

Quick Reference Data

Section 01-05

Komatsu has made effort to make this manual as accurate as possible based on the information available at the time of publication and printing. Continuous improvement and advancement of product design may cause changes to machines which may not have been included in this publication. Komatsu reserves the right to make changes and improvements at any time. To ensure the most current information, please contact your service center.

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Schematics

Specification Sheet

Bolt Torque Chart Located in Section Titled “General Information”

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Schematics, Diagrams & Specifications

L1350-2302

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- Rear Frame Auto Lube Hose Group

Electrical Schematics

REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	SEE SHEET 9,13 & 14	1397539	2019-10-17	FL	BBD	JMS

100

VCU / IO CARD CONNECTOR
SEE PAGE 21 FOR FURTHER DETAILS

VCU CONNECTOR PIN NUMBER
NOTE: 0 BASED IN SOFTWARE
1 BASED IN SCHEMATIC

INDICATES LED ON CHANNEL
SEE PAGE 22 FOR FURTHER DETAILS

I/O CHANNEL NAME AND NUMBER

I/O TYPE
SEE PAGE 21 FOR FURTHER DETAILS

INTERFACE CARD CONNECTOR
DIG: DIGITAL INTERFACE (428-1247)
ALG: ANALOG INTERFACE (425-9224)
IN: INPUT
OUT: OUTPUT
PWR: POWER
GND: GROUND

CONNECTOR PIN NUMBER

BREAKOUT BOX 3 PIN CONNECTIONS PIN

HARNESS NAME / WIRE CODE

HARNESS PINS / WIRE

MAIN COMPONENT DETAIL

PART LOCATION

EXAMPLE CIRCUIT

SEE CONNECTOR
COLOR CODES PAGE 24
3 PIN

PCP1-08/12 (J4-1)

GRN GND

PCP1-02 (J4-2)

BLK SIG

PCP1-10/11 (J4-3)

WHT 24V

SEE BREAKOUT BOX PAGE 25

CABLE PCP1 J4

CABLE PCP1

BEHIND CABINET

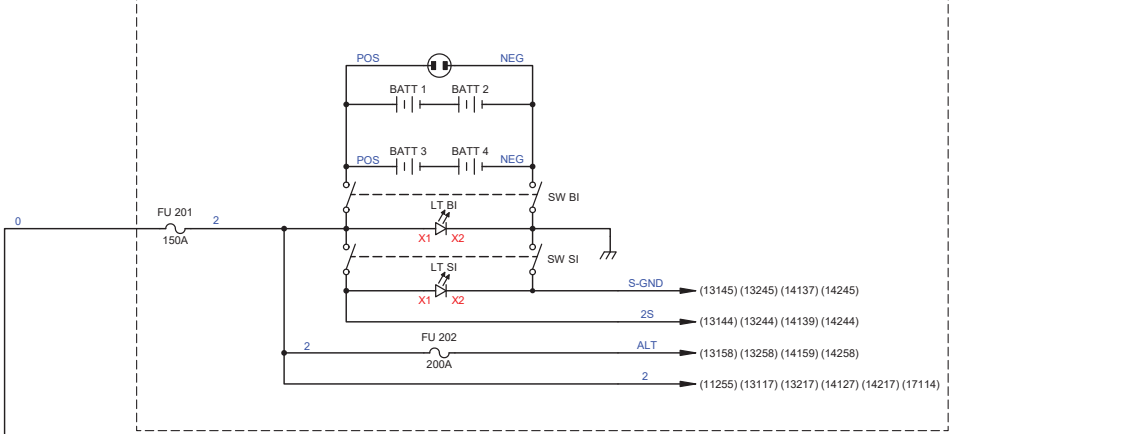
<u>LOADER SPECIFIC FEATURES / OPTIONS</u>		
DDEC IV ENGINE (T1 & T2)	(SHEET 13)	
ADEC ENGINE (T2)	(SHEET 13)	
ADEC ENGINE (T4)	(SHEET 14)	✓
CUMMINS QST30 ENGINE (T2)	(SHEET 14)	
CUMMINS QSK38 ENGINE (T2)	(SHEET 14)	
CUMMINS QSK50 ENGINE (T2)	(SHEET 14)	
CUMMINS QSK60 HPI ENGINE (T1)	(SHEET 14)	
CUMMINS QSK60 MCERS ENGINE (T2)	(SHEET 14)	
AUXILIARY STEERING	(SHEET 17)	
REAR VISION CAMERA	(SHEET 17)	
HEATERS - COLD CLIMATE	(SHEET 17)	
BEACON LIGHT AMBER	(SHEET 4)	
RED DOT CLIMATE CONTROL	(SHEET 16)	
MINE AIR CLIMATE CONTROL	(SHEET 16)	

[illegible]

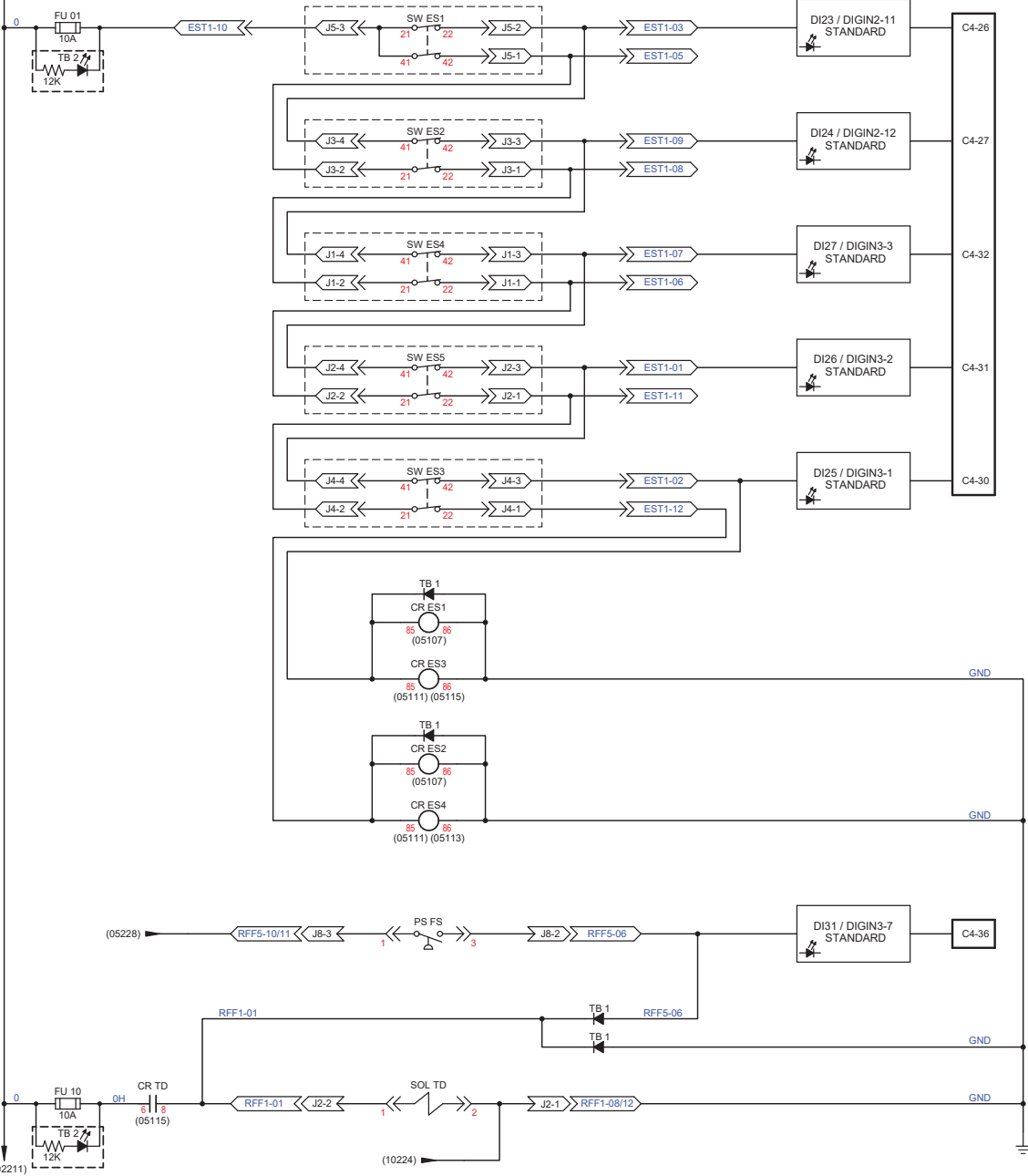
24V ELECTRICS

REVISION HISTORY						
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK
00	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD
01	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

BATTERY ISOLATION SWITCH BOX



EMERGENCY STOP



BATTERY CHARGING SOCKET
416-3355 (D1)

BATTERY 1 & 2

BATTERY 3 & 4

BATTERY ISOLATION SWITCH
426-7269 (D1)

FU 201 425-9237 (E2)
LT BI 424-0049 (D1)

STARTER ISOLATION SWITCH
426-7268 (D1)

LT SI 424-0048 (D1)

FU 202 427-9013 (E2)

CAB E-STOP SWITCH
427-4443 (B5)

HV CABINET E-STOP SWITCH
427-4515 (C4)

RIGHT REAR E-STOP SWITCH
427-4515 (E1)

LEFT REAR E-STOP SWITCH
427-4515 (D1)

HYD RESERVOIR E-STOP SWITCH
427-4515 (F4)

E-STOP RELAY 1
411-9992 (D4)

E-STOP RELAY 3
426-0950 (D4)

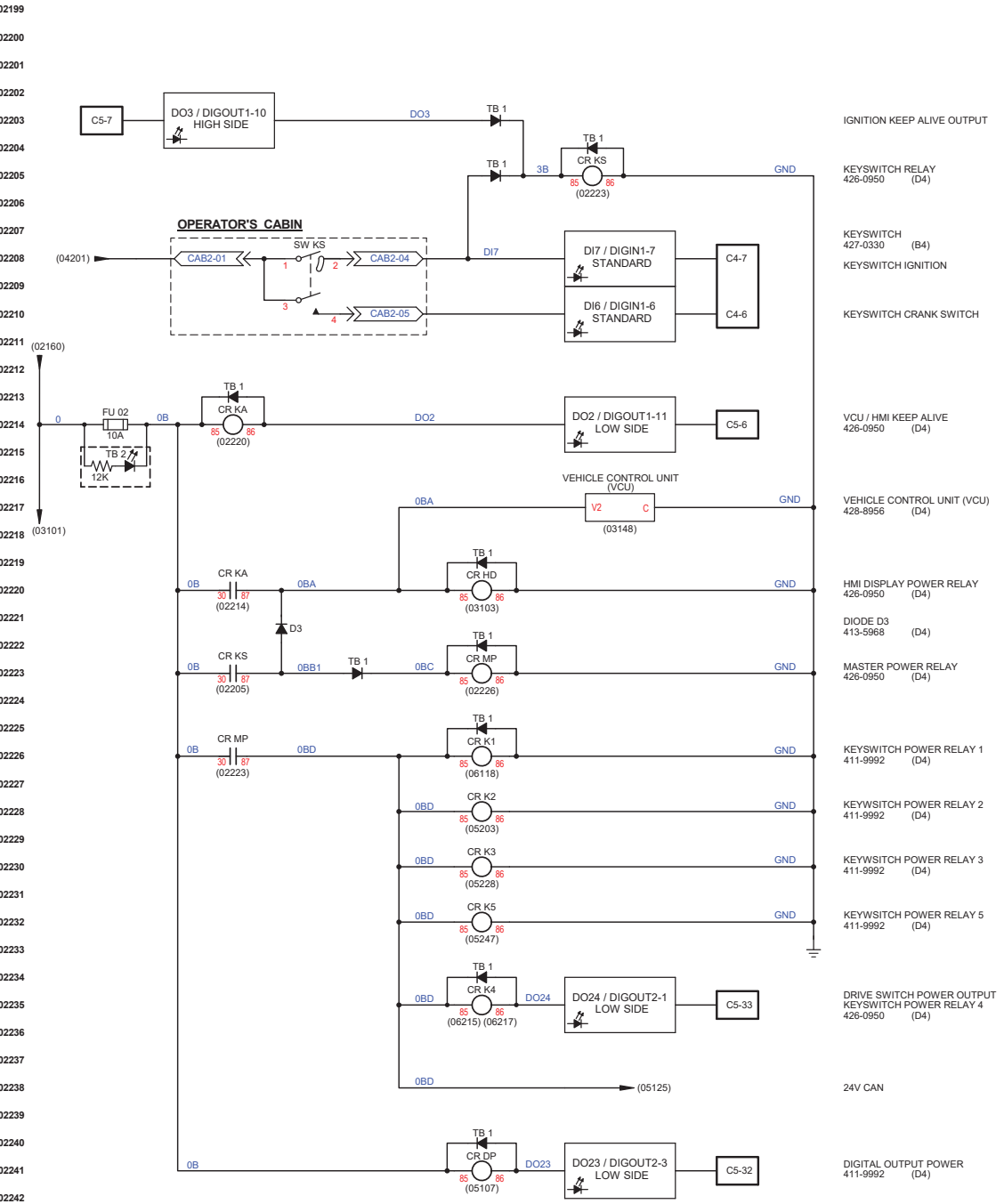
E-STOP RELAY 2
411-9992 (D4)

E-STOP RELAY 4
426-0950 (D4)

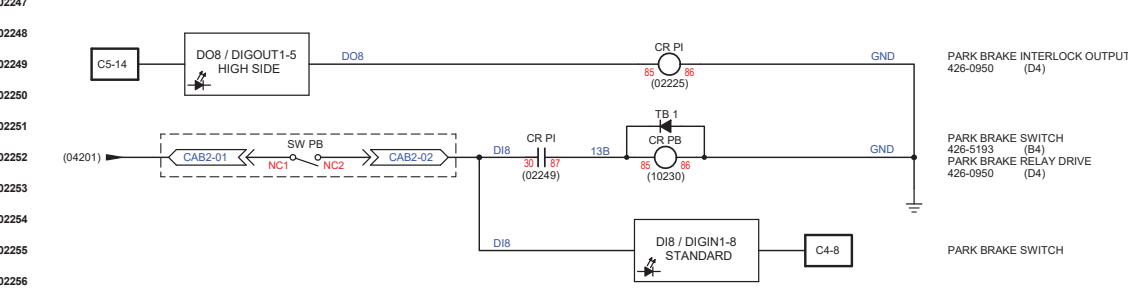
FIRE SYSTEM STATUS
415-5057 (D4)

HYD TANK DUMP SOL
426-1177 (D4)

KEYSWITCH



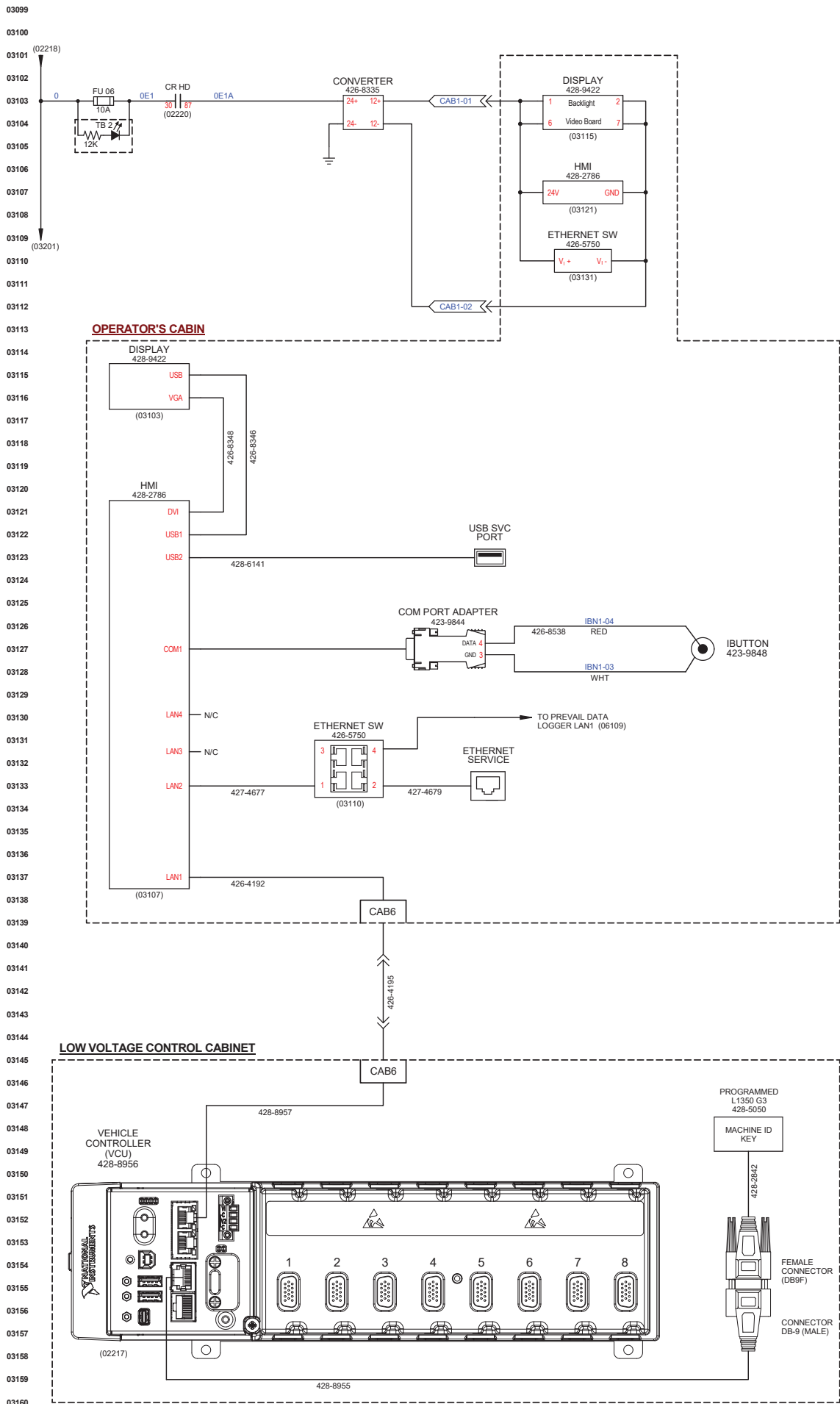
PARK BRAKE



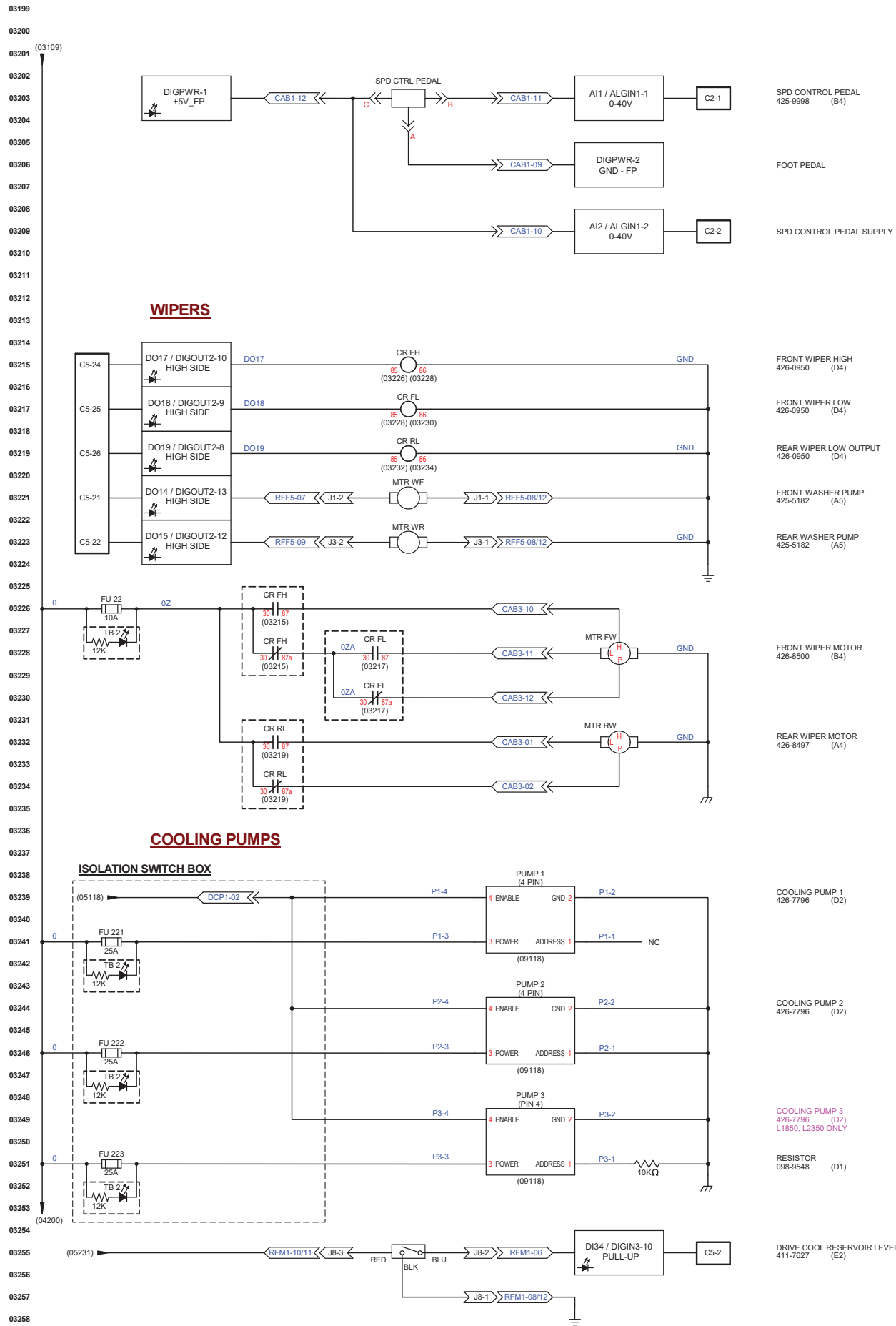
24V ELECTRICS

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	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

HUMAN MACHINE INTERFACE (HMI)



SPEED CONTROL PEDAL



WIPERS

COOLING PUMPS

ISOLATION SWITCH BOX

24V ELECTRICS

LIGHTS & ALARMS

LIGHTS & ALARMS (cont)

ZONE		REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
01	NO CHANGE THIS SHEET	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
		01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

CAB INTERIOR LIGHTS 424-5974 SW CA1 427-0329 SW CA2 426-8357 SW CA3 426-8357 HORN 427-9005 SW HORN 428-9009 BEACON LIGHT (OPT)	(A5) (A4) (A4) (A5) (B4) (B5) (B4)
LADDER LIGHT CONTROL RELAY 428-0950 SW LL1 405-9189 SW LL2 425-3960	(D4) (D1) (A5)
MAINTENANCE LIGHT RELAY 428-0950 SW ML 403-1378	(D4) (D1)
HOOD LIGHT 429-2884	(A5)
LADDER LIGHT FRONT 429-2884	(A5)
HYD TANK LADDER LIGHT 429-2884	(A5)
LADDER LIGHT REAR 429-2884	(D1)
MAINTENANCE LIGHT LEFT FRONT 429-2884	(D5)
MAINTENANCE LIGHT RIGHT FRONT 429-2884	(E5)
MAINTENANCE LIGHT MIDDLE LEFT 429-2884	(D4)
MAINTENANCE LIGHT MIDDLE RIGHT 429-2884	(D4)
MAINTENANCE LIGHT LEFT REAR 429-2884	(D2)
MAINTENANCE LIGHT RIGHT REAR 429-2884	(E2)
MAINTENANCE LIGHT RIGHT HOOD 429-2884	(E2)
POLE WORK LT (NARROW FLOOD) LEFT 429-2885	(C5)
POLE WORK LT (NARROW FLOOD) LEFT 429-2885	(C5)
POLE WORK LT (NARROW FLOOD) RIGHT 429-2885	(F5)
POLE WORK LT (NARROW FLOOD) RIGHT 429-2885	(F5)
CAB LIGHT BAR LT (MEDIUM FLOOD) LEFT 429-2886	(B5)
CAB LIGHT BAR LT (NARROW FLOOD) LEFT 429-2885	(B5)
CAB LIGHT BAR LT (NARROW FLOOD) LEFT 429-2885	(B5)
CAB LIGHT BAR LT (PERIPHERAL) LEFT 429-2886	(B5)
CAB LIGHT BAR LT (MEDIUM FLOOD) RIGHT 429-2886	(B4)
CAB LIGHT BAR LT (NARROW FLOOD) RIGHT 429-2885	(B4)
CAB LIGHT BAR LT (NARROW FLOOD) RIGHT 429-2885	(B4)
CAB LIGHT BAR LT (PERIPHERAL) RIGHT 429-2886	(B5)
REAR COWL LT (MEDIUM FLOOD) LEFT 429-2886	(D1)
REAR COWL LT (MEDIUM FLOOD) RIGHT 429-2886	(E1)

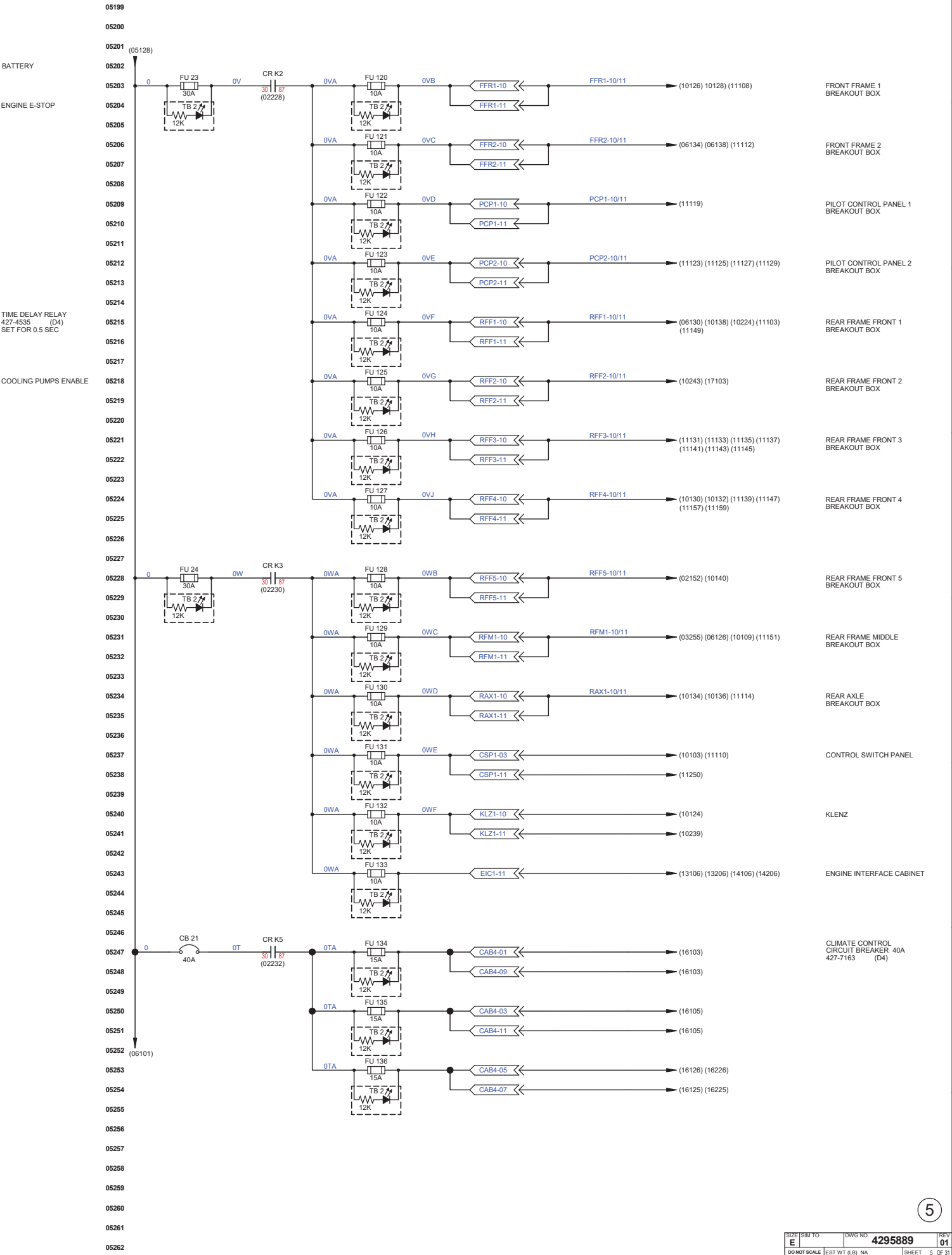
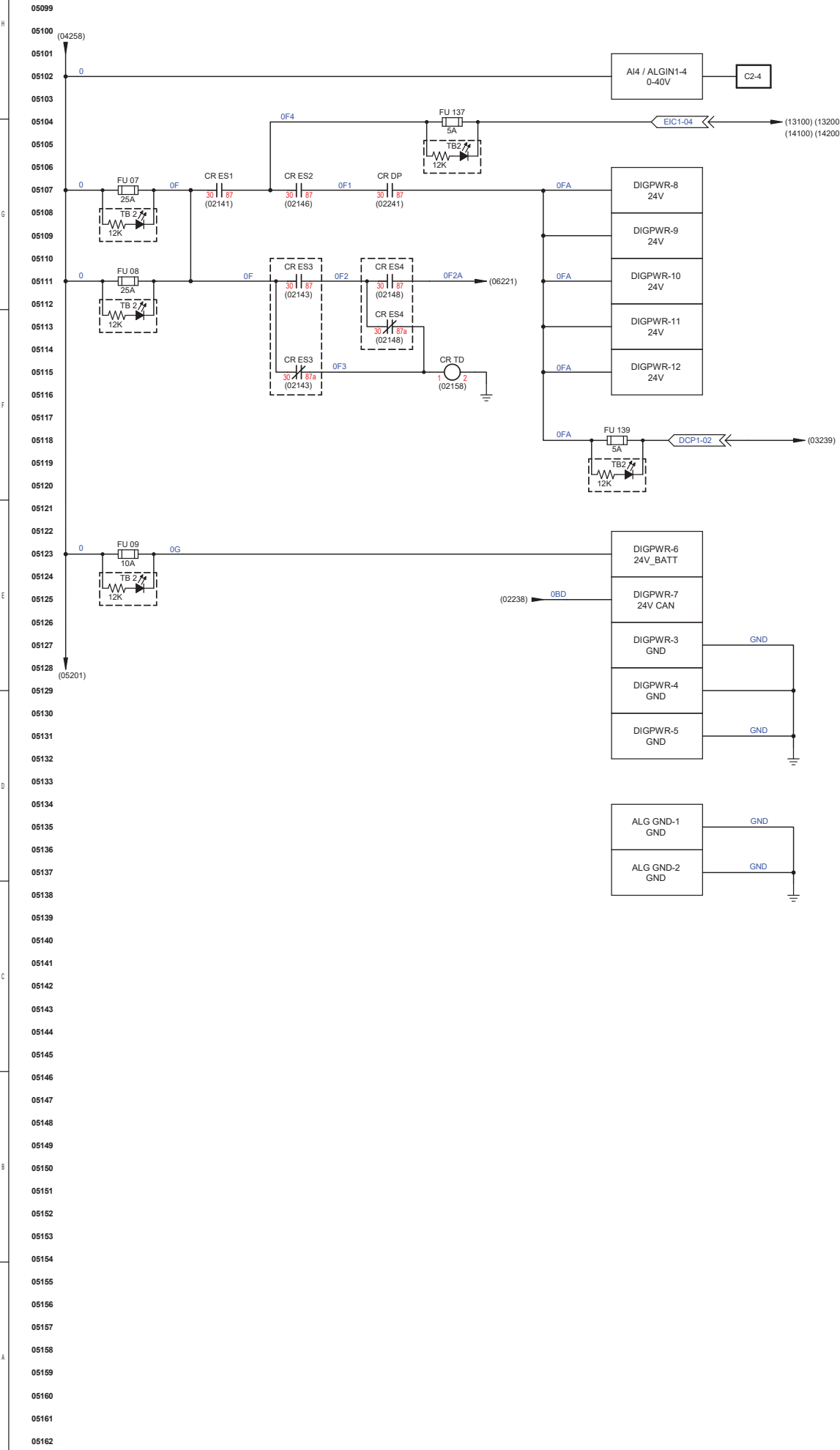
SIZE: SM TO	DWG NO	REV
E	4295889	01
DO NOT SCALE	EST W/T (LB) NA	SHEET 4 OF 31

24V ELECTRICS

POWER DISTRIBUTION

POWER DISTRIBUTION (cont)

ZONE		REV	DESCRIPTION		ECM	DATE	CHG	CHK	APVD
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01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS			

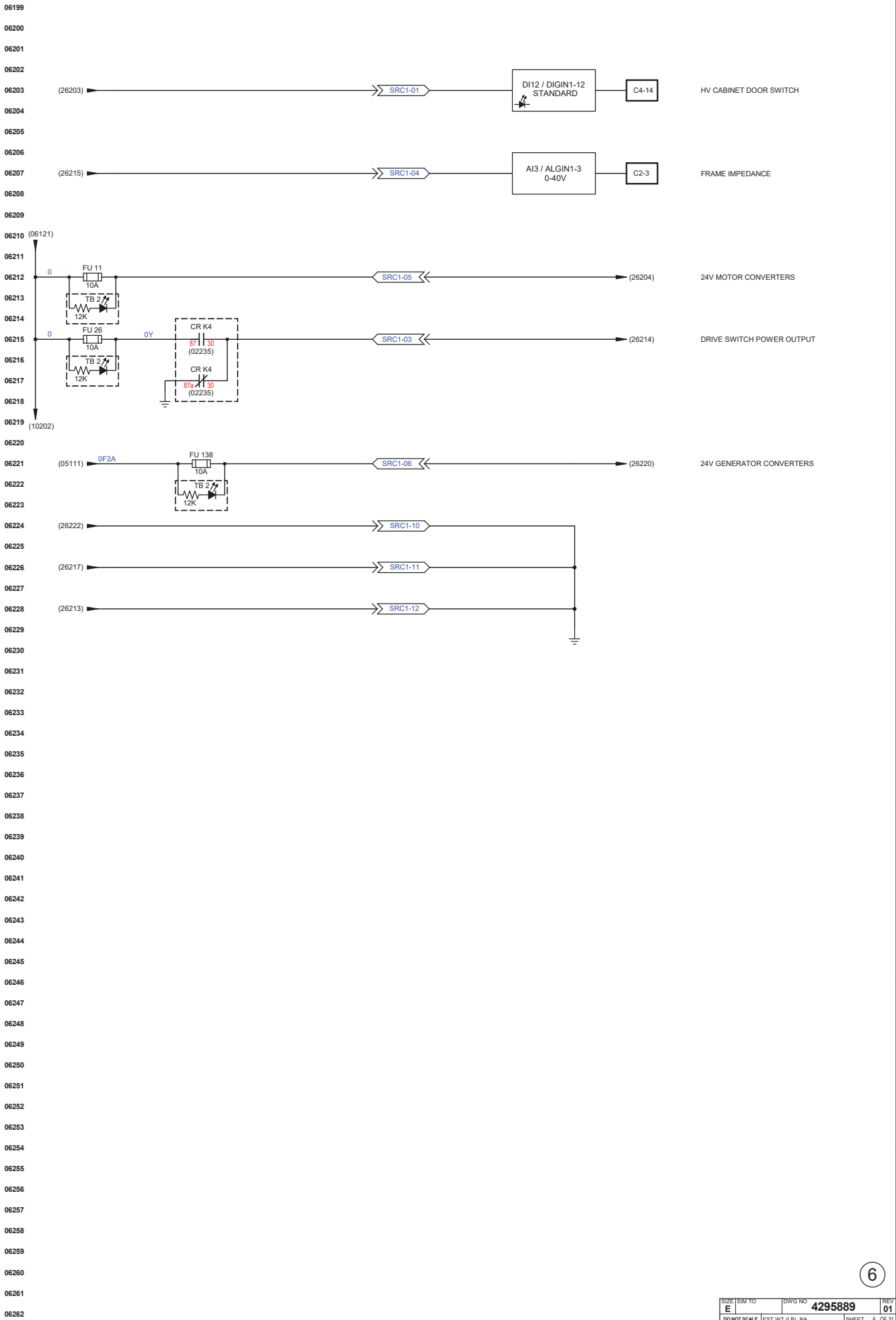
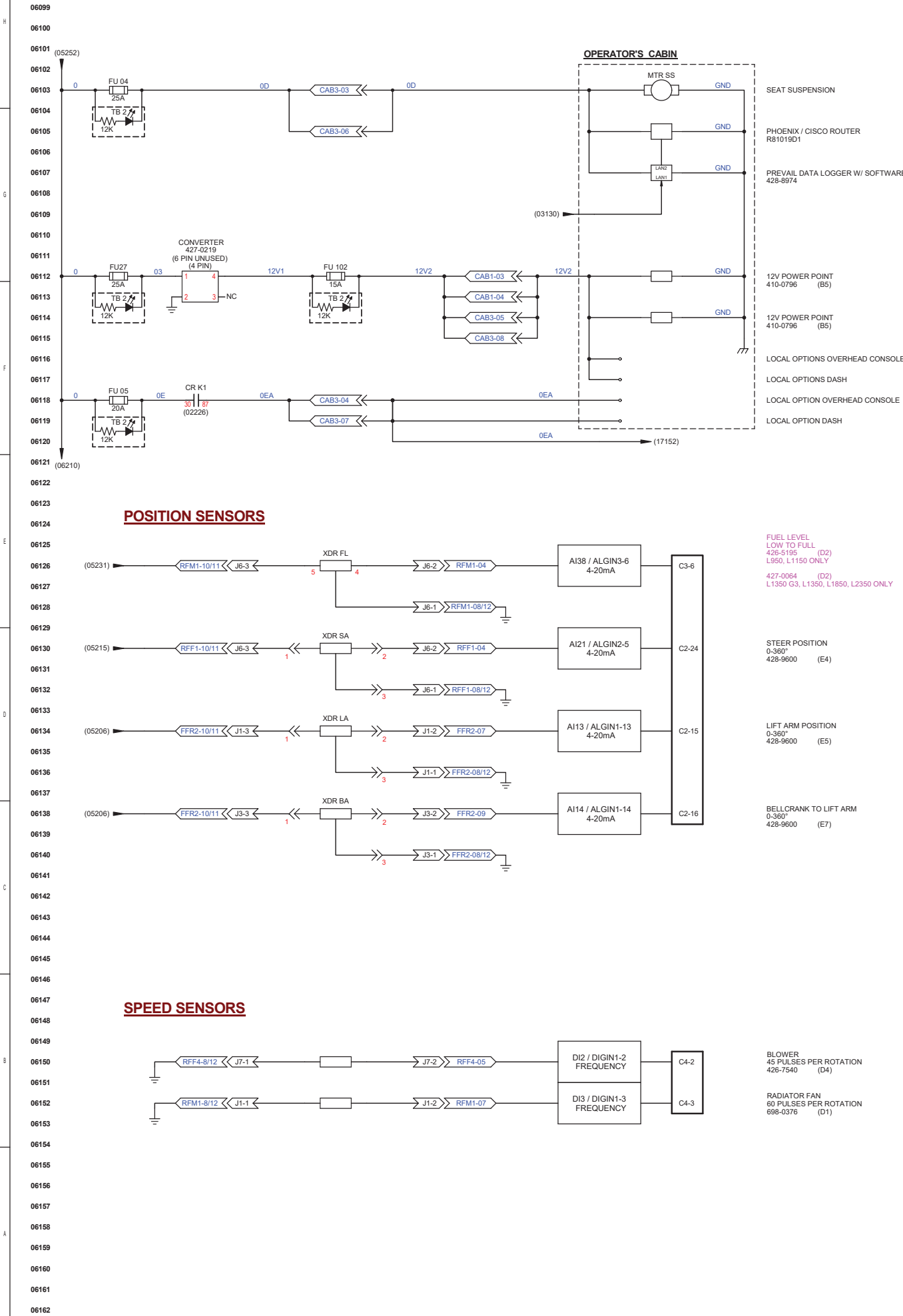


24V ELECTRICS

DEALER OPTIONS

DRIVE SYSTEM INTERFACE

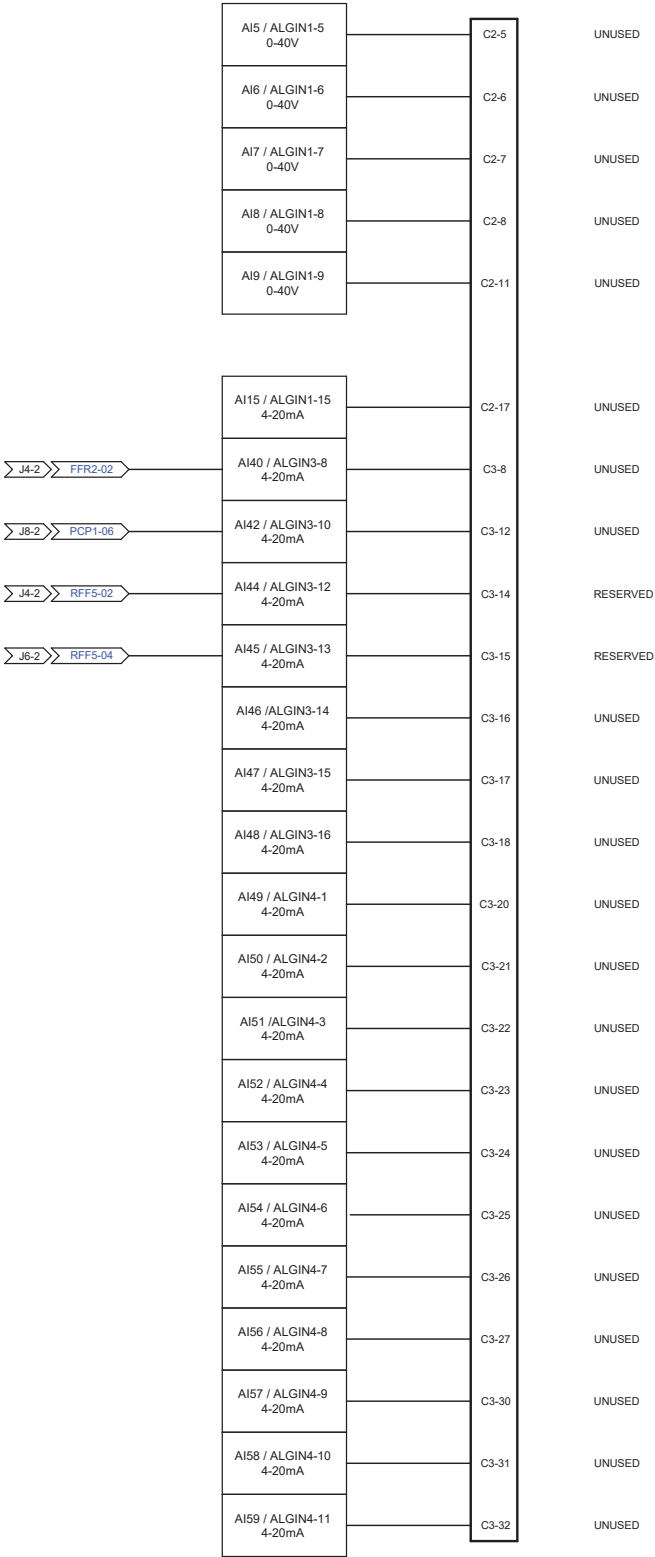
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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS



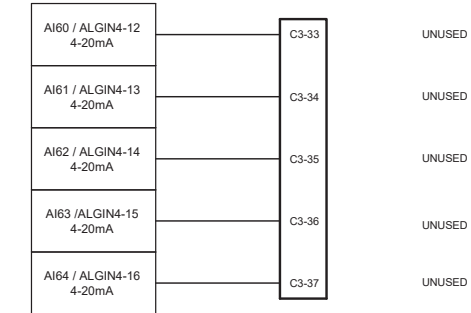
24V ELECTRICS

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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

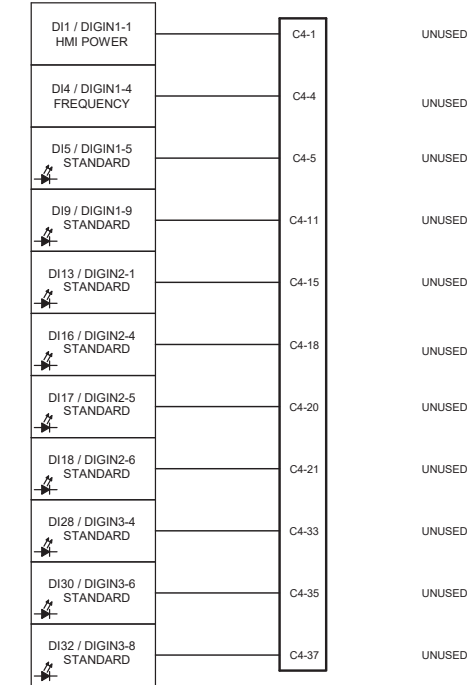
SPARE I/O - ANALOG INPUT



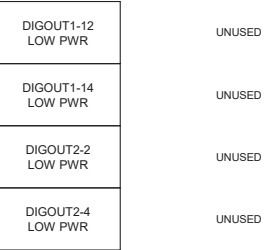
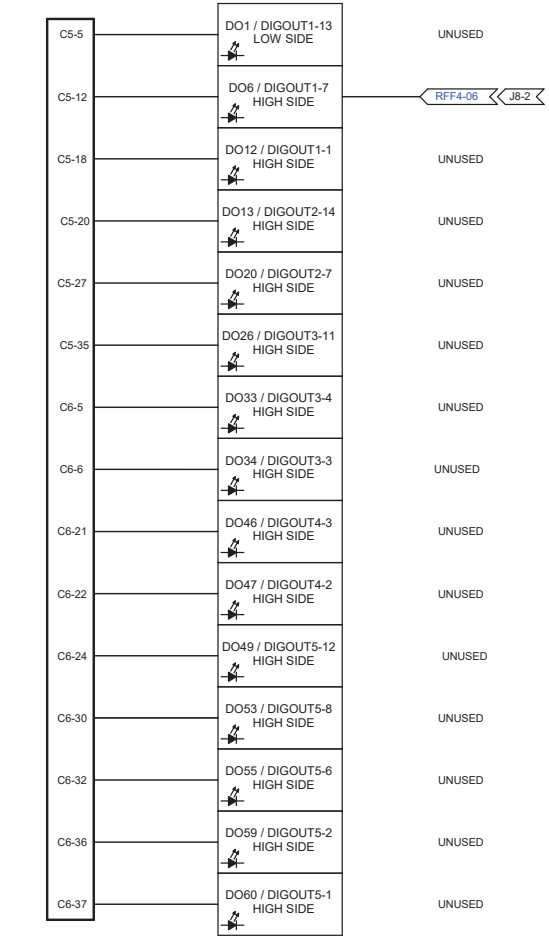
SPARE I/O ANALOG INPUT (cont)

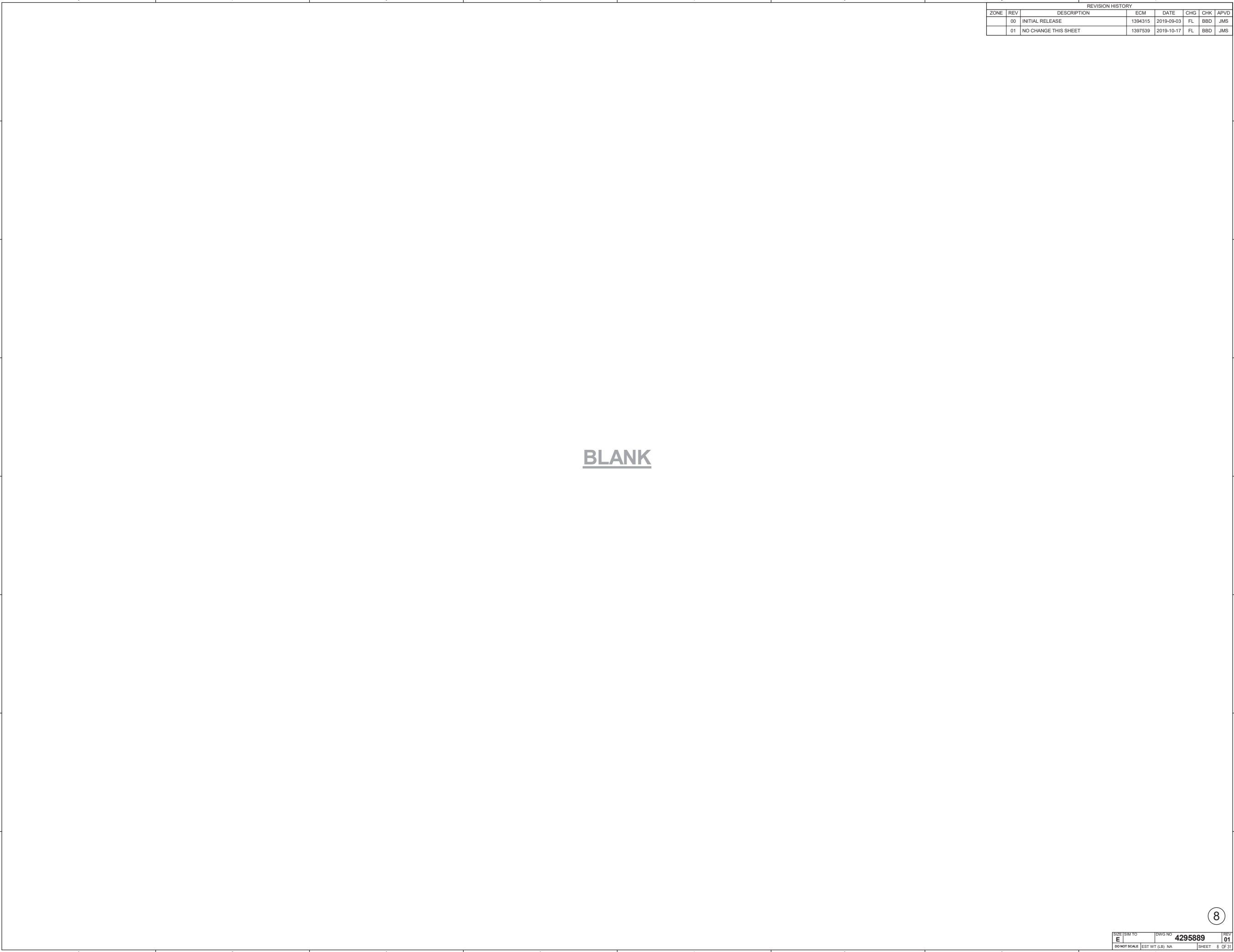


SPARE I/O DIGITAL INPUT



SPARE I/O DIGITAL OUTPUT





BLANK

REVISION HISTORY						
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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

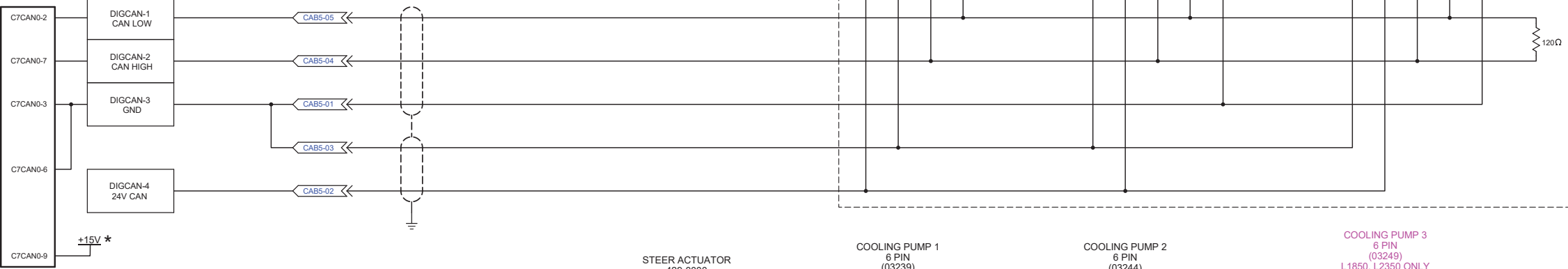
SIZE: SIM TO	DWG NO	REV
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DO NOT SCALE	EST W/T (LB) NA	SHEET 8 OF 31

CAN

REVISION HISTORY						
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK
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E1	01	REMOVE 120Ω RESISTOR AT COOLING PUMP 3	1397539	2019-10-17	FL	BBD

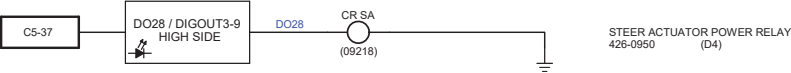
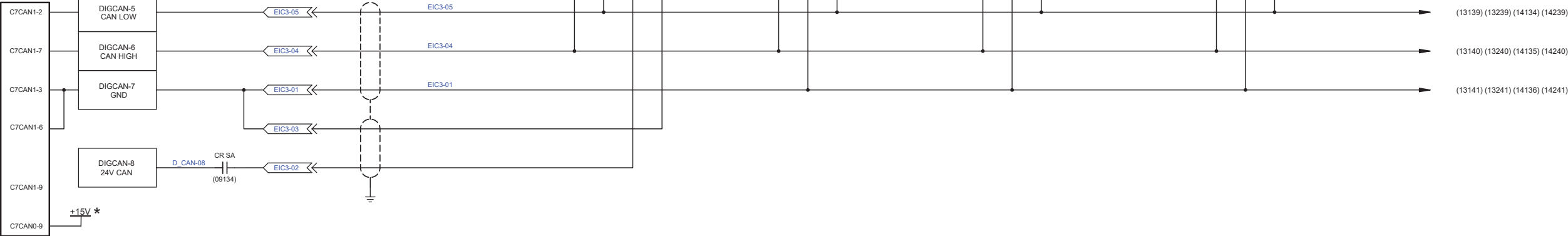
CAB

CAN 0



ENGINE / COOLING PUMP / STEER ACTUATOR

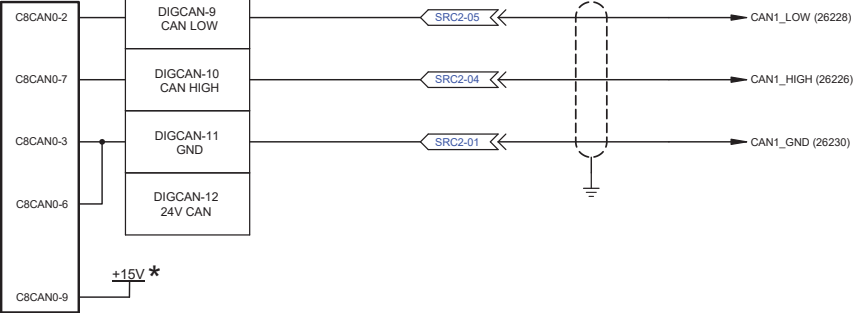
CAN 1



DRIVE SYSTEM

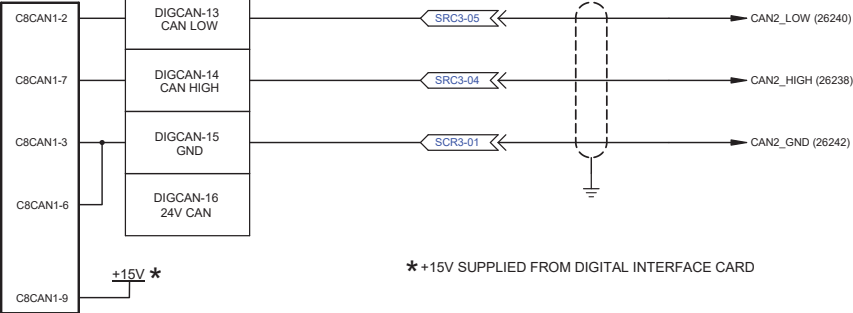
BUS 1

CAN 2



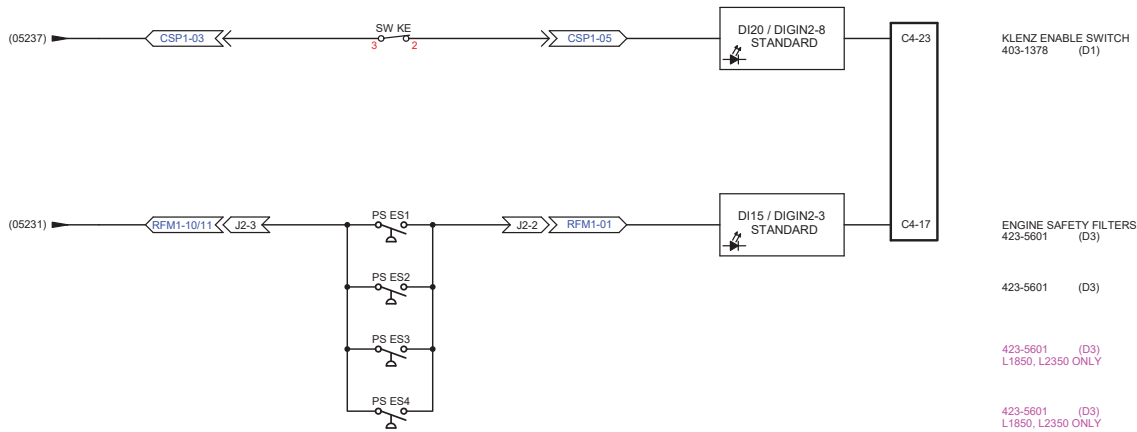
BUS 2

CAN 3

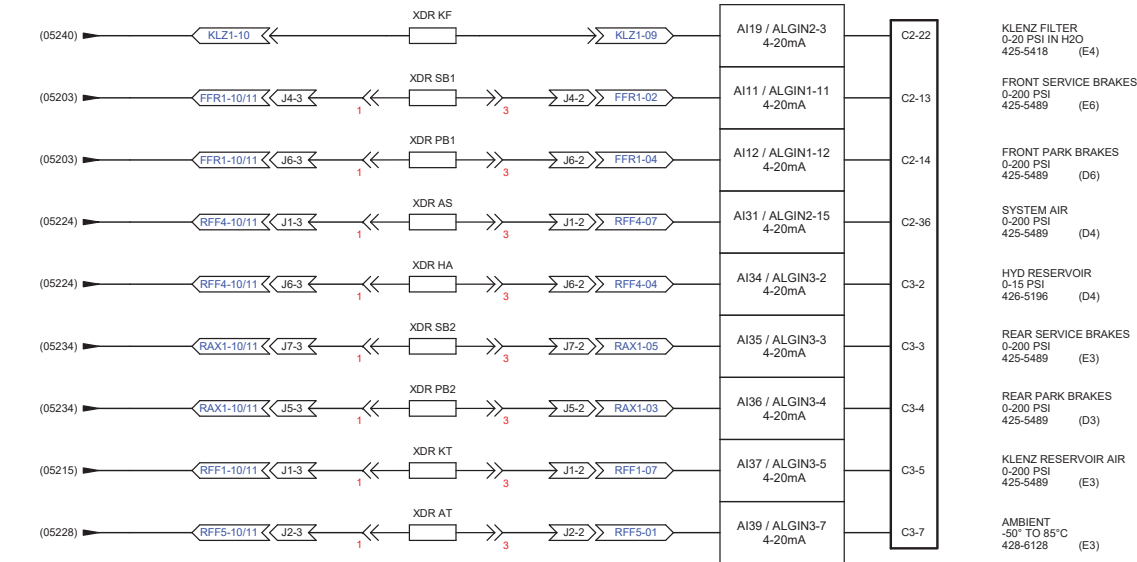


* +15V SUPPLIED FROM DIGITAL INTERFACE CARD

SWITCHES

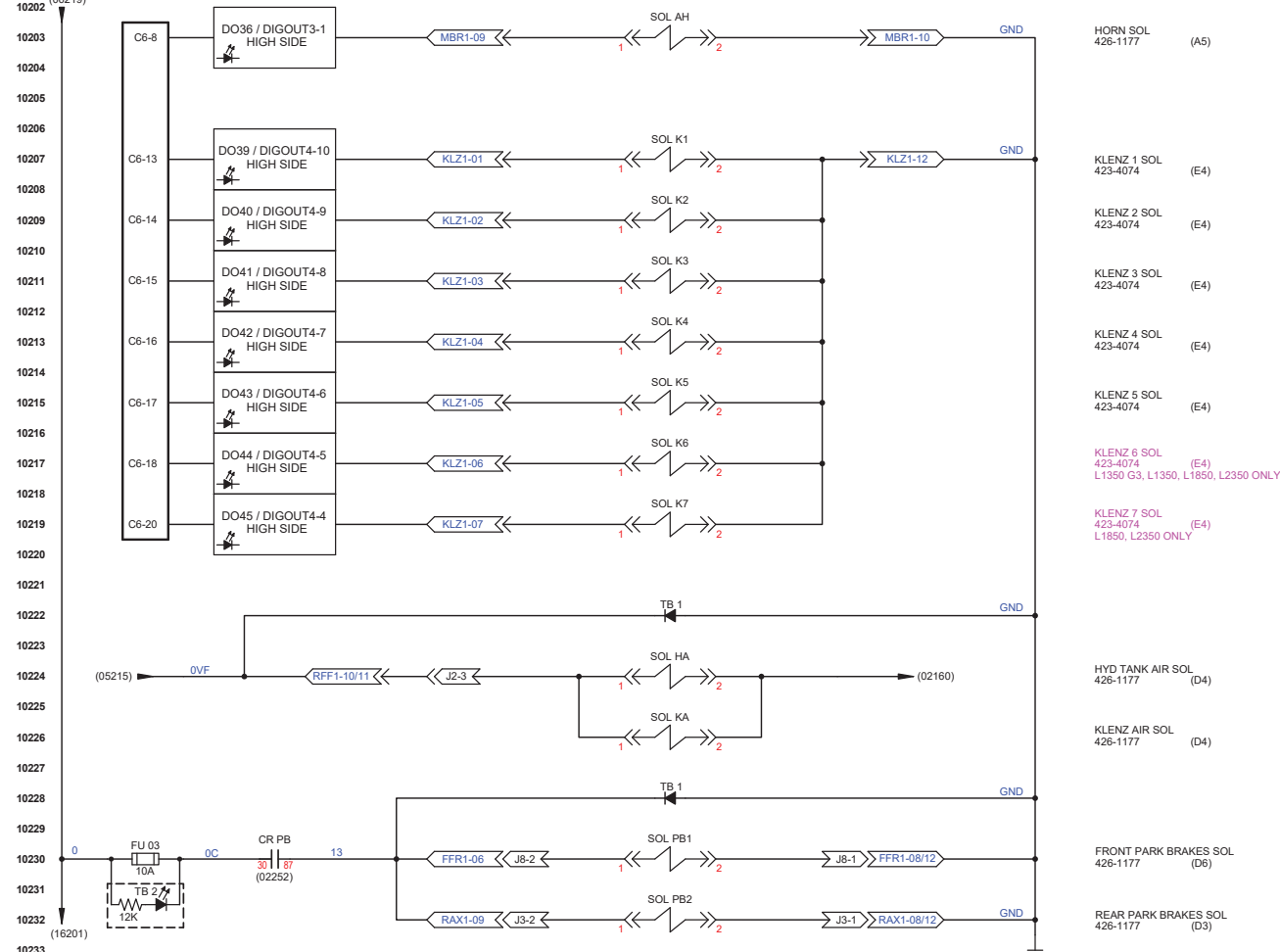


TRANSDUCERS

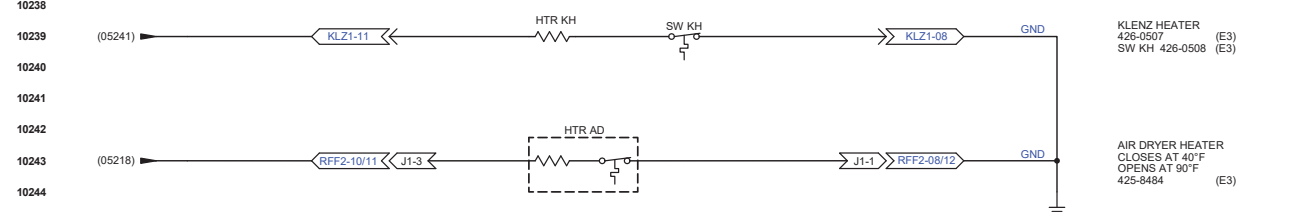


AIR

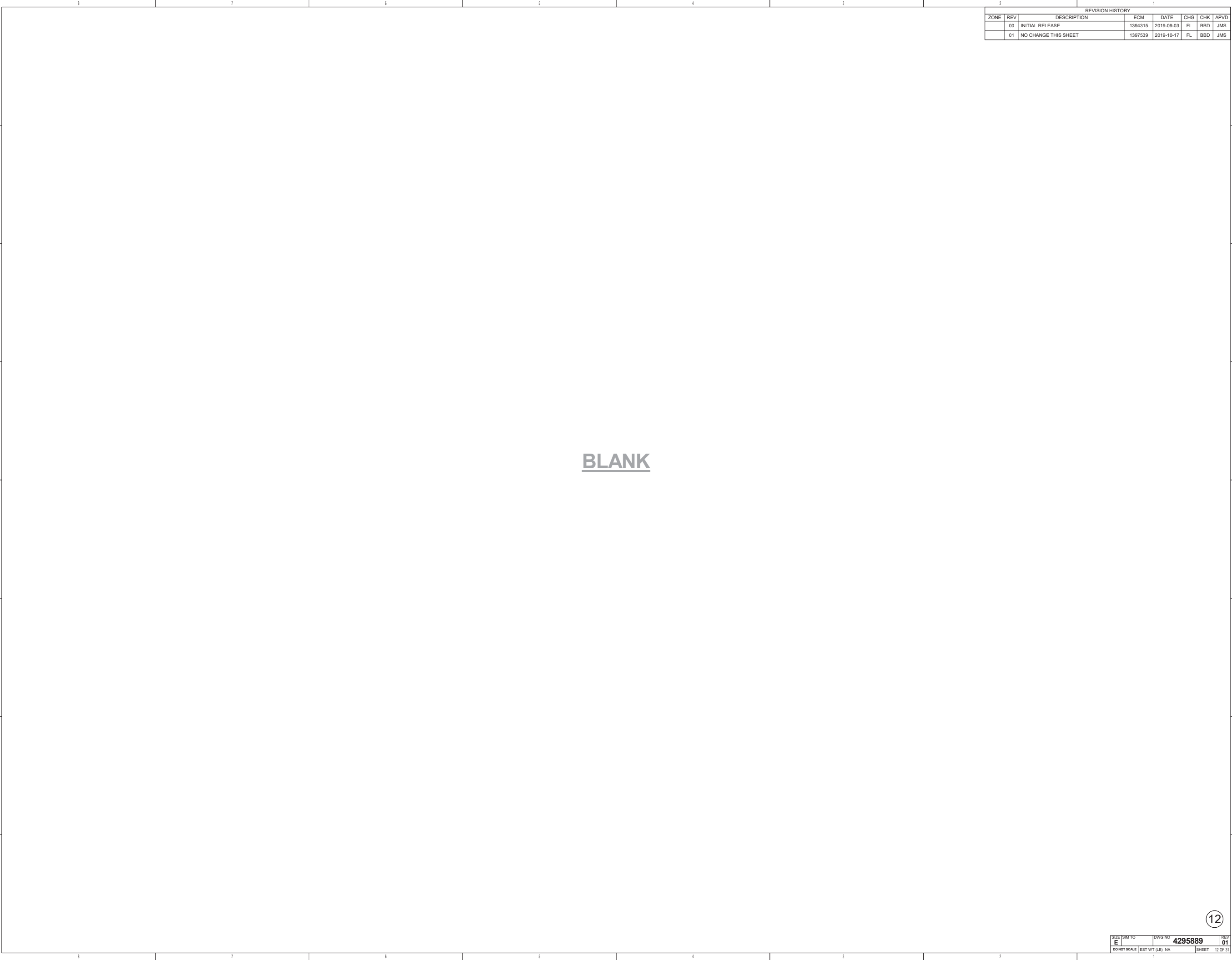
SOLENOIDS



HEATERS



REVISION HISTORY						
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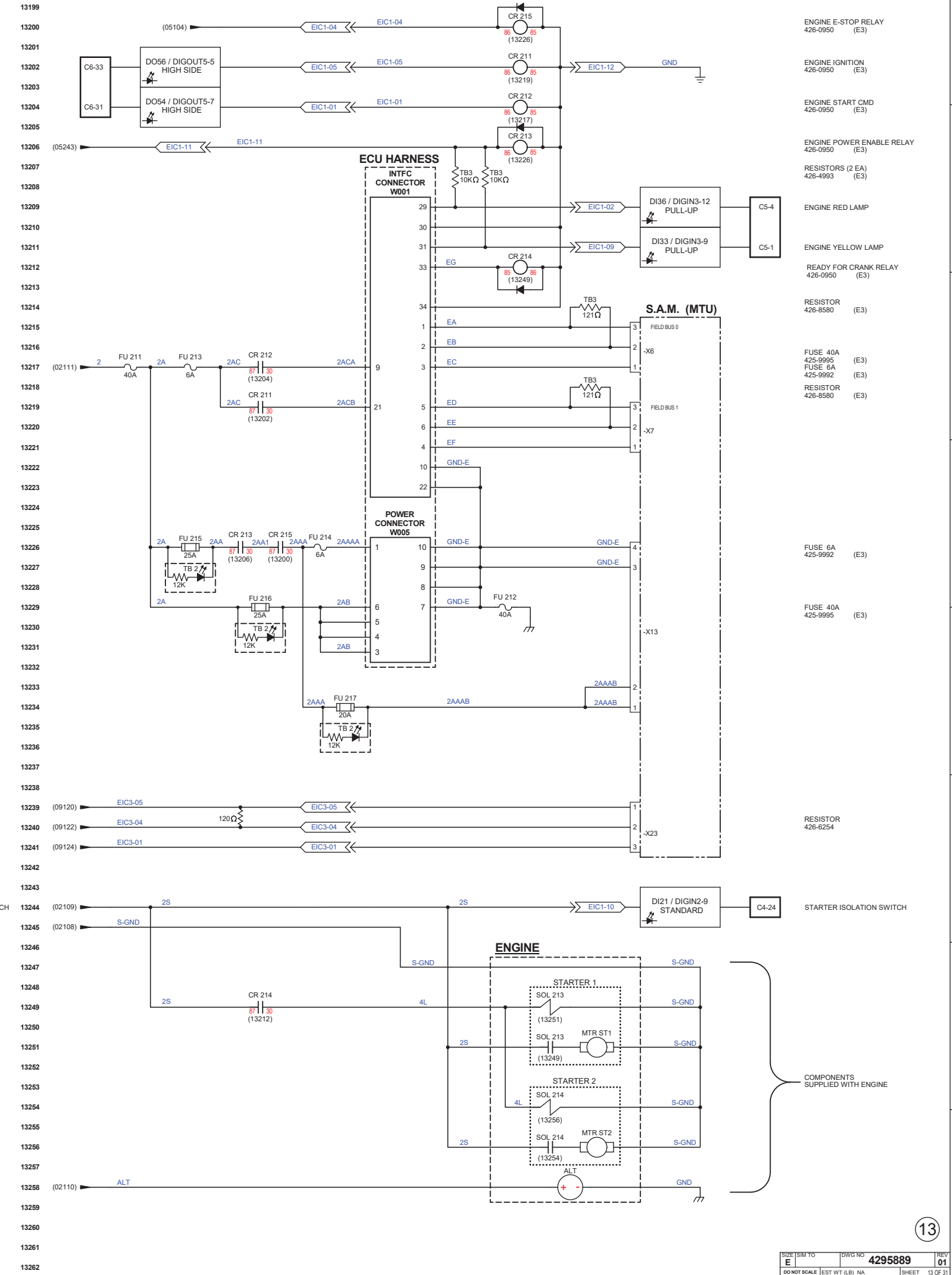
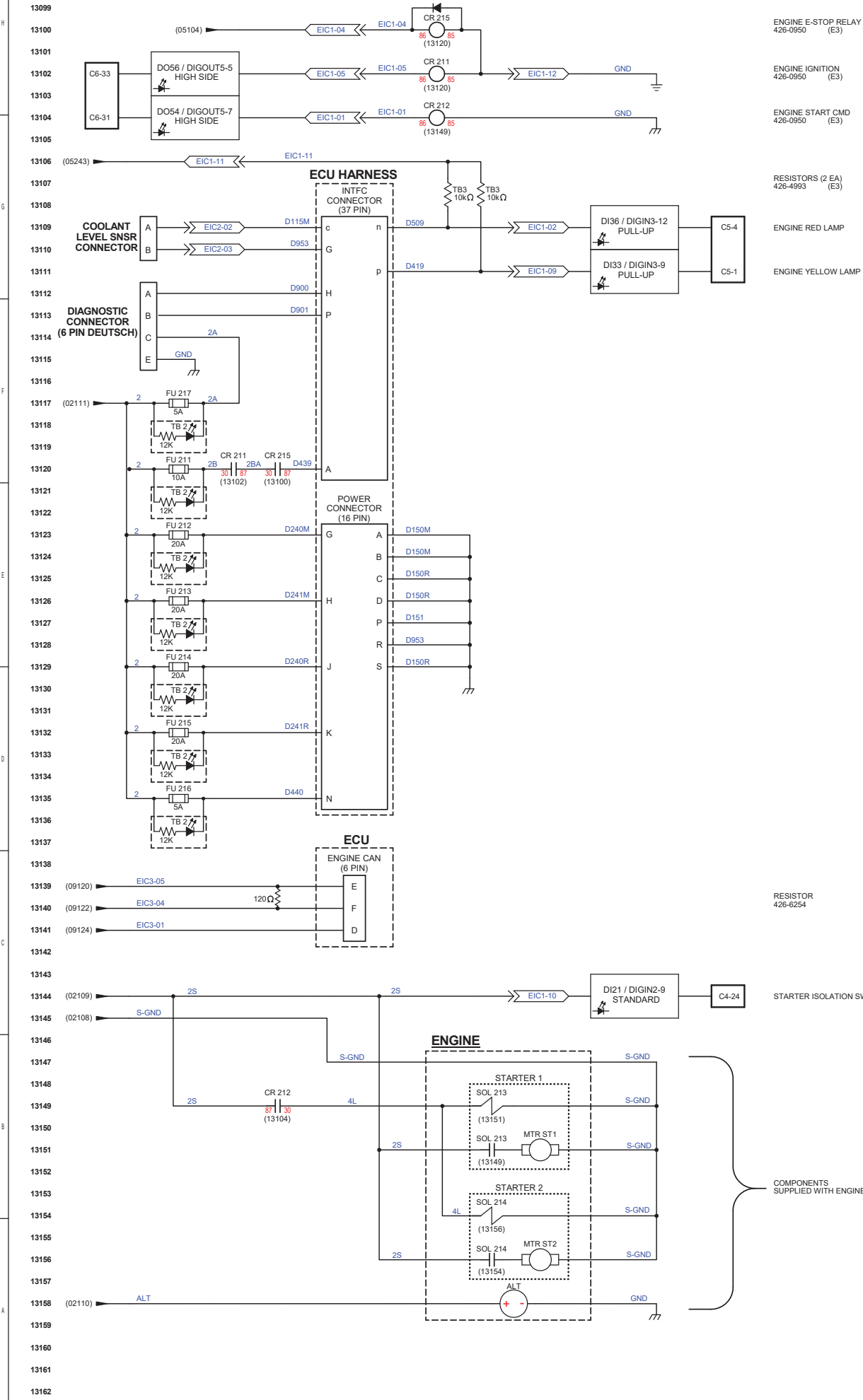
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	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

ENGINE

ADEC (T2)

		REVISION HISTORY				
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK
00	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD
01	01	ADD 1200 RES: DDEC IV ENG CAN, ADEC T2 - EIC3-05	1397539	2019-10-17	FL	BBD

DDEC IV

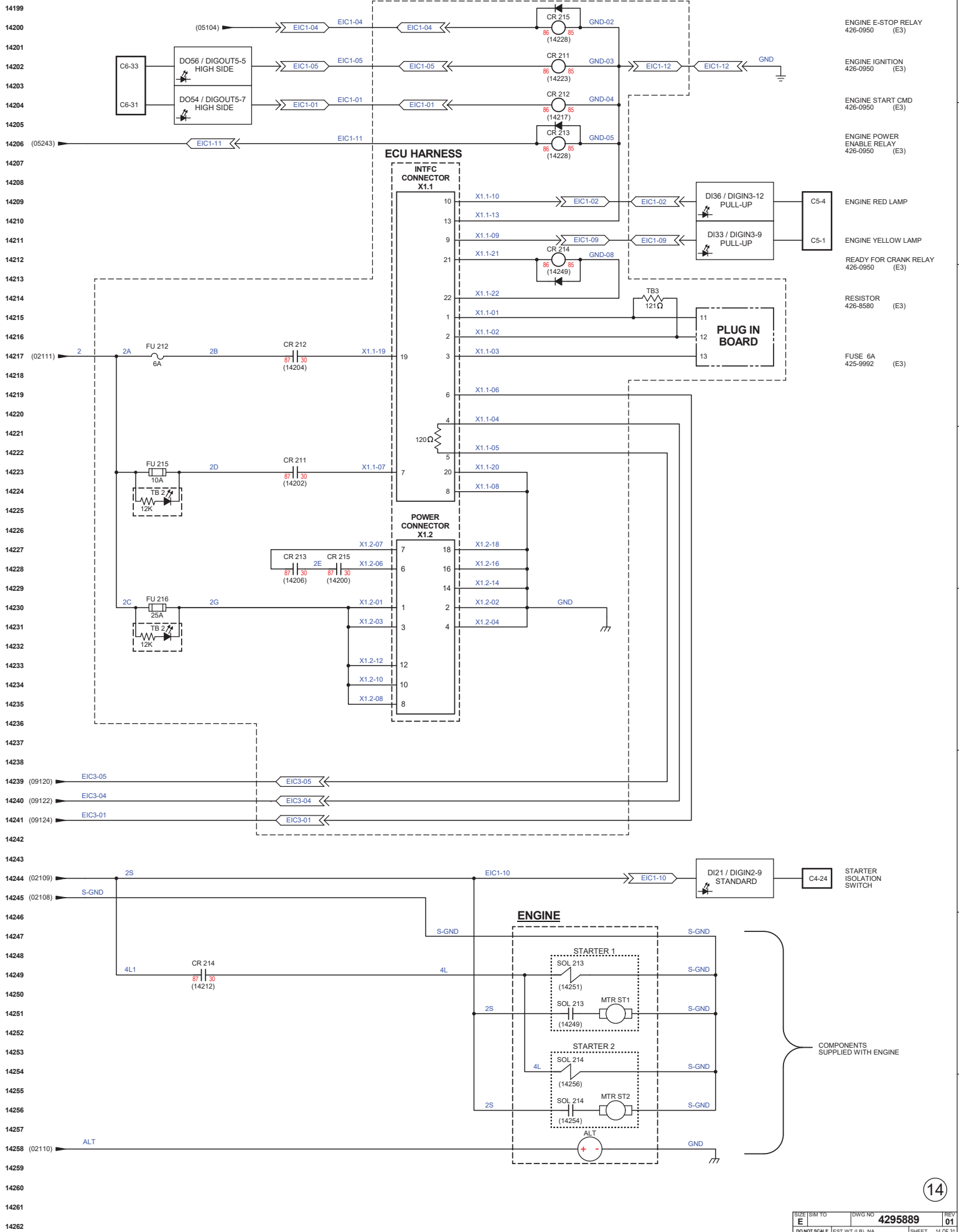
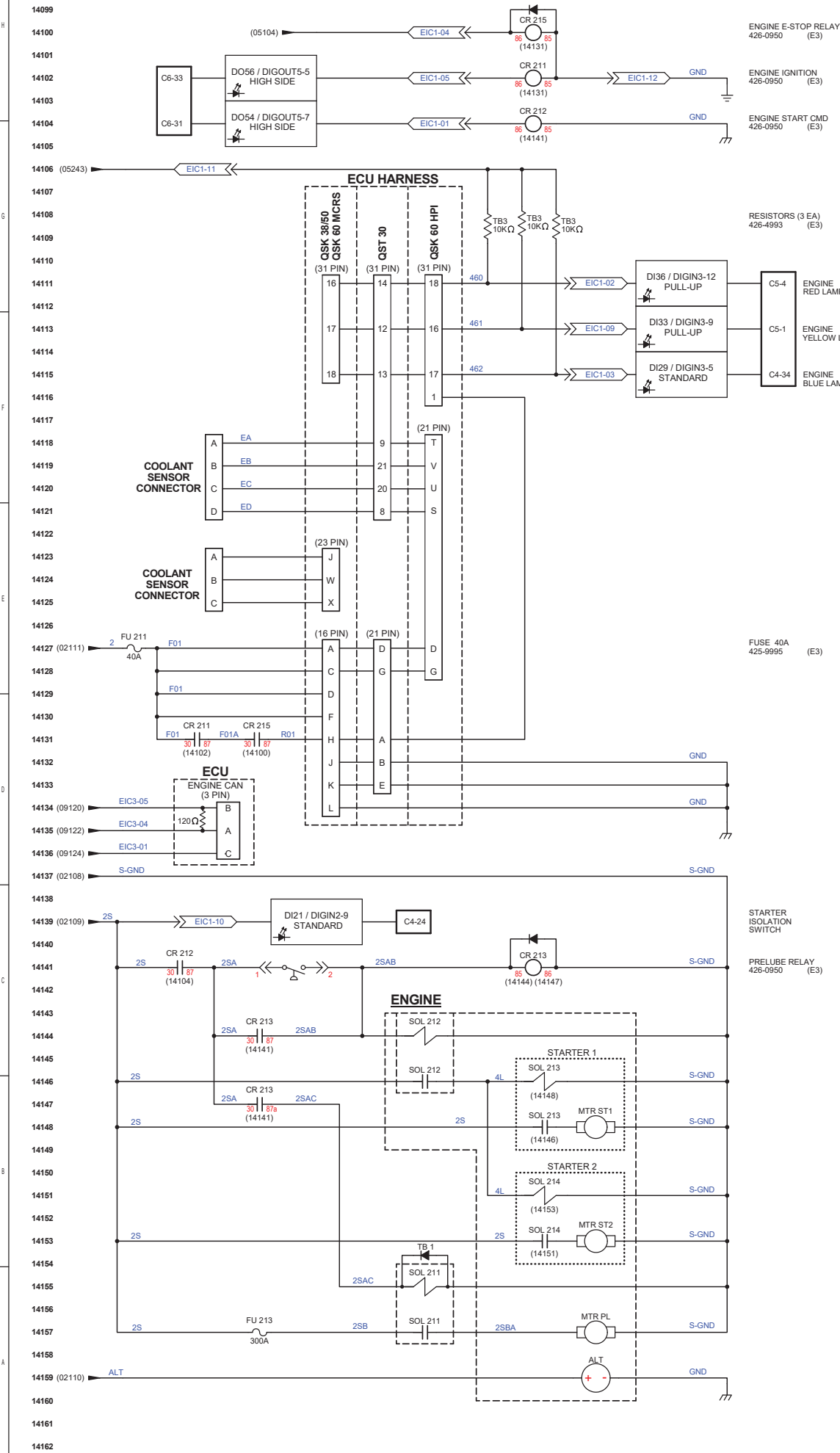


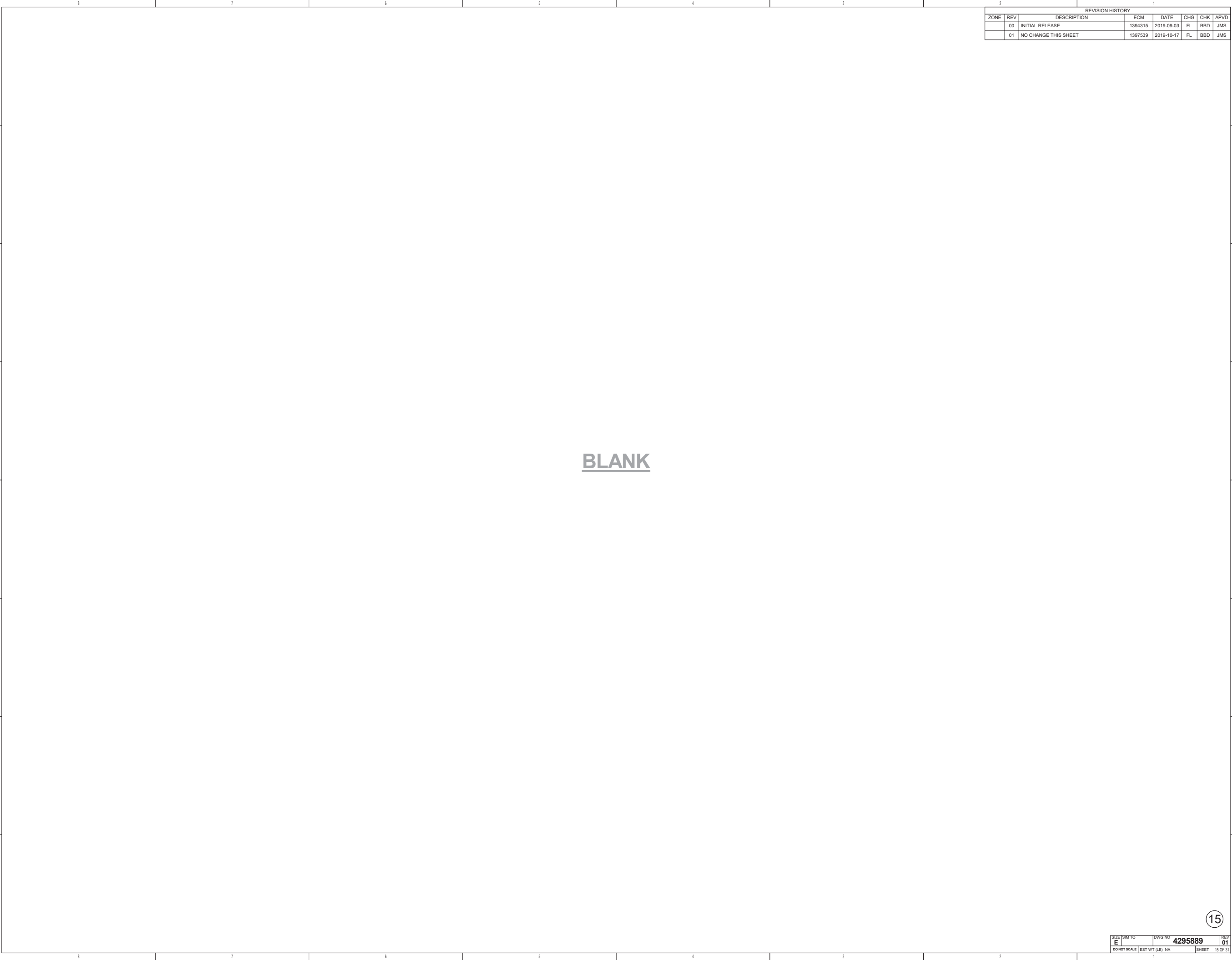
CUMMINS

ENGINE

ADEC (T4)

REVISION HISTORY						
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK
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D8/E3	01	ADD 1200 RES: CUMMINS ENG CAN, ADEC INTFC X1.1	1397539	2019-10-17	FL	BBD





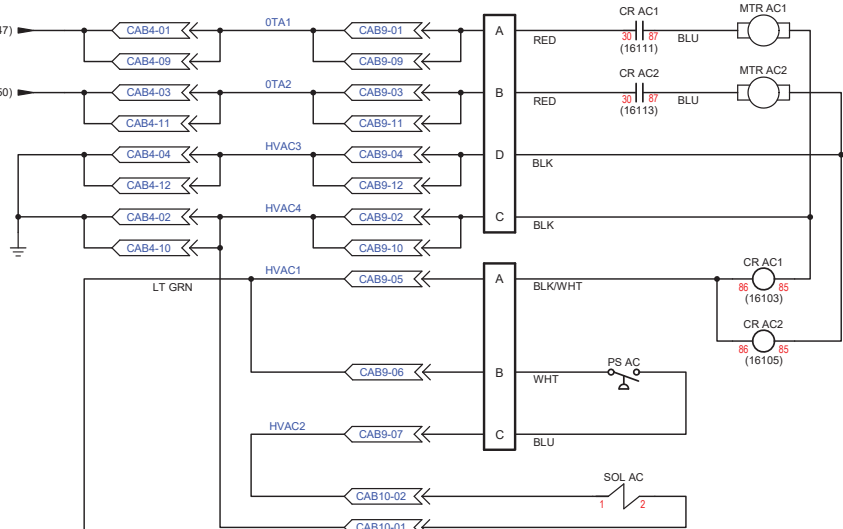
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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

SIZE: SIM TO	DWG NO	REV
E	4295889	01
DO NOT SCALE	EST W/T (LB) NA	SHEET 15 OF 31

CLIMATE CONTROL

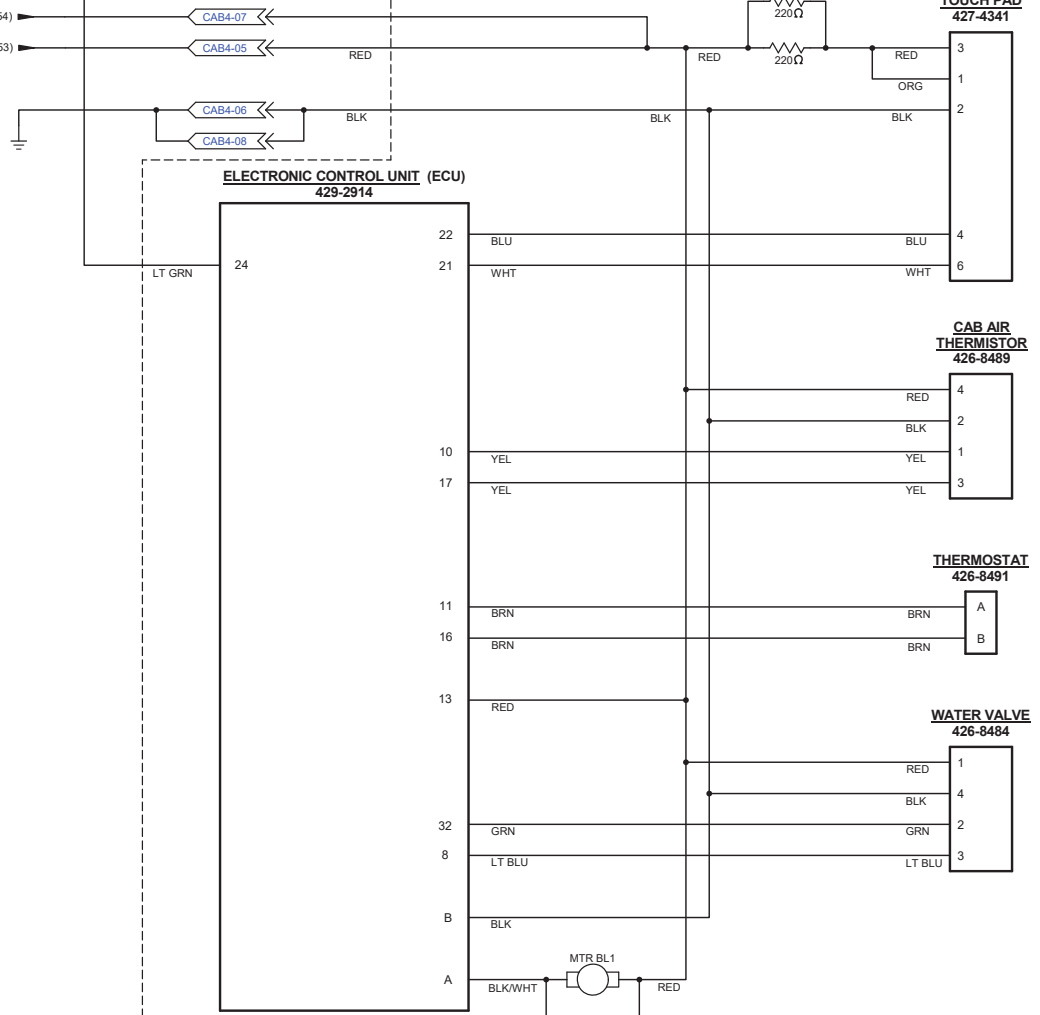
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	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

RED DOT

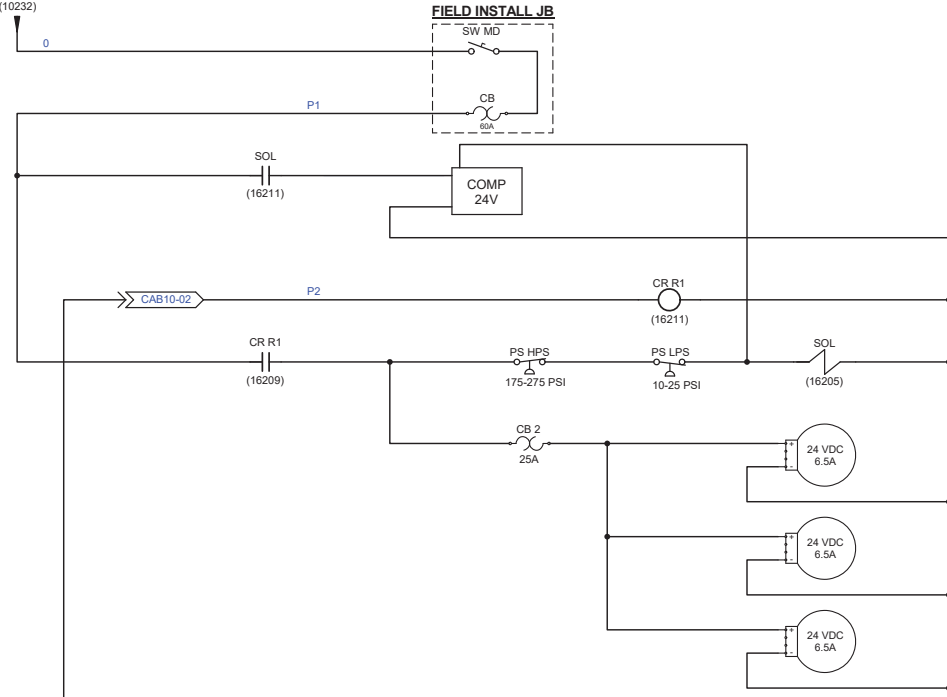


OPERATOR'S CABIN

CONTROL PANEL with TOUCH PAD 427-4341

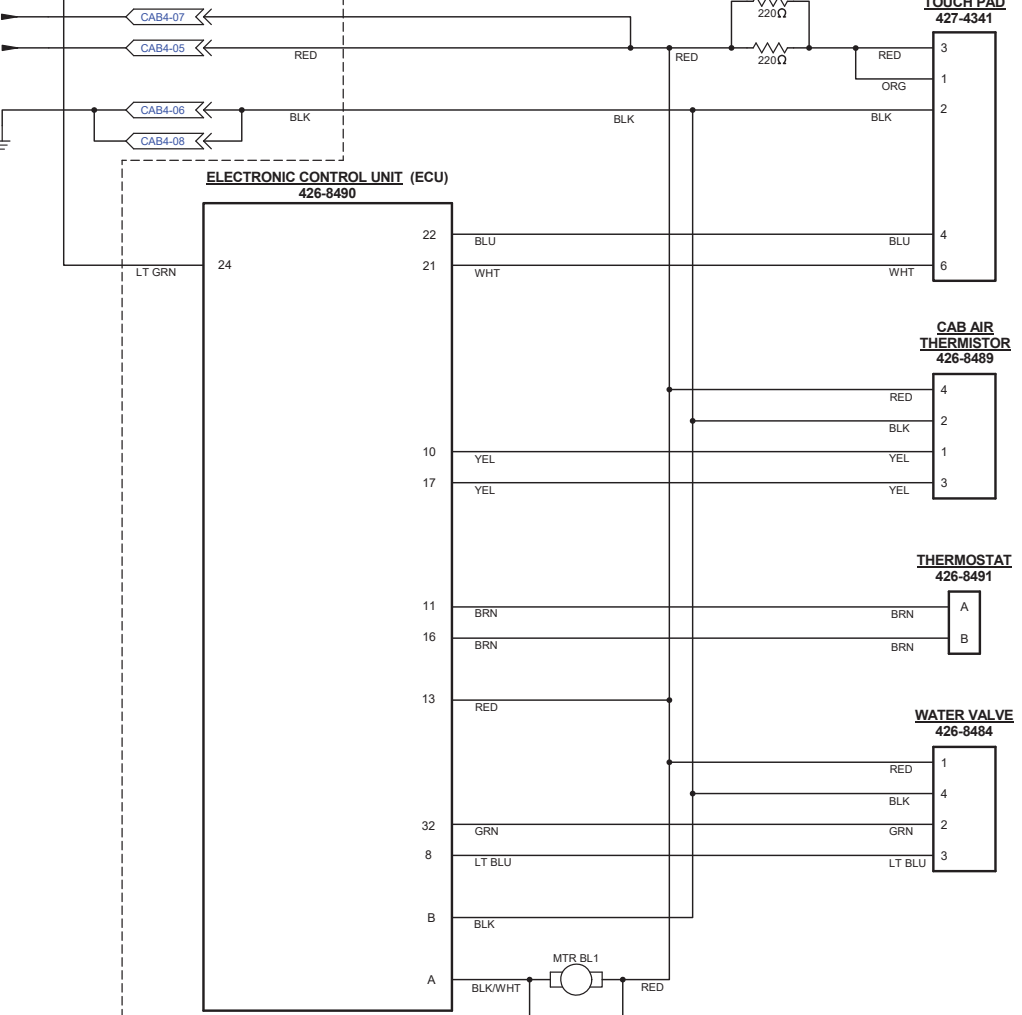


MINE AIR



OPERATOR'S CABIN

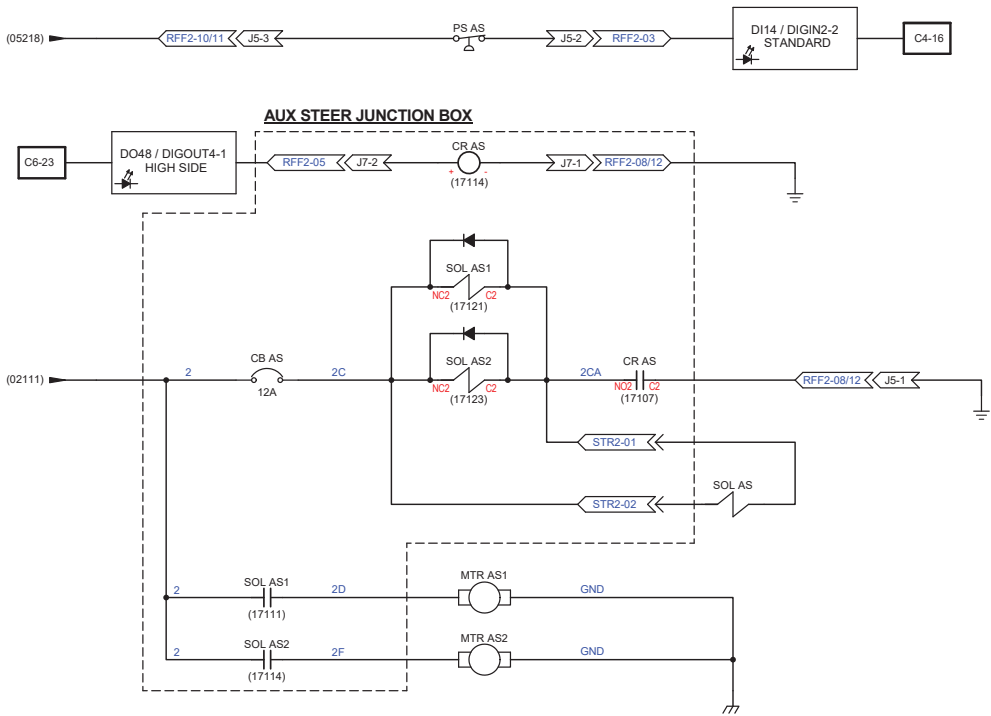
CONTROL PANEL with TOUCH PAD 427-4341



COMPONENT OPTIONS

ZONE		REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
00	00	INITIAL RELEASE		1394315	2019-09-03	FL	BBD	JMS
01	01	NO CHANGE THIS SHEET		1397539	2019-10-17	FL	BBD	JMS

AUXILIARY STEER



STEER SUPPLY PRESSURE SWITCH
CLOSED AT < 30 PSI
422-4575 (E4)

AUX STEER ENABLE
422-8641 (E4)

AUX STEER DIODE
404-6417 (E4)

AUX STEER SOLENOID 1
111-5519 (E4)

AUX STEER DIODE
404-6417 (E4)

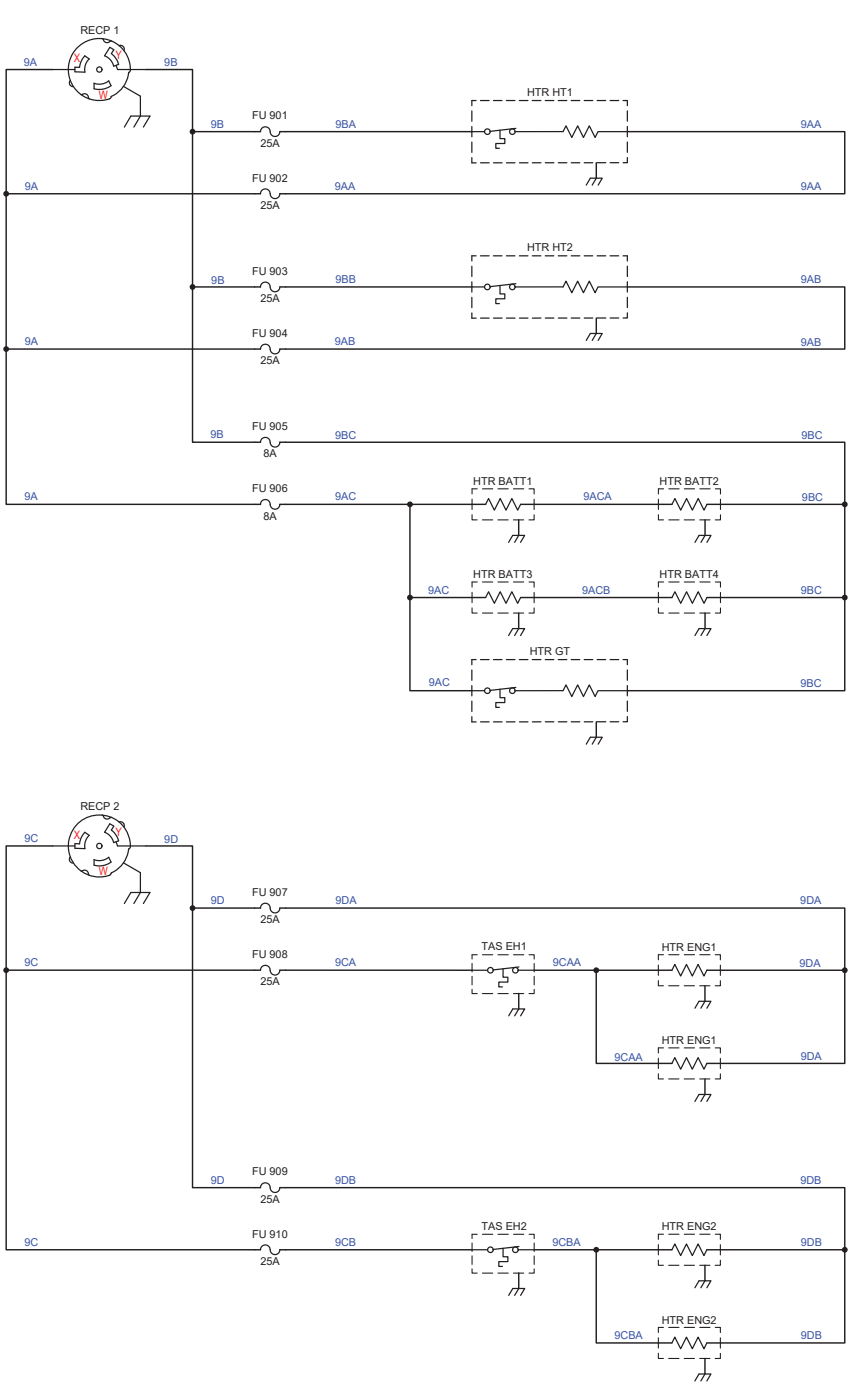
AUX STEER CIRCUIT BREAKER
423-0771 (E4)
AUX STEER SOLENOID 2
111-5519 (E4)

AUX STEER SOLENOID
424-4836
L1850, L2350 ONLY

AUX STEER MOTOR 1
406-0275 (E4)

AUX STEER MOTOR 2
406-0275 (E5)

HEATERS (COLD CLIMATE)



RECEPTACLE
125/250V 50A
426-5178

HYDRAULIC TANK HEATER
SET AT 120°F
403-8051

FUSE 25A (4 EACH)
426-5172

HYDRAULIC TANK HEATER
SET AT 120°F
403-8051
L1350 G3, L1350, L1850, L2350 ONLY

FUSE 8A (2 EACH)
426-5173

BATTERY HEATERS (4 EACH)
403-8052

GREASE TANK HEATER
427-4363

RECEPTACLE
125/250V 50A
426-5178

FUSE 25A (2 EACH)
426-5172

THERMOSTAT
058-3631
ENGINE COOLANT HEATER
085-3460

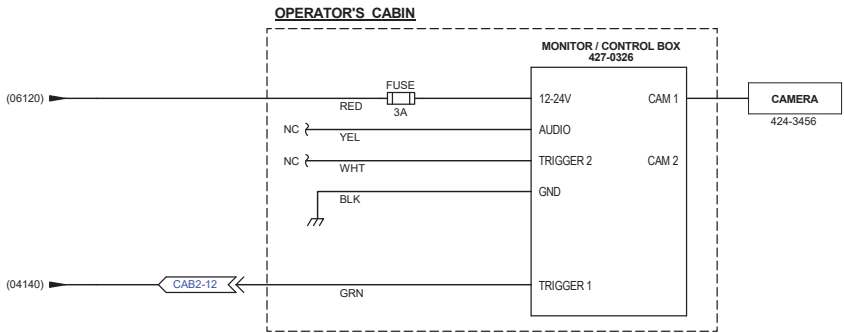
ENGINE OIL HEATER LEFT
425-3381

FUSE 25A (2 EACH)
426-5172

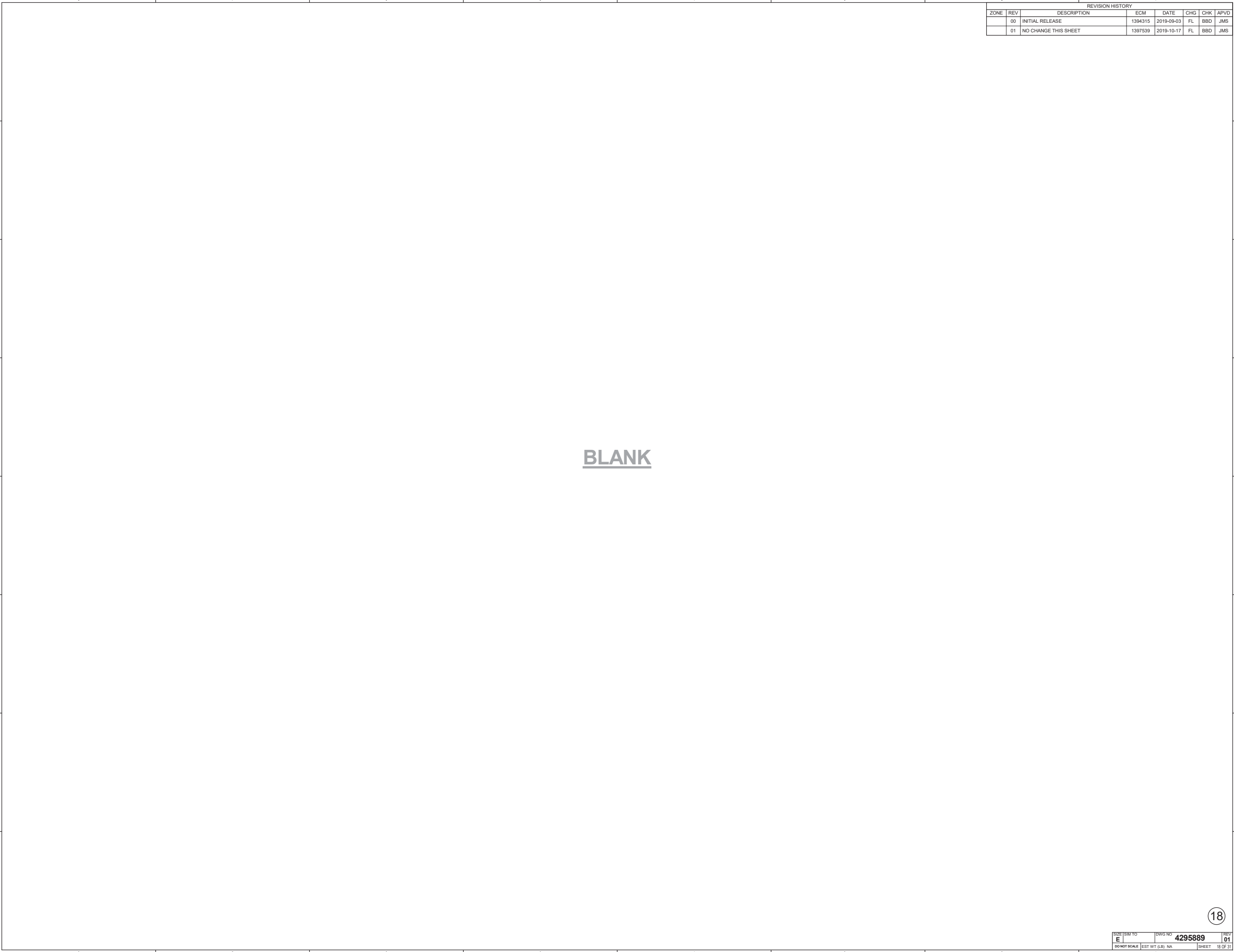
THERMOSTAT
058-3631
ENGINE COOLANT HEATER
085-3460
L1150 CUMMINS
L1350 G3, L1350, L1850, L2350 ONLY

ENGINE OIL HEATER RIGHT
425-3381
L1350 G3, L1350, L1850, L2350 ONLY

REAR VISION CAMERA



FUSE 3A
425-0909
CABLE - 65 FT
425-0900

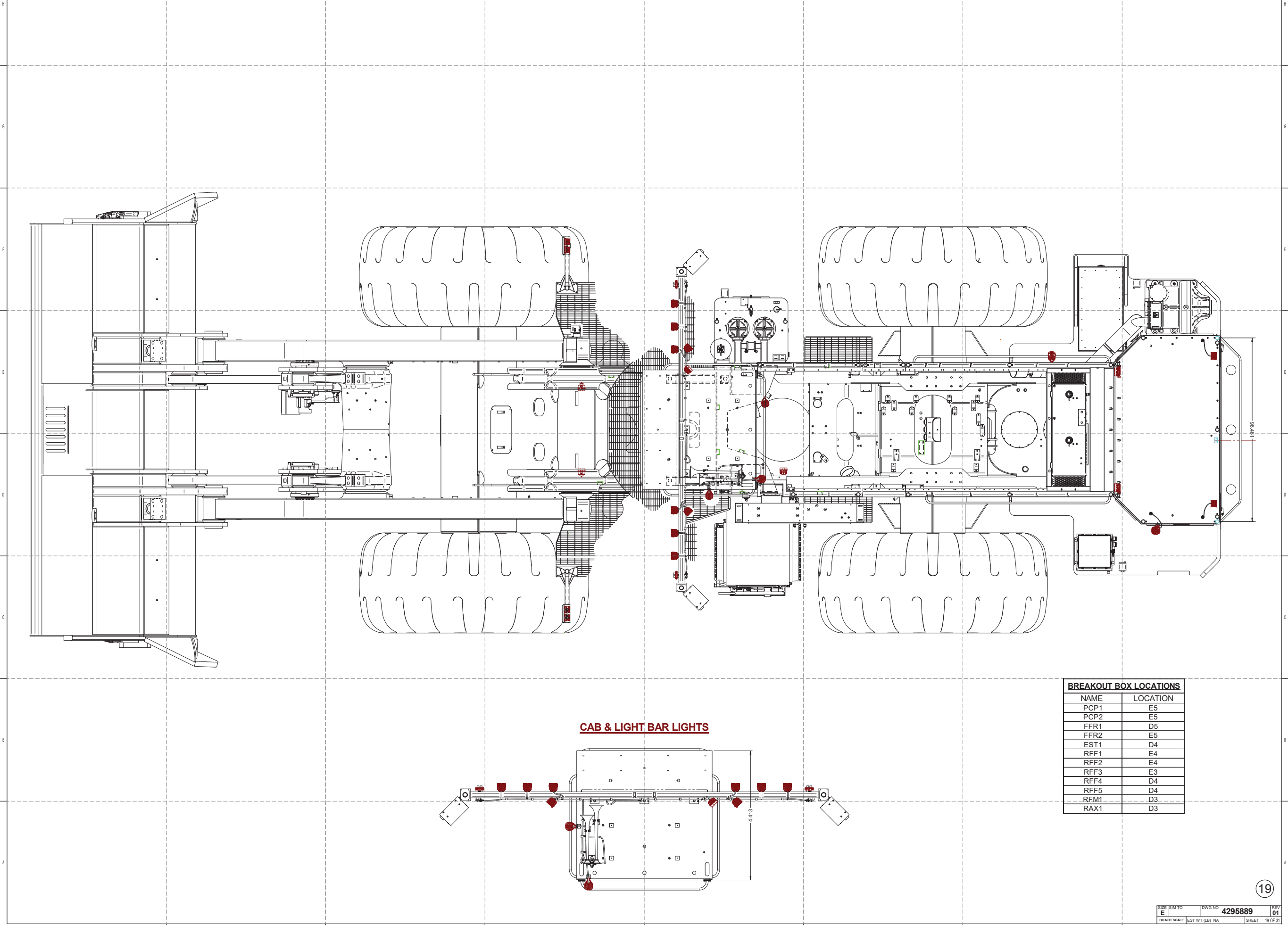


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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD

SIZE: SIM TO	DWG NO	REV
E	4295889	01
DO NOT SCALE	EST W/T (LB) NA	SHEET 18 OF 31

FRAME LOCATION MAP

		REVISION HISTORY					
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS



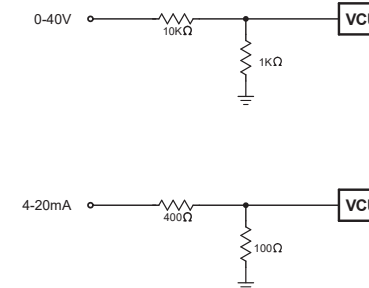
BREAKOUT BOX LOCATIONS	
NAME	LOCATION
PCP1	E5
PCP2	E5
FFR1	D5
FFR2	E5
EST1	D4
RFF1	E4
RFF2	E4
RFF3	E3
RFF4	D4
RFF5	D4
RFM1	D3
RAX1	D3

REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.
0	02106,02158,02214	2AB	13229	CAB4-01	05247,16103	EA	13215,14118	GND-02	14200	P1-1	03241	RFF4-10	05224,10130,
0B	02214,02241	2AC	13217	CAB4-02	16109	EB	13216,14119	GND-03	14202	P1-2	03239		11139,11147,11157
0BA	02217,02220	2ACA	13217	CAB4-03	05250,16105	EC	13217,14120	GND-04	14204	P1-3	03241	RFF4-11	05225,10130,
0BB1	02223	2ACB	13219	CAB4-04	16107	ED	13219,14121	GND-05	14206	P1-4	03239		11139,11147,11157
0BC	02223	2B	13120,14217	CAB4-05	05253,16126,16226	EE	13220	GND-08	14212			RFF4-12	06150
0BD	02226,02238,05125	2BA	13120	CAB4-06	16128,16228	EF	13221			P2-1	03246		
0C	10230	2C	14230,17114	CAB4-07	05254,16125,16225	EG	13212	GND-E	13222,13226,13229	P2-2	03244	RFF5-01	10140
0D	06103	2CA	17114	CAB4-08	16129,16229					P2-3	03246	RFF5-02	07123
0E	06118	2D	14223,17121	CAB4-09	05248,16104	EIC1-01	13104,13204,	HVAC1	16111	P2-4	03244	RFF5-04	07125
0E1	03103	2E	14228	CAB4-10	16110		14104,14204	HVAC2	16116	P3-1	03251	RFF5-05	11227
0E1A	03103	2F	17123	CAB4-11	05251,16106	EIC1-02	13109,13209,	HVAC3	16107	P3-2	03249	RFF5-06	02152,02155
0EA	06118	2G	14230	CAB4-12	16108		14111,14209	HVAC4	16109	P3-3	03251	RFF5-07	03221
						EIC1-03	14115			P3-4	03249	RFF5-08	03221,11227
		2S	02109,13144,	CAB5-01	09108	EIC1-04	05104,	IBN1-03	03128			RFF5-09	03223
0F	05107,05111		13156,13244,13256,	CAB5-02	09112		13100,13200,	IBN1-04	03126	R01	14131	RFF5-10	02152,05228,10140
0F1	05107		14139,14244	CAB5-03	09110		14100,14200					RFF5-11	02152,05229,10140
0F2	05111	2SA	14141,14147	CAB5-04	09106	EIC1-05	13102,13202,	KLZ1-01	10207	RAX1-03	10136	RFF5-12	03221,11227
0F2A	05111,06221	2SAB	14141,14144	CAB5-05	09104		14102,14202	KLZ1-02	10209	RAX1-05	10134		
0F3	05115	2SAC	14147,14155			EIC1-09	13111,13211,	KLZ1-03	10211	RAX1-07	11114	RFM1-01	10109
0F4	05104	2SB	14157	CAB9-01	16103		14113,14211	KLZ1-04	10213	RAX1-08	10232	RFM1-04	06126
0FA	05107,05118	2SBA	14157	CAB9-02	16109	EIC1-10	13144,13244,	KLZ1-05	10215	RAX1-09	10232	RFM1-05	11151
0G	05123	3B	02205	CAB9-03	16105		14139,14244	KLZ1-06	10217	RAX1-10	05234,10134,11114	RFM1-06	03255
0H	02158	4L	13149,13154,	CAB9-04	16107	EIC1-11	05243,	KLZ1-07	10219	RAX1-11	05235,10134,11114	RFM1-07	06152
0JA	04211		13249,13254,	CAB9-05	16111		13106,13206,	KLZ1-08	10239	RAX1-12	10232	RFM1-08	03257,04225
0JB	04212		14146,14249	CAB9-06	16114		14106,14206	KLZ1-09	10124				06128,06152
0K	04217	4L1	14249	CAB9-07	16116	EIC1-12	13102,13202,	KLZ1-10	05240,10124	RCL1-01	04258	RFM1-09	04225
0KA	04217			CAB9-09	16104		14102,14202	KLZ1-11	05241,10239	RCL1-02	04258	RFM1-10	03255,05231,
0L	04221	9A	17204,17218	CAB9-10	16110			KLZ1-12	10207	RCL1-03	04132		0612

ATC FUSE P/N (USED IN TB2)	
CURRENT RATING	P/N
2A	426-7770
5A	426-5742
10A	426-5743
15A	426-5744
20A	426-5745
25A	426-5746
30A	426-5747

REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS



DIGITAL INTERFACE CARD STATUS LEDs

ZONE		REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00		INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01		NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

DIGITAL INPUTS

DI33 - 36 (> Rev. 3)
LED OFF = 0 VDC INPUT
LED ON = 24 VDC INPUT

DI33 - 36
LED OFF = 24 VDC INPUT
LED ON = 0 VDC INPUT

DI5 - 32
LED OFF = 0 VDC INPUT
LED ON = 24 VDC INPUT

CONN-PIN	CHANNEL	DI LED	LINE #
DIGIN3-12	ENGINE RED LAMP	36	13109,13209,14111,14209
DIGIN3-11	HYD RESERVOIR LEVEL SWITCH	35	11103
DIGIN3-10	DRIVE COOL RESERVOIR LEVEL SWITCH	34	03255
DIGIN3-9	ENGINE YELLOW LAMP	33	13111,13211,14113,14211
DIGIN3-8	UNUSED	32	-----
DIGIN3-7	FIRE SYSTEM STATUS	31	02152
DIGIN3-6	UNUSED	30	-----
DIGIN3-5	ENGINE BLUE LAMP	29	14115
DIGIN3-4	UNUSED	28	-----
DIGIN3-3	RIGHT REAR E-STOP SWITCH	27	02128
DIGIN3-2	LEFT REAR E-STOP SWITCH	26	02132
DIGIN3-1	HYD RESERVOIR E-STOP SWITCH	25	02136

DIGIN2-12	HV CABINET E-STOP SWITCH	24	02124
DIGIN2-11	CAB E-STOP SWITCH	23	02120
DIGIN2-10	LADDER POSITION SWITCH	22	11250
DIGIN2-9	STARTER ISOLATION SWITCH	21	13144,13244,14139,14244
DIGIN2-8	KLENZ ENABLE SWITCH	20	10103
DIGIN2-7	REAR DRIVER LUBE FLOW SWITCH	19	11114
DIGIN2-6	UNUSED	18	-----
DIGIN2-5	UNUSED	17	-----
DIGIN2-4	UNUSED	16	-----
DIGIN2-3	ENGINE SAFETY FILTERS	15	10109
DIGIN2-2	STEER SUPPLY PRESSURE SWITCH	14	17103
DIGIN2-1	UNUSED	13	-----

DIGIN1-12	HV CABINET DOOR SWITCH	12	06203
DIGIN1-11	FRONT DRIVER LUBE FLOW SWITCH	11	11112
DIGIN1-10	AUTOLUBE SWITCH	10	11108
DIGIN1-9	UNUSED	9	-----
DIGIN1-8	PARK BRAKE SWITCH	8	02255
DIGIN1-7	KEYSWITCH IGNITION	7	02208
DIGIN1-6	KEYSWITCH CRANK SWITCH	6	02210
DIGIN1-5	UNUSED	5	-----
DIGIN1-4	UNUSED	4	-----
DIGIN1-3	RADIATOR FAN SPEED	3	06152
DIGIN1-2	BLOWER SPEED	2	06150
DIGIN1-1	HMI POWER SENSE	-	N/A

CONN-PIN	CHANNEL	DO LED	LINE #
DIGOUT1-13	UNUSED	1	-----
DIGOUT1-11	VCU / HMI KEEP ALIVE	2	02214
DIGOUT1-10	IGNITION KEEP ALIVE OUTPUT	3	02203
DIGOUT1-9	POLE WORK LIGHTS	4	04103
DIGOUT1-8	CAB LIGHT BAR LIGHTS	5	04107
DIGOUT1-7	UNUSED	6	-----
DIGOUT1-6	REAR COWL LIGHTS	7	04111
DIGOUT1-5	PARK BRAKE INTERLOCK OUTPUT	8	02249
DIGOUT1-4	RED ALARM LIGHT	9	04115
DIGOUT1-3	YELLOW WARNING LIGHT	10	04117
DIGOUT1-2	CAB AUDIBLE ALARM	11	04119
DIGOUT1-1	UNUSED	12	-----

DIGOUT3-12	DUMP PRESSURE REDUCING SOL	25	11211
DIGOUT3-11	UNUSED	26	-----
DIGOUT3-10	TAIL LIGHTS	27	04134
DIGOUT3-9	STEER ACTUATOR POWER	28	09134
DIGOUT3-8	HOIST RAISE PILOT SOL	29	11203
DIGOUT3-7	BUCKET DUMP PILOT SOL	30	11209
DIGOUT3-6	BUCKET ROLLBACK PILOT SOL	31	11207
DIGOUT3-5	HOIST LOWER PILOT SOL	32	11205
DIGOUT3-4	UNUSED	33	-----
DIGOUT3-3	UNUSED	34	-----
DIGOUT3-2	BEACON	35	04144
DIGOUT3-1	HORN SOL	36	10203

DIGOUT4-12	LEFT TURN SIGNAL LIGHT	37	04125
DIGOUT4-11	RIGHT TURN SIGNAL LIGHT	38	04130
DIGOUT4-10	KLENZ 1 SOL	39	10207
DIGOUT4-9	KLENZ 2 SOL	40	10209
DIGOUT4-8	KLENZ 3 SOL	41	10211
DIGOUT4-7	KLENZ 4 SOL	42	10213
DIGOUT4-6	KLENZ 5 SOL	43	10215
DIGOUT4-5	KLENZ 6 SOL	44	10217
DIGOUT4-4	KLENZ 7 SOL	45	10219
DIGOUT4-3	UNUSED	46	-----
DIGOUT4-2	UNUSED	47	-----
DIGOUT4-1	AUX STEER ENABLE	48	17107

DIGOUT5-12	UNUSED	49	-----
DIGOUT5-11	OIL COOLER BYPASS SOL	50	11219
DIGOUT5-10	AUX FAN ENABLE SOL	51	11221
DIGOUT5-9	RADIATOR FAN CONTROL SOL	52	11225
DIGOUT5-8	UNUSED	53	-----
DIGOUT5-7	ENGINE START CMD	54	13104,13204,14104,14204
DIGOUT5-6	UNUSED	55	-----
DIGOUT5-5	ENGINE IGNITION	56	13102,13202,14102,14202
DIGOUT5-4	BLOWER CONTROL SOL	57	11227
DIGOUT5-3	BACKUP LIGHT & ALARM	58	04138
DIGOUT5-2	UNUSED	59	-----
DIGOUT5-1	UNUSED	60	-----

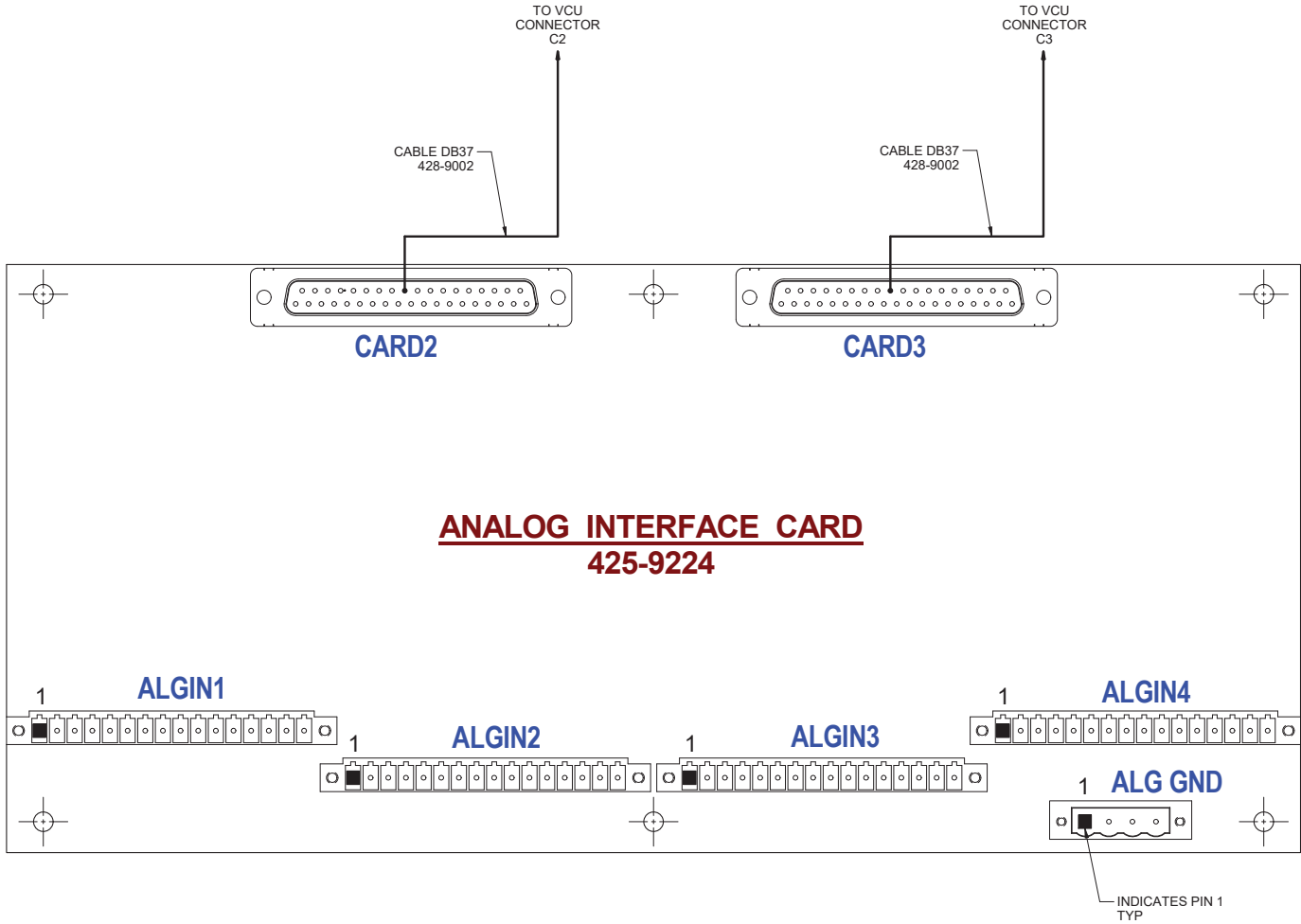
DIGOUT2-14	UNUSED	13	-----
DIGOUT2-13	FRONT WASHER PUMP	14	03221
DIGOUT2-12	REAR WASHER PUMP	15	03223
DIGOUT2-11	PARK BRAKE SWITCH LIGHT	16	04121
DIGOUT2-10	FRONT WIPER HIGH	17	03215
DIGOUT2-9	FRONT WIPER LOW	18	03217
DIGOUT2-8	REAR WIPER LOW	19	03219
DIGOUT2-7	UNUSED	20	-----
DIGOUT2-6	AUTOLUBE SOL	21	11215
DIGOUT2-5	FLOAT SOL	22	11213
DIGOUT2-3	DIGITAL OUTPUT POWER	23	02241
DIGOUT2-1	DRIVE SWITCH POWER OUTPUT	24	02235

DIGITAL OUTPUTS

LED OFF = 0% DUTY CYCLE
LED ON = >0% DUTY CYCLE
(BRIGHTNESS VARIES WITH DUTY CYCLE)

ANALOG INTERFACE CARD STATUS

ZONE		REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00		INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01		NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

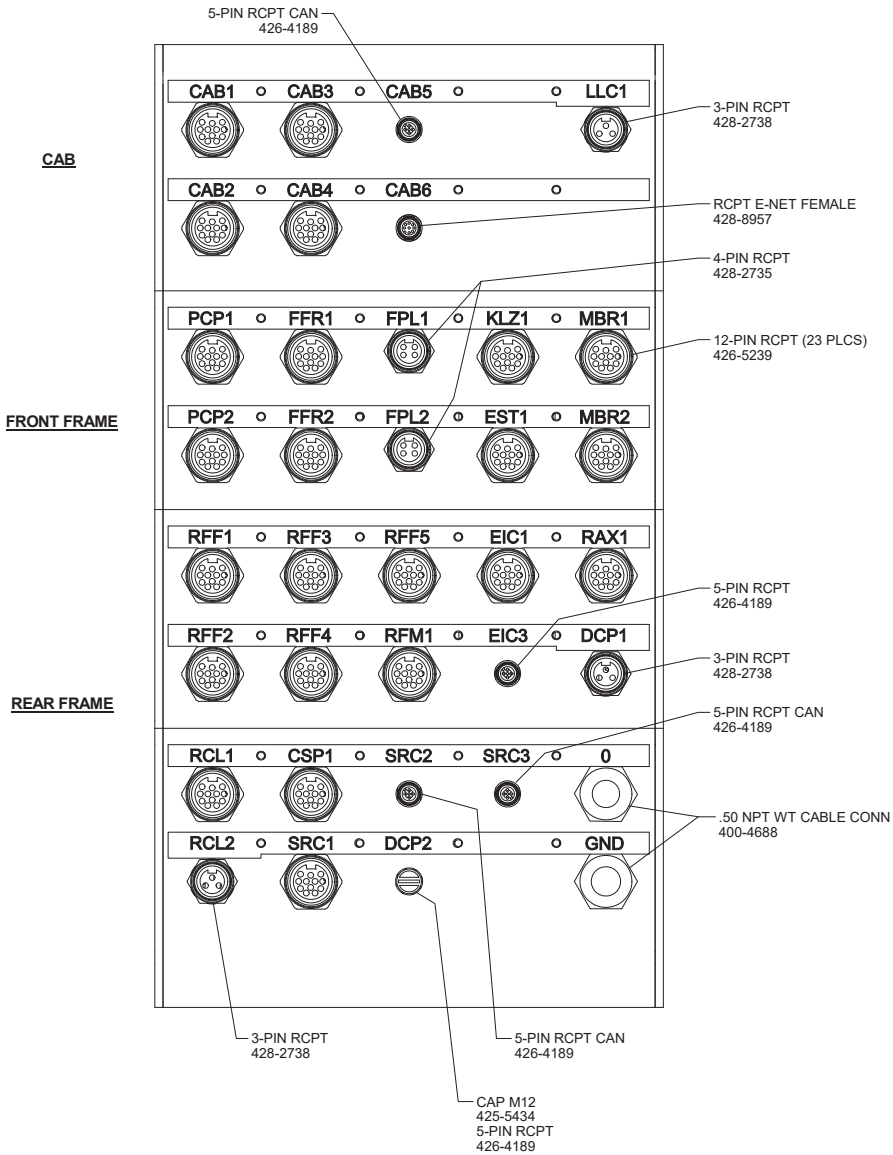


ANALOG INTERFACE CARD ASSIGNMENTS										
CONN-PIN	CHANNEL	LINE No.		CONN-PIN	CHANNEL	LINE No.		CONN-PIN	CHANNEL	LINE No.
ALGIN1-1	SPEED CONTROL PEDAL RAW (V)	03203		ALGIN2-1	GREATEST PILOT CMD (psi)	11125		ALGIN3-1	HPD GEARBOX (psi)	11159
ALGIN1-2	SPEED CONTROL PEDAL SUPPLY (V)	03209		ALGIN2-2	HOIST CYLINDER BASE (psi)	11127		ALGIN3-2	HYD RESERVOIR (psi)	10132
ALGIN1-3	FRAME IMPEDANCE	06207		ALGIN2-3	KLENZ FILTER (psi)	10124		ALGIN3-3	REAR SERVICE BRAKES (psi)	10134
ALGIN1-4	BATTERY (V)	05102		ALGIN2-4	HYDRAULIC RESERVOIR OIL (°F)	11149		ALGIN3-4	REAR PARK BRAKES (psi)	10136
ALGIN1-5		---		ALGIN2-5	STEER POSITION RAW (V)	06130		ALGIN3-5	KLENZ RESERVOIR AIR (psi)	10138
ALGIN1-6		---		ALGIN2-6	FAST HOIST PUMP (psi)	11131		ALGIN3-6	FUEL LEVEL LOW TO FILL	06126
ALGIN1-7		---		ALGIN2-7	HOIST / BUCKET PUMP A (psi)	11133		ALGIN3-7	AMBIENT (°F)	10140
ALGIN1-8		---		ALGIN2-8	HOIST / BUCKET PUMP B (psi)	11135		ALGIN3-8		---
ALGIN1-9		---		ALGIN2-9	HOIST / BUCKET PUMP C (psi)	11137		ALGIN3-9	HOIST CYL ROD (psi)	11129
ALGIN1-10	AUTOLUBE GREASE (psi)	11151		ALGIN2-10	BLOWER PUMP (psi)	11139		ALGIN3-10		---
ALGIN1-11	FRONT SERVICE BRAKES (psi)	10126		ALGIN2-11	STEER PUMP A (psi)	11141		ALGIN3-11	BUCKET CYL ROD (psi)	11119
ALGIN1-12	FRONT PARK BRAKES (psi)	10128		ALGIN2-12	STEER PUMP B (psi)	11143		ALGIN3-12		---
ALGIN1-13	LIFT ARM POSITION RAW (V)	06134		ALGIN2-13	ACCESSORY PUMP (psi)	11145		ALGIN3-13		---
ALGIN1-14	BELLCRANK TO LIFT ARM RAW (V)	06138		ALGIN2-14	RADIATOR FAN PUMP (PSI)	11147		ALGIN3-14		---
ALGIN1-15				ALGIN2-15	SYSTEM AIR (PSI)	10130		ALGIN3-15		---
ALGIN1-16	PILOT SUPPLY (psi)	11123		ALGIN2-16	HPD GEARBOX OIL (°F)	11157		ALGIN3-16		---

ZONE		REV	REVISION HISTORY			ECM	DATE	CHG	CHK	APVD
	00		INITIAL RELEASE			1394315	2019-09-03	FL	BBD	JMS
	01		NO CHANGE THIS SHEET			1397539	2019-10-17	FL	BBD	JMS

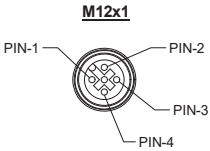
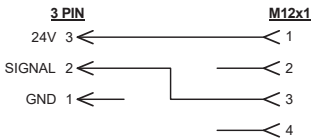
REFERENCE INFORMATION

CONNECTOR IDENTIFICATION BACK PANEL CONNECTOR LOW VOLT CONTROL CABINET (LVCC) 427-4479

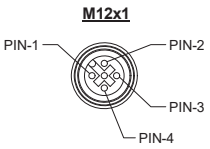
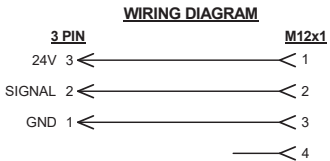


COMMON CABLES

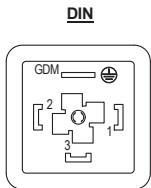
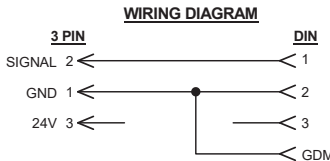
CABLE 3 PIN - M12x1 (GRAY) 426-5234



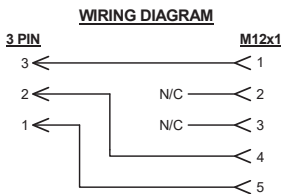
CABLE 3 PIN - M12x1 3 CONDUCTOR (YELLOW) 426-7338



CABLE 3 PIN - DIN (YELLOW) 426-5233

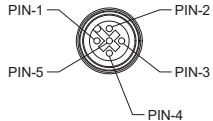


CABLE 3 PIN - M12x1 ENCODER (YELLOW) 428-9059



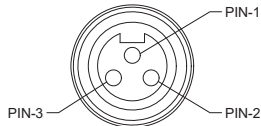
CONNECTOR COLOR CODES

5 PIN FEMALE CAN RECEPTACLE



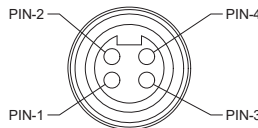
PIN LEGEND	
PIN	COLOR
1	DRAIN
2	RED 24V
3	BLK GND
4	WHT (CAN H)
5	BLU (CAN L)

3 PIN FEMALE RECEPTACLE



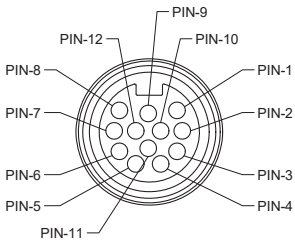
PIN LEGEND	
PIN	COLOR
1	GREEN
2	BLACK
3	WHITE

4 PIN FEMALE RECEPTACLE



PIN LEGEND	
PIN	COLOR
1	RED
2	GREEN
3	WHITE
4	BLACK

12 PIN FEMALE RECEPTACLE



PIN LEGEND	
PIN	COLOR
1	ORANGE
2	BLUE
3	WHITE/BLACK
4	RED/BLACK
5	GREEN/BLACK
6	ORANGE/BLACK
7	BLUE/BLACK
8	BLACK/WHITE
9	GREEN
10	RED
11	WHITE
12	BLACK

REFERENCE PART NUMBERS:

	ASSY CAB WITH ELECTRICS	427-4464
L1350 G3	GP HARNESS FRONT FRAME	428-9056
L1350 G3	GP HARNESS REAR FRAME	428-9027
	CABLE ASSY RPT/RTD FW1	428-6311
	CABLE ASSY RPT/RTD FW2	428-6312
	CABLE ASSY RPT/RTD GEN	428-6310
	CABLE ASSY RPT/RTD M1	428-6306
	CABLE ASSY RPT/RTD M2	428-6307
	CABLE ASSY RPT/RTD M3	428-6308
	CABLE ASSY RPT/RTD M4	428-6309
	BATTERY BOX ASSY	429-2797
	ISOLATION & SW BOX ASSY	427-0117
	MIRROR BAR HARNESS	428-9016
	REAR COWL HARNESS	428-6036

REVISION HISTORY									
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD		
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS		
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS		

BREAKOUT BOXES I/O

FFR1

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
FFR1-J1	FFR1-07	AUTO LUBE SWITCHES	FFR1-J2	FFR1-01	UNUSED
FFR1-J3	FFR1-09	MAINTENANCE LIGHT LEFT FRONT	FFR1-J4	FFR1-02	FRONT SERVICE BRAKES XDCR
FFR1-J5	FFR1-03	AUTO LUBE SOL	FFR1-J6	FFR1-04	FRONT PARK BRAKES XDCR
FFR1-J7	FFR1-05	UNUSED	FFR1-J8	FFR1-06	FRONT PARK BRAKES SOL

FFR2

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
FFR2-J1	FFR2-07	LIFT ARM POSITION XDCR	FFR2-J2	FFR2-01	MAINTENANCE LIGHT RIGHT FRONT
FFR2-J3	FFR2-09	BELLCRANK TO LIFT ARM XDCR	FFR2-J4	FFR2-02	UNUSED
FFR2-J5	FFR2-03	CLAMSHLL CYL EXT XDCR (OPT)	FFR2-J6	FFR2-04	UNUSED
FFR2-J7	FFR2-05	FRONT DRIVER LUBE FLOW SWITCHES	FFR2-J8	FFR2-06	UNUSED

PCP1

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
PCP1-J1	PCP1-07	BUCKET ROLLBACK PILOT SOL	PCP1-J2	PCP1-01	HOIST LOWER PILOT SOL
PCP1-J3	PCP1-09	BUCKET DUMP PILOT SOL	PCP1-J4	PCP1-02	HOIST RAISE PILOT SOL
PCP1-J5	PCP1-03	UNUSED	PCP1-J6	PCP1-04	BUCKET CYL ROD XDCR
PCP1-J7	PCP1-05	UNUSED	PCP1-J8	PCP1-06	UNUSED

PCP2

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
PCP2-J1	PCP2-07	GREATEST PILOT CMD XDCR	PCP2-J2	PCP2-01	CLAMSHLL OPEN PILOT SOL (OPT)
PCP2-J3	PCP2-09	HOIST CYL BASE XDCR	PCP2-J4	PCP2-02	PILOT SUPPLY XDCR
PCP2-J5	PCP2-03	CLAMSEHLL CLOSE PILOT SOL (OPT)	PCP2-J6	PCP2-04	DUMP PRESS REDUCING SOL
PCP2-J7	PCP2-05	HOIST CYL ROD XDCR	PCP2-J8	PCP2-06	FLOAT SOL

RFF1

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFF1-J1	RFF1-07	KLENZ RESERVOIR AIR XDCR	RFF1-J2	RFF1-01	HYD TANK DUMP SOL
RFF1-J3	RFF1-09	UNUSED	RFF1-J4	RFF1-02	UNUSED
RFF1-J5	RFF1-03	HYD RESERVOIR OIL TEMP XDCR	RFF1-J6	RFF1-04	STEER POSITION XDCR
RFF1-J7	RFF1-05	HYD RESERVOIR LEVEL SWITCH	RFF1-J8	RFF1-06	AUX FAN ENABLE SOL (OPT)

RFF2

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFF2-J1	24V ONLY	AIR DRYER HEATER	RFF2-J2	RFF2-01	RADIATOR FAN CONTROL SOL
RFF2-J3	RFF2-09	UNUSED	RFF2-J4	RFF2-02	MAINTENANCE LIGHT MIDDLE RIGHT
RFF2-J5	RFF2-03	* AUX STEER SUPPLY PRESS SWITCH (OPT)	RFF2-J6	RFF2-04	UNUSED
RFF2-J7	RFF2-05	* AUX STEER ENABLE (OPT)	RFF2-J8	RFF2-06	UNUSED

RFF3

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFF3-J1	RFF3-07	HOIST/BUCKET PUMP C XDCR	RFF3-J2	RFF3-01	ACCESSORY PUMP XDCR
RFF3-J3	RFF3-09	HOIST/BUCKET PUMP B XDCR	RFF3-J4	RFF3-02	STEER PUMP A XDCR
RFF3-J5	RFF3-03	HOIST/BUCKET PUMP A XDCR	RFF3-J6	RFF3-04	STEER PUMP B XDCR
RFF3-J7	RFF3-05	FAST HOIST PUMP XDCR	RFF3-J8	RFF3-06	HYD OIL COOLER BYPASS SOL

RFF4

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFF4-J1	RFF4-07	SYSTEM AIR PRESS XDCR	RFF4-J2	RFF4-01	HPD GEARBOX TEMP XDCR
RFF4-J3	RFF4-09	RADIATOR FAN PUMP PRESS XDCR	RFF4-J4	RFF4-02	HPD GEARBOX PRESS XDCR
RFF4-J5	RFF4-03	BLOWER PUMP PRESS XDCR	RFF4-J6	RFF4-04	HYD RESERVOIR AIR PRESS XDCR
RFF4-J7	RFF4-05	BLOWER SPEED SENSOR	RFF4-J8	RFF4-06	UNUSED

RFF5

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFF5-J1	RFF5-07	FRONT WASHER PUMP	RFF5-J2	RFF5-01	AMBIENT AIR TEMPERATURE XDCR
RFF5-J3	RFF5-09	REAR WASHER PUMP	RFF5-J4	RFF5-02	UNUSED
RFF5-J5	RFF5-03	UNUSED	RFF5-J6	RFF5-04	UNUSED
RFF5-J7	RFF5-05	BLOWER SPEED CONTROL SOL	RFF5-J8	RFF5-06	FIRE SYSTEM STATUS

RAX1

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RAX1-J1	RAX1-07	REAR DRIVER LUBE FLOW SWITCHES	RAX1-J2	RAX1-01	UNUSED
RAX1-J3	RAX1-09	REAR PARK BRAKES SOL	RAX1-J4	RAX1-02	UNUSED
RAX1-J5	RAX1-03	REAR PARK BRAKES XDCR	RAX1-J6	RAX1-04	UNUSED
RAX1-J7	RAX1-05	REAR SERVICE BRAKES XDCR	RAX1-J8	RAX1-06	UNUSED

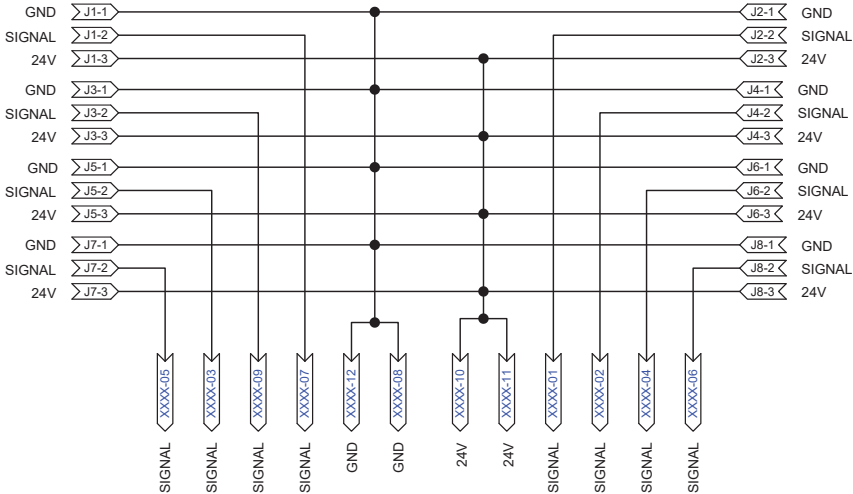
RFM1

HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION
RFM1-J1	RFM1-07	RADIATOR FAN SPEED SENSOR	RFM1-J2	RFM1-01	ENGINE SAFETY FILTER RESTRICTION
RFM1-J3	RFM1-09	MAINTENANCE LIGHT MIDDLE LEFT	RFM1-J4	RFM1-02	UNUSED
RFM1-J5	RFM1-03	UNUSED	RFM1-J6	RFM1-04	FUEL LEVEL XDCR
RFM1-J7	RFM1-05	AUTO LUBE GREASE XDCR	RFM1-J8	RFM1-06	DRIVE COOL RESERVOIR LEVEL SWITCH

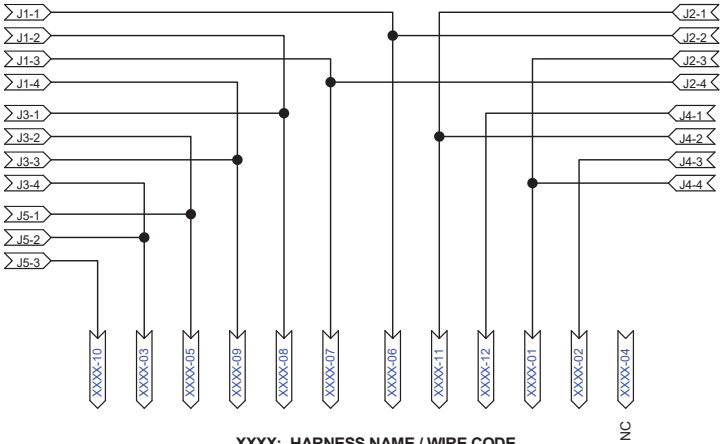
EST1

HARNESS CODE	DEVICE DESCRIPTION	HARNESS CODE	DEVICE DESCRIPTION
EST1-J1	RIGHT REAR E-STOP SWITCH	EST1-J2	LEFT REAR E-STOP SWITCH
EST1-J3	HV CABINET E-STOP SWITCH	EST1-J4	HYD RESERVOIR E-STOP SWITCH
EST1-J5	CAB E-STOP SWITCH		

BREAKOUT BOX
426-5235



BREAKOUT BOX
427-4507
(E-STOP ONLY)



REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

26225

26226 CAN1_HIGH (09141) SRC2-04 CAN1_HI WHT YEL

26227

26228 CAN1_LOW (09139) SRC2-05 CAN1_LOW BLU GRN

26229

26230 CAN1_GND (09143) SRC2-01 CAN1_SHIELD DRAIN BLK

26231

26232

26233

26234

26235 TWISTED

26236

26237

26238 CAN2_HIGH (09153) SRC3-04 CAN2_HI WHT YEL

26239

26240 CAN2_LOW (09151) SRC3-05 CAN2_LOW BLU GRN

26241

26242 CAN2_GND (09155) SRC3-01 CAN2_SHIELD DRAIN BLK

26243

26244

26245

26246

26247 TWISTED

26248

26249

26250

26251

26252

26253

26254

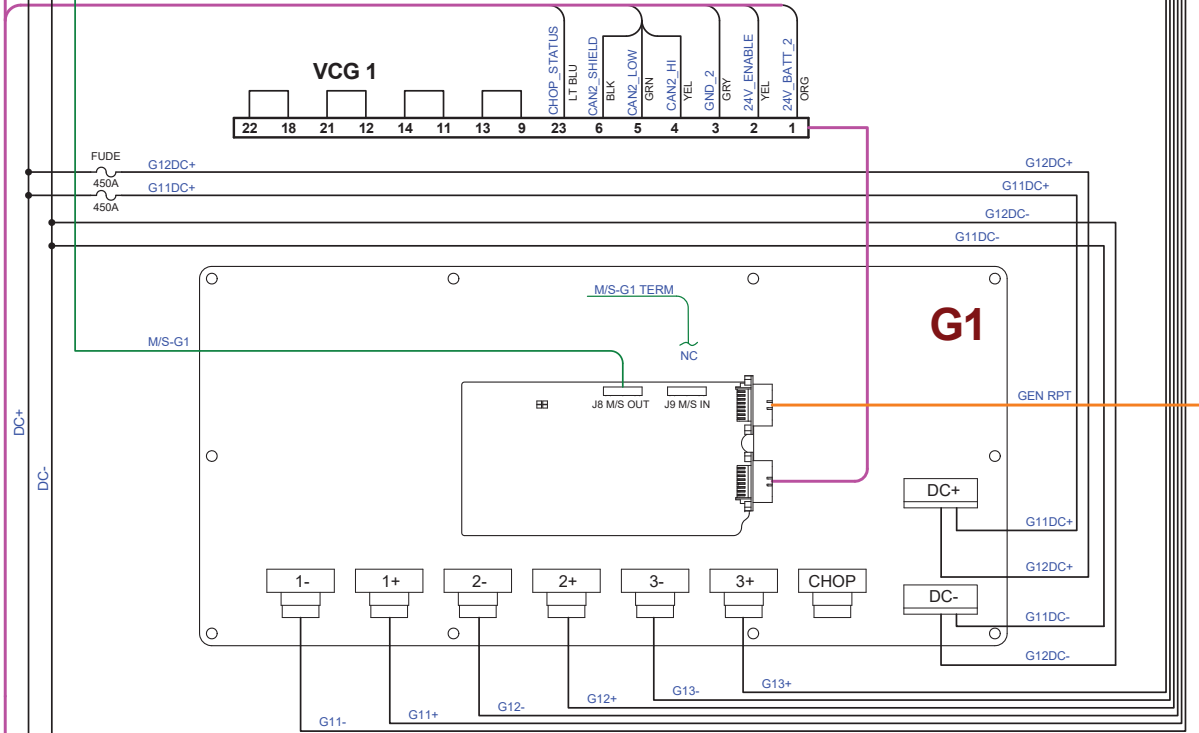
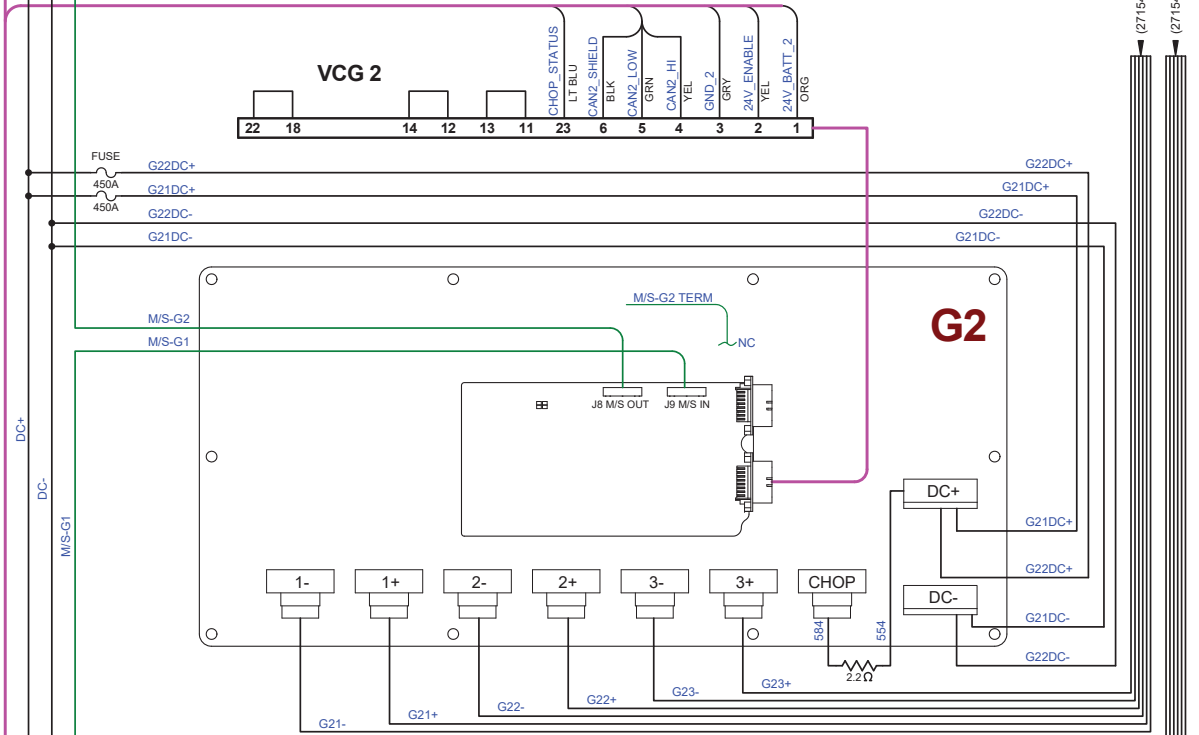
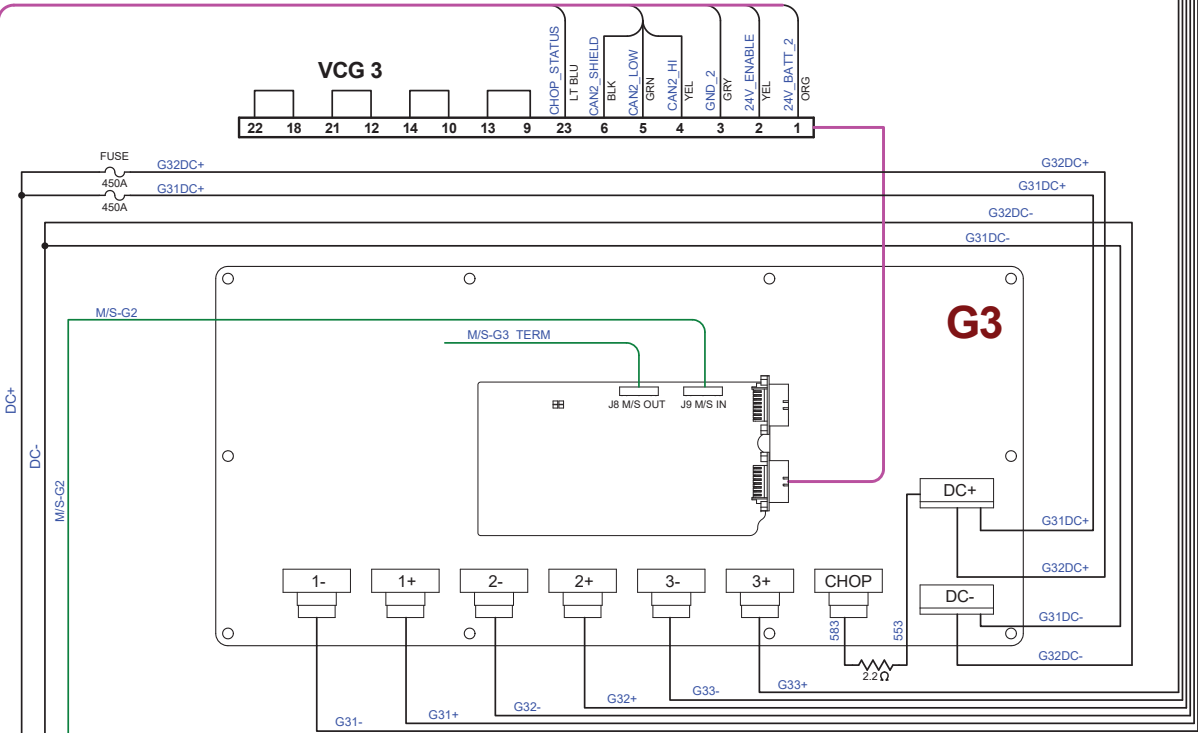
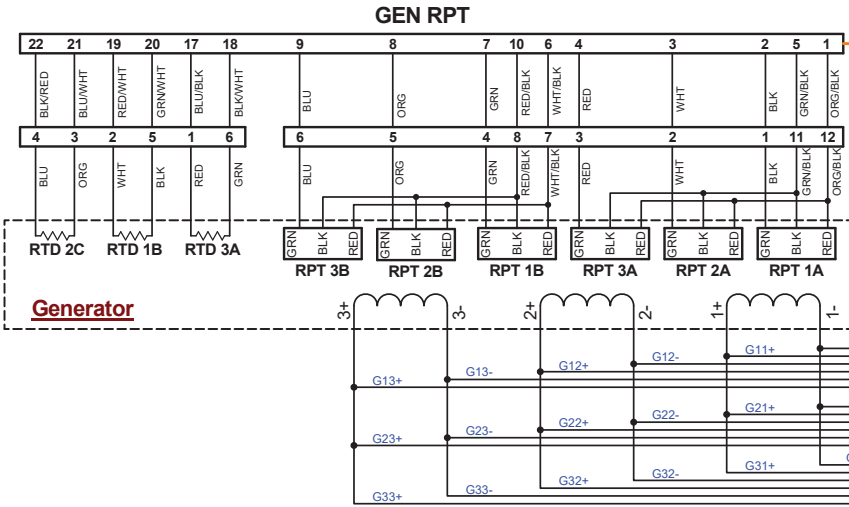
HV CABINET LEFT WALL

HV CABINET RIGHT WALL

(26)

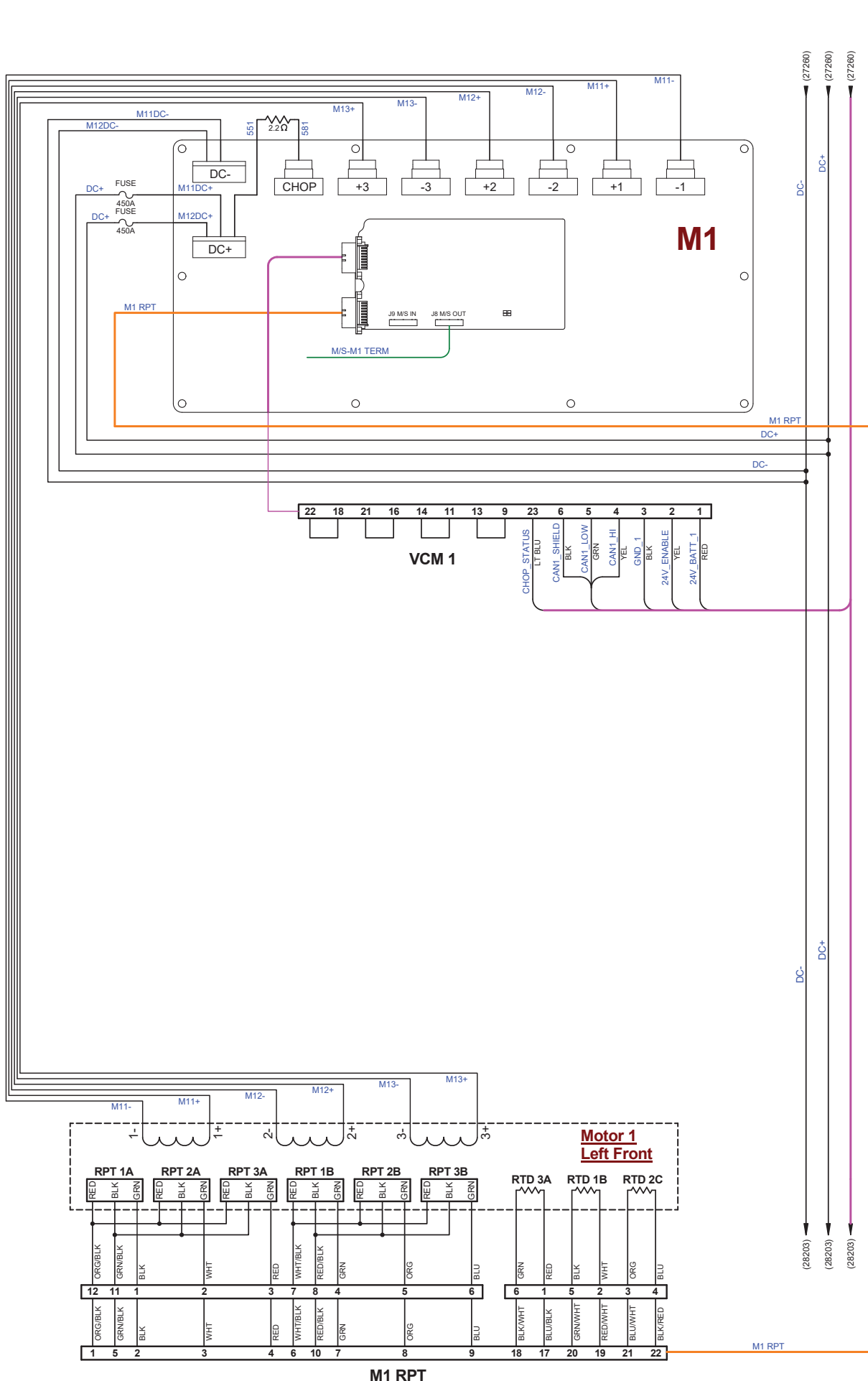
SR GENERATORS

ZONE		REV	DESCRIPTION	ECM	DATE	CHG	CHK	APVD
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01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS		

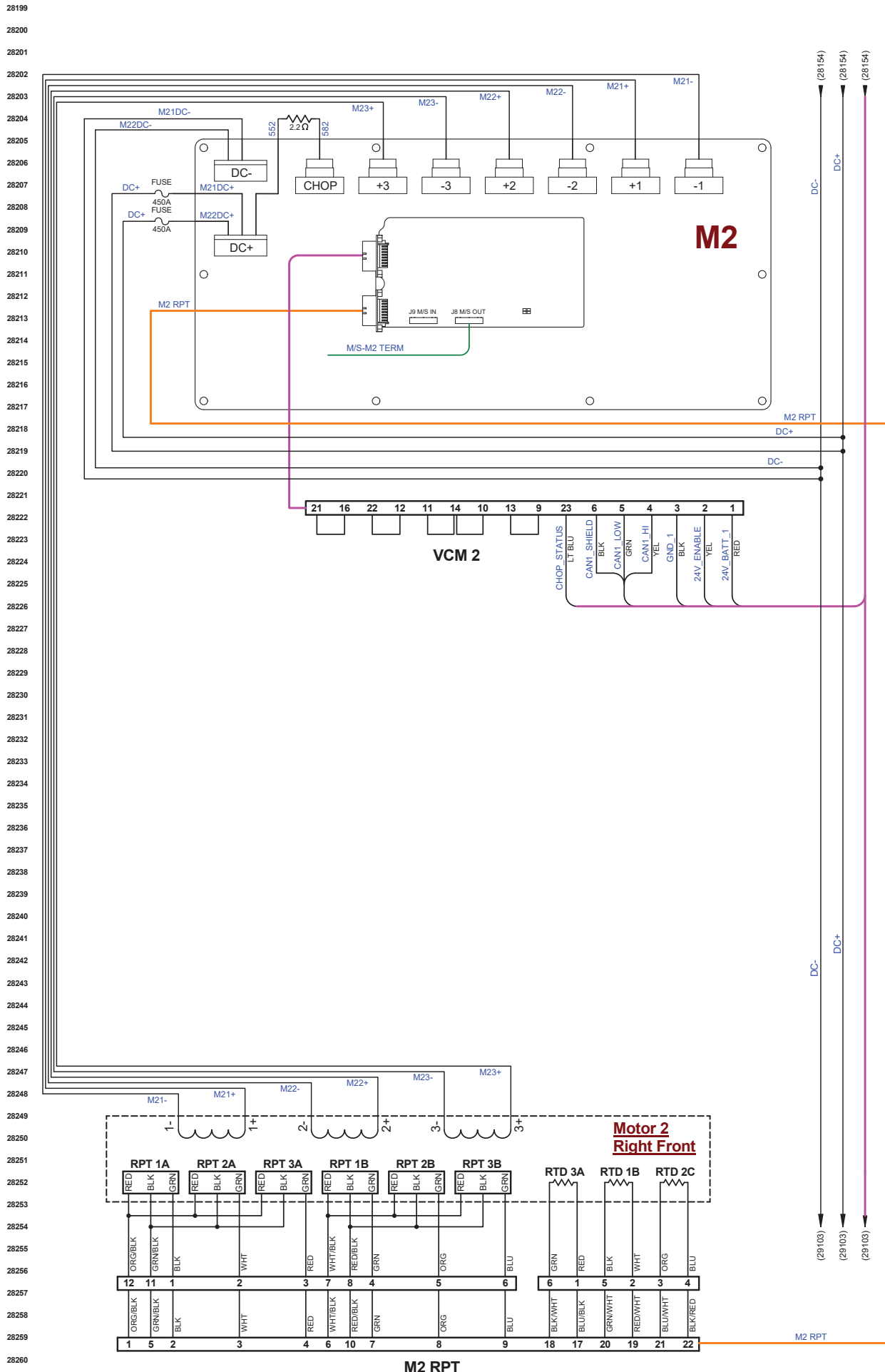


SR MOTORS

SR MOTOR



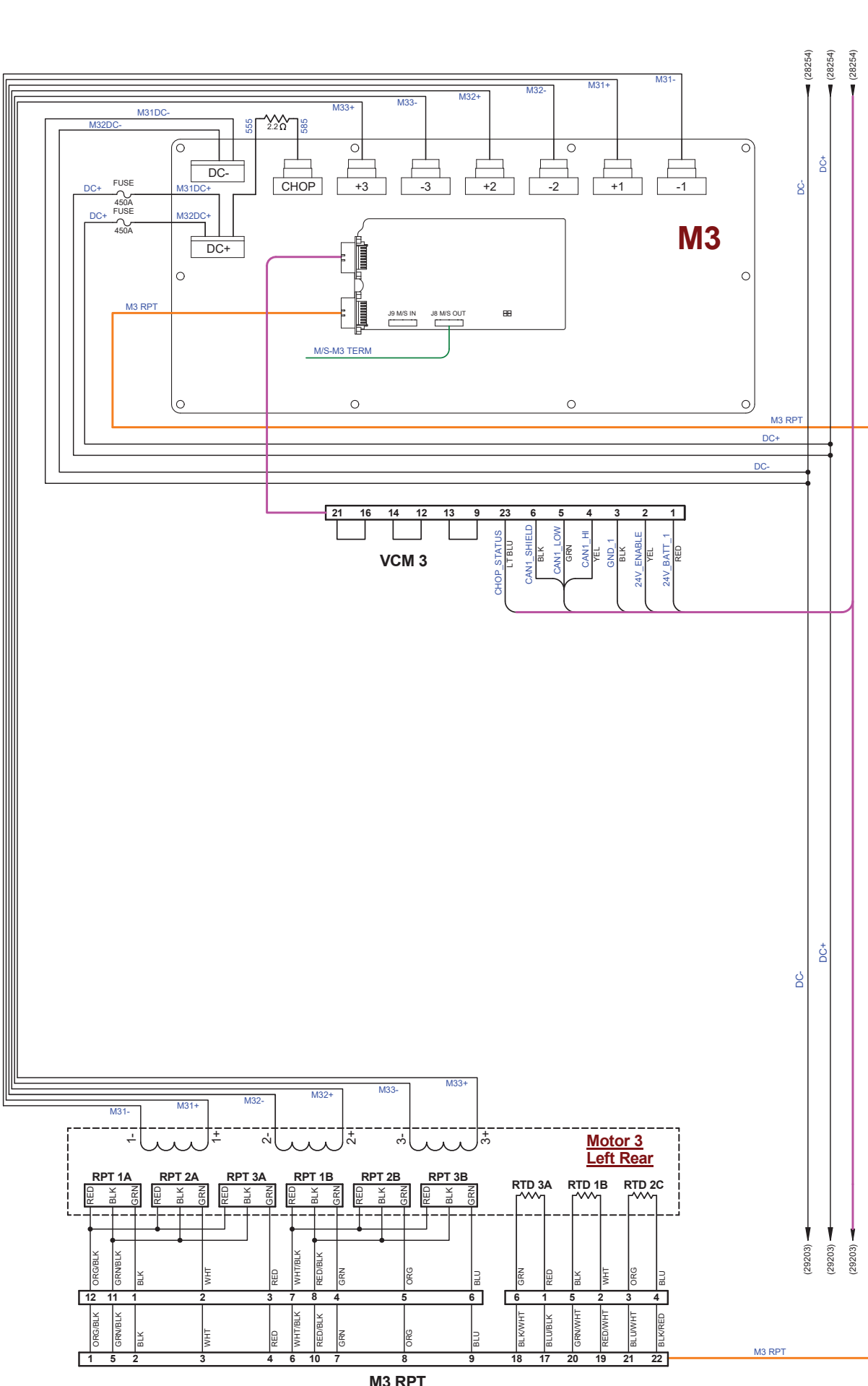
SR MOTOR 2



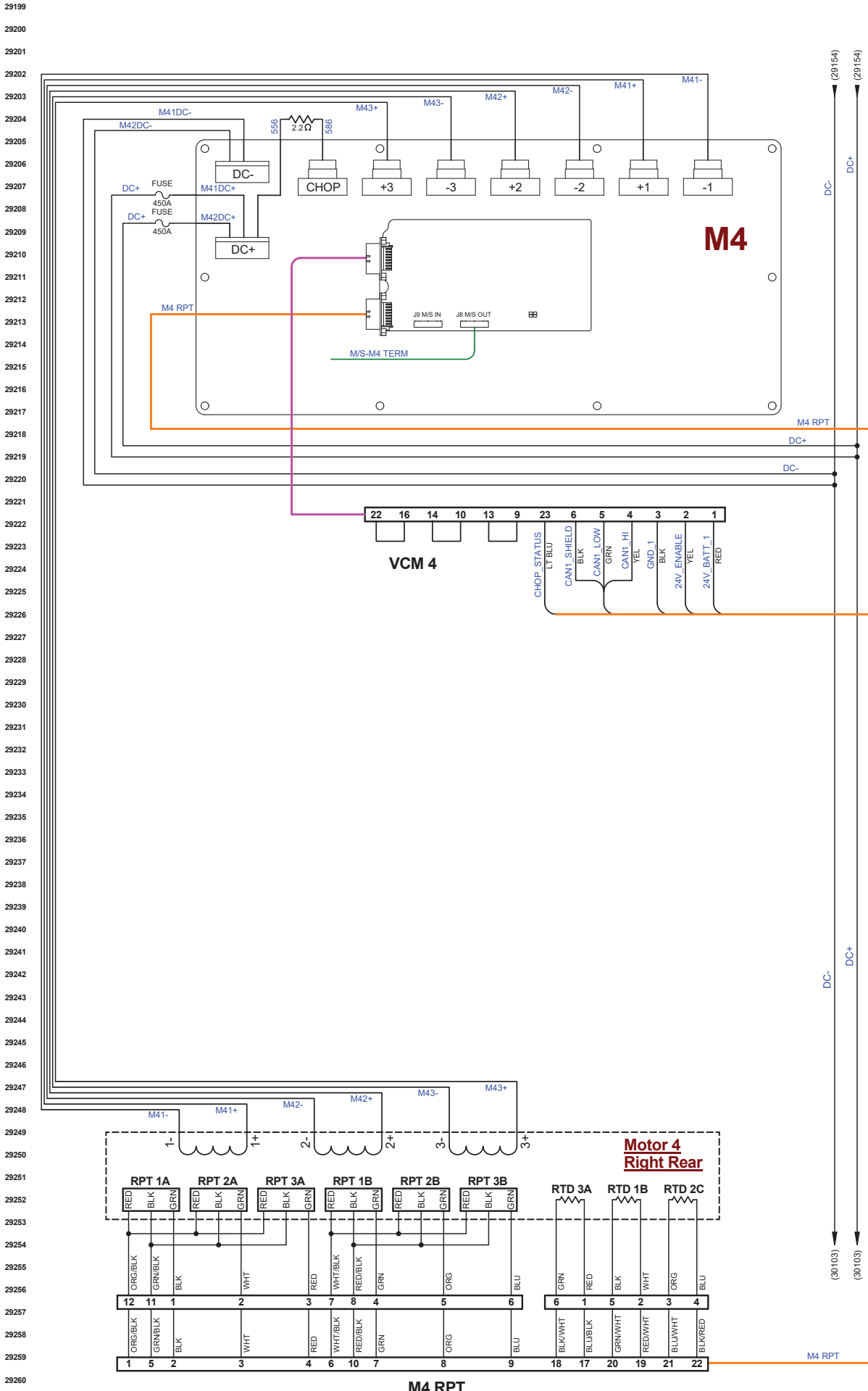
REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APV
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

SR MOTORS (CONT.)

SR MOTOR :



SR MOTOR 4



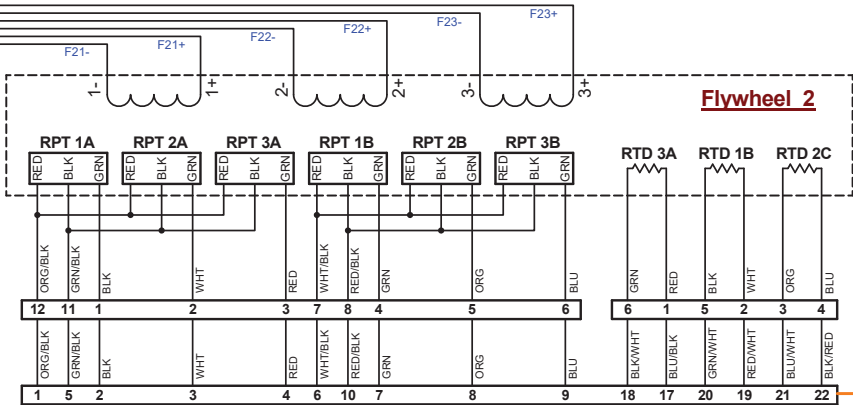
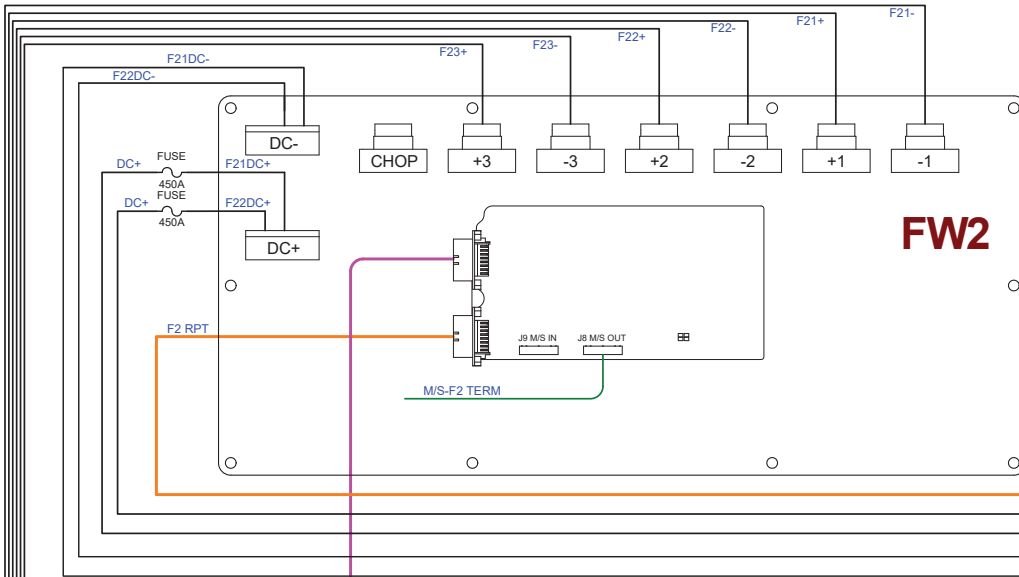
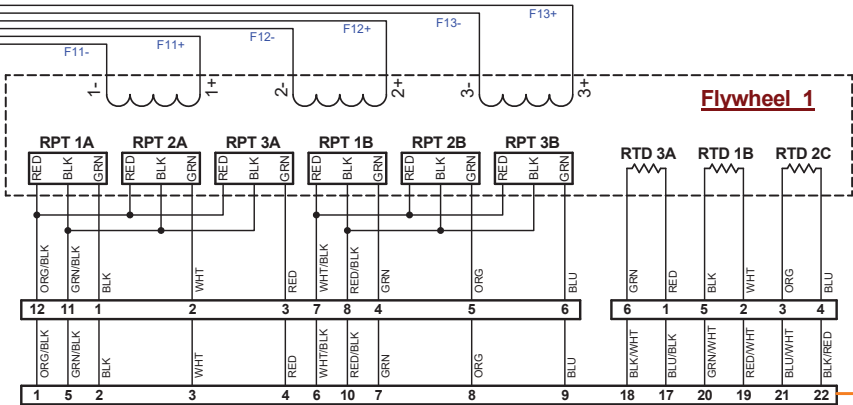
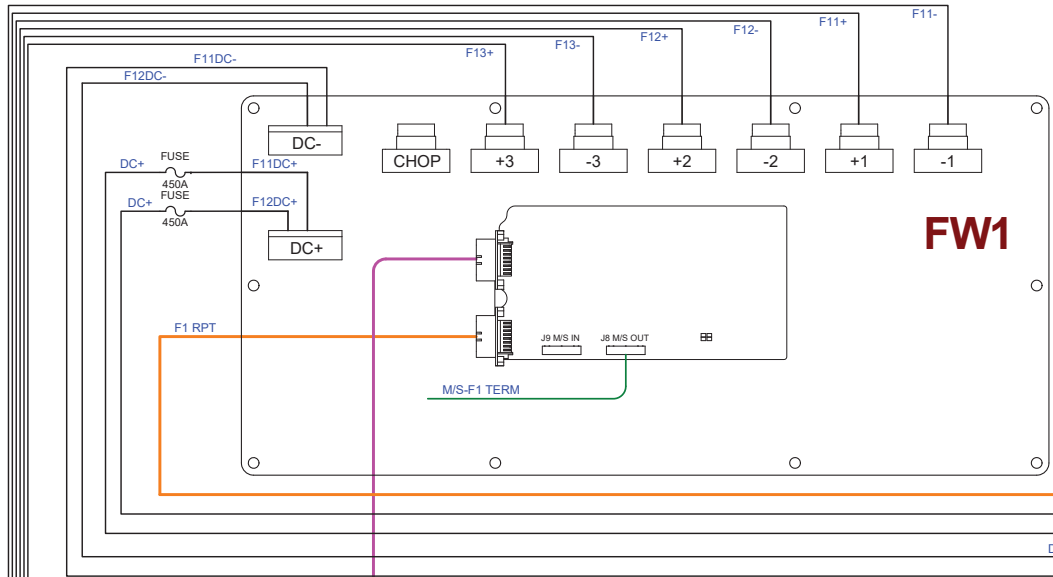
REVISION HISTORY							
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK	APV
	00	INITIAL RELEASE	1394315	2019-09-03	FL	BBD	JMS
	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

FLYWHEELS

FLYWHEEL 1

FLYWHEEL 2

REVISION HISTORY						
ZONE	REV	DESCRIPTION	ECM	DATE	CHG	CHK
	00	INITIAL RELEASE		1394315	2019-09-03	FL BBD JMS
	01	NO CHANGE THIS SHEET		1397539	2019-10-17	FL BBD JMS



REFERENCE INFORMATION - DRIVE SYSTEM

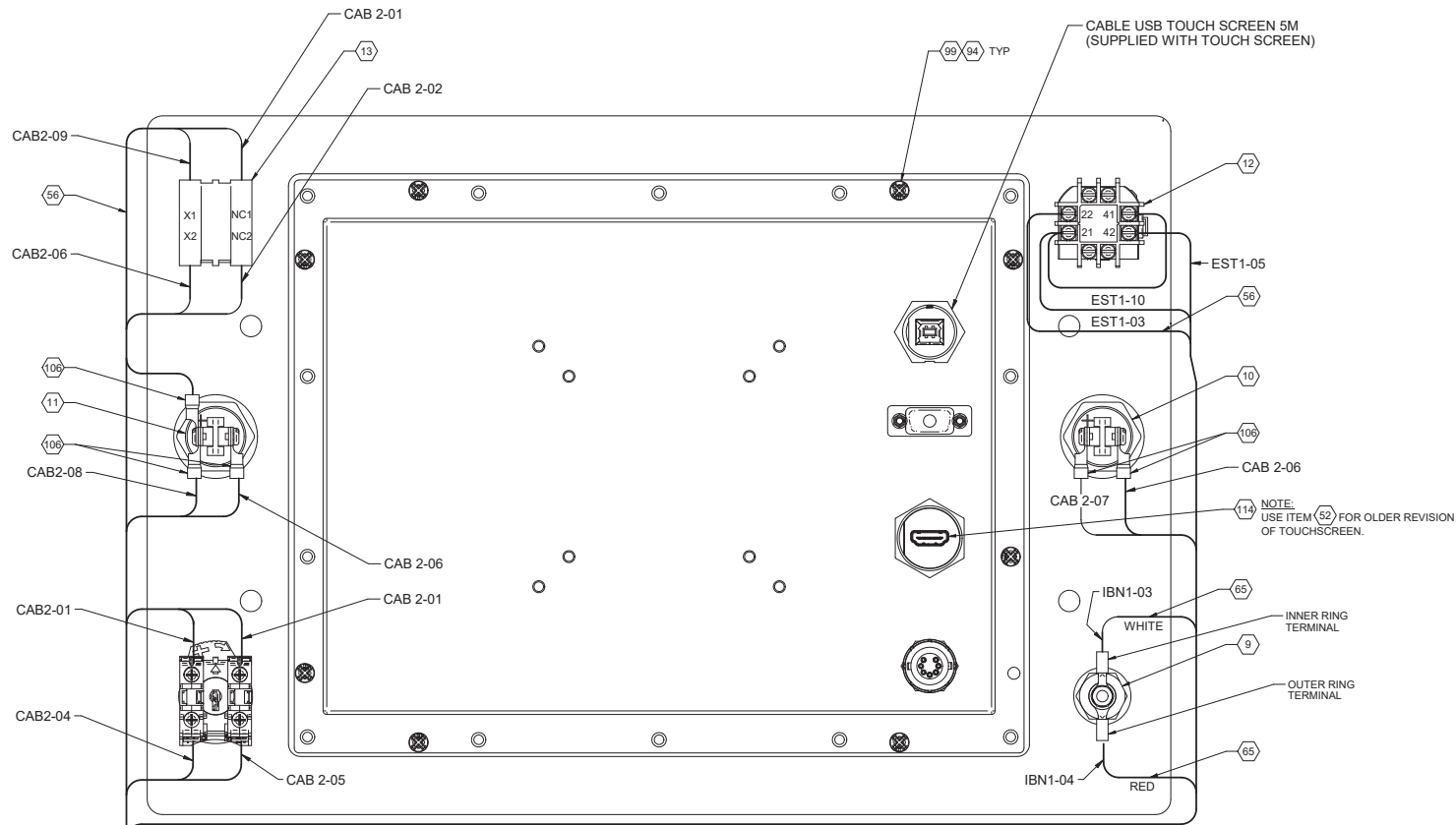
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	01	NO CHANGE THIS SHEET	1397539	2019-10-17	FL	BBD	JMS

DRIVE SYSTEM WIRE LOCATION CHART

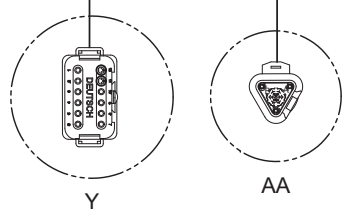
WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.	WIRE CODE	LINE NO.
24V_BATT 1	26204,	DC+	27148,27208,27249,	G21+	27112,27234	M22+	28202,28247
	28124,28224,		28107,28108,28118,	G21-	27112,27234	M22-	28202,28247
	29124,29224		28207,28208,28218,	G21DC+	27217,27228	M22DC+	28208
			29107,29108,29118,	G21DC-	27219,27231	M22DC-	28204
24V_BATT 2	26220,		29207,29208,29218			M23+	28203,28246
	27139,27215,27239,		30107,30108,30118,	G22+	27113,27234	M23-	28203,28247
	30124,30224		30207,30207,30218	G22-	27113,27234		
		DC-		G22DC+	27216,27229	M3 RPT	29112,29117,29159
24V_ENABLE	26214,		27150,27209,27250,	G22DC-	27218,27232	M31+	29102,29147
	27139,27215,27239,		28107,28119,28207,28219,	G23+	27113,27233	M31-	29102,29148
	28124,28224,		29107,29119,29207,29219,	G23-	27113,27233	M31DC+	29107
	29124,29224,		30107,30119,30207,30219			M31DC-	29104
	30124,30224			G31+	27114,27158	M32+	29102,29147
		F1 RPT	30112,30117,30159	G31-	27114,27158	M32-	29102,29147
24V_LIGHT	26206	F11+	30102,30147	G31DC+	27141,27152	M32DC+	29108
		F11-	30102,30148	G31DC-	27143,27155	M32DC-	29104
551	28104	F11DC+	30107			M33+	29103,29146
552	28204	F11DC-	30104	G32+	27115,27158	M33-	29103,29147
553	27156			G32-	27115,27158		
554	27231	F12+	30102,30147	G32DC+	27140,27153		
555	29104	F12-	30102,30147	G32DC-	27142,27156	M4 RPT	29212,29217,29259
556	29204	F12DC+	30108	G33+	27115,27157	M41+	29202,29247
		F12DC-	30104	G33-	27115,27157	M41-	29202,29248
		F13+	30103,30146			M41DC+	29207
581	28104	F13-	30103,30147	INTLK_NO	26202	M41DC-	29204
582	28204			INTLK_COM	26206	M42+	29202,29247
583	27156	F2 RPT	30212,30217,30259			M42-	29202,29247
584	27231	F21+	30202,30247	M/S-F1 TERM	30114	M42DC+	29208
585	29104	F21-	30202,30248	M/S-F2 TERM	30214	M42DC-	29204
586	29204	F21DC+	30207			M43+	29203,29246
		F21DC-	30204			M43-	29203,29247
				M/S-G1	27229,27222,27246		
CAN1_HI	26226,	F22+	30202,30247	M/S-G1 TERM	27244	SRC1-01	26203
	28124,28224,	F22-	30202,30247	M/S-G2	27145,27221	SRC1-03	26214
	29124,29224,	F22DC+	30208	M/S-G2 TERM	27221	SRC1-04	26215
	30124,30224	F22DC-	30204	M/S-G3 TERM	27146	SRC1-05	26204
		F23+	30203,30246			SRC1-06	26220
CAN1_LOW	26228,	F23-	30203,30247	M/S-M1 TERM	28114	SRC1-10	26222
	28124,28224,			M/S-M2 TERM	28214	SRC1-11	26217
	29124,29224,	GEN RPT	27102,27202,27248	M/S-M3 TERM	29114	SRC1-12	26213
	30124,30224	GF_DETECT	26215	M/S-M4 TERM	29214		
						SRC2-01	26230
CAN1_SHIELD	26230,	GND_1	26206,26222,	M1 RPT	28112,28117,28159	SRC2-04	26226
	28124,28224,		28124,28224,	M11+	28102,28147	SRC2-05	26228
	29124,29224,		29124,29224	M11-	28102,28148		
	30124,30224	GND_2	26217,26219,	M11DC+	28107	SRC3-01	26242
			27139,27215,27239,	M11DC-	28104	SRC3-04	26238
CAN2_HI	26238,		30124,30224			SRC3-05	26240
	27139,27215,27239,	GND_3	26213	M12+	28102,28147		
	30124,30224			M12-	28102,28147		
		G11+	27110,27258	M12DC+	28108		
CAN2_LOW	26240,	G11-	27110,27258	M12DC-	28104		
	27139,27215,27239,	G11DC+	27241,27252	M13+	28103,28146		
	30124,30224	G11DC-	27243,27255	M13-	28103,28147		
		G12+	27111,27258				
CAN2_SHIELD	26242,	G12-	27111,27258	M2 RPT	28212,28217,28259		
	27139,27215,27239,	G12DC+	27240,27253	M21+	28202,28247		
	30124,30224	G12DC-	27242,27256	M21-	28202,28248		
		G13+	27111,27257	M21DC+	28207		
CHOP_STATUS	27139,27215,27239,	G13-	27111,27257	M21DC-	28204		
	28124,28224,						
	29124,29224						

Cab Wiring Diagram LINCS II

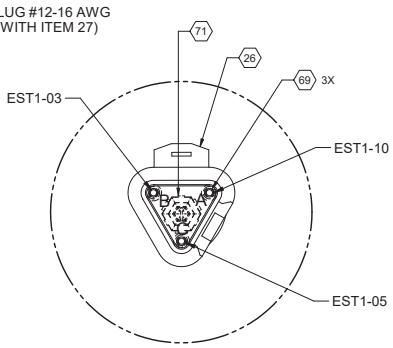
REVISIONS									
ZONE	REV	DESCRIPTION	EN	DATE	CHK	CHK	APP		
26		NO CHANGE THIS SHEET	1406904	2020-03-16	AKN	BBD	JBD		
27		NO CHANGE THIS SHEET	1408158	2020-04-06	JFM	BBD	JMS		



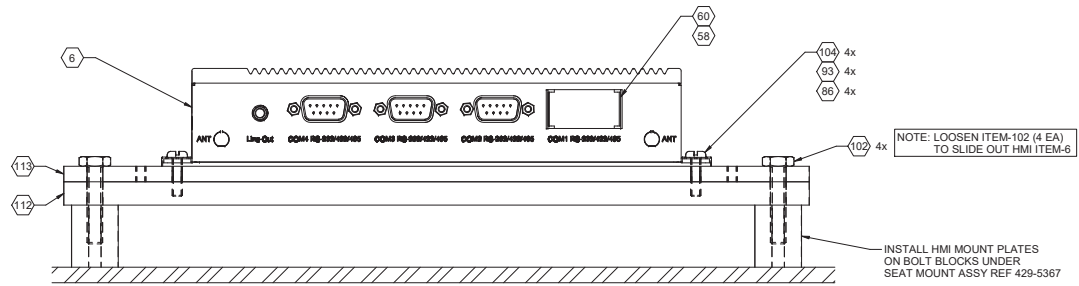
DASH CENTER CONSOLE WIRING VIEW
REAR VIEW OF DISPLAY



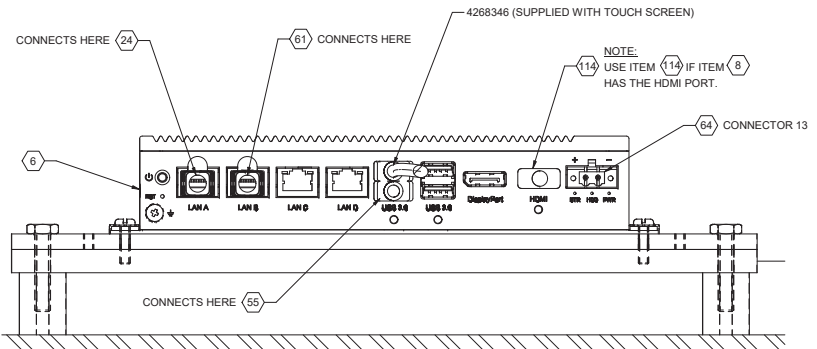
DETAIL Y
RECEPTACLE 12 WAY



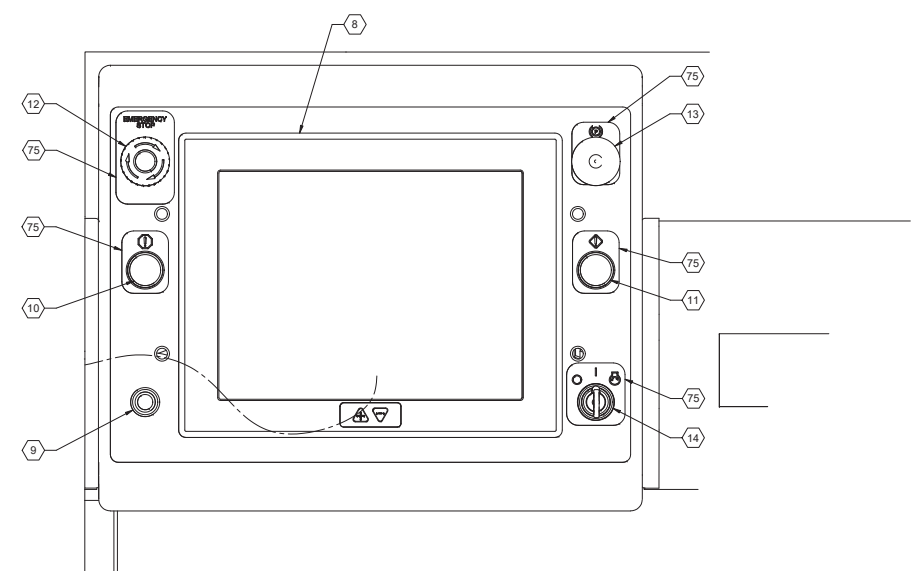
DETAIL AA
RECEPTACLE 3 WAY



SECTION V-V
FROM SECTION U-U SHEET-2

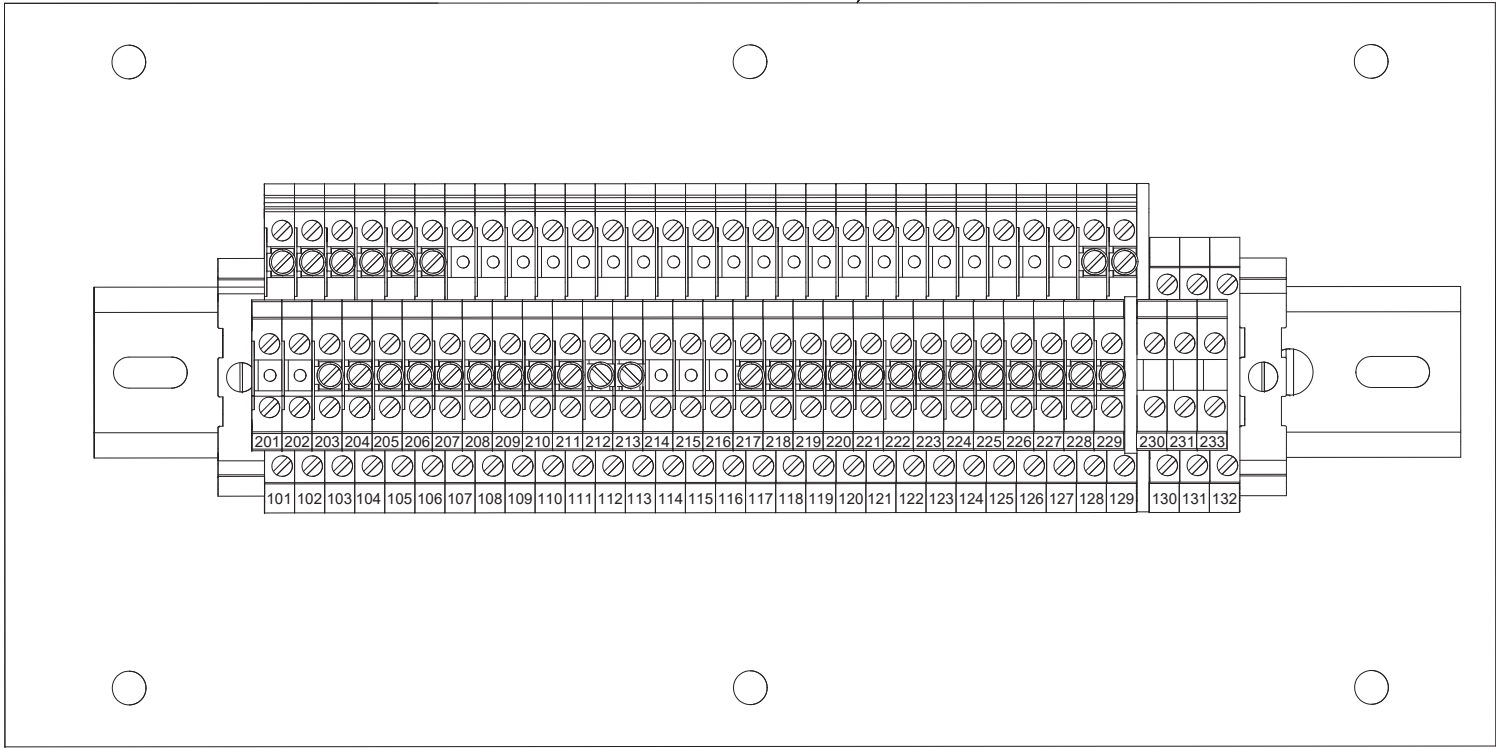


SECTION W-W
FROM SECTION U-U SHEET-2

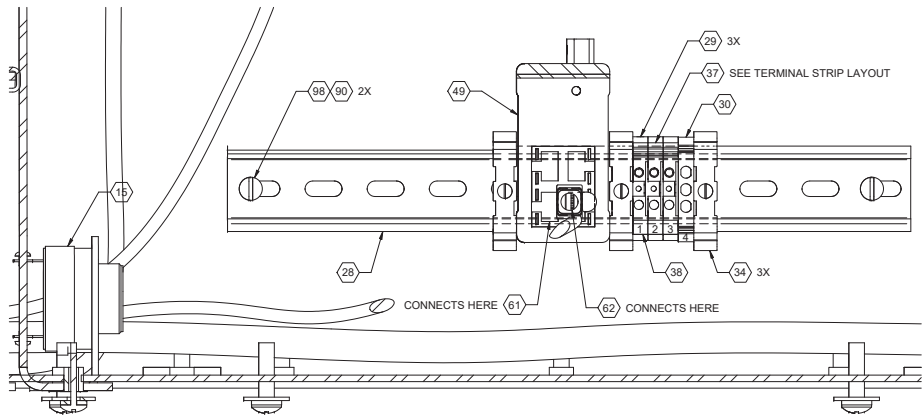


SECTION K-K
FROM SECTION B-B SHEET-2
(DASH CENTER CONSOLE FRONT VIEW)

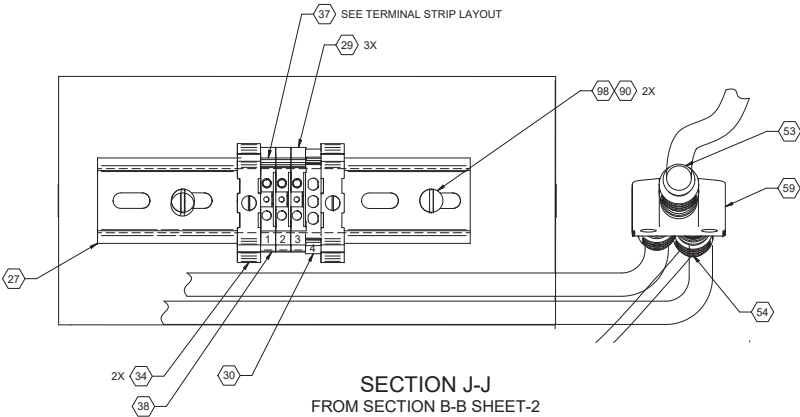
REVISIONS							
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	CHK	APP
	26	NO CHANGE THIS SHEET	1406904	2020-03-16	AKN	BBD	JBD
	27	NO CHANGE THIS SHEET	1408158	2020-04-06	JFM	BBD	JMS



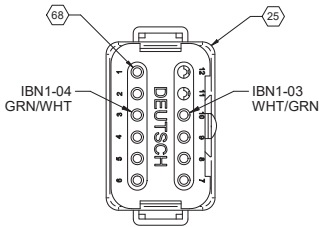
SECTION N-N
FROM SECTION B-B SHEET-2
(REAR DIN RAIL COMPONENTS)



SECTION L-L
FROM SECTION B-B SHEET-2
(DASH DIN RAIL COMPONENTS)



SECTION J-J
FROM SECTION B-B SHEET-2
(UPPER DIN RAIL COMPONENTS)



12 PIN DEUTSCH CONNECTOR
(ON LOWER HARNESS)

NOTES:

- 1) REMOVE WEDGE FROM 12 PIN DEUTSCH CONNECTOR ON LOWER HARNESS.
- 2) CRIMP PINS (ITEM-68) TO WIRES SHOWN ABOVE & LABEL APPROPRIATELY.
- 3) REMOVE PLUGS FROM UNUSED HOLES 3 & 10.
- 4) INSTALL PINS IN CORRECT HOLES AS SHOWN ABOVE.
- 5) REINSTALL THE WEDGE ON THE 12 PIN DEUTSCH CONNECTOR.

NOTE:
SEE TERMINAL BLOCK
TORQUE SPECIFICATIONS CHART
PRIOR TO INSTALLING WIRES
IN THE TERMINAL BLOCKS.

TORQUE SPECIFICATIONS CHART					
ITEM NO.	L T I P / N	MIN TORQUE (lb in)	MAX TORQUE (lb in)	MIN TORQUE (Nm)	MAX TORQUE (Nm)
29	4227190	5.3	7.1	0.6	0.8
31	4264183	5.3	7.1	0.6	0.8
30	4228646	5.3	7.1	0.6	0.8
32	4264180	5.3	7.1	0.6	0.8

TURCK12 AND 3 PIN CONNECTORS		
CONNECTOR-PIN	DESTINATION	
WIRE CODE	WIRE COLOR	TERMINAL BLOCK
CAB1-01	ORN	101-L
CAB1-02	BLU	104-L
CAB1-03	WHT/BLK	208-L
CAB1-04	RED/BLK	209-L
CAB1-05	GRN/BLK	NC
CAB1-06	ORIG/BLK	NC
CAB1-07	BLU/BLK	107-L
CAB1-08	BLK/WHT	108-L
CAB1-09	GRN	109-L
CAB1-10	RED	110-L
CAB1-11	WHT	111-L
CAB1-12	BLK	112-L
CAB2-01	ORN	113-L
CAB2-02	BLU	114-L
CAB2-03	WHT/BLK	115-L
CAB2-04	RED/BLK	116-L
CAB2-05	GRN/BLK	117-L
CAB2-06	ORNB/LK	118-L
CAB2-07	BLU/BLK	119-L
CAB2-08	BLK/WHT	120-L
CAB2-09	GRN	121-L
CAB2-10	RED	122-L
CAB2-11	WHT	123-L
CAB2-12	BLK	124-L
CAB3-01	ORN	201-L
CAB3-02	BLU	202-L
CAB3-03	WHT/BLK	203-L
CAB3-04	RED/BLK	205-L
CAB3-05	GRN/BLK	210-L
CAB3-06	ORNB/LK	204-L
CAB3-07	BLU/BLK	206-L
CAB3-08	BLK/WHT	211-L
CAB3-09	GRN	212-L
CAB3-10	RED	214-L
CAB3-11	WHT	215-L
CAB3-12	BLK	216-L

LOWER HARNESS	
WIRE CODE	DESTINATION
WIRE CODE	TERMINAL BLOCK
CAB1-01	101-R
	102-R
CAB1-02	104-R
	105-R
	106-R
CAB1-07	107-R
CAB1-08	108-R
CAB1-09	109-R
CAB1-10	110-R
CAB1-11	111-R
CAB1-12	112-R
CAB2-01	113-R
CAB2-02	114-R
CAB2-03	115-R
CAB2-04	116-R
CAB2-05	117-R
CAB2-06	118-R
CAB2-07	119-R
CAB2-08	120-R
CAB2-09	121-R
CAB3-10	214-R
CAB3-11	215-R
CAB3-12	216-R

UPPER HARNESS	
WIRE CODE	DESTINATION
WIRE CODE	TERMINAL BLOCK
CAB2-10	122-R
CAB2-11	123-R
CAB3-01	201-R
CAB3-02	202-R
CAB3-09	212-R
CAB3-09	213-R
OD	204-R
0EA	206-R
12V2	211-R
GND	132-R

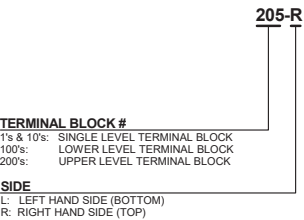
AC HARNESS	
WIRE COLOR	DESTINATION
WIRE COLOR	TERMINAL BLOCK
RED	226-R
BLK	228-R
LT GRN	128-L

EST1-J5 CONNECTOR *		
CONNECTOR-PIN	DESTINATION	
WIRE CODE	WIRE COLOR	3PIN CONNECTOR-ITEMS 104,105 & 106
EST1-05	GRN	PIN C
EST1-03	BLK	PIN B
EST1-10	WHT	PIN A

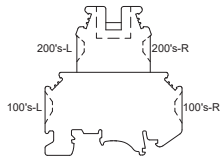
* CUT WIRES TO LENGTH NEEDED TO MATE WITH 3 PIN CONNECTOR ITEM 26 FROM THE E-STOP SWITCH.

JUMPER		
WIRE CODE	ORIGIN	DESTINATION
WIRE CODE	TERMINAL BLOCK	TERMINAL BLOCK
CAB3-09	213-L	225-L

LEGEND

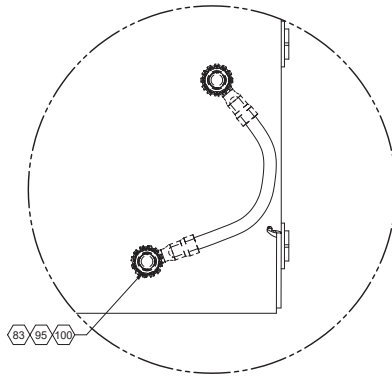
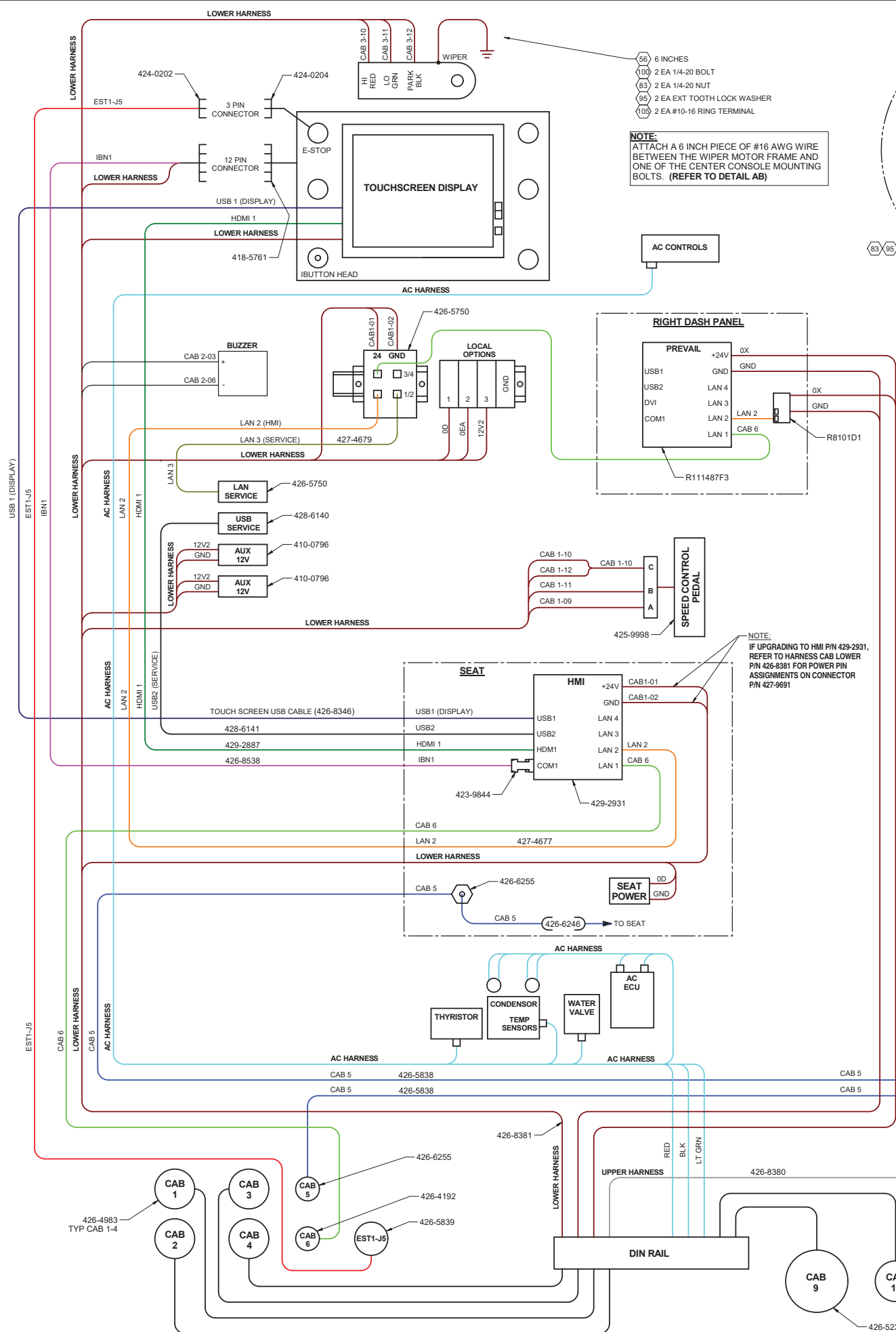


[: TERMINAL BRIDGE
- : SEPERATING PLATE
— : SPACER COVER

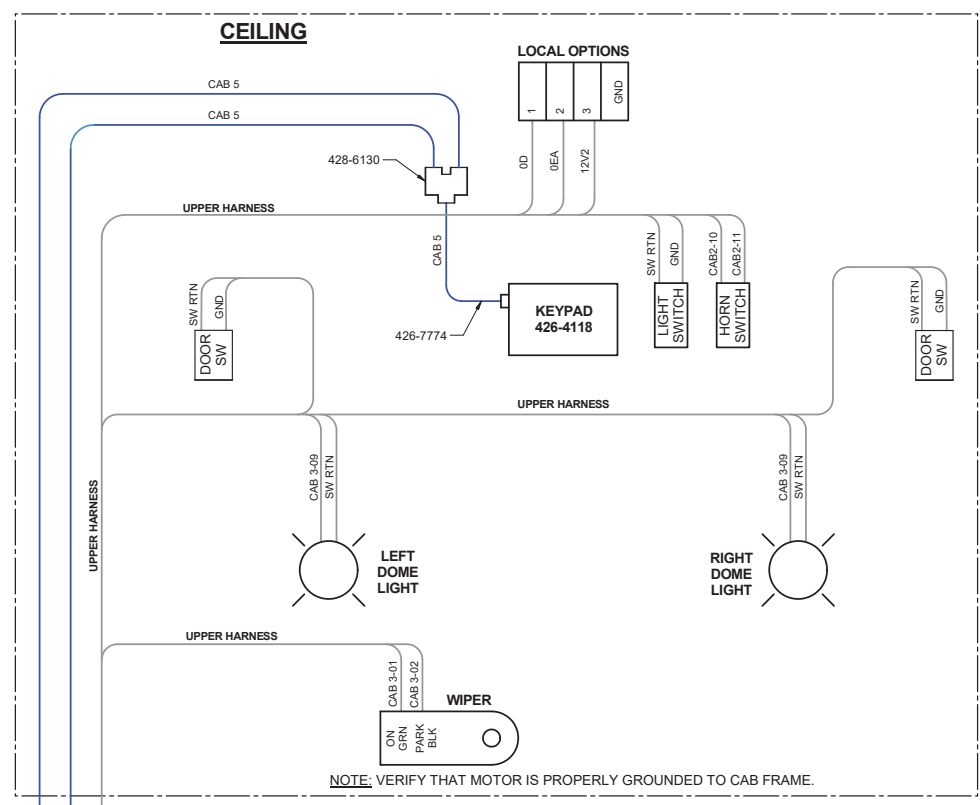


TERMINAL BLOCK LAYOUT

REV		DESCRIPTION	EN	DATE	CHK	APP
26		NO CHANGE THIS SHEET	1406904	2020-03-16	AKN	BBD JBD
F5	27	R111487F3 WAS 4268974 AT PREVAIL RIGHT DASH PANEL	1408158	2020-04-06	JFM	BBD JMS

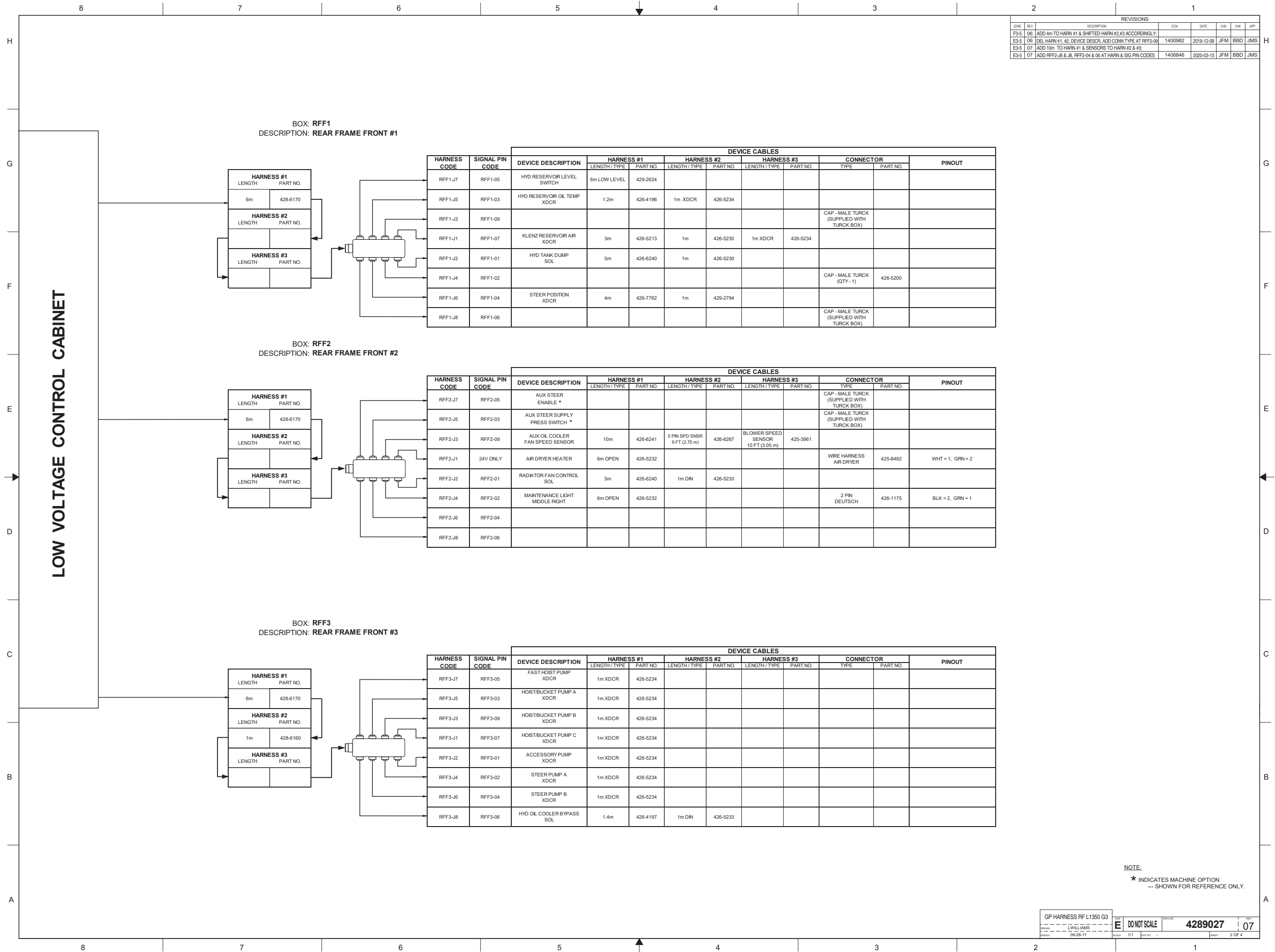


DETAIL AB
(FRONT WIPER MOTOR GND DETAIL)
FROM SECTION B-B SHEET-1



Front Frame Harness Group

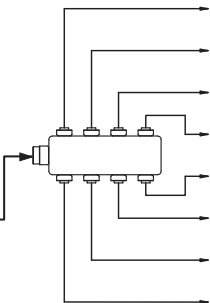
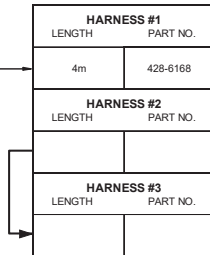
Rear Frame Harness Group



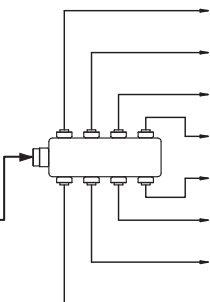
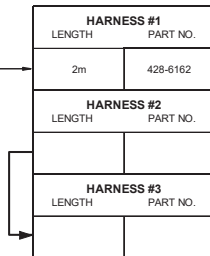
REVISIONS							
ZONE	REV	DESCRIPTION	EDN	DATE	CHG	CHK	APP
	06	NO CHANGE THIS SHEET	1400982	2019-12-09	JFM	BBD	JMS
	07	NO CHANGE THIS SHEET	1406846	2020-03-13	JFM	BBD	JMS

LOW VOLTAGE CONTROL CABINET

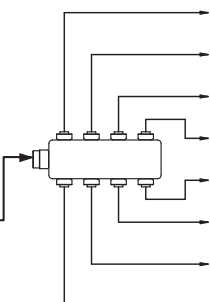
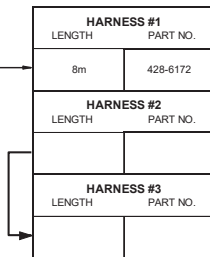
BOX: RFF4
DESCRIPTION: REAR FRAME FRONT #4

[illegible]

BOX: RFF5
DESCRIPTION: REAR FRAME FRONT #5

[illegible]

BOX: RAX1
DESCRIPTION: REAR AXLE #1



		DEVICE CABLES									
HARNESS CODE	SIGNAL PIN CODE	DEVICE DESCRIPTION	HARNESS #1		HARNESS #2		HARNESS #3		CONNECTOR		PINOUT
			LENGTH / TYPE	PART NO.	LENGTH / TYPE	PART NO.	LENGTH / TYPE	PART NO.	TYPE	PART NO.	
RAX1-J7	RAX1-05	REAR SERVICE BRAKES XDCR	1m XDCR	426-5234							
RAX1-J5	RAX1-03	REAR PARK BRAKES XDCR	1m XDCR	426-5234							
RAX1-J3	RAX1-09	REAR PARK BRAKES SOL	6m OPEN	426-5232					2 PIN DEUTSCH	426-1175	BLK = 1, GRN = 2
RAX1-J1	RAX1-07	REAR DRIVER LUBE FLOW SWITCHES	TEE	427-0079	5m	426-6240	6m OPEN 6m OPEN	426-5232 426-5232	2 PIN DEUTSCH 2 PIN DEUTSCH	426-1175 426-1175	BLK = 1, WHT = 2 BLK = 1, WHT = 2
RAX1-J2	RAX1-01								CAP - MALE TURCK (SUPPLIED WITH TURCK BOX)		
RAX1-J4	RAX1-02								CAP - MALE TURCK (QTY - 1)	426-5200	
RAX1-J6	RAX1-04								CAP - MALE TURCK (QTY - 1)	426-5200	
RAX1-J8	RAX1-06								CAP - MALE TURCK (QTY - 1)	426-5200	

NOTE:

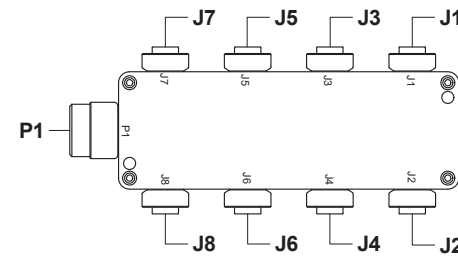
* INDICATES MACHINE OPTION
--- SHOWN FOR REFERENCE ONLY

REVISIONS							
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	CHK	APP
E5-6	06	ADD 4.3m TO HARN #1 & 1m TO HARN #2 AND					
E5-6	06	SHIFTED OTHERS ACCORDINGLY AT EIC3 CONT.	1400982	2019-12-09	JFM	BBD	JMS
	07	NO CHANGE THIS SHEET	1406846	2020-03-13	JFM	BBD	JMS

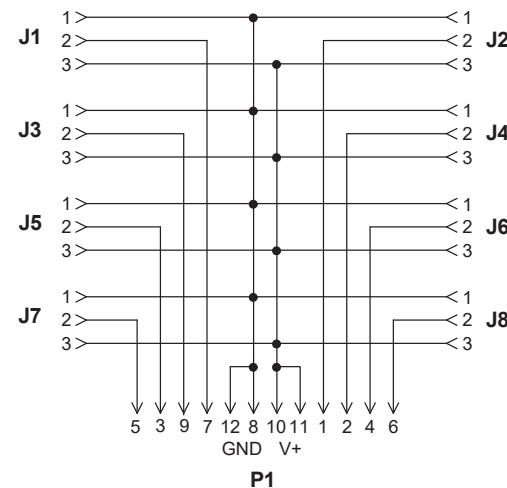
		HARNESS #1		HARNESS #2		HARNESS #3		CONNECTOR	
CABLE	DESCRIPTION	LENGTH / TYPE	PART NO.	LENGTH / TYPE	PART NO.	LENGTH / TYPE	PART NO.	TYPE	PART NO.
KLZ1	KLENZ BOX	4m	428-6168	1.5m	428-6161				
MBR1	MIRROR BAR	6m	428-6170	1.5m	428-6161				
MBR2	MIRROR BAR	6m	428-6170	1.5m	428-6161				
DCP1	DRIVE COOLING PUMP	10m	426-6241	2m	426-5231				
EIC1	ENGINE INTERFACE CABINET	10m	428-6173	3m	428-6167				
EIC3	ENGINE INTERFACE CABINET	4.3m	426-5838	CAN Y MALE - 2 FEM	428-6130	4.3m	426-5838		
	(EIC3 CONT.)	STEER VALVE	428-2857 [END]	0.5m	426-6246	0.4m/WATER PUMP	426-7798 [END]		
		CAN Y MALE - 2 FEM	428-6130	0.5m	426-6246	CAN Y MALE - 2 FEM	428-6130		
	(EIC3 CONT.)	1m	426-6249	0.4m/WATER PUMP	426-7798 [END]				
		4.3m	426-5838						
CSP1	CONTROL SWITCH PANEL	10m	428-6173	2m	428-6162				
RCL1	REAR COWL	10m	428-6173	4m	428-6168				
RCL2	REAR COWL	10m	426-6241	4m	426-7762				
SRC1	SR CABINET	1m	428-6160	HARNESS PROVIDED AS PART OF SR CABINET ASSY					
SRC2	SR CABINET	1m	426-6249	HARNESS PROVIDED AS PART OF SR CABINET ASSY					
LLC1	LADDER LIGHT CONTROL	5m	426-6240	1m	426-5230				
CAB1	CAB	1.5m	428-6161						
CAB2	CAB	1.5m	428-6161						
CAB3	CAB	1.5m	428-6161						
CAB4	CAB	1.5m	428-6161						
CAB5	CAB	1.5m	426-4188						
CAB6	CAB	1.5m	426-4195						
CAB9	CAB TO AC CONDENSOR	5.2m	428-6133						
CAB10	CAB TO AC CLUTCH	1.4m	426-4197	1m DIN	426-5233				

CABLE	DESCRIPTION	LENGTH / TYPE	PART NO.	PINOUT
CSP2	LADDER LIMIT SWITCH	6m OPEN	426-5232	GRN = NO CONNECTION WHT & BLK = CONNECT TOGETHER AT ONE SIDE OF THE LIMIT SWITCH TERMINAL

BREAKOUT BOX 12 PIN - 8 X 3 PIN
(P/N: 426-5235)
(ALL BOXES EXCEPT EST1)

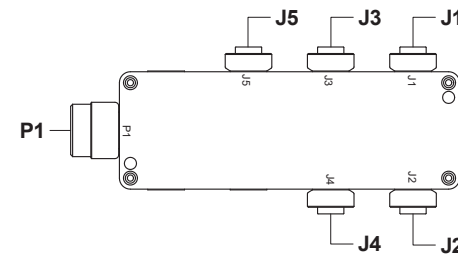


TOP VIEW - BREAKOUT BOX

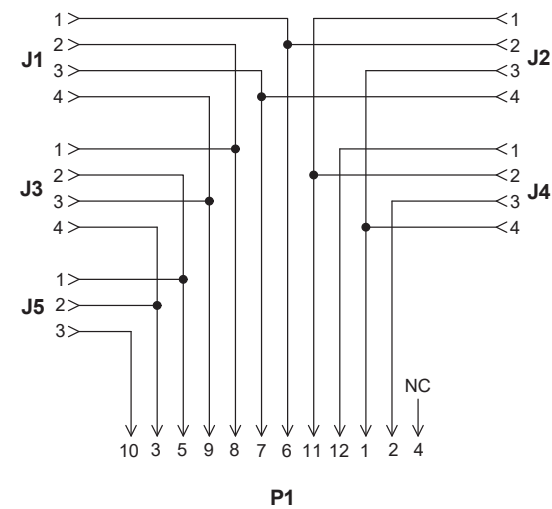


SCHEMATIC - BREAKOUT BOX

BREAKOUT BOX - 5 PORT
(P/N: 427-4507)
(EST1 BOX ONLY)



TOP VIEW - BREAKOUT BOX



SCHEMATIC - BREAKOUT BOX

NOTE:
* INDICATES MACHINE OPTION
--- SHOWN FOR REFERENCE ONLY.

GP HARNESS RF L1350 G3		SIZE	DRAWING NO.		REV
LWILLIAMS		E	DO NOT SCALE		07
DRAWN	08-28-17	SCALE	1/1	EST WT	-
ISSUED		SHEET	4 OF 4		

Fluid Power Diagram

ZONE		REV	DESCRIPTION	ECN	DATE	CHK	CHK	APP
00		RELEASE		1343928	05-12-17	KMD	EER	JBD

ITEM	PART NO.	DESCRIPTION
1	428-0265	ASSY BUCKET CYL STD L1350G2 R
2	428-0266	ASSY BUCKET CYL STD L1350G2 L
3	428-0268	ASSY BUCKET CYL HL1350G2 R
4	428-0269	ASSY BUCKET CYL HL1350G2 L
5	428-0226	GP HOSE BKT CYL SL L1350 G2
6	428-0227	GP HOSE BKT CYL HL L1350G2

ITEM	PART NO.	DESCRIPTION
37	428-9633	GP HDW RADIATOR L1250 G3
38	428-9634	GP HOSE RADIATOR L1250 G3
39	428-0221	GP HOSE RDTR SUB-ASSY L1350 G2

ITEM	PART NO.	DESCRIPTION
7	427-1125	GP HOIST CYL L1350 G2

ITEM	PART NO.	DESCRIPTION
16	427-8032	GP HOSE PIVOT LOOP L1350 G2

ITEM	PART NO.	DESCRIPTION
35	428-8449	GP HDW DRIVER FILTER RF L1250G3
36	428-0220	GP HOSE REAR DRIVER L1350 G2

ITEM	PART NO.	DESCRIPTION
8	428-8368	GP HDW HYD MAIN FF L1250 G3
9	428-8369	GP HOSE HYD MAIN FF L1250 G3
10	427-4767	GP HW HYD PANEL L13-2350 G2
11	427-0966	GP HOSE HYD PANEL L13-2350 G2
12	427-8037	GP HW PILOT/ACC FF L1350 G2
13	427-8038	GP HOSE PILOT/ACC FF L1350 G2
14	428-8448	GP HW DRIVER FILTER FF L1250G3
15	428-8450	GP HOSE DRVR FLTR FF L1250G3

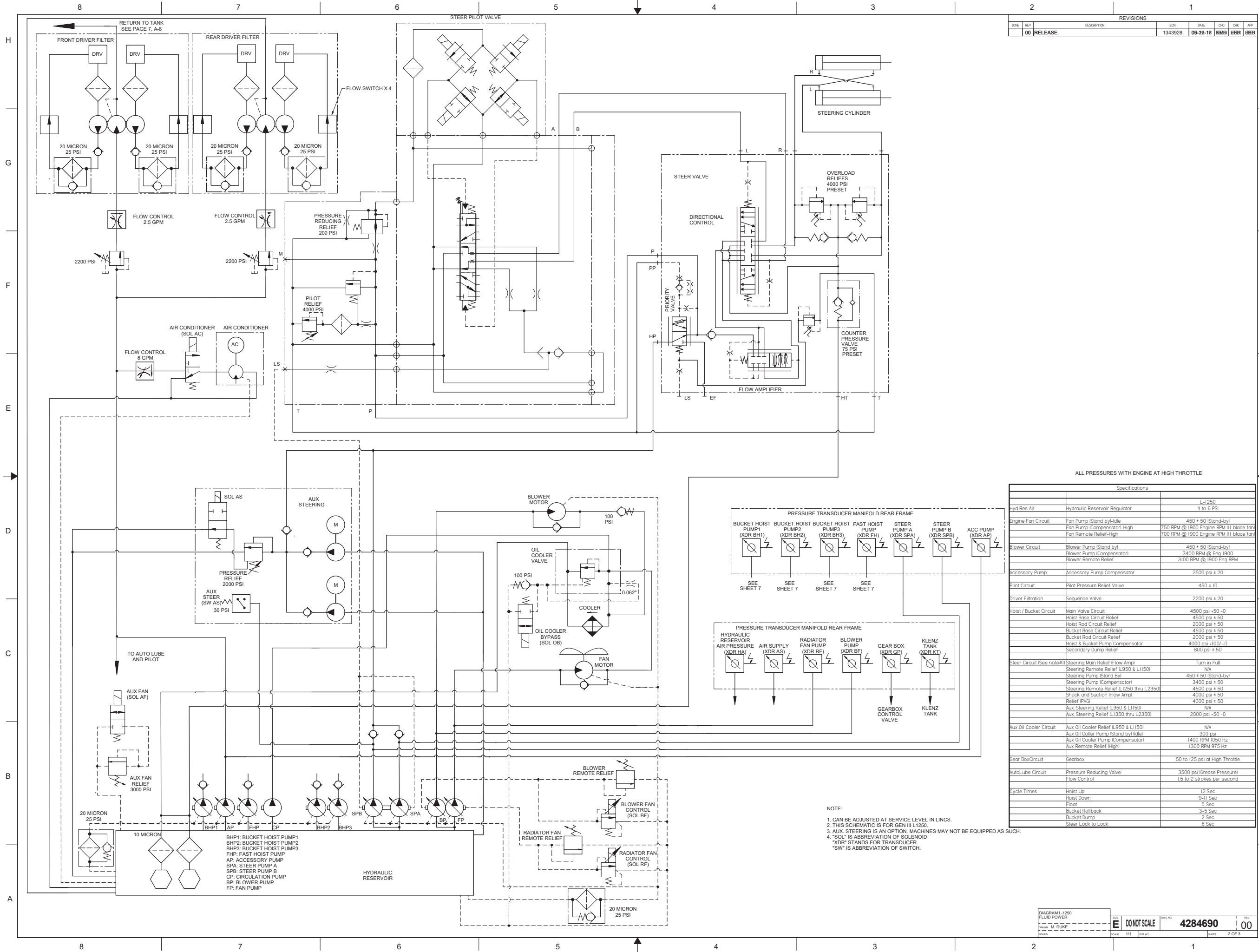
ITEM	PART NO.	DESCRIPTION
17	428-0201	GP HDW HYD RES L1350 G2
18	428-0202	GP HOSE HYD RES L1350 G2
19	428-0207	GP HW HYD RES INSTL L1350 G2
20	428-9625	GP HDW HYD PUMP INST L1250 G3
21	428-9626	GP HOSE HYD PUMP INST L1250 G3
22	428-9627	GP HDW AFTER GBOX L1250G3
23	428-9628	GP HOSE AFTER GBOX L1250G3
24	428-9629	GP HDW UNDER GBOX L1250G3
25	428-9630	GP HOSE UNDER GBOX L1250G3
26	428-9631	GP HDW UNDER PWR UNIT L1250 G3
27	428-9632	GP HOSE UNDER PWR UNIT L1250 G3
28	427-7960	GP HW STR CYL L1850 G2
29	427-7961	GP HOSE STR CYL L1850 G2
30	428-8375	GP INSTL HYD PUMP GBOX
31	428-8366	ASSY HYD PUMP GBOX L1250 G3
32	428-8367	GP PUMP SUCTION L1250 G3
33	428-0224	GP HW AUX STEER L1350 G2
34	428-0225	GP HOSE AUX STEER L1350 G2

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UNLESS OTHERWISE SPECIFIED:
• DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS.
• TOLERANCES ON:
ANGLES ±1°
FRACTIONS ±.016
XX DECIMAL ±.03
XXX DECIMAL ±.015
• MACHINED CORNERS: .064 X .45
• WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL.

FIRST USED ON/CONTRACT NO.
DWN mduke
CHK JBD
ENGR
PROD ENGR
PROJ APPROVAL
MATL

LeTourneau, Inc.
REF FLUID PWR DIA L1250
E DO NOT SCALE 4284690 1 00
SCALE 1/1 1 OF 3

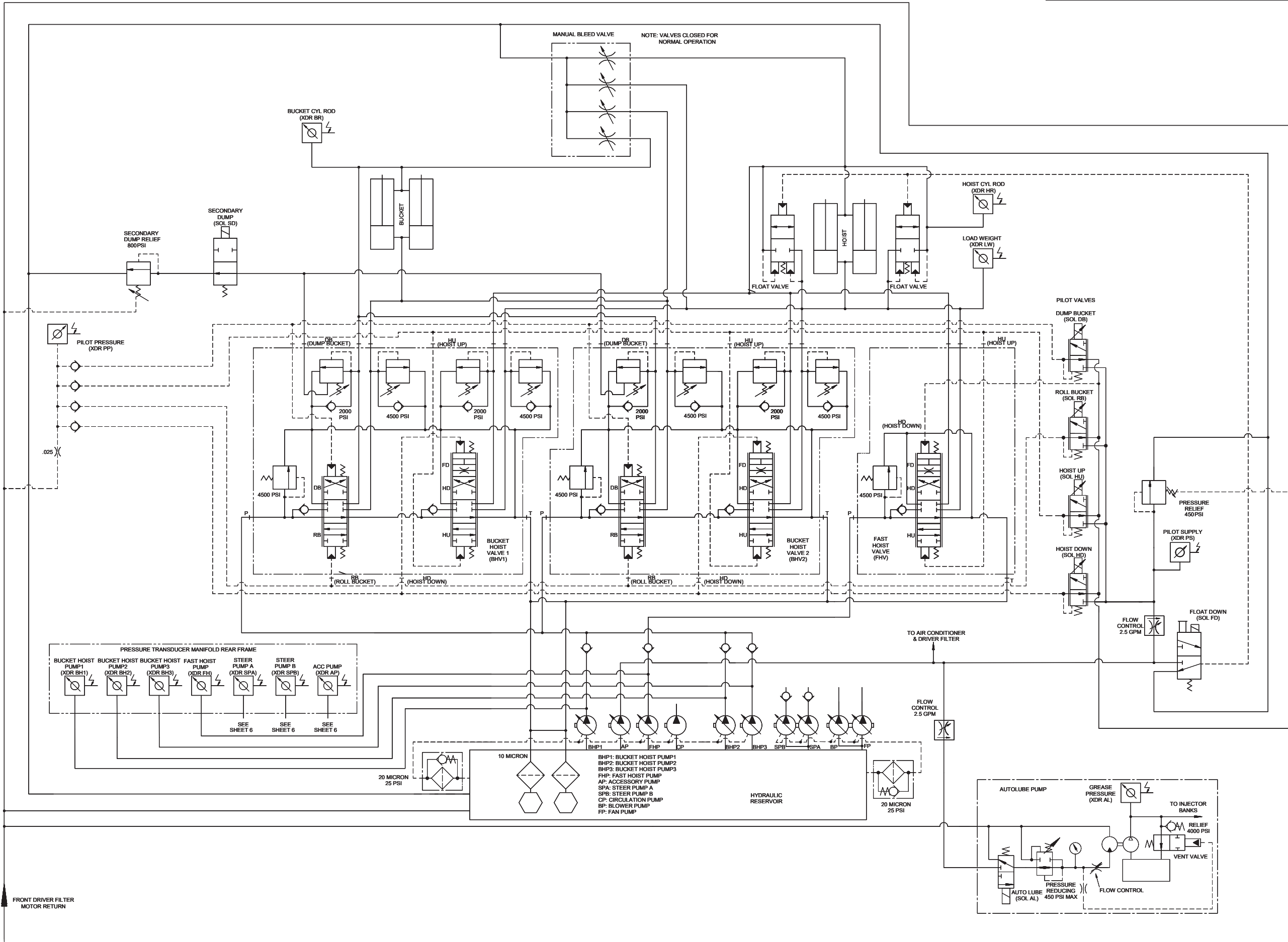


REVISIONS						
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	APP
00	RELEASE		1343928	09-28-18	KMD	BER

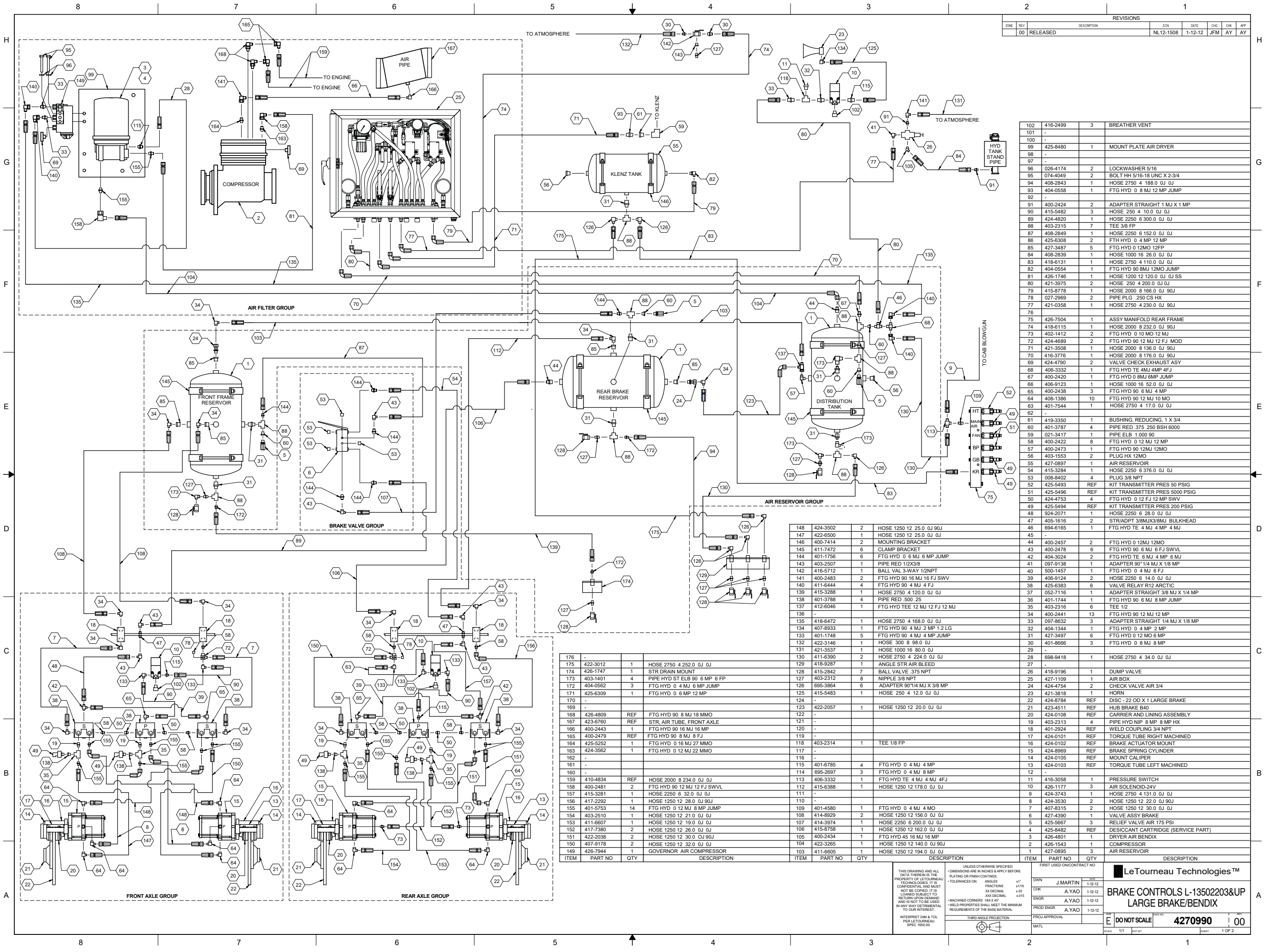
Specifications		
Hyd Res Air	Hydraulic Reservoir Regulator	L-1250 4 to 6 PSI
Engine Fan Circuit	Fan Pump (Stand by-Ide)	450 ± 50 (Stand-by)
	Fan Pump (Compensator)-High	750 RPM @ 1900 Engine RPM (11 blade fan)
	Fan Remote Relief-High	700 RPM @ 1900 Engine RPM (11 blade fan)
Blower Circuit	Blower Pump (Stand by)	450 ± 50 (Stand-by)
	Blower Pump (Compensator)	3400 RPM @ Eng 1900
	Blower Remote Relief	3100 RPM @ 1900 Eng RPM
Accessory Pump	Accessory Pump Compensator	2500 psi ± 20
Pilot Circuit	Pilot Pressure Relief Valve	450 ± 10
Driver Filtration	Sequence Valve	2200 psi ± 20
Hoist / Bucket Circuit	Main Valve Circuit	4500 psi ± 50 -0
	Hoist Base Circuit Relief	4500 psi ± 50
	Hoist Rod Circuit Relief	2000 psi ± 50
	Bucket Base Circuit Relief	4500 psi ± 50
	Bucket Rod Circuit Relief	2000 psi ± 50
	Hoist & Bucket Pump Compensator	4000 psi ±100/-0
Steer Circuit (See note#1)	Steering Main Relief (Flow Amp)	Turn in Full
	Steering Remote Relief (L950 & L1150)	N/A
	Steering Pump (Stand By)	450 ± 50 (Stand-by)
Aux Oil Cooler Circuit	Steering Pump (Compensator)	3400 psi ± 50
	Steering Remote Relief (L1250 thru L2350)	4500 psi ± 50
	Shock and Suction Flow Amp	4000 psi ± 50
	Relief PVQ	4000 psi ± 50
	Aux Steering Relief (L950 & L1150)	N/A
Gear Box Circuit	Aux Steering Relief (L1350 thru L2350)	2000 psi ± 50 -0
	Aux Oil Cooler Relief (L950 & L1150)	N/A
	Aux Oil Cooler Pump (Stand by) Ideal	300 psi
	Aux Oil Cooler Pump (Compensator)	1400 RPM 1050 Hz
AutoLube Circuit	Aux Remote Relief #high	1300 RPM 975 Hz
	Gearbox	50 to 125 psi at High Throttle
	Pressure Reducing Valve	3500 psi (Grease Pressure)
Cycle Times	Flow Control	1.5 to 2 strokes per second
	Hoist Up	12 Sec
Steer Lock to Lock	Hoist Down	9-11 Sec
	Float	5 Sec
	Bucket Rollback	3-5 Sec
	Bucket Dump	2 Sec
		6 Sec

NOTE:
1. CAN BE ADJUSTED AT SERVICE LEVEL IN Lincs.
2. THIS SCHEMATIC IS FOR GEN III L1250.
3. AUX. STEERING IS AN OPTION. MACHINES MAY NOT BE EQUIPPED AS SUCH.
4. "SOL" IS ABBREVIATION OF SOLENOID
"XDR" STANDS FOR TRANSDUCER
"SW" IS ABBREVIATION OF SWITCH.

REVISIONS						
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	APP
00	RELEASE		1343928	09-28-18	END	END



Brake Controls Diagram

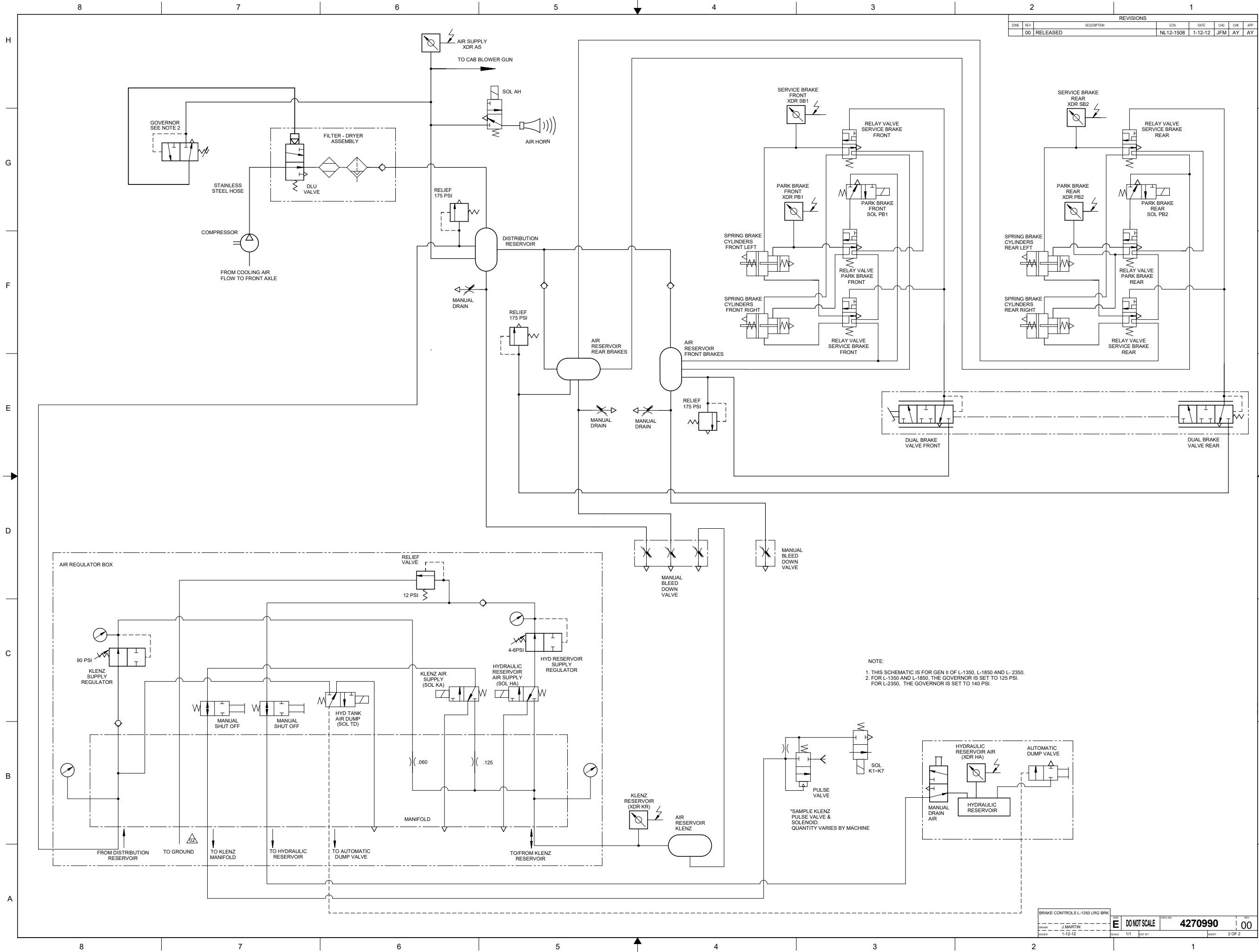


REVISIONS									
ZONE	REV	DESCRIPTION	ECN	DATE	CHK	CHK	APP		
00	RELEASED		NL12-1508	1-12-12	JFM	AY	AY		

102	416-2499	3	BREATHING VENT
101	-		
100	-		
99	425-8480	1	MOUNT PLATE AIR DRYER
98	-		
97	-		
96	026-4174	2	LOCKWASHER 5/16
95	074-4049	2	BOLT 1/4-16-18 UNC X 2-3/4
94	408-2843	1	HOSE 2750 4 188.0 OJ OJ
93	404-0558	1	FTG HYD 0 8 MJ 12 MP JUMP
92	-		
91	400-2424	2	ADAPTER STRAIGHT 1 MJ X 1 MP
90	415-5482	3	HOSE 250 4 10.0 OJ OJ
89	424-4820	1	HOSE 2250 6 300.0 OJ OJ
88	403-2315	7	TEE 3/8 FP
87	408-2849	1	HOSE 2250 6 152.0 OJ OJ
86	425-6308	2	FTG HYD 0 4 MP 12 MP
85	427-3487	5	FTG HYD 0 12MO 12FP
84	408-2839	1	HOSE 1000 16 26.0 OJ OJ
83	418-6131	1	HOSE 2750 4 110.0 OJ OJ
82	404-0554	1	FTG HYD 90 8MJ 12MO JUMP
81	426-1746	1	HOSE 1200 12 120.0 OJ OJ SS
80	421-3975	2	HOSE 250 4 200.0 OJ OJ
79	415-8778	1	HOSE 2000 8 166.0 OJ 90J
78	027-2869	2	PIPE PLG 350 CS HK
77	421-0358	1	HOSE 2750 4 230.0 OJ 90J
76	-		
75	426-7504	1	ASSY MANIFOLD REAR FRAME
74	418-6115	1	HOSE 2000 8 232.0 OJ 90J
73	402-1412	2	FTG HYD 0 10 MO 12 MJ
72	424-4689	2	FTG HYD 90 12 MJ 12 FJ MOD
71	421-3508	1	HOSE 2000 8 136.0 OJ 90J
70	416-3776	1	HOSE 2000 8 176.0 OJ 90J
69	424-4790	2	VALVE CHECK EXHAUST ASY
68	406-3332	1	FTG HYD TE 4MJ 4MP 4FJ
67	400-2420	1	FTG HYD 0 8MJ 6MP JUMP
66	406-9123	1	HOSE 1000 16 52.0 OJ OJ
65	400-2438	3	FTG HYD 90 6 MJ 4 MP
64	408-1386	10	FTG HYD 90 12 MJ 10 MO
63	401-7544	1	HOSE 2750 4 17.0 OJ OJ
62	-		
61	419-3350	1	BUSHING, REDUCING, 1 X 3/4
60	401-3787	4	PIPE RED 375 250 BSH 6000
59	021-3417	1	PIPE ELB 1.000 90
58	400-2422	8	FTG HYD 0 12 MJ 12 MP
57	400-2473	1	FTG HYD 90 12MJ 12MO
56	403-1553	2	PLUG HX 12MO
55	427-0897	1	AIR RESERVOIR
54	415-3284	1	HOSE 2250 6 376.0 OJ OJ
53	008-8402	4	PLUG 3/8 NPT
52	425-5493	REF	KIT TRANSMITTER PRES 50 PSIG
51	425-5498	REF	KIT TRANSMITTER PRES 5000 PSIG
50	424-4753	1	FTG HYD 0 12 FJ 12 MP SWV
49	425-5494	REF	KIT TRANSMITTER PRES 200 PSIG
48	924-2071	1	HOSE 2250 6 28.0 OJ OJ
47	405-1616	2	STRADPT 3/8MJX3/8MJ BULKHEAD
46	694-6165	1	FTG HYD TE 4 MJ 4 MP 4 MJ
45	-		
44	400-2457	2	FTG HYD 0 12MJ 12MO
43	400-2478	6	FTG HYD 90 6 MJ 6 FJ SWVL
42	404-3024	2	FTG HYD TE 6 MJ 4 MP 6 MJ
41	097-9138	1	ADAPTER 90° 1/4 MJ X 1/8 MP
40	500-1457	1	FTG HYD 0 4 MJ 6 FJ
39	408-9124	2	HOSE 2250 6 14.0 OJ OJ
38	425-0383	6	VALVE RELAY R12 ARCTIC
37	052-7116	1	ADAPTER STRAIGHT 3/8 MJ X 1/4 MP
36	401-1744	1	FTG HYD 90 6 MJ 8 MP JUMP
35	403-2316	6	TEE 1/2
34	400-2441	13	FTG HYD 90 12 MJ 12 MP
33	097-8632	3	ADAPTER STRAIGHT 1/4 MJ X 1/8 MP
32	404-1344	1	FTG HYD 0 4 MP 2 MP
31	427-3497	6	FTG HYD 0 12 MO 6 MP
30	401-8666	3	FTG HYD 0 8 MJ 8 MP
29	-		
28	698-9418	1	HOSE 2750 4 34.0 OJ OJ
27	-		
26	418-9196	1	DUMP VALVE
25	427-1109	1	AIR BOX
24	424-4754	2	CHECK VALVE AIR 3/4
23	421-3818	1	HORN
22	424-8784	REF	DISC - 22 OD X 1 LARGE BRAKE
21	423-4511	REF	HUB BRAKE B40
20	424-0108	REF	CARRIER AND LINING ASSEMBLY
19	403-2313	4	PIPE HYD NIP 8 MP 8 MP HX
18	401-2924	REF	WELD COUPLING 3/4 NPT
17	424-0101	REF	TORQUE TUBE RIGHT MACHINED
16	424-0102	REF	BRAKE ACTUATOR MOUNT
15	424-8969	REF	BRAKE SPRING CYLINDER
14	424-0105	REF	MOUNT CALIPER
13	424-0103	REF	TORQUE TUBE LEFT MACHINED
12	-		
11	416-3058	1	PRESSURE SWITCH
10	426-1177	3	AIR SOLENOID-24V
9	424-3743	1	HOSE 2750 4 131.0 OJ OJ
8	424-3530	2	HOSE 1250 12 22.0 OJ 90J
7	407-8315	2	HOSE 1250 12 30.0 OJ OJ
6	427-4390	1	VALVE ASSY BRAKE
5	425-5667	3	RELIEF VALVE AIR 175 PSI
4	425-8482	REF	DESICCANT CARTRIDGE (SERVICE PART)
3	426-4801	1	DRYER AIR BENDIX
2	426-1543	1	COMPRESSOR
1	427-0895	3	AIR RESERVOIR

ITEM	PART NO	QTY	DESCRIPTION	ITEM	PART NO	QTY	DESCRIPTION
176	-			148	424-3502	2	HOSE 1250 12 25.0 OJ 90J
175	422-3012	1	HOSE 2750 4 252.0 OJ OJ	147	422-6500	1	HOSE 1250 12 25.0 OJ OJ
174	426-1747	1	STR DRAIN MOUNT	146	400-7414	2	MOUNTING BRACKET
173	403-1401	4	PIPE HYD ST ELB 90 6 MP 6 FP	145	411-7472	6	CLAMP BRACKET
172	404-0562	3	FTG HYD 0 4 MJ 8 MP JUMP	144	401-1756	6	FTG HYD 0 6 MJ 6 MP JUMP
171	425-6309	1	FTG HYD 0 6 MP 12 MP	143	403-2507	1	PIPE RED 1/2X3/8
169	-			142	416-5712	1	BALL VAL 3-WAY 1/2NPT
168	426-4809	REF	FTG HYD 90 8 MJ 18 MMO	141	400-2483	2	FTG HYD 90 16 MJ 16 FJ SWV
167	423-6760	REF	STR. AIR TUBE, FRONT AXLE	140	411-8444	4	FTG HYD 90 4 MJ 4 FJ
166	400-2443	1	FTG HYD 90 16 MJ 16 MP	139	415-3288	1	HOSE 2750 4 120.0 OJ OJ
165	400-2479	REF	FTG HYD 90 6 MJ 8 FJ	138	401-3788	4	PIPE RED 500 25
164	425-5252	1	FTG HYD 0 16 MJ 27 MMO	137	412-6046	1	FTG HYD TEE 12 MJ 12 FJ 12 MJ
163	424-3562	1	FTG HYD 0 12 MJ 22 MMO	136	-		
162	-			135	418-6472	1	HOSE 2750 4 168.0 OJ OJ
161	-			134	407-8933	1	FTG HYD 90 4 MJ 2 MP 1.2 LG
160	-			133	401-1748	5	FTG HYD 90 4 MJ 4 MP JUMP
159	410-4834	REF	HOSE 2000 8 234.0 OJ OJ	132	422-3146	1	HOSE 300 8 98.0 OJ
158	400-2481	2	FTG HYD 90 12 MJ 12 FJ SWVL	131	421-3537	1	HOSE 1000 16 80.0 OJ
157	415-3281	1	HOSE 2250 6 32.0 OJ OJ	130	411-6390	2	HOSE 2750 4 224.0 OJ OJ
156	417-2292	1	HOSE 1250 12 28.0 OJ 90J	129	418-9287	1	ANGLE STR AIR BLEED
155	401-5753	14	FTG HYD 0 12 MJ 8 MP JUMP	128	415-2842	7	BALL VALVE 3/75 NPT
154	403-2510	1	HOSE 1250 12 21.0 OJ OJ	127	403-2312	6	NIPPLE 3/8 NPT
153	411-6607	1	HOSE 1250 12 19.0 OJ OJ	126	695-3864	6	ADAPTER 90° 1/4 MJ X 3/8 MP
152	417-7380	2	HOSE 1250 12 26.0 OJ OJ	125	415-5483	1	HOSE 250 4 12.0 OJ OJ
151	422-2038	2	HOSE 1250 12 30.0 OJ 90J	124	-		
150	407-9178	2	HOSE 1250 12 140.0 OJ 90J	123	422-2057	1	HOSE 1250 12 20.0 OJ OJ
149	426-7944	1	GOVERNOR AIR COMPRESSOR	122	-		
148	-			121	-		
147	-			120	-		
146	-			119	-		
145	-			118	403-2314	1	TEE 1/8 FP
144	-			117	-		
143	-			116	-		
142	-			115	401-6785	4	FTG HYD 0 4 MJ 4 MP
141	-			114	695-2697	3	FTG HYD 0 4 MJ 8 MP
140	-			113	406-3332	1	FTG HYD TE 4 MJ 4 MJ 4FJ
139	-			112	415-6386	1	HOSE 1250 12 178.0 OJ OJ
138	-			111	-		
137	-			110	-		
136	-			109	401-4580	1	FTG HYD 0 4 MJ 4 MO
135	-			108	414-8929	2	HOSE 1250 12 156.0 OJ OJ
134	-			107	414-3974	1	HOSE 2250 6 200.0 OJ OJ
133	-			106	415-8758	1	HOSE 1250 12 162.0 OJ OJ
132	-			105	400-2434	1	FTG HYD 45 16 MJ 16 MP
131	-			104	422-3265	1	HOSE 1250 12 140.0 OJ 90J
130	-			103	411-6605	1	HOSE 1250 12 194.0 OJ OJ

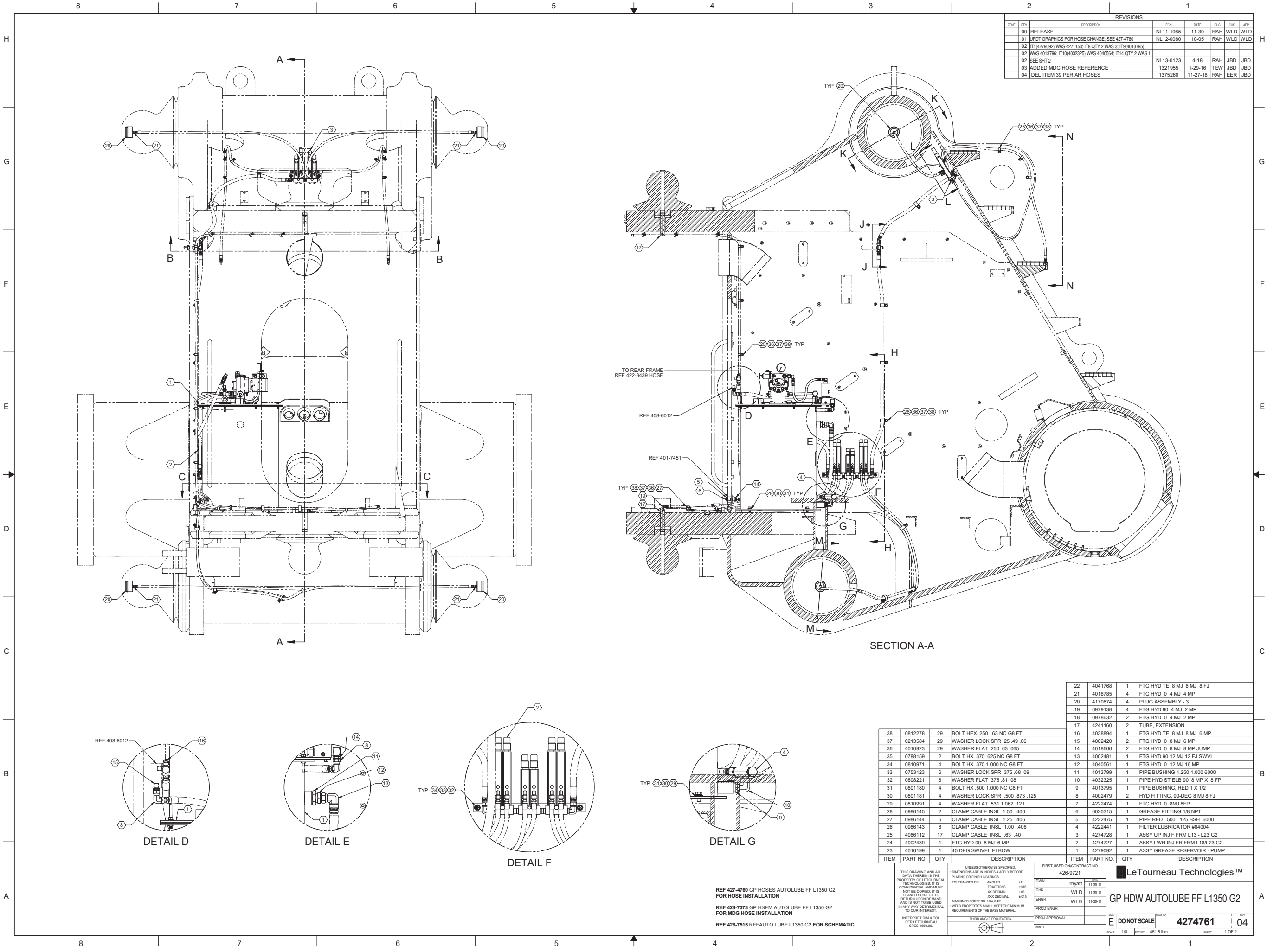
ITEM	PART NO	QTY	DESCRIPTION
102	416-2499	3	BREATHING VENT
101	-		
100	-		
99	425-8480	1	MOUNT PLATE AIR DRYER
98	-		
97	-		
96	026-4174	2	LOCKWASHER 5/16
95	074-4049	2	BOLT 1/4-16-18 UNC X 2-3/4
94	408-2843	1	HOSE 2750 4 188.0 OJ OJ
93	404-0558	1	FTG HYD 0 8 MJ 12 MP JUMP
92	-		
91	400-2424	2	ADAPTER STRAIGHT 1 MJ X 1 MP
90	415-5482	3	HOSE 250 4 10.0 OJ OJ
89	424-4820	1	HOSE 2250 6 300.0 OJ OJ
88	403-2315	7	TEE 3/8 FP
87	408-2849	1	HOSE 2250 6 152.0 OJ OJ
86	425-6308	2	FTG HYD 0 4 MP 12 MP
85	427-3487	5	FTG HYD 0 12MO 12FP
84	408-2839	1	HOSE 1000 16 26.0 OJ OJ
83	418-6131	1	HOSE 2750 4 110.0 OJ OJ
82	404-0554	1	FTG HYD 90 8MJ 12MO JUMP
81	426-1746	1	HOSE 1200 12 120.0 OJ OJ SS
80	421-3975	2	HOSE 250 4 200.0 OJ OJ
79	415-8778	1	HOSE 2000 8 166.0 OJ 90J
78	027-2869	2	PIPE PLG 350 CS HK
77	421-0358	1	HOSE 2750 4 230.0 OJ 90J
76	-		
75	426-7504	1	ASSY MANIFOLD REAR FRAME
74	418-6115	1	HOSE 2000 8 232.0 OJ 90J
73	402-1412	2	FTG HYD 0 10 MO 12 MJ
72	424-4689	2	FTG HYD 90 12 MJ 12 FJ MOD
71	421-3508	1	HOSE 2000 8 136.0 OJ 90J
70	416-3776	1	HOSE 2000 8 176.0 OJ 90J
69	424-4790	2	VALVE CHECK EXHAUST ASY
68	406-3332	1	FTG HYD TE 4MJ 4MP 4FJ
67	400-2420	1	FTG HYD 0 8MJ 6MP JUMP
66	406-9123	1	HOSE 1000 16 52.0 OJ OJ
65	400-2438	3	FTG HYD 90 6 MJ 4 MP
64	408-1386	10	FTG HYD 90 12 MJ 10 MO
63	401-7544	1	HOSE 2750 4 17.0 OJ OJ
62	-		
61	419-3350	1	BUSHING, REDUCING, 1 X 3/4
60	401-3787	4	PIPE RED 375 250 BSH 6000
59	021-3417	1	PIPE ELB 1.000 90
58	400-2422	8	FTG HYD 0 12 MJ 12 MP
57	400-2473	1	FTG HYD 90 12MJ 12MO
56	403-1553	2	PLUG HX 12MO
55	427-0897	1	AIR RESERVOIR
54	415-3284	1	HOSE 2250 6 376.0 OJ OJ
53	008-8402	4	PLUG 3/8 NPT
52	425-5493	REF	KIT TRANSMITTER PRES 50 PSIG
51	425-5498	REF	KIT TRANSMITTER PRES 5000 PSIG
50	424-4753	1	FTG HYD 0 12 FJ 12 MP SWV
49	425-5494	REF	KIT TRANSMITTER PRES 200 PSIG
48	924-2071	1	HOSE 2250 6 28.0 OJ OJ
47	405-1616	2	STRADPT 3/8MJX3/8MJ BULKHEAD
46	694-6165	1	FTG HYD TE 4 MJ 4 MP 4 MJ
45	-		
44	400-2457	2	FTG HYD 0 12MJ 12MO
43	400-2478	6	FTG HYD 90 6 MJ 6 FJ SWVL
42	404-3024	2	FTG HYD TE 6 MJ 4 MP 6 MJ
41	097-9138	1	ADAPTER 90° 1/4 MJ X 1/8 MP
40	500-1457	1	FTG HYD 0 4 MJ 6 FJ
39	408-9124	2	HOSE 2250 6 14.0 OJ OJ
38	425-0383	6	VALVE RELAY R12 ARCTIC
37	052-7116	1	ADAPTER STRAIGHT 3/8 MJ X 1/4 MP
36	401-1744	1	FTG HYD 90 6 MJ 8 MP JUMP
35	403-2316	6	TEE 1/2
34	400-2441	13	FTG HYD 90 12 MJ 12 MP
33	097-8632	3	ADAPTER STRAIGHT 1/4 MJ X 1/8 MP
32	404-1344	1	FTG HYD 0 4 MP 2 MP
31	427-3497	6	FTG HYD 0 12 MO 6 MP
30	401-8666	3	FTG HYD 0 8 MJ 8 MP
29	-		
28	698-9418	1	HOSE 2750 4 34.0 OJ OJ
27	-		
26	418-9196	1	DUMP VALVE
25	427-1109	1	AIR BOX
24	424-4754	2	CHECK VALVE AIR 3/4
23	421-3818		



REVISIONS						
ZONE	REV	DESCRIPTION	EN	DATE	CHK	APP
00	RELEASED		NL12-1508	1-12-12	JFM	AY

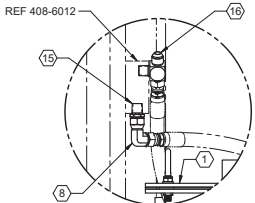
NOTE:
1. THIS SCHEMATIC IS FOR GEN II OF L-1350, L-1850 AND L-2350.
2. FOR L-1350 AND L-1850, THE GOVERNOR IS SET TO 125 PSI.
FOR L-2350, THE GOVERNOR IS SET TO 140 PSI.

Front Frame
Auto Lube Hardware Group

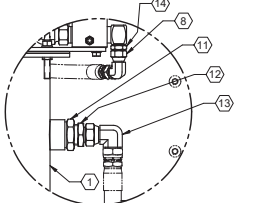


ZONE		REV	DESCRIPTION	REVISIONS						
ZONE	REV	DESCRIPTION	DATE	CHK	CHK	APP	DATE	CHK	CHK	APP
00	RELEASE		NL11-1965	11-30	RAH	WLD	WLD			
01	UPDT GRAPHICS FOR HOSE CHANGE: SEE 427-4760		NL12-0060	10-05	RAH	WLD	WLD			
02	IT1(4279092) WAS 4271150; IT8 QTY 2 WAS 3; IT9(4013795)									
02	WAS 4013796; IT10(4032325) WAS 4040564; IT14 QTY 2 WAS 1									
02	SEE SHT 2		NL13-0123	4-18	RAH	JBD	JBD			
03	ADDED MDG HOSE REFERENCE		1321955	1-29-16	TEW	JBD	JBD			
04	DEL ITEM 39 PER AR HOSES		1375260	11-27-18	RAH	EER	JBD			

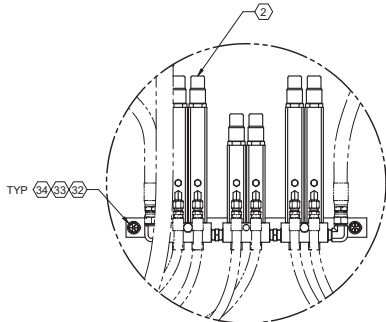
SECTION A-A



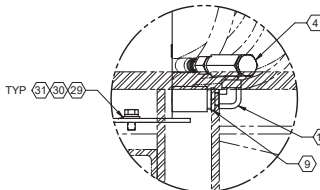
DETAIL D



DETAIL E



DETAIL F



DETAIL G

22	4041768	1	FTG HYD TE 8 MJ 8 MJ 8 FJ	22	4041768	1	FTG HYD TE 8 MJ 8 MJ 8 FJ
21	4016785	4	FTG HYD 0 4 MJ 4 MP	21	4016785	4	FTG HYD 0 4 MJ 4 MP
20	4170674	4	PLUG ASSEMBLY - 3	20	4170674	4	PLUG ASSEMBLY - 3
19	0979138	4	FTG HYD 90 4 MJ 2 MP	19	0979138	4	FTG HYD 90 4 MJ 2 MP
18	0978632	2	FTG HYD 0 4 MJ 2 MP	18	0978632	2	FTG HYD 0 4 MJ 2 MP
17	4241160	2	TUBE EXTENSION	17	4241160	2	TUBE EXTENSION
16	4038894	1	FTG HYD TE 8 MJ 8 MJ 6 MP	16	4038894	1	FTG HYD TE 8 MJ 8 MJ 6 MP
15	4002420	2	FTG HYD 0 8 MJ 6 MP	15	4002420	2	FTG HYD 0 8 MJ 6 MP
14	4018666	2	FTG HYD 0 8 MJ 8 MP JUMP	14	4018666	2	FTG HYD 0 8 MJ 8 MP JUMP
13	4002481	1	FTG HYD 90 12 MJ 12 FJ SWVL	13	4002481	1	FTG HYD 90 12 MJ 12 FJ SWVL
12	4040561	1	FTG HYD 0 12 MJ 16 MP	12	4040561	1	FTG HYD 0 12 MJ 16 MP
11	4013799	1	PIPE BUSHING 1.250 1.000 6000	11	4013799	1	PIPE BUSHING 1.250 1.000 6000
10	4032325	1	PIPE HYD ST ELB 90 8 MP X 8 FP	10	4032325	1	PIPE HYD ST ELB 90 8 MP X 8 FP
9	4013795	1	PIPE BUSHING, RED 1 X 1/2	9	4013795	1	PIPE BUSHING, RED 1 X 1/2
8	4002479	2	HYD FITTING, 90-DEG 8 MJ 8 FJ	8	4002479	2	HYD FITTING, 90-DEG 8 MJ 8 FJ
7	4222474	1	FTG HYD 0 8 MJ 8FP	7	4222474	1	FTG HYD 0 8 MJ 8FP
6	0020315	1	GREASE FITTING 1/8 NPT	6	0020315	1	GREASE FITTING 1/8 NPT
5	4222475	1	PIPE RED .500 .125 BSH 6000	5	4222475	1	PIPE RED .500 .125 BSH 6000
4	4222441	1	FILTER LUBRICATOR #84004	4	4222441	1	FILTER LUBRICATOR #84004
3	4274728	1	ASSY UP INJ F FRM L13 - L23 G2	3	4274728	1	ASSY UP INJ F FRM L13 - L23 G2
2	4274727	1	ASSY LWR INJ F FRM L18/L23 G2	2	4274727	1	ASSY LWR INJ F FRM L18/L23 G2
1	4279092	1	ASSY GREASE RESERVOIR - PUMP	1	4279092	1	ASSY GREASE RESERVOIR - PUMP

ITEM	PART NO.	QTY	DESCRIPTION	ITEM	PART NO.	QTY	DESCRIPTION
38	0812276	29	BOLT HEX .250 .63 NC G8 FT	22	4041768	1	FTG HYD TE 8 MJ 8 MJ 8 FJ
37	0213584	29	WASHER LOCK SPR .25 .49 .06	21	4016785	4	FTG HYD 0 4 MJ 4 MP
36	4010923	29	WASHER FLAT .250 .63 .065	20	4170674	4	PLUG ASSEMBLY - 3
35	0788159	2	BOLT HX .375 .625 NC G8 FT	19	0979138	4	FTG HYD 90 4 MJ 2 MP
34	0810971	4	BOLT HX .375 1.000 NC G8 FT	18	0978632	2	FTG HYD 0 4 MJ 2 MP
33	0753123	6	WASHER LOCK SPR .375 .68 .09	17	4241160	2	TUBE EXTENSION
32	0808221	6	WASHER FLAT .375 .81 .08	16	4038894	1	FTG HYD TE 8 MJ 8 MJ 6 MP
31	0801180	4	BOLT HX .500 1.000 NC G8 FT	15	4002420	2	FTG HYD 0 8 MJ 6 MP
30	0801181	4	WASHER LOCK SPR .500 .873 .125	14	4018666	2	FTG HYD 0 8 MJ 8 MP JUMP
29	0810991	4	WASHER FLAT .531 1.062 .121	13	4002481	1	FTG HYD 90 12 MJ 12 FJ SWVL
28	0988145	2	CLAMP CABLE INSL 1.50 .406	12	4040561	1	FTG HYD 0 12 MJ 16 MP
27	0988144	6	CLAMP CABLE INSL 1.25 .406	11	4013799	1	PIPE BUSHING 1.250 1.000 6000
26	0988143	6	CLAMP CABLE INSL 1.00 .406	10	4032325	1	PIPE HYD ST ELB 90 8 MP X 8 FP
25	4086112	17	CLAMP CABLE INSL .63 .40	9	4013795	1	PIPE BUSHING, RED 1 X 1/2
24	4002439	1	FTG HYD 90 8 MJ 6 MP	8	4002479	2	HYD FITTING, 90-DEG 8 MJ 8 FJ
23	4016199	1	45 DEG SWIVEL ELBOW	7	4222474	1	FTG HYD 0 8 MJ 8FP

UNLESS OTHERWISE SPECIFIED:
• DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS.
• TOLERANCES ON:
ANGLES ±1°
FRACTIONS ±.015
XX DECIMAL ±.03
XXX DECIMAL ±.015
• MACHINED CORNERS: .064 X .45
• WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL.
THIRD ANGLE PROJECTION

FIRST USED ON CONTRACT NO. 426-9721

DWN rhyatt 11-30-11
CHK WLD 11-30-11
ENGR WLD 11-30-11
PROD ENGR
PROJ APPROVAL
MATL

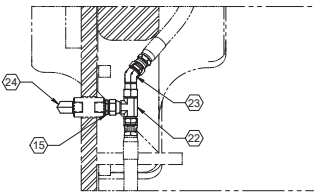
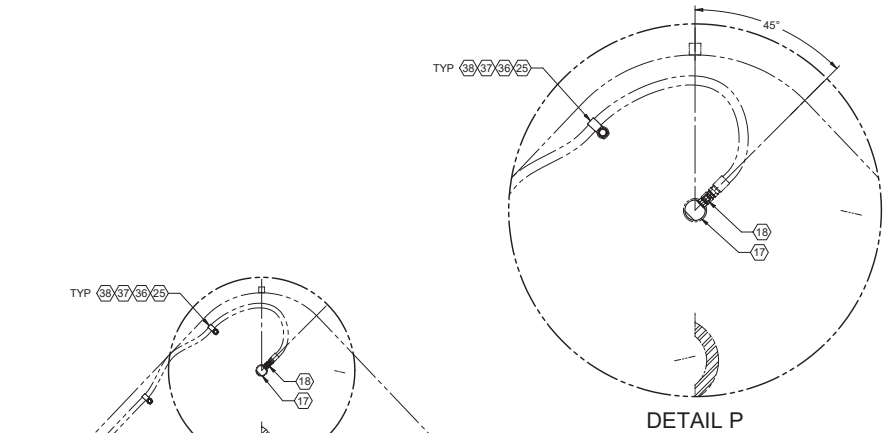
LeTourneau Technologies™

GP HDW AUTOLUBE FF L1350 G2

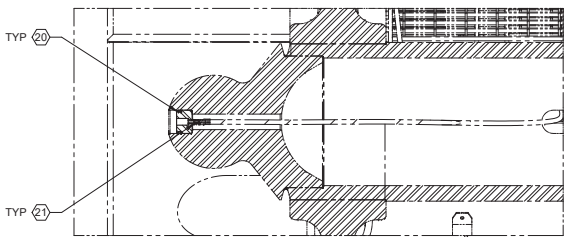
DO NOT SCALE 4274761 04

SCALE 1/8 DIST HT 451.5 Bm SHEET 1 OF 2

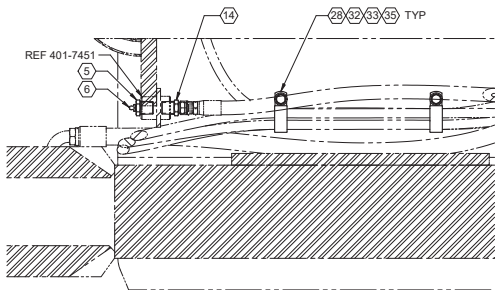
REVISIONS							
ZONE	REV	DESCRIPTION	EN	DATE	CHK	CHK	APP
	00	RELEASE	NL11-1965	11-30	RAH	WLD	WLD
	01	UPDT GRAPHICS FOR HOSE CHANGE: SEE 427-4761	NL12-0080	10-05	RAH	WLD	WLD
	02	MOVE IT4 TO 8TM FTG ON IT1, SEC H-H, R-R, SEE SHT 1	NL13-0123	4-18	RAH	JBD	JBD
	03	SEE SHEET 1	1321955	1-29-16	TEW	JBD	JBD
	04	SEE SHEET 1	1375260	11-27-18	RAH	EER	JBD



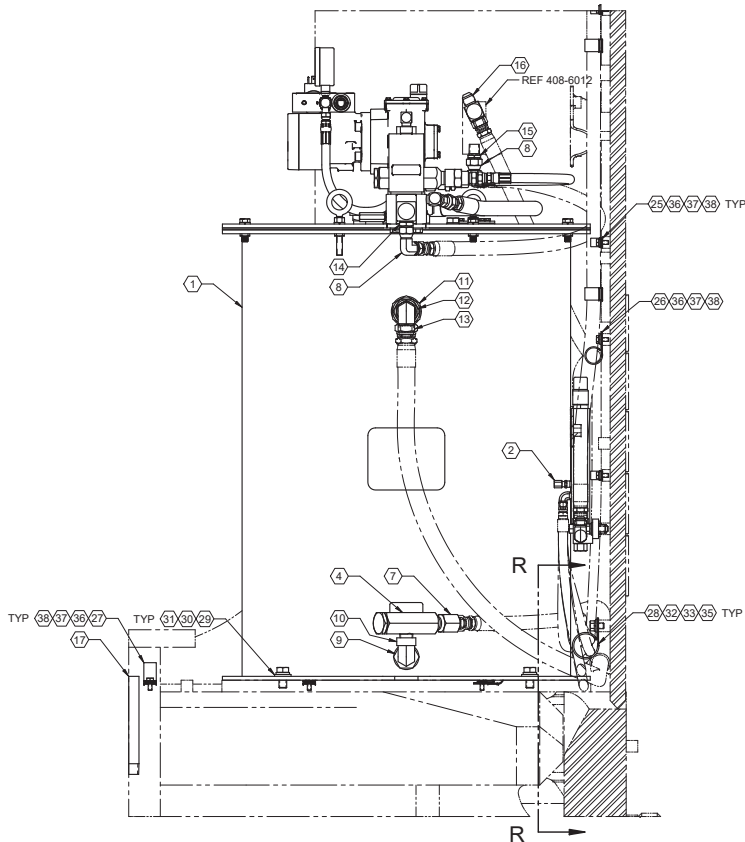
SECTION J-J
1:4



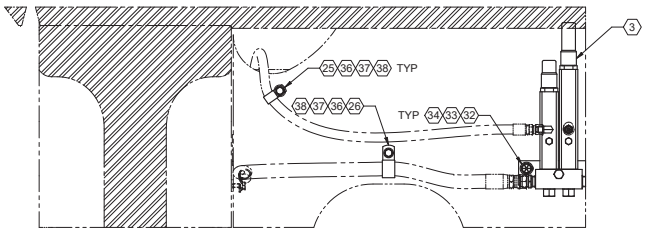
SECTION K-K
INSIDE CROSSTUBE / BALL
SHOWN ONLY



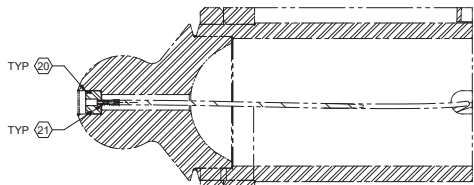
SECTION R-R
IT1(427-9092) GREASE RESERVOIR
NOT SHOWN FOR CLARITY



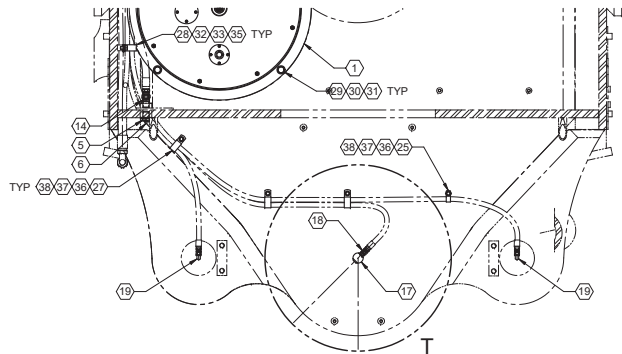
SECTION H-H
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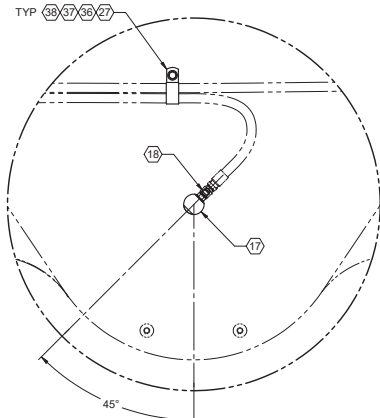
SECTION L-L
1:4



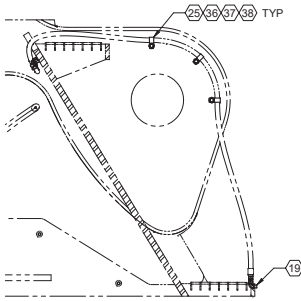
SECTION M-M
INSIDE CROSSTUBE / BALL
SHOWN ONLY



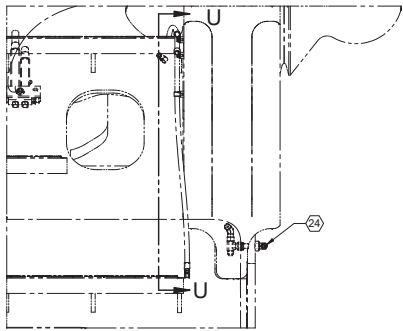
SECTION C-C



DETAIL T



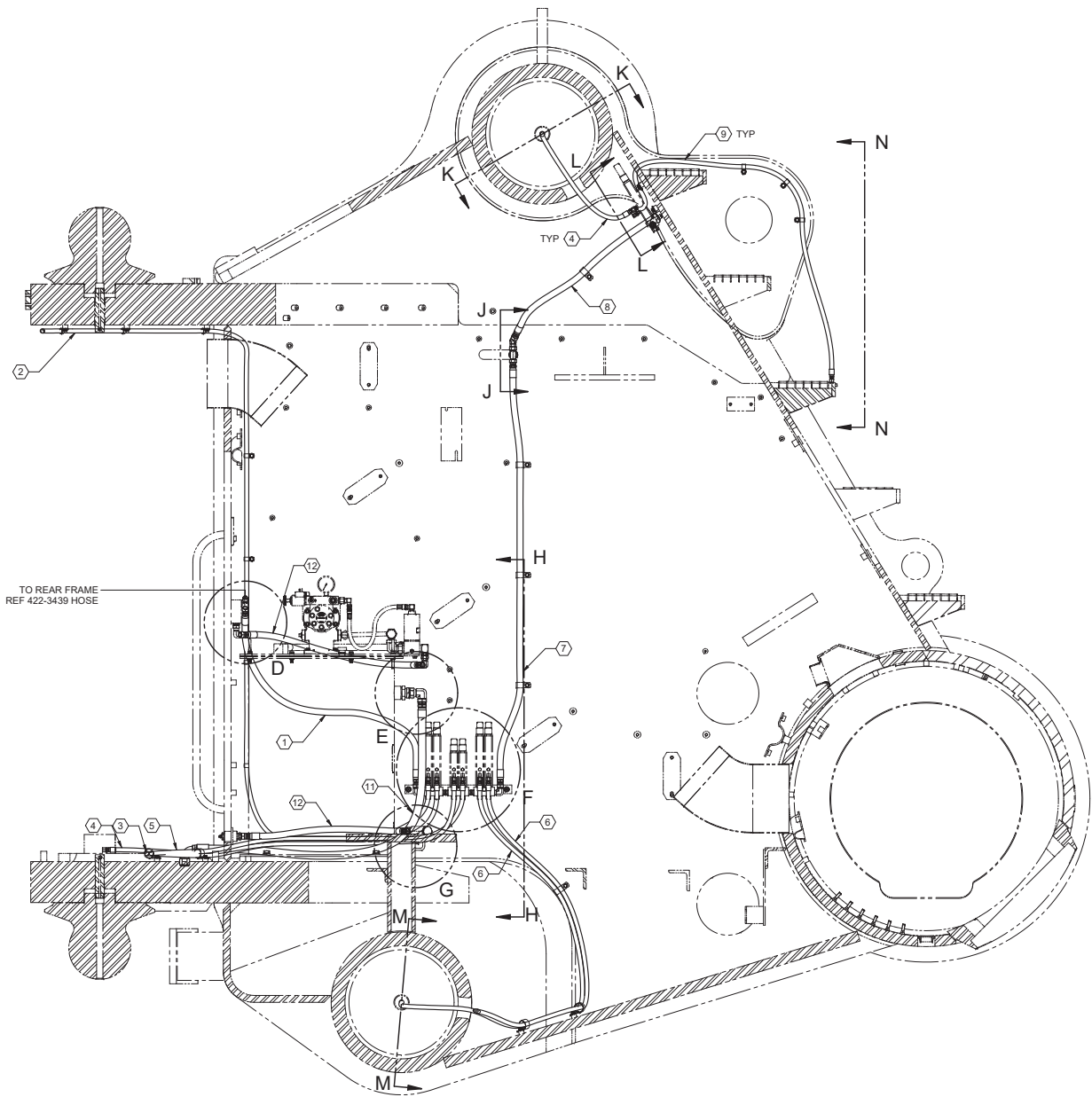
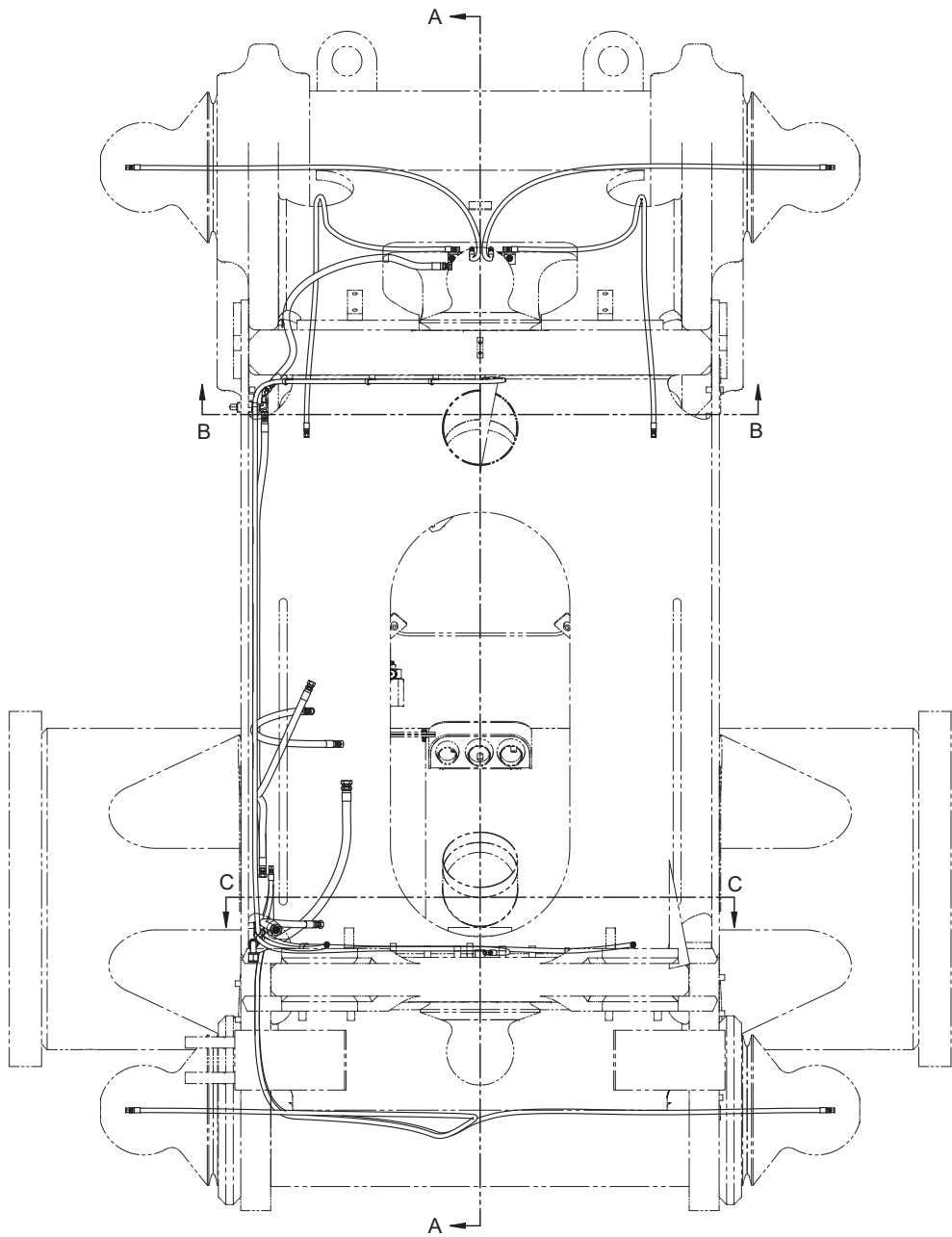
SECTION U-U



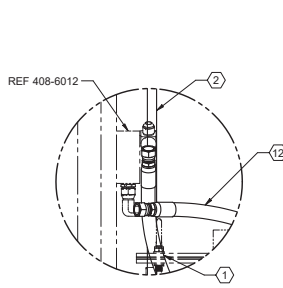
VIEW N-N

Front Frame
Auto Lube Hose Group

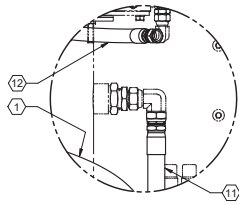
ZONE		REV	DESCRIPTION	REVISIONS		DATE	CHK	CHK	APP
00	RELEASE			NL11-1965	11-30	RAH	WLD	WLD	
E3	01	IT 12 WAS IT 10; DEL IT 10(412-9007); ADD IT 12, QTY 1		NL12-0060	10-04	RAH	WLD	WLD	
02	UPDT GRAPHICS FOR NEW GREASE RES, SEE 427-4761			NL13-0123	4-17	RAH	JBD	JBD	
03	ADD AR WRAP TO ITEM 2-6			1375260	11-26-18	RAH	EER	JBD	



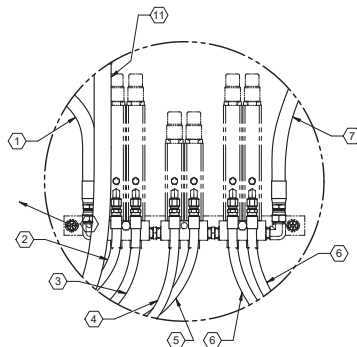
SECTION A-A



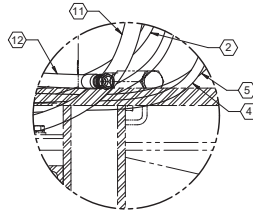
DETAIL D



DETAIL E



DETAIL F



DETAIL G

REF 427-4761 GP HDW AUTOLUBE FF L1350 G2 FOR INJECTOR AND HARDWARE INSTALLATION

REF 426-7515 REFAUTO LUBE L1350 G2 FOR SCHEMATIC

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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS. TOLERANCES ON: ANGLES ±1° FRACTIONS ±.015 3XX DECIMAL ±.03 1XXX DECIMAL ±.015 MACHINED CORNERS: .064 X .45 WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL.

THIRD ANGLE PROJECTION

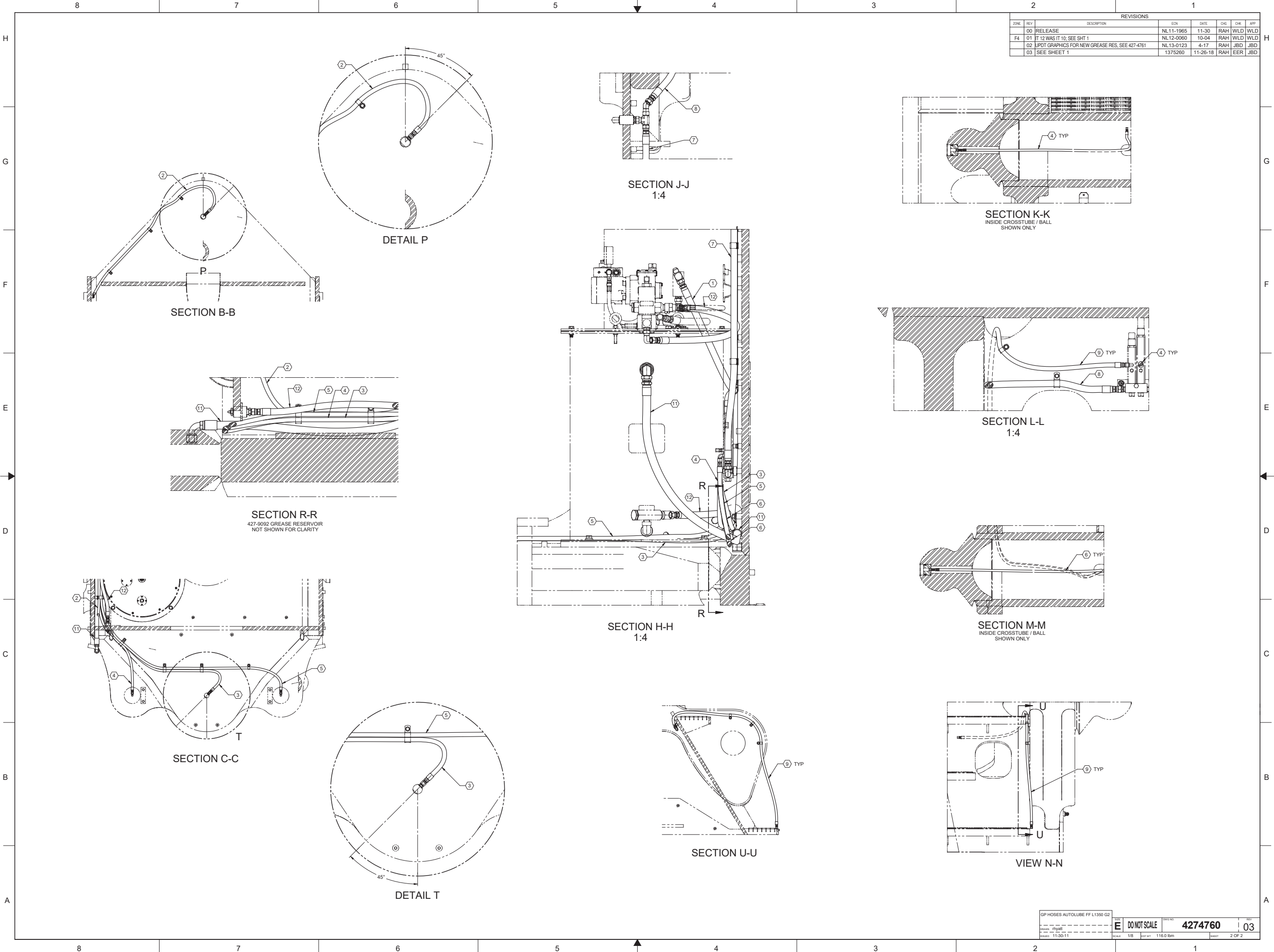
FIRST USED ON CONTRACT NO. 426-9721 DWN rhyatt 11-30-11 CHK WLD 11-30-11 ENGR WLD 11-30-11 PROD ENGR PROJ APPROVAL MATL

LeTourneau Technologies™

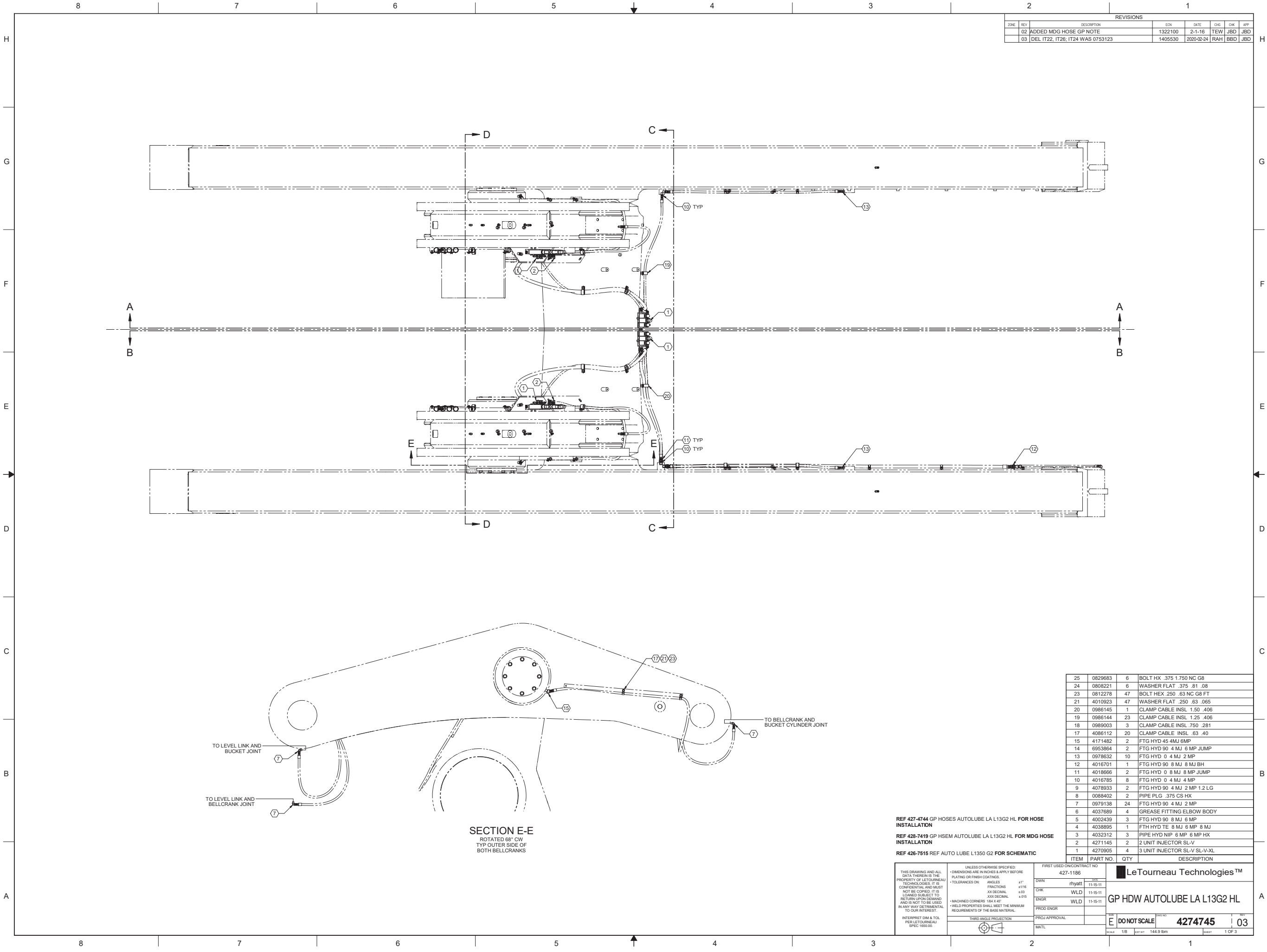
GP HOSES AUTOLUBE FF L1350 G2

DO NOT SCALE 4274760 03

SCALE 1/8 116.0 mm 1 OF 2



Liftarm Auto Lube Hardware Group



		REVISIONS									
ZONE	REV	DESCRIPTION	ECN	DATE	CHK	CHK	APP				
02	ADDED MDG HOSE GP NOTE		1322100	2-1-16	TEW	JBD	JBD				
03	DEL IT22, IT26; IT24 WAS 0753123		1405530	2020-02-24	RAH	BBD	JBD				

25	0829683	6	BOLT HX .375 1.750 NC G8
24	0808221	6	WASHER FLAT .375 .81 .08
23	0812278	47	BOLT HEX .250 .63 NC G8 FT
21	4010923	47	WASHER FLAT .250 .63 .065
20	0986145	1	CLAMP CABLE INSL 1.25 .406
19	0986144	23	CLAMP CABLE INSL 1.25 .406
18	0989003	3	CLAMP CABLE INSL .750 .281
17	4086112	20	CLAMP CABLE INSL .63 .40
15	4171482	2	FTG HYD 45 4MJ 6MP
14	6953864	2	FTG HYD 90 4 MJ 6 MP JUMP
13	0978632	10	FTG HYD 0 4 MJ 2 MP
12	4016701	1	FTG HYD 90 8 MJ 8 MJ BH
11	4018666	2	FTG HYD 0 8 MJ 8 MP JUMP
10	4016785	8	FTG HYD 0 4 MJ 4 MP
9	4078933	2	FTG HYD 90 4 MJ 2 MP 1.2 LG
8	0088402	2	PIPE PLG .375 CS HX
7	0979138	24	FTG HYD 90 4 MJ 2 MP
6	4037689	4	GREASE FITTING ELBOW BODY
5	4002439	3	FTG HYD 90 8 MJ 6 MP
4	4038895	1	PTH HYD TE 8 MJ 6 MP 8 MJ
3	4032312	3	PIPE HYD NIP 6 MP 6 MP HX
2	4271145	2	2 UNIT INJECTOR SL-V
1	4270905	4	3 UNIT INJECTOR SL-V SL-V-XL

REF 427-4744 GP HOSES AUTOLUBE LA L13G2 HL FOR HOSE INSTALLATION

REF 428-7419 GP HSEM AUTOLUBE LA L13G2 HL FOR MDG HOSE INSTALLATION

REF 426-7515 REF AUTO LUBE L1350 G2 FOR SCHEMATIC

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INTERPRET DIM & TOL PER LETOURNEAU SPEC 1600.00

UNLESS OTHERWISE SPECIFIED:
• DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS.
• TOLERANCES ON:
ANGLES ±1°
FRACTIONS ±.010
XX DECIMAL ±.03
XXX DECIMAL ±.015
• MACHINED CORNERS: .064 X .45
• WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL.

THIRD ANGLE PROJECTION

FIRST USED ON CONTRACT NO. 427-1186

DWN	rhvatt	11-15-11
CHK	WLD	11-15-11
ENGR	WLD	11-15-11
PROD ENGR		
PROJ APPROVAL		
MATL		

LeTourneau Technologies™

GP HDW AUTOLUBE LA L13G2 HL

DO NOT SCALE

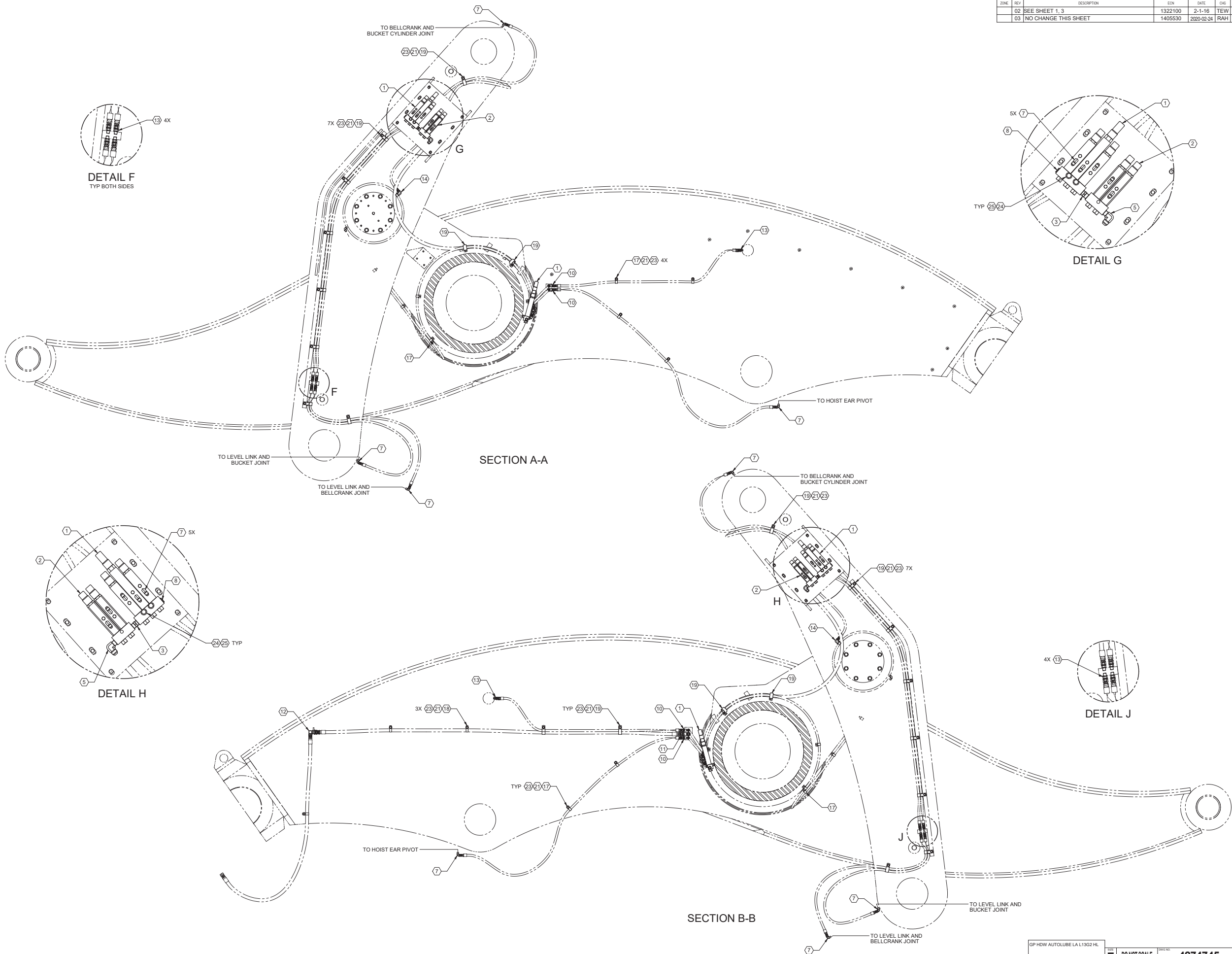
4274745

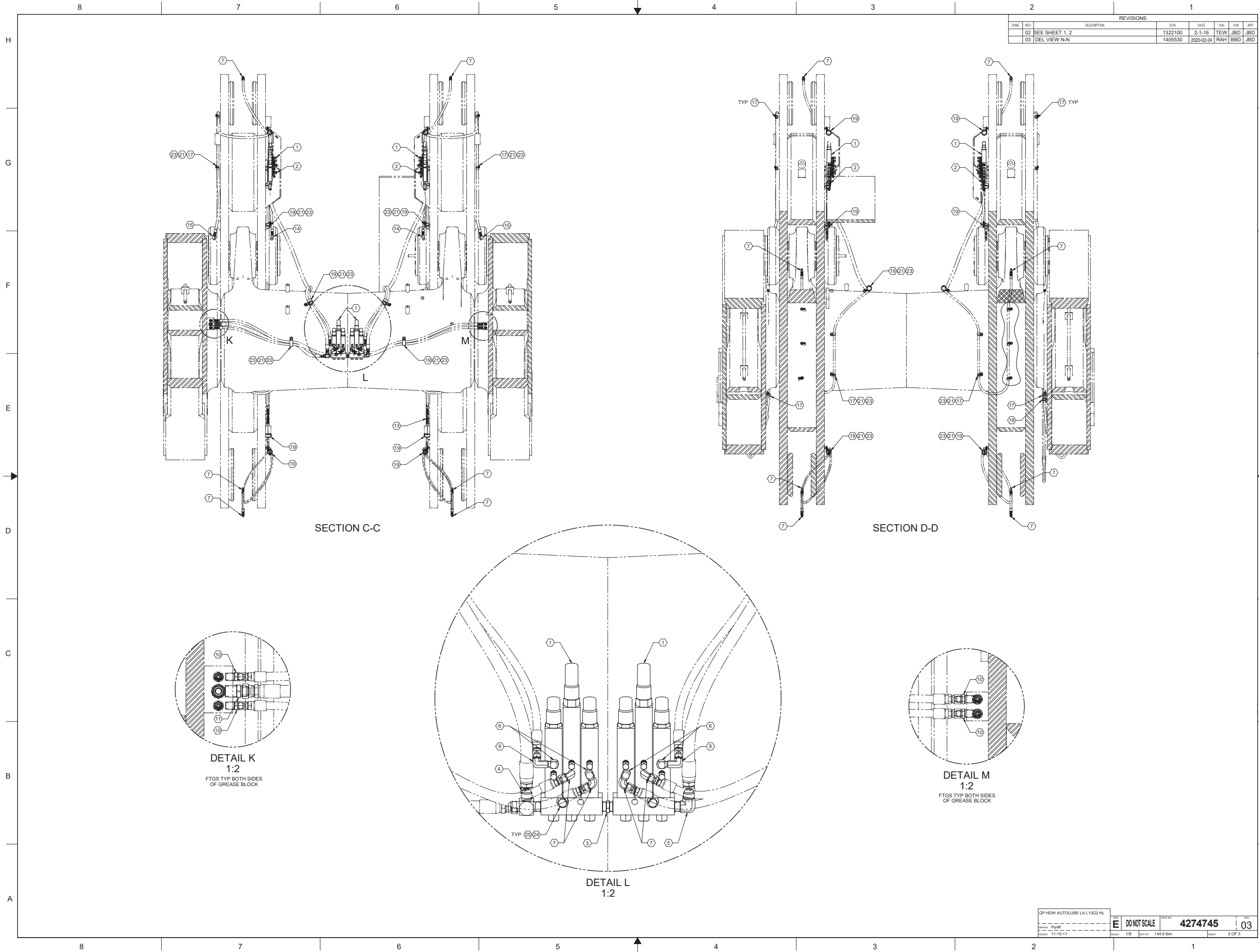
03

SCALE: 1/8" = 1'-0"

SHEET: 1 OF 3

		REVISIONS					
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	CHK	APP
02	02	SEE SHEET 1, 3	1322100	2-1-16	TEW	JBD	JBD
03	03	NO CHANGE THIS SHEET	1405530	2020-02-24	RAH	BBD	JBD





REV		DESCRIPTION	REVISIONS					
			EN	DATE	CHK	CHK	APP	
02	SEE SHEET 1.2		1322100	2-1-16	TEW	JBD	JBD	
03	DEL VIEW N-N		1405530	2020-02-24	RAH	BBD	JBD	

DETAIL K
1:2

FTGS TYP BOTH SIDES
OF GREASE BLOCK

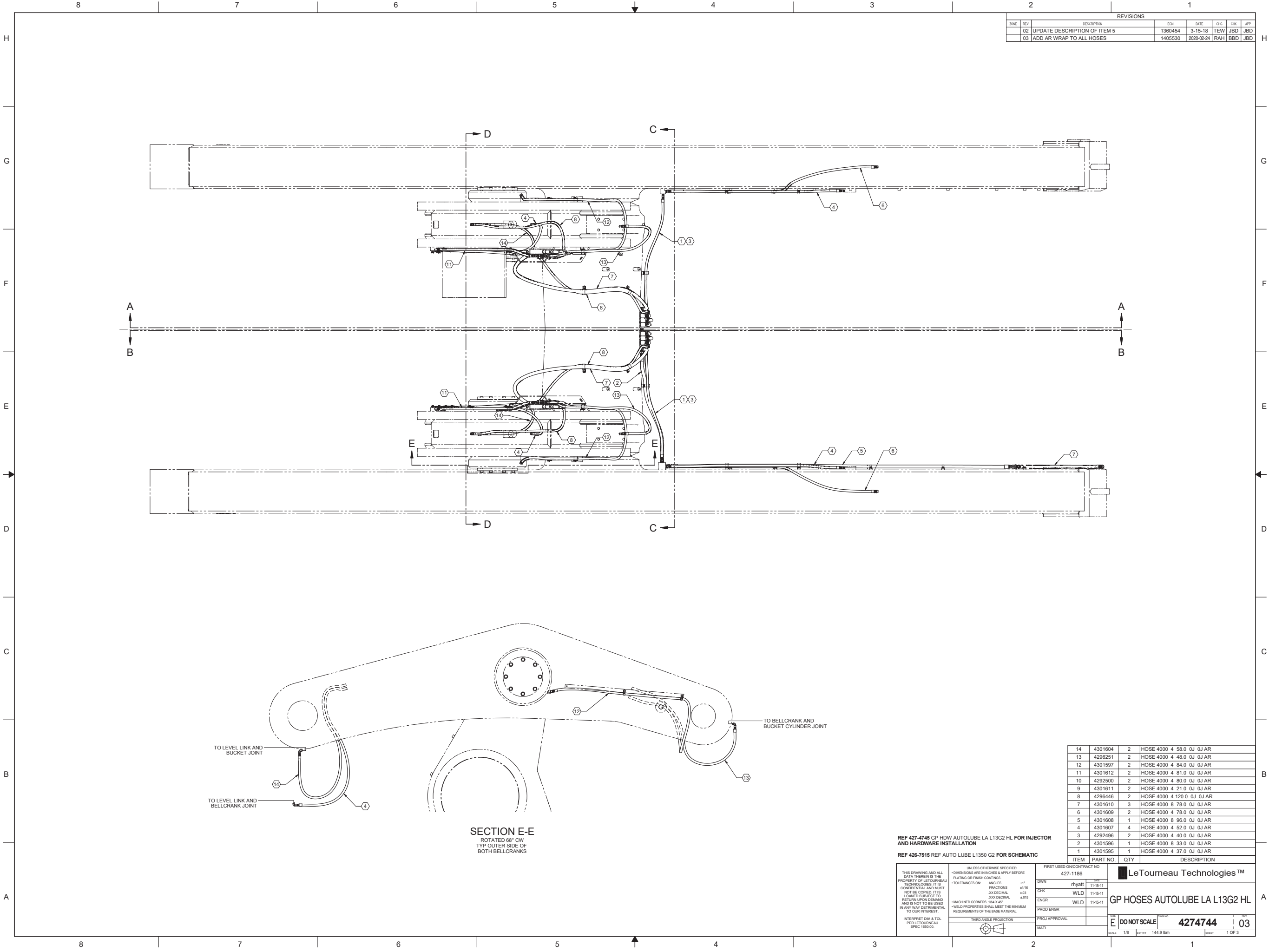
DETAIL L
1:2

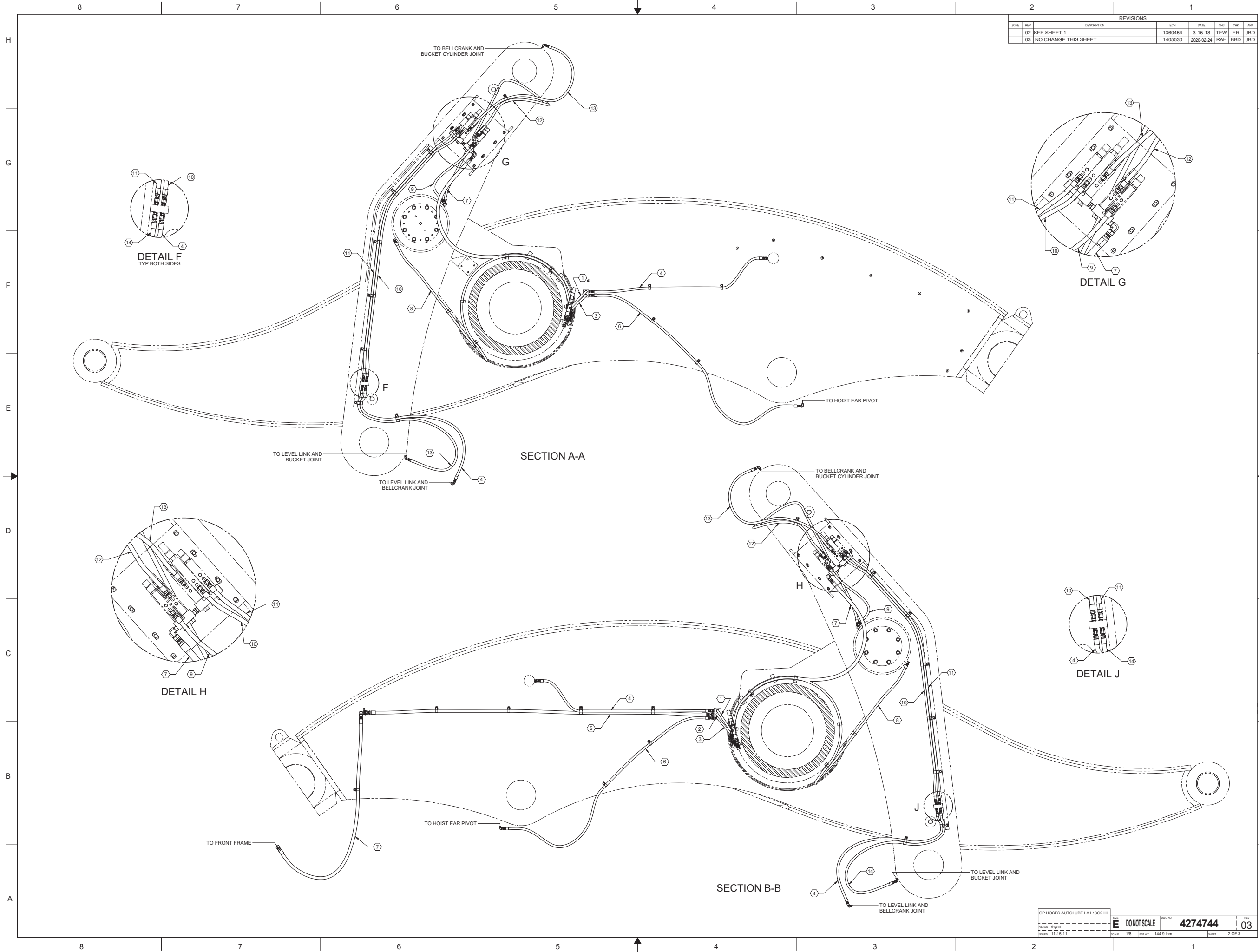
DETAIL M
1:2

FTGS TYP BOTH SIDES
OF GREASE BLOCK

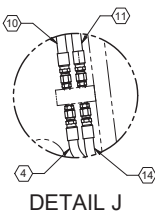
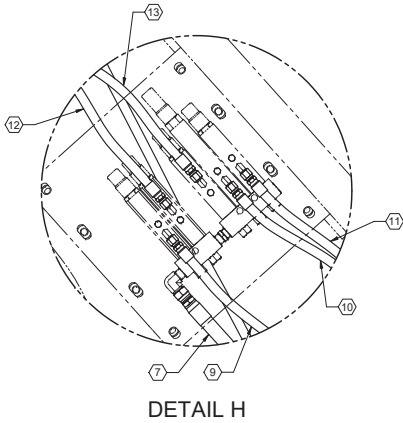
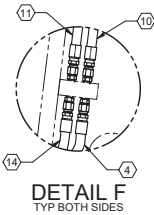
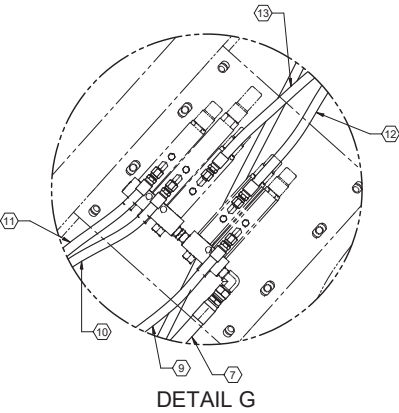
GP HDW AUTOLUBE LA L13G2 HL		DESIGN NO.	4274745	REV	03
SCALE	1/8	UNIT	144.9 mm	SHEET	3 OF 3

Liftarm Auto Lube Hose Group

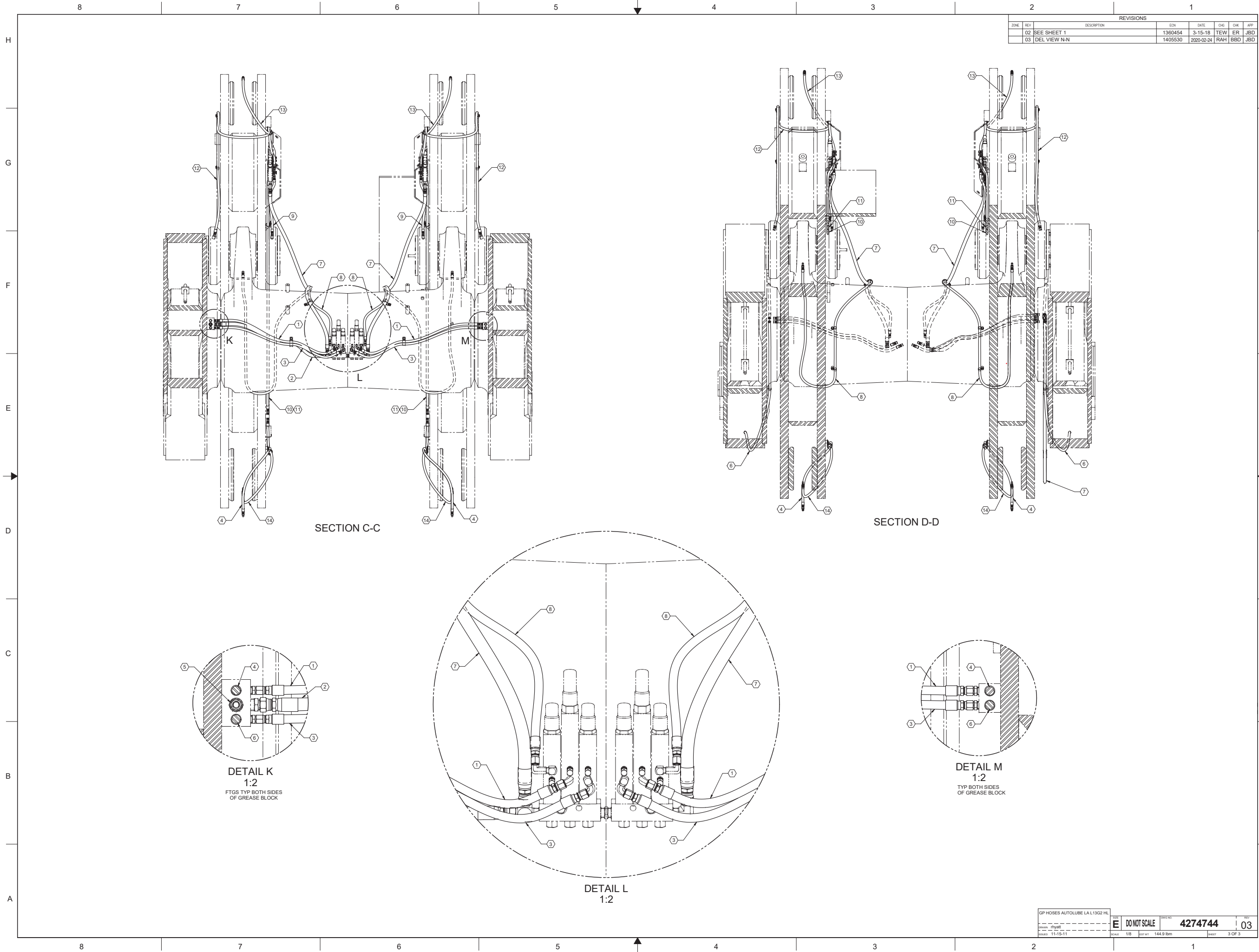




REV		DESCRIPTION	REVISIONS				
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	CHK	APP
02	SEE SHEET 1		1360454	3-15-18	TEW	ER	JBD
03	NO CHANGE THIS SHEET		1405530	2020-02-24	RAH	BBD	JBD



GP HOSES AUTOLUBE LA L1302 HL		DESIGN	4274744	REV	03
E		DO NOT SCALE	144.9 mm	2 OF 3	
SCALE 1/8		DATE 11-15-11			



REV		DESCRIPTION	REVISIONS					
ZONE	REV	DESCRIPTION	EDN	DATE	CHK	CHK	APP	
02	02	SEE SHEET 1	1360454	3-15-18	TEW	ER	JBD	
03	03	DEL VIEW N-N	1405530	2020-02-24	RAH	BBD	JBD	

DETAIL K
1:2

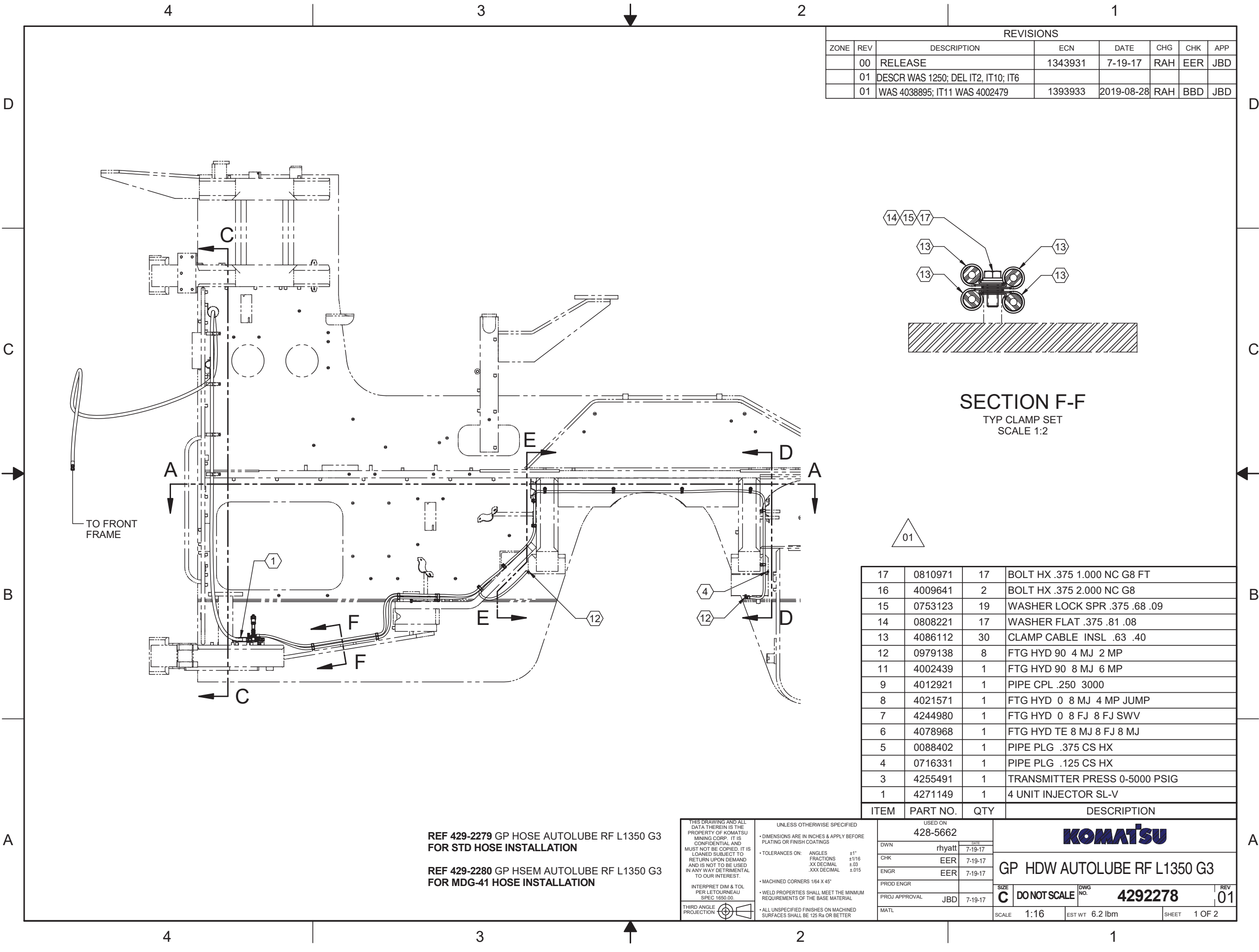
FTGS TYP BOTH SIDES
OF GREASE BLOCK

DETAIL L
1:2

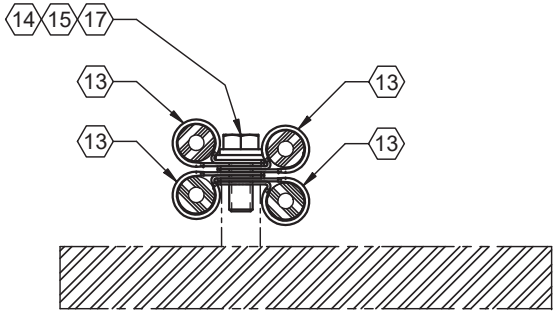
DETAIL M
1:2

TYP BOTH SIDES
OF GREASE BLOCK

Rear Frame
Auto Lube Hardware Group



REVISIONS							
ZONE	REV	DESCRIPTION	ECN	DATE	CHG	CHK	APP
	00	RELEASE	1343931	7-19-17	RAH	EER	JBD
	01	DESCR WAS 1250; DEL IT2, IT10; IT6					
	01	WAS 4038895; IT11 WAS 4002479	1393933	2019-08-28	RAH	BBD	JBD



SECTION F-F
TYP CLAMP SET
SCALE 1:2

01

17	0810971	17	BOLT HX .375 1.000 NC G8 FT
16	4009641	2	BOLT HX .375 2.000 NC G8
15	0753123	19	WASHER LOCK SPR .375 .68 .09
14	0808221	17	WASHER FLAT .375 .81 .08
13	4086112	30	CLAMP CABLE INSL .63 .40
12	0979138	8	FTG HYD 90 4 MJ 2 MP
11	4002439	1	FTG HYD 90 8 MJ 6 MP
9	4012921	1	PIPE CPL .250 3000
8	4021571	1	FTG HYD 0 8 MJ 4 MP JUMP
7	4244980	1	FTG HYD 0 8 FJ 8 FJ SWV
6	4078968	1	FTG HYD TE 8 MJ 8 FJ 8 MJ
5	0088402	1	PIPE PLG .375 CS HX
4	0716331	1	PIPE PLG .125 CS HX
3	4255491	1	TRANSMITTER PRESS 0-5000 PSIG
1	4271149	1	4 UNIT INJECTOR SL-V

ITEM	PART NO.	QTY	DESCRIPTION		
USED ON			KOMATSU GP HDW AUTOLUBE RF L1350 G3 SIZE C DO NOT SCALE DWG NO. 4292278 REV 01 SCALE 1:16 EST WT 6.2 lbm SHEET 1 OF 2		
DWN	rhyatt	7-19-17			
CHK	EER	7-19-17			
ENGR	EER	7-19-17			
PROD ENGR					
PROJ APPROVAL	JBD	7-19-17			
MATL					

REF 429-2279 GP HOSE AUTOLUBE RF L1350 G3
FOR STD HOSE INSTALLATION

REF 429-2280 GP HSEM AUTOLUBE RF L1350 G3
FOR MDG-41 HOSE INSTALLATION

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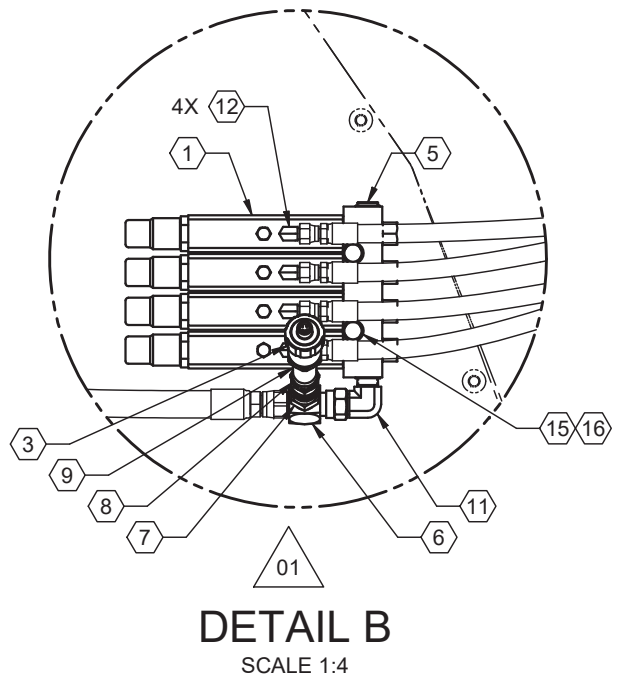
INTERPRET DIM & TOL PER LETOURNEAU SPEC 1650.00.

THIRD ANGLE PROJECTION

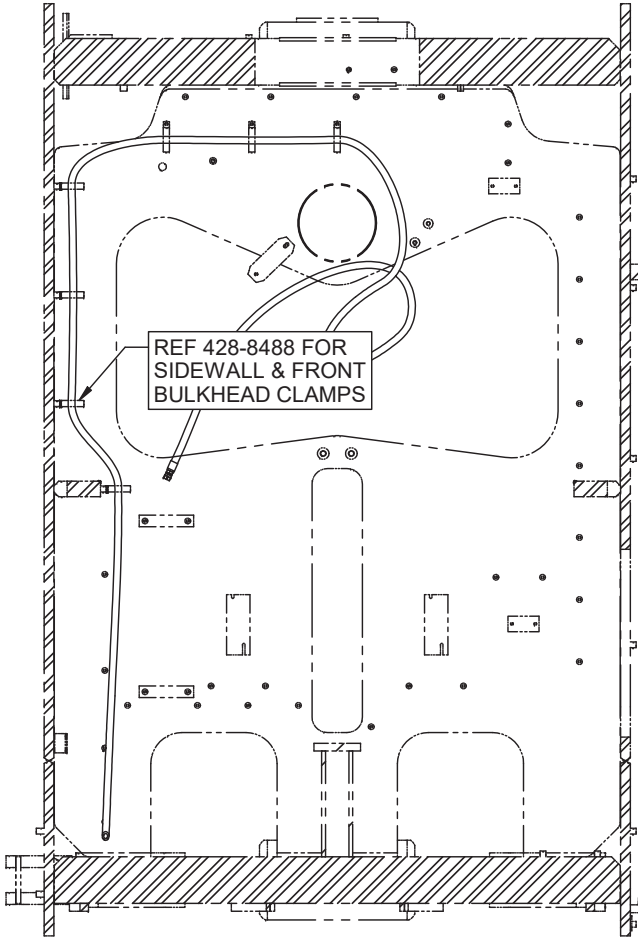
UNLESS OTHERWISE SPECIFIED

- DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS
- TOLERANCES ON:
 - ANGLES ±1°
 - FRACTIONS ±1/16
 - XX DECIMAL ±.03
 - XXX DECIMAL ±.015
- MACHINED CORNERS 1/64 X 45°
- WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL
- ALL UNSPECIFIED FINISHES ON MACHINED SURFACES SHALL BE 125 Ra OR BETTER

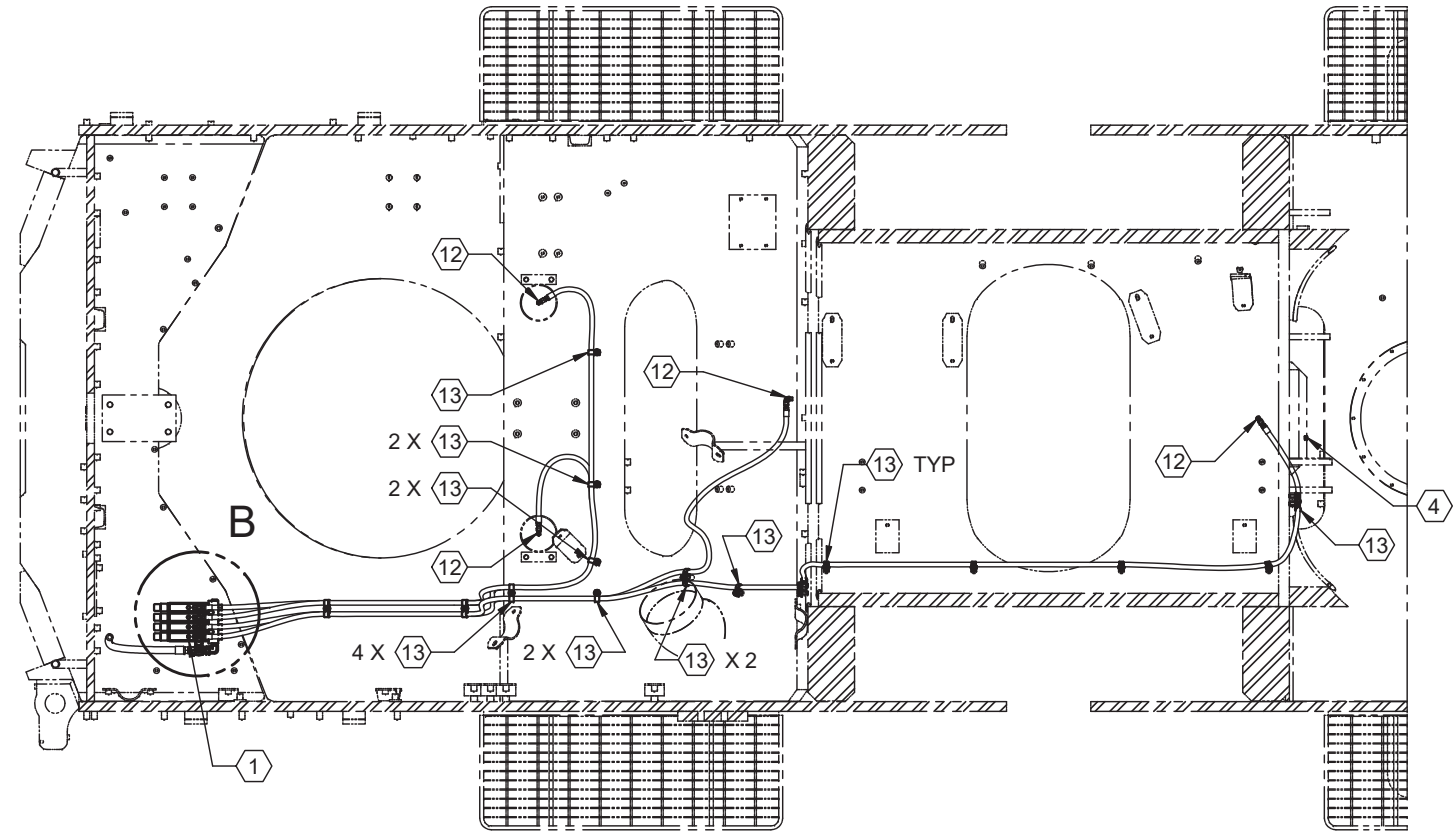
REVISIONS							
ZONE	REV	DESCRIPTION	ECN	DATE	CHG	CHK	APP
	00	RELEASE	1343931	7-19-17	RAH	EER	JBD
C4	01	DET B: RECONFIGURE IT1 INJ FTGS	1393933	2019-08-28	RAH	BBD	JBD



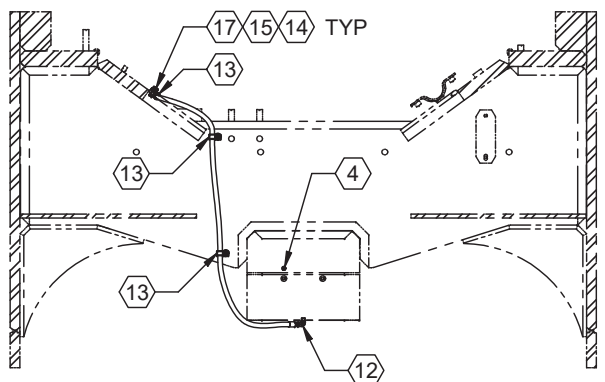
DETAIL B
SCALE 1:4



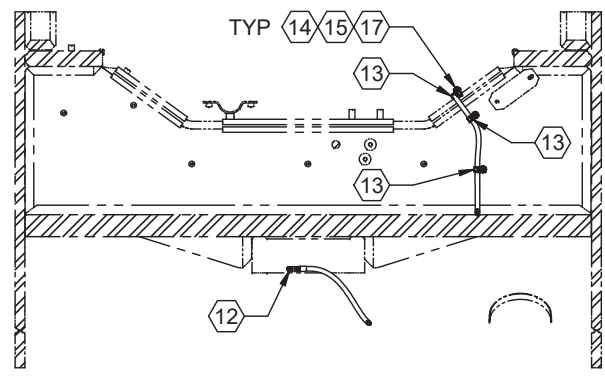
SECTION C-C



SECTION A-A



SECTION D-D



SECTION E-E

GP HDW AUTOLUBE RF L1350 G3		SIZE C	DO NOT SCALE	DWG NO. 4292278	REV 01
DRAWN rhyatt	ISSUED 7-19-17	SCALE 1:1	EST WT 6.2 lbm	SHEET 2 OF 2	

Rear Frame
Auto Lube Hose Group

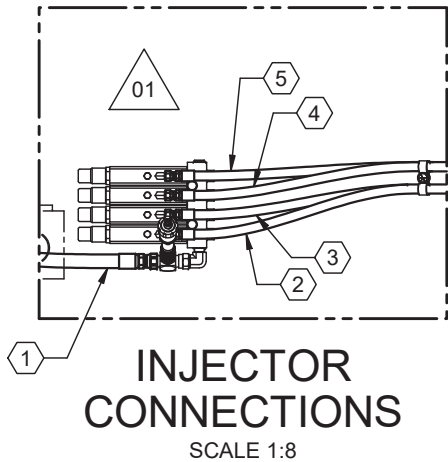
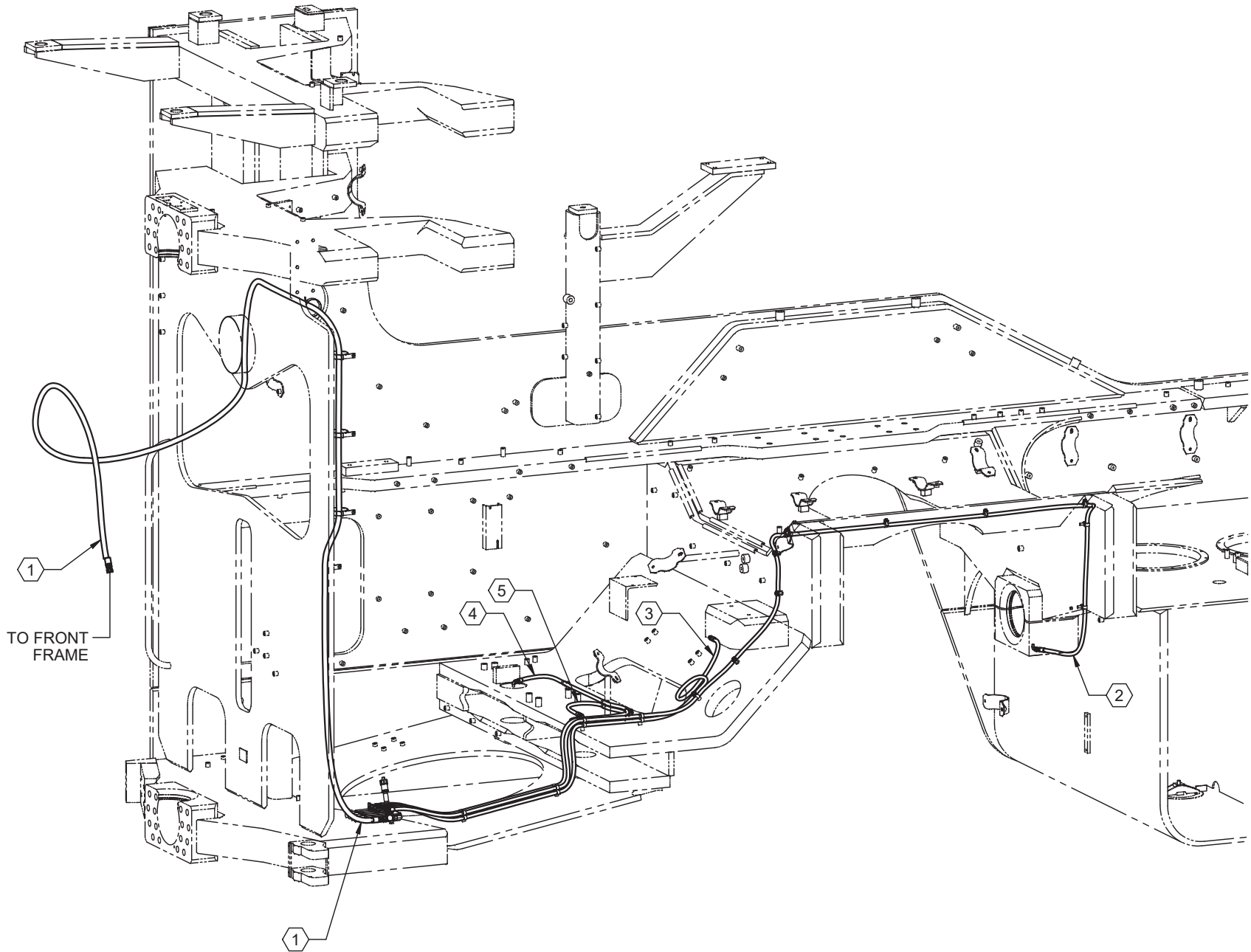
4

3

2

1

REVISIONS							
ZONE	REV	DESCRIPTION	ECN	DATE	CHG	CHK	APP
	00	RELEASE	1343931	7-19-17	RAH	EER	JBD
	01	DESCR WAS 1250; RE-ROUTE HOSES					
	01	PER HDW UPDT; STANDARDIZE HOSE					
	01	LENGTHS WITH G2; ADD AR WRAP TO					
	01	ALL HOSES	1393933	2019-08-28	RAH	BBD	JBD



5	4298040	1	HOSE 4000 4 90.0 0J 0J AR
4	4298041	1	HOSE 4000 4 108.0 0J 0J AR
3	4298042	1	HOSE 4000 4 114.0 0J 0J AR
2	4296434	1	HOSE 4000 4 224.0 0J 0J AR
1	4295042	1	HOSE 4000 8 262.0 0J 0J AR
ITEM	PART NO.	QTY	DESCRIPTION

REF 429-2278 GP HDW AUTOLUBE RF L1350 G3
FOR HARDWARE INSTALLATION

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	• DIMENSIONS ARE IN INCHES & APPLY BEFORE PLATING OR FINISH COATINGS			428-5662								
	• TOLERANCES ON: ANGLES ±1° FRACTIONS ±1/16 .XX DECIMAL ±.03 .XXX DECIMAL ±.015			DWN	rhyatt	DATE 7-19-17	4292279			REV 01		
				CHK	EER	7-19-17						
	• MACHINED CORNERS 1/64 X 45°			ENGR	EER	7-19-17						
				PROD ENGR								
	• WELD PROPERTIES SHALL MEET THE MINIMUM REQUIREMENTS OF THE BASE MATERIAL			PROJ APPROVAL			SIZE C	DO NOT SCALE		DWG NO.		
				JBD 7-19-17								
• ALL UNSPECIFIED FINISHES ON MACHINED SURFACES SHALL BE 125 Ra OR BETTER			MATL			SCALE 1:16		EST WT 9.2 lbm		SHEET 1 OF 1		

Specifications Quick Reference Chart

GEN 3 Hydraulic Specifications Sheet

All pressures with Engine at High Throttle		Procedure paragraph number	L-1350
Govenor	System air pressure	A	130psi +5 /-0
KLENZ	KLENZ regulator air pressure	B	90 PSI
Hyd Res Air	Hydraulic Reservoir regulator	C	4 to 6 psi
Engine Fan Circuit	Fan Pump (Stand by) - Idle	D	450 ± 50 (Stand-by)
	Fan Pump (Compensator) - High	D	820 RPM @ 1900 Eng RPM
	Fan Remote Relief - High	D	800 RPM (Max) @ 1900 Eng RPM
Blower Circuit	Blower Pump (Stand by)	E	450 ± 50 (Stand-by)
	Blower Pump (Compensator)	E	3400 RPM @ Eng 1900
	Blower Remote Relief	E	3100 RPM @ 1900 Eng RPM
Accessory Pump	Accessory Pump Compensator	F	2500psi ± 20
Pilot Circuit	Pilot Pressure Relief Valve	G	450 ± 10
Driver Filtration	Sequence Valve	H	2200psi ± 20
Hoist / Bucket Circuit	Main Valve Relief	I	4500 psi +50 -0
	Hoist Base Circuit Relief	I	4500 psi ± 50
	Hoist Rod Circuit Relief	I	2000 psi ± 50
	Bucket Base Circuit Relief	I	4500 psi ± 50
	Bucket Rod Circuit Relief	I	2000 psi ± 50
	Hoist & Bucket Pump Compensators	J	4000 psi +100 / -0
	Secondary Dump Relief	K	800 ~ 1200 psi ± 50
Steer Circuit	Steering Main Relief (Flow Amp)	L	Turn in Full
	Steering Pump (Stand By)	M	450 ± 50 (Stand-by)
	Steering Pump (Compensator)	M	3400 psi ± 50
	Steering Crossover Relief Valve	M1	N/A
	Shock and Suction (Flow Amp)	N	4000 psi ± 50
	Relief (PVG)	O	4000 psi ± 50
Gear Box Circuit	Gearbox	Reference	50 to 125 psi at High Throttle
AutoLube Circuit	Pressure Reducing Valve	Reference	3500 psi (Grease Pressure) Non-Adjustable
	Flow Control	Reference	1.5 to 2 strokes per second Non-Adjustable
Cycle Times	Hoist Up		TBD
	Hoist Down		TBD
	Float		TBD
	Bucket Rollback		TBD
	Bucket Dump		TBD
	Steer Lock to Lock		TBD

Revision Notes: Replace Steering Remote Relief (L1350 thru L2350) with Steering Crossover Relief M1

REV 01 (08/29/2019)

TA16130D2

NOTICE

Always follow all local organization/department rules or regulations when making any pressure or flow adjustment on the machine.

 WARNING

Struck-by hazards exist when around hydraulic fluid, fuel, or grease that is under pressure. Hoses under pressure can blow out or come loose from connections, causing a struck-by hazard with deadly force. DO NOT tighten or loosen hydraulic, fuel, or grease lines without first relieving the pressure. DO NOT make adjustments to any fluid pressures or flow while the machine is running. Shut down the machine, make the adjustment, then restart the machine to check the adjustment. Wear safety goggles for eye protection and wear all other locally required personal protective equipment (PPE) when working around possibly pressurized liquids. Failure to use proper PPE or to shut down the machine before making adjustments can cause a struck-by hazard resulting in serious injury or death.

 WARNING

Skin injection hazard exists when around hydraulic fluid, or grease that is under pressure. Fluid leaks under pressure may not be visible. When searching for leaks, NEVER use your hand; use a piece of metal. Wear work gloves and keep your hand well away from the possible source of leakage. Failure to use proper PPE or to shut down the machine before making adjustments can cause a skin injection hazard or a struck-by hazard resulting in serious injury or death.

 WARNING

Burn hazards exist when around hot hydraulic fluid that is under pressure. Hoses under pressure can blow out or come loose from connections, causing a burn hazard from leaks or spraying. DO NOT tighten or loosen hydraulic, fuel without first relieving the pressure. DO NOT make adjustments to any fluid pressures or flow while the machine is running. Shut down the machine, make the adjustment, then restart the machine to check the adjustment. Wear safety goggles for eye protection and wear all other locally required personal protective equipment (PPE) when working around possibly hot pressurized liquids. Failure to use proper PPE or to shut down the machine before making adjustments can cause a burn hazard resulting in serious injury or death.

 WARNING

Struck-by hazards exist when setting fans and blowers. Altitude and air temperature can greatly affect radiator, blower, and auxiliary oil cooler fan speeds. Do not overspeed the fan or blower. Before making fan or blower speed adjustments always decrease the maximum pump pressure. This will help prevent fan or blower overspeed which can cause fan or blower destruction. Failure to reduce maximum pump pressure before making fan or blower speed adjustments can cause struck-by hazards resulting in serious injury or death.

