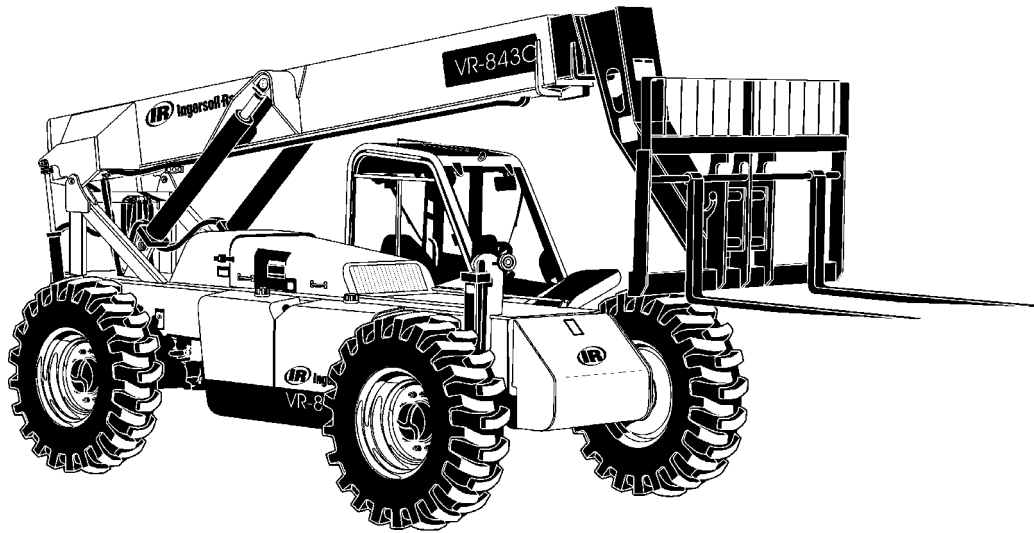




Parts Manual
VR-843C
Forklift



052263AA

HOW TO USE THIS MANUAL

This Parts Manual applies to all [VR-843C Forklifts](#).

When the Comm. # is not Known - Use the Word Index:

- Ingersoll-Rand's Word Index will make this item easy to locate. The Word Index is found in the very back of the book. The items listed are in alphabetical order and may be repeated several times depending on their functional descriptions.
- Let's assume you need to replace the [AIR CLEANER PRIMARY FILTER ELEMENT](#).

Use any of the functional words in the item description to locate the desired item. Example: The first listing for the Air Cleaner Primary Filter Element in the **Word Index** is: [Air Cleaner Primary Filter Element](#). The index shows the component will be found on page [C-43](#) that is the **Parts List** page number for the [Air Cleaner Installation](#).

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- The item is also listed as:

[Air Cleaner Primary Filter Element
Element, Air Cleaner Primary Filter
Filter Element, Air Cleaner Primary
Primary Filter Element, Air Cleaner](#)

Using the Parts Identification Pages:

- The **PARTS IDENTIFICATION PAGES** consist of the **PARTS ILLUSTRATION** (even numbered pages) and the **PARTS LIST** (odd numbered pages).
- The **Parts Illustration** shows the assembly with its component parts identified by **Item Numbers**.
- On the **Parts List**, the components are listed in **Item Number** order as found in the **ITEM** column. Other information provided by the **Parts List** is the **Comm. Number** which will be required to order Genuine Ingersoll-Rand Replacement Parts, a **functional description**, the **quantity** required to assemble one complete assembly, and any additional **notes/ dimensions** required to help place your parts order.
- **For the example:** The [Air Cleaner Primary Filter Element](#) is listed under the [Air Cleaner \(Item 5\)](#), Comm. Number [54484092](#), Quantity of [1](#).

When the Comm. # is not known - Use the Table of Contents:

- Turn to the **TABLE OF CONTENTS** pages in the front of this manual. These pages show the major systems of the machine divided into **FUNCTIONAL GROUPS** (identified by capital letters).
- Find the **Functional Group** that best describes the area of the machine you are interested in. For example: [Air Cleaner Installation](#)
- See the sample **Table of Contents** shown below:

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Listed under the **Functional Group** of [Engine](#) are **SECTIONS** (identified by numbers that describe major repairable components of that group. Find the listing that refers to the [Air Cleaner Installation](#).

- Since the [Air Cleaner Primary Filter Element](#) is what needs to be replaced, refer to the parts listing for the [Air Cleaner Installation](#). The Air Cleaner used on your machine is found in **Functional Group C**, this makes up the first part of the page number. Turn to that section of the parts manual and find the parts listing on page **C-43** for the Air Cleaner ([54524418](#)).

When the Comm. # is Known - Use the Numerical Index:

- If you already know the **Comm. Number** (part number) for the item required, a **NUMERICAL INDEX** is provided in the back of the manual to assist you. Look up the **Comm. Number** desired and the **Numerical Index** will show the **Functional Group, Section, and Page Number** where the item can be found.

For our [Air Cleaner Primary Filter Element](#) Example: The **Comm. Number** [54484092](#) is found in the **Numerical Index**, it shows that component will be found on pages **C-43** that is the Parts List page for the [Air Cleaner Installation](#).

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STANDARD ABBREVIATIONS

AC	Alternating Current	Ref	Reference
A/R	As Required	RH	Right Hand
ARC	Authorized Rebuilt Component	RHSS	Round Head SelfTapping Screw
Assy	Assembly	ROPS	Roll-Over Protection System
BHCS	Button Head Cap Screw	RPM	Revolutions Per Minute
Cu Yd	Cubic Yard	SAE	Society of Automotive Engineers
Cyl	Cylinder	Sec	Section
DC	Direct Current	SFH	Slotted Fillister Head
Dia	Diameter	SHCS	Socket Head Cap Screw
Eff	Effective	SMV	Slow Moving Vehicle
FHCS	Flat Head Cap Screw	S/N	Serial Number
F-N-R	Forward-Neutral-Reverse	SPST	Single Pole/Single Throw
FOPS	Falling Object Protection System	S.T.	Self-Tapping
F/P	Fork Positioning	Std	Standard
Gr	Grade	Str	Straight
HHCS	Hex Head Cap Screw	Sw S	wivel
HHMS	Hex Head Machine Screw	Tach	Tachometer
HSBHCS	Hex Socket Button Head Cap	Temp	Temperature
Screw		Thd	Thread
ID	Inside Diameter	Thk	Thick
LH	Left Hand	Typ	Typical
M	Metric	UNC	Unified Coarse
MIK	Maintenance Interval Kit	UNF	Unified Fine
mm	Millimeter	Univ	Universal
Nat Asp	Naturally Aspirated	Var	Variable
Neg	Negative	V	Volt
NSS	Not Sold Separately	VPM	Vibrations Per Minute
NSVA	Non Serviceable Assembly	Wgt	Weight
OD	Outside Diameter	w/	With
Pos	Positive	w/o	Without
PSI	Pounds per Square Inch	Wp	Weatherproof
Q/A	Quick-Attach		

Rev01/02/01

*****Always use Ingersoll-Rand Replacement parts!*****

LUBRICANTS, FILTERS AND MANUALS



Lubricants, Filters And Manuals

LUBRICANTS

	1 Qt.	1 Gal.	5 Gal.	55 Gal.
IR All-Season Premium Hydraulic Oil	n/a	n/a	59045179	59045187
IR Multi-Purpose Premium Engine Oil	59022343	59023507	57022327	59022335
IR Premium Limited-Slip Component Lubricant	13248455	13248463	59022418	59022426
IR Premium Multi-Purpose ATF	13248471	13248489	59023572	59023580
IR Synthetic Component Lubricant	13248430	13248448	59877597	59022459
IR Synthetic Plus Component Lubricant	13248414	13248422	59046177	59046165

FILTERS - Effective with S/N 186420

		Quantity
Engine Oil Filter	13284716	1
Fuel Filter	13284708	1
Inline Fuel Filter	58827932	1
Hydraulic Filter Canister	59124677	1

FILTERS - Prior to S/N 186420

		Quantity
Engine Oil Filter	13284716	1
Water Separator/Fuel Filter	13465547	1
Inline Fuel Filter	58827932	1
Hydraulic Filter Canister	59124677	1

MANUALS

Parts Manual	43888866
Operation/Maintenance Manual	13858303
Cummins Engine Operation Manual	13308853
Cummins Engine Parts Manual	13368212
Safety Label Manual	13341466
FIEI Safety Manual	59985069

RECOMMENDED SERVICE PARTS



Recommended Service Parts

<u>Assembly</u>	<u>Description</u>	<u>1000</u> <u>Hrs</u>	<u>2000</u> <u>Hrs</u>	<u>3000</u> <u>Hrs</u>	<u>CPN</u>
Air Cleaner					
	Air Cleaner			1	54524418
	Air Cleaner Primary Filter Element	1	1	1	54484092
	Air Cleaner Secondary Filter Element	1	1	1	54493259
Axle and Wheels					
	Front Drive Shaft Assembly			1	54568522
	Rear Drive Shaft Assembly			1	54479878
	Frame Level Cylinder			1	13224969
	Frame Level Cylinder Locknut			1	56944465
	Rim (Standard)			1	59182097
	Tire (Standard)			1	59158345
	Air Valve (Foamless Wheel & Tire Assemblies)			1	59524447
	Wheel Nut		20		59163758
Boom and Carriage					
	Bearing		4		50268127
	Anchor		2		59455154
	Tilt Compensation Cylinder			1	59221895
	Cylinder Pivot Pin		4		13232244
	Lift Cylinder			1	59221721
	Fork Tilt Cylinder			1	59221770
	Anchor Pin		2		59001891
	Anchor Chain			2	59101170
	Chain Anchor Rod		1		59101048
	Chain Extension		1		59157339
	Anchor Chain Pin		2		59456962
	Base Ring			1	59462895
	Pin			1	59454801
	Crowd Cylinder			1	59282715
	Wear Pad		2		13156799
	Bushing			1	59455204
	Bracket Guide Plate			1	59116459
	Anchor Guide		1		59116467

RECOMMENDED SERVICE PARTS

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<u>Assembly</u>	<u>Description</u>	<u>1000 Hrs</u>	<u>2000 Hrs</u>	<u>3000 Hrs</u>	<u>CPN</u>
	Chain Sheave Guard		2		59135087
	Chain Sheave			1	59169953
	<i>Outer Boom Section</i>				
	Wear Pad		2		13156799
	Wear Pad		2		13156781
	Shim Plate		2		59269134
	Wear Pad		6		59182196
	Block			2	59451641
	Bearing			2	13232277
	Boom Cowling		1		13351135
	<i>Intermediate Boom Section</i>				
	Hose Sheeve			2	13334552
	Block			2	59157099
	Shim Plate		6		59100941
	Wear Pad		2		13156799
	Wear Pad			2	13243639
	Wear Pad		2		59182196
	Finger			1	13183074
	Shim Plate		4		59136804
	<i>Inner Boom Section</i>				
	Wear Pad		2		13156799
	Spacer Plate			2	59116491
	Shim Plate		2		59100941
	Shim Plate		2		59135194
	Shim Plate		2		59136804
	<i>Quick-Attach Carriage</i>				
	Pin		1		13232251
	48" Load Arm			1	58793209
	60" Load Arm			1	58793191
	72" Load Arm			1	58793183
	Plate			2	59451815
	Pin		2		59101758
	Apron Handle		1		13199393
	Quick-Attach Apron			1	13187364
	Rubber Stop Pin			1	13195862
	<i>Truss Boom</i>				
	12' Truss Boom			1	59199513

<u>Assembly</u>	<u>Description</u>	<u>1000 Hrs</u>	<u>2000 Hrs</u>	<u>3000 Hrs</u>	<u>CPN</u>
Electrical					
	Power Relay with Diodes	1	1	1	13316831
	Relay	1	1	1	59436899
	Battery			1	59436931
	Battery Hold Down			1	59181875
	Horn		1		43802339
	Switch		1		59112011
	Fuse, 10 A		1		59325712
	Fuse, 15 A		1		59483339
	Fuse, 20 A		1		59398016
	Diode Assembly			1	59149146
Engine					
	Engine Oil Filter	1	1	1	13284716
	Fuel Filter	1	1	1	13284708
	Inline Fuel Filter	1	1	1	58827932
	Fan Belt		1		13284734
	Starter			1	13284724
	Alternator - Effective with S/N 186420			1	13852256
	Alternator - Prior to S/N 186420			1	13503719
	Transmission Temperature Sender			1	59302554
	Engine Oil Pressure Sender		1		58878000
	Suction Fan		1		59023747
	Engine Coolant Temperature Sender		1		59816322
	Engine Oil Pressure Switch			1	59124578
	Muffler			1	58933623
	Exhaust Clamp			2	59179218
	Tail Pipe			1	13195912
	Radiator Cap	1	1	1	13281571
	Upper Radiator Hose			1	13267067
	Lower Radiator Hose			1	13307863
Frame					
	Cable			1	59436741
	Fuel Level Sender		1		59129528
	Fuel Cap		1		59182428

RECOMMENDED SERVICE PARTS

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<u>Assembly</u>	<u>Description</u>	<u>1000 Hrs</u>	<u>2000 Hrs</u>	<u>3000 Hrs</u>	<u>CPN</u>
	Magnetic Plug		1		59144428
	Fuel Tank			1	13258314
Hydraulics					
	Hydraulic Pump			1	54535646
	Hydraulic Filter	1	1	1	59124677
	Steering Control Unit			1	13267596
	Brake Valve			1	59113480
	Steering Selector Valve			1	13163274
	Pressure Switch		1		59124578
	Pressure Reducing Valve		2		13510482
	Crowd and Lift Valve			1	13264635
	<i>Stabilizer</i>				
	Stabilizer Valve			1	13173331
	Stabilizer Cylinder			1	59221812
	Bearing		2		58951674
	Anchor		2		59455154
Instrument Panel					
	Ignition Switch		1		13316849
	Ignition Switch Key	1	1	1	58917261
	Ignition Switch Cover		1		58892902
	Cable			1	59436741
	Fuel Level Gauge		1		59046920
	Voltmeter			1	59044297
	Oil Pressure Gauge		1		59046904
	Transmission Temperature Gauge			1	59113761
	Water Temperature Gauge			1	59132324
	Hourmeter		1		59165001
	Parking Brake Switch			1	54666094
	Brake Test Switch			1	54666102
	Indicator Light		1		59816447
Operator Compartment					
	Horn Button		1		59159558
	Spinner Kit			1	59199141
	Transmission Shifter		1		59113696
	Level Gauge			1	59181545
	Heater/Blower Assembly			1	13838123

<u>Assembly</u>	<u>Description</u>	<u>1000 Hrs</u>	<u>2000 Hrs</u>	<u>3000 Hrs</u>	<u>CPN</u>
	<i>Open Cab</i>				
	Rear Wiper Arm		1		59072694
	Wiper Blade		1		59194514
	Wiper Motor Kit		1		59194548
	<i>Enclosed Cab</i>				
	Front Window			1	13174081
	Sliding Window			1	59154641
	Rear Wiper Arm		1		59072694
	Wiper Blade		1		59194514
	Wiper Motor Kit		1		59194548
	Seat Assemblies		1		13372602
	Defrost Fan			1	59154757
	Door Strap			1	59142851
	Outside Door Latch			1	59142661
	Inside Latch Handle			1	59154955
	Door Key		1		59155598
Kits					
	VR-843C Decal Kit		1		13341581
	Frame Level Cylinder Seal Kit			1	13248505
	Tilt Compensation Cylinder Seal Kit			1	13421896
	Lift Cylinder Seal Kit			1	13268271
	Fork Tilt Cylinder Seal Kit			1	13281431
	Crowd Cylinder Seal Kit			1	13284104
	Hydraulic Pump Seal Kit		1		59154310
	Brake Valve Seal Kit		1		59154617
	Stabilizer Cylinder Seal Kit			1	13284120
Optional Equipment					
	<i>Wheel and Tire Assemblies</i>				
	Foam Filled Tire			1	54503016
	<i>72" Swing Carriage</i>				
	Hydraulic Cylinder			2	13170147
	Counterbalance Valve			2	58874751
	Seal Kit			1	54728886
	Bearing			1	50275395
	Flow Control Valve			1	13170188
	Cover Plate			2	59583450
	<i>Load Bucket</i>				

<u>Assembly</u>	<u>Description</u>	<u>1000 Hrs</u>	<u>2000 Hrs</u>	<u>3000 Hrs</u>	<u>CPN</u>
	Load Bucket			1	59149484
	<i>Tapered Forks</i>				
	48" Tapered Fork			1	59272583
	60" Tapered Fork			1	59272591
	<i>Scrap Grapple Bucket</i>				
	Cylinder			1	59110932
	Seal Kit			1	59231282
	<i>Block Heater</i>				
	Block Heater			1	59118521
	<i>Worklights</i>				
	Work Lamp		2		43804483
	Cable Seal			3	59854877
	<i>Stop/Turn Signal</i>				
	Brake Light Switch			1	59157792
	<i>Single Function Auxiliary Hydraulics</i>				
	Sheave			2	13334552
	Lift/Crowd Valve			1	13315361

LUBRICANTS

	1 Qt.	1 Gal.	5 Gal.	55 Gal.
IR All-Season Premium Hydraulic Oil	n/a	n/a	59045179	59045187
IR Multi-Purpose Premium Engine Oil	59022343	59023507	57022327	59022335
IR Premium Limited-Slip Component Lubricant	13248455	13248463	59022418	59022426
IR Premium Multi-Purpose ATF	13248471	13248489	59023572	59023580
IR Synthetic Component Lubricant	13248430	13248448	59877597	59022459
IR Synthetic Plus Component Lubricant	13248414	13248422	59046177	59046165

*****Always use Ingersoll-Rand Replacement parts!*****

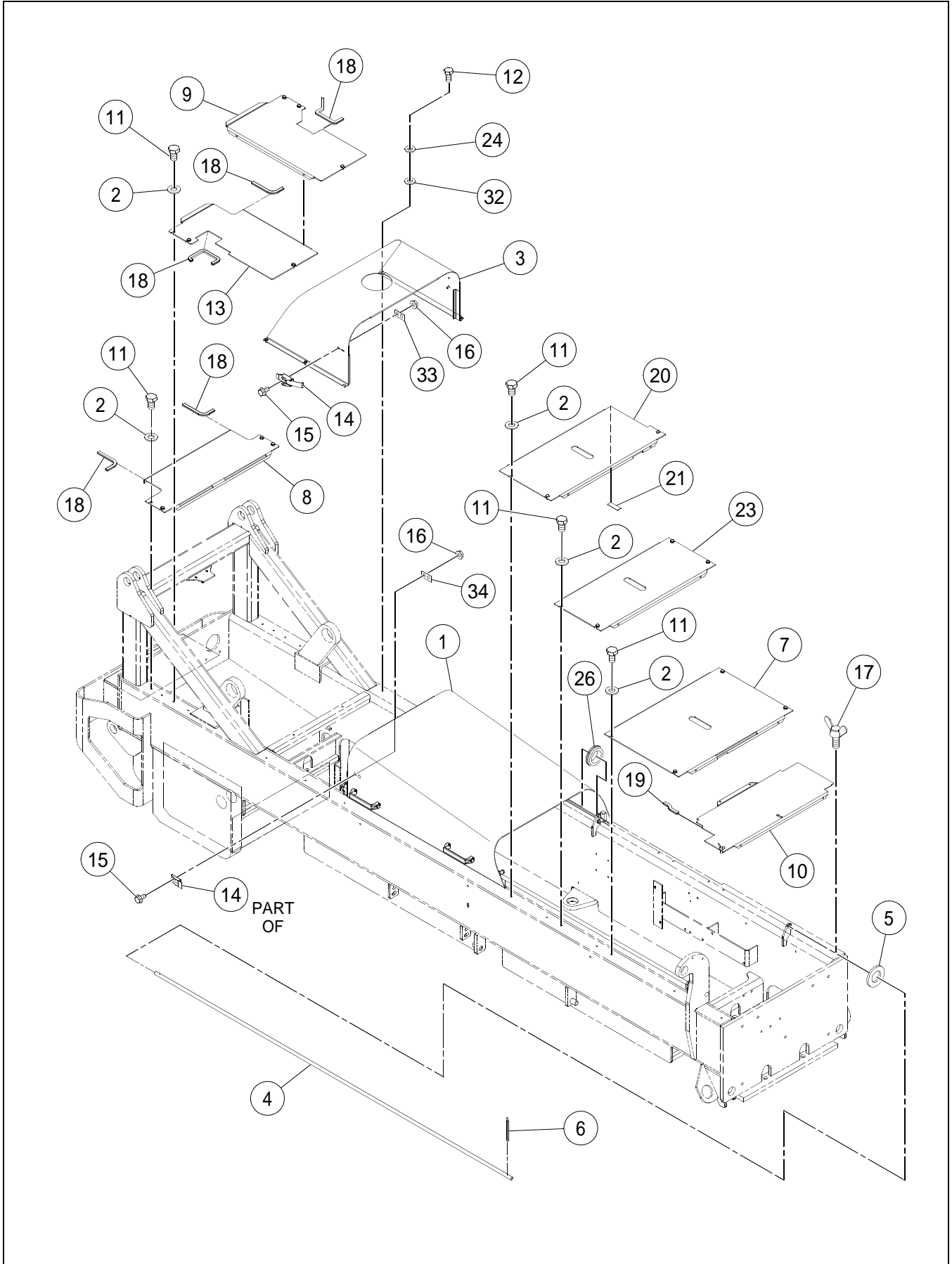


Section A - MAIN FRAME



SHEETMETAL INSTALLATION - SHEET 1 OF 2

Dwg D13315403/00/01



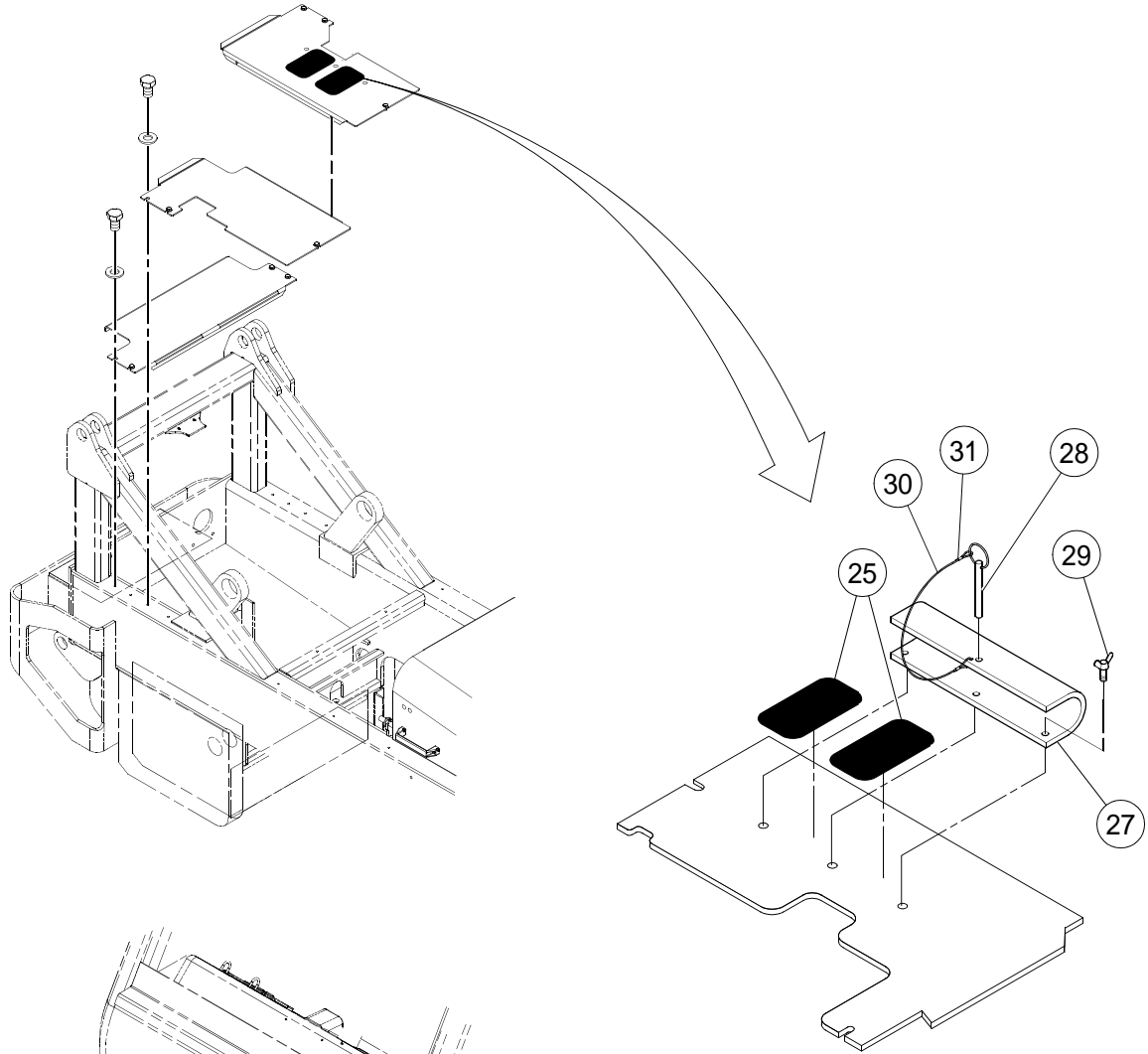
SHEETMETAL INSTALLATION - SHEET 1 OF 2

BOM 13360458, 13315429, 13306089

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
**	13306071	Main Frame	1	
1	NSVA	Engine Cover Assembly	1	See Page A - 6.
2	96741046	Flatwasher, Zinc Plated	19	M10 CI 200
3	13883863	Rear Cover	1	
4	13158332	Slide Bar	2	
5	95922423	Flatwasher, Zinc Plated	4	3/4
6	95923926	Cotter Pin	4	
7	59115469	Front Plate	2	
8	13315437	Rear Deck Plate	1	
9	13375472	Rear Cover Plate, LH (Effective with S/N 175806)	1	
-	13318811	Rear Cover Plate, LH (Prior to S/N 175806)	1	
10	13318803	Front Deck Plate	1	
11	96701479	HHCS, Fully Threaded, Zinc Plated	19	M10 x 1.5 x 16 CI 8.8
12	96703863	HHCS	6	M20 x 2.5 x 150 CI 10.9
13	13375480	Rear Cover Plate, RH (Effective with S/N 175806)	1	
-	13166178	Rear Cover Plate, RH (Prior to S/N 175806)	1	
14	54496328	Draw Latch	1	
15	96704564	HHCS, Fully Threaded, Zinc Plated	4	M6 x 1.0 x 20 CI 8.8
16	96704598	Hex Locknut, Zinc Plated	4	M6 CI 8
17	59136226	Wingscrew	2	M10 x 25
18	59182485	Trim	4	
19	58783242	Trim	1	
20	59180133	Front Deck Plate	1	
21	59180281	Wear Pad	1	
23	59168377	Front Deck Plate	1	
24	59887182	Washer	6	Hardened
26	59212746	Grommet	2	
32	54601299	Reinforced Rubber Washer	6	
33	59270363	Latch Pad Plate	1	
34	59270330	Latch Keeper Backing Plate	1	

SHEETMETAL INSTALLATION - SHEET 2 OF 2

Dwg D13315403/00/02



VIEW ROTATED 180 DEGREES

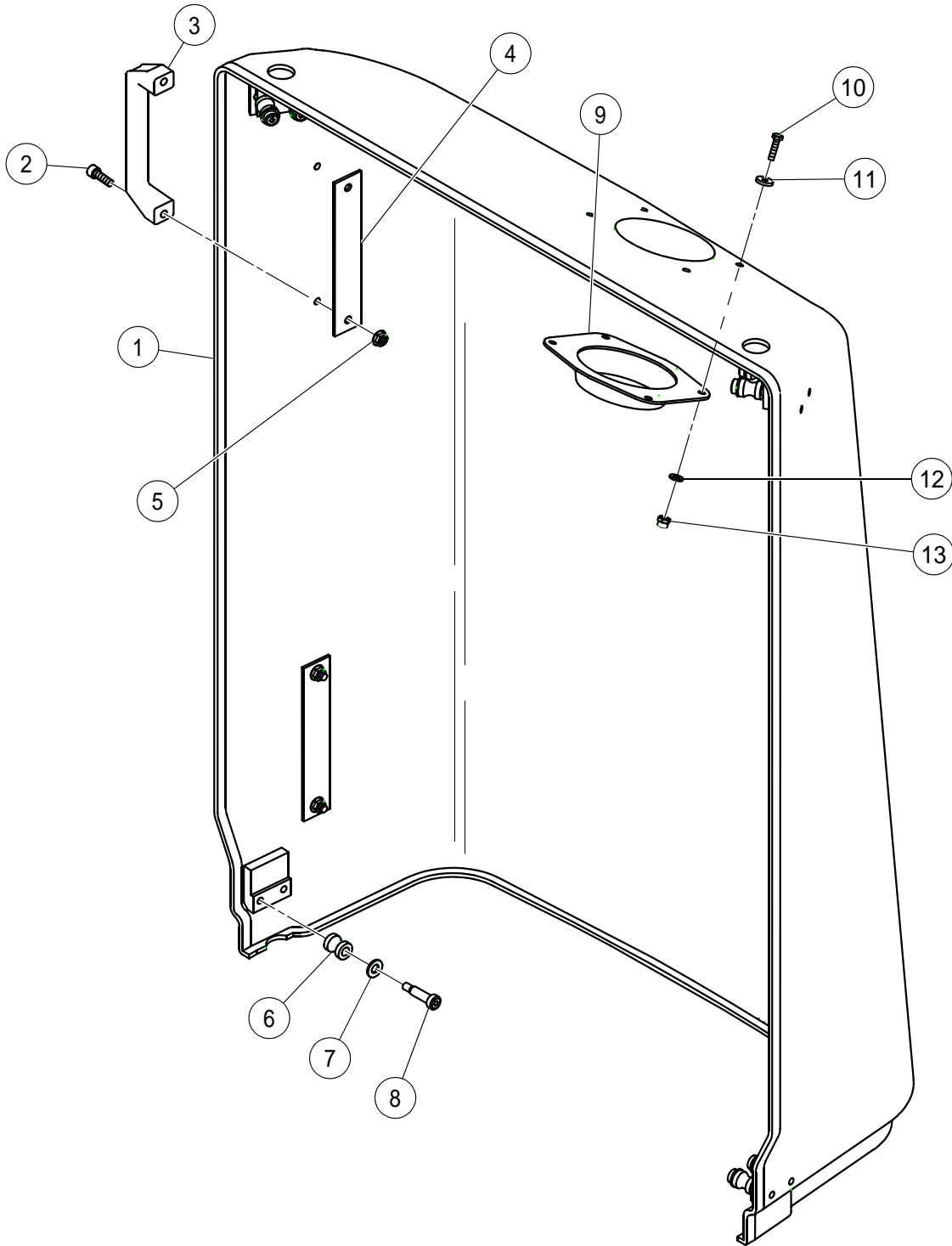
SHEETMETAL INSTALLATION - SHEET 2 OF 2

BOM 13360458, 13315429, 13306089

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
22	13335237	Fender	1	
25	13258249	Wear Pad	2	
27	59268003	Boom Stop Tube	1	
28	59987537	Detent Pin	1	
29	59136226	Wingscrew	2	M10 x 25
30	59436741	Cable	1	
31	59436758	Ferrule	2	

ENGINE COVER ASSEMBLY

Dwg D13334800/00



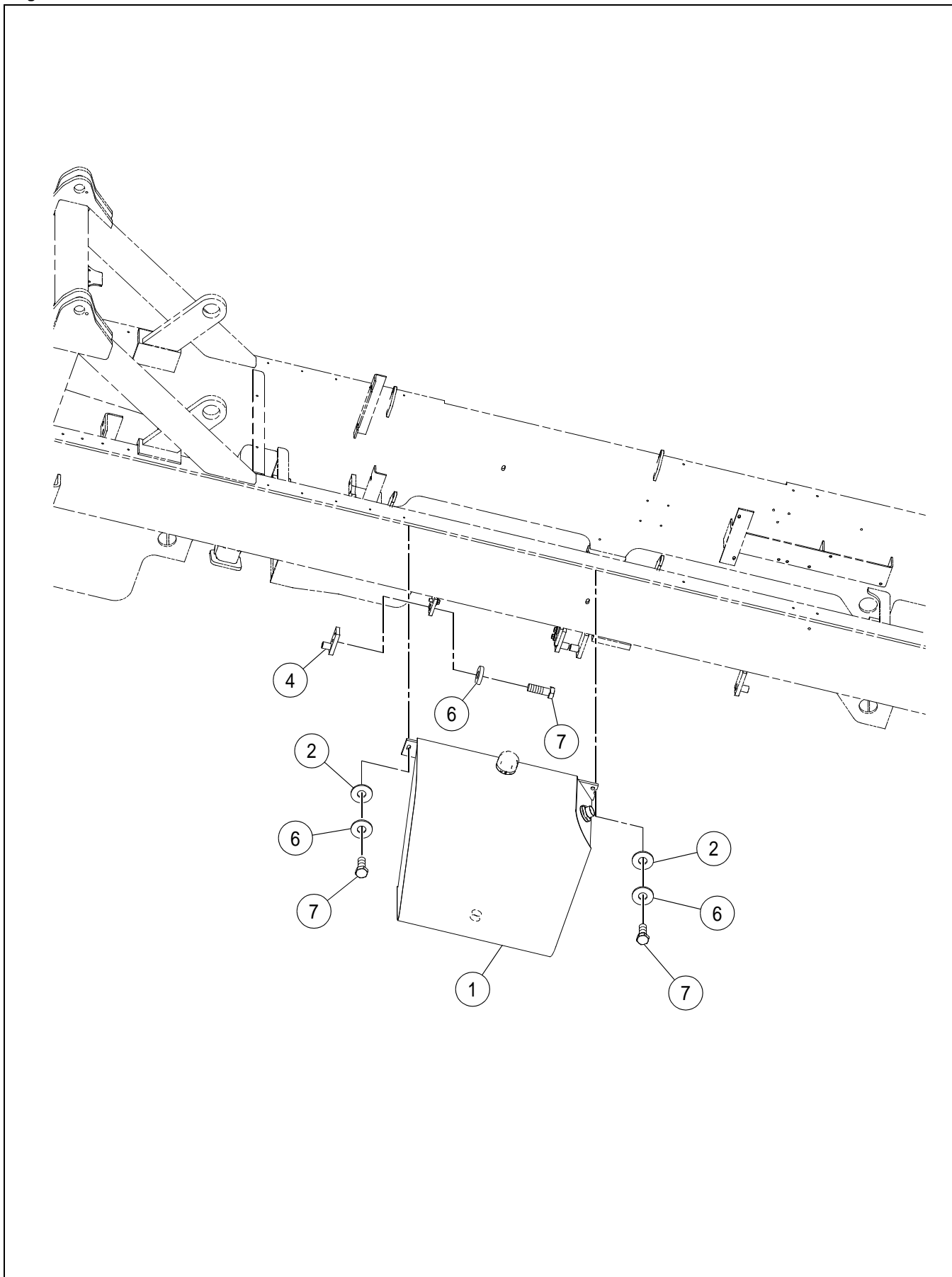
ENGINE COVER ASSEMBLY

BOM 13883855

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13883848	Engine Cover	1	
2	96728712	Hex Socket Shoulder Screw, Zinc Plated	4	M8 x 1.25 x 25 CI 8.8
3	59187799	Pull Handle	2	
4	59270322	Pull Handle Backing Plate	2	
5	96704416	Locknut, Zinc Plated	4	M8 x 1.25 CI 8
6	59116277	Roller Slide Cover	8	
7	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
8	96728357	Hex Socket Shoulder Screw	8	
9	13334826	Air Inlet	1	
10	96701461	HHCS, Fully Threaded	4	M6 x 25 CI 8.8
11	13334974	Reinforced Rubber Washer	4	
12	96741053	Flatwasher, Zinc Plated	4	M6 CI 200
13	96704598	Hex Locknut, Zinc Plated	4	M6 CI 8

FUEL TANK INSTALLATION

Dwg D59202473/02



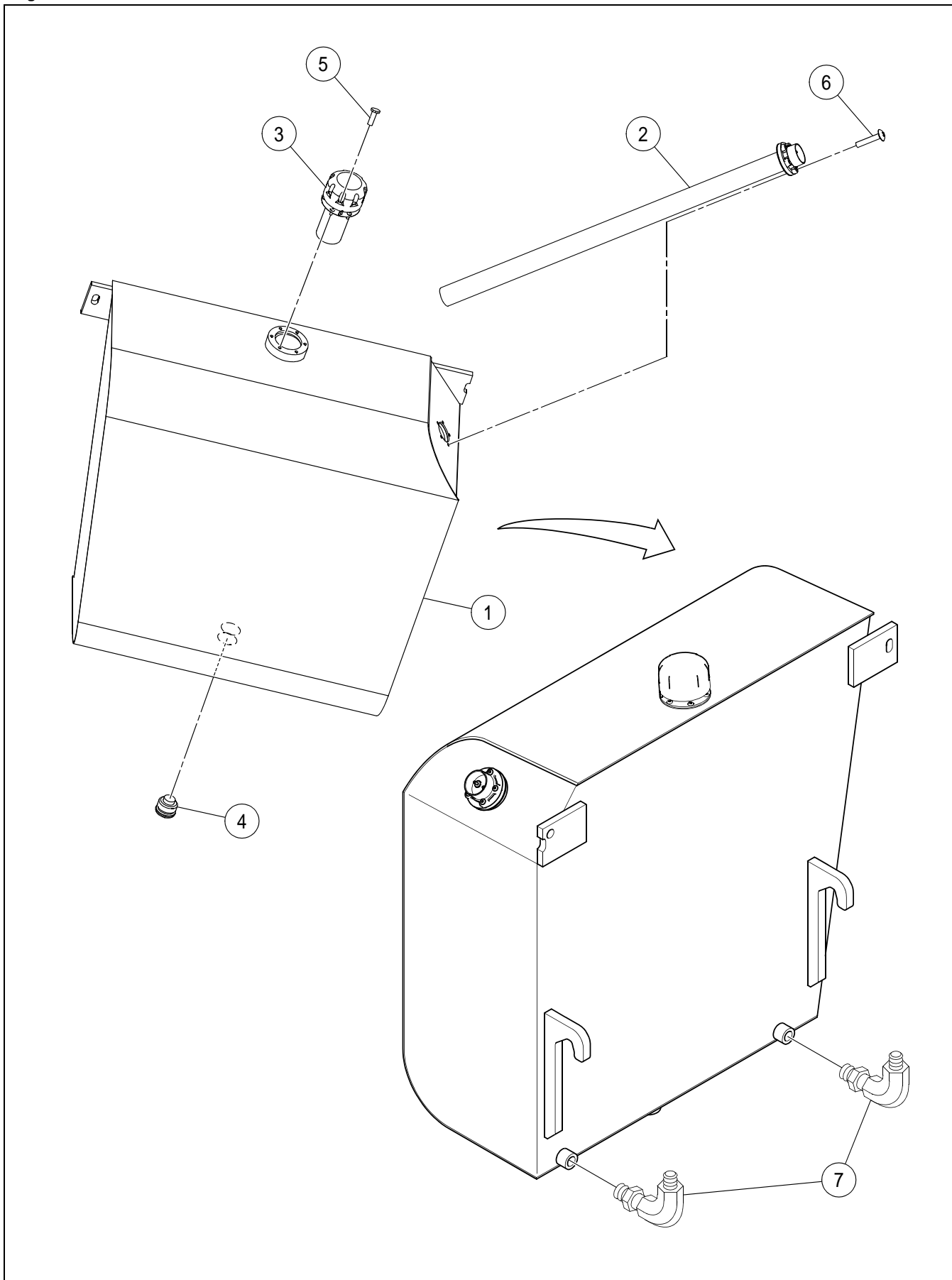
FUEL TANK INSTALLATION

BOM 59202473

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Fuel Tank Assembly	1	See Page A - 10.
2	95922258	Flatwasher, Zinc Plated	2	1/2
4	59181479	Tank Mounting Bracket	2	
6	96712237	Flatwasher, Zinc Plated	6	M12 Hardened CI 10
7	96703111	HHCS, Fully Threaded, Zinc Plated	6	M12 x 1.75 x 35 CI 10.9

FUEL TANK ASSEMBLY

Dwg 43801836/00



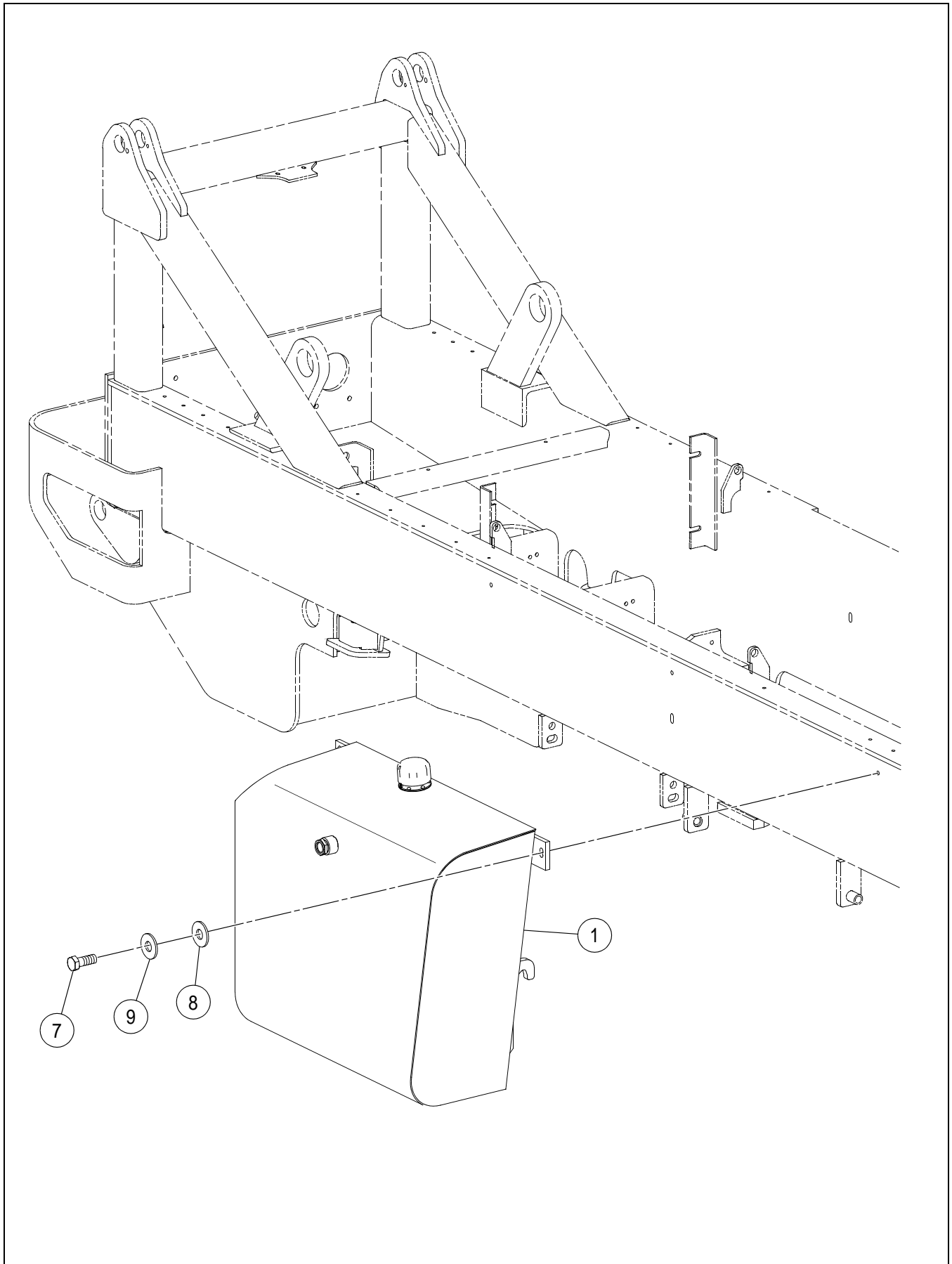
FUEL TANK ASSEMBLY

BOM 43801836

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13258314	Fuel Tank	1	
2	59129528	Fuel Level Sender	1	
3	59182428	Fuel Cap	1	
4	59144428	Magnetic Plug	1	
5	95972295	HSBHCS	6	#10 x 32UNF x 0.5
6	95992590	HSBHCS	5	#10 x 32UNF x 1.0
7	95356853	Adapter	2	

HYDRAULIC TANK INSTALLATION

Dwg D59126508/04



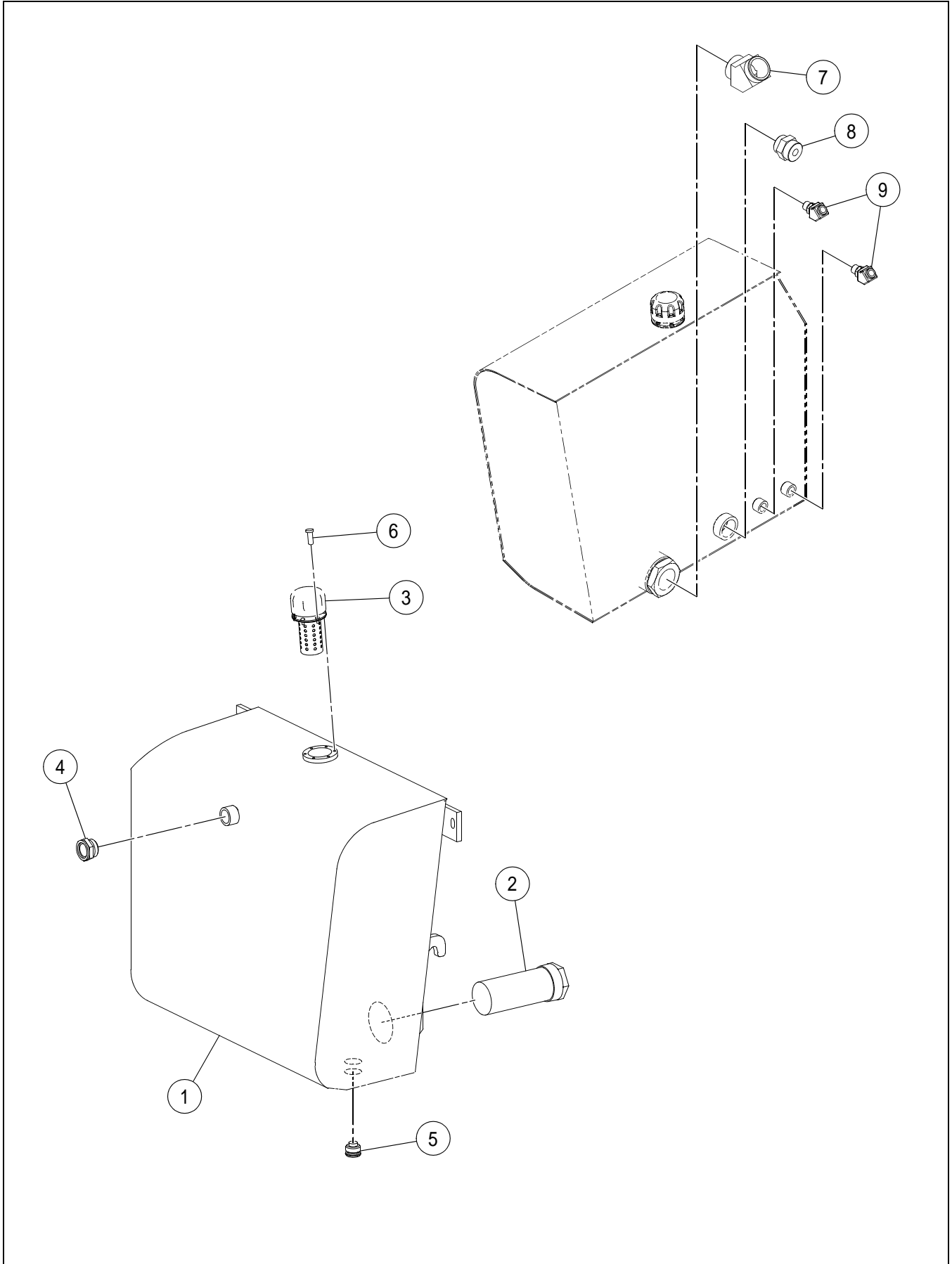
HYDRAULIC TANK INSTALLATION

BOM 59126508

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Hydraulic Tank Assembly	1	See Page A - 14.
7	96703111	HHCS, Fully Threaded, Zinc Plated	1	M12 x 1.75 x 35 CI 10.9
8	95922258	Flatwasher, Zinc Plated	1	1/2
9	96712237	Flatwasher, Zinc Plated	1	M12 Hardened CI 10

HYDRAULIC TANK ASSEMBLY

Dwg 43801844/00



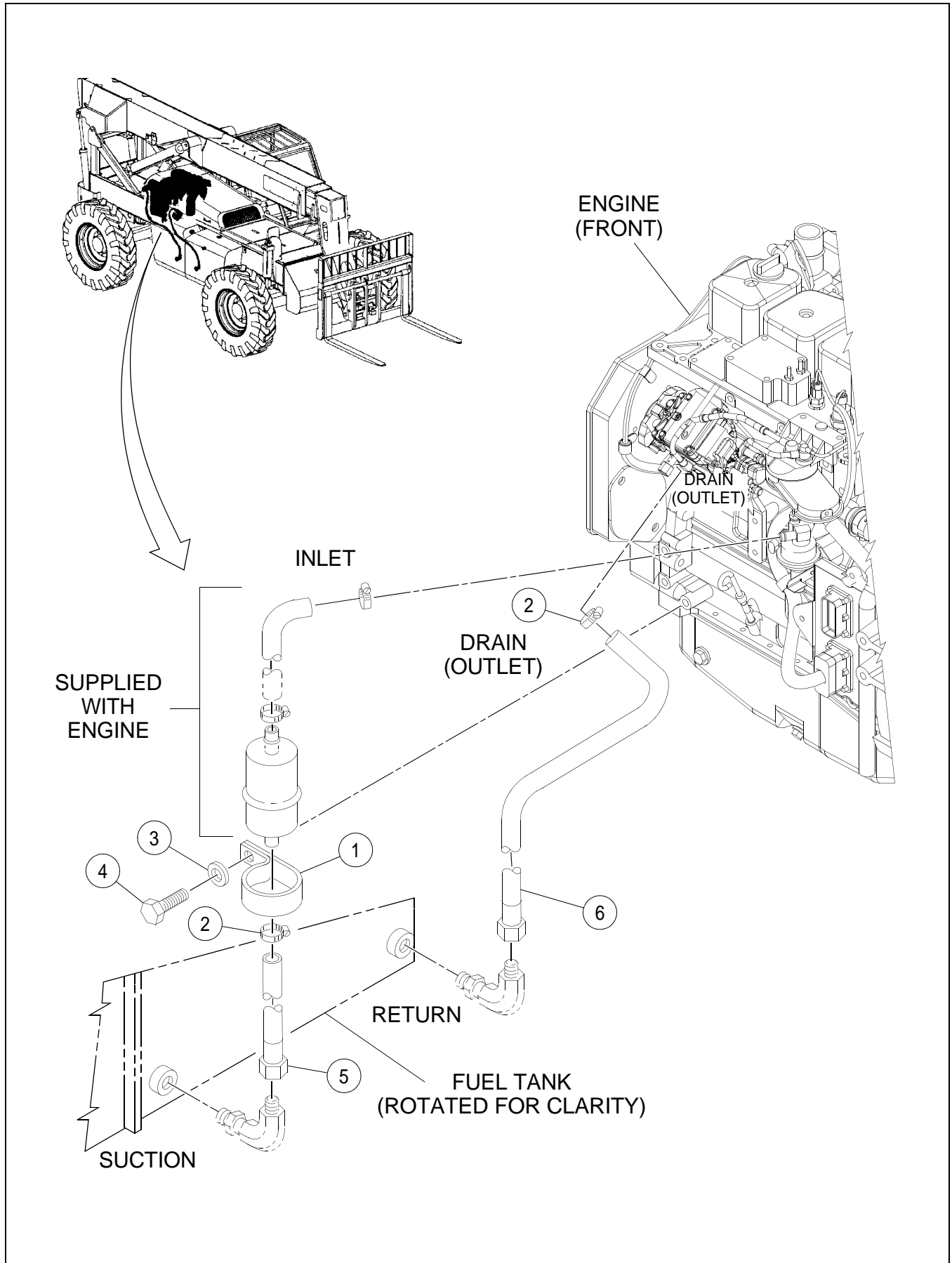
HYDRAULIC TANK ASSEMBLY

BOM 43801844

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13258439	Hydraulic Tank	1	
2	59180307	Hydraulic Tank Strainer	1	
3	59182410	Hydraulic Tank Cap	1	
4	58849829	Hydraulic Tank Sight Gauge	1	
5	59144428	Magnetic Plug	1	
6	95972295	HSBHCS	6	#10 x 32UNF x 0.5
7	95660601	Elbow	1	
8	59922690	Adapter	1	
9	59922302	Adapter	2	

FUEL LINES INSTALLATION

Dwg 13259403/02



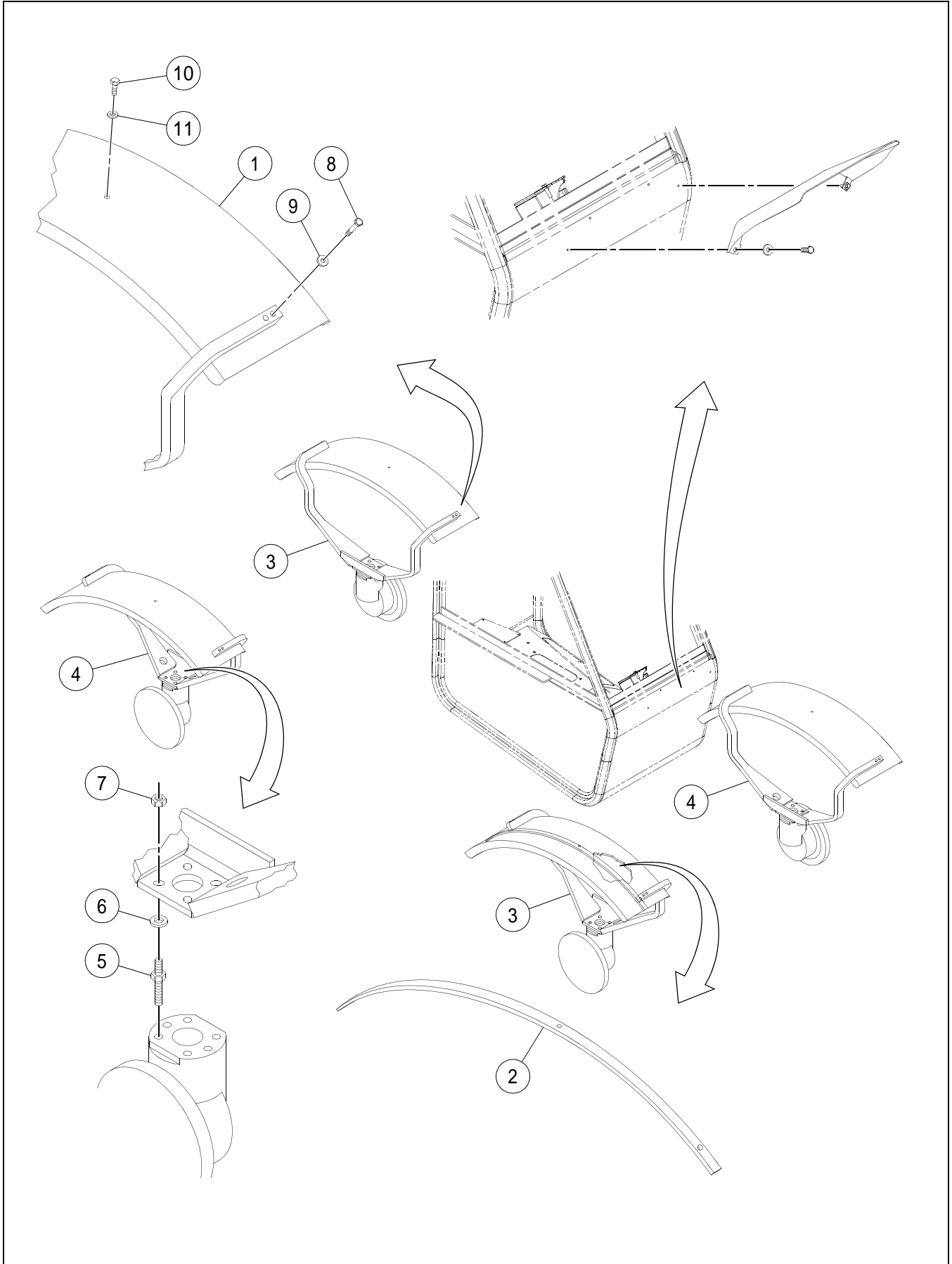
FUEL LINES INSTALLATION

BOM 13259528

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	95378873	Hose Clamp	1	
2	59363259	Hose Clamp	2	
3	96738596	Flatwasher, Zinc Plated	1	M12 Hardened CI 200
4	96701495	HHCS, Fully Threaded, Zinc Plated	1	M12 x 1.75 x 25 CI 8.8
5	59138925	Hose Assembly	1	34.0"
6	59138933	Hose Assembly	1	37.0"

FENDER INSTALLATION

Dwg D13259114/00



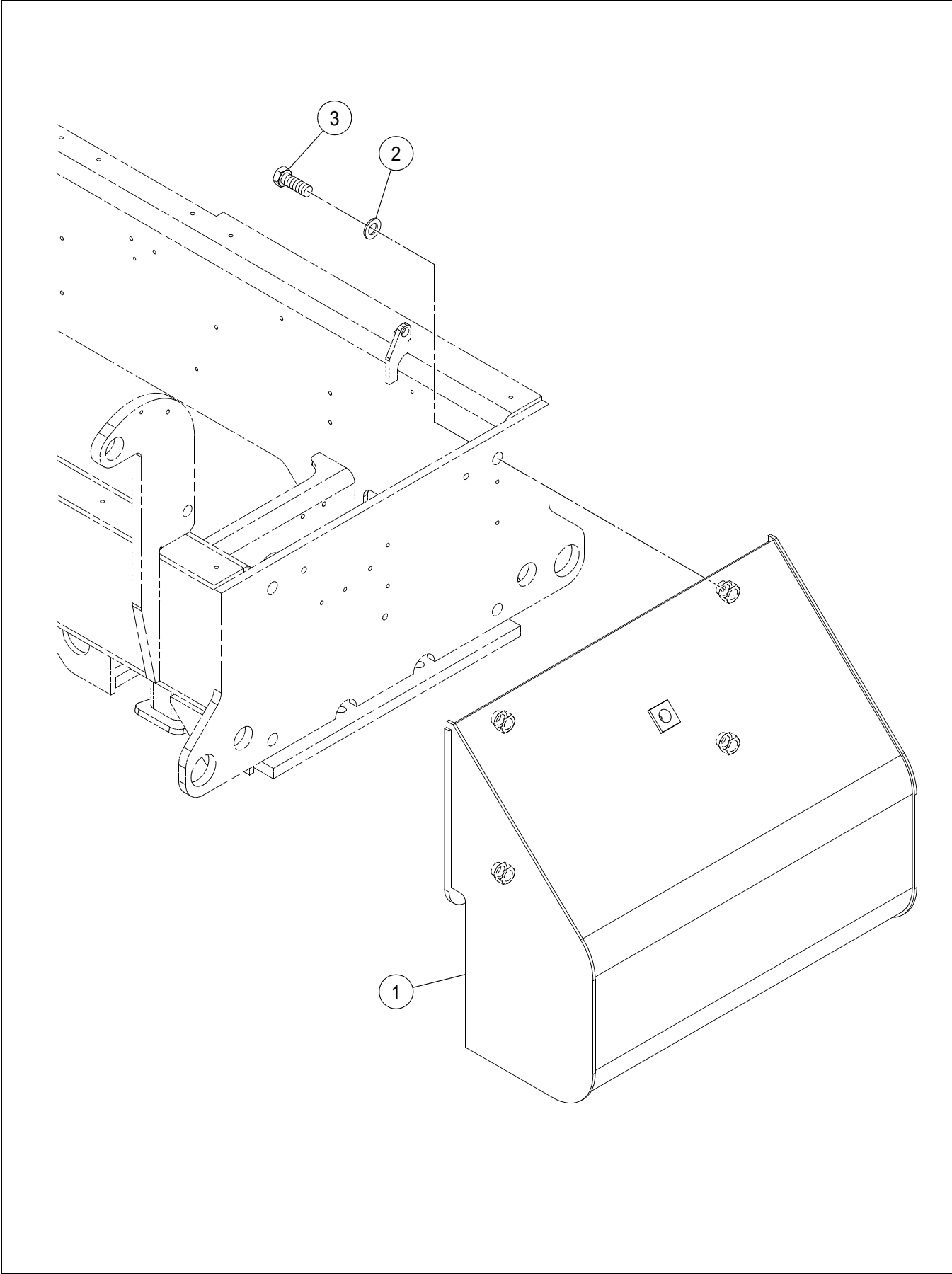
FENDER INSTALLATION

BOM 13259114

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	54714258	Wing	4	
2	13259288	Fender Reinforcement	4	
3	13264767	Fender Support, LH	2	
4	13266606	Fender Support, RH	2	
5	13259270	Axle Stud Pin	16	
6	96738596	Flatwasher, Zinc Plated	16	M12 Hardened CI 200
7	96742986	Hex Nut, Zinc Plated	16	M12 x 1.25 CI 8
8	96704317	HHCS, Zinc Plated	8	M10 x 1.5 x 55 CI 8.8
9	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
10	96702279	HHCS, Fully Threaded, Zinc Plated	8	M10 x 1.5 x 20 CI 8.8
11	50264860	Washer	8	

BALLAST INSTALLATION

Dwg D13167630/00



BALLAST INSTALLATION

BOM 13157607

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13169461	Counterweight Box	1	
2	96738646	Flatwasher, Zinc Plated	4	M24 Hardened CI 200
3	96720008	HHCS, Fully Threaded, Zinc Plated	4	M24 x 3.0 x 65 CI 8.8

*****Always use Ingersoll-Rand Replacement parts!*****

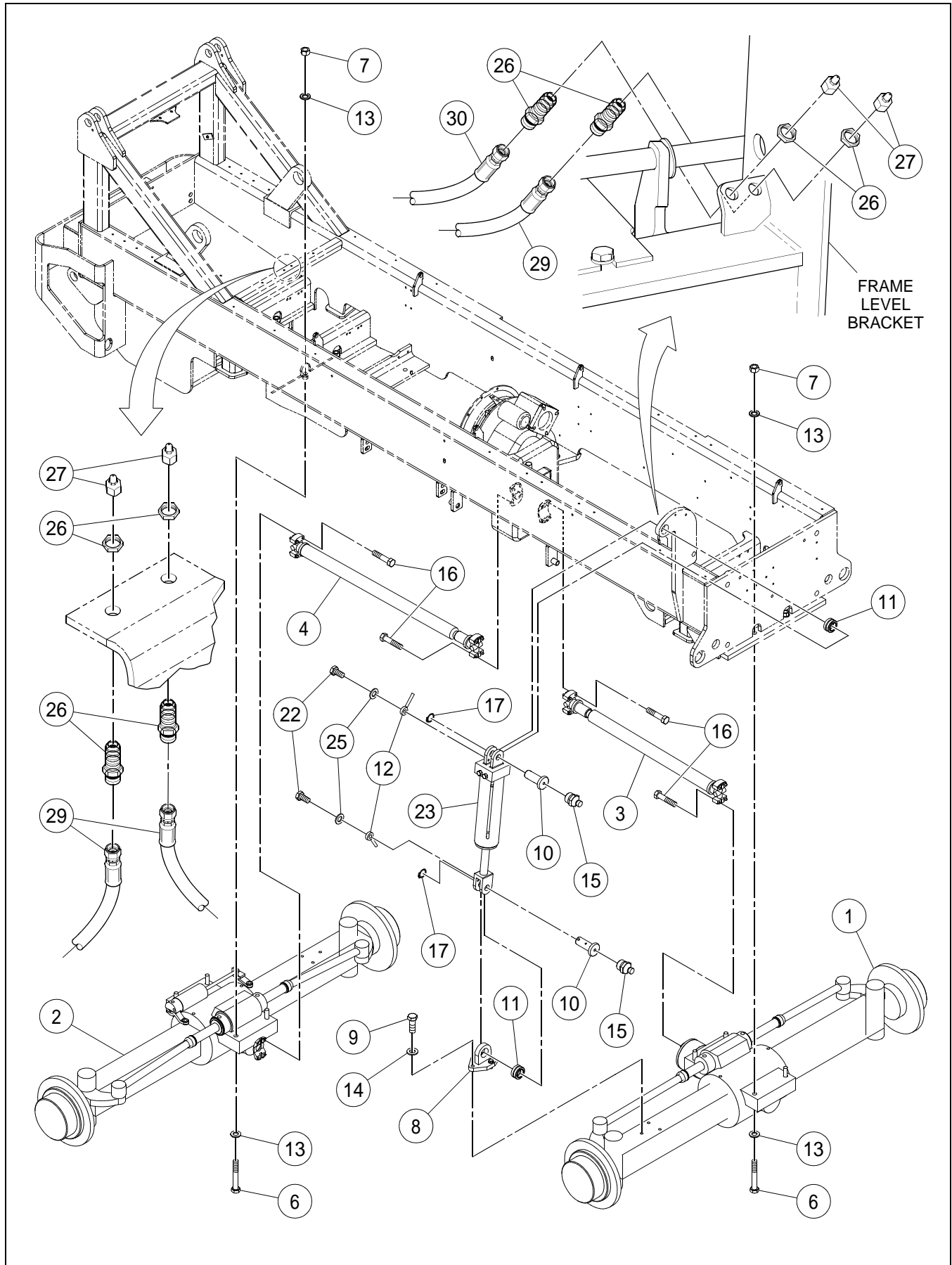


Section B - AXLE



AXLE INSTALLATION - EFFECTIVE WITH S/N 175806 -
SHEET 1 OF 2

Dwg 13360409/01/01



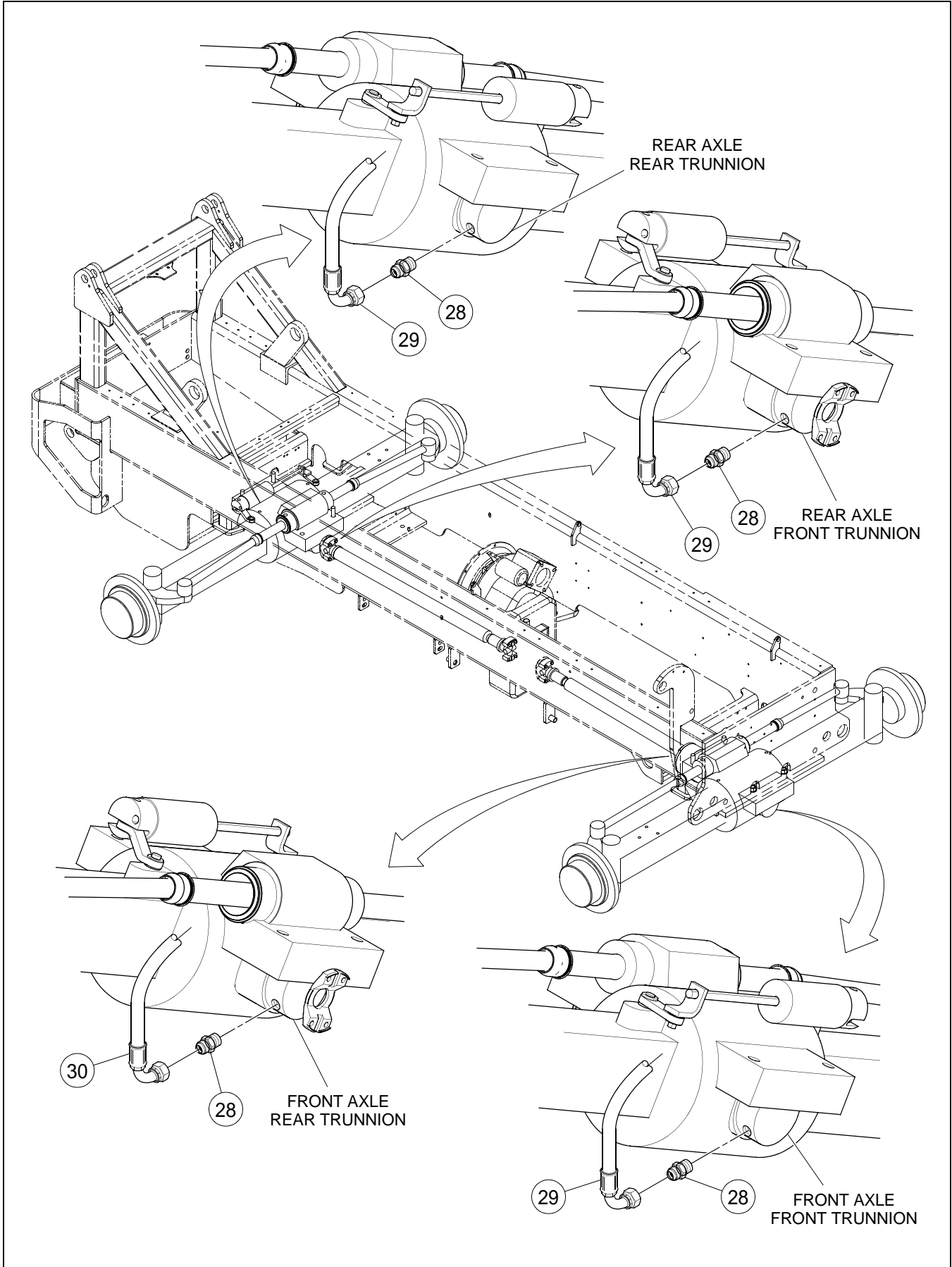
AXLE INSTALLATION - EFFECTIVE WITH S/N 175806 -
SHEET 1 OF 2

BOM 13360417

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13259221	Front Axle	1	See Breakdown B - 8.
2	13337894	Rear Axle	1	See Breakdown B - 16.
3	54568522	Front Drive Shaft Assembly	1	
-	13287420	- Cross and Bearing	2	
4	54479878	Rear Drive Shaft Assembly	1	
-	13287420	- Cross and Bearing	2	
6	96705678	HHCS, Zinc Plated	8	M20 x 2.5 x 130 CI 10.9
7	96703665	Nut, Zinc Plated	8	M20 x 2.5 CI 10
8	59212118	Tilt Pad	1	
9	96705090	HHCS, Fully Threaded, Zinc Plated	3	M14 x 40 CI 10.9
10	59272450	Cylinder Pivot Pin	2	
11	50268127	Bearing	2	
12	59455154	Anchor	2	
13	96701560	Flatwasher, Zinc Plated	16	M20 Hardened
14	96738604	Flatwasher, Zinc Plated	3	M14 Hardened CI 200
15	95201547	Grease Fitting	2	
16	95920815	HHCS, Zinc Plated	16	3/8 x 24 x 1.75 Grd 8
17	95992608	External Retaining Ring	2	
22	96702311	HHCS, Fully Threaded, Zinc Plated	2	M12 x 1.75 x 30 CI 8.8
23	13224969	Frame Level Cylinder	1	
-	59144295	- Check Valve	1	
-	13248505	- Seal Kit	1	
-	56944465	- Locknut	1	
25	96738596	Flatwasher, Zinc Plated	2	M12 Hardened CI 200
26	13036603	Staight Adapter	4	
27	95912648	Grease Fitting	4	
29	13360482	Hose Assembly	3	38.0"
30	13360490	Hose Assembly	1	45.0"

AXLE INSTALLATION - EFFECTIVE WITH S/N 175806 -
SHEET 2 OF 2

Dwg 13360409/01/02



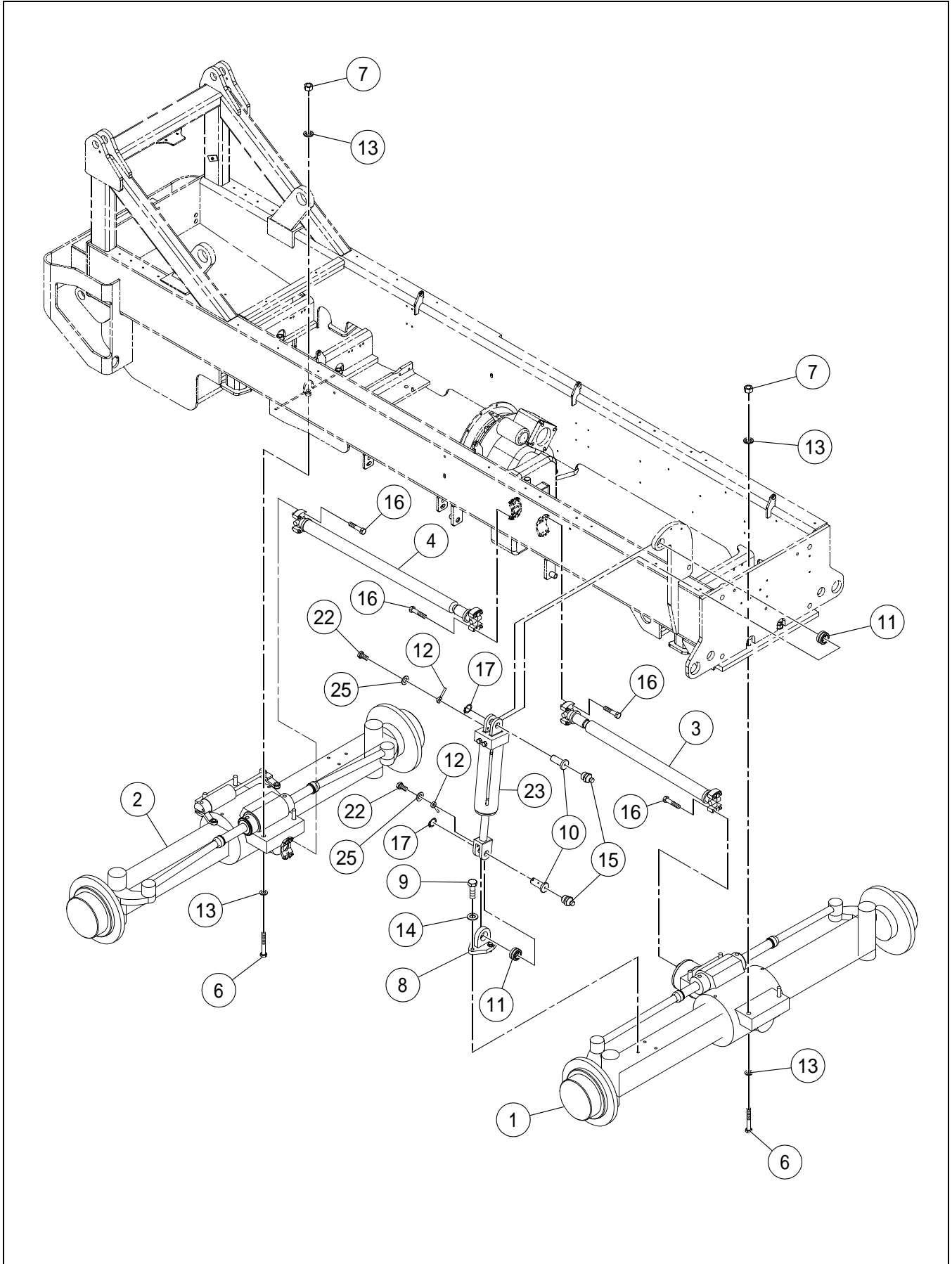
AXLE INSTALLATION - EFFECTIVE WITH S/N 175806 -
SHEET 2 OF 2

BOM 13360417

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
28	95287629	Adapter	4	
29	13360482	Hose Assembly	3	38.0"
30	13360490	Hose Assembly	1	45.0"

AXLE INSTALLATION - PRIOR TO S/N 175806

Dwg D13259536/00



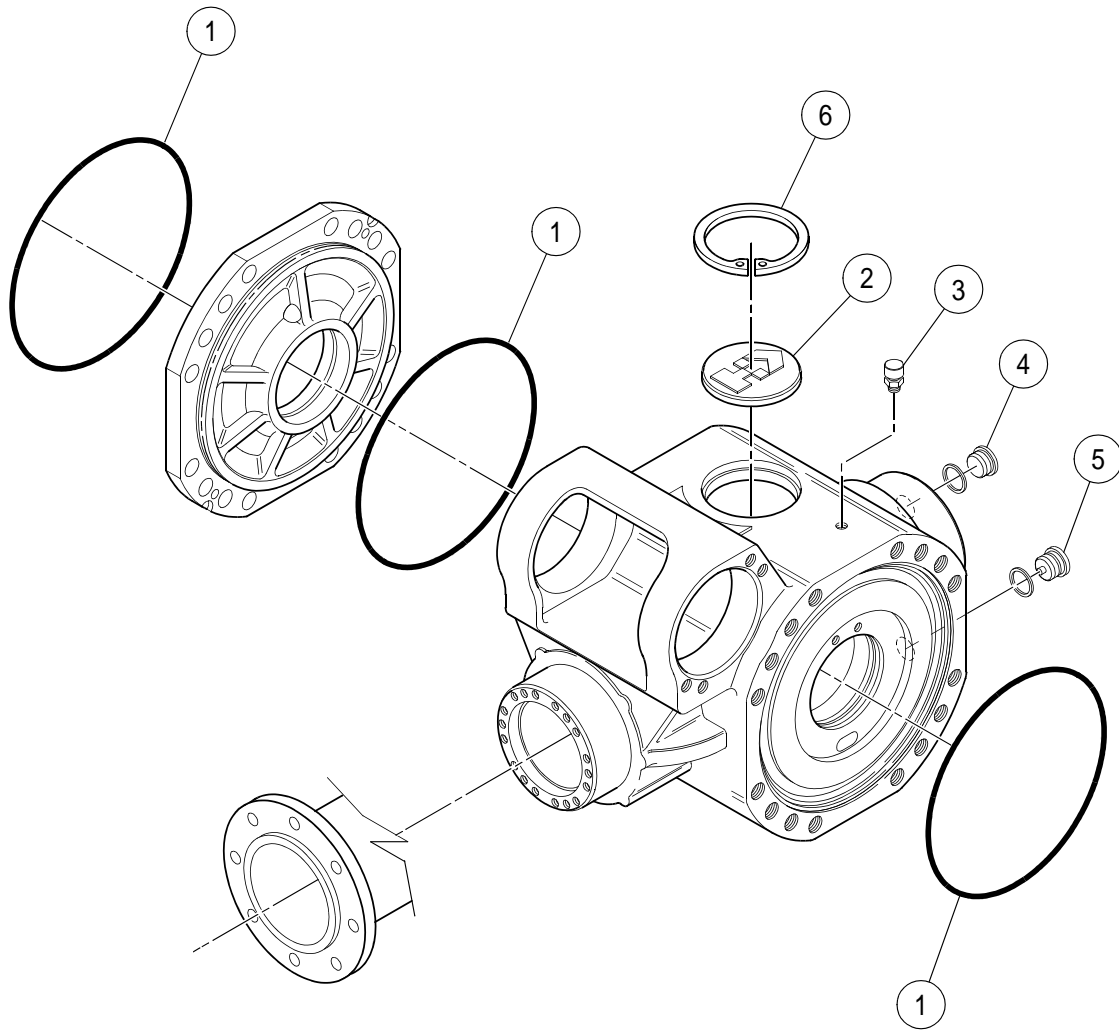
AXLE INSTALLATION - PRIOR TO S/N 175806

BOM 13259536

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13259221	Front Axle	1	See Breakdown B - 8.
2	13337894	Rear Axle	1	See Breakdown B - 16.
3	54568522	Front Drive Shaft Assembly	1	
-	13287420	- Cross and Bearing	2	
4	54479878	Rear Drive Shaft Assembly	1	
-	13287420	- Cross and Bearing	2	
6	96705678	HHCS, Zinc Plated	8	M20 x 2.5 x 130 CI 10.9
7	96703665	Nut, Zinc Plated	8	M20 x 2.5 CI 10
8	59212118	Tilt Pad	1	
9	96705090	HHCS, Fully Threaded, Zinc Plated	3	M14 x 40 CI 10.9
10	59272450	Cylinder Pivot Pin	2	
11	50268127	Bearing	2	
12	59455154	Anchor	2	
13	96701560	Flatwasher, Zinc Plated	16	M20 Hardened
14	96738604	Flatwasher, Zinc Plated	3	M14 Hardened CI 200
15	95201547	Fitting	2	
16	95920815	HHCS, Zinc Plated	16	3/8 x 24 x 1.75 Grd 8
17	95992608	External Retaining Ring	2	
22	96702311	HHCS, Fully Threaded, Zinc Plated	2	M12 x 1.75 x 30 CI 8.8
23	13224969	Frame Level Cylinder	1	
-	54479407	- Valve	1	
-	13248505	- Seal Kit	1	
-	56944465	- Locknut	1	
25	96738596	Flatwasher, Zinc Plated	2	M12 Hardened CI 200

FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
1 OF 4

Dwg 13259221/00/01



FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET

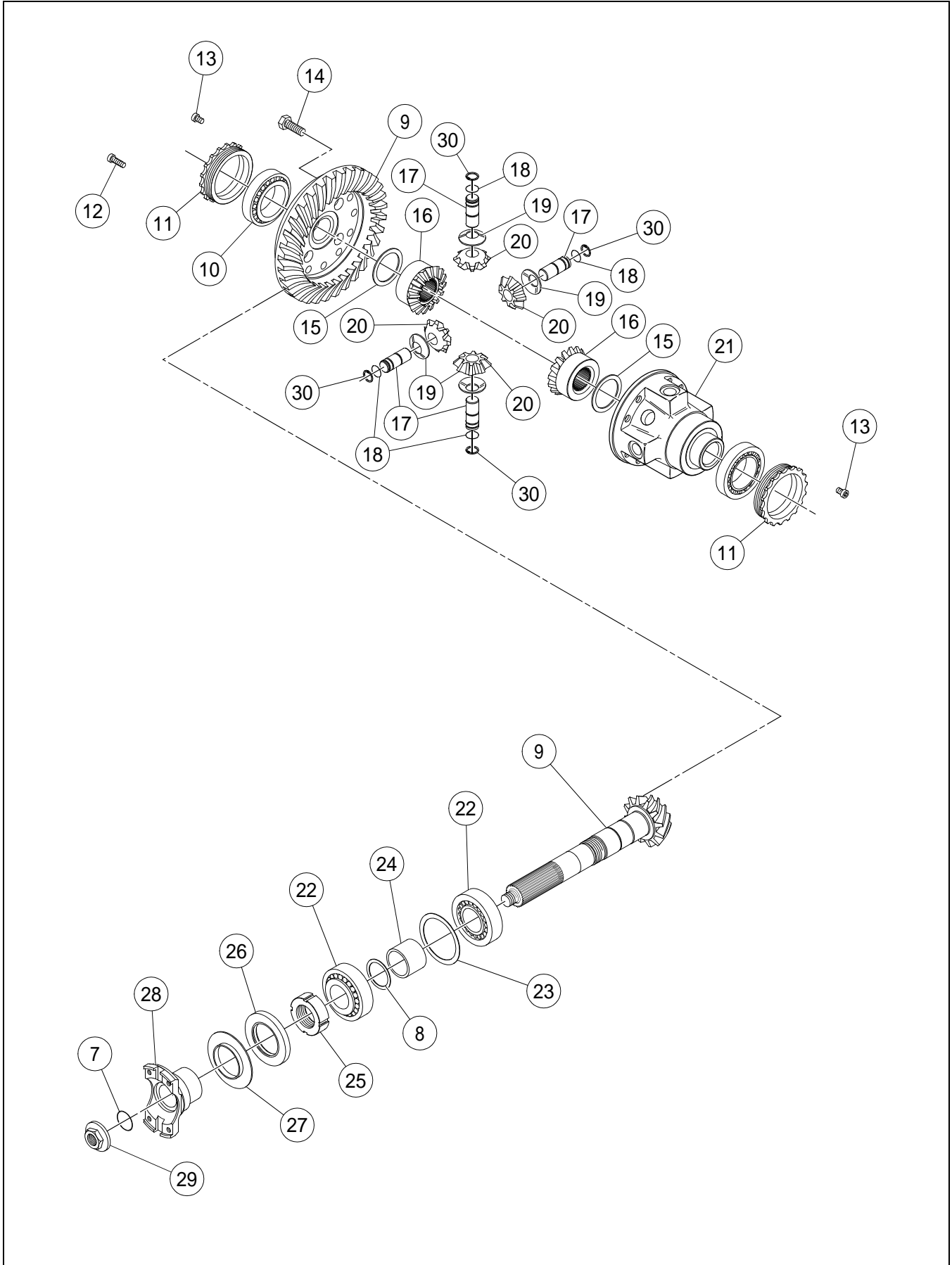
1 OF 4

BOM 13259221

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59793521	O-ring	3	
2	13263306	Plug	1	
3	59146233	Vent	1	
4	13485743	Plug	1	
5	13485750	Magnetic Plug	1	
6	54761739	Washer	1	

FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
2 OF 4

Dwg 13259221/00/02



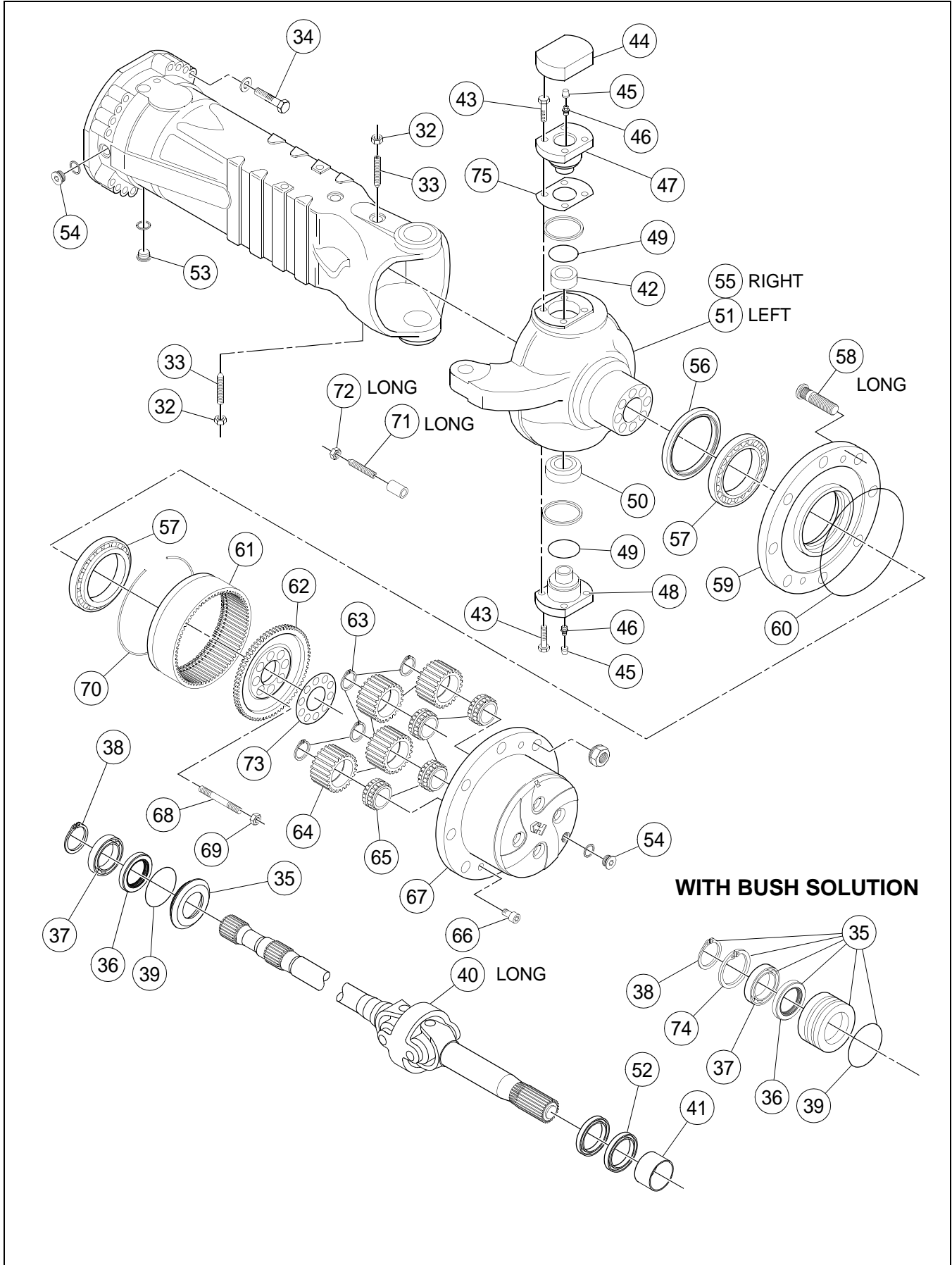
FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
2 OF 4

BOM 13259221

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
7	59146258	O-ring	1	
8	59154179	Shim	1	
9	59194100	Bevel Gear Set	1	
10	59793786	Tapered Bearing	2	
11	59146274	Ring Nut	2	
12	59146282	Cylinder Bolt	4	
13	59146290	Cylinder Bolt	2	
14	54632781	Bolt	12	
15	59146316	Friction Washer	2	
16	59146324	Differential Side Gear	2	
17	59146357	Pin	4	
18	59146332	Circlip	4	
19	59146365	Friction Washer	4	
20	59146423	Differential Pinion	4	
21	59146373	Differential Carrier	1	
22	59769661	Bearing	2	
23	59154138	Shim	1	
24	59146381	Spacer	1	
25	59769653	Nut	1	
26	58803958	Seal	1	
27	13082839	Cover Plate	1	
28	13511100	Flange	1	
29	59146415	Nut	1	
30	59146340	Circlip	4	

FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
3 OF 4

Dwg 13259221/00/03



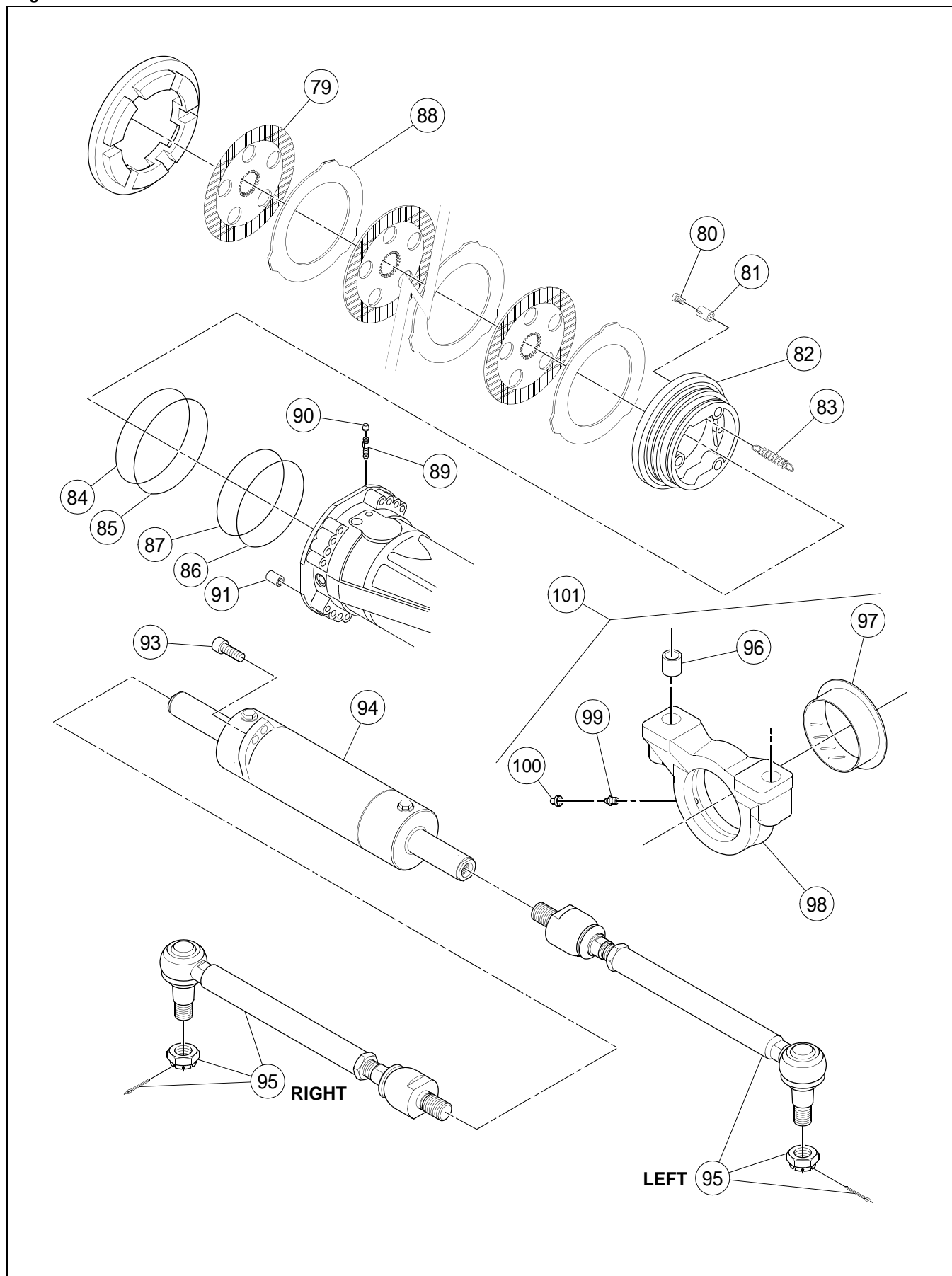
FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
3 OF 4

BOM 13259221

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
31	59243121	Differential Kit (Not Shown)	1	
32	59791004	Nut	2	
33	59194134	Grub Bolt	2	
34	13486063	Bolt	32	
35	59194159	Reduction Bushing	2	
36	58804444	Seal	2	
37	58804451	Bearing	2	
38	59790865	Circlip	2	
39	59194167	O-ring	2	
40	59194175	Joint	2	
41	59146480	Thrust Bushing	1	
42	59146498	Outer Race	2	
43	59146308	Bolt	20	
44	59242545	Cover	2	
45	59243006	Plug	4	
46	59769364	Fitting	1	
47	59242552	Pivot Pin	2	
48	59242594	Pivot Pin	2	
49	59146548	Seal	2	
50	59146555	Articulation	2	
51	13253174	Steer Case RF/LR	1	
52	13360672	Seal	2	
53	13486253	Magnetic Plug	2	
54	13486261	Plug	4	
55	13306352	Steering Case LF/RR	1	
56	13431937	Seal	2	
57	59146613	Bearing	4	
58	13228564	Wheel Stud	20	
59	59246819	Inner Hub	2	
60	58974155	O-ing	2	
61	59243162	Ring Gear	2	
62	59242834	Ring Gear Support	2	
63	59146654	Circlip	8	
64	59146662	Planet Gear	8	
65	59146670	Bearing	8	
66	59246835	Tapped Bolt	4	
67	13486394	Planetary Gear Carrier	2	
68	59153601	Stud	16	
69	59153619	Nut	16	
70	59153627	Circlip	2	
71	54633169	Bolt	4	
72	59153643	Nut	4	
73	59153650	Locking Plate	2	
74	59790824	Circlip	2	
75	59243139	Shim	2	
76	13486493	Planetary Gear Carrier (Not Shown)	2	
77	13306360	Steering Case LR/RF (Not Shown)	1	
78	13306352	Steering Case LF/RR (Not Shown)	1	

FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
4 OF 4

Dwg 13259221/00/04



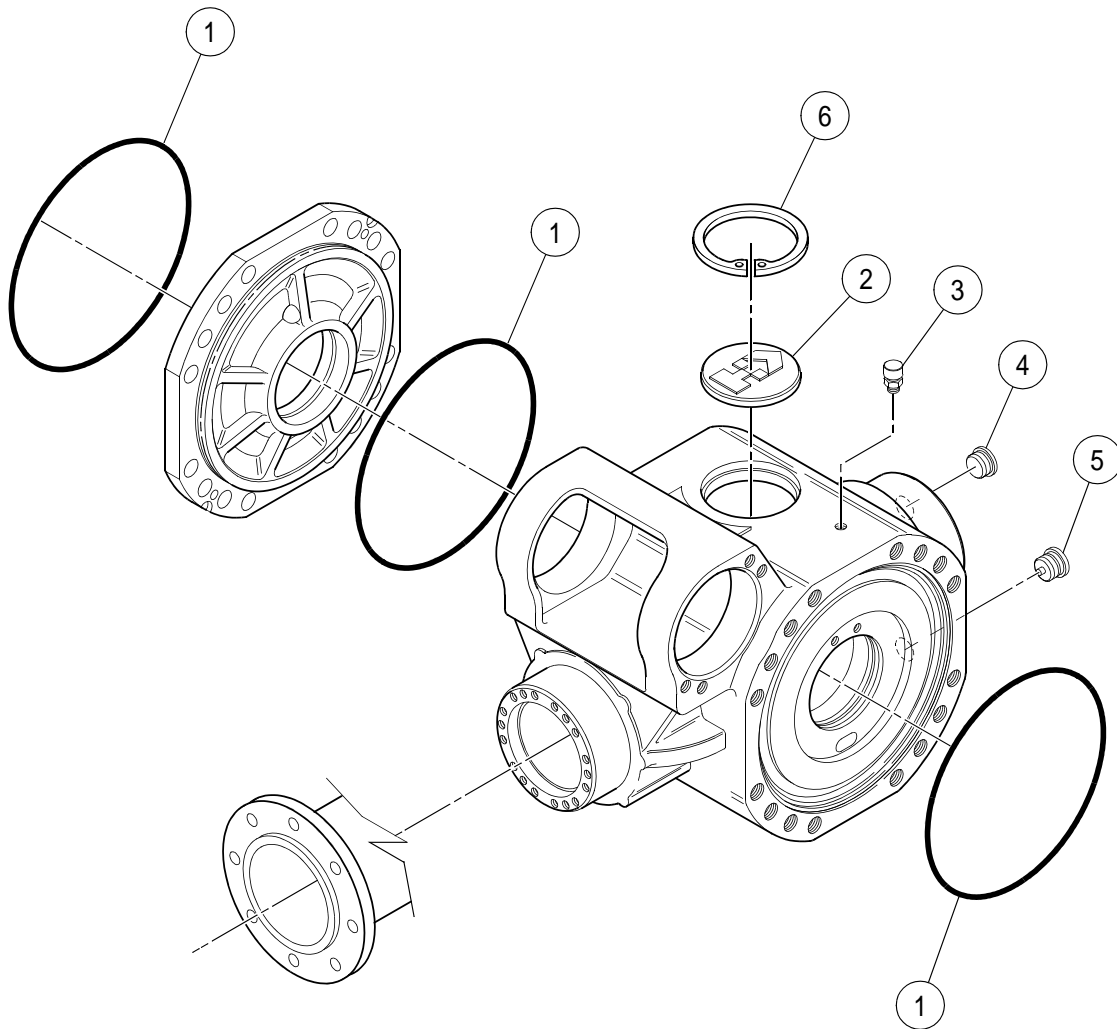
FRONT AXLE (13259221) - INTERNAL BREAKDOWN - SHEET
4 OF 4

BOM 13259221

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
79	54705447	Disc Brake	8	
80	59153676	Adjusting Bolt	6	
81	59153684	Spring	6	
82	59194191	Piston	2	
83	59153700	Spring	6	
84	59153718	Backup Ring	2	
85	59153726	O-ring	2	
86	59153734	Backup Ring	2	
87	59153742	O-ring	2	
88	59153759	Intermediate Disc Brake	10	
89	59242891	Bleeding Bolt	2	
90	59243006	Plug	2	
91	59769935	Dowel	2	
92	54710983	Piston Kit (Not Shown)	2	
93	58804337	Cylinder Bolt	4	
94	59194217	Cylinder	1	
-	59141986	- Seal Kit	1	
95	59194225	Articulated Tie Rod	2	
-	59210518	- Castle Nut	2	
96	59154070	Reduction Bushing	4	
97	59154088	Thrust Bushing	2	
98	59194233	Support	2	
99	59769364	Fitting	2	
100	59243006	Plug	2	
101	13247440	Support	2	

REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
1 OF 5

Dwg 13337894/00



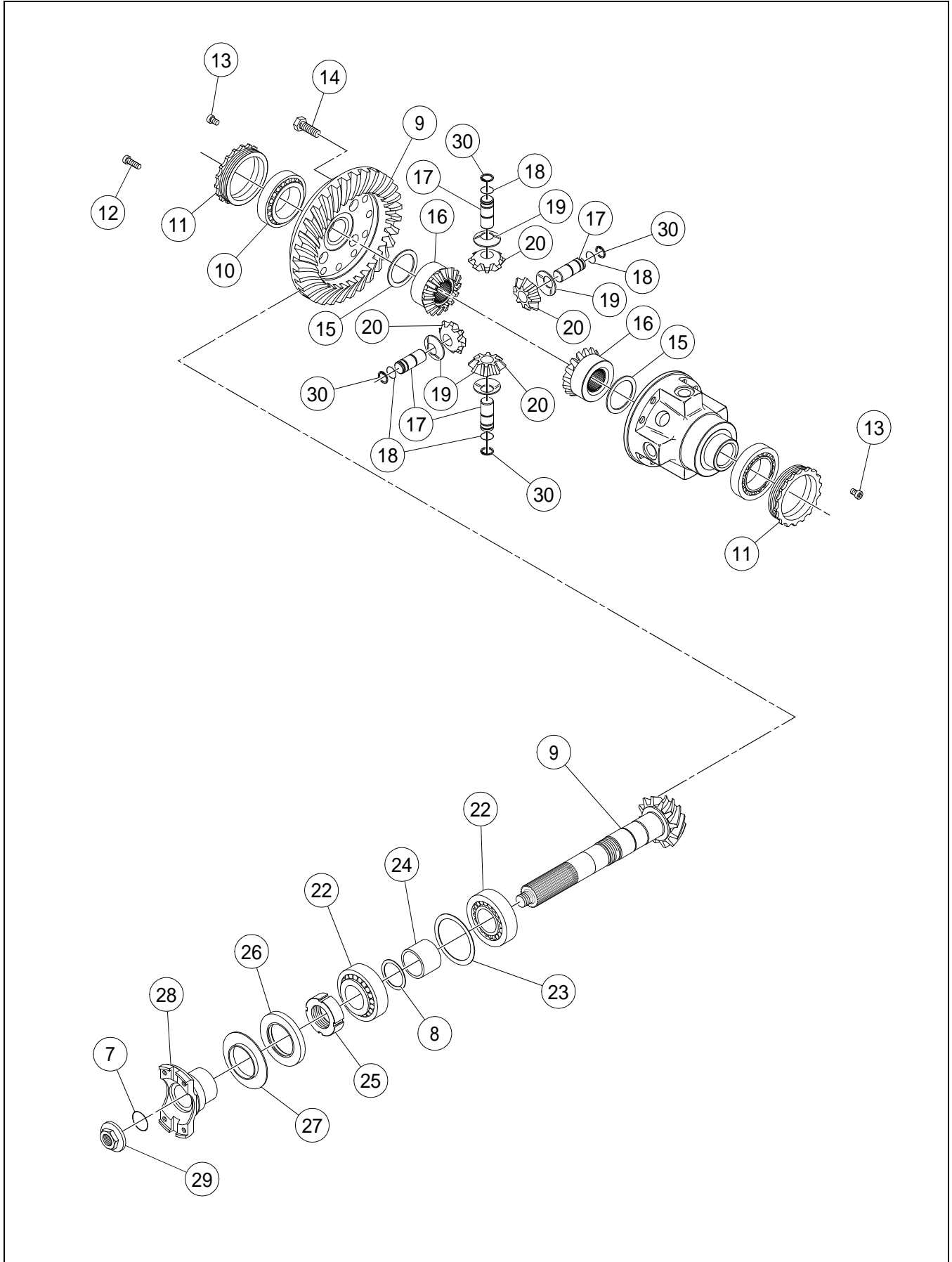
REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
1 OF 5

BOM 13337894

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59793521	O-ring	3	
2	13263306	Plug	1	
3	59146233	Vent	1	
4	13485743	Plug	1	
5	13485750	Magnetic Plug	1	
6	59790824	Circlip	1	

REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
2 OF 5

Dwg 13337894/00



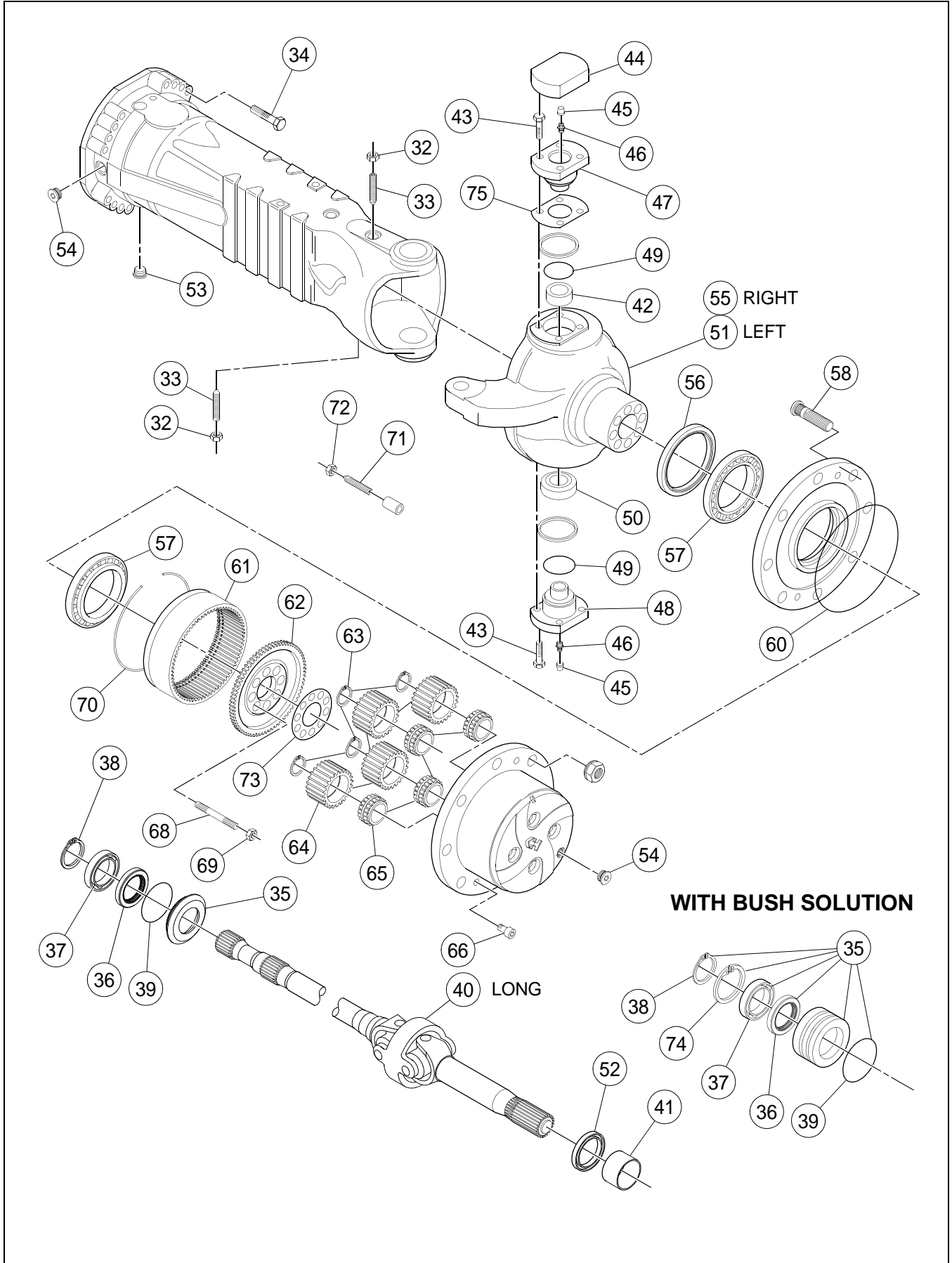
REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
2 OF 5

BOM 13337894

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
7	59146258	O-ring	1	
8	13511910	Shim Set	1	
9	59194100	Bevel Gear Set	1	
10	59793786	Tapered Bearing	1	
11	59146274	Ring Nut	2	
12	59146282	Cylinder Bolt	4	
13	59146290	Cylinder Bolt	2	
14	54632781	Bolt	12	
15	59146316	Friction Washer	2	
16	59146324	Gear Side Differential	2	
17	59146357	Pin	4	
18	59146332	Circlip	4	
19	59146365	Friction Washer	4	
20	59146423	Pinion Differential	4	
22	59769661	Bearing	2	
23	13511928	Shim Set	1	
-	59154120	- Shim	1	
-	59154138	- Shim	1	
-	59154146	- Shim	1	
-	59154153	- Shim	1	
24	59146381	Spacer	1	
25	59769653	Nut	1	
26	58803958	Seal	1	
27	13082839	Cover Plate	1	
28	13511100	Flange	1	
29	59146415	Nut	1	
30	59146340	Circlip	4	

REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
3 OF 5

Dwg 13337894/00



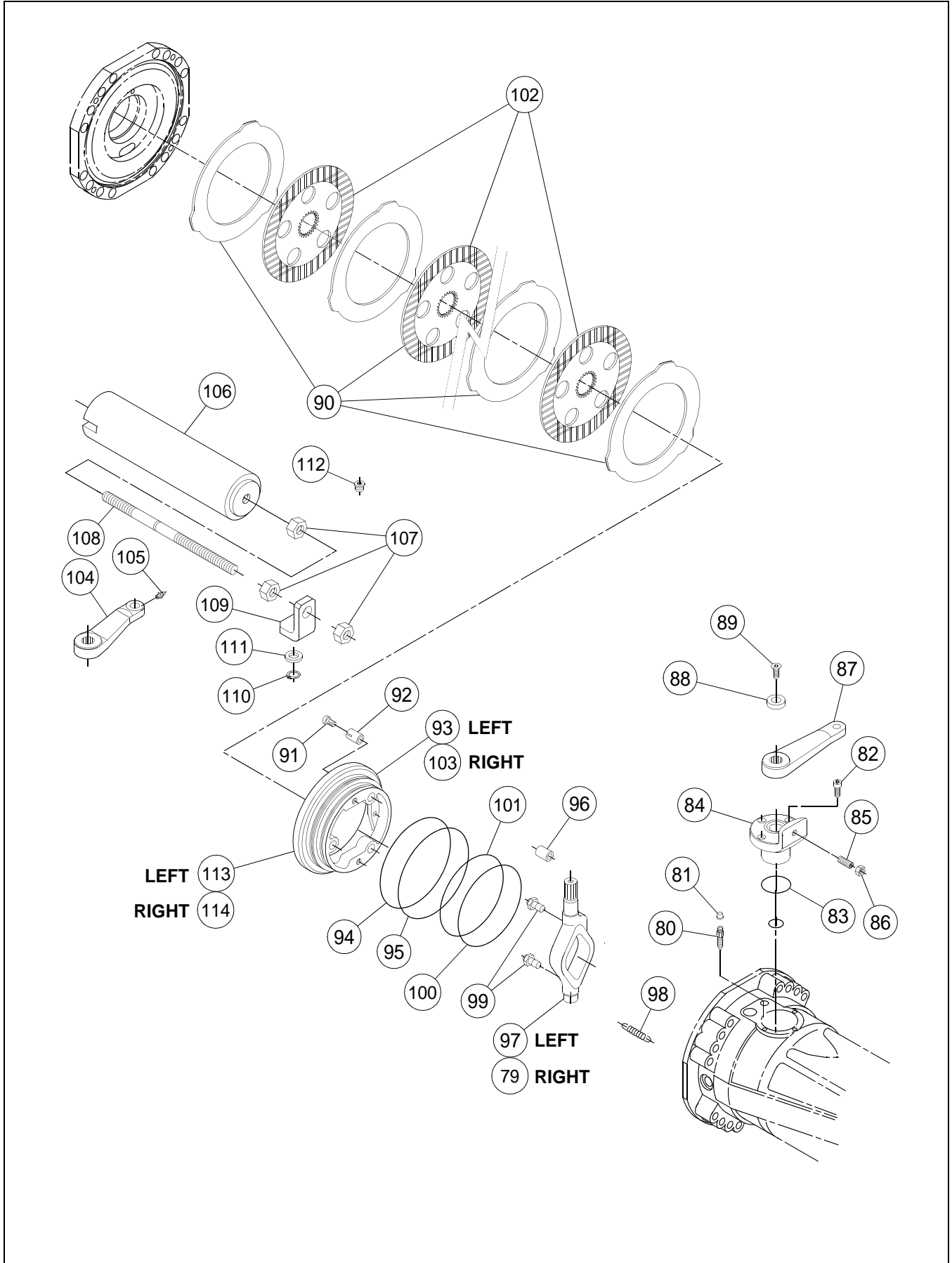
REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
3 OF 5

BOM 13337894

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
32	59791004	Nut	2	
33	59194134	Grub Bolt	2	
34	13486063	Bolt	32	
35	59194159	Reduction Bushing	2	
36	58804444	Seal	2	
37	58804451	Bearing	2	
38	59790865	Circlip	2	
39	59194167	O-ring	2	
40	59194175	Joint	2	
41	59146480	Thrust Bushing	1	
42	59146498	Outer Race	2	
43	59146308	Bolt	20	
44	59242545	Cover	2	
45	59243006	Plug	4	
46	59769364	Fitting	2	
47	59242552	Pivot Pin	2	
48	59242594	Pivot Pin	2	
49	59146548	Seal	2	
50	59146555	Articulation	2	
51	13253174	Steer Case RF/LR	1	
52	13360672	Seal	2	
53	13485750	Magnetic Plug	2	
54	13485743	Plug	4	
55	13306352	Steering Case LF/RR	1	
56	13431937	Seal	2	
57	59146613	Bearing	4	
58	13228564	Wheel Stud	20	
60	58974155	O-ring	2	
61	59243162	Gear Ring	2	
62	59242834	Support Ring Gear	2	
63	59146654	Circlip	8	
64	59146662	Planet Gear	8	
65	59146670	Bearing	8	
66	59246835	Tapered Bolt	4	
68	59153601	Stud	16	
69	59153619	Nut	16	
70	59153627	Circlip	2	
71	54633169	Bolt	4	
72	59153643	Nut	4	
73	59153650	Locking Plate	2	
74	59790824	Circlip	2	
75	13511936	Shim Set	1	
-	59242537	- Shim	2	
-	59243139	- Shim	2	
-	59243147	- Shim	2	
76	13486493	Planetary Gear Carrier (Not Shown)	2	
77	13306360	Steering Case LR/RF (Not Shown)	1	
78	13306352	Steering Case LF/RR (Not Shown)	1	

REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
4 OF 5

Dwg 13337894/00



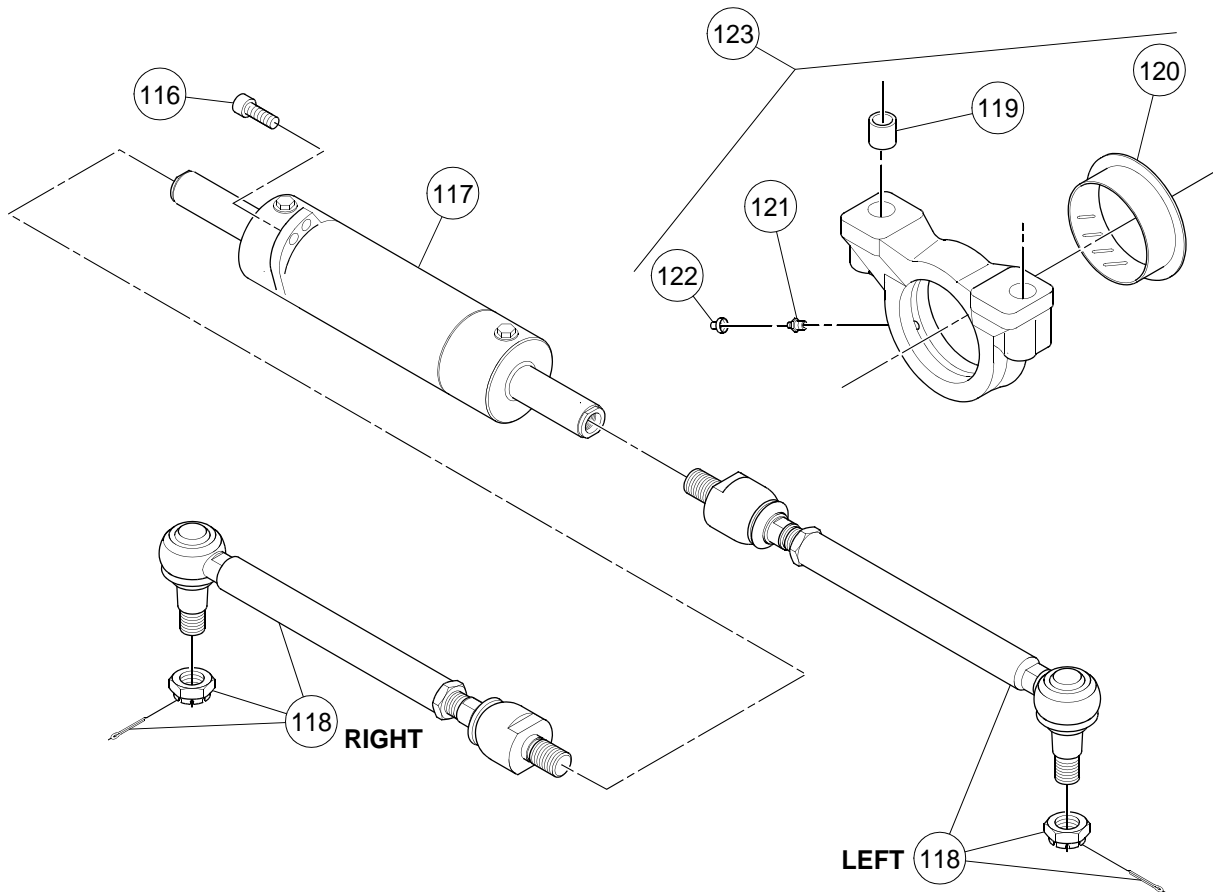
REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
4 OF 5

BOM 13337894

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
79	59242883	Lever	1	
80	59242891	Bleeding Bolt	2	
81	59243006	Plug	2	
82	59794073	Bolt	6	
83	59794073	Bolt	2	
84	13511118	Bushing	2	
85	59243014	Grub Bolt	2	
86	59793430	Nut	2	
87		This Item Not Used With This Assembly		
88	59793190	Spacer	2	
89	59793182	Bolt	2	
90	59153759	Intermediate Disc Brake	10	
91	59153676	Adjusting Bolt	6	
92	59153684	Spring	3	
93	59243055	Piston	1	
94	59153718	Backup Ring	1	
95	59153726	O-ring	1	
96	59769935	Dowel	2	
97	59243071	Lever	1	
98	59153700	Spring	6	
99	13082870	Pusher	2	
100	59153734	Backup Ring	1	
101	59153742	O-ring	1	
102	54705447	Disc Brake	8	
103	59243089	Piston	1	
104	54705488	Lever	1	
105	59803684	Fitting Bolt	2	
106	13346226	Parking Brake Cylinder	1	
107	13083027	Nut	3	
108	13511126	Bar	1	
109	13083019	Support	1	
110	59944967	Retainer Ring	1	
111	13082995	Spacer	1	
112	54705512	Bolt	1	
113	59243105	Kit "B" Piston	1	
114	59243097	Kit "A" Piston	1	
115	13335666	O-ring (Not Shown)	2	

REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
5 OF 5

Dwg 13337894/00



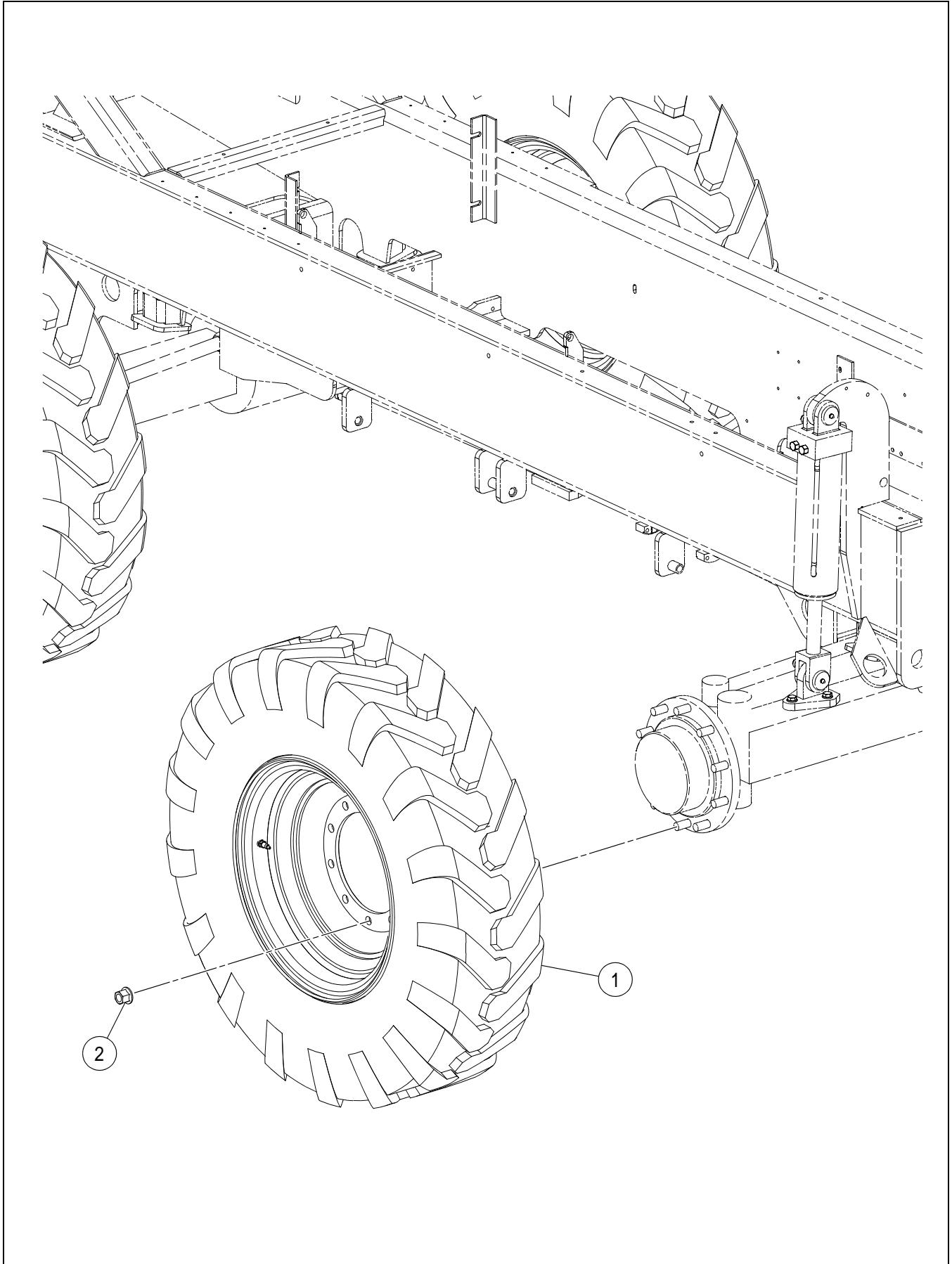
REAR AXLE (13337894) - INTERNAL BREAKDOWN - SHEET
5 OF 5

BOM 13337894

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
116	59154039	Cylinder Bolt	4	
117	59194217	Cylinder	1	
-	59141986	- Seal Kit	1	
118	59194225	Articulated Tie Rod	2	
-	59210518	- Castle Nut	2	
119	59154070	Reduction Bushing	4	
120	59154088	Thrust Bushing	2	
121	59769364	Fitting	2	
122	59243006	Plug	2	
123	13247440	Support	2	

WHEEL AND TIRE ASSEMBLY - SHEET 1 OF 2

Dwg D59132266/02



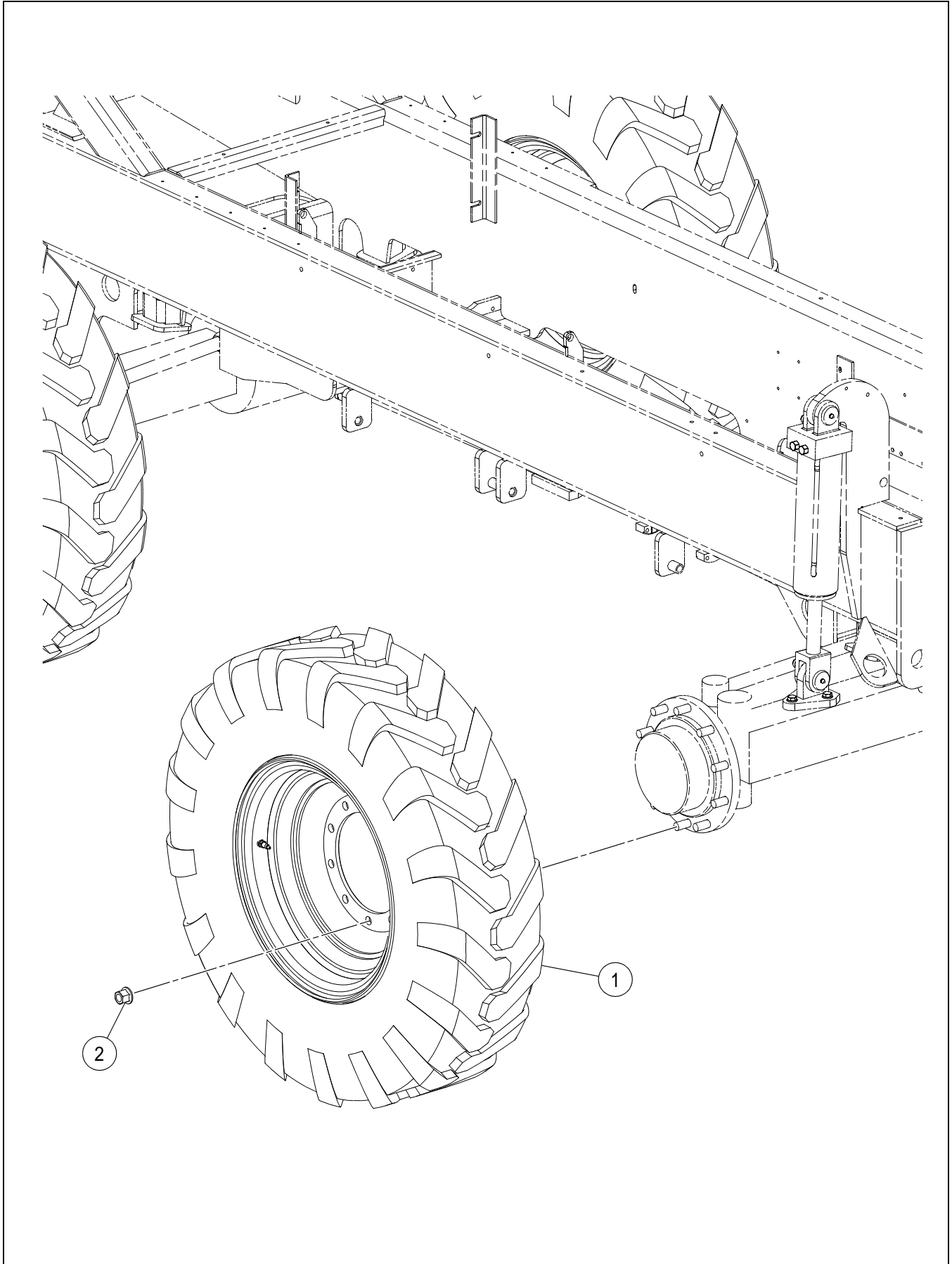
WHEEL AND TIRE ASSEMBLY - SHEET 1 OF 2

BOM 13162714

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59175083	Wheel and Tire Assembly	4	Road Grader
-	59182097	- Rim	1	24.0 x 9
-	59158345	- Tire	1	13-24, 12 Ply
-	59524447	- Air Valve	1	
-	59175109	Foam Wheel and Tire Assembly (Optional)	4	Foam Road Grader
-	59175083	- Wheel and Tire Assembly	1	Road Grader
-	54503016	- Foam Filled Tire	1	
-	13517040	Wheel and Tire Assembly (Optional)	4	Road Grader
-	13517057	- Rim	1	24.0 x 9
-	59169656	- Tire	1	14-24 12 Ply
-	59524447	- Air Valve	1	
-	13155734	Foam Wheel and Tire Assembly (Optional)	4	Foam Road Grader
-	13517040	- Wheel and Tire Assembly	1	Road Grader
-	54503016	- Foam Filled Tire	1	
-	13170063	Wheel and Tire Assembly (Optional)	4	Yokohama
-	59182097	- Rim	1	24.0 x 9
-	59158386	- Tire	1	13-24, 16 Ply
-	59524447	- Air Valve	1	
-	13170071	Foam Wheel and Tire Assembly (Optional)	4	Foam Yokohama
-	13170063	- Wheel and Tire Assembly	1	Yokohama
-	54503016	- Foam Filled Tire	1	
-	54502620	Wheel and Tire Assembly (Optional)	4	LSW
-	59229500	- Rim	1	33.5 x 10
-	54502612	- Tire	1	13-33.5, 12 Ply
-	54502638	Foam Wheel and Tire Assembly (Optional)	4	LSW w/Foam
-	54502620	- Wheel and Tire Assembly (Optional)	4	LSW
-	54503016	- Foam Filled Tire	1	
-	13409743	Wheel and Tire Assembly (Optional)	4	LSW
-	13252713	- Rim	1	33.5 x 12.5
-	13409792	- Tire	1	483 375-581 16 Ply
-	59524447	- Air Valve	1	
-	13409776	Foam Wheel and Tire Assembly (Optional)	4	LSW w/Foam
-	13409743	- Wheel and Tire Assembly	1	LSW
-	54503016	- Foam Filled Tire	1	
-	13335062	Wheel and Tire Assembly (Optional)	4	Titan
-	59182097	- Rim	1	24.0 x 9
-	13335104	- Tire	1	13 x 24 16 Ply
-	59524447	- Air Valve	1	
-	13335070	Foam Wheel and Tire Assembly (Optional)	4	Foam Titan
-	13335062	- Wheel and Tire Assembly	1	
-	54503016	- Foam Filled Tire	1	

WHEEL AND TIRE ASSEMBLY - SHEET 2 OF 2

Dwg D59132266/02



WHEEL AND TIRE ASSEMBLY - SHEET 2 OF 2

BOM 13162714

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
-	13335088	Wheel and Tire Assembly (Optional)	4	LSW Titan
-	59229500	- Rim	1	33.5 x 10
-	13335112	- Tire	1	330-851 16 Ply
-	59524447	- Air Valve	1	
-	13335096	Foam Wheel and Tire Assembly (Optional)	4	LSW Titan w/Foam
-	13335088	- Wheel and Tire Assembly (Optional)	4	LSW Titan
-	54503016	- Foam Filled Tire	1	
-	13409750	Wheel and Tire Assembly (Optional)	4	Super RGR
-	13170048	- Rim	1	24.0 x 10.0
-	13409800	- Tire	1	14-24 16 Ply
-	59637348	- Air Valve	1	
-	13409784	Foam Wheel and Tire Assembly (Optional)	4	Super RGR w/Foam
-	13409750	- Wheel and Tire Assembly (Optional)	4	
-	54503016	- Foam Filled Tire	1	
2	59163758	Wheel Nut	40	

*****Always use Ingersoll-Rand Replacement parts!*****



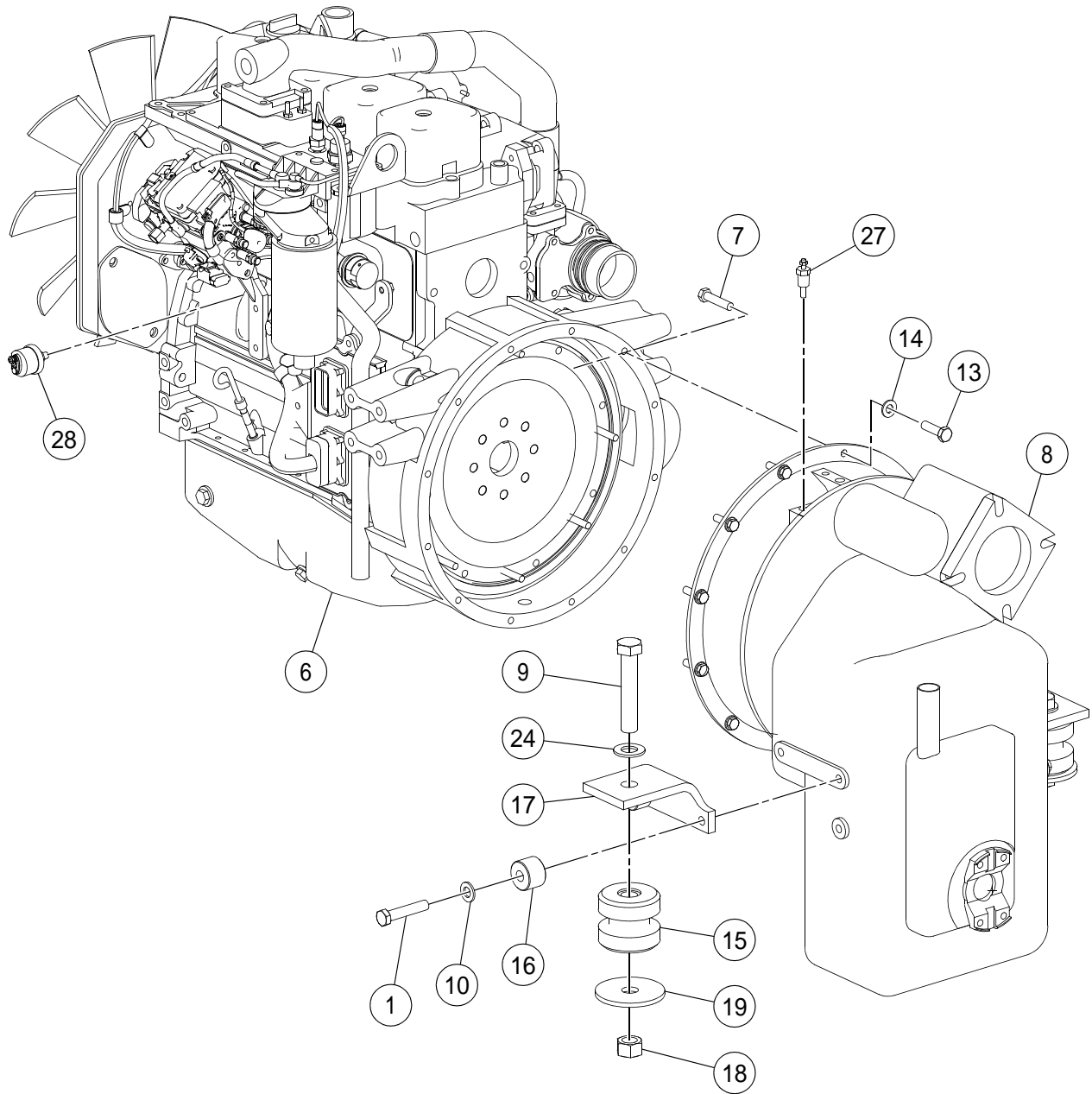
Section C - ENGINE



ENGINE AND TRANSMISSION INSTALLATION - SHEET 1 OF

2

Dwg 13252739/04



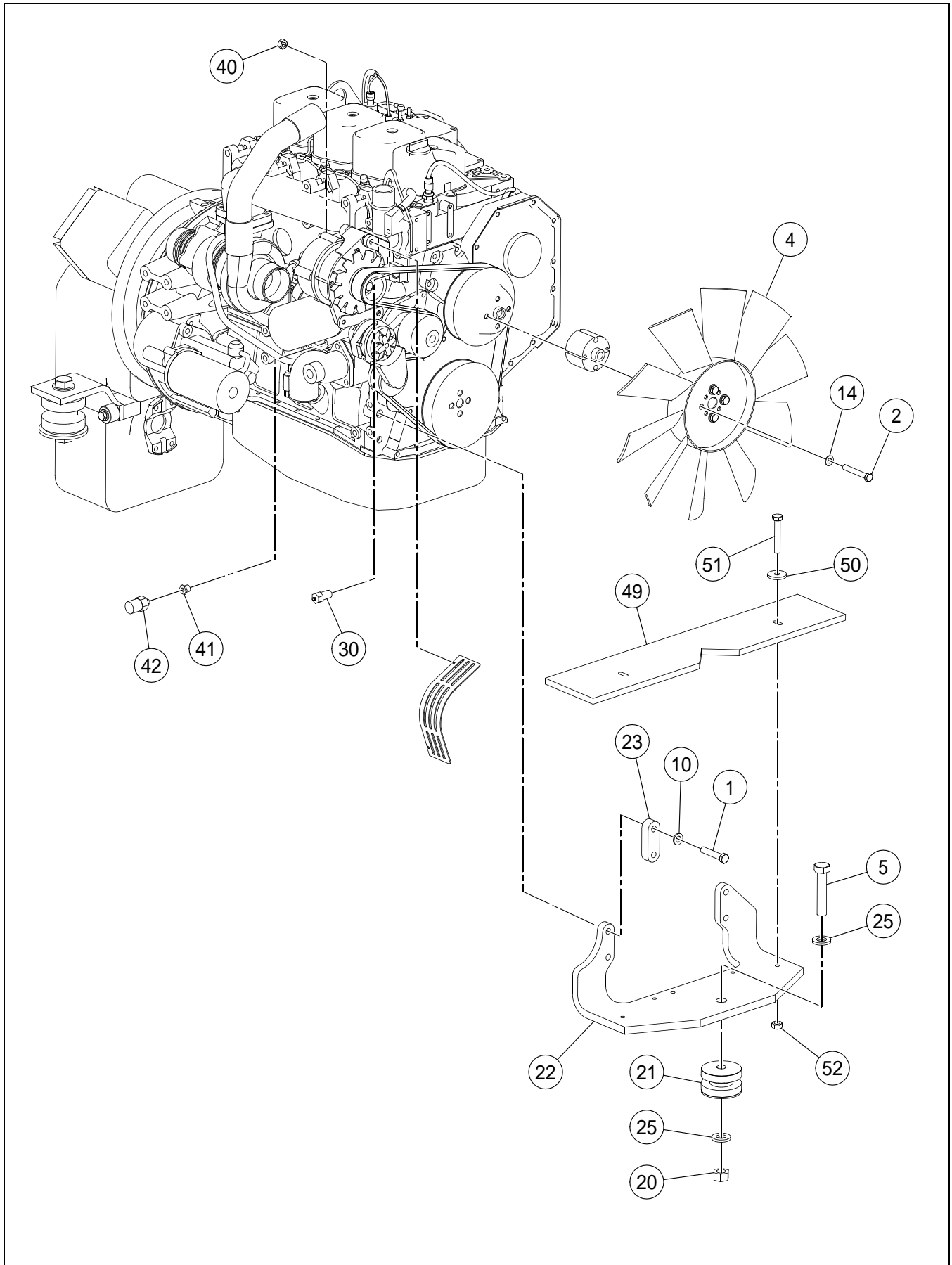
ENGINE AND TRANSMISSION INSTALLATION - SHEET 1 OF

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96714910	HHCS, Zinc Plated	8	M12 x 1.75 x 60 CI 10.9
6	13843693	Engine - Effective with S/N 186420	1	
-	13284716	- Engine Oil Filter	1	
-	13284708	- Fuel Filter	1	
-	58827932	- Inline Fuel Filter	1	
-	13284724	- Starting Motor	1	
-	13284732	- Fan Belt	1	
-	13852256	- Alternator	1	
-	13252648	Engine - Prior to S/N 186420	1	
-	13284716	- Engine Oil Filter	1	
-	13465547	- Water Separator/Fuel Filter	1	
-	58827932	- Inline Fuel Filter	1	
-	13284724	- Starting Motor	1	
-	13284732	- Fan Belt	1	
-	13503719	- Alternator	1	
-	13503727	- ARC - Alternator	1	
7	95920815	HHCS, Zinc Plated	8	3/8 x 24 x 1.75 Grd 8
8	13481130	Transmission - Effective with S/N 182415, Including S/N 182255 and 182256	1	See Breakdown C - 6.
-	54615711	Transmission - Prior to S/N 182415, Excluding S/N 182255 and 182256	1	See Breakdown C - 24.
-	13360664	ARC - Transmission	1	
9	95972451	HHCS, Zinc Plated	2	7/8 x 9 x 4.75
10	59539569	Washer	8	Hardened
13	96702410	HHCS, Fully Threaded, Zinc Plated	11	M10 x 35 CI 10.9
14	96741046	Flatwasher, Zinc Plated	15	M10 CI 200
15	13308044	Transmission Mounting Bushing	2	
16	13161849	Spacer Bolt	4	
17	13161856	Transmission Mounting Bracket	2	
18	59327908	Hex Nut	2	7/8 x 9
19	59115220	Snubbing Washer	2	
24	95922290	Flatwasher, Zinc Plated	2	7/8
27	59302554	Transmission Temperature Sender	1	
28	58878000	Engine Oil Pressure Sender	1	

ENGINE AND TRANSMISSION INSTALLATION - SHEET 2 OF

2

Dwg 13252739/04



ENGINE AND TRANSMISSION INSTALLATION - SHEET 2 OF

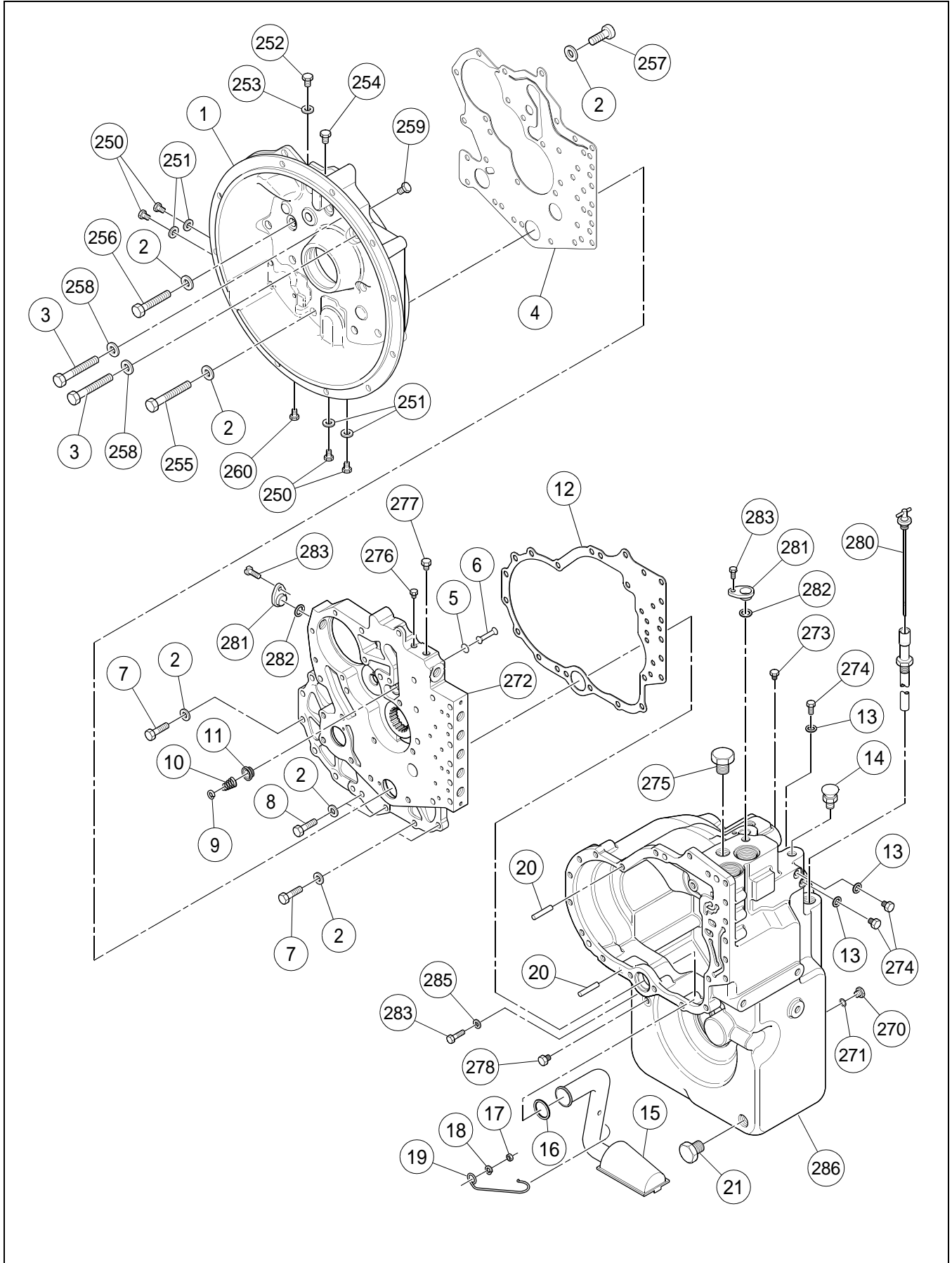
2

BOM 13252739

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96714910	HHCS, Zinc Plated	8	M12 x 1.75 x 60 CI 10.9
2	96704713	Hex Head Bolt, Zinc Plated	4	M10 x 1.5 x 70 CI 8.8
4	59023747	Suction Fan	1	
5	95920096	HHCS, Zinc Plated	1	3/4 x 10 x 3.75
10	59539569	Washer	8	Hardened
14	96741046	Flatwasher, Zinc Plated	15	M10 CI 200
20	59327890	Hex Nut	1	3/4 x 10
21	59413757	Shock Mount	1	
22	13155361	Engine Mounting Plate	1	
23	59176503	Engine Spacer	2	
25	59544213	Washer	2	
30	59816322	Engine Coolant Temperature Sender	1	
40	96701370	Nut, Zinc Plated	1	M8 x 1.25 CI 8
41	95038030	Bushing	1	
42	59124578	Engine Oil Pressure Switch	1	
49	59291179	Engine Mount Baffle	1	
50	50264860	Washer	2	
51	96702402	HHCS, Zinc Plated	2	M8 x 1.25 x 50 CI 8.8
52	96704606	Hex Locknut, Zinc Plated	2	M8 x 1.25 CI 8

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 1 OF 9

Dwg 13492756/00



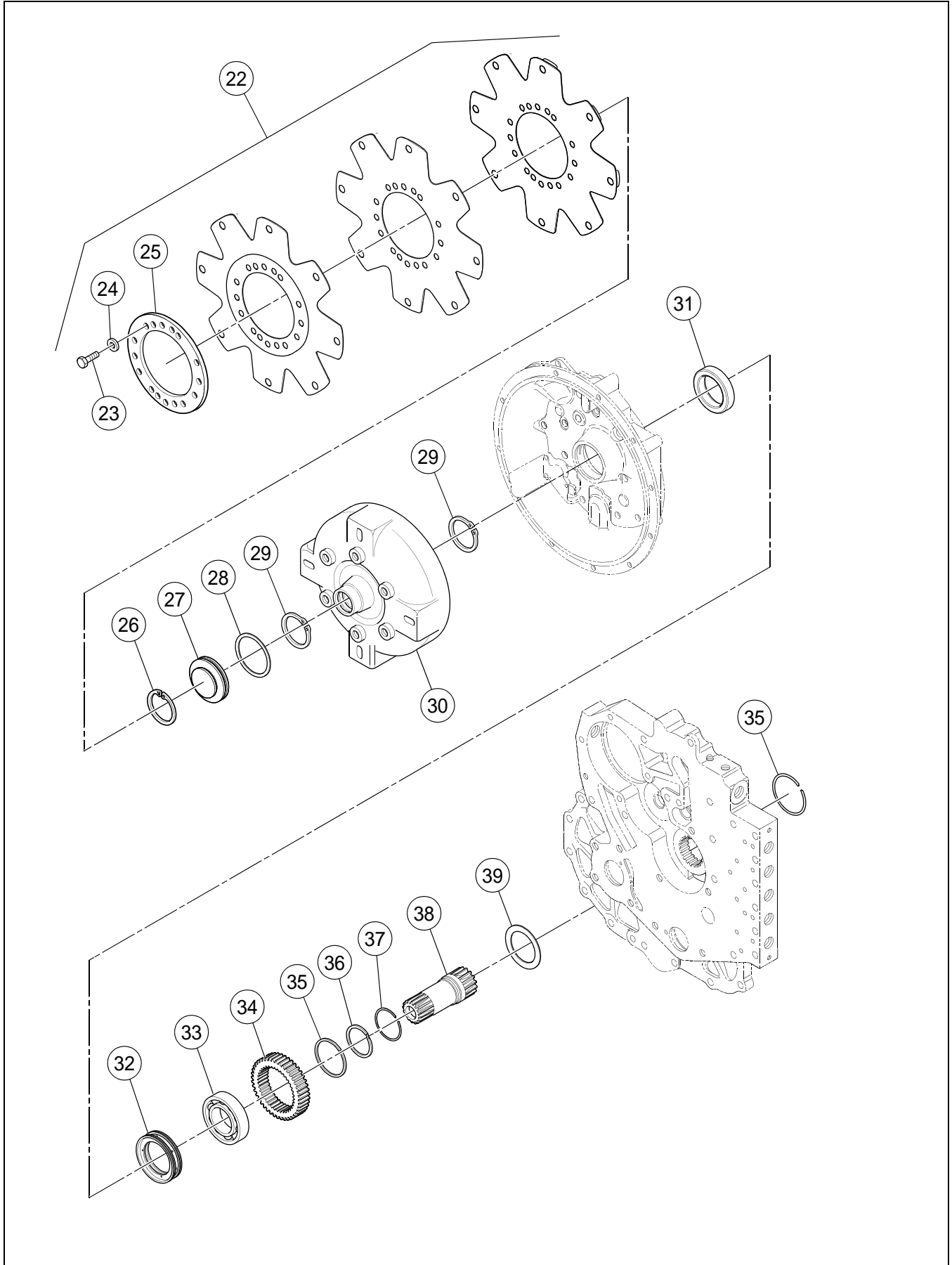
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 1 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13309331	Converter Housing	1	
2	59248567	Lockwasher	19	
3	59124123	Screw	13	
4	59124107	Gasket	1	
5	59130641	Seat Snap Ring	1	
6	59130633	Poppet Safety Valve	1	
7	59130658	Screw	7	
8	59130666	Screw	2	
9	59130674	Washer Poppet	1	
10	59130682	Spring Safety Valve	1	
11	59130690	Seat Safety Valve	1	
12	59124164	Gasket	1	
13	54496591	O-ring	3	
14	51009116	Air Breather	1	
15	59130617	Screw and Tube Assembly	1	
16	59130625	O-ring	1	
17	59131110	Nut	1	
18	59144105	Washer	1	
19	59144113	Retainer Clip	1	
20	59124172	Dowel Pin	2	
21	50754977	Drain Plug	1	
250	13497532	Plug	4	
251	54496591	O-ring	4	
252	13497532	Plug	1	
253	54496591	O-ring	1	
254	51009108	Plug	1	
255	59124131	Screw	6	
256	59124123	Screw	3	
257	54727342	Screw	1	
258	59248567	Lockwasher	13	
259	13497540	Plug	1	
260	13497557	Plug	1	
270	13497565	Plug	2	
271	13497573	O-ring	2	
272	13497581	Spacer Plate	1	
273	13497599	Plug	1	
274	13497607	Plug	3	
275	50801257	Plug	1	
276	13497599	Plug	1	
277	51009108	Plug	1	
278	13497615	Plug	1	
279	54483037	Dipstick Tube (Not Shown)	1	
280	13335575	Dipstick Kit	1	
281	59124149	Sensor Port Plug	2	
282	54493176	O-ring	2	
283	13497623	Speed Sensor Screw	2	
284	59124131	Screw (Not Shown)	1	
285	59144097	Washer	1	
286	13306477	Transmission Case	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 2 OF 9

Dwg 13492756/00



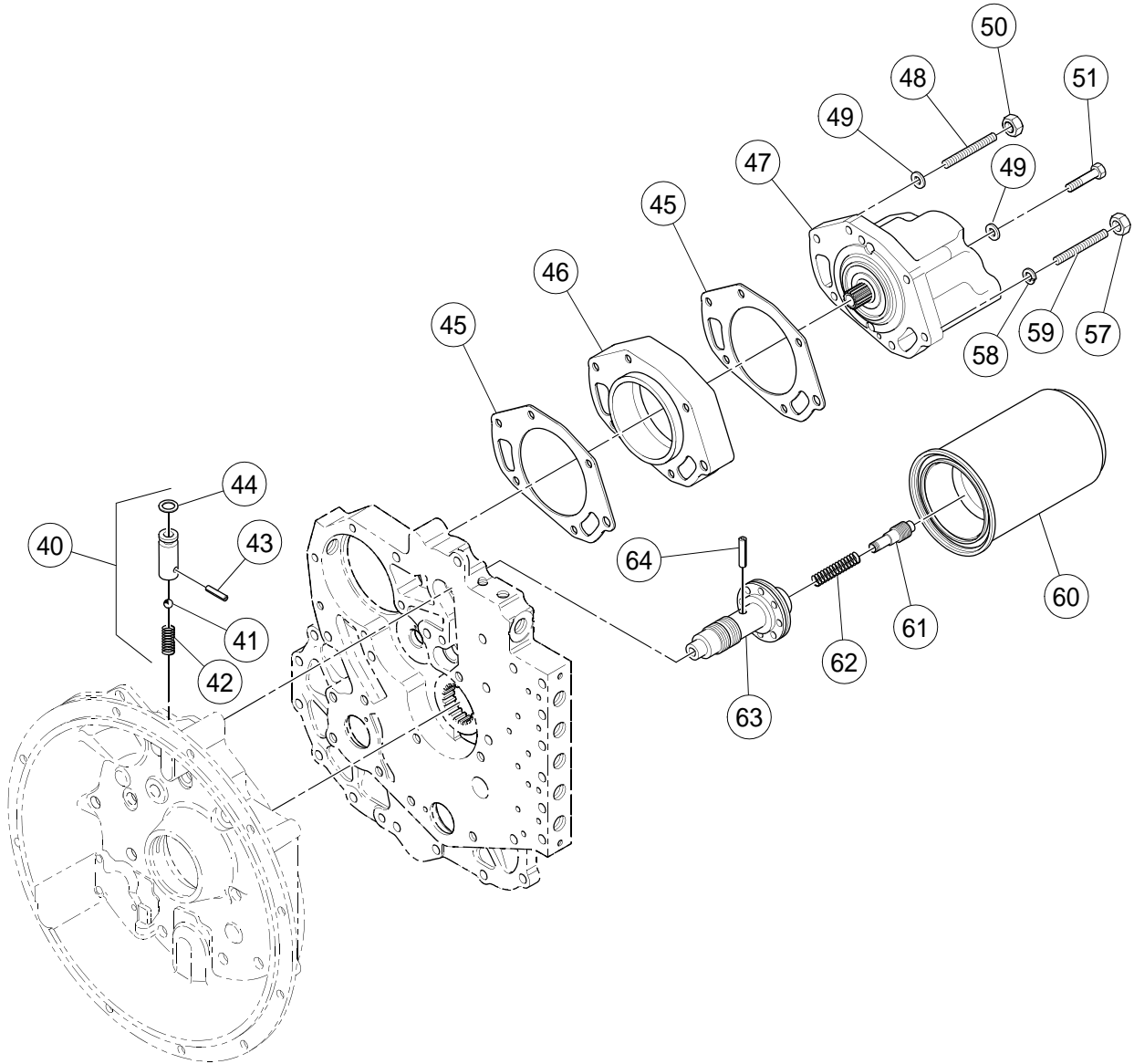
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 2 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
22	59133579	Drive Plate Kit	1	
23	54634175	- Screw	6	
24	54483086	- Lockwasher	6	
25	58886029	- Driveplate Backing Ring	1	
26	58886052	Retaining Ring	1	
27	50959824	Plug	1	
28	59481572	O-ring	1	
29	59130732	Snap Ring	2	
30	59144121	Torque Converter	1	
31	59130757	Seal Oil	1	
32	59130773	Oil Distributor Ring	1	
33	59130781	Bearing Torque Converter	1	
34	59130799	Gear Impeller Hub	1	
35	59130807	Snap Ring	2	
36	59130815	Piston Ring	1	
37	59130823	Expander Piston Ring	1	
38	59130831	Support Stator	1	
39	59130849	Washer	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 3 OF 9

Dwg 13492756/00



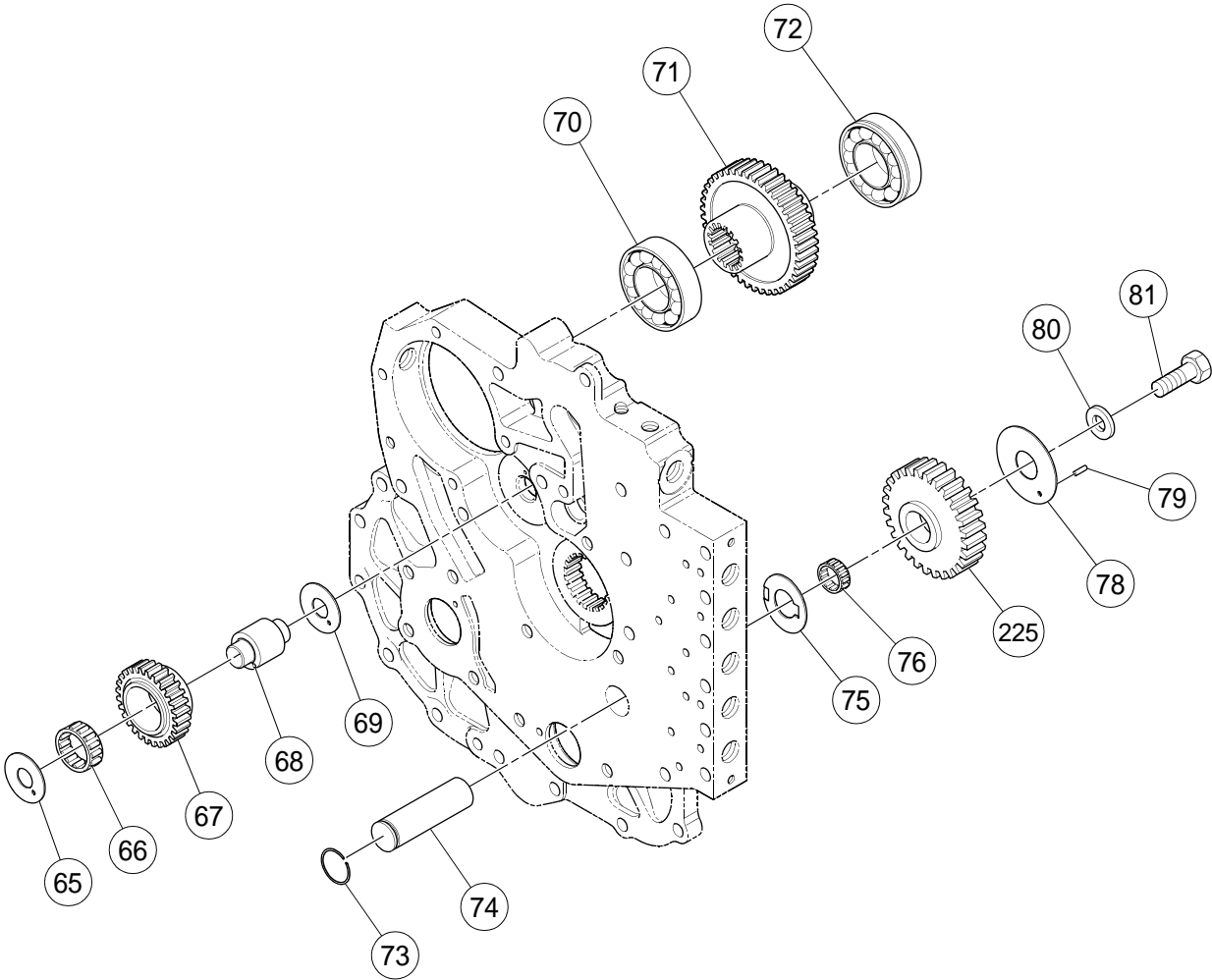
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 3 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
40	59130948	Check Ball Valve	1	
41	59130963	- Ball	1	
42	59130971	- Spring	1	
43	59130955	- Pin	1	
44	59130930	- O-ring	1	
45	59130989	Gasket	2	
46	59130997	Adater	1	
47	59131003	Charge Pump	1	
48	59131011	Stud	1	
49	59131052	Lockwasher Stud	5	
50	59131037	Nut Stud	1	
51	13284781	Pump Mounting Screw	4	
57	59131110	Nut	1	
58	59248567	Lockwasher	1	
59	59131128	Stud	1	
60	13284450	Transmission Element	1	
61	59131144	Piston	1	
62	59131151	Spring	1	
63	59131185	Regulator Valve	1	
64	59131169	Pin	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 4 OF 9

Dwg 13492756/00



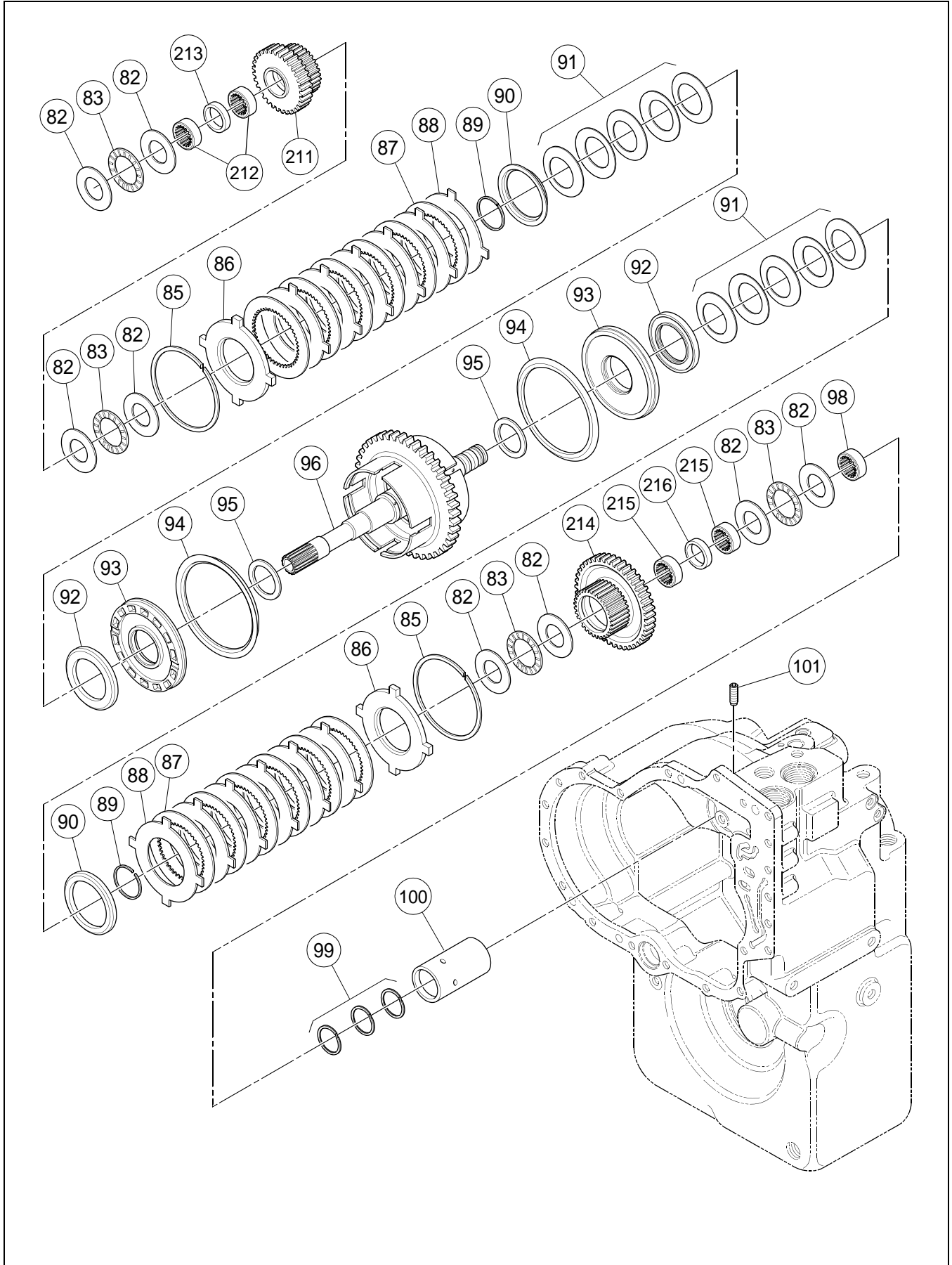
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 4 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
65	59130856	Thrust Washer	2	
66	59130864	Bearing Idler Gear	1	
67	59130872	Idler Gear	1	31 Tooth
68	59130880	Shaft Idler and Pin	1	
69		This item not used with this Assembly		
70	59130906	Bearing	1	
71	59130914	Drive Gear	1	34 Tooth
72	59130922	Bearing	1	
73	59131193	Snap Ring	1	
74	59131201	Shaft	1	
75	59131219	Thrust Washer	1	
76	59131227	Bearing	1	
78	59124198	End Plate	1	
79	59130724	Roll Pin	1	
80	59130708	Washer	1	
81	59130716	Capscrew	1	
225	59131235	Reverse Idler Gear	1	
226	54483763	First Driven Gear (Not Shown)	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 5 OF 9

Dwg 13492756/00



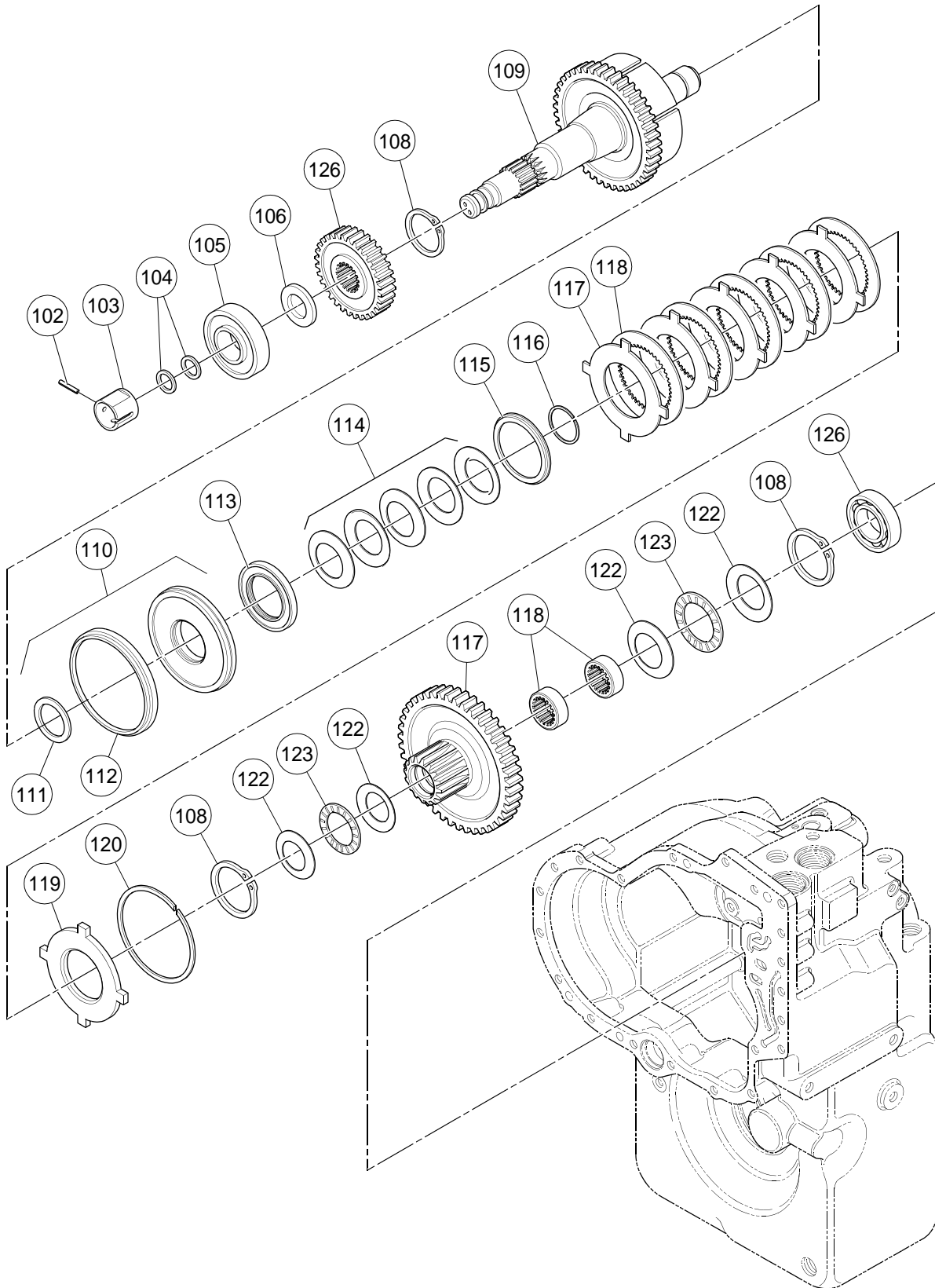
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
 INCLUDING S/N 182255 AND 182256 - SHEET 5 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
82	59131243	Thrust Washer	8	
83	59131250	Bearing Thrust Washer	4	
85	59131268	Snap Ring	2	
86	59131276	End Plate	2	
87	59131284	Inner Disc	12	
88	59131292	Outer Disc	12	
89	59131300	Snap Ring	2	
90	59131318	Retainer Snap Ring	2	
91	59131326	Disc Washer	2	
92	59131334	Wear Plate	2	
93	59131342	Piston Clutch	2	
94	59131359	Outer Seal	2	
95	59131367	Inner Seal	2	
96	59131375	Turbine Shaft	1	
98	59131383	Piston Ring	1	
99	59131391	Piston Ring	3	
100	59143404	Oil Distributor Sleeve	1	
101	59143412	Retainer Screw	1	
211	59143453	Gear and Bearing	1	
212	59143420	Bearing	2	
213	59143438	Spacer	1	
214	59143461	Gear and Bearing	1	
215	59143420	Bearing	2	
216	59143438	Spacer	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 6 OF 9

Dwg 13492756/00



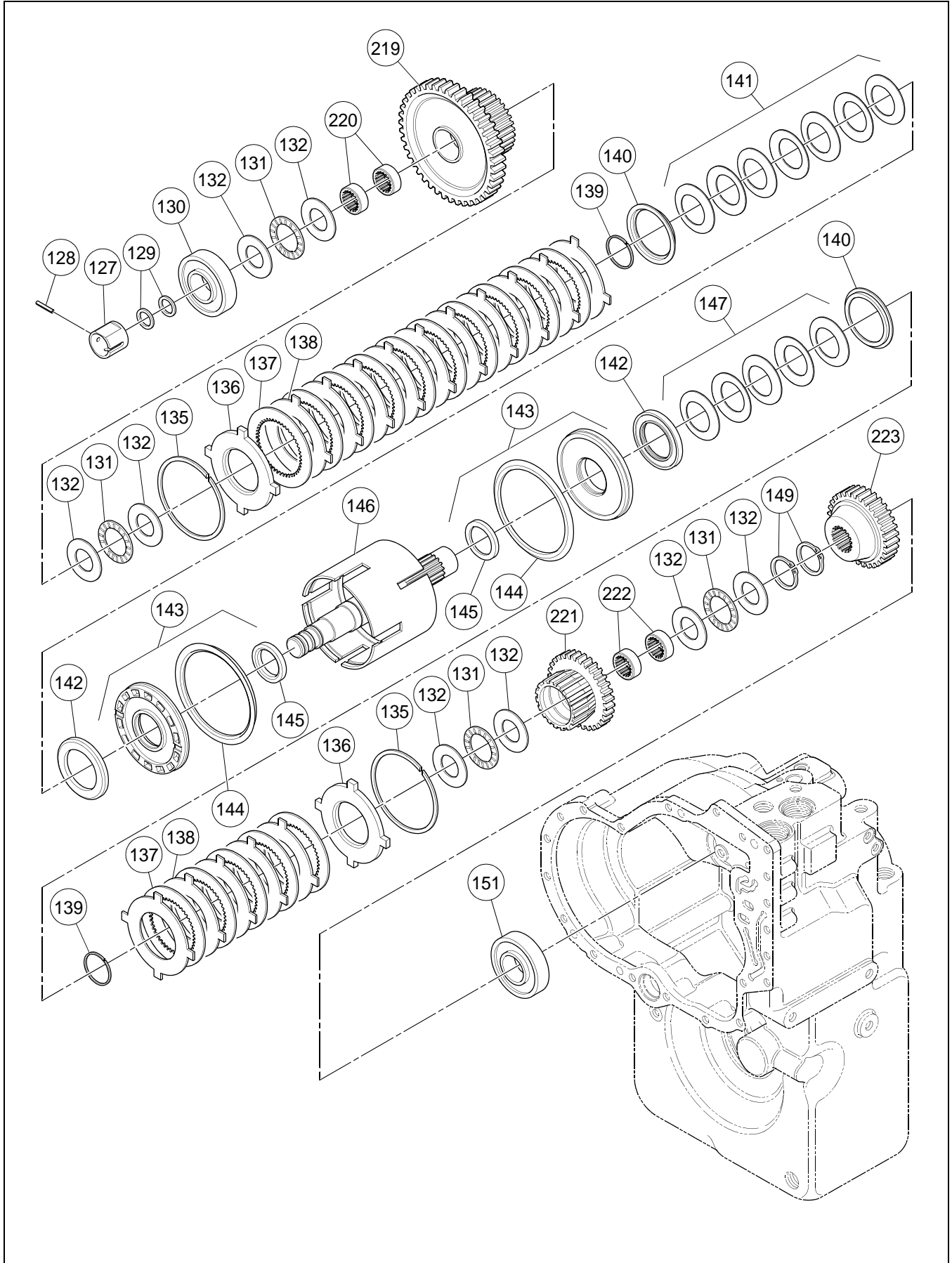
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 6 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
102	59143479	Screw	1	
103	59143495	Sleeve	1	
104	59131391	Piston Ring	2	
105	54483961	Bearing Seal	1	
106	54483987	Washer Bearing Support	1	
108	54484001	External Snap Ring	3	
109	13284773	Third Shaft Drum and Plug Assembly	1	
110	59143537	Seat Piston and Ball	1	
111	59131367	Inner Seal	1	
112	59131359	Outer Seal	1	
113	59131334	Wear Plate	1	
114	59131326	Disc Washer	1	
115	59131318	Retainer Snap Ring	1	
116	59131300	Snap Ring	1	
117	59131292	Outer Disc	5	
118	59131284	Inner Disc	5	
119	59131276	End Plate	1	
120	59131268	Snap Ring	1	
122	54484035	Thrust Washer	4	
123	54484043	Thrust Bearing	2	
126	54484050	Roller Bearing	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 7 OF 9

Dwg 13492756/00



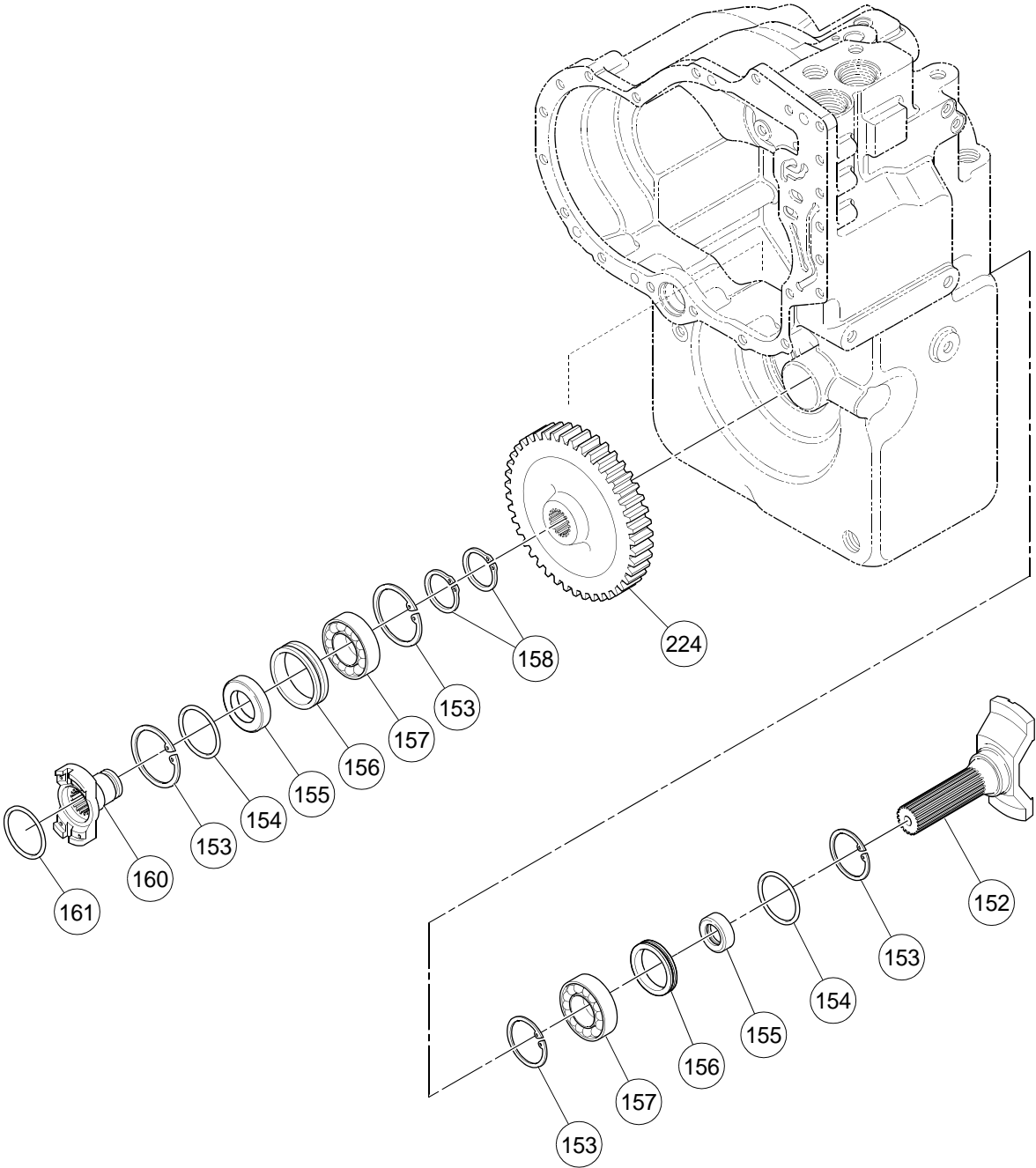
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 7 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
127	59143644	Sleeve	1	
128	59143479	Screw	1	
129	59131391	Piston Ring	2	
130	54483961	Bearing Seal	1	
131	59131250	Bearing Thrust Washer	4	
132	59131243	Thrust Washer	8	
135	59131268	Snap Ring	2	
136	59131276	End Plate	2	
137	59131284	Inner Disc	15	
138	59131292	Outer Disc	15	
139	59131300	Snap Ring	2	
140	59131318	Retainer Snap Ring	2	
141	59143651	Spring Disc Assembly	1	
142	59131334	Wear Plate	2	
143	59143669	Piston and Seal Assembly	2	
144	59131359	Outer Seal	2	
145	59131367	Inner Seal	2	
146	54496716	Shaft Drum Plug/Seat	1	
147	59131326	Disc Washer	1	
149	59143511	Snap Ring	2	
151	59143685	Rear Bearing	1	
219	59143693	Gear and Bearing Assembly	1	
220	59143420	Bearing	2	
221	59143701	Gear and Bearing Assembly	1	
222	59143420	Bearing	2	
223	59143719	Third Driven Gear	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 8 OF 9

Dwg 13492756/00



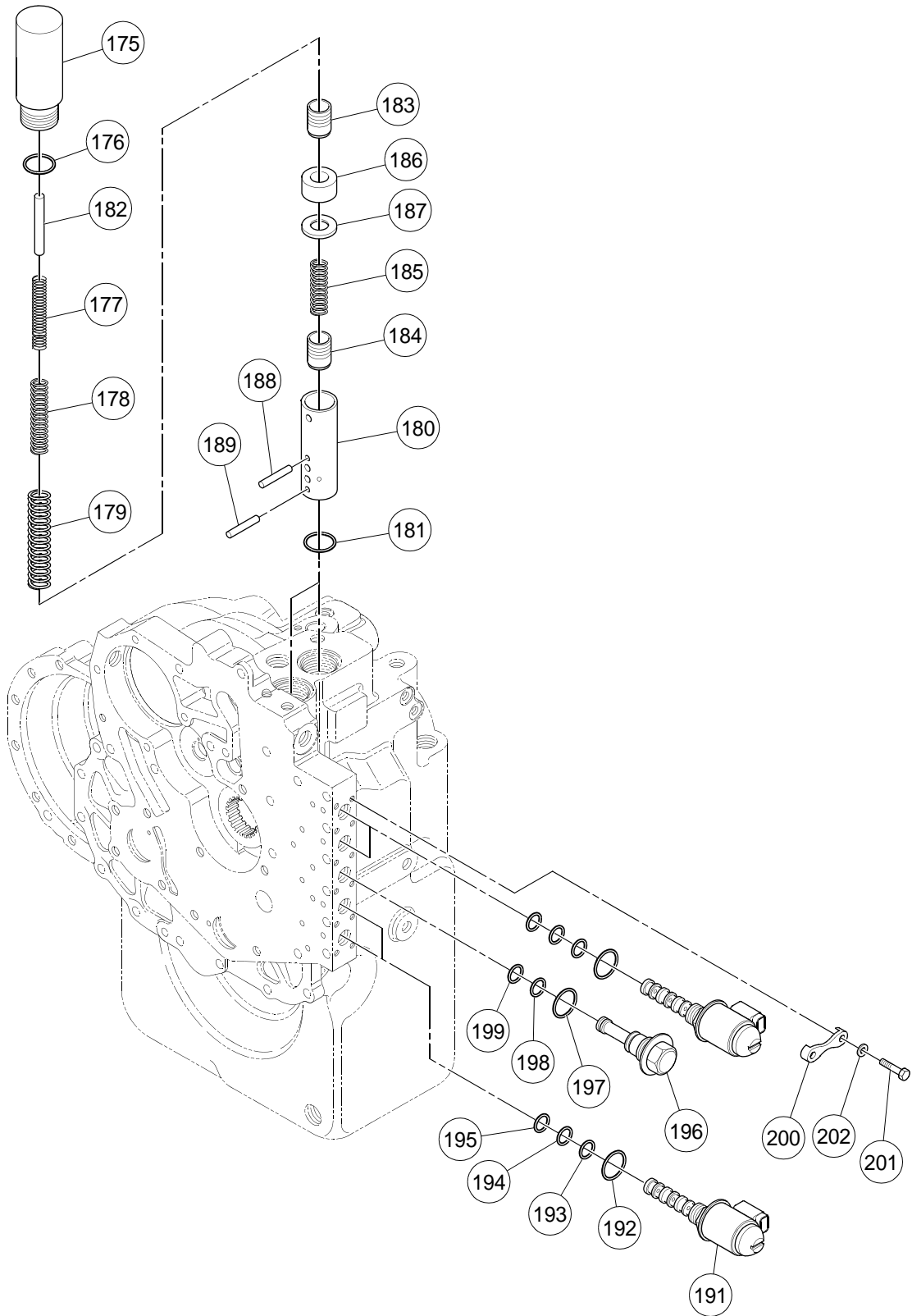
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 8 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
152	54484142	Output Shaft	1	
153	59143578	Snap Ring	4	
154	59143610	O-ring	2	
155	59143743	Oil Seal	2	
156	59143750	Sleeve	2	
157	50755230	Bearing	2	
158	59143594	Snap Ring	2	
160	59143735	Output Flange	1	
-	59143727	- Flange Plug	1	
161	59143727	Flange Plug	1	
224	59143776	Gear Output Shaft	1	

TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 9 OF 9

Dwg 13492756/00



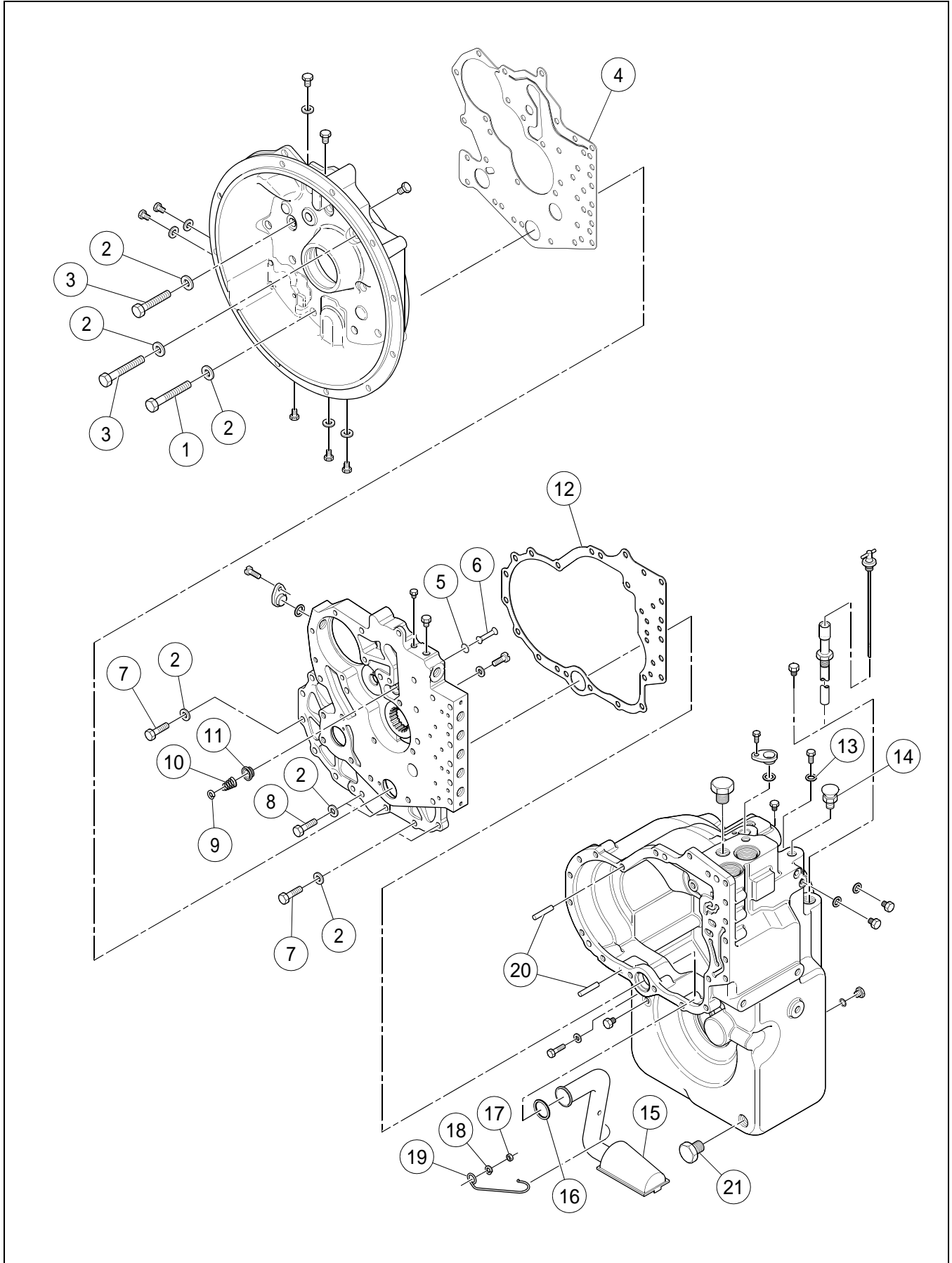
TRANSMISSION (13481130) - EFFECTIVE WITH S/N 182415,
INCLUDING S/N 182255 AND 182256 - SHEET 9 OF 9

BOM 13481130

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
175	59143784	Housing	1	
176	59143792	O-ring	1	
177	54683495	Accumulator Spring	1	
178	59143826	Middle Spring	1	
179	59143925	Outer Spring	1	
180	59143867	Sleeve	1	
181	59143859	O-ring	1	
182	59143800	Stop Pin	1	
183	59143917	Spool	1	
184	54493424	Regulator Spool	1	
185	59143883	Spring	1	
186	59143909	Retainer Spring	1	
187	59143891	Spacer	1	
188	59143834	Upper Pin	1	
189	59143842	Lower Pin	1	
191	13497631	Solenoid	4	
192	13497649	O-ring	4	
193	13497656	O-ring	4	
194	13497664	O-ring	4	
195	13497672	O-ring	4	
196	13497680	Plug	1	
197	13497698	O-ring	1	
198	13497656	O-ring	1	
199	13497672	O-ring	1	
200	13497706	Clamp	6	
201	13497714	Capscrew	12	
202	13497722	Washer	12	
217	54483904	Clutch Gear Bearing (Not Shown)	1	
218	54496781	Bearing (Not Shown)	2	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 1 OF 9

Dwg D13303094/00/01



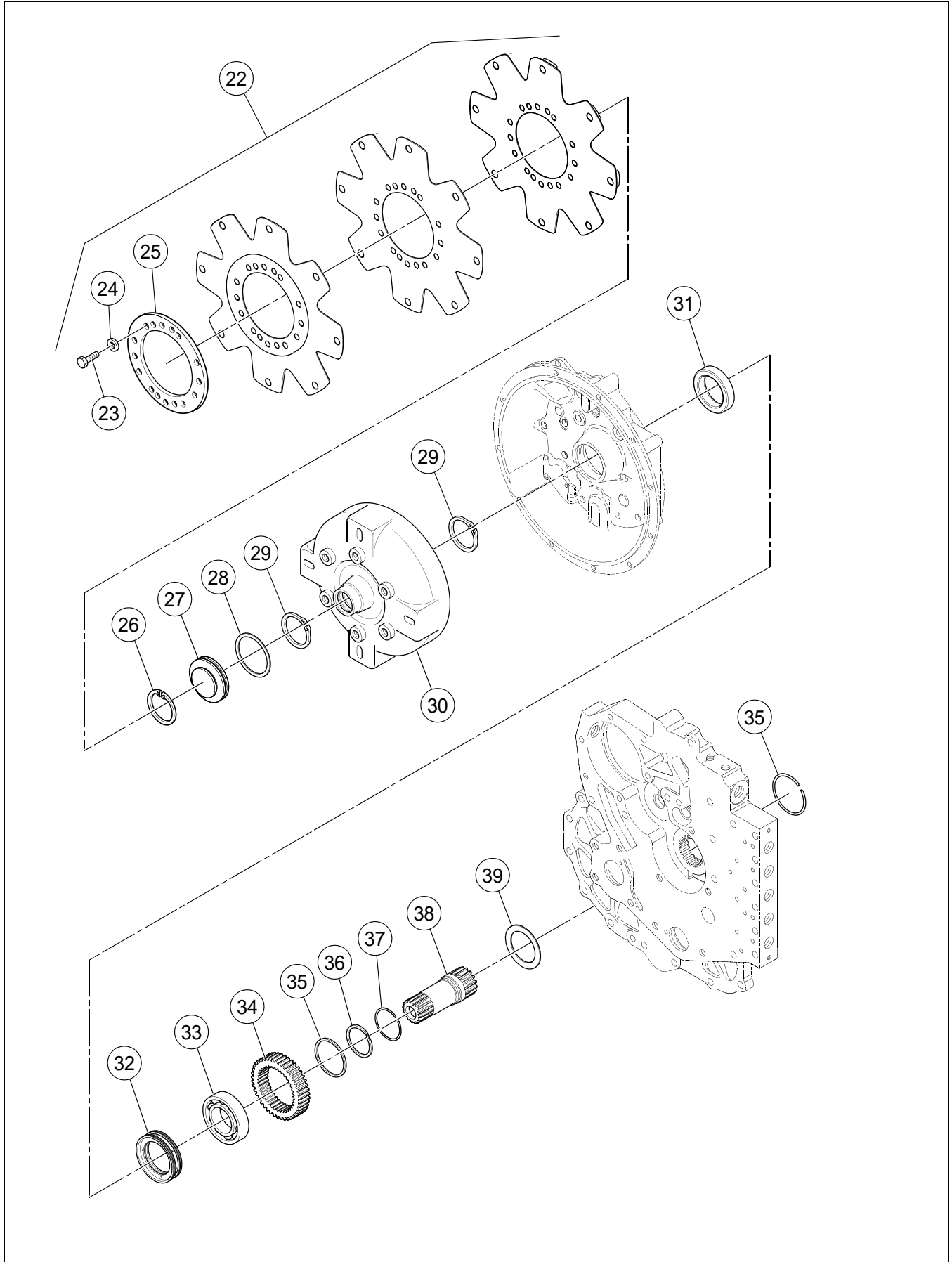
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 1 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59124131	Screw	6	
2	59124115	Lockwasher	32	
3	59124123	Screw	16	
4	59124107	Gasket	1	
5	59130641	Snap Ring Seat	1	
6	59130633	Safety Valve Poppet	1	
7	59130658	Screw	7	
8	59130666	Screw	2	
9	59130674	Poppet Washer	1	
10	59130682	Safety Valve Spring	1	
11	59130690	Safety Valve Seat	1	
12	59124164	Gasket	1	
13	54496591	O-ring	1	
14	51009116	Air Breather	1	
15	59130617	Tube and Screen Assembly	1	
16	59130625	Oil Supply Tube O-ring	1	
17	59131110	Nut	1	
18	59144105	Washer	1	
-	59131110	- Nut	1	
19	59144113	Retainer Clip	1	
20	59124172	Dowel Pin	2	
21	50754977	Magnetic Drain Plug	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 2 OF 9

Dwg D13303094/00/02



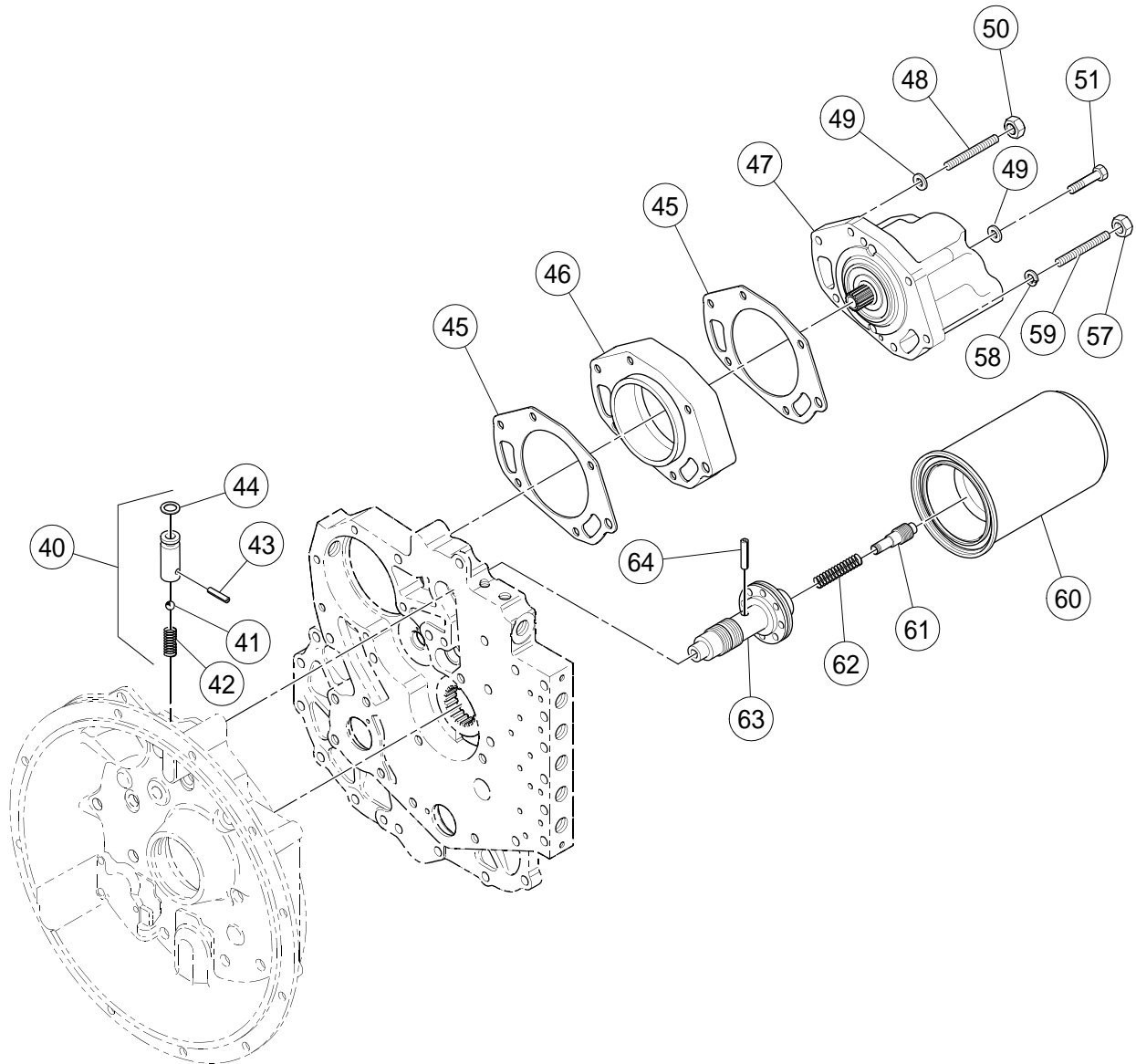
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 2 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
22	59133579	Drive Plate Kit	1	
23	54634175	- Mounting Screw	6	
24	54483086	- Lockwasher	6	
25	58886029	- Drive Plate Backing Ring	1	
26	58886052	Bore Plug Retaining Ring	1	
27	50959824	Plug	1	
28	59481572	O-ring	1	
29	59130732	Snap Ring	2	
30	59144121	Torque Converter	1	
31	59130757	Oil Seal	1	
32	59130773	Ring	1	
33	59130781	Bearing	1	
34	59130799	Impeller Hub Gear	1	
35	59130807	Snap Ring	1	
36	59130815	Ring	1	
37	59130823	Ring Piston Expander	1	
38	59130831	Stator Support	1	
39	59130849	Washer	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 3 OF 9

Dwg D13303094/00/03



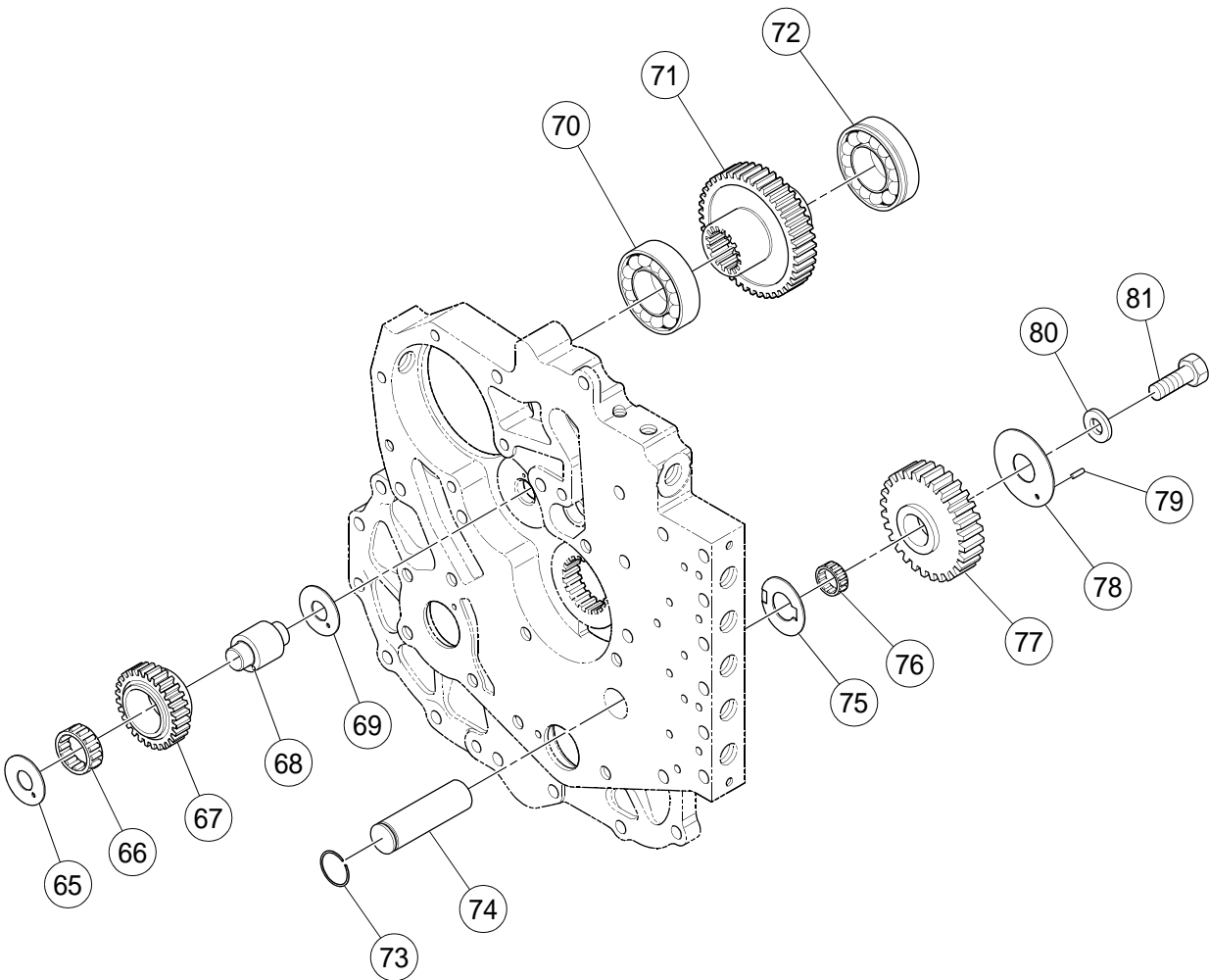
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 3 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
40	59130948	Check Ball Valve Assembly	1	
41	NSS	Not Sold Separately	1	
42	NSS	Not Sold Separately	1	
43	NSS	Not Sold Separately	1	
44	59130930	- O-ring	1	
45	59130989	Gasket	2	
46	59130997	Adaptor	1	
47	59131003	Charging Pump	1	
48	59131011	Stud	1	
49	59131052	Lockwasher	5	
50	59131037	Stud Nut	1	
51	13284781	Screw	1	
57	59131110	Nut	1	
58	59124115	Lockwasher	1	
59	59131128	Stud	1	
60	13284450	Filter	1	
61	59131144	Piston	1	
62	59131151	Spring	1	
63	59131177	Sleeve Regulator Valve	1	
64	59131169	Pin	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 4 OF 9

Dwg D13303094/00/04



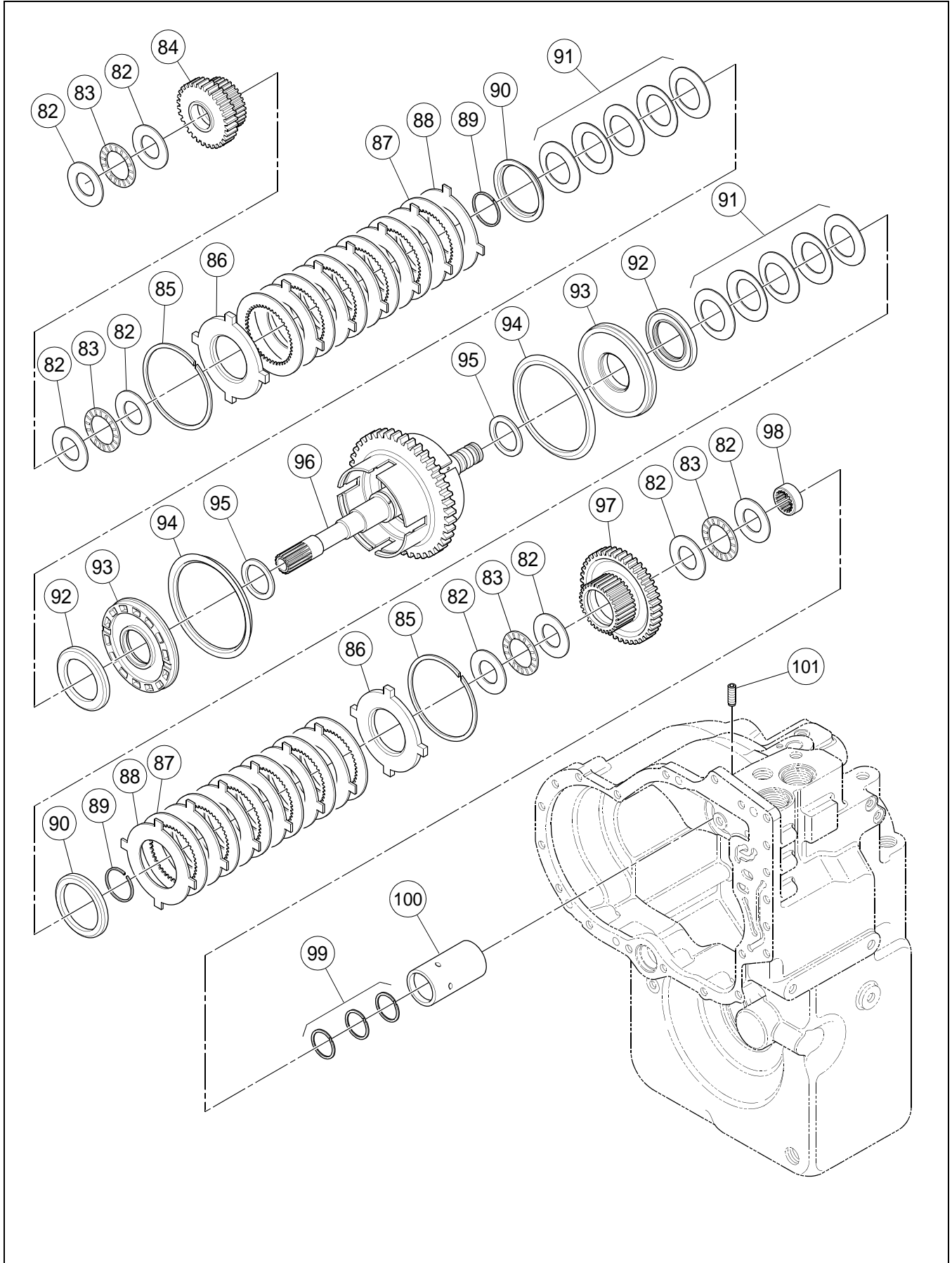
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 4 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
65	59130856	Thrust Washer	2	
66	59130864	Idler Gear Bearing	1	
67	59130872	Idler 31T Gear	1	
68	59130880	Pump Drive Shaft and Pin	1	
69	59130898	Roll Pin	1	
70	59130906	Bearing	1	
71	59130914	Drive 34T Gear	1	
72	59130922	Drive Gear Bearing	1	
73	59131193	Snap Ring	1	
74	59131201	Idler and Pilot Shaft	1	
75	59131219	Thrust Washer	1	
76	59131227	Bearing	1	
77	59131235	Idler Reverse Gear	1	
78	59124198	End Plate	1	
79	59130724	Roll Pin	1	
80	59130708	Washer	1	
81	59130716	Capscrew	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 5 OF 9

Dwg D13303094/00/05



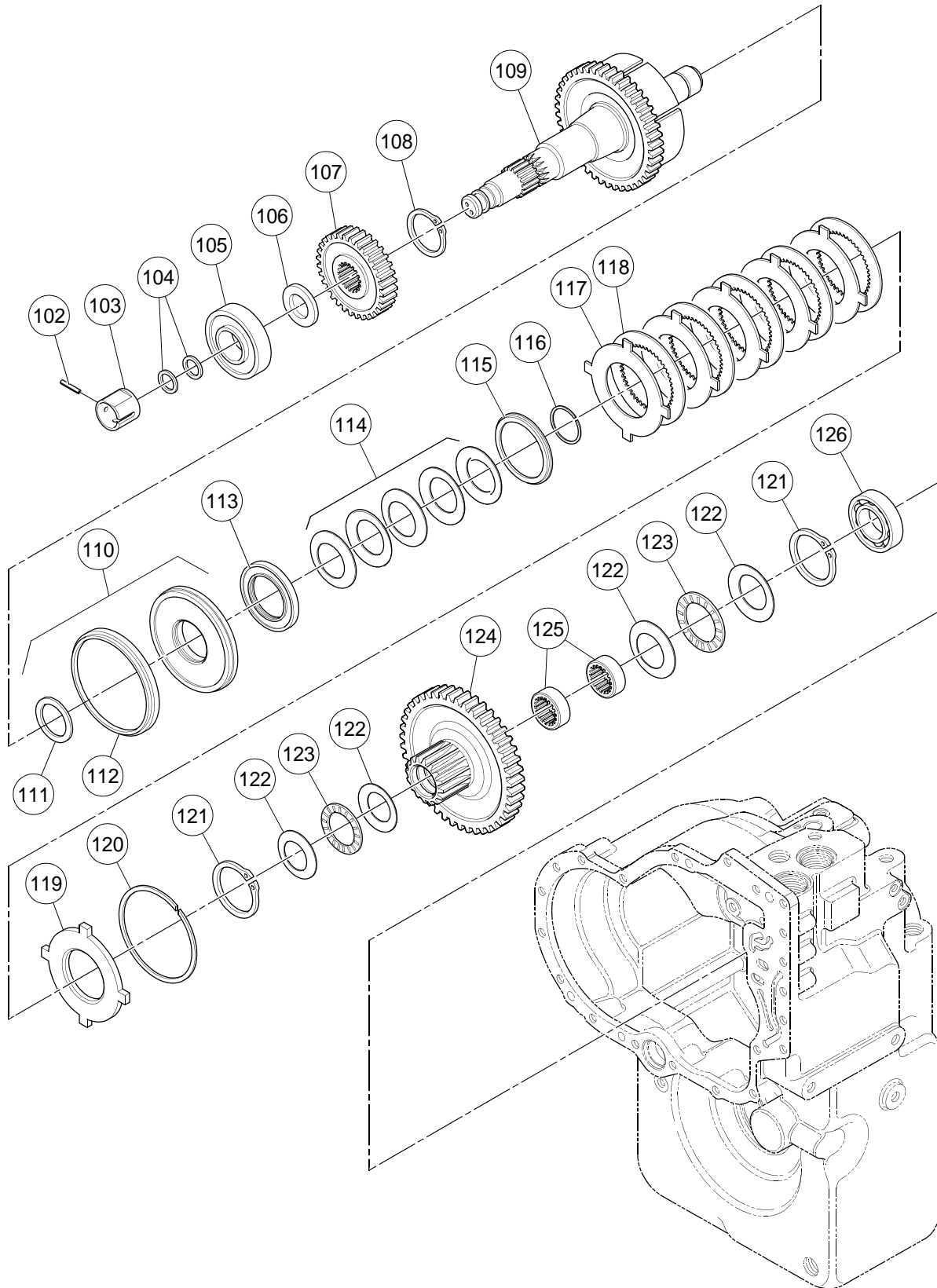
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 5 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
82	59131243	Thrust Washer	8	
83	59131250	Bearing	4	
84	59143453	Reverse Clutch Gear	1	
85	59131268	Snap Ring	2	
86	59131276	End Plate	1	
87	59131284	Inner Disc	12	
88	59131292	Outer Disc	12	
89	59131300	Snap Ring	2	
90	59131318	Snap Ring Retainer	2	
91	59131326	Disc Spring Assembly	2	
92	59131334	Wear Plate	2	
93	59131342	Piston and Seals Assembly	2	
94	59131359	Outer Seal	2	
95	59131367	Inner Seal	2	
96	59131375	Turbine Shaft	1	
97	59143461	Forward Clutch Bearing	1	
98	59131383	Turbine Shaft Bearing	1	
99	59131391	Piston Ring	3	
100	59143404	Oil Distributor Sleeve	1	
101	59143412	Retainer Screw	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 6 OF 9

Dwg D13303094/00/06



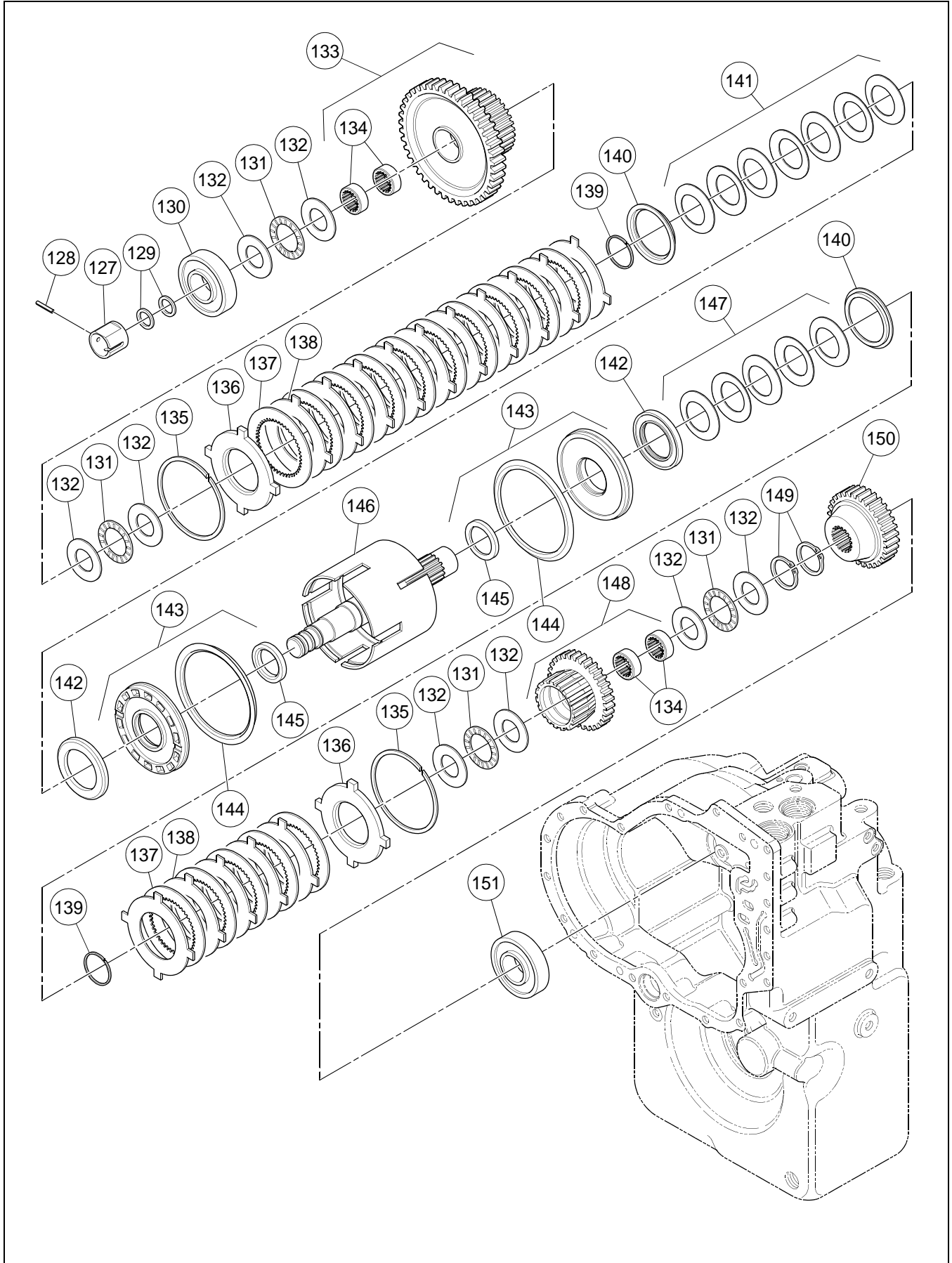
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 6 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
102	59143479	Sleeve Retaining Screw	1	
103	59143495	Oil Distributor Sleeve	1	
104	59131391	Piston Ring	2	
105	54483961	Bearing and Seal Assembly	1	
106	54483987	Washer	1	
107	54483763	1st Driven Gear	1	
108	54484001	External Snap Ring	1	
109	13284773	3rd Shaft Drum and Plug Assembly	1	
110	59143537	Piston and Seals Assembly	1	
111	59131367	- Inner Seal	1	
112	59131359	- Outer Seal	1	
113	59131334	Wear Plate	1	
114	59131326	Disc Spring Assembly	1	
115	59131318	Snap Ring Retainer	1	
116	59131300	Snap Ring	3	
117	59131292	Outer Disc	5	
118	59131284	Inner Disc	5	
119	59131276	End Plate	1	
120	59131268	Snap Ring	1	
121	54484001	External Snap Ring	3	
122	54484035	Clutch Gear Thrust Washer	4	
123	54484043	Thrust Needle Roller Bearing	2	
124	54483904	3rd Clutch Gear and Bearing	1	
125	54496781	Bearing	2	
126	54484050	Roller Bearing	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 7 OF 9

Dwg D13303094/00/07



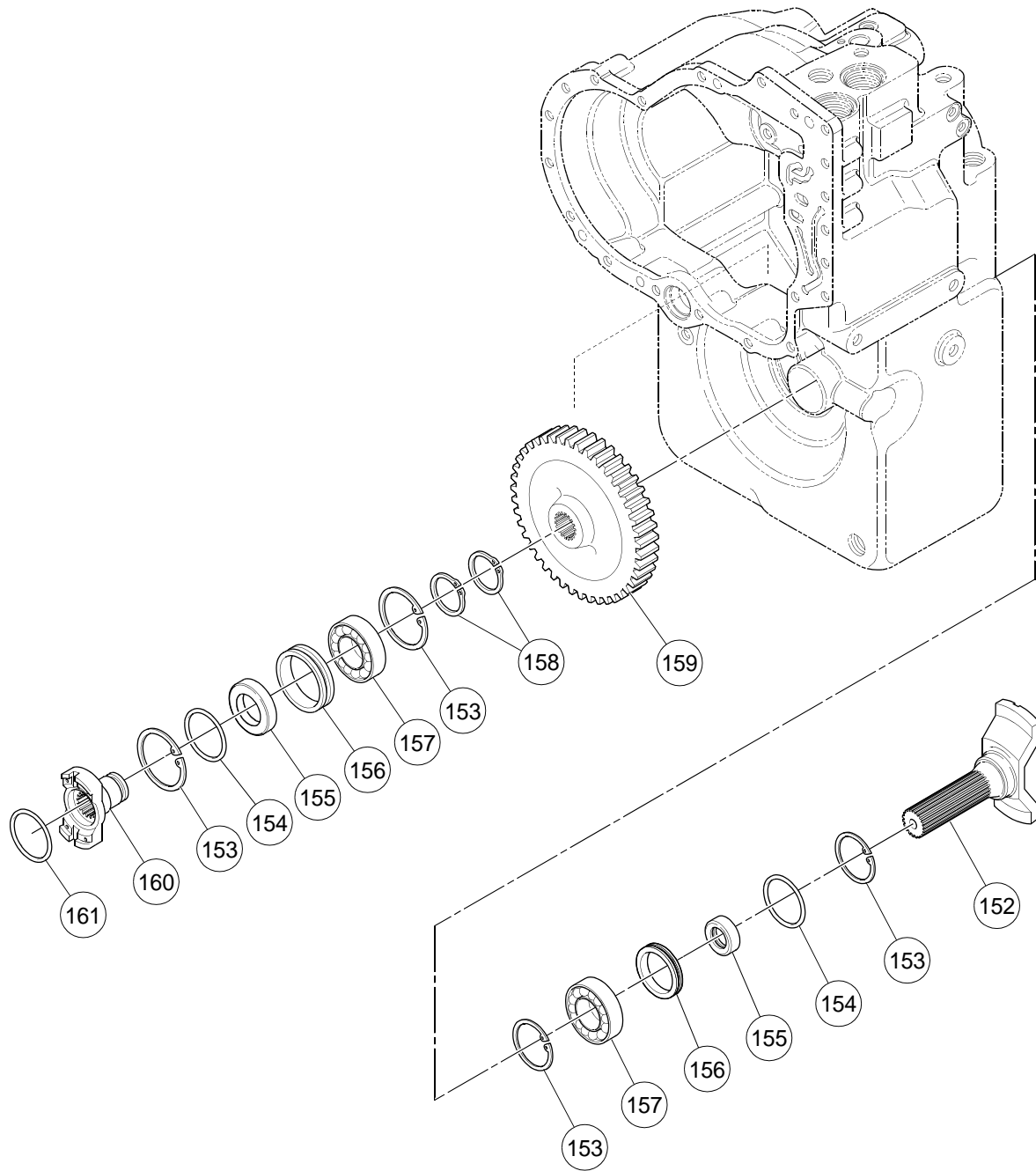
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 7 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
127	59143644	Oil Distribution Sleeve	1	
128	59143479	Screw	1	
129	59131391	Piston Ring	2	
130	54483961	Bearing and Seal Assembly	1	
131	59131250	Bearing	4	
132	59131243	Washer	8	
133	59143693	1st Clutch Gear and Bearing Assembly	1	
134	59143420	- Clutch Gear Bearing	4	
135	59131286	Snap Ring	2	
136	59131276	End Plate	2	
137	59131284	Inner Disc (1st)	10	
138	59131292	Outer Disc (1st)	10	
139	59131300	Snap Ring	2	
140	59131318	Snap Ring Retainer	2	
141	59143651	Disc Spring Assembly	1	
142	59131334	Wear Plate	2	
143	59143669	Piston and Seals Assembly	2	
144	59131359	- Outer Seal	2	
145	59131367	- Inner Seal	2	
146	54496716	Shaft, Drum, Plug and Seat Assembly	1	
147	59131326	Disc Spring Assembly	1	
148	59143701	2nd Clutch Gear and Bearing Assembly	1	
149	59143511	Snap Ring	2	
150	59143719	3rd Driven Gear	1	
151	59143685	Roller Bearing	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 8 OF 9

Dwg D13303094/00/08



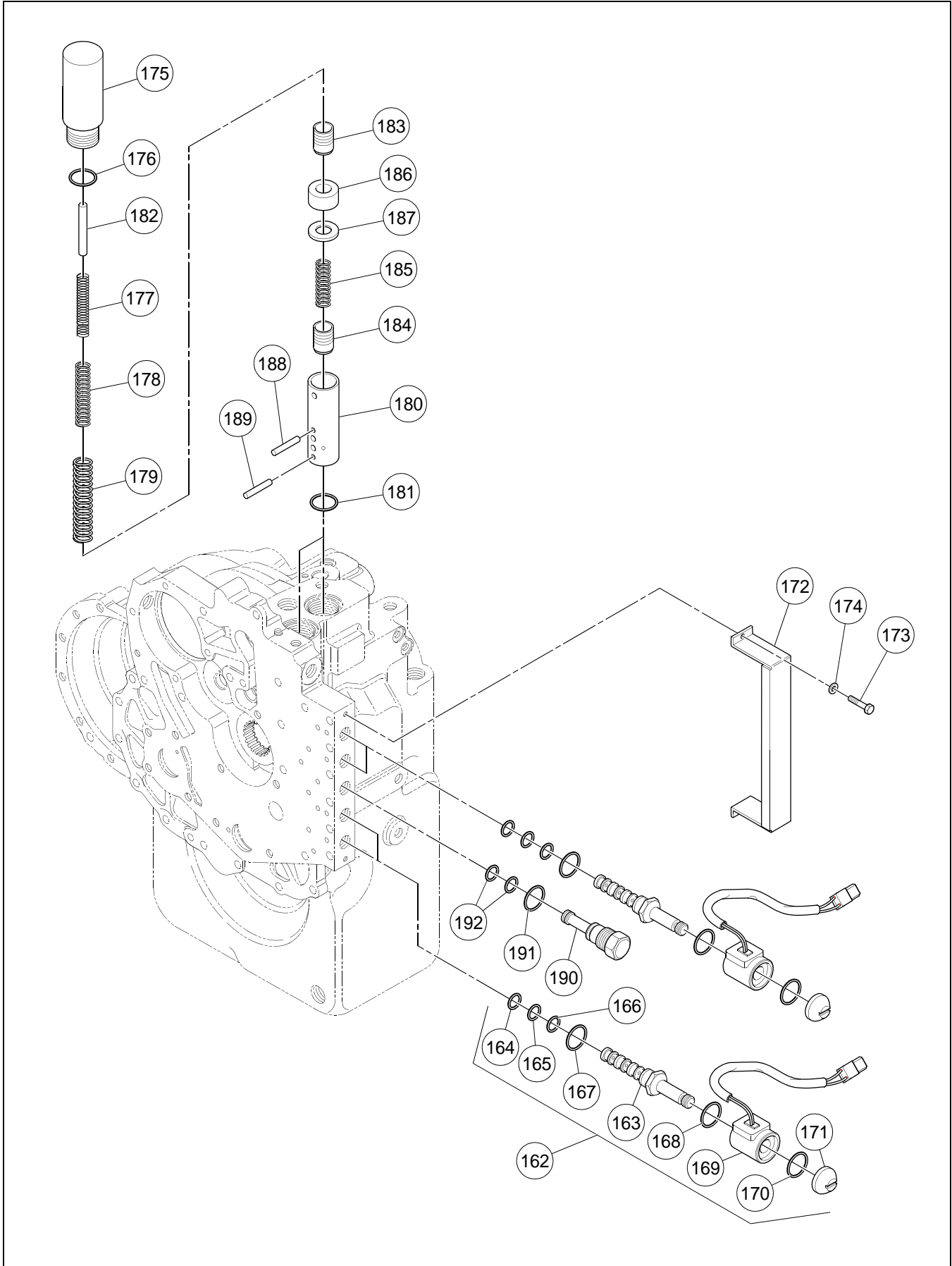
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 8 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
152	54484142	Output Shaft	1	
153	59143578	Snap Ring	4	
154	59143610	O-ring	2	
155	59143743	Oil Seal	2	
156	59143750	Sleeve	2	
157	50755230	Bearing	2	
158	59143594	Snap Ring	2	
159	59143776	Output Shaft Gear	1	
160	59143735	Output Flange and Plug Assembly	1	
161	59143727	Flange Cap	1	

TRANSMISSION (54615711) - PRIOR TO S/N 182415,
EXCLUDING S/N 182255 and 182256 - SHEET 9 OF 9

Dwg D13303094/00/09



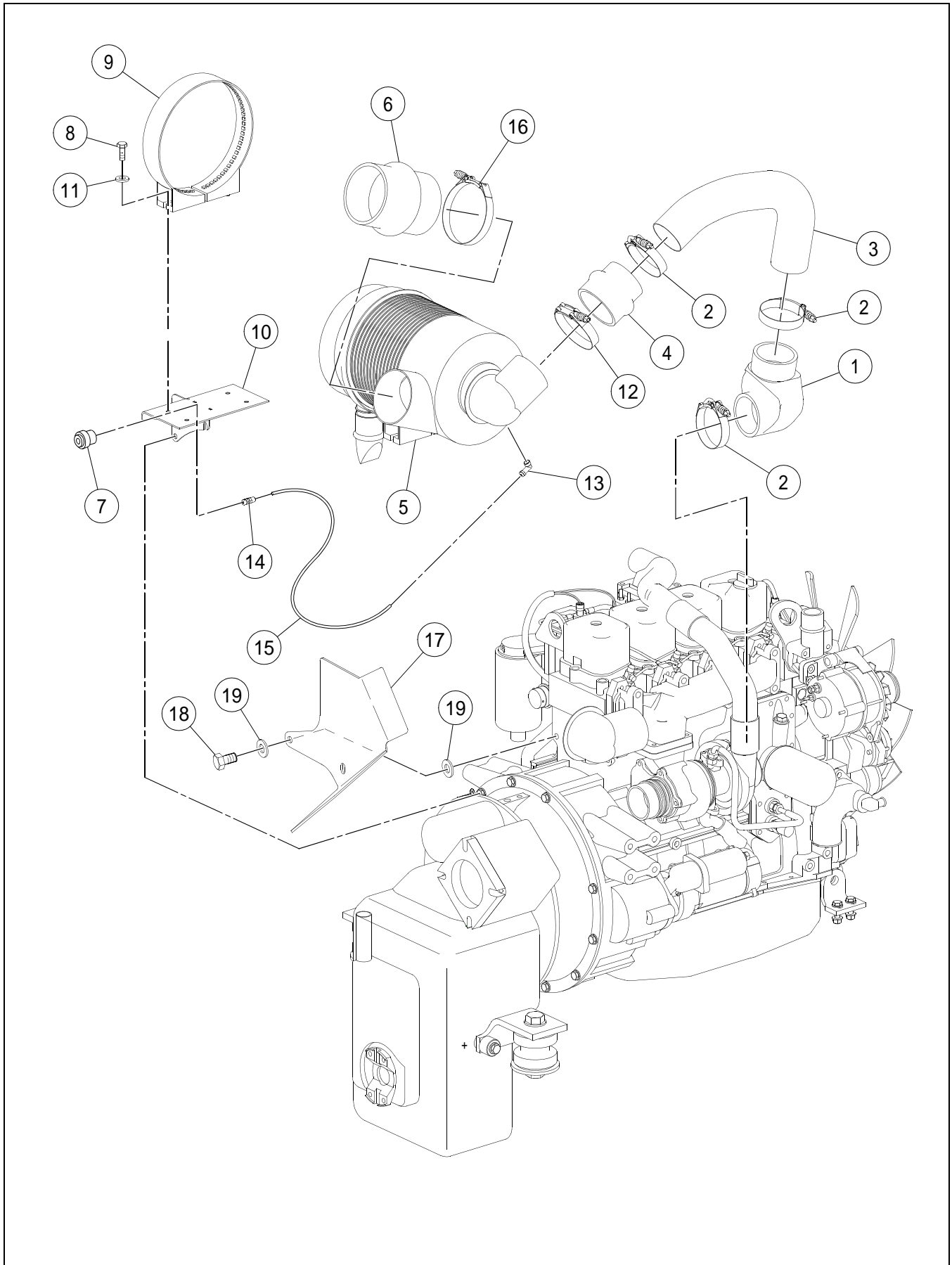
TRANSMISSION (54615711) - PRIOR TO S/N 182415,
 EXCLUDING S/N 182255 and 182256 - SHEET 9 OF 9

BOM 54615711

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
162	59144055	Solenoid Assembly	4	
163	59144030	- Cartridge Valve - 4 Way	4	
164	54484233	- O-ring	4	
165	59144006	- O-ring	4	
166	54484225	- O-ring	4	
167	59144022	- O-ring	4	
168	59143974	- O-ring	8	
169	59143982	- Solenoid Coil	4	
170	NSS	- O-ring	1	
171	59143966	- Nut Retainer	4	
172	59143958	Cover	1	
173	59143941	Screw	2	
174	59143933	Lockwasher	2	
175	59143784	Housing	2	
176	54484191	O-ring	2	
177	54683495	Inner Spring	2	
178	59143826	Middle Spring	2	
179	59143925	Outer Spring	2	
180	59143867	Modulation Valve Sleeve	2	
181	59143859	O-ring	2	
182	59143800	Stop Pin	2	
183	59143917	Accumulator Spool	2	
184	54484217	Regulator Spool	2	
185	59143883	Modulator Valve Spring	2	
186	59143909	Spring Retainer	2	
187	59143891	Spring Spacer	2	
188	59143834	Upper Pin	2	
189	59143842	Lower Pin	2	
190	59144048	Solenoid Bore Plug	1	
191	59144022	O-ring	1	
192	54484225	O-ring	1	
193	54484233	O-ring (Not Shown)	1	

AIR CLEANER INSTALLATION

Dwg 13259478/05



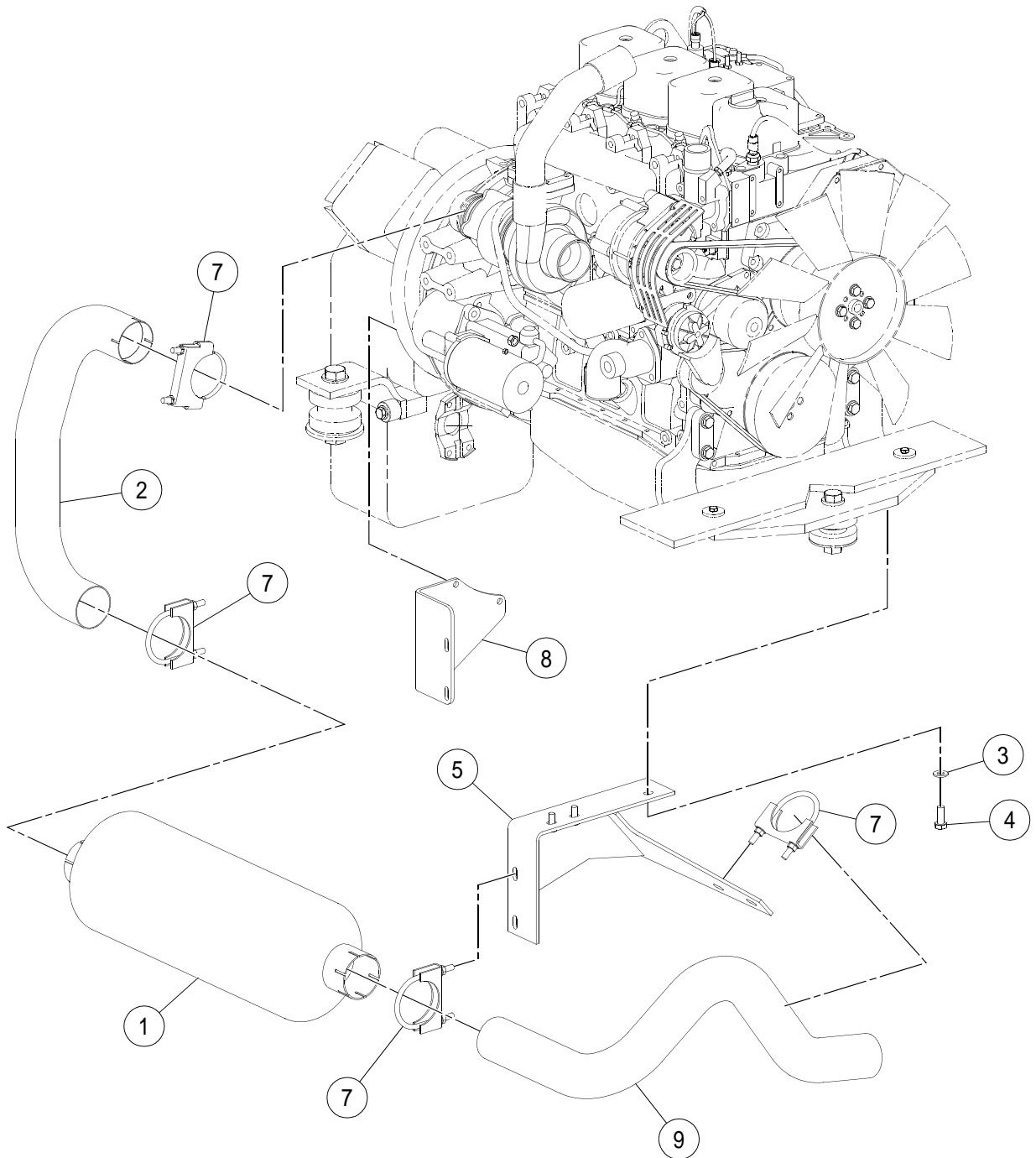
AIR CLEANER INSTALLATION

BOM 13259478

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59896118	Elbow	1	
2	54680087	T-bolt Spring Clamp	3	
3	13267182	Air Intake Pipe	1	
4	59456889	Reducer	1	
5	54524418	Air Cleaner	1	
-	54484092	- Air Cleaner Primary Filter Element	1	
-	54493259	- Air Cleaner Secondary Filter Element	1	
6	13318621	Straight Hump Hose	1	
7	50266907	Air Filter Service Indicator	1	
8	96702659	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 25 CI 8.8
9	54524434	Air Filter Bracket	2	
10	13267174	Air Filter Mounting Bracket	1	
11	96741038	Flatwasher	4	M8 x 1.25 CI 200
12	54680103	T-bolt Spring Clamp	1	
13	59311670	Elbow, 90°	1	
14	59311621	Connector	1	
15	59312801	Tube	1	
16	54720032	T-bolt Spring Clamp	1	
17	13414727	Air Cleaner Heat Shield	1	
18	96701495	HHCS, Fully Threaded, Zinc Plated	2	M12 x 1.75 x 25 CI 8.8
19	96712237	Flatwasher, Zinc Plated	4	M12 Hardened CI 10

EXHAUST INSTALLATION

Dwg 13259486/04



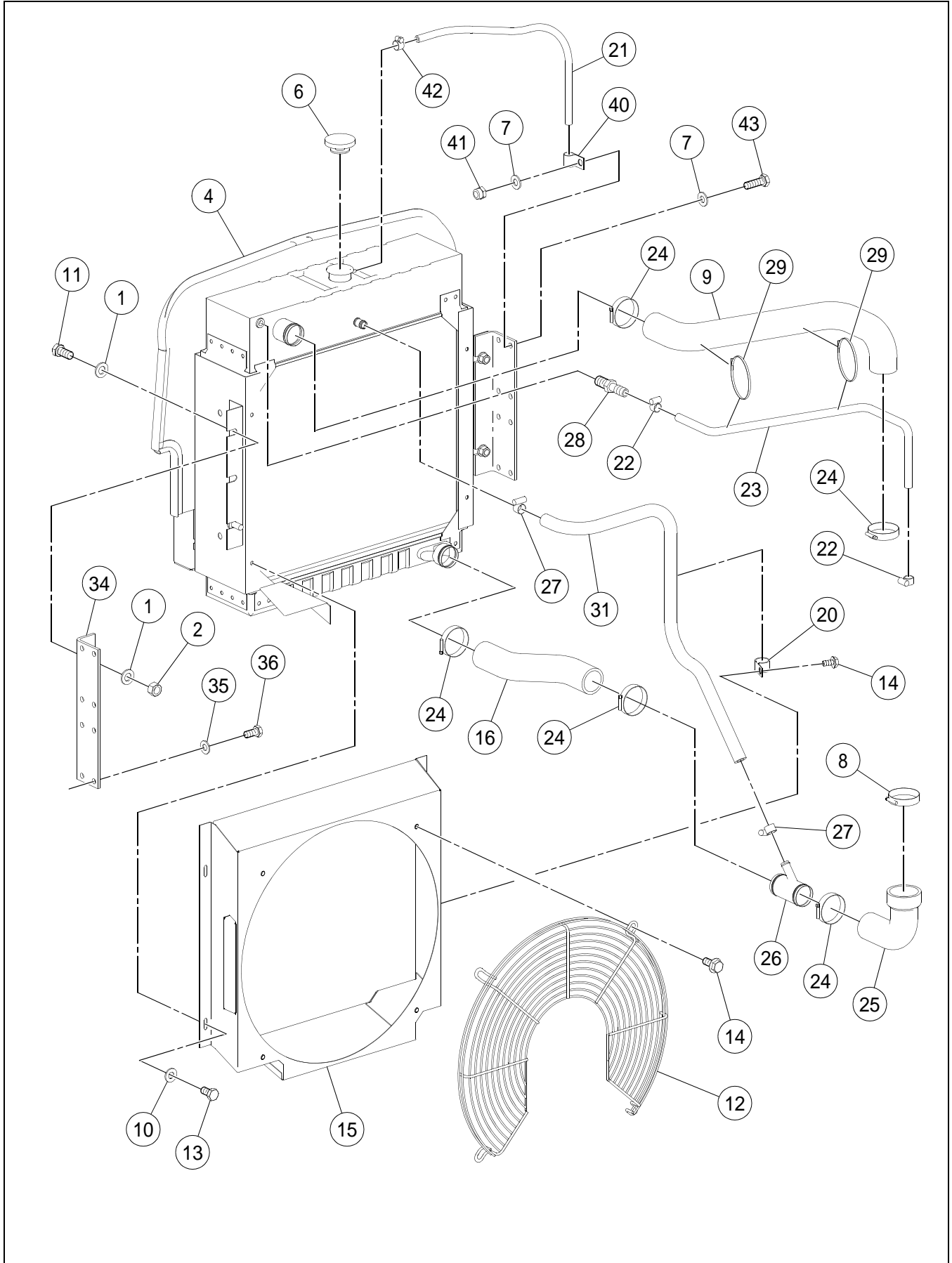
EXHAUST INSTALLATION

BOM 13259486

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	58933623	Muffler	1	
2	13224803	Exhaust Pipe	1	
3	96714399	Flatwasher, Zinc Plated	3	M10 CI 140
4	96702287	HHCS, Fully Threaded, Zinc Plated	3	M10 x 1.5 x 25 CI 8.8
5	13195920	Tailpipe Mounting Plate	1	
7	59179218	Exhaust Clamp	4	
8	13348917	Muffler Mounting Plate	1	
9	13195912	Tail Pipe	1	

RADIATOR/OIL COOLER INSTALLATION - SHEET 1 OF 2

Dwg D13267141/02/01



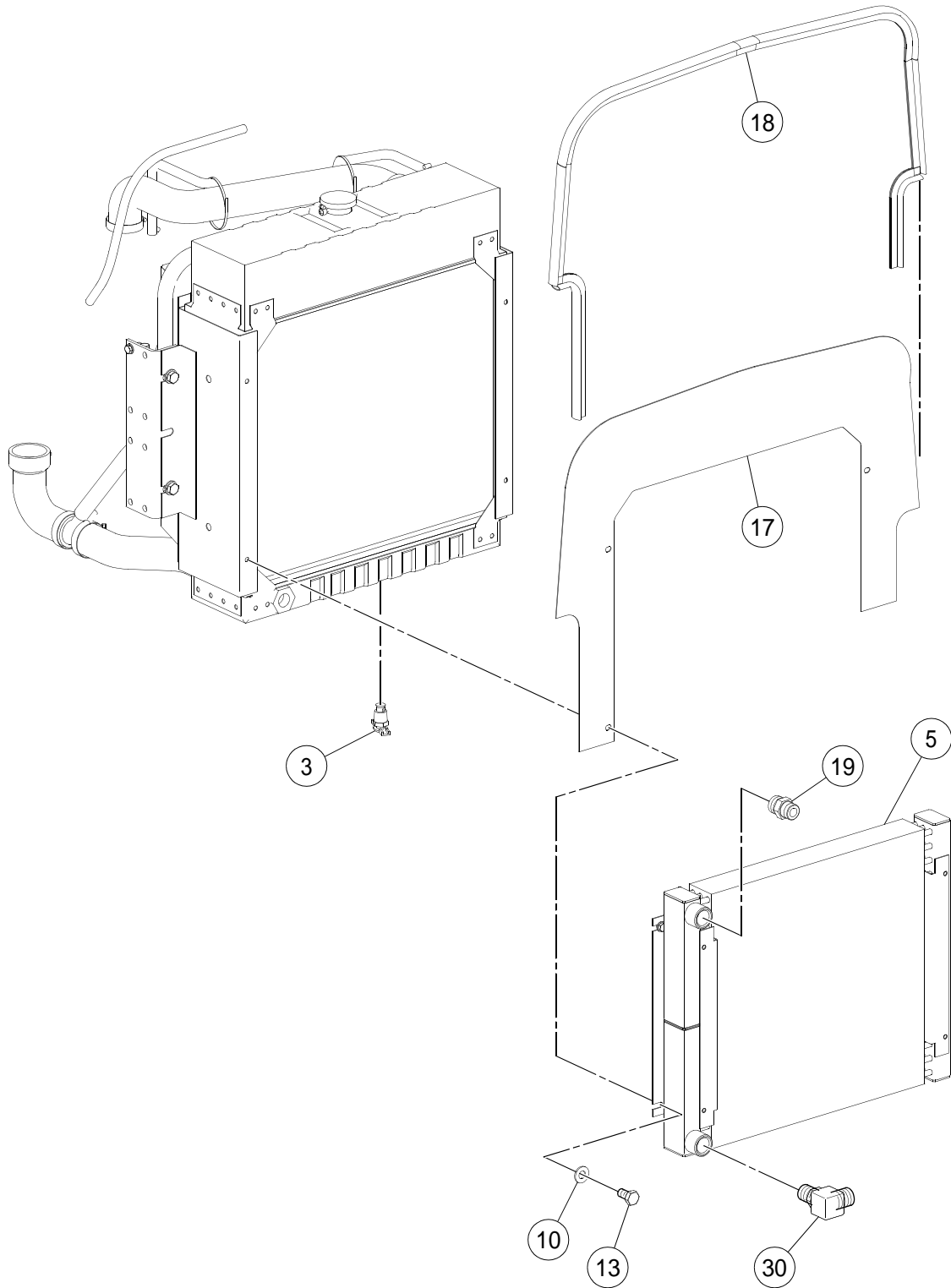
RADIATOR/OIL COOLER INSTALLATION - SHEET 1 OF 2

BOM 13259494

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96738596	Flatwasher, Zinc Plated	8	M12 Hardened CI 200
2	96704291	Hex Nut, Zinc Plated	4	M12 x 1.75 CI 8
4	13308028	Radiator	1	
-	13281597	- Oil Cooler	1	
-	13281647	- Shroud	1	
6	13281571	Radiator Cap	1	
7	96741038	Flatwasher	2	M8 x 1.25 CI 200
8	95286266	Hose Clamp	1	
9	13267067	Upper Radiator Hose	1	
10	59887182	Washer	8	Hardened
13	96705041	HHCS, Fully Threaded, Zinc Plated	8	M8 x 1.25 x 12 CI 8.8
11	96701495	HHCS, Fully Threaded, Zinc Plated	4	M12 x 1.75 x 25 CI 8.8
12	59137570	Fan Guard	1	
14	96704218	Lockbolt, Zinc Plated	5	M8 x 1.25 x 16 CI 90
15	13345327	Shroud	1	
16	13307863	Lower Radiator Hose	1	
20	95301867	Clamp	1	
21	59137216	Hose Assembly	1	20.0"
22	59363259	Hose Clamp	2	
23	59447177	Hose Assembly	1	24.0"
24	95302683	Hose Clamp	5	
25	13307871	Lower Radiator Hose	1	
26	13318373	Pipe	1	
27	95671285	Hose Clamp	2	
28	59331934	Adapter	1	
29	13286125	Wire Tie	A/R	
31	13267125	Hose Assembly	1	33.0"
34	59295113	Radiator Mounting Angle	2	
35	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
36	96702279	HHCS, Fully Threaded, Zinc Plated	8	M10 x 1.5 x 20 CI 8.8
40	59103598	Clamp	1	
41	96704606	Hex Locknut, Zinc Plated	1	M8 x 1.25 CI 8
42	50274299	Hose Clamp	1	
43	96702659	HHCS, Fully Threaded, Zinc Plated	1	M8 x 1.25 x 25 CI 8.8

RADIATOR/OIL COOLER INSTALLATION - SHEET 2 OF 2

Dwg D13267141/02/02



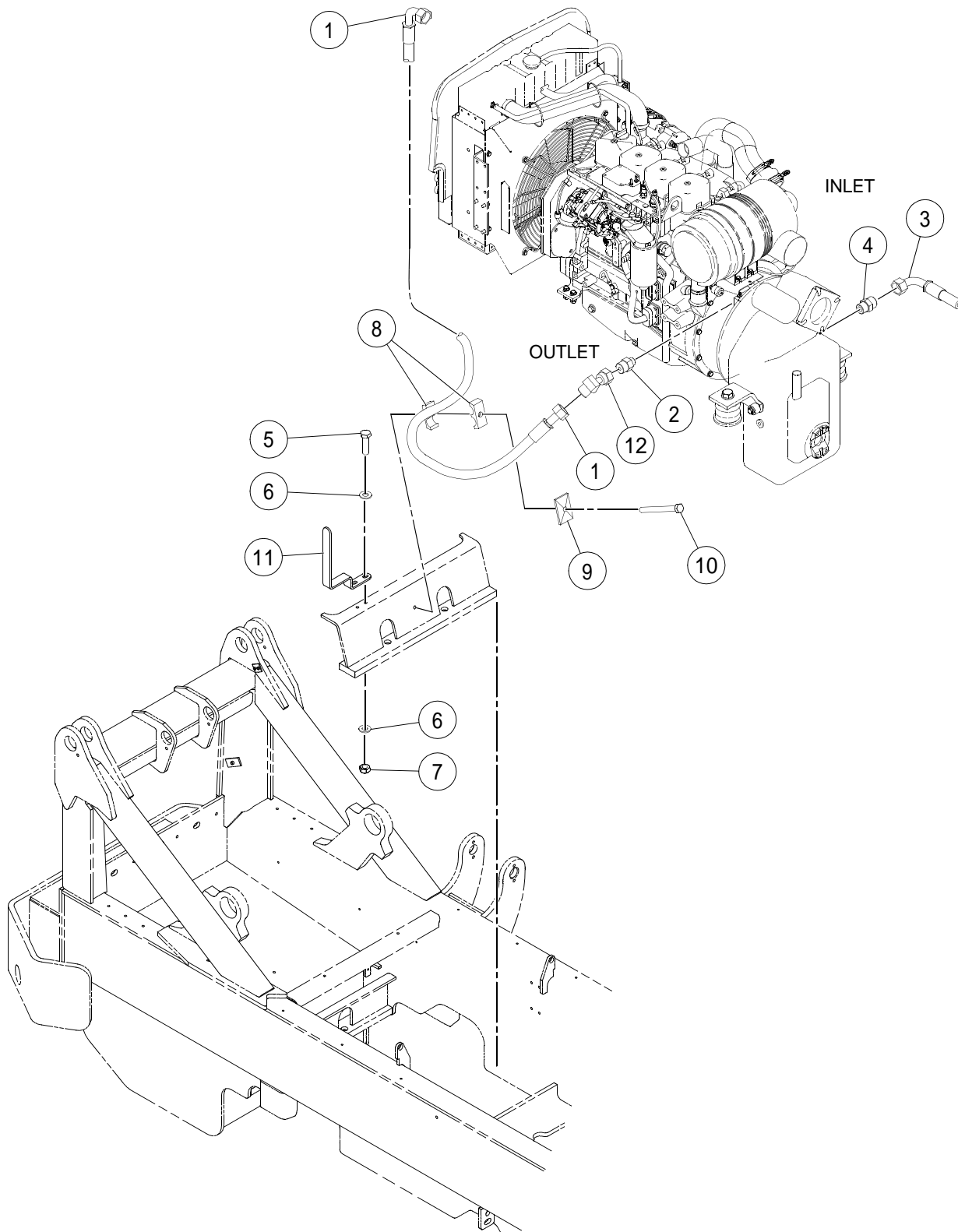
RADIATOR/OIL COOLER INSTALLATION - SHEET 2 OF 2

BOM 13259494

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	95250692	Radiator Drain	1	
5	13300579	Oil Cooler	1	
10	59887182	Washer	8	Hardened
13	96705041	HHCS, Fully Threaded, Zinc Plated	8	M8 x 1.25 x 12 Cl 8.8
17	13300561	Air Dam	1	
18	13267109	Seal Trim	1	
19	59922591	Adapter	1	
30	59922971	Fitting	1	

TRANSMISSION COOLING LINES INSTALLATION

Dwg D13259502/00



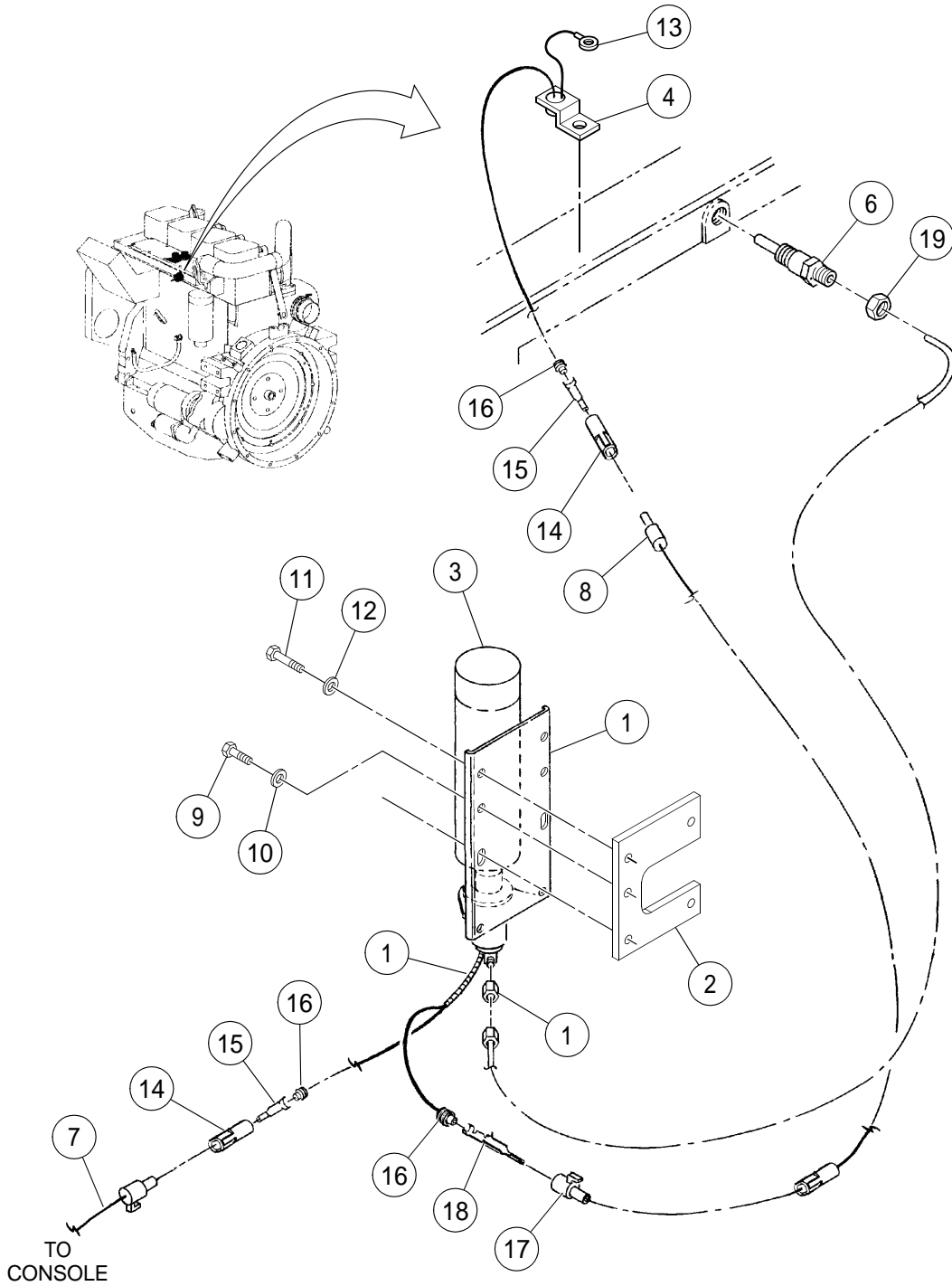
TRANSMISSION COOLING LINES INSTALLATION

BOM 13259502

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13307970	Hose Assembly	1	102.0"
2	59922583	Adapter, Straight	1	
3	13307988	Hose Assembly	1	148.0"
4	59922591	Adapter	1	
5	96705587	HHCS, Fully Threaded, Zinc Plated	2	M8 x 1.25 x 30 CI 8.8
6	96741038	Flatwasher	4	M8 x 1.25 CI 200
7	96704606	Hex Locknut, Zinc Plated	2	M8 x 1.25 CI 8
8	59963538	Insert Clamp	2	
9	59656322	Cover Plate	1	
10	96718978	HHCS, Zinc Plated	1	M8 x 1.25 x 80 CI 8.8
11	13300280	Hose Clamp Plate	1	
12	59328492	Adapter	1	

COLD START INSTALLATION FOR SINGLE BATTERY -
OPTIONAL - SHEET 1 OF 2

Dwg D13307194/01/01



VIEW "A"
(ROTATED 90 DEGREES
CCW FOR CLARITY)

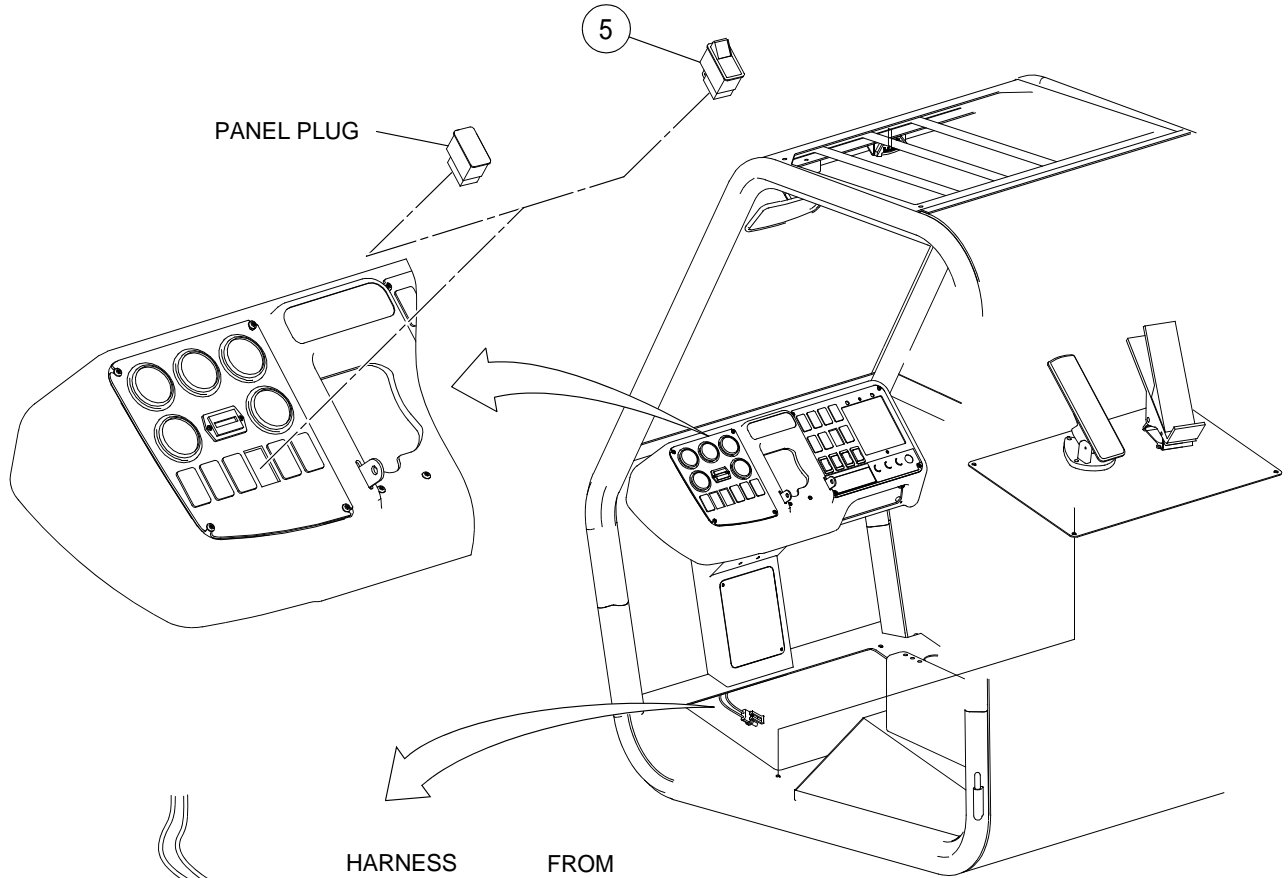
COLD START INSTALLATION FOR SINGLE BATTERY -
OPTIONAL - SHEET 1 OF 2

BOM 13307194

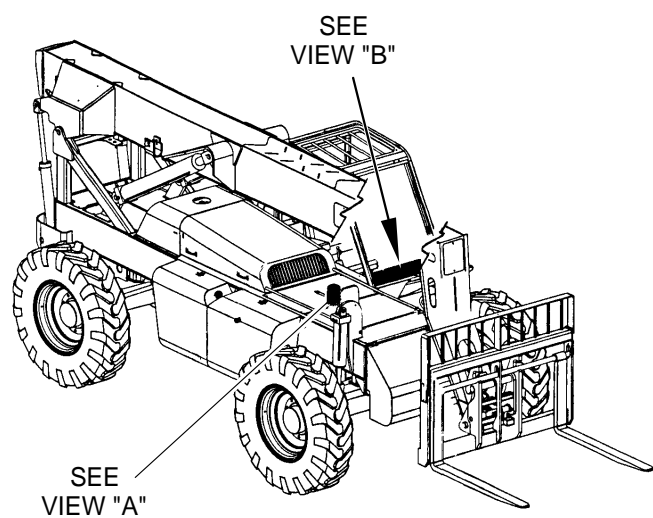
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59398925	Cold Start Kit	1	
2	13307202	Bottle Mount Spacer Plate	1	
3	59866970	Ether Cylinder	1	
4	59352476	Thermo Switch	1	
6	59352542	Atomizer	1	
7	59149039	Console Wire Harness	1	
8	59137364	Ether/Thermo Wire Harness	1	
9	96719851	HHCS, Fully Threaded, Zinc Plated	1	M12 x 1.75 x 16 CI 8.8
10	96738596	Flatwasher, Zinc Plated	1	M12 Hardened CI 200
11	96702659	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 25 CI 8.8
12	96741038	Flatwasher	4	M8 x 1.25 CI 200
13	58754433	Ring Terminal	1	
14	58753104	Waterproof Connector	2	
15	59854828	Male Pin	2	
16	59854877	Cable Seal	3	
17	58753112	Waterproof Connector	1	
18	58797499	Waterproof Terminal	1	
19	59137471	Tube	1	

COLD START INSTALLATION FOR SINGLE BATTERY -
OPTIONAL - SHEET 2 OF 2

Dwg D13307194/01/02



VIEW "B"
(ROTATED 180 DEGREES
CCW FOR CLARITY)



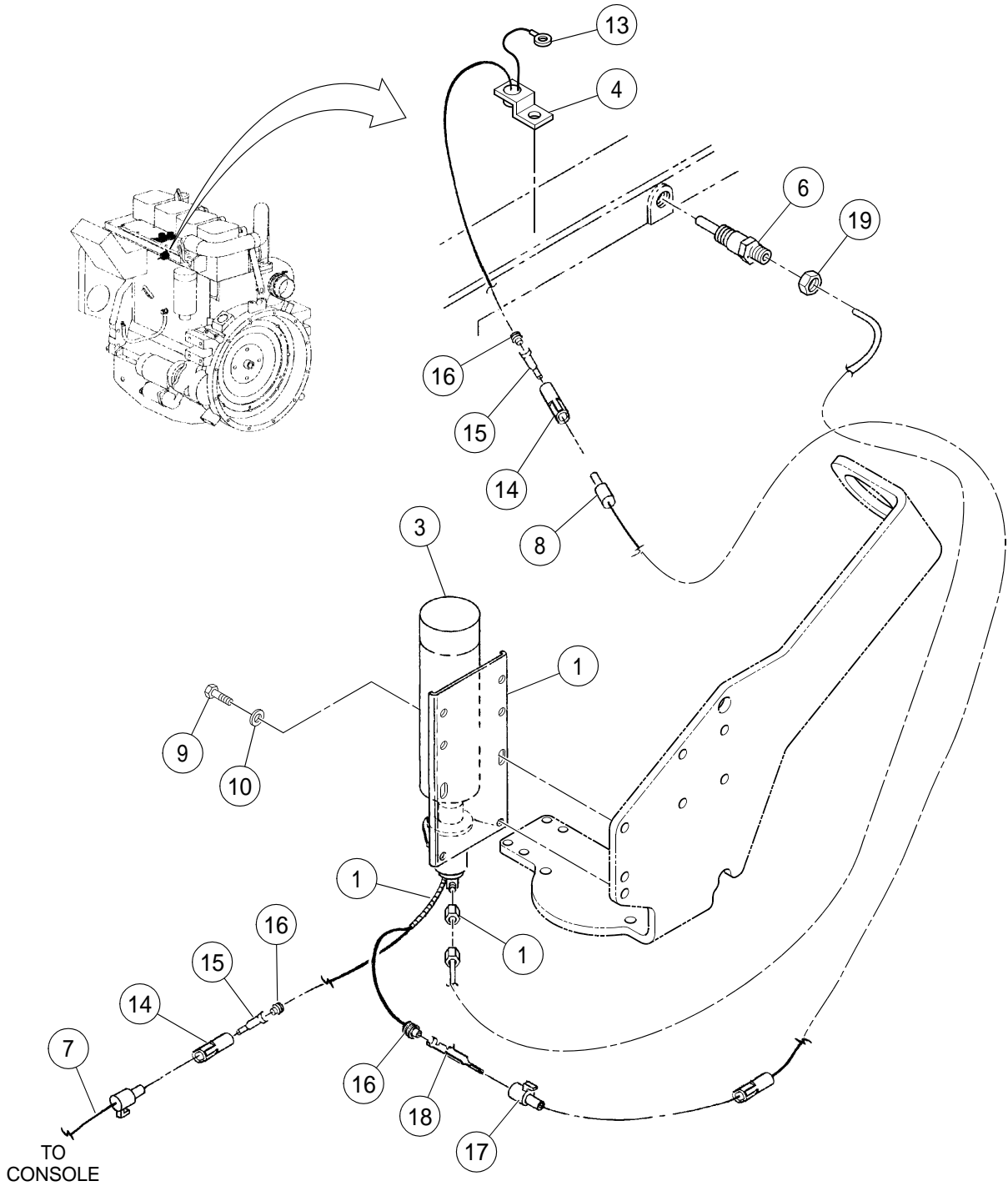
COLD START INSTALLATION FOR SINGLE BATTERY -
OPTIONAL - SHEET 2 OF 2

BOM 13307194

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13305693	Ether Start Switch	1	
7	59149039	Console Wire Harness	1	

COLD START INSTALLATION FOR DUAL BATTERY -
OPTIONAL - SHEET 1 OF 2

Dwg 13856372/00



VIEW "A"
(ROTATED 90 DEGREES
CCW FOR CLARITY)

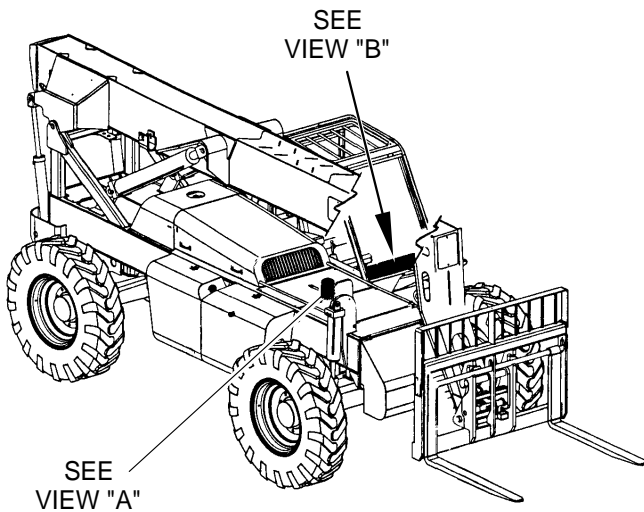
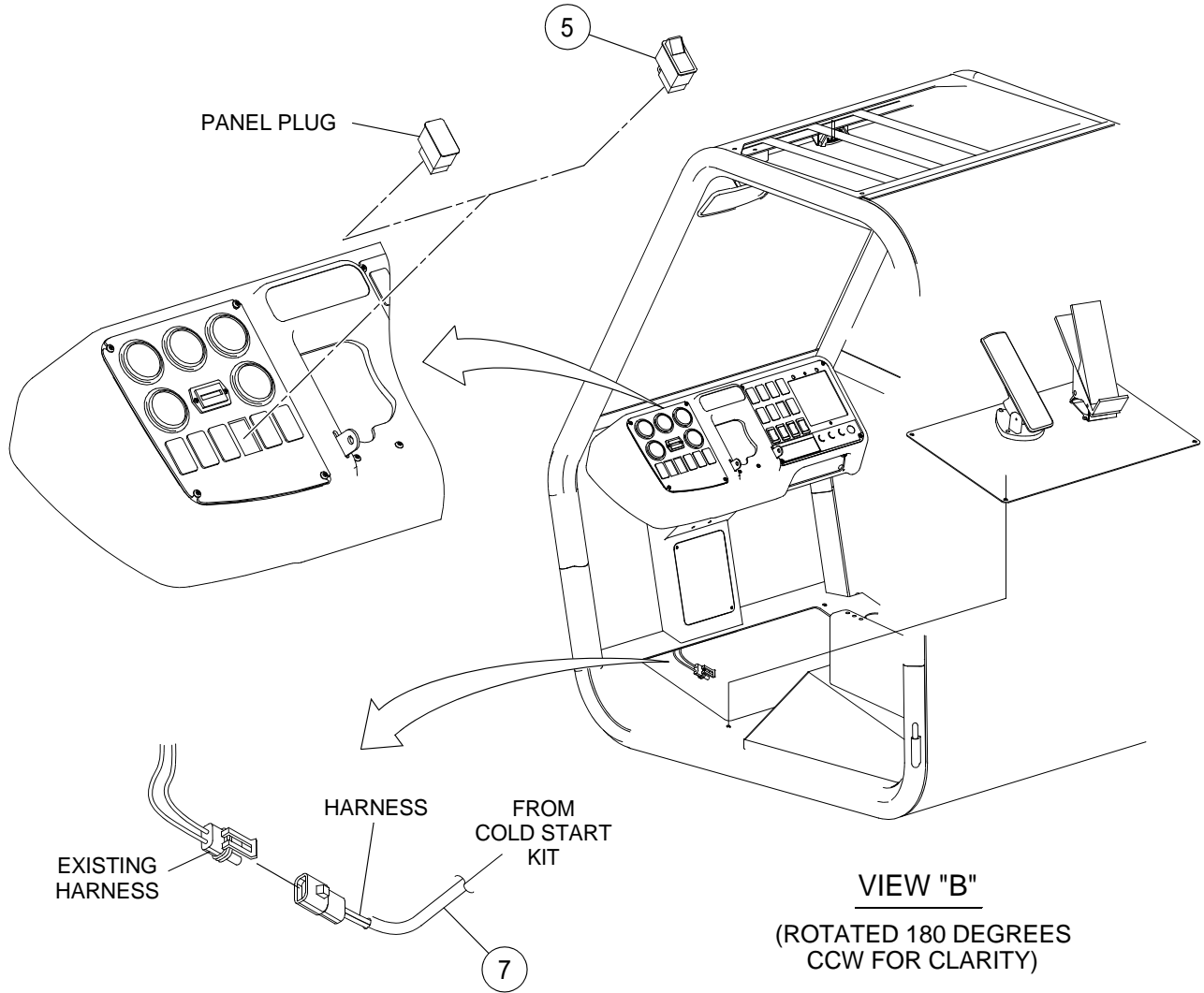
COLD START INSTALLATION FOR DUAL BATTERY -
OPTIONAL - SHEET 1 OF 2

BOM 13856372

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59398925	Cold Start Kit	1	
3	59866970	Ether Cylinder	1	
4	59352476	Thermo Switch	1	
6	59352542	Atomizer	1	
7	59149039	Console Wire Harness	1	
8	59137364	Ether/Thermo Wire Harness	1	
9	96702816	HHCS, Fully Threaded, Zinc Plated	2	M8 x 1.25 x 16 CI 8.8
10	96740188	Washer, Zinc Plated	2	M8 x 3 CI HV100
13	58754433	Ring Terminal	1	
14	58753104	Waterproof Connector	2	
15	59854828	Male Pin	2	
16	59854877	Cable Seal	3	
17	58753112	Waterproof Connector	1	
18	58797499	Waterproof Terminal	1	
19	59137471	Tube	1	

COLD START INSTALLATION FOR DUAL BATTERY -
OPTIONAL - SHEET 2 OF 2

Dwg 13856372/00



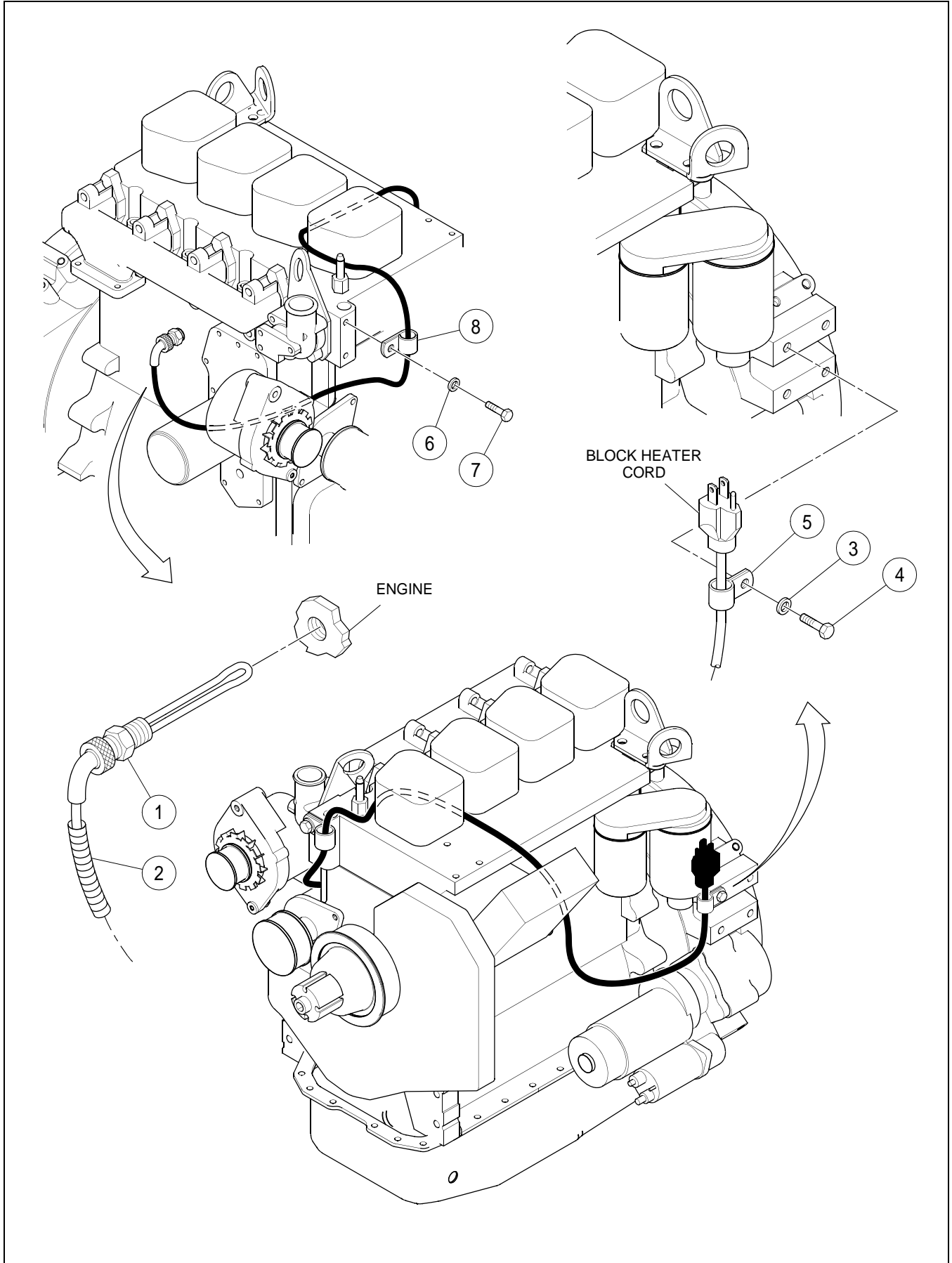
COLD START INSTALLATION FOR DUAL BATTERY -
OPTIONAL - SHEET 2 OF 2

BOM 13856372

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13305693	Ether Start Switch	1	
7	59149039	Console Wire Harness	1	

BLOCK HEATER INSTALLATION - OPTIONAL

Dwg 13421144/00



BLOCK HEATER INSTALLATION - OPTIONAL

BOM 3421169

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59118521	Block Heater	1	
-	59144394	- Cord	1	
2	59974915	Loom	6	
3	96738596	Flatwasher, Zinc Plated	1	M12 Hardened CI 200
4	59973511	Capscrew	1	
5	59465641	Clamp	1	
6	96741020	Flatwasher, Zinc Plated	1	M8 CI 140
7	96702816	HHCS, Fully Threaded, Zinc Plated	1	M8 x 1.25 x 16 CI 8.8
8	59103598	Clamp	1	

*****Always use Ingersoll-Rand Replacement parts!*****

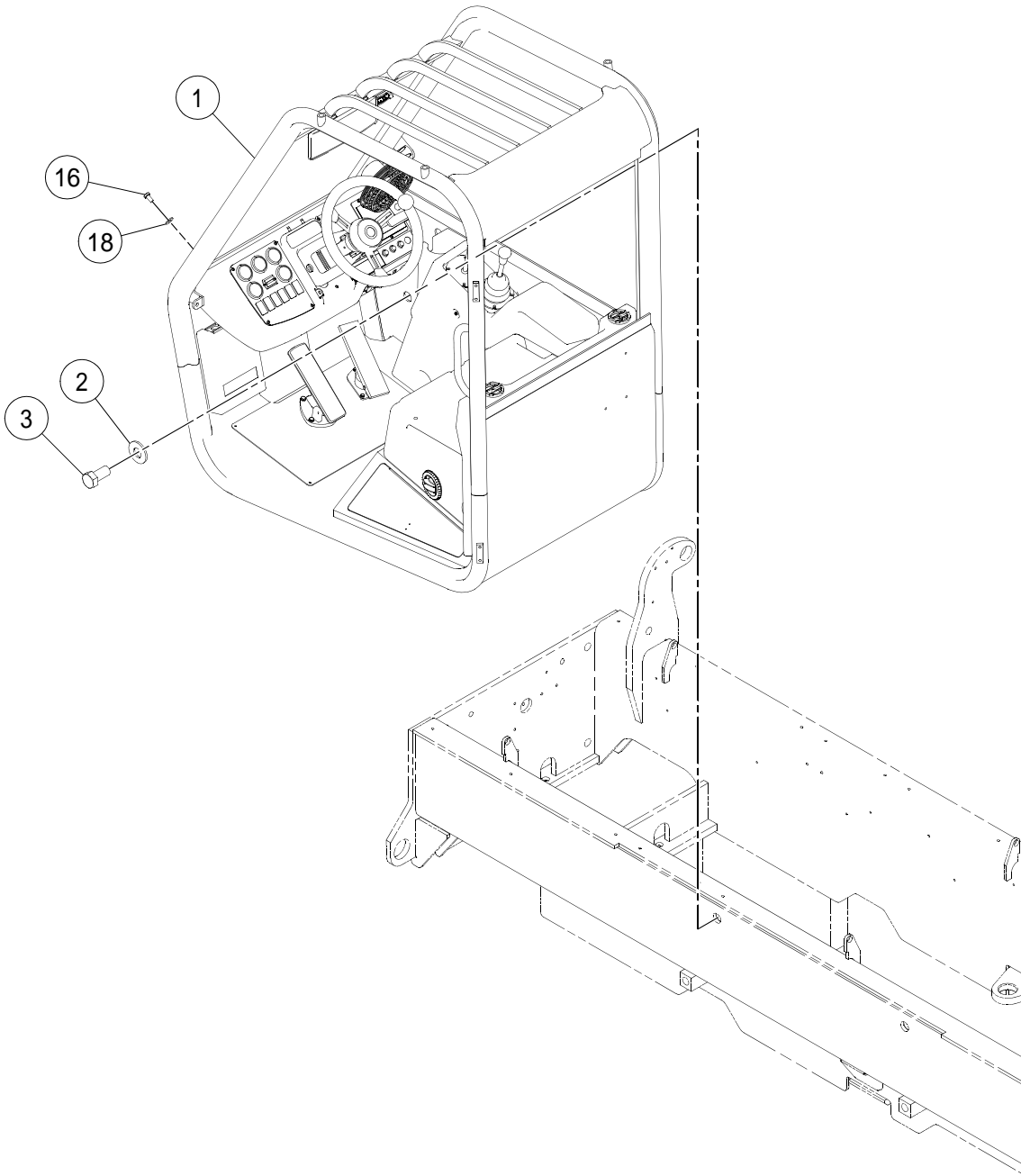


Section D - OPERATORS COMPARTMENT



CAB INSTALLATION

Dwg D13259411/00



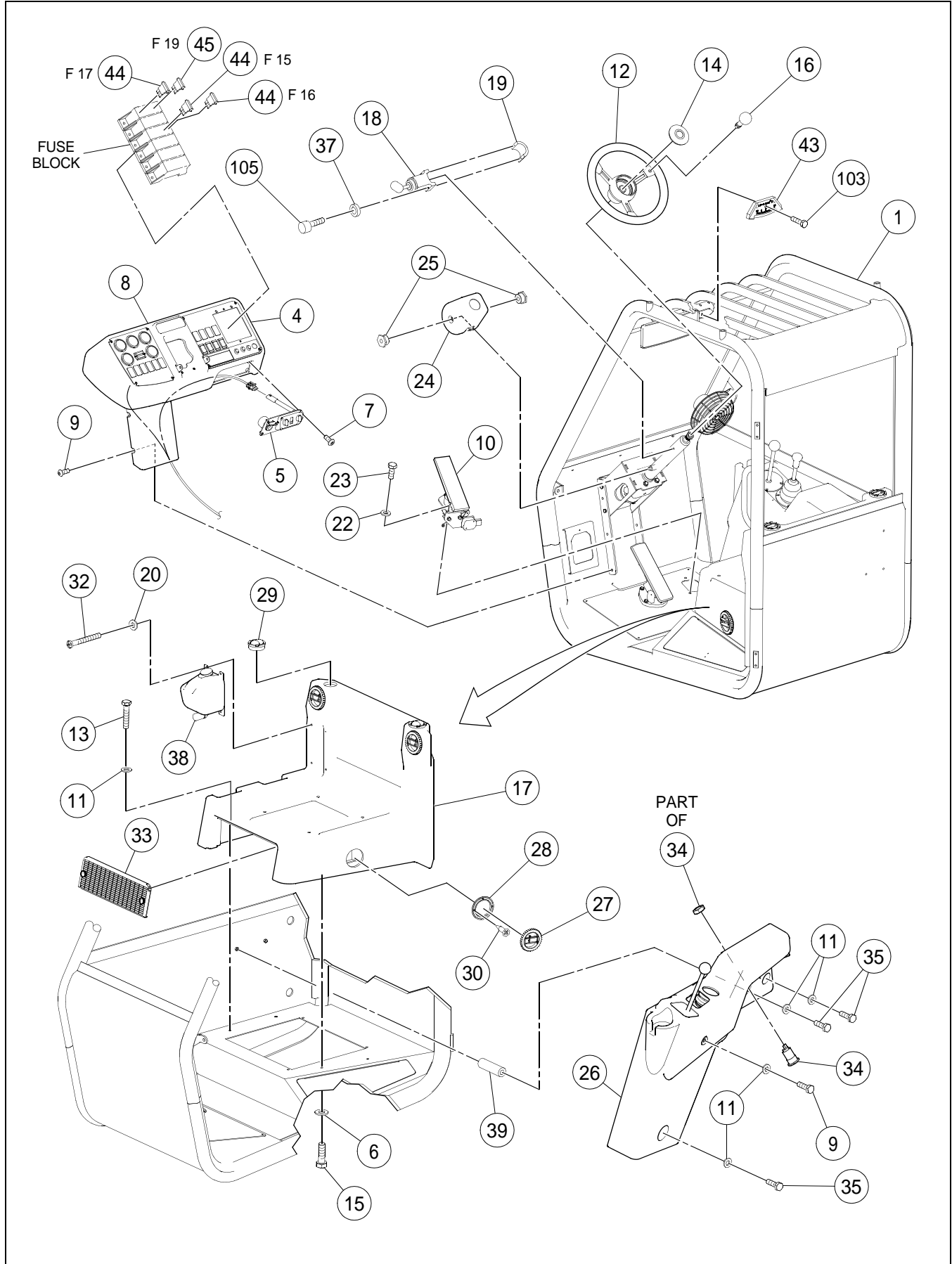
CAB INSTALLATION

BOM 13259544, 13280573

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Cab Assembly - Effective with S/N 187990	1	See Page D - 4.
-	NSVA	Cab Assembly - Prior to S/N 187990	1	See Page D - 18.
2	54441506	Washer	4	
3	95920435	HHCS, Zinc Plated	4	1 1/4 x 7 x 2.5
16	96702816	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 16 Cl 8.8
18	96741038	Flatwasher	4	M8 x 1.25 Cl 200

CAB ASSEMBLY - EFFECTIVE WITH S/N 187990

Dwg 18004275/01



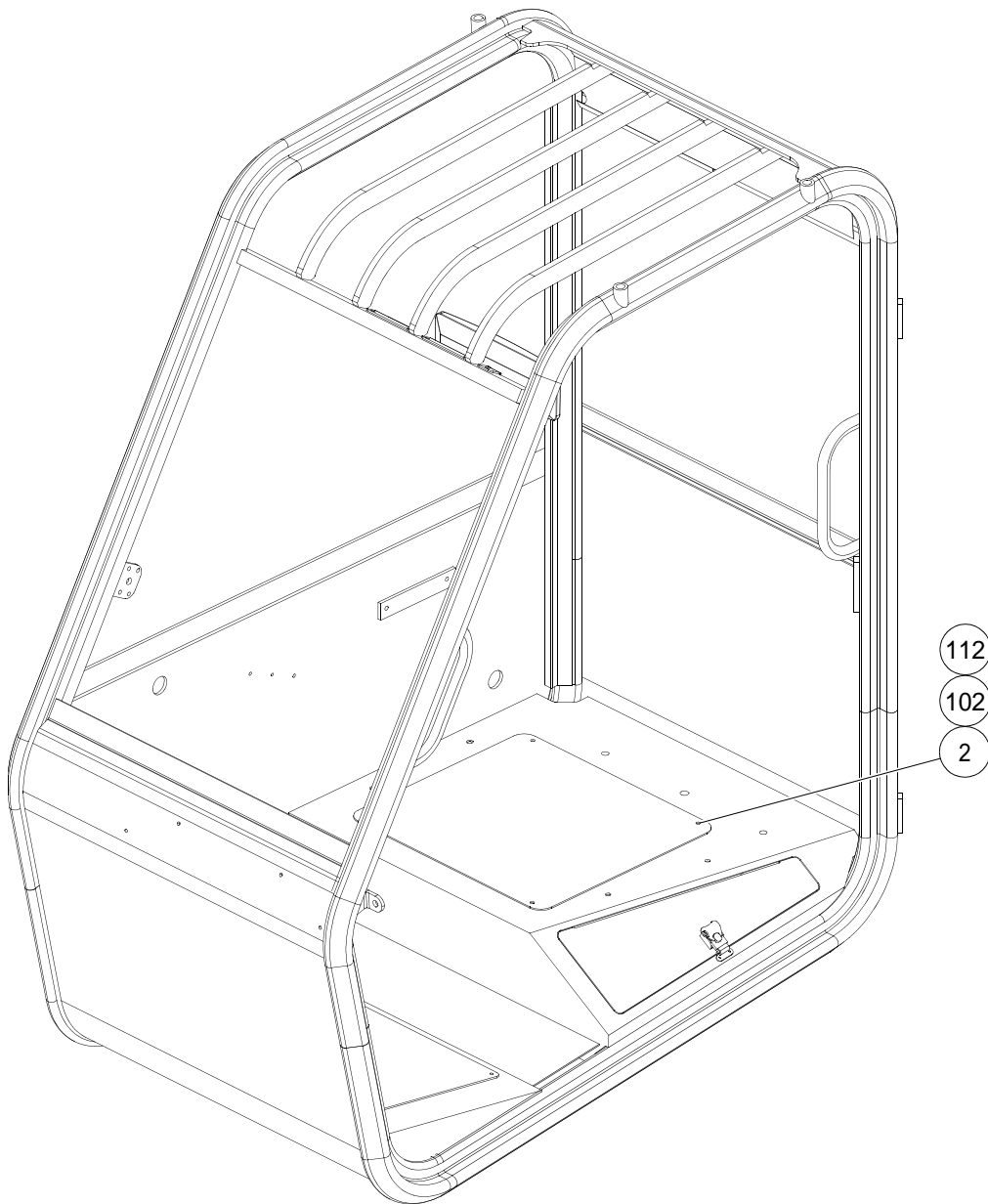
CAB ASSEMBLY - EFFECTIVE WITH S/N 187990

BOM 18004275, 18004283

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13856570	Open Cab	1	See Breakdown D - 6.
-	13443189	Enclosed Cab	1	See Breakdown D - 14.
4		This Item Not Used With This Assembly		
5	NSVA	Ignition Switch Panel Assembly	1	See Page D - 42.
6	18008029	Washer	2	
7	59148569	HSBHCS	3	M5 x 0.8 x 12
8	NSVA	Console Assembly	1	See Page D - 44.
9	96743984	HSBHCS, Zinc Plated	7	M8 x 1.25 x 20 CI 8.8
10	13842240	Throttle Pedal	1	
11	96711833	Flatwasher, Zinc Plated	8	M10 CI 10
12	13158647	Steering Wheel	1	
13	96719786	HHCS, Zinc Plated	2	M8 x 1.25 x 40 CI 8.8
14	59159558	Horn Button	1	
15	96701917	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 30 CI 8.8
16	59199141	Spinner Kit	1	
17	13414255	Seat Support (Open Cab)	1	
-	13414248	Seat Support - Vented (Enclosed Cab)	1	
18	59113696	Transmission Shifter	1	
19	13315783	Transmission Shifter Clamp	1	
20	95922332	Flatwasher, Zinc Plated	4	#10
22	96741053	Flatwasher, Zinc Plated	3	M6 CI 200
23	96701958	HHCS, Fully Threaded, Zinc Plated	3	M6 x 16 CI 8.8
24	13307889	Cover	1	
25	13236872	Pivot Nut	2	
26	13880463	Armrest	1	
27	13161724	Louver (Enclosed Cab)	3	
28	13300256	Louver Adapter (Enclosed Cab)	3	
29	13300264	Louver (Enclosed Cab)	2	
30	13209887	Wood Screw (Enclosed Cab)	20	
32	96728548	Self-tapping Screw, Zinc Plated	4	1.6
33	13300538	Recirculation Filter (Enclosed Cab)	1	
34	19282102	Power Port	1	
35	96704606	Hex Locknut, Zinc Plated	3	M8 x 1.25 CI 8
37	14083992	Washer	2	
38	22084818	Washer Bottle	1	
39	96739750	Stud	3	M8
43	59181537	Level Gauge	1	
44	59325712	Fuse	3	10 Amp
45	58893249	Fuse	1	30 Amp
103	96705736	HHCS, Fully Threaded, Zinc Plated	1	M5 x 0.8 x 20 CI 8.8
105	96733910	SHCS, Zinc Plated	2	M5 x 0.8 x 40 CI 8.8

OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 1
OF 4

Dwg 13856570/00



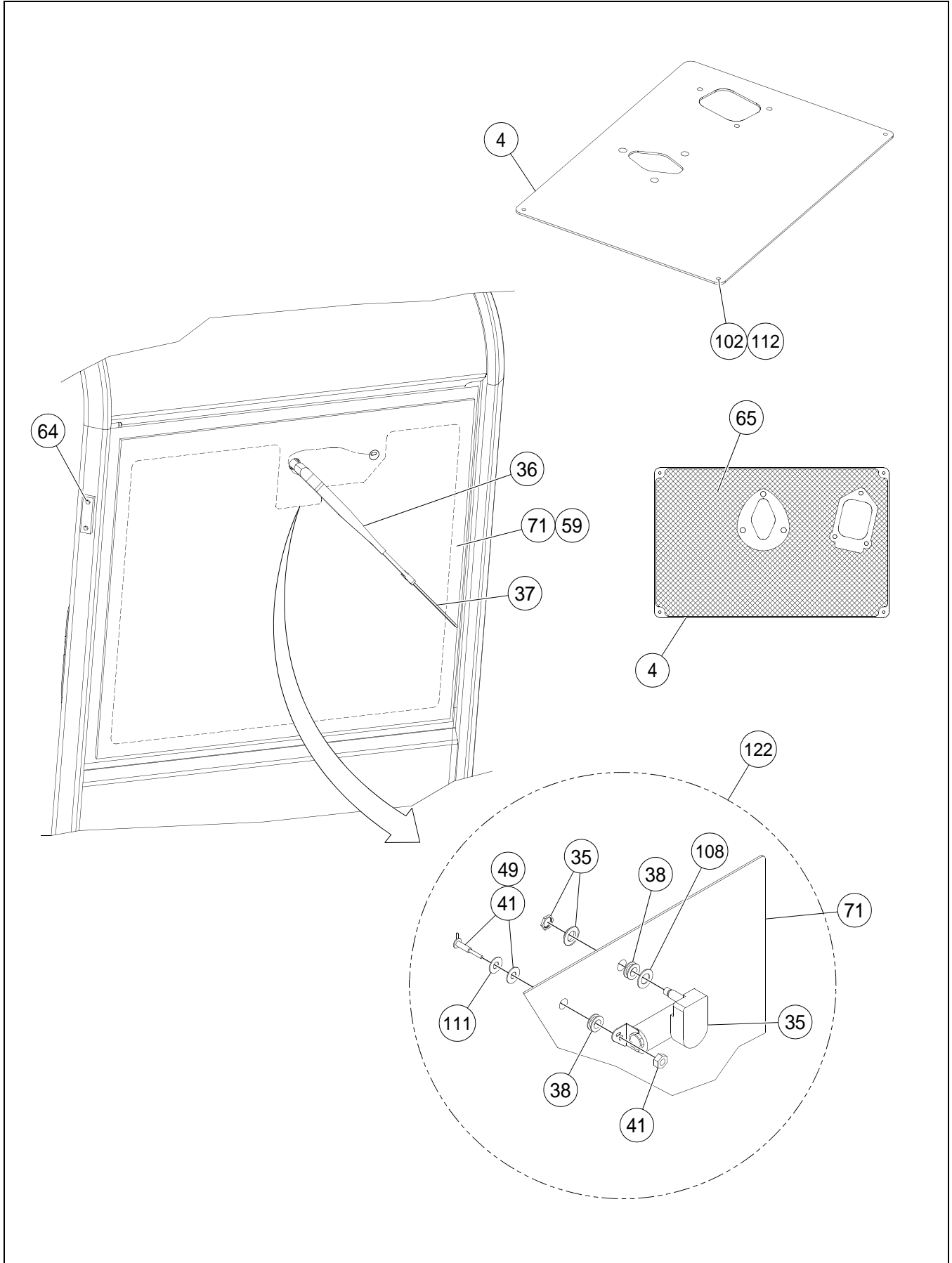
OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 1
OF 4

BOM 13856570

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2		This Item Not Used With This Assembly		
102	96701958	HHCS, Fully Threaded, Zinc Plated	4	M6 x 1 x 16 Cl 8.8
112	96741053	Flatwasher, Zinc Plated	4	M6 Cl 200

OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 2
OF 4

Dwg 13856570/00



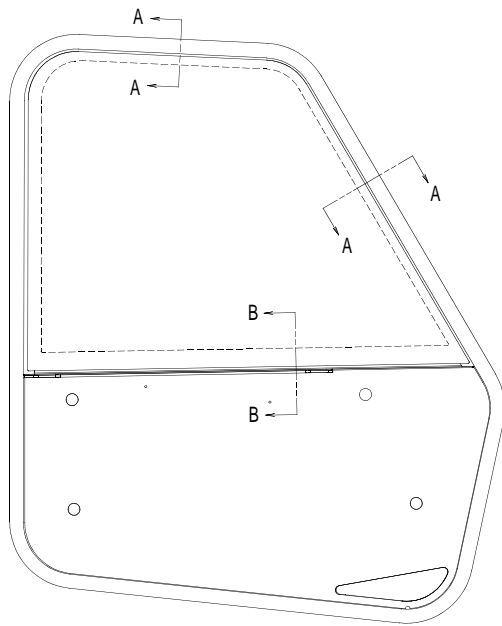
OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 2
OF 4

BOM 13856570

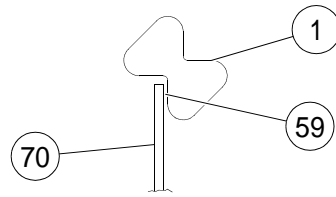
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
4	13191234	Pedal Mounting Plate	1	
35	NSS			
36	59072694	Rear Wiper Arm	1	
37	59194514	Wiper Blade	1	14.0"
38	NSS			
41	NSS			
49	95713798	Strap	2	
59	NSS			
64	NSS			
65	54579933	Safety Tread (Inner Section)	1	
71	13184478	Rear Glass	1	
102	96701958	HHCS, Fully Threaded, Zinc Plated	4	M6 x 1 x 16 Cl 8.8
108	NSS			
111	NSS			
112	96741053	Flatwasher, Zinc Plated	4	M6 Cl 200
122	59194548	Wiper Motor Kit	1	

OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 3
OF 4

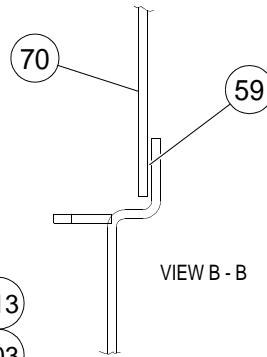
Dwg 13856570/00



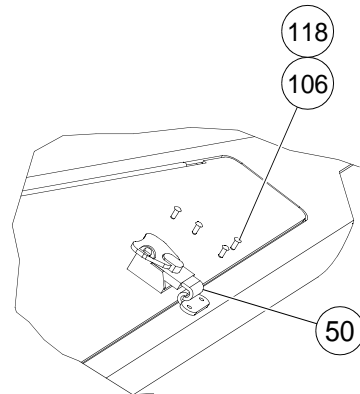
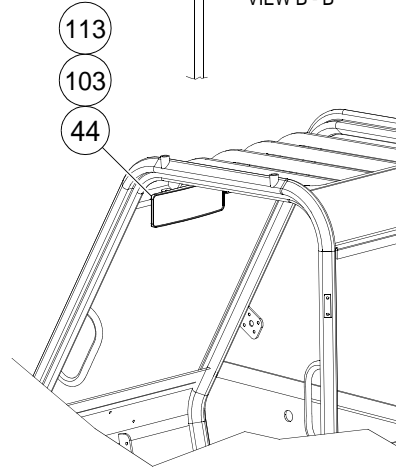
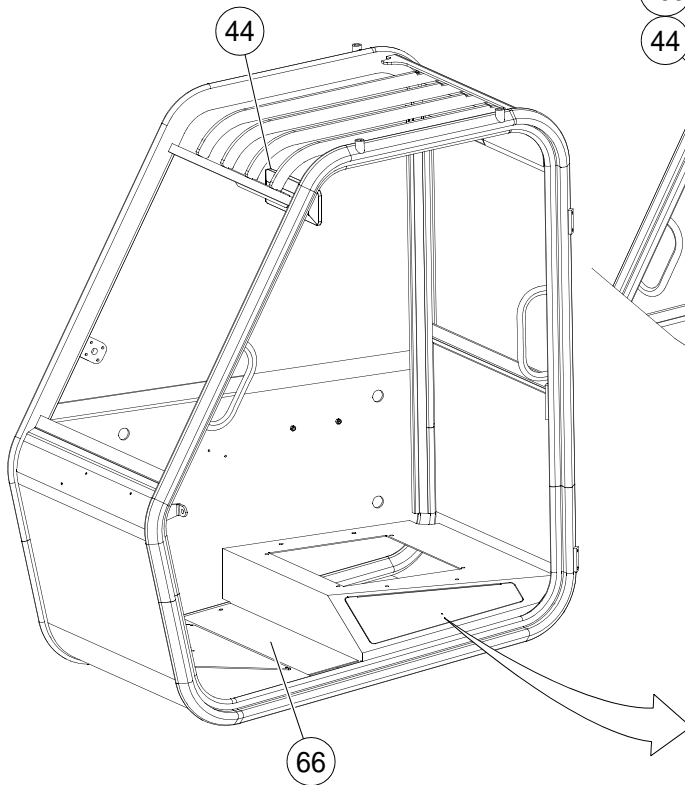
RIGHT SIDE VIEW



VIEW A - A



VIEW B - B



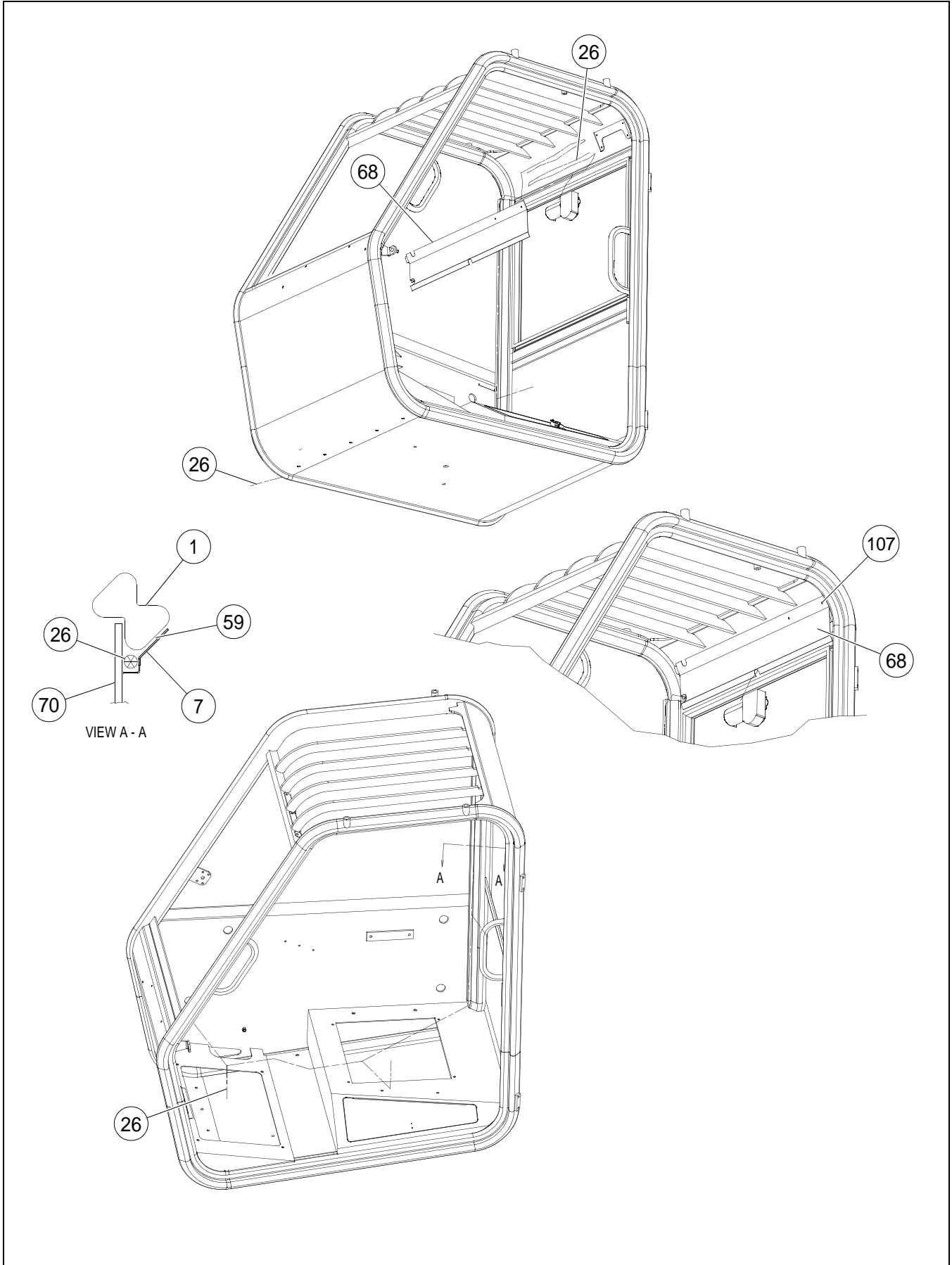
OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 3
OF 4

BOM 13856570

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
44	13307152	Interior Mirror	1	
50	54718291	Tool Box Latch	1	
59	NSS			
66	54579941	Safety Tread (Outer Section)	1	
70	13184460	Side Glass	1	
103	95923298	Locknut, Zinc Plated	2	1/4 x 20
106	NSS			
113	95922183	Flatwasher, Zinc Plated	2	1/4
118	58877093	Nut	4	

OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 4
OF 4

Dwg 13856570/00



OPEN CAB (13856570) - INTERNAL BREAKDOWN - SHEET 4
OF 4

BOM 13856570

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
7	13174057	Vertical Wire Cover	1	
26	13856562	Open Cab Wire Harness	1	
59	NSS			
68	NSS			
70	13184460	Side Glass	1	
72	54718226	Trim (Not Shown)	1	
107	NSS			

ENCLOSED CAB (13443189) - INTERNAL BREAKDOWN -
SHEET 1 OF 2

List Only
No Drawing Required

ENCLOSED CAB (13443189) - INTERNAL BREAKDOWN -
SHEET 1 OF 2

BOM 13443189

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
4	13191234	Pedal Mounting Plate	1	
10	13191291	Cab Door Assembly	1	See Breakdown D - 38.
11	59155747	Door Hinge	2	
12	13174057	Vertical Wire Cover	1	
13	13174065	Horizontal Wire Cover	2	
31	13526868	Enclosed Cab Wire Harness	1	
34	13174099	Top Curved Window	1	
35	13174081	Front Window	1	
36	59154641	Sliding Side Window	1	
37	13174032	Rear Window Assembly	1	
-	22109284	- Rear Window W/Frame	1	
-	22109292	- Gas Spring	1	
-	22109300	- Latch Plate	1	
-	13248521	- Rear Glass	1	
-	22109318	- Window Rubber Seal	1	
-	22109326	- Latch Handle	1	
40	58962879	Interior Light	1	
42	54718366	Door Strap Clamp Bar	2	
43	59142851	Door Strap	1	
51	22088256	Wet Arm Washer Kit	2	
52	13253125	Wiper Motor	3	
53	59072694	Rear Wiper Arm	3	
54	59194522	Wiper Blade	1	18.0"
55	59194514	Wiper Blade	2	14.0"
56	54516034	Bushing	3	
60	59195909	Striker Bolt	1	
64	59154757	Fan	1	
67	54611975	Bushing	4	
68	13285481	Plastic Cover Washer	1	
69	54515879	Cap	1	
73	13307152	Interior Mirror	1	
78	59155598	Cab Key	2	
-	13284690	- IR Key Tag	2	
79	13320510	Wire Tie	A/R	
80	54718291	Tool Box Latch	1	
87	54628326	Door Frame Weatherstrip	14	
89	13248513	Door Shock	1	
90	22067607	Adhesive	1	
93	22080238	Ball Stud	1	
94	54720800	Rubber Plug	3	

ENCLOSED CAB (13443189) - INTERNAL BREAKDOWN -
SHEET 2 OF 2

List Only
No Drawing Required

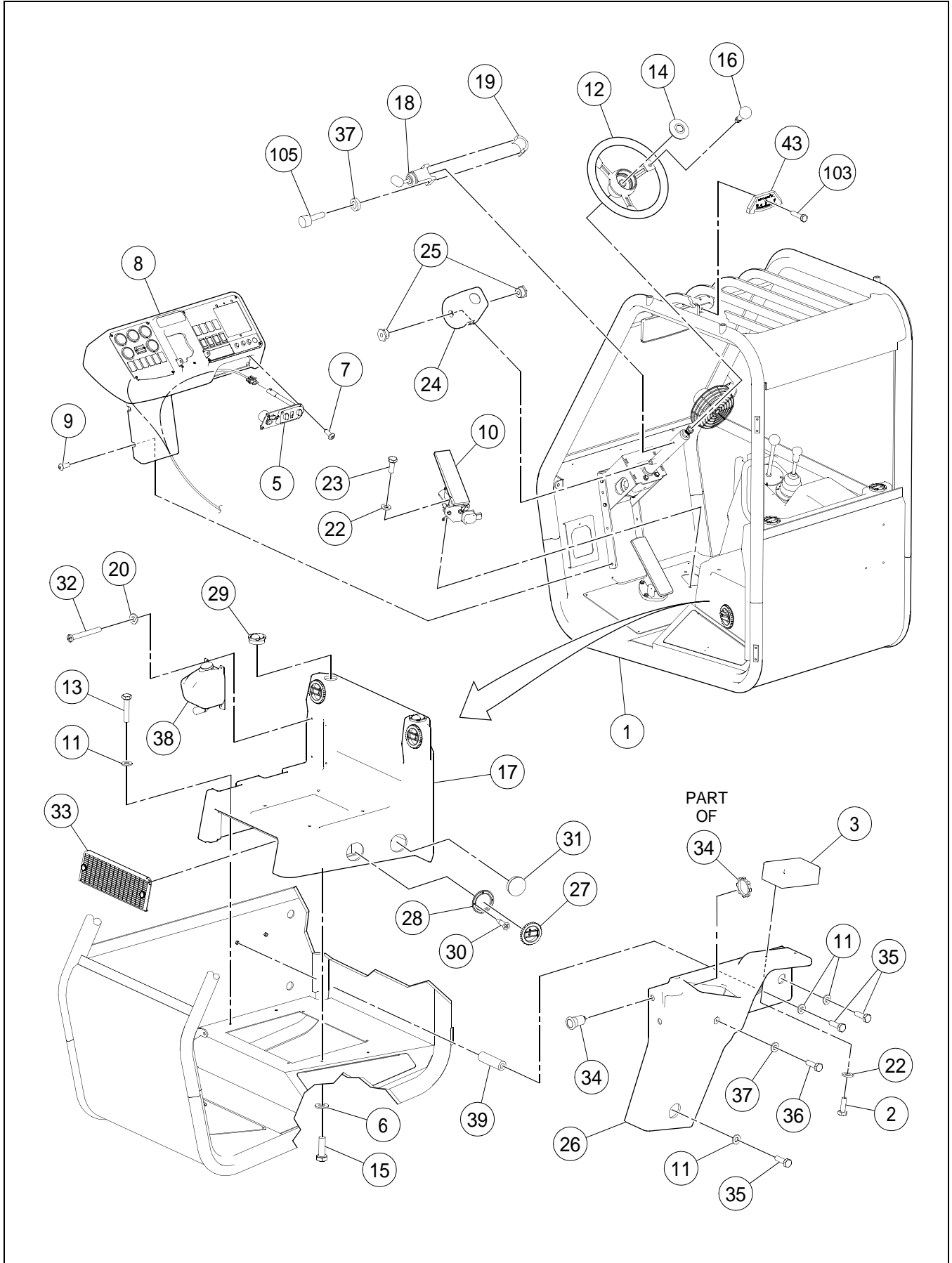
ENCLOSED CAB (13443189) - INTERNAL BREAKDOWN -
SHEET 2 OF 2

BOM 13443189

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
110	54579933	Safety Tread (Inner Section)	1	
111	54579941	Safety Tread (Outer Section)	1	
117	54718226	Trim	2	
146	96721022	HSBHCS	4	M8 x 1.25 x 16 Gr A2
148	96701958	HHCS, Fully Threaded, Zinc Plated	11	M6 x 1 x 16 CI 8.8
153	96744008	HSHBHCS, Zinc Plated	2	M6 x 1.0 x 16 CI 8.8
154	95996203	Machine Screw	4	#6 x 32 x 1/2
155	96743265	HSBHCS, Zinc Plated	4	M5 x 0.8 x 16 CI 8.8
157	96720115	HHCS, Zinc Plated	4	M5 x 0.8 CI 8.8
162	96741038	Flatwasher	4	M8 x 1.25 CI 200
163	95922233	Flatwasher, Zinc Plated	2	3/8
164	96741053	Flatwasher, Zinc Plated	6	M6 CI 200
165	95922183	Flatwasher, Zinc Plated	5	1/4
169	96704291	Hex Nut, Zinc Plated	1	M12 x 1.75 CI 8
171	96704598	Hex Locknut, Zinc Plated	1	M6 CI 8
173	58877093	Nut	4	
174	95923298	Locknut, Zinc Plated	5	1/4 x 20
186	59194548	Wiper Motor Kit	3	

CAB ASSEMBLY - PRIOR TO S/N 187990

Dwg D13280672/06



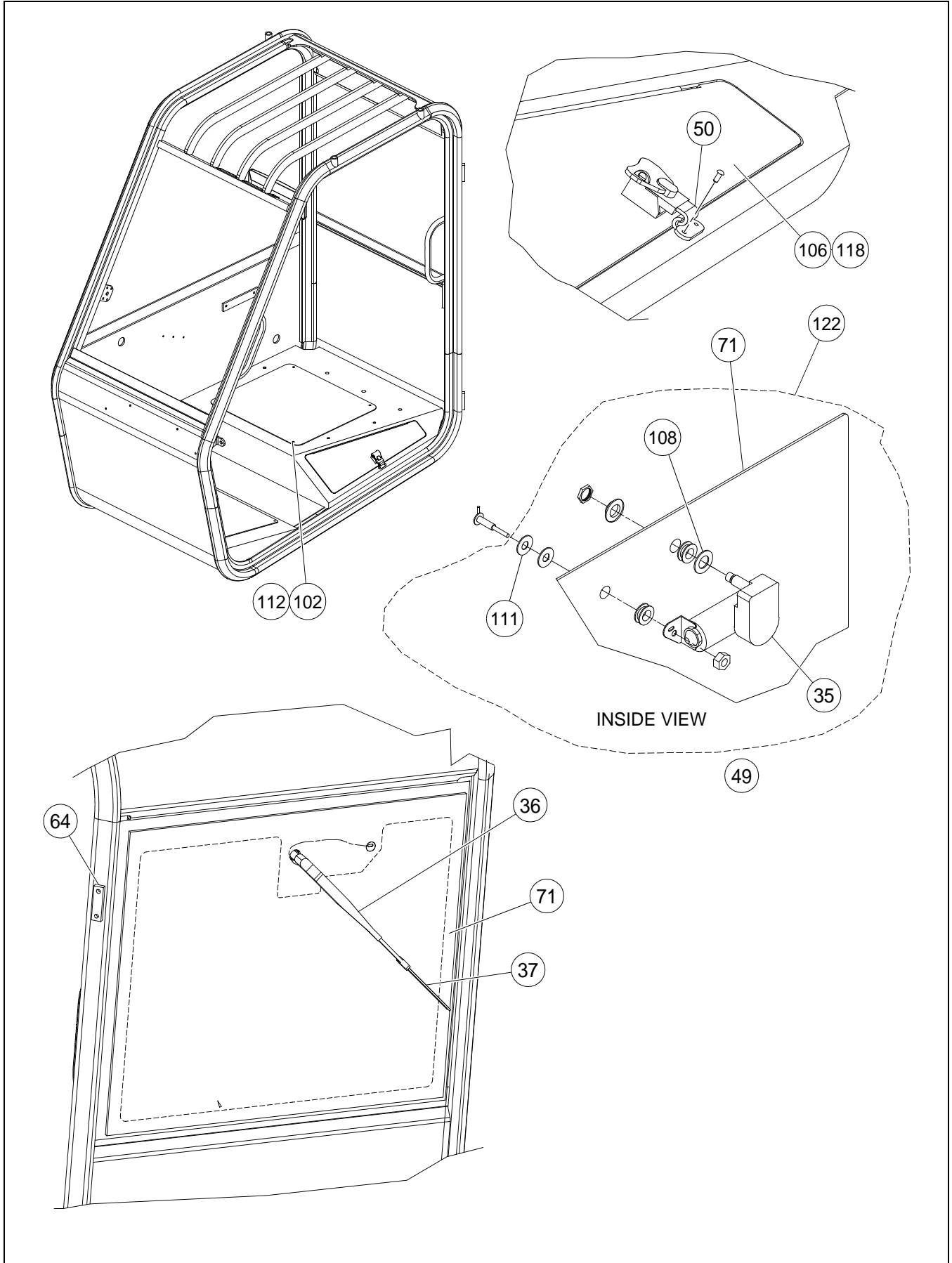
CAB ASSEMBLY - PRIOR TO S/N 187990

BOM 13280698, 13280581

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280680	Open Cab	1	See Breakdown D - 20.
-	13265228	Enclosed Cab	1	See Breakdown D - 26.
2	95920377	HHCS, Zinc Plated	2	1/4 x 20 x 1.0 Grd 8
3	13318670	Armrest Pad	1	
5	NSVA	Ignition Switch Panel Assembly	1	See Page D - 42.
6	18008029	Washer	2	
7	59148569	HSBHCS	3	M5 x 0.8 x 12
8	NSVA	Console Assembly	1	See Page D - 44.
9	96743984	HSBHCS, Zinc Plated	6	M8 x 1.25 x 20 CI 8.8
10	13366489	Throttle	1	
11	96711833	Flatwasher, Zinc Plated	7	M10 CI 10
12	13158647	Steering Wheel	1	
13	96719786	HHCS, Zinc Plated	2	M8 x 1.25 x 40 CI 8.8
14	59159558	Horn Button	1	
15	96701917	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 30 CI 8.8
16	59199141	Spinner Kit	1	
17	13414255	Seat Support (Open Cab)	1	
-	13414248	Seat Support - Vented (Enclosed Cab)	1	
18	59113696	Transmission Shifter	1	
19	13315783	Transmission Shifter Clamp	1	
20	95922332	Flatwasher, Zinc Plated	4	#10
22	96741053	Flatwasher, Zinc Plated	3	M6 CI 200
23	96701958	HHCS, Fully Threaded, Zinc Plated	3	M6 x 16 CI 8.8
24	13307889	Cover	1	
25	13236872	Pivot Nut	2	
26	13267273	Armrest	1	
27	13161724	Louver (Enclosed Cab)	3	
28	13300256	Louver Adapter (Enclosed Cab)	3	
29	13300264	Louver (Enclosed Cab)	2	
30	13209887	Wood Screw (Enclosed Cab)	20	
31	13300512	Plastic Plug	2	
32	96728548	Self-tapping Screw, Zinc Plated	4	1.6
33	13300538	Recirculation Filter (Enclosed Cab)	1	
34	19282102	Power Port	1	
35	96704606	Hex Locknut, Zinc Plated	3	M8 x 1.25 CI 8
36	96705736	HHCS, Fully Threaded, Zinc Plated	1	M5 x 0.8 x 20 CI 8.8
37	14083992	Washer	3	
38	22084818	Washer Bottle	1	
39	96739750	Stud	3	M8
43	59181537	Level Gauge	1	
103	96705736	HHCS, Fully Threaded, Zinc Plated	1	M5 x 0.8 x 20 CI 8.8
105	96733910	SHCS, Zinc Plated	2	M5 x 0.8 x 40 CI 8.8

OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 1
OF 3

Dwg 13280680/00



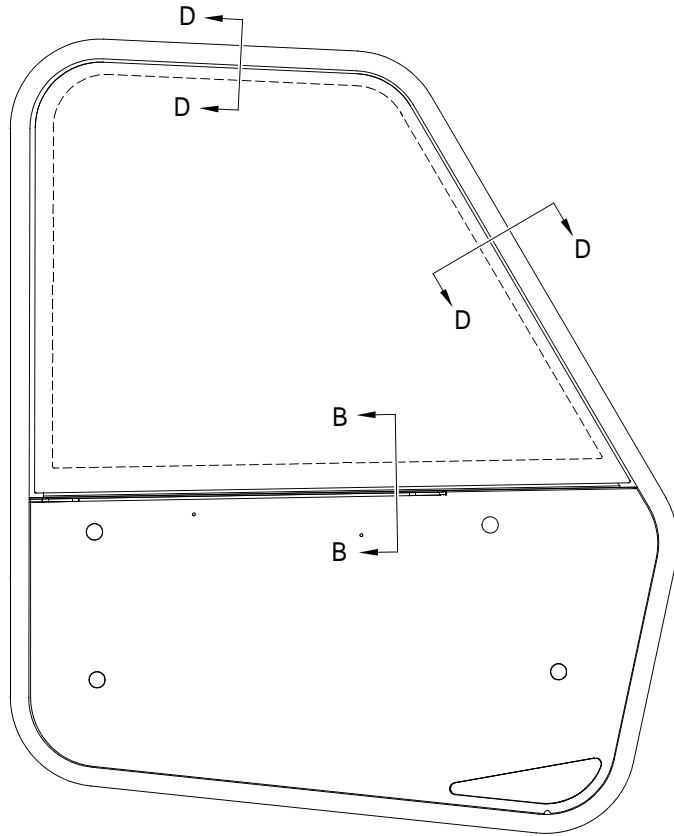
OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 1
OF 3

BOM 13280680

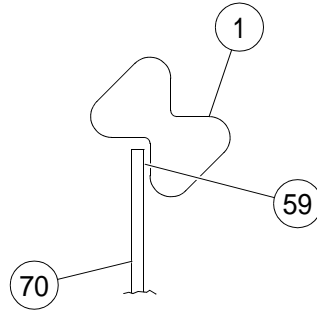
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
35	13253125	Wiper Motor	1	
36	59072694	Rear Wiper Arm	1	
37	59194514	Wiper Blade	1	14.0"
49	95713798	Strap	2	
50	54718291	Tool Box Latch	1	
64	NSS			
71	13184478	Rear Glass	1	
102	96701958	HHCS, Fully Threaded, Zinc Plated	4	M6 x 1 x 16 Cl 8.8
106	NSS			
108	NSS			
111	NSS			
112	96741053	Flatwasher, Zinc Plated	4	M6 Cl 200
118	58877093	Nut	4	
122	59194548	Wiper Motor Kit	1	

OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 2
OF 3

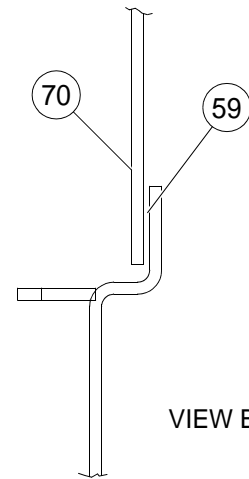
Dwg 13280680/00



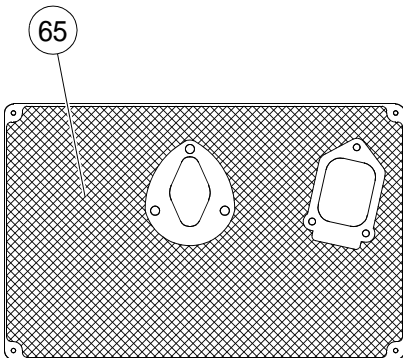
RIGHT SIDE VIEW



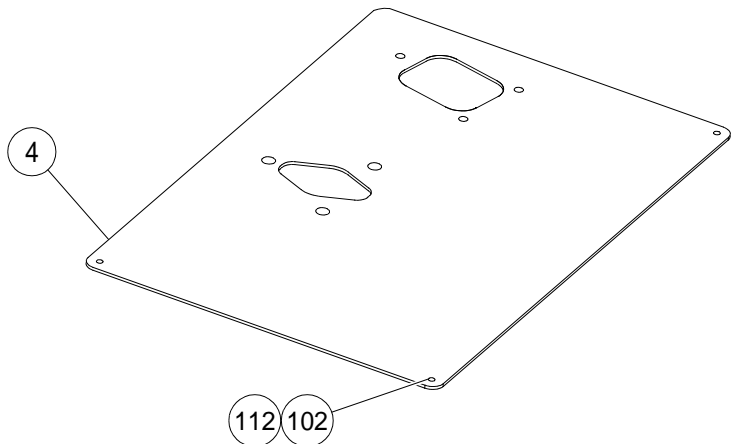
VIEW D-D



VIEW B-B



TOP VIEW



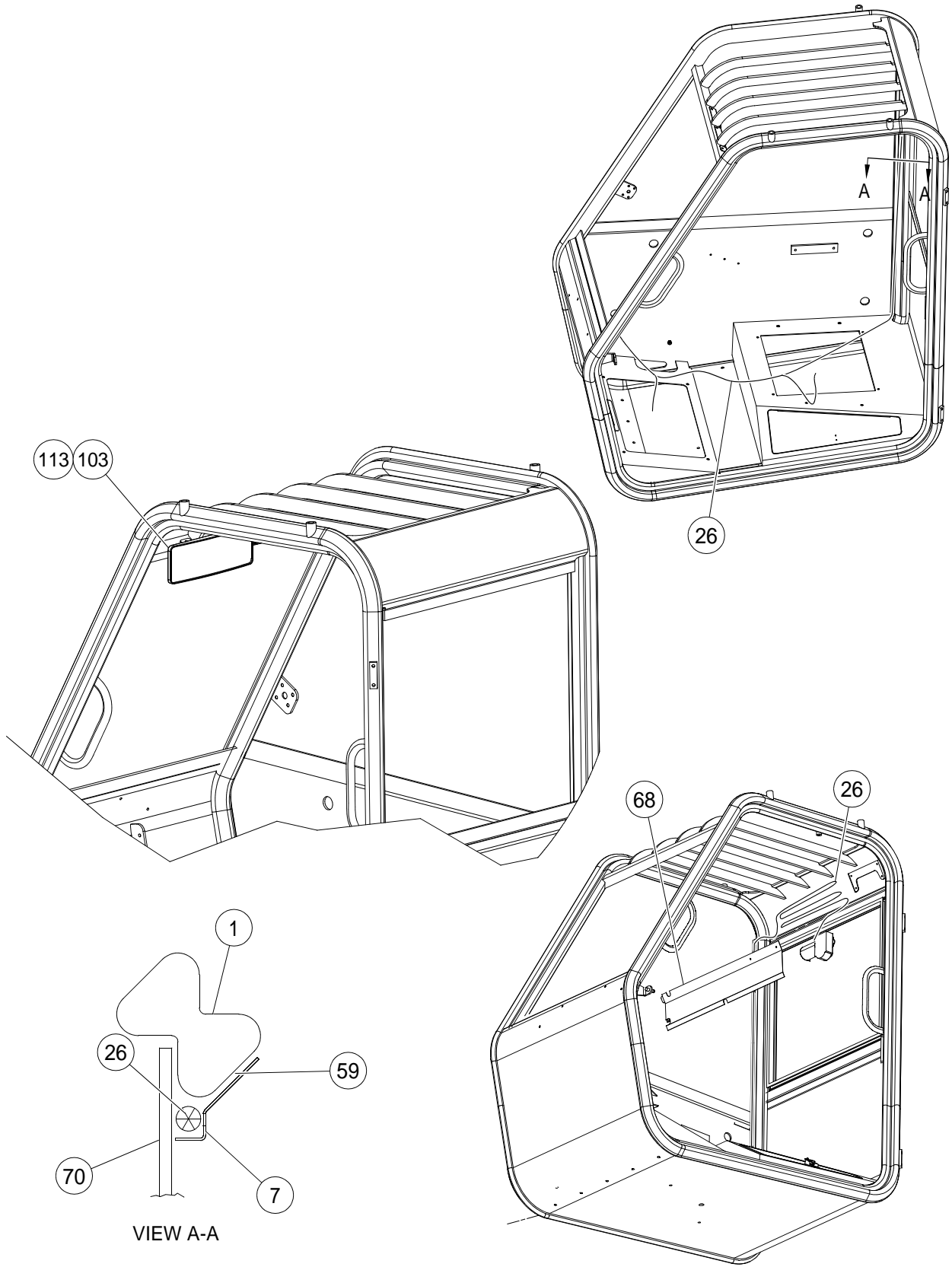
OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 2
OF 3

BOM 13280680

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
4	13191234	Pedal Mounting Plate	1	
59	43806165	Adhesive	1	
65	54579933	Safety Tread (Inner Section)	1	
70	13184460	Side Glass	1	
102	96701958	HHCS, Fully Threaded, Zinc Plated	4	M6 x 1 x 16 Cl 8.8
112	96741053	Flatwasher, Zinc Plated	4	M6 Cl 200

OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 3
OF 3

Dwg 13280680/00



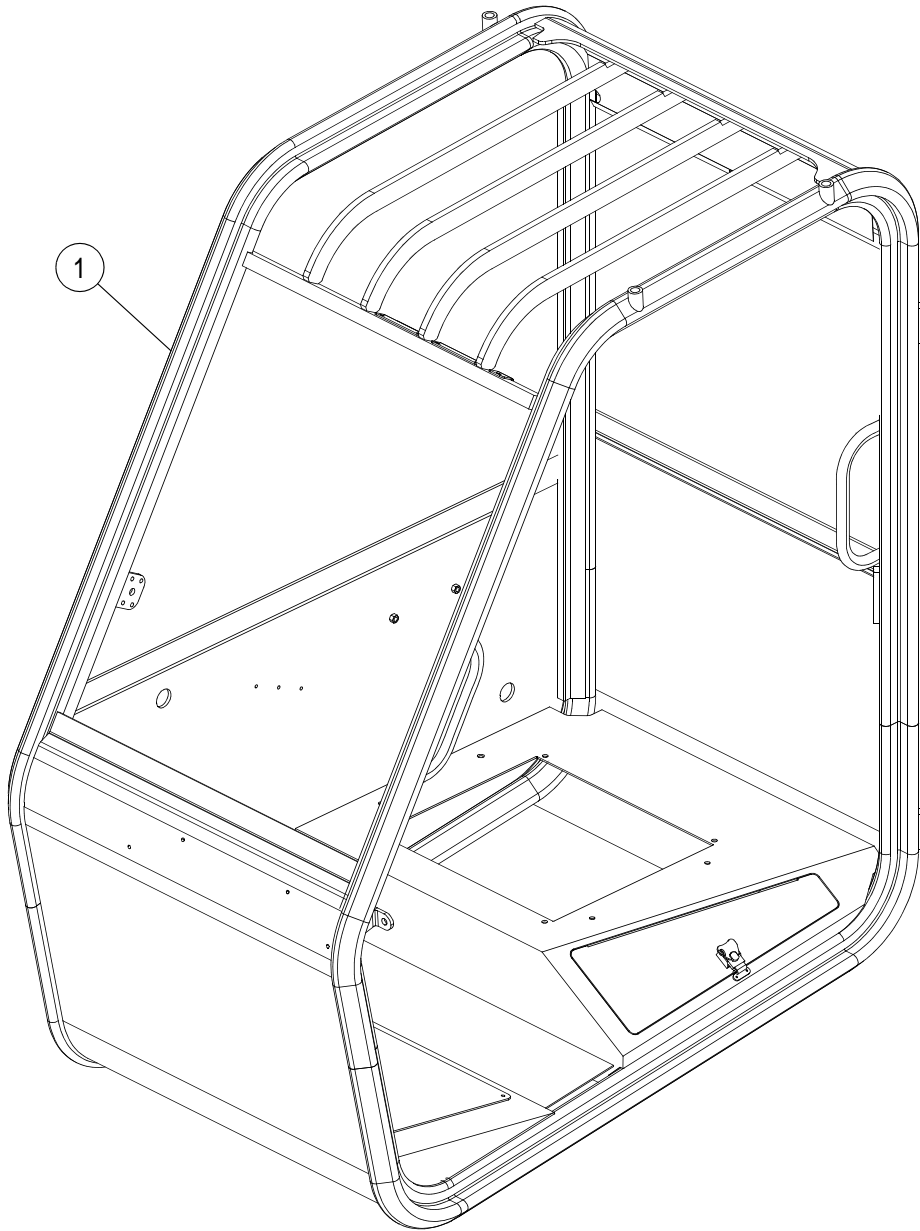
OPEN CAB (13280680) - INTERNAL BREAKDOWN - SHEET 3
OF 3

BOM 13280680

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
7	13174057	Vertical Wire Cover	1	
26	13307137	Cab Wire Harness	1	
34	22088256	Wet Arm Washer Kit (Not Shown)	1	
55	19282102	Power Port (Not Shown)	1	
58	43806157	Adhesive (Not Shown)	1	
59	43806165	Adhesive	1	
66	54579941	Safety Tread (Outer Section) (Not Shown)	1	
68	43806108	Headliner	1	
70	13184460	Side Glass	1	
72	54718226	Trim (Not Shown)	1	
103	96705736	HHCS, Fully Threaded, Zinc Plated	2	M5 x 0.8 x 20 Cl 8.8
113	NSS			

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 1 OF 6

Dwg 13265228/03



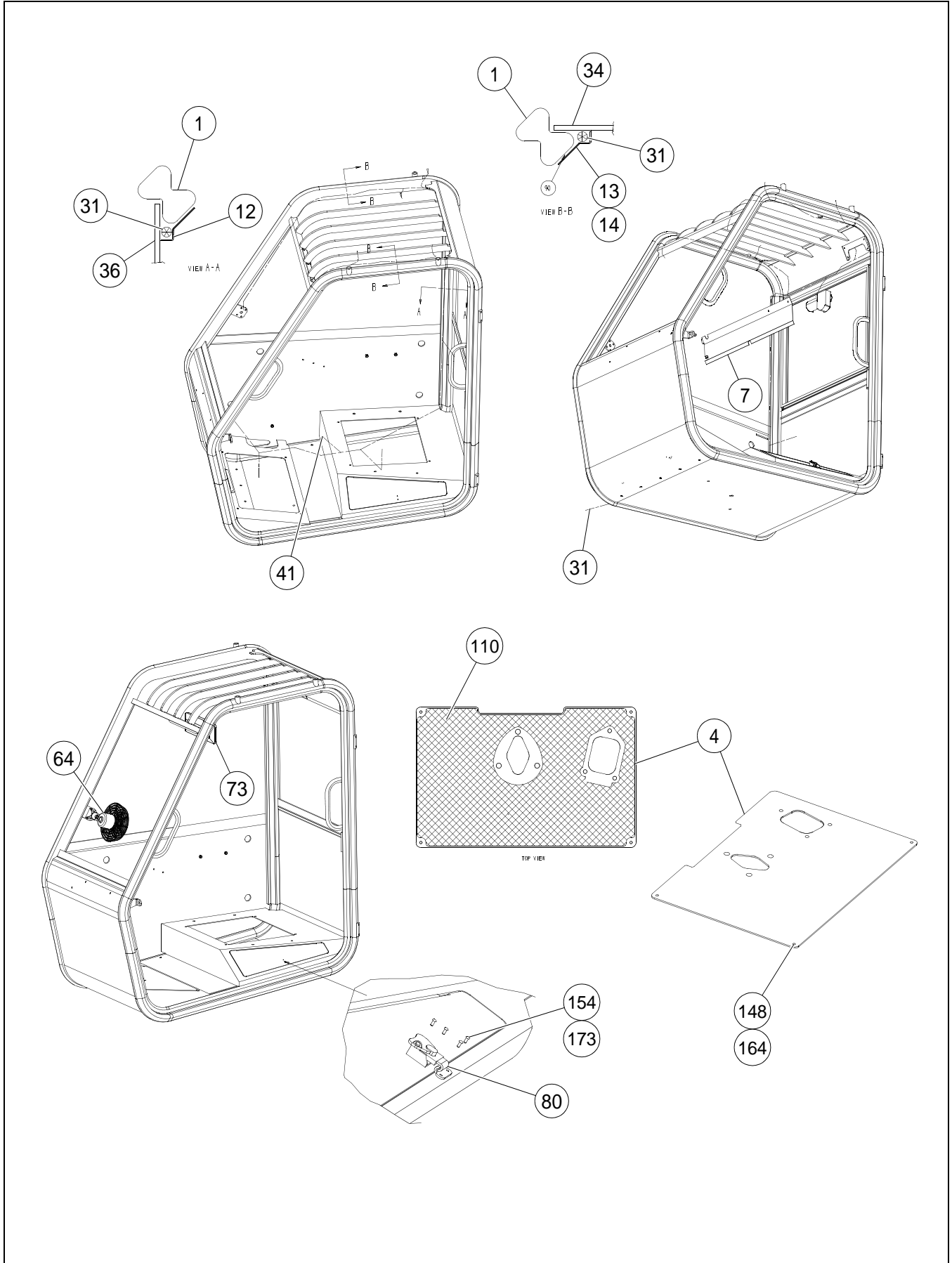
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 1 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 2 OF 6

Dwg 13265228/03



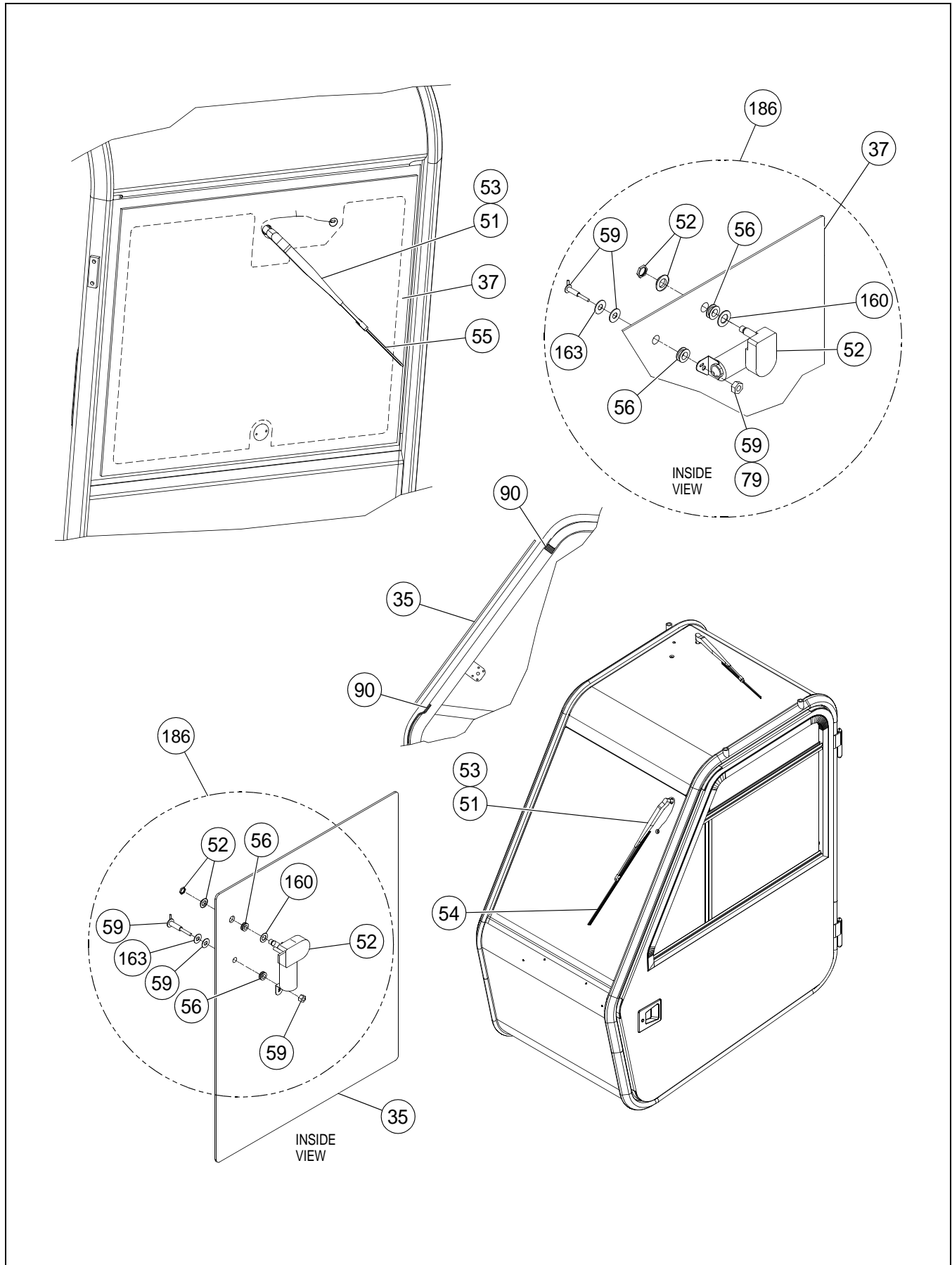
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 2 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
4	13191234	Pedal Mounting Plate	1	
7	43806108	Headliner (Not Shown)	1	
12	13174057	Vertical Wire Cover	1	
13	13174065	Horizontal Wire Cover	2	
14	43806116	Wire Harness Retainer	1	
31	13305586	Cab Wiring Harness	1	
34	13174081	Front Window	1	
36	59154641	Sliding Window	1	
41	19282102	Power Port	1	
64	59154757	Defrost Fan	1	
73	13307152	Interior Mirror	1	
80	54718291	Tool Box Latch	1	
89	13248513	Door Shock (Not Shown)	1	
91	43806165	Adhesive (Not Shown)	1	
110	54579933	Safety Tread (Inner Section)	1	
148	96701958	HHCS, Fully Threaded, Zinc Plated	22	M6 x 16 CI 8.8
154	NSS			
164	96738554	Flatwasher, Zinc Plated	10	M5 Hardened CI 200
173	58877093	Nylon Nut	4	#6

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 3 OF 6

Dwg 13265228/03



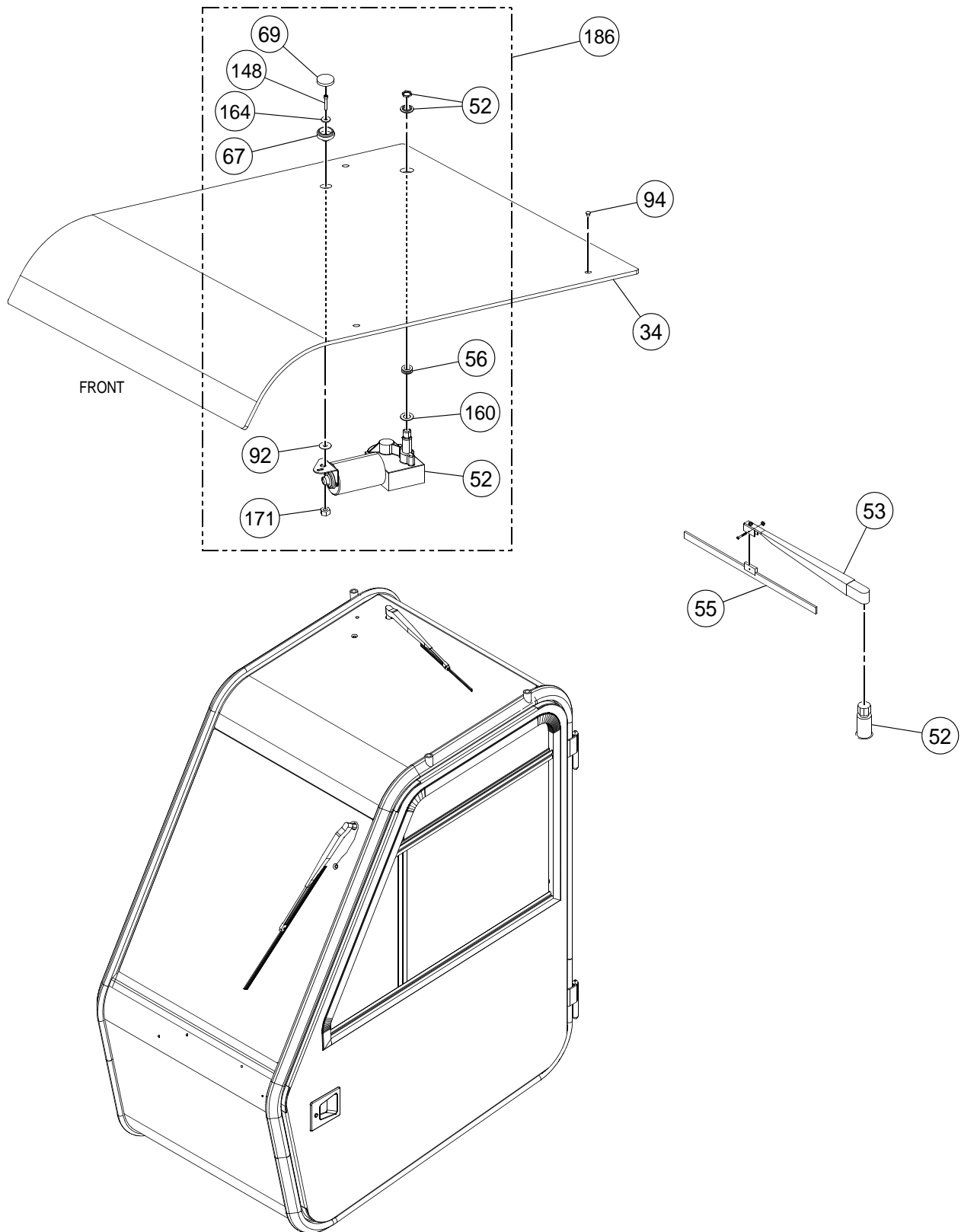
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 3 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
35	13174099	Top Curved Window	1	
37	13174032	Rear Window Assembly	1	
-	22109284	- Rear Window W/Frame	1	
-	22109292	- Gas Spring	1	
-	22109300	- Latch Plate	1	
-	13248521	- Rear Glass Only	1	
-	22109318	- Window Rubber Seal	1	
-	22109326	- Latch Handle	1	
51	22088256	Wet Arm Washer Kit	2	
52	13253125	Wiper Motor	3	
53	59072694	Rear Wiper Arm	3	
54	59194522	Wiper Blade	1	18.0"
55	59194514	Wiper Blade	2	14.0"
56	NSS			
59	13220835	Washer Hose Fitting	2	
79	95713798	Strap	7	
90	43806157	Adhesive	A/R	
160	NSS			
163	96741053	Flatwasher, Zinc Plated	2	M6 CI 200
186	59194548	Wiper Motor Kit	3	

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 4 OF 6

Dwg 13265228/03



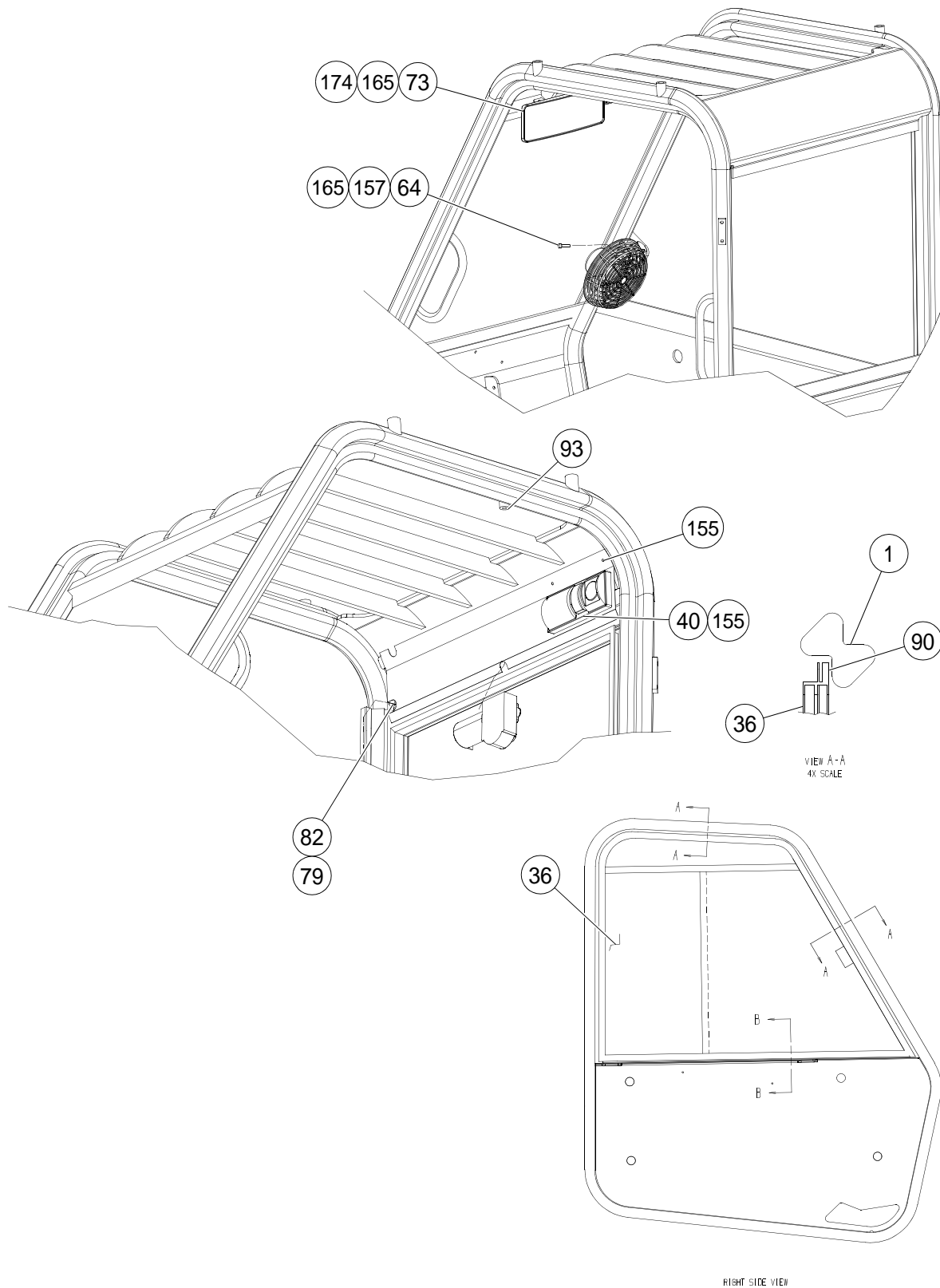
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 4 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
34	13174081	Front Window	1	
52	13253125	Wiper Motor	3	
53	59072694	Rear Wiper Arm	3	
55	59194514	Wiper Blade	2	14.0"
56	NSS			
67	54611975	Bushing	1	
69	54515879	Cap	1	
92	54516513	Sealing Washer	1	
94	54720800	Rubber Plug	3	
148	96701958	HHCS, Fully Threaded, Zinc Plated	22	M6 x 16 CI 8.8
160	NSS			
164	96738554	Flatwasher, Zinc Plated	10	M5 Hardened CI 200
171	96704598	Hex Locknut, Zinc Plated	4	M6 CI 8
186	59194548	Wiper Motor Kit	3	

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 5 OF 6

Dwg 13265228/03



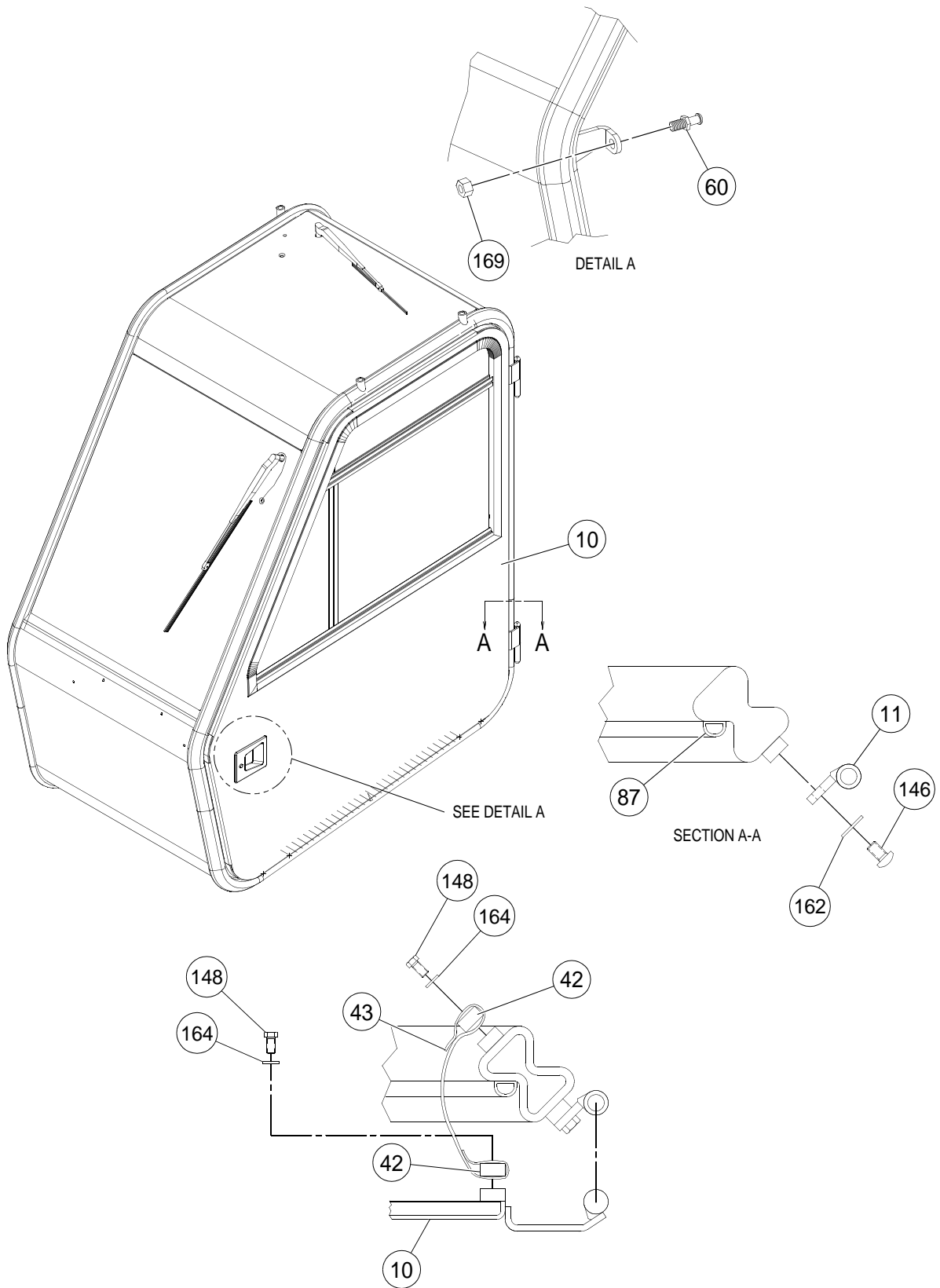
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 5 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13280664	ROPS	1	
36	59154641	Sliding Window	1	
40	58962879	Interior Light	1	
64	59154757	Defrost Fan	1	
73	13307152	Interior Mirror	1	
79	95713798	Strap	7	
82	NSS			
90	43806157	Adhesive	1	
93	22080238	Ball Stud	1	
155	NSS			
157	NSS			
165	NSS			
174	NSS			

ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 6 OF 6

Dwg 13265228/03



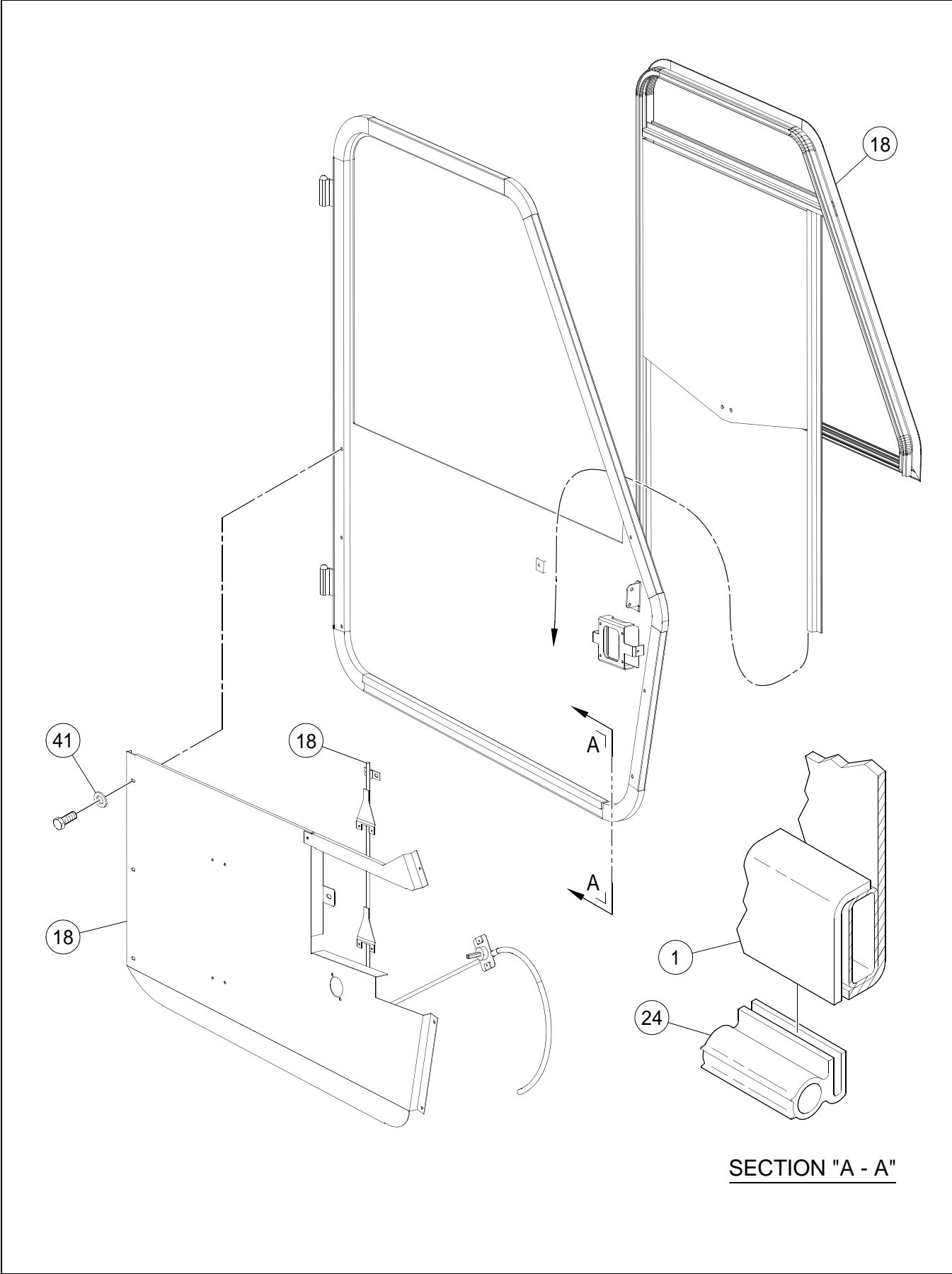
ENCLOSED CAB (13265228) - INTERNAL BREAKDOWN -
SHEET 6 OF 6

BOM 13265228

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
10	13191291	Cab Door Assembly (Not Shown)	1	See Breakdown D - 38.
11	59155747	Door Hinge Pin	1	
42	54718366	Door Strap Clamp Bar	1	
43	59142851	Door Strap	1	
60	59195909	Striker Bolt	1	
87	54628326	Door Weatherstrip	14	
146	96721022	HSBHCS	4	M8 x 1.25 x 16 Gr A2
148	96701958	HHCS, Fully Threaded, Zinc Plated	22	M6 x 16 CI 8.8
162	96741038	Flatwasher	10	M8 x 1.25 CI 200
164	96738554	Flatwasher, Zinc Plated	10	M5 Hardened CI 200
169	96704291	Hex Nut, Zinc Plated	1	M12 x 1.75 CI 8

CAB DOOR ASSEMBLY (13191291) - INTERNAL
BREAKDOWN - SHEET 1 OF 2

Dwg D13191291/00



SECTION "A - A"

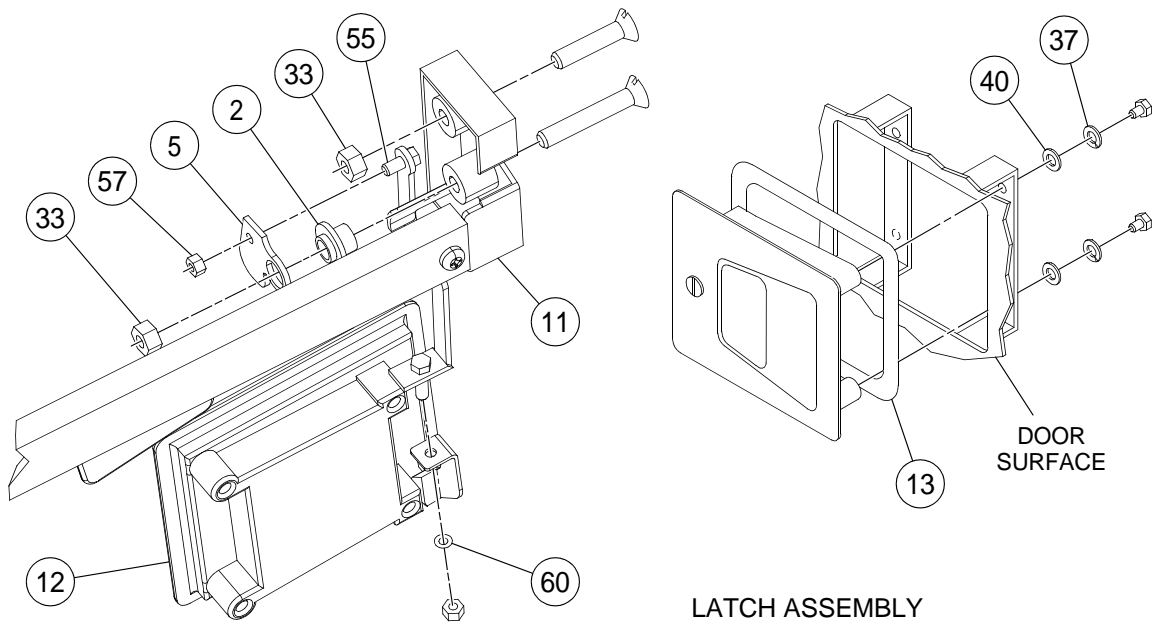
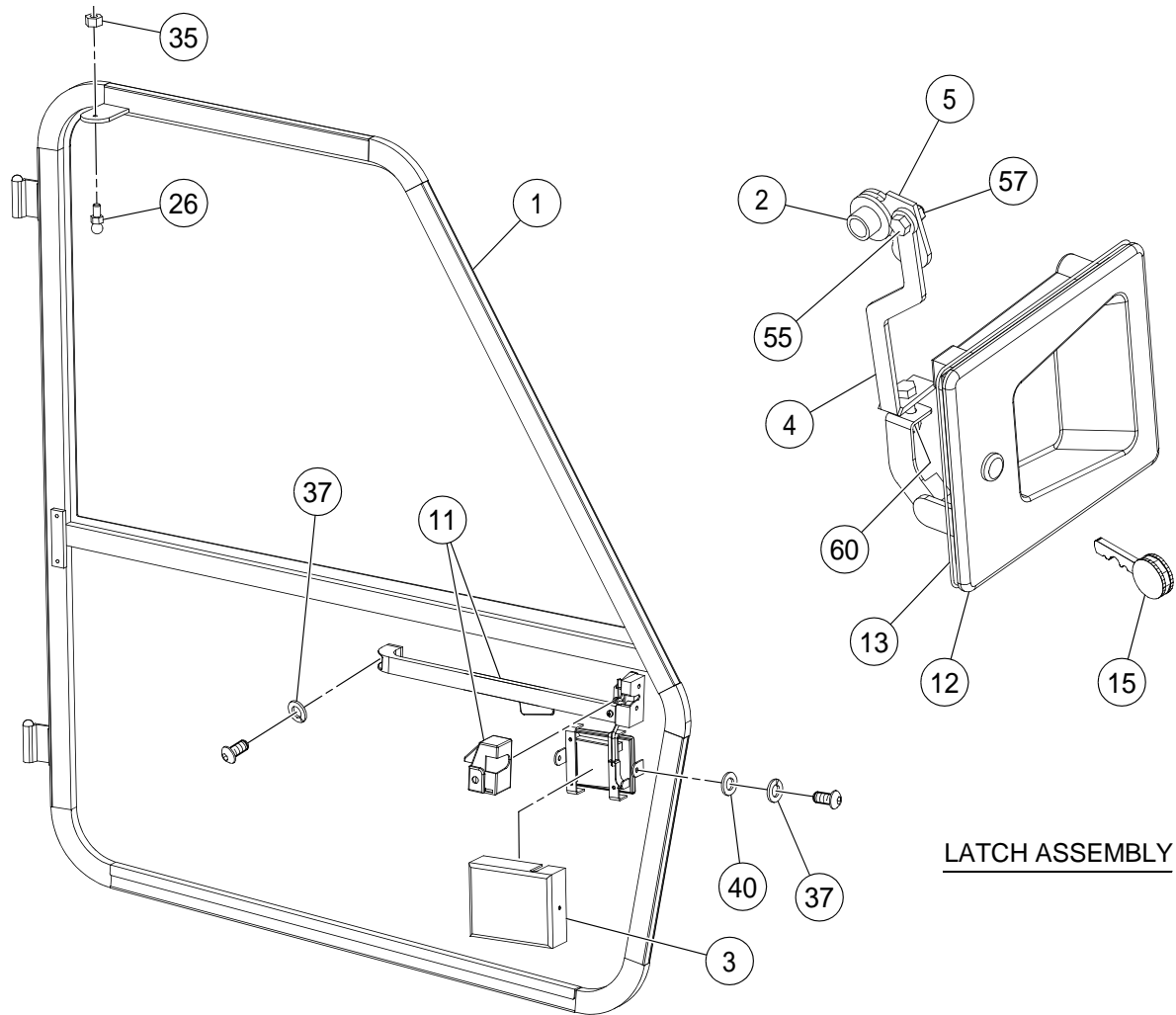
CAB DOOR ASSEMBLY (13191291) - INTERNAL
BREAKDOWN - SHEET 1 OF 2

BOM 13191291

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	22080170	Cab Door	1	
18	22080220	Rolldown Window Assembly	1	
24	59072702	Door Seal	1	
41	96738554	Flatwasher, Zinc Plated	7	M5 Hardened CI 200

CAB DOOR ASSEMBLY (13191291) - INTERNAL BREAKDOWN - SHEET 2 OF 2

Dwg D13191291/00



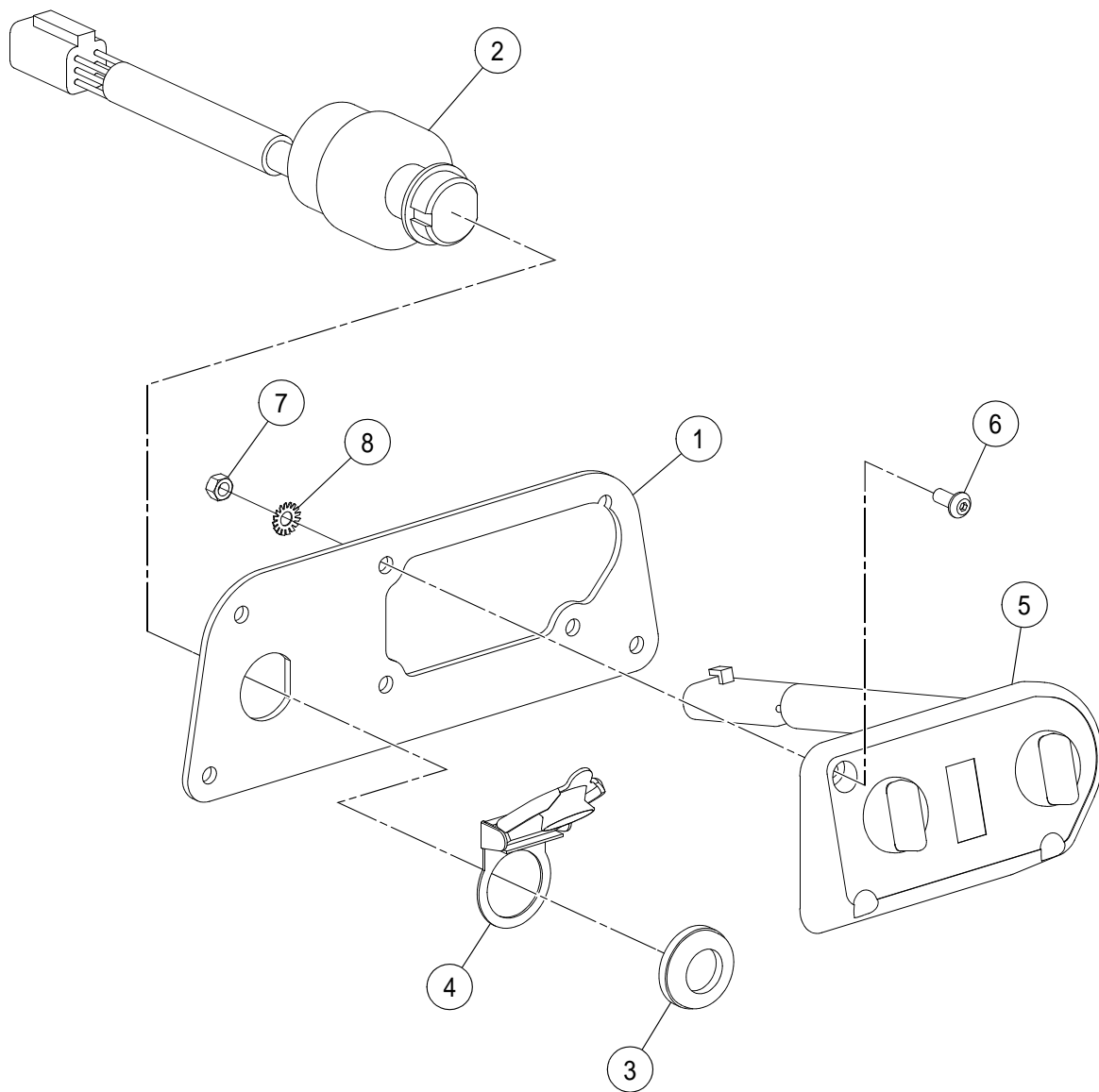
CAB DOOR ASSEMBLY (13191291) - INTERNAL
BREAKDOWN - SHEET 2 OF 2

BOM 13191291

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	22080170	Cab Door	1	
2	22080188	Door Latch Spacer	1	
3	13224662	Door Latch Cover	1	
4	22080196	Door Latch Linkage Rod	1	
5	22080204	Door Linkage	1	
11	59154955	Inside Latch Handle	1	
12	59142661	Outside Door Latch	1	
13	22080212	Outside Latch Gasket	1	
15	59155598	Door Key	2	
-	13284690	- IR Key Tag	2	
26	22080238	Ball Stud	1	
33	96728431	Locknut, Zinc Plated	2	M8 x 1.25 CI 10
35	95929782	Hex Nut, Zinc Plated	1	5/16 x 18 Grd A
37	59545616	Lockwasher	7	
40	96741053	Flatwasher, Zinc Plated	6	M6 CI 200
55	96702386	HHCS, Fully Threaded, Zinc Plated	1	M5 x 0.8 x 12 CI 8.8
57	96702865	Locknut, Zinc Plated	1	M5 x 0.8 CI 10
60	96738554	Flatwasher, Zinc Plated	1	M5 Hardened CI 200
61	13852579	Lower Window Panel (Not Shown)	1	
62	13852587	Regulator (Not Shown)	1	

IGNITION SWITCH PANEL ASSEMBLY

Dwg D13267422/01



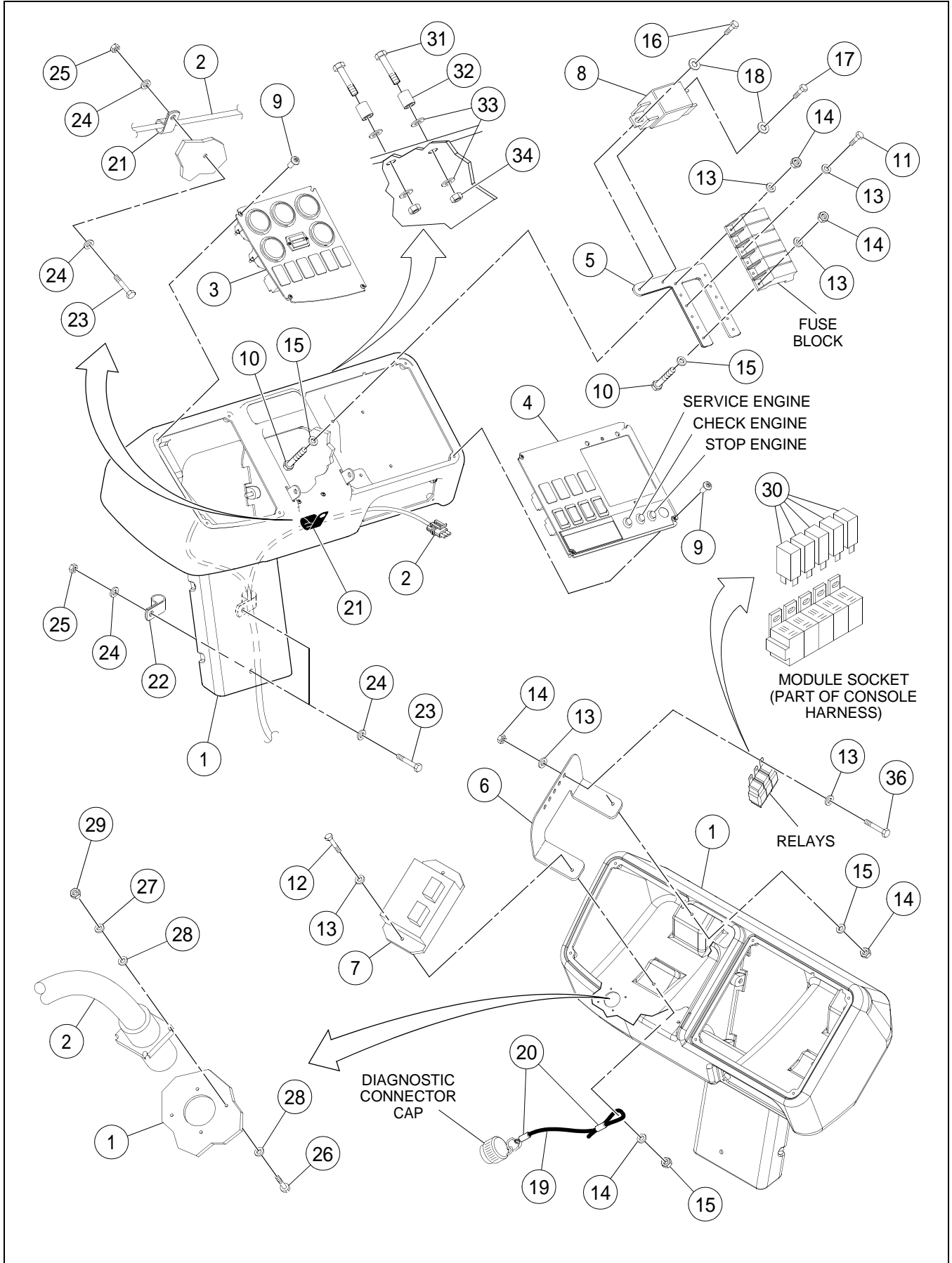
IGNITION SWITCH PANEL ASSEMBLY

BOM 13267422, 13267562

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13267406	Ignition Switch Panel (Enclosed Cab)	1	
-	13267414	Ignition Switch Panel (Open Cab)	1	
2	13316849	Ignition Switch	1	
-	58917261	- Ignition Key	1	
-	13284690	- IR Key Tag	1	
3	59126961	Ignition Switch Nut	1	
4	58892902	Ignition Switch Cover	1	
5	13843131	Control Panel (Enclosed Cab Only)	1	
-	13281514	- Control Panel Knob	2	
6	59148569	HSBHCS (Enclosed Cab Only)	3	M5 x 0.8 x 12
7	96705132	Hex Nut, Zinc Plated (Enclosed Cab Only)	3	M5 x 0.08 CI 8
8	96714449	External Tooth Star Washer	1	

CONSOLE ASSEMBLY

Dwg D13385752/00



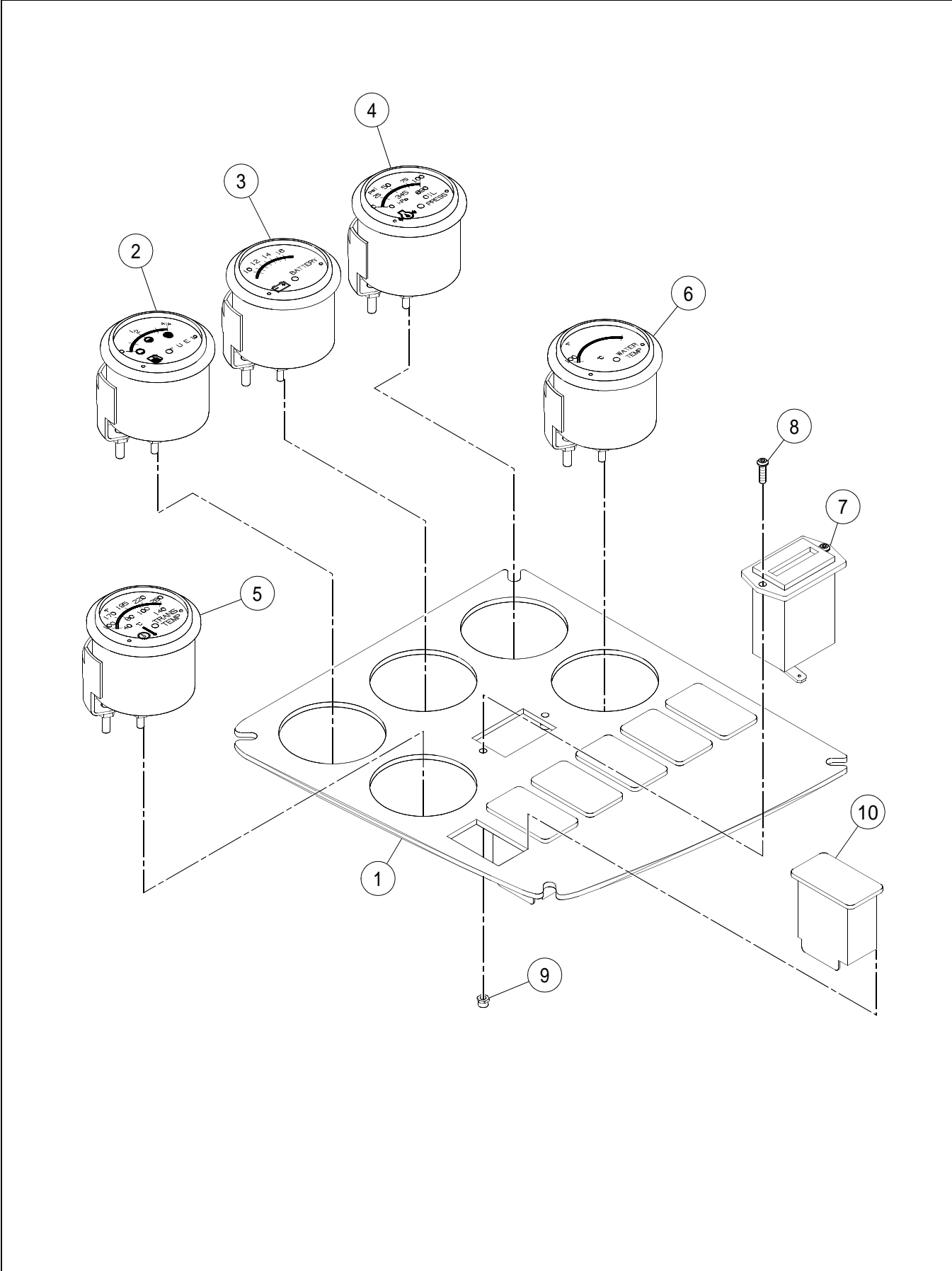
CONSOLE ASSEMBLY

BOM 13443163, 13385760

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13318746	Instrument Console	1	
2	13526843	Console Wire Harness - Eff S/N 187990	1	
-	13384706	Console Wire Harness - Prior to S/N 187990	1	
3	NSVA	Gauge Panel Assembly	1	See Page D - 46.
4	NSVA	Switch Panel Assembly	1	See Page D - 48.
5	13267570	Fuse Holder Mounting Plate	1	
6	13418843	Relay/RAS Support Plate - Eff S/N 187990	1	
-	13316930	Relay/RAS Support Plate - Prior to S/N 187990	1	
7		Not used with this Assembly		
8	13316831	Power Relay w/Diodes	1	
9	59148569	HSBHCS	8	M5 x 0.8 x 12
10	96704903	HHCS, Zinc Plated	4	M5 x 0.8 x 30 CI 8.8
11	96702386	HHCS, Fully Threaded, Zinc Plated	8	M5 x 0.8 x 12 CI 8.8
12	96705736	HHCS, Fully Threaded, Zinc Plated	2	M5 x 0.8 x 20 CI 8.8
13	96738554	Flatwasher, Zinc Plated - Eff S/N 187990	28	M5 Hardened CI 200
-	96738554	Flatwasher, Zinc Plated - Prior to S/N 187990	24	M5 Hardened CI 200
14	96704580	Hex Locknut, Zinc Plated - Eff S/N 187990	13	M5 x 0.8 CI 8
-	96704580	Hex Locknut, Zinc Plated - Prior to S/N 187990	11	M5 x 0.8 CI 8
15	95922332	Flatwasher, Zinc Plated	6	#10
16	96702394	HHCS, Fully Threaded, Zinc Plated	1	CI 8.8
17	96705769	HHCS, Fully Threaded, Zinc Plated	1	M6 x 1.0 x 10 CI 8.8
18	96741053	Flatwasher, Zinc Plated	2	M6 CI 200
19	59436741	Cable	1	
20	59436758	Ferrule	1	
21	95457586	Clamp	1	
22	95301875	Hose Clamp	2	
23	96705587	HHCS, Fully Threaded, Zinc Plated	3	M8 x 1.25 x 30 CI 8.8
24	96741020	Flatwasher, Zinc Plated	6	M8 CI 140
25	96704606	Hex Locknut, Zinc Plated	3	M8 x 1.25 CI 8
26	95021184	Pan Head Slot Screw, Zinc Plated	4	#4 x 40 x 0.75
27	95929766	Lockwasher, Zinc Plated	4	
28	95929030	Flatwasher, Zinc Plated	8	#4
29	95929790	Hex Nut, Zinc Plated	4	#4 x 40
30	59436899	Relay - Effective with S/N 187990	7	
-	59436899	Relay - Prior to S/N 187990	5	
31	96728696	SHCS, Zinc Plated	2	M4 x 0.7 x 25 CI 8.8
32	59158931	Spacer	2	
33	96705165	Flatwasher, Zinc Plated	4	M4 CI 140
34	96703756	Hex Nut, Zinc Plated	2	M4 x 0.7 CI 8
35	58771940	Ring Terminal (Not Shown)	1	
36	96705728	Screw, Fully Threaded, Zinc Plated - Eff S/N 187990	7	M5 x 0.8 x 16 CI 8.8
-	96705728	Screw, Fully Threaded, Zinc Plated- Prior to S/N 187990	5	M5 x 0.8 x 16 CI 8.8

GAUGE PANEL ASSEMBLY

Dwg D13267430/02



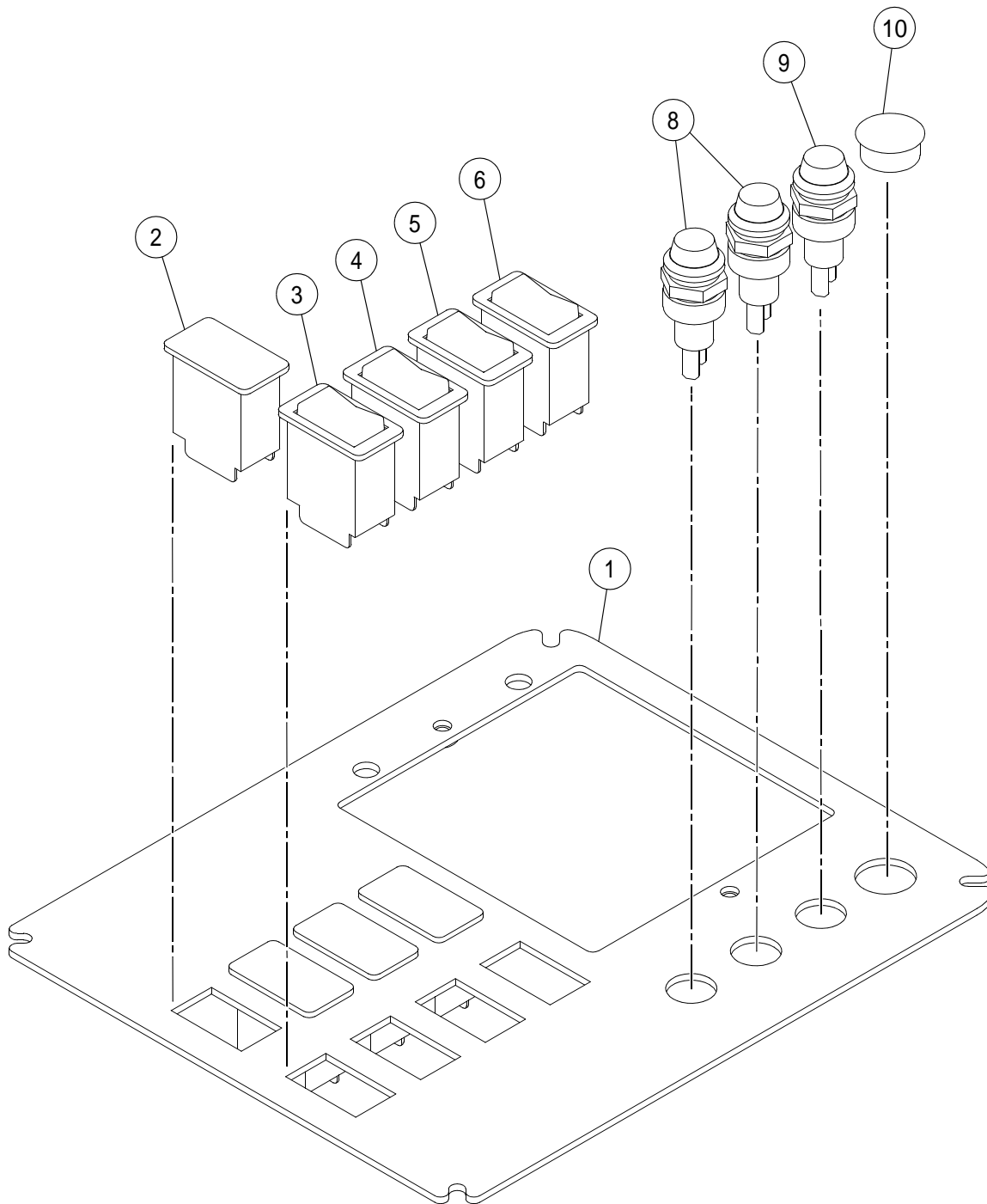
GAUGE PANEL ASSEMBLY

BOM 13267430

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13300553	Gauge Panel	1	
2	59046920	Fuel Level Gauge	1	
3	59044297	Voltmeter	1	
4	59046904	Oil Pressure Gauge	1	
5	59113761	Transmission Temperature Gauge	1	
6	59132324	Water Temperature Gauge	1	
7	59165001	Hourmeter	1	
8	59148692	HSBHCS	2	M3 x 1.0 x 12
9	59137448	Locknut	2	M3 x 0.5
10	13225156	Switch Plug	6	

SWITCH PANEL ASSEMBLY

Dwg D13315791/02



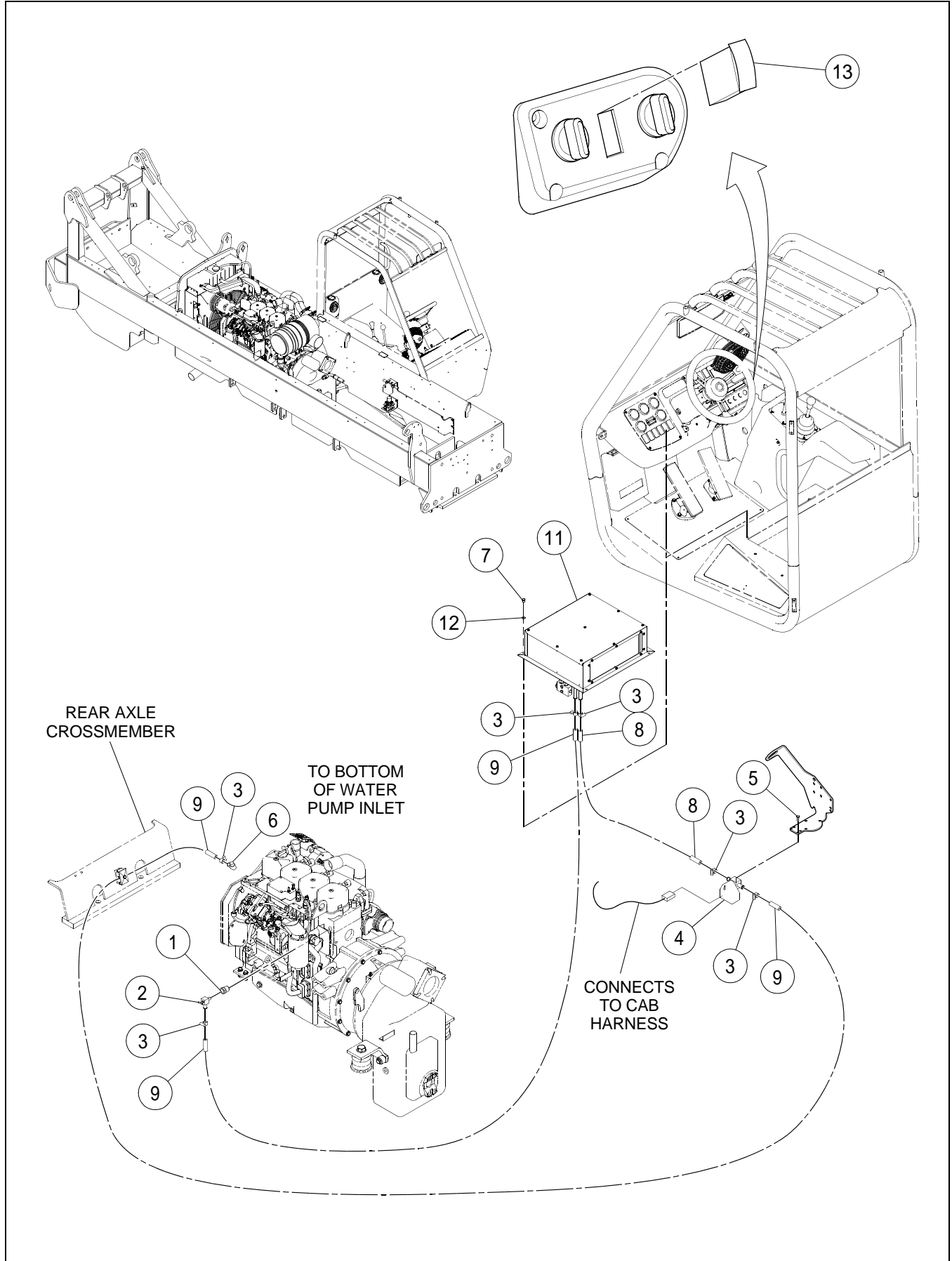
SWITCH PANEL ASSEMBLY

BOM 13315791

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13315767	Switch Panel	1	
2	13225156	Switch Plug	8	
3	13280102	Steering Selector Switch	1	
4	13280128	Wiper Washer Switch	1	
5	54666102	Brake Test Switch	1	
6	54666094	Parking Brake Switch	1	
8	13315759	Amber Indicator Light	2	
9	59816447	Indicator Light	1	
-	58909268	- Bulb	1	
10	59887000	Dome Plug	1	

CAB HEATER INSTALLATION - EFFECTIVE WITH S/N 187990

Dwg 18005991/01



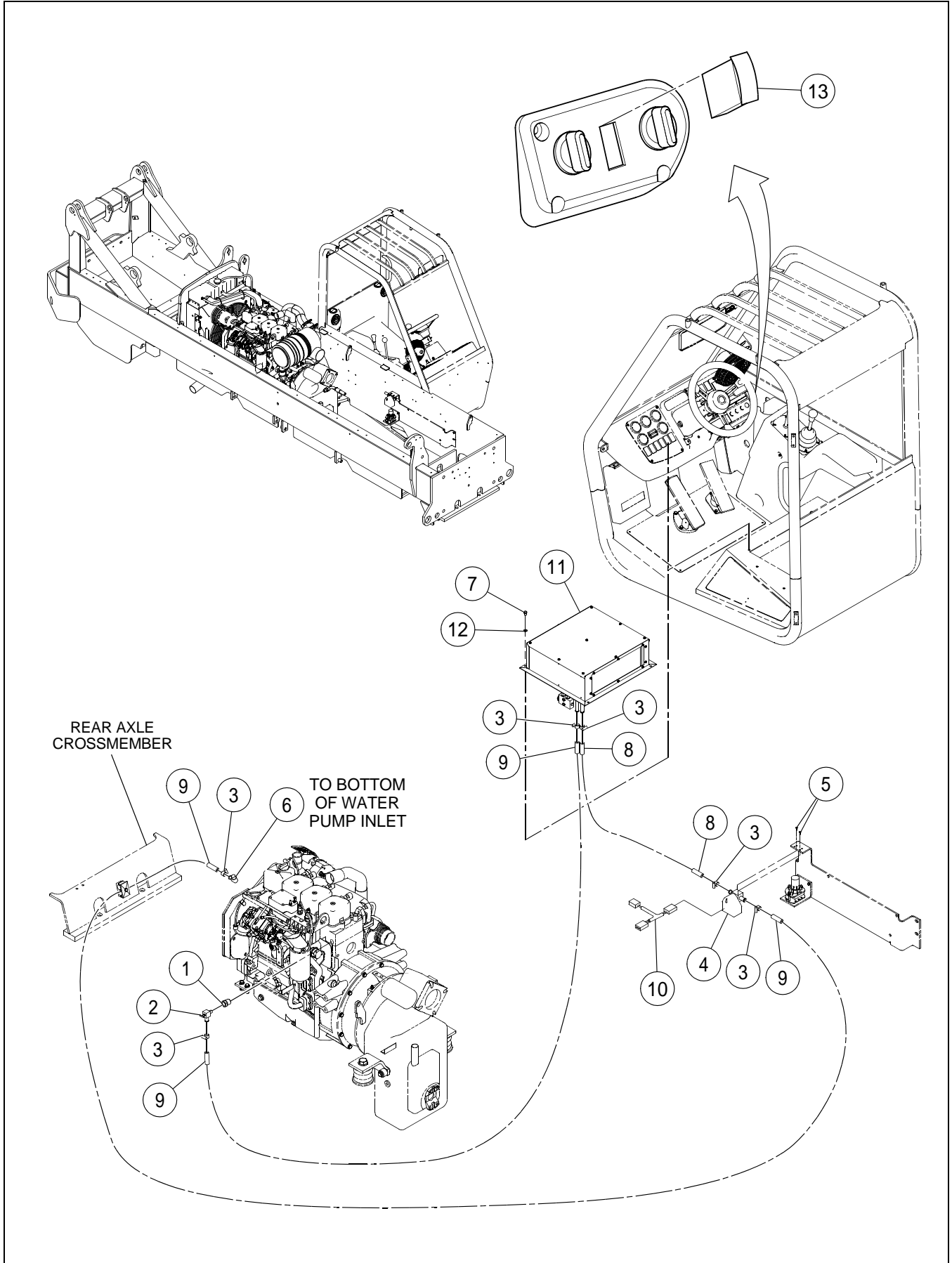
CAB HEATER INSTALLATION - EFFECTIVE WITH S/N 187990

BOM 18005991

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59924241	External Reducer	1	
2	59392795	Valve	1	
3	95671285	Hose Clamp	6	
4	13831698	Heater Valve	1	
5	13214051	Self-tapping Screw	2	#8-32
6	58962226	Elbow	1	
7	96702824	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 20 CI 8.8
8	13372735	Hose Assembly	1	72.5"
9	13300504	Heater Hose	2	148.0"
11	13838123	Heater/Blower Assembly	1	
12	96741038	Flatwasher	4	M8 x 1.25 CI 200
13	13156997	Control Panel Plug	1	

CAB HEATER INSTALLATION - PRIOR TO S/N 187990

Dwg D13265277/02



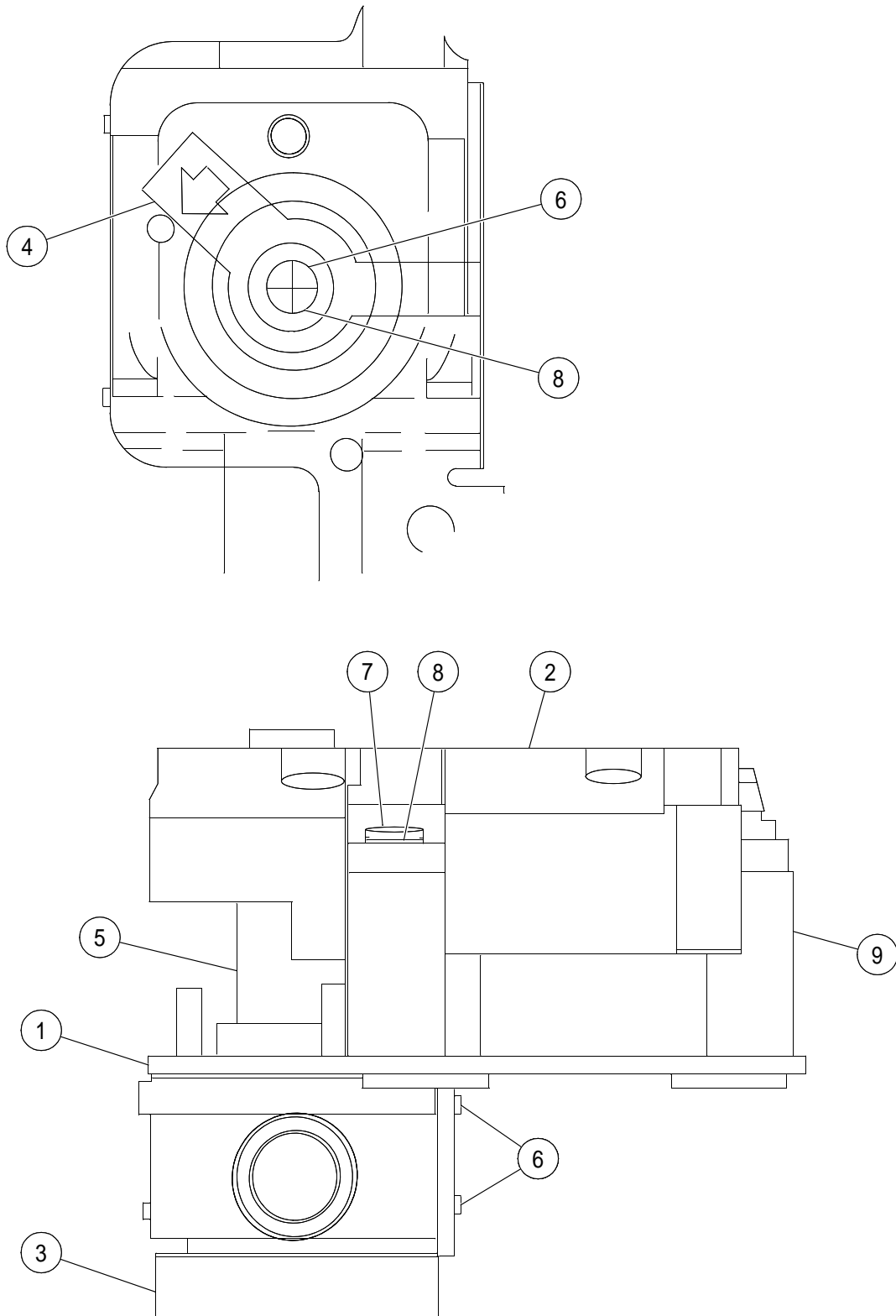
CAB HEATER INSTALLATION - PRIOR TO S/N 187990

BOM 13265277

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59924241	External Reducer	1	
2	59392795	Valve	1	
3	95671285	Hose Clamp	6	
4	13831698	Heater Valve - Effective with S/N 185254	1	
-	13200027	Heater Valve - Prior to S/N 185254 Note: Heater Valve 13200027 can be replaced with Heater Valve 13831698 if both the Wire Harness, 13200035, and Control Panel, 13254644, are replaced at the same time with part numbers 13843123 and 13843131, respectively.	1	See Breakdown D - 54.
5	13214051	Self-tapping Screw	2	#8-32
6	58962226	Elbow	1	
7	96702824	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 20 CI 8.8
8	13372735	Hose Assembly	1	72.5"
9	13300504	Heater Hose	2	148.0"
10	13843123	Cab Heater Wiring Harness - Eff S/N 185254	1	
-	13200035	Cab Heater Wiring Harness - Prior to S/N 185254	1	
11	13267000	Heater/Blower Assembly	1	
-	43824994	- Blower	1	
-	43825009	- Heater Coil	1	
12	96741038	Flatwasher	4	M8 x 1.25 CI 200
13	13156997	Control Panel Plug	1	
14	13306568	Connector Plug (Not Shown)	1	

HEATER VALVE (13200027) - PRIOR TO S/N 185254 -
INTERNAL BREAKDOWN

Dwg D13244645/00



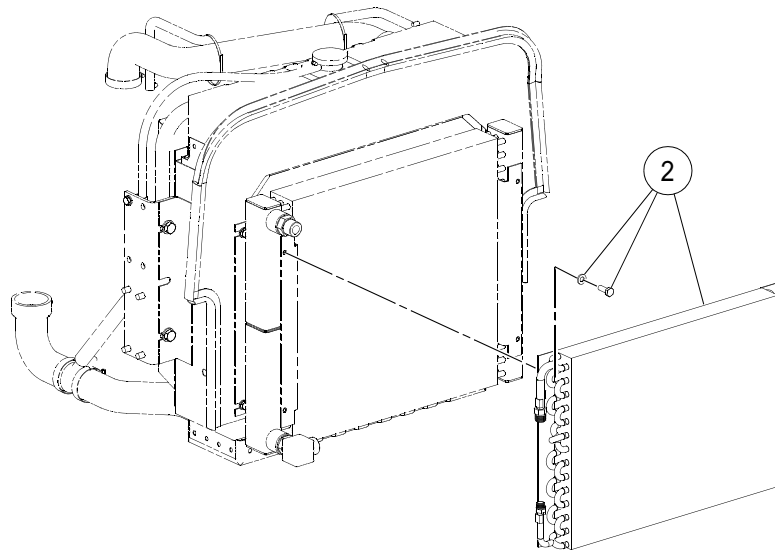
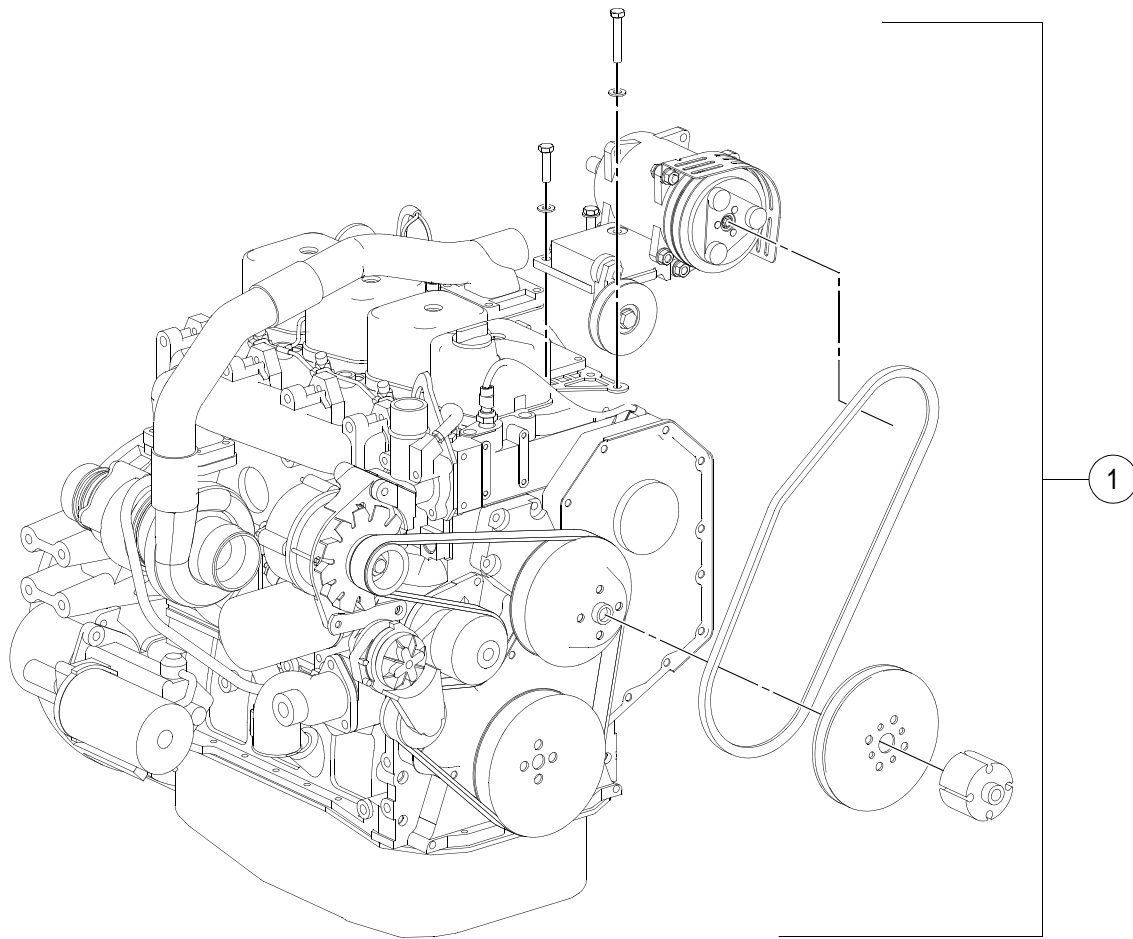
HEATER VALVE (13200027) - PRIOR TO S/N 185254 -
INTERNAL BREAKDOWN

BOM 13200027

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13258942	Mounting Bracket	1	
2	13258959	Motor Adaptor	1	
3	13258967	Heater Valve	1	
4	13258975	Valve Lever Arm	1	
5	13258983	Shaft Adapter	1	
6	13258991	Plastite Screw	3	
7	13259007	Screw	3	
8	13259015	Washer	4	
9	13259023	Spacer	3	

CAB AIR CONDITIONING INSTALLATION - SHEET 1 OF 4

Dwg D13265285/00/01



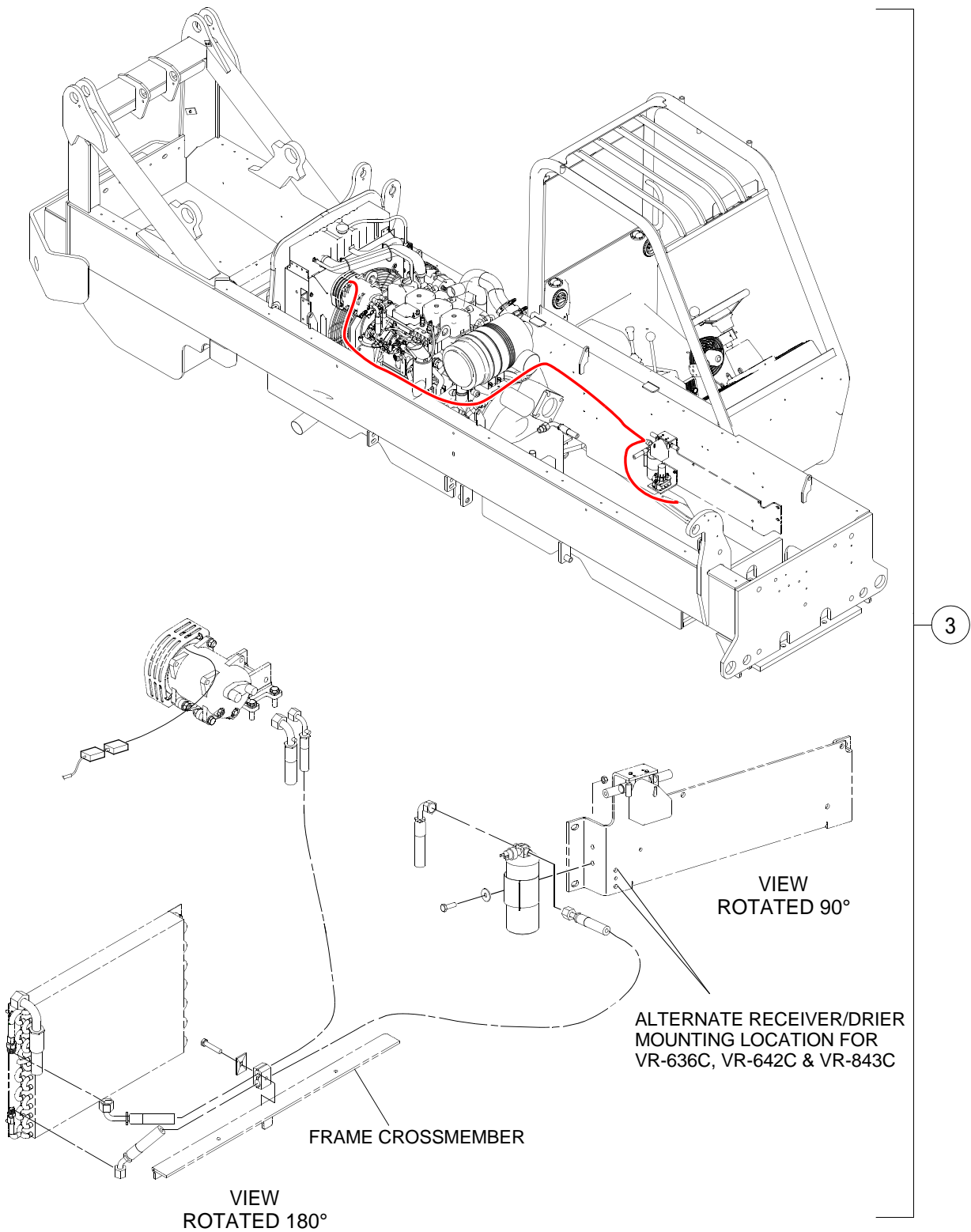
CAB AIR CONDITIONING INSTALLATION - SHEET 1 OF 4

BOM 13856455, 13265285

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Compressor Installation	1	See Page D - 64.
2	NSVA	Condenser Installation	1	See Page D - 68.

CAB AIR CONDITIONING INSTALLATION - SHEET 2 OF 4

Dwg D13265285/00/02



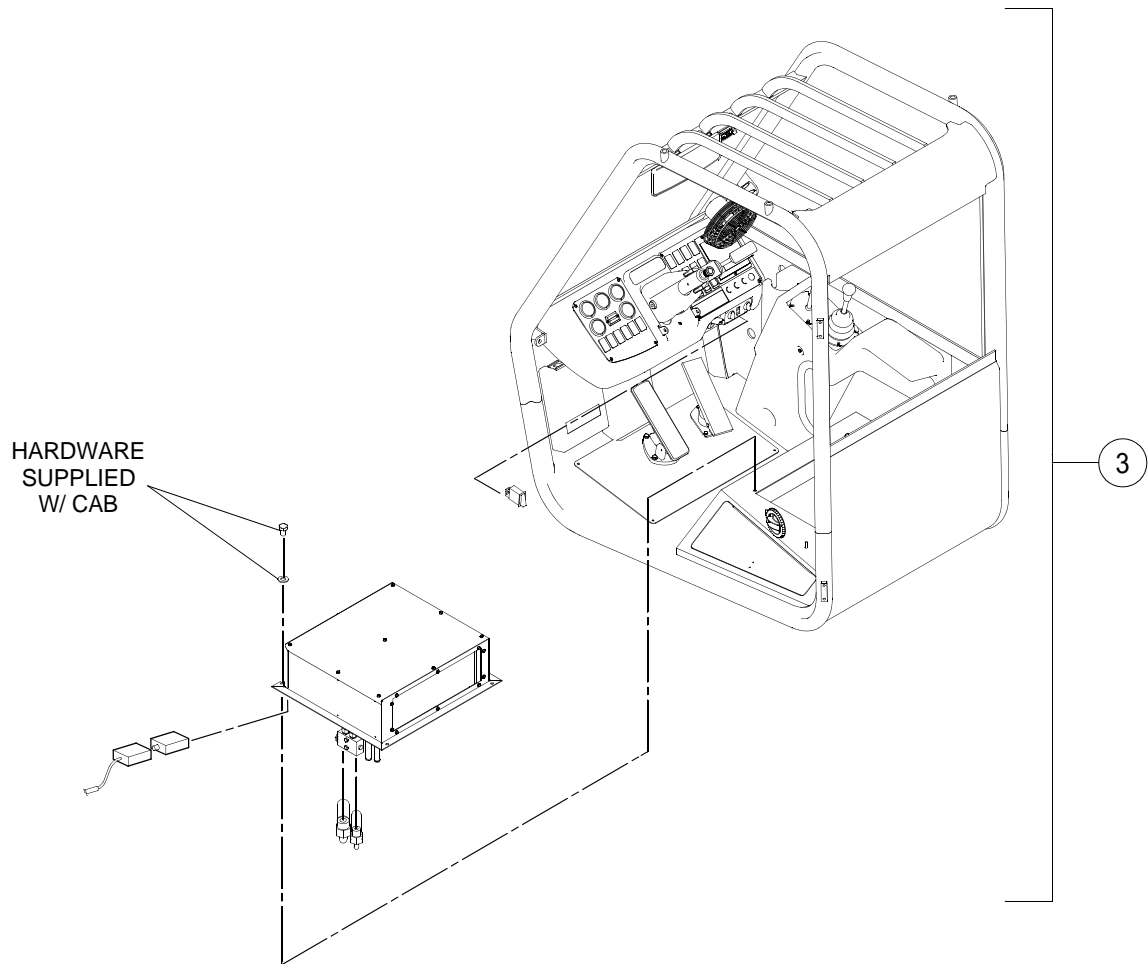
CAB AIR CONDITIONING INSTALLATION - SHEET 2 OF 4

BOM 13856455, 13265285

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	NSVA	Air Conditioning Hosing Installation - Effective with S/N 187990	1	See Page D - 70.
-	NSVA	Air Conditioning Hosing Installation - Prior to S/N 187990	1	See Page D - 74.

CAB AIR CONDITIONING INSTALLATION - SHEET 3 OF 4

Dwg D13265285/00/03



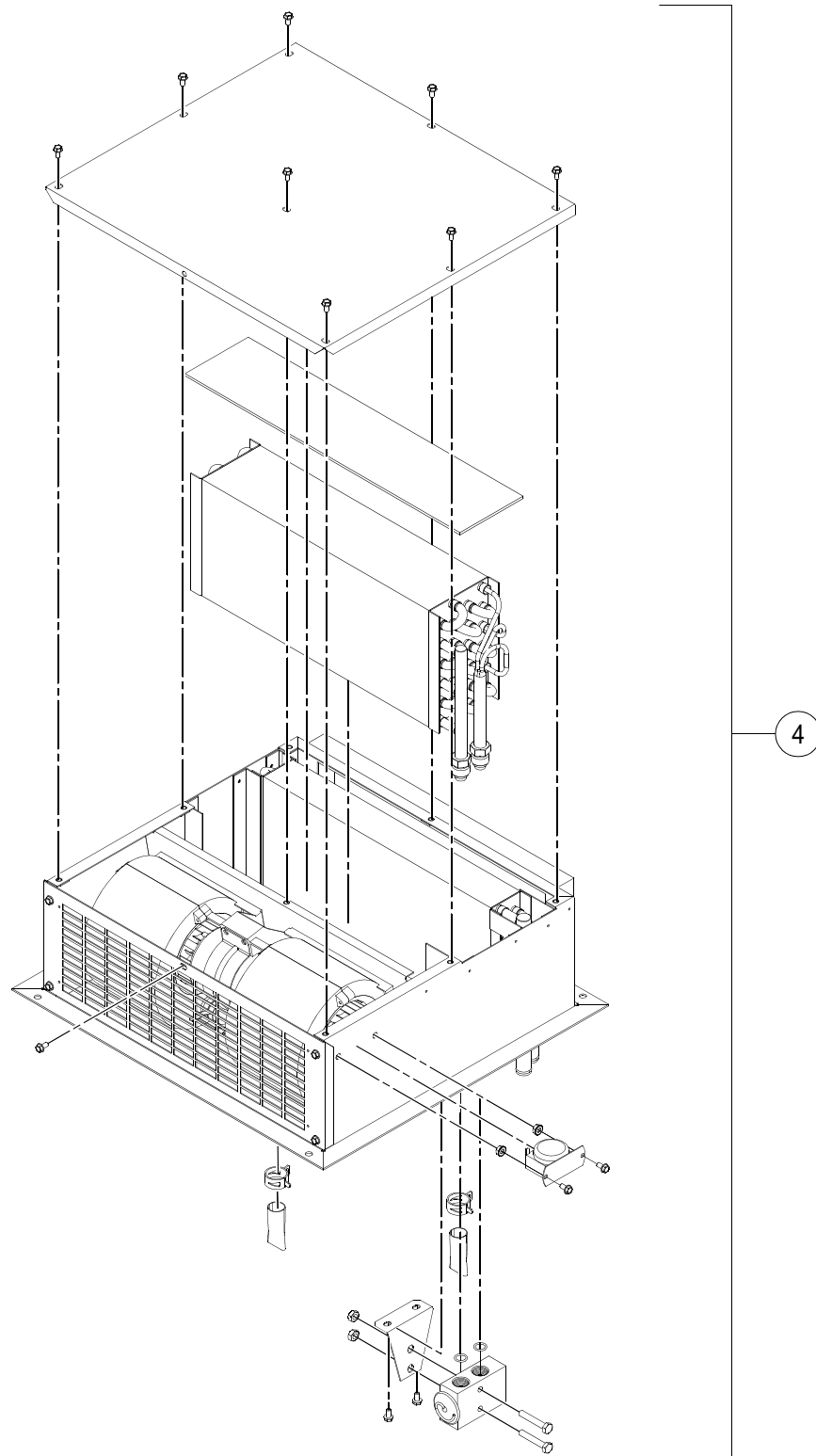
CAB AIR CONDITIONING INSTALLATION - SHEET 3 OF 4

BOM 13856455, 13265285

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	NSVA	Air Conditioning Hosing Installation - Effective with S/N 187990	1	See Page D - 70.
-	NSVA	Air Conditioning Hosing Installation - Prior to S/N 187990	1	See Page D - 74.

CAB AIR CONDITIONING INSTALLATION - SHEET 4 OF 4

Dwg D13265285/00/04



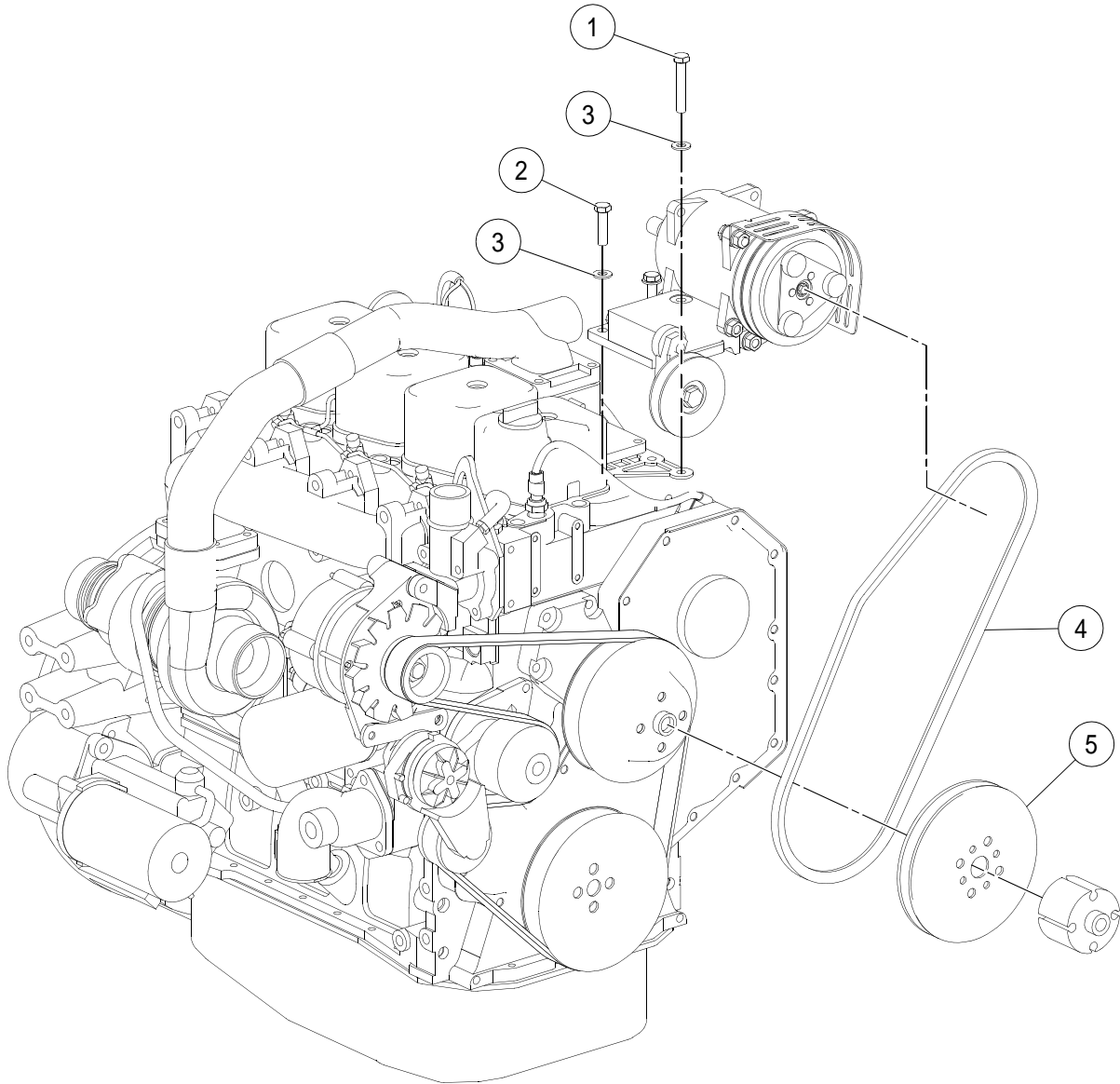
CAB AIR CONDITIONING INSTALLATION - SHEET 4 OF 4

BOM 13856455, 13265285

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
4	13267018	Air Conditioning Kit	1	

COMPRESSOR INSTALLATION

Dwg D13264916/03



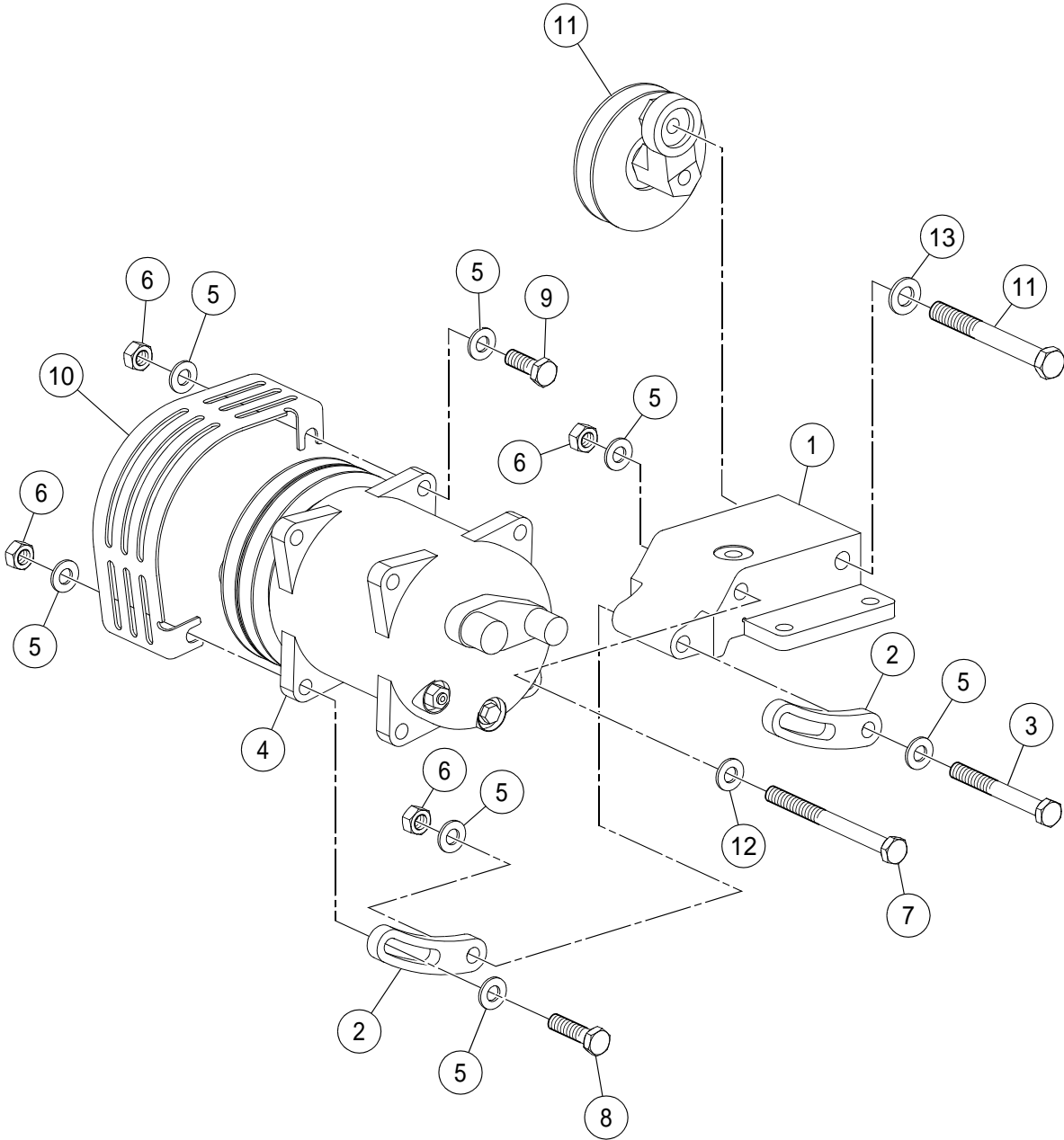
COMPRESSOR INSTALLATION

BOM 13264916

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Compressor Assembly	1	See Page D - 66.
2	96702782	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 30 CI 10.9
3	96741046	Flatwasher, Zinc Plated	3	M10 CI 200
4	13265384	V-belt	1	
5	58910662	Compressor Pulley	1	
6	96703798	HHCS, Zinc Plated (Not Shown)	1	M10 x 1.5 CI 10.9
7	13355003	Decal: Refrigerant Charge (Not Shown)	1	

COMPRESSOR ASSEMBLY

Dwg D13300652/04



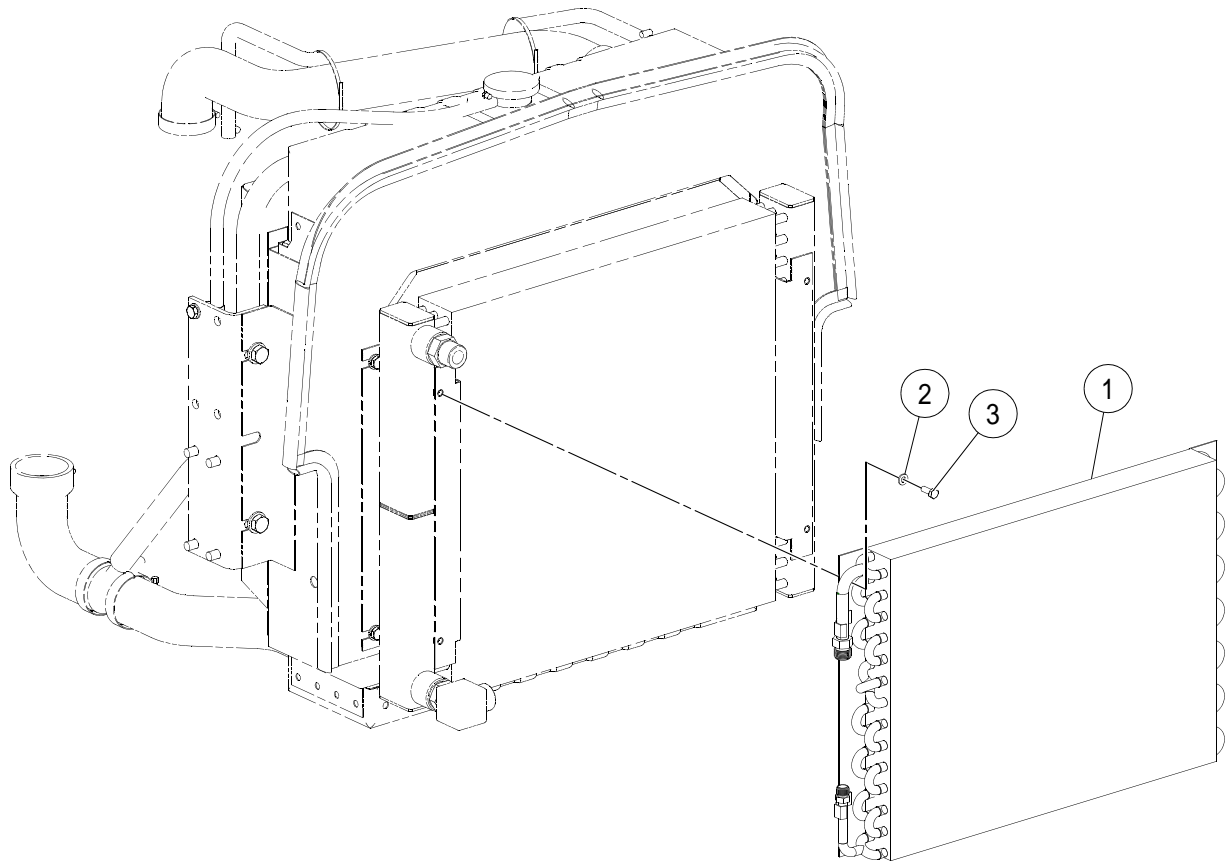
COMPRESSOR ASSEMBLY

BOM 13300652

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13318357	Compressor Bracket	1	
2	59147991	Adjustment Arm	2	
3	96714779	HHCS	1	M10 x 1.5 x 90 CI 10.9
4	13274535	Compressor	1	
5	96741046	Flatwasher, Zinc Plated	10	M10 CI 200
6	96704812	Hex Nut, Zinc Plated	5	M10 x 1.5 CI 8
7	96714795	HHCS, Zinc Plated	1	M10 x 1.5 x 120 CI 10.9
8	96701941	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 40
9	96702782	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 30 CI 10.9
10	13300637	Guard Sheave	1	
11	13308036	Tensioner Pulley	1	
12	96727896	HHCS, Zinc Plated	1	M12 x 1.75 x 110 CI 8.8
13	96738596	Flatwasher, Zinc Plated	1	M12 Hardened CI 200

CONDENSOR INSTALLATION

Dwg D13264924/01



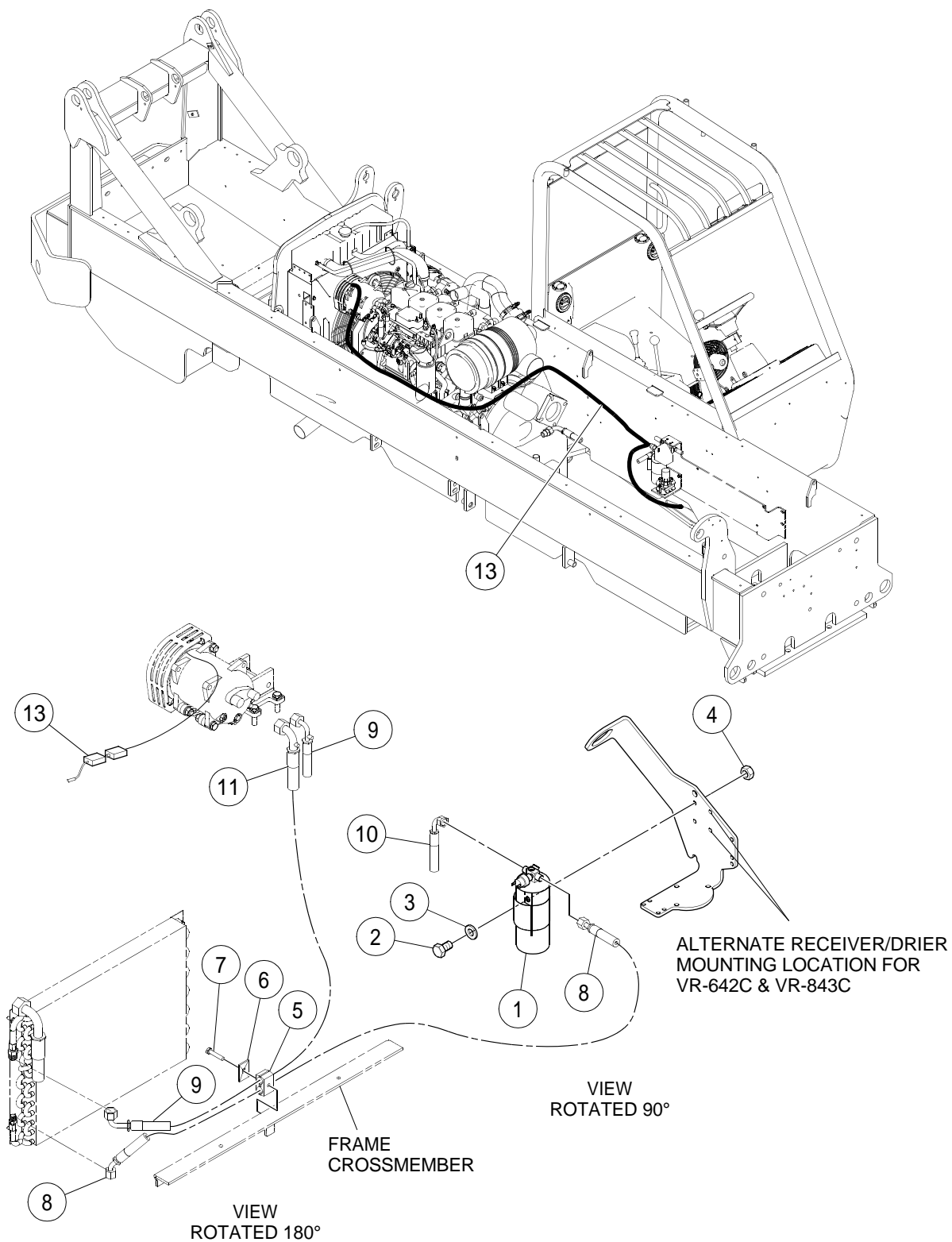
CONDENSOR INSTALLATION

BOM 13264924

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13300587	Condenser	1	
2	96741053	Flatwasher, Zinc Plated	4	M6 CI 200
3	96701958	HHCS, Fully Threaded, Zinc Plated	4	M6 x 16 CI 8.8

AIR CONDITIONING HOISING INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 1 OF 2

Dwg 13856414/00



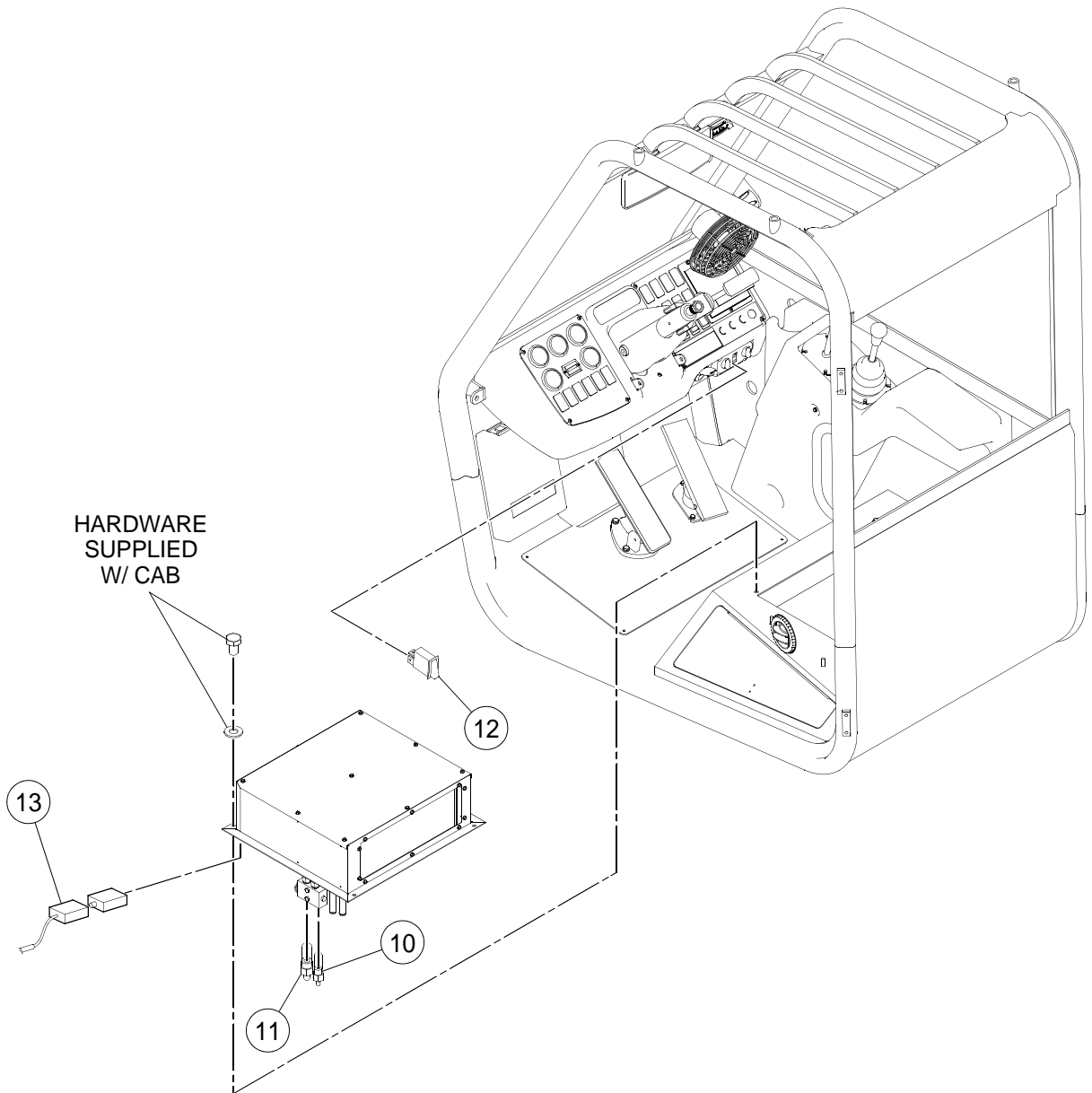
AIR CONDITIONING HOISING INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 1 OF 2

BOM 13856414

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13156989	Drier/Binary Bracket	1	
2	96705587	HHCS, Zinc Plated	2	M8-1.25x30 CI 8.8
3	96740204	Washer	2	M8 x 25
4	13167812	Spacer	2	
5	59583518	Clamp	2	
6	59583500	Cover Plate	1	
7	96702402	HHCS, Zinc Plated	1	M8 x 1.25 x 50 CI 8.8
8	13300660	Hose Assembly	1	6.0"
9	13300678	Hose Assembly	1	8.0"
10	13300686	Hose Assembly	1	6.0"
11	13300694	Hose Assembly	1	10.0"
13	13305685	Air Conditioner Wire Harness	1	

AIR CONDITIONING HOISING INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 2

Dwg 13856414/00



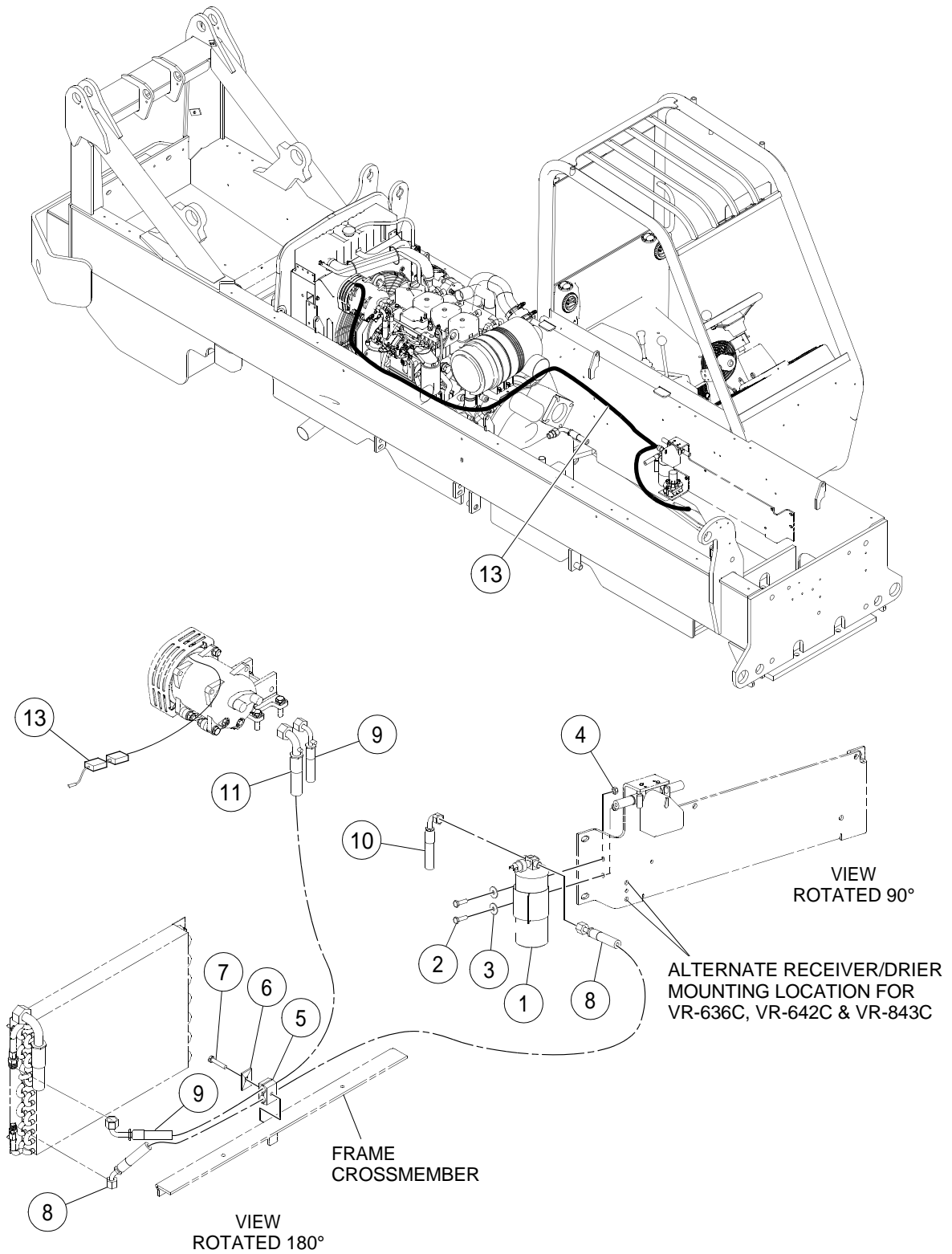
AIR CONDITIONING HOISING INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 2

BOM 13856414

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
10	13300686	Hose Assembly	1	6.0"
11	13300694	Hose Assembly	1	10.0"
12	13156963	Air Conditioner Switch	1	
13	13305685	Air Conditioner Wire Harness	1	

AIR CONDITIONING HOISING INSTALLATION - PRIOR TO S/
N 187990 - SHEET 1 OF 2

Dwg D13307897/00/01



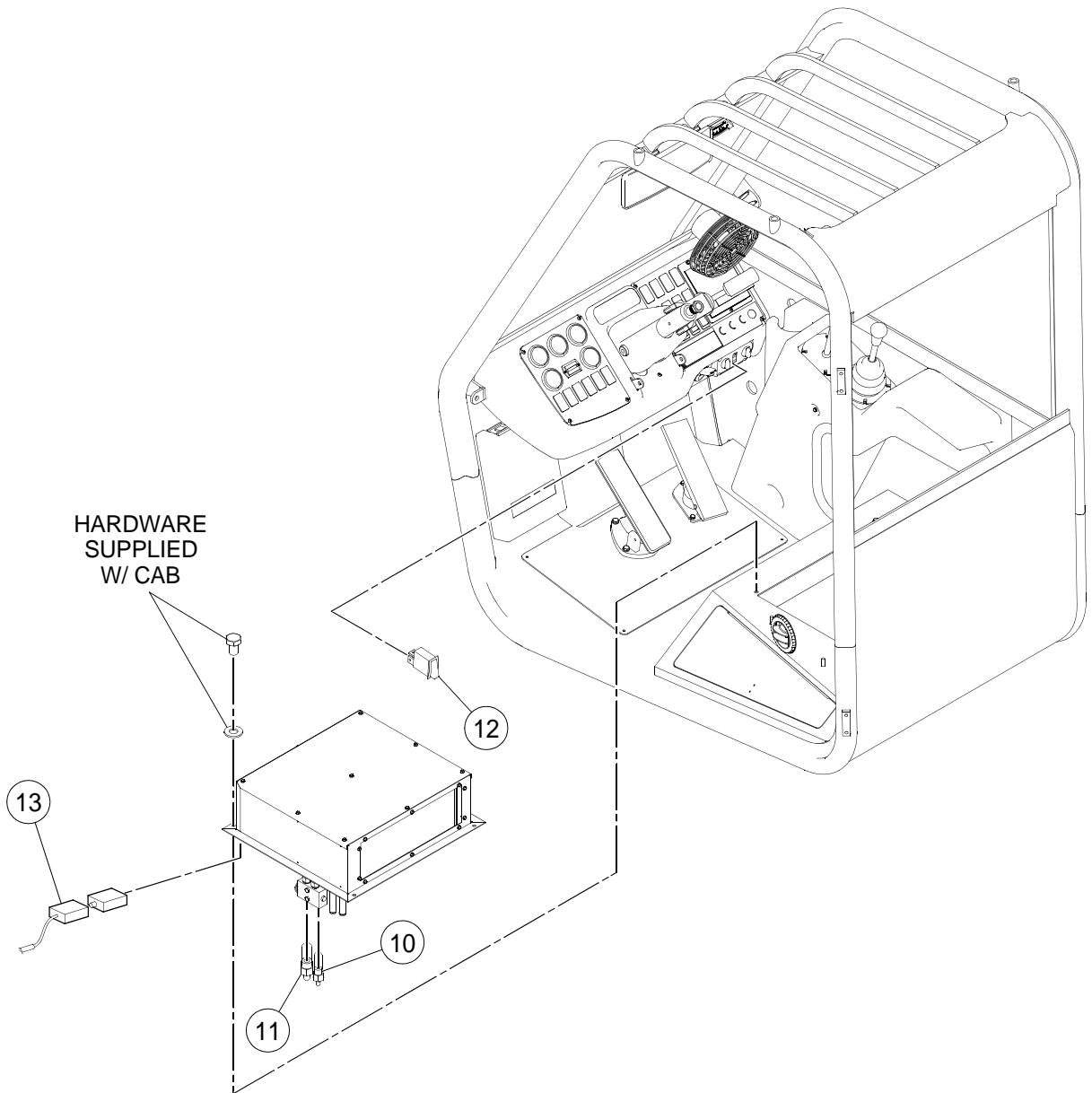
AIR CONDITIONING HOISING INSTALLATION - PRIOR TO S/
N 187990 - SHEET 1 OF 2

BOM 13307897

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13156989	Drier/Binary Bracket	1	
2	96702659	HHCS, Fully Threaded, Zinc Plated	2	M8 x 1.25 x 25 CI 8.8
3	96740204	Washer	2	M8 x 25
4	96705009	Locknut, Zinc Plated	2	M8 x 1.25 CI 8
5	59583518	Clamp	2	
6	59583500	Cover Plate	1	
7	96702402	HHCS, Zinc Plated	1	M8 x 1.25 x 50 CI 8.8
8	13300660	Hose Assembly	1	6.0"
9	13300678	Hose Assembly	1	8.0"
10	13300686	Hose Assembly	1	6.0"
11	13300694	Hose Assembly	1	10.0"
13	13305685	Air Conditioner Wire Harness	1	

AIR CONDITIONING HOISING INSTALLATION - PRIOR TO S/
N 187990 - SHEET 2 OF 2

Dwg D13307897/00/02



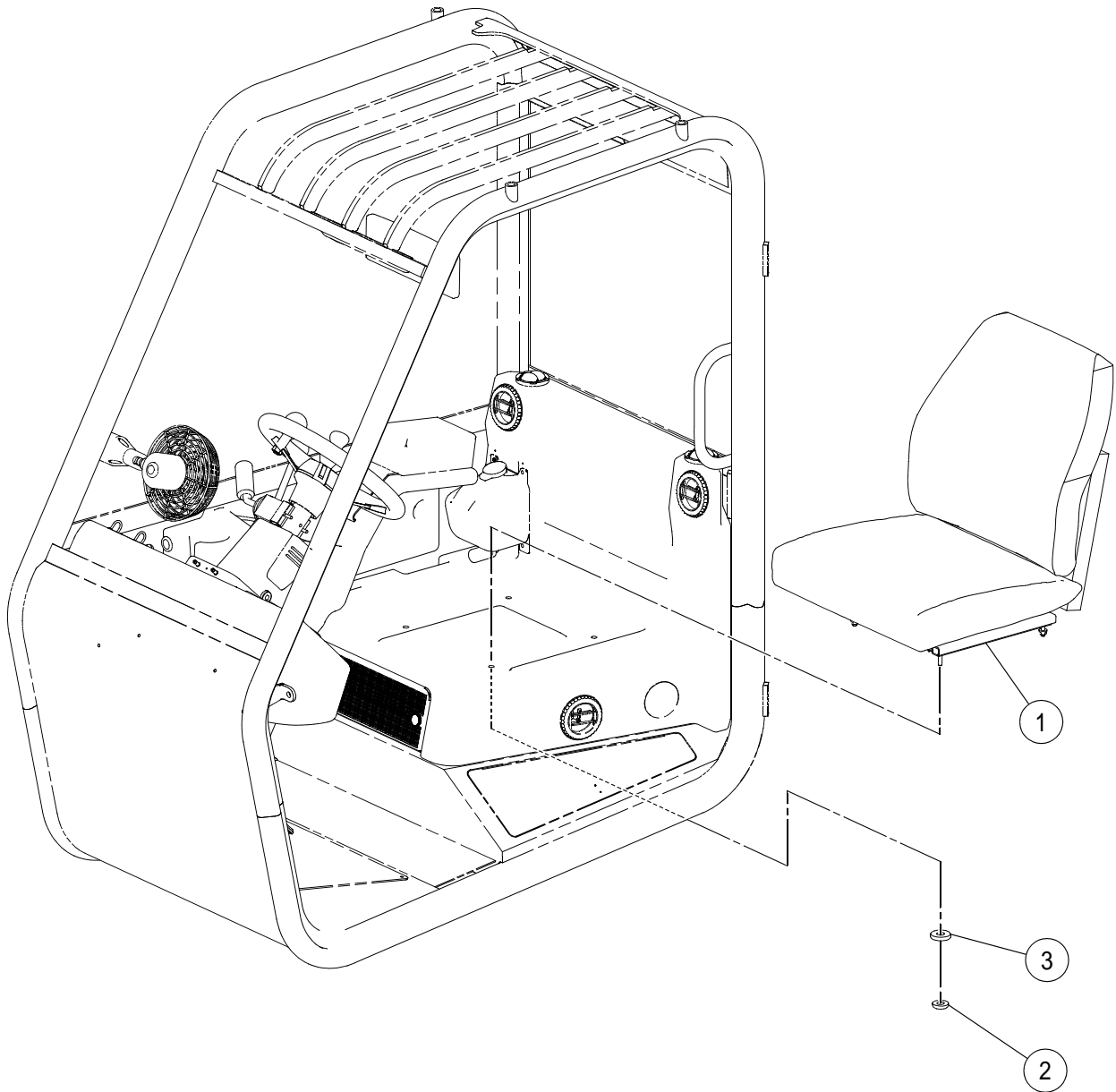
AIR CONDITIONING HOISING INSTALLATION - PRIOR TO S/
N 187990 - SHEET 2 OF 2

BOM 13307897

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
10	13300686	Hose Assembly	1	6.0"
11	13300694	Hose Assembly	1	10.0"
12	13156963	Air Conditioner Switch	1	
13	13305685	Air Conditioner Wire Harness	1	

SEAT INSTALLATION

Dwg D13335245/00



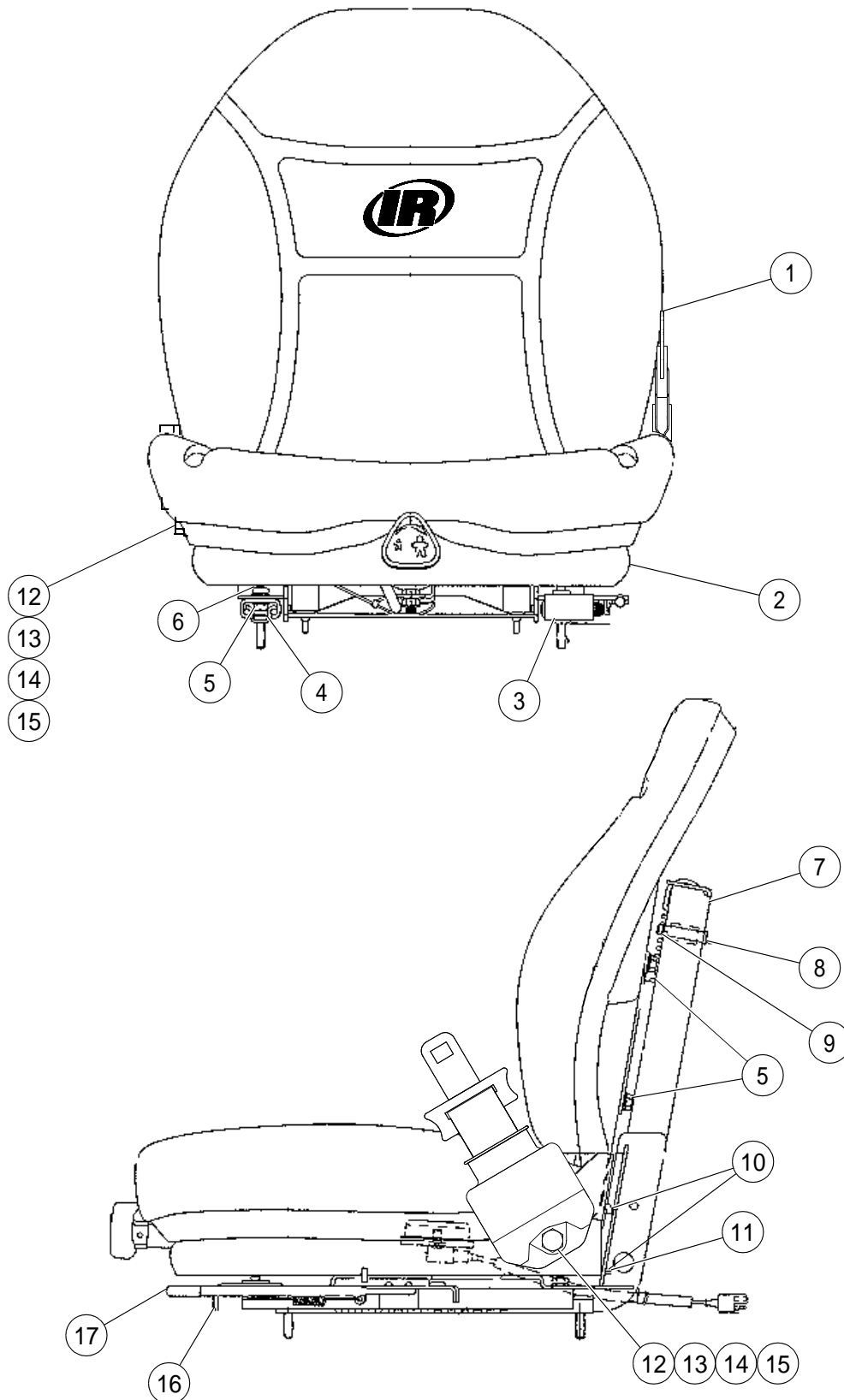
SEAT INSTALLATION

BOM 13300389, 13372115

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	18003434	Standard Seat	1	
-	18003764	- Seat Cushion	1	
-	13437884	- Seat Belt Kit	1	
-	19292622	- Adjuster Slide Assembly	1	
-	19292630	- Adjuster Latch W/Handle	1	
-	13372602	Suspension Seat Assembly Eff S/N 180764	1	
-	13494455	- Seat Cushion/Frame Assembly	1	
-	13494463	- Seat Adjuster Kit	1	
-	13494661	- Seat Belt/Tether Kit	1	
-	59156901	Suspension Seat - Prior to S/N 180764	1	See Breakdown D - 80.
2	59464610	Locknut	4	
3	96712674	Washer, Zinc Plated	4	M8 Hardened CI 10

SUSPENSION SEAT (59156901) - PRIOR TO S/N 180764
INTERNAL BREAKDOWN

Dwg D59156901



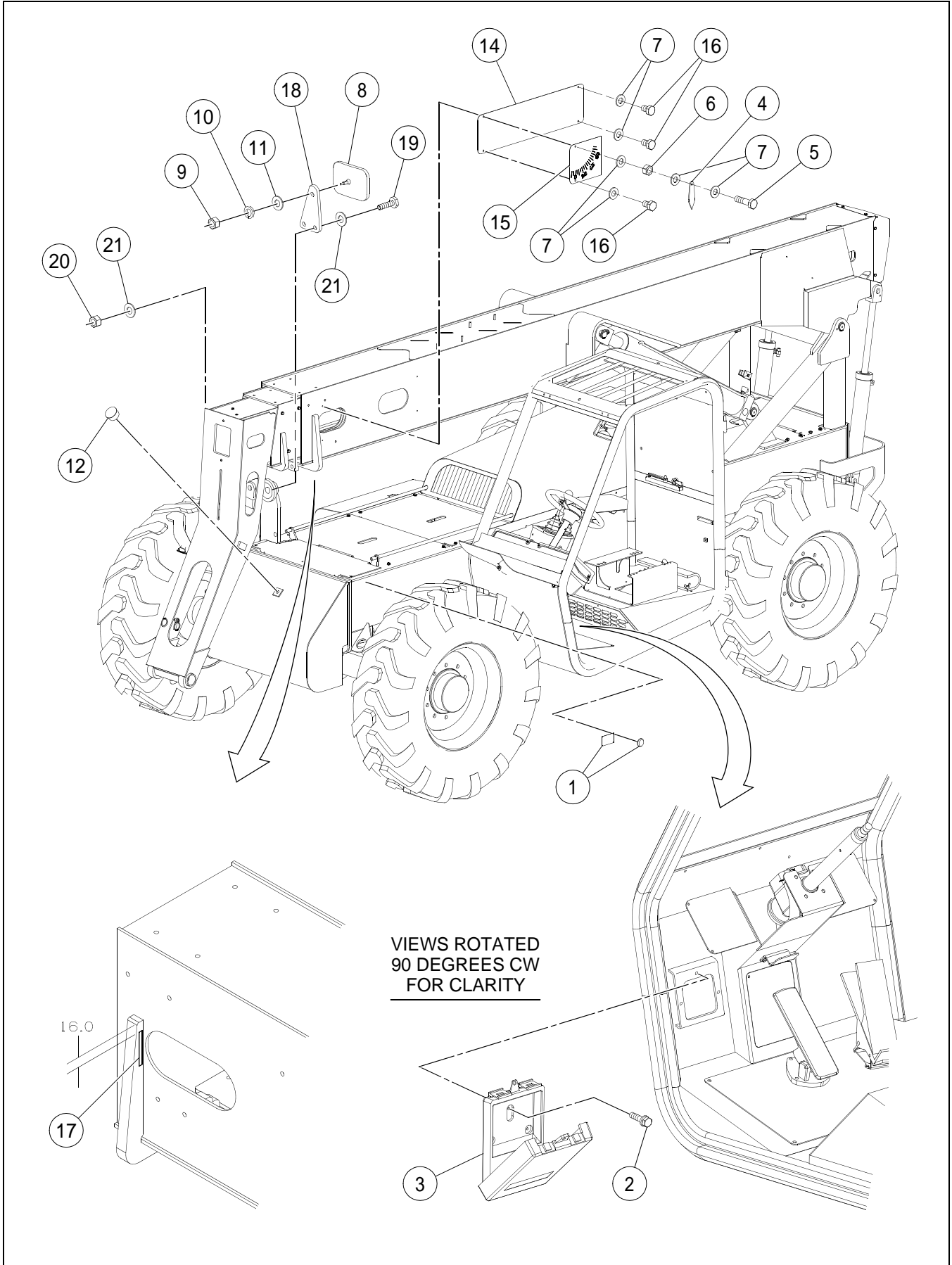
SUSPENSION SEAT (59156901) - PRIOR TO S/N 180764
INTERNAL BREAKDOWN

BOM 59156901

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59154823	Pan Assembly w/Cushion	1	
2	59154484	Boot	1	
3	59154351	Adjuster Latch w/Handle	1	
4	59195719	Seat Kit	1	
5	59154476	HHCS	1	
6	59154542	Flange Lock Nut	3	
7	59154450	Suspension Assembly w/Damper	1	
8	59154518	Clevis Pin	2	
9	59154526	Push Nut	2	
10	59154492	Upper Wire Form	1	
11	59154500	Lower Wire Form	2	
12	59154427	HHCS	2	
13	59154435	Hex Head Lock Nut	2	
14	59154443	Plain Washer	4	
15	59154419	Seal Belt w/Retractor and Buckle	1	
16	59195719	Seat Kit	1	
17	59154377	Vinyl Tip	1	

MANUAL CASE, MIRROR AND POINTER INSTALLATION

Dwg C13318837/01



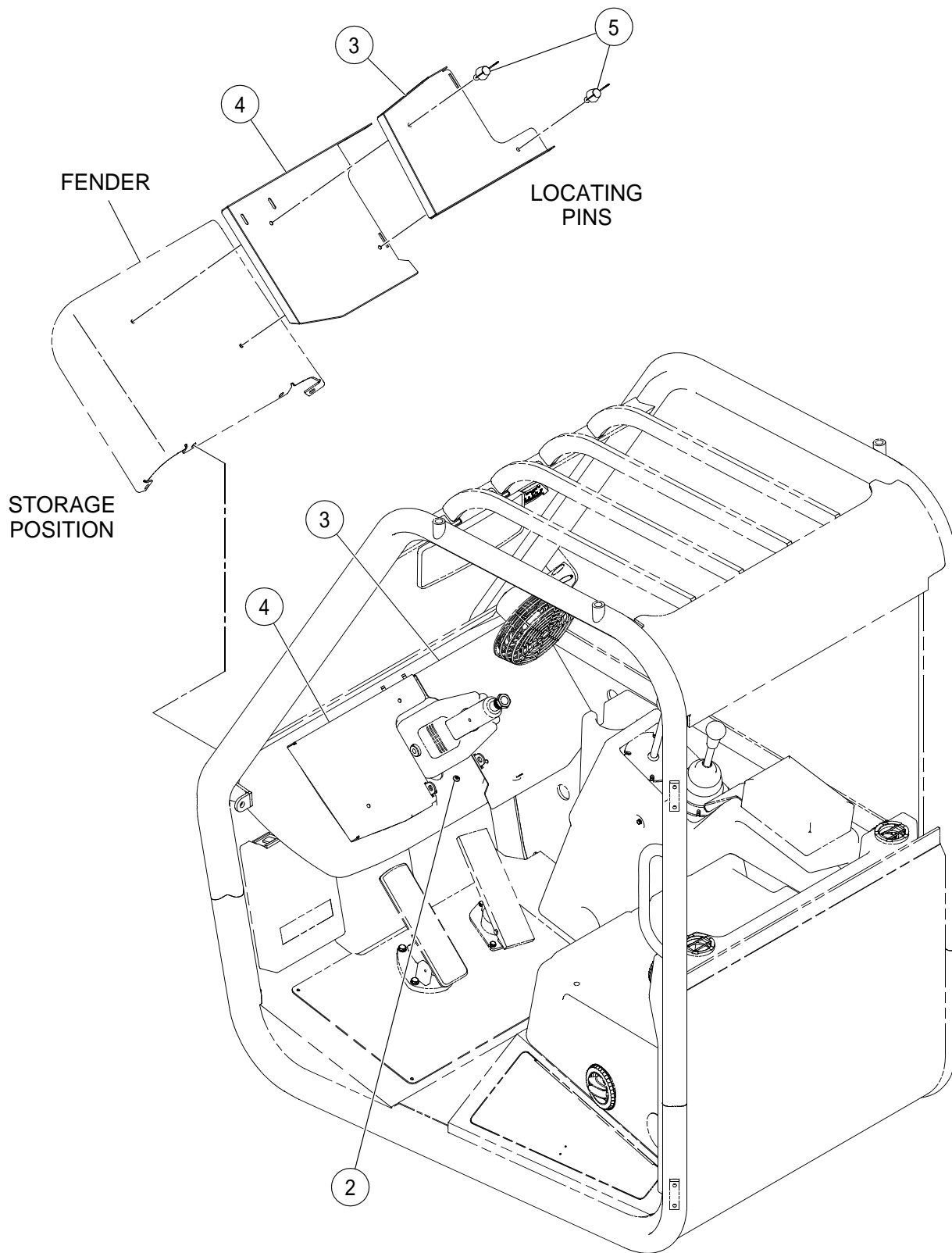
MANUAL CASE, MIRROR AND POINTER INSTALLATION

BOM 13318837

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1		Not used with this Assembly		
2	96717525	Lockscrew, Zinc Plated	3	M6 x 1 x 10 CI 90
3	59185074	Manual Case	1	
4	59116558	Pointer	1	
5	96705587	HHCS, Fully Threaded, Zinc Plated	1	M8 x 1.25 x 30 CI 8.8
6	96702840	Hex Nut, Zinc Plated	1	M8 x 1.25 CI 10
7	96741038	Flatwasher	10	M8 x 1.25 CI 200
8	59450734	Mirror	1	
9	95922894	Hex Nut, Zinc Plated	1	3/8 x 16 UNC Grd A
10	95931440	Lockwasher, Zinc Plated	1	3/8
11	95922373	Flatwasher, Zinc Plated	1	3/8
12	59180950	Plug	1	
14	59181024	Boom Side Cover Plate	2	
15	59187518	Decal: Angle	1	
16	96705041	HHCS, Fully Threaded, Zinc Plated	7	M8 x 1.25 x 12 CI 8.8
17	59212571	Tape	1	
18	59277038	Mirror Bracket	1	
19	96702402	HHCS, Zinc Plated - Effective S/N 191610	2	M8 x 1.25 x 50 CI 8.8
-	96719265	HHCS, Zinc Plated - Prior to S/N 191610	2	M10 x 1.5 x 50 CI 8.8
20	96704606	Hex Locknut, Zinc Plated - Effective S/N 191610	2	M8 x 1.25 CI 8
-	96704614	Nut, Zinc Plated - Prior to S/N 191610	2	M10 x 1.5 CI 8
21	59887182	Washer - Effective S/N 191610	4	Hardened
-	96741046	Flatwasher, Zinc Plated - Prior to S/N 191610	4	M10 CI 200

VANDAL COVER INSTALLATION - OPTIONAL

Dwg D13335229/00



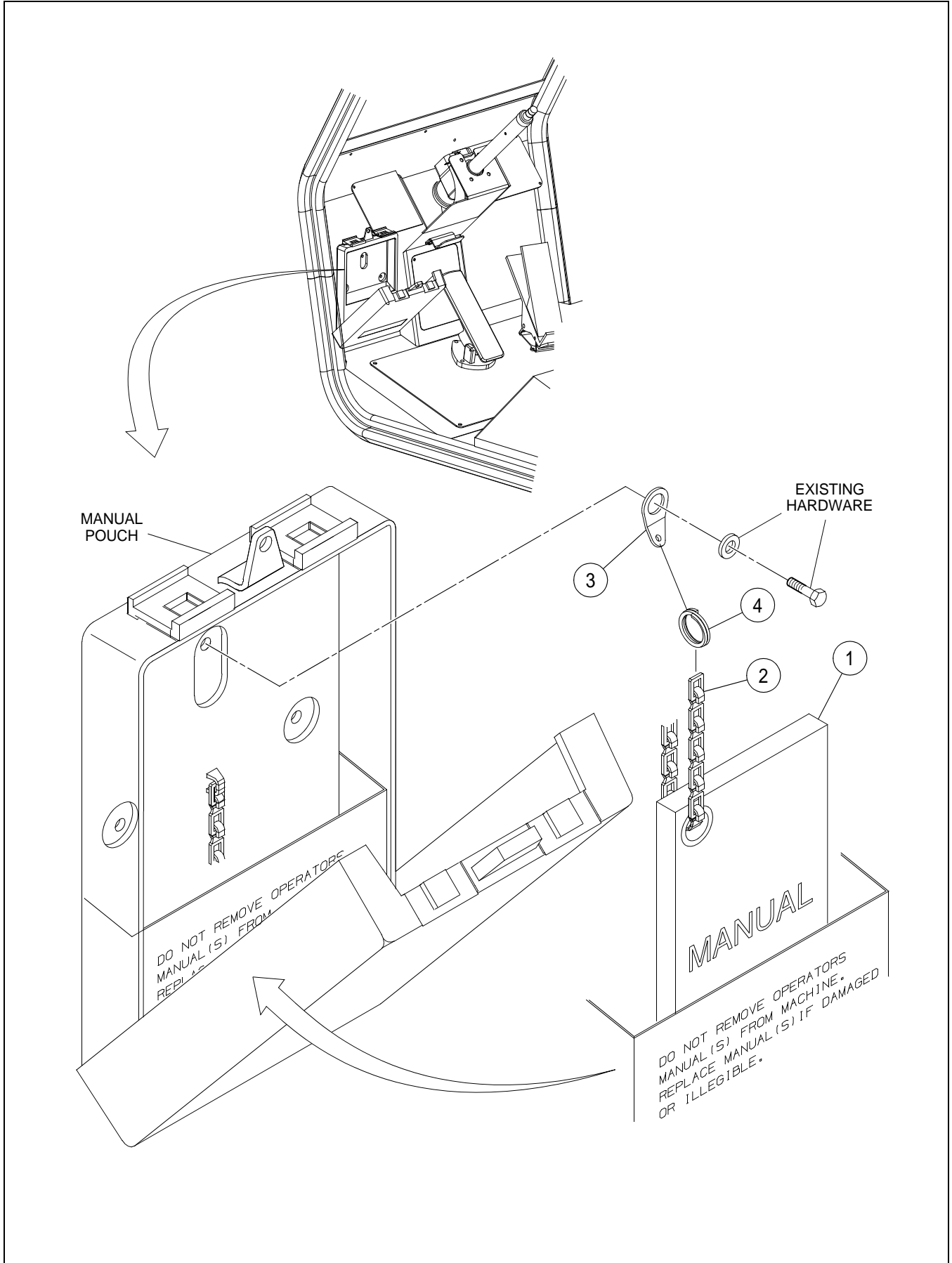
VANDAL COVER INSTALLATION - OPTIONAL

BOM 13300116

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13308010	Lockplate (Not Shown)	1	
2	59148569	HSBHCS	2	M5 x 0.8 x 12
3	13307996	Vandal Cover Plate, LH	1	
4	13308002	Vandal Cover Plate, RH	1	
5	96745906	Wing Screw	2	M6 x 20

SAFETY LABEL MANUAL INSTALLATION

Dwg D13345699/00



SAFETY LABEL MANUAL INSTALLATION

BOM 13345699

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13341466	Safety Label Manual	1	
2	58874389	Chain	1	
3	58874397	Formed Washer	1	
4	58880303	Split Ring	1	

*****Always use Ingersoll-Rand Replacement parts!*****

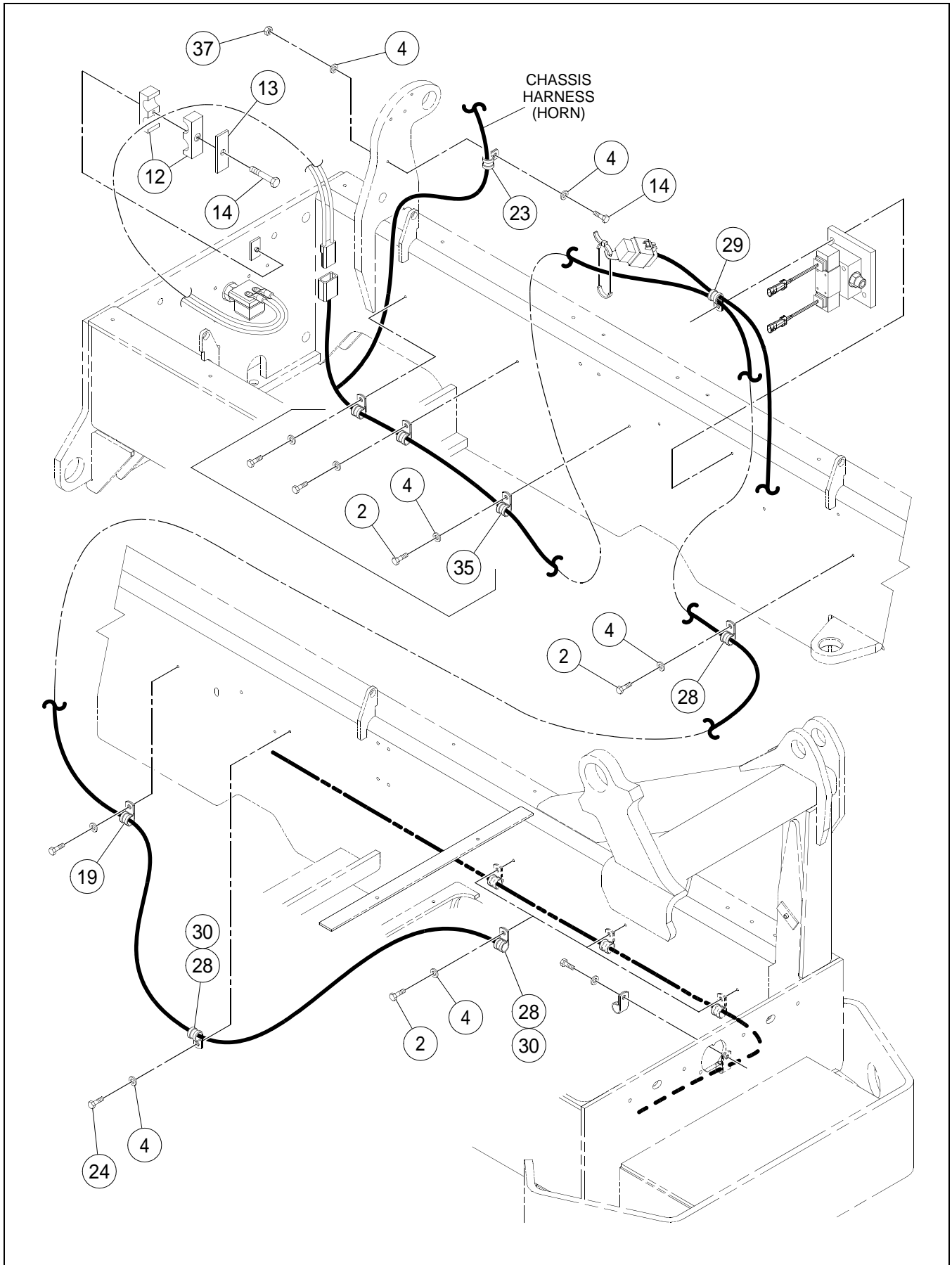


Section E - ELECTRICAL



WIRING HARNESS INSTALLATION - SHEET 1 OF 3

Dwg 13259593/00



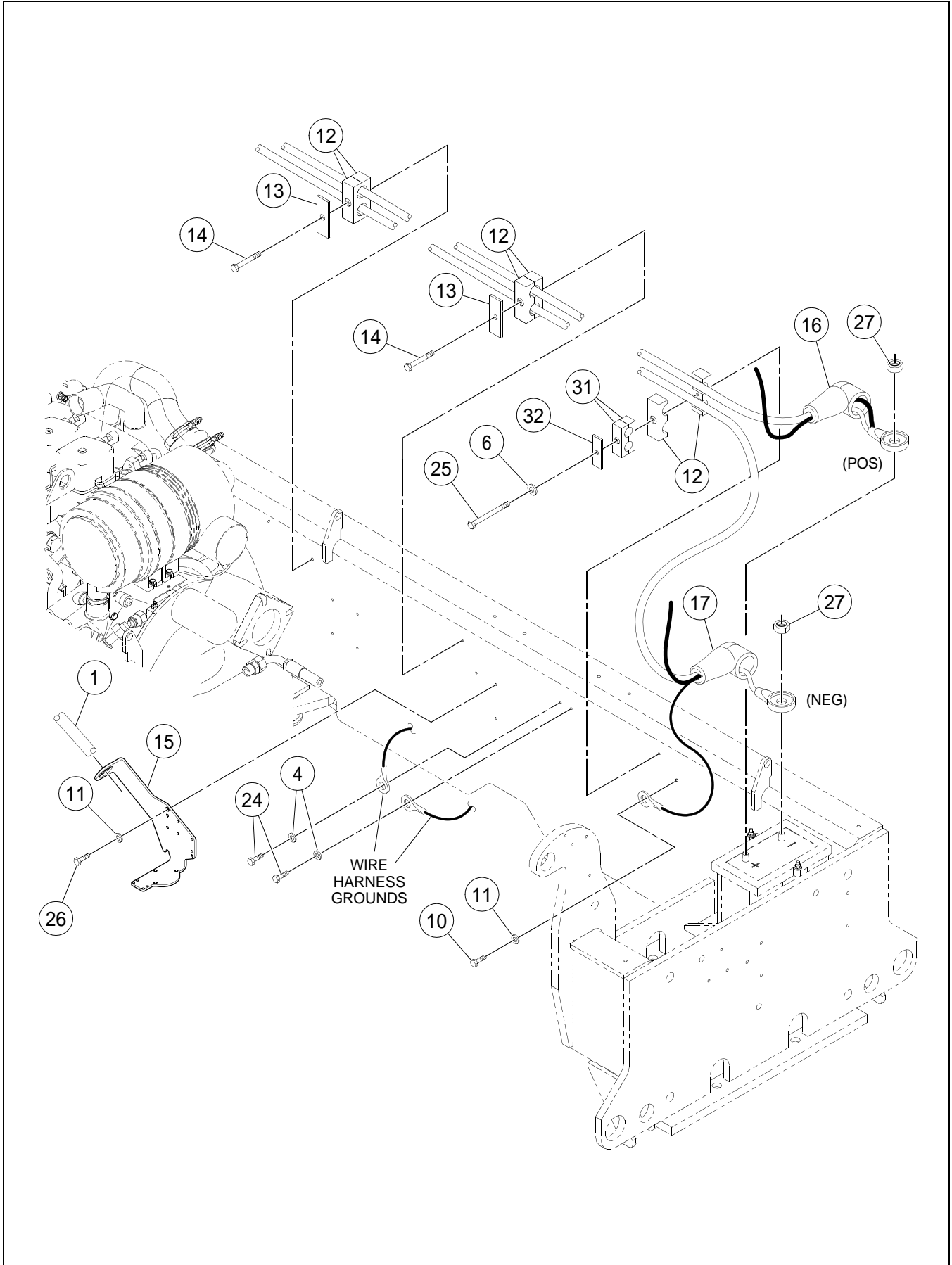
WIRING HARNESS INSTALLATION - SHEET 1 OF 3

BOM 13259593

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	96705041	HHCS, Fully Threaded, Zinc Plated	8	M8 x 1.25 x 12 CI 8.8
4	96741038	Flatwasher	12	M8 x 1.25 CI 200
12	59583468	Insert Clamp	8	
13	59583450	Cover Plate	3	
14	96705553	HHCS, Zinc Plated	3	M8 x 1.25 x 45 CI 8.8
19	59020271	Clamp	1	
23	59465658	Clamp	1	
24	96702816	HHCS, Fully Threaded, Zinc Plated	3	M8 x 1.25 x 16 CI 8.8
28	59020214	Clamp	6	
29	59442046	Clamp	1	
30	59020222	Conduit Clamp	1	
35	59117317	Clamp	3	
37	96704606	Hex Locknut, Zinc Plated	1	M8 x 1.25 CI 8

WIRING HARNESS INSTALLATION - SHEET 2 OF 3

Dwg 13259593/00



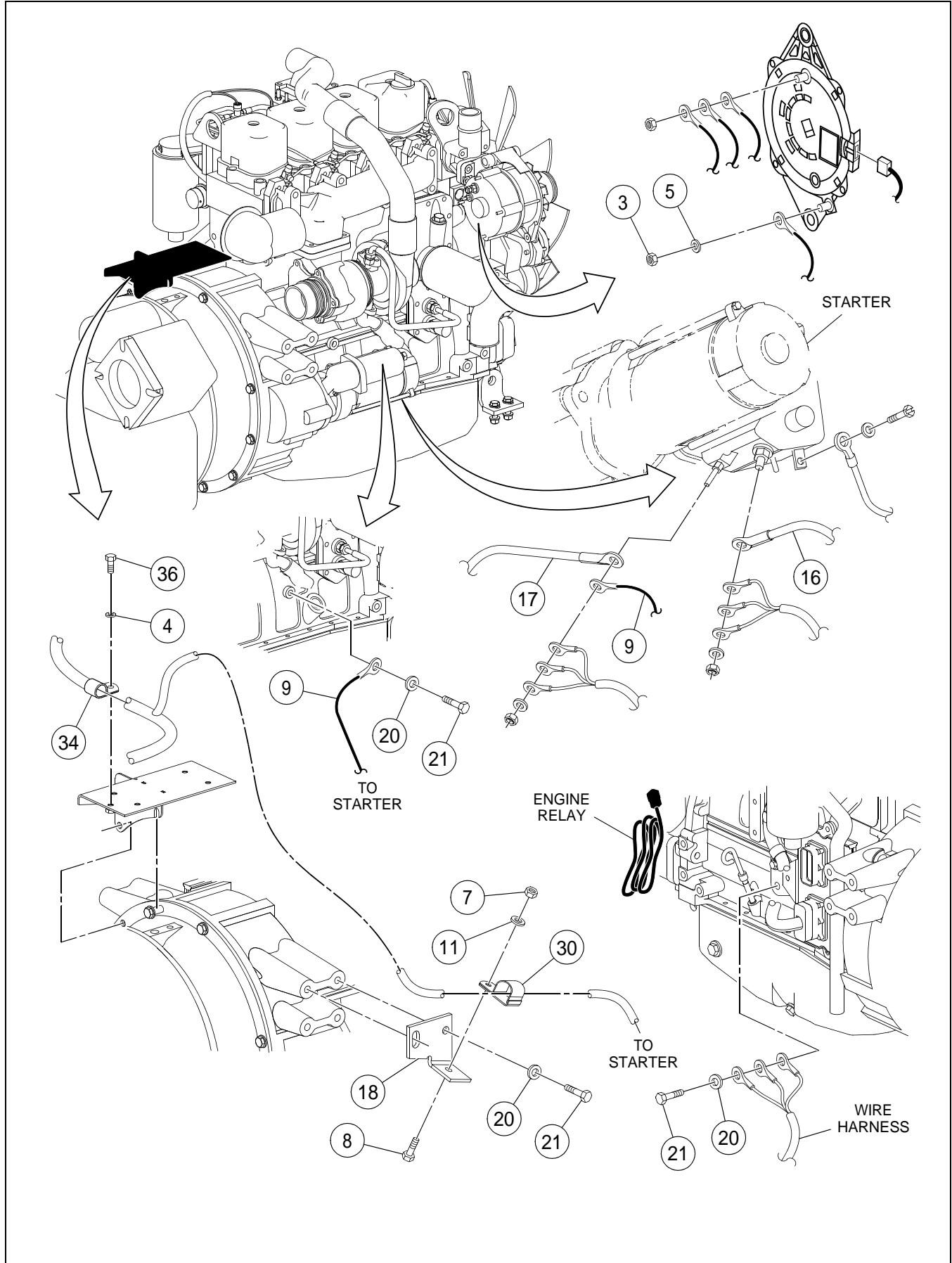
WIRING HARNESS INSTALLATION - SHEET 2 OF 3

BOM 13259593

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13847132	Chassis Wire Harness - Effective with S/N 186420	1	
-	13481288	Chassis Wire Harness - Effective with S/N 182415, Including S/N 182255 and 182256 thru S/N 186419	1	
-	13315494	Chassis Wire Harness - Prior to S/N 182415, Excluding S/N 182255 and 182256	1	
-	43871789	- Strain Relief	1	
-	43871797	- Connector	1	
4	96741038	Flatwasher	12	M8 x 1.25 CI 200
6	96712674	Washer, Zinc Plated	1	M8 Hardened CI 10
10	96701479	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 16 CI 8.8
11	96741046	Flatwasher, Zinc Plated	4	M10 CI 200
12	59583468	Insert Clamp	8	
13	59583450	Cover Plate	3	
14	96705553	HHCS, Zinc Plated	3	M8 x 1.25 x 45 CI 8.8
15	13856588	Bracket	1	
16	13315726	Positive Battery Cable	1	
17	13315734	Negative Battery Cable	1	
24	96702816	HHCS, Fully Threaded, Zinc Plated	3	M8 x 1.25 x 16 CI 8.8
25	96718978	HHCS, Zinc Plated	1	M8 x 1.25 x 80 CI 8.8
26	96702410	HHCS, Fully Threaded, Zinc Plated	2	M10 x 35 CI 10.9
27	59365130	Nut	2	
31	59891002	Insert Clamp	2	
32	59583500	Cover Plate	1	
33	13167812	Spacer (Not Shown)	2	

WIRING HARNESS INSTALLATION - SHEET 3 OF 3

Dwg 13259593/00



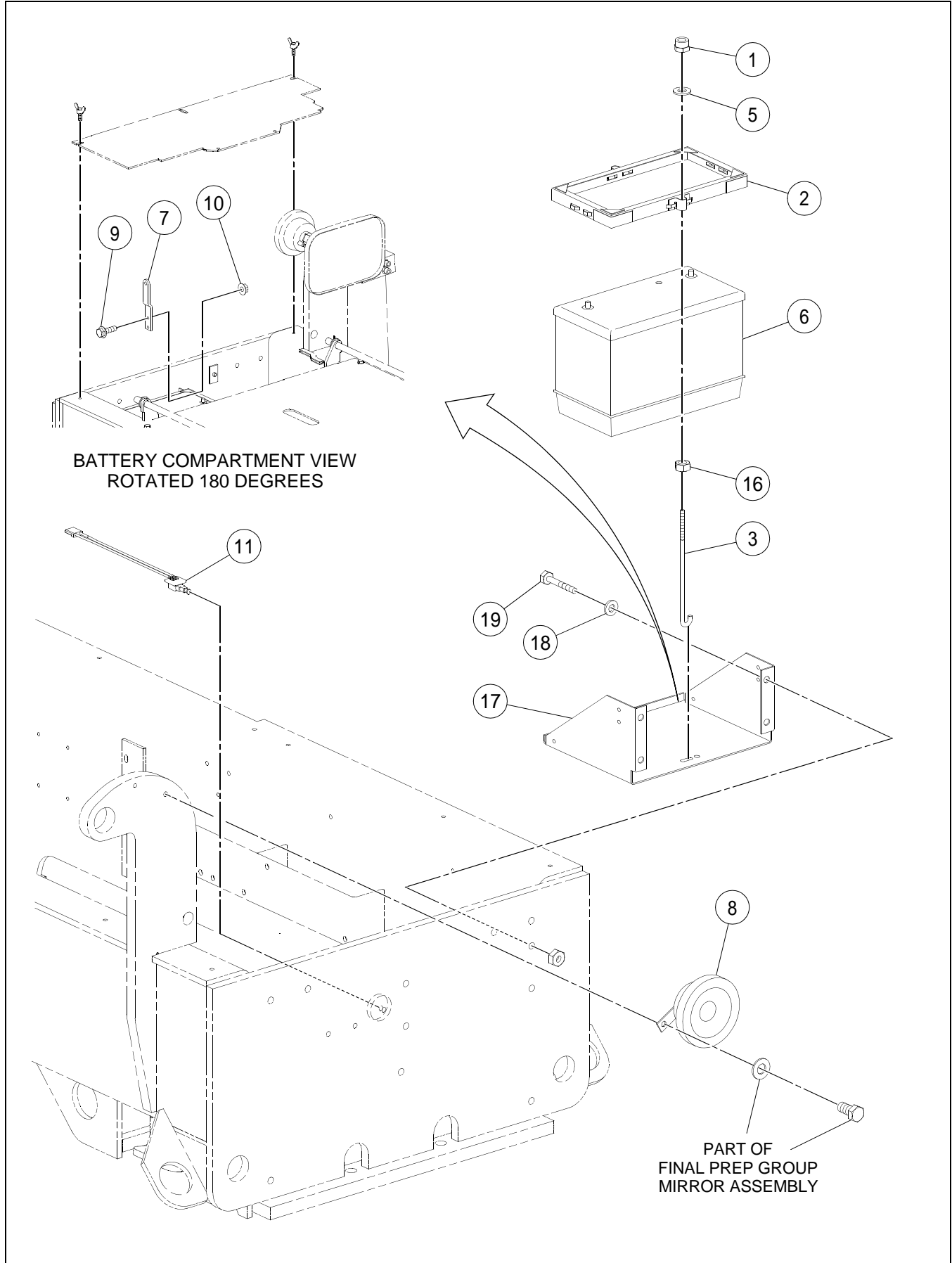
WIRING HARNESS INSTALLATION - SHEET 3 OF 3

BOM 13259593

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	96704598	Hex Locknut, Zinc Plated - Effective with S/N 186420	1	M6 CI 8
-	96704580	Hex Locknut, Zinc Plated - Prior to S/N 186420	3	M5 x 0.8 CI 8
4	96741038	Flatwasher	12	M8 x 1.25 CI 200
5	96741053	Flatwasher, Zinc Plated - Effective with S/N 186420	1	M6 CI 200
-	96738554	Flatwasher, Zinc Plated - Prior to S/N 186420	2	M5 Hardened CI 200
7	96704812	Hex Nut, Zinc Plated	1	M10 x 1.5 CI 8
8	96702279	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 20 CI 8.8
9	13306519	Ground Jumper Cable	1	
11	96741046	Flatwasher, Zinc Plated	42	M10 CI 200
16	13315726	Positive Battery Cable	1	
17	13315734	Negative Battery Cable	1	
18	13306535	Starter Cable Support	1	
20	96738596	Flatwasher, Zinc Plated	4	M12 Hardened CI 200
21	59973511	HHCS	4	
30	59020222	Conduit Clamp	6	
34	95457586	Clamp	1	
36	96702824	HHCS, Fully Threaded, Zinc Plated	1	M8 x 1.25 x 20 CI 8.8

SINGLE BATTERY AND HORN INSTALLATION

Dwg D13243589/02



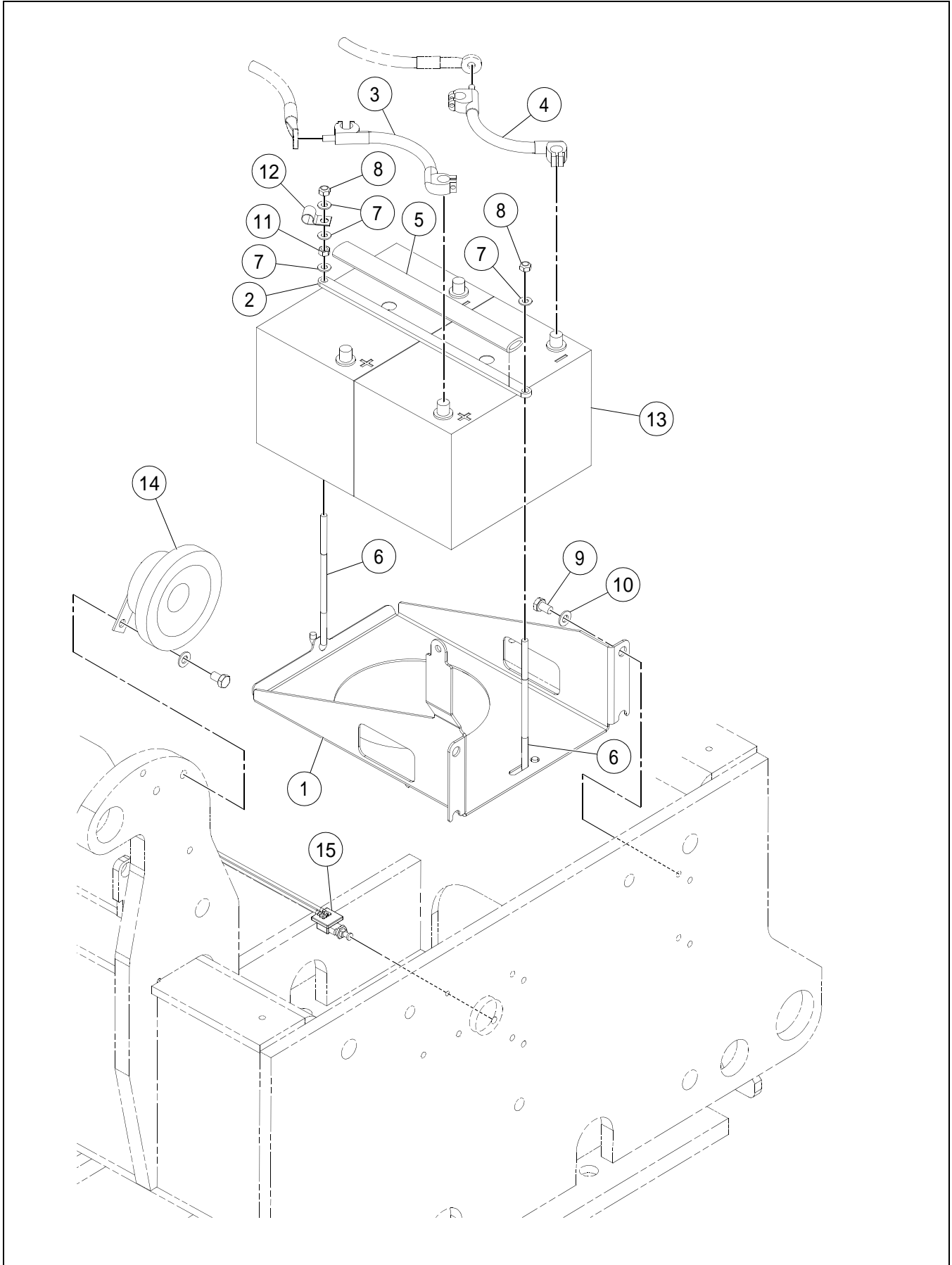
SINGLE BATTERY AND HORN INSTALLATION

BOM 13243589

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96704606	Hex Locknut, Zinc Plated	2	M8 x 1.25 CI 8
2	59181875	Battery Hold Down	1	
3	54516836	J-hook	2	
5	96741038	Flatwasher	2	M8 x 1.25 CI 200
6	59436931	Battery	1	
7	59299123	Vandal Resistant Battery Tab	1	
8	43802339	Horn - Effective with S/N 191610	1	
-	13111422	Horn - Prior to S/N 191610	1	
9	96719190	HHCS, Zinc Plated	2	M6 x 1.0 x 20 CI 90
10	96704176	Locknut, Zinc Plated	2	M6 x 1.0 CI 8
11	59112011	Switch	1	
16	96701370	Nut, Zinc Plated	2	M8 x 1.25 CI 8
17	59265827	Battery Tray	1	
18	96741046	Flatwasher, Zinc Plated	4	M10 CI 200
19	96701479	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 16 CI 8.8

DUAL BATTERY AND HORN INSTALLATION

Dwg 13482724/00



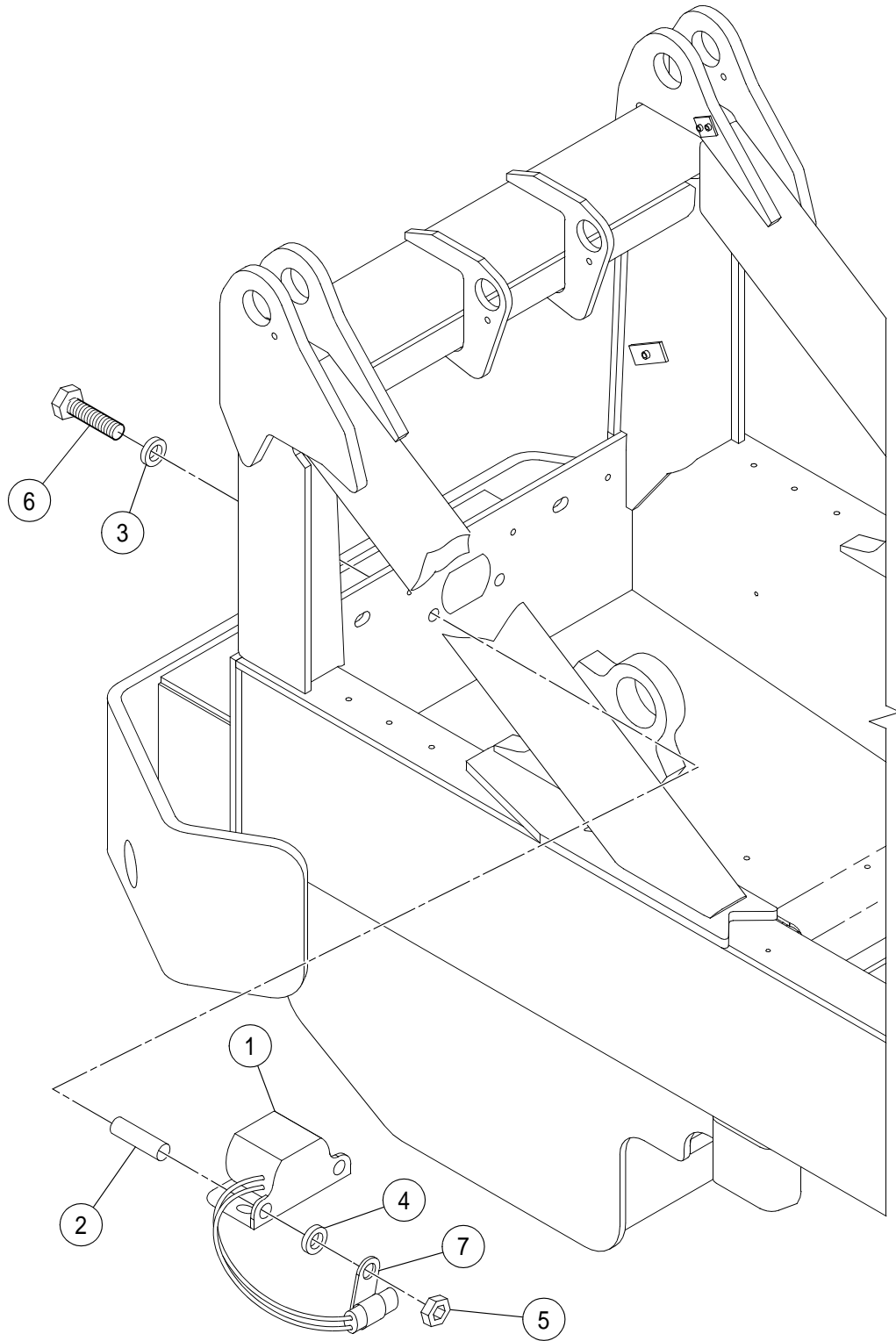
DUAL BATTERY AND HORN INSTALLATION

BOM 13482724

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13481809	Dual Battery Tray	1	
2	13481817	Dual Battery Hold Down	1	
3	13442918	Positive Dual Battery Cable	1	
4	13442926	Negative Dual Battery Cable	1	
5	59135681	Hose J-hook Cover	1	
6	13323274	J-hook	2	
7	96741038	Flatwasher	4	M8 x 1.25 CI 200
8	96705009	Locknut, Zinc Plated	2	M8 x 1.25 CI 8
9	96701479	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 16 CI 8.8
10	96741046	Flatwasher, Zinc Plated	4	M10 CI 200
11	96701370	Nut, Zinc Plated	1	M8 x 1.25 CI 8
12	59103598	Clamp	1	
13	13413471	Battery	2	
14	43802339	Horn - Effective with S/N 191610	1	
-	13111422	Horn - Prior to S/N 191610	1	
15	59112011	Switch Assembly	1	

BACKUP ALARM INSTALLATION

Dwg D13300249/00



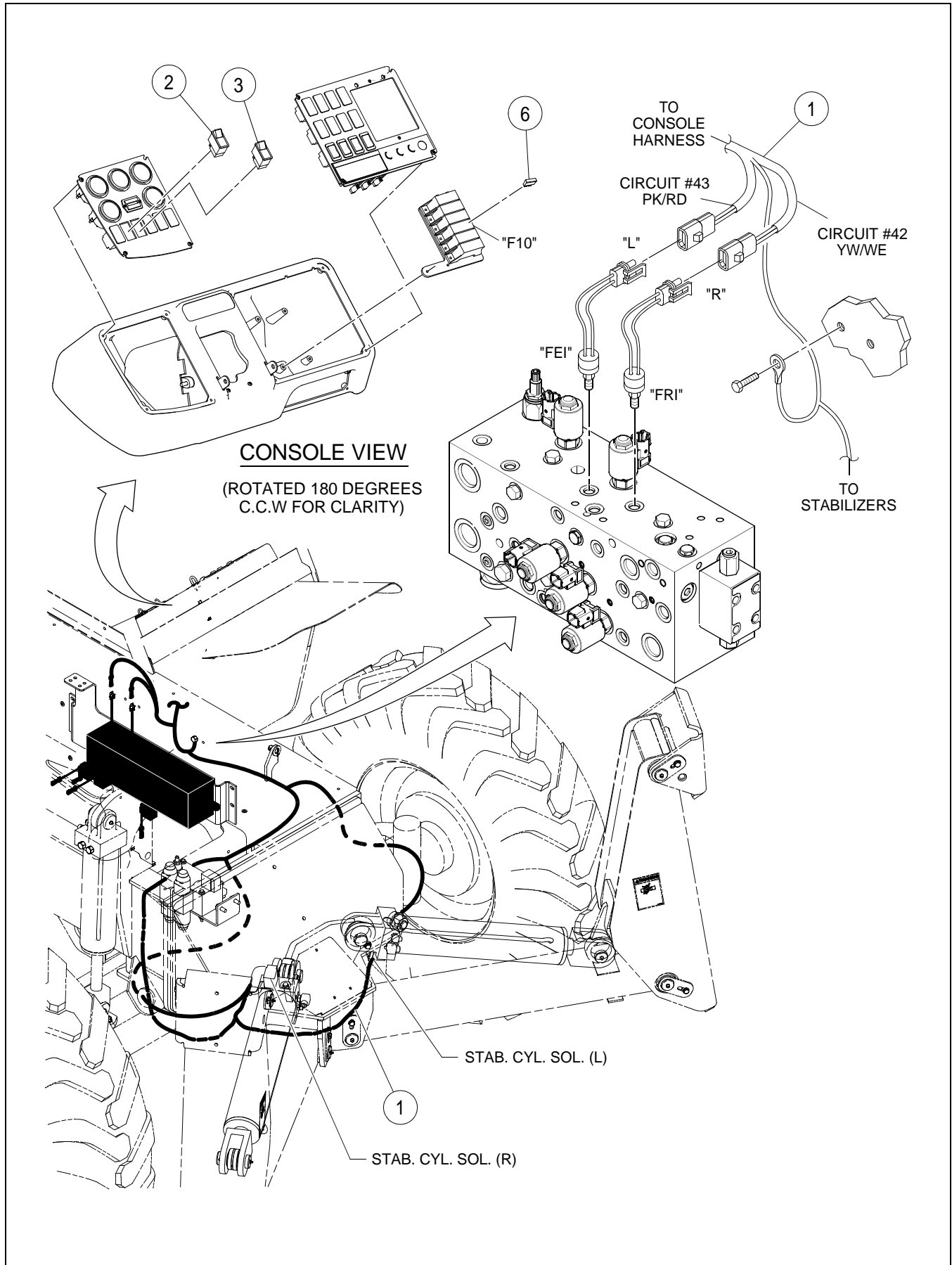
BACKUP ALARM INSTALLATION

BOM 13300249

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13273362	Backup Alarm Assembly	1	
-	13273354	- Backup Alarm	1	
-	59436865	- Electrical Receptacle	1	
2	59264820	Bracket Spacer	2	
3	96741038	Flatwasher	2	M8 x 1.25 CI 200
4	59887182	Washer	2	Hardened
5	96704606	Hex Locknut, Zinc Plated	2	M8 x 1.25 CI 8
6	96726435	HHCS, Zinc Plated	2	M8 x 1.25 x 100 CI 8.8
7	59103598	Clamp	1	

STABILIZER ASSEMBLY ELECTRICAL KIT - OPTIONAL

Dwg 18006049/00



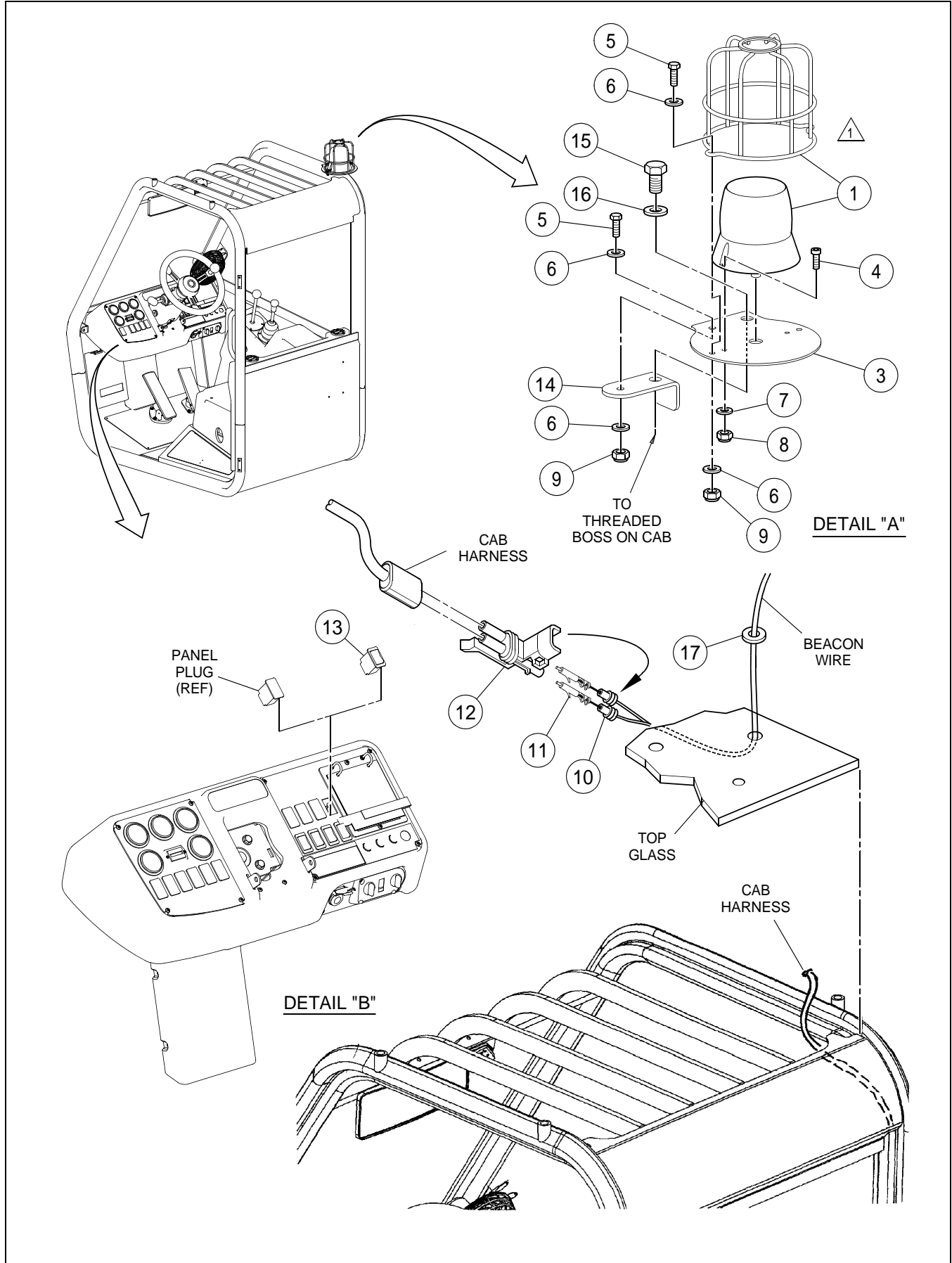
STABILIZER ASSEMBLY ELECTRICAL KIT - OPTIONAL

BOM 18006049, 13280151

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13306659	Stabilizer Wire Harness	1	
2	13280086	Stabilizer Switch, LH	1	
3	13280094	Stabilizer Switch, RH	1	
6	59325712	Fuse	1	10 Amp

BEACON LIGHT INSTALLATION - OPTIONAL

Dwg 13267554/01



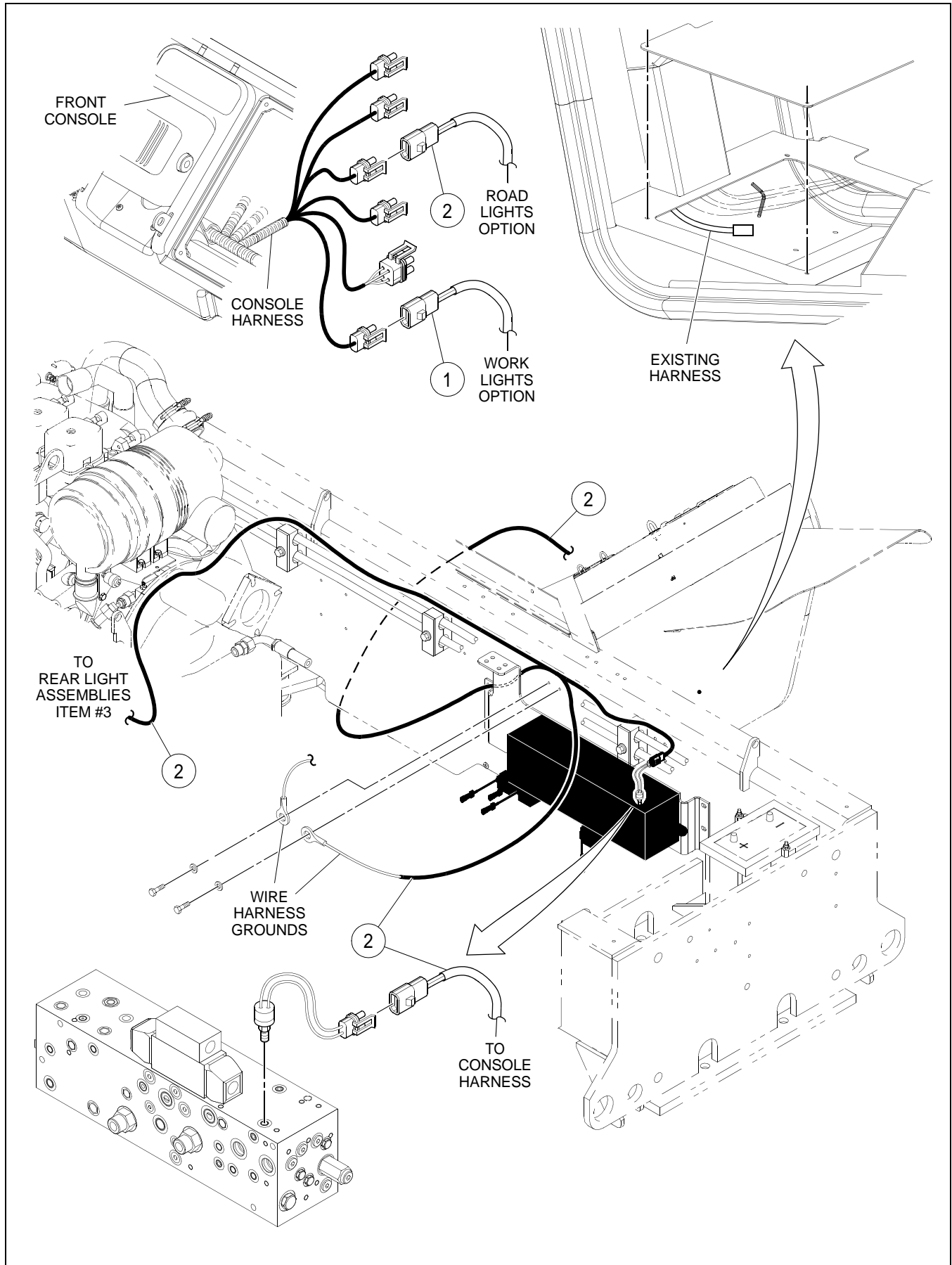
BEACON LIGHT INSTALLATION - OPTIONAL

BOM 13267554

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59154732	Strobe Light	1	
-	59194332	- Amber Lens	1	
-	59194340	- Strobe	1	
-	59194324	- Strobe Light Cage	1	
3	13295852	Beacon Light Mounting Plate	1	
4	96703012	SHCS	2	M6 x 20 CI 8.8
5	96702659	HHCS, Fully Threaded, Zinc Plated	3	M8 x 1.25 x 25 CI 8.8
6	96741038	Flatwasher	6	M8 x 1.25 CI 200
7	96741053	Flatwasher, Zinc Plated	2	M6 CI 200
8	96714423	Locknut, Zinc Plated	2	M6 CI 8
9	96705009	Locknut, Zinc Plated	3	M8 x 1.25 CI 8
10	59854877	Cable Seal	1	
11	59854828	Male Pin	1	
12	59854943	Connector	1	
13	54688619	Beacon Light Switch	1	
14	13300215	Light Bracket Plate	1	
15	95919775	HHCS, Zinc Plated	1	5/8 x 11 x 1 Grd 8
16	95922266	Flatwasher, Zinc Plated	1	9/16
17	13195821	Grommet	1	

ROAD LIGHTS INSTALLATION - OPTIONAL - SHEET 1 OF 2

Dwg D13265269/00/01



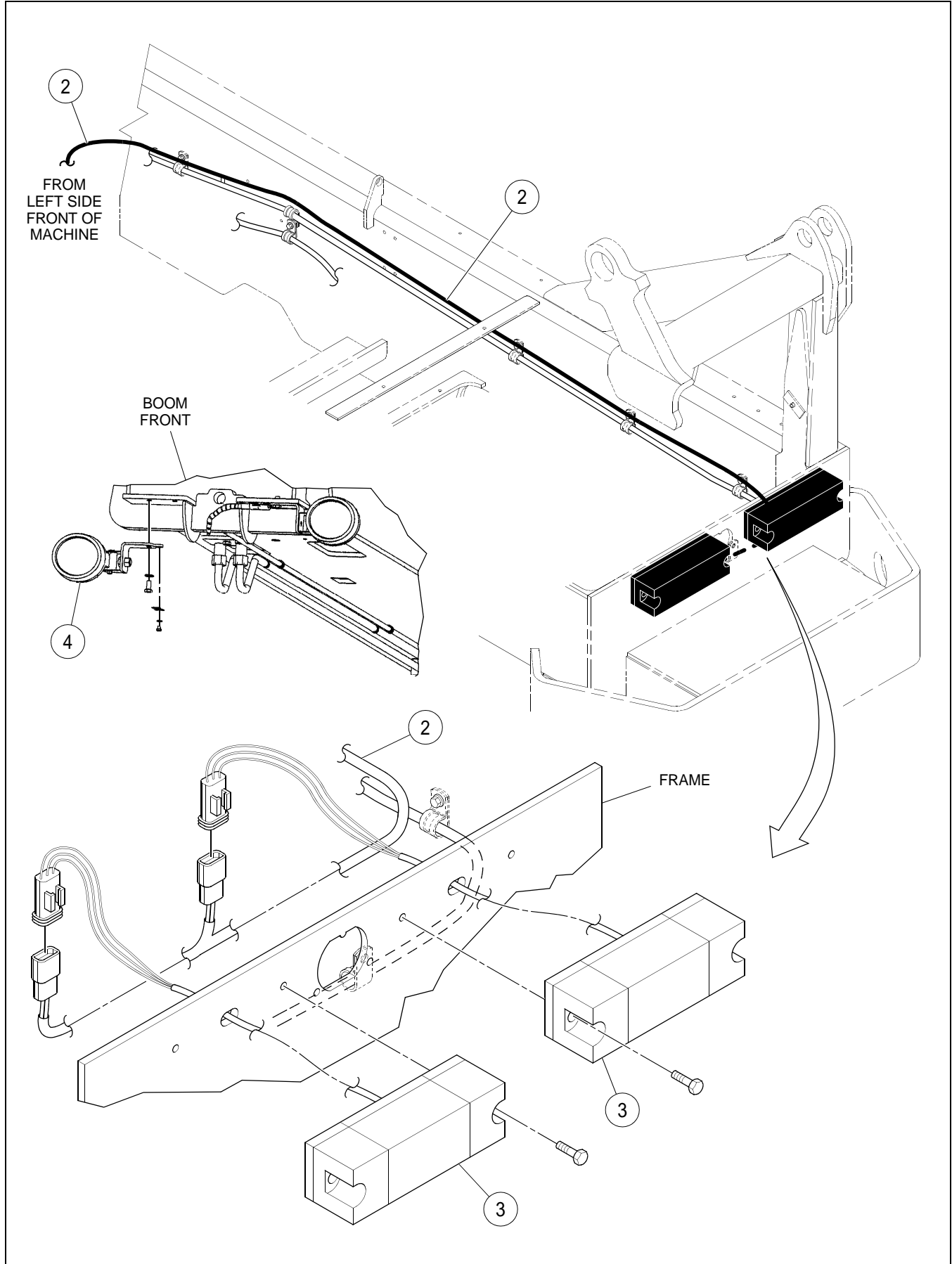
ROAD LIGHTS INSTALLATION - OPTIONAL - SHEET 1 OF 2

BOM 13265269

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Worklight Installation	1	See Page E - 22.
2	13305636	Roadlights Wire Harness	1	

ROAD LIGHTS INSTALLATION - OPTIONAL - SHEET 2 OF 2

Dwg D13265269/00/02



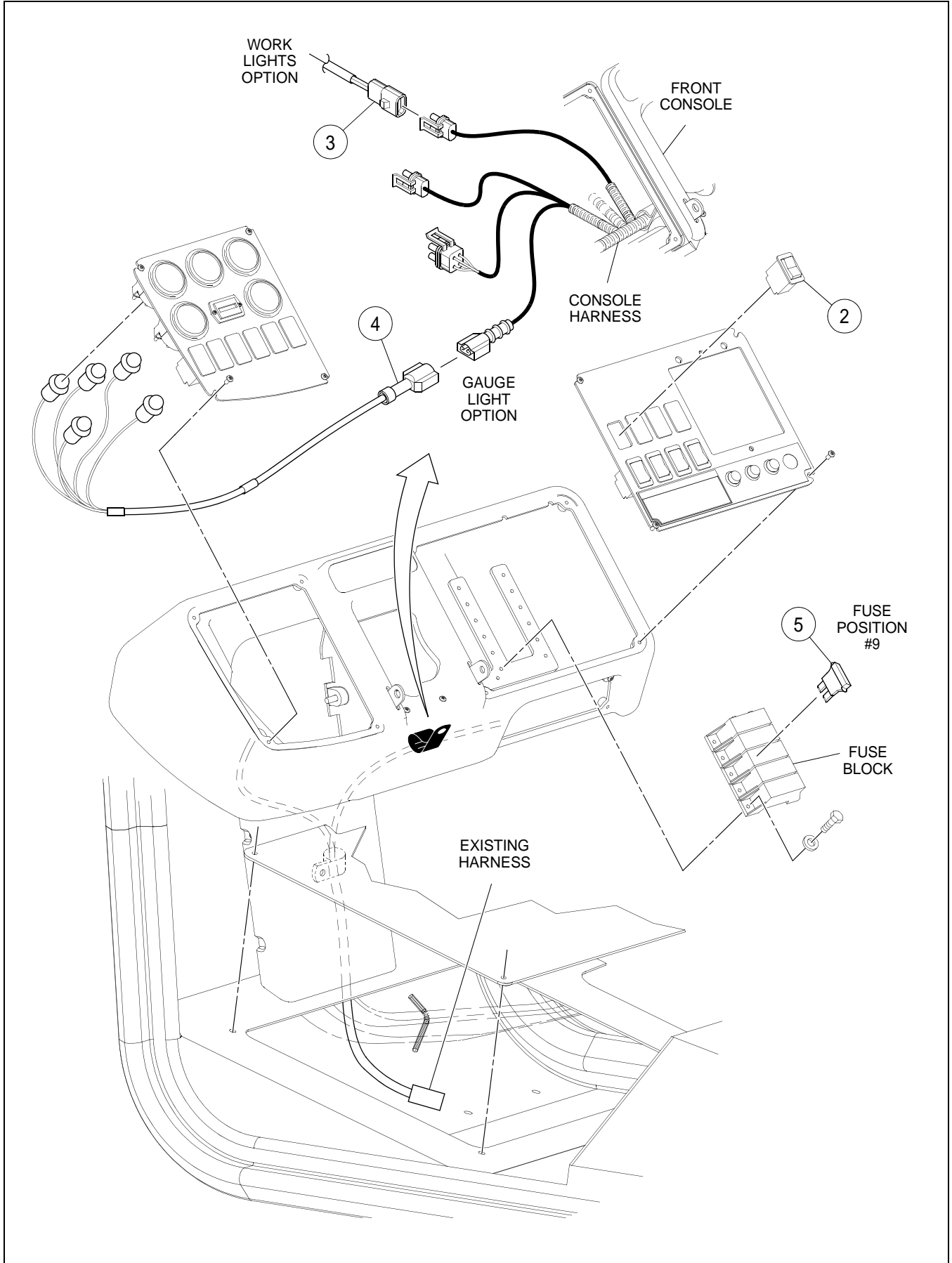
ROAD LIGHTS INSTALLATION - OPTIONAL - SHEET 2 OF 2

BOM 13265269

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	13305636	Roadlights Wire Harness	1	
3	NSVA	Stop/Turn Signal Assembly	1	See Page E - 30.
4	NSVA	Boom Lights Installation	1	See Page E - 32.

WORKLIGHT INSTALLATION - OPTIONAL - SHEET 1 OF 3

Dwg 13265244/0C



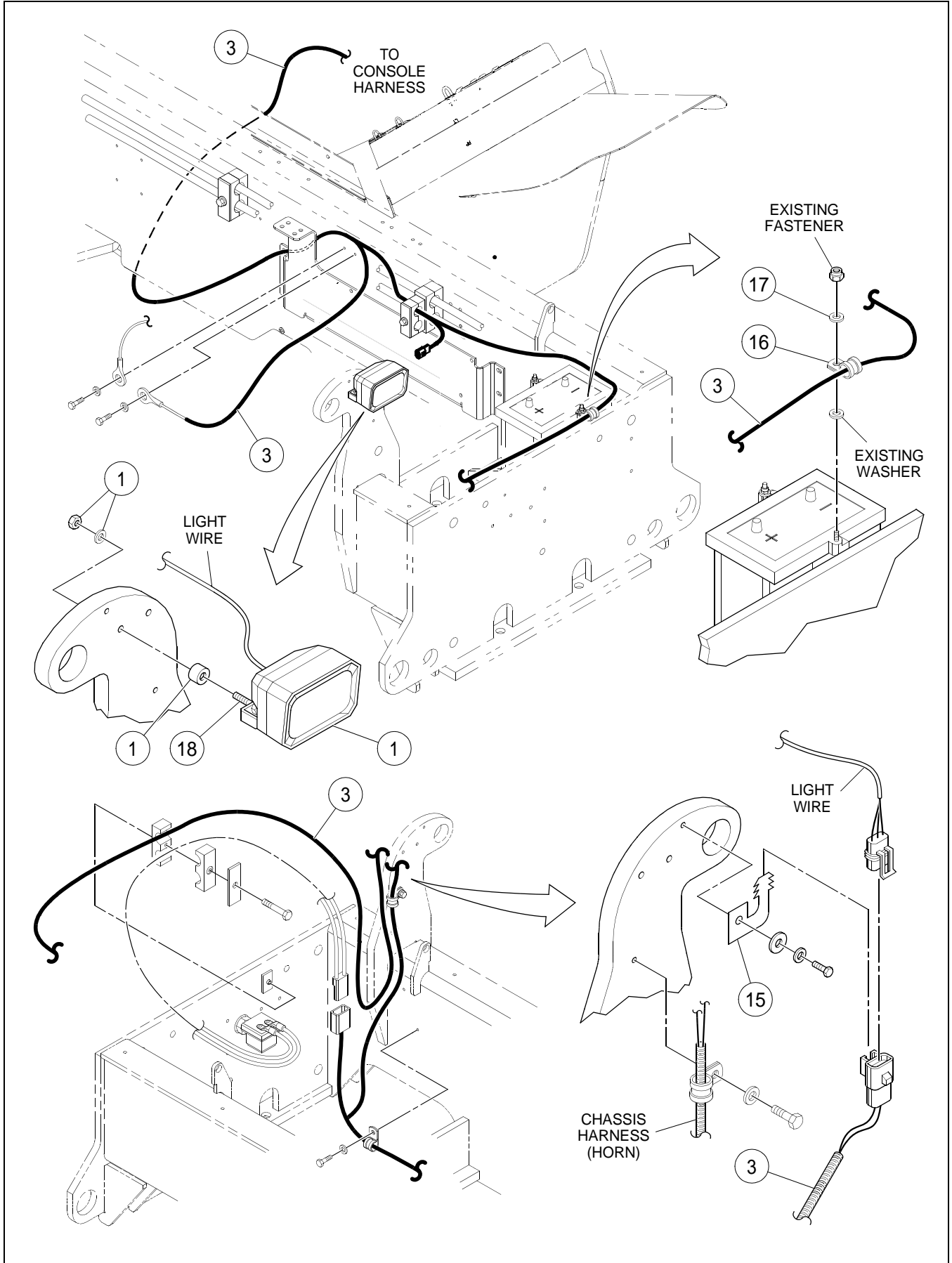
WORKLIGHT INSTALLATION - OPTIONAL - SHEET 1 OF 3

BOM 13265244

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	13197108	Worklights Switch	1	
3	13306642	Front Light Wire Harness	1	
4	59149088	Gauge Lights Wire Harness	1	
5	59398016	Fuse	1	20 Amp

WORKLIGHT INSTALLATION - OPTIONAL - SHEET 2 OF 3

Dwg 13265244/0C



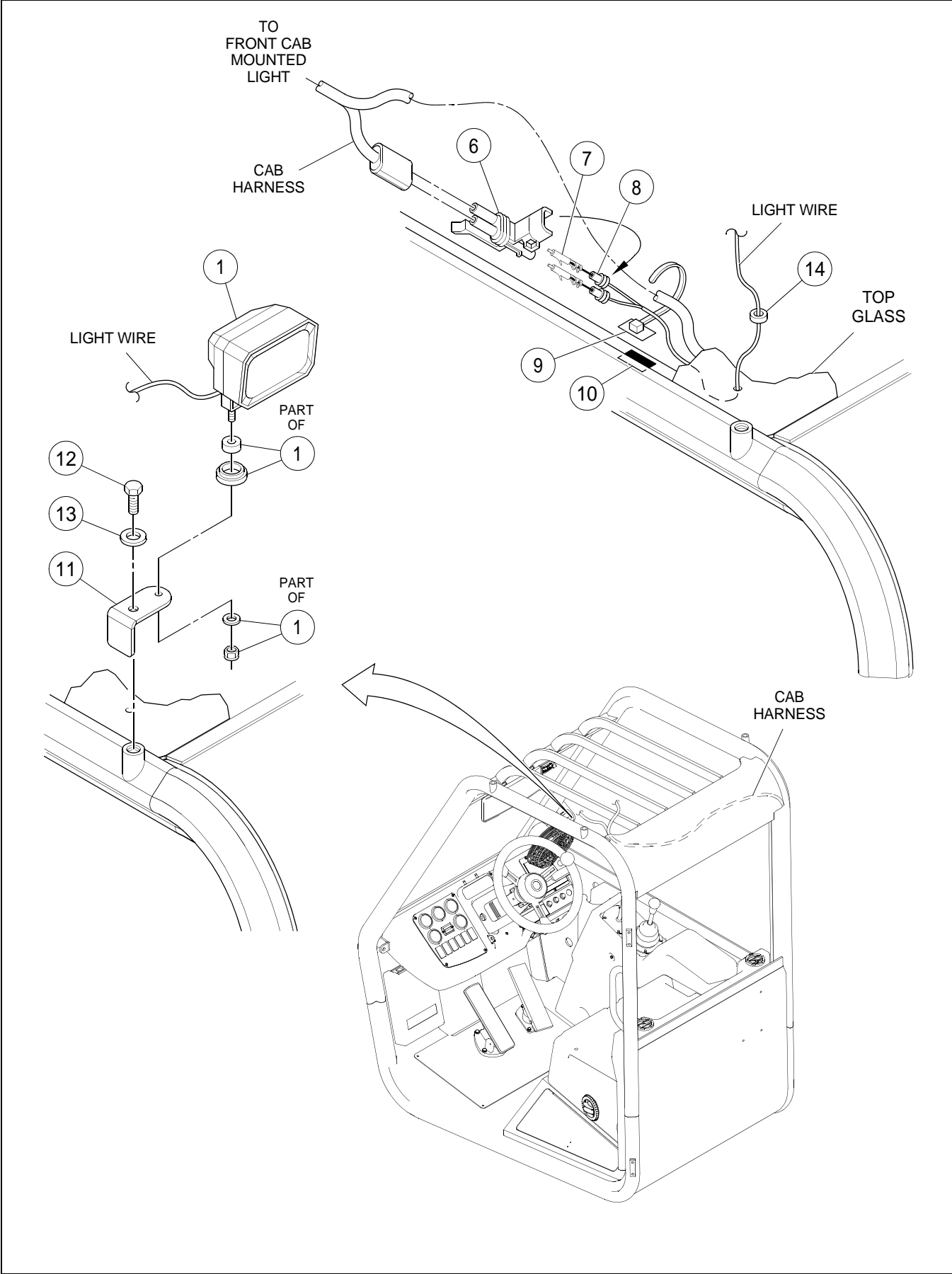
WORKLIGHT INSTALLATION - OPTIONAL - SHEET 2 OF 3

BOM 13265244

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	43804483	Work Lamp	3	
3	13306642	Front Light Wire Harness	1	
15	59050740	Connector Clip	1	
16	59117309	Clamp	1	
17	96741038	Flatwasher	1	M8 x 1.25 CI 200
18	96728142	HHCS, Zinc Plated	1	M8 x 1.25 x 55 CI 10.9

WORKLIGHT INSTALLATION - OPTIONAL - SHEET 3 OF 3

Dwg 13265244/0C



WORKLIGHT INSTALLATION - OPTIONAL - SHEET 3 OF 3

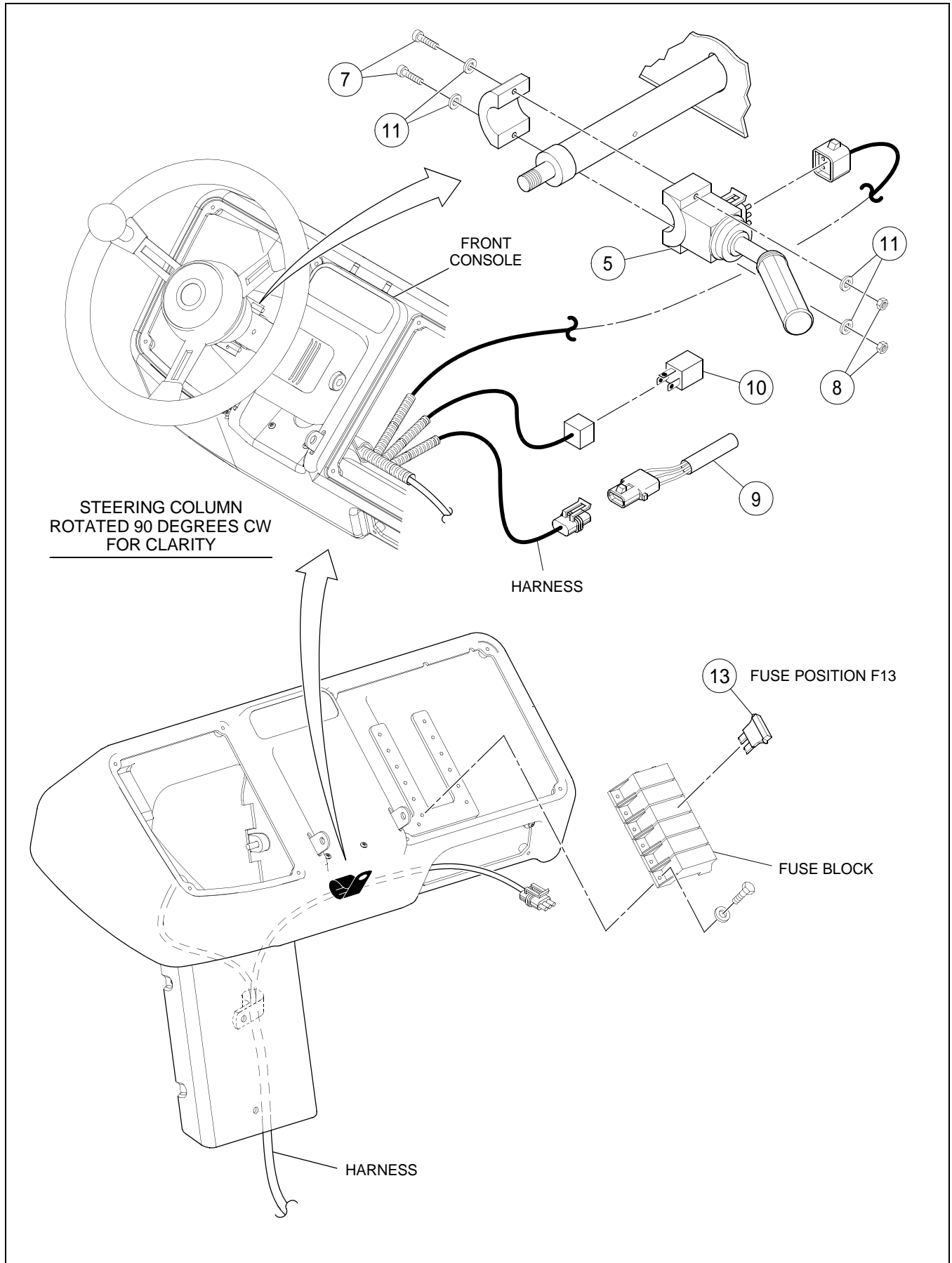
BOM 13265244

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	43804483	Work Lamp	3	
6	59854943	Connector	3	
7	59854828	Male Pin	6	
8	59854877	Cable Seal	6	
9	95373973	Wire Tie	A/R	
10	59670554	Adhesive	A/R	
11	13300215	Light Bracket Plate	2	
12	95919775	HHCS, Zinc Plated	2	5/8 x 11 x 1 Grd 8
13	95922266	Flatwasher, Zinc Plated	2	9/16
14	13195821	Grommet	2	

STOP/TURN SIGNAL ASSEMBLY - OPTIONAL

SHEET 1 OF 2

Dwg 13443387/00



STOP/TURN SIGNAL ASSEMBLY - OPTIONAL SHEET 1 OF 2

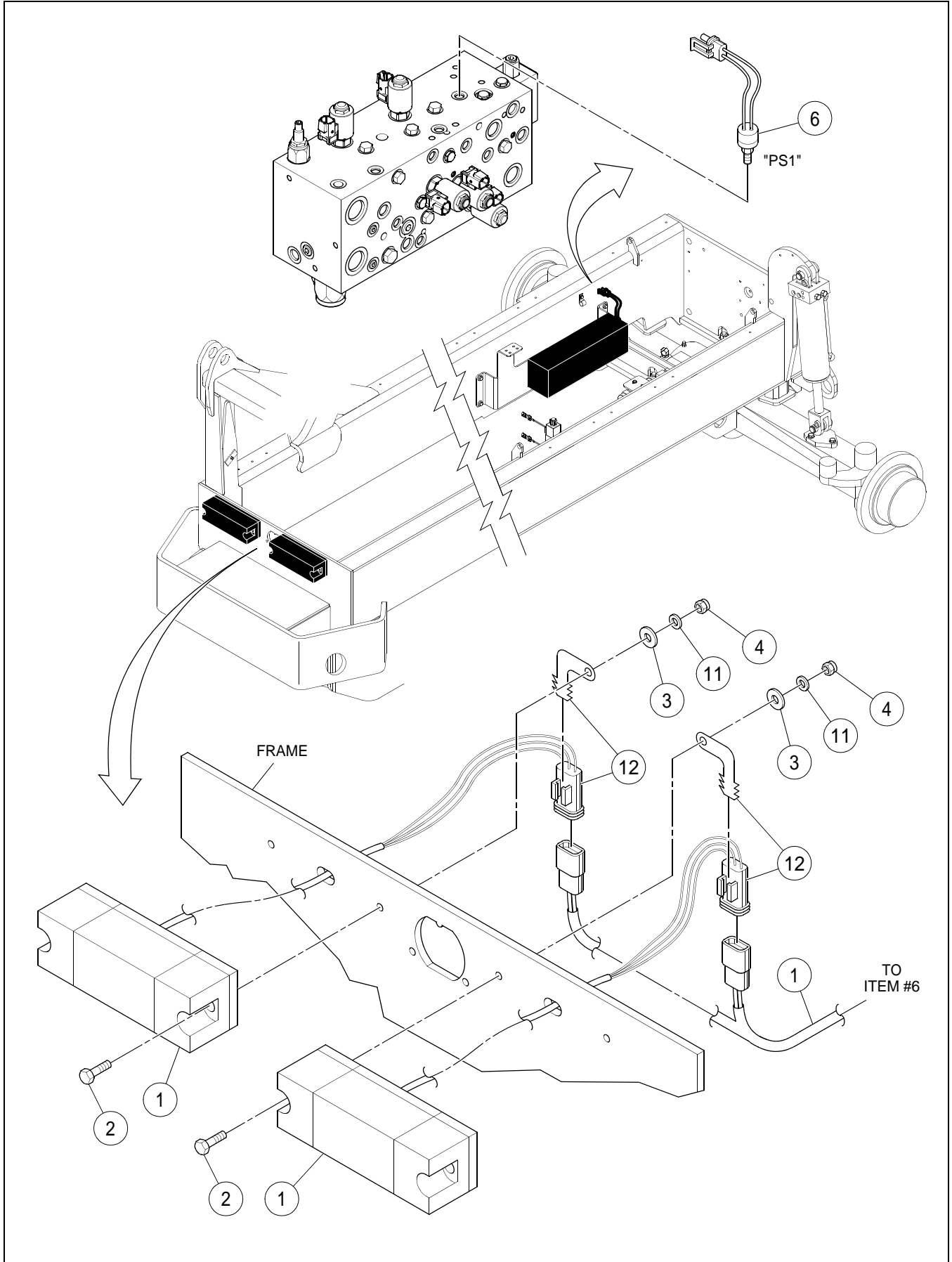
BOM 13443387, 13300488

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	59149138	Turn Signal Switch	1	
7	95922068	Round Head Machine Screw	2	
8	95943346	Nylon Nut	2	
9	59149146	Diode Assembly	1	
10	58961582	Flasher	1	
11	96738554	Flatwasher, Zinc Plated	8	M5 Hardened CI 200
13	59325712	Fuse	1	10 Amp

STOP/TURN SIGNAL ASSEMBLY - OPTIONAL

SHEET 2 OF 2

Dwg 13443387/00



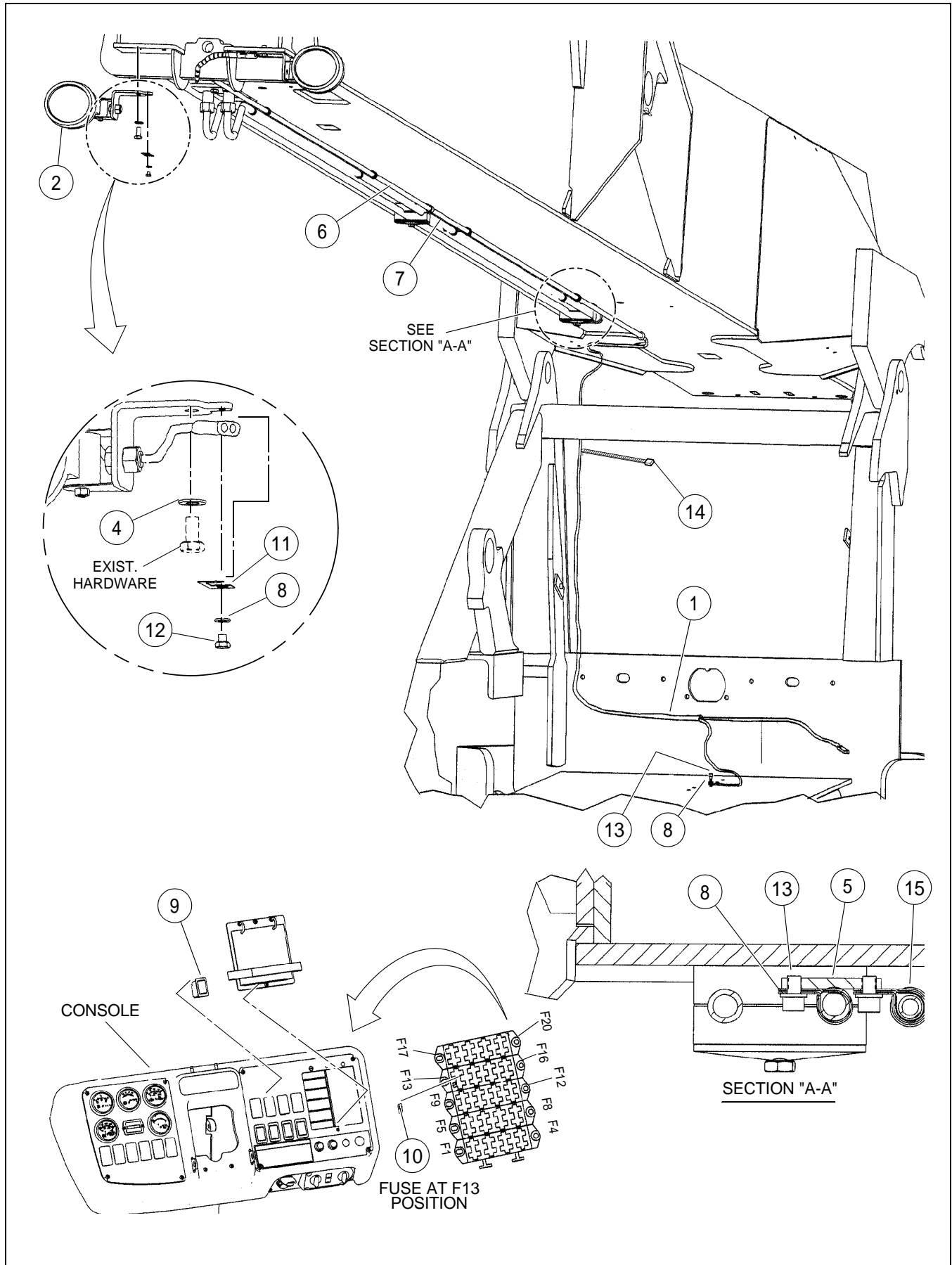
STOP/TURN SIGNAL ASSEMBLY - OPTIONAL SHEET 2 OF 2

BOM 13443387, 13300488

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59158196	Light Assembly	2	
-	59895151	- Three-way Connector	2	
-	59157081	- Light	2	
-	59854828	- Male Pin	6	
-	59854877	- Cable Seal	6	
2	96737499	SHCS, Zinc Plated	4	M5 x 0.8 x 50 CI 8.8
3	59889162	Hardened Washer	4	
4	96702865	Locknut, Zinc Plated	4	M5 x 0.8 CI 10
6	59157792	Brake Light Switch	1	
11	96738554	Flatwasher, Zinc Plated	8	M5 Hardened CI 200
12	59050740	Connector Clip	2	

BOOM LIGHTS INSTALLATION - OPTIONAL

Dwg D13334685/01



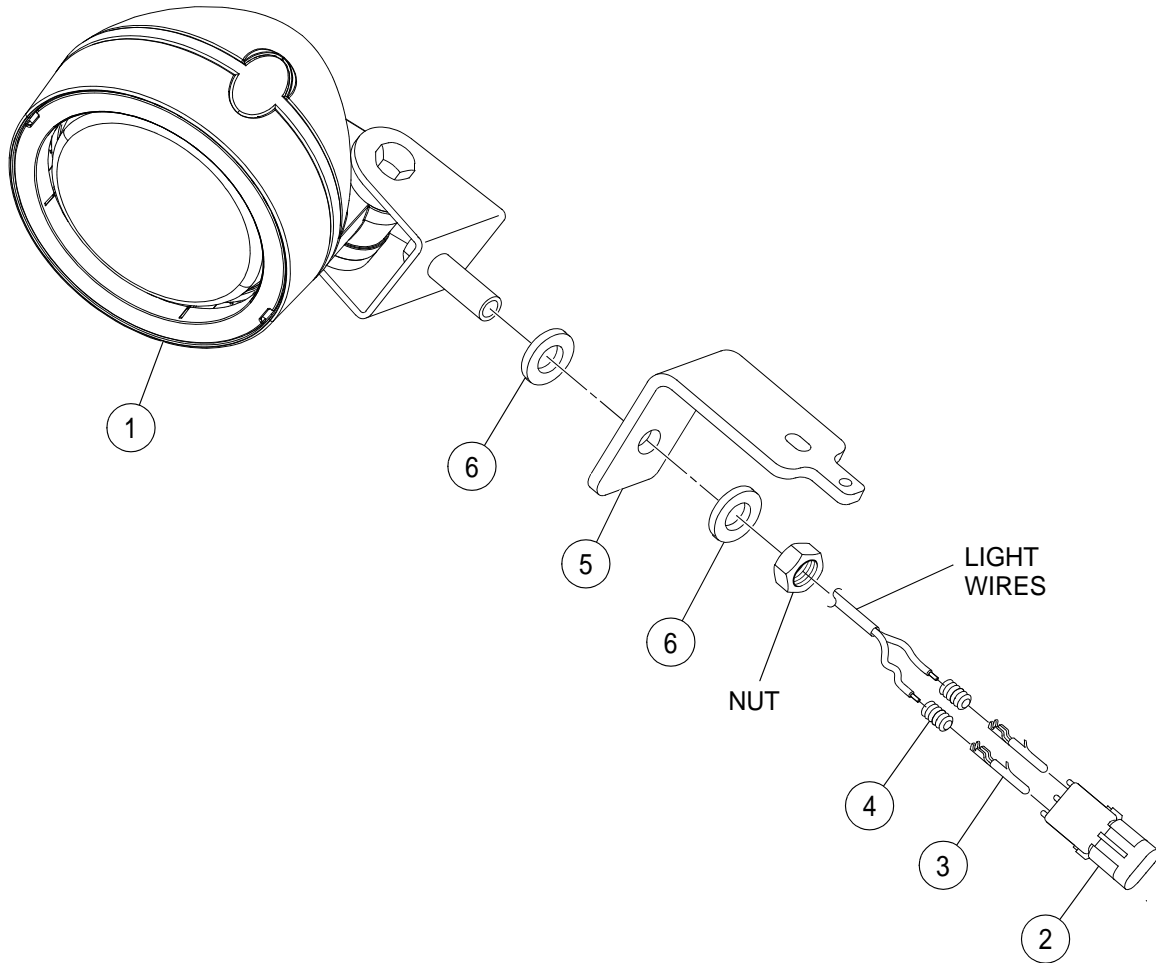
BOOM LIGHTS INSTALLATION - OPTIONAL

BOM 13334537

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13382304	Boom Worklight Harness	1	
2	NSVA	Boom Lights Assembly	2	See Page E - 34.
4	96714399	Flatwasher, Zinc Plated	2	M10 CI 140
5	13328596	Clamp Base	4	
6	13328612	Wire Guide Tube, Female	1	
7	13328745	Wire Guide Tube, Male	1	
8	96741053	Flatwasher, Zinc Plated	11	M6 CI 200
9	13334529	Boom Worklight Switch	1	
10	59483339	Fuse	1	15 Amp
11	59050740	Connector Clip	2	
12	96711874	HHCS, Fully Threaded, Zinc Plated	2	M6 x 1.0 x 6 CI 8.8
13	96745997	HSCS, Zinc Plated	9	M6 x 1 x 12 CI 8.8
14	95373973	Wire Tie	A/R	
15	59397059	Clamp	8	

BOOM LIGHTS ASSEMBLY - OPTIONAL

Dwg D13334701/00



BOOM LIGHTS ASSEMBLY - OPTIONAL

BOM 13334511

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13334503	Boom Worklight	2	
2	59854943	Connector	2	
3	59854828	Male Pin	4	
4	59854877	Cable Seal	4	
5	13328604	Light Bracket	2	
6	96738596	Flatwasher, Zinc Plated	4	M12 Hardened CI 200

*****Always use Ingersoll-Rand Replacement parts!*****

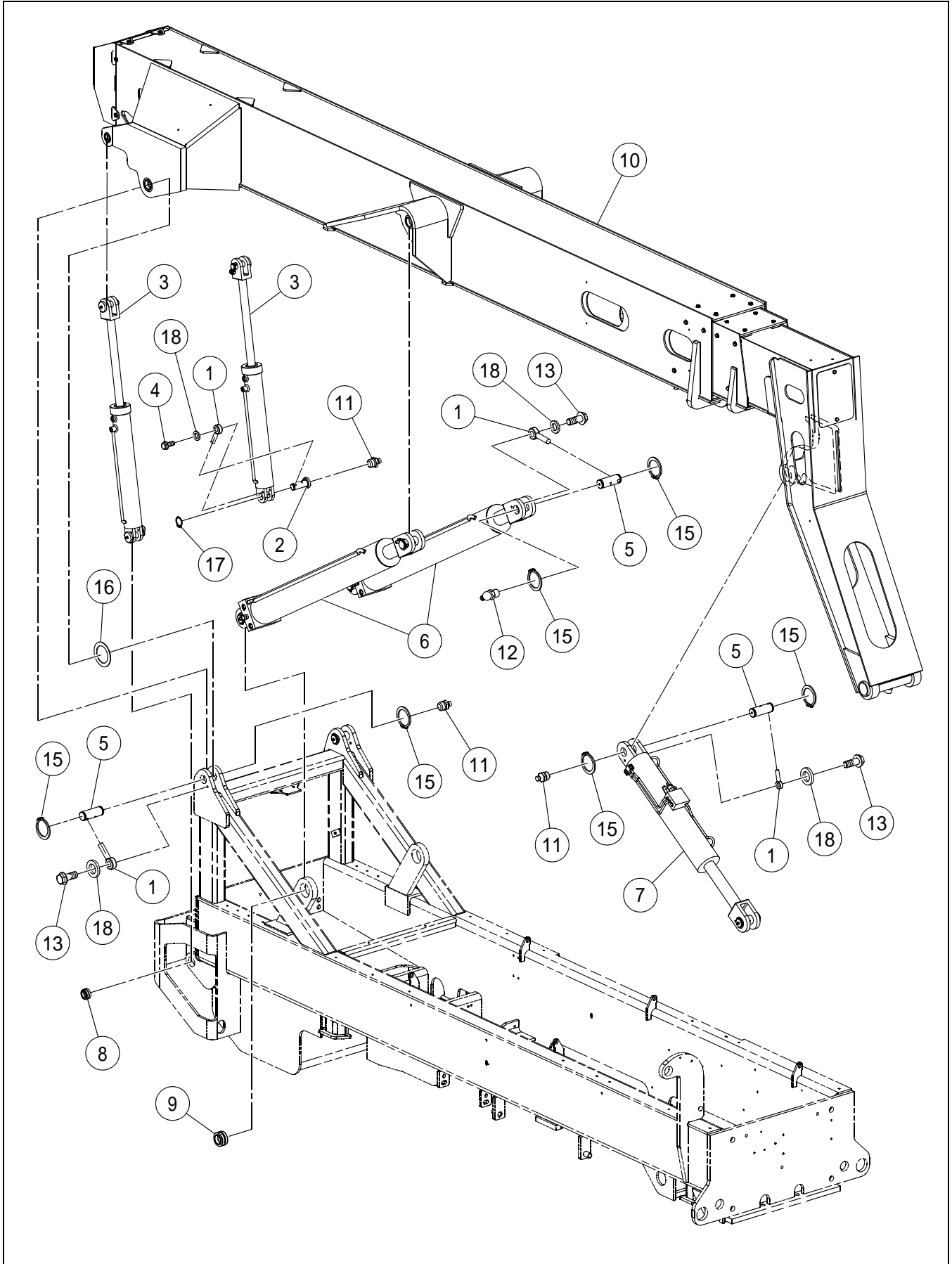


Section F - BOOM AND CARRIAGE



BOOM INSTALLATION

Dwg D13167424/04



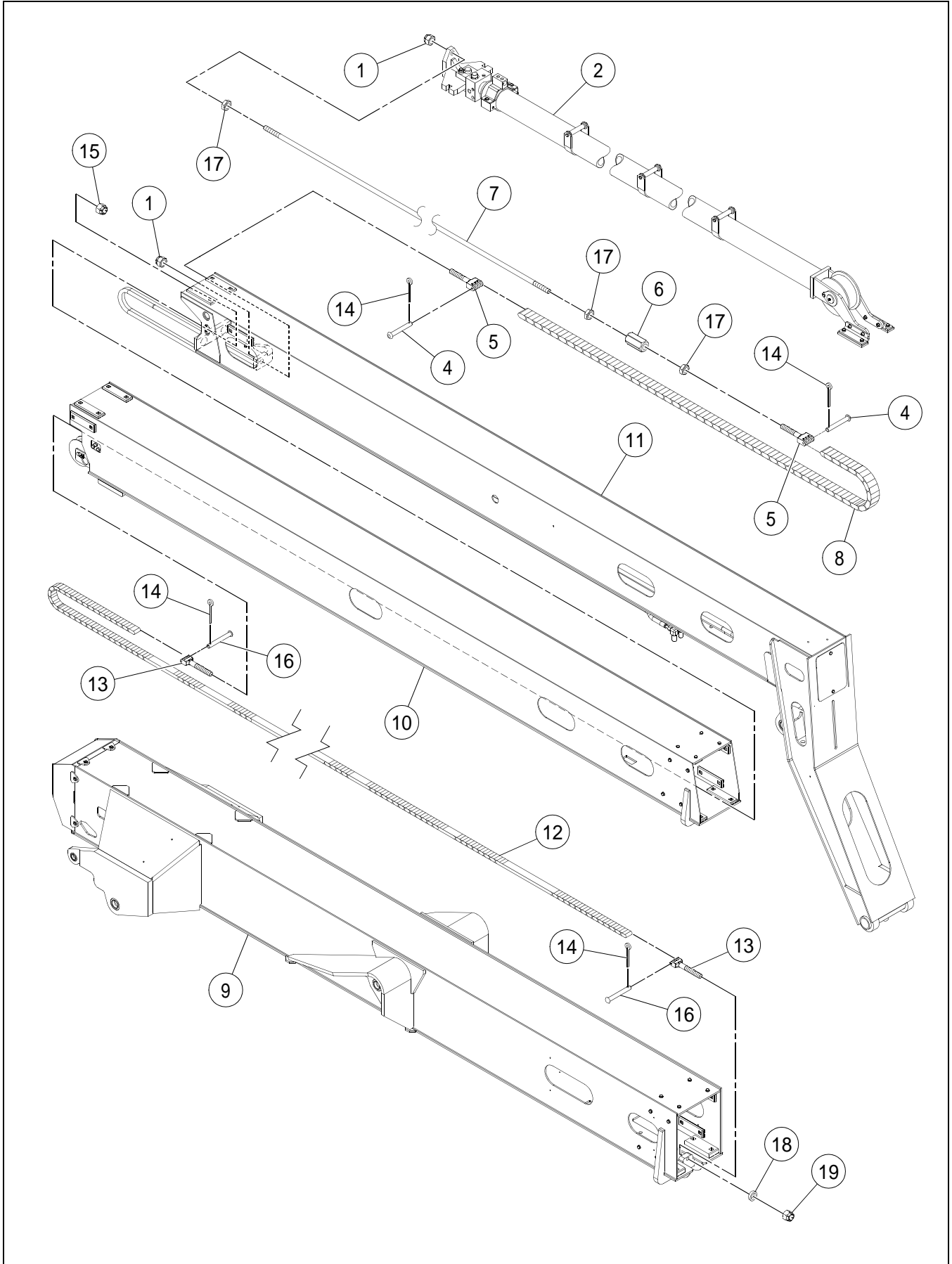
BOOM INSTALLATION

BOM 13306063

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59455154	Anchor	11	
2	59272450	Cylinder Pivot Pin	4	
3	59221895	Tilt Compensation Cylinder	2	
-	13421896	- Seal Kit	2	
-	56944465	- Locknut	2	
4	96702311	HHCS, Fully Threaded, Zinc Plated	4	M12 x 1.75 x 30 CI 8.8
5	13232244	Cylinder Pivot Pin	7	
6	59221721	Lift Cylinder	2	
-	57183584	- Locknut	1	
-	59194274	- Cartridge Valve	1	
-	13268271	- Seal Kit	1	
7	59221770	Fork Tilt Cylinder	1	
-	57183584	- Locknut	1	
-	13281415	- Cartridge Valve	1	
-	13281431	- Seal Kit	1	
8	50268127	Bearing	2	
9	13232277	Bearing	2	
10	NSVA	Boom Assembly	1	See Page F - 4.
11	95201547	Fitting	9	
12	95208971	Fitting	2	
13	96738349	SHCS	7	M12 x 1.75 x 35 CI 8.8
15	95992616	Retaining Ring	14	
16	59457374	Thrustwasher	2	
17	95992608	Retaining Ring	8	
18	96701545	Flatwasher, Zinc Plated	6	M12 Hardened

BOOM ASSEMBLY

Dwg D13167226/01



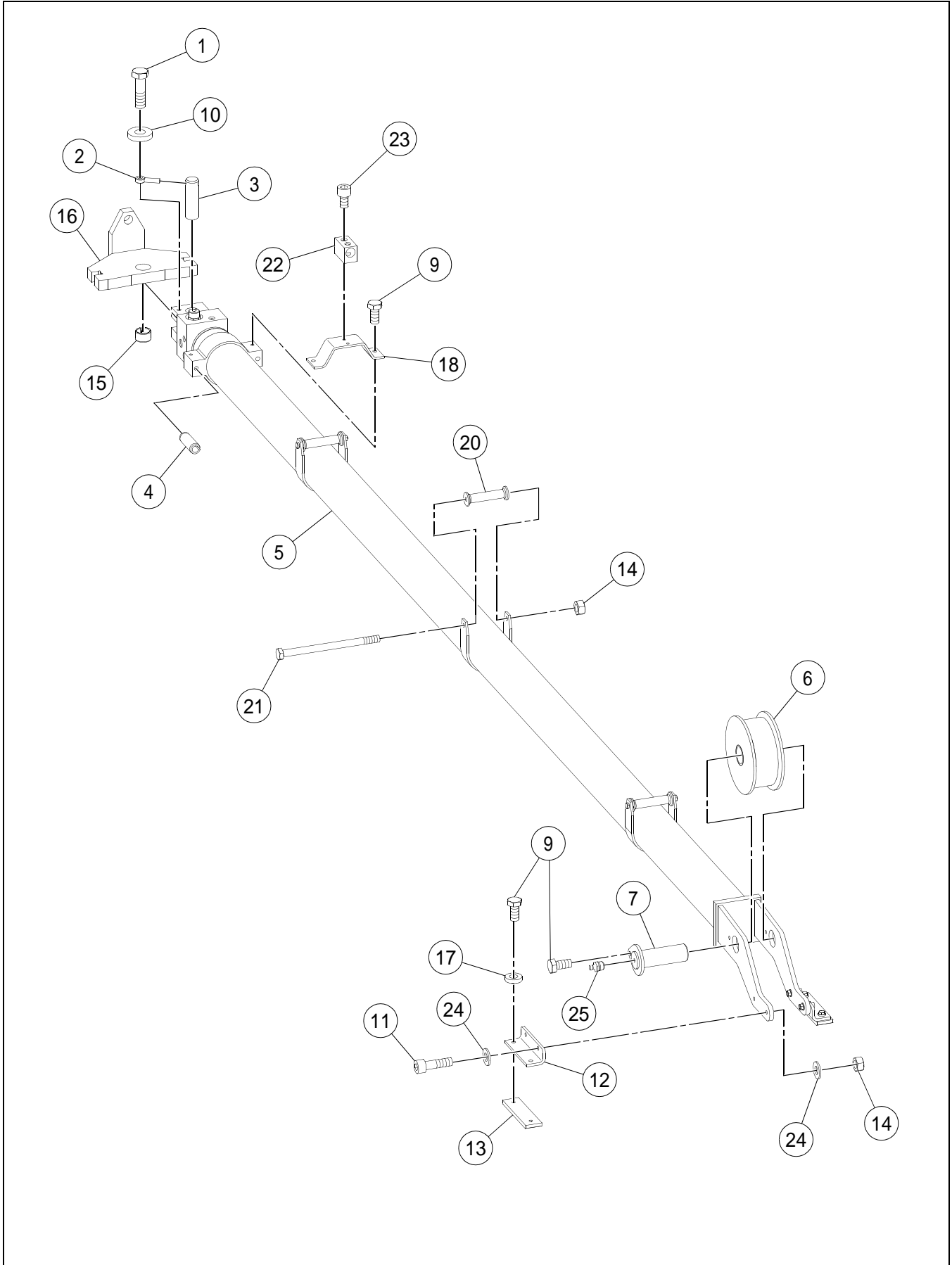
BOOM ASSEMBLY

BOM 13306055

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	95972014	Locknut, Zinc Plated	2	1.0 x 12
2	NSVA	Crowd Cylinder Assembly	1	See Page F - 6.
4	59001891	Anchor Pin	2	
5	59101170	Anchor Chain	2	
6	59101618	Union Nut	1	
7	59101048	Chain Anchor Rod	1	
8	59157339	Chain Extension	1	
9	NSVA	Outer Boom Section Assembly	1	See Page F - 10.
10	NSVA	Intermediate Boom Section Assembly	1	See Page F - 14.
11	NSVA	Inner Boom Section Assembly	1	See Page F - 18.
12	13208772	Retract Chain	1	
13	13167028	Threaded Anchor	2	
14	95985479	Cotter Pin	4	
15	59590091	Hex Locknut	1	Gr B
16	59456962	Anchor Chain Pin	2	
17	95944468	Jam Nut	3	
18	59462895	Base Ring	1	
19	59456178	Self-aligning Nut	1	

CROWD CYLINDER ASSEMBLY

Dwg D59183905/00



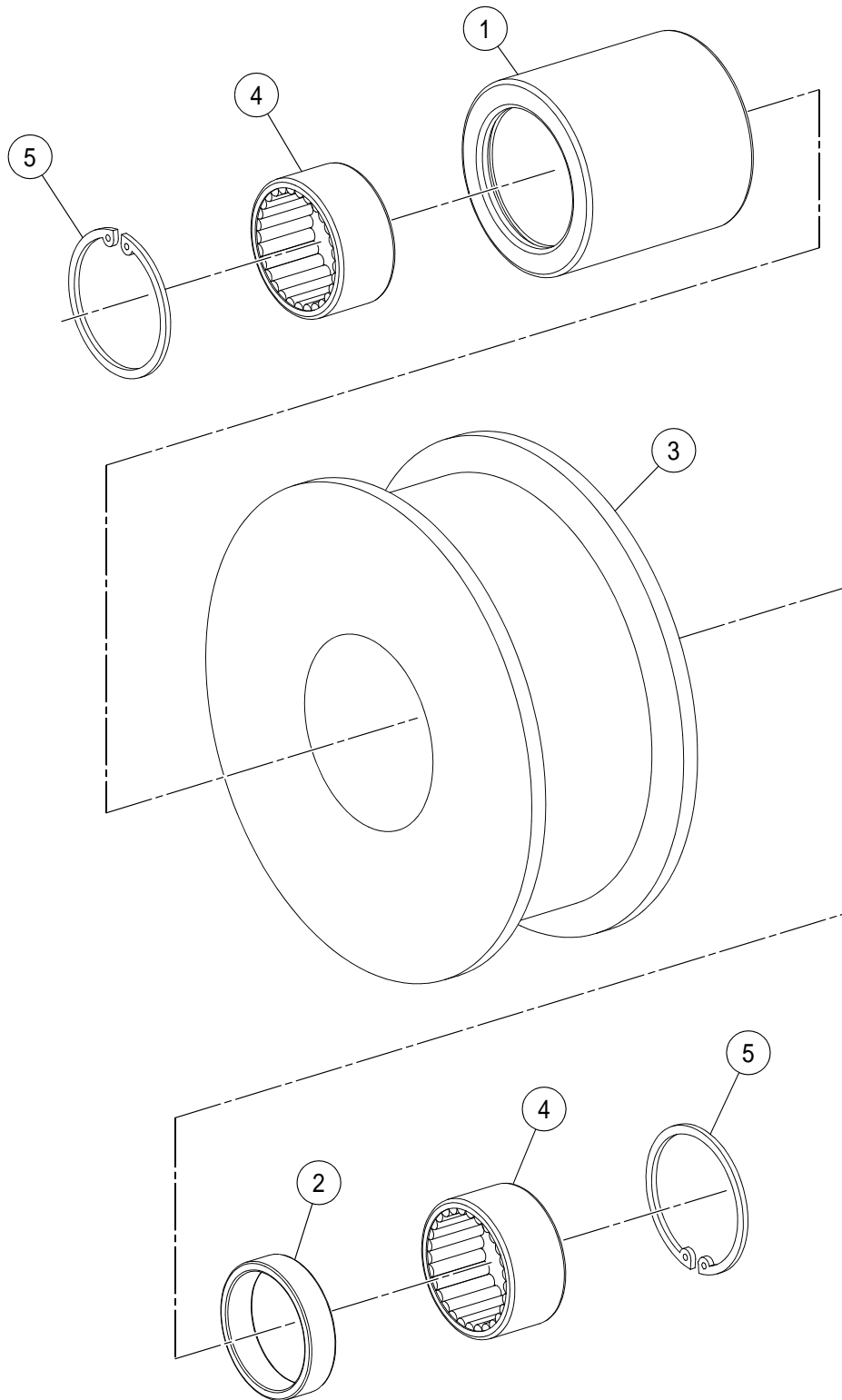
CROWD CYLINDER ASSEMBLY

BOM 13265103

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96702444	HHCS, Fully Threaded, Zinc Plated	1	M12 x 1.75 x 40 CI 8.8
2	59455154	Anchor	1	
3	59454801	Pin	1	
4	95246088	Roll Pin	2	
5	59282715	Crowd Cylinder	1	
-	59144329	- Counterbalance Valve	1	
-	13284112	- Cartridge Valve	1	
-	13284104	- Seal Kit	1	
6	NSVA	Crowd Cylinder Chain Sheave Assembly	1	See Page F - 8.
7	59157404	Keeper Pin	1	
9	96702279	HHCS, Fully Threaded, Zinc Plated	7	M10 x 1.5 x 20 CI 8.8
10	96712237	Flatwasher, Zinc Plated	1	M12 Hardened CI 10
11	96702410	HHCS, Zinc Plated	4	M10 x 1.5 x 35 CI 10.9
12	59100974	Cylinder Support Angle	2	
13	13156799	Wear Pad	2	
14	96704812	Hex Nut, Zinc Plated	7	M10 x 1.5 CI 8
15	59455204	Bushing	1	
16	59115089	Anchor	1	
17	59565036	Hardened Washer	4	0.40 x 0.81 x 0.19
18	59116459	Bracket Guide Plate	1	
20	59135087	Chain Sheave Guard	3	
21	96714985	HHCS, Zinc Plated	3	M10 x 1.5 x 150 CI 8.8
22	59116467	Anchor Guide	1	
23	96708136	SHCS	2	M10 x 16 x 8.8 CI 8.8
24	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
25	95201547	Fitting	1	

CROWD CYLINDER CHAIN SHEAVE ASSEMBLY

Dwg D59174128



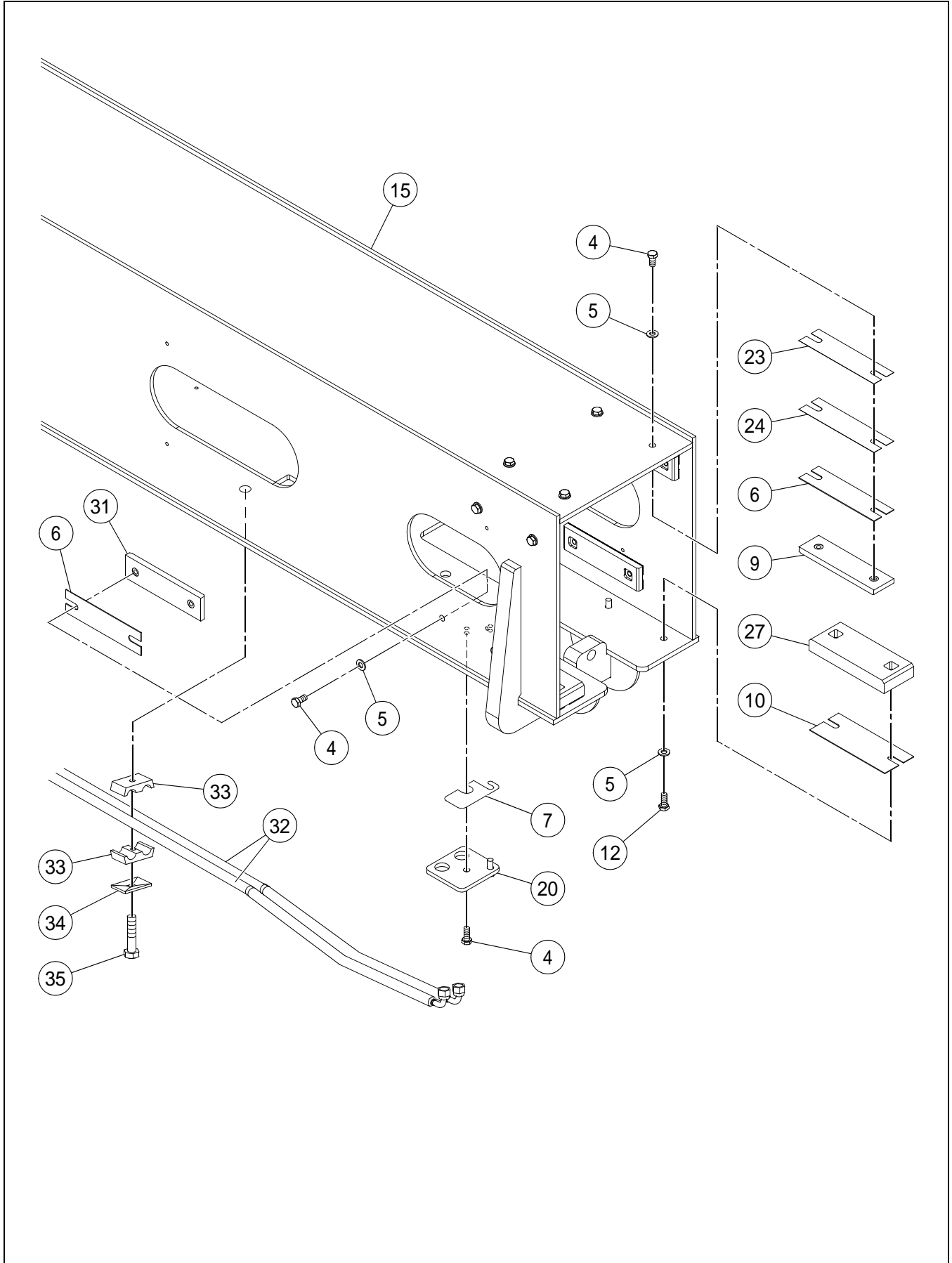
CROWD CYLINDER CHAIN SHEAVE ASSEMBLY

BOM 59169979

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59169938	Bushing	1	
2	59169946	Spacer	1	
3	59169953	Chain Sheave	1	
4	59169961	Bearing	2	
5	95325882	Snap Ring	2	

OUTER BOOM SECTION ASSEMBLY - SHEET 1 OF 2

Dwg D13334719/02/01



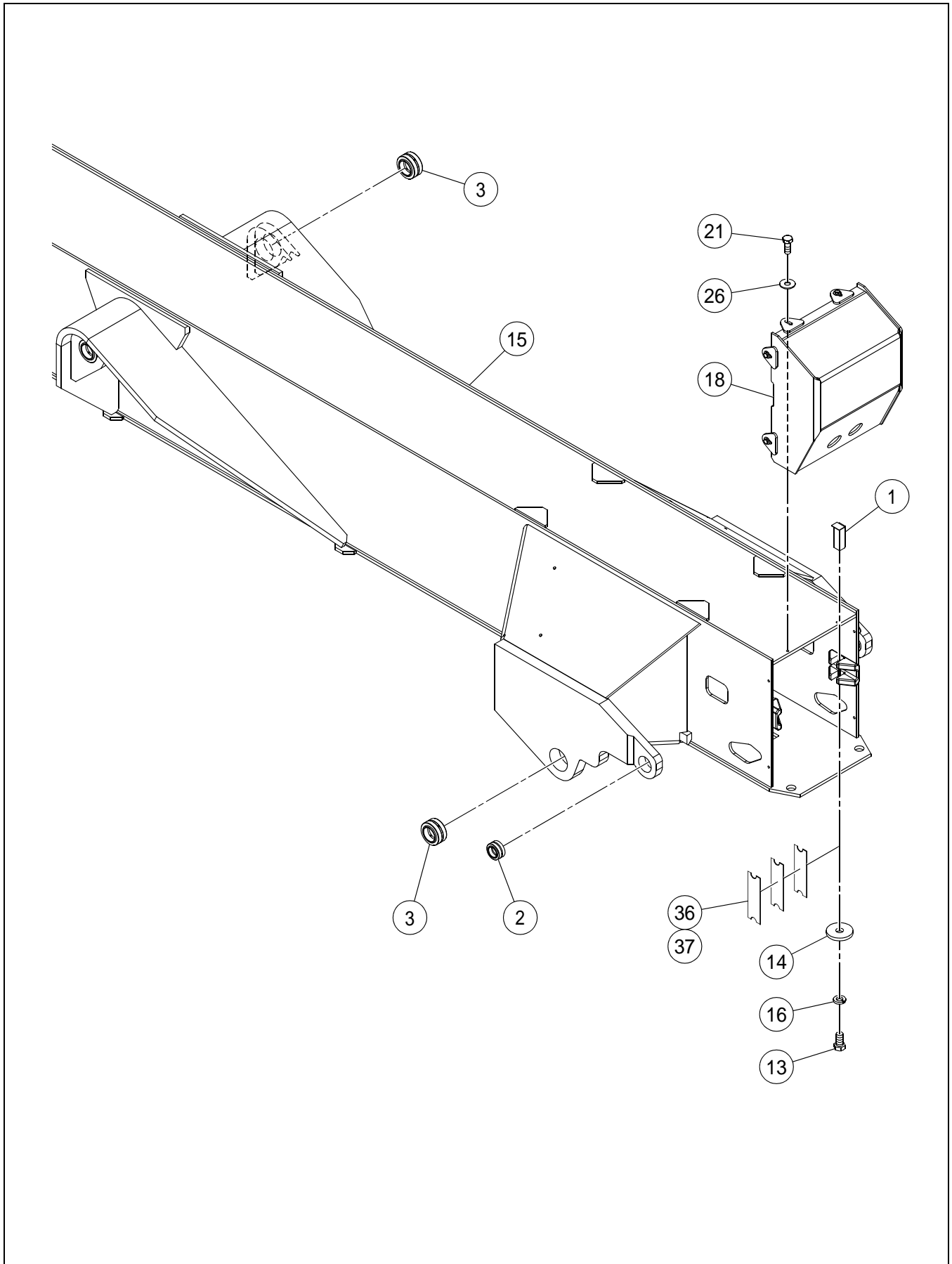
OUTER BOOM SECTION ASSEMBLY - SHEET 1 OF 2

BOM 13334719

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
4	96702279	HHCS, Fully Threaded, Zinc Plated	14	M10 x 1.5 x 20 CI 8.8
5	96741046	Flatwasher, Zinc Plated	12	M10 CI 200
6	59100941	Shim Plate	6	1.52mm
7	13388384	Bulkhead Plate Shim	1	
9	13156799	Wear Pad	2	
10	59269134	Shim Plate	2	1.52mm
12	96702287	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 25 CI 8.8
15	13165774	Outer Boom	1	
20	13158548	Bulkhead Plate	1	
23	59135194	Shim Plate	2	0.76mm
24	59136804	Shim Plate	4	0.38mm
27	13156781	Wear Pad	2	
31	59182196	Wear Pad	4	
32	59286054	Tube Assembly	2	
33	54525811	Clamp	4	
34	96741038	Flatwasher	2	M8 x 1.25 CI 200
35	96746029	HSBHCS, Fully Threaded, Zinc Plated	2	M8 x 1.25 CI 8.8

OUTER BOOM SECTION ASSEMBLY - SHEET 2 OF 2

Dwg D13334719/02/02



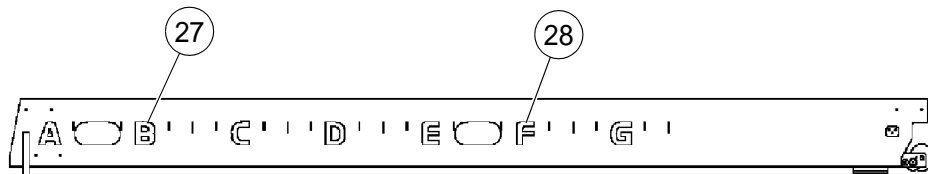
OUTER BOOM SECTION ASSEMBLY - SHEET 2 OF 2

BOM 13334719

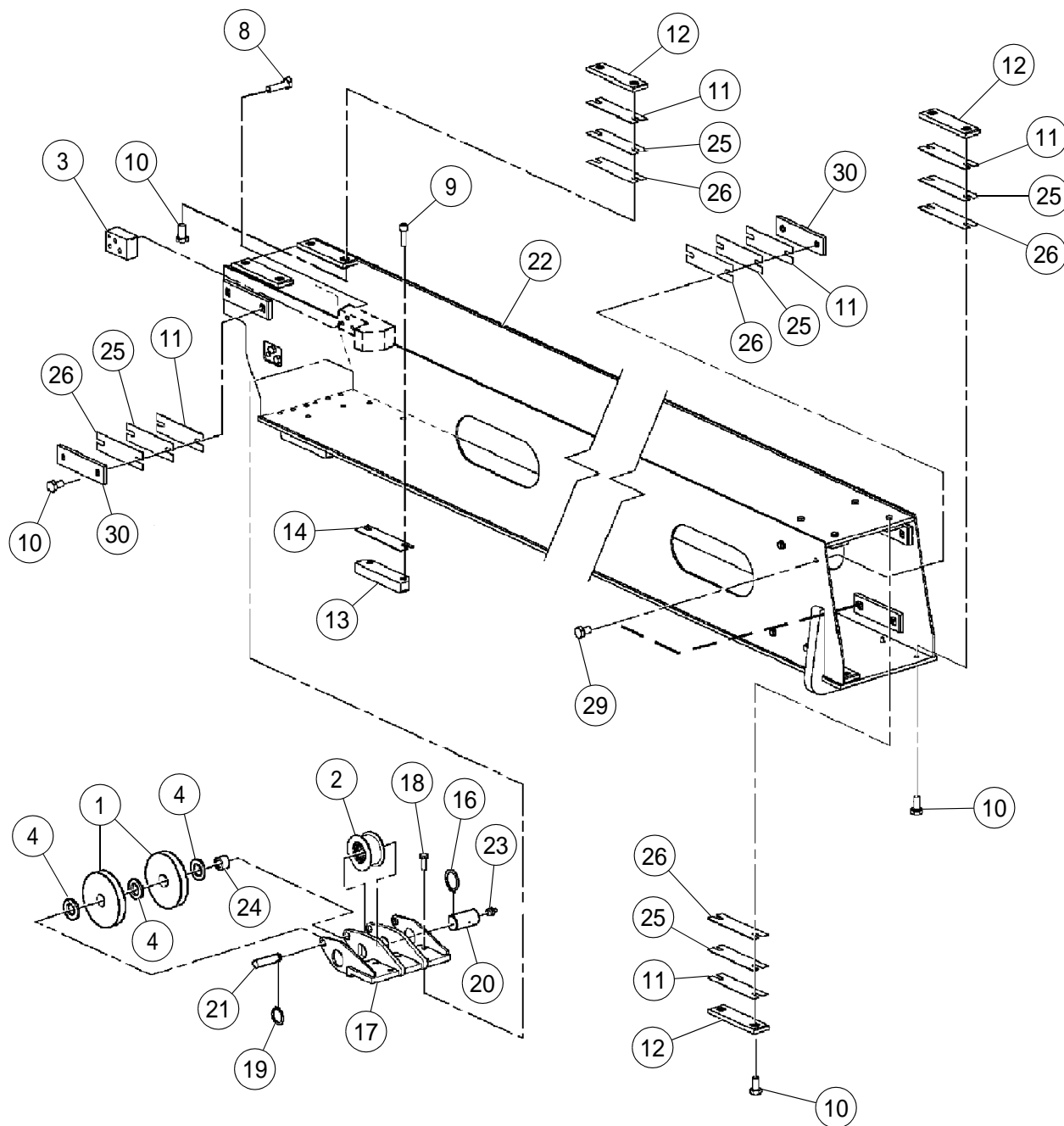
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59451641	Block	2	
2	50268127	Bearing	2	
3	13232277	Bearing	4	
13	95919197	HHCS, Zinc Plated	2	3/8 x 0.75 x 16 Grd 8
14	50264860	Flatwasher	2	
15	13165774	Outer Boom	1	
16	95931432	Lockwasher, Zinc Plated	2	3/8
18	13351135	Boom Cowling	1	
21	96702824	HHCS, Fully Threaded, Zinc Plated	6	M8 x 1.25 x 20 Cl 8.8
26	59887182	Washer	6	Hardened
36	13280755	Cylinder Shim	4	3.0mm
37	13280763	Cylinder Shim	4	1.5mm

INTERMEDIATE BOOM SECTION ASSEMBLY

Dwg D59183889/10



LEFT - HAND SIDE VIEW



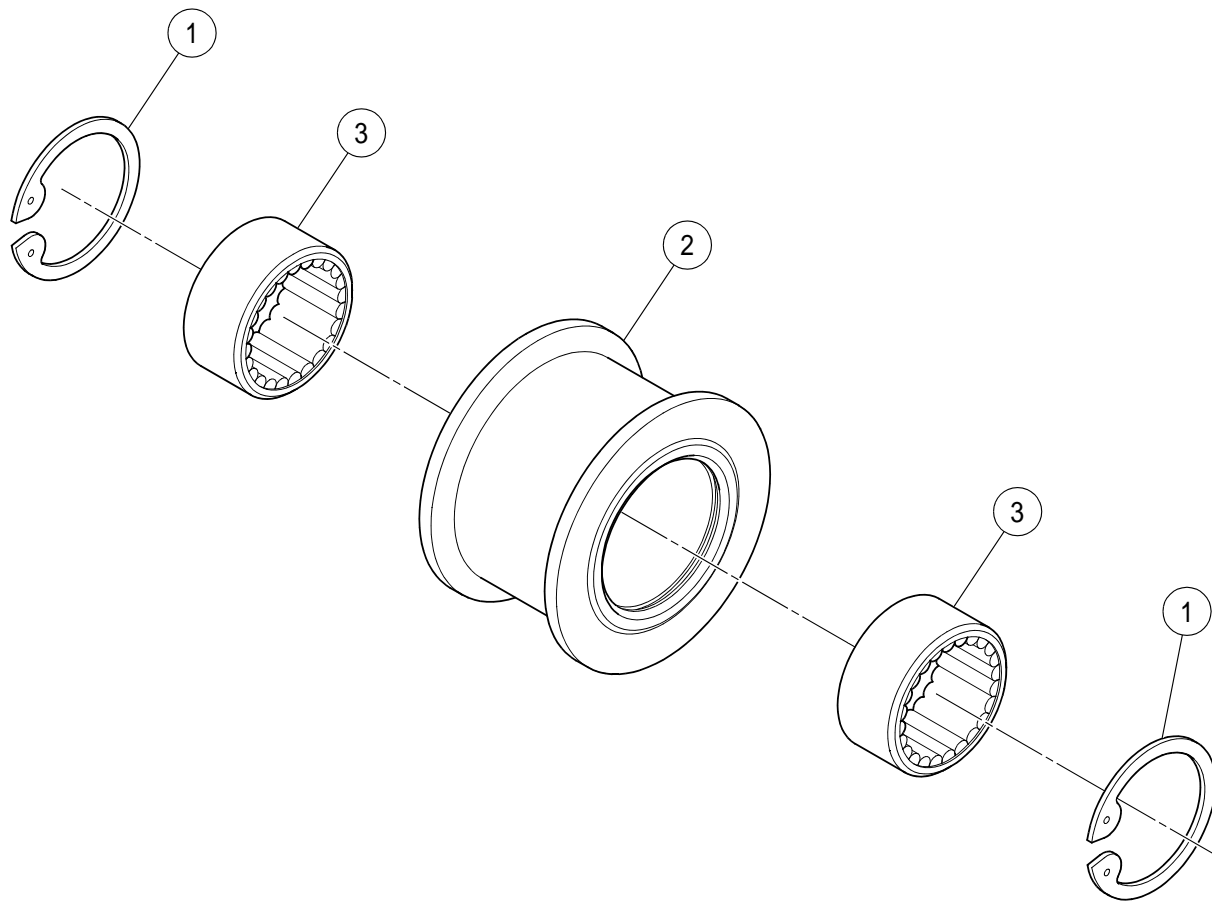
INTERMEDIATE BOOM SECTION ASSEMBLY

BOM 59282558

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13334552	Hose Sheave	2	
2	NSVA	Intermediate Boom Chain Sheave Assembly	1	See Page F - 16.
3	59157099	Block	2	
4	59454991	Thrust Washer	3	
8	95919593	HHCS, Zinc Plated	6	1/2 x 13 x 2 Grd 8
9	96726328	SHCS, Zinc Plated	4	M10 x 1.5 x 25 Cl 8.8
10	96702279	HHCS, Fully Threaded, Zinc Plated	12	M10 x 1.5 x 20 Cl 8.8
11	59100941	Shim Plate	12	1.52mm
12	13156799	Wear Pad	6	
13	13243639	Wear Pad	2	
14	59115873	Shim Plate	4	1.52mm
16	95223392	External Snap Ring	1	
17	13183074	Finger	1	
18	96702774	HHCS, Fully Threaded, Zinc Plated	8	M10 x 1.5 x 25 Cl 10.9
19	95223301	Retaining Ring	1	
20	13187406	Chain Sheave Pin	1	
21	13184080	Pin	1	
22	13183025	Intermediate Boom	1	
23	95208971	Grease Fitting	1	
24	13417530	Bushing	1	
25	59135194	Shim Plate	2	0.76mm
26	59136804	Shim Plate	4	0.38mm
27	59116640	Decal: ABCD	1	
28	59116657	Decal: EFG	1	
29	96701479	HHCS, Fully Threaded, Zinc Plated	12	M10 x 1.5 x 16 Cl 8.8
30	59182196	Wear Pad	6	

INTERMEDIATE BOOM CHAIN SHEAVE ASSEMBLY

Dwg D13159579/01



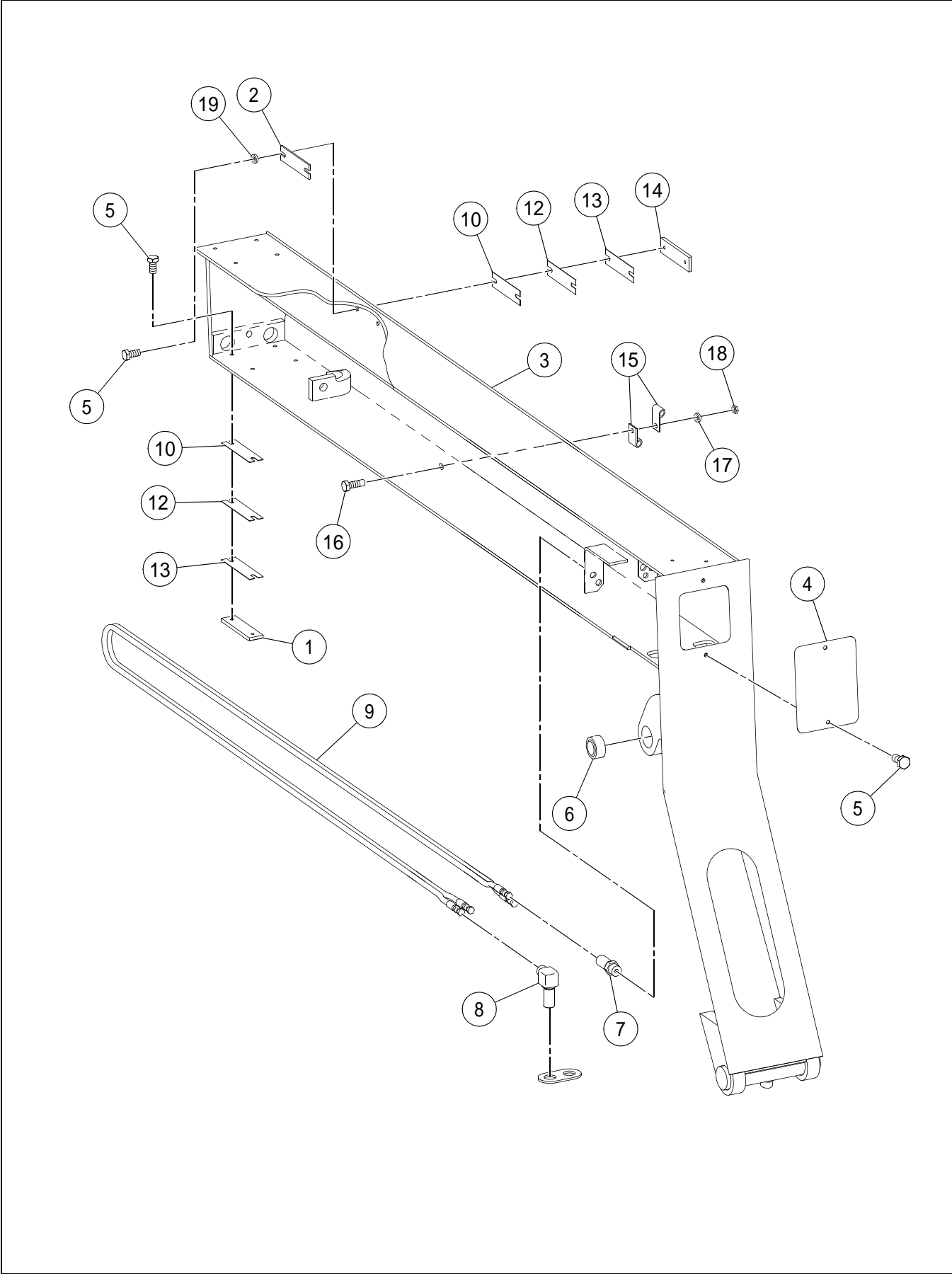
INTERMEDIATE BOOM CHAIN SHEAVE ASSEMBLY

BOM 59297812

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	95222964	Snap Ring	2	
2	59297804	Chain Sheave	1	
3	54607296	Bearing	2	

INNER BOOM SECTION ASSEMBLY

Dwg D59183897/05



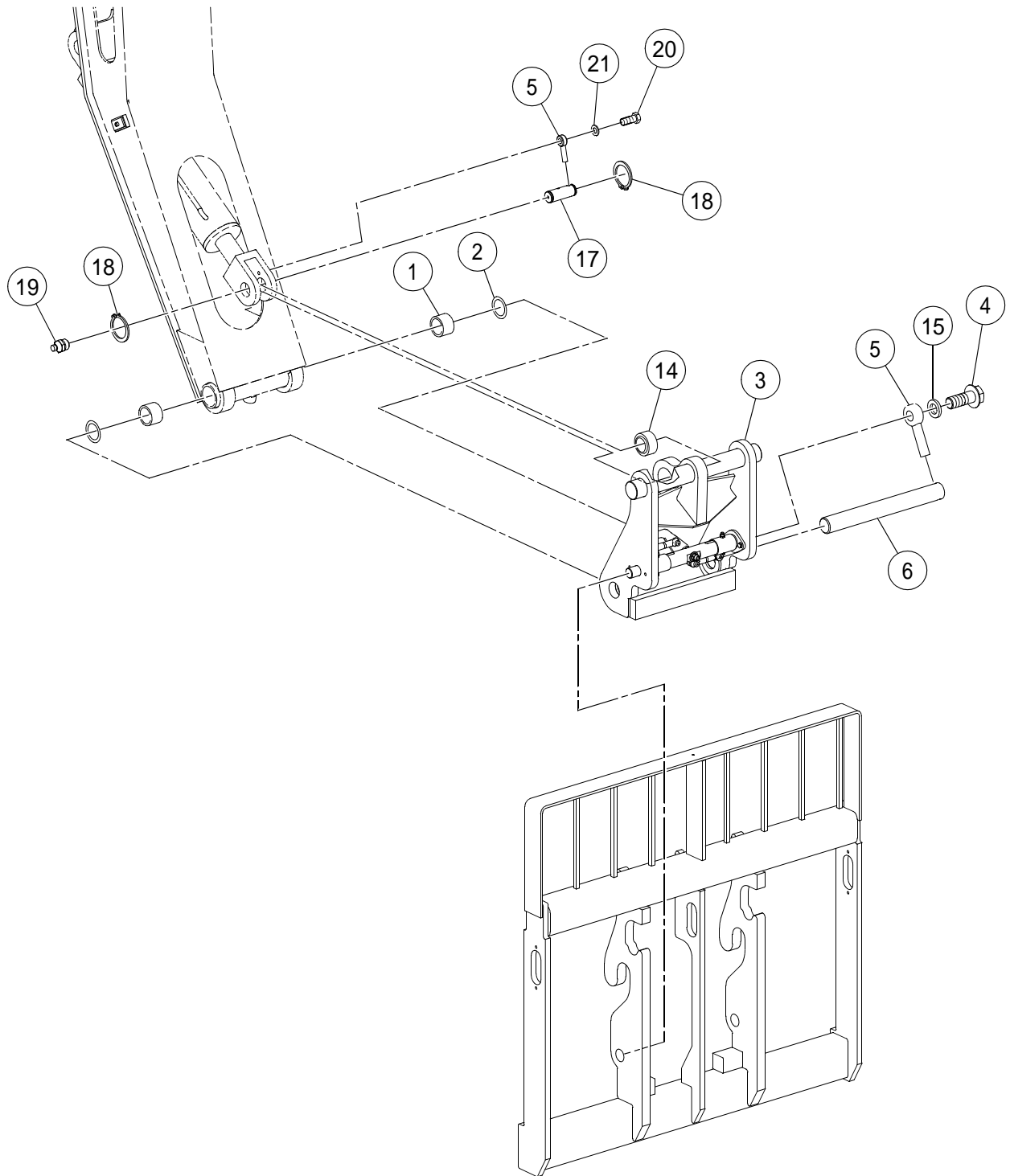
INNER BOOM SECTION ASSEMBLY

BOM 13163092

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13156799	Wear Pad	4	
2	59116491	Spacer Plate	2	
3	13258264	Inner Boom	1	
4	59101527	Boom Cover Plate	1	
5	96702279	HHCS, Fully Threaded, Zinc Plated	14	M10 x 1.5 x 20 CI 8.8
6	13232277	Bearing	1	
7	59947044	Fitting	2	
8	54503644	Adapter	2	
9	59286047	Hose Assembly	2	352.0"
10	59100941	Shim Plate	2	1.52mm
12	59135194	Shim Plate	2	0.76mm
13	59136804	Shim Plate	4	0.38mm
14	59182196	Wear Pad	2	
15	95301867	Clamp	2	
16	96701917	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 30 CI 8.8
17	59565036	Hardened Washer	1	0.40 x 0.81 x 0.19
18	96704614	Nut, Zinc Plated	1	M10 x 1.5 CI 8
19	96741046	Flatwasher, Zinc Plated	4	M10 CI 200

QUICK-ATTACH CARRIAGE INSTALLATION - SHEET 1 OF 2

Dwg D59158469/01/01



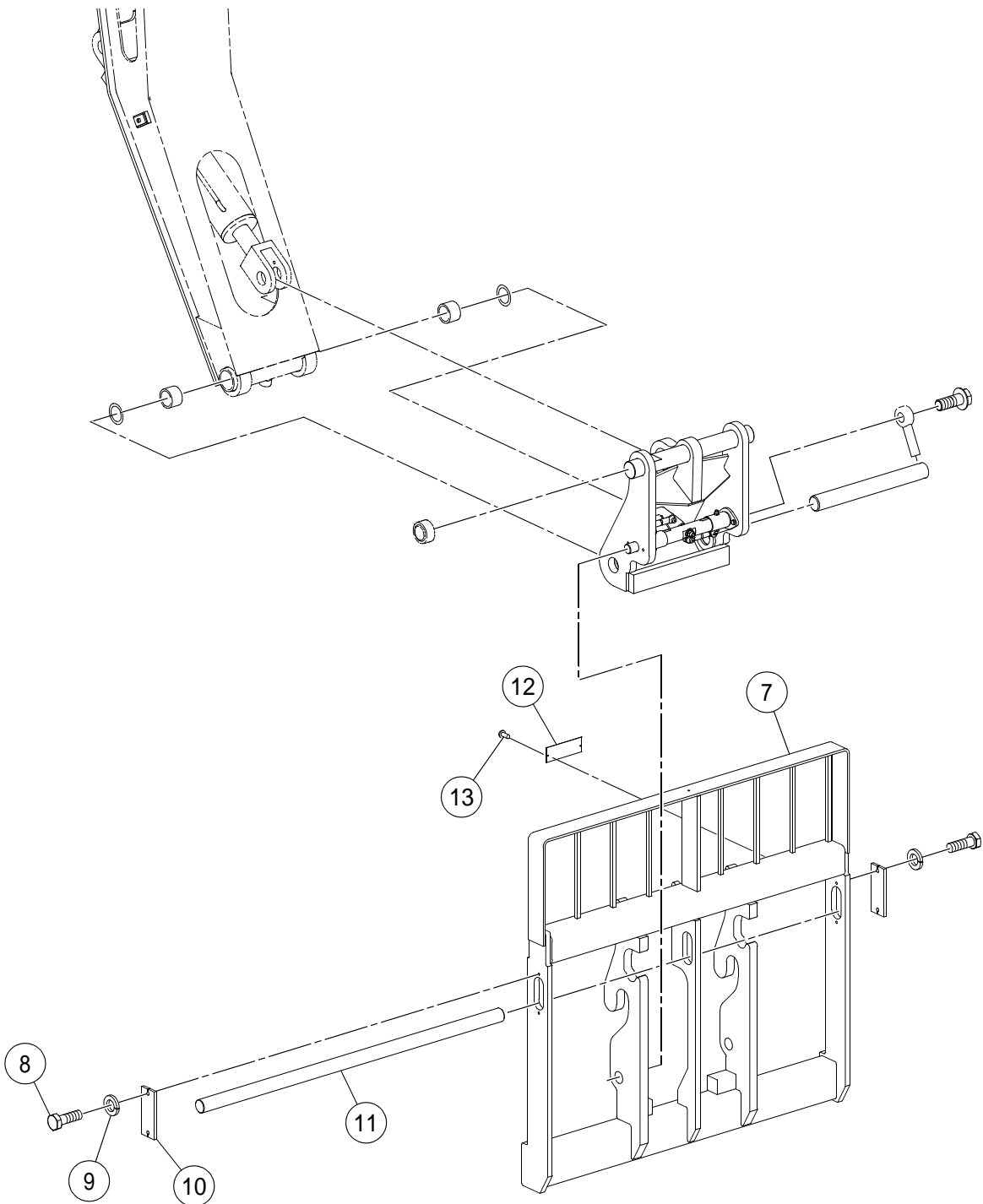
QUICK-ATTACH CARRIAGE INSTALLATION - SHEET 1 OF 2

BOM 59229781, 59299370, 59299321, 59295139, 13305164

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59454215	Inner Bearing	2	
2	59455766	Thrust Washer	2	
3	NSVA	Quick-Attach Apron Assembly	1	See Page F - 24.
4	96738349	SHCS	7	M12 x 1.75 x 35 CI 8.8
5	59455154	Anchor	2	
6	13232251	Pin	1	
14	13232277	Bearing	1	
15	96701545	Flatwasher, Zinc Plated	1	M12 Hardened
17	13232244	Cylinder Pivot Pin	1	
18	95992616	External Retaining Ring	2	
19	95201547	Fitting	1	
20	96743216	SHSS, Zinc Plated	1	M10 x 1.5 x 12 CI 12.9
21	96741046	Flatwasher, Zinc Plated	1	M10 CI 200

QUICK-ATTACH CARRIAGE INSTALLATION - SHEET 2 OF 2

Dwg D59274506/00



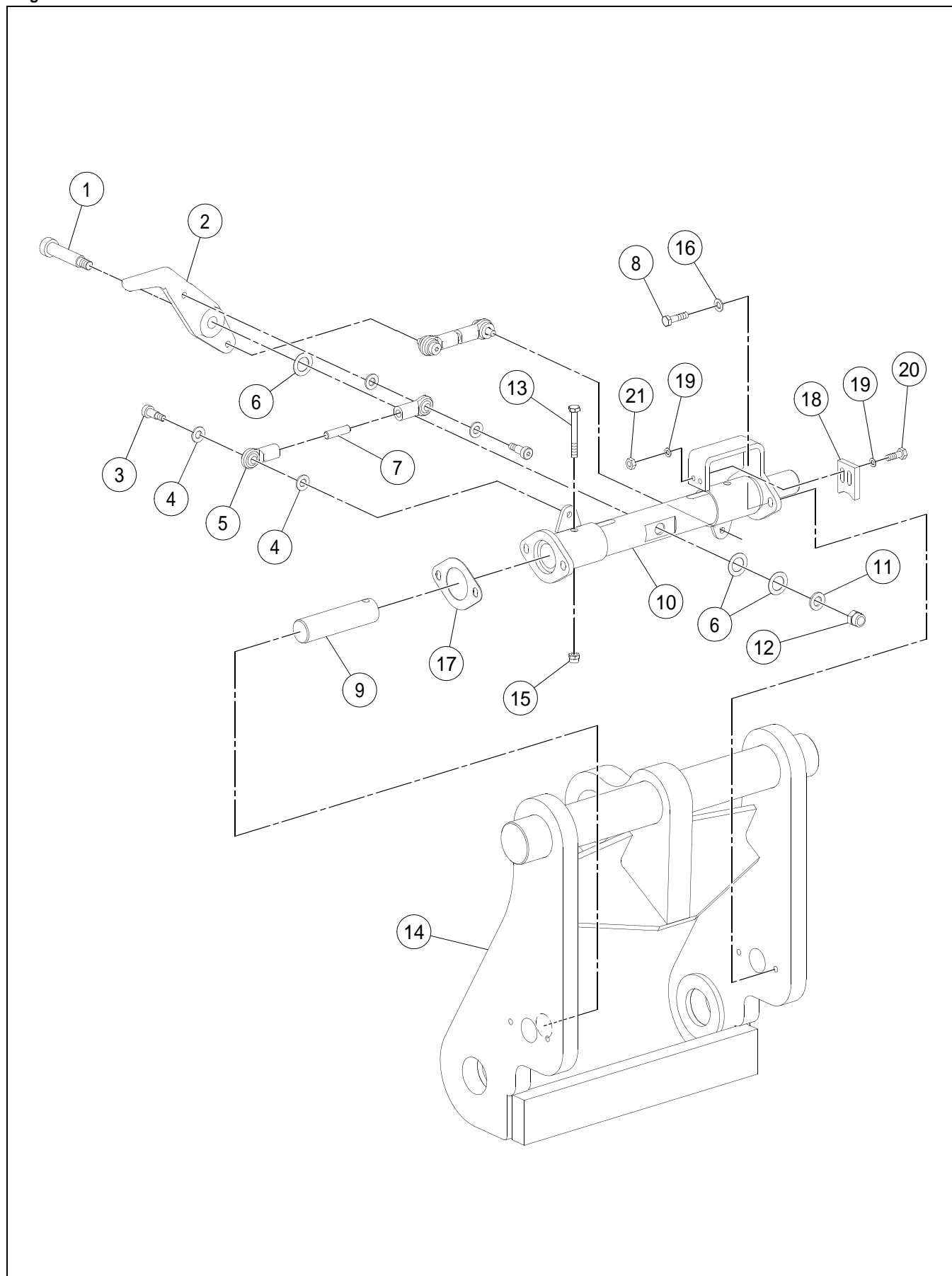
QUICK-ATTACH CARRIAGE INSTALLATION - SHEET 2 OF 2

BOM 59229781, 59299370, 59299321, 59295139, 13305164

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
7	59299388	48" Quick-Attach Carriage	1	
-	59299339	60" Quick-Attach Carriage	1	
-	59295147	72" Quick-Attach Carriage	1	
-	59160101	60" Quick-Attach Fork Positioning Carriage	1	
8	96701917	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 30 CI 8.8
9	59510065	Lockwasher	4	
10	59451815	Plate	2	
11	58793209	48" Load Arm	1	
-	58793191	60" Load Arm	1	
-	58793183	72" Load Arm	1	
12	13340484	Decal: Quick-Attach Carriage	1	
13	59010173	Metal Tack	2	

QUICK-ATTACH APRON ASSEMBLY

Dwg D13219589/00



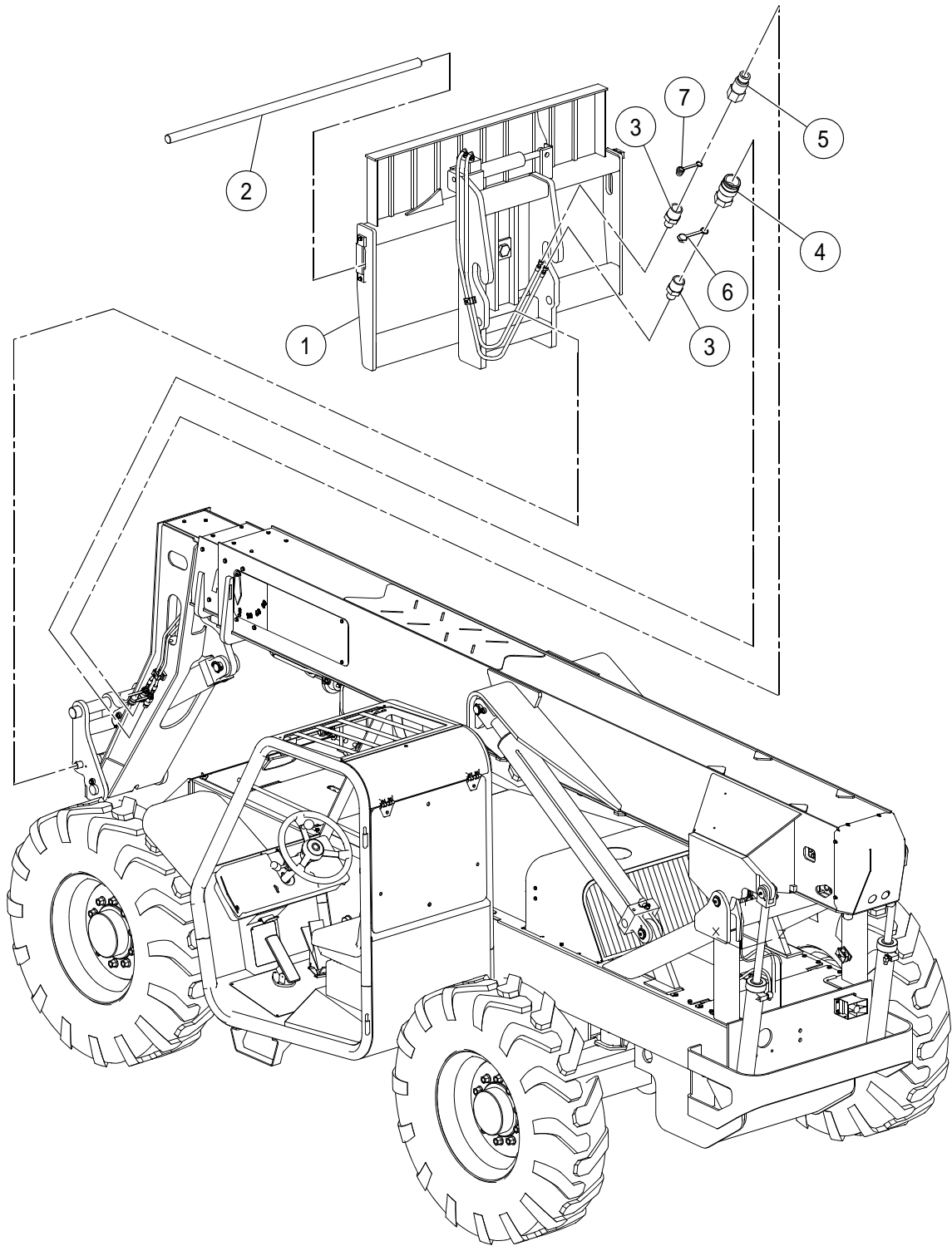
QUICK-ATTACH APRON ASSEMBLY

BOM 13219597

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96741137	SHSS, Zinc Plated	1	M16 x 1.75 x 60 CI 12.9
2	59129593	Handle	1	
3	96728233	SHSS, Zinc Plated	4	10 x M8 x 1.25 x 16 CI 12.9
4	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
5	59101774	Rod End	4	
6	59454991	Thrust Washer	3	
7	13161872	Threaded Rod	2	
8	96705587	HHCS, Fully Threaded, Zinc Plated	4	M8 x 1.25 x 30 CI 8.8
9	59101758	Pin	2	
10	13199393	Apron Handle	1	
11	96738596	Flatwasher, Zinc Plated	1	M12 Hardened CI 200
12	96704622	Locknut, Zinc Plated	1	M12 x 1.75 CI 8
13	96705140	HHCS, Fully Threaded, Zinc Plated	2	M8 x 1.25 x 65 CI 8.8
14	13187364	Quick-Attach Apron	1	
15	96704606	Hex Locknut, Zinc Plated	2	M8 x 1.25 CI 8
16	96741038	Flatwasher	4	M8 x 1.25 CI 200
17	59181248	Shim	2	1.0mm
18	13195862	Rubber Stop Pin	1	
19	59889162	Hardened Washer	4	
20	96701461	HHCS, Fully Threaded	2	M6 x 25 CI 8.8
21	96704598	Hex Locknut, Zinc Plated	2	M6 CI 8

SIDE TILT CARRIAGE INSTALLATION - OPTION

Dwg D59213447/00



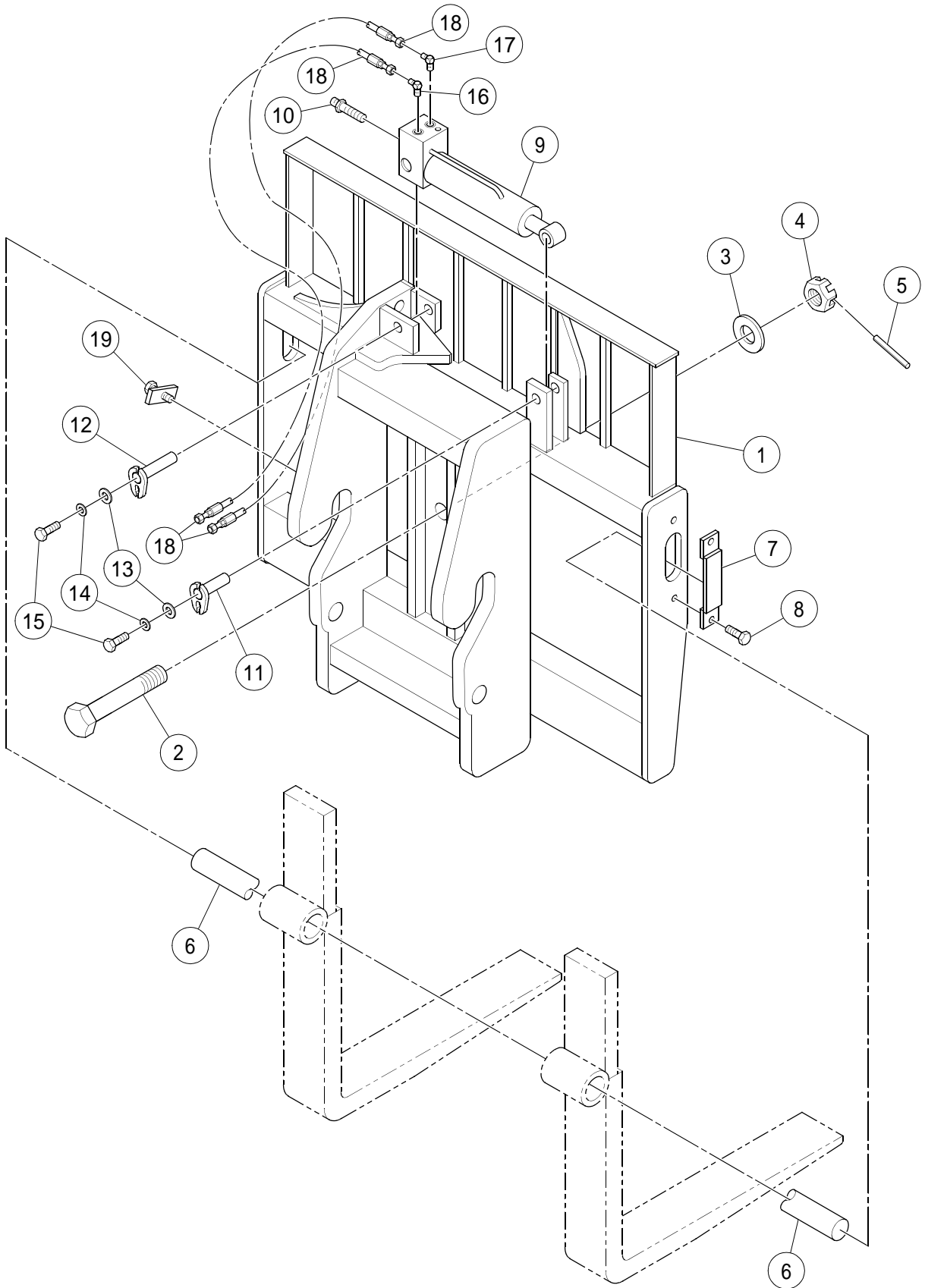
SIDE TILT CARRIAGE INSTALLATION - OPTION

BOM 59149385, 59149419, 13219878

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59199687	48" Side/Tilt Quick-Attach Carriage	1	See Breakdown F - 28.
-	59199695	60" Side/Tilt Quick-Attach Carriage	1	See Breakdown F - 30.
-	13198742	72" Side/Tilt Quick-Attach Carriage	1	See Breakdown F - 32.
2		This Item Not Used With This Assembly		
3	95231031	Adapter	2	
4	59096735	Coupler	1	
5	59096743	Nipple	1	
6	59096750	Coupler Dust Cap	1	
7	59096768	Nipple Dust Cap	1	

48" SIDE TILT CARRIAGE (59199687) - INTERNAL BREAKDOWN

Dwg 59199687/00



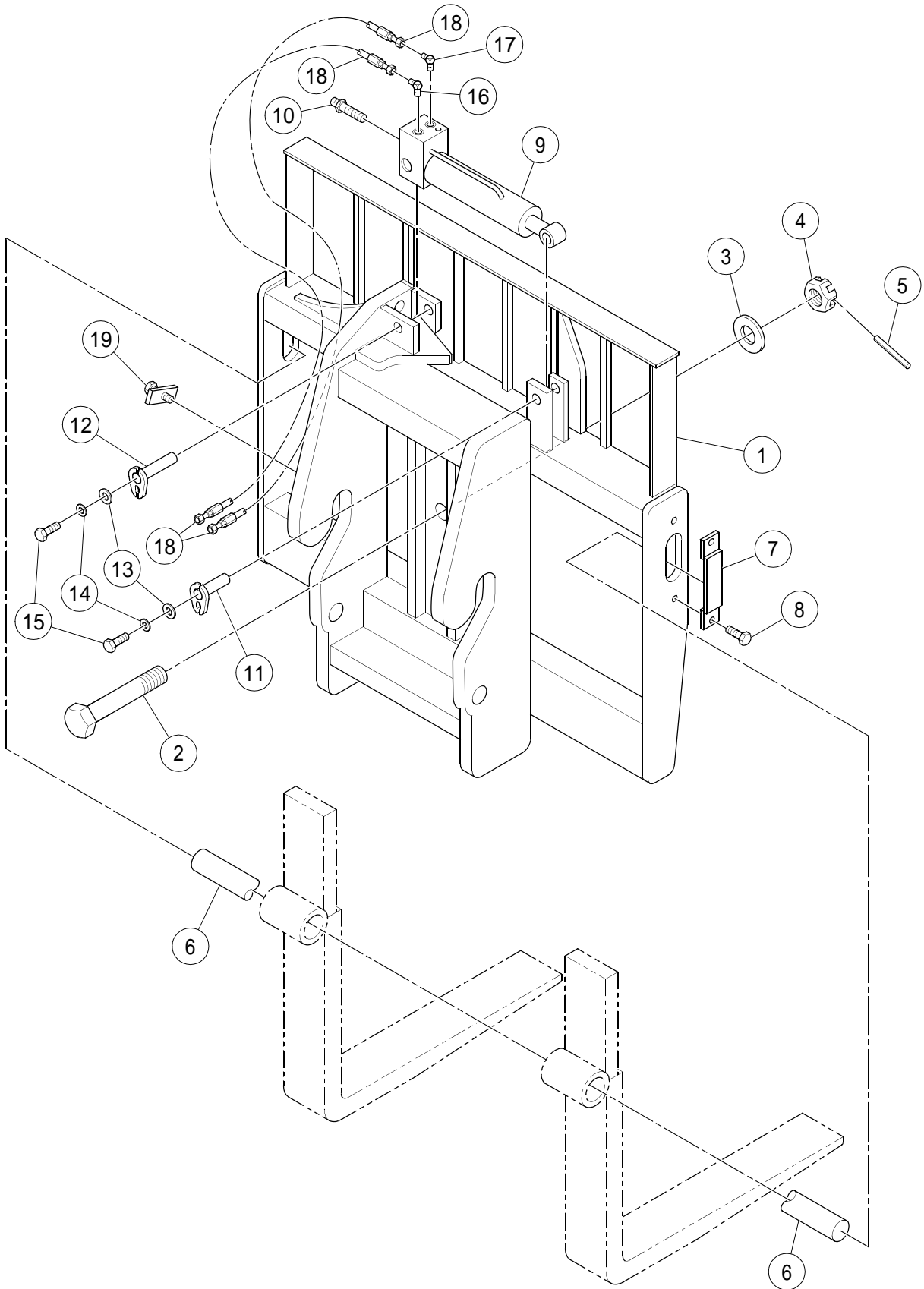
48" SIDE TILT CARRIAGE (59199687) - INTERNAL
BREAKDOWN

BOM 59199687

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSS	Front and Rear Frame	1	
2	59231316	Hex Head Bolt	1	
3	59231324	Flatwasher	1	
4	59231332	Castle Hex Nut	1	
5	59231340	Split Pin	1	
6	59231357	Fork Pin	1	
7	59231365	Fork Pin Retainer	2	
8	59231373	HHMS	2	
9	59110932	Cylinder	1	
-	59231282	- Seal Kit	1	
10	59231381	Center Valve	2	
-	59231399	- O-ring Kit	1	
11	59231407	Locking Pin	1	
12	59231415	Locking Pin	1	
13	59231423	Flatwasher	2	
14	59231431	Lockwasher	2	
15	59231449	HHMS	2	
16	59231456	Fitting, 90°	1	
17	59231506	Fitting w/Orifice, 90°	1	
18	59231464	Hose Assembly	2	69.0"
19	59231472	Hose Clamp	1	
20	59231480	Hose Kit (Includes Items 16 and 18) (Not Shown)	1	

60" SIDE TILT CARRIAGE (59199695) - INTERNAL BREAKDOWN

Dwg 59199687/00



60" SIDE TILT CARRIAGE (59199695) - INTERNAL
BREAKDOWN

BOM 59199695

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSS	Front and Rear Frame	1	
2	59231316	Hex Head Bolt	1	
3	59231324	Flatwasher	1	
4	59231332	Castle Hex Nut	1	
5	59231340	Split Pin	1	
6	59231498	Fork Pin	1	
7	59231365	Fork Pin Retainer	1	
8	59231373	HHMS	2	
9	59110932	Cylinder	1	
-	59231282	- Seal Kit	1	
10	59231381	Center Valve	2	
-	59231399	- O-ring Kit	1	
11	59231407	Locking Pin	1	
12	59231415	Locking Pin	1	
13	59231423	Flatwasher	2	
14	59231431	Lockwasher	2	
15	59231449	HHMS	2	
16	59231456	Fitting, 90°	1	
17	59231506	Fitting w/Orifice, 90°	1	
18	59231464	Hose Assembly	2	69.0"
19	59231472	Hose Clamp	1	
20	59231480	Hose Kit (Includes Items 16 and 18) (Not Shown)	1	

72" SIDE TILT CARRIAGE (13198742) - INTERNAL BREAKDOWN

Dwg 13198742/00

MAJOR
 ATTACHMENT TECHNOLOGIES, INC.
 DELHI, IOWA 52222 U.S.A.

ATTACHMENT MODEL#: _____
 SERIAL#: _____

MAX HYDRAULIC PRESSURE: _____ PSI

WEIGHT: _____ LBS. CAPACITY: _____ LBS.

Capacity of Rough Terrain Truck AND Attachment Combination May Be Less Than Capacity Shown on Attachment. Consult Truck Nameplate and Load Handling Chart Furnished by Truck Manufacturer. #40495

WARNING



HIGH-PRESSURE FLUID HAZARD

To prevent serious injury or death:

- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.

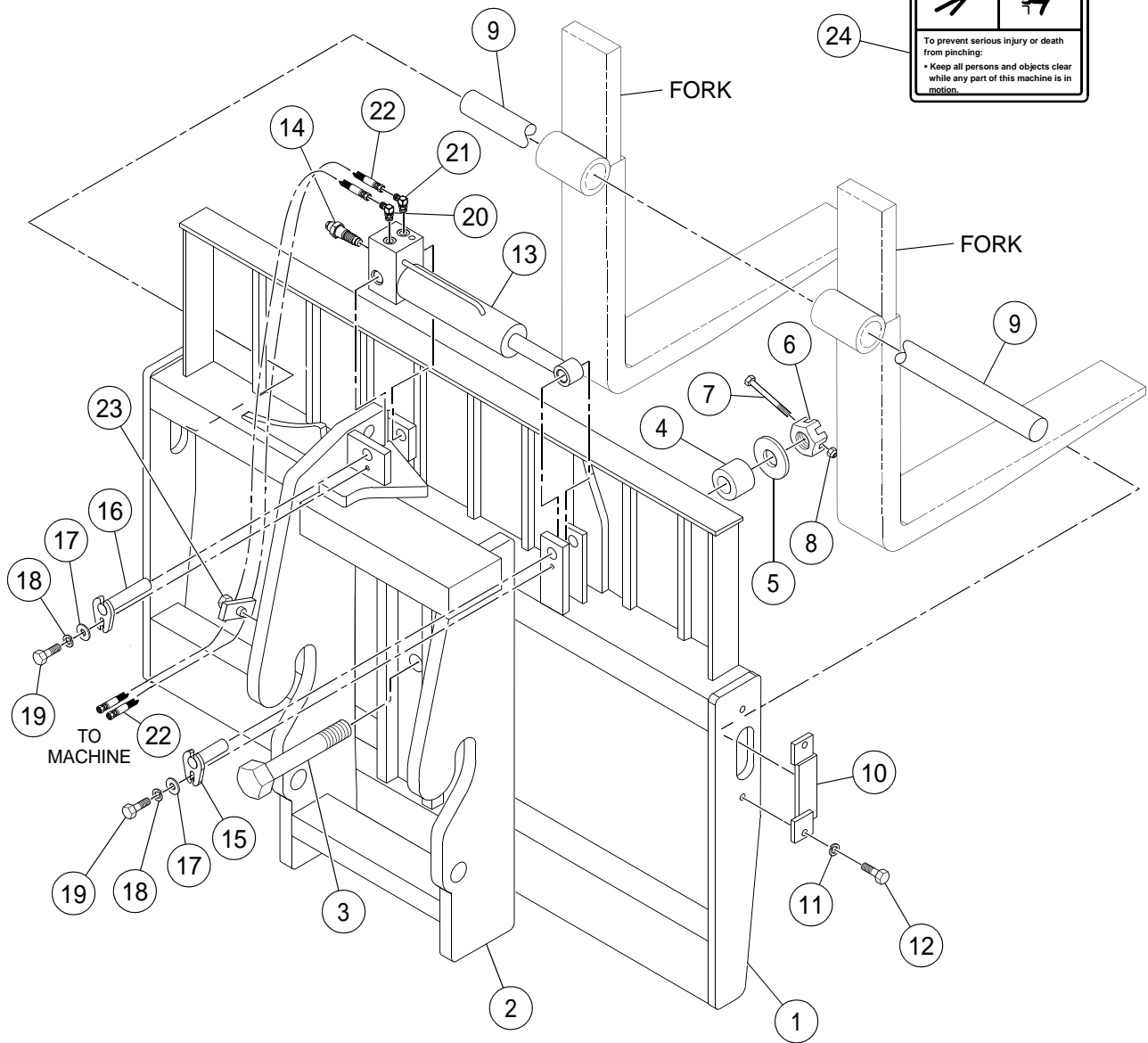
#40151

DANGER



To prevent serious injury or death from pinching:

- Keep all persons and objects clear while any part of this machine is in motion.



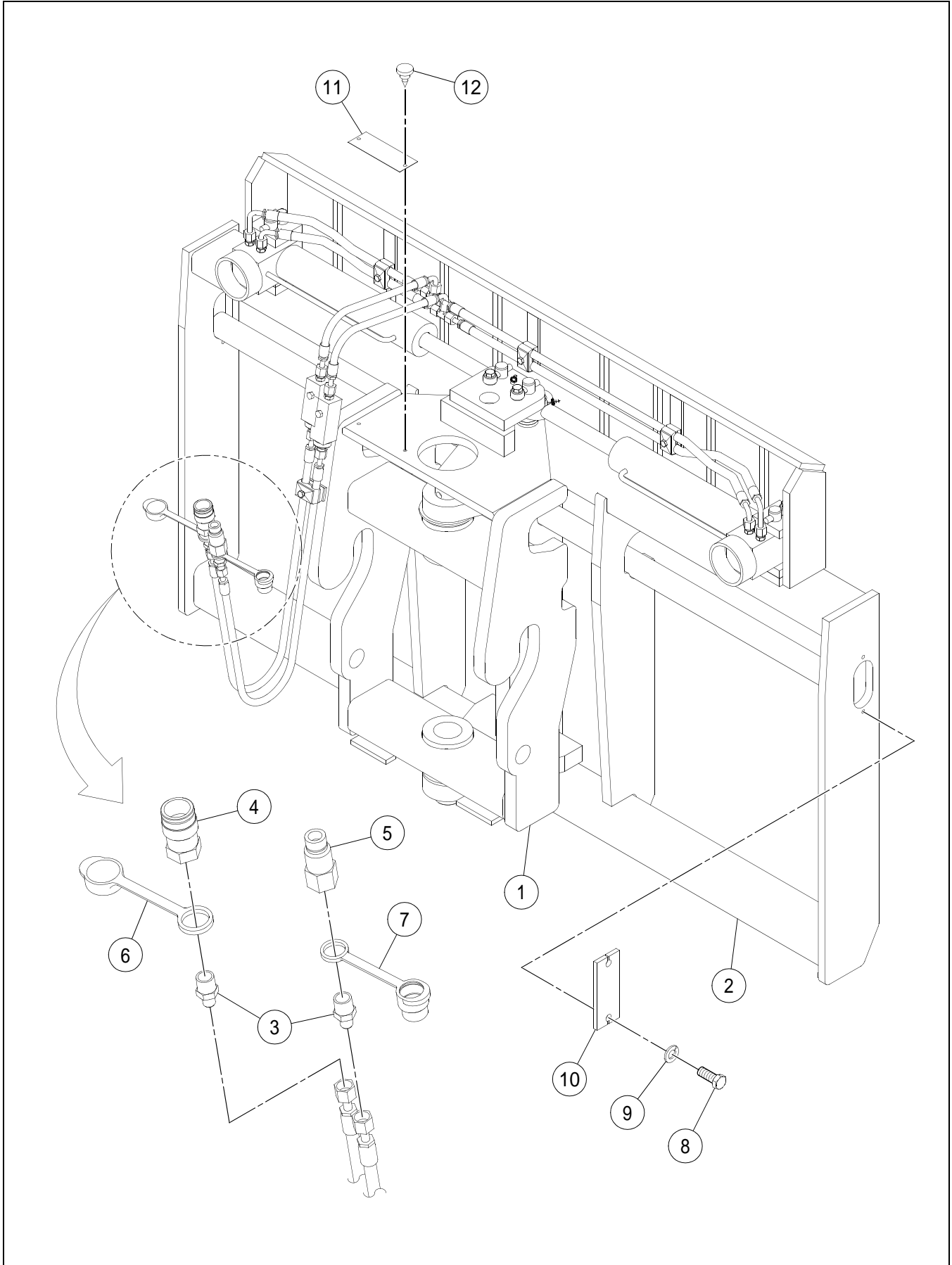
72" SIDE TILT CARRIAGE (13198742) - INTERNAL
BREAKDOWN

BOM 13198742

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510763	Front Frame	1	
2	13510771	Rear Frame	1	
3	13510789	Hex Head Bolt	1	
4	13510797	Bearing Spacer	1	
5	13510805	Washer	1	
6	13510813	Hex Nut	1	
7	13510821	Hex Head Bolt	1	
8	13510839	Hex Nut	1	
9	13306303	Load Arm	1	
10	13510847	Retainer Assembly	1	
11	13510854	Washer	2	
12	13510862	Hex Head Screw	2	
13	13510870	Cylinder	1	
-	13510979	- Cylinder Packing Kit	1	
14	13510896	Center Valve	2	
15	13510904	Locking Pin	1	
16	59231415	Locking Pin	1	
17	59231423	Flatwasher	2	
18	59231431	Lockwasher	2	
19	13510912	Hex Head Screw	2	
20	13510920	Fitting	1	
21	13510938	Fitting	1	
22	13510946	Hose Assembly	2	
23	13510953	Hose Clamp	1	
24	13510961	Pinch Point Decal	2	
25	13510987	High Pressure Fluid Decal	1	
26	13510995	Serial Number Decal	1	

72" SWING CARRIAGE INSTALLATION - OPTIONAL

Dwg D13170204/00



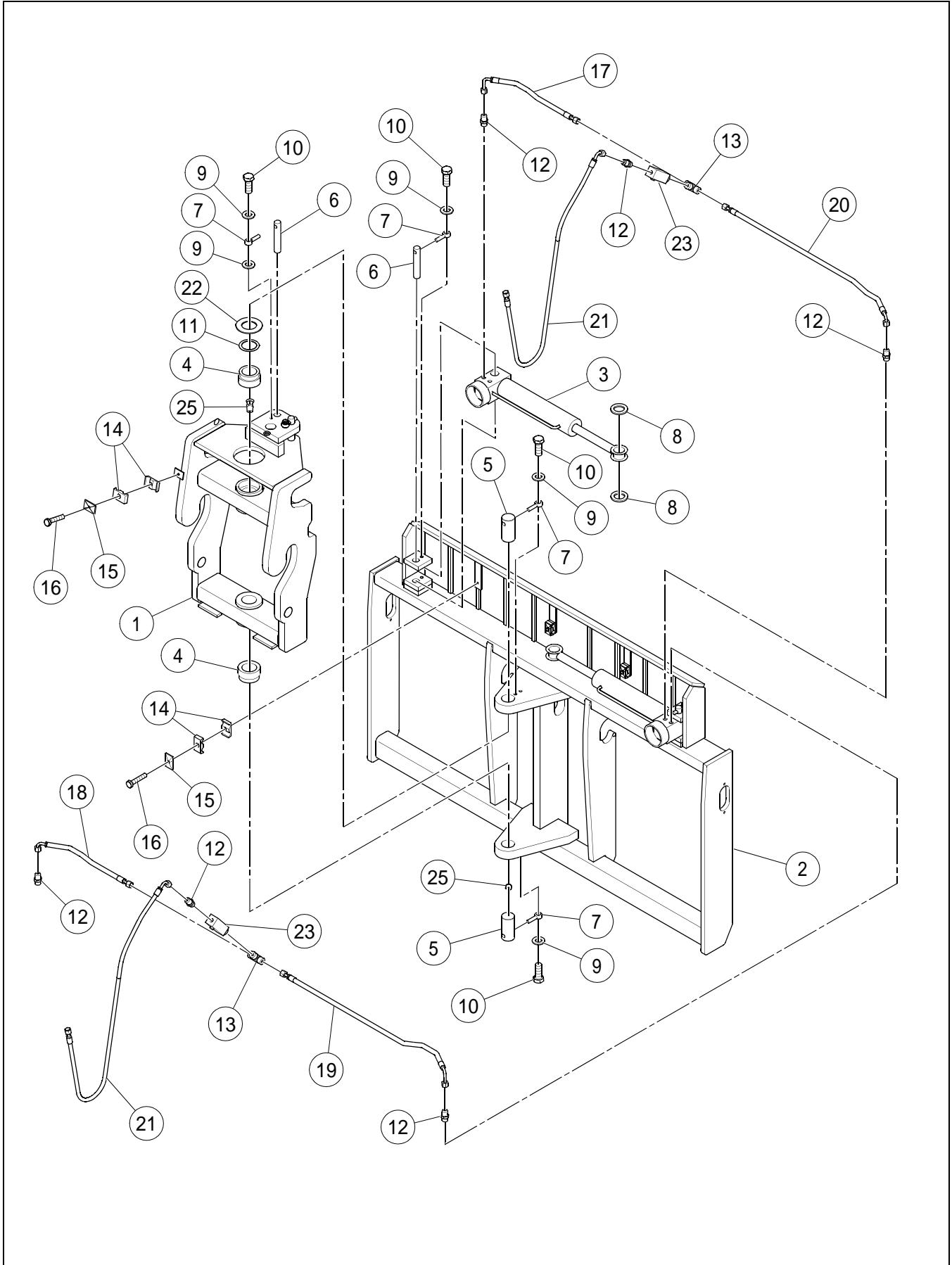
72" SWING CARRIAGE INSTALLATION - OPTIONAL

BOM 13170204

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	72" Swing Carriage Assembly	1	See Page F - 36.
2	58793183	72" Load Arm	1	
3	95231031	Adapter	2	
4	59096735	Quick Disconnect Coupler	1	
5	59096743	Quick Disconnect Nipple	1	
6	59096750	Quick Disconnect Coupler Dust Cap	1	
7	59096768	Quick Disconnect Nipple Dust Cap	1	
8	96701917	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 30 CI 8.8
9	59510065	Lockwasher	4	
10	59451815	Plate	2	
11	13340484	Decal: Swing Carriage	1	
12	59010173	Metal Tack	2	

72" SWING CARRIAGE ASSEMBLY - OPTIONAL

Dwg D13170196/03



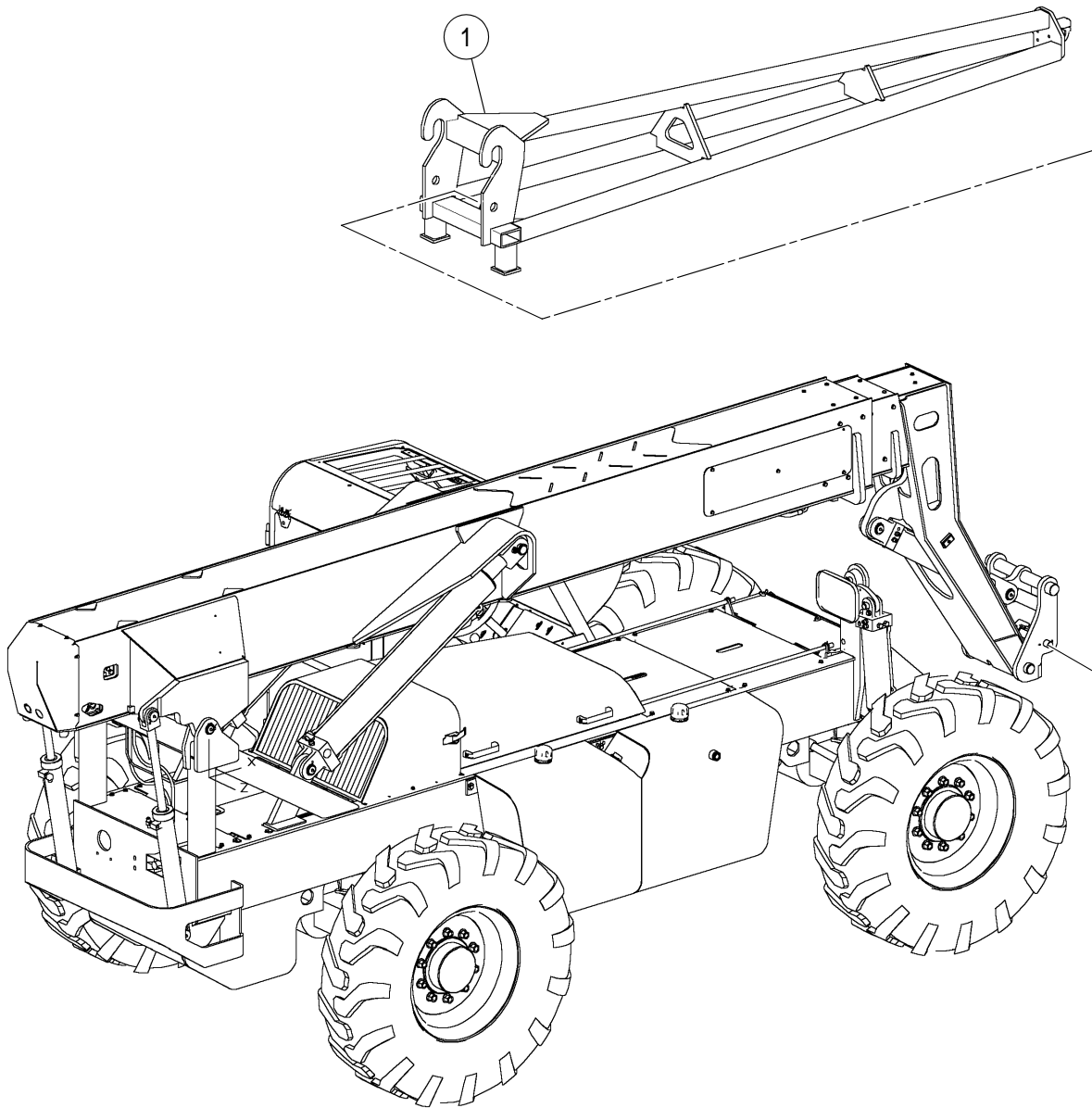
72" SWING CARRIAGE ASSEMBLY - OPTIONAL

BOM 13170196

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59300129	Carriage Support	1	
2	59283481	72" Swing Carriage	1	
3	13170147	Hydraulic Cylinder	2	
-	58874751	- Counterbalance Valve	2	
*	54728886	- Seal Kit	1	
4	50275395	Bearing	2	
5	59283598	Pivot Pin	2	
6	59283606	Pivot Pin	4	
7	59455154	Anchor	6	
8	59630798	Flatwasher	4	
9	96738596	Flatwasher, Zinc Plated	8	M12 Hardened CI 200
10	96702808	HHCS, Fully Threaded, Zinc Plated	6	M12 x 1.75 x 30 CI 10.9
11	95922175	Flatwasher, Zinc Plated	1	2.0
12	95365078	Adapter	8	
13	95480117	Adapter, Tee	2	
14	59929026	Insert Clamp	8	
15	59583450	Cover Plate	4	
16	96719786	HHCS, Zinc Plated	4	M8 x 1.25 x 40 CI 8.8
17	54638598	Hose Assembly	1	21.0"
18	54638564	Hose Assembly	1	21.0"
19	54638606	Hose Assembly	1	34.0"
20	54638572	Hose Assembly	1	33.0"
21	59300152	Hose Assembly	2	84.0"
22	59456236	Thrust Washer	1	
23	13170188	Flow Control Valve	2	
25	95246393	Grease Fitting	2	

TRUSS BOOM INSTALLATION

Dwg D59209478/01



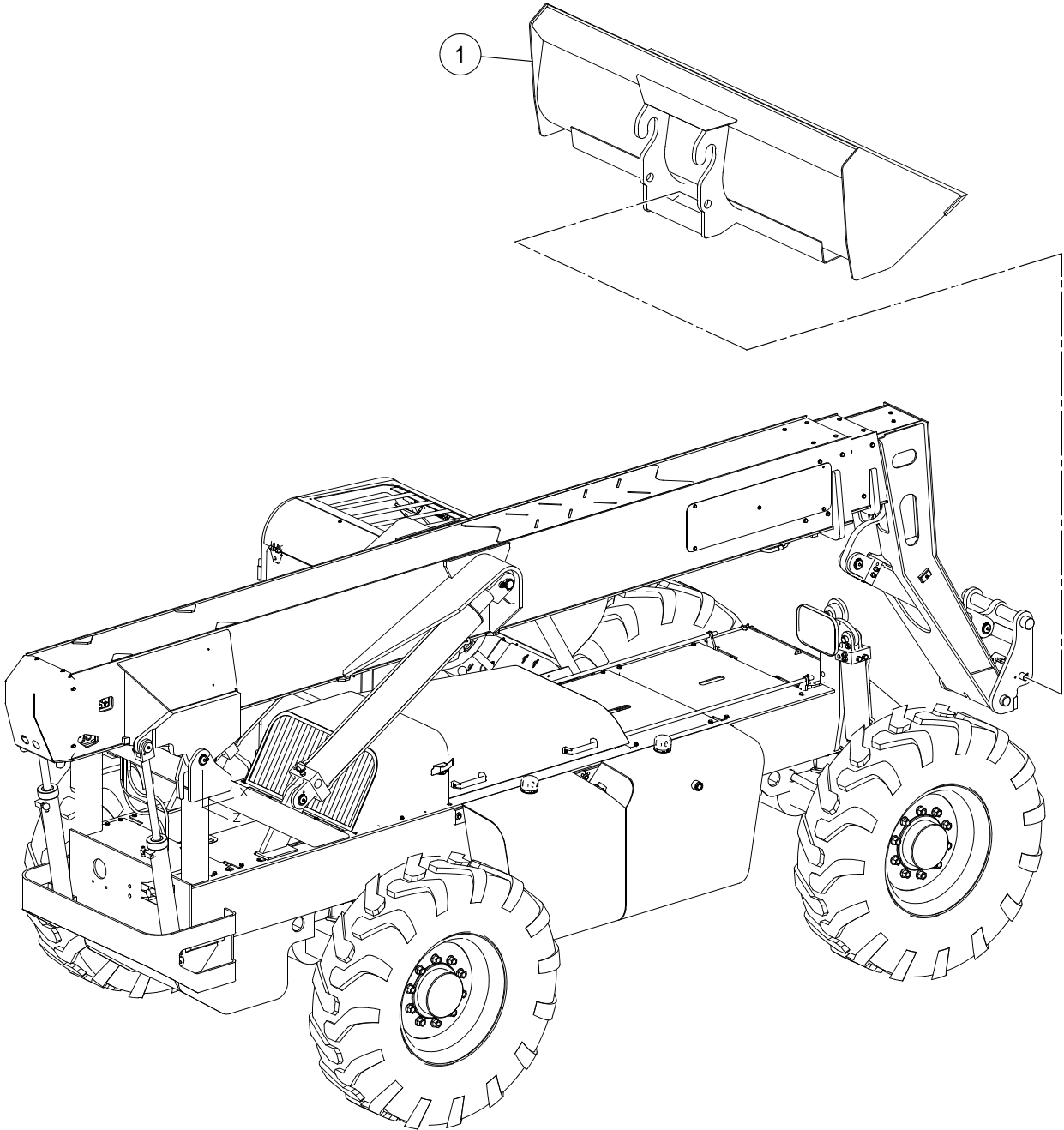
TRUSS BOOM INSTALLATION

BOM 59149443

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59199513	Truss Boom - 12 Ft	1	

LOAD BUCKET INSTALLATION - OPTIONAL

Dwg D59209460/00



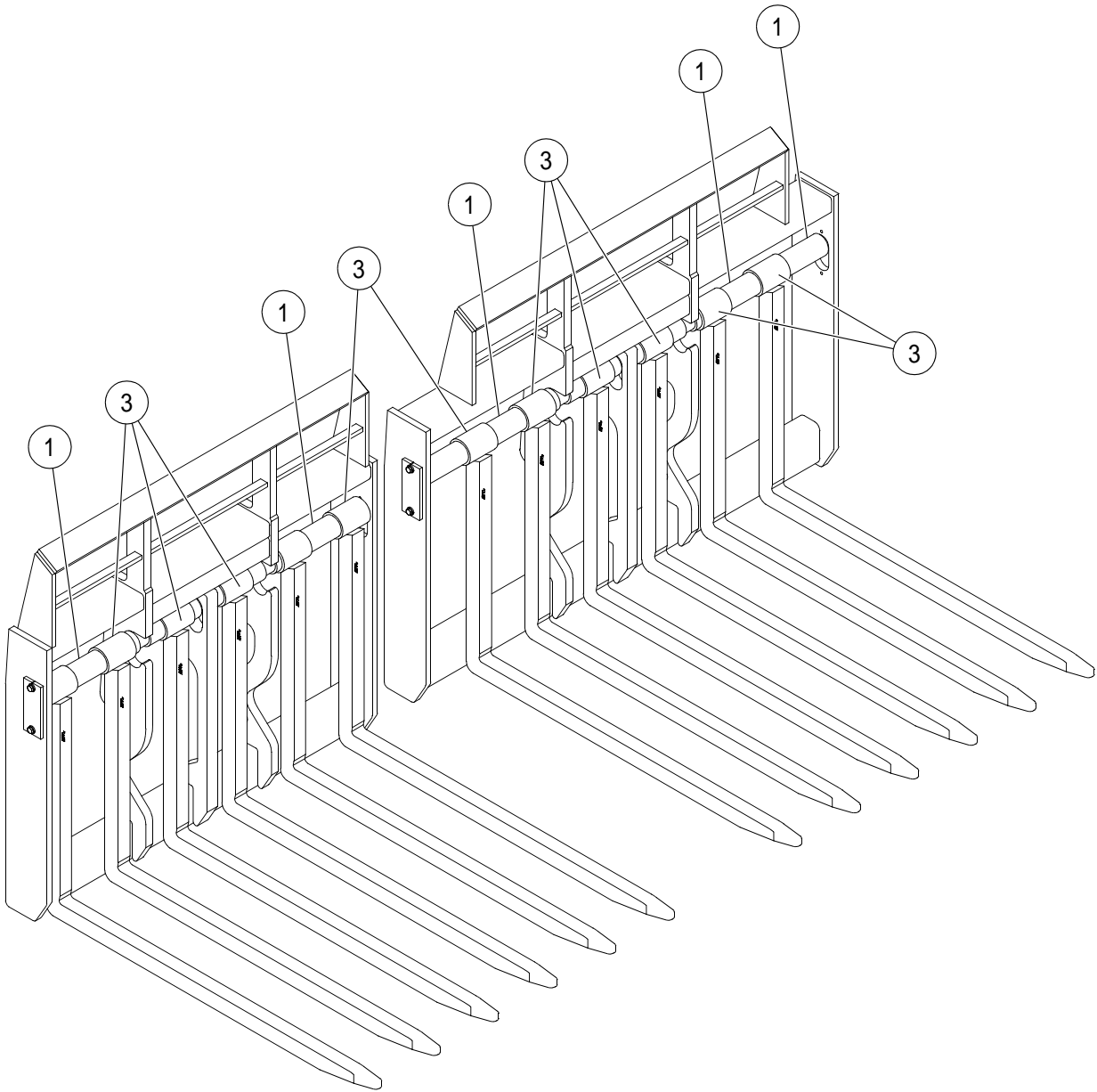
LOAD BUCKET INSTALLATION - OPTIONAL

BOM 59149476

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59149484	Load Bucket	1	1.75 Cubic Yards

BLOCK FORKS INSTALLATION

Dwg 13360185/01



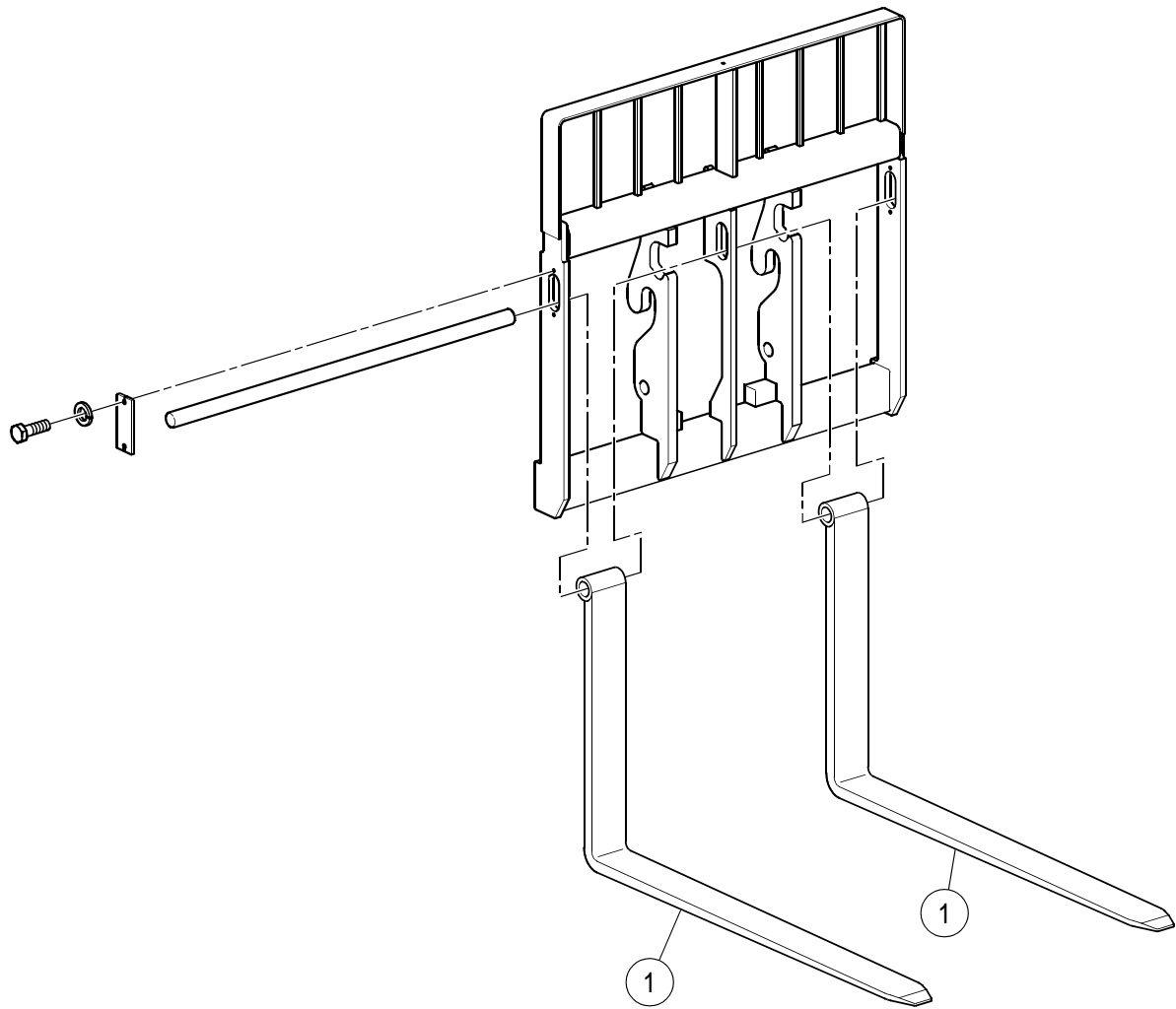
BLOCK FORKS INSTALLATION

BOM 58851288, 58851296

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59493304	Bulk Hose - 48" Carriage	1	2.490 Ft.
-	59493304	Bulk Hose - 60" Carriage	1	3.486 Ft.
3	13360029	Block Fork	6	2 x 1.5 x 45

TAPERED FORK INSTALLATION

Dwg D59460527/00



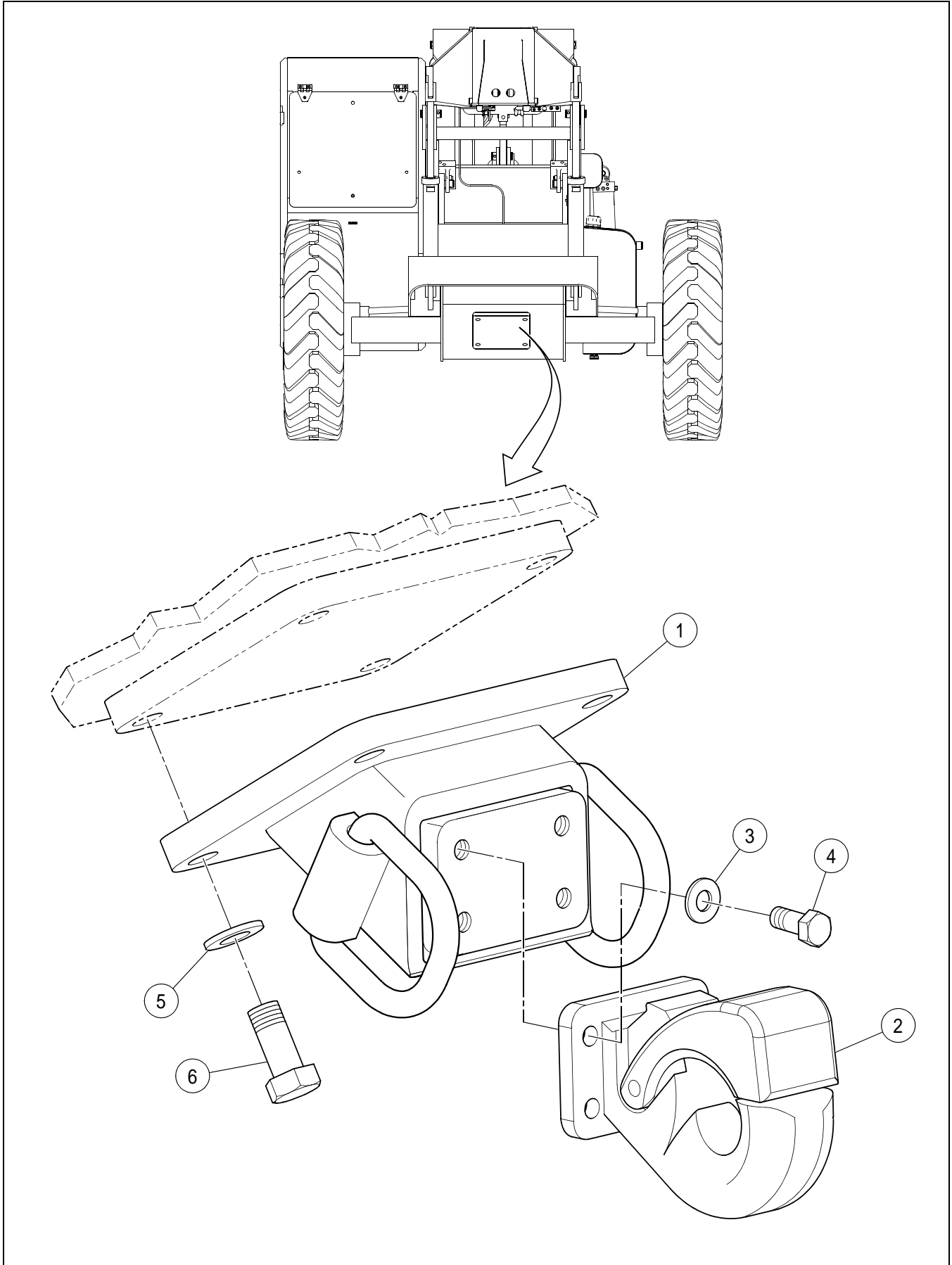
TAPERED FORK INSTALLATION

BOM 59248146, 59248120, 59248138, 59248153, 13285846, 59460527, 59474015

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59272583	48" Tapered Fork	2	2.25 x 5 x 48
-	59272591	60" Tapered Fork	2	2.25 x 5 x 60
-	59460931	48" Tapered Fork	2	2.00 x 5 x 48
-	59460949	60" Lumber Fork	2	2.00 x 5 x 60
-	59272609	48" Fully Tapered Fork	2	1.75 x 7 x 48
-	59272617	60" Fully Tapered Fork	2	1.75 x 7 x 60
-	13268164	72" Tapered Fork	2	2.25 x 5 x 72

PINTLE HOOK INSTALLATION - OPTIONAL

Dwg D13306261/01



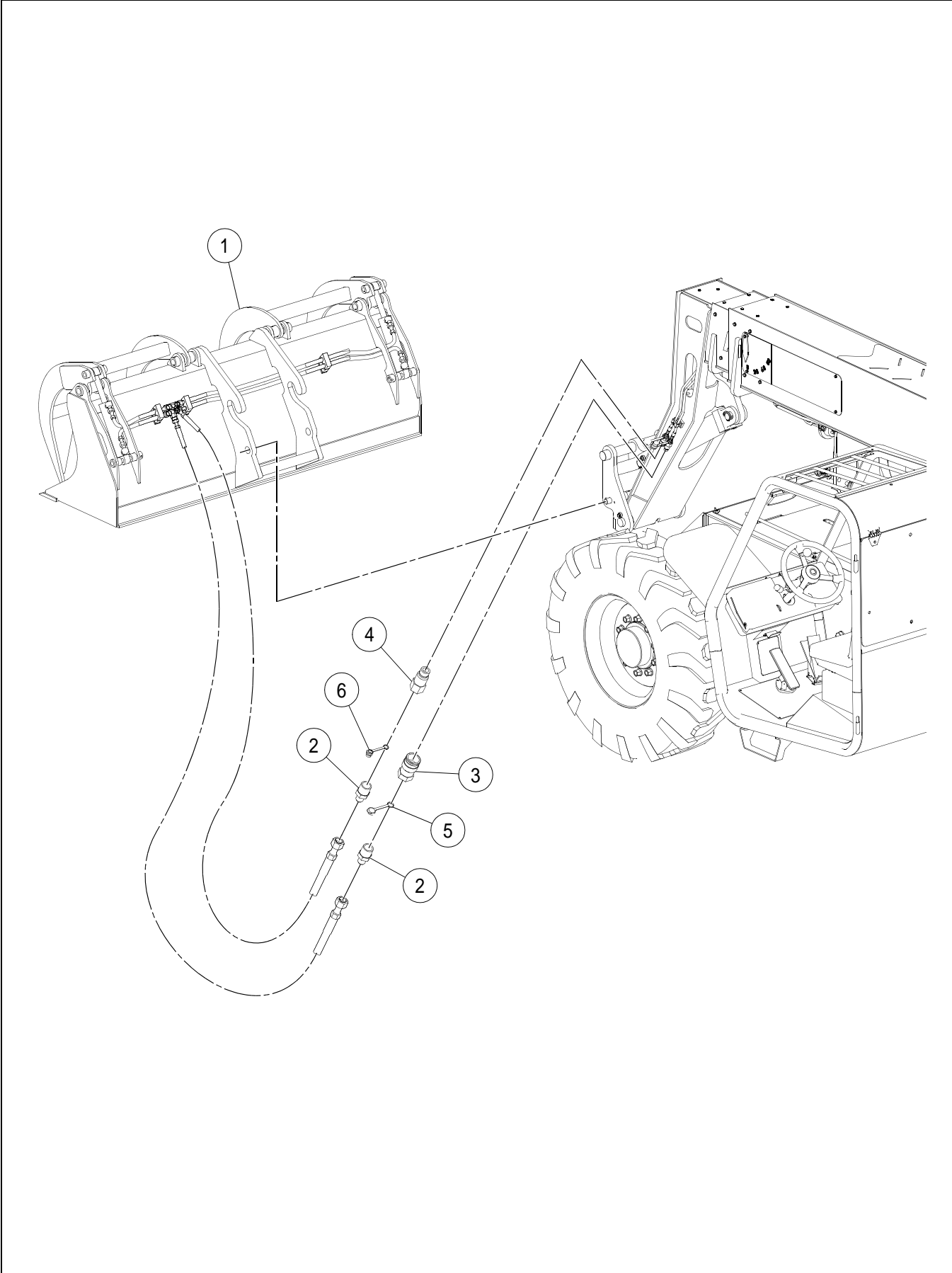
PINTLE HOOK INSTALLATION - OPTIONAL

BOM 13306261

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13326327	Pintle Hook Mounting Plate	1	
2	13326095	Pintle Hook	1	
3	95922399	Washer, Zinc Plated	4	1/2
4	95919551	HHCS, Zinc Plated	4	1/2 x 13 x 1.250
5	95922423	Flatwasher, Zinc Plated	4	3/4
6	95920021	HHCS, Zinc Plated	4	3/4 x 10 x 1.75

SCRAP GRAPPLE BUCKET INSTALLATION - OPTIONAL

Dwg D13259361/00



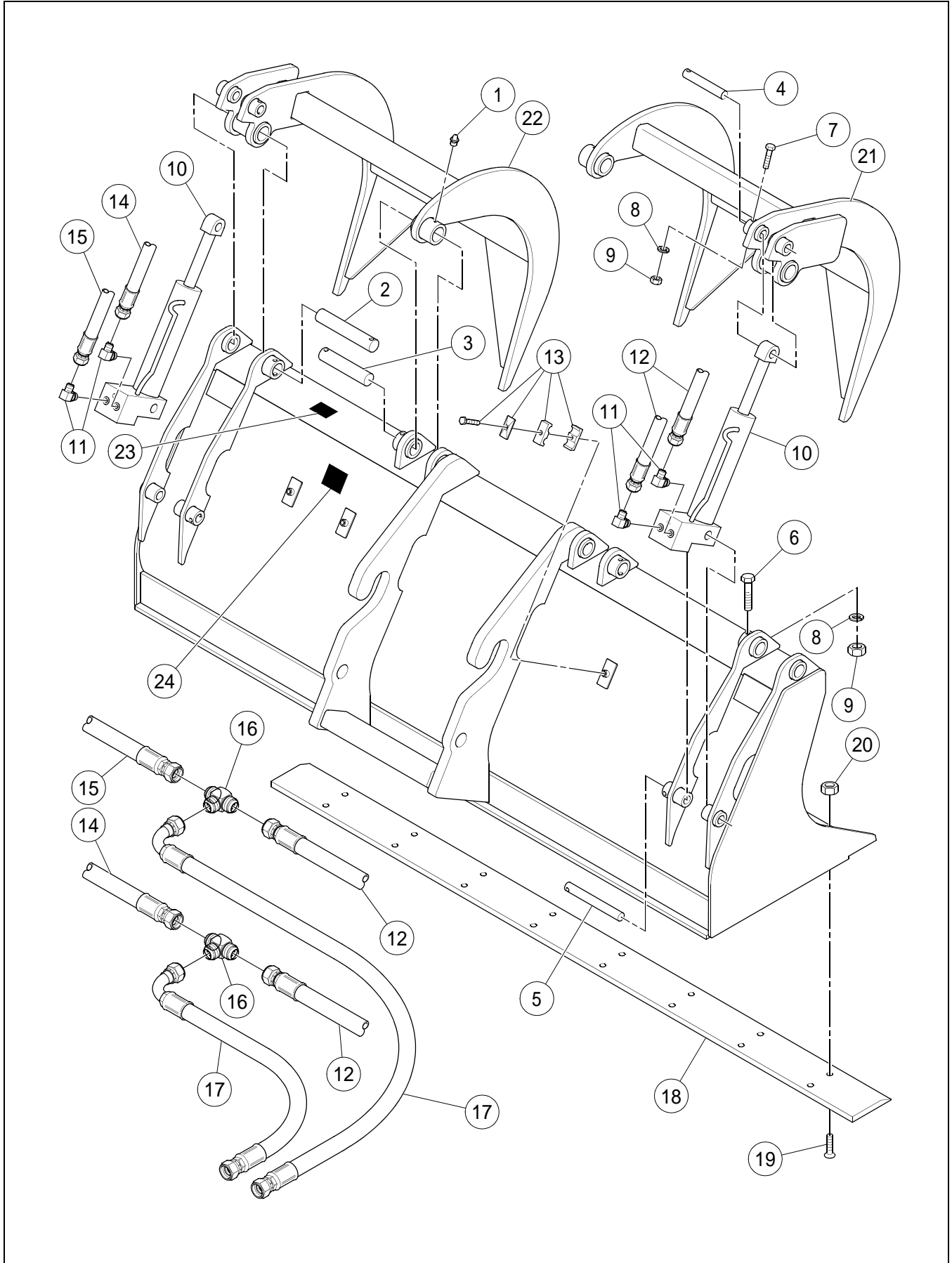
SCRAP GRAPPLE BUCKET INSTALLATION - OPTIONAL

BOM 13259361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Scrap Grapple Bucket Assembly	1	See Page F - 50.
2	95231031	Adapter	2	
3	59096735	Coupler	1	
4	59096743	Nipple	1	
5	59096750	Coupler Dust Cap	1	
6	59096768	Nipple Dust Cap	1	

SCRAP GRAPPLE BUCKET ASSEMBLY - OPTIONAL

Dwg D13303045/01



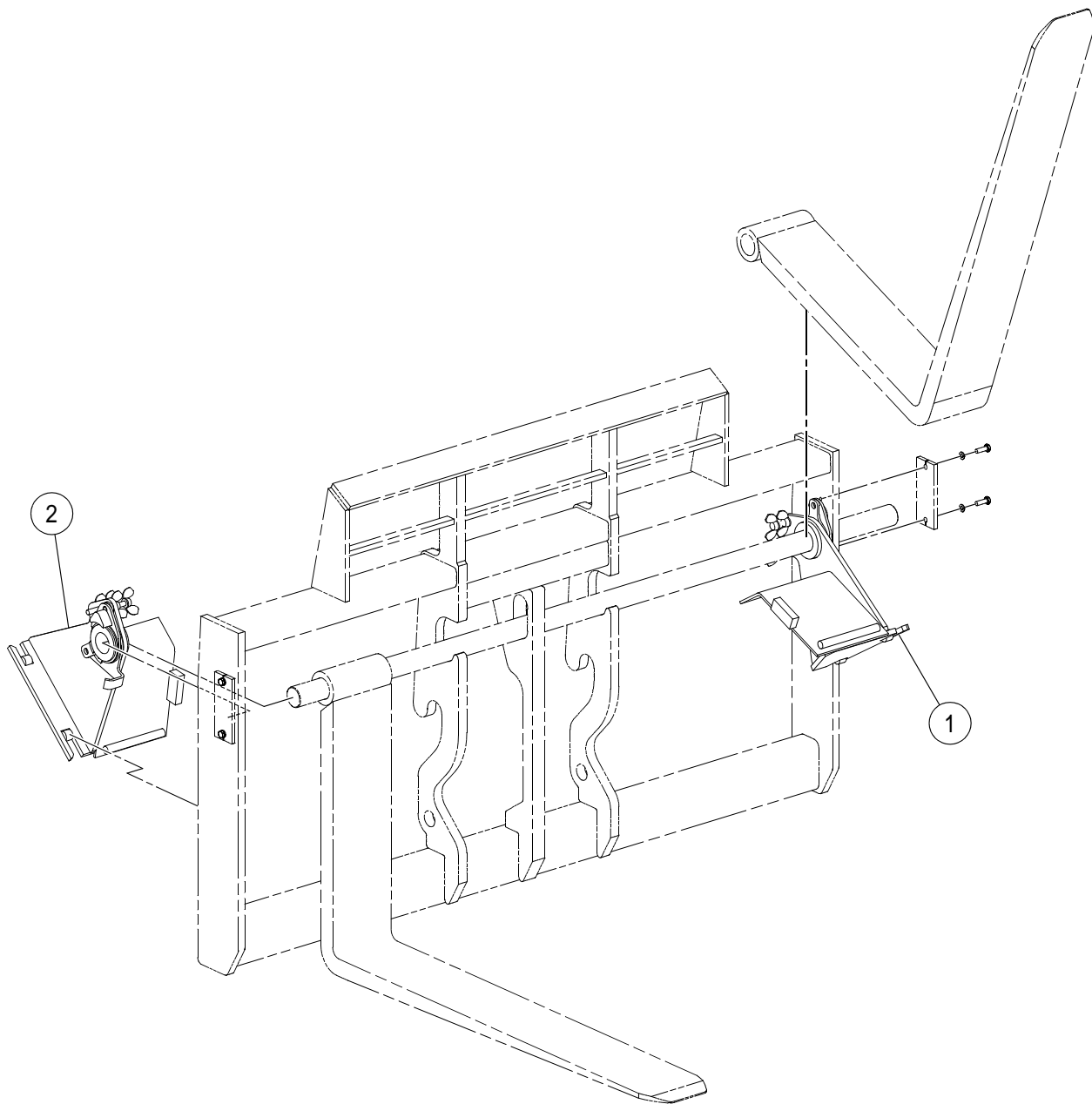
SCRAP GRAPPLE BUCKET ASSEMBLY - OPTIONAL

BOM 13259387

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13284211	Grease Fitting	4	
2	13284229	Pin	2	
3	13284237	Pin	2	
4	13284245	Pin	2	
5	13284252	Pin	2	
6	13284260	HHCS	4	3/8 x 24 x 3.0
7	13284278	HHCS	4	3/8 x 24 x 2.5
8	13284286	Lockwasher	8	3/8
9	13284294	Hex Nut	8	3/8 x 24
10	59110932	Cylinder	2	
-	59231282	- Seal Kit	2	
11	13284302	Elbow, 90°	4	
12	13284310	Hose Assembly	2	70.0"
13	13284328	Clamp	3	
14	13284336	Hose Assembly	1	21.0"
15	13284344	Hose Assembly	1	23.0"
16	13284351	Fitting, Tee	2	
17	13284369	Hose Assembly	2	76.0"
18	13224746	Cutting Edge	1	
19	13266754	Bolt	8	
20	13266762	Nut	8	
21	13284377	Grapple Hook, RH	1	
22	13284385	Grapple Hook, LH	1	
23	13284393	Decal: Danger	2	
24	13284401	Decal: High Pressure Hydraulic Fluid	1	

DRYWALL HANDLER INSTALLATION - OPTIONAL

Dwg D13252895/02



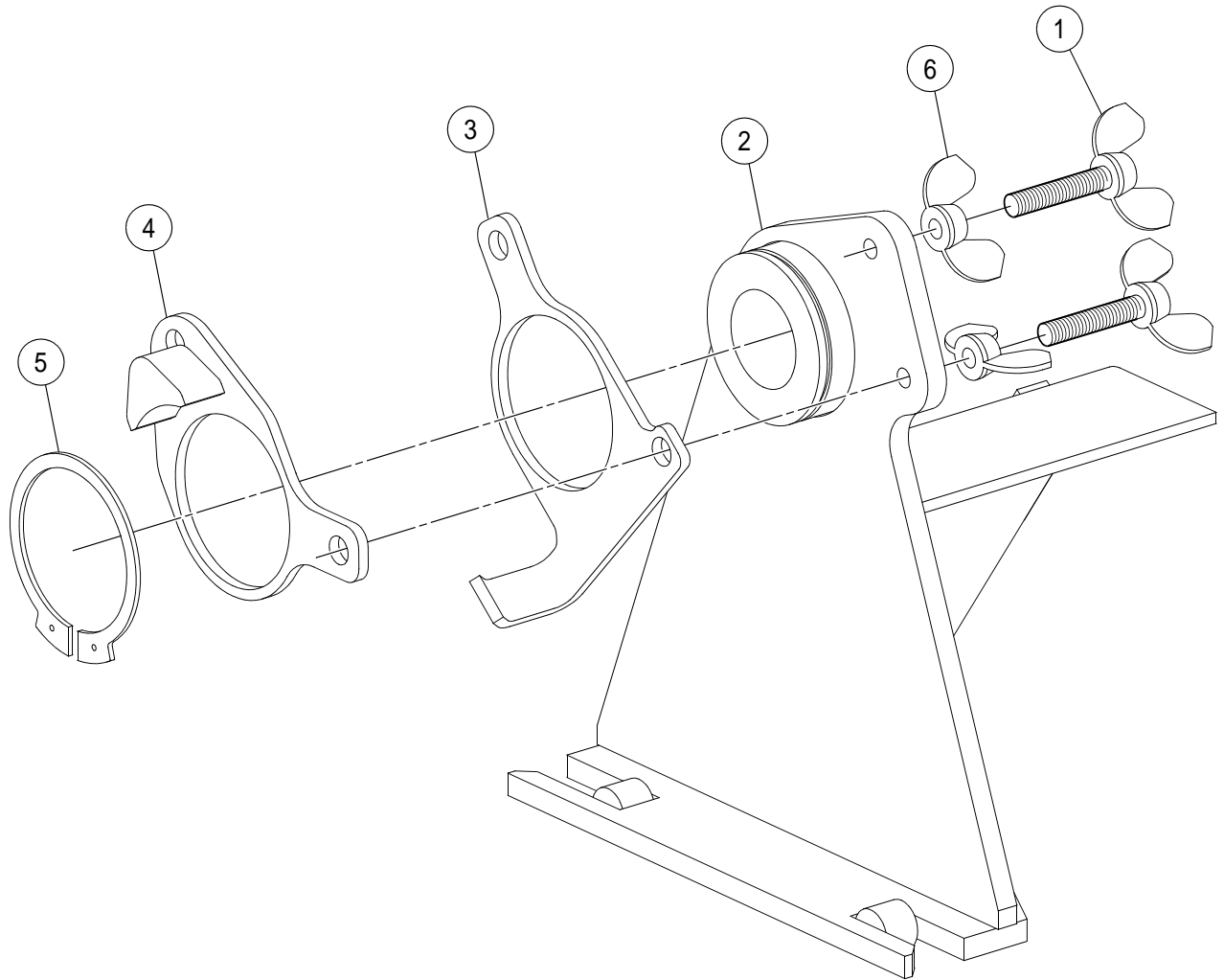
DRYWALL HANDLER INSTALLATION - OPTIONAL

BOM 13252895

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Drywall Handler Assembly, Left Hand	1	See Page F - 54.
2	NSVA	Drywall Handler Assembly, Right Hand	1	See Page F - 56.

DRYWALL HANDLER ASSEMBLY - LEFT HAND - OPTIONAL

Dwg D13259320/02



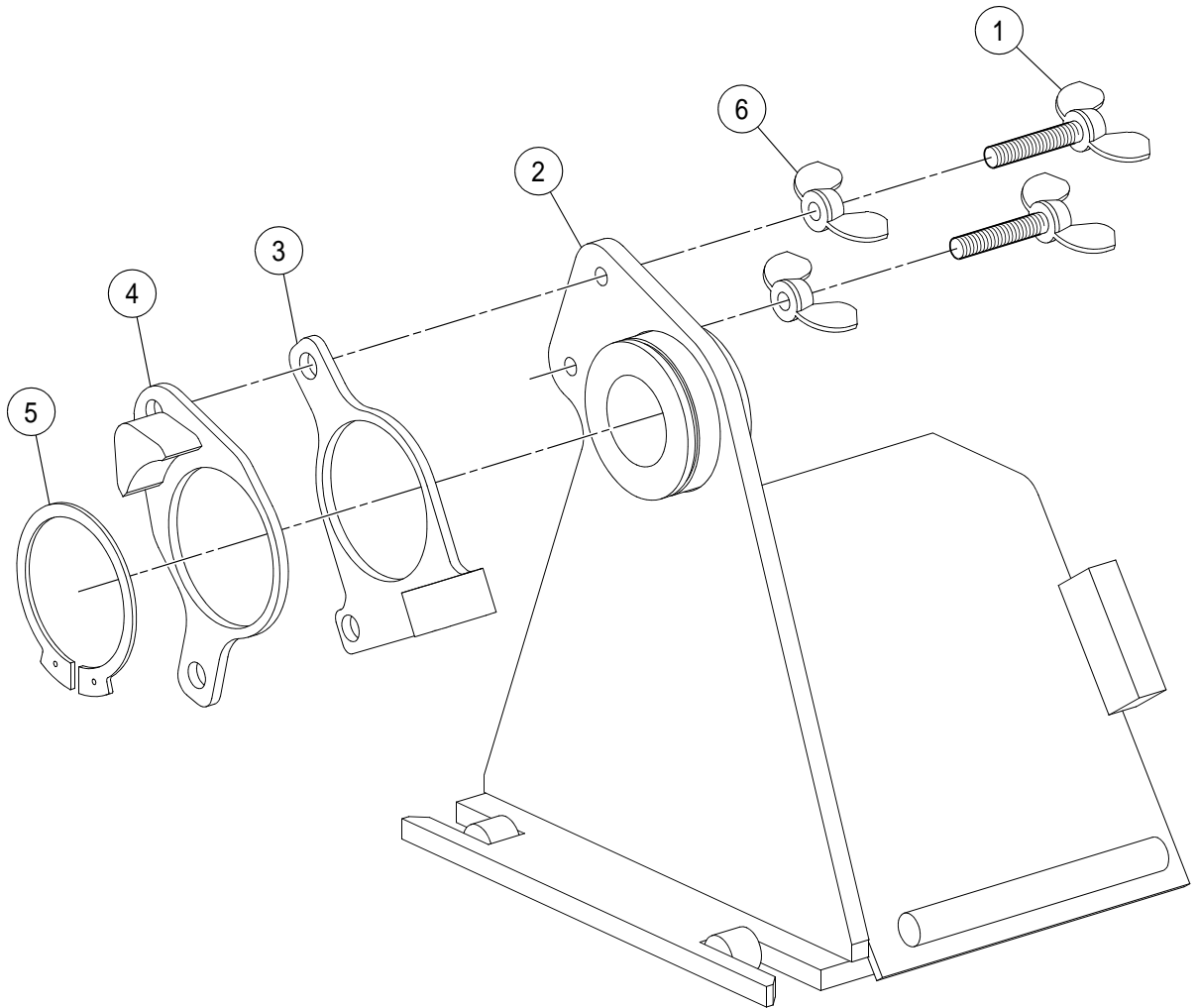
DRYWALL HANDLER ASSEMBLY - LEFT HAND - OPTIONAL

BOM 13259320

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96744016	Wing Screw, Zinc Plated	2	M12 x 1.75 x 60
2	13259304	Fork Rest, LH	1	
3	13252747	Catch Plate, LH	1	
4	13252788	Float Stop, LH	1	
5	95428520	Retaining Ring	1	
6	96724752	Wing Nut, Zinc Plated	2	M12 x 1.75 Cl 5

DRYWALL HANDLER ASSEMBLY - RIGHT HAND - OPTIONAL

Dwg D13259338/02



DRYWALL HANDLER ASSEMBLY - RIGHT HAND - OPTIONAL

BOM 13259338

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	96744016	Wing Screw, Zinc Plated	2	M12 x 1.75 x 60
2	13259312	Fork Rest, RH	1	
3	13252754	Catch Plate, RH	1	
4	13252796	Float Stop, RH	1	
5	95428520	Retaining Ring	1	
6	96724752	Wing Nut, Zinc Plated	2	M12 x 1.75 Cl 5

*****Always use Ingersoll-Rand Replacement parts!*****

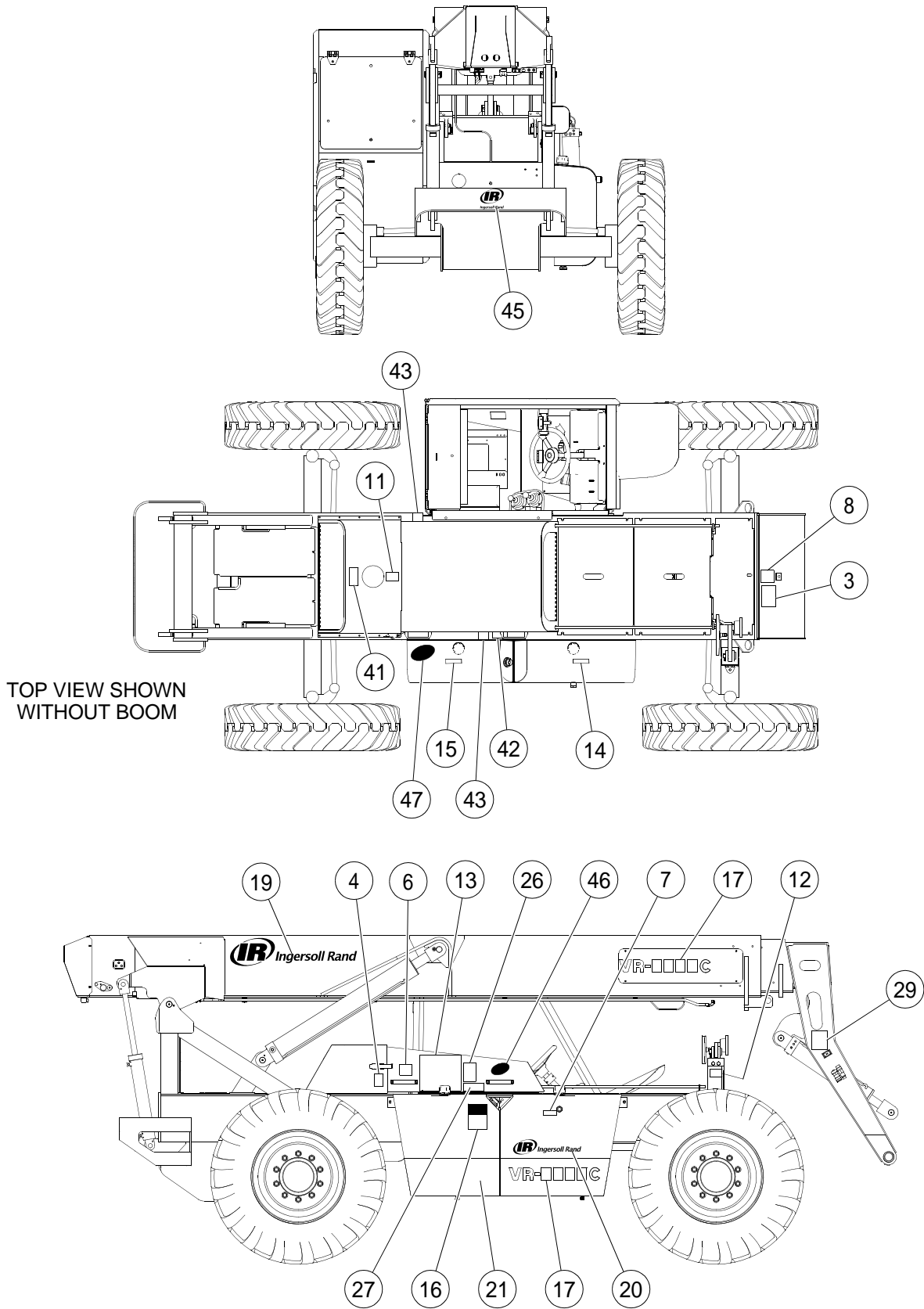


Section G - DECALS



DECAL INSTALLATION - SHEET 1 OF 3

Dwg 13259445/06



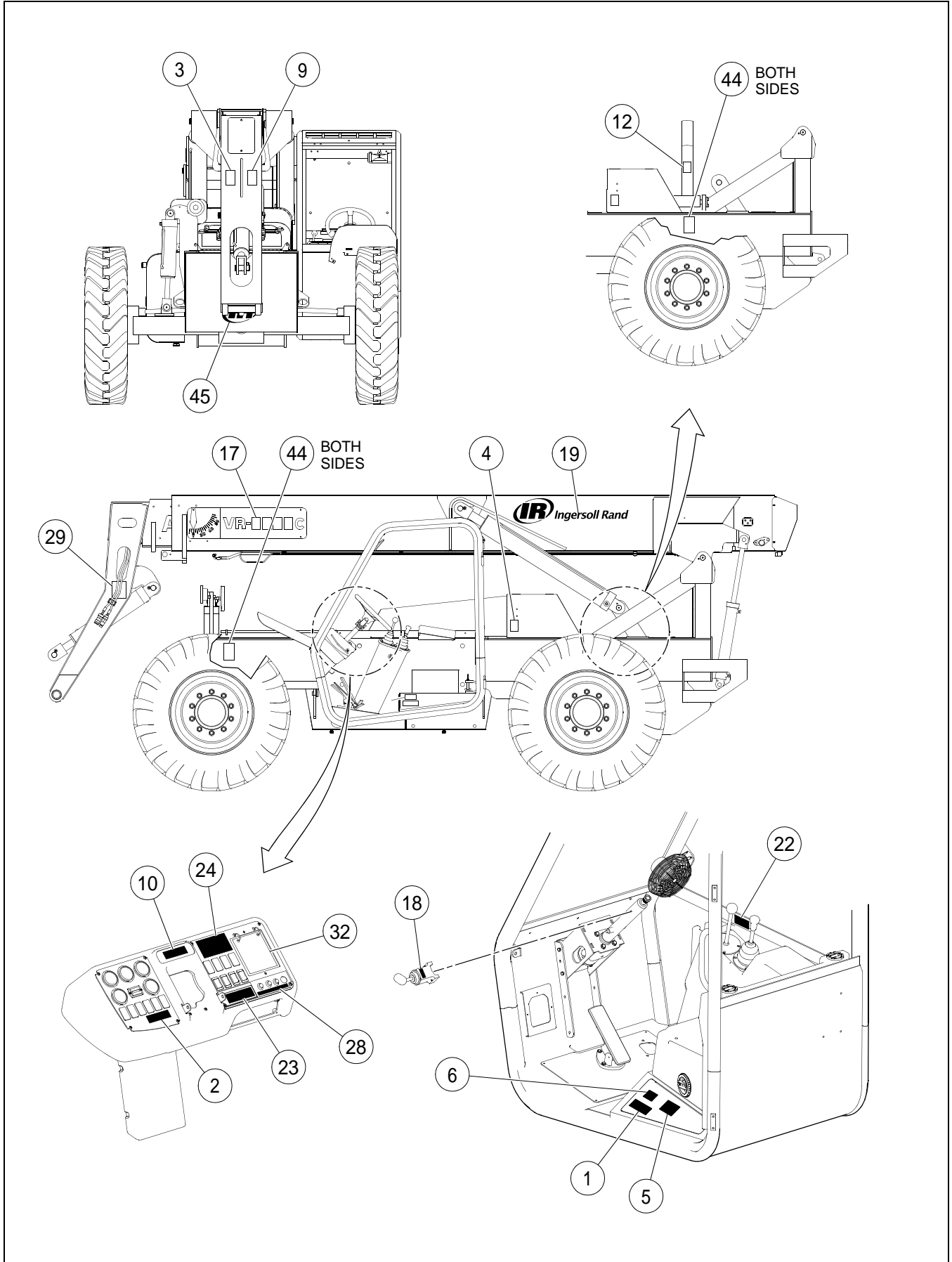
DECAL INSTALLATION - SHEET 1 OF 3

BOM 13259569

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	58965583	Decal: Falling Object Hazard Warning	2	
4	59132142	Decal: Rotating Fan and Belts Warning	2	
6	59132118	Decal: Operation Warning	2	
7	59087361	Decal: Hydraulic Oil Level	1	
8	58965526	Decal: Crush Warning	1	
11	59132134	Decal: Pressure Hazard Warning	1	
12	59455097	Decal: Frame Tipping Hazard Warning	1	
13	13375415	Decal: Lube Chart VR-843C (Eff S/N 175806)	1	
-	13340161	Decal: Lube Chart VR-843C (Prior to S/N 175806)	1	
14	13199344	Decal: Hydraulic Oil	1	
15	59087569	Decal: Diesel Fuel	1	
16	13220157	Decal: Machine Runover	1	
17	13315890	Decal: VR-843C	3	
19	13855572	Decal: Signature	2	
20	13855598	Decal: Signature	1	
21	59132191	Stripe	1	10.5"
25	13345020	Decal: Battery Disconnect (Not Shown)	1	
26	59179457	Decal: Rollover-Tire	1	
27	13409719	Decal: Tire Inflation	1	
29	58851551	Decal: Carriage Shift	2	
41	59147314	Decal: Radiator Fill	1	
42	59048926	Decal: Unmetered Ether	1	
43	59166231	Decal: Moving Machine	2	
45	13855648	Decal: I-R Corporate Monogram	2	
46	13198353	Decal: I-R Genuine Parts	1	
47		This Item not used with this Assembly		

DECAL INSTALLATION - SHEET 2 OF 3

Dwg 13259445/06



DECAL INSTALLATION - SHEET 2 OF 3

BOM 13259569

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59153312	Decal: OSHA Notice	1	
2	13316914	Decal: Rollover Warning	1	
3	58965583	Decal: Falling Object Hazard Warning	2	
4	59132142	Decal: Rotating Fan and Belts Warning	2	
5	13170493	Decal: No Riders	1	
6	59132118	Decal: Operation Warning	2	
9	58965617	Decal: Falling Hazard	1	
10	19292739	Decal: Electrical Hazard	1	
12	59455097	Decal: Frame Tipping Hazard Warning	1	
17	13315890	Decal: VR-843C	3	
18	59132084	Decal: F-N-R	1	
19	13855572	Decal: Signature	2	
22	59454769	Decal: Frame Level	1	
23	13316815	Decal: Park Brake Notice	1	
24	13316823	Decal: Unpinned Attachment	1	
28	13316872	Decal: Engine/RAS Lights	1	
29	58851551	Decal: Carriage Shift	2	
32	NSS	Load Chart Assembly	1	
-	NSVA	- Flip Chart Assembly	1	See Page G - 8.
-	13334982	- Load Chart: Q/A Carriages	1	
-	13334990	- Load Chart: S/T Carriages	1	
-	13335005	- Load Chart: 1.75 Cubic Yard Bucket	1	
-	13335013	- Load Chart: 12 Ft Truss Boom	1	
-	13335021	- Load Chart: 72" Swing Carriage	1	
-	13335039	- Load Chart: 72" Forks	1	
-	13335047	- Load Chart: Scrap Grapple Bucket	1	
-	13360250	- Load Chart: Stabilizer	1	
-	13340237	- Load Chart: Cover Sheet	1	
44	59166314	Decal: Crush Area	4	
45	13855648	Decal: I-R Corporate Monogram	2	

DECAL INSTALLATION - SHEET 3 OF 3

Dwg 13259445/06

List Only
No Drawing Required

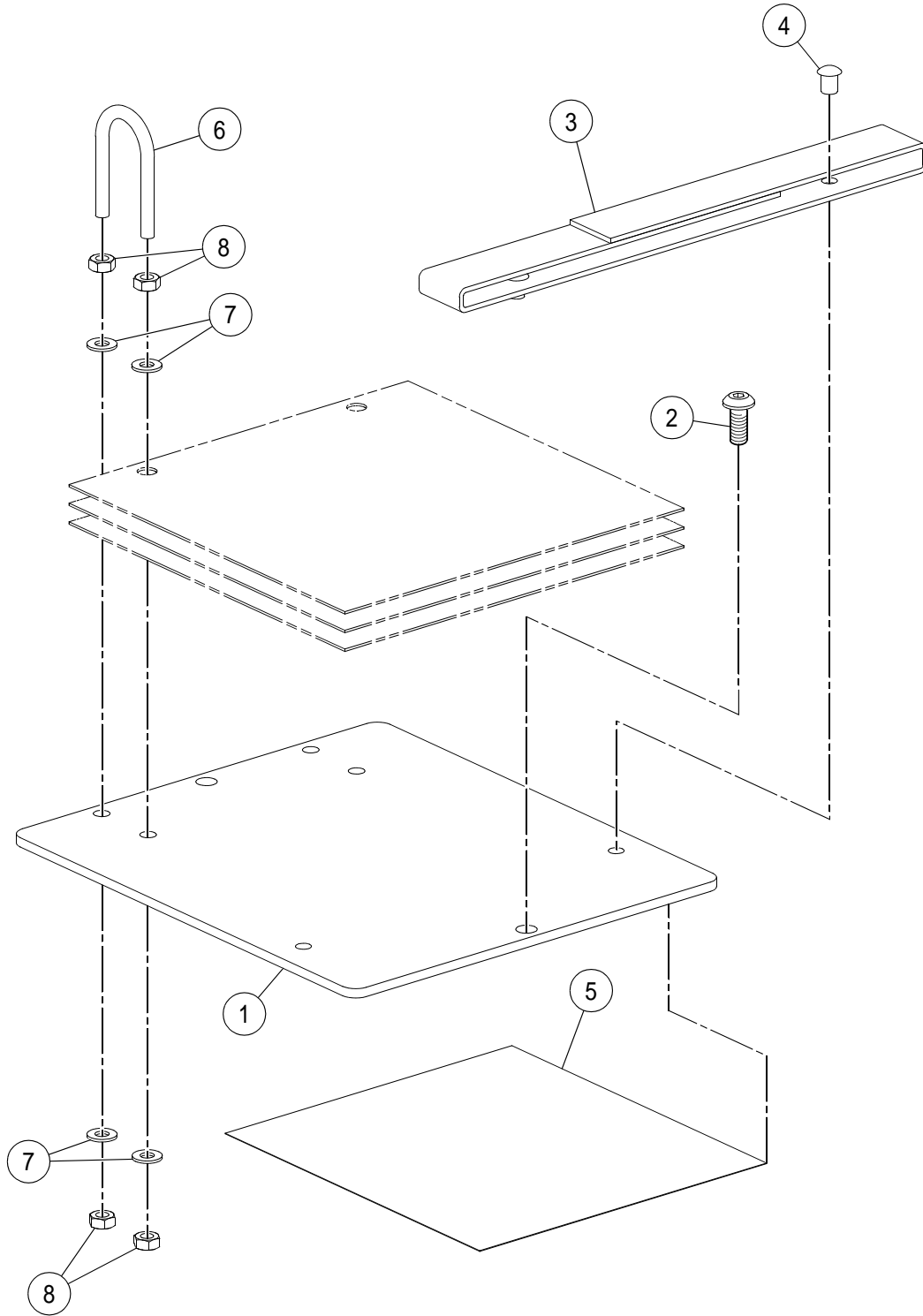
DECAL INSTALLATION - SHEET 3 OF 3

BOM 13259569

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
50	13285002	Decal: Warning - Buckle Up (Not Shown)	1	
51	13285010	Decal: Warning Tag - ROPS (Not Shown)	1	
52	13285028	Decal: Warning Tag - ROPS Installation (Not Shown)	1	
**	13341581	Decal Kit (contains Items 1 thru 12, 14 thru 29 and 41 thru 52. Order Items 13 and 32 separately)	1	
**	59947507	Beige Paint	1	Gallon
**	35304286	Beige Paint	1	Spray Can

FLIP CHART ASSEMBLY

Dwg D13267455/00



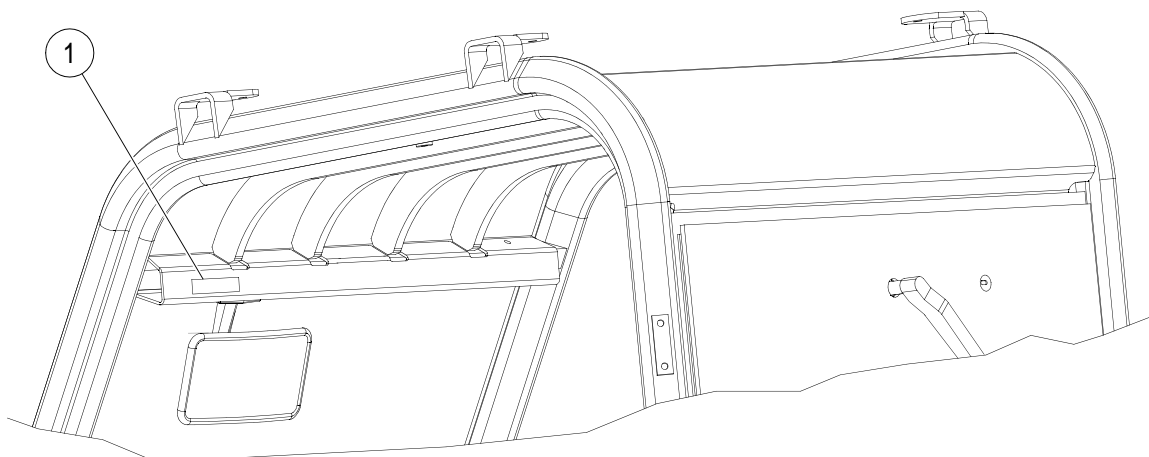
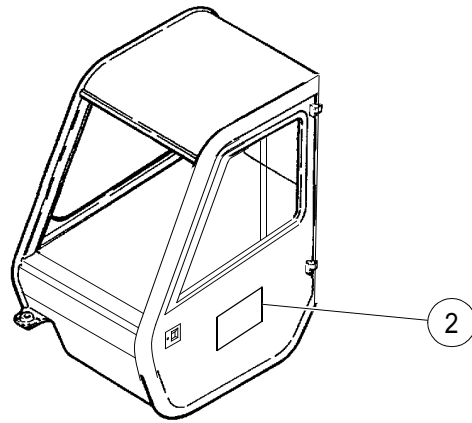
FLIP CHART ASSEMBLY

BOM 13443239, 13267455

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13267448	Flip Chart Plate	1	
2	59148569	HSBHCS	2	M5 x 0.8 x 12
3	13300124	Strap	1	
4	58869918	Rivet	2	
5	13443221	Decal: Fuse Panel - Effective with S/N 187990	1	
-	13345038	Decal: Fuse Panel - Prior to S/N 187990	1	
6	59168823	U-bolt	2	
7	96738547	Flatwasher, Zinc Plated	8	M4 Hardened CI 200
8	96703756	Hex Nut, Zinc Plated		M4 x 0.7 CI 8

CAB DECAL INSTALLATION

Dwg D13199369/00



CAB DECAL INSTALLATION

BOM 13199369

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1		This Item not used with this Assembly		
2	54612494	Decal: I-R Corporate Monogram	1	

*****Always use Ingersoll-Rand Replacement parts!*****

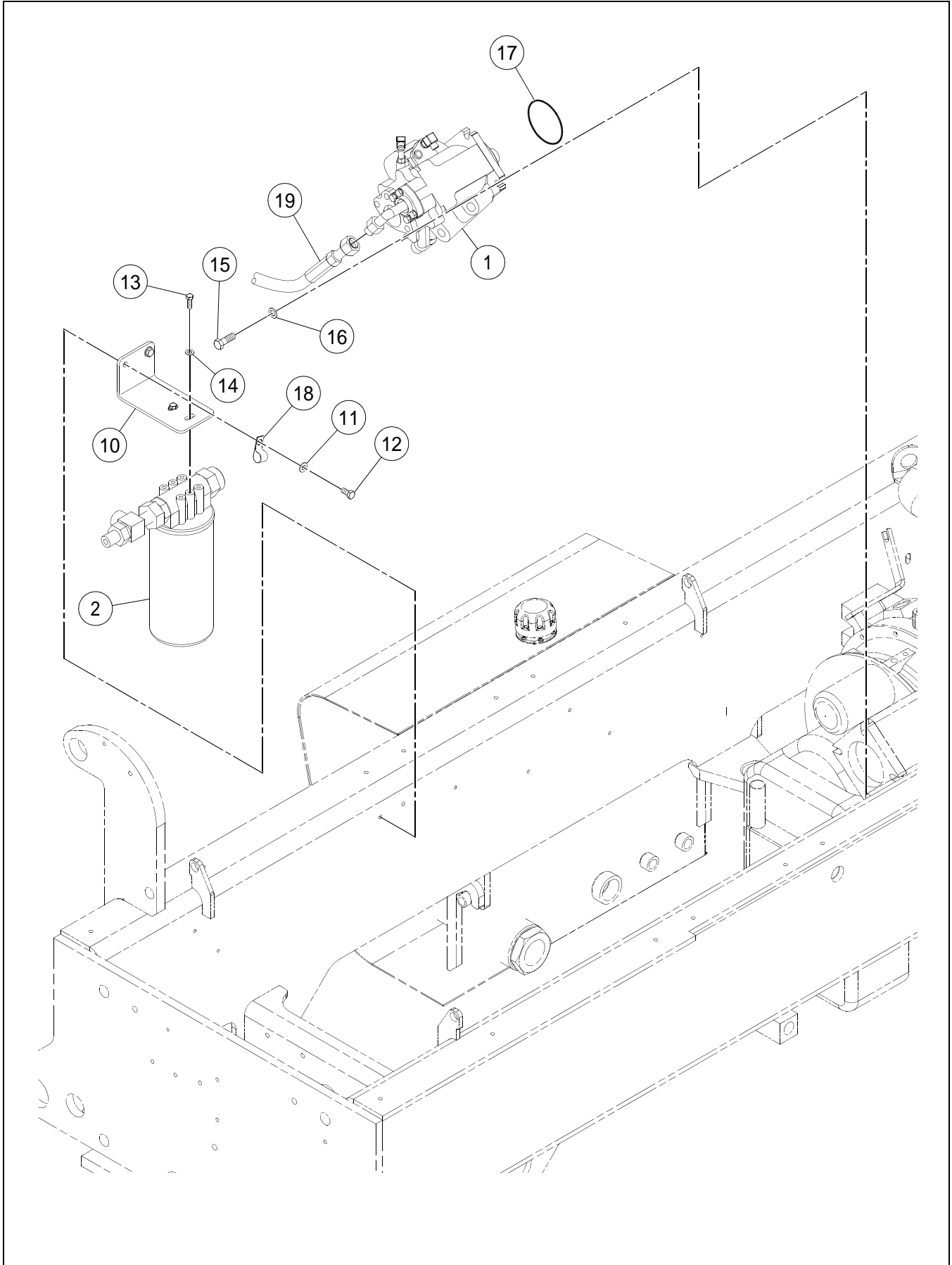


Section H - HYDRAULICS



HYDRAULIC PUMP, FILTER AND TANK ADAPTERS INSTALLATION

Dwg 13259726/01



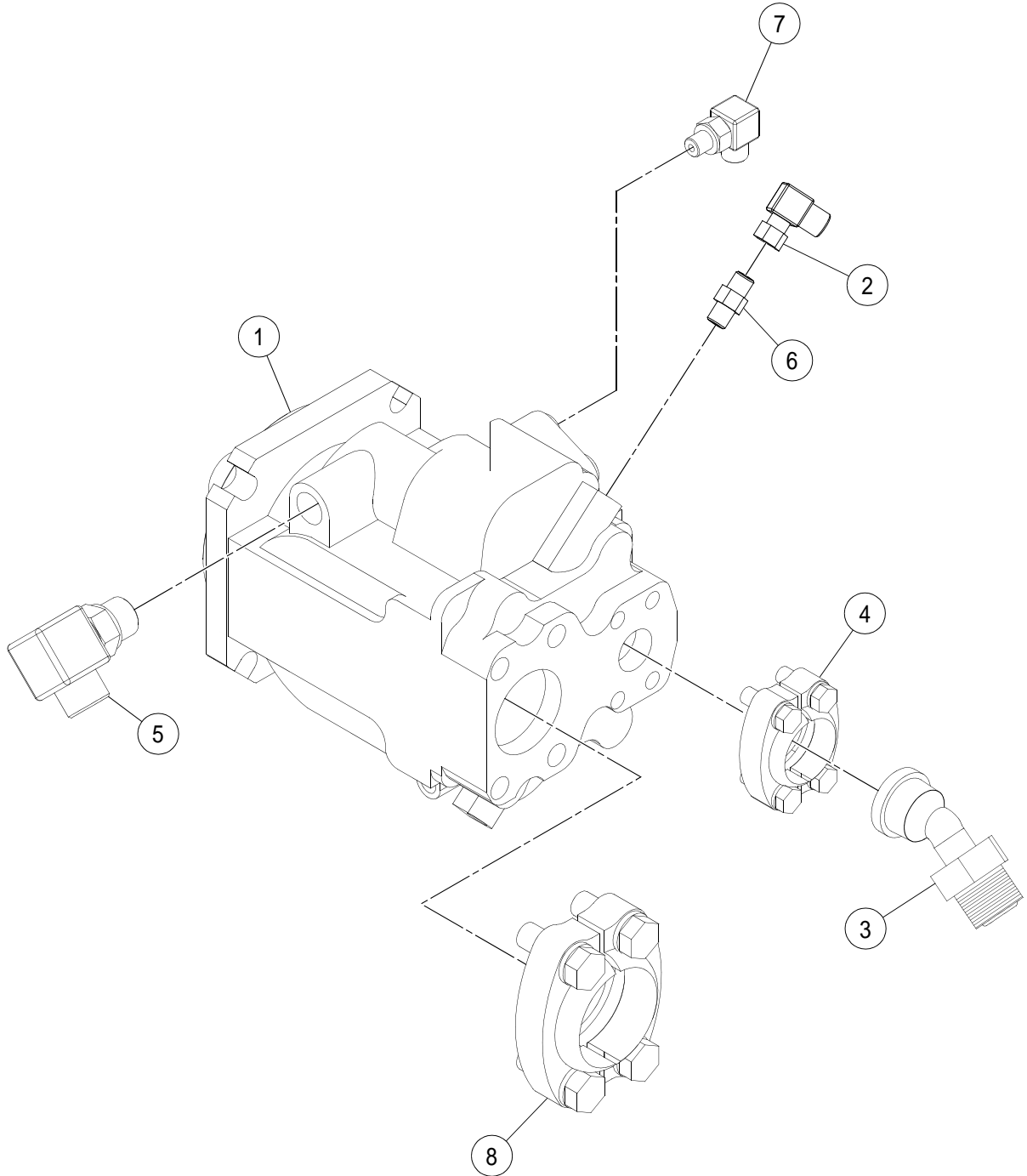
HYDRAULIC PUMP, FILTER AND TANK ADAPTERS
INSTALLATION

BOM 13346200

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Hydraulic Pump Assembly	1	See Page H - 4.
2	NSVA	Hydraulic Filter Assembly	1	See Page H - 10.
10	13168570	Hydraulic Mounting Bracket	1	
11	96741046	Flatwasher, Zinc Plated	2	M10 CI 200
12	96702279	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 20 CI 8.8
13	95920419	HHCS, Zinc Plated	2	5/16 x 18 x 0.75 Grd 8
14	95922365	Flatwasher, Zinc Plated	2	5/16
15	95919569	HHCS, Zinc Plated	2	1/2 x 13 x 1.50 Grd 8
16	59673137	Washer	2	
17	95988721	O-ring	1	
18	59151001	Clamp	1	
19	NSVA	Hydraulic Pump And Filter Hosing Assembly - Effective with S/N 187990	1	See Page H - 12.
-	NSVA	Hydraulic Pump And Filter Hosing Assembly - Prior to S/N 187990	1	See Page H - 14.

HYDRAULIC PUMP ASSEMBLY

Dwg D13259734/00



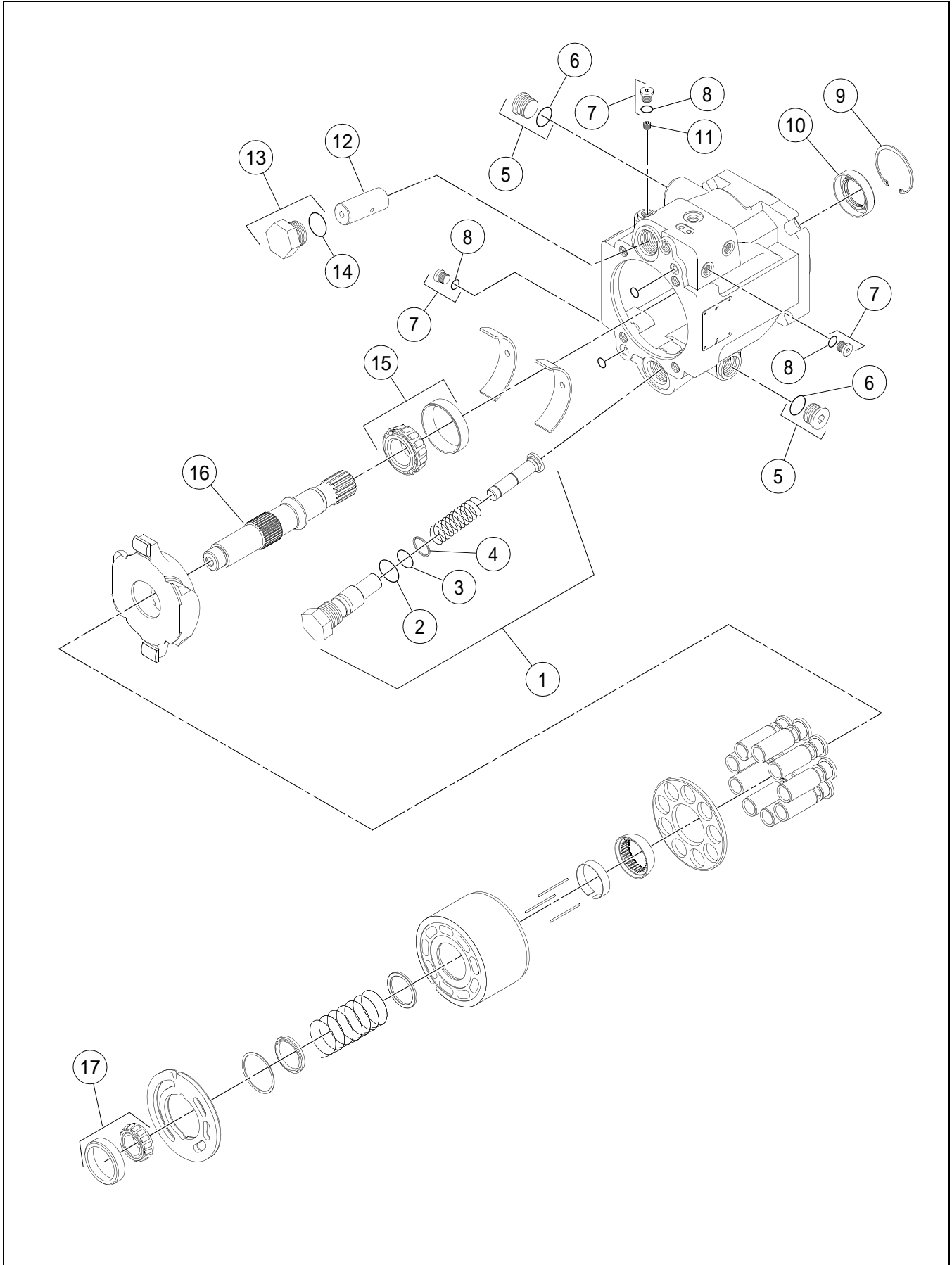
HYDRAULIC PUMP ASSEMBLY

BOM 13346218

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	54535646	Hydraulic Pump	1	See Breakdown H - 6.
-	13284930	ARC - Hydraulic Pump	1	
2	59923458	Adapter	1	
3	58777301	Adapter	1	
4	59378687	Split Flange	1	
5	59922930	Adapter	1	
6	59929182	Adapter	1	
7	59922807	Adapter	1	
8	59866863	Adapter	1	

HYDRAULIC PUMP (54535646) - INTERNAL BREAKDOWN -
SHEET 1 OF 2

Dwg D13245006/01/01



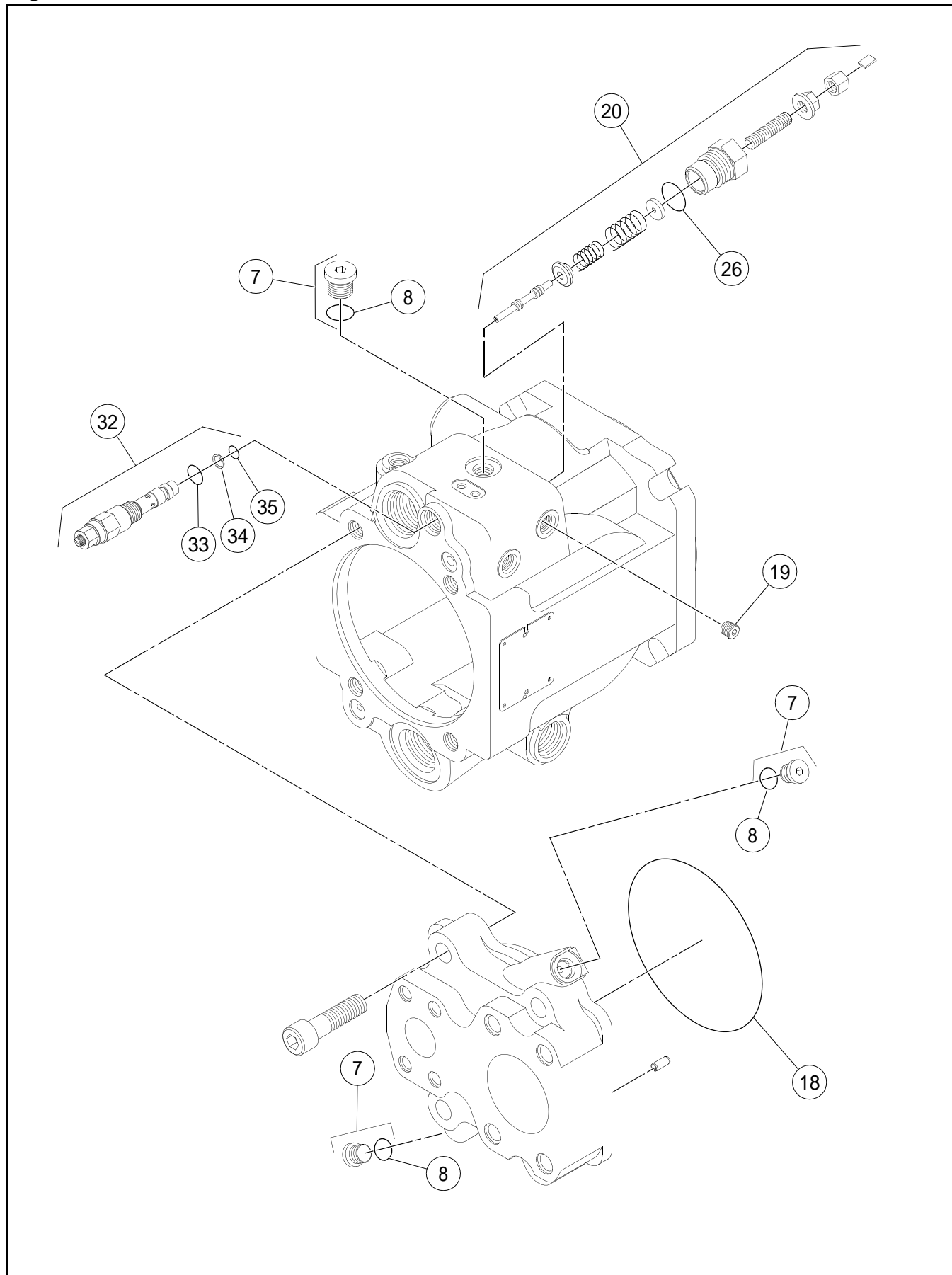
HYDRAULIC PUMP (54535646) - INTERNAL BREAKDOWN -
SHEET 1 OF 2

BOM 54535646

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59154229	Piston Guide	1	
2	59986463	- O-ring	1	
3	59360735	- O-ring	1	
4	59154302	- Backup Ring	1	
5	58891540	Plug	2	
6	59360610	- O-ring	2	
7	59359836	Plug	5	
8	50278894	- O-ring	5	
9	13269600	Orifice	1	
10	13269451	Retaining Ring	1	
11	59154294	Lip Seal	1	
12	13269469	Plug	1	
13	59986463	- O-ring	1	
14	13269477	Servo Piston	1	
15	59154211	Front Kit Bearing	1	
16	13269485	Shaft	1	
17	59154203	Rear Bearing Kit	1	

HYDRAULIC PUMP (54535646) - INTERNAL BREAKDOWN -
SHEET 2 OF 2

Dwg D13245006/01/02



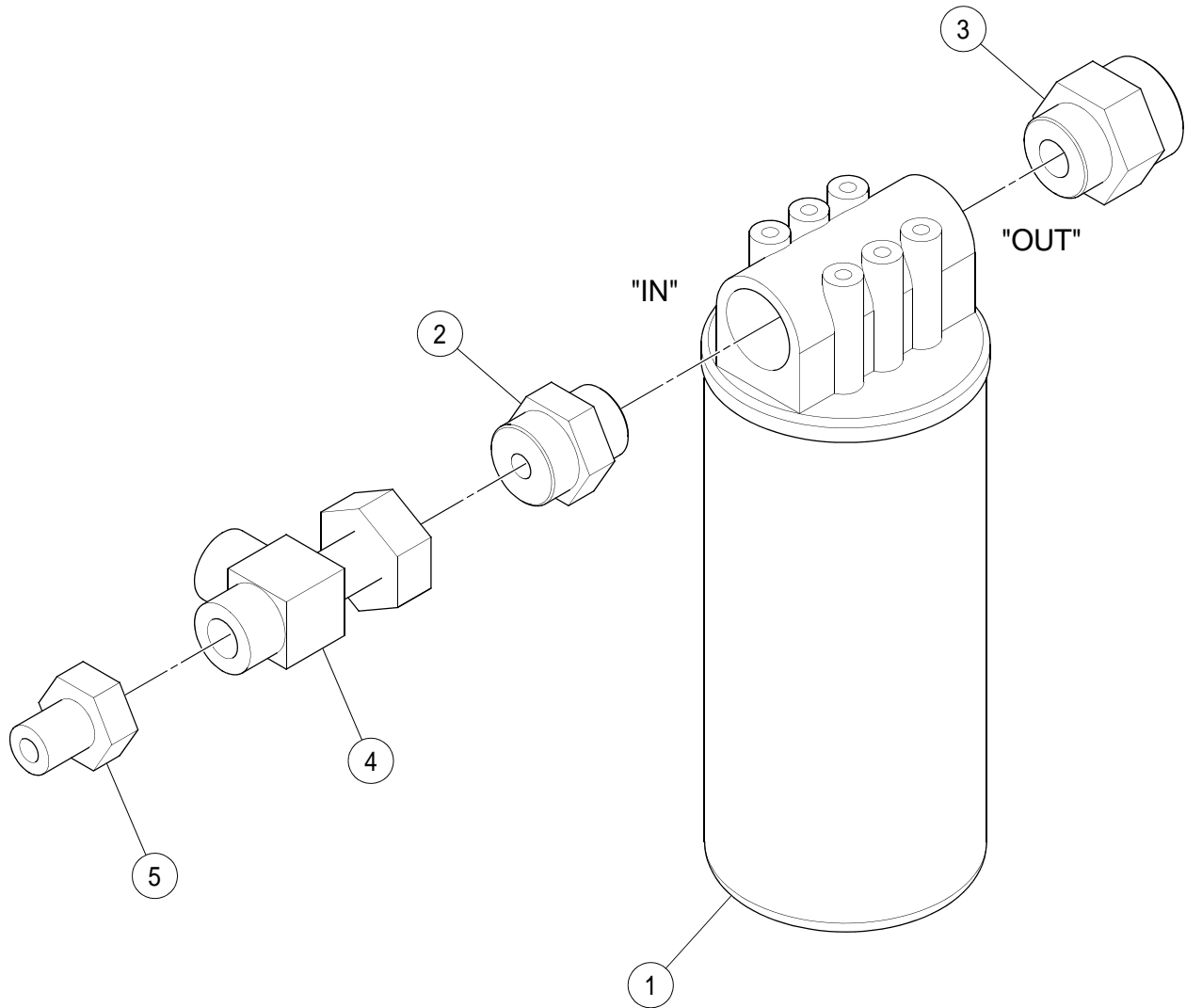
HYDRAULIC PUMP (54535646) - INTERNAL BREAKDOWN -
SHEET 2 OF 2

BOM 54535646

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
7	59359836	Plug	5	
8	50278894	- O-ring	5	
18	59155101	O-ring	1	
19		This item not used with this Assembly		
20	13269493	Control Kit	1	
26	59558650	O-ring	1	
32	13269592	PC Valve Kit	1	
33	58881863	O-ring	1	
34	59154245	Backup Ring	1	
35	59004713	O-ring	1	

HYDRAULIC FILTER ASSEMBLY

Dwg D13183447/00



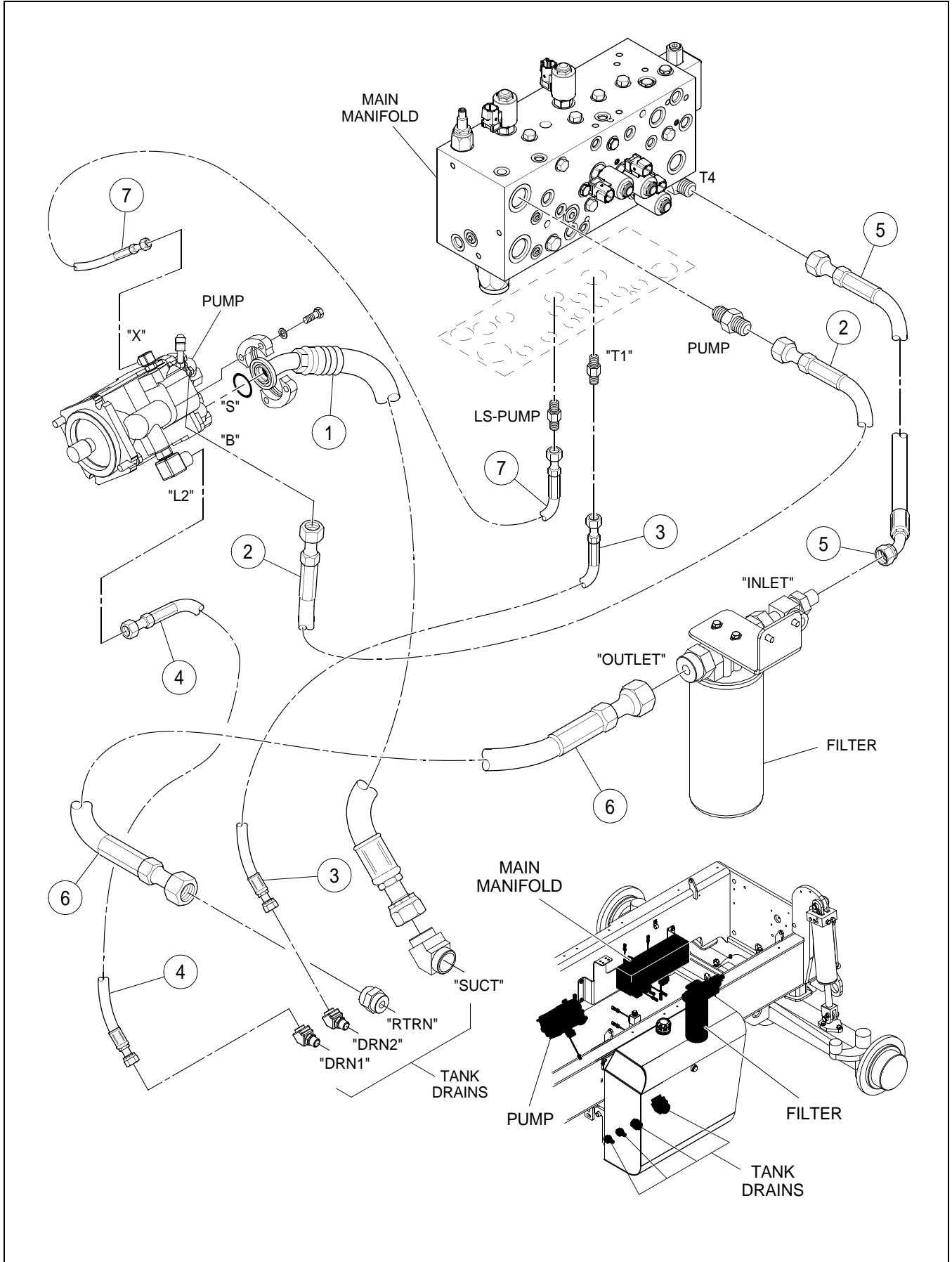
HYDRAULIC FILTER ASSEMBLY

BOM 13173455

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173802	Hydraulic Filter	1	
-	59124677	- Hydraulic Filter Canister	1	
2	59922658	Adapter, Straight	1	
3	59922682	Adapter, Straight	1	
4	59923813	Adapter, Tee	1	
5	59056036	Reducer	1	

HYDRAULIC PUMP AND FILTER HOSE ASSEMBLY - EFFECTIVE WITH S/N 187990

Dwg 13443320/01



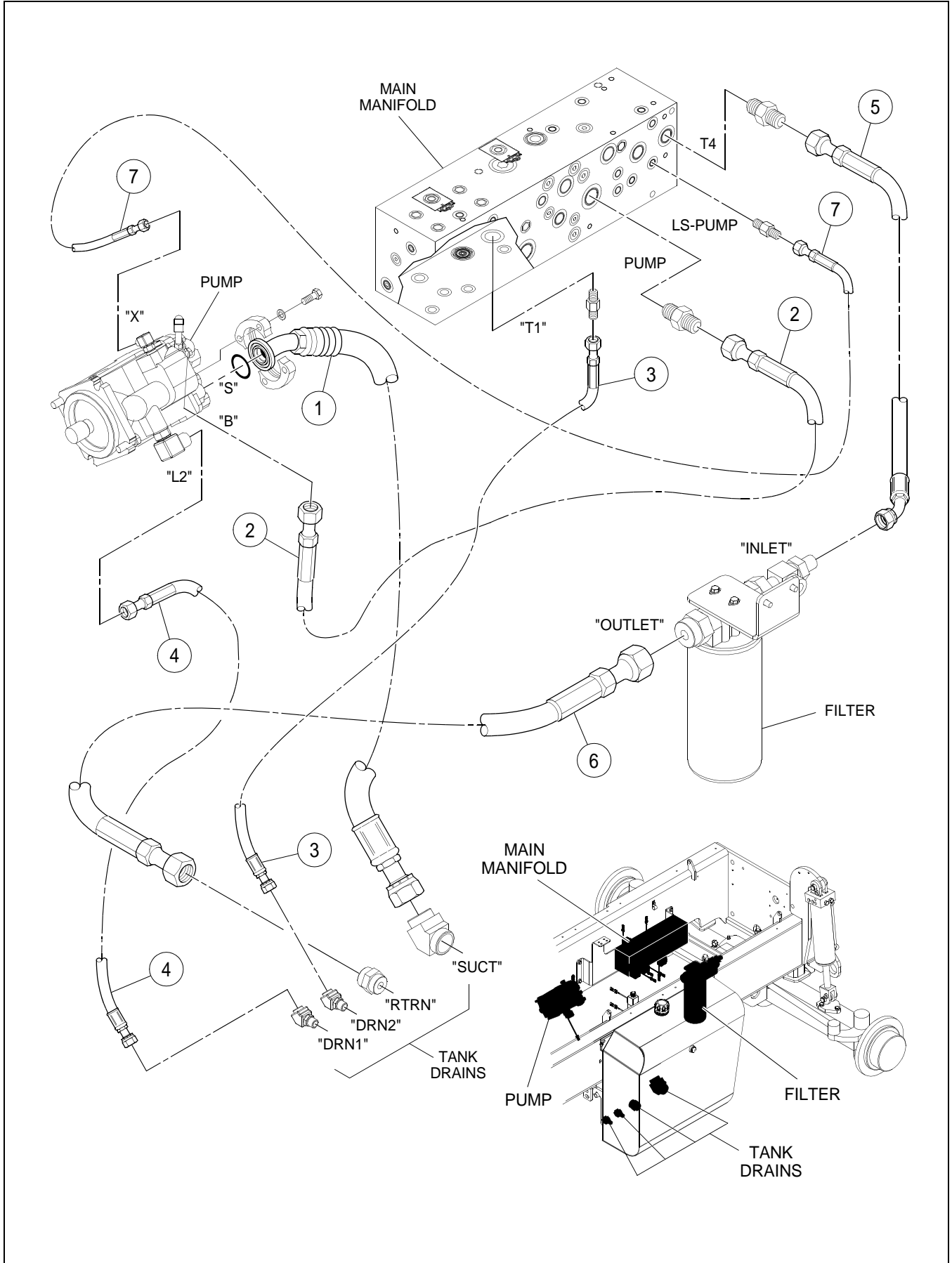
HYDRAULIC PUMP AND FILTER HOSE ASSEMBLY -
EFFECTIVE WITH S/N 187990

BOM 18006411

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13181284	Hose Assembly	1	37.0"
2	13402375	Hose Assembly	1	24.0"
3	13304076	Hose Assembly	1	59.0"
4	59174755	Hose Assembly	1	34.0"
5	59198549	Hose Assembly	1	22.0"
6	59148825	Hose Assembly	1	35.0"
7	13181482	Hose Assembly	1	44.0"

HYDRAULIC PUMP AND FILTER HOSE ASSEMBLY - PRIOR TO S/N 187990

Dwg D13304050/00



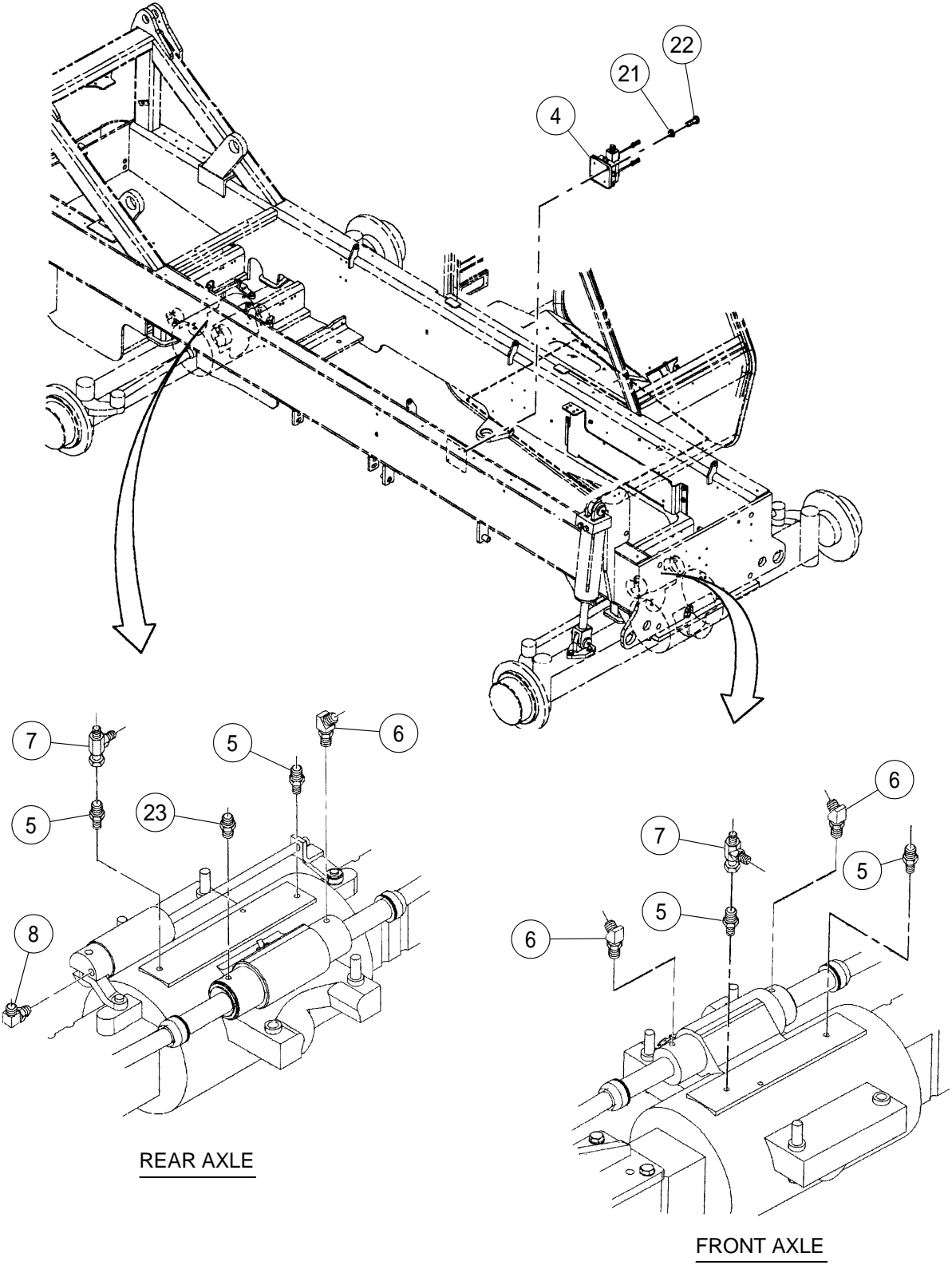
HYDRAULIC PUMP AND FILTER HOSE ASSEMBLY -
PRIOR TO S/N 187990

BOM 13304050

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13181284	Hose Assembly	1	37.0"
2	13304068	Hose Assembly	1	40.0"
3	13304076	Hose Assembly	1	59.0"
4	59174755	Hose Assembly	1	34.0"
5	13346275	Hose Assembly	1	13.5"
6	59148825	Hose Assembly	1	35.0"
7	13304084	Hose Assembly	1	59.0"

STEERING AND BRAKE INSTALLATION - SHEET 1 OF 2

Dwg D13259635/01/01



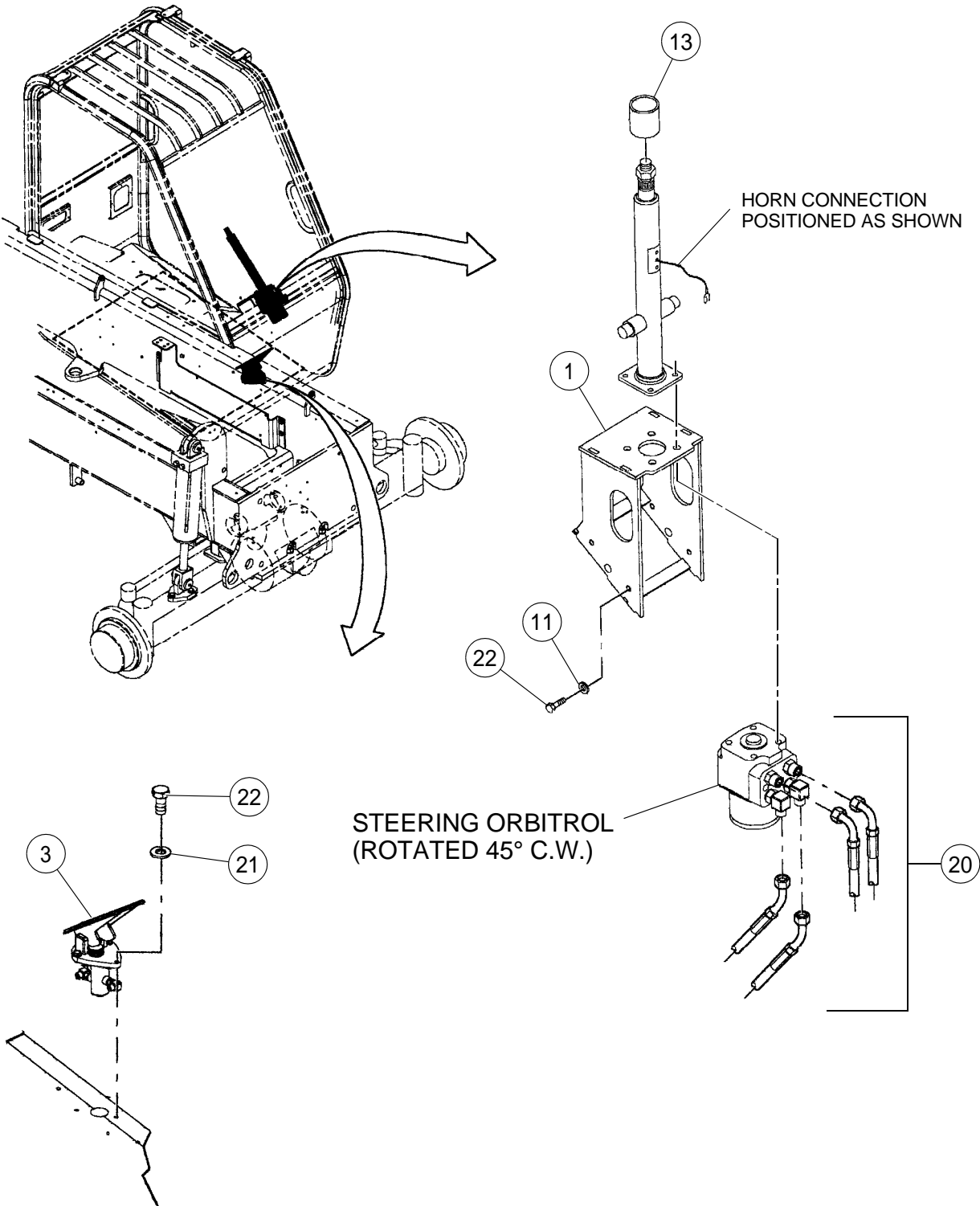
STEERING AND BRAKE INSTALLATION - SHEET 1 OF 2

BOM 13259635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
4	NSVA	Steering Select Valve Assembly	1	See Page H - 26.
5	59031559	Threaded Stud Connector	4	
6	59922245	Adapter, 45°	3	
7	59918615	Adapter	2	
8	54617162	Male Elbow	1	
21	96741038	Flatwasher	6	M8 x 1.25 CI 200
22	96702659	HHCS, Fully Threaded, Zinc Plated	9	M8 x 1.25 x 25 CI 8.8
23	59918649	Adapter, Straight	1	

STEERING AND BRAKE INSTALLATION - SHEET 2 OF 2

Dwg D13259635/01/02



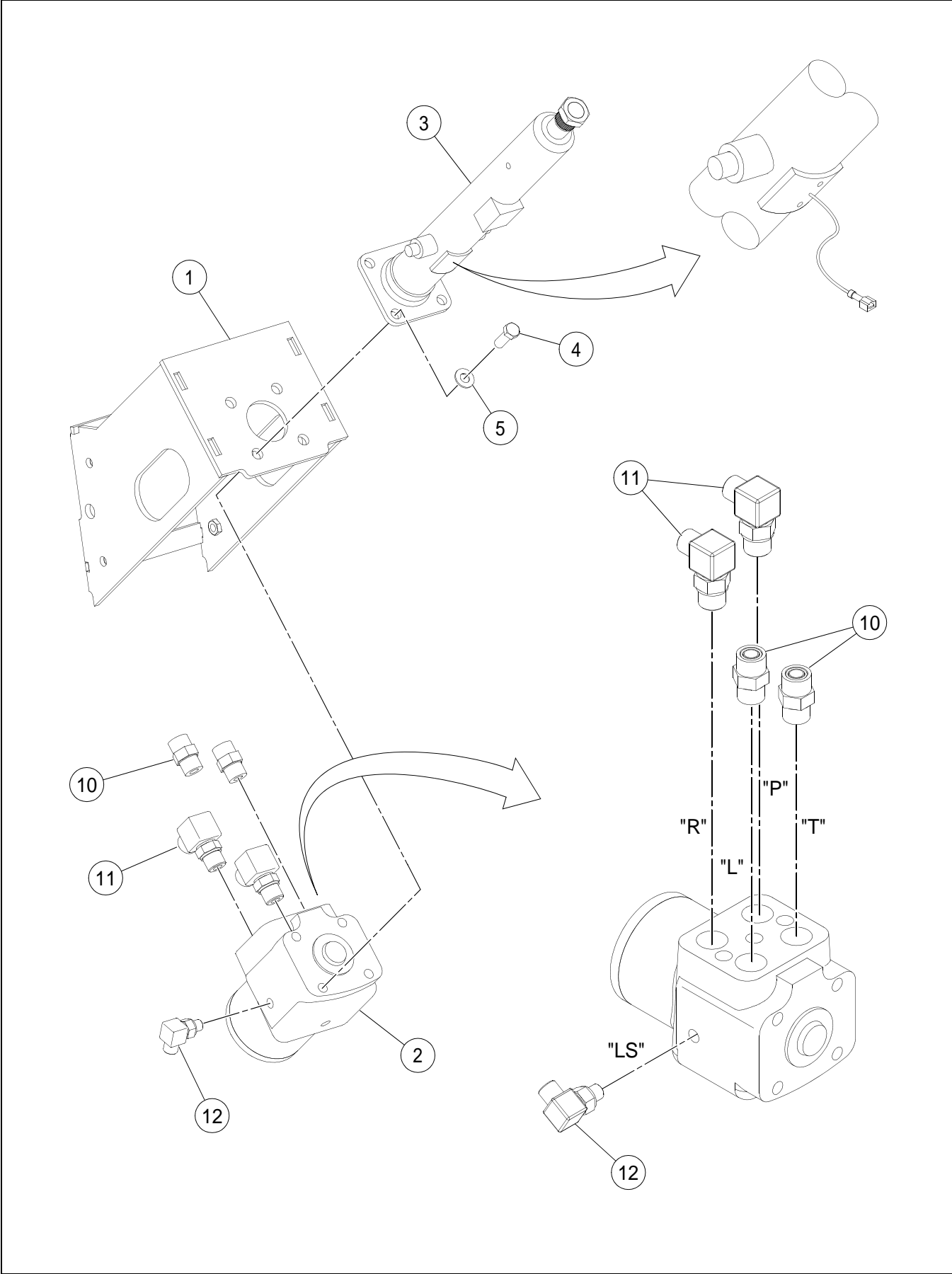
STEERING AND BRAKE INSTALLATION - SHEET 2 OF 2

BOM 13259635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Steering Column/Orbital Assembly	1	See Page H - 20.
3	NSVA	Brake Valve Assembly	1	See Page H - 22.
11	96741038	Flatwasher	4	M8 x 1.25 CI 200
13	59465377	Heat Shrink Tube	A/R	
20	NSVA	Steering And Brake Hosing Assembly - Effective with S/N 187990	1	See Page H - 28.
-	NSVA	Steering And Brake Hosing Assembly - Prior to S/N 187990	1	See Page H - 32.
21	96741038	Flatwasher	5	M8 x 1.25 CI 200
22	96702659	HHCS, Fully Threaded, Zinc Plated	9	M8 x 1.25 x 25 CI 8.8

STEERING COLUMN/ORBITAL ASSEMBLY

Dwg D13267323/03



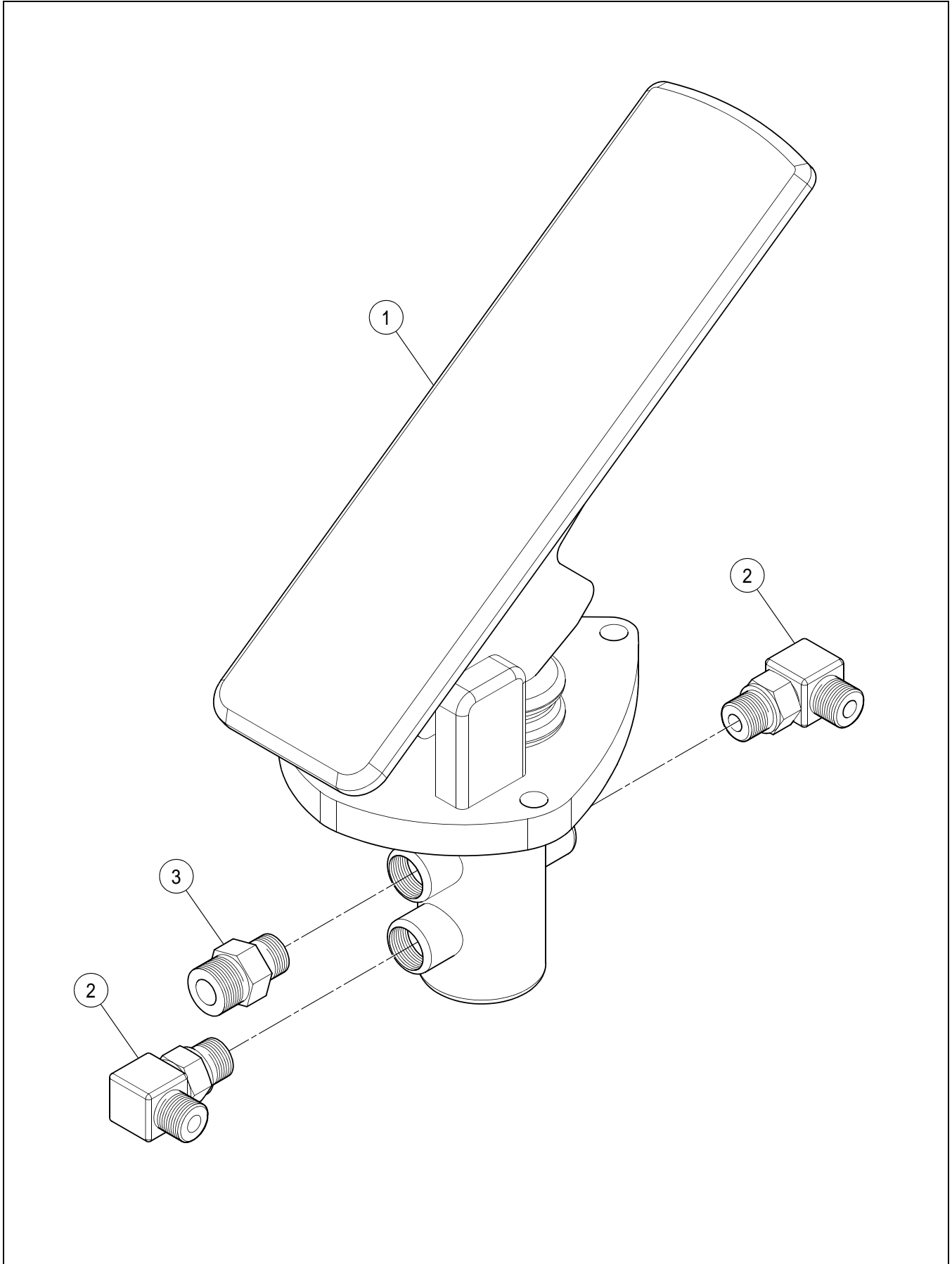
STEERING COLUMN/ORBITAL ASSEMBLY

BOM 13267323

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13307913	Steering Column/Orbital Mount	1	
2	13267596	Steering Control Unit	1	
-	54747340	- Seal Kit	1	
3	13318209	Steering Column	1	
4	95919221	Bolt	4	
5	95922373	Flatwasher, Zinc Plated	4	3/8
10	59922492	Adapter, Straight	2	
11	59922898	Adapter, 90°	2	
12	59922807	Adapter	1	

BRAKE VALVE ASSEMBLY

Dwg D13183835/00



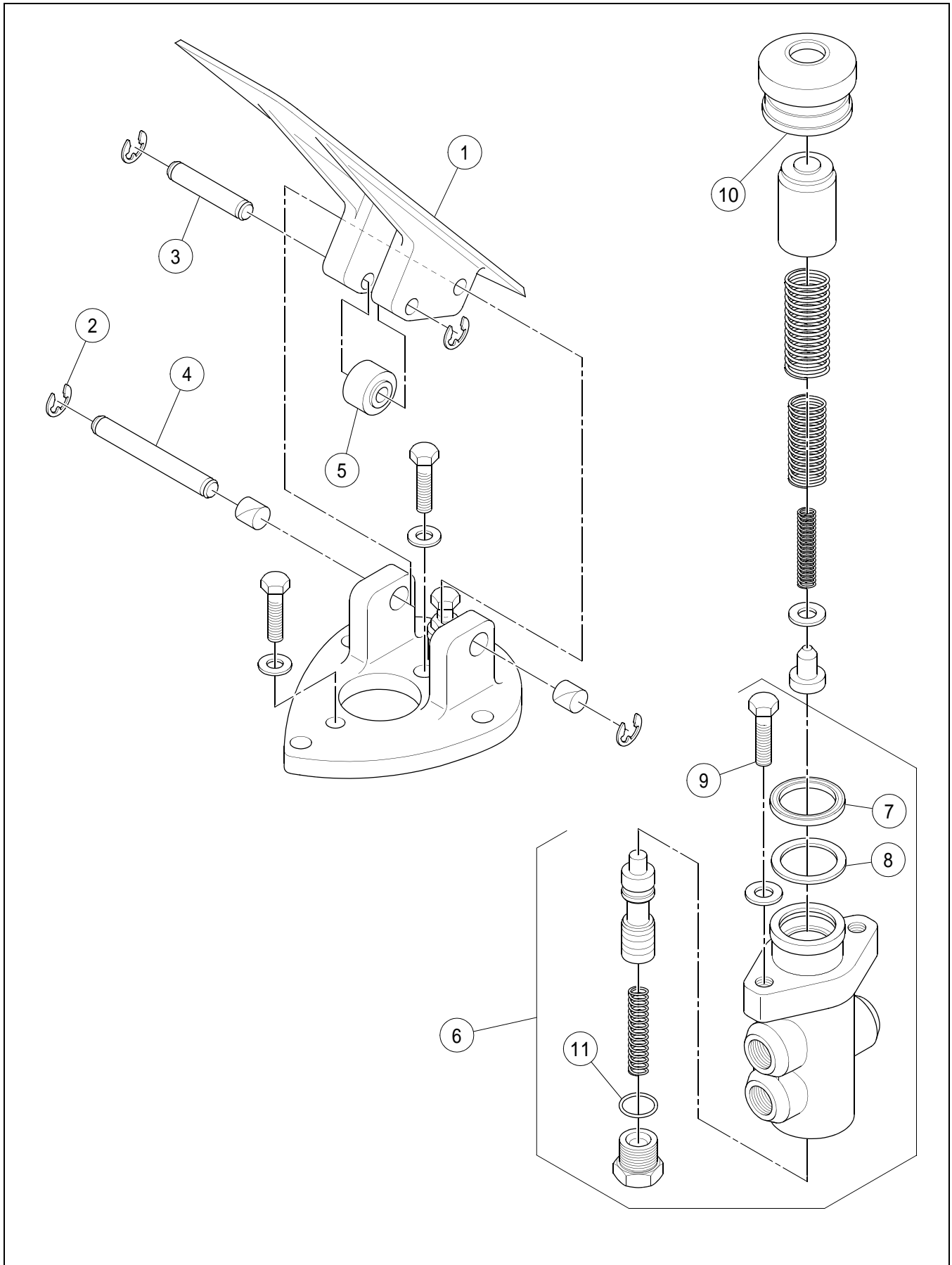
BRAKE VALVE ASSEMBLY

BOM 13173489

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59113480	Brake Valve	1	See Breakdown H - 24.
2	59922823	Adapter, 90°	2	
3	59922419	Adapter, Straight	1	

BRAKE VALVE (59113480) - INTERNAL BREAKDOWN

Dwg B59113480



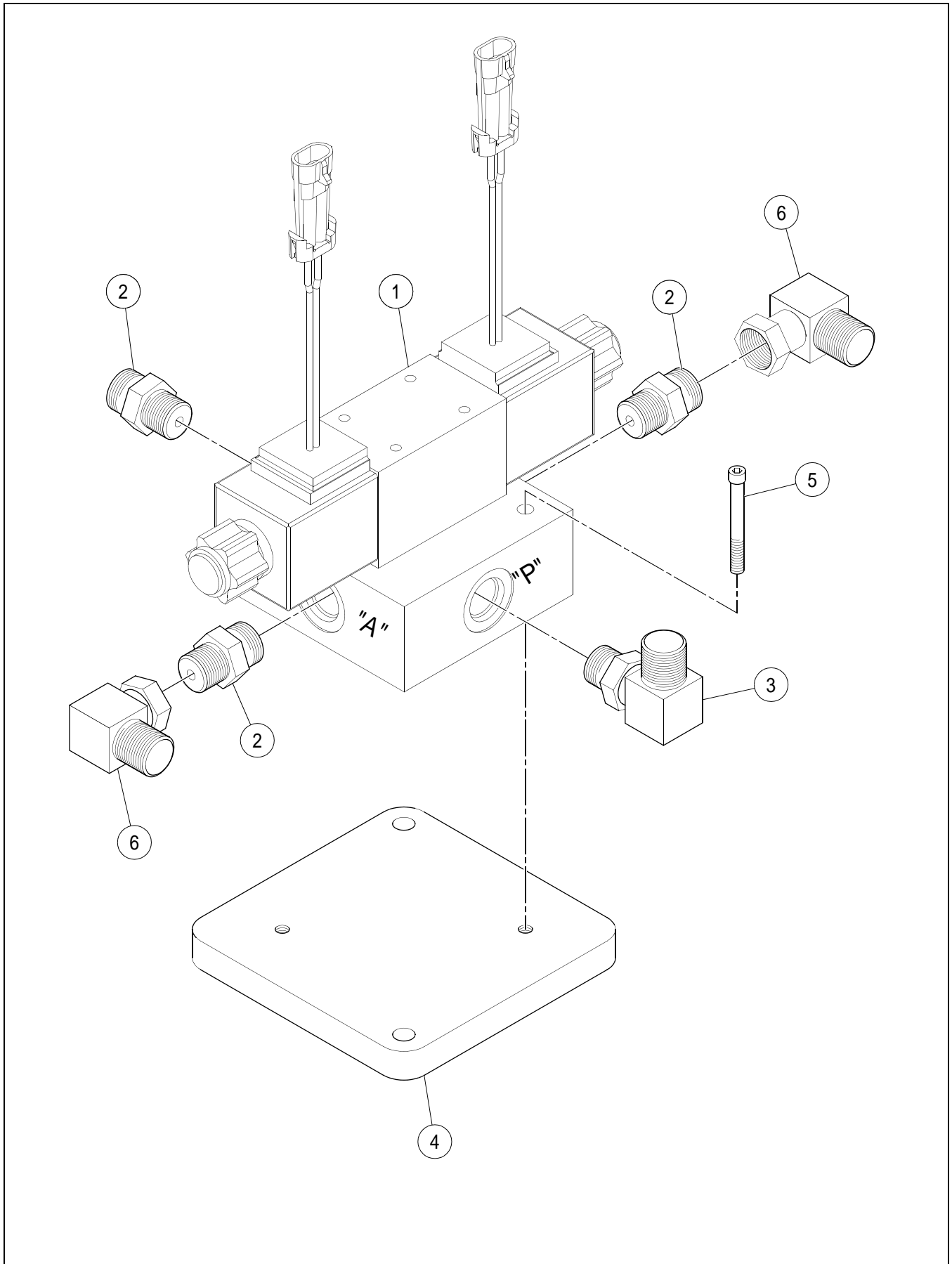
BRAKE VALVE (59113480) - INTERNAL BREAKDOWN

BOM 59113480

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59154567	Pedal	1	
2	59154575	Ring	1	
3	59154583	Pin	1	
4	59154591	Pin	1	
5	59154609	Roller	1	
6	59154617	Repair Kit (includes items 7 thru 11)	A/R	
7	NSS	- Seal	1	
8	NSS	- Cup	1	
9	NSS	- HHCS	1	
10	NSS	- Boot	1	
11	NSS	- O-ring	1	

STEERING SELECT VALVE ASSEMBLY

Dwg D13305511/01



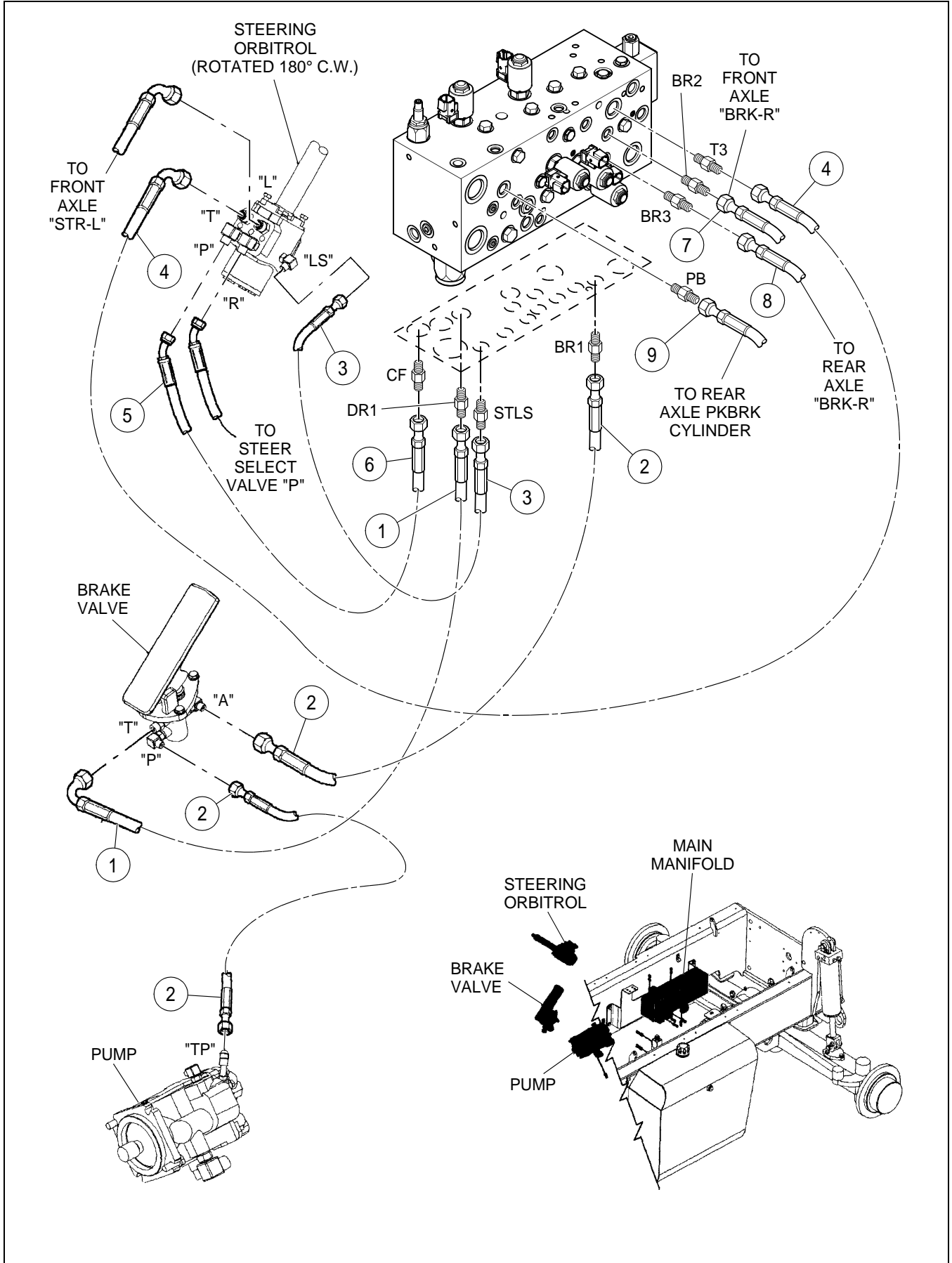
STEERING SELECT VALVE ASSEMBLY

BOM 13307830

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13163274	Steering Selector Valve	1	
-	13269630	- Valve	1	
-	13205463	- Solenoid Valve	1	
-	13263256	- Coil	2	
-	13263249	- Seal Kit	1	
-	13266739	- O-ring	4	
-	13266739	- O-ring	4	
2	59918649	Adapter, Straight	3	
3	59921031	Adapter	1	
4	13168562	Mounting Plate	1	
5	95067658	HHCS	2	1/4 x 20 x 1.5
6	59921056	Adapter	2	

STEERING AND BRAKE HOISING ASSEMBLY - EFFECTIVE WITH S/N 187990 - SHEET 1 OF 2

Dwg 13443338/00



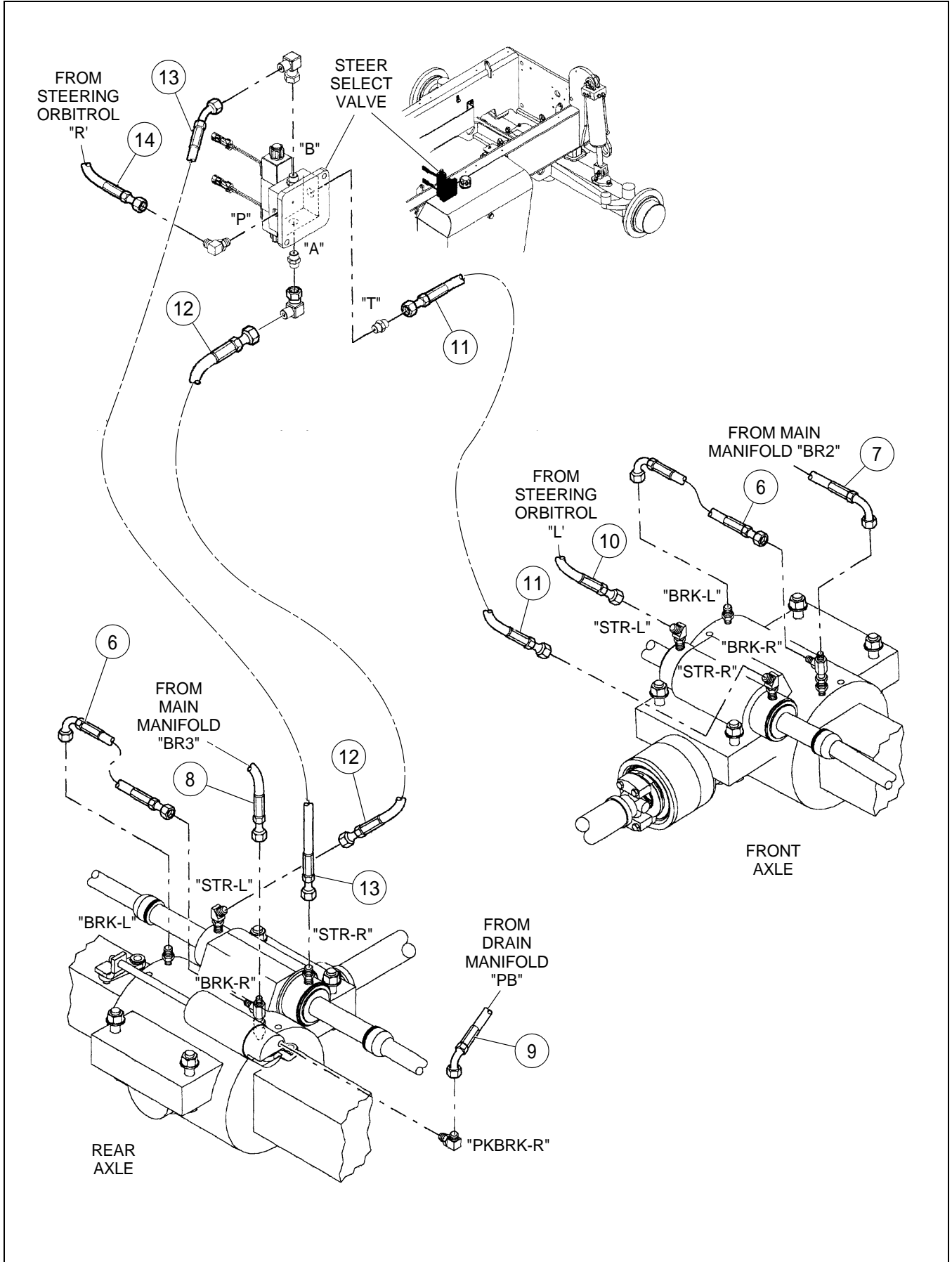
STEERING AND BRAKE HOSING ASSEMBLY - EFFECTIVE
WITH S/N 187990 - SHEET 1 OF 2

BOM 18006429

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13190905	Hose Assembly	1	40.0"
2	13181417	Hose Assembly	1	59.0"
3	13443254	Hose Assembly	1	67.0"
4	59174748	Hose Assembly	1	
5	13342340	Hose Assembly	1	63.0"
6	13190897	Hose Assembly	2	14.0
7	13190905	Hose Assembly	1	40.0"
8	13190921	Hose Assembly	1	145.0"
9	59218883	Hose Assembly	1	135.0"
15	13191077	Hose Assembly (Not Shown)	1	51.0"

STEERING AND BRAKE HOISING ASSEMBLY - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 2

Dwg 13443338/00



STEERING AND BRAKE HOSING ASSEMBLY - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 2

BOM 18006429

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
6	13190897	Hose Assembly	2	14.0"
7	13190905	Hose Assembly	1	40.0"
8	13190921	Hose Assembly	1	145.0"
9	59218883	Hose Assembly	1	135.0"
10	13342357	Hose Assembly	1	93.0"
11	13190988	Hose Assembly	1	49.0
12	13348941	Hose Assembly	1	100.0
13	13342381	Hose Assembly	1	93.0
14	13342365	Hose Assembly	1	80.0"

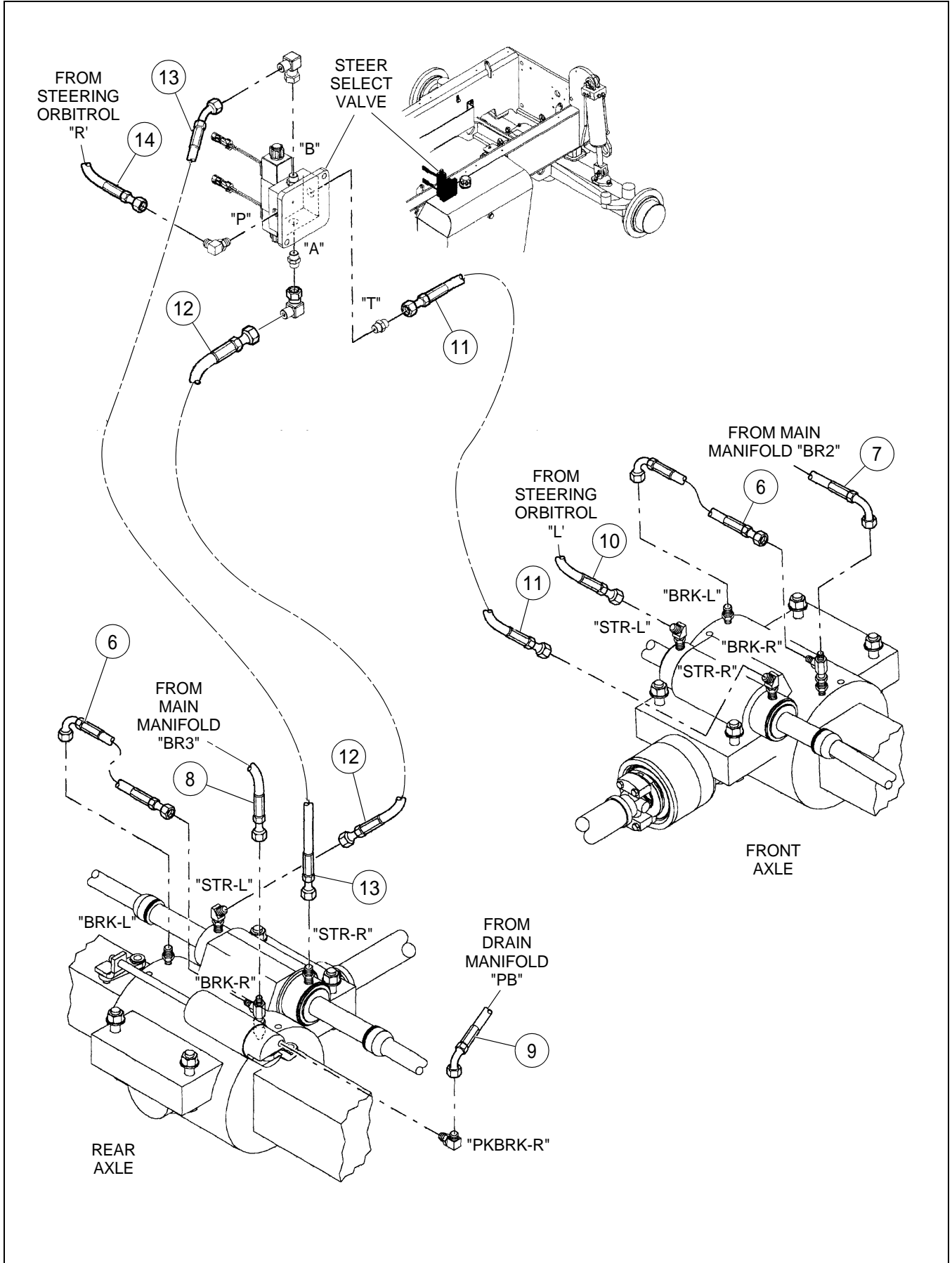
STEERING AND BRAKE HOISING ASSEMBLY - PRIOR TO S/
N 187990 - SHEET 1 OF 2

BOM 13259643

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13190905	Hose Assembly	1	40.0"
2	13193065	Hose Assembly	1	65.0"
3	13318860	Hose Assembly	1	73.0"
4	13342332	Hose Assembly	1	65.0"
5	13342340	Hose Assembly	1	63.0"
7	13190905	Hose Assembly	1	40.0"
8	13190921	Hose Assembly	1	145.0"
9	59218883	Hose Assembly	1	135.0"
10	13342357	Hose Assembly	1	93.0"
14	13342365	Hose Assembly	1	80.0"
15	13191077	Hose Assembly	1	51.0"

STEERING AND BRAKE HOSE ASSEMBLY - PRIOR TO S/
N 187990 - SHEET 2 OF 2

Dwg D13259643/01/02



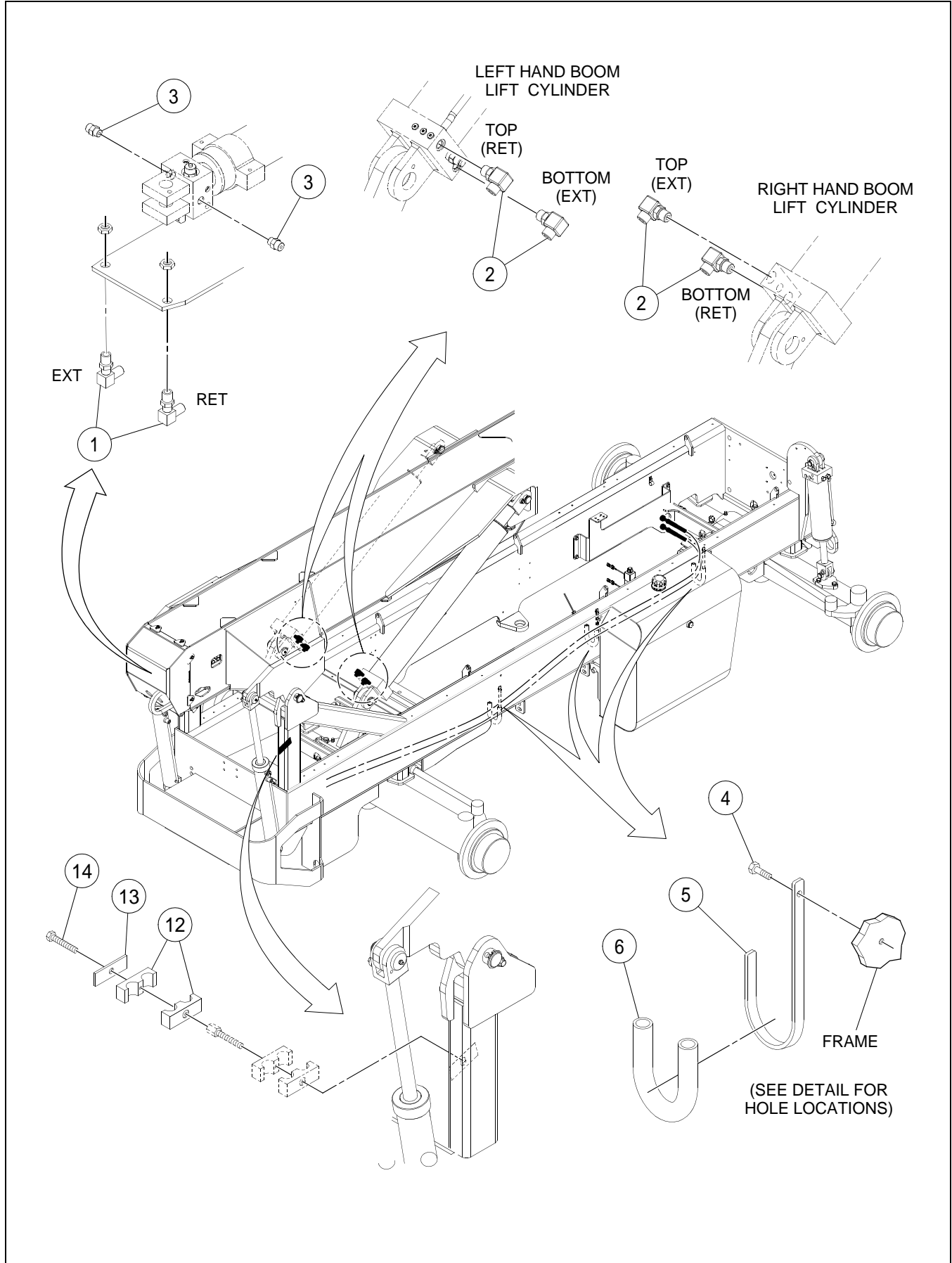
STEERING AND BRAKE HOSING ASSEMBLY - PRIOR TO S/
N 187990 - SHEET 2 OF 2

BOM 13259643

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
6	13190897	Hose Assembly	2	14.0"
7	13190905	Hose Assembly	1	40.0"
8	13190921	Hose Assembly	1	145.0"
9	59218883	Hose Assembly	1	135.0"
10	13342357	Hose Assembly	1	93.0"
11	13190988	Hose Assembly	1	49.0"
12	13348941	Hose Assembly	1	100.0"
13	13342381	Hose Assembly	1	93.0"
14	13342365	Hose Assembly	1	80.0"

LIFT AND CROWD INSTALLATION

Dwg 13259742/0A



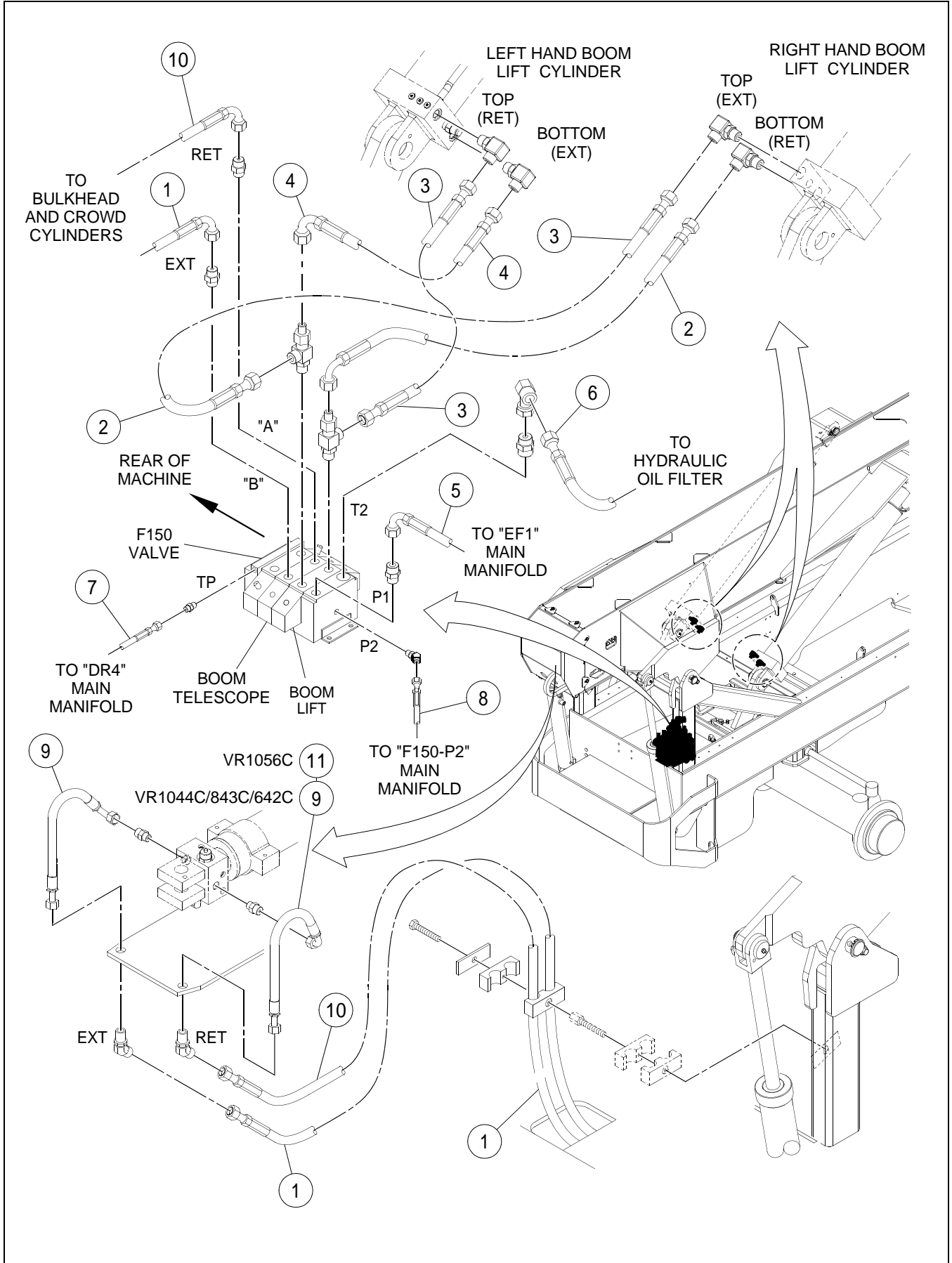
LIFT AND CROWD INSTALLATION

BOM 13259650

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59962324	Adapter	2	
2	59922898	Adapter, 90°	4	
3	59922542	Adapter, Straight	2	
4	96702824	HHCS, Fully Threaded, Zinc Plated	3	M8 x 1.25 x 20 CI 8.8
5	59180695	J-hook	3	
6	59135681	J-hook Hose Cover	3	
12	59583518	Clamp	2	
13	59583500	Cover Plate	1	
14	95920526	HHCS, Zinc Plated	1	5/16 x 18 x 1.75 Grd 8
15	NSVA	Lift And Crowd Hosing Assembly (Not Shown)	1	See Page H - 38.

LIFT AND CROWD HOISING ASSEMBLY - SHEET 1 OF 2

Dwg 13443312/00



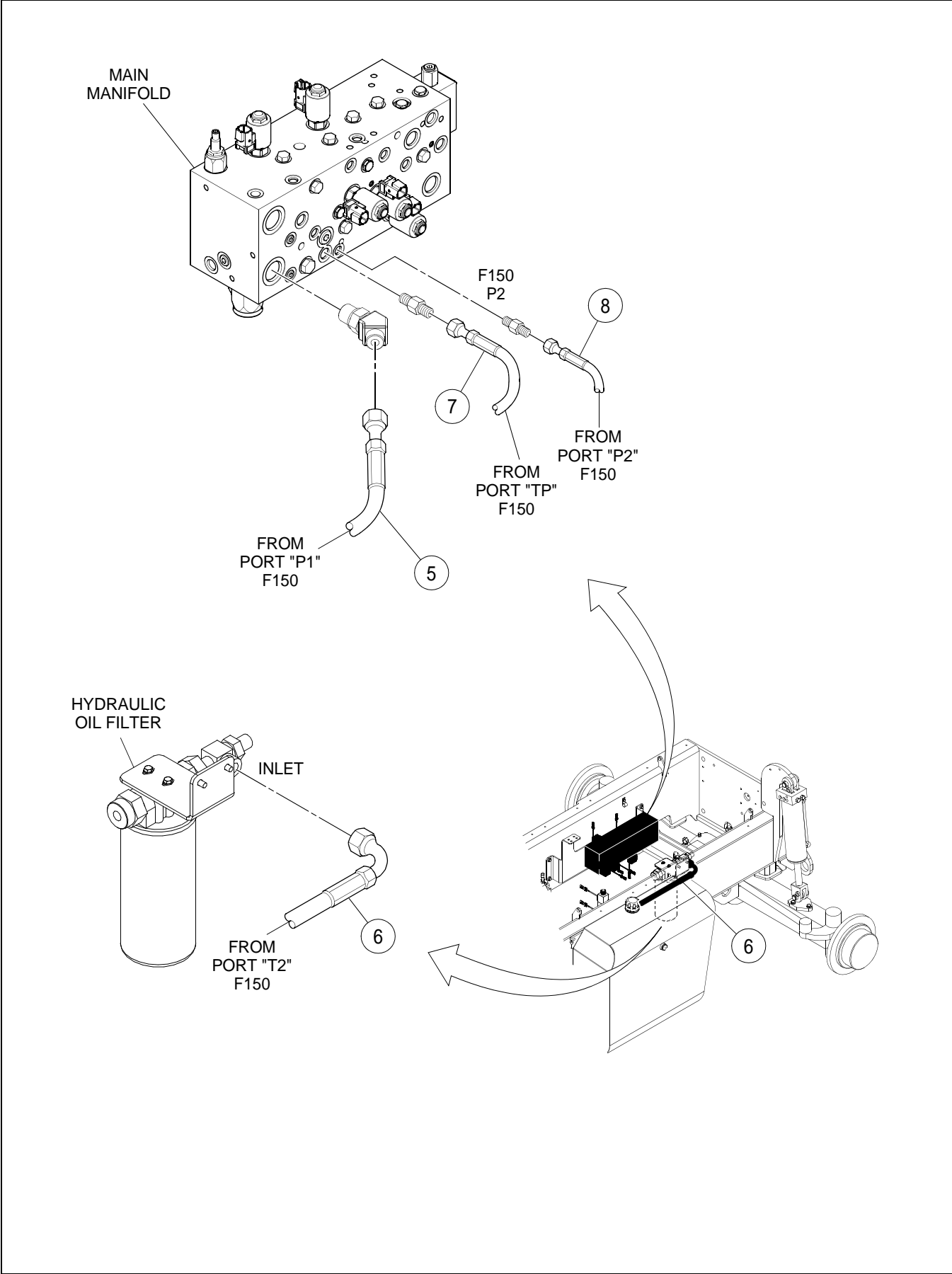
LIFT AND CROWD HOSING ASSEMBLY - SHEET 1 OF 2

BOM 18006445, 13259676

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13315338	Hose Assembly	1	70.0"
2	13220389	Hose Assembly	1	32.0"
3	13181334	Hose Assembly	2	30.0"
4	59293845	Hose Assembly	1	34.0"
5	13193156	Hose Assembly	1	135.0"
6	13181268	Hose Assembly	1	135.0"
7	13315353	Hose Assembly	1	152.0"
8	13181375	Hose Assembly	1	156.0"
9	59198549	Hose Assembly	2	22.0"
10	13315346	Hose Assembly	1	70.5"
11		This Item not used with this Assembly		

LIFT AND CROWD HOISING ASSEMBLY - SHEET 2 OF 2

Dwg 13443312/00



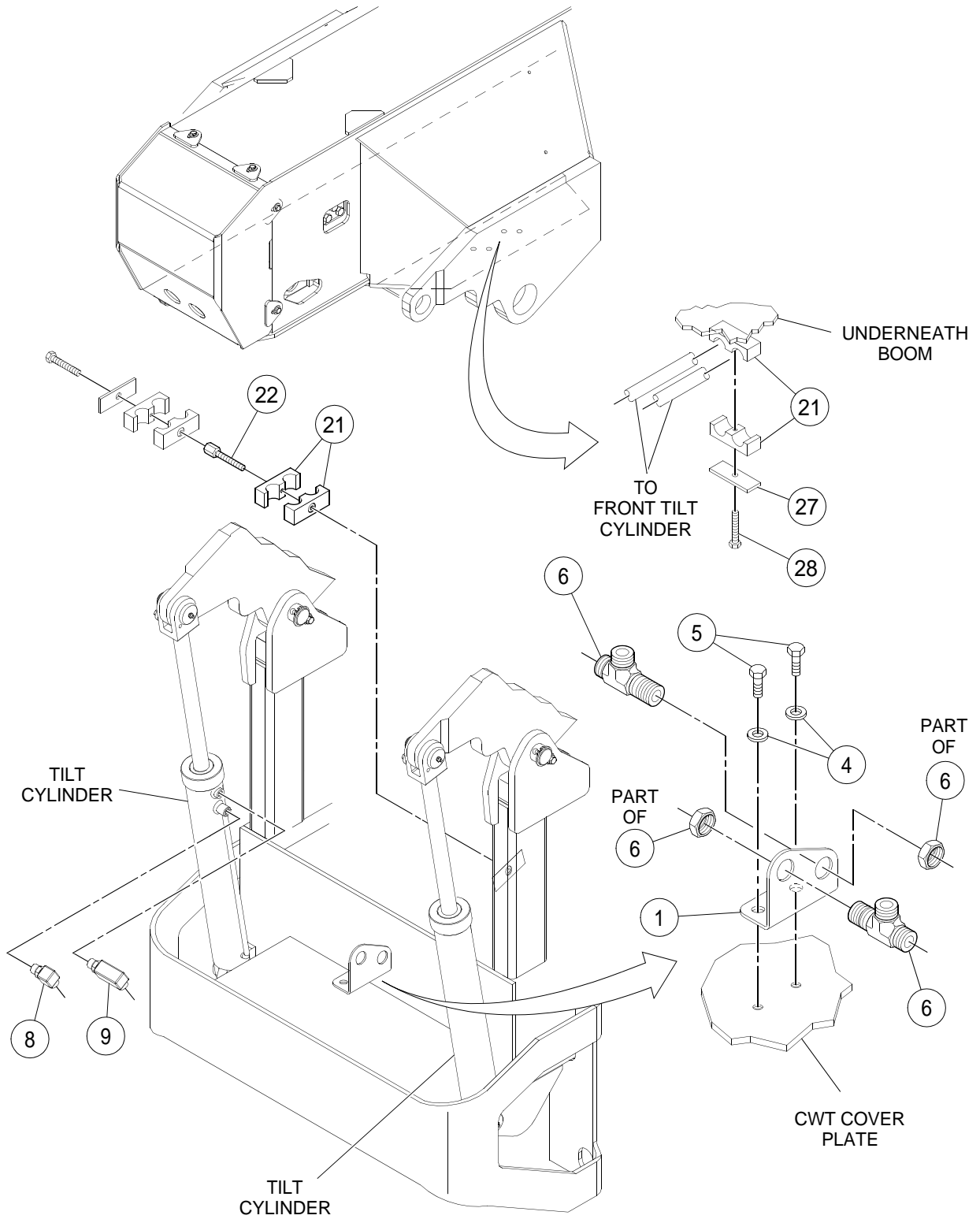
LIFT AND CROWD HOSING ASSEMBLY - SHEET 2 OF 2

BOM 18006445, 13259676

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13193156	Hose Assembly	1	135.0"
6	13181268	Hose Assembly	1	135.0"
7	13315353	Hose Assembly	1	152.0"
8	13181375	Hose Assembly	1	156.0"

FRAME LEVEL/FORK TILT INSTALLATION - SHEET 1 OF 2

Dwg 18006056/01



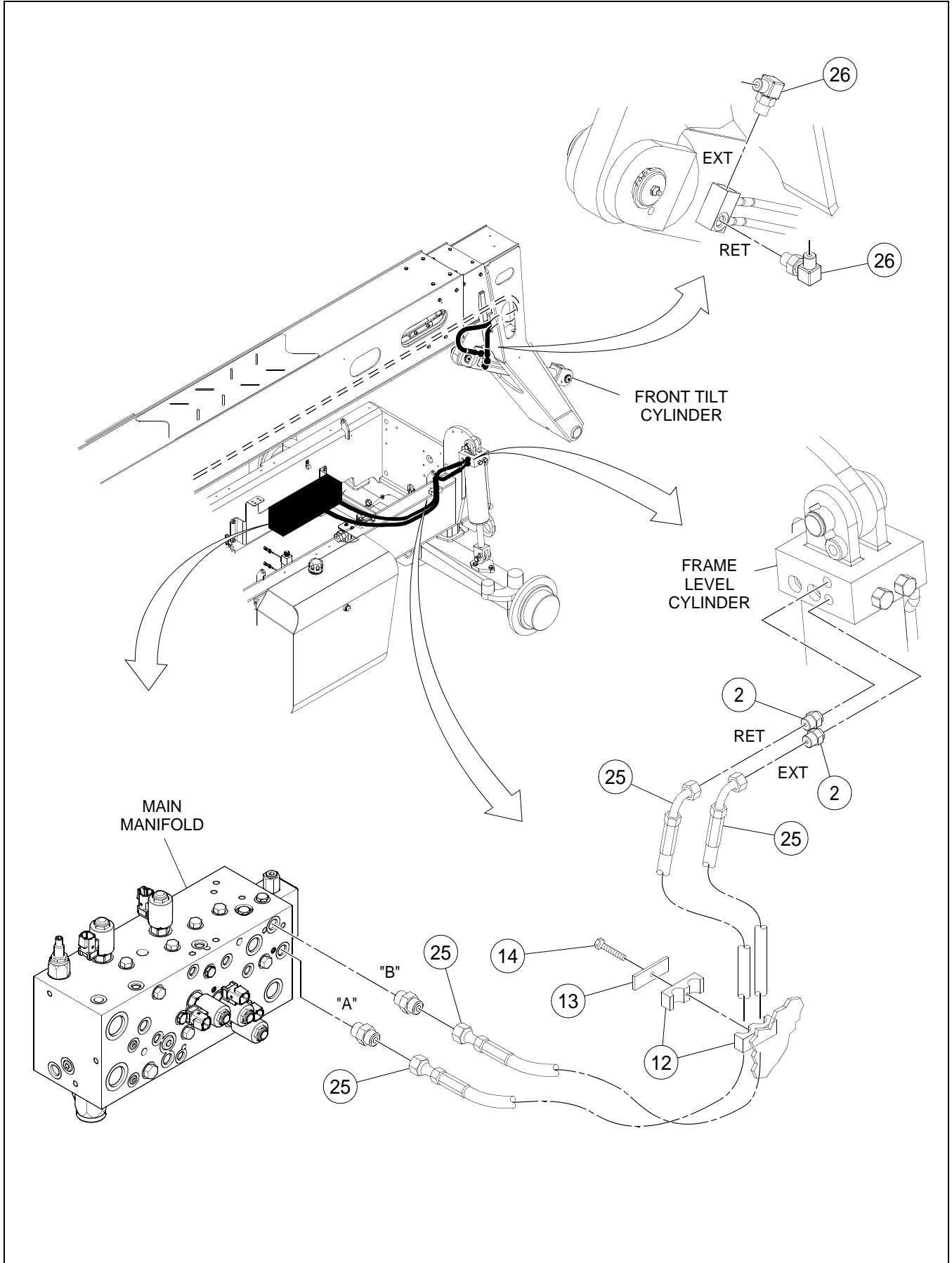
FRAME LEVEL/FORK TILT INSTALLATION - SHEET 1 OF 2

BOM 13259684

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13348925	Bulkhead Bracket	1	
4	96741046	Flatwasher, Zinc Plated	2	M10 CI 200
5	96701479	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 16 CI 8.8
6	59962639	Adapter, Tee	2	
8	59922864	Adapter, 90°	2	
9	59408534	Adapter	2	
21	59746248	Clamp	4	
22	59583484	Bolt	1	
27	59583500	Cover Plate	1	
28	96728142	HHCS, Zinc Plated	1	M8 x 1.25 x 55 CI 10.9

FRAME LEVEL/FORK TILT INSTALLATION - SHEET 2 OF 2

Dwg 18006056/01



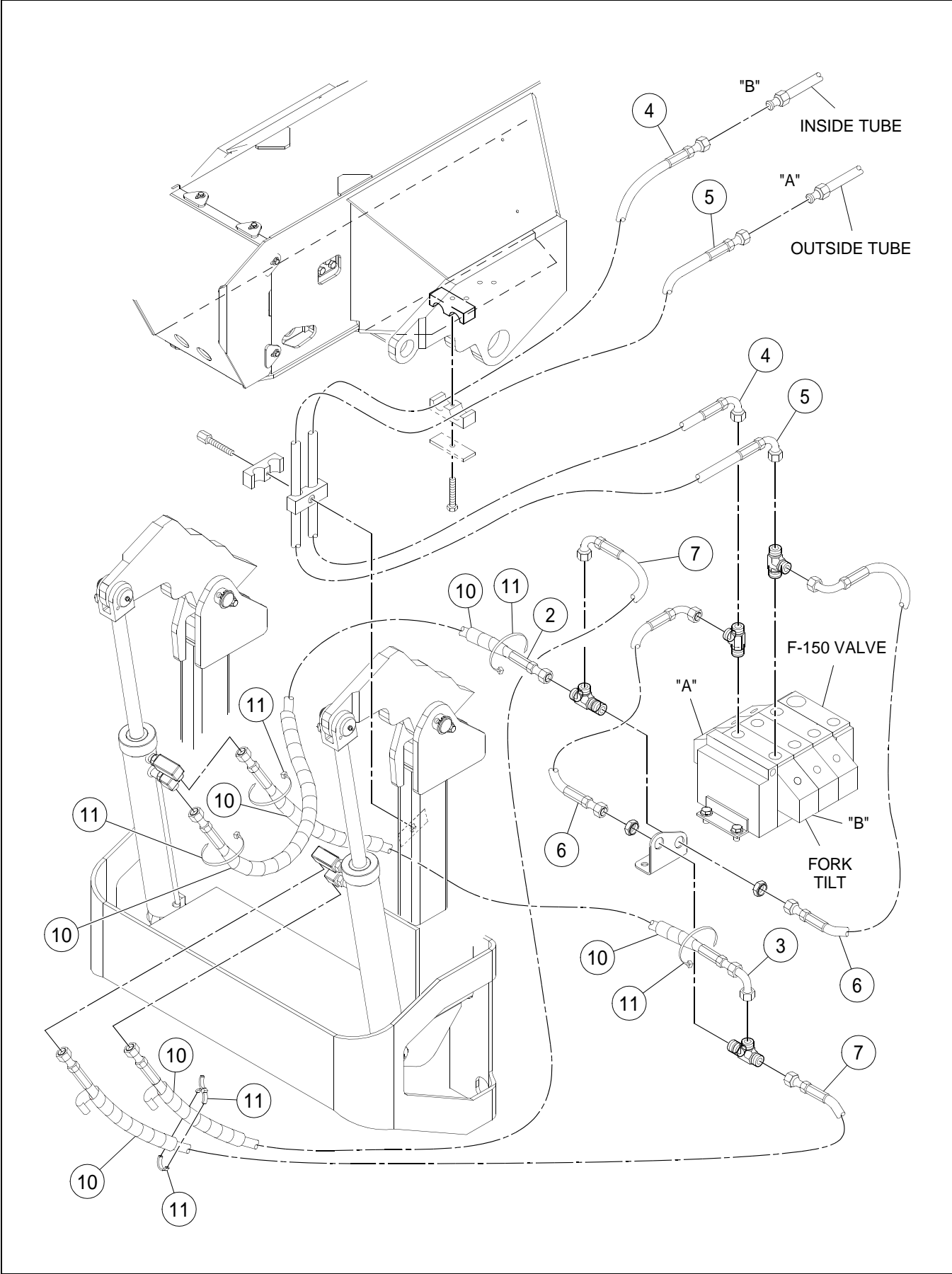
FRAME LEVEL/FORK TILT INSTALLATION - SHEET 2 OF 2

BOM 13259684

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	59919670	Adapter, Straight	2	
12	59929026	Insert Clamp	2	
13	59583450	Cover Plate	1	
14	96705553	HHCS, Zinc Plated	1	M8 x 1.25 x 45 CI 8.8
25	NSVA	Frame Level/Fork Tilt Hosing Assembly - Effective with S/N 187990	1	See Page H - 46.
-	NSVA	Frame Level/Fork Tilt Hosing Assembly - Prior to S/N 187990	1	See Page H - 50.
26	59922880	Adapter	2	

FRAME LEVEL/ FORK TILT HOISING ASSEMBLY -
EFFECTIVE WITH S/N 187990 - SHEET 1 OF 2

Dwg 13443346/01



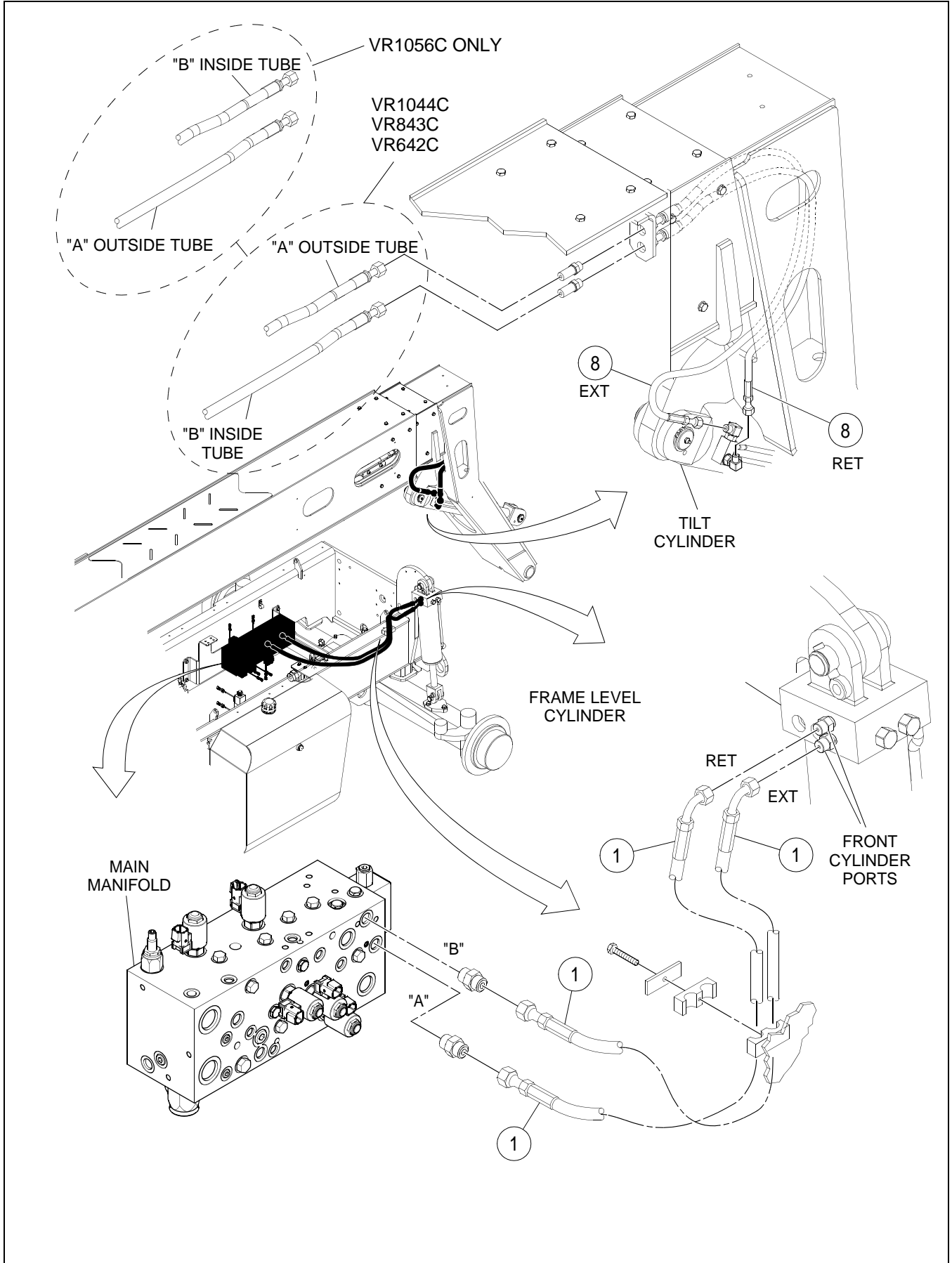
FRAME LEVEL/ FORK TILT HOSING ASSEMBLY -
EFFECTIVE WITH S/N 187990 - SHEET 1 OF 2

BOM 18006452

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	13334321	Hose Assembly	1	30.0"
3	13334305	Hose Assembly	1	30.0"
4	13337860	Hose Assembly	1	84.0"
5	13337886	Hose Assembly	1	81.0"
6	54471859	Hose Assembly	2	24.0"
7	13334339	Hose Assembly	1	33.0"
9	13334313	Hose Assembly (Not Shown)	1	35.0"
10	58848979	Spiral Wrap	6	
11	95424586	Wire Tie	A/R	

FRAME LEVEL/ FORK TILT HOISING ASSEMBLY -
EFFECTIVE WITH S/N 187990 - SHEET 2 OF 2

Dwg 13443346/01



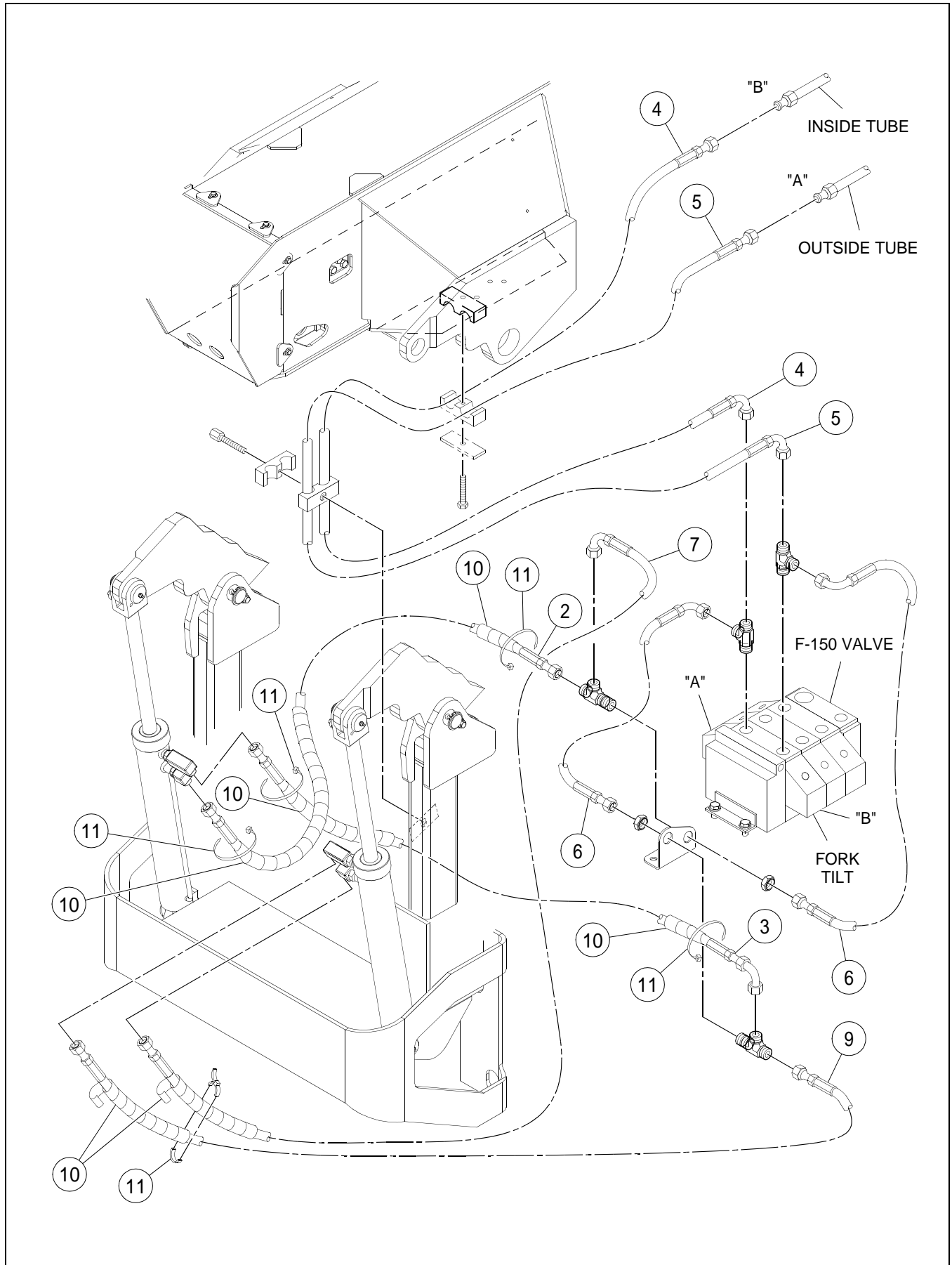
FRAME LEVEL/ FORK TILT HOSING ASSEMBLY -
EFFECTIVE WITH S/N 187990 - SHEET 2 OF 2

BOM 18006452

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	58849159	Hose Assembly	2	49.0"
8	13191085	Hose Assembly	2	38.0"

FRAME LEVEL/ FORK TILT HOISING ASSEMBLY - PRIOR TO
S/N 187990 - SHEET 1 OF 2

Dwg D13259775/03/01



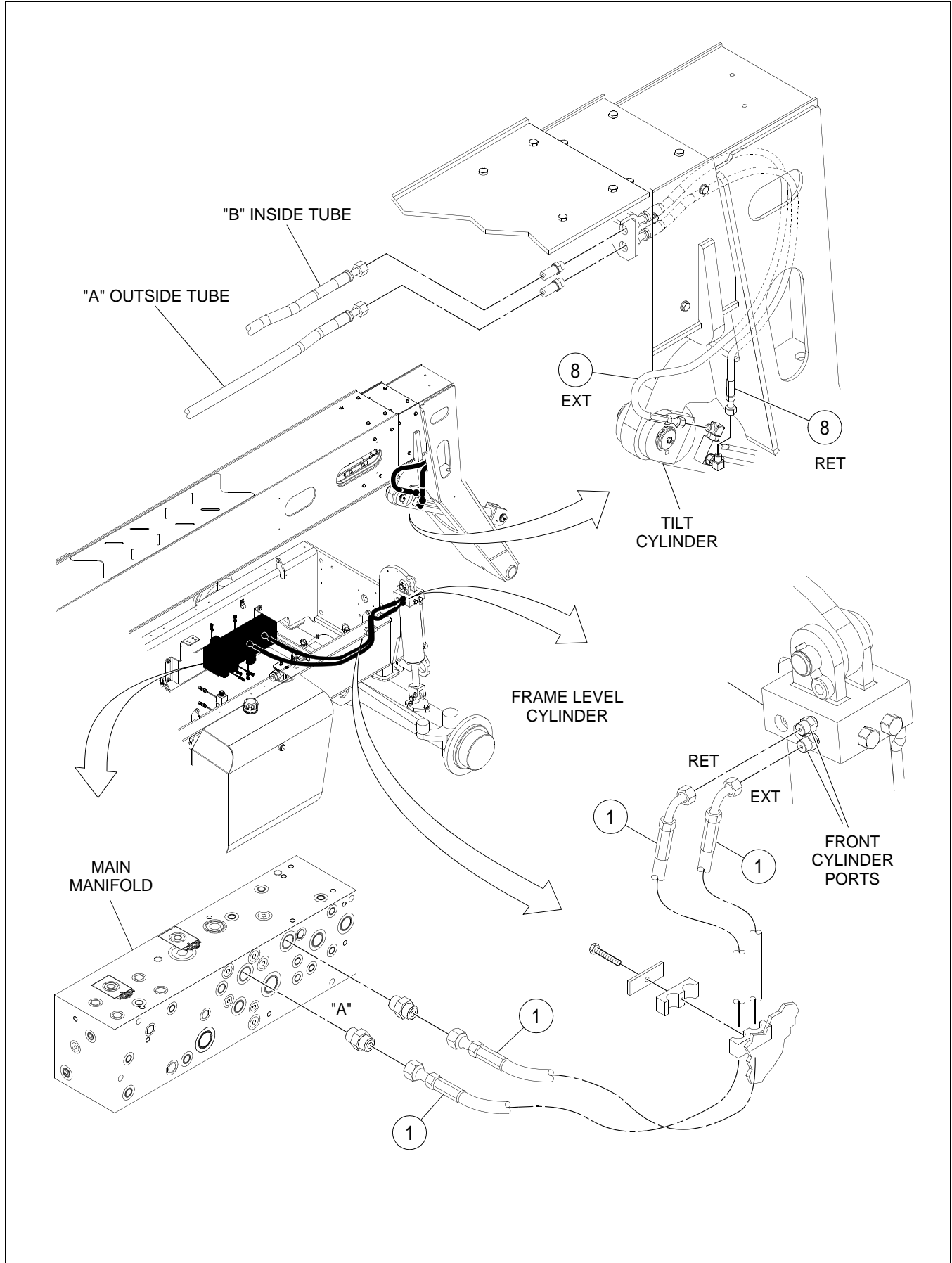
FRAME LEVEL/ FORK TILT HOISING ASSEMBLY - PRIOR TO
S/N 187990 - SHEET 1 OF 2

BOM 13259692

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	13334321	Hose Assembly	1	30.0"
3	13334305	Hose Assembly	1	30.0"
4	13337860	Hose Assembly	1	84.0"
5	13337886	Hose Assembly	1	81.0"
6	54471859	Hose Assembly	2	24.0"
7	13334339	Hose Assembly	1	33.0"
9	13334313	Hose Assembly	1	35.0"
10	58848979	Spiral Wrap	6	
11	95424586	Wire Tie	A/R	

FRAME LEVEL/ FORK TILT HOISING ASSEMBLY - PRIOR TO
S/N 187990 - SHEET 2 OF 2

Dwg D13259775/03/02



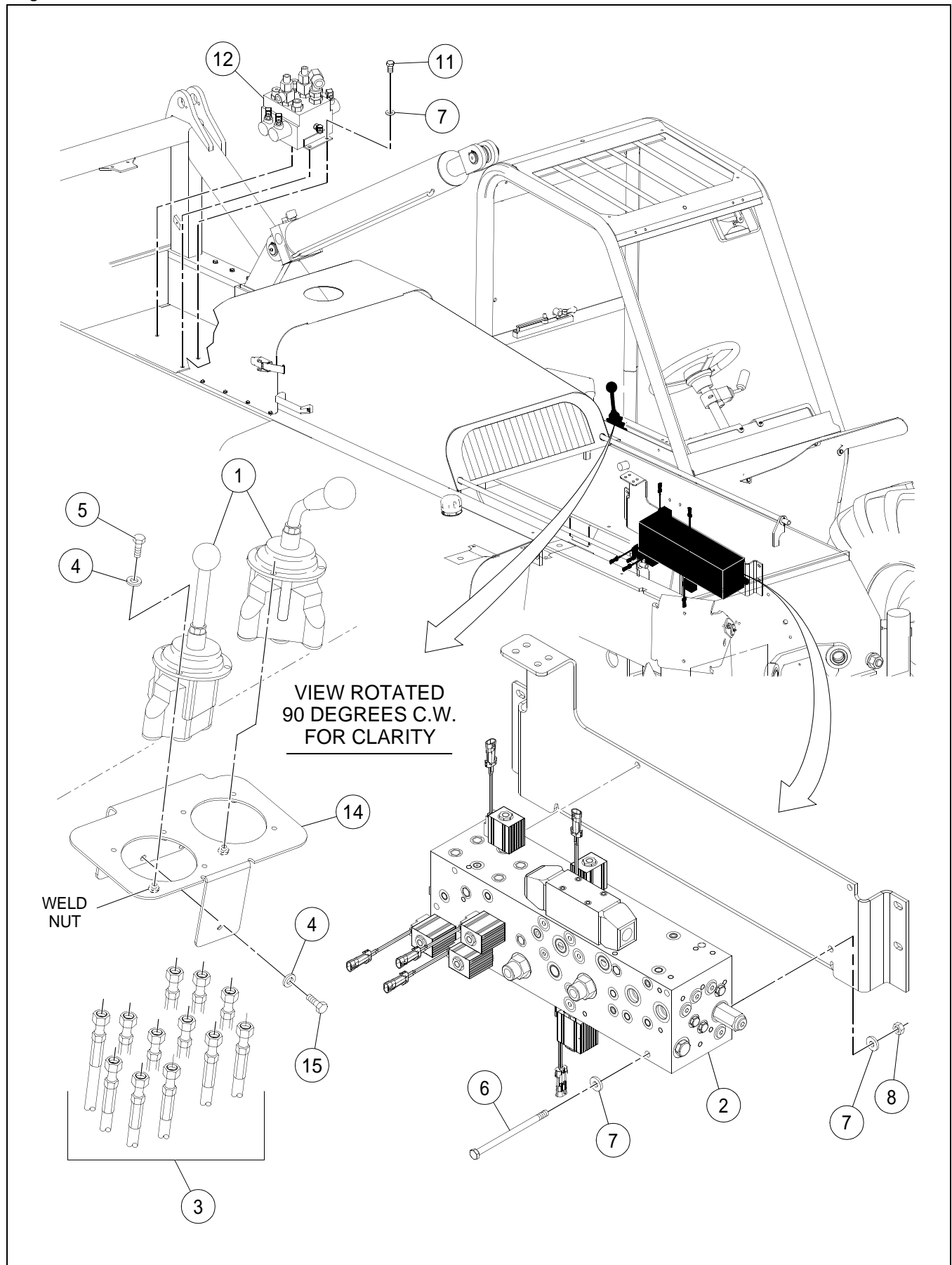
FRAME LEVEL/ FORK TILT HOISING ASSEMBLY - PRIOR TO
S/N 187990 - SHEET 2 OF 2

BOM 13259692

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13181466	Hose Assembly	2	51.0"
8	13191085	Hose Assembly	2	38.0"

DUAL JOYSTICK CONTROL INSTALLATION - SHEET 1 OF 2

Dwg D13265137/01/01



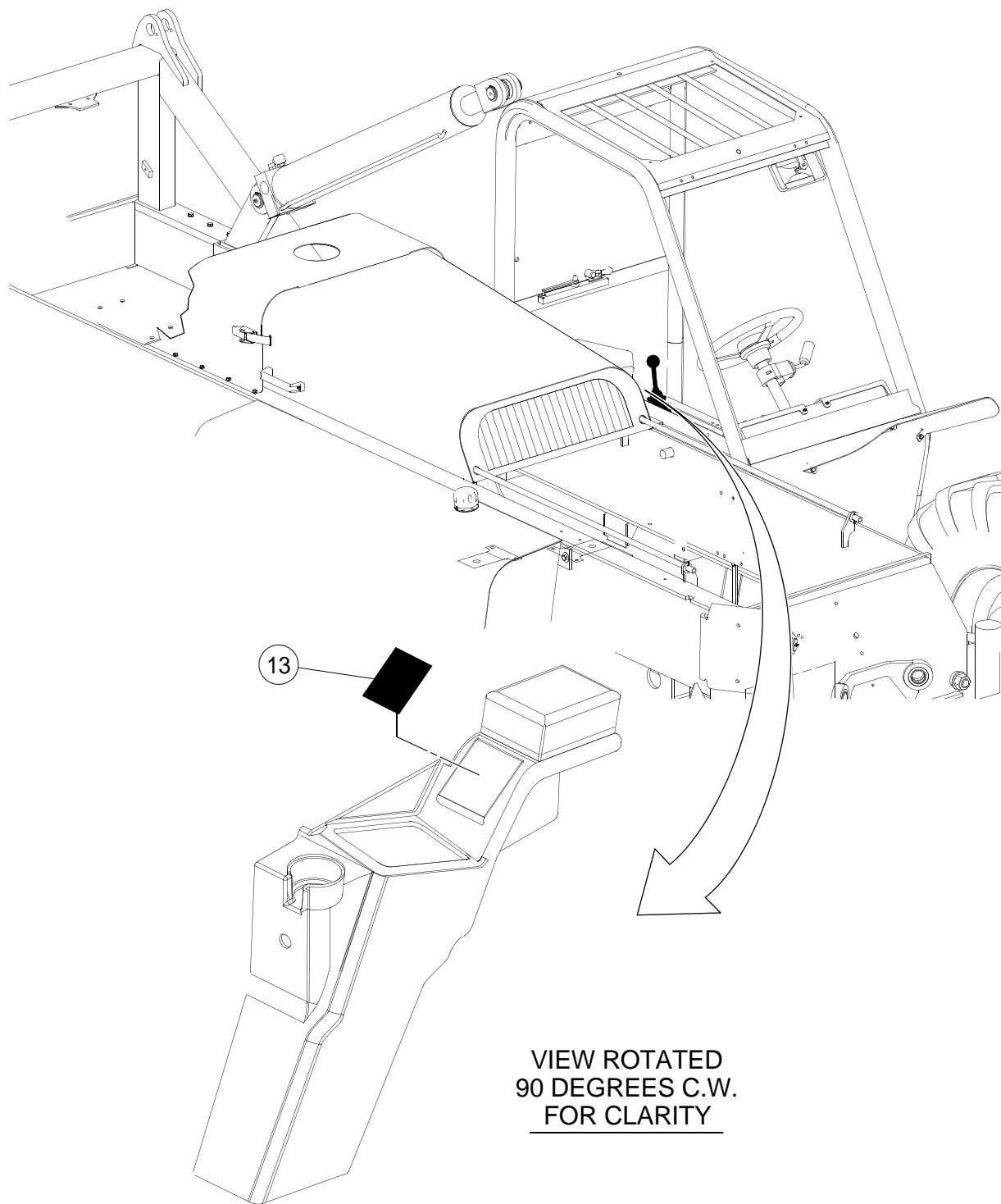
DUAL JOYSTICK CONTROL INSTALLATION - SHEET 1 OF 2

BOM 13372206

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Lift/Crowd Joystick Assembly - Dual Joysticks	1	See Page H - 58.
2	NSVA	Main Manifold Assembly - Dual Joysticks	1	See Page H - 60.
3	NSVA	Hosing Installation - Dual Joysticks	1	
4	96741053	Flatwasher, Zinc Plated	11	M6 CI 200
5	96720164	SHCS, Zinc Plated	8	M6 x 1 x 25 CI 8.8
6	96714985	HHCS, Zinc Plated	3	M10 x 1.5 x 150 CI 8.8
7	96741046	Flatwasher, Zinc Plated	9	M10 CI 200
8	96704614	Nut, Zinc Plated	3	M10 x 1.5 CI 8
11	96702279	HHCS, Fully Threaded, Zinc Plated	3	M10 x 1.5 x 20 CI 8.8
12	NSVA	Lift/Crowd Valve Assembly - Dual Joysticks	1	See Page H - 68.
14	13300223	Dual Joystick Mounting Plate	1	
15	96702394	HHCS, Fully Threaded, Zinc Plated	3	CI 8.8

DUAL JOYSTICK CONTROL INSTALLATION - SHEET 2 OF 2

Dwg D13265137/01/02



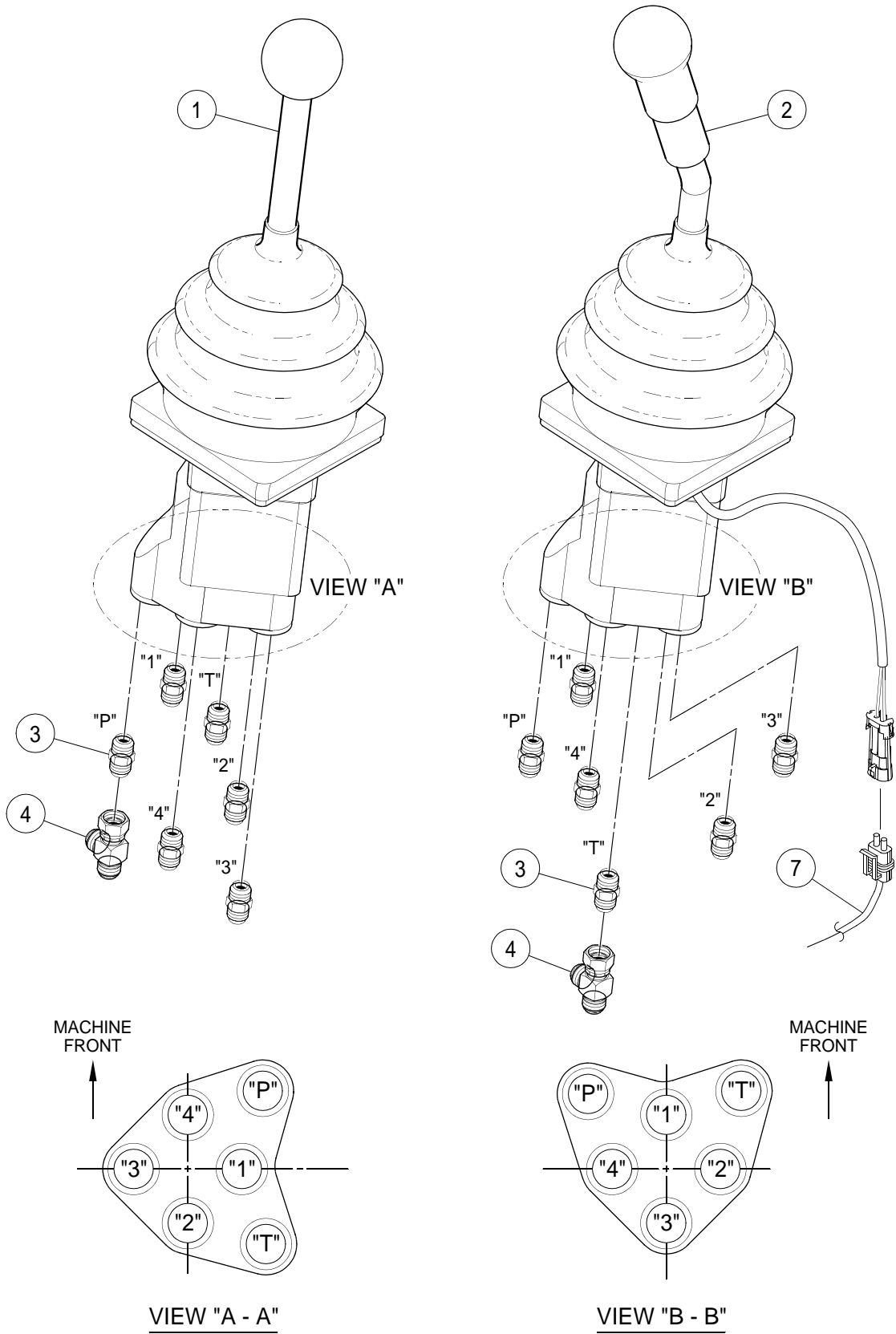
DUAL JOYSTICK CONTROL INSTALLATION - SHEET 2 OF 2

BOM 13372206

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
13	13316898	Decal: Dual Joysticks	1	

LIFT/CROWD JOYSTICK ASSEMBLY - DUAL JOYSTICKS

Dwg D13173539/02



LIFT/CROWD JOYSTICK ASSEMBLY - DUAL JOYSTICKS

BOM 13318753

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13170535	Joystick	1	
-	13269147	- Handle	1	
-	13269287	- Bellows	1	
-	13269295	- Locking Strap	1	
-	13269303	- Mounting Plate	1	
-	13269311	- Plug	1	
-	13269329	- Flat Seal	1	
2	13318738	Joystick	1	
-	13360680	- Joystick Switch	1	
3	59922419	Adapter, Straight	12	
4	59918615	Adapter	2	
7	13195748	Frame/Level Wire Harness	1	

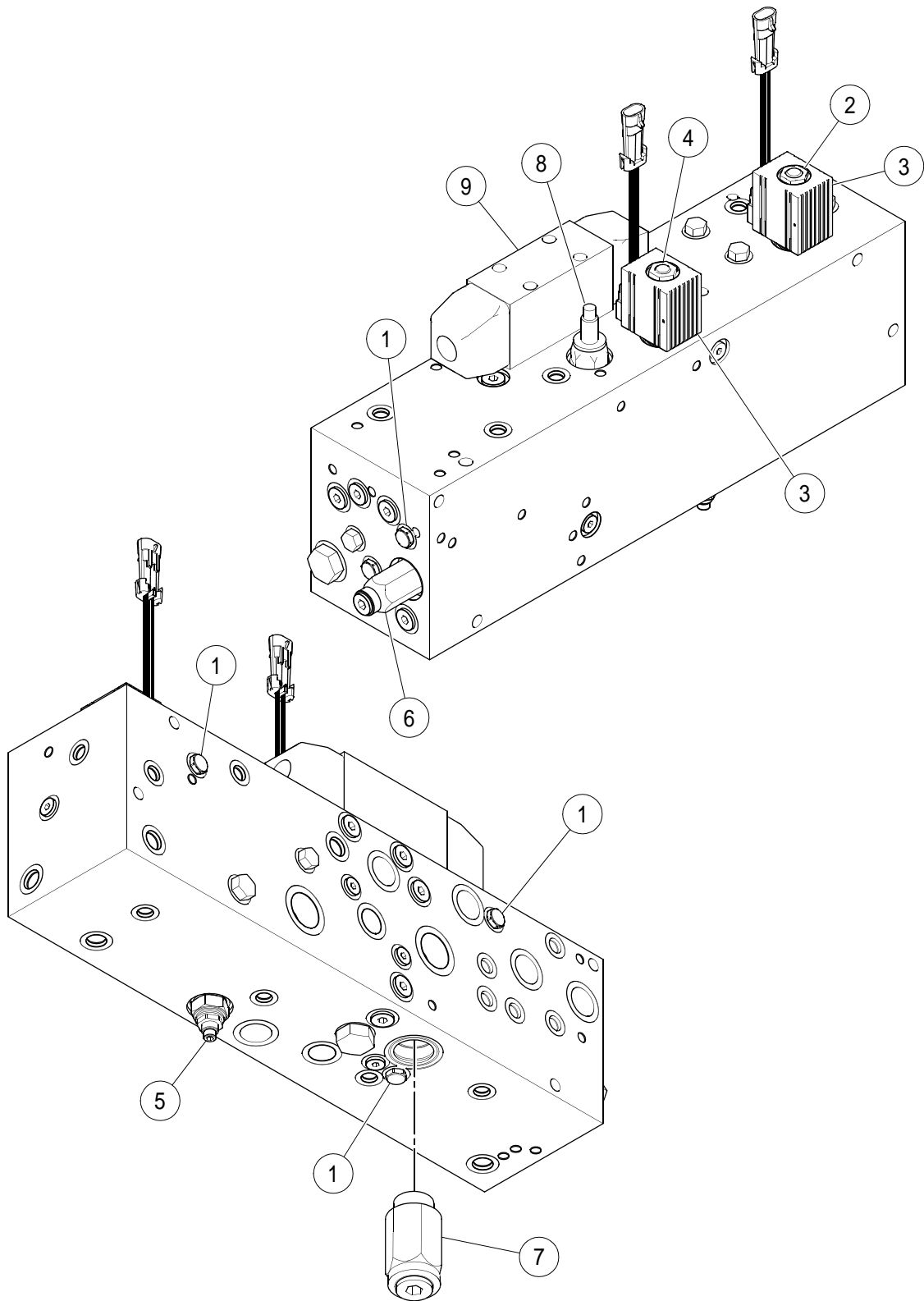
MAIN MANIFOLD ASSEMBLY - DUAL JOYSTICKS

BOM 13280524

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13259296	Main Manifold - Dual Joysticks	1	See Breakdown H - 62.
2	59918532	Adapter, Tee	1	
3	59922542	Adapter, Straight	2	
4	59922823	Adapter, 90°	1	
5	59158881	Reducer	1	
6	59922336	Adapter	1	
7	59922807	Adapter	1	
8	59929182	Adapter, Straight	12	
10	59919670	Adapter, Straight	1	
11	59922419	Adapter, Straight	1	
12	59918649	Adapter, Straight	1	
14	59922591	Adapter	1	
15	59922898	Adapter, 90°	1	
16	13304092	Pressure Switch - two wire	1	
17	13220405	Pressure Switch - three wire	1	
18	13259189	Pressure Switch - two wire	1	

MAIN MANIFOLD - DUAL JOYSTICKS (13259296) - INTERNAL BREAKDOWN

Dwg 13259296/00



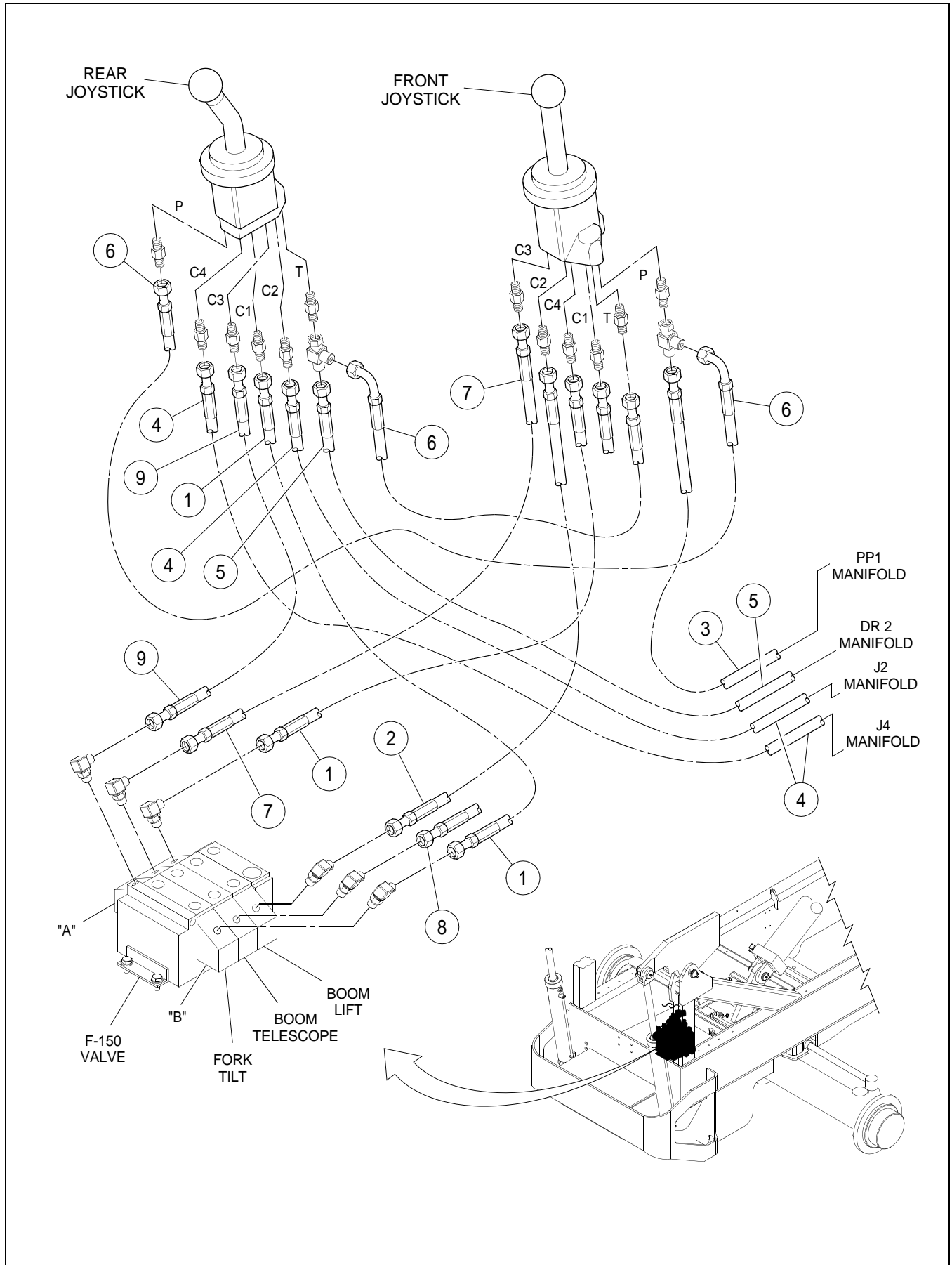
MAIN MANIFOLD - DUAL JOYSTICKS (13259296) - INTERNAL
BREAKDOWN

BOM 13259296

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	54729256	Shuttle Valve	5	
-	13269410	- Seal Kit	5	
2	13491758	Cartridge	1	
-	13282199	- Seal Kit	1	
3	13491766	Coil	2	
4	13384854	Valve Assembly	2	
-	13491741	- Seal Kit	2	
5	13284633	Pressure Reducer	1	
-	13491741	- Seal Kit	1	
6	59052902	Relief Cartridge	1	
-	13491774	- Seal Kit	1	
7	13491782	Logic Element	1	
-	13491790	- Seal Kit	1	
8	13491808	Pressure Reducer	1	
-	13491816	- Seal Kit	1	
9	13491824	Directional Valve	1	

HOSING INSTALLATION - DUAL JOYSTICKS - SHEET 1 OF 2

Dwg D13265160/00/01



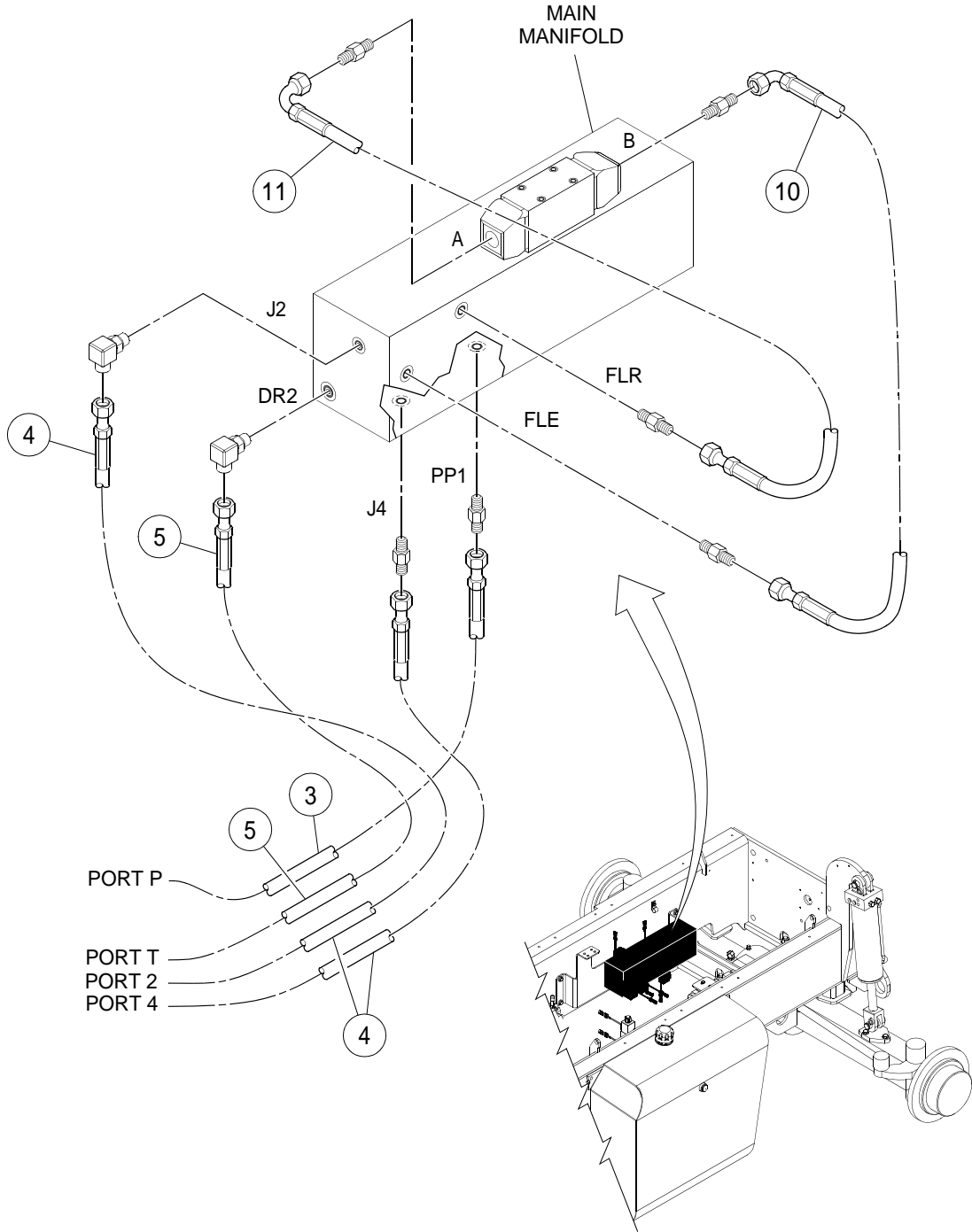
HOSING INSTALLATION - DUAL JOYSTICKS - SHEET 1 OF 2

BOM 13307145

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13305719	Hose Assembly	2	194.0"
2	13305727	Hose Assembly	1	188.0"
3	13305735	Hose Assembly	1	52.0"
4	13305743	Hose Assembly	2	47.0"
5	13181383	Hose Assembly	1	44.0"
6	13181441	Hose Assembly	2	18.0"
7	13306691	Hose Assembly	1	197.0"
8	13307103	Hose Assembly	1	191.0"
9	13307111	Hose Assembly	1	200.0"

HOSING INSTALLATION - DUAL JOYSTICKS - SHEET 2 OF 2

Dwg D13265160/00/02



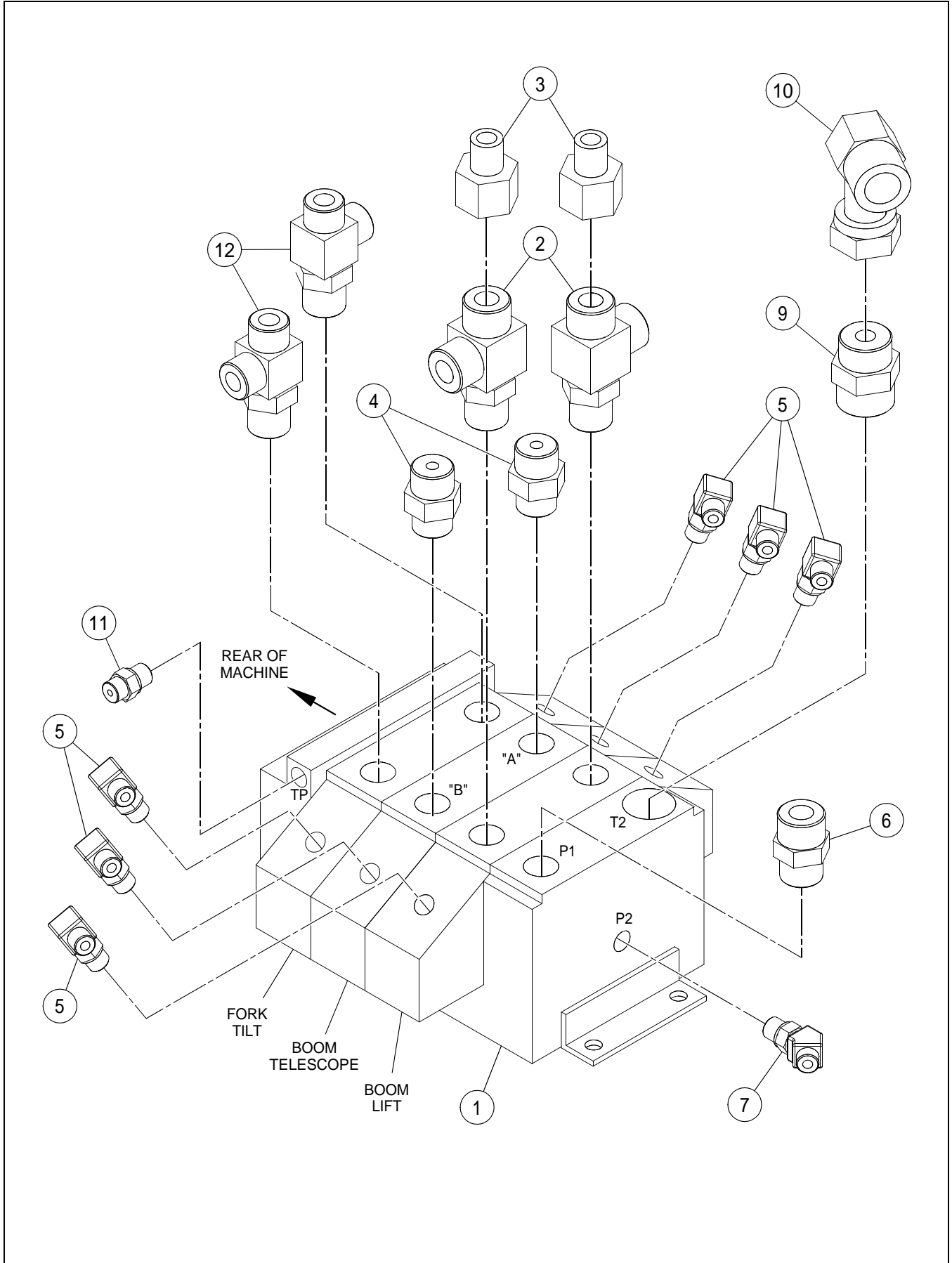
HOSING INSTALLATION - DUAL JOYSTICKS - SHEET 2 OF 2

BOM 13307145

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13305735	Hose Assembly	1	52.0"
4	13305743	Hose Assembly	2	47.0"
5	13181383	Hose Assembly	1	44.0"
10	13190830	Hose Assembly	1	26.5"
11	13305750	Hose Assembly	1	20.0"

LIFT/CROWD VALVE ASSEMBLY - DUAL JOYSTICKS

Dwg D13280540/01



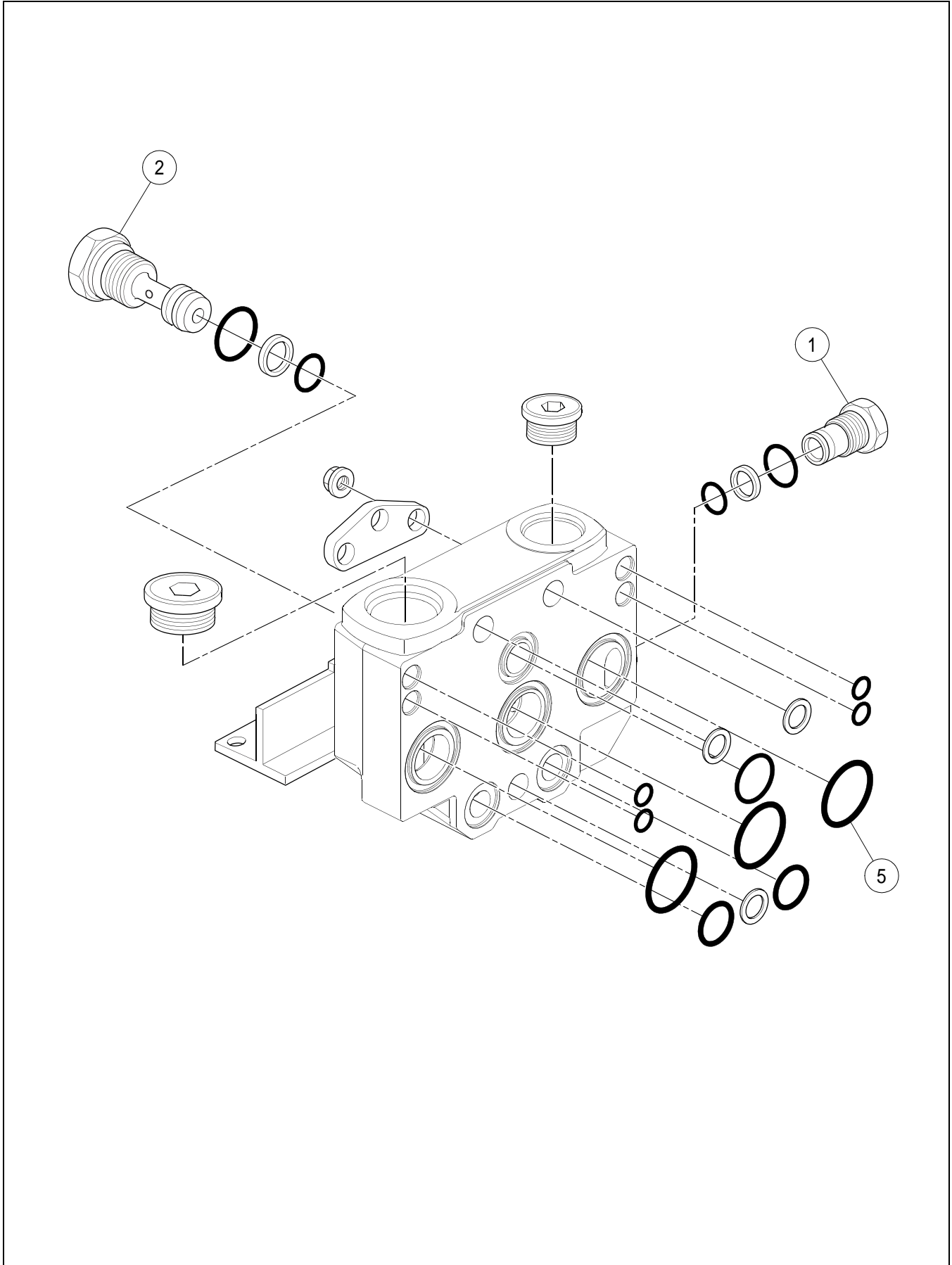
LIFT/CROWD VALVE ASSEMBLY - DUAL JOYSTICKS

BOM 13259668

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13264601	Crowd and Lift Valve - Dual Joysticks	1	See Breakdown H - 70.
2	59923094	Adapter	2	
3	59924027	Reducer	2	
4	59922559	Adapter	2	
5	59922823	Adapter, 90°	6	
6	59922591	Adapter	1	
7	59922211	Adapter, 45°	1	
9	59922641	Adapter, Straight	1	
10	59923490	Adapter	1	
11	59922419	Adapter, Straight	1	
12	59409193	Adapter	2	

CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

Dwg 13264601/00/01



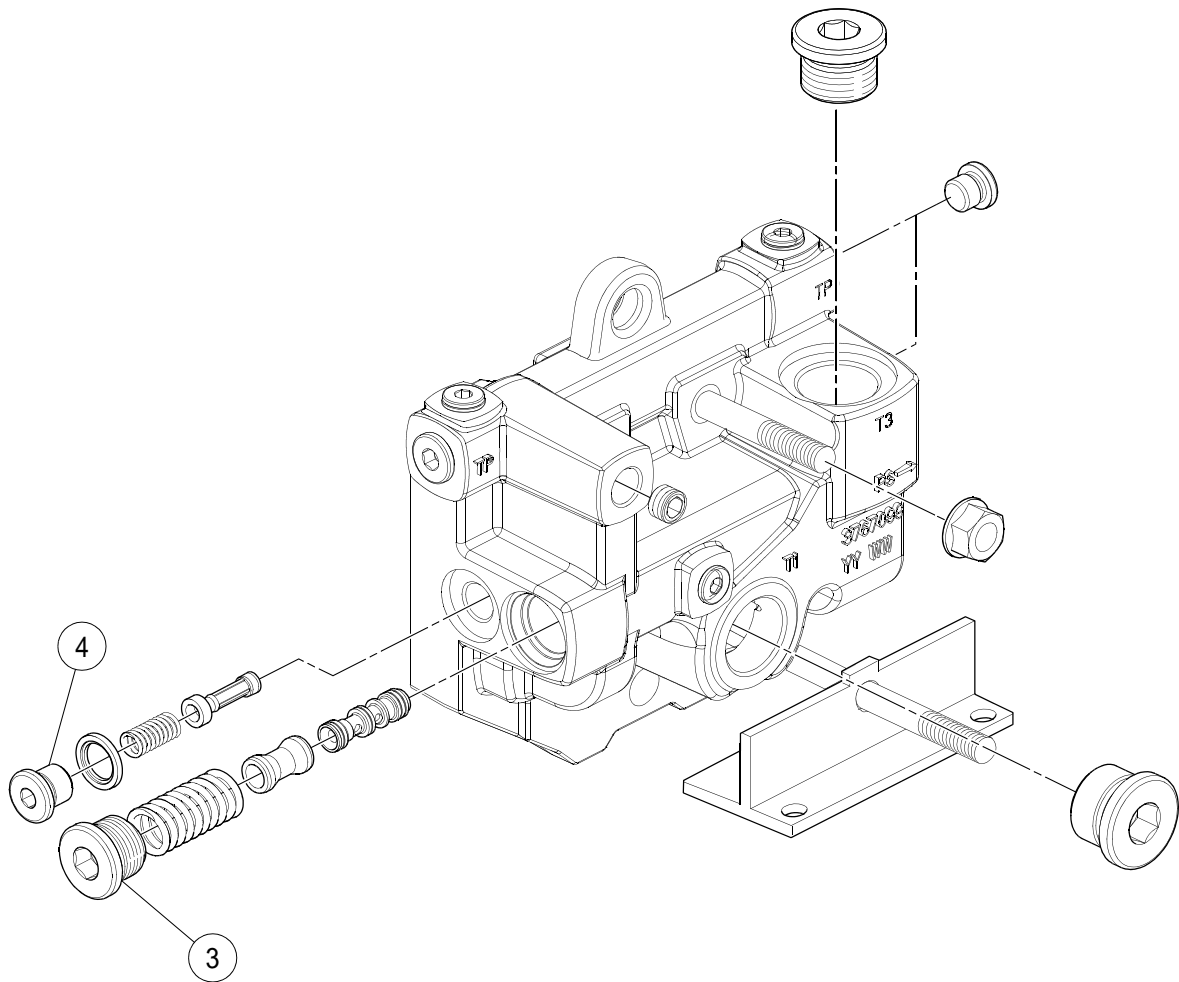
CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

BOM 13264601

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510441	Plug	1	
-	13510458	- Seal Kit	1	
2	13510466	Adaptor	1	
-	13510474	- Seal Kit	1	
5	13510508	Intersection Seal Kit	1	

CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

Dwg 13264601/00/02



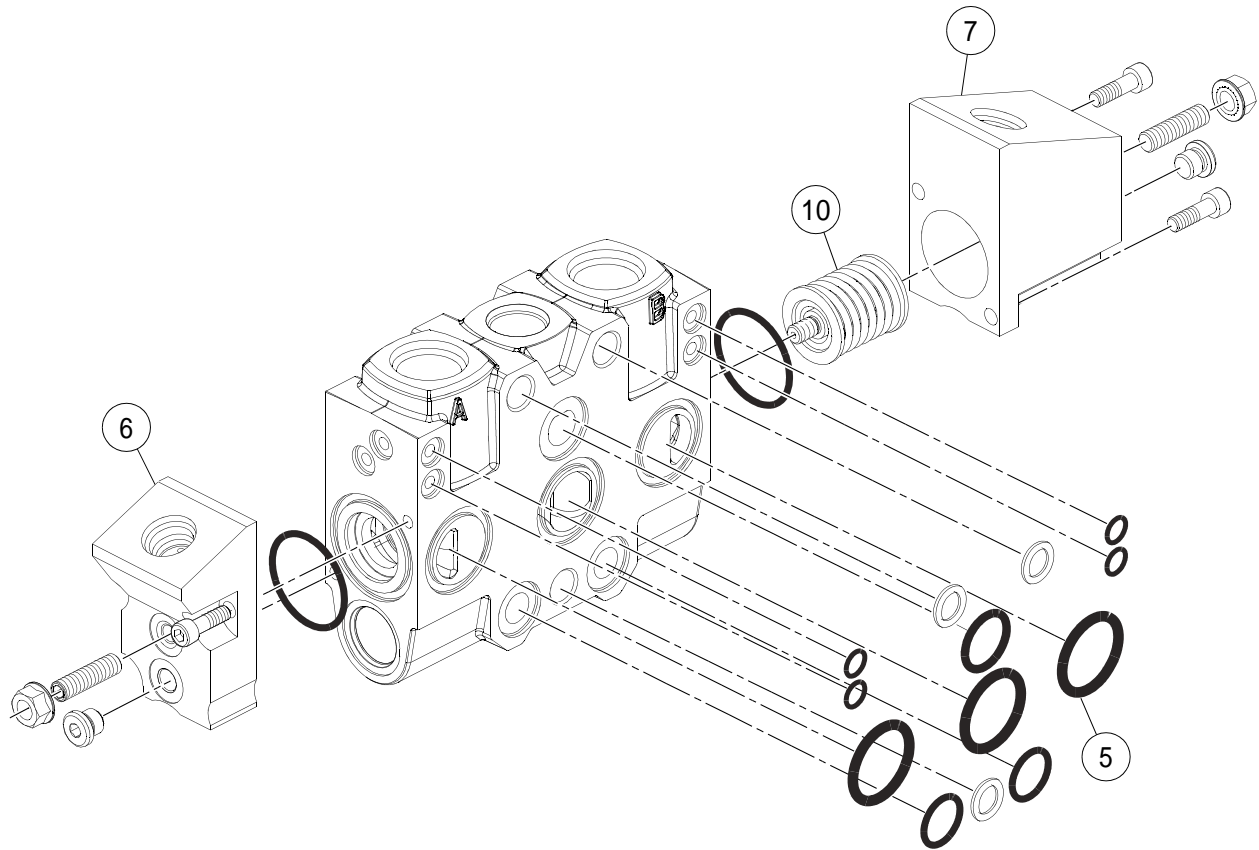
CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

BOM 13264601

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13510482	Pressure Reducing Valve	1	
4	13510490	Pilot Oil Filter	1	

CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

Dwg 13264601/00/03



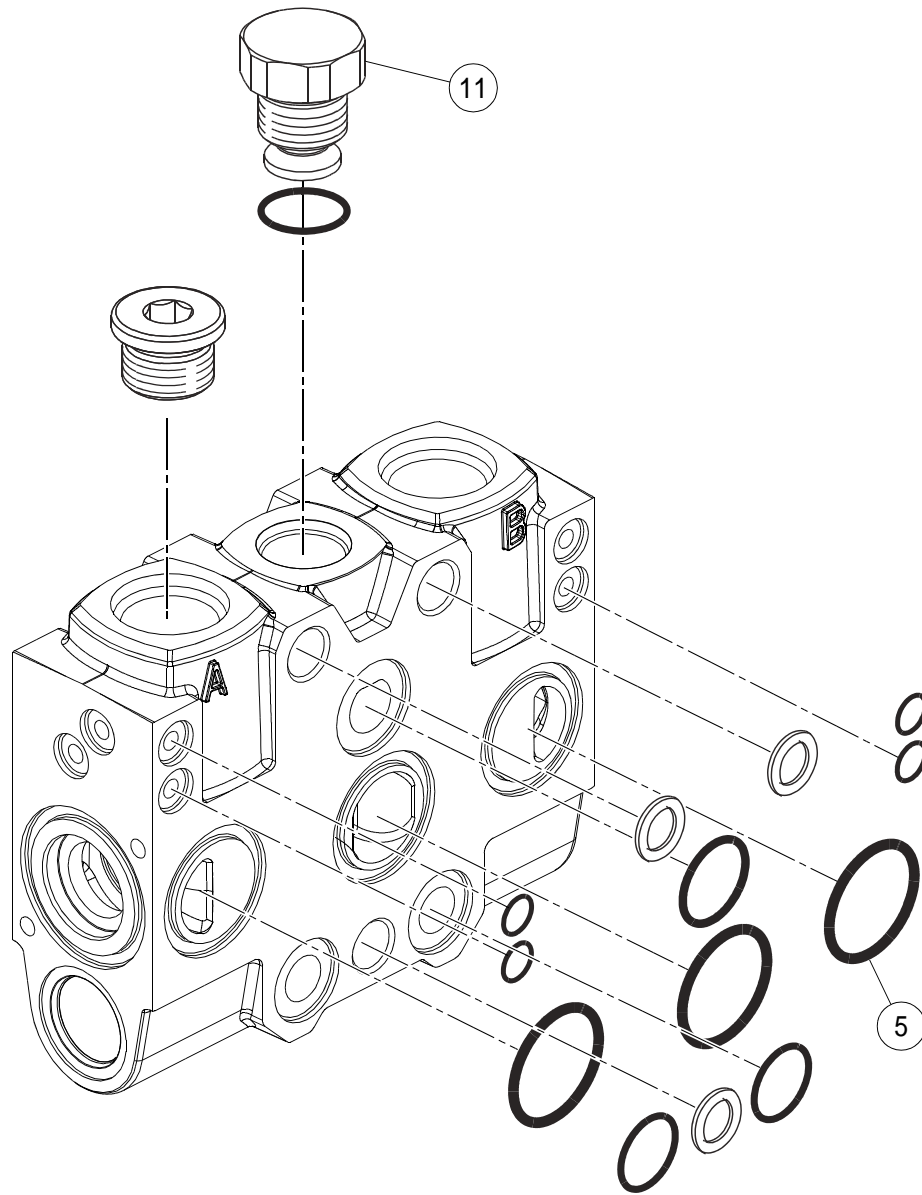
CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

BOM 13264601

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
6	13510516	Actuator	3	
-	13510524	- Seal Kit	3	
7	13510532	Actuator	3	
-	13510524	- Seal Kit	3	
10	13510557	Spring Kit	3	

CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

Dwg 13264601/00/04



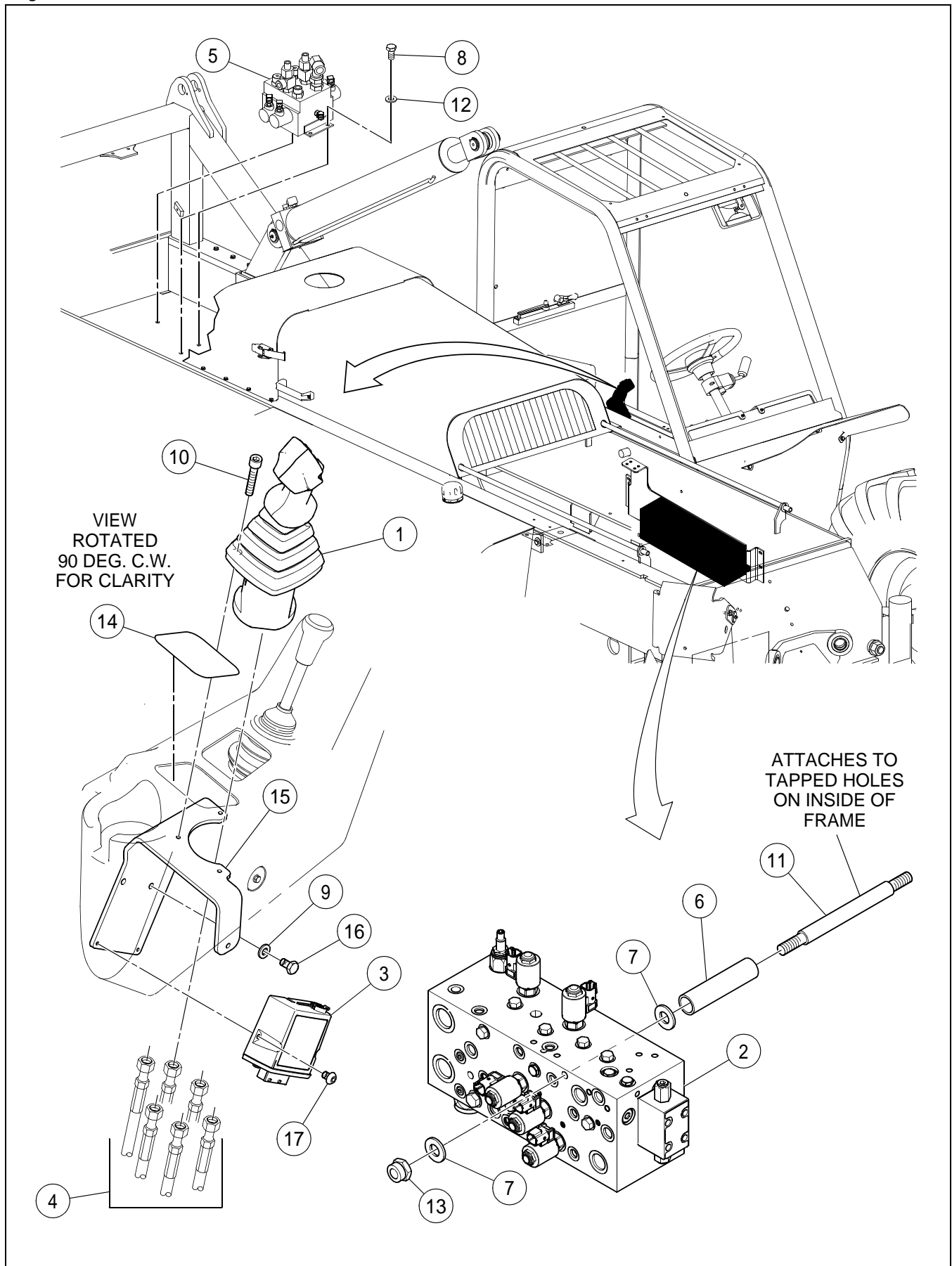
CROWD AND LIFT VALVE - DUAL JOYSTICKS (13264601) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

BOM 13264601

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
11	13510565	Check Valve	3	

SINGLE JOYSTICK CONTROL INSTALLATION - EFFECTIVE WITH S/N 187990

Dwg 13443395/0A



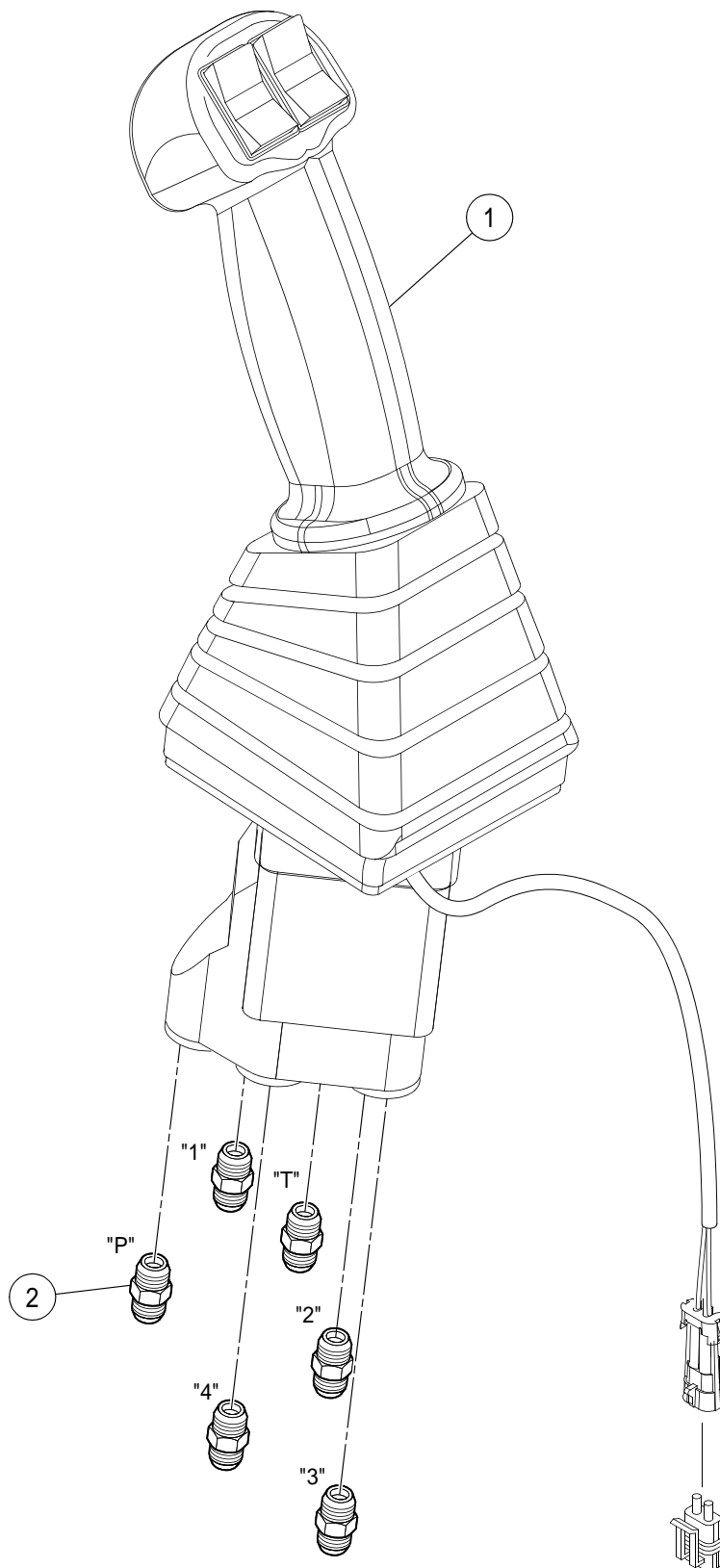
SINGLE JOYSTICK CONTROL INSTALLATION - EFFECTIVE
WITH S/N 187990

BOM 18006346

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Single Joystick Assembly - Effective with S/N 187990, Including S/N 187981 and 187982	1	See Page H - 80.
2	NSVA	Main Manifold Assembly - Single Joystick - Effective with S/N 187990	1	See Page H - 82.
3	13224985	Driver Valve	1	
4	NSVA	Hosing Installation - Single Joystick - Effective with S/N 187990	1	See Page H - 86.
5	NSVA	Lift/Crowd Valve Assembly - Single Joystick - Effective with S/N 187990	1	See Page H - 88.
6	19314681	Stand-off	1	
7	96711833	Flatwasher, Zinc Plated	4	M10 CI 10
8	96702279	HHCS, Fully Threaded, Zinc Plated	3	M10 x 1.5 x 20 CI 8.8
9	96741053	Flatwasher, Zinc Plated	2	M6 CI 200
10	96705082	Screw	3	M6 x 1.0 x 16
12	96741046	Flatwasher, Zinc Plated	3	M10 CI 200
11		This item not used with this Assembly		
13	43834985	HHCS, Zinc Plated	2	M10 x 1.5 x 225 CI 8.8
14	13316807	Decal: Single Joystick	1	
15	13856737	Joystick Support	1	
16	96702394	HHCS, Fully Threaded, Zinc Plated	2	CI 8.8
17	59148569	HSBHCS	2	M5 x 0.8 x 12

SINGLE JOYSTICK ASSEMBLY - EFFECTIVE WITH S/N
187990, INCLUDING S/N 187981 AND 187982

Dwg 13443247/00



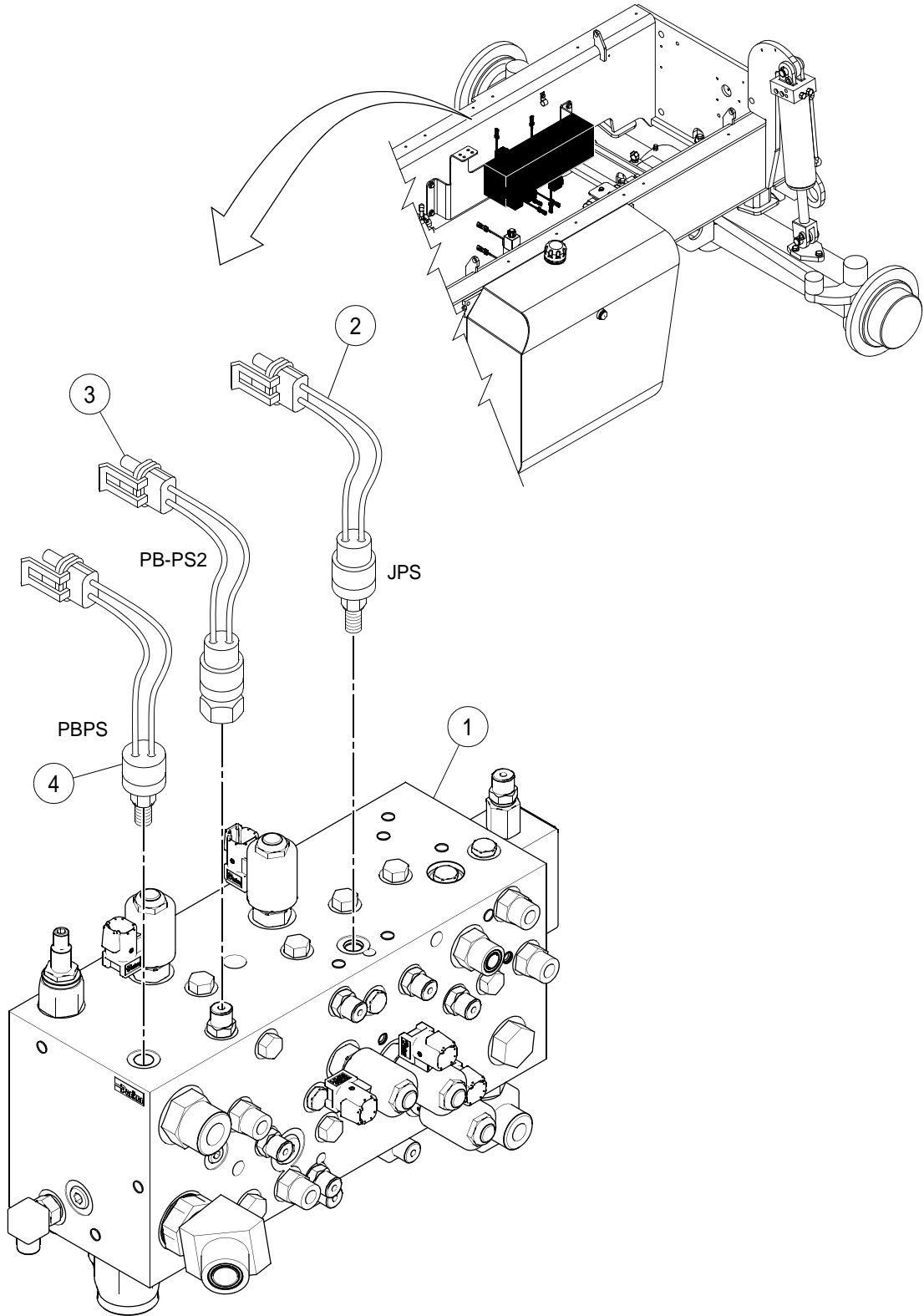
SINGLE JOYSTICK ASSEMBLY - EFFECTIVE WITH S/N
187990, INCLUDING S/N 187981 AND 187982

BOM 13443247

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13443155	Single Joystick	1	
2	59922419	Adapter, Straight	6	

MAIN MANIFOLD ASSEMBLY - EFFECTIVE WITH S/N 187990
- SINGLE JOYSTICK

Dwg 13443379/01



MAIN MANIFOLD ASSEMBLY - EFFECTIVE WITH S/N 187990
- SINGLE JOYSTICK

BOM 13443379

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Main Manifold Subassembly - Effective with S/N 187990	1	See Page H - 84.
2	19312685	Pressure Switch	1	
3	13220405	Pressure Switch	1	
4	19312701	Pressure Switch	1	

MAIN MANIFOLD SUBASSEMBLY - EFFECTIVE WITH S/N
187990

Dwg

List Only
No Drawing Required

MAIN MANIFOLD SUBASSEMBLY - EFFECTIVE WITH S/N
187990

BOM 13443270

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13835582	Main Manifold	1	
2	59919670	Adapter, Straight	4	
3	59922823	Adapter, 90°	1	
5	59922591	Adapter	2	
6	59922492	Adapter, Straight	1	
7	59918649	Adapter, Straight	1	
8	59922419	Adapter, Straight	1	
9	59922807	Adapter	2	
10	59922542	Adapter, Straight	1	
11	59922930	Adapter	1	
12	59929182	Adapter, Straight	15	

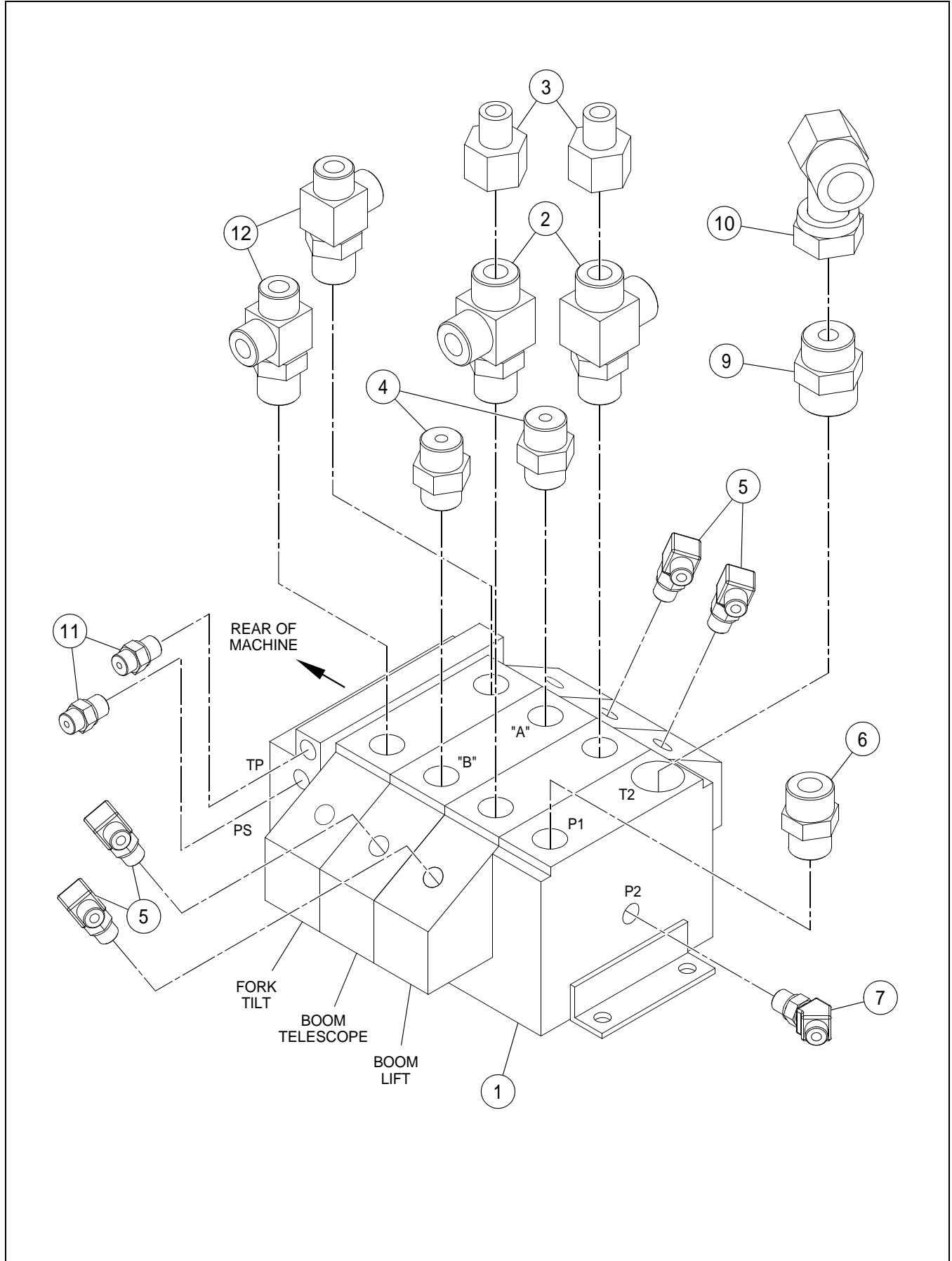
HOSING INSTALLATION - SINGLE JOYSTICK - EFFECTIVE
WITH S/N 187990

BOM 18006338

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	18006312	Hose Assembly	1	206.0"
2	13307111	Hose Assembly	1	200.0"
3	13193271	Hose Assembly	1	170.0"
4	13181375	Hose Assembly	2	156.0"
5	18006320	Hose Assembly	2	57.0"
6	13193289	Hose Assembly	1	49.0"
7	13181417	Hose Assembly	1	59.0"
8	13305750	Hose Assembly (Not Shown)	2	20.0"

LIFT/CROWD VALVE ASSEMBLY - EFFECTIVE WITH S/N
187990 - SINGLE JOYSTICK

Dwg 18005215/00



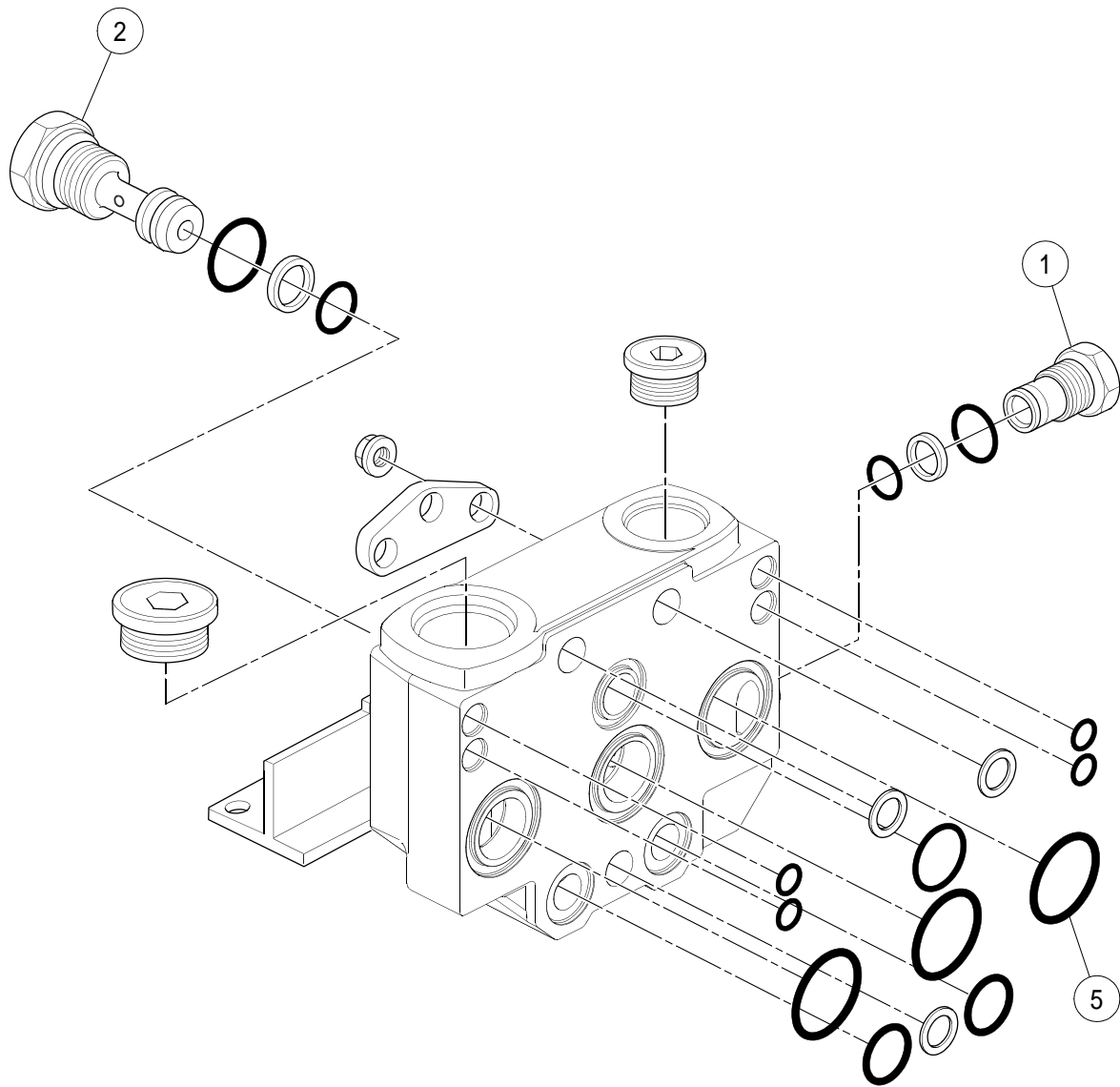
LIFT/CROWD VALVE ASSEMBLY - EFFECTIVE WITH S/N
187990 - SINGLE JOYSTICK

BOM 18005215

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13264635	Crowd and Lift Valve - Single Joystick	1	See Page H - 90.
2	59923094	Adapter	2	
3	59924027	Reducer	2	
4	59922559	Adapter	2	
5	59922823	Adapter, 90°	4	
6	59922591	Adapter	1	
7	59922211	Adapter, 45°	1	
9	59922641	Adapter, Straight	1	
10	59923490	Adapter	1	
11	59922419	Adapter, Straight	2	
12	59409193	Adapter	2	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

Dwg 13264635/00/01



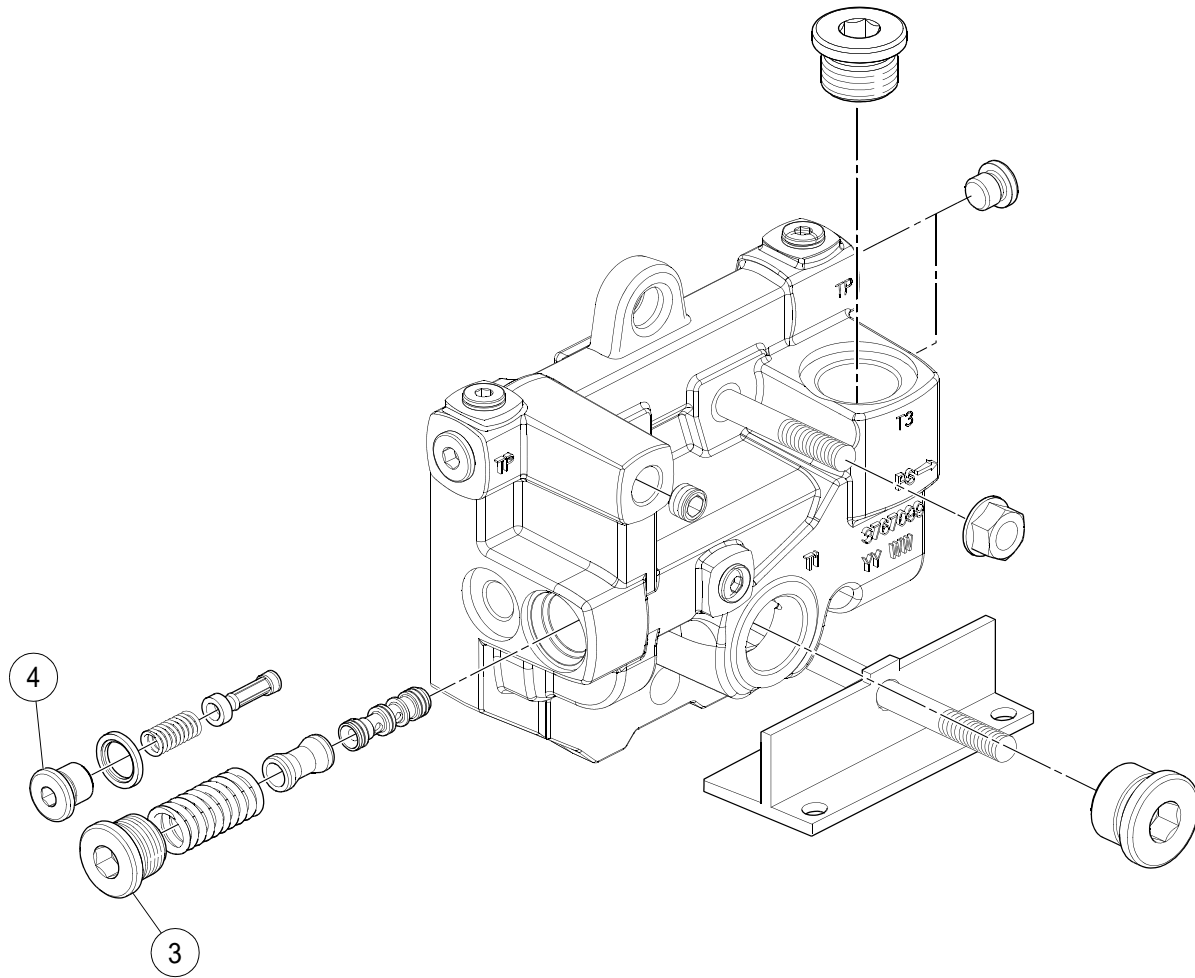
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510441	Plug	1	
-	13510458	- Seal Kit	1	
2	13510466	Adaptor	1	
-	13510474	- Seal Kit	1	
5	13510508	Intersection Seal Kit	1	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

Dwg 13264635/00/02



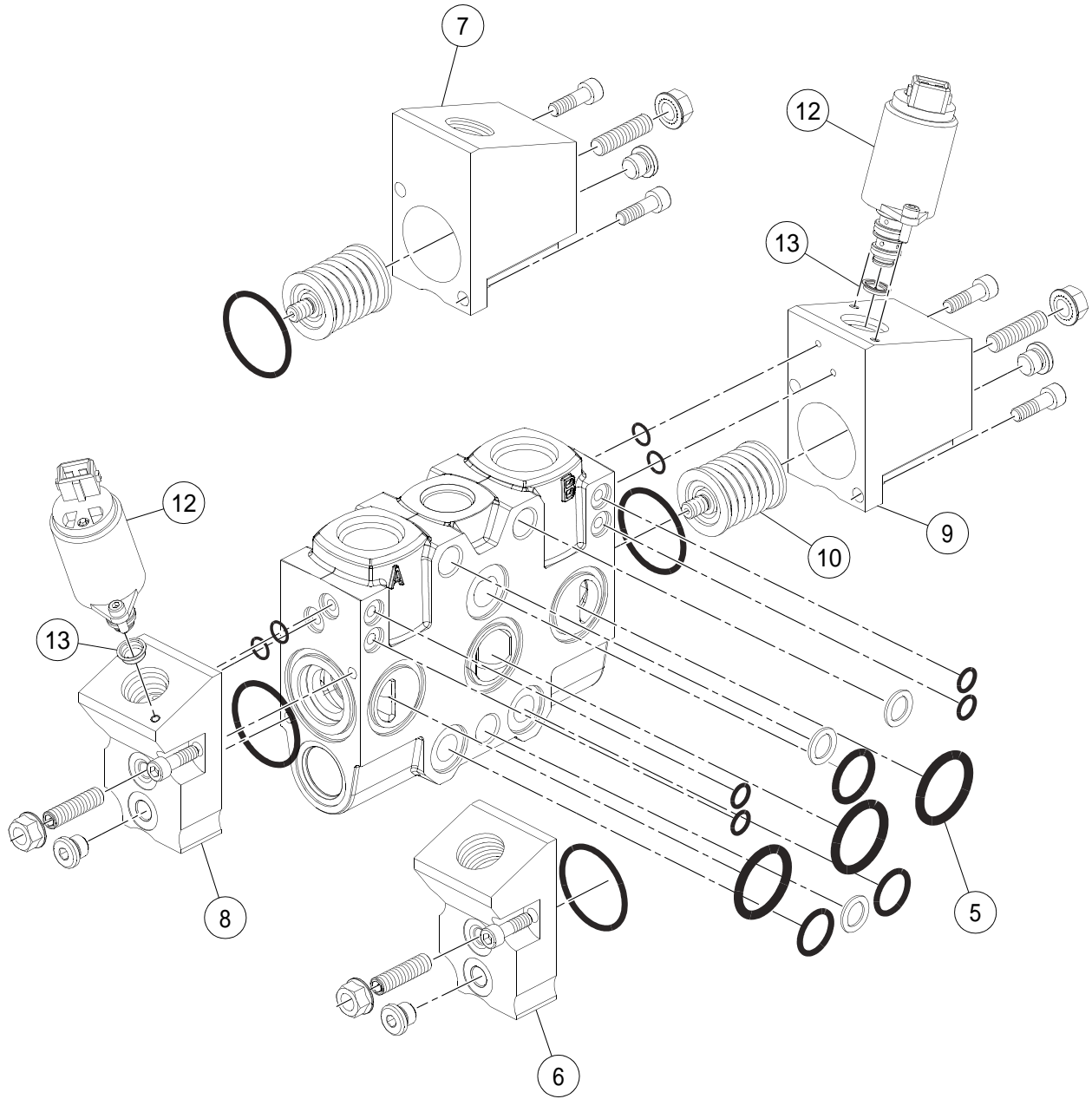
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13510482	Pressure Reducing Valve	1	
4	13510490	Pilot Oil Filter	1	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

Dwg 13264635/00/03



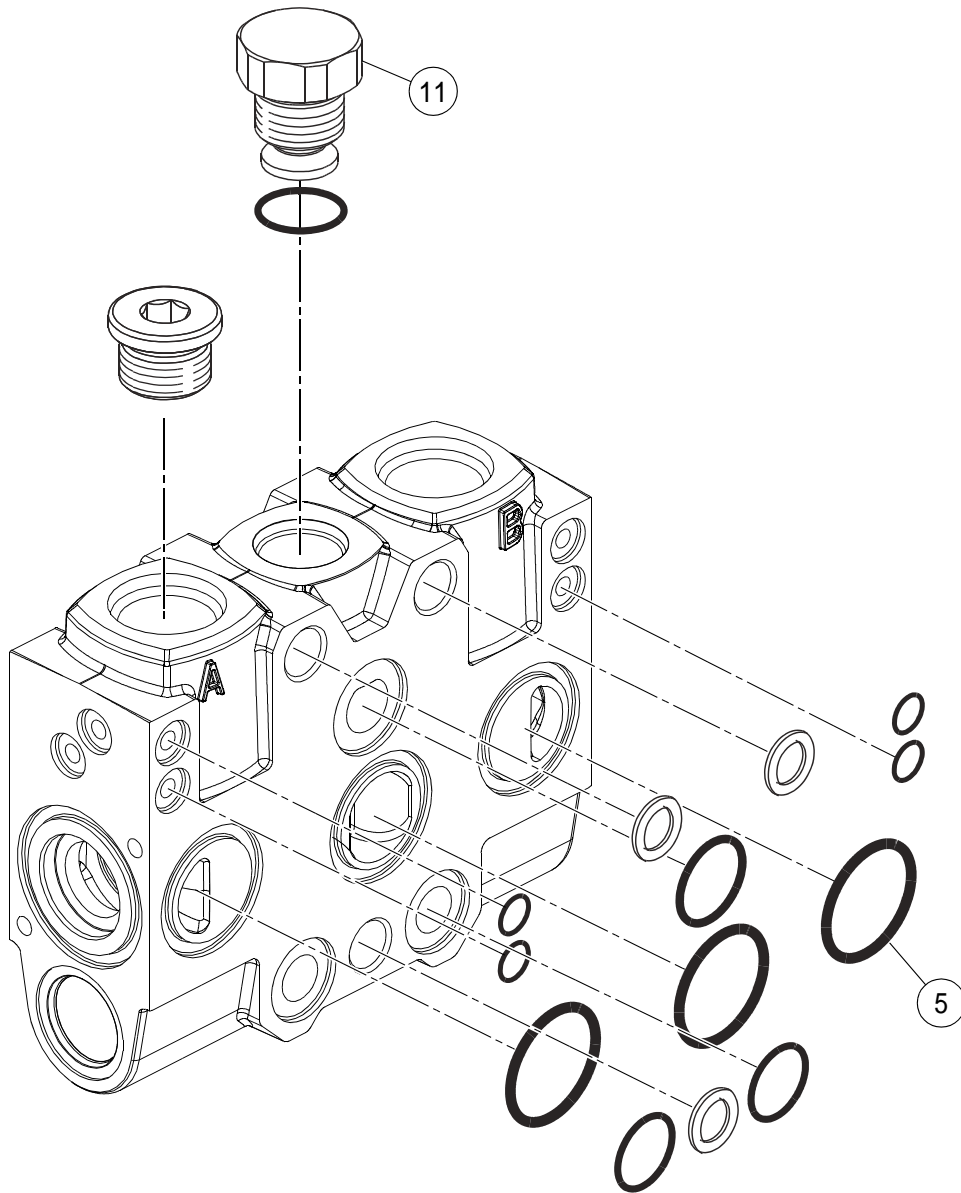
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
6	13510516	Actuator	2	
-	13510524	- Seal Kit	2	
7	13510532	Actuator	2	
-	13510524	- Seal Kit	2	
8	13510573	Actuator	1	
-	13510615	- Seal Kit	1	
9	13510581	Actuator	1	
-	13510615	- Seal Kit	1	
10	13510557	Spring Kit	3	
12	13510631	Solenoid Valve	2	
13	13510656	Pilot Oil Restrictor	2	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

Dwg 13264635/00/04



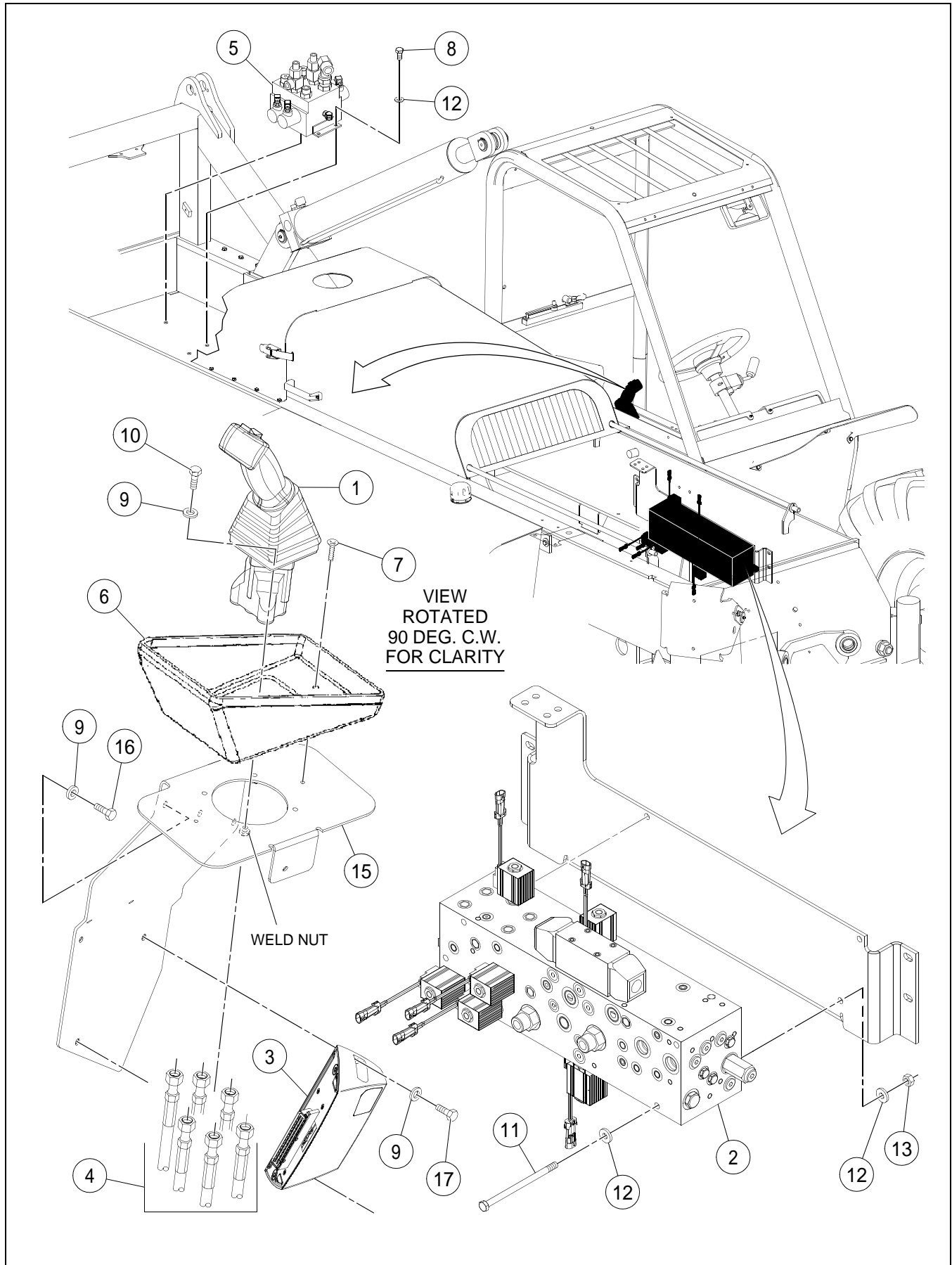
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
11	13510565	Check Valve	3	

SINGLE JOYSTICK CONTROL INSTALLATION - PRIOR TO S/
N 187990 - SHEET 1 OF 2

Dwg D13265145/02/01



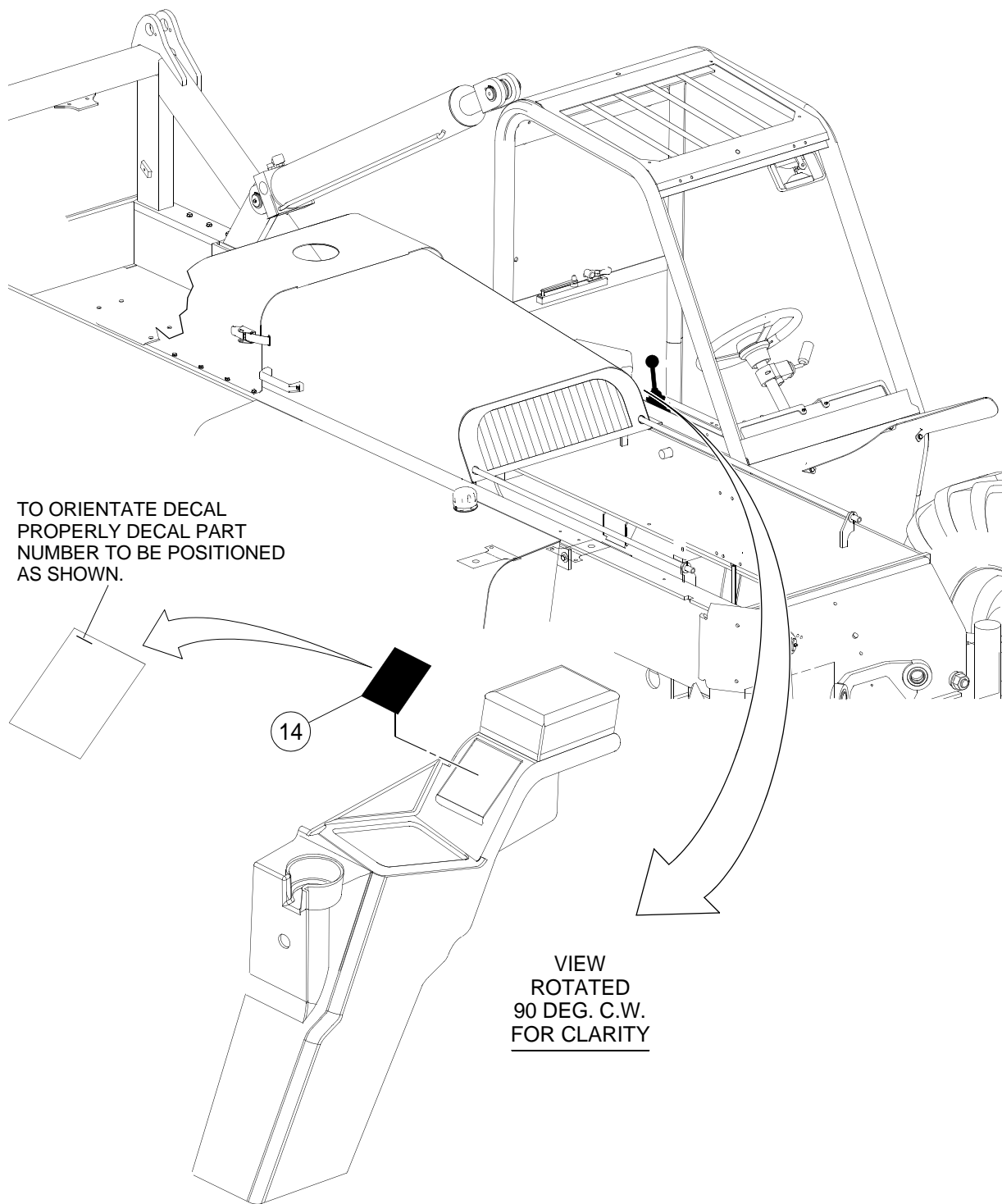
SINGLE JOYSTICK CONTROL INSTALLATION - PRIOR TO S/
N 187990 - SHEET 1 OF 2

BOM 13280508

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Single Joystick Assembly - Prior to S/N 187990, Excluding S/N 187981 and 187982	1	See Page H - 102.
2	NSVA	Main Manifold Assembly - Single Joystick - Prior to S/N 187990	1	See Page H - 108.
3	13306683	Driver Valve	1	
4	NSVA	Hosing Installation - Single Joystick - Prior to S/N 187990	1	See Page H - 112.
5	NSVA	Lift/Crowd Valve Assembly - Single Joystick - Prior to S/N 187990	1	See Page H - 116.
6	13297684	Armrest	1	
7	95887436	Self-tapping Screw, Zinc Plated	2	
8	96702279	HHCS, Fully Threaded, Zinc Plated	3	M10 x 1.5 x 20 CI 8.8
9	96741053	Flatwasher, Zinc Plated	9	M6 CI 200
10	96720164	SHCS, Zinc Plated	4	M6 x 1 x 25 CI 8.8
11	96714985	HHCS, Zinc Plated	3	M10 x 1.5 x 150 CI 8.8
12	96741046	Flatwasher, Zinc Plated	9	M10 CI 200
13	96704614	Nut, Zinc Plated	3	M10 x 1.5 CI 8
15	13306527	Mounting Plate	1	
16	96702394	HHCS, Fully Threaded, Zinc Plated	3	CI 8.8
17	96704564	HHCS, Fully Threaded, Zinc Plated	2	M6 x 1.0 x 20 CI 8.8

SINGLE JOYSTICK CONTROL INSTALLATION - PRIOR TO S/
N 187990 - SHEET 2 OF 2

Dwg D13265145/02/02



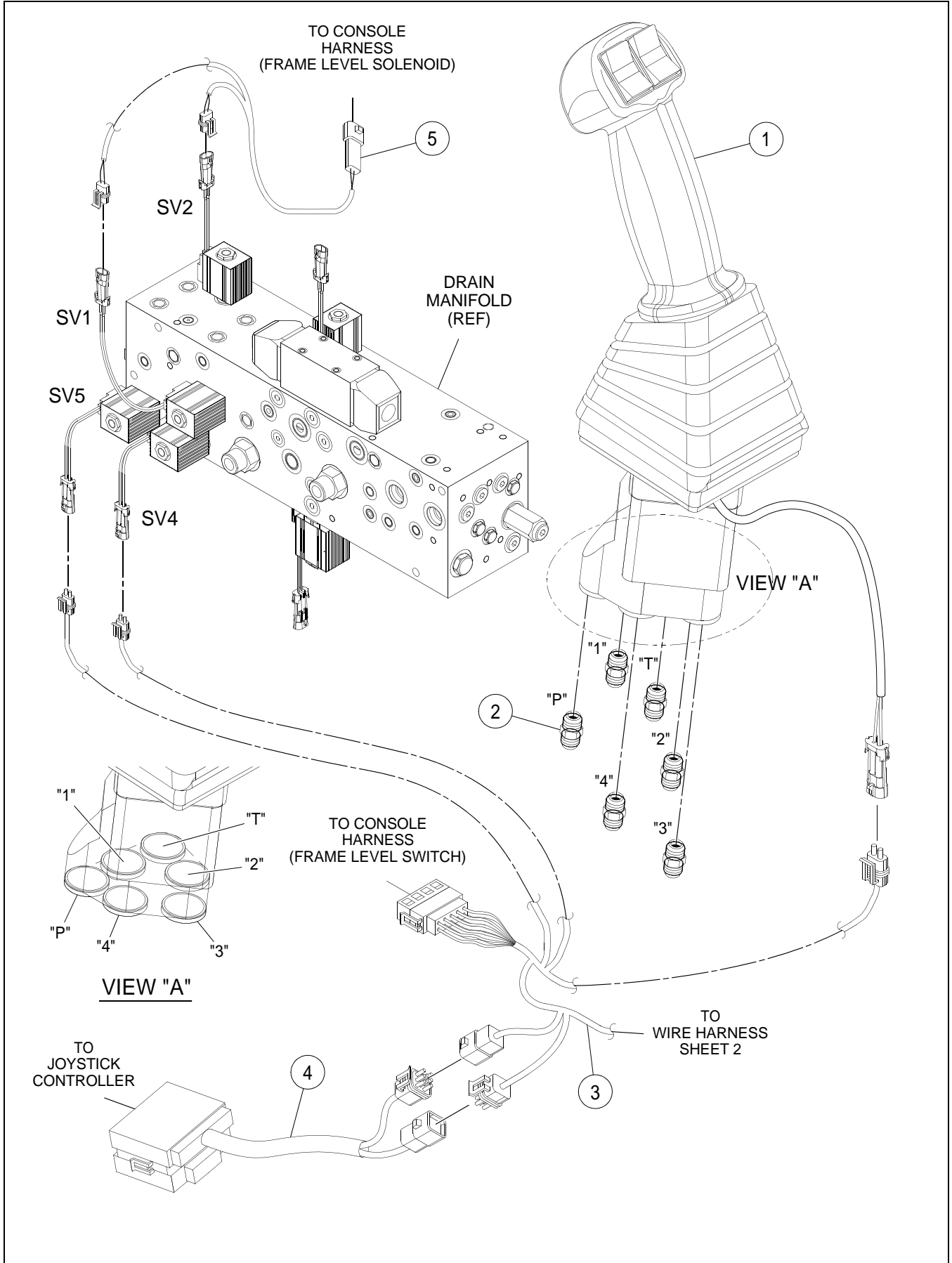
SINGLE JOYSTICK CONTROL INSTALLATION - PRIOR TO S/
N 187990 - SHEET 2 OF 2

BOM 13280508

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
14	13316807	Decal: Single Joystick	1	

SINGLE JOYSTICK ASSEMBLY - PRIOR TO S/N 187990,
 EXCLUDING S/N 187981 AND 187982 - SHEET 1 OF 2

Dwg D13280136/02/01



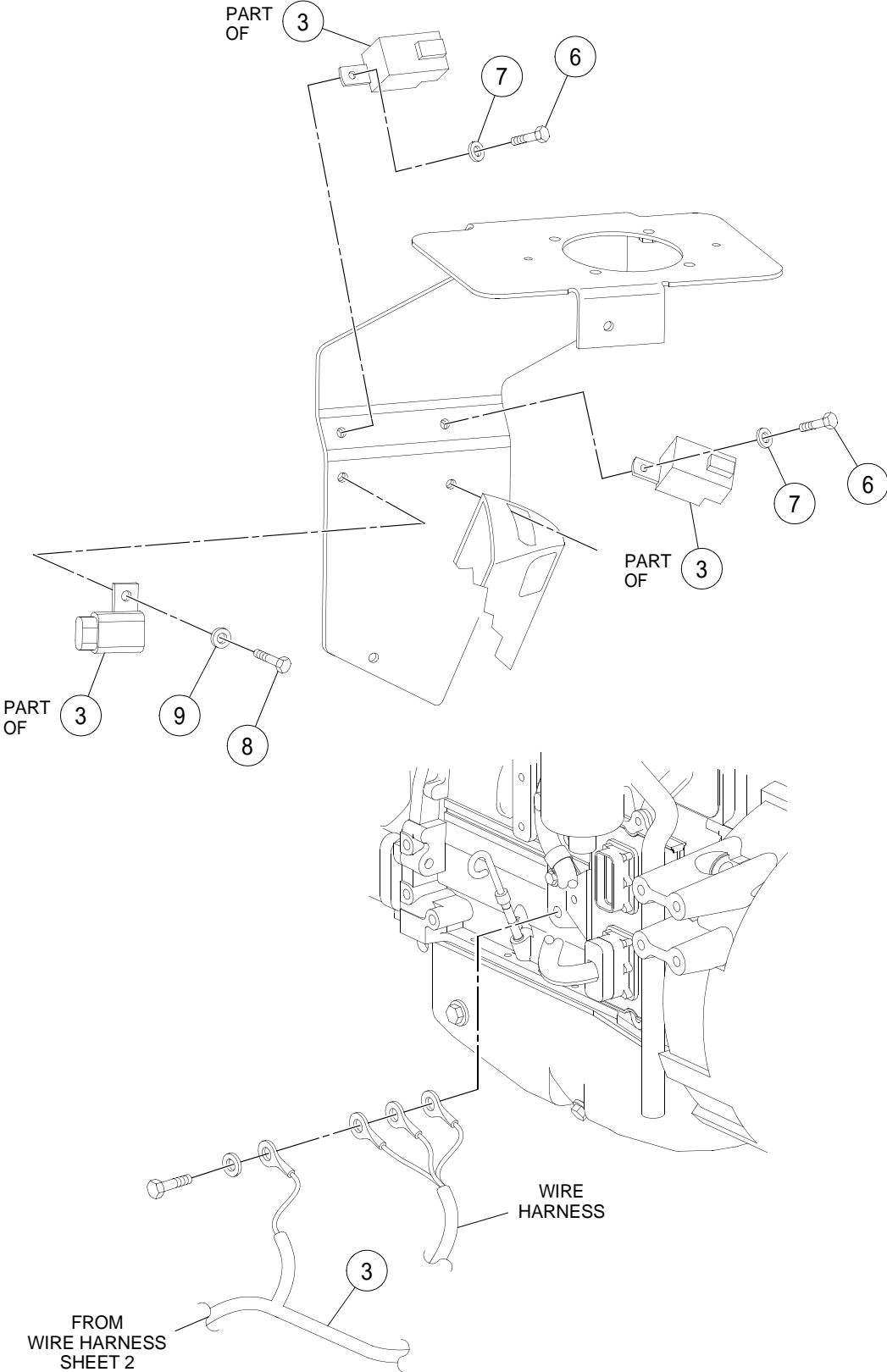
SINGLE JOYSTICK ASSEMBLY - PRIOR TO S/N 187990,
EXCLUDING S/N 187981 AND 187982 - SHEET 1 OF 2

BOM 13280136

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13266697	Single Joystick - Prior to S/N 187990, Excluding S/N 187981 and 187982	1	See Page H - 106.
2	59922419	Adapter, Straight	6	
3	13305578	Joystick Wire Harness	1	
4	13305792	Jumper Wire Harness	1	
5	13285739	Frame Level Jumper Harness	1	

SINGLE JOYSTICK ASSEMBLY - PRIOR TO S/N 187990,
EXCLUDING S/N 187981 AND 187982 - SHEET 2 OF 2

Dwg D13280136/02/02



SINGLE JOYSTICK ASSEMBLY - PRIOR TO S/N 187990,
 EXCLUDING S/N 187981 AND 187982 - SHEET 2 OF 2

BOM 13280136

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13305578	Joystick Wire Harness	1	
6	96701958	HHCS, Fully Threaded, Zinc Plated	2	M6 x 16 CI 8.8
7	96741053	Flatwasher, Zinc Plated	2	M6 CI 200
8	96702386	HHCS, Fully Threaded, Zinc Plated	1	M5 x 0.8 x 12 CI 8.8
9	96738554	Flatwasher, Zinc Plated	1	M5 Hardened CI 200

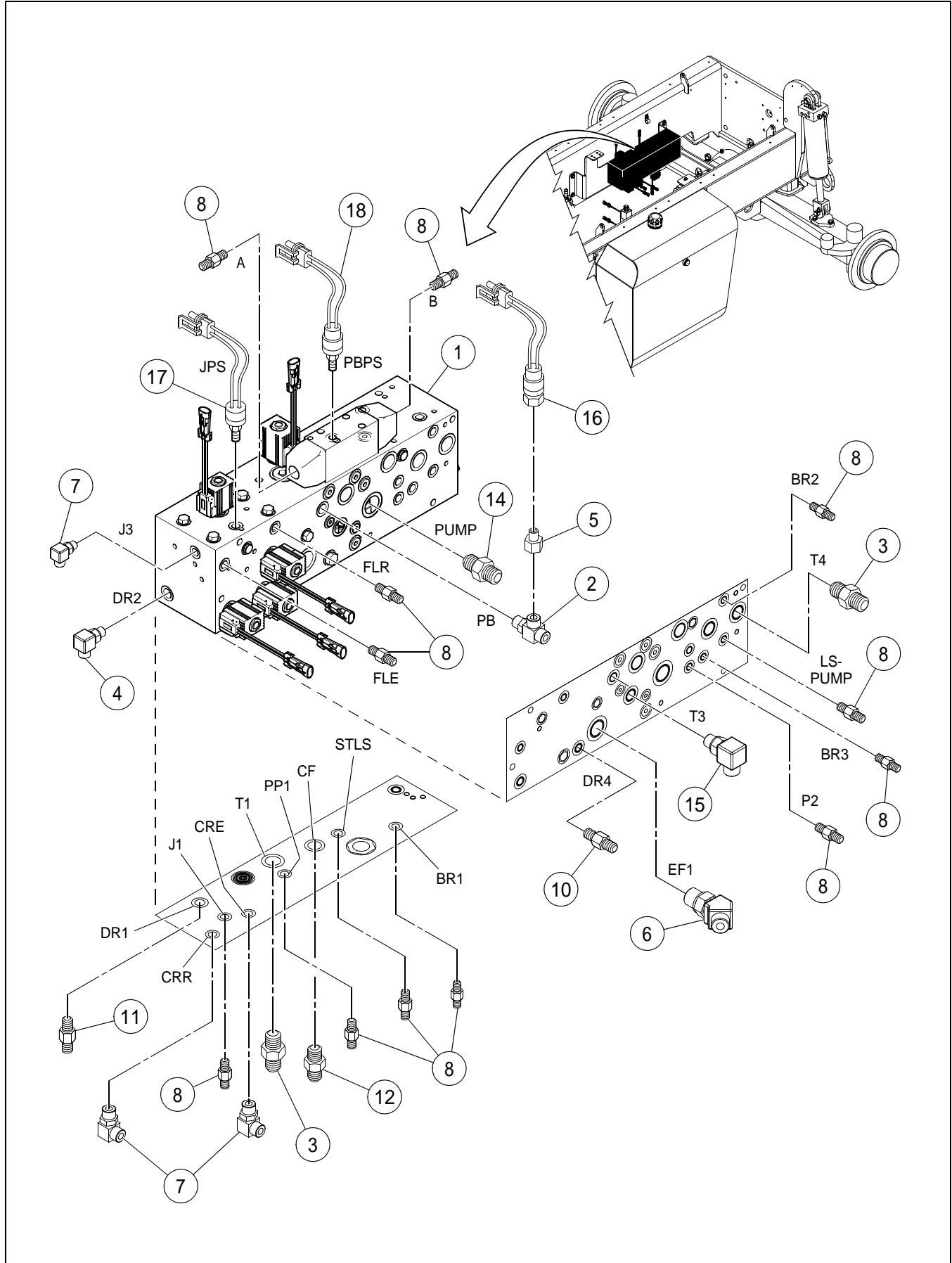
SINGLE JOYSTICK (13266697) - PRIOR TO S/N 187990,
EXCLUDING S/N 187981 AND 187982

BOM 13266697

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510706	Joystick	1	
2	13444138	Dual Rocker Handle	1	
3	13510722	Wire Tie	A/R	
4	13510748	Locknut	1	
5	13510755	Mounting Plate	1	
6	13444146	Bellows	1	
7	13444153	Plate	1	

MAIN MANIFOLD ASSEMBLY - PRIOR TO S/N 187990 - SINGLE JOYSTICK

Dwg D13280516/00



MAIN MANIFOLD ASSEMBLY - PRIOR TO S/N 187990 -
SINGLE JOYSTICK

BOM 13280516

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13264627	Main Manifold - Single Joystick - Prior to S/N 187990	1	See Breakdown H - 110.
2	59918532	Adapter, Tee	1	
3	59922542	Adapter, Straight	2	
4	59922823	Adapter, 90°	1	
5	59158881	Reducer	1	
6	59922336	Adapter	1	
7	59922807	Adapter	3	
8	59929182	Adapter, Straight	12	
10	59918441	Adapter, Straight	1	
11	59922419	Adapter, Straight	1	
12	59918649	Adapter, Straight	1	
14	59922591	Adapter	1	
15	59922898	Adapter, 90°	1	
16	19312685	Pressure Switch	1	
17	13220405	Pressure Switch	1	
18	19312701	Pressure Switch	1	

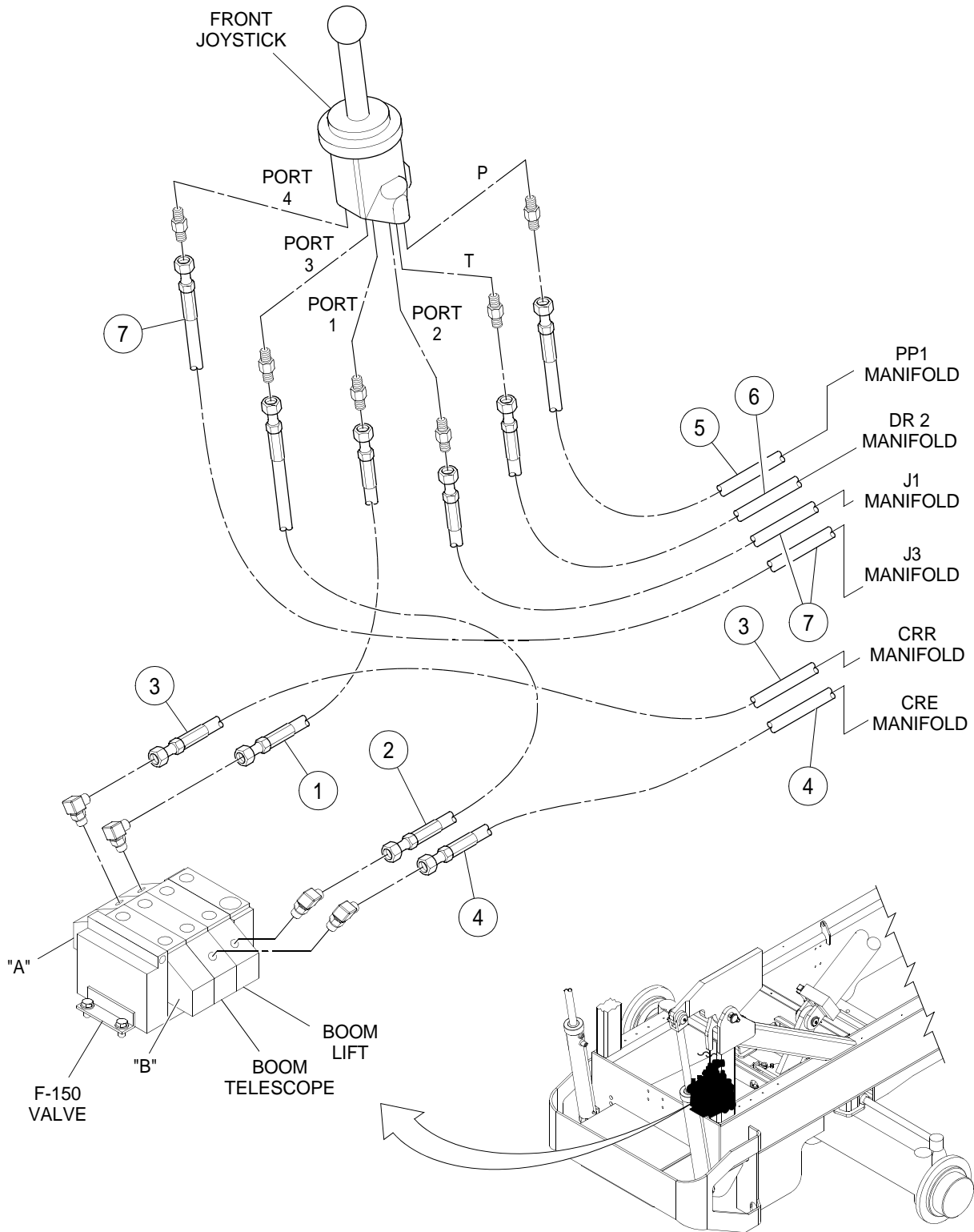
MAIN MANIFOLD - SINGLE JOYSTICK (13264627) - PRIOR
TO S/N 187990 - INTERNAL BREAKDOWN

BOM 13264627

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	54729256	Shuttle Valve	5	
-	13269410	- Seal Kit	5	
2	13384854	Valve Assembly	1	
-	13491741	- Seal Kit	1	
3	13491766	Coil	2	
4	13444179	Cartridge W/O Coil	2	
-	13269428	- Seal Kit	2	
5	13269402	Valve	2	
-	13269436	- Seal Kit	2	
6	13258629	Coil	4	
7	13284633	Pressure Reducer	1	
-	13491741	- Seal Kit	1	
8	13491832	Relief Valve	1	
-	13491774	- Seal Kit	1	
9	13491782	Logic Element	1	
-	13491790	- Seal Kit	1	
10	13491808	Pressure Reducer	1	
-	13491816	- Seal Kit	1	
11	13491824	Directional Valve	1	

HOISING INSTALLATION - SINGLE JOYSTICK - PRIOR TO S/ N 187990 - SHEET 1 OF 2

Dwg D13265186/00/01



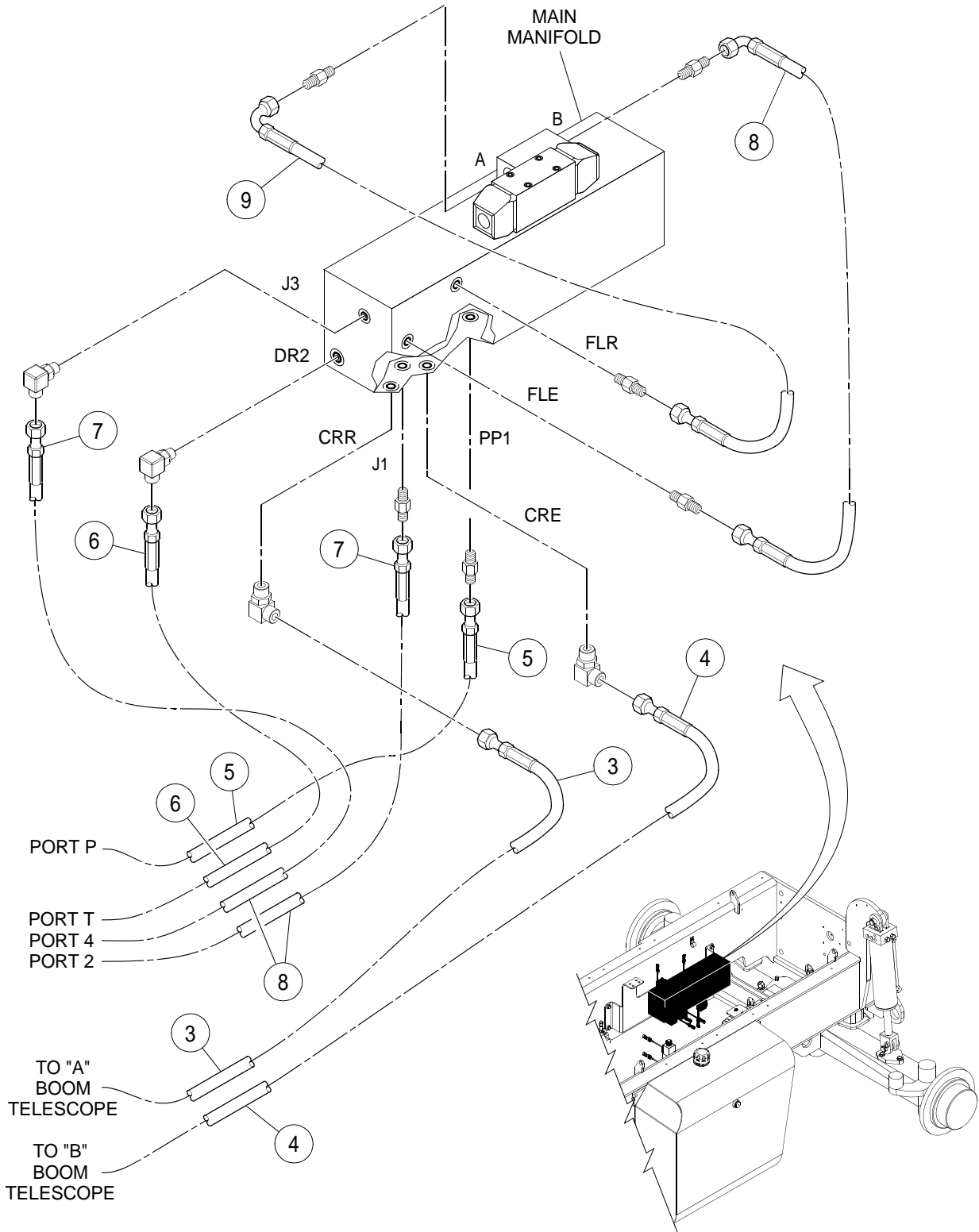
HOSING INSTALLATION - SINGLE JOYSTICK - PRIOR TO S/
N 187990 - SHEET 1 OF 2

BOM 13265186

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13305719	Hose Assembly	1	194.0"
2	13305727	Hose Assembly	1	188.0"
3	13181375	Hose Assembly	1	156.0"
4	13190921	Hose Assembly	1	145.0"
5	13305735	Hose Assembly	1	52.0"
6	13181383	Hose Assembly	1	44.0"
7	13305743	Hose Assembly	2	47.0"

HOSING INSTALLATION - SINGLE JOYSTICK - PRIOR TO S/
N 187990 - SHEET 2 OF 2

Dwg D13265186/00/02



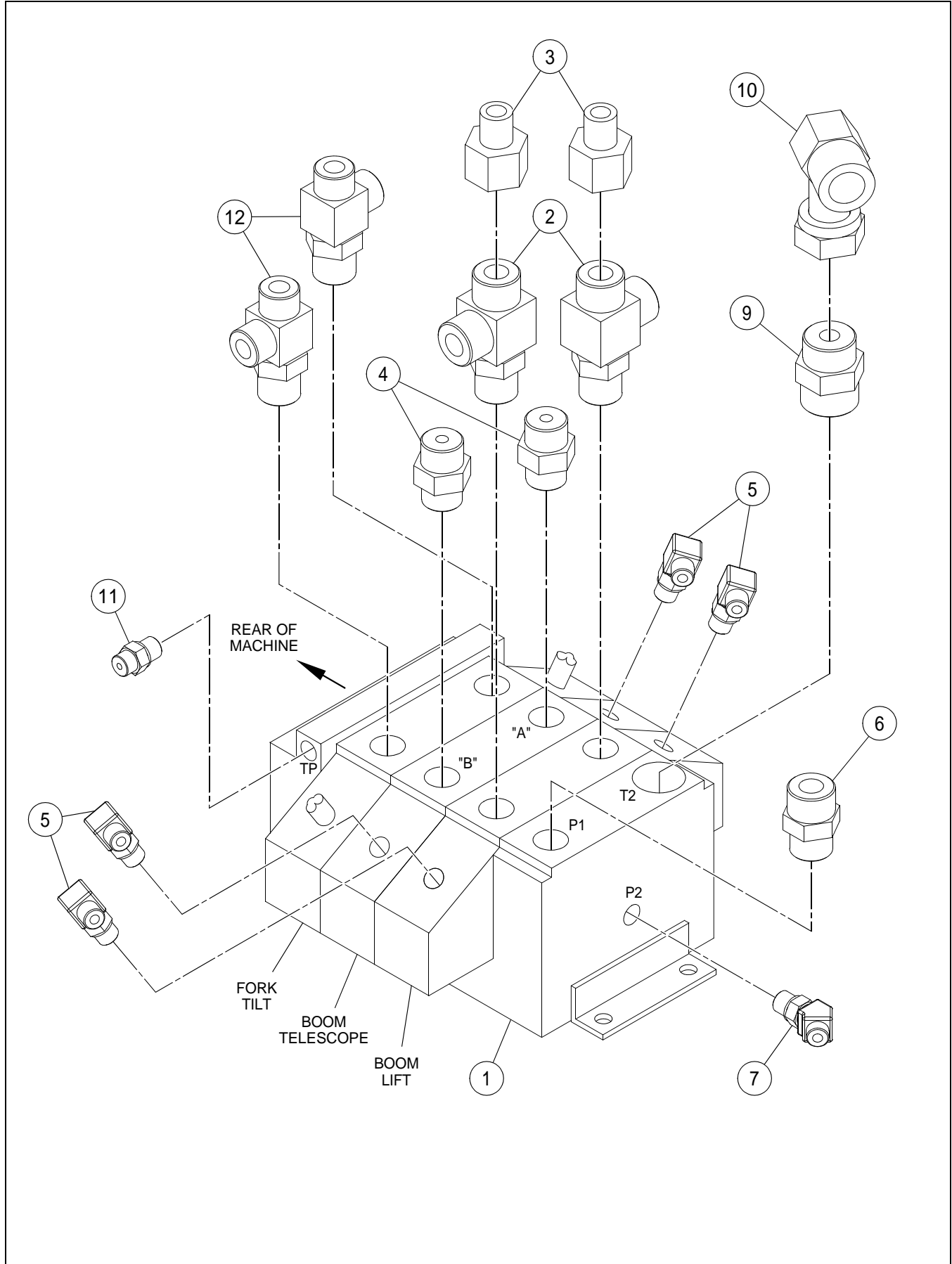
HOSING INSTALLATION - SINGLE JOYSTICK - PRIOR TO S/
N 187990 - SHEET 2 OF 2

BOM 13265186

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13181375	Hose Assembly	1	156.0"
4	13190921	Hose Assembly	1	145.0"
5	13305735	Hose Assembly	1	52.0"
6	13181383	Hose Assembly	1	44.0"
7	13305743	Hose Assembly	2	47.0"
8	13190830	Hose Assembly	1	26.5"
9	13305750	Hose Assembly	1	20.0"

LIFT/CROWD VALVE ASSEMBLY - PRIOR TO S/N 187990 - SINGLE JOYSTICK

Dwg D13280557/01



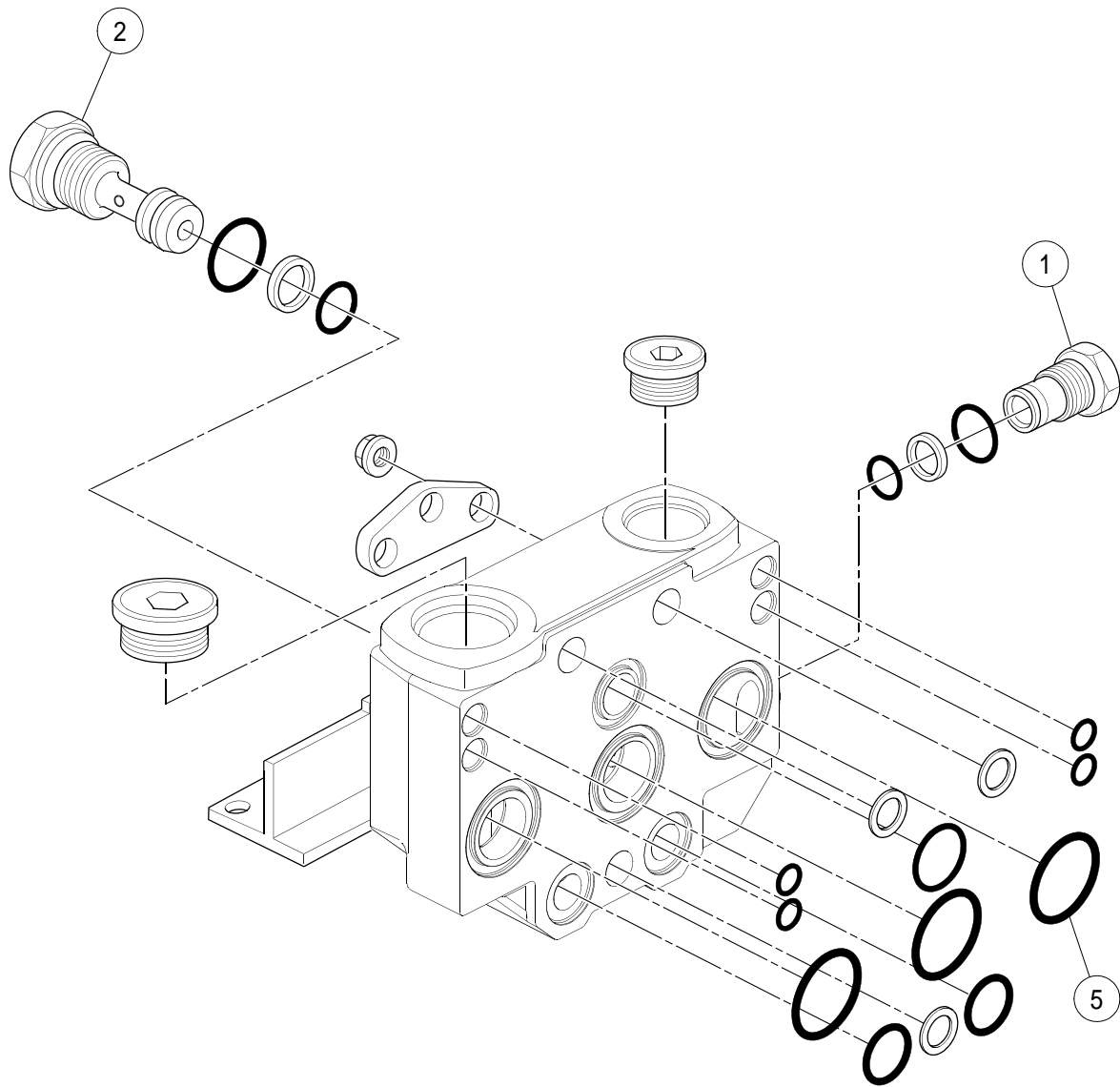
LIFT/CROWD VALVE ASSEMBLY - PRIOR TO S/N 187990 -
SINGLE JOYSTICK

BOM 13280532

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13264635	Crowd and Lift Valve - Single Joystick	1	See Breakdown H - 118.
2	59923094	Adapter	2	
3	59924027	Reducer	2	
4	59922559	Adapter	2	
5	59922823	Adapter, 90°	4	
6	59922591	Adapter	1	
7	59922211	Adapter, 45°	1	
9	59922641	Adapter, Straight	1	
10	59923490	Adapter	1	
11	59922419	Adapter, Straight	1	
12	59409193	Adapter	2	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

Dwg 13264635/00/01



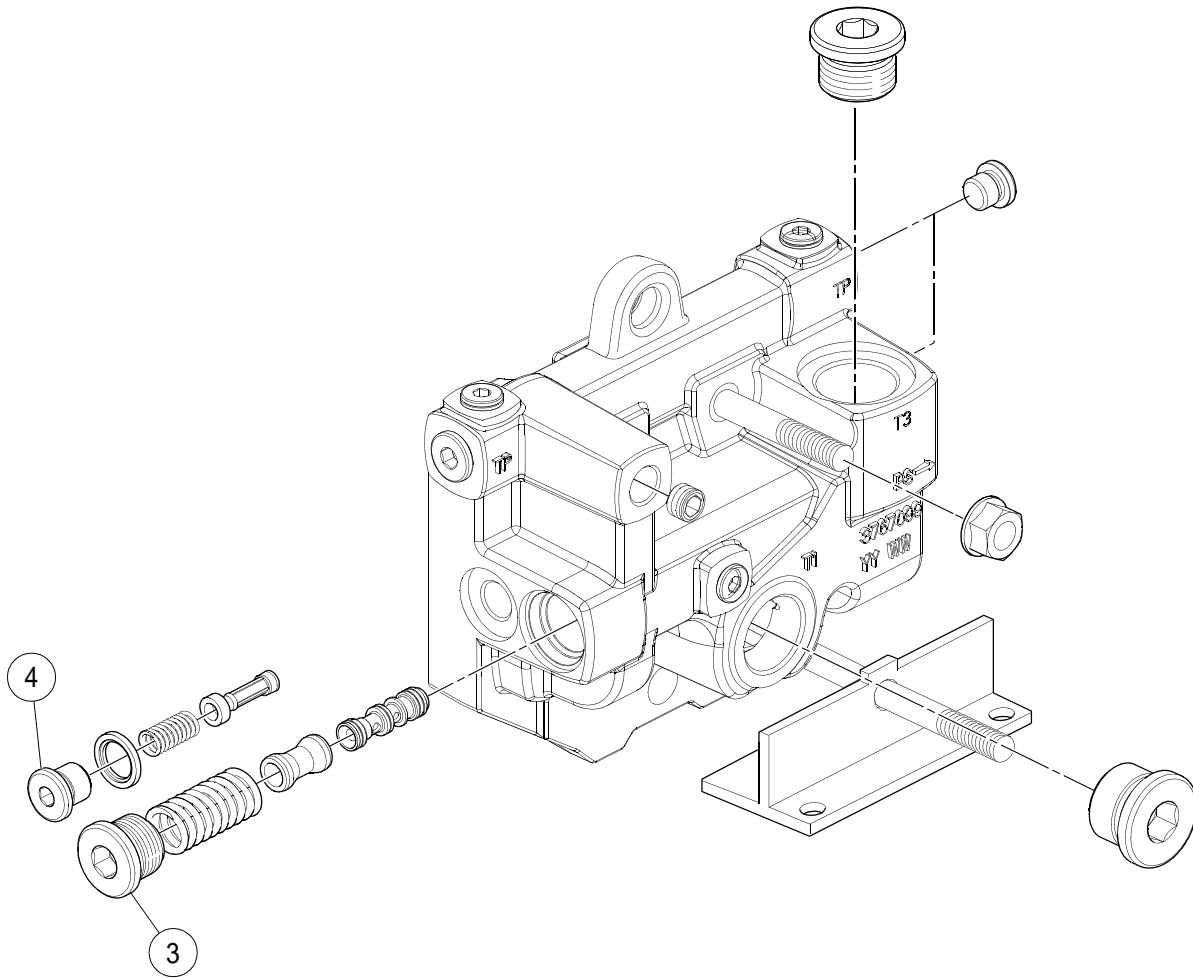
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 1 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510441	Plug	1	
-	13510458	- Seal Kit	1	
2	13510466	Adaptor	1	
-	13510474	- Seal Kit	1	
5	13510508	Intersection Seal Kit	1	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

Dwg 13264635/00/02



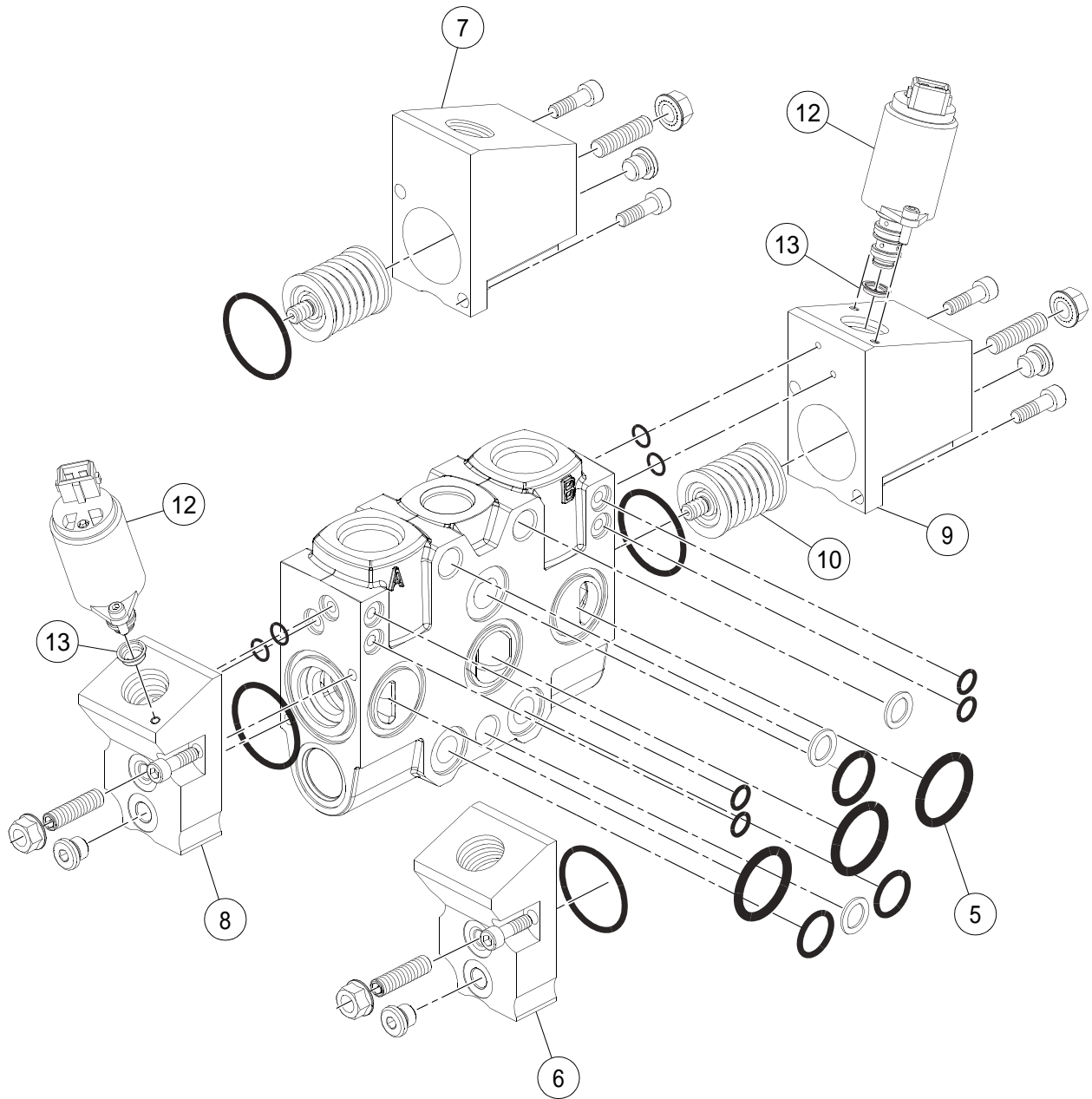
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 2 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13510482	Pressure Reducing Valve	1	
4	13510490	Pilot Oil Filter	1	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

Dwg 13264635/00/03



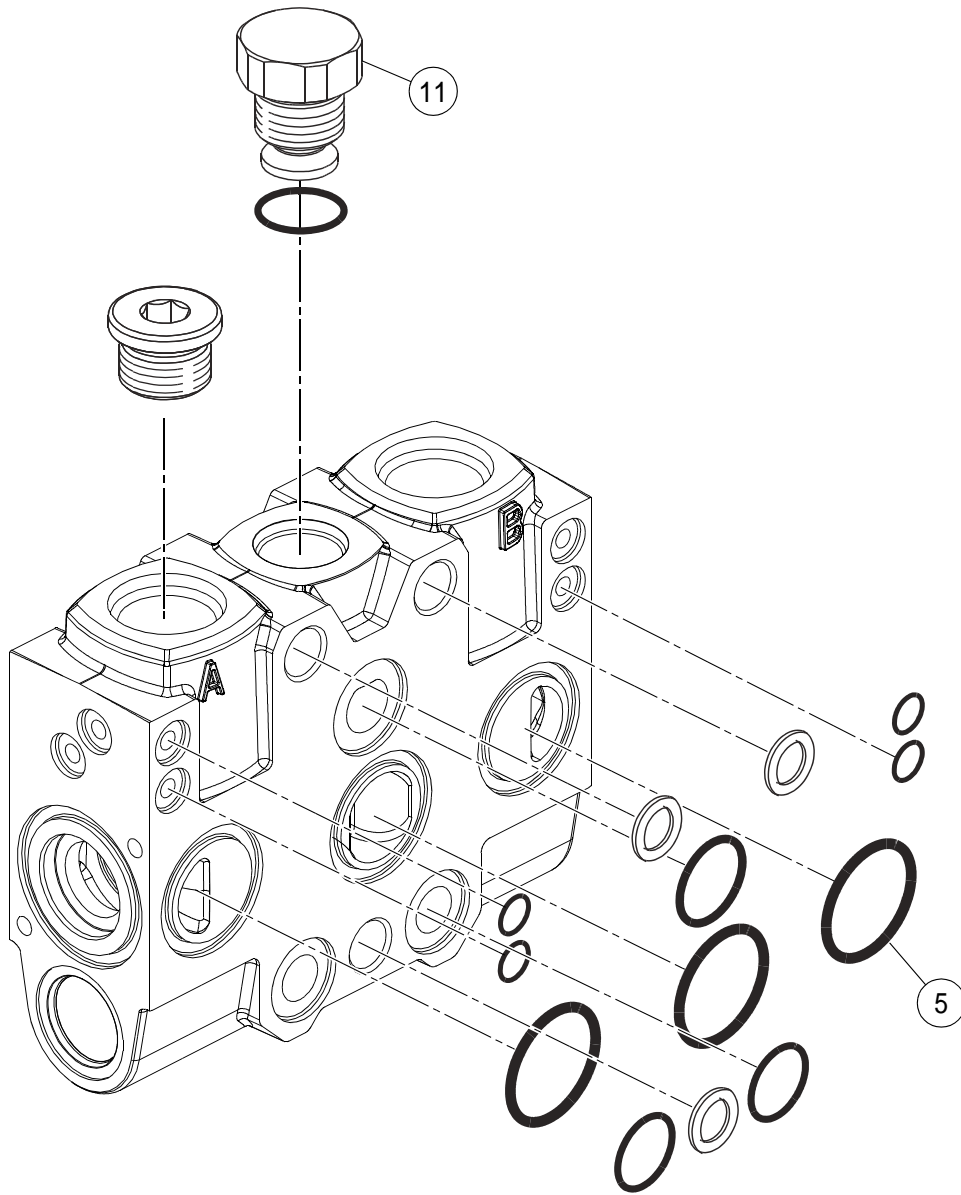
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 3 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
6	13510516	Actuator	2	
-	13510524	- Seal Kit	2	
7	13510532	Actuator	2	
-	13510524	- Seal Kit	2	
8	13510573	Actuator	1	
-	13510615	- Seal Kit	1	
9	13510581	Actuator	1	
-	13510615	- Seal Kit	1	
10	13510557	Spring Kit	3	
12	13510631	Solenoid Valve	2	
13	13510656	Pilot Oil Restrictor	2	

CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

Dwg 13264635/00/04



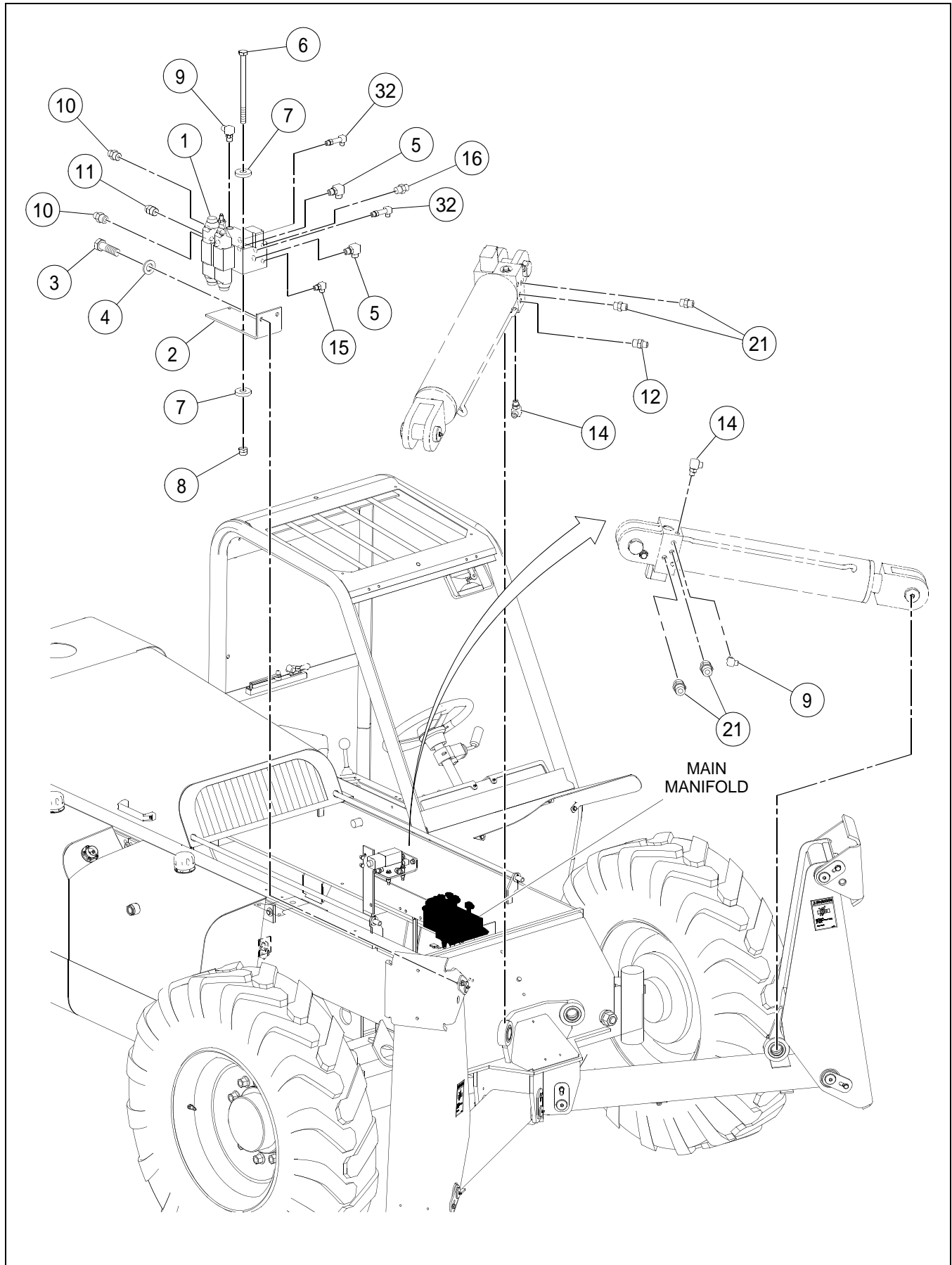
CROWD AND LIFT VALVE - SINGLE JOYSTICK (13264635) -
INTERNAL BREAKDOWN - SHEET 4 OF 4

BOM 13264635

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
11	13510565	Check Valve	3	

STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 1 OF 3

Dwg 13443361/01



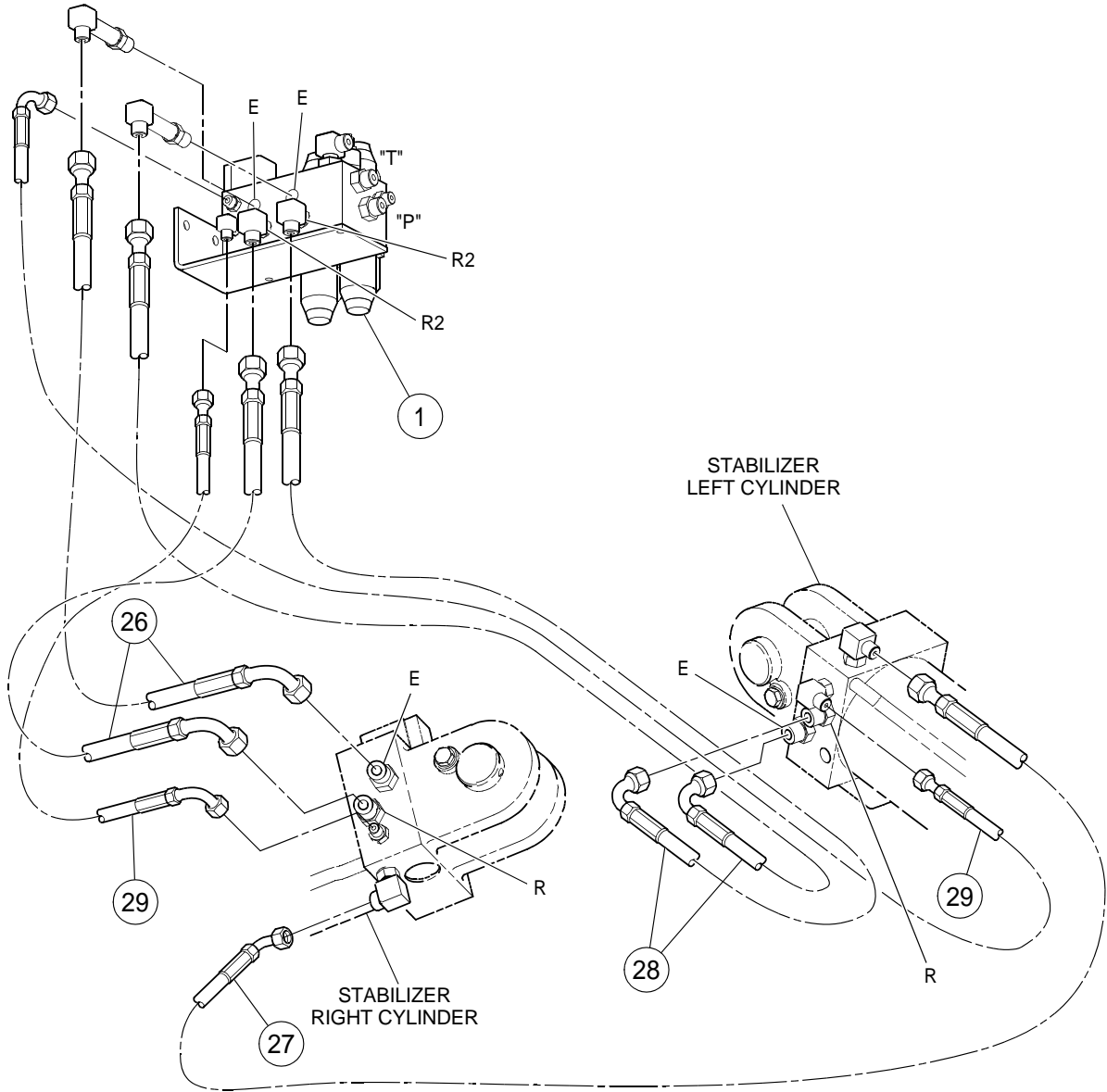
STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 1 OF 3

BOM 13443361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
2	59169185	Manifold Mounting Bracket	1	
3	96702287	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 25 CI 8.8
4	96741046	Flatwasher, Zinc Plated	2	M10 CI 200
5	59922898	Adapter, 90°	2	
6	96728787	Hex Head Bolt, Zinc Plated	2	M8 x 1.25 x 120 CI 8.8
7	96741038	Flatwasher	4	M8 x 1.25 CI 200
8	96728431	Locknut, Zinc Plated	2	M8 x 1.25 CI 10
9	59922807	Adapter	2	
10	59922542	Adapter, Straight	3	
11	59919670	Adapter, Straight	2	
12	59929182	Adapter, Straight	2	
14	59922864	Adapter, 90°	2	
15	59922823	Adapter, 90°	1	
16	59922419	Adapter, Straight	1	
21	59922492	Adapter, Straight	4	
32	59408542	Adapter	2	

STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 3

Dwg 13443361/01



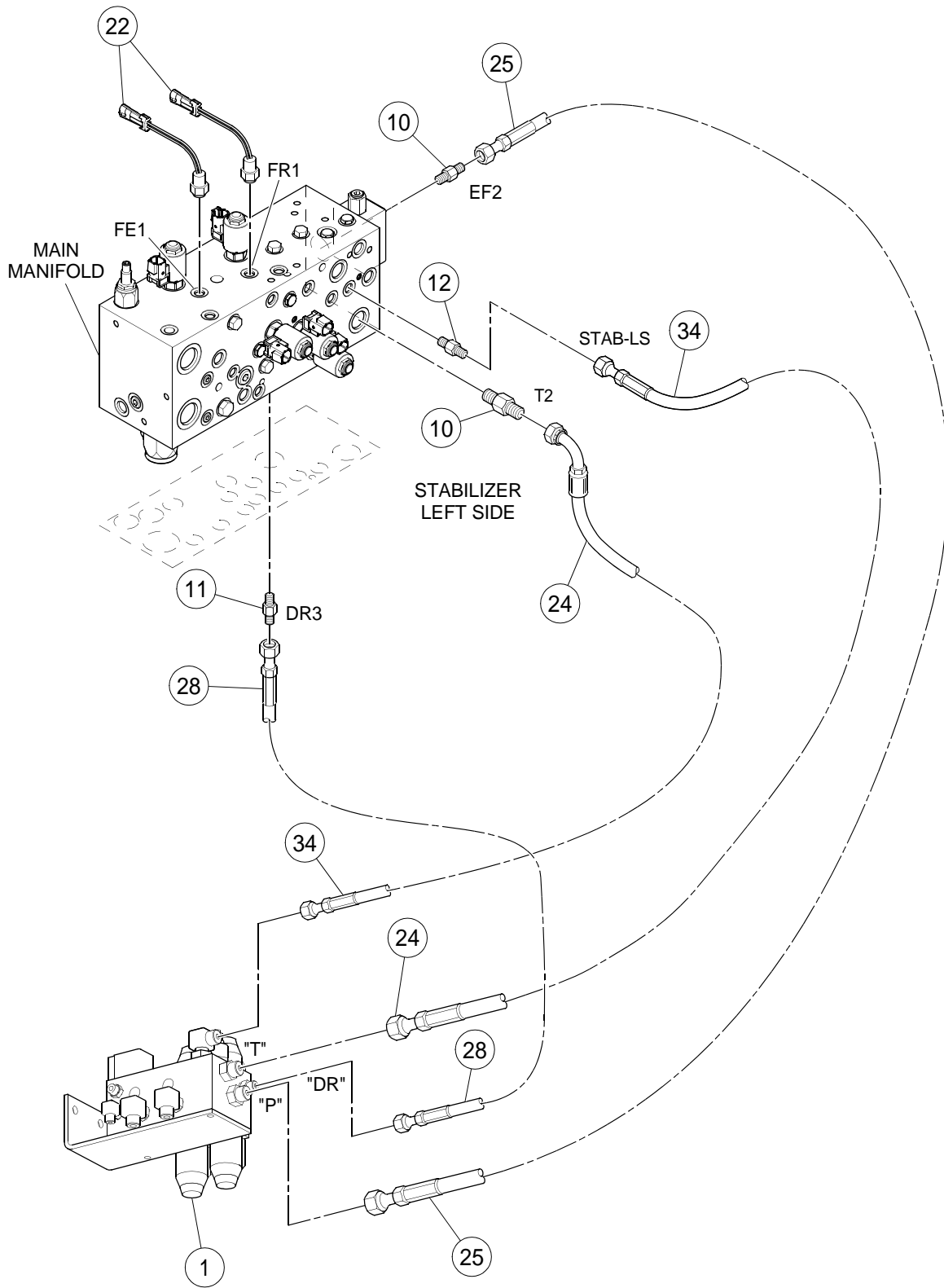
STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 2 OF 3

BOM 13443361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
26	13043559	Hose Assembly	4	57.0"
27	59199000	Hose Assembly	1	88.0"
28	58849019	Hose Assembly	1	33.5"
29	59175331	Hose Assembly	2	56.0"

STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 3 OF 3

Dwg 13443361/01



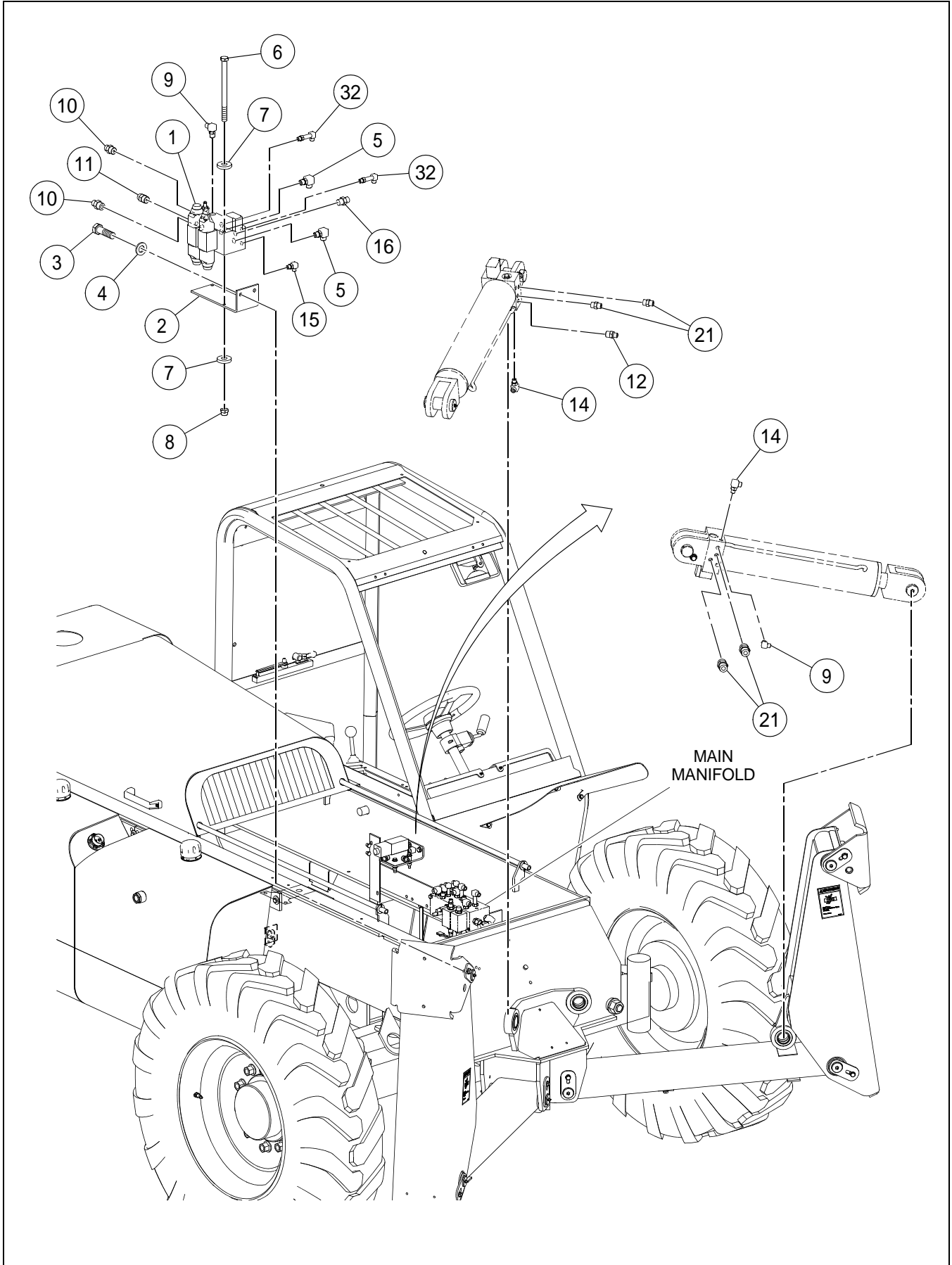
STABILIZER HYDRAULICS INSTALLATION - EFFECTIVE
WITH S/N 187990 - SHEET 3 OF 3

BOM 13443361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
10	59922542	Adapter, Straight	3	
11	59919670	Adapter, Straight	2	
12	59929182	Adapter, Straight	2	
22	59157792	Brake Light Switch	2	
24	59198549	Hose Assembly	1	22.0"
25	18005819	Hose Assembly	1	32.0"
28	58849019	Hose Assembly	1	33.5"
34	13425095	Hose Assembly	1	

STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 1 OF 3

Dwg D13348883/00/01



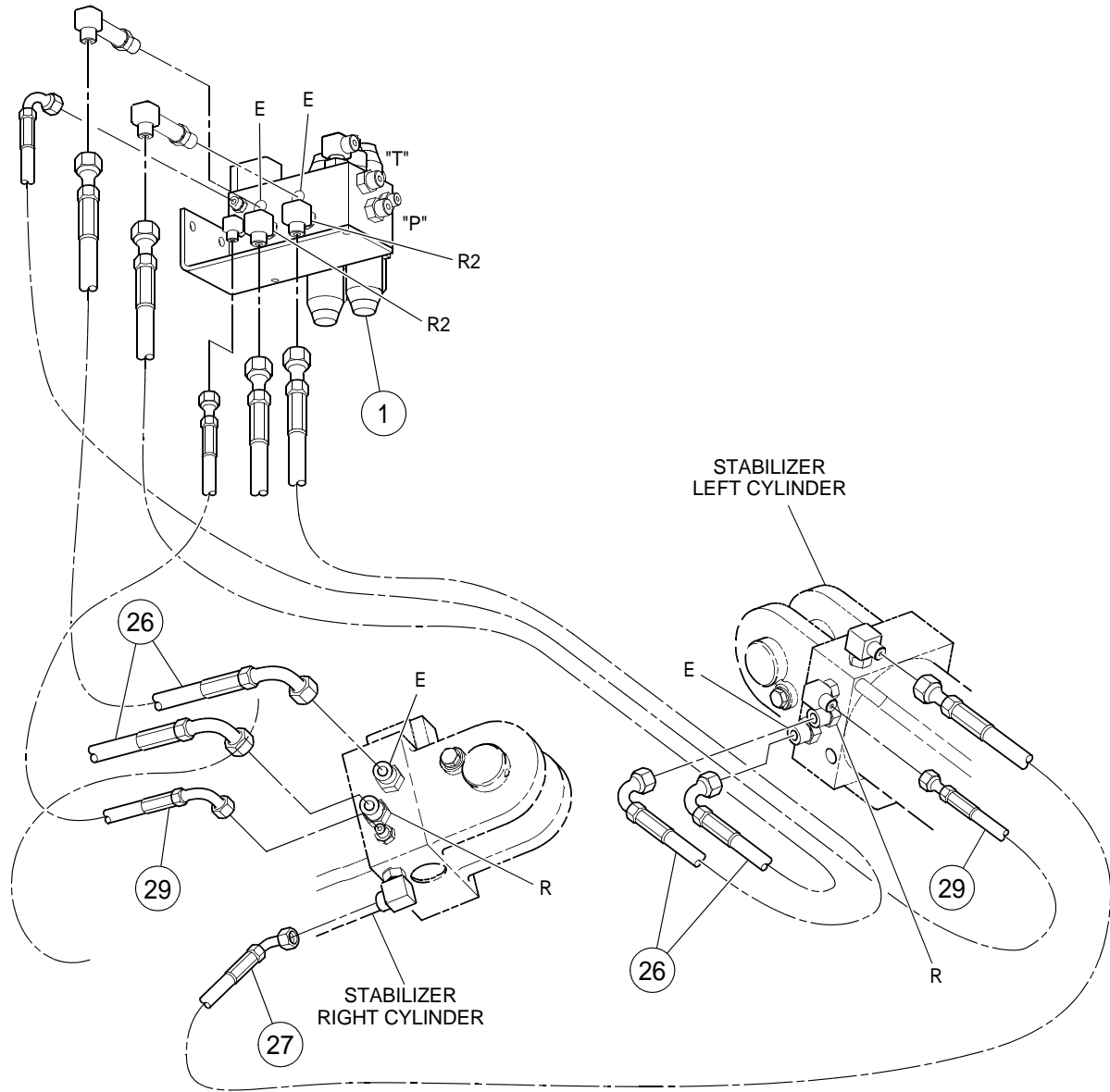
STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 1 OF 3

BOM 13348883

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
2	59169185	Manifold Mounting Bracket	1	
3	96702287	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 25 CI 8.8
4	96741046	Flatwasher, Zinc Plated	2	M10 CI 200
5	59922898	Adapter, 90°	2	
6	96728787	Hex Head Bolt, Zinc Plated	2	M8 x 1.25 x 120 CI 8.8
7	96741038	Flatwasher	4	M8 x 1.25 CI 200
8	96705009	Locknut, Zinc Plated	2	M8 x 1.25 CI 8
9	59922807	Adapter	2	
10	59922542	Adapter, Straight	3	
11	59919670	Adapter, Straight	2	
12	59929182	Adapter, Straight	2	
14	59922864	Adapter, 90°	2	
15	59922823	Adapter, 90°	1	
16	59922419	Adapter, Straight	1	
21	59922492	Adapter, Straight	4	
32	59408542	Adapter	2	

STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 2 OF 3

Dwg D13348883/00/02



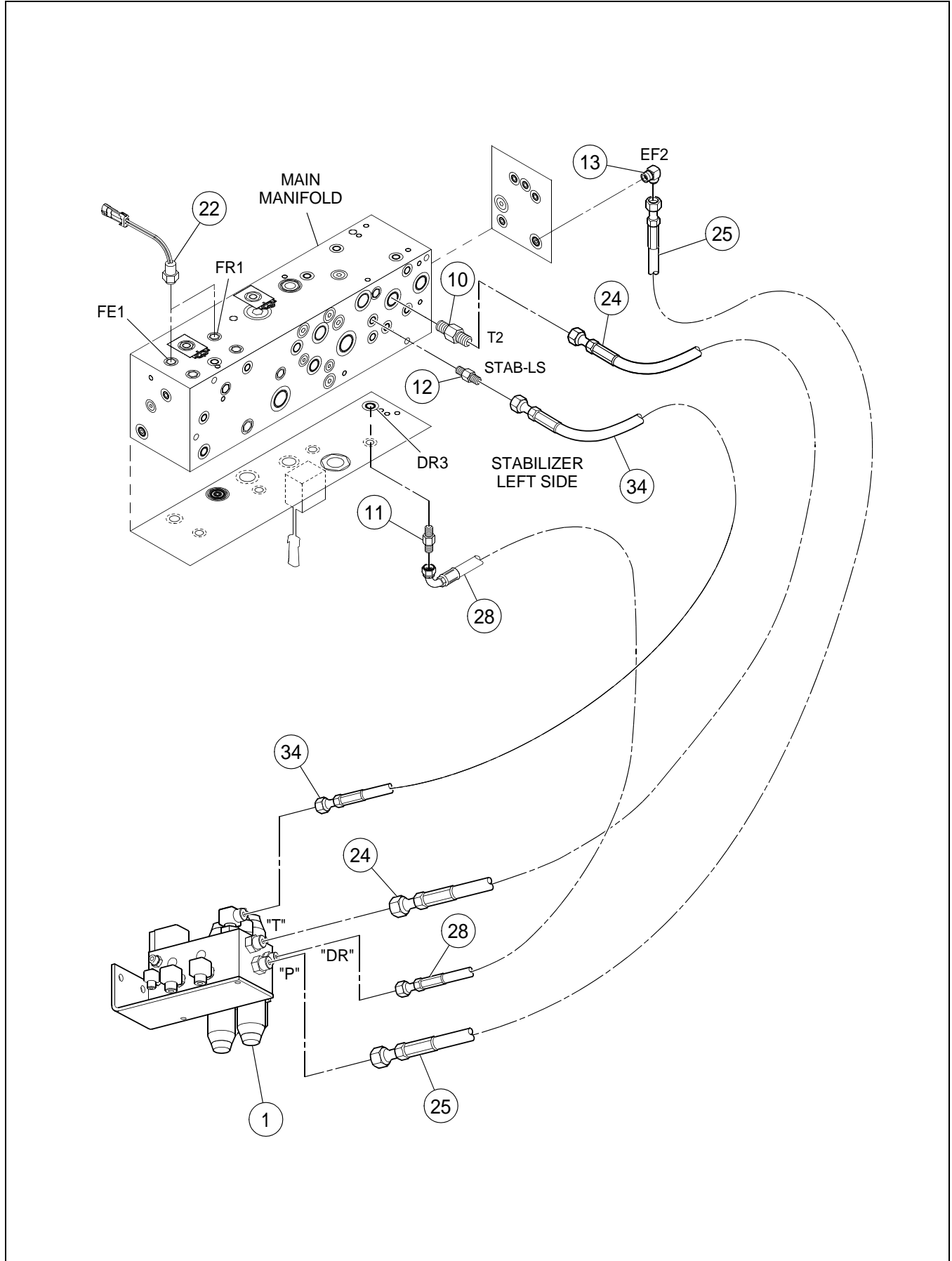
STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 2 OF 3

BOM 13348883

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
26	13043559	Hose Assembly	4	57.0"
27	59199000	Hose Assembly	1	88.0"
29	59175331	Hose Assembly	2	56.0"

STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 3 OF 3

Dwg D13348883/00/03



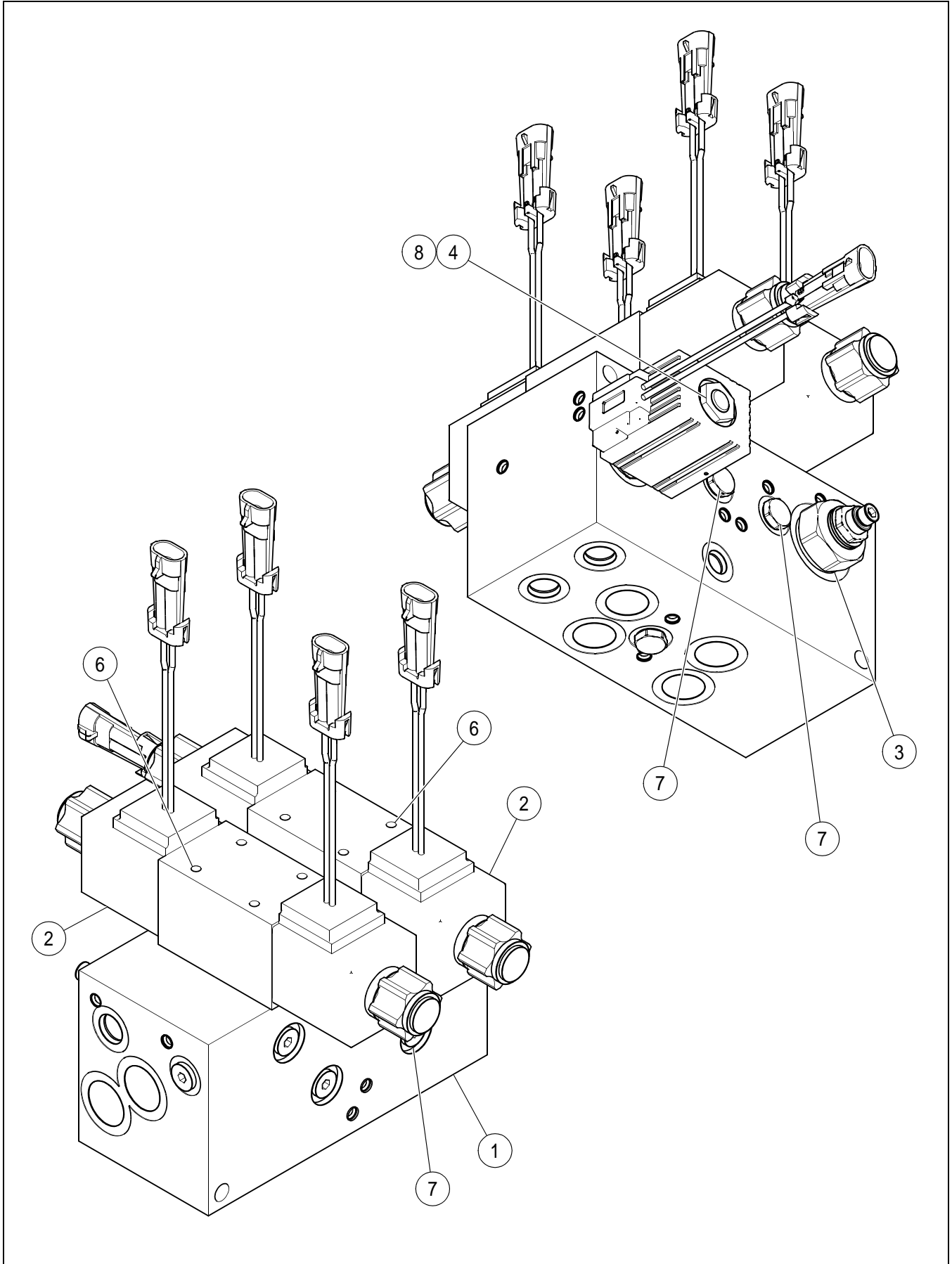
STABILIZER HYDRAULICS INSTALLATION - PRIOR TO S/N
187990 - SHEET 3 OF 3

BOM 13348883

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13173331	Stabilizer Valve	1	See Breakdown H - 138.
10	59922542	Adapter, Straight	3	
11	59919670	Adapter, Straight	2	
12	59929182	Adapter, Straight	2	
13	59922930	Adapter	1	
22	59157792	Brake Light Switch	2	
24	13305768	Hose Assembly	1	23.0"
25	13305776	Hose Assembly	1	19.0"
28	13079140	Hose Assembly	1	28.0"
34	13305784	Hose Assembly	1	31.0"

STABILIZER VALVE (13173331) - INTERNAL BREAKDOWN

Dwg D13173331



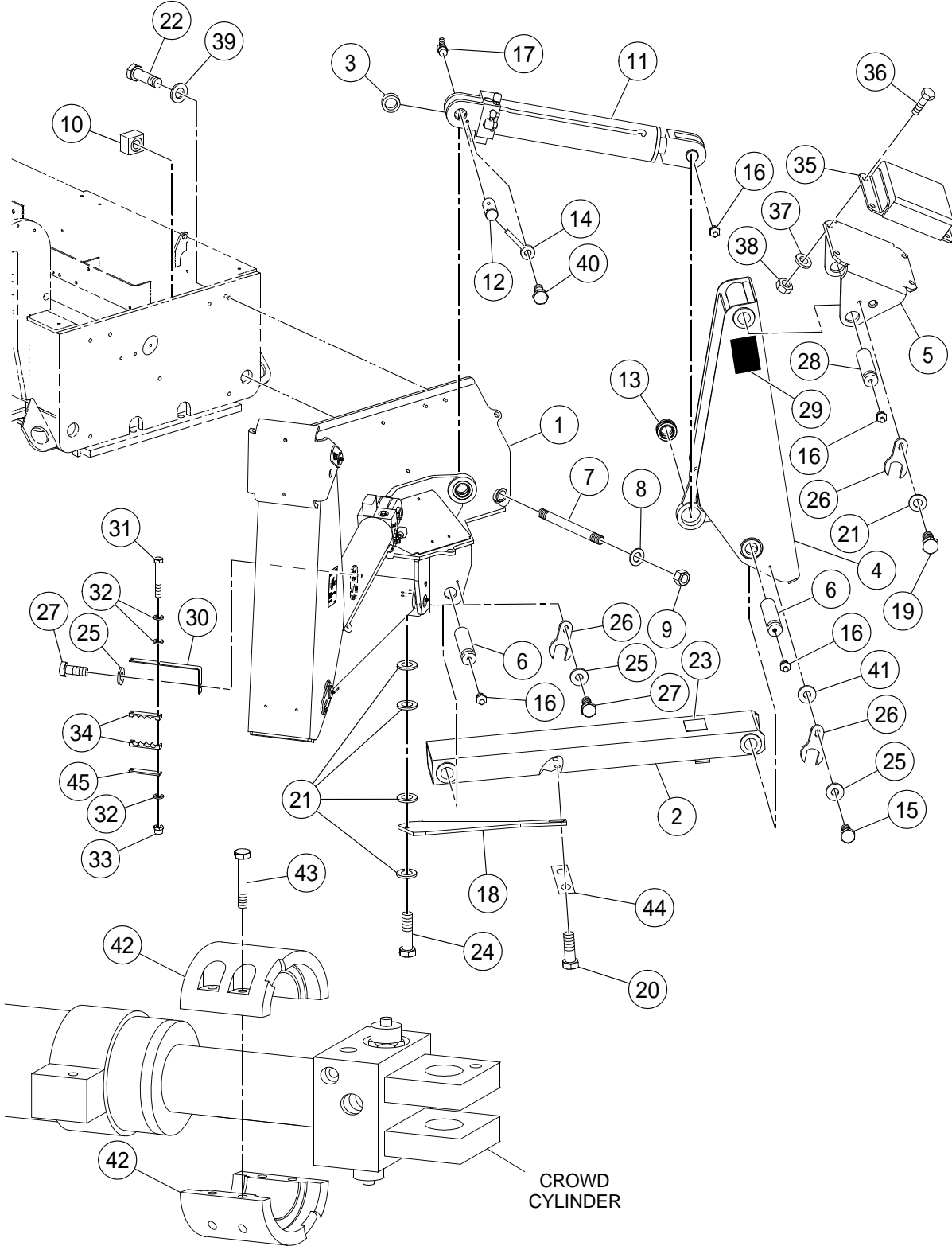
STABILIZER VALVE (13173331) - INTERNAL BREAKDOWN

BOM 13173331

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	54729207	Manifold	1	
2	54729215	Directional Valve	2	
3	54729223	Pressure Reducer	1	
4	54729231	Directional Valve	1	
6	54729249	Bolt Kit	2	
7	59729256	Shuttle Valve	3	
-	13269410	- Seal Kit	3	
8	54729264	Coil	1	12vdc

STABILIZER ASSEMBLY - SHEET 1 OF 2

Dwg 13305958/05



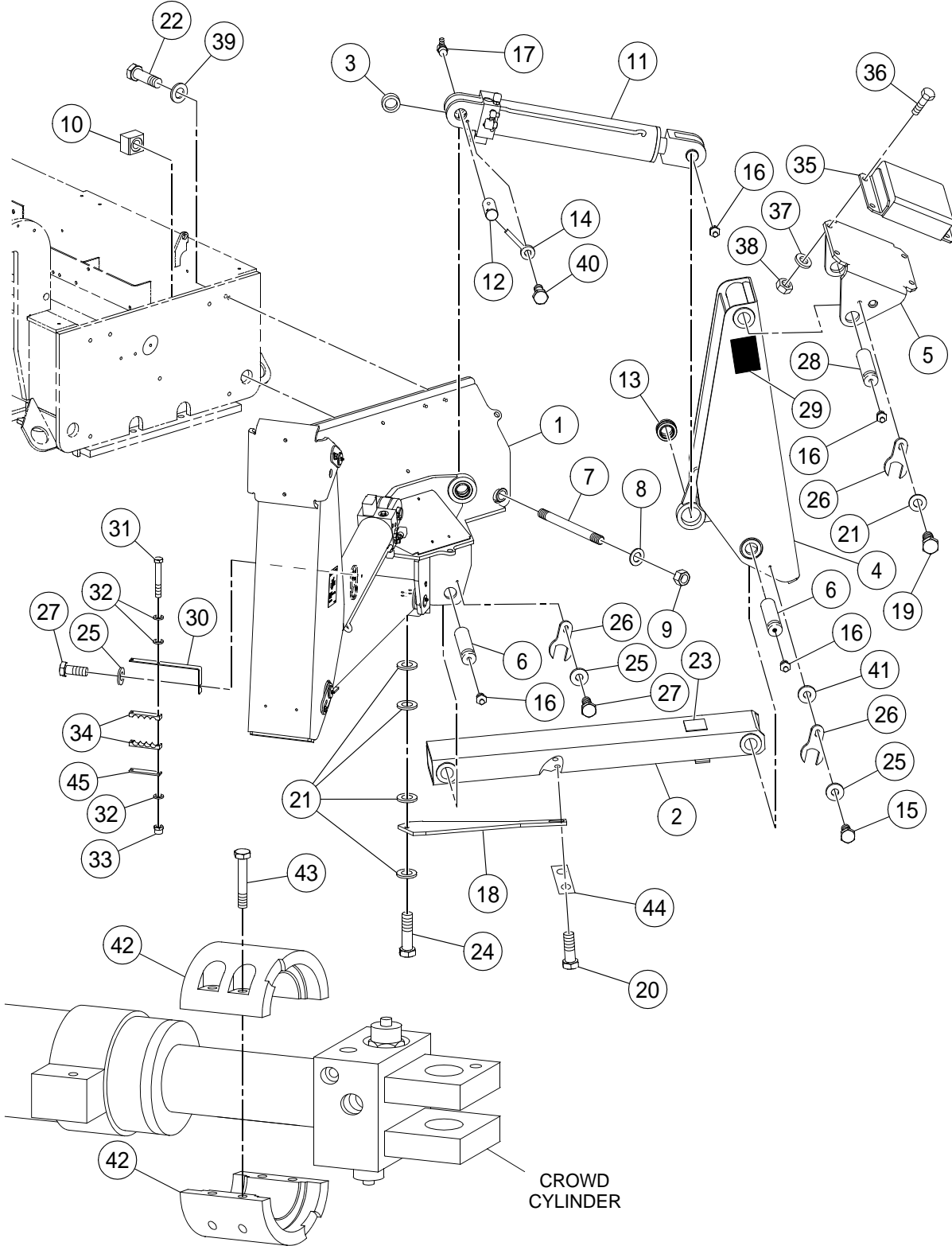
STABILIZER ASSEMBLY - SHEET 1 OF 2

BOM 13305958

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13417522	Stabilizer Base	1	
2	13286067	Support Arm	2	
3	59455261	Race Thrust	4	
4	13286026	Swing Arm	2	
5	13161898	Foot Pad	2	
6	13279187	Pin	4	
7	59167957	Stud	2	
8	95987392	Flatwasher, Zinc Plated	2	1.125 Hardened
9	59327932	Nut	2	1 1/4 x 7
10	59136879	Outrigger Nut	2	
11	59221812	Stabilizer Cylinder	2	
-	59144295	- PO Check Valve	1	
-	59195669	- Counterbalance Valve	1	
-	59195644	- Solenoid Valve	1	
-	59195651	- Solenoid	1	
-	57181240	- Locknut	1	
-	13284120	- Seal Kit	1	
12	59276469	Cylinder Pivot Pin	4	
13	58951674	Bearing	4	
14	59455154	Anchor	4	
15	96702279	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 20 CI 8.8
16	95201547	Fitting	8	
17	95208971	Fitting	2	
18	59168005	Springbar	2	
19	96701495	HHCS, Fully Threaded, Zinc Plated	4	M12 x 1.75 x 25 CI 8.8
20	96702329	HHCS, Fully Threaded, Zinc Plated	4	M12 x 1.75 x 35 CI 8.8
21	96738596	Flatwasher, Zinc Plated	14	M12 Hardened CI 200
22	96720008	HHCS, Fully Threaded, Zinc Plated	2	M24 x 3.0 x 65 CI 8.8
23	13258249	Wear Pad	2	
24	96701966	HHCS, Fully Threaded, Zinc Plated	2	M12 x 1.75 x 45 CI 10.9
25	96741046	Flatwasher, Zinc Plated	8	M10 CI 200
26	13279203	Keeper Pin	6	
27	96702287	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 25 CI 8.8
28	13285754	Pin	2	
29	58965526	Decal: Crush Warning	4	
30	59212399	Hose Bracket	2	
31	96728514	HHCS, Zinc Plated	4	M6 x 1 x 45 CI 8.8
32	96741053	Flatwasher, Zinc Plated	12	M6 CI 200
33	96702873	Locknut, Zinc Plated	4	M6 CI 10
34	59475152	Hose Clamp	4	
35	59285106	Stabilizer Pad	2	
36	96703129	HHCS, Fully Threaded, Zinc Plated	8	M16 x 2 x 40
37	96701552	Washer, Zinc Plated	8	M16 Hardened
38	96703657	Nut, Zinc Plated	8	M16 CI 10

STABILIZER ASSEMBLY - SHEET 2 OF 2

Dwg 13305958/05



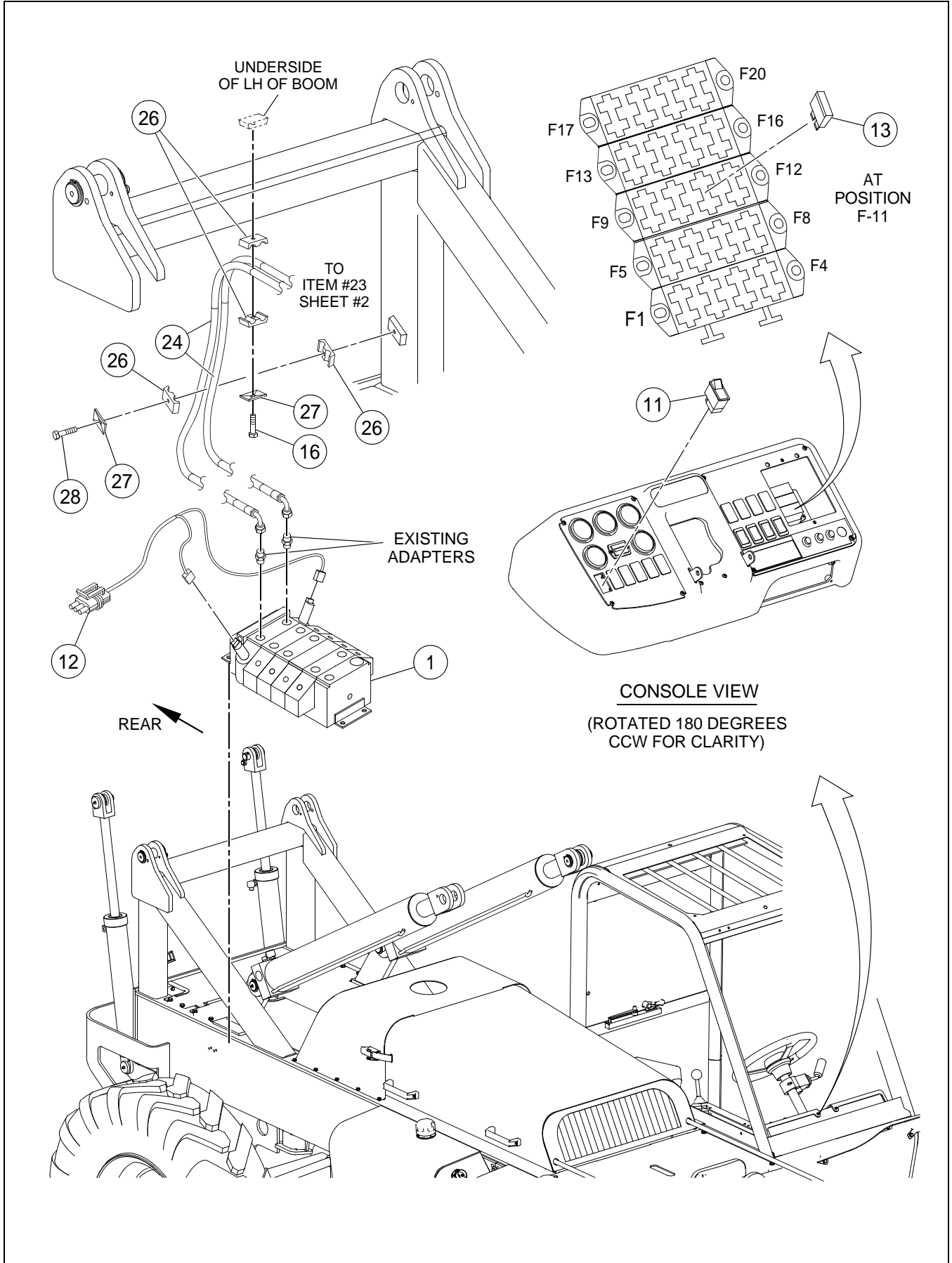
STABILIZER ASSEMBLY - SHEET 2 OF 2

BOM 13305958

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
39	96738646	Flatwasher, Zinc Plated	2	M24 Hardened CI 200
40	96702311	HHCS, Fully Threaded, Zinc Plated	4	M12 x 1.75 x 30 CI 8.8
41	96711833	Flatwasher, Zinc Plated	4	M10 CI 10
42	13285689	Crowd Cylinder Retract Spacer	1	
43	96703798	HHCS, Zinc Plated	4	M10 x 1.5 CI 10.9
44	13320882	Springbar Keeper Plate	2	
45	13286083	Cover Plate	2	

SINGLE FUNCTION AUXILIARY HYDRAULICS - OPTIONAL -
SHEET 1 OF 2

Dwg D13334735/02



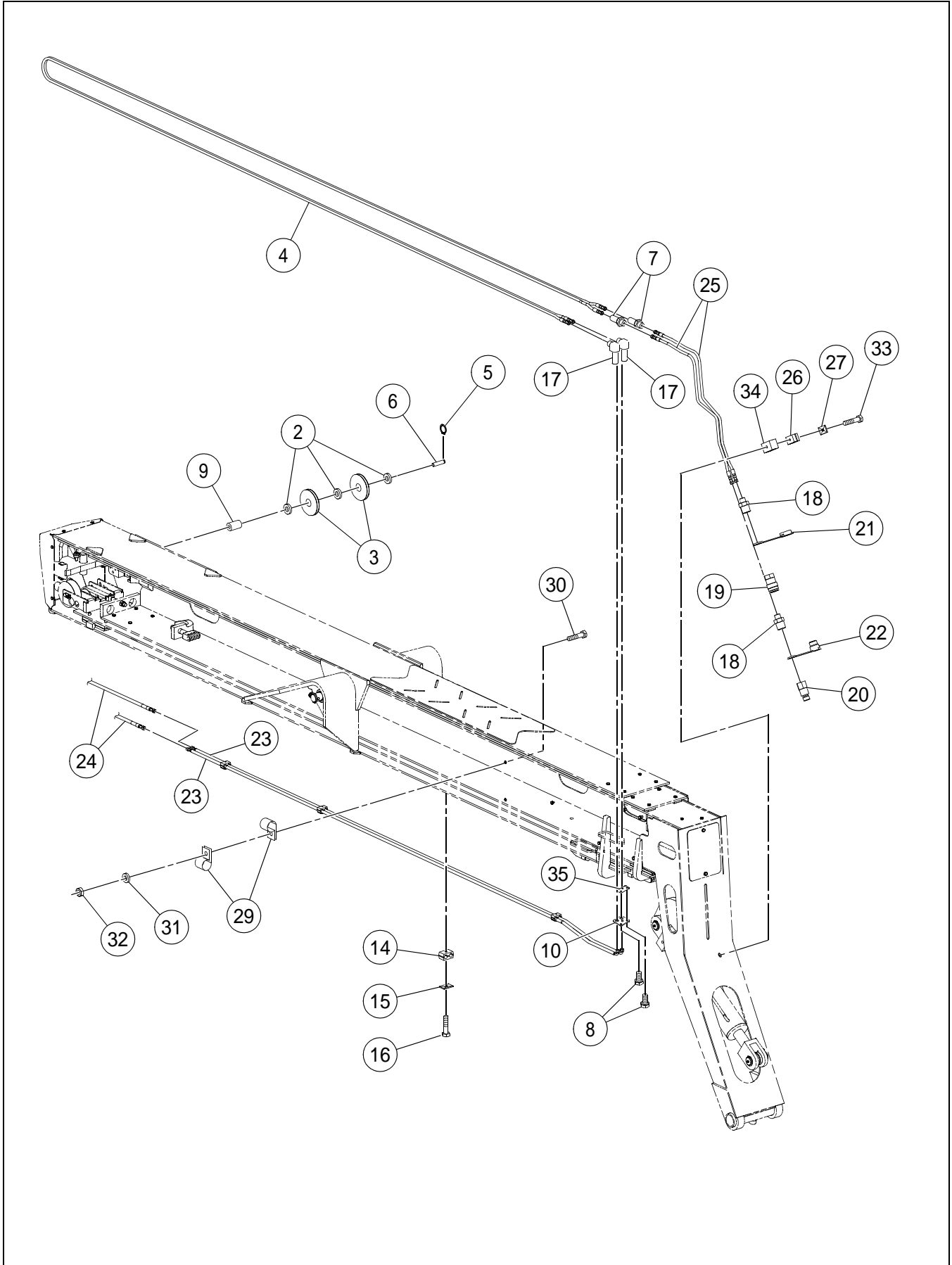
SINGLE FUNCTION AUXILIARY HYDRAULICS - OPTIONAL -
SHEET 1 OF 2

BOM 13265319, 13280714

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	NSVA	Auxiliary Lift/Crowd Valve Assembly - Dual Joysticks	1	See Page H - 148.
-	NSVA	Auxiliary Lift/Crowd Valve Assembly - Single Joystick	1	See Page H - 158.
11	13280110	Auxiliary Hydraulics Switch - Dual Joysticks	1	
12	13305602	Auxiliary Hydraulics Wire Harness	1	
13	59325712	Fuse	1	
16	96702402	HHCS, Zinc Plated	3	M8 x 1.25 x 50 CI 8.8
24	13337886	Hose Assembly	2	81.0"
26	59746248	Clamp	6	
27	59583500	Cover Plate	3	
28	95920526	HHCS, Zinc Plated	2	5/16 x 18 x 1.75 Grd 8

SINGLE FUNCTION AUXILIARY HYDRAULICS - OPTIONAL -
SHEET 2 OF 2

Dwg D13334735/02



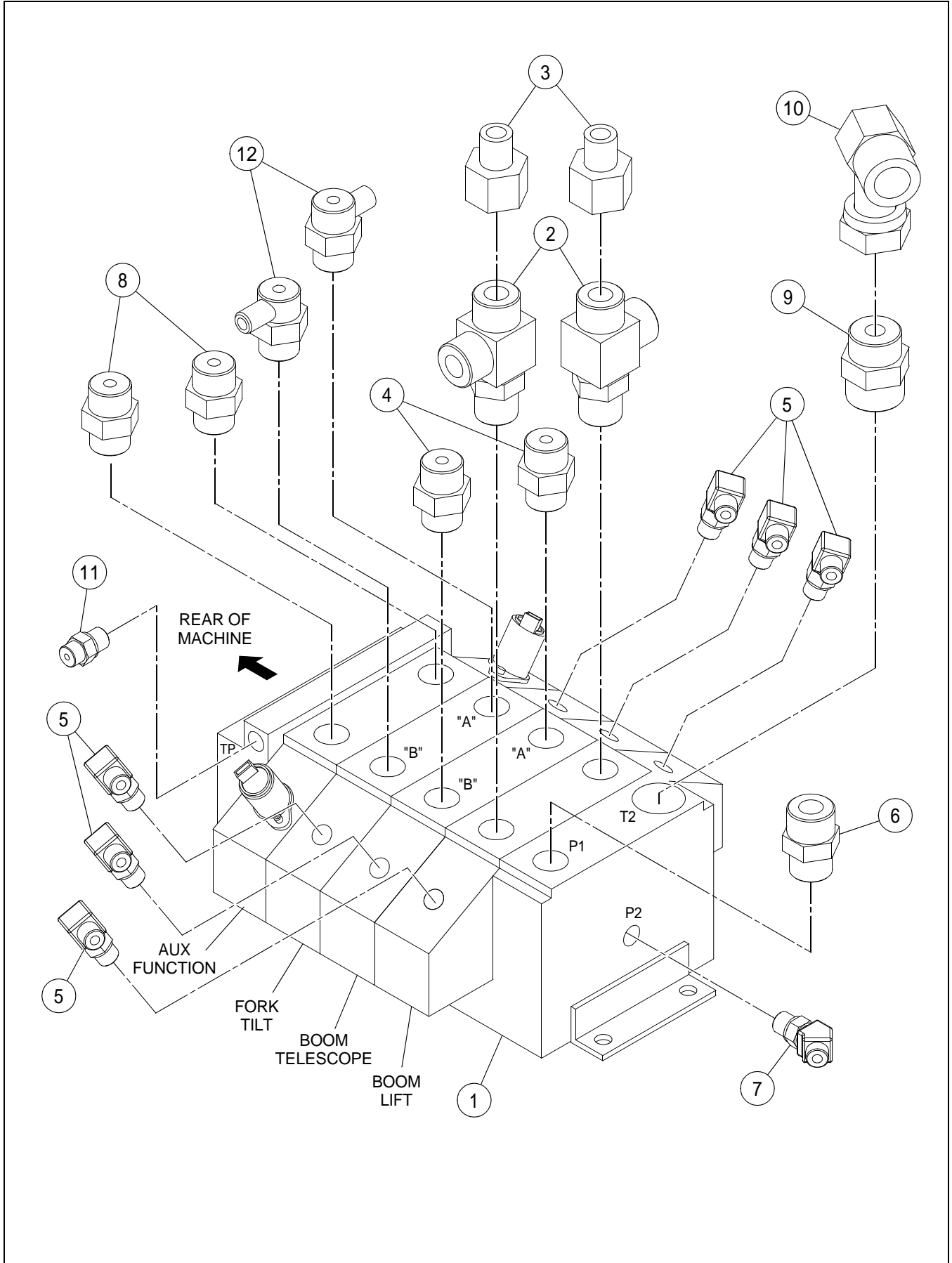
SINGLE FUNCTION AUXILIARY HYDRAULICS - OPTIONAL -
SHEET 2 OF 2

BOM 13265319, 13280714

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	59454991	Thrust Washer	3	
3	13334552	Sheave	2	
4	59286047	Hose Assembly	2	
5	95223301	Retaining Ring	1	
6	13184080	Pin	1	
7	59947044	ORS Fitting	2	
8	96702279	HHCS, Fully Threaded, Zinc Plated	2	M10 x 1.5 x 20 CI 8.8
9	13417530	Bushing	1	
10	13158548	Bulkhead Plate	1	
14	54525811	Clamp	4	
15	96741038	Flatwasher	2	M8 x 1.25 CI 200
16	96702402	HHCS, Zinc Plated	3	M8 x 1.25 x 50 CI 8.8
17	54503644	Adapter	2	
18	59903138	Adapter	2	
19	59096735	Quick Disconnect Coupler	1	
20	59096743	Quick Disconnect Nipple	1	
21	59096750	Quick Connect Coupler Dust Cap	1	
22	59096768	Quick Connect Nipple Dust Cap	1	
23	59286054	Tube Assembly	2	
24	13337886	Hose Assembly	2	81.0"
25	59197350	Hose Assembly	2	49.0"
26	59746248	Clamp	6	
27	59583500	Cover Plate	3	
29	95301867	Clamp	2	
30	96701917	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 30 CI 8.8
31	96741046	Flatwasher, Zinc Plated	3	M10 CI 200
32	96704614	Nut, Zinc Plated	1	M10 x 1.5 CI 8
33	96715131	HHCS, Zinc Plated	1	M8 x 1.25 x 70 CI 8.8
34	59271023	Stand-off Hose Mount	1	
35	13388384	Bulkhead Plate Shim	1	
38	96746029	HSBHCS, Fully Threaded, Zinc Plated (Not Shown)	2	M8 x 1.25 CI 8.8

AUXILIARY LIFT/CROWD VALVE ASSEMBLY - DUAL JOYSTICKS

Dwg D13334420/00



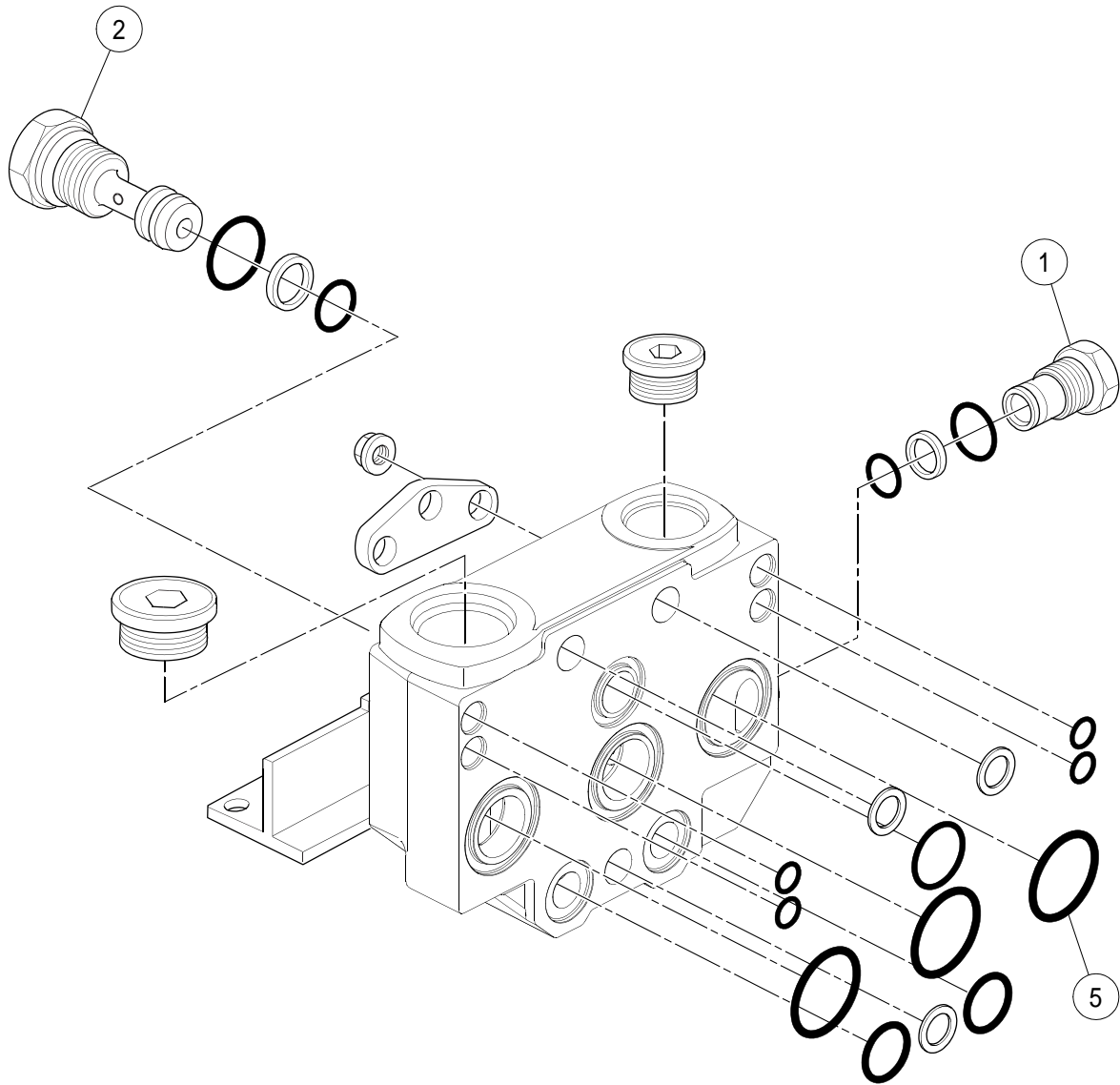
AUXILIARY LIFT/CROWD VALVE ASSEMBLY - DUAL
JOYSTICKS

BOM 13334404

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13315387	Lift/Crowd Valve	1	See Breakdown H - 150.
2	59923094	Adapter	2	
3	59924027	Reducer	2	
4	59922559	Adapter	2	
5	59922823	Adapter, 90°	6	
6	59922591	Adapter	1	
7	59922211	Adapter, 45°	1	
8	59922518	Adapter, Straight	2	
9	59922641	Adapter, Straight	1	
10	59923490	Adapter	1	
11	59922419	Adapter, Straight	1	
12	59409193	Adapter	2	

LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 1 OF 4

Dwg 13264635/00/01



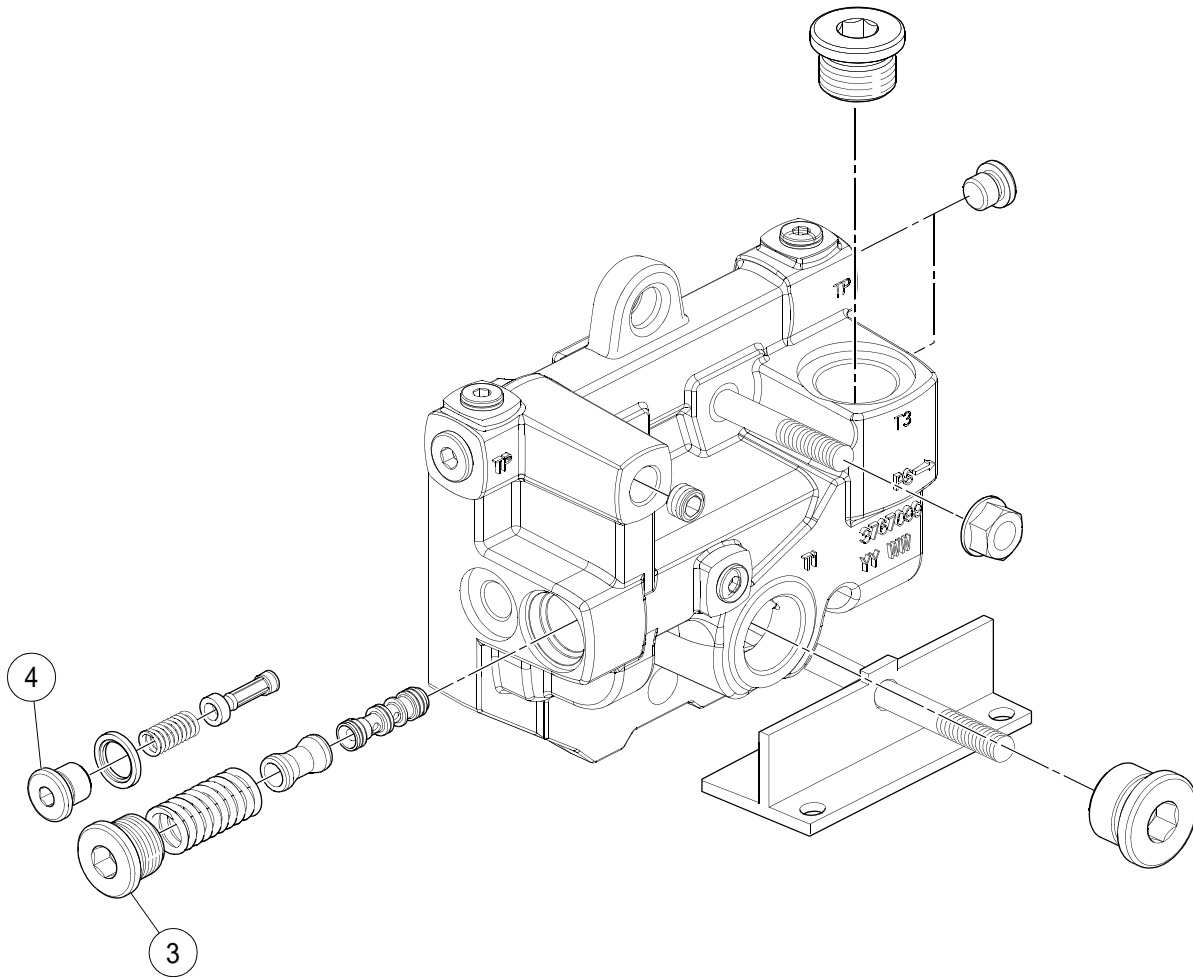
LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 1 OF 4

BOM 13315387

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510441	Plug	1	
-	13510458	- Seal Kit	1	
2	13510466	Adaptor	1	
-	13510474	- Seal Kit	1	
5	13510508	Intersection Seal Kit	1	

LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 2 OF 4

Dwg 13264635/00/01



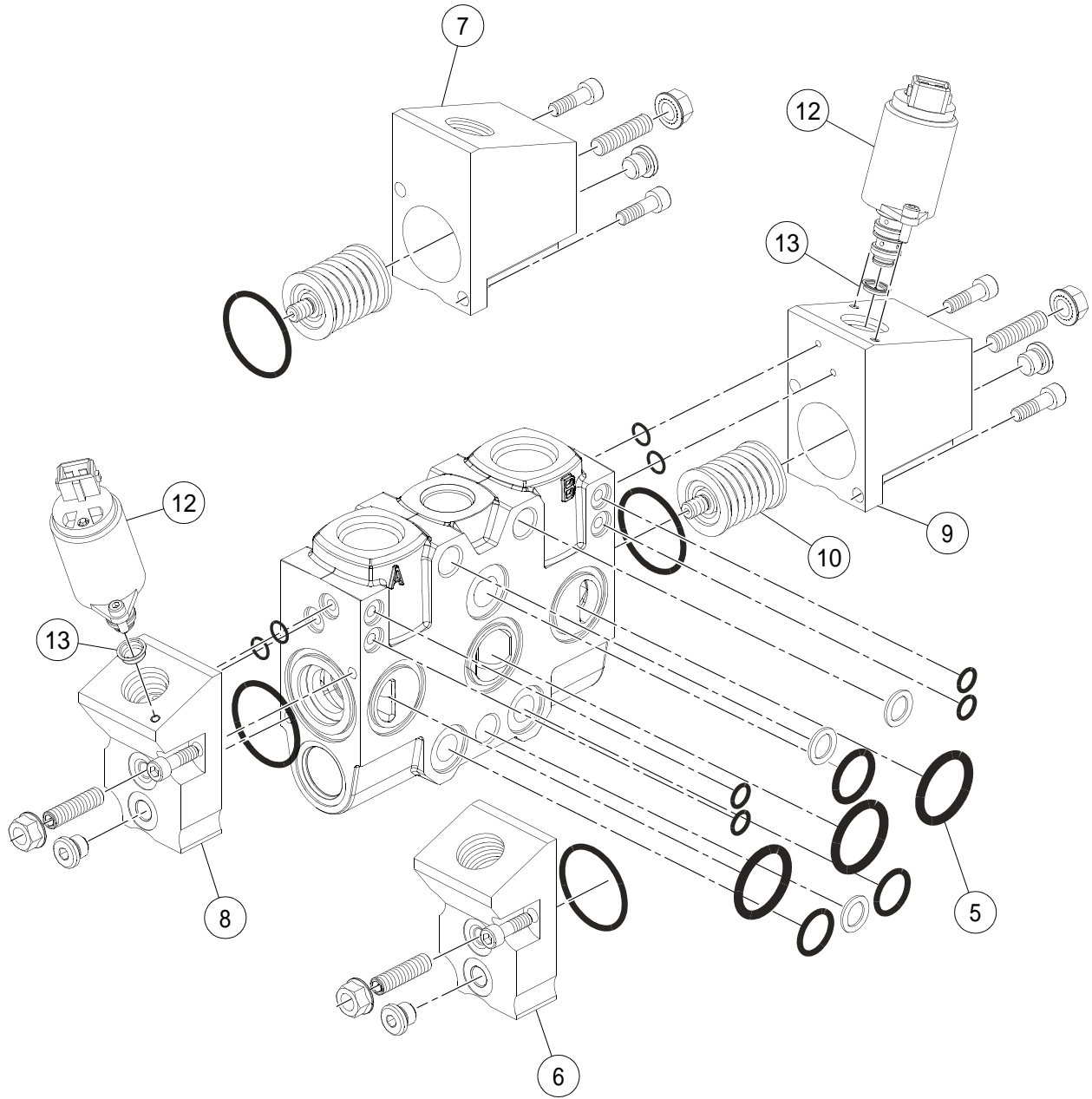
LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 2 OF 4

BOM 13315387

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13510482	Pressure Reducing Valve	1	
4	13510490	Pilot Oil Filter	1	

LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 3 OF 4

Dwg 13264635/00/01



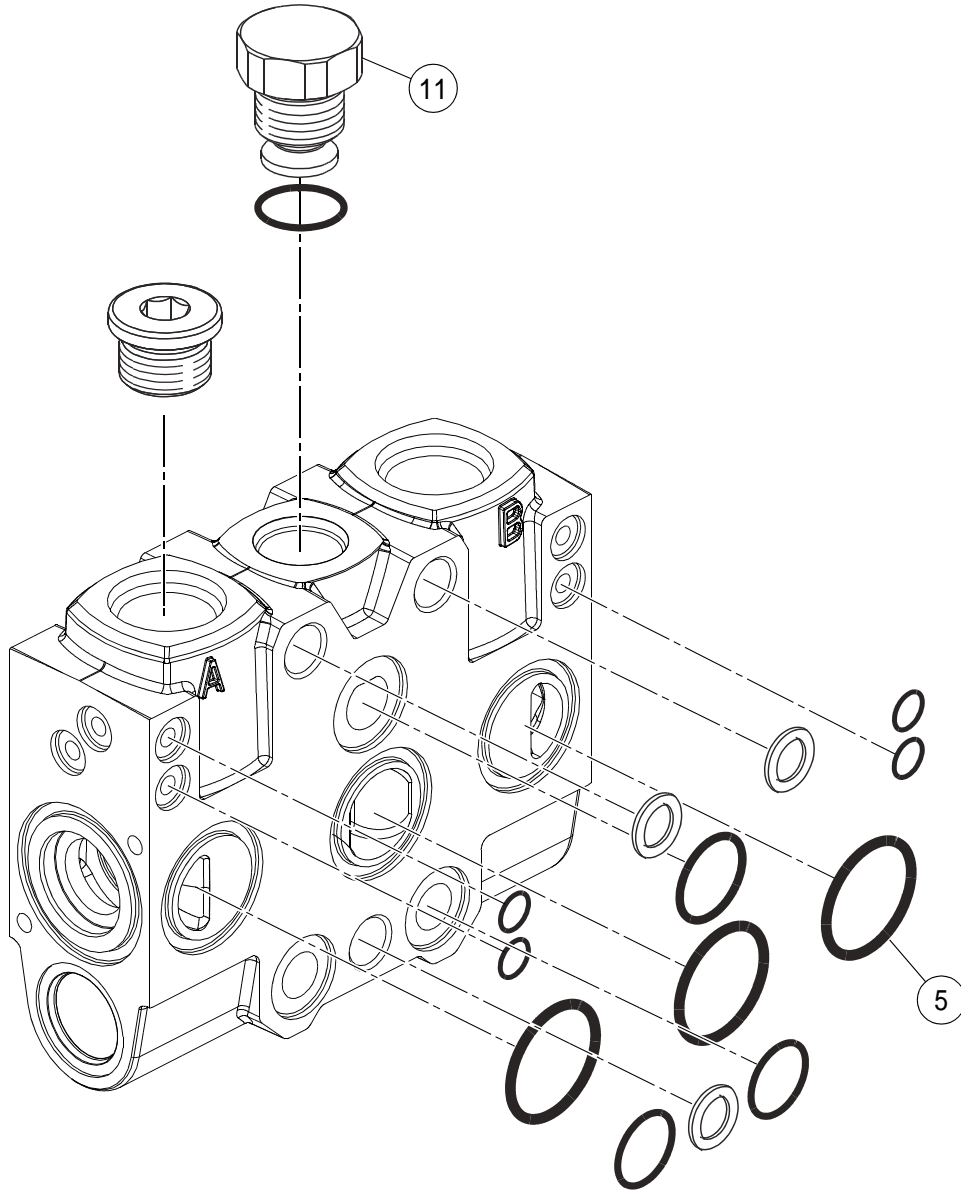
LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 3 OF 4

BOM 13315387

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
6	13510516	Actuator	3	
-	13510524	- Seal Kit	3	
7	13510532	Actuator	3	
-	13510524	- Seal Kit	3	
8	13510573	Actuator	1	
-	13510615	- Seal Kit	1	
9	13510581	Actuator	1	
-	13510615	- Seal Kit	1	
10	13510557	Spring Kit	4	
12	13510631	Solenoid Valve	2	
13	13510656	Pilot Oil Restrictor	2	

LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 4 OF 4

Dwg 13264635/00/01



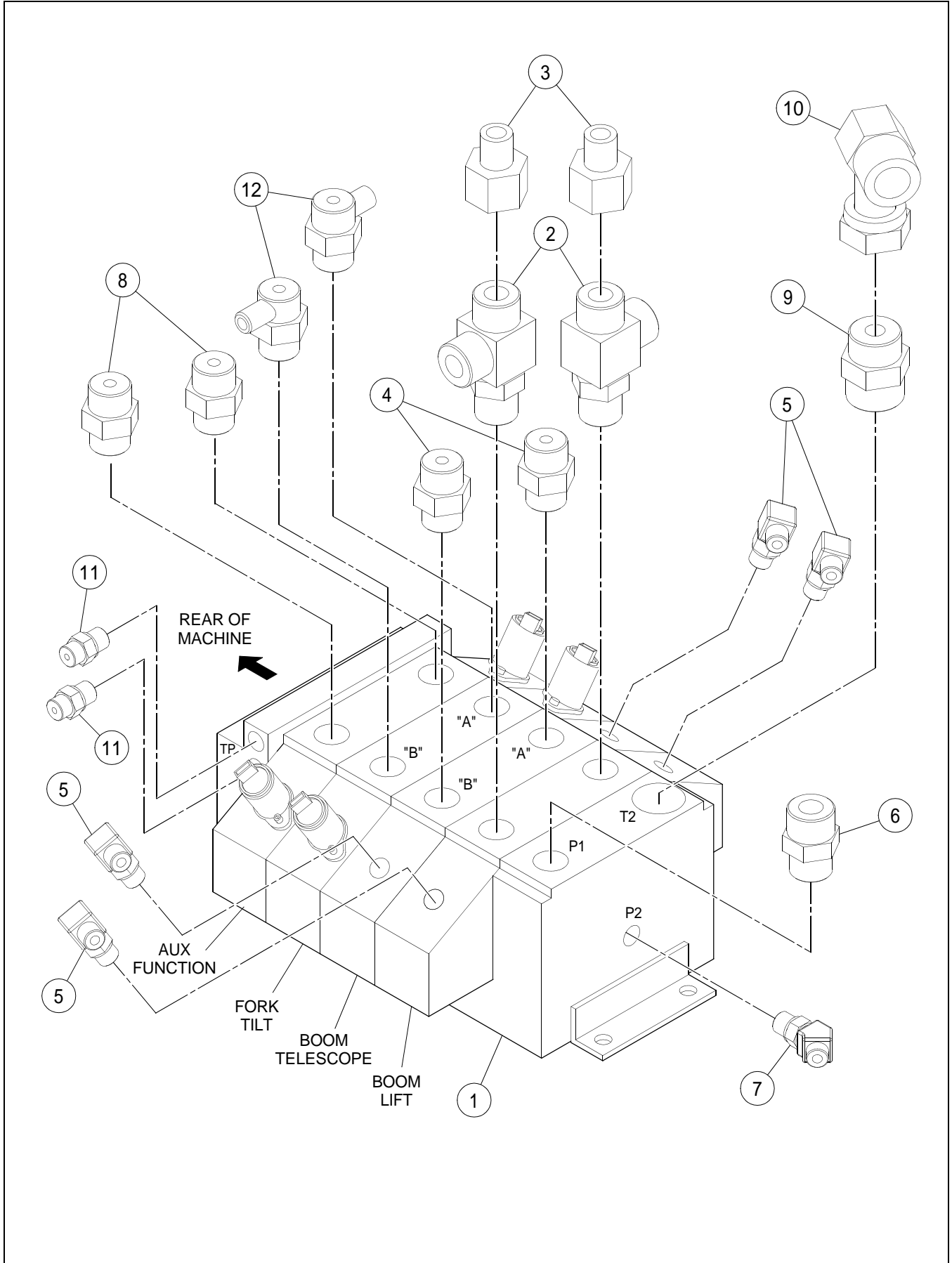
LIFT/CROWD VALVE (13315387) - INTERNAL BREAKDOWN -
SHEET 4 OF 4

BOM 13315387

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
11	13510565	Check Valve	4	

AUXILIARY LIFT/CROWD VALVE ASSEMBLY - SINGLE JOYSTICK

Dwg D13334438/00



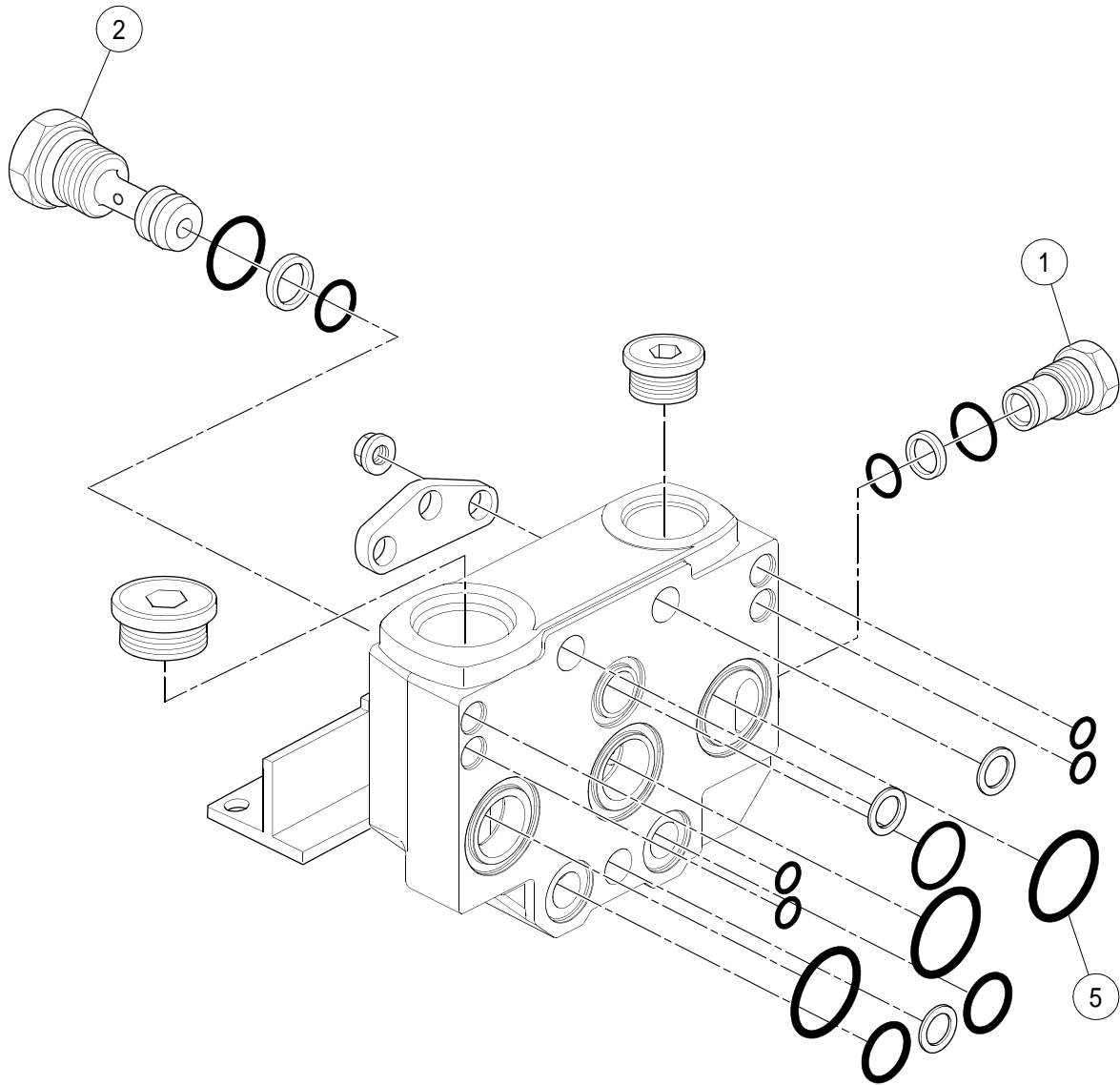
AUXILIARY LIFT/CROWD VALVE ASSEMBLY - SINGLE
JOYSTICK

BOM 13334412

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13315361	Lift/Crowd Valve	1	See Breakdown H - 160.
2	59923094	Adapter	2	
3	59924027	Reducer	2	
4	59922559	Adapter	2	
5	59922823	Adapter, 90°	4	
6	59922591	Adapter	1	
7	59922211	Adapter, 45°	1	
8	59922518	Adapter, Straight	2	
9	59922641	Adapter, Straight	1	
10	59923490	Adapter	1	
11	59922419	Adapter, Straight	2	
12	59409193	Adapter	2	

LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 1 OF 4

Dwg 13264635/00/01



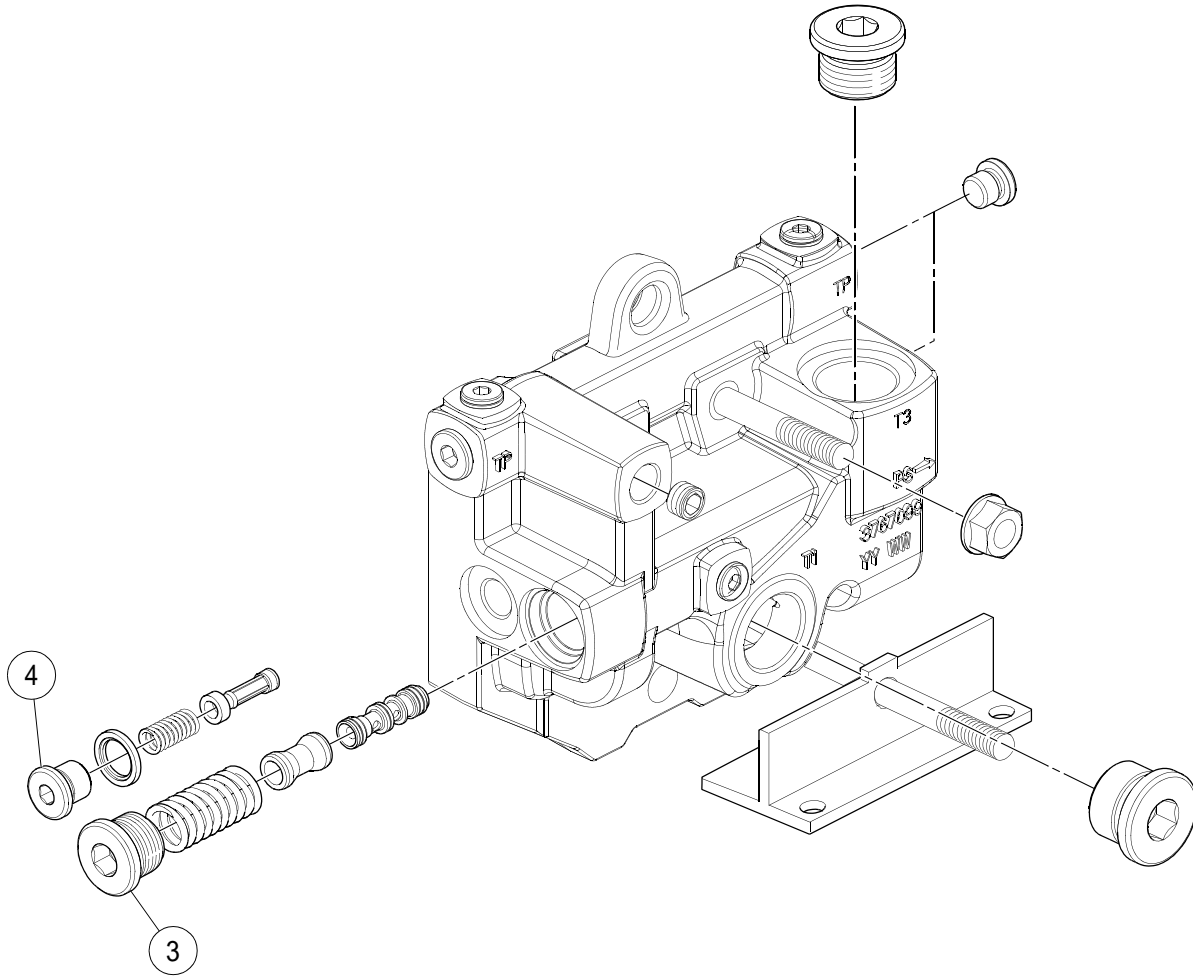
LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 1 OF 4

BOM 13315361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13510441	Plug	1	
-	13510458	- Seal Kit	1	
2	13510466	Adaptor	1	
-	13510474	- Seal Kit	1	
5	13510508	Intersection Seal Kit	1	

LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 2 OF 4

Dwg 13264635/00/02



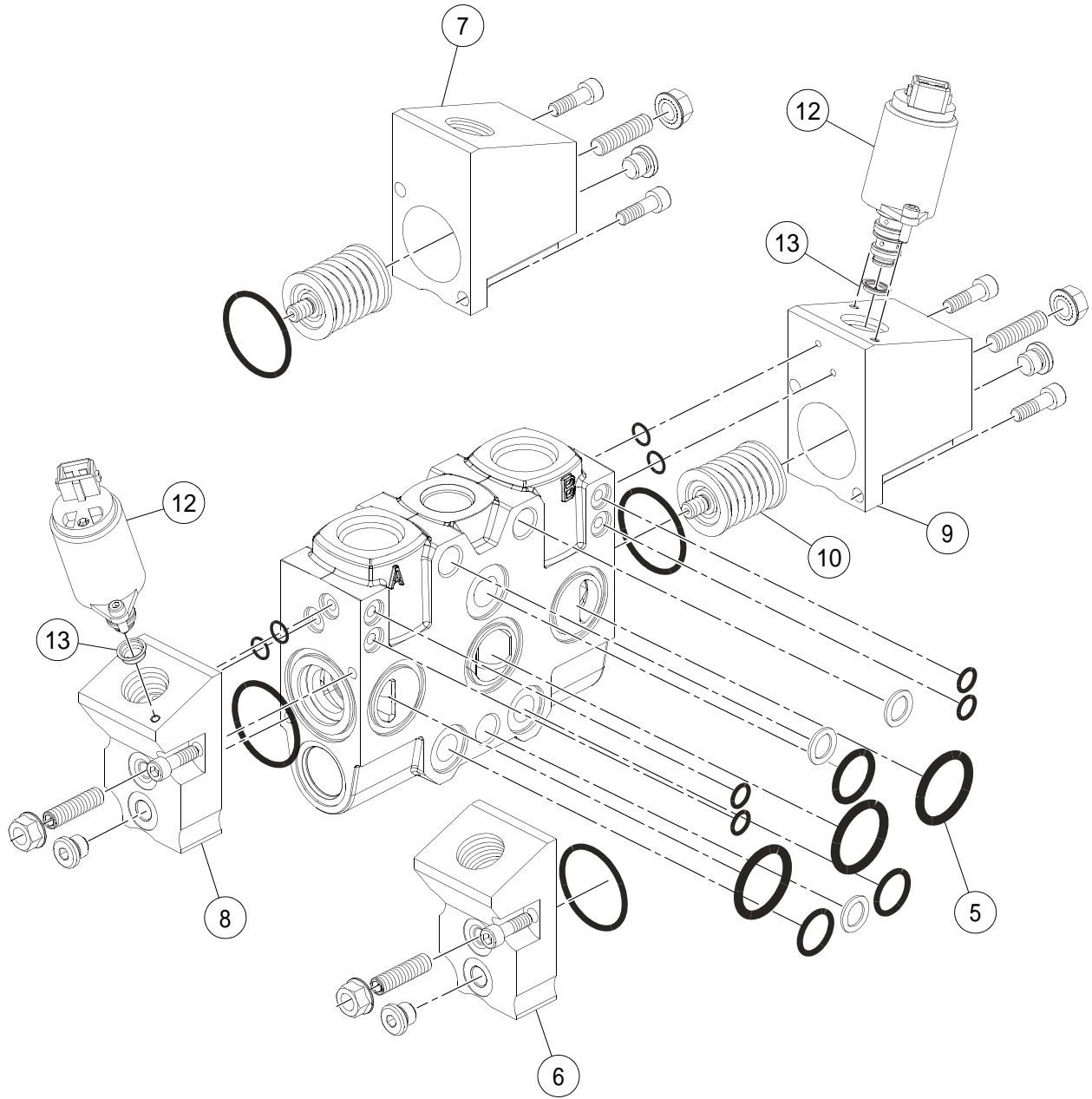
LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 2 OF 4

BOM 13315361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	13510482	Pressure Reducing Valve	1	
4	13510490	Pilot Oil Filter	1	

LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 3 OF 4

Dwg 13264635/00/03



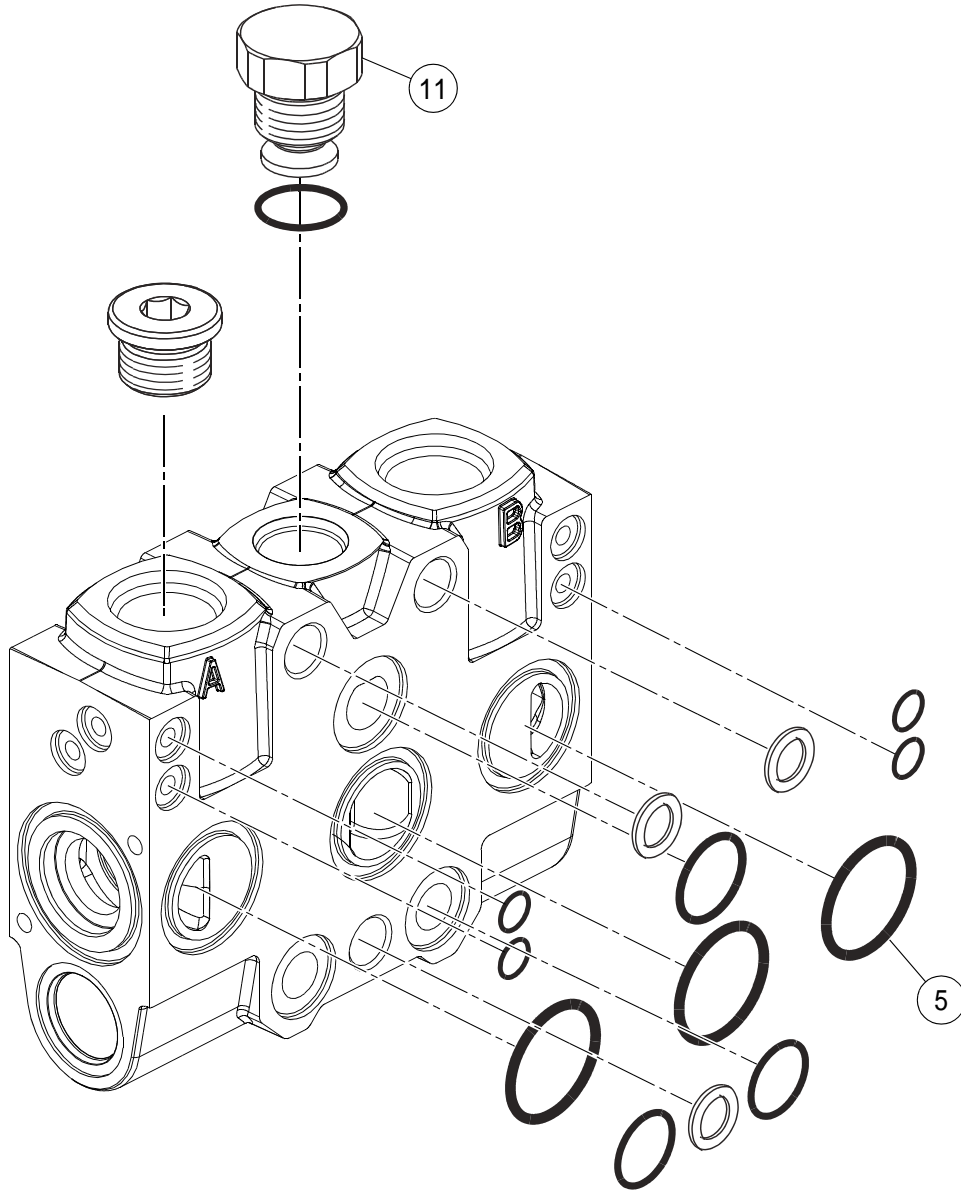
LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 3 OF 4

BOM 13315361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
6	13510516	Actuator	2	
-	13510524	- Seal Kit	2	
7	13510532	Actuator	2	
-	13510524	- Seal Kit	2	
8	13510573	Actuator	2	
-	13510615	- Seal Kit	2	
9	13510581	Actuator	2	
-	13510615	- Seal Kit	2	
10	13510557	Spring Kit	4	
12	13510631	Solenoid Valve	4	
13	13510656	Pilot Oil Restrictor	4	

LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 4 OF 4

Dwg 13264635/00/04



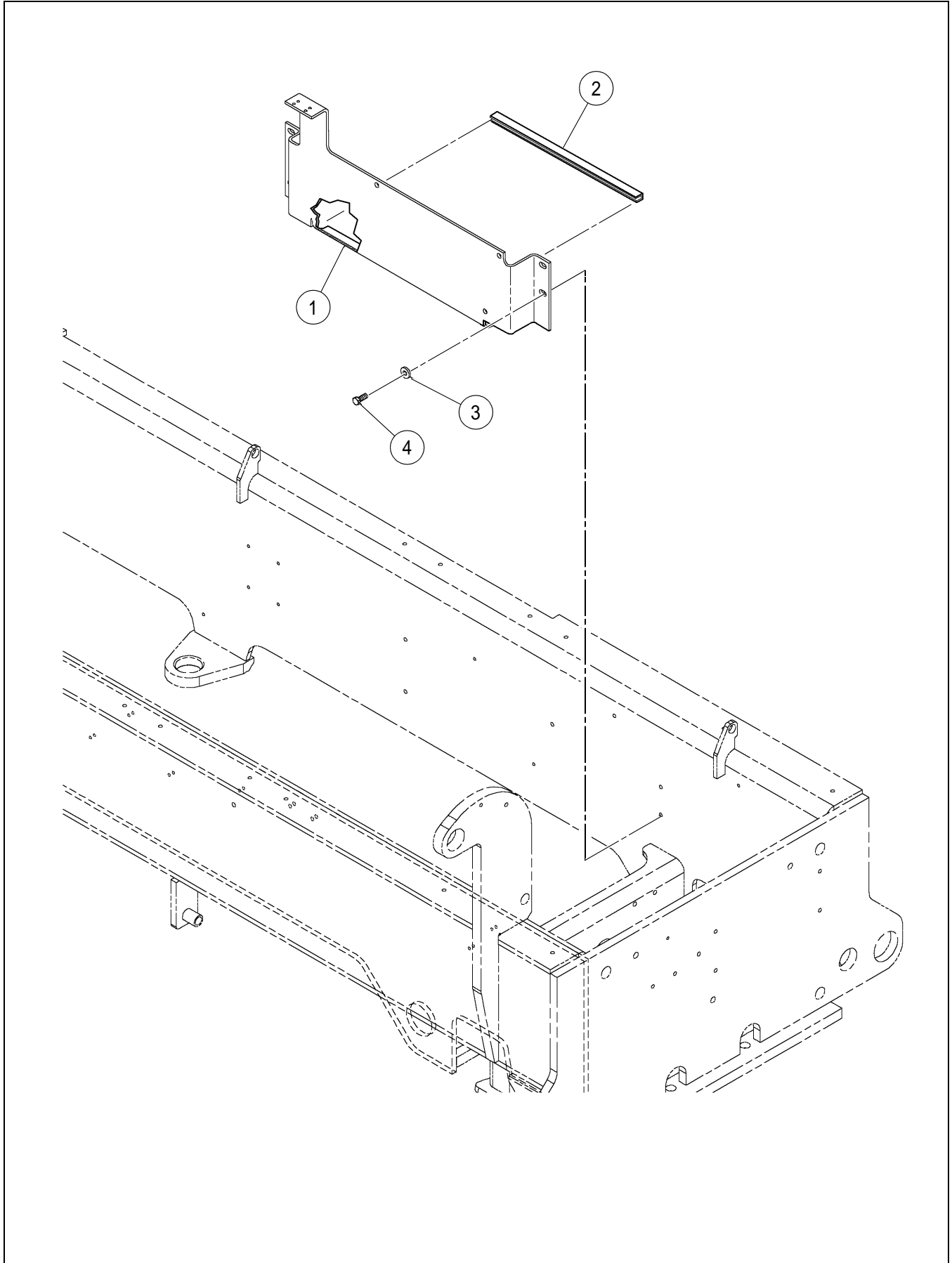
LIFT/CROWD VALVE (13315361) - INTERNAL BREAKDOWN -
SHEET 4 OF 4

BOM 13315361

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
5	13510508	Intersection Seal Kit	1	
11	13510565	Check Valve	4	

HYDRAULIC BRACKET INSTALLATION

Dwg D13259700/01



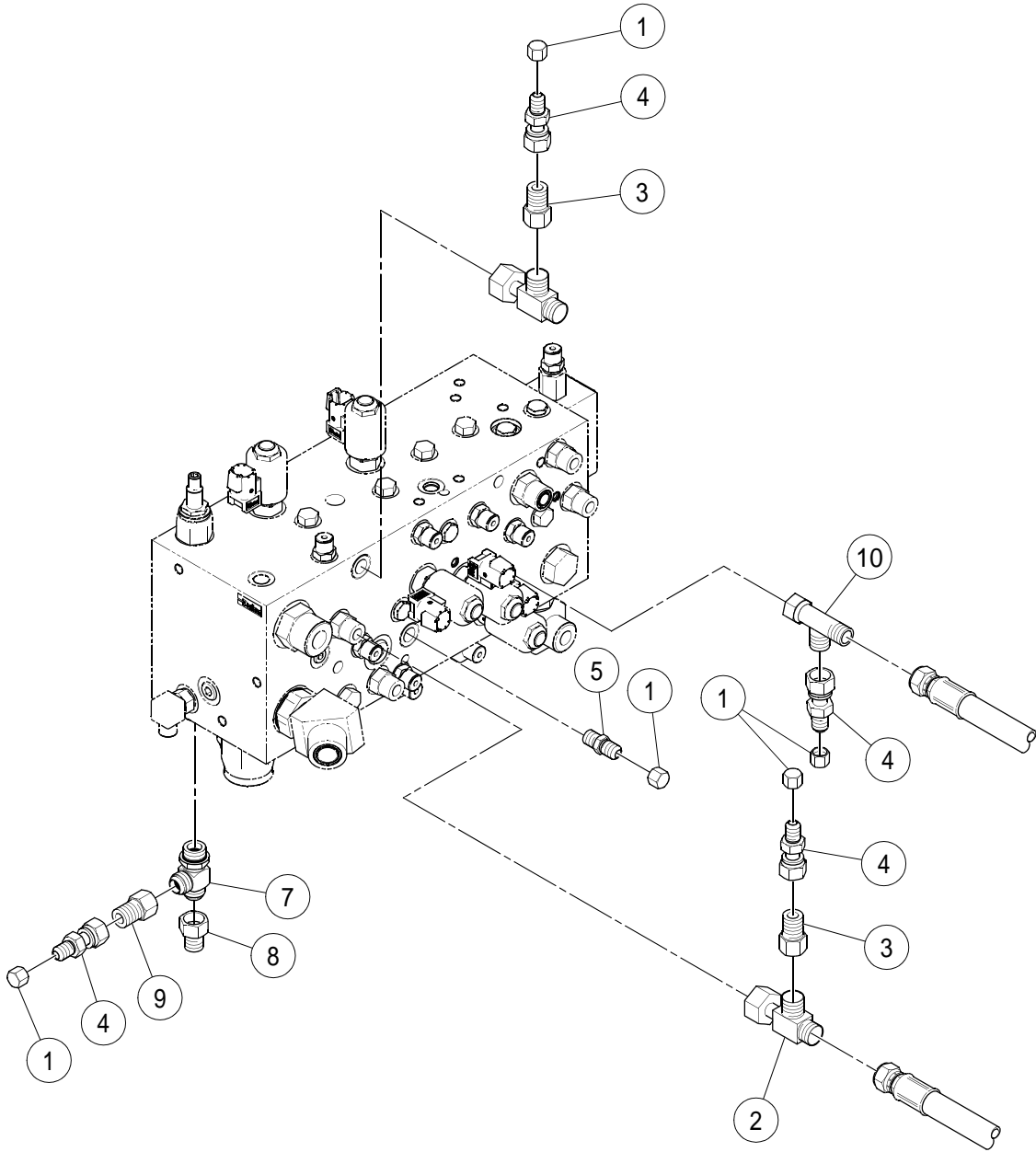
HYDRAULIC BRACKET INSTALLATION

BOM 13259700

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13285747	Hydraulic Mounting Bracket	1	
2	50829662	Trim	1	
3	96711833	Flatwasher, Zinc Plated	4	M10 CI 10
4	96702287	HHCS, Fully Threaded, Zinc Plated	4	M10 x 1.5 x 25 CI 8.8

HYDRAULIC TEST PORT INSTALLATION - EFFECTIVE WITH
S/N 187990 - OPTIONAL - SHEET 1 OF 2

Dwg 18006759/01



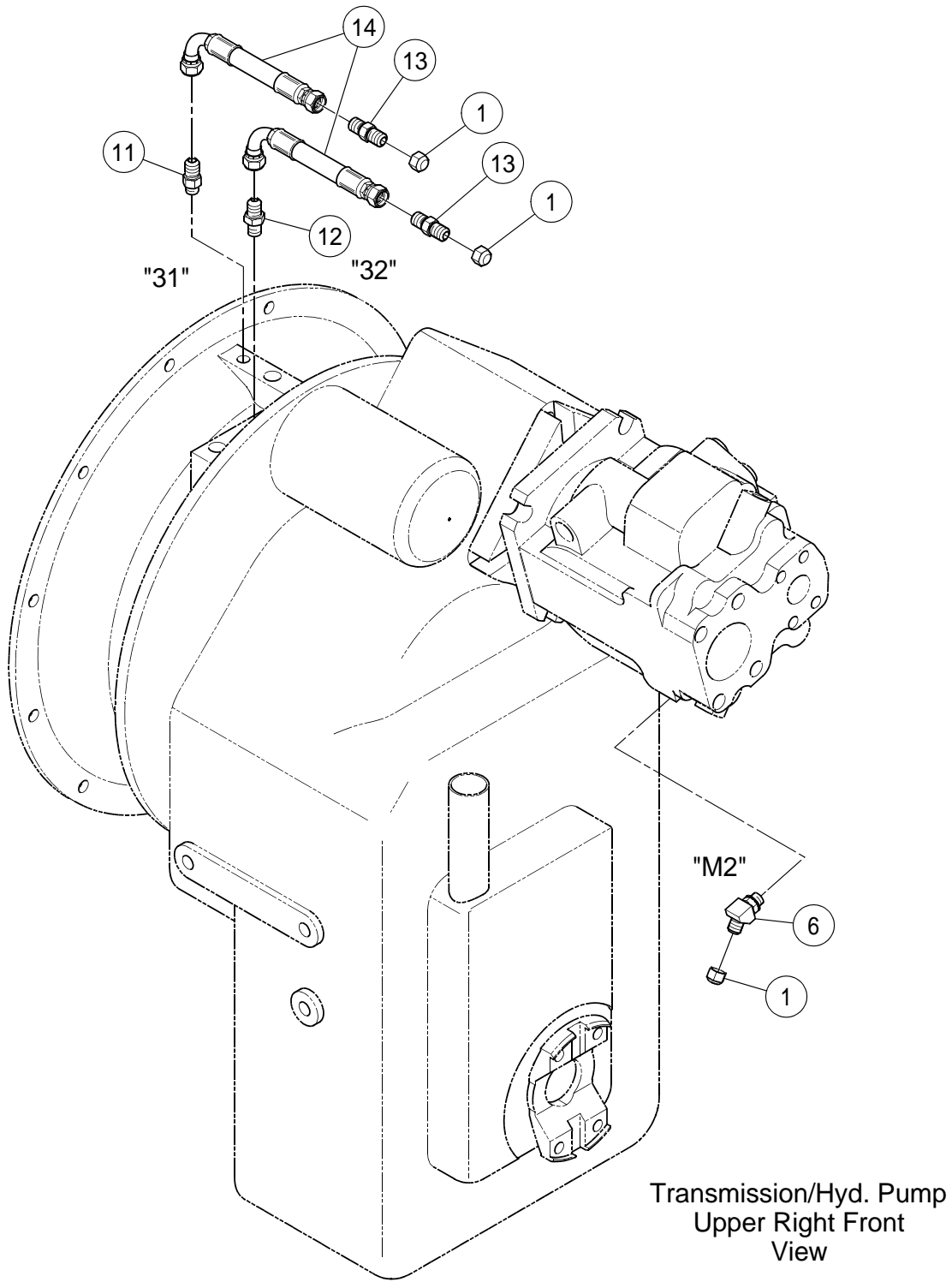
HYDRAULIC TEST PORT INSTALLATION - EFFECTIVE WITH
S/N 187990 - OPTIONAL - SHEET 1 OF 2

BOM 18006759

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	91300970	Cap	8	
2	59918540	Adapter, Tee	1	
3	59158881	Reducer	2	
4	59158899	Adapter	4	
5	95365086	Adapter	1	
7	59923078	Adapter	1	
8	58935644	Adapter	1	
9	59923961	Reducer	1	
10	59918615	Adapter	1	

HYDRAULIC TEST PORT INSTALLATION - EFFECTIVE WITH
S/N 187990 - OPTIONAL - SHEET 2 OF 2

Dwg 18006759/01



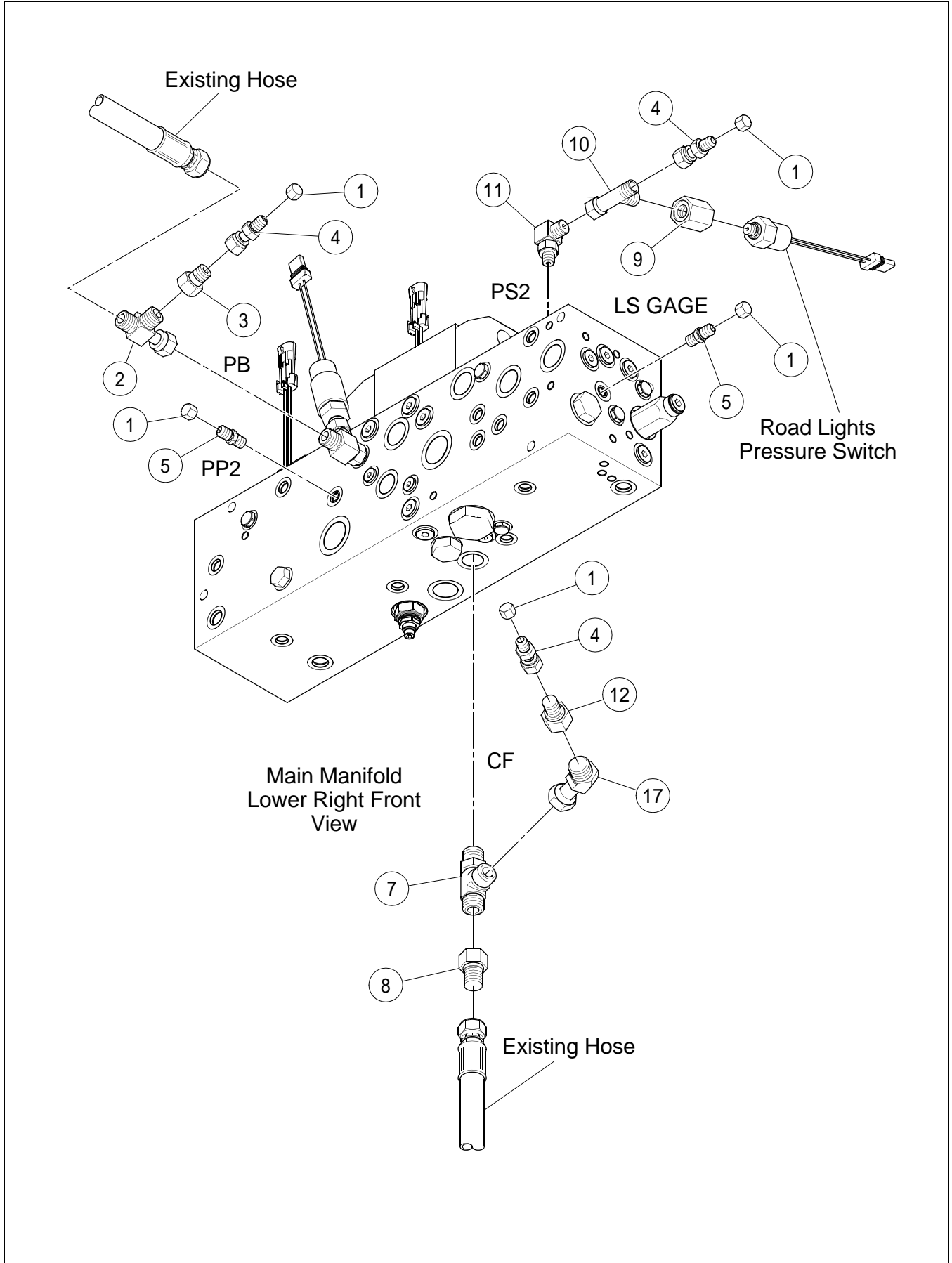
HYDRAULIC TEST PORT INSTALLATION - EFFECTIVE WITH
S/N 187990 - OPTIONAL - SHEET 2 OF 2

BOM 18006759

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	91300970	Cap	8	
6	95329967	Adapter	1	
11	59212696	Adapter	1	
12	95287629	Adapter	1	
13	95405221	Adapter	2	
14	59158410	Hose Assembly	2	6.0"

HYDRAULIC TEST PORT INSTALLATION - PRIOR TO S/N
187990 - OPTIONAL

Dwg D13360060/01/01



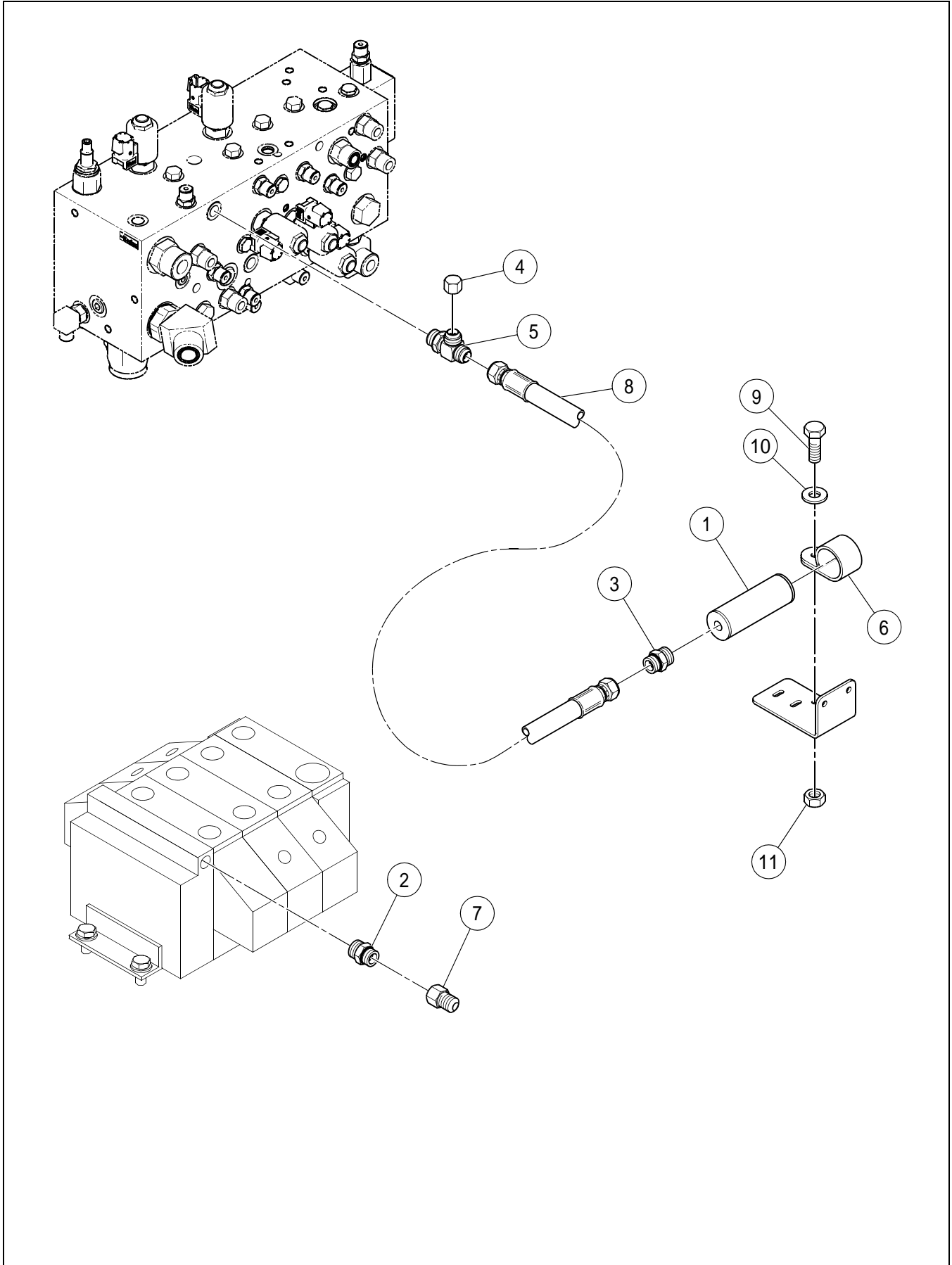
HYDRAULIC TEST PORT INSTALLATION - PRIOR TO S/N
187990 - OPTIONAL

BOM 13360060

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	91300970	Cap	8	
2	59918540	Adapter, Tee	1	
3	59158881	Reducer	1	
4	59158899	Adapter	3	
5	95365086	Adapter	2	
6	95329967	Adapter (Not Shown)	1	
7	59923078	Adapter	1	
8	58935644	Adapter	1	
9	59149369	Female Couplingo	1	
10	59918615	Adapter	1	
11	59922807	Adapter	1	
12	59923961	Adapter	1	
13	95405221	Adapter (Not Shown)	2	
14	59158410	Hose Assembly (Not Shown)	2	6.0
15	59212696	Adapter (Not Shown)	1	
16	95287629	Adapter (Not Shown)	1	
17	59054189	Adapter Swivel	1	

HYDRAULIC PILOT CIRCUIT INSTALLATION

Dwg 13856638/01



HYDRAULIC PILOT CIRCUIT INSTALLATION

BOM 13856638

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	13856612	Accumulator	1	
2	13856620	Check Valve	1	
3	59919670	Adapter, Straight	1	
4	59924050	Cap	1	
5	59158212	Fitting	1	
6	95322871	Clamp	1	
7	59158881	Reducer	1	
8	59138289	Hose Assembly	1	
9	96702287	HHCS, Fully Threaded, Zinc Plated	1	M10 x 1.5 x 25 CI 8.8
10	96741046	Flatwasher, Zinc Plated	1	M10 CI 200
11	96704614	Nut, Zinc Plated	1	M10 x 1.5 CI 8

*****Always use Ingersoll-Rand Replacement parts!*****



SECTION I - SCHEMATICS



SCHEMATICS

GENERAL INFORMATION

Hydraulic and electrical schematics are included here for the convenience of the owner/operator. Additional copies of the schematics are available by contacting the Ingersoll-Rand Road Development Division. See your authorized Ingersoll-Rand dealer for assistance if required.

For ultimate machine life and maximum performance, we recommend the use of genuine Ingersoll-Rand brand parts.

The electrical and hydraulic schematics included herein are applicable to the VR-843C Forklifts.

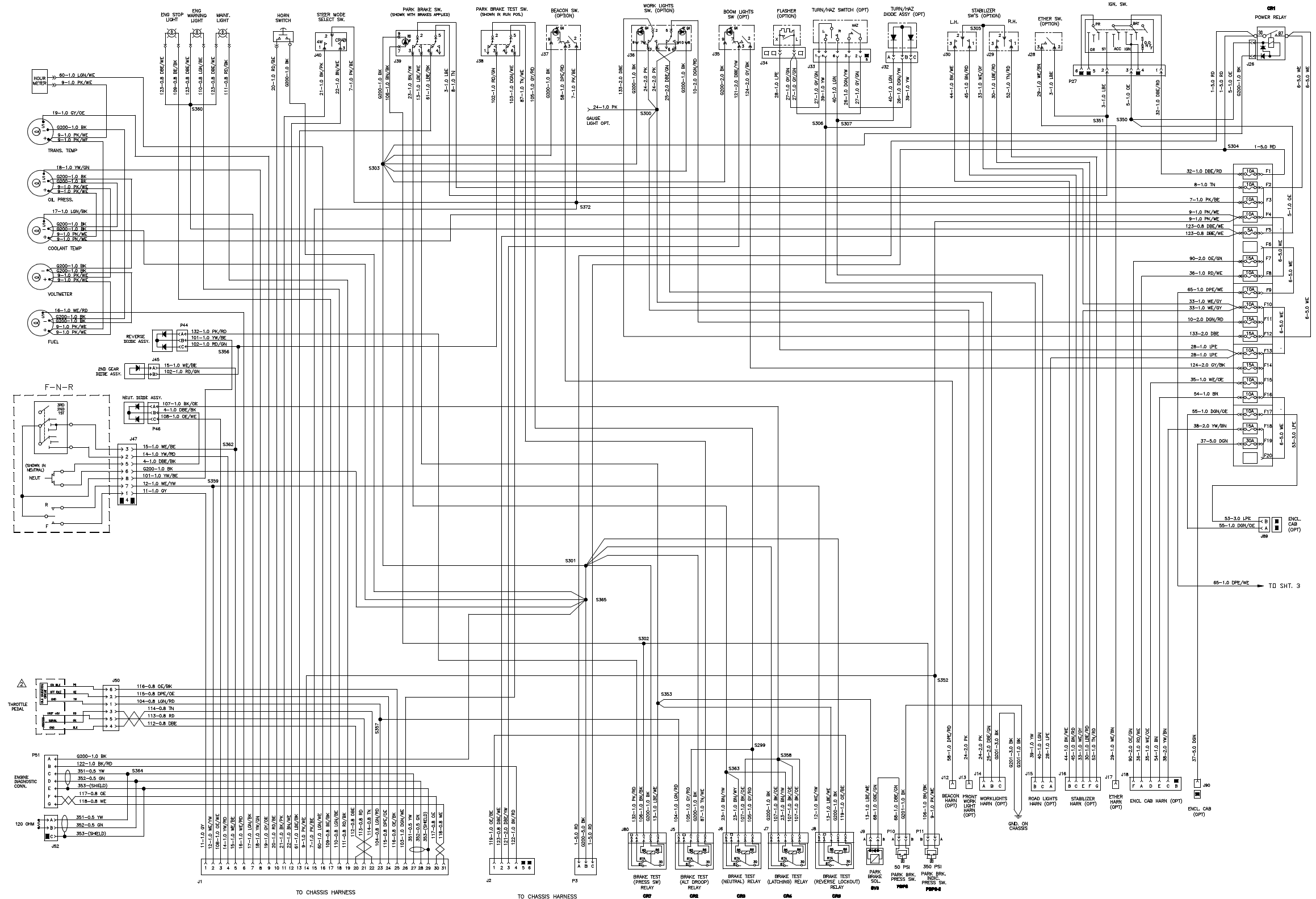
Electrical Schematic

- Electrical Schematic - VR-843C - Effective With S/N 187990, Drawing No. 13443197, Page I-3.
- Electrical Schematic - VR-843C - Prior To S/N 187990, Drawing No. 13315718, Page I-6.

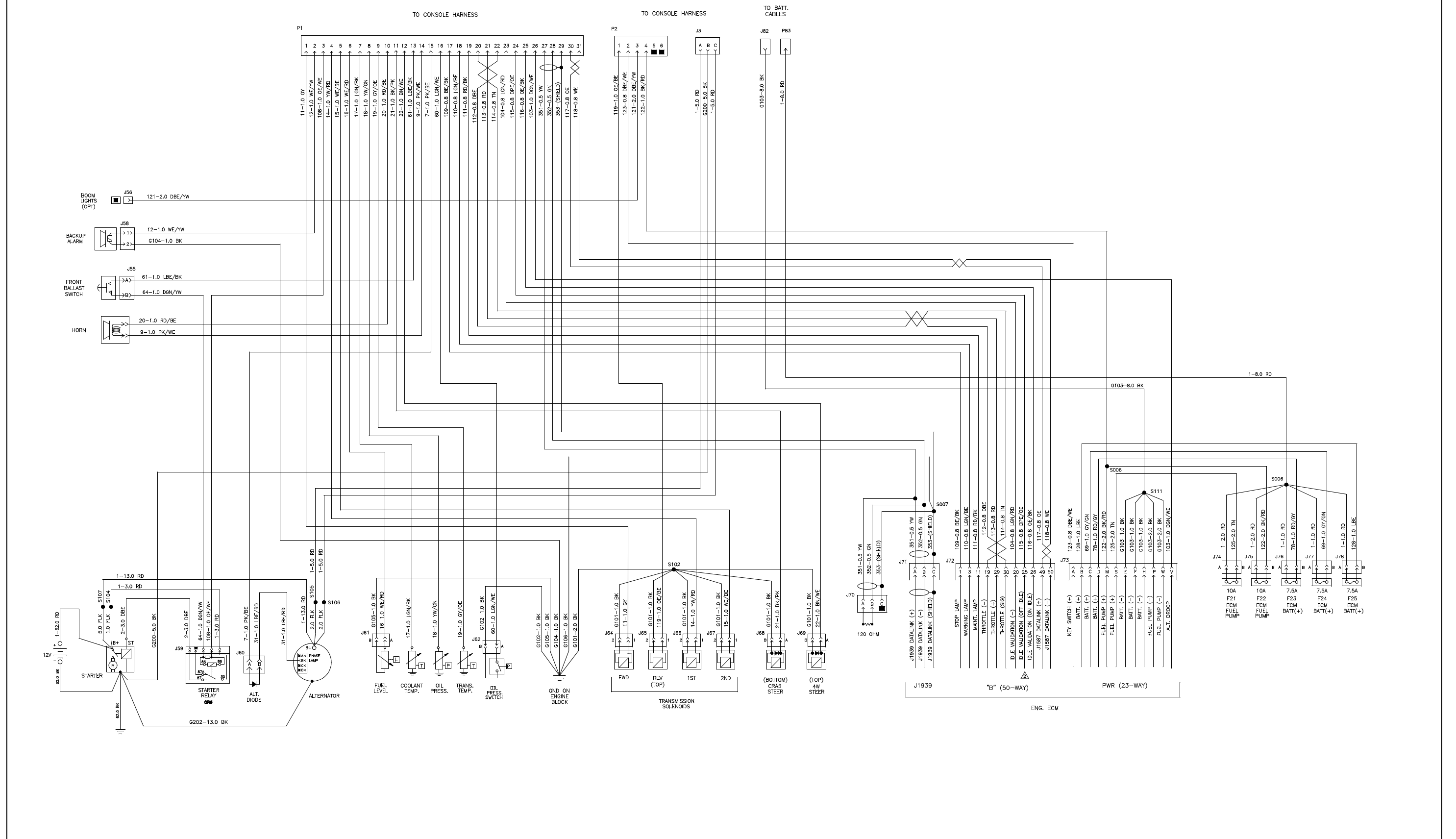
Hydraulic Schematic

- Hydraulic Schematic - VR-843C - Effective with S/N 187990, Drawing No. 18006643, page I-9.
- Hydraulic Schematic - VR-843C - Prior To S/N 187990, Drawing No. 13303904, page I-10.

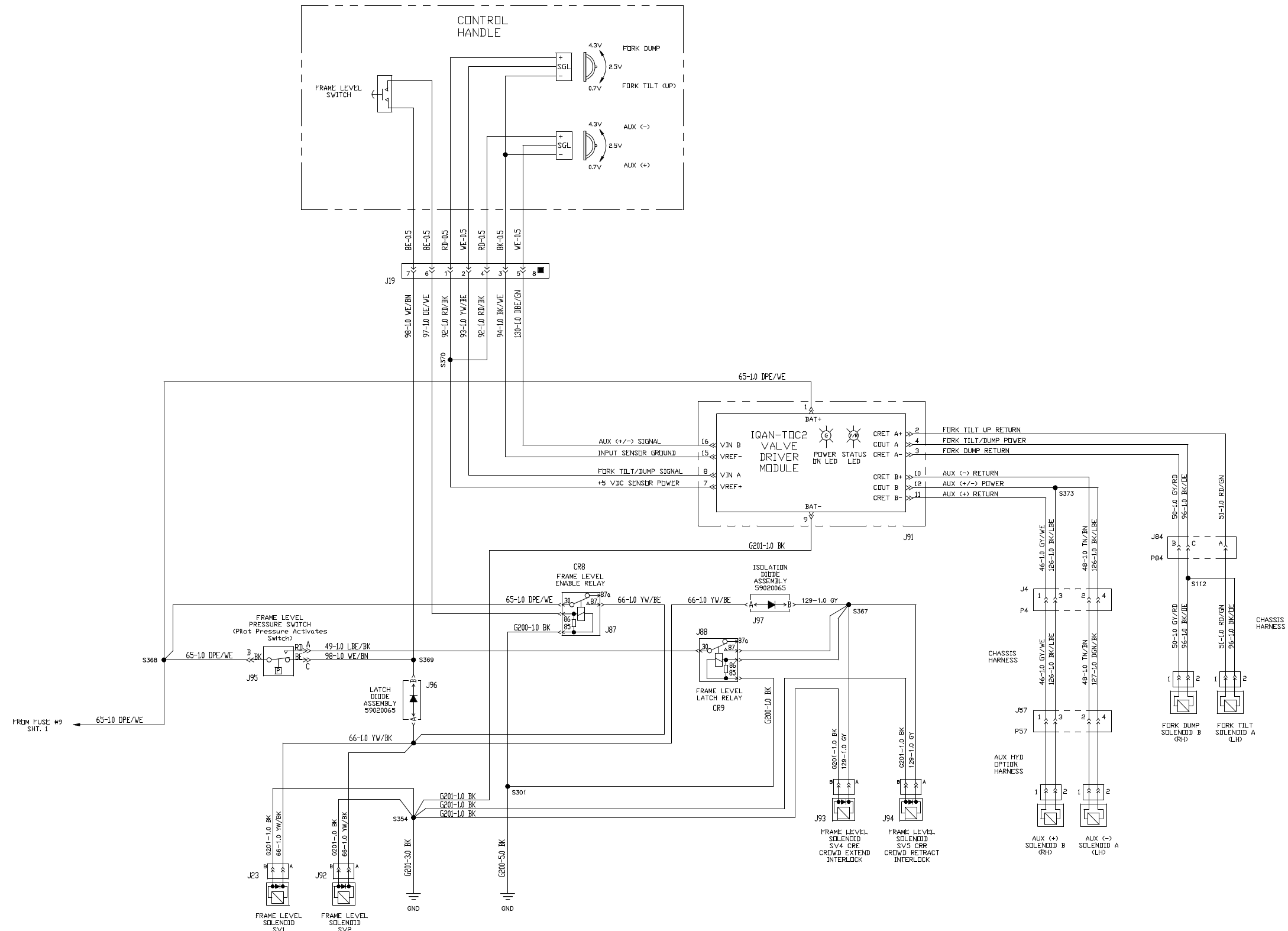
Electrical Schematic for VR-843C - Effective with S/N 187990 - Sheet 1 of 3



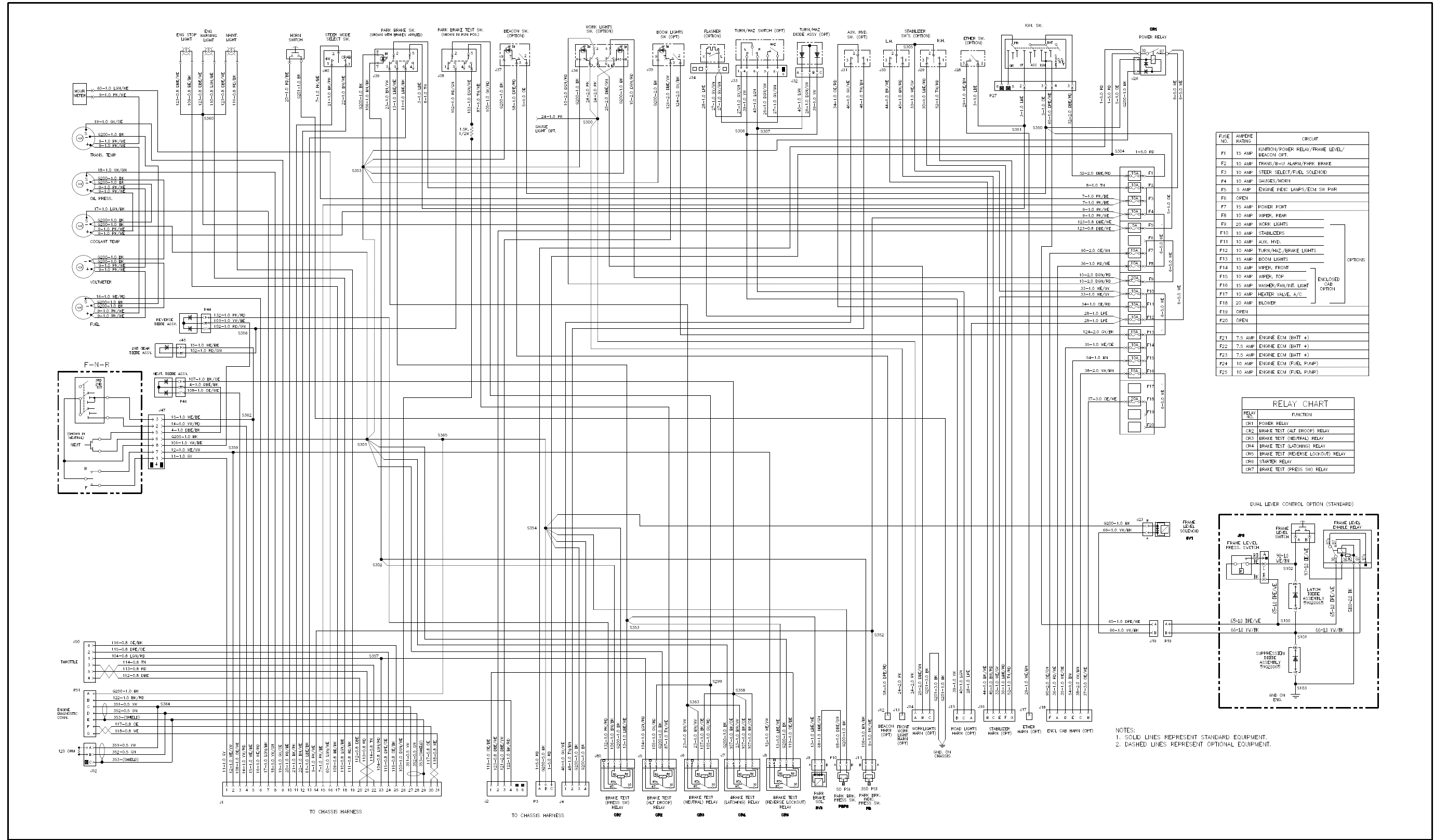
Electrical Schematic for VR-843C - Effective with S/N 187990 - Sheet 2 of 3



Electrical Schematic for VR-843C - Effective with S/N 187990 - Sheet 3 of 3

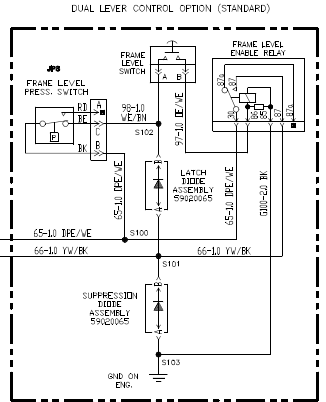


Electrical Schematic for VR-843C - Prior to S/N 187990 - Sheet 1 of 3



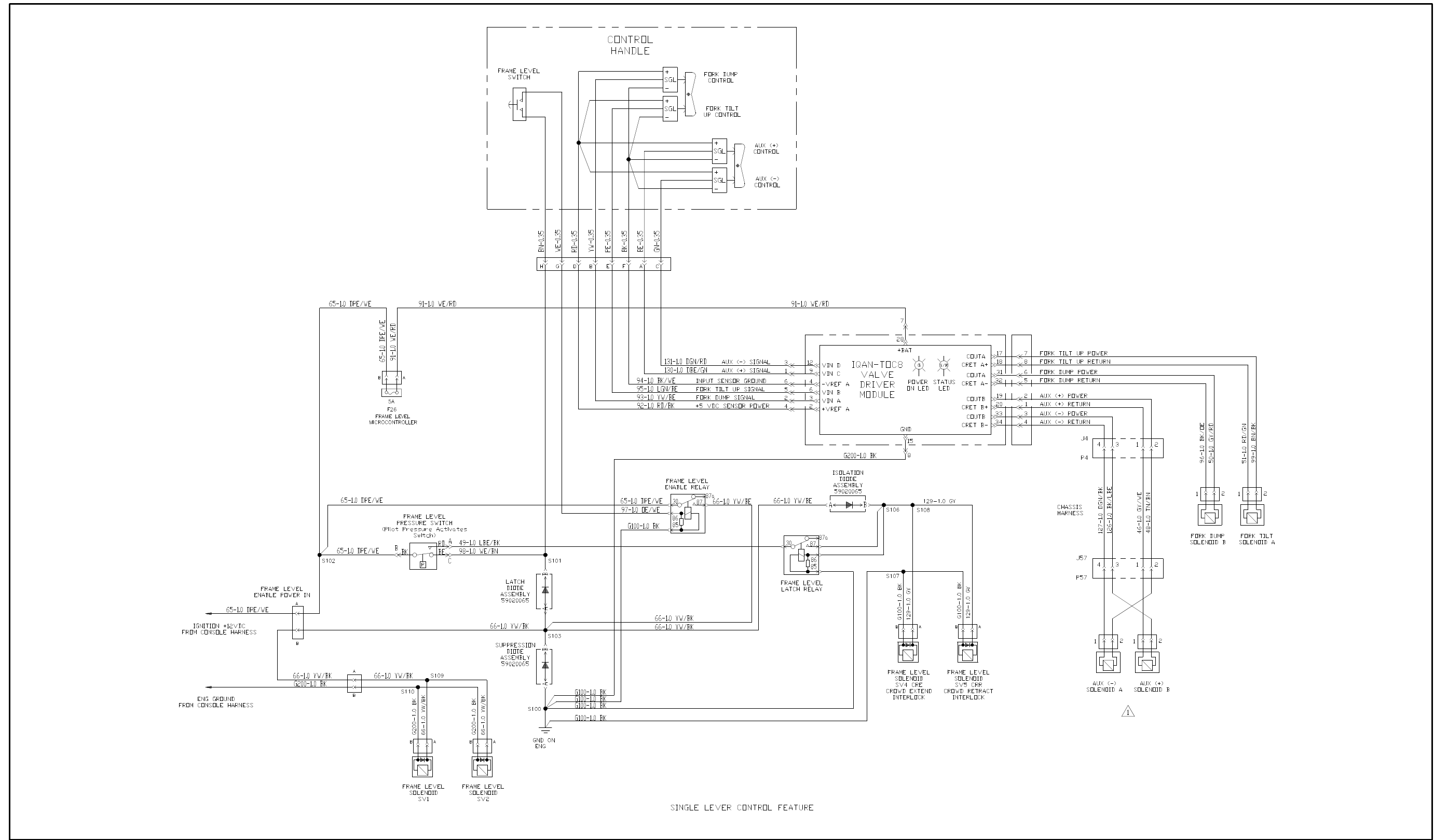
FUSE NO.	AMPERE RATING	CIRCUIT
F1	15 AMP	IGNITION/POWER RELAY/FRAME LEVEL/BEACON OPT.
F2	10 AMP	TRANE/B-U ALARM/PARK BRAKE
F3	10 AMP	STEER SELECT/FUEL SOLENOID
F4	10 AMP	GAUGES/HORN
F5	5 AMP	ENGINE INDIC LAMP/ECM SW PAIR
F6	OPEN	
F7	15 AMP	POWER PORT
F8	10 AMP	WIPER, REAR
F9	20 AMP	WORK LIGHTS
F10	10 AMP	STABILIZERS
F11	10 AMP	AUX. HYD.
F12	10 AMP	TURN/HAZ/BRAKE LIGHTS
F13	15 AMP	BOOM LIGHTS
F14	10 AMP	WIPER, FRONT
F15	10 AMP	WIPER, TOP
F16	15 AMP	WASHER/FAN/LIGHT
F17	10 AMP	HEATER VALVE, A/C
F18	20 AMP	BLOWER
F19	OPEN	
F20	OPEN	
F21	7.5 AMP	ENGINE ECM (BATT #)
F22	7.5 AMP	ENGINE ECM (BATT #)
F23	7.5 AMP	ENGINE ECM (BATT #)
F24	10 AMP	ENGINE ECM (FUEL PUMP)
F25	10 AMP	ENGINE ECM (FUEL PUMP)

RELAY NO.	FUNCTION
CR1	POWER RELAY
CR2	BRAKE TEST (ALT. BROOP) RELAY
CR3	BRAKE TEST (NEUTRAL) RELAY
CR4	BRAKE TEST (LATCHING) RELAY
CR5	BRAKE TEST (REVERSE LOCKOUT) RELAY
CR6	STARTER RELAY
CR7	BRAKE TEST (PRESS SW) RELAY



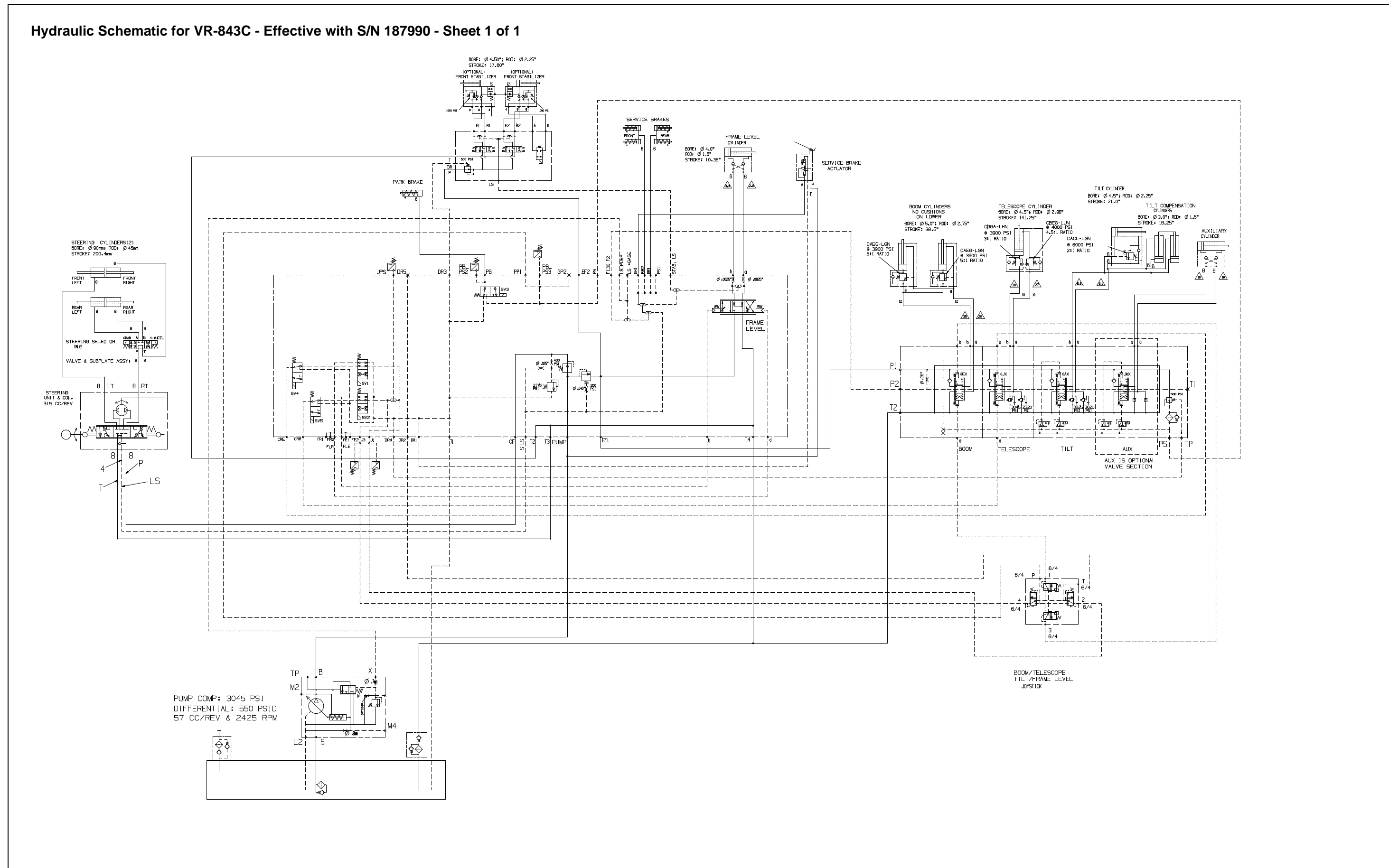
NOTES:
 1. SOLID LINES REPRESENT STANDARD EQUIPMENT.
 2. DASHED LINES REPRESENT OPTIONAL EQUIPMENT.

Electrical Schematic for VR-843C - Prior to S/N 187990 - Sheet 3 of 3

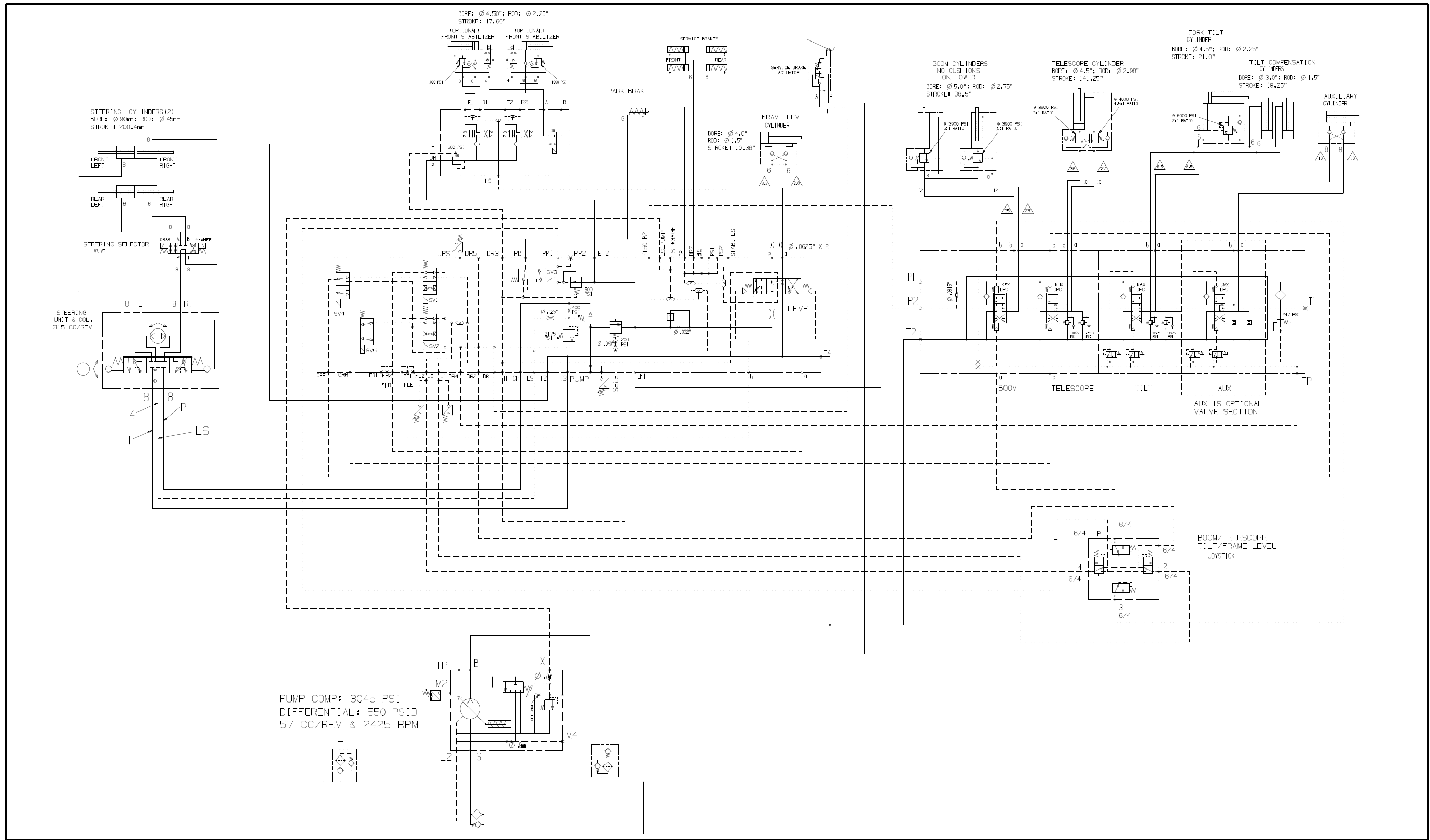


SINGLE LEVER CONTROL FEATURE

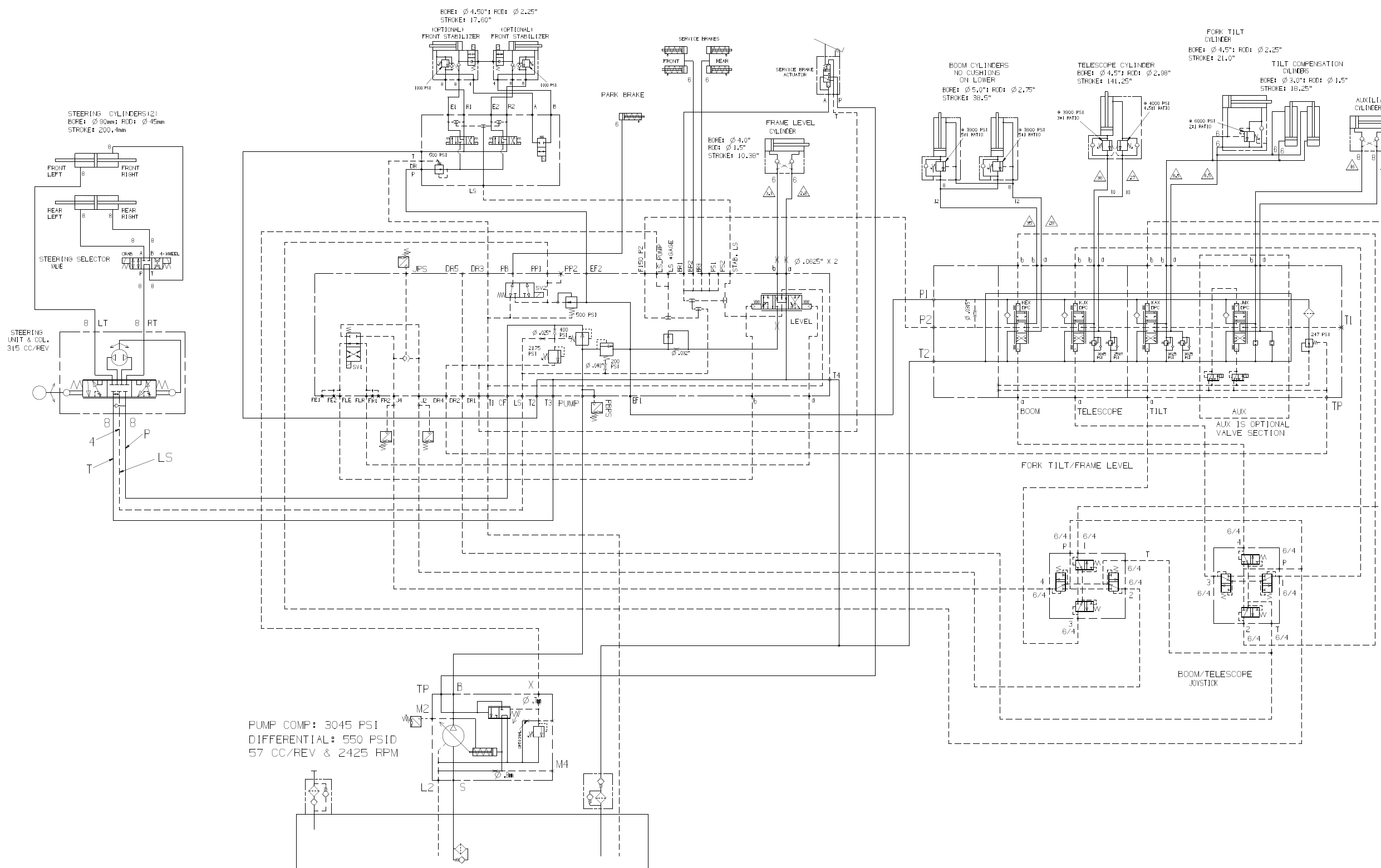
Hydraulic Schematic for VR-843C - Effective with S/N 187990 - Sheet 1 of 1



Hydraulic Schematic for VR-843C - Prior to S/N 187990 - Sheet 1 of 2



Hydraulic Schematic for VR-843C - Prior to S/N 187990 - - Sheet 2 of 2



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HOW TO USE THIS INDEX

When the Description is Known - Use the Word Index:

- Ingersoll-Rand's Word Index makes **any** item easy to locate.
- Use any of the **functional** words in the item description to locate the desired item. The items listed are in alphabetical order in the first column of the index and may be **repeated** several times depending on their **functional descriptions**.

If searching for the *Air Cleaner Primary Filter Element*, the first listing in the **Word Index** is:

Air Cleaner Primary Filter Element

The item is also listed as:

*Element, Air Cleaner Primary Filter
Filter Element, Air Cleaner Primary
Primary Filter Element, Air Cleaner*

- The alpha-numeric listing in the second column of the index is the location of the item in the manual. The location is identified as; the **Functional Group, Section Number**, and **Parts List Page Number**. Example: *C-43* would be Functional Group *C*, Page *43*.

The index shows the filter will be found on page *C-43* which is the **Parts List** page number for the *Air Cleaner Installation*

*****Always use Ingersoll-Rand Replacement parts!*****

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MATERIAL HANDLER WARRANTY

Ingersoll-Rand Company ("IR") warrants to its and its affiliates' authorized distributors, who in turn warrant to the initial user only, that each new Ingersoll-Rand material handler sold by the distributor will be free from proven defects in material and workmanship for the following period:

- VR Series and RT-700G and H Series limited to **1 year** or **1,000 hours** of operation, from date of entry into service, or **twenty-four** (24) months from the date of delivery from the factory to the distributor, whichever occurs first.
- RT-700J Series limited to **3 years** or **3,000 hours** of operation from date of entry into service, or **forty-eight** (48) months from date of delivery from the factory to the distributor, whichever occurs first

During the warranty period, the authorized distributor shall repair or replace, at IR's option, any part that is found upon inspection to be defective in material or workmanship. Such part will be repaired or replaced without charge for parts and labor to the initial user by the authorized distributor. The initial user shall provide the authorized distributor with prompt notification of the defect and allow reasonable time for repair or replacement. IR may require failed parts to be returned to the factory. Transportation of the product to the authorized distributor is the responsibility of the user. The remedies provided in this warranty are exclusive.

This warranty does not apply to failures occurring as a result of abuse, misuse, negligent repairs, corrosion, erosion and normal wear and tear, alterations or modifications made to the product without the express written consent of IR, or failure to follow the recommended operating practices and maintenance procedures as provided in the product's operating and maintenance publications. This warranty does not cover replacement of scheduled service items such as oil, filters, and wear items. This warranty does not apply to engines (including engine electrical components) and tires or other accessories and equipment furnished by IR, but manufactured by others. The initial user shall rely solely on the warranty, if any, of the respective manufacturers thereof.

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Road Development

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