

PARTS MANUAL

**E45XN, E50XN, E55XN, E60XN,
E65XN, E70XN
(A268)**

CUSTOMER EDITION

HYSTER

SECTIONS

1	FRAME
2	ELECTRICAL SYSTEM
3	DRIVE UNIT
4	STEERING SYSTEM
5	BRAKE/ACCELERATOR SYSTEM
6	HYDRAULIC SYSTEM
7	MAST-TWO STAGE LIMITED FREE-LIFT
8	MAST-THREE STAGE FULL FREE-LIFT
9	MAST-TWO STAGE FULL FREE-LIFT
10	MAST-FOUR STAGE FULL FREE-LIFT
11	OPTIONS
12	FIELD CONVERSION KITS
13	NUMERICAL INDEX

This Parts Manual is divided into 13 major sections which are listed above. Quick reference to these sections can be made by placing the right thumb on the tab of the desired section, bending the book back and thumbing the pages to the corresponding tab.

TABLE OF CONTENTS

DESCRIPTION	PAGE
A	
ACCELERATOR PEDAL	12-2
ACCELERATOR PEDAL ASSEMBLY	
MONOTROL	5-3
STANDARD	5-2
ACCUMULATOR	
D508/D563 MAST SERIES	11-76
F508/F563 SERIES MAST	11-78
ADD ON OPTION KITS	
ADD ON TELEMETRY KITS	12-3
ADD-ON OPTION KITS	12-3
ARMREST SLIDER ASSEMBLY	
→ 9/2010	1-30
9/2010 →	1-32
AUXILIARY EXTENSION TUBES	
AUXILIARY KEY SWITCH	2-42
AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES	
THREE STAGE FULL FREE-LIFT - SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION (11/2016 →)	11-58
THREE STAGE FULL FREE-LIFT - DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR FUNCTION (11/2016 →)	11-62
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (DUAL AUXILIARY WITH E- HYDRAULICS)) - THREE AND FOUR FUNCTION (→ 11/2016)	11-60
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH E- HYDRAULICS)) - THREE FUNCTION	11-54
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)) - FOUR FUNCTION (→ 11/2016)	11-56
TWO STAGE LIMITED FREE-LIFT (F507/F562 SERIES MAST) (SINGLE AUXILIARY WITH E- HYDRAULIC) - THREE FUNCTION	11-48
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS) - FOUR FUNCTION	11-50
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (WITH DUAL AUXILIARY WITH E- HYDRAULICS) - THREE AND FOUR FUNCTION	11-52
AUXILIARY TUBE EXTENSION KIT	
AUXILIARY TUBE EXTENSION KITS	
AUXILIARY TUBE EXTENSIONS	
FOUR STAGE FULL FREE-LIFT (→ S/N D515V05514H)	11-30
FOUR STAGE FULL FREE-LIFT (S/N D515V05515H →)	11-32
FOUR STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS	11-34
TWO AND THREE STAGE FULL FREE-LIFT (→ S/N D508V27242H) (→ S/N D509V02103H) (→ S/N D563V11350H) (→ S/N D564V02121H)	11-20
TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)	11-24
TWO AND THREE STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)	11-26
TWO STAGE LIMITED FREE-LIFT (→ S/N D507V02972H) (→ S/N D562V02053H)	11-6
TWO STAGE LIMITED FREE-LIFT - WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-8

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
TWO STAGE LIMITED FREE-LIFT - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (→ S/N D507V02972H) (→ S/N D562V02053H)	11-10
TWO STAGE LIMITED FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-12
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-14
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-16
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-18
AUXILIARY TUBE EXTENSIONS ISS ONLY	
FOUR FUNCTION THREE STAGE FULL FREE-LIFT (12/2016 →)	11-46
FOUR FUNCTION, FOUR STAGE FULL FREE-LIFT (12/2016 →)	11-47
FOUR FUNCTION, TWO STAGE FULL FREE-LIFT (12/2016 →)	11-45
FOUR FUNCTION, TWO STAGE LIMITED FREE-LIFT (12/2016 →)	11-44
AUXILIARY TUBES	
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT	11-38
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT	11-42
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - WITH MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT	11-36
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - MANUAL AND E-HYDRAULIC VALVE WITH QUICK DISCONNECT	11-40
B	
BACK-UP ALARM	11-74
BATTERY CONNECTOR AND CABLE ASSEMBLY	
WITH RAPID CHARGE OPTION (→ S/N A268N08622K)	2-32
WITH RAPID CHARGE OPTION (S/N A268N08623K →)	2-34
WITHOUT RAPID CHARGE OPTION	2-29
BATTERY REMOVAL OPTIONS	
BATTERY SPACERS	1-62
BRAKE ASSEMBLY	5-4
BRAKE MASTER CYLINDER ASSEMBLY	5-10
BRAKE PEDAL LINKAGE	5-8
C	
CARRIAGE	
FOUR STAGE FULL FREE-LIFT	10-22
HEAVY DUTY - THREE STAGE FULL FREE-LIFT (D508/D563)	8-32
HEAVY DUTY - TWO STAGE FULL FREE-LIFT	9-58
HEAVY DUTY - FOUR STAGE FULL FREE-LIFT	10-24
THREE STAGE FULL FREE-LIFT - D508/D563	8-30
THREE STAGE FULL FREE-LIFT - F508/F563	8-86
TWO STAGE FULL FREE-LIFT	9-56
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-14
TWO STAGE LIMITED FREE-LIFT - F507-F562	7-38

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
CONTACTOR	
UL-E	2-24
UL-EE	2-26
CONTACTOR ASSEMBLY	
→ S/N A268N08622K	2-18
S/N A268N08623K ↔ 11/2015	2-20
CONTACTOR-FUSE PANEL ASSEMBLY	
SEALED (11/2015 →)	2-22
CONTROL PANEL	
→ S/N A268N08622K	2-10
S/N A268N08623K ↔ 11/2014	2-14
11/2014 →	2-16
CONVERSION KIT	
CONVERSION KITS	
COUNTERWEIGHT	1-2
COUNTERWEIGHT COVER	
WITH RAPID CHARGE OPTION	1-3
D	
DASH AND STEERING COLUMN COVERS	
FIXED COLUMN	1-44
TELESCOPIC COLUMN	1-46
DC TO DC CONVERTER KITS	12-5
DC-DC CONVERTER AND ATTACHING PARTS	11-72
DIFFERENTIAL	3-10
DISPLAY	
LOW MOUNT	2-48
LOW MOUNT	11-4
DISPLAY GROUP AND HARNESS	2-46
DOME LIGHT	11-70
DRIVE AXLE AND HOUSING	3-4
DRIVE AXLE HUB	3-8
DRIVE AXLE MOUNTING	3-2
WITH SPACER - FOUR STAGE FULL FREE-LIFT	3-3
DRIVE TIRES AND WHEELS	
LUG TREAD - NARROW	3-18
LUG TREAD - WIDE	3-20
SMOOTH TREAD - NARROW	3-14
SMOOTH TREAD - WIDE	3-16
E	
ELECTRICAL SYSTEM	
→ 10/2013	2-4
10/2013 →	2-6
F	
FENDER	1-64
FIRE EXTINGUISHER	
→ 11/2014	11-128
11/2014 →	11-129

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
WITH DRIVE-IN RACK OVERHEAD GUARD (11/2014 →)	11-130
FIRE EXTINGUISHER KIT	12-5
FLOORPLATES AND COVERS	1-40
FORK POSITIONER ASSEMBLY	11-116
FORKS	1-68
OPTIONAL	1-70
FORKS WITH LEVER	
OPTIONAL	1-72
FREE-LIFT	
FOUR STAGE FULL FREE-LIFT	10-16
THREE STAGE FULL FREE-LIFT - D508/D563	8-22
TWO STAGE FULL FREE- LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-38
TWO STAGE FULL FREE- LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-42
TWO STAGE FULL FREE-LIFT - D509-D564	9-12
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT - F508-F563	8-74
TWO STAGE FULL FREE- LIFT - E509-E564	9-45
FREE-LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-66
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-70
FREE-LIFT CYLINDERS	
FOUR STAGE FULL FREE-LIFT	10-19
THREE STAGE FULL FREE-LIFT - D508/D563	8-26
TWO STAGE FULL FREE-LIFT - D509-D564	9-16
FRONT WORKLIGHT MOUNTING	
OVERHEAD GUARD WITH DRIVE-THRU RACK	11-82
FULL SUSPENSION SEAT	
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL - SHEET 1 OF 4	1-22
RECLINER AND DAMPER KITS - SHEET 2 OF 4	1-24
SERVICE KITS FOR NON SWIVEL AND SWIVEL - SHEET 3 OF 4	1-26
G	
GATE AND BATTERY ROLLER WITH BATTERY SPACER	
→ S/N A268N09901L	1-48
27 INCH (S/N A268N09902L →)	1-52
30 INCH (S/N A268N09902L →)	1-54
33 INCH (S/N A268N09902L →)	1-56
36 INCH (S/N A268N09902L →)	1-58
40 INCH (S/N A268N09902L →)	1-60
H	
HEADER HOSE	
FOUR STAGE FULL FREE-LIFT (→ 12/2009)	10-26
FOUR STAGE FULL FREE-LIFT - WITH HOSE CHANNELS (12/2009 →)	10-30
THREE STAGE FULL FREE-LIFT - D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)	8-34
THREE STAGE FULL FREE-LIFT - D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)	8-38
TWO STAGE FULL FREE-LIFT - D509-D564	9-20
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-16

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
HEADER HOSE AND ATTACHING PARTS	
TWO STAGE LIMITED FREE-LIFT - F507-F562 (→ 11/2014)	7-30
TWO STAGE LIMITED FREE-LIFT - F507-F562 (11/2014 →)	7-34
HEADER HOSE CONVERSION KITS	
HEADER HOSE CONVERSION KITS FOUR STAGE FULL FREE-LIFT	12-18
HEADER HOSES	
TWO STAGE FULL FREE-LIFT - E509-E564 (→ PENDING PER ECN 135710)	9-48
TWO STAGE FULL FREE-LIFT - E509-E564 (PENDING PER ECN 135710 →)	9-52
HEADER HOSES AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508/F563 (→ 11/2015)	8-78
THREE STAGE FULL FREE-LIFT - F508/F563 (11/2015 →)	8-82
HOOD	1-34
HOSE CHANNELS	
HEADER HOSE - FOUR STAGE FULL FREE-LIFT (12/2009 →)	10-34
HYDRAULIC CONTROL VALVE	
ELECTRONIC - THREE AND FOUR FUNCTION (→ 12/2016)	6-56
ELECTRONIC CONTROL - THREE AND FOUR FUNCTION (12/2016 →)	6-58
MANUAL - THREE AND FOUR FUNCTION (→ 12/2016)	6-44
MANUAL - THREE AND FOUR FUNCTION (12/2016 →)	6-48
HYDRAULIC FILTER HOUSING	6-12
HYDRAULIC HOSES	
HOIST, TILT AND AUXILIARY	6-10
STEERING	6-8
HYDRAULIC PUMP	6-18
19 CC	6-20
HYDRAULIC PUMP AND MOTOR ASSEMBLY	
36/48 VOLT	6-14
72/80 VOLT	6-16
HYDRAULIC SUPPLY AND RETURN	6-2
WITH METAL HYDRAULIC TANK	6-6
HYDRAULIC VALVE ASSEMBLY	
ELECTRONIC - THREE AND FOUR FUNCTION	6-54
MANUAL - THREE AND FOUR FUNCTION (→ 12/2016)	6-40
MANUAL CONTROL - THREE AND FOUR FUNCTION (12/2016 →)	6-42
HYDRAULIC VALVE CONVERSION KIT	12-7
I	
IMPACT SENSOR	11-68
INNER MAST	
FOUR STAGE FULL FREE-LIFT	10-8
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-56
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-58
THREE STAGE FULL FREE-LIFT - D508/D563	8-8
TWO STAGE FULL FREE- LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-28
TWO STAGE FULL FREE- LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-30
TWO STAGE FULL FREE-LIFT - D509-D564	9-4
TWO STAGE LIMITED FREE LIFT - F507-F562	7-22
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-4

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
INTEGRAL SIDE-SHIFT	
FORK POSITIONER - THREE STAGE FULL FREE-LIFT (D508/D563)	11-108
FORK POSITIONER - TWO STAGE FULL FREE-LIFT (E509/E564)	11-114
FORK POSITIONER (F507-F562) - TWO STAGE LIMITED FREE-LIFT	11-110
FORK POSITIONER (F508-F563) - THREE STAGE FULL FREE-LIFT	11-112
HYDRAULIC HOSES - TWO STAGE LIMITED FREE-LIFT (D507, D562)	11-120
HYDRAULIC HOSES - THREE STAGE FULL FREE-LIFT (D508/D563)	11-121
HYDRAULIC HOSES - TWO STAGE FULL FREE-LIFT	11-122
INTEGRAL SIDE-SHIFT ASSEMBLY	
THREE STAGE FULL FREE-LIFT - F508/F563 (→ 12/2016)	11-104
INTEGRAL SIDE-SHIFT CARRIAGE	
FOUR STAGE FULL FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-99
THREE STAGE FULL FREE LIFT - D508/D563 (→ 12/2016)	11-102
THREE STAGE FULL FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-106
TWO AND FOUR STAGE FULL FREE-LIFT (→ 12/2016)	11-94
TWO STAGE FULL FREE- LIFT - 977 MM 38.5 IN (12/2016 →)	11-97
TWO STAGE LIMITED FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-92
INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY	
TWO STAGE LIMITED FREE LIFT - D507/D562 (→ 12/2016)	11-88
TWO STAGE LIMITED FREE-LIFT - F507/F562 (→ 12/2016)	11-90
INTEGRAL SIDE-SHIFT CYLINDER	
→ 12/2016	11-118
ROD ASSEMBLY (12/2016 →)	11-119
INTEGRAL SIDE-SHIFT HYDRAULIC HOSE	
FOUR STAGE FULL FREE-LIFT	11-123
INTEGRAL SIDE-SHIFT HYDRAULIC HOSES	
THREE STAGE FULL FREE LIFT - F508/F563	11-125
TWO STAGE LIMITED FREE-LIFT - F507/F562	11-124
INTERMEDIATE 2 MAST	
FOUR STAGE FULL FREE-LIFT	10-4
INTERMEDIATE 3 MAST	
FOUR STAGE FULL FREE-LIFT	10-6
INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-50
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-52
THREE STAGE FULL FREE-LIFT - D508/D563	8-4
L	
LABELS	
EXTERIOR	1-74
HYDRAULIC CONTROL FUNCTIONS	1-78
INTERIOR	1-76
LIGHTS	
INBOARD REAR LIGHTS	2-58
WITH DRIVE-THRU RACK OVERHEAD GUARD	2-54
WITH STANDARD OVERHEAD GUARD	2-50
LOAD BACKREST EXTENSION	1-66

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
M	
MAIN CYLINDER	
LEFT HAND - THREE STAGE FULL FREE-LIFT (D508/D563)	8-14
RIGHT HAND - THREE STAGE FULL FREE-LIFT (D508/D563)	8-18
MAIN LIFT	
FOUR STAGE FULL FREE-LIFT	10-10
THREE STAGE FULL FREE-LIFT - D508/D563	8-10
TWO STAGE FULL FREE- LIFT - E509-E564	9-32
TWO STAGE FULL FREE-LIFT - D509-D564	9-6
TWO STAGE LIMITED FREE LIFT - F507-F562	7-24
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-6
MAIN LIFT CYLINDER	
LEFT HAND - TWO STAGE FULL FREE-LIFT (D509-D564)	9-10
LEFT HAND - FOUR STAGE FULL FREE-LIFT	10-12
RIGHT HAND - TWO STAGE FULL FREE-LIFT (D509-D564)	9-8
RIGHT HAND - FOUR STAGE FULL FREE-LIFT	10-14
THREE STAGE FULL FREE-LIFT - F508-F563	8-62
TWO STAGE LIMITED FREE LIFT - F507-F562	7-26
MAIN LIFT CYLINDER - LH	
TWO STAGE FULL FREE- LIFT - E509-E564	9-36
MAIN LIFT CYLINDER - RH	
TWO STAGE FULL FREE- LIFT - E509-E564	9-34
MAIN LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563	8-60
MAIN LIFT CYLINDERS	
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-10
MANUAL CONTROL LEVERS	
→ S/N A268N02928H	6-28
FOUR FUNCTION (S/N A268N02929H →)	6-36
THREE FUNCTION (S/N A268N02929H →)	6-32
MANUAL LEVER KITS	
MINI LEVER CONVERSION KIT	12-6
MINI-LEVER CONTROLS	
3 FUNCTION	2-64
4 FUNCTION	2-68
MIRROR	
PANORAMIC	11-66
MIRROR CONVERSION KITS	12-5
MIRRORS	11-64
WITH DRIVE-THRU RACK OVERHEAD GUARD	11-65
MISCELLANEOUS KITS	12-5
N	
NON SUSPENSION SEAT	
WITHOUT ELECTRONIC CONTROLS - WITH BOLT IN SENSOR	1-16
WITHOUT ELECTRONIC CONTROLS - WITH SNAP IN SENSOR	1-18
WITHOUT ELECTRONIC CONTROLS - OPTIONAL	1-20

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
O	
OPERATOR MODULE	1-38
OUTER MAST	
FOUR STAGE FULL FREE-LIFT	10-2
THREE STAGE FULL FREE LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-42
THREE STAGE FULL FREE LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-46
THREE STAGE FULL FREE-LIFT - D508/D563	8-2
TWO STAGE FULL FREE LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-24
TWO STAGE FULL FREE LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-26
TWO STAGE FULL FREE-LIFT - D509-D564	9-2
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-2
TWO STAGE LIMITED FREE-LIFT - F507-F562	7-20
OVERHEAD GUARD	
→ 11/2014	1-4
11/2014 →	1-6
DRIVE-IN RACK (→ 10/2010)	1-12
DRIVE-IN RACK (10/2010 →)	1-14
FLAT (→ 11/2014)	1-8
FLAT (11/2014 →)	1-10
P	
PARK BRAKE	
AUTOMATIC	5-14
MANUAL	5-12
PARK BRAKE KIT	12-6
POWER CABLES	
→ 11/2014	2-36
11/2014 →	2-40
PUMP MOTOR	
36/48 VOLT	6-22
72/80 VOLT - ENHANCED PERFORMANCE	6-24
R	
REAR DRIVE HANDLE	11-67
REAR DRIVE HANDLE KITS	12-6
REAR WORK AND TAIL LIGHT MOUNTING	
DRIVE-THRU OVERHEAD GUARD	11-84
S	
SEAT ATTACHING PARTS	
NOT INCLUDED WITH SEAT - SHEET 4 OF 4	1-28
STEER TIRES AND WHEELS	
MONARCH - SMOOTH TREAD	4-24
MONARCH - LUG TREAD	4-26
TRELLEBORG - SMOOTH TREAD	4-25
TRELLEBORG - LUG TREAD	4-27
STEERING ACCUMULATOR	4-16
STEERING AXLE	
WITH SENSOR	4-20
WITHOUT SENSOR	4-18

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
STEERING COLUMN ASSEMBLY	
FIXED (→ 10/2013)	4-6
FIXED (10/2013 →)	4-8
TELESCOPIC (→ 10/2013)	4-10
TELESCOPIC (10/2013 →)	4-11
STEERING CYLINDER	4-23
STEERING HAND PUMP ASSEMBLY	
→ 11/2014	4-12
11/2014 →	4-14
STEERING WHEEL AND COLUMN	
FIXED	4-2
TELESCOPIC	4-4
STROBE LIGHT	
LED	11-86
T	
TAIL LIGHT MOUNTING	
OVERHEAD GUARD WITH DRIVE THRU RACK	11-80
TILT CYLINDER AND MAST INSTALLATION	6-66
TILT CYLINDERS	
E45-55XN	6-68
E60-70XN	6-70
TILT SENSOR GROUP	
TWO AND THREE STAGE	2-44
TRACTION MOTOR	3-12
TRACTION SPEED LIMITER	
STANDARD AND INTEGRAL SIDE-SHIFT CARRIAGES	2-72
TURN SIGNAL	2-61
TURN SIGNAL SWITCH	2-62
V	
VALVE ASSEMBLY	
INLET SECTION - MANUAL AND ELECTRONIC	6-64
VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY	
ELECTRIC HYDRAULIC (→ 12/2016)	6-60
ELECTRIC HYDRAULIC (12/2016 →)	6-62
MANUAL HYDRAULIC (→ 12/2016)	6-50
MANUAL HYDRAULIC (12/2016 →)	6-52
VEHICLE SYSTEM MANAGER	2-28
W	
WIDE TREAD KITS	12-6
WIRE HARNESS	
BACK-UP ALARM STROBE	2-188
FAN ADAPTOR - 80V	2-192
FAN ADAPTOR - 36/48V	2-194
FRONT SWITCH	2-195
FRONT SWITCH	11-127
INTERFACE FRONT/REAR LIGHTS	11-126
JUMPER	2-191

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
LH LIGHT WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS (→ 10/2013)	2-158
LH LIGHT WITH OVERHEAD GUARD - WITH TURN SIGNAL (→ 10/2013)	2-160
LH LIGHT WITH OVERHEAD GUARD - DRIVE-THRU RACK (→ 10/2013)	2-162
LH LIGHT WITH OVERHEAD GUARD - WITH INBOARD REAR LIGHTS MOUNT (→ 10/2013)	2-164
LH LIGHT WITH OVERHEAD GUARD - WITH TURN SIGNALS (10/2013 →)	2-166
LH LIGHT WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS (10/2013 →)	2-168
MAIN - 36/48 VOLT WITHOUT LIGHTS OR ELECTROHYDRAULICS	2-155
MAIN LIGHTS CHASSIS - 36/48V (→ 11/2014)	2-140
MAIN LIGHTS CHASSIS - 36/48V (11/2014 →)	2-144
MAIN LIGHTS CHASSIS - 80V (→ 11/2014)	2-148
MAIN LIGHTS CHASSIS - 80V (11/2014 →)	2-152
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 2 (→ 10/2013)	2-104
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 2 (→ 10/2013)	2-108
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 3 (10/2013 ↔ 11/2014)	2-110
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 3 (10/2013 ↔ 11/2014)	2-114
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 3 OF 3 (10/2013 ↔ 11/2014)	2-118
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 3 (11/2014 →)	2-122
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 3 (11/2014 →)	2-126
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 3 OF 3 (11/2014 →)	2-130
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 3 (10/2013 ↔ 11/2014)	2-80
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 3 (10/2013 ↔ 11/2014)	2-84
MAIN WITH MANUAL HYDRAULICS - SHEET 3 OF 3 (10/2013 ↔ 11/2014)	2-88
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 3 (11/2014 →)	2-92
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 3 (11/2014 →)	2-96
MAIN WITH MANUAL HYDRAULICS - SHEET 3 OF 3 (11/2014 →)	2-100
MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) - SHEET 1 OF 2 (→ 10/2013)	2-74
MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) - SHEET 2 OF 2 (→ 10/2013)	2-78
MANUAL HYDRAULICS (→ 11/2014)	2-180
MANUAL HYDRAULICS (11/2014 →)	2-181
MANUAL INTERLOCK	2-190
PARK BRAKE	2-186
RH LIGHT WITH FREEZER DISPLAY (→ 10/2013)	2-174
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)	2-176
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNALS-LOW MOUNT (10/2013 →)	2-177
RH LIGHT WITH STANDARD DISPLAY - STANDARD OPTION (→ 10/2013)	2-170
RH LIGHT WITH STANDARD DISPLAY - WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)	2-171
RH LIGHT WITH STANDARD DISPLAY - WITHOUT TURN SIGNALS-LOW MOUNT (10/2013 →)	2-172
SEAT WITH E-HYDRAULICS	2-136
SEAT WITH E-HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE	2-138
SEAT WITH MANUAL HYDRAULICS	2-133
SEAT WITH MANUAL HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE	2-134
STEERING COLUMN	2-178
SYNCHRONOUS STEERING	2-184
TURN SIGNAL	2-182

ABBREVIATIONS QUICK REFERENCE SHEET

Listed below are abbreviations used in parts manuals to denote the following expressions:

TERM	DEFINITION	TERM	DEFINITION
Amp	Amperes	FRE	Freezer Environment
AR	As Required	in.	inches
BDI	Battery Discharge Indicators	LPG	Liquefied Petroleum Gas
BWI	Brush Wear Indicator	MAP	Manifold Absolute Pressure
CE	Communicator End	mm	millimeters
CRE	Corrosive Environment	MSTS	Microprocessor Spark Timing System
D/B	Date Break	NPT	National Pipe Threads
dbA	Decibel "A" Scale	O/S	Oversize
DE	Drive End	PTO	Power Take Off
ECH	Empty Container Handler	RPM	Revolutions per Minute
ECH-3	Empty Container Handler - 3 High Stacking	S/N	Serial Number
ECH-4	Empty Container Handler - 4 High Stacking	TMM	Truck Management Module
ECH-5	Empty Container Handler - 5 High Stacking	UL Type D	Diesel-Powered Safety Rating
ECH-6	Empty Container Handler - 6 High Stacking	UL Type DS	Diesel-Powered Safety Rating
ECH-7	Empty Container Handler - 7 High Stacking	UL Type E	Battery-Powered Safety Rating
ECM	Electronic Control Module	UL Type EE	Battery-Powered Safety Rating
ECN	Engineering Change Notice	UL Type ES	Battery-Powered Safety Rating
EEPROM	Electrically Erasable Programmable Read Only Memory	UL Type G	Gasoline-Powered Safety Rating
EPA	US Environmental Protection Agency	UL Type GS	Gasoline-Powered Safety Rating
EPROM	Electrically Programmable Read Only Memory	UL Type LP	Gas-Powered Safety Rating
		UL Type LPS	LP Gas-Powered Safety Rating
		U/S	Undersize
		UL	Underwriters Laboratory
		V	Volts

HOW TO USE THE ILLUSTRATED PARTS MANUAL

This parts manual describes and illustrates assemblies, subassemblies, and detail parts needed for service replacement.

The different constructions are indicated by keys and footnotes. The callouts correspond to descriptions found on the next page.

Diagram illustrating the structure and usage of the Hyster Illustrated Parts Manual, showing various sections and their corresponding parts lists.

Section 1: TABLE OF CONTENTS

DESCRIPTION	PAGE
AIR INTAKE AND FILTER DIESEL (⇒ D/B 11/96)	3-22
AIR INTAKE AND FILTER DIESEL (D/B 11/96 ⇒)	
AIR INTAKE AND FILTER GASOLINE AND LPG	
ALTERNATOR GASOLINE, LPG, AND DIESEL	
ALTERNATOR TYPES GS, LPS, AND DS	
AUXILIARY FUNCTION TUBE TWO AND THREE STAGE FULL P	

Section 13: NUMERICAL INDEX

PART NO.	PAGE NO.	ITEM NO.	PART NO.	PAGE NO.	ITEM NO.	PART NO.	PAGE NO.	ITEM NO.
142	3-4	19	10-13	25	11-27	29	12-31	12
12445	3-32	19	10-17	6	11-31	25	16719	3-36
	3-34	1	10-27	11	11-32	37	16751	3-16
			11-11	6	8-4	29	16849	3-34
			11-21	11	8-4	45		3-36
			12-13	6	8-8	34	16863	3-26
			12-6	6	9-7	9	16865	3-6
			13-17	9	9-11	9	16882	4-27
			13-10	10	9-11	17		9-11
			23-46	46	10-9	21		27
			27-46	46	10-9	28		36
			26-14	14	10-9	28		32
			28-14	14	10-13	16		24
			50-14	14	11-7	19		17

Section 10: TRANSMISSION HOUSING

KEY: A: Diesel B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	2022547	Transmission	1
2	2023329	Transmission	1
3	2021670	Case	2
4	2023418	Bearing Cap	4
5	296426	Washer	4
6	293991	Bolt	1
7	2021390	Cover	2
8	1371656	Colter Pin	2
9	2021915	O-Ring	4
10	2021675	Plug	1
11	2021336	Housing	4
12	287860	Pin	22
13	292682	Lockwasher	39
14	2021345	Hydraulic Pump	1
15	214364	⇒ Figure 5-3	1
16	296418	Gasket	8
17	2021388	Bolt	8
18	2021389	Washer	1
19	2021383	Temperature Switch	1
20	292515	Breather	9
21	136692	Dipstick	9
22	292527	Bolt	2
23	292531	Nut	3
24	292583	Cap screw	3
25	293637	Lockwasher	4
26	296420	Bolt	4
27	996403	Washer	1
28	996405	Transmission Kit (Includes item 7)	1
		Transmission Kit (Includes item 14)	1

This Parts Manual is divided into 11 major sections which are listed above. Quick be made by placing the right thumb on the tab of the desired section, bending the pages to the corresponding tab.

See Service Manual for service procedures.

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5-15

HP990004

HOW TO FIND THE DESIRED PART NUMBER

WHEN THE PART NUMBER AND THE NEXT HIGHER ASSEMBLY IS NOT KNOWN:

1. Determine the function and application of the part required. Turn to the Sections Page. Choose the general area of reference most likely to include the part.
2. Turn to the section you chose. Use the Section Table of Contents to determine the assembly which would normally contain the part required. Then locate the part on the assembly breakdown page.

WHEN THE PART NUMBER IS NOT KNOWN AND THE NEXT HIGHER ASSEMBLY IS KNOWN:

3. Determine the assembly the required part is used on. Turn to the Table of Contents (Page i).
4. Locate the assembly the required part is used on and turn to the page indicated for that assembly. Then locate the part on the assembly breakdown page.

WHEN THE PART NUMBER IS KNOWN:

5. Use the Numerical Index (Page 13-1) to find the part number. Turn to the page listed and locate the part as indicated by the item number.

GENERAL:

The assembly breakdowns include part numbers, descriptions, quantities required, keys and footnotes to help in selecting correct parts.

6. Parts Supersession Information. Part numbers that have this history will be displayed in the parts list in the order that they were superseded (from oldest to newest). The superseded part numbers will be shown with a line through them.

Five periods in the PART NO. column (.) indicate that the part is either *Not Serviced Separately* or there is a reference to another figure. A figure reference is denoted by a pointing hand followed by a figure number in the DESCRIPTION column (☞ Figure 10)

7. Keys are used to show two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C", "D", or "E" and the corresponding quantity column to find the required parts. Two periods in the QTY column (..) indicate that the part is not used for that assembly.
8. Indented descriptions under the DESCRIPTION column are used to indicate assemblies and

subparts of assemblies. In the example on the previous page, *BEARING CAP* (Item 2) is a subpart of the major assembly *CASE*.

9. Quantities shown are for one assembly. The quantities of the subpart *BEARING CAP* are indicated as two and two. This means two per *CASE* assembly.
10. Serial number breaks identify the most current parts information and are shown as follows:
 - **S/N D001H2628**
Indicates last serial number affected.
 - S/N D001H2629** →
Indicates the first serial number affected.
 - S/N D001H1553 ↔ S/N D001H3291**
Indicates a range of serial numbers affected.

ECN numbers for pending serial numbers are shown to allow for the inclusion of the most current parts information and are identified as follows:

→ **S/N Pending Per ECN 63243**

Indicates a pending serial number for last unit affected.

S/N Pending Per ECN 63243 →

Indicates a pending serial number for first unit affected.

Date breaks are used to indicate when a change occurred but a subsequent serial number break was not recorded. This is an arbitrary date usually based on the ECN release and are identified as follows:

→ **D/B 3/00**

Indicates that a change occurred sometime within that month for the item affected.

D/B 3/00 →

Indicates that a change occurred sometime within that month for the item affected.

D/B 3/00 ↔ D/B 4/00

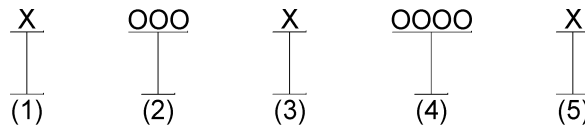
Indicates a range of production dates of the item affected.

Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

ORDERING PARTS:

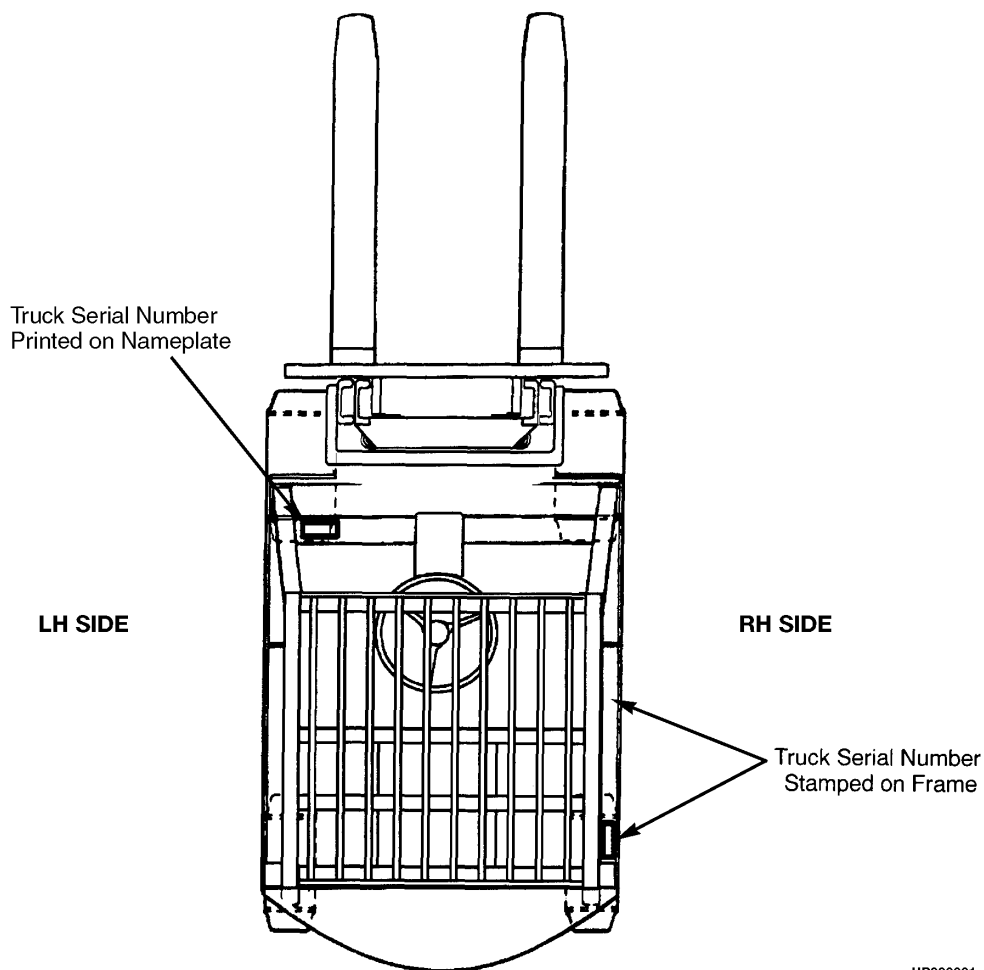
When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

IDENTIFICATION OF TRUCK SERIAL NUMBERS

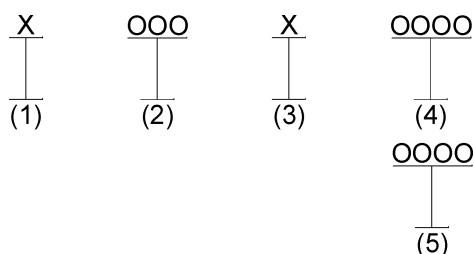
- (1) and (2) The first letter and three numbers indicate the truck unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the truck.
- (5) The final letter indicates the year of manufacture starting with "A" in 1957, 1980, and 2003.
The letters "I", "O", and "Q" will not be used.

For pending serial numbers contact your local dealer for Hyster lift trucks.



HP990001

Parts referred to in this book as right or left hand parts are in accordance with the illustration above.

IDENTIFICATION OF MAST SERIAL NUMBERS

- (1) and (2) The first letter and number indicates the mast unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the mast.
- (5) Carriage travel in millimeters stamped just below the serial number.

Mast Group identification consists of mast unit code (1) and (2) plus carriage travel (5).

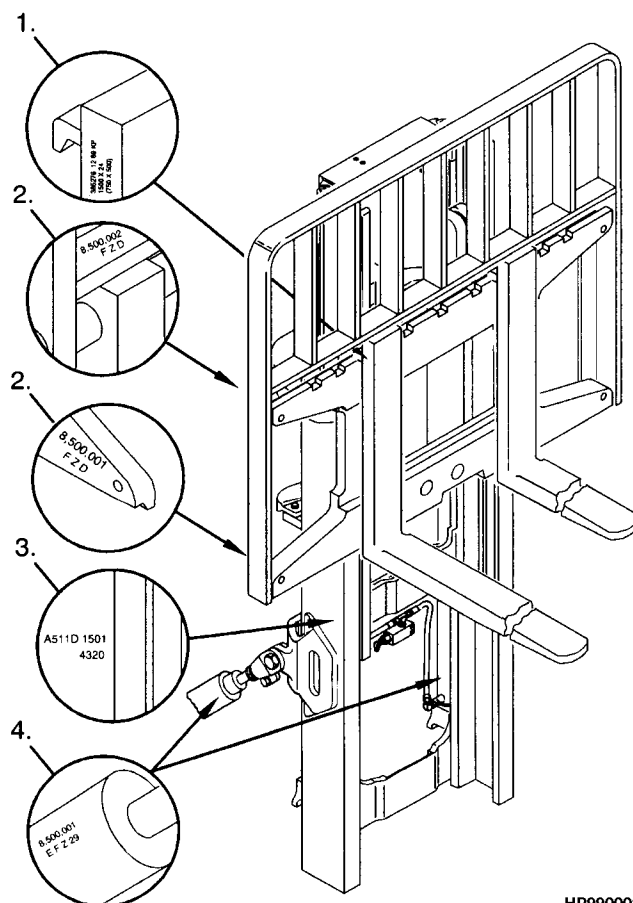
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

LIFT EQUIPMENT IDENTIFICATION

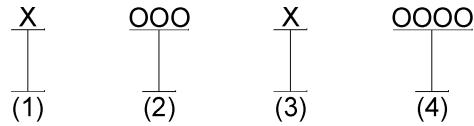
1. Fork part number, capacity rating, plant code letter, and date of manufacture are stamped approximately six inches below the top of most forks.
2. The carriage group number is stamped on the right hand side of the top crossmember (pin type) or on the back of the right hand end of the bottom crossmember (hook type). A date code has two letters in line with or below the carriage group number.
3. The mast identification number has a unit code, a letter indicating the plant of manufacture, and a serial number. Underneath the production sequence number is a four digit number that indicates the carriage travel in millimeters.
4. Tilt and lift cylinder group numbers are stamped on the cylinder shell.

Always refer to the group, serial, or part number when ordering service parts.

Modification of masts and carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". contact your dealer for Hyster lift trucks for information on these assemblies.



HP990002

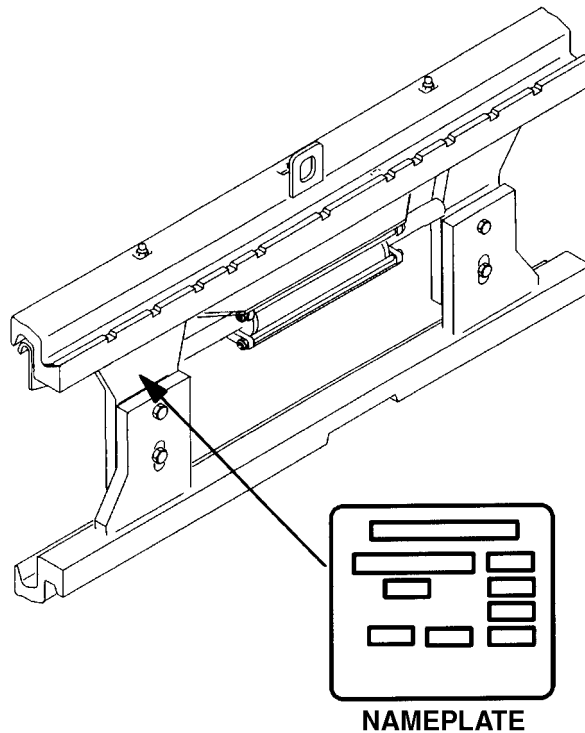
IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS

(1) and (2) The first letter and three numbers indicate the attachment unit code.

(3) The second letter indicates the plant of manufacture.

(4) The four or five digit number indicates the production sequence number.

For pending production sequence numbers contact your local dealer for Hyster lift trucks.



HP990003

Side-shift carriages and attachments have nameplates. Use the serial number found on the nameplate to identify the attachment.

Always refer to the group, serial, or part number when ordering service parts.

Modifications of attachments and side-shift carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.

PUBLICATIONS

Every new lift truck is provided with an OPERATING MANUAL. This manual has information that the operator must know for inspection and operation of the lift truck.

SERVICE MAINTENANCE MANUALS, which provide service and overhaul procedures, and PARTS

MANUALS with complete replacement part identification, are available at a nominal fee from your Hyster dealer to assist users in effectively maintaining Hyster lift trucks in a safe, useful condition. See the list below for information on ordering specific publications for this model lift truck.

PUBLICATION	HYSTER PART NUMBER
Operating Manual.....	1646377
Service Manual (Complete).....	1688862
Parts Manual.....	1688833

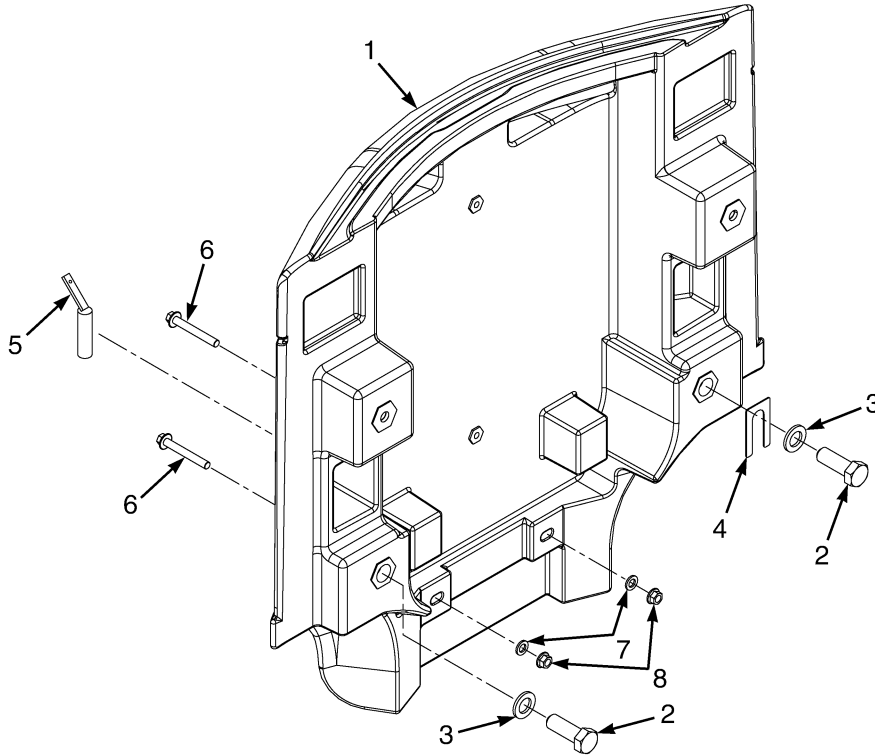
[illegible]

1	FRAME

SECTION 1
FRAME

DESCRIPTION	PAGE
ARMREST SLIDER ASSEMBLY	
→ 9/2010	1-30
9/2010 →	1-32
BATTERY SPACERS	1-62
COUNTERWEIGHT	1-2
COUNTERWEIGHT COVER	
WITH RAPID CHARGE OPTION	1-3
DASH AND STEERING COLUMN COVERS	
FIXED COLUMN	1-44
TELESCOPIC COLUMN	1-46
FENDER	1-64
FLOORPLATES AND COVERS	1-40
FORKS	1-68
OPTIONAL	1-70
FORKS WITH LEVER	
OPTIONAL	1-72
FULL SUSPENSION SEAT	
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL - SHEET 1 OF 4	1-22
RECLINER AND DAMPER KITS - SHEET 2 OF 4	1-24
SERVICE KITS FOR NON SWIVEL AND SWIVEL - SHEET 3 OF 4	1-26
GATE AND BATTERY ROLLER WITH BATTERY SPACER	
→ S/N A268N09901L	1-48
27 INCH (S/N A268N09902L →)	1-52
30 INCH (S/N A268N09902L →)	1-54
33 INCH (S/N A268N09902L →)	1-56
36 INCH (S/N A268N09902L →)	1-58
40 INCH (S/N A268N09902L →)	1-60
HOOD	1-34
LABELS	
EXTERIOR	1-74
HYDRAULIC CONTROL FUNCTIONS	1-78
INTERIOR	1-76
LOAD BACKREST EXTENSION	1-66
NON SUSPENSION SEAT	
WITHOUT ELECTRONIC CONTROLS - WITH BOLT IN SENSOR	1-16
WITHOUT ELECTRONIC CONTROLS - WITH SNAP IN SENSOR	1-18
WITHOUT ELECTRONIC CONTROLS - OPTIONAL	1-20
OPERATOR MODULE	1-38
OVERHEAD GUARD	
→ 11/2014	1-4
11/2014 →	1-6
DRIVE-IN RACK (→ 10/2010)	1-12
DRIVE-IN RACK (10/2010 →)	1-14
FLAT (→ 11/2014)	1-8
FLAT (11/2014 →)	1-10
SEAT ATTACHING PARTS	
NOT INCLUDED WITH SEAT - SHEET 4 OF 4	1-28

COUNTERWEIGHT (FIGURE 1-1)



BP120406

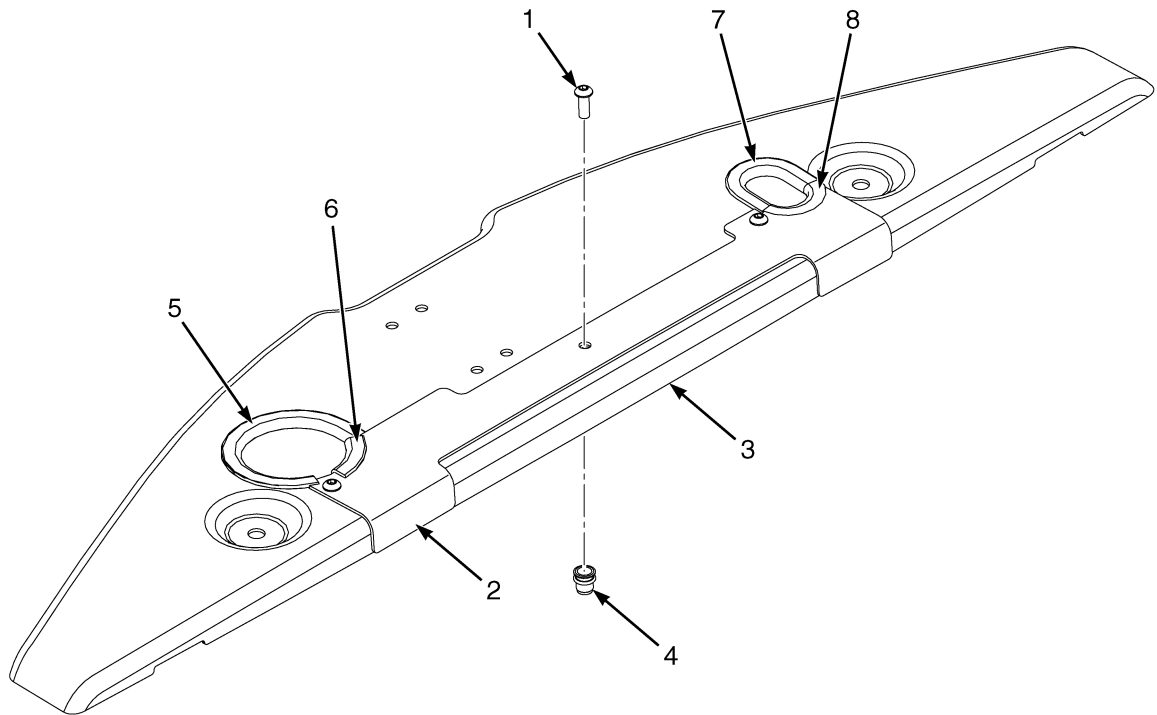
ITEM	PART NO.	DESCRIPTION	QTY
1	b 1670839		
	4047114	Counterweight	1
1	a 1670840		
	4047115	Counterweight	1
1	c 1670844		
	4047116	Counterweight	1
2	1308451	Capscrew	2
3	296434	Washer	2
4	2311349	Shim	1
5	326347	Tow Pin	1
6	1699317	Bolt	2
7	296422	Washer	2
8	1699258	Nut	2

FOOTNOTES:

a E45XN 27 in. Battery Compartment; E50XN 30 in. BC; E55XN 33 in. BC; E65XN 40 in. BC

b E45XN 30-33 in. Battery Compartment; E50XN 33 in. BC

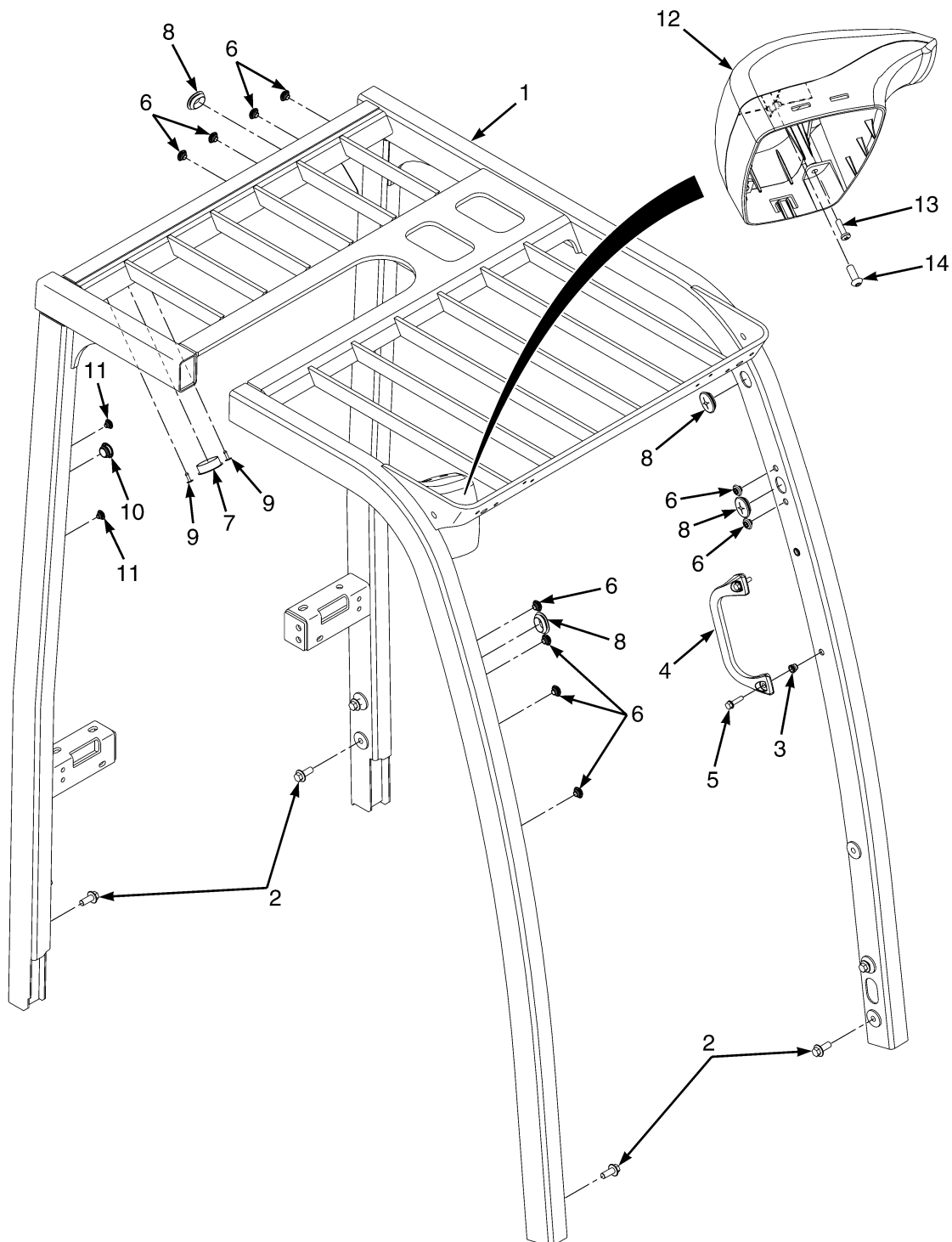
c E50XN 27 in. Battery Compartment; E60XN 33 in. BC; E65XN 36 in. BC; E70XN 40 in. BC

**COUNTERWEIGHT COVER (FIGURE 1-2)
WITH RAPID CHARGE OPTION**

BP121164

ITEM	PART NO.	DESCRIPTION	QTY
1	296159	Capscrew	3
2	4025664	Cover	1
3	4025662	Cover (Counterweight)	1
4	1531558	Insert	3
5	4025668	Trim	1
6	4025667	Trim	1
7	4025666	Trim	1
8	4025665	Trim	1

OVERHEAD GUARD (FIGURE 1-3) (→ 11/2014)



BP260108

OVERHEAD GUARD

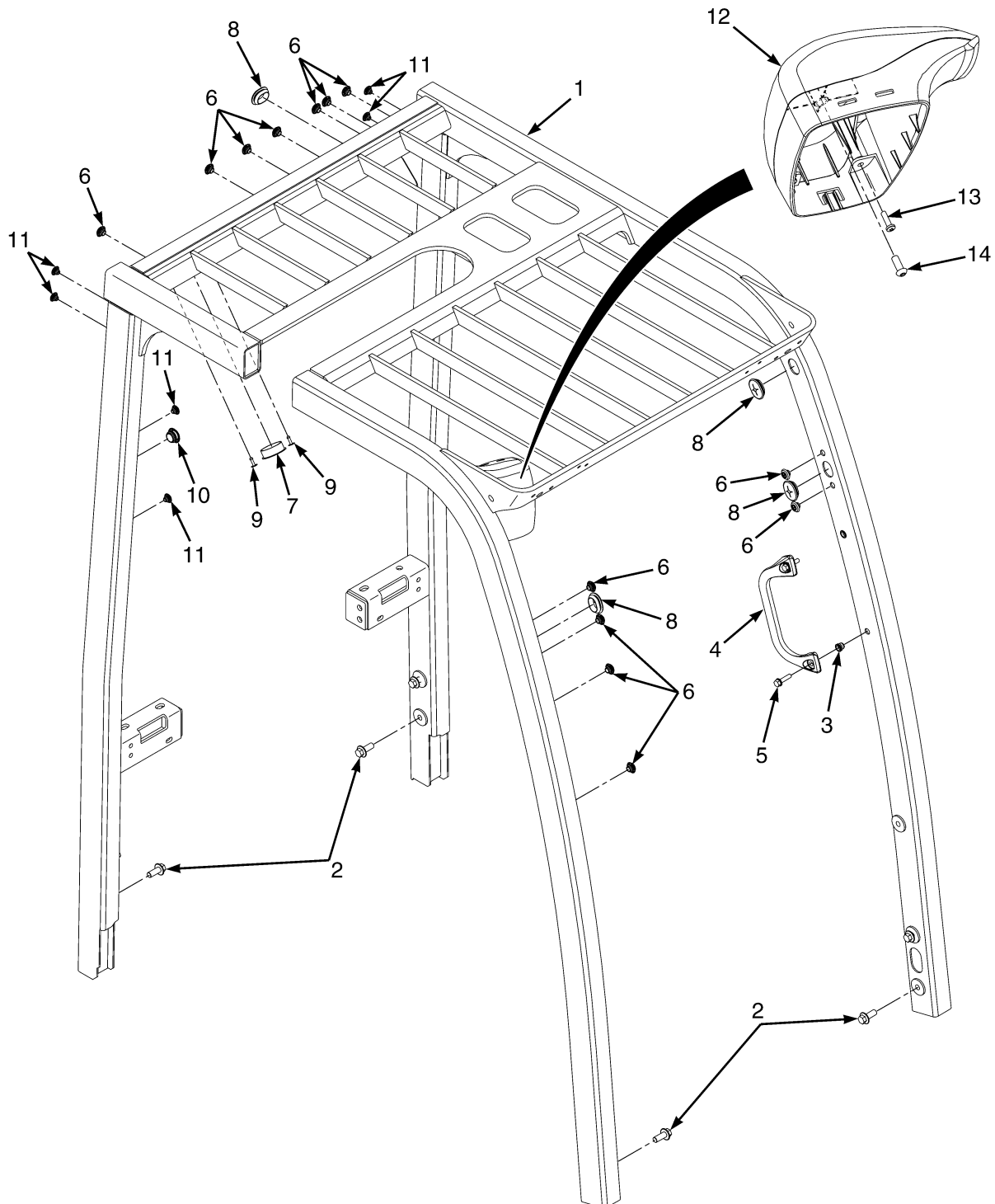
(→ 11/2014)

KEY:**A: Standard Height (88.5 in.)****B: Low Height (86.5 in.)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 4000864	Overhead Guard (27 in. Battery Compartment)	1	..
1	a 4000865	Overhead Guard (30 in. Battery Compartment)	1	..
1	b 4000866	Overhead Guard (33 in. Battery Compartment)	1	..
1	d 4000867	Overhead Guard (36 in. Battery Compartment)	1	..
1	c 4000868	Overhead Guard (40 in. Battery Compartment)	1	..
1	a 4000859	Overhead Guard (27 in. Battery Compartment)	..	1
1	a 4000860	Overhead Guard (30 in. Battery Compartment)	..	1
1	b 4000861	Overhead Guard (33 in. Battery Compartment)	..	1
1	d 4000862	Overhead Guard (36 in. Battery Compartment)	..	1
1	c 4000863	Overhead Guard (40 in. Battery Compartment)	..	1
2	1528889	Capscrew	8	8
3	1531557	Insert	2	2
4	1676884	Handle	1	1
5	1586627	Capscrew	2	2
6	1698801	Plug (Yellow) (0.53 in)	10	10
7	1398009	Plug (Hole)	2	2
8	4601386	Grommet	5	5
9	1363916	Plug (Hole)	4	4
10	1702413	Plug (Yellow) (0.91 in)	1	1
11	1698800	Plug (Yellow) (0.39 in)	2	2
12	1687924	Display Cover Assembly	1	1
13	1704669	Screw	4	4
14	1510126	Screw (Button Head)	2	2

FOOTNOTES:**a** E45-50XN**c** E65-70XN**b** E45-60XN**d** E65XN

OVERHEAD GUARD (FIGURE 1-4) (11/2014 →)



BP120976

OVERHEAD GUARD

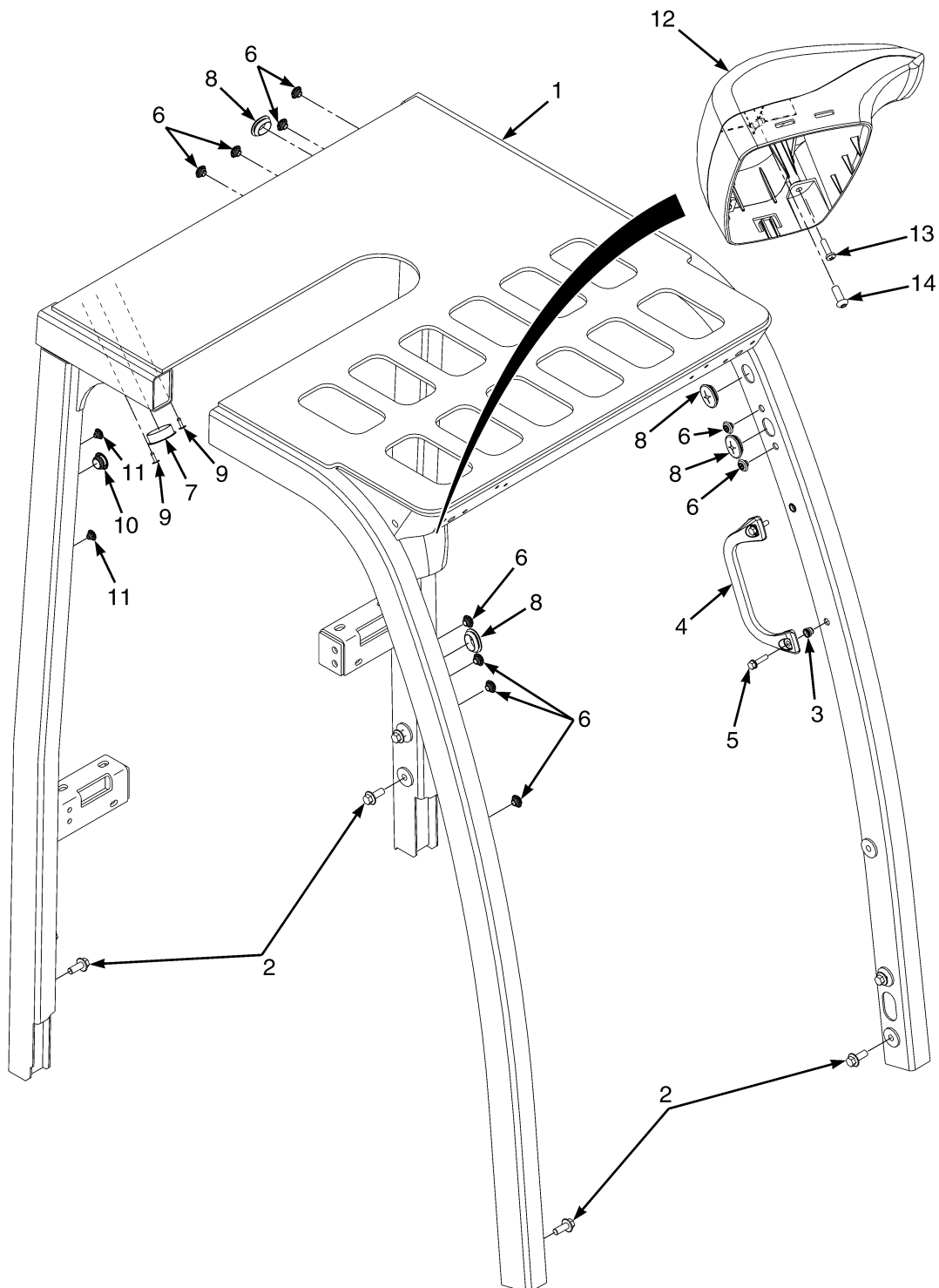
(11/2014 →)

KEY:**A: Standard Height (88.5 in.)****B: Low Height (86.5 in.)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 4045333	Overhead Guard (Standard) (27 in. Battery Compartment)	1	..
1	a 4045334	Overhead Guard (Standard) (30 in. Battery Compartment)	1	..
1	b 4045335	Overhead Guard (Standard) (33 in. Battery Compartment)	1	..
1	d 4045336	Overhead Guard (Standard) (36 in. Battery Compartment)	1	..
1	c 4045337	Overhead Guard (Standard) (40 in. Battery Compartment)	1	..
1	a 4045328	Overhead Guard (Low) (27 in. Battery Compartment)	..	1
1	a 4045329	Overhead Guard (Low) (30 in. Battery Compartment)	..	1
1	b 4045330	Overhead Guard (Low) (33 in. Battery Compartment)	..	1
1	d 4045331	Overhead Guard (Low) (36 in. Battery Compartment)	..	1
1	c 4045332	Overhead Guard (Low) (40 in. Battery Compartment)	..	1
2	1528889	Capscrew	8	8
3	1531557	Insert	2	2
4	1676884	Handle	1	1
5	1586627	Capscrew	2	2
6	1698801	Plug (Yellow) (0.53 in)	13	13
7	1398009	Plug	2	2
8	4601386	Grommet	5	5
9	1363916	Plug	4	4
10	1702413	Plug (Yellow) (0.91 in)	1	1
11	1698800	Plug (Yellow) (0.39 in)	6	6
12	1687924	Display Cover Assembly	1	1
13	1704669	Screw	4	4
14	1510126	Screw (Button Head)	2	2

FOOTNOTES:**a** E45-50XN**c** E65-70XN**b** E45-60XN**d** E65XN

OVERHEAD GUARD (FIGURE 1-5) FLAT (→ 11/2014)



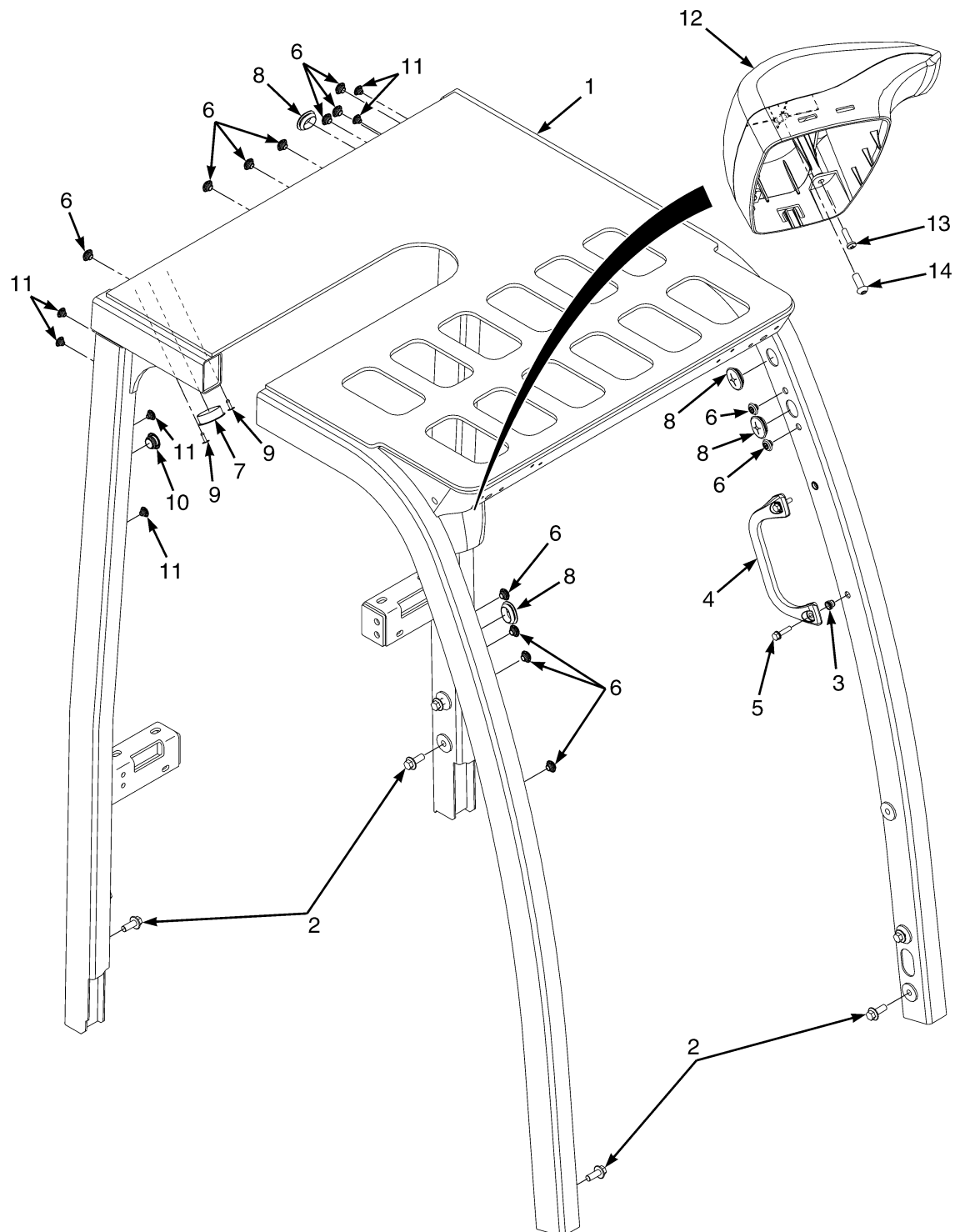
BP121279

OVERHEAD GUARD
FLAT (→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1693483	Overhead Guard (27 in. Battery Compartment) (Flat)	1
1	a 1693484	Overhead Guard (30 in. Battery Compartment) (Flat)	1
1	b 1693485	Overhead Guard (33 in. Battery Compartment) (Flat)	1
1	d 1693486	Overhead Guard (36 in. Battery Compartment) (Flat)	1
1	c 1693487	Overhead Guard (40 in. Battery Compartment) (Flat)	1
2	1528889	Capscrew	8
3	1531557	Insert	2
4	1676884	Handle	1
5	1586627	Capscrew	2
6	1698801	Plug (Yellow) (0.53 in)	10
7	1398009	Plug (Hole)	2
8	4601386	Grommet	5
9	1363916	Plug (Hole)	4
10	1702413	Plug (Yellow) (0.91 in)	1
11	1698800	Plug (Yellow) (0.39 in)	2
12	1687924	Display Cover Assembly	1
13	1704669	Screw	4
14	1510126	Screw (Button Head)	2

FOOTNOTES:**a** E45-50XN**c** E65-70XN**b** E45-60XN**d** E65XN

OVERHEAD GUARD (FIGURE 1-6) FLAT (11/2014 →)



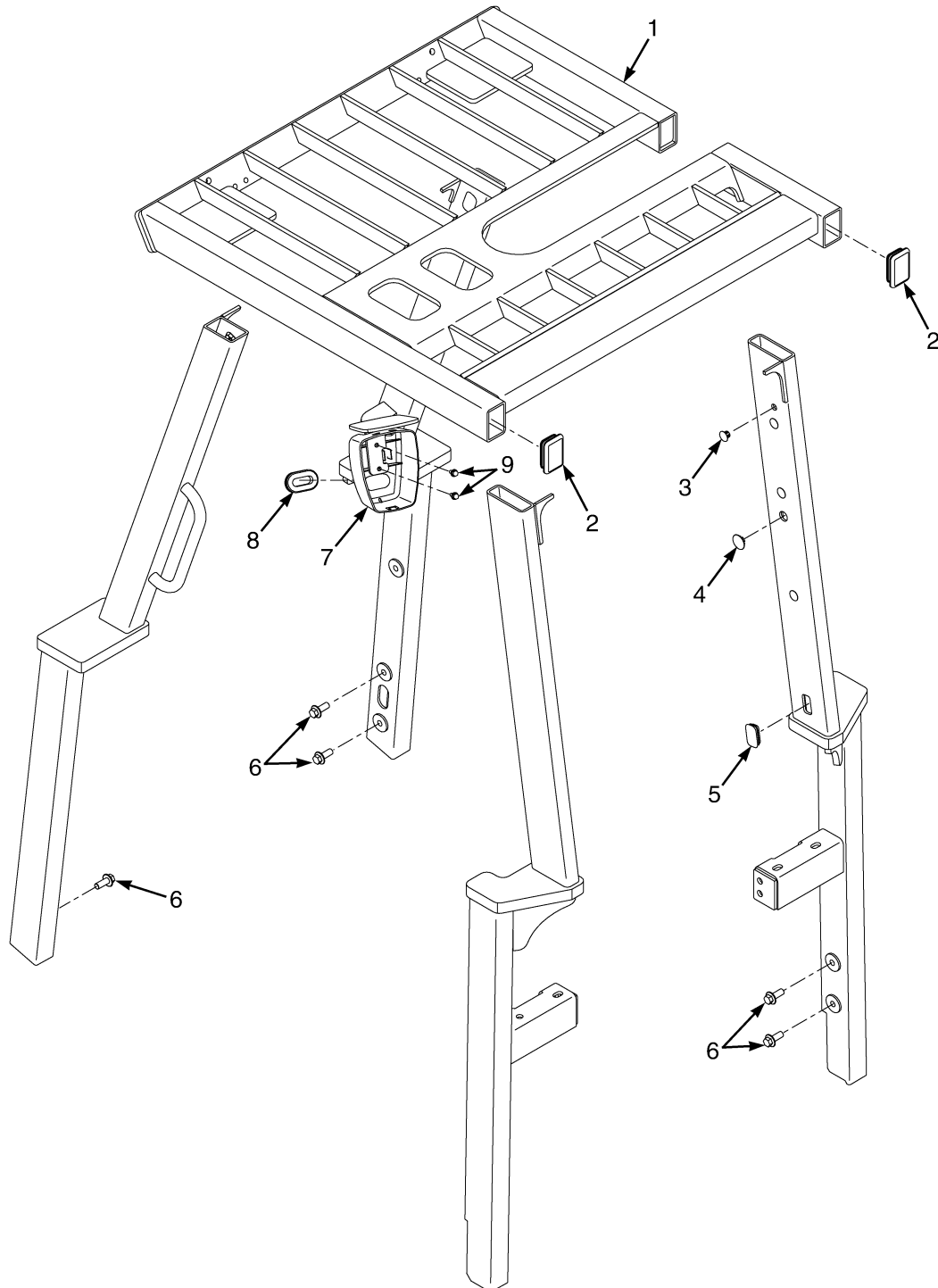
BP121278

OVERHEAD GUARD
FLAT (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	a 4045358	Overhead Guard (27 in. Battery Compartment) (Flat)	1
1	a 4045359	Overhead Guard (30 in. Battery Compartment) (Flat)	1
1	b 4045360	Overhead Guard (33 in. Battery Compartment) (Flat)	1
1	c 4045361	Overhead Guard (36 in. Battery Compartment) (Flat)	1
2	1528889	Capscrew	8
3	1531557	Insert	2
4	1676884	Handle	1
5	1586627	Capscrew	2
6	1698801	Plug (Yellow) (0.53 in)	13
7	1398009	Plug	2
8	4601386	Grommet	5
9	1363916	Plug	4
10	1702413	Plug (Yellow) (0.91 in)	1
11	1698800	Plug (Yellow) (0.39 in)	6
12	1687924	Display Cover Assembly	1
13	1704669	Screw	4
14	1510126	Screw (Button Head)	2
	d 4016103	Trim	2

FOOTNOTES:**a** E45-50XN**b** E45-60XN**c** E65XN**d** Not Illustrated

OVERHEAD GUARD (FIGURE 1-7) DRIVE-IN RACK (→ 10/2010)



BP120664

**OVERHEAD GUARD
DRIVE-IN RACK (→ 10/2010)**

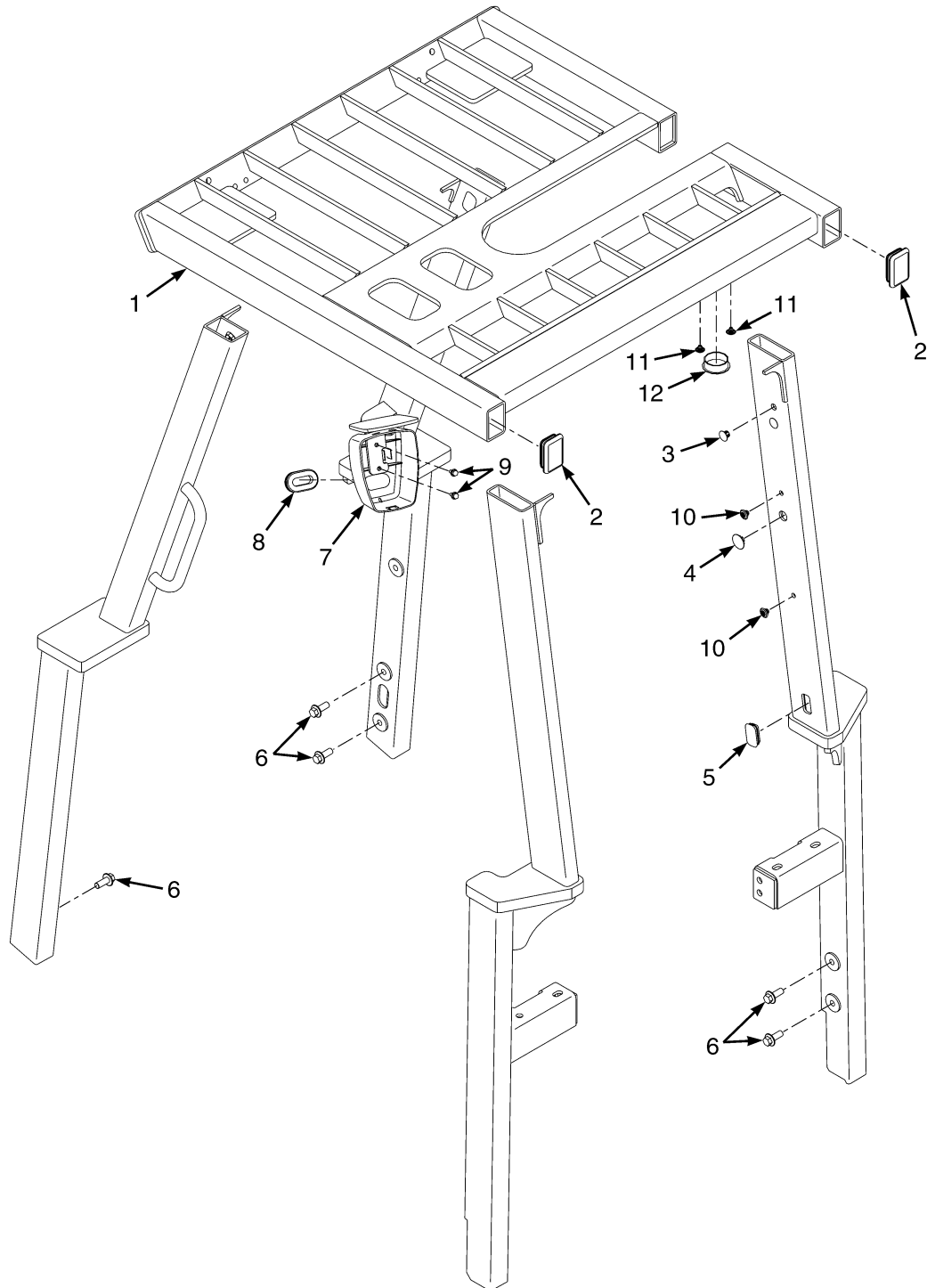
ITEM	PART NO.	DESCRIPTION	QTY
1	a 1673317	Overhead Guard (27 in. Battery Compartment)	1
1	a 1673318	Overhead Guard (30 in. Battery Compartment)	1
1	b 1673319	Overhead Guard (33 in. Battery Compartment)	1
1	d 1673320	Overhead Guard (36 in. Battery Compartment)	1
1	c 1673321	Overhead Guard (40 in. Battery Compartment)	1
2	4602870	Cap	2
3	1574301	Plug (Yellow)	12
4	1599415	Plug (Yellow)	1
5	2100206	Grommet	7
6	1528889	Capscrew	8
7	2105726	Cover , Display	1
8	1539584	Grommet	1
9	1527876	Capscrew	2
10	4601386	Grommet	3

FOOTNOTES:

a E45-50XN
b E45-60XN

c E65-70XN
d E65XN

OVERHEAD GUARD (FIGURE 1-8) DRIVE-IN RACK (10/2010 →)



BP121280

**OVERHEAD GUARD
DRIVE-IN RACK (10/2010 →)**

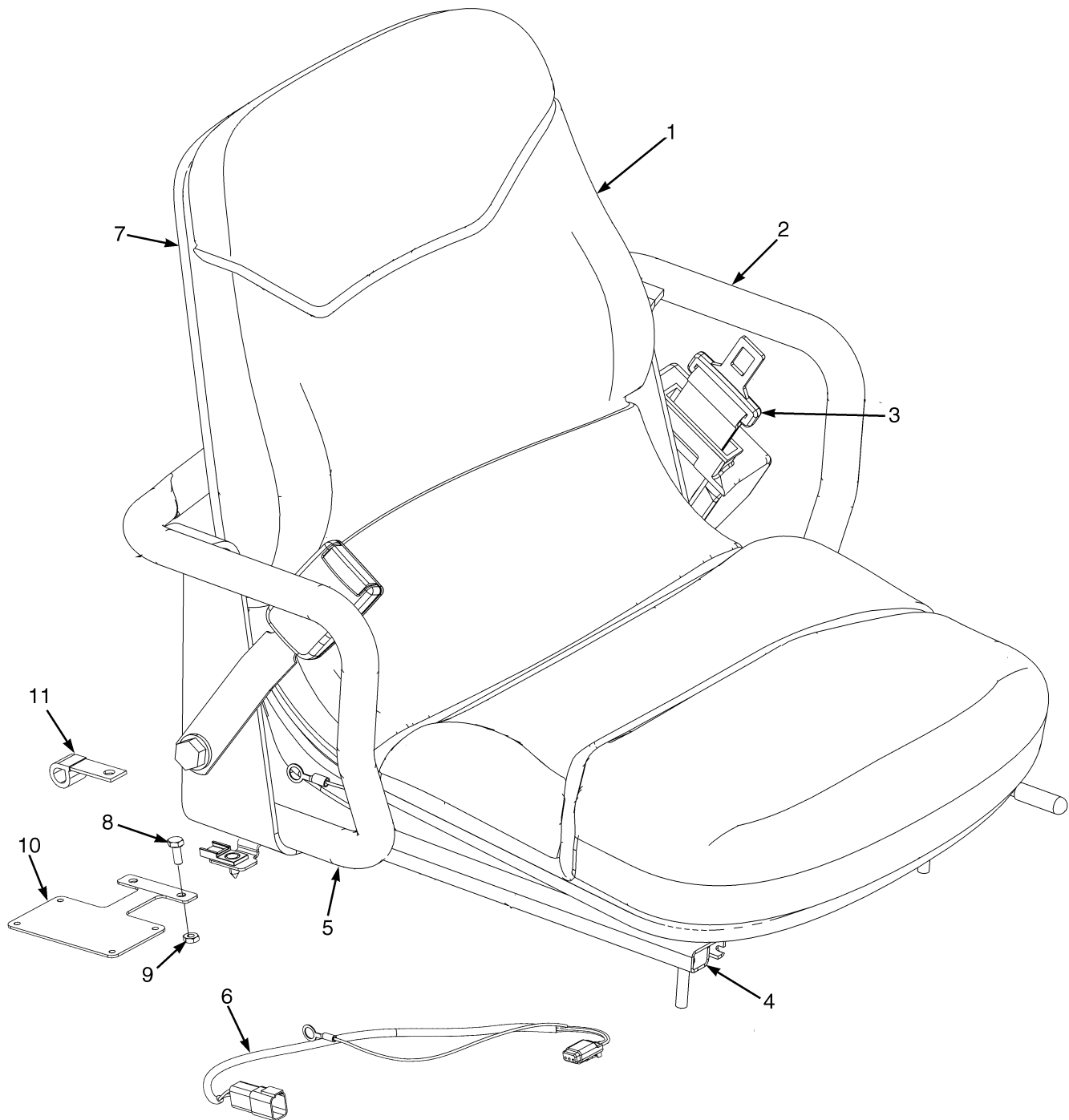
ITEM	PART NO.	DESCRIPTION	QTY
1	a 1673317	Overhead Guard (27 in. Battery Compartment)	1
1	a 1673318	Overhead Guard (30 in. Battery Compartment)	1
1	b 1673319	Overhead Guard (33 in. Battery Compartment)	1
1	d 1673320	Overhead Guard (36 in. Battery Compartment)	1
1	c 1673321	Overhead Guard (40 in. Battery Compartment)	1
2	4602870	Cap	2
3	1698801	Plug (Yellow) (0.53 in)	10
4	1702413	Plug (Yellow) (0.91 in)	1
5	2100206	Grommet	7
6	1528889	Capscrew	8
7	2105726	Cover , Display	1
8	1539584	Grommet	2
9	1527876	Capscrew	2
10	1698800	Plug (Yellow) (0.39 in)	2
11	1698799	Plug (Yellow) (0.26 in)	2
12	1398009	Plug	1

FOOTNOTES:

a E45-50XN
b E45-60XN

c E65-70XN
d E65XN

NON SUSPENSION SEAT (FIGURE 1-9) WITHOUT ELECTRONIC CONTROLS — WITH BOLT IN SENSOR



BP120459

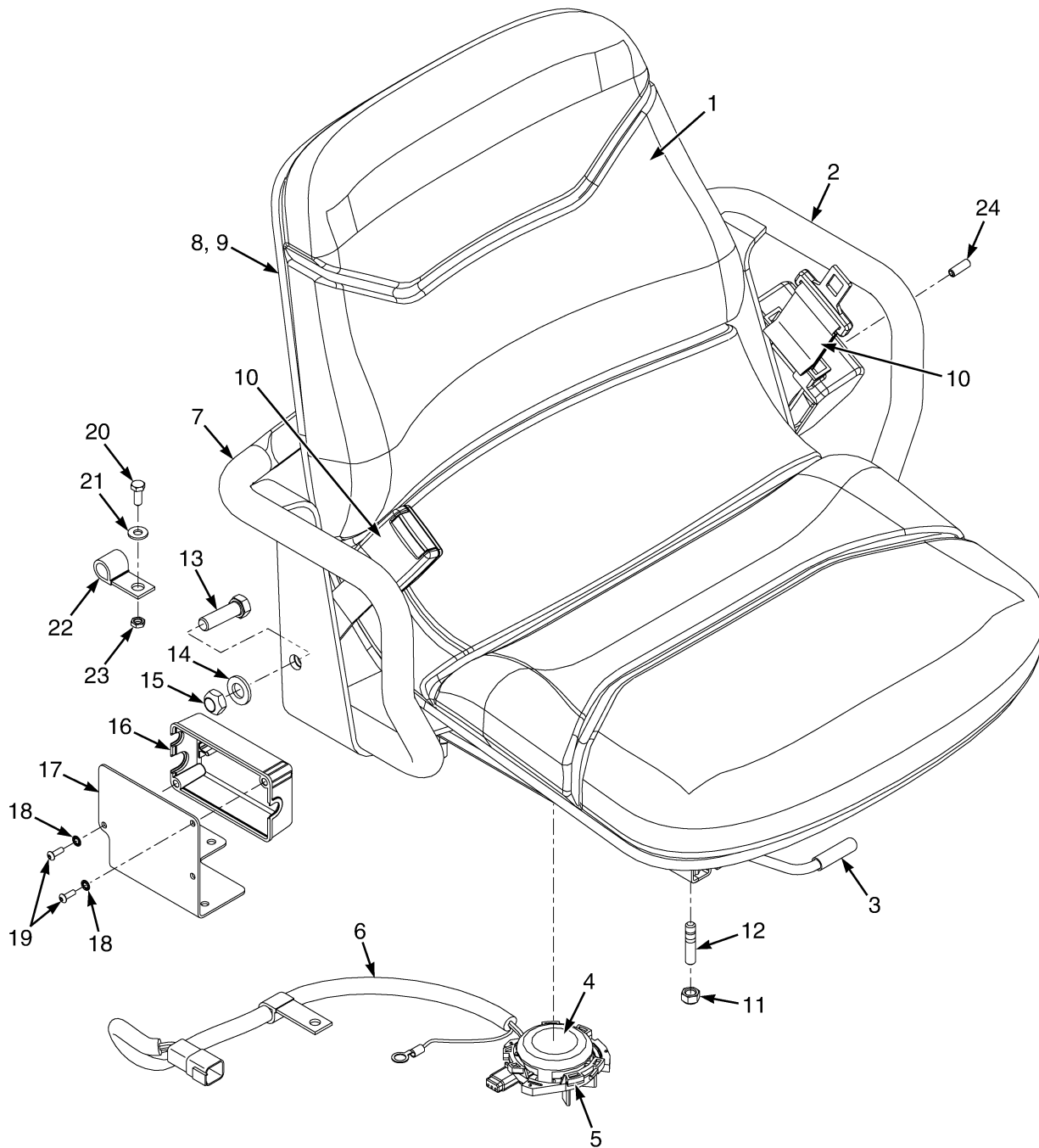
NON SUSPENSION SEAT
WITHOUT ELECTRONIC CONTROLS – WITH BOLT IN SENSOR

ITEM	PART NO.	DESCRIPTION	QTY
	2100697	Seat Assy (Vinyl)	1
	2100698	Seat Assy (Cloth)	1
1	1563351	Kit-Seat Cushion (Vinyl)	1
1	1563222	Kit-Seat Cushion (Cloth)	1
2	1563216	Hip Restraint (LH)	1
3	1598504	Kit-Seat Belt (Black)	1
3	1636120	Kit-Red Seat Belt High Visibility without Interlock	1
4	1690996	Kit-Seat Rail	1
5	19901	Roll Pin	1
5	1563217	Hip Restraint (RH)	1
6	1692919	Wire Harness	1
7	335988	Information Case	1
7	335991	Cover (Information Case)	1
8	292500	Capscrew	2
9	1593334	Nut	2
10	1705438	Bracket	1
11	272133	Clamp	1
	a 1563215	Sensor (Operator Presence)	1

FOOTNOTES:

a Not Illustrated, located under seat

NON SUSPENSION SEAT (FIGURE 1-10) WITHOUT ELECTRONIC CONTROLS — WITH SNAP IN SENSOR

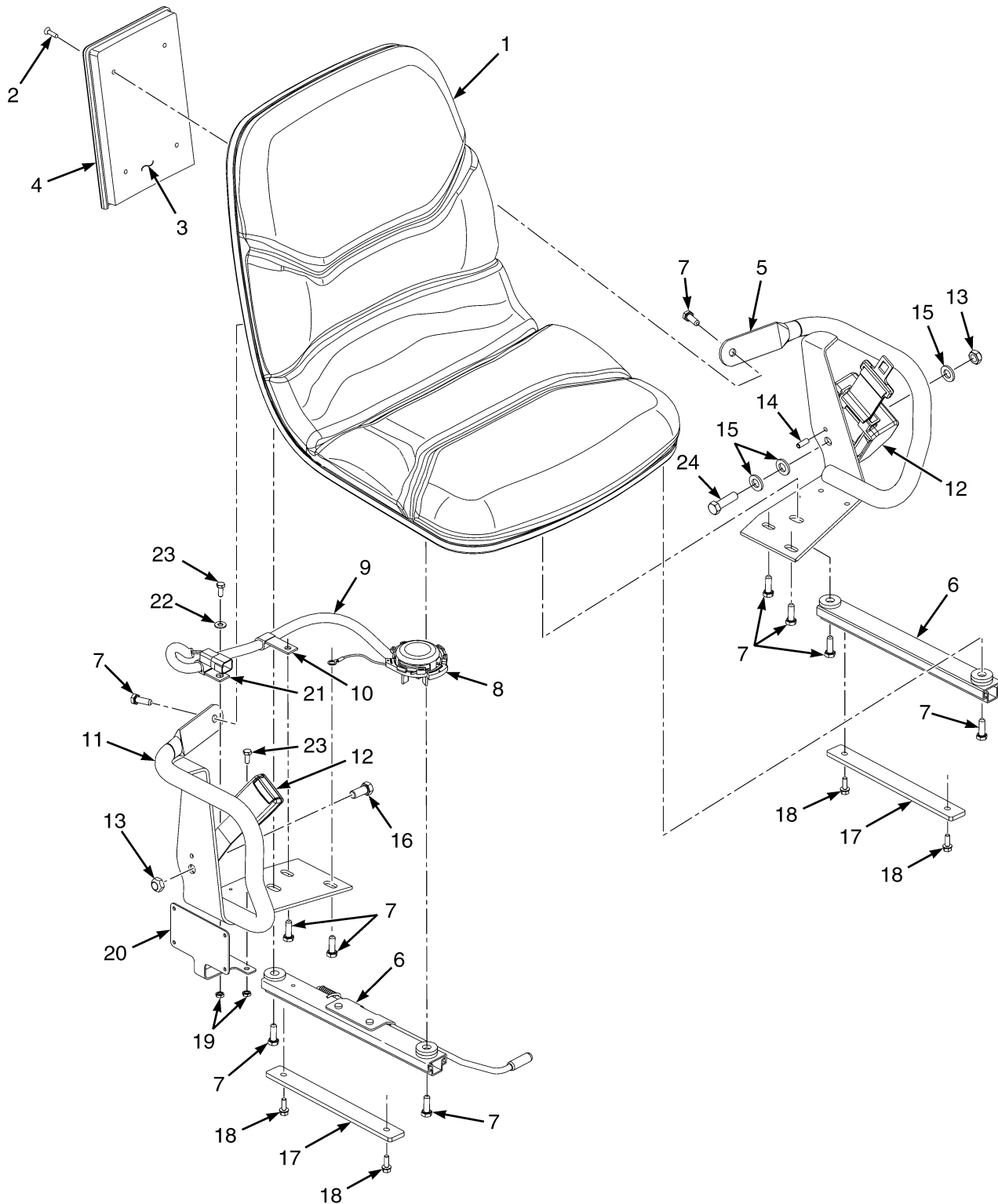


BP120693

NON SUSPENSION SEAT
WITHOUT ELECTRONIC CONTROLS – WITH SNAP IN SENSOR

ITEM	PART NO.	DESCRIPTION	QTY
	4603376	Seat-Non Suspension (Vinyl)	1
	4607331	Seat-Non Suspension (Cloth)	1
1	1563351	Kit-Seat Cushion (Vinyl)	1
1	1584113	Seat -Non Suspension (Cushion-Cloth)	1
2	1563216	Hip Restraint (LH)	1
3	1690996	Kit-Seat Rail	1
4	1709876	Sensor (Operator Presence)	1
5	4002682	Bracket (Operator Presence Sensor)	1
6	4013095	Wire Harness	1
7	1563217	Hip Restraint (RH)	1
8	1584060	Box (Book)	1
9	1482950	Cover	1
10	1598504	Kit-Seat Belt (Black)	1
10	1636120	Kit-Red Seat Belt High Visibility without Interlock	1
11	313828	Nut	4
12	1677286	Stud	4
13	16375	Capscrew	2
14	15177	Washer	3
15	221353	Locknut	2
16	2107969	Cover (Seat-Side Electrical)	1
17	4007891	Cover Plate	1
18	296357	Washer	2
19	1694830	Capscrew	2
20	292500	Capscrew	2
21	15127	Washer	1
22	272133	Clamp	1
23	1593334	Nut	2
24	19901	Roll Pin	1

NON SUSPENSION SEAT (FIGURE 1-11) WITHOUT ELECTRONIC CONTROLS — OPTIONAL



BP121235

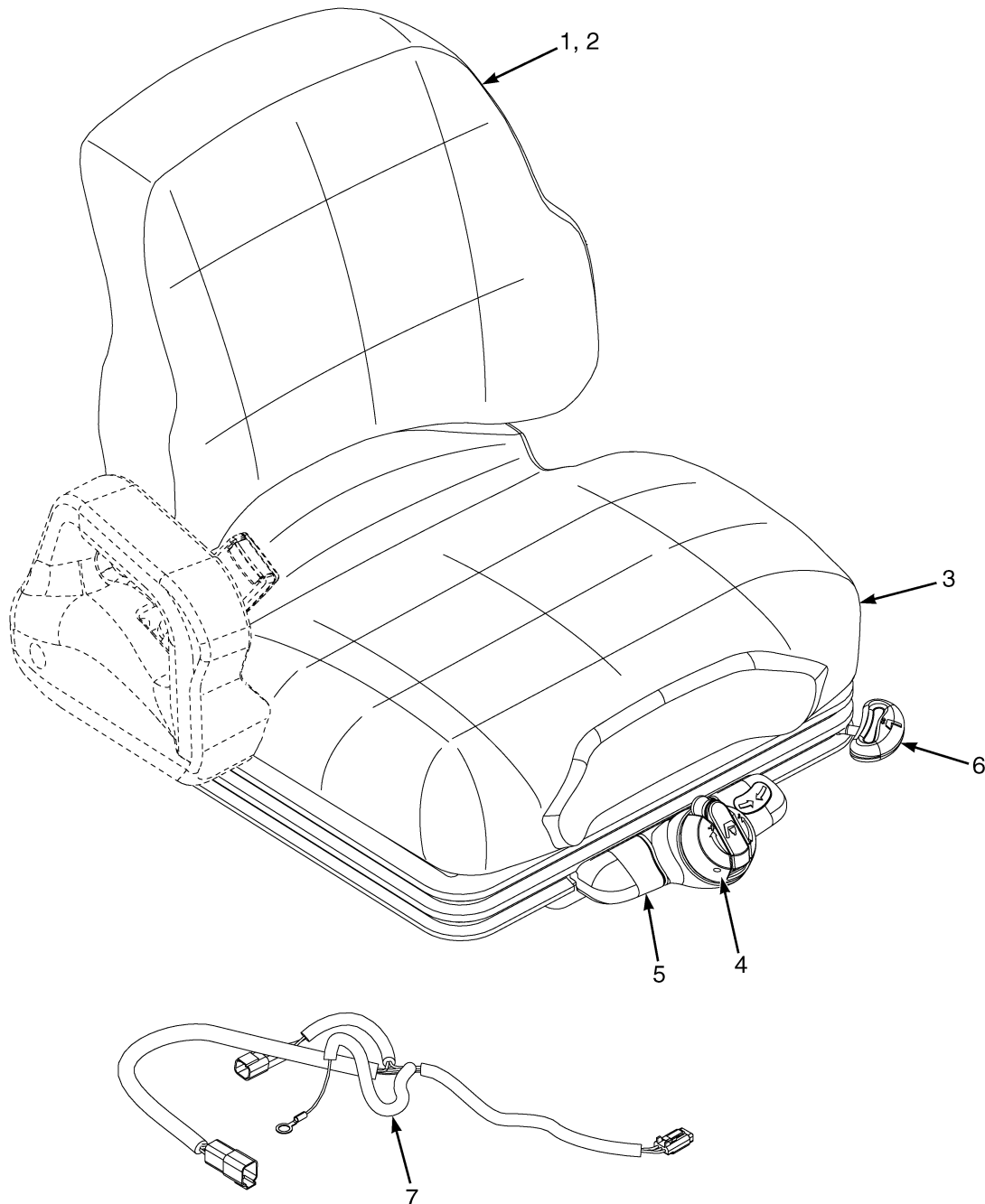
NON SUSPENSION SEAT WITHOUT ELECTRONIC CONTROLS – OPTIONAL

KEY:**A:** Vinyl Seat**B:** Cloth Seat

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4615812			
	4636318	Seat-Non Suspension Assy (Vinyl)	1	..
	4607331	Seat-Non Suspension (Cloth)	..	1
1	4615813	Seat-Non Suspension (Base)	1	..
1	1584113	Seat -Non Suspension (Base)	..	1
2	296463	Screw	4	..
2	.....	Screw	..	4
3	4030278	Box , Operator Manual (Operator Manual Storage)	1	..
3	1584060	Box (Book) (Operator Manual Storage)	..	1
4	4030279	Cover (Manual Storage Box)	1	..
4	1482950	Cover (Manual Storage Box)	..	1
5	.....	Hip Restraint (LH)	1	..
5	1563216	Hip Restraint (LH)	..	1
6	a 4618438	Seat Rail Assembly (Includes Locking and Slave Seat Rails) Assembly	1	..
6	a 1690996	Kit-Seat Rail	..	1
7	136749	Screw	10	..
7	.....	Screw	..	10
8	4615811	Sensor Assy (Operator Presence)	1	..
9	4615969	Sensor (Operator Presence System)	1	..
10	1479453	Clamp	1	..
11	.....	Hip Restraint (RH)	1	..
11	1563217	Hip Restraint (RH)	..	1
12	1636120	Kit-Red Seat Belt High Visibility without Interlock	1	1
12	1598504	Kit-Seat Belt (Black)	1	1
13	221353	Locknut	2	2
14	19901	Roll Pin	1	1
15	1581852	Washer	3	3
16	221530	Capscrew	1	1
17	c 4004912	Plate	2	2
18	c 1583611	Capscrew	4	4
18	b 1613324	Capscrew	4	4
19	1593334	Nut	2	2
20	1705438	Bracket	1	1
21	272133	Clamp	1	1
22	15127	Washer	1	1
23	292500	Capscrew	2	2
24	221536	Capscrew	1	1

FOOTNOTES:**a** Includes left and right hand sides**b** With Flat Overhead Guard Option**c** With Standard, Low, or Drive-In Rack Overhead
Guard Option

FULL SUSPENSION SEAT (FIGURE 1-12)
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL — SHEET 1 OF 4



BP121050

FULL SUSPENSION SEAT

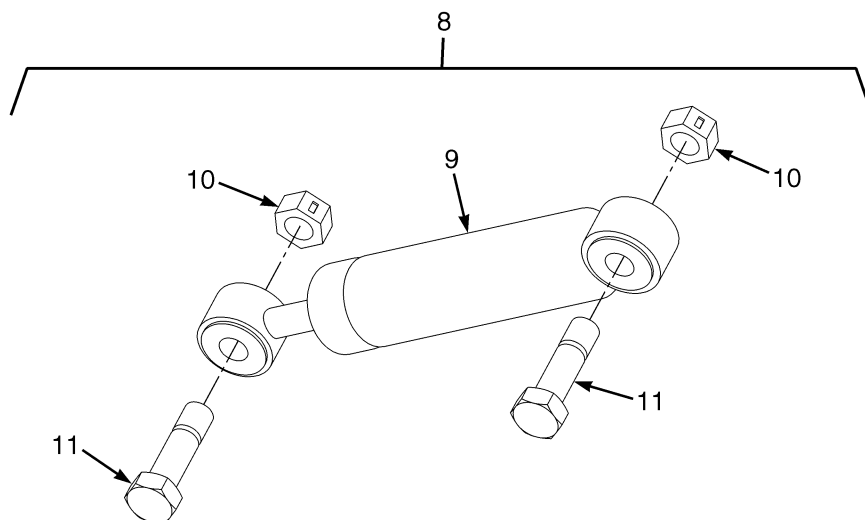
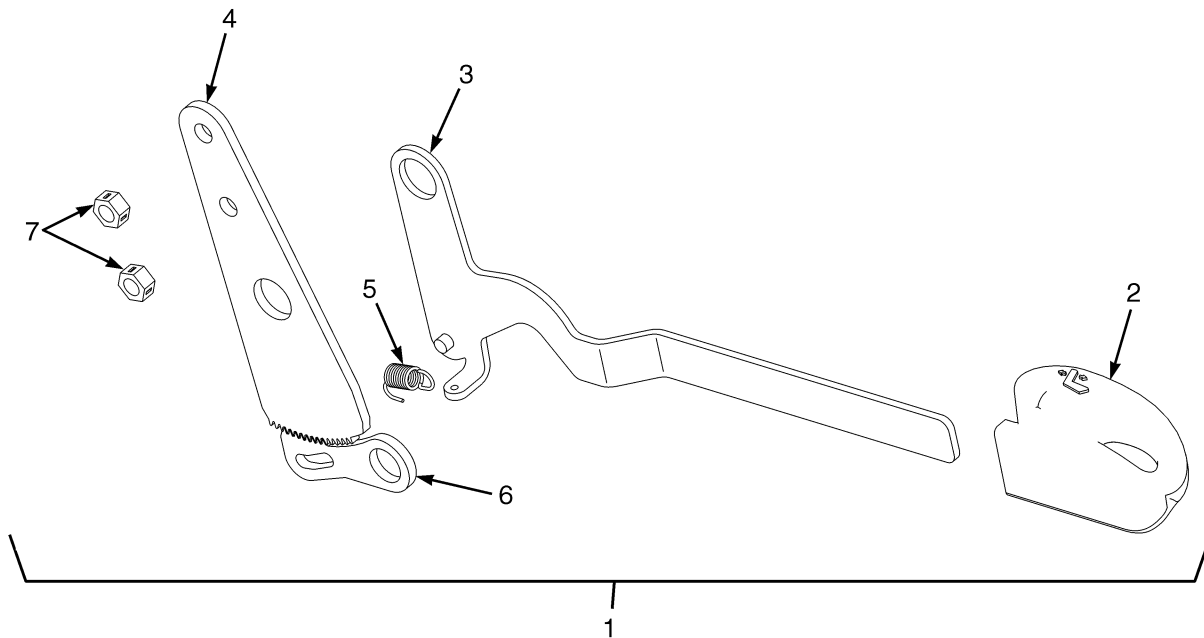
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL — SHEET 1 OF 4

ITEM	PART NO.	DESCRIPTION	QTY
	2101602	Seat-Full Suspension (Vinyl-Maximum Travel)	1
	2101603	Seat-Full Suspension (Cloth-Maximum Travel)	1
	2101604		
	4603384	Seat-Full Suspension (Vinyl) (Swivel)	1
	2101605		
	4603385	Seat-Full Suspension (Cloth) (Swivel)	1
	c 2101606	Seat-Full Suspension (Vinyl-Low Profile)	1
	c 2101607	Seat-Full Suspension (Cloth-Low Profile)	1
1	1703900	Kit-Cushion (Seat and Back, Cloth)	1
1	1703903	Kit-Cushion (Seat and Back, Vinyl)	1
2	1703901	Kit-Cushion (Back Cushion, Vinyl)	1
2	1703898	Kit-Cushion (Back Cushion, Cloth)	1
2	.....	Back Cushion	1
2	1584643	Screw	2
3	1703902	Kit-Seat Cushion (Vinyl)	1
3	1703899	Kit-Seat Cushion (Cloth)	1
3	.....	Seat Cushion	1
3	1637285	Spring	2
3	1513089	Cotter Pin (Hair)	2
4	1703892	Kit-Weight Adjuster	1
5	1703893	Kit-Service (Front Panel) (Non Swivel)	1
5	1703894	Kit-Service (Front Panel) (With Swivel)	1
6	1703904	Kit-Seat Rail	1
6	.....	Locking Rail	1
6	.....	Slave Rail	1
6	.....	Bolt	4
6	1367150	Nut	4
7	4013095	Wire Harness	1
	b 1470155	Information Case (Kit)	1
	b 4027341	Bracket (Angle Controller)	1
	b 4046492	Lever Spring Pull	1
	1563208	Sensor (Operator Presence)	1
	a 4036586	Kit -Seat Suspension without Swivel	1
	a 4036587	Kit -Seat Suspension with Swivel	1

FOOTNOTES:

- a** Also Includes Tether and 1703891 Kit-Recliner on Sheet 2 **c** With Restricted Suspension
- b** Not Illustrated

FULL SUSPENSION SEAT (FIGURE 1-13) RECLINER AND DAMPER KITS — SHEET 2 OF 4



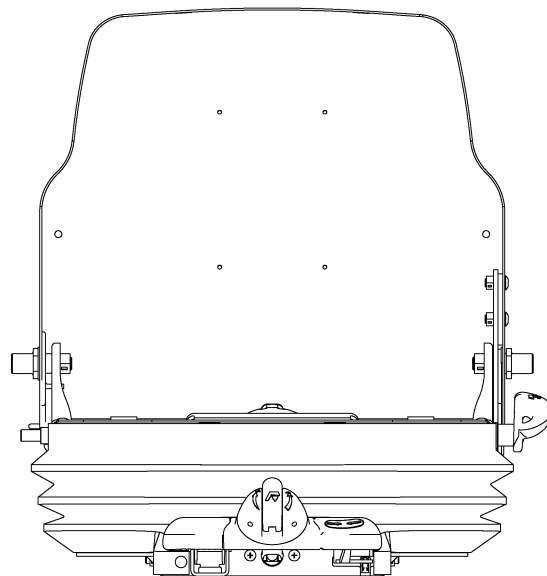
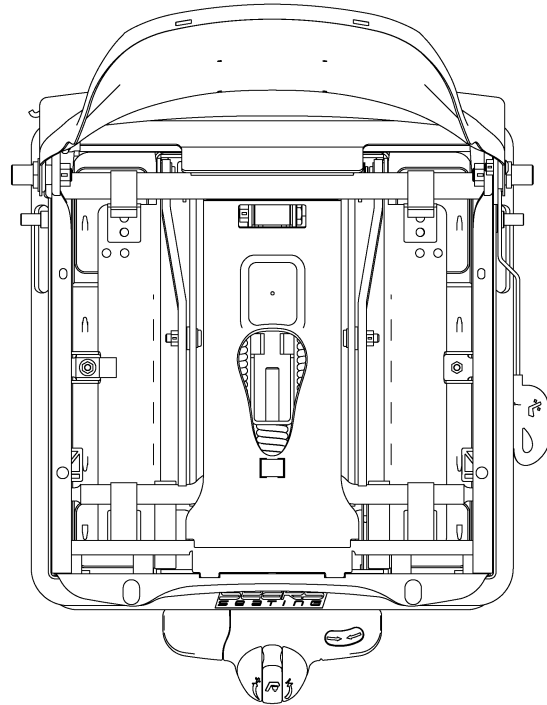
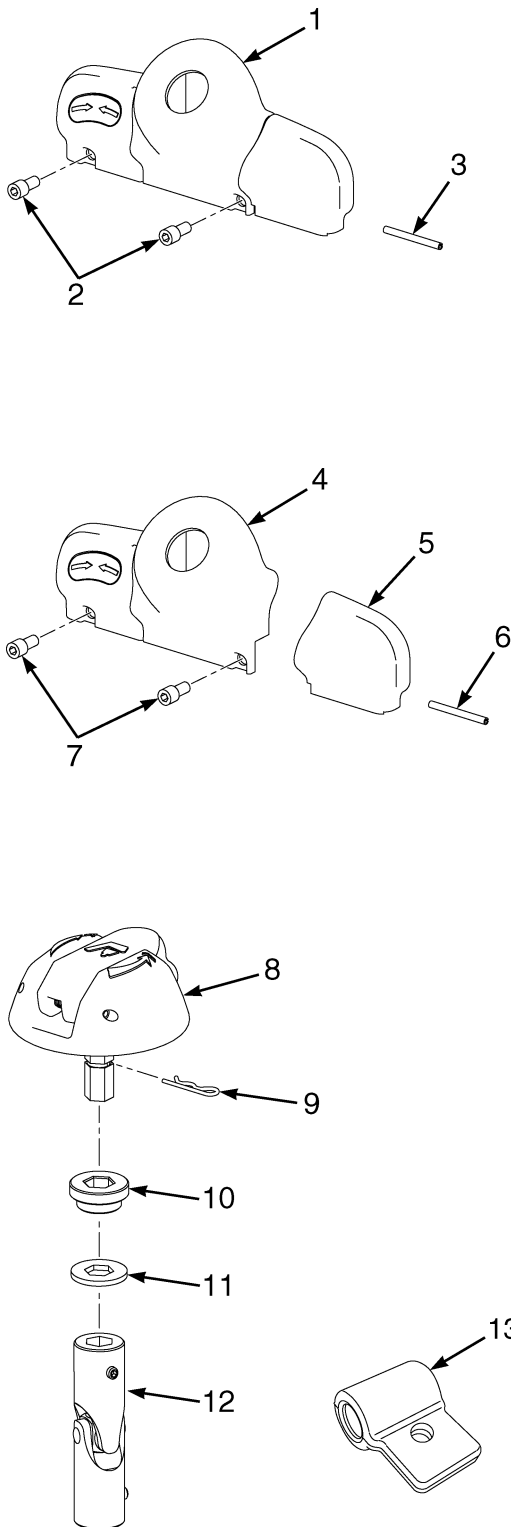
BP120646

**FULL SUSPENSION SEAT
RECLINER AND DAMPER KITS – SHEET 2 OF 4**

ITEM	PART NO.	DESCRIPTION	QTY
1	a b 1703891	Kit-Recliner (Back Seat Adjustment)	1
2	.....	Knob	1
3	.....	Lever	1
4	1482905	Plate	1
5	.....	Spring	1
6	1482906	Latch	1
7	1367150	Nut	2
8	a 1703890	Kit-Damper Service	1
9	1584632	Damper	1
10	1367150	Nut	2
11	1584638	Bolt	2

FOOTNOTES:**a** Included with Seat**b** Included with Seat and Non Swivel/Swivel Sets

FULL SUSPENSION SEAT (FIGURE 1-14) SERVICE KITS FOR NON SWIVEL AND SWIVEL — SHEET 3 OF 4

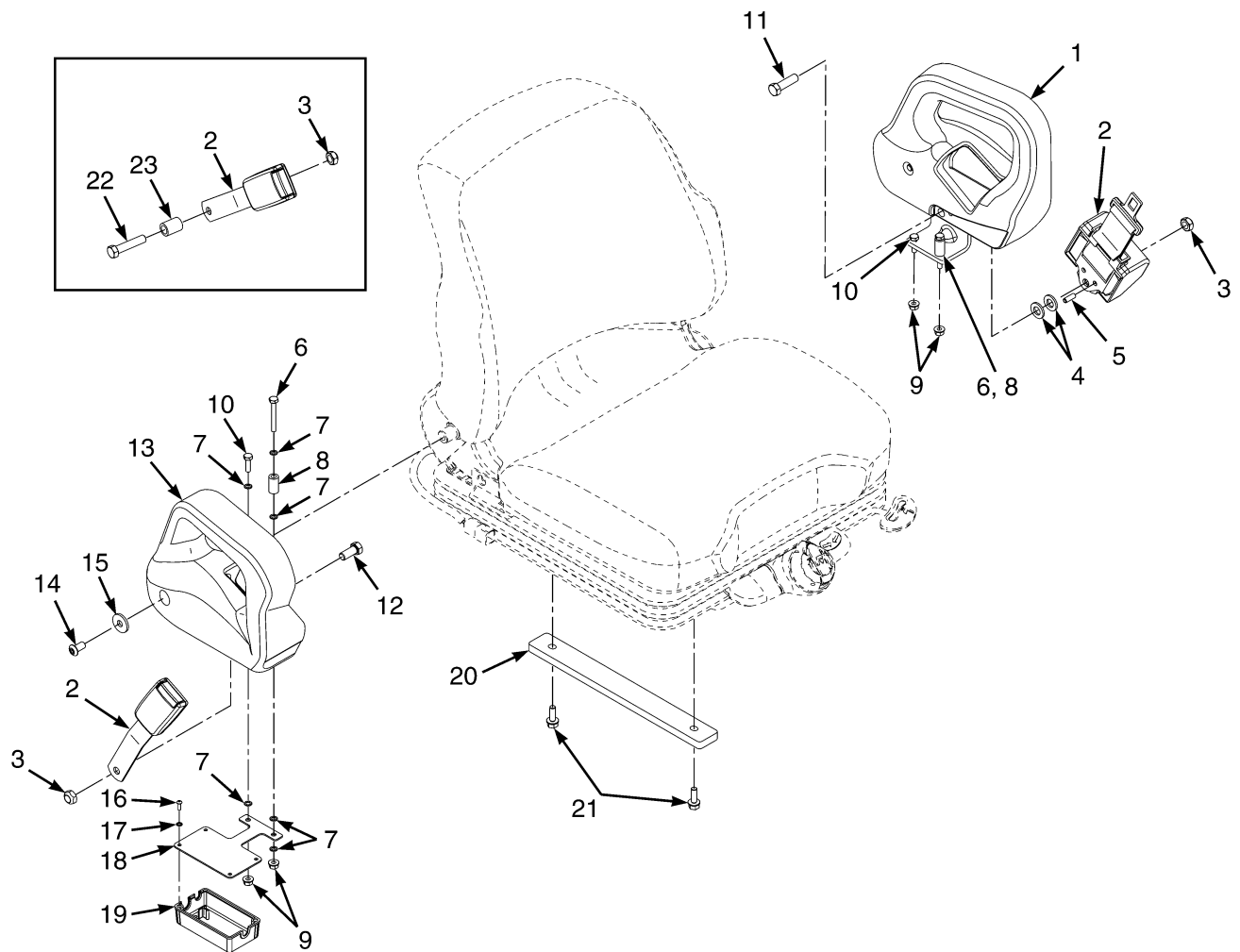


BP121221

FULL SUSPENSION SEAT
SERVICE KITS FOR NON SWIVEL AND SWIVEL – SHEET 3 OF 4

ITEM	PART NO.	DESCRIPTION	QTY
	4036586	Kit -Seat Suspension without Swivel	1
	4036587	Kit -Seat Suspension with Swivel	1
	4036590	Kit Non Swivel with Restricted Suspension	1
1	1703893	Kit-Service (Front Panel) (Non Swivel)	1
1	.....	Front Panel	1
2	.....	Capscrew	2
3	.....	Roll Pin	1
4	1703894	Kit-Service (Front Panel) (With Swivel)	1
4	.....	Front Panel	1
5	.....	Swivel Knob	1
6	.....	Roll Pin	1
7	.....	Capscrew	2
8	1703892	Kit-Weight Adjuster	1
8	.....	Knob	1
9	.....	Cotter Pin	1
10	.....	Bushing	1
11	.....	Washer	1
12	.....	U-Joint	1
13	4046492	Lever Spring Pull	2

SEAT ATTACHING PARTS (FIGURE 1-15) NOT INCLUDED WITH SEAT — SHEET 4 OF 4



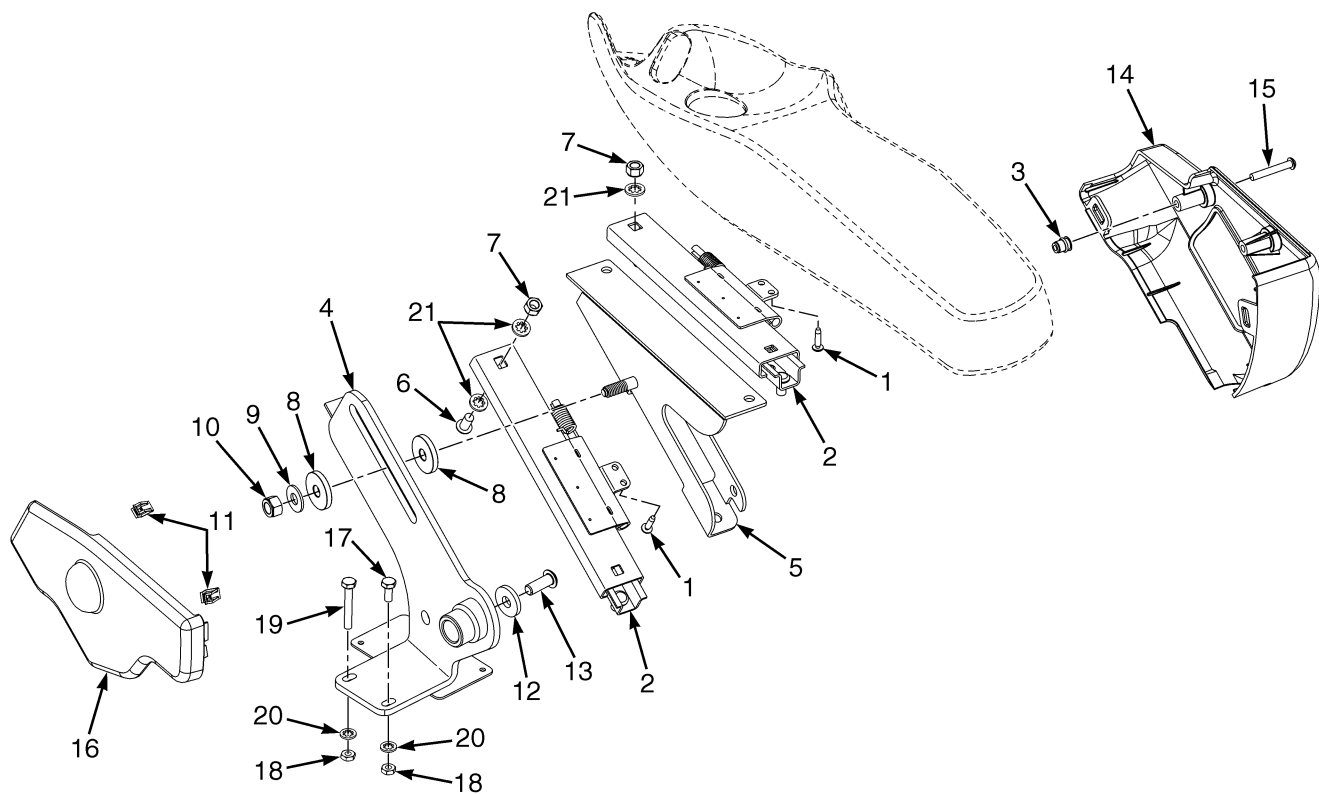
BP121243

SEAT ATTACHING PARTS
NOT INCLUDED WITH SEAT – SHEET 4 OF 4**KEY:****A: With Manual Levers****B: With Mini Levers**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2099952	Armrest (LH)	1	1
2	1598504	Kit-Seat Belt (Black)	1	1
2	1636120	Kit-Red Seat Belt High Visibility without Interlock	1	1
2	4053079	Seat Belt (High Visibility with Interlock)	1	1
3	221353	Locknut	2	2
4	15177	Washer	3	3
4	1581852	Washer (Optional)	3	3
5	19901	Roll Pin	1	1
6	18471	Capscrew	2	1
7	296379	Washer	6	..
8	4007318	Spacer (Frame)	2	1
9	169874	Nut	4	2
10	18462	Capscrew	2	1
11	16375	Capscrew	1	1
11	221536	Capscrew (Optional)	1	1
12	16375	Capscrew	1	..
12	221530	Capscrew (Optional)	1	..
13	2099951	Armrest (Right-Hand Side)	1	..
13	.....	Armrest (Electro-Hydraulic) (Right Hand Side)	..	1
13	4005010	Armrest (Slider for Mini Lever) (☞ Figure 1-17).....	..	1
13	.....	Mini-Lever Modules	..	1
14	18735	Screw	2	1
15	1512536	Washer	2	1
16	1694830	Capscrew	2	2
17	296357	Washer	2	2
18	1695723	Bracket	1	..
19	2107969	Cover (Seat-Side Electrical)	1	1
20	4004912	Plate	2	2
21	1583611	Capscrew	4	4
22	18562	Capscrew	..	1
22	221542	Capscrew (Optional)	..	1
23	1694700	Spacer	..	1
	a 114312	Strap Clamp	1	1
	1703895	Kit-Service Internal Tether-80 MM Travel	1	1
	1703896	Kit-Service Internal Tether-56 MM Travel	1	1
	1703897	Kit-Service Internal Tether-40 MM Travel	1	1

FOOTNOTES:**a** Not Illustrated

ARMREST SLIDER ASSEMBLY (FIGURE 1-16) (→ 9/2010)



HP121229

ARMREST SLIDER ASSEMBLY

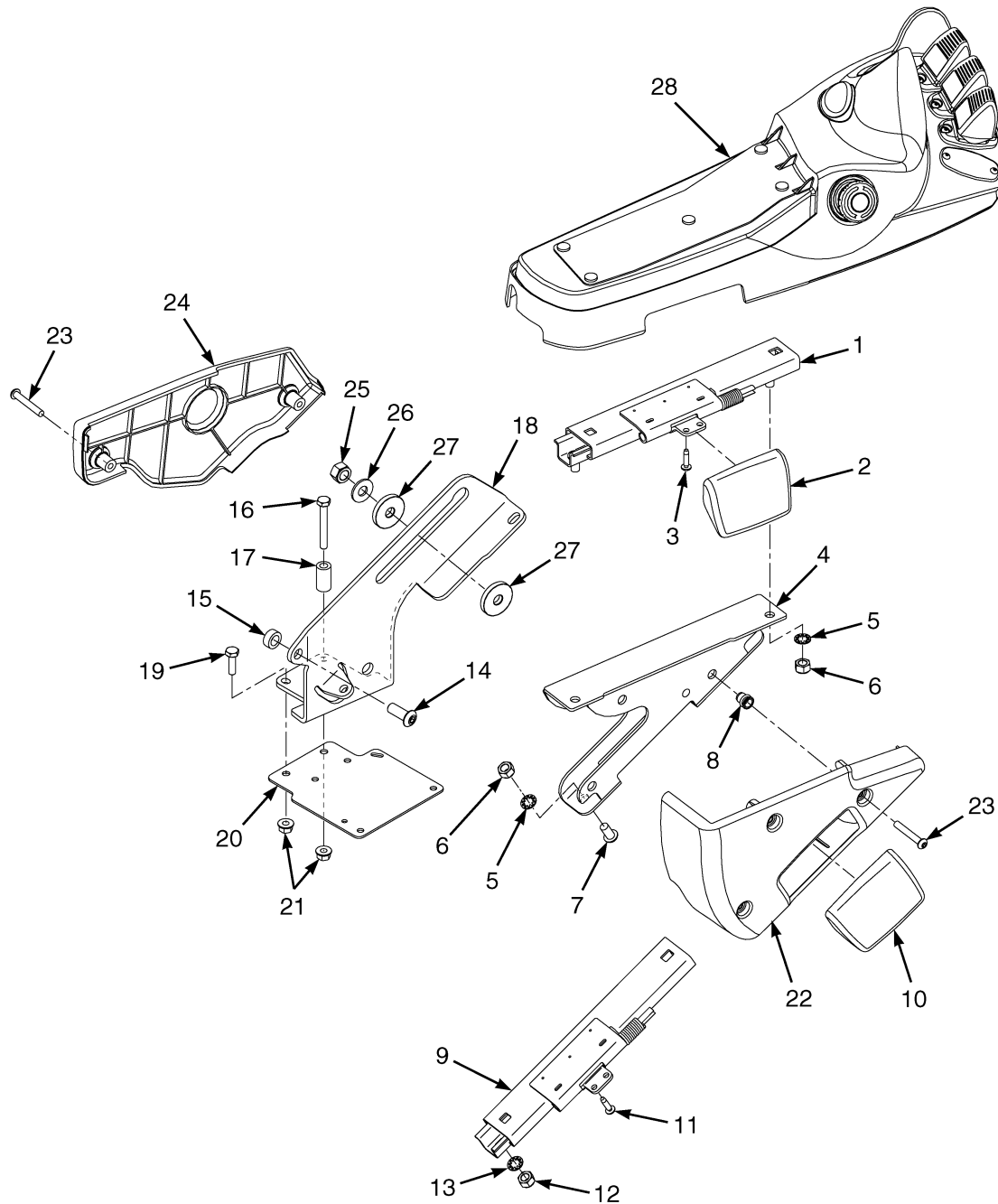
(→ 9/2010)

ITEM	PART NO.	DESCRIPTION	QTY
	1694521	Armrest (Right-Hand Side) Assembly	1
	.....	Armrest (Handle Slide Assy-Upper)	1
	.....	Armrest (Handle Slide Assy-Lower)	1
	a 1655865	Handle (Slider)	2
1	227157	Screw	4
2	1661511	Armrest (Slider)	2
3	1531558	Insert	3
4	1661509	Bracket Wldmt	1
5	4007052	Bracket Wldmt	1
6	296165	Capscrew	2
7	313828	Nut	6
8	1650640	Washer	2
9	320160	Washer	1
10	316826	Nut	1
11	2065667	Clip	2
12	1572889	Washer	1
13	18738	Capscrew	1
14	4603492	Cover	1
15	2062875	Capscrew	3
16	4603493	Cover	1
17	18462	Capscrew	1
18	169874	Nut	2
19	18471	Capscrew	1
	a 296380	Washer (Star)	1
	a 296360	Washer (Star)	6
	a 296166	Capscrew	2
	a	Mini-Lever Controls	1

FOOTNOTES:**a** Not Illustrated

ARMREST SLIDER ASSEMBLY (FIGURE 1-17)

(9/2010 →)



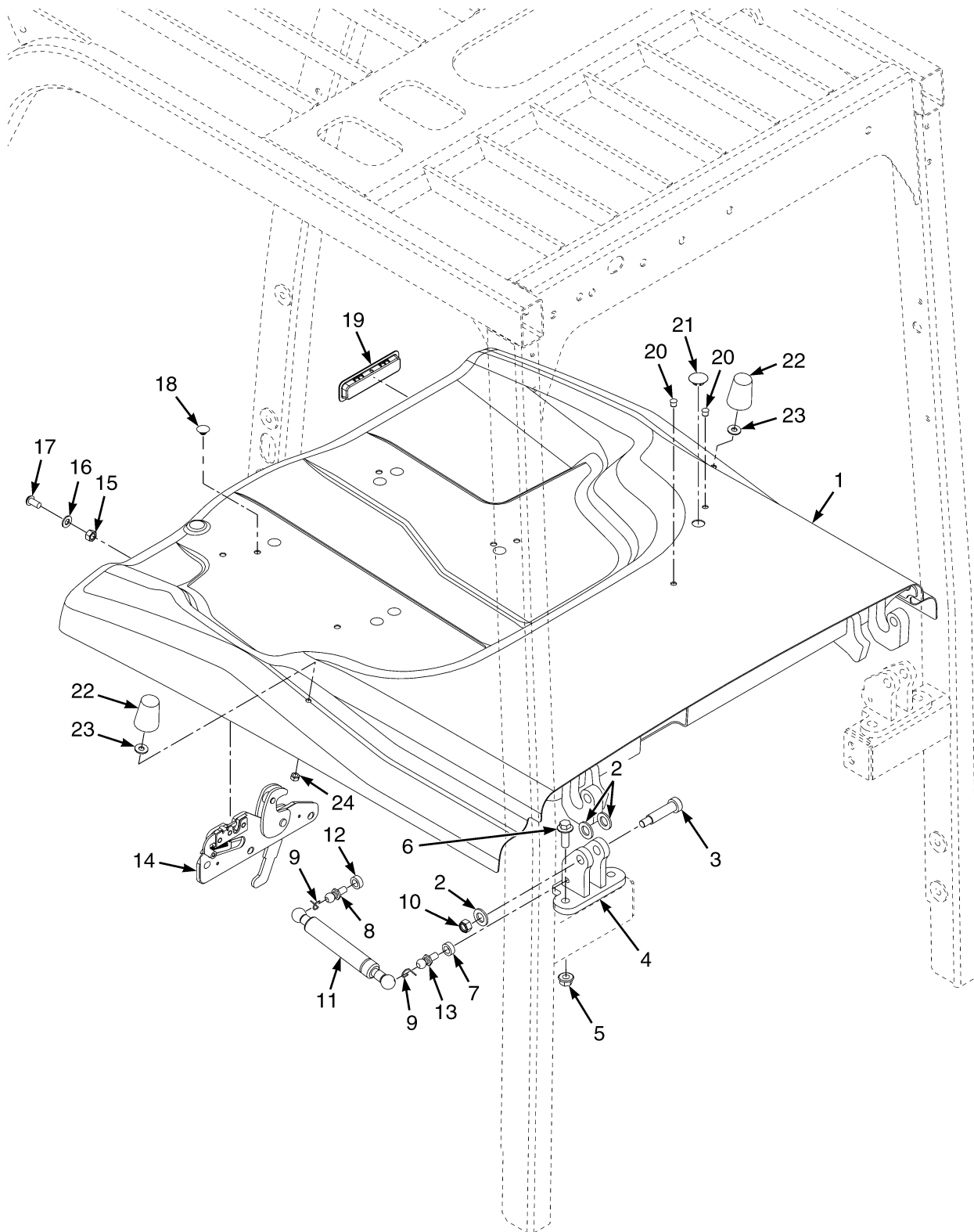
BP120759

ARMREST SLIDER ASSEMBLY

(9/2010 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4005010	Armrest (Slider for Mini Lever)	1
1	.....	Armrest (Handle Slide - Upper)	1
1	1661511	Armrest (Slider)	1
2	1655865	Handle (Slider)	1
3	227157	Screw	2
4	4007052	Bracket Wldmt	1
5	296360	Washer	4
6	313828	Nut	4
7	296165	Capscrew	2
8	1531558	Insert	3
9	.....	Armrest (Handle Slide Assy)	1
9	1661511	Armrest (Slider)	1
10	1655865	Handle (Slider)	1
11	227157	Screw	2
12	313828	Nut	2
13	296360	Washer	2
14	18738	Capscrew	1
15	4007319	Spacer	1
16	18471	Capscrew	1
17	4007318	Spacer	1
18	4004775	Bracket	1
19	18462	Capscrew	1
20	4004776	Cover Plate	1
21	169874	Nut	2
22	4603492	Cover	1
23	2062875	Capscrew	5
24	4603493	Cover	1
25	316826	Nut	1
26	320160	Washer	1
27	1650640	Washer	2
28	.....	Mini-Lever Control Arm	1

HOOD (FIGURE 1-18)



BP121272

HOOD**KEY:****A: E Hood Group****B: EE Hood Group**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1657579	Hood (27 in. Battery Compartment)	1	..
1	4062940	Hood (30 in. Battery Compartment)	1	..
1	4062941	Hood (33 in. Battery Compartment)	1	..
1	1657582	Hood (36 in. Battery Compartment)	1	..
1	1657583	Hood (40 in. Battery Compartment)	1	..
1	1699252	Hood (27 in. Battery Compartment)	..	1
1	4062942	Hood (30 in. Battery Compartment)	..	1
1	4062943	Hood (33 in. Battery Compartment)	..	1
1	1699255	Hood (36 in. Battery Compartment)	..	1
1	1699256	Hood (40 in. Battery Compartment)	..	1
2	320165	Washer	4	4
3	1661274	Bolt	2	2
4	4002296	Hinge	2	2
5	~~1370949~~			
	1528888	Nut (Shoulder)	4	4
6	1527888	Capscrew	4	4
7	i 1649134	Spacer (27 in. BC)	4	4
7	i 1649134	Spacer (30-40 in. BC)	2	2
8	1677113	Ball Stud (Alternate Part)	2	2
8	4020998	Ball Stud (27 in. BC)	2	2
8	4020999	Ball Stud (30-40 in. BC)	2	2
9	1677115	Clip	4	4
10	302402	Locknut	2	2
11	b 4002219	Gas Spring (Extra Light)	2	2
11	a 4002220	Gas Spring (Light)	2	2
11	c f 4002221	Gas Spring (Medium)	2	2
11	d 4002222	Gas Spring (Heavy)	2	2
11	e 4002223	Gas Spring (Extra Heavy)	2	2
12	1379488	Nut	2	2
13	1677113	Ball Stud (Alternate Part)	2	2
13	4020998	Ball Stud	2	2
14	4001872	Hood Latch	1	..
14	4027592	Latch Assembly	..	1
14	4006840	Lock	..	1
14	4004524	Key	..	2
14	4006839	Plate	..	1
14	4027591	Hood Latch	..	1
15	292655	Nut	3	3
16	320159	Washer	..	3
17	2028137	Capscrew	3	3
18	2027940	Plug	8	8
19	1661162	Handle (Hood)	2	2
20	1494888	Plug (Yellow) (36-40 in. BC)	2	2
21	1599415	Plug (Yellow) (36-40 in. BC)	1	1
22	1347088	Screw (Stop) (27-36 in. BC)	2	2
22	4015507	Bumper (40 in. BC)	2	2

HOOD

KEY:
A: E Hood Group

B: EE Hood Group

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
22	g h 1698796	Plug (0.39 Inch)	2	2
23	15175	Lockwasher (Stop Screw)	2	2
24	15055	Nut (Stop Screw)	2	2
	g h 2102184	Rubber Mount	2	2
	g h 1531557	Insert (Rubber Mount)	2	2

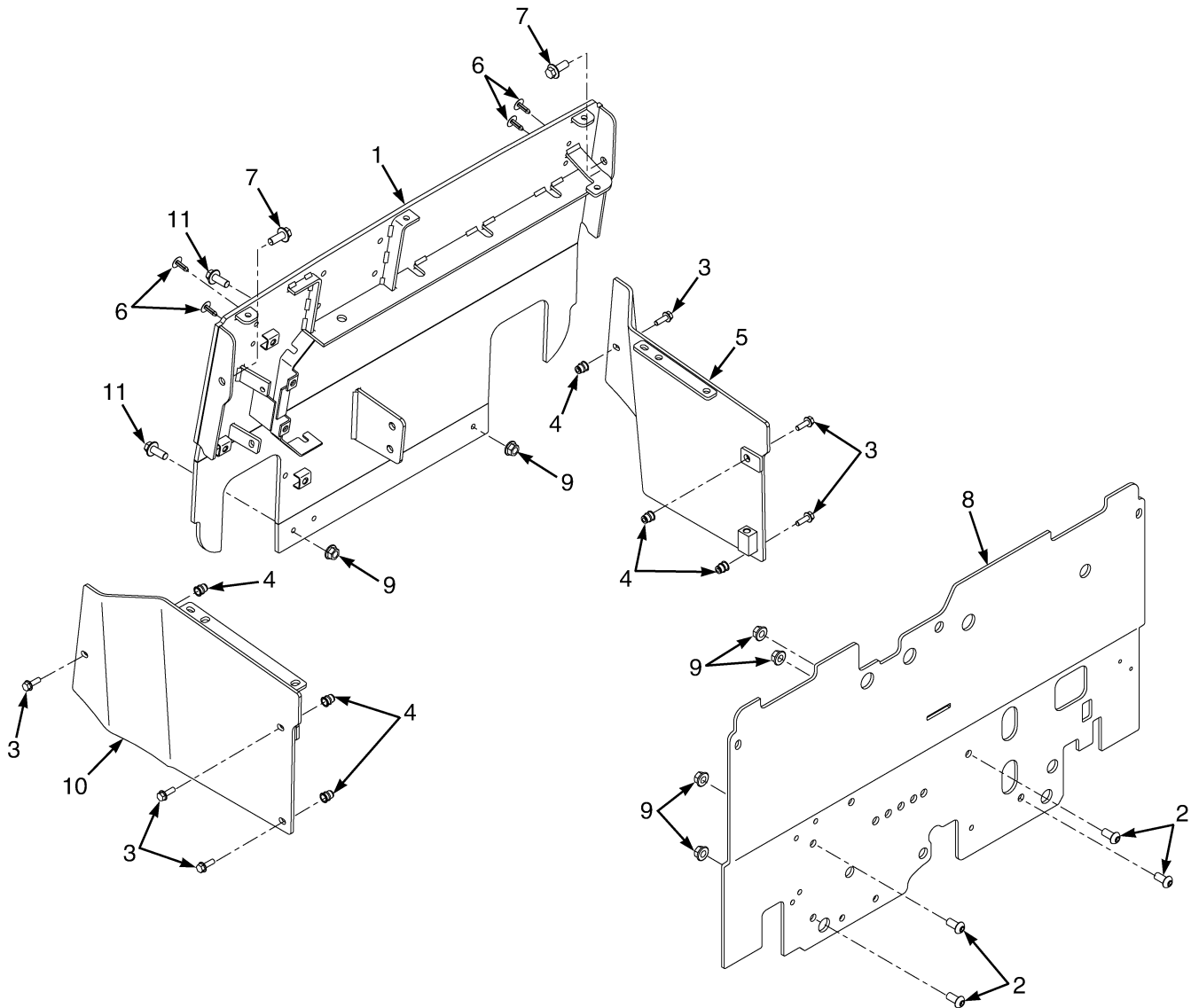
FOOTNOTES:

a 27 in. BC with Full Suspension Seat and 30-36 in. BC with Non Suspension Seat b 27 in. BC with Non Suspension Seat c 30-33 in. BC with Full Suspension Swivel Seat and 30 in. BC with Full Suspension Non-Swivel Seat d 36-40 in. BC with Full Suspension Non-Swivel Seat or 33-36 in. BC with Full Suspension Swivel Seat e 40 in. BC with Full Suspension Swivel Seat	f 40 in. BC with Non Suspension Seat g Drive-In Rack Overhead Guard h Not Illustrated i Used with 1677113 Ball Stud Only

NOTES

[illegible]

OPERATOR MODULE (FIGURE 1-19)



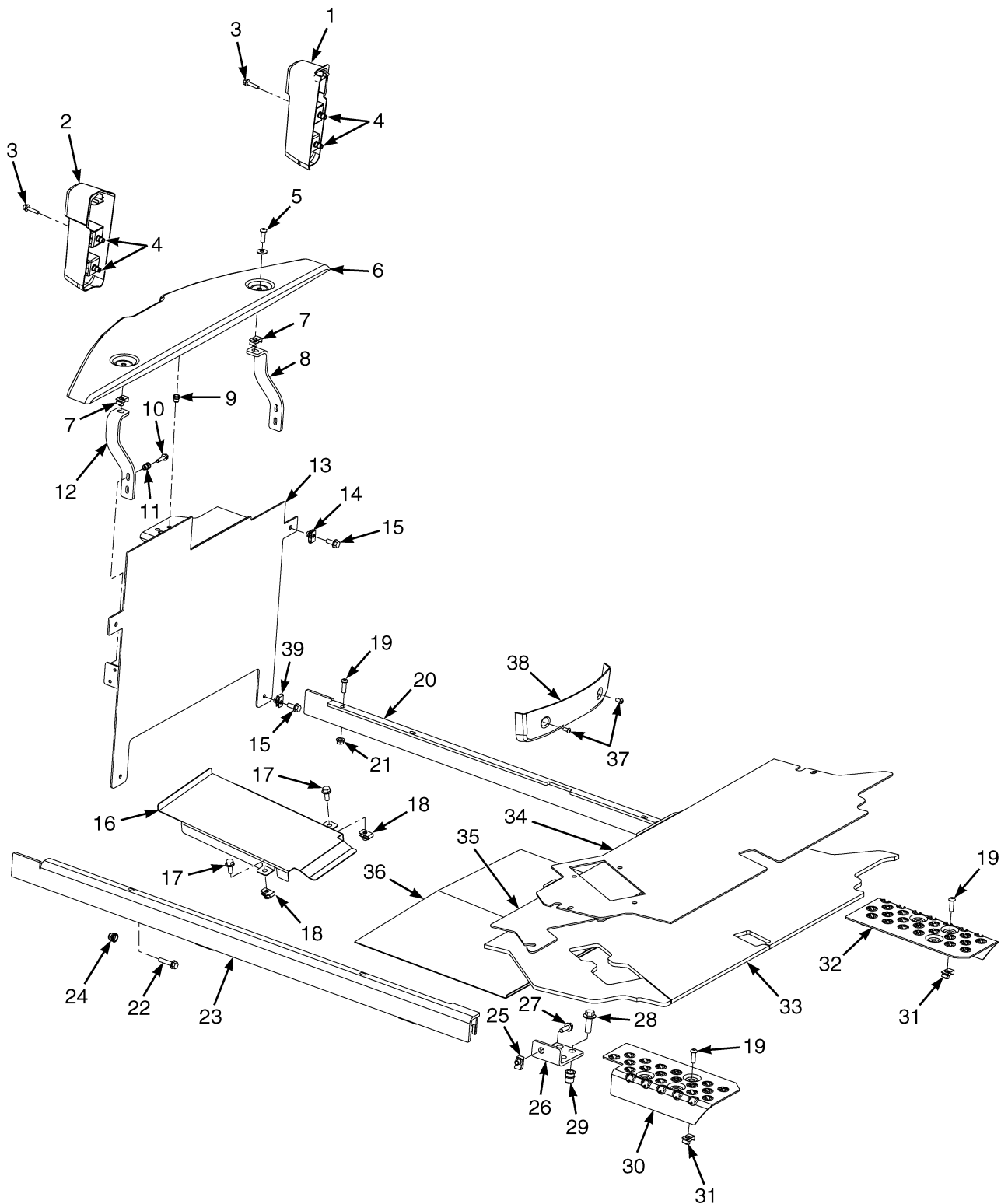
BP120431

OPERATOR MODULE

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1696914	Cowl	1
1	b 4097691	Cowl	1
2	296179	Capscrew	4
3	1698633	Capscrew	6
4	1530243	Insert	6
5	a 4045310	Side Plate Wldmt (RH)	1
5	b 4096860	Side Plate Wldmt (RH)	1
6	2090695	Fastener	4
6	1698795	Plug (Black) (Alternate Part)	4
7	1528889	Capscrew	2
8	a 4001077	Bulkhead	1
8	b 4096855	Bulkhead	1
9	~~1370949~~ 1528888	Nut (Shoulder)	6
10	a 4045313	Side Plate Wldmt (LH)	1
10	b 4096861	Side Plate Wldmt (LH)	1
11	1527888	Capscrew	2

FOOTNOTES:**a** → 11/2014**b** 11/2014 →

FLOORPLATES AND COVERS (FIGURE 1-20)



BP121163

FLOORPLATES AND COVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	2101032	Tail Light Base (LH)	1
2	2101031	Tail Light Base (RH)	1
3	1586495	Capscrew	4
4	1531001	Insert	4
4	1531558	Insert (Alternate Part)	4
5	1583611	Capscrew	2
6	1657360	Cover (Counterweight) (Without Rapid Charge Option)	1
6	a 4025662	Cover (Counterweight) (With Rapid Charge Option)	1
7	1398062	Nut (Fold Over)	2
8	1696561	Bracket (Counterweight Cover, LH) (Counterweight Cover LH)	1
9	1531558	Insert	6
10	1583611	Capscrew	4
10	1586627	Capscrew (Alternate Part)	4
11	1530243	Insert	4
12	1696562	Bracket (Counterweight Cover, RH) (Counterweight Cover RH)	1
13	4029275	Cover	1
14	1480237	Nut , Foldover	2
14	1398062	Nut (Fold Over) (Alternate Part)	2
15	1527880	Capscrew	4
15	296166	Capscrew (Alternate Part)	4
16	4000849	Cover (Power Cable)	1
17	296166	Capscrew	2
17	1527880	Capscrew (Alternate Part)	2
18	1480237	Nut , Foldover	2
19	370599	Capscrew	8
20	1677728	Side Plate (27 in. Battery Compartment LH)	1
20	1677729	Side Plate (30 in. Battery Compartment LH)	1
20	1677730	Side Plate (33 in. Battery Compartment LH)	1
20	1677731	Side Plate (36 in. Battery Compartment LH)	1
20	1677732	Side Plate (40 in. Battery Compartment LH)	1
21	~~1382472~~		
	1502543	Nut	2
22	1528482	Capscrew	1
23	b 1695643	Side Plate (27 in. Battery Compartment RH)	1
23	d 4014659	Side Plate (27 in. Battery Compartment RH)	1
23	b 1695644	Side Plate (30 in. Battery Compartment RH)	1
23	d 4014660	Side Plate (30 in. Battery Compartment RH)	1
23	b 1695645	Side Plate (33 in. Battery Compartment RH)	1
23	d 4014661	Side Plate (33 in. Battery Compartment RH)	1
23	b 1695646	Side Plate (36 in. Battery Compartment RH)	1
23	d 4014662	Side Plate (36 in. Battery Compartment RH)	1
23	b 1695648	Side Plate (40 in. Battery Compartment RH)	1
23	d 4014663	Side Plate (40 in. Battery Compartment RH)	1
24	1480237	Nut , Foldover	1
24	1531557	Insert (Alternate Part)	1
25	1398062	Nut (Fold Over)	1
26	4011624	Plate (Vertical Battery Removal Cover)	1
27	1510113	Capscrew	1
28	1527888	Capscrew	3
29	4013503	Insert	3
30	1654759	Step (RH)	1

FLOORPLATES AND COVERS

ITEM	PART NO.	DESCRIPTION	QTY
31	1398062	Nut (Fold Over)	6
32	1654758	Step (LH) (LH)	1
33	c 2102886	Floormat (Manual Hydraulic)	1
33	e 4605967	Floormat (Manual Hydraulic)	1
33	c 2102885	Floormat (E Hydraulic)	1
33	e 4605968	Floormat (E Hydraulic)	1
34	1651320	Floorplate	1
34	4045592	Floorplate (Alternate Part)	1
35	1670817	Floorplate (E Hydraulic)	1
35	1670816	Floorplate (Manual Hydraulic)	1
36	4006788	Cover (27 in. Battery Compartment)	1
36	4006789	Cover (30 in. Battery Compartment)	1
36	4006790	Cover (33 in. Battery Compartment)	1
36	4006791	Cover (36 in. Battery Compartment)	1
36	4006792	Cover (40 in. Battery Compartment)	1
37	1463910	Capscrew	2
38	2103714	Cover (Latch) (Standard)	1
38	2109763	Cover (Latch) (EE)	1
39	1480237	Nut , Foldover	2

FOOTNOTES:

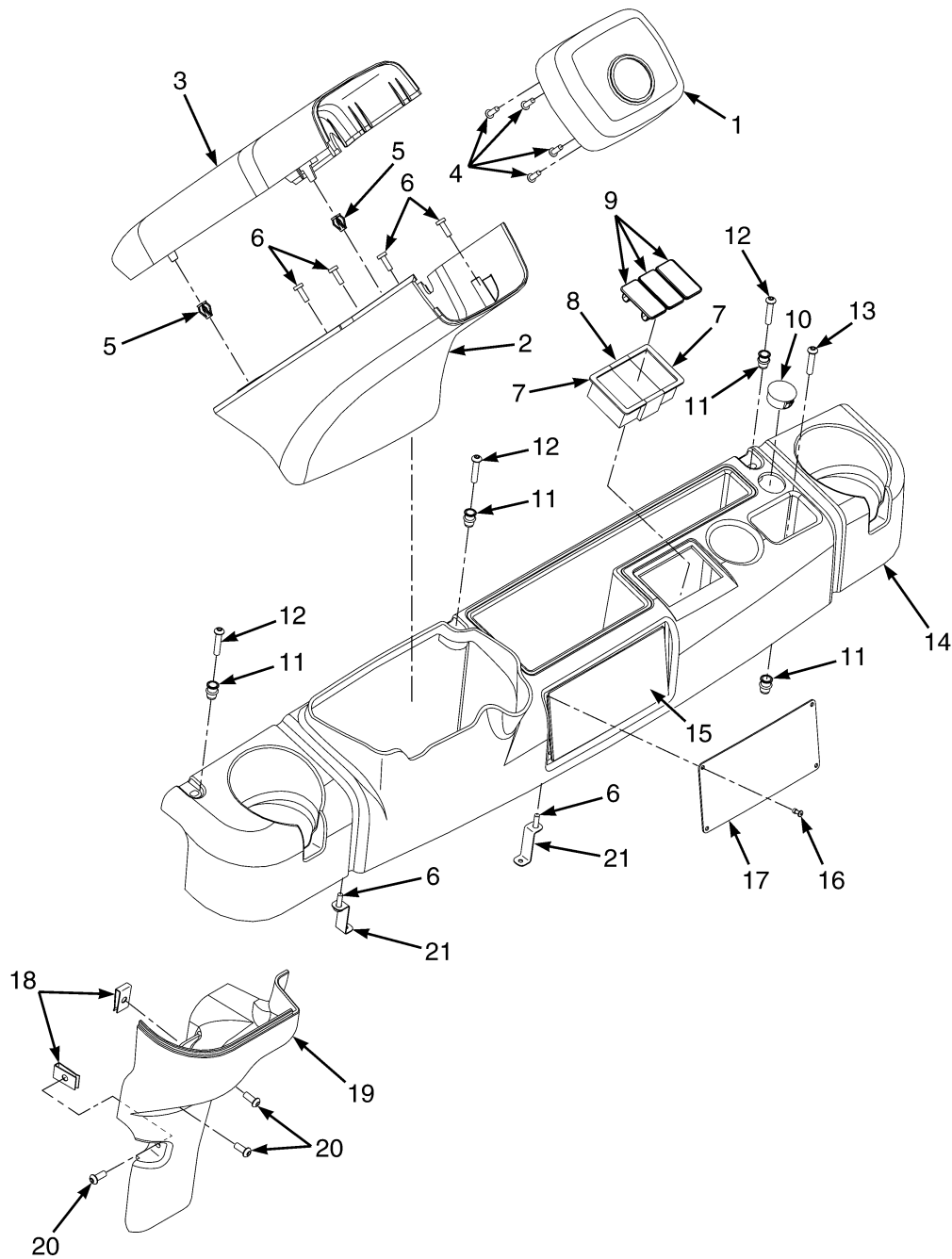
a Not Illustrated
b → 7/2010
c → S/N A268N03621H

d 7/2010 →
e S/N A268N03622H →

NOTES

[illegible]

DASH AND STEERING COLUMN COVERS (FIGURE 1-21) FIXED COLUMN

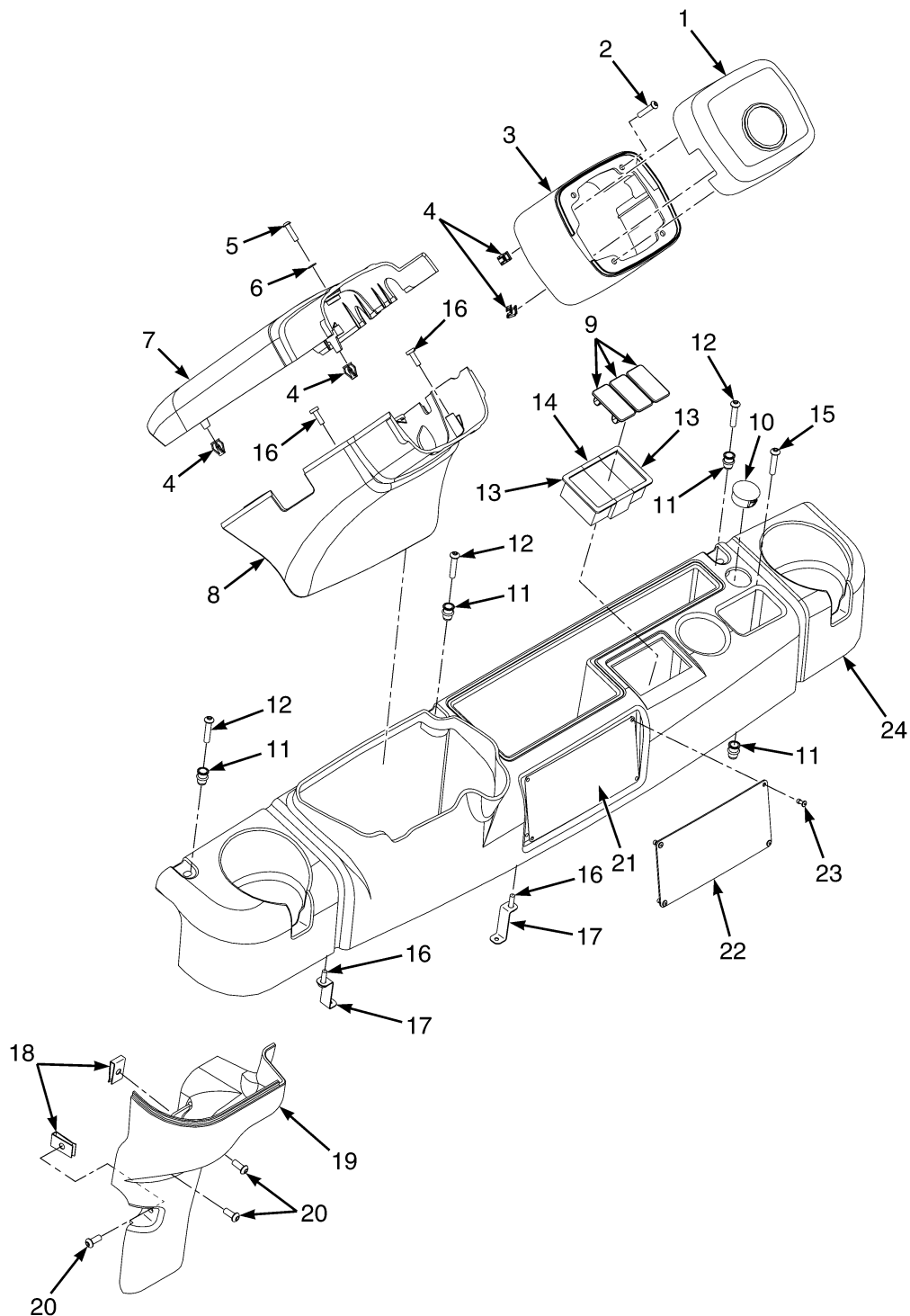


BP120942

**DASH AND STEERING COLUMN COVERS
FIXED COLUMN**

ITEM	PART NO.	DESCRIPTION	QTY
1	2101893	Cover , Steering Column Top	1
2	2101791	Cover , Lower (Steering Column)	1
3	2101792	Cover , Upper (Steering Column)	1
4	1378550	Capscrew	4
5	2065667	Clip	2
6	2027655	Screw	6
7	1382311	Panel , Plug (End)	2
8	1382312	Panel , Plug (Center)	1
9	1382313	Cover	3
10	1695158	Plug	1
11	1531001	Insert	4
12	4044968	Capscrew	3
13	2071260	Capscrew	1
14	2096648	Dash Panel	1
15	.....	Nameplate	1
16	170658	Rivet	4
17	389688	Nameplate Cover	1
18	325182	Nut , Foldover	3
19	2102271	Cover , Park Brake (With Manual Park Brake)	1
19	~~2102273~~ 4611114	Cover (With Auto Park Brake)	1
20	2022617	Capscrew	3
21	1695110	Bracket (Harness Support)	2

DASH AND STEERING COLUMN COVERS (FIGURE 1-22) TELESCOPIC COLUMN



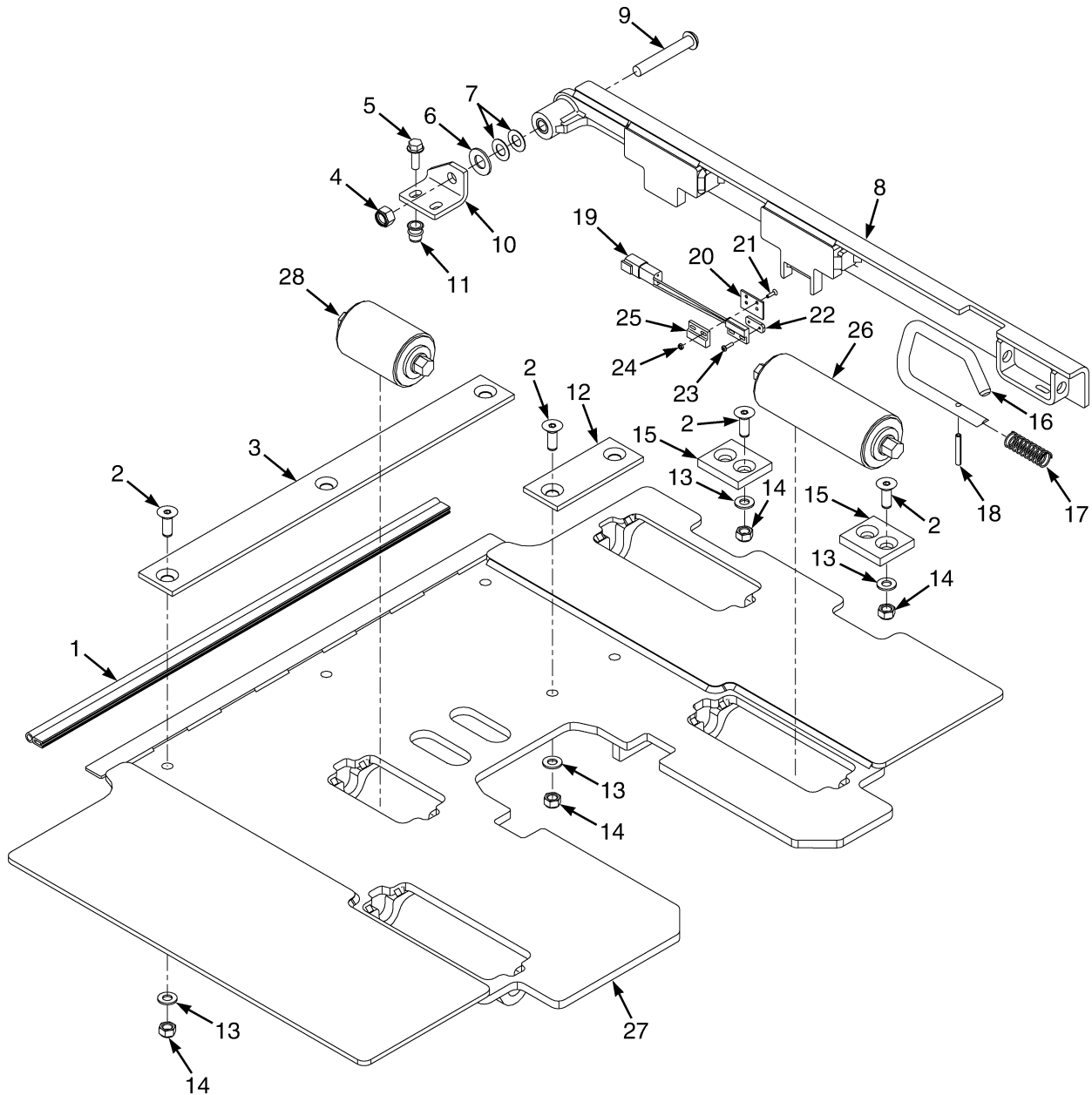
BP120943

**DASH AND STEERING COLUMN COVERS
TELESCOPIC COLUMN**

ITEM	PART NO.	DESCRIPTION	QTY
1	2101893	Cover , Steering Column Top	1
2	1378550	Capscrew	4
3	2101894	Cover (Steering Column-Telescopic)	1
4	2065667	Clip	4
5	296154	Capscrew	1
6	320155	Washer	1
7	2101790	Cover (Steering Column-Upper)	1
8	2101789	Cover (Steering Column-Lower)	1
9	1382313	Cover	3
10	1695158	Plug	1
11	1531001	Insert	4
12	4044968	Capscrew	3
13	1382311	Panel , Plug (End)	2
14	1382312	Panel , Plug (Center)	1
15	2071260	Capscrew	1
16	2027655	Screw	6
17	1695110	Bracket (Harness Support)	2
18	325182	Nut , Foldover	3
19	2102271	Cover , Park Brake (With Manual Park Brake)	1
19	~~2102273~~		
	4611114	Cover (With Auto Park Brake)	1
20	2022617	Capscrew	3
21	.....	Nameplate	1
22	389688	Nameplate Cover	1
23	170658	Rivet	4
24	2096648	Dash Panel	1

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-23)

(→ S/N A268N09901L)



BP120608

GATE AND BATTERY ROLLER WITH BATTERY SPACER

(→ S/N A268N09901L)

ITEM	PART NO.	DESCRIPTION	QTY
1	1638440	Trim Seal	1
2	296240	Capscrew	9
3	1677812	Pad	1
4	b 302402	Locknut	1
4	c 300937	Nut	1
4	c 296423	Washer (Not Illustrated)	1
5	b 1510113	Capscrew	2
5	c 1527888	Capscrew	3
6	1676500	Spring	1
7	1516799	Shim (0.031 Inch)	1
8	b 4001563	Gate (27 in. Battery Compartment)	1
8	c 4013571	Gate (27 in. Battery Compartment)	1
8	b 4001564	Gate (30 in. Battery Compartment)	1
8	c 4013572	Gate (30 in. Battery Compartment)	1
8	b 4001565	Gate (33 in. Battery Compartment)	1
8	c 4013573	Gate (33 in. Battery Compartment)	1
8	b 4001566	Gate (36 in. Battery Compartment)	1
8	c 4013574	Gate (36 in. Battery Compartment)	1
8	b 4001567	Gate (40 in. Battery Compartment)	1
8	c 4013575	Gate (40 in. Battery Compartment)	1
9	b 1479855	Capscrew	1
9	c 1510118	Capscrew	1
9	c 296423	Washer (Not Illustrated)	1
10	b 1693535	Plate	1
10	c 4058016	Plate	1
11	b 1530243	Insert	2
11	c 4013503	Insert	3
12	1701196	Pad (Battery Slide)	1
13	320159	Washer	9
14	302401	Locknut	9
15	1702584	Pad	2
16	1694227	Rod	1
17	2307799	Spring	1
18	19890	Roll Pin	1
19	1627835	Switch Assembly	1
20	1704522	Cover Plate	1
20	4006730	Cover Plate (Alternate Part)	1
21	296187	Capscrew	4
21	296185	Capscrew (Alternate Part)	4
22	1585765	Nut , nut plate	2
23	302010	Screw (M3 x .05 x 12)	2
23	302012	Screw (Alternate Part)	2
24	2074859	Nut	4
25	1565545	Magnet , Reed Switch	1
26	~~1677335~~		
	4046964	Roller (27 in. Battery Compartment)	3
26	~~1677335~~		
	4046964	Roller (33, 36 and 40 in. Battery Compartment)	5
26	~~1677335~~		
	4046964	Roller (30 in. Battery Compartment)	4

GATE AND BATTERY ROLLER WITH BATTERY SPACER (→ S/N A268N09901L)

ITEM	PART NO.	DESCRIPTION	QTY
27	4001261	Plate Wldmt (27 in. Battery Compartment)	1
27	4001262	Plate Wldmt (30 in. Battery Compartment)	1
27	4001263	Plate Wldmt (33 in. Battery Compartment)	1
27	4001264	Plate Wldmt (36 in. Battery Compartment)	1
27	4001265	Plate Wldmt (40 in. Battery Compartment)	1
28	~~1694655~~		
	4046965	Roller (30 and 40 in. Battery Compartment)	2
28	~~1694655~~		
	4046965	Roller (27, 33, 36 in. Battery Compartment)	1
	a 4007732	Shim	AR
	264134	Loctite	AR

FOOTNOTES:

a Not Illustrated

c 5/2010 →

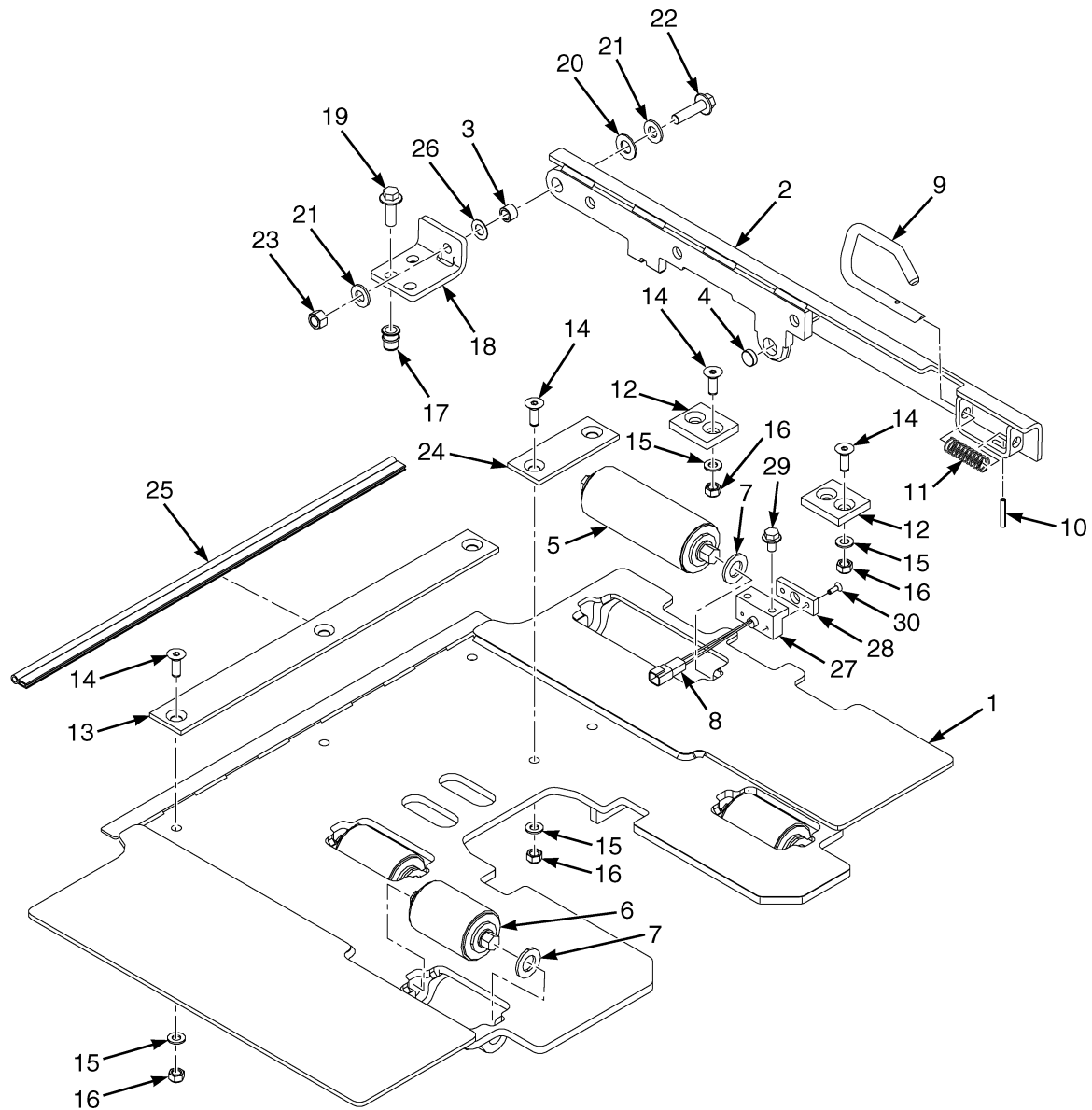
b → 5/2010

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-24)

27 INCH (S/N A268N09902L →)

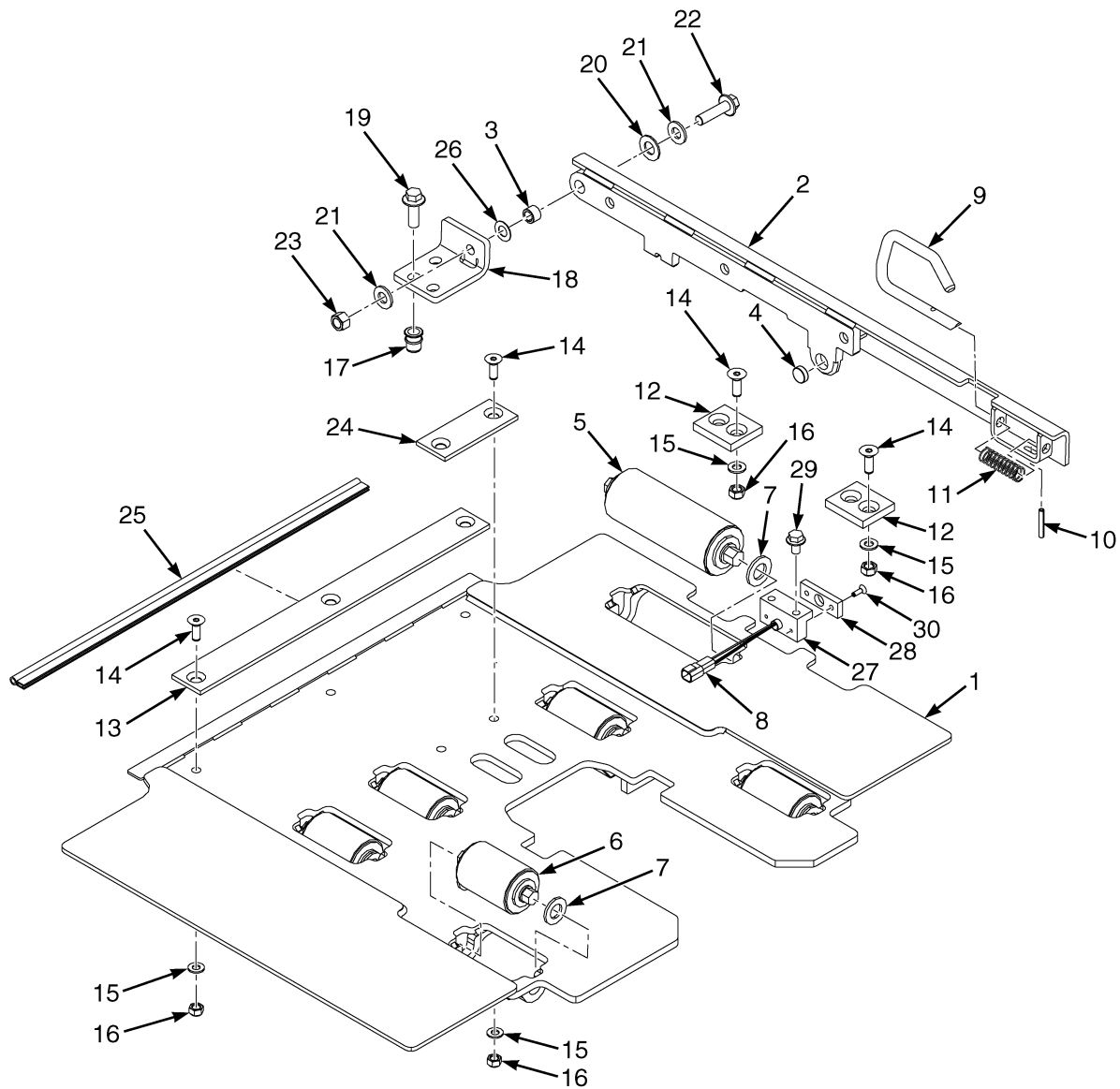


BP121300

GATE AND BATTERY ROLLER WITH BATTERY SPACER
27 INCH (S/N A268N09902L →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4001261	Plate Wldmt (27 in. Battery Compartment)	1
2	4057338	Gate (27 in. Battery Compartment)	1
2	4057346	Plate Wldmt	1
2	280472	Sealant	AR
3	.....	Bushing	1
4	4059174	Magnet	1
5	~~1677335~~		
	4046964	Roller	1
6	~~1694655~~		
	4046965	Roller	3
7	15136	Washer	8
8	4057839	Switch Assembly	1
9	1694227	Rod	1
10	19890	Roll Pin	1
11	2307799	Spring	1
12	1702584	Pad	2
13	1677812	Pad	1
14	296240	Capscrew	9
15	320159	Washer	9
16	302401	Locknut	9
17	4013503	Insert	3
18	4058016	Plate	1
19	1527888	Capscrew	3
20	1676500	Spring	1
21	296423	Washer	2
22	1510118	Capscrew	1
23	300937	Nut	1
24	1701196	Pad (Battery Slide)	1
25	1638440	Trim Seal	1
26	1516799	Shim (0.031 Inch)	1
27	4057487	Bracket	1
28	4057909	Shield	1
29	1528778	Capscrew	2
30	296204	Capscrew	2

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-25) 30 INCH (S/N A268N09902L →)



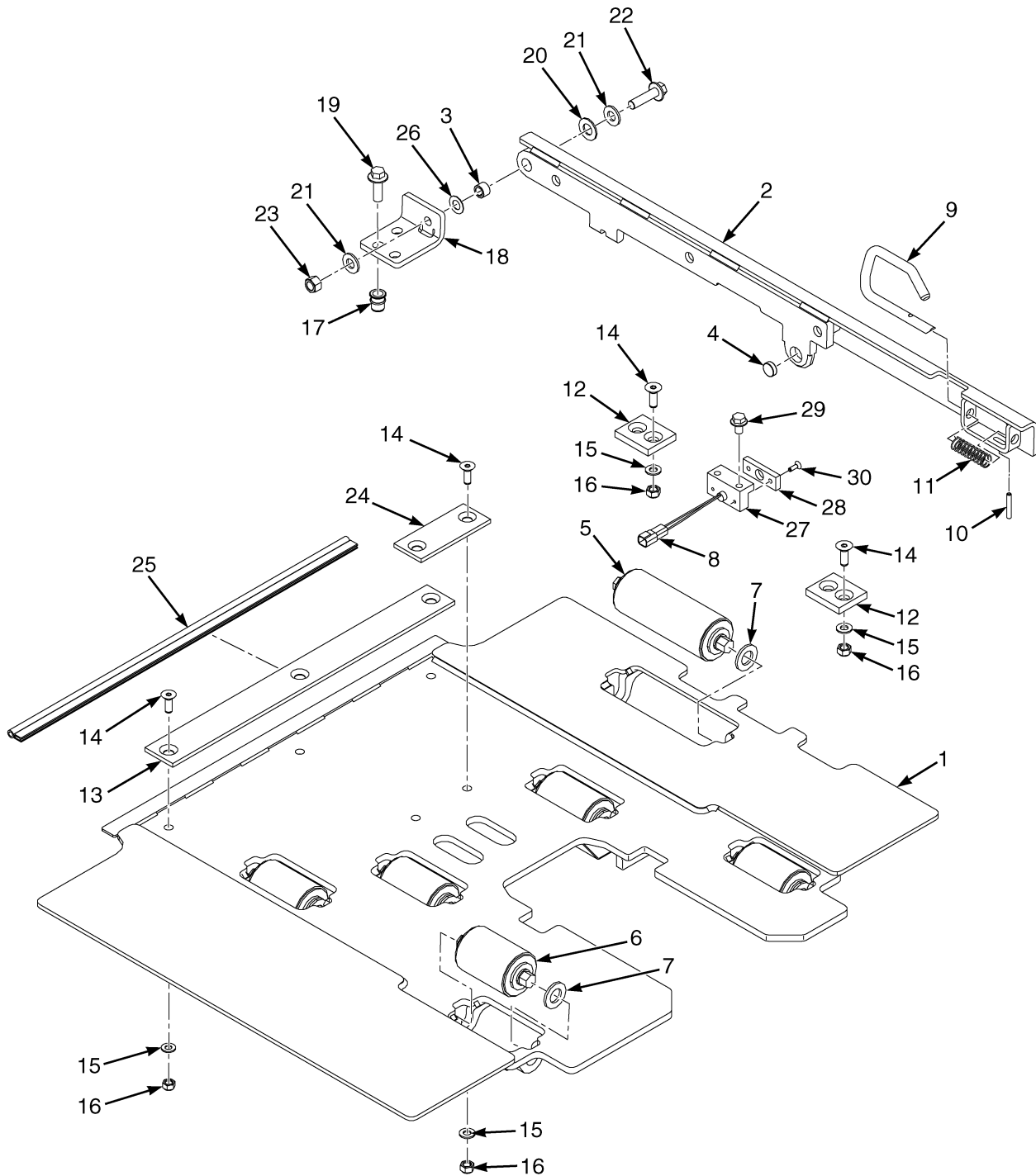
BP121303

GATE AND BATTERY ROLLER WITH BATTERY SPACER
30 INCH (S/N A268N09902L →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4001262	Plate Wldmt (30 in. Battery Compartment)	1
2	4057339	Gate (30 in. Battery Compartment)	1
2	4057347	Plate Wldmt	1
2	280472	Sealant	1
3	.....	Bushing	1
4	4059174	Magnet	1
5	~~1677335~~		
	4046964	Roller	1
6	~~1694655~~		
	4046965	Roller	5
7	15136	Washer	12
8	4057839	Switch Assembly	1
9	1694227	Rod	1
10	19890	Roll Pin	1
11	2307799	Spring	1
12	1702584	Pad	2
13	1677812	Pad	1
14	296240	Capscrew	9
15	320159	Washer	9
16	302401	Locknut	9
17	4013503	Insert	3
18	4058016	Plate	1
19	1527888	Capscrew	3
20	1676500	Spring	1
21	296423	Washer	2
22	1510118	Capscrew	1
23	300937	Nut	1
24	1701196	Pad (Battery Slide)	1
25	1638440	Trim Seal	1
26	1516799	Shim (0.031 Inch)	1
27	4057487	Bracket	1
28	4057909	Shield	1
29	1528778	Capscrew	2
30	296204	Capscrew	2

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-26)

33 INCH (S/N A268N09902L →)

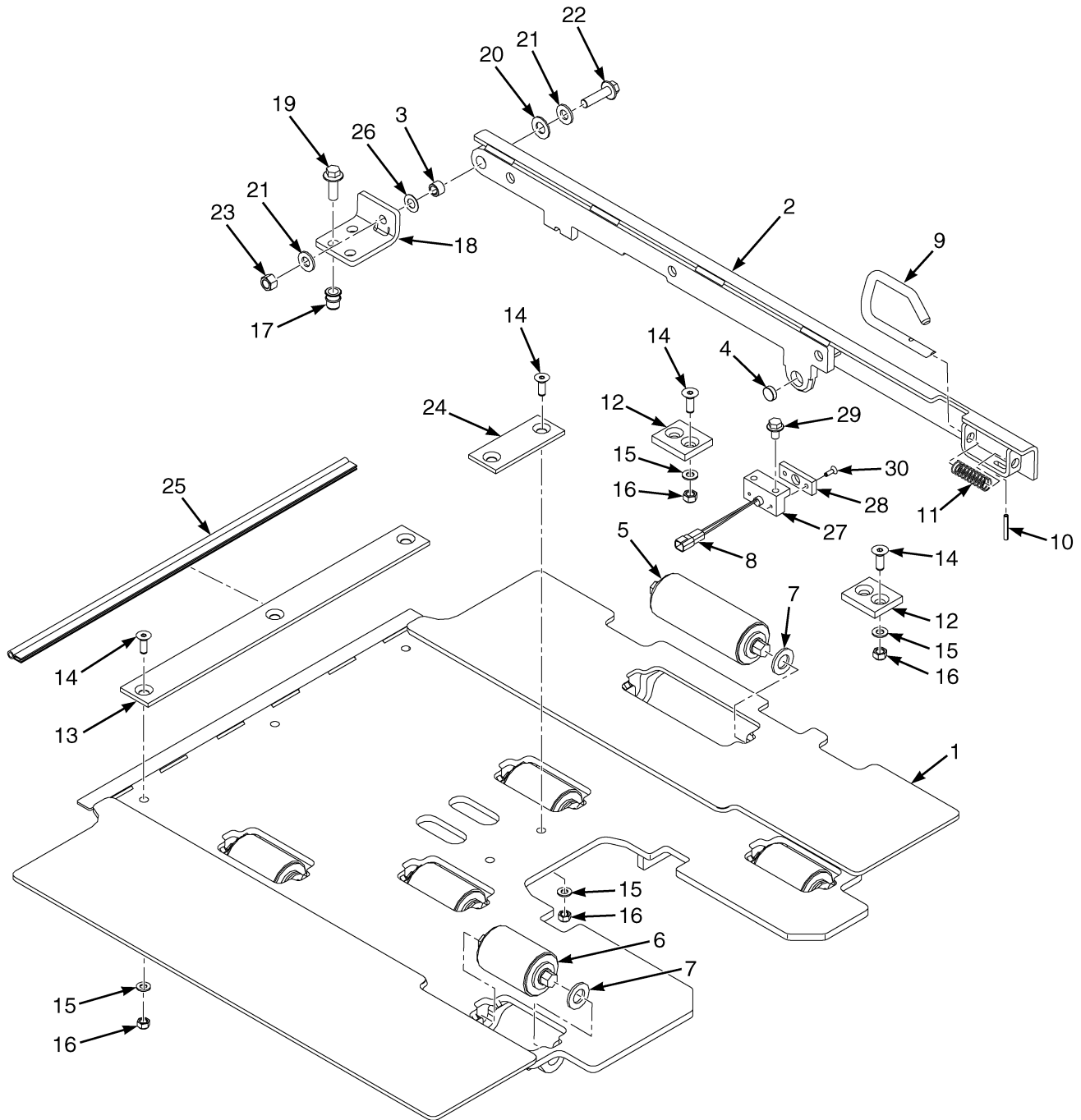


BP121306

GATE AND BATTERY ROLLER WITH BATTERY SPACER
33 INCH (S/N A268N09902L →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4001263	Plate Wldmt (33 in. Battery Compartment)	1
2	4057340	Gate (33 in. Battery Compartment)	1
2	4057348	Plate Wldmt	1
2	280472	Sealant	AR
3	.....	Bushing	1
4	4059174	Magnet	1
5	~~1677335~~		
	4046964	Roller	1
6	~~1694655~~		
	4046965	Roller	5
7	15136	Washer	12
8	4057839	Switch Assembly	1
9	1694227	Rod	1
10	19890	Roll Pin	1
11	2307799	Spring	1
12	1702584	Pad	2
13	1677812	Pad	1
14	296240	Capscrew	9
15	320159	Washer	9
16	302401	Locknut	9
17	4013503	Insert	3
18	4058016	Plate	1
19	1527888	Capscrew	3
20	1676500	Spring	1
21	296423	Washer	2
22	1510118	Capscrew	1
23	300937	Nut	1
24	1701196	Pad (Battery Slide)	1
25	1638440	Trim Seal	1
26	1516799	Shim (0.031 Inch)	1
27	4057487	Bracket	1
28	4057909	Shield	1
29	1528778	Capscrew	2
30	296204	Capscrew	2

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-27) 36 INCH (S/N A268N09902L →)

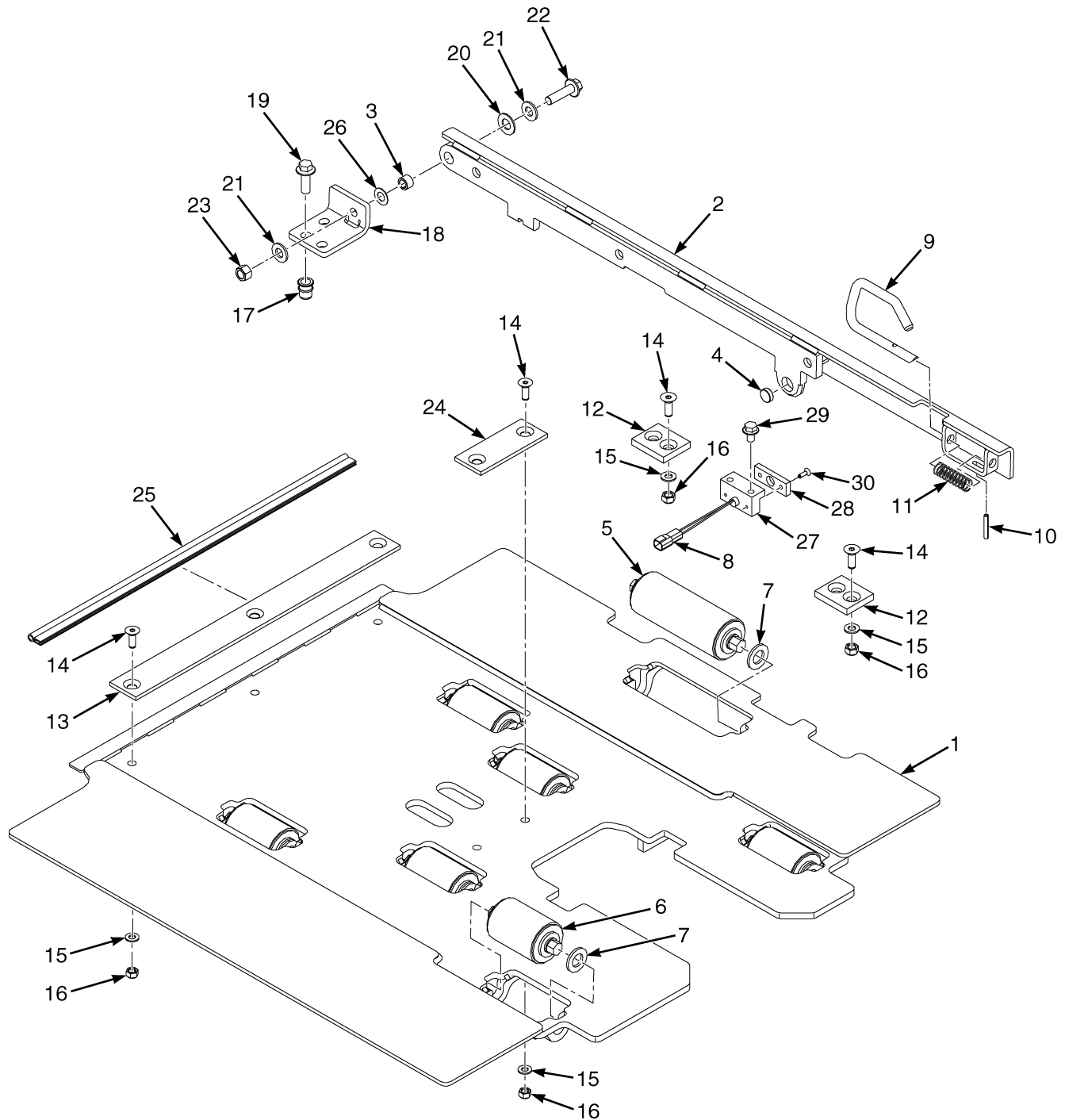


BP121307

GATE AND BATTERY ROLLER WITH BATTERY SPACER
36 INCH (S/N A268N09902L →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4001264	Plate Wldmt (36 in. Battery Compartment)	1
2	4057341	Gate (36 in. Battery Compartment)	1
2	4057349	Plate Wldmt	1
2	280472	Sealant	AR
3	.....	Bushing	1
4	4059174	Magnet	1
5	~~1677335~~		
	4046964	Roller	1
6	~~1694655~~		
	4046965	Roller	5
7	15136	Washer	12
8	4057839	Switch Assembly	1
9	1694227	Rod	1
10	19890	Roll Pin	1
11	2307799	Spring	1
12	1702584	Pad	2
13	1677812	Pad	1
14	296240	Capscrew	9
15	320159	Washer	9
16	302401	Locknut	9
17	4013503	Insert	3
18	4058016	Plate	1
19	1527888	Capscrew	3
20	1676500	Spring	1
21	296423	Washer	2
22	1510118	Capscrew	1
23	300937	Nut	1
24	1701196	Pad (Battery Slide)	1
25	1638440	Trim Seal	1
26	1516799	Shim (0.031 Inch)	1
27	4057487	Bracket	1
28	4057909	Shield	1
29	1528778	Capscrew	2
30	296204	Capscrew	2

GATE AND BATTERY ROLLER WITH BATTERY SPACER (FIGURE 1-28) 40 INCH (S/N A268N09902L →)

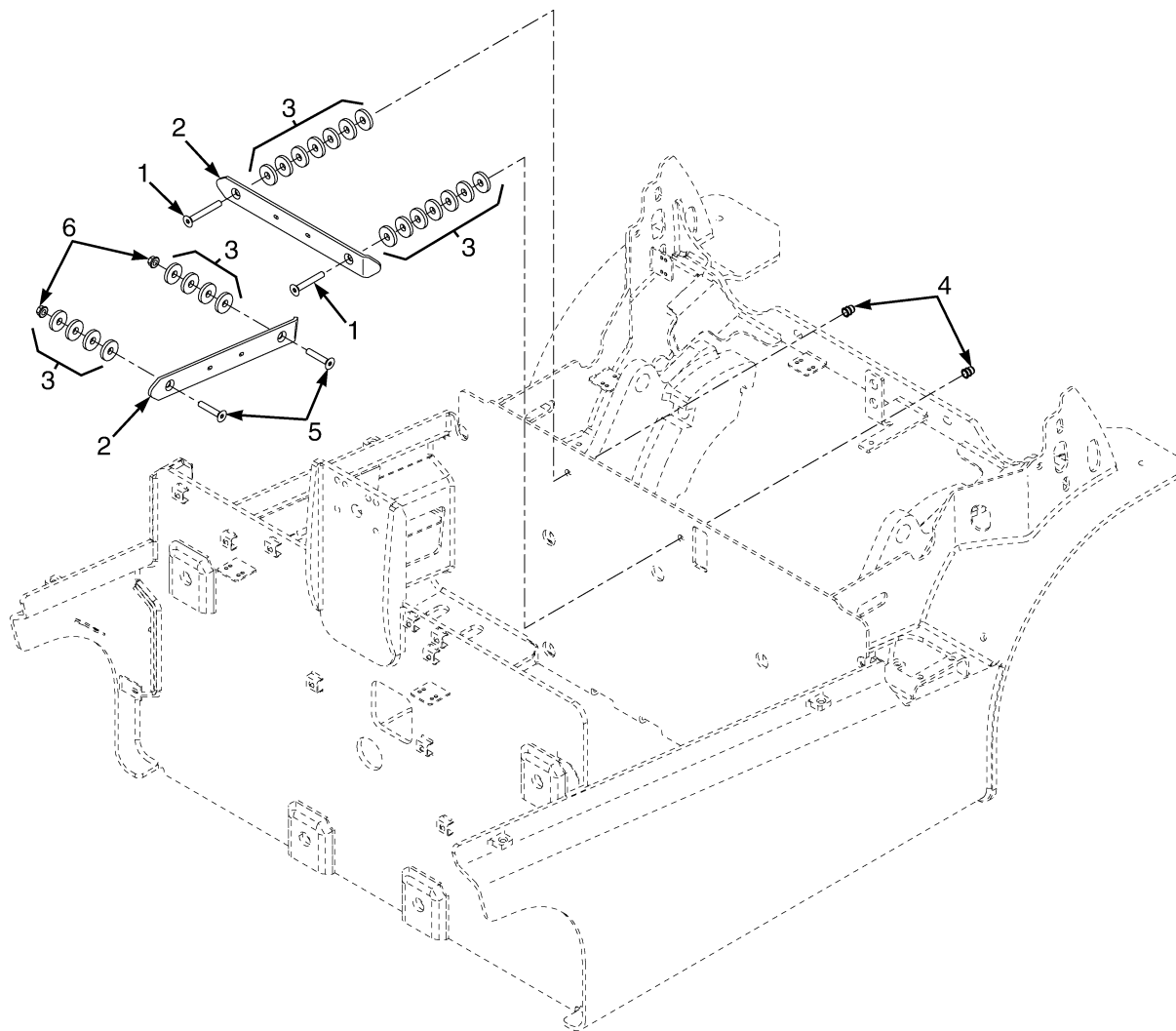


BP121308

GATE AND BATTERY ROLLER WITH BATTERY SPACER
40 INCH (S/N A268N09902L →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4001265	Plate Wldmt (40 in. Battery Compartment)	1
2	4057342	Gate (40 in. Battery Compartment)	1
2	4057350	Plate Wldmt	1
2	280472	Sealant	AR
3	.....	Bushing	1
4	4059174	Magnet	1
5	~~1677335~~		
	4046964	Roller	1
6	~~1694655~~		
	4046965	Roller	6
7	15136	Washer	14
8	4057839	Switch Assembly	1
9	1694227	Rod	1
10	19890	Roll Pin	1
11	2307799	Spring	1
12	1702584	Pad	2
13	1677812	Pad	1
14	296240	Capscrew	9
15	320159	Washer	9
16	302401	Locknut	9
17	4013503	Insert	3
18	4058016	Plate	1
19	1527888	Capscrew	3
20	1676500	Spring	1
21	296423	Washer	2
22	1510118	Capscrew	1
23	300937	Nut	1
24	1701196	Pad (Battery Slide)	1
25	1638440	Trim Seal	1
26	1516799	Shim (0.031 Inch)	1
27	4057487	Bracket	1
28	4057909	Shield	1
29	1528778	Capscrew	2
30	296204	Capscrew	2

BATTERY SPACERS (FIGURE 1-29)

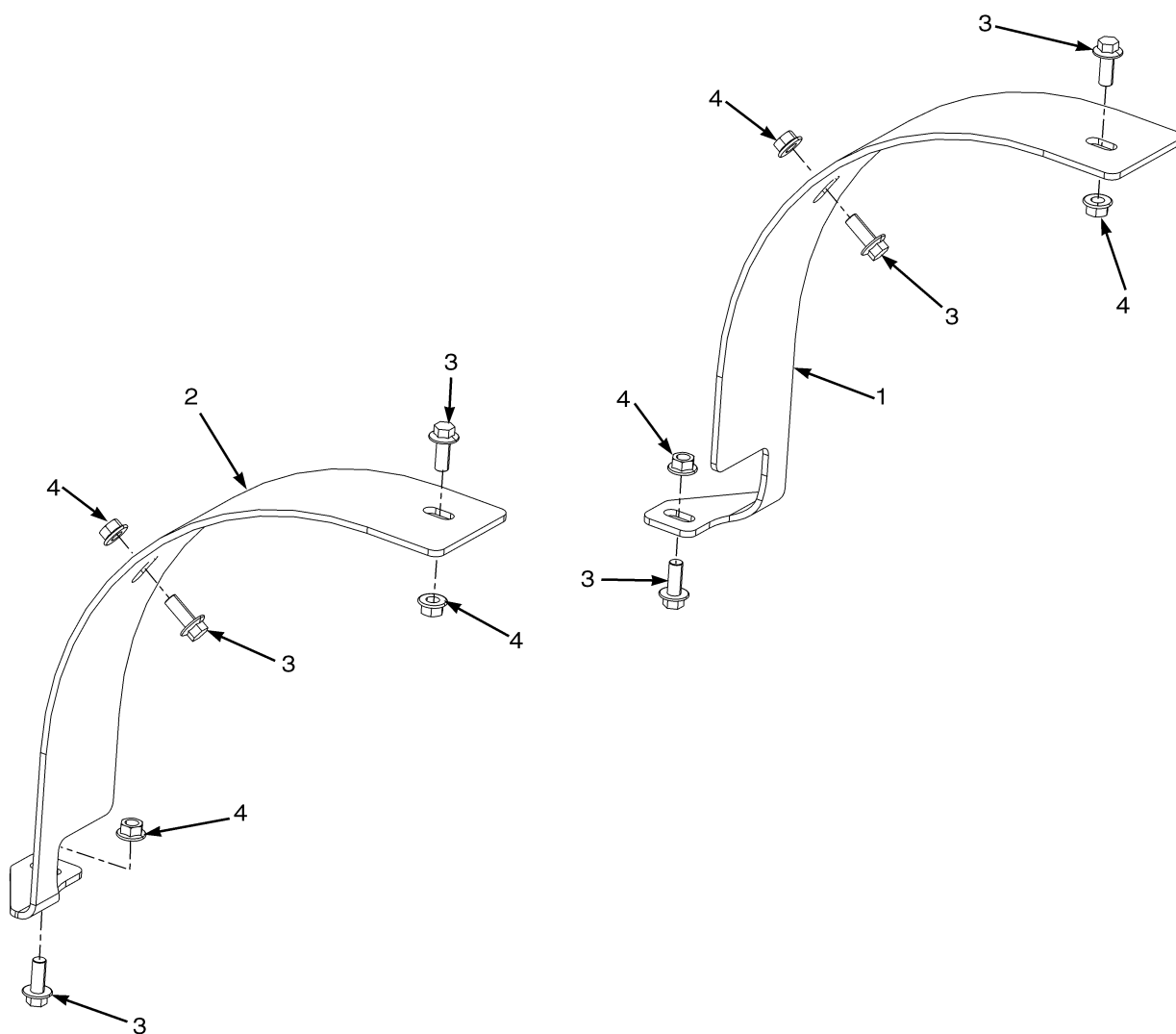


BP120694

BATTERY SPACERS

ITEM	PART NO.	DESCRIPTION	QTY
1	296248	Capscrew (M10 x 1.5 x 80)	2
1	296247	Capscrew (M10 x 1.5 x 70)	2
1	296244	Screw (M10 x 1.5 x 50)	2
2	1665644	Plate	2
3	1657116	Spacer	28
4	1530244	Insert	2
5	296247	Capscrew (M10 x 1.5 x 70)	2
5	296241	Capscrew (M10 x 1.5 x 35)	2
5	296243	Capscrew (M10 x 1.5 x 45)	2
5	296245	Capscrew (M10 x 1.5 x 55)	2
6	1460477	Nut	2

FENDER (FIGURE 1-30)



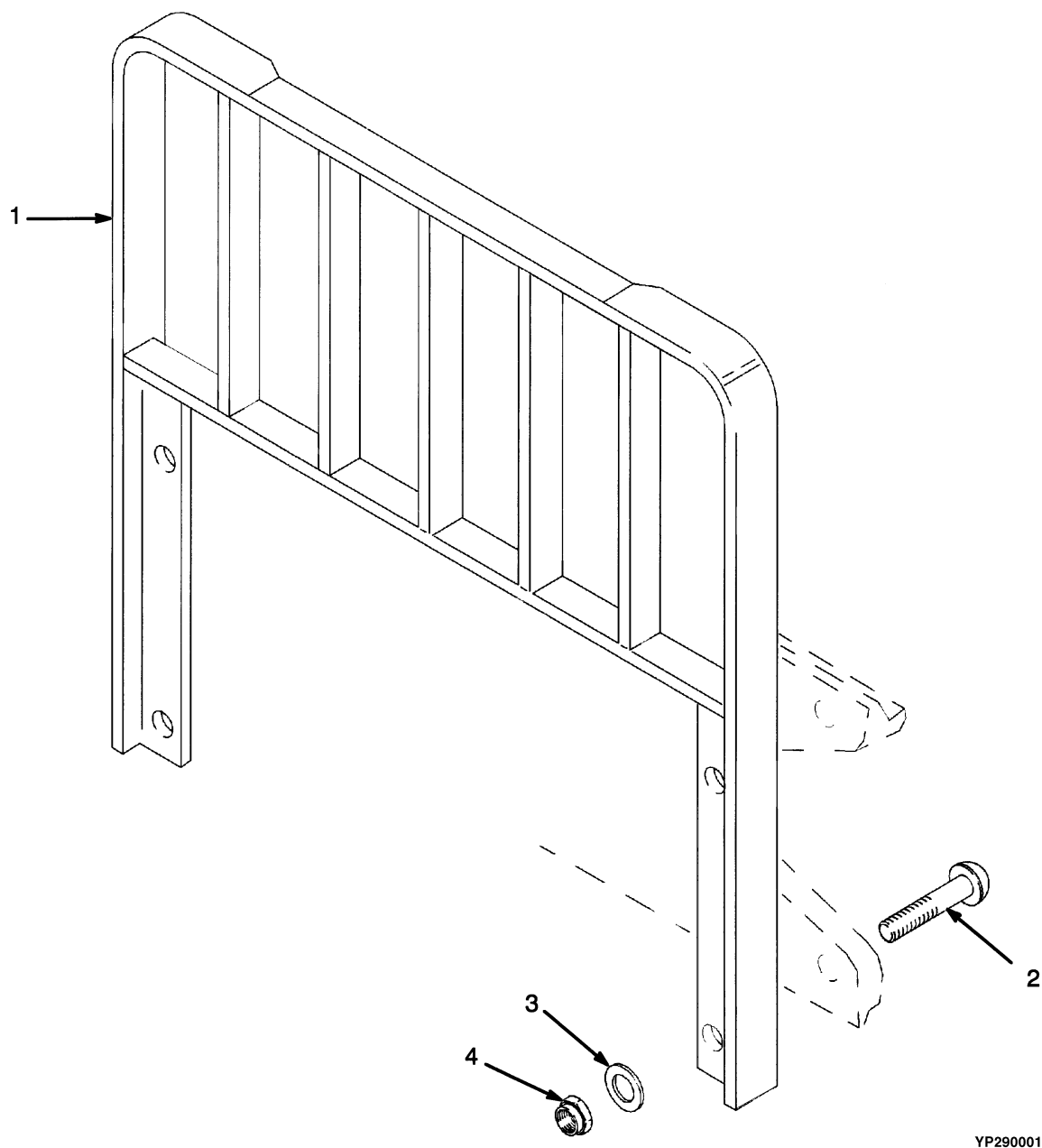
BP120432

FENDER

ITEM	PART NO.	DESCRIPTION	QTY
1	c 1651187	Fender (LH)	1
1	d 1651188	Fender (LH)	1
2	c 1651190	Fender (RH)	1
2	d 1651191	Fender (RH)	1
3	1528889	Capscrew	6
4	~~1370949~~		
	1528888	Nut (Shoulder)	6
	a b 1581079	Plug	4

FOOTNOTES:

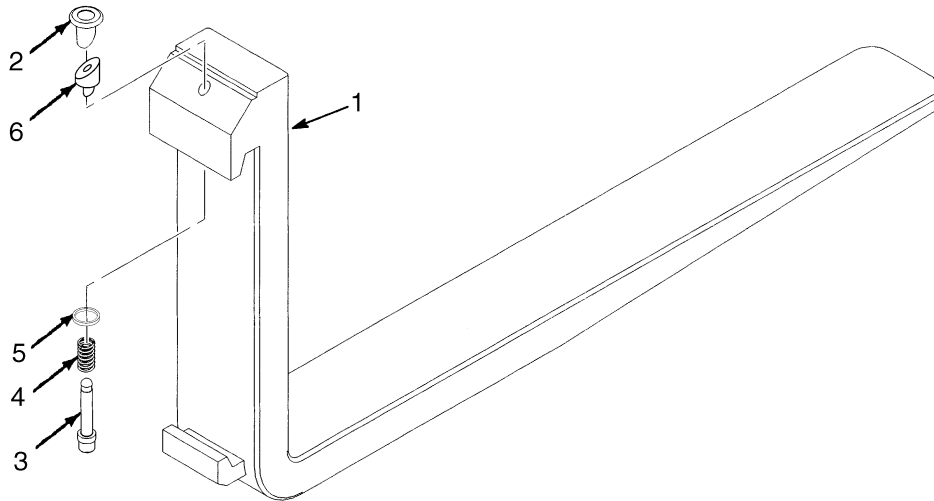
a Not Illustrated	c Used with Standard Tread 21 x 9 Tires
b Used with Standard Tread 21 x 7 and 21 x 8 Tires without extensions	d Used with Wide Tread Options 21 x 7, 21 x 8, and 21 x 9.

LOAD BACKREST EXTENSION (FIGURE 1-31)

LOAD BACKREST EXTENSION**KEY:****A: Standard Carriage (Class II)****B: ISS Carriage (Class II)****C: Standard and ISS Carriage (Class III)**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	4119246	Load Backrest (CLII) (38.5 in)	1	1	..
1	4119241	Load Backrest (CLIII) (38.5 in.)	..	..	1
2	1581838	Capscrew	4	4	..
2	1581593	Capscrew	..	..	4
3	296423	Washer	4	4	4
4	300937	Nut	4	4	4

FORKS (FIGURE 1-32)



BP290003

KEY:

- A:** Standard Class II (100 mm x 40 mm) (4 in. x 1.5 in.)
B: Polished Full Bottom Taper, Class II (125 mm x 40 mm) (5 in. x 1.5 in.)
C: Standard Class III (125 mm x 50 mm) (5 in. x 2 in.)
D: Polished Full Bottom Taper, Class III (180 mm x 45 mm) (7 in. x 1.8 in.)

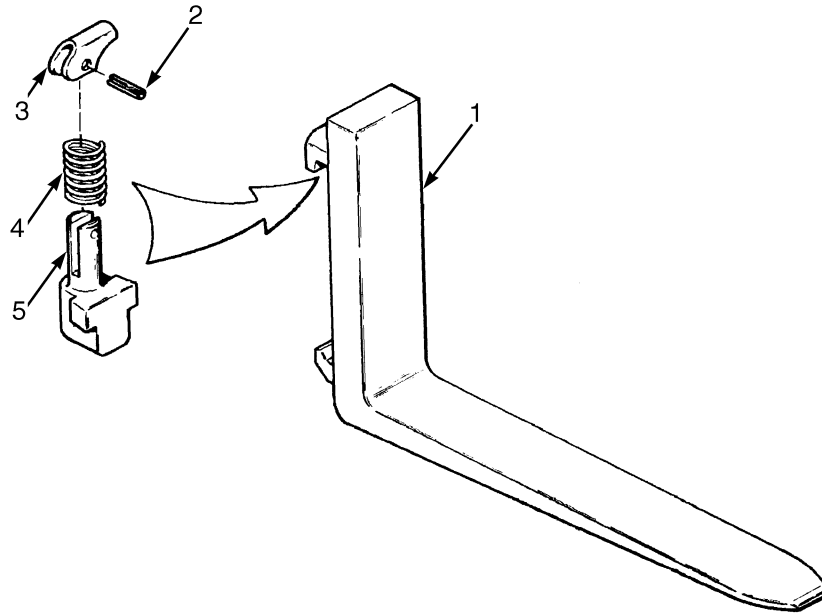
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	384211	Fork (36 in.)	2	..	..	..
1	1308093	Fork (40 in.)	2	..	..	..
1	384213	Fork (42 in.)	2	..	..	..
1	384214	Fork (48 in.)	2	..	..	..
1	384215	Fork (54 in.)	2	..	..	..
1	384216	Fork (60 in.)	2	..	..	..
1	1338087	Fork (36 in.)	..	2	..	..
1	1338088	Fork (42 in.)	..	2	..	..
1	1338089	Fork (48 in.)	..	2	..	..
1	367419	Fork (36 in.)	..	..	2	..
1	367420	Fork (42 in.)	..	..	2	..
1	367421	Fork (48 in.)	..	..	2	..
1	367422	Fork (54 in.)	..	..	2	..
1	367423	Fork (60 in.)	..	..	2	..
1	367424	Fork (72 in.)	..	..	2	..
1	1338097	Fork (42 in.)	..	..	..	2
1	1338098	Fork (48 in.)	..	..	..	2
1	1332745	Fork (54 in.)	..	..	..	2
2	1523732	Knob	1	1	1	1
3	1523733	Pin	1	1	..	..
3	1523737	Pin	..	..	1	1
4	1500782	Spring	1	1	..	..

KEY:**A: Standard Class II (100 mm x 40 mm) (4 in. x 1.5 in.)****B: Polished Full Bottom Taper, Class II (125 mm x 40 mm) (5 in. x 1.5 in.)****C: Standard Class III (125 mm x 50 mm) (5 in. x 2 in.)****D: Polished Full Bottom Taper, Class III (180 mm x 45 mm) (7 in. x 1.8 in.)**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
4	1500784	Spring	..	..	1	1
5	b 1477166	Washer	1	1	1	1
6	b 1477167	Wedge Band	1	1	..	..
6	1477237	Wedge Band	..	..	1	1
	a 1523734	Pin , Pin Retainer	1	1	1	1
	1523735	Kit-Latch (Kenhar)	2	2	..	..
	4033434	Kit-Latch (Cascade)	2	2	..	..
	1523739	Kit-Latch (Class III) (Kenhar)	..	..	2	2
	4033435	Kit-Latch (Class III) (Cascade)	..	..	2	2

FOOTNOTES:**a** Not Illustrated**b** Refer to Latch Kit Installation Instructions

FORKS (FIGURE 1-33) OPTIONAL



HP120793

KEY:

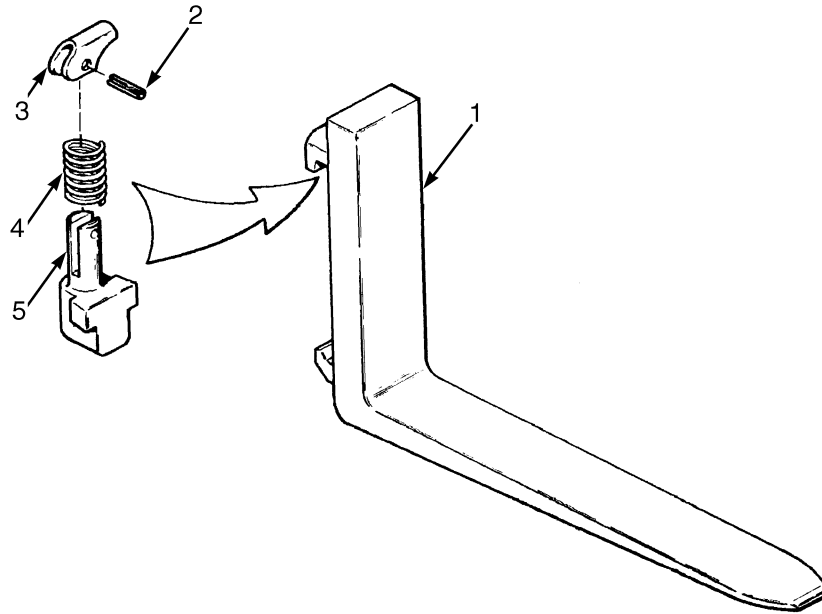
- A: 100 mm x 40 mm (4 in. x 1.5 in.) Standard Taper (E45-50FXN)
- B: 125 mm x 40 mm (5 in. x 1.5 in.) Polished, Full Bottom Taper (E45-50XN)
- C: 125 mm x 50 mm (5 in. x 2 in.) Standard Taper (E60-70XN)
- D: 180 mm x 45 mm (7 in. x 1.75 in.) Polished, Full Bottom Taper (E60-70XN)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1378786	Fork (36 in.)	2	..	..	..
1	1378787	Fork (40 in.)	2	..	..	..
1	1378788	Fork (42 in.)	2	..	..	..
1	1378789	Fork (48 in.)	2	..	..	..
1	1378790	Fork (54 in.)	2	..	..	..
1	1378791	Fork (60 in.)	2	..	..	..
1	1378807	Fork (36 in.)	..	2	..	..
1	1378808	Fork (42 in.)	..	2	..	..
1	1378809	Fork (48 in.)	..	2	..	..
1	1378732	Fork (36 in.)	..	..	2	..
1	1378733	Fork (42 in.)	..	..	2	..
1	1378734	Fork (48 in.)	..	..	2	..
1	1378735	Fork (54 in.)	..	..	2	..
1	1378736	Fork (60 in.)	..	..	2	..
1	1378737	Fork (72 in.)	..	..	2	..
1	1381816	Fork (42 in.)	..	..	..	2
1	1381817	Fork (47.5 in.)	..	..	..	2
1	1550764	Fork (54 in.)	..	..	..	2
2	302450	Roll Pin	1	1	1	1
3	1378763	Latch	1	1	1	1
4	1378762	Spring	1	1	1	1
5	1378760	Pin	1	1	..	..

KEY:**A: 100 mm x 40 mm (4 in. x 1.5 in.) Standard Taper (E45-50FXN)****B: 125 mm x 40 mm (5 in. x 1.5 in.) Polished, Full Bottom Taper (E45-50XN)****C: 125 mm x 50 mm (5 in. x 2 in.) Standard Taper (E60-70XN)****D: 180 mm x 45 mm (7 in. x 1.75 in.) Polished, Full Bottom Taper (E60-70XN)**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
5	1378761	Fork (Pin)	..	..	1	1
	1378765	Kit-Latch (Class II)	2	2	..	..
	1378766	Kit-Latch (Class III And IV)	..	..	1	1

FORKS WITH LEVER (FIGURE 1-34) OPTIONAL



HP120793

KEY:

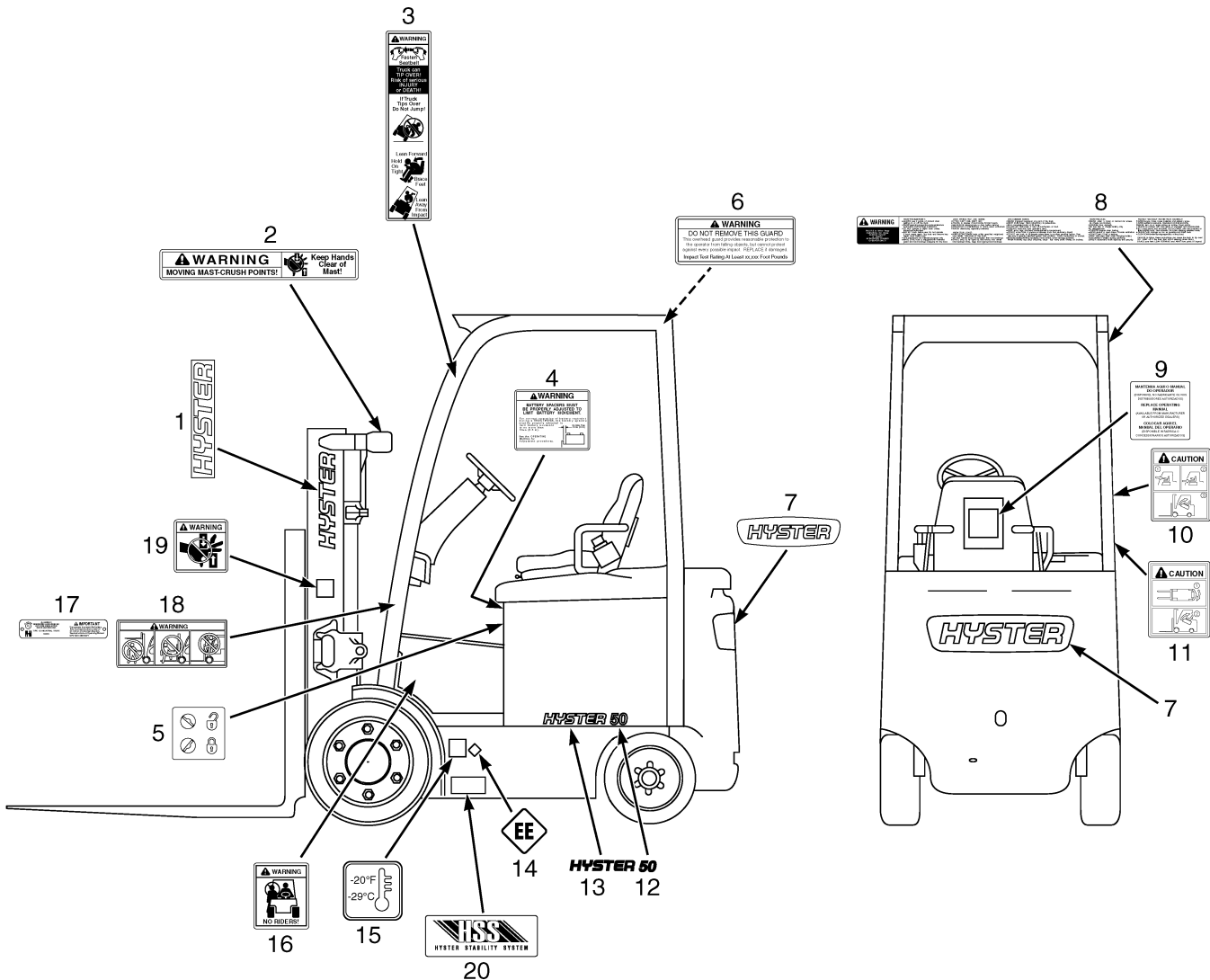
- A: 100 mm x 40 mm (4 in. x 1.5 in.) Standard Taper (E45-50FXN)
 B: 125 mm x 40 mm (5 in. x 1.5 in.) Polished, Full Bottom Taper (E45-50XN)
 C: 125 mm x 50 mm (5 in. x 2 in.) Standard Taper (E60-70XN)
 D: 180 mm x 45 mm (7 in. x 1.75 in.) Polished, Full Bottom Taper (E60-70XN)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	4083370	Fork (36 in.)	2	..	..	..
1	4083371	Fork (40 in.)	2	..	..	..
1	4083372	Fork (42 in.)	2	..	..	..
1	4083373	Fork (48 in.)	2	..	..	..
1	4083374	Fork (54 in.)	2	..	..	..
1	4083375	Fork (60 in.)	2	..	..	..
1	4083678	Fork (36 in.)	..	2	..	..
1	4083679	Fork (42 in.)	..	2	..	..
1	4083680	Fork (48 in.)	..	2	..	..
1	4083870	Fork (36 in.)	..	..	2	..
1	4083874	Fork (42 in.)	..	..	2	..
1	4083876	Fork (48 in.)	..	..	2	..
1	4083878	Fork (54 in.)	..	..	2	..
1	4083881	Fork (60 in.)	..	..	2	..
1	4083883	Fork (72 in.)	..	..	2	..
1	4083686	Fork (42 in.)	..	..	..	2
1	4083687	Fork (48 in.)	..	..	..	2
1	4083688	Fork (54 in.)	..	..	..	2
2	.....	Pin	1	1	1	1
3	.....	Lever	1	1	1	1
4	.....	Spring	1	1	1	1
5	.....	Pin	1	1	..	..

KEY:**A: 100 mm x 40 mm (4 in. x 1.5 in.) Standard Taper (E45-50FXN)****B: 125 mm x 40 mm (5 in. x 1.5 in.) Polished, Full Bottom Taper (E45-50XN)****C: 125 mm x 50 mm (5 in. x 2 in.) Standard Taper (E60-70XN)****D: 180 mm x 45 mm (7 in. x 1.75 in.) Polished, Full Bottom Taper (E60-70XN)**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
5	.....	Pin	..	..	1	1
	4083888	Kit Fork Latch Mechanism (Class 2A)	2	2	..	..
	4083889	Kit Fork Latch Mechanism	..	..	2	2

LABELS (FIGURE 1-35) EXTERIOR



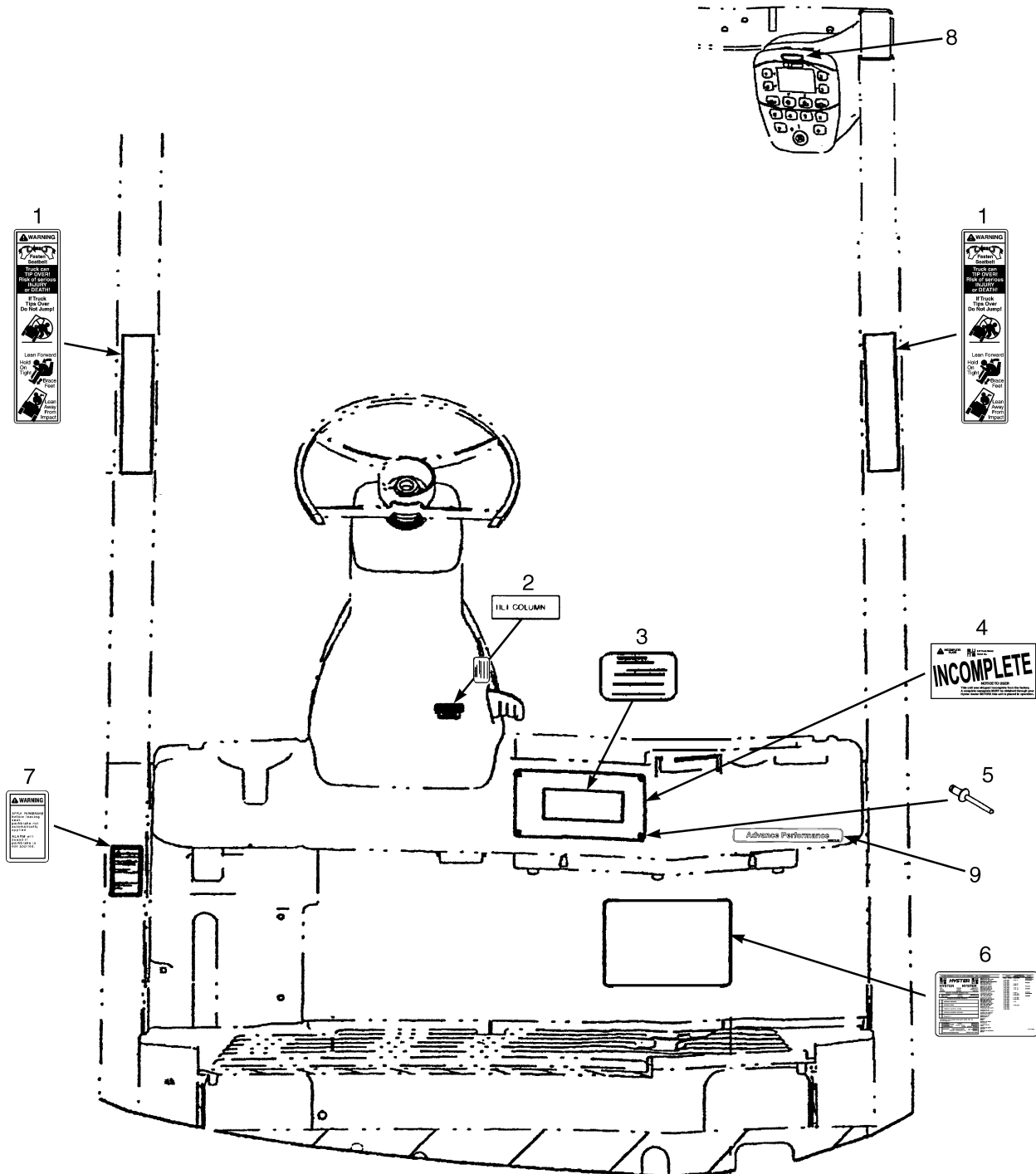
BP120429

**LABELS
EXTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	1562353	Label (Hyster)	2
2	1330919	Label (Mast Warning)	1
3	1330917	Label (Operator Restraint)	2
4	1330924	Label (Battery Spacer)	1
5	2109984	Label (Lock/Unlock)	1
6	a	Label- Overhead Guard Impact Rating	1
7	1676403	Label (Hyster Counterweight)	1
8	2073197	Label (Operator Warning)	1
9	1328205	Label (Replace Operator Manual)	1
10	2083689	Label (Electronic Hydraulics Caution)	2
11	2076169	Label (Swivel Seat)	2
12	1684386	Label (Model 45)	2
12	1586447	Label (Model 50)	2
12	1586446	Label (Model 55)	2
12	1586448	Label (Model 60)	2
12	1684380	Label (Model 65)	2
12	1586449	Label (Model 70)	2
13	1562353	Label (Hyster)	2
14	196927	Label (UL Type EE)	2
15	2108690	Label (Freezer / Cooler)	2
16	1330920	Label (No Riders)	2
17	325958	U.L. Plate (U.L. Inspection-Type E)	1
17	325956	U.L. Plate (U.L. Inspection-Type EE)	1
18	2075656	Label (Mast Warning)	1
19	1335129	Label (Pinch Point)	2
20	4035750	Label (Stability System)	2

FOOTNOTES:**a** Contact Your Local Hyster Dealer

LABELS (FIGURE 1-36) INTERIOR

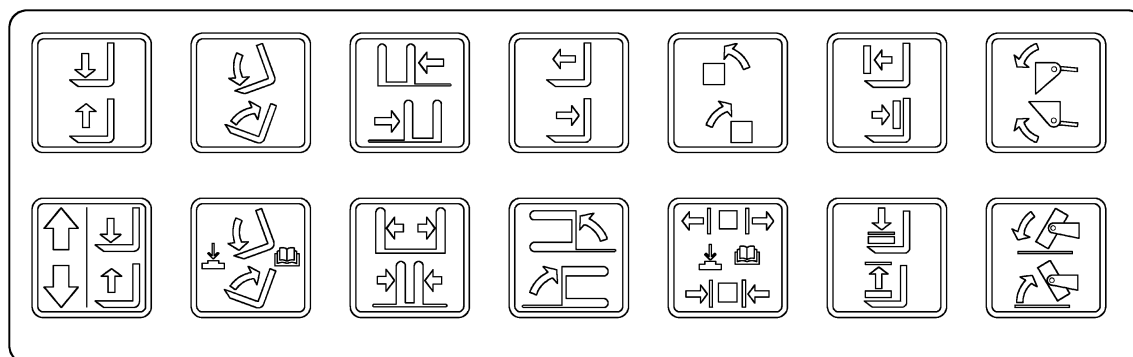
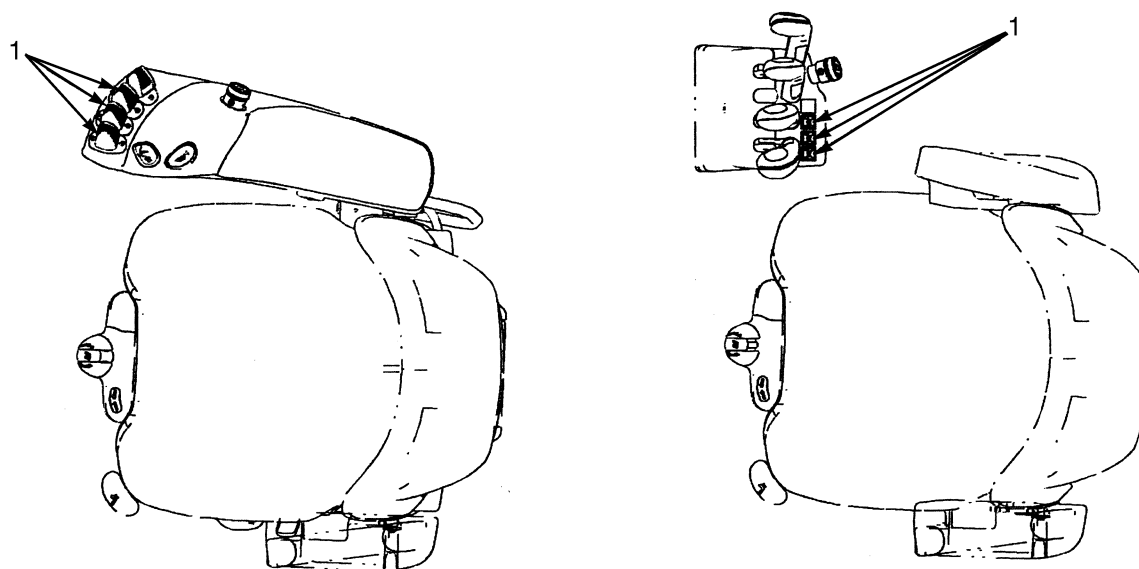


HP121155

**LABELS
INTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	1330917	Label (Operator Restraint)	2
2	2303178	Label (Tilt Column)	1
3	1335137	Nameplate Label Tag	1
4	389688	Nameplate Cover	1
4	1574147	Nameplate (Incomplete Truck)	1
4	1473843	Nameplate (Non EEC)	1
5	170658	Rivet	4
5	2307400	Rivet (Optional)	4
6	1534660	Label (Patents and Trademarks)	1
7	2074209	Label (Parking Brake Warning) (w/o Electric Seat)	1
7	2100542	Label (Parking Brake Warning) (with Electric Seat)	1
8	1693738	Label HYSTER, Dome Style	1
9	1698209	Label (Power Plus Performance)	1

LABELS (FIGURE 1-37) HYDRAULIC CONTROL FUNCTIONS



BP120427

LABELS
HYDRAULIC CONTROL FUNCTIONS

ITEM	PART NO.	DESCRIPTION	QTY
1	2102640	Label , Mini Lever	1

[illegible]

**SECTION 2
ELECTRICAL SYSTEM**

DESCRIPTION	PAGE
AUXILIARY KEY SWITCH	2-42
BATTERY CONNECTOR AND CABLE ASSEMBLY	
WITH RAPID CHARGE OPTION (→ S/N A268N08622K)	2-32
WITH RAPID CHARGE OPTION (S/N A268N08623K →)	2-34
WITHOUT RAPID CHARGE OPTION	2-29
CONTACTOR	
UL-E	2-24
UL-EE	2-26
CONTACTOR ASSEMBLY	
→ S/N A268N08622K	2-18
S/N A268N08623K ↔ 11/2015	2-20
CONTACTOR-FUSE PANEL ASSEMBLY	
SEALED (11/2015 →)	2-22
CONTROL PANEL	
→ S/N A268N08622K	2-10
S/N A268N08623K ↔ 11/2014	2-14
11/2014 →	2-16
DISPLAY	
LOW MOUNT	2-48
DISPLAY GROUP AND HARNESS	2-46
ELECTRICAL SYSTEM	
→ 10/2013	2-4
10/2013 →	2-6
LIGHTS	
INBOARD REAR LIGHTS	2-58
WITH DRIVE-THRU RACK OVERHEAD GUARD	2-54
WITH STANDARD OVERHEAD GUARD	2-50
MINI-LEVER CONTROLS	
3 FUNCTION	2-64
4 FUNCTION	2-68
POWER CABLES	
→ 11/2014	2-36
11/2014 →	2-40
TILT SENSOR GROUP	
TWO AND THREE STAGE	2-44
TRACTION SPEED LIMITER	
STANDARD AND INTEGRAL SIDE-SHIFT CARRIAGES	2-72
TURN SIGNAL	2-61
TURN SIGNAL SWITCH	2-62
VEHICLE SYSTEM MANAGER	2-28
WIRE HARNESS	
BACK-UP ALARM STROBE	2-188
FAN ADAPTOR - 80V	2-192
FAN ADAPTOR - 36/48V	2-194
FRONT SWITCH	2-195
JUMPER	2-191
LH LIGHT WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS (→ 10/2013)	2-158
LH LIGHT WITH OVERHEAD GUARD - WITH TURN SIGNAL (→ 10/2013)	2-160
LH LIGHT WITH OVERHEAD GUARD - DRIVE-THRU RACK (→ 10/2013)	2-162

SECTION 2

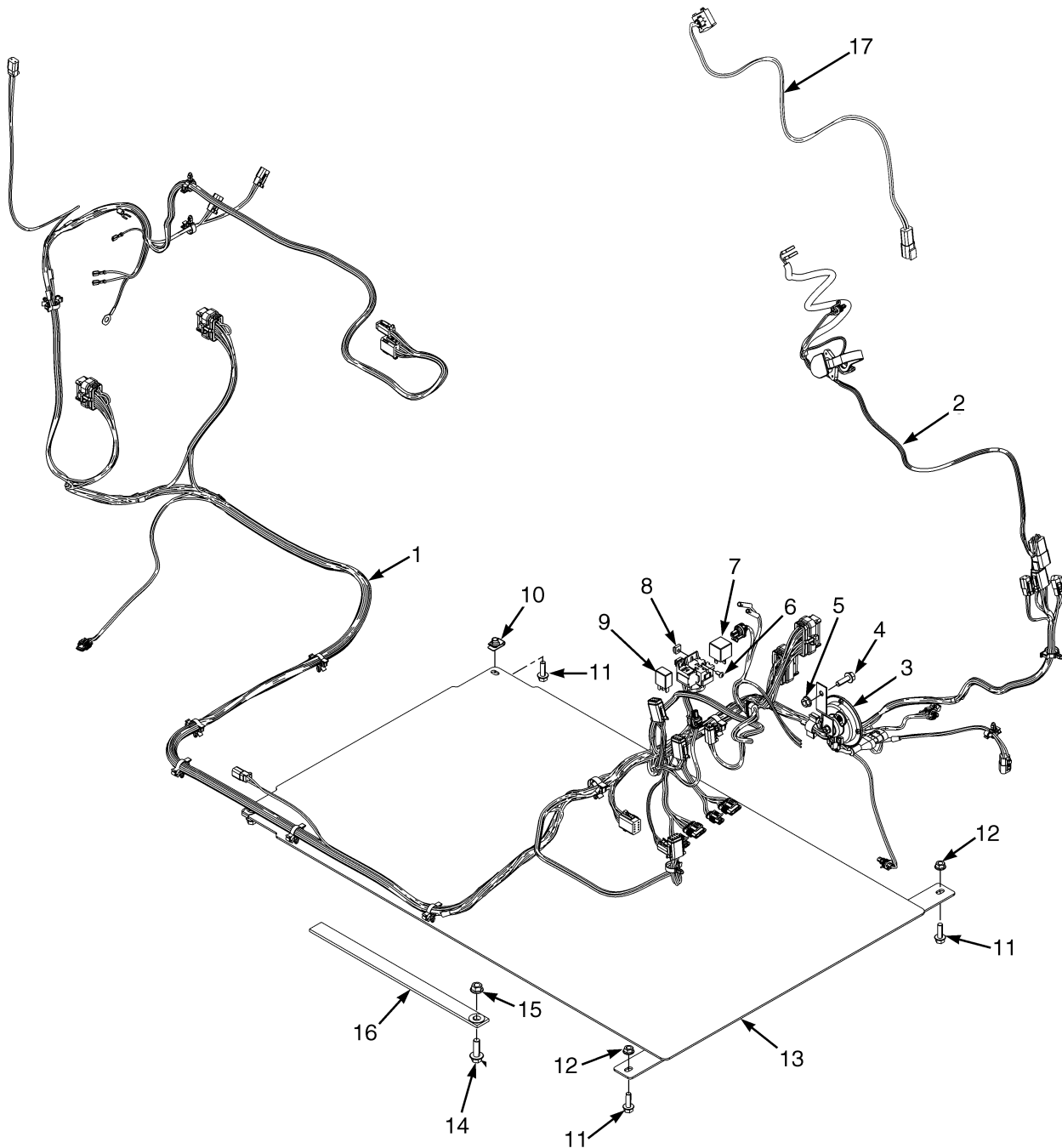
ELECTRICAL SYSTEM

DESCRIPTION	PAGE
LH LIGHT WITH OVERHEAD GUARD - WITH INBOARD REAR LIGHTS MOUNT (→ 10/2013)	2-164
LH LIGHT WITH OVERHEAD GUARD - WITH TURN SIGNALS (10/2013 →)	2-166
LH LIGHT WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS (10/2013 →)	2-168
MAIN - 36/48 VOLT WITHOUT LIGHTS OR ELECTROHYDRAULICS	2-155
MAIN LIGHTS CHASSIS - 36/48V (→ 11/2014)	2-140
MAIN LIGHTS CHASSIS - 36/48V (11/2014 →)	2-144
MAIN LIGHTS CHASSIS - 80V (→ 11/2014)	2-148
MAIN LIGHTS CHASSIS - 80V (11/2014 →)	2-152
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 2 (→ 10/2013)	2-104
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 2 (→ 10/2013)	2-108
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 3 (10/2013 ↔ 11/2014)	2-110
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 3 (10/2013 ↔ 11/2014)	2-114
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 3 OF 3 (10/2013 ↔ 11/2014)	2-118
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 1 OF 3 (11/2014 →)	2-122
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 2 OF 3 (11/2014 →)	2-126
MAIN WITH ELECTRONIC HYDRAULICS - SHEET 3 OF 3 (11/2014 →)	2-130
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 3 (10/2013 ↔ 11/2014)	2-80
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 3 (10/2013 ↔ 11/2014)	2-84
MAIN WITH MANUAL HYDRAULICS - SHEET 3 OF 3 (10/2013 ↔ 11/2014)	2-88
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 3 (11/2014 →)	2-92
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 3 (11/2014 →)	2-96
MAIN WITH MANUAL HYDRAULICS - SHEET 3 OF 3 (11/2014 →)	2-100
MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) - SHEET 1 OF 2 (→ 10/2013)	2-74
MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) - SHEET 2 OF 2 (→ 10/2013)	2-78
MANUAL HYDRAULICS (→ 11/2014)	2-180
MANUAL HYDRAULICS (11/2014 →)	2-181
MANUAL INTERLOCK	2-190
PARK BRAKE	2-186
RH LIGHT WITH FREEZER DISPLAY (→ 10/2013)	2-174
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)	2-176
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNALS-LOW MOUNT (10/2013 →)	2-177
RH LIGHT WITH STANDARD DISPLAY - STANDARD OPTION (→ 10/2013)	2-170
RH LIGHT WITH STANDARD DISPLAY - WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)	2-171
RH LIGHT WITH STANDARD DISPLAY - WITHOUT TURN SIGNALS-LOW MOUNT (10/2013 →)	2-172
SEAT WITH E-HYDRAULICS	2-136
SEAT WITH E-HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE	2-138
SEAT WITH MANUAL HYDRAULICS	2-133
SEAT WITH MANUAL HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE	2-134
STEERING COLUMN	2-178
SYNCHRONOUS STEERING	2-184
TURN SIGNAL	2-182

NOTES

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ELECTRICAL SYSTEM (FIGURE 2-1) (→ 10/2013)



BP080696

ELECTRICAL SYSTEM

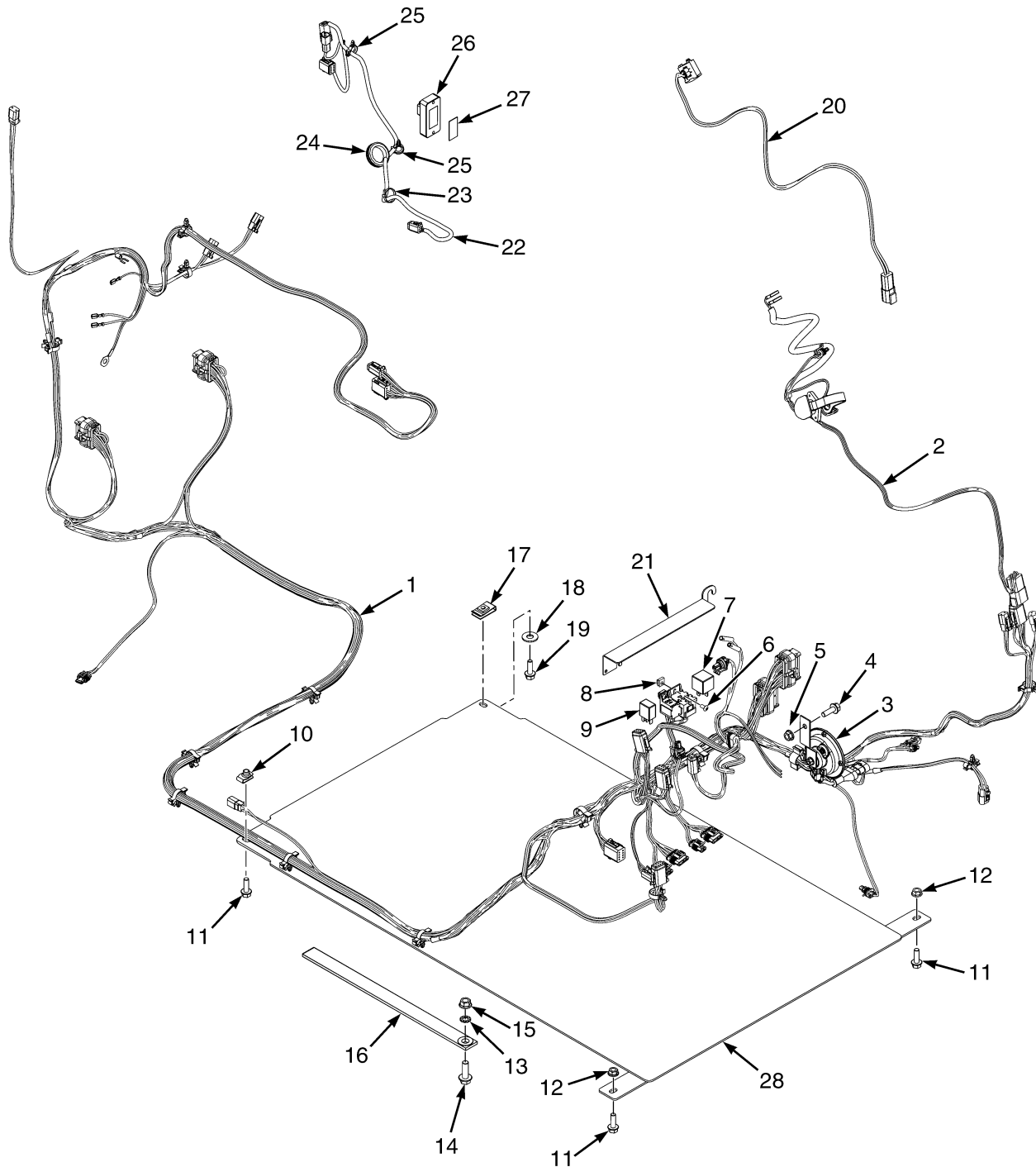
(→ 10/2013)

KEY:**A:** Electric Hydraulic**B:** Manual Hydraulic

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4600586	Wire Harness (☞ Figure 2-38, ☞ Figure 2-37).....	1	..
1	4600585	Wire Harness (☞ Figure 2-29, ☞ Figure 2-30).....	..	1
2	2108591	Wire Harness (Steer Column) (☞ Figure 2-66).....	1	1
3	2105928	Horn (24/48 V)	1	1
3	~~2102796~~			
	2105929	Horn (72/80 V)	1	1
4	1510113	Capscrew	1	1
5	~~1382472~~			
	1502543	Nut	1	1
6	296153	Capscrew	2	1
7	2100367	Relay (Mini) (Synchronous Steering , Valve)	2	1
8	4019192	Clip , Nut	2	1
9	2109677	Relay (Key Switch)	1	1
10	1480237	Nut , Foldover	2	2
11	1510113	Capscrew	4	4
12	~~1382472~~			
	1502543	Nut	2	2
13	b 1672043	Drip Shield (27 in. Battery Compartment)	1	1
13	c 1695897	Drip Shield (27 in. Battery Compartment)	1	1
13	b 1672044	Drip Shield (30 in. Battery Compartment)	1	1
13	c 1695898	Drip Shield (30 in. Battery Compartment)	1	1
13	b 1672045	Drip Shield (33 in. Battery Compartment)	1	1
13	c 1695900	Drip Shield (33 in. Battery Compartment)	1	1
13	b 1672046	Drip Shield (36 in. Battery Compartment)	1	1
13	c 1695902	Drip Shield (36 in. Battery Compartment)	1	1
13	b 1672047	Drip Shield (40 in. Battery Compartment)	1	1
13	c 1695903	Drip Shield (40 in. Battery Compartment)	1	1
14	1527884	Capscrew	1	1
14	a 296381	Washer	1	1
15	1460477	Nut	1	1
16	216895	Static Strap	1	1
17	2105365	Wire Harness (Synchronous Steering) (☞ Figure 2-70).....	1	1
	1402815	Clip (Not Illustrated)	3	3
	1706796	Bracket (Not Illustrated)	1	1
	4025952	Bracket (Not Illustrated (Alternate Part))	1	1

FOOTNOTES:**a** Not Illustrated**c** 12/2009 →**b** → 12/2009

ELECTRICAL SYSTEM (FIGURE 2-2) (10/2013 →)



BP081777

ELECTRICAL SYSTEM

(10/2013 →)

KEY:**A: Electric Hydraulic****B: Manual Hydraulic**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b 4624975	Wire Harness (☞ Figure 2-39, ☞ Figure 2-40, ☞ Figure 2-41).....	1	..
1	b 4624976	Wire Harness (☞ Figure 2-31, ☞ Figure 2-32, ☞ Figure 2-33).....	..	1
1	c 4634252	Wire Harness (☞ Figure 2-34, ☞ Figure 2-35, ☞ Figure 2-36).....	1	..
1	c 4634253	Wire Harness (Main) (☞ Figure 2-42, ☞ Figure 2-43, ☞ Figure 2-44).....	..	1
2	2108591	Wire Harness (Steer Column) (☞ Figure 2-66).....	1	1
3	2105928	Horn (36/48V)	1	1
3	~~2102796~~			
	2105929	Horn (80V)	1	1
4	1510113	Capscrew	1	1
5	~~1382472~~			
	1502543	Nut	1	1
6	296153	Capscrew	1	1
7	2100367	Relay (Mini) (Synchronous Steering , Valve)	1	1
8	4019192	Clip , Nut	2	2
9	2109677	Relay (Key Switch)	1	1
10	1480237	Nut , Foldover	1	1
11	1510113	Capscrew	3	3
12	~~1382472~~			
	1502543	Nut	2	2
13	296381	Washer	1	1
14	1527884	Capscrew	1	1
15	1460477	Nut	1	1
16	216895	Static Strap	1	1
17	325182	Nut , Foldover (27 in. Battery Compartment)	1	1
17	1480237	Nut , Foldover (30-40 in. Battery Compartment)	1	1
18	296419	Washer	1	1
19	1527877	Capscrew (27 in. Battery Compartment)	1	1
19	1510113	Capscrew (30-40 in. Battery Compartment)	1	1
20	2105365	Wire Harness (Synchronous Steering) (☞ Figure 2-70).....	1	1
21	4025952	Bracket	1	1
22	2104030	Wire Harness (Seat) (☞ Figure 2-47).....	1	..
22	a 4635372	Wire Harness (Seat) (☞ Figure 2-48).....	1	..
22	2104097	Wire Harness (Seat) (☞ Figure 2-45).....	..	1
22	a 4635373	Wire Harness (Seat) (☞ Figure 2-46).....	..	1
23	137852	Strap Clamp	1	1
24	2107319	Grommet	1	1
25	1402815	Clip	2	2
26	a ~~4634955~~			
	~~4651927~~			
	4655560	Control Module (Seat Belt Sequence)	1	1
26	a ~~4634955~~			
	~~4651927~~			
	4655560	Control Module (Seat Belt Sequence) (Alternate Part)	1	1
27	a 4103377	Tape	1	1
28	1695897	Drip Shield (27 in. Battery Compartment)	1	1

ELECTRICAL SYSTEM
(10/2013 →)**KEY:****A:** Electric Hydraulic**B:** Manual Hydraulic

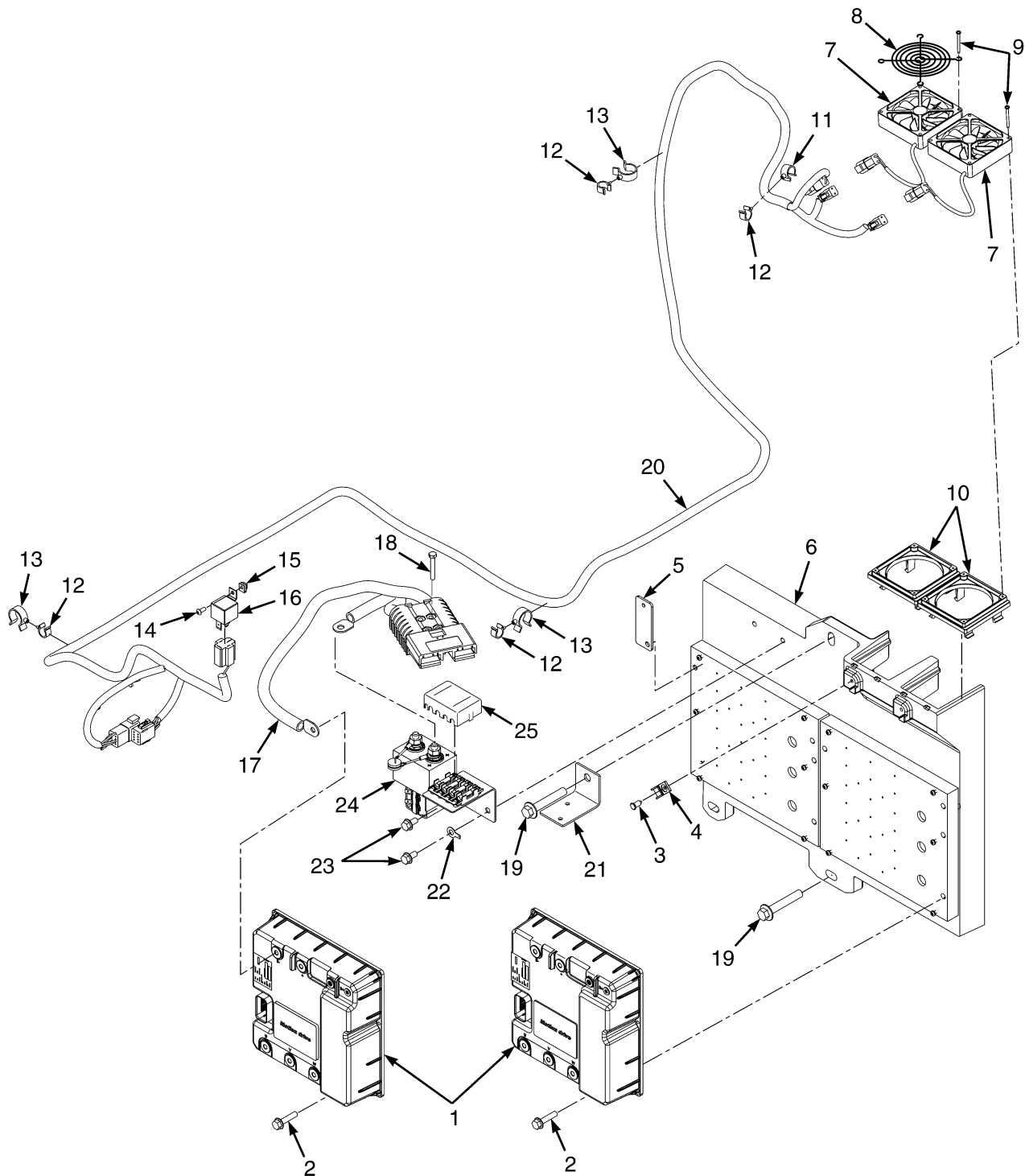
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
28	1695898	Drip Shield (30 in. Battery Compartment)	1	1
28	1695900	Drip Shield (33 in. Battery Compartment)	1	1
28	1695902	Drip Shield (36 in. Battery Compartment)	1	1
28	1695903	Drip Shield (40 in. Battery Compartment)	1	1

FOOTNOTES:**a** With Seat Belt Sequence Module**c** 11/2014 →**b** → 11/2014

NOTES

[illegible]

CONTROL PANEL (FIGURE 2-3) (→ S/N A268N08622K)



BP081295

CONTROL PANEL

(→ S/N A268N08622K)

KEY:**A: Standard Performance****B: Enhanced Performance**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1650275	Control Panel Assembly (36/48 Volt) (E45-50XN)	1	..
	1700148	Control Panel Assembly (36/48 Volt) (E55-70XN)	1	..
	1650276	Control Panel Assembly (36/48 Volt) (E45-70XN)	..	1
	1650278	Control Panel Assembly (72/80 Volt) (E55-70XN)	..	1
1	2094711	Controller -Type 1 (36/48 Volt) (E45-50XN)	2	..
1	a 2094713	Controller -Type 2 (36/48 Volt) (E55-70XN)	..	2
1	2094711	Controller -Type 1 (36/48 Volt) (E55-70XN) (Pump Controller)	1	..
1	a 2094713	Controller -Type 2 (36/48 Volt) (E55-70XN)(Traction Controller)	1	..
1	a 2094714	Controller -Type 2 (72/80 Volt) (E55-70XN)	..	2
2	1528482	Capscrew (E45-50XN)	8	12
2	1528482	Capscrew (E55-70XN)	10	..
3	1582464	Fastener	2	2
4	1500912	Clip	2	2
5	1670407	Bracket (Harness Mounting)	1	1
6	1649275	Heatsink (Motor Controller)	1	1
7	1647928	Fan (12V)	2	..
7	1694646	Fan (36/48 Volt) (E45-50XN)	..	2
7	4015542	Fan (12V) (72/80 Volt)(E55-70XN)	..	2
8	1565693	Guard	2	2
9	1694618	Screw	8	..
9	4609752	Screw (36/48 Volt) (E45-50XN)	..	8
9	4015541	Screw (72/80 Volt)(E55-70XN)	..	8
10	1537132	Spacer	2	2
11	1606544	Clamp (Swivel) (80V)	..	1
11	1606544	Clamp (Swivel) (36/48V)	..	2
12	1502055	Clamp (Swivel) (80V)	..	8
12	1573549	Clamp (Swivel) (36/48V)	..	2
13	1542436	Clamp (Swivel) (80V)	..	7
14	296152	Capscrew (80V)	..	1
15	4019192	Clip , Nut (80V)	..	1
16	4609161	Relay (Mini Power) (80V)	..	1
17	.....	Battery Connector (☞Figure 2-12).....	1	1
18	2062875	Capscrew	2	2
19	1510119	Capscrew	3	3
20	4610522	Wire Harness (80V) (Fan Adaptor) (☞Figure 2-75).....	..	1
20	4610521	Wire Harness (36/48V) (Fan Adaptor) (☞Figure 2-76).....	..	1
21	1656131	Bracket	1	1
22	1380434	Tab	1	1
23	4109993	.....	.....	.....
	1527879	Capscrew	2	2
24	2094710	Contact (UL-EE) (☞Figure 2-6).....	1	1
24	2094709	Contact (UL-E) (☞Figure 2-6).....	1	1
25	2105360	Cover (Fuse Box)	1	1

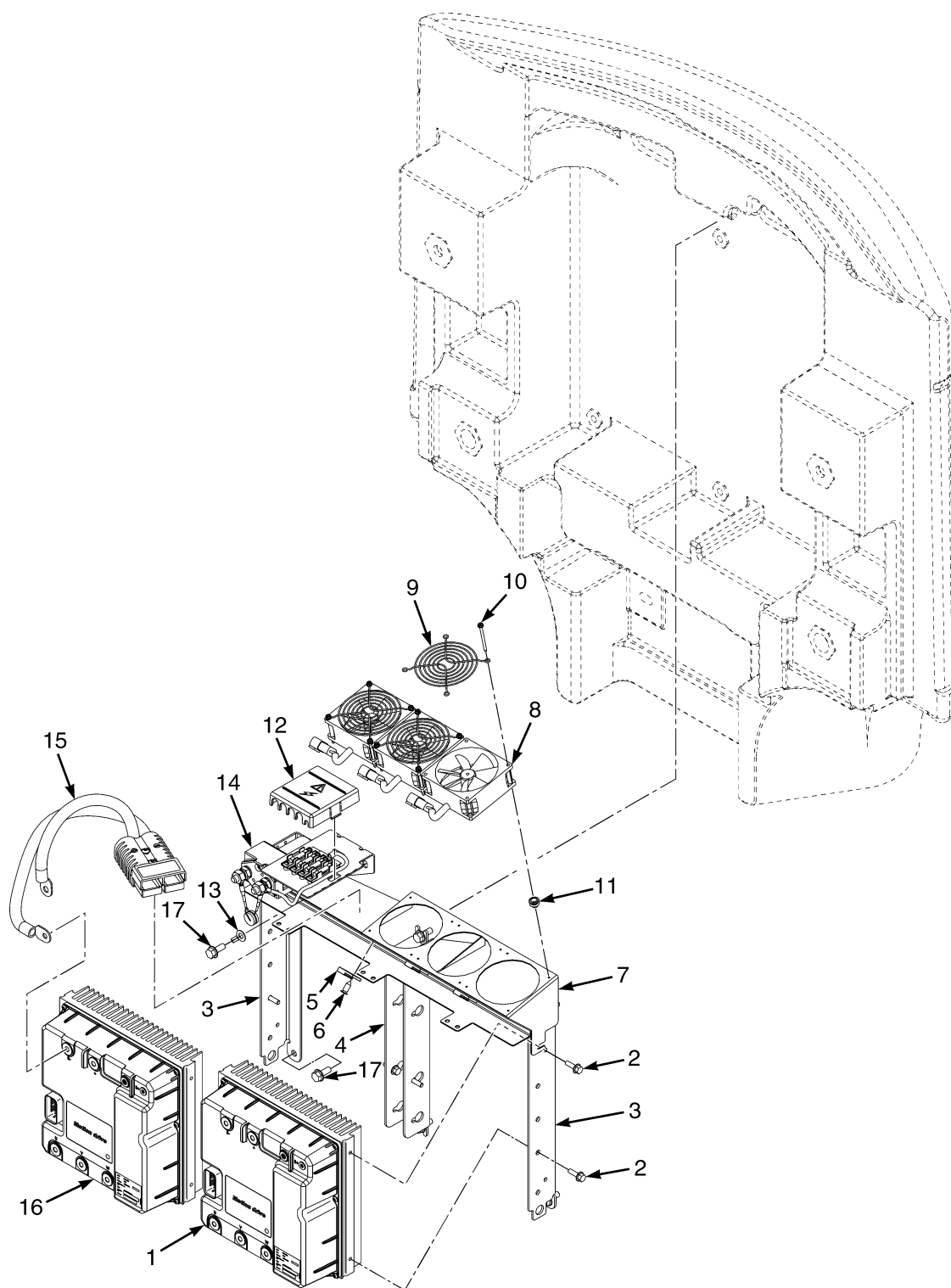
FOOTNOTES:

a Not Illustrated

NOTES

[illegible]

CONTROL PANEL (FIGURE 2-4) (S/N A268N08623K ↔ 11/2014)



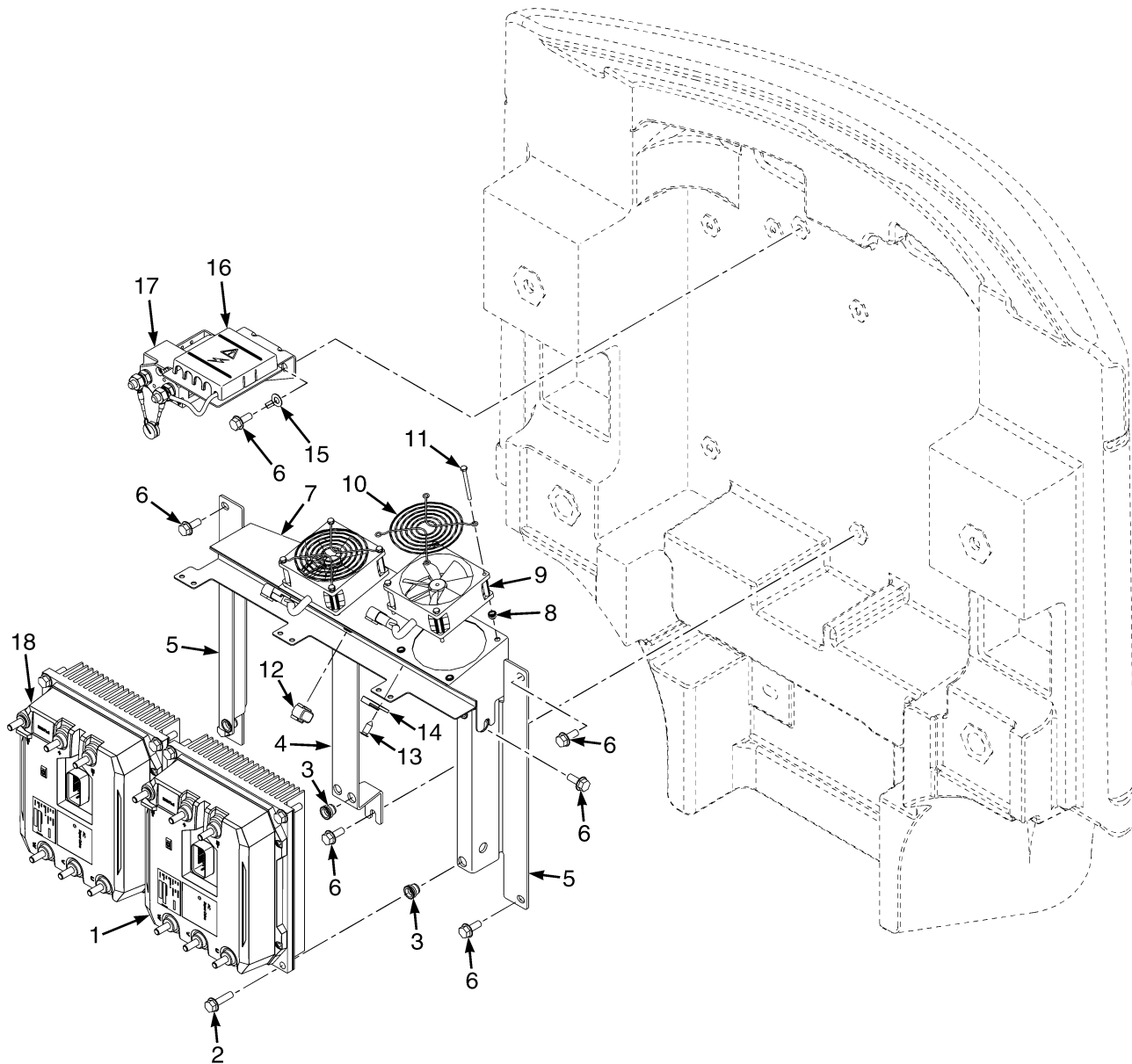
BP081783

CONTROL PANEL
(S/N A268N08623K ↔ 11/2014)**KEY:****A:** Standard Performance**B:** Enhanced Performance

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 4615152	Controller (36/48 Volt) (E45-50XN)	1	..
1	a 4615152	Controller (36/48 Volt) (E55-70XN)	1	..
1	a 4609750	Controller (48 Volt) (E45-70XN)	..	1
1	a 4609749	Controller (80 Volt) (E45-70XN)	..	1
2	1527876	Capscrew	8	8
3	4034279	Bracket	2	2
4	4047236	Bracket	1	1
5	1582464	Fastener	3	3
6	1500912	Clip	3	3
7	4034245	Air Duct	1	1
8	4044470	Fan (36/48 VDC)	3	3
8	4609751	Fan (12 Volt)	..	3
9	1565693	Guard	3	3
10	2053858	Screw	12	12
11	1683346	Insert	12	12
12	2105360	Cover (Fuse Box)	1	1
13	1380434	Tab	1	1
14	4614161	Contactor (UL-E) (☞ Figure 2-7).....	1	1
14	4614162	Contactor (UL-EE) (☞ Figure 2-7).....	1	1
15	.....	Battery Connector Assembly (☞ Figure 2-14, ☞ Figure 2-13, ☞ Figure 2-12).....	1	1
16	b 4615152	Controller (36/48 Volt) (E45-50XN)	1	..
16	b 4609750	Controller (36/48 Volt) (E55-70XN)	1	..
16	b 4609750	Controller (48 Volt) (E45-70XN)	..	1
16	b 4609749	Controller (80 Volt) (E45-70XN)	..	1
17	1527880	Capscrew	8	8

FOOTNOTES:**a** Hydraulic Pump**b** Traction Motor

CONTROL PANEL (FIGURE 2-5) (11/2014 →)



BP081784

CONTROL PANEL

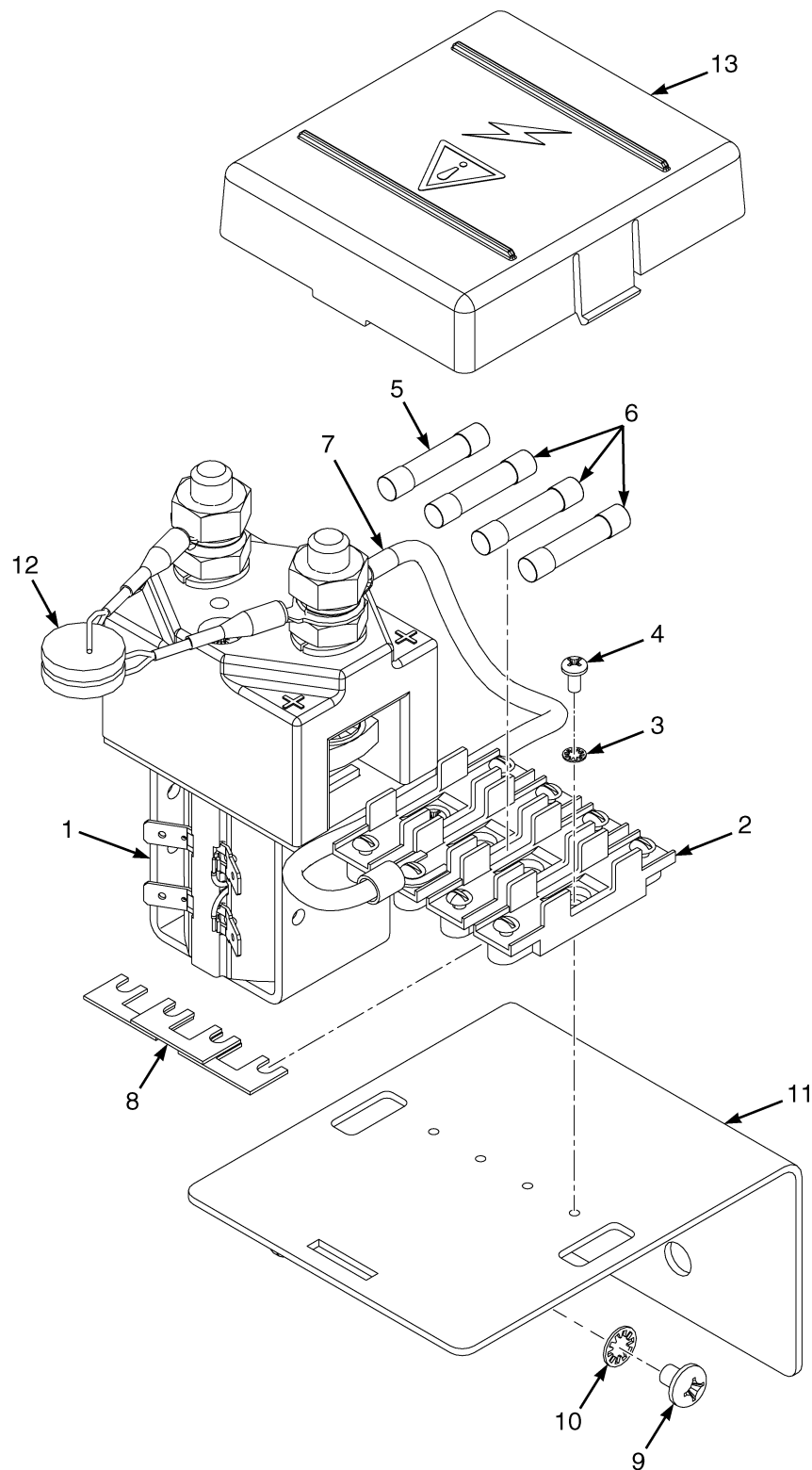
(11/2014 →)

KEY:**A:** Standard Performance**B:** Enhanced Performance

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b 4627629	Control Panel (36/48V) (E45-50XN)	1	..
1	c 4627629	Control Panel (36/48V) (E55-70XN)	1	..
1	d 4628563	Controller-Motor (36/48V) (E45-70XN)	..	1
1	a 4627258	Control Panel (80V) (E45-70XN)	..	1
2	1527881	Capscrew	8	8
3	1531557	Insert	8	8
4	4074725	Bracket	1	1
5	.....	Bracket	2	2
6	1527880	Capscrew	10	10
7	4074728	Air Duct	1	1
8	1683346	Insert	8	8
9	4044470	Fan (36/48 VDC)	2	..
9	4609751	Fan (12 Volt) (80V)	..	2
10	1565693	Guard	2	2
11	2053858	Screw	8	8
12	1626727	Connector	1	1
13	1500912	Clip	2	2
14	1582464	Fastener	3	3
15	1380434	Tab	1	1
16	2105360	Cover (Fuse Box)	1	1
17	4614162	Contactor (UL-EE)	1	1
17	4614161	Contactor (UL-E)	1	1
18	b 4627629	Control Panel (36/48V) (E45-50XN)	1	..
18	c 4628563	Controller-Motor (36/48V) (E55-70XN)	1	..
18	d 4628563	Controller-Motor (36/48V) (E45-70XN)	..	1
18	a 4627258	Control Panel (80V) (E45-70XN)	..	1

FOOTNOTES:**a** 440A Pump Motor Controller/440A Traction Motor Controller**b** 525A Pump Motor Controller/525A Traction Motor Controller**c** 525A Pump Motor Controller/700A Traction Motor Controller**d** 700A Pump Motor Controller/700A Traction Motor Controller

CONTACTOR ASSEMBLY (FIGURE 2-6) (→ S/N A268N08622K)



BP080691

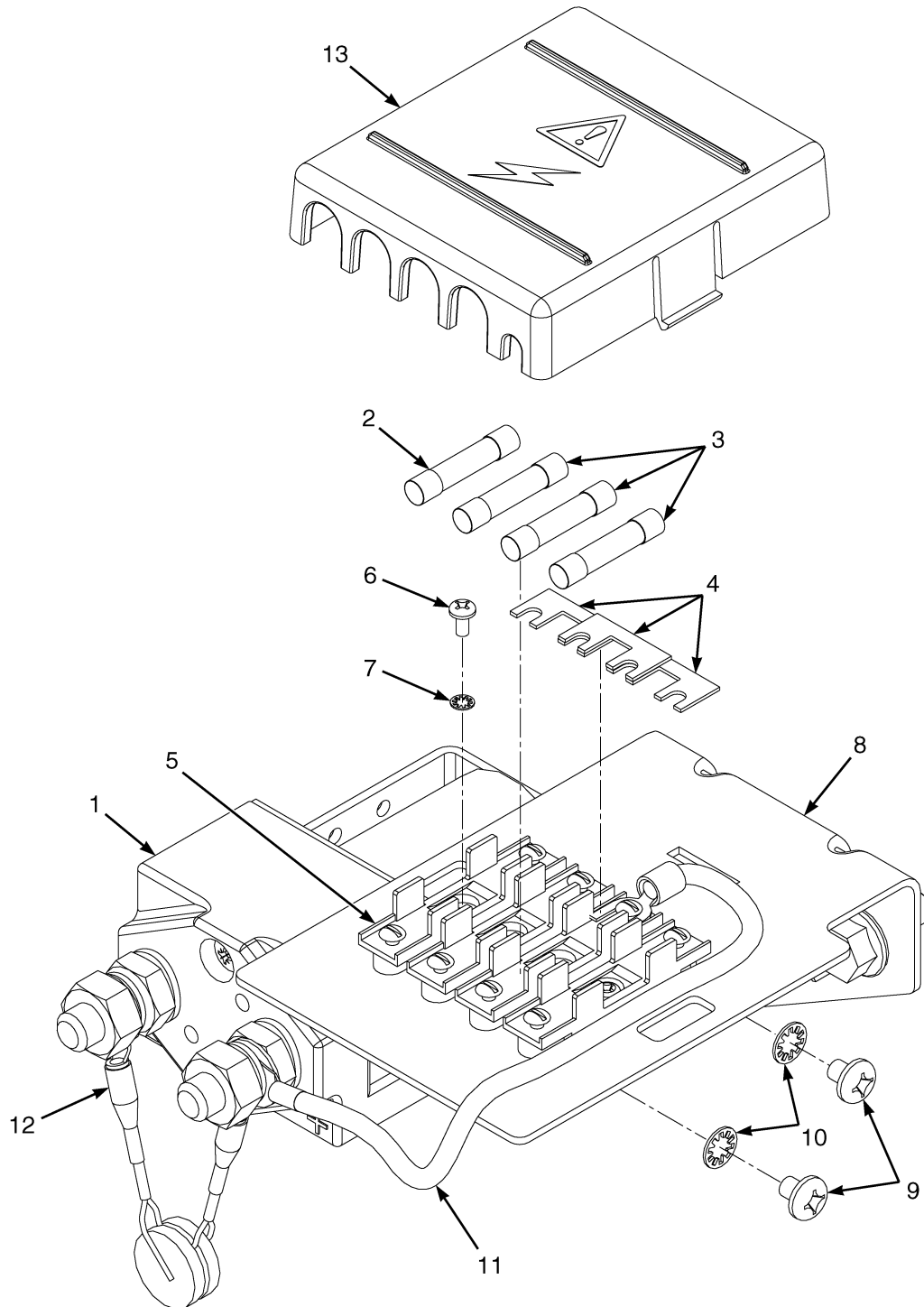
CONTACTOR ASSEMBLY

(→ S/N A268N08622K)

ITEM	PART NO.	DESCRIPTION	QTY
	2094709	Contactor (UL-E)	1
	2094710	Contactor (UL-EE)	1
1	1553414	Contactor (UL-E) (☞ Figure 2-9).....	1
1	1650824	Contactor (UL-EE) (☞ Figure 2-10).....	1
2	1374210	Fuse Block	1
3	296353	Washer	2
4	302007	Screw	2
5	~~350996~~		
	4184300	Fuse (5A Glass and Ceramic)	1
6	314878	Fuse (15 Amp)	3
7	1692287	Wire	1
8	1553417	Fuse Connector	1
9	369218	Screw	2
10	296358	Washer	2
11	1647924	Bracket	1
12	1525921	Thermistor	1
13	2105360	Cover (Fuse Box)	1
	a 1704190	Buss Bar (2 Pole)	1

FOOTNOTES:**a** Not Illustrated

CONTACTOR ASSEMBLY (FIGURE 2-7) (S/N A268N08623K ↔ 11/2015)

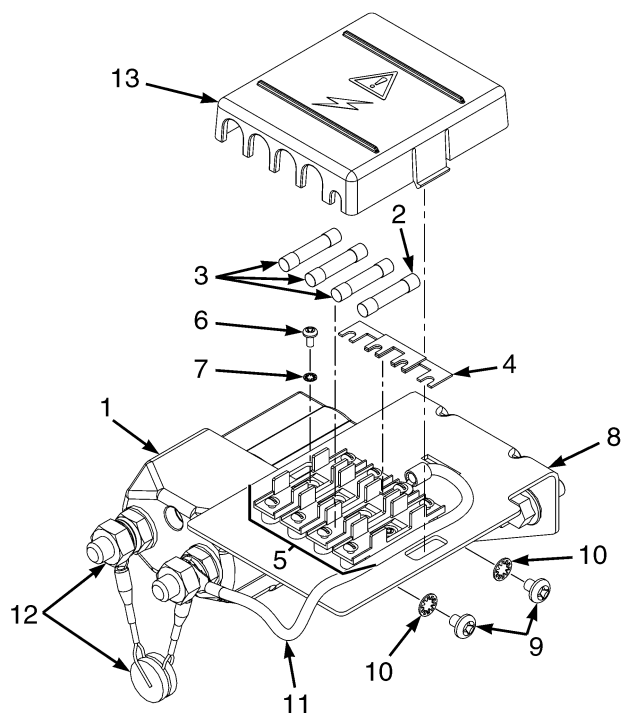


BP081299

CONTACTOR ASSEMBLY
(S/N A268N08623K ↔ 11/2015)

ITEM	PART NO.	DESCRIPTION	QTY
	4614161	Contactors (Assembly)	1
	4614162	Contactors (Assembly)	1
1	1553414	Contactors (Figure 2-9).....	1
1	1650824	Contactors (Figure 2-10).....	1
2	350996		
	4184300	Fuse (5A Glass and Ceramic)	1
3	314878	Fuse (15 Amp)	3
4	1553417	Fuse Connector	3
5	1374210	Fuse Block	1
6	302007	Screw	2
7	296353	Washer	2
8	4034281	Bracket	1
9	369218	Screw	2
10	296358	Washer	2
11	4020681	Wire (Contactors)	1
12	1525921	Thermistor (PTC Assembly)	1
12	1525920	E-Ring	2
12	222522	Heat Shrink	AR
13	2105360	Cover (Fuse Box)	1

CONTACTOR-FUSE PANEL ASSEMBLY (FIGURE 2-8) SEALED (11/2015 →)



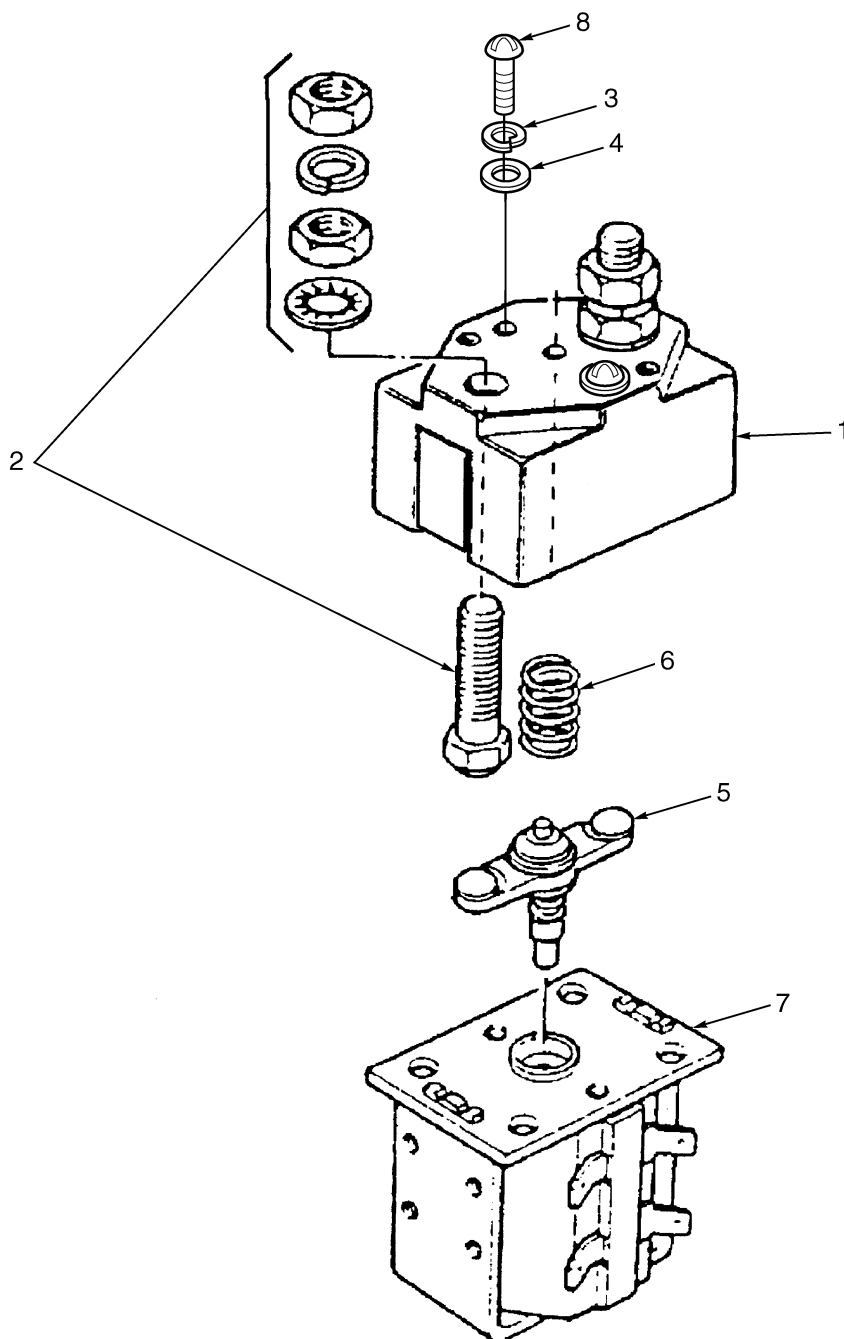
BP082143

ITEM	PART NO.	DESCRIPTION	QTY
	4640194	Contactor (Assembly)	1
1	4114105	Contactor	1
2	350996		
	4184300	Fuse (5A Glass and Ceramic)	1
3	314878	Fuse (15 Amp)	3
4	1553417	Fuse Connector	3
5	1374210	Fuse Block	1
6	302007	Screw	2
7	296353	Washer	2
8	4120282	Bracket (Contactor Fuse Assembly)	1
9	369218	Screw	2
10	296358	Washer	2
11	4020681	Wire	1
12	1525921	Thermistor	1
12	1525920	E-Ring	2
12	222522	Heat Shrink	AR
13	2105360	Cover (Fuse Box)	1

NOTES

[illegible]

CONTACTOR (FIGURE 2-9) UL-E

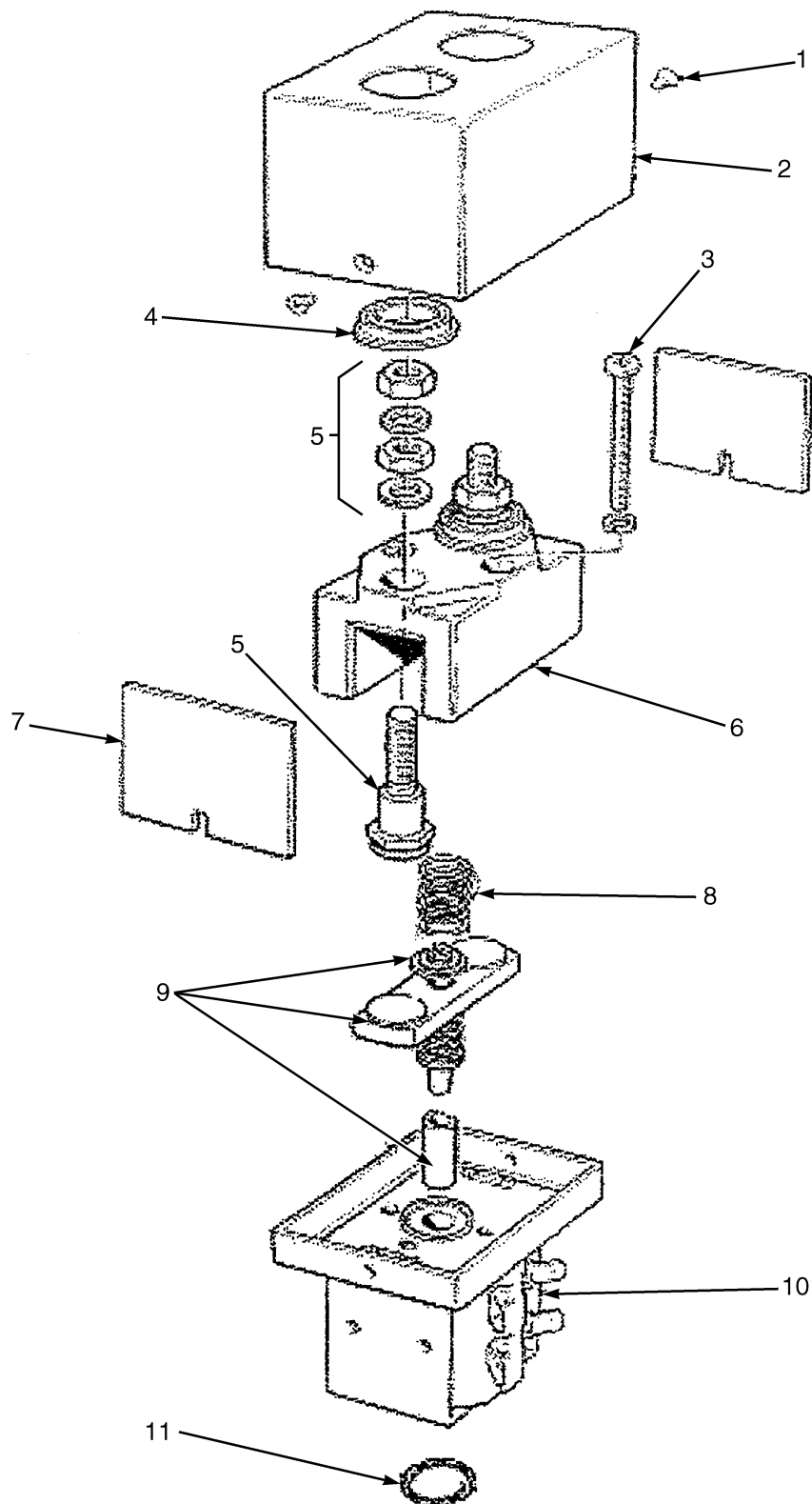


BP080143

**CONTACTOR
UL-E**

ITEM	PART NO.	DESCRIPTION	QTY
	1553414	Contactors	1
1	383978	Cover	2
2	1553429	Contact (Fixed)	2
3	275672	Washer	2
4	2304572	Washer	2
5	1532765	Contact	1
6	1495699	Spring	1
7	1553427	Coil	1
7	1454122	End Cap	1
8	302040	Screw	2
	1553428	Kit-Contactors	1

CONTACTOR (FIGURE 2-10) UL-EE

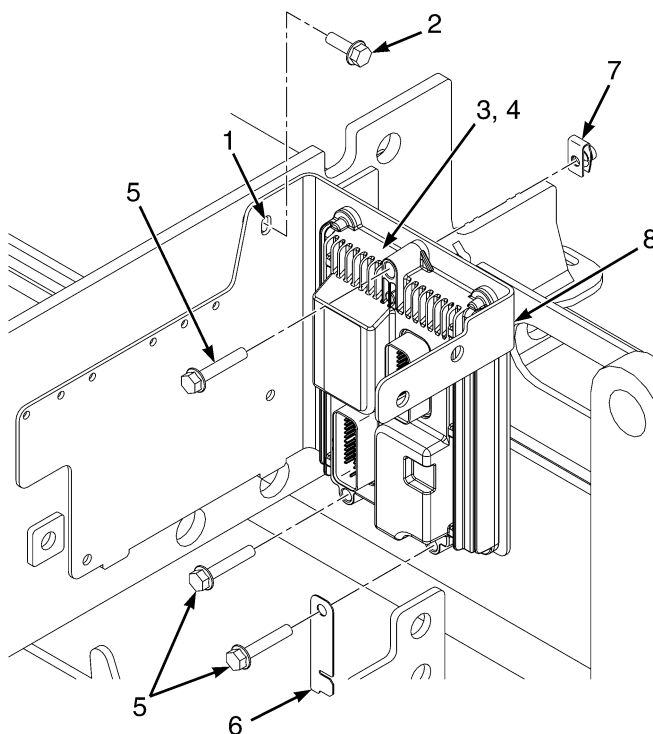


BP080796

**CONTACTOR
UL-EE**

ITEM	PART NO.	DESCRIPTION	QTY
	1650824	Contactors	1
1	2304652	Screw	2
2	1660405	Contactors (Cover)	1
3	1660403	Screw	2
4	2305096	Insulator	2
5	1553429	Contact (Fixed)	2
6	383978	Cover (With Magnets)	1
7	1660406	Contactors (Arc Shield)	2
8	1495699	Spring	1
9	1532765	Contact	1
10	1660404	Contactors Coil	1
11	1454122	End Cap	1
	1532764	Cover Assembly	1

VEHICLE SYSTEM MANAGER (FIGURE 2-11)

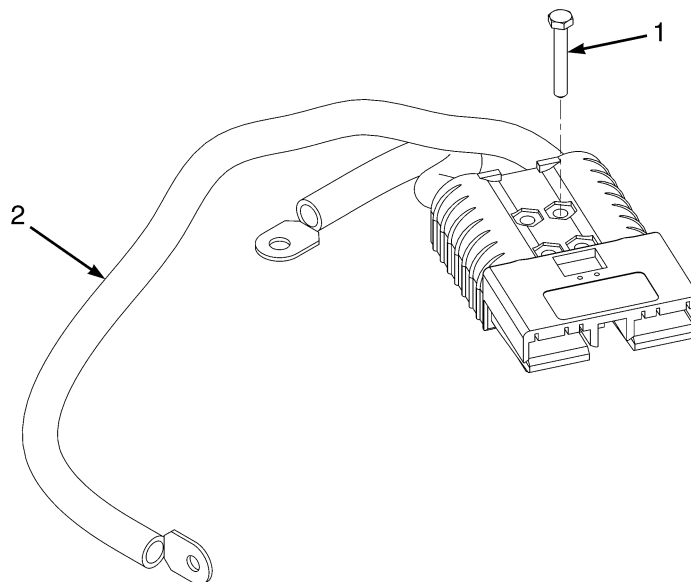


BP081297

ITEM	PART NO.	DESCRIPTION	QTY
1	1530243	Insert	1
2	a 1527880	Capscrew	1
2	b 1510113	Capscrew	1
3	.....	VSM Assembly (Manual Hydraulic)	1
3	.....	VSM Assembly (Electric Hydraulic)	1
4	2091228	Master Controller (VSM) (Manual Hydraulic)	1
4	2091150	Master Controller (VSM) (Electric Hydraulic)	1
5	1527882	Capscrew	3
6	1532758	Clip	1
7	1480237	Nut , Foldover	3
8	1699759	Bracket	1

FOOTNOTES:

a → S/N A268N08622K**b** S/N A268N08623K →

BATTERY CONNECTOR AND CABLE ASSEMBLY (FIGURE 2-12)
WITHOUT RAPID CHARGE OPTION

BP081298

KEY:**A: Standard Performance****B: Enhanced Performance**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2062875	Capscrew	2	2
2	a 1650714	Battery Connector and Cable (SB-36V)	1	1
2	b 4034259	Battery Connector (SB-36V)	1	1
2	195293	Battery Connector (Gray)	1	1
2	190811	Cable	AR	AR
2	194368	E-Ring	1	1
2	1357263	Cable	AR	AR
2	1547841	E-Ring	1	1
2	a 1650716	Battery Connector and Cable (SB-48V)	1	1
2	b 4034264	Battery Connector (SB-48V)	1	1
2	190811	Cable	AR	AR
2	194368	E-Ring	1	1
2	1357263	Cable	AR	AR
2	1547841	E-Ring	1	1
2	195296	Battery Connector (Blue)	1	1
2	a 1705557	Battery Connector (DIN-80V)	..	1
2	b 4619223	Battery Connector (SBE-80V)	..	1
2	378386	Battery Connector	..	1
2	190811	Cable	..	1
2	1357263	Cable	..	1
2	203694	E-Ring	..	1

FOOTNOTES:

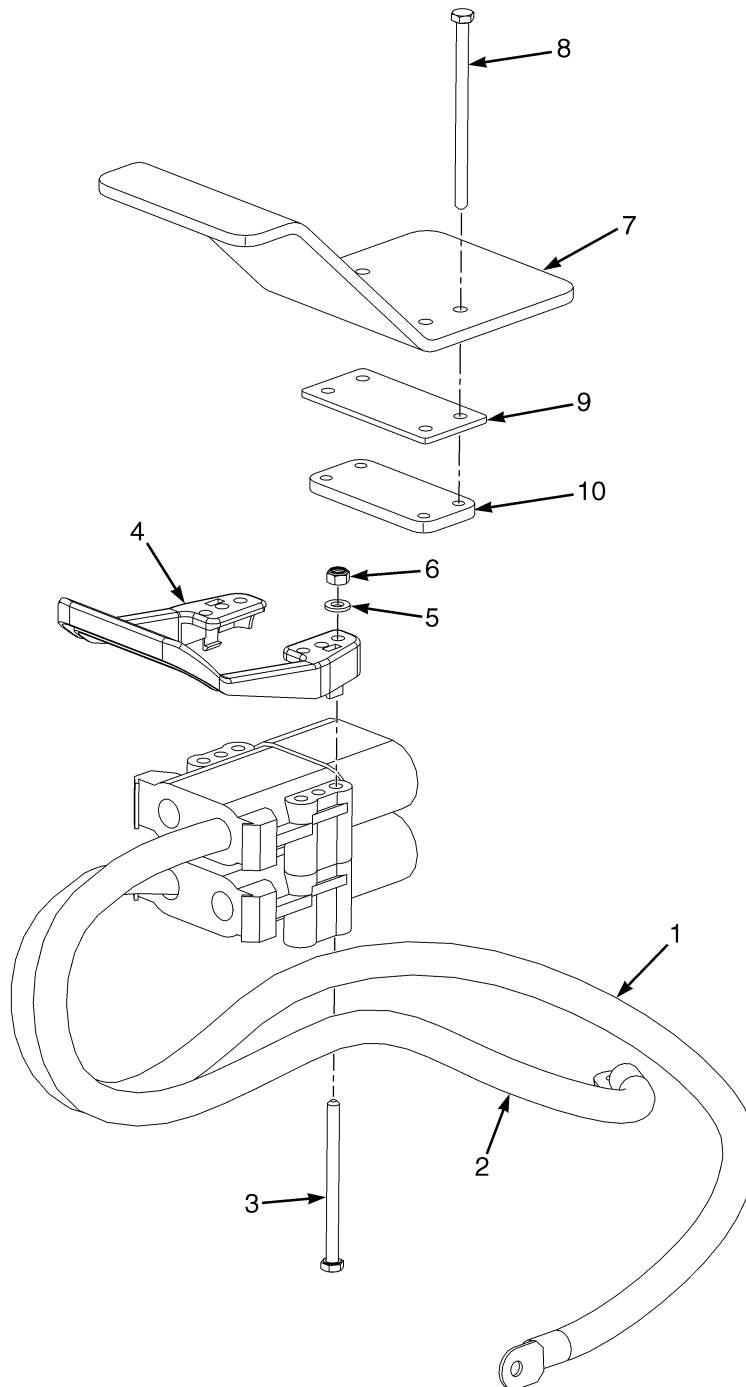
a → S/N A268N08622K

b S/N A268N08623K →

NOTES

[illegible]

BATTERY CONNECTOR AND CABLE ASSEMBLY (FIGURE 2-13) WITH RAPID CHARGE OPTION (→ S/N A268N08622K)



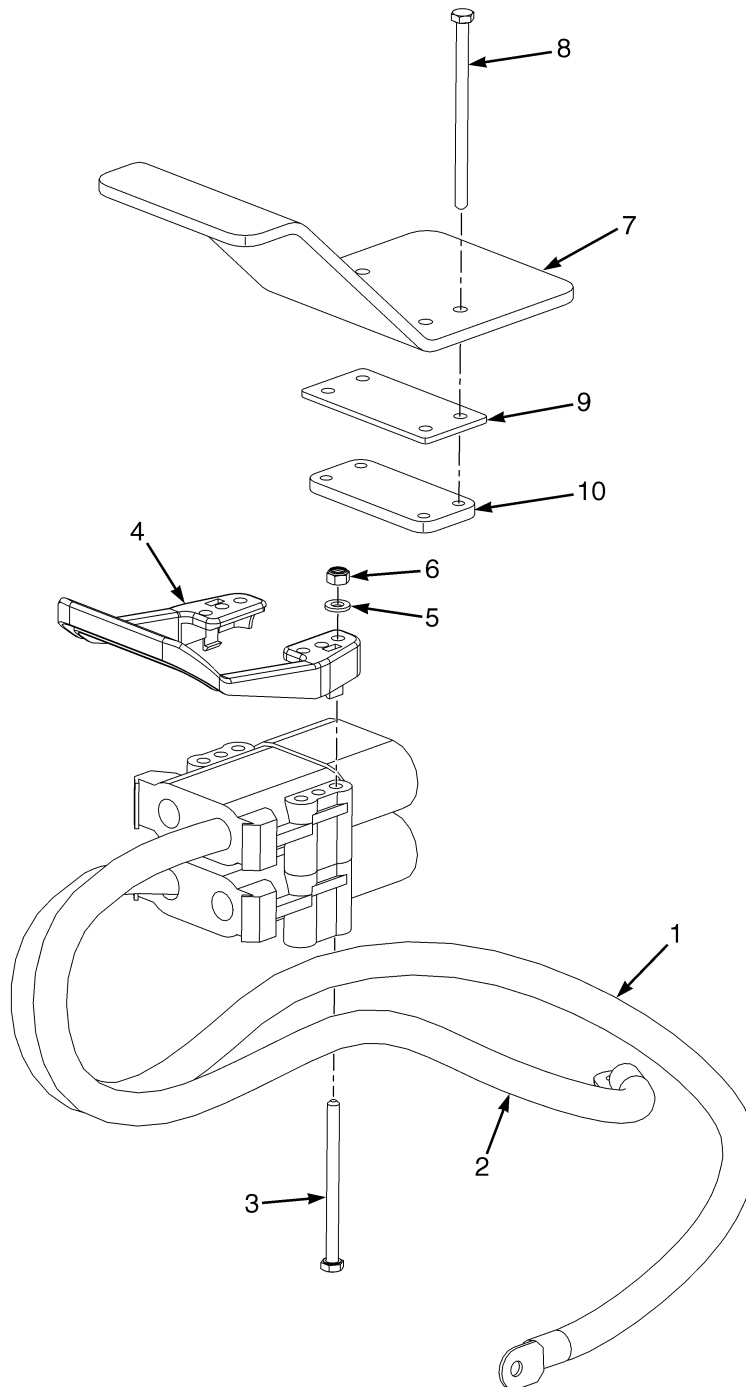
BP080874

**BATTERY CONNECTOR AND CABLE ASSEMBLY
WITH RAPID CHARGE OPTION (→ S/N A268N08622K)**

ITEM	PART NO.	DESCRIPTION	QTY
	1696234	Battery Connector And Cable (Assembly)	1
	4025669	Battery Connector (Assembly) (Alternate Part)	1
1	1697122	Battery Connector And Cable (Negative)	1
1	4025670	Battery Connector And Cable (Negative) (Alternate Part)	1
1	1697143	Plug	1
1	190811	Cable	AR
1	194368	E-Ring	1
2	1697123	Battery Connector And Cable	1
2	4025671	Battery Connector And Cable (Positive) (Alternate Part)	1
2	1697143	Plug	1
2	1357263	Cable	AR
2	1547841	E-Ring	1
3	1607686	Metr Hex HD Cpscr HCE1000	4
4	1696232	Handle	1
5	~~4093489~~		
	320156	Washer	4
6	~~1512440~~		
	302399	Nut	4
7	1696235	Plate	1
8	1696233	Capscrew	4
8	4026976	Capscrew (Alternate Part)	4
9	1697128	Plate (Spacer)	1
10	1696236	Plate (Mounting)	1
	a 4023228	Plate (Spacer) (Alternate Part)	1
	4019304	Kit -Rapid Charge	1

FOOTNOTES:**a** Not Illustrated

BATTERY CONNECTOR AND CABLE ASSEMBLY (FIGURE 2-14) WITH RAPID CHARGE OPTION (S/N A268N08623K →)



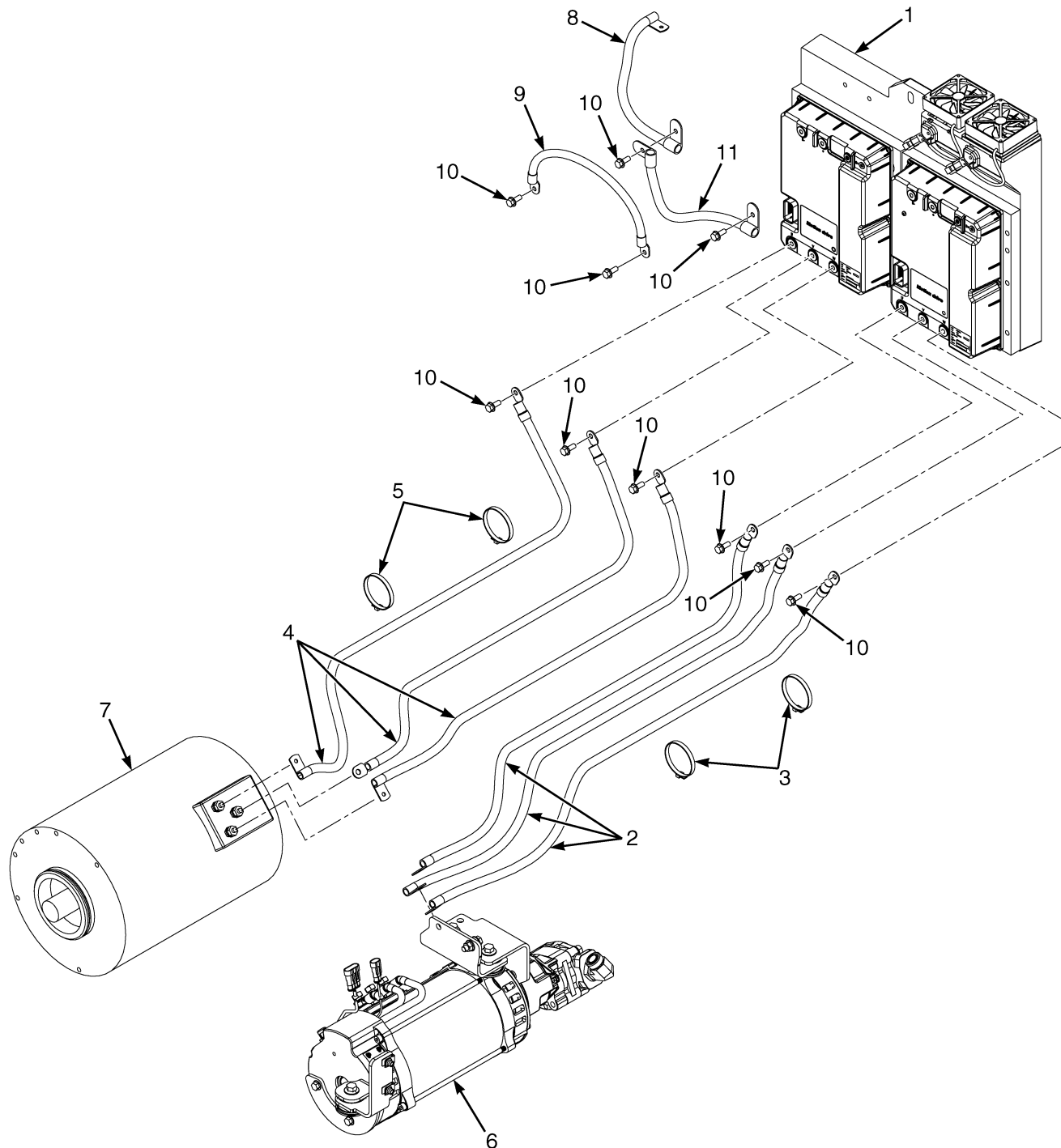
BP080874

BATTERY CONNECTOR AND CABLE ASSEMBLY
WITH RAPID CHARGE OPTION (S/N A268N08623K →)

ITEM	PART NO.	DESCRIPTION	QTY
	4034496	Battery Connector (Assembly)	1
1	4025670	Battery Connector And Cable (Negative)	1
1	1697143	Plug	1
1	203694	E-Ring	1
1	2302912	Cable	AR
1	280472	Sealant	AR
2	4034497	Battery Connector And Cable (Assembly)	1
2	1697143	Plug	1
2	280472	Sealant	AR
3	1607686	Metr Hex HD Cpscr HCE1000	4
4	1696232	Handle	1
5	~~4093489~~		
	320156	Washer	4
6	~~1512440~~		
	302399	Nut	4
7	1696235	Plate	1
8	4026976	Capscrew	4
9	1697128	Plate (Spacer)	1
10	1696236	Plate (Mounting)	1
	a 4023228	Plate (Spacer)	1
	4019304	Kit -Rapid Charge	1

FOOTNOTES:**a** Not Illustrated

POWER CABLES (FIGURE 2-15) (→ 11/2014)



BP081785

POWER CABLES

(→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Control Panel (☞ Figure 2-3).....	1
2	.....	Power Cable Assembly (27 in. Battery Compartment)	1
2	1650247		
	4034256	Power Cable (Pump Motor)	1
2	1650248		
	4034257	Power Cable (Pump Motor)	1
2	1650249		
	4034258	Power Cable (Pump Motor)	1
2	.....	Power Cable Assembly (30-33 in. Battery Compartment)	1
2	1650241		
	4034266	Power Cable (Pump Motor)	1
2	1650242		
	4034267	Power Cable (Pump Motor)	1
2	1650243		
	4034268	Power Cable (Pump Motor)	1
2	.....	Power Cable Assembly (36-40 in. Battery Compartment)	1
2	1650708		
	4034276	Power Cable (Pump Motor)	1
2	1650709		
	4034277	Power Cable (Pump Motor)	1
2	1650710		
	4034278	Power Cable (Pump Motor)	1
3	397676	Strap Clamp	2
4	.....	Power Cable Assembly (27 in. Battery Compartment)	1
4	4034251	Power Cable (Traction Motor)	1
4	1650245		
	4034252	Power Cable (Traction Motor)	1
4	1650246		
	4034253	Power Cable (Traction Motor)	1
4	.....	Power Cable Assembly (30-33 in. Battery Compartment)	1
4	1650238		
	4034261	Power Cable (Traction Motor)	1
4	1650239		
	4034262	Power Cable (Traction Motor)	1
4	1650240		
	4034263	Power Cable (Traction Motor)	1
4	.....	Power Cable Assembly (36-40 in. Battery Compartment)	1
4	1650705		
	4034271	Power Cable (Traction Motor)	1
4	1650706		
	4034272	Power Cable (Traction Motor)	1
4	1650707		
	4034273	Power Cable (Traction Motor)	1
5	397676	Strap Clamp	2
6	.....	Pump Motor	1
7	.....	Traction Motor (☞ Figure 3-6).....	1
8	a 1650703	Power Cable	1
8	b 4034254	Power Cable	1
9	a 1514074	Power Cable	1
9	b 4035734	Power Cable	1

POWER CABLES
(→ 11/2014)

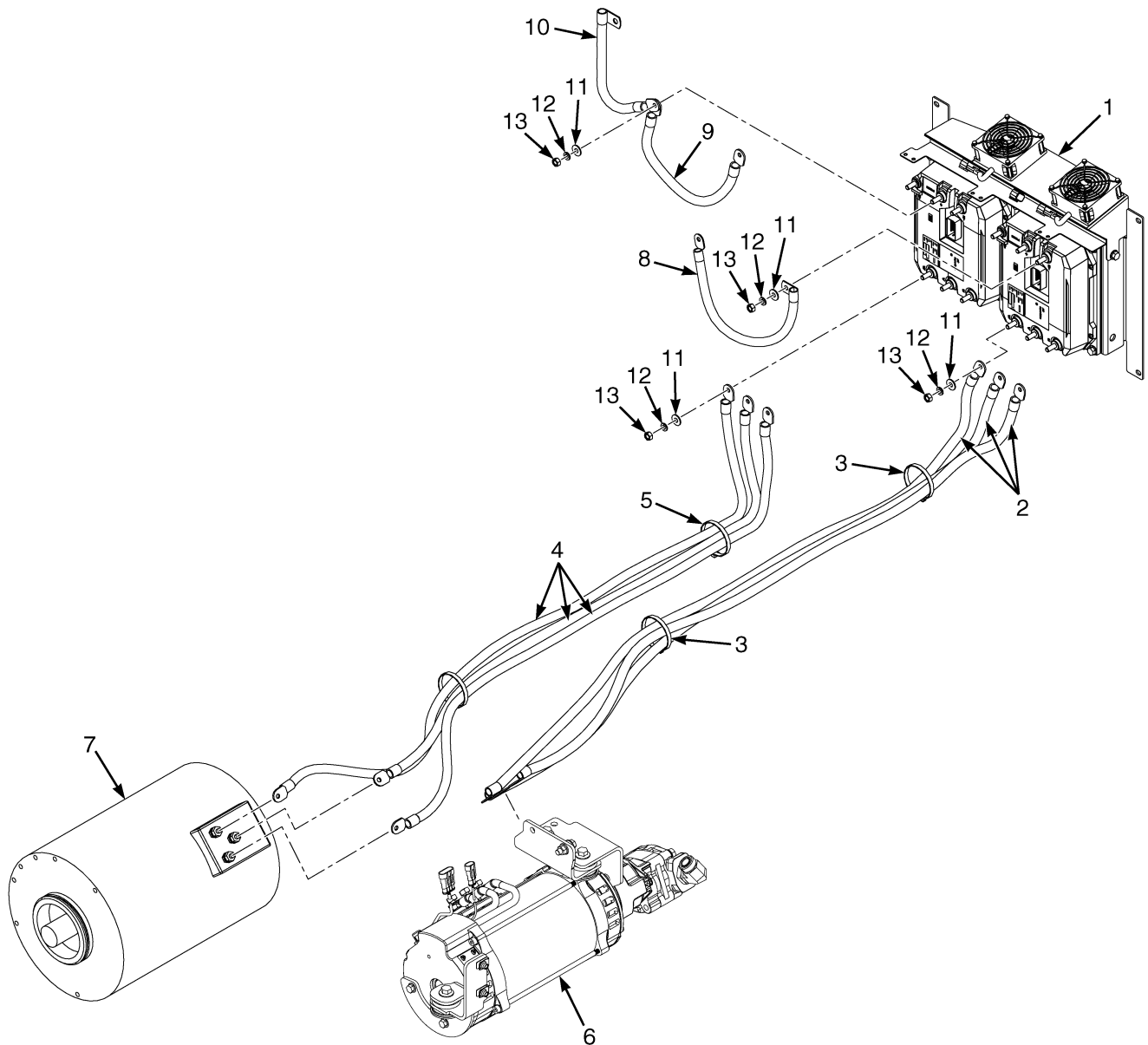
ITEM	PART NO.	DESCRIPTION	QTY
10	1527880	Capscrew	10
10	136749	Screw (Alternate Part)	10
10	292681	Lockwasher (Alternate Part)	10
10	320158	Washer (Alternate Part)	10
11	1650704	Power Cable	1

FOOTNOTES:**a** → S/N A268N08622K**b** S/N A268N08623K →

NOTES

[illegible]

POWER CABLES (FIGURE 2-16) (11/2014 →)

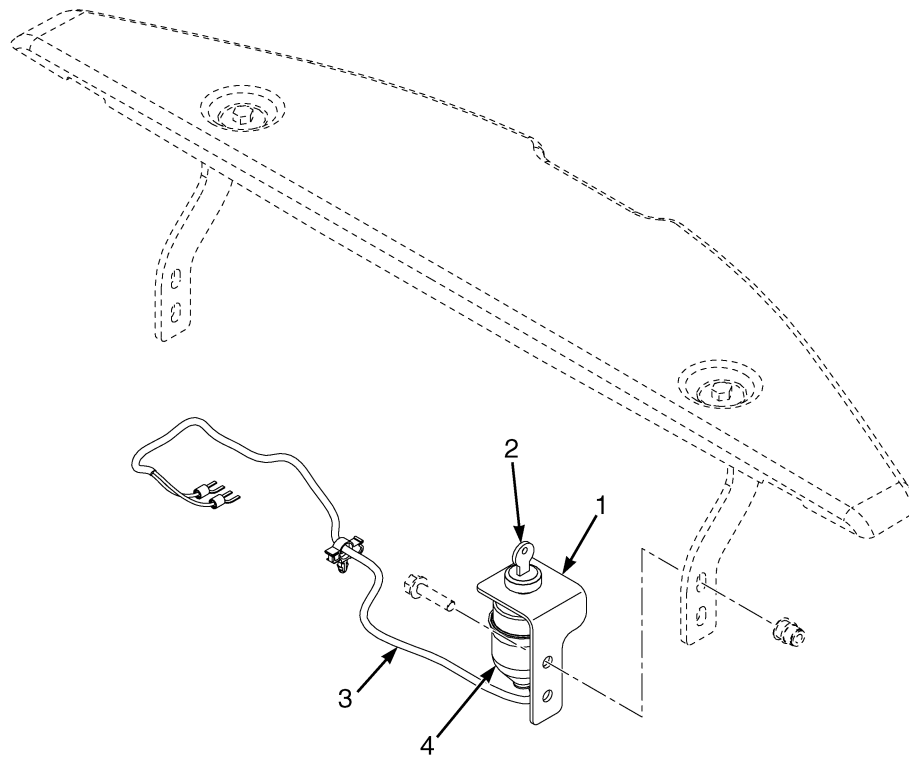


BP081786

POWER CABLES

(11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Control Panel (☞ Figure 2-5).....	1
2	.....	Power Cable Assembly (27 in. Battery Compartment)	1
2	4077701	Power Cable (Pump Motor)	1
2	4077702	Power Cable (Pump Motor)	1
2	4077703	Power Cable (Pump Motor)	1
2	.....	Power Cable Assembly (30-33 in. Battery Compartment)	1
2	4077692	Power Cable (Pump Motor)	1
2	4077693	Power Cable (Pump Motor)	1
2	4077694	Power Cable (Pump Motor)	1
2	.....	Power Cable Assembly (36-40 in. Battery Compartment)	1
2	4077670	Power Cable (Pump Motor)	1
2	4077668	Power Cable (Pump Motor)	1
2	4077669	Power Cable (Pump Motor)	1
3	397676	Strap Clamp	2
4	.....	Power Cable Assembly (27 in. Battery Compartment)	1
4	4077697	Power Cable (Traction Motor)	1
4	4077698	Power Cable (Traction Motor)	1
4	4077699	Power Cable (Traction Motor)	1
4	.....	Power Cable Assembly (30-33 in. Battery Compartment)	1
4	4077688	Power Cable (Traction Motor)	1
4	4077689	Power Cable (Traction Motor)	1
4	4077690	Power Cable (Traction Motor)	1
4	.....	Power Cable Assembly (36-40 in. Battery Compartment)	1
4	4077672	Power Cable (Traction Motor)	1
4	4077673	Power Cable (Traction Motor)	1
4	4077676	Power Cable (Traction Motor)	1
5	397676	Strap Clamp	2
6	.....	Pump Motor	1
7	.....	Traction Motor (☞ Figure 3-6).....	1
8	4077678	Power Cable	1
9	4077677	Power Cable	1
10	4077679	Power Cable	1
11	320158	Washer	10
12	292681	Lockwasher	10
13	239503	Nut	10
14	4100310	End Cap	10

AUXILIARY KEY SWITCH (FIGURE 2-17)

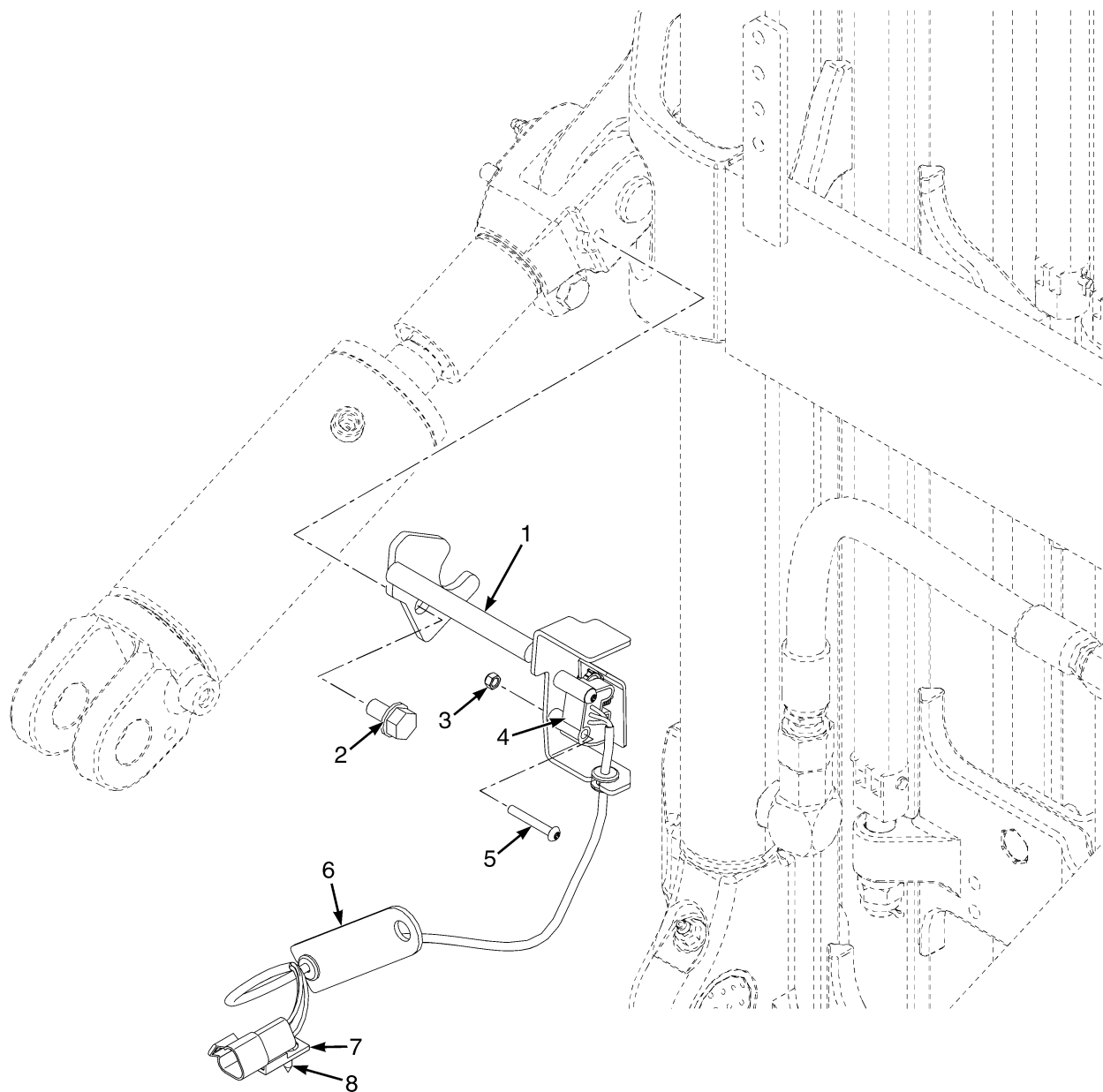
BP000921

ITEM	PART NO.	DESCRIPTION	QTY
1	1695274	Bracket	1
2	2058111	Ignition Switch	1
2	262798	Key Set	1
3	190380	Boot	1
4	2107945	Wire Harness	1
4	1521309	Connector Body	2
4	1301784	E-Spade	2
4	1402816	Clip	1

NOTES

[illegible]

TILT SENSOR GROUP (FIGURE 2-18) TWO AND THREE STAGE

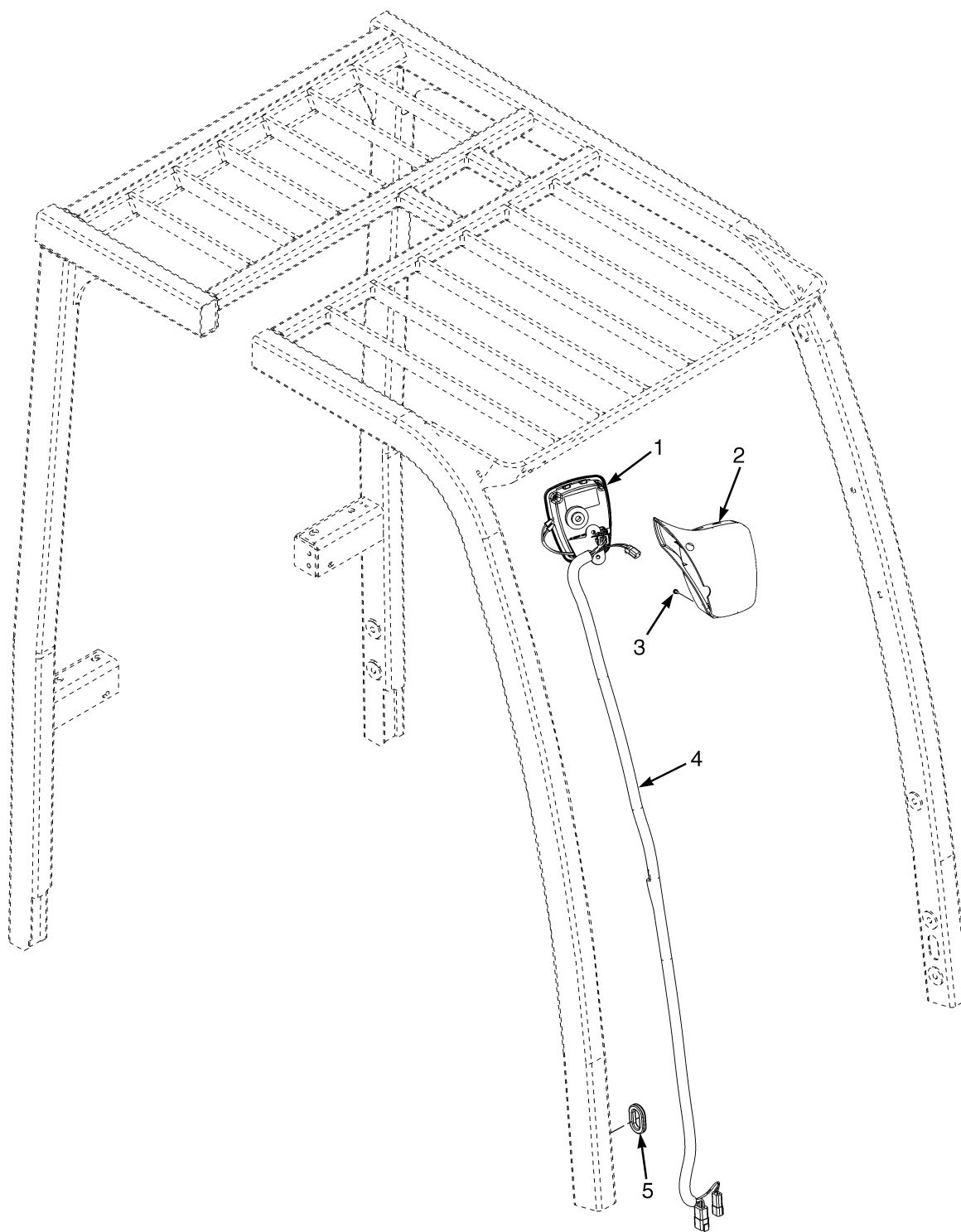


BP230013

**TILT SENSOR GROUP
TWO AND THREE STAGE**

ITEM	PART NO.	DESCRIPTION	QTY
1	a 4000840	Bracket	1
1	b 4089623	Bracket	1
1	1590151	Bracket Wldmt	1
2	1615163	Capscrew	1
3	302398	Locknut	2
4	1589621	Sensor (Mast Position)	1
4	1493466	Connector (3-Way)	1
4	1330415	Connector (Secondary Lock)	1
4	175944	Heat Shrink .001 M	AR
4	26284	Grommet	2
4	1330437	Terminal (Pin)	3
5	1553897	Capscrew	2
6	4000853	Bracket	1
7	1500912	Clip	1
8	1344124	Fastener	1

FOOTNOTES:**a** D Series Mast**b** F Series Mast

DISPLAY GROUP AND HARNESS (FIGURE 2-19)

BP080692

DISPLAY GROUP AND HARNESS

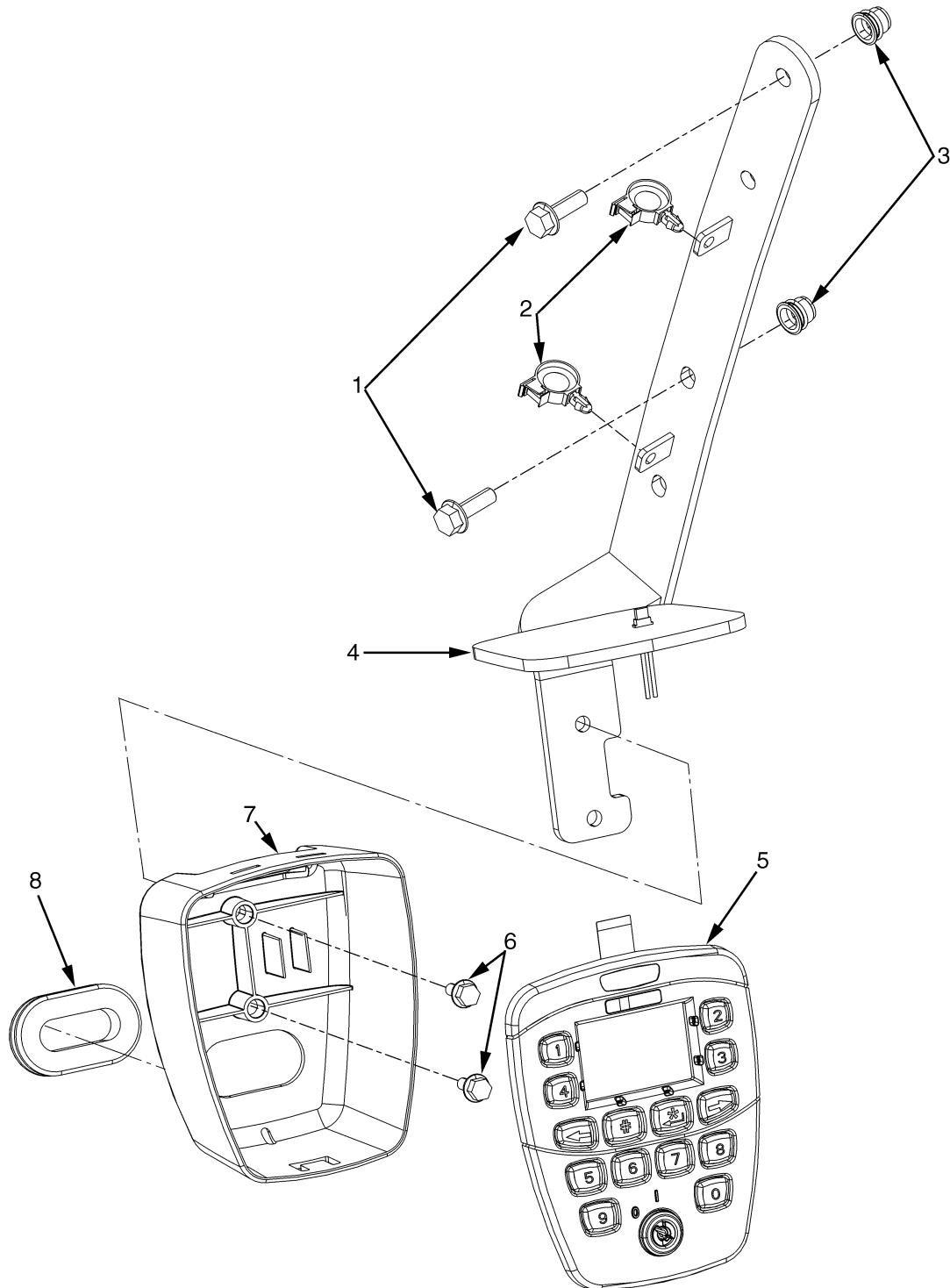
ITEM	PART NO.	DESCRIPTION	QTY
1	2094578	Display , Standard	1
1	2094579	Display , Freezer (Freezer)	1
1	1677333	Ignition Switch (Key)	1
1	1539584	Grommet	1
2	1687924	Display Cover Assembly	1
3	1704669	Screw	4
4	c 2109672	Wire Harness (RH Lights) (Standard Option) (☞Figure 2-60).....	1
4	c 2109673	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-63).....	1
4	b d 4626042	Wire Harness (RH Lights) (Standard Display without Turn Signals) (☞Figure 2-61).....	1
4	a d 4625269	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-64).....	1
5	1654142	Grommet	1
6	1337197	Key Set	1
6	1687435	Knob (Keyless Start)	1

FOOTNOTES:

a With Turn Signal Option
b Without Turn Signal Option

c → 10/2013
d 10/2013 →

DISPLAY (FIGURE 2-20) LOW MOUNT



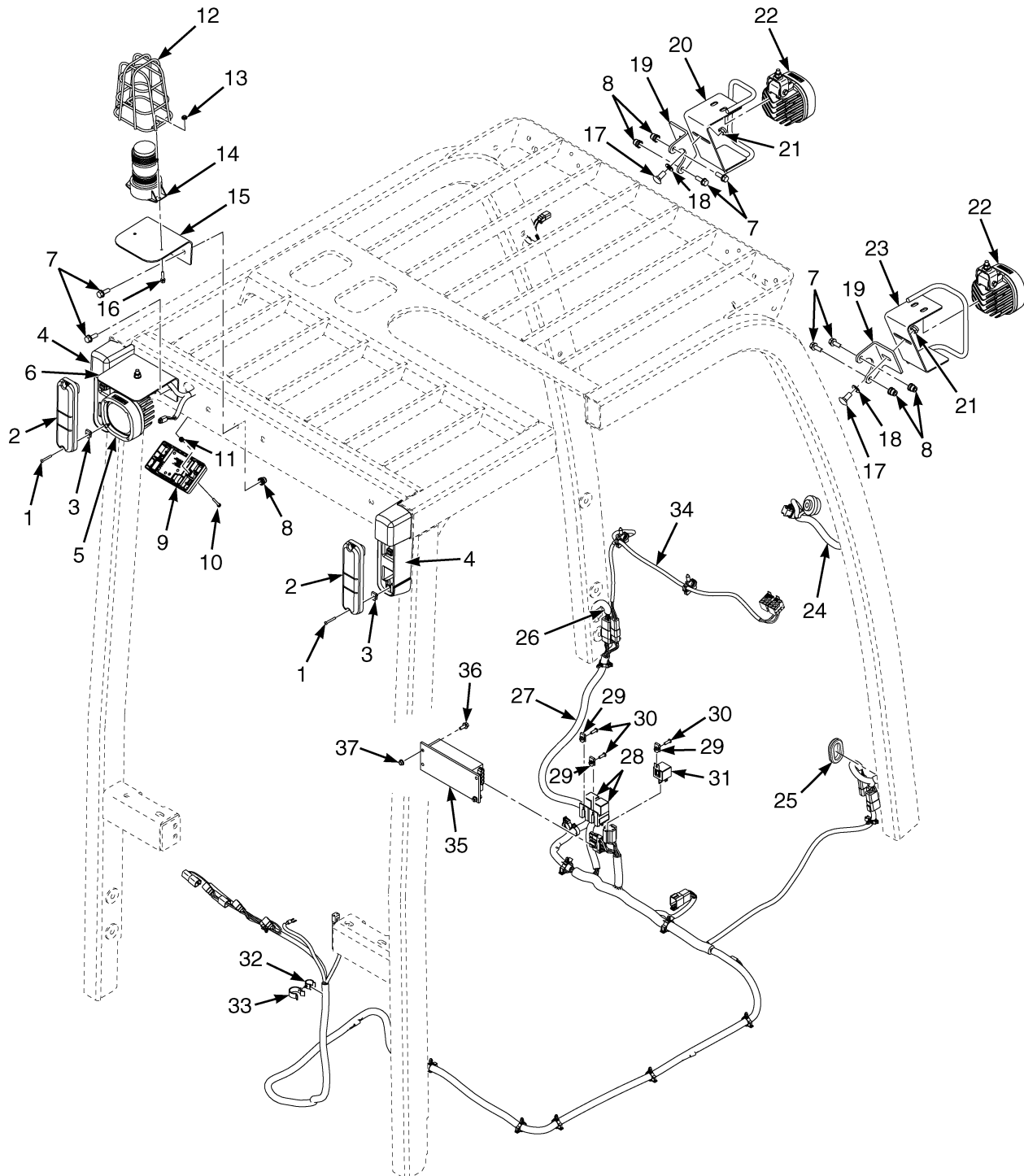
BP000218

**DISPLAY
LOW MOUNT**

ITEM	PART NO.	DESCRIPTION	QTY
1	1510113	Capscrew	2
2	1402815	Clip	2
3	1531557	Insert	2
4	4010035		
	4024512	Bracket Wldmt	1
5	2094578	Display , Standard (Standard)	1
5	2094579	Display , Freezer (Freezer)	1
6	1527876	Capscrew	2
7	2105726	Cover , Display	1
8	1539584	Grommet	1
	a 1337197	Key Set	1
	a 1687435	Knob (Keyless Start)	1
	a 4626043	Wire Harness (RH Lights) (Standard Option) (☞ Figure 2-62).....	1
	a 4626041	Wire Harness (RH Lights) (Freezer Option) (☞ Figure 2-65).....	1

FOOTNOTES:**a** Not Illustrated

LIGHTS (FIGURE 2-21) WITH STANDARD OVERHEAD GUARD



BP081271

LIGHTS

WITH STANDARD OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
1	1672692	Screw	2
2	4602052	Light (Tail) (LED)	2
2	2056826	Reflector (Tail)	2
3	1537551	Nut (Clip)	2
4	2101032	Tail Light Base (LH)	1
4	2101031	Tail Light Base (RH)	1
5	2107382	Worklight (Rear) (LED)	1
5	2098968	Worklight (Rear) (Halogen)	1
6	1664407	Bracket	1
7	1583611	Capscrew	8
8	1531557	Insert	8
9	2111852	Dome Light	1
10	302027	Screw	2
11	1683346	Insert	2
12	1302024	Guard (Strobe Light)	1
13	1586428	Nut	2
14	1654013	Strobe Light Assembly	1
15	1659602	Bracket	1
16	1586759	Capscrew	2
17	1470021	Bolt	2
18	320159	Washer	2
19	~~1702892~~		
	4023408	Bracket (Front Work Lights)	1
20	~~1702898~~		
	4023410	Bracket Wldmt (LH Front Work Light)	1
21	316836	Nut	2
22	2098969	Worklight (RH Front) (Glass Lens) (Halogen)	1
22	2098970	Worklight (LH Front) (Glass Lens) (Halogen)	1
22	2107383	Worklight (RH Front) (LED)	1
22	2107384	Worklight (LH Front) (LED)	1
23	~~1702897~~		
	4023409	Bracket Wldmt (RH)	1
24	b 2109672	Wire Harness (RH Lights) (Standard Option) (☞Figure 2-60).....	1
24	d 4626042	Wire Harness (RH Lights) (Standard Display without Turn Signals) (☞Figure 2-61).....	1
24	b 2109673	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-63).....	1
24	d 4625269	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-64).....	1
25	1654142	Grommet	1
26	b 2110501	Wire Harness (LH Lights w/o Turn Signals) (☞Figure 2-54).....	1
26	d 4625433	Wire Harness (LH Lights w/o Turn Signals) (☞Figure 2-59).....	1
27	c 4616775	Wire Harness (Main)(36V/48V)(w/ Lights or E-Hyds) (☞Figure 2-49).....	1
27	e 4636158	Wire Harness (Main)(36/48V) (☞Figure 2-50).....	1
27	c 4614700	Wire Harness (Main) (80V) (☞Figure 2-51).....	1
27	e 4636154	Wire Harness (Main)(80V) (☞Figure 2-52).....	1
28	2100367	Relay (Mini)	2
29	4019192	Clip , Nut	3
30	296153	Capscrew	3
31	4609161	Relay (Mini Power)	1
32	1543698	Clamp (Swivel)	1
33	1542436	Clamp (Swivel)	1

LIGHTS
WITH STANDARD OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
34	2097858	Wire Harness (Front Switch) (☞ Figure 2-77).....	1
35	~~2066644~~ 4638711	DC-DC Converter (36/80 Volt)	1
36	1527876	Capscrew	2
37	~~1307884~~ 1514429	Nut	2
	a 1463849	Lubricant	AR

FOOTNOTES:

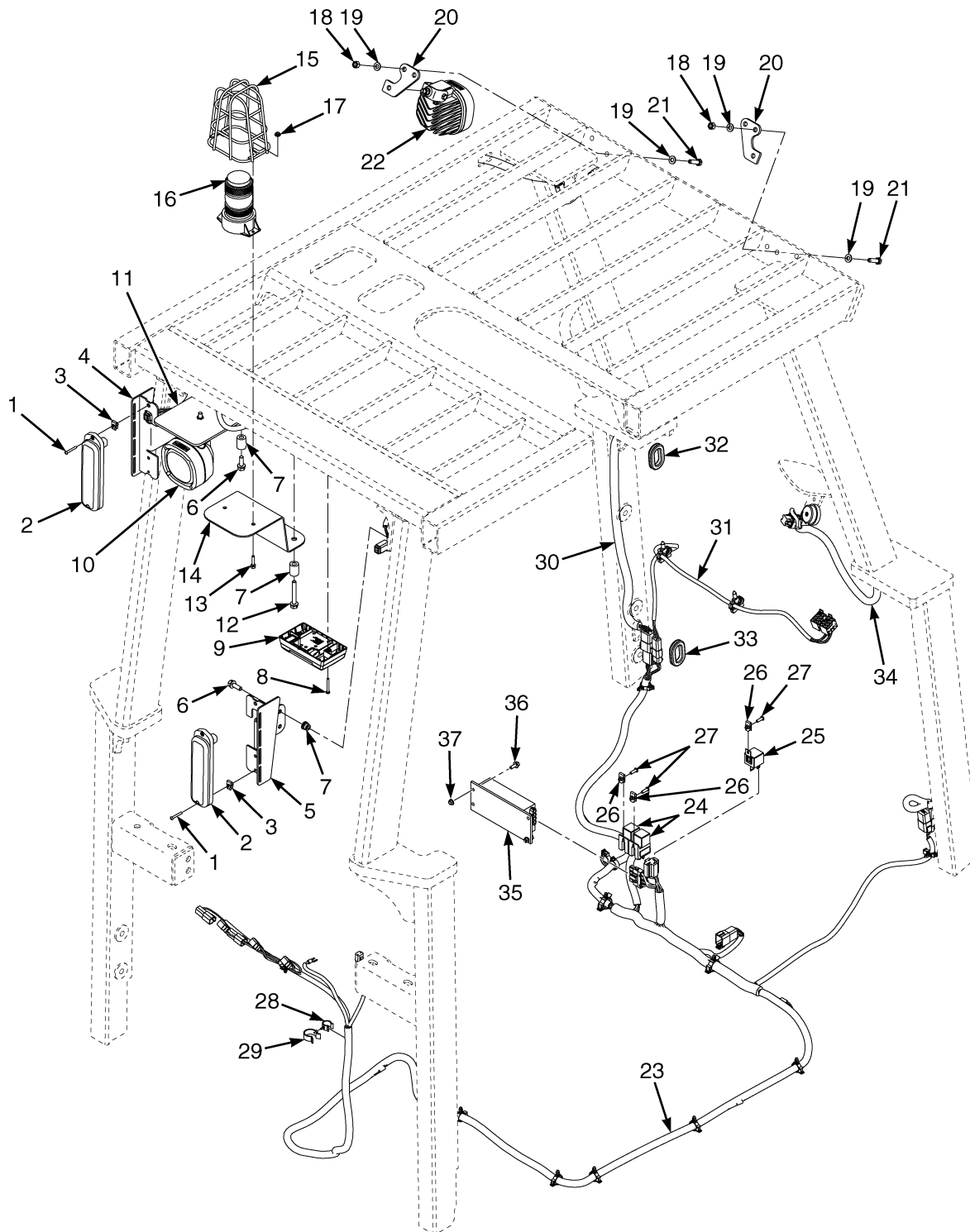
a Not Illustrated
b → 10/2013
c → 11/2014

d 10/2013 →
e 11/2014 →

NOTES

[illegible]

LIGHTS (FIGURE 2-22) WITH DRIVE-THRU RACK OVERHEAD GUARD



BP081273

LIGHTS

WITH DRIVE-THRU RACK OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
1	1672692	Screw	4
2	4602052	Light (Tail) (LED)	2
2	2056826	Reflector (Tail)	2
3	1537551	Nut (Clip)	4
4	1702006	Bracket Wldmt (Tail Light LH)	1
5	1702007	Bracket Wldmt (Tail Light RH)	1
6	1583611	Capscrew	6
7	1531557	Insert	8
8	302027	Screw	2
9	2111852	Dome Light	1
10	2107382	Worklight (Rear) (LED)	1
10	2098968	Worklight (Rear) (Halogen)	1
11	1698432	Bracket	1
12	1585835	Capscrew	2
13	1586759	Capscrew	2
14	1701029	Bracket Wldmt	1
15	1302024	Guard (Strobe Light)	1
16	1654013	Strobe Light Assembly	1
17	1586428	Nut	2
18	2022719	Nut	4
19	320157	Washer	8
20	4029069	Bracket	2
21	176640	Bolt	4
22	2098969	Worklight (RH Front) (Glass Lens) (Halogen)	1
22	2098970	Worklight (LH Front) (Glass Lens) (Halogen)	1
22	2107383	Worklight (RH Front) (LED)	1
22	2107384	Worklight (LH Front) (LED)	1
23	c 4616775	Wire Harness (Main)(36V/48V)(w/ Lights or E-Hyds) (☞Figure 2-49).....	1
23	e 4636158	Wire Harness (Main) (36/48v) (☞Figure 2-50).....	1
23	c 4614700	Wire Harness (Main) (80V) (☞Figure 2-51).....	1
23	e 4636154	Wire Harness (Main) (80V) (☞Figure 2-52).....	1
24	2100367	Relay (Mini)	2
25	4609161	Relay (Mini Power)	1
26	4019192	Clip , Nut	3
27	296153	Capscrew	3
28	1543698	Clamp (Swivel)	1
29	1542436	Clamp (Swivel)	1
30	b 4611313	Wire Harness (LH Lights w/o Turn Signals, with DTR) (☞Figure 2-56).....	1
30	d 4625433	Wire Harness (LH Lights w/o Turn Signals) (☞Figure 2-59).....	1
31	2097858	Wire Harness (Front Switch) (☞Figure 2-77).....	1
32	1539584	Grommet	1
33	1654142	Grommet	1
34	b 2109672	Wire Harness (RH Lights) (Standard Option) (☞Figure 2-60).....	1
34	d 4626043	Wire Harness (RH Lights) (Standard Option) (☞Figure 2-62).....	1
34	b 2109673	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-63).....	1
34	d 4626041	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-65).....	1
35	~~2066644~~ 4638711	DC-DC Converter (36/80 Volt)	1
36	1527876	Capscrew	2
37	~~1307884~~	Nut	2

LIGHTS
WITH DRIVE-THRU RACK OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
	1514429		
	a 1463849	Lubricant	AR

FOOTNOTES:

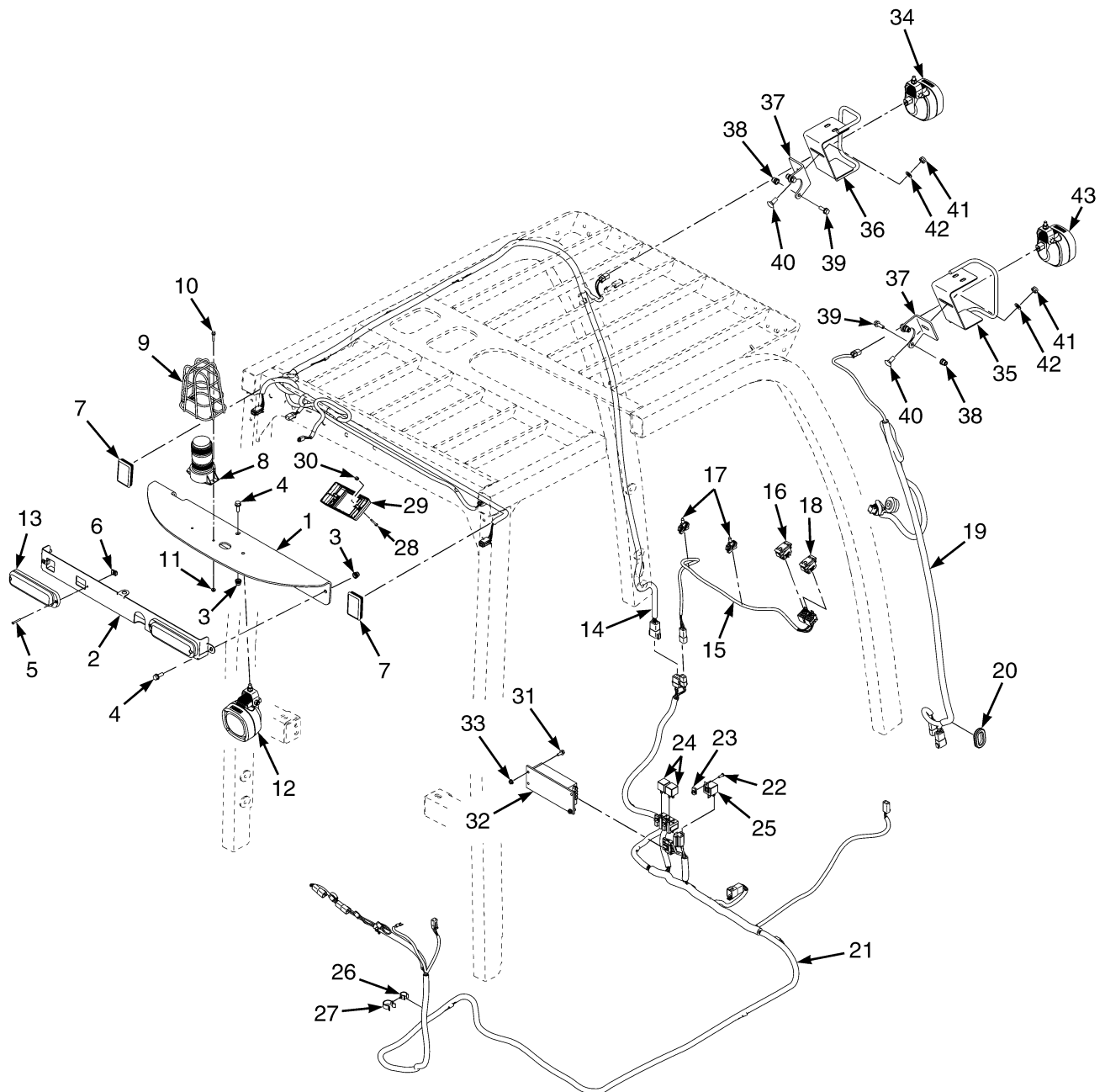
a Not Illustrated
b → 10/2013
c → 11/2014

d 10/2013 →
e 11/2014 →

NOTES

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, and the page contains no handwriting or other markings.

LIGHTS (FIGURE 2-23) INBOARD REAR LIGHTS



BP081789

LIGHTS
INBOARD REAR LIGHTS

ITEM	PART NO.	DESCRIPTION	QTY
1	4043654	Plate (Rear Lights Mount - Inboard)	1
2	4043644	Plate (Rear Lights Mount - Inboard)	1
3	1531557	Insert	4
4	1583611	Capscrew	4
5	1672692	Screw	2
6	1537551	Nut (Clip)	2
7	1702360	Cap (Drive Through OHG)	2
8	1654013	Strobe Light Assembly	1
9	1302024	Guard (Strobe Light)	1
10	1586759	Capscrew	2
11	1586428	Nut	2
12	2098968	Worklight (Rear) (Halogen)	1
12	1662409	Bulb (Clear) (55 W 1450 lm)	1
12	2107382	Worklight (Rear) (LED)	1
13	4602052	Light (Tail) (LED)	1
13	2056826	Reflector (Tail)	1
14	b 4617533	Wire Harness (LH Lights)(OHG) (☞Figure 2-57).....	1
14	d 4625432	Wire Harness (LH Lights with Turn Signals) (☞Figure 2-58).....	1
14	d 4625433	Wire Harness (LH Lights w/o Turn Signals) (☞Figure 2-59).....	1
15	2097858	Wire Harness (Front Switch) (☞Figure 2-77).....	1
16	1382302	Switch	1
17	1646457	Clip	2
18	1382304	Switch (Rear Work Light 12V)	1
19	b 2109672	Wire Harness (RH Lights) (Standard Option) (☞Figure 2-60).....	1
19	d 4626042	Wire Harness (RH Lights) (Standard Display without Turn Signals) (☞Figure 2-61).....	1
19	b 2109673	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-63).....	1
19	d 4625269	Wire Harness (RH Lights) (Freezer Option) (☞Figure 2-64).....	1
20	1654142	Grommet	1
21	c 4616775	Wire Harness (Main)(36V/48V)(w/ Lights or E-Hyds) (☞Figure 2-49).....	1
21	e 4636158	Wire Harness (Main) (36/48V) (☞Figure 2-50).....	1
21	a 4616884	Wire Harness (Main)(36/48V)(w/out Lights or E-Hyds) (☞Figure 2-53).....	1
21	c 4614700	Wire Harness (Main) (80V) (☞Figure 2-51).....	1
21	e 4636154	Wire Harness (Main) (80V) (☞Figure 2-52).....	1
22	296153	Capscrew	3
23	4019192	Clip , Nut	3
24	2100367	Relay (Mini)	2
25	4609161	Relay (Mini Power)	1
26	1543698	Clamp (Swivel)	1
27	1542436	Clamp (Swivel)	1
28	302027	Screw (Dome Light)	2
29	2111852	Dome Light	1
30	1683346	Insert (Dome Light)	2
31	1527876	Capscrew	2
32	~~2066644~~		
	4638711	DC-DC Converter (36/80 Volt)	1
32	~~2066644~~		
	4638711	DC-DC Converter (36/80 Volt)	1
33	~~1307884~~		
	1514429	Nut	2

LIGHTS

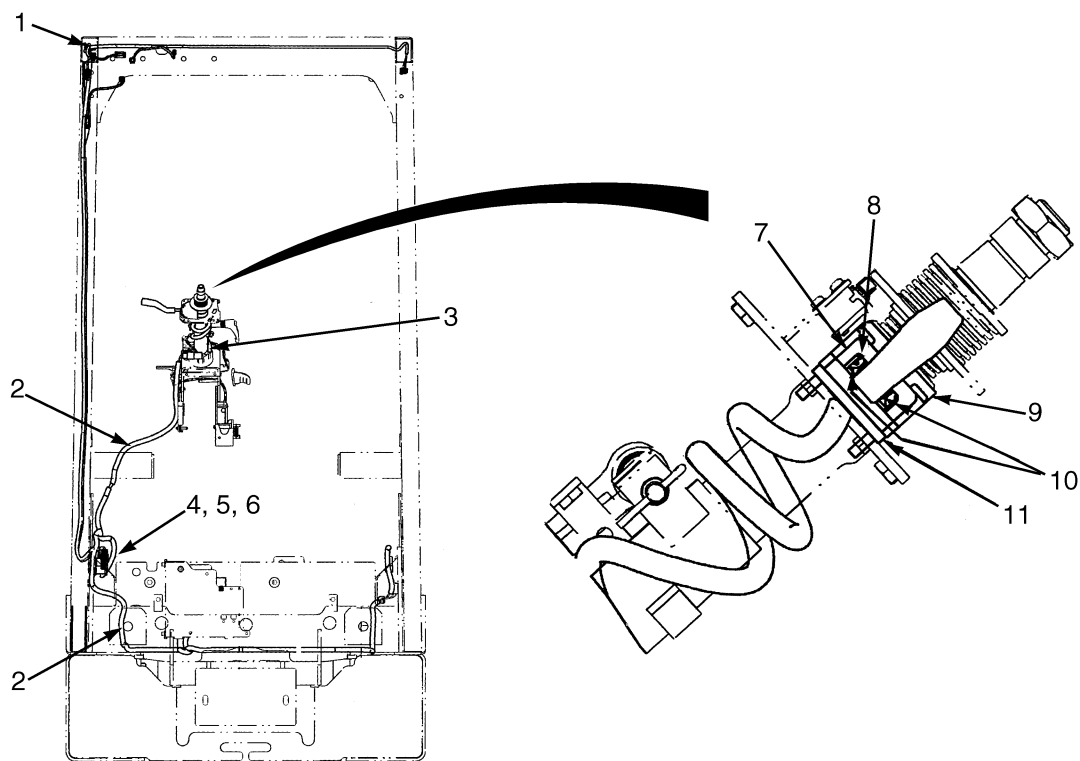
INBOARD REAR LIGHTS

ITEM	PART NO.	DESCRIPTION	QTY
34	2098970	Worklight (LH Front) (Glass Lens) (Halogen)	1
34	1662409	Bulb (Clear) (55 W 1450 lm)	1
34	2107384	Worklight (LH Front) (LED)	1
35	~~1702897~~		
	4023409	Bracket Wldmt (RH)	1
36	~~1702898~~		
	4023410	Bracket Wldmt (LH Front Work Light)	1
37	~~1702892~~		
	4023408	Bracket (Front Work Lights)	2
38	1531557	Insert	4
39	1583611	Capscrew	4
40	1470021	Bolt	2
41	316836	Nut	2
42	320159	Washer	2
43	2098969	Worklight (RH Front) (Glass Lens) (Halogen)	1
43	1662409	Bulb (Clear) (55 W 1450 lm)	1
43	2107383	Worklight (RH Front) (LED)	1

FOOTNOTES:

a DC to DC Converter Not Required
b → 10/2013
c → 11/2014

d 10/2013 →
e 11/2014 →

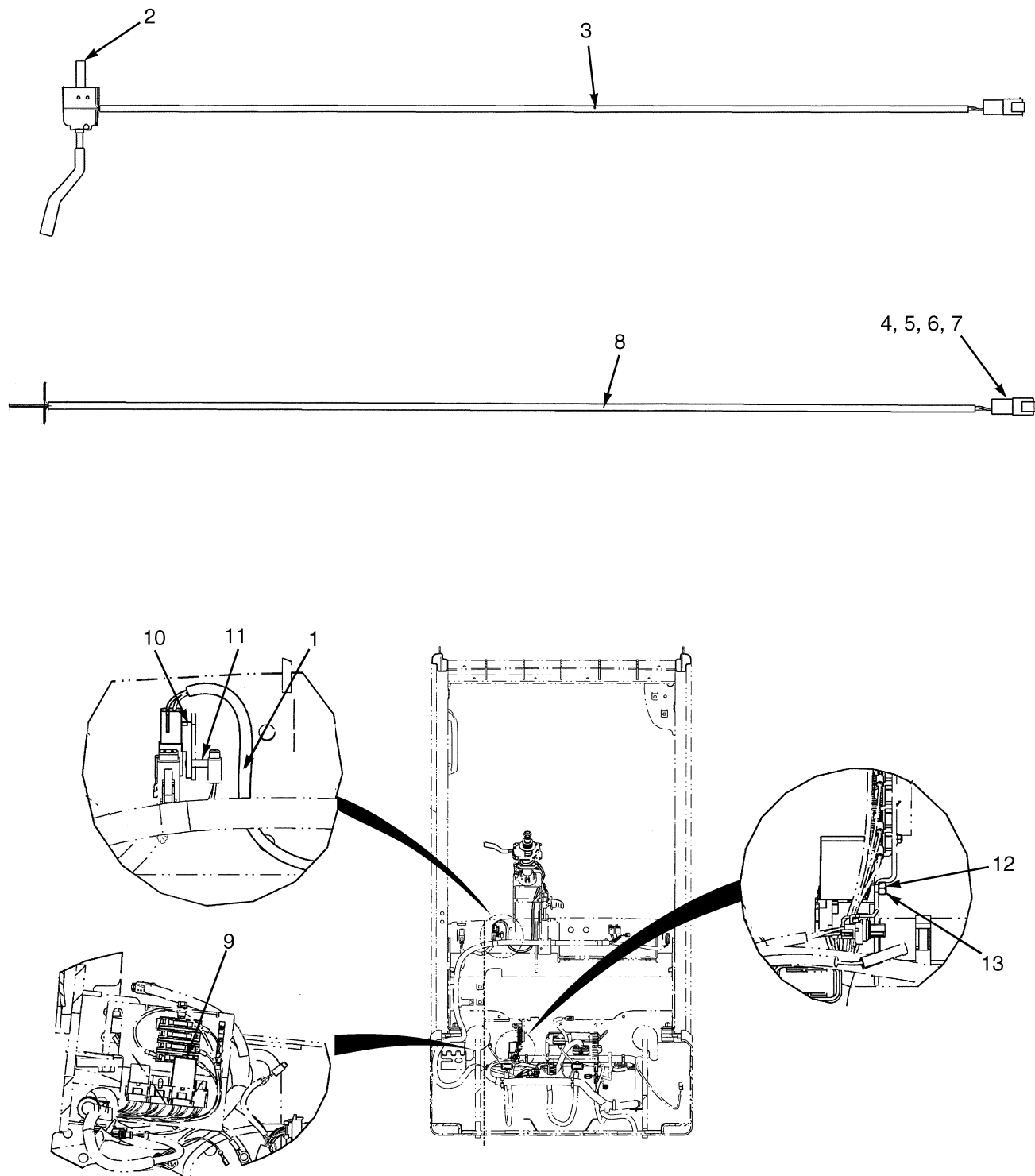
TURN SIGNAL (FIGURE 2-24)

BP080743

ITEM	PART NO.	DESCRIPTION	QTY
1	2108243	Wire Harness (LH Lights with Turn Signals) (☞ Figure 2-55).....	1
2	2101918		
	4608393	Wire Harness (Turn Signal) (☞ Figure 2-69).....	1
3	a 2107967	Switch (Assembly)	1
4	1694442	Flasher	1
5	4019192	Clip , Nut	1
6	296153	Capscrew	1
7	1702593	Bracket (Guide)	1
8	302027	Screw	2
9	1702594	Bracket (Turn Signal)	1
10	227168	Screw	2
11	1702595	Spacer (Turn Signal) (Telescoping)	1

FOOTNOTES:**a** → 3/2009

TURN SIGNAL SWITCH (FIGURE 2-25)

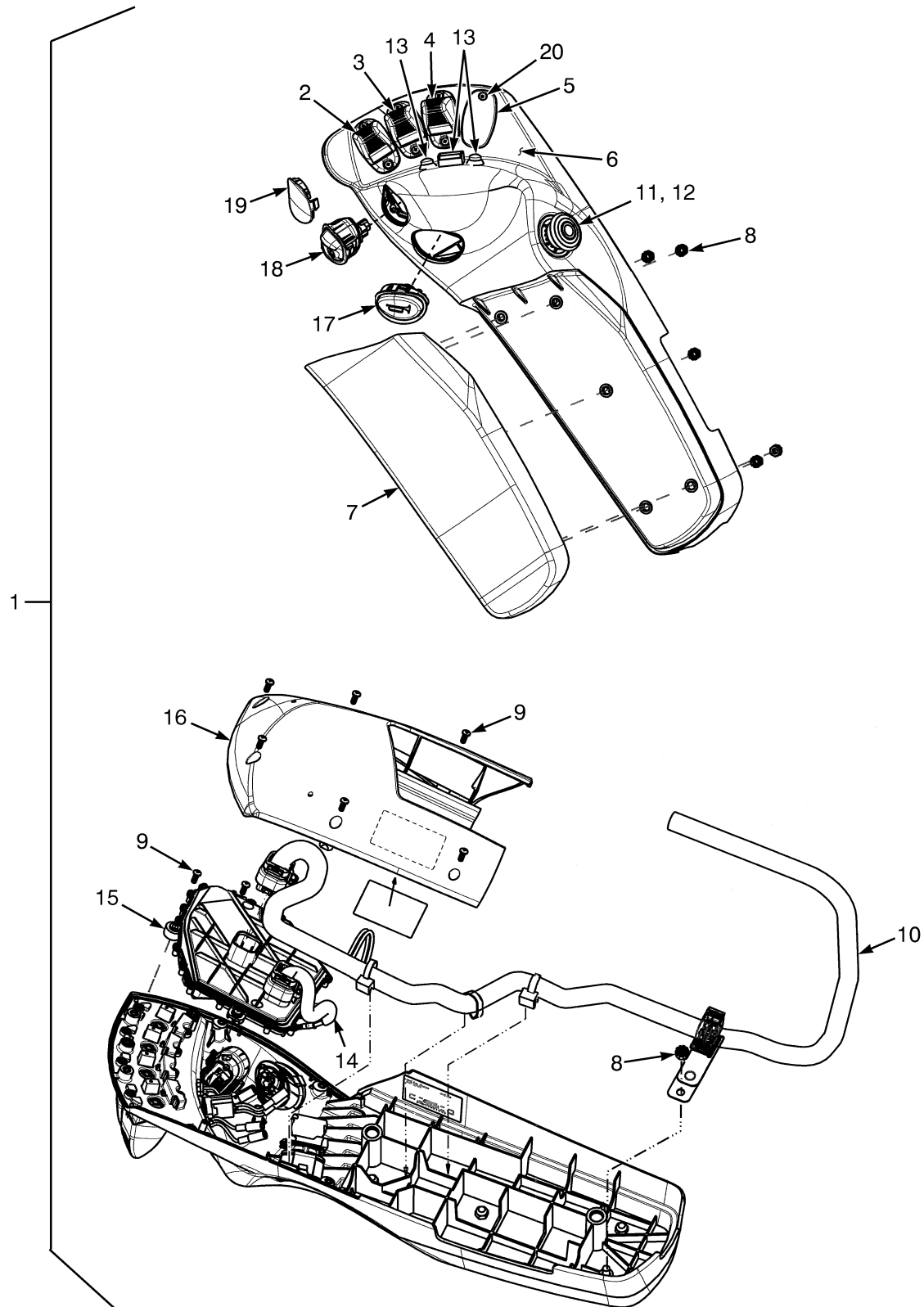


BP080777

TURN SIGNAL SWITCH

ITEM	PART NO.	DESCRIPTION	QTY
1	2107967	Switch (Assembly)	1
2	1705202	Switch	1
3	2095405	Wire Harness (Turn Signal)	1
4	1463184	Connector	1
5	~~4046140~~		
	1463193	Connector (Secondary Lock) (Secondary Lock)	1
6	1463138	Terminal Pin	1
7	1484377	Plug	1
8	275493	Conduit	1
9	1694442	Flasher	1
10	1500912	Clip	1
11	222029	Rivet	1
12	296153	Capscrew	1
13	4019192	Clip , Nut	1

MINI-LEVER CONTROLS (FIGURE 2-26) 3 FUNCTION



BP080936

**MINI-LEVER CONTROLS
3 FUNCTION****KEY:****A: Without Directional Control Switch****B: With Directional Control Switch****C: Without Directional Control Switch, With RTST****D: With Directional Control Switch, With RTST**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	2108514	Mini-Lever Assembly	1	..	..	..
1	d 2108515	Mini-Lever Assembly	1	..	..	..
1	2108517	Mini-Lever Assembly	..	1	..	..
1	d 2108503	Mini-Lever Assembly	..	1	..	..
1	2108499	Mini-Lever Assembly	..	..	1	..
1	d 2108500	Mini-Lever Assembly	..	..	1	..
1	2108505	Mini-Lever Assembly	..	..	..	1
1	d 2108519	Mini-Lever Assembly	..	..	..	1
2	.....	Lever Position 1	1	1	1	1
2	2110791	Lever (Single Function)	1	1	1	1
3	.....	Lever Position 2	1	1	1	1
3	2110791	Lever (Single Function)	1	1	..	..
3	2110793	Lever (With Override)	..	..	1	1
4	.....	Lever Position 3	1	1	1	1
4	2110791	Lever (Single Function)	1	1	1	1
4	2110792	Lever (Clamping)	1	1	1	1
5	.....	Lever Position 4	1	1	1	1
5	2108249	Plug	1	1	1	1
6	f 2111799	Armrest (Without Push Buttons)	1	1	..	..
6	4603439	Armrest (With Push Buttons)	1	1	1	1
7	2111769	Cushion (Armrest)	1	1	1	1
8	1709587	Nut	5	5	5	5
9	1703513	Screw	9	9	9	9
10	2111801	Wire Harness	1	1	1	1
11	2111768	Switch (E-Stop) (Emergency Switch)	1	1	1	1
12	a 2107320	Push Button Switch (Emergency Disconnect)	1	1	1	1
12	4180406	Block Push Button Contact	1	1	1	1
13	a 1704528	Push Button (Position 3)	1	..	..	..
13	a 1704528	Push Button (Position 2)	..	1	..	..
13	a d 1704528	Push Button (Position 2 and 3)	..	..	2	2
13	b c 1705359	Cover (Push Button)	AR	AR	AR	AR
14	e 1704529	Wire Harness (Forward/Reverse Switch in the MLM)	1	1	1	1
15	2111802	.....				
	4605337	Printed Circuit Board	1	1	1	1
16	2111800	Cover (Bottom Armrest)	1	1	1	1
17	2111770	Horn Button	1	1	1	1
18	2110943	Switch (Directional Control)	..	1	..	1
19	2110942	Plug (Directional Control Switch)	1	..	1	..
20	1698449	Capscrew	8	8	8	8

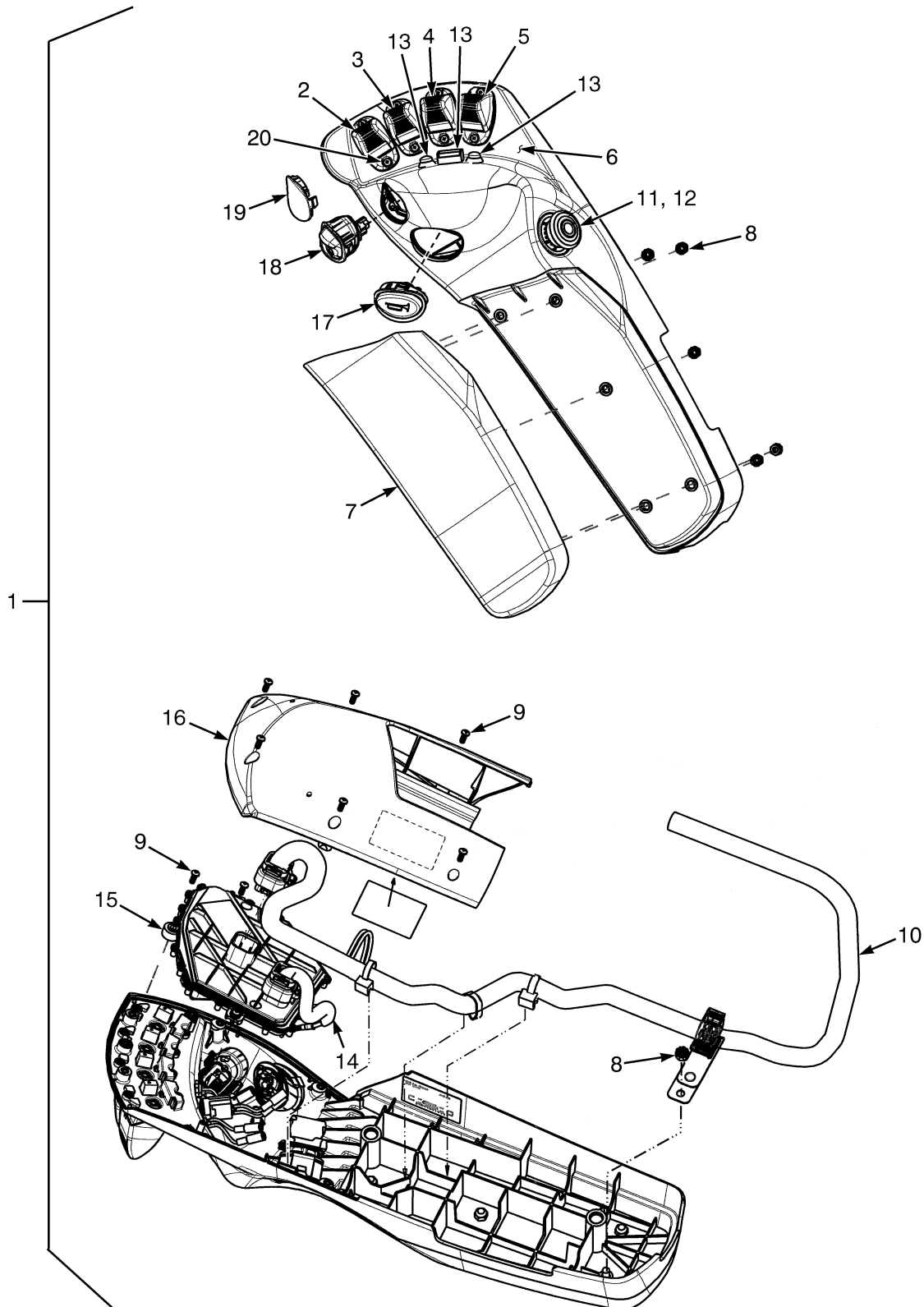
FOOTNOTES:

a	Not all Lift Trucks may have all the switches and buttons shown.	d	With Clamping
b	Not Illustrated	e	With RTST/With Clamping
c	Plug for Use Without Push Button	f	Without Clamping

NOTES

[illegible]

MINI-LEVER CONTROLS (FIGURE 2-27) 4 FUNCTION



BP080844

**MINI-LEVER CONTROLS
4 FUNCTION****KEY:****A: Without Directional Control Switch****B: With Directional Control Switch****C: Without Directional Control Switch, With RTST****D: With Directional Control Switch, With RTST**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	2108497	Mini-Lever Assembly	1	..	..	..
1	e 2108498	Mini-Lever Assembly	1	..	..	..
1	2108502	Mini-Lever Assembly	..	1	..	..
1	e 2108504	Mini-Lever Assembly	..	1	..	..
1	2108516	Mini-Lever Assembly	..	..	1	..
1	e 2108501	Mini-Lever Assembly	..	..	1	..
1	2108518	Mini-Lever Assembly	..	..	..	1
1	e 2108506	Mini-Lever Assembly	..	..	..	1
2	.....	Lever Position 1	1	1	1	1
2	2110791	Lever (Single Function)	1	1	1	1
3	.....	Lever Position 2	1	1	1	1
3	2110791	Lever (Single Function)	1	1	..	..
3	2110793	Lever (With Override)	..	..	1	1
4	.....	Lever Position 3	1	1	1	1
4	2110791	Lever (Single Function)	1	1	1	1
5	.....	Lever Position 4	1	1	1	1
5	2110791	Lever (Single Function)	1	1	..	..
5	2110792	Lever (Clamping)	..	..	1	1
6	f 2111799	Armrest (Without Push Buttons)	1	1	..	..
6	4603439	Armrest (With Push Buttons)	1	1	1	1
7	2111769	Cushion (Armrest)	1	1	1	1
8	1709587	Nut	5	5	5	5
9	1703513	Screw	9	9	9	9
10	2111801	Wire Harness	1	1	1	1
11	2111768	Switch (E-Stop) (Emergency Switch)	1	1	1	1
12	a 2107320	Push Button Switch (Emergency Disconnect)	1	1	1	1
12	4180406	Block Push Button Contact	1	1	1	1
13	a e 1704528	Push Button (Position 4)	1	1	..	..
13	a 1704528	Push Button (Position 2)	..	..	1	1
13	a e 1704528	Push Button (Position 2 and 4)	..	..	1	1
13	b c 1705359	Cover (Push Button)	AR	AR	AR	AR
14	d 1704529	Wire Harness (Forward/Reverse Switch in the MLM)	1	1	1	1
15	2111802	.....				
	4605337	Printed Circuit Board	1	1	1	1
16	2111800	Cover (Bottom Armrest)	1	1	1	1
17	2111770	Horn Button	1	1	1	1
18	2110943	Switch (Directional Control)	..	1	..	1
19	2110942	Plug (Directional Control Switch)	1	..	1	..
20	1698449	Capscrew	8	8	8	8

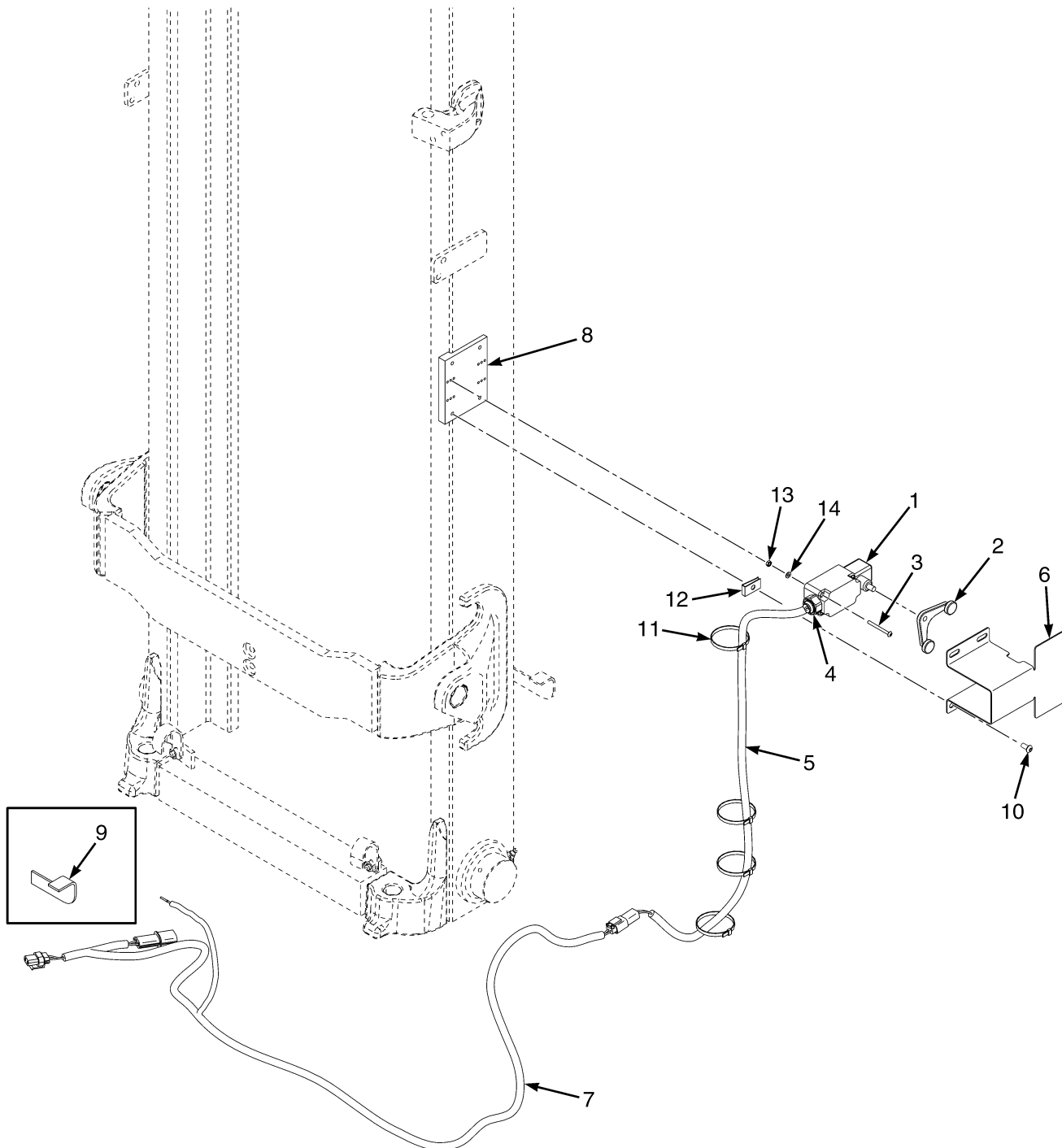
FOOTNOTES:

a	Not all Lift Trucks may have all the switches and buttons shown.	d	RTST With Clamping
b	Not Illustrated	e	With Clamping
c	Plug for Use Without Push Button	f	Without Clamping

NOTES

[illegible]

TRACTION SPEED LIMITER (FIGURE 2-28) STANDARD AND INTEGRAL SIDE-SHIFT CARRIAGES



BP230017

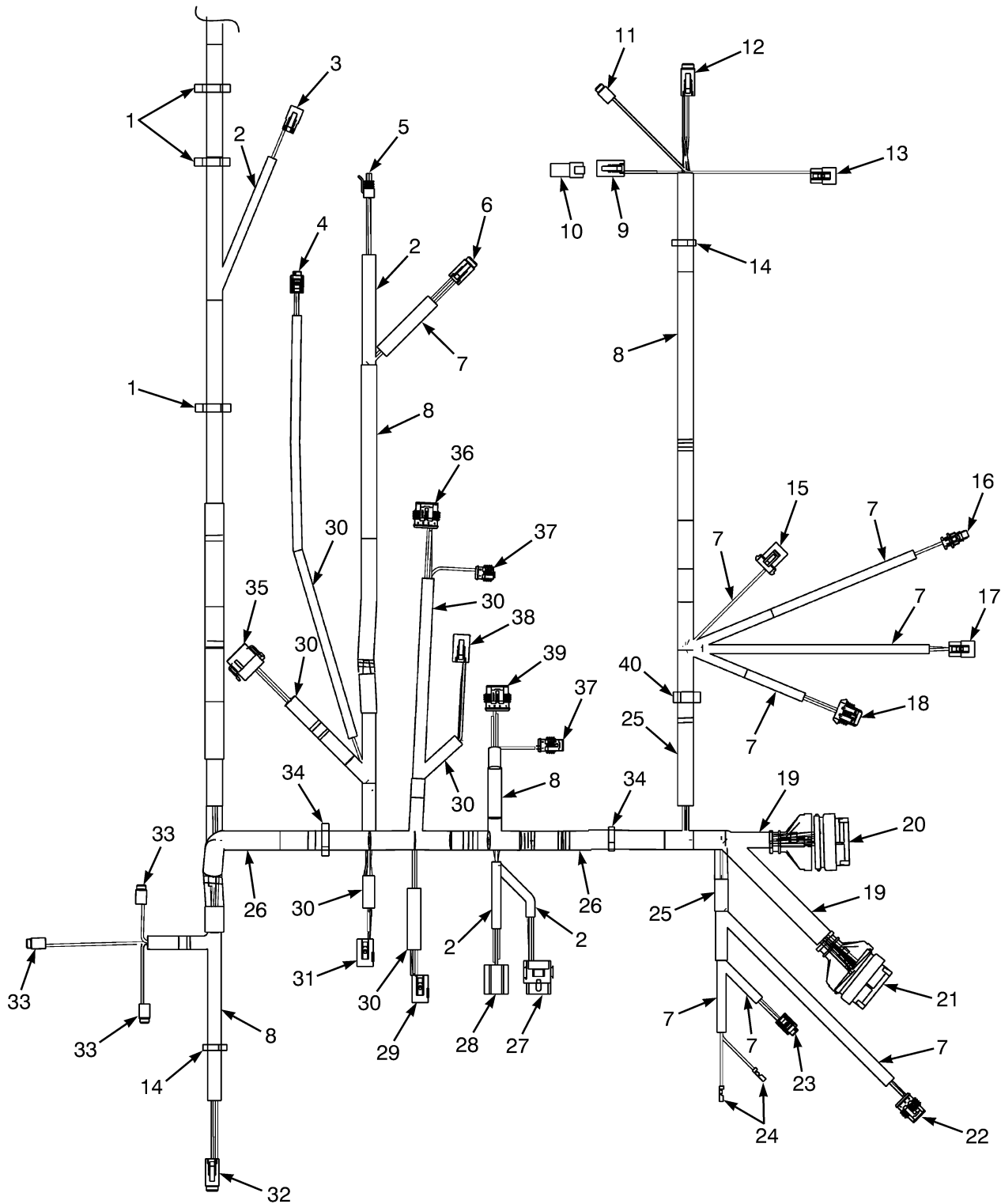
TRACTION SPEED LIMITER

STANDARD AND INTEGRAL SIDE-SHIFT CARRIAGES

KEY:**A: With Two Stage LFL Mast****B: With Two and Three Stage FFL Mast**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4102172	Switch -Limit	1	1
2	4102173	Lever	1	1
3	1697553	Capscrew	4	4
4	4102179	Gland	1	1
5	4635538	Wire Harness (Switch)	1	..
5	4635539	Wire Harness (Switch)	..	1
6	4102176	Cover	1	1
7	4635558	Wire Harness (Traction Speed)	1	1
8	.....	Bracket	..	..
9	.....	Bracket (welded to carriage)	..	..
10	296158	Capscrew	4	4
11	2004005	Strap Clamp (Class II)	4	..
11	2004005	Strap Clamp (Class III)	5	..
11	2004005	Strap Clamp (Class II)	..	7
11	2004005	Strap Clamp (Class III)	..	8

WIRE HARNESS (FIGURE 2-29) MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) — SHEET 1 OF 2 (→ 10/2013)



BP080649

WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) – SHEET 1 OF 2 (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	4600585	Wire Harness	1
1	1402813	Clip	3
2	275493	Conduit	AR
3	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
3	137852	Strap Clamp	1
3	1597773	Terminal	2
3	1490243	Connector (Secondary Lock)	1
3	1490242	Connector (2 Way)	1
4	.....	Lift Pressure Sensor	1
4	1525595	Connector	1
4	137852	Strap Clamp	1
4	1525596	Terminal	3
4	1673840	Seal (Green)	3
5	.....	Connector Assembly (Accelerator Pedal Position Sensor)	1
5	1532571	Terminal	6
5	1525584	Connector	1
6	.....	Connector Assembly (Direct Select Sensor)	1
6	1463141	Terminal (Socket)	4
6	1463196	Connector (Secondary Lock)	1
6	1463189	Connector	1
7	275493	Conduit	AR
8	275495	Conduit	AR
9	.....	Connector Assembly (Termination Resistor)	1
9	1597773	Terminal	2
9	1330439	Plug	2
9	1489657	Connector (Secondary Lock)	1
9	1489656	Connector (4-Way)	1
10	1525577	Connector (With Resistor)	1
11	.....	Synchronous Steer Valve Harness	1
11	1484557	Connector (2 Socket)	1
11	137852	Strap Clamp	1
11	1484558	Connector (Secondary Lock)	1
11	1463139	Terminal	2
12	.....	Connector Assembly (Steer Harness)	1
12	1484377	Plug	1
12	1463141	Terminal (Socket)	7
12	1541991	Connector	1
12	1541992	Connector (Secondary Lock)	1
13	.....	Connector Assembly (Park Brake Position)	1
13	1484397	Connector (3-Way)	1
13	1463194	Connector (Secondary Lock)	1
13	1597773	Terminal	3
14	1402815	Clip	1
15	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
15	1402888	Seal (Purple)	2
15	137852	Strap Clamp	1
15	1329152	Plug	1
15	1329151	Terminal	1
15	1330281	Terminal	2
16	.....	Connector Assembly (Hydraulic Oil Temperature Sensor)	1

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) – SHEET 1 OF 2 (→ 10/2013)

ITEM	PART NO.	DESCRIPTION	QTY
16	1547480	Connector (2 Way)	1
16	1674376	Terminal	2
16	1673840	Seal (Green)	2
17	.....	Connector Assembly (Tilt Position Sensor)	1
17	1484397	Connector (3-Way)	1
17	1597773	Terminal	3
18	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
18	1476067	Connector	1
18	1476109	Connector Lock	1
18	1330355	Terminal	3
18	1476108	Wire Seal (White)	3
18	137852	Strap Clamp	1
18	4600243	Cover	2
19	275498	Conduit	AR
20	.....	Connector Assembly (Vehicle System Manager)	1
20	2056243	Connector (35-Way)	1
20	1561019	.....	
	2035276	Connector (Socket Female)	26
20	2068741	Plug , Socket Contact, Female	9
20	4600243	Cover	2
20	137852	Strap Clamp	1
21	.....	Connector Assembly (Vehicle System Manager)	1
21	1553094	Connector (Grey)	1
21	1561019	.....	
	2035276	Connector (Socket Female)	17
21	2068741	Plug , Socket Contact, Female	18
21	4600243	Cover	2
21	137852	Strap Clamp	1
22	.....	Connector Assembly (Horn Assembly)	1
22	1547629	Connector (3 Way)	1
22	1508232	Terminal (Pin)	2
22	2060555	Wire Seal (Yellow)	3
22	1597839	Receptacle Contact 20-22 AWG	1
23	.....	Connector Assembly (Service Break Pressure Sensor)	1
23	1525595	Connector	1
23	1525596	Terminal	3
23	1533810	Seal (Green)	3
24	1324310	Terminal	1
24	1324309	Sleeve	1
24	.....	Connector Assembly (Level Sensor)	2
25	275496	Conduit	AR
26	275497	Conduit	AR
27	.....	Connector Assembly (Synchronized Steer Valve Harness)	1
27	2100204	Receptacle	2
27	1689606	Terminal	4
28	.....	Connector Assembly (Key Switch Relay)	1
28	1377860	Connector	1
28	1655183	Terminal	2
28	4001753	Terminal	2
29	.....	Manual Hydraulic Harness	1

WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) – SHEET 1 OF 2 (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
29	1330423	Connector (8 Socket)	1
29	1330429	Connector (Secondary Lock)	1
29	1330438	Terminal (Socket)	1
29	1597773	Terminal	6
30	275494	Conduit	AR
31	1330438	Terminal (Socket)	1
31	1330429	Connector (Secondary Lock)	1
31	.....	Connector Assembly (Light Option Harness)	1
32	1484377	Plug	1
32	1463141	Terminal (Socket)	7
32	1541992	Connector (Secondary Lock)	1
32	1541991	Connector	1
33	.....	Connector Assembly (Manual Hydraulic Intake Coils)	3
33	1484557	Connector (2 Socket)	1
33	1484558	Connector (Secondary Lock)	1
33	1463141	Terminal (Socket)	2
33	1463139	Terminal	1
34	1534329	Clip	2
35	.....	Connector Assembly (Manual Hydraulic Spool Position Sensor)	1
35	1463141	Terminal (Socket)	12
35	1529046	Connector (Secondary Lock)	1
35	1525567	Connector	1
36	.....	Connector Assembly (Traction Motor Speed Sensor)	2
36	1508211	Connector (4 Way)	1
36	1597839	Receptacle Contact 20-22 AWG	4
36	2060555	Wire Seal (Yellow)	4
37	.....	Connector Assembly (Traction Motor Temperature Sensor)	2
37	2060555	Wire Seal (Yellow)	2
37	1597839	Receptacle Contact 20-22 AWG	2
37	1508206	Connector (2 Way)	1
38	.....	Connector Assembly (Park Brake)	1
38	1489656	Connector (4-Way)	1
38	1597773	Terminal	2
38	1489657	Connector (Secondary Lock)	1
38	1330438	Terminal (Socket)	1
38	1484377	Plug	1
39	.....	Pump Motor Speed Sensor	1
39	2060555	Wire Seal (Yellow)	1
39	1597839	Receptacle Contact 20-22 AWG	4
39	1508211	Connector (4 Way)	1
40	1329152	Plug	1

A technical drawing of a mechanical assembly, likely a piping or structural system, with numbered callouts 1 through 17. The assembly consists of a central horizontal pipe (12) with several vertical and horizontal branches. Key components include: a vertical pipe (5) at the top left with a flange (4) and a small component (7); a vertical pipe (6) on the right with a flange (13); a horizontal pipe (17) at the bottom left; and a horizontal pipe (14) on the right. Various fittings, valves, and connectors are indicated by the numbered callouts. The drawing is a black and white line drawing with arrows pointing to specific parts.

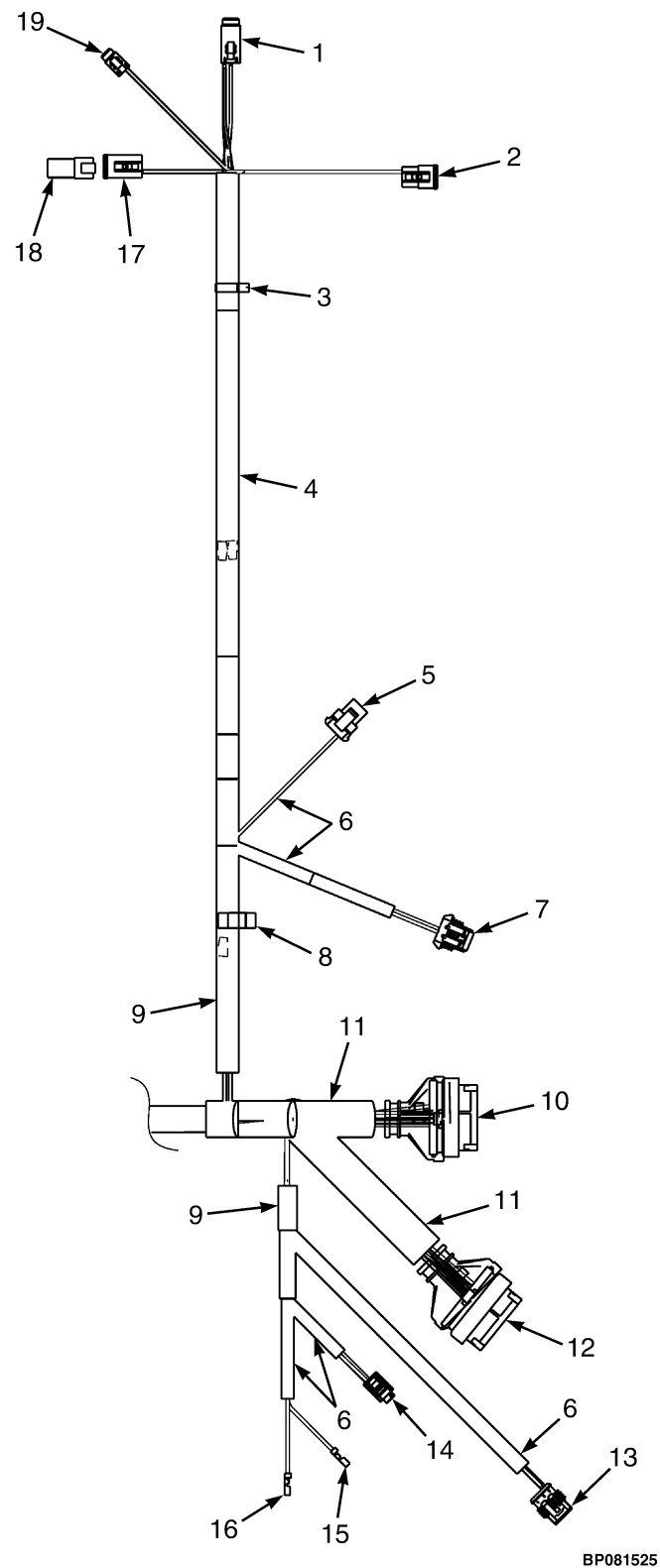
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WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS (EARLY PRODUCTION) – SHEET 2 OF 2 (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	4600585	Wire Harness	1
1	.....	Connector Assembly (Seat Harness)	1
1	1463141	Terminal (Socket)	4
1	1531973	Connector	1
1	1531974	Connector (Secondary Lock)	1
1	1484377	Plug	2
2	1500901	Clip	2
3	275494	Conduit	AR
4	.....	Connector Assembly (Fan)	2
4	1597773	Terminal	2
4	1490243	Connector (Secondary Lock)	1
4	1490242	Connector (2 Way)	1
5	275493	Conduit	AR
6	275495	Conduit	AR
7	.....	Connector Assembly (Overhead Guard Horn Switch)	1
7	1597773	Terminal	2
7	1330424	Connector (Secondary Lock)	1
7	1330419	Connector	1
8	1402624	Clip	1
9	2007554	E-Spade	1
10	248196	Terminal	3
11	1402620	Ring Terminal	1
12	275496	Conduit	AR
13	.....	Connector Assembly (Traction Motor Controller)	1
13	2035275	Connector	1
13	1561019	Connector (Socket Female)	17
13	2068741	Plug , Socket Contact, Female	6
13	4600244	Cover (Connector)	2
13	137852	Strap Clamp	1
14	.....	Connector Assembly (Pump Controller)	1
14	2035275	Connector	1
14	1561019	Connector (Socket Female)	11
14	2068741	Plug , Socket Contact, Female	12
14	4600244	Cover (Connector)	1
14	137852	Strap Clamp	1
15	275497	Conduit	AR
16	1402813	Clip	2
17	.....	Connector Assembly (Steer Axle Sensor)	1
17	1493462	Connector	1
17	1493464	Connector (Secondary Lock)	1
17	1463141	Terminal (Socket)	3

WIRE HARNESS (FIGURE 2-31)

MAIN WITH MANUAL HYDRAULICS — SHEET 1 OF 3 (10/2013 ↔ 11/2014)



BP081525

WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS – SHEET 1 OF 3 (10/2013 ↔ 11/2014)**

ITEM	PART NO.	DESCRIPTION	QTY
	4624976	Wire Harness (Main)	1
1	.....	Connector Assembly (Steer Harness)	1
1	1541991	Connector	1
1	1463141	Terminal (Socket)	7
1	1484377	Plug	1
1	1541992	Connector (Secondary Lock) (Secondary Lock)	1
2	.....	Connector Assembly (Park Brake Position)	1
2	1484397	Connector (3-Way)	1
2	1597773	Terminal	3
2	1463194	Connector (Secondary Lock)	1
3	1402815	Clip	1
4	275495	Conduit	AR
5	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
5	1329152	Plug	1
5	1330281	Terminal	2
5	1402888	Seal (Purple)	2
5	1329151	Terminal (Secondary Lock)	1
6	275493	Conduit	AR
7	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
7	1476067	Connector	1
7	1330355	Terminal	3
7	1476108	Wire Seal (White)	3
7	1476109	Connector Lock	1
8	1532776	Clip	1
9	275496	Conduit	AR
10	.....	Connector Assembly (Vehicle System Manager)	1
10	2056243	Connector (35-Way)	1
10	1561049	.....	
	2035276	Connector (Socket Female)	25
10	2068741	Plug , Socket Contact, Female	10
11	1540388	Conduit	AR
12	.....	Connector Assembly (Vehicle System Manager)	1
12	1553094	Connector (Grey)	1
12	1561049	.....	
	2035276	Connector (Socket Female)	18
12	2068741	Plug , Socket Contact, Female	17
13	.....	Connector Assembly (Horn Assembly)	1
13	1547629	Connector (3 Way)	1
13	1508232	Terminal (Pin)	2
13	1597839	Receptacle Contact 20-22 AWG	1
13	2060555	Wire Seal (Yellow)	3
14	.....	Connector Assembly (Service Brake Pressure Sensor)	1
14	1525595	Connector	1
14	1525596	Terminal	3
14	1533810	Seal (Green)	3
15	1324310	Terminal (Brake Fluid Level)	1
16	1324310	Terminal (Brake Fluid Level)	1
17	.....	Connector Assembly (Termination Resistor)	1
17	1489656	Connector (4-Way)	1
17	1330439	Plug	2

WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS – SHEET 1 OF 3 (10/2013 ↔ 11/2014)**

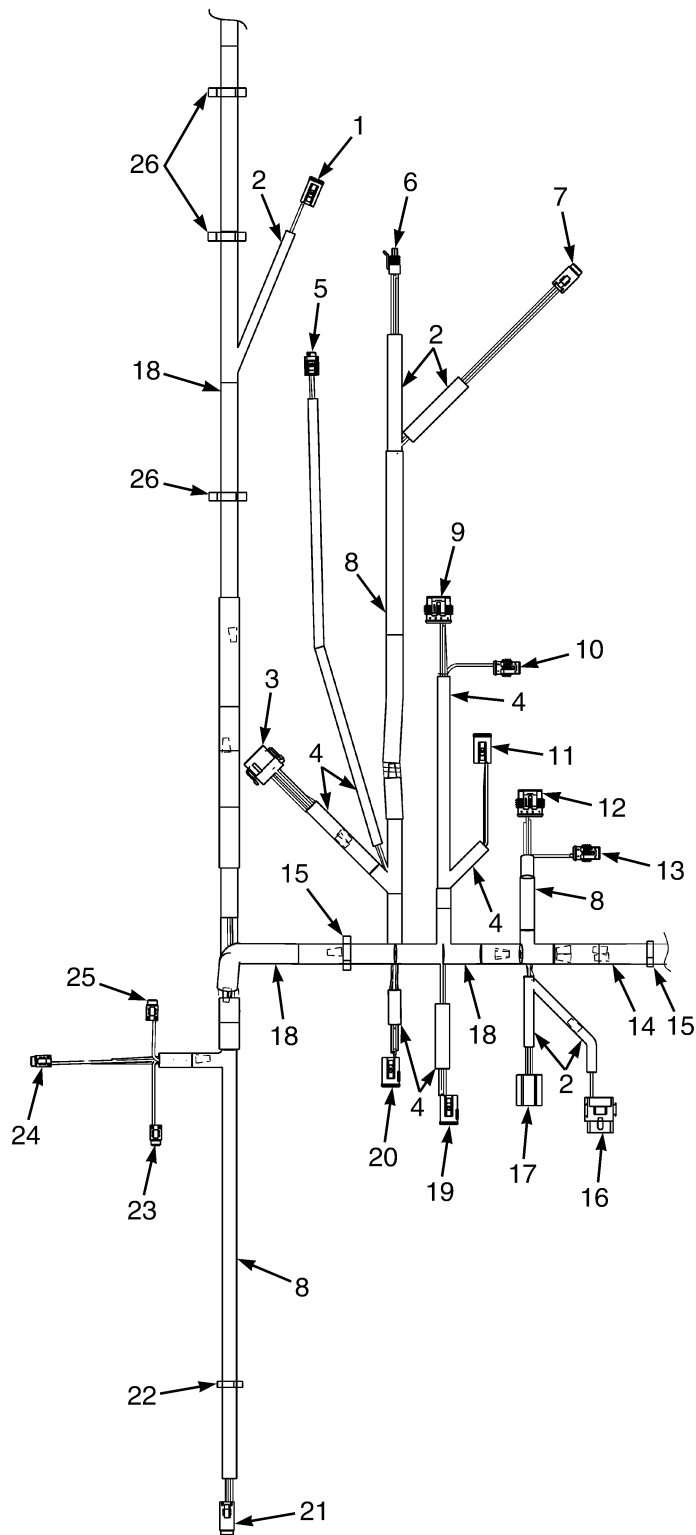
ITEM	PART NO.	DESCRIPTION	QTY
17	1597773	Terminal	2
17	1489657	Connector (Secondary Lock) (Secondary Lock)	1
18	1525577	Connector (With Resistor)	1
19	.....	Connector Assembly (Synchronous Steer Valve Harness)	1
19	1484557	Connector (2 Socket)	1
19	1463139	Terminal	2
19	1484558	Connector (Secondary Lock)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-32)

MAIN WITH MANUAL HYDRAULICS — SHEET 2 OF 3 (10/2013 ↔ 11/2014)



BP081526

WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS – SHEET 2 OF 3 (10/2013 ↔ 11/2014)**

ITEM	PART NO.	DESCRIPTION	QTY
	4624976	Wire Harness (Main)	1
1	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1490243	Connector (Secondary Lock)	1
2	275493	Conduit	AR
3	.....	Connector Assembly (Manual Hydraulic Spool Position Sensor)	1
3	1525567	Connector	1
3	1463141	Terminal (Socket)	12
3	1529046	Connector (Secondary Lock) (Secondary Lock)	1
4	275494	Conduit	AR
5	.....	Connector Assembly (Lift Pressure)	1
5	1525595	Connector	1
5	1525596	Terminal	3
5	1533810	Seal (Green)	3
6	.....	Connector Assembly (Accelerator Pedal Position Sensor)	1
6	1525584	Connector	1
6	4011600	Terminal	6
7	.....	Connector Assembly (Direction Select Sensor)	1
7	1463189	Connector	1
7	1463141	Terminal (Socket)	4
7	1463196	Connector (Secondary Lock) (Secondary Lock)	1
8	275495	Conduit	AR
9	.....	Connector Assembly (Traction Motor Speed Sensor)	1
9	1508211	Connector (4 Way)	1
9	1597839	Receptacle Contact 20-22 AWG	4
9	2060555	Wire Seal (Yellow)	4
10	.....	Connector Assembly (Traction Motor Temperature Sensor)	1
10	1508206	Connector (2 Way)	1
10	1597839	Receptacle Contact 20-22 AWG	2
10	2060555	Wire Seal (Yellow)	2
11	.....	Connector Assembly (Park Brake)	1
11	1489656	Connector (4-Way)	1
11	1597773	Terminal	2
11	1330438	Terminal (Socket)	1
11	1484377	Plug	1
11	1489657	Connector (Secondary Lock) (Secondary Lock)	1
12	.....	Connector Assembly (Pump Motor Speed Sensor)	1
12	1508211	Connector (4 Way)	1
12	1597839	Receptacle Contact 20-22 AWG	4
12	2060555	Wire Seal (Yellow)	4
13	.....	Connector Assembly (Pump Motor Temperature Sensor)	1
13	1508206	Connector (2 Way)	1
13	1597839	Receptacle Contact 20-22 AWG	2
13	2060555	Wire Seal (Yellow)	2
14	275498	Conduit	AR
15	1534282	Clip	1
16	.....	Connector Assembly (Enable Relay)	1
16	2100204	Receptacle	1
16	1655187	Terminal	1

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS – SHEET 2 OF 3 (10/2013 ↔ 11/2014)

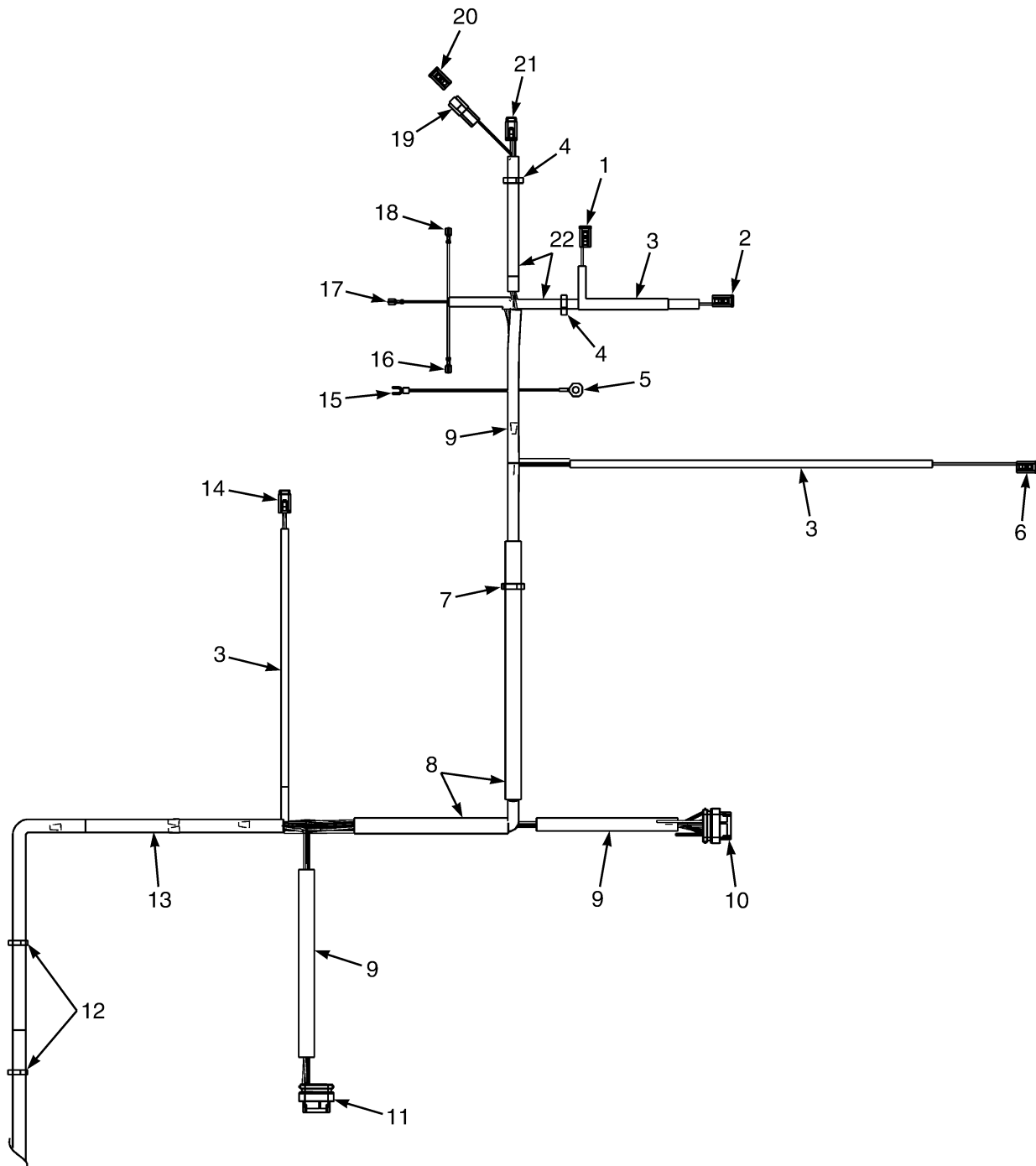
ITEM	PART NO.	DESCRIPTION	QTY
16	1689606	Terminal	3
17	.....	Connector Assembly (Key Switch Relay)	1
17	1377860	Connector	1
17	4001753	Terminal	2
17	1706004	Terminal	2
18	275497	Conduit	AR
19	.....	Connector Assembly (Manual Hydraulic Harness)	1
19	1330423	Connector (8 Socket)	1
19	1597773	Terminal	6
19	1330438	Terminal (Socket)	2
19	1330429	Connector (Secondary Lock) (Secondary Lock)	1
20	.....	Connector Assembly (Light Option Harness)	1
20	1330423	Connector (8 Socket)	1
20	1597773	Terminal	5
20	1330438	Terminal (Socket)	3
20	1330429	Connector (Secondary Lock) (Secondary Lock)	1
21	.....	Connector Assembly (Display Harness)	1
21	1541991	Connector	1
21	1463141	Terminal (Socket)	7
21	1484377	Plug	1
21	1541992	Connector (Secondary Lock) (Secondary Lock)	1
22	1402815	Clip	1
23	.....	Connector Assembly (Manual Hydraulic Coil)	1
23	1484557	Connector (2 Socket)	1
23	1463139	Terminal	1
23	1463141	Terminal (Socket)	1
23	1484558	Connector (Secondary Lock)	1
24	.....	Connector Assembly (Manual Hydraulic Coil)	1
24	1484557	Connector (2 Socket)	1
24	1463139	Terminal	1
24	1463141	Terminal (Socket)	1
24	1484558	Connector (Secondary Lock)	1
25	.....	Connector Assembly (Clamp Coil)	1
25	1484557	Connector (2 Socket)	1
25	1463139	Terminal	1
25	1463141	Terminal (Socket)	1
25	1484558	Connector (Secondary Lock)	1
26	1402813	Clip	3

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-33)

MAIN WITH MANUAL HYDRAULICS — SHEET 3 OF 3 (10/2013 ↔ 11/2014)



BP081527

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS – SHEET 3 OF 3 (10/2013 ↔ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
	4624976	Wire Harness (Main)	1
1	.....	Connector Assembly (Controller Fan)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1330424	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Controller Fan)	1
2	1490242	Connector (2 Way)	1
2	1597773	Terminal	2
2	1490243	Connector (Secondary Lock)	1
3	275493	Conduit	AR
4	1500901	Clip	2
5	1402891	Terminal	1
6	.....	Connector Assembly (Overhead Guard Horn Switch)	1
6	1330419	Connector	1
6	1597773	Terminal	2
6	1330423	Connector (8 Socket)	1
7	1402624	Clip	1
8	275496	Conduit	AR
9	275495	Conduit	AR
10	.....	Connector Assembly (Traction Motor Controller)	1
10	2035275	Connector	1
10	1561019	Connector (Socket Female)	17
10	2068741	Plug , Socket Contact, Female	6
11	.....	Connector Assembly (Pump Controller)	1
11	2035275	Connector	1
11	1561019	Connector (Socket Female)	12
11	2068741	Plug , Socket Contact, Female	11
12	1402813	Clip	2
13	275497	Conduit	AR
14	.....	Connector Assembly (Steer Axle Sensor)	1
14	1493462	Connector	1
14	1463141	Terminal (Socket)	3
14	1493464	Connector (Secondary Lock)	1
15	2007554	E-Spade	1
16	248196	Terminal (Main Contactor Coil)	1
17	248196	Terminal	1
18	248196	Terminal (Main Contactor Coil)	1
19	.....	Connector Assembly (Seat Belt Switch Harness)	1
19	1493465	Connector (2 Pin)	1
19	1330437	Terminal (Pin)	2
19	1330414	Connector (Secondary Lock)	1
20	.....	Endcap	1
20	1531973	Connector	1
20	1463141	Terminal (Socket)	1
20	1484377	Plug	2
21	.....	Connector Assembly (Seat Harness)	1
21	1531973	Connector	1
21	1463141	Terminal (Socket)	4

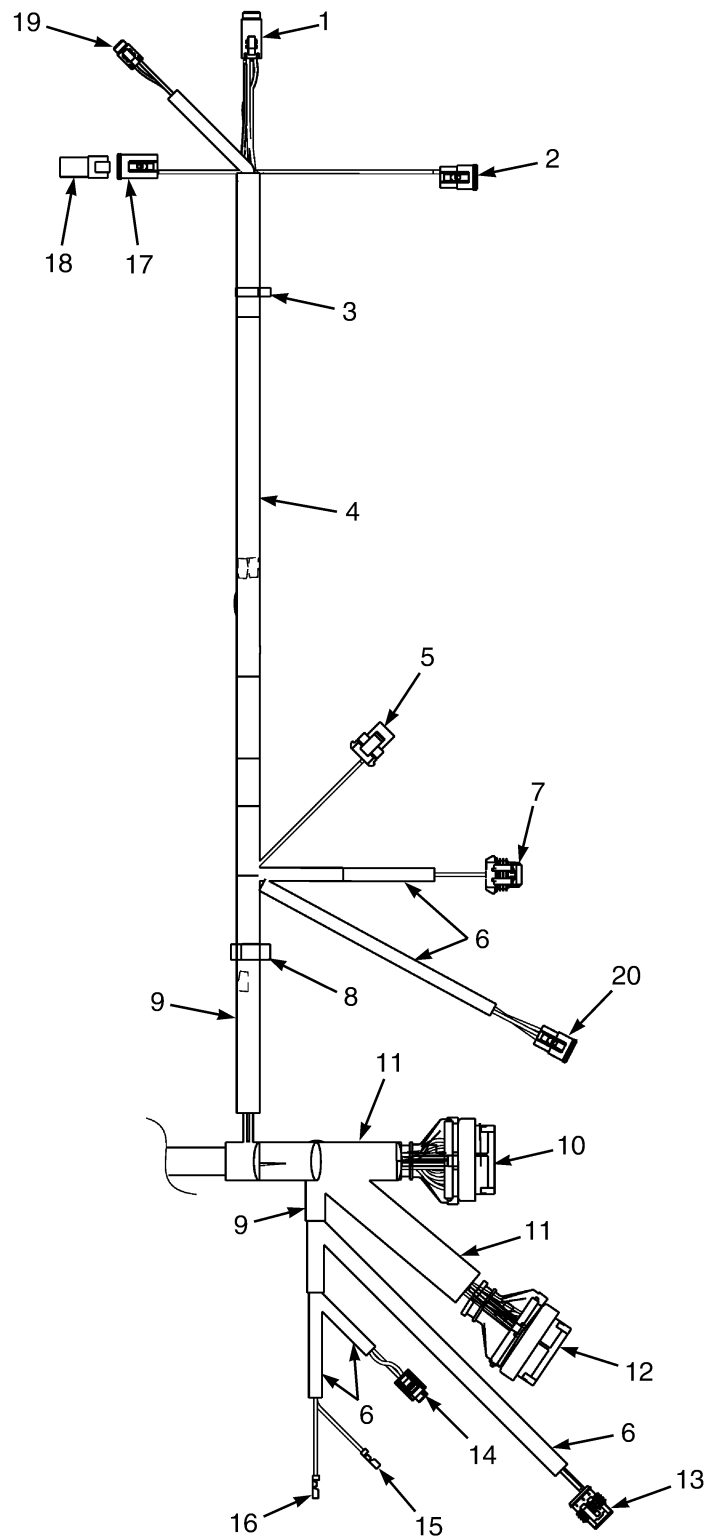
WIRE HARNESS**MAIN WITH MANUAL HYDRAULICS – SHEET 3 OF 3 (10/2013 ↔ 11/2014)**

ITEM	PART NO.	DESCRIPTION	QTY
21	1484377	Plug	2
21	1531974	Connector (Secondary Lock) (Secondary Lock)	1
22	275494	Conduit	AR

NOTES

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WIRE HARNESS (FIGURE 2-34) MAIN WITH MANUAL HYDRAULICS — SHEET 1 OF 3 (11/2014 →)



BP081779

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS – SHEET 1 OF 3 (11/2014 →)

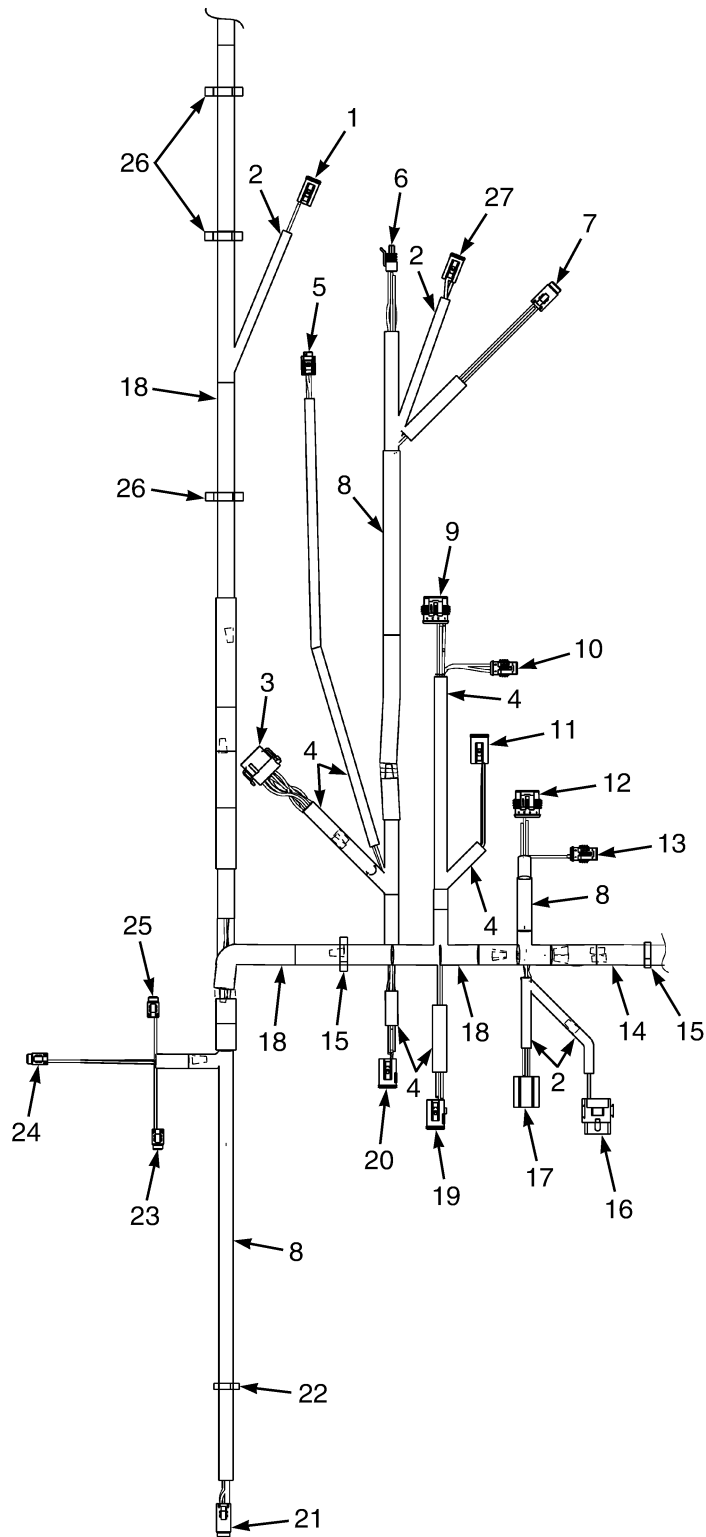
ITEM	PART NO.	DESCRIPTION	QTY
	4634253	Wire Harness (Main)	1
1	.....	Connector Assembly (Steer Harness)	1
1	1541991	Connector	1
1	1463141	Terminal (Socket)	7
1	1484377	Plug	1
1	1541992	Connector (Secondary Lock) (Secondary Lock)	1
2	.....	Connector Assembly (Park Brake Position)	1
2	1484397	Connector (3-Way)	1
2	1597773	Terminal	3
2	1463194	Connector (Secondary Lock)	1
3	1402815	Clip	1
4	275495	Conduit	AR
5	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
5	1329152	Plug	1
5	1330281	Terminal	2
5	1402888	Seal (Purple)	2
5	1329151	Terminal (Secondary Lock)	1
6	275493	Conduit	AR
7	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
7	1476067	Connector	1
7	1330355	Terminal	3
7	1476108	Wire Seal (White)	3
7	1476109	Connector Lock	1
8	1532776	Clip	1
9	275496	Conduit	AR
10	.....	Connector Assembly (Vehicle System Manager)	1
10	2056243	Connector (35-Way)	1
10	1561049	Connector (Socket Female)	26
10	2068741	Plug , Socket Contact, Female	9
11	1540388	Conduit	AR
12	.....	Connector Assembly (Vehicle System Manager)	1
12	1553094	Connector (Grey)	1
12	1561049	Connector (Socket Female)	19
12	2068741	Plug , Socket Contact, Female	16
13	.....	Connector Assembly (Horn Assembly)	1
13	1547629	Connector (3 Way)	1
13	1508232	Terminal (Pin)	2
13	1597839	Receptacle Contact 20-22 AWG	1
13	2060555	Wire Seal (Yellow)	3
14	.....	Connector Assembly (Service Brake Pressure Sensor)	1
14	1525595	Connector	1
14	1525596	Terminal	3
14	1533810	Seal (Green)	3
15	1324310	Terminal (Brake Fluid Level)	1
16	1324310	Terminal (Brake Fluid Level)	1
17	.....	Connector Assembly (Termination Resistor)	1
17	1489656	Connector (4-Way)	1
17	1330439	Plug	2

WIRE HARNESS
MAIN WITH MANUAL HYDRAULICS – SHEET 1 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
17	1597773	Terminal	2
17	1489657	Connector (Secondary Lock) (Secondary Lock)	1
18	1525577	Connector (With Resistor)	1
19	.....	Connector Assembly (Synchronous Steer Valve Harness)	1
19	1484557	Connector (2 Socket)	1
19	1463139	Terminal	2
19	1484558	Connector (Secondary Lock)	1
20	.....	Connector Assembly (Tilt Position Sensor)	1
20	1484397	Connector (3-Way)	1
20	1597773	Terminal	3
20	1463194	Connector (Secondary Lock)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-35)
MAIN WITH MANUAL HYDRAULICS — SHEET 2 OF 3 (11/2014 →)

BP081780

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS – SHEET 2 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4634253	Wire Harness (Main)	1
1	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1490243	Connector (Secondary Lock)	1
2	275493	Conduit	AR
3	.....	Connector Assembly (Manual Hydraulic Spool Position Sensor)	1
3	1525567	Connector	1
3	1463141	Terminal (Socket)	12
3	1529046	Connector (Secondary Lock) (Secondary Lock)	1
4	275494	Conduit	AR
5	.....	Connector Assembly (Lift Pressure)	1
5	1525595	Connector	1
5	1525596	Terminal	3
5	1533810	Seal (Green)	3
6	.....	Connector Assembly (Accelerator Pedal Position Sensor)	1
6	1525584	Connector	1
6	4011600	Terminal	6
7	.....	Connector Assembly (Direction Select Sensor)	1
7	1463189	Connector	1
7	1463141	Terminal (Socket)	4
7	1463196	Connector (Secondary Lock) (Secondary Lock)	1
8	275495	Conduit	AR
9	.....	Connector Assembly (Traction Motor Speed Sensor)	1
9	1508211	Connector (4 Way)	1
9	1597839	Receptacle Contact 20-22 AWG	4
9	2060555	Wire Seal (Yellow)	4
10	.....	Connector Assembly (Traction Motor Temperature Sensor)	1
10	1508206	Connector (2 Way)	1
10	1597839	Receptacle Contact 20-22 AWG	2
10	2060555	Wire Seal (Yellow)	2
11	.....	Connector Assembly (Park Brake)	1
11	1489656	Connector (4-Way)	1
11	1597773	Terminal	2
11	1330438	Terminal (Socket)	1
11	1484377	Plug	1
11	1489657	Connector (Secondary Lock) (Secondary Lock)	1
12	.....	Connector Assembly (Pump Motor Speed Sensor)	1
12	1508211	Connector (4 Way)	1
12	1597839	Receptacle Contact 20-22 AWG	4
12	2060555	Wire Seal (Yellow)	4
13	.....	Connector Assembly (Pump Motor Temperature Sensor)	1
13	1508206	Connector (2 Way)	1
13	1597839	Receptacle Contact 20-22 AWG	2
13	2060555	Wire Seal (Yellow)	2
14	275498	Conduit	AR
15	1534282	Clip	1
16	.....	Connector Assembly (Enable Relay)	1
16	2100204	Receptacle	1
16	4056908	Terminal	1

WIRE HARNESS

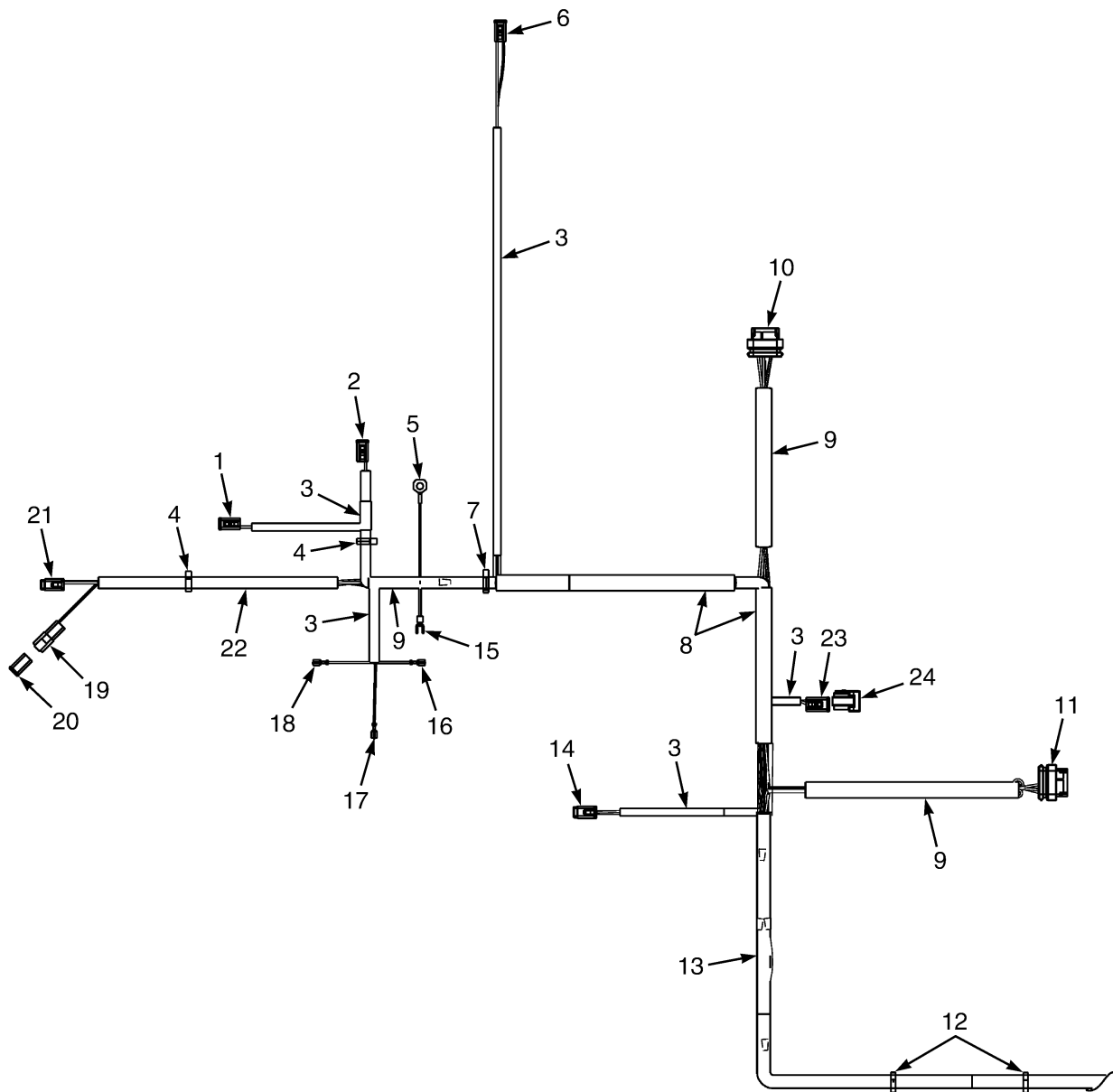
MAIN WITH MANUAL HYDRAULICS – SHEET 2 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
16	4056907	Terminal	2
16	4105612	Terminal	1
17	.....	Connector Assembly (Key Switch Relay)	1
17	1377860	Connector	1
17	4001753	Terminal	2
17	1706004	Terminal	2
18	275497	Conduit	AR
19	.....	Connector Assembly (Manual Hydraulic Harness)	1
19	1525563	Connector	1
19	1597773	Terminal	8
19	1330438	Terminal (Socket)	2
19	1484377	Plug	2
19	1500913	Connector (Secondary Lock) (Secondary Lock)	1
20	.....	Connector Assembly (Light Option Harness)	1
20	1330423	Connector (8 Socket)	1
20	1597773	Terminal	5
20	1330438	Terminal (Socket)	3
20	1330429	Connector (Secondary Lock) (Secondary Lock)	1
21	.....	Connector Assembly (Display Harness)	1
21	1541991	Connector	1
21	1463141	Terminal (Socket)	7
21	1484377	Plug	1
21	1541992	Connector (Secondary Lock) (Secondary Lock)	1
22	1402815	Clip	1
23	.....	Connector Assembly (Manual Hydraulic Coil)	1
23	1484557	Connector (2 Socket)	1
23	1463139	Terminal	1
23	1463141	Terminal (Socket)	1
23	1484558	Connector (Secondary Lock)	1
24	.....	Connector Assembly (Manual Hydraulic Coil)	1
24	1484557	Connector (2 Socket)	1
24	1463139	Terminal	1
24	1463141	Terminal (Socket)	1
24	1484558	Connector (Secondary Lock)	1
25	.....	Connector Assembly (Clamp Coil)	1
25	1484557	Connector (2 Socket)	1
25	1463139	Terminal	1
25	1463141	Terminal (Socket)	1
25	1484558	Connector (Secondary Lock)	1
26	1402813	Clip	3
27	.....	Connector Assembly (RTST Valve)	1
27	1330419	Connector	1
27	1597773	Terminal	2
27	1330424	Connector (Secondary Lock)	1

NOTES

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WIRE HARNESS (FIGURE 2-36) MAIN WITH MANUAL HYDRAULICS — SHEET 3 OF 3 (11/2014 →)



BP081781

WIRE HARNESS

MAIN WITH MANUAL HYDRAULICS – SHEET 3 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4634253	Wire Harness (Main)	1
1	.....	Connector Assembly (Controller Fan)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1490243	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Controller Fan)	1
2	1490242	Connector (2 Way)	1
2	1597773	Terminal	2
2	1490243	Connector (Secondary Lock)	1
3	275493	Conduit	AR
4	1500901	Clip	2
5	1402891	Terminal	1
6	.....	Connector Assembly (Overhead Guard Horn Switch)	1
6	1330419	Connector	1
6	1597773	Terminal	2
6	1330423	Connector (8 Socket)	1
7	1402624	Clip	1
8	275496	Conduit	AR
9	275495	Conduit	AR
10	.....	Connector Assembly (Traction Motor Controller)	1
10	2035275	Connector	1
10	1561019	.....	
	2035276	Connector (Socket Female)	17
10	2068741	Plug , Socket Contact, Female	6
11	.....	Connector Assembly (Pump Controller)	1
11	2035275	Connector	1
11	1561019	.....	
	2035276	Connector (Socket Female)	12
11	2068741	Plug , Socket Contact, Female	11
12	1402813	Clip	2
13	275497	Conduit	AR
14	.....	Connector Assembly (Steer Axle Sensor)	1
14	1493462	Connector	1
14	1463141	Terminal (Socket)	3
14	1493464	Connector (Secondary Lock)	1
15	2007554	E-Spade	1
16	248196	Terminal (Main Contactor Coil)	1
17	248196	Terminal	1
18	248196	Terminal (Main Contactor Coil)	1
19	.....	Connector Assembly (Seat Belt Switch Harness)	1
19	1493465	Connector (2 Pin)	1
19	1330437	Terminal (Pin)	2
19	1330414	Connector (Secondary Lock)	1
20	.....	Endcap	1
20	1490242	Connector (2 Way)	1
20	1490243	Connector (Secondary Lock)	1
20	1484377	Plug	2
21	.....	Connector Assembly (Seat Harness)	1
21	1531973	Connector	1
21	1463141	Terminal (Socket)	4

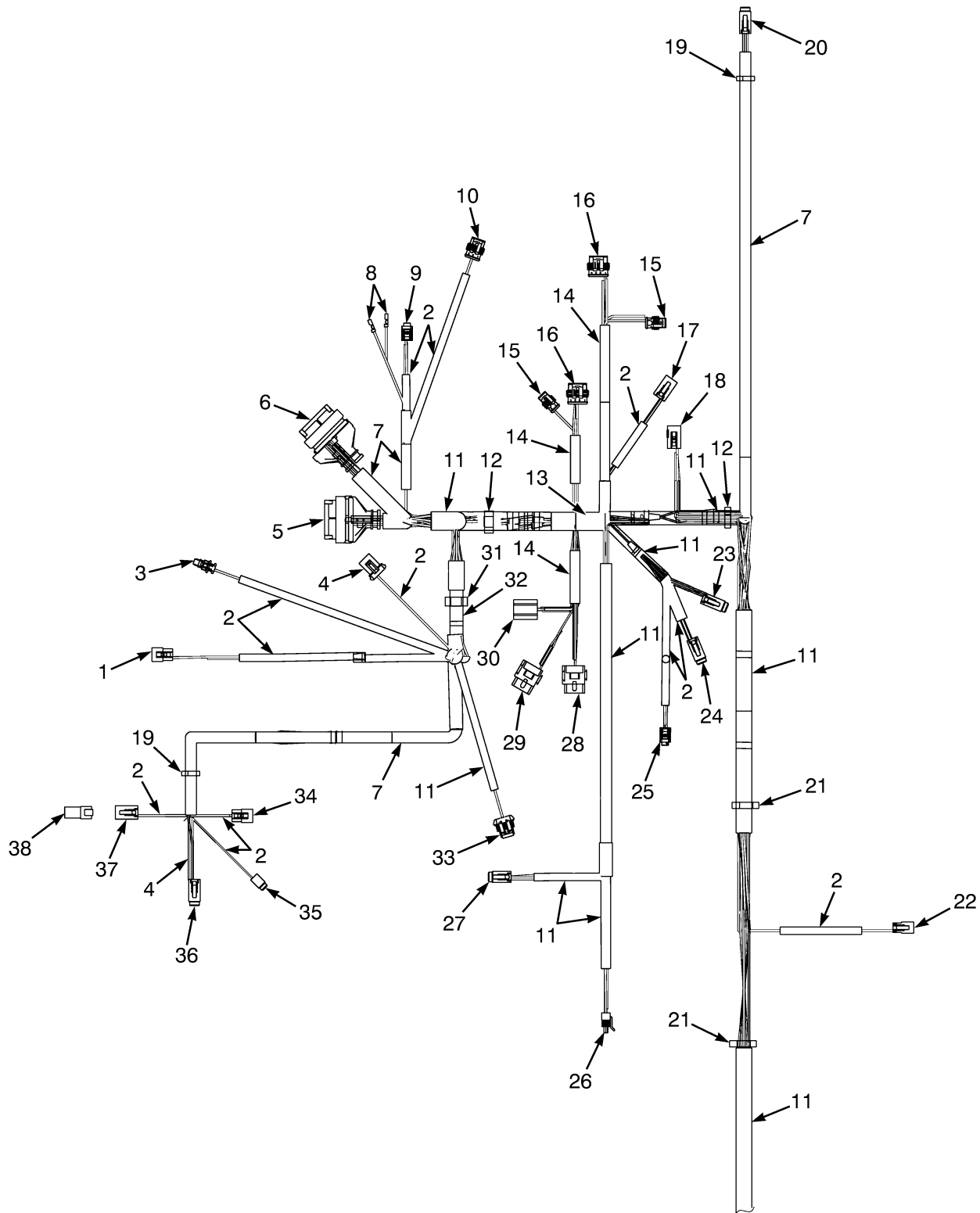
WIRE HARNESS
MAIN WITH MANUAL HYDRAULICS – SHEET 3 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
21	1484377	Plug	2
21	1531974	Connector (Secondary Lock)	1
22	275494	Conduit	AR
23	.....	Connector Assembly (Fan Diode)	1
23	1489656	Connector (4-Way)	1
23	1597773	Terminal	4
23	1489657	Connector (Secondary Lock)	1
24	4604553	Connector (With Diodes)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-37) MAIN WITH ELECTRONIC HYDRAULICS — SHEET 1 OF 2 (→ 10/2013)



BP080652

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 2 (→ 10/2013)

ITEM	PART NO.	DESCRIPTION	QTY
	4600586	Wire Harness	1
1	.....	Connector Assembly (Tilt Position Sensor)	1
1	1484397	Connector (3-Way)	1
1	1463194	Connector (Secondary Lock)	1
1	1597773	Terminal	3
2	275493	Conduit	AR
3	.....	Connector Assembly (Hydraulic Oil Temperature Sensor)	1
3	1547480	Connector (2 Way)	1
3	1674376	Terminal	2
3	1673840	Seal (Green)	2
4	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
4	1329152	Plug	1
4	1329151	Terminal	1
4	1330281	Terminal	1
4	1402888	Seal (Purple)	2
4	137852	Strap Clamp	1
5	.....	Connector Assembly (Vehicle System Manager)	1
5	2056243	Connector (35-Way)	1
5	1561019	.....	
	2035276	Connector (Socket Female)	22
5	2068741	Plug , Socket Contact, Female	13
5	137852	Strap Clamp	1
5	4600243	Cover	2
6	.....	Connector Assembly (Vehicle System Manager)	1
6	2068741	Plug , Socket Contact, Female	11
6	1561019	.....	
	2035276	Connector (Socket Female)	24
6	1553094	Connector (Grey)	1
6	4600243	Cover	2
6	137852	Strap Clamp	1
7	275495	Conduit	AR
8	.....	Connector Assembly (Fluid Level)	2
8	1324310	Terminal	1
8	1324309	Sleeve	1
9	.....	Connector Assembly (Service Break Pressure Sensor)	1
9	1533810	Seal (Green)	3
9	1525596	Terminal	3
9	1525595	Connector	1
10	.....	Connector Assembly (Horn Assembly)	1
10	2060555	Wire Seal (Yellow)	3
10	1508232	Terminal (Pin)	3
10	1547629	Connector (3 Way)	2
10	1597839	Receptacle Contact 20-22 AWG	1
11	275497	Conduit	AR
12	1534329	Clip	2
13	275498	Conduit	AR
14	275494	Conduit	AR
15	.....	Connector Assembly (Pump Motor Temperature Sensor)	2
15	1508206	Connector (2 Way)	1
15	1597839	Receptacle Contact 20-22 AWG	2

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 2 (→ 10/2013)

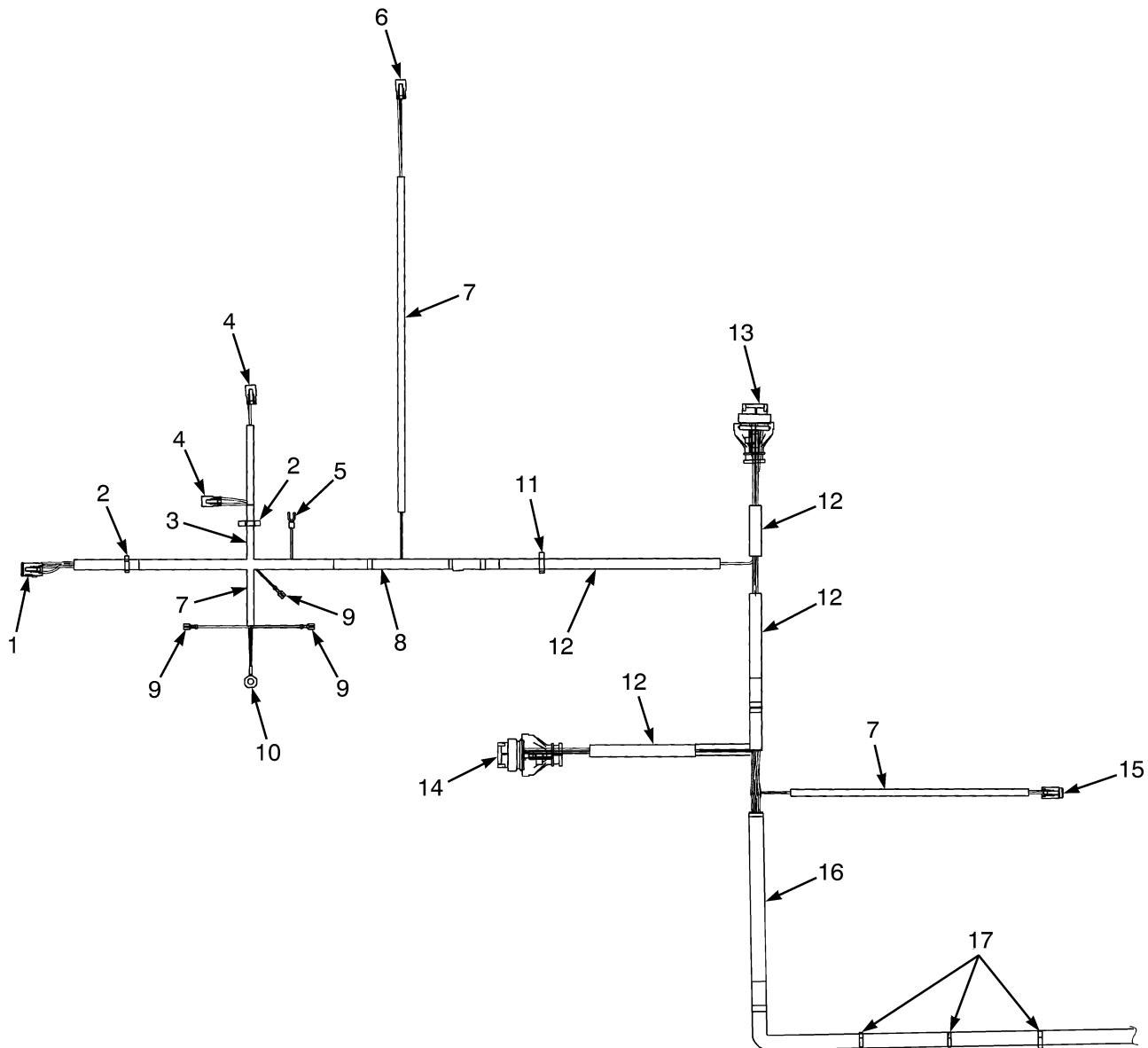
ITEM	PART NO.	DESCRIPTION	QTY
15	2060555	Wire Seal (Yellow)	2
16	.....	Connector Assembly (Pump Motor Speed Sensor)	2
16	1508211	Connector (4 Way)	1
16	2060555	Wire Seal (Yellow)	4
16	1597839	Receptacle Contact 20-22 AWG	4
17	.....	Connector Assembly (Traction Motor Temperature Sensor)	1
17	1597773	Terminal	2
17	1489657	Connector (Secondary Lock)	1
17	1489656	Connector (4-Way)	1
17	1330438	Terminal (Socket)	1
17	1484377	Plug	1
18	.....	Connector Assembly (Light Option Harness)	1
18	1597773	Terminal	5
18	1330423	Connector (8 Socket)	1
18	1330438	Terminal (Socket)	3
18	1330429	Connector (Secondary Lock)	1
19	1402815	Clip	3
20	.....	Connector Assembly (Display Harness)	1
20	1541991	Connector	1
20	1541992	Connector (Secondary Lock)	1
20	1463141	Terminal (Socket)	7
20	1484377	Plug	1
21	1402624	Clip	2
22	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
22	1597773	Terminal	2
22	1490243	Connector (Secondary Lock)	1
22	1490242	Connector (2 Way)	1
22	137852	Strap Clamp	1
23	.....	Connector Assembly (Elec. Hydraulic Valve Lower Coils)	1
23	1463141	Terminal (Socket)	8
23	1541992	Connector (Secondary Lock)	1
23	1655172	Connector	1
24	.....	Connector Assembly (Elec. Hydraulic Valve Upper Coils)	1
24	1463141	Terminal (Socket)	8
24	1541992	Connector (Secondary Lock)	1
24	1541991	Connector	1
25	.....	Connector Assembly (Lift Pressure)	1
25	1525595	Connector	1
25	137852	Strap Clamp	1
25	1525596	Terminal	3
25	1533810	Seal (Green)	3
26	.....	Connector Assembly (Accelerator Pedal Sensor)	1
26	1532571	Terminal	6
26	1525584	Connector	1
27	.....	Connector Assembly (Direct Select Sensor)	1
27	1463141	Terminal (Socket)	4
27	1463196	Connector (Secondary Lock)	1
27	1463189	Connector	1
28	.....	Connector Assembly (Elec. Hydraulic Relay)	1
28	1689606	Terminal	4

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 2 (→ 10/2013)

ITEM	PART NO.	DESCRIPTION	QTY
28	2100204	Receptacle	1
29	.....	Connector Assembly (Synchronous Steer Valve Relay)	1
29	1689606	Terminal	4
29	2100204	Receptacle	1
30	.....	Connector Assembly (Key Switch Relay)	1
30	1377860	Connector	1
30	1655183	Terminal	2
30	4001753	Terminal	2
31	1532776	Clip	1
32	275496	Conduit	AR
33	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
33	1476108	Wire Seal (White)	3
33	1330355	Terminal	3
33	1476109	Connector Lock	1
33	1476067	Connector	1
33	137852	Strap Clamp	1
34	.....	Connector Assembly (Park Break Position)	1
34	1597773	Terminal	3
34	1463194	Connector (Secondary Lock)	1
34	1484397	Connector (3-Way)	1
35	.....	Connector Assembly (Steer Harness)	1
35	137852	Strap Clamp	1
35	1484558	Connector (Secondary Lock)	1
35	1463139	Terminal	2
35	1484557	Connector (2 Socket)	1
36	.....	Connector Assembly (Steer Harness)	1
36	1484377	Plug	1
36	1463141	Terminal (Socket)	7
36	1541992	Connector (Secondary Lock)	1
36	1541991	Connector	1
37	.....	Connector Assembly (Termination Resistor)	1
37	1597773	Terminal	2
37	1330439	Plug	2
37	1489657	Connector (Secondary Lock)	1
37	1489656	Connector (4-Way)	1
38	1525577	Connector (With Resistor)	1

WIRE HARNESS (FIGURE 2-38) MAIN WITH ELECTRONIC HYDRAULICS — SHEET 2 OF 2 (→ 10/2013)



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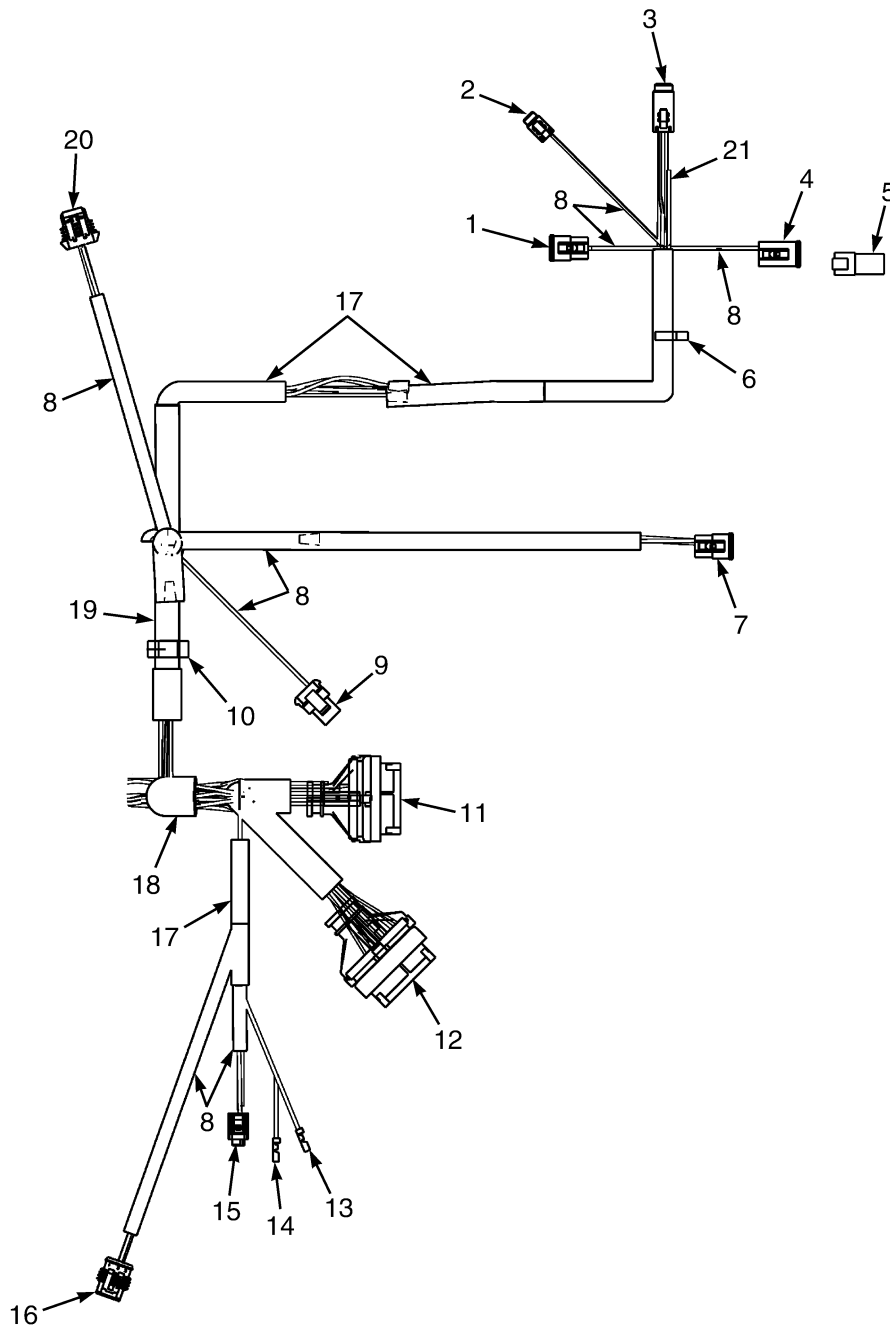
WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 2 OF 2 (→ 10/2013)

ITEM	PART NO.	DESCRIPTION	QTY
	4600586	Wire Harness	1
1	.....	Connector Assembly (Seat Harness)	1
1	1525563	Connector	1
1	1500913	Connector (Secondary Lock)	1
1	1330438	Terminal (Socket)	2
1	1463141	Terminal (Socket)	9
1	1484377	Plug	1
2	1500901	Clip	1
3	275494	Conduit	AR
4	.....	Connector Assembly (Controller Fan)	2
4	1597773	Terminal	2
4	1490243	Connector (Secondary Lock)	1
4	1490242	Connector (2 Way)	1
5	2007554	E-Spade	1
6	.....	Connector Assembly (Overhead Guard Horn Switch)	1
6	1597773	Terminal	2
6	1330424	Connector (Secondary Lock)	1
6	1330419	Connector	1
7	275493	Conduit	AR
8	275495	Conduit	AR
9	248196	Terminal	3
10	1402620	Ring Terminal	1
11	1402624	Clip	1
12	275496	Conduit	AR
13	.....	Connector Assembly (Traction Motor Controller)	1
13	2068741	Plug , Socket Contact, Female	6
13	1561019	.....	
	2035276	Connector (Socket Female)	17
13	2035275	Connector	1
13	4600244	Cover (Connector)	2
13	137852	Strap Clamp	1
14	.....	Connector Assembly (Pump Controller)	1
14	2068741	Plug , Socket Contact, Female	12
14	1561019	.....	
	2035276	Connector (Socket Female)	11
14	2035275	Connector	1
14	4600244	Cover (Connector)	2
14	137852	Strap Clamp	1
15	.....	Connector Assembly (Steer Axle Sensor)	1
15	1673825	Connector	1
15	1673826	Terminal	3
15	1673840	Seal (Green)	3
15	1493462	Connector	1
15	1493464	Connector (Secondary Lock)	1
15	1463141	Terminal (Socket)	3
16	275497	Conduit	AR
17	1402813	Clip	3

WIRE HARNESS (FIGURE 2-39)

MAIN WITH ELECTRONIC HYDRAULICS — SHEET 1 OF 3 (10/2013 ↔ 11/2014)



BP081522

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 3 (10/2013 ↔ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
	4624975	Wire Harness (Main)	1
1	.....	Connector Assembly (Park Brake Position)	1
1	1484397	Connector (3-Way)	1
1	1597773	Terminal	3
1	1463194	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Synchronous Steer Valve Harness)	1
2	1484557	Connector (2 Socket)	1
2	1463139	Terminal	2
2	1484558	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Steer Harness)	1
3	1541991	Connector	1
3	1463141	Terminal (Socket)	7
3	1484377	Plug	1
3	1541992	Connector (Secondary Lock) (Secondary Lock)	1
4	.....	Connector Assembly (Termination Resistor)	1
4	1489656	Connector (4-Way)	1
4	1330439	Plug	2
4	1597773	Terminal	2
4	1489657	Connector (Secondary Lock) (Secondary Lock)	1
5	1525577	Connector (With Resistor)	1
6	1402815	Clip	1
7	.....	Connector Assembly (Tilt Position Sensor)	1
7	1484397	Connector (3-Way)	1
7	1597773	Terminal	3
7	1463194	Connector (Secondary Lock)	1
8	275493	Conduit	AR
9	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
9	1329152	Plug	1
9	1330281	Terminal	2
9	1402888	Seal (Purple)	2
9	1329151	Terminal (Secondary Lock)	1
10	1532776	Clip	1
11	.....	Connector Assembly (Vehicle System Manager)	1
11	2056243	Connector (35-Way)	1
11	1561049	Connector (Socket Female)	21
11	2068741	Plug , Socket Contact, Female	13
12	.....	Connector Assembly (Vehicle System Manager)	1
12	1553094	Connector (Grey)	1
12	1561049	Connector (Socket Female)	24
12	2068741	Plug , Socket Contact, Female	11
13	1324310	Terminal (Brake Fluid Level)	1
14	1324310	Terminal (Brake Fluid Level)	1
15	.....	Connector Assembly (Service Brake Pressure Sensor)	1
15	1525595	Connector	1
15	1525596	Terminal	3
15	1533810	Seal (Green)	3
16	.....	Connector Assembly (Horn Assembly)	1
16	1547629	Connector (3 Way)	1

WIRE HARNESS**MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 3 (10/2013 ↔ 11/2014)**

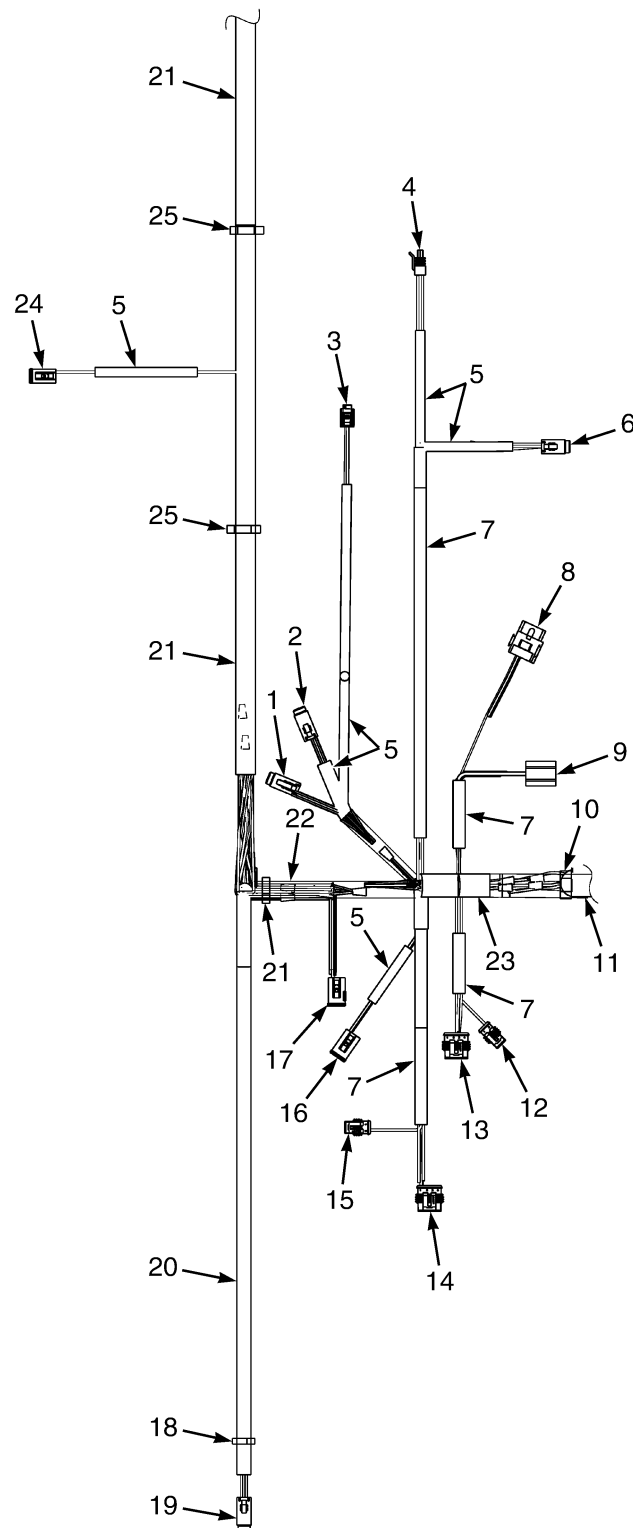
ITEM	PART NO.	DESCRIPTION	QTY
16	1508232	Terminal (Pin)	2
16	1597839	Receptacle Contact 20-22 AWG	1
16	2060555	Wire Seal (Yellow)	3
17	275495	Conduit	AR
18	1540388	Conduit	AR
19	275496	Conduit	AR
20	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
20	1476067	Connector	1
20	1330355	Terminal	3
20	1476108	Wire Seal (White)	3
20	1476109	Connector Lock	1
21	275494	Conduit	AR

NOTES

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WIRE HARNESS (FIGURE 2-40)

MAIN WITH ELECTRONIC HYDRAULICS — SHEET 2 OF 3 (10/2013 ↔ 11/2014)



BP081523

WIRE HARNESS**MAIN WITH ELECTRONIC HYDRAULICS – SHEET 2 OF 3 (10/2013 ↔ 11/2014)**

ITEM	PART NO.	DESCRIPTION	QTY
	4624975	Wire Harness (Main)	1
1	.....	Connector Assembly (E. Hydraulic Valve Lower Coils)	1
1	1655172	Connector	1
1	1463141	Terminal (Socket)	8
1	1541992	Connector (Secondary Lock) (Secondary Lock)	1
2	.....	Connector Assembly (E. Hydraulic Valve Upper Coils)	1
2	1541991	Connector	1
2	1463141	Terminal (Socket)	8
2	1541992	Connector (Secondary Lock) (Secondary Lock)	1
3	.....	Connector Assembly (Lift Pressure)	1
3	1525595	Connector	1
3	1525596	Terminal	3
3	1533810	Seal (Green)	3
4	.....	Connector Assembly (Accelerator Pedal Position Sensor)	1
4	1525584	Connector	1
4	4011600	Terminal	6
5	275493	Conduit	AR
6	.....	Connector Assembly (Direction Select Sensor)	1
6	1463189	Connector	1
6	1463141	Terminal (Socket)	4
6	1463196	Connector (Secondary Lock) (Secondary Lock)	1
7	275494	Conduit	AR
8	.....	Connector Assembly (Enable Relay)	1
8	2100204	Receptacle	1
8	1689606	Terminal	4
9	.....	Connector Assembly (Key Switch Relay)	1
9	1377860	Connector	1
9	4001753	Terminal	2
9	1706004	Terminal	2
10	1534282	Clip	1
11	1540388	Conduit	AR
12	.....	Connector Assembly (Pump Motor Temperature Sensor)	1
12	1508206	Connector (2 Way)	1
12	1597839	Receptacle Contact 20-22 AWG	2
12	2060555	Wire Seal (Yellow)	4
13	.....	Connector Assembly (Pump Motor Speed Sensor)	1
13	1508211	Connector (4 Way)	1
13	1597839	Receptacle Contact 20-22 AWG	4
13	2060555	Wire Seal (Yellow)	4
14	.....	Connector Assembly (Traction Motor Speed Sensor)	1
14	1508211	Connector (4 Way)	1
14	1597839	Receptacle Contact 20-22 AWG	4
14	2060555	Wire Seal (Yellow)	4
15	.....	Connector Assembly (Traction Motor Temperature Sensor)	1
15	1508206	Connector (2 Way)	1
15	1597839	Receptacle Contact 20-22 AWG	2
15	2060555	Wire Seal (Yellow)	2
16	.....	Connector Assembly (Park Brake)	1
16	1489656	Connector (4-Way)	1
16	1597773	Terminal	2

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 2 OF 3 (10/2013 ↔ 11/2014)

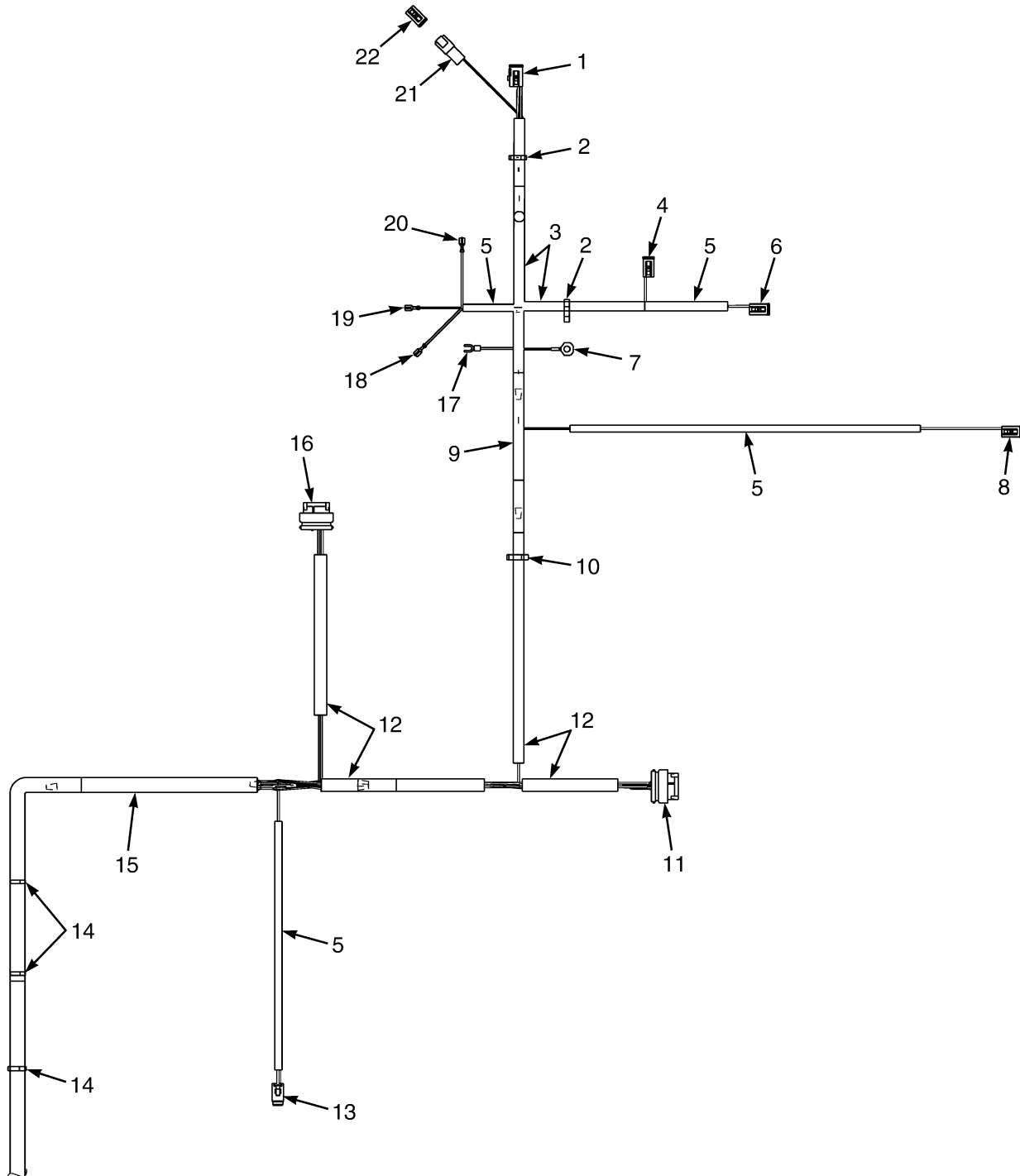
ITEM	PART NO.	DESCRIPTION	QTY
16	1330438	Terminal (Socket)	1
16	1484377	Plug	1
17	.....	Connector Assembly (Light Option Harness)	1
17	1330423	Connector (8 Socket)	1
17	1597773	Terminal	5
17	1330438	Terminal (Socket)	3
17	1330429	Connector (Secondary Lock) (Secondary Lock)	1
18	1402815	Clip	1
19	.....	Connector Assembly (Display Harness)	1
19	1541991	Connector	1
19	1463141	Terminal (Socket)	7
19	1484377	Plug	1
19	1541992	Connector (Secondary Lock) (Secondary Lock)	1
20	275495	Conduit	AR
21	275497	Conduit	AR
22	1534329	Clip	1
23	275498	Conduit	AR
24	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
24	1490242	Connector (2 Way)	1
24	1597773	Terminal	2
24	1490243	Connector (Secondary Lock)	1
25	1402813	Clip	2

NOTES

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WIRE HARNESS (FIGURE 2-41)

MAIN WITH ELECTRONIC HYDRAULICS — SHEET 3 OF 3 (10/2013 ↔ 11/2014)



BP081524

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 3 OF 3 (10/2013 ↔ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
	4624975	Wire Harness (Main)	1
1	.....	Connector Assembly (Seat Harness)	1
1	1525563	Connector	1
1	1597773	Terminal	9
1	1330438	Terminal (Socket)	2
1	1484377	Plug	1
1	1500913	Connector (Secondary Lock) (Secondary Lock)	1
2	1500901	Clip	2
3	275494	Conduit	AR
4	.....	Connector Assembly (Controller Fan)	1
4	1597773	Terminal	2
4	1490243	Connector (Secondary Lock)	1
5	275493	Conduit	AR
6	.....	Connector Assembly (Controller Fan)	1
6	1490242	Connector (2 Way)	1
6	1597773	Terminal	2
6	1490243	Connector (Secondary Lock)	1
7	1402891	Terminal (Negative Terminal Traction Controller)	1
8	.....	Connector Assembly (Overhead Guard Horn Switch)	1
8	1330419	Connector	1
8	1597773	Terminal	2
8	1330424	Connector (Secondary Lock)	1
9	275495	Conduit	AR
10	1402624	Clip	1
11	.....	Connector Assembly (Traction Motor Controller)	1
11	2035275	Connector	1
11	1561019	Connector (Socket Female)	17
11	2068741	Plug , Socket Contact, Female	6
12	275496	Conduit	AR
13	.....	Connector Assembly (Steer Axle Sensor)	1
13	1493462	Connector	1
13	1463141	Terminal (Socket)	3
13	1493464	Connector (Secondary Lock)	1
14	1402813	Clip	3
15	275497	Conduit	AR
16	.....	Connector Assembly (Pump Controller)	1
16	2035275	Connector	1
16	1561019	Connector (Socket Female)	12
16	2068741	Plug , Socket Contact, Female	11
17	2007554	E-Spade	1
18	248196	Terminal (Main Contactor Coil)	1
19	248196	Terminal	1
20	248196	Terminal (Main Contactor Coil)	1
21	.....	Connector Assembly (Seat Belt Switch Harness)	1
21	1493465	Connector (2 Pin)	1
21	1330437	Terminal (Pin)	2
21	1330414	Connector (Secondary Lock)	1
22	.....	Connector Assembly (Endcap)	1

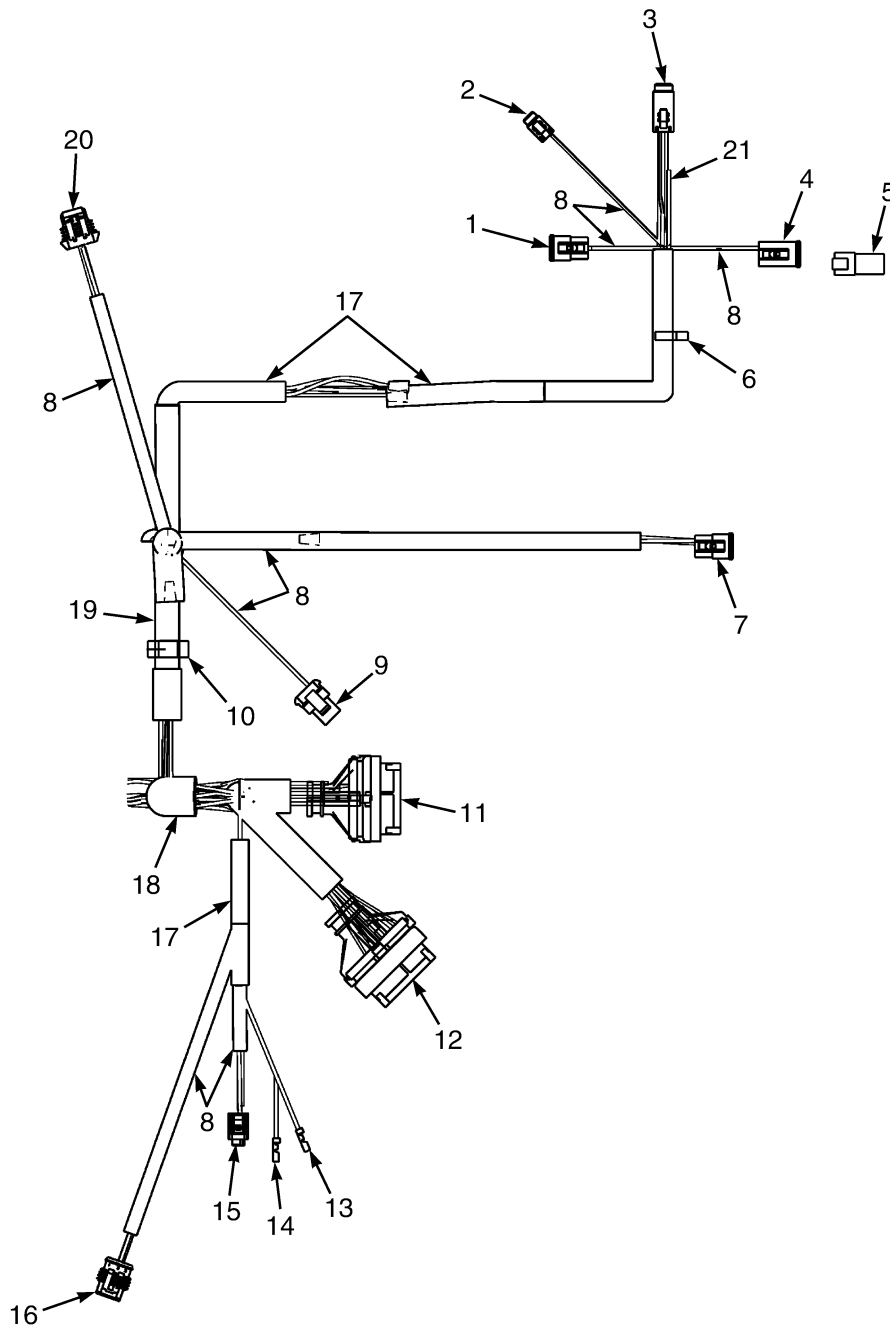
WIRE HARNESS**MAIN WITH ELECTRONIC HYDRAULICS – SHEET 3 OF 3 (10/2013 ↔ 11/2014)**

ITEM	PART NO.	DESCRIPTION	QTY
22	1490242	Connector (2 Way)	1
22	1484377	Plug	2
22	1490243	Connector (Secondary Lock)	1

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

WIRE HARNESS (FIGURE 2-42) MAIN WITH ELECTRONIC HYDRAULICS — SHEET 1 OF 3 (11/2014 →)



BP081522

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4634252	Wire Harness (Main)	1
1	.....	Connector Assembly (Park Brake Position)	1
1	1484397	Connector (3-Way)	1
1	1597773	Terminal	3
1	1463194	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Synchronous Steer Valve Harness)	1
2	1484557	Connector (2 Socket)	1
2	1463139	Terminal	2
2	1484558	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Steer Harness)	1
3	1541991	Connector	1
3	1463141	Terminal (Socket)	7
3	1484377	Plug	1
3	1541992	Connector (Secondary Lock) (Secondary Lock)	1
4	.....	Connector Assembly (Termination Resistor)	1
4	1489656	Connector (4-Way)	1
4	1330439	Plug	2
4	1597773	Terminal	2
4	1489657	Connector (Secondary Lock) (Secondary Lock)	1
5	1525577	Connector (With Resistor)	1
6	1402815	Clip	1
7	.....	Connector Assembly (Tilt Position Sensor)	1
7	1484397	Connector (3-Way)	1
7	1597773	Terminal	3
7	1463194	Connector (Secondary Lock)	1
8	275493	Conduit	AR
9	.....	Connector Assembly (Hydraulic Filter Pressure Switch)	1
9	1329152	Plug	1
9	1330281	Terminal	2
9	1402888	Seal (Purple)	2
9	1329151	Terminal (Secondary Lock)	1
10	1532776	Clip	1
11	.....	Connector Assembly (Vehicle System Manager)	1
11	2056243	Connector (35-Way)	1
11	1561049	Connector (Socket Female)	21
11	2068741	Plug , Socket Contact, Female	13
12	.....	Connector Assembly (Vehicle System Manager)	1
12	1553094	Connector (Grey)	1
12	1561049	Connector (Socket Female)	24
12	2068741	Plug , Socket Contact, Female	11
13	1324310	Terminal (Brake Fluid Level)	1
14	1324310	Terminal (Brake Fluid Level)	1
15	.....	Connector Assembly (Service Brake Pressure Sensor)	1
15	1525595	Connector	1
15	1525596	Terminal	3
15	1533810	Seal (Green)	3
16	.....	Connector Assembly (Horn Assembly)	1
16	1547629	Connector (3 Way)	1

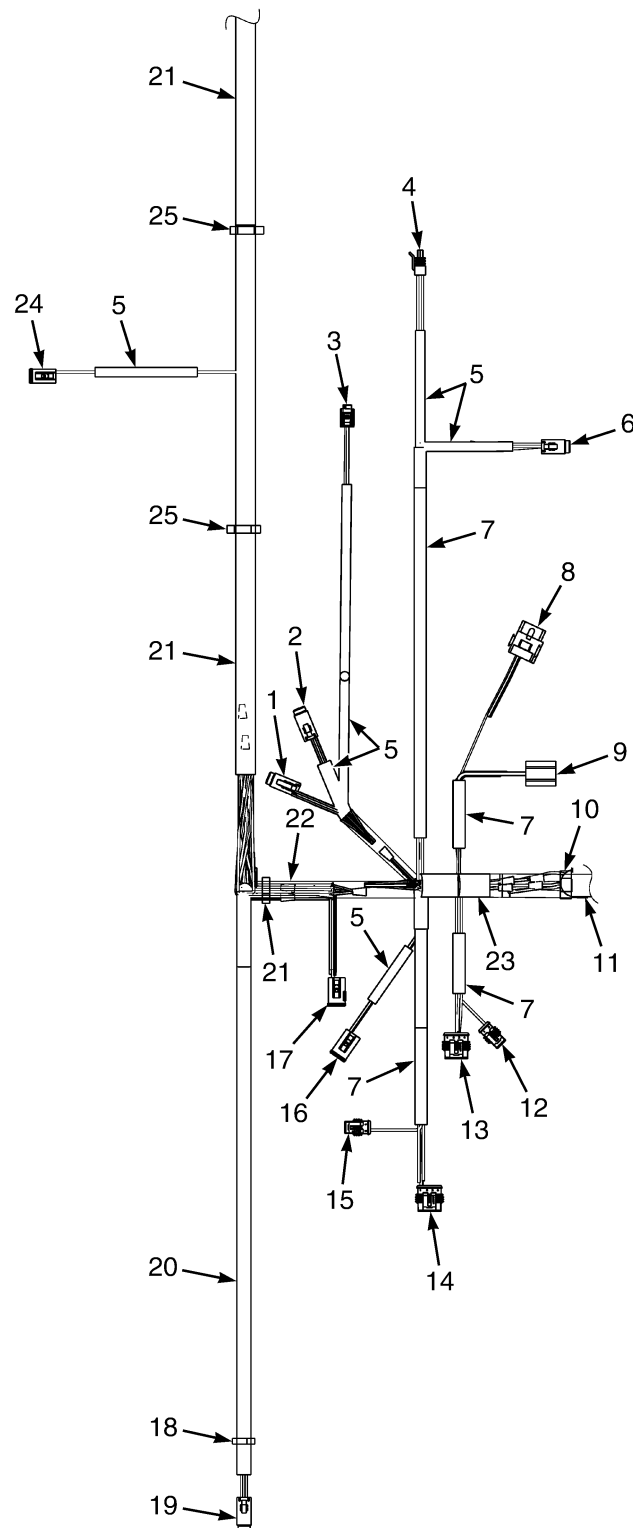
WIRE HARNESS**MAIN WITH ELECTRONIC HYDRAULICS – SHEET 1 OF 3 (11/2014 →)**

ITEM	PART NO.	DESCRIPTION	QTY
16	1508232	Terminal (Pin)	2
16	1597839	Receptacle Contact 20-22 AWG	1
16	2060555	Wire Seal (Yellow)	3
17	275495	Conduit	AR
18	1540388	Conduit	AR
19	275496	Conduit	AR
20	.....	Connector Assembly (Hydraulic Oil Level Sensor)	1
20	1476067	Connector	1
20	1330355	Terminal	3
20	1476108	Wire Seal (White)	3
20	1476109	Connector Lock	1
21	275494	Conduit	AR

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-43) MAIN WITH ELECTRONIC HYDRAULICS — SHEET 2 OF 3 (11/2014 →)



BP081523

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 2 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4634252	Wire Harness (Main)	1
1	.....	Connector Assembly (E. Hydraulic Valve Lower Coils)	1
1	1655172	Connector	1
1	1463141	Terminal (Socket)	8
1	1541992	Connector (Secondary Lock) (Secondary Lock)	1
2	.....	Connector Assembly (E. Hydraulic Valve Upper Coils)	1
2	1541991	Connector	1
2	1463141	Terminal (Socket)	8
2	1541992	Connector (Secondary Lock) (Secondary Lock)	1
3	.....	Connector Assembly (Lift Pressure)	1
3	1525595	Connector	1
3	1525596	Terminal	3
3	1533810	Seal (Green)	3
4	.....	Connector Assembly (Accelerator Pedal Position Sensor)	1
4	1525584	Connector	1
4	4011600	Terminal	6
5	275493	Conduit	AR
6	.....	Connector Assembly (Direction Select Sensor)	1
6	1463189	Connector	1
6	1463141	Terminal (Socket)	4
6	1463196	Connector (Secondary Lock) (Secondary Lock)	1
7	275494	Conduit	AR
8	.....	Connector Assembly (Enable Relay)	1
8	2100204	Receptacle	1
8	4056907	Terminal	3
8	4105612	Terminal	1
9	.....	Connector Assembly (Key Switch Relay)	1
9	1377860	Connector	1
9	4001753	Terminal	2
9	1706004	Terminal	2
10	1534282	Clip	1
11	1540388	Conduit	AR
12	.....	Connector Assembly (Pump Motor Temperature Sensor)	1
12	1508206	Connector (2 Way)	1
12	1597839	Receptacle Contact 20-22 AWG	2
12	2060555	Wire Seal (Yellow)	4
13	.....	Connector Assembly (Pump Motor Speed Sensor)	1
13	1508211	Connector (4 Way)	1
13	1597839	Receptacle Contact 20-22 AWG	4
13	2060555	Wire Seal (Yellow)	4
14	.....	Connector Assembly (Traction Motor Speed Sensor)	1
14	1508211	Connector (4 Way)	1
14	1597839	Receptacle Contact 20-22 AWG	4
14	2060555	Wire Seal (Yellow)	4
15	.....	Connector Assembly (Traction Motor Temperature Sensor)	1
15	1508206	Connector (2 Way)	1
15	1597839	Receptacle Contact 20-22 AWG	2
15	2060555	Wire Seal (Yellow)	2
16	.....	Connector Assembly (Park Brake)	1
16	1489656	Connector (4-Way)	1

WIRE HARNESS

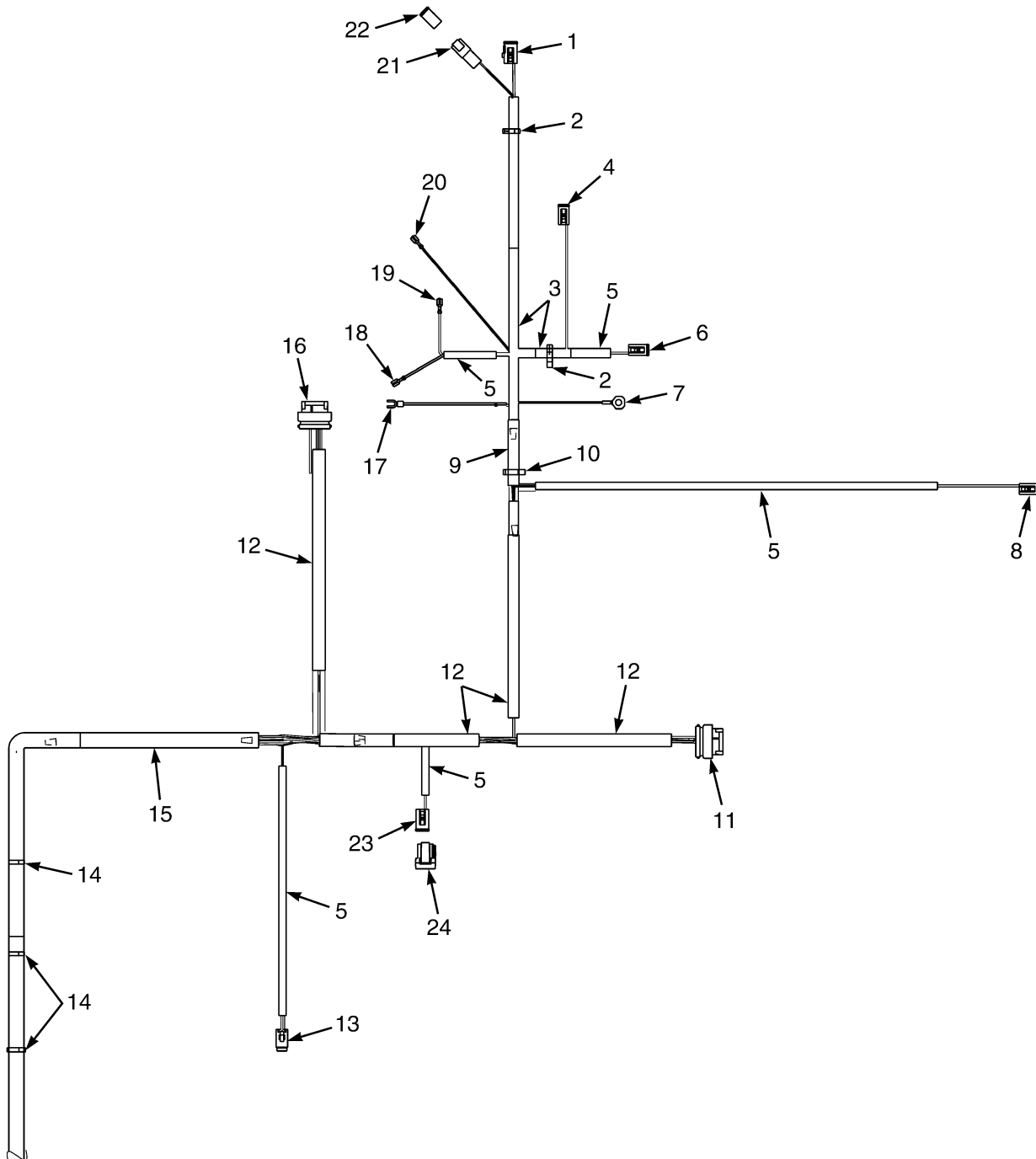
MAIN WITH ELECTRONIC HYDRAULICS – SHEET 2 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
16	1597773	Terminal	2
16	1330438	Terminal (Socket)	1
16	1484377	Plug	1
17	.....	Connector Assembly (Light Option Harness)	1
17	1330423	Connector (8 Socket)	1
17	1597773	Terminal	5
17	1330438	Terminal (Socket)	3
17	1330429	Connector (Secondary Lock) (Secondary Lock)	1
18	1402815	Clip	1
19	.....	Connector Assembly (Display Harness)	1
19	1541991	Connector	1
19	1463141	Terminal (Socket)	7
19	1484377	Plug	1
19	1541992	Connector (Secondary Lock) (Secondary Lock)	1
20	275495	Conduit	AR
21	275497	Conduit	AR
22	1534329	Clip	1
23	275498	Conduit	AR
24	.....	Connector Assembly (Battery Gate Magnetic Switch)	1
24	1490242	Connector (2 Way)	1
24	1597773	Terminal	2
24	1490243	Connector (Secondary Lock)	1
25	1402813	Clip	2

NOTES

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WIRE HARNESS (FIGURE 2-44) MAIN WITH ELECTRONIC HYDRAULICS — SHEET 3 OF 3 (11/2014 →)



BP081782

WIRE HARNESS

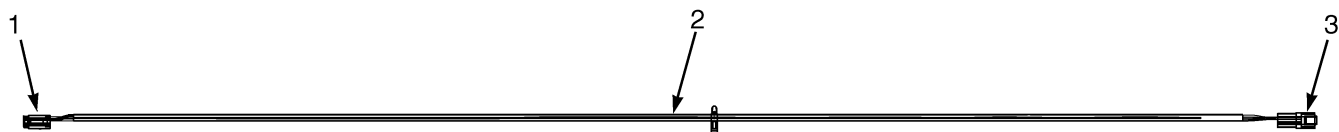
MAIN WITH ELECTRONIC HYDRAULICS – SHEET 3 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4634252	Wire Harness (Main)	1
1	.....	Connector Assembly (Seat Harness)	1
1	1525563	Connector	1
1	1597773	Terminal	9
1	1330438	Terminal (Socket)	2
1	1484377	Plug	1
1	1500913	Connector (Secondary Lock) (Secondary Lock)	1
2	1500901	Clip	2
3	275494	Conduit	AR
4	.....	Connector Assembly (Controller Fan)	1
4	1490242	Connector (2 Way)	1
4	1597773	Terminal	2
4	1490243	Connector (Secondary Lock)	1
5	275493	Conduit	AR
6	.....	Connector Assembly (Controller Fan)	1
6	1490242	Connector (2 Way)	1
6	1597773	Terminal	2
6	1490243	Connector (Secondary Lock)	1
7	1402891	Terminal (Negative Terminal Traction Controller)	1
8	.....	Connector Assembly (Overhead Guard Horn Switch)	1
8	1330419	Connector	1
8	1597773	Terminal	2
8	1330424	Connector (Secondary Lock)	1
9	275495	Conduit	AR
10	1402624	Clip	1
11	.....	Connector Assembly (Traction Motor Controller)	1
11	2035275	Connector	1
11	1561049	Connector (Socket Female)	17
11	2068741	Plug , Socket Contact, Female	6
12	275496	Conduit	AR
13	.....	Connector Assembly (Steer Axle Sensor)	1
13	1493462	Connector	1
13	1463141	Terminal (Socket)	3
13	1493464	Connector (Secondary Lock)	1
14	1402813	Clip	3
15	275497	Conduit	AR
16	.....	Connector Assembly (Pump Controller)	1
16	2035275	Connector	1
16	1561049	Connector (Socket Female)	12
16	2068741	Plug , Socket Contact, Female	11
17	2007554	E-Spade	1
18	248196	Terminal (Main Contactor Coil)	1
19	248196	Terminal	1
20	248196	Terminal (Main Contactor Coil)	1
21	.....	Connector Assembly (Seat Belt Switch Harness)	1
21	1493465	Connector (2 Pin)	1
21	1330437	Terminal (Pin)	2
21	1330414	Connector (Secondary Lock)	1

WIRE HARNESS

MAIN WITH ELECTRONIC HYDRAULICS – SHEET 3 OF 3 (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
22	.....	Connector Assembly (Endcap)	1
22	1490242	Connector (2 Way)	1
22	1484377	Plug	2
22	1490243	Connector (Secondary Lock)	1
23	.....	Connector Assembly (Fan Diode)	1
23	1489656	Connector (4-Way)	1
23	1597773	Terminal	4
23	1489657	Connector (Secondary Lock)	1
24	4604553	Connector (With Diodes)	1

WIRE HARNESS (FIGURE 2-45)
SEAT WITH MANUAL HYDRAULICS

BP080211

ITEM	PART NO.	DESCRIPTION	QTY
	2104097	Wire Harness (Seat)	1
1	.....	Connector Assembly (Seat Sensor)	1
1	1531973	Connector	1
1	1531974	Connector (Secondary Lock)	1
1	1463141	Terminal (Socket)	4
1	1484377	Plug	2
2	1699754	Conduit	AR
3	.....	Connector Assembly (Main Harness)	1
3	1530960	Connector	1
3	1530961	Connector (Secondary Lock)	1
3	~~1570624~~		
	1463140	Terminal (Pin)	4
3	1484377	Plug	2

WIRE HARNESS (FIGURE 2-46)

SEAT WITH MANUAL HYDRAULICS — WITH SEAT BELT SEQUENCE MODULE



BP081738

ITEM	PART NO.	DESCRIPTION	QTY
	4635373	Wire Harness	1
1	.....	Connector Assembly (Main Harness)	1
1	1530960	Connector	1
1	1530961	Connector (Secondary Lock)	1
1	1484377	Plug	2
1	1570624	.....	
	1463140	Terminal (Pin)	4
2	.....	Connector Assembly (Seat Belt Switch Harness)	1
2	1493465	Connector (2 Pin)	1
2	1330414	Connector (Secondary Lock)	1
2	1531312	Terminal	2
3	.....	Connector Assembly (Seat Sensor)	1
3	1531973	Connector	1
3	1531974	Connector (Secondary Lock)	1
3	1531312	Terminal	4
3	1484377	Plug	2
4	.....	Connector Assembly (Seat Belt Sequence Module)	1
4	1502625	Connector	1
4	1502626	Connector (Secondary Lock) (Lock)	1
4	1484377	Plug	2
4	1597773	Terminal	6

NOTES

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WIRE HARNESS (FIGURE 2-47)
SEAT WITH E-HYDRAULICS

BP081135

**WIRE HARNESS
SEAT WITH E-HYDRAULICS**

ITEM	PART NO.	DESCRIPTION	QTY
	2104030	Wire Harness (Seat)	1
1	.....	Connector Assembly (MLM Joystick / Armrest)	1
1	1502625	Connector	1
1	1330438	Terminal (Socket)	7
1	1484377	Plug	1
1	1502626	Connector (Secondary Lock) (Secondary Lock)	1
2	1699754	Conduit	AR
3	.....	Connector Assembly (Main Harness)	1
3	1500925	Connector	1
3	1330437	Terminal (Pin)	11
3	1484377	Plug	1
3	1352603	Secondary Lock	1
4	.....	Connector Assembly (Seat Sensor)	1
4	1531973	Connector	1
4	1463141	Terminal (Socket)	4
4	1484377	Plug	2
4	1531974	Connector (Secondary Lock) (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-48)

SEAT WITH E-HYDRAULICS — WITH SEAT BELT SEQUENCE MODULE



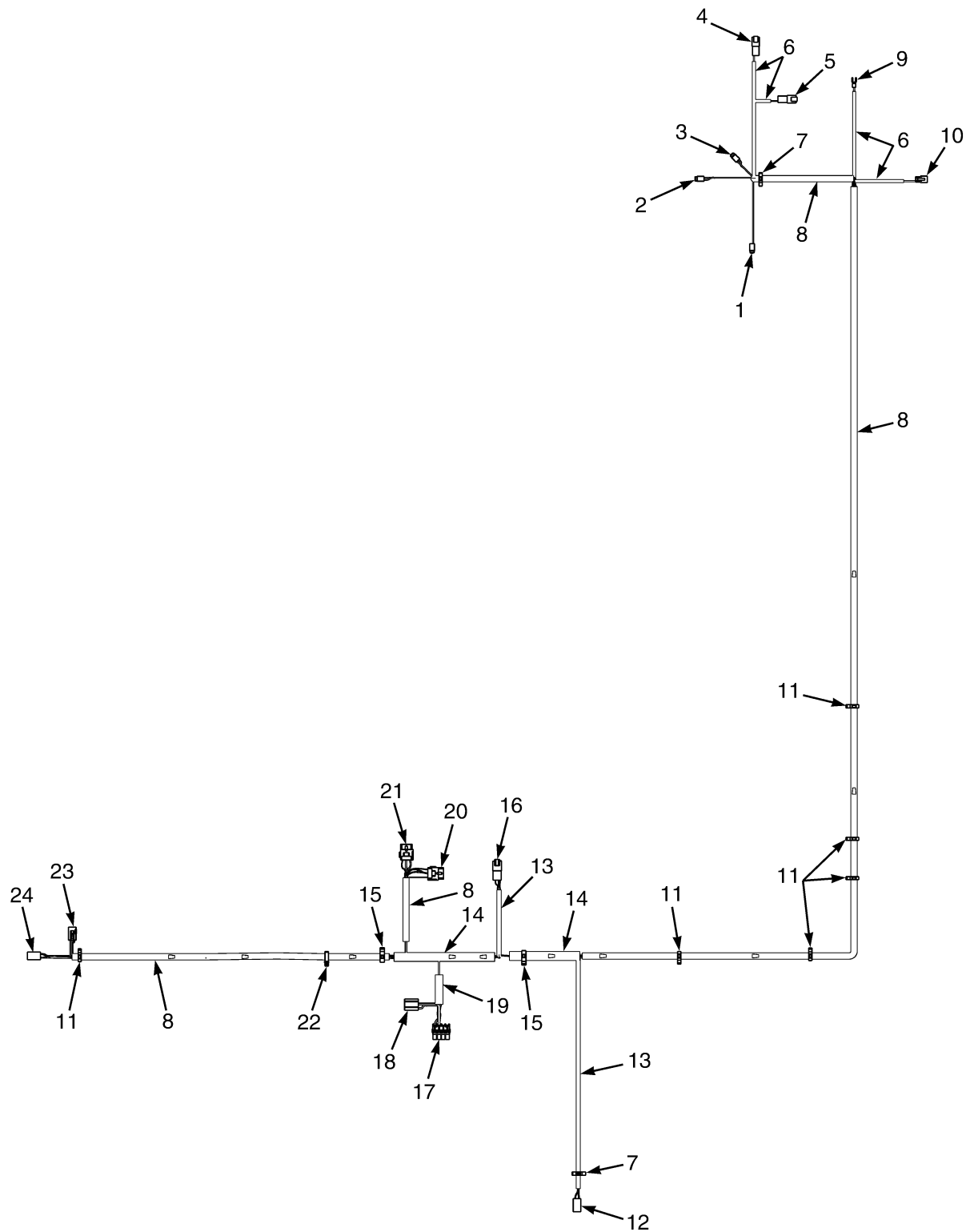
BP081737

ITEM	PART NO.	DESCRIPTION	QTY
	4635372	Wire Harness	1
1	.....	Connector Assembly (Main Harness)	1
1	1500925	Connector	1
1	1352603	Secondary Lock	1
1	1484377	Plug	1
1	1531312	Terminal	11
2	.....	Connector Assembly (Seat Belt Switch Harness)	1
2	1493465	Connector (2 Pin)	1
2	1330414	Connector (Secondary Lock)	1
2	1531312	Terminal	2
3	.....	Connector Assembly (MLM/Joystick Arm Rest)	1
3	1502625	Connector	1
3	1502626	Connector (Secondary Lock) (Lock)	1
3	1484377	Plug	1
3	1597773	Terminal	7
4	.....	Connector Assembly (Seat Sensor)	1
4	1531973	Connector	1
4	1531974	Connector (Secondary Lock)	1
4	1463141	Terminal (Socket)	4
4	1484377	Plug	2
5	.....	Connector Assembly (Seat Belt Sequence Module)	1
5	1502625	Connector	1
5	1502626	Connector (Secondary Lock) (Lock)	1
5	1484377	Plug	2
5	1597773	Terminal	6

NOTES

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WIRE HARNESS (FIGURE 2-49) MAIN LIGHTS CHASSIS — 36/48V (→ 11/2014)



BP081269

WIRE HARNESS

MAIN LIGHTS CHASSIS – 36/48V (→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
	4616775	Wire Harness (Main)(36V/48V)(w/ Lights or E-Hyds)	1
1	.....	Connector Assembly (Fan)	1
1	1484557	Connector (2 Socket)	1
1	1597773	Terminal	2
1	1484558	Connector (Secondary Lock)	1
1	1463139	Terminal	2
2	.....	Connector Assembly (Fan)	1
2	1484557	Connector (2 Socket)	1
2	1597773	Terminal	2
2	1484558	Connector (Secondary Lock)	1
2	1463139	Terminal	2
3	.....	Connector Assembly (Fan)	1
3	1484557	Connector (2 Socket)	1
3	1597773	Terminal	2
3	1484558	Connector (Secondary Lock)	1
3	1463139	Terminal	2
4	.....	Connector Assembly (Main Harness Fan Connection)	1
4	1493465	Connector (2 Pin)	1
4	1330437	Terminal (Pin)	2
4	1330414	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Main Harness Fan Connection)	1
5	1493465	Connector (2 Pin)	1
5	1330437	Terminal (Pin)	2
5	1330414	Connector (Secondary Lock)	1
6	1655195	Conduit	AR
7	1402816	Clip	2
8	275495	Conduit	AR
9	1301784	E-Spade	1
10	.....	Connector Assembly (Back-up Alarm)	1
10	1330419	Connector	1
10	1597773	Terminal	2
10	1330424	Connector (Secondary Lock)	1
11	1402815	Clip	6
12	.....	Connector Assembly (Display Light Harness)	1
12	1330421	Connector (4 Soc)	1
12	1330438	Terminal (Socket)	4
12	1330427	Connector (Secondary Lock)	1
13	275493	Conduit	AR
14	275497	Conduit	AR
15	1534329	Clip	2
16	.....	Connector Assembly (Main Harness)	1
16	1330413	Connector (8 Pin)	1
16	1531312	Terminal	3
16	1330437	Terminal (Pin)	3
16	1330439	Plug	2
16	1330418	Connector	1
17	.....	Connector Assembly (DC-DC Converter)	1
17	1554879	Connector	1
17	1554877	Terminal	2
17	1682736	Terminal	2

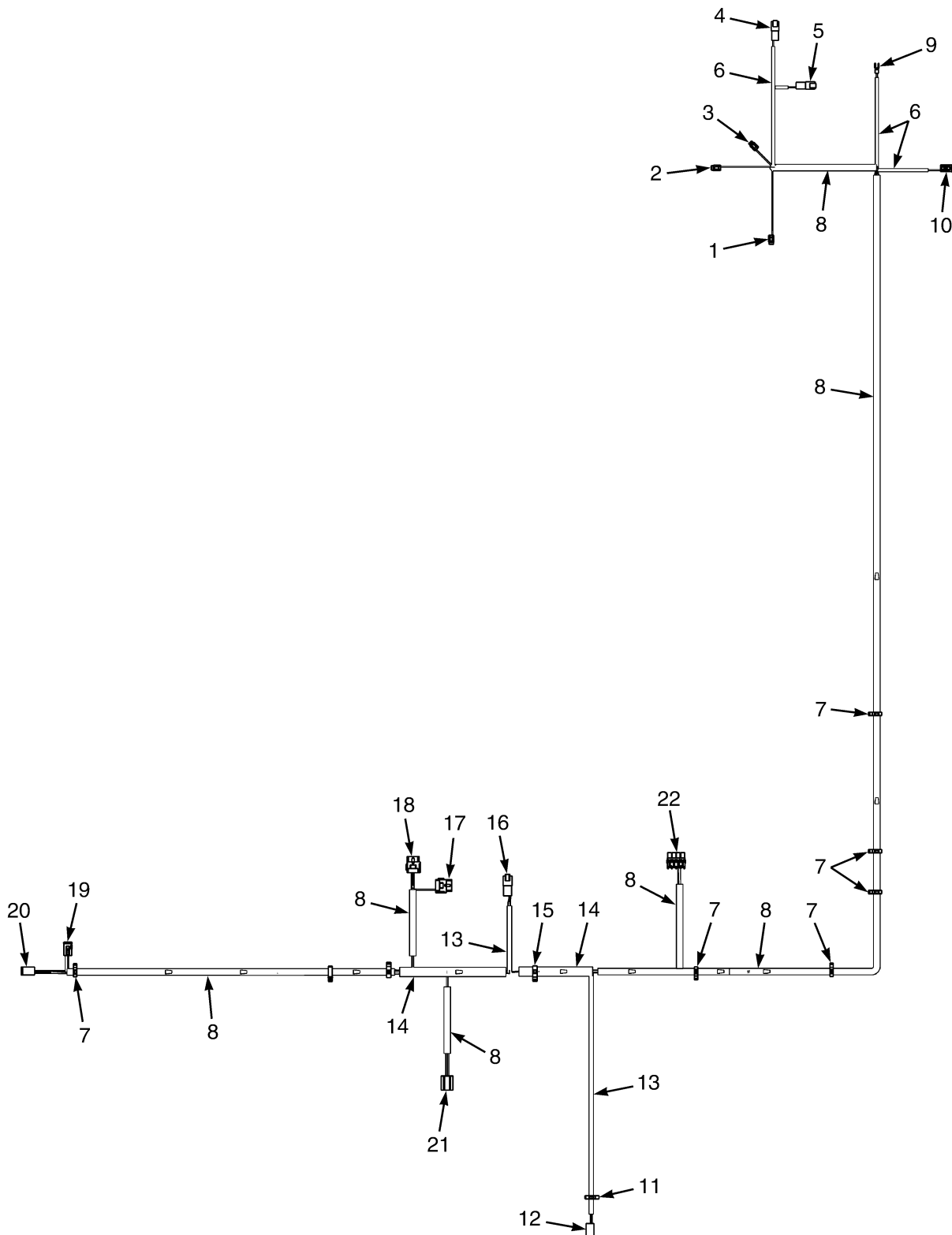
WIRE HARNESS
MAIN LIGHTS CHASSIS – 36/48V (→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
18	.....	Connector Assembly (Fan Relay)	1
18	1377860	Connector	1
18	1655183	Terminal	2
18	1377868	Receptacle	2
19	275496	Conduit	AR
20	.....	Connector Assembly (Brake Light Relay)	1
20	2100204	Receptacle	1
20	1689606	Terminal	4
20	4056907	Terminal	3
21	.....	Connector Assembly (Reverse Relay)	1
21	2100204	Receptacle	1
21	1689606	Terminal	4
21	4056907	Terminal	3
22	1531485	Clip	1
23	.....	Connector Assembly (Wire Harness-Lights with Left Hand OHG)	1
23	1330423	Connector (8 Socket)	1
23	1330438	Terminal (Socket)	6
23	1597773	Terminal	2
24	.....	Connector Assembly (Harness-Light Switch)	1
24	1330421	Connector (4 Soc)	1
24	1330438	Terminal (Socket)	4
24	1330427	Connector (Secondary Lock)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-50) MAIN LIGHTS CHASSIS — 36/48V (11/2014 →)



BP081787

WIRE HARNESS **MAIN LIGHTS CHASSIS – 36/48V (11/2014 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4636158	Wire Harness	1
1	.....	Connector Assembly (Fan)	1
1	1484557	Connector (2 Socket)	1
1	1484558	Connector (Secondary Lock)	1
1	1463139	Terminal	2
2	.....	Connector Assembly (Fan)	1
2	1484557	Connector (2 Socket)	1
2	1484558	Connector (Secondary Lock)	1
2	1463139	Terminal	2
3	.....	Connector Assembly (Fan)	1
3	1484557	Connector (2 Socket)	1
3	1484558	Connector (Secondary Lock)	1
3	1463139	Terminal	2
4	.....	Connector Assembly (Main Harness Fan Connection)	1
4	1493465	Connector (2 Pin)	1
4	1330437	Terminal (Pin)	2
4	1330414	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Main Harness Fan Connection)	1
5	1493465	Connector (2 Pin)	1
5	1330437	Terminal (Pin)	2
5	1330414	Connector (Secondary Lock)	1
6	1655195	Conduit	AR
7	1402815	Clip	6
8	275495	Conduit	AR
9	1301784	E-Spade	1
10	.....	Connector Assembly (Back-up Alarm)	1
10	1330419	Connector	1
10	1597773	Terminal	2
10	1330424	Connector (Secondary Lock)	1
11	1402816	Clip	1
12	.....	Connector Assembly (Display Light Harness)	1
12	1330421	Connector (4 Soc)	1
12	1330438	Terminal (Socket)	3
12	1330439	Plug	1
12	1330427	Connector (Secondary Lock)	1
13	275493	Conduit	AR
14	275497	Conduit	AR
15	1534329	Clip	2
16	.....	Connector Assembly (Main Harness)	1
16	1330413	Connector (8 Pin)	1
16	1531312	Terminal	3
16	1330437	Terminal (Pin)	3
16	1330439	Plug	2
16	1330418	Connector	1
17	1554877	Terminal	2
17	.....	Connector Assembly (Brake Light Relay)	1
17	2100204	Receptacle	1
17	1689606	Terminal	1
17	4056907	Terminal	3
18	.....	Connector Assembly (Reverse Relay)	1

WIRE HARNESS

MAIN LIGHTS CHASSIS – 36/48V (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
18	2100204	Receptacle	1
18	1689606	Terminal	1
18	4056907	Terminal	3
19	.....	Connector Assembly (Wire Harness-Lights with Left Hand OHG)	1
19	1330423	Connector (8 Socket)	1
19	1330438	Terminal (Socket)	6
19	1597773	Terminal	2
19	1330429	Connector (Secondary Lock)	1
20	.....	Connector Assembly (Harness-Light Switch)	1
20	1330421	Connector (4 Soc)	1
20	1330438	Terminal (Socket)	4
20	1330427	Connector (Secondary Lock)	1
21	.....	Connector Assembly (Fan Relay)	1
21	1377860	Connector	1
21	1655183	Terminal	2
21	1377868	Receptacle	2
22	.....	Connector Assembly (DC-DC Converter)	1
22	1554879	Connector	1
22	1682736	Terminal	2
22	1554877	Terminal	2

NOTES

[illegible]

BP081270

WIRE HARNESS
MAIN LIGHTS CHASSIS – 80V (→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
	4614700	Wire Harness (Main) (80V)	1
1	.....	Connector Assembly (Fan)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1490243	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Fan)	1
2	1490242	Connector (2 Way)	1
2	1597773	Terminal	2
2	1490243	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Fan)	1
3	1490242	Connector (2 Way)	1
3	1597773	Terminal	2
3	1490243	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Main Harness Fan Connection)	1
4	1493465	Connector (2 Pin)	1
4	1330437	Terminal (Pin)	1
4	1330439	Plug	1
4	1330414	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Main Harness Fan Connection)	1
5	1330437	Terminal (Pin)	1
5	1330439	Plug	1
5	1330414	Connector (Secondary Lock)	1
6	1655195	Conduit	AR
7	1402816	Clip	2
8	275493	Conduit	AR
9	1301784	E-Spade	1
10	.....	Connector Assembly (Back-up Alarm)	1
10	1330419	Connector	1
10	1597773	Terminal	2
10	1330424	Connector (Secondary Lock)	1
11	275495	Conduit	AR
12	1402815	Clip	6
13	.....	Connector Assembly (Display Light Harness)	1
13	1330421	Connector (4 Soc)	1
13	1330439	Plug	1
13	1330438	Terminal (Socket)	3
13	1330427	Connector (Secondary Lock)	1
14	275497	Conduit	AR
15	1534329	Clip	1
16	.....	Connector Assembly (Main Harness)	1
16	1330413	Connector (8 Pin)	1
16	1531312	Terminal	3
16	1330439	Plug	2
16	1330437	Terminal (Pin)	3
16	1330418	Connector	1
17	.....	Connector Assembly (DC-DC Converter)	1
17	1554879	Connector	1
17	1554877	Terminal	2
17	1682736	Terminal	2
18	.....	Connector Assembly (Fan Relay)	1

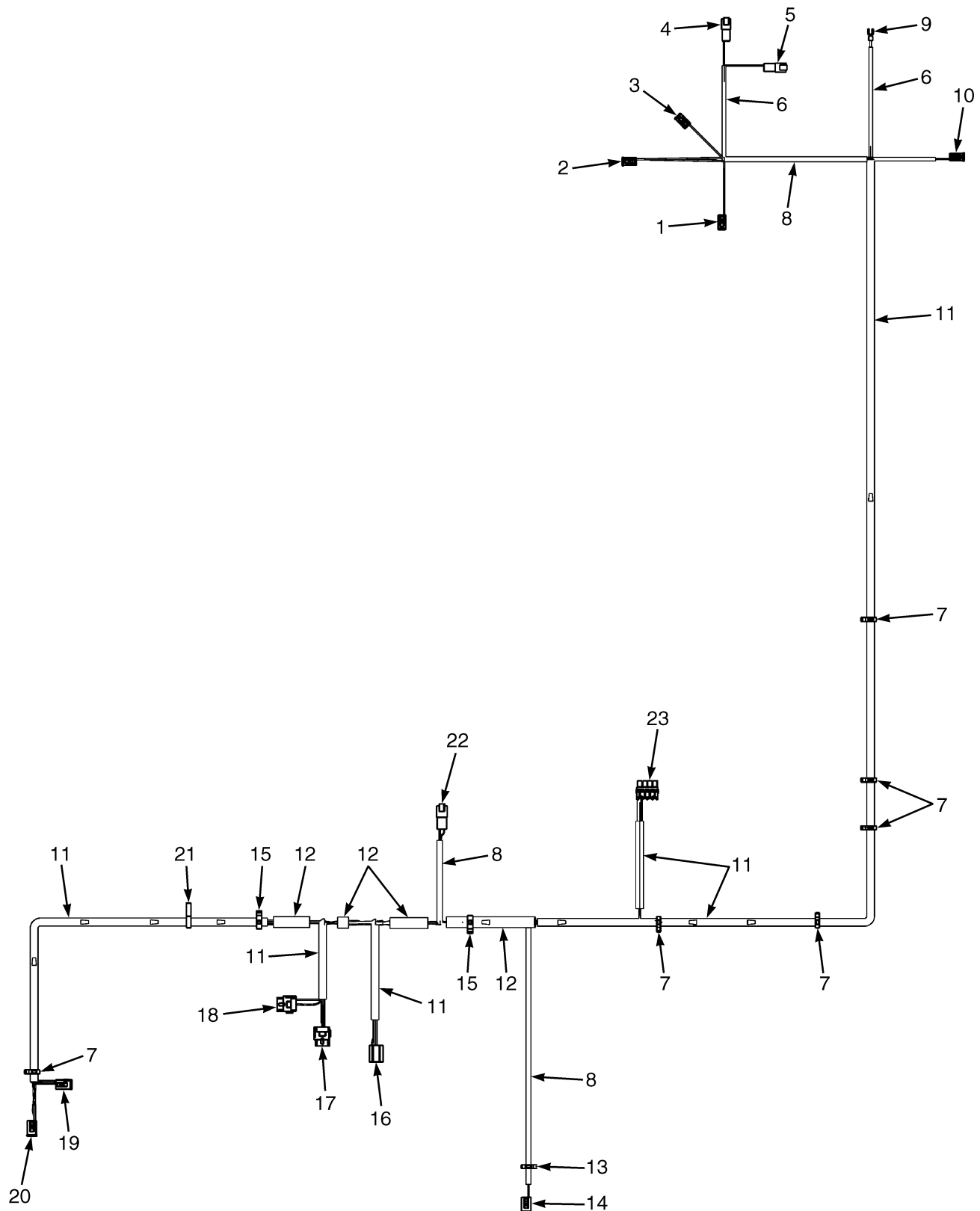
WIRE HARNESS
MAIN LIGHTS CHASSIS – 80V (→ 11/2014)

ITEM	PART NO.	DESCRIPTION	QTY
18	1377860	Connector	1
18	1377868	Receptacle	2
18	1655183	Terminal	2
19	275496	Conduit	AR
20	.....	Connector Assembly (Reverse Relay)	1
20	2100204	Receptacle	1
20	1689606	Terminal	4
21	.....	Connector Assembly (Brake Light Relay)	1
21	2100204	Receptacle	1
21	1689606	Terminal	4
22	1531485	Clip	1
23	.....	Connector Assembly (Wire Harness-Lights Left Hand OHG)	1
23	1330423	Connector (8 Socket)	1
23	1330438	Terminal (Socket)	7
23	1597773	Terminal	1
23	1330429	Connector (Secondary Lock) (Secondary Lock)	1
24	.....	Connector Assembly (Wire Harness-Light Switch)	1
24	1330421	Connector (4 Soc)	1
24	1330438	Terminal (Socket)	4
24	1330427	Connector (Secondary Lock)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-52) MAIN LIGHTS CHASSIS — 80V (11/2014 →)



BP081788

WIRE HARNESS

MAIN LIGHTS CHASSIS – 80V (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4636154	Wire Harness	1
1	.....	Connector Assembly (Fan)	1
1	1490242	Connector (2 Way)	1
1	1597773	Terminal	2
1	1490243	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Fan)	1
2	1490242	Connector (2 Way)	1
2	1597773	Terminal	2
2	1490243	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Fan)	1
3	1490242	Connector (2 Way)	1
3	1597773	Terminal	2
3	1490243	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Main Harness Fan Connection)	1
4	1493465	Connector (2 Pin)	1
4	1330437	Terminal (Pin)	1
4	1330439	Plug	1
4	1330414	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Main Harness Fan Connection)	1
5	1493465	Connector (2 Pin)	1
5	1330437	Terminal (Pin)	1
5	1330439	Plug	1
5	1330414	Connector (Secondary Lock)	1
6	1655195	Conduit	AR
7	1402815	Clip	6
8	275493	Conduit	AR
9	1301784	E-Spade	1
10	.....	Connector Assembly (Back-up Alarm)	1
10	1330419	Connector	1
10	1597773	Terminal	2
10	1330424	Connector (Secondary Lock)	1
11	275495	Conduit	AR
12	275497	Conduit	AR
13	1402816	Clip	1
14	.....	Connector Assembly (Display Light Harness)	1
14	1330421	Connector (4 Soc)	1
14	1330439	Plug	1
14	1330438	Terminal (Socket)	3
14	1330427	Connector (Secondary Lock)	1
15	1534329	Clip	1
16	.....	Connector Assembly (Fan Relay)	1
16	1377860	Connector	1
16	1377868	Receptacle	2
16	1655183	Terminal	2
17	.....	Connector Assembly (Reverse Relay)	1
17	2100204	Receptacle	1
17	1689606	Terminal	4
18	.....	Connector Assembly (Brake Light Relay)	1
18	2100204	Receptacle	1
18	1689606	Terminal	4

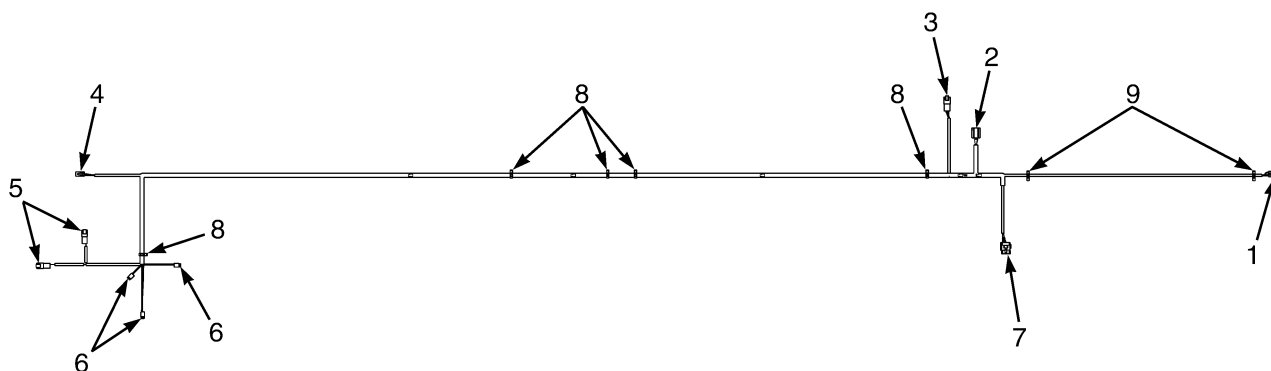
WIRE HARNESS

MAIN LIGHTS CHASSIS – 80V (11/2014 →)

ITEM	PART NO.	DESCRIPTION	QTY
19	.....	Connector Assembly (Wire Harness-Lights Left Hand OHG)	1
19	1330423	Connector (8 Socket)	1
19	1330438	Terminal (Socket)	7
19	1597773	Terminal	1
19	1330429	Connector (Secondary Lock) (Secondary Lock)	1
20	.....	Connector Assembly (Wire Harness-Light Switch)	1
20	1330421	Connector (4 Soc)	1
20	1330438	Terminal (Socket)	4
20	1330427	Connector (Secondary Lock)	1
21	1531485	Clip	1
22	.....	Connector Assembly (Main Harness)	1
22	1330413	Connector (8 Pin)	1
22	1531312	Terminal	3
22	1330439	Plug	2
22	1330437	Terminal (Pin)	3
22	1330418	Connector	1
23	.....	Connector Assembly (DC-DC Converter)	1
23	1554879	Connector	1
23	1682736	Terminal	2
23	1554877	Terminal	2

WIRE HARNESS (FIGURE 2-53)

MAIN — 36/48 VOLT WITHOUT LIGHTS OR ELECTROHYDRAULICS



BP081313

ITEM	PART NO.	DESCRIPTION	QTY
	4616884	Wire Harness (Main)(36/48V)(w/out Lights or E-Hyds)	1
1	.....	Connector Assembly (Lights)	1
1	1330423	Connector (8 Socket)	1
1	1330438	Terminal (Socket)	2
1	1330439	Plug	6
2	.....	Connector Assembly (Fan Relay)	1
2	1377860	Connector	1
2	1655183	Terminal	2
2	1377868	Receptacle	2
3	.....	Connector Assembly (Main Harness)	1
3	1330413	Connector (8 Pin)	1
3	1330418	Connector	1
3	1330439	Plug	5
3	1531312	Terminal	3
4	.....	Connector Assembly (Backup Alarm)	1
4	1330419	Connector	1
4	1330424	Connector (Secondary Lock)	1
4	1330438	Terminal (Socket)	2
5	.....	Connector Assembly (Fan)	2
5	1493465	Connector (2 Pin)	1
5	1330414	Connector (Secondary Lock)	1
5	1330437	Terminal (Pin)	2
6	.....	Connector Assembly (36/48 Volt Fan)	3
6	1484557	Connector (2 Socket)	1
6	1484558	Connector (Secondary Lock)	1
6	1463139	Terminal	2

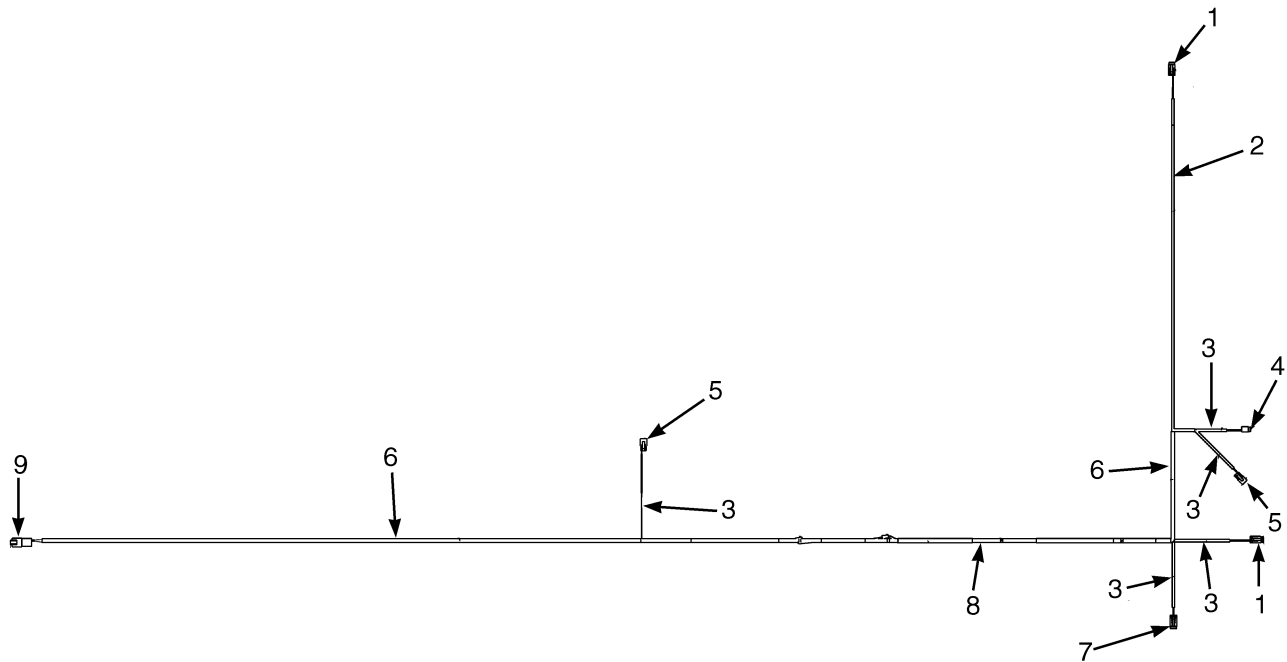
ITEM	PART NO.	DESCRIPTION	QTY
7	.....	Connector Assembly (Reverse Relay)	1
7	2100204	Receptacle	1
7	1689606	Terminal	4
8	1500901	Clip	5
9	1402816	Clip	2

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-54)

LH LIGHT WITH OVERHEAD GUARD — WITHOUT TURN SIGNALS (→ 10/2013)

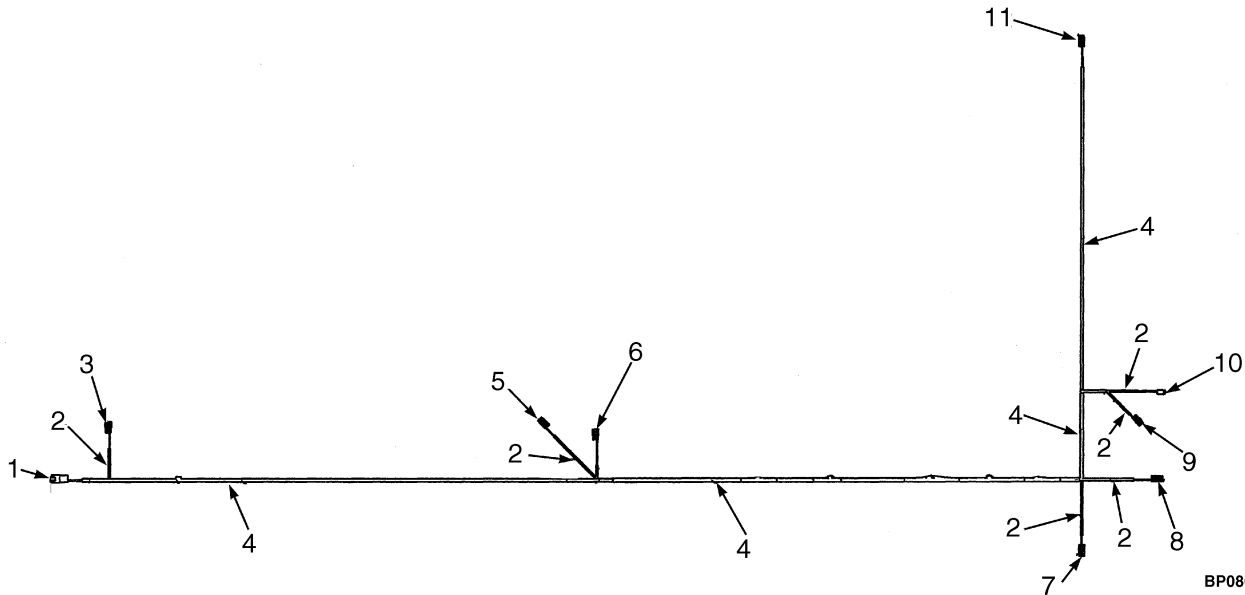


BP080659

WIRE HARNESS**LH LIGHT WITH OVERHEAD GUARD – WITHOUT TURN SIGNALS (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	2110501	Wire Harness (LH Lights w/o Turn Signals)	1
1	.....	Connector Assembly (Rear Tail Light - Right Hand)	2
1	1484377	Plug	2
1	1463141	Terminal (Socket)	4
1	1531974	Connector (Secondary Lock)	1
1	1531973	Connector	1
2	275494	Conduit	AR
3	275493	Conduit	AR
4	.....	Connector Assembly (Strobe Light)	1
4	1484557	Connector (2 Socket)	1
4	1484558	Connector (Secondary Lock)	1
4	1463141	Terminal (Socket)	2
4	1463139	Terminal	1
5	.....	Connector Assembly (Rear Work Light)	1
5	1490242	Connector (2 Way)	1
5	1490243	Connector (Secondary Lock)	1
5	1597773	Terminal	2
6	275496	Conduit	AR
7	.....	Dome Light with Switch	1
7	1493462	Connector	1
7	1493464	Connector (Secondary Lock)	1
7	1463141	Terminal (Socket)	2
7	1484377	Plug	1
8	275498	Conduit	AR
9	.....	Connector Assembly (To Main Light Harness)	1
9	1330413	Connector (8 Pin)	1
9	1330418	Connector	1
9	1531312	Terminal	6
9	1330437	Terminal (Pin)	2

WIRE HARNESS (FIGURE 2-55)
LH LIGHT WITH OVERHEAD GUARD — WITH TURN SIGNAL (→ 10/2013)



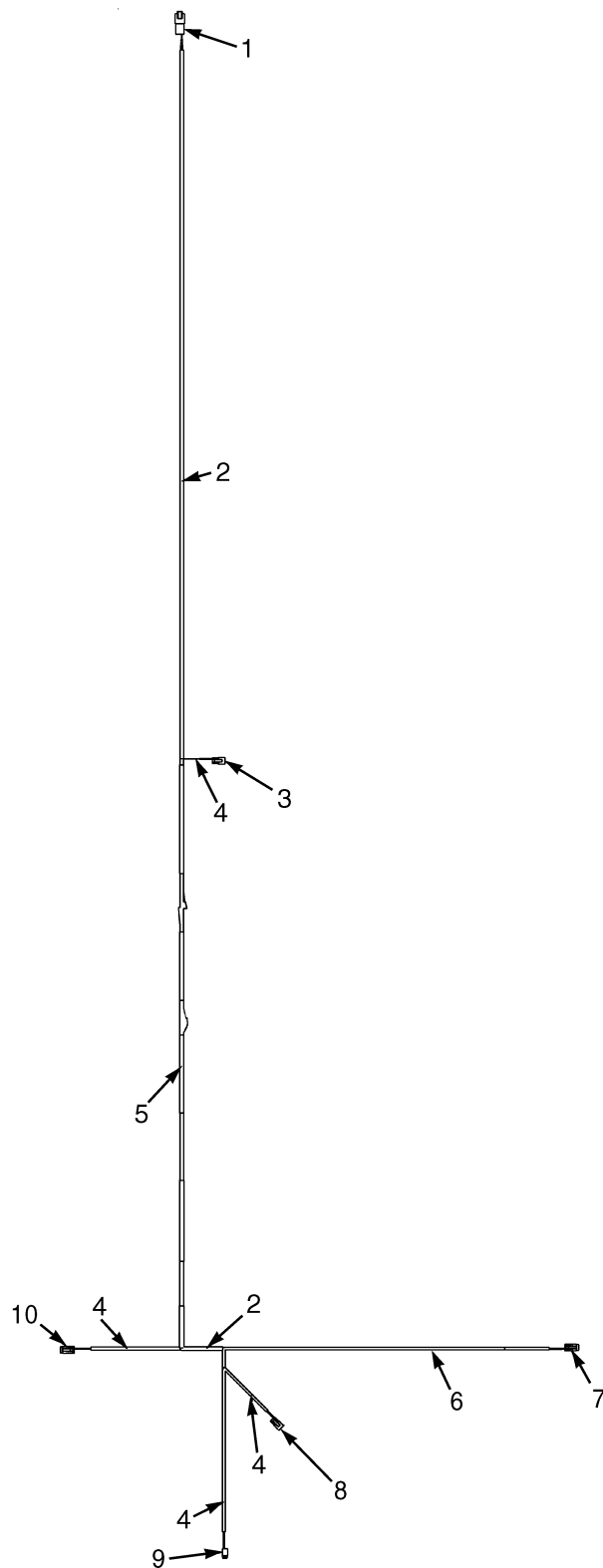
BP080301

ITEM	PART NO.	DESCRIPTION	QTY
	2108243	Wire Harness (LH Lights with Turn Signals)	1
1	.....	Connector Assembly (Main Light Harness)	1
1	1330437	Terminal (Pin)	2
1	1531312	Terminal	6
1	1330418	Connector	1
1	1330413	Connector (8 Pin)	1
2	275494	Conduit	AR
3	.....	Connector Assembly (To Turn Signal Harness)	1
3	1597773	Terminal	3
3	1463194	Connector (Secondary Lock)	1
3	1484397	Connector (3-Way)	1
4	275498	Conduit	AR
5	.....	Connector Assembly (Front Marker Left Hand)	1
5	1484397	Connector (3-Way)	1
5	1463194	Connector (Secondary Lock)	1
5	1597773	Terminal	3
6	.....	Connector Assembly (Work Light Front Left Hand)	1
6	1490242	Connector (2 Way)	1
6	1490243	Connector (Secondary Lock)	1
6	1597773	Terminal	2
7	.....	Connector Assembly (Dome Light)	1
7	1484377	Plug	1
7	1463141	Terminal (Socket)	2
7	1493464	Connector (Secondary Lock)	1
7	1493462	Connector	1
8	.....	Connector Assembly (Tail Light Left Hand)	1
8	1531973	Connector	1
8	1531974	Connector (Secondary Lock)	1
8	1463141	Terminal (Socket)	5
8	1484377	Plug	1

ITEM	PART NO.	DESCRIPTION	QTY
9	.....	Connector Assembly (Rear Work Light)	1
9	1490242	Connector (2 Way)	1
9	1490243	Connector (Secondary Lock)	1
9	1597773	Terminal	2
10	.....	Connector Assembly (Strobe Light)	1
10	1484557	Connector (2 Socket)	1
10	1484558	Connector (Secondary Lock)	1
10	1463141	Terminal (Socket)	2
10	1463139	Terminal	1
11	.....	Connector Assembly (Tail Light Right Hand)	1
11	1484377	Plug	1
11	1463141	Terminal (Socket)	5
11	1531974	Connector (Secondary Lock)	1
11	1531973	Connector	1

WIRE HARNESS (FIGURE 2-56)

LH LIGHT WITH OVERHEAD GUARD — DRIVE-THRU RACK (→ 10/2013)



BP080798

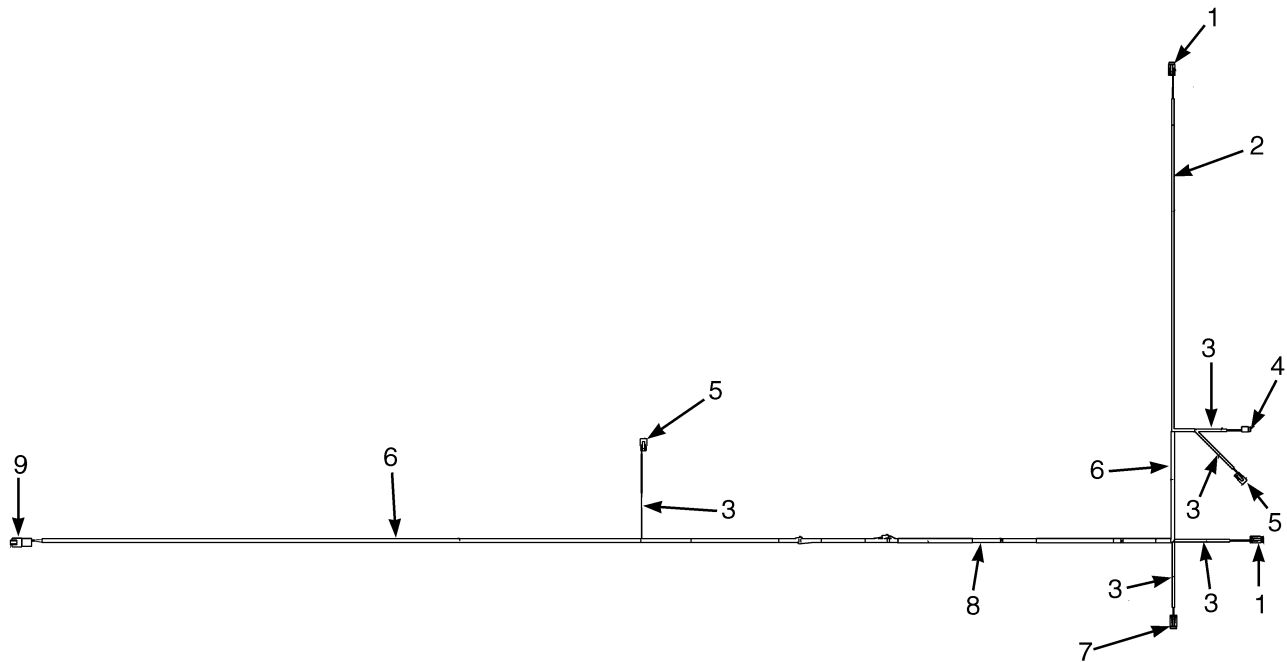
WIRE HARNESS

LH LIGHT WITH OVERHEAD GUARD – DRIVE-THRU RACK (→ 10/2013)

ITEM	PART NO.	DESCRIPTION	QTY
	4611313	Wire Harness (LH Lights w/o Turn Signals, with DTR)	1
1	.....	Connector Assembly (Main Light Harness)	1
1	1330413	Connector (8 Pin)	1
1	1531312	Terminal	5
1	1330437	Terminal (Pin)	2
1	1330418	Connector	1
2	275496	Conduit	AR
3	.....	Connector Assembly (Work Light)	2
3	1490242	Connector (2 Way)	1
3	1597773	Terminal	2
3	1490243	Connector (Secondary Lock)	1
4	275493	Conduit	AR
5	275498	Conduit	AR
6	.....	Connector Assembly (Dome Light)	1
6	1493462	Connector	1
6	1463141	Terminal (Socket)	2
6	1484377	Plug	1
6	1493464	Connector (Secondary Lock)	1
7	.....	Connector Assembly (Tail Light-RH)	2
7	1531973	Connector	1
7	1463141	Terminal (Socket)	4
7	1484377	Plug	2
7	1531974	Connector (Secondary Lock) (Secondary Lock)	1
8	.....	Connector Assembly (Rear Work Light)	1
8	1490242	Connector (2 Way)	1
8	1597773	Terminal	2
8	1490243	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Strobe Light)	1
9	1484557	Connector (2 Socket)	1
9	1463139	Terminal	1
9	1463141	Terminal (Socket)	1
9	1484558	Connector (Secondary Lock)	1
10	.....	Connector Assembly (Tail Light-LH)	1
10	1531973	Connector	1
10	1463141	Terminal (Socket)	4
10	1484377	Plug	2
10	1531974	Connector (Secondary Lock) (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-57)

LH LIGHT WITH OVERHEAD GUARD — WITH INBOARD REAR LIGHTS MOUNT (→ 10/2013)

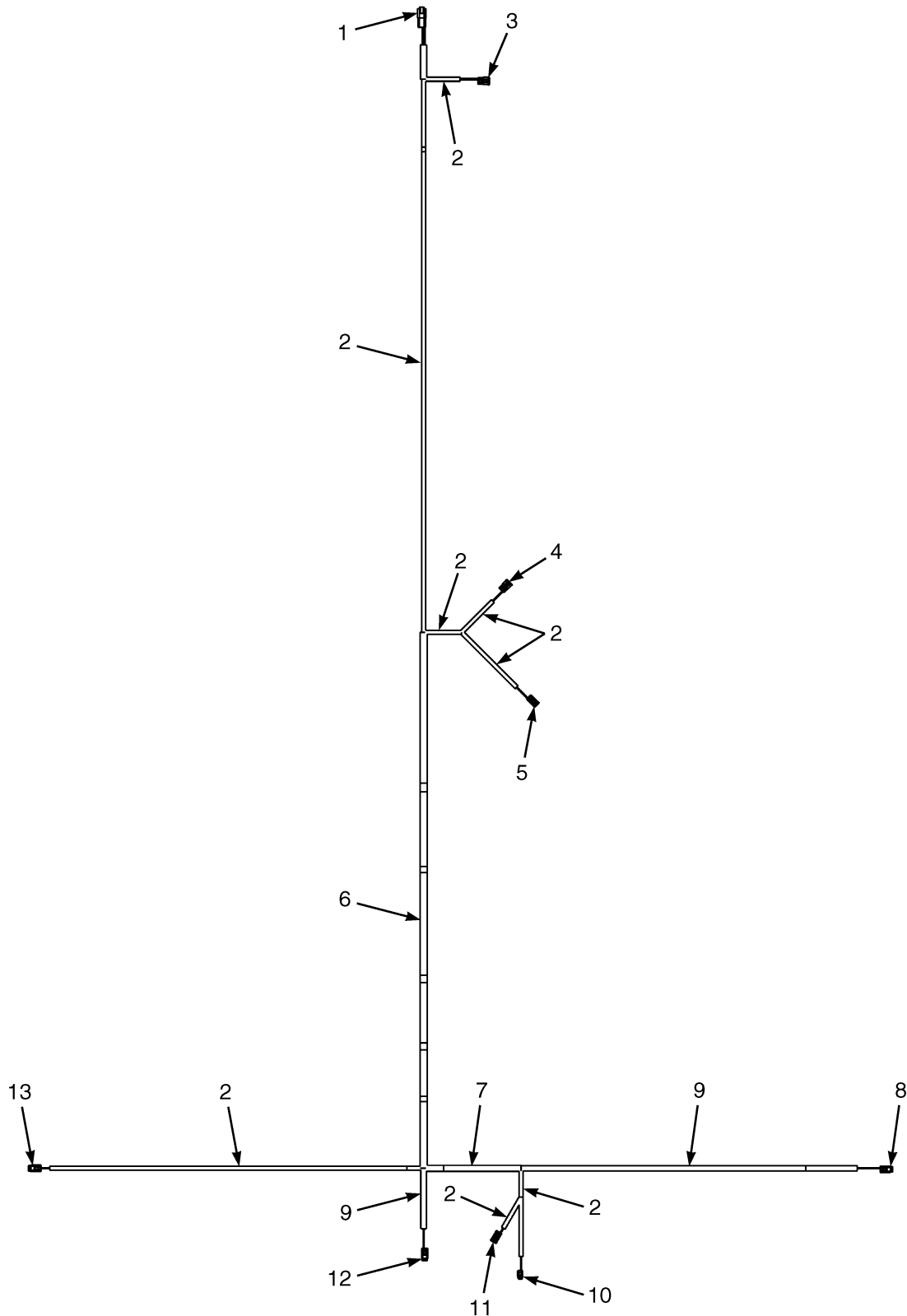


BP080659

WIRE HARNESS**LH LIGHT WITH OVERHEAD GUARD – WITH INBOARD REAR LIGHTS MOUNT (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	4617533	Wire Harness (LH Lights)(OHG)	1
1	.....	Connector Assembly (Tail Light - Right Hand)	2
1	1484377	Plug	2
1	1463141	Terminal (Socket)	4
1	1531974	Connector (Secondary Lock)	1
1	1531973	Connector	1
2	.....	Connector Assembly (Tail Light - Left Hand)	1
2	1484377	Plug	2
2	1463141	Terminal (Socket)	4
2	1531974	Connector (Secondary Lock)	1
2	1531973	Connector	1
3	.....	Connector Assembly (Strobe Light)	1
3	1484557	Connector (2 Socket)	1
3	1484558	Connector (Secondary Lock)	1
3	1463141	Terminal (Socket)	2
3	1463139	Terminal	1
4	.....	Connector Assembly (Work Light - Front)	1
4	1490242	Connector (2 Way)	1
4	1490243	Connector (Secondary Lock)	1
4	1597773	Terminal	2
5	.....	Connector Assembly (Work Light - Rear)	1
5	1490242	Connector (2 Way)	1
5	1490243	Connector (Secondary Lock)	1
5	1597773	Terminal	2
6	.....	Connector Assembly (Dome Light with Switch)	1
6	1493462	Connector	1
6	1493464	Connector (Secondary Lock)	1
6	1463141	Terminal (Socket)	2
6	1484377	Plug	1
7	.....	Connector Assembly (Main Light Harness)	1
7	1330413	Connector (8 Pin)	1
7	1330418	Connector	1
7	1531312	Terminal	6
7	1330437	Terminal (Pin)	2

WIRE HARNESS (FIGURE 2-58) LH LIGHT WITH OVERHEAD GUARD — WITH TURN SIGNALS (10/2013 →)



BP081538

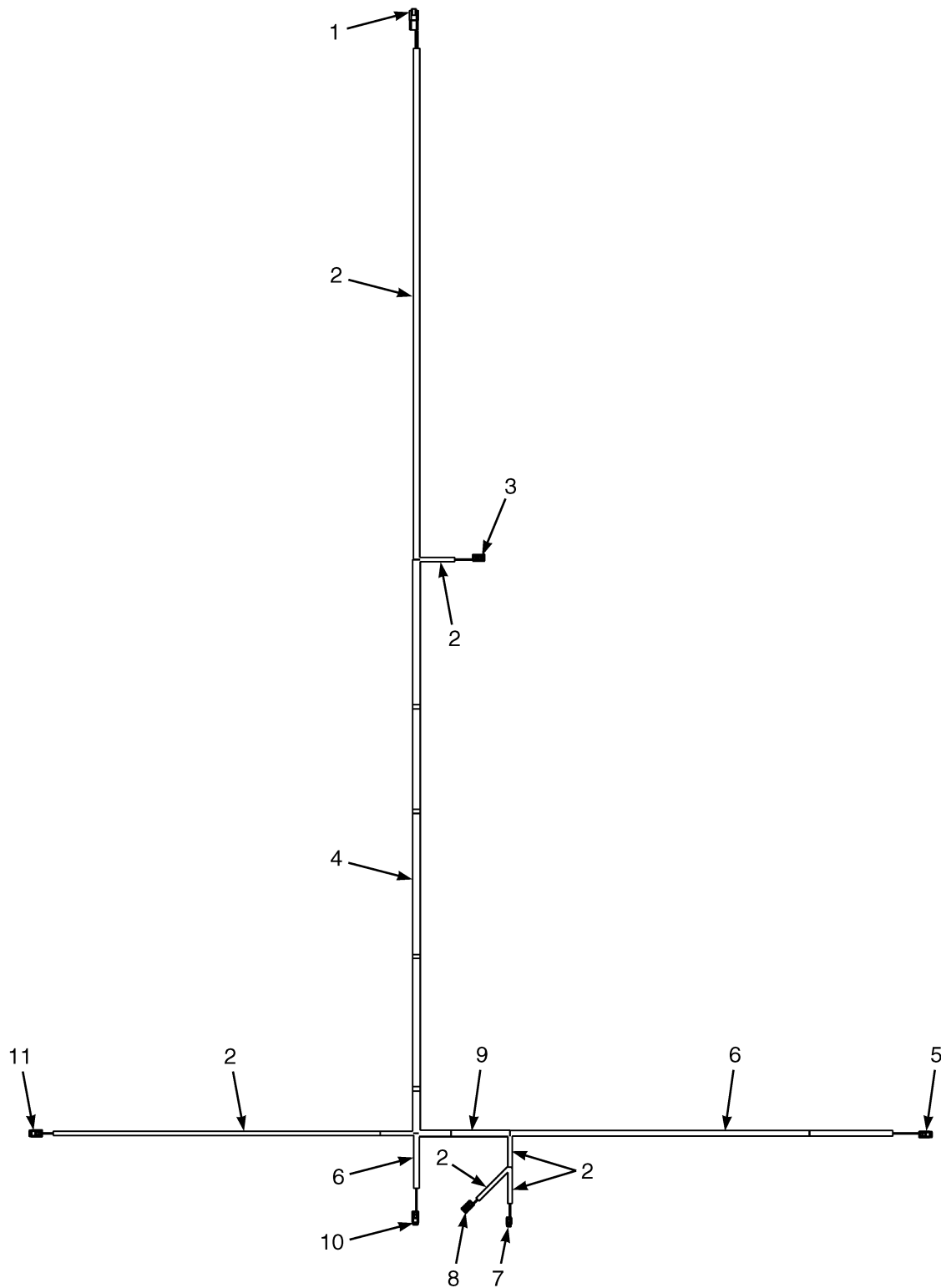
WIRE HARNESS

LH LIGHT WITH OVERHEAD GUARD – WITH TURN SIGNALS (10/2013 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4625432	Wire Harness (LH Lights with Turn Signals)	1
1	.....	Connector Assembly (Main Light Harness)	1
1	1623050	Housing	1
1	1330437	Terminal (Pin)	6
1	1484377	Plug	2
2	275493	Conduit	AR
3	.....	Connector Assembly (Turn Signal Harness)	1
3	1484397	Connector (3-Way)	1
3	1330438	Terminal (Socket)	3
3	1463194	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Front Marker) (LH)	1
4	1484397	Connector (3-Way)	1
4	1330438	Terminal (Socket)	3
4	1463194	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Front Work Light) (LH)	1
5	1490242	Connector (2 Way)	1
5	1330438	Terminal (Socket)	2
5	1490243	Connector (Secondary Lock)	1
6	275496	Conduit	AR
7	275495	Conduit	AR
8	.....	Connector Assembly (Tail Light) (RH)	1
8	1531973	Connector	1
8	1463139	Terminal	5
8	1484377	Plug	1
8	1531974	Connector (Secondary Lock) (Secondary Lock)	1
9	275494	Conduit	AR
10	.....	Connector Assembly (Strobe Light)	1
10	1484557	Connector (2 Socket)	1
10	1463139	Terminal	2
10	1484558	Connector (Secondary Lock)	1
11	.....	Connector Assembly (Rear Work Light)	1
11	1490242	Connector (2 Way)	1
11	1330438	Terminal (Socket)	2
11	1490243	Connector (Secondary Lock)	1
12	.....	Connector Assembly (Tail Light) (LH)	1
12	1531973	Connector	1
12	1463139	Terminal	5
12	1484377	Plug	1
12	1531974	Connector (Secondary Lock) (Secondary Lock)	1
13	.....	Connector Assembly (Dome Light)	1
13	1493462	Connector	1
13	1463139	Terminal	2
13	1484377	Plug	1
13	1493464	Connector (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-59)

LH LIGHT WITH OVERHEAD GUARD — WITHOUT TURN SIGNALS (10/2013 →)



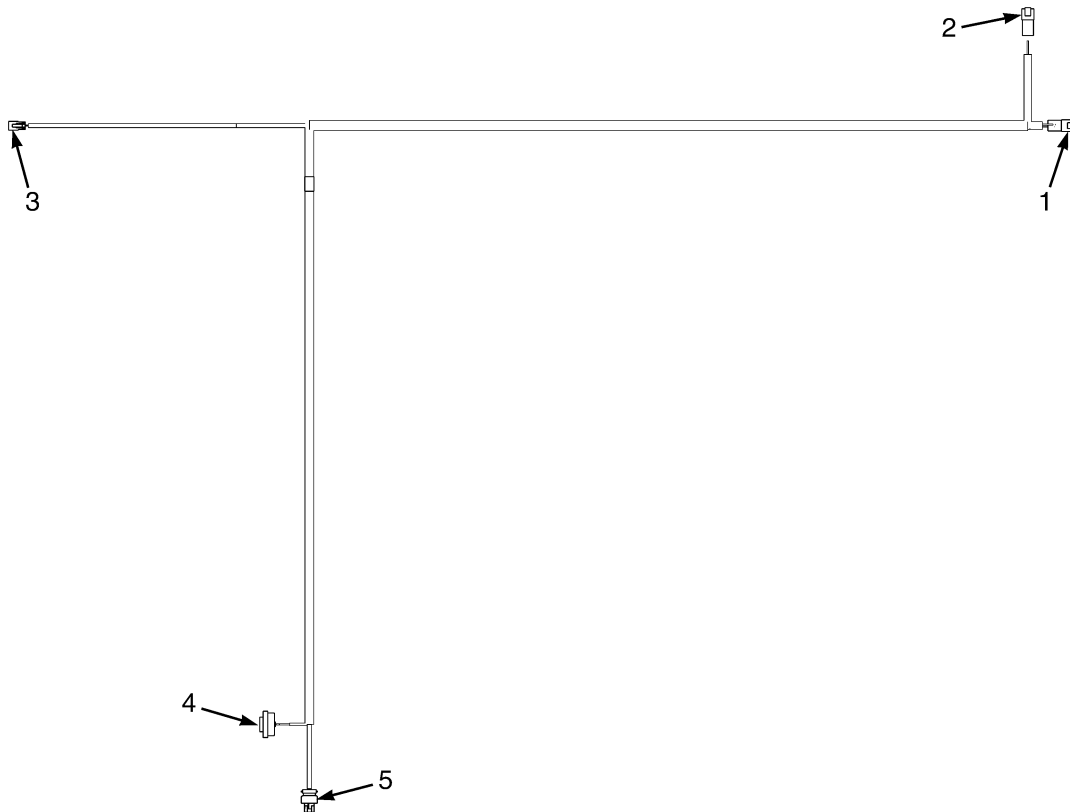
BP081537

WIRE HARNESS**LH LIGHT WITH OVERHEAD GUARD – WITHOUT TURN SIGNALS (10/2013 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4625433	Wire Harness (LH Lights w/o Turn Signals)	1
1	.....	Connector Assembly (Main Light Harness)	1
1	1623050	Housing	1
1	1330437	Terminal (Pin)	8
1	1330418	Connector	1
2	275493	Conduit	AR
3	.....	Connector Assembly (Front Work Light) (LH)	1
3	1490242	Connector (2 Way)	1
3	1330438	Terminal (Socket)	2
3	1490243	Connector (Secondary Lock)	1
4	275496	Conduit	AR
5	.....	Connector Assembly (Tail Light) (RH)	1
5	1531973	Connector	1
5	1463139	Terminal	4
5	1484377	Plug	2
5	1531974	Connector (Secondary Lock) (Secondary Lock)	1
6	275494	Conduit	AR
7	.....	Connector Assembly (Strobe Light)	1
7	1484557	Connector (2 Socket)	1
7	1463139	Terminal	2
7	1484558	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Rear Work Light)	1
8	1490242	Connector (2 Way)	1
8	1330438	Terminal (Socket)	2
8	1490243	Connector (Secondary Lock)	1
9	275495	Conduit	AR
10	.....	Connector Assembly (Tail Light) (LH)	1
10	1531973	Connector	1
10	1463139	Terminal	4
10	1484377	Plug	2
10	1531974	Connector (Secondary Lock) (Secondary Lock)	1
11	.....	Connector Assembly (Dome Light)	1
11	1493462	Connector	1
11	1463139	Terminal	2
11	1484377	Plug	1
11	1493464	Connector (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-60)

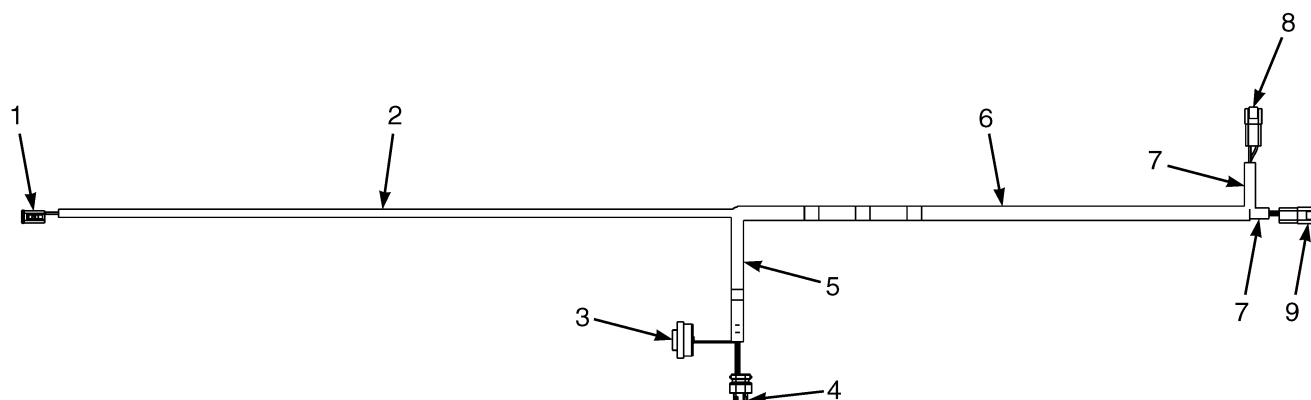
RH LIGHT WITH STANDARD DISPLAY — STANDARD OPTION (→ 10/2013)



BP081316

ITEM	PART NO.	DESCRIPTION	QTY
	2109672	Wire Harness (RH Lights) (Standard Option)	1
1	.....	Connector Assembly (Main Harness)	1
1	1541988	Connector (8 Pin)	1
1	1541989	Connector (Secondary Lock)	1
1	4570624	.....	
	1463140	Terminal (Pin)	7
1	1484377	Plug	2
2	.....	Connector Assembly (Main Lights Harness)	1
2	1489655	Connector (4 Way)	1
2	1330416	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	2
2	1484377	Plug	2
3	.....	Connector Assembly (RH Front Work Light)	1
3	1490242	Connector (2 Way)	1
3	1490243	Connector (Secondary Lock)	1
3	1330438	Terminal (Socket)	2
4	2101546	Buzzer	1
5	.....	Connector Assembly (Display)	1
5	2069414	Connector (Plug)	1
5	4561019	.....	
	2035276	Connector (Socket Female)	1
5	2068741	Plug , Socket Contact, Female	1

WIRE HARNESS (FIGURE 2-61)
RH LIGHT WITH STANDARD DISPLAY — WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)

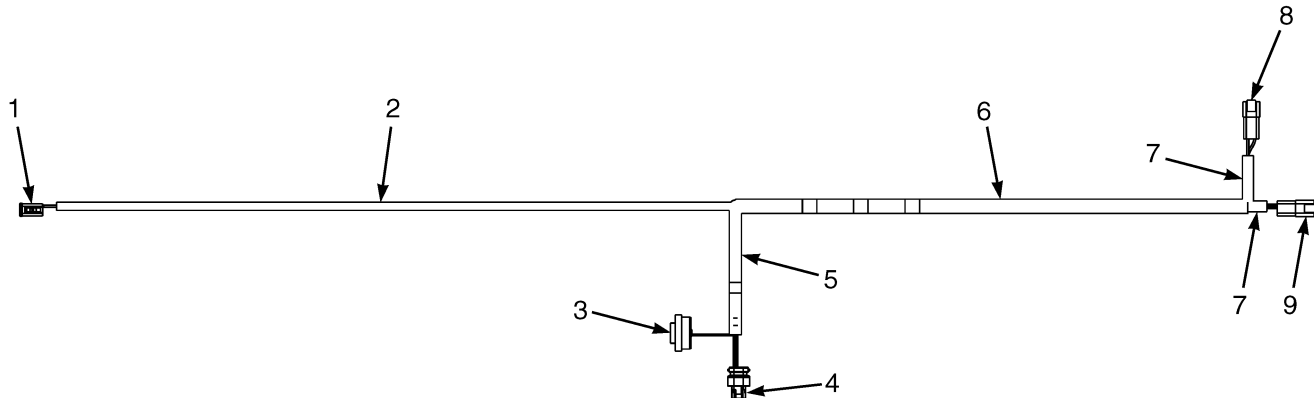


BP081536

ITEM	PART NO.	DESCRIPTION	QTY
	4626042	Wire Harness (RH Lights) (Standard Display without Turn Signals)	1
1	.....	Connector Assembly (Right Hand Front Work Light)	1
1	1490242	Connector (2 Way)	1
1	1330438	Terminal (Socket)	2
1	1490243	Connector (Secondary Lock)	1
2	275493	Conduit	AR
3	2101546	Buzzer	1
4	.....	Connector Assembly (Display)	1
4	2069414	Connector (Plug)	1
4	4561049	.....	
	2035276	Connector (Socket Female)	7
4	2068741	Plug , Socket Contact, Female	1
5	275495	Conduit	AR
6	275496	Conduit	AR
7	275494	Conduit	AR
8	.....	Connector Assembly (Main Lights Harness)	1
8	1489655	Connector (4 Way)	1
8	1484377	Plug	2
8	1330437	Terminal (Pin)	2
8	1330416	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Main Harness)	1
9	1541988	Connector (8 Pin)	1
9	4570624	.....	
	1463140	Terminal (Pin)	7
9	1484377	Plug	1
9	1541989	Connector (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-62)

RH LIGHT WITH STANDARD DISPLAY — WITHOUT TURN SIGNALS-LOW MOUNT (10/2013 →)



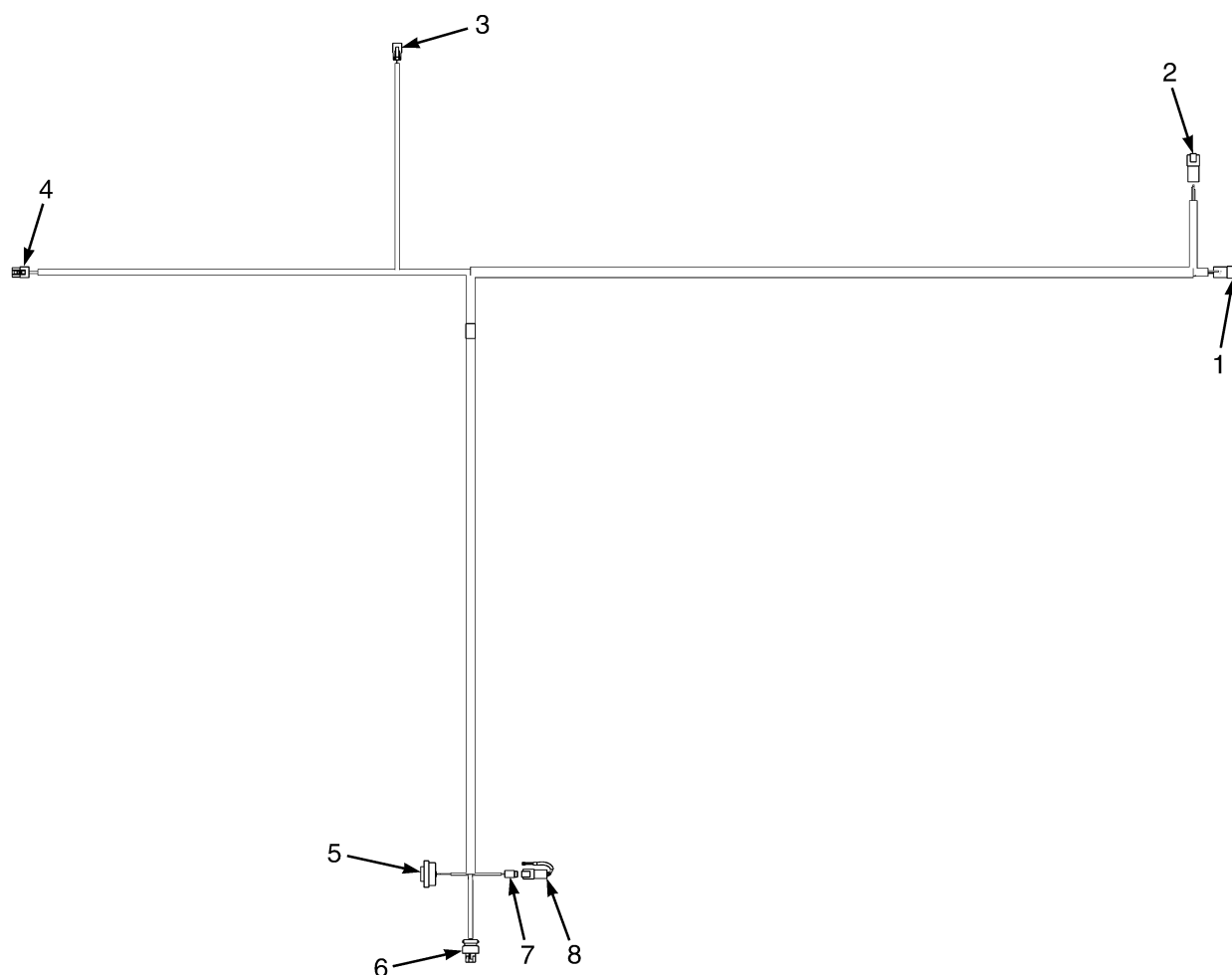
BP081536

ITEM	PART NO.	DESCRIPTION	QTY
	4626043	Wire Harness (RH Lights) (Standard Option)	1
1	.....	Connector Assembly (Right Hand Front Work Light)	1
1	1490242	Connector (2 Way)	1
1	1330438	Terminal (Socket)	2
1	1490243	Connector (Secondary Lock)	1
2	275493	Conduit	AR
3	2101546	Buzzer	1
4	.....	Connector Assembly (Display)	1
4	2069414	Connector (Plug)	1
4	4561019	.....	
	2035276	Connector (Socket Female)	7
4	2068741	Plug , Socket Contact, Female	1
5	275495	Conduit	AR
6	275496	Conduit	AR
7	275494	Conduit	AR
8	.....	Connector Assembly (Main Lights Harness)	1
8	1489655	Connector (4 Way)	1
8	1484377	Plug	2
8	1330437	Terminal (Pin)	2
8	1330416	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Main Harness)	1
9	1541988	Connector (8 Pin)	1
9	4570624	.....	
	1463140	Terminal (Pin)	7
9	1484377	Plug	1
9	1541989	Connector (Secondary Lock)	1

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-63) RH LIGHT WITH FREEZER DISPLAY (→ 10/2013)



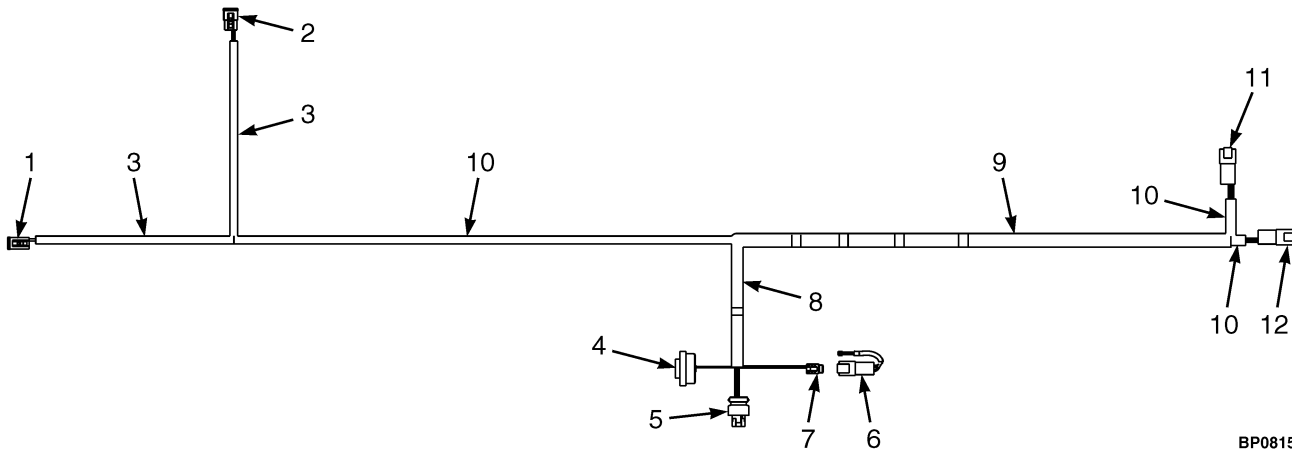
BP081315

WIRE HARNESS **RH LIGHT WITH FREEZER DISPLAY (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	2109673	Wire Harness (RH Lights) (Freezer Option)	1
1	.....	Connector Assembly (Main Harness)	1
1	1541988	Connector (8 Pin)	1
1	1541989	Connector (Secondary Lock)	1
1	~~1570624~~		
	1463140	Terminal (Pin)	7
1	1484377	Plug	1
2	.....	Connector Assembly (Main Lights Harness)	1
2	1489655	Connector (4 Way)	1
2	1330416	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	4
3	.....	Connector Assembly (RH Front Work Light)	1
3	1490242	Connector (2 Way)	1
3	1490243	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Front Marker RH)	1
4	1484397	Connector (3-Way)	1
4	1463194	Connector (Secondary Lock)	1
4	1330438	Terminal (Socket)	3
5	2101546	Buzzer	1
6	.....	Connector Assembly (Display)	1
6	2069414	Connector (Plug)	1
6	~~1561019~~		
	2035276	Connector (Socket Female)	8
7	.....	Connector Assembly (Temperature Sensor)	1
7	1484557	Connector (2 Socket)	1
7	1484558	Connector (Secondary Lock)	1
7	1463141	Terminal (Socket)	2
8	2108466	Wire Harness (Temperature Sensor)	1
8	1561559	Connector (2 Pin)	1

WIRE HARNESS (FIGURE 2-64)

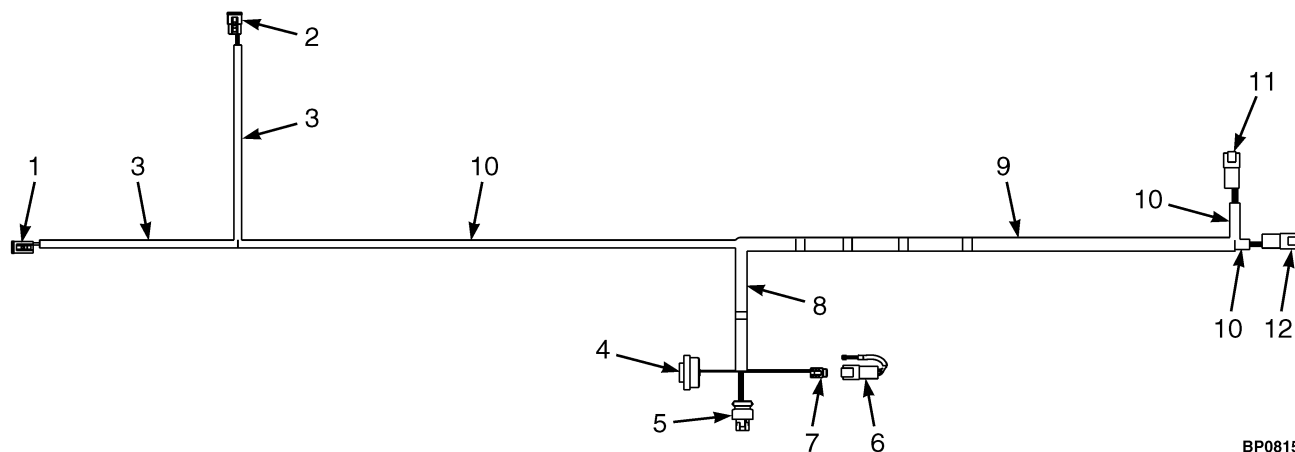
RH LIGHT WITH FREEZER DISPLAY — WITH TURN SIGNALS-HIGH MOUNT (10/2013 →)



BP081535

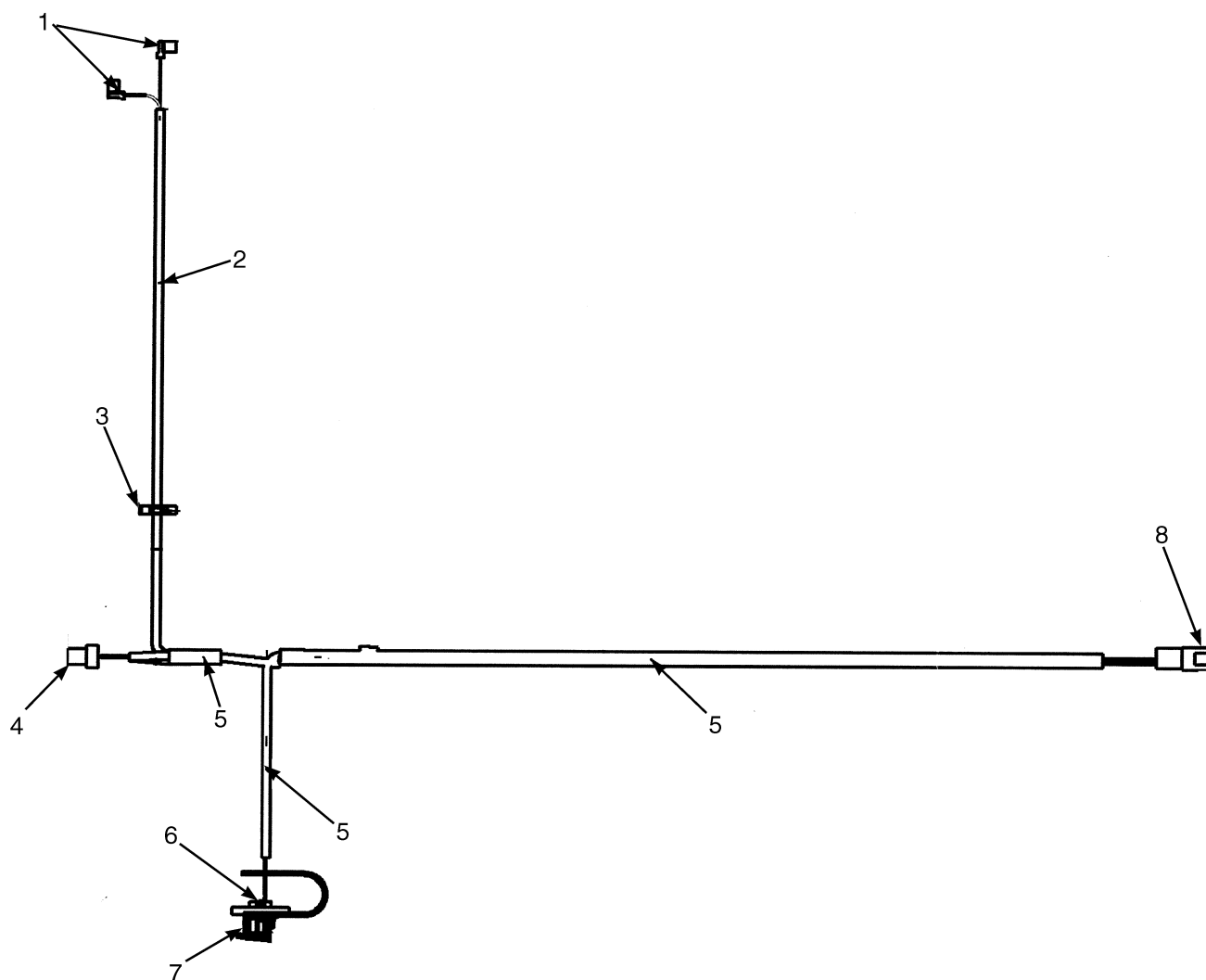
ITEM	PART NO.	DESCRIPTION	QTY
	4625269	Wire Harness (RH Lights) (Freezer Option)	1
1	.....	Connector Assembly (Right Hand Front Work Light)	1
1	1490242	Connector (2 Way)	1
1	1330438	Terminal (Socket)	2
1	1490243	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Right Hand Front Marker)	1
2	1484397	Connector (3-Way)	1
2	1330438	Terminal (Socket)	3
2	1463194	Connector (Secondary Lock)	1
3	275493	Conduit	AR
4	2101546	Buzzer	1
5	.....	Connector Assembly (Display with Key Switch)	1
5	2069414	Connector (Plug)	1
5	1561019	.....	
	2035276	Connector (Socket Female)	8
6	2108466	Wire Harness (Temperature Sensor)	1
7	.....	Connector Assembly (Wire Harness Temperature Sensor)	1
7	1484557	Connector (2 Socket)	1
7	1463141	Terminal (Socket)	2
7	1484558	Connector (Secondary Lock)	1
8	275495	Conduit	AR
9	275496	Conduit	AR
10	275494	Conduit	AR
11	.....	Connector Assembly (Main Lights Harness)	1
11	1489655	Connector (4 Way)	1
11	1330437	Terminal (Pin)	4
11	1330416	Connector (Secondary Lock)	1
12	.....	Connector Assembly (Main Harness)	1
12	1541988	Connector (8 Pin)	1
12	1570624	.....	
	1463140	Terminal (Pin)	7
12	1484377	Plug	1

WIRE HARNESS (FIGURE 2-65)
RH LIGHT WITH FREEZER DISPLAY — WITH TURN SIGNALS-LOW MOUNT (10/2013 →)



BP081535

ITEM	PART NO.	DESCRIPTION	QTY
	4626041	Wire Harness (RH Lights) (Freezer Option)	1
1	.....	Connector Assembly (Right Hand Front Work Light)	1
1	1490242	Connector (2 Way)	1
1	1330438	Terminal (Socket)	2
1	1490243	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Right Hand Front Marker)	1
2	1484397	Connector (3-Way)	1
2	1330438	Terminal (Socket)	3
2	1463194	Connector (Secondary Lock)	1
3	275493	Conduit	AR
4	2101546	Buzzer	1
5	.....	Connector Assembly (Display with Key Switch)	1
5	2069414	Connector (Plug)	1
5	1561019	.....	
	2035276	Connector (Socket Female)	8
6	2108466	Wire Harness (Temperature Sensor)	1
7	.....	Connector Assembly (Wire Harness Temperature Sensor)	1
7	1484557	Connector (2 Socket)	1
7	1463141	Terminal (Socket)	2
7	1484558	Connector (Secondary Lock)	1
8	275495	Conduit	AR
9	275496	Conduit	AR
10	275494	Conduit	AR
11	.....	Connector Assembly (Main Lights Harness)	1
11	1489655	Connector (4 Way)	1
11	1330437	Terminal (Pin)	4
11	1330416	Connector (Secondary Lock)	1
12	.....	Connector Assembly (Main Harness)	1
12	1541988	Connector (8 Pin)	1
12	1570624	.....	
	1463140	Terminal (Pin)	7
12	1484377	Plug	1

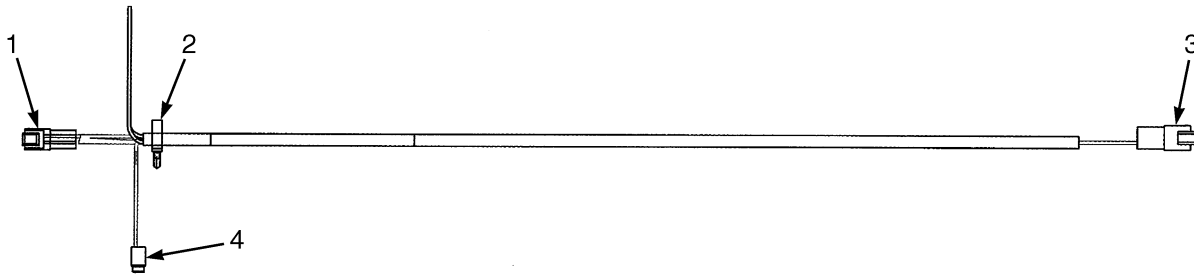
**WIRE HARNESS (FIGURE 2-66)
STEERING COLUMN**

BP080747

**WIRE HARNESS
STEERING COLUMN**

ITEM	PART NO.	DESCRIPTION	QTY
	2108591	Wire Harness (Steer Column)	1
1	2107952	Terminal	2
2	2108744	Conduit	AR
3	1402816	Clip	1
4	.....	Connector Assembly (Steer Wheel Position Sensor)	1
4	1323576	Terminal	3
4	1402865	Connector	1
5	275494	Conduit	AR
6	.....	Connector Assembly (Diagnostic Connector)	1
6	1597773	Terminal	3
6	1532664	Connector (Secondary Lock)	1
6	1566116	Connector	1
7	1566117	Dust Cap (For Diagnostic Cable)	1
8	.....	Connector Assembly (Main Harness)	1
8	1541988	Connector (8 Pin)	1
8	1541989	Connector (Secondary Lock)	1
8	1463138	Terminal Pin	7
8	1484377	Plug	1

WIRE HARNESS (FIGURE 2-67) MANUAL HYDRAULICS (→ 11/2014)



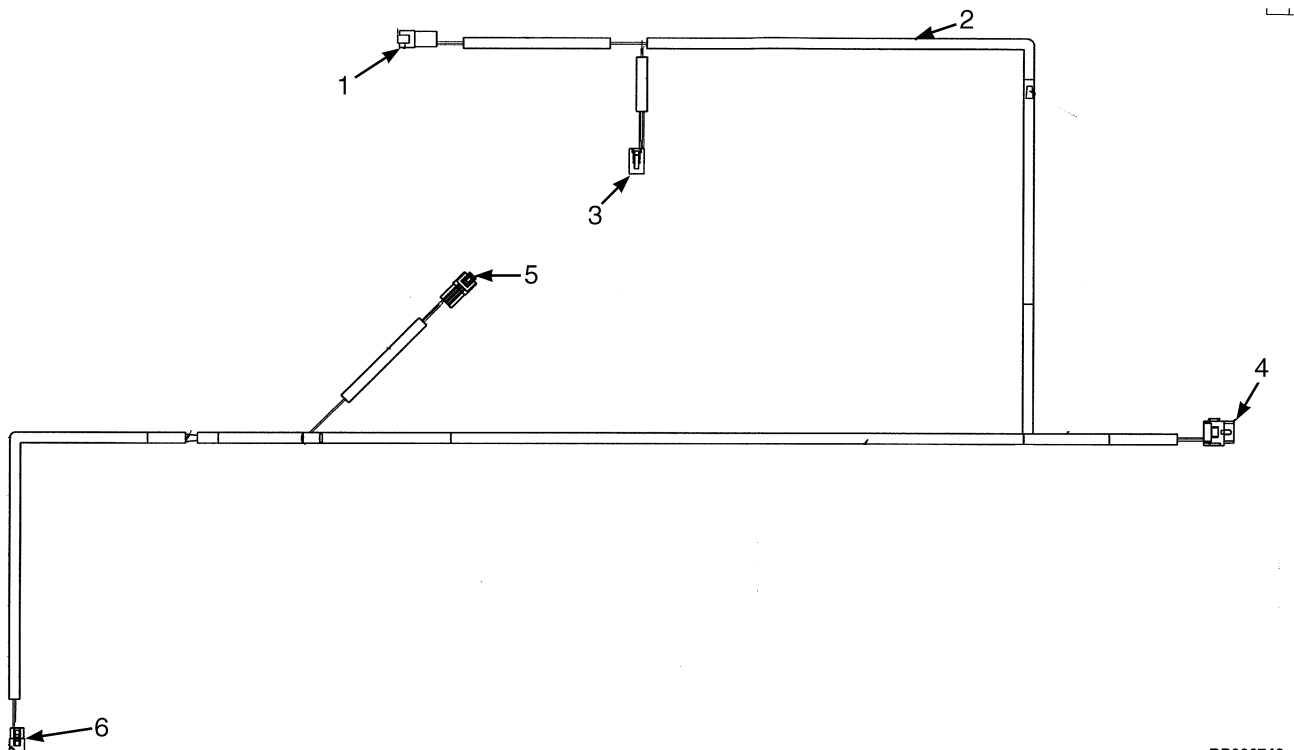
BP080297

ITEM	PART NO.	DESCRIPTION	QTY
	2107661	Wire Harness (Manual Hydraulics)	1
1	.....	Forward / Reverse Switch	1
1	1570624		
	1463140	Terminal (Pin)	4
1	4046140		
	1463193	Connector (Secondary Lock)	1
1	1532904	Connector	1
2	1402815	Clip	1
3	.....	To Main Harness	1
3	1330413	Connector (8 Pin)	1
3	1330418	Connector	1
3	1570624		
	1463140	Terminal (Pin)	8
4	.....	Clamp Coil Switch	1
4	1463141	Terminal (Socket)	2
4	1484558	Connector (Secondary Lock)	1
4	1484557	Connector (2 Socket)	1

WIRE HARNESS (FIGURE 2-68)
MANUAL HYDRAULICS (11/2014 →)

BP081847

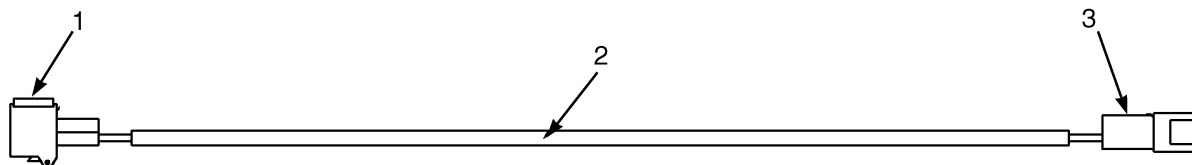
ITEM	PART NO.	DESCRIPTION	QTY
	4636019	Wire Harness (Manual Hydraulics) (Manual Hydraulics)	1
1	.....	Forward / Reverse Switch	1
1	1570624		
	1463140	Terminal (Pin)	4
1	4046140		
	1463193	Connector (Secondary Lock)	1
1	1532904	Connector	1
2	1402815	Clip	1
3	.....	To Main Harness	1
3	4047908	Connector	1
3	1352603	Secondary Lock	1
3	1570624		
	1463140	Terminal (Pin)	10
3	1484377	Plug	2
4	.....	Return to Set Tilt Coil Switch	1
4	1484557	Connector (2 Socket)	1
4	1484558	Connector (Secondary Lock)	1
4	1463141	Terminal (Socket)	1
5	.....	Clamp Coil Switch	1
5	1463141	Terminal (Socket)	2
5	1484558	Connector (Secondary Lock)	1
5	1484557	Connector (2 Socket)	1

WIRE HARNESS (FIGURE 2-69)
TURN SIGNAL

BP080742

ITEM	PART NO.	DESCRIPTION	QTY
	2101918		
	4608393	Wire Harness (Turn Signal)	1
1	.....	Connector Assembly (To Lighting Harness)	1
1	1330411	Connector	1
1	1489655	Connector (4 Way) (Alternate Power)	1
1	1330416	Connector (Secondary Lock)	1
1	1330437	Terminal (Pin)	3
1	1484377	Plug	1
2	275494	Conduit	AR
3	.....	Connector Assembly (To Display Freezer Harness)	1
3	1330421	Connector (4 Soc)	1
3	1489656	Connector (4-Way) (Alternate Part)	1
3	1330427	Connector (Secondary Lock)	1
3	1489657	Connector (Secondary Lock) (Alternate Part)	1
3	1330438	Terminal (Socket)	4
4	.....	Connector Assembly (Flasher)	1
4	2100204	Receptacle	1
4	1689606	Terminal	3
5	.....	Connector Assembly (To LH OHG w/Turn Signal Harness)	1
5	1493466	Connector (3-Way)	1
5	1330415	Connector (Secondary Lock)	1
5	1330437	Terminal (Pin)	3
6	.....	To Turn Signal Switch Harness	1
6	1330420	Connector	1
6	1463189	Connector (Alternate Part)	1
6	1330426	Connector (Secondary Lock)	1

ITEM	PART NO.	DESCRIPTION	QTY
6	1463196	Connector (Secondary Lock) (Alternate Part)	1
6	1330438	Terminal (Socket)	3
6	1463139	Terminal (Alternate Part)	3
6	1484377	Plug (Alternate Part)	1

WIRE HARNESS (FIGURE 2-70)
SYNCHRONOUS STEERING

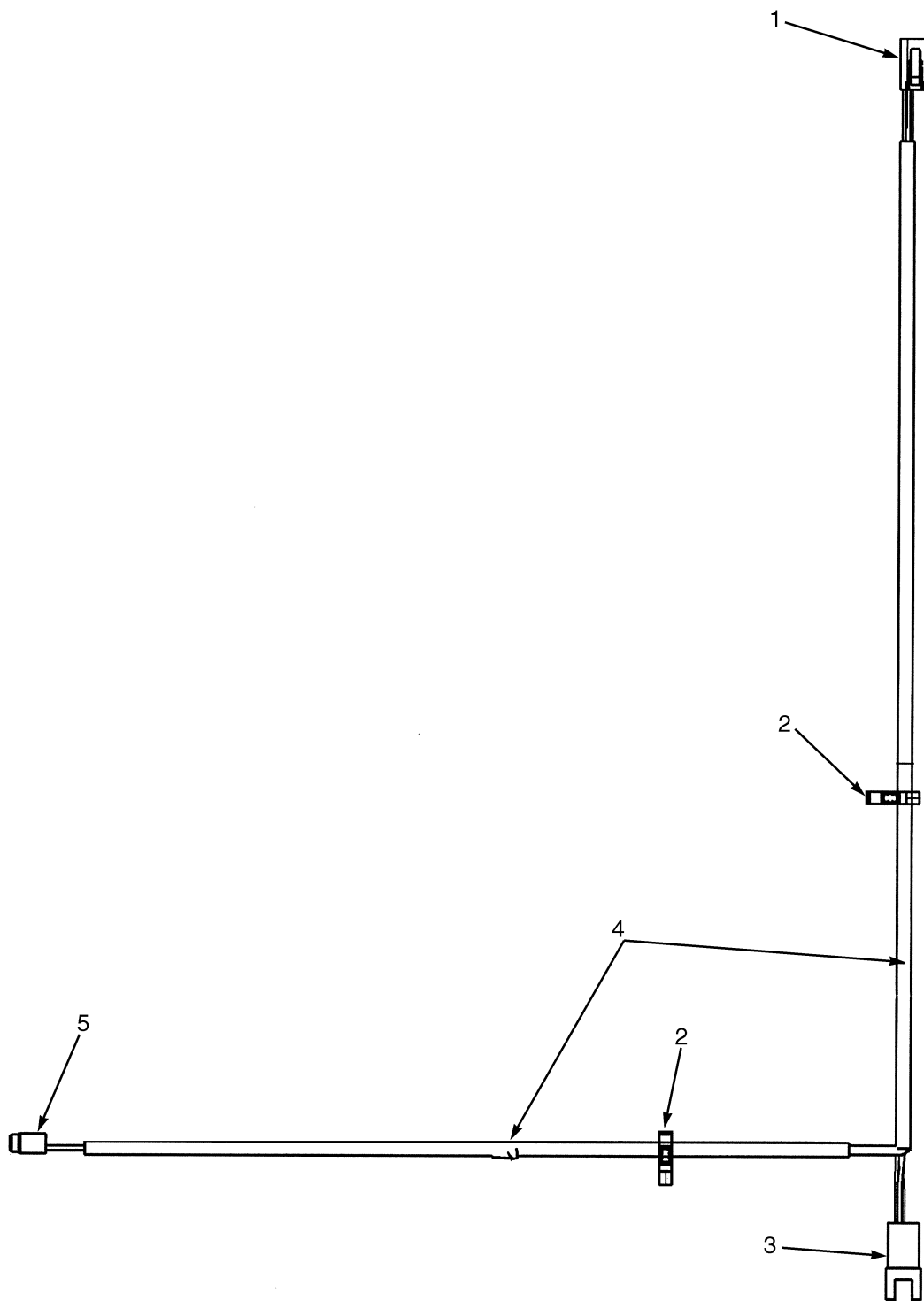
BP080756

ITEM	PART NO.	DESCRIPTION	QTY
	2105365	Wire Harness (Synchronous Steering)	1
1	.....	Connector Assembly (To Steer Make-Up Valve)	1
1	1627833	Connector	1
1	1561755	Connector (Secondary Lock)	1
1	1402814	Terminal	2
1	1562649	Seal	2
2	1655195	Conduit	AR
3	.....	Connector Assembly (To Main Harness)	1
3	1561559	Connector (2 Pin)	1
3	1463138	Terminal Pin	2

NOTES

[illegible]

WIRE HARNESS (FIGURE 2-71) PARK BRAKE



BP080774

**WIRE HARNESS
PARK BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	2108494	Wire Harness (Park Brake)	1
1	.....	Park Brake Module	1
1	1330438	Terminal (Socket)	6
1	1330428	Connector (Secondary Lock)	1
1	1330422	Connector	1
2	1402816	Clip	2
3	.....	Main Harness	1
3	1489655	Connector (4 Way)	1
3	1330416	Connector (Secondary Lock)	1
3	1531312	Terminal	4
4	275493	Conduit	AR
5	.....	Park Brake Solenoid	1
5	1463139	Terminal	2
5	1484558	Connector (Secondary Lock)	1
5	1484557	Connector (2 Socket)	1

A technical drawing of a mechanical assembly, likely a frame or support structure, shown in a perspective view. The assembly consists of a main vertical frame with a horizontal top rail and a horizontal bottom rail. The top rail is supported by a series of vertical brackets (labeled 3) and is connected to a horizontal support (labeled 1). The bottom rail is supported by a series of vertical brackets (labeled 3) and is connected to a horizontal support (labeled 9). The vertical frame is supported by a series of horizontal brackets (labeled 3) and is connected to a vertical support (labeled 5). The assembly is shown in a perspective view, with the top rail and bottom rail running horizontally and the vertical frame running vertically. The drawing includes numbered callouts (1 through 9) pointing to various components of the assembly.

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**WIRE HARNESS
BACK-UP ALARM STROBE**

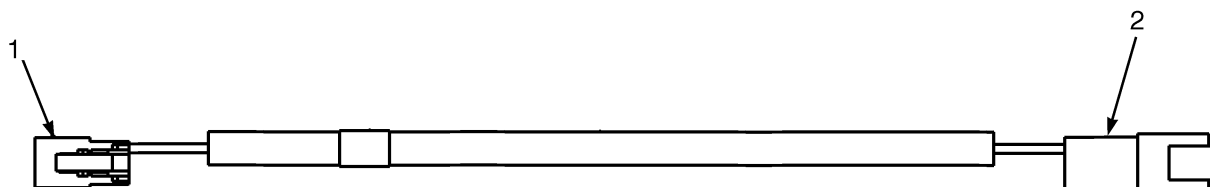
ITEM	PART NO.	DESCRIPTION	QTY
	2109528	Wire Harness	1
1	.....	Light Option Harness	1
1	1330423	Connector (8 Socket)	1
1	1330429	Connector (Secondary Lock)	1
1	1330438	Terminal (Socket)	2
1	1330439	Plug	6
2	275493	Conduit	AR
3	1402816	Clip	9
4	1531485	Clip	1
5	275495	Conduit	AR
6	.....	Reverse Relay	1
6	2100204	Receptacle	1
6	1689606	Terminal	4
7	275494	Conduit	AR
8	.....	Main Harness	1
8	1330413	Connector (8 Pin)	1
8	1330418	Connector	1
8	1330439	Plug	5
8	1531312	Terminal	3
9	.....	Backup Alarm	1
9	1330419	Connector	1
9	1330424	Connector (Secondary Lock)	1
9	1330438	Terminal (Socket)	2

WIRE HARNESS (FIGURE 2-73)
MANUAL INTERLOCK



BP080908

ITEM	PART NO.	DESCRIPTION	QTY
	2100705	Wire Harness (Manual Interlock)	1
1	1671887	Push Button Switch (Included with Manual Interlock Wire Harness)	1
2	.....	Connector Assembly (Main Harness)	1
2	1561559	Connector (2 Pin)	1
2	1561755	Connector (Secondary Lock)	1

WIRE HARNESS (FIGURE 2-74)
JUMPER

BP080632

ITEM	PART NO.	DESCRIPTION	QTY
	4604015	Wire Harness	1
1	.....	Connector Assembly	1
1	1330419	Connector	1
1	1330414	Connector (Secondary Lock)	1
1	1597773	Terminal	2
2	.....	Connector Assembly	1
2	1493465	Connector (2 Pin) (Secondary Lock)	1
2	1330424	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	2

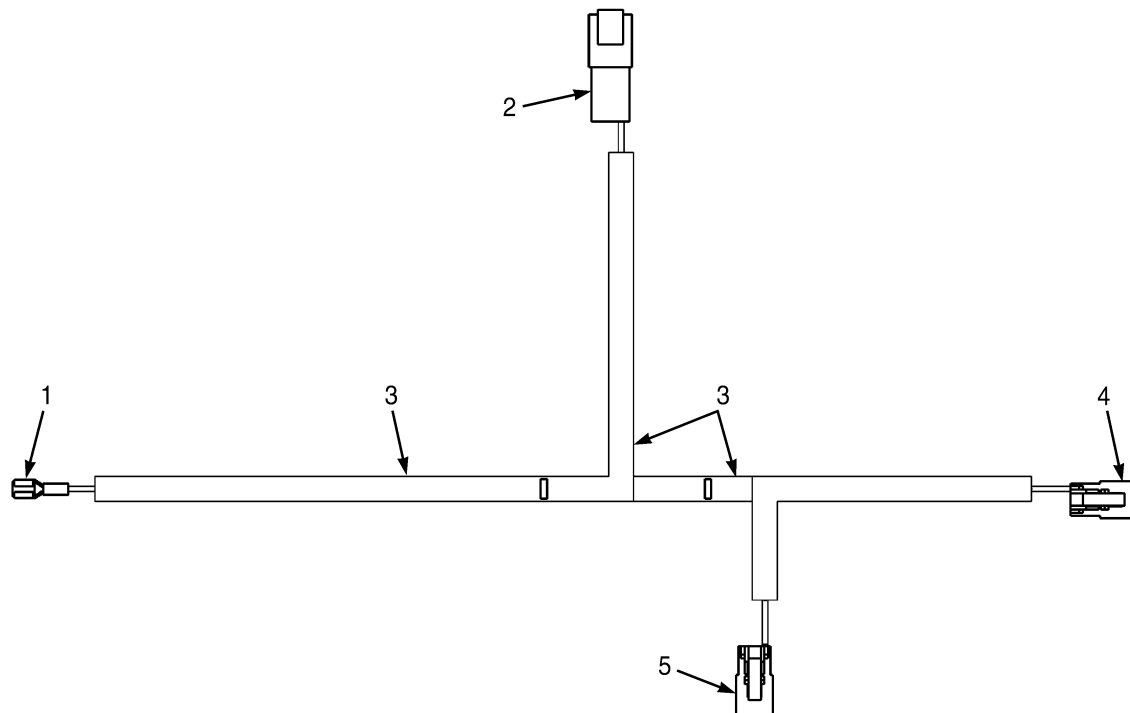
WIRE HARNESS (FIGURE 2-75)
FAN ADAPTOR — 80V

BP081071

ITEM	PART NO.	DESCRIPTION	QTY
	4610522	Wire Harness (Fan Adaptor 80V)	1
1	.....	Connector Assembly (Fan)	1
1	1490242	Connector (2 Way)	1
1	1490243	Connector (Secondary Lock)	1
1	1330438	Terminal (Socket)	2
2	275494	Conduit	AR
3	.....	Connector Assembly (Fan)	1
3	1490242	Connector (2 Way)	1
3	1490243	Connector (Secondary Lock)	1
3	1330438	Terminal (Socket)	2
4	.....	Connector Assembly (Traction Controller Fan)	1
4	1493465	Connector (2 Pin)	1
4	1330414	Connector (Secondary Lock)	1
4	1330437	Terminal (Pin)	1
4	1484377	Plug	1
5	275494	Conduit	AR
6	.....	Connector Assembly (Main Electrical Harness)	1
6	1623050	Housing	1
6	1330418	Connector	1
6	1330437	Terminal (Pin)	8
7	.....	Connector Assembly (Fan Relay)	1
7	1377860	Connector	1
7	1377868	Receptacle	2
7	1655183	Terminal	2
8	.....	Connector Assembly (Main Light Harness)	1
8	1502625	Connector	1

ITEM	PART NO.	DESCRIPTION	QTY
8	1502626	Connector (Secondary Lock)	1
8	1330438	Terminal (Socket)	8

WIRE HARNESS (FIGURE 2-76) FAN ADAPTOR — 36/48V



BP081072

ITEM	PART NO.	DESCRIPTION	QTY
	4610521	Wire Harness (Fan Adaptor 36/48V)	1
1	.....	Connector Assembly (Main Contactor Coil)	1
1	4026003	Terminal	1
2	.....	Connector Assembly (Traction Controller Fan)	1
2	1493465	Connector (2 Pin)	1
2	1330414	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	1
2	1484377	Plug	1
3	275493	Conduit	AR
4	.....	Connector Assembly (Fan)	1
4	1493465	Connector (2 Pin)	1
4	1490243	Connector (Secondary Lock)	1
4	1330438	Terminal (Socket)	2
5	.....	Connector Assembly (Fan)	1
5	1493465	Connector (2 Pin)	1
5	1490243	Connector (Secondary Lock)	1
5	1330438	Terminal (Socket)	2

WIRE HARNESS (FIGURE 2-77)
FRONT SWITCH

BP080792

ITEM	PART NO.	DESCRIPTION	QTY
	2097858	Wire Harness (Front Switch)	1
1	.....	Connector Assembly (Light Chassis Main)	1
1	1330411	Connector	1
1	1330416	Connector (Secondary Lock)	1
1	1330437	Terminal (Pin)	4
2	.....	Connector Assembly (Switch - Rear Work Light)	1
2	4484564	.....	
	1382308	Socket	1
2	233141	Terminal	2
3	.....	Connector Assembly (Switch - Front Work Light/ Tail Light)	1
3	4484564	.....	
	1382308	Socket	1
3	233141	Terminal	3

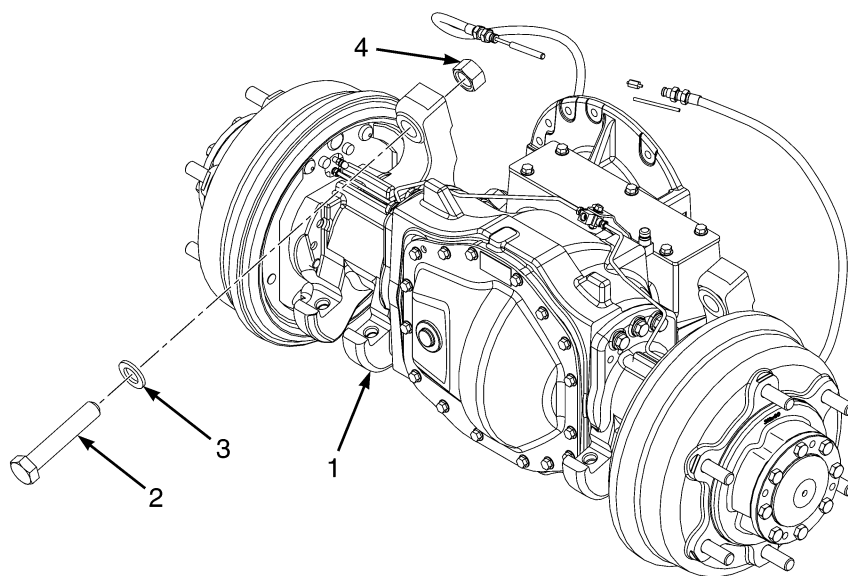
[illegible]

3	DRIVE UNIT

**SECTION 3
DRIVE UNIT**

DESCRIPTION	PAGE
DIFFERENTIAL	3-10
DRIVE AXLE AND HOUSING	3-4
DRIVE AXLE HUB	3-8
DRIVE AXLE MOUNTING	3-2
WITH SPACER - FOUR STAGE FULL FREE-LIFT	3-3
DRIVE TIRES AND WHEELS	
LUG TREAD - NARROW	3-18
LUG TREAD - WIDE	3-20
SMOOTH TREAD - NARROW	3-14
SMOOTH TREAD - WIDE	3-16
TRACTION MOTOR	3-12

DRIVE AXLE MOUNTING (FIGURE 3-1)

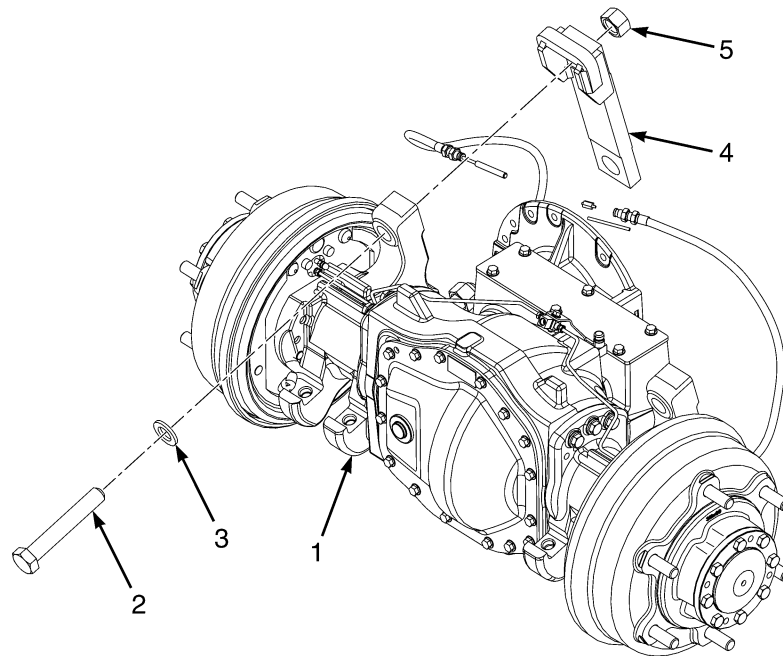


BP070141

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1694309	Drive Axle Assembly	1
2	293733	Capscrew	4
3	296434	Washer	4
4	292660	Nut	4

FOOTNOTES:

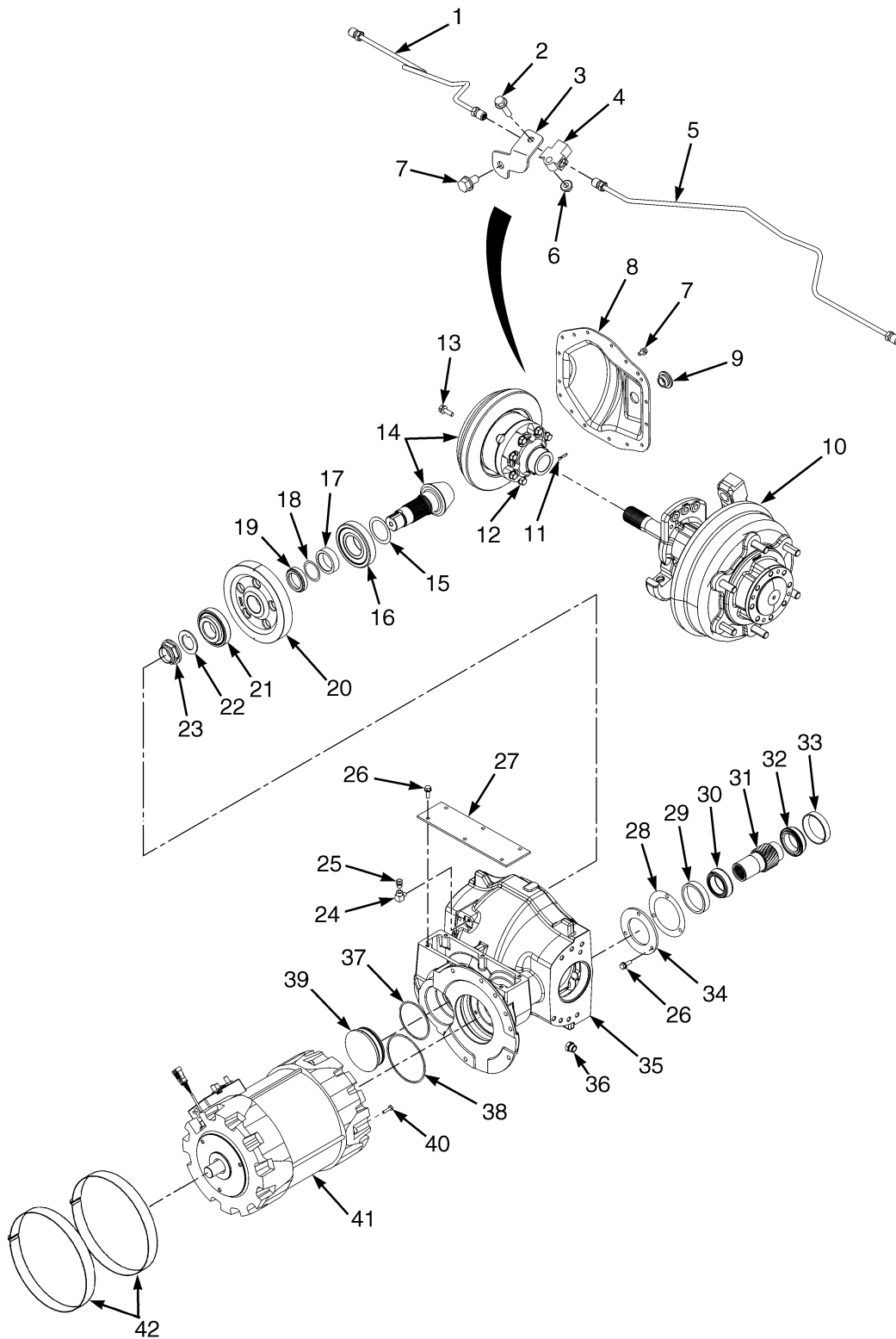
a Does not include motor.

**DRIVE AXLE MOUNTING (FIGURE 3-2)
WITH SPACER — FOUR STAGE FULL FREE-LIFT**

BP070142

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Drive Axle Assembly	1
2	293735	Capscrew	4
3	296434	Washer	4
4	1707023	Spacer	2
5	292660	Nut	4

DRIVE AXLE AND HOUSING (FIGURE 3-3)



BP070062

DRIVE AXLE AND HOUSING

ITEM	PART NO.	DESCRIPTION	QTY
	1694309	Drive Axle Assembly	1
1	2060085	Tube Assy	1
2	1527878	Capscrew	1
3	1618311	Bracket	1
4	1641351	Fitting	1
5	2060084	Tube Assy	1
6	~~1307884~~		
	1514429	Nut	1
7	~~4109993~~		
	1527879	Capscrew	17
8	1532733	Cover	1
9	1516075	Plug , Oil Level	1
10	.....	Drive Axle Hub (☞ Figure 3-4).....	1
11	15242	Cotter Pin	2
12	2067574	Differential (☞ Figure 3-5).....	1
13	2029436	Bolt	12
14	2051219	Gear and Pinion (Hypoid)	1
15	1532715	Shim (0.040 in.)	AR
15	1569858	Shim (.008 in.)	AR
15	1532714	Shim (0.019 in.)	AR
15	1569861	Shim (.018 in.)	AR
15	1532713	Shim (0.015 in.)	AR
15	1569859	Shim (.010 in.)	AR
15	1569860	Shim (.014 in.)	AR
15	1532712	Shim (0.011 in.)	AR
16	2076153	Bearing Set	1
16	1578982	Bearing Set (Optional)	1
17	b 1643977	Spacer	1
17	c 4154954	Spacer	1
18	1516334	Shim (0.009 in.)	AR
18	1516335	Shim (0.019 in.)	AR
18	1516331	Shim (0.004 in.)	AR
18	1516332	Shim (0.005 in.)	AR
18	1516333	Shim (0.007 in.)	AR
19	b 1643974	Spacer	1
19	c 4162014	Spacer	1
20	~~1643971~~		
	4020076	Gear (Driven)	1
21	2022352	Tapered Roller Bearing	1
21	1578978	Tapered Roller Bearing (Optional)	1
22	1530588	Washer	1
23	2026861	Nut	1
24	16151	Fitting	1
25	21420	Breather	1
26	1510113	Capscrew	9
27	1643973	Cover (Housing)	1
28	1643982	Shim	AR
28	1643981	Shim	AR
28	1643980	Shim	AR
29	183614	Bearing Cup	1
30	183615	Bearing Cone	1

DRIVE AXLE AND HOUSING

ITEM	PART NO.	DESCRIPTION	QTY
31	1662421		
	4020074	Drive Gear	1
32	183615	Bearing Cone	1
33	183614	Bearing Cup	1
34	1643978	Retainer (Bearing)	1
35	1661482	Housing (Center Section Assy)	1
36	1521809	Drain Plug	1
37	15884	O-Ring	1
38	57597	O-Ring	1
39	375154	Cap	1
40	1586629	Capscrew	7
41	2104814	Traction Motor (72/80 Volt Enhanced Performance) (☞ Figure 3-6).....	1
42	1703667	Kit-Motor Band	1
	a 1673612	Identification Plate	1
	a 1673613	Tape-Bulk (FT)	AR
	a 264159	Adhesive	AR
	a 1584621	Sealant	AR
	a 383789	Thread Sealant	AR
	a 1499028	Grease-Bulk (L)	AR
	a 4162064	Kit Drive Axle Center Section Kit	1

FOOTNOTES:

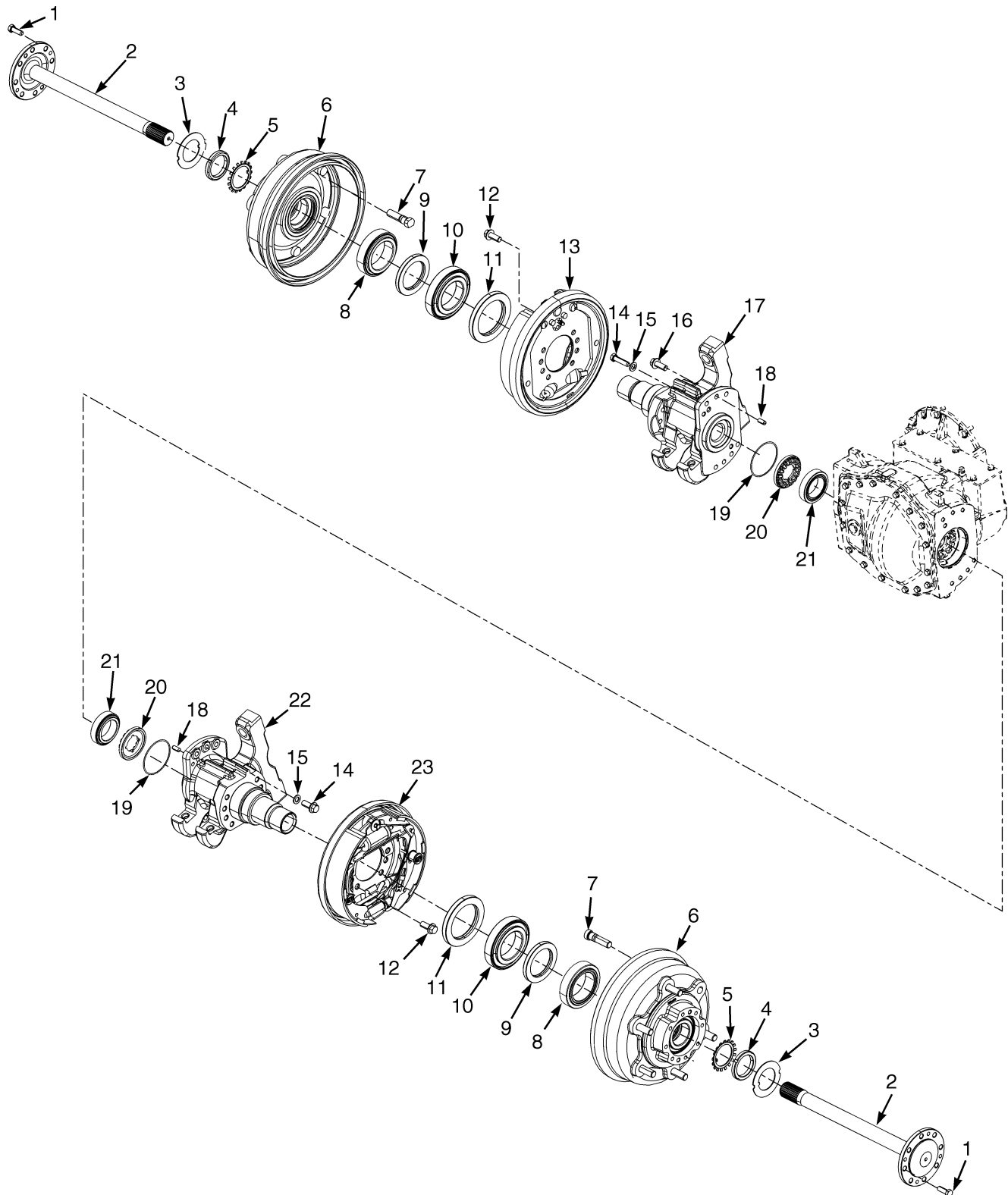
- a** Not Illustrated
b → S/N A268N01934P

- c** S/N A268N01935P →

NOTES

[illegible]

DRIVE AXLE HUB (FIGURE 3-4)



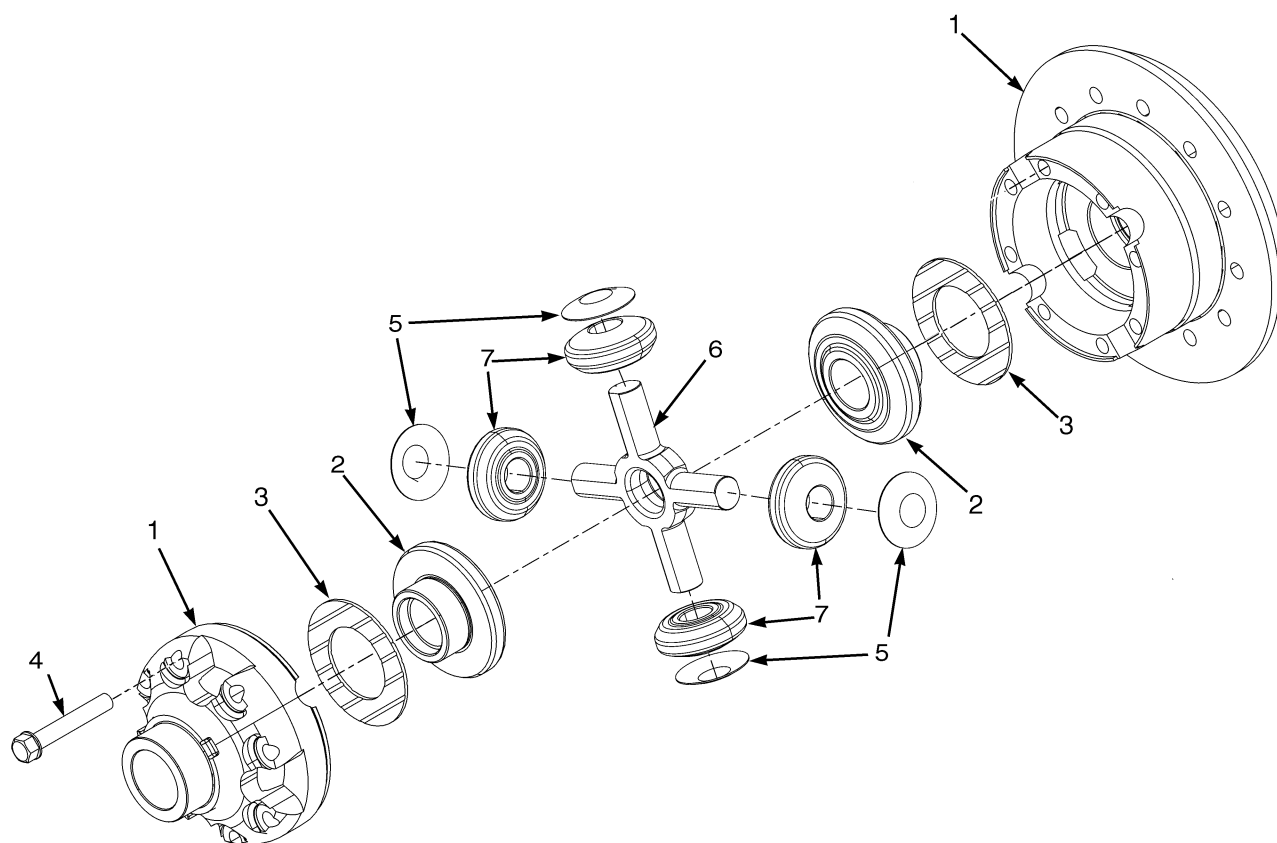
BP070065

DRIVE AXLE HUB

ITEM	PART NO.	DESCRIPTION	QTY
	1694309	Drive Axle Assembly	1
1	293646	Capscrew	16
2	1518353	Axle Shaft	2
3	1515219	Washer	2
4	2028145	Nut	2
5	2027756	Lockwasher	2
6	1646607	Hub (Drive Assembly)	2
6	1530429	Hub	1
7	1530431	Wheel Stud	6
8	1375486	Bearing	1
9	1523530	Oil Seal	1
10	~~1375492~~		
	2027662	Bearing Set (Tapered)	1
11	2027817	Oil Seal	1
12	1327246	Bolt	16
13	1664137	Brake Assembly (RH, With Cable) (☞ Figure 5-3).....	1
14	293649	Capscrew	14
15	296422	Washer	14
16	293646	Capscrew	16
17	1516538	Hanger (RH)	1
18	302385	Dowel	2
19	2027828	O-Ring	2
20	1652926	Retainer	2
21	1375488	Bearing Set	2
22	1516537	Hanger (LH)	1
23	1664136	Brake Assembly (LH, With Cable) (☞ Figure 5-3).....	1
	a 4162064	Kit Drive Axle Center Section Kit	1

FOOTNOTES:**a** Not Illustrated

DIFFERENTIAL (FIGURE 3-5)

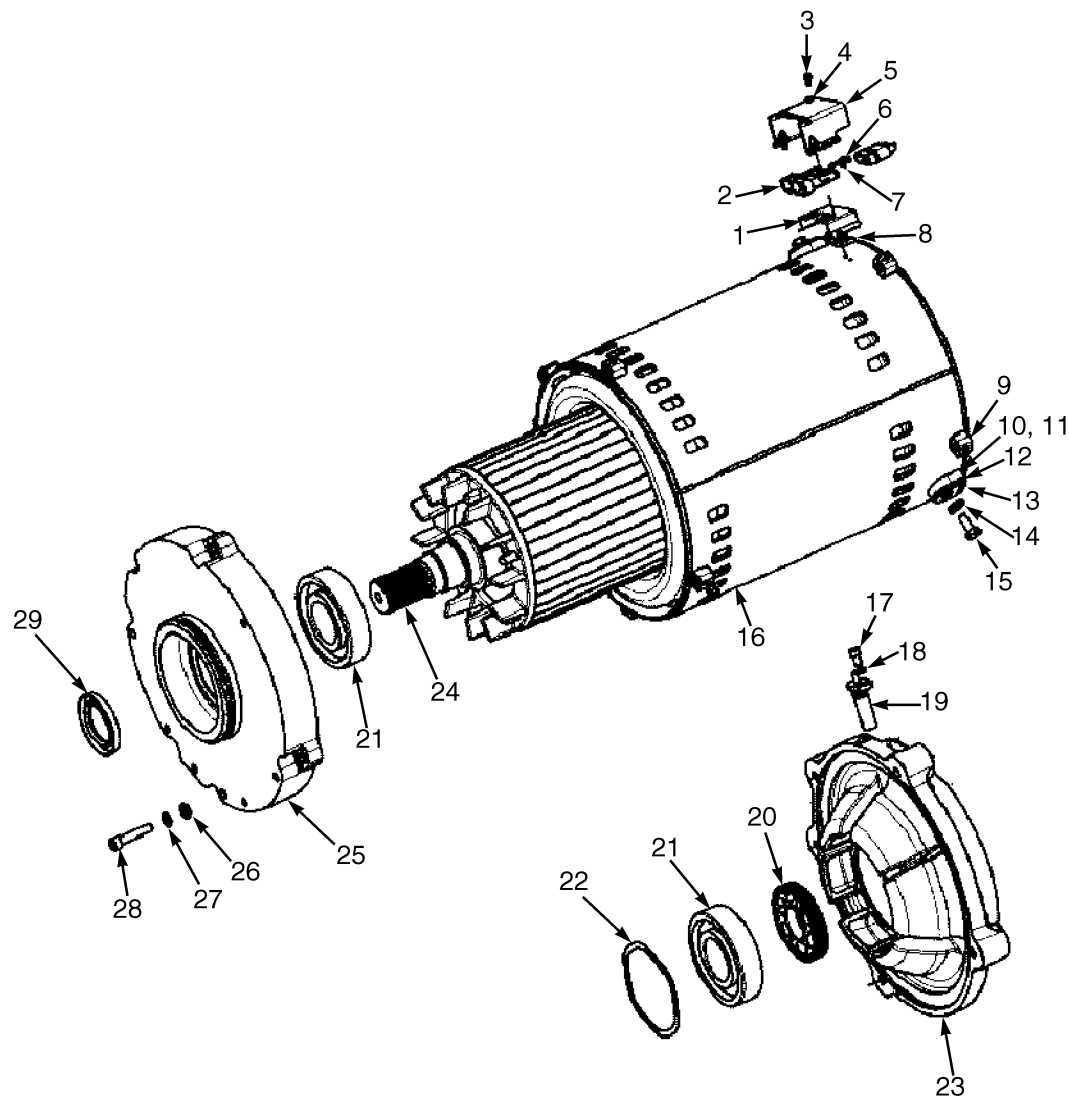


BP070069

DIFFERENTIAL

ITEM	PART NO.	DESCRIPTION	QTY
	2067574	Differential	1
1	.....	Case Set	1
2	.....	Gear Side	2
3	.....	Washer (Side Gear)	2
4	1565327	Bolt	8
5	.....	Washer pinion	4
6	2029383	Spider	1
7	.....	Pinion Differential	4
	1565324	Kit-Washer	1
	1606531	Kit-Gear	1

TRACTION MOTOR (FIGURE 3-6)

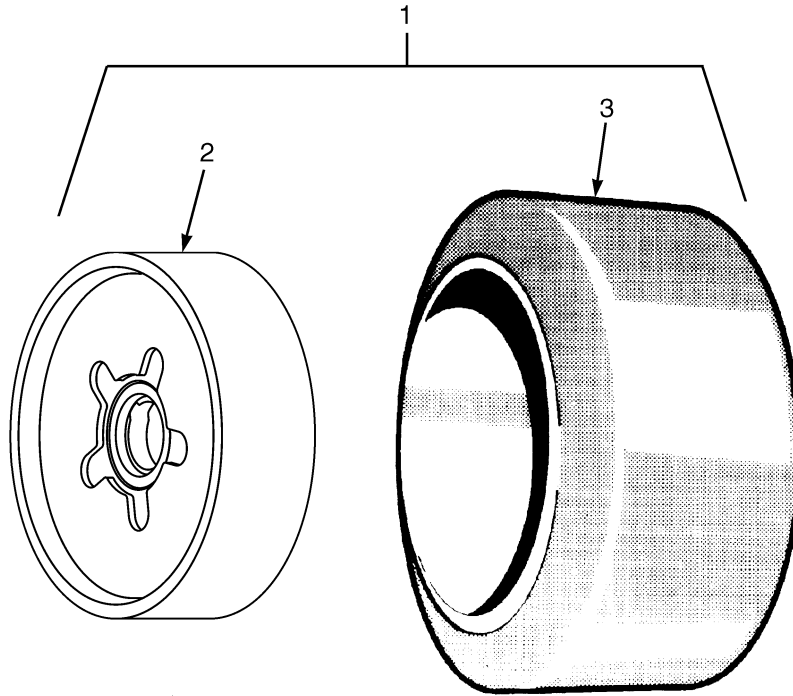


BP070078

TRACTION MOTOR**KEY:****A: 36/48 Volt****B: 36/48 Volt Enhanced****C: 72/80 Volt Enhanced**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	2104811	Traction Motor (36/48 Volt Standard Performance)	1	..	..
	2104813	Traction Motor (36/48 Volt Enhanced Performance)	..	1	..
	2104814	Traction Motor (72/80 Volt Enhanced Performance)	..	..	1
1	1600020	Bracket	1	1	1
2	1600035	Seal	1	1	1
3	1600023	Capscrew	2	2	2
4	1600028	Lockwasher	2	2	2
5	1555894	Bracket	1	1	1
6	1600037	Wire Seal	2	2	2
7	1600038	Contact	2	2	2
8	1555892	Rubber Mount	1	1	1
9	1555881	Nut	5	5	5
10	.....	Insulator	3	3	3
11	1555891	Nut	3	3	3
12	.....	Terminal Cover	3	3	3
13	.....	Terminal Flag	3	3	3
14	1600034	Washer	3	3	3
15	1600032	Bolt	3	3	3
16	.....	Stator Housing Assembly	1	1	1
17	.....	Capscrew	1	1	1
18	1600027	Lockwasher	1	1	1
19	.....	Proximity Sensor	1	1	1
20	1705523	Wheel (Proximity Sensor)	1	1	1
21	1555879	Ball Bearing	2	2	2
22	1705522	Spring	1	1	1
23	.....	Non-Drive Side End Bell	1	1	1
24	.....	Rotor Assembly	1	1	1
25	.....	Drive Side End Bell	1	1	1
26	320157	Washer	5	5	5
27	292681	Lockwasher	5	5	5
28	1654576	Capscrew	5	5	5
29	1705529	Seal (Shaft)	1	1	1
	1706986	Kit (Stator)	1	..	..
	1706987	Kit (Stator)	..	1	..
	1706990	Kit (Stator)	..	..	1
	1706988	Kit (Bracket)	1	1	1
	1705526	Kit-Drive End (Non Drive Side Bell Kit)	1	1	1
	1705535	Kit-Hardware	1	1	1
	1705532	Kit-Sensor (Proximity/Speed)	1	1	1
	1705484	Kit (Rotor)	1	..	..
	1705485	Kit (Rotor)	..	1	1
	1705528	Kit-Drive End (Drive Side Bell)	1	1	1
	1705531	Kit-Bearing	1	1	1
	1703667	Kit-Motor Band	1	1	1

DRIVE TIRES AND WHEELS (FIGURE 3-7) SMOOTH TREAD — NARROW



BP220337

KEY:

A: E45XN - E55XN
B: E60XN - E65XN
C: E70XN

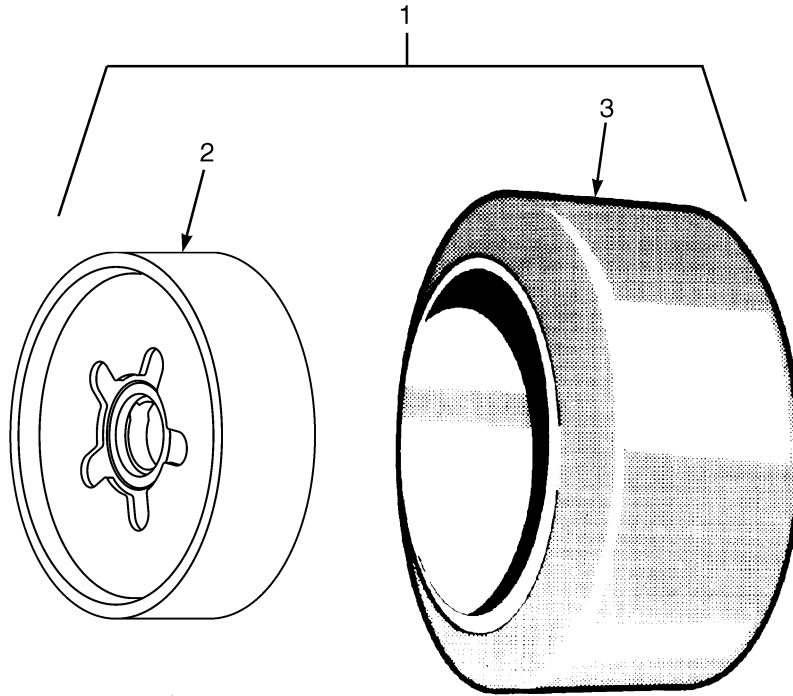
ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1521062	Wheel And Tire (Standard Compound)	2	..	..
1	a 1656321	Wheel And Tire (Non-Marking Compound)	2	..	..
1	b 1693635	Wheel And Tire (Non-Marking Compound)	2	..	..
1	1521063	Wheel And Tire (Standard Compound)	..	2	..
1	a 1656197	Wheel And Tire (Non-Marking Compound)	..	2	..
1	b 1693636	Wheel And Tire (Non-Marking Compound)	..	2	..
1	1521064	Wheel And Tire (Standard Compound)	..	..	2
1	a 1656199	Wheel And Tire (Non-Marking Compound)	..	..	2
1	b 1693637	Wheel And Tire (Non-Marking Compound)	..	..	2
2	1521038	Wheel (Narrow Tread) (21 x 7 x 15)	1	..	..
2	1521039	Wheel (Narrow Tread) (21 x 8 x 15)	..	1	..
2	1521129	Wheel (Narrow Tread) (21 x 9 x 15)	..	..	1
3	1540113	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
3	a 1655314	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
3	b 1339097	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
3	1540114	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
3	a 1655313	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
3	b 237213	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
3	1521126	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
3	a 1655312	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1
3	b 1693641	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1

FOOTNOTES:

a Monarch

b Trelleborg

DRIVE TIRES AND WHEELS (FIGURE 3-8) SMOOTH TREAD — WIDE



BP220337

KEY:

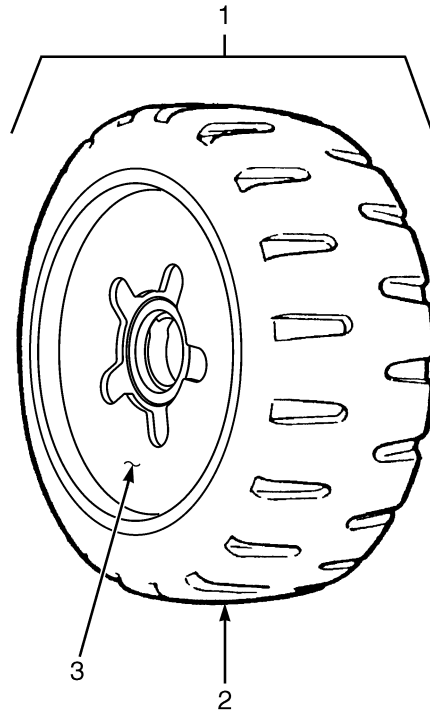
A: E45XN - E55XN
B: E60XN - E65XN
C: E70XN

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1521065	Wheel And Tire (Standard Compound)	2	..	..
1	a 1656322	Wheel And Tire (Non-Marking Compound)	2	..	..
1	b 1693674	Wheel And Tire (Non-Marking Compound)	2	..	..
1	1521066	Wheel And Tire (Standard Compound)	..	2	..
1	a 1656198	Wheel And Tire (Non-Marking Compound)	..	2	..
1	b 1693675	Wheel And Tire (Non-Marking Compound)	..	2	..
1	1521067	Wheel And Tire (Standard Compound)	..	..	2
1	a 1656200	Wheel And Tire (Non-Marking Compound)	..	..	2
1	b 1693676	Wheel And Tire (Non-Marking Compound)	..	..	2
2	1521040	Wheel (Wide Tread) (21 x 7 x 15) (21 x 8 x 15)	1	1	..
2	1521130	Wheel (Wide Tread) (21 x 9 x 15)	..	..	1
3	1540113	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
3	a 1655314	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
3	b 1339097	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
3	1540114	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
3	a 1655313	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
3	b 237213	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
3	1521126	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
3	a 1655312	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1
3	b 1693641	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1

FOOTNOTES:

a Monarch

b Trelleborg

DRIVE TIRES AND WHEELS (FIGURE 3-9)
LUG TREAD — NARROW

BP220338

KEY:**A: E45XN - E55XN****B: E60XN - E65XN****C: E70XN**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	a 1521068	Wheel And Tire (Standard Compound)	2	..	..
1	b 1693632	Wheel And Tire (Standard Compound)	2	..	..
1	1668616	Wheel And Tire (Non-Marking Compound)	2	..	..
1	a 1521069	Wheel And Tire (Standard Compound)	..	2	..
1	b 1693633	Wheel And Tire (Standard Compound)	..	2	..
1	1668617	Wheel And Tire (Non-Marking Compound)	..	2	..
1	a 1521070	Wheel And Tire (Standard Compound)	..	..	2
1	b 1693634	Wheel And Tire (Standard Compound)	..	..	2
1	1668618	Wheel And Tire (Non-Marking Compound)	..	..	2
2	a 1540117	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
2	b 1693638	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
2	1687417	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
2	a 1540118	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
2	b 1693639	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
2	1687418	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
2	a 1521127	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
2	b 1693640	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
2	1668613	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1
3	1521038	Wheel (Narrow Tread) (21 x 7 x 15)	1	..	..
3	1521039	Wheel (Narrow Tread) (21 x 8 x 15)	..	1	..
3	1521129	Wheel (Narrow Tread) (21 x 9 x 15)	..	..	1

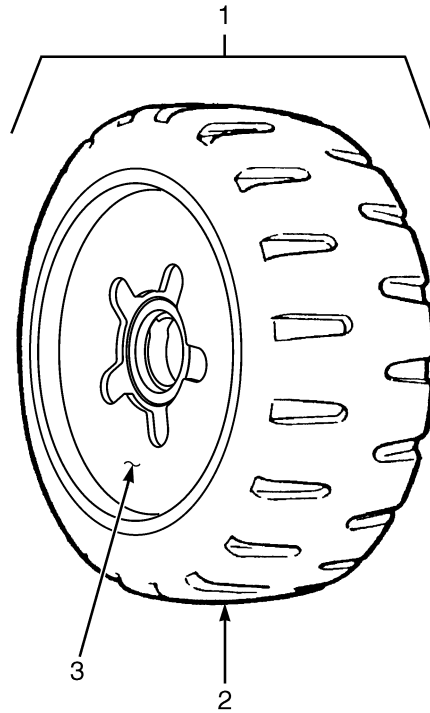
FOOTNOTES:

a Monarch

b Trelleborg

DRIVE TIRES AND WHEELS (FIGURE 3-10)

LUG TREAD — WIDE



BP220338

KEY:

- A:** E45XN - E55XN
B: E60XN - E65XN
C: E70XN

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	a 1521071	Wheel And Tire (Standard Compound)	2	..	..
1	b 1693671	Wheel And Tire (Standard Compound)	2	..	..
1	1668619	Wheel And Tire (Non-Marking Compound)	2	..	..
1	a 1521072	Wheel And Tire (Standard Compound)	..	2	..
1	b 1693672	Wheel And Tire (Standard Compound)	..	2	..
1	1668620	Wheel And Tire (Non-Marking Compound)	..	2	..
1	a 1521073	Wheel And Tire (Standard Compound)	..	..	2
1	b 1693673	Wheel And Tire (Standard Compound)	..	..	2
1	1668621	Wheel And Tire (Non-Marking Compound)	..	..	2
2	a 1540117	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
2	b 1693638	Cushion Tire (21 x 7 x 15) (Standard Compound)	1	..	..
2	1687417	Cushion Tire (21 x 7 x 15) (Non-Marking Compound)	1	..	..
2	a 1540118	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
2	b 1693639	Cushion Tire (21 x 8 x 15) (Standard Compound)	..	1	..
2	1687418	Cushion Tire (21 x 8 x 15) (Non-Marking Compound)	..	1	..
2	a 1521127	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
2	b 1693640	Cushion Tire (21 x 9 x 15) (Standard Compound)	..	..	1
2	1668613	Cushion Tire (21 x 9 x 15) (Non-Marking Compound)	..	..	1
3	1521040	Wheel (Wide Tread) (21 x 7 x 15) (21 x 8 x 15)	1	1	..
3	1521130	Wheel (Wide Tread) (21 x 9 x 15)	..	..	1

FOOTNOTES:

a Monarch

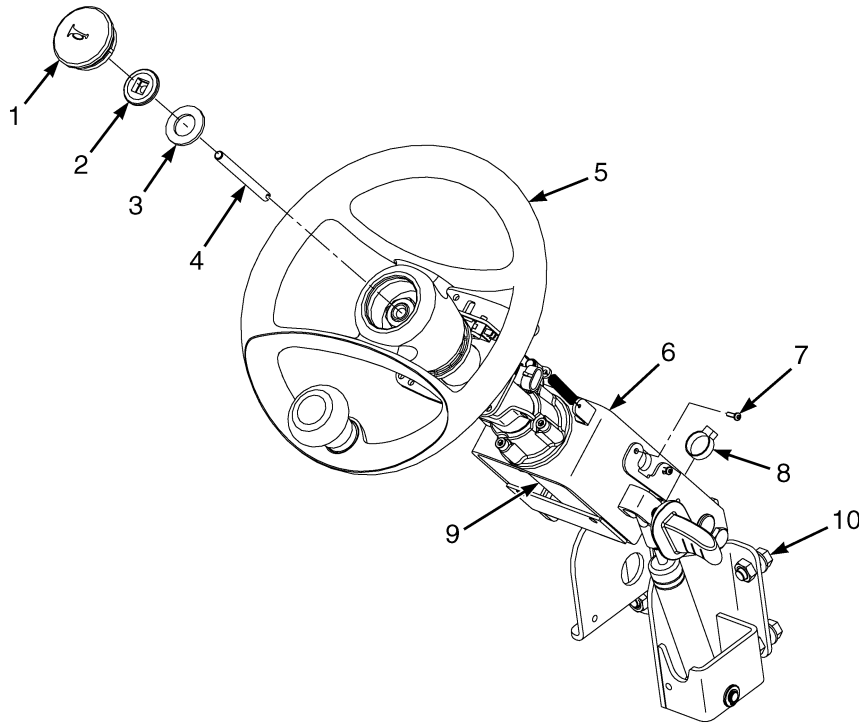
b Trelleborg

[illegible]

SECTION 4 STEERING SYSTEM

DESCRIPTION	PAGE
STEER TIRES AND WHEELS	
MONARCH - SMOOTH TREAD	4-24
MONARCH - LUG TREAD	4-26
TRELLEBORG - SMOOTH TREAD	4-25
TRELLEBORG - LUG TREAD	4-27
STEERING ACCUMULATOR	4-16
STEERING AXLE	
WITH SENSOR	4-20
WITHOUT SENSOR	4-18
STEERING COLUMN ASSEMBLY	
FIXED (→ 10/2013)	4-6
FIXED (10/2013 →)	4-8
TELESCOPIC (→ 10/2013)	4-10
TELESCOPIC (10/2013 →)	4-11
STEERING CYLINDER	4-23
STEERING HAND PUMP ASSEMBLY	
→ 11/2014	4-12
11/2014 →	4-14
STEERING WHEEL AND COLUMN	
FIXED	4-2
TELESCOPIC	4-4

STEERING WHEEL AND COLUMN (FIGURE 4-1) FIXED



BP220292

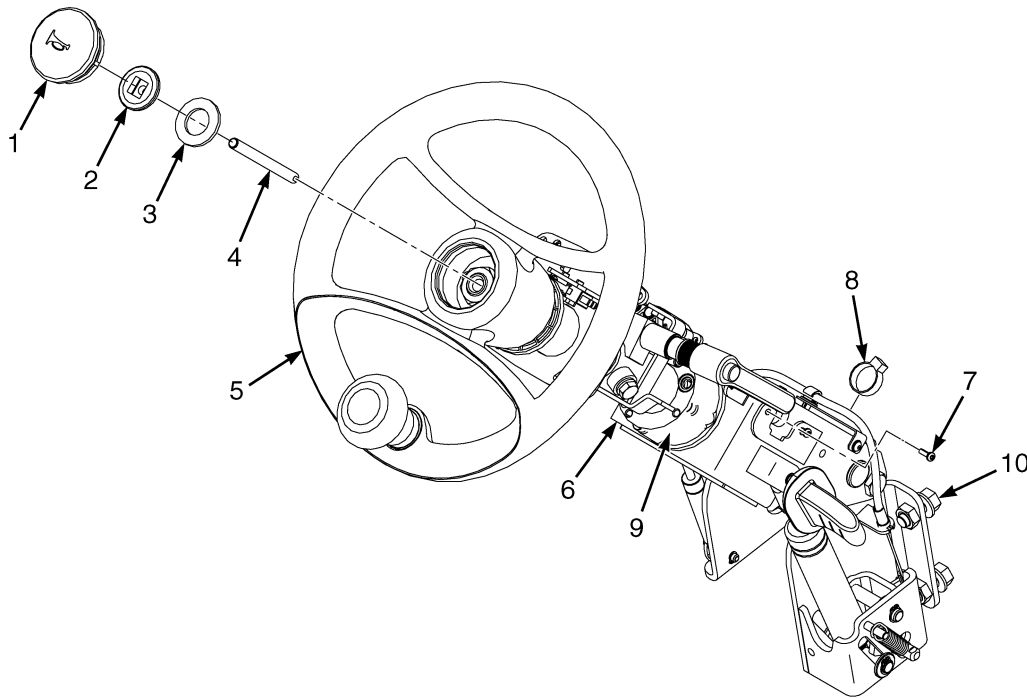
ITEM	PART NO.	DESCRIPTION	QTY
1	1661883	Horn Button	1
2	2111049	Nut (Horn Button)	1
3	1596408	Washer	1
4	1661879	Rod	1
5	1551839	Steering Wheel (Without Spinner Knob)	1
5	1531563	Steering Wheel (With Spinner)	1
5	1586109	Knob Assembly	1
5	4675583		
	1675581	Knob , Spinner	1
5	1675582	Cap	1
5	4675583		
	1675581	Knob , Spinner	1
6	a 2111289	Steering Column (Fixed) (☞ Figure 4-3).....	1
6	c 4619561	Steering Column (Fixed) (☞ Figure 4-4).....	1
7	1554902	Screw	2
8	373301	Strap Clamp	1
9	b 1655650	Steering Hand Pump (Without Synchronous Steering) (☞ Figure 4-7).....	1
9	b 1655652	Steering Hand Pump (With Synchronous Steering) (☞ Figure 4-7).....	1
9	1467430	Kit-Seal	1
9	1705632	Kit-Solenoid	1
9	d 4634957	Steering Control Unit (Without Synchronous Steering)	1
9	d 4634959	Steering Control Unit (With Synchronous Steering) (☞ Figure 4-8).....	1
10	1510117	Capscrew	4

FOOTNOTES:

a → 10/2013
b → 11/2014

c 10/2103 →
d 11/2014 →

STEERING WHEEL AND COLUMN (FIGURE 4-2) TELESCOPIC



BP220291

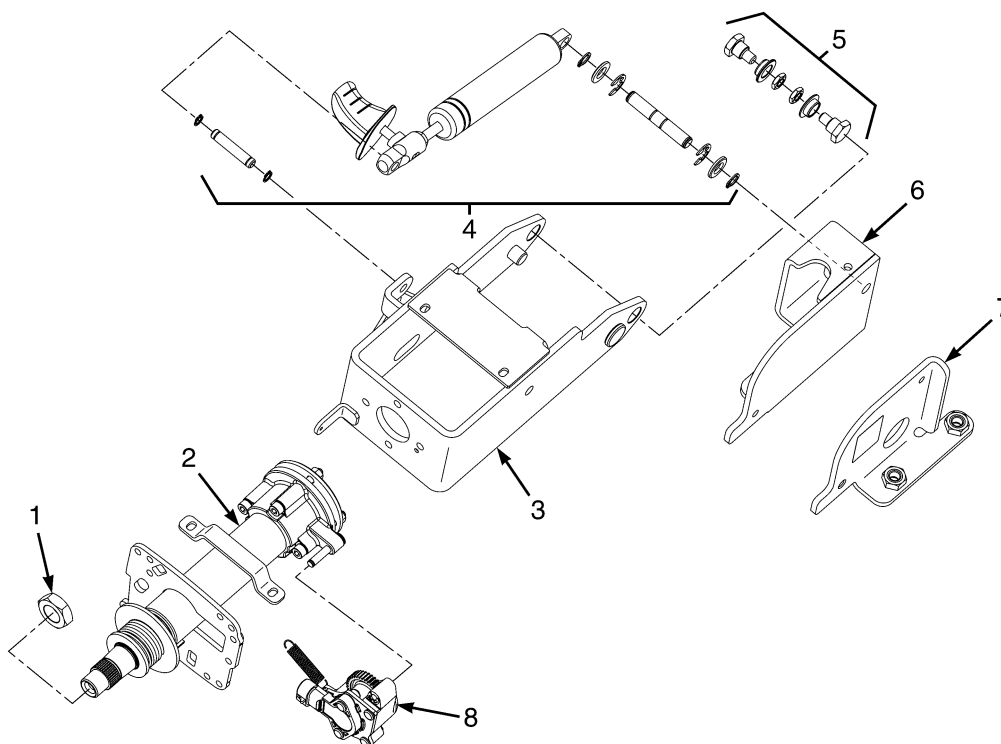
ITEM	PART NO.	DESCRIPTION	QTY
1	1661883	Horn Button	1
2	2111049	Nut (Horn Button)	1
3	1596408	Washer	1
4	1661879	Rod	1
5	1551839	Steering Wheel (Without Spinner Knob)	1
5	1531563	Steering Wheel (With Spinner)	1
5	1586109	Knob Assembly	1
5	4675583		
	1675581	Knob , Spinner	1
5	1675582	Cap	1
5	4675583		
	1675581	Knob , Spinner	1
6	a 2111288	Steering Column (Telescopic) (☞ Figure 4-5).....	1
6	c 4619560	Steering Column (Telescopic) (☞ Figure 4-6).....	1
7	1554902	Screw	2
8	373301	Strap Clamp	1
9	b 1655650	Steering Hand Pump (Without Synchronous Steering) (☞ Figure 4-7).....	1
9	b 1655652	Steering Hand Pump (With Synchronous Steering) (☞ Figure 4-7).....	1
9	1467430	Kit-Seal	1
9	1705632	Kit-Solenoid	1
9	d 4634957	Steering Control Unit (Without Synchronous Steering) (☞ Figure 4-8).....	1
9	d 4634959	Steering Control Unit (With Synchronous Steering) (☞ Figure 4-8).....	1
10	a 1510117	Capscrew	4

FOOTNOTES:

a → 10/2013
b → 11/2014

c 10/2013 →
d 11/2014 →

STEERING COLUMN ASSEMBLY (FIGURE 4-3) FIXED (→ 10/2013)



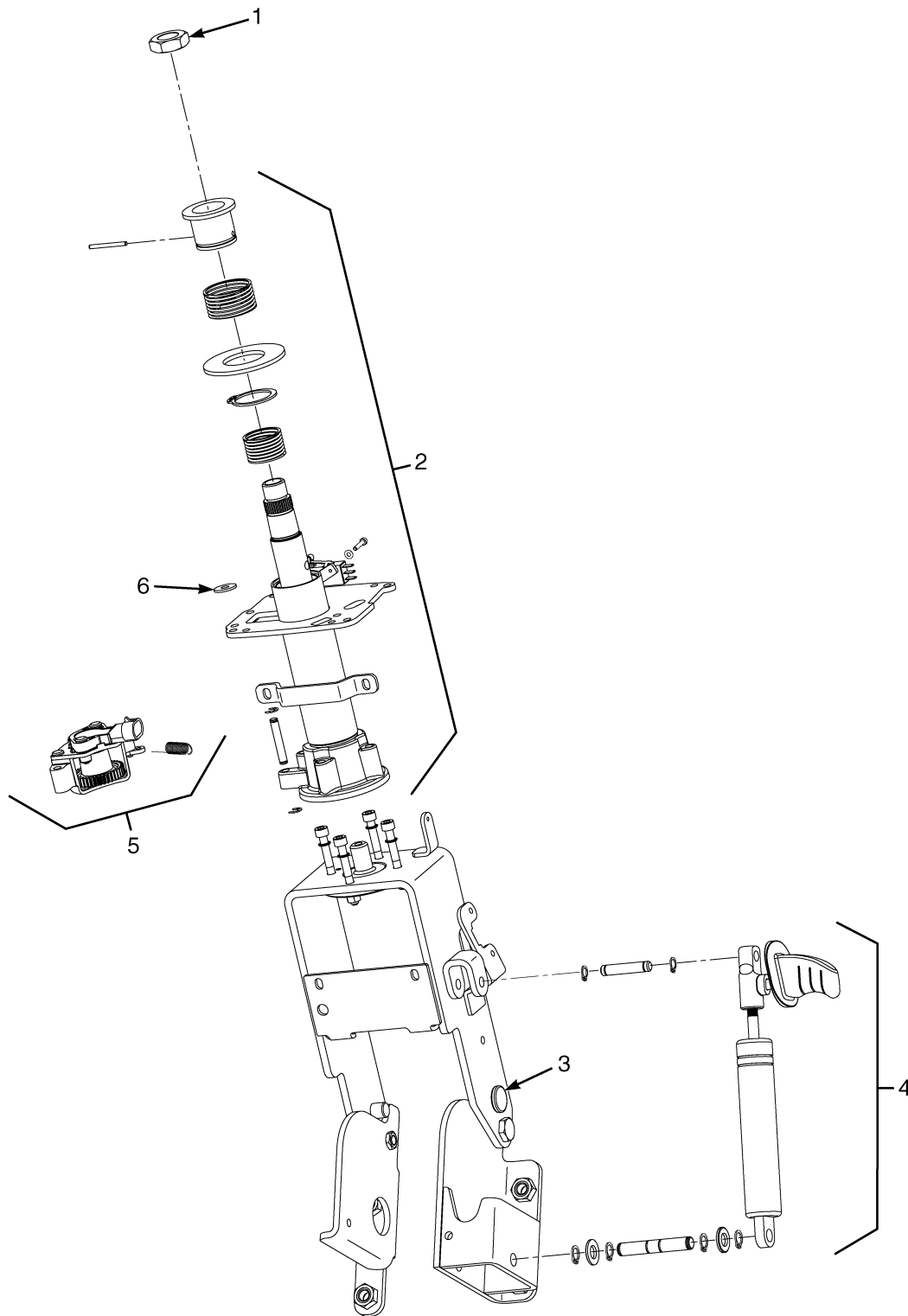
BP220287

ITEM	PART NO.	DESCRIPTION	QTY
	2111289	Steering Column (Fixed)	1
1	1562492	Kit-Nut	1
2	1707426	Kit-Shaft	1
2	2046035	Switch	1
2	1593347	Plate	1
3	1707427	Kit-Support	1
4	1707429		
	4089420	Kit-Gas Spring	1
5	1707402	Kit-Pivot	1
6	1707428	Kit-Support	1
7	1707430	Kit-Support	1
8	1707407	Kit-Sensor	1

NOTES

[illegible]

STEERING COLUMN ASSEMBLY (FIGURE 4-4) FIXED (10/2013 →)

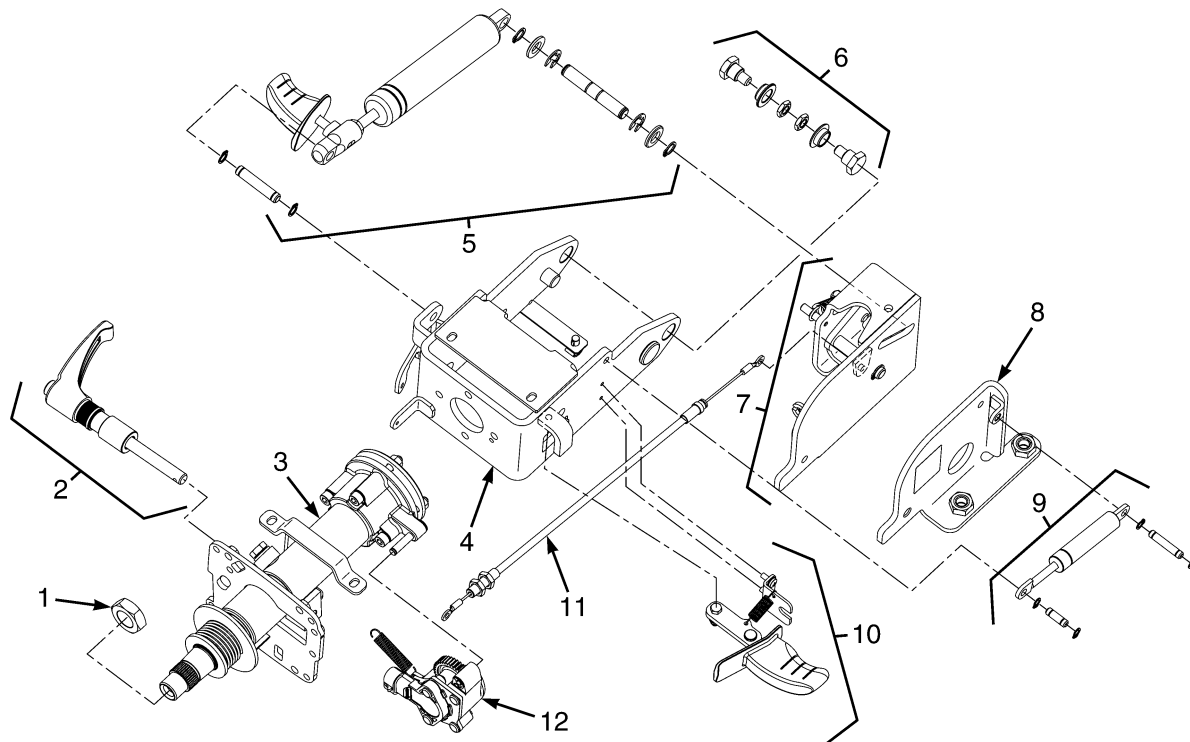


BP220405

STEERING COLUMN ASSEMBLY
FIXED (10/2013 →)

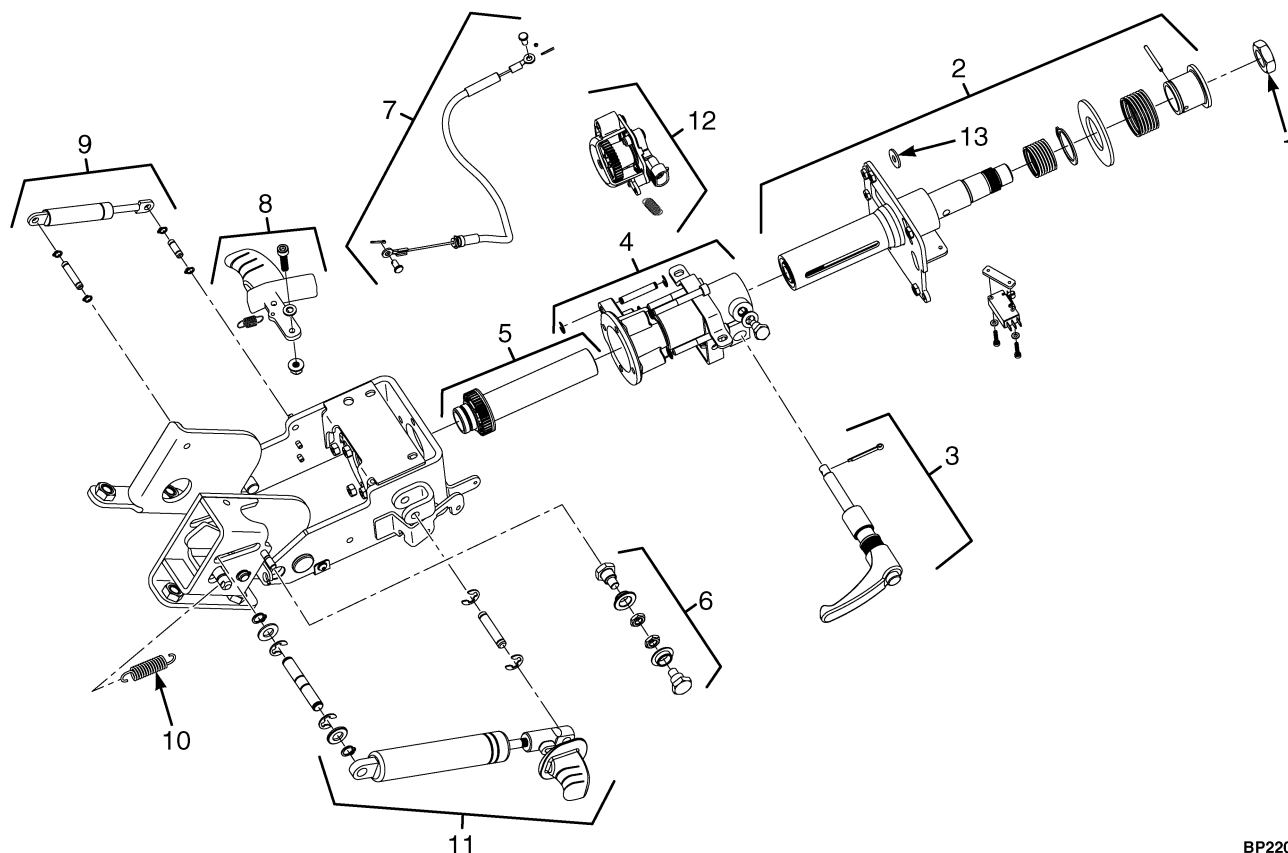
ITEM	PART NO.	DESCRIPTION	QTY
	4619561	Steering Column (Fixed)	1
1	1562492	Kit-Nut	1
2	4071613	Kit (Upper)	1
3	4038677	Kit Pivot (Lower)	1
4	~~4104385~~		
	4098460	Kit-Gas Spring	1
5	1665225	Sensor Assembly (Steering Column)	1
5	1672339	Spring	1
5	1359482	E-Ring	2
6	1476421	Washer	4

STEERING COLUMN ASSEMBLY (FIGURE 4-5) TELESCOPIC (→ 10/2013)



BP220288

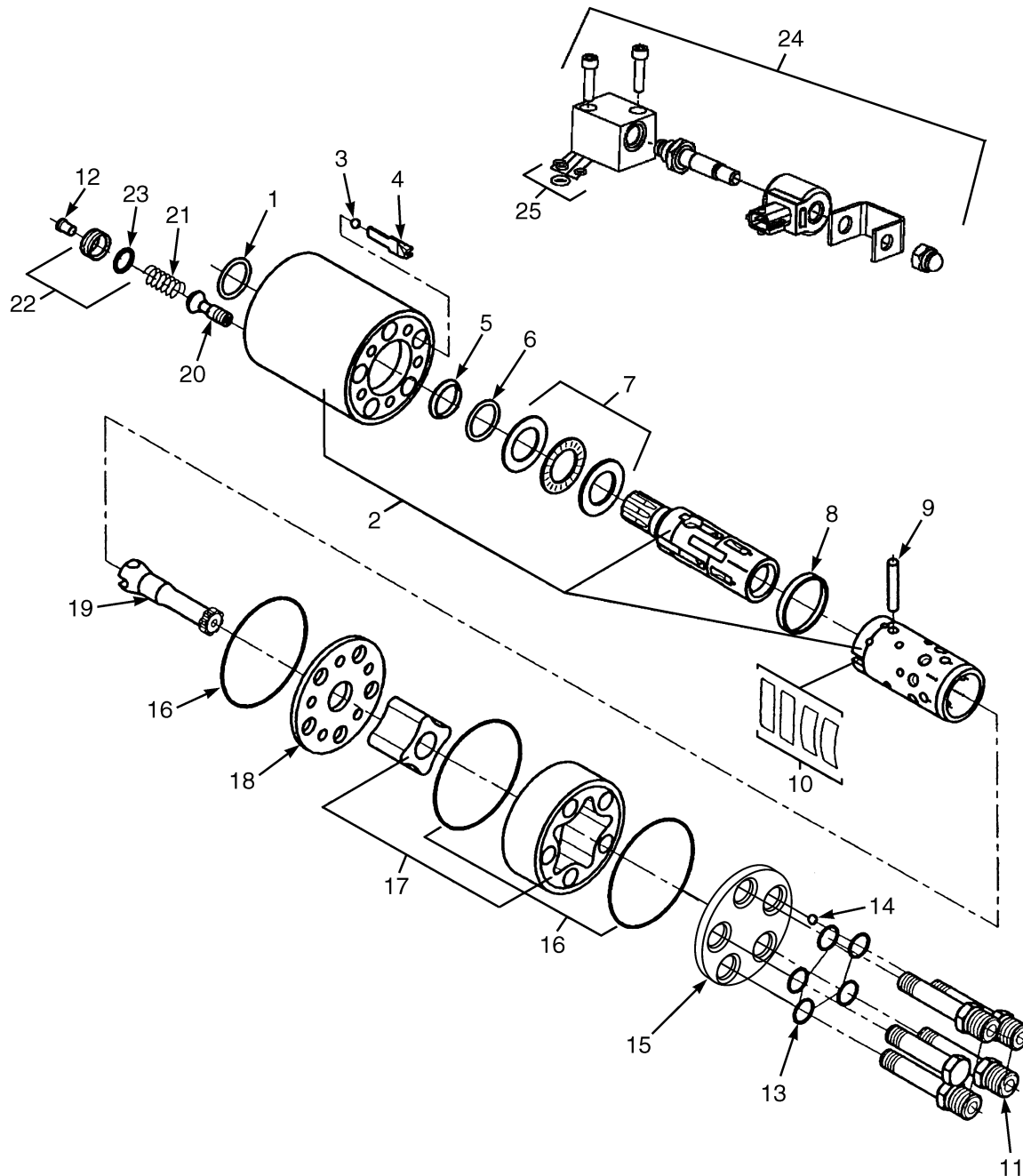
ITEM	PART NO.	DESCRIPTION	QTY
	2111288	Steering Column (Telescopic)	1
1	1562492	Kit-Nut	1
2	1707398	Kit-Handle	1
3	1707399	Kit-Steering Support	1
3	2046035	Switch	1
3	1593347	Plate	1
4	1707400	Kit-Support	1
5	1707401	Kit-Gas Spring	1
6	1707402	Kit-Pivot	1
7	1707403	Kit-Support	1
8	1707404	Kit-Support	1
9	1707405	Kit Lift-O-Mat	1
10	1707406	Kit-Lever	1
11	1692284	Cable Assy	1
12	1707407	Kit-Sensor	1

STEERING COLUMN ASSEMBLY (FIGURE 4-6)
TELESCOPIC (10/2013 →)

BP220406

ITEM	PART NO.	DESCRIPTION	QTY
	4619560	Steering Column (Telescopic)	1
1	1562492	Kit-Nut	1
2	4071541	Kit (Upper Telescoping)	1
3	4071542	Kit (Clamping Lever)	1
4	4071543	Kit (Lower Telescoping)	1
5	4071544	Kit-Shaft (Shaft)	1
6	4038677	Kit Pivot (Lower)	1
7	4071546	Kit (Tilt Memory Cable)	1
8	4071545	Kit (Tilt Memory Lever)	1
9	4071549	Kit (Gas Spring-Small)	1
10	4071548	Kit (Release Spring)	1
11	4071547	Kit (Gas Spring-Big)	1
12	1665225	Sensor Assembly (Steering Column)	1
12	1359482	E-Ring	2
12	1672339	Spring	1
13	1476421	Washer	4

STEERING HAND PUMP ASSEMBLY (FIGURE 4-7) (→ 11/2014)



BP220150

STEERING HAND PUMP ASSEMBLY

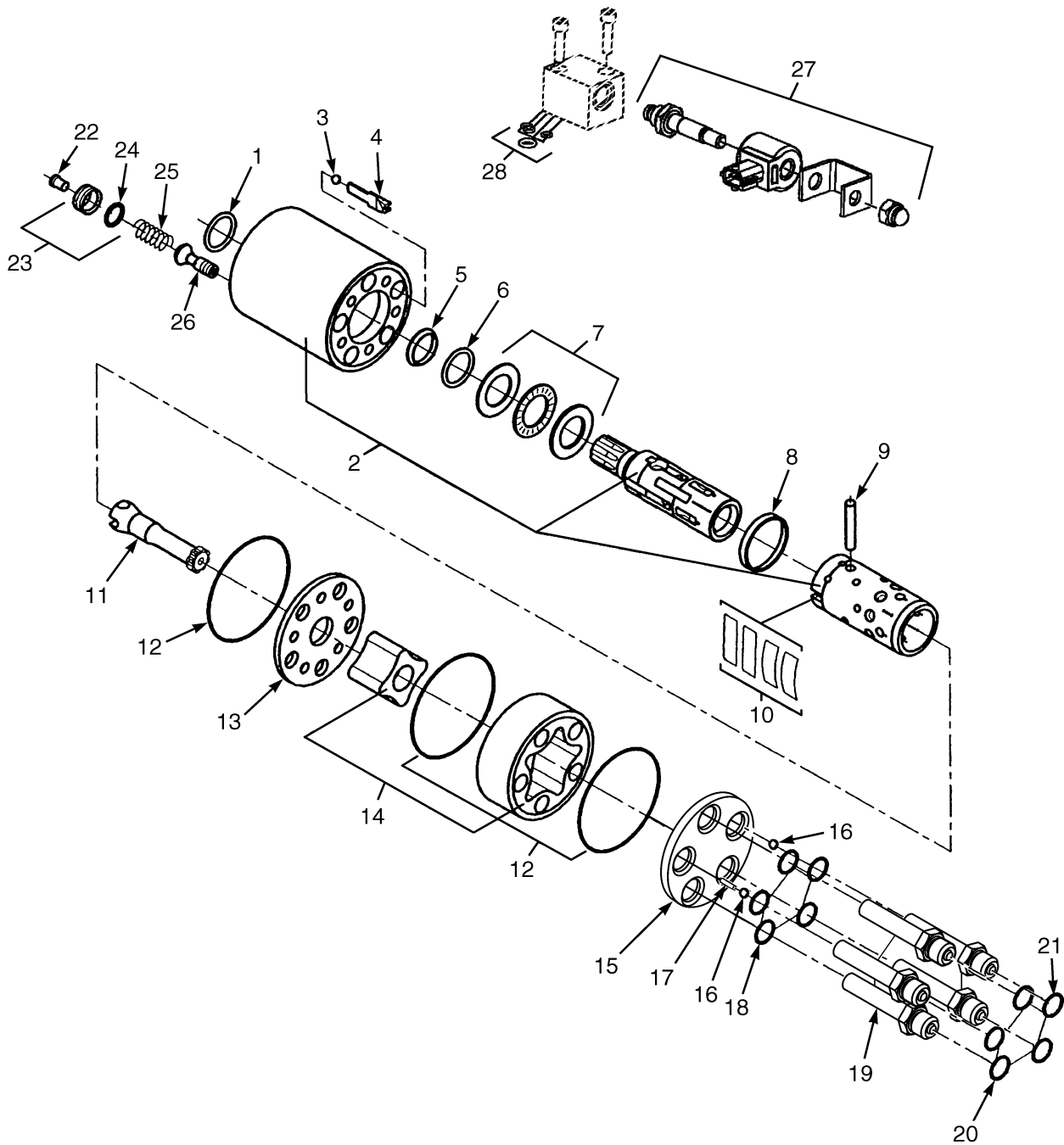
(→ 11/2014)

KEY:**A: Without Sync Steer****B: With Sync Steer**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1655650	Steering Hand Pump	1	..
	1655652	Steering Hand Pump	..	1
1	1467390	Dust Seal	1	1
2	.....	Housing Spool and Sleeve	1	1
3	.....	Ball	1	1
4	.....	Stop	1	1
5	.....	Shaft Seal	1	1
6	1467424	Seal (Integrated Column)	1	1
7	.....	Bearing	1	1
8	.....	Ring	1	1
9	.....	Pin (Cross)	1	1
10	.....	Kit Spring	1	1
11	.....	Screw (With O-Ring)	5	5
12	.....	Cab	1	1
13	.....	O-Ring	5	5
14	.....	Ball	1	1
15	.....	End Cover	1	1
16	.....	O-Ring	3	3
17	.....	Gear Set	1	1
18	.....	Plate	1	1
19	.....	Shaft	1	1
20	.....	Relief Valve	1	1
21	.....	Spring (Relief Valve)	1	1
22	.....	Adjusting Screw	1	1
23	1467425	O-Ring	1	1
24	.....	Solenoid	..	1
25	.....	Solenoid Rings	..	1
	1467430	Kit-Seal	1	1
	1705632	Kit-Solenoid	..	1

STEERING HAND PUMP ASSEMBLY (FIGURE 4-8)

(11/2014 →)



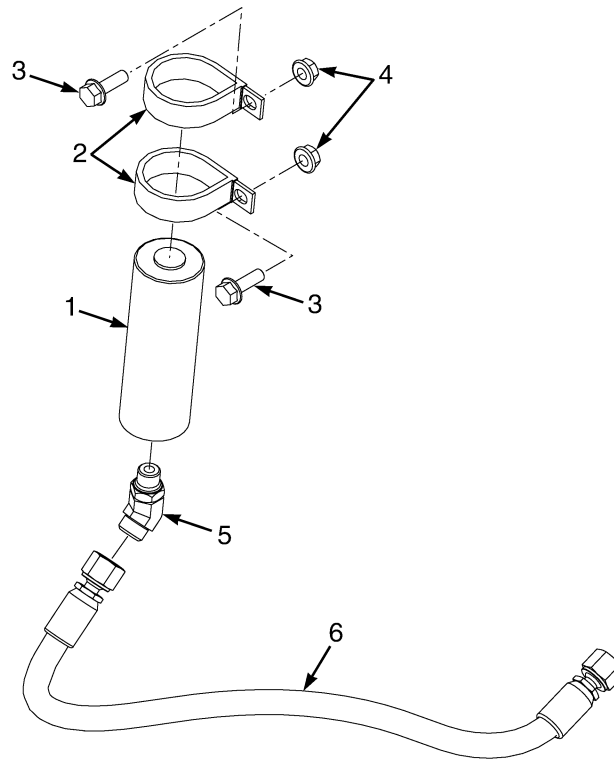
BP220339

STEERING HAND PUMP ASSEMBLY

(11/2014 →)

KEY:**A: Without Synchronous Steering****B: With Synchronous Steering**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4634957	Steering Control Unit	1	..
	4634959	Steering Control Unit	..	1
1		Dust Seal	1	1
2		Housing Spool and Sleeve	1	1
3		Ball	1	1
4		Stop	1	1
5		Seal	1	1
6		Shaft Seal	1	1
7		Bearing	1	1
8		Ring	1	1
9		Pin	1	1
10		Spring	1	1
11		Shaft	1	1
12		O-Ring	3	3
13		Plate	1	1
14		Gear Set	1	1
15		End Cover	1	1
16		Ball	2	2
17		Pin	1	1
18		O-Ring	5	5
19		Screws	5	5
20		O-Ring	4	4
21		O-Ring	1	1
22		Cap	1	1
23		Adjusting Screw	1	1
24		O-Ring	1	1
25		Spring (Relief Valve)	1	1
26		Relief Valve	1	1
27		Solenoid	..	1
28		Solenoid Rings	..	1
	1467430	Kit-Seal	1	1
	4002477	Kit-Seal	1	1

STEERING ACCUMULATOR (FIGURE 4-9)

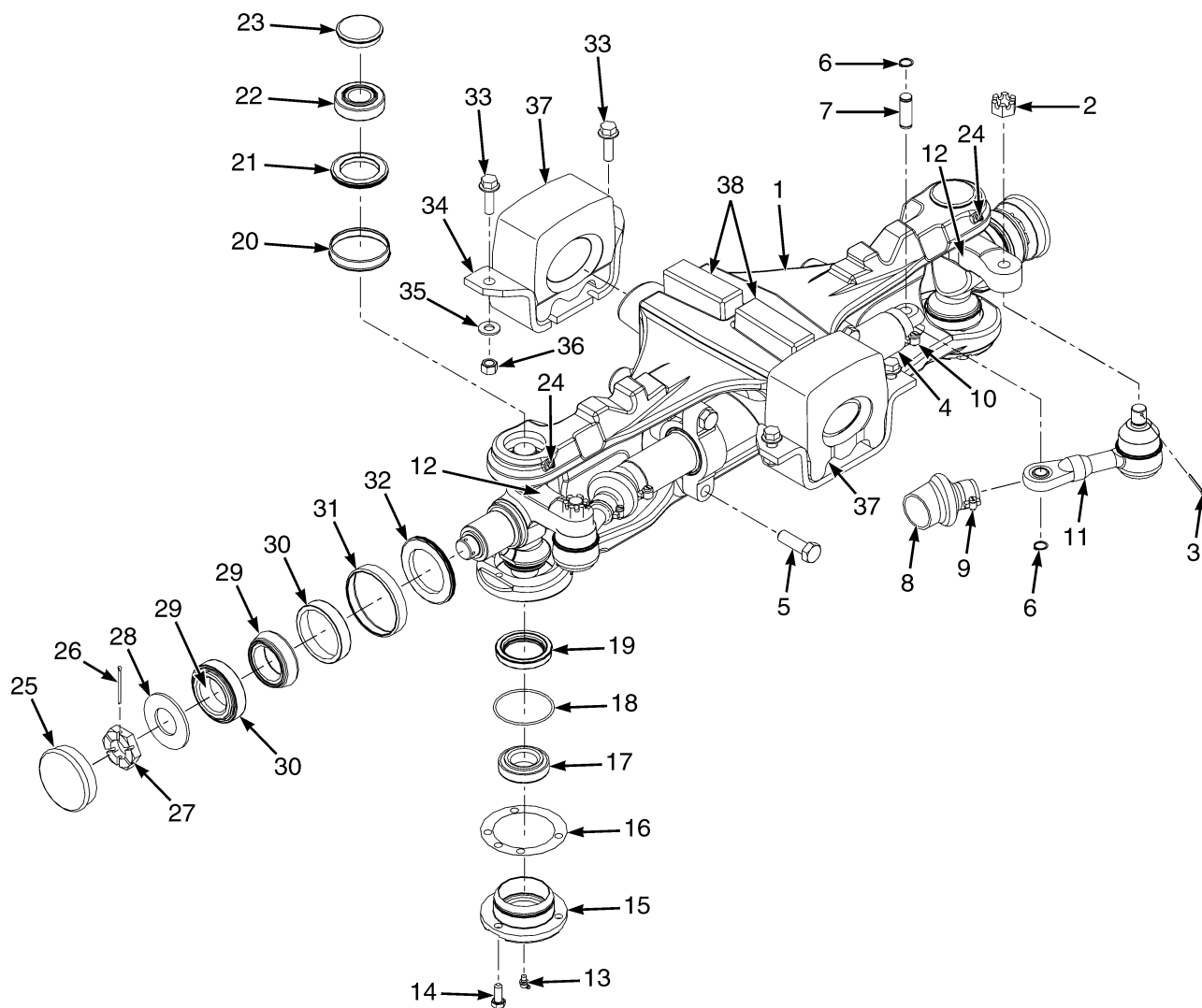
BP220165

ITEM	PART NO.	DESCRIPTION	QTY
1	2110399	Accumulator	1
2	181899	Clamp	2
3	1510113	Capscrew	2
4	4382472	Nut	2
5	1516199	Fitting	1
6	2110401	Hose Assy	1

NOTES

[illegible]

STEERING AXLE (FIGURE 4-10) WITHOUT SENSOR

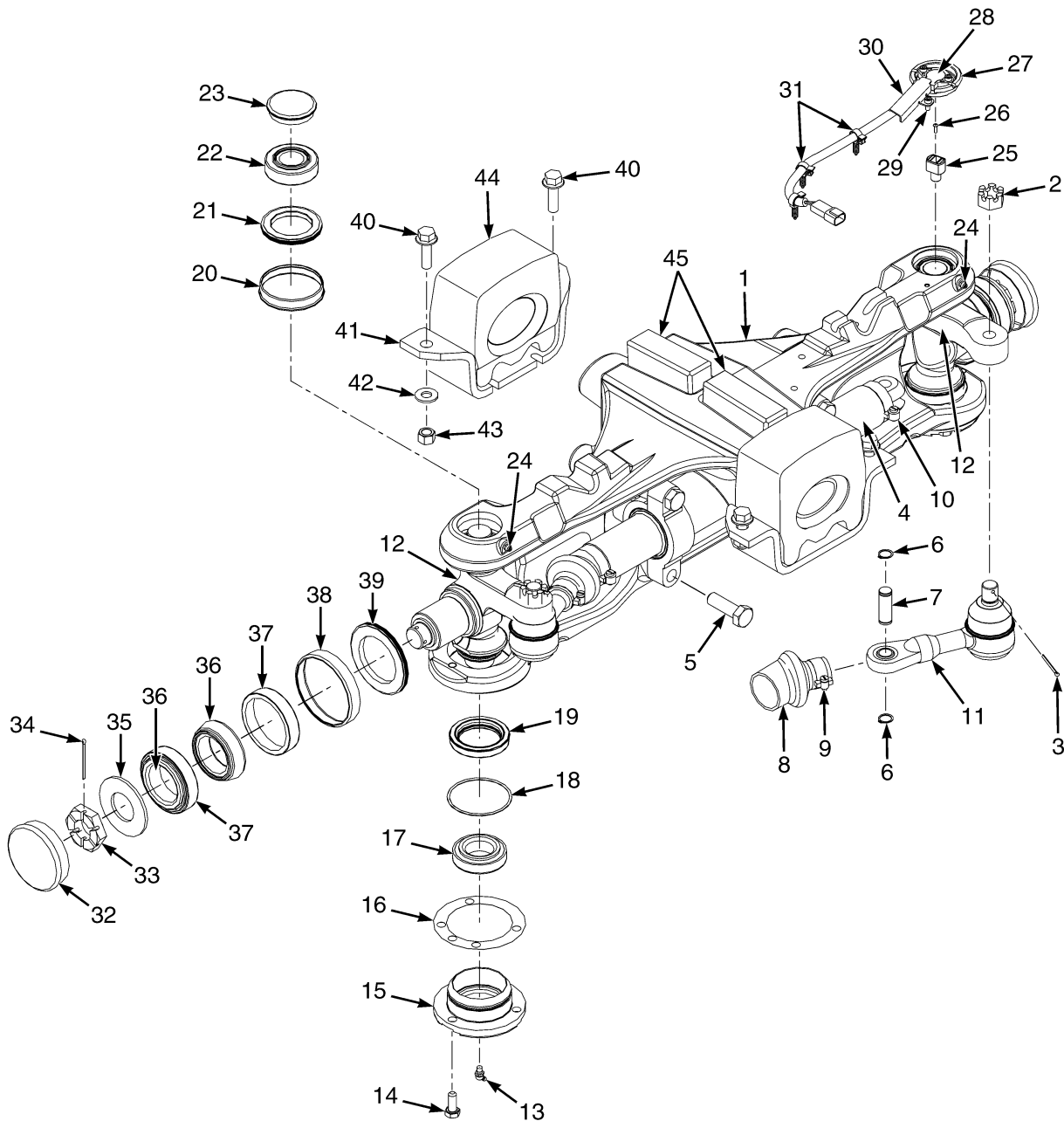


BP220335

**STEERING AXLE
WITHOUT SENSOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	1534420	Steering Axle (Assembly)	1
1	1534418	Steering Axle (Frame)	1
2	21189	Nut	2
3	15225	Cotter Pin	2
4	1593351	Steering Cylinder (☞ Figure 4-12).....	1
5	293686	Capscrew	4
6	58903	Snap Ring	4
7	1568271	Pin	2
8	185869	Boot	2
9	127045	Clamp (Hose)	2
10	119236	Clamp	2
11	185870	Tie Rod Assembly	2
11	185872	Bushing	1
11	4017812	Tie Rod (Optional)	2
12	1464149	Spindle (RH Larger)	1
12	1464150	Spindle (LH Larger)	1
13	13963	Grease Fitting	2
14	293628	Capscrew	6
15	369812	Bearing Cap	2
16	185856	Shim (0.005 in.)	AR
16	185857	Shim (0.007 in.)	AR
16	185858	Shim (0.020 in.)	AR
17	1374823	Bearing Set	1
17	135657	Bearing Cone	2
17	135658	Bearing Cup	2
18	39678	O-Ring	2
19	266733	Seal	2
20	153717	Wear Sleeve	2
21	153716	Seal	2
22	1374815	Bearing Set	1
22	156194	Bearing Cup	2
22	156195	Bearing Cone	2
23	185860	Plug	2
24	13957	Grease Fitting	2
25	69029	Cap	2
26	15227	Cotter Pin	2
27	1461672	Nut	2
28	1461671	Washer	2
29	183615	Bearing Cone	4
30	183614	Bearing Cup	4
31	164639	Wear Sleeve	2
32	44542	Seal	2
33	1566853	Capscrew	4
34	1543254	Plate	2
35	320162	Washer	4
36	300937	Nut	4
37	1525354	Rubber Mount	2
38	1388838	Rubber Mount	2

STEERING AXLE (FIGURE 4-11) WITH SENSOR



BP220336

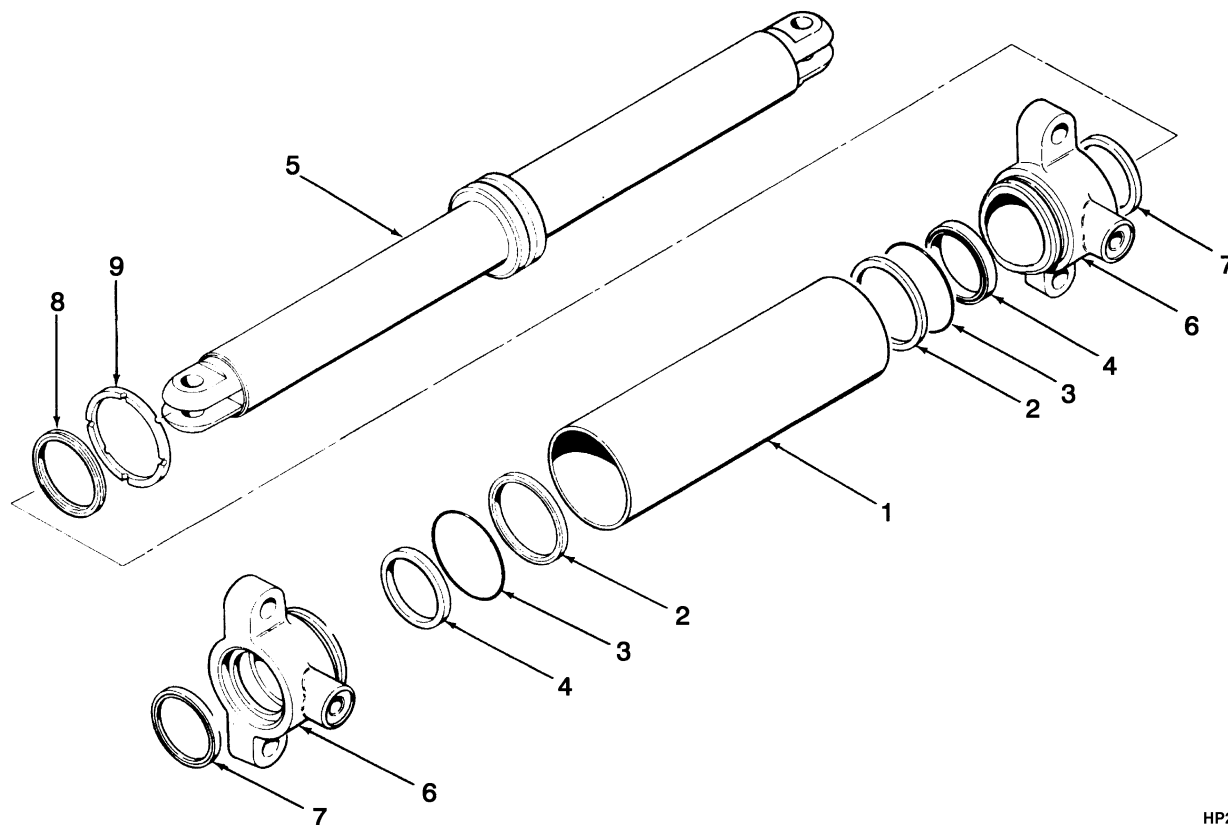
**STEERING AXLE
WITH SENSOR**

ITEM	PART NO.	DESCRIPTION	QTY
	1650895	Steering Axle (Assembly With Sensor)	1
1	1692356	Steering Axle	1
1	1650202	Steering Axle (Frame)	1
2	21189	Nut	2
3	15225	Cotter Pin	2
4	1593351	Steering Cylinder (☞ Figure 4-12).....	1
5	293686	Capscrew	4
6	58903	Snap Ring	4
7	1568271	Pin	2
8	185869	Boot	2
9	127045	Clamp (Hose)	2
10	119236	Clamp	2
11	185870	Tie Rod Assembly	2
11	185872	Bushing	1
11	185871	Tie Rod	1
12	1694616	Spindle (RH)	1
12	1464150	Spindle (LH Larger)	1
13	13963	Grease Fitting	2
14	293628	Capscrew	6
15	369812	Bearing Cap	2
16	185856	Shim (0.005 in.)	AR
16	185857	Shim (0.007 in.)	AR
16	185858	Shim (0.020 in.)	AR
17	135657	Bearing Cone	2
17	135658	Bearing Cup	2
18	39678	O-Ring	2
19	266733	Seal	2
20	153717	Wear Sleeve	2
21	153716	Seal	2
22	156194	Bearing Cup	2
22	156195	Bearing Cone	2
23	185860	Plug	1
24	13957	Grease Fitting	2
25	2089058	Magnet (Carrier)	1
26	296144	Capscrew	1
27	1694543	Cap	1
28	1683761	Sensor	1
29	a 2046866	Capscrew	3
29	b 293742	Screw	3
30	1683842	Cover	1
31	1509888	Clip	3
32	69029	Cap	2
33	1461672	Nut	2
34	15227	Cotter Pin	2
35	1461671	Washer	2
36	183615	Bearing Cone	4
37	183614	Bearing Cup	4
38	164639	Wear Sleeve	2
39	44542	Seal	2
40	1566853	Capscrew	4

**STEERING AXLE
WITH SENSOR**

ITEM	PART NO.	DESCRIPTION	QTY
41	1543254	Plate	2
42	320162	Washer	4
43	300937	Nut	4
44	1525354	Rubber Mount	2
45	1388838	Rubber Mount	2

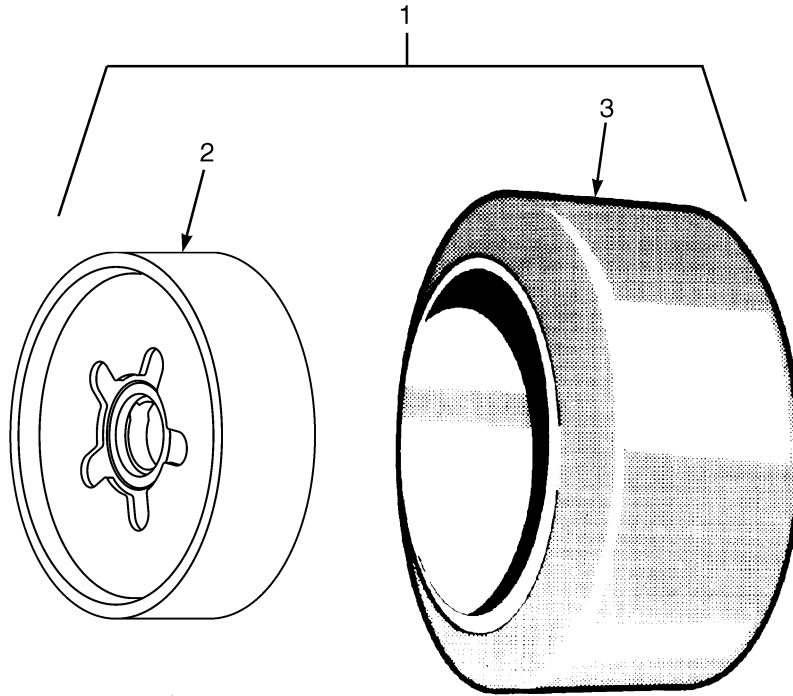
FOOTNOTES:**a** → 10/2013**b** 10/2013 →

STEERING CYLINDER (FIGURE 4-12)

HP220095

ITEM	PART NO.	DESCRIPTION	QTY
	1593351	Steering Cylinder	1
1	329218	Tube Wldmt-Cylinder	1
2	1310391	Back-Up Ring	2
3	1310389	O-Ring	2
4	2032490	Seal	2
5	1591967	Cylinder Rod	1
6	1591667	End Cap	2
7	2071094	Rod Wiper	2
8	14191	O-Ring	2
9	2044370	Piston Seal	1
	1593352	Kit-Seal	1

STEER TIRES AND WHEELS (FIGURE 4-13) MONARCH — SMOOTH TREAD



BP220337

KEY:

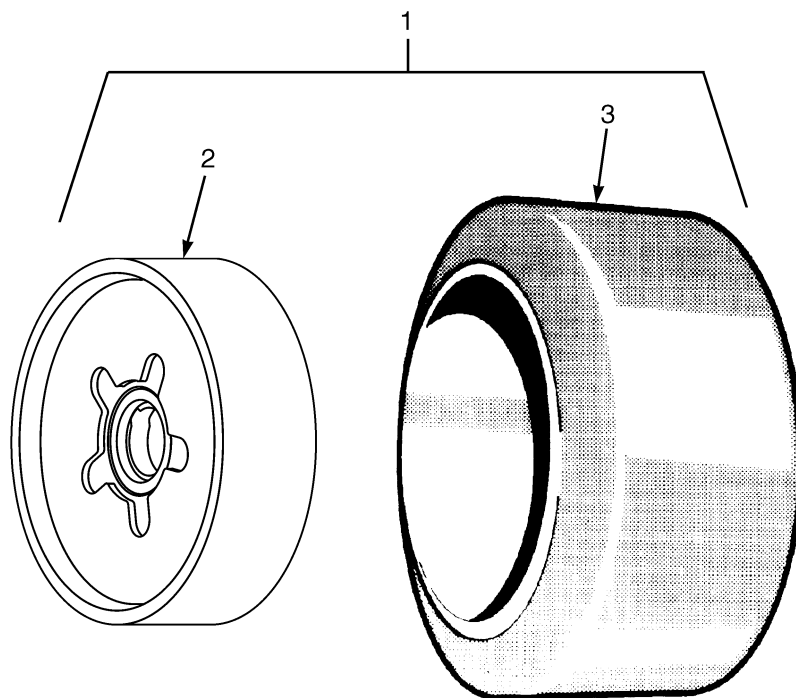
A: E45XN-55XN
B: E60XN-65XN
C: E70XN

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	a 1656201	Wheel and Tire Assembly (16 x 5 x 10.5)	2	..	..
1	a 1656202	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2	..
1	a 1668115	Wheel And Tire Assembly (16 x 7 x 10.5)	..	..	2
1	b 1540356	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..	..
1	b 1540357	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2	..
1	b 1668111	Wheel And Tire Assembly (16 x 7 x 10.5)	..	..	2
2	1461669	Wheel	1	1	..
2	1668113	Wheel	..	..	1
3	a 1655319	Cushion Tire (16 x 5 x 10.5)	1	..	..
3	a 1655320	Cushion Tire (16 x 6 x 10.5)	..	1	..
3	a 1668116	Cushion Tire (16 x 7 x 10.5)	..	..	1
3	b 1540115	Cushion Tire (16 x 5 x 10.5)	1	..	..
3	b 1540116	Cushion Tire (16 x 6 x 10.5)	..	1	..
3	b 1668112	Cushion Tire (16 x 7 x 10.5)	..	..	1

FOOTNOTES:

a Non-Marking Compound

b Standard Compound

STEER TIRES AND WHEELS (FIGURE 4-14)
TRELLEBORG — SMOOTH TREAD

BP220337

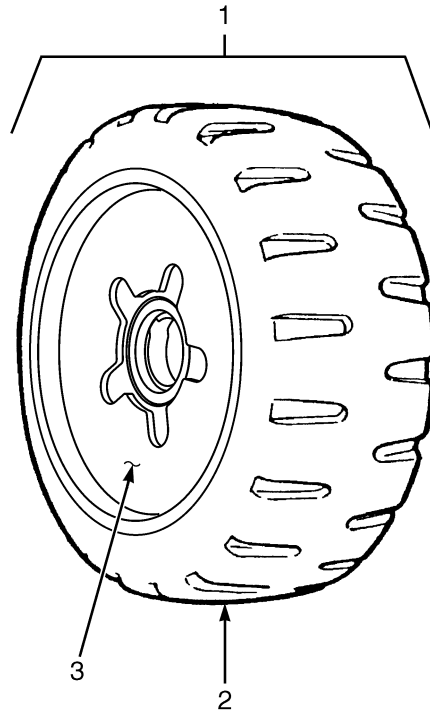
KEY:**A: E45XN-55XN****B: E60XN-65XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 1693648	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..
1	a 1693649	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2
1	b 1693642	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..
1	b 1693643	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2
2	1461669	Wheel	1	1
3	a 1693657	Cushion Tire (16 x 5 x 10.5)	1	..
3	a 237208	Cushion Tire (16 x 6 x 10.5)	..	1
3	b 1693651	Cushion Tire (16 x 5 x 10.5)	1	..
3	b 1693652	Cushion Tire (16 x 6 x 10.5)	..	1

FOOTNOTES:**a** Non-Marking Compound**b** Standard Compound

STEER TIRES AND WHEELS (FIGURE 4-15)

MONARCH — LUG TREAD

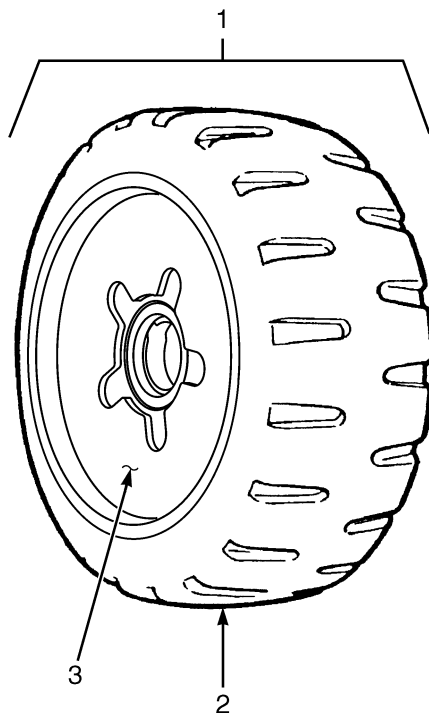


BP220338

KEY:**A: E45XN-55XN****B: E60XN-65XN****C: E70XN**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	a 1668622	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..	..
1	a 1668623	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2	..
1	a 1689946	Wheel And Tire Assembly (16 x 7 x 10.5)	..	..	2
1	b 1540358	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..	..
1	b 1540359	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2	..
1	b 1689945	Wheel And Tire Assembly (16 x 7 x 10.5)	..	..	2
2	a 1668614	Cushion Tire (16 x 5 x 10.5)	1	..	..
2	a 1668615	Cushion Tire (16 x 6 x 10.5)	..	1	..
2	a 1689944	Cushion Tire (16 x 7 x 10.5)	..	..	1
2	b 1540119	Cushion Tire (16 x 5 x 10.5)	1	..	..
2	b 1540120	Cushion Tire (16 x 6 x 10.5)	..	1	..
2	b 1689943	Cushion Tire (16 x 7 x 10.5)	..	..	1
3	1461669	Wheel	1	1	..
3	1668113	Wheel	..	..	1

FOOTNOTES:**a** Non-Marking Compound**b** Standard Compound

STEER TIRES AND WHEELS (FIGURE 4-16)
TRELLEBORG — LUG TREAD

BP220338

KEY:**A: E45XN-55XN****B: E60XN-65XN****C: E70XN**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	a 1693645	Wheel And Tire Assembly (16 x 5 x 10.5)	2	..	..
1	a 1693646	Wheel And Tire Assembly (16 x 6 x 10.5)	..	2	..
1	a 1693647	Wheel And Tire Assembly (16 x 7 x 10.5)	..	..	2
2	a 1693654	Cushion Tire (16 x 5 x 10.5)	1	..	..
2	a 1693655	Cushion Tire (16 x 6 x 10.5)	..	1	..
2	a 1693656	Cushion Tire (16 x 7 x 10.5)	..	..	1
3	1461669	Wheel	1	1	..
3	1668113	Wheel	..	..	1

FOOTNOTES:**a** Standard Compound

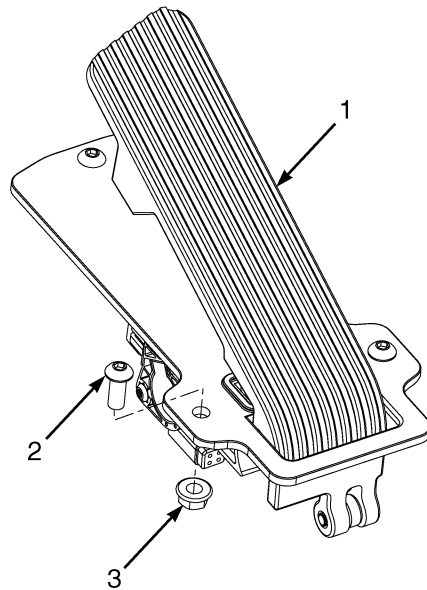
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SECTION 5
BRAKE/ACCELERATOR SYSTEM

DESCRIPTION	PAGE
ACCELERATOR PEDAL ASSEMBLY	
MONOTROL	5-3
STANDARD	5-2
BRAKE ASSEMBLY	5-4
BRAKE MASTER CYLINDER ASSEMBLY	5-10
BRAKE PEDAL LINKAGE	5-8
PARK BRAKE	
AUTOMATIC	5-14
MANUAL	5-12

ACCELERATOR PEDAL ASSEMBLY (FIGURE 5-1)

STANDARD

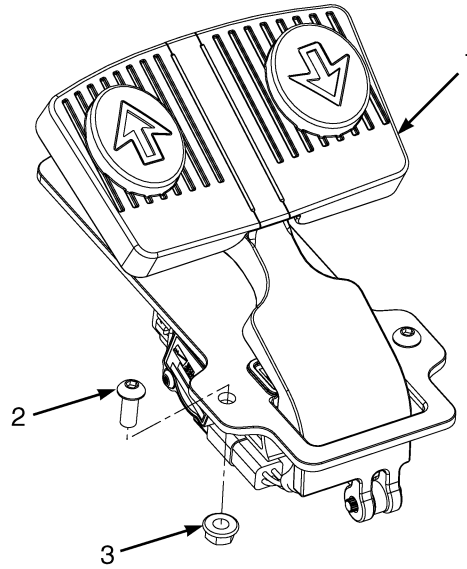


BP040142

ITEM	PART NO.	DESCRIPTION	QTY
1	a 2094798	Accelerator Pedal (Standard)	1
1	b 4016800		
	4142049	Accelerator Pedal (Standard w/ Pad)	1
1	b 4016802	Accelerator Pedal (Cover)	1
1	4083440	Kit-Sensor	1
2	369242	Capscrew	3
3	313828	Nut	3

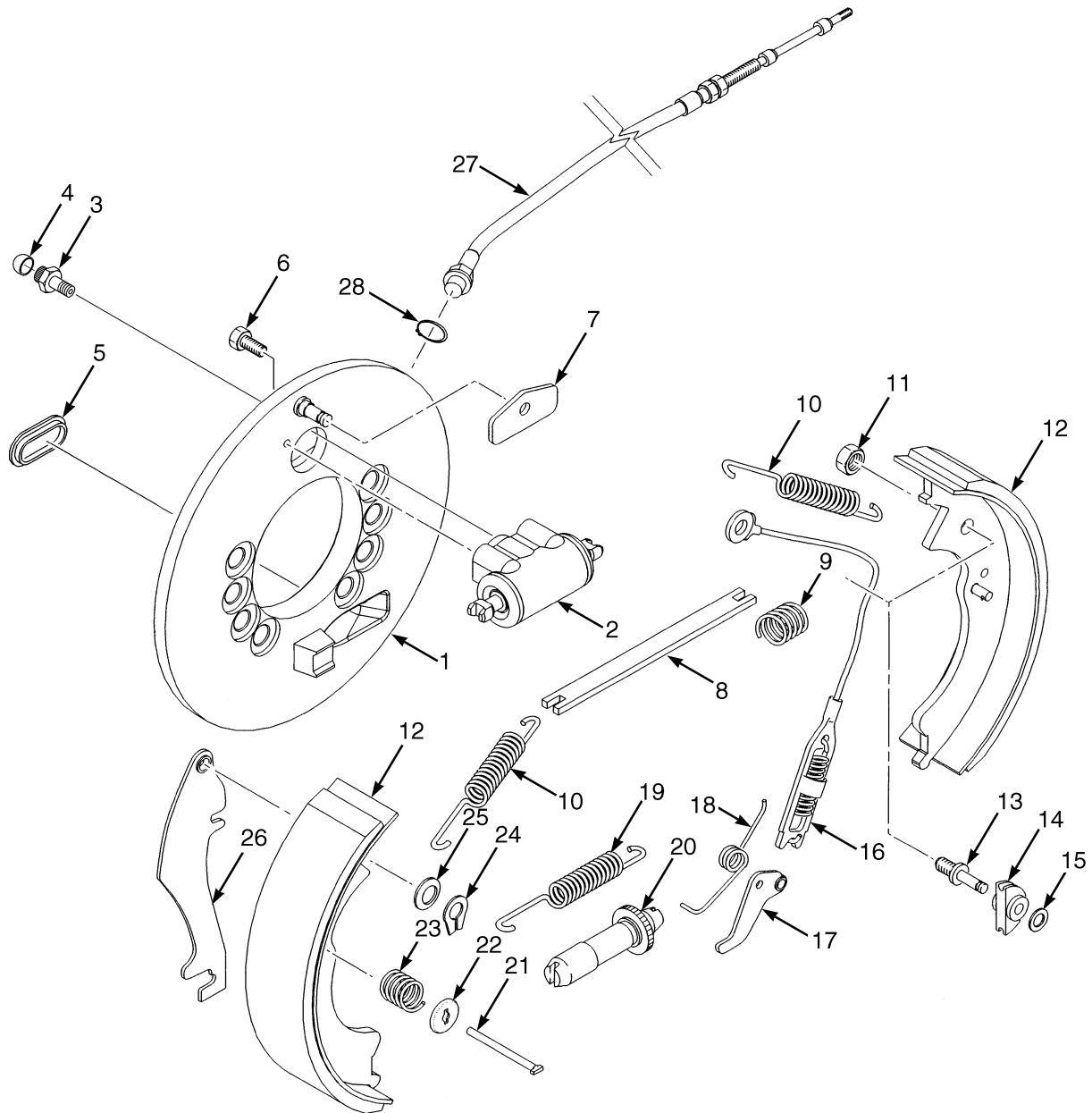
FOOTNOTES:

a → S/N A268N03621H**b** S/N A268N03622H →

ACCELERATOR PEDAL ASSEMBLY (FIGURE 5-2)
MONOTROL

ITEM	PART NO.	DESCRIPTION	QTY
1	1652183 4050140 4142048	Accelerator Pedal	1
2	369242	Capscrew	3
3	313828	Nut	3

BRAKE ASSEMBLY (FIGURE 5-3)



BP040047

BRAKE ASSEMBLY**KEY:****A: Right Hand****B: Left Hand**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1664137	Brake Assembly (RH, With Cable) (With Cable)	1	..
	1664136	Brake Assembly (LH, With Cable) (With Cable)	..	1
	1565308	Brake Assembly (RH, w/o Cable) (Without Cable)	1	..
	1565307	Brake Assembly (LH, w/o Cable) (Without Cable)	..	1
1	1565289	Backplate	1	..
1	1565288	Backplate	..	1
2	1565290	Wheel Cylinder	1	1
2	1334647	Kit-Repair Wheel Cylinder	1	1
3	2041967	Bleeder Screw	1	1
4	1361504	Cap	1	1
5	1334642	Cover	1	1
6	1565303	Bolt	2	2
7	2037343	Wear Plate	1	1
8	1360796	Strut	1	..
8	1361507	Strut	..	1
9	1360797	Spring	1	1
10	.....	Spring	1	1
11	.....	Nut	1	1
12	1565314	Kit-Brake Shoe	1	..
12	1565313	Kit-Brake Shoe	..	1
13	.....	Pin	1	1
14	1334644	Sheave	1	1
15	1361500	Washer	1	1
16	.....	Cable and Spring Assembly	1	1
17	2037518	Lever	1	..
17	2037517	Lever	..	1
18	.....	Spring	1	1
19	2037340	Spring	1	1
20	~~1565295~~			
	1600492	Adjuster	1	..
20	~~1565294~~			
	1600491	Adjuster	..	1
21	2037323	Pin	1	1
22	2037341	Cup	1	1
23	.....	Spring	1	1
24	1338916	Retainer	1	1
25	1338917	Washer	1	1
26	.....	Park Brake Lever	1	1
27	1708276	Parking Brake Cable	1	..
27	1708275	Parking Brake Cable	..	1
28	1361502	Snap Ring	1	1
	1565316	Kit-Spring	1	1
	1565310	Kit-Adjuster , RH (RH)	1	..
	1565309	Kit-Adjuster , LH (LH)	..	1
	1565311	Kit-Repair Parking Brake , LH (LH)	..	1
	1565312	Kit-Park Brake , RH (RH)	1	..

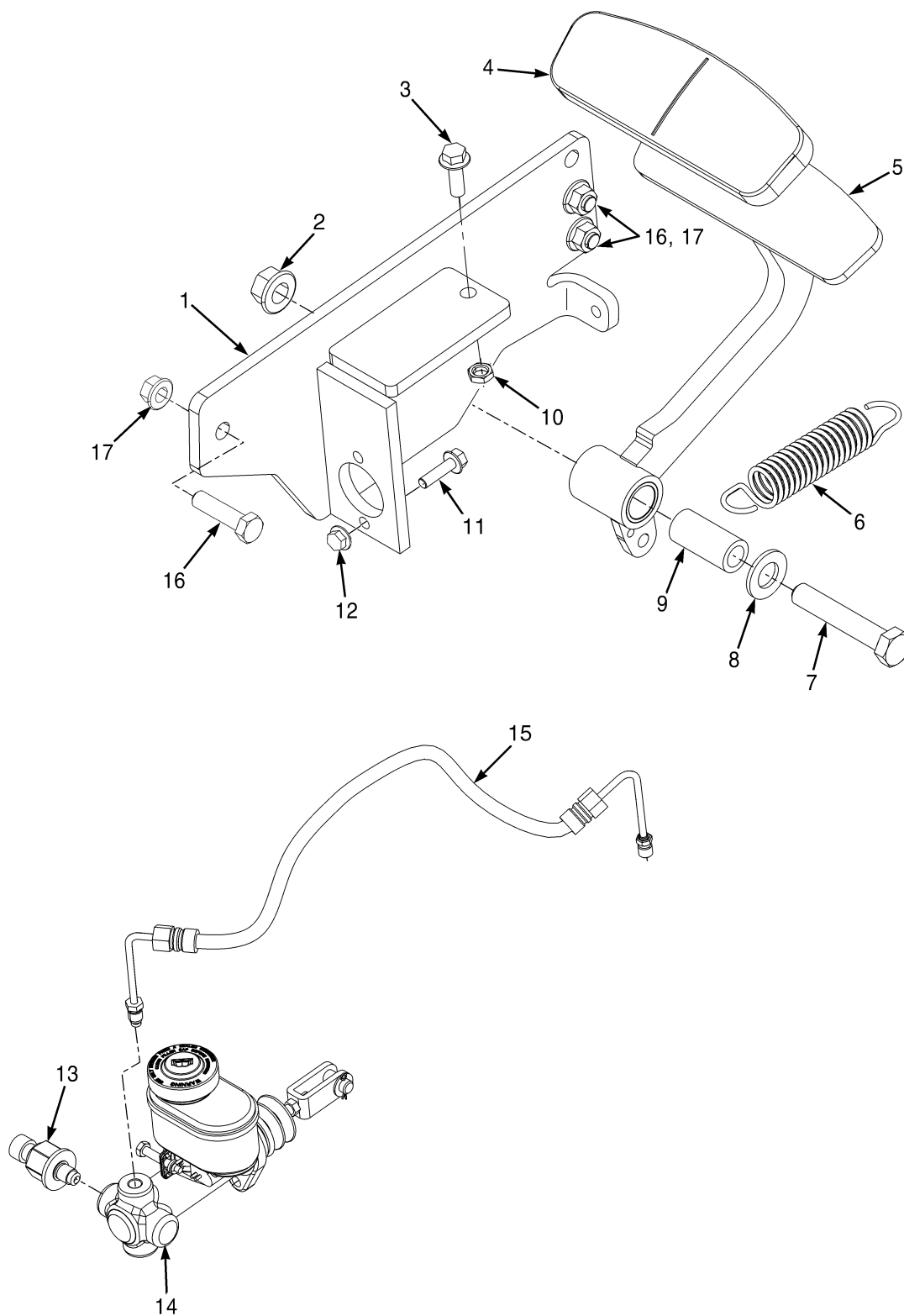
BRAKE ASSEMBLY**KEY:****A:** Right Hand**B:** Left Hand

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1565315	Kit-Hold Down	1	1

NOTES

[illegible]

BRAKE PEDAL LINKAGE (FIGURE 5-4)

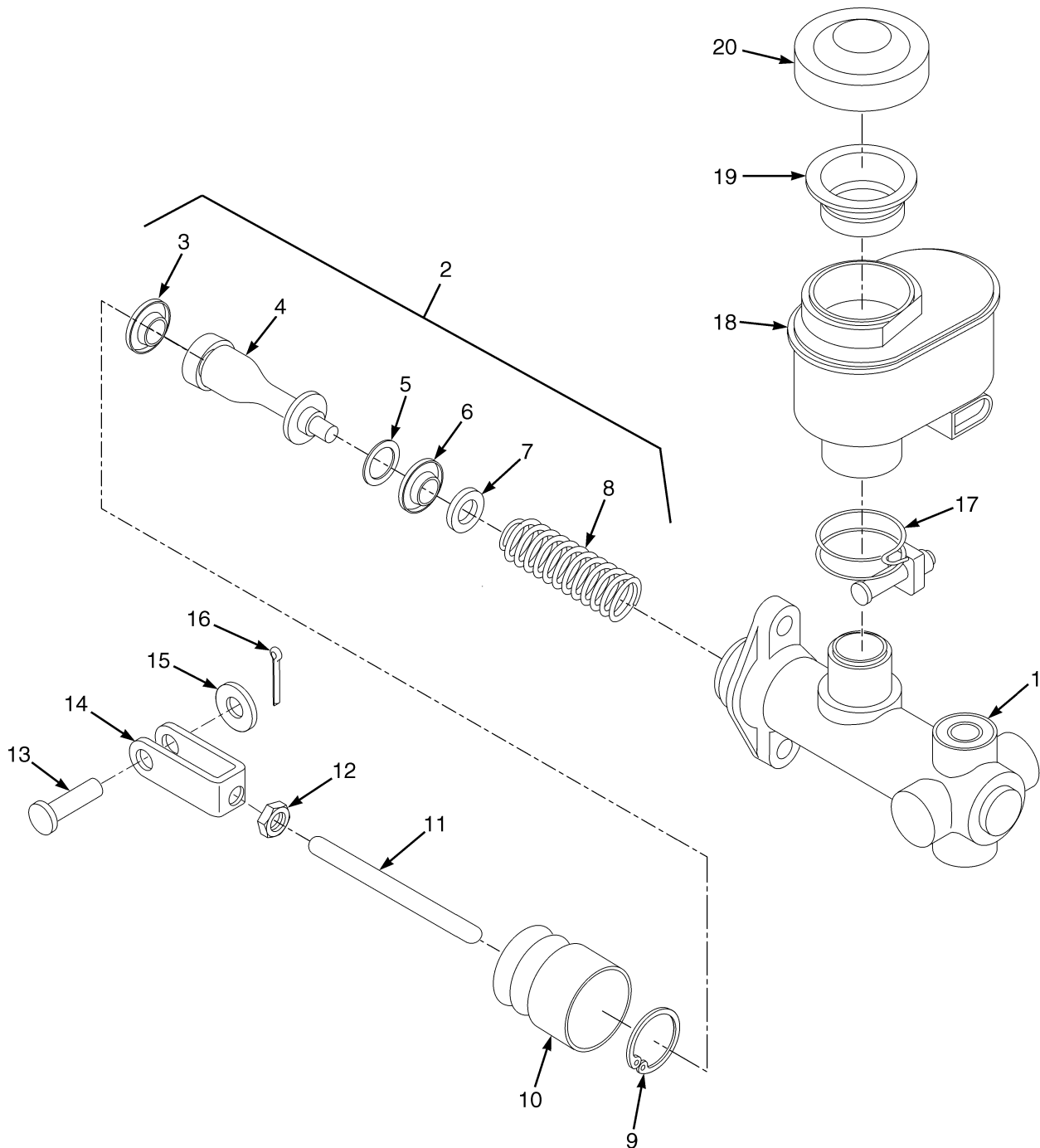


BP040155

BRAKE PEDAL LINKAGE

ITEM	PART NO.	DESCRIPTION	QTY
	1655660	Brake Assembly	1
1	1677664	Brake Mount Plate	1
2	1586436	Nut	1
3	1527884	Capscrew	1
4	1673283	Pad (Brake Pedal)	1
5	1655659	Brake Pedal Assembly	1
5	1655658	Brake Pedal	1
5	66359	Bushing	2
6	1340998	Spring	1
7	292570	Capscrew	1
8	296427	Washer	1
9	1656319	Tube	1
10	1593336	Nut	2
11	1527881	Capscrew	2
12	~~1382472~~		
	1502543	Nut	2
13	1701850	Transducer	1
13	~~1707679~~		
	4083331	Pressure Transducer	1
14	1656045	Master Cylinder Assembly	1
15	2111677	Tube Assy	1
16	1528889	Capscrew	3
17	~~1370949~~		
	1528888	Nut (Shoulder)	3

BRAKE MASTER CYLINDER ASSEMBLY (FIGURE 5-5)



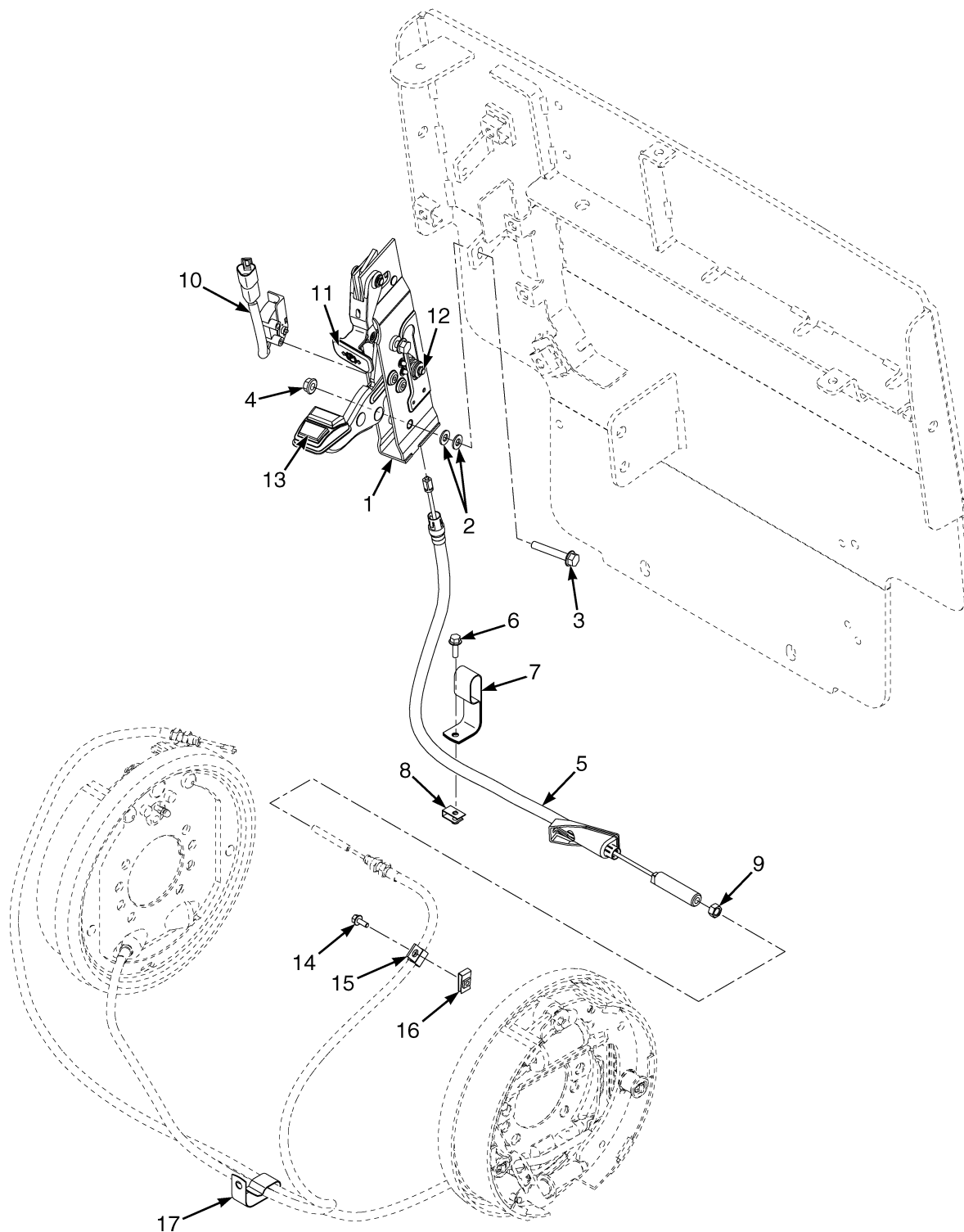
BP040118

BRAKE MASTER CYLINDER ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
	1656045	Master Cylinder Assembly	1
1	.....	Cylinder	1
2	.....	Piston Assembly	1
3	.....	Secondary Cup	1
4	.....	Piston	1
5	.....	Spacer	1
6	.....	Primary Cup	1
7	.....	Retainer	1
8	.....	Spring	1
9	.....	Retaining Ring	1
10	.....	Boot	1
11	1671849	Push Rod	1
12	1671850	Nut	1
13	1671852	Pin	1
14	~~1556263~~		
	1367194	Rod End	1
15	1556266	Washer	1
16	1671853	Split Pin	1
17	1671854	Clamp	1
18	.....	Reservoir	1
19	.....	Diaphragm Gasket	1
20	.....	Cap	1
	a 1684101	Switch (Brake Level)	1
	1671859	Kit-Repair Master Cylinder	1

FOOTNOTES:**a** Not Illustrated

PARK BRAKE (FIGURE 5-6) MANUAL



BP040239

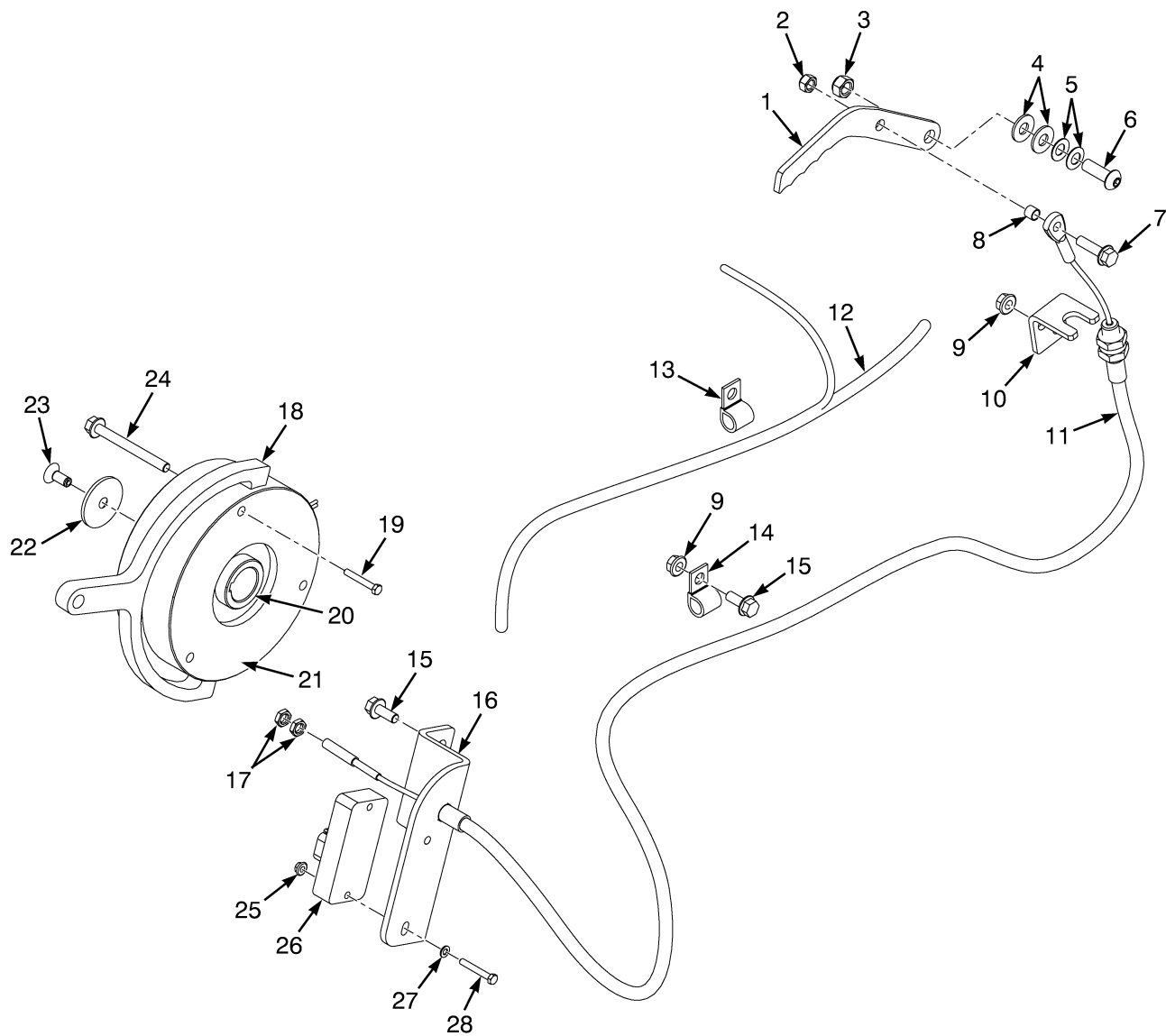
**PARK BRAKE
MANUAL**

ITEM	PART NO.	DESCRIPTION	QTY
1	~~1652838~~ 4149837	Parking Brake Assembly	1
2	320157	Washer	2
3	1510115	Capscrew	2
4	~~1382472~~ 1502543	Nut	2
5	1652842	Cable (Park Brake)	1
6	1527877	Capscrew	1
7	1676536	Clip	1
8	1350215	Nut	1
9	303117	Nut	1
10	a 4034955	Kit-Sensor	1
11	a 4034954	Kit-Handle	1
11	4035674	Spring	1
12	a 4034953	Clevis Kit	1
13	a 4034896	Pad Kit Pedal Kit	1
13	323617	Pad	1
14	1527876	Capscrew	1
15	136516	Clamp	1
16	325182	Nut , Foldover	1
17	1637398	Clip	1

FOOTNOTES:

a Included in Parking Brake Assembly (Item 1)

PARK BRAKE (FIGURE 5-7) AUTOMATIC



BP040062

**PARK BRAKE
AUTOMATIC**

ITEM	PART NO.	DESCRIPTION	QTY
1	4000480	Handle	1
2	302400	Nut	1
3	302401	Locknut	1
4	320160	Washer	2
5	1581747	Disk Spring	2
6	296174	Capscrew	1
7	1527881	Capscrew	1
8	a 1678368	Bushing	1
9	~~1382472~~		
	1502543	Nut	5
10	1677802	Plate (Bracket)	1
11	4600129	Cable (Parking Brake)	1
12	2108494	Wire Harness (Park Brake) (☞ Figure 2-71).....	1
13	385670	Clamp	1
14	136516	Clamp	1
15	1527880	Capscrew	7
16	1678177	Plate (Bracket)	1
17	1593335	Nut	1
18	2104032	Parking Brake	1
18	.....	Friction Disc	1
19	.....	Screw	3
20	.....	Hub	1
21	.....	Flange	1
22	1709213	Retainer	1
23	296226	Capscrew	1
24	1550767	Capscrew	3
25	302398	Locknut	2
26	2095448	Module (Auto Brake)	1
27	320155	Washer	4
28	2070686	Capscrew	2
	1703232	Key (Not Illustrated)	1

FOOTNOTES:

a No Longer Required replace with Nut 1502543

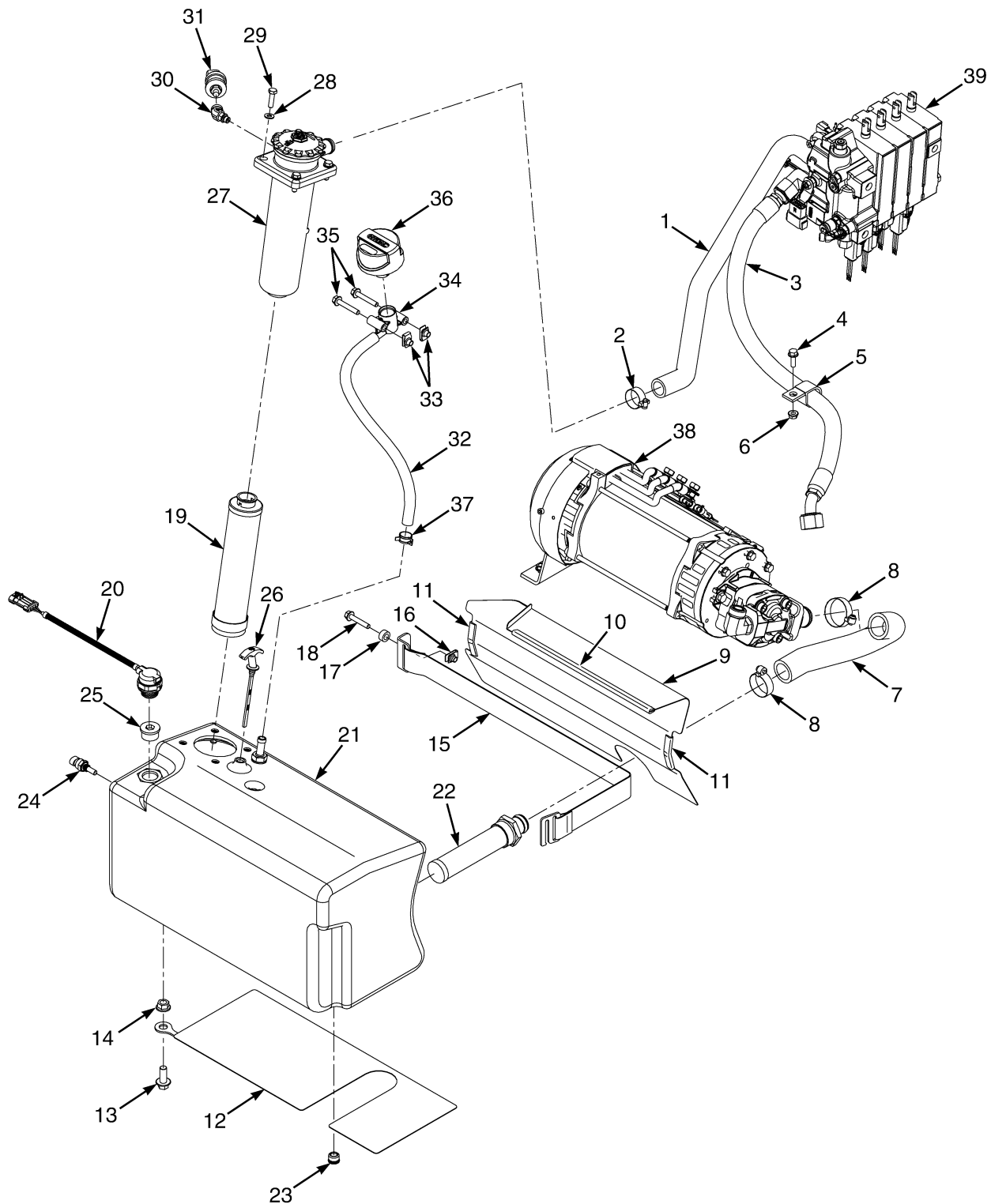
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SECTION 6

HYDRAULIC SYSTEM

DESCRIPTION	PAGE
HYDRAULIC CONTROL VALVE	
ELECTRONIC - THREE AND FOUR FUNCTION (→ 12/2016)	6-56
ELECTRONIC CONTROL - THREE AND FOUR FUNCTION (12/2016 →)	6-58
MANUAL - THREE AND FOUR FUNCTION (→ 12/2016)	6-44
MANUAL - THREE AND FOUR FUNCTION (12/2016 →)	6-48
HYDRAULIC FILTER HOUSING	6-12
HYDRAULIC HOSES	
HOIST, TILT AND AUXILIARY	6-10
STEERING	6-8
HYDRAULIC PUMP	6-18
19 CC	6-20
HYDRAULIC PUMP AND MOTOR ASSEMBLY	
36/48 VOLT	6-14
72/80 VOLT	6-16
HYDRAULIC SUPPLY AND RETURN	6-2
WITH METAL HYDRAULIC TANK	6-6
HYDRAULIC VALVE ASSEMBLY	
ELECTRONIC - THREE AND FOUR FUNCTION	6-54
MANUAL - THREE AND FOUR FUNCTION (→ 12/2016)	6-40
MANUAL CONTROL - THREE AND FOUR FUNCTION (12/2016 →)	6-42
MANUAL CONTROL LEVERS	
→ S/N A268N02928H	6-28
FOUR FUNCTION (S/N A268N02929H →)	6-36
THREE FUNCTION (S/N A268N02929H →)	6-32
PUMP MOTOR	
36/48 VOLT	6-22
72/80 VOLT - ENHANCED PERFORMANCE	6-24
TILT CYLINDER AND MAST INSTALLATION	6-66
TILT CYLINDERS	
E45-55XN	6-68
E60-70XN	6-70
VALVE ASSEMBLY	
INLET SECTION - MANUAL AND ELECTRONIC	6-64
VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY	
ELECTRIC HYDRAULIC (→ 12/2016)	6-60
ELECTRIC HYDRAULIC (12/2016 →)	6-62
MANUAL HYDRAULIC (→ 12/2016)	6-50
MANUAL HYDRAULIC (12/2016 →)	6-52

HYDRAULIC SUPPLY AND RETURN (FIGURE 6-1)



BP150227

HYDRAULIC SUPPLY AND RETURN

ITEM	PART NO.	DESCRIPTION	QTY
1	2107941	Hose (Return Line)	1
2	127045	Clamp (Hose)	2
3	2107710	Hose Assy (Pressure Line)	1
3	4600406	Hose Assy (Pressure Line) (80 Volt)	1
3	4605393	Hose Assy (Hoist)	1
4	1510113	Capscrew	5
5	1320114	Clamp	1
6	~~1382472~~		
	1502543	Nut (☞Figure 6-28, ☞Figure 6-29).....	1
7	2094809	Hose (Pump Suction)	1
8	369804	Clamp	2
9	a 4007120	Cover	1
9	b 4007121	Cover	1
9	d 4007122	Cover	1
10	a 1616037	Edge Protector	1
10	c 4007124	Trim (☞Figure 6-28, ☞Figure 6-29).....	1
11	4007123	Trim	2
12	4006830	Tray	1
13	1528889	Capscrew	AR
14	~~1370949~~		
	1528888	Nut (Shoulder)	AR
15	1644598	Strap	1
16	1480237	Nut , Foldover	1
17	878236	Spacer	1
18	1527882	Capscrew	1
19	2099416	Element (Filter)	1
20	1650732	Sensor (Tank Level)	1
21	1642037	Hydraulic Tank (Assembly)	1
21	2103003	Hydraulic Tank	1
22	1624904	Strainer	1
22	16984	O-Ring	1
23	1528481	Plug (With O-Ring for Drain)	1
24	1515654	Temperature Sensor	1
25	4019240	Fitting (Sensor Extension)	1
26	2094791	Dipstick	1
27	.....	Filter Housing (☞Figure 6-5).....	1
28	320157	Washer	4
29	176640	Bolt	4
30	1688347	Adapter	1
31	2068337	Pressure Switch	1
32	4600435	Hose	1
33	1480237	Nut , Foldover	2
34	1582160	Adapter (Breather)	1
35	1510115	Capscrew	2
36	1582161	Breather	1
37	1502006	Hose Clamp	1
38	.....	Pump Motor (☞Figure 6-11, ☞Figure 6-10).....	1
39	.....	Hydraulic Control Valve (☞Figure 6-22, ☞Figure 6-17).....	1

FOOTNOTES:

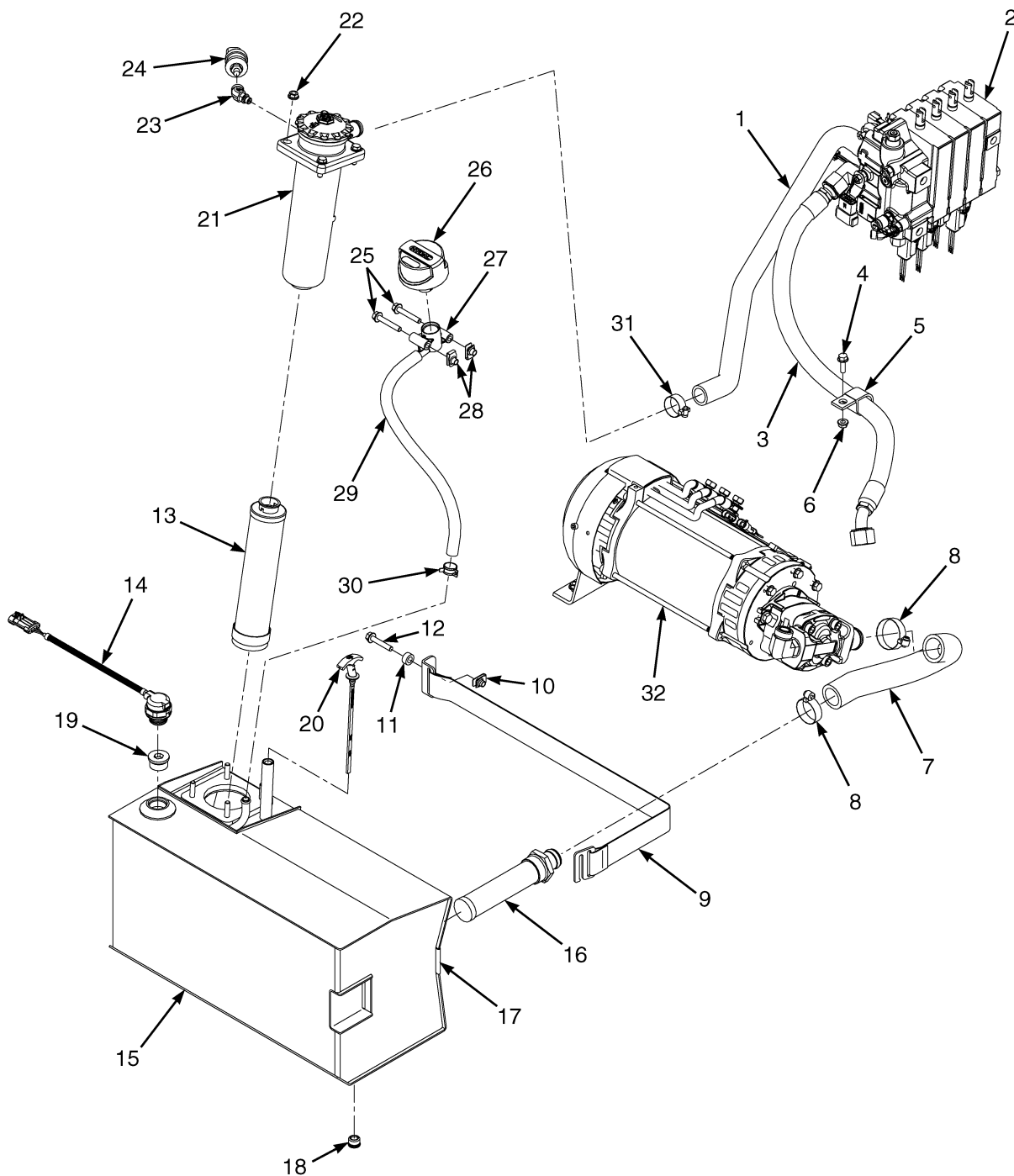
- a** 27 in. Battery Compartment
- b** 30 in. Battery Compartment

- c** 30-40 in. Battery Compartment
- d** 33-40 in. Battery Compartment

NOTES

[illegible]

HYDRAULIC SUPPLY AND RETURN (FIGURE 6-2) WITH METAL HYDRAULIC TANK



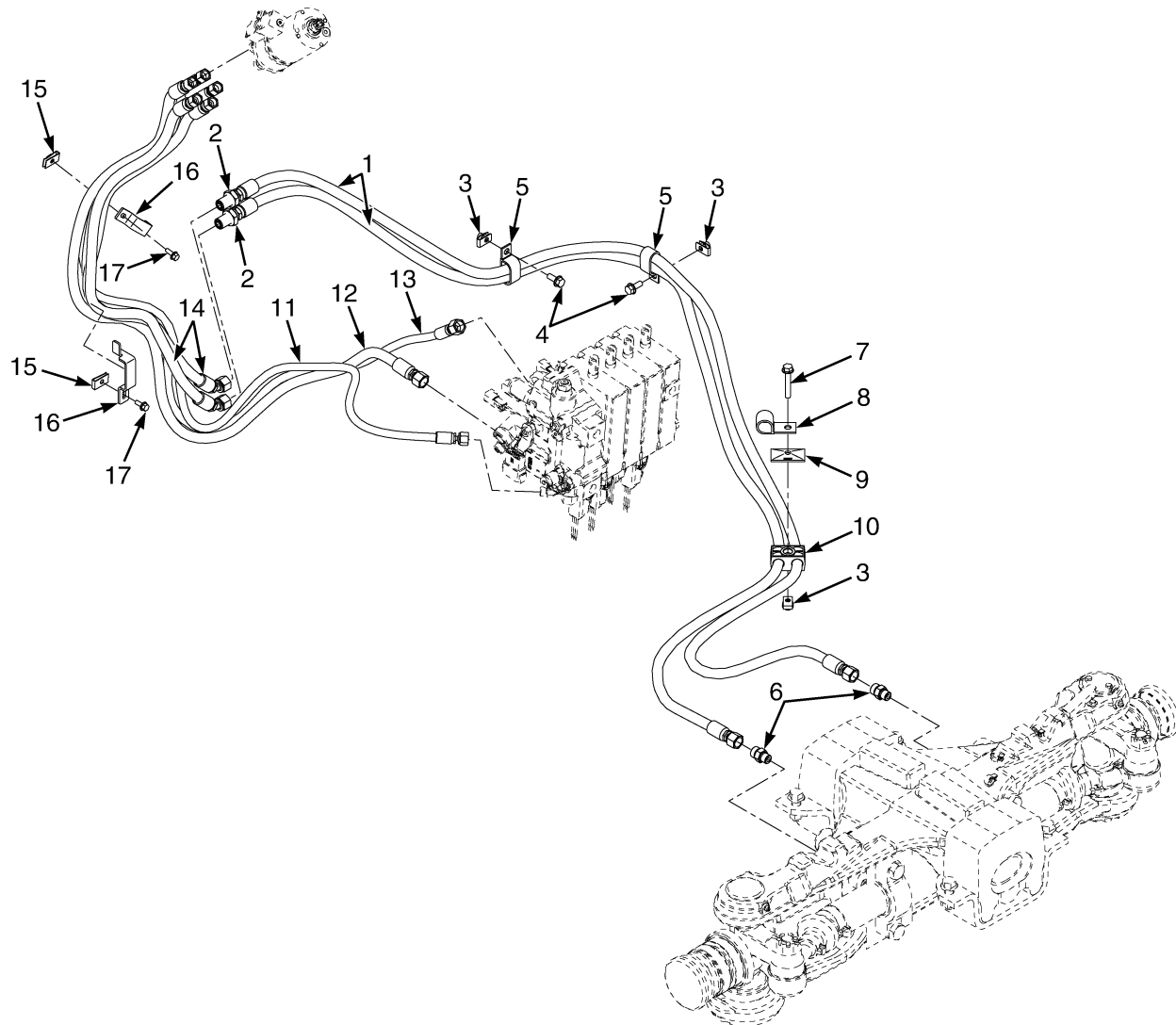
BP150420

**HYDRAULIC SUPPLY AND RETURN
WITH METAL HYDRAULIC TANK**

ITEM	PART NO.	DESCRIPTION	QTY
1	2107941	Hose (Return Line)	1
2	.....	Hydraulic Control Valve (☞Figure 6-22, ☞Figure 6-17).....	1
3	2107710	Hose Assy (Pressure Line)	1
3	4600406	Hose Assy (Pressure Line) (80 Volt)	1
3	4605393	Hose Assy (Hoist)	1
4	1510113	Capscrew	5
5	1320114	Clamp	1
6	~~1382472~~		
	1502543	Nut (☞Figure 6-28, ☞Figure 6-29).....	1
7	2094809	Hose (Pump Suction)	1
8	369804	Clamp	2
9	1644598	Strap	1
10	1480237	Nut , Foldover	1
11	878236	Spacer	1
12	1527882	Capscrew	1
13	2099416	Element (Filter)	1
14	1650732	Sensor (Tank Level)	1
15	4607465	Hydraulic Tank	1
16	1624904	Strainer	1
16	16984	O-Ring	1
17	a 4026696	Edge Protector	2
18	1528481	Plug (With O-Ring for Drain)	1
19	200659	Fitting	1
20	2060751	Dipstick	1
20	2094791	Dipstick (Optional)	1
21	.....	Filter Housing (☞Figure 6-5).....	1
22	~~1382472~~		
	1502543	Nut	4
23	1688347	Adapter	1
24	2068337	Pressure Switch	1
25	1510115	Capscrew	2
26	1582161	Breather	1
27	1582160	Adapter (Breather)	1
28	1480237	Nut , Foldover	2
29	4600435	Hose	1
30	1502006	Hose Clamp	1
31	127045	Clamp (Hose)	2
32	.....	Pump Motor (☞Figure 6-11, ☞Figure 6-10).....	1

FOOTNOTES:**a** → 10/2013

HYDRAULIC HOSES (FIGURE 6-3) STEERING



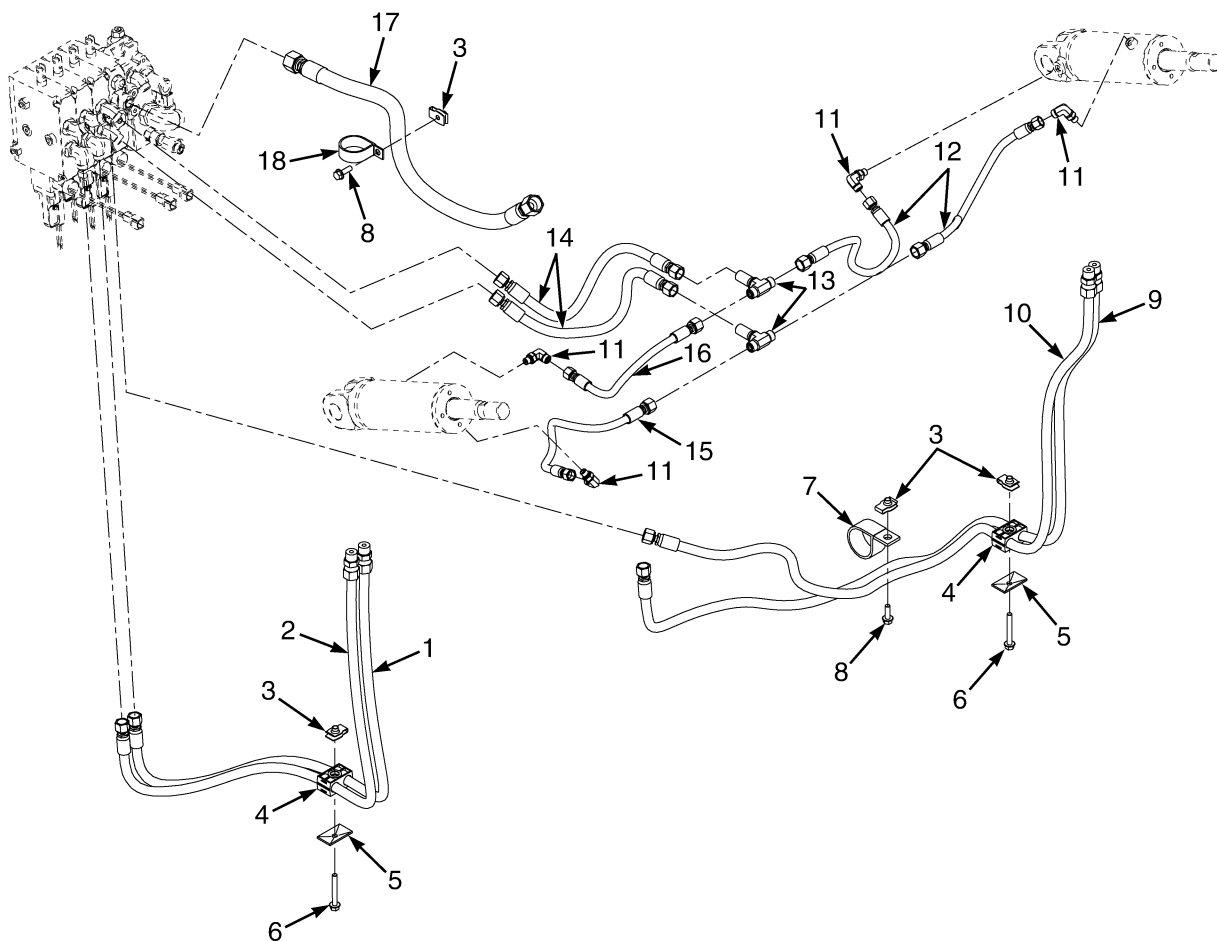
BP150369

**HYDRAULIC HOSES
STEERING****KEY:****A: With Telescopic Steering Column****B: With Fixed Steering Column**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 2111708	Hose Assy (Steer Axle)	2	2
1	b 2111709	Hose Assy (Steer Axle)	2	2
2	1528602	Locknut	2	2
3	1480237	Nut , Foldover	3	3
4	1527880	Capscrew	2	2
5	110322	Clamp	2	2
6	1486740	Fitting	2	2
6	4024213	Fitting (Alternate Part)	2	2
7	1510115	Capscrew	1	1
8	c 1397326	Clamp	1	1
8	e 329835	Clamp	1	1
9	1695975	Plate	1	1
10	1695974	Hose Clamp	1	1
11	4600405	Hose Assy (Steer Load Sensor)	1	..
11	4600403	Hose Assy (Steer Load Sensor)	..	1
12	c 4600404	Hose Assy (Steer Supply)	1	..
12	d 4624015	Hose Assy (Steer Supply)	1	..
12	f 4653150	Hose Assy (Steer Supply)	1	..
12	c 4600402	Hose Assy (Steer Supply)	..	1
12	d 4624016	Hose Assy (Steer Supply)	..	1
12	f 4653153	Hose Assy (Steer Supply)	..	1
13	4600409	Hose Assy (Steer Return)	1	..
13	4600407	Hose Assy (Steer Return)	..	1
14	4600410	Hose Assy (Steer Axle)	2	..
14	4600408	Hose Assy (Steer Axle)	..	2
15	325182	Nut , Foldover	2	2
16	1660274	Bracket (Steer Hose)	2	2
17	1527876	Capscrew	2	2

FOOTNOTES:**a** 27-33 in. Battery Compartment**b** 36-40 in. Battery Compartment**c** → 10/2013**d** 10/2013 ↔ 12/2016**e** 10/2013 →**f** 12/2016 →

HYDRAULIC HOSES (FIGURE 6-4) HOIST, TILT AND AUXILIARY



BP150370

**HYDRAULIC HOSES
HOIST, TILT AND AUXILIARY**

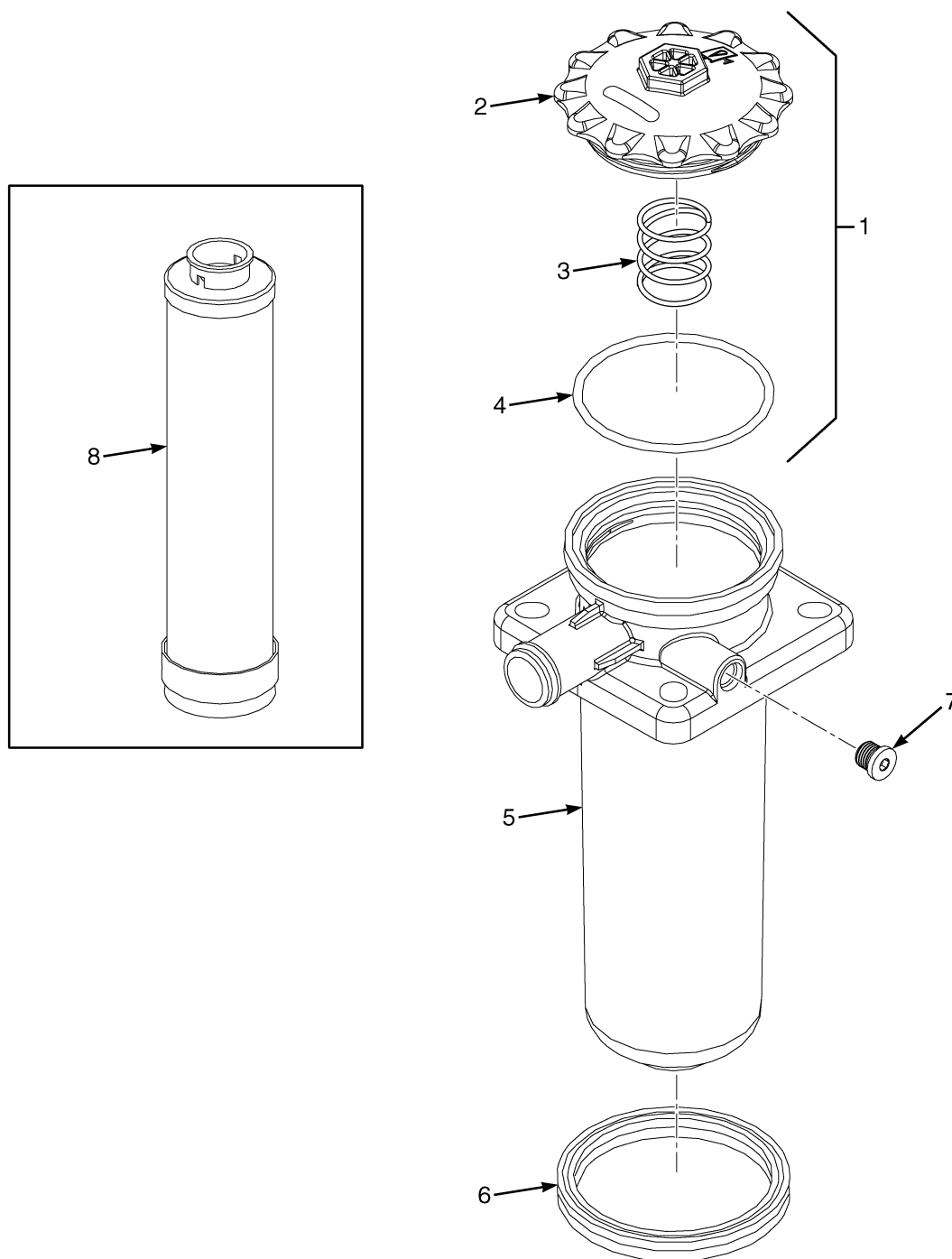
ITEM	PART NO.	DESCRIPTION	QTY
1	a c 4600047	Hose Assy (3 Function)	1
1	b c 4624927	Hose Assy (3 Function)	1
2	a c 4600046	Hose Assy (3 Function Auxiliary)	1
2	b c 4624927	Hose Assy (3 Function)	1
3	1393879	Nut	4
4	1695974	Hose Clamp	2
5	1695975	Plate	2
6	1510116	Capscrew	2
7	1460510	Clamp	1
8	1510113	Capscrew	1
9	a c 4600049	Hose Assy (4 Function)	1
9	b c d 4624929	Hose Assy (4 Function)	1
9	b c e 4639528	Hose Assy (4 Function)	1
10	a c 4600048	Hose Assy (4 Function Auxiliary)	1
10	b c d 4624928	Hose Assy (4 Function)	1
10	b c e 4639527	Hose Assy (4 Function)	1
11	1487058	Fitting	4
12	2107713	Hose Assy (LH Tilt)	2
13	1644602	Fitting	2
14	d 4600050	Hose Assy (Tilt Line)	1
14	e 4635582	Hose Assy (Tilt)	2
15	2107944	Hose Assy	1
16	2108251	Hose Assy (Tilt Line RH)	1
17	a 2107711	Hose Assy (Hoist)	1
17	b 4624931	Hose Assy (Hoist)	1
17	2109196	Hose Assy (Hoist Line) (With Load Weight Sensor)	1
18	1316496	Clamp	1

FOOTNOTES:

- a** 2 FFL and 4FFL Masts
b 2 LFL and 3 FFL Mast
c Connection Hoses Control Valve to Mast

- d** → 11/2014
e 11/2014 →

HYDRAULIC FILTER HOUSING (FIGURE 6-5)



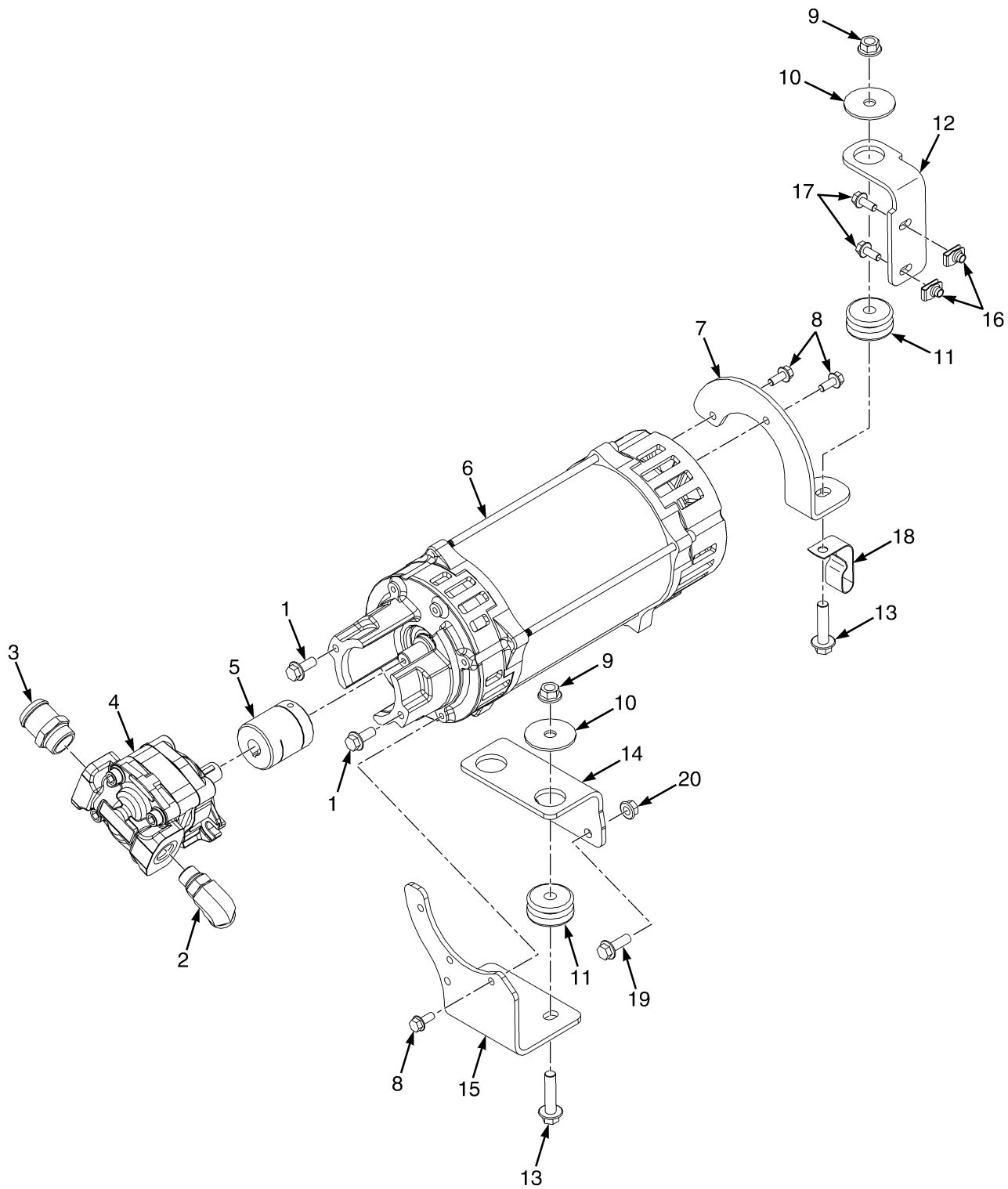
BP150460

HYDRAULIC FILTER HOUSING

ITEM	PART NO.	DESCRIPTION	QTY
	1642038	Filter (Hydraulic)	1
1	1676341	Cover Assembly	1
2	.....	Lid	1
3	.....	Spring	1
4	.....	Seal - Cover	1
5	1676334	Housing	1
6	.....	Seal - Quad Ring	1
7	222442	Fitting	1
7	204128	Plug	1
7	16481	O-Ring	1
8	2099416	Element (Filter) (Not Included in Filter Assembly)	1
	1676342	Kit-Seal	1

HYDRAULIC PUMP AND MOTOR ASSEMBLY (FIGURE 6-6)

36/48 VOLT

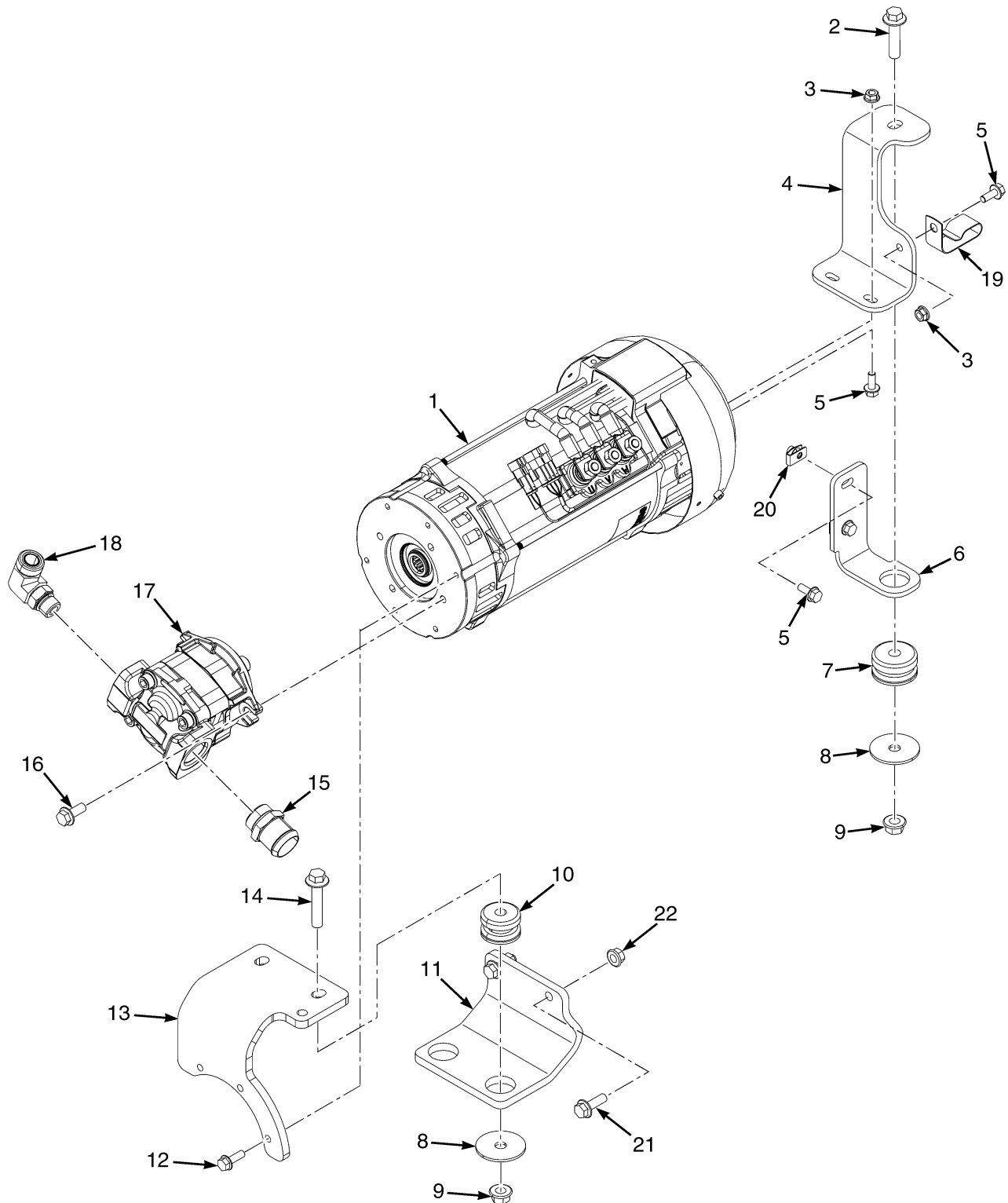


BP150343

HYDRAULIC PUMP AND MOTOR ASSEMBLY
36/48 VOLT

ITEM	PART NO.	DESCRIPTION	QTY
	.....	Pump/Motor Assembly	1
1	1510117	Capscrew	2
2	1487072	O-Ring Face Seal Ftg	1
2	280154	O-Ring	1
2	16485	O-Ring	1
3	1568199	Adapter (Suction)	1
4	2105544	Hydraulic Pump (☞ Figure 6-8).....	1
5	1642047	Coupling	1
6	2094298	Hydraulic Motor Assembly (36/48 Volt Standard Performance)	1
6	2094668	Hydraulic Motor Assembly (36/48 Volt Enhanced Performance)	1
7	1642046	Bracket (Motor Mount) (Enhanced Performance)	1
8	1527880	Capscrew	5
9	~~1370949~~		
	1528888	Nut (Shoulder)	3
10	1384366	Washer (Snubbing)	3
11	284373	Motor Mount	3
12	1642044	Bracket (Motor Support)	1
13	1527889	Capscrew	3
14	1642043	Bracket (Motor Support)	1
15	1642045	Bracket (Motor Mount)	1
16	1480237	Nut , Foldover	2
17	1527880	Capscrew	2
18	1637398	Clip	1
19	1527884	Capscrew	2
20	1460477	Nut	2
	4001203		
	1703670	Kit-Motor Band	1

HYDRAULIC PUMP AND MOTOR ASSEMBLY (FIGURE 6-7) 72/80 VOLT



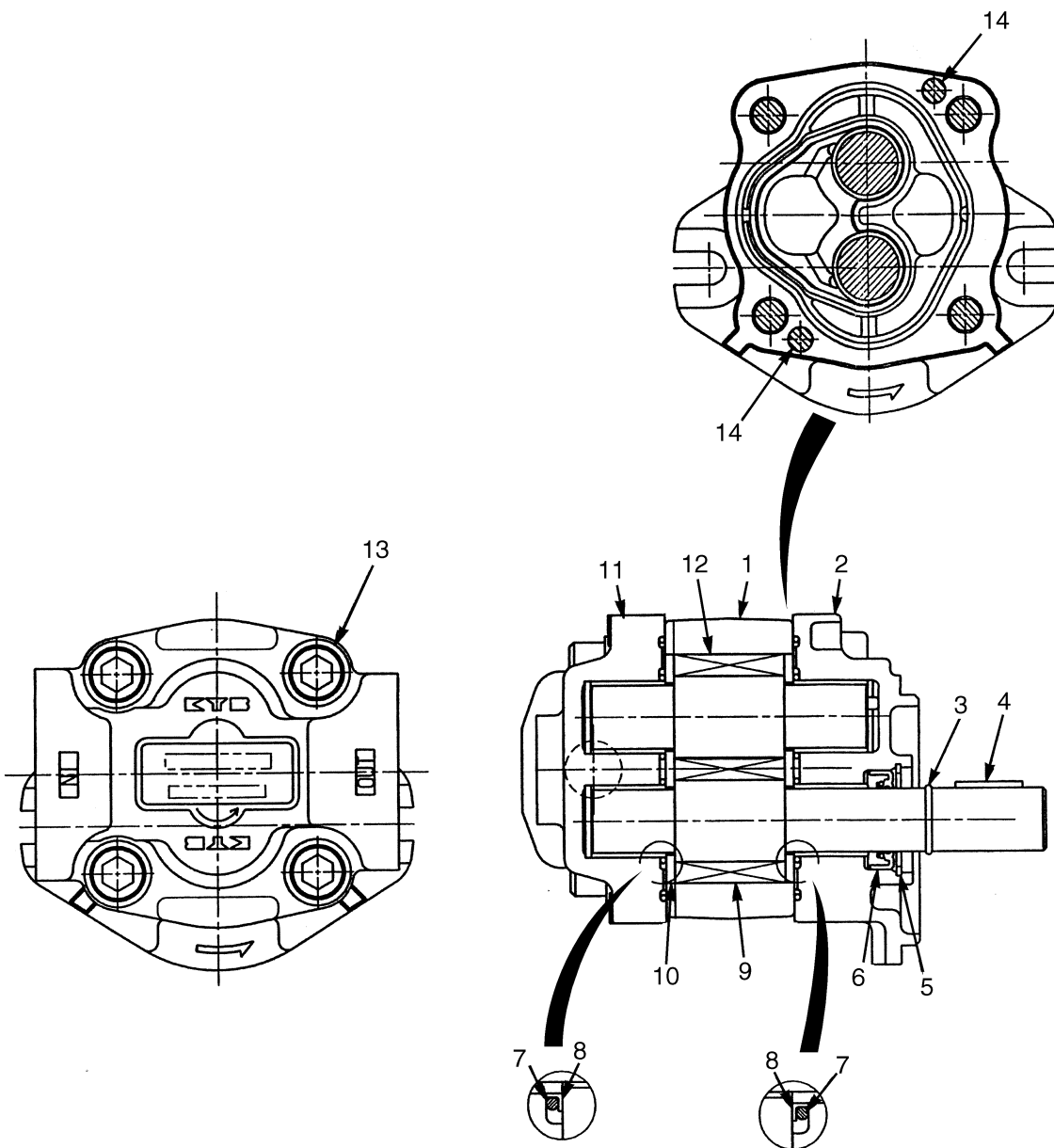
BP150703

HYDRAULIC PUMP AND MOTOR ASSEMBLY
72/80 VOLT

ITEM	PART NO.	DESCRIPTION	QTY
1	2106669	Electric Motor (☞ Figure 6-11).....	1
2	1527889	Capscrew	1
3	~~1382472~~		
	1502543	Nut	5
4	4008400	Bracket	1
5	1527880	Capscrew	5
6	1642044	Bracket (Motor Support)	1
7	284373	Motor Mount	1
8	1384366	Washer (Snubbing)	3
9	~~1370949~~		
	1528888	Nut (Shoulder)	3
10	209067	Motor Mount	2
11	1693398	Bracket (Motor Support)	1
12	1510113	Capscrew	3
13	1693397	Bracket (Motor Mount)	1
14	1583945	Capscrew	2
15	1568199	Adapter (Suction)	1
16	1510117	Capscrew	2
17	2106668	Hydraulic Pump (☞ Figure 6-9).....	1
18	1487072	O-Ring Face Seal Ftg	1
18	280154	O-Ring	1
18	16485	O-Ring	1
19	1637398	Clip	1
20	1480237	Nut , Foldover	2
21	1527884	Capscrew	2
22	1460477	Nut	2
	a 4001203		
	1703670	Kit-Motor Band	1

FOOTNOTES:**a** Not Illustrated

HYDRAULIC PUMP (FIGURE 6-8)

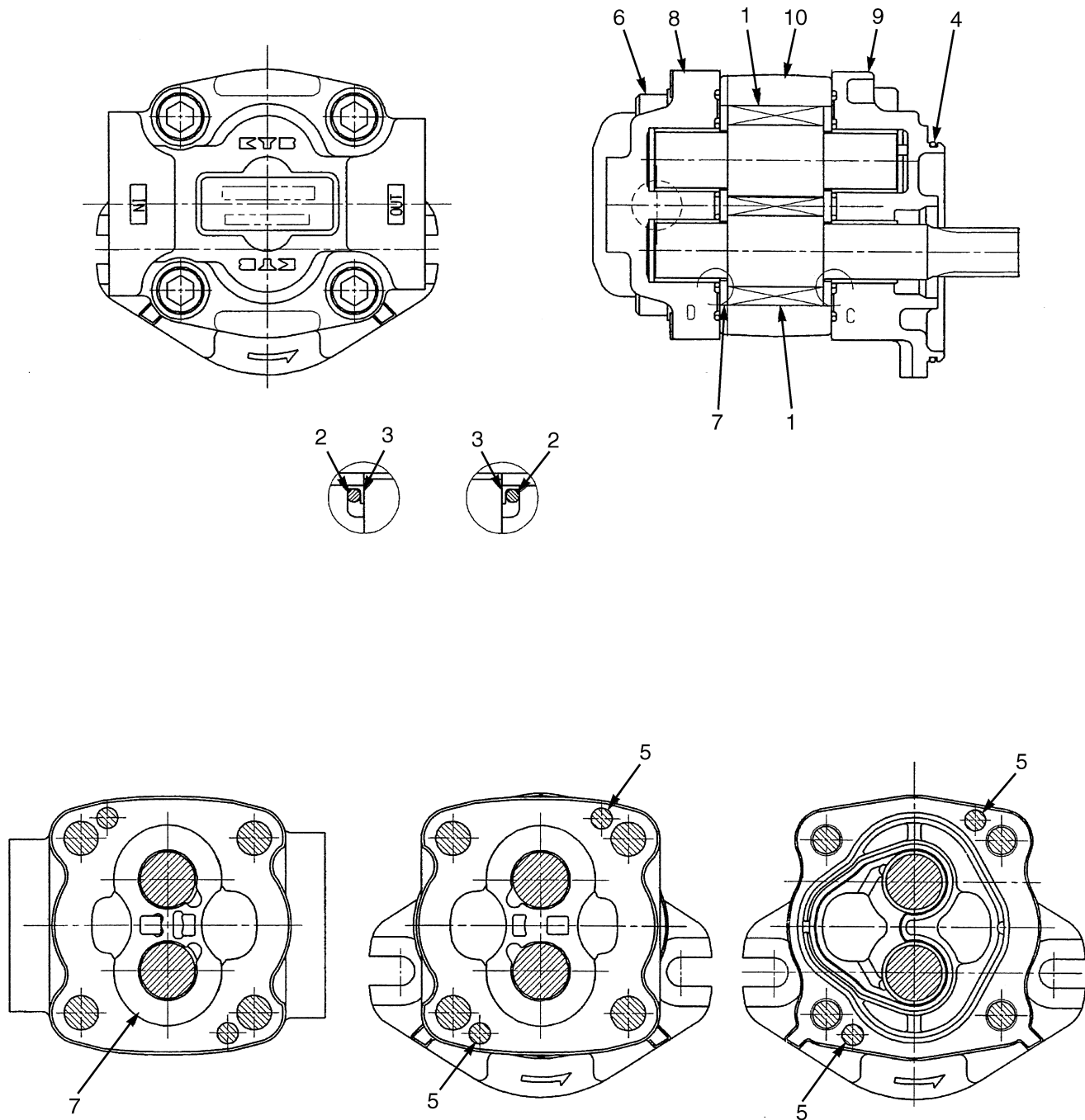


BP150233

HYDRAULIC PUMP

ITEM	PART NO.	DESCRIPTION	QTY
	2105544	Hydraulic Pump	1
1	.....	Gear Housing	1
2	1622213	Flange	1
3	1591762	Clip	1
4	1591759	Key	1
5	.....	Snap Ring	1
6	.....	Oil Seal	1
7	.....	Seal Plate	2
8	.....	Back-Up	2
9	1699390	Drive Gear	1
10	1622215	Side Plate	2
11	1675590	Cover Plate	1
12	1622212	Gear	1
13	1622216	Screw	4
14	1578672	Dowel	4
15	1465140	Kit-Seal	1
16	1699389	Gear Set	1

HYDRAULIC PUMP (FIGURE 6-9) 19 CC

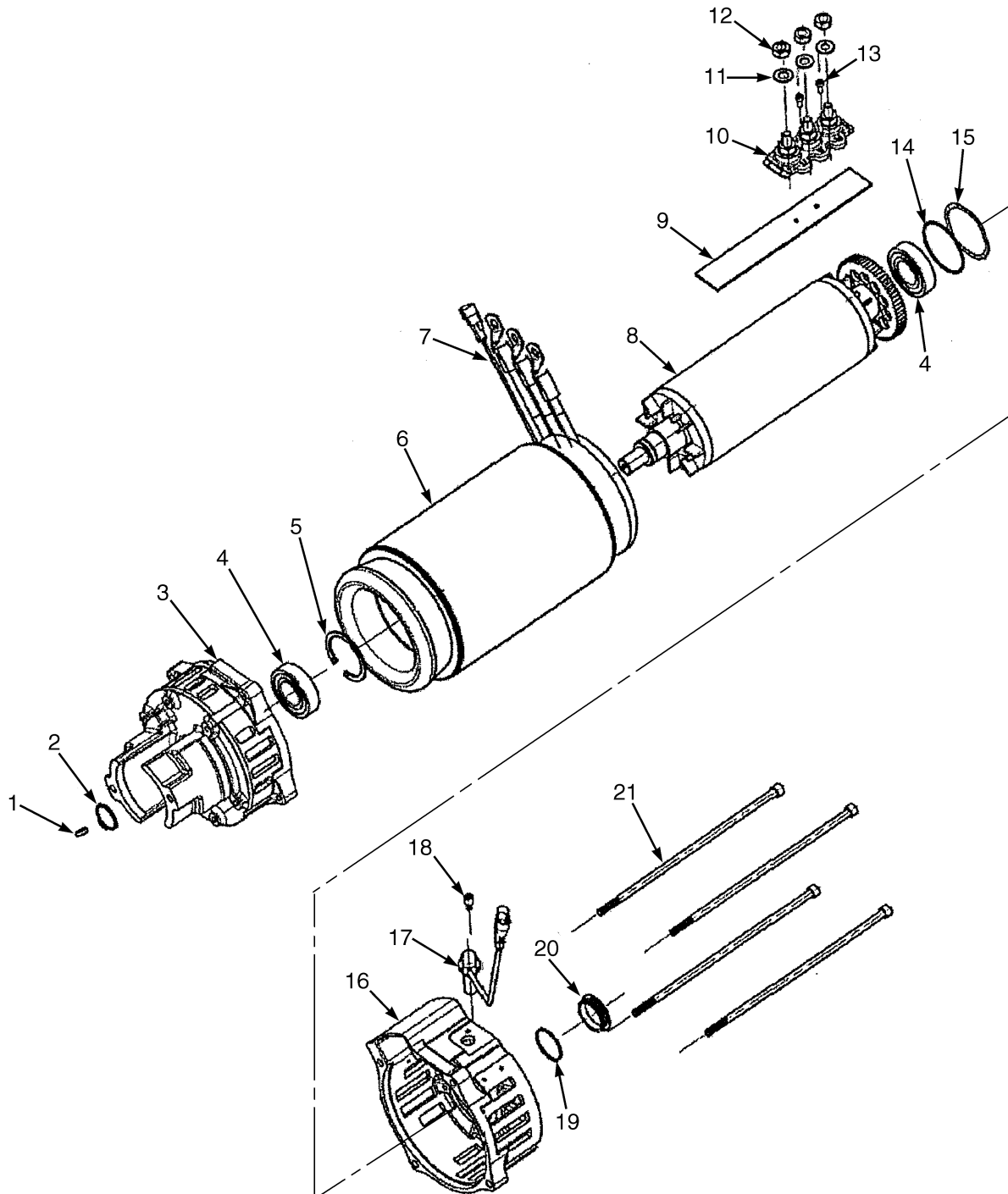


BP150299

**HYDRAULIC PUMP
19 CC**

ITEM	PART NO.	DESCRIPTION	QTY
	2106668	Hydraulic Pump	1
1	1701713	Gear Set	1
1	.....	Gear - Driven	1
1	.....	Drive Gear	1
2	.....	Seal (Plate)	2
3	.....	Back-Up	2
4	.....	Seal	1
5	1578672	Dowel	4
6	1622216	Screw	4
7	1622215	Side Plate	2
8	1675590	Cover Plate	1
9	1701714	Flange	1
10	.....	Plate (Gear)	1
11	1675593	Kit-Seal	1

PUMP MOTOR (FIGURE 6-10) 36/48 VOLT

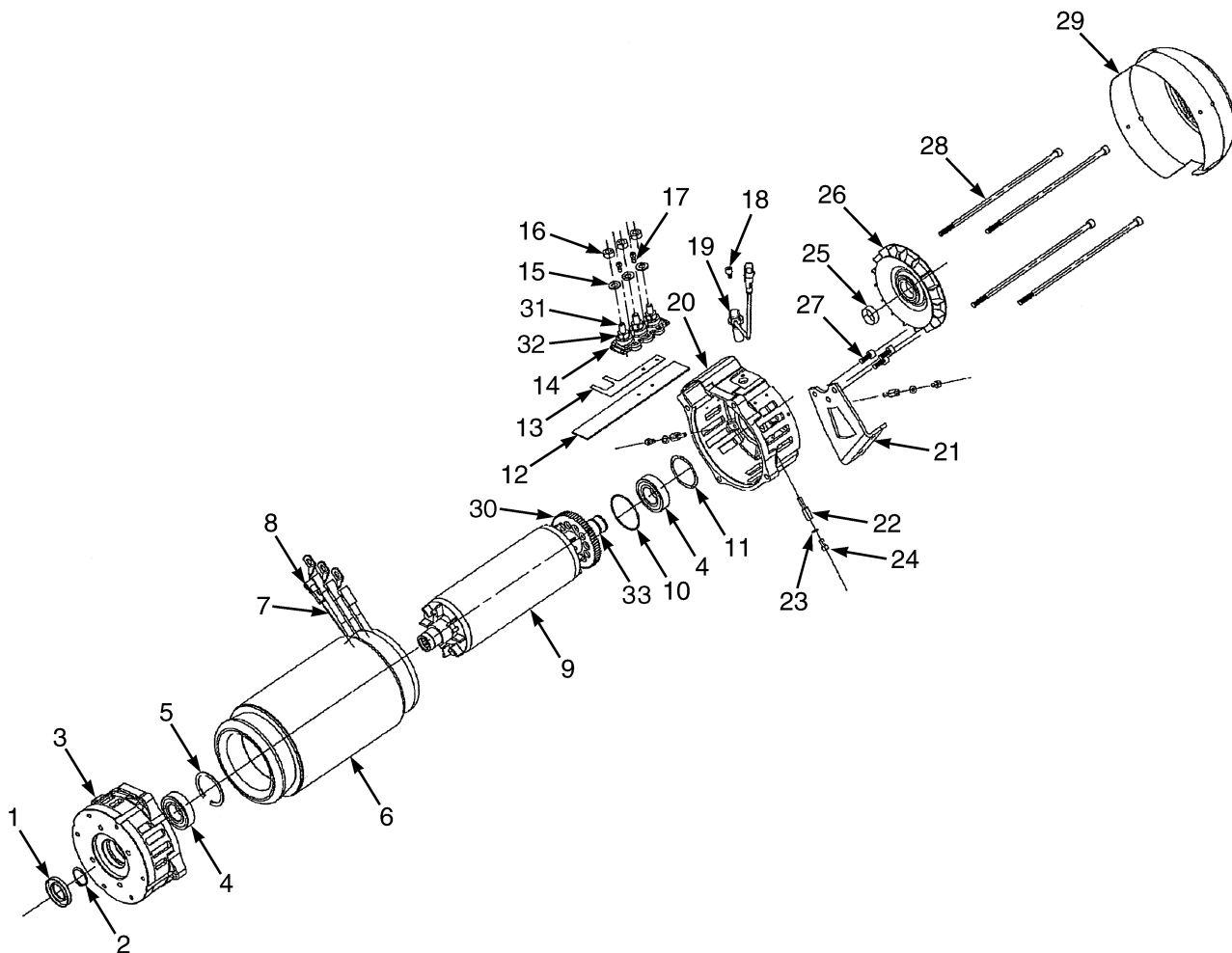


BP150268

PUMP MOTOR
36/48 VOLT

ITEM	PART NO.	DESCRIPTION	QTY
	2094298	Hydraulic Motor Assembly (36/48 Volt Standard Performance)	1
	2094668	Hydraulic Motor Assembly (36/48 Volt Enhanced Performance)	1
1	1694059		
	1462084	Woodruff Key	1
2	1692276		
	58908	Snap Ring	2
3	1694056	Shield	1
4	1502092		
	4068565	Ball Bearing	2
5	1502093		
	12921	Snap Ring	1
6	1691527	Housing (36/48 Volt Standard Performance)	1
6	1691523	Housing (36/48 Volt Enhanced Performance)	1
7	1694049		
	1552052		
	4637916	Thermal Sensor	1
8	1691522	Armature	1
9	1694048	Terminal Post	1
10	1692268	Terminal Post	1
11	388049		
	292682	Lockwasher	3
12	136692	Nut	3
13	293742	Screw	2
14	1507307	O-Ring	1
15	1692274		
	1307244	Spherical Washer	1
16	1692273	Shield	1
17	1692275		
	4033792	Sensor Assembly (Speed)	1
18	4028802	Capscrew	1
19	1694058	O-Ring	1
20	1692274		
	4028638	Plug	1
21	1694057	Screw	4
	4001203		
	1703670	Kit-Motor Band	1

PUMP MOTOR (FIGURE 6-11) 72/80 VOLT — ENHANCED PERFORMANCE



BP150462

PUMP MOTOR
72/80 VOLT – ENHANCED PERFORMANCE

ITEM	PART NO.	DESCRIPTION	QTY
	2106669	Electric Motor (Enhanced Performance)	1
1	1591518	Ring (Input Shaft Seal)	1
2	~~1692276~~		
	58908	Snap Ring	2
3	~~1696937~~		
	4028637	Shield	1
4	~~1502092~~		
	4068565	Ball Bearing	2
5	~~1502093~~		
	12921	Snap Ring	1
6	1697032	Housing (With Stator)	1
7	1591525	Sensor (Temperature)	1
8	1591527	Connector	1
9	1696934	Armature	1
10	1507307	O-Ring	1
11	~~1692274~~		
	1307244	Spherical Washer	1
12	1694048	Terminal Post	1
13	1696936	Bracket	1
14	1585141	Terminal	1
15	~~388049~~		
	292682	Lockwasher	3
16	136692	Nut	3
17	4025784	Screw	2
18	4033793	Capscrew	1
19	~~1692275~~		
	4033792	Sensor Assembly (Speed)	1
19	~~1591532~~		
	2787341	Connector (4 Way)	1
19	2787350	Pin Terminal	4
19	2060555	Wire Seal (Yellow)	4
19	~~1591528~~		
	1708184	Contact	6
19	~~1591534~~		
	2795594	Wire Seal	6
19	4028740	Sensor	1
20	1696938	Shield (Non Drive End)	1
21	1696943	Bracket (Mounting)	1
22	1696942	Spacer (Fan Cover)	3
23	4033794	Washer	3
24	293762	Capscrew	3
25	1696940	Bushing (Retaining)	1
26	~~1696939~~		
	4008787	Fan (Cooling)	1
27	296010	Capscrew	3
28	1694057	Screw	4
29	1696941	Cover (Fan)	1
30	1697031	Sensor	1
31	1591542	Screw	3
32	296419	Washer	3

PUMP MOTOR
72/80 VOLT – ENHANCED PERFORMANCE

ITEM	PART NO.	DESCRIPTION	QTY
	a 1462085	Ring	1

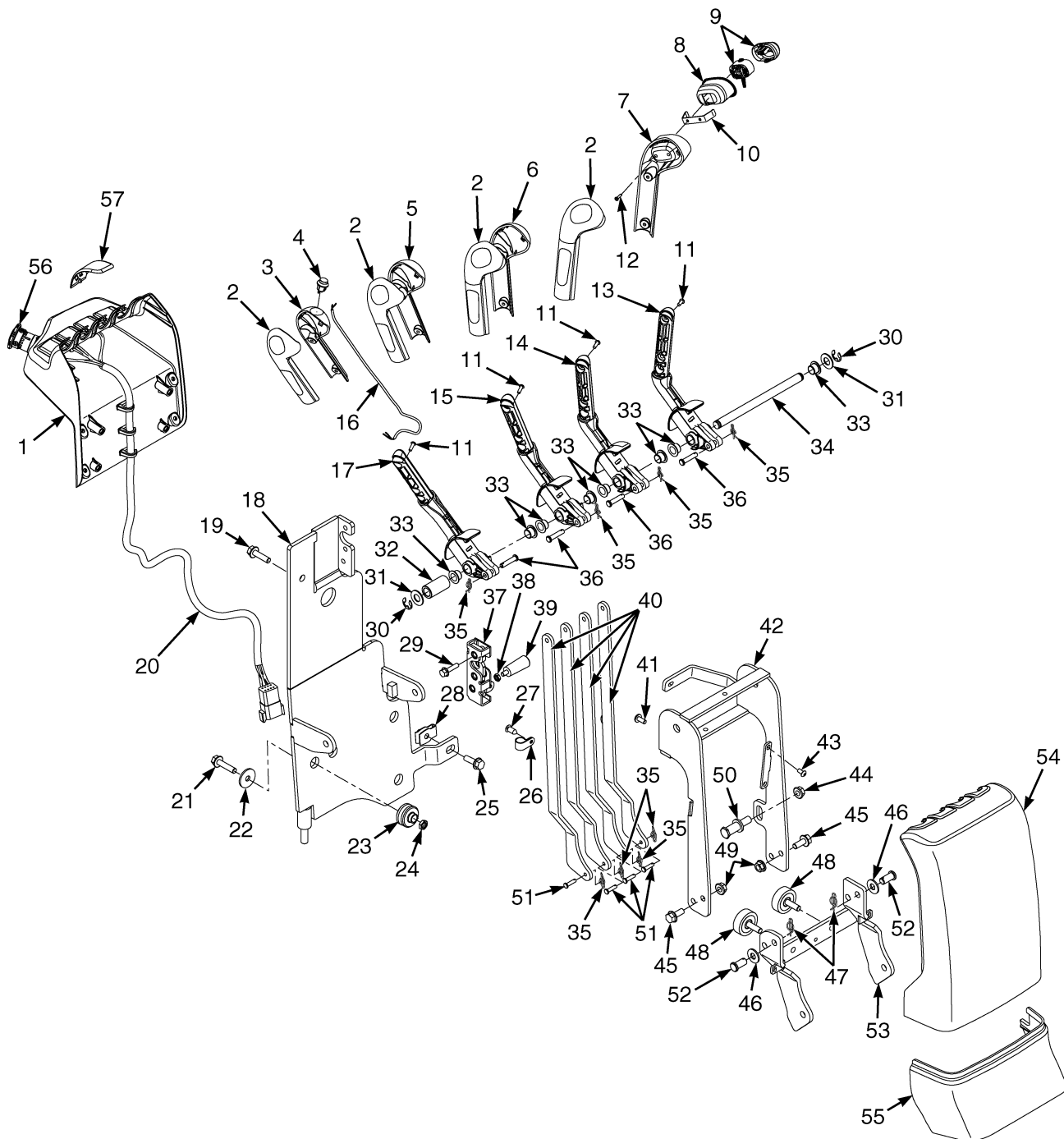
FOOTNOTES:**a** Not Illustrated

NOTES

[illegible]

MANUAL CONTROL LEVERS (FIGURE 6-12)

(→ S/N A268N02928H)



BP150367

MANUAL CONTROL LEVERS

(→ S/N A268N02928H)

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2111173	Cover (Upper Rear)	1	1
2	2104011	Handle (Palm Side Blank Half)	3	4
3	2104014	Handle (Clamp Switch Blank Half)	1	1
4	1671887	Push Button Switch (Included with Manual Interlock Wire Harness)	1	1
5	2104012	Handle (Finger Side Blank Half)	1	2
6	2104012	Handle (Finger Side Blank Half)	1	1
7	2109136	Handle (Forward / Reverse Switch Half)	1	1
8	2109137	Cup	1	1
9	2101896	Switch	1	1
10	1696034	Retainer	1	1
11	1694830	Capscrew	11	14
12	227132	Screw	2	2
13	1699347	Lever	..	1
14	1699348	Lever	1	1
15	1699349	Lever	1	1
16	2100705	Wire Harness (Manual Interlock) (☞ Figure 2-73).....	1	1
17	1699350	Lever	1	1
17	a 4603823	Lever	1	1
18	1696000	Mounting Weldment	1	1
19	1510113	Capscrew	1	1
20	2107661	Wire Harness (Manual Hydraulics) (☞ Figure 2-67).....	1	1
21	1586627	Capscrew	3	3
22	1346752	Washer	3	3
23	2063991	Isolator	3	3
24	1593335	Nut	4	4
25	1510113	Capscrew	1	1
26	.....	Clip	1	1
27	1582464	Fastener	1	1
28	1393879	Nut	1	1
29	1527878	Capscrew	3	3
30	1530971	E-Ring	2	2
31	1682764	Washer	AR	AR
32	1657021	Spacer	1	..
33	1657016	Bushing	6	8
34	1657013	Pin	1	1
35	1517361	Locking Ring Cotter Pin	6	8
36	1657014	Pin	3	4
37	1674167	Latch	1	1
38	.....	Nut	1	1
39	1694731	Handle	1	1
40	1654774	Plate (Low Hood)	3	4
41	2062718	Capscrew	4	4
42	1674173	Bracket Wldmt (Upper)	1	1
43	296151	Capscrew	7	7
44	1460477	Nut	1	1

MANUAL CONTROL LEVERS

(→ S/N A268N02928H)

KEY:**A:** Three Function**B:** Four Function

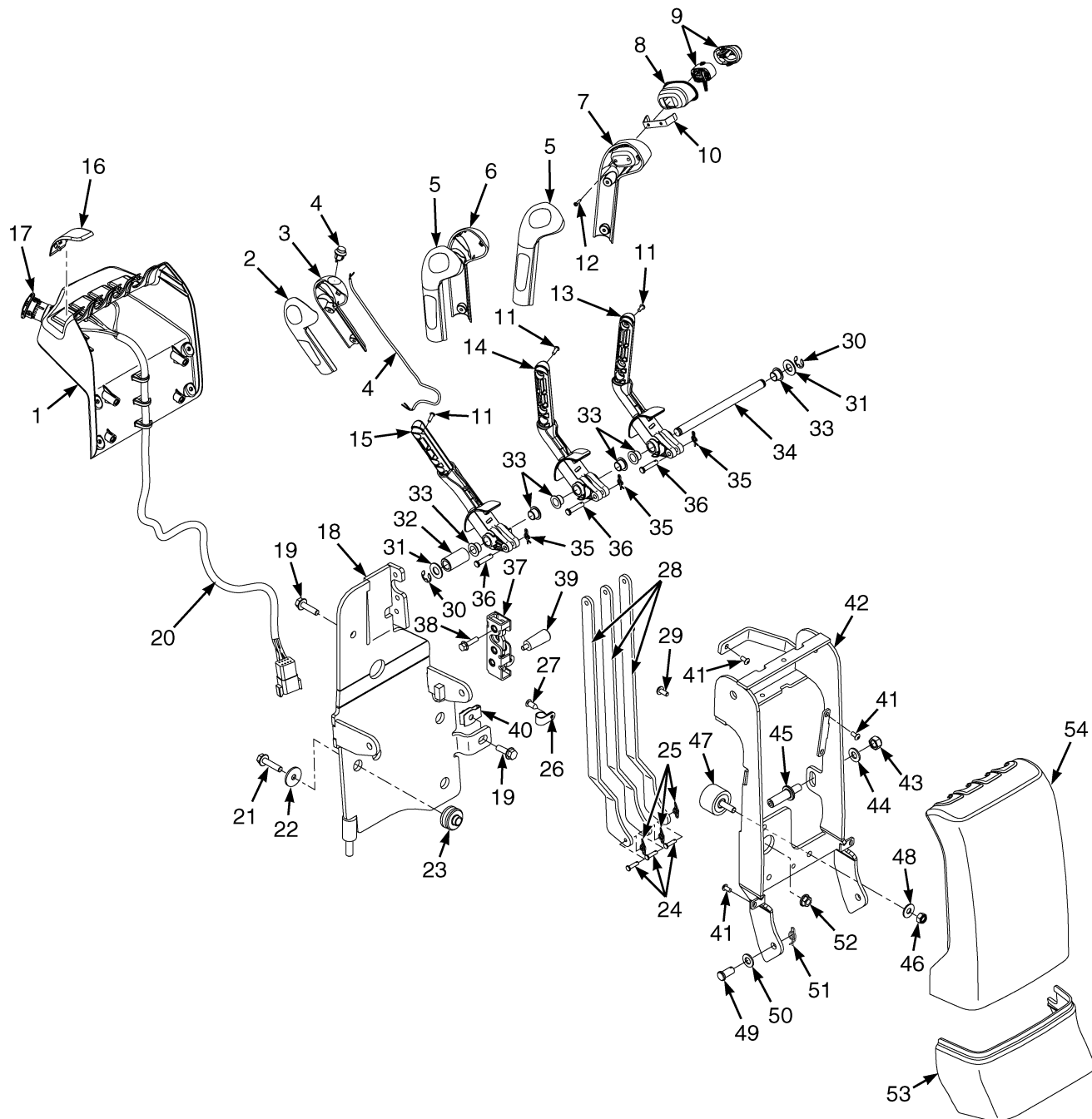
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
45	1527880	Capscrew	4	4
46	1702735	Washer	2	2
47	1351689	Locking Cotter Pin	2	2
48	2102184	Rubber Mount	2	2
49	~~1382472~~			
	1502543	Nut	5	5
50	~~1674168~~			
	4011232	Striker Bolt	1	1
51	1674164	Pin	3	4
52	1674165	Pin	2	2
53	1674171	Bracket Wldmt	1	1
54	~~2105525~~			
	4601702	Cover (Upper Front)	1	1
55	4600150	Cover (Lower)	1	1
56	2107320	Push Button Switch (Emergency Disconnect)	1	1
57	~~2105528~~			
	4601859	Cover	1	..

FOOTNOTES:**a** For use with Drive-Thru Rack option.

NOTES

[illegible]

MANUAL CONTROL LEVERS (FIGURE 6-13) THREE FUNCTION (S/N A268N02929H →)



BP150636

MANUAL CONTROL LEVERS

THREE FUNCTION (S/N A268N02929H →)

KEY:**A: With Monotrol Control Option****B: With Seat Directional Control Option**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2111173	Cover (Upper Rear)	1	1
2	2104011	Handle (Palm Side Blank Half) (Aux. 1 Lever)	1	1
2	a 4603825	Handle (Palm Side) (Aux. 1 Lever)	1	1
3	2104012	Handle (Finger Side Blank Half) (w/o Clamping)	1	1
3	2104014	Handle (Clamp Switch Blank Half) (Finger Side w/ Clamping)	1	1
3	a 4603826	Handle (Finger Side Blank w/o Clamping)	1	1
3	a 4603827	Handle (Finger Side w/ Clamping)	1	1
4	2100705	Wire Harness (Manual Interlock) (w/ Clamping Lever) (☞ Figure 2-73).....	1	1
4	1671887	Push Button Switch (Included with Manual Interlock Wire Harness)	1	1
5	2104011	Handle (Palm Side Blank Half)	2	2
6	2104012	Handle (Finger Side Blank Half)	1	1
7	2104012	Handle (Finger Side Blank Half)	1	..
7	2109136	Handle (Forward / Reverse Switch Half)	..	1
8	2109137	Cup	..	1
9	2101896	Switch	..	1
10	1696034	Retainer	..	1
11	1694830	Capscrew	11	11
12	227168	Screw	..	2
13	1699348	Lever (Lift)	1	1
14	1699349	Lever (Tilt)	1	1
15	1699350	Lever (Aux. 1)	1	1
15	a 4603823	Lever (Aux. 1)	1	1
15	a 4604542	Lever (Aux. 1) (Optional)	1	1
16	2105528	Cover	1	1
17	2107320	Push Button Switch (Emergency Disconnect)	1	1
17	4180406	Block Push Button Contact	1	1
18	4013012	Mounting Weldment	1	1
19	1510113	Capscrew	2	2
20	2107661	Wire Harness (Manual Hydraulics)	1	1
20	4636019	Wire Harness (Manual Hydraulics)	1	1
21	1586627	Capscrew	3	3
22	1346752	Washer	3	3
23	2063991	Isolator	3	3
24	309109	Pin	3	3
25	1517361	Locking Ring Cotter Pin	3	3
26	.....	Clip	1	1
27	1582464	Fastener	1	1
28	4015337	Plate	3	3
29	296151	Capscrew	6	6
30	1530971	E-Ring	2	2
31	1682764	Washer	AR	AR
32	1657021	Spacer	1	1
33	1657016	Bushing	6	6
34	1657013	Pin	1	1

MANUAL CONTROL LEVERS

THREE FUNCTION (S/N A268N02929H →)

KEY:**A:** With Monotrol Control Option**B:** With Seat Directional Control Option

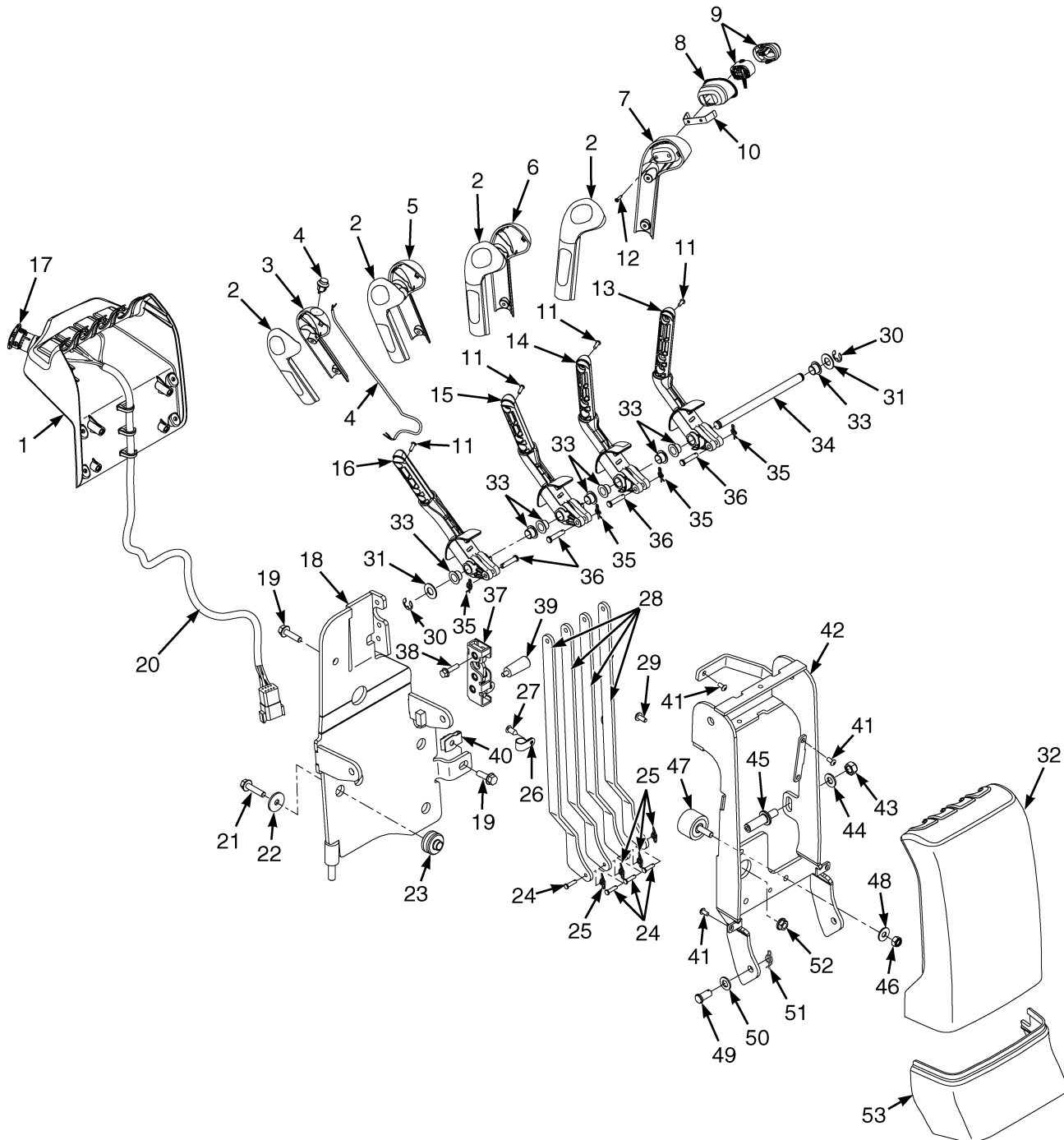
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
35	1517361	Locking Ring Cotter Pin	3	3
36	1657014	Pin	3	3
37	1674167	Latch	1	1
38	1527878	Capscrew	3	3
39	1694731	Handle	1	1
40	1393879	Nut	1	1
41	296151	Capscrew	5	5
42	4012915	Bracket Wldmt	1	1
43	302401	Locknut	1	1
43	a 1460477	Nut	1	1
44	320159	Washer	1	1
45	~~1674168~~			
	4011232	Striker Bolt	1	1
46	302400	Nut	2	2
47	4015304	Rubber Mount	2	2
48	320158	Washer	2	2
49	1674165	Pin	2	2
50	1702735	Washer	2	2
51	1351689	Locking Cotter Pin	2	2
52	~~1382472~~			
	1502543	Nut	1	1
53	4600150	Cover (Lower)	1	1
54	~~2105525~~			
	4601702	Cover (Upper Front)	1	1

FOOTNOTES:**a** With Drive-Thru Rack Overhead Guard

NOTES

[illegible]

MANUAL CONTROL LEVERS (FIGURE 6-14) FOUR FUNCTION (S/N A268N02929H →)



BP150637

MANUAL CONTROL LEVERS
FOUR FUNCTION (S/N A268N02929H →)**KEY:****A: With Monotrol Control Option****B: With Seat Directional Control**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2111173	Cover (Upper Rear)	1	1
2	2104011	Handle (Palm Side Blank Half) (Lift, Tilt, Aux. 1 and Aux. 2 Levers)	4	4
3	2104012	Handle (Finger Side Blank Half) (w/o Clamping)	1	1
3	2104014	Handle (Clamp Switch Blank Half) (Finger Side w/ Clamping)	1	1
4	2100705	Wire Harness (Manual Interlock) (w/ Clamping Lever) (☞ Figure 2-73).....	1	1
4	1671887	Push Button Switch (Included with Manual Interlock Wire Harness)	1	1
5	2104012	Handle (Finger Side Blank Half)	1	1
6	2104012	Handle (Finger Side Blank Half)	1	1
7	2104012	Handle (Finger Side Blank Half)	1	..
7	2109136	Handle (Forward / Reverse Switch Half)	..	1
8	2109137	Cup	..	1
9	2101896	Switch	..	1
10	1696034	Retainer	..	1
11	1694830	Capscrew	14	14
12	227168	Screw	..	2
13	1699347	Lever (Lift)	1	1
14	1699348	Lever (Tilt)	1	1
15	1699349	Lever (Aux. 1)	1	1
16	1699350	Lever (Aux. 2)	1	1
17	2107320	Push Button Switch (Emergency Disconnect)	1	1
17	4180406	Block Push Button Contact	1	1
18	4013012	Mounting Weldment	1	1
19	1510113	Capscrew	2	2
20	a 2107661	Wire Harness (Manual Hydraulics) (☞ Figure 2-67).....	1	1
20	b 4636019	Wire Harness (Manual Hydraulics) (☞ Figure 2-68).....	1	1
21	1586627	Capscrew	3	3
22	1346752	Washer	3	3
23	2063991	Isolator	3	3
24	309109	Pin	4	4
25	1517361	Locking Ring Cotter Pin	4	4
26	.....	Clip	1	1
27	1582464	Fastener	1	1
28	4015337	Plate	4	4
29	296151	Capscrew	6	6
30	1530971	E-Ring	2	2
31	1682764	Washer	AR	AR
32	2105525			
	4601702	Cover (Upper Front)	1	1
33	1657016	Bushing	8	8
34	1657013	Pin	1	1
35	1517361	Locking Ring Cotter Pin	4	4
36	1657014	Pin	4	4
37	1674167	Latch	1	1
38	1527878	Capscrew	3	3
39	1694731	Handle	1	1

MANUAL CONTROL LEVERS

FOUR FUNCTION (S/N A268N02929H →)

KEY:**A:** With Monotrol Control Option**B:** With Seat Directional Control

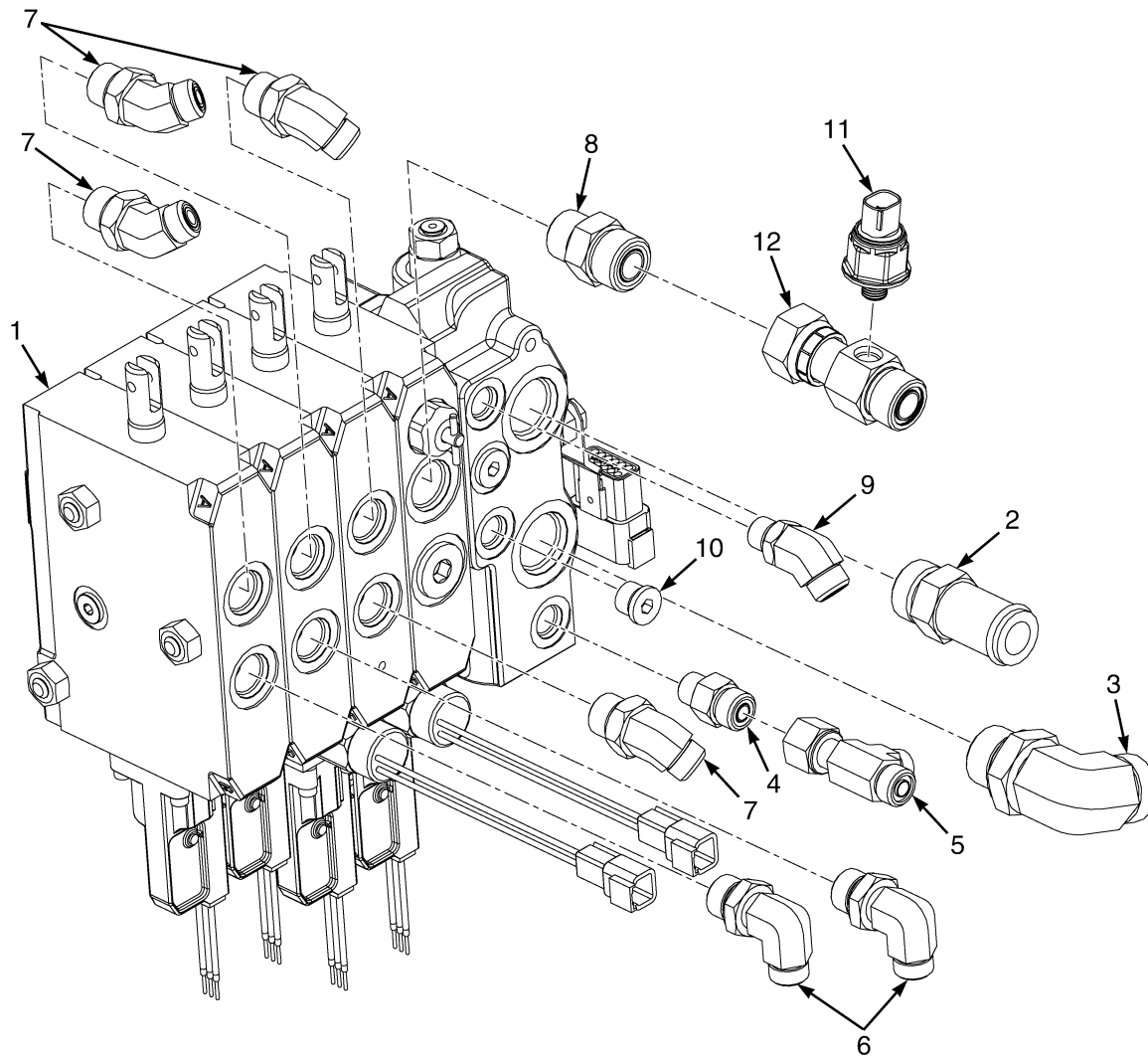
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
40	1393879	Nut	1	1
41	296151	Capscrew	5	5
42	4012915	Bracket Wldmt	1	1
43	302401	Locknut	1	1
44	320159	Washer	1	1
45	~~1674168~~			
	4011232	Striker Bolt	1	1
46	302400	Nut	2	2
47	4015304	Rubber Mount	2	2
48	320158	Washer	2	2
49	1674165	Pin	2	2
50	1702735	Washer	2	2
51	1351689	Locking Cotter Pin	2	2
52	~~1382472~~			
	1502543	Nut	1	1
53	4600150	Cover (Lower)	1	1

FOOTNOTES:**a** → 11/2014**b** 11/2014 →

NOTES

[illegible]

HYDRAULIC VALVE ASSEMBLY (FIGURE 6-15) MANUAL — THREE AND FOUR FUNCTION (→ 12/2016)



BP140182

HYDRAULIC VALVE ASSEMBLY

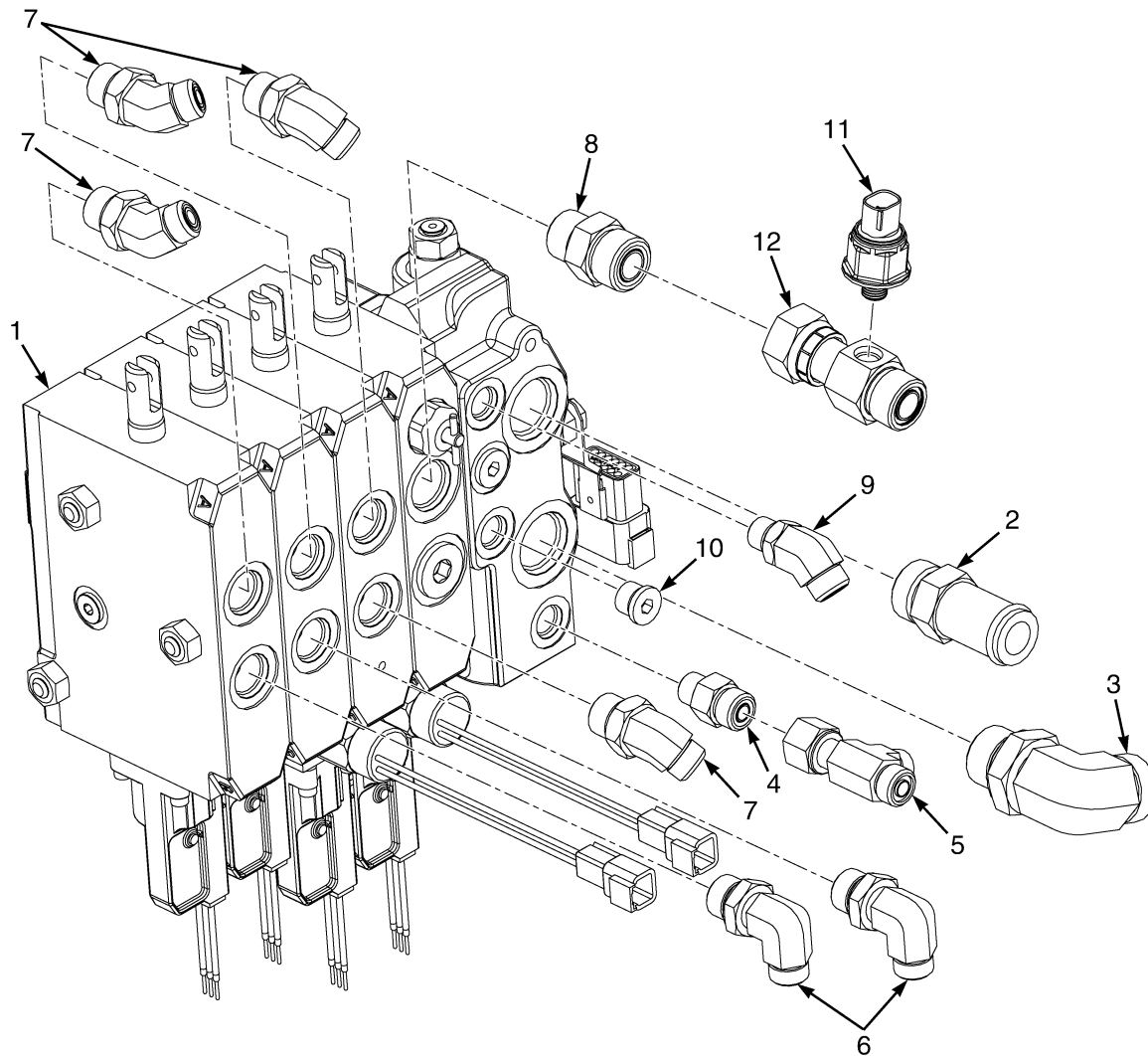
MANUAL – THREE AND FOUR FUNCTION (→ 12/2016)

KEY:**A: 3 Function****B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Hydraulic Control Valve Assembly (☞ Figure 6-17).....	1	1
2	98599	Fitting	1	1
2	~~1450764~~			
	16486	O-Ring	1	1
3	1473898	Fitting	1	1
4	a 1704570	Check Valve	1	1
4	c 1486740	Fitting	1	1
4	265787	O-Ring	1	1
5	a 1487097	Fitting	1	1
6	1487061	Fitting	1	2
7	1516201	Fitting	3	4
8	1486749	Fitting	1	1
9	1516199	Fitting	1	1
10	~~1579809~~			
	222443	Fitting	2	2
10	16483	O-Ring	1	1
11	b 1606735	Sensor (Load Sensing)	1	1
11	d 1707681	Pressure Transducer (Load Sensing) (Optional)	1	1
12	1687430	T-Fitting (Load Sensing) (Optional)	1	1

FOOTNOTES:**a** → 10/2013**b** → 11/2008**c** 10/2013 →**d** 11/2008 →

HYDRAULIC VALVE ASSEMBLY (FIGURE 6-16) MANUAL CONTROL — THREE AND FOUR FUNCTION (12/2016 →)



BP140182

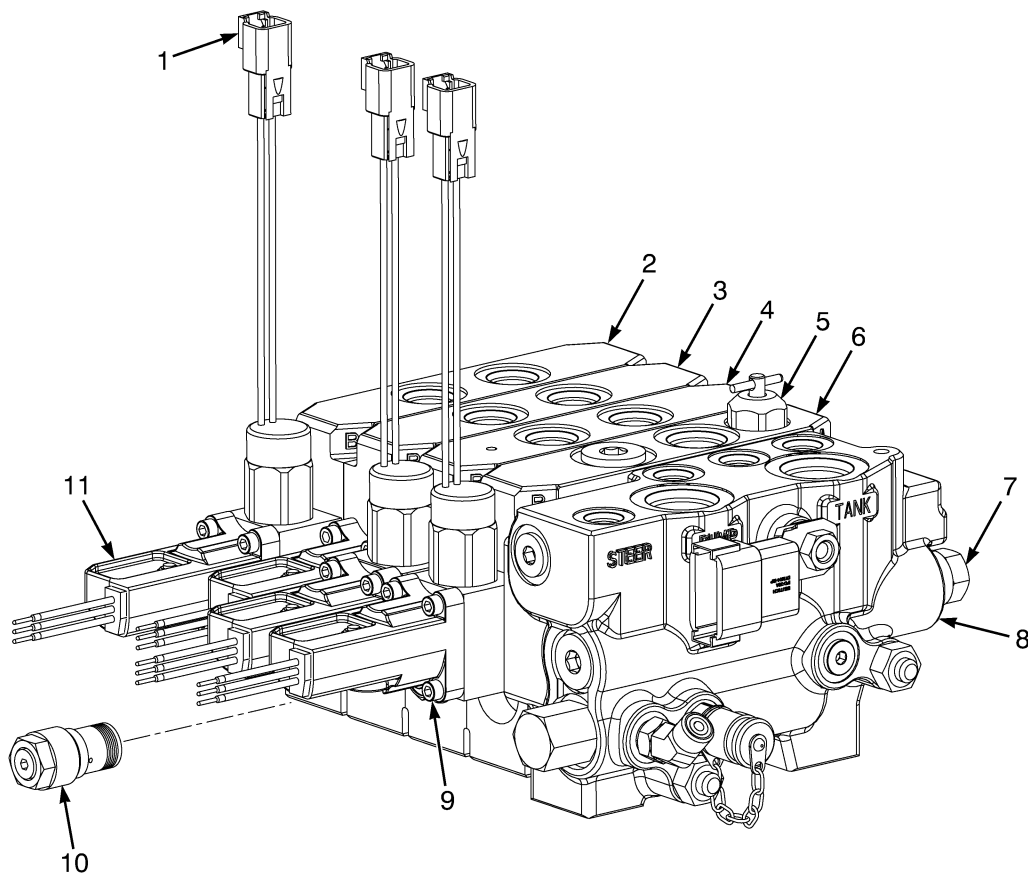
HYDRAULIC VALVE ASSEMBLY

MANUAL CONTROL – THREE AND FOUR FUNCTION (12/2016 →)

KEY:**A: 3 Function****B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Hydraulic Control Valve Assembly (☞ Figure 6-17).....	1	1
2	98599	Fitting	1	1
2	~~1450764~~			
	16486	O-Ring	1	1
3	1473898	Fitting	1	1
4	1704570	Check Valve	1	1
5	1487097	Fitting	1	1
6	1487061	Fitting	1	2
7	1516201	Fitting	3	4
8	1486749	Fitting	1	1
9	1516199	Fitting	1	1
10	~~1579809~~			
	222443	Fitting	2	2
10	16483	O-Ring	1	1
11	1707681	Pressure Transducer (Load Sensing) (Optional)	1	1
12	1687430	T-Fitting (Load Sensing) (Optional)	1	1

HYDRAULIC CONTROL VALVE (FIGURE 6-17) MANUAL — THREE AND FOUR FUNCTION (→ 12/2016)



BP140145

HYDRAULIC CONTROL VALVE

MANUAL – THREE AND FOUR FUNCTION (→ 12/2016)

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 2094692	Hydraulic Control Valve Assembly (Without Clamping) (E45-55XN)	1	..
	b 4606509	Hydraulic Control Valve Assembly (Without Clamping) (E45-55XN)	1	..
	a 2098807	Hydraulic Control Valve Assembly (With Clamping) (E45-55XN)	1	..
	b 4606513	Hydraulic Control Valve Assembly (With Clamping) (E45-55XN)	1	..
	a 2094694	Hydraulic Control Valve Assembly (Without Clamping) (E45-55XN)	..	1
	b 4606511	Hydraulic Control Valve Assembly (Without Clamping) (E45-55XN)	..	1
	a 2098810	Hydraulic Control Valve Assembly (With Clamping) (E45-55XN)	..	1
	b 4606515	Hydraulic Control Valve Assembly (With Clamping) (E45-55XN)	..	1
	a 2094693	Hydraulic Control Valve Assembly (Without Clamping) (E60-70XN)	1	..
	b 4606510	Hydraulic Control Valve Assembly (Without Clamping) (E60-70XN)	1	..
	a 2098808	Hydraulic Control Valve Assembly (With Clamping) (E60-70XN)	1	..
	b 4606514	Hydraulic Control Valve Assembly (With Clamping) (E60-70XN)	1	..
	a 2094695	Hydraulic Control Valve Assembly (Without Clamping) (E60-70XN)	..	1
	b 4606512	Hydraulic Control Valve Assembly (Without Clamping) (E60-70XN)	..	1
	a 2098811	Hydraulic Control Valve Assembly (With Clamping) (E60-70XN)	..	1
	b 4606516	Hydraulic Control Valve Assembly (With Clamping) (E60-70XN)	..	1
1	1701855	Spool (Solenoid)	1	1
2	1701661	Valve Section (End Aux) (Without Clamping) (☞Figure 6-19).....	1	1
2	1703684	Valve Section (End Aux) (With Clamping) (☞Figure 6-19).....	1	1
3	1701666	Valve Section (Dual Aux Section) (☞Figure 6-19).....	..	1
4	a 1701663	Valve Section (Tilt) (☞Figure 6-19).....	1	1
4	b 4037962			
	4068230	Valve Section (Tilt) (☞Figure 6-19).....	1	1
4	a 1701660	Valve Section (Tilt) (☞Figure 6-19).....	1	1
4	b 4037964			
	4068229	Valve Section (Tilt) (☞Figure 6-19).....	1	1
5	1696312	Lowering Control Valve	1	1
6	1701659	Valve Section (Lift) (☞Figure 6-19).....	1	1
7	1696035			
	4068226	Relief Valve (E45-55XN)	1	1
7	1696044			
	4068227	Relief Valve (E60-70XN)	1	1
8	1701657	Valve Section (Inlet) (E45-55XN) (☞Figure 6-26).....	1	1
8	1701671	Valve Section (Inlet) (E60-70XN) (☞Figure 6-26).....	1	1
9	18096	Capscrew (With Spool Lock)	4	4
9	18089	Capscrew (Without Spool Lock)	4	4
10	1696304			
	1703511			
	4069956			
	4132001	Relief Valve	1	1
11	.....	Sensor	1	1
11	1703512	Spring	1	1
	1701654	Kit-Sensor	1	1

FOOTNOTES:

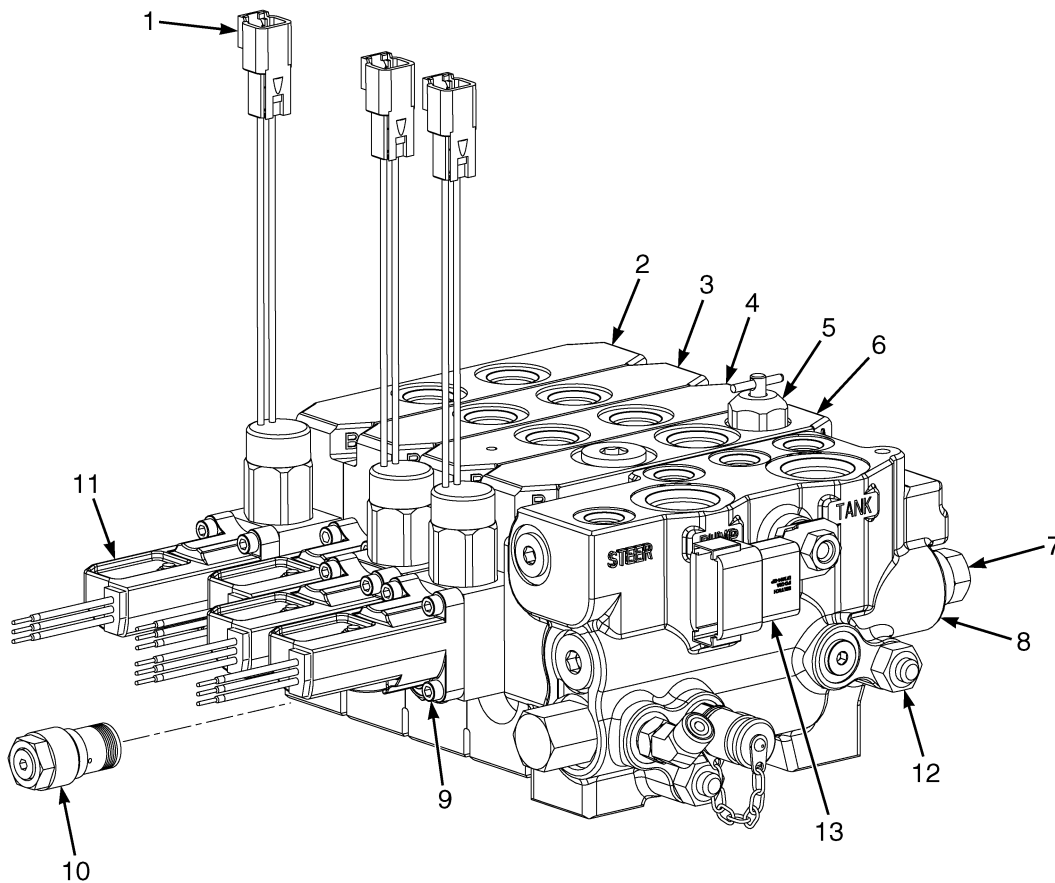
a → S/N A268N03186J

b S/N A268N03187J →

NOTES

[illegible]

HYDRAULIC CONTROL VALVE (FIGURE 6-18) MANUAL — THREE AND FOUR FUNCTION (12/2016 →)



BP140280

HYDRAULIC CONTROL VALVE

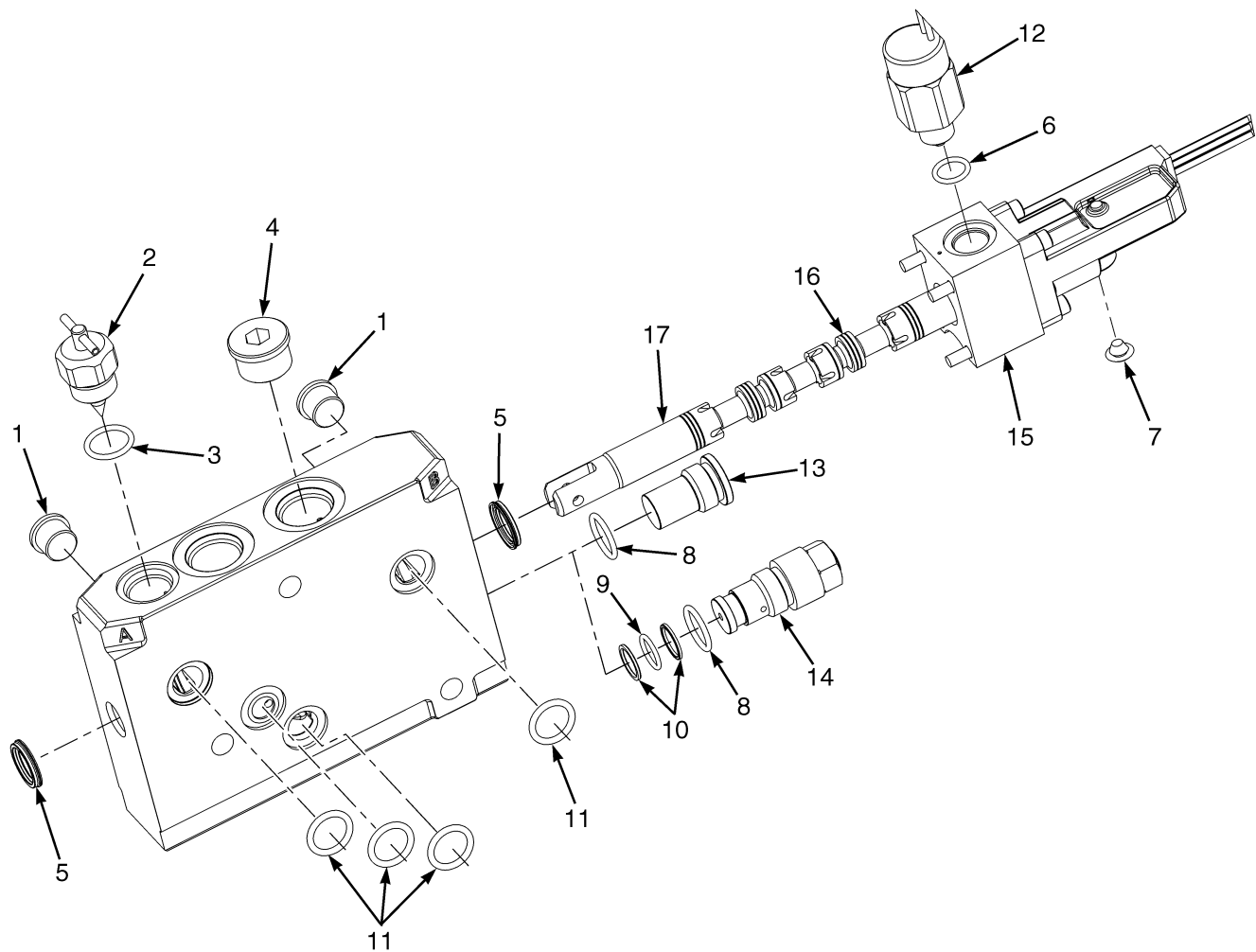
MANUAL – THREE AND FOUR FUNCTION (12/2016 →)

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4648996	Hyd Control Valve Assembly (Without Clamping) (E45-55XN)	1	..
	4649000	Hyd Control Valve (With Clamping) (E45-55XN)	1	..
	4648998	Hyd Control Valve (Without Clamping) (E45-55XN)	..	1
	4649002	Hyd Control Valve (With Clamping) (E45-55XN)	..	1
	4648997	Hyd Control Valve (Without Clamping) (E60-70XN)	1	..
	4649001	Hyd Control Valve (With Clamping) (E60-70XN)	1	..
	4648999	Hyd Control Valve (Without Clamping) (E60-70XN)	..	1
	4649003	Hyd Control Valve (With Clamping) (E60-70XN)	..	1
1	1701855	Spool (Solenoid)	1	1
2	1701661	Valve Section (End Aux) (Without Clamping) (☞Figure 6-20).....	1	1
2	1703684	Valve Section (End Aux) (With Clamping) (☞Figure 6-20).....	1	1
3	1701666	Valve Section (Dual Aux Section) (☞Figure 6-20).....	..	1
4	4166223	Valve Section Assembly, Tilt (☞Figure 6-20).....	1	1
4	4166224	Valve Section Assembly, Tilt (☞Figure 6-20).....	1	1
5	1696312	Lowering Control Valve	1	1
6	1701659	Valve Section (Lift) (☞Figure 6-20).....	1	1
7	1696035			
	4068226	Relief Valve (E45-55XN)	1	1
7	1696044			
	4068227	Relief Valve (E60-70XN)	1	1
8	1701657	Valve Section (Inlet) (E45-55XN) (☞Figure 6-26).....	1	1
8	1701671	Valve Section (Inlet) (E60-70XN) (☞Figure 6-26).....	1	1
9	18096	Capscrew (With Spool Lock)	4	4
9	18089	Capscrew (Without Spool Lock)	4	4
10	4166220	Valve Section (Tilt Relief)	1	1
11	.....	Sensor	1	1
11	4166221	Kit-Spring	1	1
12	1696043	Tie Rod Kit	1	..
12	1695985	Tie Rod Kit	..	1
13	1701817	Kit-Connector	1	1
	1701654	Kit-Sensor	1	1

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY (FIGURE 6-19)

MANUAL HYDRAULIC (→ 12/2016)



BP140163

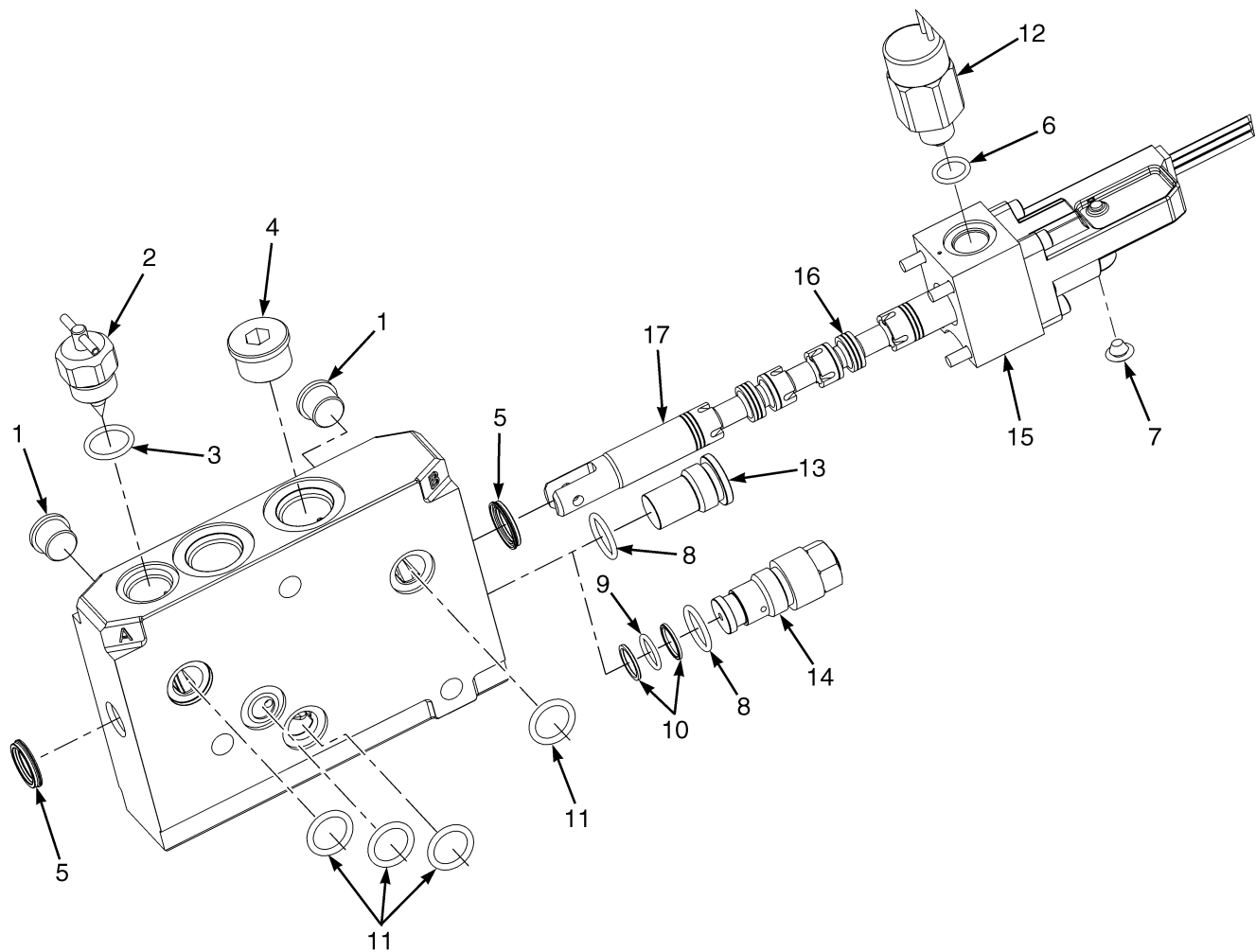
VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY
MANUAL HYDRAULIC (→ 12/2016)

ITEM	PART NO.	DESCRIPTION	QTY
	1701661	Valve Section (End Aux) (Without Clamping)	1
	1703684	Valve Section (End Aux) (With Clamping)	1
	1701666	Valve Section (Dual Aux Section)	1
	a 1701660	Valve Section (Tilt) (E45-55XN)	1
	b 4037961		
	4068229	Valve Section (Tilt) (E45-55XN)	1
	a 1701663	Valve Section (Tilt) (E60-70XN)	1
	b 4037962		
	4068230	Valve Section (Tilt) (E60-70XN)	1
	1701659	Valve Section (Lift)	1
1	1579809		
	222443	Fitting	2
1	16483	O-Ring	1
2	.....	Fitting	5
3	.....	O-Ring	1
4	233693	Fitting	1
4	16485	O-Ring	1
5	1701825	Seal	2
6	.....	O-Ring	1
7	288474	Plug	1
8	.....	O-Ring	2
9	.....	O-Ring	1
10	.....	Back-Up Ring	2
11	.....	O-Ring	4
12	1701855	Spool (Solenoid)	1
13	.....	Plug (Lift Section Only)	1
14	1696301		
	1703511		
	4069956		
	4132001	Relief Valve (Tilt Section Only)	1
15	1701654	Kit-Sensor	1
15	.....	Sensor	1
15	18096	Capscrew	4
15	18089	Capscrew	4
15	1703512	Spring	1
15	4011177	Retainer (With Ball)	1
16	.....	Spool	1
17	.....	Clevis	1
	1696316	Kit-Seal	1

FOOTNOTES:**a** → S/N A268N03186J**b** S/N A268N03187J →

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY (FIGURE 6-20)

MANUAL HYDRAULIC (12/2016 →)

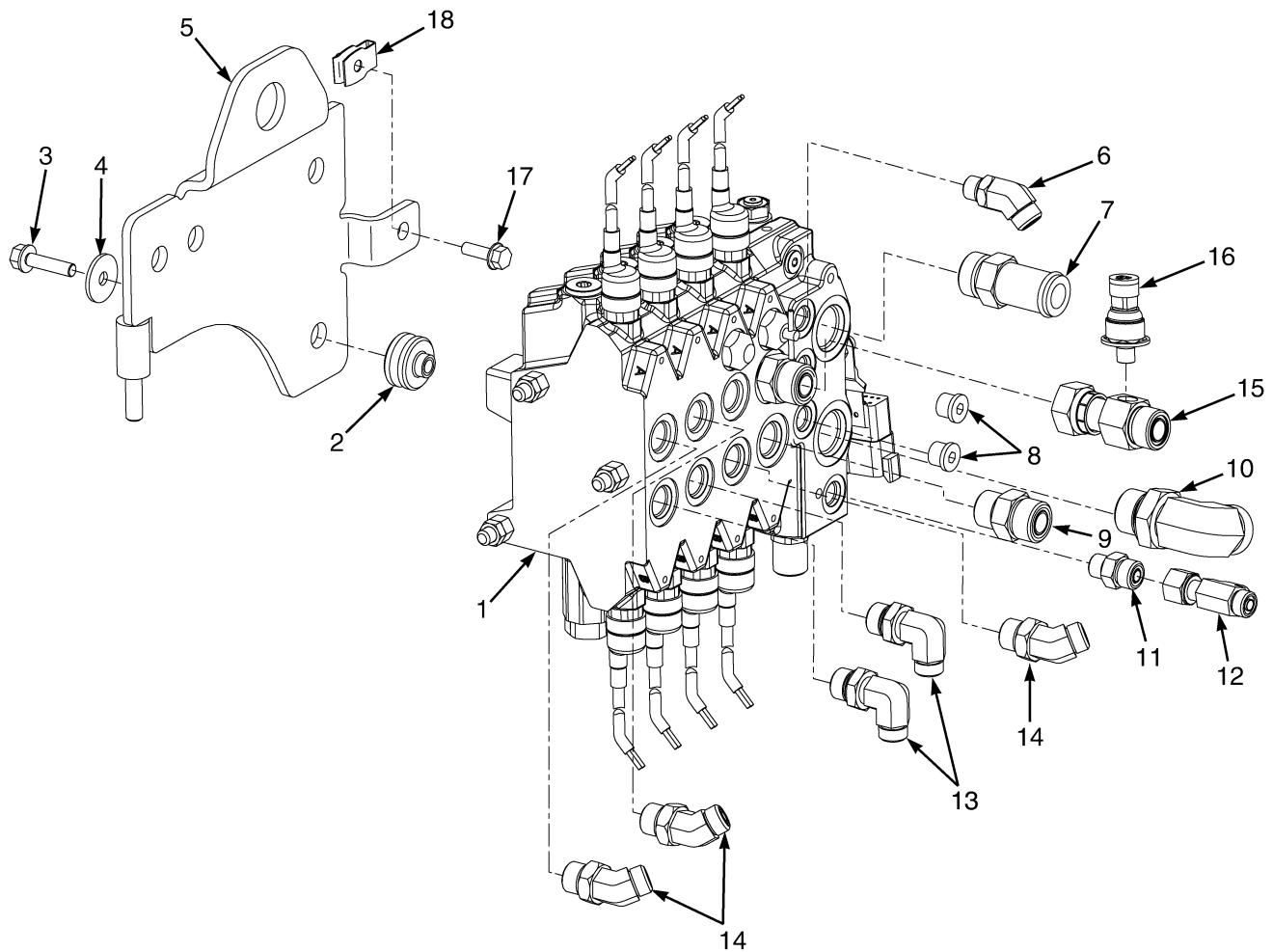


BP140163

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY
MANUAL HYDRAULIC (12/2016 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1701661	Valve Section (End Aux) (Without Clamping)	1
	1703684	Valve Section (End Aux) (With Clamping)	1
	1701666	Valve Section (Dual Aux Section)	1
	4166223	Valve Section Assembly, Tilt (E45-55XN)	1
	4166224	Valve Section Assembly, Tilt (E60-70XN)	1
	1701659	Valve Section (Lift)	1
1	1579809		
	222443	Fitting	2
1	16483	O-Ring	1
2	.....	Fitting	5
3	.....	O-Ring	1
4	233693	Fitting	1
4	16485	O-Ring	1
5	1701825	Seal	2
6	.....	O-Ring	1
7	288474	Plug	1
8	.....	O-Ring	2
9	.....	O-Ring	1
10	.....	Back-Up Ring	2
11	.....	O-Ring	4
12	1701855	Spool (Solenoid)	1
13	.....	Plug (Lift Section Only)	1
14	4166220	Valve Section (Tilt Relief) (Tilt Section Only)	1
15	1701654	Kit-Sensor	1
15	.....	Sensor	1
15	18096	Capscrew	4
15	18089	Capscrew	4
15	1703512	Spring	1
15	4011177	Retainer (With Ball)	1
16	.....	Spool	1
17	.....	Clevis	1
	1696316	Kit-Seal	1

HYDRAULIC VALVE ASSEMBLY (FIGURE 6-21) ELECTRONIC — THREE AND FOUR FUNCTION



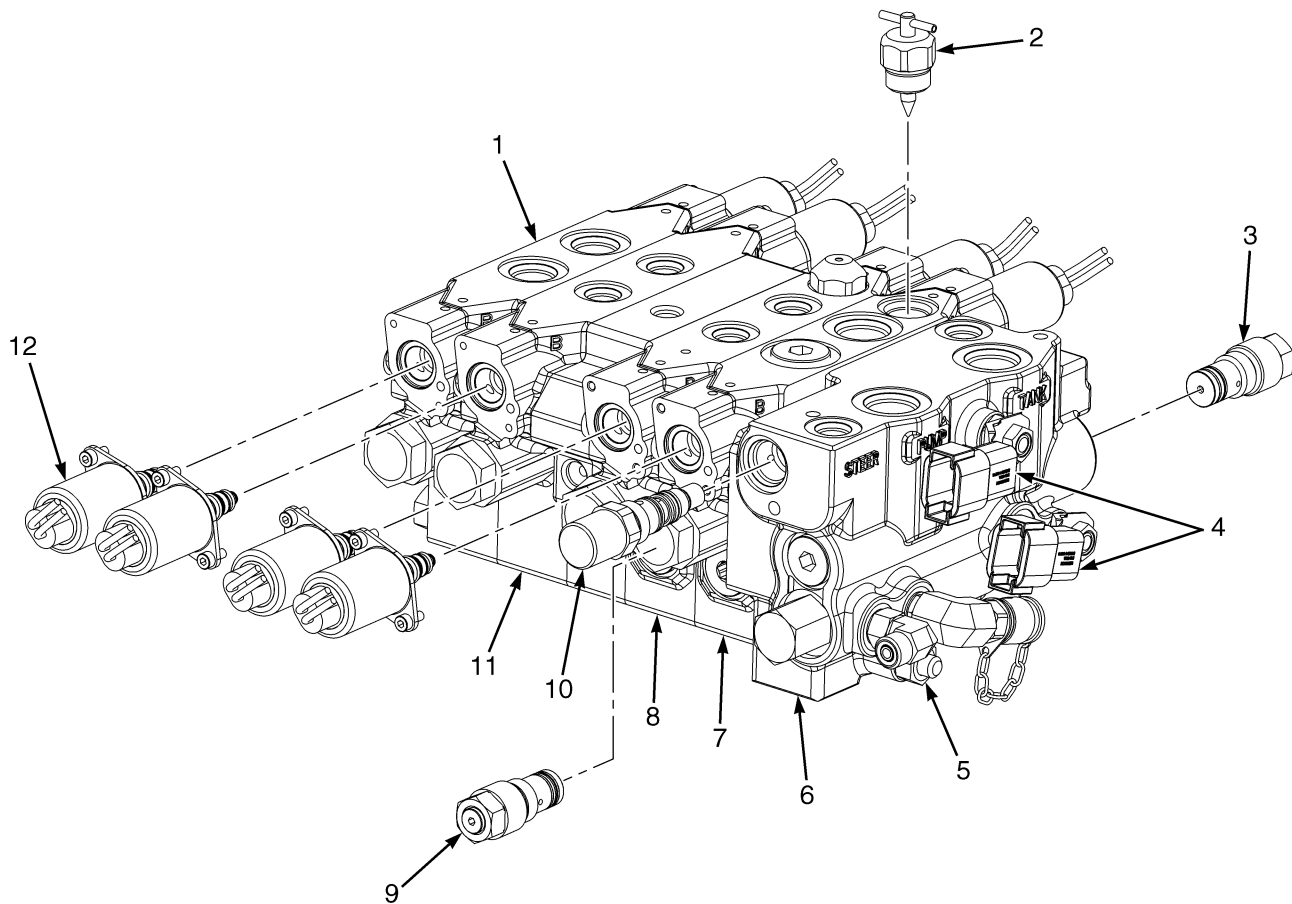
BP140181

**HYDRAULIC VALVE ASSEMBLY
ELECTRONIC – THREE AND FOUR FUNCTION****KEY:****A: 3 Function****B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Hydraulic Control Valve Assembly (☞ Figure 6-22).....	1	1
2	2063991	Isolator	3	3
3	1586627	Capscrew	3	3
4	1346752	Washer	3	3
5	a 1709143	Bracket Wldmt	1	1
5	c 4081884	Bracket Wldmt	1	1
6	1516199	Fitting	1	1
7	98599	Fitting	1	1
7	~~1450764~~ 16486	O-Ring	1	1
8	~~1579809~~ 222443	Fitting	2	2
8	16483	O-Ring	1	1
9	1486749	Fitting	1	1
10	1473898	Fitting	1	1
11	1704570	Check Valve	1	1
12	a 1487097	Fitting	1	1
13	1487061	Fitting	1	2
14	1516201	Fitting	3	4
15	1687430	T-Fitting (Load Sensing) (Optional)	1	1
16	b 1606735	Sensor (Load Sensing) (Optional)	1	1
16	d 1707681	Pressure Transducer (Load Sensing)(Optional)	1	1
17	1510113	Capscrew	1	1
18	1393879	Nut	1	1

FOOTNOTES:**a** → 10/2013**b** → 11/2008**c** 10/2013 →**d** 11/2008 →

HYDRAULIC CONTROL VALVE (FIGURE 6-22) ELECTRONIC — THREE AND FOUR FUNCTION (→ 12/2016)



BP140160

HYDRAULIC CONTROL VALVE

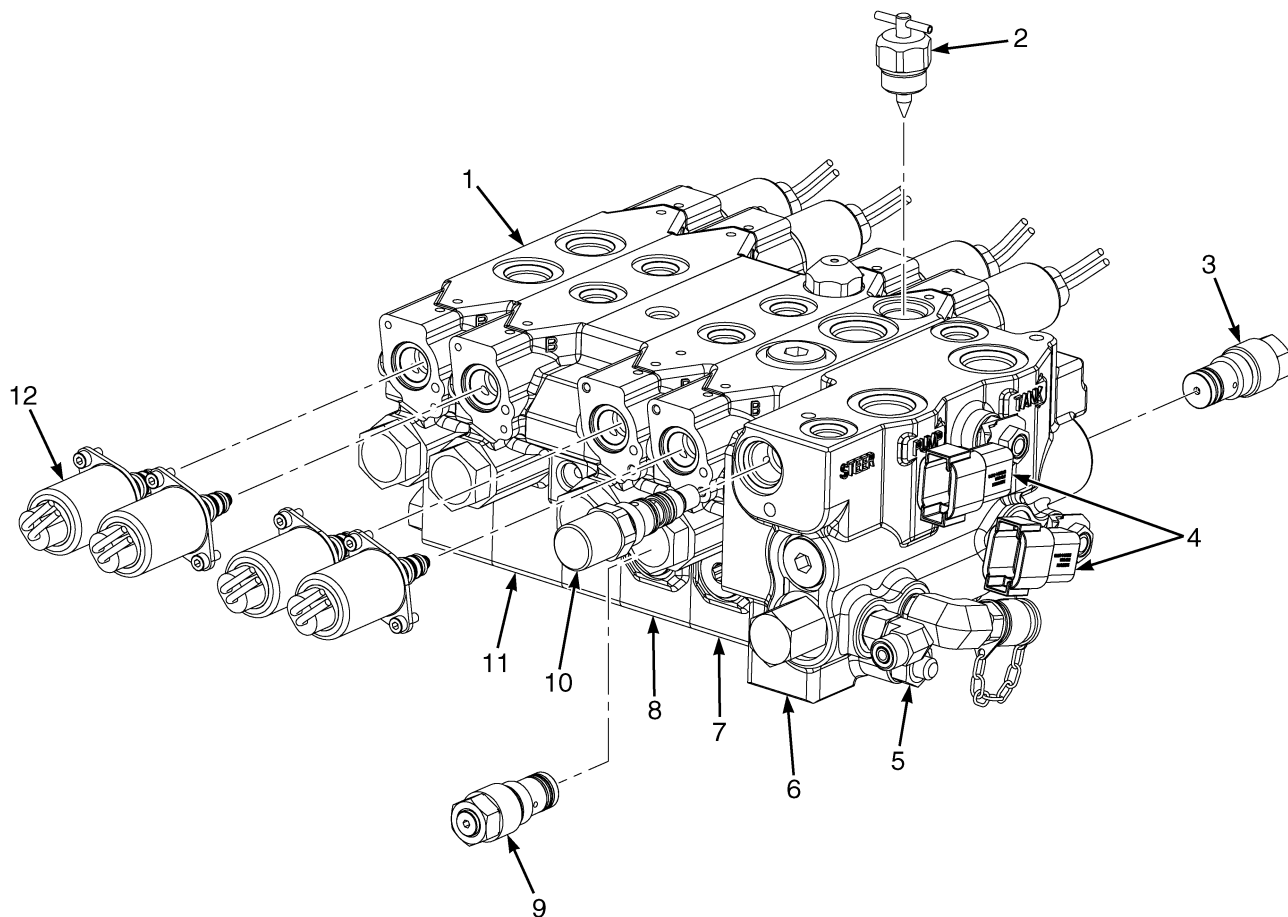
ELECTRONIC – THREE AND FOUR FUNCTION (→ 12/2016)

KEY:**A: 3 Function****B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2103159	Hydraulic Control Valve (E45-55XN)	1	..
	2103160	Hydraulic Control Valve (E60-70XN)	1	..
	2103164	Hydraulic Control Valve (E45-55XN)	..	1
	2103165	Hydraulic Control Valve (E60-70XN)	..	1
1	~~1696042~~			
	4069957	Valve Section (End) (End Aux) (☞Figure 6-24).....	1	1
2	1696312	Lowering Control Valve	1	1
3	~~1696035~~			
	4068226	Relief Valve (Main)	1	..
3	~~1696044~~			
	4068227	Relief Valve (Main)	..	1
4	1701367	Kit-Service	1	1
5	1696043	Tie Rod Kit	1	..
5	1695985	Tie Rod	..	1
5	a 1696418	Nut	2	2
5	a 1696419	Nut	6	6
5	a 1696453	Tie Rod	3	3
6	1696036	Valve Section (Inlet) (E45-55XN) (☞Figure 6-26).....	1	1
6	1696045	Valve Section (Inlet) (E60-70XN) (☞Figure 6-26).....	1	1
7	1696040	Valve Section (Lift) (☞Figure 6-24).....	1	1
8	1696041	Valve Section (Tilt Section) (E45-55XN) (☞Figure 6-24).....	1	1
8	1696046	Valve Section (Tilt Section) (E60-70XN) (☞Figure 6-24).....	1	1
9	~~1696304~~			
	~~1703511~~			
	~~4069956~~			
	4132001	Relief Valve	1	1
10	~~1696318~~			
	4069955	Pilot Valve	1	1
11	~~1696226~~			
	4069958	Valve Section (Dual Aux) (☞Figure 6-24).....	..	1
12	1696315	Solenoid Valve	6	8
12	4138658	Kit-Seal	1	1
	a 1696319	Kit-Seal Complete Valve	1	1

FOOTNOTES:**a** Not Illustrated

HYDRAULIC CONTROL VALVE (FIGURE 6-23) ELECTRONIC CONTROL — THREE AND FOUR FUNCTION (12/2016 →)



BP140279

HYDRAULIC CONTROL VALVE

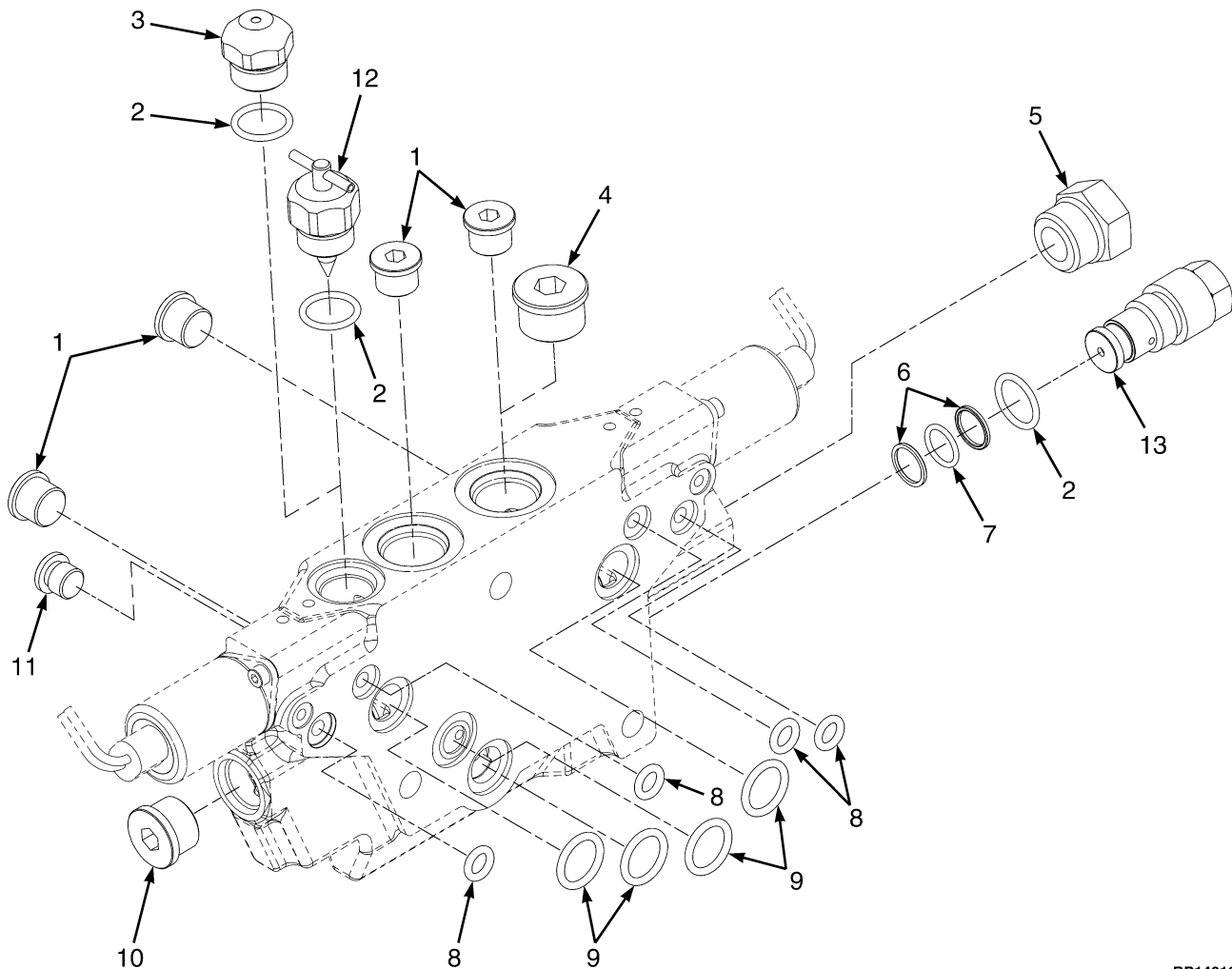
ELECTRONIC CONTROL – THREE AND FOUR FUNCTION (12/2016 →)

KEY:**A: 3 Function****B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4647553	Hyd Control Valve (E45-55XN)	1	..
	4647554	Hyd Control Valve (E60-70XN)	1	..
	4647555	Hyd Control Valve (E45-55XN)	..	1
	4647556	Hyd Control Valve (E60-70XN)	..	1
1	~~1696042~~			
	4069957	Valve Section (End) (End Aux) (☞Figure 6-24).....	1	1
2	1696312	Lowering Control Valve	1	1
3	~~1696035~~			
	4068226	Relief Valve (Main)	1	..
3	~~1696044~~			
	4068227	Relief Valve (Main)	..	1
4	1701367	Kit-Service Connector	1	1
5	1696043	Tie Rod Kit	1	..
5	1695985	Tie Rod Kit	..	1
6	1696036	Valve Section (Inlet) (E45-55XN) (☞Figure 6-26).....	1	1
6	1696045	Valve Section (Inlet) (E60-70XN) (☞Figure 6-26).....	1	1
7	1696040	Valve Section (Lift) (☞Figure 6-25).....	1	1
8	4166225	Valve Section Assembly, Tilt (E45-55XN) (☞Figure 6-25).....	1	1
8	4166227	Valve Section Assembly, Tilt (E60-70XN) (☞Figure 6-25).....	1	1
9	4166220	Valve Section (Tilt Relief)	1	1
9	a 4166221	Kit-Spring	1	1
10	~~1696318~~			
	4069955	Pilot Valve	1	1
11	~~1696226~~			
	4069958	Valve Section (Dual Aux) (☞Figure 6-25).....	..	1
12	1696315	Solenoid Valve	6	8
12	4138658	Kit-Seal	1	1
13	4011175	Plug	1	1
	a 4166222	Cap (Solenoid)	6	8
	a 1696319	Kit-Seal Complete Valve	1	1

FOOTNOTES:**a** Not Illustrated

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY (FIGURE 6-24) ELECTRIC HYDRAULIC (→ 12/2016)

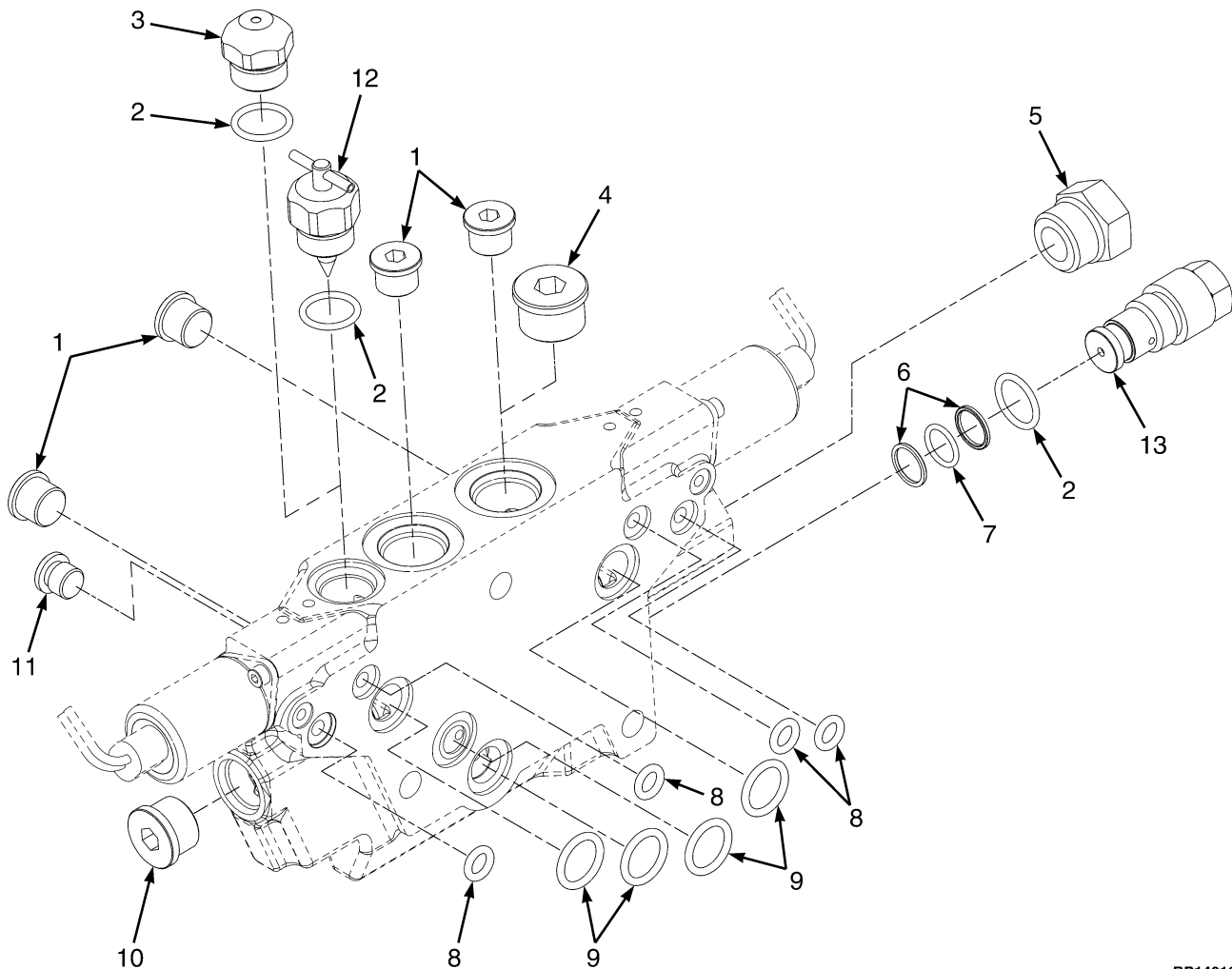


BP140161

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY
ELECTRIC HYDRAULIC (→ 12/2016)

ITEM	PART NO.	DESCRIPTION	QTY
	1696042		
	4069957	Valve Section (End)	1
	1696040	Valve Section (Lift)	1
	1696041	Valve Section (Tilt Section) (E45-55XN)	1
	1696046	Valve Section (Tilt Section) (E60-70XN)	1
1	1579809		
	222443	Fitting	2
2	.....	O-Ring	2
3	.....	Fitting	4
4	233693	Fitting	1
5	216590	Fitting	1
6	.....	Back-Up Ring	2
7	.....	O-Ring	1
8	.....	O-Ring	4
9	.....	O-Ring	4
10	1589792		
	235691	Fitting	1
11	222442	Fitting	1
12	1696312	Lowering Control Valve	1
13	1696304		
	1703511		
	4069956		
	4132001	Relief Valve (Tilt Section Only)	1
	1696266	Kit-Seal (Order one for each valve section)	1

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY (FIGURE 6-25) ELECTRIC HYDRAULIC (12/2016 →)

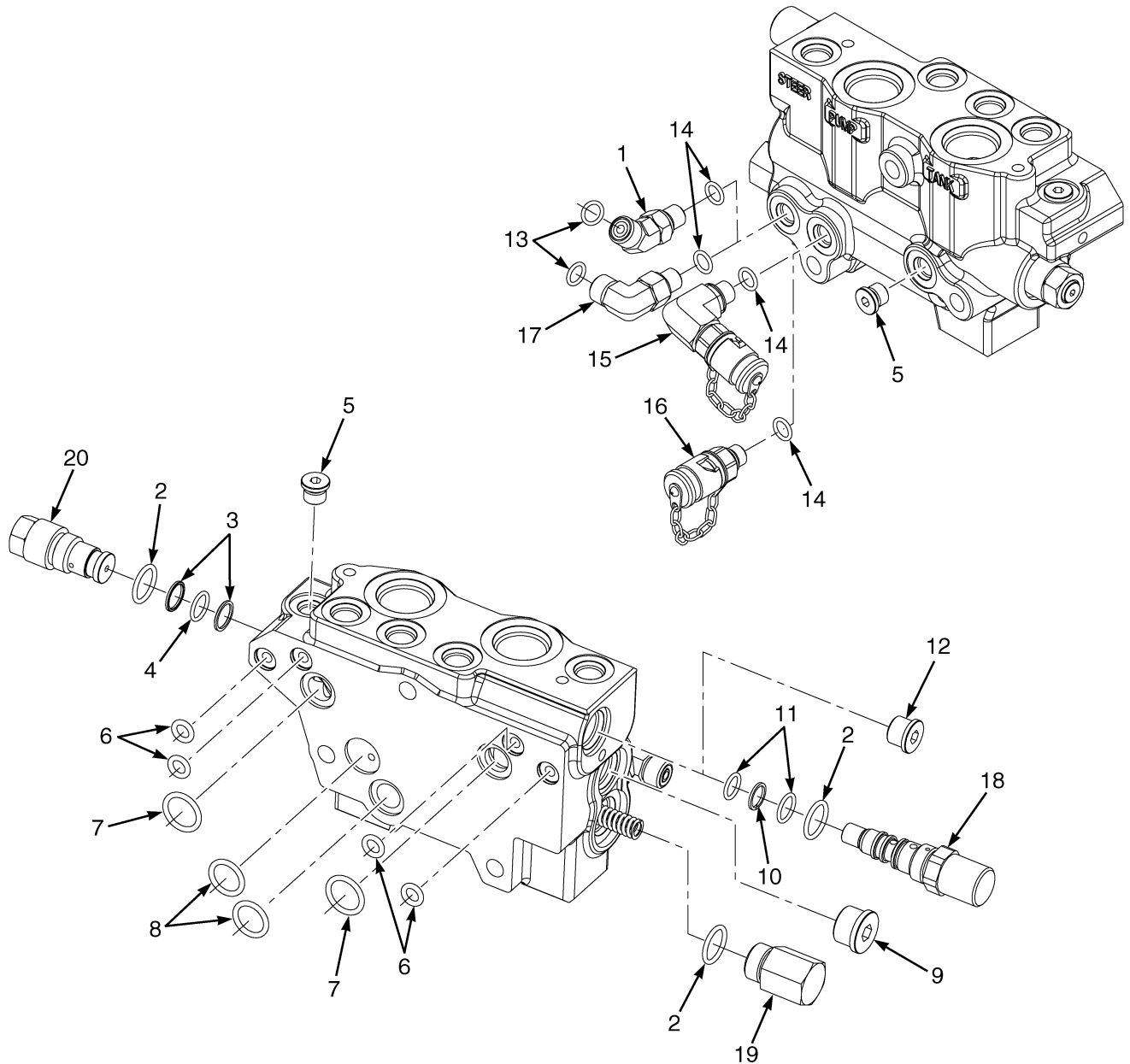


BP140161

VALVE ASSEMBLY, LIFT, TILT, AND AUXILIARY
ELECTRIC HYDRAULIC (12/2016 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1696042		
	4069957	Valve Section (End)	1
	1696040	Valve Section (Lift)	1
	4166225	Valve Section Assembly, Tilt (E45-55XN)	1
	4166227	Valve Section Assembly, Tilt (E60-70XN)	1
1	1579809		
	222443	Fitting	2
2	.....	O-Ring	2
3	.....	Fitting	4
4	233693	Fitting	1
5	216590	Fitting	1
6	.....	Back-Up Ring	2
7	.....	O-Ring	1
8	.....	O-Ring	4
9	.....	O-Ring	4
10	1589792		
	235691	Fitting	1
11	222442	Fitting	1
12	1696312	Lowering Control Valve	1
13	4166220	Valve Section (Tilt Relief) (Tilt Section Only)	1
	1696266	Kit-Seal (Order one for each valve section)	1

VALVE ASSEMBLY (FIGURE 6-26) INLET SECTION — MANUAL AND ELECTRONIC



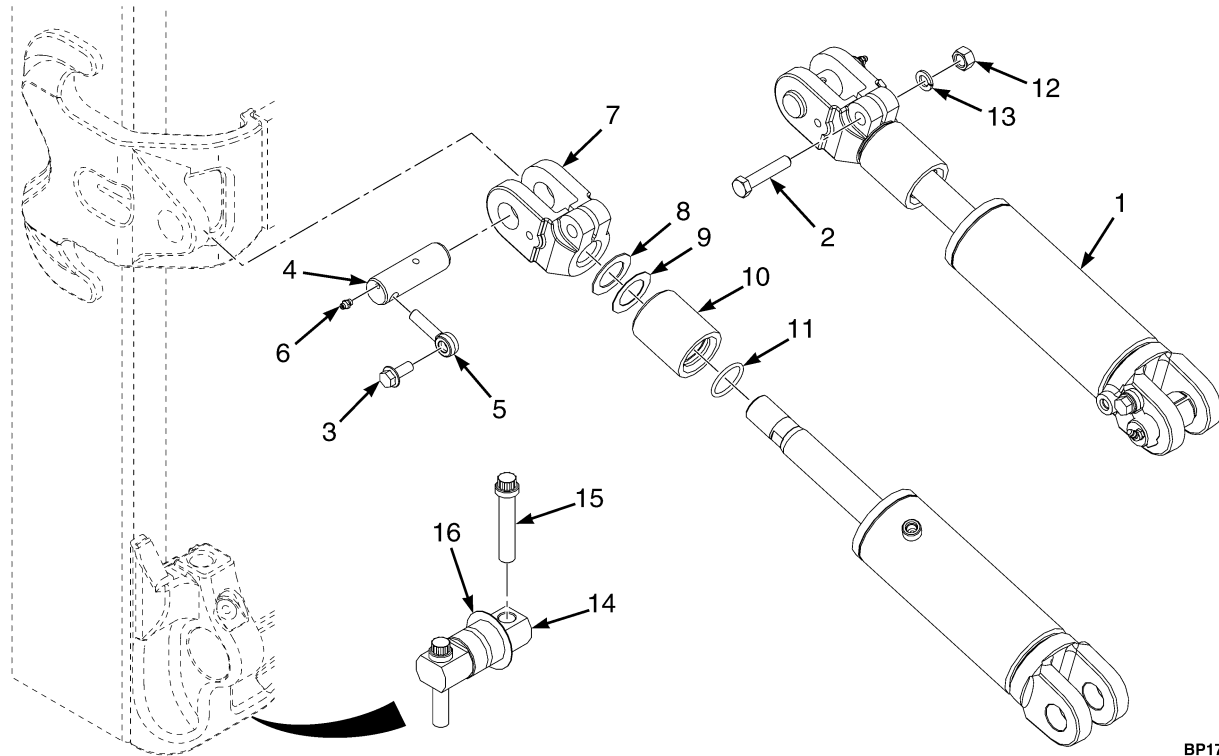
BP140162

VALVE ASSEMBLY
INLET SECTION – MANUAL AND ELECTRONIC

ITEM	PART NO.	DESCRIPTION	QTY
	a 1696036	Valve Section (Inlet) (E45-55XN)	1
	a 1696045	Valve Section (Inlet) (E60-70XN)	1
	b 1701657	Valve Section (Inlet) (E45-55XN)	1
	b 1701671	Valve Section (Inlet) (E60-70XN)	1
1	1516199	Fitting (45 Degree Optional)	4
2	.....	O-Ring	3
3	.....	Back-Up Ring	2
4	.....	O-Ring	1
5	222442	Fitting	2
6	.....	O-Ring	4
7	.....	O-Ring	2
8	.....	O-Ring	2
9	~~1589792~~		
	235691	Fitting	1
10	.....	Back-Up Ring	1
11	.....	O-Ring	2
12	~~1579809~~		
	222443	Fitting	1
13	.....	O-Ring	1
14	.....	O-Ring	3
15	1545546	Fitting (90 Degree Optional)	1
16	2061646	Fitting (Diagnostic)	2
17	.....	Fitting (90 Degree Optional)	1
18	~~1696318~~		
	4069955	Pilot Valve	1
19	.....	Fitting	1
20	~~1696035~~		
	4068226	Relief Valve (E45-55XN)	1
20	~~1696044~~		
	4068227	Relief Valve (E60-70XN)	1
	1696414	Kit-Seal	1

FOOTNOTES:**a** Electronic**b** Manual

TILT CYLINDER AND MAST INSTALLATION (FIGURE 6-27)



BP170748

KEY:

A: E45-55XN

B: E60-70XN

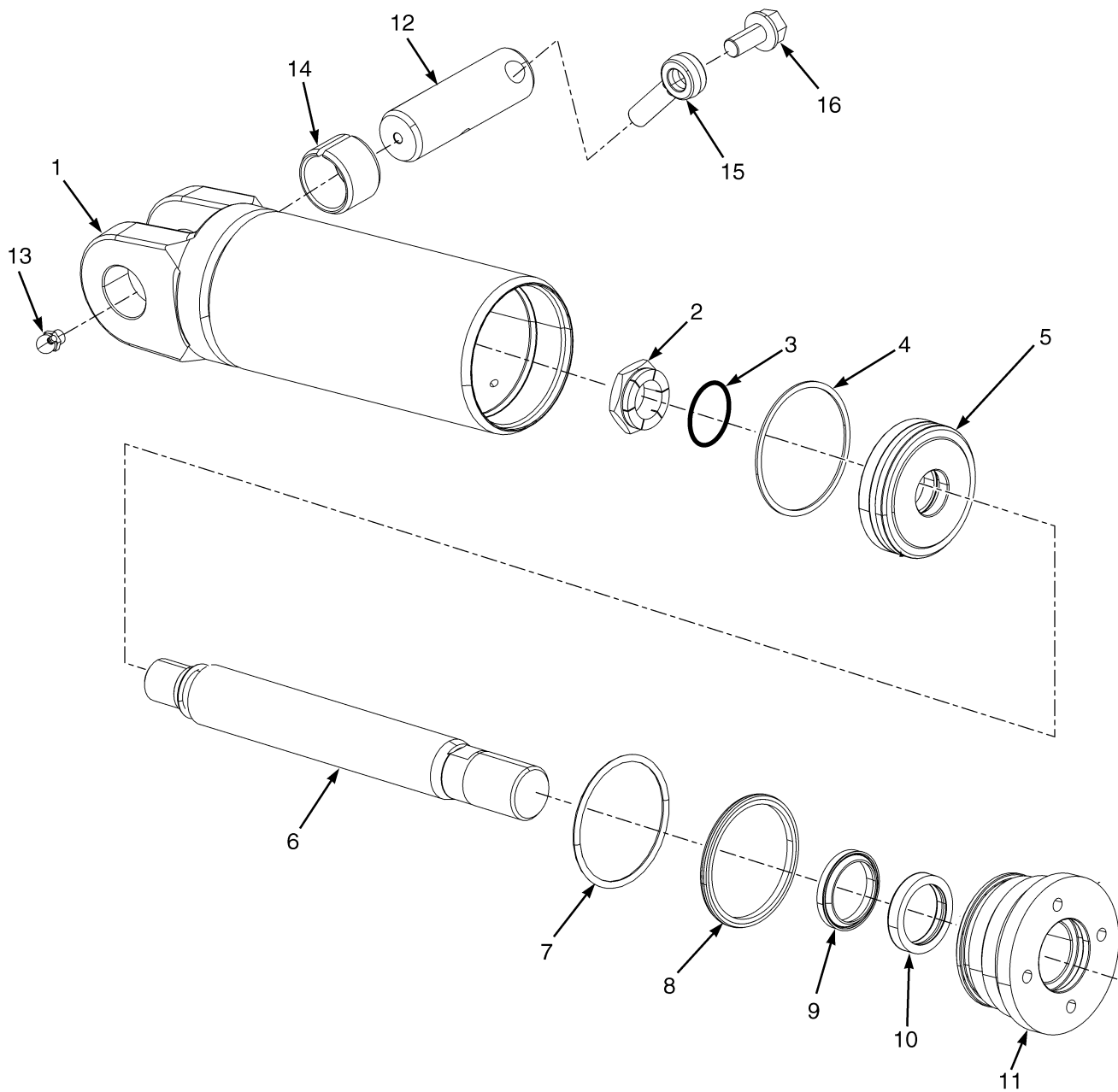
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Tilt Cylinder (☞ Figure 6-28, ☞ Figure 6-29).....	2	2
2	1597381	Capscrew	2	2
3	1586013	Capscrew	2	2
3	1510117	Capscrew (Alternate Part)	2	2
4	1533493	Pin	4	4
5	1533494	Pin Anchor	2	2
6	16041	Grease Fitting	2	2
7	b c 1529929	Rod End	2	..
7	a e 1544118	Rod End	2	..
7	a e 4635566	Rod End (Alternate Part)	2	..
7	4103816	Rod End (Optional)	2	..
7	a e f 1529931	Rod End	..	2
7	a e h 1544119	Rod End	..	2
7	4635567	Rod End (Alternate Part)	..	2
7	4103817	Rod End (Optional)	..	2
8	e 134677	Shim	AR	..
8	e 142247	Shim	..	AR
8	c 134675	Shim	2	..
9	e 1325120	Shim	AR	AR
9	c 1325119	Shim	2	..
10	d 1527899	Spacer (Tilt)	2	..
10	c 1530043	Spacer (Tilt)	2	..

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
10	d 378177	Spacer (Tilt)	..	2
10	c 1527900	Spacer (Tilt)	..	2
10	1708918	Spacer	..	2
11	60563	O-Ring	2	2
11	55434	O-Ring	2	..
12	1581848	Nut	2	2
13	1581564	Lockwasher	2	2
13	1581852	Washer (Alternate Part)	2	2
14	1514269	Pin (Mast Mounting)	2	2
15	1520290	Capscrew	4	4
16	g 4012960	Shim	1	1

FOOTNOTES:**a** 10° Forward/5° Back**b** 4 Stage Mast**c** 5° Forward/4° Back**d** 5° Forward/5° Back**e** 5° Forward/5° Back, 5° Forward/4° Back**f** → 10/2013**g** 1/2015 →**h** 10/2013 →

TILT CYLINDERS (FIGURE 6-28) E45-55XN



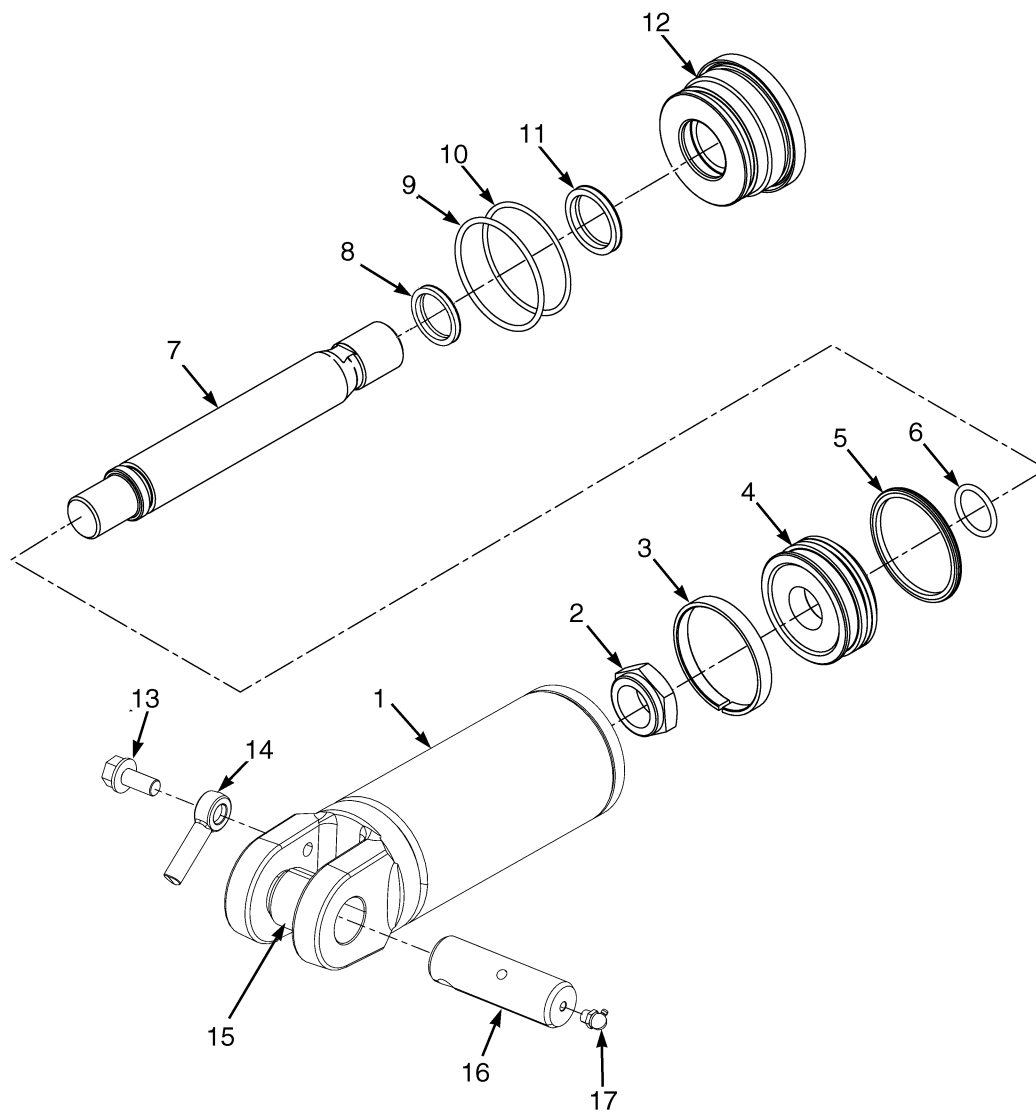
BP150230

TILT CYLINDERS
E45-55XN**KEY:****A: Two and Three Stage Mast****B: Four Stage Mast**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	c 2072659	Tilt Cylinder	2	..
	a 2071862	Tilt Cylinder	2	..
	b 2111733	Tilt Cylinder	..	2
1	c 2072660	Tube Wldmt-Cylinder	1	..
1	a b 2072661	Tube Wldmt-Cylinder	1	1
2	2302899	Locknut	1	1
3	39374	O-Ring	1	1
4	2044370	Piston Seal	1	1
5	1338741	Piston	1	1
6	c 2072662	Cylinder Rod	1	..
6	a b 2072663	Cylinder Rod	1	1
7	46388	O-Ring	1	1
8	154375	Back-Up Ring	1	1
9	1381082	Rod Seal	1	1
10	1383062	Rod Wiper	1	1
11	1338744	Gland	1	1
12	1673555	Pin	2	2
13	16046	Grease Fitting	2	2
14	300982	Bushing	2	2
15	1533494	Pin Anchor	2	2
16	1586013	Capscrew	2	2
	1492644	Kit-Seal	2	2

FOOTNOTES:**a** 10° Forward/5° Back**b** 5° Forward/4° Back**c** 5° Forward/4° Back, 5° Forward/5° Back,

TILT CYLINDERS (FIGURE 6-29) E60-70XN



BP150231

**TILT CYLINDERS
E60-70XN****KEY:****A: Two and Three Stage Mast****B: Four Stage Mast**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	c 2068888	Tilt Cylinder	2	..
	a 2068889	Tilt Cylinder	2	..
	b 2111732	Tilt Cylinder	..	2
1	c 2067345	Tube Wldmt-Cylinder	1	1
1	a 2067346	Tube Wldmt-Cylinder	1	..
2	2070018	Locknut	1	1
3	199852	Wear Ring	1	1
4	1381078	Piston	1	1
5	2044371	Piston Seal	1	1
6	237812	O-Ring	1	1
7	c 2072657	Cylinder Rod	1	..
7	b 2102710	Cylinder Rod	..	1
7	a 2072658	Cylinder Rod	1	..
8	1381083	Rod Seal	1	1
9	268619	O-Ring	1	1
10	147973	Back-Up Ring	1	1
11	1383063	Rod Wiper	1	1
12	1527520	Gland	1	1
13	1586013	Capscrew	2	2
14	1533494	Pin Anchor	2	2
15	300982	Bushing	2	2
16	1673555	Pin	2	2
17	16046	Grease Fitting	2	2
	1527719	Kit-Seal (Tilt Cylinder)	2	2

FOOTNOTES:**a** 10° Forward/5° Back**b** 5° Forward/4° Back**c** 5° Forward/4° Back, 5° Forward/5° Back

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7

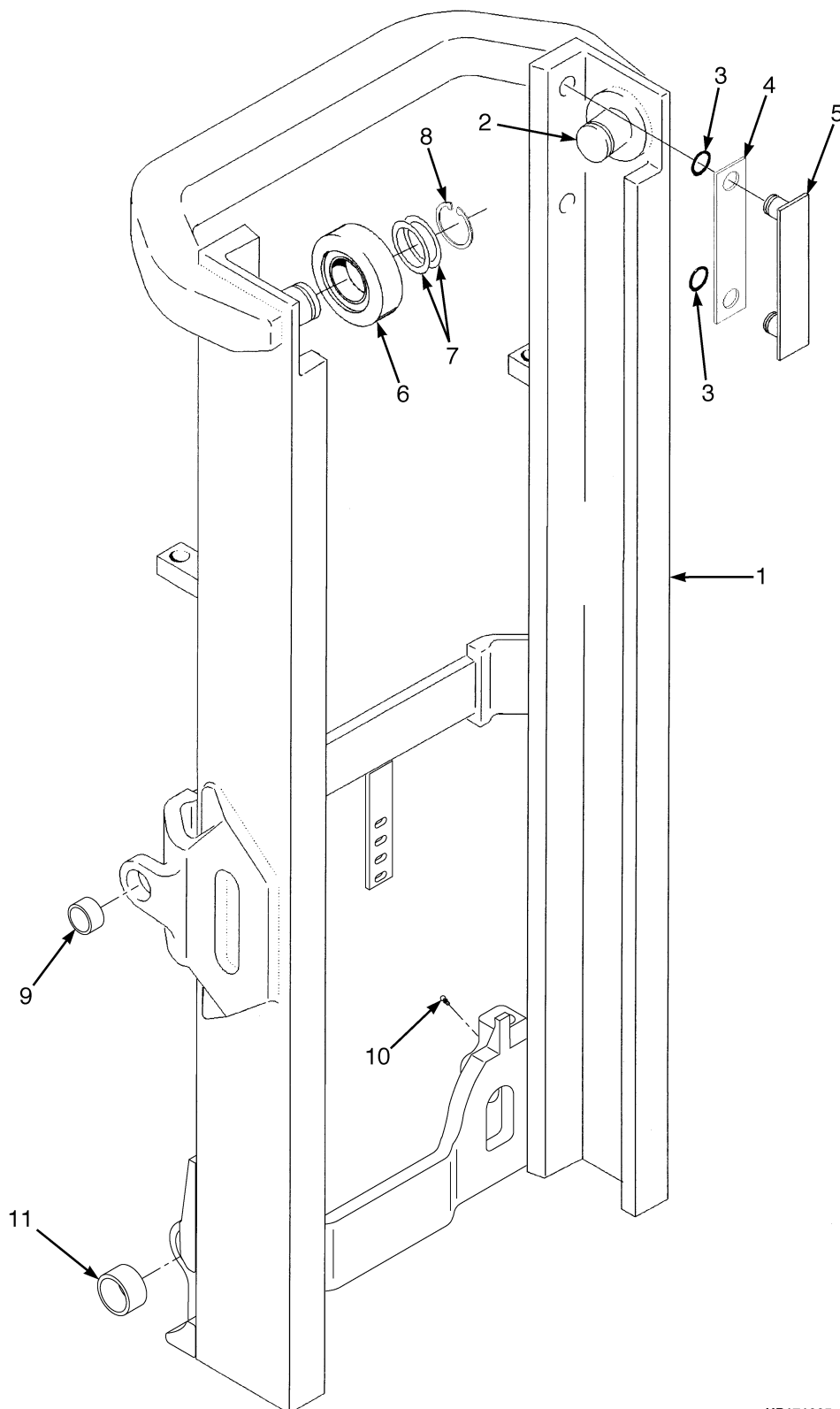
MAST-TWO STAGE LIMITED FREE-LIFT

SECTION 7

MAST-TWO STAGE LIMITED FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-14
TWO STAGE LIMITED FREE-LIFT - F507-F562	7-38
HEADER HOSE	
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-16
HEADER HOSE AND ATTACHING PARTS	
TWO STAGE LIMITED FREE-LIFT - F507-F562 (→ 11/2014)	7-30
TWO STAGE LIMITED FREE-LIFT - F507-F562 (11/2014 →)	7-34
INNER MAST	
TWO STAGE LIMITED FREE LIFT - F507-F562	7-22
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-4
MAIN LIFT	
TWO STAGE LIMITED FREE LIFT - F507-F562	7-24
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-6
MAIN LIFT CYLINDER	
TWO STAGE LIMITED FREE LIFT - F507-F562	7-26
MAIN LIFT CYLINDERS	
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-10
OUTER MAST	
TWO STAGE LIMITED FREE-LIFT - D507/D562	7-2
TWO STAGE LIMITED FREE-LIFT - F507-F562	7-20

OUTER MAST (FIGURE 7-1) TWO STAGE LIMITED FREE-LIFT — D507/D562



HP171065

OUTER MAST
TWO STAGE LIMITED FREE-LIFT – D507/D562**D507**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3352	D507 3452
	Mast Assy	2054713	2054715	2054716
1	Outer Mast	1524754	1524756	1524757

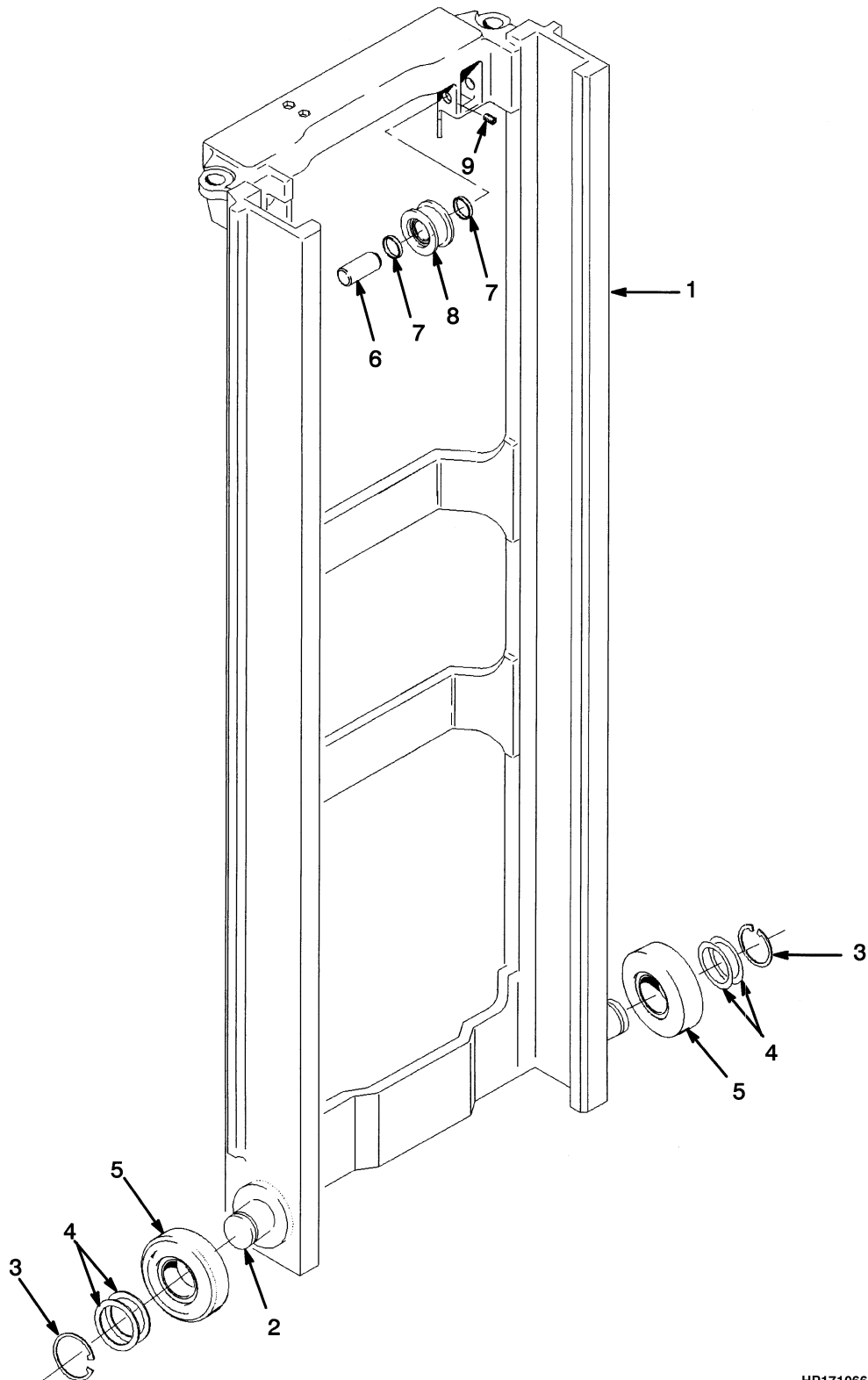
D562

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
	Mast Assy	2054752	2054754	2054755
1	Outer Mast	1524754	1524756	1524757

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.020 in.)	4
5	215211	Wear Strip	2
6	b 1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.020 in.)	AR
8	58901	Snap Ring	2
9	300982	Bushing	2
10	16001	Grease Fitting	2
11	1502811	Bushing	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

INNER MAST (FIGURE 7-2) TWO STAGE LIMITED FREE-LIFT — D507/D562



HP171066

INNER MAST
TWO STAGE LIMITED FREE-LIFT – D507/D562**D507**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3352	D507 3452
	Mast Assy	2054713	2054715	2054716
1	Inner Mast	1524797	1524799	1524800

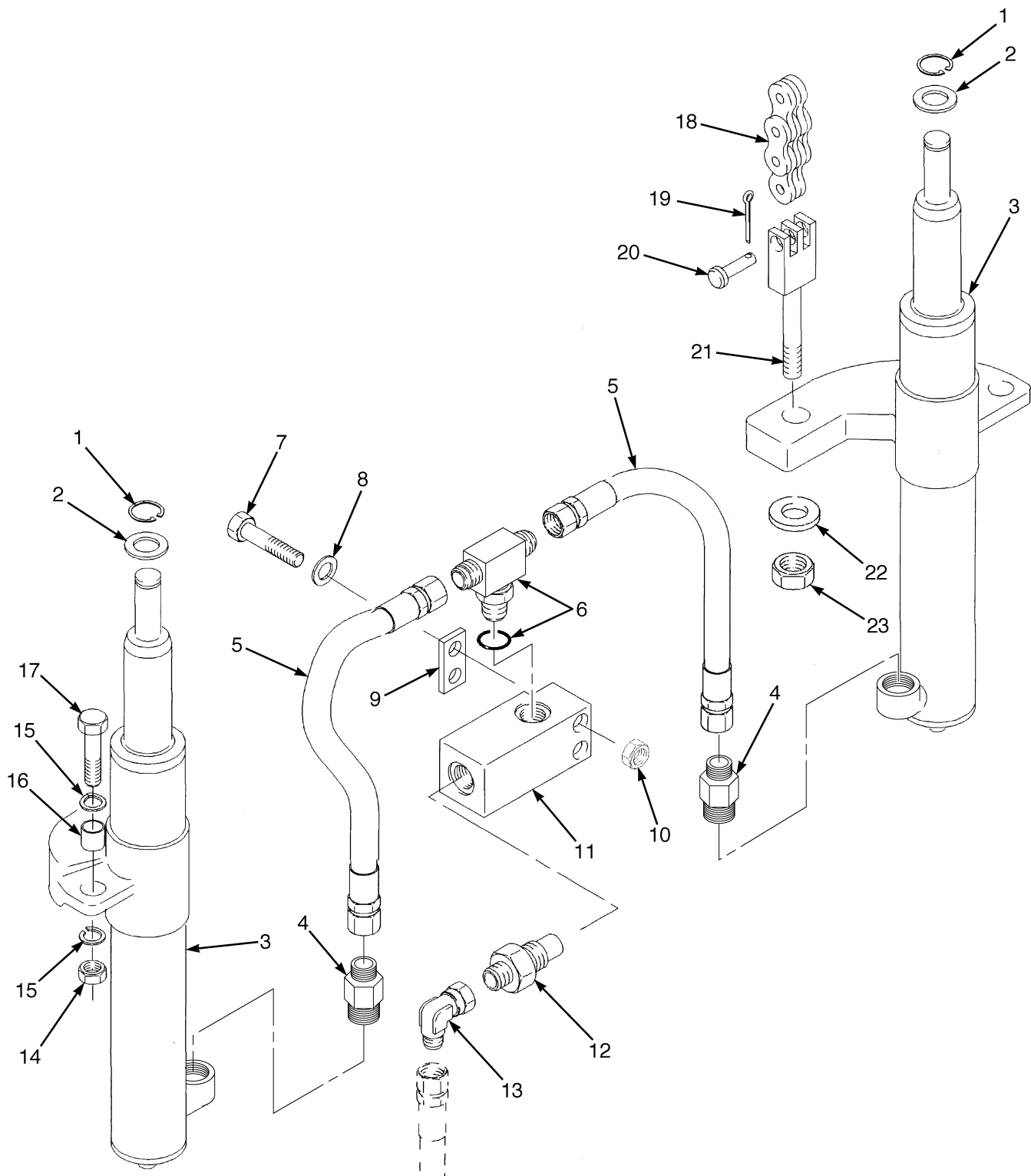
D562

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
	Mast Assy	2054752	2054754	2054755
1	Inner Mast	1524797	1524799	1524800

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.020 in.)	4
5	b 1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2
6	1368656	Pin	2
7	1378691	Spacer	4
8	1379685	Chain Sheave (Assembly) (E45XN-E60XN)	2
8	1379684	Chain Sheave (Assembly) (E65XN-E70XN)	2
8	1378698	Chain Sheave (E45XN-E60XN)	1
8	1378694	Chain Sheave (E65XN-E70XN)	1
8	37752	Snap Ring	1
8	1378699	Ball Bearing	1
9	302462	Roll Pin	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

MAIN LIFT (FIGURE 7-3) TWO STAGE LIMITED FREE-LIFT — D507/D562



HP170032

MAIN LIFT
TWO STAGE LIMITED FREE-LIFT – D507/D562**D507**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3352	D507 3452
18	Chain	337174	129361	986599

D562

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
18	Chain	1342123	1342384	1342126

ITEM	PART NO.	DESCRIPTION	QTY
1	131358	Snap Ring	2
2	1333382	Washer (0.060 in.)	2
2	1354915	Washer (0.010 in.)	AR
2	1354916	Washer (0.030 in.)	AR
2	1354917	Washer (0.060 in.)	AR
3	.....	Main Lift Cylinders (☞ Figure 7-4).....	2
4	2062686	Hyd Velocity Fuse (E45XN-E60XN)	2
4	2062687	Hyd Velocity Fuse (E65XN-E70XN)	2
4	16483	O-Ring	1
4	252729	O-Ring	1
5	1481097	Hose Assy	2
6	1532650	Fitting	1
6	16485	O-Ring	1
6	1527818	O-Ring	2
7	1581836	Capscrew	2
8	1581556	Washer	2
9	1354913	Side Plate	1
10	1581566	Nut	2
11	1379687	Housing (Lowering Control)	1
12	2062651	Lowering Control Valve (E45XN-E60XN)	1
12	2062652	Lowering Control Valve (E65XN-E70XN)	1
13	1486773	Fitting	1
13	1527818	O-Ring	1
14	1581849	Nut	2
15	1581852	Washer	4
16	323090	Spacer	2
17	1581829	Capscrew	2
18	a.....	Chain	1
19	15211	Cotter Pin	2
20	1514866	Pin	2

MAIN LIFT
TWO STAGE LIMITED FREE-LIFT – D507/D562

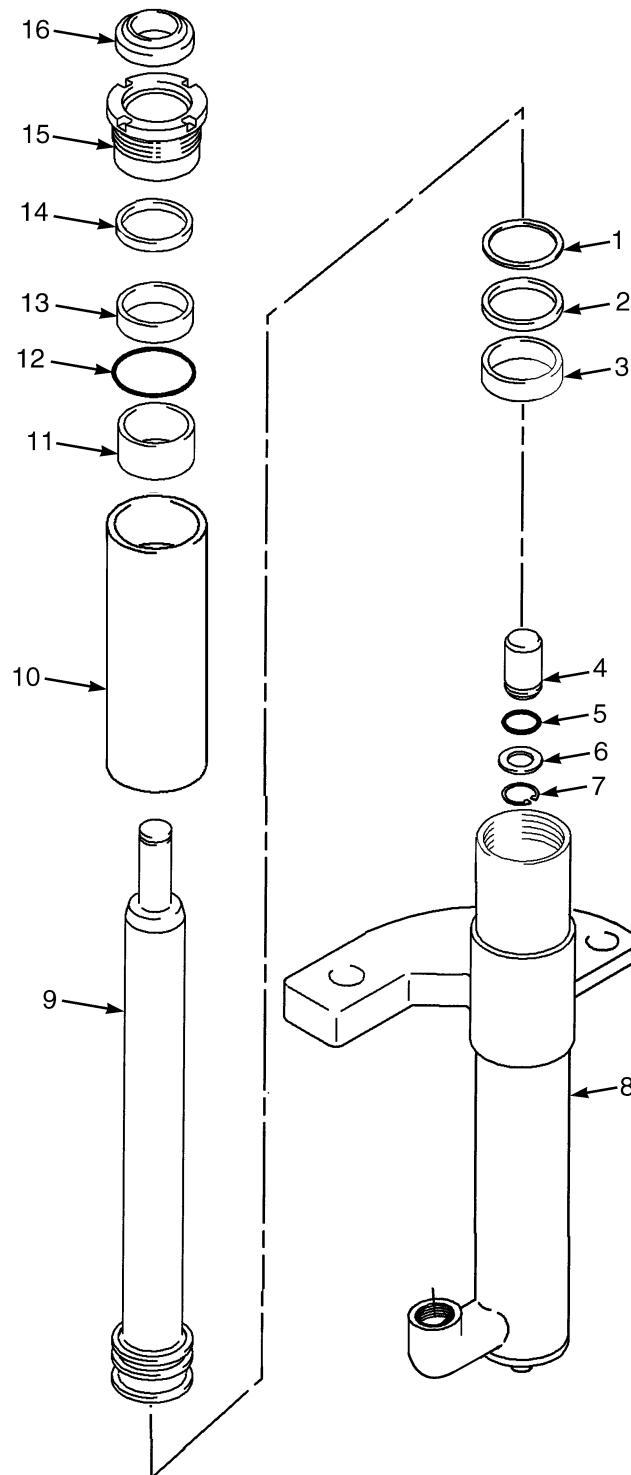
ITEM	PART NO.	DESCRIPTION	QTY
21	1369357	Chain Anchor (E45XN-E60XN)	2
21	1369356	Chain Anchor (E65XN-E70XN)	2
22	297649	Ring	2
23	161003	Nut	2

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

MAIN LIFT CYLINDERS (FIGURE 7-4) TWO STAGE LIMITED FREE-LIFT — D507/D562



BP170293

MAIN LIFT CYLINDERS
TWO STAGE LIMITED FREE-LIFT – D507/D562**LEFT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3152 mm (124.1 in.)	3252 mm (128.0 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3252	D507 3352	D507 3452
	Cylinder Group Number	8517708	8517709	8517710	8517711
	Cylinder Assy	2064141	2064142	2064143	2064144
8	Tube Wldmt- Cylinder	2064201	2064202	2064203	2064204
9	Cylinder Rod	1355154	1355158	1355162	1355166
10	Spacer	----	----	----	----

RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3152 mm (124.1 in.)	3252 mm (128.0 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3252	D507 3352	D507 3452
	Cylinder Group Number	8517758	8517759	8517760	8517761
	Cylinder Assy	2064165	2064166	2064167	2064168
8	Tube Wldmt- Cylinder	2064238	2064239	2064240	2064241
9	Cylinder Rod	1355154	1355158	1355162	1355166
10	Spacer	----	----	----	----

LEFT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3252 mm (128.0 in.)	3352 mm (132.0 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
	Cylinder Group Number	8518008	8518010	8518011
	Cylinder Assy	2064351	2064353	2064354
8	Tube Wldmt- Cylinder	2064277	2064279	2064280
9	Cylinder Rod	1355363	1355371	1355375
10	Spacer	1355711	1355711	1355711

MAIN LIFT CYLINDERS
TWO STAGE LIMITED FREE-LIFT – D507/D562
RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3252 mm (128.0 in.)	3352 mm (132.0 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
	Cylinder Group Number	8518058	8518060	8518061
	Cylinder Assy	2064368	2064370	2064371
8	Tube Wldmt- Cylinder	2064313	2064315	2064316
9	Cylinder Rod	1355363	1355371	1355375
10	Spacer	1355711	1355711	1355711

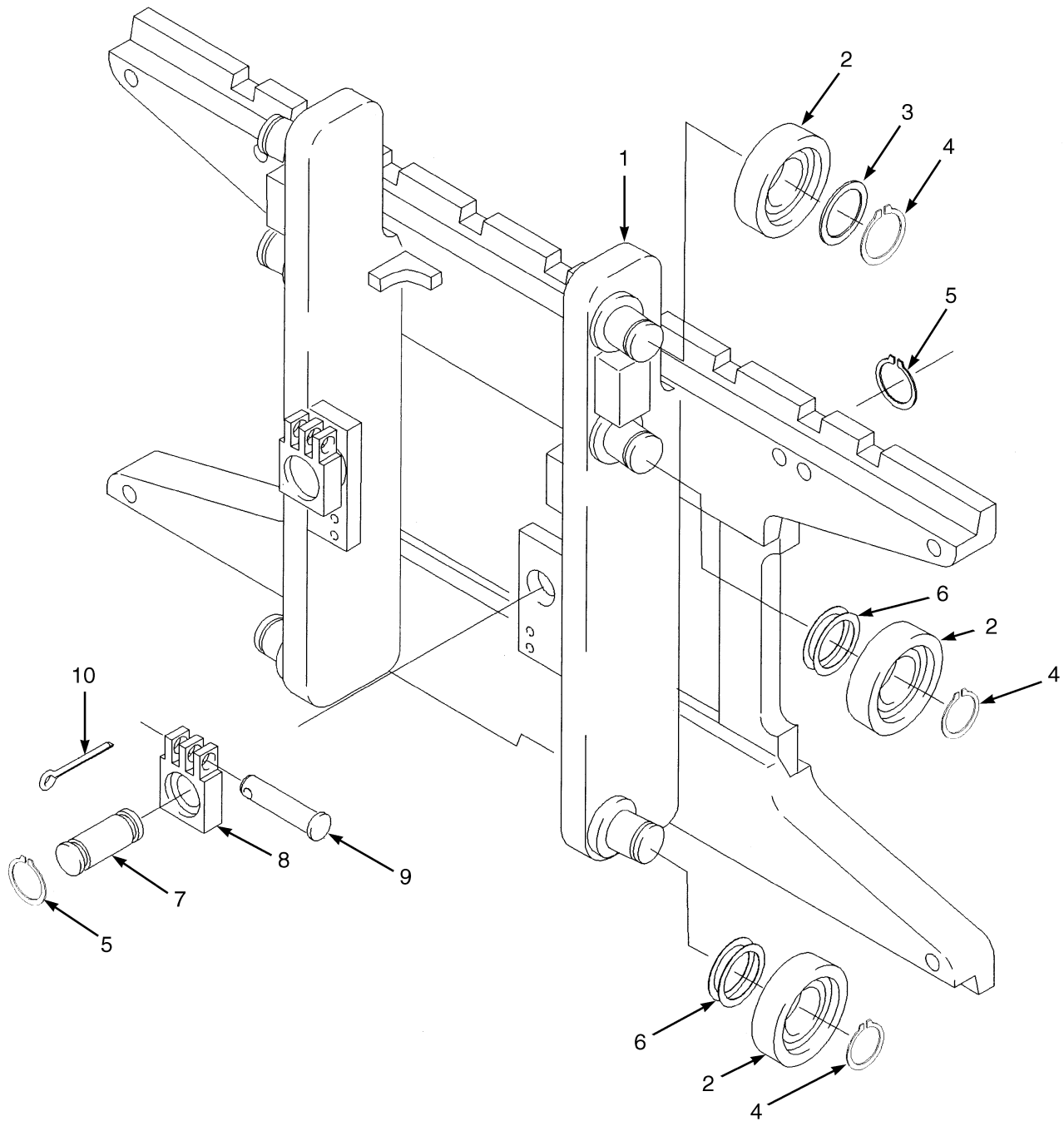
KEY:**A: E45XN-E60XN (D507)****B: E65XN-E70XN (D562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	638246	Back-Up Ring	1	..
1	335012	Back-Up Ring	..	1
2	2013075	Rod Seal	1	..
2	334156	Rod Seal	..	1
3	1356750	Wear Ring	1	..
3	1356751	Wear Ring	..	1
4	257913	Check Valve	1	1
5	190580	O-Ring	1	1
6	297531	Washer	1	1
7	187388	Snap Ring	1	1
8	a	Tube Wldmt-Cylinder	1	1
9	a	Cylinder Rod	1	1
10	a	Spacer	..	1
11	322902	Wear Ring	1	1
12	59229	O-Ring	..	1
12	~~4028986~~ 92861	O-Ring	1	..
13	1356749	Rod Seal	1	1
14	322824	Back-Up Ring	1	1
15	2091257	Gland	1	..
15	2091259	Gland	..	1
16	1319668	Rod Wiper	1	1
	1355276	Kit-Seal	1	..
	1499111	Kit-Seal	..	1

FOOTNOTES:

- a** Refer to Table

CARRIAGE (FIGURE 7-5) TWO STAGE LIMITED FREE-LIFT — D507/D562



HP170913

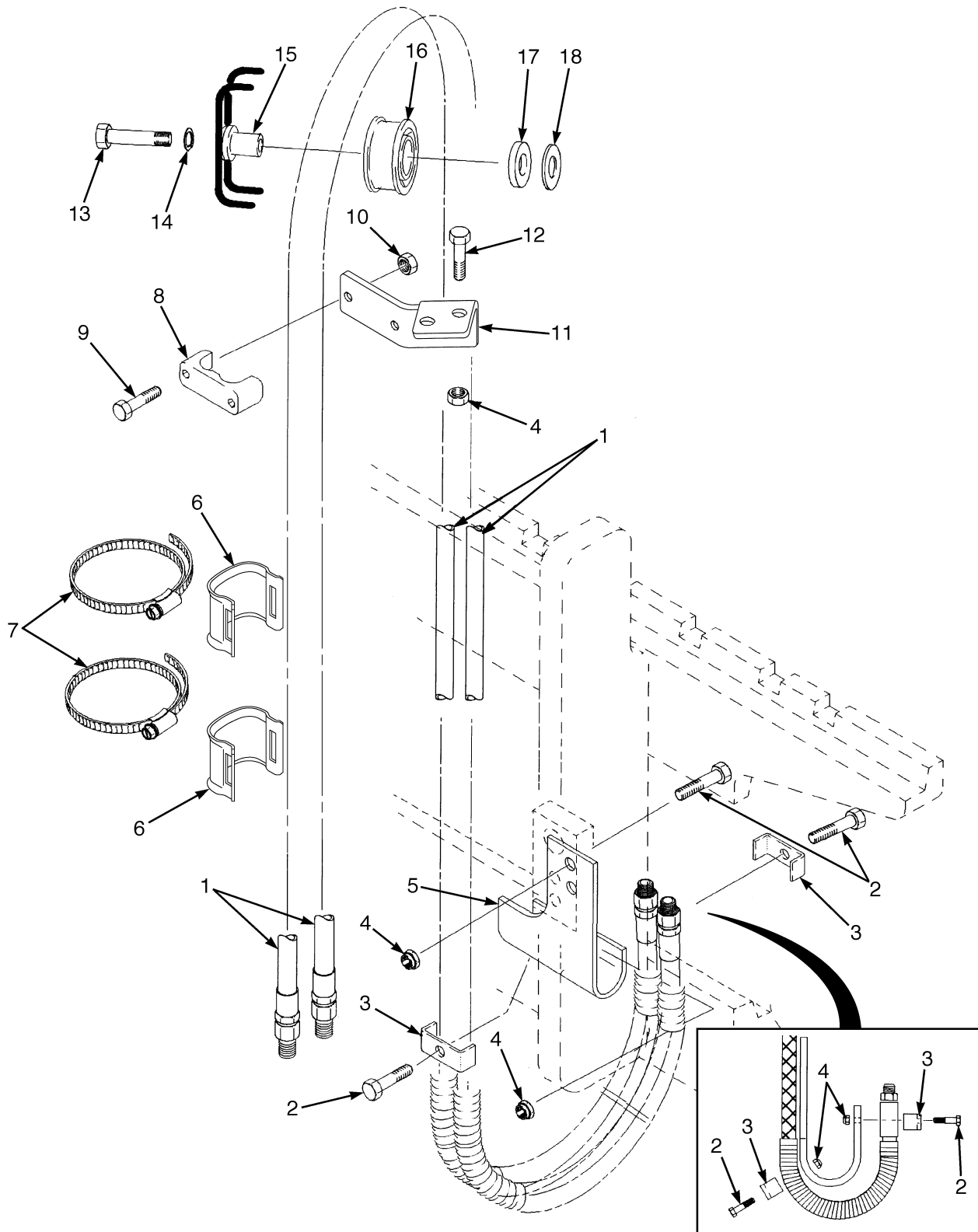
CARRIAGE

TWO STAGE LIMITED FREE-LIFT – D507/D562

KEY:**A: E45N-E55XN Class II****B: E60XN-E70XN Class III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1371662	Carriage (38.5 in.)	1	..
	1477649	Carriage (38.5 in.)	..	1
1	1359325	Carriage Wldmt (38.5 in.)	1	..
1	1477843	Carriage Wldmt (38.5 in.)	..	1
1	1345264	Stubshaft	6	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	366116	Spacer	2	2
4	12891	Snap Ring	6	6
5	131358	Snap Ring	4	4
6	1345263	Shim (0.020 in.)	AR	AR
7	1353408	Pin	2	2
8	1369345	Chain Anchor (Dual Hole)	2	..
8	1504010	Chain Anchor (Single Hole) (Optional)	2	..
8	1369344	Chain Anchor (Dual Hole)	..	2
8	1504011	Chain Anchor (Single Hole) (Optional)	..	2
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2

HEADER HOSE (FIGURE 7-6) TWO STAGE LIMITED FREE-LIFT — D507/D562



HP170914

HEADER HOSE
TWO STAGE LIMITED FREE-LIFT – D507/D562**D507**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	D507 3152	D507 3352	D507 3452
1	Hose Assy	2065137	2065139	2065140

D562

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	D562 2959	D562 3159	D562 3259
1	Hose Assy	2065137	2065139	2065140

KEY:**A: Three Functions****B: Four Functions**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Hose Assy	2	4
2	1581582	Capscrew	4	8
3	1345348	Clamp	2	4
4	1581566	Nut	6	12
5	1345412	Bracket (RH)	1	1
5	1345413	Bracket (LH)	..	1
6	1477996	Hose Clamp	1	2
7	1617657	Clamp	1	2
8	1360386	Clamp (Double Hose)	1	2
9	1581834	Capscrew	2	4
10	1581565	Nut	2	4
11	1354919	Bracket (RH)	1	1
11	1354921	Bracket (LH)	..	1
12	1581836	Capscrew	2	4
13	1581830	Capscrew	1	2
14	b 1581564	Lockwasher	1	2
15	b 1360548	Stubshaft (With Guard)	1	2
15	c 4051751	Stubshaft	1	2
16	b 1381595			
	1494017	Hose Sheave	1	2
16	c 4041194	Hose Sheave	1	2
17	1360549	Spacer	1	2
18	1345190	Washer	3	6

FOOTNOTES:

a Refer to Table

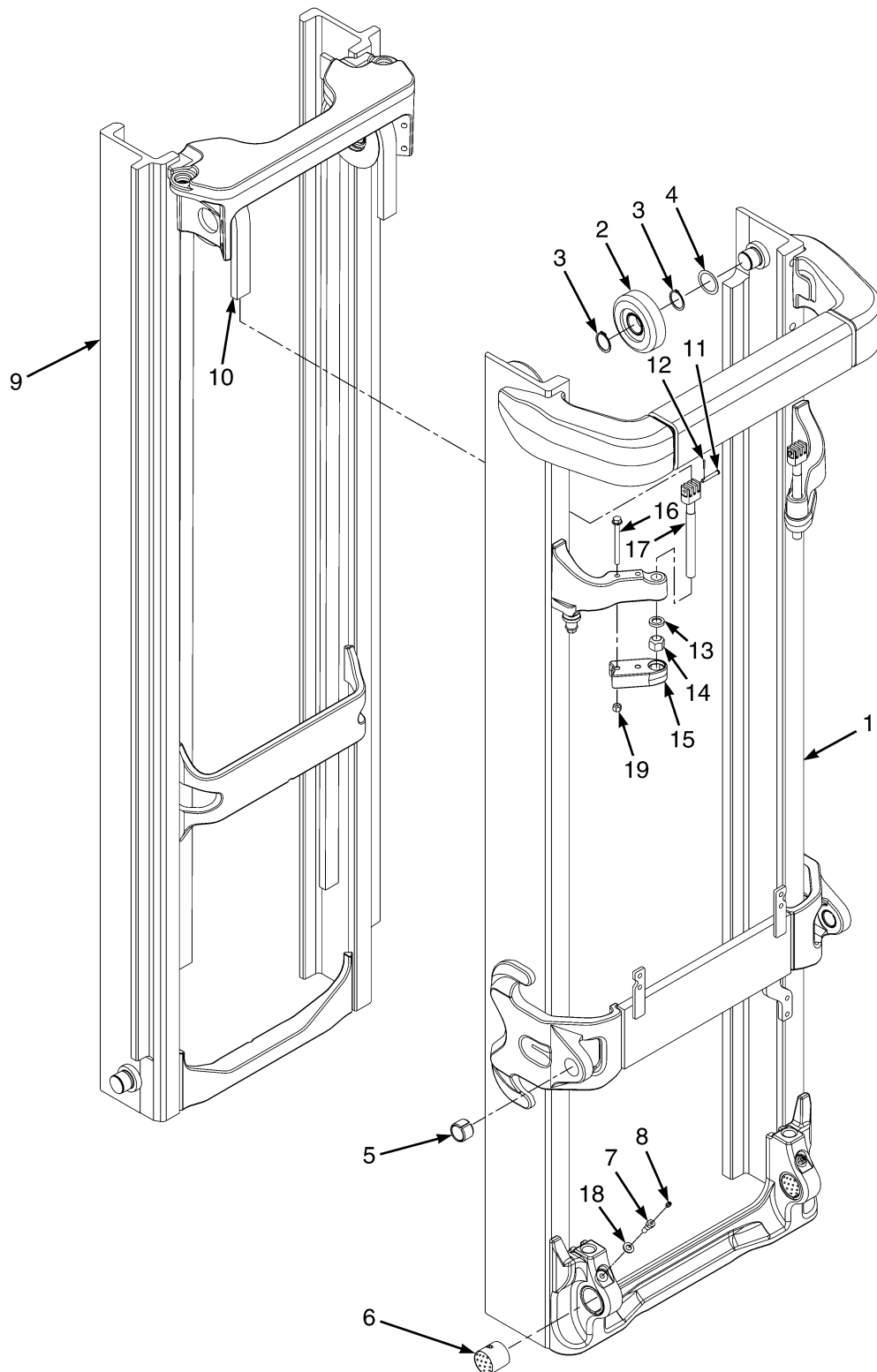
b → S/N A268N08141K

c S/N A268N08142K →

NOTES

[illegible]

OUTER MAST (FIGURE 7-7) TWO STAGE LIMITED FREE-LIFT — F507-F562



BP170642

OUTER MAST
TWO STAGE LIMITED FREE-LIFT – F507-F562**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	F507 3152	F507 3352	F507 3452
	Mast Assy	4627974	4627976	4627977
1	Outer Mast	4053746	4053748	4053749

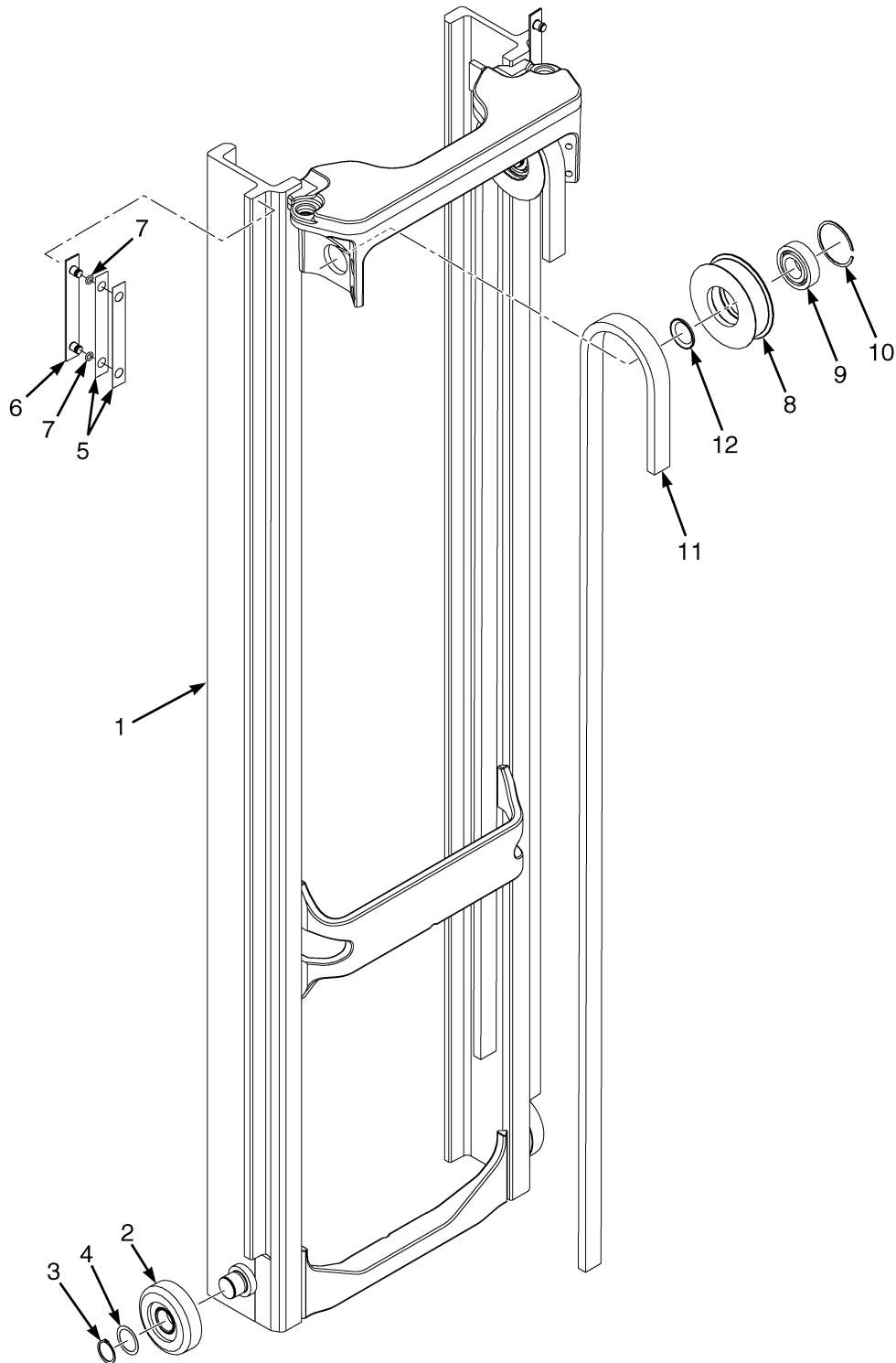
E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	F562 2959	F562 3159	F562 3259
	Mast Assy	4627955	4627957	4627958
1	Outer Mast	4053746	4053748	4053749

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1333396	Load Roller ("B") (111.48/111.22)	2
2	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
3	58901	Snap Ring	2
3	1374797	Snap Ring (Optional)	2
4	129387	Shim (0.020 in.)	AR
5	300982	Bushing	2
6	4033414	Bushing (Bronze)	2
7	4033412	Capscrew	2
8	13957	Grease Fitting	2
9		Inner Mast (☞ Figure 7-8)	1
10		Chain (☞ Figure 7-8)	2
11	1514866	Pin	2
12	15211	Cotter Pin	2
13	297649	Ring	2
14	4031973	Nut	2
15	4051079	Restraint	2
16	4082846	Capscrew	4
17	4072717	Chain Anchor (E45-55XN)	2
17	4072704	Chain Anchor (E60-70XN)	2
18	1581557	Washer	2
19	1581566	Nut	4

FOOTNOTES:**a** Refer to Table

INNER MAST (FIGURE 7-8) TWO STAGE LIMITED FREE LIFT — F507-F562



BP170643

INNER MAST
TWO STAGE LIMITED FREE LIFT – F507-F562**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	F507 3152	F507 3352	F507 3452
	Mast Assy	4627974	4627976	4627977
1	Inner Mast	4054061	4054063	4054064
11	Chain	223389	986599	88446

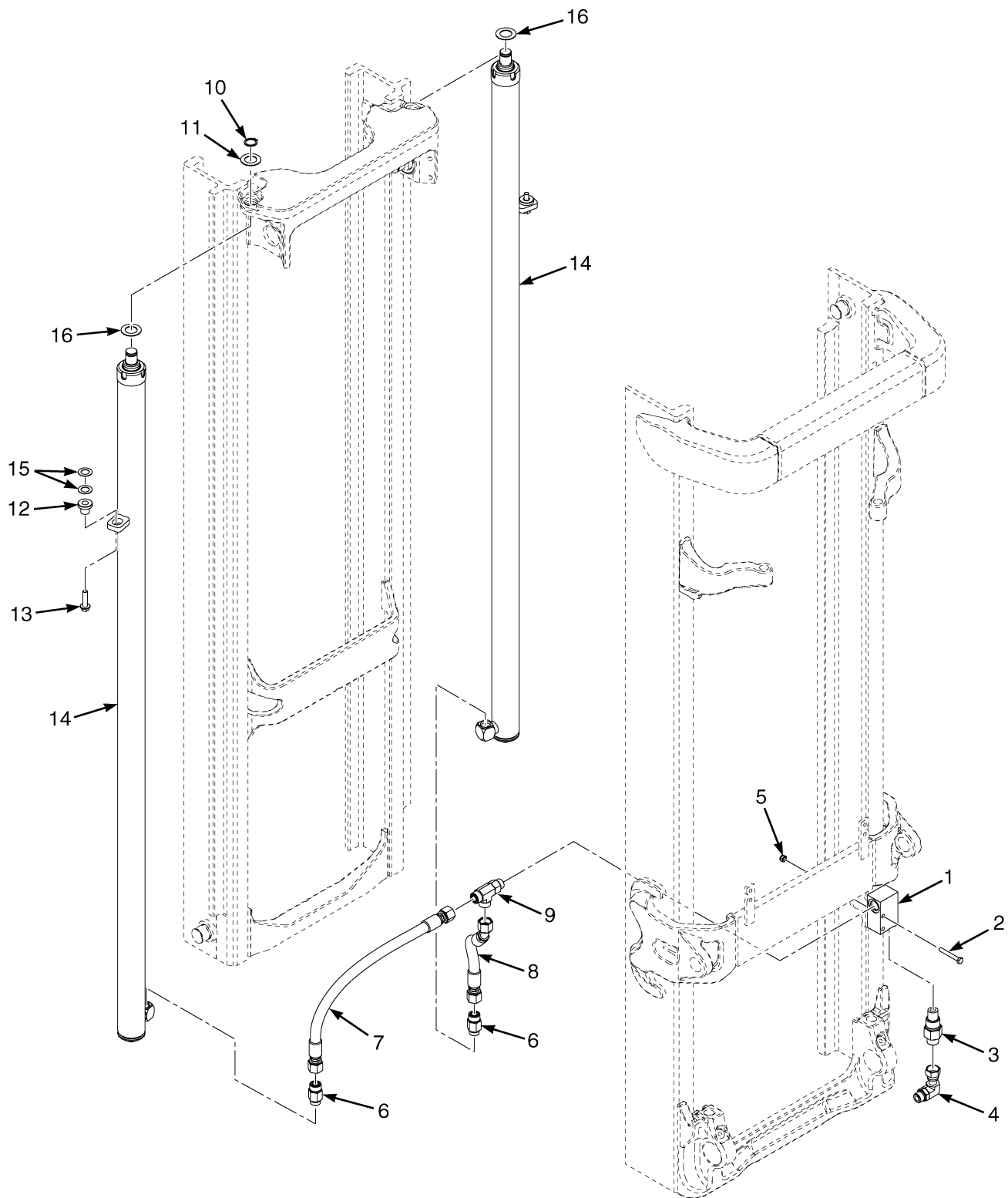
E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	F562 2959	F562 3159	F562 3259
	Mast Assy	4627955	4627957	4627958
1	Inner Mast	4054061	4054063	4054064
11	Chain	1342383	1342126	1342385

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1333396	Load Roller ("B") (111.48/111.22)	2
2	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
3	58901	Snap Ring	2
3	1374797	Snap Ring (Optional)	2
4	129387	Shim (0.020 in.)	AR
5	131716	Shim (0.020 in.)	2
5	131715	Shim (0.007 in.) (Optional)	2
6	215211	Wear Strip	2
7	104506	O-Ring	4
8	4054944	Chain Sheave Assembly (E45-55XN)	2
8	4048508	Chain Sheave Assembly (E60-70XN)	2
8	4054945	Chain Sheave (E45-55XN)	1
8	4046499	Chain Sheave (E60-70XN)	1
9	1378699	Ball Bearing	1
10	37752	Snap Ring	1
11	a	Chain	2
12	335661	Spacer	2

FOOTNOTES:**a** Refer to Table

MAIN LIFT (FIGURE 7-9) TWO STAGE LIMITED FREE LIFT — F507-F562

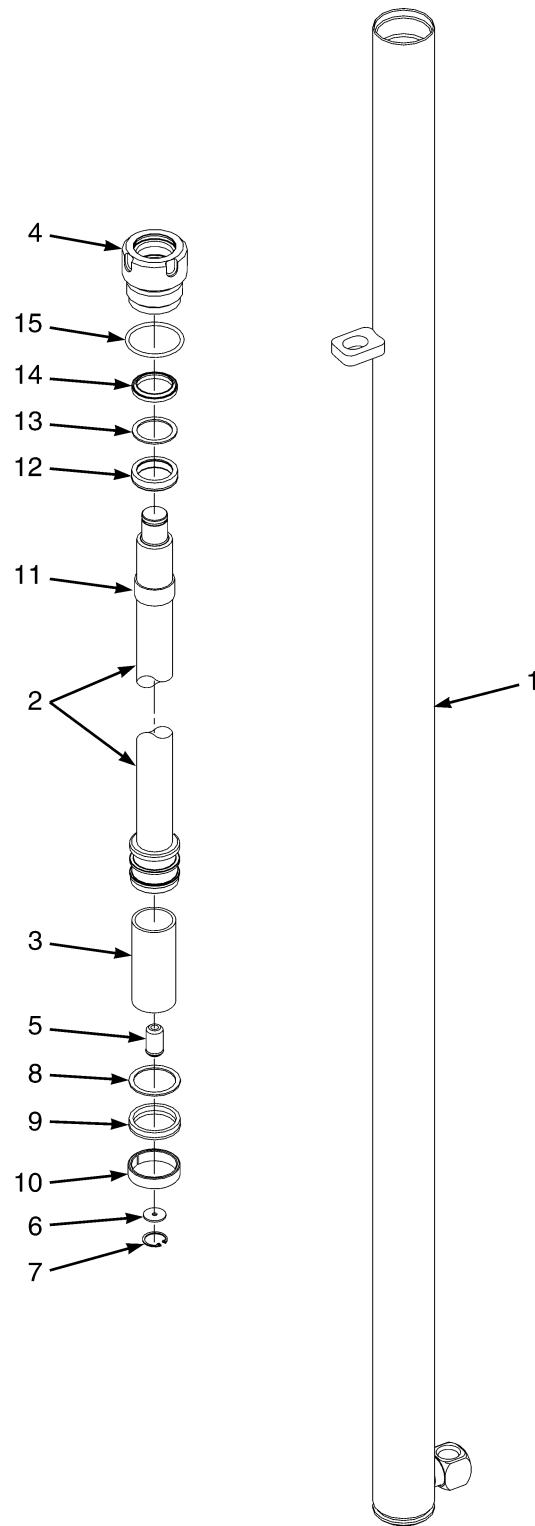


BP170644

MAIN LIFT
TWO STAGE LIMITED FREE LIFT – F507-F562

ITEM	PART NO.	DESCRIPTION	QTY
1	4058916	Housing (Lowering Control)	1
2	1581836	Capscrew	2
3	2062651	Lowering Control Valve (E45-55XN)	1
3	2062652	Lowering Control Valve (E60-70XN)	1
4	1486773	Fitting	1
5	1581566	Nut	2
6	2062686	Hyd Velocity Fuse (E45-55XN)	2
6	2062687	Hyd Velocity Fuse (E60-70XN)	2
7	4620151	Hose Assy (LH)	1
8	4620152	Hose Assy (RH)	1
9	1592853	Fitting	1
10	131358	Snap Ring	2
11	1333382	Washer (0.060 in.)	2
12	4054558	Isolator	2
13	4029051	Capscrew	2
14	.....	Main Cylinder (☞ Figure 7-10).....	2
15	1581557	Washer	4
16	1354915	Washer (0.010 in.)	2
16	1354916	Washer (0.030 in.)	2
16	1354917	Washer (0.060 in.)	2

MAIN LIFT CYLINDER (FIGURE 7-10) TWO STAGE LIMITED FREE LIFT — F507-F562



BP170645

MAIN LIFT CYLINDER
TWO STAGE LIMITED FREE LIFT – F507-F562**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	F507 3152	F507 3352	F507 3452
	Cylinder Group Number	8607405	8607407	8607408
	Lift Cylinder	4625307	4625309	4625310
1	Tube Wldmt- Cylinder	4064605	4064607	4064608
2	Cylinder Rod	1355154	1355162	1355166

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	F562 2959	F562 3159	F562 3259
	Cylinder Group Number	8607504	8607506	8607507
	Lift Cylinder	4625338	4625340	4625341
1	Tube Wldmt- Cylinder	4064634	4064636	4064637
2	Cylinder Rod	1355363	1355371	1355375
3	Spacer	----	1355711	1355711

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Lift Cylinder	2	2
	a	Tube Wldmt-Cylinder	1	1
2	a	Cylinder Rod	1	1
3	a	Spacer	..	1
4	4615847	Gland	1	..
4	4615848	Gland	..	1
5	257913	Check Valve	1	1
6	297531	Washer	1	1
6	637635	Washer (Optional)	1	1
7	187388	Snap Ring	1	1
8	638246	Back-Up Ring	1	..
8	335012	Back-Up Ring	..	1

MAIN LIFT CYLINDER **TWO STAGE LIMITED FREE LIFT – F507-F562**

KEY:**A: E45-55XN****B: E60-70XN**

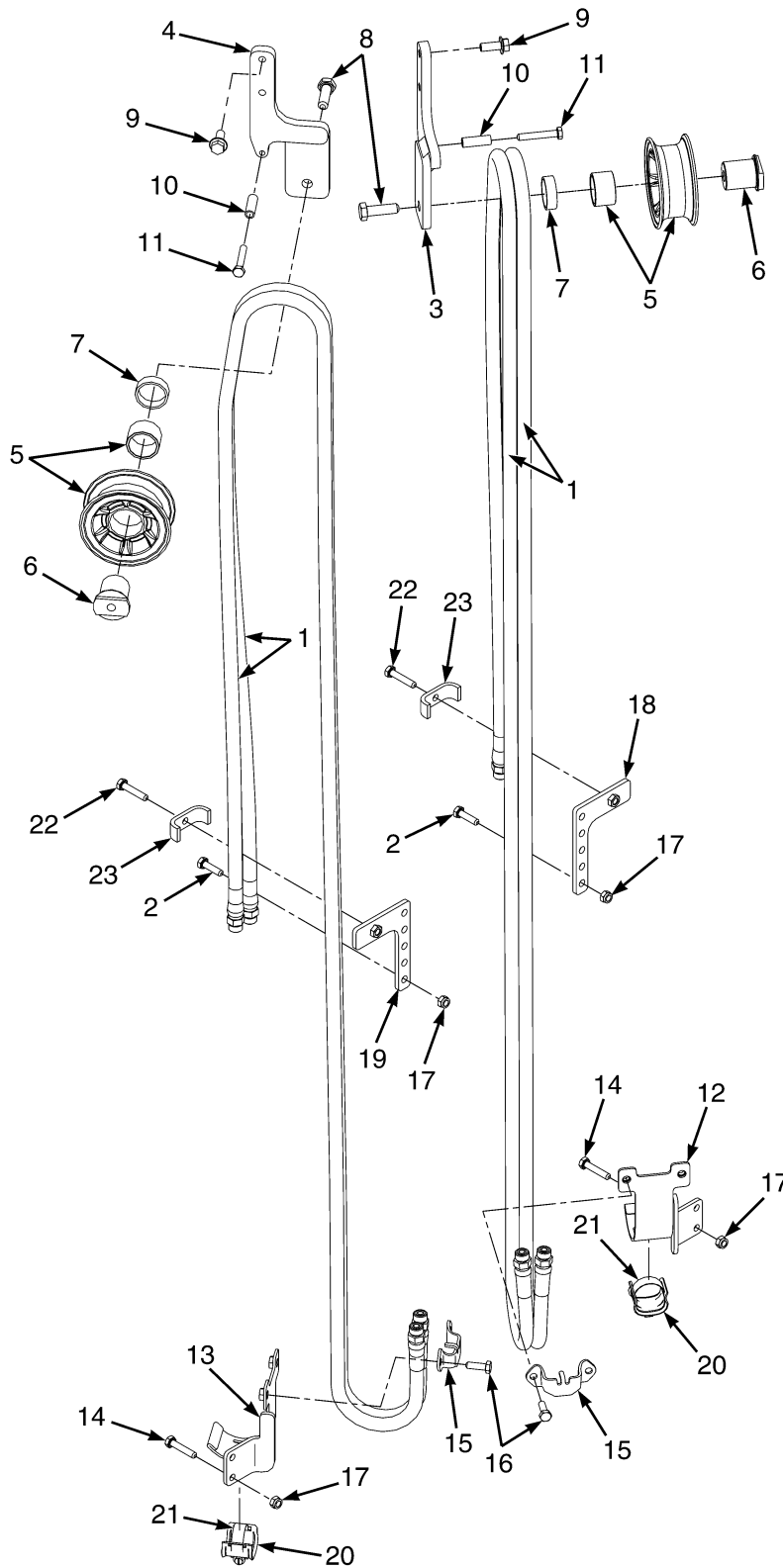
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
9	1381064	Piston Seal	1	..
9	1381063	Piston Seal	..	1
10	1356750	Wear Ring	1	..
10	1356751	Wear Ring	..	1
11	322902	Wear Ring	1	1
12	1356749	Rod Seal	1	1
13	322824	Back-Up Ring	1	1
14	1383063	Rod Wiper	1	1
15	~~4028986~~			
	92861	O-Ring	1	..
15	59229	O-Ring	..	1
	4623973	Kit-Seal	1	..
	4623974	Kit-Seal	..	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

HEADER HOSE AND ATTACHING PARTS (FIGURE 7-11) TWO STAGE LIMITED FREE-LIFT — F507-F562 (→ 11/2014)



BP170655

HEADER HOSE AND ATTACHING PARTS

TWO STAGE LIMITED FREE-LIFT – F507-F562 (→ 11/2014)

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	F507 3152	F507 3352	F507 3452
1	Header Hose	4628134	4628136	4628137

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	F562 2959	F562 3159	F562 3259
1	Header Hose	4628134	4628136	4628137

KEY:
A: Three Function

B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Header Hose	2	4
2	1696161	Capscrew	2	4
3	4051290	Bracket Wldmt	1	1
4	4058915	Bracket Wldmt	..	1
5	4048781	Hose Sheave	1	2
6	4013268	Stubshaft	1	2
7	4051293	Spacer	1	2
8	1581591	Capscrew	1	2
9	b 4043636	Capscrew	2	4
9	c 4051501	Capscrew	2	4
10	4013273	Spacer (Thin Wall)	1	2
11	1581583	Capscrew	1	2
12	4058930	Bracket Wldmt	1	1
13	4058935	Bracket Wldmt	..	1
14	1581582	Capscrew	2	4
15	4059830	Clamp	2	4
16	1581581	Capscrew	2	4
17	1581566	Nut	4	8
18	4093657	Plate Wldmt (LH)	1	1
19	4093656	Plate Wldmt (RH)	..	1
20	1477996	Hose Clamp	1	2
21	369804	Clamp	1	2
22	292508	Capscrew	1	2
23	1345348	Clamp	1	2

FOOTNOTES:

a Refer to Table

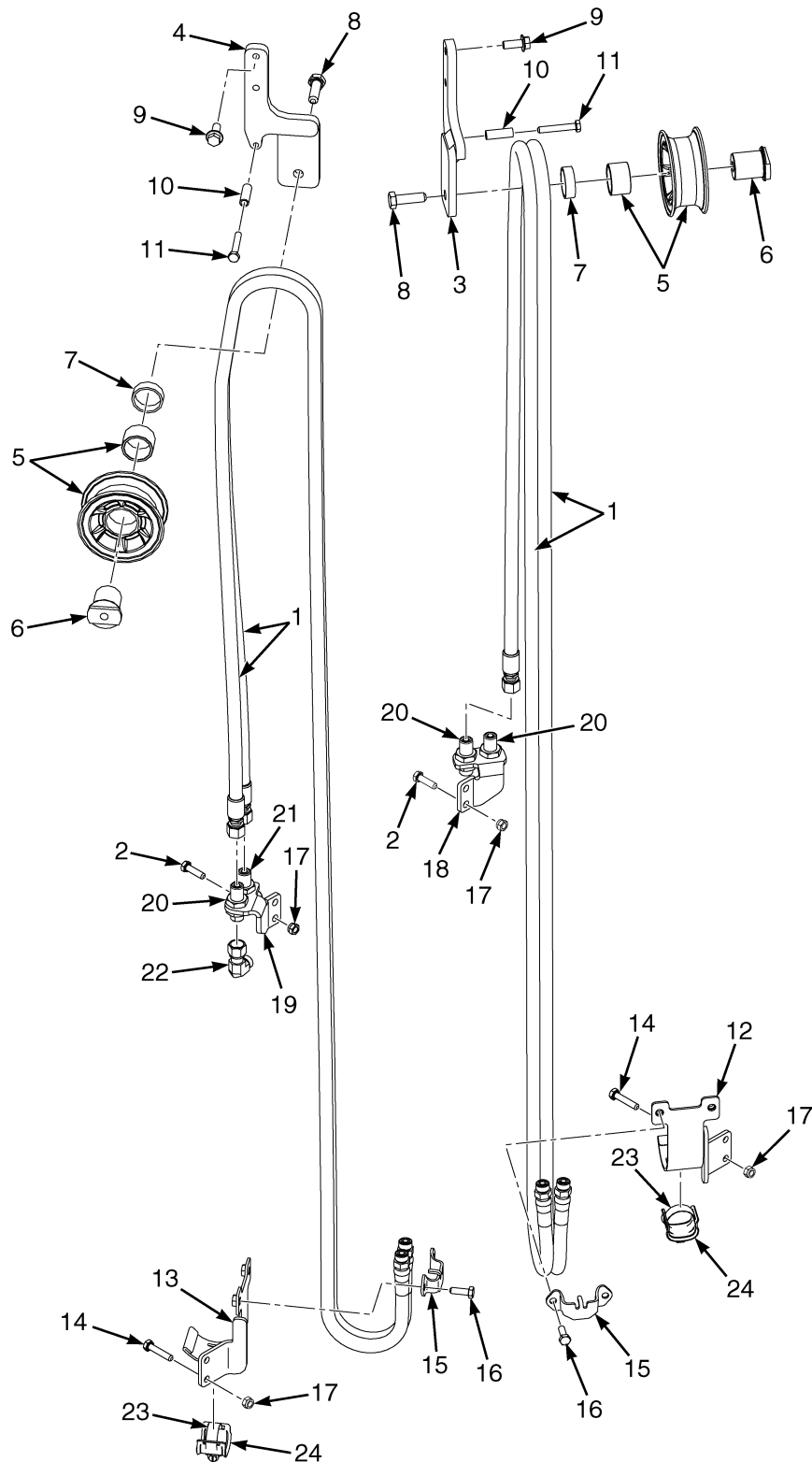
b → 2/2014

c 2/2014 →

NOTES

[illegible]

HEADER HOSE AND ATTACHING PARTS (FIGURE 7-12) TWO STAGE LIMITED FREE-LIFT — F507-F562 (11/2014 →)



BP170751

HEADER HOSE AND ATTACHING PARTS
TWO STAGE LIMITED FREE-LIFT – F507-F562 (11/2014 →)**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
	Mast Group Number	F507 3152	F507 3352	F507 3452
1	Header Hose	4636858	4636860	4636861

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
	Mast Group Number	F562 2959	F562 3159	F562 3259
1	Header Hose	4636858	4636860	4636861

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b	Header Hose	2	4
2	1696161	Capscrew	2	4
3	4051290	Bracket Wldmt	1	1
4	4058915	Bracket Wldmt	..	1
5	4048781	Hose Sheave	1	2
5	4050091	Bushing	1	1
6	4013268	Stubshaft	1	2
7	4051293	Spacer	1	2
8	1581591	Capscrew	1	2
9	4051501	Capscrew	2	4
10	4013273	Spacer (Thin Wall)	1	2
11	1581583	Capscrew	1	2
12	4058930	Bracket Wldmt (LH)	1	1
13	4058935	Bracket Wldmt (RH)	..	1
14	1581582	Capscrew	2	4
15	4059830	Clamp	2	4
16	1581581	Capscrew	2	4
17	1581566	Nut	4	8
18	4122876	Bracket	1	1
19	4122875	Bracket	..	1
20	1528573	Fitting	2	2
21	1528579	Fitting	..	1
22	1473895	Fitting	..	1
23	369804	Clamp	1	2
24	1477996	Hose Clamp	1	2

HEADER HOSE AND ATTACHING PARTS
TWO STAGE LIMITED FREE-LIFT – F507-F562 (11/2014 →)**KEY:****A:** Three Function**B:** Four Function

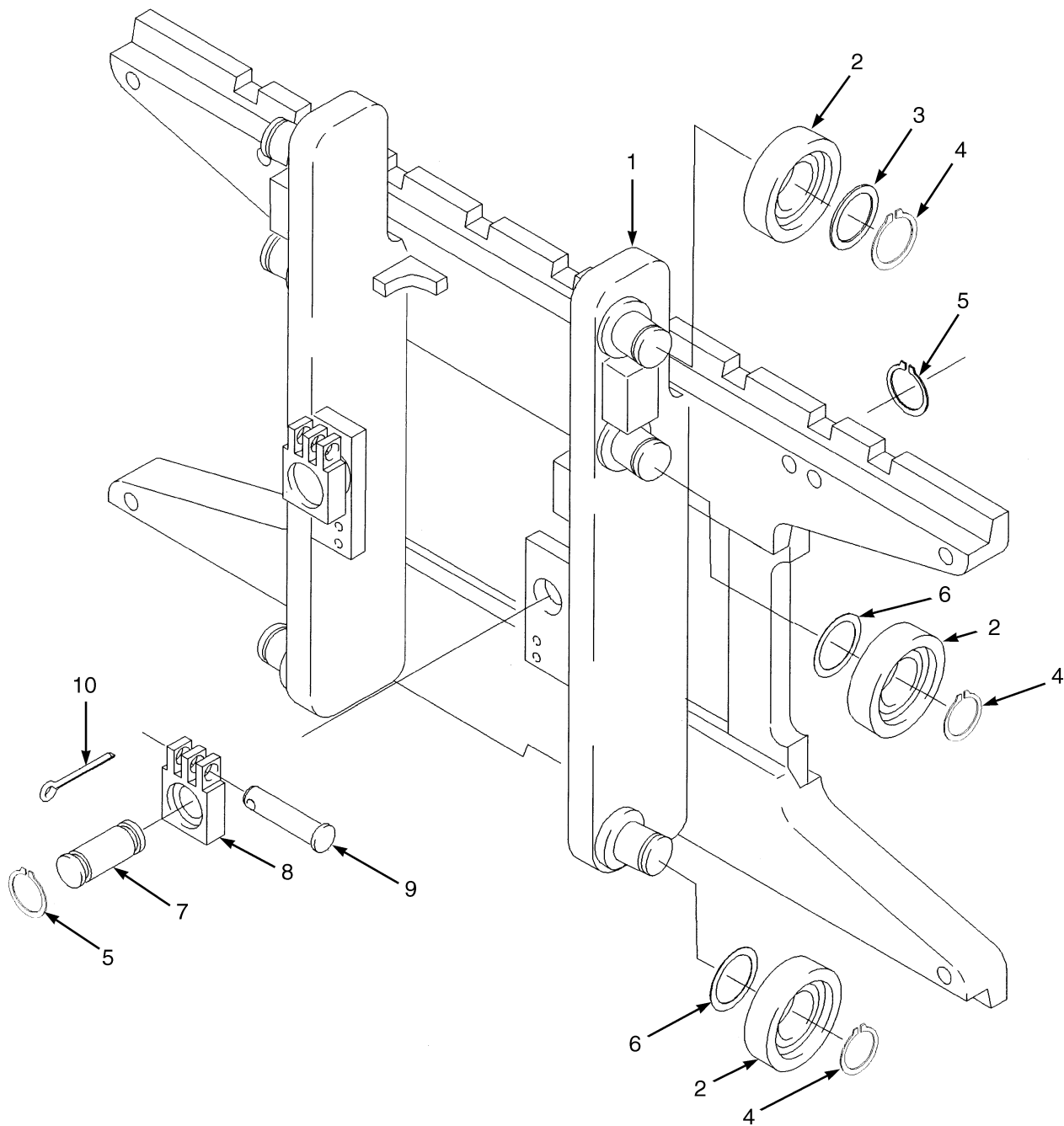
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a c 1529015	Cap	2	4

FOOTNOTES:**a** Not Illustrated**b** Refer to Table**c** Without header hoses

NOTES

[illegible]

CARRIAGE (FIGURE 7-13) TWO STAGE LIMITED FREE-LIFT — F507-F562



HP290013

CARRIAGE

TWO STAGE LIMITED FREE-LIFT – F507-F562

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4625585	Carriage (38.5 in.)	1	..
	4625593	Carriage (38.5 in.)	..	1
1	4065172	Carriage Wldmt (38.5 in.)	1	..
1	4065199	Carriage Wldmt (38.5 in.)	..	1
1	1345264	Stubshaft	6	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	366116	Spacer	2	2
4	12891	Snap Ring	6	6
5	131358	Snap Ring	4	4
6	1345263	Shim (0.020 in.)	AR	AR
7	1353408	Pin	2	2
8	1369345	Chain Anchor (Dual Hole)	2	..
8	1504010	Chain Anchor (Single Hole) (Optional)	2	..
8	1369344	Chain Anchor (Dual Hole)	..	2
8	1504012	Chain Anchor (Single Hole) (Optional)	..	2
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2
	a 386422	Snap Ring	6	6

FOOTNOTES:**a** Not Illustrated

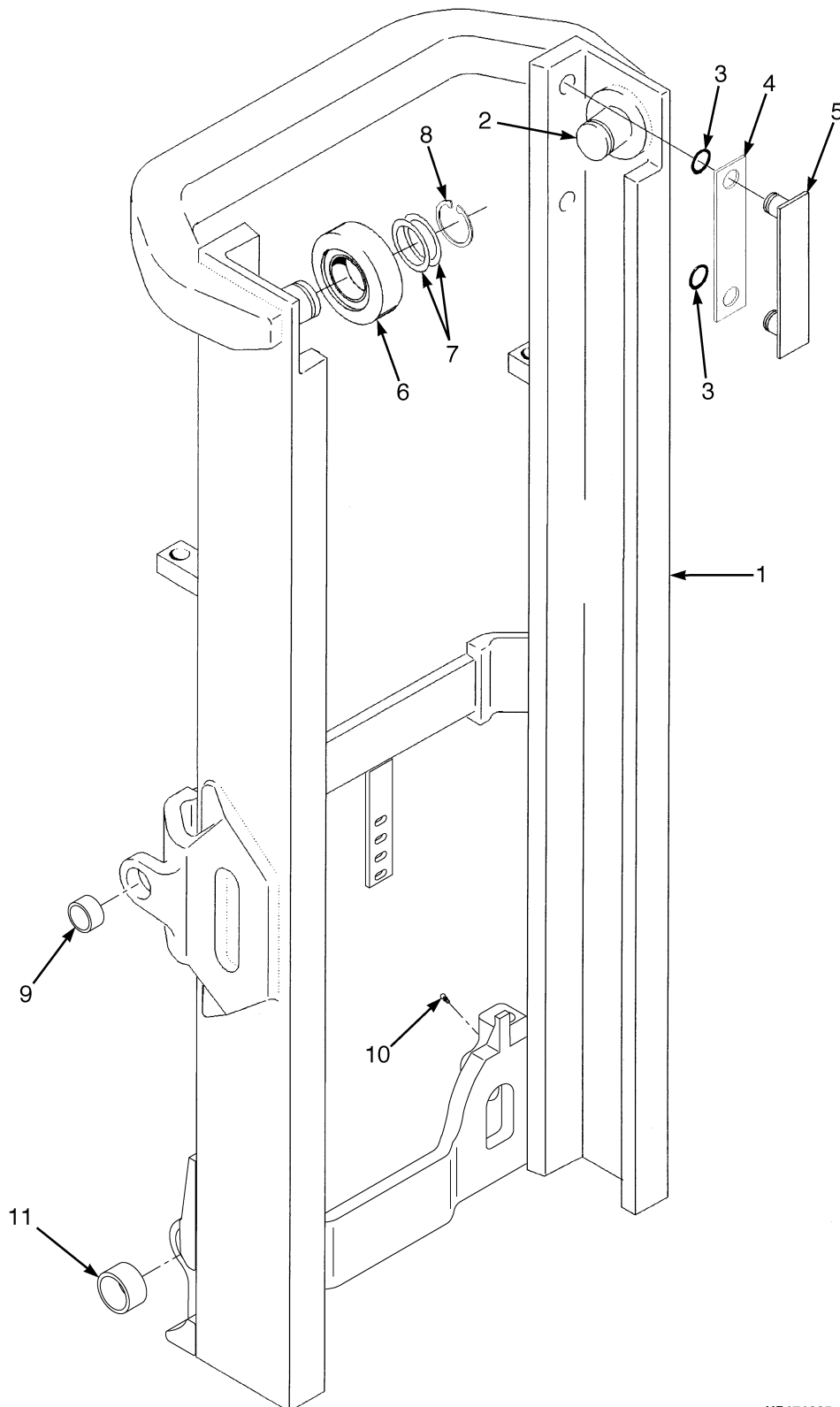
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SECTION 8

MAST-THREE STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
HEAVY DUTY - THREE STAGE FULL FREE-LIFT (D508/D563)	8-32
THREE STAGE FULL FREE-LIFT - D508/D563	8-30
THREE STAGE FULL FREE-LIFT - F508/F563	8-86
FREE-LIFT	
THREE STAGE FULL FREE-LIFT - D508/D563	8-22
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT - F508-F563	8-74
FREE-LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-66
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-70
FREE-LIFT CYLINDERS	
THREE STAGE FULL FREE-LIFT - D508/D563	8-26
HEADER HOSE	
THREE STAGE FULL FREE-LIFT - D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)	8-34
THREE STAGE FULL FREE-LIFT - D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)	8-38
HEADER HOSES AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508/F563 (→ 11/2015)	8-78
THREE STAGE FULL FREE-LIFT - F508/F563 (11/2015 →)	8-82
INNER MAST	
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-56
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-58
THREE STAGE FULL FREE-LIFT - D508/D563	8-8
INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-50
THREE STAGE FULL FREE-LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-52
THREE STAGE FULL FREE-LIFT - D508/D563	8-4
MAIN CYLINDER	
LEFT HAND - THREE STAGE FULL FREE-LIFT (D508/D563)	8-14
RIGHT HAND - THREE STAGE FULL FREE-LIFT (D508/D563)	8-18
MAIN LIFT	
THREE STAGE FULL FREE-LIFT - D508/D563	8-10
MAIN LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT - F508-F563	8-62
MAIN LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563	8-60
OUTER MAST	
THREE STAGE FULL FREE LIFT - F508-F563 (→ PENDING PER ECN 160638)	8-42
THREE STAGE FULL FREE LIFT - F508-F563 (PENDING PER ECN 160638 →)	8-46
THREE STAGE FULL FREE-LIFT - D508/D563	8-2

OUTER MAST (FIGURE 8-1) THREE STAGE FULL FREE-LIFT — D508/D563



HP171065

OUTER MAST

THREE STAGE FULL FREE-LIFT – D508/D563

D508

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Mast Assy	2065455	2065457	2065459	2065465	2065470
1	Outer Mast	1524754	1524755	1524757	1524760	1524763

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Mast Assy	2065395	2065397	2065399	2065404	2065410
1	Outer Mast	1524754	1524755	1524757	1524760	1524763

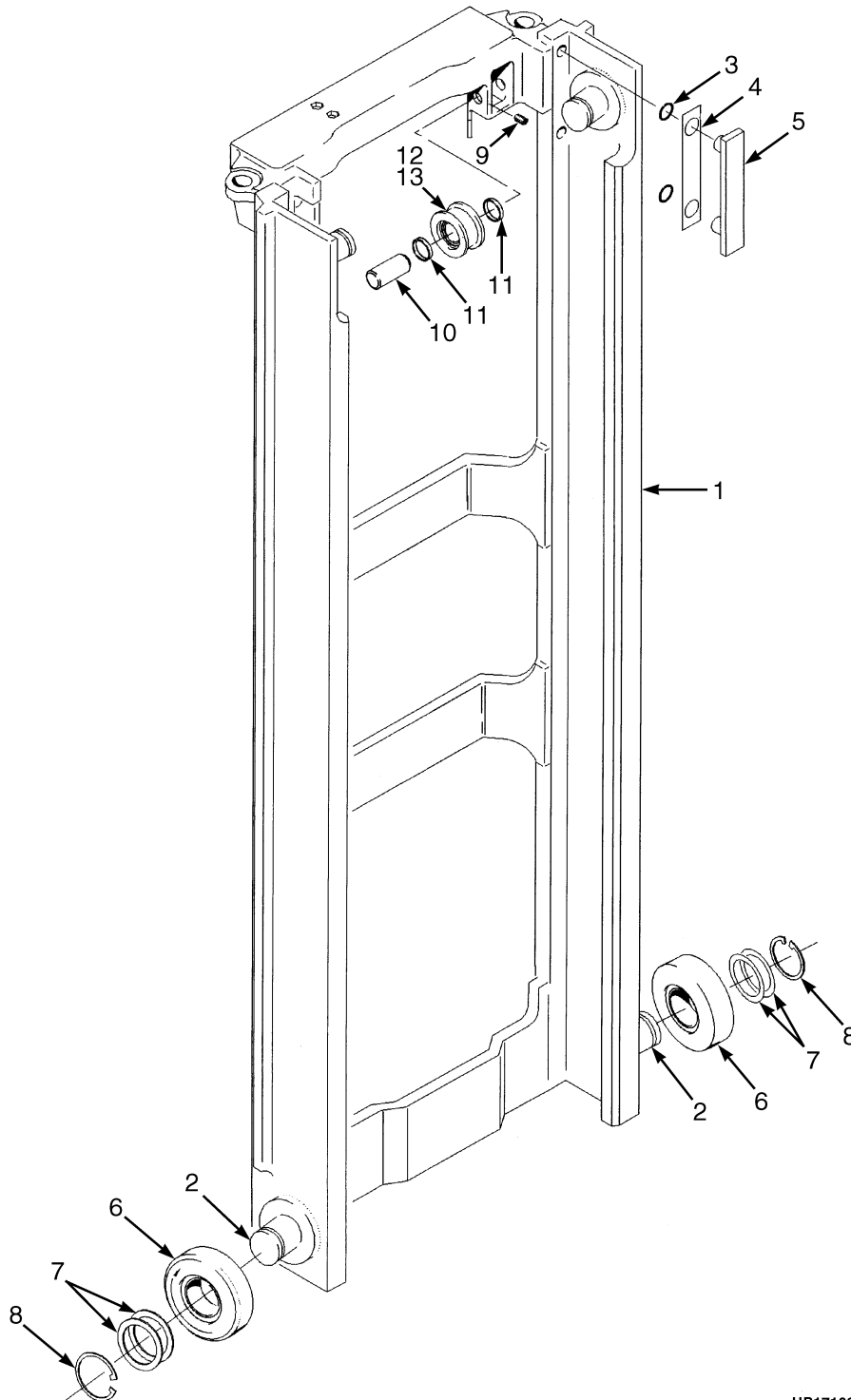
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131715	Shim (0.007 in.)	4
4	131716	Shim (0.020 in.)	4
5	215211	Wear Strip	2
6	b 1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.020 in.)	AR
8	58901	Snap Ring	2
9	300982	Bushing	2
10	16001	Grease Fitting	2
11	1502811	Bushing	2

FOOTNOTES:

a Refer to Table

b Replace with larger depending on wear.

INTERMEDIATE MAST (FIGURE 8-2) THREE STAGE FULL FREE-LIFT — D508/D563



HP171030

**INTERMEDIATE MAST
THREE STAGE FULL FREE-LIFT – D508/D563****D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Mast Assy	2065455	2065457	2065459	2065465	2065470
1	Intermediate Mast	1524834	1524835	1524836	1524839	1524842

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Mast Assy	2065395	2065397	2065399	2065404	2065410
1	Intermediate Mast	1524834	1524835	1524836	1524839	1524842

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Mast Assy	1	1
1	a	Intermediate Mast	1	1
2	1345216	Stubshaft	2	2
3	104506	O-Ring	4	4
4	131716	Shim (0.020 in.)	4	4
5	215211	Wear Strip	2	2
6	b 1395168	Load Roller ("A") (111.10/110.84)	4	4
6	1333396	Load Roller ("B") (111.48/111.22)	4	4
6	1333397	Load Roller ("C") (112.62/112.36)	4	4
7	129387	Shim (0.020 in.)	AR	AR
8	58901	Snap Ring	4	4
9	302462	Roll Pin	2	2
10	1368656	Pin	2	2
11	1378691	Spacer	4	4
12	1379685	Chain Sheave (Assembly)	2	..
12	1378698	Chain Sheave	1	..
12	37752	Snap Ring	1	..
12	1378699	Ball Bearing	1	..
13	1379684	Chain Sheave (Assembly)	..	2
13	1378694	Chain Sheave	..	1
13	37752	Snap Ring	..	1
13	1378699	Ball Bearing	..	1

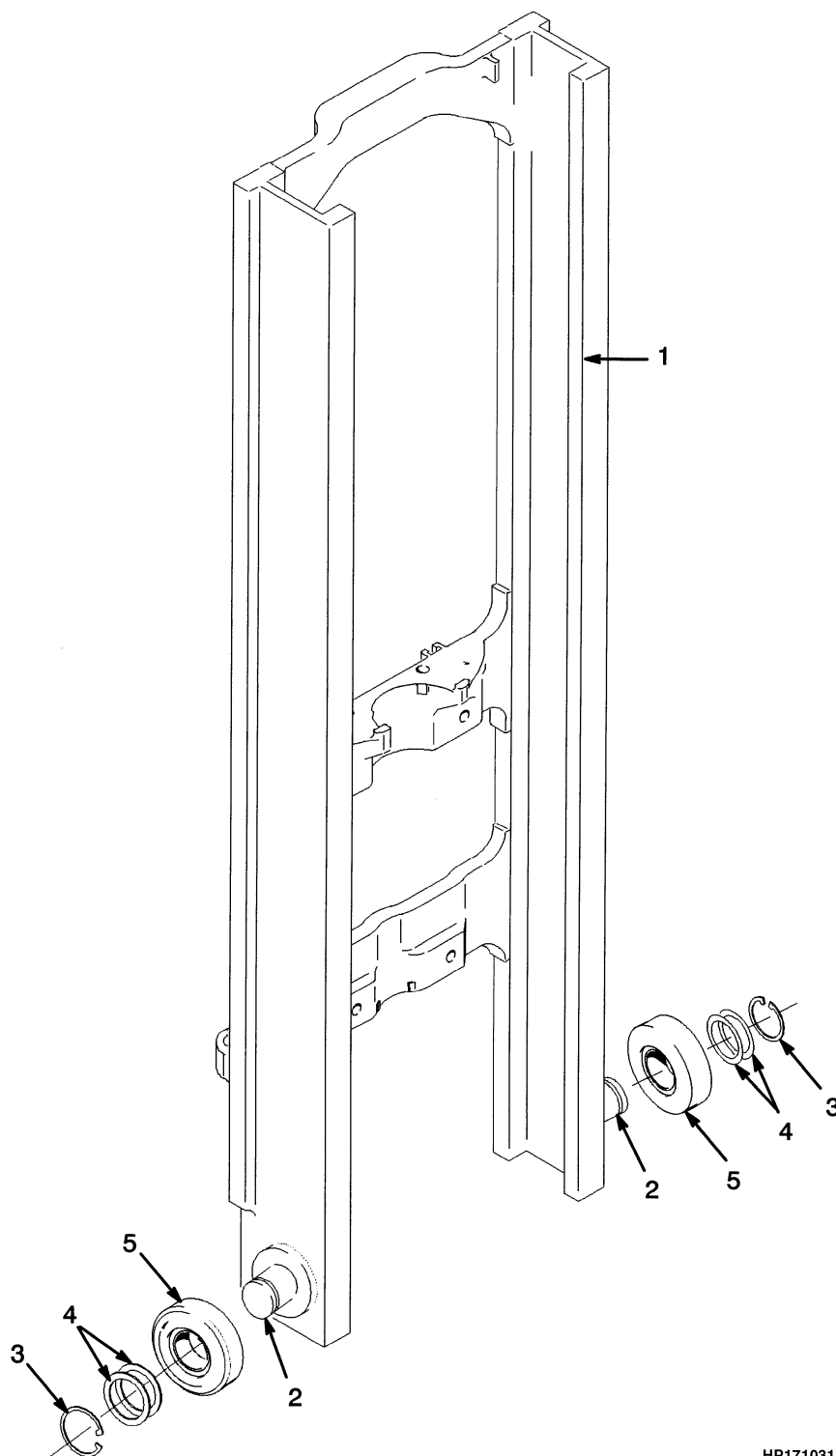
FOOTNOTES:

- a** Refer to Table
- b** Replace with larger depending on wear

NOTES

[illegible]

INNER MAST (FIGURE 8-3) THREE STAGE FULL FREE-LIFT — D508/D563



HP171031

INNER MAST **THREE STAGE FULL FREE-LIFT – D508/D563**

D508

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Mast Assy	2065455	2065457	2065459	2065465	2065470
1	Inner Mast	1381357	1381358	1381359	1381362	1381365

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Mast Assy	2065395	2065397	2065399	2065404	2065410
1	Inner Mast	1381357	1381358	1381359	1381362	1381365

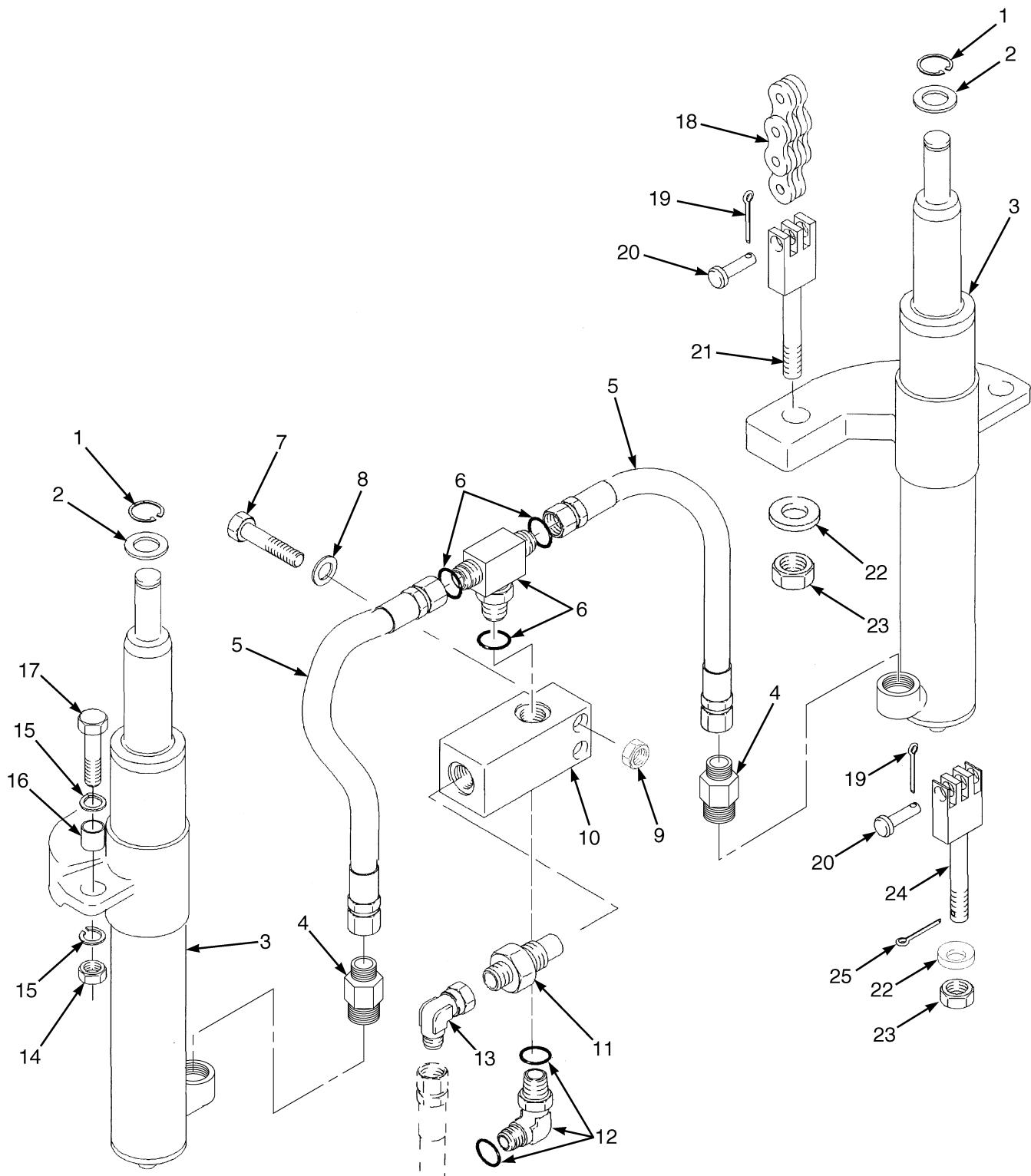
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.020 in.)	AR
5	b 1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2

FOOTNOTES:

a Refer to Table

b Replace with larger depending on wear

MAIN LIFT (FIGURE 8-4) THREE STAGE FULL FREE-LIFT — D508/D563



HP170922

MAIN LIFT
THREE STAGE FULL FREE-LIFT – D508/D563**D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
18	Chain	135634	337174	129361	135588	335041

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
18	Chain	1342123	1342124	1342384	1342129	1342388

ITEM	PART NO.	DESCRIPTION	QTY
1	131358	Snap Ring	2
2	1333382	Washer (0.060 in.)	2
2	1354915	Washer (0.010 in.)	AR
2	1354916	Washer (0.030 in.)	AR
2	1354917	Washer (0.060 in.)	AR
3	.....	Main Lift Cylinders (☞ Figure 8-6).....	2
4	2062686	Hyd Velocity Fuse (E45XN-E60XN)	2
4	2062687	Hyd Velocity Fuse (E65XN-E70XN)	2
4	16485	O-Ring	1
4	252729	O-Ring	1
5	1481097	Hose Assy	2
6	1532650	Fitting	1
6	16485	O-Ring	1
6	1527818	O-Ring	2
7	1581835	Capscrew	2
8	1581556	Washer	2
9	1581566	Nut	2
10	1333392	Housing (Lowering Control)	1
11	2062651	Lowering Control Valve (E45XN-E60XN)	1
11	2062652	Lowering Control Valve (E65XN-E70XN)	1
12	1480747	Fitting	1
12	4450764		
	16486	O-Ring	1
12	1527820	O-Ring	1
13	1486773	Fitting	1
13	1527818	O-Ring	1
14	1581849	Nut	2
15	1581852	Washer	4
16	323090	Spacer	2
17	1581829	Capscrew	2

MAIN LIFT THREE STAGE FULL FREE-LIFT – D508/D563

ITEM	PART NO.	DESCRIPTION	QTY
18	a	Chain	2
19	15211	Cotter Pin	4
20	1514866	Pin	4
21	1369357	Chain Anchor (E45XN-E60XN)	2
21	1369356	Chain Anchor (E65XN-E70XN)	2
22	297649	Ring	4
23	161003	Nut	4
24	1365140	Chain Anchor (E45XN-E60XN)	2
24	1333329	Chain Anchor (E65XN-E70XN)	2
25	15223	Cotter Pin	2

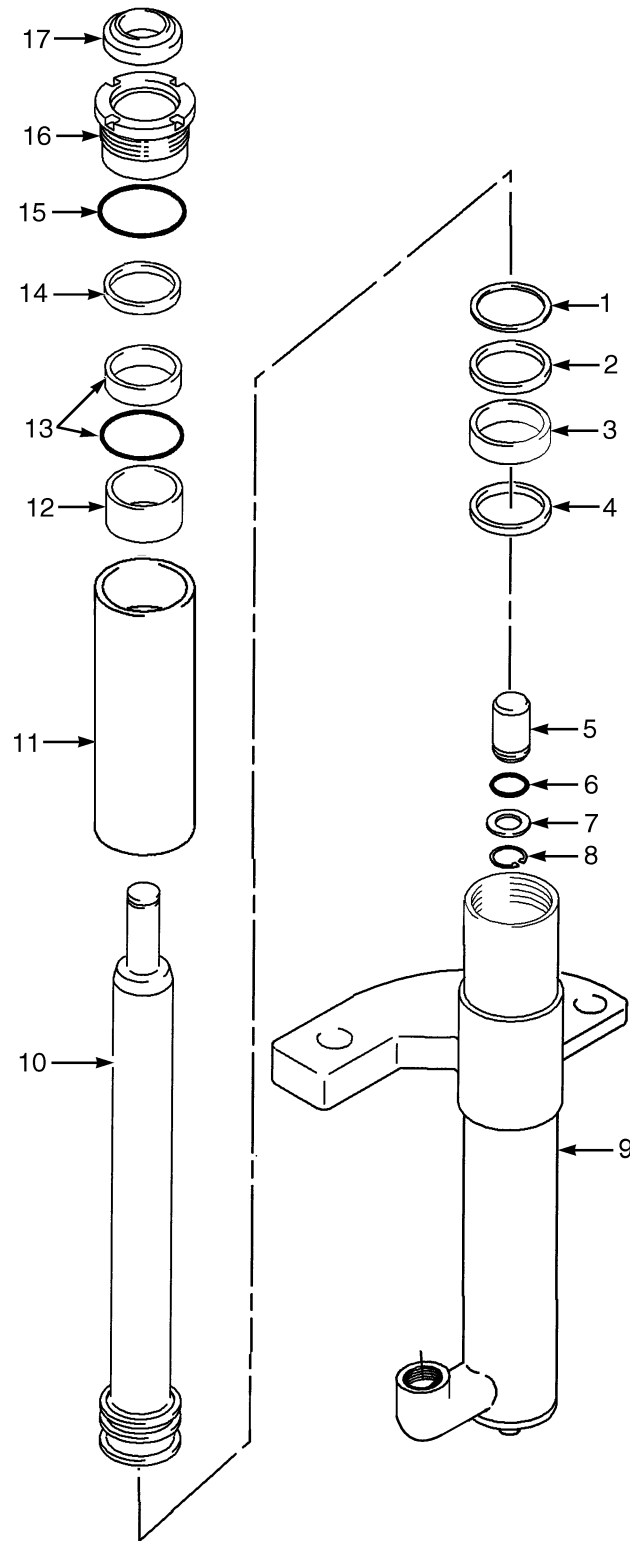
FOOTNOTES:

a Refer to Table

NOTES

[illegible]

MAIN CYLINDER (FIGURE 8-5) LEFT HAND — THREE STAGE FULL FREE-LIFT (D508/D563)



BP170294

MAIN CYLINDER

LEFT HAND – THREE STAGE FULL FREE-LIFT (D508/D563)

D508

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Cylinder Group Number	8518208	8518209	8518210	8518213	8518216
	Cylinder Assy	2064643	2064644	2064645	2064648	2064651
9	Tube Wldmt- Cylinder	2064610	2064611	2064612	2064615	2064618
10	Cylinder Rod	1355599	1355603	1355607	1355620	1355633
11	Spacer	----	----	1355610	1355610	1355626

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Cylinder Group Number	8518308	8518309	8518310	8518313	8518316
	Cylinder Assy	2064709	2064710	2064711	2064714	2064717
9	Tube Wldmt- Cylinder	2064562	2064563	2064564	2064567	2064570
10	Cylinder Rod	1355741	1355745	1355749	1355758	1355771
11	Spacer	2046164	2046164	2073087	2073087	2077818

KEY:
A: E45XN-E60XN
B: E65XN-E70XN

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	b	Cylinder Assy	1	1
1	638246	Back-Up Ring	1	..
1	335012	Back-Up Ring	..	1
2	2013075	Rod Seal	1	..
2	334156	Rod Seal	..	1
3	1356750	Wear Ring	1	..
3	1356751	Wear Ring	..	1
4	1360127	Piston Ring	1	..
4	1356748	Piston Ring	..	1
5	257913	Check Valve	1	1
6	190580	O-Ring	1	1

MAIN CYLINDER

LEFT HAND – THREE STAGE FULL FREE-LIFT (D508/D563)

KEY:
A: E45XN-E60XN

B: E65XN-E70XN

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
7	297531	Washer	1	1
8	187388	Snap Ring	1	1
9	b	Tube Wldmt-Cylinder	1	1
10	b	Cylinder Rod	1	1
11	b	Spacer	1	1
12	322902	Wear Ring	1	1
13	1356749	Rod Seal	1	1
14	a 322824	Back-Up Ring	1	1
15	~~4028986~~			
	92861	O-Ring	1	..
15	59229	O-Ring	..	1
16	2091257	Gland	1	..
16	2091259	Gland	..	1
17	1319668	Rod Wiper	1	1
	1355497	Kit-Seal	1	..
	1355714	Kit-Seal	..	1

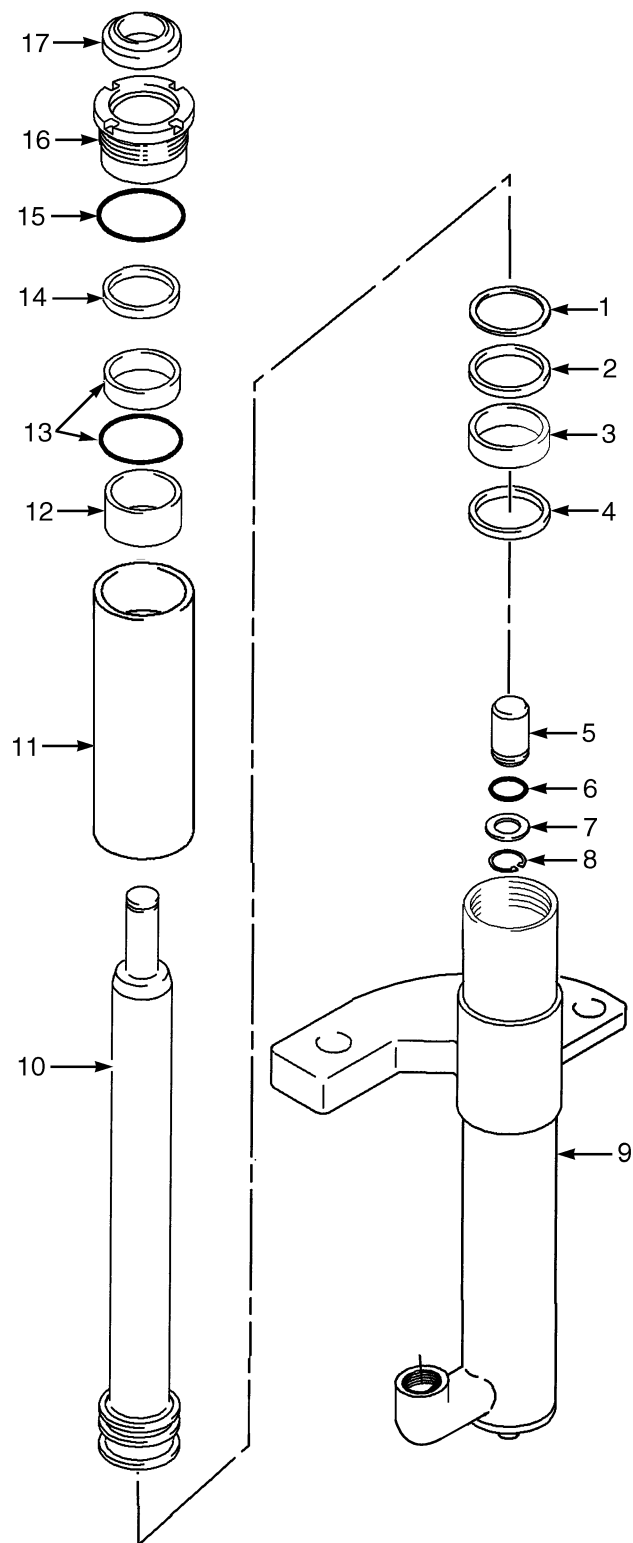
FOOTNOTES:
a Not Illustrated

b Refer to Table

NOTES

[illegible]

MAIN CYLINDER (FIGURE 8-6) RIGHT HAND — THREE STAGE FULL FREE-LIFT (D508/D563)



BP170294

MAIN CYLINDER **RIGHT HAND – THREE STAGE FULL FREE-LIFT (D508/D563)**

D508

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Cylinder Group Number	8518258	8518259	8518260	8518263	8518266
	Cylinder Assy	2064676	2064677	2064678	2064681	2064684
9	Tube Wldmt- Cylinder	2073083	2073084	2073085	2073086	2079984
10	Cylinder Rod	1355599	1355603	1355607	1355620	1355633
11	Spacer	----	----	1355610	1355610	1355626

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Cylinder Group Number	8518358	8518359	8518360	8518363	8518366
	Cylinder Assy	2064734	2064735	2064736	2064739	2064742
9	Tube Wldmt- Cylinder	2064586	2064587	2064588	2064591	2064594
10	Cylinder Rod	1355741	1355745	1355749	1355758	1355771
11	Spacer	2046164	2046164	2073087	2073087	2077818

KEY:

A: E45XN-E60XN

B: E65XN-E70XN

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	b	Cylinder Assy	1	1
1	638246	Back-Up Ring	1	..
1	335012	Back-Up Ring	..	1
2	2013075	Rod Seal	1	..
2	334156	Rod Seal	..	1
3	1356750	Wear Ring	1	..
3	1356751	Wear Ring	..	1
4	1360127	Piston Ring	1	..
4	1356748	Piston Ring	..	1
5	257913	Check Valve	1	1
6	190580	O-Ring	1	1

MAIN CYLINDER **RIGHT HAND – THREE STAGE FULL FREE-LIFT (D508/D563)**

KEY:**A:** E45XN-E60XN**B:** E65XN-E70XN

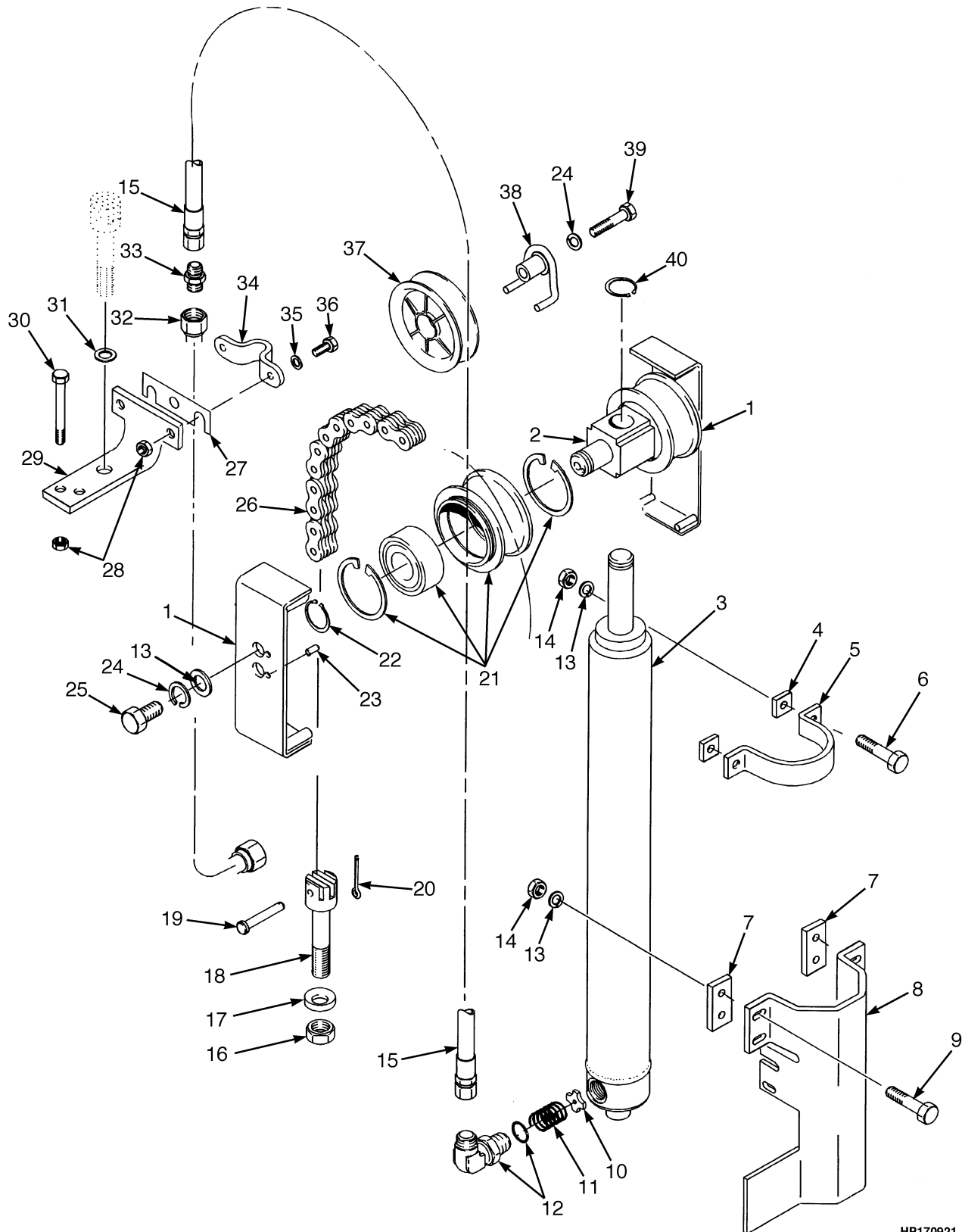
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
7	297531	Washer	1	1
8	187388	Snap Ring	1	1
9	b	Tube Wldmt-Cylinder	1	1
10	b	Cylinder Rod	1	1
11	b	Spacer	1	1
12	322902	Wear Ring	1	1
13	1356749	Rod Seal	1	1
	a 322824	Back-Up Ring	1	1
15	~~4028986~~			
	92861	O-Ring	1	..
15	59229	O-Ring	..	1
16	2091257	Gland	1	..
16	2091259	Gland	..	1
17	1319668	Rod Wiper	1	1
	1355497	Kit-Seal	1	..
	1355714	Kit-Seal	..	1

FOOTNOTES:**a** Not Illustrated**b** Refer to Table

NOTES

[illegible]

FREE-LIFT (FIGURE 8-7) THREE STAGE FULL FREE-LIFT — D508/D563



HP170921

**FREE-LIFT
THREE STAGE FULL FREE-LIFT – D508/D563****D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
15	Hose Assy	2084653	2084654	2084655	2084658	2084661
26	Chain	231084	88431	135619	164474	223389
32	Tube Assy	2075928	2075929	2075930	2075933	2075936

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
15	Hose Assy	2084569	2084570	2084571	2084574	2084577
26	Chain	1342377	1342378	1342379	1342381	1342383
32	Tube Assy	2075928	2075929	2075930	2075933	2075936

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1395285	Chain Guard	2	2
2	1378690	Crosshead	1	1
3	.....	Free-Lift Cylinder (☞ Figure 8-8).....	1	1
4	1354902	Spacer	2	2
5	1465504	Tie Down	1	1
6	1581827	Capscrew	2	..
6	1581828	Capscrew	..	2
7	1354903	Spacer	2	2
8	b c 1702706	Bracket	1	1
8	d e 4015720	Bracket Wldmt	1	1
9	1581832	Capscrew	4	4
10	356505	Washer (Special)	1	1
11	154355	Spring	1	1
12	1481095	Fitting	1	1
12	16485	O-Ring	1	1
13	1581559	Washer	8	8
14	1581849	Nut	6	6
15	a	Hose Assy	1	1
16	161003	Nut	2	2
17	297649	Ring	2	2

FREE-LIFT **THREE STAGE FULL FREE-LIFT – D508/D563**

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
18	1369357	Chain Anchor	2	..
18	1369356	Chain Anchor	..	2
19	1514866	Pin	2	2
20	15211	Cotter Pin	2	2
21	1379682	Chain Sheave Assembly	2	..
21	1378692	Chain Sheave	1	..
21	1379683	Chain Sheave Assembly	..	2
21	1378693	Chain Sheave	..	1
21	37752	Snap Ring	1	1
21	1378699	Ball Bearing	1	1
22	304526	Snap Ring	2	2
23	302461	Roll Pin	2	2
24	1581564	Lockwasher	3	3
25	1581590	Capscrew	2	2
26	a	Chain	2	2
27	325616	Spacer	AR	AR
27	4022999	Spacer (Alternate Part)	AR	AR
28	1581566	Nut	4	4
28	1581565	Nut (Alternate Part)	6	6
29	1550298	Bracket	1	1
29	4022998	Bracket (Alternate Part)	1	1
30	1581836	Capscrew	2	2
31	1581850	Washer	1	1
32	a	Tube Assy	1	1
33	1522442	Fitting	1	1
33	1527820	O-Ring	1	1
33	1527819	O-Ring	1	1
34	4022906	Clamp	1	1
34	1345401	Clamp (Optional)	1	1
35	1581556	Washer	2	2
35	1673754	Washer (Alternate Part)	4	4
36	1581581	Capscrew	2	2
36	4022940	Capscrew (Alternate Part)	2	2
37	1343989	Hose Sheave	1	1
37	1354901	Bushing	1	1
38	1360534	Stubshaft	1	1
39	1362433	Spacer	4	4
39	1581829	Capscrew	1	1
40	131358	Snap Ring	1	1

FOOTNOTES:

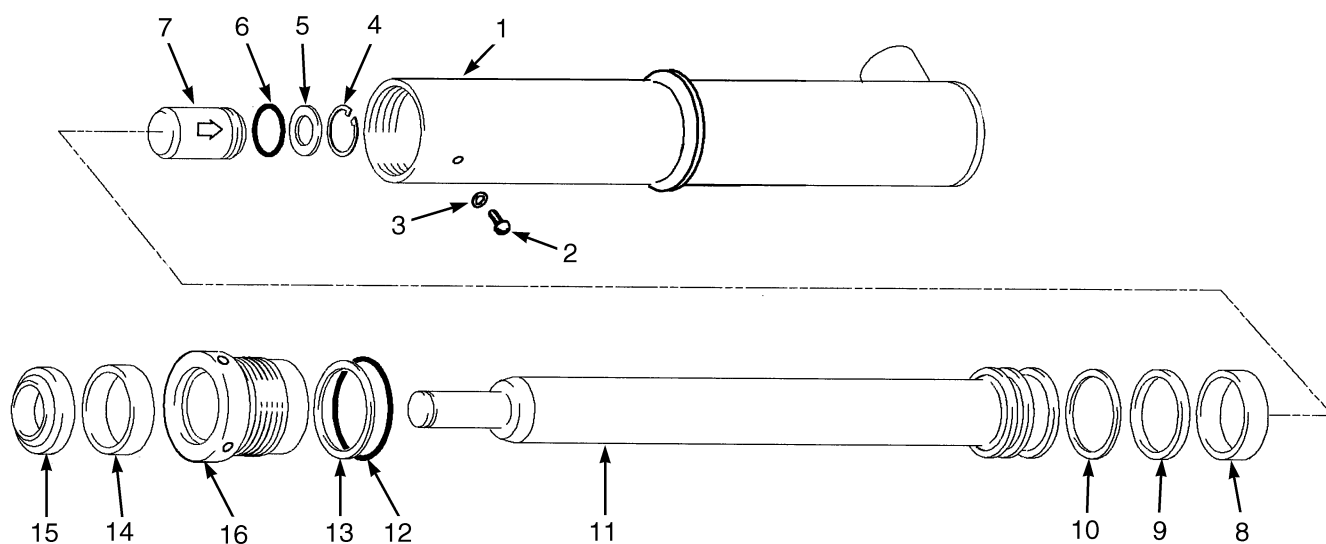
a Refer to Table
b → S/N D508V27872H
c → S/N D563V11658H

d S/N D508V27873H →
e S/N D563V11659H →

NOTES

[illegible]

FREE-LIFT CYLINDERS (FIGURE 8-8) THREE STAGE FULL FREE-LIFT — D508/D563



BP170103

FREE-LIFT CYLINDERS
THREE STAGE FULL FREE-LIFT – D508/D563**D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
	Cylinder Group Number	8514559	8514560	8514562	8514565	8514568
	Cylinder Assy	2053796	2053797	2053798	2053799	2058126
1	Tube Wldmt- Cylinder	2058213	2058214	2058216	2058219	2058222
11	Cylinder Rod	1356569	1356572	1356578	1371631	1356596

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
	Cylinder Group Number	8518710	8518711	8518713	8518716	8518720
	Cylinder Assy	2058327	2058328	2058330	2058333	2058337
1	Tube Wldmt- Cylinder	2058253	2063691	2058254	2064754	2058258
11	Cylinder Rod	1356691	1356694	1356065	1356074	1356086

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	1361302	Screw	1	1
3	190887	Sealing Ring	1	1
4	187388	Snap Ring	1	1
5	297531	Washer	1	1
6	190580	O-Ring	1	1
7	297538	Check Valve	1	1
8	1358972	Wear Ring	1	..
8	636941	Wear Ring	..	1
9	2013088	Rod Seal	1	..
9	309062	Rod Seal	..	1
10	2013089	Back-Up Ring	1	..

FREE-LIFT CYLINDERS **THREE STAGE FULL FREE-LIFT – D508/D563**

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

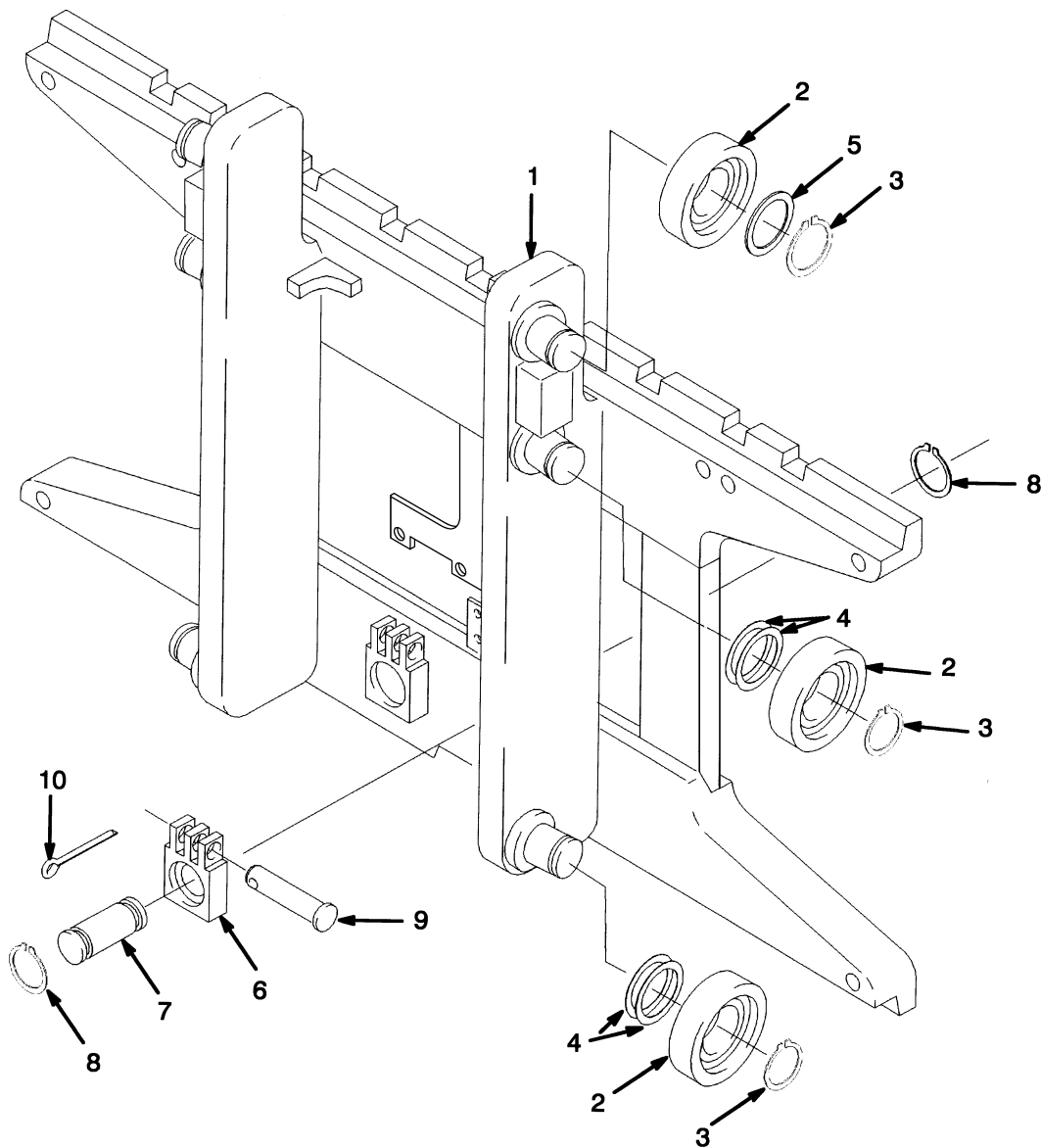
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
10	637565	Back-Up Ring	..	1
11	a	Cylinder Rod	1	1
12	90263	O-Ring	1	..
12	15880	O-Ring	..	1
13	147973	Back-Up Ring	1	..
13	164840	Back-Up Ring	..	1
14	1358970	Rod Seal	1	1
14	1622946	Rod Seal (Alternate Part)	1	1
15	2013099	Rod Wiper	1	1
15	1463105	Rod Wiper (Alternate Part)	1	1
16	1356292	Gland	1	..
16	1356661	Gland	..	1
	1358969	Kit-Seal	1	..
	1356662	Kit-Seal	..	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

CARRIAGE (FIGURE 8-9) THREE STAGE FULL FREE-LIFT — D508/D563



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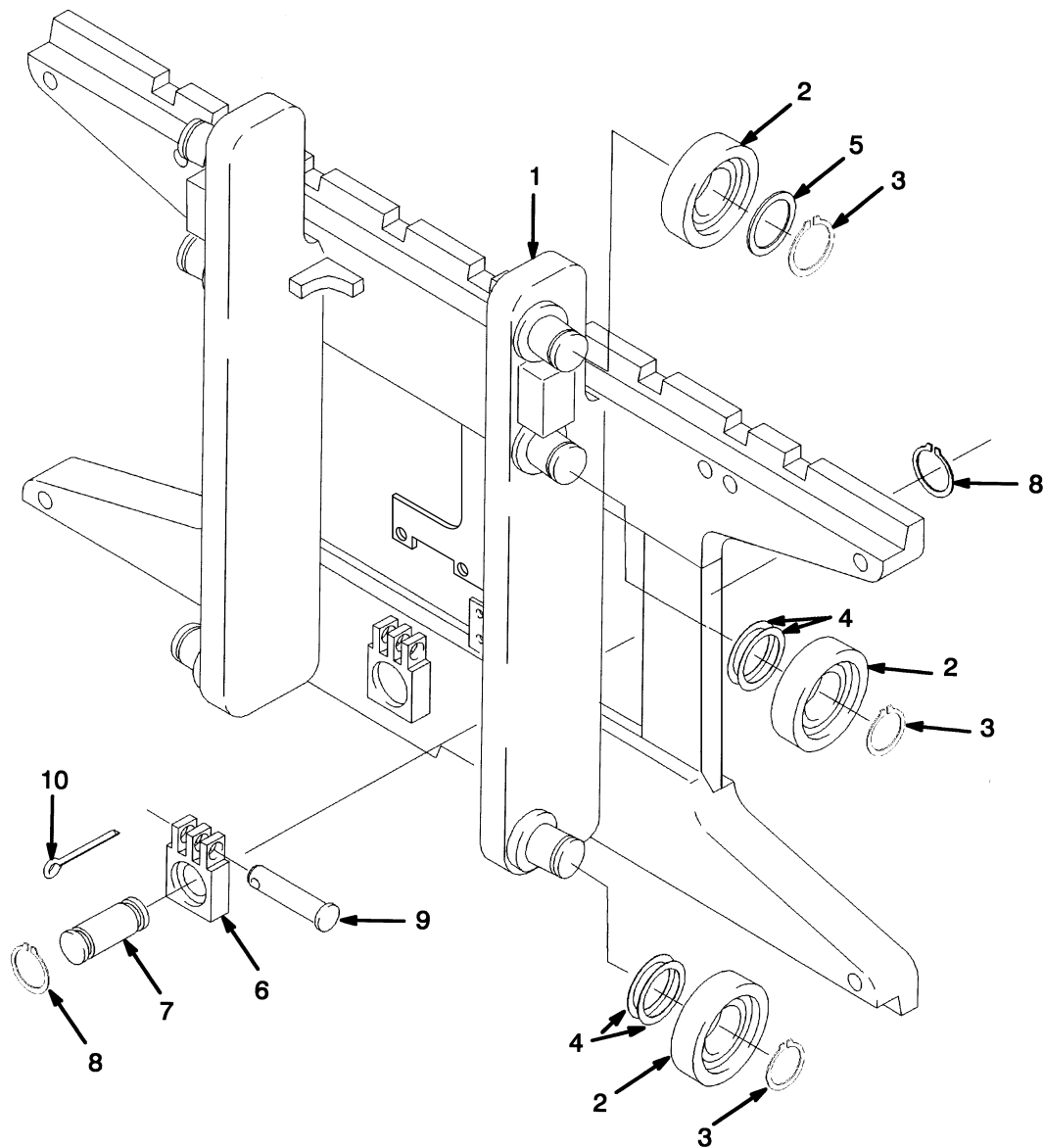
CARRIAGE

THREE STAGE FULL FREE-LIFT – D508/D563

KEY:**A: E45XN-E55XN Class II****B: E60XN-E70XN Class III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1379461	Carriage (Group No. 8500277)	1	..
	1477682	Carriage (Group No. 8504877)	..	1
1	1381562	Carriage Wldmt	1	..
1	1345216	Stubshaft	6	..
1	1477844	Carriage Wldmt	..	1
1	1345216	Stubshaft	..	6
2	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
2	1393142	Load Roller ("B") (3.24 in.) (Optional)	6	6
2	1395176	Load Roller ("A") (3.23 in.) (Optional)	6	6
2	1395174	Load Roller ("A") (3.22 in.) (Optional)	6	6
3	58901	Snap Ring	6	6
4	129387	Shim (0.020 in.)	AR	AR
5	366115	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole)	..	2
6	1504012	Chain Anchor (Single Hole) (Optional)	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin (Chain Anchor)	2	2
10	15211	Cotter Pin	2	2

CARRIAGE (FIGURE 8-10) HEAVY DUTY — THREE STAGE FULL FREE-LIFT (D508/D563)



HP170506

CARRIAGE

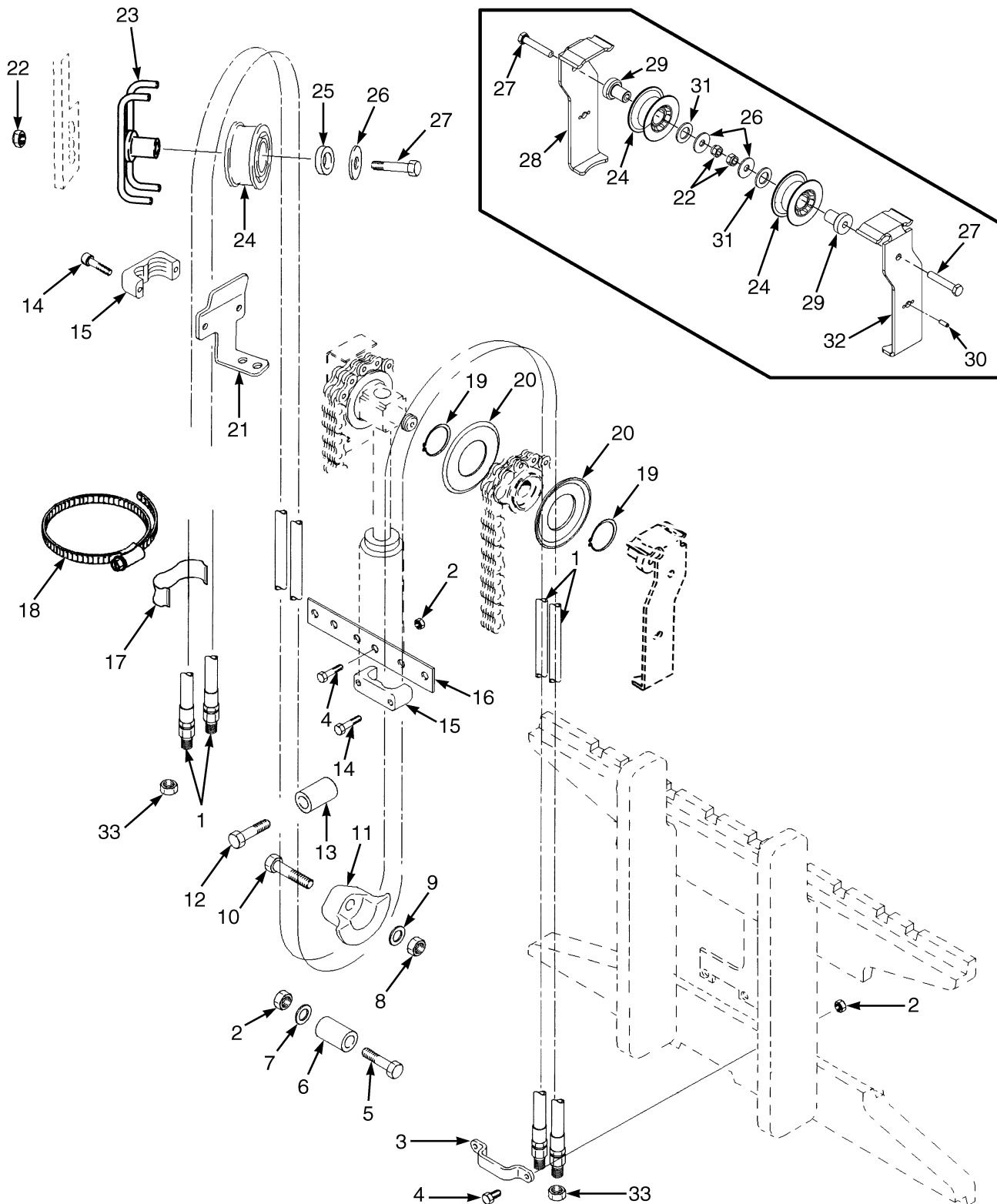
HEAVY DUTY – THREE STAGE FULL FREE-LIFT (D508/D563)

KEY:**A: E45XN-E55XN Class II****B: E60XN-E70XN Class III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2070776	Carriage (Group No. 8526354)	1	..
	2071863	Carriage (Group No. 8505024)	..	1
1	1566791	Carriage Wldmt	1	..
1	1345216	Stubshaft	6	..
1	1481006	Carriage Wldmt	..	1
1	1345216	Stubshaft	..	6
2	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
2	1393142	Load Roller ("B") (3.24 in.) (Optional)	6	6
2	1395174	Load Roller ("A") (3.22 in.) (Optional)	6	6
2	1395176	Load Roller ("A") (3.23 in.) (Optional)	6	6
3	58901	Snap Ring	6	6
4	129387	Shim (0.020 in.)	AR	AR
5	366115	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole)	..	2
6	1504012	Chain Anchor (Single Hole) (Optional)	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin (Chain Anchor)	2	2
10	15211	Cotter Pin	2	2

HEADER HOSE (FIGURE 8-11)

THREE STAGE FULL FREE-LIFT — D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)



HP020342

HEADER HOSE**THREE STAGE FULL FREE-LIFT – D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)****D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
1	Hose Assy	2065124	2065125	2065161	2065164	2065167

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 4868
1	Hose Assy	2065124	2065125	2065161	2065162

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		5168 mm (203.5 in.)	5318 mm (209.4 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 5168	D563 5318	D563 5618
1	Hose Assy	2065164	2065165	2065167

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Hose Assy	2	4
2	1581566	Nut	5	10
3	1643405	Hose Clamp	1	2
4	1581581	Capscrew	4	10
5	1581835	Capscrew	1	2
6	1354961	Spacer	1	2
7	1581851	Washer	1	2
8	1581567	Nut	1	2
9	1581558	Washer	1	2
10	1581588	Capscrew	1	2
11	1348246	Hose Guide (RH)	1	1
11	1348247	Hose Guide (LH)	..	1
12	1581831	Capscrew	1	2
13	1360538	Tube Assy	1	2
14	1581842	Capscrew	4	8
15	1360386	Clamp (Double Hose)	2	4

HEADER HOSE**THREE STAGE FULL FREE-LIFT – D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
16	1353464	Plate	1	1
17	1477996	Hose Clamp	1	2
18	1617657	Clamp	1	2
19	1345204	Snap Ring (Spiral Retaining Ring)	2	4
20	1345199	Hose Guide	2	4
21	1354906	Bracket (RH)	1	1
21	1354907	Bracket (LH)	..	1
22	1390182	Nut	2	4
23	1362387	Stubshaft	1	2
24	~~1381595~~			
	1494017	Hose Sheave	2	4
25	1360549	Spacer	1	2
26	1345190	Washer	2	4
27	1581830	Capscrew	2	4
28	1395291	Bracket (RH Hose Guard)	1	1
29	1396406	Stubshaft	1	2
30	302461	Roll Pin	1	2
31	1581560	Washer	1	2
32	1395292	Bracket (LH Hose Guard)	..	1
33	1529015	Cap	2	4
	1566564	Cap (for Chain anchors)	1	2

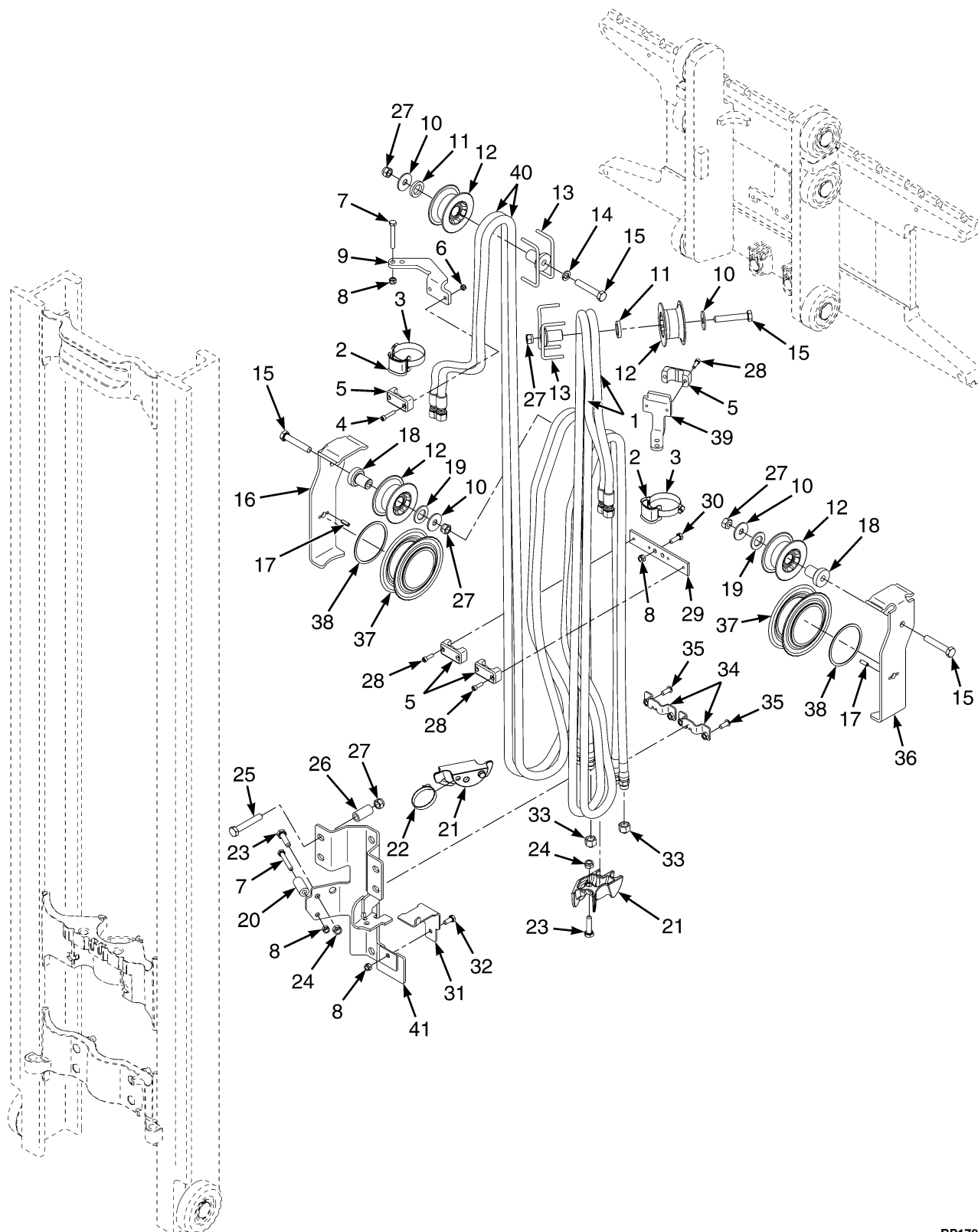
FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

HEADER HOSE (FIGURE 8-12)

THREE STAGE FULL FREE-LIFT — D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)



BP170529

HEADER HOSE**THREE STAGE FULL FREE-LIFT – D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)****D508**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
1	Hose Assy	4608524	4608525	4608526	4608529	4608532
40	Hose Assy	4608559	4608560	4608561	4608564	4608567

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
1	Hose Assy	4608524	4608525	4608526	4608529	4608532
40	Hose Assy	4608559	4608560	4608561	4608564	4608567

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b	Hose Assy	2	2
2	1477996	Hose Clamp (D508 187.4-216.9 in.) (D563 173.9-203.5 in.)	2	4
2	1477996	Hose Clamp (D508 234.6 in.) (D563 221.2 in.)	2	4
3	1617657	Clamp (D508 187.4-216.9 in.) (D563 173.9-203.5 in.)	3	6
3	1617657	Clamp (D508 234.6 in.) (D563 221.2 in.)	3	6
4	1581742	Capscrew	..	2
5	1360386	Clamp (Double Hose)	2	4
6	1581565	Nut	..	2
7	1581836	Capscrew	..	3
8	d 1581566	Nut	5	10
8	g 1581566	Nut	3	6
9	1354921	Bracket	..	1
10	1345190	Washer	2	4
11	e 1360549	Spacer	1	2
11	1360549	Spacer	..	1
12	e 1381595	Hose Sheave	2	4
12	h 4041194	Hose Sheave	2	3
12	h 1381595	Hose Sheave (Upper LH)	..	1
13	e 1362387	Stubshaft	1	1
13	h 1360548	Stubshaft (With Guard) (Upper LH)	..	1
13	h 4051749	Stubshaft (Upper RH)	1	..

HEADER HOSE

THREE STAGE FULL FREE-LIFT – D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)

KEY:

A: Three Function

B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	e 1581564	Lockwasher	..	1
15	1581830	Capscrew	2	4
16	1395292	Bracket (LH Hose Guard)	..	1
17	302461	Roll Pin	1	2
18	1396406	Stubshaft	1	2
19	c 1581560	Washer	1	2
19	f 4064560	Spacer	1	2
20	4021618	Spacer	..	1
21	~~4609464~~			
	4613901	Casting (Header Hose Turnaround Guide) (RH)	1	1
21	4609465	Casting (Header Hose Turnaround Guide) (LH)	..	1
22	397676	Strap Clamp	..	1
23	1658075	Capscrew	1	2
24	1581567	Nut	1	2
25	1581831	Capscrew	1	2
26	1360538	Tube Assy	1	2
27	1390182	Nut	2	3
27	1581849	Nut (Optional)	2	3
28	1581842	Capscrew	4	6
29	1353464	Plate	1	1
30	1581581	Capscrew	2	2
31	d ~~4019607~~			
	4034686	Bracket	1	1
32	1581580	Capscrew	1	1
33	1529015	Cap	2	4
34	d 1643405	Hose Clamp	1	2
34	g 4008020	Clamp	1	2
35	g 1597448	Capscrew	2	4
36	1395291	Bracket (RH Hose Guard)	1	1
37	1345199	Hose Guide	2	4
38	1345204	Snap Ring (Spiral Retaining Ring)	2	4
39	1354906	Bracket	1	1
40	b	Hose Assy	..	2
41	4015720	Bracket Wldmt	1	1
	a 1566564	Cap	1	2

FOOTNOTES:

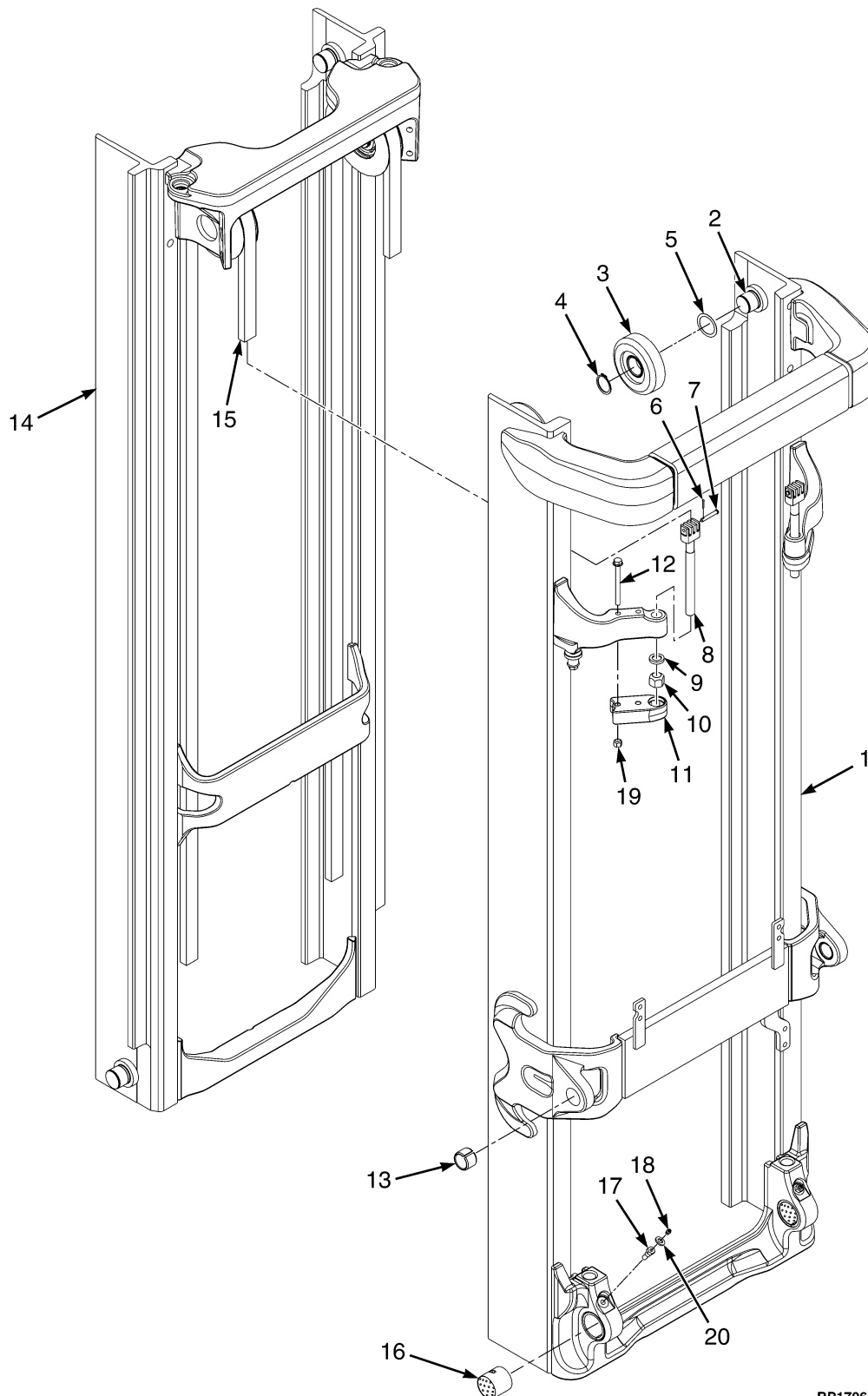
a Not Illustrated**b** Refer to Table**c** → 2/2013**d** → S/N A268N05499J**e** → S/N A268N08141K**f** 2/2013 →**g** S/N A268N05500J →**h** S/N A268N08142K →

NOTES

[illegible]

OUTER MAST (FIGURE 8-13)

THREE STAGE FULL FREE LIFT — F508-F563 (→ PENDING PER ECN 160638)



BP170646

OUTER MAST **THREE STAGE FULL FREE LIFT – F508-F563 (→ PENDING PER ECN 160638)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Outer Mast	4053746	4053747	4053749	4053752	4053755

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
1	Outer Mast	4053746	4053747	4053749	4053752	4053755

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	1333396	Load Roller ("B") (111.48/111.22)	2
3	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
4	58901	Snap Ring	2
4	1374797	Snap Ring (Optional)	2
5	129387	Shim (0.020 in.)	AR
6	15211	Cotter Pin	2
7	1514866	Pin	2
8	4072717	Chain Anchor (E45-55XN)	2
8	4072704	Chain Anchor (E60-70XN)	2
9	297649	Ring	2
10	4031973	Nut	2
11	4051079	Restraint	2
12	4082846	Capscrew	4
13	300982	Bushing	2
14		Intermediate Mast (☞Figure 8-15).....	1
15		Chain (☞Figure 8-15).....	2
16	4033414	Bushing	2
17	4033412	Capscrew	2
18	13957	Grease Fitting	2
18	16041	Grease Fitting (Optional)	4
19	1581566	Nut	4
20	1581557	Washer	2

FOOTNOTES:

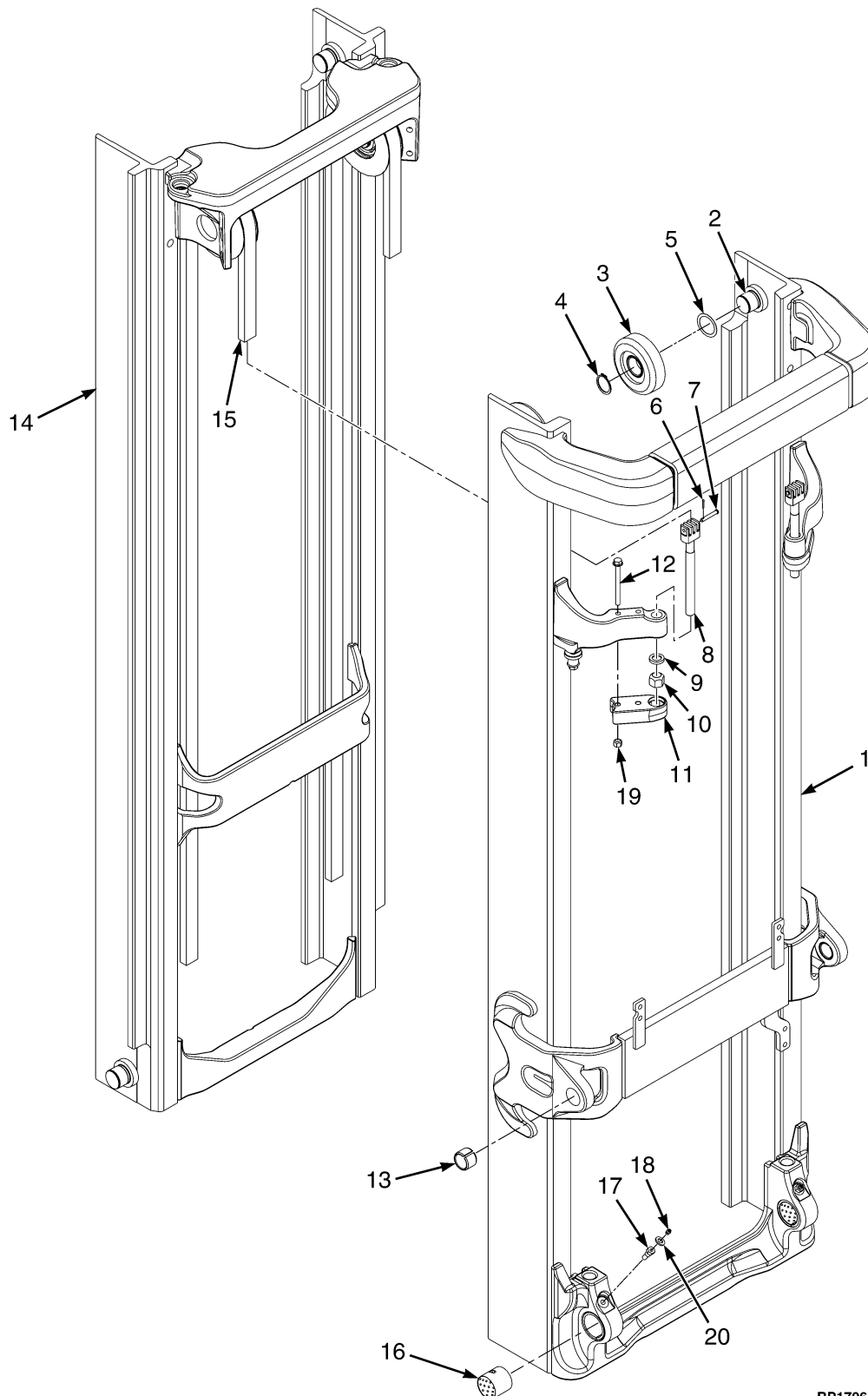
- a Refer to Table

NOTES

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OUTER MAST (FIGURE 8-14)

THREE STAGE FULL FREE LIFT — F508-F563 (PENDING PER ECN 160638 →)



BP170646

OUTER MAST

THREE STAGE FULL FREE LIFT – F508-F563 (PENDING PER ECN 160638 →)

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Outer Mast	4053746	4053747	4053749	4053752	4053755

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
1	Outer Mast	4053746	4053747	4053749	4053752	4053755

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	1333396	Load Roller ("B") (111.48/111.22)	2
3	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
4	58901	Snap Ring	2
4	1374797	Snap Ring (Optional)	2
5	129387	Shim (0.020 in.)	AR
6	15211	Cotter Pin	2
7	1514866	Pin	2
8	4184156	Chain Anchor (E45-55XN)	2
8	4184157	Chain Anchor (E60-70XN)	2
9	297649	Ring	2
10	4031973	Nut	2
11	4051079	Restraint	2
12	4082846	Capscrew	4
13	300982	Bushing	2
14		Intermediate Mast (☞Figure 8-16).....	1
15		Chain (☞Figure 8-16).....	2
16	4033414	Bushing	2
17	4033412	Capscrew	2
18	13957	Grease Fitting	2
18	16041	Grease Fitting (Optional)	4
19	1581566	Nut	4
20	1581557	Washer	2

FOOTNOTES:

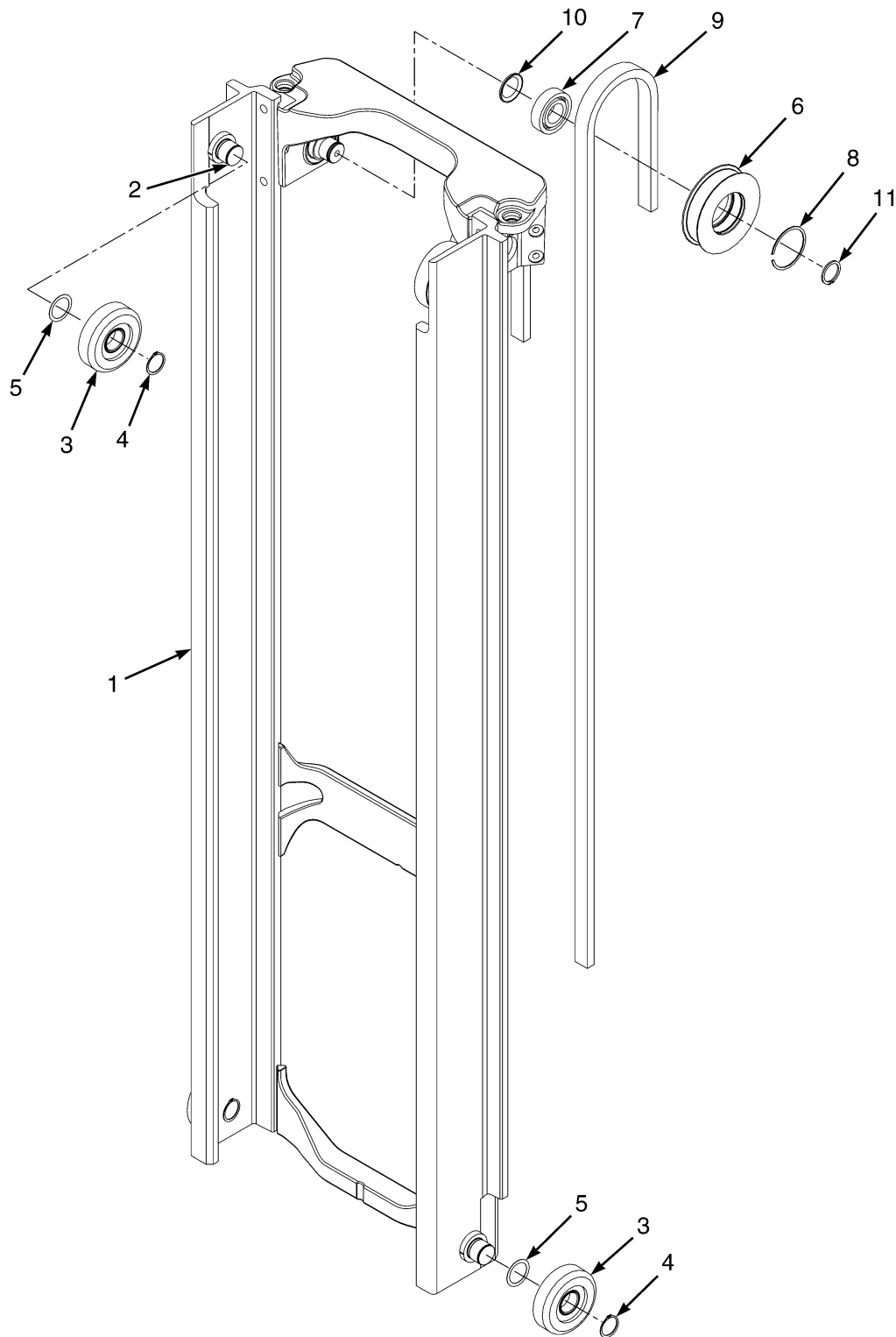
- a Refer to Table

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

INTERMEDIATE MAST (FIGURE 8-15)

THREE STAGE FULL FREE-LIFT — F508-F563 (→ PENDING PER ECN 160638)



BP170647

INTERMEDIATE MAST **THREE STAGE FULL FREE-LIFT – F508-F563 (→ PENDING PER ECN 160638)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Intermediate Mast	4053808	4053809	4053810	4053813	4053816
9	Chain	180137	129361	88446	180176	1342079

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
		F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
1	Intermediate Mast	4053808	4053809	4053810	4053813	4053816
9	Chain	1342125	1342384	1342385	1342387	1342133

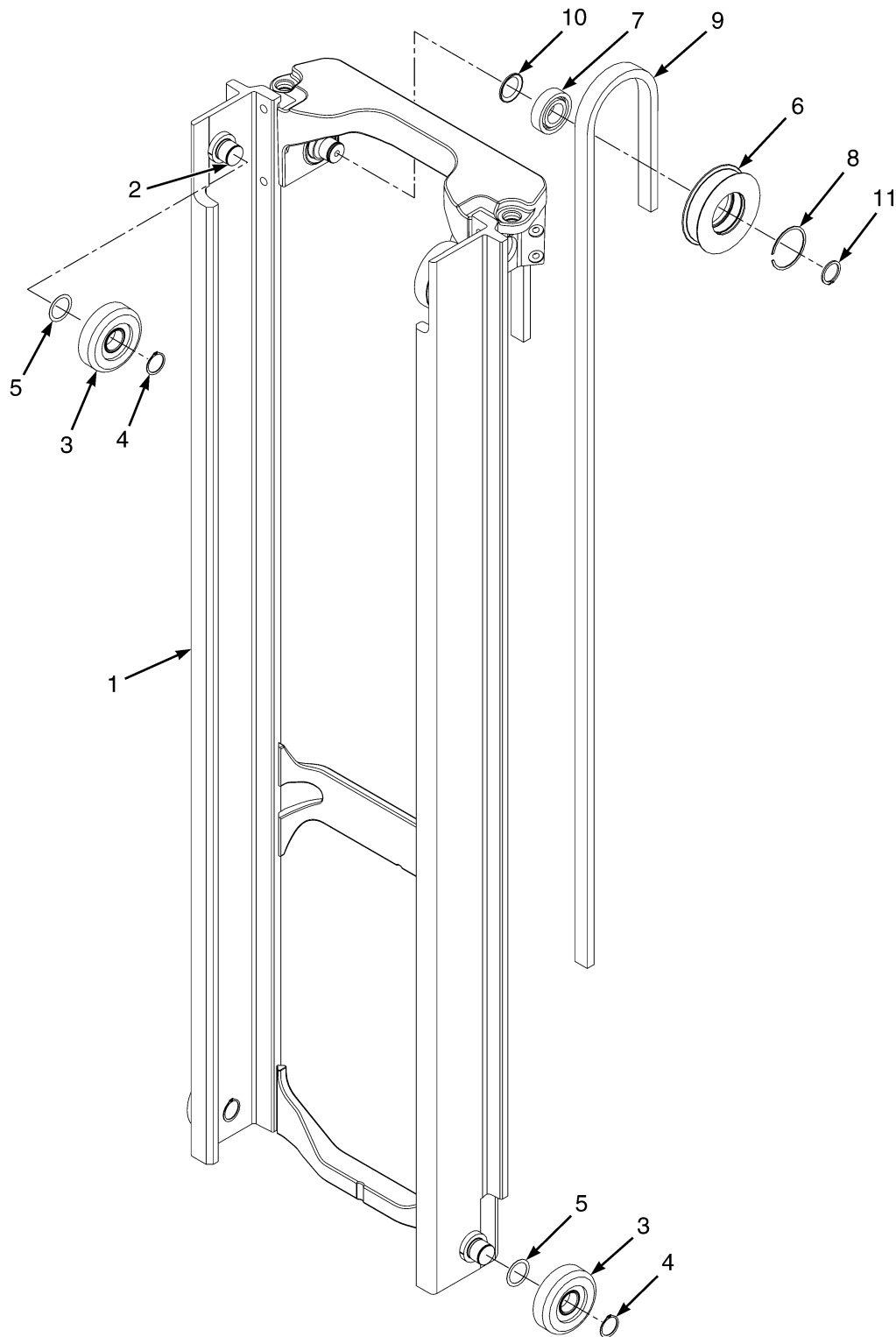
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Intermediate Mast	1
2	1345216	Stubshaft	4
3	1333396	Load Roller ("B") (111.48/111.22)	4
3	1395168	Load Roller ("A") (111.10/110.84) (Optional)	4
4	58901	Snap Ring	4
4	1374797	Snap Ring (Optional)	4
5	129387	Shim (0.020 in.)	AR
6	4054944	Chain Sheave Assembly (E45-55XN)	2
6	4048508	Chain Sheave Assembly (E60-70XN)	2
6	4054945	Chain Sheave (E45-55XN)	1
6	4046499	Chain Sheave (E60-70XN)	1
7	1378699	Ball Bearing	1
8	37752	Snap Ring	1
9	a	Chain	2
10	335661	Spacer	2
11	304526	Snap Ring	2

FOOTNOTES:

a Refer to Table

INTERMEDIATE MAST (FIGURE 8-16)

THREE STAGE FULL FREE-LIFT — F508-F563 (PENDING PER ECN 160638 →)



BP170647

INTERMEDIATE MAST **THREE STAGE FULL FREE-LIFT – F508-F563 (PENDING PER ECN 160638 →)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Intermediate Mast	4053808	4053809	4053810	4053813	4053816
9	Chain	180137	129361	88446	180176	1342079

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		4760 mm (187.4 in.)
	Mast Group Number	F563 4568
	Mast Assy	4623042
1	Intermediate Mast	----
9	Chain	----

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	----	4623043	4623046	4623049
1	Intermediate Mast	4053808	4053809	4053810	4053813	4053816
9	Chain	1342125	1342384	1342385	1342387	1342133

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Intermediate Mast	1
2	1345216	Stubshaft	4
3	1333396	Load Roller ("B") (111.48/111.22)	4
3	1395168	Load Roller ("A") (111.10/110.84) (Optional)	4
4	58901	Snap Ring	4
4	1374797	Snap Ring (Optional)	4
5	129387	Shim (0.020 in.)	AR
6	4054944	Chain Sheave Assembly (E45-55XN)	2
6	4048508	Chain Sheave Assembly (E60-70XN)	2
6	4054945	Chain Sheave (E45-55XN)	1
6	4046499	Chain Sheave (E60-70XN)	1

INTERMEDIATE MAST
THREE STAGE FULL FREE-LIFT – F508-F563 (PENDING PER ECN 160638 →)

ITEM	PART NO.	DESCRIPTION	QTY
7	1378699	Ball Bearing	1
8	37752	Snap Ring	1
9	a	Chain	2
10	335661	Spacer	2
11	304526	Snap Ring	2

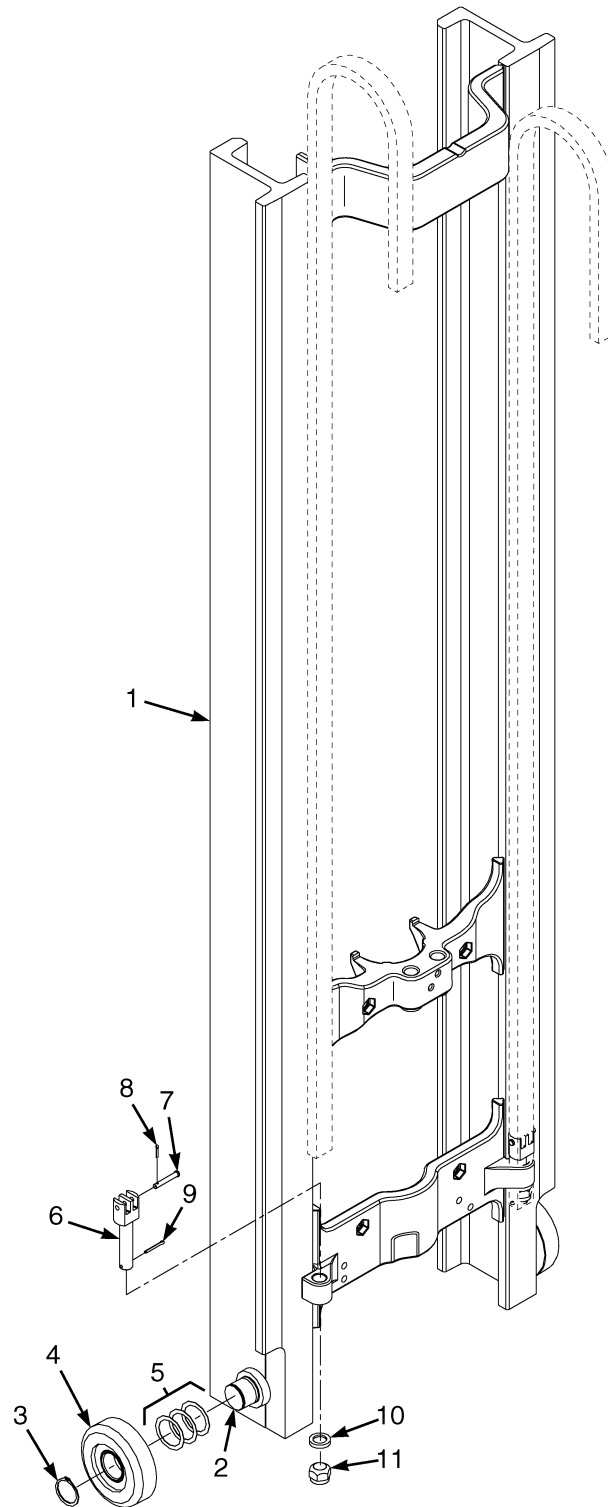
FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

INNER MAST (FIGURE 8-17)

THREE STAGE FULL FREE-LIFT — F508-F563 (→ PENDING PER ECN 160638)



BP170648

INNER MAST **THREE STAGE FULL FREE-LIFT – F508-F563 (→ PENDING PER ECN 160638)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Inner Mast	4053840	4053841	4053842	4053845	4053848

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
1	Inner Mast	4053840	4053841	4053842	4053845	4053848

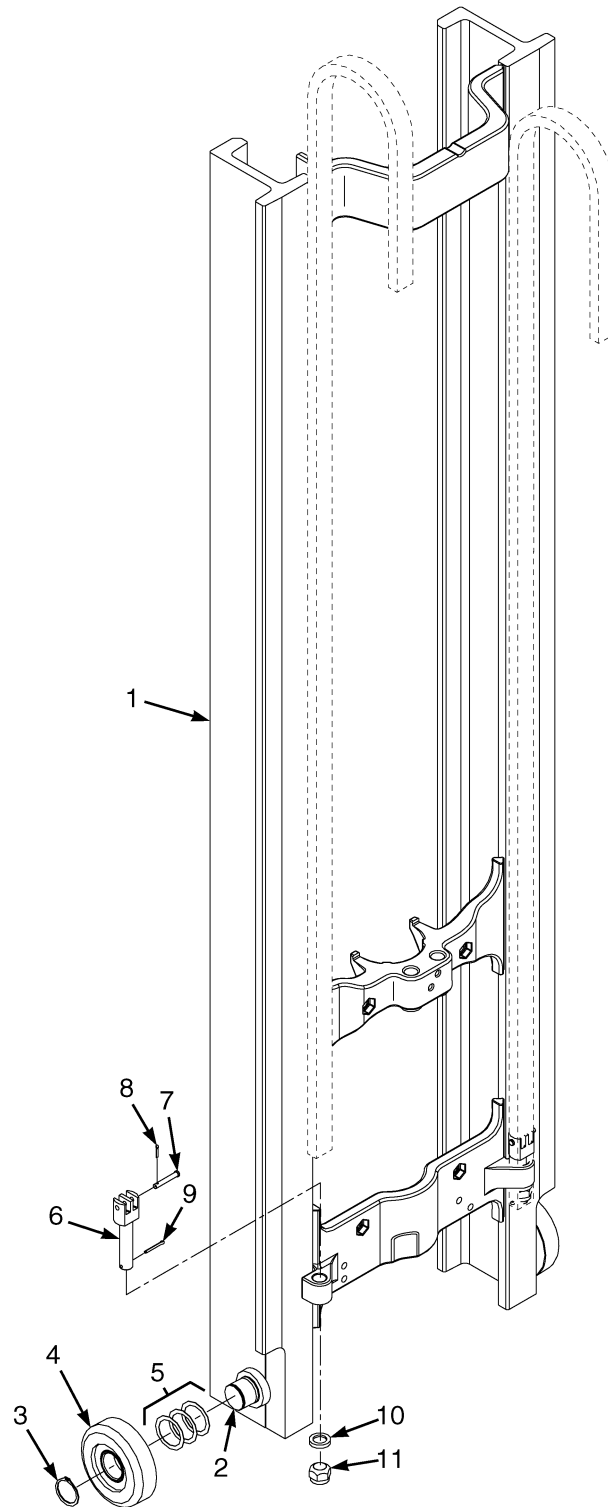
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
3	1374797	Snap Ring (Optional)	2
4	1333396	Load Roller ("B") (111.48/111.22)	2
4	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
5	129387	Shim (0.020 in.)	AR
6	1365140	Chain Anchor (E45-55XN)	2
6	1333329	Chain Anchor (E60-70XN)	2
7	1514866	Pin	2
8	15211	Cotter Pin	2
9	15223	Cotter Pin	2
10	297649	Ring	2
11	161003	Nut	2

FOOTNOTES:

a Refer to Table

INNER MAST (FIGURE 8-18)

THREE STAGE FULL FREE-LIFT — F508-F563 (PENDING PER ECN 160638 →)



BP170648

INNER MAST **THREE STAGE FULL FREE-LIFT – F508-F563 (PENDING PER ECN 160638 →)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
1	Inner Mast	4053840	4053841	4053842	4053845	----

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
1	Inner Mast	4053840	4053841	4053842	4053845	4053848

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
3	1374797	Snap Ring (Optional)	2
4	1333396	Load Roller ("B") (111.48/111.22)	2
4	1395168	Load Roller ("A") (111.10/110.84) (Optional)	2
5	129387	Shim (0.020 in.)	AR
6	1365140	Chain Anchor (E45-55XN)	2
6	1333329	Chain Anchor (E60-70XN)	2
7	1514866	Pin	2
8	15211	Cotter Pin	2
9	15223	Cotter Pin	2
10	297649	Ring	2
11	161003	Nut	2

FOOTNOTES:

a Refer to Table

This exploded view diagram illustrates the assembly of a refrigerator door. The components are numbered as follows:

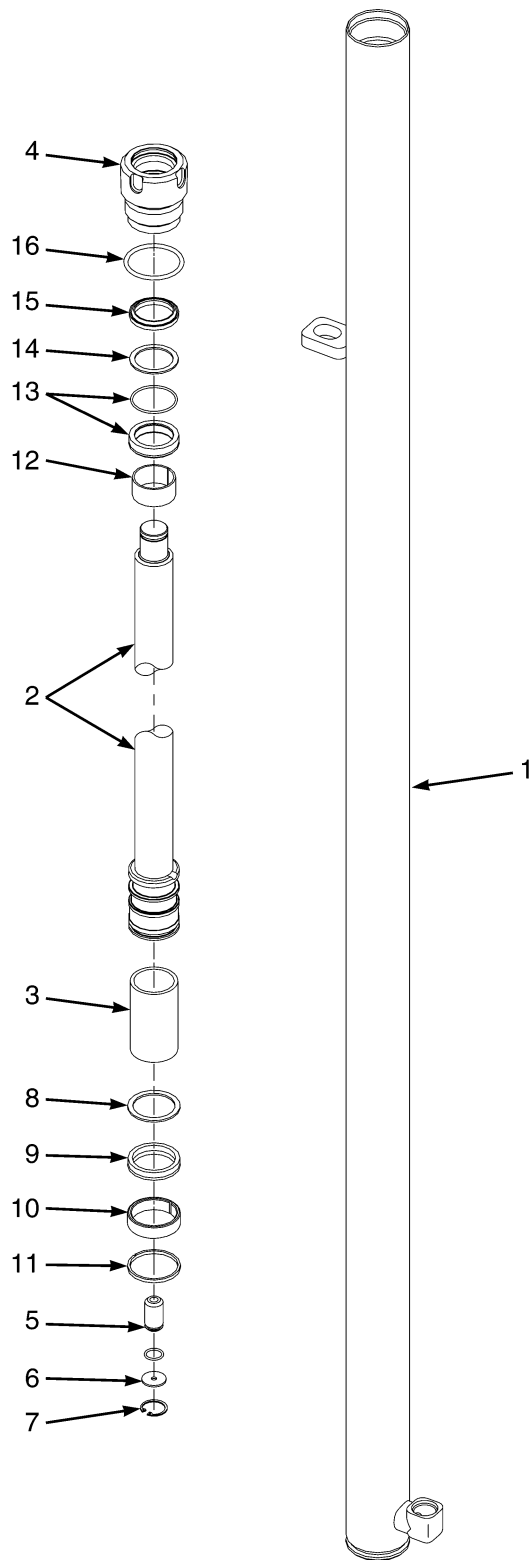
- 1**: Main door frame or outer panel.
- 2**: Top hinge assembly.
- 3**: Top hinge pin.
- 4**: Top hinge pin sleeve.
- 5**: Bottom hinge assembly.
- 6**: Hinge guide rail.
- 7**: Hinge guide pin.
- 8**: Hinge pin sleeve.
- 9**: Hinge pin sleeve.
- 10**: Hinge pin sleeve.
- 11**: Hinge pin sleeve.
- 12**: Hinge pin sleeve.
- 13**: Hinge pin sleeve.
- 14**: Hinge pin sleeve.
- 15**: Hinge pin sleeve.
- 16**: Hinge pin sleeve.
- 17**: Hinge pin sleeve.
- 18**: Hinge pin sleeve.
- 19**: Hinge pin sleeve.
- 20**: Hinge pin sleeve.
- 21**: Hinge pin sleeve.
- 22**: Hinge pin sleeve.
- 23**: Hinge pin sleeve.

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MAIN LIFT CYLINDER AND ATTACHING PARTS
THREE STAGE FULL FREE-LIFT – F508-F563

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Outer Mast (☞ Figure 8-13).....	1
2	.....	Intermediate Mast (☞ Figure 8-15).....	1
3	1333382	Washer (0.060 in.)	2
4	1354915	Washer (0.010 in.)	2
4	1354916	Washer (0.030 in.)	2
4	1354917	Washer (0.060 in.)	2
5	.....	Main Lift Cylinder (☞ Figure 8-20).....	2
6	215211	Wear Strip	4
7	131716	Shim (0.020 in.)	4
7	131715	Shim (0.007 in.)	4
8	1486751	Fitting	1
9	4055582	Housing (Lowering Control)	1
10	4029051	Capscrew	2
11	4620151	Hose Assy	1
12	4620152	Hose Assy	1
13	4065168	Capscrew	2
14	1581566	Nut	2
15	4065167	Spacer	1
16	1592853	Fitting	1
17	1486773	Fitting	1
18	2062686	Hyd Velocity Fuse (E45-55XN)	2
18	2062687	Hyd Velocity Fuse (E60-70XN)	2
18	16485	O-Ring	1
18	252729	O-Ring	1
19	2062651	Lowering Control Valve (E45-55XN)	1
19	2062652	Lowering Control Valve (E60-70XN)	1
19	16982	O-Ring	1
19	252729	O-Ring	1
20	104506	O-Ring	4
21	131358	Snap Ring	2
22	4054558	Isolator	2
23	1581557	Washer	4

MAIN LIFT CYLINDER (FIGURE 8-20) THREE STAGE FULL FREE-LIFT — F508-F563



BP170651

**MAIN LIFT CYLINDER
THREE STAGE FULL FREE-LIFT – F508-F563****E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Cylinder Group Number	8607207	8607208	8607209	8607212	8607215
	Lift Cylinder	4616167	4615883	4615884	4615886	4615890
1	Tube Wldmt-Cylinder	4041107	4041108	4041109	4041112	4041115
2	Cylinder Rod	1355599	1355603	1355607	1355620	1355633
3	Spacer	----	----	1355610	1355610	1355626

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
		F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Cylinder Group Number	8607307	8607308	8607309	8607312	8607315
	Lift Cylinder	4615904	4615905	4615906	4615909	4615912
1	Tube Wldmt-Cylinder	4041237	4041238	4041239	4041242	4041245
2	Cylinder Rod	1355741	1355745	1355749	1355758	1355771
3	Spacer	2046164	2046164	2073087	2073087	2077818

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Lift Cylinder	2	2
1	a	Tube Wldmt-Cylinder	1	1
2	a	Cylinder Rod	1	1
3	a	Spacer	1	1
4	4615847	Gland	1	..
4	4615848	Gland	..	1
5	257913	Check Valve	1	1
6	297531	Washer	1	1
6	637635	Washer (Optional)	1	1
7	187388	Snap Ring	1	1
8	638246	Back-Up Ring	1	..

MAIN LIFT CYLINDER THREE STAGE FULL FREE-LIFT – F508-F563

KEY:

A: E45-55XN

B: E60-70XN

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
8	335012	Back-Up Ring	..	1
9	1381064	Piston Seal	1	..
9	1381063	Piston Seal	..	1
10	1356750	Wear Ring	1	..
10	1356751	Wear Ring	..	1
11	1360127	Piston Ring	1	..
11	1356748	Piston Ring	..	1
12	322902	Wear Ring	1	1
13	1356749	Rod Seal	1	1
14	322824	Back-Up Ring	1	1
15	1383063	Rod Wiper	1	1
16	~~4028986~~			
	92861	O-Ring	1	..
16	59229	O-Ring	..	1
	4623973	Kit-Seal	1	..
	4623974	Kit-Seal	..	1

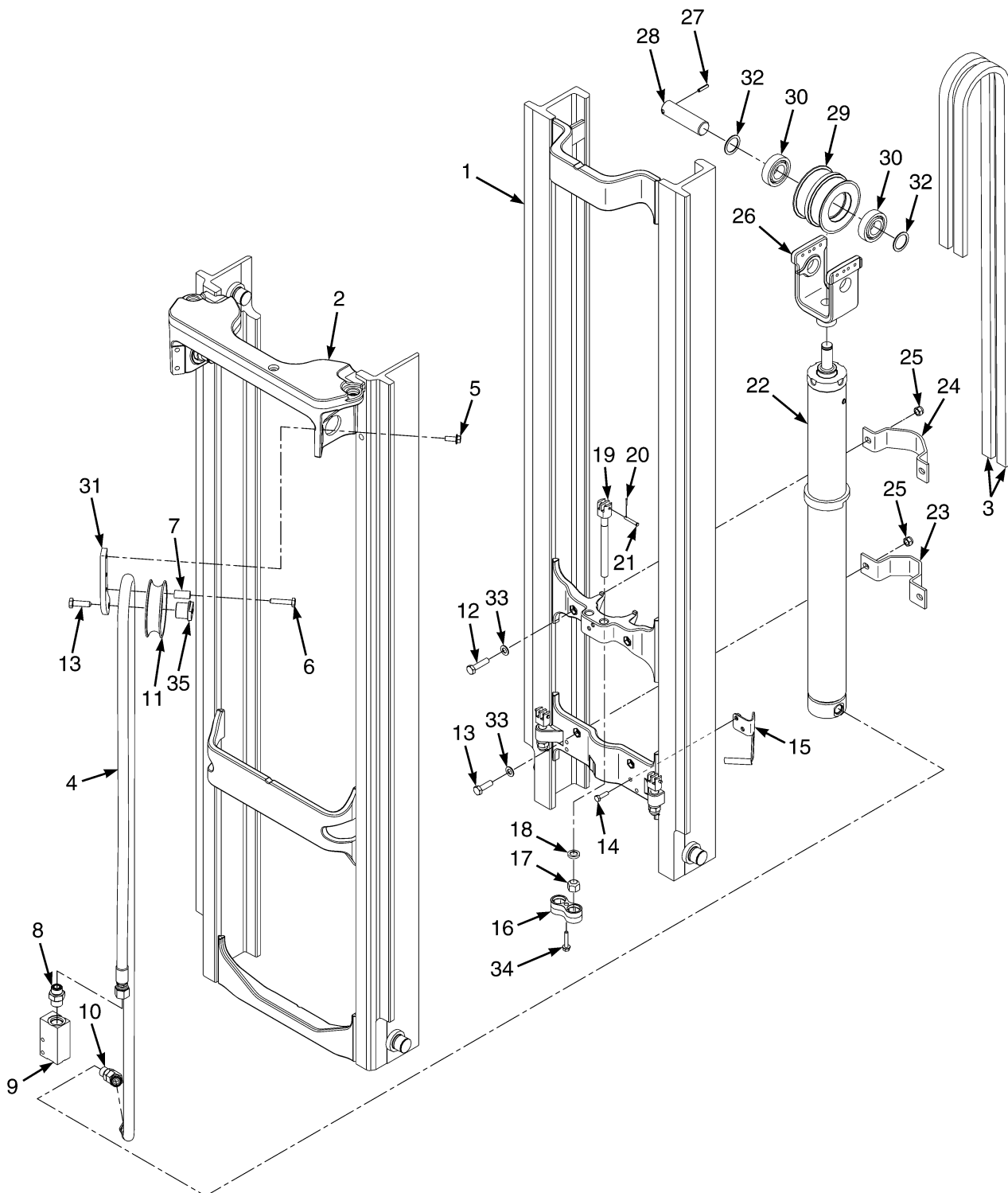
FOOTNOTES:

a Refer to Table

NOTES

[illegible]

FREE-LIFT CYLINDER AND ATTACHING PARTS (FIGURE 8-21) THREE STAGE FULL FREE-LIFT — F508-F563 (→ PENDING PER ECN 160638)



BP170649

FREE-LIFT CYLINDER AND ATTACHING PARTS
THREE STAGE FULL FREE-LIFT – F508-F563 (→ PENDING PER ECN 160638)

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
3	Chain	182343	164474	135634	129361	255548
4	Hose Assy	4623613	4623614	4623615	4623618	4623621

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	4623046	4623049
3	Chain	1342120	1342381	1342382	1342384	1342393
4	Hose Assy	4637734	4637735	4637736	4637739	4637742

ITEM	PART NO.	DESCRIPTION	QTY
	b	Mast Assy	1
1		Inner Mast (☞ Figure 8-17).....	1
2		Intermediate Mast (☞ Figure 8-15).....	1
3	b	Chain	2
4	b	Hose Assy	1
5	d 4043636	Capscrew	2
5	e 4051501	Capscrew	2
6	1598660	Capscrew	1
7	1660415	Spacer (Thin Wall)	1
8	1486751	Fitting	1
9	4055582	Housing	1
10	1516205	Fitting	1
11	4048782	Hose Sheave	1
12	1581827	Capscrew	2
13	1581591	Capscrew	1
14	1696161	Capscrew	2
15	4051074	Bracket Wldmt	1
16	4052568	Restraint	1
17	4031973	Nut	2
18	297649	Ring	2
19	4072717	Chain Anchor (E45-55XN)	2
19	4072704	Chain Anchor (E60-70XN)	2
20	15211	Cotter Pin	2
21	1514866	Pin	2
22		Free-Lift Cylinder (☞ Figure 8-23).....	1

FREE-LIFT CYLINDER AND ATTACHING PARTS

THREE STAGE FULL FREE-LIFT – F508-F563 (→ PENDING PER ECN 160638)

ITEM	PART NO.	DESCRIPTION	QTY
23	4057313	Clamp	1
24	4057611	Clamp	1
25	1581849	Nut	4
26	4055072	Crosshead	1
27	302465	Roll Pin	1
28	4046548	Pin	1
29	4052261	Chain Sheave (Assembly)	1
29	4049031	Chain Sheave	1
30	1378699	Ball Bearing	2
31	4049173	Plate	1
32	1354902	Spacer	2
33	1581559	Washer	4
34	4069407	Capscrew	1
35	4013267	Stubshaft	1
	a c 4059843	Bracket	1
	a c 1581579	Capscrew	4

FOOTNOTES:

- a** Not Illustrated
b Refer to Table
c Without Header Hose

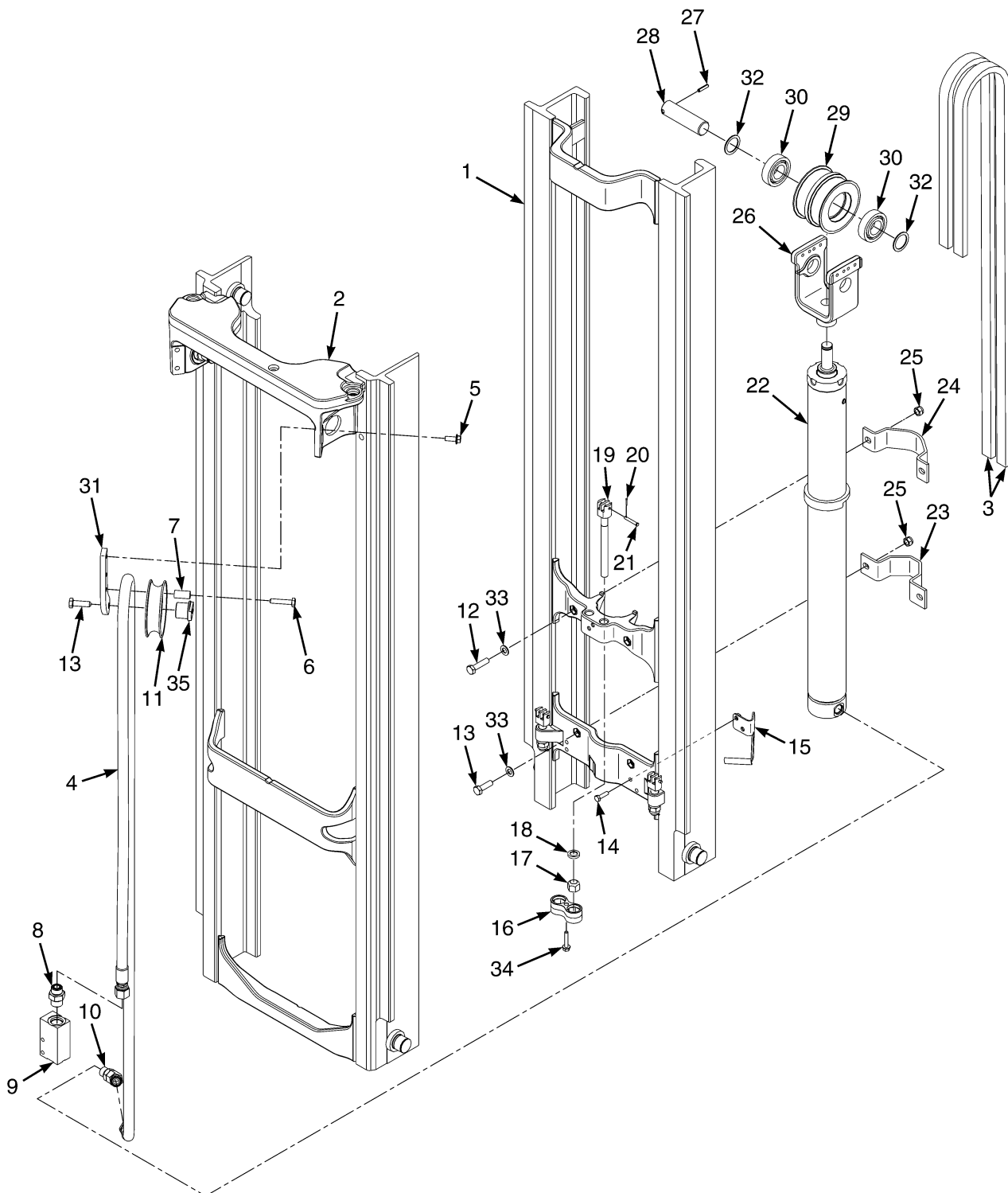
- d** → 2/2014
e 2/2014 →

NOTES

[illegible]

FREE-LIFT CYLINDER AND ATTACHING PARTS (FIGURE 8-22)

THREE STAGE FULL FREE-LIFT — F508-F563 (PENDING PER ECN 160638 →)



BP170649

FREE-LIFT CYLINDER AND ATTACHING PARTS **THREE STAGE FULL FREE-LIFT – F508-F563 (PENDING PER ECN 160638 →)**

E45-55XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Mast Assy	4623061	4623062	4623063	4623066	4623069
3	Chain	88436	182343	88441	180137	1301870
4	Hose Assy	4623613	4623614	4623615	4623618	4623621

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Mast Assy	4623041	4623042	4623043	----	4623049
3	Chain	1342119	1342120	1342122	1342125	1342129
4	Hose Assy	4637734	4637735	4637736	4637739	4637742

ITEM	PART NO.	DESCRIPTION	QTY
	b	Mast Assy	1
1		Inner Mast (☞Figure 8-18).....	1
2		Intermediate Mast (☞Figure 8-16).....	1
3	b	Chain	2
4	b	Hose Assy	1
5	d 4043636	Capscrew	2
5	e 4051501	Capscrew	2
6	1598660	Capscrew	1
7	1660415	Spacer (Thin Wall)	1
8	1486751	Fitting	1
9	4055582	Housing	1
10	1516205	Fitting	1
11	4048782	Hose Sheave	1
12	1581827	Capscrew	2
13	1581591	Capscrew	1
14	1696161	Capscrew	2
15	4051074	Bracket Wldmt	1
16	4052568	Restraint	1
17	4031973	Nut	2
18	297649	Ring	2
19	4184156	Chain Anchor (E45-55XN)	2
19	4184157	Chain Anchor (E60-70XN)	2
20	15211	Cotter Pin	2
21	1514866	Pin	2
22		Free-Lift Cylinder (☞Figure 8-23).....	1

FREE-LIFT CYLINDER AND ATTACHING PARTS
THREE STAGE FULL FREE-LIFT – F508-F563 (PENDING PER ECN 160638 →)

ITEM	PART NO.	DESCRIPTION	QTY
23	4057313	Clamp	1
24	4057611	Clamp	1
25	1581849	Nut	4
26	4055072	Crosshead	1
27	302465	Roll Pin	1
28	4046548	Pin	1
29	4052261	Chain Sheave (Assembly)	1
29	4049031	Chain Sheave	1
30	1378699	Ball Bearing	2
31	4049173	Plate	1
32	1354902	Spacer	2
33	1581559	Washer	4
34	4069407	Capscrew	1
35	4013267	Stubshaft	1
	a c 4059843	Bracket	1
	a c 1581579	Capscrew	4

FOOTNOTES:

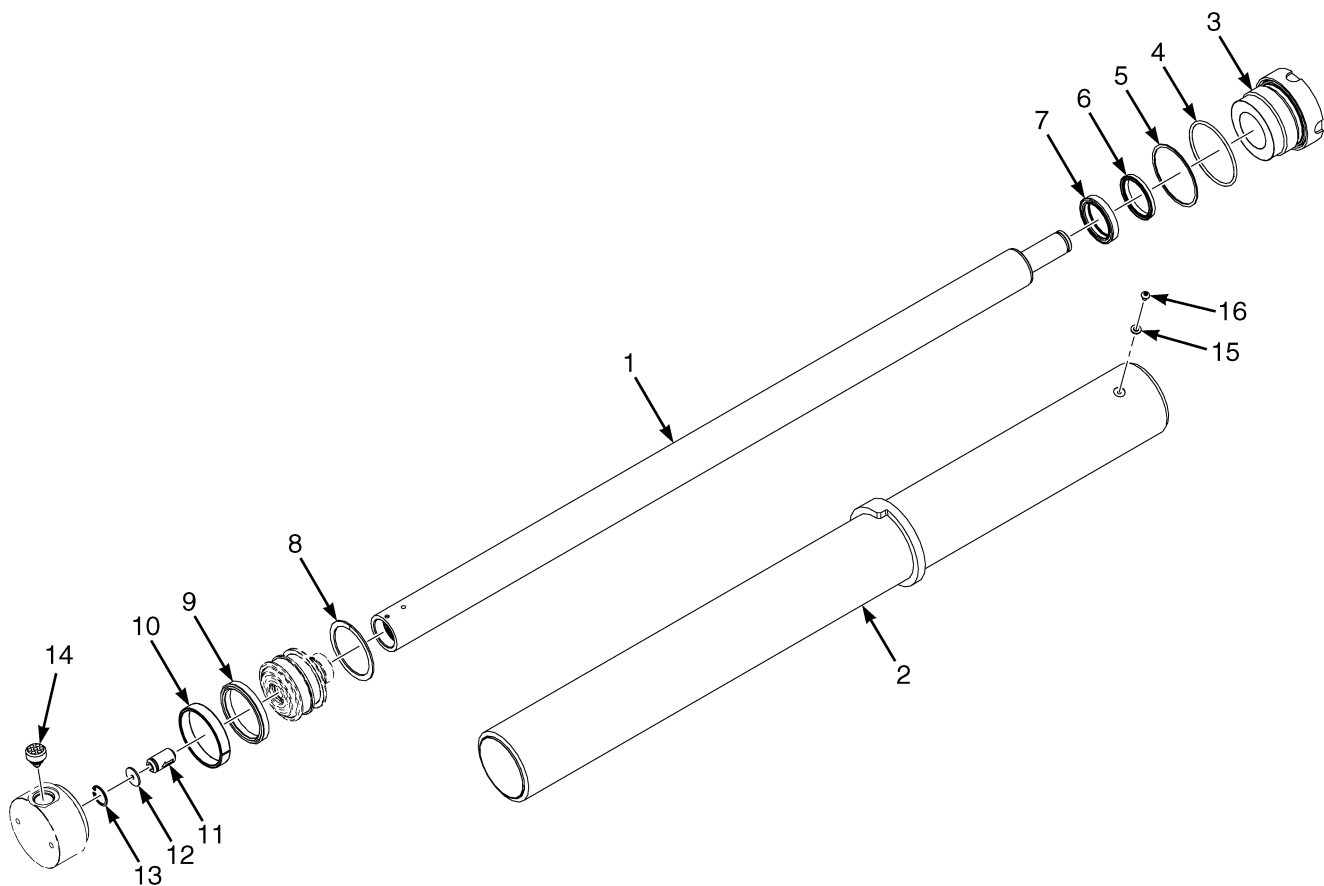
- a** Not Illustrated
b Refer to Table
c Without Header Hose

- d** → 2/2014
e 2/2014 →

NOTES

[illegible]

FREE-LIFT CYLINDER (FIGURE 8-23) THREE STAGE FULL FREE-LIFT — F508-F563



BP170652

FREE-LIFT CYLINDER
THREE STAGE FULL FREE-LIFT – F508-F563**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
	Cylinder Group Number	8607257	8607258	8607260	8607263	8607266
	Free Lift Cylinder	4617961	4617962	4617964	4617967	4617970
1	Cylinder Rod	4046237	4046238	4046240	4046243	4046246
2	Tube Wldmt- Cylinder	4046207	4046208	4046210	4046213	4046216

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
	Cylinder Group Number	8607357	8607358	8607360	8607363	8607367
	Free Lift Cylinder	4618056	4618057	4618059	4618062	4618066
1	Cylinder Rod	4046307	4046308	4046310	4046313	4046317
2	Tube Wldmt- Cylinder	4046267	4046268	4046270	4046273	4046277

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Free Lift Cylinder	1	1
1	a	Cylinder Rod	1	1
2	a	Tube Wldmt-Cylinder	1	1
3	1356292	Gland	1	..
3	1356661	Gland	..	1
4	90263	O-Ring	1	1
4	15880	O-Ring	1	1
5	147973	Back-Up Ring	1	..
5	164840	Back-Up Ring	..	1
6	1463105	Rod Wiper	1	1
7	1622946	Rod Seal	1	1
8	2013089	Back-Up Ring	1	..
8	637565	Back-Up Ring	..	1

FREE-LIFT CYLINDER **THREE STAGE FULL FREE-LIFT – F508-F563**

KEY:**A:** E45-55XN**B:** E60-70XN

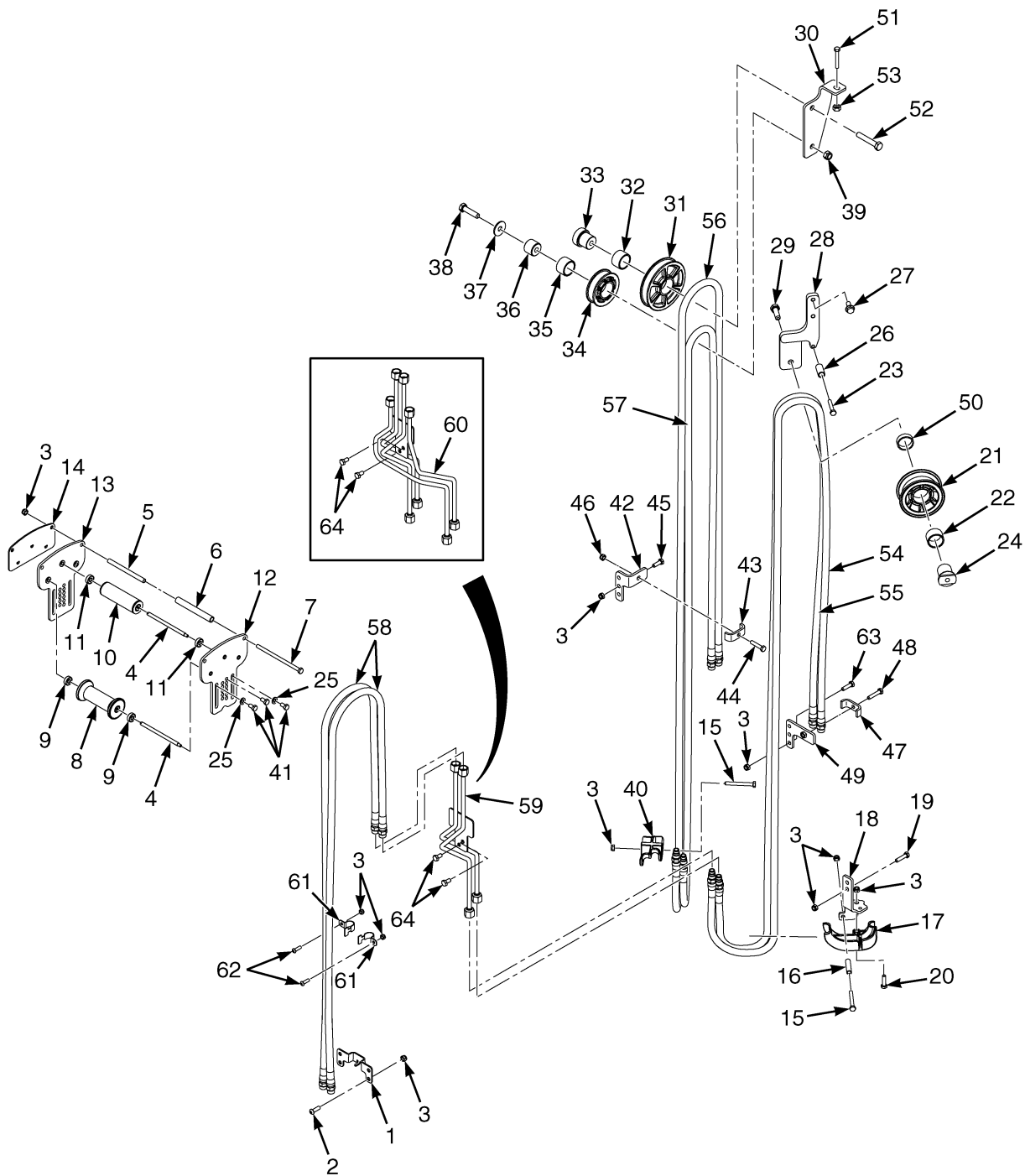
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
9	2013088	Rod Seal	1	..
9	309062	Rod Seal	..	1
10	1358972	Wear Ring	1	..
10	636941	Wear Ring	..	1
11	297538	Check Valve	1	1
12	297531	Washer	1	1
12	637635	Washer (Optional)	1	1
13	187388	Snap Ring	1	1
14	4055505	Flow Valve	1	..
14	4055506	Flow Valve	..	1
15	190887	Sealing Ring	1	1
16	1361302	Screw	1	1
	1358969	Kit-Seal	1	..
	1356662	Kit-Seal	..	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

HEADER HOSES AND ATTACHING PARTS (FIGURE 8-24) THREE STAGE FULL FREE-LIFT — F508/F563 (→ 11/2015)



BP170653

HEADER HOSES AND ATTACHING PARTS
THREE STAGE FULL FREE-LIFT – F508/F563 (→ 11/2015)**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
54	Header Hose	4624115	4624116	4624117	4624120	4624123
55	Header Hose	4624175	4624176	4624177	4624180	4624183
56	Header Hose	4624135	4624136	4624137	4624140	4624143
57	Header Hose	4624155	4624156	4624157	4624160	4624163
58	Header Hose	4624195	4624196	4624197	4624200	4624203

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
54	Header Hose	4624115	4624116	4624117	4624120	4624123
55	Header Hose	4624175	4624176	4624177	4624180	4624183
56	Header Hose	4624135	4624136	4624137	4624140	4624143
57	Header Hose	4624155	4624156	4624157	4624160	4624163
58	Header Hose	4624195	4624196	4624197	4624200	4624203

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4055683	Hose Clamp	1	1
2	1597448	Capscrew	2	2
3	1581566	Nut	12	12
4	4049213	Rod	3	3
5	4056718	Roller Spacer	2	2
6	4049218	Roller Shaft	2	2
7	4061309	Capscrew	2	2
8	4055608	Roller (Side Assy)	2	2
9	4032665	Ball Bearing	2	2
10	4055800	Roller (Center Assy)	1	1
11	4032665	Ball Bearing	2	2
12	4056125	Plate (LH)	1	1
12	4056123	Bushing	3	3
13	4056126	Plate (RH)	1	1
13	4056124	Bushing	3	3

HEADER HOSES AND ATTACHING PARTS

THREE STAGE FULL FREE-LIFT – F508/F563 (→ 11/2015)

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	4051460	Plate	1	1
15	d 4016370	Capscrew	1	1
15	e 1581584	Capscrew	1	1
16	d 1301703	Spacer (Thin Wall)	1	1
16	e 4104561	Spacer (Thin Wall)	1	1
17	4622150	Turnaround	1	1
18	d 4050421	Bracket	1	1
18	e 4104560	Bracket	1	1
	4120649	Bracket	1	1
19	1596420	Capscrew	2	2
20	1696161	Capscrew	3	3
21	4048781	Hose Sheave	1	1
22	4050091	Bushing	1	1
23	1581583	Capscrew	1	1
24	4013268	Stubshaft	1	1
25	4081768	Washer	4	4
26	4020913	Spacer	1	1
27	d 4043636	Capscrew	2	2
27	e 4051501	Capscrew	2	2
28	4051290	Bracket Wldmt	1	1
29	1581591	Capscrew	1	1
30	4049172	Bracket	..	1
31	4048784	Hose Sheave	..	1
32	4050091	Bushing	..	1
33	4051885	Stubshaft	..	1
34	4048783	Hose Sheave	..	1
35	4050091	Bushing	..	1
36	4048778	Stubshaft	..	1
37	1345190	Washer	..	1
38	1581827	Capscrew	..	1
39	1581849	Nut	..	1
40	4057777	Bracket	..	1
41	1581580	Capscrew	6	6
42	4086521	Plate Wldmt	..	1
43	1345348	Clamp	..	1
44	292508	Capscrew	..	1
45	1581581	Capscrew	..	2
46	1581566	Nut	..	4
47	1345348	Clamp	..	1
48	292508	Capscrew	2	2
49	4093654	Plate Wldmt	1	1
50	4051293	Spacer	1	1
51	1626461	Capscrew	..	1
52	1581830	Capscrew	..	1
53	1581567	Nut	..	1

HEADER HOSES AND ATTACHING PARTS

THREE STAGE FULL FREE-LIFT – F508/F563 (→ 11/2015)

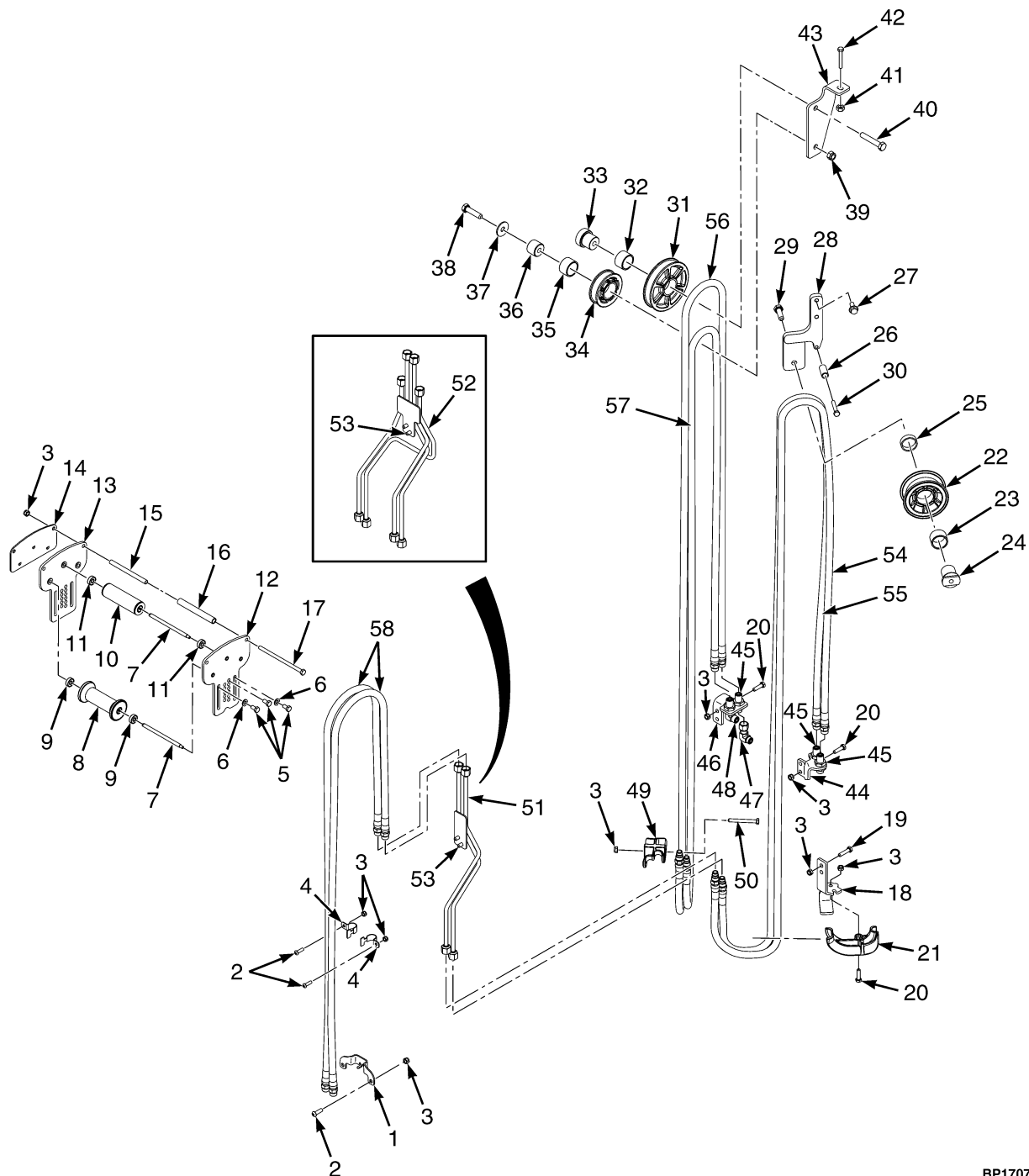
KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
54	c	Header Hose	1	1
55	c	Header Hose	1	1
56	c	Header Hose	..	1
57	c	Header Hose	..	1
58	c	Header Hose	2	4
59	a 4084720	Tube Assembly	1	..
59	b 4084721	Tube Assembly	1	..
60	b 4084722	Tube Assembly	..	1
60	a 4084719	Tube Assembly	..	1
61	4082001	Clamp	..	2
62	1597448	Capscrew	..	2
63	1696161	Capscrew	..	2
64	1581579	Capscrew	2	2

FOOTNOTES:

- a** For Lift heights 6110/5768 mm (240.5/227.0 in.) and below.
- b** For Lift heights 6260/5918 mm (246.4/233.0 in.) and above.
- c** Refer to Table
- d** → 2/2014
- e** 2/2014 →

HEADER HOSES AND ATTACHING PARTS (FIGURE 8-25) THREE STAGE FULL FREE-LIFT — F508/F563 (11/2015 →)



BP170752

HEADER HOSES AND ATTACHING PARTS
THREE STAGE FULL FREE-LIFT – F508/F563 (11/2015 →)**E45-55XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
54	Header Hose	4636895	4636896	4636897	4636900	4636903
55	Header Hose	4636928	4636929	4636930	4636933	4636936
56	Header Hose	4636961	4636962	4636963	4636966	4636969
57	Header Hose	4636994	4636995	4636996	4636999	4637002
58	Header Hose	4624195	4624196	4624197	4624200	4624203

E60-70XN

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
	Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
54	Header Hose	4636895	4636896	4636897	4636900	4636903
55	Header Hose	4636928	4636929	4636930	4636933	4636936
56	Header Hose	4636961	4636962	4636963	4636966	4636969
57	Header Hose	4636994	4636995	4636996	4636999	4637002
58	Header Hose	4624195	4624196	4624197	4624200	4624203

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4055683	Hose Clamp	1	1
2	1597448	Capscrew	2	4
3	1581566	Nut	9	14
4	4082001	Clamp	..	2
5	1581580	Capscrew	6	6
6	4081768	Washer	4	4
7	4049213	Rod	3	3
8	4055608	Roller (Side Assy)	2	2
9	4032665	Ball Bearing	2	2
10	4055800	Roller (Center Assy)	1	1
11	4032665	Ball Bearing	2	2
12	4056125	Plate (LH)	1	1
12	4056123	Bushing	3	3
13	4056126	Plate (RH)	1	1
13	4056124	Bushing	3	3

HEADER HOSES AND ATTACHING PARTS

THREE STAGE FULL FREE-LIFT – F508/F563 (11/2015 →)

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	4051460	Plate	1	1
15	4056718	Roller Spacer	2	2
16	4049218	Roller Shaft	2	2
17	4061309	Capscrew	2	2
18	~~4104560~~			
	4120649	Bracket	1	1
19	1596420	Capscrew	2	2
20	1696161	Capscrew	3	5
21	4622150	Turnaround	1	1
22	4048781	Hose Sheave	1	1
23	4050091	Bushing	1	1
24	4013268	Stubshaft	1	1
25	4051293	Spacer	1	1
26	4020913	Spacer	1	1
26	4013273	Spacer (Thin Wall) (Alternate Part)	1	1
27	4051501	Capscrew	2	2
28	4051290	Bracket Wldmt	1	1
29	1581591	Capscrew	1	1
30	1581583	Capscrew	1	1
31	4048784	Hose Sheave	..	1
32	4050091	Bushing	..	1
33	4051885	Stubshaft	..	1
34	4048783	Hose Sheave	..	1
35	4050091	Bushing	..	1
36	4048778	Stubshaft	..	1
37	1345190	Washer	..	1
38	1581827	Capscrew	..	1
39	1581849	Nut	..	1
40	1581830	Capscrew	..	1
41	1581567	Nut	..	1
42	1626461	Capscrew	..	1
42	4101577	Capscrew (Optional)	..	1
43	4049172	Bracket	..	1
44	4122876	Bracket	1	1
45	1528573	Fitting	2	3
46	4058926	Bracket	..	1
47	1473895	Fitting	..	1
48	1528579	Fitting	..	1
49	4057777	Bracket	..	1
50	4016370	Capscrew	..	1
51	4084720	Tube Assembly	1	..
52	4084719	Tube Assembly	..	1
53	1581579	Capscrew	2	2
54	b	Header Hose	1	1
55	b	Header Hose	1	1

HEADER HOSES AND ATTACHING PARTS

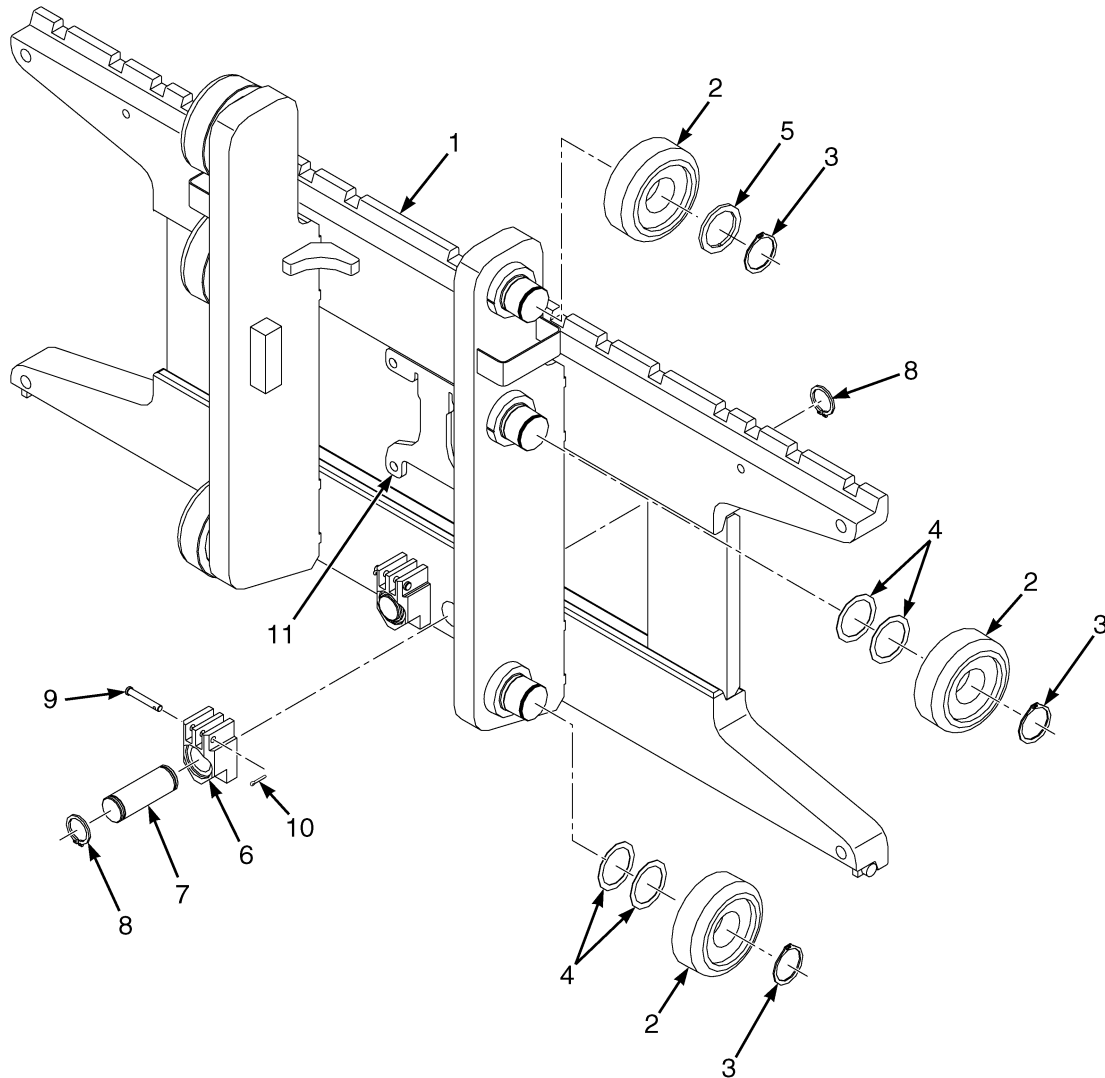
THREE STAGE FULL FREE-LIFT – F508/F563 (11/2015 →)

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
56	b	Header Hose	..	1
57	b	Header Hose	..	1
58	b	Header Hose	2	4
	a c 1529015	Cap	2	4

FOOTNOTES:**a** Not Illustrated**b** Refer to Table**c** Without header hoses

CARRIAGE (FIGURE 8-26) THREE STAGE FULL FREE-LIFT — F508/F563



BP170681

CARRIAGE

THREE STAGE FULL FREE-LIFT – F508/F563

KEY:**A: E45-55XN****B: E60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621630	Carriage Assembly (38.5 in.) (Group No. 8809528)	1	..
	4617800	Carriage Assembly (38.5 in.) (Group No. 8807786)	..	1
	a 4623434	Carriage Assembly (38.5 in.) (Heavy Duty)	1	..
	b 4623435	Carriage Assembly (38.5 in.) (Heavy Duty)	..	1
1	4055429	Carriage Wldmt (38.5 in.)	1	..
1	a 4058434	Carriage Wldmt (38.5 in.) (Heavy Duty)	1	..
1	1345216	Stubshaft	6	..
1	4046428	Carriage Wldmt (38.5 in.)	..	1
1	b 4058433	Carriage Wldmt (38.5 in.)	..	1
1	1345216	Stubshaft	..	6
2	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
3	58901	Snap Ring	6	6
4	129387	Shim (0.020 in.)	AR	AR
5	366115	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole)	..	2
6	1504012	Chain Anchor (Single Hole) (Optional)	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin (Chain Anchor)	2	2
10	15211	Cotter Pin	2	2
11	4082003	Plate (Hose)	1	..
11	4082005	Plate (Hose)	..	1

FOOTNOTES:**a** Group No. 8810748**b** Group No. 8810749

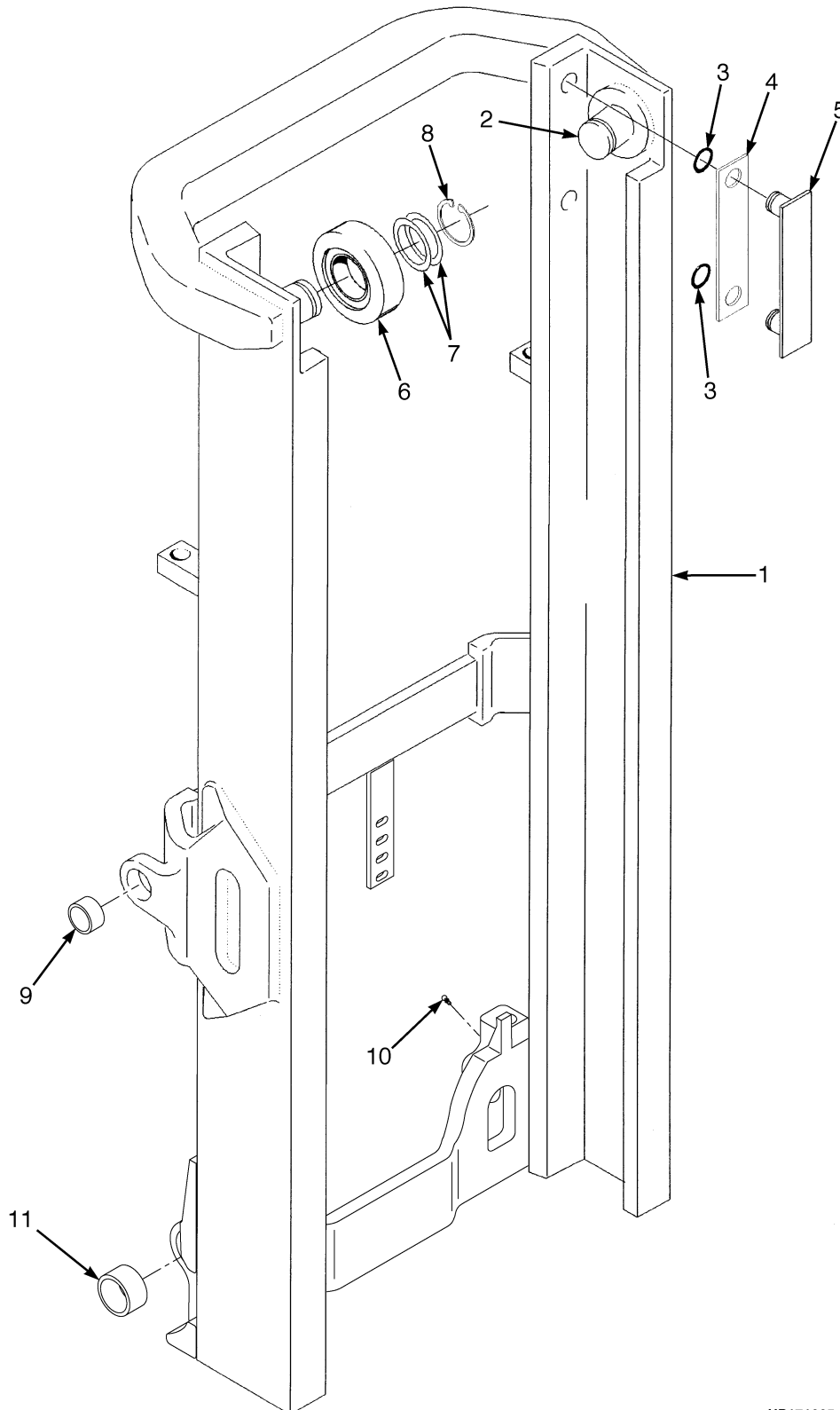
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SECTION 9

MAST-TWO STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
HEAVY DUTY - TWO STAGE FULL FREE-LIFT	9-58
TWO STAGE FULL FREE-LIFT	9-56
FREE-LIFT	
TWO STAGE FULL FREE- LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-38
TWO STAGE FULL FREE- LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-42
TWO STAGE FULL FREE-LIFT - D509-D564	9-12
FREE-LIFT CYLINDER	
TWO STAGE FULL FREE- LIFT - E509-E564	9-45
FREE-LIFT CYLINDERS	
TWO STAGE FULL FREE-LIFT - D509-D564	9-16
HEADER HOSE	
TWO STAGE FULL FREE-LIFT - D509-D564	9-20
HEADER HOSES	
TWO STAGE FULL FREE-LIFT - E509-E564 (→ PENDING PER ECN 135710)	9-48
TWO STAGE FULL FREE-LIFT - E509-E564 (PENDING PER ECN 135710 →)	9-52
INNER MAST	
TWO STAGE FULL FREE- LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-28
TWO STAGE FULL FREE- LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-30
TWO STAGE FULL FREE-LIFT - D509-D564	9-4
MAIN LIFT	
TWO STAGE FULL FREE- LIFT - E509-E564	9-32
TWO STAGE FULL FREE-LIFT - D509-D564	9-6
MAIN LIFT CYLINDER	
LEFT HAND - TWO STAGE FULL FREE-LIFT (D509-D564)	9-10
RIGHT HAND - TWO STAGE FULL FREE-LIFT (D509-D564)	9-8
MAIN LIFT CYLINDER - LH	
TWO STAGE FULL FREE- LIFT - E509-E564	9-36
MAIN LIFT CYLINDER - RH	
TWO STAGE FULL FREE- LIFT - E509-E564	9-34
OUTER MAST	
TWO STAGE FULL FREE LIFT - E509-E564 (→ PENDING PER ECN 160638)	9-24
TWO STAGE FULL FREE LIFT - E509-E564 (PENDING PER ECN 160638 →)	9-26
TWO STAGE FULL FREE-LIFT - D509-D564	9-2

OUTER MAST (FIGURE 9-1) TWO STAGE FULL FREE-LIFT — D509-D564



HP171065

OUTER MAST
TWO STAGE FULL FREE-LIFT – D509-D564**D509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
	Mast Assy	2065578	2065582	2065584
1	Outer Mast	1524754	1524756	1524757

D564

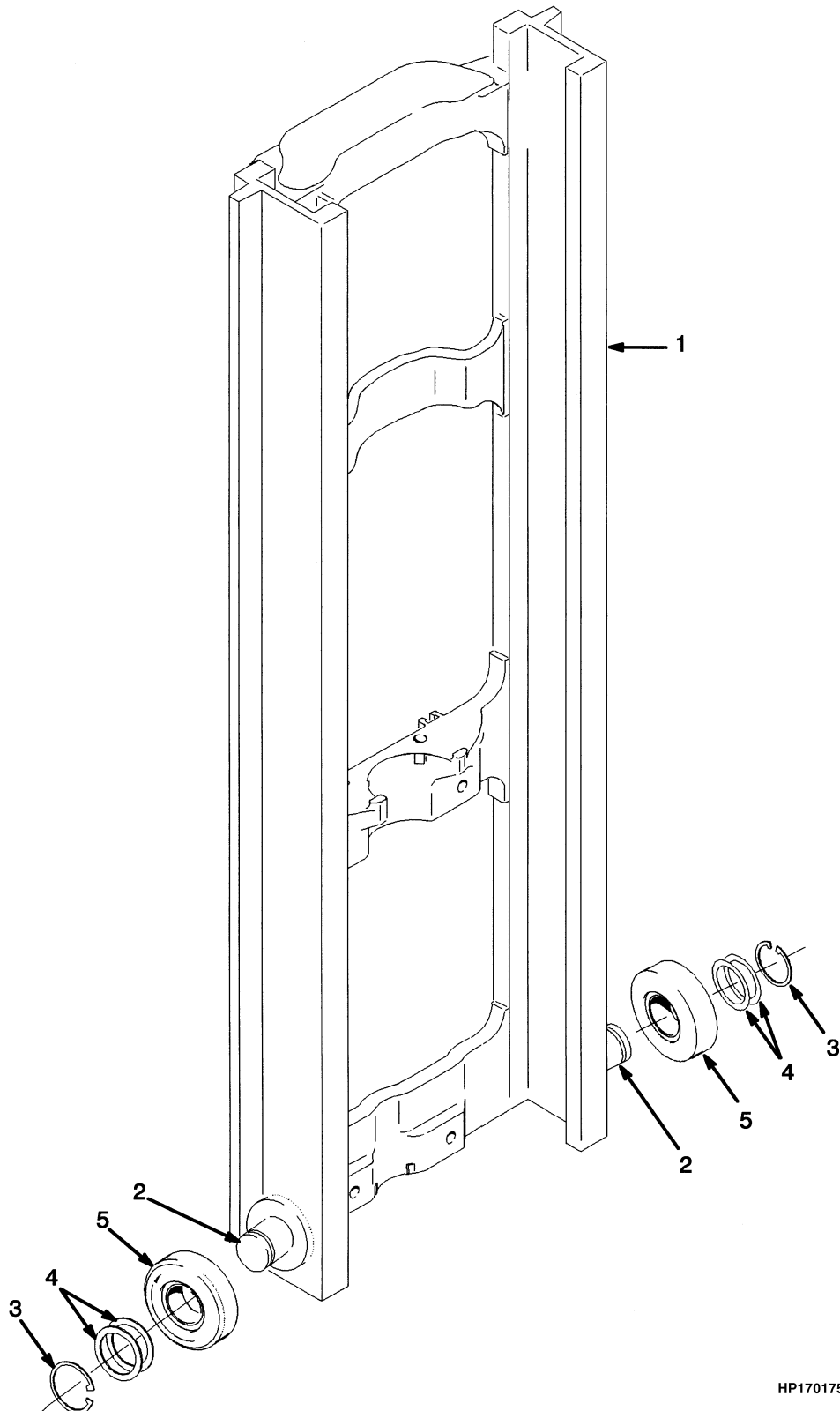
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
	Mast Assy	2065521	2065525	2065527
1	Outer Mast	1524754	1524756	1524757

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Mast Assy	1	1
1	a	Outer Mast	1	1
2	1345216	Stubshaft	2	2
3	104506	O-Ring	4	4
4	131716	Shim (0.020 in.)	4	4
5	215211	Wear Strip	2	2
6	b 1395168	Load Roller ("A") (111.10/110.84)	2	2
6	1333396	Load Roller ("B") (111.48/111.22)	2	2
6	1333397	Load Roller ("C") (112.62/112.36)	2	2
7	129387	Shim (0.020 in.)	AR	AR
8	58901	Snap Ring	2	2
9	300982	Bushing	2	2
10	16001	Grease Fitting	2	2
11	1502811	Bushing	2	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

INNER MAST (FIGURE 9-2) TWO STAGE FULL FREE-LIFT — D509-D564



HP170175

INNER MAST
TWO STAGE FULL FREE-LIFT – D509-D564**D509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
	Mast Assy	2065578	2065582	2065584
1	Inner Mast	1342476	1342478	1342479

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
	Mast Assy	2065521	2065525	2065527
1	Inner Mast	1342476	1342478	1342479

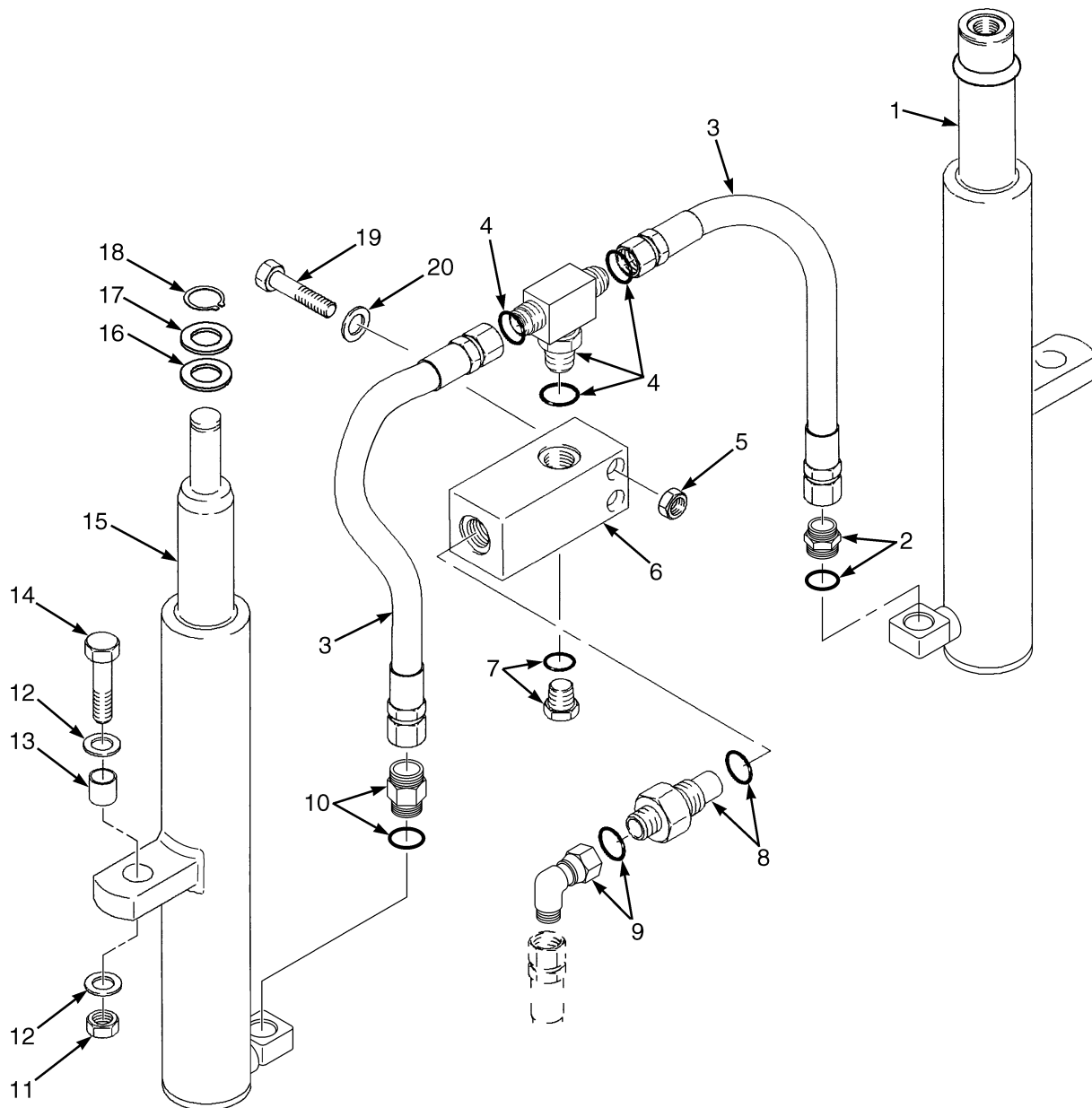
KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Mast Assy	1	1
1	a	Inner Mast	1	1
2	1345216	Stubshaft	2	2
3	58901	Snap Ring	2	2
4	129387	Shim (0.020 in.)	AR	AR
5	b 1395168	Load Roller ("A") (111.10/110.84)	2	2
5	1333396	Load Roller ("B") (111.48/111.22)	2	2
5	1333397	Load Roller ("C") (112.62/112.36)	2	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

MAIN LIFT (FIGURE 9-3)

TWO STAGE FULL FREE-LIFT — D509-D564

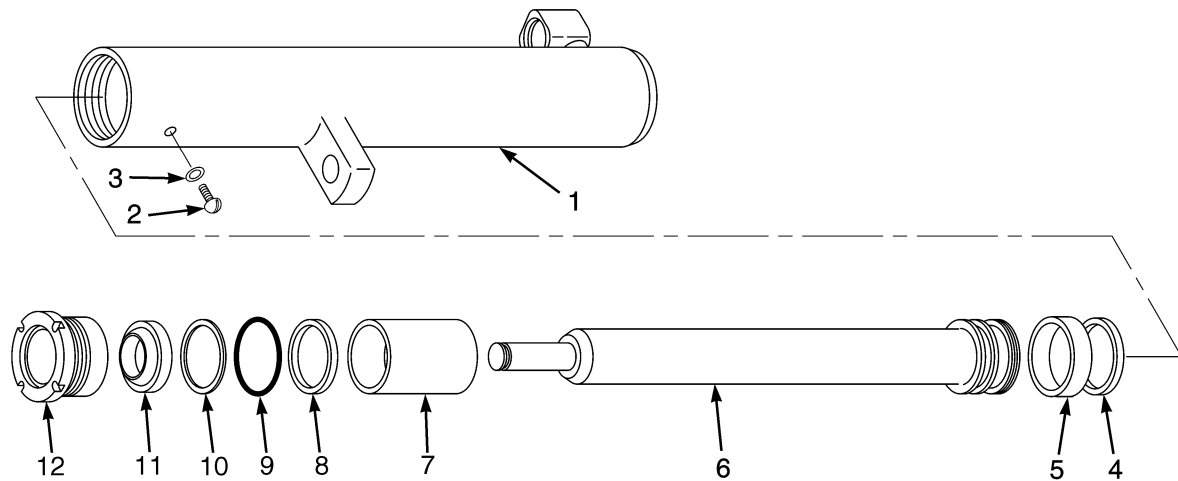


BP170106

MAIN LIFT **TWO STAGE FULL FREE-LIFT – D509-D564**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Main Lift Cylinder (LH) (☞ Figure 9-5).....	1
2	1486749	Fitting	1
2	16485	O-Ring	1
2	1527818	O-Ring	1
3	1481097	Hose Assy	1
4	1532650	Fitting	1
4	16485	O-Ring	1
4	1527818	O-Ring	1
5	1581566	Nut	2
6	1379687	Housing (Lowering Control)	1
7	14603	Plug	1
7	~~1450764~~		
	16486	O-Ring	1
8	2062652	Lowering Control Valve	1
8	16982	O-Ring	1
8	1527818	O-Ring	1
9	1486773	Fitting	1
9	1527822	O-Ring	1
10	2062687	Hyd Velocity Fuse	1
10	16485	O-Ring	1
10	1527818	O-Ring	1
11	1581849	Nut	2
12	1581852	Washer	4
13	323090	Spacer	2
14	1581829	Capscrew	2
15	.....	Main Lift Cylinder (RH) (☞ Figure 9-4).....	1
16	1354915	Washer (0.010 in.)	AR
16	1354916	Washer (0.030 in.)	AR
16	1354917	Washer (0.060 in.)	AR
17	1333382	Washer (0.060 in.)	1
18	131358	Snap Ring	1
19	1581835	Capscrew	2
20	1581556	Washer	2

MAIN LIFT CYLINDER (FIGURE 9-4) RIGHT HAND — TWO STAGE FULL FREE-LIFT (D509-D564)



BP170124

MAIN LIFT CYLINDER RIGHT HAND – TWO STAGE FULL FREE-LIFT (D509-D564)

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
	Cylinder Group Number	8518608	8518610	8518611
	Cylinder Assy	2058650	2058652	2058653
1	Tube Wldmt- Cylinder	2058535	2058537	2058538
6	Cylinder Rod	1358939	1358941	1358942

MAIN LIFT CYLINDER
RIGHT HAND – TWO STAGE FULL FREE-LIFT (D509-D564)**D564**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
	Cylinder Group Number	8518658	8518660	8518661
	Cylinder Assy	2060421	2060423	2060424
1	Tube Wldmt- Cylinder	2058535	2058537	2058538
6	Cylinder Rod	1358939	1358941	1358942
7	Spacer	2073159	2073159	2073159

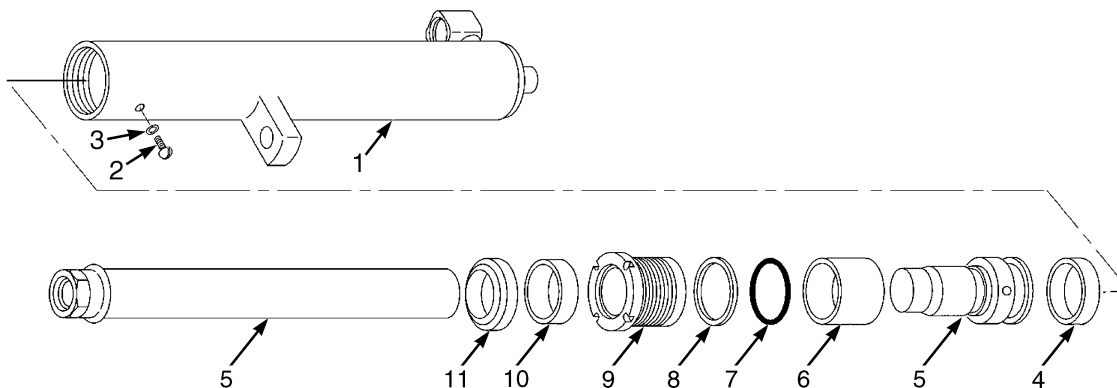
KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	295649	Screw	1	1
3	190887	Sealing Ring	1	1
4	1356748	Piston Ring	1	1
5	1356747	Wear Ring	1	1
6	a	Cylinder Rod	1	1
7	a	Spacer	..	1
8	1356749	Rod Seal	1	1
9	59229	O-Ring	1	1
10	147972	Back-Up Ring	1	1
11	1319668	Rod Wiper	1	1
12	1355713	Gland	1	1
	1496922	Kit-Seal	1	1

FOOTNOTES:**a** Refer to Table

MAIN LIFT CYLINDER (FIGURE 9-5)

LEFT HAND — TWO STAGE FULL FREE-LIFT (D509-D564)



BP170125

MAIN LIFT CYLINDER

LEFT HAND – TWO STAGE FULL FREE-LIFT (D509-D564)

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
	Cylinder Group Number	8518508	8518510	8518511
	Cylinder Assy	2058618	2058620	2058621
1	Tube Wldmt- Cylinder	2058499	2058501	2058502
5	Cylinder Rod	1355923	1355935	1355941

MAIN LIFT CYLINDER
LEFT HAND – TWO STAGE FULL FREE-LIFT (D509-D564)**D564**

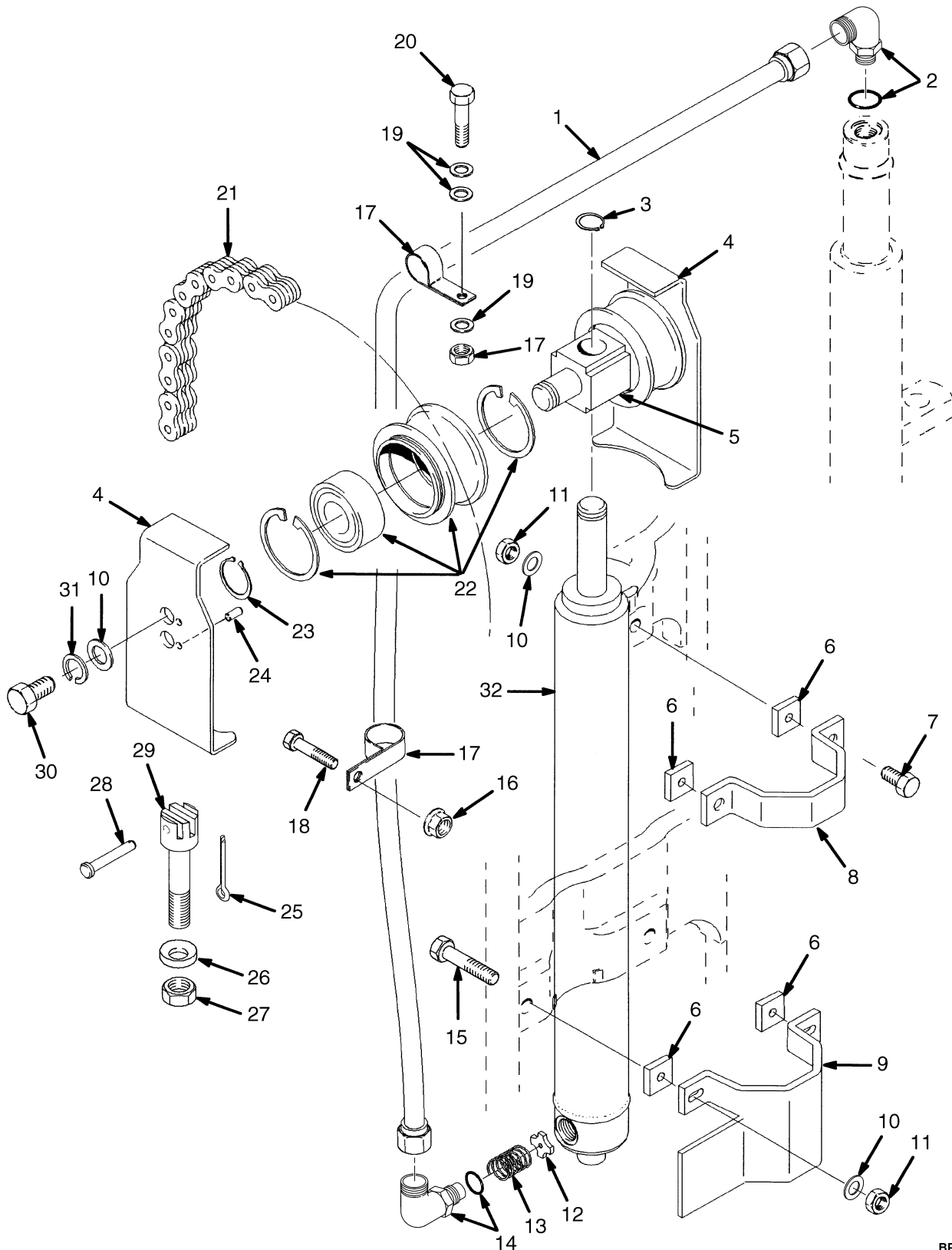
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
	Cylinder Group Number	8518558	8518560	8518561
	Cylinder Assy	2058822	2058824	2058825
1	Tube Wldmt- Cylinder	2058499	2058501	2058502
5	Cylinder Rod	1355923	1355935	1355941
6	Spacer	2073159	2073159	2073159

KEY:**A: E45XN-E60XN, D509****B: E65XN-E70XN, D564**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	295649	Screw	1	1
3	190887	Sealing Ring	1	1
4	1356747	Wear Ring	1	1
5	a	Cylinder Rod	1	1
6	a	Spacer	..	1
7	59229	O-Ring	1	1
8	147972	Back-Up Ring	1	1
9	1355713	Gland	1	1
10	1356749	Rod Seal	1	1
11	1319668	Rod Wiper	1	1
	1496922	Kit-Seal	1	1

FOOTNOTES:**a** Refer to Table

FREE-LIFT (FIGURE 9-6) TWO STAGE FULL FREE-LIFT — D509-D564



BP170107

FREE-LIFT
TWO STAGE FULL FREE-LIFT – D509-D564**D509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
1	Tube Assy	1481741	1480952	1481744
21	Chain	161059	88431	161029

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
1	Tube Assy	1481741	1480952	1481744
21	Chain	1342375	1342377	1342378

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Tube Assy	1	1
2	1481090	Fitting	1	1
2	16485	O-Ring	1	1
2	1527820	O-Ring	1	1
3	131358	Snap Ring	1	1
4	1395285	Chain Guard	2	2
5	1378690	Crosshead	1	1
6	1354902	Spacer	4	4
7	1581828	Capscrew	2	2
8	1465504	Tie Down	1	1
9	1354967	Bracket Wldmt	1	1
10	1581559	Washer	6	6
11	1581849	Nut	4	4
12	356505	Washer (Special)	1	1
13	154355	Spring	1	1
14	1481096	Fitting	1	1
14	16485	O-Ring	1	1
15	1581832	Capscrew	2	2
16	1581567	Nut	2	2
17	178119	Clamp	2	2
18	1581587	Capscrew	1	1
19	1581557	Washer	3	3
20	1581841	Capscrew	1	1

FREE-LIFT

TWO STAGE FULL FREE-LIFT – D509-D564

KEY:**A:** E45XN-E60XN**B:** E65XN-E70XN

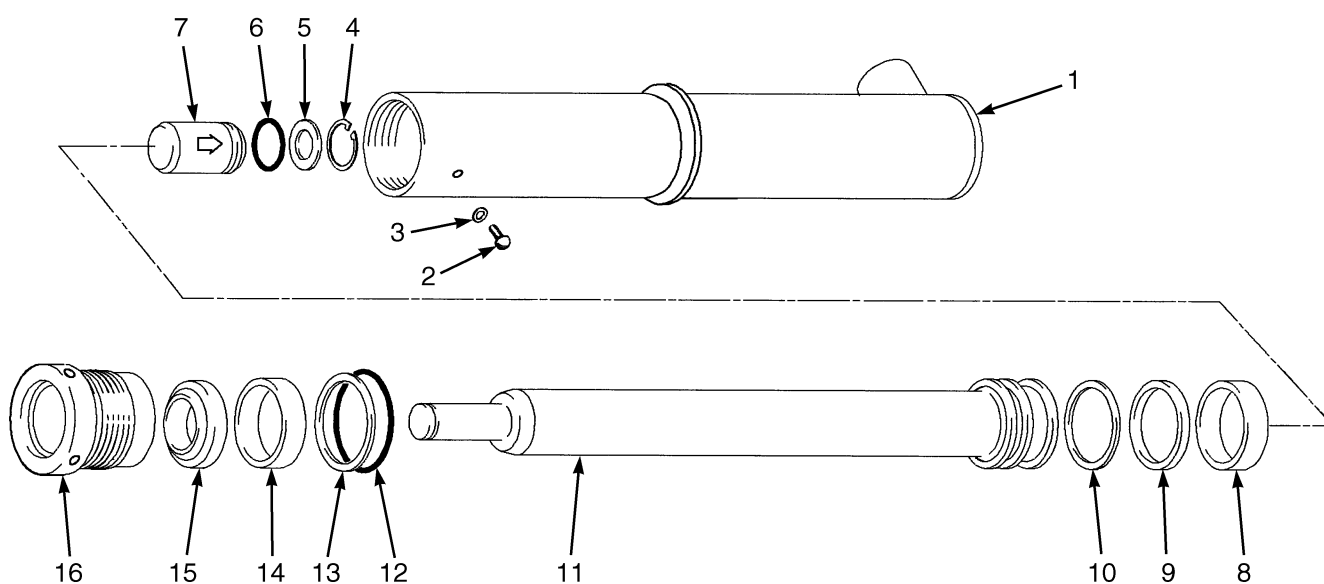
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
21	a	Chain	2	2
22	1379683	Chain Sheave Assembly	2	2
22	1378693	Chain Sheave	1	1
22	37752	Snap Ring	2	2
22	1378699	Ball Bearing	1	1
23	304526	Snap Ring	2	2
24	302461	Roll Pin	2	2
25	15211	Cotter Pin	2	2
26	297649	Ring	2	2
27	161003	Nut	2	2
28	1514866	Pin	2	2
29	1369356	Chain Anchor	2	2
30	1581590	Capscrew	2	2
31	1581564	Lockwasher	2	2
32		Free-Lift Cylinder (☞ Figure 9-7).....	1	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

FREE-LIFT CYLINDERS (FIGURE 9-7) TWO STAGE FULL FREE-LIFT — D509-D564



BP170110

FREE-LIFT CYLINDERS
TWO STAGE FULL FREE-LIFT – D509-D564**D509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3362	D509 3462
	Cylinder Group Number	8514558	8514560	8514561
	Cylinder Assy	2058121	2053797	2058122
1	Tube Wldmt- Cylinder	2058212	2058214	2058215
11	Cylinder Rod	1356566	1356572	1356575

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
	Cylinder Group Number	8518708	8518710	8518711
	Cylinder Assy	2058325	2058327	2058328
1	Tube Wldmt- Cylinder	2063690	2058253	2063691
11	Cylinder Rod	1356697	1356691	1356694

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	1361302	Screw	1	1
3	190887	Sealing Ring	1	1
4	187388	Snap Ring	1	1
5	297531	Washer	1	1
6	190580	O-Ring	1	1
7	297538	Check Valve	1	1
8	636941	Wear Ring	..	1
8	1358972	Wear Ring	1	..
9	309062	Rod Seal	..	1
9	2013088	Rod Seal	1	..
10	637565	Back-Up Ring	..	1

FREE-LIFT CYLINDERS **TWO STAGE FULL FREE-LIFT – D509-D564**

KEY:**A: E45XN-E60XN****B: E65XN-E70XN**

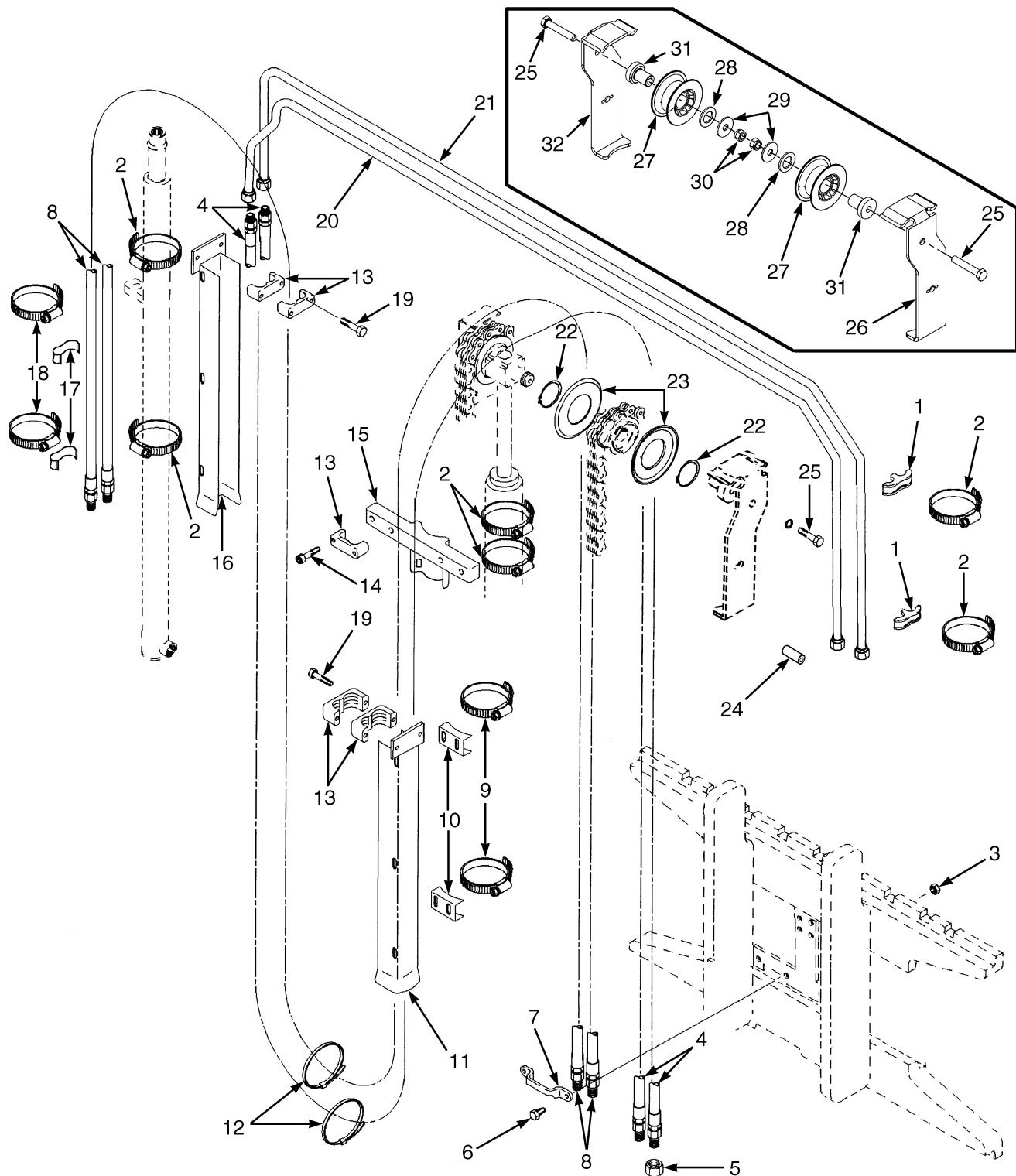
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
10	2013089	Back-Up Ring	1	..
11	a	Cylinder Rod	1	1
12	15880	O-Ring	..	1
12	90263	O-Ring	1	..
13	164840	Back-Up Ring	..	1
13	147973	Back-Up Ring	1	..
14	1358970	Rod Seal	1	1
14	1622946	Rod Seal (Alternate Part)	1	1
15	2013099	Rod Wiper	1	1
15	1463105	Rod Wiper (Alternate Part)	1	1
16	1356661	Gland	..	1
16	1356292	Gland	1	..
	1356662	Kit-Seal	..	1
	1358969	Kit-Seal	1	..

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

HEADER HOSE (FIGURE 9-8) TWO STAGE FULL FREE-LIFT — D509-D564



HP020340

**HEADER HOSE
TWO STAGE FULL FREE-LIFT – D509-D564****D509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3162 mm (124.5 in.)	3262 mm (128.4 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	D509 3162	D509 3262	D509 3362	D509 3462
4	Hose Assy (To Side-Shift)	2065210	2065211	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065241	2065242	2065243
11	Hose Guard (RH)	1481232	1481232	1481232	1481232
16	Hose Guard (LH)	1365516	1365517	1365518	1365520
20	Tube Assy	2065029	2065030	2065031	2065032
21	Tube Assy	2065000	2065001	2065002	2065003

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	D564 2960	D564 3160	D564 3260
4	Hose Assy (To Side-Shift)	2065210	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065242	2065243
11	Hose Guard (RH)	1481232	1481232	1481232
16	Hose Guard (LH)	1365516	1365518	1365520
20	Tube Assy	2065029	2065031	2065032
21	Tube Assy	2065000	2065002	2065003

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1606855	Spacer	2	2
2	1360507	Clamp	6	6
3	b 1581566	Nut	2	4
4	a	Hose Assy (To Side-Shift)	2	2
5	1529015	Cap	2	4
6	b 1581581	Capscrew	2	4
6	d 1597448	Capscrew	2	4
7	b 1643405	Hose Clamp	1	2
7	d 4008020	Clamp	1	2
8	a	Hose Assy (To Mast)	2	2

HEADER HOSE

TWO STAGE FULL FREE-LIFT – D509-D564

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
9	1360508	Clamp	2	2
10	1345423	Clamp	2	2
11	a	Hose Guard (RH)	1	1
12	137852	Strap Clamp	1	2
13	1360386	Clamp (Double Hose)	3	6
14	1581741	Capscrew	2	4
15	1354918	Bracket	1	1
16	a	Hose Guard (LH)	1	1
17	1477996	Hose Clamp	..	2
18	1617657	Clamp	..	2
19	1581842	Capscrew	4	8
20	a	Tube Assy	1	1
21	a	Tube Assy	1	1
22	1345204	Snap Ring (Spiral Retaining Ring)	2	4
23	1345199	Hose Guide	2	4
24	302461	Roll Pin	2	4
25	1581830	Capscrew	1	2
26	1395292	Bracket	..	1
27	c 1381595	.....		
	1494017	Hose Sheave	1	2
27	e 4041194	Hose Sheave	1	2
28	1581560	Washer	1	2
29	1345190	Washer	1	2
30	1581849	Nut	1	2
31	1396406	Stubshaft	1	2
32	1395291	Bracket	1	1

FOOTNOTES:

a Refer to Table
b → S/N A268N05499J
c → S/N A268N08141K

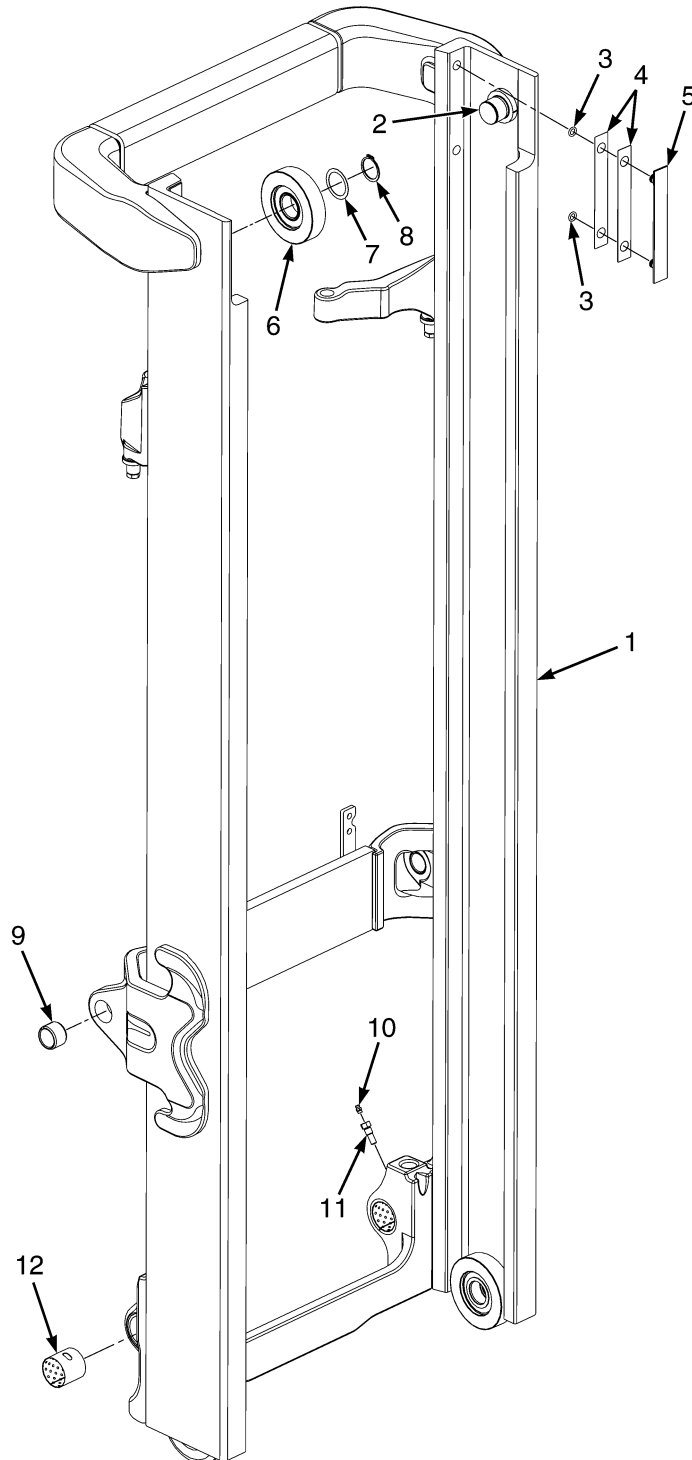
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e S/N A268N08142K →

NOTES

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

OUTER MAST (FIGURE 9-9)

TWO STAGE FULL FREE LIFT — E509-E564 (→ PENDING PER ECN 160638)



BP290161

OUTER MAST

TWO STAGE FULL FREE LIFT – E509-E564 (→ PENDING PER ECN 160638)

E509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624665	4624669	4624671
1	Outer Mast	4062953	4062955	4062956

E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624723	4624727	4624729
1	Outer Mast	4062953	4062955	4062956

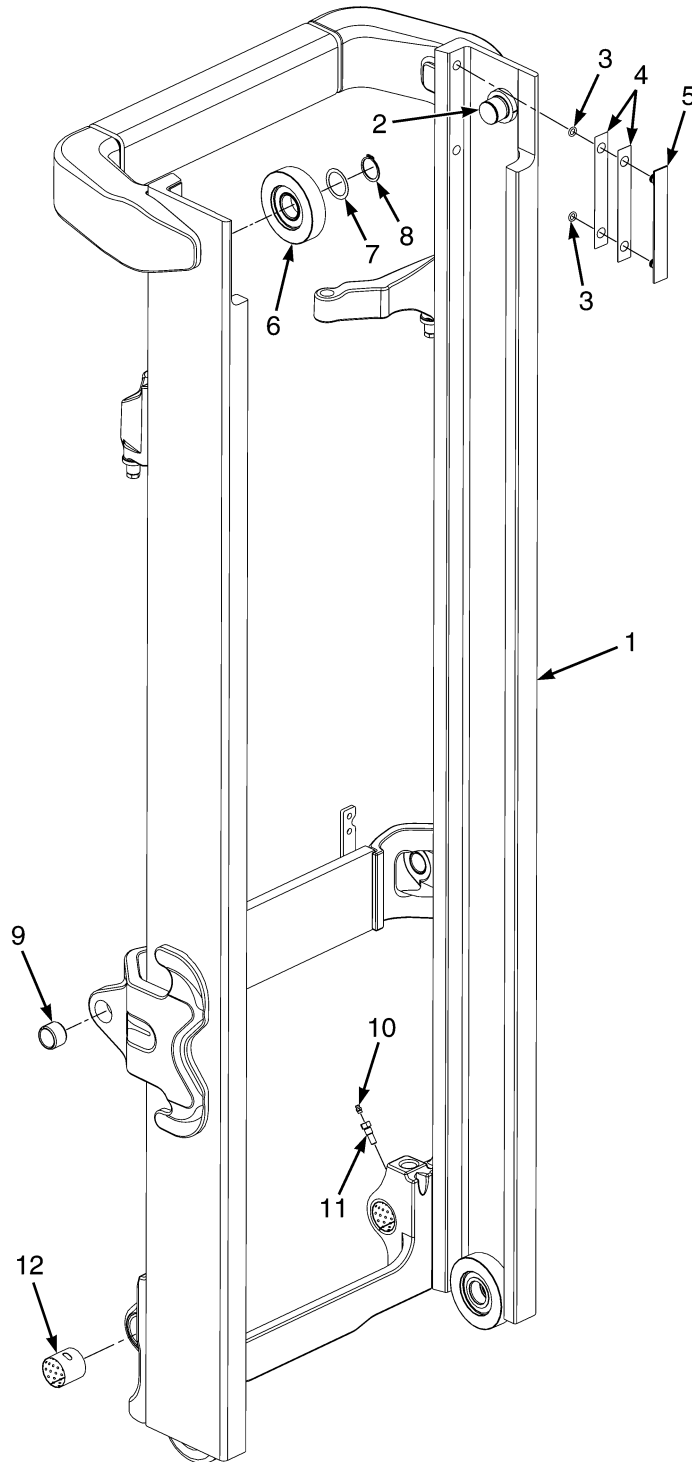
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.020 in.)	AR
4	131715	Shim (0.007 in.) (Optional)	AR
5	215211	Wear Strip	2
6	1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.020 in.)	2
8	58901	Snap Ring	2
9	300982	Bushing	2
10	13957	Grease Fitting	2
11	4033412	Capscrew (Lube)	2
12	4033414	Bushing	2

FOOTNOTES:

a Refer to Table

OUTER MAST (FIGURE 9-10)

TWO STAGE FULL FREE LIFT — E509-E564 (PENDING PER ECN 160638 →)



BP290161

OUTER MAST**TWO STAGE FULL FREE LIFT – E509-E564 (PENDING PER ECN 160638 →)****E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624666	4624670	4624672
1	Outer Mast	4062953	4062955	4062956

E564

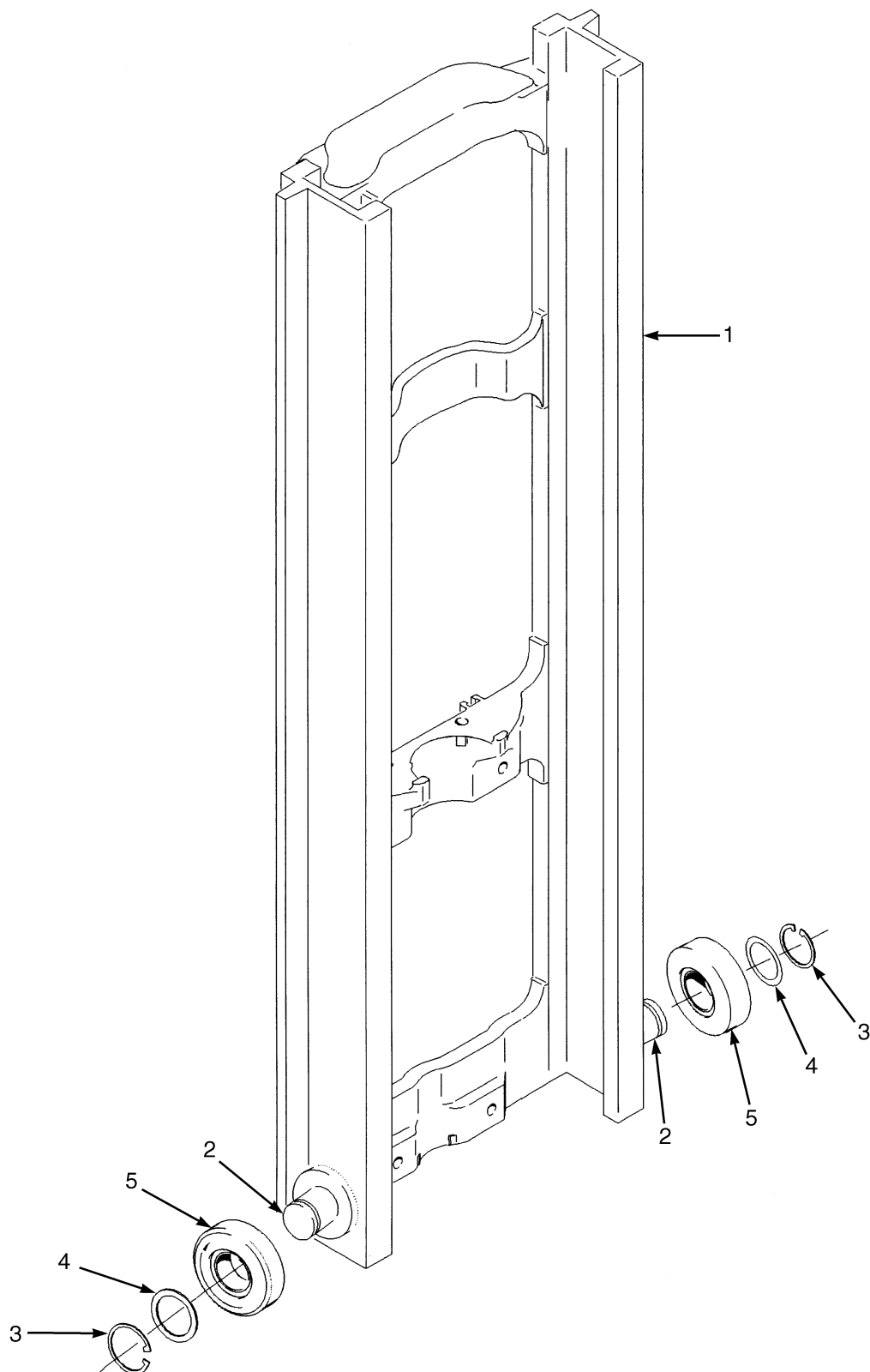
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624724	4624728	4624730
1	Outer Mast	4062953	4062955	4062956

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.020 in.)	AR
4	131715	Shim (0.007 in.) (Optional)	AR
5	215211	Wear Strip	2
6	1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.020 in.)	2
8	58901	Snap Ring	2
9	300982	Bushing	2
10	13957	Grease Fitting	2
11	4033412	Capscrew (Lube)	2
12	4033414	Bushing	2

FOOTNOTES:**a** Refer to Table

INNER MAST (FIGURE 9-11)

TWO STAGE FULL FREE- LIFT — E509-E564 (→ PENDING PER ECN 160638)



HP290005

INNER MAST**TWO STAGE FULL FREE- LIFT – E509-E564 (→ PENDING PER ECN 160638)****E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624665	4624669	4624671
1	Inner Mast	1342476	1342478	1342479

E564

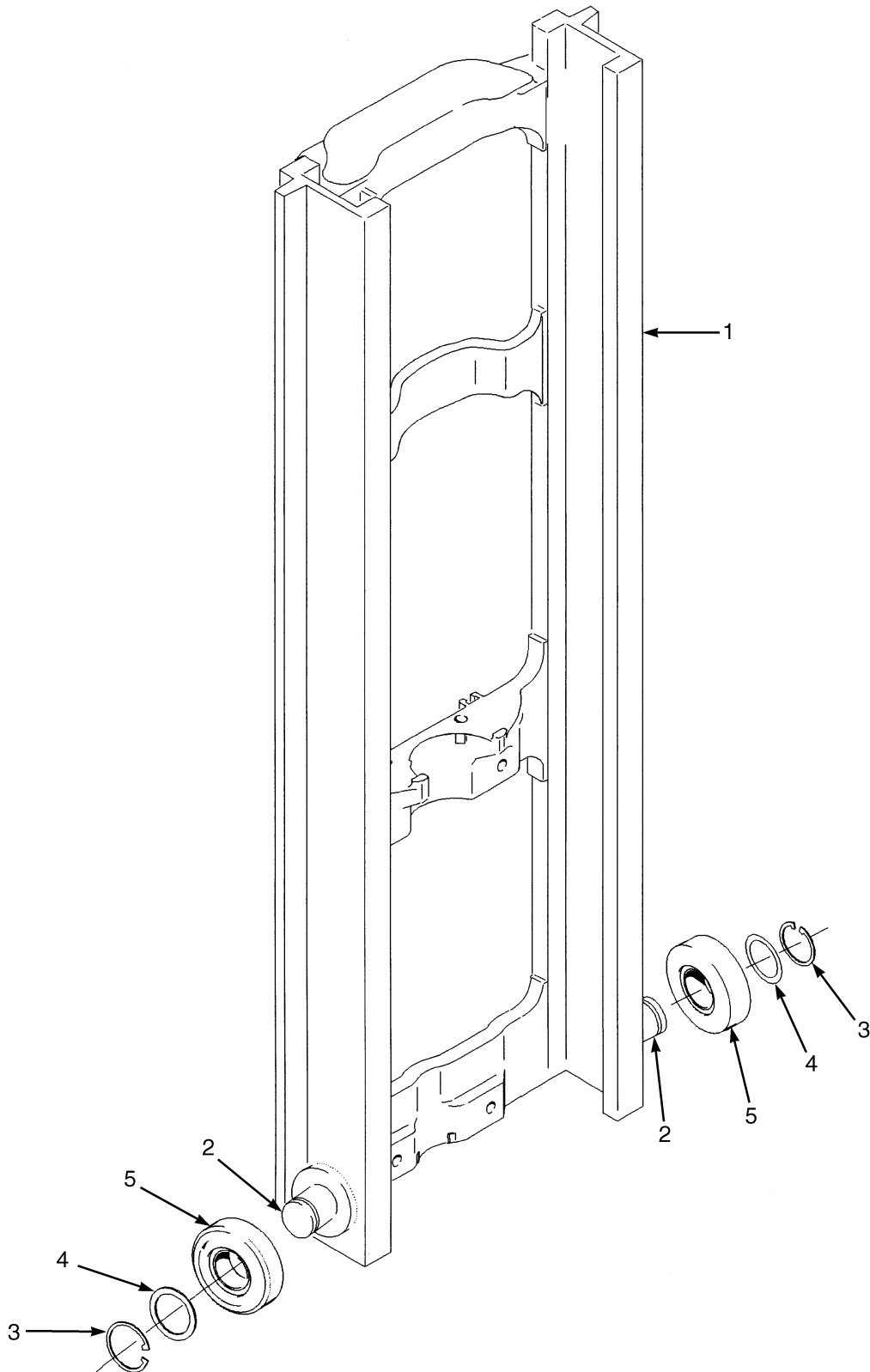
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624723	4624727	4624729
1	Inner Mast	1342476	1342478	1342479

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.020 in.)	AR
5	1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2

FOOTNOTES:**a** Refer to Table

INNER MAST (FIGURE 9-12)

TWO STAGE FULL FREE- LIFT — E509-E564 (PENDING PER ECN 160638 →)



HP290005

INNER MAST**TWO STAGE FULL FREE- LIFT – E509-E564 (PENDING PER ECN 160638 →)****E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624666	4624670	4624672
1	Inner Mast	1342476	1342478	1342479

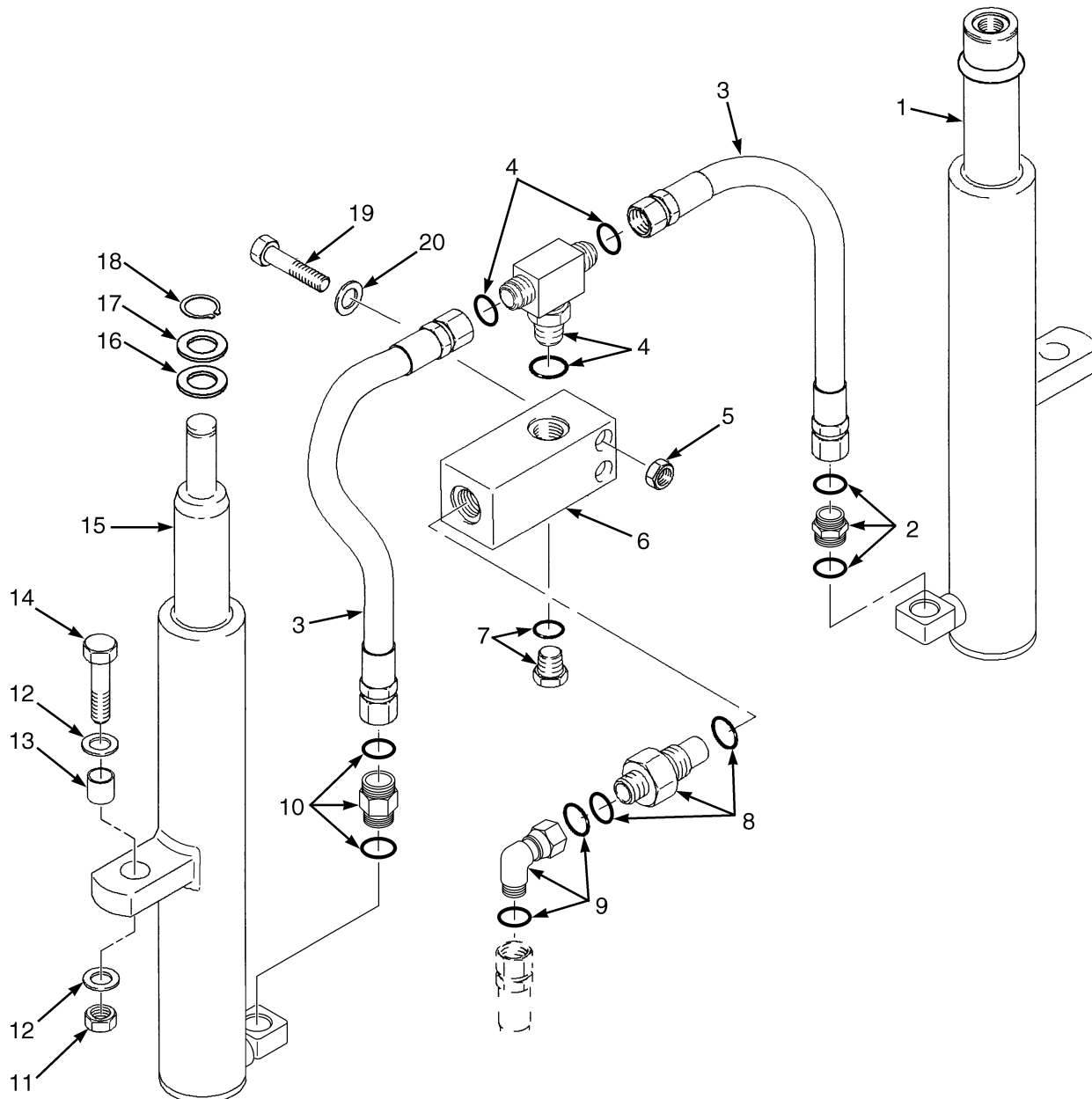
E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624724	4624728	4624730
1	Inner Mast	1342476	1342478	1342479

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.020 in.)	AR
5	1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2

FOOTNOTES:**a** Refer to Table

MAIN LIFT (FIGURE 9-13) TWO STAGE FULL FREE- LIFT — E509-E564

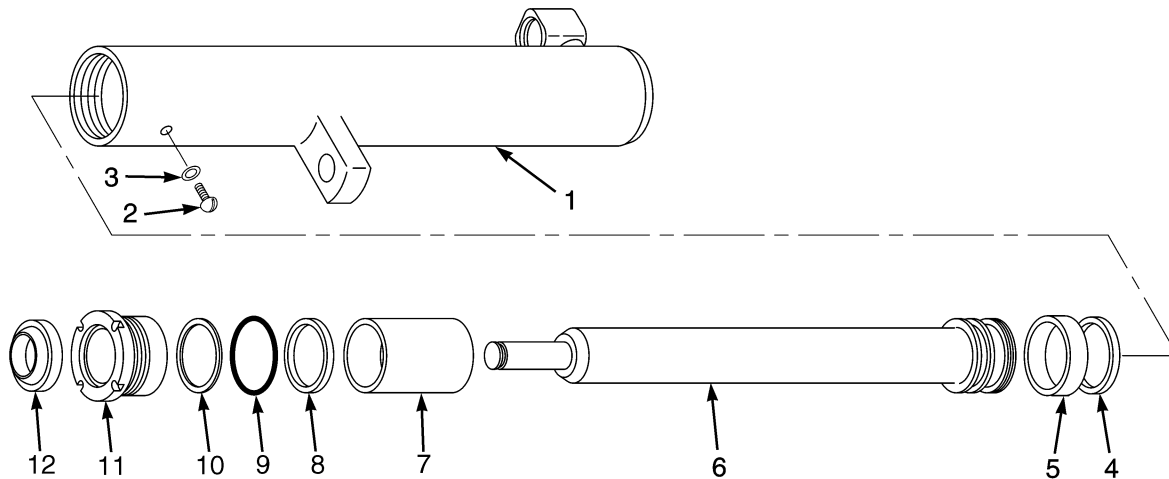


HP290006

MAIN LIFT **TWO STAGE FULL FREE- LIFT – E509-E564**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Main Lift Cylinder (LH) (☞ Figure 9-15).....	1
2	1486749	Fitting	1
2	16485	O-Ring	1
2	252729	O-Ring	1
3	1481097	Hose Assy	2
4	1532650	Fitting	1
4	16485	O-Ring	1
4	252729	O-Ring	1
5	1581566	Nut	2
6	1379687	Housing (Lowering Control)	1
7	14603	Plug	1
7	~~1450764~~		
	16486	O-Ring	1
8	2062651	Lowering Control Valve (E45-55XN)	1
8	2062652	Lowering Control Valve (E60-70XN)	1
8	280154	O-Ring	1
8	252729	O-Ring	1
9	1486773	Fitting	1
9	252729	O-Ring	2
10	2062686	Hyd Velocity Fuse (E45-55XN)	1
10	2062687	Hyd Velocity Fuse (E60-70XN)	1
11	1581849	Nut	2
12	1581852	Washer	4
13	323090	Spacer	2
14	1581829	Capscrew	2
15	.....	Main Lift Cylinder (RH) (☞ Figure 9-14).....	1
16	1354915	Washer (0.010 in.)	AR
16	1354916	Washer (0.030 in.)	AR
16	1354917	Washer (0.060 in.)	AR
17	1333382	Washer (0.060 in.)	1
18	131358	Snap Ring	1
19	1581835	Capscrew	2
20	1581556	Washer	2

MAIN LIFT CYLINDER - RH (FIGURE 9-14) TWO STAGE FULL FREE- LIFT — E509-E564



HP171367

MAIN LIFT CYLINDER - RH TWO STAGE FULL FREE- LIFT – E509-E564

RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
		E509 3162	E509 3362	E509 3462
	Mast Group Number			
	Cylinder Group Number	8518608	8518610	8518611
	Cylinder Assy	2058650	2058652	2058653
1	Tube Wldmt- Cylinder	2058535	2058537	2058538
6	Cylinder Rod Assembly	1358939	1358941	1358942
7	Spacer	----	----	----

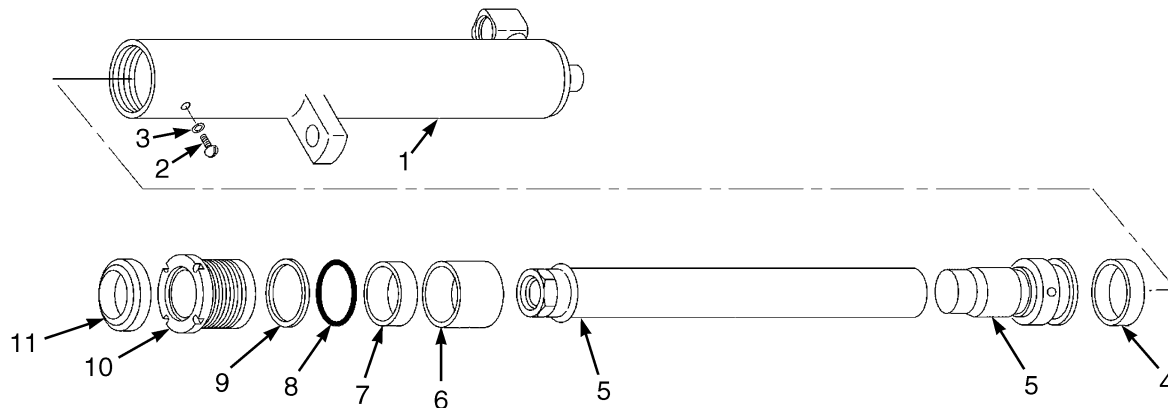
MAIN LIFT CYLINDER - RH
TWO STAGE FULL FREE- LIFT – E509-E564
RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Cylinder Group Number	8518658	8518660	8518661
	Cylinder Assy	2060421	2060423	2060424
1	Tube Wldmt- Cylinder	2058535	2058537	2058538
6	Cylinder Rod Assembly	1358939	1358941	1358942
7	Spacer	2073159	2073159	2073159

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	295649	Screw	1
3	190887	Sealing Ring	1
4	1356748	Piston Ring	1
5	1356747	Wear Ring	1
6	a	Cylinder Rod Assembly	1
6	1355878	Piston	1
7	a	Spacer	1
8	1381095	Rod Seal	1
9	59229	O-Ring	1
10	147972	Back-Up Ring	1
11	1355713	Gland	1
12	1319668	Rod Wiper	1
	1496922	Kit-Seal	1

FOOTNOTES:**a** Refer to Table

MAIN LIFT CYLINDER - LH (FIGURE 9-15) TWO STAGE FULL FREE- LIFT — E509-E564



HP171366

MAIN LIFT CYLINDER - LH TWO STAGE FULL FREE- LIFT – E509-E564

LEFT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Cylinder Group Number	8518508	8518510	8518511
	Cylinder Assy	2058618	2058620	2058621
1	Tube Wldmt- Cylinder	2058499	2058501	2058502
5	Cylinder Rod Assembly	1355923	1355935	1355941
6	Spacer	----	----	----

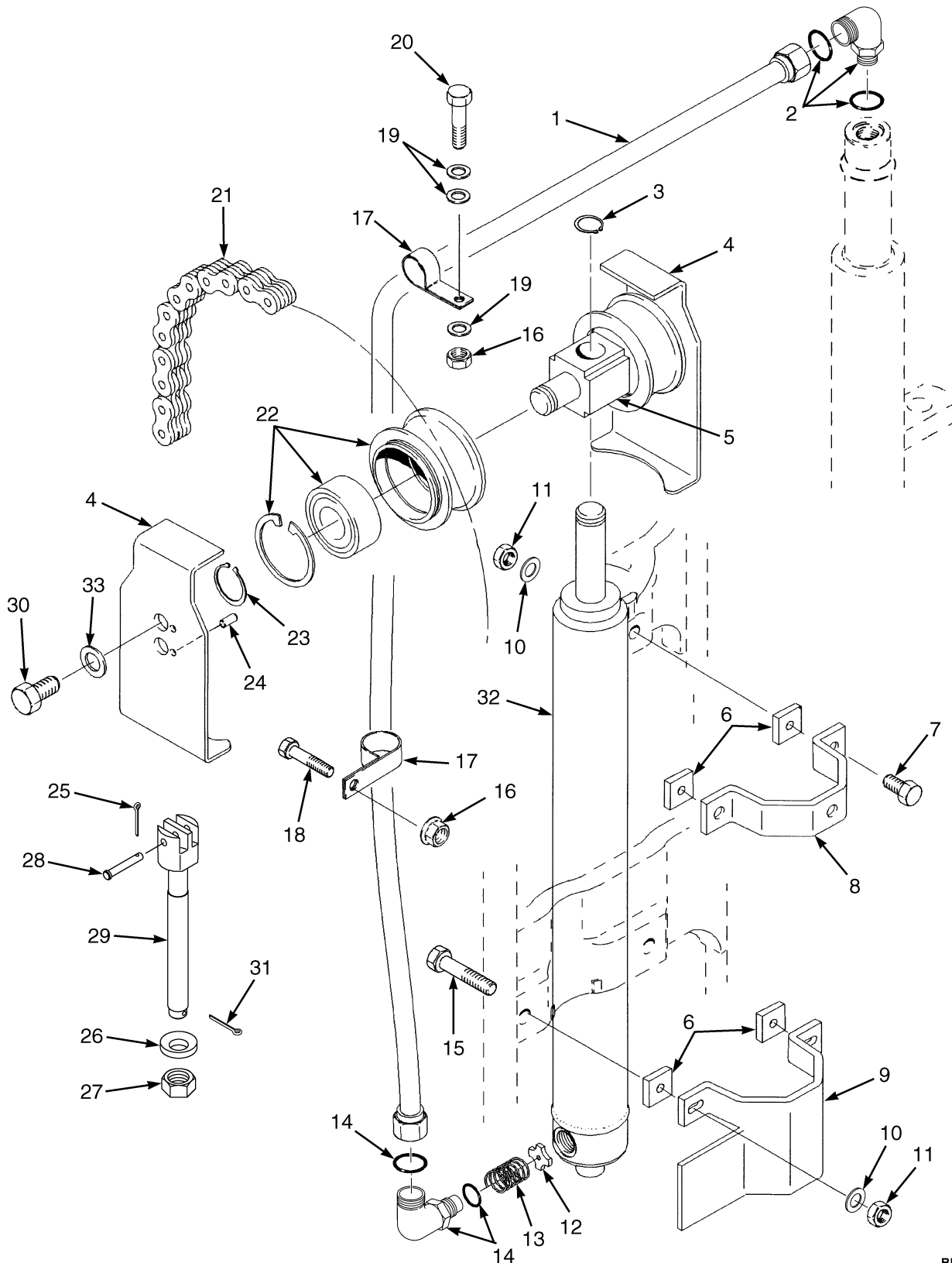
MAIN LIFT CYLINDER - LH
TWO STAGE FULL FREE- LIFT – E509-E564
LEFT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Cylinder Group Number	8518558	8518560	8518561
	Cylinder Assy	2058822	2058824	2058825
1	Tube Wldmt- Cylinder	2058499	2058501	2058502
5	Cylinder Rod Assembly	1355923	1355935	1355941
6	Spacer	2073159	2073159	2073159

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	295649	Screw	1
3	190887	Sealing Ring	1
4	1356747	Wear Ring	1
5	a	Cylinder Rod Assembly	1
5	2064464	Piston	1
6	a	Spacer	1
7	1381095	Rod Seal	1
8	59229	O-Ring	1
9	147972	Back-Up Ring	1
10	1355713	Gland	1
11	1319668	Rod Wiper	1
	1496922	Kit-Seal	1

FOOTNOTES:**a** Refer to Table

FREE-LIFT (FIGURE 9-16) TWO STAGE FULL FREE- LIFT — E509-E564 (→ PENDING PER ECN 160638)



BP170666

FREE-LIFT
TWO STAGE FULL FREE- LIFT – E509-E564 (→ PENDING PER ECN 160638)

E509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624665	4624669	4624671
1	Tube Assy	1481741	1480952	1481744
21	Chain	231084	161029	135619

E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624723	4624727	4624729
1	Tube Assy	1481741	1480952	1481744
21	Chain	1342376	1342378	1342117

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Tube Assy	1
2	1481090	Fitting	1
2	16485	O-Ring	1
2	244167	O-Ring	1
3	131358	Snap Ring	1
4	1395285	Chain Guard	2
5	1378690	Crosshead	1
6	1354902	Spacer (E60-70XN)	4
7	1581828	Capscrew	2
8	1465504	Tie Down	1
9	1354967	Bracket Wldmt	1
10	1581559	Washer	4
11	1581849	Nut	4
12	356505	Washer	1
13	154355	Spring	1
14	1481096	Fitting	1
15	1581827	Capscrew	2
16	1581567	Nut	2
17	178119	Clamp	2
18	1581587	Capscrew	1
19	1581557	Washer	3
20	1581841	Capscrew	1
21	a	Chain	2
22	1379683	Chain Sheave Assembly (E60-70XN)	2

FREE-LIFT**TWO STAGE FULL FREE- LIFT – E509-E564 (→ PENDING PER ECN 160638)**

ITEM	PART NO.	DESCRIPTION	QTY
22	1379682	Chain Sheave Assembly (E45-55XN)	2
22	1378693	Chain Sheave	1
22	37752	Snap Ring	1
22	1378699	Ball Bearing	1
23	304526	Snap Ring	3
24	302461	Roll Pin	2
25	15211	Cotter Pin	2
26	297649	Ring	2
27	161003	Nut	2
28	1514866	Pin	2
29	1369356	Chain Anchor (E60-70XN)	2
29	1369357	Chain Anchor (E45-55XN)	2
30	1581590	Capscrew	2
31	15223	Cotter Pin	2
32		Free-Lift Cylinder (☞ Figure 9-18).....	1
33	1581852	Washer	2

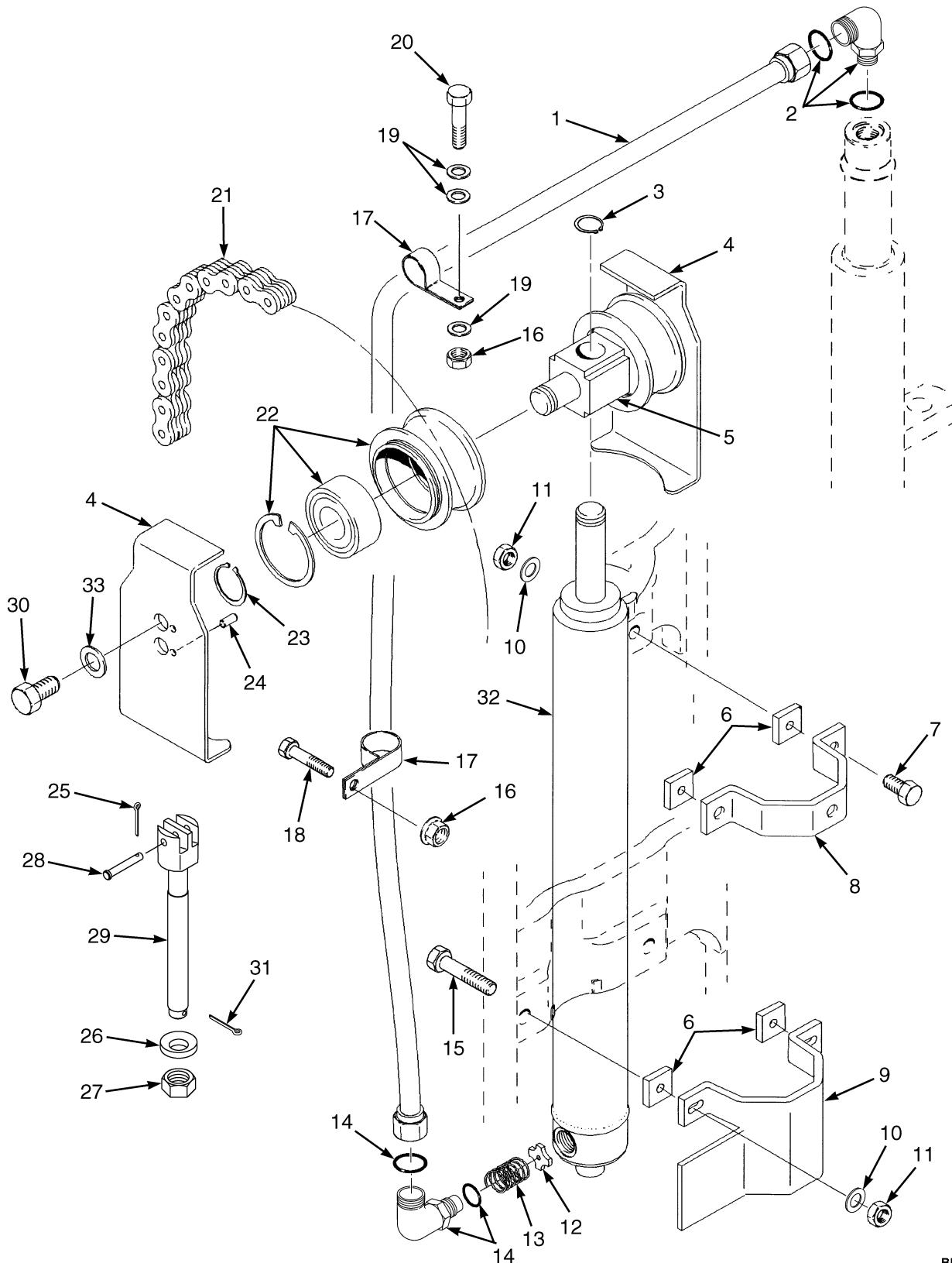
FOOTNOTES:

a Refer to Table

NOTES

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FREE-LIFT (FIGURE 9-17) TWO STAGE FULL FREE- LIFT — E509-E564 (PENDING PER ECN 160638 →)



BP170666

FREE-LIFT**TWO STAGE FULL FREE- LIFT – E509-E564 (PENDING PER ECN 160638 →)****E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Mast Assy	4624666	4624670	4624672
1	Tube Assy	1481741	1480952	1481744
21	Chain	231083	180177	88431

E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Mast Assy	4624724	4624728	4624730
1	Tube Assy	1481741	1480952	1481744
21	Chain	1342391	1342376	1369328

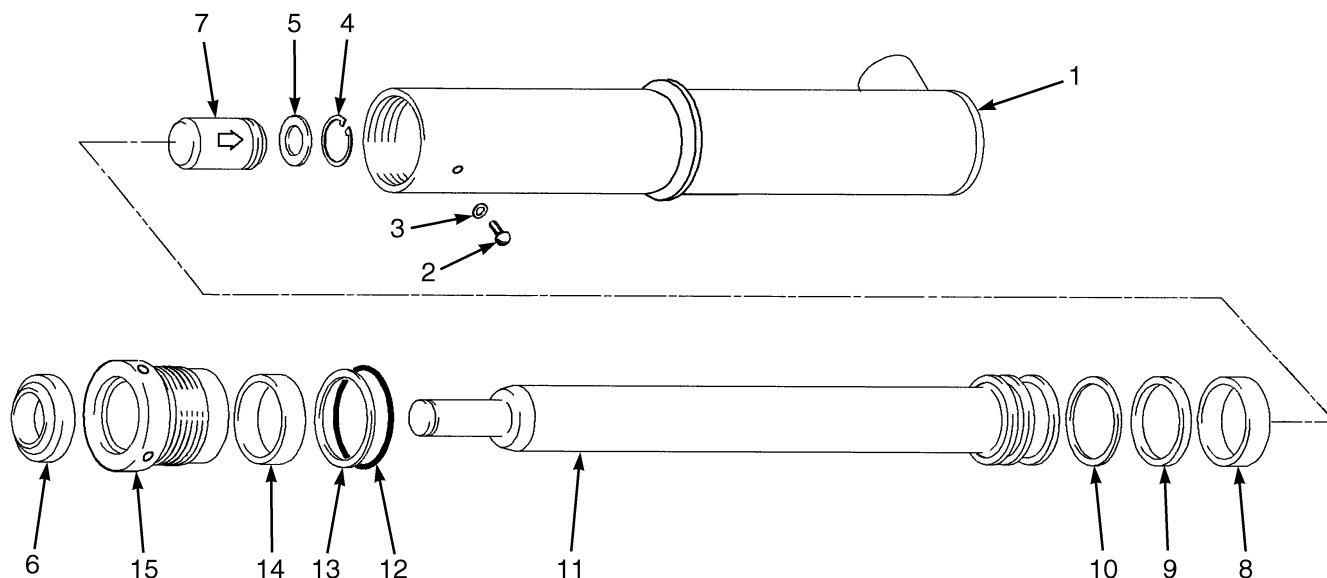
ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Tube Assy	1
2	1481090	Fitting	1
2	16485	O-Ring	1
2	244167	O-Ring	1
3	131358	Snap Ring	1
4	1395285	Chain Guard	2
5	1378690	Crosshead	1
6	1354902	Spacer (E60-70XN)	4
7	1581828	Capscrew	2
8	1465504	Tie Down	1
9	1354967	Bracket Wldmt	1
10	1581559	Washer	4
11	1581849	Nut	4
12	356505	Washer	1
13	154355	Spring	1
14	1481096	Fitting	1
15	1581827	Capscrew	2
16	1581567	Nut	2
17	178119	Clamp	2
18	1581587	Capscrew	1
19	1581557	Washer	3
20	1581841	Capscrew	1
21	a	Chain	2
22	1379683	Chain Sheave Assembly (E60-70XN)	2

FREE-LIFT**TWO STAGE FULL FREE- LIFT – E509-E564 (PENDING PER ECN 160638 →)**

ITEM	PART NO.	DESCRIPTION	QTY
22	1379682	Chain Sheave Assembly (E45-55XN)	2
22	1378693	Chain Sheave	1
22	37752	Snap Ring	1
22	1378699	Ball Bearing	1
23	304526	Snap Ring	3
24	302461	Roll Pin	2
25	15211	Cotter Pin	2
26	297649	Ring	2
27	161003	Nut	2
28	1514866	Pin	2
29	4188921	Chain Anchor (E60-70XN)	2
29	4188920	Chain Anchor (E45-55XN)	2
30	1581590	Capscrew	2
31	15223	Cotter Pin	2
32	.....	Free-Lift Cylinder (☞ Figure 9-18).....	1
33	1581852	Washer	2

FOOTNOTES:

a Refer to Table

FREE-LIFT CYLINDER (FIGURE 9-18)
TWO STAGE FULL FREE- LIFT — E509-E564

BP170667

FREE-LIFT CYLINDER
TWO STAGE FULL FREE- LIFT – E509-E564**E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
	Cylinder Group Number	8514558	8514560	8514561
	Cylinder Assy	2058121	2053797	2058122
1	Tube Wldmt- Cylinder	2058212	2058214	2058215
11	Cylinder Rod	1356566	1356572	1356575

FREE-LIFT CYLINDER
TWO STAGE FULL FREE- LIFT – E509-E564
E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
	Cylinder Group Number	8518708	8518710	8518711
	Cylinder Assy	2058325	2058327	2058328
1	Tube Wldmt- Cylinder	2063690	2058253	2063691
11	Cylinder Rod	1356697	1356691	1356694

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	1361302	Screw	1
3	190887	Sealing Ring	1
4	187388	Snap Ring	1
5	297531	Washer	1
6	1463105	Rod Wiper	1
7	297538	Check Valve	1
8	1358972	Wear Ring (E45-55XN)	1
8	636941	Wear Ring (E60-70XN)	1
9	2013088	Rod Seal (E45-55XN)	1
9	309062	Rod Seal (E60-70XN)	1
10	2013089	Back-Up Ring (E45-55XN)	1
10	637565	Back-Up Ring (E60-70XN)	1
11	a	Cylinder Rod	1
12	90263	O-Ring (E45-55XN)	1
12	15880	O-Ring (E60-70XN)	1
13	147973	Back-Up Ring (E45-55XN)	1
13	164840	Back-Up Ring (E60-70XN)	1
14	1622946	Rod Seal	1
15	1356292	Gland (E45-55XN)	1
15	1356661	Gland (E60-70XN)	1
	1358969	Kit-Seal (E45-55XN)	1
99	1356662	Kit-Seal (E60-70XN)	1

FOOTNOTES:

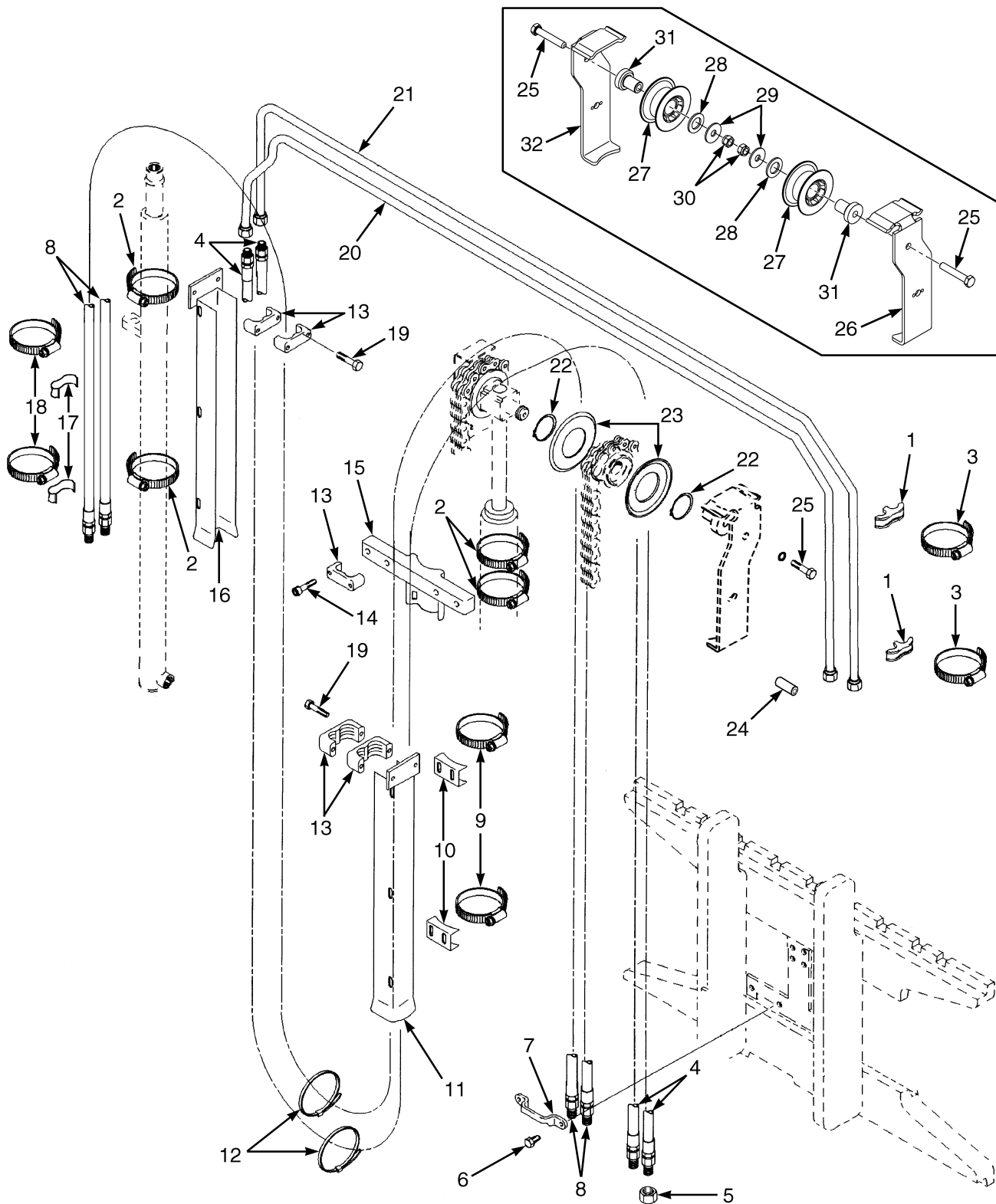
a Refer to Table

NOTES

[illegible]

HEADER HOSES (FIGURE 9-19)

TWO STAGE FULL FREE-LIFT — E509-E564 (→ PENDING PER ECN 135710)



BP170665

HEADER HOSES

TWO STAGE FULL FREE-LIFT – E509-E564 (→ PENDING PER ECN 135710)

E509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
4	Hose Assy (To Side Shift)	2065210	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065242	2065243
16	Hose Guard	1365516	1365518	1365520
20	Tube Assy	2065029	2065031	2065032
21	Tube Assy	2065000	2065002	2065003

E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
4	Hose Assy (To Side Shift)	2065210	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065242	2065243
16	Hose Guard	1365516	1365518	1365520
20	Tube Assy	2065029	2065031	2065032
21	Tube Assy	2065000	2065002	2065003

KEY:
A: Three Function
B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1606855	Spacer	2	2
2	1360507	Clamp	6	6
3	1617658	Clamp	2	2
4	a	Hose Assy (To Side Shift)	2	2
5	1529015	Cap	2	4
6	1597448	Capscrew	2	4
7	4008020	Clamp	1	2
8	a	Hose Assy (To Mast)	..	2
9	1360508	Clamp	2	2
10	1345423	Clamp	2	2
11	1481232	Hose Guard (RH)	1	1
12	137852	Strap Clamp	1	2
13	1360386	Clamp (Double Hose)	3	6

HEADER HOSES

TWO STAGE FULL FREE-LIFT – E509-E564 (→ PENDING PER ECN 135710)

KEY:

A: Three Function

B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	1581741	Capscrew	2	4
15	1354918	Bracket	1	1
16	a	Hose Guard	1	1
17	1477996	Hose Clamp	..	2
18	1617657	Clamp	..	2
19	1581842	Capscrew	4	4
19	1581843	Capscrew	..	4
20	a	Tube Assy	1	1
21	a	Tube Assy	1	1
22	1345204	Snap Ring (Spiral Retaining Ring)	2	4
23	1345199	Hose Guide	2	4
24	302461	Roll Pin	2	4
25	1581830	Capscrew	1	2
26	1395292	Bracket (LH)	..	1
27	4041194	Hose Sheave	1	2
28	4064560	Spacer	1	2
29	1345190	Washer	1	2
30	1581849	Nut	1	2
31	1396406	Stubshaft	1	2
32	1395291	Bracket (RH)	1	1

FOOTNOTES:

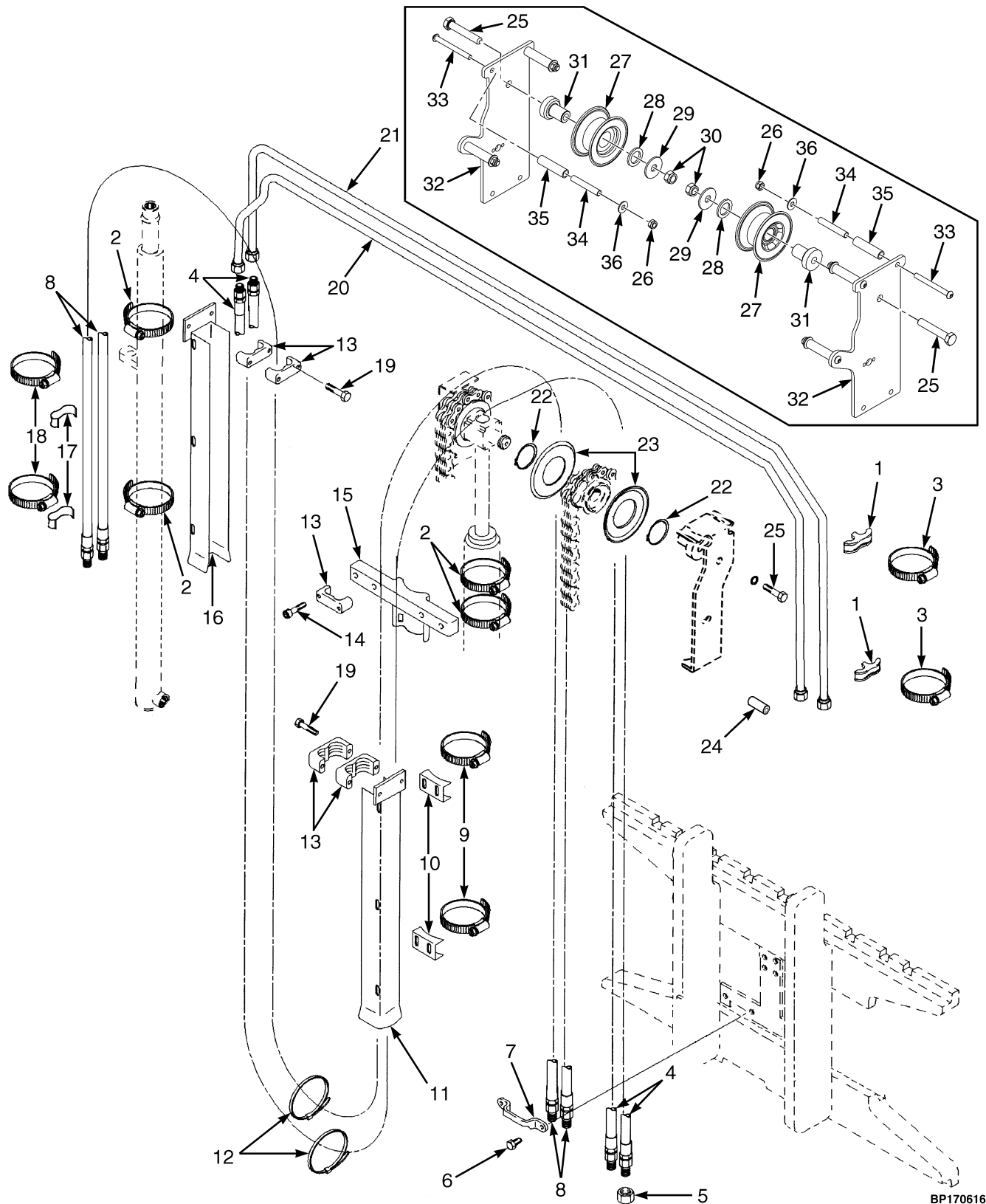
a Refer to Table

NOTES

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HEADER HOSES (FIGURE 9-20)

TWO STAGE FULL FREE-LIFT — E509-E564 (PENDING PER ECN 135710 →)



HEADER HOSES

TWO STAGE FULL FREE-LIFT – E509-E564 (PENDING PER ECN 135710 →)

E509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3162 mm (124.5 in.)	3362 mm (132.4 in.)	3462 mm (136.3 in.)
	Mast Group Number	E509 3162	E509 3362	E509 3462
4	Hose Assy (To Side Shift)	2065210	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065242	2065243
16	Hose Guard	1365516	1365518	1365520
20	Tube Assy	2065029	2065031	2065032
21	Tube Assy	2065000	2065002	2065003

E564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		2960 mm (116.5 in.)	3160 mm (124.4 in.)	3260 mm (128.3 in.)
	Mast Group Number	E564 2960	E564 3160	E564 3260
4	Hose Assy (To Side Shift)	2065210	2065212	2065213
8	Hose Assy (To Mast)	2065240	2065242	2065243
16	Hose Guard	1365516	1365518	1365520
20	Tube Assy	2065029	2065031	2065032
21	Tube Assy	2065000	2065002	2065003

KEY:
A: Three Function
B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1606855	Spacer	2	2
2	1360507	Clamp	6	6
3	1617658	Clamp	2	2
4	a	Hose Assy (To Side Shift)	2	2
5	1529015	Cap	2	4
6	1597448	Capscrew	2	4
7	4008020	Clamp	1	2
8	a	Hose Assy (To Mast)	..	2
9	1360508	Clamp	2	2
10	1345423	Clamp	2	2
11	1481232	Hose Guard (RH)	1	1
12	137852	Strap Clamp	1	2
13	1360386	Clamp (Double Hose)	3	6

HEADER HOSES**TWO STAGE FULL FREE-LIFT – E509-E564 (PENDING PER ECN 135710 →)****KEY:****A: Three Function****B: Four Function**

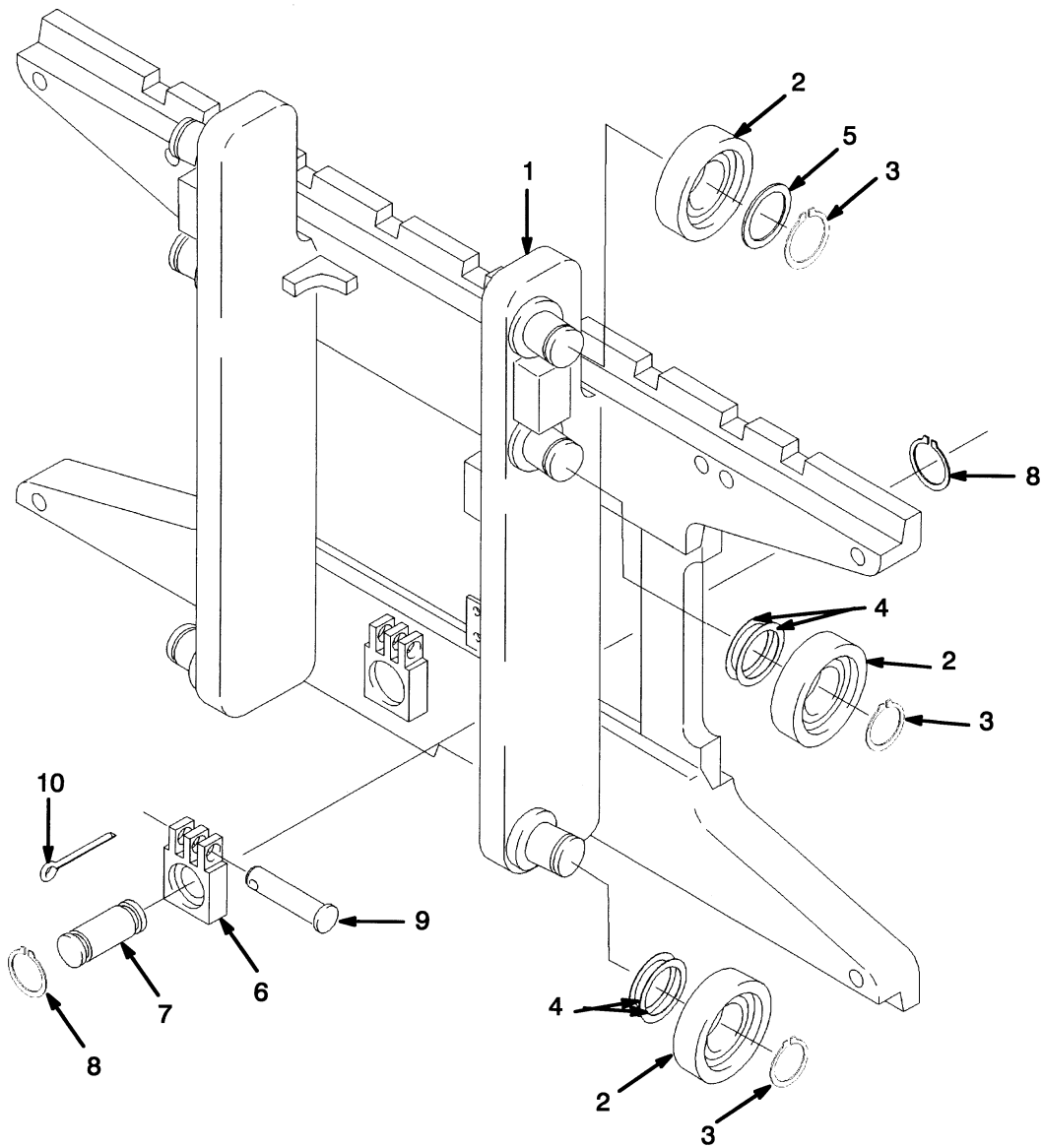
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	1581741	Capscrew	2	4
15	1354918	Bracket	1	1
16	a	Hose Guard	1	1
17	1477996	Hose Clamp	..	2
18	1617657	Clamp	..	2
19	1581842	Capscrew	4	4
19	1581843	Capscrew	..	4
20	a	Tube Assy	1	1
21	a	Tube Assy	1	1
22	1345204	Snap Ring (Spiral Retaining Ring)	2	4
23	1345199	Hose Guide	2	4
24	302461	Roll Pin	2	4
25	1581830	Capscrew	1	2
26	1581566	Nut	3	3
27	4041194	Hose Sheave	1	2
28	4064560	Spacer	1	2
29	1345190	Washer	1	2
30	1581849	Nut	1	2
31	1396406	Stubshaft	1	2
32	4143194	Hose Guard	1	1
33	1597451	Capscrew	3	3
34	4139004	Roller (Spacer)	3	3
35	4139003	Roller (Shaft)	3	3
36	320158	Washer	3	3

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

CARRIAGE (FIGURE 9-21) TWO STAGE FULL FREE-LIFT

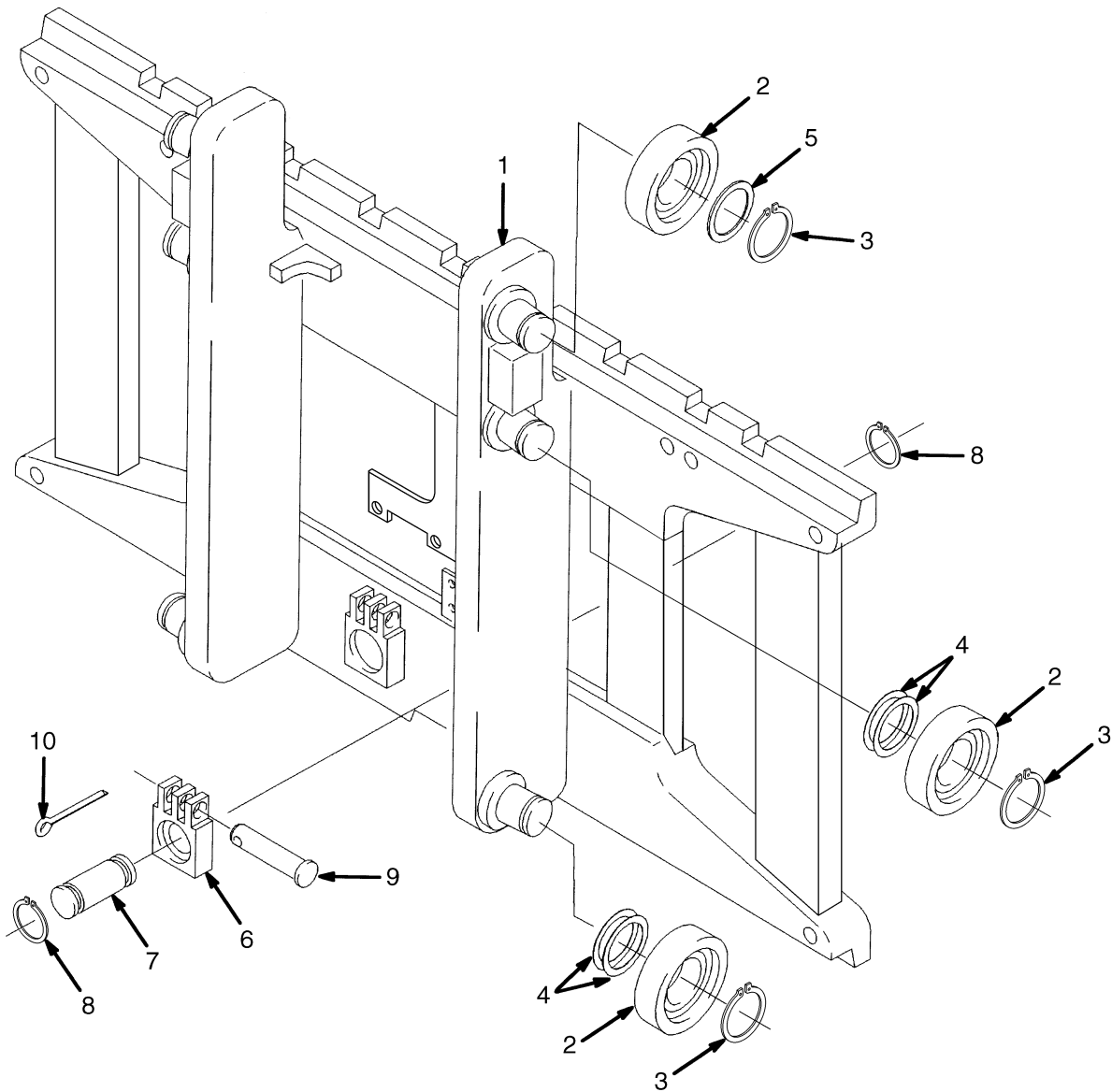


HP170182

CARRIAGE
TWO STAGE FULL FREE-LIFT**KEY:****A: E45XN-E55XN Class II****B: E60XN-E70XN Class III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1371660	Carriage	1	..
	1477685	Carriage	..	1
1	1359245	Carriage Wldmt	1	..
1	1345264	Stubshaft	6	..
1	1477845	Carriage Wldmt	..	1
1	1345264	Stubshaft	..	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	12891	Snap Ring	6	6
4	1345263	Shim (0.020 in.)	AR	AR
5	366116	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole)	..	2
6	1504012	Chain Anchor (Single Hole) (Optional)	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2

CARRIAGE (FIGURE 9-22) HEAVY DUTY — TWO STAGE FULL FREE-LIFT



BP170310

CARRIAGE

HEAVY DUTY – TWO STAGE FULL FREE-LIFT

KEY:**A: E45XN-E55XN Class II****B: E60XN-E70XN Class III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2070778	Carriage	1	..
	2071864	Carriage	..	1
1	1566778	Carriage Wldmt	1	..
1	1345264	Stubshaft	6	..
1	1549716	Carriage Wldmt	..	1
1	1345264	Stubshaft	..	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	12891	Snap Ring	6	6
4	1345263	Shim (0.020 in.)	AR	AR
5	366116	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole)	..	2
6	1504012	Chain Anchor (Single Hole) (Optional)	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2

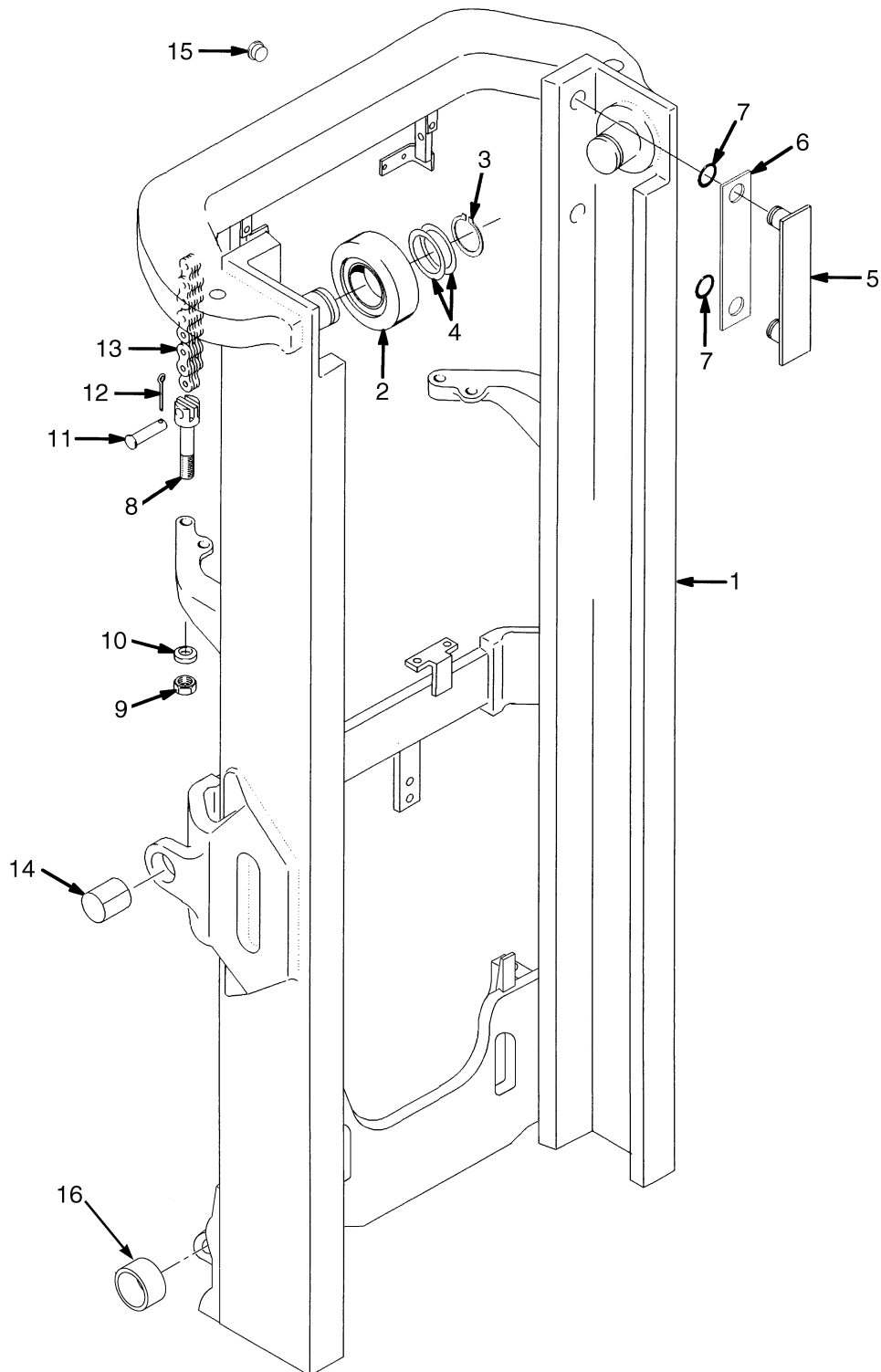
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SECTION 10

MAST-FOUR STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
FOUR STAGE FULL FREE-LIFT	10-22
HEAVY DUTY - FOUR STAGE FULL FREE-LIFT	10-24
FREE-LIFT	
FOUR STAGE FULL FREE-LIFT	10-16
FREE-LIFT CYLINDERS	
FOUR STAGE FULL FREE-LIFT	10-19
HEADER HOSE	
FOUR STAGE FULL FREE-LIFT (→ 12/2009)	10-26
FOUR STAGE FULL FREE-LIFT - WITH HOSE CHANNELS (12/2009 →)	10-30
HOSE CHANNELS	
HEADER HOSE - FOUR STAGE FULL FREE-LIFT (12/2009 →)	10-34
INNER MAST	
FOUR STAGE FULL FREE-LIFT	10-8
INTERMEDIATE 2 MAST	
FOUR STAGE FULL FREE-LIFT	10-4
INTERMEDIATE 3 MAST	
FOUR STAGE FULL FREE-LIFT	10-6
MAIN LIFT	
FOUR STAGE FULL FREE-LIFT	10-10
MAIN LIFT CYLINDER	
LEFT HAND - FOUR STAGE FULL FREE-LIFT	10-12
RIGHT HAND - FOUR STAGE FULL FREE-LIFT	10-14
OUTER MAST	
FOUR STAGE FULL FREE-LIFT	10-2

OUTER MAST (FIGURE 10-1) FOUR STAGE FULL FREE-LIFT



BP170112

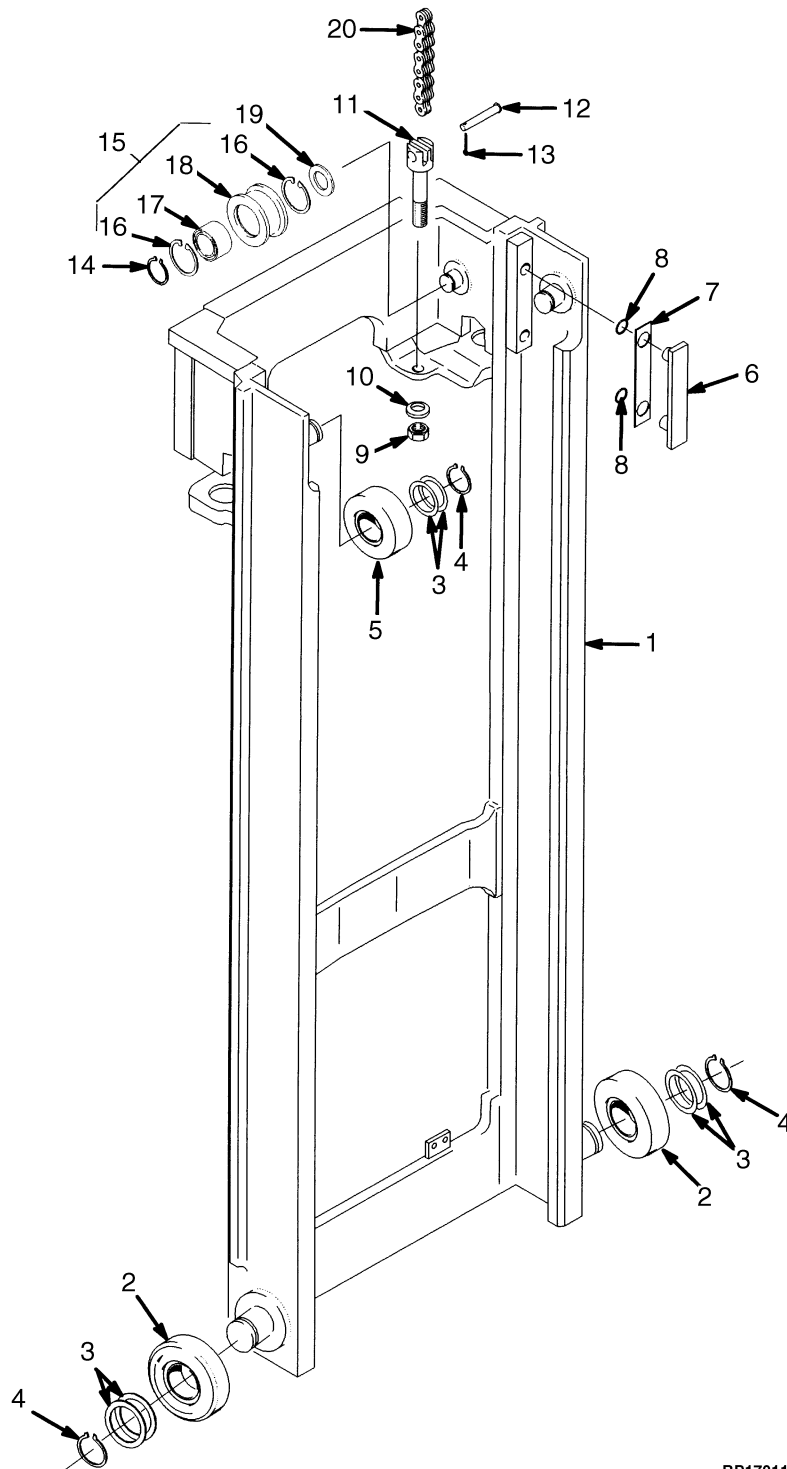
**OUTER MAST
FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Mast Assy	2071068	2071069	2071070
1	Outer Mast	c1524893 d4034862	c1524894 d4034863	c1524895 d4034864
13	Chain	182342	194607	191085

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
1	1345216	Stubshaft	2
2	b 1395168	Load Roller ("A") (111.10/110.84)	2
2	1333396	Load Roller ("B") (111.48/111.22)	2
2	1333397	Load Roller ("C") (112.62/112.36)	2
3	58901	Snap Ring	AR
4	129387	Shim (0.020 in.)	2
5	215212	Wear Strip	2
6	131716	Shim (0.020 in.)	AR
7	104506	O-Ring	4
8	351666	Chain Anchor	2
9	182377	Nut	2
10	182376	Ring	2
11	129339	Pin	2
12	15222	Cotter Pin	2
13	a	Chain	2
14	300982	Bushing	2
15	1375595	Plug	2
16	1502811	Bushing	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear**c** → 12/2009**d** 12/2009 →

INTERMEDIATE 2 MAST (FIGURE 10-2) FOUR STAGE FULL FREE-LIFT



BP170113

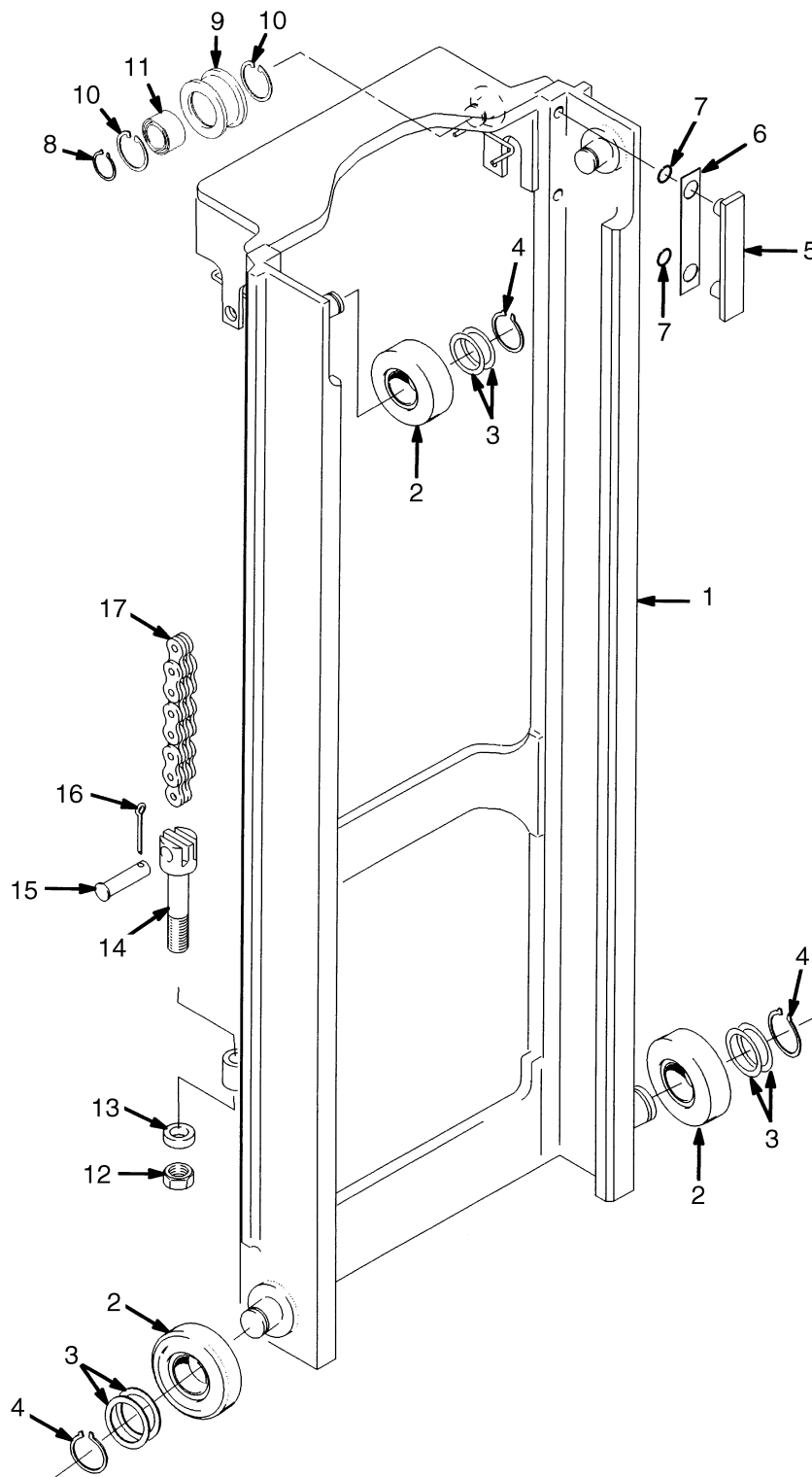
**INTERMEDIATE 2 MAST
FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Mast Assy	2071068	2071069	2071070
1	Intermediate Mast	1591461	1591462	1591463
20	Chain	164474	88441	223389

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Intermediate Mast	1
1	1345216	Stubshaft	2
2	b 1395168	Load Roller ("A") (111.10/110.84)	2
2	1333396	Load Roller ("B") (111.48/111.22)	2
2	1333397	Load Roller ("C") (112.62/112.36)	2
3	129387	Shim (0.020 in.)	AR
4	58901	Snap Ring	4
5	b 1395169	Load Roller ("A") (3.61 in./3.60 in.)	2
5	1333399	Load Roller ("B") (3.63 in./3.62 in.)	2
5	1337900	Load Roller ("C") (3.67 in./3.66 in.)	2
6	215212	Wear Strip	2
7	131716	Shim (0.020 in.)	AR
8	104506	O-Ring	2
9	161003	Nut	2
10	297649	Ring	2
11	1369357	Chain Anchor	2
12	1514866	Pin	2
13	15211	Cotter Pin	2
14	304526	Snap Ring	2
15	1370187	Chain Sheave	2
16	37752	Snap Ring	2
17	231020	Ball Bearing	1
18	1370191	Chain Sheave	1
19	335661	Spacer	2
20	a	Chain	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

INTERMEDIATE 3 MAST (FIGURE 10-3) FOUR STAGE FULL FREE-LIFT



BP170114

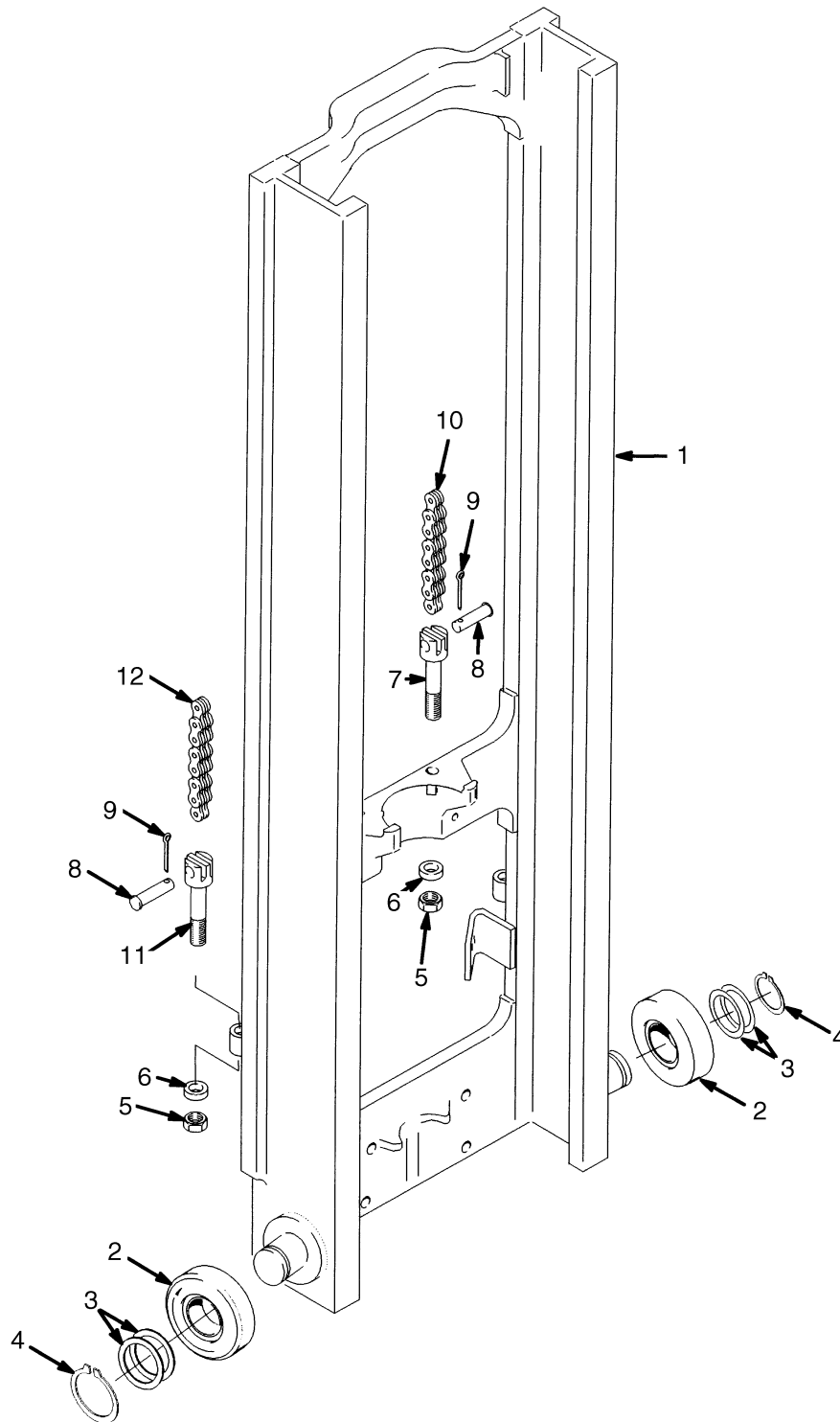
**INTERMEDIATE 3 MAST
FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Mast Assy	2071068	2071069	2071070
1	Intermediate Mast	1370245	1370246	1370247
17	Chain	182342	194607	191085

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
	a	Intermediate Mast	1
1	1345216	Stubshaft	2
2	b 1395168	Load Roller ("A") (111.10/110.84)	4
2	1333396	Load Roller ("B") (111.48/111.22)	4
2	1333397	Load Roller ("C") (112.62/112.36)	4
3	129387	Shim (0.020 in.)	AR
4	58901	Snap Ring	4
5	215212	Wear Strip	2
6	131716	Shim (0.020 in.)	AR
7	104506	O-Ring	2
8	304526	Snap Ring	2
9	1381917	Chain Sheave	2
9	1381913	Chain Sheave	1
10	37752	Snap Ring	1
11	1378699	Ball Bearing	1
12	182377	Nut	2
13	182376	Ring	2
14	356556	Chain Anchor	2
15	129339	Pin	2
16	15222	Cotter Pin	2
17	a	Chain	2

FOOTNOTES:**a** Refer to Table**b** Replace with larger depending on wear

INNER MAST (FIGURE 10-4) FOUR STAGE FULL FREE-LIFT



BP170115

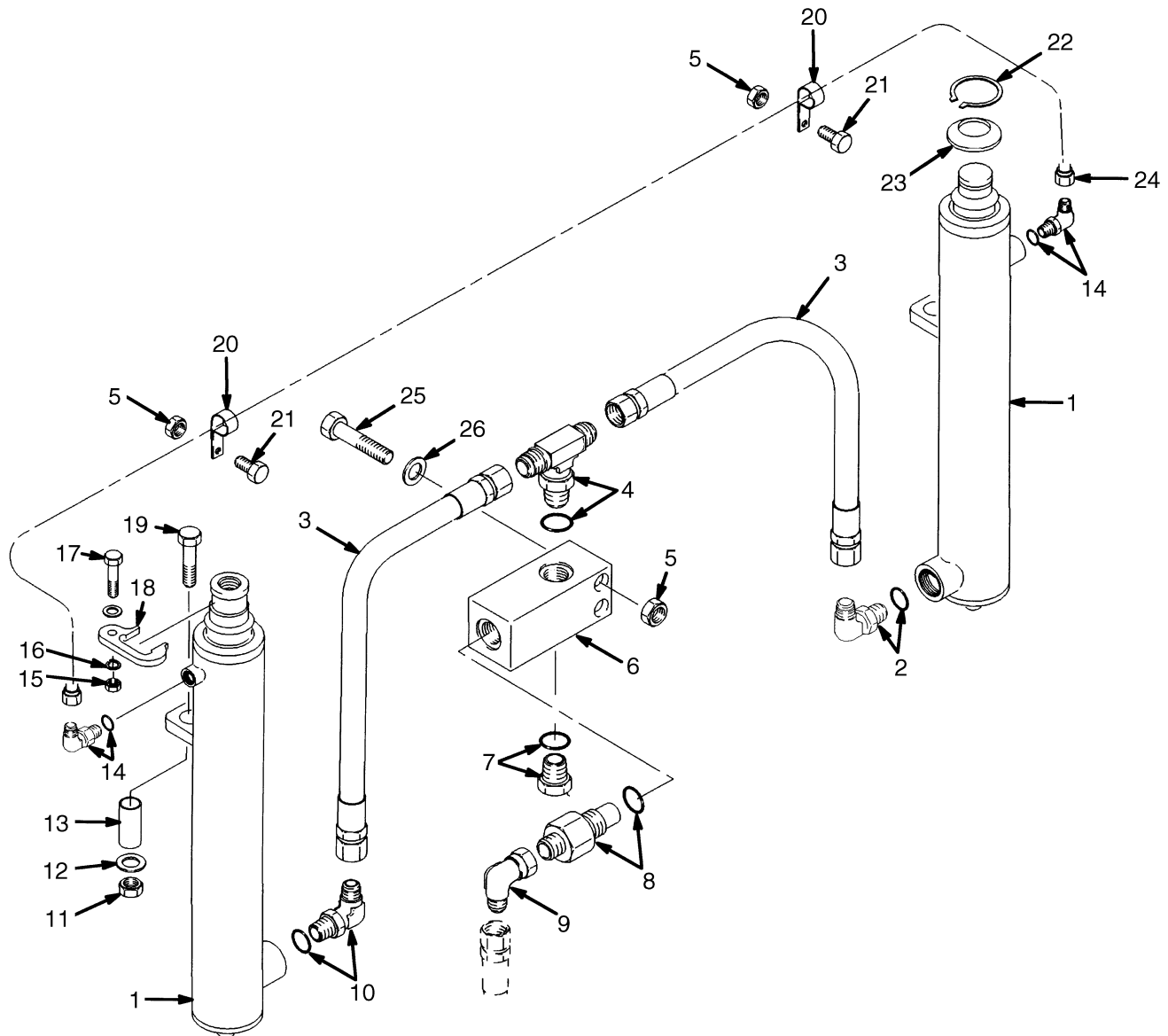
**INNER MAST
FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Mast Assy	2071068	2071069	2071070
1	Inner Mast	1381389	1381390	1381391
10	Chain	182332	180217	164474
12	Chain	182342	194607	191085

ITEM	PART NO.	DESCRIPTION	QTY
	b	Mast Assy	1
1	b	Inner Mast	1
1	1345216	Stubshaft	2
2	c 1395168	Load Roller ("A") (111.10/110.84)	2
2	1333396	Load Roller ("B") (111.48/111.22)	2
2	1333397	Load Roller ("C") (112.62/112.36)	2
3	129387	Shim (0.020 in.)	AR
4	58901	Snap Ring	2
5	161003	Nut	2
6	296426	Washer	2
7	1369357	Chain Anchor	2
7	a 1566564	Cap	2
8	1514866	Pin	2
9	15211	Cotter Pin	2
10	b	Chain	2
11	1365140	Chain Anchor	2
12	b	Chain	2

FOOTNOTES:**a** Not Illustrated**b** Refer to Table**c** Replace with larger depending on wear

MAIN LIFT (FIGURE 10-5) FOUR STAGE FULL FREE-LIFT

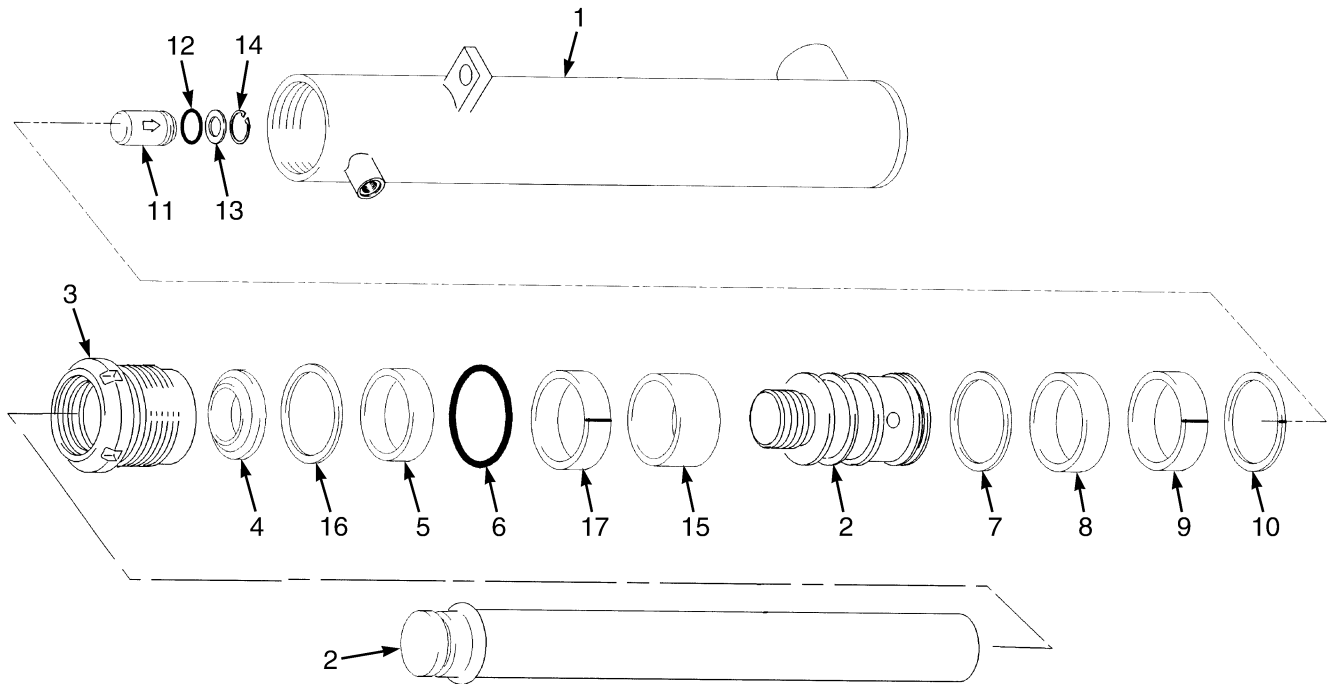


BP170116

**MAIN LIFT
FOUR STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Main Lift Cylinder (LH) (☞ Figure 10-6).....	1
1	.....	Main Lift Cylinder (RH) (☞ Figure 10-7).....	1
2	1482177	Valve	1
2	16485	O-Ring	1
2	1527818	O-Ring	1
3	1481097	Hose Assy	2
4	1532650	Fitting	1
4	16485	O-Ring	1
4	1527818	O-Ring	1
5	1581566	Nut	4
6	1333392	Housing (Lowering Control)	1
7	14603	Plug	1
7	1450764	.....	
	16486	O-Ring	1
8	1481348	Lowering Control Valve (Lowering)	1
8	16982	O-Ring	1
9	1486773	Fitting	1
9	1527818	O-Ring	1
10	16560	Fitting	1
10	16485	O-Ring	1
11	1581849	Nut	2
12	1660415	Spacer (Thin Wall)	2
13	323090	Spacer	2
14	1487059	Fitting	2
14	16483	O-Ring	1
14	1527813	O-Ring	1
15	1581567	Nut	1
16	1581557	Washer	1
17	1598660	Capscrew	1
18	1370420	Keeper	1
19	1581830	Capscrew	2
20	124359	Clamp	2
21	1581581	Capscrew	2
22	194705	Snap Ring	1
23	1370257	Shim (0.010 in.)	AR
23	1370258	Shim (0.030 in.)	AR
23	1370259	Shim (0.060 in.)	AR
24	1482178	Tube Assy	1
25	1581835	Capscrew	2
26	1581556	Washer	2

MAIN LIFT CYLINDER (FIGURE 10-6) LEFT HAND — FOUR STAGE FULL FREE-LIFT



HP170650

MAIN LIFT CYLINDER LEFT HAND — FOUR STAGE FULL FREE-LIFT

D515

ITEM	DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	1 2 3 4			
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Cylinder Group Number	8602705	8602706	8602707
	Cylinder Assy	2308031	2304616	2311126
1	Tube Wldmt- Cylinder	1379005	1379006	1379007
2	Cylinder Rod	1379035	1379036	1379037
15	Spacer	----	2065130	2065131

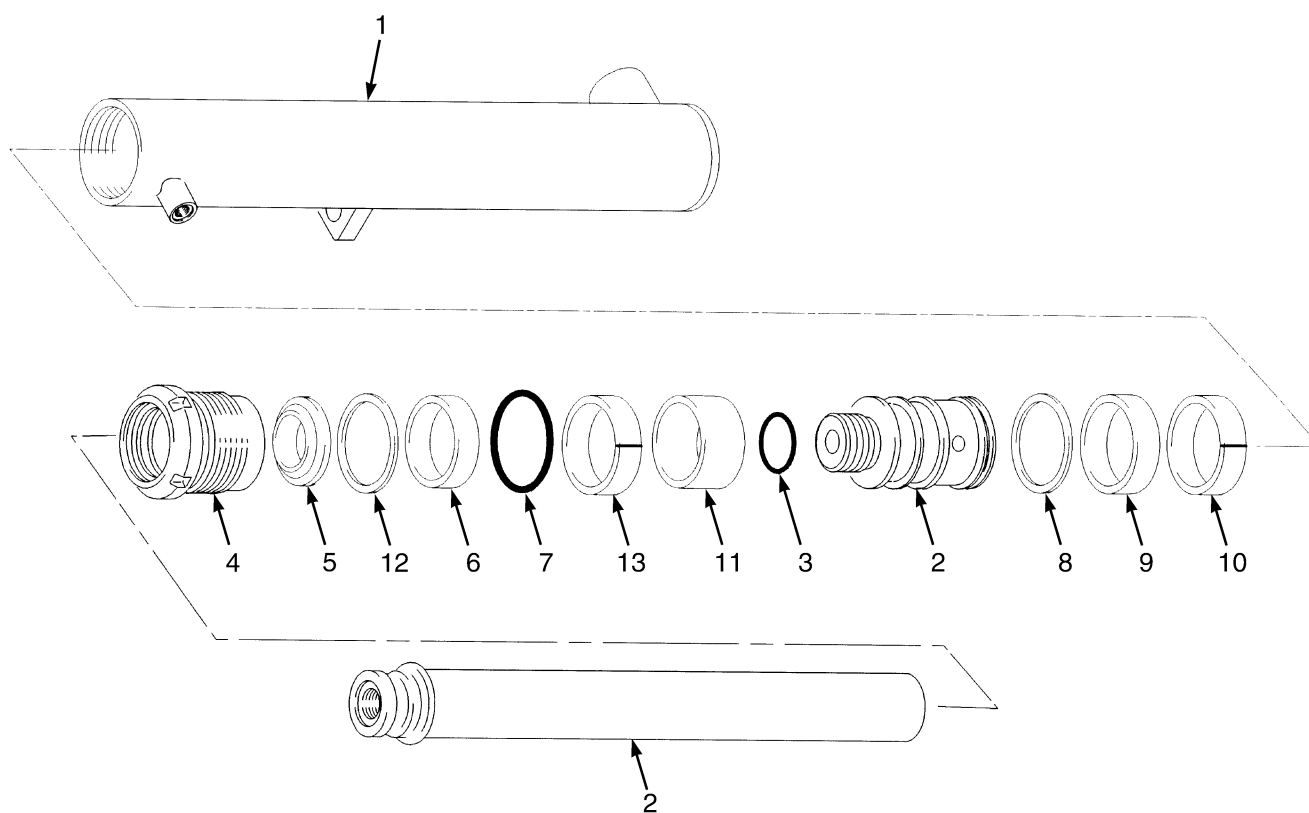
ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	a	Cylinder Rod	1
3	1379062	Gland	1
3	4603822	Gland (Alternate Part)	1
4	2013099	Rod Wiper	1

**MAIN LIFT CYLINDER
LEFT HAND – FOUR STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
5	1358970	Rod Seal	1
6	57664	O-Ring	1
7	638249	Back-Up Ring	1
8	270077	Rod Seal	1
9	1379064	Wear Ring	1
10	1379063	Piston Ring	1
11	257913	Check Valve	1
12	190580	O-Ring	1
13	297531	Washer	1
14	187388	Snap Ring	1
15	a	Spacer	1
16	215928	Back-UP Ring	1
17	334155	Wear Ring	1
	1378724	Kit-Seal	1

FOOTNOTES:**a** Refer to Table

MAIN LIFT CYLINDER (FIGURE 10-7) RIGHT HAND — FOUR STAGE FULL FREE-LIFT



YP170096

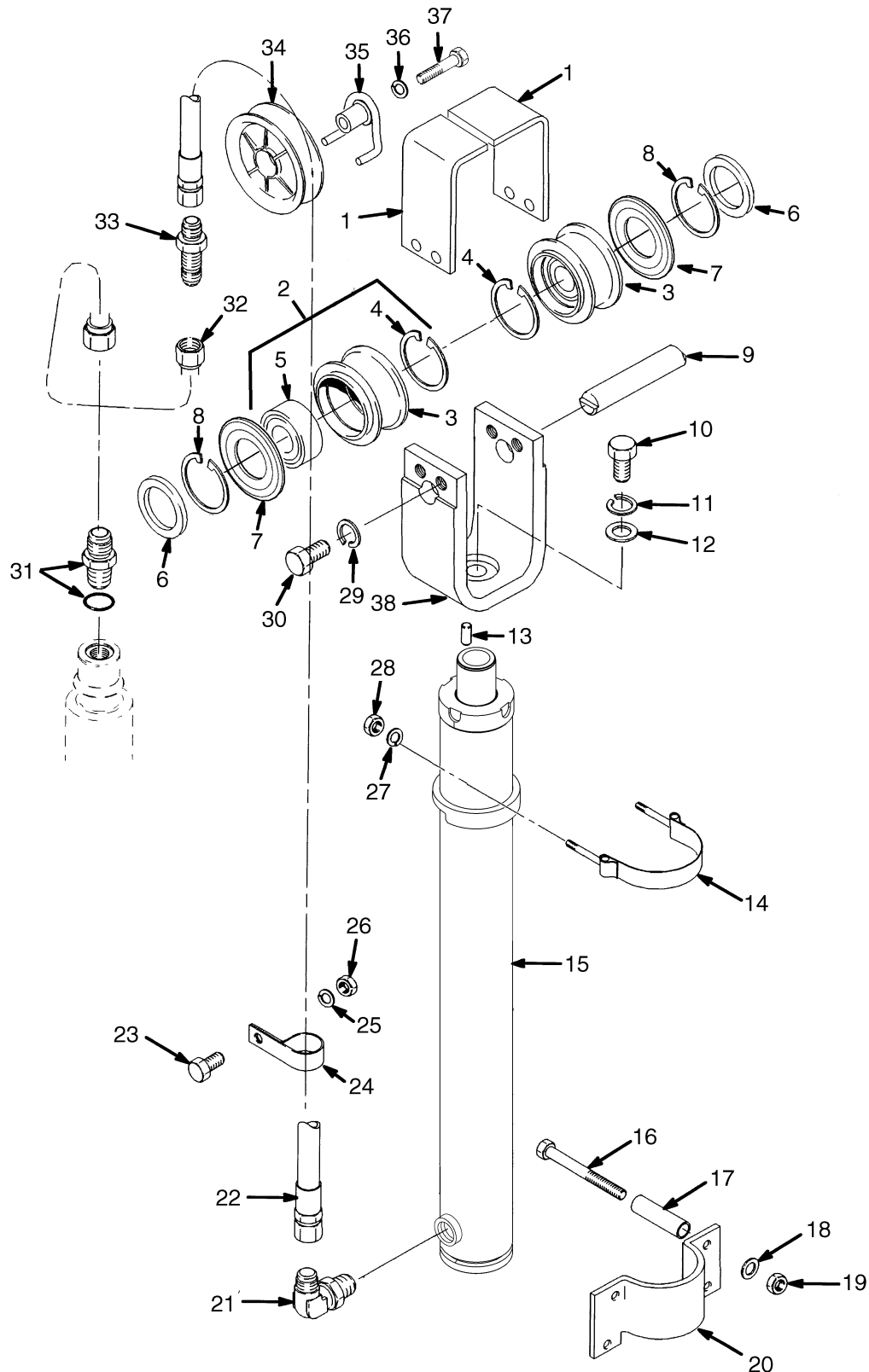
**MAIN LIFT CYLINDER
RIGHT HAND – FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Cylinder Group Number	8602755	8602756	8602757
	Cylinder Assy	2303152	2310629	2307276
1	Tube Wldmt- Cylinder	1379020	1379021	1379022
2	Cylinder Rod	1379050	1379051	1379052
11	Spacer	----	2065130	2065131

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	a	Cylinder Rod	1
3	39348	O-Ring	1
4	1379062	Gland	1
4	4603822	Gland (Alternate Part)	1
5	2013099	Rod Wiper	1
6	1358970	Rod Seal	1
7	57664	O-Ring	1
8	638249	Back-Up Ring	1
9	270077	Rod Seal	1
10	1379064	Wear Ring	1
11	a	Spacer	1
12	215928	Back-UP Ring	1
13	334155	Wear Ring	1
	2304661	Kit-Seal	1

FOOTNOTES:**a** Refer to Table

FREE-LIFT (FIGURE 10-8) FOUR STAGE FULL FREE-LIFT



BP170286

**FREE-LIFT
FOUR STAGE FULL FREE-LIFT****D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
22	Hose Assy	1481595	1481596	1481597

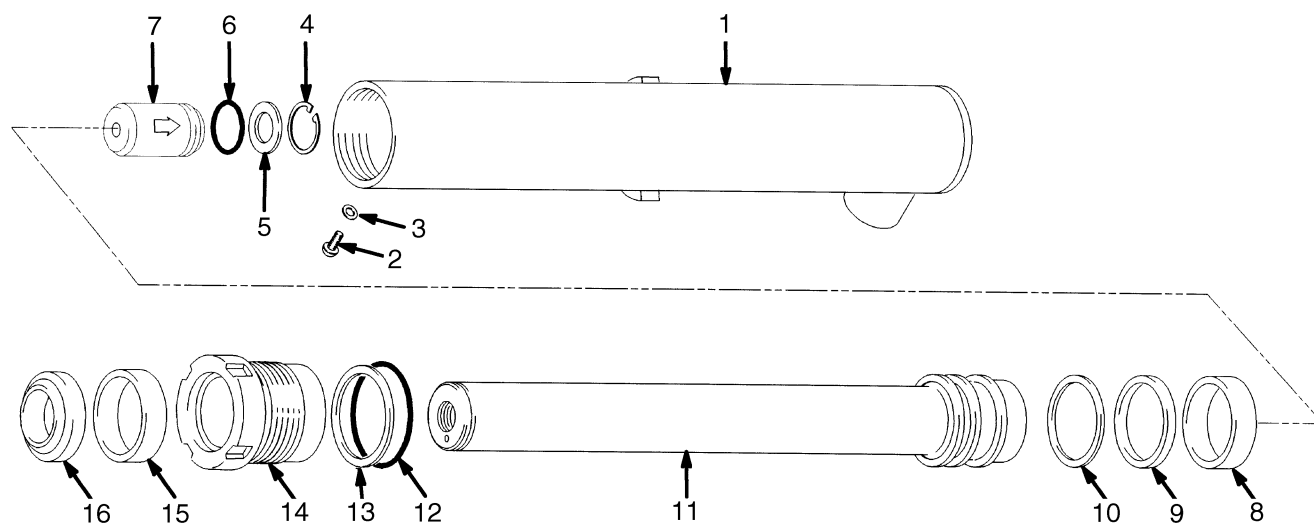
ITEM	PART NO.	DESCRIPTION	QTY
1	1474912	Chain Guard	2
2	1381916	Chain Sheave	2
3	1381915	Chain Sheave	1
4	37752	Snap Ring	1
5	1378699	Ball Bearing	1
6	1381914	Washer (Nylon)	2
7	1370524	Hose Guide	4
8	1345204	Snap Ring (Spiral Retaining Ring)	4
9	1370516	Pin	1
10	1596406	Capscrew	1
11	1596407	Lockwasher	1
12	1596408	Washer	1
13	310549	Pin	1
14	1370194	Strap Clamp	1
15	.....	Free-Lift Cylinder (☞ Figure 10-9).....	1
16	1581593	Capscrew	4
17	1370521	Spacer	4
18	1581559	Washer	4
19	1581849	Nut	4
20	1370576	Clamp	1
21	1482177	Valve (Flow Regulator)	1
21	16485	O-Ring	1
21	252729	O-Ring	1
22	a.....	Hose Assy	1
23	1581581	Capscrew	1
24	178119	Clamp	1
25	1581556	Washer	1
26	1581566	Nut	1
27	1581557	Washer	2
28	1598658	Fitting	2
29	388049		
	292682	Lockwasher	2
30	1598659	Capscrew	2
31	16543	Connector	1
31	4450764		
	16486	O-Ring	1
32	1482179	Hydraulic Tube	1
33	1528574	O-Ring Face Seal Ftg	1
34	309007	Hose Sheave	1
35	1370360	Stubshaft	1

**FREE-LIFT
FOUR STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
36	1581564	Lockwasher	1
36	1581852	Washer (Alternate Part)	1
37	1581592	Capscrew	1
38	1370119	Crosshead	1

FOOTNOTES:

a Refer to Table

FREE-LIFT CYLINDERS (FIGURE 10-9)
FOUR STAGE FULL FREE-LIFT

HP170306

FREE-LIFT CYLINDERS
FOUR STAGE FULL FREE-LIFT**D515**

ITEM	DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	1 2 3 4			
	Mast Group Number	D515 6058	D515 6364	D515 6670
	Cylinder Group Number	8602655	8602656	8602657
	Cylinder Assy	2308770	2306897	2308828
1	Tube Wldmt- Cylinder	1379358	1379359	1379360
11	Cylinder Rod	1379373	1379374	1379375

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	1361302	Screw	1
3	190887	Sealing Ring	1
4	187388	Snap Ring	1
5	297531	Washer	1
6	190580	O-Ring	1
7	297538	Check Valve	1

**FREE-LIFT CYLINDERS
FOUR STAGE FULL FREE-LIFT**

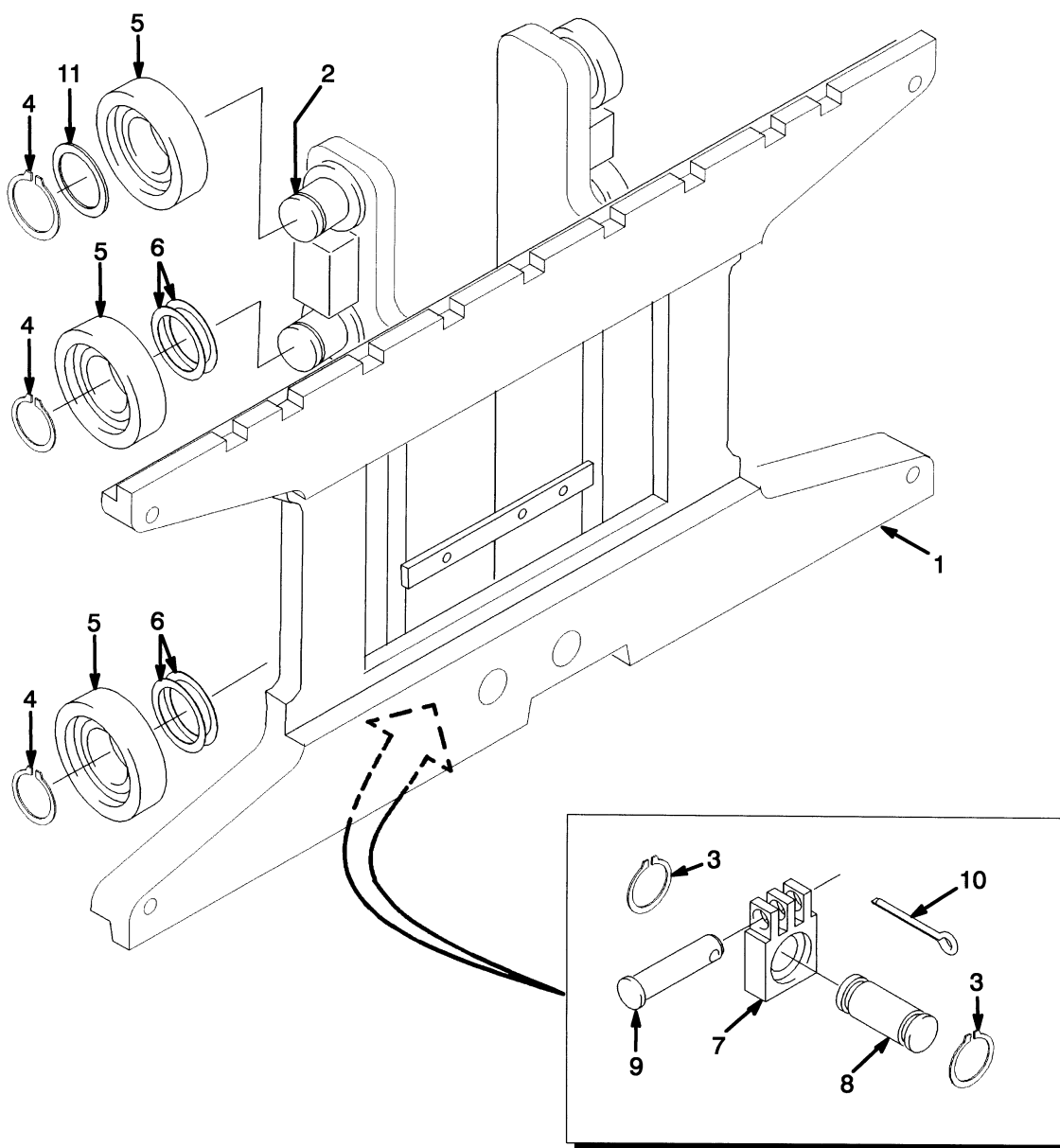
ITEM	PART NO.	DESCRIPTION	QTY
8	1362881	Wear Ring	1
9	201829	Rod Seal	1
10	638250	Back-Up Ring	1
11	a	Cylinder Rod	1
12	55146	O-Ring	1
13	615135	Back-Up Ring	1
14	1362880	Gland	1
15	1358970	Rod Seal	1
15	1622946	Rod Seal (Alternate Part)	1
16	2013099	Rod Wiper	1
16	1463105	Rod Wiper (Alternate Part)	1
	1360141	Kit-Seal	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

CARRIAGE (FIGURE 10-10) FOUR STAGE FULL FREE-LIFT

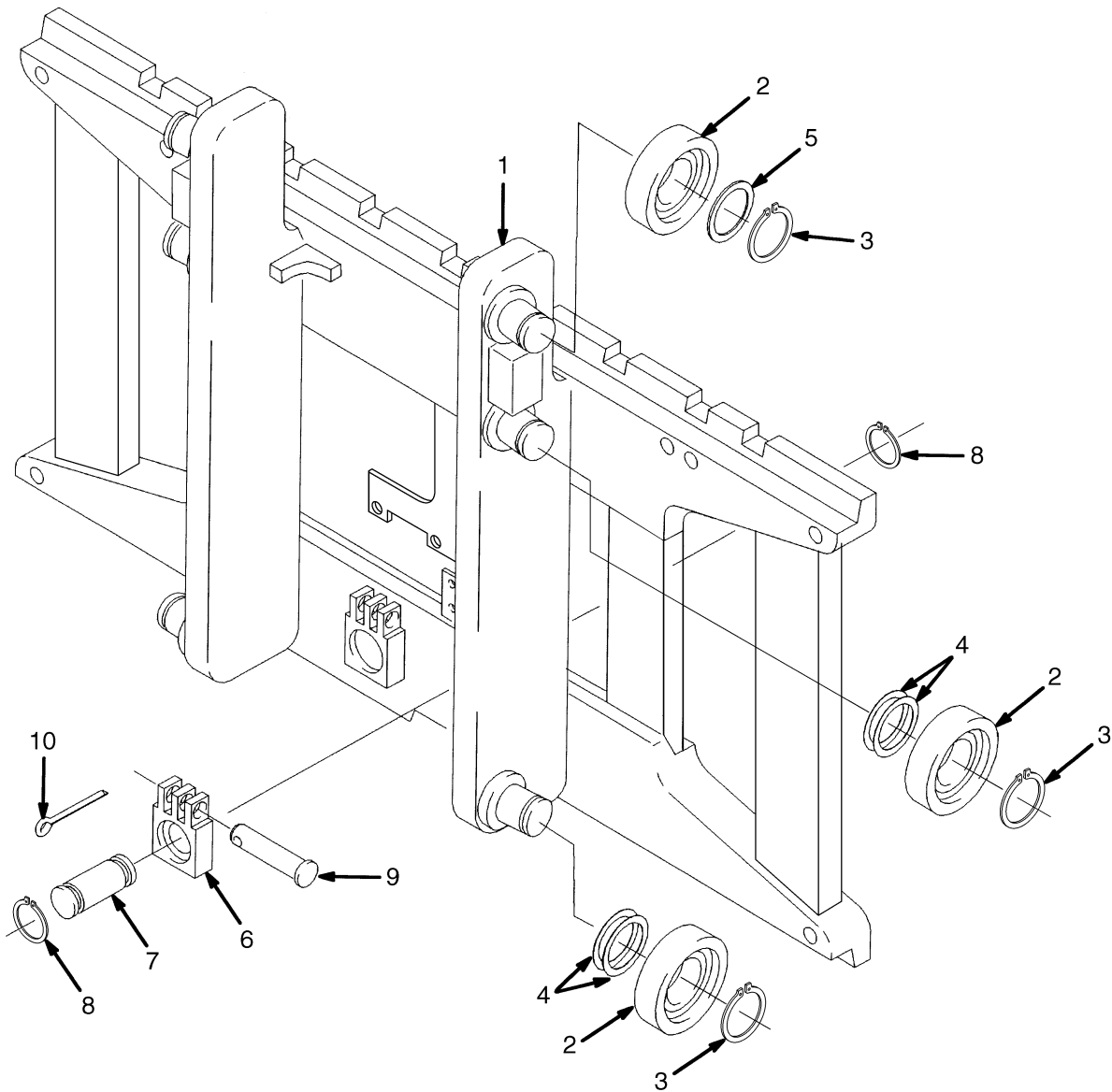


HP170307

**CARRIAGE
FOUR STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	1379467	Carriage	1
1	1381570	Carriage Wldmt	1
2	1345216	Stubshaft	6
3	131358	Snap Ring	4
4	58901	Snap Ring	6
5	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6
6	129387	Shim (0.020 in.)	AR
7	1369345	Chain Anchor (Dual Hole)	2
8	317735	Pin	2
9	1514866	Pin	2
10	15211	Cotter Pin	2
11	366115	Spacer	2

CARRIAGE (FIGURE 10-11) HEAVY DUTY — FOUR STAGE FULL FREE-LIFT

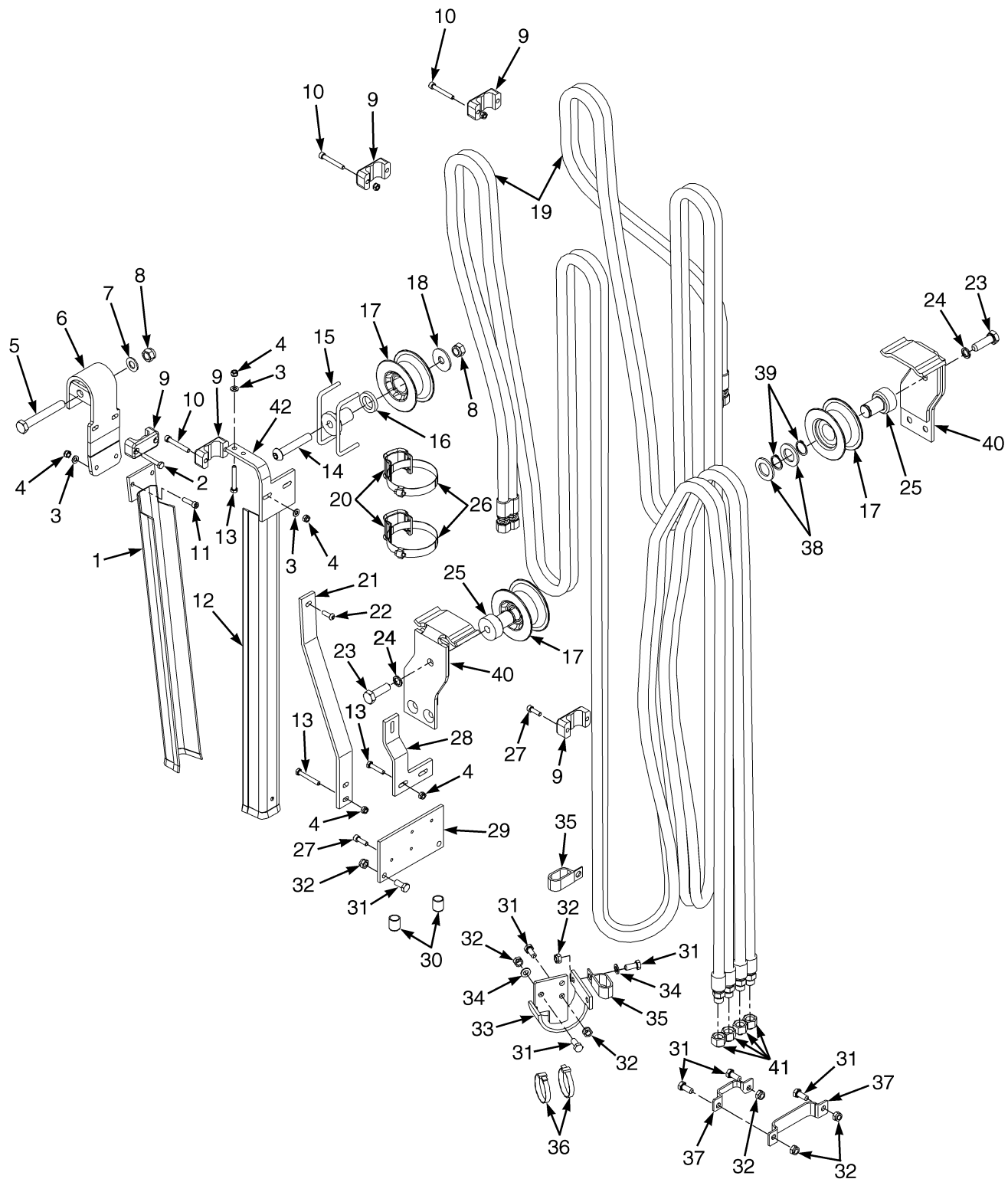


BP170310

CARRIAGE
HEAVY DUTY – FOUR STAGE FULL FREE-LIFT

ITEM	PART NO.	DESCRIPTION	QTY
	2070780	Carriage	1
1	1566773	Carriage Wldmt	1
1	1345264	Stubshaft	6
2	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6
3	58901	Snap Ring	6
4	129387	Shim (0.020 in.)	AR
5	366115	Spacer	2
6	1369345	Chain Anchor (Dual Hole)	2
7	317735	Pin	2
8	131358	Snap Ring	4
9	1514866	Pin	2
10	15211	Cotter Pin	2

HEADER HOSE (FIGURE 10-12) FOUR STAGE FULL FREE-LIFT (→ 12/2009)



BP170427

HEADER HOSE
FOUR STAGE FULL FREE-LIFT (→ 12/2009)**D515**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
1	Channel	1671798	1671799	1671800
12	Channel	1671783	1671784	1671785
19	Hose Assy	2104035	2104036	2104037
37	Hose Clamp	1643405	1643405	1643405

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Channel	1	2
2	1581578	Capscrew	2	2
3	1673754	Washer	12	24
4	1581565	Nut	16	32
5	1597661	Capscrew	1	2
6	1387163	Bracket Wldmt	1	2
7	1581559	Washer	1	2
8	1581849	Nut	2	4
9	1360386	Clamp (Double Hose)	4	8
10	1581843	Capscrew	4	8
11	1581741	Capscrew	2	4
12	a	Channel	1	2
13	1673564	Capscrew	4	8
14	1581838	Capscrew	1	2
15	1360548	Stubshaft (With Guard)	1	2
16	1360549	Spacer	1	2
17	1494017	Hose Sheave	2	4
18	1345190	Washer	1	2
19	a	Hose Assy	1	2
20	1477996	Hose Clamp	2	3
21	1387167	Plate	1	2
22	1683896	Capscrew	2	4
23	1581591	Capscrew	1	2
24	1597696	Metric Washer	1	2
25	1474913	Stubshaft	1	2
26	1569979	Clamp	1	1
27	1581842	Capscrew	2	4
28	1663564	Plate	1	..
28	1387169	Plate	..	1
29	1370469	Plate	1	..

HEADER HOSE

FOUR STAGE FULL FREE-LIFT (→ 12/2009)

KEY:**A:** Three Function**B:** Four Function

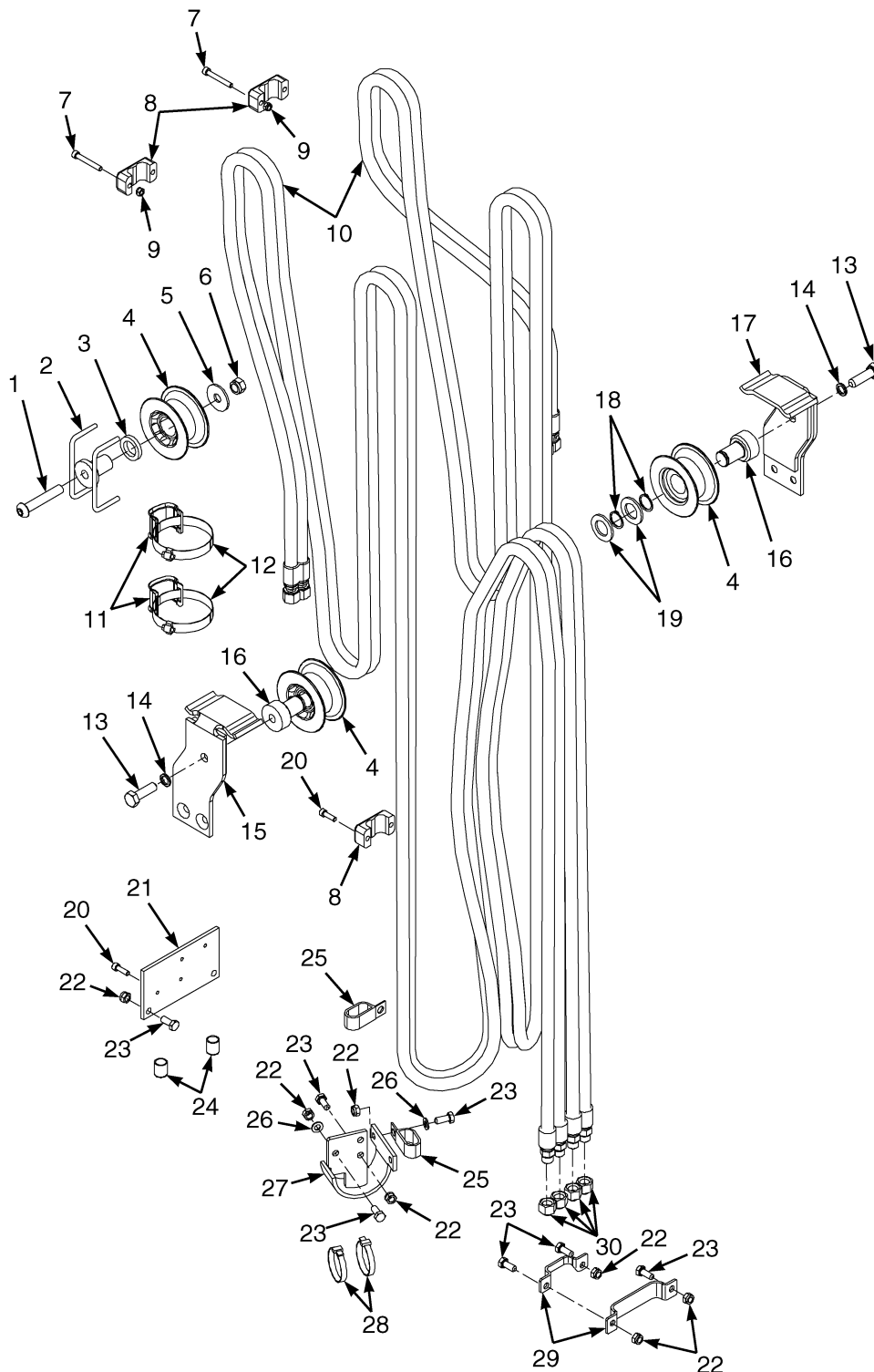
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
30	1566564	Cap	1	1
31	1581580	Capscrew	7	13
32	1581566	Nut	7	13
33	1371947	Bracket Wldmt	1	2
34	1581556	Washer	2	4
35	110322	Clamp	2	4
36	273775	Strap Clamp	2	4
37	a	Hose Clamp	1	..
37	1370470	Hose Clamp	..	1
38	1581560	Washer	1	2
39	58902	Snap Ring	1	2
40	1482729	Guard (LH)	..	1
40	1482726	Guard (RH)	1	..
41	1529015	Cap	2	4
42	1663563	Bracket	1	1
42	1387160	Bracket	..	1

FOOTNOTES:**a** Refer to Table

NOTES

[illegible]

HEADER HOSE (FIGURE 10-13) FOUR STAGE FULL FREE-LIFT — WITH HOSE CHANNELS (12/2009 →)



BP170468

HEADER HOSE

FOUR STAGE FULL FREE-LIFT – WITH HOSE CHANNELS (12/2009 →)

D515

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
10	Hose Assy	2104035	2104036	2104037

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1581838	Capscrew	1	2
2	1360548	Stubshaft (With Guard)	1	2
3	1360549	Spacer	1	2
4	~~1381595~~ 1494017	Hose Sheave	2	4
5	1345190	Washer	1	2
6	1581849	Nut	2	4
7	1654323	Capscrew	4	8
8	1360386	Clamp (Double Hose)	2	4
9	1581565	Nut	8	16
10	b	Hose Assy	1	2
11	1477996	Hose Clamp	2	4
12	1569979	Clamp	2	4
13	1581591	Capscrew	1	2
14	1597696	Metric Washer	1	2
15	1482726	Guard (RH)	1	..
16	1474913	Stubshaft	1	2
17	1482729	Guard (LH)	..	1
18	58902	Snap Ring	1	2
19	1581560	Washer	1	2
20	1581842	Capscrew	3	6
21	1370469	Plate	1	..
22	1581566	Nut	8	16
23	1581580	Capscrew	8	16
24	1566564	Cap	1	2
25	110322	Clamp	2	4
26	1581556	Washer	2	4
27	1371947	Bracket Wldmt	1	2
28	273775	Strap Clamp	2	4
29	1643405	Hose Clamp	1	..
29	1370470	Hose Clamp	..	1
30	1529015	Cap	2	4
	a 1581834	Capscrew	4	8

FOOTNOTES:

a Not Illustrated

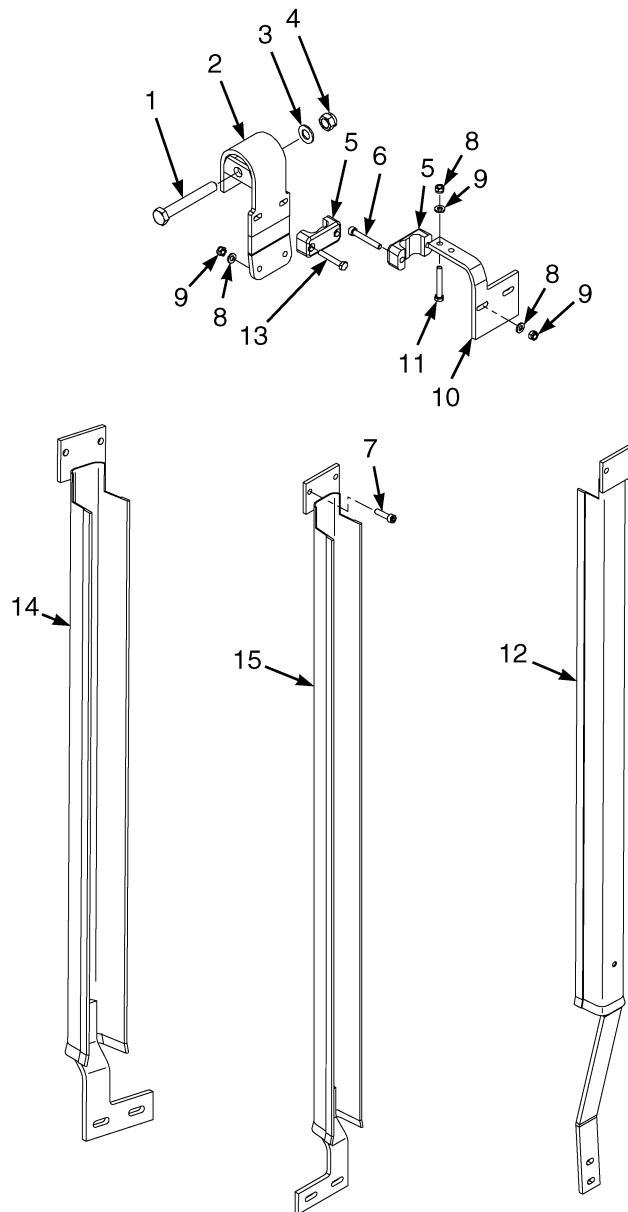
b Refer to Table

NOTES

[illegible]

HOSE CHANNELS (FIGURE 10-14)

HEADER HOSE — FOUR STAGE FULL FREE-LIFT (12/2009 →)



BP170505

HOSE CHANNELS

HEADER HOSE – FOUR STAGE FULL FREE-LIFT (12/2009 →)

D515

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
	Mast Group Number	D515 6058	D515 6364	D515 6670
12	Channel	1671798	1671799	1671800
14	Channel	4012925	4012926	4012927
15	Channel	1671783	1671784	1671785

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1597661	Capscrew	1	2
2	1387163	Bracket Wldmt	1	2
2	4032611	Bracket Wldmt (Alternate Part)	1	1
3	1581559	Washer	1	2
4	1581849	Nut	2	4
5	1360386	Clamp (Double Hose)	2	4
6	1654323	Capscrew	2	4
7	1581741	Capscrew	2	4
8	1581565	Nut	14	28
9	1673754	Washer	10	20
10	1663563	Bracket (RH)	1	..
10	1387160	Bracket (LH)	..	1
11	1673564	Capscrew	2	4
12	a	Channel	1	2
12	1345190	Washer	1	2
13	1581578	Capscrew	4	8
14	a	Channel	..	1
15	a	Channel	1	1

FOOTNOTES:**a** Refer to Table

[illegible]

**SECTION 11
OPTIONS**

DESCRIPTION	PAGE
ACCUMULATOR	
D508/D563 MAST SERIES	11-76
F508/F563 SERIES MAST	11-78
AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES	
THREE STAGE FULL FREE-LIFT - SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION (11/2016 →)	11-58
THREE STAGE FULL FREE-LIFT - DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR FUNCTION (11/2016 →)	11-62
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (DUAL AUXILIARY WITH E- HYDRAULICS)) - THREE AND FOUR FUNCTION (→ 11/2016)	11-60
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH E- HYDRAULICS)) - THREE FUNCTION	11-54
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)) - FOUR FUNCTION (→ 11/2016)	11-56
TWO STAGE LIMITED FREE-LIFT (F507/F562 SERIES MAST) (SINGLE AUXILIARY WITH E- HYDRAULIC) - THREE FUNCTION	11-48
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS) - FOUR FUNCTION	11-50
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (WITH DUAL AUXILIARY WITH E- HYDRAULICS) - THREE AND FOUR FUNCTION	11-52
AUXILIARY TUBE EXTENSIONS	
FOUR STAGE FULL FREE-LIFT (→ S/N D515V05514H)	11-30
FOUR STAGE FULL FREE-LIFT (S/N D515V05515H →)	11-32
FOUR STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS	11-34
TWO AND THREE STAGE FULL FREE-LIFT (→ S/N D508V27242H) (→ S/N D509V02103H) (→ S/N D563V11350H) (→ S/N D564V02121H)	11-20
TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)	11-24
TWO AND THREE STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)	11-26
TWO STAGE LIMITED FREE-LIFT (→ S/N D507V02972H) (→ S/N D562V02053H)	11-6
TWO STAGE LIMITED FREE-LIFT - WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-8
TWO STAGE LIMITED FREE-LIFT - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (→ S/N D507V02972H) (→ S/N D562V02053H)	11-10
TWO STAGE LIMITED FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-12
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-14
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-16
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)	11-18
AUXILIARY TUBE EXTENSIONS ISS ONLY	
FOUR FUNCTION THREE STAGE FULL FREE-LIFT (12/2016 →)	11-46
FOUR FUNCTION, FOUR STAGE FULL FREE-LIFT (12/2016 →)	11-47
FOUR FUNCTION, TWO STAGE FULL FREE-LIFT (12/2016 →)	11-45
FOUR FUNCTION, TWO STAGE LIMITED FREE-LIFT (12/2016 →)	11-44

SECTION 11

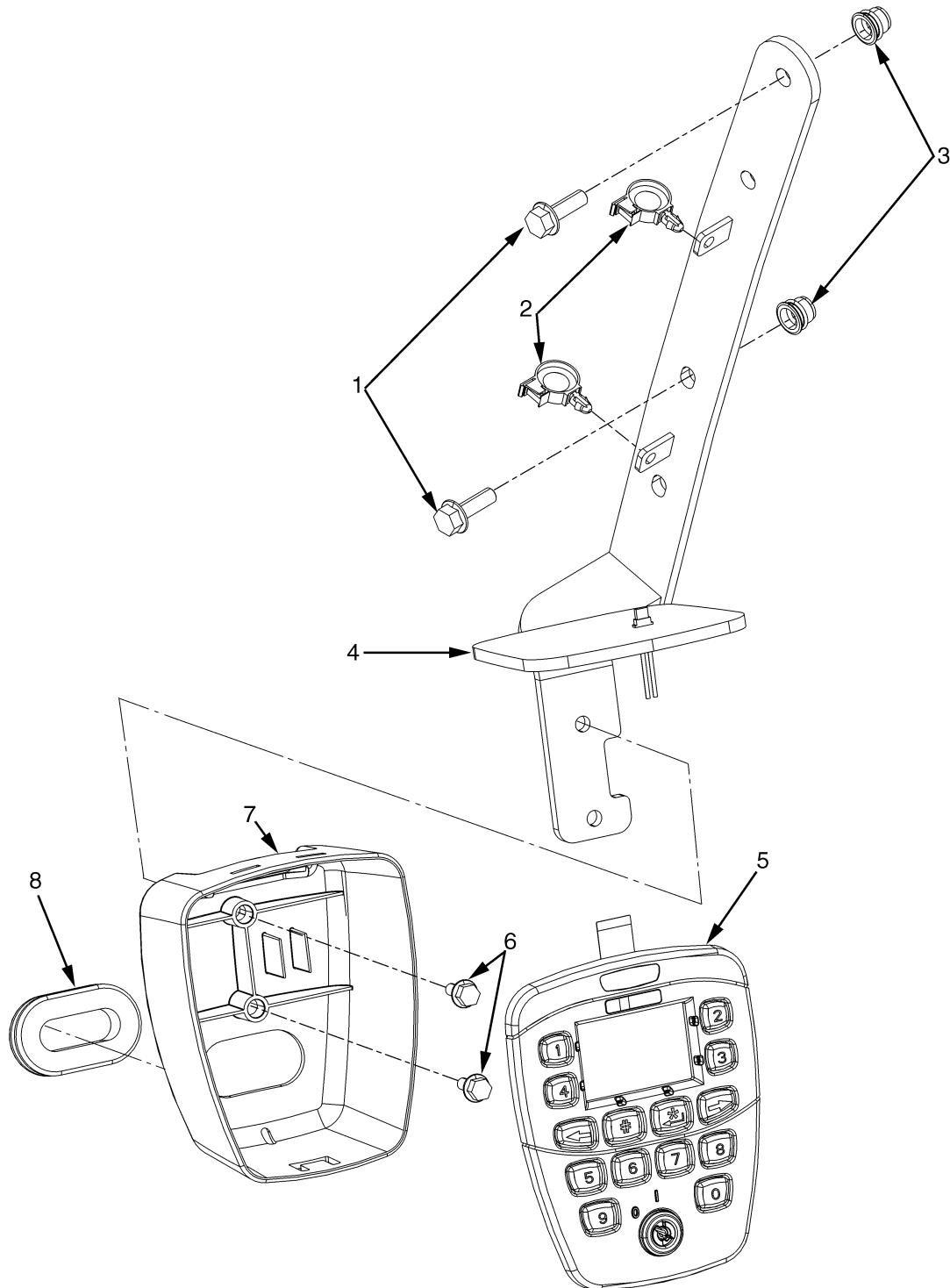
OPTIONS

DESCRIPTION	PAGE
AUXILIARY TUBES	
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT	11-38
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT	11-42
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - WITH MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT	11-36
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - MANUAL AND E-HYDRAULIC VALVE WITH QUICK DISCONNECT	11-40
BACK-UP ALARM	11-74
DC-DC CONVERTER AND ATTACHING PARTS	11-72
DISPLAY	
LOW MOUNT	11-4
DOME LIGHT	11-70
FIRE EXTINGUISHER	
→ 11/2014	11-128
11/2014 →	11-129
WITH DRIVE-IN RACK OVERHEAD GUARD (11/2014 →)	11-130
FORK POSITIONER ASSEMBLY	11-116
FRONT WORKLIGHT MOUNTING	
OVERHEAD GUARD WITH DRIVE-THRU RACK	11-82
IMPACT SENSOR	11-68
INTEGRAL SIDE-SHIFT	
FORK POSITIONER - THREE STAGE FULL FREE-LIFT (D508/D563)	11-108
FORK POSITIONER - TWO STAGE FULL FREE-LIFT (E509/E564)	11-114
FORK POSITIONER (F507-F562) - TWO STAGE LIMITED FREE-LIFT	11-110
FORK POSITIONER (F508-F563) - THREE STAGE FULL FREE-LIFT	11-112
HYDRAULIC HOSES - TWO STAGE LIMITED FREE-LIFT (D507, D562)	11-120
HYDRAULIC HOSES - THREE STAGE FULL FREE-LIFT (D508/D563)	11-121
HYDRAULIC HOSES - TWO STAGE FULL FREE-LIFT	11-122
INTEGRAL SIDE-SHIFT ASSEMBLY	
THREE STAGE FULL FREE-LIFT - F508/F563 (→ 12/2016)	11-104
INTEGRAL SIDE-SHIFT CARRIAGE	
FOUR STAGE FULL FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-99
THREE STAGE FULL FREE LIFT - D508/D563 (→ 12/2016)	11-102
THREE STAGE FULL FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-106
TWO AND FOUR STAGE FULL FREE-LIFT (→ 12/2016)	11-94
TWO STAGE FULL FREE- LIFT - 977 MM 38.5 IN (12/2016 →)	11-97
TWO STAGE LIMITED FREE-LIFT - 977 MM 38.5 IN (12/2016 →)	11-92
INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY	
TWO STAGE LIMITED FREE LIFT - D507/D562 (→ 12/2016)	11-88
TWO STAGE LIMITED FREE-LIFT - F507/F562 (→ 12/2016)	11-90
INTEGRAL SIDE-SHIFT CYLINDER	
→ 12/2016	11-118
ROD ASSEMBLY (12/2016 →)	11-119
INTEGRAL SIDE-SHIFT HYDRAULIC HOSE	
FOUR STAGE FULL FREE-LIFT	11-123
INTEGRAL SIDE-SHIFT HYDRAULIC HOSES	
THREE STAGE FULL FREE LIFT - F508/F563	11-125

**SECTION 11
OPTIONS**

DESCRIPTION	PAGE
TWO STAGE LIMITED FREE-LIFT - F507/F562	11-124
MIRROR	
PANORAMIC	11-66
MIRRORS	11-64
WITH DRIVE-THRU RACK OVERHEAD GUARD	11-65
REAR DRIVE HANDLE	11-67
REAR WORK AND TAIL LIGHT MOUNTING	
DRIVE-THRU OVERHEAD GUARD	11-84
STROBE LIGHT	
LED	11-86
TAIL LIGHT MOUNTING	
OVERHEAD GUARD WITH DRIVE THRU RACK	11-80
WIRE HARNESS	
FRONT SWITCH	11-127
INTERFACE FRONT/REAR LIGHTS	11-126

DISPLAY (FIGURE 11-1) LOW MOUNT



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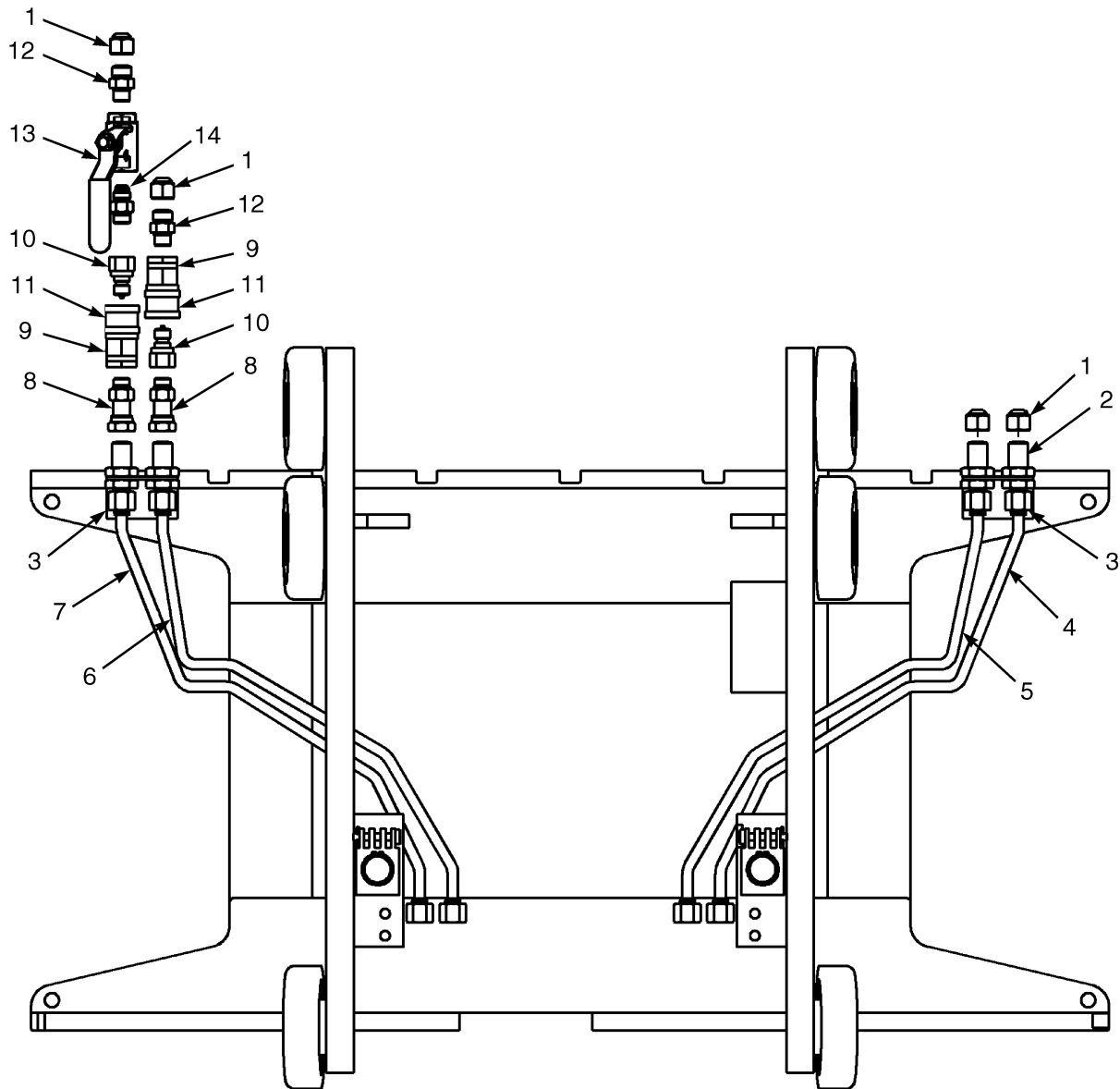
**DISPLAY
LOW MOUNT**

ITEM	PART NO.	DESCRIPTION	QTY
1	1510113	Capscrew	2
2	1402815	Clip	2
3	1531557	Insert	2
4	4010035		
	4024512	Bracket Wldmt	1
5	2094578	Display , Standard	1
6	1527876	Capscrew	2
7	2105726	Cover , Display	1
8	1539584	Grommet	1
	a 1337197	Key Set	1

FOOTNOTES:**a** Not Illustrated

AUXILIARY TUBE EXTENSIONS (FIGURE 11-2)

TWO STAGE LIMITED FREE-LIFT (→ S/N D507V02972H) (→ S/N D562V02053H)



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AUXILIARY TUBE EXTENSIONS

TWO STAGE LIMITED FREE-LIFT (→ S/N D507V02972H) (→ S/N D562V02053H)

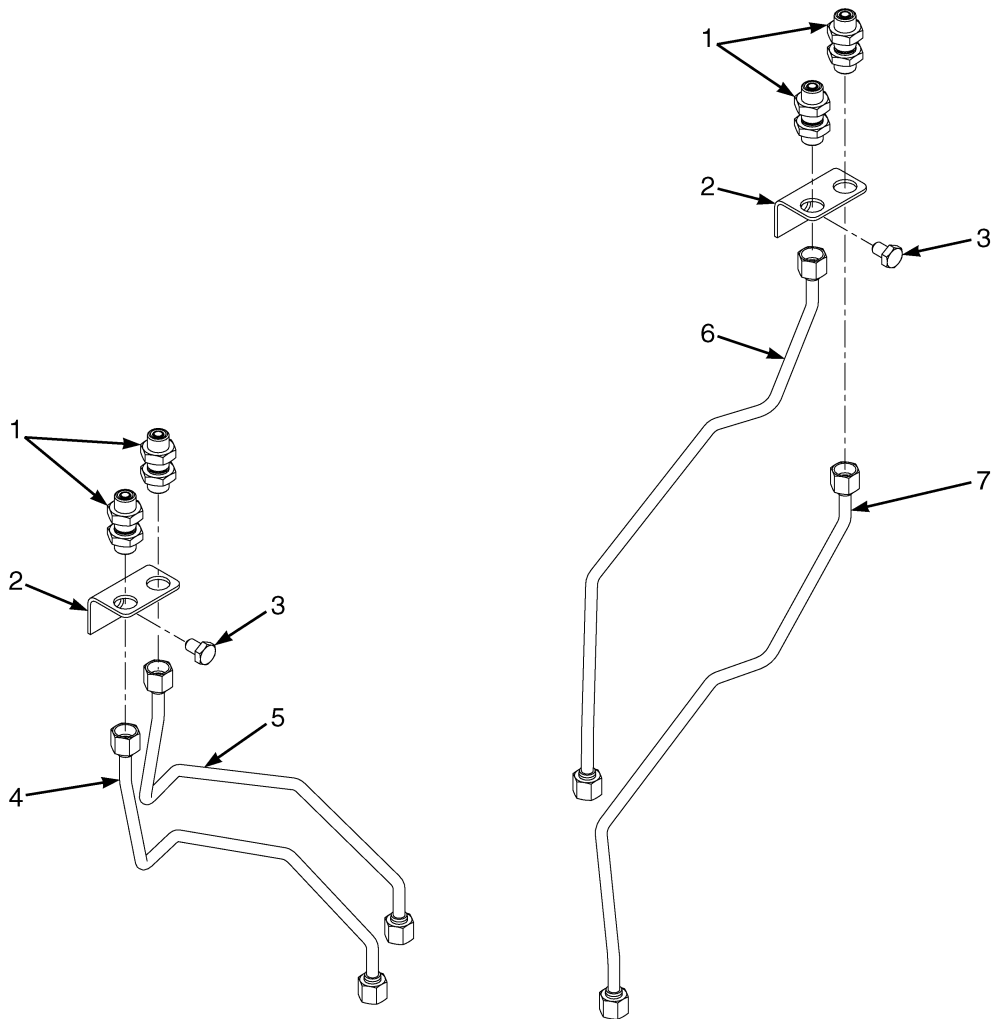
KEY:**A:** D507, Three Function**B:** D507, Four Function**C:** D562, Three Function**D:** D562, Four Function

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529015	Cap	2	2	2	2
2	a 1528573	Fitting	2	2	2	2
2	265787	O-Ring	2	2	2	2
3	b 1550070	Bracket	2	2	2	2
3	c 1696635	Bracket (Bolted on)	2	2	2	2
3	c 4109993					
	1527879	Capscrew	4	4	4	4
4	2074400	Tube Assy	1	..	..	..
4	2074404	Tube Assy	..	..	1	..
5	2074401	Tube Assy	1	..	..	..
5	2074405	Tube Assy	..	..	1	..
6	2074402	Tube Assy	..	1	..	..
6	2074406	Tube Assy	..	..	..	1
7	2074403	Tube Assy	..	1	..	..
7	2074407	Tube Assy	..	..	..	1
8	1549715	Fitting	2	2	2	2
8	265787	O-Ring	2	2	2	2
8	1527813	O-Ring	2	2	2	2
9	1483663	Quick Disconnect Fitting	2	2	2	2
10	1483664	Fitting	2	2	2	2
11	1483661	Dust Cap	2	2	2	2
12	1486740	Fitting	2	2	2	2
12	1527813	O-Ring	1	1	1	1
12	265787	O-Ring	1	1	1	1
13	2081418	Drain Valve	1	1	1	1
14	16540	Connector	1	1	1	1
14	16483	O-Ring	1	1	1	1

FOOTNOTES:**a** Used without quick disconnect fittings**c** 11/2009 →**b** → 11/2009

AUXILIARY TUBE EXTENSIONS (FIGURE 11-3)

TWO STAGE LIMITED FREE-LIFT — WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →)
(S/N D562V02054H →)



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AUXILIARY TUBE EXTENSIONS

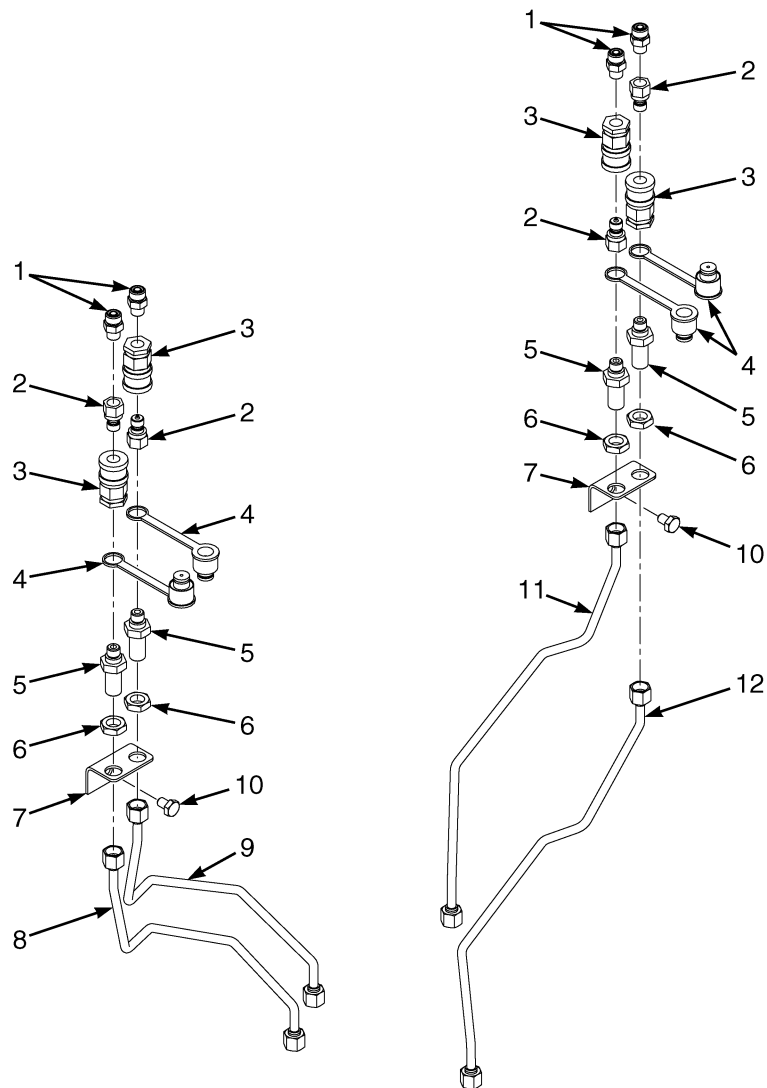
**TWO STAGE LIMITED FREE-LIFT – WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →)
(S/N D562V02054H →)**

KEY:**A: D507 3 Function****B: D507 4 Function****C: D562 3 Function****D: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1528573	Fitting	1	2	1	2
2	1550070	Bracket	1	2	1	2
3	1658934	Capscrew	1	2	1	2
4	2074403	Tube Assy	..	1	..	..
4	2074407	Tube Assy	..	..	..	1
5	2074402	Tube Assy	..	1	..	..
5	2074406	Tube Assy	..	..	..	1
6	2074401	Tube Assy	1	1	..	..
6	2074405	Tube Assy	..	..	1	1
7	2074400	Tube Assy	1	1	..	..
7	2074404	Tube Assy	..	..	1	1

AUXILIARY TUBE EXTENSIONS (FIGURE 11-4)

TWO STAGE LIMITED FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (→ S/N D507V02972H) (→ S/N D562V02053H)



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AUXILIARY TUBE EXTENSIONS**TWO STAGE LIMITED FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS**

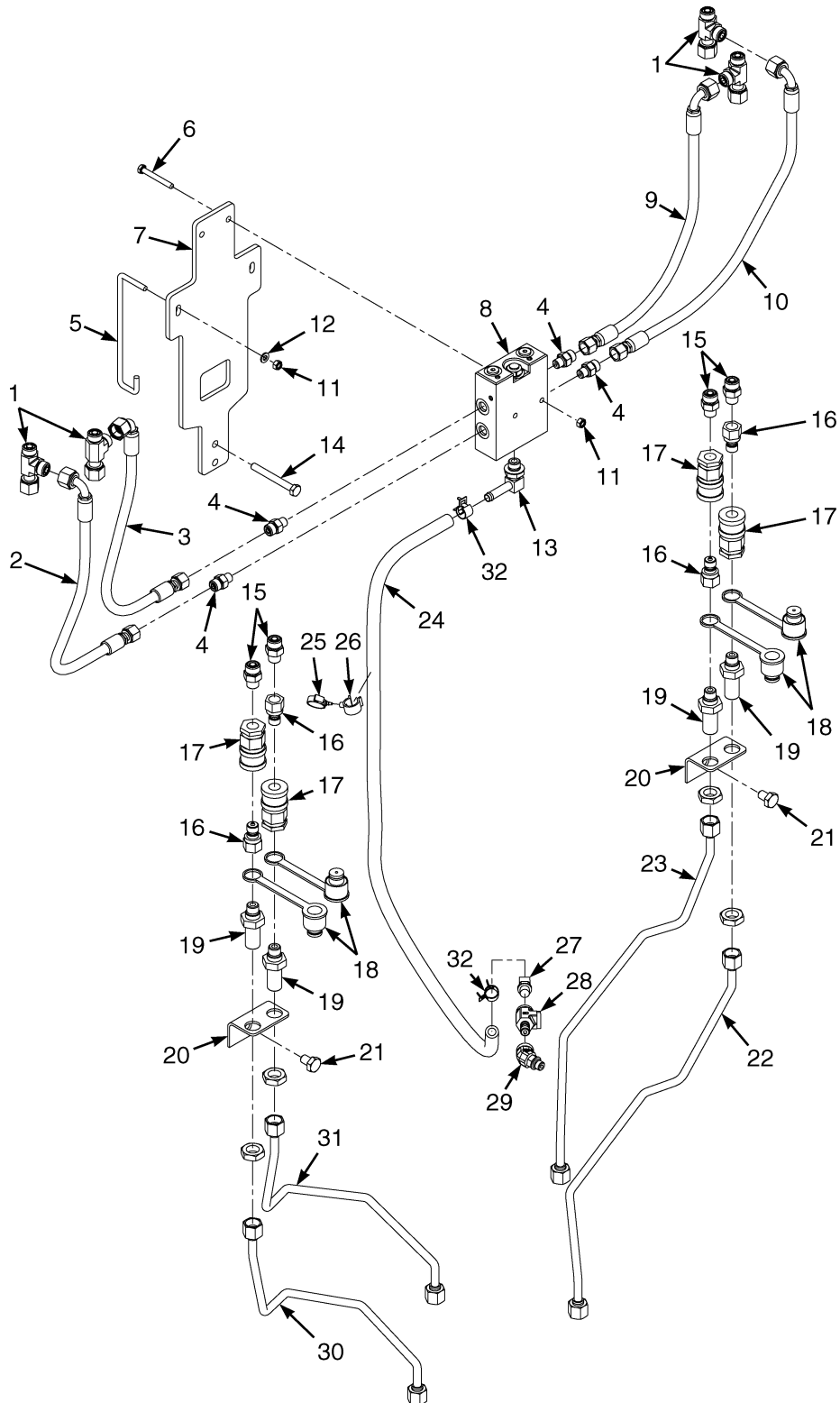
(→ S/N D507V02972H) (→ S/N D562V02053H)

KEY:**A: D507 3 Function****B: D507 4 Function****C: D562 3 Function****D: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1486740	Fitting	2	4	2	4
2	1483664	Fitting (Quick Disconnect)	2	4	2	4
3	1483663	Quick Disconnect Fitting	2	4	2	4
4	1483661	Dust Cap	2	4	2	4
5	1708364	Bulkhead (Fitting)	2	4	2	4
6	1528602	Locknut	2	4	2	4
7	1550070	Bracket	1	2	1	2
8	2074407	Tube Assy	..	..	..	1
8	2074403	Tube Assy	..	1	..	..
9	2074406	Tube Assy	..	..	..	1
9	2074402	Tube Assy	..	1	..	..
10	1658934	Capscrew	1	2	1	2
11	2074405	Tube Assy	..	..	1	1
11	2074401	Tube Assy	1	1	..	..
12	2074404	Tube Assy	..	..	1	1
12	2074400	Tube Assy	1	1	..	..

AUXILIARY TUBE EXTENSIONS (FIGURE 11-5)

TWO STAGE LIMITED FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)



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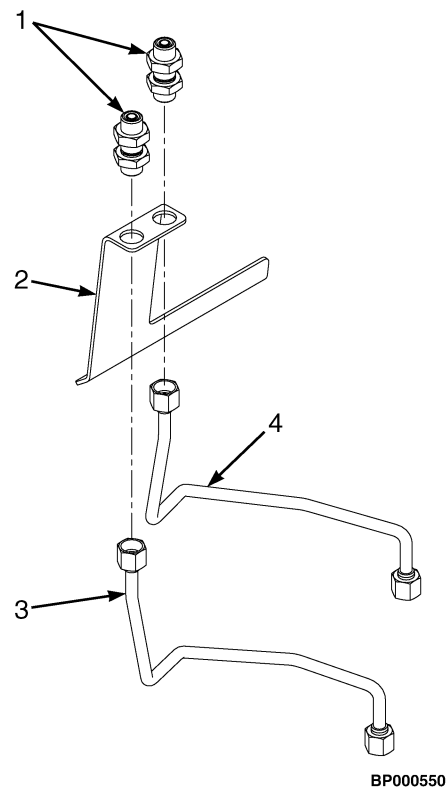
AUXILIARY TUBE EXTENSIONS
TWO STAGE LIMITED FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS
(S/N D507V02973H →) (S/N D562V02054H →)

KEY:**A: D507 3 Function****B: D507 4 Function****C: D562 3 Function****D: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting	2	4	2	4
2	4604683	Hose Assy	..	1	..	1
3	4604565	Hose Assy	..	1	..	1
4	1486737	Fitting	2	4	2	4
5	4016313	Hook	2	2	2	2
6	292505	Capscrew	2	2	2	2
7	4013928	Bracket	1	1	1	1
8	2111754	Valve (Single Auxiliary)	1	..	1	..
8	2111755	Valve (Dual Auxiliary)	..	1	..	1
9	4604566	Hose Assy	1	1	1	1
10	4604564	Hose Assy	1	1	1	1
11	~~1512440~~					
	302399	Nut	4	4	4	4
12	1673754	Washer	2	2	2	2
13	17221	Fitting	1	1	1	1
14	1581836	Capscrew	2	2	2	2
15	1486740	Fitting	2	4	2	4
16	1483664	Fitting (Quick Disconnect)	2	4	2	4
17	1483663	Quick Disconnect Fitting	2	4	2	4
18	1483661	Dust Cap	2	4	2	4
19	1708364	Bulkhead (Fitting)	2	4	2	4
20	1550070	Bracket	1	2	1	2
21	1658934	Capscrew	1	2	1	2
22	2074400	Tube Assy	1	1	..	..
22	2074404	Tube Assy	..	..	1	1
23	2074401	Tube Assy	1	1	..	..
23	2074405	Tube Assy	..	..	1	..
24	1688347	Adapter	1	1	1	1
25	1644398	Clamp (Swivel)	1	1	1	1
26	1606544	Clamp (Swivel)	1	1	1	1
27	222500	Fitting	1	1	1	1
28	.....	Fitting	1	1	1	1
29	1688347	Adapter	1	1	1	1
30	2074403	Tube Assy	..	1	..	..
30	2074407	Tube Assy	..	..	..	7
31	2074402	Tube Assy	..	1	..	..
31	2074406	Tube Assy	..	..	..	1
32	1569616	Hose Clamp	2	2	2	2

AUXILIARY TUBE EXTENSIONS (FIGURE 11-6)

TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS
(S/N D507V02973H →) (S/N D562V02054H →)



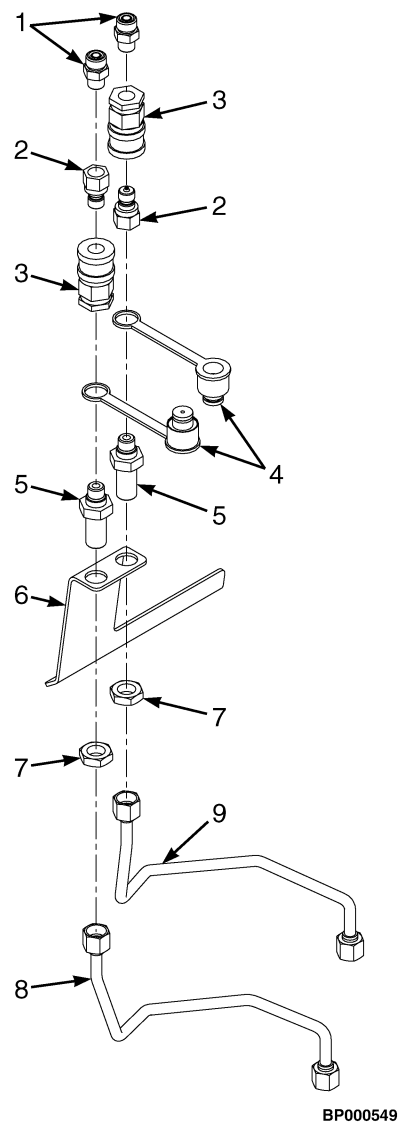
AUXILIARY TUBE EXTENSIONS

TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS
(S/N D507V02973H →) (S/N D562V02054H →)

KEY:**A: D507 4 Function****B: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1528573	Fitting	2	2
2	1549718	Bracket	1	..
2	1549724	Bracket	..	1
3	2074403	Tube Assy	1	..
3	2074407	Tube Assy	..	1
4	2074402	Tube Assy	1	..
4	2074406	Tube Assy	..	1

AUXILIARY TUBE EXTENSIONS (FIGURE 11-7)
TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)

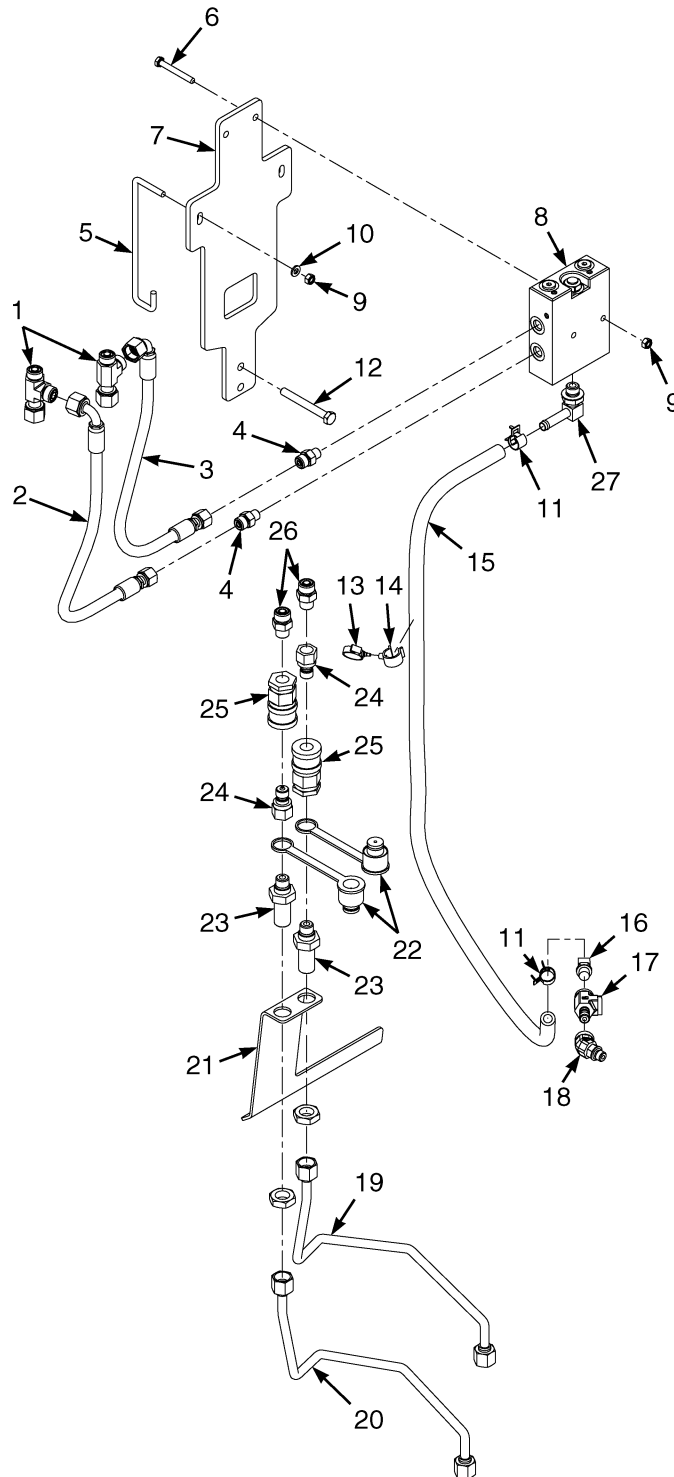


AUXILIARY TUBE EXTENSIONS**TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK
DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)****KEY:****A: D507 4 Function****B: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1486740	Fitting	2	2
2	1483664	Fitting (Quick Disconnect)	2	2
3	1483663	Quick Disconnect Fitting	2	2
4	1483661	Dust Cap	2	2
5	1708364	Bulkhead (Fitting)	2	2
6	1549718	Bracket	1	1
7	1528602	Locknut	2	2
8	2074403	Tube Assy	1	..
8	2074407	Tube Assy	..	1
9	2074402	Tube Assy	1	..
9	2074406	Tube Assy	..	1

AUXILIARY TUBE EXTENSIONS (FIGURE 11-8)

TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)

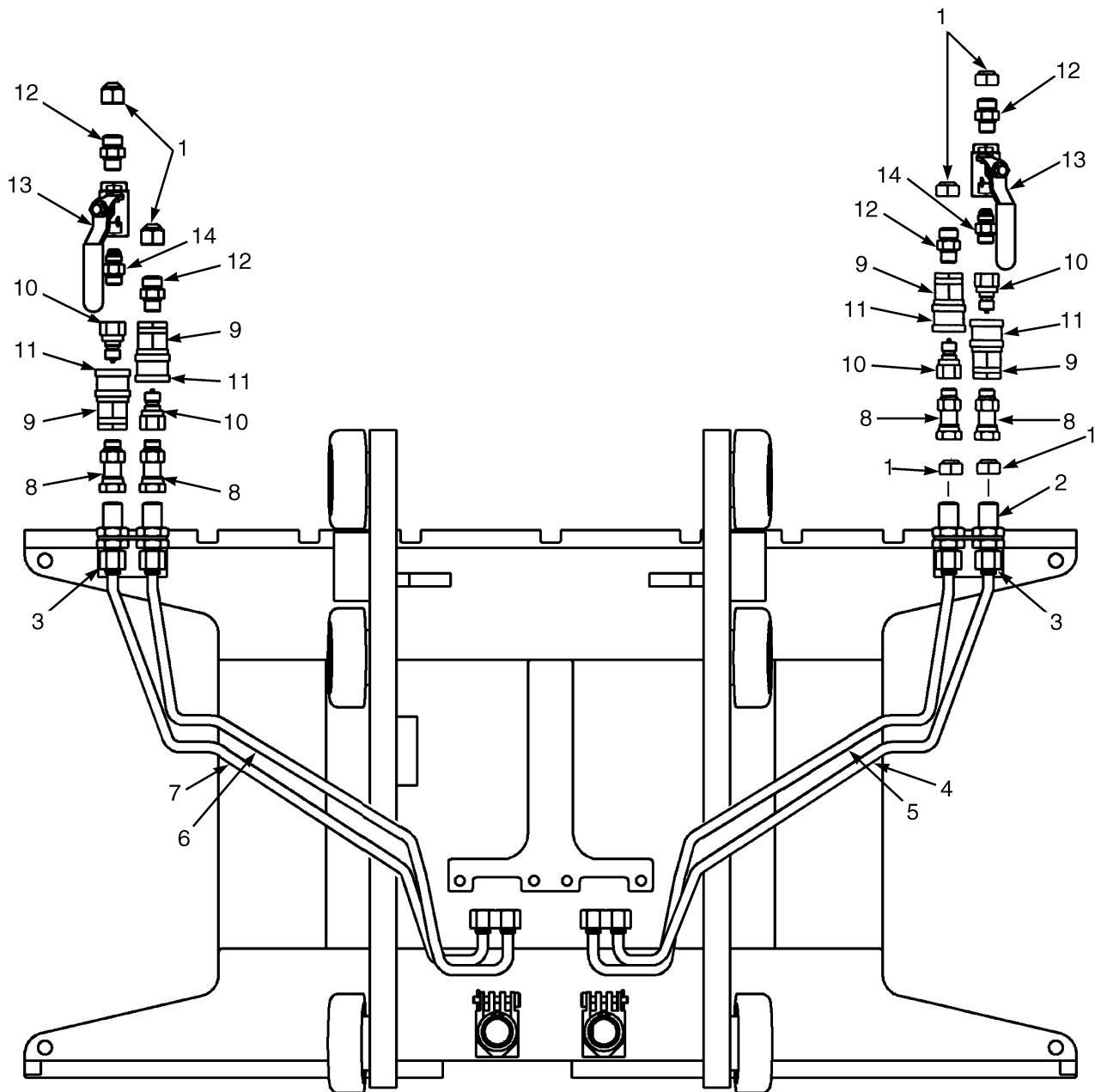


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AUXILIARY TUBE EXTENSIONS**TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT
FITTINGS (S/N D507V02973H →) (S/N D562V02054H →)****KEY:****A: D507 4 Function****B: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1487095	Fitting	2	2
2	4604683	Hose Assy	1	1
3	4604683	Hose Assy	1	1
4	1486737	Fitting	2	2
5	4016313	Hook	2	2
6	292505	Capscrew	2	2
7	4013928	Bracket	1	1
8	2111754	Valve (Single Auxiliary)	1	1
9	1512440			
	302399	Nut	4	4
10	1673754	Washer	2	2
11	1569616	Hose Clamp	2	2
12	1581836	Capscrew	2	2
13	1644398	Clamp (Swivel)	1	1
14	1606544	Clamp (Swivel)	1	1
15	85767	Hose	1	1
16	222500	Fitting	1	1
17	.....	Fitting	1	1
18	1688347	Adapter	1	1
19	2074402	Tube Assy	1	..
19	2074406	Tube Assy	..	1
20	2074403	Tube Assy	1	..
20	2074407	Tube Assy	..	1
21	1549724	Bracket	1	1
22	1483661	Dust Cap	2	2
23	1708364	Bulkhead (Fitting)	2	2
23	1528602	Locknut	2	2
24	1483664	Fitting (Quick Disconnect)	2	2
25	1483663	Quick Disconnect Fitting	2	2
26	1486740	Fitting	2	2
27	17221	Fitting	1	1

AUXILIARY TUBE EXTENSIONS (FIGURE 11-9)
TWO AND THREE STAGE FULL FREE-LIFT (→ S/N D508V27242H) (→ S/N D509V02103H)
(→ S/N D563V11350H) (→ S/N D564V02121H)



AUXILIARY TUBE EXTENSIONS

**TWO AND THREE STAGE FULL FREE-LIFT (→ S/N D508V27242H) (→ S/N D509V02103H)
(→ S/N D563V11350H) (→ S/N D564V02121H)**

KEY:**A: D508, D509 Three Function, Class 2****B: D508, D509 Four Function, Class 2****C: D563, D564 Three Function, Class 3****D: D563, D564 Four Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529015	Cap	2	4	2	4
2	d 1528573	Fitting	2	4	2	4
3	c e 1550070	Bracket (LH)	1	1	1	1
3	f 1696635	Bracket (Bolted on)	2	2	2	2
3	a 1549717	Bracket (RH)	1	1	..	..
3	a 1549718	Bracket (LH)	..	1	..	..
3	a 1549723	Bracket (RH)	..	..	1	1
3	a 1549724	Bracket (LH)	..	..	..	1
3	4109993					
	1527879	Capscrew	4	4	4	4
4	2079985					
	4613398	Tube Assy (RH)	1	1	..	..
4	2079989					
	4613402	Tube Assy (RH)	..	..	1	1
5	2079986					
	4613399	Tube Assy (RH)	1	1	..	..
5	2079990					
	4613403	Tube Assy (RH)	..	..	1	1
6	2079988					
	4613401	Tube Assy (LH)	..	1	..	..
6	2079992					
	4613405	Tube Assy (LH)	..	..	..	1
7	2079987					
	4613400	Tube Assy (LH)	..	1	..	..
7	2079994					
	4613404	Tube Assy (LH)	..	..	..	1
8	b 1549715	Fitting	2	4	2	4
8	b 1527813	O-Ring	2	4	2	4
8	b 265787	O-Ring	2	4	2	4
9	b 1483663	Quick Disconnect Fitting	2	4	2	4
10	b 1483664	Fitting	2	4	2	4
11	b 1483661	Dust Cap	2	4	2	4
12	b 1486740	Fitting	2	4	2	4
12	b 1527813	O-Ring	1	1	1	1
12	b 265787	O-Ring	1	1	1	1
13	b 2081418	Drain Valve	1	2	1	2
14	16540	Connector	1	2	1	2
14	16483	O-Ring	1	1	1	1

FOOTNOTES:

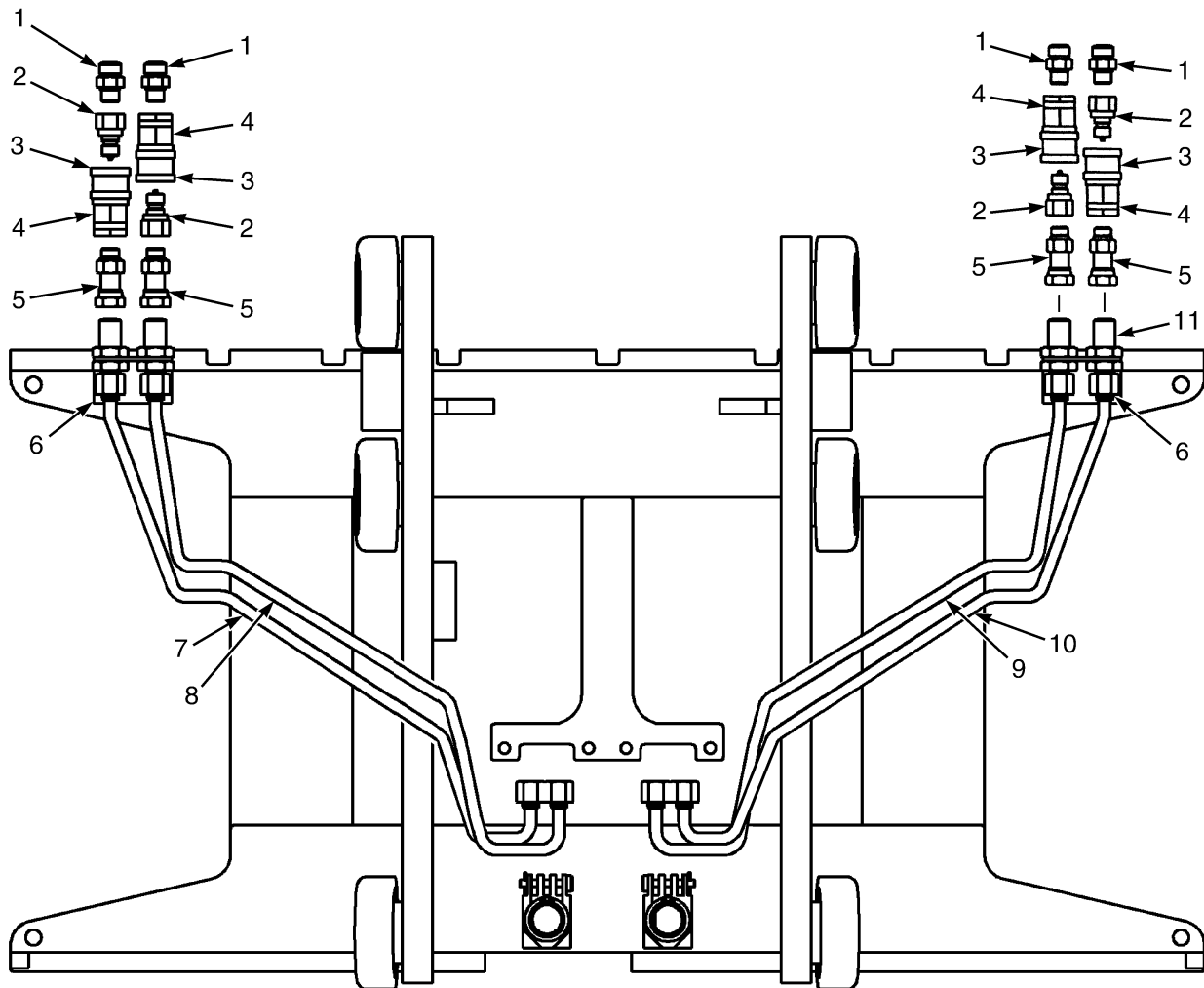
- a** Used With Integral Sideshift Carriage
- b** Used With Quick Disconnect Only
- c** Used With Standard Carriage

- d** Without Quick Disconnect
- e** → 11/2009
- f** 11/2009 →

NOTES

[illegible]

AUXILIARY TUBE EXTENSIONS (FIGURE 11-10)
TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →)
(S/N D509V02104H →) (S/N D564V02122H →)



BP000554

AUXILIARY TUBE EXTENSIONS

**TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →)
(S/N D509V02104H →) (S/N D564V02122H →)**

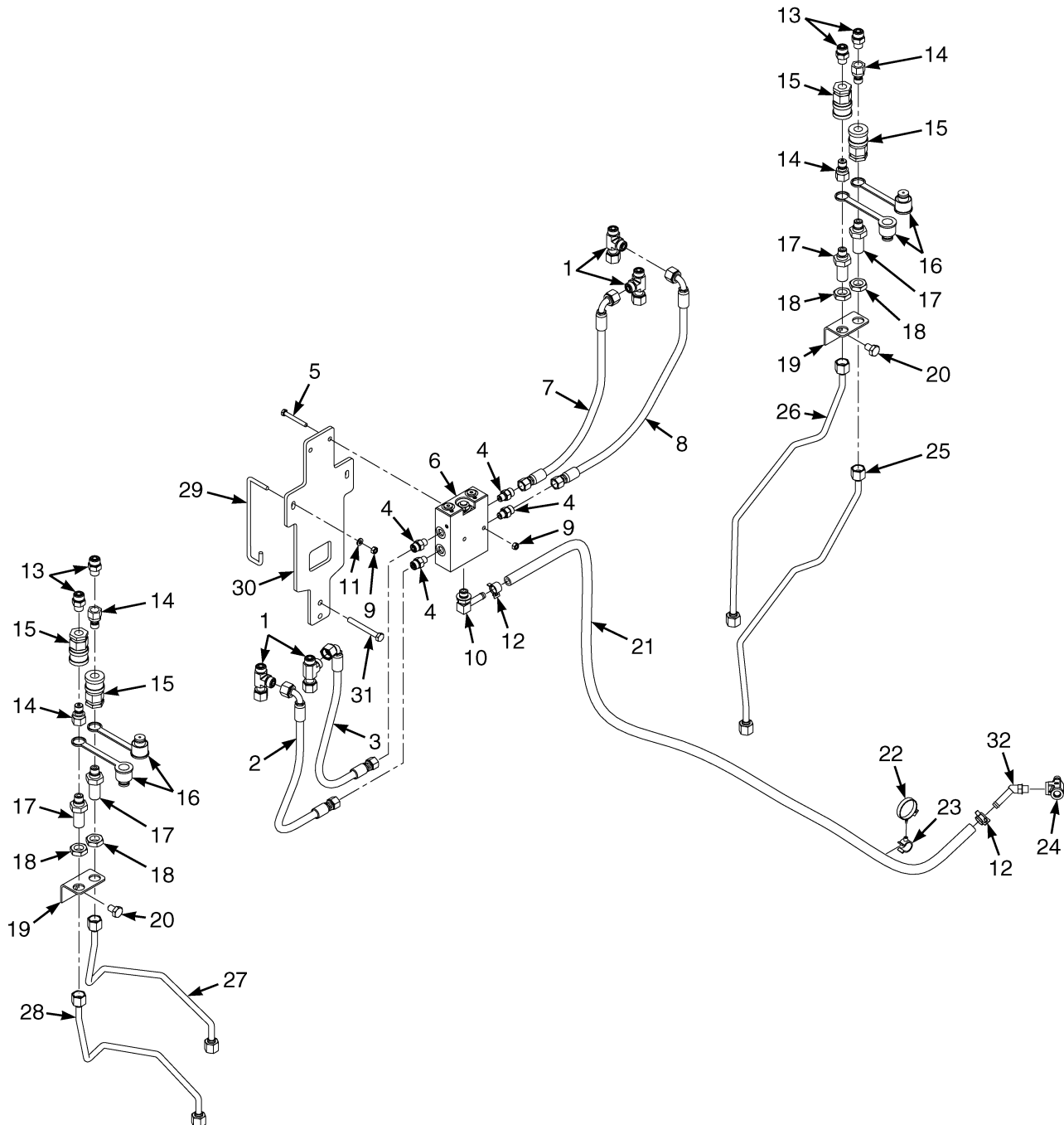
KEY:**A: D508, D509 Three Function, Class 2****B: D508, D509 Four Function, Class 2****C: D563, D564 Three Function, Class 3****D: D563, D564 Four Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	b 1486740	Fitting	2	4	2	4
2	b 1483664	Fitting	2	4	2	4
3	b 1483661	Dust Cap	2	4	2	4
4	b 1483663	Quick Disconnect Fitting	2	4	2	4
5	b 1708364	Bulkhead (Fitting)	2	4	2	4
6	c 1550070	Bracket	1	2	1	2
6	a 1549718	Bracket	..	1	..	..
6	a 1549724	Bracket	..	..	..	1
7	2079987					
	4613400	Tube Assy	..	1	..	..
7	4616325	Tube Assy (Alternate Part)	..	1	..	..
7	2079994					
	4613404	Tube Assy	..	..	..	1
8	2079988					
	4613401	Tube Assy	..	1	..	..
8	4616326	Tube Assy (Alternate Part)	..	1	..	..
8	2079992					
	4613405	Tube Assy	..	..	..	1
9	2079986					
	4613399	Tube Assy	1	1	..	..
9	4616324	Tube Assy (Alternate Part)	1	1	..	..
9	2079990					
	4613403	Tube Assy	..	..	1	1
10	2079985					
	4613398	Tube Assy	1	1	..	..
10	4616420	Tube Assy (Alternate Part)	1	1	..	..
10	2079989					
	4613402	Tube Assy	..	..	1	1
11	d 1528573	Fitting	2	4	2	4

FOOTNOTES:**a** Used With Integral Sideshift Carriage**b** Used With Quick Disconnect Only**c** Used With Standard Carriage**d** Without Quick Disconnect

AUXILIARY TUBE EXTENSIONS (FIGURE 11-11)

TWO AND THREE STAGE FULL FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS
(S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)



BP000547

AUXILIARY TUBE EXTENSIONS**TWO AND THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS**

(S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)

KEY:**A: D508, D509, E509 3 Function, Class 2****B: D508, D509, E509 4 Function, Class 2****C: D563, D564, E564 3 Function, Class 3****D: D563, D564, E564 4 Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting	2	4	2	4
2	4604683	Hose Assy	..	1	..	1
3	4604565	Hose Assy	..	1	..	1
4	1486737	Fitting	2	4	2	4
5	292505	Capscrew	2	2	2	2
6	2111754	Valve (Single Auxiliary)	1	..	1	..
6	2111755	Valve (Dual Auxiliary)	..	1	..	1
7	4604566	Hose Assy	1	1	1	1
8	4604564	Hose Assy	1	1	1	1
9	1512440					
	302399	Nut	4	4	4	4
10	17221	Fitting	1	1	1	1
11	1673754	Washer	2	2	2	2
12	1569616	Hose Clamp	2	2	2	2
13	1486740	Fitting	2	4	2	4
14	1483664	Fitting (Quick Disconnect)	2	4	2	4
15	1483663	Quick Disconnect Fitting	2	4	2	4
16	1483661	Dust Cap	2	4	2	4
17	1708364	Bulkhead (Fitting)	2	4	2	4
18	1528602	Locknut	2	4	2	4
19	1550070	Bracket	1	2	1	2
19	a 1549718	Bracket	..	1	..	..
19	a 1549724	Bracket	..	1	..	1
20	1658934	Capscrew	1	2	1	2
21	110153	Hose	1	1	1	1
22	1644398	Clamp (Swivel)	1	1	1	1
23	1606544	Clamp (Swivel)	1	1	1	1
24	1688347	Adapter	1	1	1	1
25	2079985					
	4613398	Tube Assy	1	1	..	..
25	4616420	Tube Assy (Alternate Part)	1	1	..	..
25	2079989					
	4613402	Tube Assy	..	..	1	1
26	2079986					
	4613399	Tube Assy	1	1	..	..
26	4616324	Tube Assy (Alternate Part)	1	1	..	..
26	2079990					
	4613403	Tube Assy	..	..	1	1
27	2079988					
	4613401	Tube Assy	..	1	..	..
27	4616326	Tube Assy (Alternate Part)	..	1	..	..
27	2079992	Tube Assy	..	..	..	1

AUXILIARY TUBE EXTENSIONS

TWO AND THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS
 (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02104H →) (S/N D564V02122H →)

KEY:

- A:** D508, D509, E509 3 Function, Class 2
B: D508, D509, E509 4 Function, Class 2
C: D563, D564, E564 3 Function, Class 3
D: D563, D564, E564 4 Function, Class 3

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
28	4613405					
	2079987					
	4613400	Tube Assy	..	1	..	..
28	4616325	Tube Assy (Alternate Part)	..	1	..	..
28	2079994					
	4613404	Tube Assy	..	..	..	1
29	4016370	Capscrew	2	2	2	2
30	4013928	Bracket	1	1	1	1
31	1581836	Capscrew	2	2	2	2
32	222500	Fitting	1	1	1	1

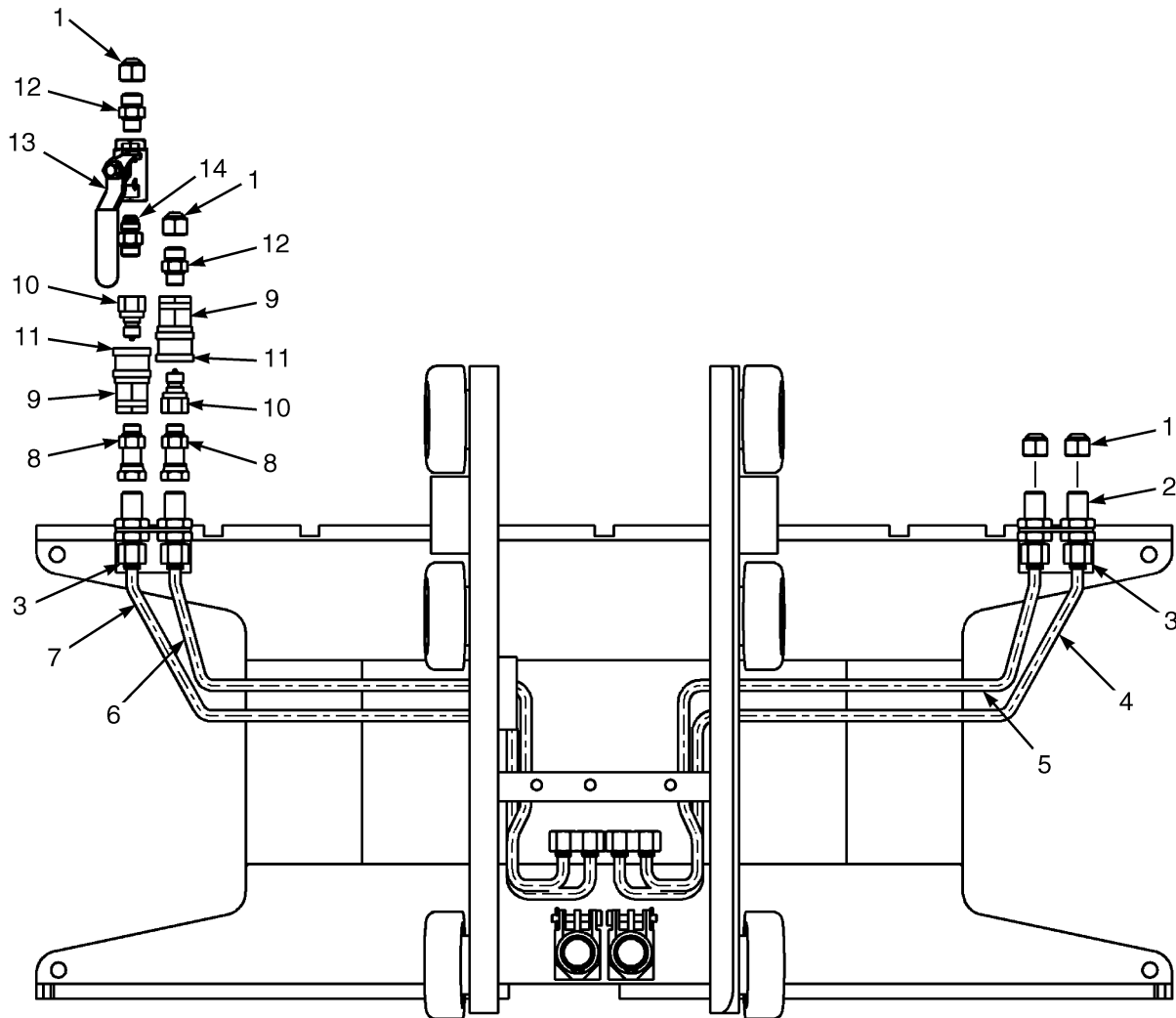
FOOTNOTES:

- a** Use with Integral Sideshift Carriage

NOTES

[illegible]

AUXILIARY TUBE EXTENSIONS (FIGURE 11-12) FOUR STAGE FULL FREE-LIFT (→ S/N D515V05514H)



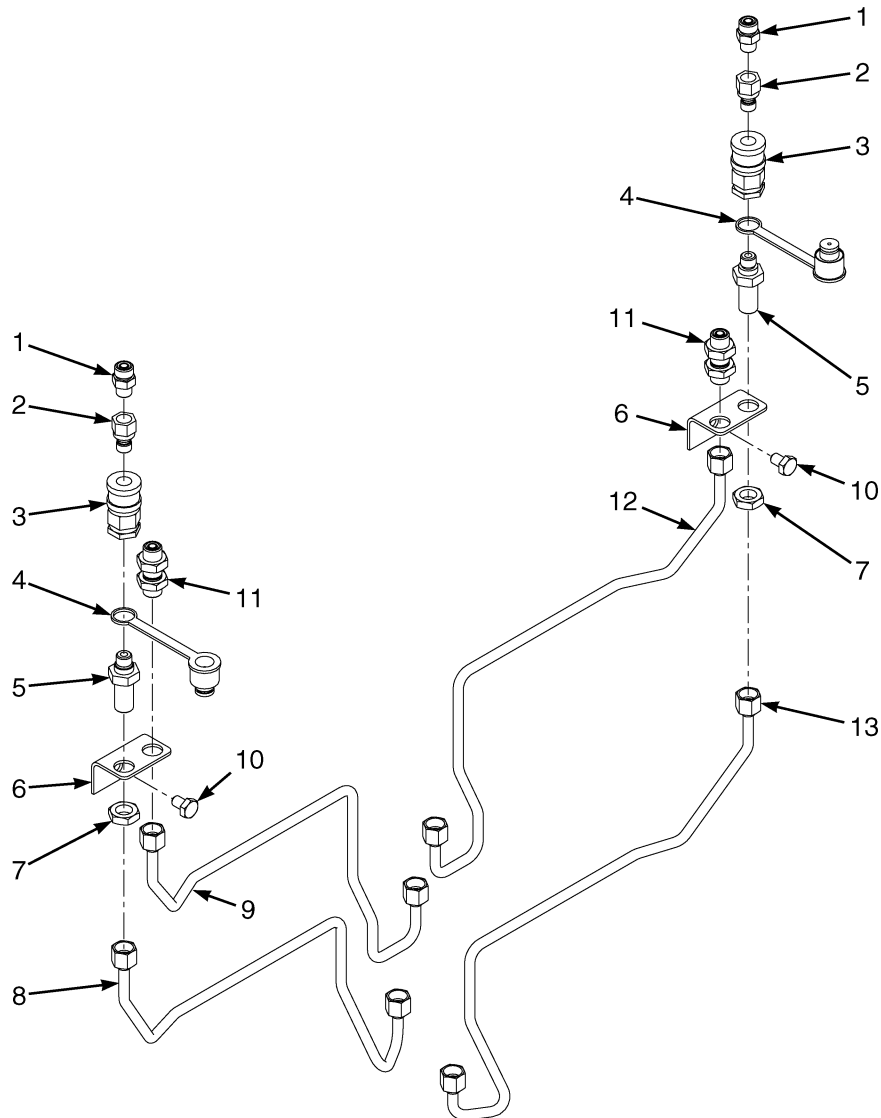
BP000293

AUXILIARY TUBE EXTENSIONS
FOUR STAGE FULL FREE-LIFT (→ S/N D515V05514H)

ITEM	PART NO.	DESCRIPTION	QTY
1	1529015	Cap	2
2	1528573	Fitting	2
3	1696635	Bracket (Bolted on)	2
3	4109993		
	1527879	Capscrew (Bolted On)	2
4	b 2074417	Tube Assy	1
4	c 2079995	Tube Assy	1
5	b 2074416	Tube Assy	1
5	c 2079996	Tube Assy	1
6	b 2074419	Tube Assy	1
6	c 2079993	Tube Assy	1
7	b 2074418	Tube Assy	1
7	c 2079994	Tube Assy	1
8	a 1549715	Fitting	2
8	a 265787	O-Ring	2
8	a 1527813	O-Ring	2
9	a 1483663	Quick Disconnect Fitting	2
10	a 1483664	Fitting	2
11	a 1483661	Dust Cap	2
12	a 1486740	Fitting	2
12	a 1527813	O-Ring	2
12	a 265787	O-Ring	2
13	a 2081418	Drain Valve	1
14	a 16540	Connector	1
14	a 16483	O-Ring	1

FOOTNOTES:**a** Quick Disconnect Option**c** 11/2009 →**b** → 11/2009

AUXILIARY TUBE EXTENSIONS (FIGURE 11-13) FOUR STAGE FULL FREE-LIFT (S/N D515V05515H →)



BP000553

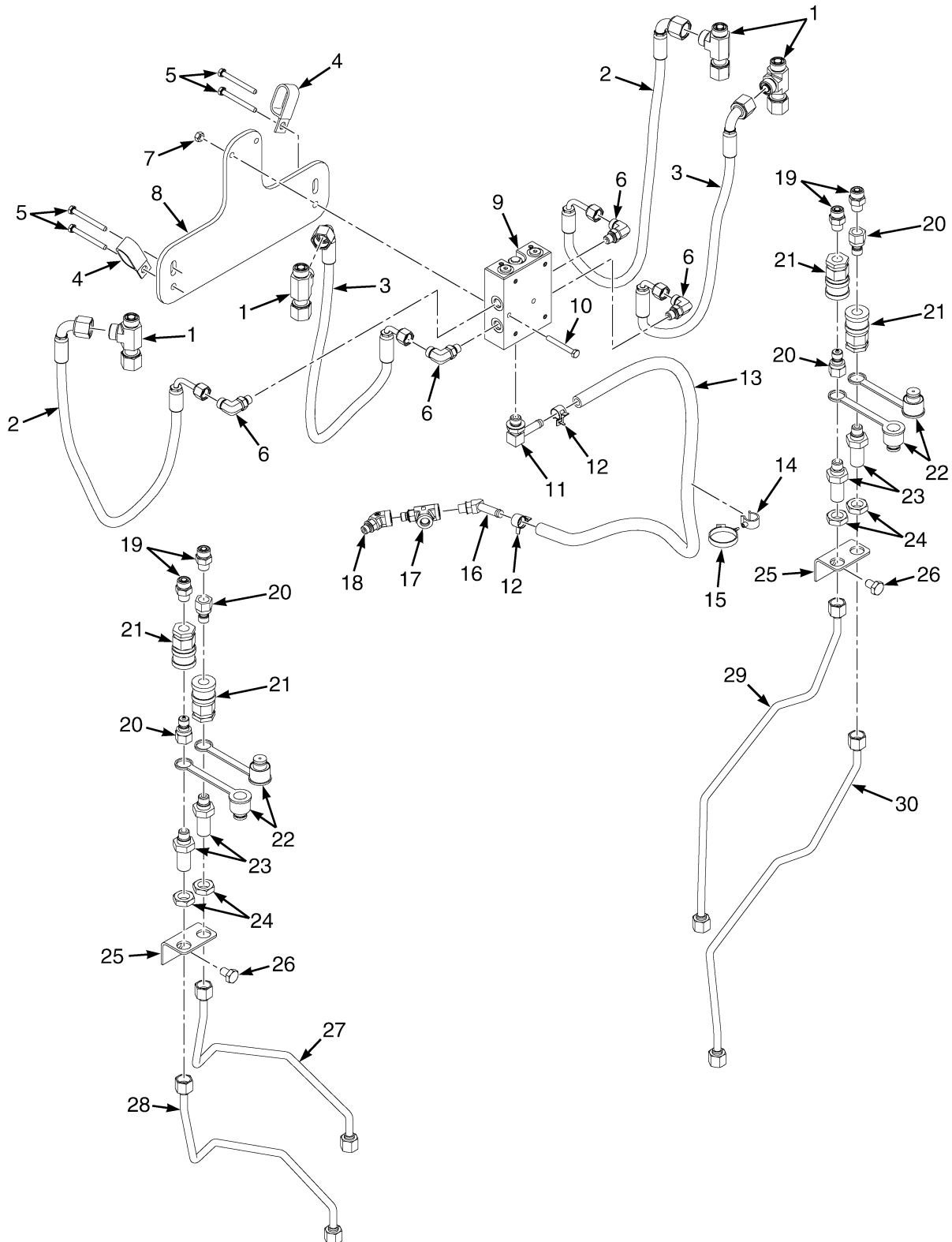
AUXILIARY TUBE EXTENSIONS

FOUR STAGE FULL FREE-LIFT (S/N D515V05515H →)

KEY:**A: D515 3 Function****B: D515 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1486740	Fitting	2	4
2	1483664	Fitting (Quick Disconnect)	2	4
3	1483663	Quick Disconnect Fitting	2	4
4	1483661	Dust Cap	2	4
5	1708364	Bulkhead (fitting)	2	4
6	1550070	Bracket	1	2
7	1528602	Locknut	2	4
8	2079995	Tube Assy	..	1
9	2079996	Tube Assy	..	1
10	1658934	Capscrew	1	2
11	1528573	Fitting (Without QD Fittings)	1	4
12	2079993	Tube Assy	1	1
13	2079994	Tube Assy	1	1

AUXILIARY TUBE EXTENSIONS (FIGURE 11-14) FOUR STAGE FULL FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS



BP000665

AUXILIARY TUBE EXTENSIONS

FOUR STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS

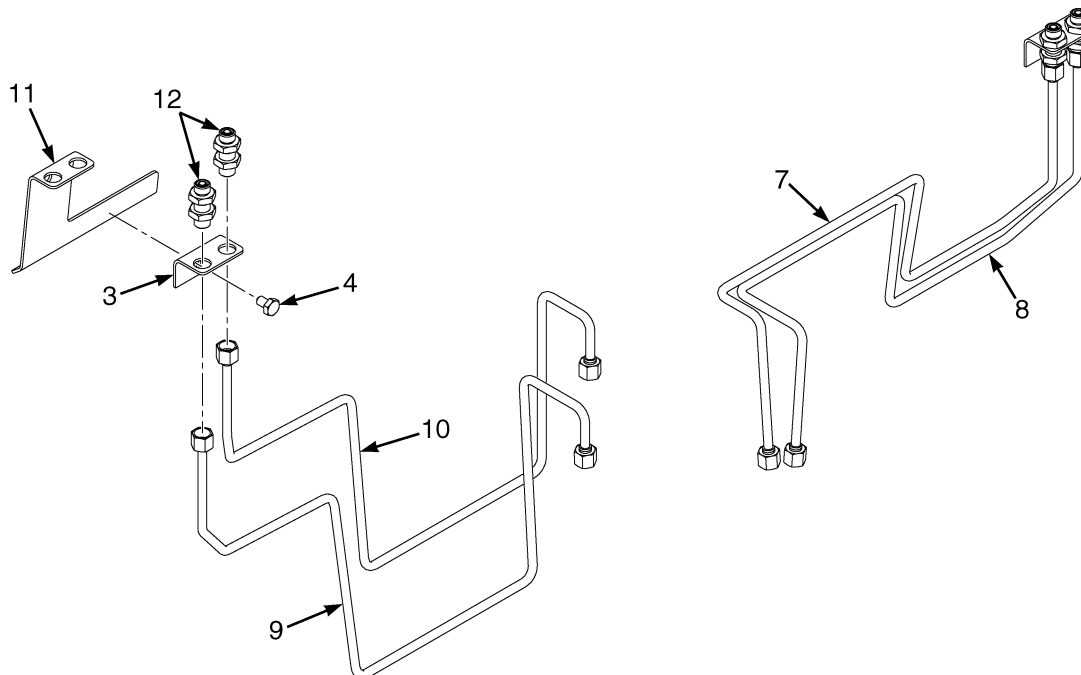
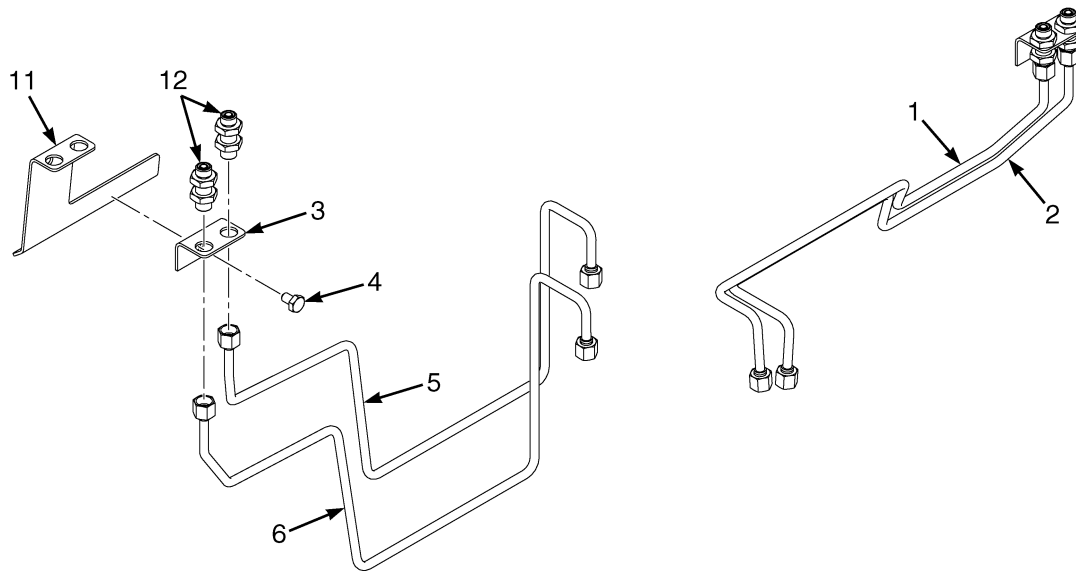
KEY:**A: 3 Function, Class II****B: 4 Function, Class II**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1487095	Fitting	2	4
2	4616686	Hose Assy	1	2
3	4616687	Hose Assy	1	2
4	110322	Clamp	1	2
5	1597662	Capscrew	4	4
6	1487058	Fitting	2	4
7	~~1512440~~			
	302399	Nut	2	4
8	4029283	Bracket	1	2
9	2111754	Valve	1	..
9	2111755	Valve	..	1
10	292505	Capscrew	2	2
11	17221	Fitting	1	1
12	1569616	Hose Clamp	2	2
13	85767	Hose	1	1
14	1606544	Clamp (Swivel)	1	1
15	1644398	Clamp (Swivel)	1	1
16	222500	Fitting	1	1
17	4606305	T-Fitting	1	1
18	1688347	Adapter	1	1
19	1486740	Fitting	2	4
20	1483664	Fitting	2	4
21	1483663	Quick Disconnect Fitting	2	4
22	1483661	Dust Cap	2	4
23	1708364	Bulkhead	2	4
24	1528602	Locknut	2	4
25	1550070	Bracket	1	2
26	1658934	Capscrew	1	2
27	2079996	Tube Assy	..	1
28	2079995	Tube Assy	..	1
29	2079993	Tube Assy	1	1
30	2079994	Tube Assy	1	1
	a 1528573	Fitting	2	4

FOOTNOTES:**a** Used on options without quick-disconnect fittings

AUXILIARY TUBES (FIGURE 11-15)

TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST — WITH MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT)



BP000843

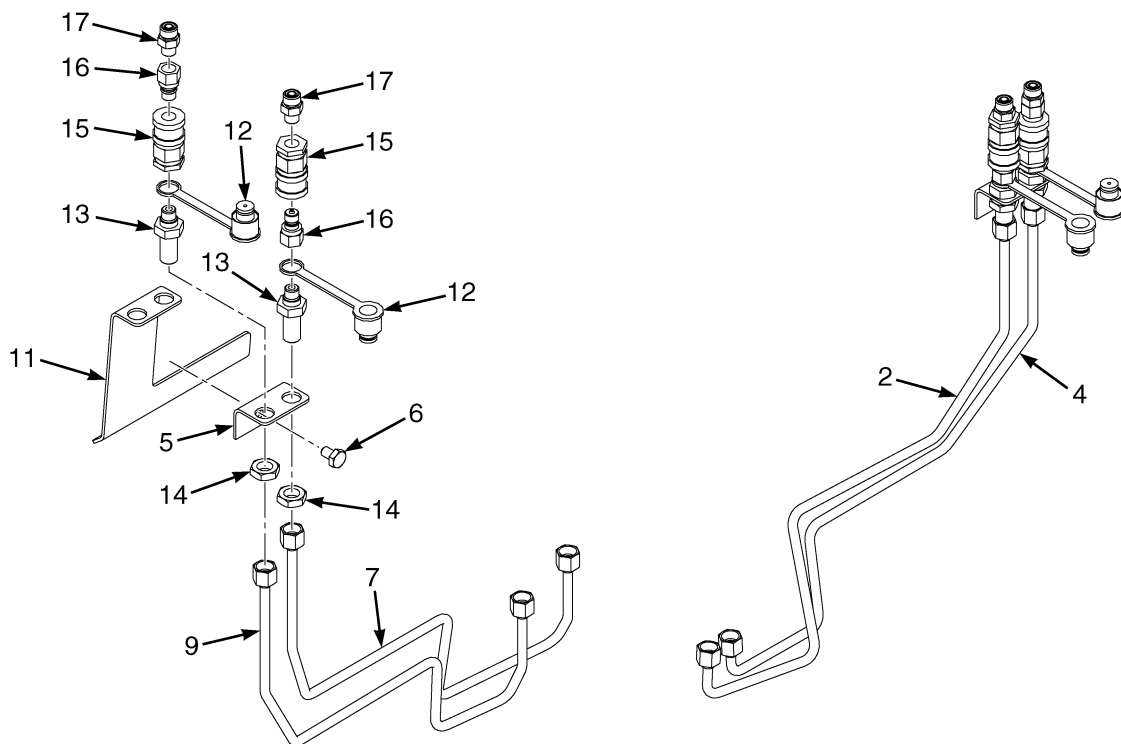
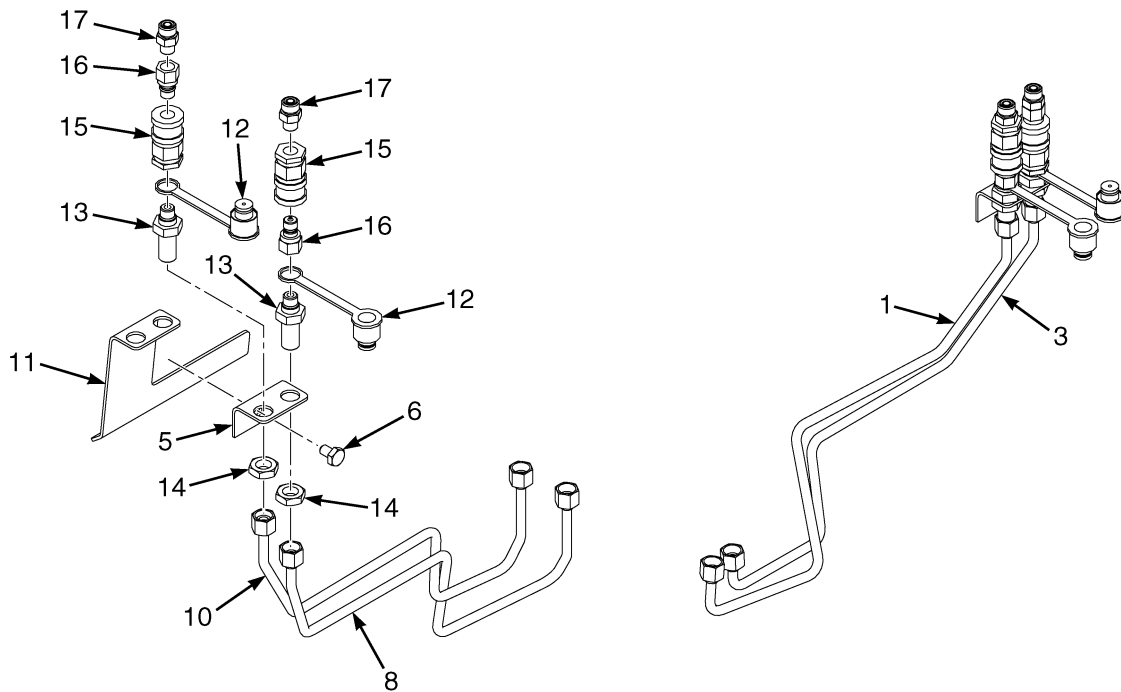
AUXILIARY TUBES**TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST – WITH MANUAL AND E-HYDRAULICS VALVE
WITHOUT QUICK DISCONNECT****KEY:****A: E45-55XN (F507)****B: E60-70XN (F562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	d 4628181	Tube Assy	1	..
2	d 4628182	Tube Assy	1	..
3	1550070	Bracket	1	2
4	1658934	Capscrew	1	2
5	a 4628179	Tube Assy	1	..
6	a 4628180	Tube Assy	1	..
7	d 4628185	Tube Assy	..	1
8	d 4628186	Tube Assy	..	1
9	a 4628183	Tube Assy	..	1
10	a 4628184	Tube Assy	..	1
11	b 4060493	Bracket (LH)	..	1
11	b 4060492	Bracket (LH)	1	..
12	1528573	Fitting	2	4
	c 1529015	Cap	2	4

FOOTNOTES:**a** Four Function**b** Integral Side-Shift Carriage**c** Not Illustrated**d** Three Function

AUXILIARY TUBES (FIGURE 11-16)

THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) — MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT



BP000861

AUXILIARY TUBES**THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) – MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT****KEY:****A: E45-55XN (F508)****B: E60-70XN (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	e 4624525	Tube Assy	1	..
2	e 4624527	Tube Assy	..	1
3	e 4624524	Tube Assy	1	..
4	e 4624526	Tube Assy	..	1
5	1550070	Bracket	2	2
6	1658934	Capscrew	2	2
7	b 4624501	Tube Assy	1	..
8	b 4624503	Tube Assy	..	1
9	b 4624502	Tube Assy	1	..
10	b 4624504	Tube Assy	..	1
11	c 4060492	Bracket	2	..
11	c 4060493	Bracket	..	2
12	d 1483661	Dust Cap	2	2
12	a 1483661	Dust Cap	4	4
13	d 1708364	Bulkhead (Fitting)	2	2
13	a 1708364	Bulkhead (Fitting)	4	4
14	d 1528602	Locknut	2	2
14	a 1528602	Locknut	4	4
15	d 1483663	Quick Disconnect Fitting	2	2
15	a 1483663	Quick Disconnect Fitting	4	4
16	d 1483664	Fitting	2	2
16	a 1483664	Fitting	4	4
17	d 1486740	Fitting	2	2
17	a 1486740	Fitting	4	4

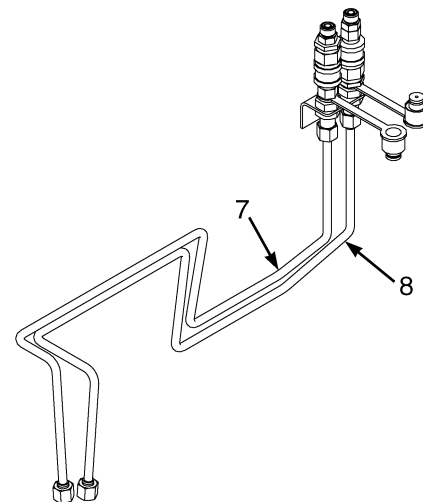
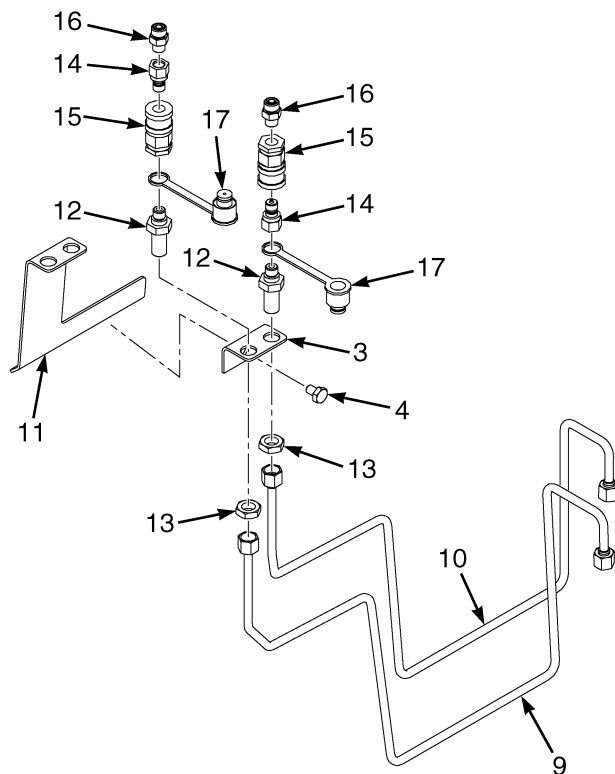
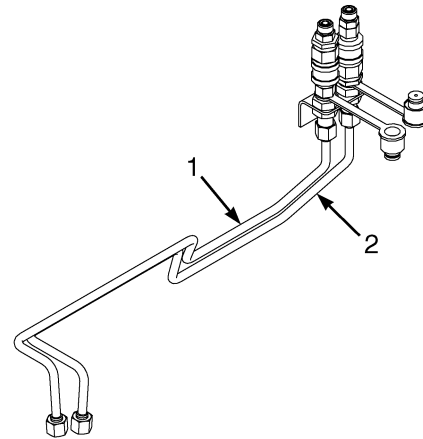
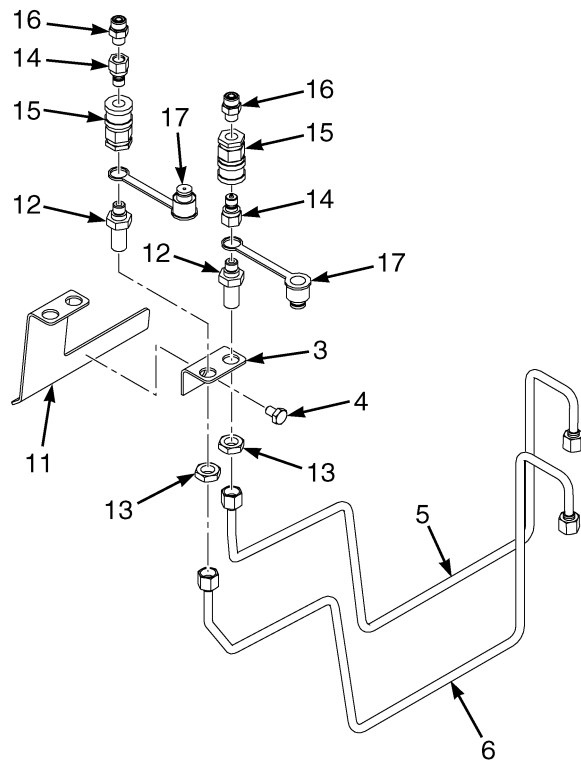
FOOTNOTES:

a Dual Auxiliary
b Four Function
c Integral Side-Shift

d Single Auxiliary
e Three Function

AUXILIARY TUBES (FIGURE 11-17)

TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST — MANUAL AND E-HYDRAULIC VALVE WITH QUICK DISCONNECT)



BP000844

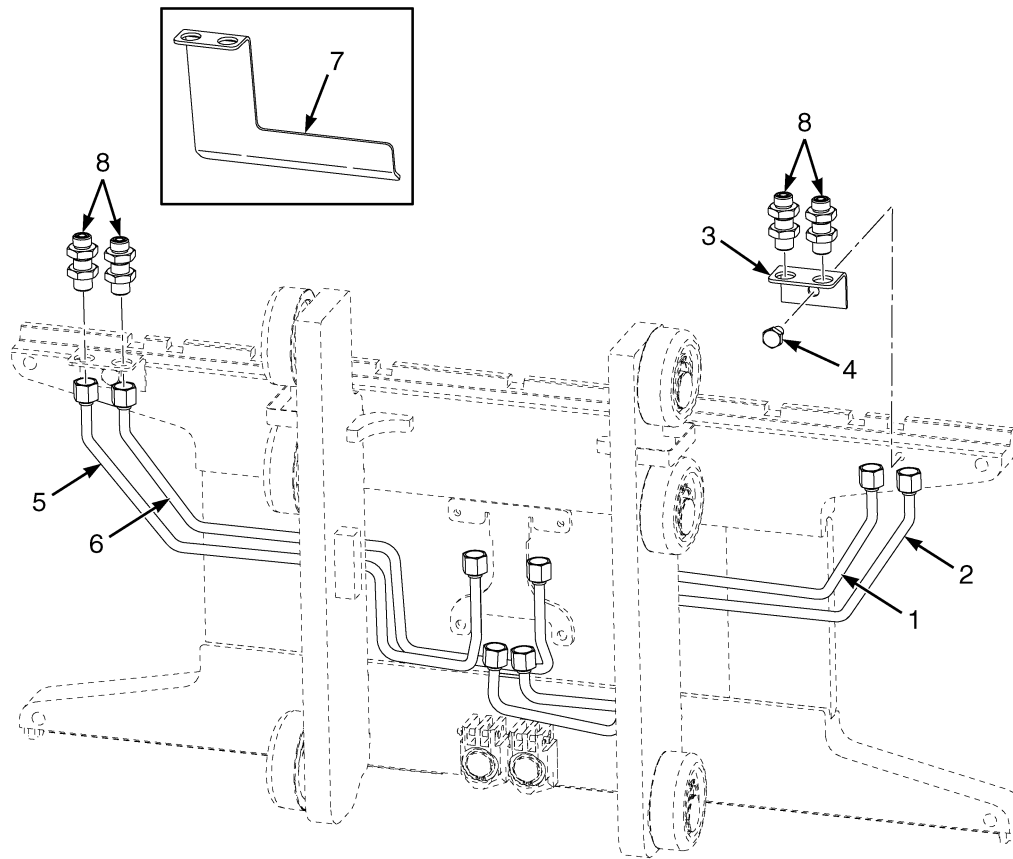
AUXILIARY TUBES**TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST – MANUAL AND E-HYDRAULIC VALVE WITH QUICK DISCONNECT)****KEY:****A: E45-55XN (F507)****B: E60-70XN (F562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	e 4628181	Tube Assy	1	..
2	e 4628182	Tube Assy	1	..
3	1550070	Bracket	1	2
4	1658934	Capscrew	1	2
5	b 4628179	Tube Assy	1	..
6	b 4628180	Tube Assy	1	..
7	e 4628185	Tube Assy	..	1
8	e 4628186	Tube Assy	..	1
9	b 4628183	Tube Assy	..	1
10	b 4628184	Tube Assy	..	1
11	c 4060493	Bracket (LH)	..	1
11	c 4060492	Bracket (LH)	1	..
12	d 1708364	Bulkhead (Fitting)	2	2
12	a 1708364	Bulkhead (Fitting)	4	4
13	d 1528602	Locknut	2	2
13	a 1528602	Locknut	4	4
14	d 1483663	Quick Disconnect Fitting	2	2
14	a 1483663	Quick Disconnect Fitting	4	4
15	d 1483664	Fitting	2	2
15	a 1483664	Fitting	4	4
16	d 1486740	Fitting	2	2
16	a 1486740	Fitting	4	4
17	d 1483661	Dust Cap	2	2
17	a 1483661	Dust Cap	4	4

FOOTNOTES:**a** Dual Auxiliary Option**b** Four Function**c** Integral Side-Shift Carriage**d** Single Auxiliary Option**e** Three Function

AUXILIARY TUBES (FIGURE 11-18)

THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) — MANUAL AND E-HYDRAULICS VALVE
WITHOUT QUICK DISCONNECT



BP170654

KEY:

A: E45-55XN (F508)

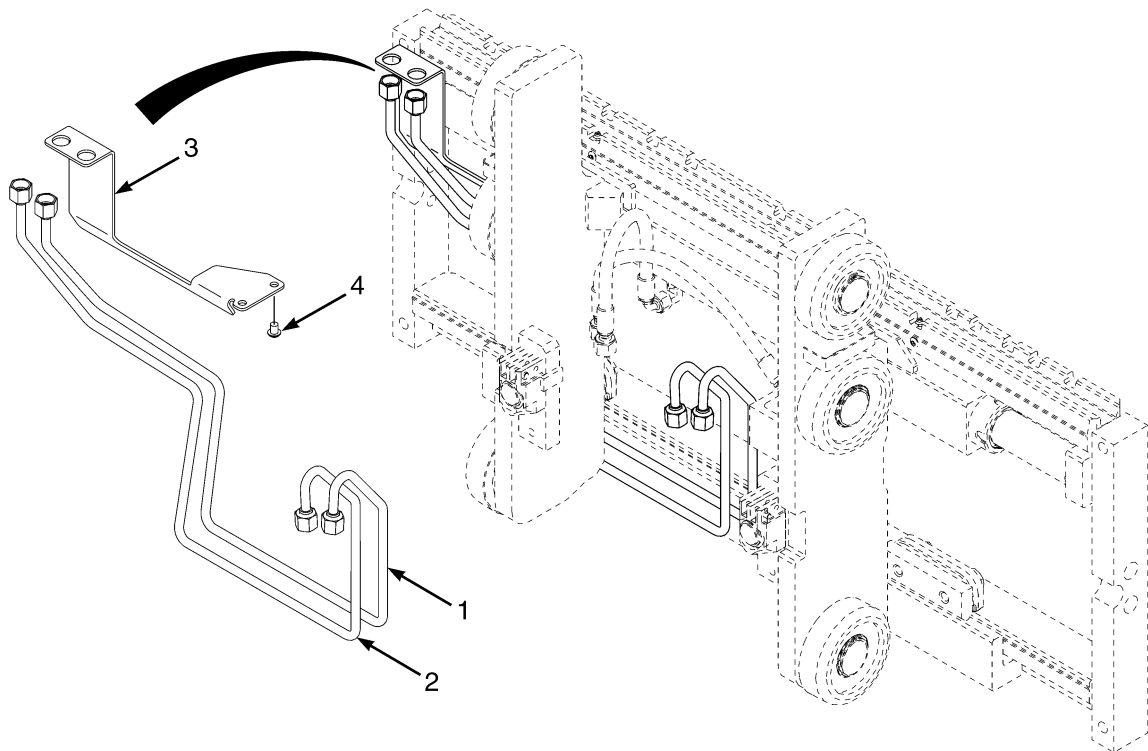
B: E60-70XN (F563)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	f 4624525	Tube Assy	1	..
1	f 4624527	Tube Assy	..	1
2	f 4624524	Tube Assy	1	..
2	f 4624526	Tube Assy	..	1
3	1550070	Bracket	2	2
4	1658934	Capscrew	2	2
5	b 4624501	Tube Assy	1	..
5	b 4624503	Tube Assy	..	1
6	b 4624502	Tube Assy	1	..
6	b 4624504	Tube Assy	..	1
7	c 4060492	Bracket	2	..
7	c 4060493	Bracket	..	2
8	e 1528573	Fitting	2	2
8	a 1528573	Fitting	4	4
	d e 1529015	Cap	2	2
	a d 1529015	Cap	4	4

FOOTNOTES:

a	Dual Auxiliary	d	Not Illustrated
b	Four Function	e	Single Auxiliary
c	Integral Side-Shift	f	Three Function

AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 11-19) FOUR FUNCTION, TWO STAGE LIMITED FREE-LIFT (12/2016 →)



BP001006

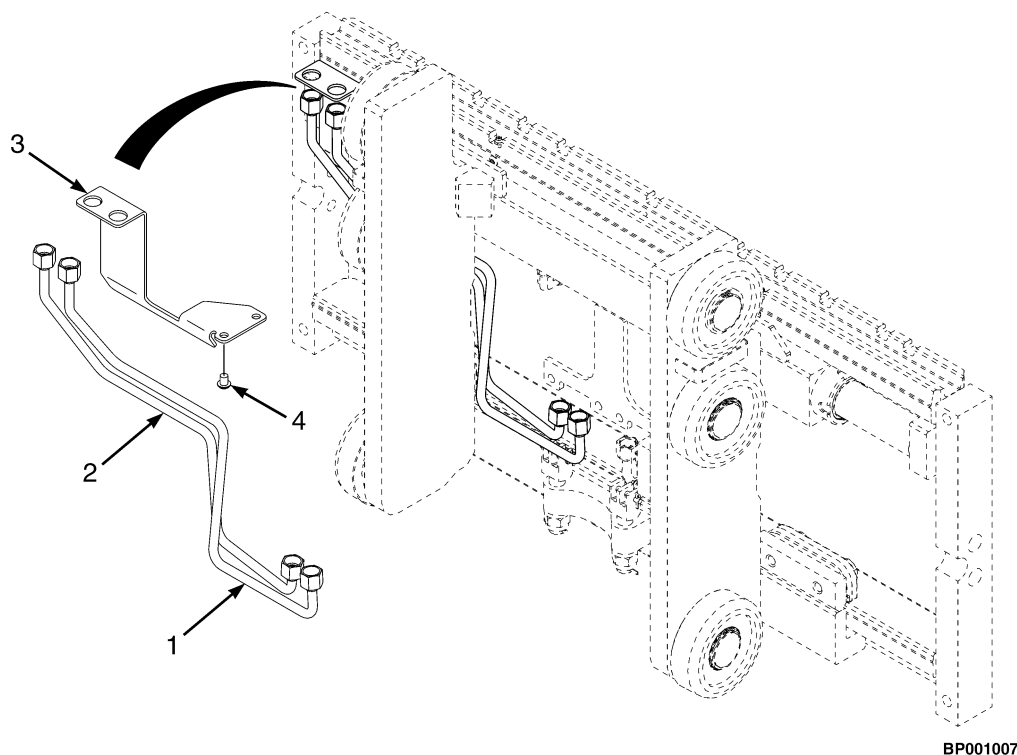
KEY:

A: CLASS II

B: CLASS III

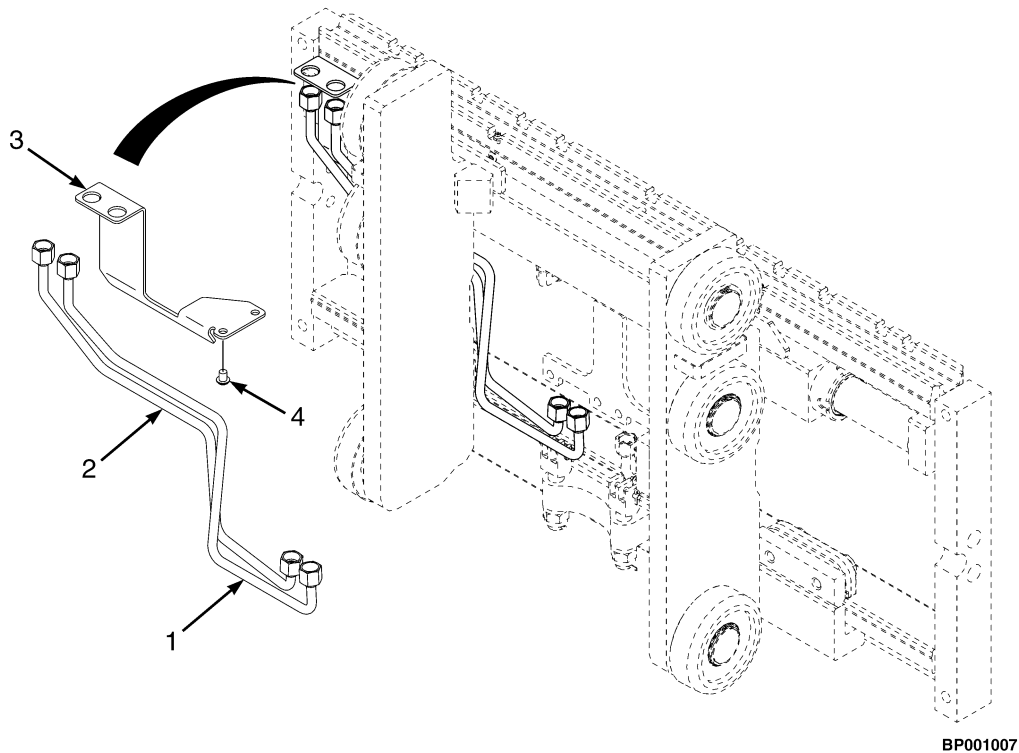
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4634605	Tube Assy	1	..
1	4628184	Tube Assy	..	1
2	4634604	Tube Assy	1	..
2	4628183	Tube Assy	..	1
3	4099255	Bracket	1	1
4	296163	Capscrew	2	2

AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 11-20)
FOUR FUNCTION, TWO STAGE FULL FREE-LIFT (12/2016 →)

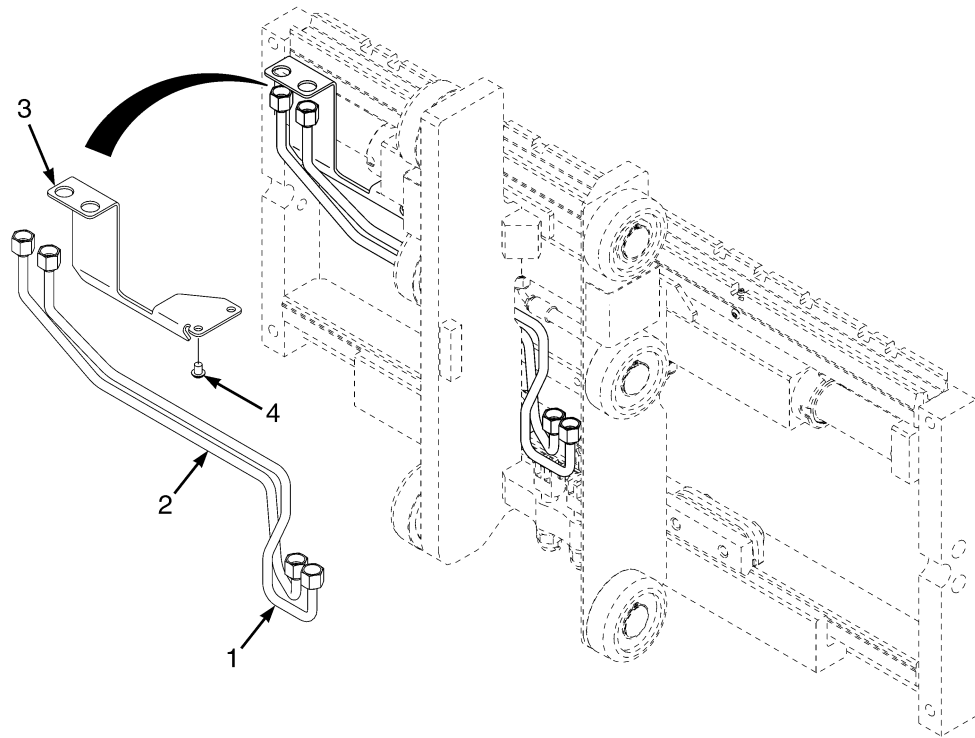
**KEY:****A: CLASS II****B: CLASS III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4635381	Tube Assy	1	..
1	4635408	Tube Assy	..	1
2	4635380	Tube Assy	1	..
2	4635407	Tube Assy	..	1
3	4099255	Bracket	1	1
4	296163	Capscrew	2	2

AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 11-21)
FOUR FUNCTION THREE STAGE FULL FREE-LIFT (12/2016 →)

**KEY:****A: CLASS II****B: CLASS III**

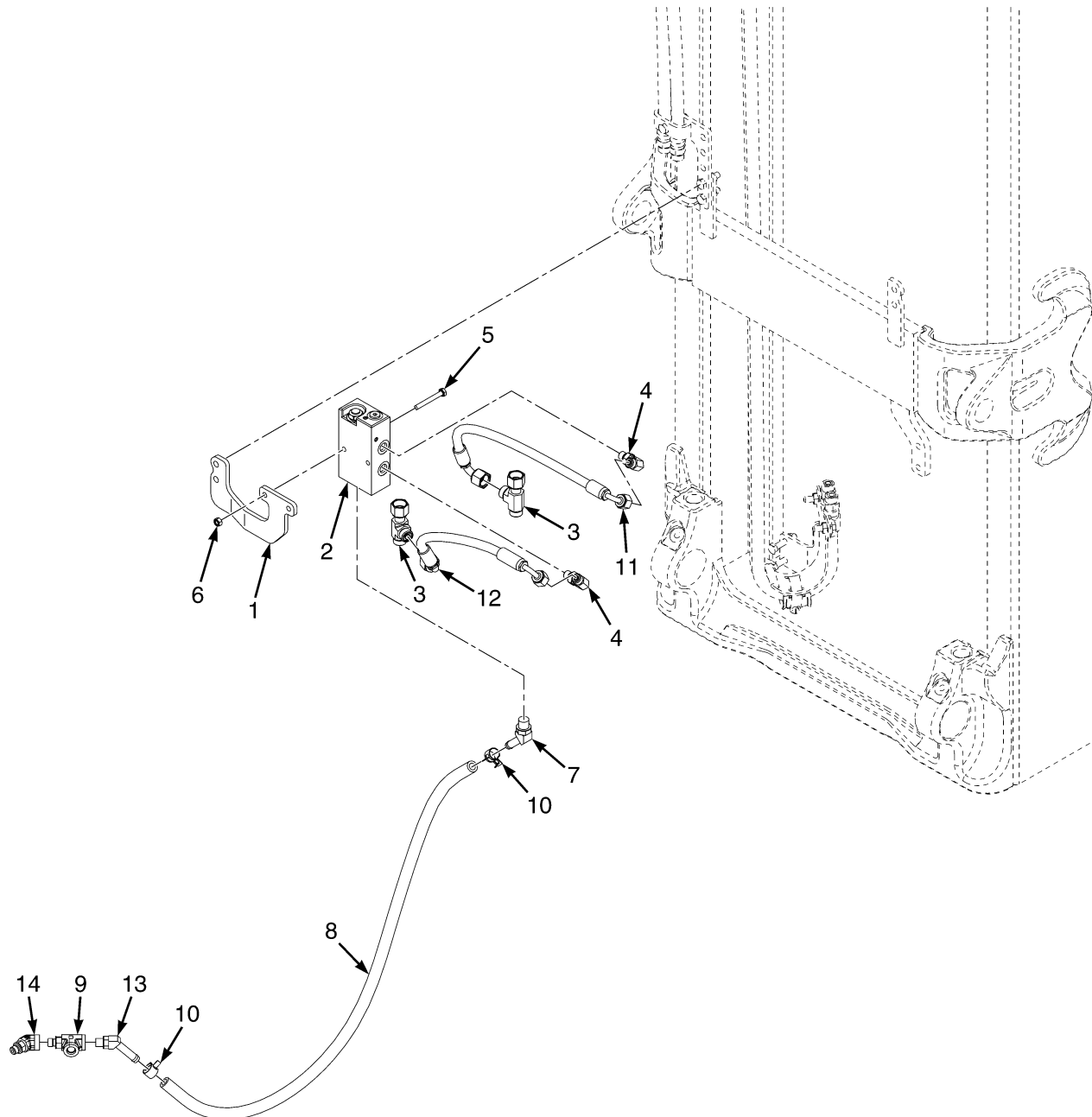
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4624501	Tube Assy	1	..
1	4624503	Tube Assy	..	1
2	4624502	Tube Assy	1	..
2	4624504	Tube Assy	..	1
3	4099255	Bracket	1	1
4	296163	Capscrew	2	2

AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 11-22)
FOUR FUNCTION, FOUR STAGE FULL FREE-LIFT (12/2016 →)

BP001008

ITEM	PART NO.	DESCRIPTION	QTY
1	4621594	Tube Assy	1
2	4624871	Tube Assy	1
3	4099255	Bracket	1
4	296163	Capscrew	2

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-23) TWO STAGE LIMITED FREE-LIFT (F507/F562 SERIES MAST) (SINGLE AUXILIARY WITH E-HYDRAULIC) — THREE FUNCTION

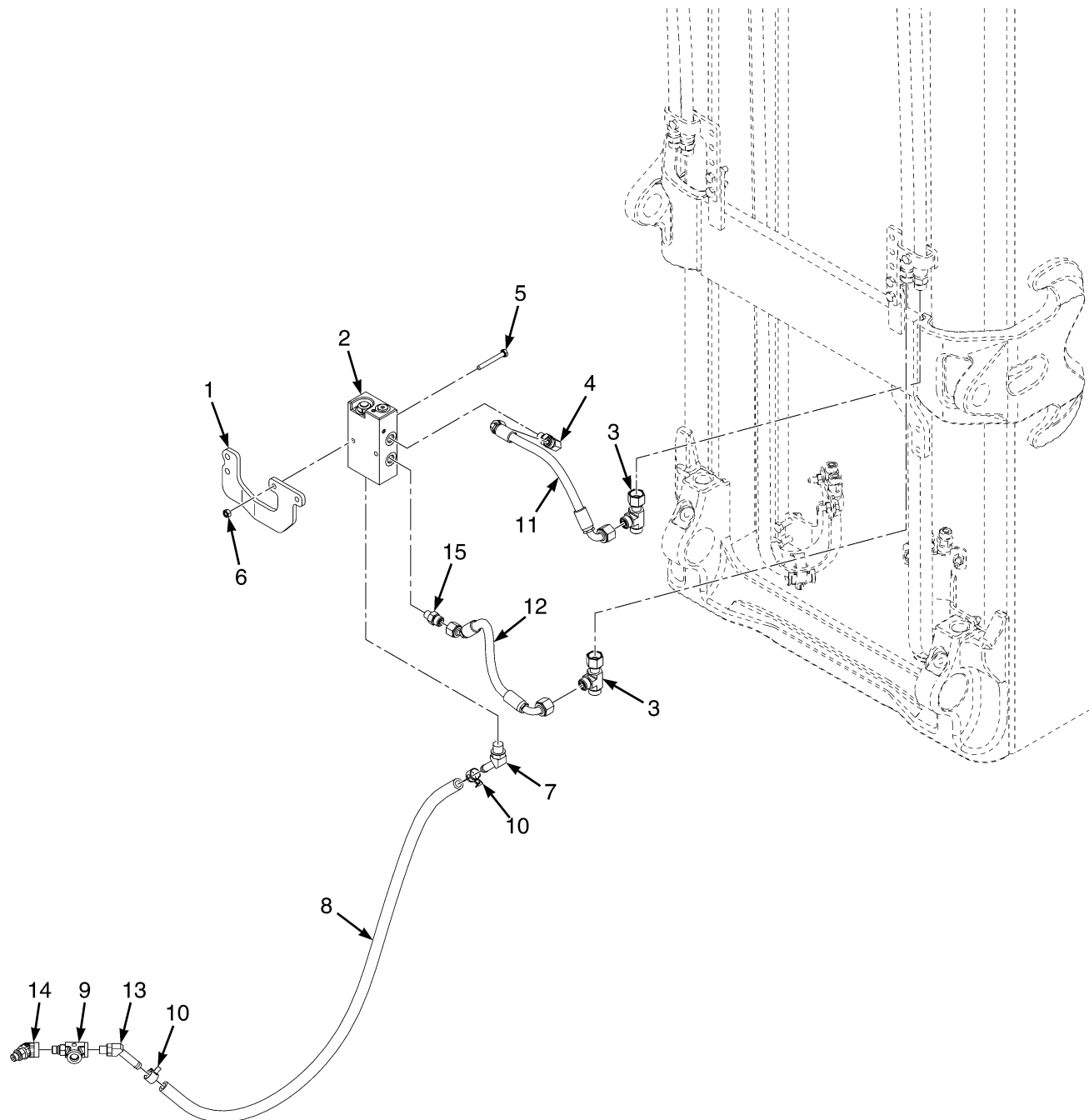


BP000849

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
TWO STAGE LIMITED FREE-LIFT (F507/F562 SERIES MAST) (SINGLE AUXILIARY WITH E-HYDRAULIC) –
THREE FUNCTION

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111754	Valve	1
3	1487097	Fitting	2
4	1487058	Fitting	2
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4626472	Hose Assy (QD Function A)	1
11	4653647	Hose Assy (QD Function A) (Alternate Part)	1
12	4626473	Hose Assy (QD Function B)	1
12	4653648	Hose Assy (QD Function B)	1
13	222500	Fitting	1
14	1688347	Adapter	1

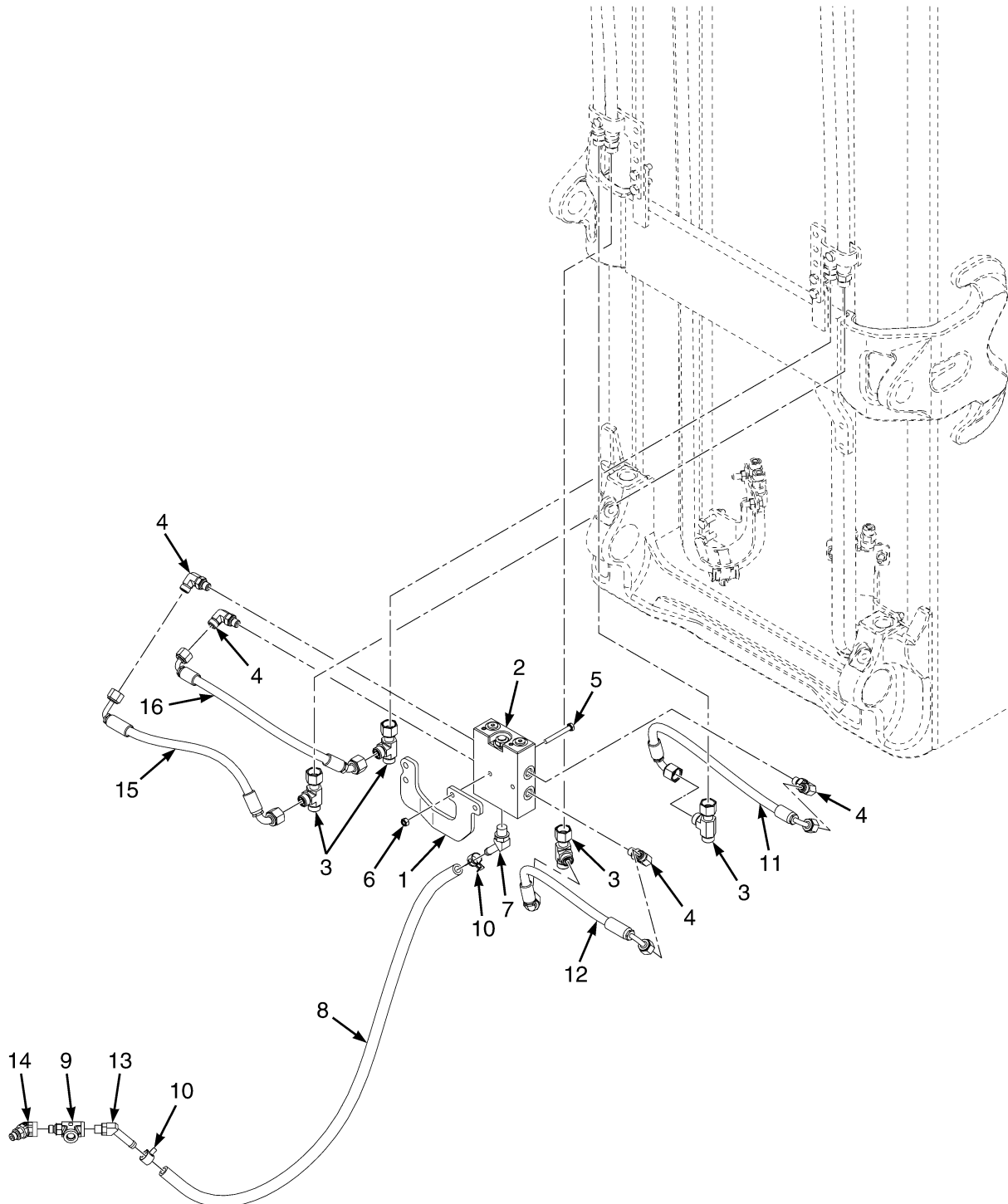
AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-24) TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS) — FOUR FUNCTION



AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS) – FOUR FUNCTION

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111754	Valve	1
3	1487097	Fitting	2
4	1487058	Fitting	1
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4628430	Hose Assy (QD Function C)	1
12	4628431	Hose Assy (QD Function D)	1
13	222500	Fitting	1
14	1688347	Adapter	1
15	1486737	Fitting	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-25) TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (WITH DUAL AUXILIARY WITH E- HYDRAULICS) — THREE AND FOUR FUNCTION

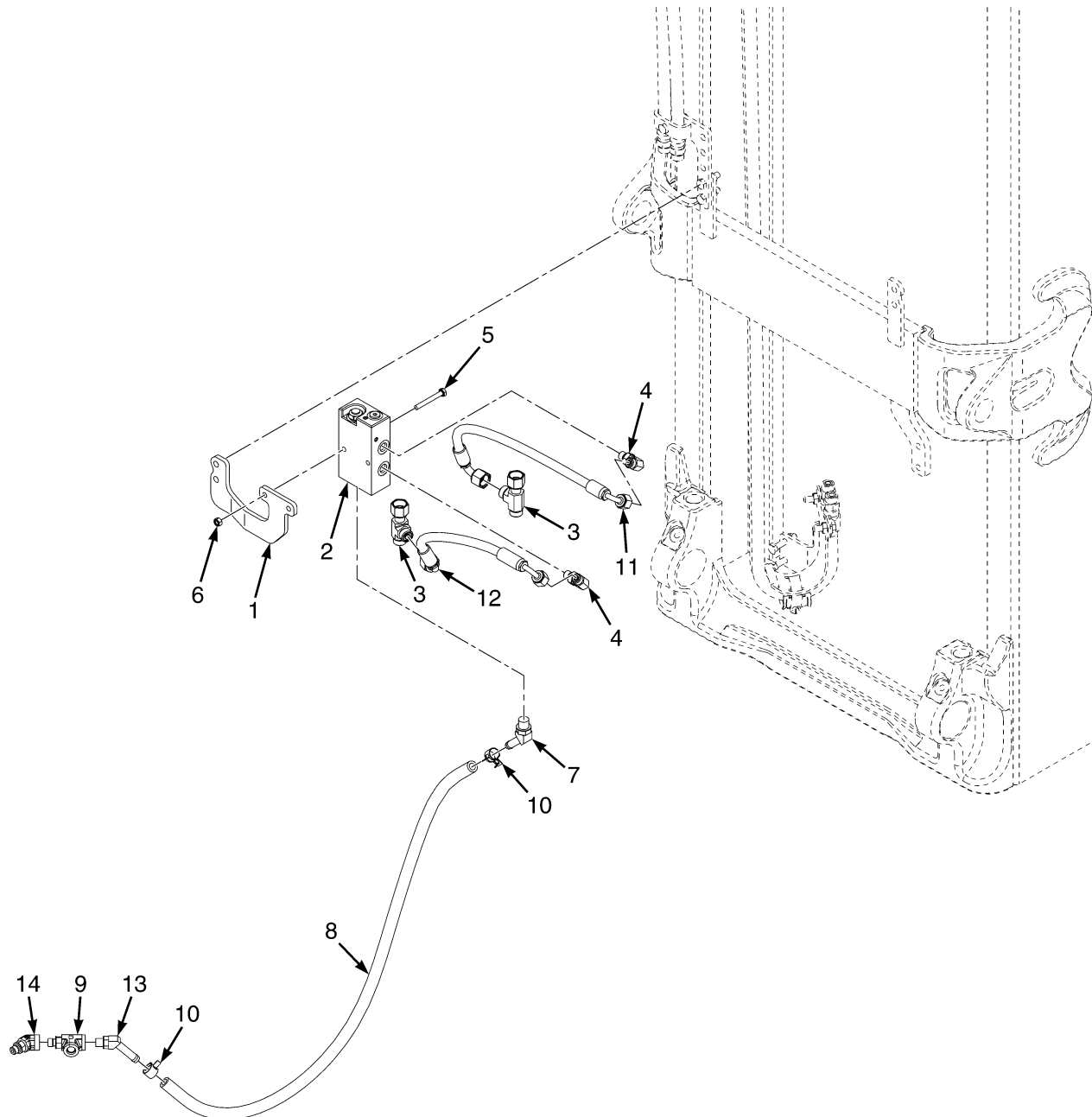


BP000851

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
TWO STAGE LIMITED FREE-LIFT (F507/F563 SERIES MAST) (WITH DUAL AUXILIARY WITH E-HYDRAULICS) – THREE AND FOUR FUNCTION

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111755	Valve	1
3	1487097	Fitting	4
4	1487058	Fitting	4
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4626472	Hose Assy (QD Function A)	1
11	4653647	Hose Assy (QD Function A) (Alternate Part)	1
12	4626473	Hose Assy (QD Function B)	1
12	4653648	Hose Assy (QD Function B) (Alternate Part)	1
13	222500	Fitting	1
14	1688347	Adapter	1
15	4628269	Hose Assy (QD Function C)	1
16	4628268	Hose Assy (QD Function D)	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-26) THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH E-HYDRAULICS)) — THREE FUNCTION

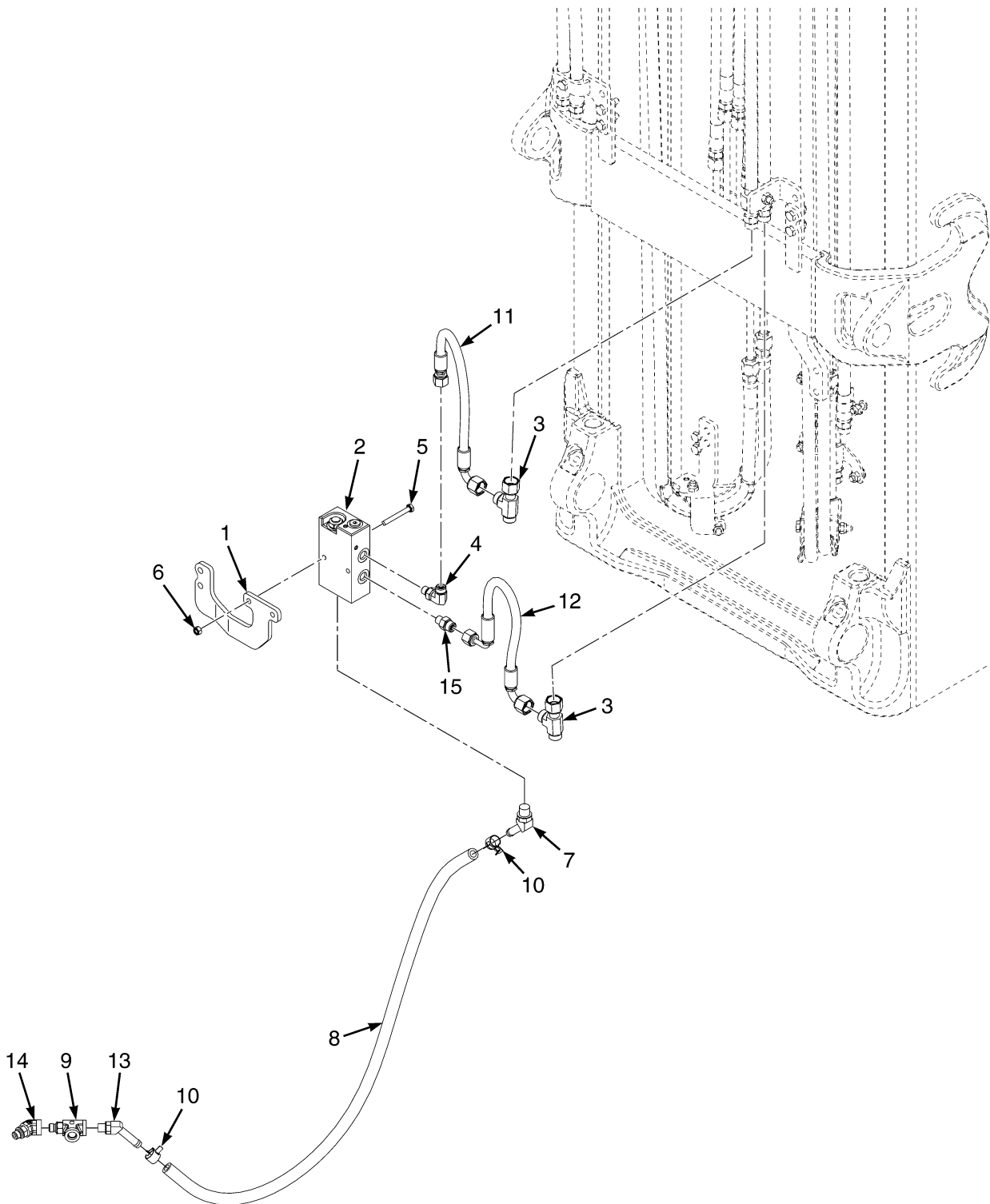


BP000849

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH E-HYDRAULICS)) –
THREE FUNCTION

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111754	Valve	1
3	1487097	Fitting	2
4	1487058	Fitting	2
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4626472	Hose Assy (QD Function A)	1
11	4653647	Hose Assy (QD Function A) (Alternate Part)	1
12	4626473	Hose Assy (QD Function B)	1
12	4653648	Hose Assy (QD Function B) (Alternate Part)	1
13	222500	Fitting	1
14	1688347	Adapter	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-27)
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)) — FOUR FUNCTION (→ 11/2016)

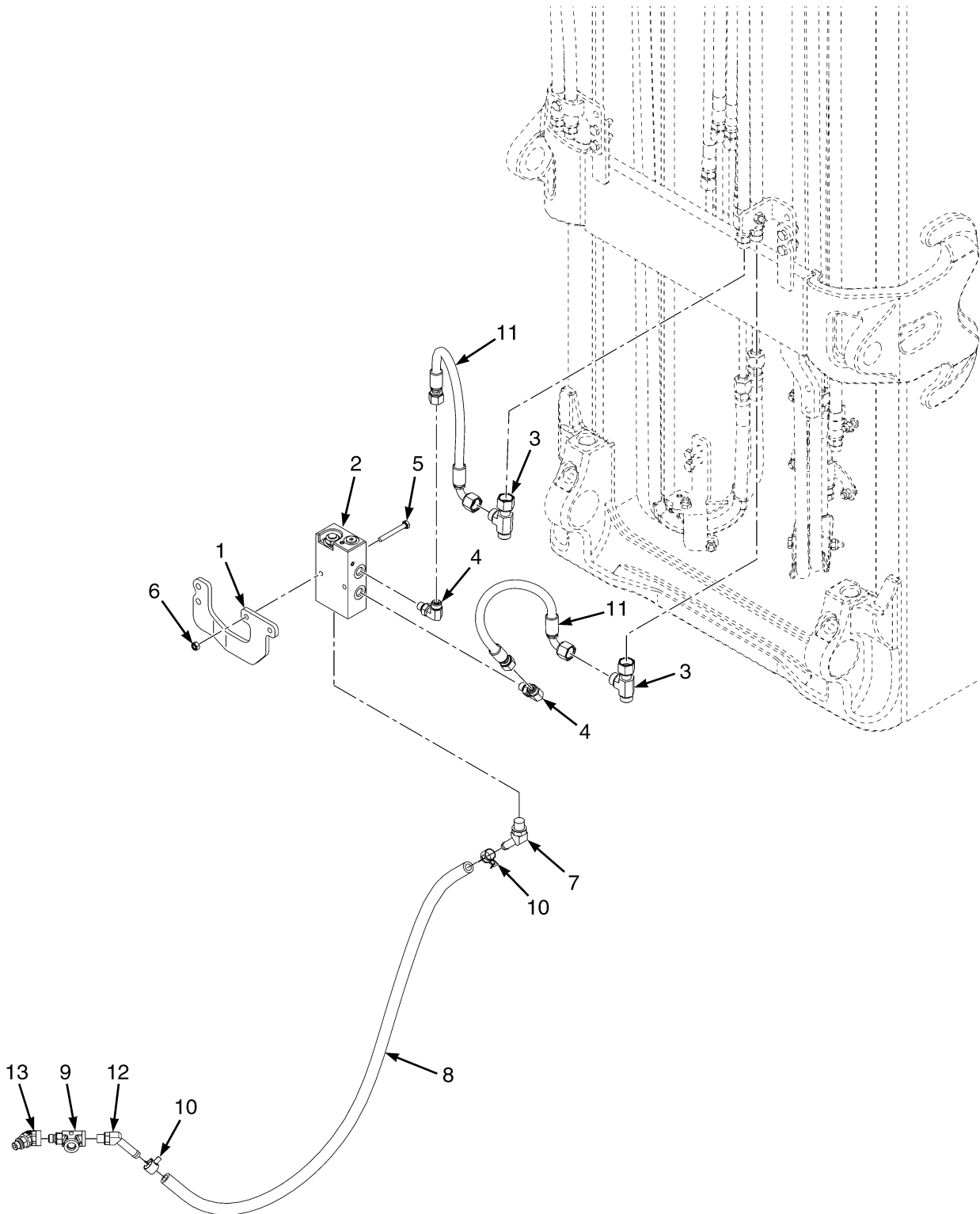


BP000857

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)) – FOUR FUNCTION (→ 11/2016)

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111754	Valve	1
3	1487097	Fitting	2
4	1487058	Fitting	1
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4626238	Hose Assy	1
12	4626239	Hose Assy	1
13	222500	Fitting	1
14	1688347	Adapter	1
15	1486737	Fitting	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-28) THREE STAGE FULL FREE-LIFT — SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION (11/2016 →)

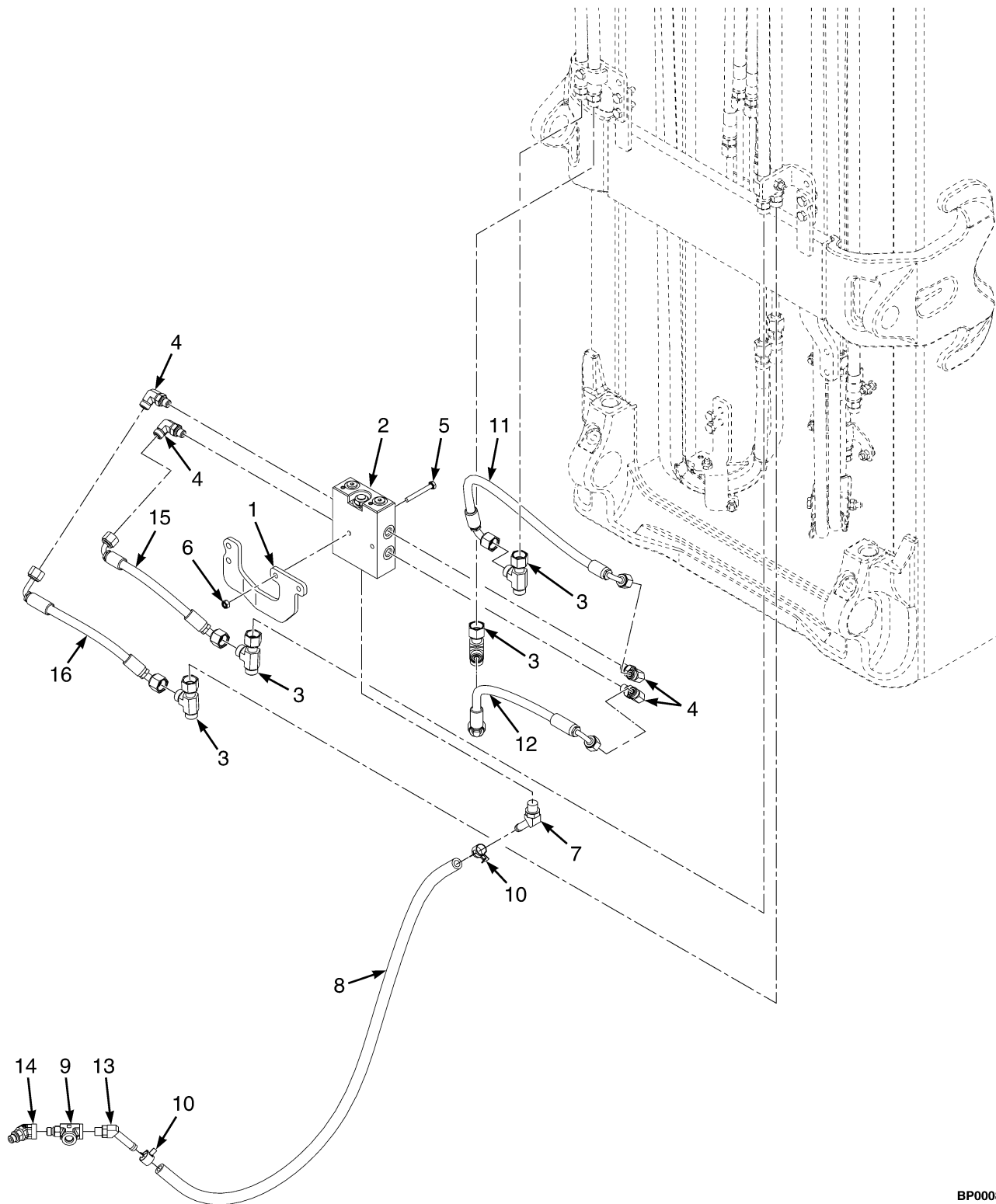


BP001035

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
THREE STAGE FULL FREE-LIFT – SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION
(11/2016 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	4124366	Bracket	1
2	2111754	Valve	1
3	1487097	Fitting	2
4	1487058	Fitting	2
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
7	16483	O-Ring	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4650905	Hose Assy , QD Four Function	2
12	222500	Fitting	1
12	16481	O-Ring	1
13	1688347	Adapter	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-29)
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (DUAL AUXILIARY WITH E-HYDRAULICS)) —
THREE AND FOUR FUNCTION (→ 11/2016)

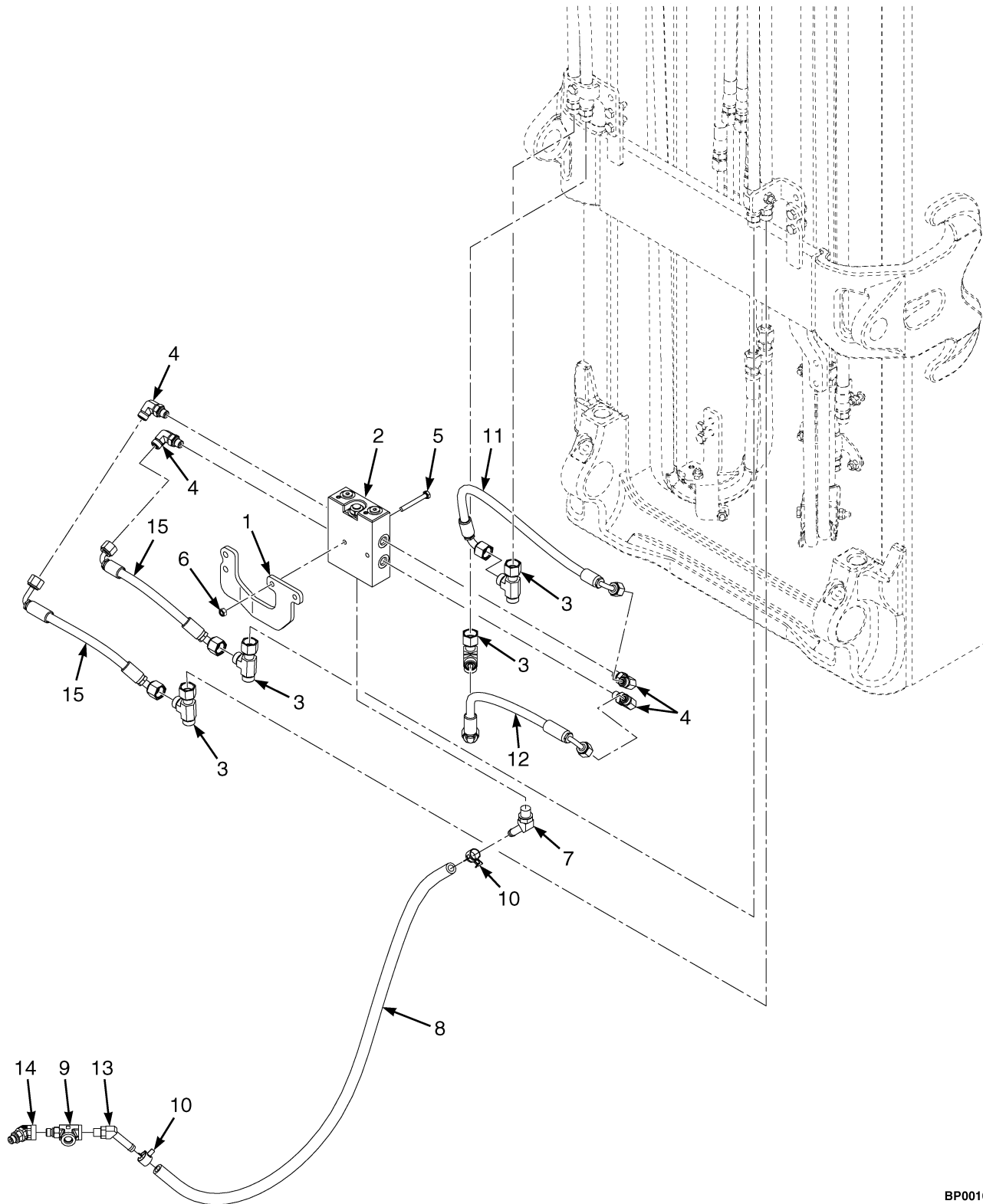


BP000858

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST (DUAL AUXILIARY WITH E-HYDRAULICS)) –
THREE AND FOUR FUNCTION (→ 11/2016)

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket	1
1	4124366	Bracket (Alternate Part)	1
2	2111755	Valve	1
3	1487097	Fitting	4
4	1487058	Fitting	4
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4626472	Hose Assy (QD Function A)	1
12	4626473	Hose Assy (QD Function B)	1
13	222500	Fitting	1
14	1688347	Adapter	1
15	4626474	Hose Assy (QD Function C)	1
16	4626475	Hose Assy (QD Function D)	1

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 11-30) THREE STAGE FULL FREE-LIFT — DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR FUNCTION (11/2016 →)

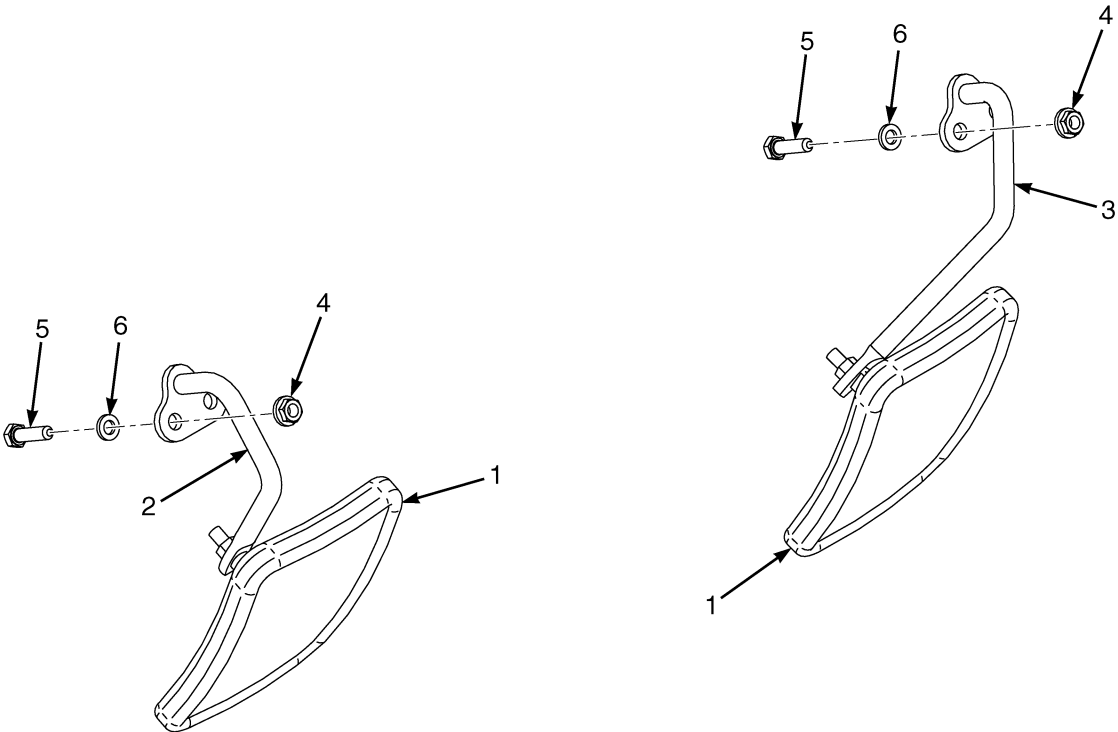


BP001039

AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES
THREE STAGE FULL FREE-LIFT – DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR
FUNCTION (11/2016 →)

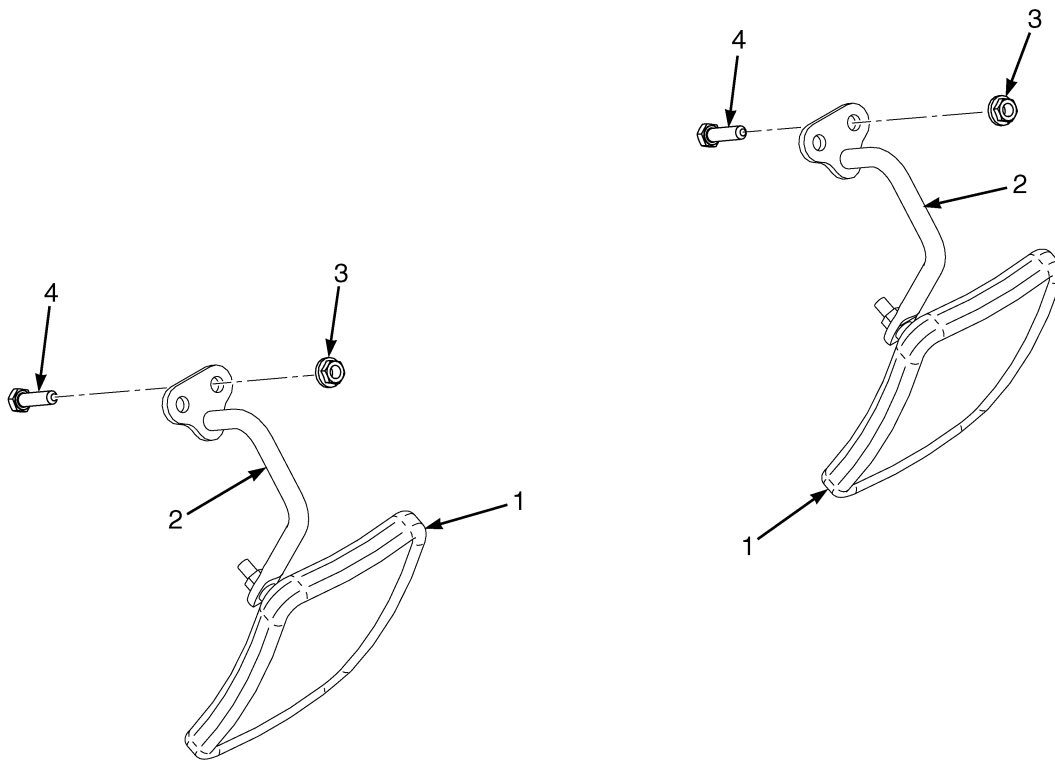
ITEM	PART NO.	DESCRIPTION	QTY
1	4124366	Bracket	1
2	2111755	Valve	1
3	1487097	Fitting	4
4	1487058	Fitting	4
5	292505	Capscrew	2
6	~~1512440~~		
	302399	Nut	2
7	222501	Fitting	1
7	16483	O-Ring	1
8	4626478	Hose Assy	1
9	4606305	T-Fitting	1
10	1569616	Hose Clamp	2
11	4653647	Hose Assy (QD Function A)	1
12	4653648	Hose Assy (QD Function B)	1
13	222500	Fitting	1
13	16481	O-Ring	1
14	1688347	Adapter	1
15	4650904	Hose Assy	2

MIRRORS (FIGURE 11-31)



BP000660

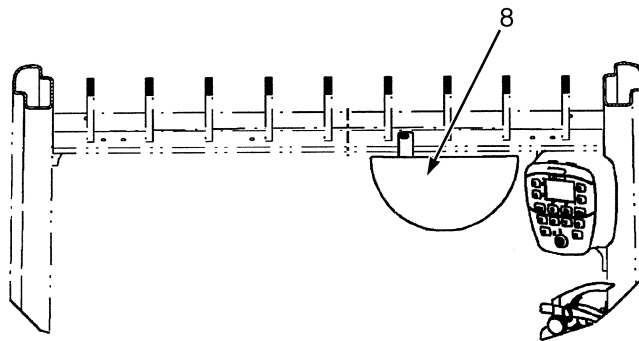
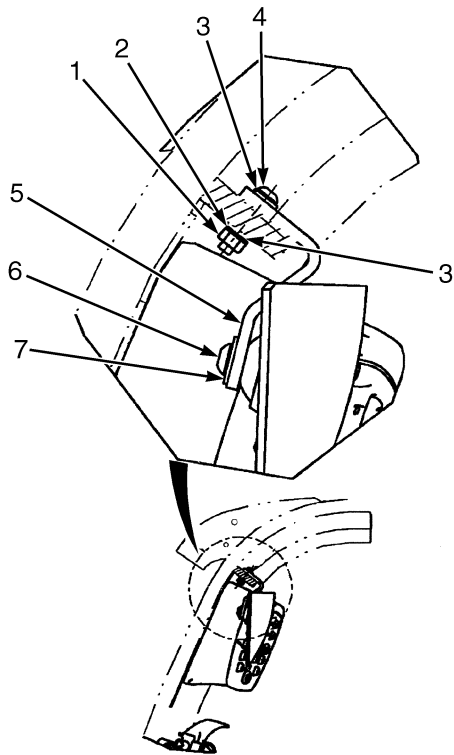
ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror (Side Mirror Assembly)	2
2	1675931	Bracket Wldmt (LH)	1
3	4004200	Bracket Wldmt (RH)	1
4	1586430	Nut	4
5	1696161	Capscrew	4
6	320157	Washer	4

MIRRORS (FIGURE 11-32)
WITH DRIVE-THRU RACK OVERHEAD GUARD

BP000661

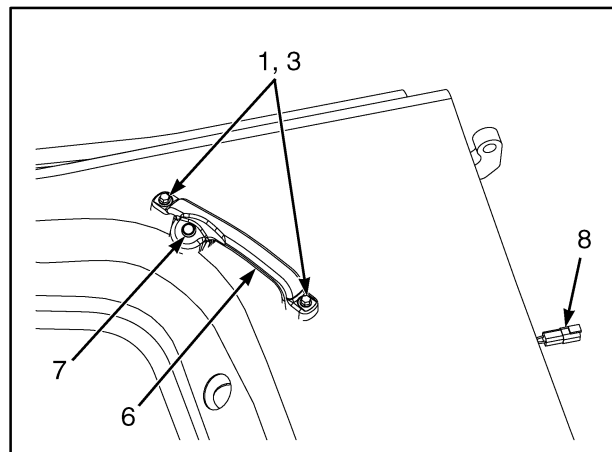
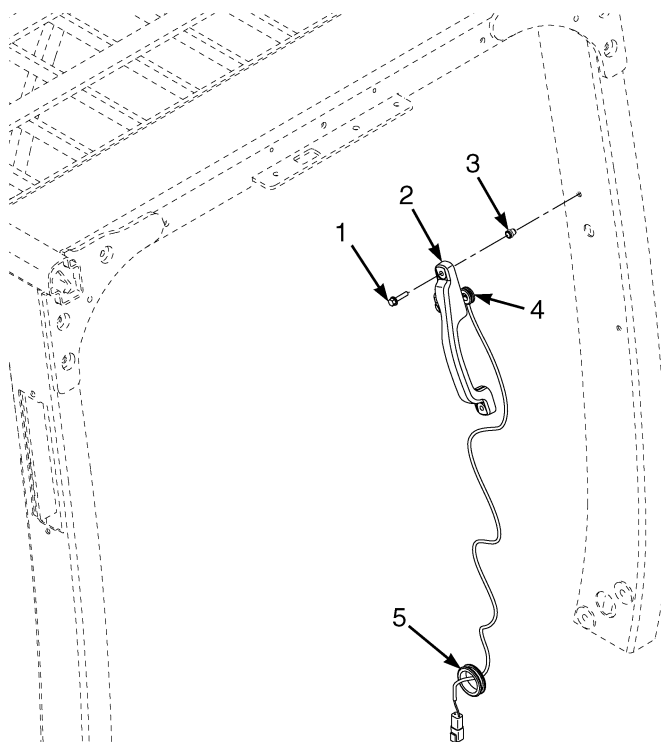
ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror (Side Mirror Assembly)	2
2	4029070	Bracket Wldmt	2
3	1586430	Nut	4
4	1596420	Capscrew	4

MIRROR (FIGURE 11-33) PANORAMIC



BP000328

ITEM	PART NO.	DESCRIPTION	QTY
1	136687	Nut	1
2	296379	Washer	1
3	1506738	Washer	2
4	2071260	Capscrew	1
5	1702459	Bracket (Panoramic Mirror)	1
6	369242	Capscrew	1
7	375629	Washer	1
8	2109975	Mirror	1

REAR DRIVE HANDLE (FIGURE 11-34)

BP000804

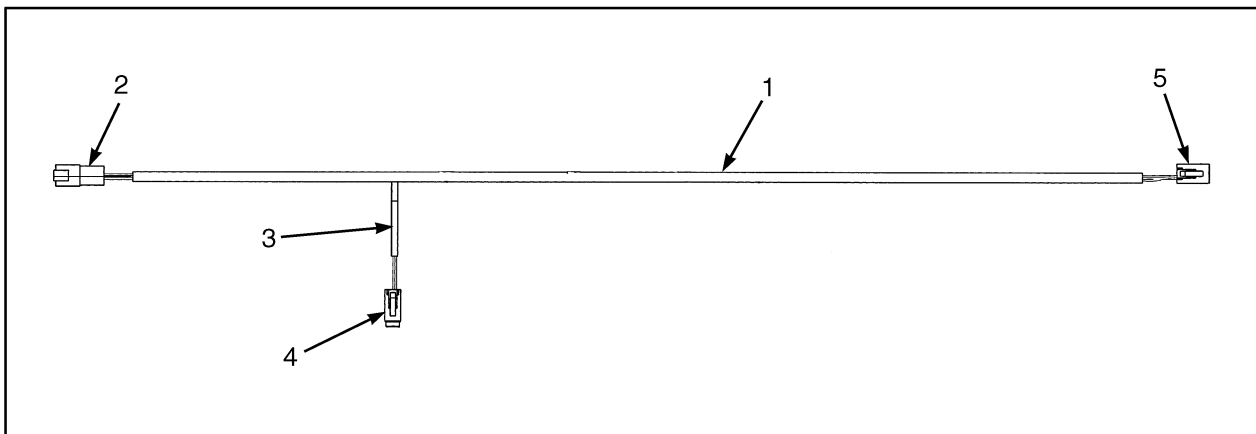
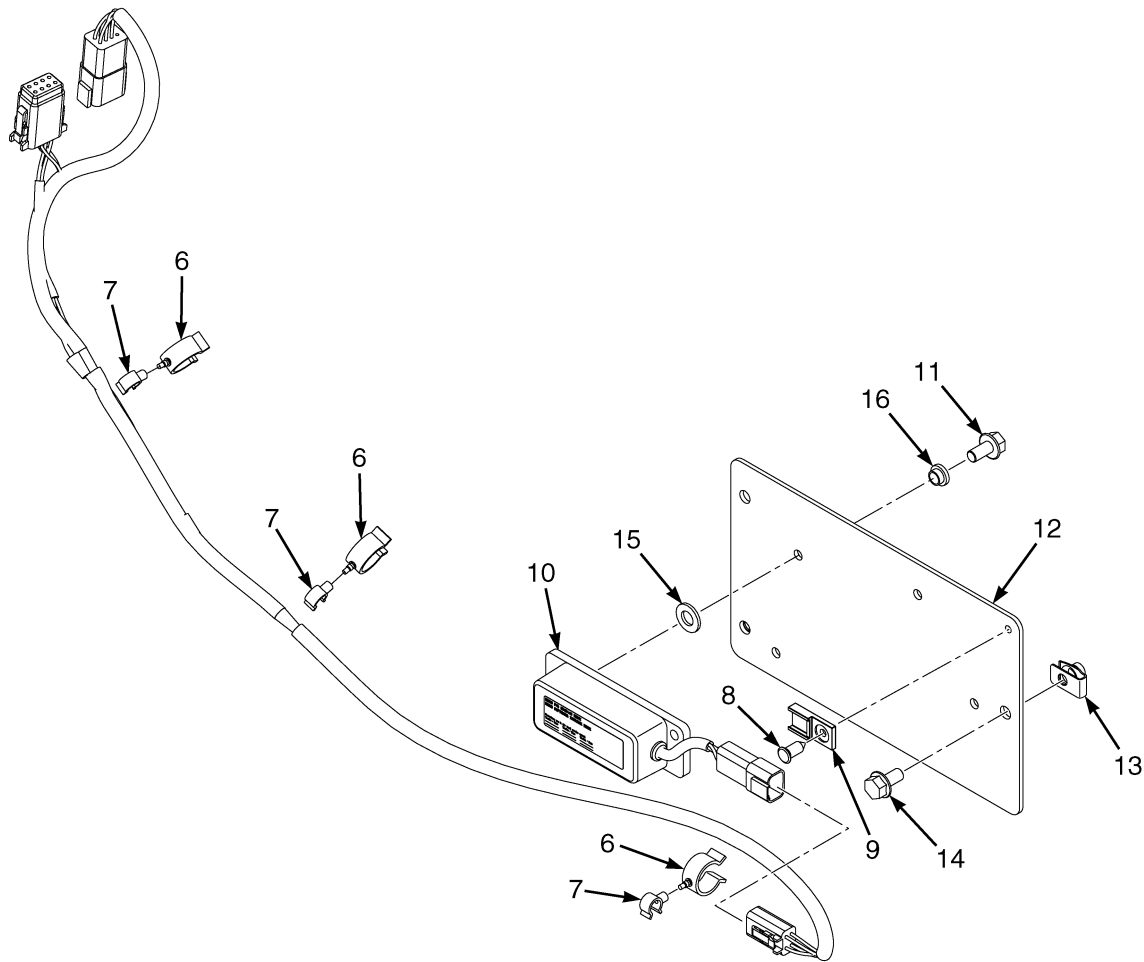
ITEM	PART NO.	DESCRIPTION	QTY
1	2071261	Capscrew	2
2	b 2070223	Handle (Assembly)	1
2	b 2109178	Handle (Assembly) (Freezer)	1
2	2069454	Handle	1
2	1566726	Push Button Switch	1
2	1493465	Connector (2 Pin)	1
2	1330414	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	2
3	1531558	Insert	2
4	1598220	Grommet	1
5	1654142	Grommet	1
6	a 4603761	Handle Assembly	1
6	a 4603762	Handle Assembly (Freezer)	1
6	4605895	Handle	1
7	1566726	Push Button Switch	1
8	1493465	Connector (2 Pin)	1
	c d 4604015	Wire Harness (Jumper) (☞ Figure 2-74).....	1

FOOTNOTES:

- a** Mounted on Hood for 36 and 39 in. Battery Box
b Mounted on Overhead Guard for 27, 31 and 33 in. Battery Box

- c** Not Illustrated
d With DTR Overhead Guard

IMPACT SENSOR (FIGURE 11-35)

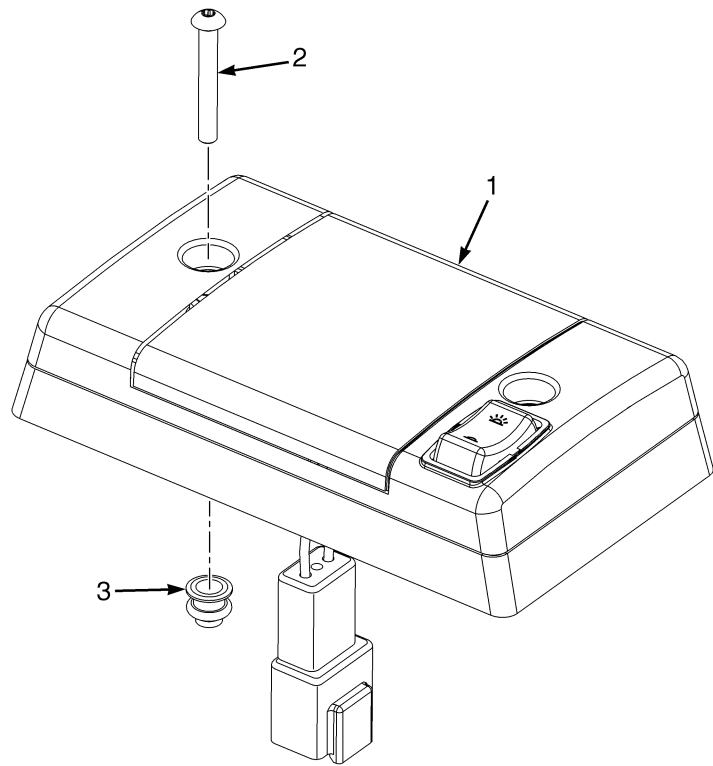


BP000210

IMPACT SENSOR

ITEM	PART NO.	DESCRIPTION	QTY
1	2108356	Wire Harness	1
2	.....	Main Harness Connector	1
2	1541988	Connector (8 Pin)	1
2	1541989	Connector (Secondary Lock)	1
2	~~1570624~~		
	1463140	Terminal (Pin)	7
2	1484377	Plug	1
3	275494	Conduit	AR
4	.....	Display Harness Connector	1
4	1484377	Plug	1
4	1463141	Terminal (Socket)	7
4	1541992	Connector (Secondary Lock)	1
4	1541991	Connector	1
5	.....	Impact Sensor	1
5	1330434	Terminal	4
5	1489657	Connector (Secondary Lock)	1
5	1489656	Connector (4-Way)	1
6	1502066	Clamp (Swivel)	3
7	1561871	Clamp (Swivel)	3
8	1582464	Fastener	1
9	1500912	Clip	1
10	4601819	Sensor (Impact)	1
11	~~4109993~~		
	1527879	Capscrew	2
12	1697361	Bracket	1
13	1480237	Nut , Foldover	3
14	~~4109993~~		
	1527879	Capscrew	3
15	1702735	Washer	2
16	4056648	Bushing	2

DOME LIGHT (FIGURE 11-36)



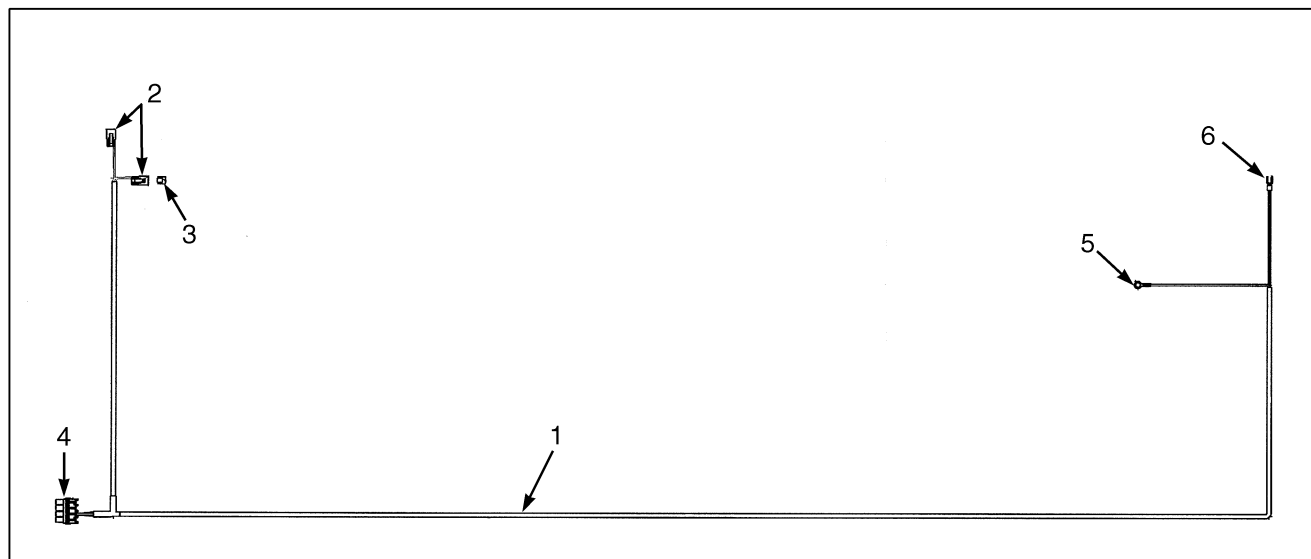
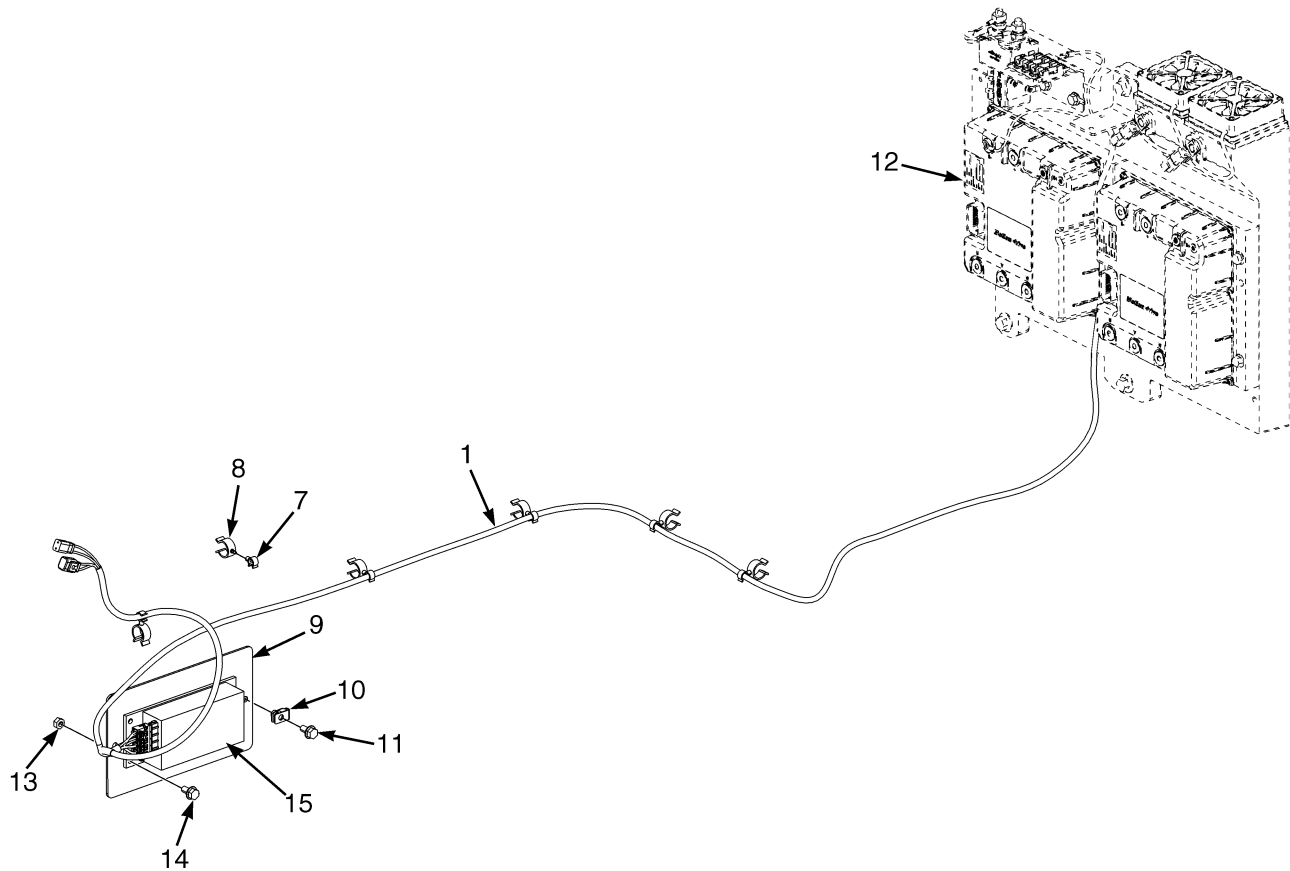
BP000279

ITEM	PART NO.	DESCRIPTION	QTY
1	2105546	Dome Light	1
2	302027	Screw	2
3	1683346	Insert	2

NOTES

[illegible]

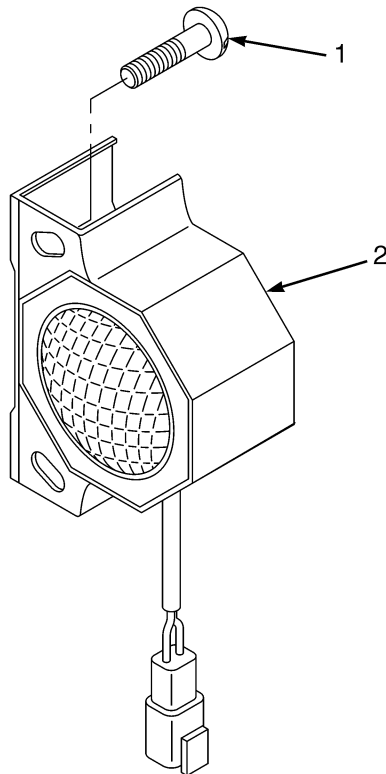
DC-DC CONVERTER AND ATTACHING PARTS (FIGURE 11-37)



BP000415

DC-DC CONVERTER AND ATTACHING PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	2097785	Wire Harness (DC-DC Converter)	1
1	275494	Conduit	AR
2	.....	Secondary Lock	2
2	1330419	Connector	1
2	1330424	Connector (Secondary Lock)	1
2	1330436	Terminal	2
3	1626727	Connector	1
4	.....	DC - DC Converter	1
4	1682736	Terminal	2
4	1554877	Terminal	2
4	1554879	Connector	1
5	148606	E-Ring	1
6	1301784	E-Spade	1
7	1606544	Clamp (Swivel)	6
8	1502066	Clamp (Swivel)	6
9	1697361	Bracket	1
10	1480237	Nut , Foldover	3
11	4109993		
	1527879	Capscrew	3
12	.....	Control Panel (☞ Figure 2-3).....	1
13	1480237	Nut , Foldover	2
14	4109993		
	1527879	Capscrew	2
15	2066644		
	4638711	DC-DC Converter (36/80 Volt)	1
15	2066644		
	4638711	DC-DC Converter (36/80 Volt) (72/80 V)	1

BACK-UP ALARM (FIGURE 11-38)

BP000403

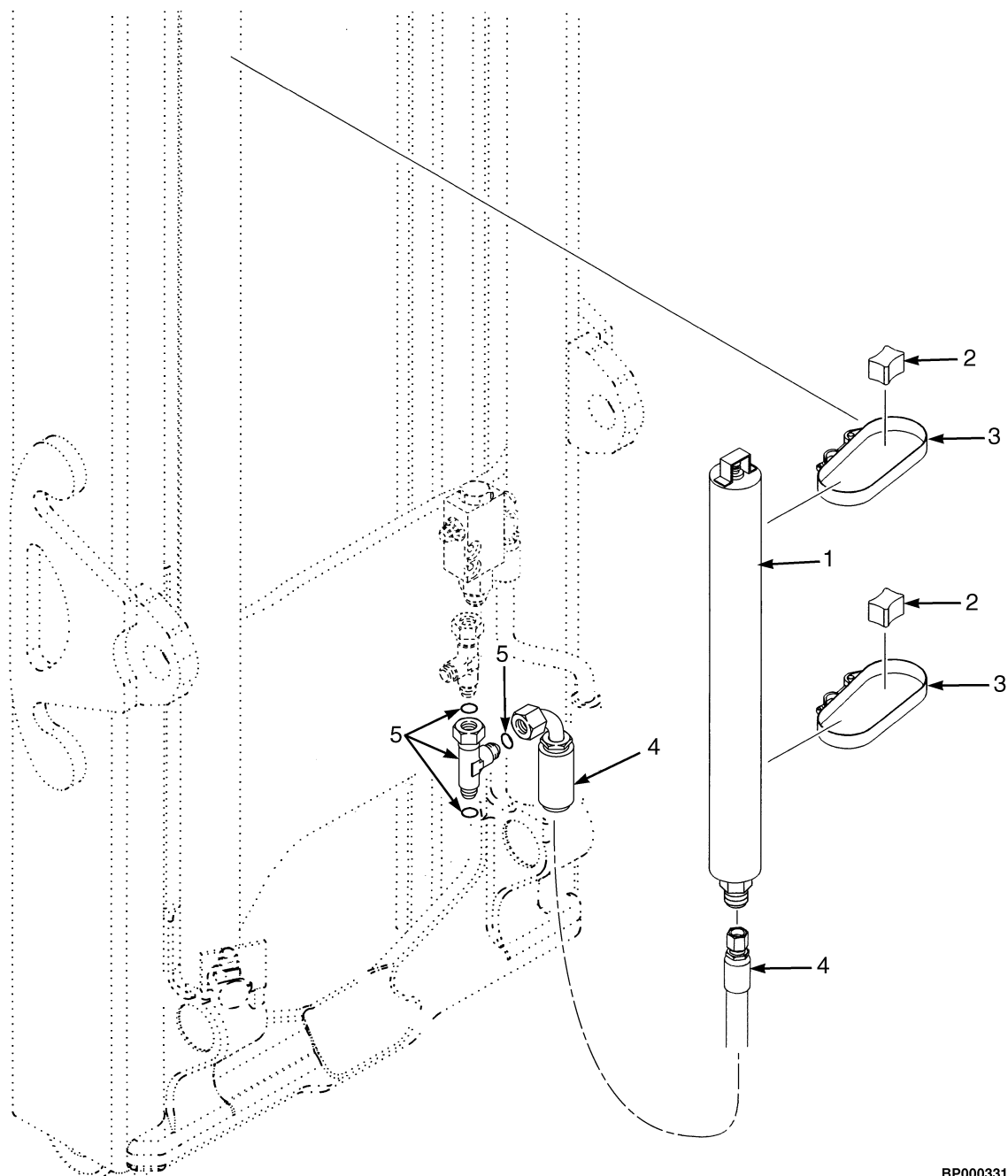
ITEM	PART NO.	DESCRIPTION	QTY
1	1527876	Capscrew	2
1	1535262	Nut (Not Illustrated)	2
2	2107985	Back-Up Alarm Assembly	1
2	2107777	Back-Up Alarm	1
2	1493465	Connector (2 Pin)	1
2	1330414	Connector (Secondary Lock)	1
2	1330433	Terminal (Pin)	2
2	a 4633862	Alarm (12-24V Adjustable 82-102 dB)	1
2	b 4633837	Alarm (24-48V Adjustable 82-102 DB)	1

FOOTNOTES:**a** When Dc-DC Converter Equiped**b** Without DC-DC Converter Equipped

NOTES

[illegible]

ACCUMULATOR (FIGURE 11-39) D508/D563 MAST SERIES

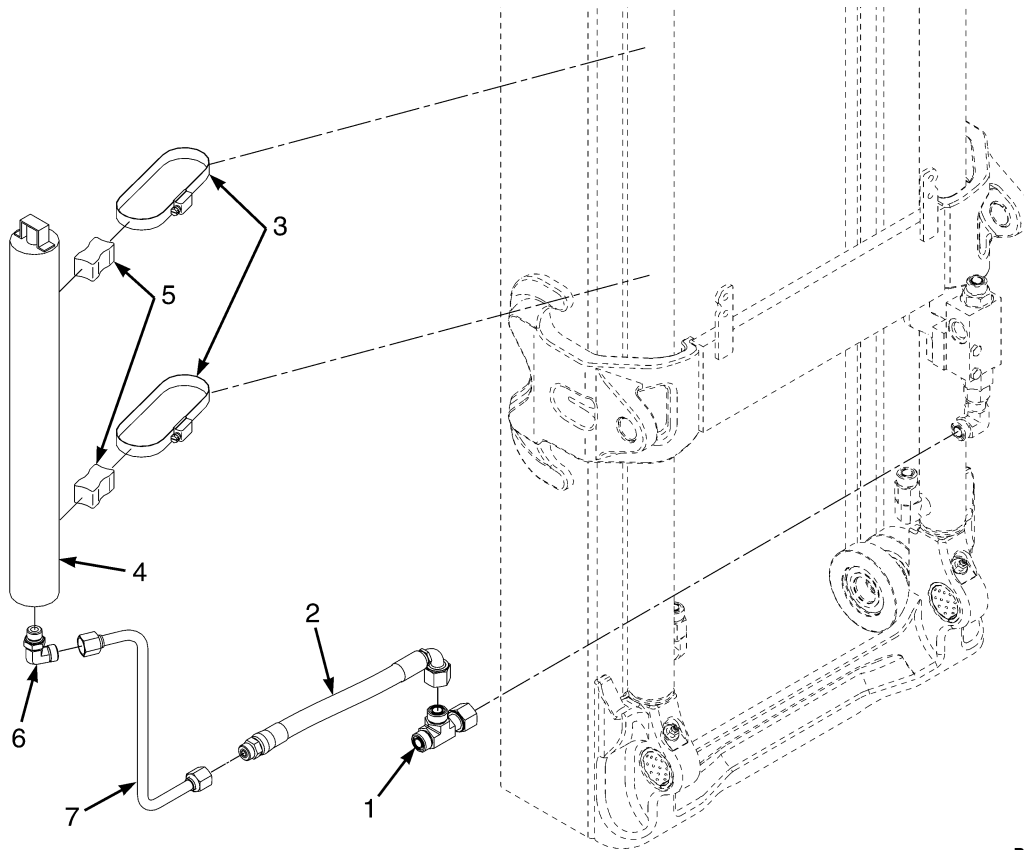


BP000331

**ACCUMULATOR
D508/D563 MAST SERIES**

ITEM	PART NO.	DESCRIPTION	QTY
1	1629185	Accumulator	1
1	a 1695807	Accumulator (Non-Repairable)	1
2	1609864	Spacer	2
3	4031653	Strap Clamp	2
4	2073766	Hose Assy	1
5	1487096	Fitting	1
5	252729	O-Ring	3

FOOTNOTES:**a** Optional

ACCUMULATOR (FIGURE 11-40)
F508/F563 SERIES MAST

BP000830

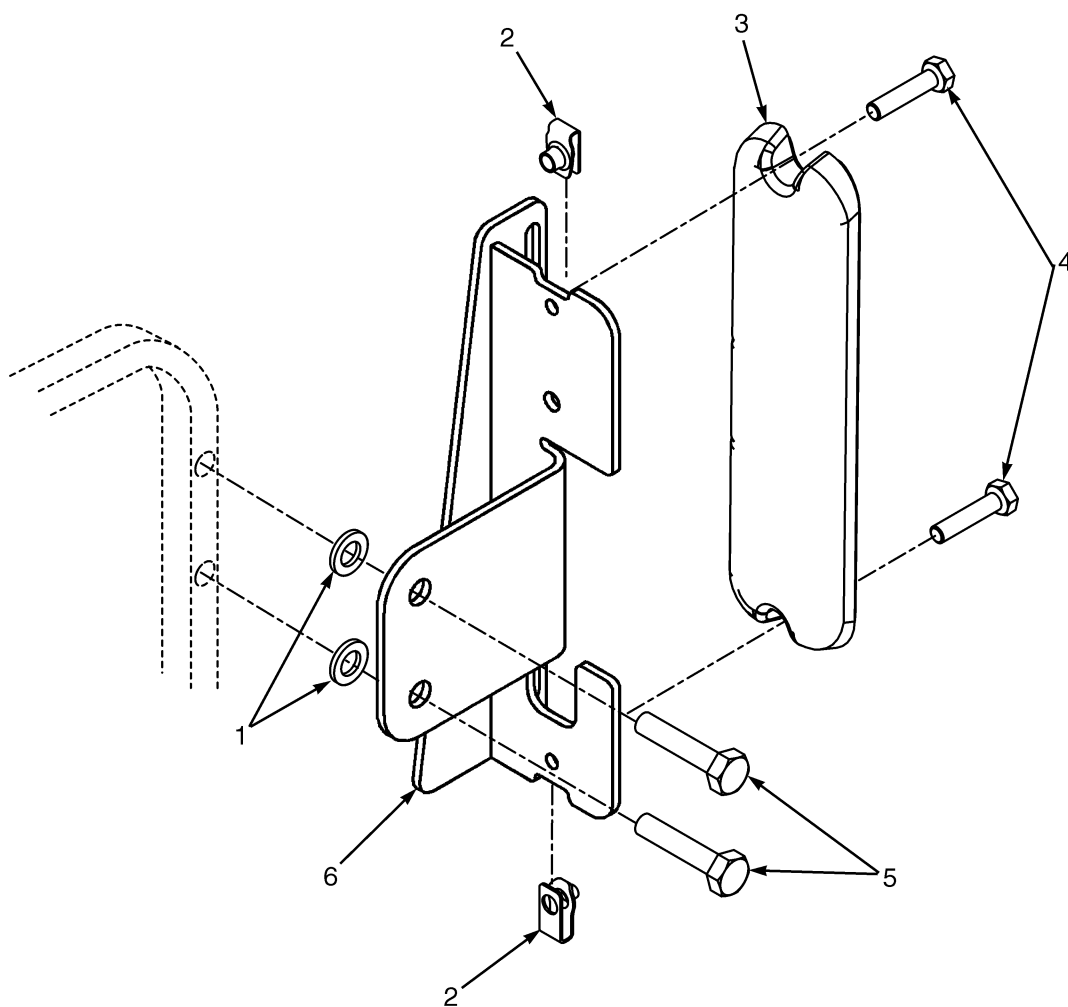
ITEM	PART NO.	DESCRIPTION	QTY
1	1487096	Fitting	1
2	4626480	Hose Assy	1
3	4031653	Strap Clamp	2
4	1629185	Accumulator (1 Quart)	1
4	a 1695807	Accumulator (Optional)	1
5	1609864	Spacer	2
6	1473897	Fitting	1
7	4630407	Tube Assy	1

FOOTNOTES:**a** Non-Repairable

NOTES

[illegible]

TAIL LIGHT MOUNTING (FIGURE 11-41) OVERHEAD GUARD WITH DRIVE THRU RACK

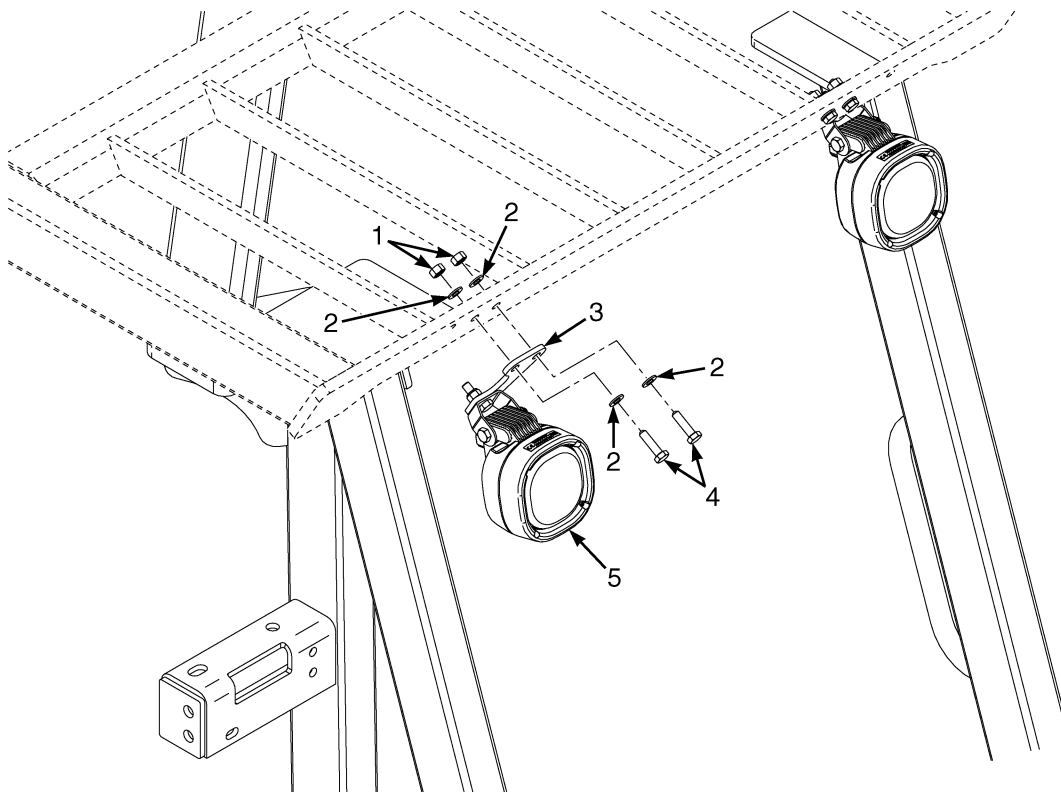


BP000344

**TAIL LIGHT MOUNTING
OVERHEAD GUARD WITH DRIVE THRU RACK**

ITEM	PART NO.	DESCRIPTION	QTY
1	1531557	Insert	4
2	1537551	Nut (Clip)	4
3	2095483	Tail Light	2
3	4602052	Light (Tail) (LED) (Alternate Part)	2
4	1672692	Screw	4
5	316678	Screw	4
6	1702006	Bracket Wldmt (Tail Light LH)	1
6	1702007	Bracket Wldmt (Tail Light RH)	1

FRONT WORKLIGHT MOUNTING (FIGURE 11-42) OVERHEAD GUARD WITH DRIVE-THRU RACK



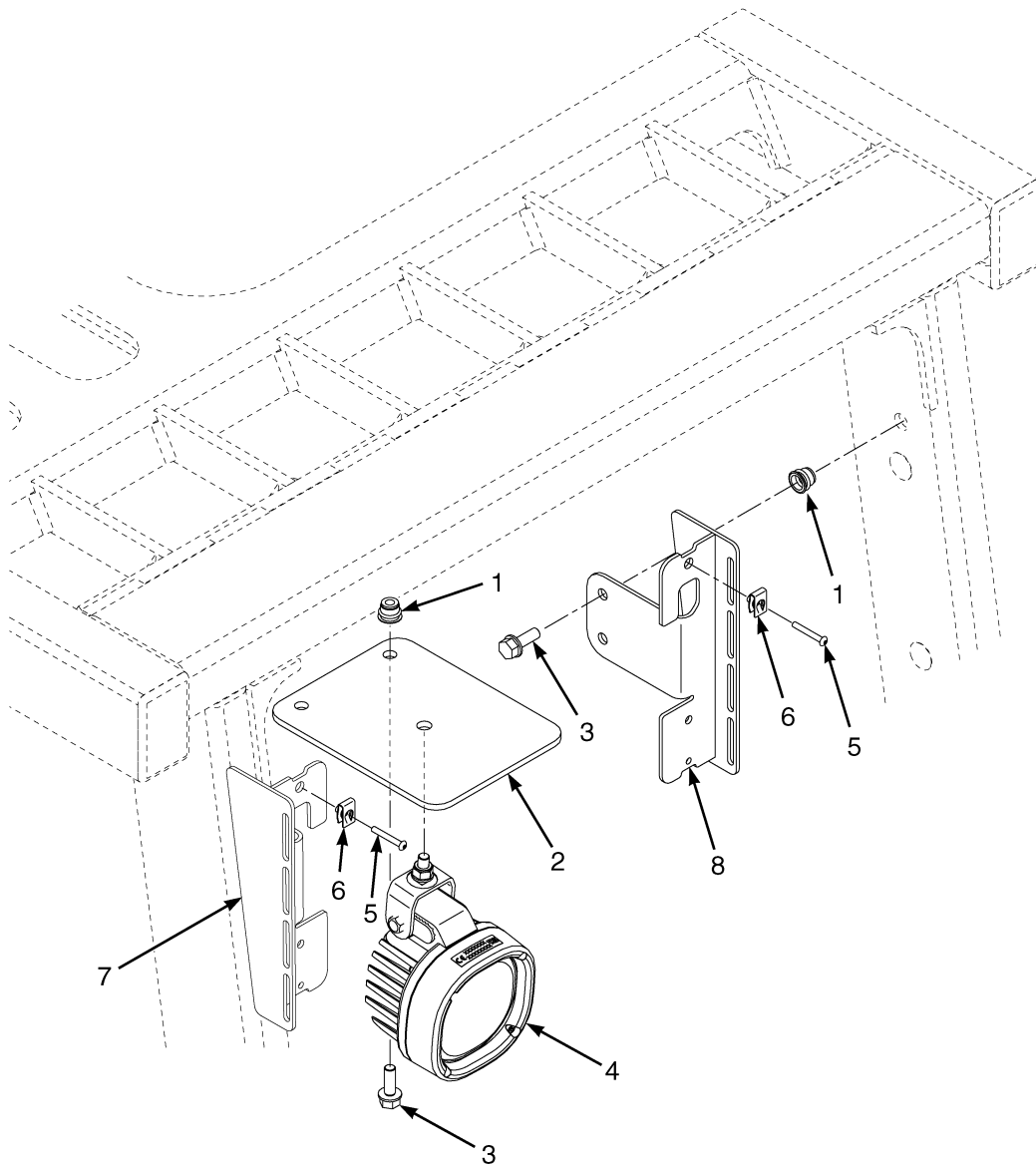
BP000659

ITEM	PART NO.	DESCRIPTION	QTY
1	2022719	Nut	4
2	320157	Washer	8
3	4029069	Bracket	2
4	176640	Bolt	4
5	2098969	Worklight (RH Front) (Glass Lens) (Halogen)	1
5	2098970	Worklight (LH Front) (Glass Lens) (Halogen)	1
5	2107383	Worklight (RH Front) (LED)	1
5	2107384	Worklight (LH Front) (LED)	1

NOTES

This image shows a single page from a notebook or ledger. It features a series of evenly spaced, thin black horizontal lines running across the width of the page. The background is plain white, and there are no margins, text, or other markings present.

REAR WORK AND TAIL LIGHT MOUNTING (FIGURE 11-43) DRIVE-THRU OVERHEAD GUARD

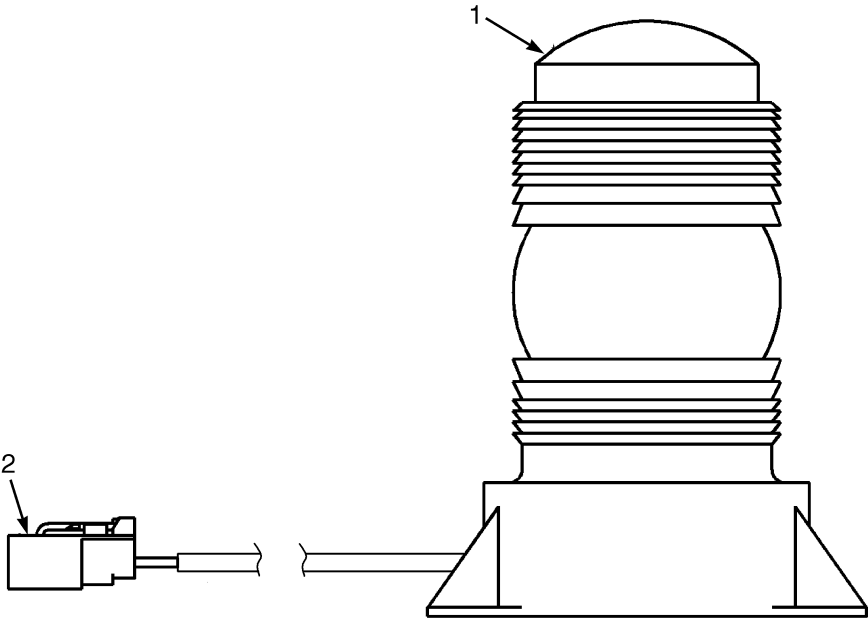


BP000616

**REAR WORK AND TAIL LIGHT MOUNTING
DRIVE-THRU OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	1531557	Insert	6
2	1698432	Bracket	1
3	1583611	Capscrew	6
4	2098968	Worklight (Rear) (Halogen) (Glass Lens)	1
4	2107382	Worklight (Rear) (LED)	1
5	1672692	Screw	4
6	1537551	Nut (Clip)	4
7	1702006	Bracket Wldmt (Tail Light LH)	1
8	1702007	Bracket Wldmt (Tail Light RH)	1

STROBE LIGHT (FIGURE 11-44)
LED



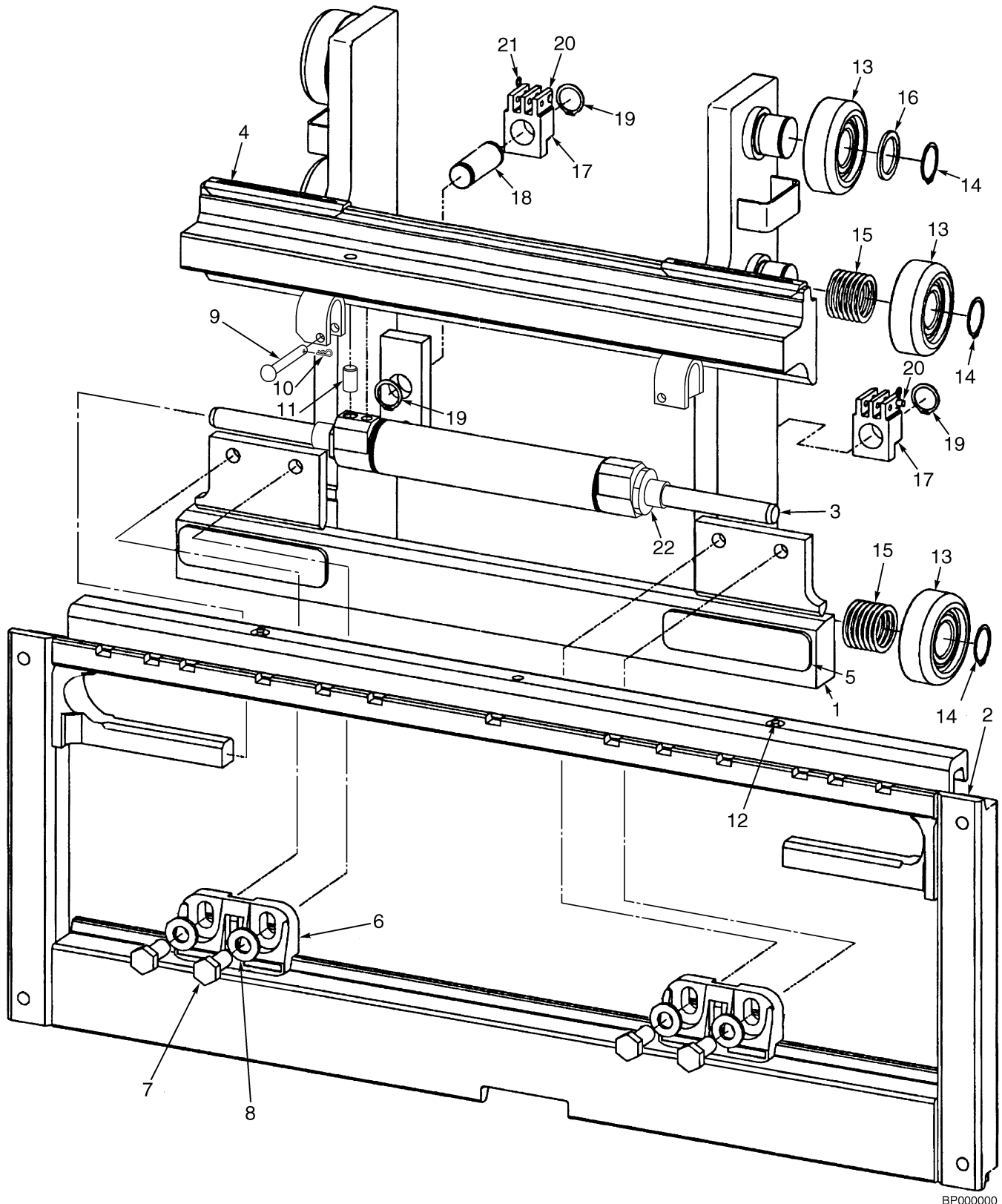
BP000363

ITEM	PART NO.	DESCRIPTION	QTY
	1654013	Strobe Light Assembly	1
1	1652290	Strobe Light (Amber LED)	1
2	.....	Connector Assembly	1
2	1463138	Terminal Pin	1
2	1561559	Connector (2 Pin)	1
2	1561755	Connector (Secondary Lock)	1

NOTES

[illegible]

INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY (FIGURE 11-45) TWO STAGE LIMITED FREE LIFT — D507/D562 (→ 12/2016)

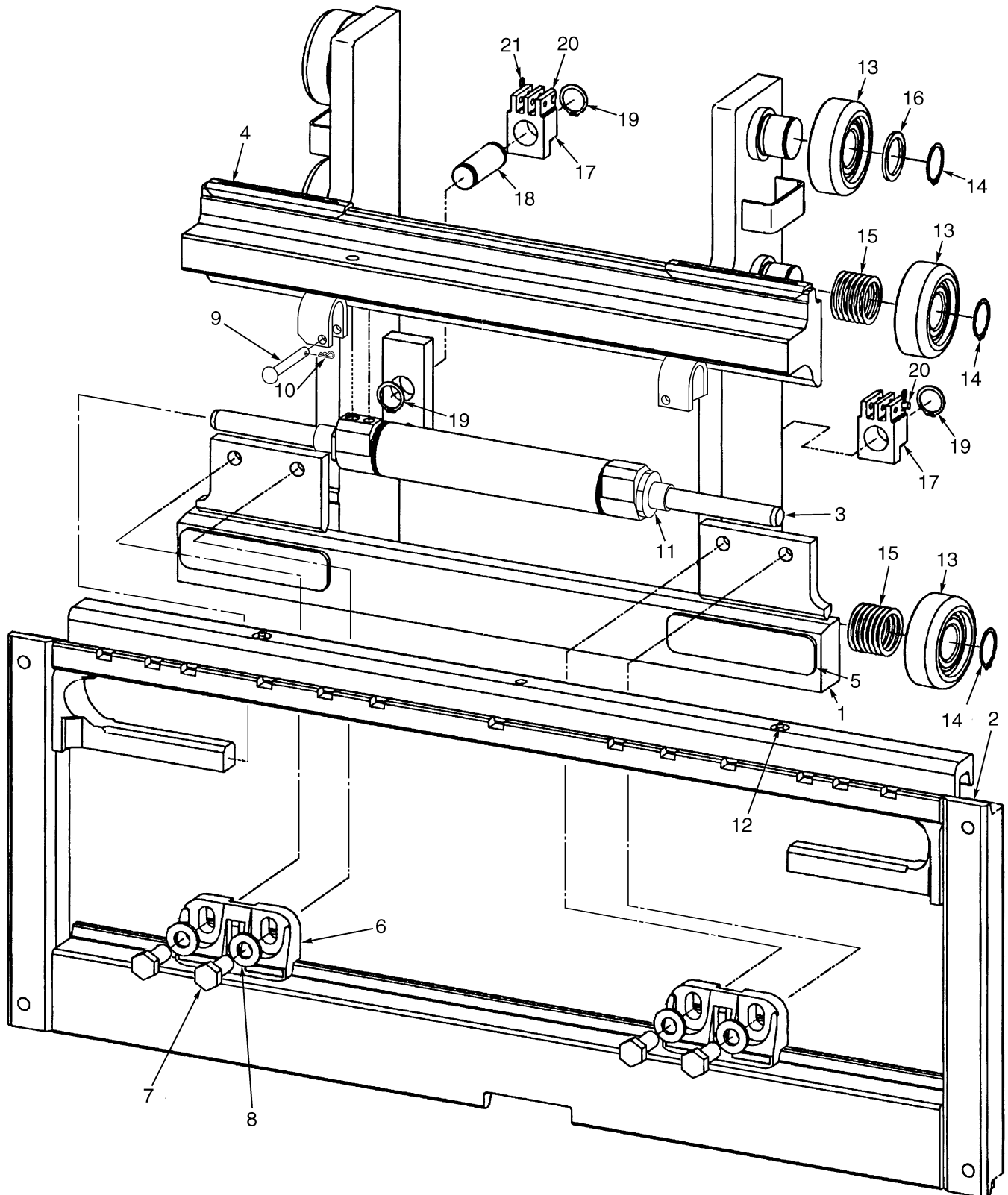


BP000000

INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY
TWO STAGE LIMITED FREE LIFT – D507/D562 (→ 12/2016)**KEY:****A: E45-55XN (D507)****B: E60-70XN (D562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1486178	Side-Shift Carriage (38.5 in.)	1	..
	1477980	Side-Shift Carriage (38 in.)	..	1
1	1488998	Carriage Wldmt (Inner) (38.5 in.)	1	..
1	1488918	Carriage Wldmt (Inner) (38.5 in.)	..	1
2	~~1489040~~			
	4033954	Frame (Outer) (38.5 in.)	1	..
2	~~1488974~~			
	4033959	Frame (Outer) (38.5 in.)	..	1
3	2043528	Sideshift Cylinder Assembly (☞Figure 11-59).....	1	..
3	2043529	Sideshift Cylinder Assembly (☞Figure 11-59).....	..	1
4	2043531	Bearing Strip (Upper)	2	..
4	2043532	Bearing (Upper)	..	2
5	2043533	Bearing Strip (Lower)	2	..
5	2043534	Bearing (Lower)	..	2
6	~~2043530~~			
	4611363	Hook	2	2
7	226458	Capscrew	4	4
8	296426	Washer	4	4
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	302487	Roll Pin	1	1
12	16041	Grease Fitting	2	2
13	1345219	Load Roller ("B") (111.48/111.22)	6	6
14	12891	Snap Ring	6	6
15	1345263	Shim (0.020 in.)	28	28
16	366116	Spacer	6	6
17	1369345	Chain Anchor (Dual Hole)	2	..
17	1504010	Chain Anchor (Single Hole)	2	..
17	1504010	Chain Anchor (Single Hole)	2	..
17	1369344	Chain Anchor (Dual Hole)	..	2
17	1504012	Chain Anchor (Single Hole)	..	2
18	1353408	Pin	2	2
19	131358	Snap Ring	4	4
20	1514866	Pin	2	2
21	15211	Cotter Pin	2	2
22	1498326	Shim	AR	AR

INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY (FIGURE 11-46) TWO STAGE LIMITED FREE-LIFT — F507/F562 (→ 12/2016)



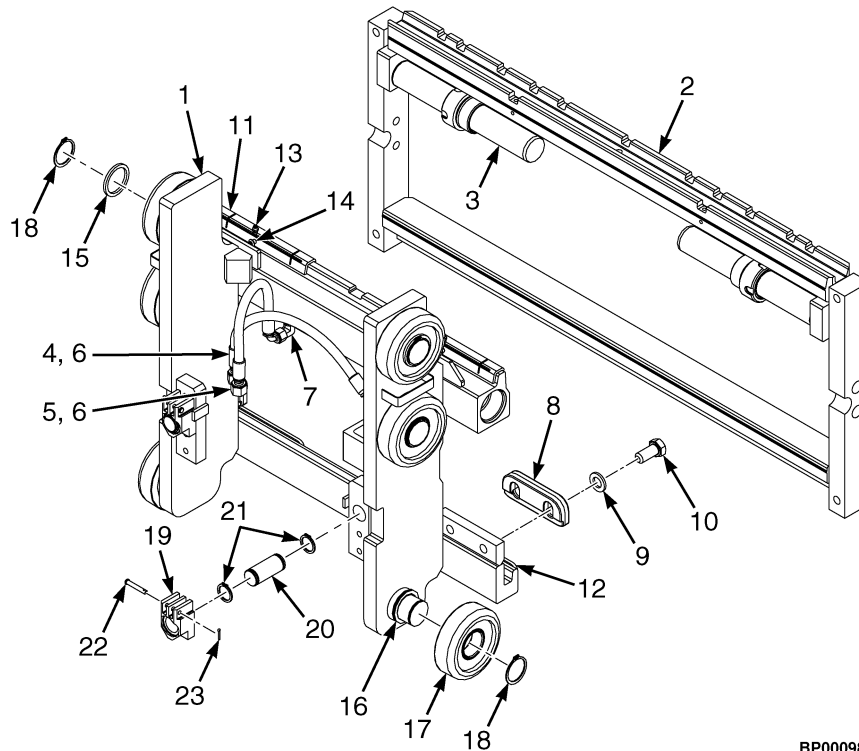
HP020343

INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY
TWO STAGE LIMITED FREE-LIFT – F507/F562 (→ 12/2016)**KEY:****A: E45-55XN F507****B: E60-70XN F562**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4625589	Side-Shift Carriage (38.5 in.)	1	..
	4625597	Side-Shift Carriage (38.5 in.)	..	1
1	4065186	Carriage Wldmt (38.5 in.)	1	..
1	4065213	Carriage Wldmt (38.5 in.)	..	1
2	1489040			
	4033954	Frame (Outer) (38.5 in.)	1	..
2	1488974			
	4033959	Frame (Outer) (38.5 in.)	..	1
3	2043528	Sideshift Cylinder Assembly (☞Figure 11-59).....	1	..
3	2043529	Sideshift Cylinder Assembly (☞Figure 11-59).....	..	1
4	2043531	Bearing Strip (Upper)	2	..
4	2043532	Bearing (Upper)	..	2
5	2043533	Bearing Strip (Lower)	2	..
5	2043534	Bearing (Lower)	..	2
6	2043530			
	4611363	Hook	2	2
7	1581833	Capscrew	4	4
8	1581854	Washer	4	4
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	1498326	Shim	3	3
12	16041	Grease Fitting	2	2
13	1345219	Load Roller ("B") (111.48/111.22)	6	6
14	12891	Snap Ring	6	6
14	a 386422	Snap Ring (Optional)	6	6
15	1345263	Shim (0.020 in.)	28	28
16	366116	Spacer	2	2
17	1369344	Chain Anchor (Dual Hole)	..	2
17	1504012	Chain Anchor (Single Hole) (Optional)	..	2
17	1369345	Chain Anchor (Dual Hole)	2	..
17	1504010	Chain Anchor (Single Hole) (Optional)	2	..
18	1353408	Pin	2	2
19	131358	Snap Ring	4	4
20	1514866	Pin	2	2
21	15211	Cotter Pin	2	2
	a 4611878	Carriage (Fork Positioner) (38.5 in) (☞Figure 11-58).....	1	..
	a 4611881	Carriage (38.5 in.) (Fork Positioner) (☞Figure 11-58).....	..	1

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-47) TWO STAGE LIMITED FREE-LIFT — 977 MM 38.5 IN (12/2016 →)



BP000986

KEY:

A: CLASS II

B: CLASS III

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621582	Side-Shift Carriage	1	..
	4621586	Side-Shift Carriage	..	1
1	4099380	Carriage Wldmt	1	..
1	4099385	Carriage Wldmt	..	1
2	4090859	Frame	1	..
2	4090863	Frame	..	1
3	4634600	Rod Assy (☞ Figure 11-60).....	2	..
3	4634602	Rod Assy (☞ Figure 11-60).....	..	2
4	4626626	Hose Assy (LH)	1	..
5	4651752	Hose Assy (RH)	1	..
6	4634486	Hose Assy	..	2
7	4116469	Fitting , 90 deg elbow	2	..
7	4116399	Fitting , Straight	..	2
8	4631491	Hook	2	2
9	1581854	Washer	4	4
10	1581833	Capscrew	4	4
11	4632428	Bearing , Upper	2	2
12	4632430	Bearing , Lower	2	2
13	16041	Grease Fitting	2	2
14	220082	Capscrew	2	2
15	366116	Spacer	2	2

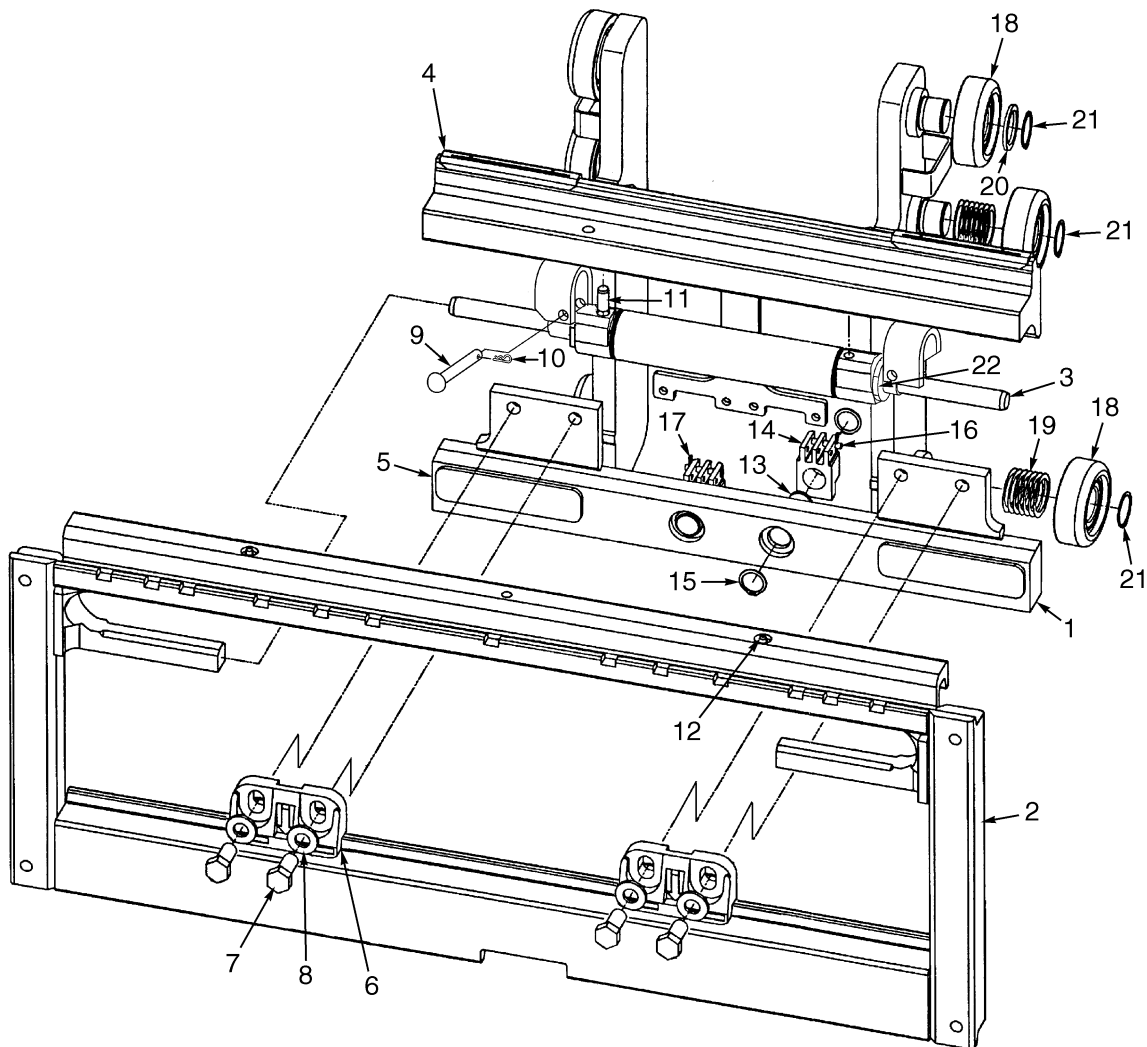
KEY:**A: CLASS II****B: CLASS III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
16	1345263	Shim (0.020 in.)	AR	AR
17	1345219	Load Roller ("B") (111.48/111.22)	6	6
17	a 1395172	Load Roller ("A") (111.10/110.84)	6	6
17	a 1345220	Load Roller ("C") (112.62/112.36)	6	6
18	12891	Snap Ring	6	6
19	1504010	Chain Anchor (Single Hole)	2	..
19	a 1369345	Chain Anchor (Dual Hole)	2	..
19	a 1369344	Chain Anchor (Dual Hole)	..	2
19	1504012	Chain Anchor (Single Hole)	..	2
20	1353408	Pin	2	2
21	131358	Snap Ring	4	4
22	1514866	Pin	2	2
23	15211	Cotter Pin	2	2

FOOTNOTES:**a** Optional

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-48)

TWO AND FOUR STAGE FULL FREE-LIFT (→ 12/2016)



BP000001

INTEGRAL SIDE-SHIFT CARRIAGE

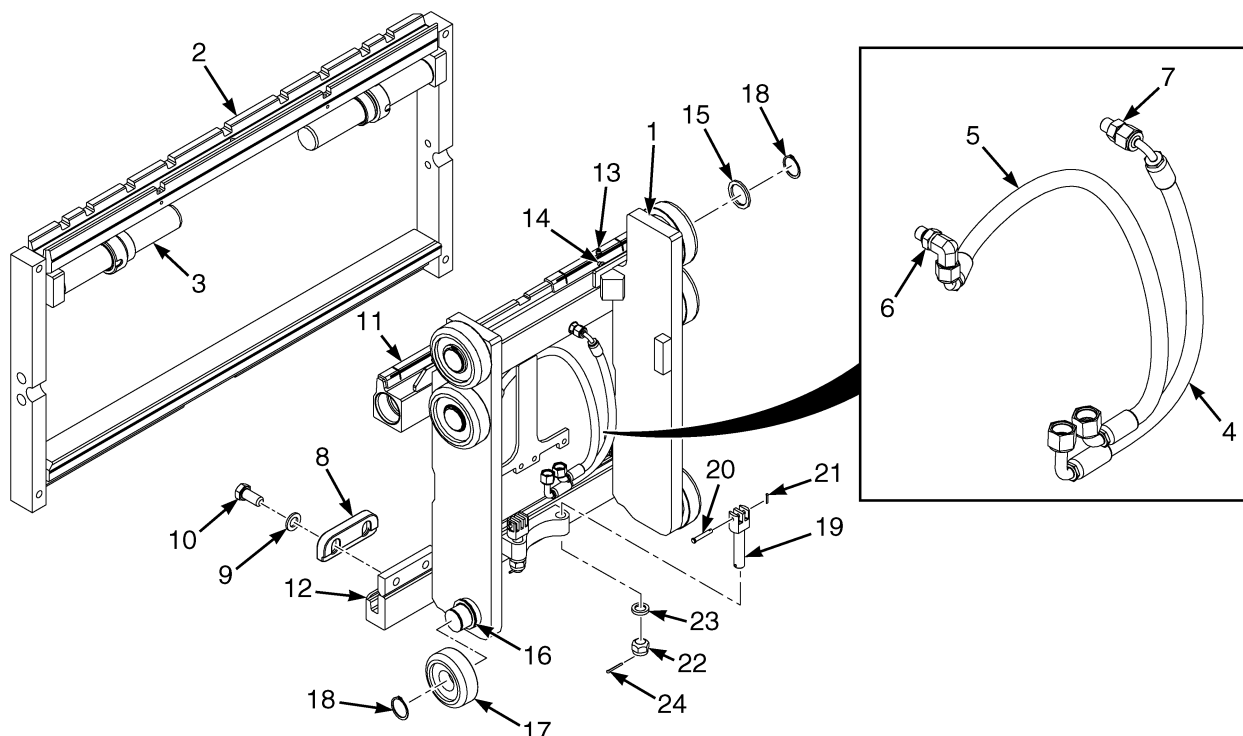
TWO AND FOUR STAGE FULL FREE-LIFT (→ 12/2016)

KEY:**A: E45-55XN (D509/E509) Two Stage Full Free-Lift****B: E60-70XN (D564/E564) Two Stage Full Free-Lift****C: E45-55XN (D515) Four Stage Full Free-Lift**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	1486179	Side-Shift Carriage (38.5 in.)	1	..	..
	1477942	Side-Shift Carriage (38 in.)	..	1	..
	1486181	Side-Shift Carriage (38.5 in.)	..	..	1
1	1488999	Carriage Wldmt (Inner) (38.5 in.)	1	..	..
1	1477936	Carriage Wldmt (Inner) (38.5 in.)	..	1	..
1	1489001	Frame (Inner) (38.5 in.)	..	..	1
2	1489010	Frame (Outer) (38.5 in.)	1	..	1
2	1488974	Frame (Outer) (38.5 in.)	..	1	..
3	2043528	Sideshift Cylinder Assembly (☞ Figure 11-59).....	1	..	1
3	2043529	Sideshift Cylinder Assembly (☞ Figure 11-59).....	..	1	..
4	2043531	Bearing Strip (Upper)	2	..	2
4	2046243	Bearing (Upper) (Bronze) (Service Option)	2	..	2
4	2043532	Bearing (Upper)	..	2	..
4	2046245	Bearing (Upper) (Bronze) (Service Option)	..	2	..
5	2043533	Bearing Strip (Lower)	2	..	2
5	2046244	Bearing (Lower) (Bronze) (Service Option)	2	..	2
5	2043534	Bearing (Lower)	..	2	..
5	2046246	Bearing (Lower) (Bronze) (Service Option)	..	2	..
6	2043530	Hook	2	2	2
7	1581833	Capscrew	4	4	4
8	1581854	Washer	4	4	4
9	1401746	Pin	2	2	2
10	18832	Cotter Pin	2	2	2
11	302487	Roll Pin	1	1	1
12	16041	Grease Fitting	2	2	2
13	317735	Pin	2	2	2
14	1369345	Chain Anchor (Dual Hole)	2	..	2
14	1504010	Chain Anchor (Single Hole)	2	..	2
14	1369344	Chain Anchor (Dual Hole)	..	2	..
14	1504012	Chain Anchor (Single Hole)	..	2	..
15	131358	Snap Ring	4	4	4
16	1514866	Pin	2	2	2
17	15211	Cotter Pin	2	2	2
18	1345219	Load Roller ("B") (111.48/111.22)	6	6	..
18	1333399	Load Roller ("B") (3.63 in./3.62 in.)	..	..	6
19	1345263	Shim (0.020 in.)	28	28	..
19	129387	Shim (0.020 in.)	..	..	28
20	366116	Spacer	6	6	..
20	366115	Spacer	..	..	6
21	12891	Snap Ring	6	6	..
21	58901	Snap Ring	..	..	6

INTEGRAL SIDE-SHIFT CARRIAGE
TWO AND FOUR STAGE FULL FREE-LIFT (→ 12/2016)**KEY:****A:** E45-55XN (D509/E509) Two Stage Full Free-Lift**B:** E60-70XN (D564/E564) Two Stage Full Free-Lift**C:** E45-55XN (D515) Four Stage Full Free-Lift

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
22	1498326	Shim	AR	AR	AR

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-49)
TWO STAGE FULL FREE- LIFT — 977 MM 38.5 IN (12/2016 →)

BP000992

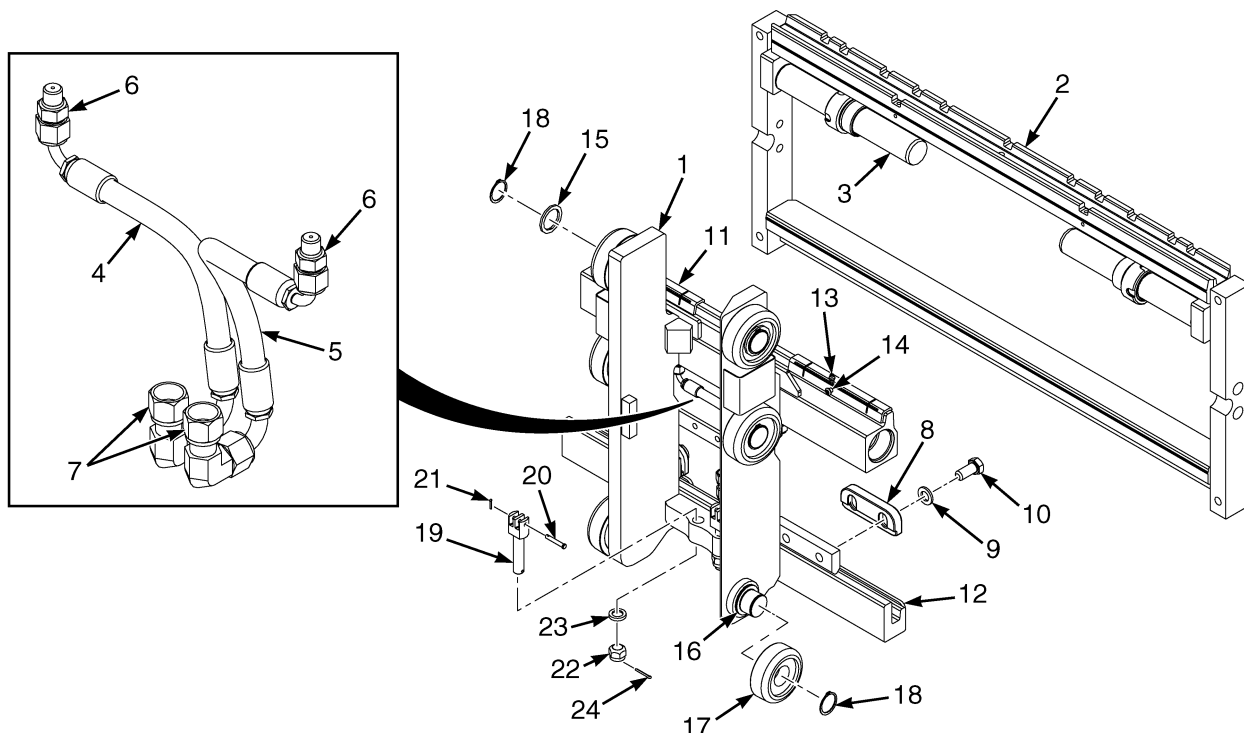
KEY:**A: CLASS II****B: CLASS III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621590	Side-Shift Carriage	1	..
	4634523	Side-Shift Carriage	..	1
1	4099391	Carriage Wldmt	1	..
1	4099396	Carriage Wldmt	..	1
2	4090859	Frame	1	..
2	4090863	Frame	..	1
3	4634600	Rod Assy (☞ Figure 11-60).....	2	..
3	4634602	Rod Assy (☞ Figure 11-60).....	..	2
4	4633877	Hose Assy (RH)	1	..
4	4633879	Hose Assy (RH)	..	1
5	4651753	Hose Assy (LH)	1	..
5	4651754	Hose Assy (LH)	..	1
6	4116469	Fitting , 90 deg elbow	1	1
7	4116399	Fitting , Straight	..	1
7	4116469	Fitting , 90 deg elbow	1	..
8	4631491	Hook	2	2
9	1581854	Washer	4	4
10	1581833	Capscrew	4	4
11	4632428	Bearing , Upper	2	2
12	4632430	Bearing , Lower	2	2
13	16041	Grease Fitting	2	2

KEY:
A: CLASS II
B: CLASS III

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
14	220082	Capscrew	2	2
15	366116	Spacer	2	2
16	1345263	Shim (0.020 in.)	AR	AR
17	1345219	Load Roller ("B") (111.48/111.22)	6	6
17	a 1395172	Load Roller ("A") (111.10/110.84)	6	6
17	a 1345220	Load Roller ("C") (112.62/112.36)	6	6
18	12891	Snap Ring	6	6
19	1365140	Chain Anchor	2	..
19	1333329	Chain Anchor	..	2
20	1514866	Pin	2	2
21	15211	Cotter Pin	2	2
22	161003	Nut	2	2
23	297649	Ring	2	2
24	15223	Cotter Pin	2	2

FOOTNOTES:
a Optional

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-50)
FOUR STAGE FULL FREE-LIFT — 977 MM 38.5 IN (12/2016 →)

BP000993

ITEM	PART NO.	DESCRIPTION	QTY
	4634608	Side-Shift Carriage	1
1	4101273	Carriage Wldmt	1
2	4090859	Frame	1
3	4634600	Rod Assy (☞ Figure 11-60).....	2
4	4634553	Hose Assy (LH)	1
5	4640227	Hose Assy (RH)	1
6	4116399	Fitting , Straight	2
7	1473895	Fitting	2
8	4631491	Hook	2
9	1581854	Washer	4
10	1581833	Capscrew	4
11	4632428	Bearing , Upper	2
12	4632430	Bearing , Lower	2
13	16041	Grease Fitting	2
14	220082	Capscrew	2
15	366115	Spacer	2
16	129387	Shim (0.020 in.)	AR
17	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6
17	a 1395169	Load Roller ("A") (3.61 in./3.60 in.)	6
17	a 1337900	Load Roller ("C") (3.67 in./3.66 in.)	6
18	58901	Snap Ring	6
19	1365140	Chain Anchor	2
20	1514866	Pin	2
21	15211	Cotter Pin	2
22	161003	Nut	2
23	297649	Ring	2

ITEM	PART NO.	DESCRIPTION	QTY
24	15223	Cotter Pin	2

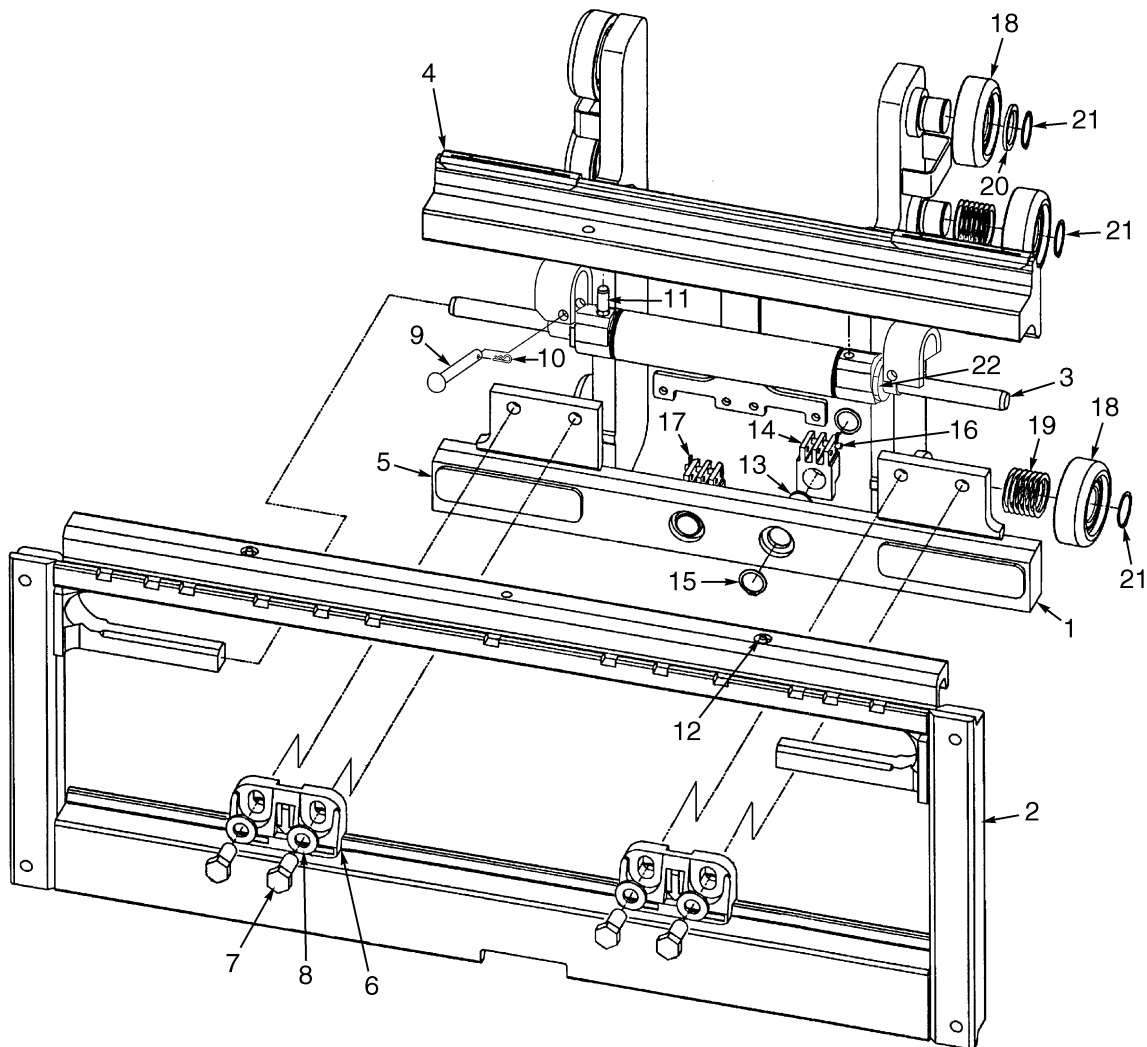
FOOTNOTES:

a Optional

NOTES

[illegible]

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-51) THREE STAGE FULL FREE LIFT — D508/D563 (→ 12/2016)



BP000001

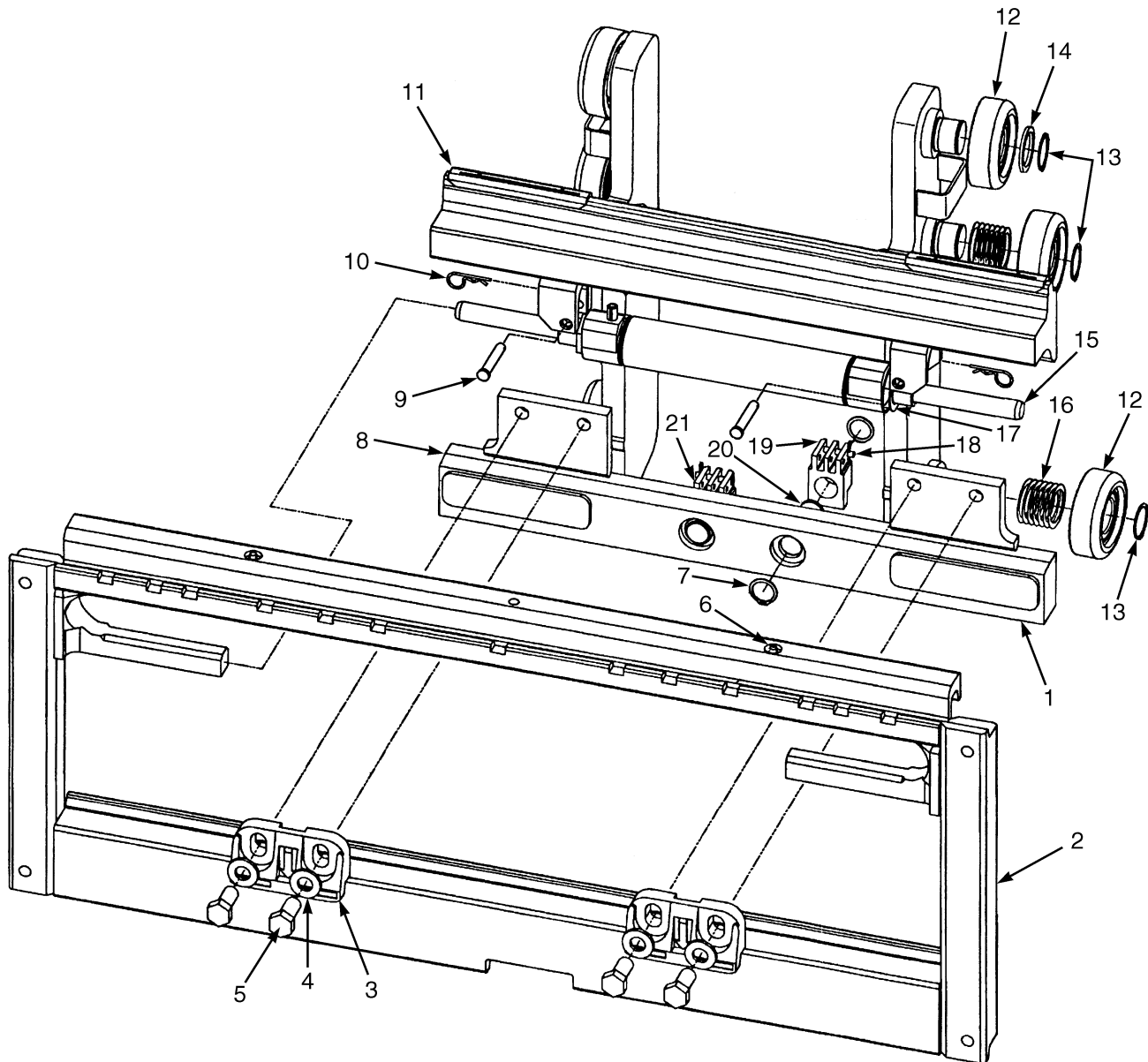
INTEGRAL SIDE-SHIFT CARRIAGE **THREE STAGE FULL FREE LIFT – D508/D563 (→ 12/2016)**

KEY:**A: E45-55XN (D508)****B: E60-70XN (D563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1486180	Side-Shift Carriage (38.5 in.)	1	..
	1477943	Side-Shift Carriage (38 in)	..	1
1	1489000	Carriage Wldmt (Inner) (38.5 in.)	1	..
1	1477937	Carriage Wldmt (Inner) (38.05 in.)	..	1
2	1489040			
	4033954	Frame (Outer) (38.5 in.)	1	..
2	1488974			
	4033959	Frame (Outer) (38.5 in.)	..	1
3	2043528	Sideshift Cylinder Assembly (☞Figure 11-59).....	1	..
3	2043529	Sideshift Cylinder Assembly (☞Figure 11-59).....	..	1
4	2043531	Bearing Strip (Upper)	2	..
4	2043532	Bearing (Upper)	..	2
5	2043533	Bearing Strip (Lower)	2	..
5	2043534	Bearing (Lower)	..	2
6	2043530			
	4611363	Hook	2	2
7	1581833	Capscrew	4	4
8	1581854	Washer	4	4
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	302487	Roll Pin	1	1
12	16041	Grease Fitting	2	2
13	317735	Pin	2	2
14	1369345	Chain Anchor (Dual Hole)	2	..
14	1504010	Chain Anchor (Single Hole)	2	..
14	1369344	Chain Anchor (Dual Hole)	..	2
14	1504012	Chain Anchor (Single Hole)	..	2
15	131358	Snap Ring	4	4
16	1514866	Pin	2	2
17	15211	Cotter Pin	2	2
18	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
19	129387	Shim (0.020 in.)	28	28
20	366115	Spacer	2	2
21	58901	Snap Ring	6	6
22	1498326	Shim	AR	AR
	a 4611878	Carriage (Fork Positioner) (38.5 in) (☞Figure 11-54).....	1	..
	a 4611881	Carriage (38.5 in.) (Fork Positioner) (☞Figure 11-54).....	..	1

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 11-52) THREE STAGE FULL FREE-LIFT — F508/F563 (→ 12/2016)



HP020344

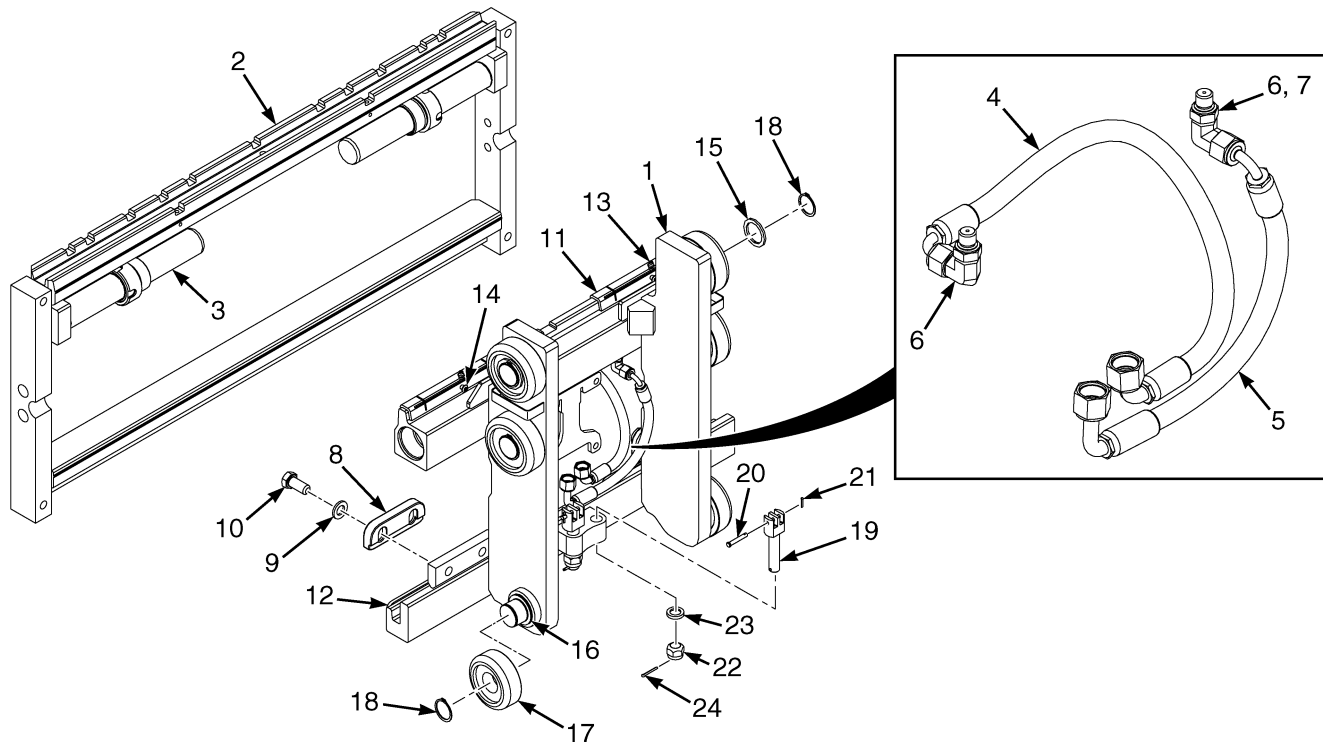
INTEGRAL SIDE-SHIFT ASSEMBLY **THREE STAGE FULL FREE-LIFT – F508/F563 (→ 12/2016)**

KEY:**A: E45-55XN F508****B: E60-70XN F563**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621634	Side-Shift Carriage (38.5 in.)	1	..
	4621640	Side-Shift Carriage (38.5 in.)	..	1
1	4055424	Carriage Wldmt (38.5 in.)	1	..
1	4082004	Plate (Hose)	1	..
1	4055464	Carriage Wldmt (38.5 in.)	..	1
1	4082006	Plate (Hose)	..	1
2	1489010			
	4033954	Frame (Outer) (38.5 in.)	1	..
2	1488974			
	4033959	Frame (Outer) (38.5 in.)	..	1
3	2043530			
	4611363	Hook	2	2
4	1581854	Washer	4	4
5	1581833	Capscrew	4	4
6	16041	Grease Fitting	2	2
7	131358	Snap Ring	4	4
8	2043533	Bearing Strip (Lower)	2	..
8	2043534	Bearing (Lower)	..	2
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	2043531	Bearing Strip (Upper)	2	..
11	2043532	Bearing (Upper)	..	2
12	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
13	58901	Snap Ring	6	6
14	366115	Spacer	2	2
15	2043528	Sideshift Cylinder Assembly (☞Figure 11-59).....	1	..
15	2043529	Sideshift Cylinder Assembly (☞Figure 11-59).....	..	1
16	129387	Shim (0.020 in.)	28	28
17	1498326	Shim	3	3
18	1514866	Pin	2	2
19	1369345	Chain Anchor (Dual Hole)	2	..
19	1504010	Chain Anchor (Single Hole) (Optional)	2	..
19	1369344	Chain Anchor (Dual Hole)	..	2
19	1504012	Chain Anchor (Single Hole) (Optional)	..	2
20	317735	Pin	2	2
21	15211	Cotter Pin	2	2
	a 4611881	Carriage (38.5 in.) (Fork Positioner) (☞Figure 11-58).....	..	1
	a 4611878	Carriage (Fork Positioner) (38.5 in) (☞Figure 11-58).....	1	..

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 11-53)
THREE STAGE FULL FREE-LIFT — 977 MM 38.5 IN (12/2016 →)



BP000987

KEY:**A: CLASS II****B: CLASS III**

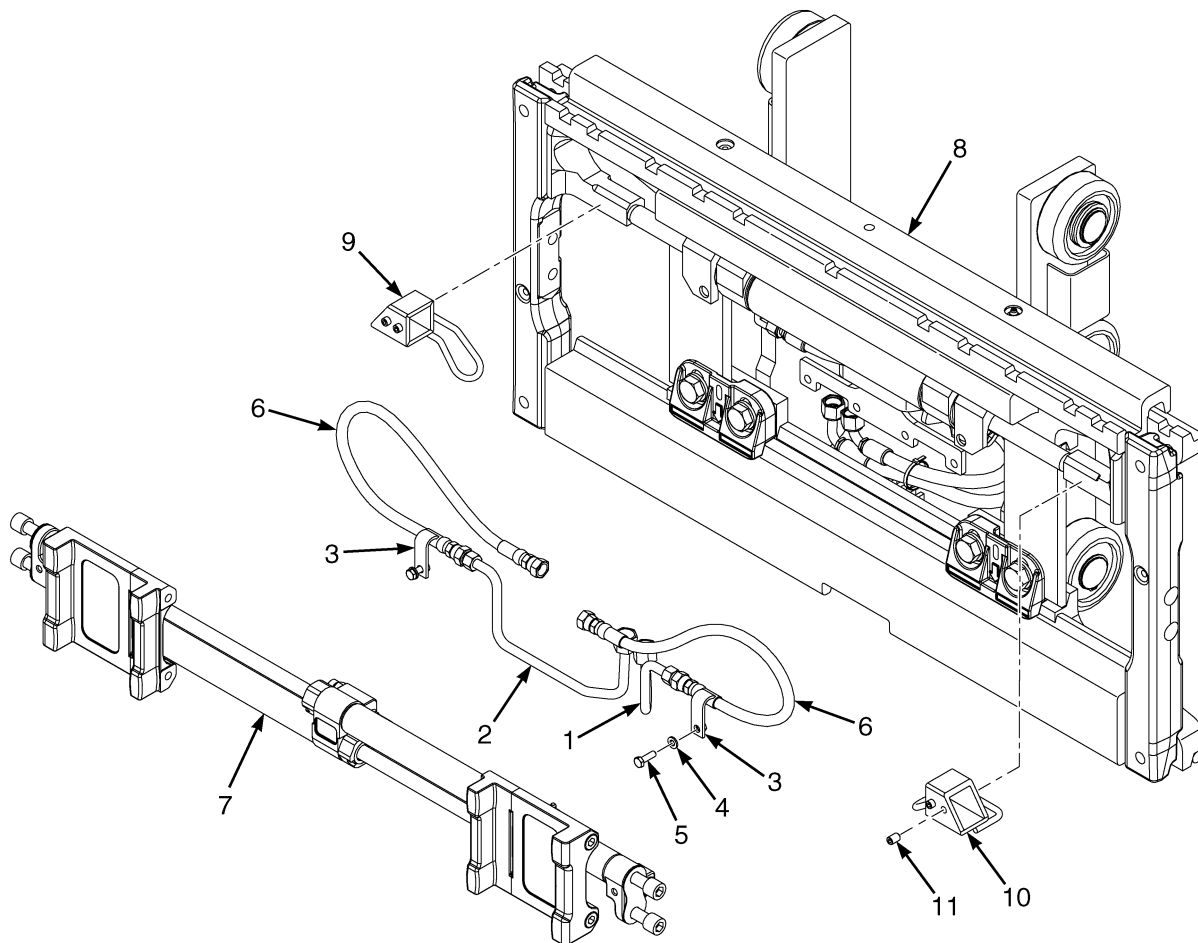
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4631896	Side-Shift Carriage	1	..
	4631900	Side-Shift Carriage	..	1
1	4090871	Carriage Wldmt	1	..
1	4082003	Plate (Hose)	1	..
1	4090876	Carriage Wldmt	..	1
1	4082005	Plate (Hose)	..	1
2	4090859	Frame	1	..
2	4090863	Frame	..	1
3	4634600	Rod Assy (☞ Figure 11-60).....	2	..
3	4634602	Rod Assy (☞ Figure 11-60).....	..	2
4	4651750	Hose Assy (LH)	1	..
4	4651751	Hose Assy (LH)	..	1
5	4633877	Hose Assy (RH)	1	..
5	4633879	Hose Assy (RH)	..	1
6	4116469	Fitting , 90 deg elbow (Hose)	2	1
7	4116399	Fitting , Straight (Hose)	..	1
8	4631491	Hook	2	2
9	1581854	Washer	4	4
10	1581833	Capscrew	4	4
11	4632428	Bearing , Upper	2	2
12	4632430	Bearing , Lower	2	2

KEY:**A: CLASS II****B: CLASS III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
13	16041	Grease Fitting	2	2
14	220082	Capscrew	2	2
15	366115	Spacer	2	2
16	129387	Shim (0.020 in.)	AR	AR
17	1333399	Load Roller ("B") (3.63 in./3.62 in.)	6	6
17	a 1395169	Load Roller ("A") (3.61 in./3.60 in.)	6	6
17	a 1337900	Load Roller ("C") (3.67 in./3.66 in.)	6	6
18	58901	Snap Ring	6	6
19	1365140	Chain Anchor	2	..
19	1333329	Chain Anchor	..	2
20	1514866	Pin	2	2
21	15211	Cotter Pin	2	2
22	161003	Nut	2	2
23	297649	Ring	2	2
24	15223	Cotter Pin	2	2

FOOTNOTES:**a** Optional

INTEGRAL SIDE-SHIFT (FIGURE 11-54) FORK POSITIONER — THREE STAGE FULL FREE-LIFT (D508/D563)



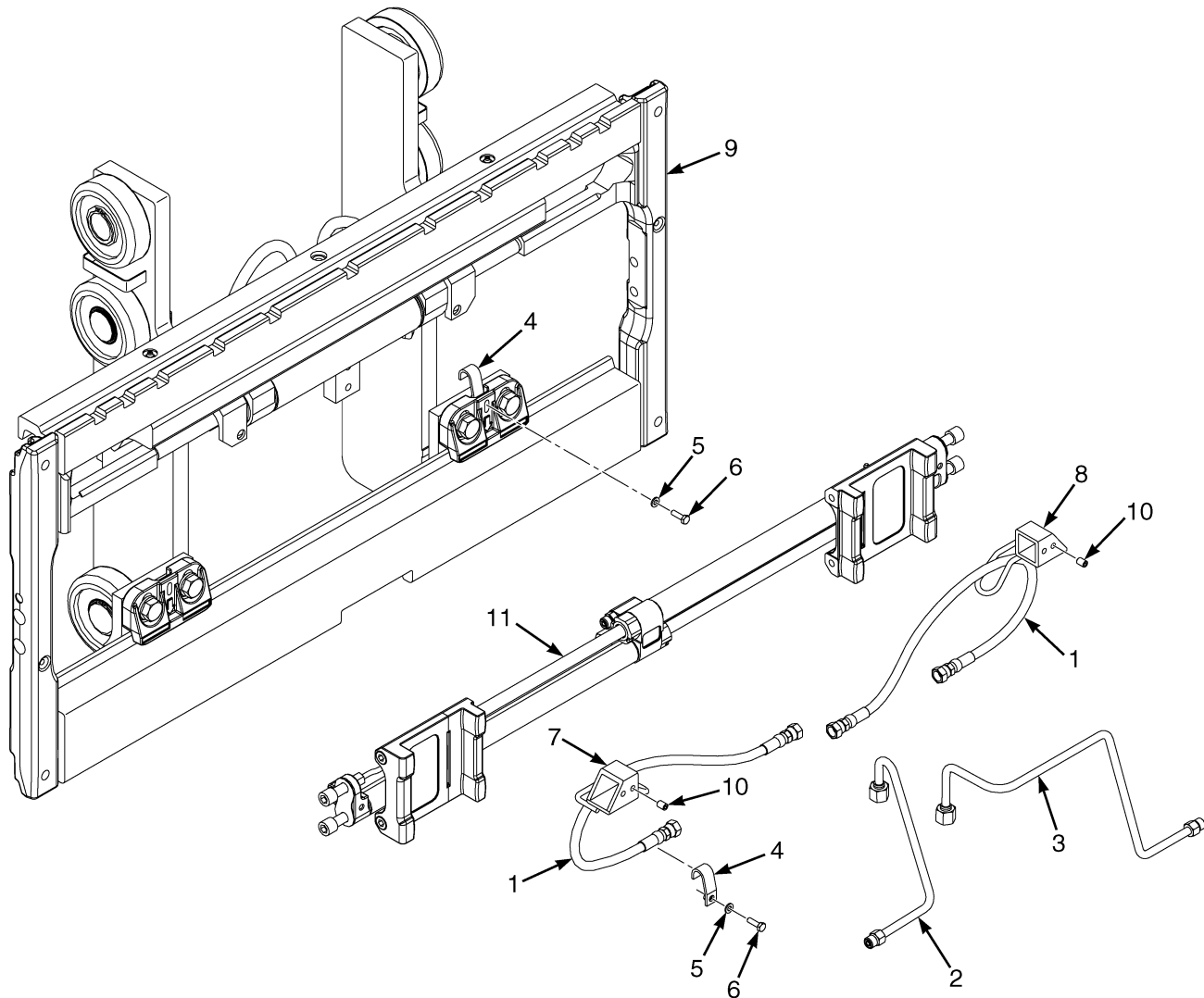
BP020032

**INTEGRAL SIDE-SHIFT
FORK POSITIONER – THREE STAGE FULL FREE-LIFT (D508/D563)**

ITEM	PART NO.	DESCRIPTION	QTY
1	~~4616647~~ 4619595	Tube Assy	1
2	~~4616648~~ 4619594	Tube Assy	1
3	4050817	Bracket Wldmt	2
4	1673754	Washer	2
5	1670032	Capscrew	2
6	b 4622266	Hose Assy	2
6	a ~~4618718~~ 4611913	Hose Assy	2
7	a 4611878	Carriage (Fork Positioner) (38.5 in) (☞Figure 11-58).....	1
7	b 4611881	Carriage (38.5 in.) (Fork Positioner) (☞Figure 11-58).....	1
8	.....	Carriage Assembly (☞Figure 11-51).....	1
9	4061319	Guide (Hose) (RH)	1
10	4061318	Guide (Hose) (LH)	1
11	4055634	Setscrew	4

FOOTNOTES:**a** Class II**b** Class III

INTEGRAL SIDE-SHIFT (FIGURE 11-55) FORK POSITIONER (F507-F562) — TWO STAGE LIMITED FREE-LIFT



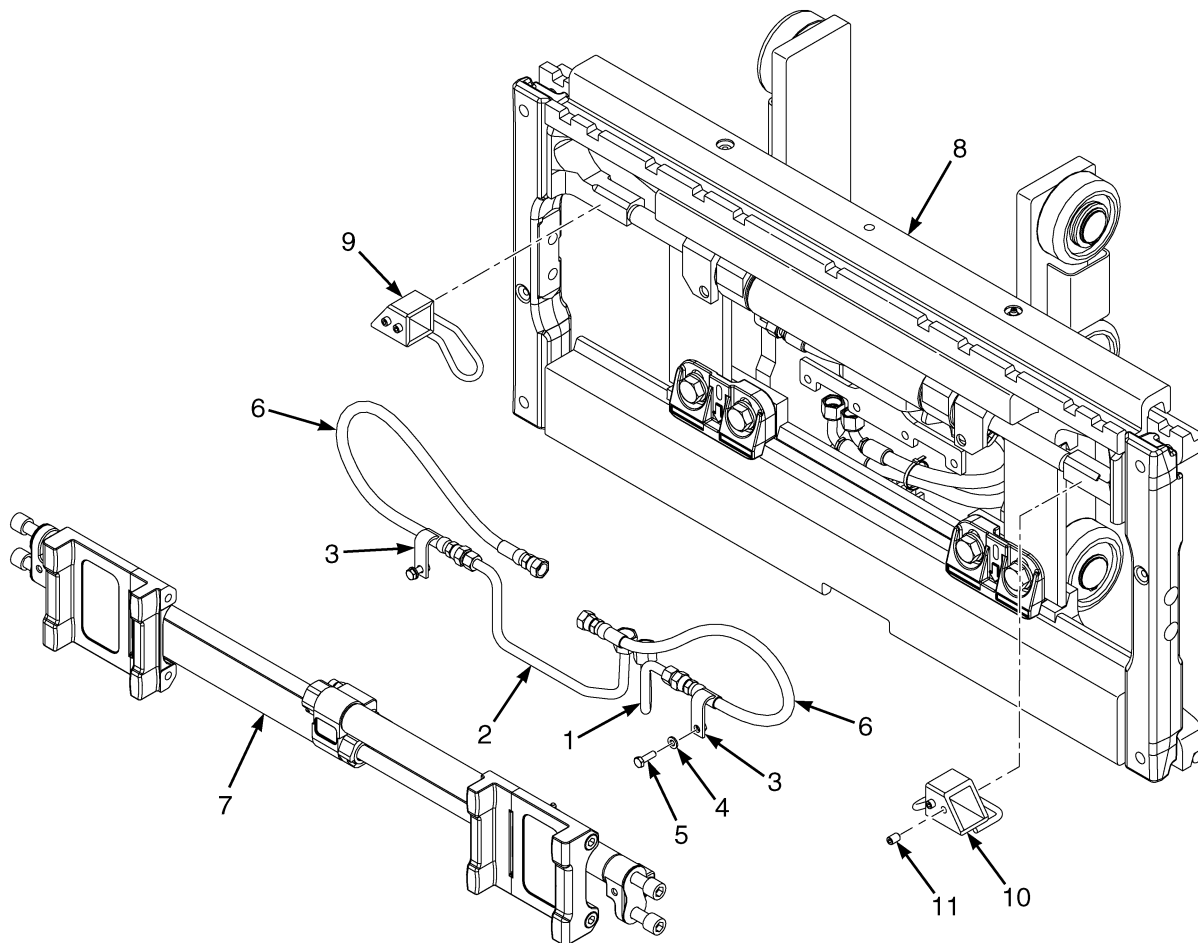
BP000831

INTEGRAL SIDE-SHIFT **FORK POSITIONER (F507-F562) – TWO STAGE LIMITED FREE-LIFT**

KEY:**A: E45-50XN F507****B: E60-70XN F562**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4610411	Hose Assy	2	2
2	4626756	Tube Assy	1	..
2	4626630	Tube Assy	..	1
3	4626757	Tube Assy	1	..
3	4626629	Tube Assy	..	1
4	4050817	Bracket Wldmt	2	2
5	1673754	Washer	2	2
6	1670032	Capscrew	2	2
7	4061318	Guide (Hose) (LH)	1	1
8	4061319	Guide (Hose) (RH)	1	1
9	.....	Carriage Assembly (☞ Figure 11-46).....	1	1
10	4055634	Setscrew	4	4
11	4611878	Carriage (Fork Positioner) (38.5 in) (☞ Figure 11-58).....	1	..
11	4611881	Carriage (38.5 in.) (Fork Positioner) (☞ Figure 11-58).....	..	1
11	4034634	Kit-Service Cylinder	1	1

INTEGRAL SIDE-SHIFT (FIGURE 11-56) FORK POSITIONER (F508-F563) — THREE STAGE FULL FREE-LIFT



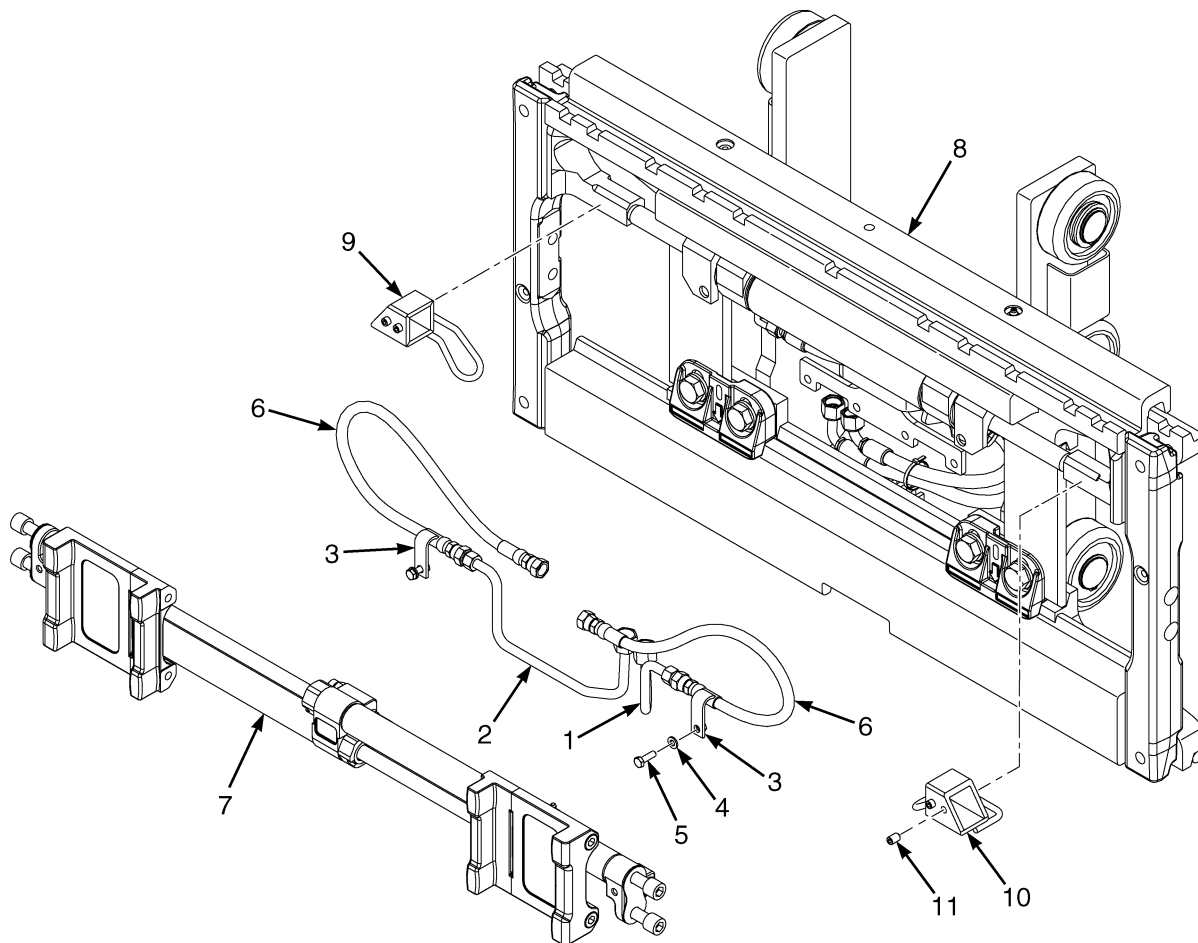
BP020032

INTEGRAL SIDE-SHIFT FORK POSITIONER (F508-F563) – THREE STAGE FULL FREE-LIFT

KEY:**A: E45-55XN, F508****B: E60-70XN, F563**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4633850	Tube Assy (LH)	1	..
1	4633852	Tube Assy (LH)	..	1
2	4633851	Tube Assy (RH)	1	..
2	4633853	Tube Assy (RH)	..	1
3	4050817	Bracket Wldmt	2	2
4	1673754	Washer	2	2
5	1670032	Capscrew	2	2
6	4618718			
	4611913	Hose Assy	2	..
6	4622266	Hose Assy	..	2
7	4611878	Carriage (Fork Positioner) (38.5 in) (☞Figure 11-58).....	1	..
7	4611881	Carriage (38.5 in.) (Fork Positioner) (☞Figure 11-58).....	..	1
7	4034634	Kit-Service Cylinder	1	1
7	4034635	Kit-Bearing	1	1
8	.....	Carriage Assembly (☞Figure 11-55).....	1	1
9	4061319	Guide (Hose) (RH)	1	1
10	4061318	Guide (Hose) (LH)	1	1
11	4055634	Setscrew	4	4

INTEGRAL SIDE-SHIFT (FIGURE 11-57) FORK POSITIONER — TWO STAGE FULL FREE-LIFT (E509/E564)



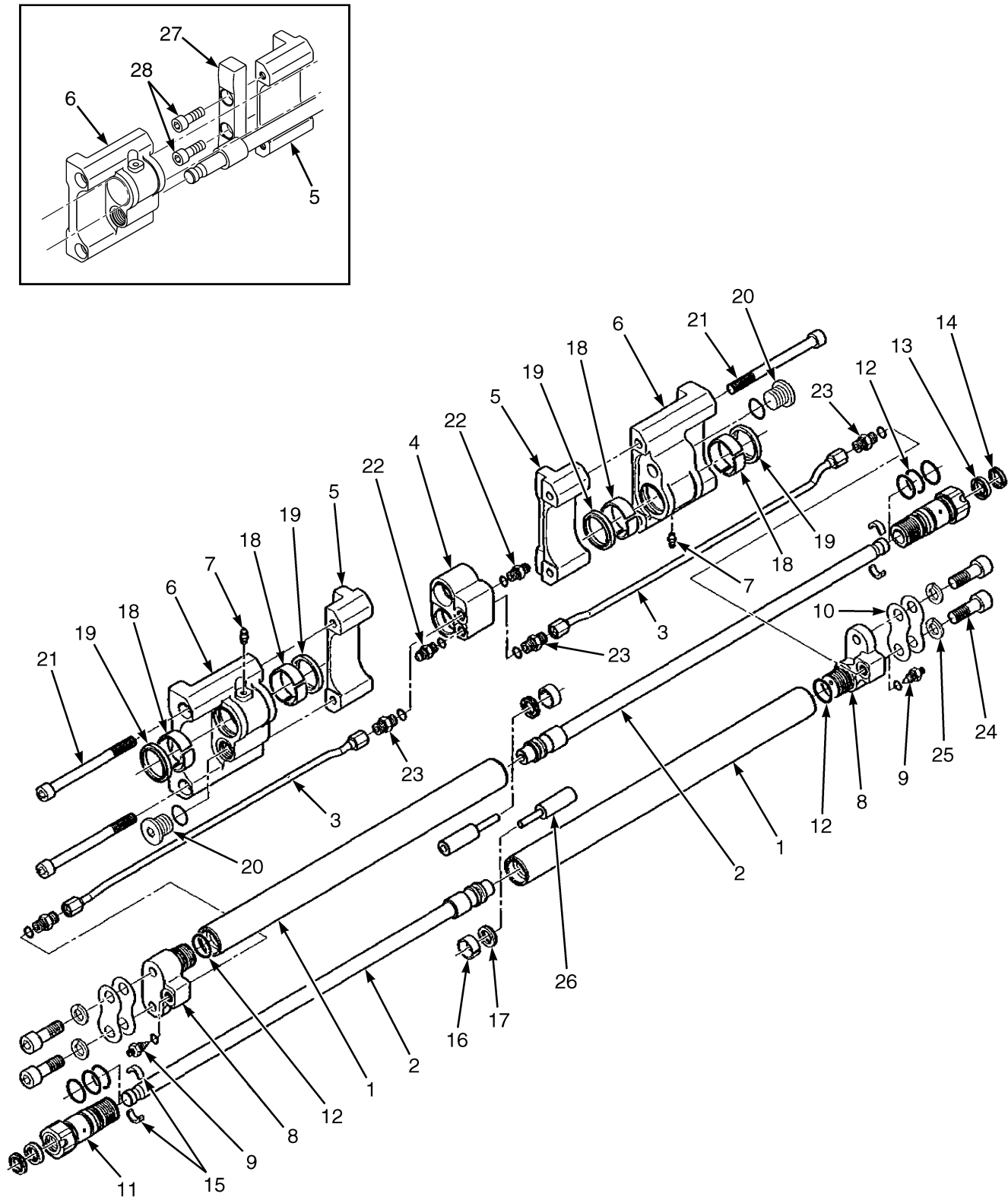
BP020032

**INTEGRAL SIDE-SHIFT
FORK POSITIONER – TWO STAGE FULL FREE-LIFT (E509/E564)**

ITEM	PART NO.	DESCRIPTION	QTY
1	~~4616647~~ 4619595	Tube Assy	1
2	~~4616648~~ 4619594	Tube Assy	1
3	4050817	Bracket Wldmt	2
4	1673754	Washer	2
5	1670032	Capscrew	2
6	b 4622266	Hose Assy	2
6	a ~~4618718~~ 4611913	Hose Assy	2
7	a 4611878	Carriage (Fork Positioner) (38.5 in) (☞ Figure 11-58).....	1
7	b 4611881	Carriage (38.5 in.) (Fork Positioner) (☞ Figure 11-58).....	1
8	.....	Carriage Assembly (☞ Figure 11-48).....	1
9	4061319	Guide (Hose) (RH)	1
10	4061318	Guide (Hose) (LH)	1
11	4055634	Setscrew	4

FOOTNOTES:**a** Class II**b** Class III

FORK POSITIONER ASSEMBLY (FIGURE 11-58)



BP000920

FORK POSITIONER ASSEMBLY

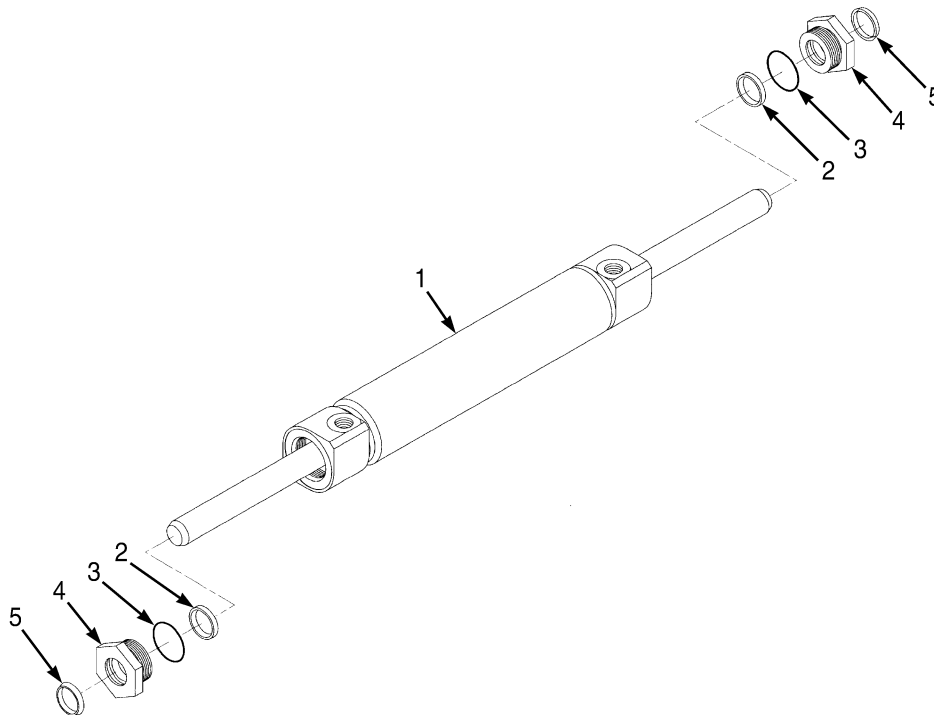
ITEM	PART NO.	DESCRIPTION	QTY
	4611878	Carriage (Fork Positioner) (38.5 in) (Class II)	1
	4611881	Carriage (38.5 in.) (Fork Positioner Class III)	1
1	.....	Cylinder Shell	2
2	.....	Cylinder Rod	2
3	a 4084990	Tube	1
3	b 4084992	Tube	2
4	.....	Mainfold	1
5	.....	Inner Carrier	2
6	.....	Outer Carrier	2
7	4063703	Grease Fitting	1
8	.....	Cylinder Head End	2
9	4133804	Restrictor Fitting	2
10	4084991	Shim	4
11	.....	Retainer	2
12	.....	O-Ring	8
13	.....	Rod Seal	2
14	.....	Rod Wiper	2
15	.....	Keeper	4
16	.....	Piston Wear Ring	2
17	.....	Piston Seal	2
18	.....	Composite Bearing	4
19	.....	Wiper	4
20	4139422	Plug	2
21	4139423	Capscrew	4
22	4145044	Fitting	2
23	4063717	Fitting	4
24	.....	Capscrew	4
25	.....	Lockwasher	4
26	.....	Piston Spacer	2
27	c 4084441	Spacer Bar (Class II)	2
28	c 4058427	Capscrew (Class II)	4
	4034634	Kit-Service Cylinder	1
	4034635	Kit-Bearing	1

FOOTNOTES:

a Class II
b Class III

c With 4" width Forks

INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 11-59) (→ 12/2016)



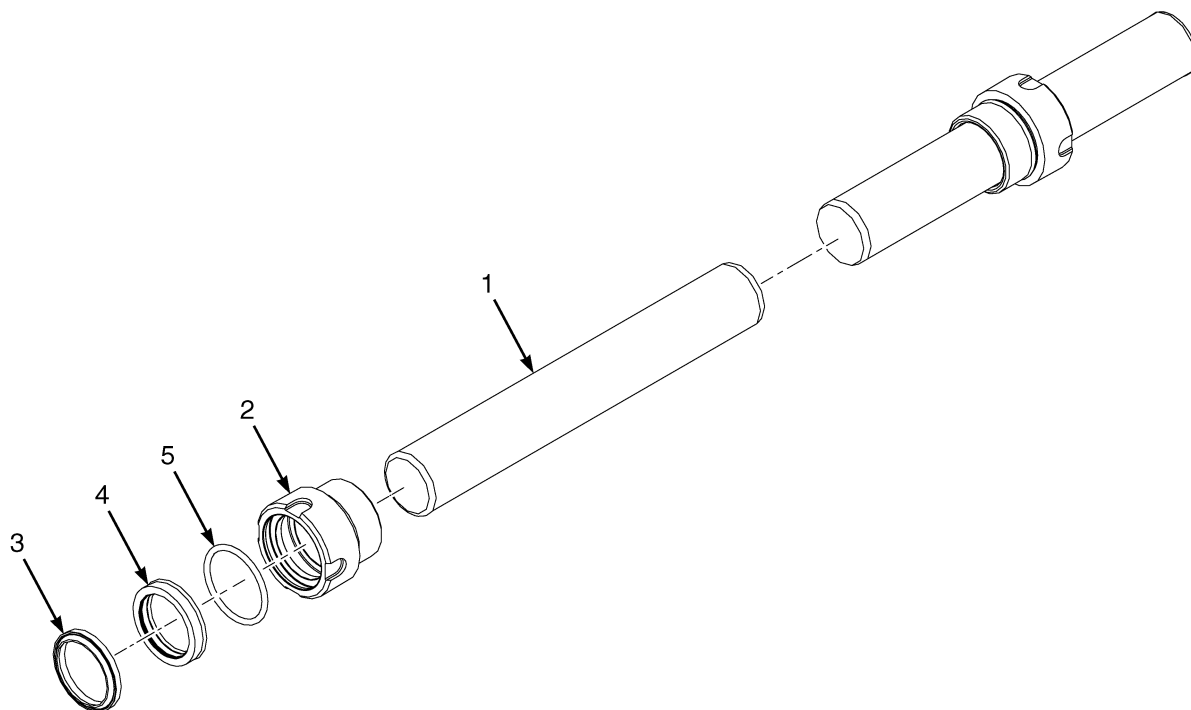
HP000536

KEY:

A: E45-55XN

B: E60-70XN

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2043528	Sideshift Cylinder Assembly	1	..
	2043529	Sideshift Cylinder Assembly	..	1
1	1489016	Sideshift Cylinder	1	..
1	1489017	Sideshift Cylinder	..	1
2	1489037	Rod Seal	2	2
3	1489035	O-Ring	2	2
4	1498325	Retainer	2	2
5	1489039	Rod Wiper	2	2
	1503096	Kit-Seal	1	1

INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 11-60)
ROD ASSEMBLY (12/2016 →)

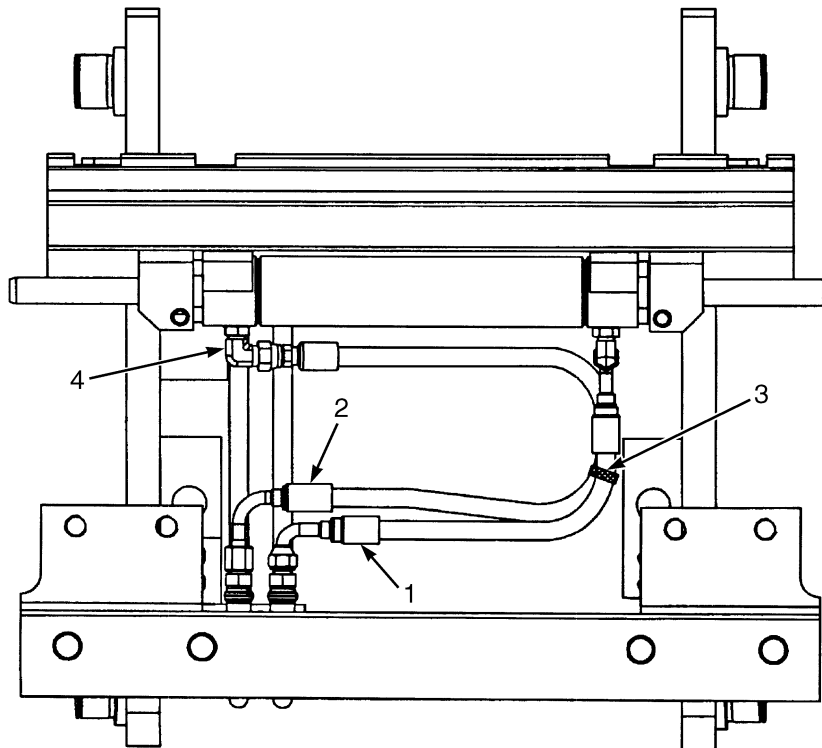
BP000994

KEY:**A: CLASS II****B: CLASS III**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4634600	Rod Assy	1	..
	4634602	Rod Assy	..	1
1	4090982	Cylinder Rod	1	..
1	4090984	Cylinder Rod	..	1
2	4090987	Gland	1	..
2	4090988	Gland	..	1
3	1383064	Rod Wiper	1	..
3	1383065	Rod Wiper	..	1
4	2032488	Seal	1	..
4	378440	Seal	..	1
5	55407	O-Ring	1	..
5	4028986	O-Ring	..	1
	92861	O-Ring	..	1
	a b 4093714	Kit-Seal	1	..
	a b 4093740	Kit-Seal	..	1

FOOTNOTES:**a** Not Illustrated**b** Optional

INTEGRAL SIDE-SHIFT (FIGURE 11-61) HYDRAULIC HOSES — TWO STAGE LIMITED FREE-LIFT (D507, D562)



BP000004

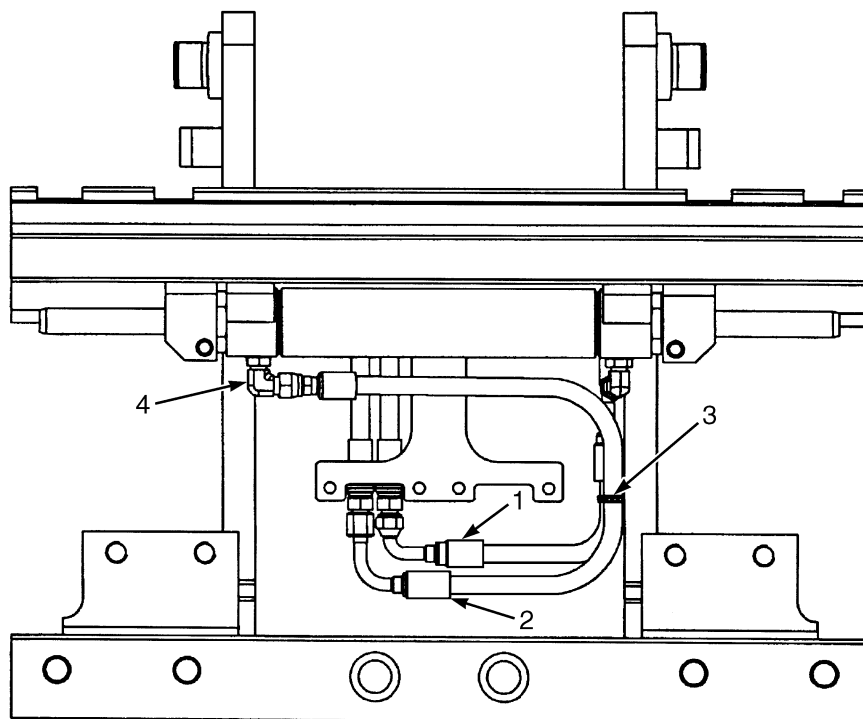
KEY:

A: E45-55XN (D507)

B: E60-70XN (D562)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2065672	Hose Assy	1	..
1	4610728	Hose Assy (Alternate Part)	1	..
1	2065673	Hose Assy	..	1
1	4610730	Hose Assy (Alternate Part)	..	1
2	2065671	Hose Assy	1	..
2	4610727	Hose Assy (Alternate Part)	1	..
2	2065669	Hose Assy	..	1
2	4610729	Hose Assy (Alternate Part)	..	1
3	114312	Strap Clamp	1	1
4	1487063	Fitting	2	2
4	1487059	Fitting (Alternate Part)	2	2

INTEGRAL SIDE-SHIFT (FIGURE 11-62)
HYDRAULIC HOSES — THREE STAGE FULL FREE-LIFT (D508/D563)



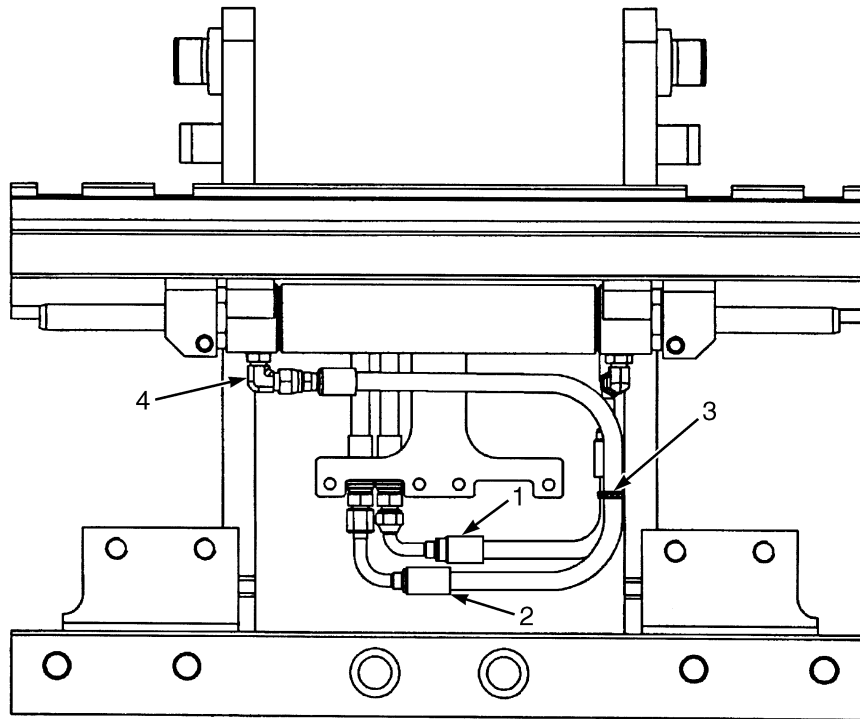
BP000003

KEY:**A:** E45-55XN (D508)**B:** E60-70XN (D563)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2065674	Hose Assy	1	..
1	a 4612128	Hose Assy (Alternate Part)	1	..
1	2065675	Hose Assy	..	1
1	a 4612130	Hose Assy (Alternate Part)	..	1
2	2065670	Hose Assy	1	..
2	a 4612127	Hose Assy (Alternate Part)	1	..
2	2065671	Hose Assy	..	1
2	a 4612129	Hose Assy (Alternate Part)	..	1
3	114312	Strap Clamp	1	1
4	1487063	Fitting	2	2
4	a 1487059	Fitting (Alternate Part)	2	2

FOOTNOTES:**a** With Fork Positioner

INTEGRAL SIDE-SHIFT (FIGURE 11-63) **HYDRAULIC HOSES — TWO STAGE FULL FREE-LIFT**

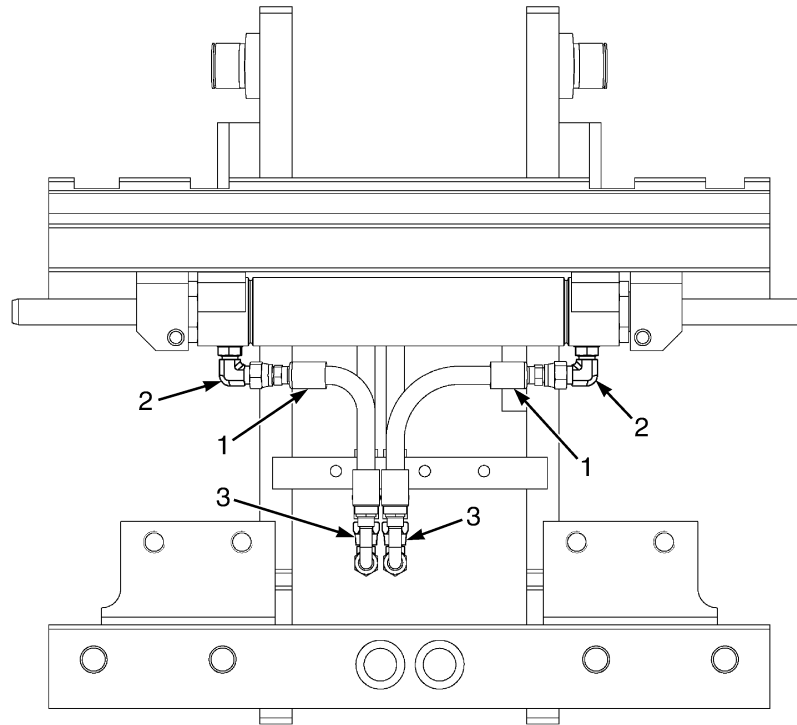


BP000003

KEY:**A:** E45-55XN (D509/E509)**B:** E60-70XN (D564/E564)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2065674	Hose Assy	1	..
1	a 4612128	Hose Assy (Alternate Part)	1	..
1	2065675	Hose Assy	..	1
1	a 4612130	Hose Assy (Alternate Part)	..	1
2	2065670	Hose Assy	1	..
2	a 4612127	Hose Assy (Alternate Part)	1	..
2	2065671	Hose Assy	..	1
2	a 4612129	Hose Assy (Alternate Part)	..	1
3	114312	Strap Clamp	1	1
4	1487063	Fitting	2	2
4	a 1487059	Fitting	2	2

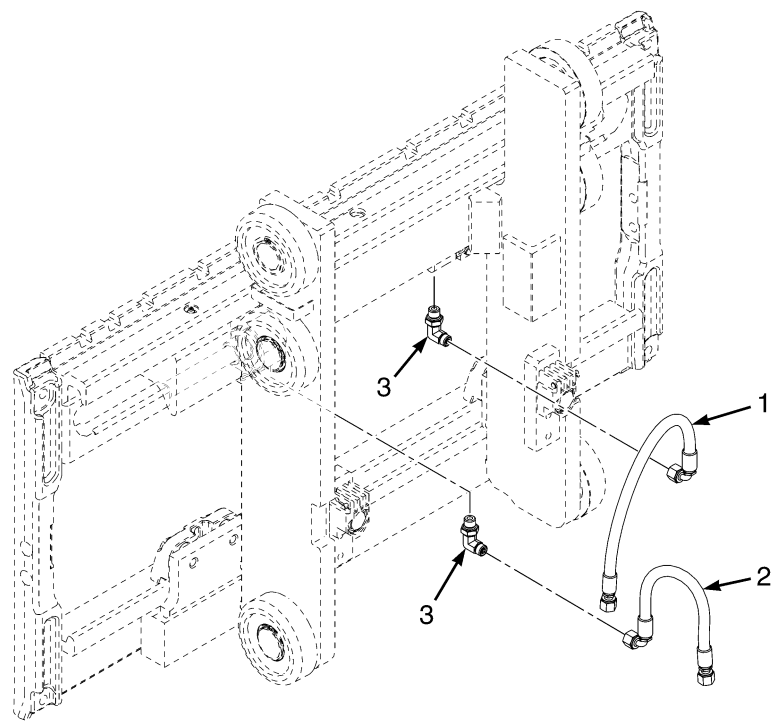
FOOTNOTES:**a** With Fork Positioner E509/E564

INTEGRAL SIDE-SHIFT HYDRAULIC HOSE (FIGURE 11-64)
FOUR STAGE FULL FREE-LIFT

BP000463

ITEM	PART NO.	DESCRIPTION	QTY
1	2070409	Hose	2
2	1487063	Fitting	2
3	1473895	Fitting	2

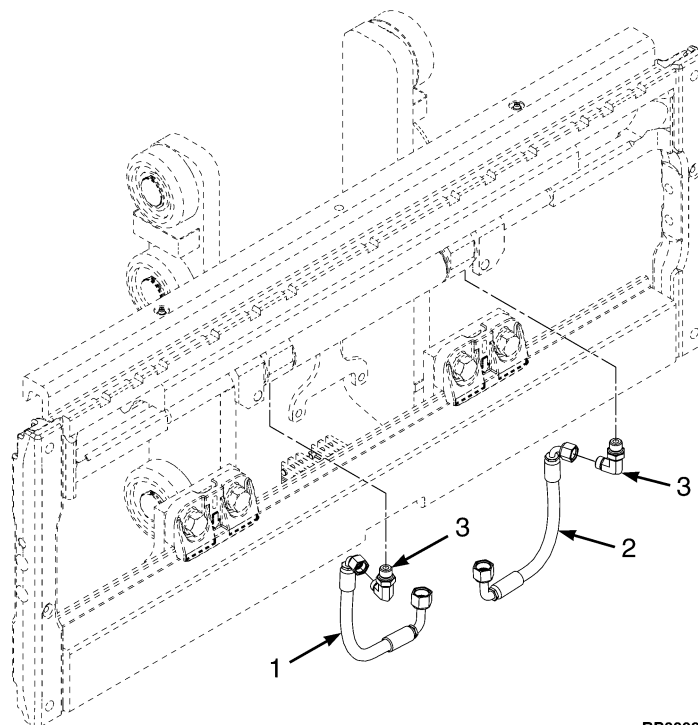
INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 11-65)
TWO STAGE LIMITED FREE-LIFT — F507/F562



BP000832

ITEM	PART NO.	DESCRIPTION	QTY
1	4626625	Hose Assy	1
2	4626626	Hose Assy	1
3	1487059	Fitting	2

INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 11-66) **THREE STAGE FULL FREE LIFT — F508/F563**



BP000833

KEY:**A: E45-55XN F508****B: E60-70XN F563**

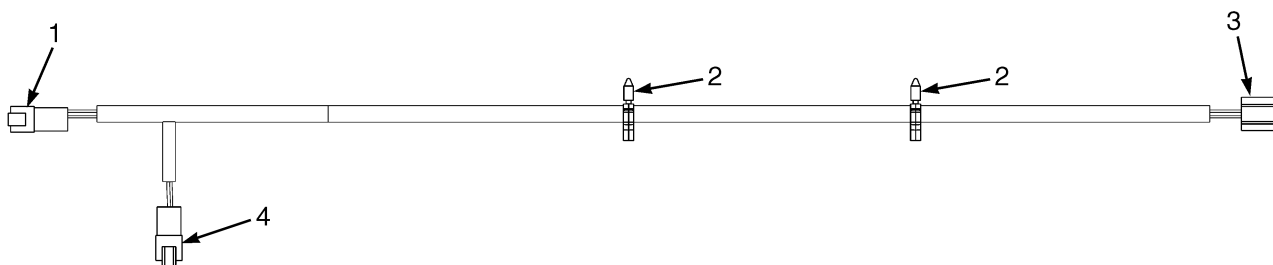
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4623988	Hose Assy	1	..
1	4623990	Hose Assy	..	1
2	4623989	Hose Assy	1	..
2	4623991	Hose Assy	..	1
3	1487059	Fitting	2	2

WIRE HARNESS (FIGURE 11-67) INTERFACE FRONT/REAR LIGHTS



BP000882

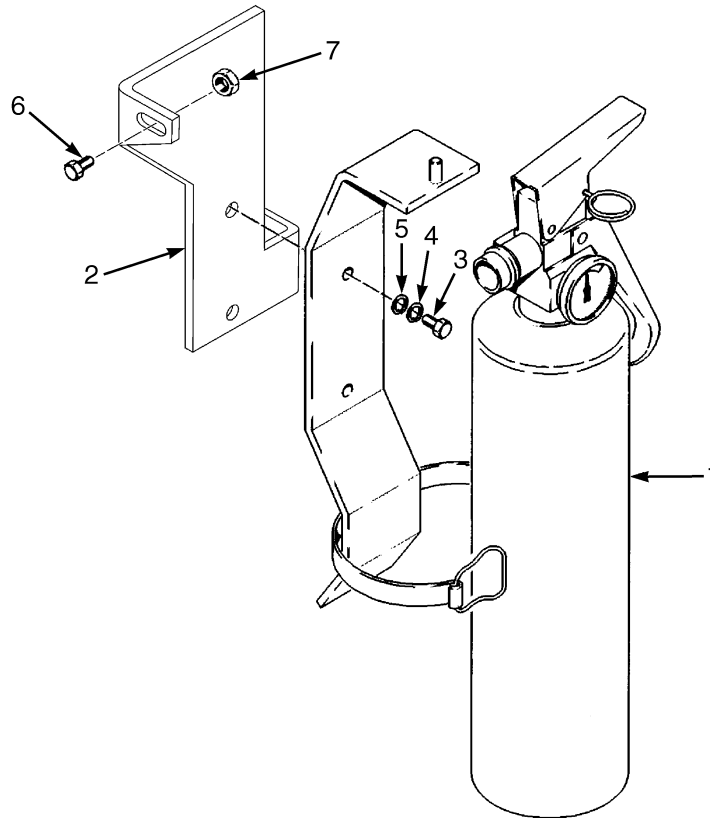
ITEM	PART NO.	DESCRIPTION	QTY
	4636470	Wire Harness (Interface)	1
1	.....	Connector Assembly (To CRP220)	1
1	1484397	Connector (3-Way)	1
1	1463194	Connector (Secondary Lock)	1
1	1330438	Terminal (Socket)	3
2	.....	Connector Assembly (Main Light Harness)	1
2	1623050	Housing	1
2	1330418	Connector	1
2	1330437	Terminal (Pin)	8
3	.....	Connector Assembly (Main Harness)	1
3	1541988	Connector (8 Pin)	1
3	1541989	Connector (Secondary Lock)	1
3	1570624	.....	
	1463140	Terminal (Pin)	5
3	1463138	Terminal Pin	2
3	1484377	Plug	1
4	.....	Connector Assembly (Display Harness)	1
4	1541991	Connector	1
4	1541992	Connector (Secondary Lock)	1
4	1463141	Terminal (Socket)	5
4	1463139	Terminal	2
4	1484377	Plug	1
5	.....	Connector Assembly (Light Options)	1
5	1502625	Connector	1
5	1502626	Connector (Secondary Lock)	1
6	1330438	Terminal (Socket)	8

WIRE HARNESS (FIGURE 11-68)
FRONT SWITCH

BP000883

ITEM	PART NO.	DESCRIPTION	QTY
	4636375	Wire Harness (Front Switch)	1
1	.....	Connector Assembly (Light Chassis Harness)	1
1	1520639	Connector	1
1	1330416	Connector (Secondary Lock)	1
1	1330437	Terminal (Pin)	3
1	1363885	Terminal (Pin)	1
2	1646457	Clip	2
3	.....	Connector Assembly (Front Relay)	1
3	1377860	Connector	1
3	4001753	Terminal	2
3	1706004	Terminal	2
4	.....	Connector Assembly (To CRP220)	1
4	1493466	Connector (3-Way)	1
4	1330415	Connector (Secondary Lock)	1
4	1330437	Terminal (Pin)	3

FIRE EXTINGUISHER (FIGURE 11-69) (→ 11/2014)



BP000252

KEY:

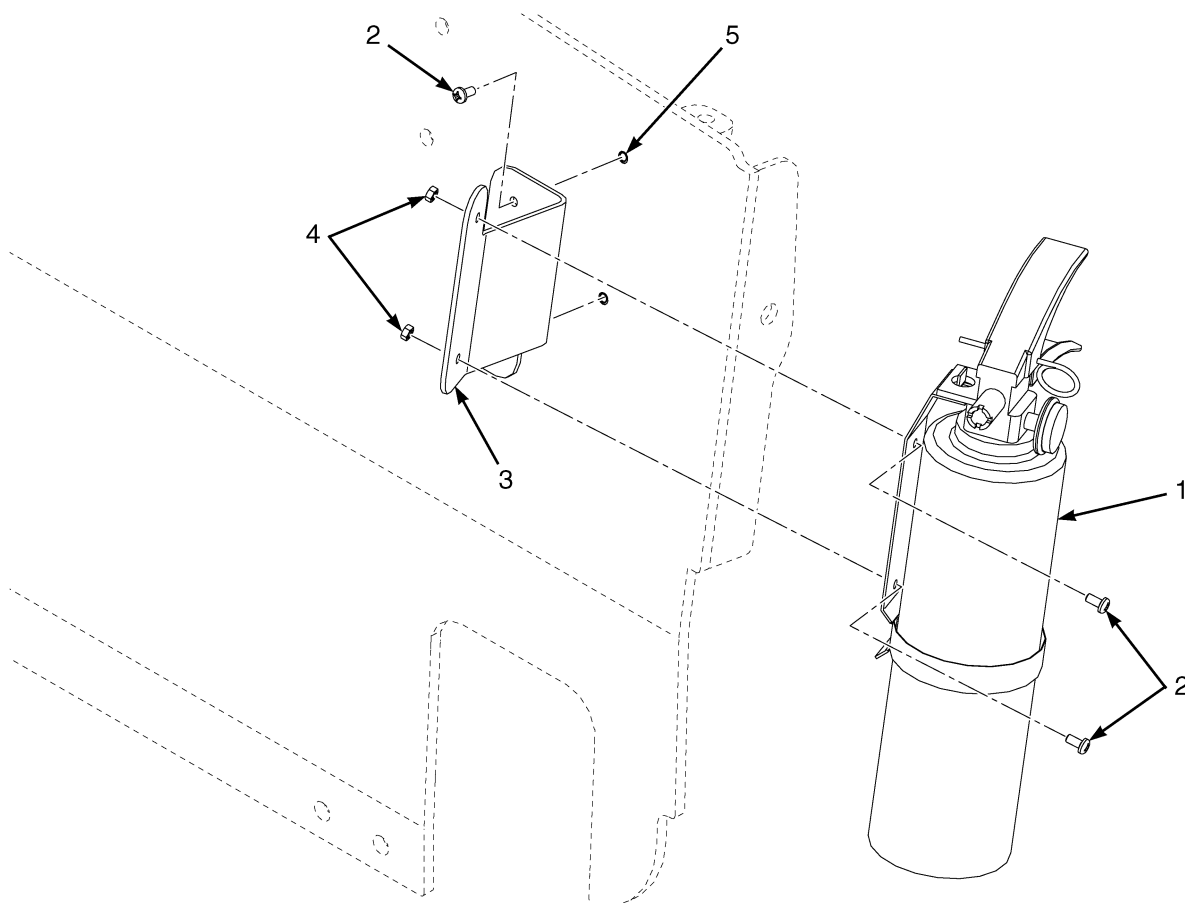
A: Standard Mount

B: Low Mount

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	146540	Fire Extinguisher	1	1
2	a 1683976	Bracket	1	..
2	a 4024514	Bracket	..	1
3	1583611	Capscrew	2	..
3	1510113	Capscrew	..	2
4	1531557	Insert	2	2
5	320155	Washer	2	2
6	296508	Screw	2	2
7	1565407	Nut	2	2

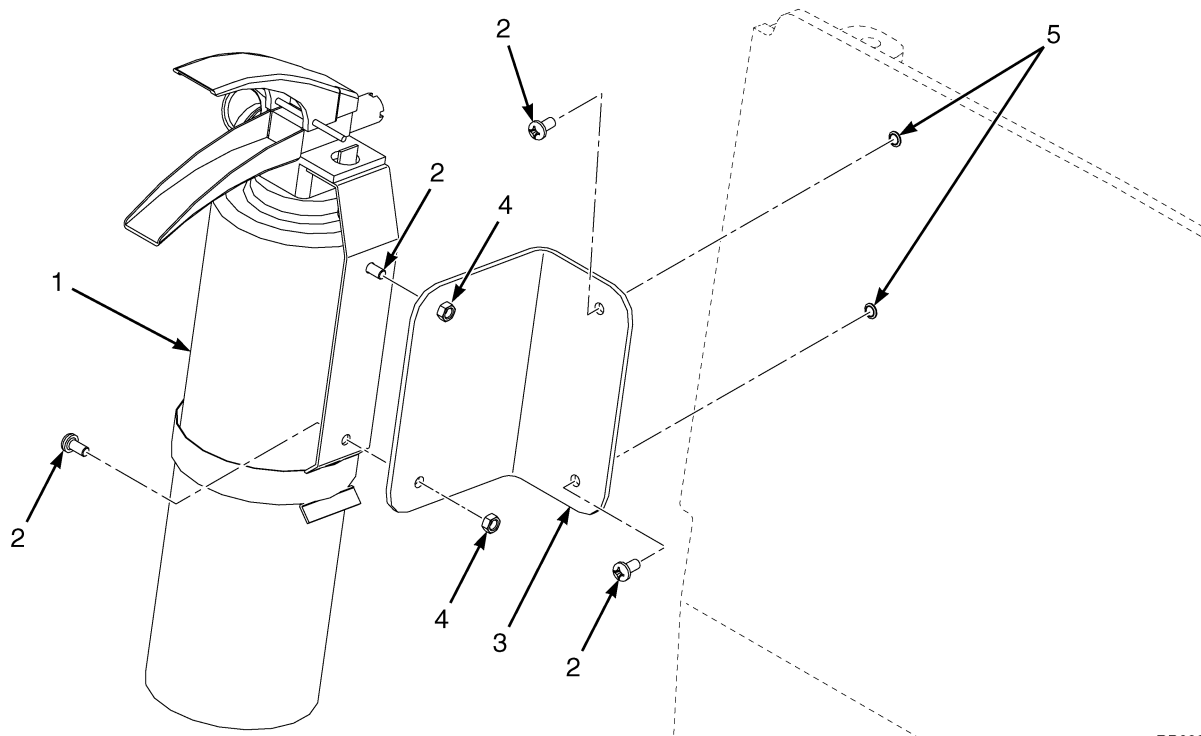
FOOTNOTES:

a For Later Models with Cowl Mount use Kit 4033148

FIRE EXTINGUISHER (FIGURE 11-70)
(11/2014 →)

BP000876

ITEM	PART NO.	DESCRIPTION	QTY
1	146540	Fire Extinguisher	1
2	4045049	Screw	4
3	4096918	Bracket	1
4	2056600	Nut	2
5	4039104	Insert	2

FIRE EXTINGUISHER (FIGURE 11-71)
WITH DRIVE-IN RACK OVERHEAD GUARD (11/2014 →)

BP000877

ITEM	PART NO.	DESCRIPTION	QTY
1	146540	Fire Extinguisher	1
2	4045049	Screw	4
3	4097258	Bracket	1
4	2056600	Nut	2
5	4039104	Insert	2

SECTION 12

FIELD CONVERSION KITS

DESCRIPTION	PAGE
ACCELERATOR PEDAL	12-2
ACCUMULATOR	12-2
ADD ON OPTION KITS	
FORK POSITIONER	12-2
LIGHTS	12-2
ADD ON TELEMETRY KITS	12-3
ADD-ON OPTION KITS	12-3
AUXILIARY EXTENSION TUBES	
ISS CARRIAGE	12-9
AUXILIARY TUBE EXTENSION KIT	
FOR D SERIES MAST	12-7
AUXILIARY TUBE EXTENSION KITS	
FOR F SERIES MAST	12-8
BATTERY REMOVAL OPTIONS	
→ S/N A268N09901L	12-4
S/N A268N09902L →	12-4
CONVERSION KIT	
CONNECTION HOSES THREE STAGE FULL FREE-LIFT - CHASSIS TO MAST	12-22
CONVERSION KITS	
VERTICAL TO SIDE BATTERY REMOVAL OPTION	12-4
DC TO DC CONVERTER KITS	12-5
FIRE EXTINGUISHER KIT	12-5
HEADER HOSE CONVERSION KITS	
THREE STAGE FULL FREE-LIFT - D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)	12-12
THREE STAGE FULL FREE-LIFT - F508 SERIES MAST	12-19
THREE STAGE FULL FREE LIFT - D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)	12-14
THREE STAGE FULL FREE- LIFT - F563 SERIES MAST	12-20
TWO STAGE FULL FREE- LIFT - D509/D564, E509/E564	12-16
TWO STAGE LIMITED FREE-LIFT - D507/D562	12-10
TWO STAGE LIMITED FREE-LIFT - F507 SERIES MAST	12-21
TWO STAGE LIMITED FREE-LIFT - F562 SERIES MAST	12-22
HEADER HOSE CONVERSION KITS FOUR STAGE FULL FREE-LIFT	12-18
HYDRAULIC VALVE CONVERSION KIT	12-7
MANUAL LEVER KITS	
WITHOUT CLAMPING TO WITH CLAMPING	12-6
MINI LEVER CONVERSION KIT	12-6
MIRROR CONVERSION KITS	12-5
MISCELLANEOUS KITS	12-5
PARK BRAKE KIT	12-6
REAR DRIVE HANDLE KITS	12-6
WIDE TREAD KITS	12-6

ACCELERATOR PEDAL

DESCRIPTION	PART NUMBER
Kit Standard Pedal with Manual Control Forward/Reverse Switch to Monotrol Pedal	1703941
Kit Standard Pedal with Mini-Lever Control Forward/Reverse Switch to Monotrol Pedal	1703944
Kit Monotrol Pedal to Standard Pedal with Manual Control Forward/Reverse Switch	1703835
Kit Monotrol Pedal to Standard Pedal with Mini-Lever Forward/Reverse Switch	1703953
Kit Accelerator Extension	4023473

ACCUMULATOR

DESCRIPTION	PART NUMBER
Kit-Accumulator (1 qt.)	1702906
Kit Steering Accumulator Fixed Column	4137740
Kit Steering Accumulator Telescoping Column	4139446

**ADD ON OPTION KITS
LIGHTS**

DESCRIPTION	PART NUMBER
Kit-Strobe Light w/Lights w/Drive Thru Rack Overhead Guard.	1708167
Kit-Strobe Light w/o Lights w/Drive Thru Rack Overhead Guard	1708168
Kit-Strobe Light w/Lights w/o Drive Thru Rack Overhead Guard	1708169
Kit-Strobe Light w/o Lights w/o Drive Thru rack Overhead Guard	1708170
Kit-Tail Light (12V LED With Lights, Without Drive-Thru Rack OHG)	1702011
Kit-Tail Light (12V LED Without Lights, Without Drive-Thru Rack OHG)	1701024
Kit-Tail Light (12V LED With Lights, With Drive-Thru Rack OHG)	1702337
Kit-Tail Light (12V LED Without Lights, With Drive-Thru Rack OHG)	1696251
Kit-Worklight (w/o Drive Thru Rack OHG w/o Lights) (Glass Lens)	1706775
Kit-Worklight (w/o Drive Thru Rack OHG w/o Lights) (Plastic Lens)	1706776
Kit-Worklight (w/Drive Thru Rack OHG w/o Lights) (Glass Lens)	1706777
Kit-Worklight (w/Drive Thru Rack OHG w/o Lights) (Plastic Lens)	1706778
Kit-Worklight (LED Mast)	4030074
Kit-Worklight (LED Mast w/OHG)	4030079
Kit-Worklight -12 Volt 1 RR/2 FR 12V Glass Lens w/DTR OHG w/o LGT	4040526
Kit-Worklight -12 Volt 1 RR/2 FR Led Plastic Lens w/DTR OHG w/o LGT	4040527

**ADD ON OPTION KITS
FORK POSITIONER**

DESCRIPTION	PART NUMBER
Kit-Fork Positioner (CL2 977mm 3FFL 2.0-2.5T) (Used with D508 Mast)	4064914

**ADD ON OPTION KITS
FORK POSITIONER
(CONTINUED)**

DESCRIPTION	PART NUMBER
Kit-Fork Positioner (CL3 977mm 3FFL 3.0-3.5T) (Used with D563 Mast)	4064918
Kit-Fork Positioner (CL2 977mm 3FFL 2.0-2.5T) (Used with F508 Mast)	4100559
Kit-Fork Positioner (CL3 977mm 3FFL 3.0-3.5T) (Used with F563 Mast)	4100560
Kit-Fork Positioner (CL2 977mm 3FFL 2.0-2.5T) (Used with F508 Mast)	4149393
Kit-Fork Positioner (CL3 977mm 3FFL 3.0-3.5T) (Used with F563 Mast)	4149394
Kit Fork Positioner Mechanism Common Parts (Included with CL2 Fork Positioners)	4149397
Kit Fork Positioner Mechanism Common Parts (Included with CL3 Fork Positioners)	4149398

ADD ON TELEMETRY KITS

DESCRIPTION	PART NUMBER
Telemetry Kit (FM1 W/GSM Cellular)	4063816
Telemetry Kit (FM1 W/WIFI)	4063817
Telemetry Kit (ER Interlock)	4063828
Telemetry Kit (W/ISO Prox Card Reader)	4063836
Telemetry Kit (W/IClass/MiFare Prox Card Reader)	4063838
Telemetry Kit (Hyster Check List)	4063829

ADD-ON OPTION KITS

DESCRIPTION	PART NUMBER
Kit-Back-UP Alarm (107 DB w/Primary DC-DC Conv. 36/48V to 12V)	1704114
Kit-Back-UP Alarm (82-102 DB w/Primary DC-DC Conv. 36/48V to 12V)	1704115
Kit-Back-UP Alarm (107 DB w/Primary DC-DC Conv. 72/80V to 12V)	1704118
Kit-Back-UP Alarm (82-102 DB w/Primary DC-DC Conv. 72/80V to 12V)	1704119
Kit-Back-UP Alarm (107 DB w/Auxiliary DC-DC Conv. 36/48V)	1704208
Kit-Back-UP Alarm (107 DB w/Auxiliary DC-DC Conv. 72/80V)	1704212
Kit-Back-UP Alarm (82-102 DB w/Auxiliary DC-DC Conv. 70/80V)	1704213
Kit-Back-UP Alarm (82-102 DB w/Auxiliary DC-DC Conv. 36/48V)	1704209
Kit Back-Up Alarm 24-28 V Adjustable 82-102 DB	4098952
Kit Back-Up Alarm 12-24 V Adjustable 82-102 DB	4092462
Kit Back-Up Alarm 107 DB	1703681
Kit Back-Up Alarm 82-102 DB	1703682
Kit-Back-UP Alarm (82-102 DB (A) Includes DC-DC Converter 36/48V)	b 4092211
Kit-Back-UP Alarm (82-102 DB (A) Includes DC-DC Converter 72/80V)	a 4092212
Kit-Back-UP Alarm (82-102 DB w/Auxiliary DC/DC Converter 72/80 V)	a 4092386
Kit-Back-UP Alarm (82-102 DB (A) with Primary DC-DC Converter 26/48 V)	b 4092213

ADD-ON OPTION KITS (CONTINUED)

DESCRIPTION	PART NUMBER
Kit-Back-UP Alarm (82-102 DB (A) with Primary DC-DC Converter 36/48V)	4068029
Kit (Hydraulic Tank Level Sensor)	4021376
Kit (Hydraulic Filter Service Sensor)	4021377
Kit-Fire Extinguisher	4024515
Kit (Sync Steering)	4054556
Kit (Header Hose Guard Bracket)	4099767
Kit Steering Accumulator Fixed Column	4137740
Kit Steering Accumulator Telescoping Column	4139446

FOOTNOTES:

- a** With Adjustable 12-24 V Alarm
b With Adjustable 24-48V Alarm

BATTERY REMOVAL OPTIONS
 (→ S/N A268N09901L)

DESCRIPTION	PART NUMBER
Kit-Side Roller (700 mm) (Vertical to Side Battery Roller)	1702837
Kit-Side Roller (786 mm) (Vertical to Side Battery Roller)	1702838
Kit-Side Roller (847 mm) (Vertical to Side Battery Roller)	1702839
Kit-Side Roller (933 mm) (Vertical to Side Battery Roller)	1702840
Kit-Side Roller (1051 mm) (Vertical to Side Battery Roller)	1702841
Kit-Repair (Battery Gate, 700mm BC)	4024382

BATTERY REMOVAL OPTIONS
 (S/N A268N09902L →)

DESCRIPTION	PART NUMBER
Kit-Side Roller (700 mm) (Vertical to Side Battery Roller)	4027351
Kit-Side Roller (786 mm) (Vertical to Side Battery Roller)	4027352
Kit-Side Roller (847 mm) (Vertical to Side Battery Roller)	4027353
Kit-Side Roller (933 mm) (Vertical to Side Battery Roller)	4027354
Kit-Side Roller (1015 mm) (Vertical to Side Battery Roller)	4027355
Kit-Repair (Battery Gate, 700 mm BC)	4024382

CONVERSION KITS
VERTICAL TO SIDE BATTERY REMOVAL OPTION

DESCRIPTION	PART NUMBER
Kit-Side Roller Battery Conversion 700mm	4168998
Kit-Side Roller Battery Conversion 786mm	4168999

CONVERSION KITS VERTICAL TO SIDE BATTERY REMOVAL OPTION (CONTINUED)

DESCRIPTION	PART NUMBER
Kit-Side Roller Battery Conversion 847mm	4169000
Kit-Side Roller Battery Conversion 933mm	4169001
Kit-Side Roller Battery Conversion 1015mm	4169002

DC TO DC CONVERTER KITS

DESCRIPTION	PART NUMBER
Kit (DC-DC Converter) (36/48V)	1703333
Kit (DC-DC Converter) (72/80V)	1703334
Kit (DC-DC Converter with Bracket) (36/48V)	1703335
Kit (DC-DC Converter with Bracket) (72/80V)	1703336
Kit-Service (Relocates DC DC Primary Converter)	4095273

FIRE EXTINGUISHER KIT

DESCRIPTION	PART NUMBER
Kit-Fire Extinguisher (Overhead Guard Mounted)	1703181
Kit-Fire Extinguisher (Low Overhead Guard Mount)	4024515
Kit-Fire Extinguisher (Cowl Mounted)	4033148

MIRROR CONVERSION KITS

DESCRIPTION	PART NUMBER
Kit (Dual Mirrors)	1702858
Kit (Panoramic Mirror)	1702860

MISCELLANEOUS KITS

DESCRIPTION	PART NUMBER
Kit-Impact Monitoring	1703495
Kit (Return to Set Tilt)	b 1704219
Kit Return to Set Tilt Add On (Manual Hydraulics)	a c 4111587
Kit (Low Mount Display)	1704581
Kit (Keyless Start)	1705321
Kit (12V Outlet)	1704766
Kit (Fixed to Telescopic Steering Column)	1704467
Kit-Latch (Hook Type Forks Class II)	4033434
Kit-Latch (Class III) (Hook Type Fork Class III)	4033435

MISCELLANEOUS KITS (CONTINUED)

DESCRIPTION	PART NUMBER
Kit (Pump Controller Fan Harness)	4067240
Kit Drive Axle Center Section Kit	4162064

FOOTNOTES:

- a** Requires software that must be Dealer Installed
b → 11/2014
c 11/2014 →

PARK BRAKE KIT

DESCRIPTION	PART NUMBER
Kit-Park Brake (Manual to Auto Brake)	1703470

MANUAL LEVER KITS
WITHOUT CLAMPING TO WITH CLAMPING

DESCRIPTION	PART NUMBER
Kit Manual Lever Conversion 4 Way w/o clamping to with clamping	a 1703839
Kit Manual lever 3 way w/o clamping to with clamping	a 1703836

FOOTNOTES:

- a** Kits require software that must be dealer installed

MINI LEVER CONVERSION KIT

DESCRIPTION	PART NUMBER
Kit-Mini-Lever without Clamping to with Clamping (E-Hydraulics Valve)	a 1705217
Kit-Mini-Lever with Clamping to without Clamping (E-Hydraulics Valve)	a 4003986

FOOTNOTES:

- a** Kits require software that must be dealer installed

REAR DRIVE HANDLE KITS

DESCRIPTION	PART NUMBER
Kit (Rear Drive Handle) (Standard 27-33 inch Battery Compartment)	1704362
Kit (Rear Drive Handle) (Freezer 27-33 inch Battery Compartment)	1704363
Kit (Rear Drive Handle) (Standard 36-40 inch Battery Compartment)	1704473
Kit (Rear Drive Handle) (Freezer 36-40 inch Battery Compartment)	1704474
Kit (Rear Drive Handle) (Standard 27-33 inch Battery Compartment)	4011224
Kit (Rear Drive Handle) (Freezer 27-33 in Battery Compartment)	4011225

WIDE TREAD KITS

WIDE TREAD KITS (CONTINUED)

DESCRIPTION	PART NUMBER
Kit-Wide Tread (70)	1702849
Kit-Wide Tread (40-60)	1702848

HYDRAULIC VALVE CONVERSION KIT

DESCRIPTION	PART NUMBER
Kit (Hydraulic Valve-3 to 4 Function Manual Valve) (Without Clamping to With Clamping)	a 1703837
Kit-E-Hyd Valve 3 to 4 Way (without Clamping to with Clamping)	a 1705216
Kit (Hydraulic Valve-3 to 4 Function Manual w/o Clamping to w/o Clamping)	1703838
Kit-E-Hyd Valve 3 TO 4 Way (Without Clamping to Without Clamping)	a 1705214
Kit-E-Hyd Valve 3 TO 4 Way (With Clamp to 4 Way Without Clamp)	a 1705215

FOOTNOTES:

a Kits require software that must be dealer installed.

**AUXILIARY TUBE EXTENSION KIT
FOR D SERIES MAST**

DESCRIPTION	PART NUMBER
Kit-Quick Disconnect Fitting (Manual Hydraulics for Two Stage LFL Mast)	1550257
Kit-Aux Tube Extension (Three Function Class II Standard Carriage, 2 Stg LFL Cush)	1550241
Kit-Aux Tube Extension (Four Function Class II Standard Carriage 2 Stg LFL Cush)	1550242
Kit-Aux Tube Extension (Three Function Class II ISS Carriage 2 Stg LFL Cush)	1550245
Kit-Aux Tube Extension (Four Function Class II ISS Carriage 2 Stg LFL Cush)	1550246
Kit-Aux Tube Extension (Three Function Class III Standard Carriage 2 LFL Cush)	1550243
Kit-Aux Tube Extension (Four Function Class III Standard Carriage 2 LFL Cush)	1550244
Kit-Aux Tube Extension (Three Function Class III ISS Carriage 2 Stg LFL Cush)	1550247
Kit-Aux Tube Extension (Four Function Class III ISS Carriage 2 Stg LFL Cush)	1550248
Kit-Aux Tube Extension (Three Function, Class II, Std Carriage, 2 and 3 FFL)	1550261
Kit-Aux Tube Extension (Four Function, Class II, Std Carriage, 2 and 3 FFL)	1550262
Kit-Aux Tube Extension (Three Function, Class II, Side-Shift Carriage, 2 and 3 FFL)	1550265
Kit-Aux Tube Extension (Four Function, Class II, Side-Shift Carriage, 2 and 3 FFL)	1550266
Kit-Aux Tube Extension (Three Function, Class III, Std Carriage, 2 and 3 FFL)	1550263
Kit-Aux Tube Extension (Four Function, Class III, Std Carriage, 2 and 3 FFL)	1550264
Kit-Aux Tube Extension (Three Function, Class III, Side-Shift Carriage, 2 and 3 FFL)	1550267
Kit-Aux Tube Extension (Four Function, Class III, Side-Shift Carriage, 2 and 3 FFL)	1550268
Kit-Aux Tube Extension (Three Function Class II Standard Carriage 4 Stg FFL)	1550277
Kit-Aux Tube Extension (Four Function Class II Standard Carriage 4 Stg FFL)	1550278
Kit-Aux Tube Extension (Three Function Class II ISS Carriage 4 Stg FFL)	1550279

AUXILIARY TUBE EXTENSION KIT FOR D SERIES MAST (CONTINUED)

DESCRIPTION	PART NUMBER
Kit-Aux Tube Extension (Four Function Class II ISS Carriage 4 Stg FFL)	1550280
Kit (Quick Connect Fittings Single Auxiliary E-Hydraulics)	b d4018149
Kit (Quick Disconnect Fittings Dual Auxiliary with E-Hydraulics)	a d4018150
Kit (Quick Disconnect Fittings Single Auxiliary E-Hydraulics)	c d4018746

FOOTNOTES:

- a** 3 and 4 Function Standard Carriage Class II and III
b 3 Function Standard Carriage Class II and III
c ISS Carriage 4 Function Class II and III
d 9/2010 →

AUXILIARY TUBE EXTENSION KITS FOR F SERIES MAST

DESCRIPTION	PART NUMBER
Kit-Quick Disconnect Fitting (Manual Hydraulics for Two Stage LFL Mast)	1550257
Kit (Quick Connect Fittings Single Auxiliary E-Hydraulics)	4018149
Kit (Quick Disconnect Fittings Dual Auxiliary with E-Hydraulics)	4018150
Kit (Quick Disconnect Fittings Single Auxiliary E-Hydraulics)	4018746
Kit-Aux Ext Tube (3 Func. Class II-Standard Carriage 2LFL)	4114740
Kit-Aux Ext Tube (3 Func. Class III-Standard Carriage 2LFL)	4114741
Kit-Aux Ext Tube (4 Func. Class II-Standard Carriage 2LFL)	4114742
Kit-Aux Ext Tube (4 Func. Class III-Standard Carriage 2LFL)	4114743
Kit-Aux Ext Tube (4 Func. Class II-Integral Side-Shift 2LFL)	4114746
Kit-Aux Ext Tube (4 Func. Class III-Integral Side-Shift 2LFL)	4114747
Kit-Aux Ext Tube (3 Func. Class II-Standard Carriage 3FFL)	4114920
Kit-Aux Ext Tube (3 Func. Class III-Standard Carriage 3FFL)	4114921
Kit-Aux Ext Tube (4 Func. Class II-Standard Carriage 3FFL)	4114922
Kit-Aux Ext Tube (4 Func. Class III-Standard Carriage 3FFL)	4114923
Kit-Aux Ext Tube (4 Func. Class II-Integral Side-Shift 3FFL)	4114924
Kit-Aux Ext Tube (4 Func. Class III-Integral Side-Shift 3FFL)	4114925
Kit-Aux Tube Extension (Three Function Class II Standard Carriage 4 Stg FFL)	1550277
Kit-Aux Tube Extension (Four Function Class II Standard Carriage 4 Stg FFL)	1550278
Kit-Aux Tube Extension (Three Function Class II ISS Carriage 4 Stg FFL)	1550279
Kit-Aux Tube Extension (Four Function Class II ISS Carriage 4 Stg FFL)	1550280
Kit-Aux Ext Tube (3 Func. Class II-Standard Carriage 2FFL)	4115116
Kit-Aux Ext Tube (4 Func. Class II-Standard Carriage 2FFL)	4115117
Kit-Aux Ext Tube (3 Func. Class III-Standard Carriage 2FFL)	4115118

**AUXILIARY TUBE EXTENSION KITS
FOR F SERIES MAST
(CONTINUED)**

DESCRIPTION	PART NUMBER
Kit-Aux Ext Tube (4 Func. Class III-Standard Carriage 2FFL)	4115119
Kit-Aux Ext Tube (4 Func. Class II-Integral Side-Shift 2FFL)	4115120
Kit-Aux Ext Tube (4 Func. Class III-Integral Side-Shift 2FFL)	4115121

**AUXILIARY EXTENSION TUBES
ISS CARRIAGE**

DESCRIPTION	PART NUMBER
Kit-Aux Ext Tube 4 Function CL II ISS Crg 3FFL	4149817
Kit-Aux Ext Tube 4 Function CL III ISS Crg 3FFL	4149818
Kit-Aux Ext Tube 4 Function CL III ISS Crg 4 FFL	4149922
Kit-Aux Ext Tube 4 Function CL II ISS Crg 2 FFL	4149933
Kit-Aux Ext Tube 4 Function CL III ISS Crg 2 FFL	4149934
Kit-Aux Ext Tube 4 Function CL II ISS Crg 2 LFL, Cush	4151088
Kit-Aux Ext Tube 4 Function CL III ISS Crg 2 LFL, Cush	4151089

HEADER HOSE CONVERSION KITS

TWO STAGE LIMITED FREE-LIFT — D507/D562

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2959 mm (116.5 in.)	3152 mm (124.1 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	D562 2959	D507 3152	D562 3159	D562 3259
Kit-Hose Group 3 to 4 Way	1704774	1704774	1584978	1704775

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	D507 3352	D507 3452
Kit-Hose Group 3 to 4 Way	1584978	1704775

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2959 mm (116.5 in.)	3152 mm (124.1 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	D562 2959	D507 3152	D562 3159	D562 3259
Kit-Hose Group 2 to 4 Way	1705101	1705101	1584979	1705103

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	D507 3352	D507 3452
Kit-Hose Group 2 to 4 Way	1584979	1705103

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2959 mm (116.5 in.)	3152 mm (124.1 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	D562 2959	D507 3152	D562 3159	D562 3259
Kit-Hose Group 2 to 3 Way	1705100	1705100	1584977	1705102

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	D507 3352	D507 3452
Kit-Hose Group 2 to 3 Way	1584977	1705102

HEADER HOSE CONVERSION KITS**THREE STAGE FULL FREE-LIFT — D508/D563 (→ S/N D563V11658H) (→ S/N D508V27872H)****THREE TO FOUR FUNCTION - D508**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 3 to 4 Way	1585190	1585193	1585196	1585199	1612042

THREE TO FOUR FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 3 to 4 Way	1585190	1585193	1585196	1585199	1612042

TWO TO FOUR FUNCTION - D508

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 2 to 4 Way	1585191	1585194	1585197	1585200	1705105

TWO TO FOUR FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 2 to 4 Way	1585191	1585194	1585197	1585200	1705105

TWO TO THREE FUNCTION - D508

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 2 to 3 Way	1585189	1585192	1585195	1585198	1612041

TWO TO THREE FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 2 to 3 Way	1585189	1585192	1585195	1585198	1612041

HEADER HOSE CONVERSION KITS**THREE STAGE FULL FREE LIFT — D508/D563 (S/N D563V11659H →) (S/N D508V27873H →)****THREE TO FOUR FUNCTION - D508**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 3 TO 4 Way	4046871	4046874	4046889	4046898	4046907

THREE TO FOUR FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 3 TO 4 Way	4046871	4046874	4046889	4046898	4046907

TWO TO FOUR FUNCTION - D508

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 2 TO 4 Way	4046872	4046887	4046890	4046899	4046908

TWO TO FOUR FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 2 TO 4 Way	4046872	4046887	4046890	4046899	4046908

TWO TO THREE FUNCTION - D508

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	D508 4760	D508 4910	D508 5060	D508 5510	D508 5960
Kit-Hose Group 2 TO 3 Way	4046870	4046873	4046888	4046897	4046906

TWO TO THREE FUNCTION - D563

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	D563 4418	D563 4568	D563 4718	D563 5168	D563 5618
Kit-Hose Group 3 TO 4 Way	4046871	4046874	4046889	4046898	4046907

HEADER HOSE CONVERSION KITS

TWO STAGE FULL FREE- LIFT — D509/D564, E509/E564

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2960 mm (116.5 in.)	3160 mm (124.4 in.)	3162 mm (124.5 in.)	3260 mm (128.3 in.)
Mast Group Number	D564 2960	D564 3160	D509 3162	D564 3260
Kit-Hose Group 3 to 4 Way	1704776	1605306	1704776	1585077

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3362 mm (132.4 in.)	3462 mm (136.3 in.)
Mast Group Number	D509 3362	D509 3462
Kit-Hose Group 3 to 4 Way	1605306	1585077

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2960 mm (116.5 in.)	3160 mm (124.4 in.)	3162 mm (124.5 in.)	3260 mm (128.3 in.)
Mast Group Number	D564 2960	D564 3160	D509 3162	D564 3260
Kit-Hose Group 2 to 4 Way	1705107	1705108	1705107	1585078

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3362 mm (132.4 in.)	3462 mm (136.3 in.)
Mast Group Number	D509 3362	D509 3462
Kit-Hose Group 2 to 4 Way	1705108	1585078

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	2960 mm (116.5 in.)	3160 mm (124.4 in.)	3162 mm (124.5 in.)	3260 mm (128.3 in.)
Mast Group Number	D564 2960	D564 3160	D509 3162	D564 3260
Kit-Hose Group 2 to 3 Way	1705106	1605305	1705106	1585076

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	3362 mm (132.4 in.)	3462 mm (136.3 in.)
Mast Group Number	D509 3362	D509 3462
Kit-Hose Group 2 to 3 Way	1605305	1585076

HEADER HOSE CONVERSION KITS FOUR STAGE FULL FREE-LIFT**THREE TO FOUR FUNCTION**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
Mast Group Number	D515 6058	D515 6364	D515 6670
Kit-Hose Group 3 TO 4 Way	1705224	1705227	1705230

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
Mast Group Number	D515 6058	D515 6364	D515 6670
Kit-Hose Group 2 TO 4 Way	1705225	1705228	1705231

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	6058 mm (238.5 in.)	6364 mm (250.6 in.)	6670 mm (262.6 in.)
Mast Group Number	D515 6058	D515 6364	D515 6670
Kit-Hose Group 2 TO 3 Way	1705223	1705226	1705229

HEADER HOSE CONVERSION KITS

THREE STAGE FULL FREE-LIFT — F508 SERIES MAST

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
Kit-Hose Group 3 TO 4 Way	4073526	4073529	4073532	4073541	4073550

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
Kit-Hose Group 2 TO 4 Way	4073527	4073530	4073533	4073542	4073551

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
Mast Group Number	F508 4760	F508 4910	F508 5060	F508 5510	F508 5960
Kit-Hose Group 2 TO 3 Way	4073525	4073528	4073531	4073540	4073549

HEADER HOSE CONVERSION KITS

THREE STAGE FULL FREE- LIFT — F563 SERIES MAST

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
Kit-Hose Group 3 TO 4 Way	4073526	4073529	4073532	4073541	4073550

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
Kit-Hose Group 2 TO 4 Way	4073527	4073530	4073533	4073542	4073551

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS				
	4418 mm (173.9 in.)	4568 mm (179.8 in.)	4718 mm (185.7 in.)	5168 mm (203.5 in.)	5618 mm (221.2 in.)
Mast Group Number	F563 4418	F563 4568	F563 4718	F563 5168	F563 5618
Kit-Hose Group 2 TO 3 Way	4073525	4073528	4073531	4073540	4073549

HEADER HOSE CONVERSION KITS

TWO STAGE LIMITED FREE-LIFT — F507 SERIES MAST

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	F507 3152	F507 3352	F507 3452
Kit-Hose Group 3 TO 4 Way	4090204	4090210	4090213

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	F507 3152	F507 3352	F507 3452
Kit-Hose Group 2 TO 4 Way	4090205	4090211	4090214

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	3152 mm (124.1 in.)	3352 mm (132.0 in.)	3452 mm (135.9 in.)
Mast Group Number	F507 3152	F507 3352	F507 3452
Kit-Hose Group 2 TO 3 Way	4090203	4090209	4090212

HEADER HOSE CONVERSION KITS

TWO STAGE LIMITED FREE-LIFT — F562 SERIES MAST

THREE TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	F562 2959	F562 3159	F562 3259
Kit-Hose Group 3 TO 4 Way	4090204	4090210	4090213

TWO TO FOUR FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	F562 2959	F562 3159	F562 3259
Kit-Hose Group 2 TO 4 Way	4090205	4090211	4090214

TWO TO THREE FUNCTION

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS		
	2959 mm (116.5 in.)	3159 mm (124.4 in.)	3259 mm (128.3 in.)
Mast Group Number	F562 2959	F562 3159	F562 3259
Kit-Hose Group 2 TO 3 Way	4090203	4090209	4090212

CONVERSION KIT

CONNECTION HOSES THREE STAGE FULL FREE-LIFT CHASSIS TO MAST

DESCRIPTION	PART NUMBER
Kit Connection Hoses 2 to 3 Function	4087679
Kit Connection Hoses 3 to 4 Function	4087680
Kit Connection Hoses 2 to 4 Function	4087681

SECTION 13
NUMERICAL INDEX

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
12891	7-15	4	8-87	10	8-47	18	9-33	4			
	7-39	4	9-14	25	11-89	12	9-39	2			
	9-57	3	9-40	25	11-91	12	9-43	2			
	9-59	3	9-44	25	11-92	13	10-11	2			
	11-89	14	9-57	10	11-95	12	10-11	4			
	11-91	14	9-59	10	11-97	13	10-11	10			
	11-93	18	10-5	13	11-99	13	10-17	21			
	11-95	21	10-9	9	11-	12	16486	6-41	2		
	11-98	18	10-23	10	103		6-43	2			
12921	6-23	5	10-25	10	11-	6	6-55	7			
	6-25	5	11-89	21	105		8-11	12			
13957	4-19	24	11-91	21	11-	13	9-7	7			
	4-21	24	11-93	23	107		9-33	7			
	7-21	8	11-95	17	16046	6-69	10-11	7			
	8-43	18	11-98	21	6-71	17	10-17	31			
	8-47	18	11-99	21	16151	3-5	16540	11-7	14		
	9-25	10	11-	17	16375	1-19	11-21	14			
	9-27	10	103		1-29	11	11-31	14			
13963	4-19	13	11-	21	1-29	12	16543	10-17	31		
	4-21	13	105		16481	6-13	16560	10-11	10		
14191	4-23	8	11-	21	11-59	12	16982	8-61	19		
14603	9-7	7	107		11-63	13	9-7	8			
	9-33	7	15222	10-3	16483	6-41	10-11	8			
	10-11	7	10-7	16	6-43	10	16984	6-3	22		
15055	1-36	24	15223	8-12	6-51	1	6-7	16			
15127	1-19	21	8-57	9	6-53	1	17221	11-13	13		
	1-21	22	8-59	9	6-55	8	11-19	27			
15136	1-53	7	9-40	31	7-7	4	11-27	10			
	1-55	7	9-44	31	10-11	14	11-35	11			
	1-57	7	11-98	24	11-7	14	18089	6-45	9		
	1-59	7	11-	24	11-21	14	6-49	9			
	1-61	7	100		11-31	14	6-51	15			
15175	1-36	23	11-	24	11-59	7	6-53	15			
15177	1-19	14	107		11-63	7	18096	6-45	9		
	1-29	4	15225	4-19	6-15	2	6-49	9			
15211	7-7	19	4-21	3	6-17	18	6-51	15			
	7-15	10	15227	4-19	6-51	4	6-53	15			
	7-21	12	4-21	34	6-53	4	18462	1-29	10		
	7-39	10	15242	3-5	7-7	6	1-31	17			
	8-12	19	15880	8-28	8-11	4	1-33	19			
	8-24	20	8-75	4	8-11	6	18471	1-29	6		
	8-31	10	9-18	12	8-23	12	1-31	19			
	8-33	10	9-46	12	8-61	18	1-33	16			
	8-43	6	15884	3-6	9-7	2	18562	1-29	22		
	8-47	6	16001	7-3	9-7	4	18735	1-29	14		
	8-57	8	8-3	10	9-7	10	18738	1-31	13		
	8-59	8	9-3	10	9-13	2	1-33	14			
	8-67	20	16041	6-66	9-13	14	18832	11-89	10		
	8-71	20	8-43	18	9-33	2	11-91	10			

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	11-95	10		8-9	3		9-14	21	129339	10-3	11
	11-	10		8-31	3		9-43	21		10-7	15
	103			8-33	3	88436	8-71	3	129361	7-7	18
	11-	10		8-43	4	88441	8-71	3		8-12	18
	105			8-47	4		10-5	20		8-51	9
19890	1-49	18		8-51	4	88446	7-23	11		8-54	9
	1-53	10		8-53	4		8-51	9		8-67	3
	1-55	10		8-57	3		8-54	9	129387	7-3	7
	1-57	10		8-59	3	90263	8-28	12		7-5	4
	1-59	10		8-87	3		8-75	4		7-21	4
	1-61	10		9-3	8		9-18	12		7-23	4
19901	1-17	5		9-5	3		9-46	12		8-3	7
	1-19	24		9-25	8	92861	7-12	12		8-5	7
	1-21	14		9-27	8		7-28	15		8-9	4
	1-29	5		9-29	3		8-16	15		8-31	4
21189	4-19	2		9-31	3		8-20	15		8-33	4
	4-21	2		10-3	3		8-64	16		8-43	5
21420	3-5	25		10-5	4		11-	5		8-47	5
26284	2-45	4		10-7	4		119			8-51	5
37752	7-5	8		10-9	4	98599	6-41	2		8-53	5
	7-23	10		10-23	4		6-43	2		8-57	5
	8-5	12		10-25	3		6-55	7		8-59	5
	8-5	13		11-95	21	104506	7-3	3		8-87	4
	8-24	21		11-99	18		7-23	7		9-3	7
	8-51	8		11-	21		8-3	3		9-5	4
	8-54	8		103			8-5	3		9-25	7
	9-14	22		11-	13		8-61	20		9-27	7
	9-40	22		105			9-3	3		9-29	4
	9-44	22		11-	18		9-25	3		9-31	4
	10-5	16		107			9-27	3		10-3	4
	10-7	10	58902	10-28	39		10-3	7		10-5	3
	10-17	4		10-31	18		10-5	8		10-7	3
39348	10-15	3	58903	4-19	6		10-7	7		10-9	3
39374	6-69	3		4-21	6	110153	11-27	21		10-23	6
39678	4-19	18	58908	6-23	2	110322	6-9	5		10-25	4
	4-21	18		6-25	2		10-28	35		11-95	19
44542	4-19	32	59229	7-12	12		10-31	25		11-99	16
	4-21	39		7-28	15		11-35	4		11-	19
46388	6-69	7		8-16	15	114312	1-29			103	
55146	10-20	12		8-20	15		11-	3		11-	16
55407	11-	5		8-64	16		120			105	
	119			9-9	9		11-	3		11-	16
55434	6-67	11		9-11	7		121			107	
57597	3-6	38		9-35	9		11-	3	131358	7-7	1
57664	10-13	6		9-37	8		122			7-15	5
	10-15	7	60563	6-67	11	119236	4-19	10		7-25	10
58901	7-3	8	66359	5-9	5		4-21	10		7-39	5
	7-5	3	69029	4-19	25	124359	10-11	20		8-11	1
	7-21	3		4-21	32	127045	4-19	9		8-24	40
	7-23	3	85767	11-19	15		4-21	9		8-31	8
	8-3	8		11-35	13		6-3	2		8-33	8
	8-5	8	88431	8-24	26		6-7	31		8-61	21

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	8-87	8	137852	2-7	23	161003	7-8	23		10-9	12
	9-7	18		2-75	3		8-12	23	182343	8-67	3
	9-13	3		2-75	4		8-23	16		8-71	3
	9-33	18		2-75	11		8-57	11	182376	10-3	10
	9-39	3		2-75	15		8-59	11		10-7	13
	9-43	3		2-76	18		9-14	27	182377	10-3	9
	9-57	8		2-76	20		9-40	27		10-7	12
	9-59	8		2-76	21		9-44	27	183614	3-5	29
	10-23	3		2-79	13		10-5	9		3-6	33
	10-25	8		2-79	14		10-9	5		4-19	30
	11-89	19		2-105	4		11-98	22		4-21	37
	11-91	19		2-105	5		11-99	22	183615	3-5	30
	11-93	21		2-105	6		11-	22		3-6	32
	11-95	15		2-106	22		107			4-19	29
	11-	15		2-106	25	161029	9-14	21		4-21	36
	103			2-107	33		9-39	21	185856	4-19	16
	11-	7		2-107	35	161059	9-14	21		4-21	16
	105			2-109	13	164474	8-24	26	185857	4-19	16
131715	7-23	5		2-109	14		8-67	3		4-21	16
	8-3	4		9-22	12		10-5	20	185858	4-19	16
	8-61	7		9-49	12		10-9	10		4-21	16
	9-25	4		9-53	12	164639	4-19	31	185860	4-19	23
	9-27	4	142247	6-66	8		4-21	38		4-21	23
131716	7-3	4	146540	11-	1	164840	8-28	13	185869	4-19	8
	7-23	5		128			8-75	5		4-21	8
	8-3	4		11-	1		9-18	13	185870	4-19	11
	8-5	4		129			9-46	13		4-21	11
	8-61	7		11-	1	169874	1-29	9	185871	4-21	11
	9-3	4		130			1-31	18	185872	4-19	11
	9-25	4	147972	9-9	10		1-33	21		4-21	11
	9-27	4		9-11	8	170658	1-45	16	187388	7-12	7
	10-3	6		9-35	10		1-47	23		7-27	7
	10-5	7		9-37	9		1-77	5		8-16	8
	10-7	6	147973	6-71	10	175944	2-45	4		8-20	8
134675	6-66	8		8-28	13	176640	2-55	21		8-27	4
134677	6-66	8		8-75	5		6-3	29		8-63	7
135588	8-12	18		9-18	13		11-82	4		8-76	13
135619	8-24	26		9-46	13	178119	9-13	17		9-17	4
	9-39	21	148606	11-73	5		9-39	17		9-46	4
135634	8-12	18	153716	4-19	21		9-43	17		10-13	14
	8-67	3		4-21	21		10-17	24		10-19	4
135657	4-19	17	153717	4-19	20	180137	8-51	9	190380	2-42	3
	4-21	17		4-21	20		8-54	9	190580	7-12	5
135658	4-19	17	154355	8-23	11		8-71	3		8-15	6
	4-21	17		9-13	13	180176	8-51	9		8-19	6
136516	5-13	15		9-39	13		8-54	9		8-27	6
	5-15	14		9-43	13	180177	9-43	21		9-17	6
136687	11-66	1	154375	6-69	8	180217	10-9	10		10-13	12
136692	6-23	12	156194	4-19	22	181899	4-16	2		10-19	6
	6-25	16		4-21	22	182332	10-9	10	190811	2-29	2
136749	1-21	7	156195	4-19	22	182342	10-3	13		2-29	2
	2-38	10		4-21	22		10-7	17		2-29	2

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
190887	2-33	1	221353	1-19	15		6-33	12		10-13	11
	8-27	3		1-21	13		6-37	12	262798	2-42	2
	8-76	15		1-29	3	231020	10-5	17	264134	1-50	
	9-9	3	221530	1-21	16	231083	9-43	21	264159	3-6	
	9-11	3		1-29	12	231084	8-24	26	265787	6-41	4
	9-17	3	221536	1-21	24		9-39	21		11-7	2
	9-35	3		1-29	11	233141	2-195	2		11-7	8
	9-37	3	221542	1-29	22		2-195	3		11-7	12
	9-46	3	222029	2-63	11	233693	6-51	4		11-21	8
	10-19	3	222442	6-13	7		6-53	4		11-21	12
191085	10-3	13		6-61	11		6-61	4		11-31	8
	10-7	17		6-63	11		6-63	4		11-31	12
	10-9	12		6-65	5	235691	6-61	10	266733	4-19	19
194368	2-29	2	222443	6-41	10		6-63	10		4-21	19
	2-29	2		6-43	10		6-65	9	268619	6-71	9
	2-33	1		6-51	1	237208	4-25	3	270077	10-13	8
194607	10-3	13		6-53	1	237213	3-14	3		10-15	9
	10-7	17		6-55	8		3-16	3	272133	1-17	11
	10-9	12		6-61	1	237812	6-71	6		1-19	22
194705	10-11	22		6-63	1	239503	2-41	13		1-21	21
195293	2-29	2		6-65	12	244167	9-39	2	273775	10-28	36
195296	2-29	2	222500	11-13	27		9-43	2		10-31	28
196927	1-75	14		11-19	16	248196	2-79	10	275493	2-63	8
199852	6-71	3		11-28	32		2-89	16		2-75	2
200659	6-7	19		11-35	16		2-89	17		2-75	7
201829	10-20	9		11-49	13		2-89	18		2-79	5
203694	2-29	2		11-51	13		2-101	16		2-81	6
	2-35	1		11-53	13		2-101	17		2-85	2
204128	6-13	7		11-55	13		2-101	18		2-89	3
209067	6-17	10		11-57	13		2-109	9		2-93	6
215211	7-3	5		11-59	12		2-119	18		2-97	2
	7-23	6		11-61	13		2-119	19		2-101	3
	8-3	5		11-63	13		2-119	20		2-105	2
	8-5	5	222501	11-49	7		2-131	18		2-109	7
	8-61	6		11-51	7		2-131	19		2-111	8
	9-3	5		11-53	7		2-131	20		2-115	5
	9-25	5		11-55	7	252729	7-7	4		2-119	5
	9-27	5		11-57	7		8-11	4		2-123	8
215212	10-3	5		11-59	7		8-61	18		2-127	5
	10-5	6		11-61	7		8-61	19		2-131	5
	10-7	5		11-63	7		9-33	2		2-141	13
215928	10-13	16	222522	2-21	12		9-33	4		2-145	13
	10-15	12		2-22	12		9-33	8		2-149	8
216590	6-61	5	223389	7-23	11		9-33	9		2-153	8
	6-63	5		8-24	26		10-17	21		2-159	3
216895	2-5	16		10-5	20		11-77	5		2-163	4
	2-7	16	226458	11-89	7	255548	8-67	3		2-167	2
220082	11-92	14	227132	6-29	12	257913	7-12	4		2-169	2
	11-98	14	227157	1-31	1		7-27	5		2-171	2
	11-99	14		1-33	3		8-15	5		2-172	2
	11-	14		1-33	11		8-19	5		2-176	3
	107		227168	2-61	10		8-63	5		2-177	3

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-187	4		2-167	7		2-160	4	293733	3-2	2
	2-189	2		2-169	9		2-163	5	293735	3-3	2
	2-194	3		2-171	5	275672	2-25	3	293742	4-21	29
275494	2-77	30		2-172	5	280154	6-15	2		6-23	13
	2-79	3		2-176	8		6-17	18	293762	6-25	24
	2-85	4		2-177	8		9-33	8	295649	9-9	2
	2-90	22		2-189	5	280472	1-53	2		9-11	2
	2-97	4	275496	2-76	25		1-55	2		9-35	2
	2-102	22		2-79	12		1-57	2		9-37	2
	2-105	14		2-81	9		1-59	2	296010	6-25	27
	2-109	3		2-89	8		1-61	2	296144	4-21	26
	2-112	21		2-93	9		2-35	1	296151	6-29	43
	2-115	7		2-101	8		2-35	2		6-33	29
	2-119	3		2-107	32	284373	6-15	11		6-34	41
	2-124	21		2-109	12		6-17	7		6-37	29
	2-127	7		2-112	19	288474	6-51	7		6-38	41
	2-131	3		2-119	12		6-53	7	296152	2-11	14
	2-159	2		2-124	19	292500	1-17	8	296153	2-5	6
	2-160	2		2-131	12		1-19	20		2-7	6
	2-167	9		2-142	19		1-21	23		2-51	30
	2-169	6		2-150	19	292505	11-13	6		2-55	27
	2-171	7		2-159	6		11-19	6		2-59	22
	2-172	7		2-163	2		11-27	5		2-61	6
	2-176	10		2-167	6		11-35	10		2-63	12
	2-177	10		2-169	4		11-49	5	296154	1-47	5
	2-179	5		2-171	6		11-51	5	296158	2-73	10
	2-182	2		2-172	6		11-53	5	296159	1-3	1
	2-189	7		2-176	9		11-55	5	296163	11-44	4
	2-192	2		2-177	9		11-57	5		11-45	4
	2-192	5	275497	2-76	26		11-59	5		11-46	4
	11-69	3		2-79	15		11-61	5		11-47	4
	11-73	1		2-86	18		11-63	5	296165	1-31	6
275495	2-75	8		2-89	13	292508	7-31	22		1-33	7
	2-79	6		2-98	18		8-80	44	296166	1-31	
	2-81	4		2-101	13		8-80	48		1-41	15
	2-85	8		2-105	11	292570	5-9	7		1-41	17
	2-89	9		2-109	16	292655	1-35	15	296174	5-15	6
	2-93	4		2-116	21	292660	3-2	4	296179	1-39	2
	2-97	8		2-119	15		3-3	5	296185	1-49	21
	2-101	9		2-128	21	292681	2-38	10	296187	1-49	21
	2-105	7		2-131	15		2-41	12	296204	1-53	30
	2-109	8		2-141	14		3-13	27		1-55	30
	2-112	17		2-145	14	292682	6-23	11		1-57	30
	2-116	20		2-149	14		6-25	15		1-59	30
	2-119	9		2-153	12		10-17	29		1-61	30
	2-124	17	275498	2-76	19	293628	4-19	14	296226	5-15	23
	2-128	20		2-85	14		4-21	14	296240	1-49	2
	2-131	9		2-97	14	293646	3-9	1		1-53	14
	2-141	8		2-105	13		3-9	16		1-55	14
	2-145	8		2-116	23	293649	3-9	14		1-57	14
	2-149	11		2-128	23	293686	4-19	5		1-59	14
	2-153	11		2-159	8		4-21	5		1-61	14

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
296241	1-63	5		9-46	5		2-55	8		11-	11
296243	1-63	5		10-13	13		2-59	28		103	
296244	1-63	1		10-19	5		2-61	8	303117	5-13	9
296245	1-63	5	297538	8-27	7		11-70	2	304526	8-24	22
296247	1-63	1		8-76	11	302040	2-25	8		8-51	11
	1-63	5		9-17	7	302385	3-9	18		8-54	11
296248	1-63	1		9-46	7	302398	2-45	3		9-14	23
296353	2-19	3		10-19	7		5-15	25		9-40	23
	2-21	7	297649	7-8	22	302399	2-33	6		9-44	23
	2-22	7		7-21	13		2-35	6		10-5	14
296357	1-19	18		8-12	22		11-13	11		10-7	8
	1-29	17		8-23	17		11-19	9	309007	10-17	34
296358	2-19	10		8-43	9		11-27	9	309062	8-27	9
	2-21	10		8-47	9		11-35	7		8-76	9
	2-22	10		8-57	10		11-49	6		9-17	9
296360	1-31			8-59	10		11-51	6		9-46	9
	1-33	5		8-67	18		11-53	6	309109	6-33	24
	1-33	13		8-71	18		11-55	6		6-37	24
296379	1-29	7		9-14	26		11-57	6	310549	10-17	13
	11-66	2		9-40	26		11-59	6	313828	1-19	11
296380	1-31			9-44	26		11-61	6		1-31	7
296381	2-5	14		10-5	10		11-63	6		1-33	6
	2-7	13		11-98	23	302400	5-15	2		1-33	12
296419	2-7	18		11-99	23		6-34	46		5-2	3
	6-25	32		11-	23		6-38	46		5-3	3
296422	1-2	7		107		302401	1-49	14	314878	2-19	6
	3-9	15	300937	1-49	4		1-53	16		2-21	3
296423	1-49	4		1-53	23		1-55	16		2-22	3
	1-49	9		1-55	23		1-57	16	316678	11-81	5
	1-53	21		1-57	23		1-59	16	316826	1-31	10
	1-55	21		1-59	23		1-61	16		1-33	25
	1-57	21		1-61	23		5-15	3	316836	2-51	21
	1-59	21		1-67	4		6-34	43		2-60	41
	1-61	21		4-19	36		6-38	43	317735	8-31	7
	1-67	3		4-22	43	302402	1-35	10		8-33	7
296426	10-9	6	300982	6-69	14		1-49	4		8-87	7
	11-89	8		6-71	15	302450	1-70	2		9-57	7
296427	5-9	8		7-3	9	302461	8-24	23		9-59	7
296434	1-2	3		7-21	5		8-36	30		10-23	8
	3-2	3		8-3	9		8-40	17		10-25	7
	3-3	3		8-43	13		9-14	24		11-95	13
296463	1-21	2		8-47	13		9-22	24		11-	13
296508	11-	6		9-3	9		9-40	24		103	
	128			9-25	9		9-44	24		11-	20
297531	7-12	6		9-27	9		9-50	24		105	
	7-27	6		10-3	14		9-54	24	320155	1-47	6
	8-16	7	302007	2-19	4	302462	7-5	9		5-15	27
	8-20	7		2-21	6		8-5	9		11-	5
	8-27	5		2-22	6	302465	8-68	27		128	
	8-63	6	302010	1-49	23		8-72	27	320156	2-33	5
	8-76	12	302012	1-49	23	302487	11-89	11		2-35	5
	9-17	5	302027	2-51	10		11-95	11	320157	2-55	19

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	3-13	26	329218	4-23	1	367422	1-68	1	637635	7-27	6
	5-13	2	329835	6-9	8	367423	1-68	1		8-63	6
	6-3	28	334155	10-13	17	367424	1-68	1		8-76	12
	11-64	6		10-15	13	369218	2-19	9	638246	7-12	1
	11-82	2	334156	7-12	2		2-21	9		7-27	8
320158	2-38	10		8-15	2		2-22	9		8-15	1
	2-41	11		8-19	2	369242	5-2	2		8-19	1
	6-34	48	335012	7-12	1		5-3	2		8-63	8
	6-38	48		7-27	8		11-66	6	638249	10-13	7
	9-54	36		8-15	1	369804	6-3	8		10-15	8
320159	1-35	16		8-19	1		6-7	8	638250	10-20	10
	1-49	13		8-64	8		7-31	21	878236	6-3	17
	1-53	15	335041	8-12	18		7-35	23		6-7	11
	1-55	15	335661	7-23	12	369812	4-19	15	986599	7-7	18
	1-57	15		8-51	10		4-21	15		7-23	11
	1-59	15		8-54	10	370599	1-41	19	1301703	8-80	16
	1-61	15		10-5	19	373301	4-2	8	1301784	2-42	4
	2-51	18	335988	1-17	7		4-4	8		2-141	9
	2-60	42	335991	1-17	7	375154	3-6	39		2-145	9
	6-34	44	337174	7-7	18	375629	11-66	7		2-149	9
	6-38	44		8-12	18	378177	6-67	10		2-153	9
320160	1-31	9	351666	10-3	8	378386	2-29	2		11-73	6
	1-33	26	356505	8-23	10	378440	11-	4	1301870	8-71	3
	5-15	4		9-13	12		119		1302024	2-51	12
320162	4-19	35		9-39	12	383789	3-6			2-55	15
	4-22	42		9-43	12	383978	2-25	1		2-59	9
320165	1-35	2	356556	10-7	14		2-27	6	1307244	6-23	15
322824	7-12	14	366115	8-31	5	384211	1-68	1		6-25	11
	7-28	13		8-33	5	384213	1-68	1	1308093	1-68	1
	8-16	14		8-87	5	384214	1-68	1	1308451	1-2	2
	8-20			10-23	11	384215	1-68	1	1310389	4-23	3
	8-64	14		10-25	5	384216	1-68	1	1310391	4-23	2
322902	7-12	11		11-95	20	385670	5-15	13	1316496	6-11	18
	7-28	11		11-99	15	386422	7-39		1319668	7-12	16
	8-16	12		11-	20		11-91	14		8-16	17
	8-20	12		103		389688	1-45	17		8-20	17
	8-64	12		11-	14		1-47	22		9-9	11
323090	7-7	16		105			1-77	4		9-11	11
	8-11	16		11-	15	397676	2-37	3		9-35	12
	9-7	13		107			2-37	5		9-37	11
	9-33	13	366116	7-15	3		2-41	3	1320114	6-3	5
	10-11	13		7-39	3		2-41	5		6-7	5
323617	5-13	13		9-57	5		8-40	22	1323576	2-179	4
325182	1-45	18		9-59	5	615135	10-20	13	1324309	2-76	24
	1-47	18		11-89	16	636941	8-27	8		2-105	8
	2-7	17		11-91	16		8-76	10	1324310	2-76	24
	5-13	16		11-92	15		9-17	8		2-81	15
	6-9	15		11-95	20		9-46	8		2-81	16
325616	8-24	27		11-98	15	637565	8-28	10		2-93	15
325956	1-75	17	367419	1-68	1		8-75	8		2-93	16
325958	1-75	17	367420	1-68	1		9-17	10		2-105	8
326347	1-2	5	367421	1-68	1		9-46	10		2-111	13

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-111	14		2-141	5		2-149	10		2-150	24
	2-123	13		2-145	4		2-153	10		2-153	14
	2-123	14		2-145	5		2-155	4		2-154	20
1325119	6-66	9		2-149	4		2-189	9		2-182	3
1325120	6-66	9		2-149	5		2-191	1	1330428	2-187	1
1327246	3-9	12		2-153	4		11-73	2	1330429	2-77	29
1328205	1-75	9		2-153	5	1330420	2-182	6		2-77	31
1329151	2-75	15		2-155	5	1330421	2-141	12		2-86	19
	2-81	5		2-191	1		2-142	24		2-86	20
	2-93	5		2-192	4		2-145	12		2-98	20
	2-105	4		2-194	2		2-146	20		2-106	18
	2-111	9		11-67	2		2-149	13		2-116	17
	2-123	9		11-74	2		2-150	24		2-128	17
1329152	2-75	15	1330415	2-45	4		2-153	14		2-146	19
	2-77	40		2-182	5		2-154	20		2-150	23
	2-81	5		11-	4		2-182	3		2-154	19
	2-93	5		127		1330422	2-187	1		2-189	1
	2-105	4	1330416	2-170	2	1330423	2-77	29	1330433	11-74	2
	2-111	9		2-171	8		2-86	19	1330434	11-69	5
	2-123	9		2-172	8		2-86	20	1330436	11-73	2
1330281	2-75	15		2-175	2		2-89	6	1330437	2-45	4
	2-81	5		2-176	11		2-98	20		2-89	19
	2-93	5		2-177	11		2-101	6		2-101	19
	2-105	4		2-182	1		2-106	18		2-119	21
	2-111	9		2-187	3		2-116	17		2-131	21
	2-123	9		2-195	1		2-128	17		2-137	3
1330355	2-76	18		11-	1		2-142	23		2-141	4
	2-81	7		127			2-146	19		2-141	5
	2-93	7	1330418	2-141	16		2-150	23		2-141	16
	2-107	33		2-145	16		2-154	19		2-145	4
	2-112	20		2-149	16		2-155	1		2-145	5
	2-124	20		2-154	22		2-189	1		2-145	16
1330411	2-182	1		2-155	3	1330424	2-79	7		2-149	4
	2-195	1		2-159	9		2-89	1		2-149	5
1330413	2-141	16		2-160	1		2-98	27		2-149	16
	2-145	16		2-163	1		2-109	6		2-153	4
	2-149	16		2-165	7		2-119	8		2-153	5
	2-154	22		2-169	1		2-131	8		2-154	22
	2-155	3		2-180	3		2-141	10		2-155	5
	2-159	9		2-189	8		2-145	10		2-159	9
	2-160	1		2-192	6		2-149	10		2-160	1
	2-163	1		11-	2		2-153	10		2-163	1
	2-165	7		126			2-155	4		2-165	7
	2-180	3	1330419	2-79	7		2-189	9		2-167	1
	2-189	8		2-89	6		2-191	2		2-169	1
1330414	2-89	19		2-98	27		11-73	2		2-170	2
	2-101	19		2-101	6	1330426	2-182	6		2-171	8
	2-119	21		2-109	6	1330427	2-141	12		2-172	8
	2-131	21		2-119	8		2-142	24		2-175	2
	2-134	2		2-131	8		2-145	12		2-176	11
	2-138	2		2-141	10		2-146	20		2-177	11
	2-141	4		2-145	10		2-149	13		2-182	1

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-182	5		2-170	3		11-98	19		10-5	5
	2-191	2		2-171	1		11-	19		10-23	5
	2-192	4		2-172	1		107			10-25	2
	2-192	6		2-175	4	1333382	7-7	2		11-95	18
	2-194	2		2-176	1		7-25	11		11-99	17
	2-195	1		2-176	2		8-11	2		11-	18
	11-67	2		2-177	1		8-61	3		103	
	11-	2		2-177	2		9-7	17		11-	12
	126			2-182	3		9-33	17		105	
	11-	1		2-183	6	1333392	8-11	10		11-	17
	127			2-187	1		10-11	6		107	
	11-	4		2-189	1	1333396	7-3	6	1334642	5-5	5
	127			2-189	9		7-5	5	1334644	5-5	14
1330438	2-77	29		2-192	1		7-21	2	1334647	5-5	2
	2-77	31		2-192	3		7-23	2	1335129	1-75	19
	2-77	38		2-193	8		8-3	6	1335137	1-77	3
	2-85	11		2-194	4		8-5	6	1337197	2-47	6
	2-86	19		2-194	5		8-9	5		2-49	
	2-86	20		11-	1		8-43	3		11-5	
	2-97	11		126			8-47	3	1337900	10-5	5
	2-98	19		11-	6		8-51	3		11-99	17
	2-98	20		126			8-53	3		11-	17
	2-106	17	1330439	2-75	9		8-57	4		107	
	2-106	18		2-81	17		8-59	4	1338087	1-68	1
	2-109	1		2-93	17		9-3	6	1338088	1-68	1
	2-116	16		2-107	37		9-5	5	1338089	1-68	1
	2-116	17		2-111	4		9-25	6	1338097	1-68	1
	2-119	1		2-123	4		9-27	6	1338098	1-68	1
	2-128	16		2-141	16		9-29	5	1338741	6-69	5
	2-128	17		2-145	12		9-31	5	1338744	6-69	11
	2-131	1		2-145	16		10-3	2	1338916	5-5	24
	2-137	1		2-149	4		10-5	2	1338917	5-5	25
	2-141	12		2-149	5		10-7	2	1339097	3-14	3
	2-142	23		2-149	13		10-9	2		3-16	3
	2-142	24		2-149	16	1333397	7-3	6	1340998	5-9	6
	2-145	12		2-153	4		7-5	5	1342079	8-51	9
	2-146	19		2-153	5		8-3	6		8-54	9
	2-146	20		2-153	14		8-5	6	1342117	9-39	21
	2-149	13		2-154	22		8-9	5	1342119	8-71	3
	2-150	23		2-155	1		9-3	6	1342120	8-67	3
	2-150	24		2-155	3		9-5	5		8-71	3
	2-153	14		2-189	1		9-25	6	1342122	8-71	3
	2-154	19		2-189	8		9-27	6	1342123	7-7	18
	2-154	20	1330917	1-75	3		9-29	5		8-12	18
	2-155	1		1-77	1		9-31	5	1342124	8-12	18
	2-155	4	1330919	1-75	2		10-3	2	1342125	8-51	9
	2-167	3	1330920	1-75	16		10-5	2		8-54	9
	2-167	4	1330924	1-75	4		10-7	2		8-71	3
	2-167	5	1332745	1-68	1		10-9	2	1342126	7-7	18
	2-167	11	1333329	8-12	24	1333399	8-31	2		7-23	11
	2-169	3		8-57	6		8-33	2	1342129	8-12	18
	2-169	8		8-59	6		8-87	2		8-71	3

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1342133	8-51	9		8-84	37		11-93	17	1354901	8-24	37
	8-54	9		9-22	29		11-95	18	1354902	8-23	4
1342375	9-14	21		9-50	29		11-98	17		8-68	32
1342376	9-39	21		9-54	29	1345220	11-93	17		8-72	32
	9-43	21		10-27	18		11-98	17		9-13	6
1342377	8-24	26		10-31	5	1345263	7-15	6		9-39	6
	9-14	21		10-35	12		7-39	6		9-43	6
1342378	8-24	26	1345199	8-36	20		9-57	4	1354903	8-23	7
	9-14	21		8-40	37		9-59	4	1354906	8-36	21
	9-39	21		9-22	23		11-89	15		8-40	39
1342379	8-24	26		9-50	23		11-91	15	1354907	8-36	21
1342381	8-24	26		9-54	23		11-93	16	1354913	7-7	9
	8-67	3	1345204	8-36	19		11-95	19	1354915	7-7	2
1342382	8-67	3		8-40	38		11-98	16		7-25	16
1342383	7-23	11		9-22	22	1345264	7-15	1		8-11	2
	8-24	26		9-50	22		7-39	1		8-61	4
1342384	7-7	18		9-54	22		9-57	1		9-7	16
	8-12	18		10-17	8		9-57	1		9-33	16
	8-51	9	1345216	7-3	2		9-59	1	1354916	7-7	2
	8-54	9		7-5	2		9-59	1		7-25	16
	8-67	3		8-3	2		10-25	1		8-11	2
1342385	7-23	11		8-5	2	1345348	7-17	3		8-61	4
	8-51	9		8-9	2		7-31	23		9-7	16
	8-54	9		8-31	1		8-80	43		9-33	16
1342387	8-51	9		8-31	1		8-80	47	1354917	7-7	2
	8-54	9		8-33	1	1345401	8-24	34		7-25	16
1342388	8-12	18		8-33	1	1345412	7-17	5		8-11	2
1342391	9-43	21		8-43	2	1345413	7-17	5		8-61	4
1342393	8-67	3		8-47	2	1345423	9-22	10		9-7	16
1342476	9-5	1		8-51	2		9-49	10		9-33	16
	9-29	1		8-53	2		9-53	10	1354918	9-22	15
	9-29	1		8-57	2	1346752	6-29	22		9-50	15
	9-31	1		8-59	2		6-33	22		9-54	15
	9-31	1		8-87	1		6-37	22	1354919	7-17	11
1342478	9-5	1		8-87	1		6-55	4	1354921	7-17	11
	9-5	1		9-3	2	1347088	1-35	22		8-39	9
	9-29	1		9-5	2	1348246	8-35	11	1354961	8-35	6
	9-29	1		9-25	2	1348247	8-35	11	1354967	9-13	9
	9-31	1		9-27	2	1350215	5-13	8		9-39	9
	9-31	1		9-29	2	1351689	6-30	47		9-43	9
1342479	9-5	1		9-31	2		6-34	51	1355154	7-12	9
	9-5	1		10-3	1		6-38	51		7-12	9
	9-29	1		10-5	1	1352603	2-137	3		7-27	2
	9-29	1		10-7	1		2-138	1	1355158	7-12	9
	9-31	1		10-9	1		2-181	3		7-12	9
	9-31	1		10-23	2	1353408	7-15	7	1355162	7-12	9
1343989	8-24	37	1345219	7-15	2		7-39	7		7-12	9
1344124	2-45	8		7-39	2		11-89	18		7-27	2
1345190	7-17	18		9-57	2		11-91	18	1355166	7-12	9
	8-36	26		9-59	2		11-93	20		7-12	9
	8-39	10		11-89	13	1353464	8-36	16		7-27	2
	8-80	37		11-91	13		8-40	29	1355276	7-12	

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1355363	7-12	9		8-20	10		9-18	11		10-13	5
	7-12	9		8-63	2		9-46	11		10-15	6
	7-27	2	1355749	8-16	10	1356697	9-18	11		10-20	15
1355371	7-12	9		8-20	10		9-46	11	1358972	8-27	8
	7-12	9		8-63	2	1356747	9-9	5		8-76	10
	7-27	2	1355758	8-16	10		9-11	4		9-17	8
1355375	7-12	9		8-20	10		9-35	5		9-46	8
	7-12	9		8-63	2		9-37	4	1359245	9-57	1
	7-27	2	1355771	8-16	10	1356748	8-15	4	1359325	7-15	1
1355497	8-16			8-20	10		8-19	4	1359482	4-9	5
	8-20			8-63	2		8-64	11		4-11	12
1355599	8-16	10	1355878	9-35	6		9-9	4	1360127	8-15	4
	8-20	10	1355923	9-11	5		9-35	4		8-19	4
	8-63	2		9-11	5	1356749	7-12	13		8-64	11
1355603	8-16	10		9-37	5		7-28	12	1360141	10-20	
	8-20	10		9-37	5		8-16	13	1360386	7-17	8
	8-63	2	1355935	9-11	5		8-20	13		8-35	15
1355607	8-16	10		9-37	5		8-64	13		8-39	5
	8-20	10		9-37	5		9-9	8		9-22	13
	8-63	2	1355941	9-11	5		9-11	10		9-49	13
1355610	8-16	11		9-11	5	1356750	7-12	3		9-53	13
	8-16	11		9-37	5		7-28	10		10-27	9
	8-20	11		9-37	5		8-15	3		10-31	8
	8-63	3	1356065	8-28	11		8-19	3		10-35	5
	8-63	3	1356074	8-28	11		8-64	10	1360507	9-21	2
1355620	8-16	10	1356086	8-28	11	1356751	7-12	3		9-49	2
	8-20	10	1356292	8-28	16		7-28	10		9-53	2
	8-63	2		8-75	3		8-15	3	1360508	9-22	9
1355626	8-16	11		9-18	16		8-19	3		9-49	9
	8-20	11		9-46	15		8-64	10		9-53	9
	8-63	3	1356566	9-18	11	1357263	2-29	2	1360534	8-24	38
1355633	8-16	10		9-46	11		2-29	2	1360538	8-35	13
	8-20	10	1356569	8-28	11		2-29	2		8-40	26
	8-63	2	1356572	8-28	11		2-33	2	1360548	7-17	15
1355711	7-12	10		9-18	11	1358939	9-9	6		8-39	13
	7-12	10		9-46	11		9-9	6		10-27	15
	7-12	10	1356575	9-18	11		9-35	6		10-31	2
	7-12	10		9-46	11		9-35	6	1360549	7-17	17
	7-12	10	1356578	8-28	11	1358941	9-9	6		8-36	25
	7-12	10	1356596	8-28	11		9-9	6		8-39	11
	7-27	3	1356661	8-28	16		9-35	6		8-39	11
	7-27	3		8-75	3		9-35	6		10-27	16
1355713	9-9	12		9-18	16	1358942	9-9	6		10-31	3
	9-11	9		9-46	15		9-9	6	1360796	5-5	8
	9-35	11	1356662	8-28			9-35	6	1360797	5-5	9
	9-37	10		8-76			9-35	6	1361302	8-27	2
1355714	8-16			9-18		1358969	8-28			8-76	16
	8-20			9-46	99		8-76			9-17	2
1355741	8-16	10	1356691	8-28	11		9-18			9-46	2
	8-20	10		9-18	11		9-46			10-19	2
	8-63	2		9-46	11	1358970	8-28	14	1361500	5-5	15
1355745	8-16	10	1356694	8-28	11		9-18	14	1361502	5-5	28

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1361504	5-5	4		9-57	6	1370470	10-28	37		9-43	5
1361507	5-5	8		9-59	6		10-31	29	1378691	7-5	7
1362387	8-36	23		11-89	17	1370516	10-17	9		8-5	11
	8-39	13		11-91	17	1370521	10-17	17	1378692	8-24	21
1362433	8-24	39		11-93	19	1370524	10-17	7	1378693	8-24	21
1362880	10-20	14		11-95	14	1370576	10-17	20		9-14	22
1362881	10-20	8		11-	14	1371631	8-28	11		9-40	22
1363885	11-	1		103		1371660	9-57			9-44	22
	127			11-	19	1371662	7-15		1378694	7-5	8
1363916	1-5	9		105		1371947	10-28	33		8-5	13
	1-7	9	1369345	7-15	8		10-31	27	1378698	7-5	8
	1-9	9		7-39	8	1374210	2-19	2		8-5	12
	1-11	9		8-31	6		2-21	5	1378699	7-5	8
1365140	8-12	24		8-33	6		2-22	5		7-23	9
	8-57	6		8-87	6	1374797	7-21	3		8-5	12
	8-59	6		9-57	6		7-23	3		8-5	13
	10-9	11		9-59	6		8-43	4		8-24	21
	11-98	19		10-23	7		8-47	4		8-51	7
	11-99	19		10-25	6		8-51	4		8-54	7
	11-	19		11-89	17		8-53	4		8-68	30
	107			11-91	17		8-57	3		8-72	30
1365516	9-22	16		11-93	19		8-59	3		9-14	22
	9-22	16		11-95	14	1374815	4-19	22		9-40	22
	9-50	16		11-	14	1374823	4-19	17		9-44	22
	9-50	16		103		1375486	3-9	8		10-7	11
	9-54	16		11-	19	1375488	3-9	21		10-17	5
	9-54	16		105		1375595	10-3	15	1378724	10-13	
1365517	9-22	16	1369356	7-8	21	1377860	2-76	28	1378732	1-70	1
1365518	9-22	16		8-12	21		2-86	17	1378733	1-70	1
	9-22	16		8-24	18		2-98	17	1378734	1-70	1
	9-50	16		9-14	29		2-107	30	1378735	1-70	1
	9-50	16		9-40	29		2-115	9	1378736	1-70	1
	9-54	16	1369357	7-8	21		2-127	9	1378737	1-70	1
	9-54	16		8-12	21		2-142	18	1378760	1-70	5
1365520	9-22	16		8-24	18		2-146	21	1378761	1-71	5
	9-22	16		9-40	29		2-150	18	1378762	1-70	4
	9-50	16		10-5	11		2-153	16	1378763	1-70	3
	9-50	16		10-9	7		2-155	2	1378765	1-71	
	9-54	16	1370119	10-18	38		2-192	7	1378766	1-71	
	9-54	16	1370187	10-5	15		11-	3	1378786	1-70	1
1367150	1-23	6	1370191	10-5	18		127		1378787	1-70	1
	1-25	7	1370194	10-17	14	1377868	2-142	18	1378788	1-70	1
	1-25	10	1370245	10-7			2-146	21	1378789	1-70	1
1367194	5-11	14	1370246	10-7			2-150	18	1378790	1-70	1
1368656	7-5	6	1370247	10-7			2-153	16	1378791	1-70	1
	8-5	10	1370257	10-11	23		2-155	2	1378807	1-70	1
1369328	9-43	21	1370258	10-11	23		2-192	7	1378808	1-70	1
1369344	7-15	8	1370259	10-11	23	1378550	1-45	4	1378809	1-70	1
	7-39	8	1370360	10-17	35		1-47	2	1379005	10-12	1
	8-31	6	1370420	10-11	18	1378690	8-23	2	1379006	10-12	1
	8-33	6	1370469	10-27	29		9-13	5	1379007	10-12	1
	8-87	6		10-31	21		9-39	5	1379020	10-15	1

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1379021	10-15	1		8-9	1		6-38	40	1397326	6-9	8
1379022	10-15	1	1381362	8-9	1		6-55	18	1398009	1-5	7
1379035	10-12	2		8-9	1	1395168	7-3	6		1-7	7
1379036	10-12	2	1381365	8-9	1		7-5	5		1-9	7
1379037	10-12	2		8-9	1		7-21	2		1-11	7
1379050	10-15	2	1381389	10-9	1		7-23	2		1-15	12
1379051	10-15	2	1381390	10-9	1		8-3	6	1398062	1-41	7
1379052	10-15	2	1381391	10-9	1		8-5	6		1-41	14
1379062	10-12	3	1381562	8-31	1		8-9	5		1-41	25
	10-15	4	1381570	10-23	1		8-43	3		1-42	31
1379063	10-13	10	1381816	1-70	1		8-47	3	1401746	11-89	9
1379064	10-13	9	1381817	1-70	1		8-51	3		11-91	9
	10-15	10	1381913	10-7	9		8-53	3		11-95	9
1379358	10-19	1	1381914	10-17	6		8-57	4		11-	9
1379359	10-19	1	1381915	10-17	3		8-59	4		103	
1379360	10-19	1	1381916	10-17	2		9-3	6		11-	9
1379373	10-20	11	1381917	10-7	9		9-5	5		105	
1379374	10-20	11	1382302	2-59	16		9-25	6	1402620	2-79	11
1379375	10-20	11	1382304	2-59	18		9-27	6		2-109	10
1379461	8-31		1382308	2-195	2		9-29	5	1402624	2-79	8
1379467	10-23			2-195	3		9-31	5		2-89	7
1379488	1-35	12	1382311	1-45	7		10-3	2		2-101	7
1379682	8-24	21		1-47	13		10-5	2		2-106	21
	9-40	22	1382312	1-45	8		10-7	2		2-109	11
	9-44	22		1-47	14		10-9	2		2-119	10
1379683	8-24	21	1382313	1-45	9	1395169	10-5	5		2-131	10
	9-14	22		1-47	9		11-99	17	1402813	2-75	1
	9-39	22	1383062	6-69	10		11-	17		2-79	16
	9-43	22	1383063	6-71	11		107			2-86	26
1379684	7-5	8		7-28	14	1395172	11-93	17		2-89	12
	8-5	13		8-64	15		11-98	17		2-98	26
1379685	7-5	8	1383064	11-	3	1395174	8-31	2		2-101	12
	8-5	12		119			8-33	2		2-109	17
1379687	7-7	11	1383065	11-	3	1395176	8-31	2		2-116	25
	9-7	6		119			8-33	2		2-119	14
	9-33	6	1384366	6-15	10	1395285	8-23	1		2-128	25
1380434	2-11	22		6-17	8		9-13	4		2-131	14
	2-15	13	1387160	10-28	42		9-39	4	1402814	2-184	1
	2-17	15		10-35	10		9-43	4	1402815	2-5	
1381063	7-28	9	1387163	10-27	6	1395291	8-36	28		2-7	25
	8-64	9		10-35	2		8-40	36		2-49	2
1381064	7-28	9	1387167	10-27	21		9-22	32		2-75	14
	8-64	9	1387169	10-27	28		9-50	32		2-81	3
1381078	6-71	4	1388838	4-19	38	1395292	8-36	32		2-86	22
1381082	6-69	9		4-22	45		8-40	16		2-93	3
1381083	6-71	8	1390182	8-36	22		9-22	26		2-98	22
1381095	9-35	8		8-40	27		9-50	26		2-106	19
	9-37	7	1393142	8-31	2	1396406	8-36	29		2-111	6
1381357	8-9	1		8-33	2		8-40	18		2-116	18
1381358	8-9	1	1393879	6-11	3		9-22	31		2-123	6
	8-9	1		6-29	28		9-50	31		2-128	18
1381359	8-9	1		6-34	40		9-54	31		2-141	11

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-145	7		2-179	8		2-181	3		2-159	1
	2-149	12		2-184	3		11-69	2		2-159	4
	2-153	7		11-86	2		11-	3		2-159	7
	2-180	2		11-	3		126			2-160	7
	2-181	2		126		1463141	2-75	6		2-160	8
1402816	11-5	2	1463139	2-75	11		2-75	12		2-161	10
	2-42	4		2-77	33		2-77	32		2-161	11
	2-141	7		2-82	19		2-77	33		2-163	6
	2-145	11		2-86	23		2-77	35		2-163	7
	2-149	7		2-86	24		2-79	1		2-163	9
	2-153	13		2-86	25		2-79	17		2-163	10
	2-156	9		2-94	19		2-81	1		2-165	1
	2-179	3		2-98	23		2-85	3		2-165	2
	2-187	2		2-98	24		2-85	7		2-165	3
	2-189	3		2-98	25		2-86	21		2-165	6
1402865	2-179	4		2-107	35		2-86	23		2-175	7
1402888	2-75	15		2-111	2		2-86	24		2-176	7
	2-81	5		2-123	2		2-86	25		2-177	7
	2-93	5		2-141	1		2-89	14		2-180	4
	2-105	4		2-141	2		2-89	20		2-181	4
	2-111	9		2-141	3		2-89	21		2-181	5
	2-123	9		2-145	1		2-93	1		11-69	4
1402891	2-89	5		2-145	2		2-97	3		11-	4
	2-101	5		2-145	3		2-97	7		126	
	2-119	7		2-155	6		2-98	21	1463184	2-63	4
	2-131	7		2-159	4		2-98	23	1463189	2-75	6
1454122	2-25	7		2-161	10		2-98	24		2-85	7
	2-27	11		2-163	9		2-98	25		2-97	7
1460477	1-63	6		2-165	3		2-101	14		2-106	27
	2-5	15		2-167	8		2-101	21		2-115	6
	2-7	15		2-167	10		2-106	20		2-127	6
	6-15	20		2-167	12		2-106	23		2-182	6
	6-17	22		2-167	13		2-106	24	1463193	2-63	5
	6-29	44		2-169	5		2-106	27		2-180	1
	6-34	43		2-169	7		2-107	36		2-181	1
1460510	6-11	7		2-169	10		2-109	1	1463194	2-75	13
1461669	4-24	2		2-169	11		2-109	15		2-81	2
	4-25	2		2-183	6		2-111	3		2-93	2
	4-26	3		2-187	5		2-115	1		2-94	20
	4-27	3		11-	4		2-115	2		2-105	1
1461671	4-19	28		126			2-115	6		2-107	34
	4-21	35	1463140	2-133	3		2-116	19		2-111	1
1461672	4-19	27		2-134	1		2-119	13		2-111	7
	4-21	33		2-170	1		2-123	3		2-123	1
1462084	6-23	1		2-171	9		2-127	1		2-123	7
1462085	6-26			2-172	9		2-127	2		2-160	3
1463105	8-28	15		2-175	1		2-127	6		2-160	5
	8-75	6		2-176	12		2-128	19		2-167	3
	9-18	15		2-177	12		2-131	13		2-167	4
	9-46	6		2-180	1		2-133	1		2-175	4
	10-20	16		2-180	3		2-137	4		2-176	2
1463138	2-63	6		2-181	1		2-138	4		2-177	2

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	11-	1		2-107	33		6-9	3	1482179	10-17	32
	126			2-112	20		6-15	16	1482726	10-28	40
1463196	2-75	6		2-124	20		6-17	20		10-31	15
	2-85	7	1476109	2-76	18		11-69	13	1482729	10-28	40
	2-97	7		2-81	7		11-73	10		10-31	17
	2-106	27		2-93	7		11-73	13	1482905	1-25	4
	2-115	6		2-107	33	1480747	8-11	12	1482906	1-25	6
	2-127	6		2-112	20	1480952	9-13	1	1482950	1-19	9
	2-183	6		2-124	20		9-13	1		1-21	4
1463849	2-52		1476421	4-9	6		9-39	1	1483661	11-7	11
	2-56			4-11	13		9-39	1		11-11	4
1463910	1-42	37	1477166	1-69	5		9-43	1		11-13	18
1464149	4-19	12	1477167	1-69	6		9-43	1		11-17	4
1464150	4-19	12	1477237	1-69	6	1481006	8-33	1		11-19	22
	4-21	12	1477649	7-15		1481090	9-13	2		11-21	11
1465140	6-19	15	1477682	8-31			9-39	2		11-25	3
1465504	8-23	5	1477685	9-57			9-43	2		11-27	16
	9-13	8	1477843	7-15	1	1481095	8-23	12		11-31	11
	9-39	8	1477844	8-31	1	1481096	9-13	14		11-33	4
	9-43	8	1477845	9-57	1		9-39	14		11-35	22
1467390	4-13	1	1477936	11-95	1		9-43	14		11-39	12
1467424	4-13	6	1477937	11-	1	1481097	7-7	5		11-39	12
1467425	4-13	23		103			8-11	5		11-41	17
1467430	4-2	9	1477942	11-95			9-7	3		11-41	17
	4-4	9	1477943	11-			9-33	3	1483663	11-7	9
	4-13			103			10-11	3		11-11	3
	4-15		1477980	11-89		1481232	9-22	11		11-13	17
1470021	2-51	17	1477996	7-17	6		9-22	11		11-17	3
	2-60	40		7-31	20		9-22	11		11-19	25
1470155	1-23			7-35	24		9-22	11		11-21	9
1473843	1-77	4		8-36	17		9-22	11		11-25	4
1473895	7-35	22		8-39	2		9-22	11		11-27	15
	8-84	47		8-39	2		9-49	11		11-31	9
	11-99	7		9-22	17		9-53	11		11-33	3
	11-	3		9-50	17	1481348	10-11	8		11-35	21
	123			9-54	17	1481595	10-17	22		11-39	15
1473897	11-78	6		10-27	20	1481596	10-17	22		11-39	15
1473898	6-41	3		10-31	11	1481597	10-17	22		11-41	14
	6-43	3	1479453	1-21	10	1481741	9-13	1		11-41	14
	6-55	10	1479855	1-49	9		9-13	1	1483664	11-7	10
1474912	10-17	1	1480237	1-41	14		9-39	1		11-11	2
1474913	10-27	25		1-41	18		9-39	1		11-13	16
	10-31	16		1-41	24		9-43	1		11-17	2
1476067	2-76	18		1-42	39	1481744	9-13	1		11-19	24
	2-81	7		2-5	10		9-13	1		11-21	10
	2-93	7		2-7	10		9-39	1		11-25	2
	2-107	33		2-7	17		9-39	1		11-27	14
	2-112	20		2-28	7		9-43	1		11-31	10
	2-124	20		6-3	16		9-43	1		11-33	2
1476108	2-76	18		6-3	33	1482177	10-11	2		11-35	20
	2-81	7		6-7	10		10-17	21		11-39	16
	2-93	7		6-7	28	1482178	10-11	24		11-39	16

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1484377	11-41	15	2-165	1		2-77	33		2-159	4	
	11-41	15	2-165	2		2-82	19		2-161	10	
	2-63	7	2-165	6		2-86	23		2-163	9	
	2-75	12	2-167	1		2-86	24		2-165	3	
	2-77	32	2-167	8		2-86	25		2-167	10	
	2-77	38	2-167	12		2-94	19		2-169	7	
	2-79	1	2-167	13		2-98	23		2-175	7	
	2-81	1	2-169	5		2-98	24		2-176	7	
	2-85	11	2-169	10		2-98	25		2-177	7	
	2-86	21	2-169	11		2-107	35		2-180	4	
	2-89	20	2-170	1		2-111	2		2-181	4	
	2-90	21	2-170	2		2-123	2		2-181	5	
	2-93	1	2-171	8		2-141	1		2-187	5	
	2-97	11	2-171	9		2-141	2	1486178	11-89		
	2-98	19	2-172	8		2-141	3	1486179	11-95		
	2-98	21	2-172	9		2-145	1	1486180	11-		
	2-101	20	2-175	1		2-145	2		103		
	2-102	21	2-176	12		2-145	3	1486181	11-95		
	2-106	17	2-177	12		2-155	6	1486737	11-13	4	
	2-106	20	2-179	8		2-159	4		11-19	4	
	2-107	36	2-181	3		2-161	10		11-27	4	
	2-109	1	2-182	1		2-163	9		11-51	15	
	2-111	3	2-183	6		2-165	3		11-57	15	
	2-116	16	2-192	4		2-167	10	1486740	6-9	6	
	2-116	19	2-194	2		2-169	7		6-41	4	
	2-119	1	11-69	2		2-175	7		11-7	12	
	2-120	22	11-69	4		2-176	7		11-11	1	
	2-123	3	11-	3		2-177	7		11-13	15	
	2-128	16	126			2-180	4		11-17	1	
	2-128	19	11-	4		2-181	4		11-19	26	
	2-131	1	126			2-181	5		11-21	12	
	2-132	22	1484397 2-75	13		2-187	5		11-25	1	
	2-133	1	2-76	17	1484558	2-75	11		11-27	13	
	2-133	3	2-81	2		2-77	33		11-31	12	
	2-134	1	2-93	2		2-82	19		11-33	1	
	2-134	3	2-94	20		2-86	23		11-35	19	
	2-134	4	2-105	1		2-86	24		11-39	17	
	2-137	1	2-107	34		2-86	25		11-39	17	
	2-137	3	2-111	1		2-94	19		11-41	16	
	2-137	4	2-111	7		2-98	23		11-41	16	
	2-138	1	2-123	1		2-98	24	1486749	6-41	8	
	2-138	3	2-123	7		2-98	25		6-43	8	
	2-138	4	2-160	3		2-107	35		6-55	9	
	2-138	5	2-160	5		2-111	2		9-7	2	
	2-159	1	2-167	3		2-123	2		9-33	2	
	2-159	7	2-167	4		2-141	1	1486751	8-61	8	
	2-160	7	2-175	4		2-141	2		8-67	8	
	2-160	8	2-176	2		2-141	3		8-71	8	
	2-161	11	2-177	2		2-145	1	1486773	7-7	13	
	2-163	6	11-	1		2-145	2		7-25	4	
	2-163	7	126			2-145	3		8-11	13	
	2-163	10	1484557 2-75	11		2-155	6		8-61	17	

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	9-7	9		11-61	3		2-123	4		2-101	1
	9-33	9		11-63	3		2-132	23		2-101	2
	10-11	9	1488918	11-89	1		2-182	3		2-101	20
1487058	6-11	11	1488998	11-89	1		11-69	5		2-106	22
	11-35	6	1488999	11-95	1	1490242	2-75	3		2-109	4
	11-49	4	1489000	11-	1		2-79	4		2-116	24
	11-51	4		103			2-85	1		2-119	4
	11-53	4	1489001	11-95	1		2-89	1		2-119	6
	11-55	4	1489016	11-	1		2-89	2		2-120	22
	11-57	4		118			2-97	1		2-128	24
	11-59	4	1489017	11-	1		2-101	1		2-131	4
	11-61	4		118			2-101	2		2-131	6
	11-63	4	1489035	11-	3		2-101	20		2-132	22
1487059	10-11	14		118			2-106	22		2-149	1
	11-	4	1489037	11-	2		2-109	4		2-149	2
	120			118			2-116	24		2-149	3
	11-	4	1489039	11-	5		2-119	6		2-153	1
	121			118			2-120	22		2-153	2
	11-	4	1489655	2-170	2		2-128	24		2-153	3
	122			2-171	8		2-131	4		2-159	5
	11-	3		2-172	8		2-131	6		2-160	6
	124			2-175	2		2-132	22		2-161	9
	11-	3		2-176	11		2-149	1		2-163	3
	125			2-177	11		2-149	2		2-163	8
1487061	6-41	6		2-182	1		2-149	3		2-165	4
	6-43	6		2-187	3		2-153	1		2-165	5
	6-55	13	1489656	2-75	9		2-153	2		2-167	5
1487063	11-	4		2-77	38		2-153	3		2-167	11
	120			2-81	17		2-159	5		2-169	3
	11-	4		2-85	11		2-160	6		2-169	8
	121			2-93	17		2-161	9		2-170	3
	11-	4		2-97	11		2-163	3		2-171	1
	122			2-102	23		2-163	8		2-172	1
	11-	2		2-106	17		2-165	4		2-175	3
	123			2-107	37		2-165	5		2-176	1
1487072	6-15	2		2-111	4		2-167	5		2-177	1
	6-17	18		2-115	16		2-167	11		2-192	1
1487095	11-13	1		2-123	4		2-169	3		2-192	3
	11-19	1		2-127	16		2-169	8		2-194	4
	11-27	1		2-132	23		2-170	3		2-194	5
	11-35	1		2-182	3		2-171	1	1492644	6-69	
1487096	11-77	5		11-69	5		2-172	1	1493462	2-79	17
	11-78	1	1489657	2-75	9		2-175	3		2-89	14
1487097	6-41	5		2-77	38		2-176	1		2-101	14
	6-43	5		2-82	17		2-177	1		2-109	15
	6-55	12		2-85	11		2-192	1		2-119	13
	11-49	3		2-94	17		2-192	3		2-131	13
	11-51	3		2-97	11	1490243	2-75	3		2-159	7
	11-53	3		2-102	23		2-79	4		2-160	7
	11-55	3		2-106	17		2-85	1		2-163	6
	11-57	3		2-107	37		2-89	2		2-165	6
	11-59	3		2-111	4		2-97	1		2-167	13

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-169	11		9-37			6-34	52		11-	19
1493464	2-79	17	1498325	11-	4		6-38	52		105	
	2-89	14		118		1502625	2-134	4	1506738	11-66	3
	2-101	14	1498326	11-89	22		2-137	1	1507307	6-23	14
	2-109	15		11-91	11		2-138	3		6-25	10
	2-119	13		11-96	22		2-138	5	1508206	2-77	37
	2-131	13		11-	22		2-192	8		2-85	10
	2-159	7		103			11-	5		2-85	13
	2-160	7		11-	17		126			2-97	10
	2-163	6		105		1502626	2-134	4		2-97	13
	2-165	6	1499028	3-6			2-137	1		2-105	15
	2-167	13	1499111	7-12			2-138	3		2-115	12
	2-169	11	1500782	1-68	4		2-138	5		2-115	15
1493465	2-89	19	1500784	1-69	4		2-193	8		2-127	12
	2-101	19	1500901	2-79	2		11-	5		2-127	15
	2-119	21		2-89	4		126		1508211	2-77	36
	2-131	21		2-101	4	1502811	7-3	11		2-77	39
	2-134	2		2-109	2		8-3	11		2-85	9
	2-138	2		2-119	2		9-3	11		2-85	12
	2-141	4		2-131	2		10-3	16		2-97	9
	2-141	5		2-156	8	1503096	11-			2-97	12
	2-145	4	1500912	2-11	4		118			2-106	16
	2-145	5		2-15	6	1504010	7-15	8		2-115	13
	2-149	4		2-17	13		7-39	8		2-115	14
	2-153	4		2-45	7		8-31	6		2-127	13
	2-153	5		2-63	10		8-33	6		2-127	14
	2-155	5		11-69	9		8-87	6	1508232	2-76	22
	2-191	2	1500913	2-98	19		9-57	6		2-81	13
	2-192	4		2-109	1		9-59	6		2-93	13
	2-194	2		2-119	1		11-89	17		2-105	10
	2-194	4		2-131	1		11-89	17		2-112	16
	2-194	5	1500925	2-137	3		11-91	17		2-124	16
	11-67	2		2-138	1		11-93	19	1509888	4-21	31
	11-67	8	1502006	6-3	37		11-95	14	1510113	1-41	27
	11-74	2		6-7	30		11-	14		1-49	5
1493466	2-45	4	1502055	2-11	12		103			2-5	4
	2-182	5	1502066	11-69	6		11-	19		2-5	11
	11-	4		11-73	8		105			2-7	4
	127		1502543	1-41	21	1504011	7-15	8		2-7	11
1494017	7-17	16		2-5	5	1504012	7-39	8		2-7	19
	8-36	24		2-5	12		8-31	6		2-28	2
	8-39	12		2-7	5		8-33	6		2-49	1
	8-39	12		2-7	12		8-87	6		3-5	26
	9-22	27		4-16	4		9-57	6		4-16	3
	10-27	17		5-9	12		9-59	6		6-3	4
	10-31	4		5-13	4		11-89	17		6-7	4
1494888	1-35	20		5-15	9		11-91	17		6-11	8
1495699	2-25	6		6-3	6		11-93	19		6-17	12
	2-27	8		6-7	6		11-95	14		6-29	19
1496922	9-9			6-7	22		11-	14		6-29	25
	9-11			6-17	3		103			6-33	19
	9-35			6-30	49					6-37	19

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	6-55	17		9-59	9	1521038	3-14	2		9-3	1
	11-5	1		10-5	12		3-18	3		9-3	1
	11-	3		10-9	8	1521039	3-14	2	1524760	8-3	1
	128			10-23	9		3-18	3		8-3	1
1510115	5-13	3		10-25	9	1521040	3-16	2	1524763	8-3	1
	6-3	35		11-89	20		3-20	3		8-3	1
	6-7	25		11-91	20	1521062	3-14	1	1524797	7-5	1
	6-9	7		11-93	22	1521063	3-14	1		7-5	1
1510116	6-11	6		11-95	16	1521064	3-14	1	1524799	7-5	1
1510117	4-2	10		11-98	20	1521065	3-16	1		7-5	1
	4-4	10		11-99	20	1521066	3-16	1	1524800	7-5	1
	6-15	1		11-	16	1521067	3-16	1		7-5	1
	6-17	16		103		1521068	3-18	1	1524834	8-5	1
	6-66	3		11-	18	1521069	3-18	1	1524835	8-5	1
1510118	1-49	9		105		1521070	3-18	1		8-5	1
	1-53	22		11-	20	1521071	3-20	1	1524836	8-5	1
	1-55	22		107		1521072	3-20	1		8-5	1
	1-57	22	1515219	3-9	3	1521073	3-20	1	1524839	8-5	1
	1-59	22	1515654	6-3	24	1521126	3-14	3		8-5	1
	1-61	22	1516075	3-5	9		3-16	3	1524842	8-5	1
1510119	2-11	19	1516199	4-16	5	1521127	3-18	2		8-5	1
1510126	1-5	14		6-41	9		3-20	2	1524893	10-3	1
	1-7	14		6-43	9	1521129	3-14	2	1524894	10-3	1
	1-9	14		6-55	6		3-18	3	1524895	10-3	1
	1-11	14		6-65	1	1521130	3-16	2	1525354	4-19	37
1512536	1-29	15	1516201	6-41	7		3-20	3		4-22	44
1513089	1-23	3		6-43	7	1521309	2-42	4	1525563	2-98	19
1514074	2-37	9		6-55	14	1521809	3-6	36		2-109	1
1514269	6-67	14	1516205	8-67	10	1522442	8-24	33		2-119	1
1514429	2-52	37		8-71	10	1523530	3-9	9		2-131	1
	2-55	37	1516331	3-5	18	1523732	1-68	2	1525567	2-77	35
	2-59	33	1516332	3-5	18	1523733	1-68	3		2-85	3
	3-5	6	1516333	3-5	18	1523734	1-69			2-97	3
1514866	7-7	20	1516334	3-5	18	1523735	1-69		1525577	2-75	10
	7-15	9	1516335	3-5	18	1523737	1-68	3		2-82	18
	7-21	11	1516537	3-9	22	1523739	1-69			2-94	18
	7-39	9	1516538	3-9	17	1524754	7-3	1		2-107	38
	8-12	20	1516799	1-49	7		7-3	1		2-111	5
	8-24	19		1-53	26		8-3	1		2-123	5
	8-31	9		1-55	26		8-3	1	1525584	2-75	5
	8-33	9		1-57	26		9-3	1		2-85	6
	8-43	7		1-59	26		9-3	1		2-97	6
	8-47	7		1-61	26	1524755	8-3	1		2-106	26
	8-57	7	1517361	6-29	35		8-3	1		2-115	4
	8-59	7		6-33	25	1524756	7-3	1		2-127	4
	8-67	21		6-34	35		7-3	1	1525595	2-75	4
	8-71	21		6-37	25		9-3	1		2-76	23
	8-87	9		6-37	35		9-3	1		2-81	14
	9-14	28	1518353	3-9	2	1524757	7-3	1		2-85	5
	9-40	28	1520290	6-67	15		7-3	1		2-93	14
	9-44	28	1520639	11-	1		8-3	1		2-97	5
	9-57	9		127			8-3	1		2-105	9

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-106	25		2-55	36		1-61	19		1-11	2
	2-111	15		2-59	31	1527889	6-15	13		1-13	6
	2-115	3		5-13	14		6-17	2		1-15	6
	2-123	15		6-9	17	1527899	6-66	10		1-39	7
	2-127	3		11-5	6	1527900	6-67	10		1-65	3
1525596	2-75	4		11-74	1	1528481	6-3	23		5-9	16
	2-76	23	1527877	2-7	19		6-7	18	1529015	6-3	13
	2-81	14		5-13	6	1528482	1-41	22		7-36	
	2-85	5	1527878	3-5	2		2-11	2		8-36	33
	2-93	14		6-29	29		2-11	2		8-40	33
	2-97	5		6-34	38	1528573	7-35	20		8-85	
	2-105	9		6-37	38		8-84	45		9-21	5
	2-106	25	1527879	2-11	23		11-7	2		9-49	5
	2-111	15		3-5	7		11-9	1		9-53	5
	2-115	3		11-7	3		11-15	1		10-28	41
	2-123	15		11-21	3		11-21	2		10-31	30
	2-127	3		11-31	3		11-25	11		11-7	1
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	2-22	12		11-69	14		11-33	11		11-31	1
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	2-21	12		11-73	14		11-37	12		11-42	
	2-22	12	1527880	1-41	15		11-42	8		11-42	
1527520	6-71	12		1-41	17		11-42	8	1529046	2-77	35
1527719	6-71			2-15	17	1528574	10-17	33		2-85	3
1527813	10-11	14		2-17	6	1528579	7-35	21		2-97	3
	11-7	8		2-28	2		8-84	48	1529929	6-66	7
	11-7	12		2-38	10	1528602	6-9	2	1529931	6-66	7
	11-21	8		5-15	15		11-11	6	1530043	6-66	10
	11-21	12		6-9	4		11-17	7	1530243	1-39	4
	11-31	8		6-15	8		11-19	23		1-41	11
	11-31	12		6-15	17		11-27	18		1-49	11
1527818	7-7	6		6-17	5		11-33	7		2-28	1
	7-7	13		6-30	45		11-35	24	1530244	1-63	4
	8-11	6	1527881	2-17	2		11-39	14	1530429	3-9	6
	8-11	13		5-9	11		11-39	14	1530431	3-9	7
	9-7	2		5-15	7		11-41	13	1530588	3-5	22
	9-7	4	1527882	2-28	5		11-41	13	1530960	2-133	3
	9-7	8		6-3	18	1528778	1-53	29		2-134	1
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	10-11	2	1527884	2-5	14		1-57	29		2-134	1
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1527819	8-24	33		6-15	19	1528888	1-35	5		6-37	30
1527820	8-11	12		6-17	21		1-39	9	1531001	1-41	4
	8-24	33	1527888	1-35	6		1-65	4		1-45	11
	9-13	2		1-39	11		5-9	17		1-47	11
1527822	9-7	9		1-41	28		6-3	14	1531312	2-134	2
1527876	1-13	9		1-49	5		6-15	9		2-134	3
	1-15	9		1-53	19		6-17	9		2-138	1
	2-15	2		1-55	19	1528889	1-5	2		2-138	2
	2-49	6		1-57	19		1-7	2		2-141	16
	2-52	36		1-59	19		1-9	2		2-145	16

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-149	16		2-165	2		2-81	14	1540358	4-26	1
	2-154	22		2-167	8		2-85	5	1540359	4-26	1
	2-155	3		2-167	12		2-93	14	1540388	2-81	11
	2-159	9		2-169	5		2-97	5		2-93	11
	2-160	1		2-169	10		2-105	9		2-112	18
	2-163	1	1531974	2-79	1		2-106	25		2-115	11
	2-165	7		2-90	21		2-111	15		2-124	18
	2-187	3		2-102	21		2-115	3		2-127	11
	2-189	8		2-133	1		2-123	15	1541988	2-170	1
1531485	2-142	22		2-134	3		2-127	3		2-171	9
	2-150	22		2-137	4	1534282	2-85	15		2-172	9
	2-154	21		2-138	4		2-97	15		2-175	1
	2-189	4		2-159	1		2-115	10		2-176	12
1531557	1-5	3		2-160	8		2-127	10		2-177	12
	1-7	3		2-161	11	1534329	2-77	34		2-179	8
	1-9	3		2-163	7		2-105	12		11-69	2
	1-11	3		2-163	10		2-116	22		11-	3
	1-36			2-165	1		2-128	22		126	
	1-41	24		2-165	2		2-141	15	1541989	2-170	1
	2-17	3		2-167	8		2-145	15		2-171	9
	2-49	3		2-167	12		2-149	15		2-172	9
	2-51	8		2-169	5		2-153	15		2-175	1
	2-55	7		2-169	10	1534418	4-19	1		2-179	8
	2-59	3	1532571	2-75	5	1534420	4-19	1		11-69	2
	2-60	38		2-106	26	1534660	1-77	6		11-	3
	11-5	3	1532650	7-7	6	1535262	11-74	1		126	
	11-81	1		8-11	6	1537132	2-11	10	1541991	2-75	12
	11-85	1		9-7	4	1537551	2-51	3		2-77	32
	11-	4		9-33	4		2-55	3		2-81	1
	128			10-11	4		2-59	6		2-86	21
1531558	1-3	4	1532664	2-179	6		11-81	2		2-93	1
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	1-33	8	1532713	3-5	15	1539584	1-13	8		2-106	20
	1-41	4	1532714	3-5	15		1-15	8		2-106	24
	1-41	9	1532715	3-5	15		2-47	1		2-107	36
	11-67	3	1532733	3-5	8		2-49	8		2-111	3
1531563	4-2	5	1532758	2-28	6		2-55	32		2-115	2
	4-4	5	1532764	2-27			11-5	8		2-116	19
1531973	2-79	1	1532765	2-25	5	1540113	3-14	3		2-123	3
	2-89	20		2-27	9		3-16	3		2-127	2
	2-89	21	1532776	2-81	8	1540114	3-14	3		2-128	19
	2-101	21		2-93	8		3-16	3		11-69	4
	2-133	1		2-107	31	1540115	4-24	3		11-	4
	2-134	3		2-111	10	1540116	4-24	3		126	
	2-137	4		2-123	10	1540117	3-18	2	1541992	2-75	12
	2-138	4	1532904	2-180	1		3-20	2		2-77	32
	2-159	1		2-181	1	1540118	3-18	2		2-81	1
	2-160	8	1533493	6-66	4		3-20	2		2-86	21
	2-161	11	1533494	6-66	5	1540119	4-26	2		2-93	1
	2-163	7		6-69	15	1540120	4-26	2		2-98	21
	2-163	10		6-71	14	1540356	4-24	1		2-106	20
	2-165	1	1533810	2-76	23	1540357	4-24	1		2-106	23

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-106	24	1550070	11-7	3	1555894	3-13	5	1566564	8-36	
	2-107	36		11-9	2	1556266	5-11	15		8-40	
	2-111	3		11-11	7	1561559	2-175	8		10-9	7
	2-115	1		11-13	20		2-184	3		10-28	30
	2-115	2		11-21	3		2-190	2		10-31	24
	2-116	19		11-25	6		11-86	2	1566726	11-67	2
	2-123	3		11-27	19	1561755	2-184	1		11-67	7
	2-127	1		11-33	6		2-190	2	1566773	10-25	1
	2-127	2		11-35	25		11-86	2	1566778	9-59	1
	2-128	19		11-37	3	1561871	11-69	7	1566791	8-33	1
	11-69	4		11-39	5	1562353	1-75	1	1566853	4-19	33
	11-	4		11-41	3		1-75	13		4-21	40
	126			11-42	3	1562492	4-6	1	1568199	6-15	3
1542436	2-11	13	1550298	8-24	29		4-9	1		6-17	15
	2-51	33	1550764	1-70	1		4-10	1	1568271	4-19	7
	2-55	29	1550767	5-15	24		4-11	1		4-21	7
	2-59	27	1551839	4-2	5	1562649	2-184	1	1569616	11-13	32
1543254	4-19	34		4-4	5	1563208	1-23			11-19	11
	4-22	41	1553094	2-76	21	1563215	1-17			11-27	12
1543698	2-51	32		2-81	12	1563216	1-17	2		11-35	12
	2-55	28		2-93	12		1-19	2		11-49	10
	2-59	26		2-105	6		1-21	5		11-51	10
1544118	6-66	7		2-111	12	1563217	1-17	5		11-53	10
1544119	6-66	7		2-123	12		1-19	7		11-55	10
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1547480	2-76	16		2-21	1	1563222	1-17	1		11-59	10
	2-105	3		2-25		1563351	1-17	1		11-61	10
1547629	2-76	22	1553417	2-19	8		1-19	1		11-63	10
	2-81	13		2-21	4	1565288	5-5	1	1569858	3-5	15
	2-93	13		2-22	4	1565289	5-5	1	1569859	3-5	15
	2-105	10	1553427	2-25	7	1565290	5-5	2	1569860	3-5	15
	2-111	16	1553428	2-25		1565303	5-5	6	1569861	3-5	15
	2-123	16	1553429	2-25	2	1565307	5-5		1569979	10-27	26
1547841	2-29	2		2-27	5	1565308	5-5			10-31	12
	2-29	2	1553897	2-45	5	1565309	5-5		1572889	1-31	12
	2-33	2	1554877	2-141	17	1565310	5-5		1573549	2-11	12
1549715	11-7	8		2-145	17	1565311	5-5		1574147	1-77	4
	11-21	8		2-146	22	1565312	5-5		1574301	1-13	3
	11-31	8		2-149	17	1565313	5-5	12	1578672	6-19	14
1549716	9-59	1		2-154	23	1565314	5-5	12		6-21	5
1549717	11-21	3		11-73	4	1565315	5-6		1578978	3-5	21
1549718	11-15	2	1554879	2-141	17	1565316	5-5		1578982	3-5	16
	11-17	6		2-146	22	1565324	3-11		1581079	1-65	
	11-21	3		2-149	17	1565327	3-11	4	1581556	7-7	8
	11-25	6		2-154	23	1565407	11-	7		8-11	8
	11-27	19		11-73	4		128			8-24	35
1549723	11-21	3	1554902	4-2	7	1565545	1-49	25		9-7	20
1549724	11-15	2		4-4	7	1565693	2-11	8		9-33	20
	11-19	21	1555879	3-13	21		2-15	9		10-11	26
	11-21	3	1555881	3-13	9		2-17	10		10-17	25
	11-25	6	1555891	3-13	11	1566116	2-179	6		10-28	34
	11-27	19	1555892	3-13	8	1566117	2-179	7		10-31	26

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1581557	7-21	18		8-80	46		9-40	30		11-97	10
	7-25	15		8-83	3		9-44	30		11-99	10
	8-43	20		9-7	5	1581591	7-31	8		11-	7
	8-47	20		9-21	3		7-35	8		103	
	8-61	23		9-33	5		8-67	13		11-	5
	9-13	19		9-54	26		8-71	13		105	
	9-39	19		10-11	5		8-80	29		11-	10
	9-43	19		10-17	26		8-84	29		106	
	10-11	16		10-28	32		10-27	23	1581834	7-17	9
	10-17	27		10-31	22		10-31	13		10-31	
1581558	8-35	9	1581567	8-35	8	1581592	10-18	37	1581835	8-11	7
1581559	8-23	13		8-40	24	1581593	1-67	2		8-35	5
	8-68	33		8-80	53		10-17	16		9-7	19
	8-72	33		8-84	41	1581741	9-22	14		9-33	19
	9-13	10		9-13	16		9-50	14		10-11	25
	9-39	10		9-39	16		9-54	14	1581836	7-7	7
	9-43	10		9-43	16		10-27	11		7-17	12
	10-17	18		10-11	15		10-35	7		7-25	2
	10-27	7	1581578	10-27	2	1581742	8-39	4		8-24	30
	10-35	3		10-35	13	1581747	5-15	5		8-39	7
1581560	8-36	31	1581579	8-68		1581827	8-23	6		11-13	14
	8-40	19		8-72			8-67	12		11-19	12
	9-22	28		8-81	64		8-71	12		11-28	31
	10-28	38		8-84	53		8-80	38	1581838	1-67	2
	10-31	19	1581580	8-40	32		8-84	38		10-27	14
1581564	6-67	13		8-80	41		9-39	15		10-31	1
	7-17	14		8-83	5		9-43	15	1581841	9-13	20
	8-24	24		10-28	31	1581828	8-23	6		9-39	20
	8-40	14		10-31	23		9-13	7		9-43	20
	9-14	31	1581581	7-31	16		9-39	7	1581842	8-35	14
	10-18	36		7-35	16		9-43	7		8-40	28
1581565	7-17	10		8-24	36	1581829	7-7	17		9-22	19
	8-24	28		8-35	4		8-11	17		9-50	19
	8-39	6		8-40	30		8-24	39		9-54	19
	10-27	4		8-80	45		9-7	14		10-27	27
	10-31	9		9-21	6		9-33	14		10-31	20
	10-35	8		10-11	21	1581830	7-17	13	1581843	9-50	19
1581566	7-7	10		10-17	23		8-36	27		9-54	19
	7-17	4	1581582	7-17	2		8-40	15		10-27	10
	7-21	19		7-31	14		8-80	52	1581848	6-67	12
	7-25	5		7-35	14		8-84	40	1581849	7-7	14
	7-31	17	1581583	7-31	11		9-22	25		8-11	14
	7-35	17		7-35	11		9-50	25		8-23	14
	8-11	9		8-80	23		9-54	25		8-40	27
	8-24	28		8-84	30		10-11	19		8-68	25
	8-35	2	1581584	8-80	15	1581831	8-35	12		8-72	25
	8-39	8	1581587	9-13	18		8-40	25		8-80	39
	8-39	8		9-39	18	1581832	8-23	9		8-84	39
	8-43	19		9-43	18		9-13	15		9-7	11
	8-47	19	1581588	8-35	10	1581833	11-91	7		9-13	11
	8-61	14	1581590	8-24	25		11-92	10		9-22	30
	8-79	3		9-14	30		11-95	7		9-33	11

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	9-39	11		11-	3		1-41	10	1597451	9-54	33
	9-43	11		128			6-29	21	1597661	10-27	5
	9-50	30	1583945	6-17	14		6-33	21		10-35	1
	9-54	30	1584060	1-19	8		6-37	21	1597662	11-35	5
	10-11	11		1-21	3		6-55	3	1597696	10-27	24
	10-17	19	1584113	1-19	1	1586629	3-6	40		10-31	14
	10-27	8		1-21	1	1586759	2-51	16	1597773	2-75	3
	10-31	6	1584621	3-6			2-55	13		2-75	9
	10-35	4	1584632	1-25	9		2-59	10		2-75	13
1581850	8-24	31	1584638	1-25	11	1589621	2-45	4		2-76	17
1581851	8-35	7	1584643	1-23	2	1590151	2-45	1		2-77	29
1581852	1-21	15	1584977			1591461	10-5	1		2-77	38
	1-29	4	1584978			1591462	10-5	1		2-79	4
	6-67	13	1584979			1591463	10-5	1		2-79	7
	7-7	15	1585076			1591518	6-25	1		2-81	2
	8-11	15	1585077			1591525	6-25	7		2-82	17
	9-7	12	1585078			1591527	6-25	8		2-85	1
	9-33	12	1585141	6-25	14	1591542	6-25	31		2-85	11
	9-40	33	1585189			1591667	4-23	6		2-86	19
	9-44	33	1585190			1591759	6-19	4		2-86	20
	10-18	36	1585191			1591762	6-19	3		2-89	1
1581854	11-91	8	1585192			1591967	4-23	5		2-89	2
	11-92	9	1585193			1592853	7-25	9		2-89	6
	11-95	8	1585194				8-61	16		2-93	2
	11-97	9	1585195			1593334	1-17	9		2-94	17
	11-99	9	1585196				1-19	23		2-94	20
	11-	8	1585197				1-21	19		2-97	1
	103		1585198			1593335	5-15	17		2-97	11
	11-	4	1585199				6-29	24		2-98	19
	105		1585200			1593336	5-9	10		2-98	20
	11-	9	1585765	1-49	22	1593347	4-6	2		2-98	27
	106		1585835	2-55	12		4-10	3		2-101	1
1582160	6-3	34	1586013	6-66	3	1593351	4-19	4		2-101	2
	6-7	27		6-69	16		4-21	4		2-101	6
1582161	6-3	36		6-71	13		4-23			2-102	23
	6-7	26	1586109	4-2	5	1593352	4-23			2-105	1
1582464	2-11	3		4-4	5	1596406	10-17	10		2-106	17
	2-15	5	1586428	2-51	13	1596407	10-17	11		2-106	18
	2-17	14		2-55	17	1596408	4-2	3		2-106	22
	6-29	27		2-59	11		4-4	3		2-107	34
	6-33	27	1586430	11-64	4		10-17	12		2-107	37
	6-37	27		11-65	3	1596420	8-80	19		2-109	4
	11-69	8	1586436	5-9	2		8-84	19		2-109	6
1583611	1-21	18	1586446	1-75	12		11-65	4		2-111	1
	1-29	21	1586447	1-75	12	1597381	6-66	2		2-111	4
	1-41	5	1586448	1-75	12	1597448	8-40	35		2-111	7
	1-41	10	1586449	1-75	12		8-79	2		2-115	16
	2-51	7	1586495	1-41	3		8-81	62		2-116	17
	2-55	6	1586627	1-5	5		8-83	2		2-116	24
	2-59	4		1-7	5		9-21	6		2-119	1
	2-60	39		1-9	5		9-49	6		2-119	4
	11-85	3		1-11	5		9-53	6		2-119	6

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-119	8		2-93	13		6-55	16		1-29	2
	2-123	1		2-97	9	1606855	9-21	1	1637285	1-23	3
	2-123	4		2-97	10		9-49	1	1637398	5-13	17
	2-123	7		2-97	12		9-53	1		6-15	18
	2-128	16		2-97	13	1607686	2-33	3		6-17	19
	2-128	17		2-105	10		2-35	3	1638440	1-49	1
	2-128	24		2-105	15	1609864	11-77	2		1-53	25
	2-131	1		2-106	16		11-78	5		1-55	25
	2-131	4		2-112	16	1612041				1-57	25
	2-131	6		2-115	12	1612042				1-59	25
	2-131	8		2-115	13	1613324	1-21	18		1-61	25
	2-132	23		2-115	14	1615163	2-45	2	1641351	3-5	4
	2-134	4		2-115	15	1616037	6-3	10	1642037	6-3	21
	2-138	3		2-124	16	1617657	7-17	7	1642038	6-13	
	2-138	5		2-127	12		8-36	18	1642043	6-15	14
	2-141	1		2-127	13		8-39	3	1642044	6-15	12
	2-141	2		2-127	14		8-39	3		6-17	6
	2-141	3		2-127	15		9-22	18	1642045	6-15	15
	2-141	10	1598220	11-67	4		9-50	18	1642046	6-15	7
	2-142	23	1598504	1-17	3		9-54	18	1642047	6-15	5
	2-145	10		1-19	10	1617658	9-49	3	1643405	8-35	3
	2-146	19		1-21	12		9-53	3		8-40	34
	2-149	1		1-29	2	1618311	3-5	3		9-21	7
	2-149	2	1598658	10-17	28	1622212	6-19	12		10-28	37
	2-149	3	1598659	10-17	30	1622213	6-19	2		10-28	37
	2-149	10	1598660	8-67	6	1622215	6-19	10		10-28	37
	2-150	23		8-71	6		6-21	7		10-31	29
	2-153	1		10-11	17	1622216	6-19	13	1643973	3-5	27
	2-153	2	1599415	1-13	4		6-21	6	1643974	3-5	19
	2-153	3		1-35	21	1622946	8-28	14	1643977	3-5	17
	2-153	10	1600020	3-13	1		8-75	7	1643978	3-6	34
	2-154	19	1600023	3-13	3		9-18	14	1643980	3-5	28
	2-159	5	1600027	3-13	18		9-46	14	1643981	3-5	28
	2-160	3	1600028	3-13	4		10-20	15	1643982	3-5	28
	2-160	5	1600032	3-13	15	1623050	2-167	1	1644398	11-13	25
	2-160	6	1600034	3-13	14		2-169	1		11-19	13
	2-161	9	1600035	3-13	2		2-192	6		11-27	22
	2-163	3	1600037	3-13	6		11-	2		11-35	15
	2-163	8	1600038	3-13	7		126		1644598	6-3	15
	2-165	4	1600491	5-5	20	1624904	6-3	22		6-7	9
	2-165	5	1600492	5-5	20		6-7	16	1644602	6-11	13
	2-179	6	1605305			1626461	8-80	51	1646457	2-59	17
	2-191	1	1605306				8-84	42		11-	2
1597839	2-76	22	1606531	3-11		1626727	2-17	12		127	
	2-77	36	1606544	2-11	11		11-73	3	1646607	3-9	6
	2-77	37		2-11	11	1627833	2-184	1	1647924	2-19	11
	2-77	39		11-13	26	1627835	1-49	19	1647928	2-11	7
	2-81	13		11-19	14	1629185	11-77	1	1649134	1-35	7
	2-85	9		11-27	23		11-78	4		1-35	7
	2-85	10		11-35	14	1636120	1-17	3	1649275	2-11	6
	2-85	12		11-73	7		1-19	10	1650202	4-21	1
	2-85	13	1606735	6-41	11		1-21	12	1650275	2-11	

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1650276	2-11			2-153	6		11-11	10	1668614	4-26	2
1650278	2-11			2-184	2		11-13	21	1668615	4-26	2
1650640	1-31	8	1655312	3-14	3		11-27	20	1668616	3-18	1
	1-33	27		3-16	3		11-33	10	1668617	3-18	1
1650703	2-37	8	1655313	3-14	3		11-35	26	1668618	3-18	1
1650704	2-38	11		3-16	3		11-37	4	1668619	3-20	1
1650714	2-29	2	1655314	3-14	3		11-39	6	1668620	3-20	1
1650716	2-29	2		3-16	3		11-41	4	1668621	3-20	1
1650732	6-3	20	1655319	4-24	3		11-42	4	1668622	4-26	1
	6-7	14	1655320	4-24	3	1659602	2-51	15	1668623	4-26	1
1650824	2-19	1	1655650	4-2	9	1660274	6-9	16	1670032	11-	5
	2-21	1		4-4	9	1660403	2-27	3		109	
	2-27			4-13		1660404	2-27	10		11-	6
1650895	4-21		1655652	4-2	9	1660405	2-27	2		111	
1651187	1-65	1		4-4	9	1660406	2-27	7		11-	5
1651188	1-65	1		4-13		1660415	8-67	7		113	
1651190	1-65	2	1655658	5-9	5		8-71	7		11-	5
1651191	1-65	2	1655659	5-9	5		10-11	12		115	
1651320	1-42	34	1655660	5-9		1661162	1-35	19	1670407	2-11	5
1652290	11-86	1	1655865	1-31		1661274	1-35	3	1670816	1-42	35
1652842	5-13	5		1-33	2	1661482	3-6	35	1670817	1-42	35
1652926	3-9	20		1-33	10	1661509	1-31	4	1671783	10-27	12
1654013	2-51	14	1656045	5-9	14	1661511	1-31	2		10-35	15
	2-55	16		5-11			1-33	1	1671784	10-27	12
	2-59	8	1656131	2-11	21		1-33	9		10-35	15
	11-86		1656197	3-14	1	1661879	4-2	4	1671785	10-27	12
1654142	2-47	5	1656198	3-16	1		4-4	4		10-35	15
	2-51	25	1656199	3-14	1	1661883	4-2	1	1671798	10-27	1
	2-55	33	1656200	3-16	1		4-4	1		10-35	12
	2-59	20	1656201	4-24	1	1662409	2-59	12	1671799	10-27	1
	11-67	5	1656202	4-24	1		2-60	34		10-35	12
1654323	10-31	7	1656319	5-9	9		2-60	43	1671800	10-27	1
	10-35	6	1656321	3-14	1	1663563	10-28	42		10-35	12
1654576	3-13	28	1656322	3-16	1		10-35	10	1671849	5-11	11
1654758	1-42	32	1657013	6-29	34	1663564	10-27	28	1671850	5-11	12
1654759	1-41	30		6-33	34	1664136	3-9	23	1671852	5-11	13
1654774	6-29	40		6-37	34		5-5		1671853	5-11	16
1655172	2-106	23	1657014	6-29	36	1664137	3-9	13	1671854	5-11	17
	2-115	1		6-34	36		5-5		1671859	5-11	
	2-127	1		6-37	36	1664407	2-51	6	1671887	2-190	1
1655183	2-76	28	1657016	6-29	33	1665225	4-9	5		6-29	4
	2-107	30		6-33	33		4-11	12		6-33	4
	2-142	18		6-37	33	1665644	1-63	2		6-37	4
	2-146	21	1657021	6-29	32	1668111	4-24	1	1672043	2-5	13
	2-150	18		6-33	32	1668112	4-24	3	1672044	2-5	13
	2-153	16	1657116	1-63	3	1668113	4-24	2	1672045	2-5	13
	2-155	2	1657360	1-41	6		4-26	3	1672046	2-5	13
	2-192	7	1657579	1-35	1		4-27	3	1672047	2-5	13
1655187	2-85	16	1657582	1-35	1	1668115	4-24	1	1672339	4-9	5
1655195	2-141	6	1657583	1-35	1	1668116	4-24	3		4-11	12
	2-145	6	1658075	8-40	23	1668613	3-18	2	1672692	2-51	1
	2-149	6	1658934	11-9	3		3-20	2		2-55	1

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-59	5		4-2	5	1683346	2-15	11		2-150	21
	11-81	4		4-4	5		2-17	8		2-153	17
	11-85	5		4-4	5		2-51	11		2-153	18
1673283	5-9	4	1675582	4-2	5		2-59	30		2-156	7
1673317	1-13	1		4-4	5		11-70	3		2-182	4
	1-15	1	1675590	6-19	11	1683761	4-21	28		2-189	6
1673318	1-13	1		6-21	8	1683842	4-21	30	1689943	4-26	2
	1-15	1	1675593	6-21	11	1683896	10-27	22	1689944	4-26	2
1673319	1-13	1	1675931	11-64	2	1683976	11-	2	1689945	4-26	1
	1-15	1	1676334	6-13	5		128		1689946	4-26	1
1673320	1-13	1	1676341	6-13	1	1684101	5-11		1690996	1-17	4
	1-15	1	1676342	6-13		1684380	1-75	12		1-19	3
1673321	1-13	1	1676403	1-75	7	1684386	1-75	12		1-21	6
	1-15	1	1676500	1-49	6	1687417	3-18	2	1691522	6-23	8
1673555	6-69	12		1-53	20		3-20	2	1691523	6-23	6
	6-71	16		1-55	20	1687418	3-18	2	1691527	6-23	6
1673564	10-27	13		1-57	20		3-20	2	1692268	6-23	10
	10-35	11		1-59	20	1687430	6-41	12	1692273	6-23	16
1673612	3-6			1-61	20		6-43	12	1692284	4-10	11
1673613	3-6		1676536	5-13	7		6-55	15	1692287	2-19	7
1673754	8-24	35	1676884	1-5	4	1687435	2-47	6	1692356	4-21	1
	10-27	3		1-7	4		2-49		1692919	1-17	6
	10-35	9		1-9	4	1687924	1-5	12	1693397	6-17	13
	11-13	12		1-11	4		1-7	12	1693398	6-17	11
	11-19	10	1677113	1-35	8		1-9	12	1693483	1-9	1
	11-27	11		1-35	13		1-11	12	1693484	1-9	1
	11-	4	1677115	1-35	9		2-47	2	1693485	1-9	1
	109		1677286	1-19	12	1688347	6-3	30	1693486	1-9	1
	11-	5	1677333	2-47	1		6-7	23	1693487	1-9	1
	111		1677664	5-9	1		11-13	24	1693535	1-49	10
	11-	4	1677728	1-41	20		11-13	29	1693632	3-18	1
	113		1677729	1-41	20		11-19	18	1693633	3-18	1
	11-	4	1677730	1-41	20		11-27	24	1693634	3-18	1
	115		1677731	1-41	20		11-35	18	1693635	3-14	1
1673825	2-109	15	1677732	1-41	20		11-49	14	1693636	3-14	1
1673826	2-109	15	1677802	5-15	10		11-51	14	1693637	3-14	1
1673840	2-75	4	1677812	1-49	3		11-53	14	1693638	3-18	2
	2-76	16		1-53	13		11-55	14		3-20	2
	2-105	3		1-55	13		11-57	14	1693639	3-18	2
	2-109	15		1-57	13		11-59	13		3-20	2
1674164	6-30	51		1-59	13		11-61	14	1693640	3-18	2
1674165	6-30	52		1-61	13		11-63	14		3-20	2
	6-34	49	1678177	5-15	16	1689606	2-76	27	1693641	3-14	3
	6-38	49	1678368	5-15	8		2-86	16		3-16	3
1674167	6-29	37	1682736	2-141	17		2-106	28	1693642	4-25	1
	6-34	37		2-146	22		2-107	29	1693643	4-25	1
	6-37	37		2-149	17		2-115	8	1693645	4-27	1
1674171	6-30	53		2-154	23		2-142	20	1693646	4-27	1
1674173	6-29	42		11-73	4		2-142	21	1693647	4-27	1
1674376	2-76	16	1682764	6-29	31		2-145	17	1693648	4-25	1
	2-105	3		6-33	31		2-146	18	1693649	4-25	1
1675581	4-2	5		6-37	31		2-150	20	1693651	4-25	3

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1693652	4-25	3	1695648	1-41	23	1696233	2-33	8		11-85	2
1693654	4-27	2	1695723	1-29	18	1696234	2-33		1698449	2-65	20
1693655	4-27	2	1695807	11-77	1	1696235	2-33	7		2-69	20
1693656	4-27	2		11-78	4		2-35	7	1698633	1-39	3
1693657	4-25	3	1695897	2-5	13	1696236	2-33	10	1698795	1-39	6
1693671	3-20	1		2-7	28		2-35	10	1698796	1-36	22
1693672	3-20	1	1695898	2-5	13	1696266	6-61		1698799	1-15	11
1693673	3-20	1		2-8	28		6-63		1698800	1-5	11
1693674	3-16	1	1695900	2-5	13	1696312	6-45	5		1-7	11
1693675	3-16	1		2-8	28		6-49	5		1-9	11
1693676	3-16	1	1695902	2-5	13		6-57	2		1-11	11
1693738	1-77	8		2-8	28		6-59	2		1-15	10
1694048	6-23	9	1695903	2-5	13		6-61	12	1698801	1-5	6
	6-25	12		2-8	28		6-63	12		1-7	6
1694056	6-23	3	1695974	6-9	10	1696315	6-57	12		1-9	6
1694057	6-23	21		6-11	4		6-59	12		1-11	6
	6-25	28	1695975	6-9	9	1696316	6-51			1-15	3
1694058	6-23	19		6-11	5		6-53		1699252	1-35	1
1694227	1-49	16	1695985	6-49	12	1696319	6-57		1699255	1-35	1
	1-53	9		6-57	5		6-59		1699256	1-35	1
	1-55	9		6-59	5	1696414	6-65		1699258	1-2	8
	1-57	9	1696000	6-29	18	1696418	6-57	5	1699317	1-2	6
	1-59	9	1696034	6-29	10	1696419	6-57	5	1699347	6-29	13
	1-61	9		6-33	10	1696453	6-57	5		6-37	13
1694309	3-2	1		6-37	10	1696561	1-41	8	1699348	6-29	14
	3-5		1696036	6-57	6	1696562	1-41	12		6-33	13
	3-9			6-59	6	1696635	11-7	3		6-37	14
1694442	2-61	4		6-65			11-21	3	1699349	6-29	15
	2-63	9	1696040	6-57	7		11-31	3		6-33	14
1694521	1-31			6-59	7	1696914	1-39	1		6-37	15
1694543	4-21	27		6-61		1696934	6-25	9	1699350	6-29	17
1694616	4-21	12		6-63		1696936	6-25	13		6-33	15
1694618	2-11	9	1696041	6-57	8	1696938	6-25	20		6-37	16
1694646	2-11	7		6-61		1696940	6-25	25	1699389	6-19	16
1694700	1-29	23	1696043	6-49	12	1696941	6-25	29	1699390	6-19	9
1694731	6-29	39		6-57	5	1696942	6-25	22	1699754	2-133	2
	6-34	39		6-59	5	1696943	6-25	21		2-137	2
	6-37	39	1696045	6-57	6	1697031	6-25	30	1699759	2-28	8
1694830	1-19	19		6-59	6	1697032	6-25	6	1700148	2-11	
	1-29	16		6-65		1697122	2-33	1	1701029	2-55	14
	6-29	11	1696046	6-57	8	1697123	2-33	2	1701196	1-49	12
	6-33	11		6-61		1697128	2-33	9		1-53	24
	6-37	11	1696161	7-31	2		2-35	9		1-55	24
1695110	1-45	21		7-35	2	1697143	2-33	1		1-57	24
	1-47	17		8-67	14		2-33	2		1-59	24
1695158	1-45	10		8-71	14		2-35	1		1-61	24
	1-47	10		8-80	20		2-35	2	1701367	6-57	4
1695274	2-42	1		8-81	63	1697361	11-69	12		6-59	4
1695643	1-41	23		8-84	20		11-73	9	1701654	6-45	
1695644	1-41	23		11-64	5	1697553	2-73	3		6-49	
1695645	1-41	23	1696232	2-33	4	1698209	1-77	9		6-51	15
1695646	1-41	23		2-35	4	1698432	2-55	11		6-53	15

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
1701657	6-45	8	1702594	2-61	9		6-55	11	1706986	3-13	
	6-49	8	1702595	2-61	11	1704669	1-5	13	1706987	3-13	
	6-65		1702706	8-23	8		1-7	13	1706988	3-13	
1701659	6-45	6	1702735	6-30	46		1-9	13	1706990	3-13	
	6-49	6		6-34	50		1-11	13	1707023	3-3	4
	6-51			6-38	50		2-47	3	1707398	4-10	2
	6-53			11-69	15	1704774			1707399	4-10	3
1701660	6-45	4	1703232	5-15		1704775			1707400	4-10	4
	6-51		1703512	6-45	11	1704776			1707402	4-6	5
1701661	6-45	2		6-51	15	1705100				4-10	6
	6-49	2		6-53	15	1705101			1707403	4-10	7
	6-51		1703513	2-65	9	1705102			1707404	4-10	8
	6-53			2-69	9	1705103			1707405	4-10	9
1701663	6-45	4	1703667	3-6	42	1705105			1707406	4-10	10
	6-51			3-13		1705106			1707407	4-6	8
1701666	6-45	3	1703670	6-15		1705107				4-10	12
	6-49	3		6-17		1705108			1707426	4-6	2
	6-51			6-23		1705202	2-63	2	1707427	4-6	3
	6-53		1703684	6-45	2	1705223			1707428	4-6	6
1701671	6-45	8		6-49	2	1705224			1707430	4-6	7
	6-49	8		6-51		1705225			1707681	6-41	11
	6-65			6-53		1705226				6-43	11
1701713	6-21	1	1703890	1-25	8	1705227				6-55	16
1701714	6-21	9	1703891	1-25	1	1705228			1708184	6-25	19
1701817	6-49	13	1703892	1-23	4	1705229			1708275	5-5	27
1701825	6-51	5		1-27	8	1705230			1708276	5-5	27
	6-53	5	1703893	1-23	5	1705231			1708364	11-11	5
1701850	5-9	13		1-27	1	1705359	2-65	13		11-13	19
1701855	6-45	1	1703894	1-23	5		2-69	13		11-17	5
	6-49	1		1-27	4	1705438	1-17	10		11-19	23
	6-51	12	1703895	1-29			1-21	20		11-25	5
	6-53	12	1703896	1-29		1705484	3-13			11-27	17
1702006	2-55	4	1703897	1-29		1705485	3-13			11-33	5
	11-81	6	1703898	1-23	2	1705522	3-13	22		11-35	23
	11-85	7	1703899	1-23	3	1705523	3-13	20		11-39	13
1702007	2-55	5	1703900	1-23	1	1705526	3-13			11-39	13
	11-81	6	1703901	1-23	2	1705528	3-13			11-41	12
	11-85	8	1703902	1-23	3	1705529	3-13	29		11-41	12
1702360	2-59	7	1703903	1-23	1	1705531	3-13		1708918	6-67	10
1702413	1-5	10	1703904	1-23	6	1705532	3-13		1709143	6-55	5
	1-7	10	1704190	2-19		1705535	3-13		1709213	5-15	22
	1-9	10	1704522	1-49	20	1705557	2-29	2	1709587	2-65	8
	1-11	10	1704528	2-65	13	1705632	4-2	9		2-69	8
	1-15	4		2-65	13		4-4	9	1709876	1-19	4
1702459	11-66	5		2-65	13		4-13		2004005	2-73	11
1702584	1-49	15		2-69	13	1706004	2-86	17		2-73	11
	1-53	12		2-69	13		2-98	17		2-73	11
	1-55	12		2-69	13		2-115	9		2-73	11
	1-57	12	1704529	2-65	14		2-127	9	2007554	2-79	9
	1-59	12		2-69	14		11-	3		2-89	15
	1-61	12	1704570	6-41	4		127			2-101	15
1702593	2-61	7		6-43	4	1706796	2-5			2-109	5

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-119	17		2-79	13		11-		2053799	8-27	
	2-131	17		2-79	14		118		2053858	2-15	10
2013075	7-12	2		2-81	10	2043531	11-89	4		2-17	11
	8-15	2		2-81	12		11-91	4	2054713	7-3	
	8-19	2		2-89	10		11-95	4		7-5	
2013088	8-27	9		2-89	11		11-	4	2054715	7-3	
	8-76	9		2-93	10		103			7-5	
	9-17	9		2-93	12		11-	11	2054716	7-3	
	9-46	9		2-101	10		105			7-5	
2013089	8-27	10		2-101	11	2043532	11-89	4	2054752	7-3	
	8-75	8		2-105	5		11-91	4		7-5	
	9-18	10		2-105	6		11-95	4	2054754	7-3	
	9-46	10		2-109	13		11-	4		7-5	
2013099	8-28	15		2-109	14		103		2054755	7-3	
	9-18	15		2-111	11		11-	11		7-5	
	10-12	4		2-111	12		105		2056243	2-76	20
	10-15	5		2-119	11	2043533	11-89	5		2-81	10
	10-20	16		2-119	16		11-91	5		2-93	10
2022352	3-5	21		2-123	11		11-95	5		2-105	5
2022617	1-45	20		2-123	12		11-	5		2-111	11
	1-47	20		2-131	11		103			2-123	11
2022719	2-55	18		2-131	16		11-	8	2056600	11-	4
	11-82	1		2-170	5		105			129	
2026861	3-5	23		2-171	4	2043534	11-89	5		11-	4
2027655	1-45	6		2-172	4		11-91	5		130	
	1-47	16		2-175	6		11-95	5	2056826	2-51	2
2027662	3-9	10		2-176	5		11-	5		2-55	2
2027756	3-9	5		2-177	5		103			2-59	13
2027817	3-9	11	2037323	5-5	21		11-	8	2058111	2-42	2
2027828	3-9	19	2037340	5-5	19		105		2058121	9-17	
2027940	1-35	18	2037341	5-5	22	2044370	4-23	9		9-46	
2028137	1-35	17	2037343	5-5	7		6-69	4	2058122	9-17	
2028145	3-9	4	2037517	5-5	17	2044371	6-71	5		9-46	
2029383	3-11	6	2037518	5-5	17	2046035	4-6	2	2058126	8-27	
2029436	3-5	13	2041967	5-5	3		4-10	3	2058212	9-17	1
2032488	11-	4	2043528	11-89	3	2046164	8-16	11		9-46	1
	119			11-91	3		8-16	11	2058213	8-27	1
2032490	4-23	4		11-95	3		8-20	11	2058214	8-27	1
2035275	2-79	13		11-	3		8-20	11		9-17	1
	2-79	14		103			8-63	3		9-46	1
	2-89	10		11-	15		8-63	3	2058215	9-17	1
	2-89	11		105		2046243	11-95	4		9-46	1
	2-101	10		11-		2046244	11-95	5	2058216	8-27	1
	2-101	11		118		2046245	11-95	4	2058219	8-27	1
	2-109	13	2043529	11-89	3	2046246	11-95	5	2058222	8-27	1
	2-109	14		11-91	3	2046866	4-21	29	2058253	8-27	1
	2-119	11		11-95	3	2051219	3-5	14		9-17	1
	2-119	16		11-	3	2053796	8-27			9-46	1
	2-131	11		103		2053797	8-27		2058254	8-27	1
	2-131	16		11-	15		9-17		2058258	8-27	1
2035276	2-76	20		105			9-46		2058325	9-17	
	2-76	21				2053798	8-27			9-46	

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
2058327	8-27		2060421	9-9		2062687	7-7	4	2064567	8-16	9
	9-17			9-35			7-25	6	2064570	8-16	9
	9-46		2060423	9-9			8-11	4	2064586	8-20	9
2058328	8-27			9-35			8-61	18	2064587	8-20	9
	9-17		2060424	9-9			9-7	10	2064588	8-20	9
	9-46			9-35			9-33	10	2064591	8-20	9
2058330	8-27		2060555	2-76	22	2062718	6-29	41	2064594	8-20	9
2058333	8-27			2-77	36	2062875	1-31	15	2064610	8-16	9
2058337	8-27			2-77	37		1-33	23	2064611	8-16	9
2058499	9-11	1		2-77	39		2-11	18	2064612	8-16	9
	9-11	1		2-81	13		2-29	1	2064615	8-16	9
	9-37	1		2-85	9	2063690	9-17	1	2064618	8-16	9
	9-37	1		2-85	10		9-46	1	2064643	8-15	
2058501	9-11	1		2-85	12	2063691	8-27	1	2064644	8-15	
	9-37	1		2-85	13		9-17	1	2064645	8-15	
	9-37	1		2-93	13		9-46	1	2064648	8-15	
2058502	9-11	1		2-97	9	2063991	6-29	23	2064651	8-15	
	9-11	1		2-97	10		6-33	23	2064676	8-19	
	9-37	1		2-97	12		6-37	23	2064677	8-19	
	9-37	1		2-97	13		6-55	2	2064678	8-19	
2058535	9-9	1		2-105	10	2064141	7-12		2064681	8-19	
	9-9	1		2-106	15	2064142	7-12		2064684	8-19	
	9-35	1		2-106	16	2064143	7-12		2064709	8-15	
	9-35	1		2-112	16	2064144	7-12		2064710	8-15	
2058537	9-9	1		2-115	12	2064165	7-12		2064711	8-15	
	9-9	1		2-115	13	2064166	7-12		2064714	8-15	
	9-35	1		2-115	14	2064167	7-12		2064717	8-15	
	9-35	1		2-115	15	2064168	7-12		2064734	8-19	
2058538	9-9	1		2-124	16	2064201	7-12	8	2064735	8-19	
	9-9	1		2-127	12	2064202	7-12	8	2064736	8-19	
	9-35	1		2-127	13	2064203	7-12	8	2064739	8-19	
	9-35	1		2-127	14	2064204	7-12	8	2064742	8-19	
2058618	9-11			2-127	15	2064238	7-12	8	2064754	8-27	1
	9-37			6-25	19	2064239	7-12	8	2065000	9-22	21
2058620	9-11		2060751	6-7	20	2064240	7-12	8		9-22	21
	9-37		2061646	6-65	16	2064241	7-12	8		9-50	21
2058621	9-11		2062651	7-7	12	2064277	7-12	8		9-50	21
	9-37			7-25	3	2064279	7-12	8		9-54	21
2058650	9-9			8-11	11	2064280	7-12	8	2065001	9-22	21
	9-35			8-61	19	2064313	7-12	8	2065002	9-22	21
2058652	9-9			9-33	8	2064315	7-12	8		9-22	21
	9-35		2062652	7-7	12	2064316	7-12	8		9-50	21
2058653	9-9			7-25	3	2064351	7-12			9-50	21
	9-35			8-11	11	2064353	7-12			9-54	21
2058822	9-11			8-61	19	2064354	7-12			9-54	21
	9-37			9-7	8	2064368	7-12		2065003	9-22	21
2058824	9-11			9-33	8	2064370	7-12			9-22	21
	9-37		2062686	7-7	4	2064371	7-12			9-50	21
2058825	9-11			7-25	6	2064464	9-37	5		9-50	21
	9-37			8-11	4	2064562	8-16	9		9-54	21
2060084	3-5	5		8-61	18	2064563	8-16	9		9-54	21
2060085	3-5	1		9-33	10	2064564	8-16	9	2065029	9-22	20

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	9-22	20		9-49	4	2065525	9-3			2-93	12
	9-50	20		9-53	4		9-5			2-101	10
	9-50	20		9-53	4	2065527	9-3			2-101	11
	9-54	20	2065240	9-21	8		9-5			2-105	5
2065030	9-22	20		9-21	8	2065578	9-3			2-105	6
2065031	9-22	20		9-49	8		9-5			2-109	13
	9-50	20		9-53	8	2065582	9-3			2-109	14
	9-50	20		9-53	8		9-5			2-111	11
	9-54	20	2065241	9-21	8	2065584	9-3			2-111	12
	9-54	20	2065242	9-21	8		9-5			2-119	11
2065032	9-22	20		9-49	8	2065667	1-31	11		2-119	16
	9-22	20		9-49	8		1-45	5		2-123	11
	9-50	20		9-53	8		1-47	4		2-123	12
	9-50	20		9-53	8	2065669	11-	2		2-131	11
	9-54	20	2065243	9-21	8		120			2-131	16
	9-54	20		9-21	8	2065670	11-	2		2-170	5
2065124	8-35	1		9-49	8		121			2-171	4
2065125	8-35	1		9-49	8		11-	2		2-172	4
	8-35	1		9-53	8		122		2068888	6-71	
2065130	10-13	15		9-53	8	2065671	11-	2	2068889	6-71	
	10-15	11	2065395	8-3			120		2069414	2-170	5
2065131	10-13	15		8-5			11-	2		2-171	4
	10-15	11		8-9			121			2-172	4
2065137	7-17	1	2065397	8-3			11-	2		2-175	6
	7-17	1		8-5			122			2-176	5
2065139	7-17	1		8-9		2065672	11-	1		2-177	5
2065140	7-17	1	2065399	8-3			120		2069454	11-67	2
	7-17	1		8-5		2065673	11-	1	2070018	6-71	2
2065161	8-35	1		8-9			120		2070223	11-67	2
	8-35	1	2065404	8-3		2065674	11-	1	2070409	11-	1
2065162	8-35	1		8-5			121			123	
2065164	8-35	1		8-9			11-	1	2070686	5-15	28
	8-35	1	2065410	8-3			122		2070776	8-33	
2065165	8-35	1		8-5		2065675	11-	1	2070778	9-59	
2065167	8-35	1		8-9			121		2070780	10-25	
	8-35	1	2065455	8-3			11-	1	2071068	10-3	
2065210	9-21	4		8-5			122			10-5	
	9-21	4		8-9		2067345	6-71	1		10-7	
	9-49	4	2065457	8-3		2067346	6-71	1		10-9	
	9-49	4		8-5		2067574	3-5	12	2071069	10-3	
	9-53	4		8-9			3-11			10-5	
	9-53	4	2065459	8-3		2068337	6-3	31		10-7	
2065211	9-21	4		8-5			6-7	24		10-9	
2065212	9-21	4		8-9		2068741	2-76	20	2071070	10-3	
	9-21	4	2065465	8-3			2-76	21		10-5	
	9-49	4		8-5			2-79	13		10-7	
	9-49	4		8-9			2-79	14		10-9	
	9-53	4	2065470	8-3			2-81	10	2071094	4-23	7
	9-53	4		8-5			2-81	12	2071260	1-45	13
2065213	9-21	4		8-9			2-89	10		1-47	15
	9-21	4	2065521	9-3			2-89	11		11-66	4
	9-49	4		9-5			2-93	10	2071261	11-67	1

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
2071862	6-69			11-15	3		11-35	30	2094714	2-11	1
2071863	8-33			11-17	8	2079995	11-31	4	2094791	6-3	26
2071864	9-59			11-19	20		11-33	8		6-7	20
2072657	6-71	7	2074404	11-7	4		11-35	28	2094798	5-2	1
2072658	6-71	7		11-9	7	2079996	11-31	5	2094809	6-3	7
2072659	6-69			11-11	12		11-33	9		6-7	7
2072660	6-69	1		11-13	22		11-35	27	2095405	2-63	3
2072661	6-69	1	2074405	11-7	5	2081418	11-7	13	2095448	5-15	26
2072662	6-69	6		11-9	6		11-21	13	2095483	11-81	3
2072663	6-69	6		11-11	11		11-31	13	2096648	1-45	14
2073083	8-20	9		11-13	23	2083689	1-75	10		1-47	24
2073084	8-20	9	2074406	11-7	6	2084569	8-23	15	2097785	11-73	1
2073085	8-20	9		11-9	5	2084570	8-23	15	2097858	2-52	34
2073086	8-20	9		11-11	9	2084571	8-23	15		2-55	31
2073087	8-16	11		11-13	31	2084574	8-23	15		2-59	15
	8-16	11		11-15	4	2084577	8-23	15		2-195	
	8-20	11		11-17	9	2084653	8-23	15	2098807	6-45	
	8-20	11		11-19	19	2084654	8-23	15	2098808	6-45	
	8-63	3	2074407	11-7	7	2084655	8-23	15	2098810	6-45	
	8-63	3		11-9	4	2084658	8-23	15	2098811	6-45	
2073159	9-9	7		11-11	8	2084661	8-23	15	2098968	2-51	5
	9-9	7		11-13	30	2089058	4-21	25		2-55	10
	9-9	7		11-15	3	2090695	1-39	6		2-59	12
	9-11	6		11-17	8	2091150	2-28	4		11-85	4
	9-11	6		11-19	20	2091228	2-28	4	2098969	2-51	22
	9-35	7	2074416	11-31	5	2091257	7-12	15		2-55	22
	9-35	7	2074417	11-31	4		8-16	16		2-60	43
	9-37	6	2074418	11-31	7		8-20	16		11-82	5
	9-37	6	2074419	11-31	6	2091259	7-12	15	2098970	2-51	22
	9-37	6	2074859	1-49	24		8-16	16		2-55	22
2073197	1-75	8	2075656	1-75	18		8-20	16		2-60	34
2073766	11-77	4	2075928	8-24	32	2094298	6-15	6		11-82	5
2074209	1-77	7		8-24	32		6-23		2099416	6-3	19
2074400	11-7	4	2075929	8-24	32	2094578	2-47	1		6-7	13
	11-9	7		8-24	32		2-49	5		6-13	8
	11-11	12	2075930	8-24	32		11-5	5	2099951	1-29	13
	11-13	22		8-24	32	2094579	2-47	1	2099952	1-29	1
2074401	11-7	5	2075933	8-24	32		2-49	5	2100204	2-76	27
	11-9	6		8-24	32	2094668	6-15	6		2-85	16
	11-11	11	2075936	8-24	32		6-23			2-97	16
	11-13	23		8-24	32	2094692	6-45			2-107	28
2074402	11-7	6	2076153	3-5	16	2094693	6-45			2-107	29
	11-9	5	2076169	1-75	11	2094694	6-45			2-115	8
	11-11	9	2077818	8-16	11	2094695	6-45			2-127	8
	11-13	31		8-20	11	2094709	2-11	24		2-142	20
	11-15	4		8-63	3		2-19			2-142	21
	11-17	9	2079984	8-20	9	2094710	2-11	24		2-145	17
	11-19	19	2079993	11-31	6		2-19			2-146	18
2074403	11-7	7		11-33	12	2094711	2-11	1		2-150	20
	11-9	4		11-35	29		2-11	1		2-150	21
	11-11	8	2079994	11-31	7	2094713	2-11	1		2-153	17
	11-13	30		11-33	13		2-11	1		2-153	18

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-156	7	2103164	6-57		2105929	2-5	3		5-15	12
	2-182	4	2103165	6-57			2-7	3	2108497	2-69	1
	2-189	6	2103714	1-42	38	2106668	6-17	17	2108498	2-69	1
2100206	1-13	5	2104011	6-29	2		6-21		2108499	2-65	1
	1-15	5		6-33	2	2106669	6-17	1	2108500	2-65	1
2100367	2-5	7		6-33	5		6-25		2108501	2-69	1
	2-7	7		6-37	2	2107319	2-7	24	2108502	2-69	1
	2-51	28	2104012	6-29	5	2107320	2-65	12	2108503	2-65	1
	2-55	24		6-29	6		2-69	12	2108504	2-69	1
	2-59	24		6-33	3		6-30	56	2108505	2-65	1
2100542	1-77	7		6-33	6		6-33	17	2108506	2-69	1
2100697	1-17			6-33	7		6-37	17	2108514	2-65	1
2100698	1-17			6-37	3	2107382	2-51	5	2108515	2-65	1
2100705	2-190			6-37	5		2-55	10	2108516	2-69	1
	6-29	16		6-37	6		2-59	12	2108517	2-65	1
	6-33	4		6-37	7		11-85	4	2108518	2-69	1
	6-37	4	2104014	6-29	3	2107383	2-51	22	2108519	2-65	1
2101031	1-41	2		6-33	3		2-55	22	2108591	2-5	2
	2-51	4		6-37	3		2-60	43		2-7	2
2101032	1-41	1	2104030	2-7	22		11-82	5		2-179	
	2-51	4		2-137		2107384	2-51	22	2108690	1-75	15
2101546	2-170	4	2104032	5-15	18		2-55	22	2108744	2-179	2
	2-171	3	2104035	10-27	19		2-60	34	2109136	6-29	7
	2-172	3		10-31	10		11-82	5		6-33	7
	2-175	5	2104036	10-27	19	2107661	2-180			6-37	7
	2-176	4		10-31	10		6-29	20	2109137	6-29	8
	2-177	4	2104037	10-27	19		6-33	20		6-33	8
2101602	1-23			10-31	10		6-37	20		6-37	8
2101603	1-23		2104097	2-7	22	2107710	6-3	3	2109178	11-67	2
2101606	1-23			2-133			6-7	3	2109196	6-11	17
2101607	1-23		2104811	3-13		2107711	6-11	17	2109528	2-189	
2101789	1-47	8	2104813	3-13		2107713	6-11	12	2109672	2-47	4
2101790	1-47	7	2104814	3-6	41	2107777	11-74	2		2-51	24
2101791	1-45	2		3-13		2107941	6-3	1		2-55	34
2101792	1-45	3	2105360	2-11	25		6-7	1		2-59	19
2101893	1-45	1		2-15	12	2107944	6-11	15		2-170	
	1-47	1		2-17	16	2107945	2-42	4	2109673	2-47	4
2101894	1-47	3		2-19	13	2107952	2-179	1		2-51	24
2101896	6-29	9		2-21	13	2107967	2-61	3		2-55	34
	6-33	9		2-22	13		2-63	1		2-59	19
	6-37	9	2105365	2-5	17	2107969	1-19	16		2-175	
2102184	1-36			2-7	20		1-29	19	2109677	2-5	9
	6-30	48		2-184		2107985	11-74	2		2-7	9
2102271	1-45	19	2105544	6-15	4	2108243	2-61	1	2109763	1-42	38
	1-47	19		6-19			2-160		2109975	11-66	8
2102640	1-79	1	2105546	11-70	1	2108249	2-65	5	2109984	1-75	5
2102710	6-71	7	2105726	1-13	7	2108251	6-11	16	2110399	4-16	1
2102885	1-42	33		1-15	7	2108356	11-69	1	2110401	4-16	6
2102886	1-42	33		2-49	7	2108466	2-175	8	2110501	2-51	26
2103003	6-3	21		11-5	7		2-176	6		2-159	
2103159	6-57		2105928	2-5	3		2-177	6	2110791	2-65	2
2103160	6-57			2-7	3	2108494	2-187			2-65	3

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	2-65	4	2111801	2-65	10		1-57	1		1-33	17
	2-69	2		2-69	10	4001264	1-50	27	4007319	1-33	15
	2-69	3	2111852	2-51	9		1-59	1	4007732	1-50	
	2-69	4		2-55	9	4001265	1-50	27	4007891	1-19	17
	2-69	5		2-59	29		1-61	1	4008020	8-40	34
2110792	2-65	4	2302899	6-69	2	4001563	1-49	8		9-21	7
	2-69	5	2302912	2-35	1	4001564	1-49	8		9-49	7
2110793	2-65	3	2303152	10-15		4001565	1-49	8		9-53	7
	2-69	3	2303178	1-77	2	4001566	1-49	8	4008400	6-17	4
2110942	2-65	19	2304572	2-25	4	4001567	1-49	8	4008787	6-25	26
	2-69	19	2304616	10-12		4001753	2-76	28	4009488	11-64	1
2110943	2-65	18	2304652	2-27	1		2-86	17		11-65	1
	2-69	18	2304661	10-15			2-98	17	4011175	6-59	13
2111049	4-2	2	2305096	2-27	4		2-107	30	4011177	6-51	15
	4-4	2	2306897	10-19			2-115	9		6-53	15
2111173	6-29	1	2307276	10-15			2-127	9	4011232	6-30	50
	6-33	1	2307400	1-77	5		11-	3		6-34	45
	6-37	1	2307799	1-49	17		127			6-38	45
2111288	4-4	6		1-53	11	4001872	1-35	14	4011600	2-85	6
	4-10			1-55	11	4002219	1-35	11		2-97	6
2111289	4-2	6		1-57	11	4002220	1-35	11		2-115	4
	4-6			1-59	11	4002221	1-35	11		2-127	4
2111677	5-9	15		1-61	11	4002222	1-35	11	4011624	1-41	26
2111708	6-9	1	2308031	10-12		4002223	1-35	11	4012915	6-34	42
2111709	6-9	1	2308770	10-19		4002296	1-35	4		6-38	42
2111732	6-71		2308828	10-19		4002477	4-15		4012925	10-35	14
2111733	6-69		2310629	10-15		4002682	1-19	5	4012926	10-35	14
2111754	11-13	8	2311126	10-12		4004200	11-64	3	4012927	10-35	14
	11-19	8	2311349	1-2	4	4004524	1-35	14	4012960	6-67	16
	11-27	6	2787341	6-25	19	4004775	1-33	18	4013012	6-33	18
	11-35	9	2787350	6-25	19	4004776	1-33	20		6-37	18
	11-49	2	2795594	6-25	19	4004912	1-21	17	4013095	1-19	6
	11-51	2	4000480	5-15	1		1-29	20		1-23	7
	11-55	2	4000840	2-45	1	4005010	1-29	13	4013267	8-68	35
	11-57	2	4000849	1-41	16		1-33			8-72	35
	11-59	2	4000853	2-45	6	4006730	1-49	20	4013268	7-31	6
2111755	11-13	8	4000859	1-5	1	4006788	1-42	36		7-35	6
	11-27	6	4000860	1-5	1	4006789	1-42	36		8-80	24
	11-35	9	4000861	1-5	1	4006790	1-42	36		8-84	24
	11-53	2	4000862	1-5	1	4006791	1-42	36	4013273	7-31	10
	11-61	2	4000863	1-5	1	4006792	1-42	36		7-35	10
	11-63	2	4000864	1-5	1	4006830	6-3	12		8-84	26
2111768	2-65	11	4000865	1-5	1	4006839	1-35	14	4013503	1-41	29
	2-69	11	4000866	1-5	1	4006840	1-35	14		1-49	11
2111769	2-65	7	4000867	1-5	1	4007052	1-31	5		1-53	17
	2-69	7	4000868	1-5	1		1-33	4		1-55	17
2111770	2-65	17	4001077	1-39	8	4007120	6-3	9		1-57	17
	2-69	17	4001261	1-50	27	4007121	6-3	9		1-59	17
2111799	2-65	6		1-53	1	4007122	6-3	9		1-61	17
	2-69	6	4001262	1-50	27	4007123	6-3	11	4013571	1-49	8
2111800	2-65	16		1-55	1	4007124	6-3	10	4013572	1-49	8
	2-69	16	4001263	1-50	27	4007318	1-29	8	4013573	1-49	8

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
4013574	1-49	8	4023228	2-33			8-67	17	4034268	2-37	2
4013575	1-49	8		2-35			8-71	17	4034271	2-37	4
4013928	11-13	7	4023408	2-51	19	4032611	10-35	2	4034272	2-37	4
	11-19	7		2-60	37	4032665	8-79	9	4034273	2-37	4
	11-28	30	4023409	2-51	23		8-79	11	4034276	2-37	2
4014659	1-41	23		2-60	35		8-83	9	4034277	2-37	2
4014660	1-41	23	4023410	2-51	20		8-83	11	4034278	2-37	2
4014661	1-41	23		2-60	36	4033412	7-21	7	4034279	2-15	3
4014662	1-41	23	4024213	6-9	6		8-43	17	4034281	2-21	8
4014663	1-41	23	4024512	2-49	4		8-47	17	4034496	2-35	
4015304	6-34	47		11-5	4		9-25	11	4034497	2-35	2
	6-38	47	4024514	11-	2		9-27	11	4034634	11-	11
4015337	6-33	28		128		4033414	7-21	6		111	
	6-37	28	4025662	1-3	3		8-43	16		11-	7
4015507	1-35	22		1-41	6		8-47	16		113	
4015541	2-11	9	4025664	1-3	2		9-25	12		11-	
4015542	2-11	7	4025665	1-3	8		9-27	12		117	
4015720	8-23	8	4025666	1-3	7	4033434	1-69		4034635	11-	7
	8-40	41	4025667	1-3	6	4033435	1-69			113	
4016103	1-11		4025668	1-3	5	4033792	6-23	17		11-	
4016313	11-13	5	4025669	2-33			6-25	19		117	
	11-19	5	4025670	2-33	1	4033793	6-25	18	4034686	8-40	31
4016370	8-80	15		2-35	1	4033794	6-25	23	4034862	10-3	1
	8-84	50	4025671	2-33	2	4033954	11-89	2	4034863	10-3	1
	11-28	29	4025784	6-25	17		11-91	2	4034864	10-3	1
4016802	5-2	1	4025952	2-5			11-95	2	4034896	5-13	13
4017812	4-19	11		2-7	21		11-	2	4034953	5-13	12
4019192	2-5	8	4026003	2-194	1		103		4034954	5-13	11
	2-7	8	4026696	6-7	17		11-	2	4034955	5-13	10
	2-11	15	4026976	2-33	8		105		4035674	5-13	11
	2-51	29		2-35	8	4033959	11-89	2	4035734	2-37	9
	2-55	26	4027341	1-23			11-91	2	4035750	1-75	20
	2-59	23	4027591	1-35	14		11-95	2	4036586	1-23	
	2-61	5	4027592	1-35	14		11-	2		1-27	
	2-63	13	4028637	6-25	3		103		4036587	1-23	
4019240	6-3	25	4028638	6-23	20		11-	2		1-27	
4019304	2-33		4028740	6-25	19		105		4036590	1-27	
	2-35		4028802	6-23	18	4034245	2-15	7	4038677	4-9	3
4020074	3-6	31	4029051	7-25	13	4034251	2-37	4		4-11	6
4020076	3-5	20		8-61	10	4034252	2-37	4	4039104	11-	5
4020681	2-21	11	4029069	2-55	20	4034253	2-37	4		129	
	2-22	11		11-82	3	4034254	2-37	8		11-	5
4020913	8-80	26	4029070	11-65	2	4034256	2-37	2		130	
	8-84	26	4029275	1-41	13	4034257	2-37	2	4041107	8-63	1
4020998	1-35	8	4029283	11-35	8	4034258	2-37	2	4041108	8-63	1
	1-35	13	4030278	1-21	3	4034259	2-29	2	4041109	8-63	1
4020999	1-35	8	4030279	1-21	4	4034261	2-37	4	4041112	8-63	1
4021618	8-40	20	4031653	11-77	3	4034262	2-37	4	4041115	8-63	1
4022906	8-24	34		11-78	3	4034263	2-37	4	4041194	7-17	16
4022940	8-24	36	4031973	7-21	14	4034264	2-29	2		8-39	12
4022998	8-24	29		8-43	10	4034266	2-37	2		9-22	27
4022999	8-24	27		8-47	10	4034267	2-37	2		9-50	27

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	9-54	27	4046307	8-75	1		8-84	36	4051501	7-31	9
4041237	8-63	1	4046308	8-75	1	4048781	7-31	5		7-35	9
4041238	8-63	1	4046310	8-75	1		7-35	5		8-67	5
4041239	8-63	1	4046313	8-75	1		8-80	21		8-71	5
4041242	8-63	1	4046317	8-75	1		8-84	22		8-80	27
4041245	8-63	1	4046428	8-87	1	4048782	8-67	11		8-84	27
4043636	7-31	9	4046492	1-23			8-71	11	4051749	8-39	13
	8-67	5		1-27	13	4048783	8-80	34	4051751	7-17	15
	8-71	5	4046499	7-23	8		8-84	34	4051885	8-80	33
	8-80	27		8-51	6	4048784	8-80	31		8-84	33
4043644	2-59	2		8-53	6		8-84	31	4052261	8-68	29
4043654	2-59	1	4046548	8-68	28	4049031	8-68	29		8-72	29
4044470	2-15	8		8-72	28		8-72	29	4052568	8-67	16
	2-17	9	4046870			4049172	8-80	30		8-71	16
4044968	1-45	12	4046871				8-84	43	4053079	1-29	2
	1-47	12	4046872			4049173	8-68	31	4053746	7-21	1
4045049	11-	2	4046873				8-72	31		8-43	1
	129		4046874			4049213	8-79	4		8-47	1
	11-	2	4046887				8-83	7		8-47	1
	130		4046888			4049218	8-79	6	4053747	8-43	1
4045310	1-39	5	4046889				8-84	16		8-43	1
4045313	1-39	10	4046890			4050091	7-35	5		8-47	1
4045328	1-7	1	4046897				8-80	22		8-47	1
4045329	1-7	1	4046898				8-80	32	4053748	7-21	1
4045330	1-7	1	4046899				8-80	35		7-21	1
4045331	1-7	1	4046906				8-84	23	4053749	7-21	1
4045332	1-7	1	4046907				8-84	32		7-21	1
4045333	1-7	1	4046908				8-84	35		8-43	1
4045334	1-7	1	4046964	1-49	26	4050421	8-80	18		8-43	1
4045335	1-7	1		1-49	26	4050817	11-	3		8-47	1
4045336	1-7	1		1-49	26		109			8-47	1
4045337	1-7	1		1-53	5		11-	4	4053752	8-43	1
4045358	1-11	1		1-55	5		111			8-43	1
4045359	1-11	1		1-57	5		11-	3		8-47	1
4045360	1-11	1		1-59	5		113			8-47	1
4045361	1-11	1		1-61	5		11-	3	4053755	8-43	1
4045592	1-42	34	4046965	1-50	28		115			8-43	1
4046207	8-75	2		1-50	28	4051074	8-67	15		8-47	1
4046208	8-75	2		1-53	6		8-71	15		8-47	1
4046210	8-75	2		1-55	6	4051079	7-21	15	4053808	8-51	1
4046213	8-75	2		1-57	6		8-43	11		8-53	1
4046216	8-75	2		1-59	6		8-47	11		8-53	1
4046237	8-75	1		1-61	6	4051290	7-31	3	4053809	8-51	1
4046238	8-75	1	4047114	1-2	1		7-35	3		8-51	1
4046240	8-75	1	4047115	1-2	1		8-80	28		8-53	1
4046243	8-75	1	4047116	1-2	1		8-84	28		8-53	1
4046246	8-75	1	4047236	2-15	4	4051293	7-31	7	4053810	8-51	1
4046267	8-75	2	4047908	2-181	3		7-35	7		8-51	1
4046268	8-75	2	4048508	7-23	8		8-80	50		8-53	1
4046270	8-75	2		8-51	6		8-84	25		8-53	1
4046273	8-75	2		8-53	6	4051460	8-80	14	4053813	8-51	1
4046277	8-75	2	4048778	8-80	36		8-84	14		8-51	1

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	8-53	1	4055634	11-	11		1-55	8		11-	10
	8-53	1		109			1-57	8		115	
4053816	8-51	1		11-	10		1-59	8	4061319	11-	9
	8-51	1		111			1-61	8		109	
	8-53	1		11-	11	4057909	1-53	28		11-	8
	8-53	1		113			1-55	28		111	
4053840	8-57	1		11-	11		1-57	28		11-	9
	8-59	1		115			1-59	28		113	
4053841	8-57	1	4055683	8-79	1		1-61	28		11-	9
	8-57	1		8-83	1	4058016	1-49	10		115	
	8-59	1	4055800	8-79	10		1-53	18	4062940	1-35	1
	8-59	1		8-83	10		1-55	18	4062941	1-35	1
4053842	8-57	1	4056123	8-79	12		1-57	18	4062942	1-35	1
	8-57	1		8-83	12		1-59	18	4062943	1-35	1
	8-59	1	4056124	8-79	13		1-61	18	4062953	9-25	1
	8-59	1		8-83	13	4058427	11-	28		9-27	1
4053845	8-57	1	4056125	8-79	12		117			9-27	1
	8-57	1		8-83	12	4058433	8-87	1	4062955	9-25	1
	8-59	1	4056126	8-79	13	4058434	8-87	1		9-25	1
	8-59	1		8-83	13	4058915	7-31	4		9-27	1
4053848	8-57	1	4056648	11-69	16		7-35	4		9-27	1
	8-57	1	4056718	8-79	5	4058916	7-25	1	4062956	9-25	1
	8-59	1		8-84	15	4058926	8-84	46		9-25	1
4054061	7-23	1	4056907	2-98	16	4058930	7-31	12		9-27	1
	7-23	1		2-127	8		7-35	12		9-27	1
4054063	7-23	1		2-142	20	4058935	7-31	13	4063703	11-	7
	7-23	1		2-142	21		7-35	13		117	
4054064	7-23	1		2-145	17	4059174	1-53	4	4063717	11-	23
	7-23	1		2-146	18		1-55	4		117	
4054558	7-25	12	4056908	2-97	16		1-57	4	4064560	8-40	19
	8-61	22	4057313	8-68	23		1-59	4		9-50	28
4054944	7-23	8		8-72	23		1-61	4		9-54	28
	8-51	6	4057338	1-53	2	4059830	7-31	15	4064605	7-27	
	8-53	6	4057339	1-55	2		7-35	15	4064607	7-27	
4054945	7-23	8	4057340	1-57	2	4059843	8-68		4064608	7-27	
	8-51	6	4057341	1-59	2		8-72		4064634	7-27	
	8-53	6	4057342	1-61	2	4060492	11-37	11	4064636	7-27	
4055072	8-68	26	4057346	1-53	2		11-39	11	4064637	7-27	
	8-72	26	4057347	1-55	2		11-41	11	4065167	8-61	15
4055424	11-	1	4057348	1-57	2		11-42	7	4065168	8-61	13
	105		4057349	1-59	2	4060493	11-37	11	4065172	7-39	1
4055429	8-87	1	4057350	1-61	2		11-39	11	4065186	11-91	1
4055464	11-	1	4057487	1-53	27		11-41	11	4065199	7-39	1
	105			1-55	27		11-42	7	4065213	11-91	1
4055505	8-76	14		1-57	27	4061309	8-79	7	4067017	11-49	1
4055506	8-76	14		1-59	27		8-84	17		11-51	1
4055582	8-61	9		1-61	27	4061318	11-	10		11-53	1
	8-67	9	4057611	8-68	24		109			11-55	1
	8-71	9		8-72	24		11-	7		11-57	1
4055608	8-79	8	4057777	8-80	40		111			11-61	1
	8-83	8		8-84	49		11-	10	4068226	6-45	7
			4057839	1-53	8		113			6-49	7

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	6-57	3	4073542			4083440	5-2	1	4090871	11-	1
	6-59	3	4073549			4083678	1-72	1		106	
	6-65	20	4073550			4083679	1-72	1	4090876	11-	1
4068227	6-45	7	4073551			4083680	1-72	1		106	
	6-49	7	4074725	2-17	4	4083686	1-72	1	4090982	11-	1
	6-57	3	4074728	2-17	7	4083687	1-72	1		119	
	6-59	3	4077668	2-41	2	4083688	1-72	1	4090984	11-	1
	6-65	20	4077669	2-41	2	4083870	1-72	1		119	
4068229	6-45	4	4077670	2-41	2	4083874	1-72	1	4090987	11-	2
	6-51		4077672	2-41	4	4083876	1-72	1		119	
4068230	6-45	4	4077673	2-41	4	4083878	1-72	1	4090988	11-	2
	6-51		4077676	2-41	4	4083881	1-72	1		119	
4068565	6-23	4	4077677	2-41	9	4083883	1-72	1	4093654	8-80	49
	6-25	4	4077678	2-41	8	4083888	1-73		4093656	7-31	19
4069407	8-68	34	4077679	2-41	10	4083889	1-73		4093657	7-31	18
	8-72	34	4077688	2-41	4	4084441	11-	27	4093714	11-	
4069955	6-57	10	4077689	2-41	4		117			119	
	6-59	10	4077690	2-41	4	4084719	8-81	60	4093740	11-	
	6-65	18	4077692	2-41	2		8-84	52		119	
4069957	6-57	1	4077693	2-41	2	4084720	8-81	59	4096855	1-39	8
	6-59	1	4077694	2-41	2		8-84	51	4096860	1-39	5
	6-61		4077697	2-41	4	4084721	8-81	59	4096861	1-39	10
	6-63		4077698	2-41	4	4084722	8-81	60	4096918	11-	3
4069958	6-57	11	4077699	2-41	4	4084990	11-	3		129	
	6-59	11	4077701	2-41	2		117		4097258	11-	3
4071541	4-11	2	4077702	2-41	2	4084991	11-	10		130	
4071542	4-11	3	4077703	2-41	2		117		4097691	1-39	1
4071543	4-11	4	4081768	8-80	25	4084992	11-	3	4098460	4-9	4
4071544	4-11	5		8-83	6		117		4099255	11-44	3
4071545	4-11	8	4081884	6-55	5	4086521	8-80	42		11-45	3
4071546	4-11	7	4082001	8-81	61	4089420	4-6	4		11-46	3
4071547	4-11	11		8-83	4	4089421	4-10	5		11-47	3
4071548	4-11	10	4082003	8-87	11	4089623	2-45	1	4099380	11-92	1
4071549	4-11	9		11-	1	4090203			4099385	11-92	1
4071613	4-9	2		106		4090204			4099391	11-97	1
4072704	7-21	17	4082004	11-	1	4090205			4099396	11-97	1
	8-43	8		105		4090209			4100310	2-41	14
	8-67	19	4082005	8-87	11	4090210			4101273	11-99	1
4072717	7-21	17		11-	1	4090211			4101577	8-84	42
	8-43	8		106		4090212			4102172	2-73	1
	8-67	19	4082006	11-	1	4090213			4102173	2-73	2
4073525				105		4090214			4102176	2-73	6
4073526			4082846	7-21	16	4090859	11-92	2	4102179	2-73	4
4073527				8-43	12		11-97	2	4103377	2-7	27
4073528				8-47	12		11-99	2	4103816	6-66	7
4073529			4083331	5-9	13		11-	2	4103817	6-66	7
4073530			4083370	1-72	1		106		4104561	8-80	16
4073531			4083371	1-72	1	4090863	11-92	2	4105612	2-98	16
4073532			4083372	1-72	1		11-97	2		2-127	8
4073533			4083373	1-72	1		11-	2	4114105	2-22	1
4073540			4083374	1-72	1		106		4116399	11-92	7
4073541			4083375	1-72	1					11-97	7

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	11-99	6	4166221	6-49	11	4600435	6-3	32	4604566	11-13	9
	11-	7		6-59	9		6-7	29		11-27	7
	106		4166222	6-59		4600585	2-5	1	4604683	11-13	2
4116469	11-92	7	4166223	6-49	4		2-75			11-19	2
	11-97	6		6-53			2-79			11-19	3
	11-97	7	4166224	6-49	4	4600586	2-5	1		11-27	2
	11-	6		6-53			2-105		4605337	2-65	15
	106		4166225	6-59	8		2-109			2-69	15
4119241	1-67	1		6-63		4601386	1-5	8	4605393	6-3	3
4119246	1-67	1	4166227	6-59	8		1-7	8		6-7	3
4120282	2-22	8		6-63			1-9	8	4605895	11-67	6
4120649	8-80	18	4180406	2-65	12		1-11	8	4605967	1-42	33
	8-84	18		2-69	12		1-13	10	4605968	1-42	33
4122875	7-35	19		6-33	17	4601702	6-30	54	4606305	11-35	17
4122876	7-35	18		6-37	17		6-34	54		11-49	9
	8-84	44	4184156	8-47	8		6-37	32		11-51	9
4124366	11-49	1		8-71	19	4601819	11-69	10		11-53	9
	11-51	1	4184157	8-47	8	4601859	6-30	57		11-55	9
	11-53	1		8-71	19		6-33	16		11-57	9
	11-55	1	4184300	2-19	5	4602052	2-51	2		11-59	9
	11-57	1		2-21	2		2-55	2		11-61	9
	11-59	1		2-22	2		2-59	13		11-63	9
	11-61	1	4188920	9-44	29		11-81	3	4606509	6-45	
	11-63	1	4188921	9-44	29	4602870	1-13	2	4606510	6-45	
4132001	6-45	10	4600046	6-11	2		1-15	2	4606511	6-45	
	6-51	14	4600047	6-11	1	4603376	1-19		4606512	6-45	
	6-57	9	4600048	6-11	10	4603384	1-23		4606513	6-45	
	6-61	13	4600049	6-11	9	4603385	1-23		4606514	6-45	
4133804	11-	9	4600050	6-11	14	4603439	2-65	6	4606515	6-45	
	117		4600129	5-15	11		2-69	6	4606516	6-45	
4138658	6-57	12	4600150	6-30	55	4603492	1-31	14	4607331	1-19	
	6-59	12		6-34	53		1-33	22		1-21	
4139003	9-54	35		6-38	53	4603493	1-31	16	4607465	6-7	15
4139004	9-54	34	4600243	2-76	18		1-33	24	4608393	2-61	2
4139422	11-	20		2-76	20	4603761	11-67	6		2-182	
	117			2-76	21	4603762	11-67	6	4608524	8-39	1
4139423	11-	21		2-105	5	4603822	10-12	3	4608525	8-39	1
	117			2-105	6		10-15	4		8-39	1
4142048	5-3	1	4600244	2-79	13	4603823	6-29	17	4608526	8-39	1
4142049	5-2	1		2-79	14		6-33	15		8-39	1
4143194	9-54	32		2-109	13	4603825	6-33	2	4608529	8-39	1
4145044	11-	22		2-109	14	4603826	6-33	3		8-39	1
	117		4600402	6-9	12	4603827	6-33	3	4608532	8-39	1
4149837	5-13	1	4600403	6-9	11	4604015	2-191			8-39	1
4154954	3-5	17	4600404	6-9	12		11-67		4608559	8-40	40
4162014	3-5	19	4600405	6-9	11	4604542	6-33	15		8-40	40
4162064	3-6		4600406	6-3	3	4604553	2-102	24	4608560	8-40	40
	3-9			6-7	3		2-132	24		8-40	40
4166220	6-49	10	4600407	6-9	13	4604564	11-13	10	4608561	8-40	40
	6-53	14	4600408	6-9	14		11-27	8		8-40	40
	6-59	9	4600409	6-9	13	4604565	11-13	3	4608564	8-40	40
	6-63	13	4600410	6-9	14		11-27	3		8-40	40

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
4608567	8-40	40		11-			11-25	9	4616687	11-35	3
	8-40	40		103			11-27	26	4616775	2-51	27
4609161	2-11	16		11-		4613404	11-21	7		2-55	23
	2-51	31		105			11-25	7		2-59	21
	2-55	25		11-	7		11-28	28		2-141	
	2-59	25		109		4613405	11-21	6	4616884	2-59	21
4609465	8-40	21		11-	11		11-25	8		2-155	
4609749	2-15	1		111			11-27	27	4617533	2-59	14
	2-15	16		11-	7	4613901	8-40	21		2-165	
4609750	2-15	1		113		4614161	2-15	14	4617800	8-87	
	2-15	16		11-	7		2-17	17	4617961	8-75	
	2-15	16		115			2-21		4617962	8-75	
4609751	2-15	8		11-		4614162	2-15	14	4617964	8-75	
	2-17	9		117			2-17	17	4617967	8-75	
4609752	2-11	9	4611913	11-	6		2-21		4617970	8-75	
4610411	11-	1		109		4614700	2-51	27	4618056	8-75	
	111			11-	6		2-55	23	4618057	8-75	
4610521	2-11	20		113			2-59	21	4618059	8-75	
	2-194			11-	6		2-149		4618062	8-75	
4610522	2-11	20		115		4615152	2-15	1	4618066	8-75	
	2-192		4612127	11-	2		2-15	1	4618438	1-21	6
4610727	11-	2		121			2-15	16	4619223	2-29	2
	120			11-	2	4615811	1-21	8	4619560	4-4	6
4610729	11-	2		122		4615813	1-21	1		4-11	
	120		4612128	11-	1	4615847	7-27	4	4619561	4-2	6
4611114	1-45	19		121			8-63	4		4-9	
	1-47	19		11-	1	4615848	7-27	4	4619594	11-	2
4611313	2-55	30		122			8-63	4		109	
	2-163		4612129	11-	2	4615883	8-63			11-	2
4611363	11-89	6		121		4615884	8-63			115	
	11-91	6		11-	2	4615886	8-63		4619595	11-	1
	11-95	6		122		4615890	8-63			109	
	11-	6	4612130	11-	1	4615904	8-63			11-	1
	103			121		4615905	8-63			115	
	11-	3		11-	1	4615906	8-63		4620151	7-25	7
	105			122		4615909	8-63			8-61	11
4611878	11-91		4613398	11-21	4	4615912	8-63		4620152	7-25	8
	11-			11-25	10	4615969	1-21	9		8-61	12
	103			11-27	25	4616167	8-63		4621582	11-92	
	11-		4613399	11-21	5	4616324	11-25	9	4621586	11-92	
	105			11-25	9		11-27	26	4621590	11-97	
	11-	7		11-27	26	4616325	11-25	7	4621594	11-47	1
	109		4613400	11-21	7		11-28	28	4621630	8-87	
	11-	11		11-25	7	4616326	11-25	8	4621634	11-	
	111			11-28	28		11-27	27		105	
	11-	7	4613401	11-21	6	4616420	11-25	10	4621640	11-	
	113			11-25	8		11-27	25		105	
	11-	7		11-27	27	4616426	11-	1	4622150	8-80	17
	115		4613402	11-21	4		120			8-84	21
	11-			11-25	10	4616427	11-	1	4622266	11-	6
	117			11-27	25		120			109	
4611881	11-91		4613403	11-21	5	4616686	11-35	2			

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	11-	6		8-47		4623990	11-	1	4624197	8-81	58
	113			8-51			125			8-81	58
	11-	6		8-53		4623991	11-	2		8-85	58
	115			8-57			125			8-85	58
4623041	8-43			8-59		4624015	6-9	12	4624200	8-81	58
	8-47			8-67		4624016	6-9	12		8-81	58
	8-51			8-71		4624115	8-81	54		8-85	58
	8-53		4623063	8-43		4624116	8-81	54		8-85	58
	8-57			8-47			8-81	54	4624203	8-81	58
	8-59			8-51		4624117	8-81	54		8-81	58
	8-67			8-53			8-81	54		8-85	58
	8-71			8-57		4624120	8-81	54		8-85	58
4623042	8-43			8-59			8-81	54	4624501	11-39	7
	8-47			8-67		4624123	8-81	54		11-42	5
	8-51			8-71			8-81	54		11-46	1
	8-53		4623066	8-43		4624135	8-81	56	4624502	11-39	9
	8-57			8-47		4624136	8-81	56		11-42	6
	8-59			8-51			8-81	56		11-46	2
	8-67			8-53		4624137	8-81	56	4624503	11-39	8
	8-71			8-57			8-81	56		11-42	5
4623043	8-43			8-59		4624140	8-81	56		11-46	1
	8-47			8-67			8-81	56	4624504	11-39	10
	8-51			8-71		4624143	8-81	56		11-42	6
	8-53		4623069	8-43			8-81	56		11-46	2
	8-57			8-47		4624155	8-81	57	4624524	11-39	3
	8-59			8-51			8-81	57		11-42	2
	8-67			8-53		4624156	8-81	57	4624525	11-39	1
	8-71			8-57			8-81	57		11-42	1
4623046	8-43			8-59		4624157	8-81	57	4624526	11-39	4
	8-47			8-67			8-81	57		11-42	2
	8-51			8-71		4624160	8-81	57	4624527	11-39	2
	8-53		4623434	8-87			8-81	57		11-42	1
	8-57		4623435	8-87		4624163	8-81	57	4624665	9-25	
	8-59		4623613	8-67	4		8-81	57		9-29	
	8-67			8-71	4	4624175	8-81	55		9-39	
4623049	8-43		4623614	8-67	4		8-81	55	4624666	9-27	
	8-47			8-71	4	4624176	8-81	55		9-31	
	8-51		4623615	8-67	4		8-81	55		9-43	
	8-53			8-71	4	4624177	8-81	55	4624669	9-25	
	8-57		4623618	8-67	4		8-81	55		9-29	
	8-59			8-71	4	4624180	8-81	55		9-39	
	8-67		4623621	8-67	4		8-81	55	4624670	9-27	
	8-71			8-71	4	4624183	8-81	55		9-31	
4623061	8-43		4623973	7-28			8-81	55		9-43	
	8-47			8-64		4624195	8-81	58	4624671	9-25	
	8-51		4623974	7-28			8-81	58		9-29	
	8-53			8-64			8-85	58		9-39	
	8-57		4623988	11-	1		8-85	58	4624672	9-27	
	8-59			125		4624196	8-81	58		9-31	
	8-67		4623989	11-	2		8-81	58		9-43	
	8-71			125			8-85	58	4624723	9-25	
4623062	8-43						8-85	58		9-29	

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	9-39			2-177			7-23			11-	11
4624724	9-27		4626042	2-47	4	4627974	7-21			106	
	9-31			2-51	24		7-23		4632430	11-92	12
	9-43			2-59	19	4627976	7-21			11-97	12
4624727	9-25			2-171			7-23			11-99	12
	9-29		4626043	2-49		4627977	7-21			11-	12
	9-39			2-55	34		7-23			106	
4624728	9-27			2-172		4628134	7-31	1	4633837	11-74	2
	9-31		4626238	11-57	11		7-31	1	4633850	11-	1
	9-43		4626239	11-57	12	4628136	7-31	1		113	
4624729	9-25		4626472	11-49	11		7-31	1	4633851	11-	2
	9-29			11-53	11	4628137	7-31	1		113	
	9-39			11-55	11		7-31	1	4633852	11-	1
4624730	9-27			11-61	11	4628179	11-37	5		113	
	9-31		4626473	11-49	12		11-41	5	4633853	11-	2
	9-43			11-53	12	4628180	11-37	6		113	
4624871	11-47	2		11-55	12		11-41	6	4633862	11-74	2
4624927	6-11	1		11-61	12	4628181	11-37	1	4633877	11-97	4
	6-11	2	4626474	11-61	15		11-41	1		11-	5
4624928	6-11	10	4626475	11-61	16	4628182	11-37	2		106	
4624929	6-11	9	4626478	11-49	8		11-41	2	4633879	11-97	4
4624931	6-11	17		11-51	8	4628183	11-37	9		11-	5
4624975	2-7	1		11-53	8		11-41	9		106	
	2-111			11-55	8		11-44	2	4634252	2-7	1
	2-115			11-57	8	4628184	11-37	10		2-123	
	2-119			11-59	8		11-41	10		2-127	
4624976	2-7	1		11-61	8		11-44	1		2-131	
	2-81			11-63	8	4628185	11-37	7	4634253	2-7	1
	2-85		4626480	11-78	2		11-41	7		2-93	
	2-89		4626625	11-	1	4628186	11-37	8		2-97	
4625269	2-47	4		124			11-41	8		2-101	
	2-51	24	4626626	11-92	4	4628268	11-53	16	4634486	11-92	6
	2-59	19		11-	2	4628269	11-53	15	4634523	11-97	
	2-176			124		4628430	11-51	11	4634553	11-99	4
4625307	7-27		4626629	11-	3	4628431	11-51	12	4634600	11-92	3
4625309	7-27			111		4628563	2-17	1		11-97	3
4625310	7-27		4626630	11-	2		2-17	18		11-99	3
4625338	7-27			111			2-17	18		11-	3
4625340	7-27		4626756	11-	2	4630407	11-78	7		106	
4625341	7-27			111		4631491	11-92	8		11-	
4625432	2-59	14	4626757	11-	3		11-97	8		119	
	2-167			111			11-99	8	4634602	11-92	3
4625433	2-51	26	4627258	2-17	1		11-	8		11-97	3
	2-55	30		2-17	18		106			11-	3
	2-59	14	4627629	2-17	1	4631896	11-			106	
	2-169			2-17	1		106			11-	
4625585	7-39			2-17	18	4631900	11-			119	
4625589	11-91		4627955	7-21			106		4634604	11-44	2
4625593	7-39			7-23		4632428	11-92	11	4634605	11-44	1
4625597	11-91		4627957	7-21			11-97	11	4634608	11-99	
4626041	2-49			7-23			11-99	11	4634957	4-2	9
	2-55	34	4627958	7-21						4-4	9

NUMERICAL INDEX (continued)

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
	4-15		4636858	7-35	1		8-85	56	4647554	6-59	
4634959	4-2	9		7-35	1	4636994	8-85	57	4647555	6-59	
	4-4	9	4636860	7-35	1	4636995	8-85	57	4647556	6-59	
	4-15			7-35	1		8-85	57	4648996	6-49	
4635372	2-7	22	4636861	7-35	1	4636996	8-85	57	4648997	6-49	
	2-138			7-35	1		8-85	57	4648998	6-49	
4635373	2-7	22	4636895	8-84	54	4636999	8-85	57	4648999	6-49	
	2-134		4636896	8-84	54		8-85	57	4649000	6-49	
4635380	11-45	2		8-84	54	4637002	8-85	57	4649001	6-49	
4635381	11-45	1	4636897	8-84	54		8-85	57	4649002	6-49	
4635407	11-45	2		8-84	54	4637734	8-67	4	4649003	6-49	
4635408	11-45	1	4636900	8-84	54		8-71	4	4650904	11-63	15
4635538	2-73	5		8-84	54	4637735	8-67	4	4650905	11-59	11
4635539	2-73	5	4636903	8-84	54		8-71	4	4651750	11-	4
4635558	2-73	7		8-84	54	4637736	8-67	4		106	
4635566	6-66	7	4636928	8-84	55		8-71	4	4651751	11-	4
4635567	6-66	7	4636929	8-84	55	4637739	8-67	4		106	
4635582	6-11	14		8-84	55		8-71	4	4651752	11-92	5
4636019	2-181		4636930	8-84	55	4637742	8-67	4	4651753	11-97	5
	6-33	20		8-84	55		8-71	4	4651754	11-97	5
	6-37	20	4636933	8-84	55	4637916	6-23	7	4653150	6-9	12
4636154	2-51	27		8-84	55	4638711	2-52	35	4653153	6-9	12
	2-55	23	4636936	8-84	55		2-55	35	4653647	11-49	11
	2-59	21		8-84	55		2-59	32		11-53	11
	2-153		4636961	8-85	56		2-59	32		11-55	11
4636158	2-51	27	4636962	8-85	56		11-73	15		11-63	11
	2-55	23		8-85	56		11-73	15	4653648	11-49	12
	2-59	21	4636963	8-85	56	4639527	6-11	10		11-53	12
	2-145			8-85	56	4639528	6-11	9		11-55	12
4636318	1-21		4636966	8-85	56	4640194	2-22			11-63	12
4636375	11-			8-85	56	4640227	11-99	5	4655560	2-7	26
	127		4636969	8-85	56	4647553	6-59			2-7	26
4636470	11-										
	126										

