

MIL-C-5015 SPEC CONNECTOR'S

Crown Connector Inc's recommendation is to not use dielectric grease for this series connector. For similar model series connectors, the manufacturer should be contacted for confirmation before applying dielectric grease. A typical application for this connector is on David Clark Intercom connections in Aerial Work Platforms.



MOLEX CMC SERIES CONNECTORS

The CMC connector family is a sealed, high-density connection system using matte-seal technology for CP 0.635 and 1.50 mm terminals. To guarantee IP6K7 and IP6K9 sealing, a seal plug option is used. However, the low-force contacts cannot displace dielectric grease and create electrical contact. It is possible to use solvents (i.e. contact cleaner or mineral spirits) for the removal of improperly applied dielectric grease. The flexbox control modules from JDES employ this connector system (for example).



Go to Discount-Equipment.com to buy your parts

7.4 AMP CONNECTOR

Applying Silicone Dielectric Compound to AMP Connectors

Silicone Dielectric Compound must be used on the AMP connections for the following reasons:

- To prevent oxidation at the mechanical joint between male and female pins.
- To prevent electrical malfunction caused by low level conductivity between pins when wet.

Use the following procedure to apply Silicone Dielectric Compound to the electrical connectors.

1. To prevent oxidation and low level conductivity, silicone dielectric grease must be packed completely around male and female pins on the inside of the connector after the mating of the housing to the header. This is easily achieved by using a syringe to fill the header with silicone dielectric compound, to a point just above the top of the male pins inside the header. When assembling the housing to the header, it is possible that the housing will become air locked, thus preventing the housing latch from engaging.
2. Pierce one of the unused wire seals to allow the trapped air inside the housing to escape.
3. Install a hole plug into this and/or any unused wire seal that has silicone dielectric compound escaping from it.

Assembly

Check to be sure the wedge lock is in the open, or as-shipped, position (See Figure 7-9.). Proceed as follows:

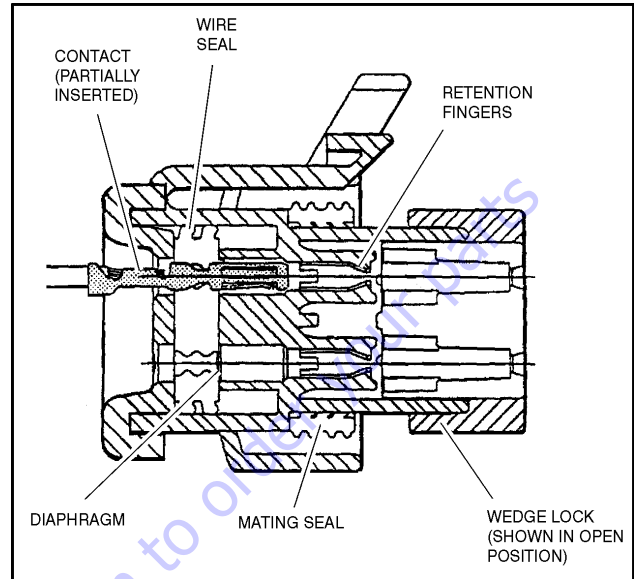


Figure 7-9. Connector Assembly Figure 1

1. To insert a contact, push it straight into the appropriate circuit cavity as far as it will go (See Figure 7-11.).
2. Pull back on the contact wire with a force of 1 or 2 lbs. to be sure the retention fingers are holding the contact (See Figure 7-11.).

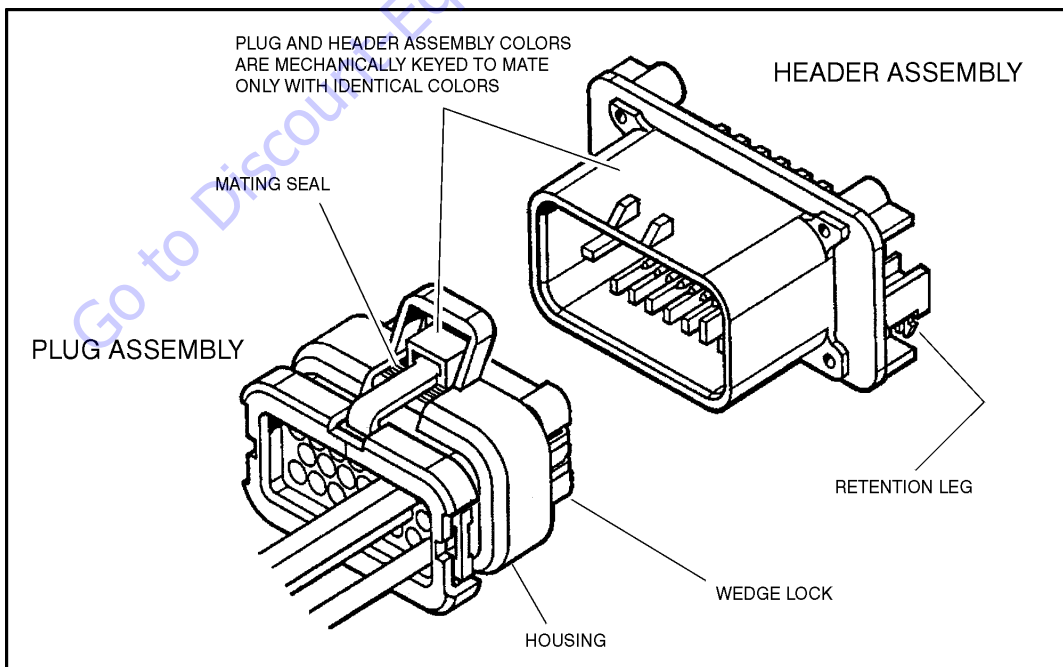


Figure 7-10. AMP Connector

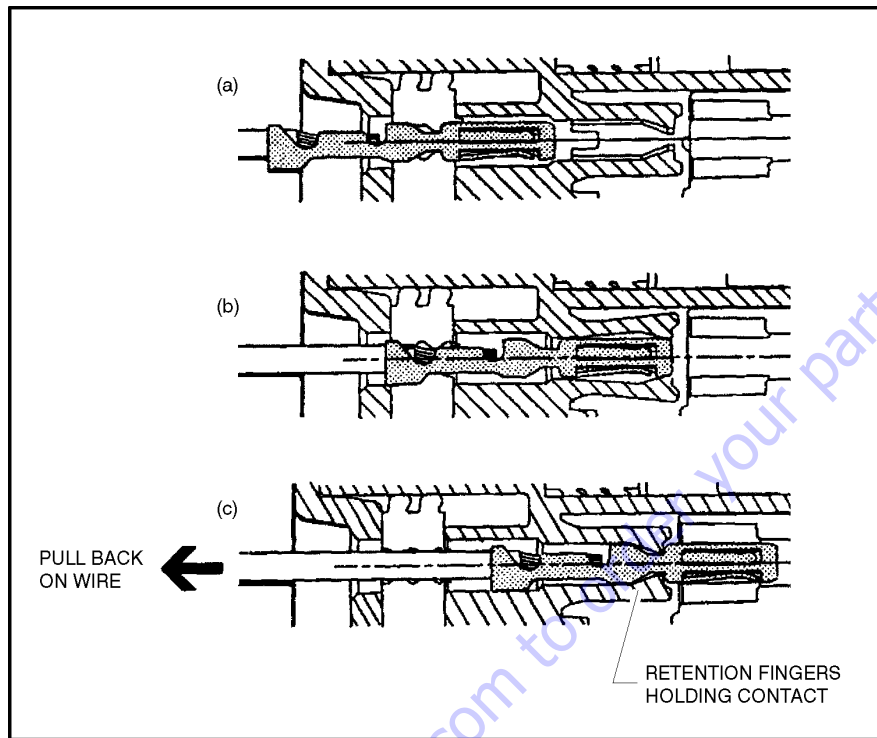


Figure 7-11. Connector Assembly Figure 2

3. After all required contacts have been inserted, the wedge lock must be closed to its locked position. Release the locking latches by squeezing them inward (See Figure 7-12.).

4. Slide the wedge lock into the housing until it is flush with the housing (See Figure 7-13.).

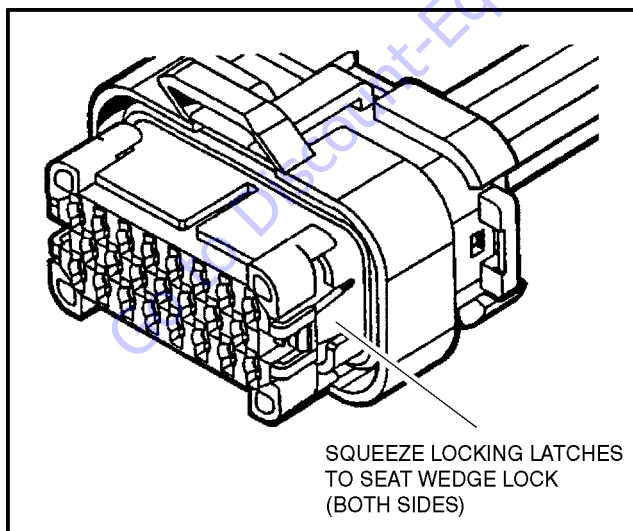


Figure 7-12. Connector Assembly Figure 3

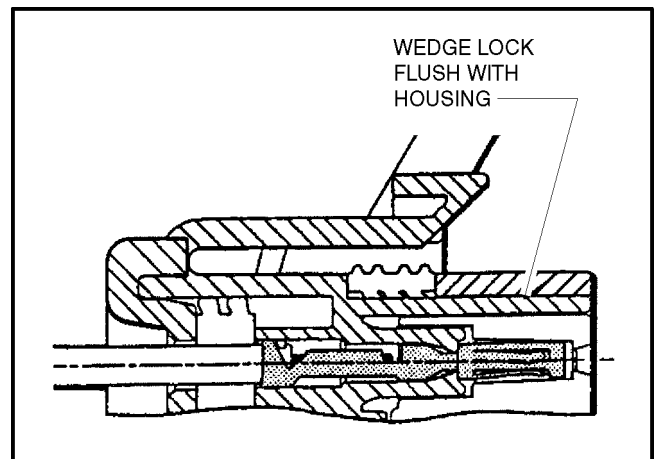


Figure 7-13. Connector Assembly Figure 4

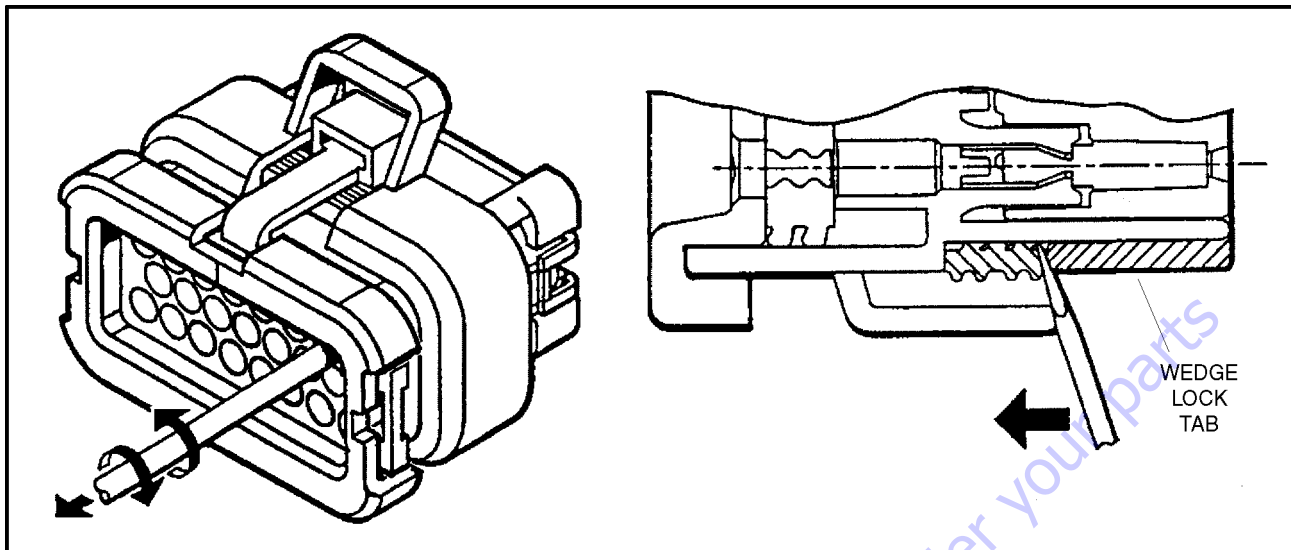


Figure 7-14. Connector Disassembly

Disassembly

1. Insert a 4.8 mm (3/16 in.) wide screwdriver blade between the mating seal and one of the red wedge lock tabs.
2. Pry open the wedge lock to the open position.
3. While rotating the wire back and forth over a half turn (1/4 turn in each direction), gently pull the wire until the contact is removed.

NOTE: The wedge lock should never be removed from the housing for insertion or removal of the contacts.

Wedge Lock

The wedge lock has slotted openings in the forward, or mating end. These slots accommodate circuit testing in the field, by using a flat probe such as a pocket knife. DO NOT use a sharp point such as an ice pick.

Service - Voltage Reading

NOTICE

DO NOT PIERCE WIRE INSULATION TO TAKE VOLTAGE READINGS.

It has been common practice in electrical troubleshooting to probe wires by piercing the insulation with a sharp point. This practice should be discouraged when dealing with the AMPSEAL plug assembly, or any other sealed connector system. The resulting pinholes in the insulation will allow moisture to invade the system by traveling along the wire strands. This nullifies the effectiveness of the connector seals and could result in system failure.

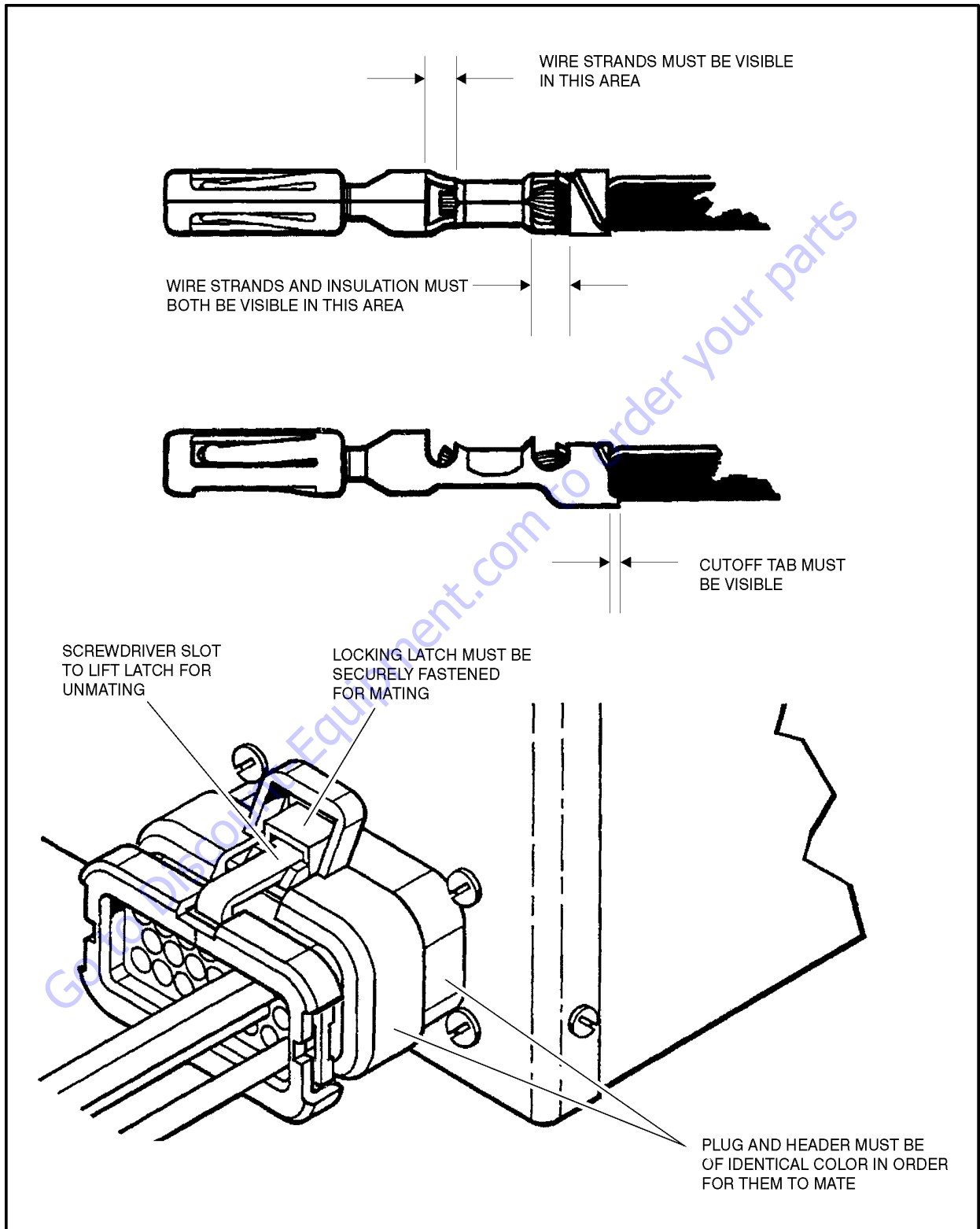


Figure 7-15. Connector Installation

7.5 DEUTSCH CONNECTORS

DT/DTP Series Assembly

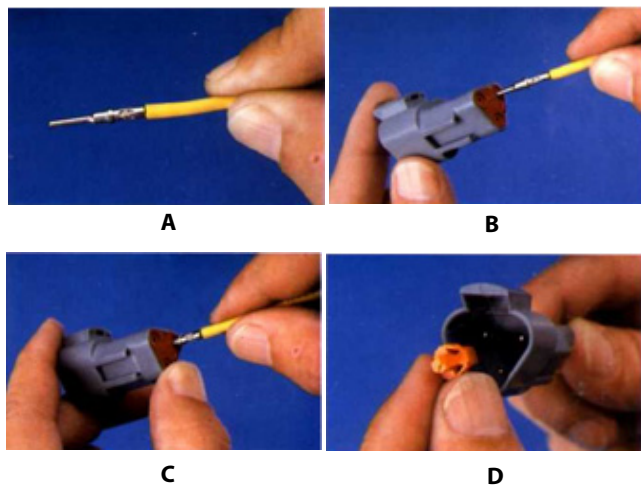


Figure 7-16. DT/DTP Contact Installation

1. Grasp crimped contact about 25 mm behind the contact barrel.
2. Hold connector with rear grommet facing you.
3. Push contact straight into connector grommet until a click is felt. A slight tug will confirm that it is properly locked in place.
4. Once all contacts are in place, insert wedgelock with arrow pointing toward exterior locking mechanism. The wedgelock will snap into place. Rectangular wedges are not oriented. They may go in either way.

NOTE: The receptacle is shown - use the same procedure for plug.

DT/DTP Series Disassembly

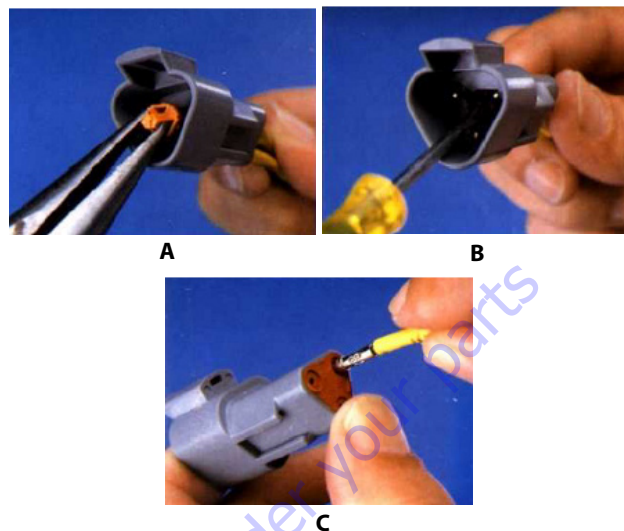


Figure 7-17. DT/DTP Contact Removal

5. Remove wedgelock using needlenose pliers or a hook shaped wire to pull wedge straight out.
6. To remove the contacts, gently pull wire backwards, while at the same time releasing the locking finger by moving it away from the contact with a screwdriver.
7. Hold the rear seal in place, as removing the contact may displace the seal.

HD30/HDP20 Series Assembly

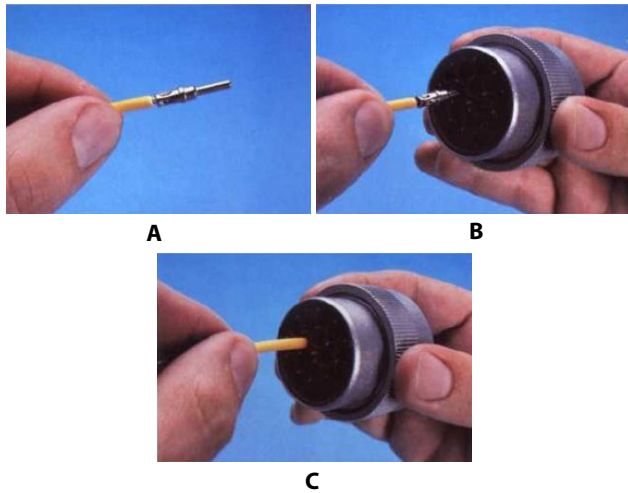


Figure 7-18. HD/HDP Contact Installation

8. Grasp contact about 25 mm behind the contact crimp barrel.
9. Hold connector with rear grommet facing you.
10. Push contact straight into connector grommet until a positive stop is felt. A slight tug will confirm that it is properly locked in place.

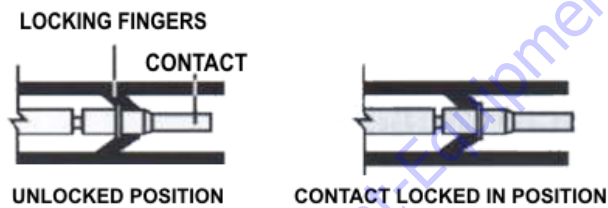


Figure 7-19. HD/HDP Locking Contacts Into Position

NOTE: For unused wire cavities, insert sealing plugs for full environmental sealing.

HD30/HDP20 Series Disassembly

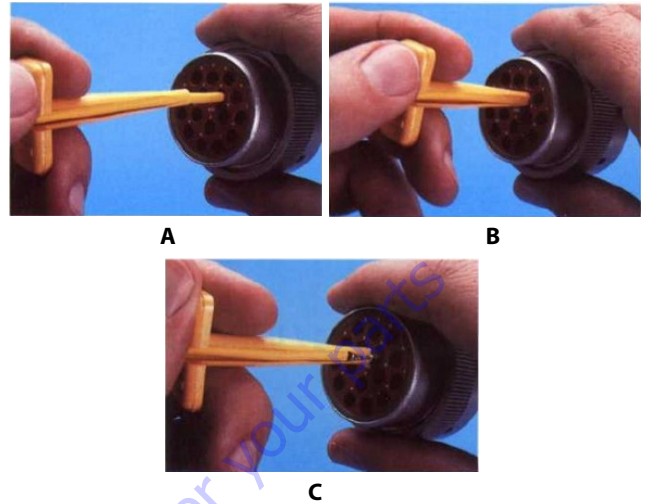


Figure 7-20. HD/HDP Contact Removal

11. With rear insert toward you, snap appropriate size extractor tool over the wire of contact to be removed.
12. Slide tool along into the insert cavity until it engages contact and resistance is felt.
13. Pull contact-wire assembly out of connector.

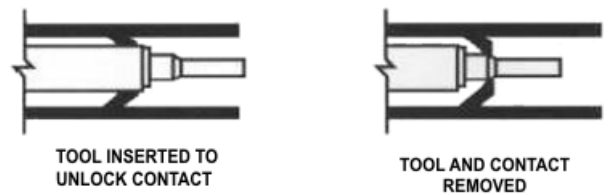


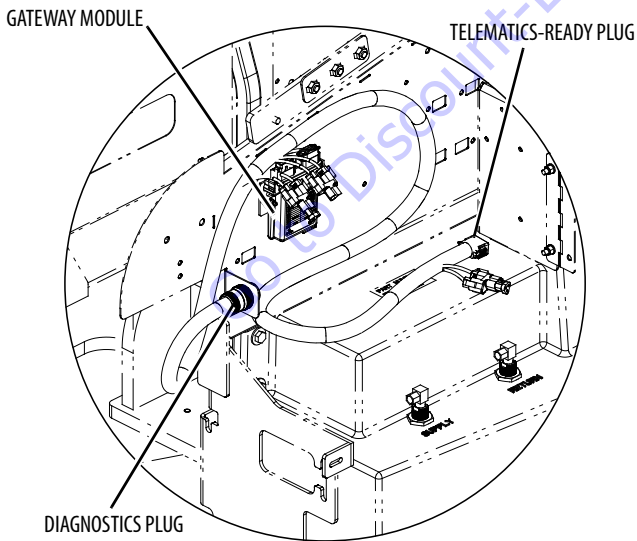
Figure 7-21. HD/HDP Unlocking Contacts

NOTE: Do Not twist or insert tool at an angle.

7.6 TELEMATICS GATEWAY

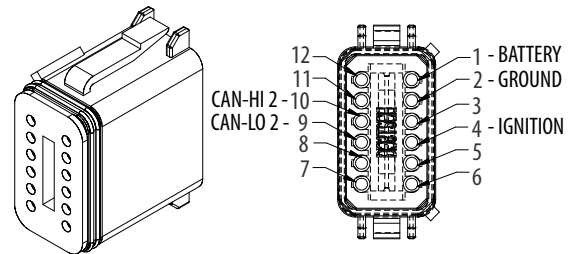
Personnel using machines equipped with an optional telematics gateway will be able to view the following data through their telematics device:

JLG LABEL	DESCRIPTION	UNIT
Engine Speed	Actual engine speed.	RPM
DEF Tank Level (If Equipped)	Indicates the level of DEF (diesel exhaust fluid) within the DEF tank if the machine is equipped with DEF tank. <ul style="list-style-type: none"> • 0% = Empty • 100% = Full 	Percentage (%)
JLG Machine Faults: Active / Not-Active	<ul style="list-style-type: none"> • 00 - No Machine Faults • 01 - Active Machine Fault • 10 - Error • 11 - Not available 	Bit
Total Idle Fuel Used	Total amount of fuel used during vehicle operation during idle conditions.	Liters
Total Idle Hours	Total time of engine operation during idle conditions.	Seconds
Total Engine Hours	Total time of engine operation.	Seconds
Total Fuel Used	Total amount of fuel used during vehicle operation.	Liters
Fuel Rate	Amount of fuel consumed by engine per unit of time.	Liters/Hour
Fuel Level	Ratio of fuel volume to the total volume of the fuel storage container. When a low fuel limit switch is present, the fuel level will indicate "full" until the switch opens, which will then indicate 10% fuel remaining. When Fuel Level 2 (SPN 38) is not used, Fuel Level 1 represents the total fuel in all fuel storage containers. When Fuel Level 2 is used, Fuel Level 1 represents the fuel level in the primary or left side fuel storage container.	Percentage (%)
DM1 Engine Faults	Shows actual engine fault codes.	N/A



Telematics-Ready (TCU) Plug

The telematics-ready (TCU) plug is a standard 12-pin Deutsch connector. Pin-out locations are shown below:



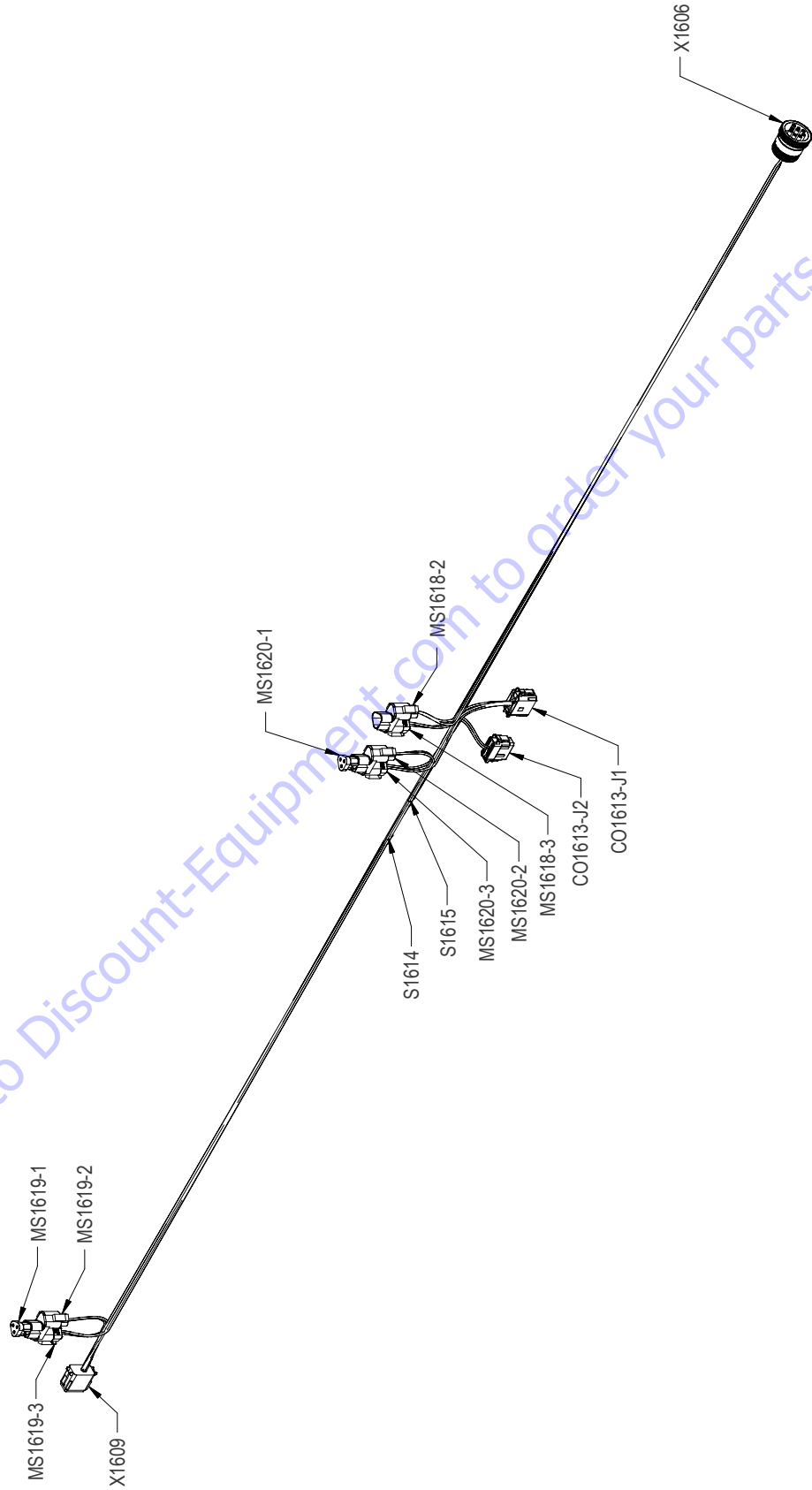


Figure 7-22. Telematics Gateway Harness - Sheet 1 of 3

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X1609 (TCU)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	1-0 BAT	16 AWG	GXL	X1606 (B)
2	BLK	0-0 GND	16 AWG	GXL	S1615 (1)
4	ORN	2-0 IGN	16 AWG	GXL	S1614 (1)
9	GRN	CANL2	18 AWG	GXL	MS1619-2 (B)
10	YEL	CANH2	18 AWG	GXL	MS1619-2 (A)

MS1619-2 (CAN-T 2)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH2	18 AWG	GXL	X1609 (10)
B	GRN	CANL2	18 AWG	GXL	X1609 (9)

MS1619-3 (CAN-T 2)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH2	18 AWG	GXL	MS1620-2 (A)
B	GRN	CANL2	18 AWG	GXL	MS1620-2 (B)

CO1613-J1 (GATEWAY 1)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
9	GRN	CAN1	18 AWG	GXL	MS1618-2 (B)
10	YEL	CANH1	18 AWG	GXL	MS1618-2 (A)
11	BLK	0-2 GND	16 AWG	GXL	S1615 (2)
12	ORN	2-2 IGN	16 AWG	GXL	S1614 (2)

CO1613-J2 (GATEWAY 2)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
9	GRN	CANL2	18 AWG	GXL	MS1620-3 (B)
10	YEL	CANH2	18 AWG	GXL	MS1620-3 (A)

MS1620-2 (CAN-T 2)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH2	18 AWG	GXL	MS1619-3 (A)
B	GRN	CANL2	18 AWG	GXL	MS1619-3 (B)

MS1620-3 (CAN-T 2)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH2	18 AWG	GXL	CO1613-J2 (10)
B	GRN	CANL2	18 AWG	GXL	CO1613-J2 (9)

S1614					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORN	2-0 IGN	16 AWG	GXL	X1609 (4)
2	ORN	2-1 IGN	16 AWG	GXL	X1606 (H)
2	ORN	2-2 IGN	16 AWG	GXL	CO1613-J1 (12)

S1615					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	0-0 GND	16 AWG	GXL	X1609 (2)
2	BLK	0-1 GND	16 AWG	GXL	X1606 (A)
2	BLK	0-2 GND	16 AWG	GXL	CO1613-J1 (11)

MS1618-2 (CAN-T 1)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH1	18 AWG	GXL	CO1613-J1 (10)
B	GRN	CANL1	18 AWG	GXL	CO1613-J1 (9)

MS1618-3 (CAN-T 1)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CANH1	18 AWG	GXL	X1606 (C)
B	GRN	CANL1	18 AWG	GXL	X1606 (D)

X1606 (DIAG)					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	BLK	0-1 GND	16 AWG	GXL	S1615 (2)
B	RED	1-0 BAT	16 AWG	GXL	X1609 (1)
C	YEL	CANH1	18 AWG	GXL	MS1618-3 (A)
D	GRN	CANL1	18 AWG	GXL	MS1618-3 (B)
H	ORN	2-1 IGN	16 AWG	GXL	S1614 (2)

Figure 7-23. Telematics Gateway Harness - Sheet 2 of 3

WIRE NO.	COLOR	WIRE GAUGE	LENGTH (mm)	JACKET	FROM		TO	
					REFERENCE	PIN	REFERENCE	PIN
CAN L2	GRN	18 AWG	1151	GXL	MS1619-3	B	MS1620-2	B
CAN L2	GRN	18 AWG	151	GXL	X1609	9	MS1619-2	B
CAN L1	GRN	18 AWG	157	GXL	MS1618-2	B	CO1613-J1	9
CAN L2	GRN	18 AWG	225	GXL	MS1620-3	B	CO1613-J2	9
CAN L1	GRN	18 AWG	1076	GXL	MS1618-3	B	X1606	D
CAN H2	YEL	18 AWG	155	GXL	X1609	10	MS1619-2	A
CAN H2	YEL	18 AWG	233	GXL	MS1620-3	A	CO1613-J2	10
CAN H1	YEL	18 AWG	157	GXL	MS1618-2	A	CO1613-J1	10
CAN H2	YEL	18 AWG	1150	GXL	MS1619-3	A	MS1620-2	A
CAN H1	YEL	18 AWG	1079	GXL	MS1618-3	A	X1606	C
0-0 GND	BLK	16 AWG	1006	GXL	X1609	2	S1615	1
0-1 GND	BLK	16 AWG	1145	GXL	X1606	A	S1615	2
0-2 GND	BLK	16 AWG	223	GXL	CO1613-J1	11	S1615	2
1-0 BAT	RED	16 AWG	2150	GXL	X1609	1	X1606	B
2-0 IGN	ORN	16 AWG	939	GXL	X1609	4	S1614	1
2-1 IGN	ORN	16 AWG	1212	GXL	S1614	2	X1606	H
2-2 IGN	ORN	16 AWG	287	GXL	CO1613-J1	12	S1614	2

Figure 7-24. Telematics Gateway Harness - Sheet 3 of 3

7.7 WIRING HARNESS CONNECTOR LABELS

Connector Labels

Connectors between harnesses are identified by the prefix "X" and a sequentially assigned number. An optional suffix (letters & numbers) may be added when multiple terminations occur at one device or when there are optional connections.

Examples:

X25 connects to X25 in another harness.

X65A, X65B connect to different portions of one device

X163 connects to X163A in ANSI and X163B in CE machines

Component Labels

Every component on the vehicle has a unique identification. A standard prefix letter is assigned according to the table below, followed by a unique sequential number. An optional suffix (letters & numbers) may be added when multiple terminations occur at one device.

Terminals that are not loaded into connectors are considered independent components and labeled in the same fashion.

Table 7-1. Wiring Harness Connector Labels

Component	Category	Label
Audible	Alarms	AH
	Horns	
Battery	Batteries	BT
	Battery Terminals	
Control Module	Ground	CO
	LSS	
	Platform	
Engine	Alternator	EC
	Cold Start	
	Controller	
	Coolant Temp	
	Fuel Pump	
	Fuel Solenoid	
	Glow Plugs	
	Oil Pressure	
Starter		
Fuse & CB Fuse FC	Fuse	FC
	Fusible Link	FC
	Circuit Breaker	CB
Gauge & Display	Board	GD
	Cluster	
	Hour meter	
	LMI	
	Speedometer	
Inline	Resistor	R
	Diode	D
Joystick & Steering	Electronic	JS
	Hydraulic	
Lights	Dome	LB
	Headlights	
	Simple	
	Taillights	
Membrane Panel		MP
Miscellaneous	Radio	MS
	Speakers	
	Splice Blocks	
	T-Connectors	

Table 7-1. Wiring Harness Connector Labels

Component	Category	Label
Other Switches	Disconnect	SW
	EMS	
	Foot	
	HVAC	WH
	Key	SW
	Park brake	
	Pump pot	
	Push	
	Shifter	
	Turn signal	
Relay	5 Pin	RL
	4 Pin	
	Contactors	
	Power module	
Rocker Switch		SW
Sensor	Angle	SN
	Fuel	
	Length	
	Limit	
	Load	
	Pressure	
	Proximity	
	Speed	
	Temperature	
	Terminals	
Sockets		
Male Blades		
Female Blades		
Rings		
Forks		
Toggle Switch	DPDT	SW
	DPST	
	SPDT	
	SPST	
	Special	
Valves	Simple	HV
	Suppression	
<p>Examples: T67 is a ring terminal connected during installation. C01-J3 is the J3 connector for a UGM control module. EC9 is a glow plug supplied with the engine</p>		

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

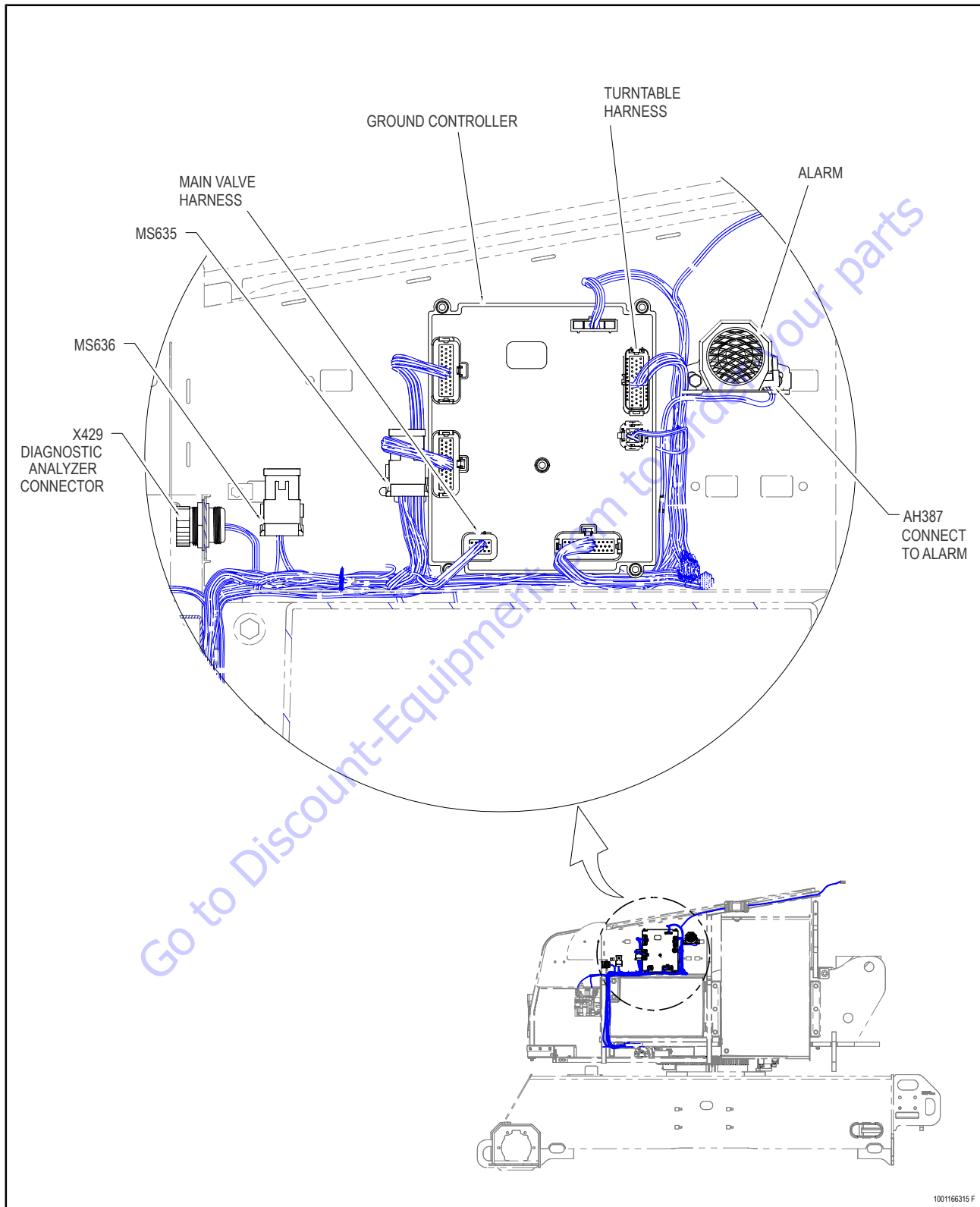


Figure 7-25. Electrical Installation - Sheet 1 of 10

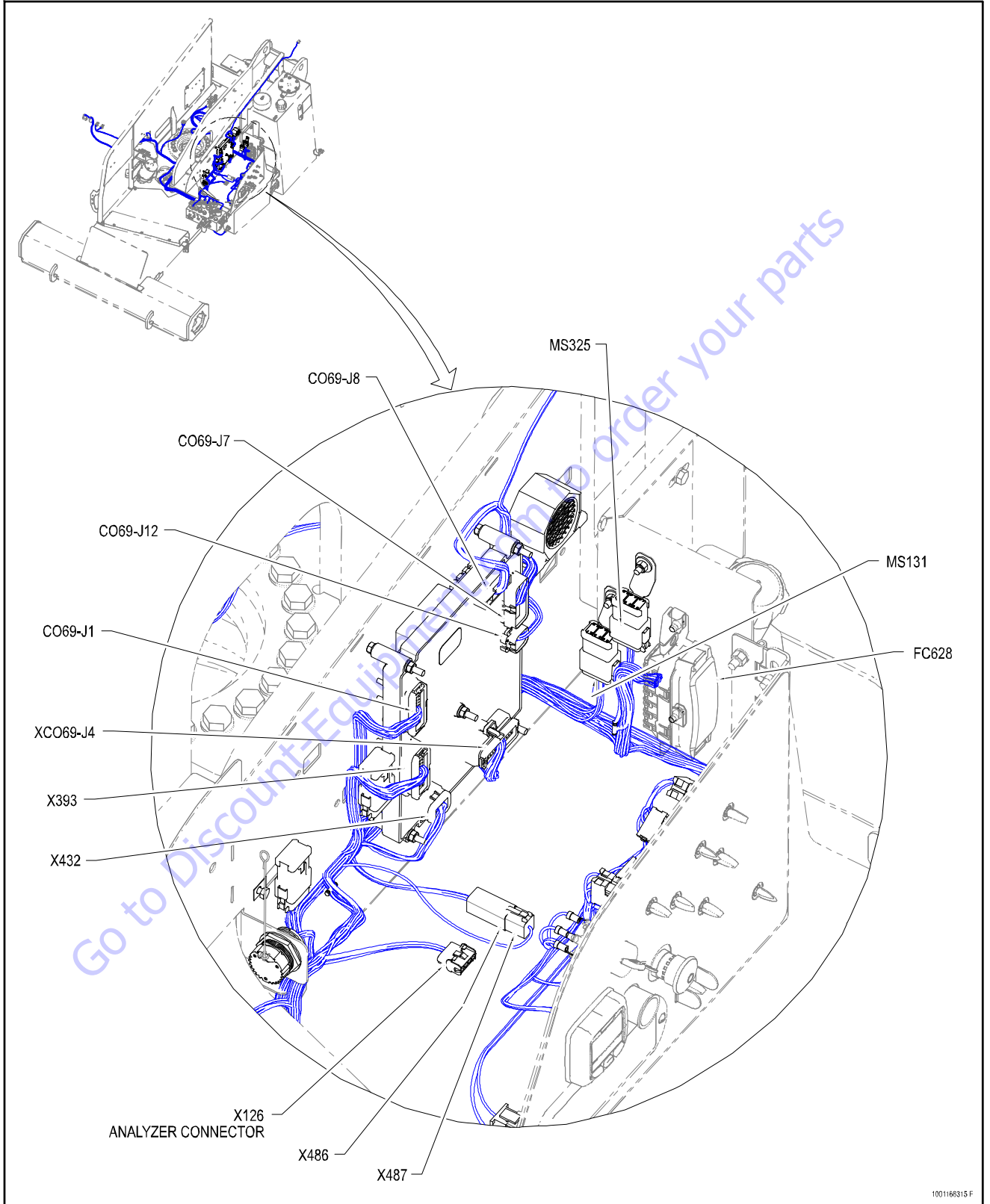


Figure 7-26. Electrical Installation - Sheet 2 of 10

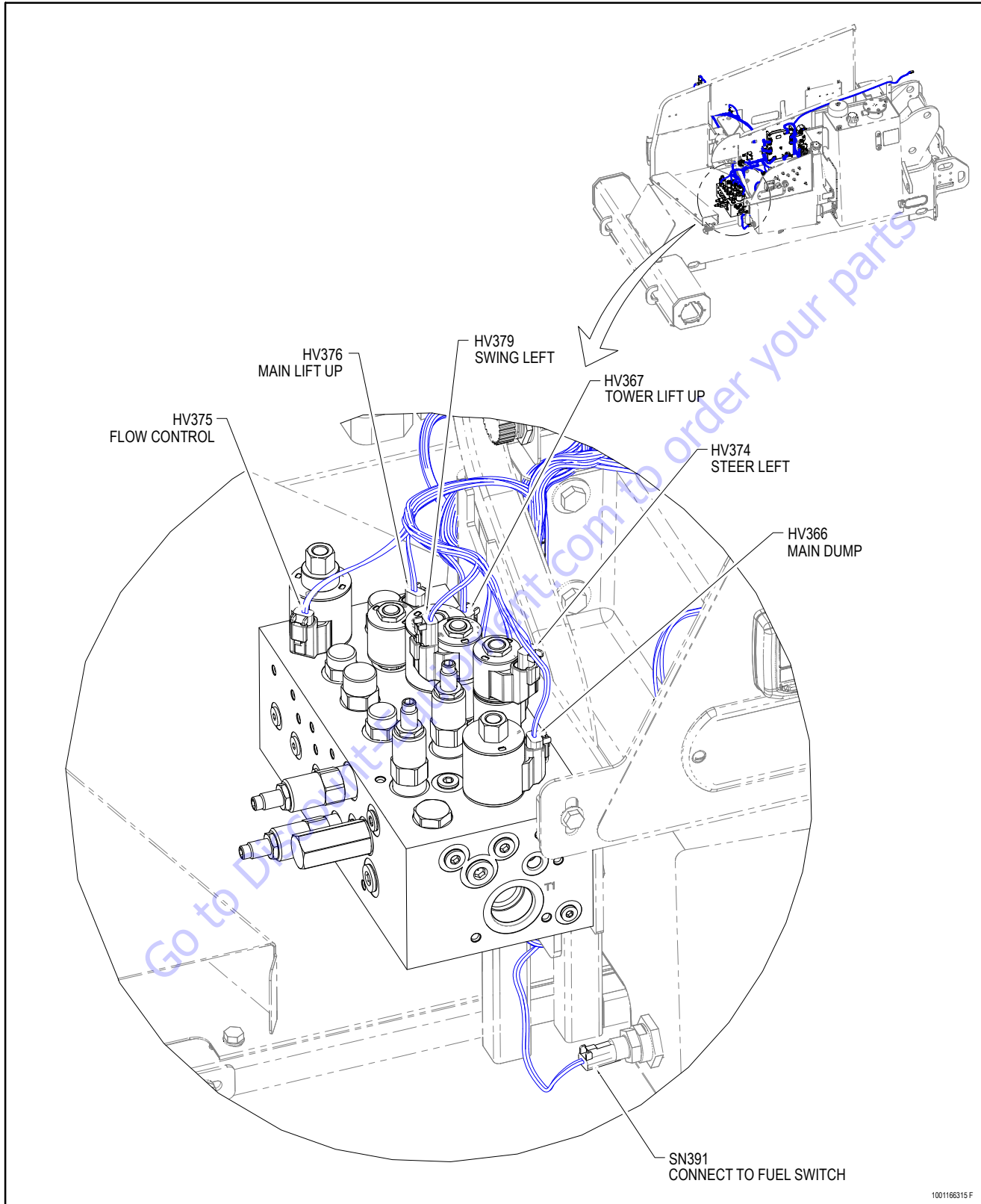


Figure 7-27. Electrical Installation - Sheet 3 of 10

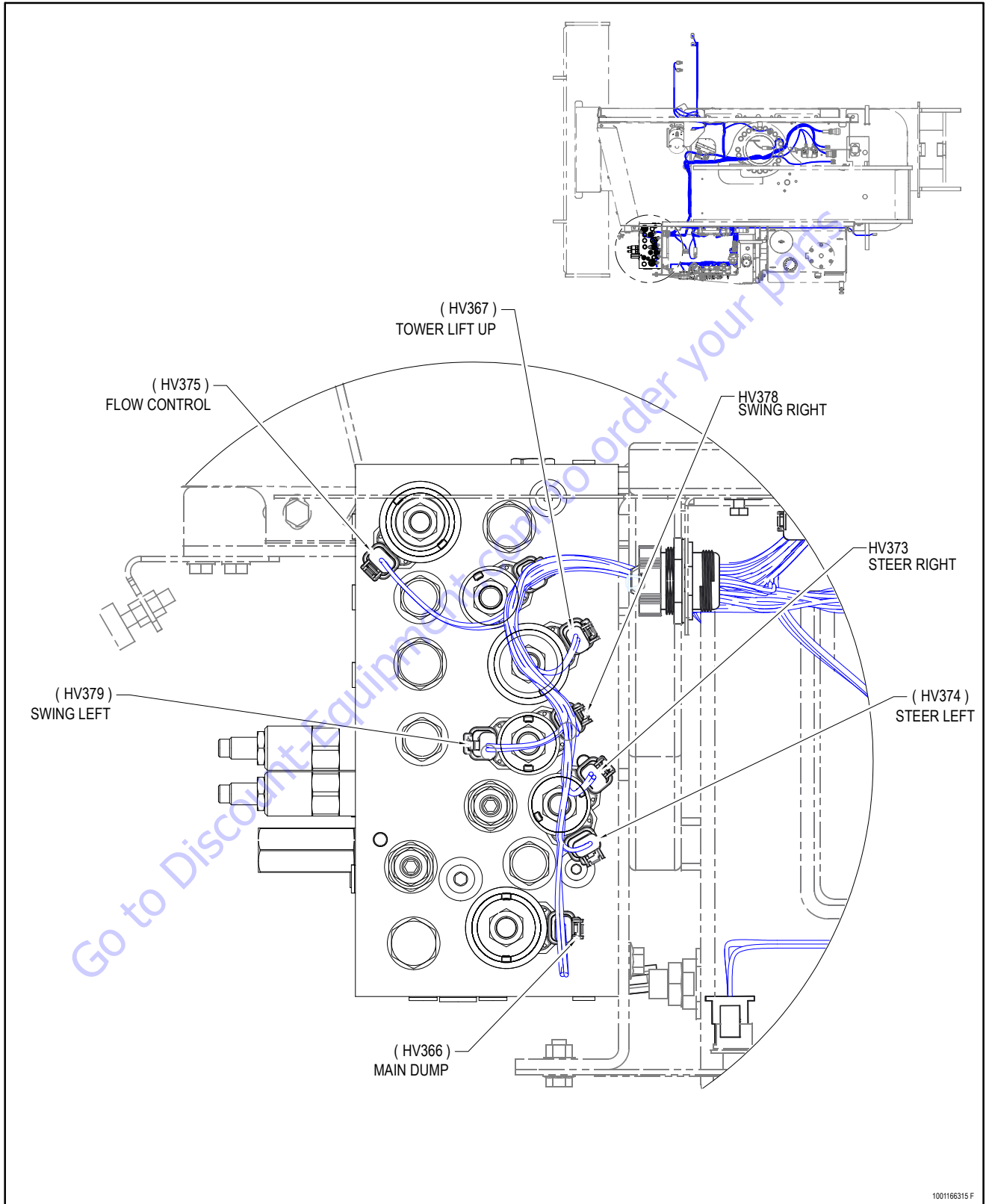


Figure 7-28. Electrical Installation - Sheet 4 of 10

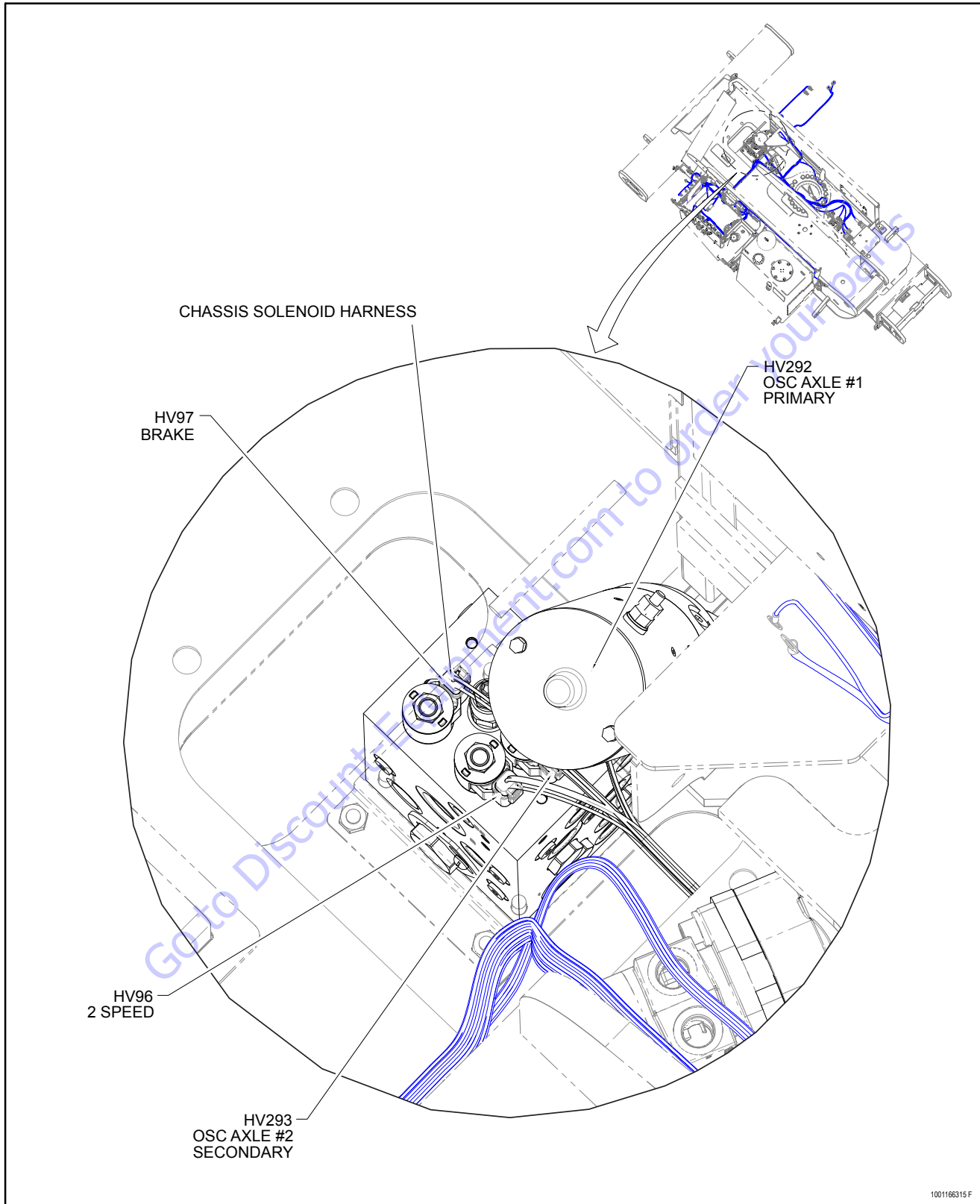


Figure 7-29. Electrical Installation - Sheet 5 of 10

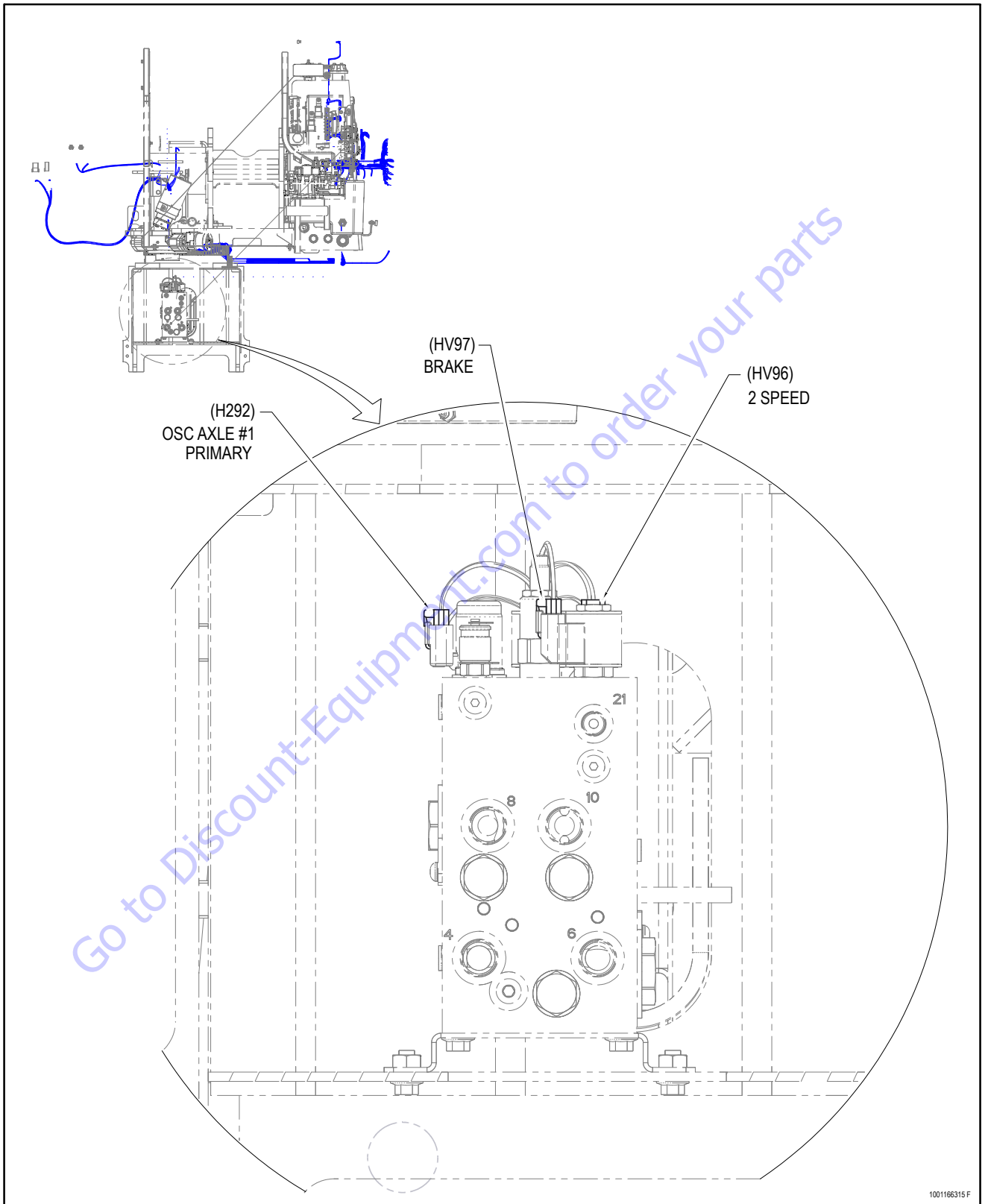


Figure 7-30. Electrical Installation - Sheet 6 of 10

1001166315 F

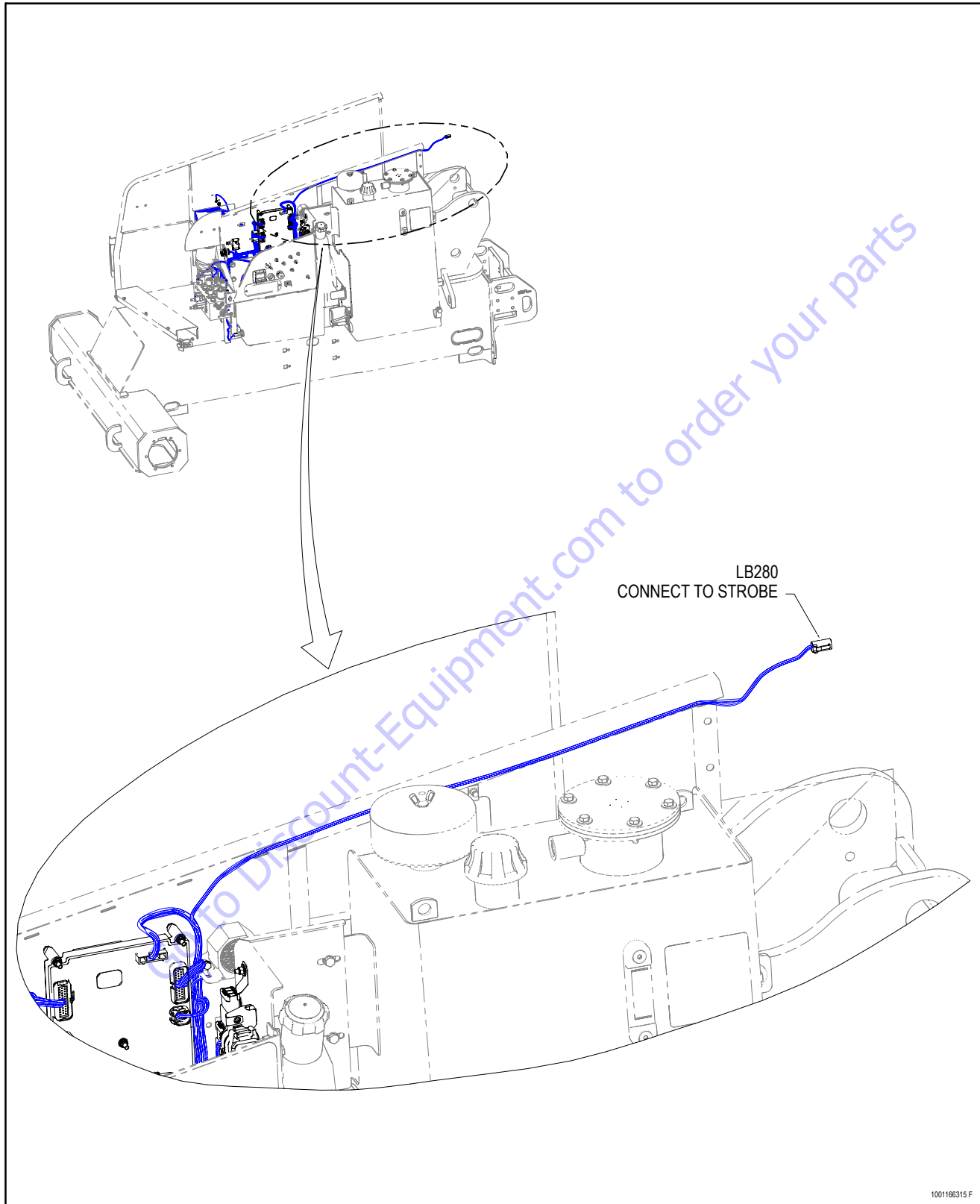


Figure 7-31. Electrical Installation - Sheet 7 of 10

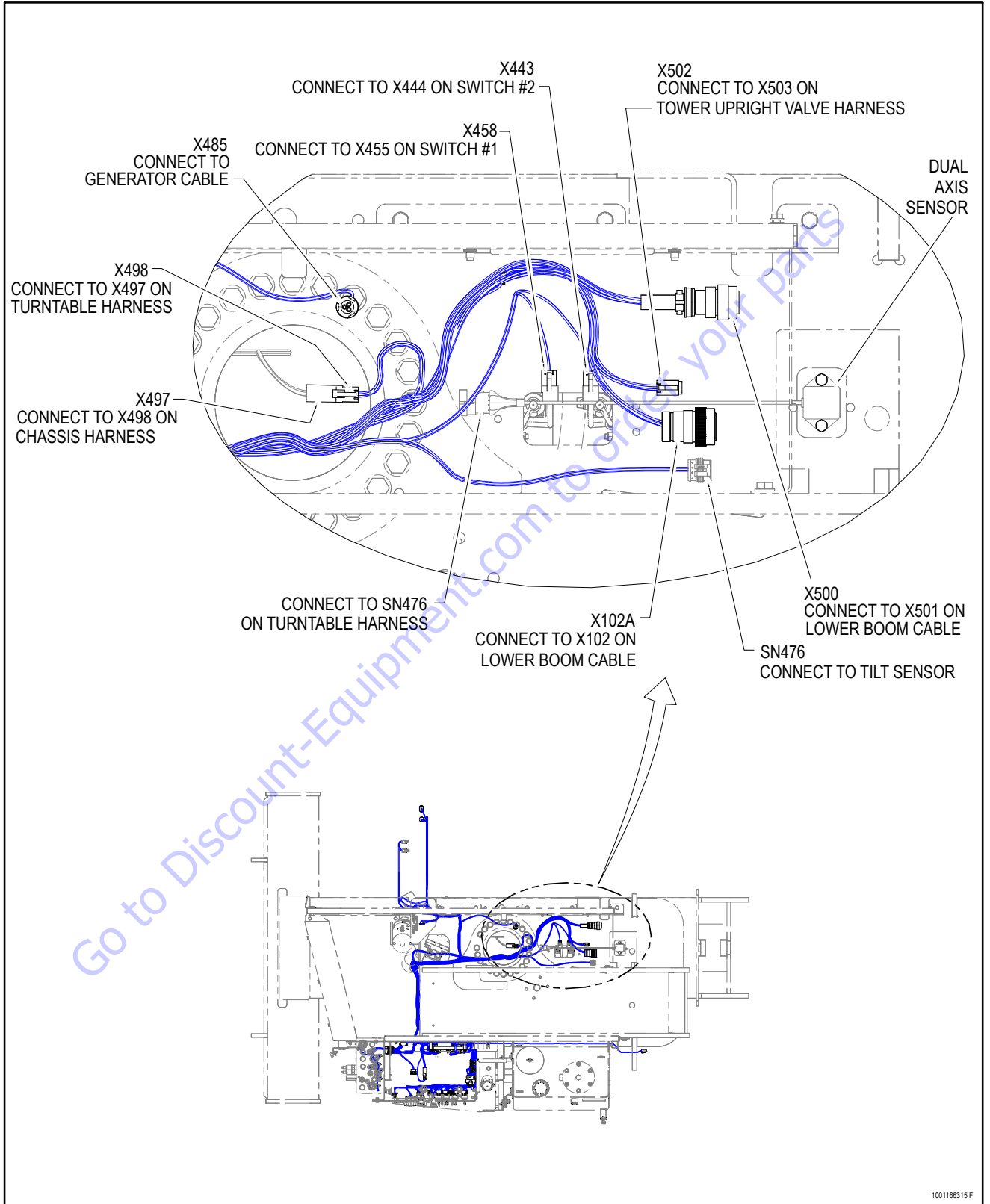


Figure 7-32. Electrical Installation - Sheet 8 of 10

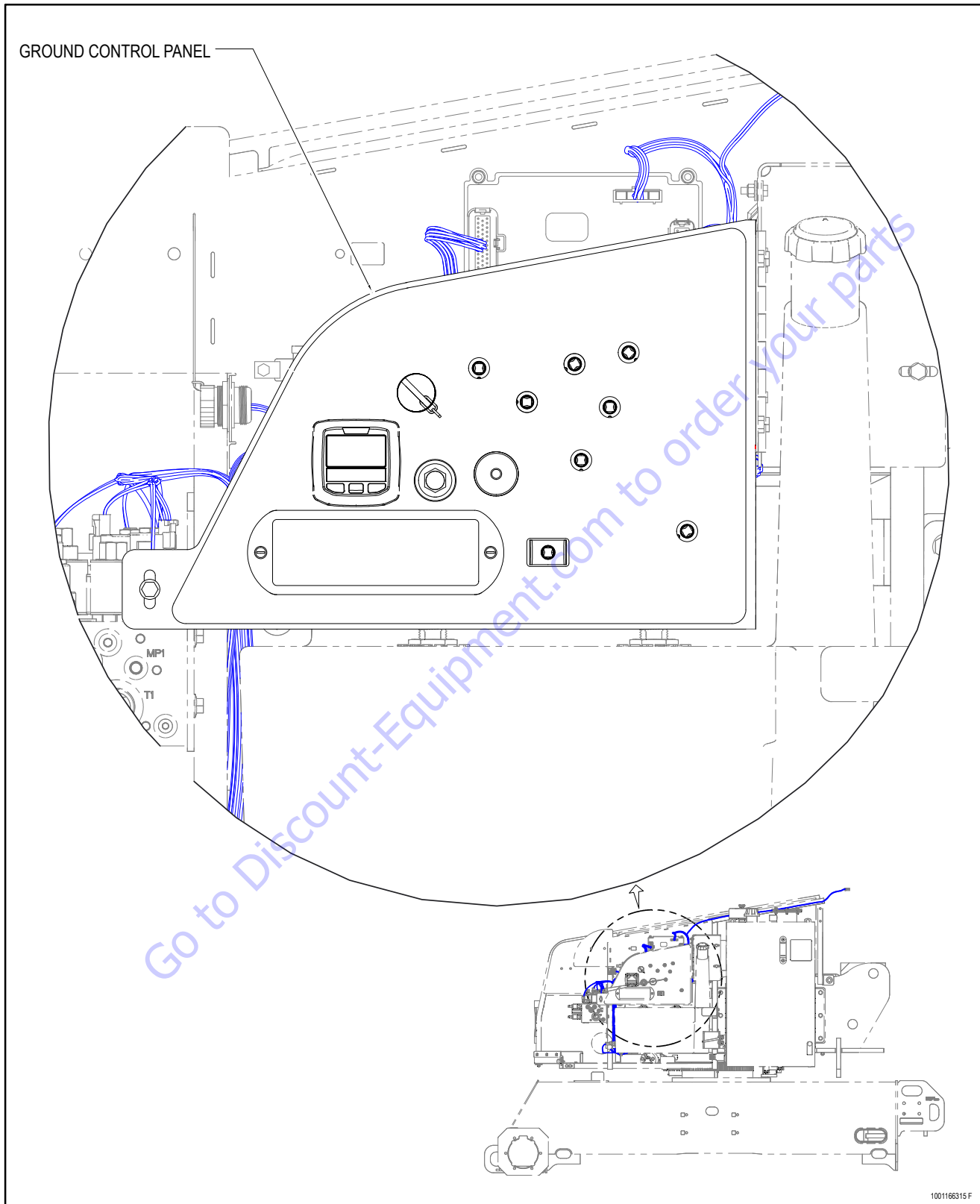


Figure 7-33. Electrical Installation - Sheet 9 of 10

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

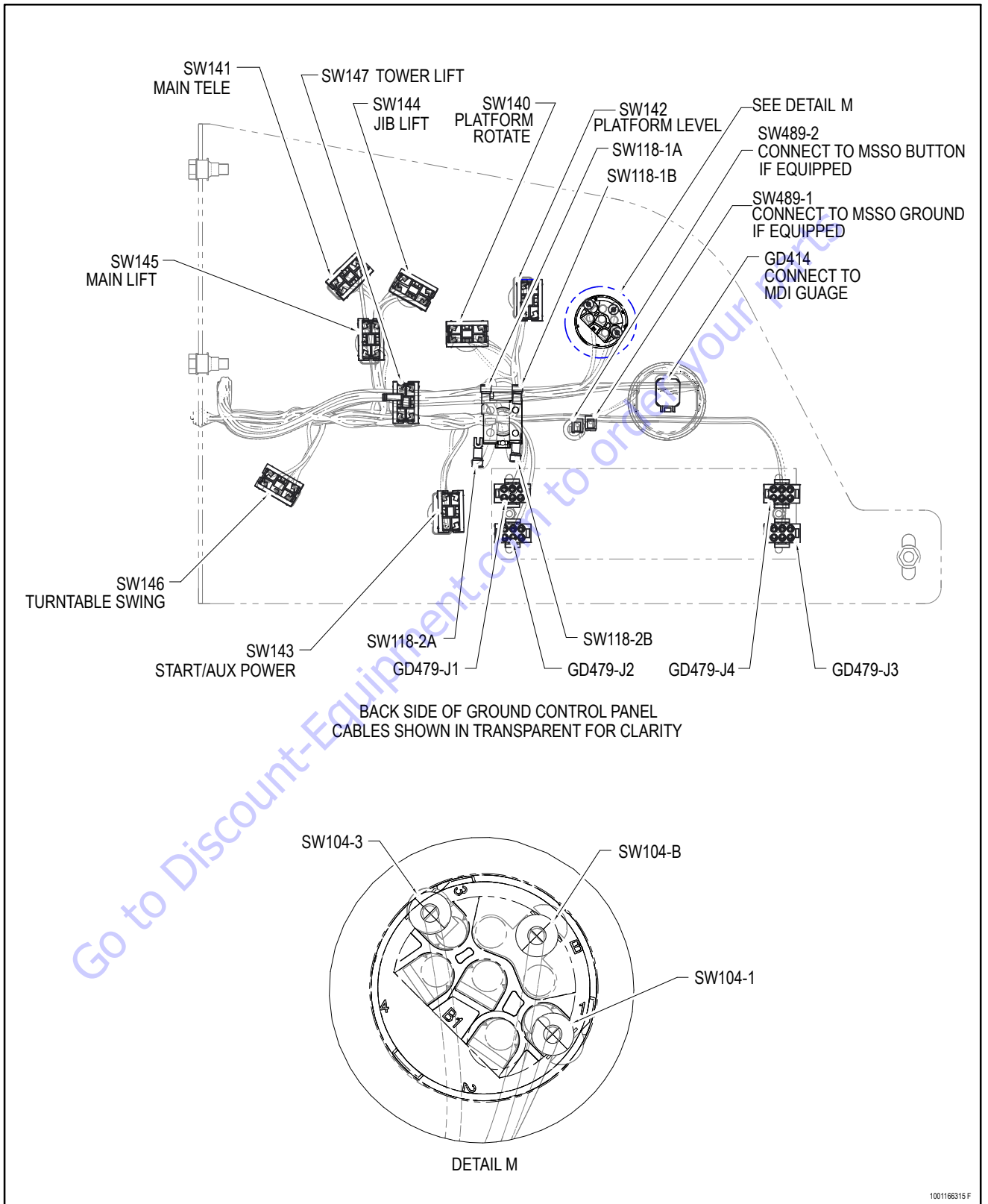


Figure 7-34. Electrical Installation - Sheet 10 of 10

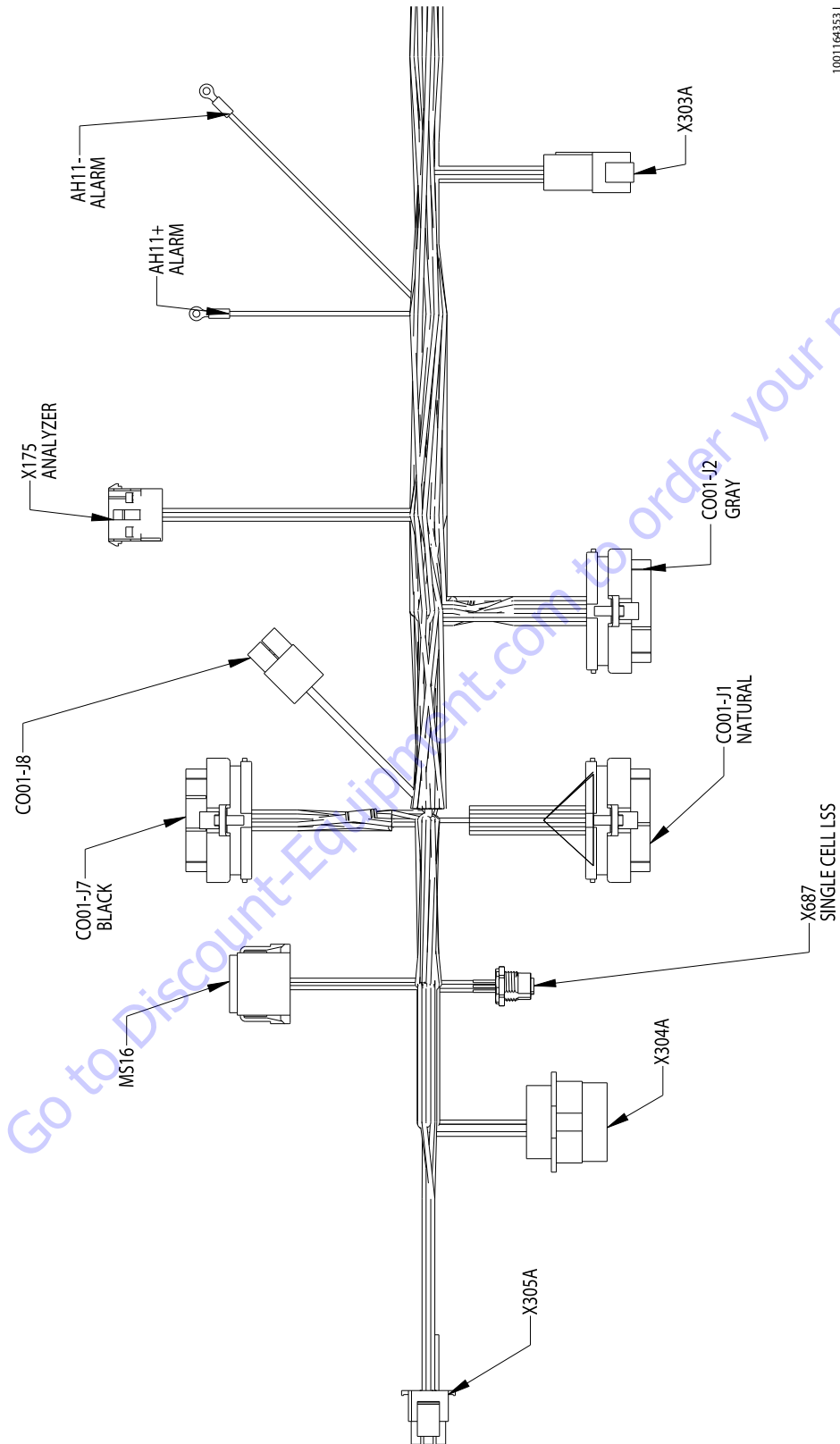


Figure 7-36. Platform Console Harness (Without SkyGuard) - Sheet 2 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X305A					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-35GENERATORSWITCH	18AWG	GXL	C001-J7(9)
2	WHT	1-38GENONSWITCH	18AWG	GXL	C001-J7(5)
3					
4	WHT	1-39 FOOTSWDISENGAGED	18AWG	GXL	C001-J7(8)
5	WHT	1-40FOOTSW	18AWG	GXL	C001-J7(4)
6					
7	WHT	1-90SGPOWER	18AWG	GXL	C001-J7(7)
8	BLK	1-86SGGND	18AWG	GXL	C001-J7(24)
9	WHT	1-85STPOWER	18AWG	GXL	C001-J2(31)
10	WHT	1-87SGINPUT1	18AWG	GXL	C001-J7(18)
11	WHT	1-88SGINPUT2	18AWG	GXL	C001-J1(23)
12	WHT	1-91STSWITCH	18AWG	GXL	C001-J1(20)
13					
14	WHT	1-551	18AWG	GXL	X305A
15	WHT	1-551	18AWG	GXL	X305A

X304A					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	GRN	CAN	20AWG	J1939 CABL	MS16(5)
3	YEL	CAN	20AWG	J1939 CABL	MS16(2)
4	WHT	1-44EMS	18AWG	GXL	C001-J7(3)
5					
6					
7					
8					
9	WHT	1-62EMS B+	18AWG	GXL	SW14-1B(1B)
10					
11	WHT	1-37GROUNDMODE	18AWG	GXL	C001-J7(1)
12	WHT	1-1	18AWG	GXL	C001-J8(2)
13					
14					
15					
16	BLK	000-10-14 GND	12AWG	GXL	C001-J8(1)
17					
18					
19					

X303A					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-41PLATFROTATELEFT	18AWG	GXL	C001-J7(33)
2	WHT	1-42PLATFROTATERIGHT	18AWG	GXL	C001-J7(34)
3	WHT	1-36JIBUP	18AWG	GXL	C001-J7(25)
4	WHT	1-43JIBDOWN	18AWG	GXL	C001-J7(26)
5	BLK	000-10-11VALVESGND	18AWG	GXL	C001-J7(23)
6	BLK	000-10-34OPTIONGND	18AWG	GXL	C001-J7(29)
7	WHT	1-89OPTIONPOWER	18AWG	GXL	C001-J2(33)
8	YEL	CAN	20AWG	J1939 CABL	MS16(3)
9	GRN	CAN	20AWG	J1939 CABL	MS16(6)
10					
11	BLK	000-10-30-2LSSGND	18AWG	GXL	S688(2)
12	WHT	1-33-2LSSPWR	18AWG	GXL	S689(2)

X175 ANALIZER					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-66 POWER	18 AWG	GXL	C001-J2 (26)
2	WHT	1-81 RECEIVE	18 AWG	GXL	C001-J2 (28)
3	WHT	1-82 TRANSMIT	18 AWG	GXL	C001-J2 (29)
4	BLK	000-10-12 GND	18 AWG	GXL	C001-J2 (27)

Figure 7-37. Platform Console Harness (Without SkyGuard) - Sheet 3 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

MS16					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN	20AWG	J1939 CABLE	C001-J7(31)
2	YEL	CAN	20AWG	J1939 CABLE	X304A (3)
3	YEL	CAN	20AWG	J1939 CABLE	X303 A (8)
4	GRN	CAN	20AWG	J1939 CABLE	C001-J7(30)
5	GRN	CAN	20AWG	J1939 CABLE	X304 A (2)
6	GRN	CAN	20AWG	J1939 CABLE	X303 A (9)
7	GRY	CAN LO	20AWG	CABLE	X687 (5)
8					
9					
10	BLK	CAN HI	20 AWG	CABLE	X687 (4)
11					
12					

AH11- ALARM					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	000-10-16 PLAT ALARM GND	18 AWG	GXL	C001-J7 (20)

C001-J7 BLACK					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-37GROUND MODE	18AWG	GXL	X304A(11)
2	WHT	1-45 PLATF EMS	18AWG	GXL	SW14-2B (2B)
3	WHT	1-44EMS	18AWG	GXL	X304A(4)
4	WHT	1-40FOOT SW	18AWG	GXL	X305A(5)
5	WHT	1-38GEN ON SWITCH	18AWG	GXL	X305A(2)
6					
7	WHT	1-90SG POWER	18AWG	GXL	X305A(7)
8	WHT	1-39FOOT SW DISENGAGED	18AWG	GXL	X305A(4)
9	WHT	1-35GENERATOR SWITCH	18AWG	GXL	X305A(1)
10					
11					
12					
13					
14					
15					
16	BLK	000-10-30LSSGND	18AWG	GXL	S688 (1)
17					
18	WHT	1-87SG INPUT1	18AWG	GXL	X305A(10)
19	WHT	1-34PLATALRM	18AWG	GXL	AH11+ (1)
20	WHT	000-10-16PLAT ALARM GND	18AWG	GXL	AH11- (1)
21					
22					
23	BLK	000-10-11 VALVES GND	18AWG	GXL	X303A(5)
24	BLK	1-86SG GND	18AWG	GXL	X305A(8)
25	WHT	1-36 JIB UP	18AWG	GXL	X303A(3)
26	WHT	1-43 JIB DOWN	18AWG	GXL	X303A(4)
27					
28					
29	BLK	000-10-34OPTION GND	18AWG	GXL	X303A(6)
30	GRN	CAN	20AWGJ	J1939 CABL	MS16 (4)
31	YEL	CAN	20AWGJ	J1939 CABL	MS16 (1)
32					
33	WHT	1-41PLATF ROTATE LEFT	18AWG	GXL	X303A(1)
34	WHT	1-42PLATF ROTATE RIGHT	18AWG	GXL	X303A(2)
35					

Figure 7-38. Platform Console Harness (Without SkyGuard) - Sheet 4 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

C001-J2 GRAY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1					
2					
3					
4	WHT	1-67 PLTF ORIENT OVERRIDE	18AWG	GXL	SW174 (1)
5					
6	WHT	1-20 TILT	18AWG	GXL	GD153-J4 (5)
7	WHT	1-32FT SWITCH ENABLE	18AWG	GXL	GD153-J2 (2)
8	WHT	1-25 SYSTEM DISTRESS	18AWG	GXL	GD153-J3 (6)
9	WHT	1-24CREEP	18AWG	GXL	GD153-J2 (1)
10					
11	WHT	1-22 PLATFORM OVERLOAD	18AWG	GXL	GD153-J4 (3)
12	WHT	1-21500#/600# MODE	18AWG	GXL	GD153-J4 (4)
13	WHT	1-271000# MODE	18AWG	GXL	GD153-J3 (4)
14	WHT	1-28DRIVE ORIENT SW	18AWG	GXL	GD153-J3 (3)
15	WHT	1-23GENERATOR ON	18AWG	GXL	GD153-J4 (2)
16	WHT	1-31SOFT TCH/SKY GUARD	18AWG	GXL	LB478+ (1)
17	WHT	1-29 GLOW PLUG	18AWG	GXL	GD153-J4 (6)
18	BLK	000-10-27 GND	18AWG	GXL	GD153-J2 (6)
19					
20	WHT	1-92 DRIVE DISABLE	18AWG	GXL	GD153-J3 (1)
21	WHT	1-30 LOW FUEL	18AWG	GXL	GD153-J2 (3)
22	WHT	1_498 1/4 FUEL	18AWG	GXL	GD153-J1 (1)
23	WHT	1_499 3/4 FUEL	18AWG	GXL	GD153-J1 (3)
24	WHT	1_500 1/2 FUEL	18AWG	GXL	GD153-J1 (2)
25	BLK	1_497 FUEL GND	18AWG	GXL	GD153-J1 (4)
26	WHT	1-66 POWER	18AWG	GXL	X175 (1)
27	BLK	000-10-12 GND	18AWG	GXL	X175 (4)
28	WHT	1-81 RECEIVE	18AWG	GXL	X175 (2)
29	WHT	1-82 TRANSMIT	18AWG	GXL	X175 (3)
30					
31	WHT	1-85 ST POWER	18AWG	GXL	X305A (9)
32	WHT	1-33 LSS PWR	18AWG	GXL	S689 (1)
33	WHT	1-89 OPTION POWER	18AWG	GXL	X303A (7)
34					
35	WHT	1_501 FUEL FULL	18AWG	GXL	GD153-J1 (6)

AH11+ ALARM					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-34 PLAT ALRM	18AWG	GXL	C001-J7 (19)

C001-J8					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	BLK	000-10-14 GND	12AWG	GXL	X304A (16)
2	WHT	1-1	18AWG	GXL	X304A (12)

Figure 7-39. Platform Console Harness (Without SkyGuard) - Sheet 5 of 12

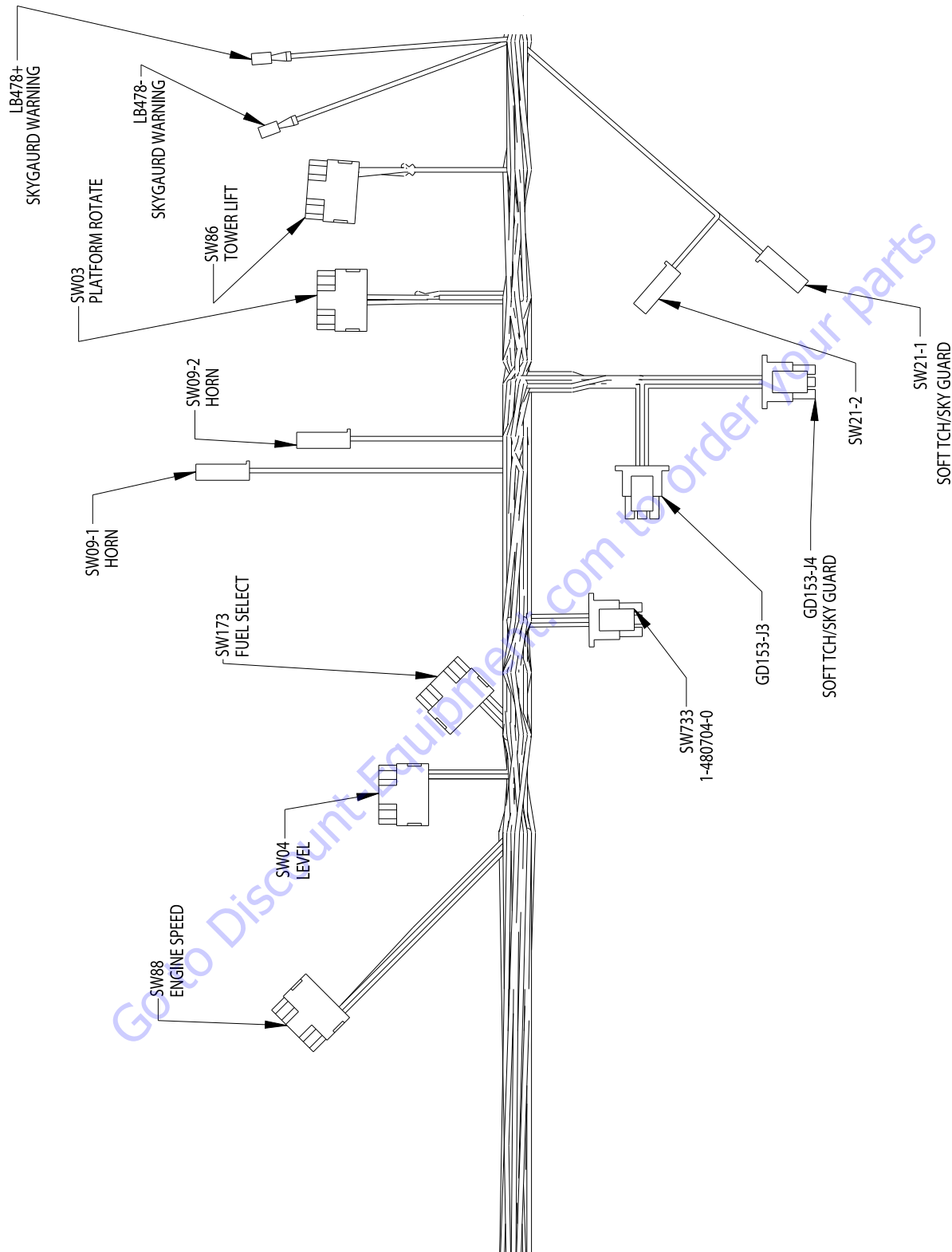


Figure 7-40. Platform Console Harness (Without SkyGuard) - Sheet 6 of 12

10011643531

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

SW88 ENGINE SPEED					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-11 MIN SPEED	18AWG	GXL	C001-J1(28)
2	WHT	1-70SWITCHESPWR	18AWG	GXL	C001-J1(18)
2	WHT	1-80SWITCHESPWR	18AWG	GXL	SW04(2)
3	WHT	1-12 MAX SPEED	18AWG	GXL	C001-J1(27)
4					
5					
6					

SW733 PUMP POT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	1-101 RSII PORT 2	18AWG	GXL	C001-J1(32)
3	WHT	1-102SWITCHESPWR	18AWG	GXL	SW09-2(1)
3	WHT	1-80SWITCHESPWR	18AWG	GXL	SW174(2)
4	WHT	1-105 POTCCW	18AWG	GXL	C001-J1(34)
5	WHT	1-103 POTCW	18AWG	GXL	C001-J1(13)
6	WHT	1-104 POTW	18AWG	GXL	C001-J1(35)

SW04 LEVEL					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	LEVELDOWN	18AWG	GXL	C001-J1(10)
2	WHT	1-73SWITCHESPWR	18AWG	GXL	SW173(2)
2	WHT	1-80SWITCHESPWR	18AWG	GXL	SW88(2)
3	WHT	1-8 LEVEL UP	18AWG	GXL	C001-J1(9)
4					
5					
6					

SW09-2 HORN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-102SWITCHESPWR	18AWG	GXL	SW733(3)
1	WHT	1-87SWITCHESPWR	18AWG	GXL	SW21-2(1)

SW09-1 HORN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-2 HORN	18AWG	GXL	C001-J1(31)

GD153-J3					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-92 DRIVE DISABLE	18AWG	GXL	C001-J2(20)
2					
3	WHT	1-28 DRIVE ORIENTSW	18AWG	GXL	C001-J2(14)
4	WHT	1-27 1000# MODE	18AWG	GXL	C001-J2(13)
5					
6	WHT	1-25 SYSTEM DISTRESS	18AWG	GXL	C001-J2(8)

SW173 FUEL SELECT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	1-73 SWITCHES PWR	18AWG	GXL	SW04(2)
2	WHT	1-74 SWITCHES PWR	18AWG	GXL	SW03(2)
3	WHT	1-68 FUEL SELECT	18AWG	GXL	C001-J1(33)
4					
5					
6					

Figure 7-41. Platform Console Harness (Without SkyGuard) - Sheet 7 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

GD153-J4					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1					
2	WHT	1-23 GENERATOR ON	18 AWG	GXL	C001-J2 (15)
3	WHT	1-22 PLATFORM OVERLOAD	18 AWG	GXL	C001-J2 (11)
4	WHT	1-21 500#/600# MODE	18 AWG	GXL	C001-J2 (12)
5	WHT	1-20 TILT	18 AWG	GXL	C001-J2 (6)
6	WHT	1-29 GLOW PLUG	18 AWG	GXL	C001-J2 (17)

SW86 TOWER LIFT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-17TOWER DOWN	18 AWG	GXL	C001-J1 (2)
2	WHT	1-72 SWITCHES PWR	18 AWG	GXL	SW03 (2)
2	WHT	1-78 SWITCHES PWR	18 AWG	GXL	SW19 (2)
3	WHT	1-16 TOWER UP	18 AWG	GXL	C001-J1 (1)
4					
5					
6					

SW03 PLATFORM ROTATE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-7 PLTF ROTATE LEFT	18 AWG	GXL	C001-J1 (8)
2	WHT	1-72 SWITCHES PWR	18 AWG	GXL	SW86 (2)
2	WHT	1-74 SWITCHES PWR	18 AWG	GXL	SW173 (2)
3	WHT	1-6 PLTF ROTATE RIGHT	18 AWG	GXL	C001-J1 (7)
4					
5					
6					

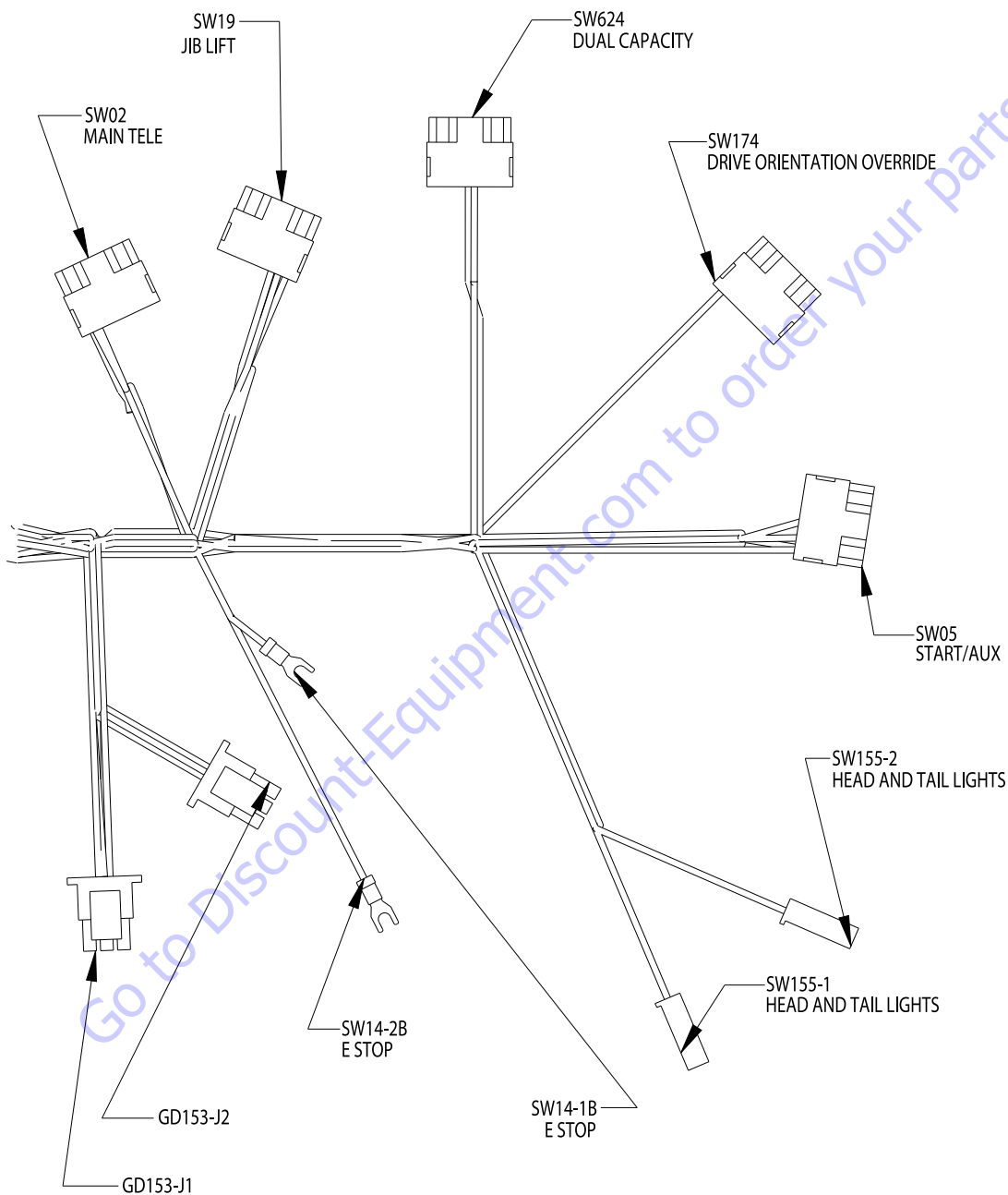
SW21-1 SOFT TCH/SKY GUARD					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-4 SOFT TOUCH	18 AWG	GXL	C001-J1 (29)

LB478- SKYGAURD WARNING					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	BLK	000-10-501 GND	18 AWG	GXL	GD153-J2 (6)

SW21-2 SOFT TCH/SKY GUARD					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-87 SWITCHES PWR	18 AWG	GXL	SW09-2 (1)

LB478+ SKYGAURD WARNING					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	1-31 SOFT TCH/SKY GUARD	18 AWG	GXL	C001-J2 (16)

Figure 7-42. Platform Console Harness (Without SkyGuard) - Sheet 8 of 12



1001164353 I

Figure 7-43. Platform Console Harness (Without SkyGuard) - Sheet 9 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

GD153-J2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-24 CREEP	18 AWG	GXL	C001-J2 (9)
2	WHT	1-32 FT SWITCH ENABLE	18 AWG	GXL	C001-J2 (7)
3	WHT	1-30 LOW FUEL	18 AWG	GXL	C001-J2 (21)
4					
5					
6	BLK	000-10-27 GND	18 AWG	GXL	C001-J2 (18)
6	BLK	000-10-501 GND	18 AWG	GXL	LB478- (1)

SW14-1B E STOP					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1B	WHT	1-62 EMS B+	18 AWG	GXL	X304A (9)

SW02 MAIN TELE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-5 TELE OUT	18 AWG	GXL	C001-J1 (6)
2	WHT	1-71 SWITCHES PWR	18 AWG	GXL	SW155-2 (1)
2	WHT	1-76 SWITCHES PWR	18 AWG	GXL	SW19 (2)
3	WHT	1-3 TELE IN	18 AWG	GXL	C001-J1 (5)
4					
5					
6					

GD153-J1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1_498 1/4 FUEL	18 AWG	GXL	C001-J2 (22)
2	WHT	1_500 1/2 FUEL	18 AWG	GXL	C001-J2 (24)
3	WHT	1_499 3/4 FUEL	18 AWG	GXL	C001-J2 (23)
4	BLK	1_497 FUEL GND	18 AWG	GXL	C001-J2 (25)
5					
6	WHT	1_501 FUEL FULL	18 AWG	GXL	C001-J2 (35)

SW19 JIB LIFT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-14 JIB DOWN	18 AWG	GXL	C001-J1 (12)
2	WHT	1-76 SWITCHES PWR	18 AWG	GXL	SW02 (2)
2	WHT	1-78 SWITCHES PWR	18 AWG	GXL	SW86 (2)
3	WHT	1-13 JIB UP	18 AWG	GXL	C001-J1 (11)
4					
5					
6					

Figure 7-44. Platform Console Harness (Without SkyGuard) - Sheet 10 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

SW624 DUAL CAPACITY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	1-75 SWITCHES PWR	18AWG	GXL	SW174 (2)
2	WHT	1-79 SWITCHES PWR	18AWG	GXL	SW05 (2)
3	WHT	1-50 DUAL CAPACITY	18AWG	GXL	CO01-J1 (21)
4					
5					
6					

SW155-2 HEAD AND TAIL LIGHTS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-71 SWITCHES PWR	18AWG	GXL	SW02 (2)
1	WHT	1-77 SWITCHES PWR	18AWG	GXL	SW05 (2)

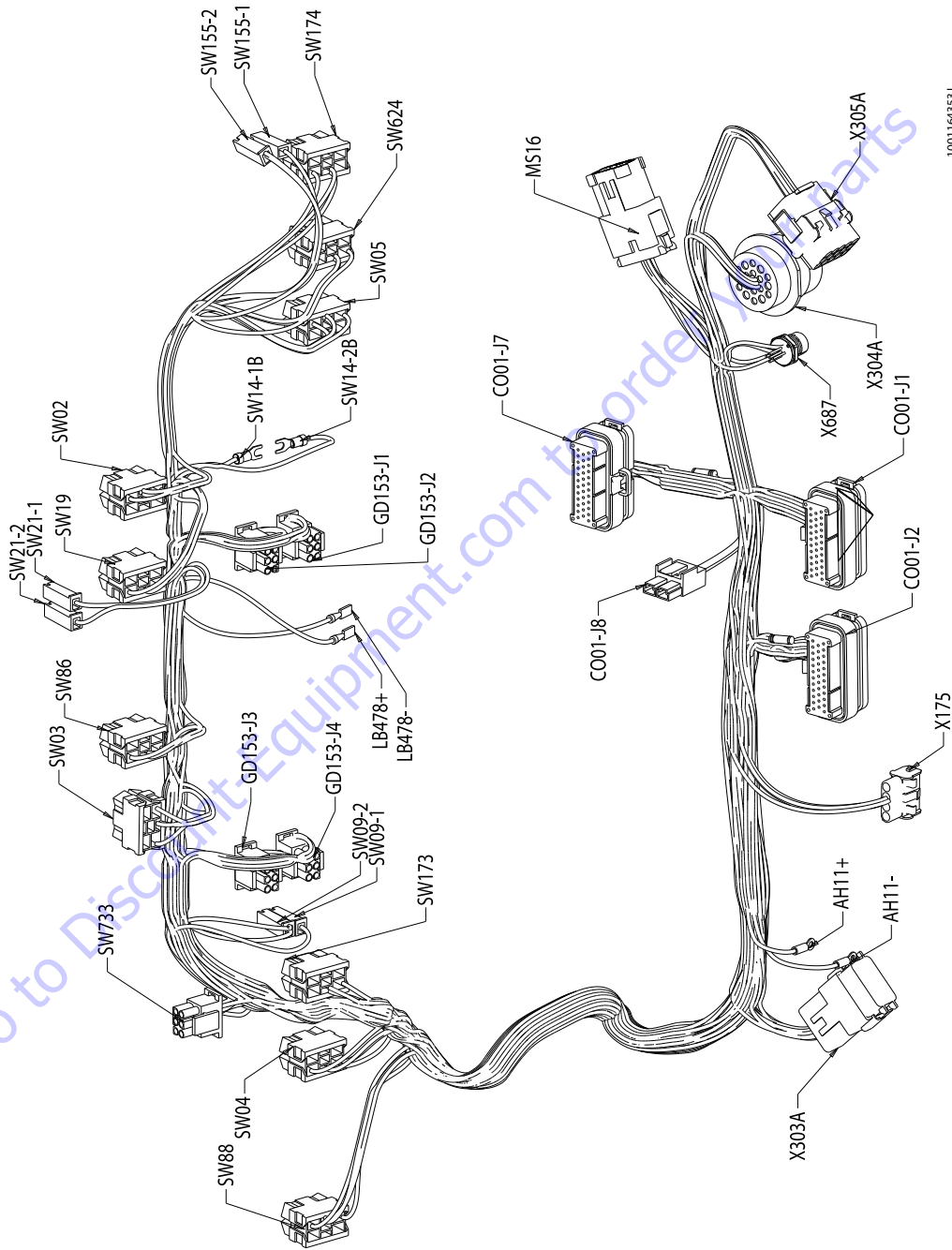
SW05 START/AUX					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-10 AUX POWER	18AWG	GXL	CO01-J1 (15)
2	WHT	1-77 SWITCHES PWR	18AWG	GXL	SW155-2 (1)
2	WHT	1-79 SWITCHES PWR	18AWG	GXL	SW624 (2)
3	WHT	1-9 START SWITCH	18AWG	GXL	CO01-J1 (14)
4					
5					
6					

SW174 DRIVE ORIENTATION OVERRIDE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-67 PLTF ORIENT OVERRIDE	18AWG	GXL	CO01-J2 (4)
2	WHT	1-75 SWITCHES PWR	18AWG	GXL	SW624 (2)
2	WHT	1-80 SWITCHES PWR	18AWG	GXL	SW733 (3)
3					
4					
5					
6					

SW155-1 HEAD AND TAIL LIGHTS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	1-15 HEAD LIGHTS	18AWG	GXL	CO01-J1 (30)

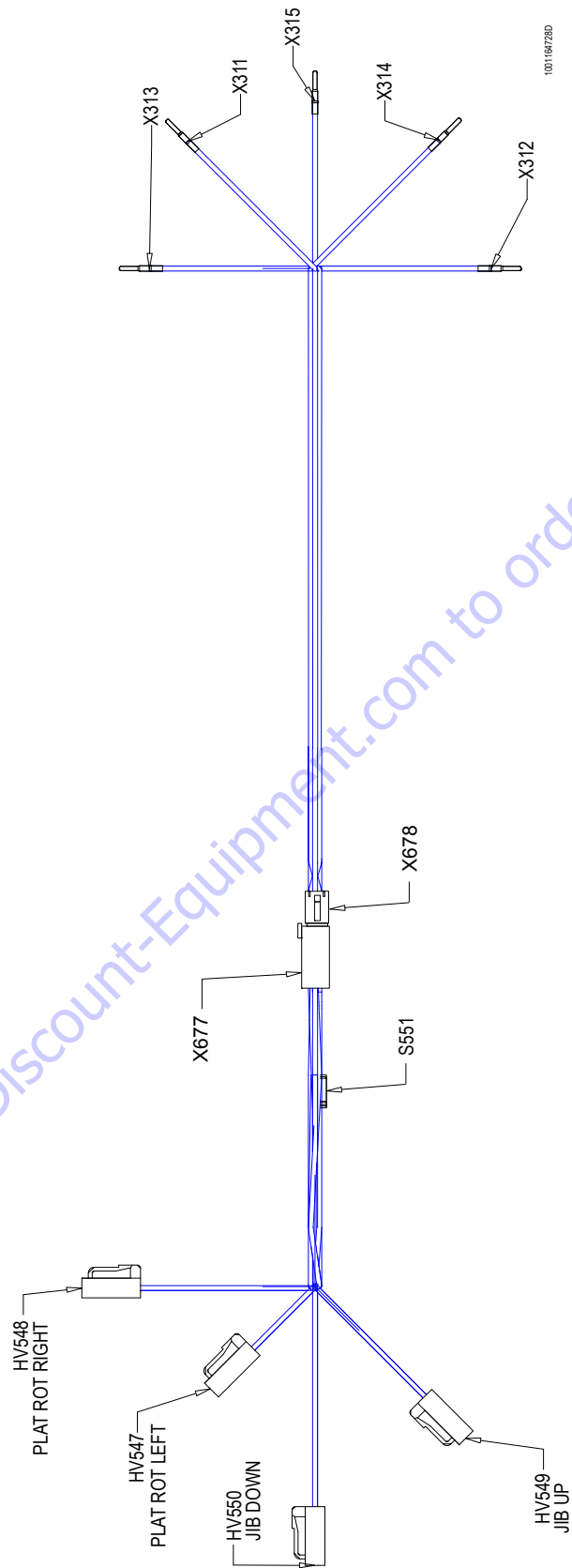
SW14-2B E STOP					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
2B	WHT	1-45 PLATF EMS	18AWG	GXL	CO01-J7 (2)

Figure 7-45. Platform Console Harness (Without SkyGuard) - Sheet 11 of 12



10011643531

Figure 7-46. Platform Console Harness (Without SkyGuard) - Sheet 12 of 12



Go to Discount-Equipment.com to order your parts

Figure 7-47. Platform Valve Harness - Sheet 1 of 2

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

HV548 PLAT ROT RIGHT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BRN/BLK	2-8 CABLE	18 AWG	TFFN	X677 (4)
2	BLK	000-2-3 GND	18 AWG	GXL	S551 (2)

HV547 PLAT ROT LEFT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL/BLK	2-7 CABLE	18 AWG	TFFN	X677 (5)
2	BLK	000-2-2 GND	18 AWG	GXL	S551 (1)

HV550 JIB DOWN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU/BLK	2-10 CABLE	18 AWG	TFFN	X677 (1)
2	BLK	000-2-5 GND	18 AWG	GXL	S551 (2)

HV549 JIB UP					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORG/BLK	2-9 CABLE	18 AWG	TFFN	X677 (2)
2	BLK	000-2-4 GND	18 AWG	GXL	S551 (2)

S551					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-2-2 GND	18 AWG	GXL	HV47 (2)
1	BLK/RED	000-2-6 CABLE	18 AWG	TFFN	X677 (3)
2	BLK	000-2-3 GND	18 AWG	GXL	HV548 (2)
2	BLK	000-2-4 GND	18 AWG	GXL	HV549 (2)
2	BLK	000-2-5 GND	18 AWG	GXL	HV550 (2)

X677					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU/BLK	000-2-2 GND	18 AWG	GXL	HV550 (1)
2	ORN/BLK	000-2-6 CABLE	18 AWG	TFFN	HV549 (1)
3	BLK/RED	000-2-3 GND	18 AWG	GXL	S551 (1)
4	BRN/BLK	000-2-4 GND	18 AWG	GXL	HV548 (1)
5	YEL/BLK	000-2-5 GND	18 AWG	GXL	HV547 (1)

X313					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORG/BLK	2-9 CABLE	18 AWG	TFFN	X678 (2)

X315					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK/RED	000-2-6 CABLE	18 AWG	TFFN	X678 (5)

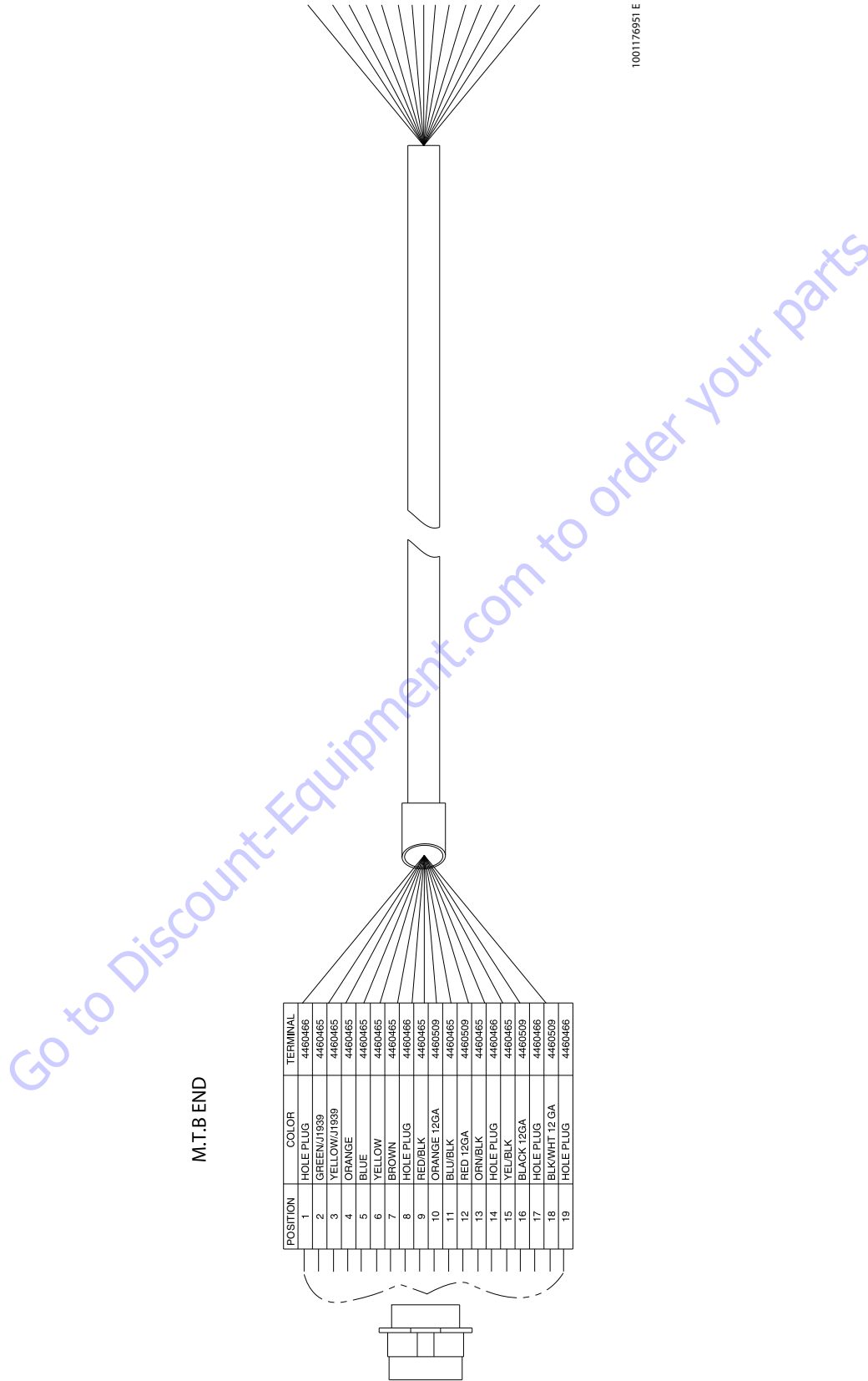
X311					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL/BLK	2-7 CABLE	18 AWG	TFFN	X678 (5)

X312					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BRN/BLK	2-8 CABLE	18 AWG	TFFN	X678 (4)

X314					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU/BLK	2-10 CABLE	18 AWG	TFFN	X678 (1)

X678					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU/BLK	2-10 CABLE	18 AWG	GXL	X314 (1)
2	ORN/BLK	2-9 CABLE	18 AWG	TFFN	X313 (1)
3	BLK/RED	000-2-6 CABLE	18 AWG	GXL	X315 (1)
4	BRN/BLK	2-8 CABLE	18 AWG	GXL	X312 (1)
5	YEL/BLK	2-7 CABLE	18 AWG	GXL	X311 (1)

Figure 7-48. Platform Valve Harness - Sheet 2 of 2



1001176951 E

Figure 7-49. Boom Lower Harness - Standard

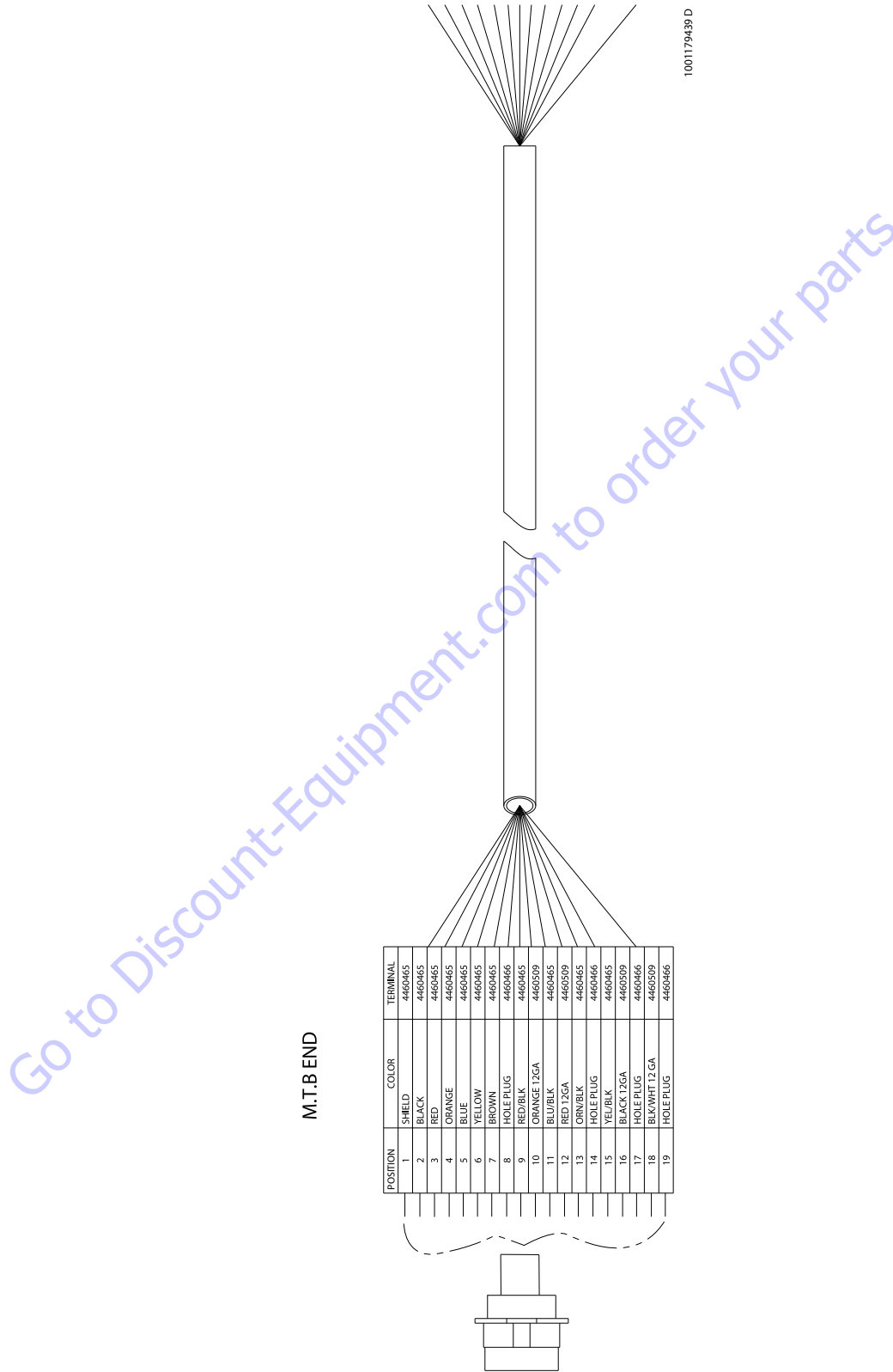
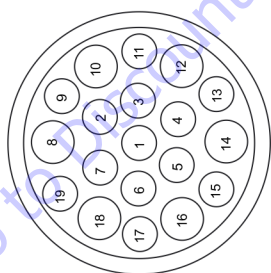


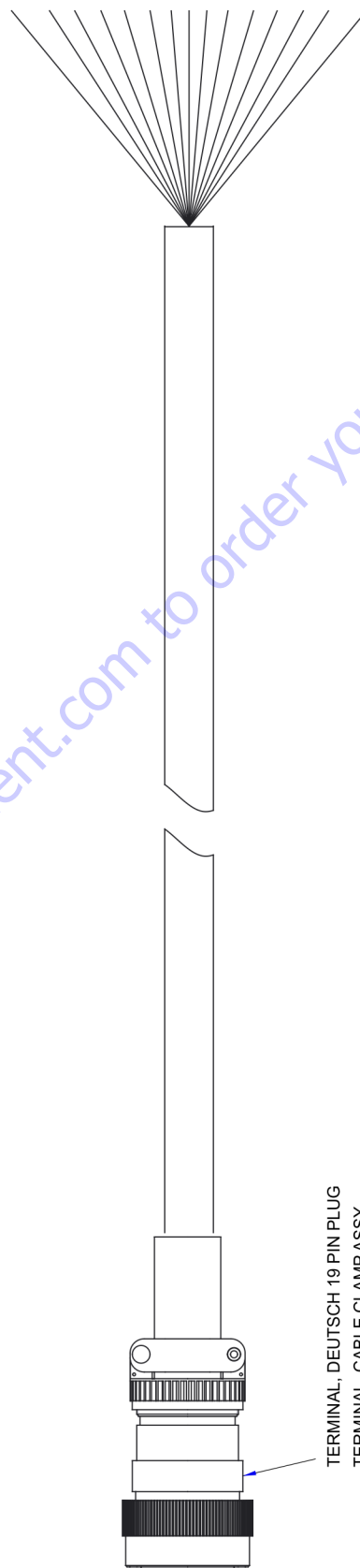
Figure 7-50. Boom Lower Harness - Arctic

POSITION	COLOR
1	HOLE PLUG
2	GREEN / J1939
3	YELLOW / J1939
4	ORANGE
5	BLUE
6	YELLOW
7	BROWN
8	HOLE PLUG
9	RED/BLK
10	ORANGE 12GA
11	BLU/BLK
12	RED 12GA
13	ORN/BLK
14	HOLE PLUG
15	YEL/BLK
16	BLACK 12GA
17	HOLE PLUG
18	BLK/WHT 12 GA
19	HOLE PLUG



6 CONTACTS SIZE #12
13 CONTACTS SIZE #16

POSITION	COLOR
1	HOLE PLUG
2	GREEN / J1939
3	YELLOW / J1939
4	ORANGE
5	BLUE
6	YELLOW
7	BROWN
8	HOLE PLUG
9	RED/BLK
10	ORANGE 12GA
11	BLU/BLK
12	RED 12GA
13	ORN/BLK
14	HOLE PLUG
15	YEL/BLK
16	BLACK 12GA
17	HOLE PLUG
18	BLK/WHT 12 GA
19	HOLE PLUG



100164738 D

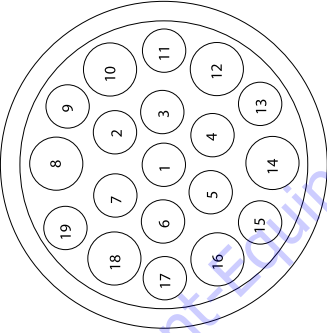
- TERMINAL, DEUTSCH 19 PIN PLUG
- TERMINAL, CABLE CLAMP ASSY
- DEUTSCH 16-18 SOCKET CONTACT
- DEUTSCH 10-12 SOCKET CONTACT
- DEUTSCH, PLUG SEAL

Go to www.Primet-Equipment.com to order your parts

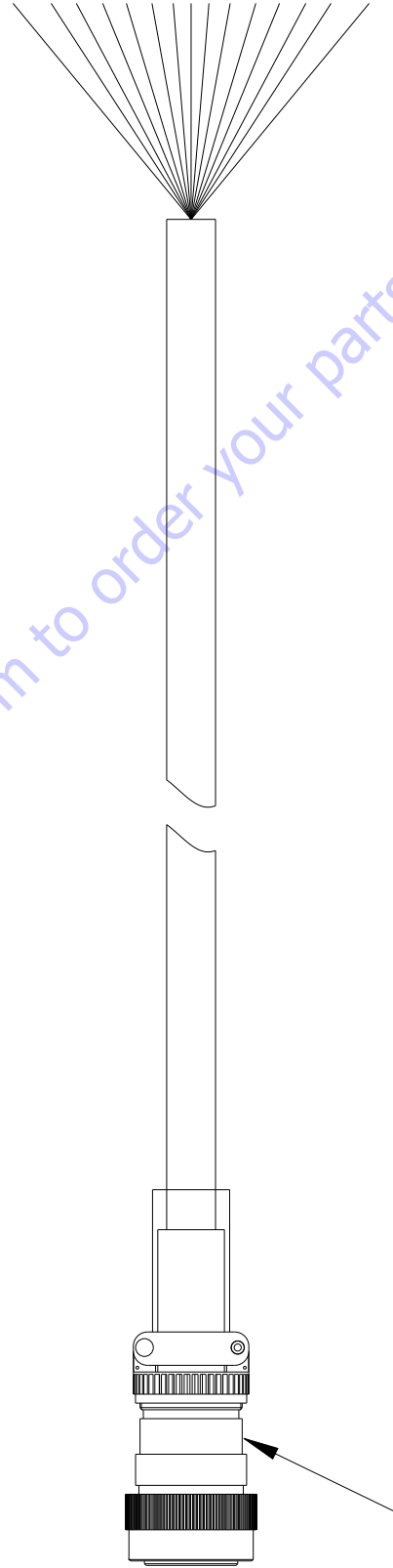
Figure 7-51. Boom Upper Harness - Standard

POSITION	COLOR	TERMINAL
1	SHIELD	4460465
2	BLACK	4460465
3	RED	4460465
4	ORANGE	4460465
5	BLUE	4460465
6	YELLOW	4460465
7	BROWN	4460465
8	HOLE PLUG	4460466
9	RED/BLK	4460465
10	ORANGE 12GA	4460509
11	BLU/BLK	4460465
12	RED 12GA	4460509
13	ORN/BLK	4460465
14	HOLE PLUG	4460466
15	YEL/BLK	4460465
16	BLACK 12GA	4460509
17	HOLE PLUG	4460466
18	BLK/WHT 12 GA	4460509
19	HOLE PLUG	4460466

COLOR	TERMINAL
SHIELD	4460465
BLACK	4460465
RED	4460465
ORANGE	4460465
BLUE	4460465
YELLOW	4460465
BROWN	4460465
RED/BLK	4460465
ORANGE 12GA	4460509
BLU/BLK	4460465
RED 12GA	4460509
ORN/BLK	4460465
YEL/BLK	4460465
BLACK 12GA	4460509
BLK/WHT 12 GA	4460509



6 CONTACTS SIZE #12
13 CONTACTS SIZE #16



TERMINAL, DEUTSCH 19 PIN PLUG
TERMINAL, CABLE CLAMP ASSY
DEUTSCH 16-18 SOCKET CONTACT
DEUTSCH 10-12 SOCKET CONTACT
DEUTSCH, PLUG SEAL

Figure 7-52. Boom Upper Harness - Arctic

1001174748 C

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

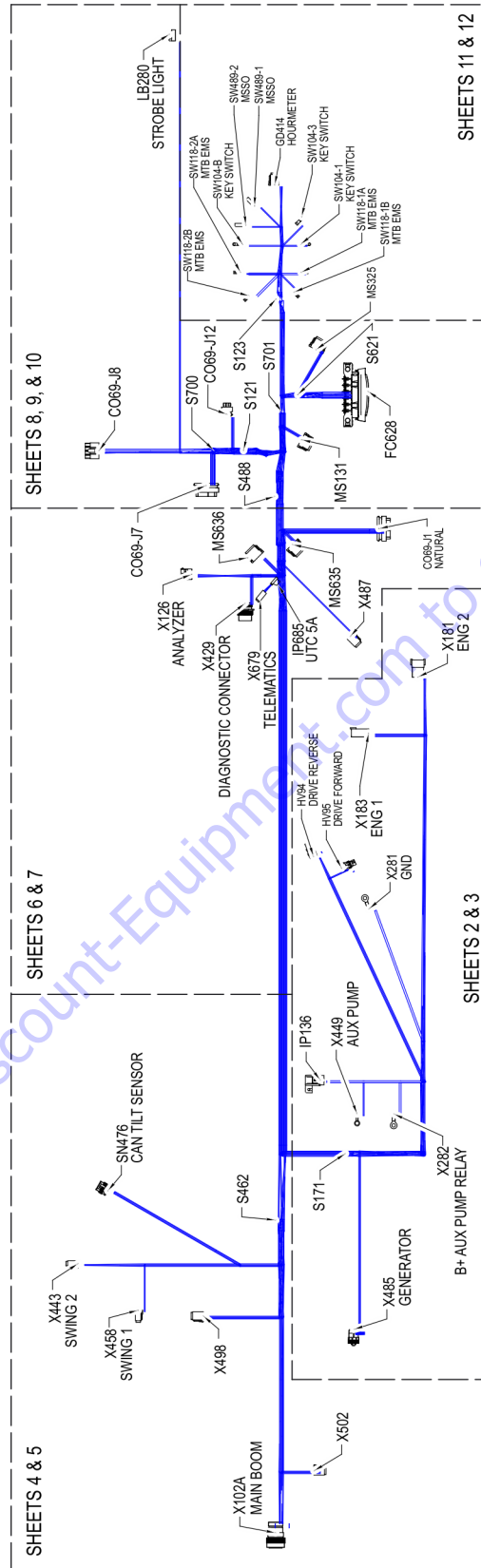


Figure 7-53. Turntable Harness - Sheet 1 of 14

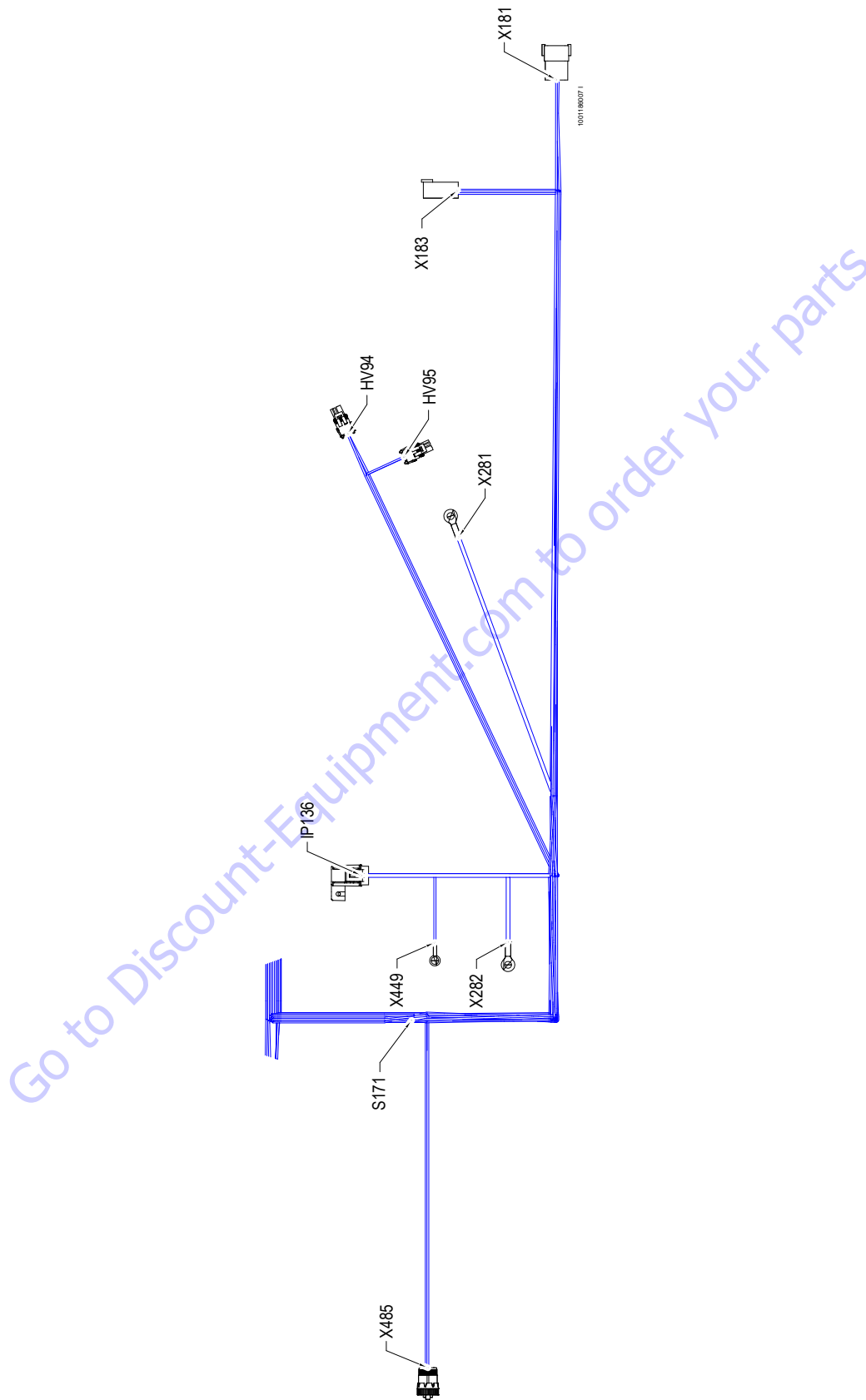


Figure 7-54. Turntable Harness - Sheet 2 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

S171					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-40 CF	18 AWG	GXL	HV95 (2)
1	BLK	000-40-41 CF	18 AWG	GXL	HV94 (2)
2	BLK	00-40-43 -	18 AWG	GXL	X487 (1)

HV94 DRIVE REVERSE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-4 DRIVE REVERSE	18 AWG	GXL	CO69-J1 (6)
2	BLK	000-40-41 CF	18 AWG	GXL	S171 (1)

IP136 30A					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-79 12AWG	12 AWG	GXL	S123 (2)
2	RED	4-49 12AWG	12 AWG	GXL	X282 (1)

HV95 DRIVE FORWARD					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-3 DRIVE FORWARD	18 AWG	GXL	CO69-J1 (3)
2	BLK	000-40-40 CF	18 AWG	GXL	S171 (1)

X485 GENERATOR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	4-82 IGN	18 AWG	GXL	FC628 (41)
2	WHT	4-74 GEN ON	18 AWG	GXL	CO69-J1 (22)
3	BLK	000-40-109	18 AWG	GXL	MS635 (5)

X281 GND					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-8 (10)	10 AWG	GXL	CO69-J8 (1)

X449 AUX PUMP					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-78 AUX PUMP	16 AWG	GXL	CO69-J1 (13)

X183 ENG 1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	4-84 IGN	18 AWG	GXL	MS636 (4)
2	WHT	4-67 START	16 AWG	GXL	CO69-J1 (11)
3	YEL	CAN 2 HI	20 AWG	J1939 CABLE	MS325 (6)
4	GRN	CAN 2 LO	20 AWG	J1939 CABLE	MS325 (4)
5	RED	4-76 ALT EXCITE	16 AWG	GXL	CO69-J1 (32)
6		2			

X282 B+ AUX PUMP RELAY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-49 12AWG	12 AWG	GXL	IP136 (2)

X181 ENG 2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-94 EMR4 IGNITION	18 AWG	GXL	CO69-J1 (10)
2	BLK	000-40-557 GROUND	18 AWG	GXL	MS635 (6)
3					
4	WHT	4-80 GLOW PLUG	16 AWG	GXL	CO69-J1 (12)
5					
6					
7					
8					

Figure 7-55. Turntable Harness - Sheet 3 of 14

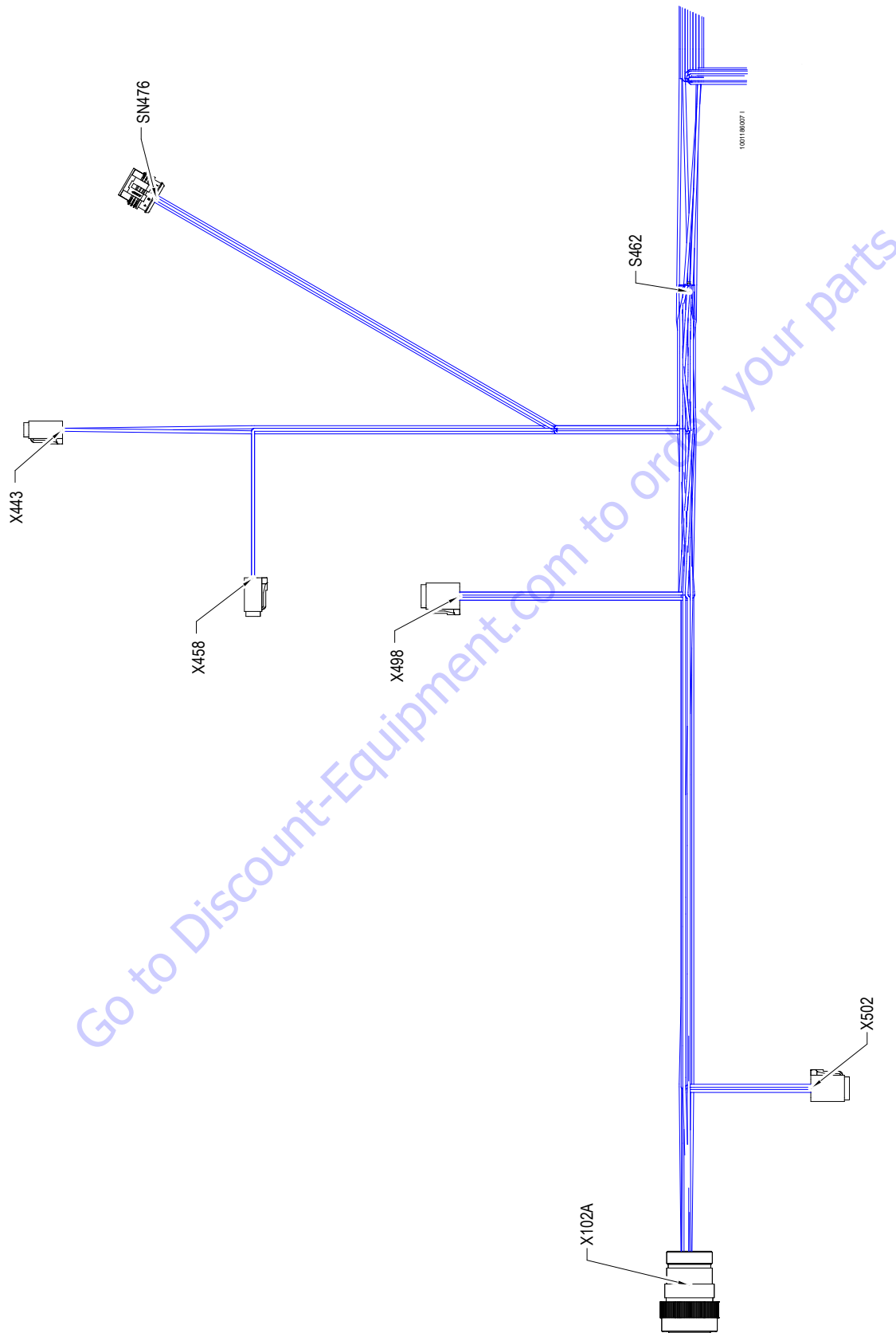


Figure 7-56. Turntable Harness - Sheet 4 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X102A MAIN BOOM					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	GRN	CAN 1 LO	20 AWG	J1939 CABLE	MS131 (3)
3	YEL	CAN 1 HI	20 AWG	J1939 CABLE	MS131 (1)
4	WHT	4-43 PLTF EMS	18 AWG	GXL	S121 (2)
5					
6	WHT	4-52 FOOT SW	18 AWG	GXL	CO69-J7 (15)
7					
8					
9	RED	4-552	16 AWG	GXL	FC628 (34)
10					
11	WHT	4-53 GROUND MODE	18 AWG	GXL	CO69-J7 (14)
12	RED	4-71	12 AWG	GXL	FC628 (33)
13					
14					
15					
16	BLK	000-40-12 PLATF GND	12 AWG	GXL	CO69-J8 (3)
17					
18					
19					

X458 SWING 1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	4-109	18 AWG	GXL	S462 (2)
3	WHT	4-110 OSC AXL SWING SW#1	18 AWG	GXL	CO69-J7 (12)
4					

X443 SWING 2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-111	18 AWG	GXL	S462 (1)
2					
3					
4	WHT	4-112 OSC AXL SWING SW#2	18 AWG	GXL	CO69-J7 (20)

SN476 CAN TILT SENSOR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-130 TILT VCC	18 AWG	GXL	CO69-J7 (34)
2	WHT	4-129 TILT GND	18 AWG	GXL	CO69-J7 (10)
3	YEL	CAN 1 HI	20 AWG	J1939 CABLE	MS131 (11)
4	GRN	CAN 1 LO	20 AWG	J1939 CABLE	MS131 (10)

X502					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-114 BOOM ANG SEN PWR	18 AWG	GXL	CO69-J7 (16)
2	WHT	4-115 BOOMANG SEN #2	18 AWG	GXL	CO69-J7 (7)
3	BLK	000-40-80 GND	18 AWG	GXL	CO69-J7 (9)
4	WHT	4-117 BOOM ANG SEN #1	18 AWG	GXL	CO69-J7 (4)
5	WHT	4-107	18 AWG	GXL	S462 (2)
6	WHT	4-108 TOWER EL SW	18 AWG	GXL	CO69-J7 (11)

S462					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-106 TRANS EL SW	18 AWG	GXL	CO69-J7 (32)
1	WHT	4-111	18 AWG	GXL	X443 (1)
2	WHT	4-107	18 AWG	GXL	X502 (5)
2	WHT	4-109	18 AWG	GXL	X458 (2)

X498					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-498 OSC VLVs GND	18 AWG	GXL	MS635 (2)
2	WHT	4-400 OSC AXLE #2 SEC	18 AWG	GXL	CO69-J1 (2)
3	WHT	4-401 OSC AXLE #1 PRIMARY	18 AWG	GXL	CO69-J1 (7)
4	BLK	000-40-499 GND	18 AWG	GXL	CO69-J1 (5)
5	WHT	4-402 BRAKE	18 AWG	GXL	CO69-J1 (23)
6	WHT	4-403 TWO SPEED	18 AWG	GXL	CO69-J1 (20)

Figure 7-57. Turntable Harness - Sheet 5 of 14

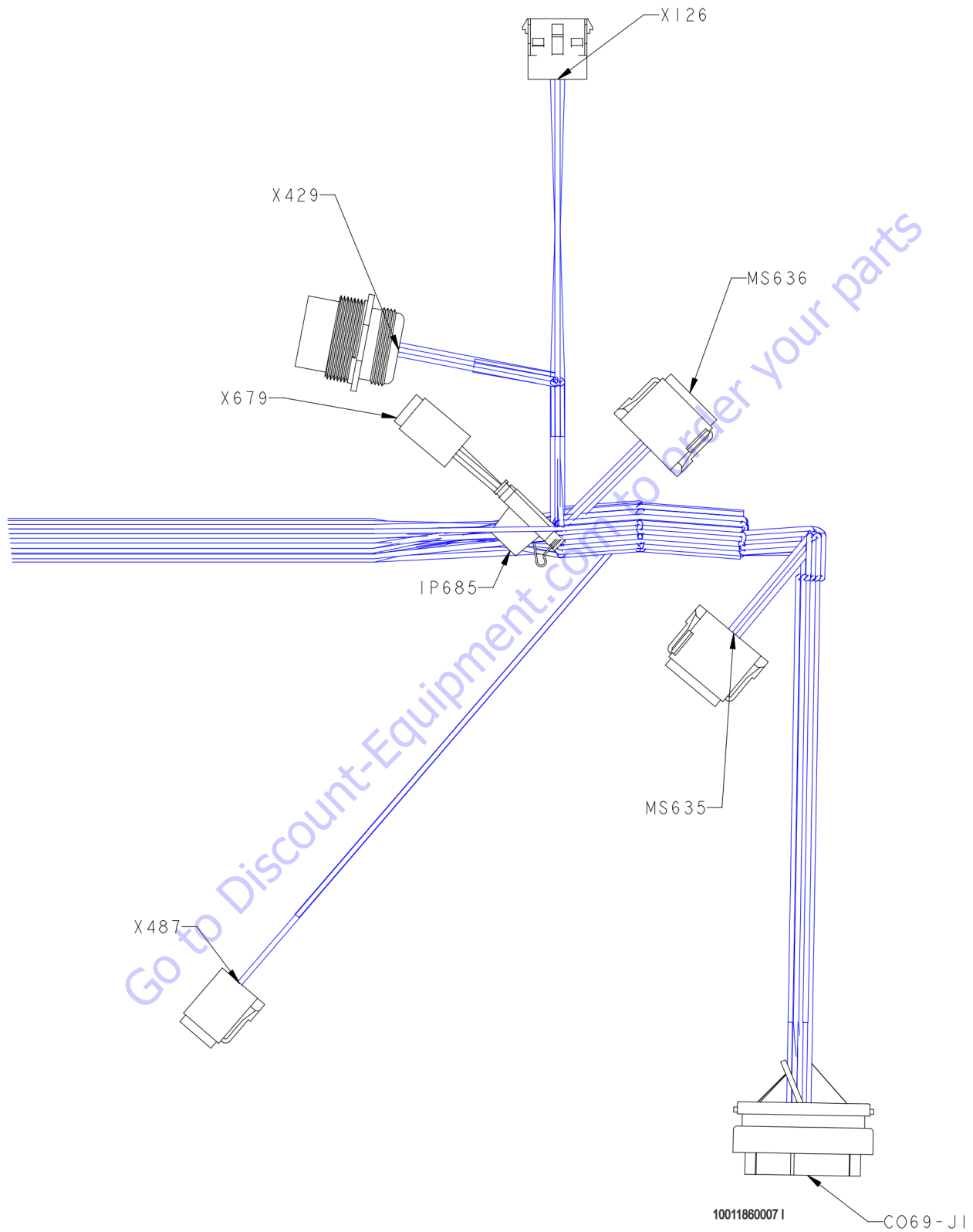


Figure 7-58. Turntable Harness - Sheet 6 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

CO69-J1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	4-400 OSC AXLE #2 SEC	18 AWG	GXL	X498 (2)
3	WHT	4-3 DRIVE FORWARD	18 AWG	GXL	HV95 (1)
4					
5	BLK	000-40-499 GND	18 AWG	GXL	X498 (4)
6	WHT	4-4 DRIVE REVERSE	18 AWG	GXL	HV94 (1)
7	WHT	4-401 OSC AXLE #1 PRIMARY	18 AWG	GXL	X498 (3)
8					
9	BLK	4-164 GND	18 AWG	GXL	SW489-2 (1)
10	WHT	4-94 EMR4 IGNITION	18 AWG	GXL	X181 (1)
11	WHT	4-67 START	16 AWG	GXL	X183 (2)
12	WHT	4-80 GLOW PLUG	16 AWG	GXL	X181 (4)
13	WHT	4-78 AUX PUMP	16 AWG	GXL	X449 (1)
14					
15					
16					
17					
18					
19					
20	WHT	4-403 TWO SPEED	18 AWG	GXL	X498 (6)
21					
22	WHT	4-74 GEN ON	18 AWG	GXL	X485 (2)
23	WHT	4-402 BRAKE	18 AWG	GXL	X498 (5)
24					
25					
26					
27					
28	WHT	4-5 POWER	18 AWG	GXL	X126 (1)
29	WHT	4-6 RECEIVE	18 AWG	GXL	X126 (2)
30	WHT	4-7 TRANSMIT	18 AWG	GXL	X126 (3)
31	BLK	000-40-4 GND	18 AWG	GXL	X126 (4)
32	RED	4-76 ALT EXCITE	16 AWG	GXL	X183 (5)
33					
34					
35					

MS635 NEG BUSS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-64 BATT GND	18 AWG	GXL	CO69-J8 (1)
2	BLK	000-40-498 OSC VLVs GND	18 AWG	GXL	X498 (1)
3	BLK	000-40-14 STROBE GND	18 AWG	GXL	LB280 (2)
4	BLK	000-40-11 NEG	18 AWG	GXL	X429 (A)
5	BLK	000-40-109	18 AWG	GXL	X485 (3)
6	BLK	000-40-557 GROUND	18 AWG	GXL	X181 (2)
7	BLK	000-40-558 GROUND	18 AWG	GXL	X679 (2)

X487					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	00-40-43 -	18 AWG	GXL	S171 (2)

MS636 IGN BUSS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	4-36 IGN	12 AWG	GXL	CO69-J8 (4)
2	YEL	4-72 IGN	18 AWG	GXL	FC628 (40)
3	YEL	4-54 IGN	18 AWG	GXL	LB280 (1)
4	YEL	4-84 IGN	18 AWG	GXL	X183 (1)
5	YEL	4-81 IGN	18 AWG	GXL	FC628 (45)
6					
7					
8					
9					
10					
11					
12					

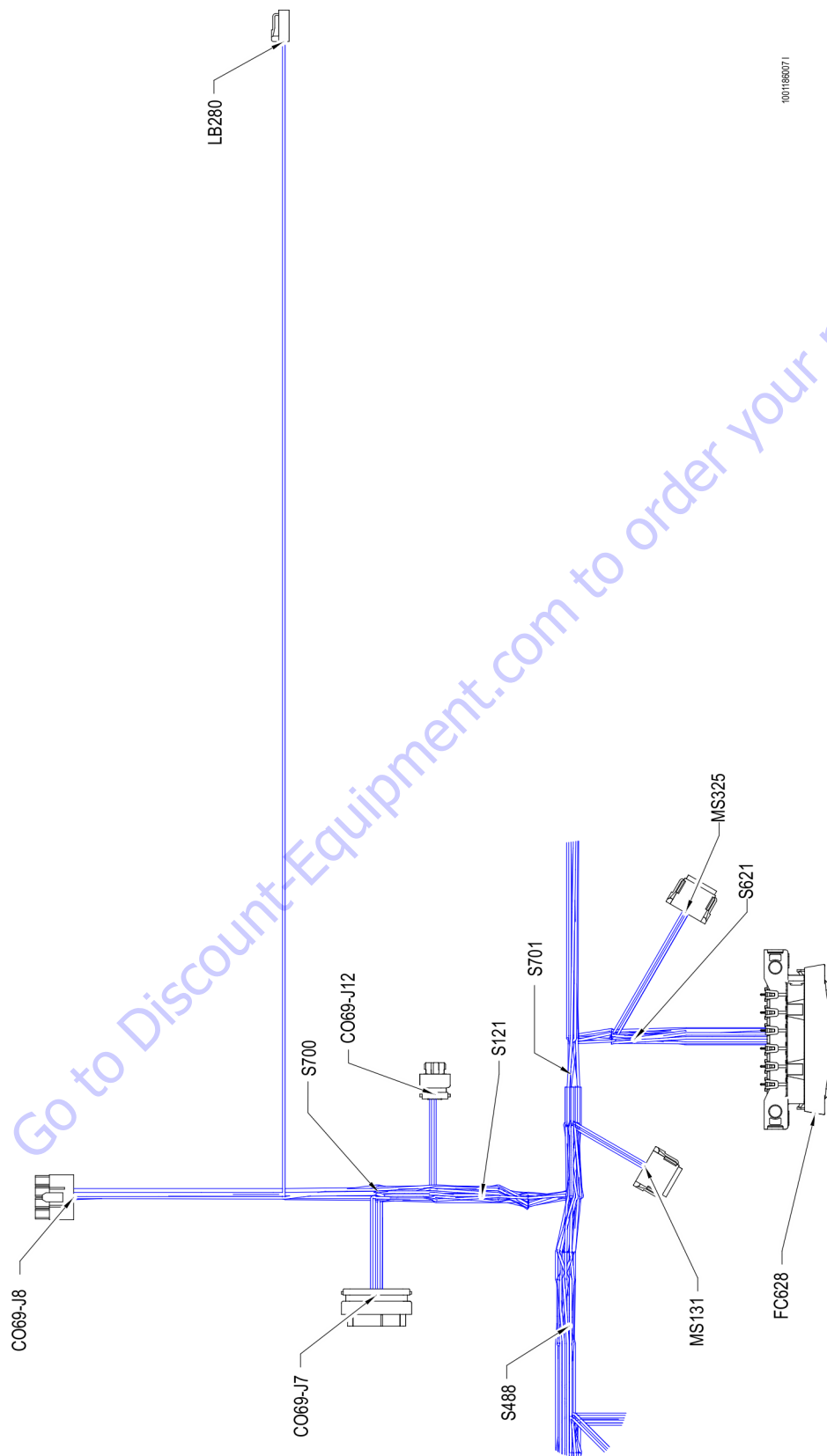
X429 DIAGNOSTIC CONNECTOR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	BLK	000-40-11 NEG	18 AWG	GXL	MS635 (4)
B	WHT	4-65-1	18 AWG	GXL	S701 (2)
C	YEL	CAN 2 HI	20 AWG	J1939 CABLE	MS325 (7)
D	GRN	CAN 2 LO	20 AWG	J1939 CABLE	MS325 (9)
E					
F					
G					
H	WHT	4-66 IGN	18 AWG	GXL	FC628 (36)
J					

X126 ANALYZER					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-5 POWER	18 AWG	GXL	CO69-J1 (28)
2	WHT	4-6 RECEIVE	18 AWG	GXL	CO69-J1 (29)
3	WHT	4-7 TRANSMIT	18 AWG	GXL	CO69-J1 (30)
4	BLK	000-40-4 GND	18 AWG	GXL	CO69-J1 (31)

X679 TELEMATICS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-65-2	18 AWG	GXL	S701 (2)
2	BLK	000-40-558 GROUND	18 AWG	GXL	MS635 (7)
3	RED	4-97-2 PWR	18 AWG	GXL	S700 (2)
4	RED	4-51-1	18 AWG	GXL	IP685 (2)

IP685 UTC 5A					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-51-1	18 AWG	GXL	SW104-3 (1)
2	RED	4-51-1	18 AWG	GXL	X679 (4)

Figure 7-59. Turntable Harness - Sheet 7 of 14



10011860071

Go to Discount-Equipment.com to order your parts

Figure 7-60. Turntable Harness - Sheet 8 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

CO69-J8					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-64 BATT GND	18 AWG	GXL	MS635 (1)
1	BLK	000-40-8 (10)	10 AWG	GXL	X281 (1)
2	RED	4-35 IGN	12 AWG	GXL	FC628 (28)
3	BLK	000-40-12 PLATF GND	12 AWG	GXL	X102A (16)
4	YEL	4-36 IGN	12 AWG	GXL	MS636 (1)

S121					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-41	18 AWG	GXL	FC628 (30)
1	WHT	4-42 PLTF EMS	18 AWG	GXL	CO69-J7 (1)
2	WHT	4-132 PLT MODE	18 AWG	GXL	CO69-J7 (2)
2	WHT	4-43 PLTF EMS	18 AWG	GXL	X102A (4)

CO69-J12					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2					
3	YEL	CAN 2 HI	20 AWG	J1939 CABLE	MS325 (5)
4	GRN	CAN 2 LO	20 AWG	J1939 CABLE	MS325 (3)
5					
6	WHT	4-96 JUMP	18 AWG	GXL	CO69-J12 (7)
7	WHT	4-96 JUMP	18 AWG	GXL	CO69-J12 (6)
8	WHT	4-165 MSS0	18 AWG	GXL	SW489-1 (1)

S488					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-38	18 AWG	GXL	FC628 (26)
1	RED	4-39	18 AWG	GXL	FC628 (25)
2	WHT	4-38	18 AWG	GXL	FC628 (1)

S621					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-550 -	12 AWG	GXL	FC628 (37)
1	RED	4-551	12 AWG	GXL	FC628 (32)
2	RED	4-166	12 AWG	GXL	FC628 (2)
2	RED	4-553	18 AWG	GXL	FC628 (47)

LB280					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	4-54 IGN	18 AWG	GXL	MS636 (3)
2	BLK	000-40-14 STROBE GND	18 AWG	GXL	MS635 (3)

MS131					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN 1 HI	20 AWG	J1939 CABLE	X102A (3)
2					
3	GRN	CAN 1 LO	20 AWG	J1939 CABLE	X102A (2)
4	GRN	CAN 1 LO	20 AWG	J1939 CABLE	CO69-J7 (24)
5					
6					
7					
8					
9					
10	GRN	CAN 1 LO	20 AWG	J1939 CABLE	SN476 (4)
11	YEL	CAN 1 HI	20 AWG	J1939 CABLE	SN476 (3)
12	YEL	CAN 1 HI	20 AWG	J1939 CABLE	CO69-J7 (13)

MS325					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2					
3	GRN	CAN 2 LO	20 AWG	J1939 CABLE	CO69-J12 (4)
4	GRN	CAN 2 LO	20 AWG	J1939 CABLE	X183 (4)
5	YEL	CAN 2 HI	20 AWG	J1939 CABLE	CO69-J12 (3)
6	YEL	CAN 2 HI	20 AWG	J1939 CABLE	X183 (3)
7	YEL	CAN 2 HI	20 AWG	J1939 CABLE	X429 (C)
8	YEL	CAN 2 HI	20 AWG	J1939 CABLE	GD414 (3)
9	GRN	CAN 2 LO	20 AWG	J1939 CABLE	X429 (D)
10	GRN	CAN 2 LO	20 AWG	J1939 CABLE	GD414 (4)
11					
12					

S700					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-97-1 PWR	18 AWG	GXL	GD414 (2)
2	RED	4-97 PWR	18 AWG	GXL	CO69-J7 (29)
2	RED	4-97-2 PWR	18 AWG	GXL	X679 (3)

S701					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-65	18 AWG	GXL	FC628 (35)
2	WHT	4-65-1	18 AWG	GXL	X429 (B)
2	WHT	4-65-2	18 AWG	GXL	X679 (1)

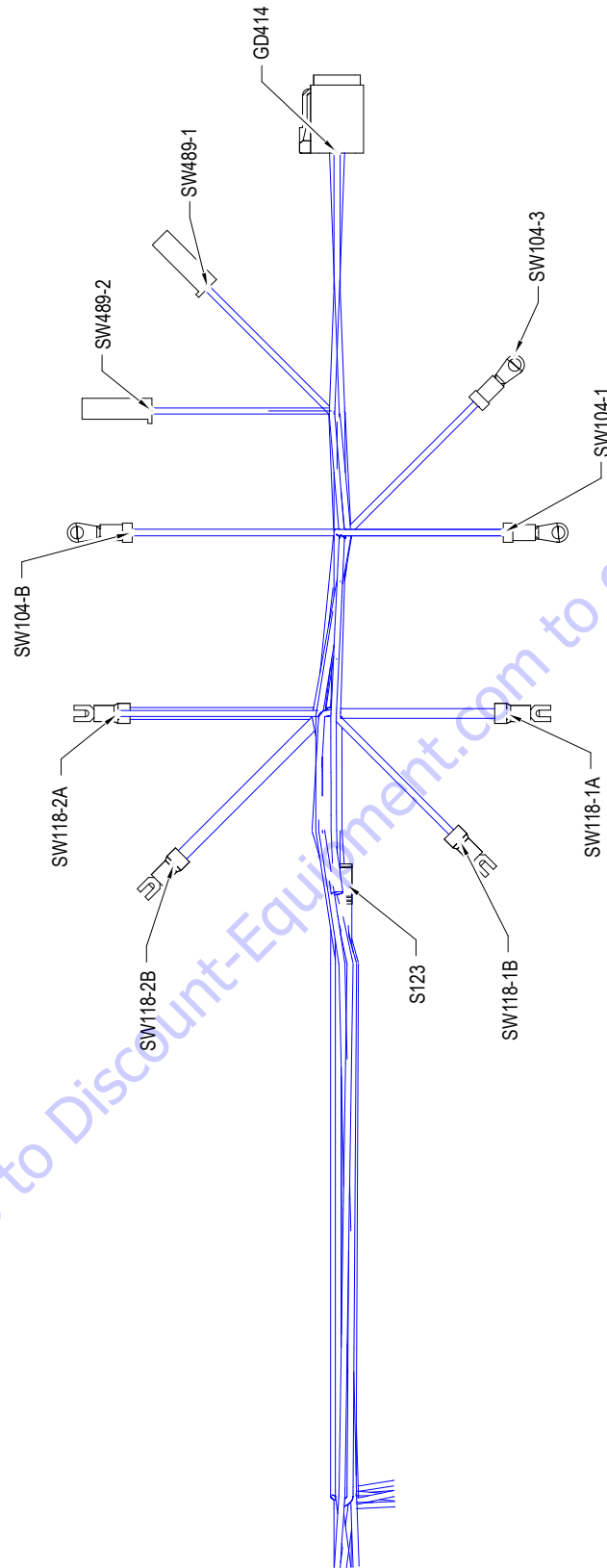
Figure 7-61. Turntable Harness - Sheet 9 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

CO69-J7 BLACK					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-42 PLTF EMS	18 AWG	GXL	S121 (1)
2	WHT	4-132 PLT MODE	18 AWG	GXL	S121 (2)
3	RED	4-122 MOD SEL	16 AWG	GXL	FC628 (46)
4	WHT	4-117 BOOM ANG SEN #1	18 AWG	GXL	X502 (4)
5					
6	WHT	4-131 JUMP	18 AWG	GXL	CO69-J7 (17)
7	WHT	4-115 BOOM ANG SEN #2	18 AWG	GXL	X502 (2)
8					
9	BLK	000-40-80 GND	18 AWG	GXL	X502 (3)
10	WHT	4-129 TILT GND	18 AWG	GXL	SN476 (2)
11	WHT	4-108 TOWER EL SW	18 AWG	GXL	X502 (6)
12	WHT	4-110 OSC AXL SWING SW#1	18 AWG	GXL	X458 (3)
13	YEL	CAN 1 HI	20 AWG	J1939 CABLE	MS131 (12)
14	WHT	4-53 GROUND MODE	18 AWG	GXL	X102A (11)
15	WHT	4-52 FOOT SW	18 AWG	GXL	X102A (6)
16	WHT	4-114 BOOM ANG SEN PWR	18 AWG	GXL	X502 (1)
17	WHT	4-131 JUMP	18 AWG	GXL	CO69-J7 (6)
18					
19	BLK	000-40-13 GND	18 AWG	GXL	FC628 (10)
20	WHT	4-112 OSC AXL SWING SW#2	18 AWG	GXL	X443 (4)
21					
22					
23					
24	GRN	CAN 1 LO	20 AWG	J1939 CABLE	MS131 (4)
25	BLK	000-40-51 GND	18 AWG	GXL	GD414 (1)
26					
27					
28					
29	RED	4-97 PWR	18 AWG	GXL	S700 (2)
30					
31					
32	WHT	4-106 TRANS EL SW	18 AWG	GXL	S462 (1)
33					
34	WHT	4-130 TILT VCC	18 AWG	GXL	SN476 (1)
35					

FC628					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-38	18 AWG	GXL	S488 (2)
2	RED	4-166	12 AWG	GXL	S621 (2)
3					
4					
5					
6					
7					
8					
9	RED	4-37 EMS	12 AWG	GXL	SW118-1A (1A)
10	BLK	000-40-13 GND	18 AWG	GXL	CO69-J7 (19)
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25	RED	4-39	18 AWG	GXL	S488 (1)
26	WHT	4-38	18 AWG	GXL	S488 (1)
27					
28	RED	4-35 IGN	12 AWG	GXL	CO69-J8 (2)
29	RED	4-40	12 AWG	GXL	SW104-1 (1)
30	WHT	4-41	18 AWG	GXL	S121 (1)
31					
32	RED	4-551	12 AWG	GXL	S621 (1)
33	RED	4-71	12 AWG	GXL	X102A (12)
34	RED	4-552	16 AWG	GXL	X102A (9)
35	WHT	4-65	18 AWG	GXL	S701 (1)
36	WHT	4-66 IGN	18 AWG	GXL	X429 (H)
37	RED	4-550 -	12 AWG	GXL	S621 (1)
38	RED	4-51	12 AWG	GXL	SW104-3 (1)
39	WHT	4-50	18 AWG	GXL	SW118-2A (2A)
40	YEL	4-72 IGN	18 AWG	GXL	MS636 (2)
41	YEL	4-82 IGN	18 AWG	GXL	X485 (1)
42	RED	4-122 MOD SEL	12 AWG	GXL	SW104-1 (1)
43					
44					
45	YEL	4-81 IGN	18 AWG	GXL	MS636 (5)
46	RED	4-122 MOD SEL	18 AWG	GXL	CO69-J7 (3)
47	RED	4-553	18 AWG	GXL	S621 (2)
48					

Figure 7-62. Turntable Harness - Sheet 10 of 14



0011860071

Go to Discount-Equipment.com to order your parts

Figure 7-63. Turntable Harness - Sheet 11 of 14

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

S123					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-121 12AWG	12 AWG	GXL	SW118-2A (2A)
1	RED	4-47 12AWG	12 AWG	GXL	SW118-2B (2B)
2	RED	4-79 12AWG	12 AWG	GXL	IP136 (1)

SW118-2B MTB EMS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
2B	RED	4-47 12AWG	12 AWG	GXL	S123 (1)

SW118-2A MTB EMS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
2A	RED	4-121 12AWG	12 AWG	GXL	S123 (1)
2A	WHT	4-50	18 AWG	GXL	FC628 (39)

SW118-1B MTB EMS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1B	RED	4-45	12 AWG	GXL	SW104-B (1)

SW118-1A MTB EMS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1A	RED	4-37 EMS	12 AWG	GXL	FC628 (9)

SW489-2 MSSO					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	4-164 GND	18 AWG	GXL	CO69-J1 (9)

SW104-B KEY SWITCH					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-45	12 AWG	GXL	SW118-1B (1B)

SW489-1 MSSO					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-165 MSS0	18 AWG	GXL	CO69-J12 (8)

GD414 HOURMETER					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-51 GND	18 AWG	GXL	CO69-J7 (25)
2	RED	4-97-1PWR	18 AWG	GXL	S700 (1)
3	YEL	CAN 2 HI	20 AWG	J1939 CABLE	MS325 (8)
4	GRN	CAN 2 LO	20 AWG	J1939 CABLE	MS325 (10)
5					
6					

SW104-3 KEY SWITCH					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-51	12 AWG	GXL	FC628 (38)
1	RED	4-51-1	18 AWG	GXL	IP685 (1)

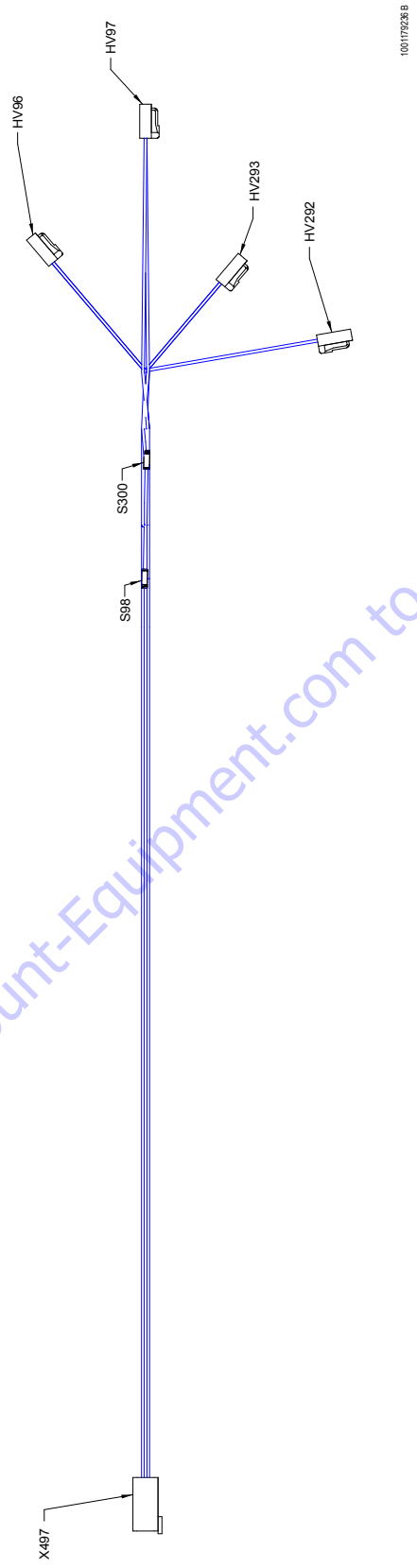
SW104-1 KEY SWITCH					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	4-122 MOD SEL	12 AWG	GXL	FC628 (42)
1	RED	4-40	12 AWG	GXL	FC628 (29)

Figure 7-64. Turntable Harness - Sheet 12 of 14

FUSE BOX LAYOUT

	DESIGNATION	POSITION	RATING
FUSES	F1	28,32	15A
	F2	33,37	15A
	F3	34,38	5A
	F4	35,39	5A
	F5	36,40	5A
	F6	41,45	5A
	F7	42,46	3A
	F8	43,47	
	F9	44,48	
DIODES	D1	29 ANODE	
		25 CATHODE	
	D2	30 ANODE	
		26 CATHODE	
	D3	31 ANODE	
		27 CATHODE	
RELAYS	R1	10 (relay post 85)	35A
		1 (relay post 86)	
		2 (relay post 87)	
		9 (relay post 30)	
		6 (relay post 87a)	
	R2	12 (relay post 85)	
		3 (relay post 86)	
		4 (relay post 87)	
		11 (relay post 30)	
		8 (relay post 87a)	
	R3	22 (relay post 85)	
		13 (relay post 86)	
		14 (relay post 87)	
		21 (relay post 30)	
		18 (relay post 87a)	
	R4	24 (relay post 85)	
		15 (relay post 86)	
		16 (relay post 87)	
		23 (relay post 30)	
		20 (relay post 87a)	

Figure 7-66. Turntable Harness - Sheet 14 of 14



Go to Discount-Equipment.com to order your parts

Figure 7-67. Chassis Solenoid Harness - Sheet 1 of 3

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X497					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-47 OSC VLVs GND	18 AWG	GXL	S300 (1)
2	WHT	4-101 OSC AXLE #2 SECONDARY	18 AWG	GXL	HV293 (1)
3	WHT	4-100 OSC AXLE #1 PRIMARY	18 AWG	GXL	HV292 (1)
4	BLK	000-40-3 GND	18 AWG	GXL	S98 (2)
5	WHT	4-1 BRAKE	18 AWG	GXL	HV97 (1)
6	WHT	4-2 TWO SPEED	18 AWG	GXL	HV96 (1)

HV97					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-1 BRAKE	18 AWG	GXL	X497 (5)
2	BLK	000-40-1 GND	18 AWG	GXL	S98 (1)

S98					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-1 GND	18 AWG	GXL	HV97 (2)
1	BLK	000-40-2	18 AWG	GXL	HV96 (2)
2	BLK	000-40-3 GND	18 AWG	GXL	X497 (4)

HV293					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-101 OSC AXLE #2 SECONDARY	18 AWG	GXL	X497 (2)
2	BLK	000-40-76	18 AWG	GXL	S300 (2)

S300					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-47 OSC VLVs GND	18 AWG	GXL	X497 (1)
2	BLK	000-40-75	18 AWG	GXL	HV292 (2)
2	BLK	000-40-76	18 AWG	GXL	HV293 (2)

HV96					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-2 TWO SPEED	18 AWG	GXL	X497 (6)
2	BLK	000-40-2	18 AWG	GXL	S98 (1)

HV292					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-100 OSC AXLE #1 PRIMARY	18 AWG	GXL	X497 (3)
2	BLK	000-40-75	18 AWG	GXL	S300 (2)

Figure 7-68. Chassis Solenoid Harness - Sheet 2 of 3

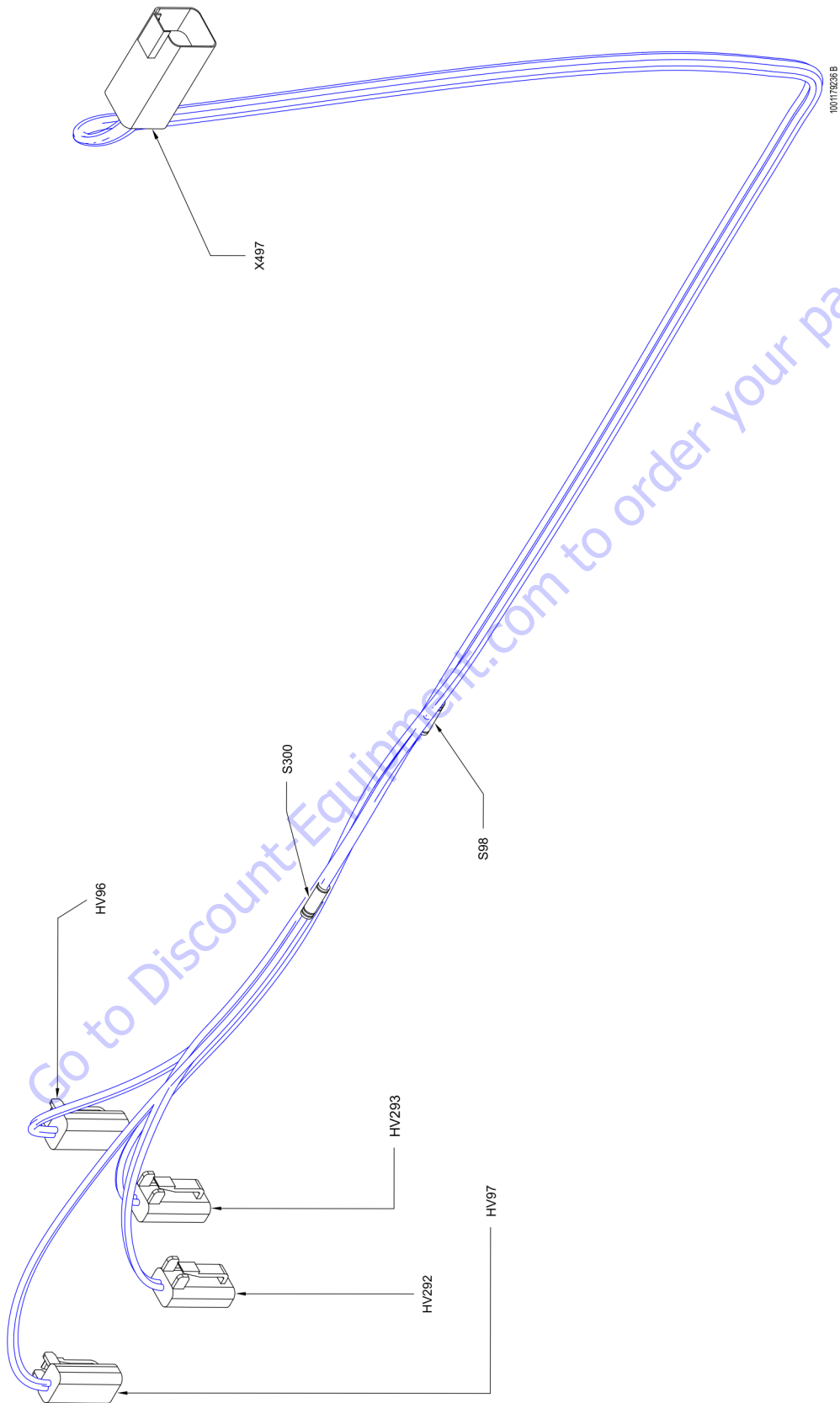


Figure 7-69. Chassis Solenoid Harness - Sheet 3 of 3

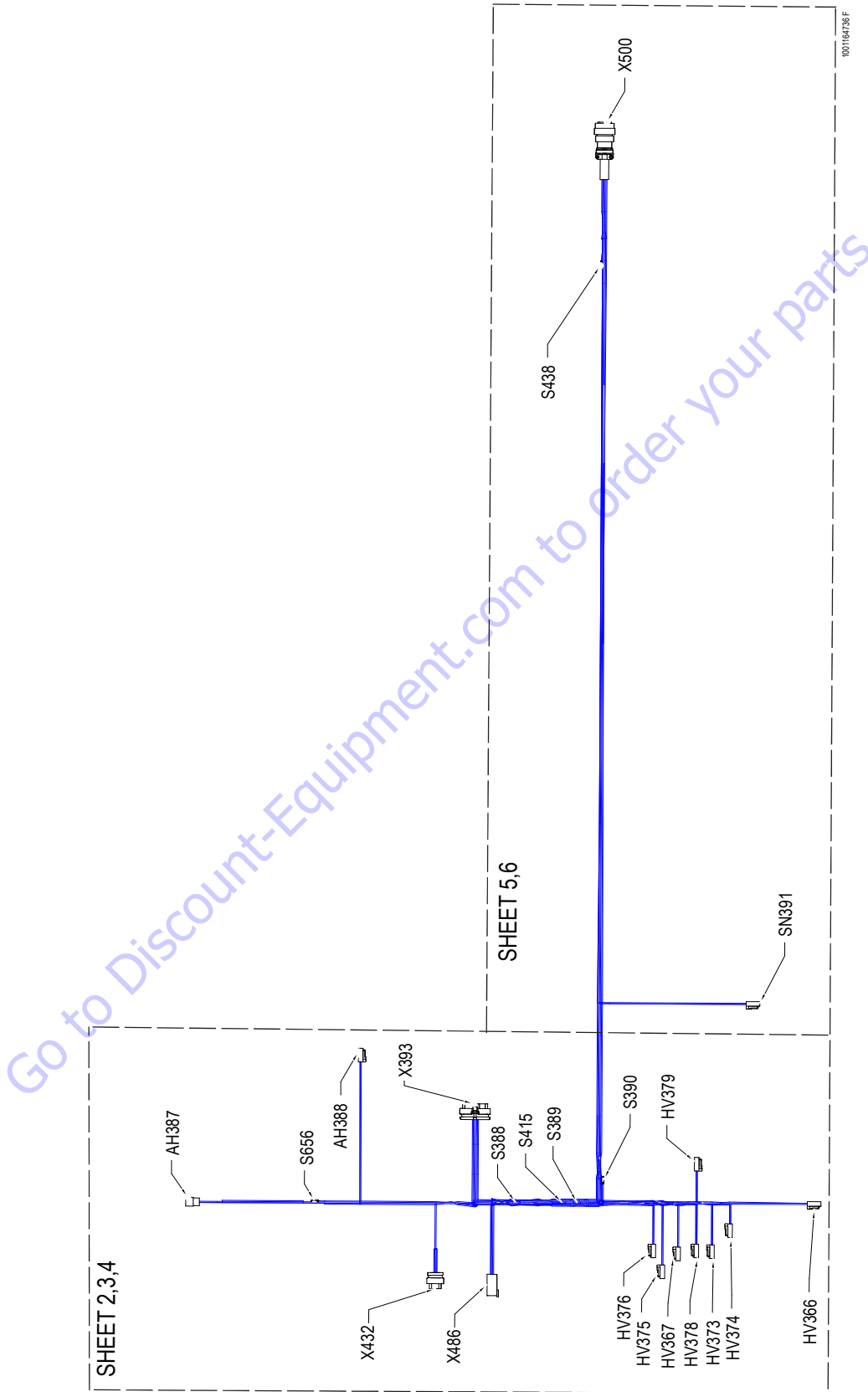


Figure 7-70. Main Valve Harness - Sheet 1 of 8

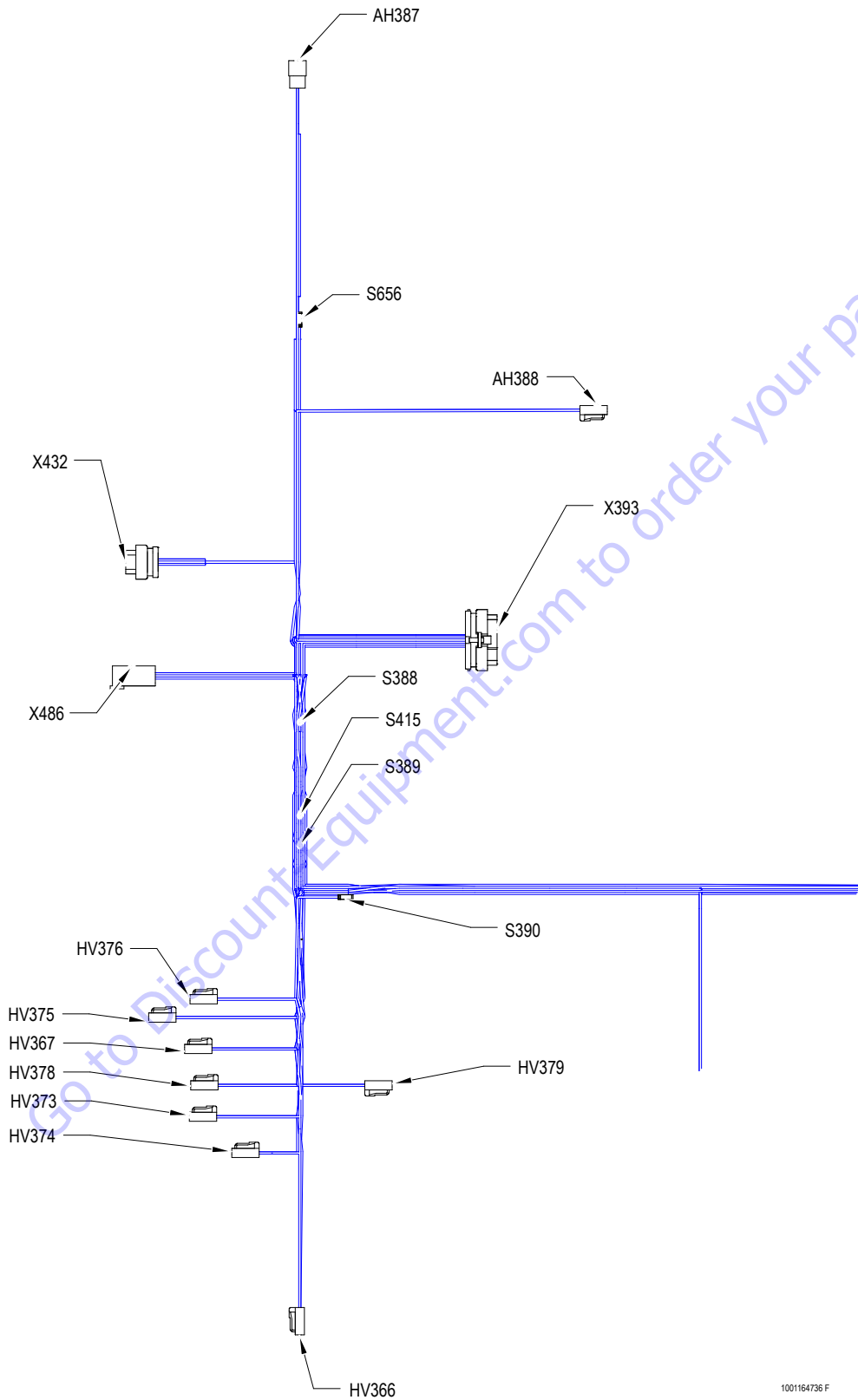


Figure 7-71. Main Valve Harness - Sheet 2 of 8

1001164736 F

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

AH387					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	WHT	4-30 ALRM	18 AWG	GXL	X432 (7)
B	WHT	4-29 ALRM	18 AWG	GXL	X393 (27)
C	BLK	000-40-11 ALRM GND	18 AWG	GXL	S656 (1)

AH388					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	77-1 WHT NOISE	18 AWG	GXL	X393 (2)
2	BLK	000-40-12 ALARM GND	18 AWG	GXL	S656 (1)

X486					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-44 CF	18 AWG	GXL	X432 (1)
2	WHT	4-102 HEAD & TAIL LIGHTS	18 AWG	GXL	X393 (26)
3	WHT	4-105 CRIBBING	18 AWG	GXL	X432 (9)
4	WHT	5-101 JUMP ENABLE	18 AWG	GXL	X432 (10)

X432					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-44 CF	18 AWG	GXL	X486 (1)
2	BLK	000-40-49 AUX TWR LIFT DOWN	18 AWG	GXL	S438 (2)
3					
4	BLK	000-40-38 CF	18 AWG	GXL	S389 (2)
5	BLK	000-40-42 CF	18 AWG	GXL	S390 (2)
6	BLK	000-40-33 CF	18 AWG	GXL	HV375 (2)
7	WHT	4-30 ALRM	18 AWG	GXL	AH387 (A)
8					
9	WHT	4-105 CRIBBING	18 AWG	GXL	X486 (3)
10	WHT	5-101 JUMP ENABLE	18 AWG	GXL	X486 (4)
11					
12					
13					
14	BLK	000-40-35 CF	18 AWG	GXL	S388 (2)

HV378					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-26 SWING RIGHT	18 AWG	GXL	X393 (35)
2	BLK	000-40-37 CF	18 AWG	GXL	S389 (1)

HV379					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-27 SWING LEFT	18 AWG	GXL	X393 (34)
2	BLK	000-40-39 CF	18 AWG	GXL	S389 (1)

HV367					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-15 TOWER LIFT UP	18 AWG	GXL	X393 (20)
2	BLK	000-40-26	18 AWG	GXL	S390 (1)

HV376					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-24 MAIN LIFT UP	18 AWG	GXL	X393 (11)
2	BLK	000-40-34 CF	18 AWG	GXL	S388 (1)

HV375					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-23 FLOW CONTROL	18 AWG	GXL	X393 (31)
2	BLK	000-40-33 CF	18 AWG	GXL	X432 (6)

HV366					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-14 MAIN DUMP	18 AWG	GXL	X393 (13)
2	BLK	000-40-25	18 AWG	GXL	X393 (30)

HV374					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-22 STEER LEFT	18 AWG	GXL	X393 (19)
2	BLK	000-40-32	18 AWG	GXL	S415 (1)

HV373					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-21 STEER RIGHT	18 AWG	GXL	X393 (8)
2	BLK	000-40-32	18 AWG	GXL	S415 (1)

Figure 7-72. Main Valve Harness - Sheet 3 of 8

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X393					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	77-1 WHT NOISE	18 AWG	GXL	AH388 (1)
3					
4	WHT	4-19 MAIN TELE IN	18 AWG	GXL	X500 (E)
5	WHT	4-8 LEVEL UP	18 AWG	GXL	X500 (C)
6	BLK	000-40-45	18 AWG	GXL	SN391 (I)
7	WHT	4-11 LEVEL DOWN	18 AWG	GXL	X500 (B)
8	WHT	4-21 STEER RIGHT	18 AWG	GXL	HV373 (1)
9	WHT	4-16 TOWER LIFT DOWN	18 AWG	GXL	X500 (N)
10					
11	WHT	4-24 MAIN LIFT UP	18 AWG	GXL	HV376 (1)
12					
13	WHT	4-14 MAIN DUMP	18 AWG	GXL	HV366 (1)
14	BLK	000-40-7	18 AWG	GXL	X500 (A)
15					
16	WHT	4-20 MAIN TELE OUT	18 AWG	GXL	X500 (D)
17					
18					
19	WHT	4-22 STEER LEFT	18 AWG	GXL	HV374 (1)
20	WHT	4-15 TOWER LIFT UP	18 AWG	GXL	HV367 (1)
21	WHT	4-103 MAIN LIFT DOWN AUX	18 AWG	GXL	X500 (G)
22	WHT	4-104 MAIN LIFT DOWN	18 AWG	GXL	X500 (J)
23	BLK	4-93 AUX TOWER LIFT DOWN	18 AWG	GXL	X500 (L)
24					
25	WHT	4-75 FUEL SWITCH	18 AWG	GXL	SN391 (2)
26	WHT	4-102 HEAD & TAIL LIGHTS	18 AWG	GXL	X486 (2)
27	WHT	4-29 ALRM	18 AWG	GXL	AH387 (B)
28	BLK	000-40-53	18 AWG	GXL	S415 (2)
29	BLK	000-40-10 ALRM GND	18 AWG	GXL	S656 (2)
30	BLK	000-40-25	18 AWG	GXL	HV366 (2)
31	WHT	4-23 FLOW CONTROL	18 AWG	GXL	HV375 (1)
32					
33					
34	WHT	4-27 SWING LEFT	18 AWG	GXL	HV379 (1)
35	WHT	4-26 SWING RIGHT	18 AWG	GXL	HV378 (1)

S390					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-42 CF	18 AWG	GXL	X432 (5)
2	BLK	000-40-26	18 AWG	GXL	HV367 (2)
2	BLK	000-40-27	18 AWG	GXL	X500 (14)

S388					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-34 CF	18 AWG	GXL	HV376 (2)
2	BLK	000-40-35	18 AWG	GXL	X432 (14)
2	BLK	000-40-63	18 AWG	GXL	X500 (10)

S415					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
2	BLK	000-40-53	18 AWG	GXL	X393 (28)
S415415:1	BLK	000-40-32	18 AWG	GXL	HV373 (2)
S415415:1	BLK	000-40-32	18 AWG	GXL	HV374 (2)

S656					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-11 ALRM GND	18 AWG	GXL	AH387 (C)
1	BLK	000-40-12 ALARM GND	18 AWG	GXL	AH388 (2)
2	BLK	000-40-10 ALRM GND	18 AWG	GXL	X393 (29)

S389					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-37 CF	18 AWG	GXL	HV378 (2)
1	BLK	000-40-39 CF	18 AWG	GXL	HV379 (2)
2	BLK	000-40-38 CF	18 AWG	GXL	X432 (4)

Figure 7-73. Main Valve Harness - Sheet 4 of 8

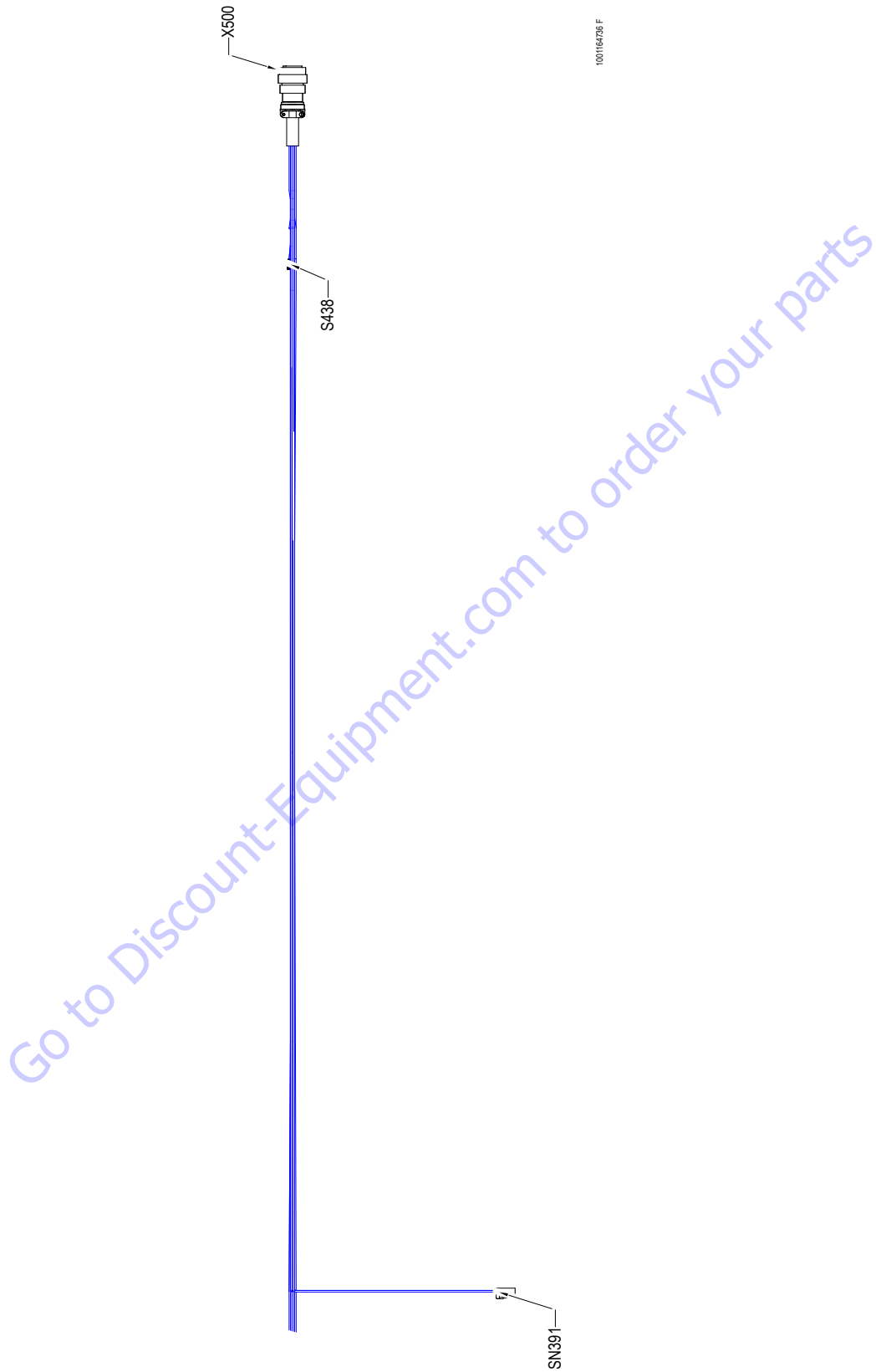


Figure 7-74. Main Valve Harness - Sheet 5 of 8

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

SN391					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-45	18 AWG	GXL	X393 (6)
2	WHT	4-75 FUEL SWITCH	18 AWG	GXL	X393 (25)

X500					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	BLK	000-40-7	18 AWG	GXL	X393 (14)
B	WHT	4-11 LEVEL DOWN	18 AWG	GXL	X393 (7)
C	WHT	4-8 LEVEL UP	18 AWG	GXL	X393 (5)
D	WHT	4-20 MAIN TELE OUT	18 AWG	GXL	X393 (16)
E	WHT	4-19 MAIN TELE IN	18 AWG	GXL	X393 (4)
F					
G	WHT	4-103 MAIN LIFT DOWN AUX	18 AWG	GXL	X393 (21)
H	BLK	000-40-62	18 AWG	GXL	S438 (1)
J	WHT	4-104 MAIN LIFT DOWN	18 AWG	GXL	X393 (22)
K	BLK	000-40-63	18 AWG	GXL	S388 (2)
L	BLK	4-93 AUX TOWER LIFT DOWN	18 AWG	GXL	X393 (23)
M	BLK	000-40-61	18 AWG	GXL	S438 (1)
N	WHT	4-16 TOWER LIFT DOWN	18 AWG	GXL	X393 (9)
P	BLK	000-40-27	18 AWG	GXL	S390 (1)

S438					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-61	18 AWG	GXL	X500 (N)
1	BLK	000-40-62	18 AWG	GXL	X500 (H)
2	BLK	000-40-49 AUX TWR LIFT DOWN	18 AWG	GXL	X432 (2)

Figure 7-75. Main Valve Harness - Sheet 6 of 8

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

WIRE NO	COLOR	WIRE GAUGE	JACKET	LENGTH (mm)	FROM		TO	
					REFERENCE	PIN	REFERENCE	PIN
000-40-10	BLK	18	GXL	525	X393	29	S656	2
000-40-11	BLK	18	GXL	247	AH387	C		
000-40-12	BLK	18	GXL	398			AH388	2
000-40-25	BLK	18	GXL	947	HV366	2	X393	30
000-40-26	BLK	18	GXL	307	HV367	2	S390	2
000-40-27	BLK	18	GXL	2168	X500	14	S390	2
000-40-32	BLK	18	GXL	405	HV374	2	S415	1
000-40-32	BLK	18	GXL	417	HV373	2	S415	1
000-40-33	BLK	18	GXL	650	HV375	2	X432	6
000-40-34	BLK	18	GXL	393	HV376	2	S388	2
000-40-35	BLK	18	GXL	197	X432	14	S388	1
000-40-37	BLK	18	GXL	349	HV378	2	S389	2
000-40-38	BLK	18	GXL	324	X432	4	S389	1
000-40-39	BLK	18	GXL	338	HV379	2	S389	2
000-40-42	BLK	18	GXL	434	X432	5	S390	1
000-40-44	BLK	18	GXL	278	X486	1	X432	1
000-40-45	BLK	18	GXL	1215	SN391	1	X393	6
000-40-49	BLK	18	GXL	2351	S438	2	X432	2
000-40-53	BLK	18	GXL	419	X393	28	S415	2
000-40-61	BLK	18	GXL	247	S438	1	X500	12
000-40-62	BLK	18	GXL	246	X500	8	S438	1
000-40-63	BLK	18	GXL	2392	X500	10	S388	2
000-40-7	BLK	18	GXL	2705	X393	14	X500	1
4-102	WHT	18	GXL	407	X486	2	X393	26
4-103	WHT	18	GXL	2710	X500	7	X393	21
4-104	WHT	18	GXL	2683	X500	9	X393	22
4-105	WHT	18	GXL	290	X486	3	X432	9
4-11	WHT	18	GXL	2703	X500	2	X393	7
4-14	WHT	18	GXL	945	HV366	1	X393	13
4-15	WHT	18	GXL	777	HV367	1	X393	20
4-16	WHT	18	GXL	2726	X500	13	X393	9
4-19	WHT	18	GXL	2696	X500	5	X393	4
4-20	WHT	18	GXL	2705	X500	4	X393	16
4-21	WHT	18	GXL	899	HV373	1	X393	8
4-22	WHT	18	GXL	814	HV374	1	X393	19
4-23	WHT	18	GXL	882	HV375	1	X393	31
4-24	WHT	18	GXL	699	HV376	1	X393	11
4-26	WHT	18	GXL	817	HV378	1	X393	35
4-27	WHT	18	GXL	762	HV379	1	X393	34
4-29	WHT	18	GXL	779	AH387	B	X393	27
4-30	WHT	18	GXL	648	AH387	A	X432	7
4-75	WHT	18	GXL	1231	SN391	2	X393	25
4-8	WHT	18	GXL	2706	X500	3	X393	5
4-93	BLK	18	GXL	2716	X500	11	X393	23
5-101	WHT	18	GXL	285	X432	13	X486	4
5-131	WHT	18	GXL	276	X486	5	X432	10
77-1	WHT	18	GXL	751	AH388	1	X393	2

Figure 7-76. Main Valve Harness - Sheet 7 of 8

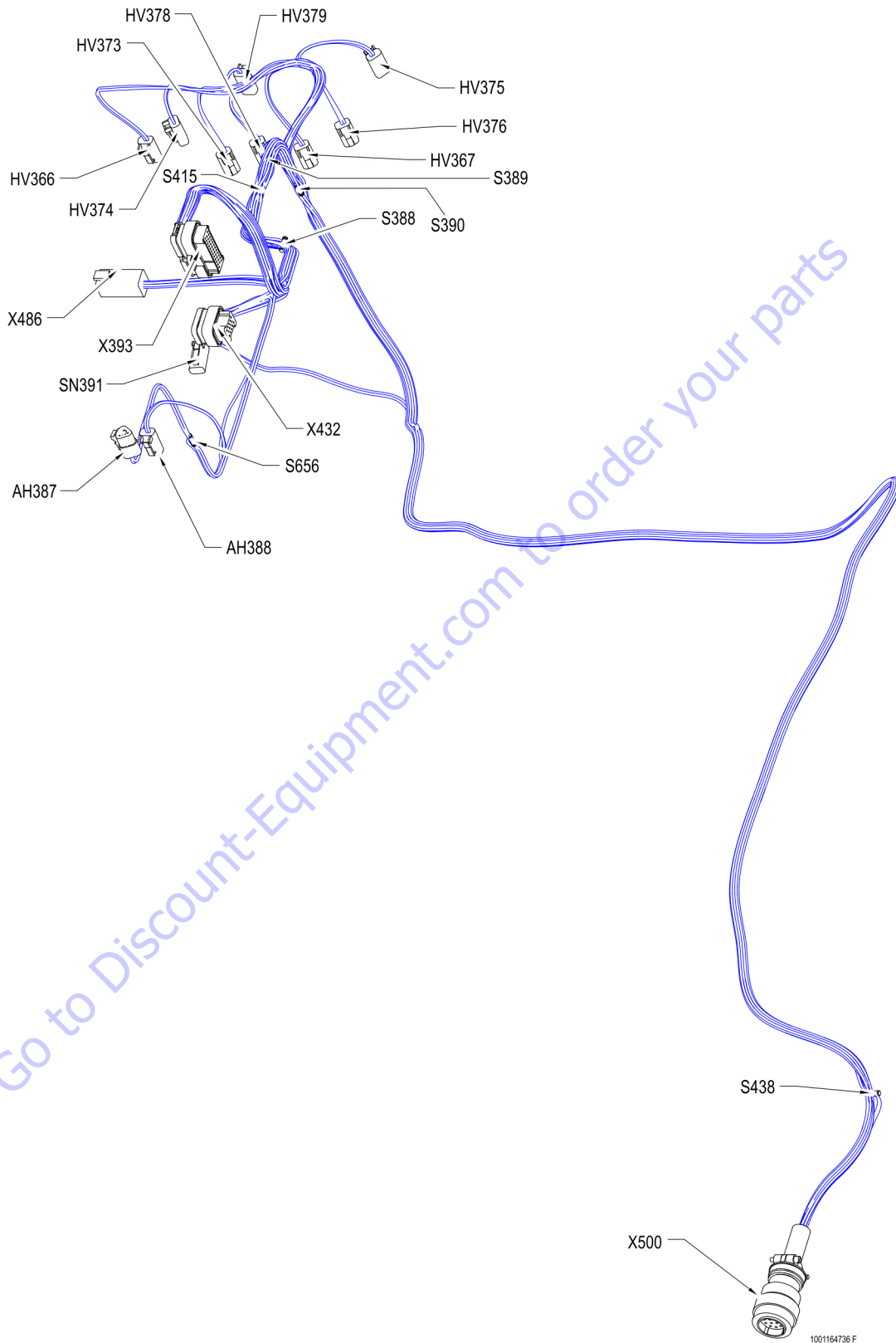
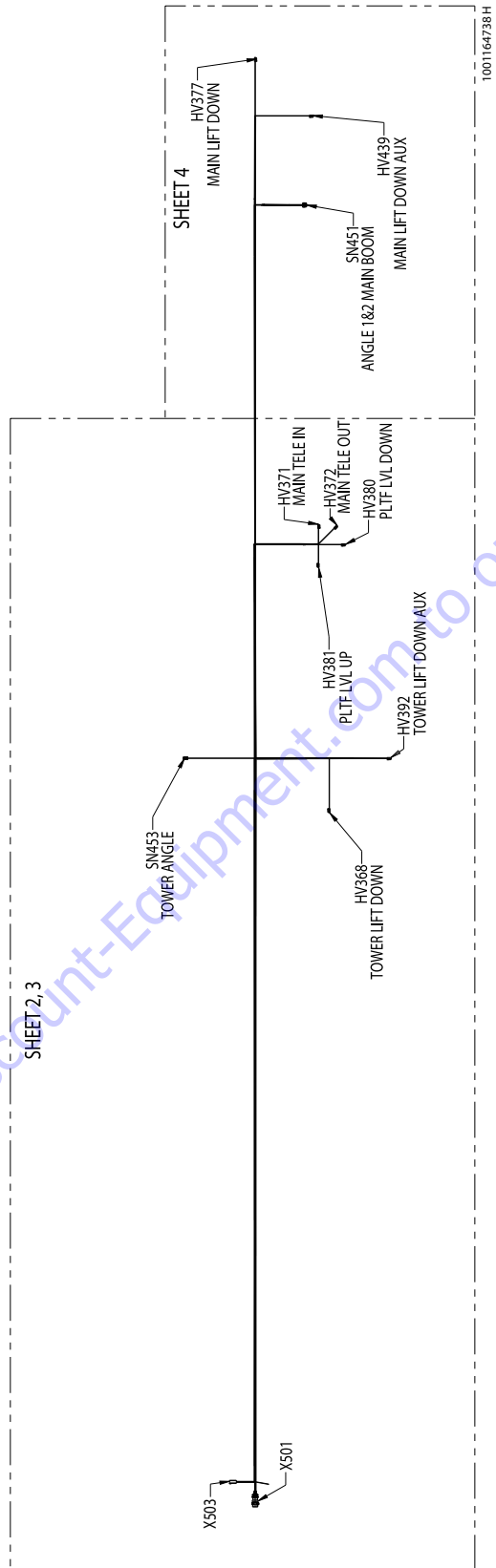
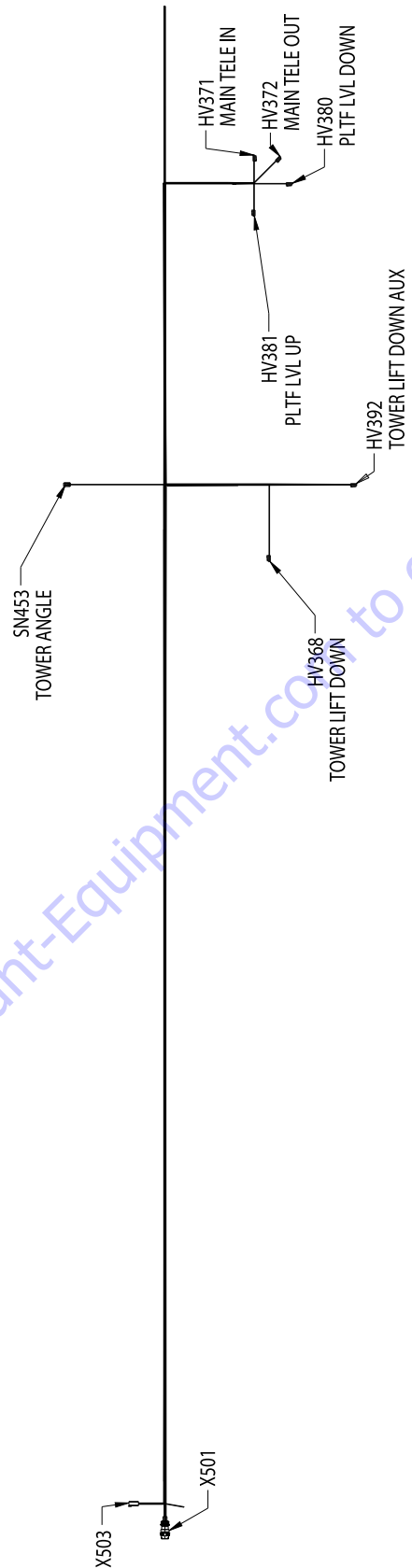


Figure 7-77. Main Valve Harness - Sheet 8 of 8



Go to Discount-Equipment.com to order your parts

Figure 7-78. Tower Upright Valve Harness - Sheet 1 of 5



1001164758 H

Figure 7-79. Tower Upright Valve Harness - Sheet 2 of 5

Go to Discount-Equipment.com to order your parts

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X501					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	BRNBLK	CABLE 4	18AWG	TFFN	S465 (2)
B	YEL/BLK	CABLE 4	18AWG	TFFN	HV380 (1)
C	ORN/BLK	CABLE 4	18AWG	TFFN	HV381 (1)
D	BLU/BLK	CABLE 4	18AWG	TFFN	HV372 (1)
E	BLK/RED	CABLE 4	18AWG	TFFN	HV371 (1)
F					
G	ORG	CABLE 3	16AWG	CABLE	HV439 (1)
H	BLU	CABLE 3	16AWG	CABLE	HV439 (2)
J	RED	CABLE 3	16AWG	CABLE	HV377 (1)
K	BLK	CABLE 3	16AWG	CABLE	HV377 (2)
L	BLU	CABLE 2	16AWG	CABLE	HV392 (1)
M	ORG	CABLE 2	16AWG	CABLE	HV392 (2)
N	RED	CABLE 2	16AWG	CABLE	HV368 (1)
P	BLK	CABLE 2	16AWG	CABLE	HV368 (2)

HV371 MAIN TELE IN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK/RED	CABLE 4	18AWG	TFFN	X501 (E)
2	BLK	000-50-52	18AWG	GXL	S465 (2)

HV381 PLTF LVL UP					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORN/BLK	CABLE 4	18AWG	TFFN	X501 (C)
2	BLK	000-50-54	18AWG	GXL	S465 (1)

HV380 PLTF LVL DOWN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL/BLK	CABLE 4	18AWG	TFFN	X501 (B)
2	BLK	000-50-49	18AWG	GXL	S465 (1)

X503					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK/RED	CABLE 5	18AWG	TFFN	S471 (1)
2	BLU/BLK	CABLE 5	18AWG	TFFN	SN451 (C)
3	ORN/BLK	CABLE 5	18AWG	TFFN	S472 (1)
4	BRN/BLK	CABLE 5	18AWG	TFFN	SN451 (D)
5	WHT	CABLE 1	18AWG	CABLE	SN453 (2)
6	BLK	CABLE 1	18AWG	CABLE	SN453 (3)

HV372 MAIN TELE OUT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU/BLK	CABLE 4	18AWG	TFFN	X501 (D)
2	BLK	000-50-53	18AWG	GXL	S465 (1)

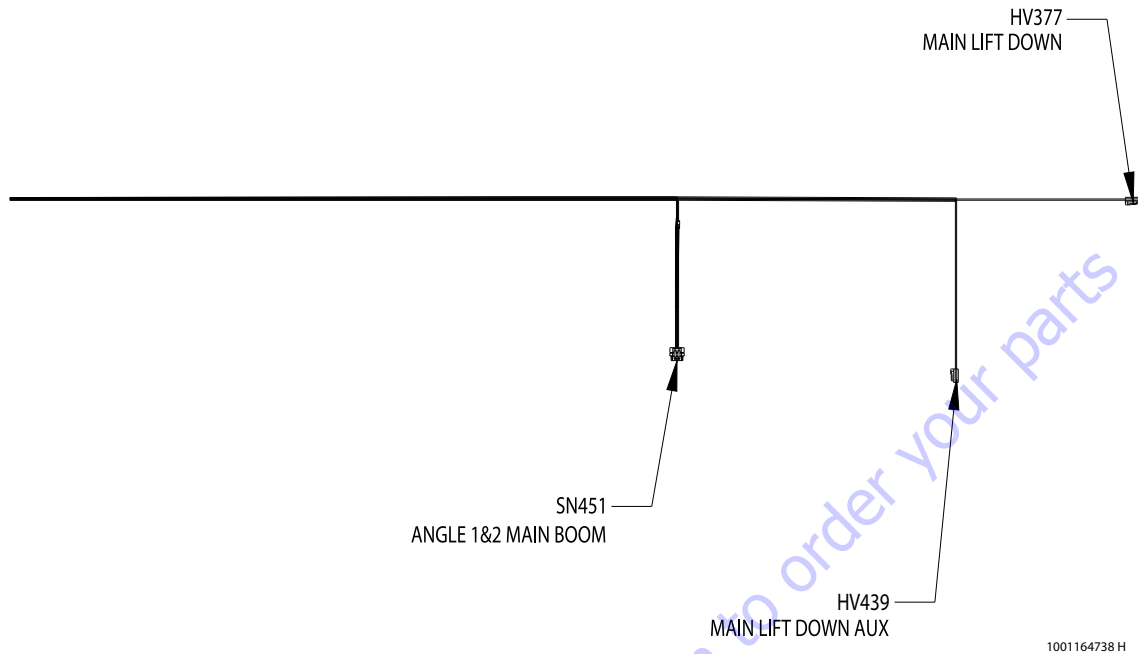
SN453 - TOWER ANGLE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	CABLE 1	18AWG	CABLE	X503 (5)
3	BLK	CABLE 1	18 AWG	CABLE	X503 (6)
4	S				

HV392 - TOWER LIFT DOWN AUX					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLU	CABLE 2	16AWG	CABLE	X501 (L)
2	ORG	CABLE 2	16AWG	CABLE	X501 (M)

HV368 TOWER LIFT DOWN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	CABLE 2	16AWG	CABLE	X501 (N)
2	BLK	CABLE 2	16AWG	CABLE	X501 (P)

Figure 7-80. Tower Upright Valve Harness - Sheet 3 of 5

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

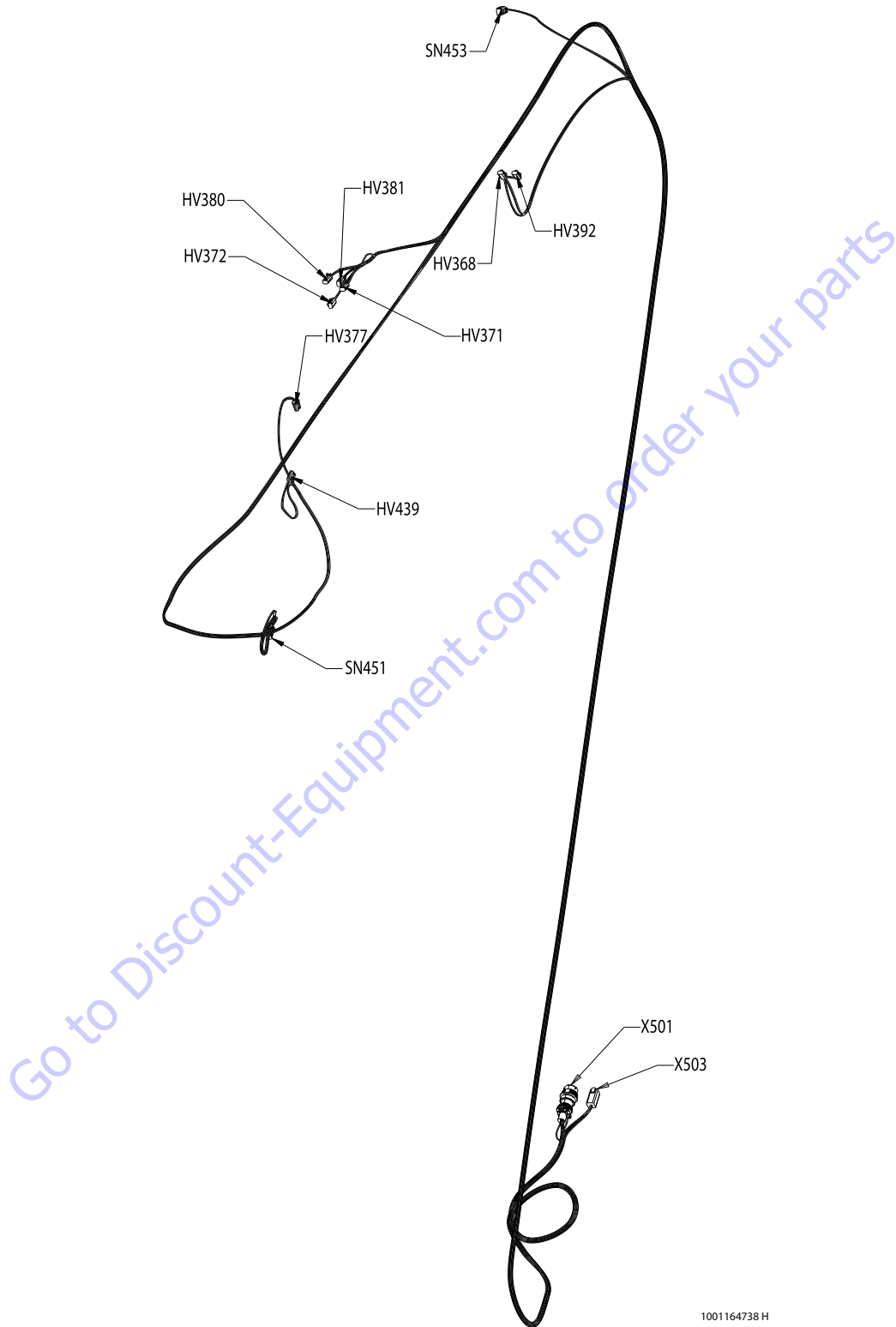


SN451 ANGLE 1&2 MAIN BOOM					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	ORN/ BLK	CABLE 5	18AWG	TFFN	S472 (2)
B	YEL/BLK	CABLE 5	18AWG	TFFN	S471 (2)
C	BLU/ BLK	CABLE 5	18AWG	TFFN	X503 (2)
D	BRN/ BLK	CABLE 5	18AWG	TFFN	X503 (4)
E	BLU/ RED	CABLE 5	18AWG	TFFN	S472 (2)
F	BLK/ RED	CABLE 5	18AWG	TFFN	S471 (2)

HV377 MAIN LIFT DOWN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	CABLE 3	16AWG	CABLE	X501 (J)
2	BLK	CABLE 3	16AWG	CABLE	X501 (K)

HV439 MAIN LIFT DOWN AUX					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORG	CABLE 3	16AWG	CABLE	X501 (G)
2	BLU	CABLE 3	16AWG	CABLE	X501 (H)

Figure 7-81. Tower Upright Valve Harness - Sheet 4 of 5



1001164738 H

Figure 7-82. Tower Upright Valve Harness - Sheet 5 of 5

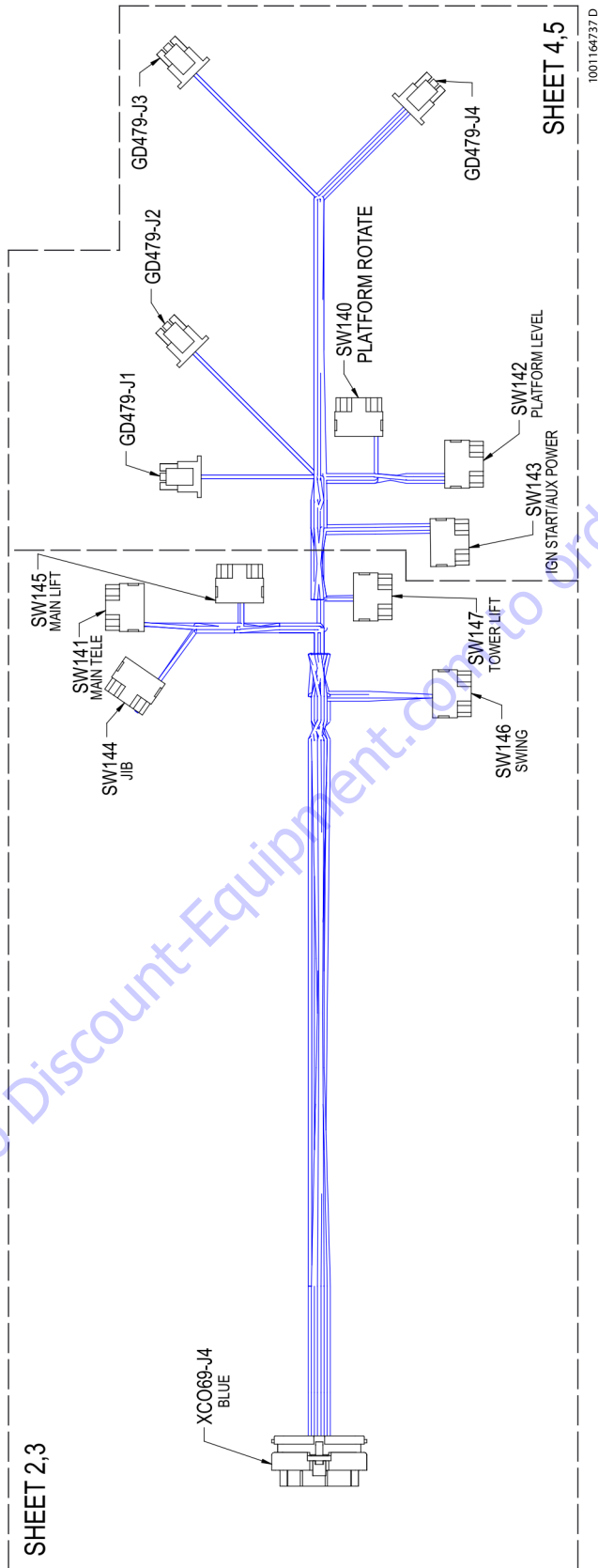


Figure 7-83. Ground Control Panel Harness - Sheet 1 of 6

This page left blank intentionally.

Go to Discount-Equipment.com to order your parts

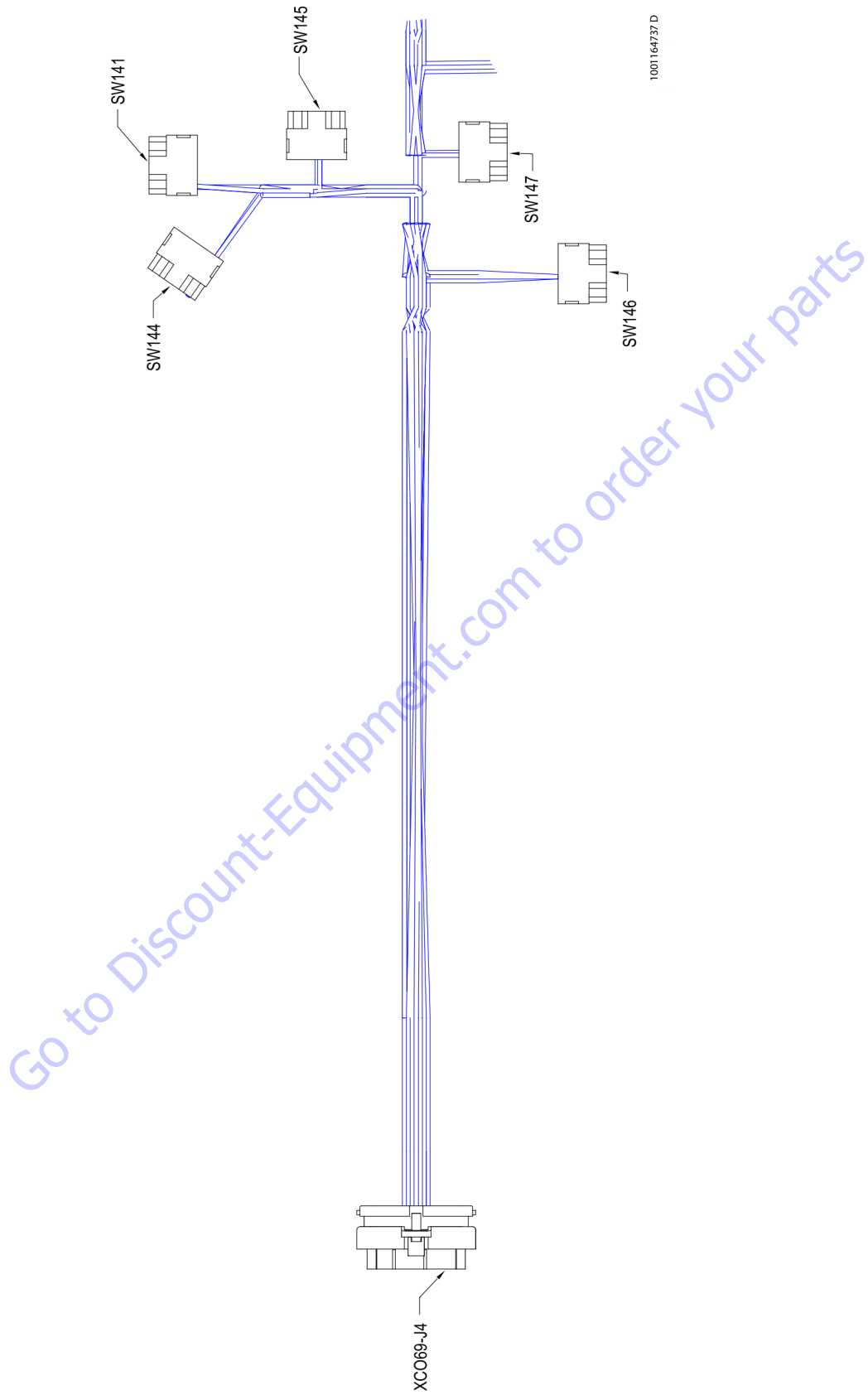


Figure 7-84. Ground Control Panel Harness - Sheet 2 of 6

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

XCO69-J4 BLUE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-23 CRIBBING ENABLED	18 AWG	GXL	GD479-J3 (1)
2	WHT	5-35 SYSTEM FAULT	18 AWG	GXL	GD479-J4 (5)
3	WHT	5-24 GLOW PLUG	18 AWG	GXL	GD479-J2 (3)
4	WHT	5-9 IGNITION START	18 AWG	GXL	SW143 (3)
5	WHT	5-6 LEVEL DOWN	18 AWG	GXL	SW142 (1)
6	WHT	5-4 ROTATE LEFT	18 AWG	GXL	SW140 (1)
7	WHT	5-1 TELE IN	18 AWG	GXL	SW141 (1)
8	WHT	5-11 JIB DOWN	18 AWG	GXL	SW144 (3)
9					
10	WHT	5-16 TOWER LIFT UP	18 AWG	GXL	SW147 (3)
11					
12					
13	WHT	5-40 LOW FUEL	18 AWG	GXL	GD479-J1 (5)
14	WHT	5-25 PLATFORM OVERLOAD	18 AWG	GXL	GD479-J3 (6)
15					
16	WHT	5-8 AUX POWER	18 AWG	GXL	SW143 (1)
17	WHT	5-5 LEVEL UP	18 AWG	GXL	SW142 (3)
18	WHT	5-3 ROTATE RIGHT	18 AWG	GXL	SW140 (3)
19	WHT	5-10 JIB UP	18 AWG	GXL	SW144 (1)
20					
21	WHT	5-17 TOWER LIFT DOWN	18 AWG	GXL	SW147 (1)
22					
23	WHT	5-12 MAIN LIFT UP	18 AWG	GXL	SW145 (3)
24					
25	WHT	5-26 SWITCH POWER	18 AWG	GXL	SW141 (2)
26	WHT	5-22 NO CHARGE	18 AWG	GXL	GD479-J4 (1)
27					
28	WHT	5-21 ENGINE HIGH TEMPERATURE	18 AWG	GXL	GD479-J4 (3)
29	WHT	5-20 ENGINE LOW OIL PRESSURE	18 AWG	GXL	GD479-J4 (2)
30	WHT	5-2 TELE OUT	18 AWG	GXL	SW141 (3)
31	BLK	000-50-1 GND	18 AWG	GXL	GD479-J2 (6)
32	BLK	00_50_501 GND	18 AWG	GXL	GD479-J1 (4)
33	WHT	5-13 MAIN LIFT DOWN	18 AWG	GXL	SW145 (1)
34	WHT	5-15 SWING LEFT	18 AWG	GXL	SW146 (1)
35	WHT	5-14 SWING RIGHT	18 AWG	GXL	SW146 (3)

SW141 MAIN TELE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-1 TELE IN	18 AWG	GXL	XCO69-J4 (7)
2	WHT	5-26 SWITCH POWER	18 AWG	GXL	XCO69-J4 (25)
2	WHT	5-27	18 AWG	GXL	SW140 (2)
3	WHT	5-2 TELE OUT	18 AWG	GXL	XCO69-J4 (30)
4					
5					
6					

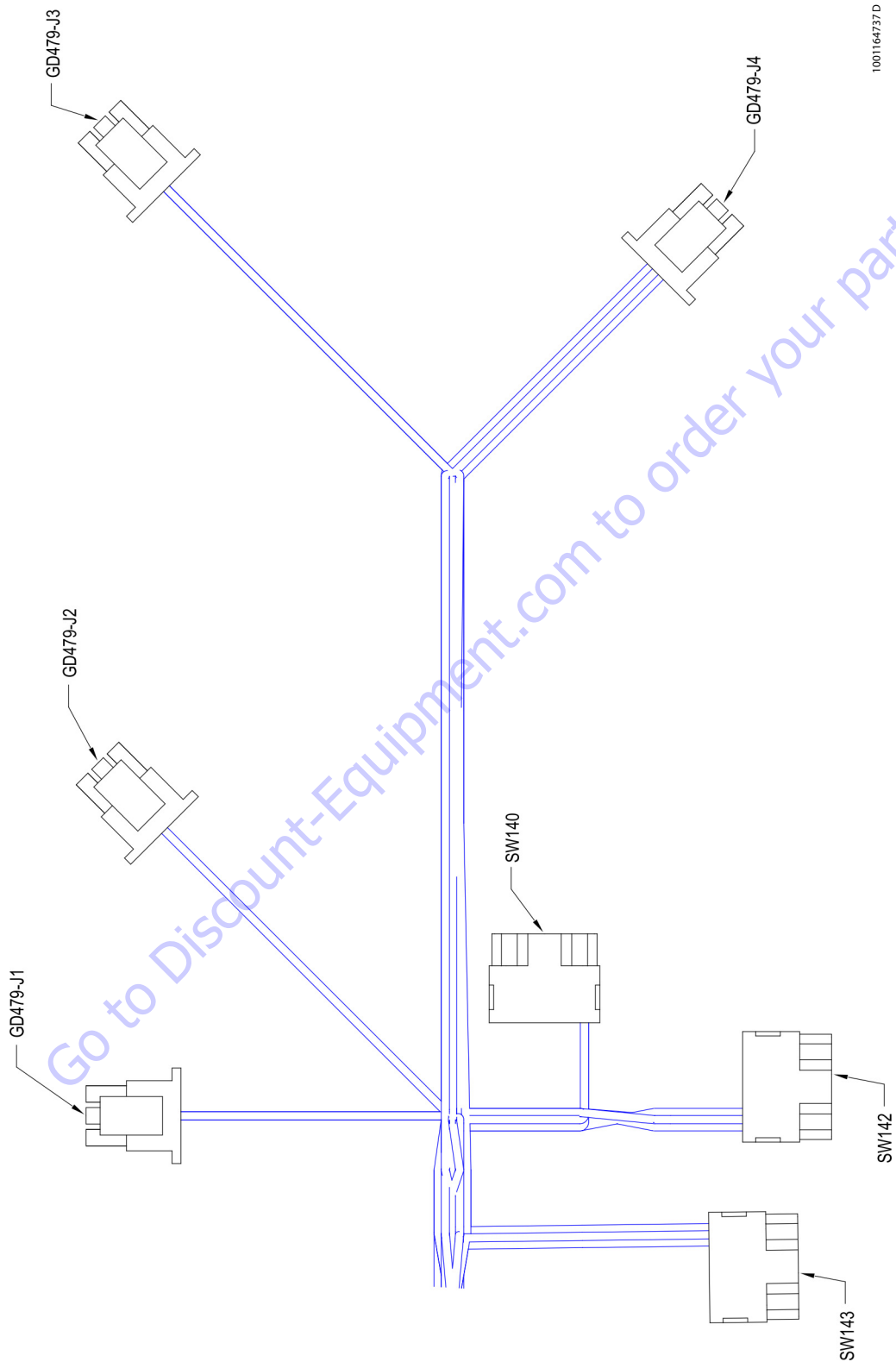
SW145 MAIN LIFT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-13 MAIN LIFT DOWN	18 AWG	GXL	XCO69-J4 (33)
2	WHT	5-31	18 AWG	GXL	SW144 (2)
2	WHT	5-32	18 AWG	GXL	SW146 (2)
3	WHT	5-12 MAIN LIFT UP	18 AWG	GXL	XCO69-J4 (23)
4					
5					
6					

SW147 TOWER LIFT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-17 TOWER LIFT DOWN	18 AWG	GXL	XCO69-J4 (21)
2	WHT	5-33	18 AWG	GXL	SW146 (2)
3	WHT	5-16 TOWER LIFT UP	18 AWG	GXL	XCO69-J4 (10)
4					
5					
6					

SW146 SWING					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-15 SWING LEFT	18 AWG	GXL	XCO69-J4 (34)
2	WHT	5-32	18 AWG	GXL	SW145 (2)
2	WHT	5-33	18 AWG	GXL	SW147 (2)
3	WHT	5-14 SWING RIGHT	18 AWG	GXL	XCO69-J4 (35)
4					
5					
6					

SW144 JIB					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-10 JIB UP	18 AWG	GXL	XCO69-J4 (19)
2	WHT	5-30	18 AWG	GXL	SW143 (2)
2	WHT	5-31	18 AWG	GXL	SW145 (2)
3	WHT	5-11 JIB DOWN	18 AWG	GXL	XCO69-J4 (8)
4					
5					
6					

Figure 7-85. Ground Control Panel Harness - Sheet 3 of 6



1001164737D

Figure 7-86. Ground Control Panel Harness - Sheet 4 of 6

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

SW143 IGN START/ AUX POWER					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-8 AUX POWER	18 AWG	GXL	XCO69-J4 (16)
2	WHT	5-29	18 AWG	GXL	SW142 (2)
2	WHT	5-30	18 AWG	GXL	SW144 (2)
3	WHT	5-9 IGNITION START	18 AWG	GXL	XCO69-J4 (4)
4					
5					
6					

SW142 PLATFORM LEVEL					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-6 LEVEL DOWN	18 AWG	GXL	XCO69-J4 (5)
2	WHT	5-28	18 AWG	GXL	SW140 (2)
2	WHT	5-29	18 AWG	GXL	SW143 (2)
3	WHT	5-5 LEVEL UP	18 AWG	GXL	XCO69-J4 (17)
4					
5					
6					

SW140 PLATFORM ROTATE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-4 ROTATE LEFT	18 AWG	GXL	XCO69-J4 (6)
2	WHT	5-27	18 AWG	GXL	SW141 (2)
2	WHT	5-28	18 AWG	GXL	SW142 (2)
3	WHT	5-3 ROTATE RIGHT	18 AWG	GXL	XCO69-J4 (18)
4					
5					
6					

GD479-J1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2					
3					
4	BLK	00_50_501 GND	18 AWG	GXL	XCO69-J4 (32)
5	WHT	5-40 LOW FUEL	18 AWG	GXL	XCO69-J4 (13)
6					

GD479-J2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2					
3	WHT	5-24 GLOW PLUG	18 AWG	GXL	XCO69-J4 (3)
4					
5					
6	BLK	000-50-1 GND	18 AWG	GXL	XCO69-J4 (31)

GD479-J3					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-23 CRIBBING ENABLED	18 AWG	GXL	XCO69-J4 (1)
2					
3					
4					
5					
6	WHT	5-25PLATFORM OVERLOAD	18 AWG	GXL	XCO69-J4 (14)

GD479-J4					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	5-22 NO CHARGE	18 AWG	GXL	XCO69-J4 (26)
2	WHT	5-20 ENGINE LOW OIL PRESSURE	18 AWG	GXL	XCO69-J4 (29)
3	WHT	5-21 ENGINE HIGH TEMPERATURE	18 AWG	GXL	XCO69-J4 (28)
4					
5	WHT	5-35 SYSTEM FAULT	18 AWG	GXL	XCO69-J4 (2)
6					

Figure 7-87. Ground Control Panel Harness - Sheet 5 of 6

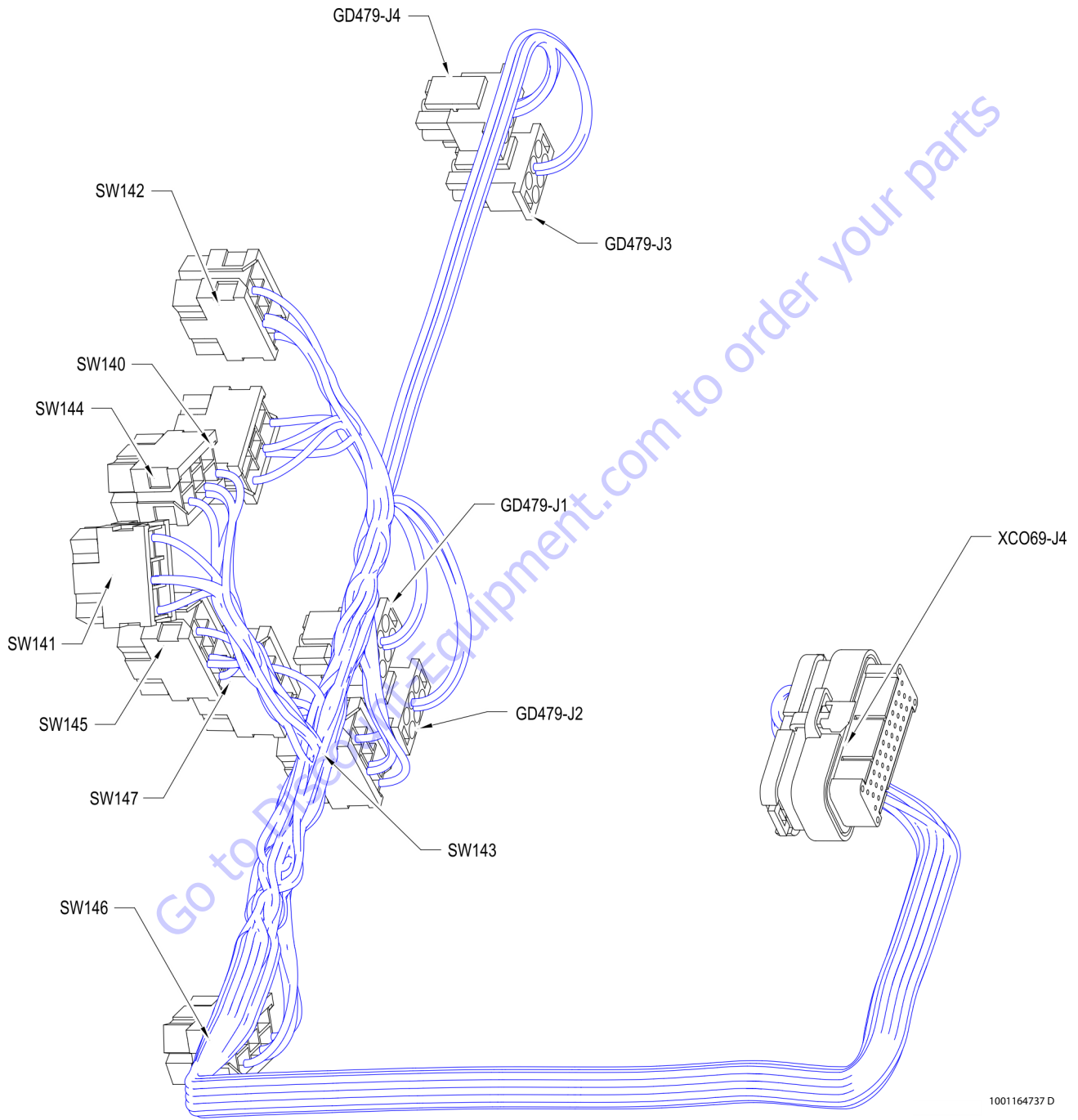
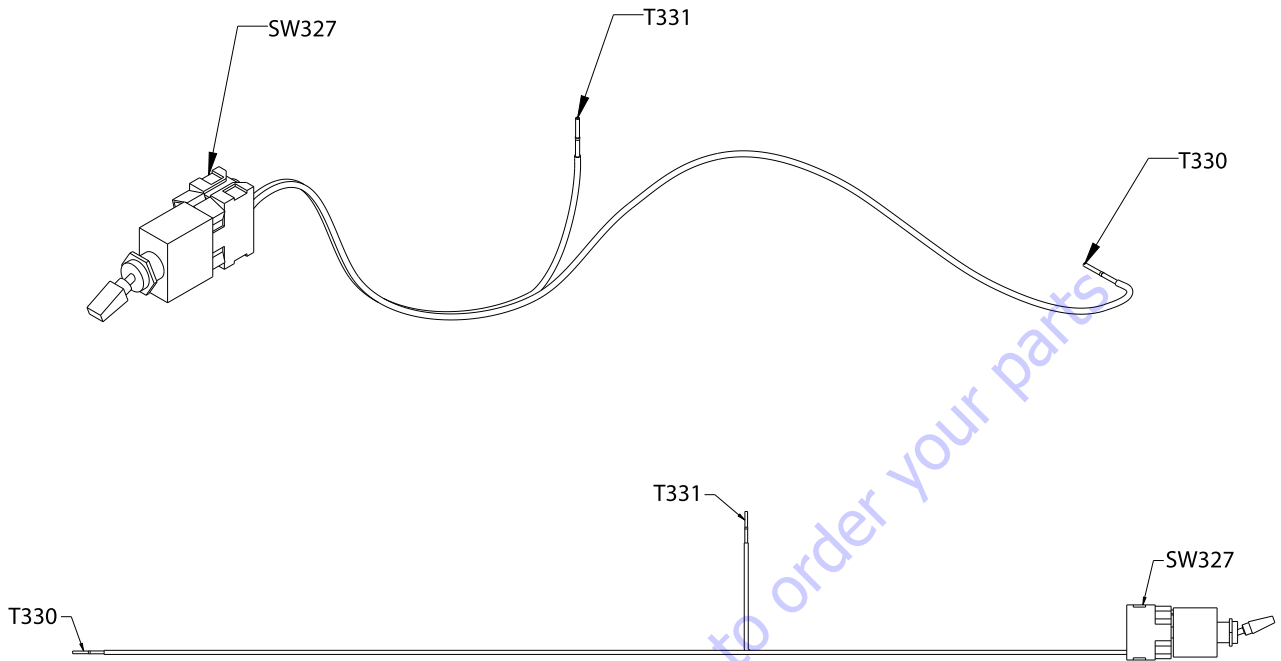


Figure 7-88. Ground Control Panel Harness - Sheet 6 of 6



1001232715 A

T330					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-105 CRIBBING	18AWG	GXL	SW327 (3)

T331					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	4-31 IGN	18AWG	GXL	SW327 (2)

SW327					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	YEL	4-31 IGN	18AWG	GXL	T331 (1)
3	WHT	4-105 CRIBBING	18AWG	GXL	T330 (1)
4					
5					
6					

Figure 7-89. Cribbing Enable Harness

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS



1001167111 B

X238					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	BLK	000-6-1 GROUND	16AWG	TFFN	X206 (1)
3					

X481					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	RED	CABLE	18AWG	CABLE	S484 (1)
B	BLK	CABLE	18AWG	CABLE	S483 (2)
C	SHIELD	6-50	18AWG	SHLD	X237 (6)

X237					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-16	18AWG	GXL	S240 (1)
2	WHT	6-25	14AWG	GXL	RL267-86 (1)
3	RED	CABLE CAN HI	18AWG	CABLE	S484 (1)
4	BLK	CABLE CAN LO	18AWG	CABLE	S483 (1)
5	RED	6-51 16AWG	16AWG	GXL	EC255-D+ (1) ***

X206					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-6-1 GROUND	16AWG	TFFN	X238 (2)
2	BLK	000-6-3	18AWG	GXL	X239 (B)
3					
4					
5					
6					
7					
8					
9					
10	WHT	6-23	18AWG	GXL	X239 (L)
11	WHT	6-23	18AWG	GXL	X239 (K)
12	RED	CABLE	18AWG	CABLE	S484 (2)
13	BLK	CABLE CAN LO	18AWG	CABLE	S483 (2)
14	WHT	6-15 DIAGNOSTIC	18AWG	GXL	S240 (2)
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Figure 7-90. Deutz T4I Engine Harness - Sheet 1 of 3

X239					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	WHT	6-17 DIAGNOSTIC	18AWG	GXL	S240 (2)
B	BLK	000-6-3	18AWG	GXL	X206 (2)
K	WHT	6-23	18AWG	GXL	X206 (11)
L	WHT	6-23	18AWG	GXL	X206 (10)

EC255-D+					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	6-51 16AWG	16AWG	GXL	X237 (5)

RL234-86					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-18 GLOW	18AWG	GXL	X238 (4)

RL267-86					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-25	14AWG	GXL	X237 (2)

Figure 7-91. Deutz T4I Engine Harness - Sheet 2 of 3

Go to Discount-Equipment.com to order your parts

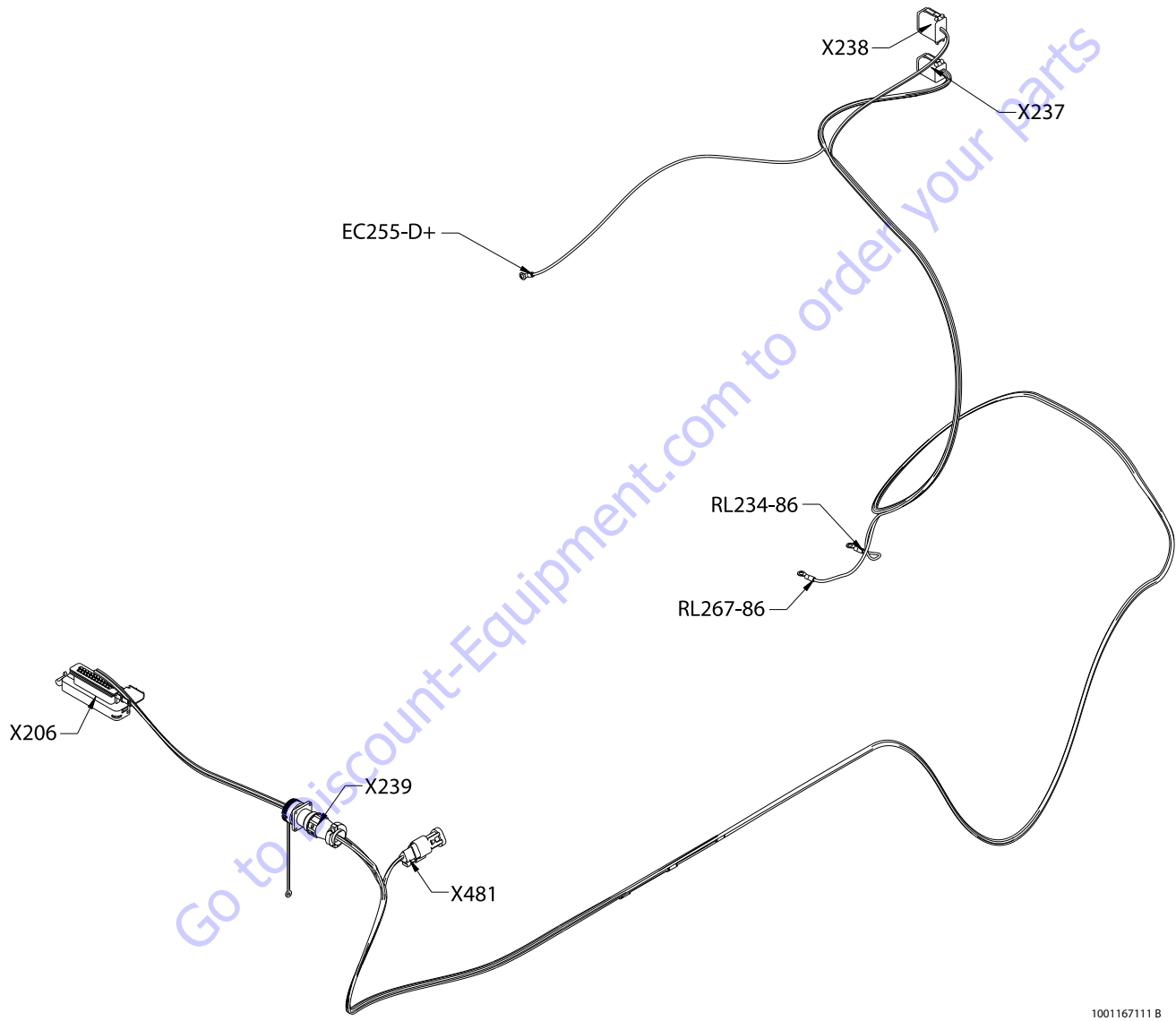
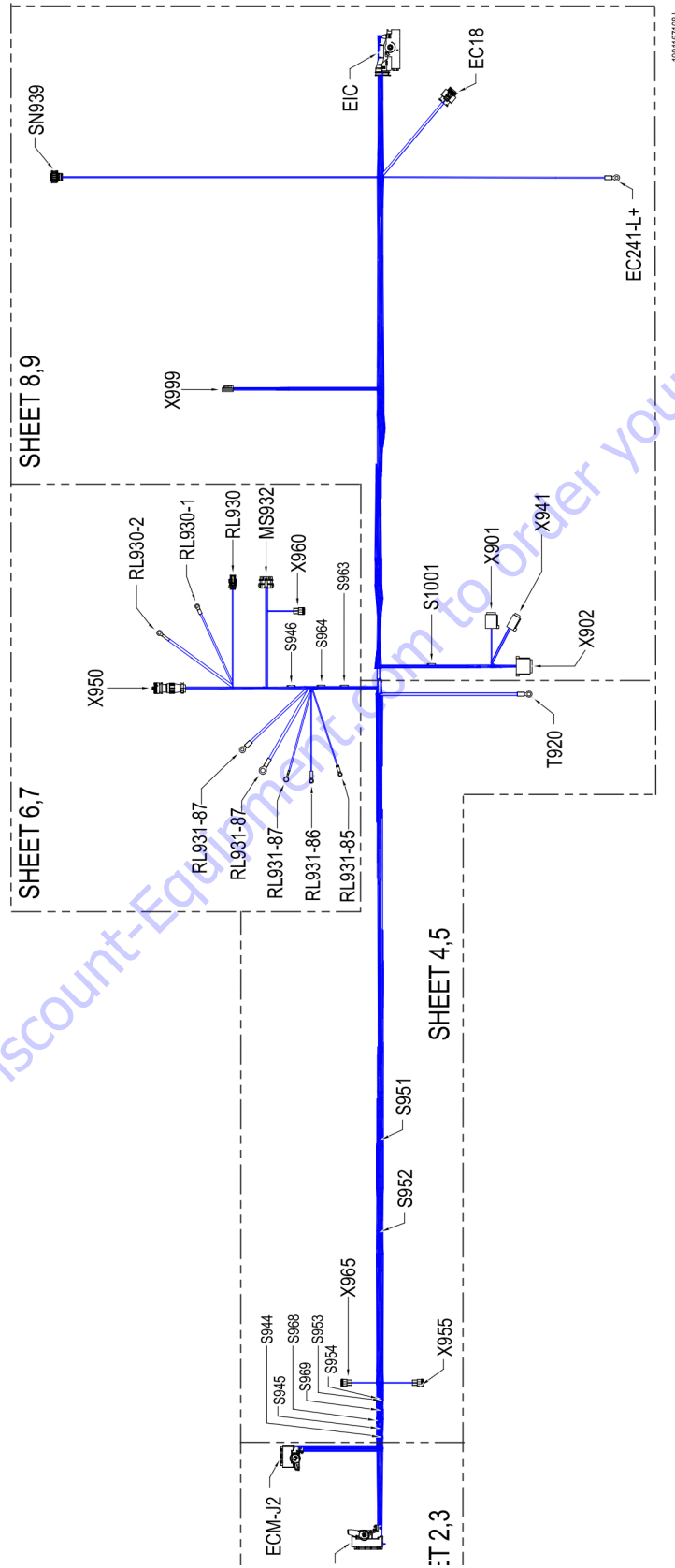


Figure 7-92. Deutz T4I Engine Harness - Sheet 3 of 3



Go to Discount-Equipment.com to order your parts

Figure 7-93. Deutz 2.9 Harness - Sheet 1 of 12

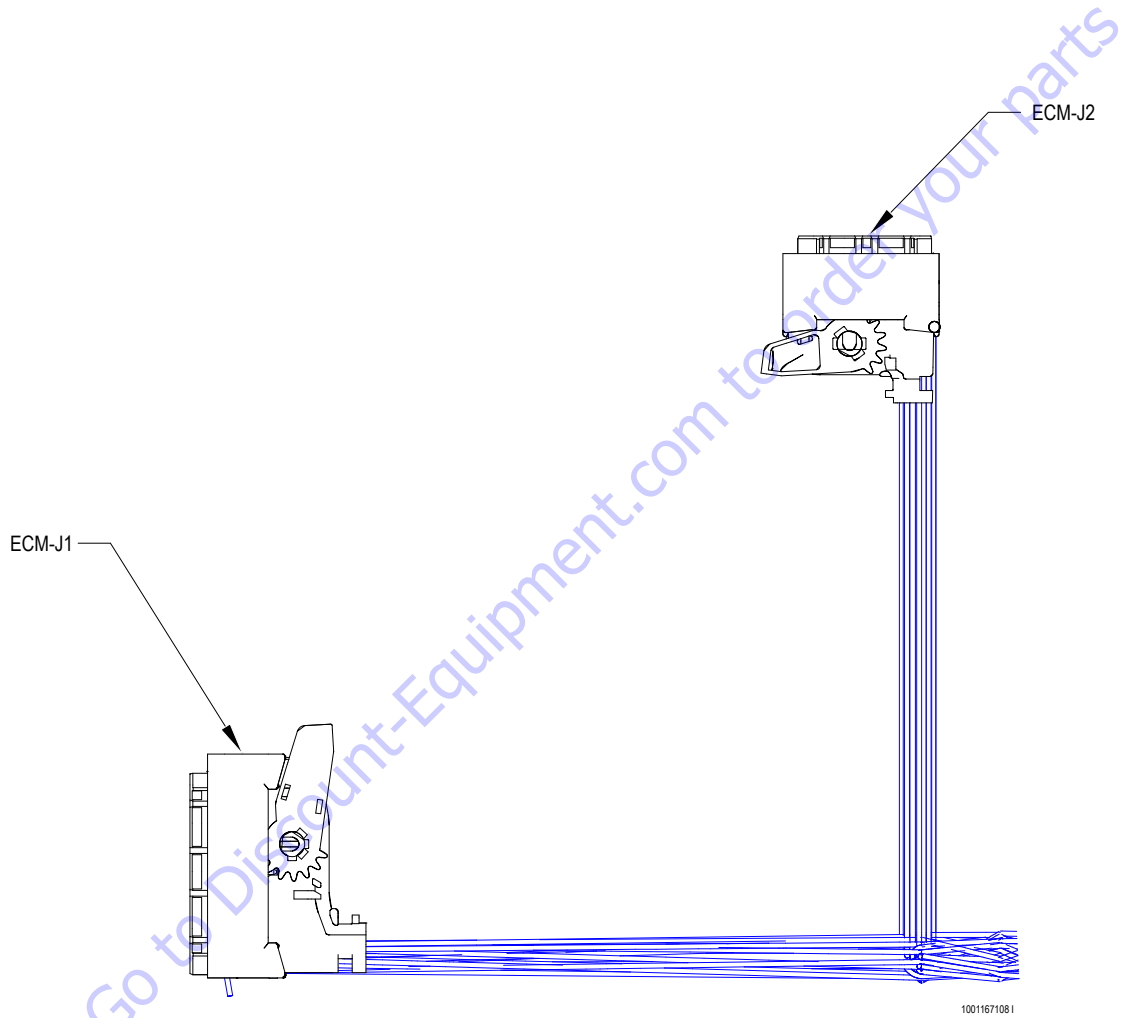


Figure 7-94. Deutz 2.9 Harness - Sheet 2 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

ECM-J1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	148-1 ECM PWR	2.5 mm²	FLRYW	S944 (2)
2	BLK	148-2 ECM GND	2.5 mm²	FLRYW	S945 (2)
3	RED	148-3 ECM PWR	2.5 mm²	FLRYW	S944 (2)
4	BLK	148-4 ECM GND	2.5 mm²	FLRYW	S945 (2)
5	RED	148-5 ECM PWR	2.5 mm²	FLRYW	S944 (2)
6	BLK	148-6 ECM GND	2.5 mm²	FLRYW	S945 (2)
7					
8					
9					
10					
11					
12					
13	BLK	148-13 COOLANT LEVEL SIG	0.75 mm²	FLRYW	SN939 (3)
14					
15	BLK	148-15-68 CLUTCH SWITCH	0.75 mm²	FLRYW	ECM-J1 (68)
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26	BLK	148-26 FUEL PUMP RELAY CONTROL GND	0.75 mm²	FLRYW	RL930 (2)
27					
28	BLK	148-28 START RTN	0.75 mm²	FLRYW	EIC (2)
29	BLK	148-29 COOLANT LEVEL PWR	0.75 mm²	FLRYW	SN939 (1)
30					
31					
32					
33					
34					
35	BLK	148-35-2 START	0.75 mm²	FLRYW	S1001 (1)
36					
37					
38	BLK	148-38 THROTTLE FLAP 4	0.75 mm²	FLRYW	EIC (52)
39					
40					
41					
42					
43					
44	BLK	148-44 EXHAUST GAS RECIRCULATION	0.75 mm²	FLRYW	EIC (50)
45					
46					
47					
48					
49					
50					
51					
52					
53	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S968 (1)
54	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S953 (1)
55					
56	BLK	148-56 AIR INLET TEMP	0.75 mm²	FLRYW	EIC (34)
57	BLK	148-57 WATER IN FUEL SW RTN	0.75 mm²	FLRYW	X941 (2)
58					
59					
60					
61	BLK	148-61 FUEL LOW PRESSURE	0.75 mm²	FLRYW	EIC (17)
62					
63					
64	BLK	148-64 WATER IN FUEL SW	0.75 mm²	FLRYW	X941 (1)
65					
66					
67					
68	BLK	148-15-68 CLUTCH SWITCH	0.75 mm²	FLRYW	ECM-J1 (15)
69					
70					
71					
72	BLK	148-72 THROTTLE FLAP 3	0.75 mm²	FLRYW	EIC (49)
73	BLK	148-73 START SIG	0.75 mm²	FLRYW	EIC (3)
74					
75	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S969 (1)
76	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	S954 (1)
77					
78					
79					
80					
81					
82	BLK	148-82 EXHAUST GAS RECIRCULATION	0.75 mm²	FLRYW	EIC (51)
83					
84					
85	BLK	148-85 EXHAUST GAS RECIRCULATION	0.75 mm²	FLRYW	EIC (46)
86					
87	BLK	148-87 COOLANT LEVEL GND	0.75 mm²	FLRYW	SN939 (2)
88	BLK	148-88 IGNITION	0.75 mm²	FLRYW	S946 (2)
89					
90					
91					
92					
93					
94					
NC	SHLD	CAN 1 SHLD/CUSTOMER CAN SHIELD	18 AWG	J1939 CABLE	X901 (6)

ECM-J2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	BLK	248-2 INJECTOR 3	1.5 mm²	FLRYW	EIC (61)
3	BLK	248-3 INJECTOR 2	1.5 mm²	FLRYW	EIC (41)
4	BLK	248-4 MPROP ACTUATOR	1.5 mm²	FLRYW	EIC (19)
5	BLK	248-5 MPROP ACTUATOR	1.5 mm²	FLRYW	EIC (20)
6					
7	BLK	248-7 RAIL PRESSURE FUEL	0.75 mm²	FLRYW	EIC (32)
8					
9					
10					
11					
12					
13					
14					
15					
16	BLK	248-16 INJECTOR 1	1.5 mm²	FLRYW	EIC (35)
17					
18	BLK	248-18 INJECTOR 4	1.5 mm²	FLRYW	EIC (37)
19	BLK	248-19 EXHAUST GAS RECIRCULATION	1.5 mm²	FLRYW	EIC (47)
20	BLK	248-20 EXHAUST GAS RECIRCULATION	1.5 mm²	FLRYW	EIC (48)
21					
22					
23	BLK	248-23 GLOW SENSE	0.75 mm²	FLRYW	MS932 (E)
24	BLK	248-24 BOOST PRESSURE / TEMP	0.75 mm²	FLRYW	EIC (22)
25	BLK	248-25 RAIL PRESSURE FUEL	0.75 mm²	FLRYW	EIC (31)
26	BLK	248-26 RAIL PRESSURE FUEL	0.75 mm²	FLRYW	EIC (25)
27	BLK	248-27 BOOST PRESSURE / TEMP	0.75 mm²	FLRYW	EIC (29)
28	BLK	248-28 COOLING TEMPERATURE	0.75 mm²	FLRYW	EIC (24)
29	BLK	248-29 OIL PRESSURE	0.75 mm²	FLRYW	EIC (27)
30					
31					
32	BLK	248-32 INJECTOR 3	1.5 mm²	FLRYW	EIC (38)
33	BLK	248-33 INJECTOR 1	1.5 mm²	FLRYW	EIC (62)
34					
35	BLK	248-35 GLOW RELAY CONTROL GND	0.75 mm²	FLRYW	RL931-85 (1)
36					
37	BLK	248-37 ENGINE SPEED CAMSHAFT	18 AWG	CABLE	EIC (14)
38	SHLD	248-38 ENGINE SPEED CRANKSHAFT	18 AWG	CABLE	EIC (1)
39	SHLD	248-39 ENGINE SPEED CRANKSHAFT	18 AWG	CABLE	EIC (15)
40	BLK	248-40 AIR INLET TEMP	0.75 mm²	FLRYW	EIC (28)
41					
42					
43	BLK	248-43 OIL PRESSURE	0.75 mm²	FLRYW	EIC (23)
44	BLK	248-44 OIL PRESSURE	0.75 mm²	FLRYW	EIC (26)
45					
46	BLK	248-46 INJECTOR 2	1.5 mm²	FLRYW	EIC (40)
47					
48	BLK	248-48 INJECTOR 4	1.5 mm²	FLRYW	EIC (42)
49					
50					
51					
52	WHT	248-52 ENGINE SPEED CAMSHAFT	18 AWG	CABLE	EIC (13)
53	SHLD	248-53 ENGINE SPEED CAMSHAFT	18 AWG	CABLE	EIC (9)
54	WHT	248-54 ENGINE SPEED CRANKSHAFT	18 AWG	CABLE	EIC (21)
55					
56					
57					
58					
59					
60					

Figure 7-95. Deutz 2.9 Harness - Sheet 3 of 12

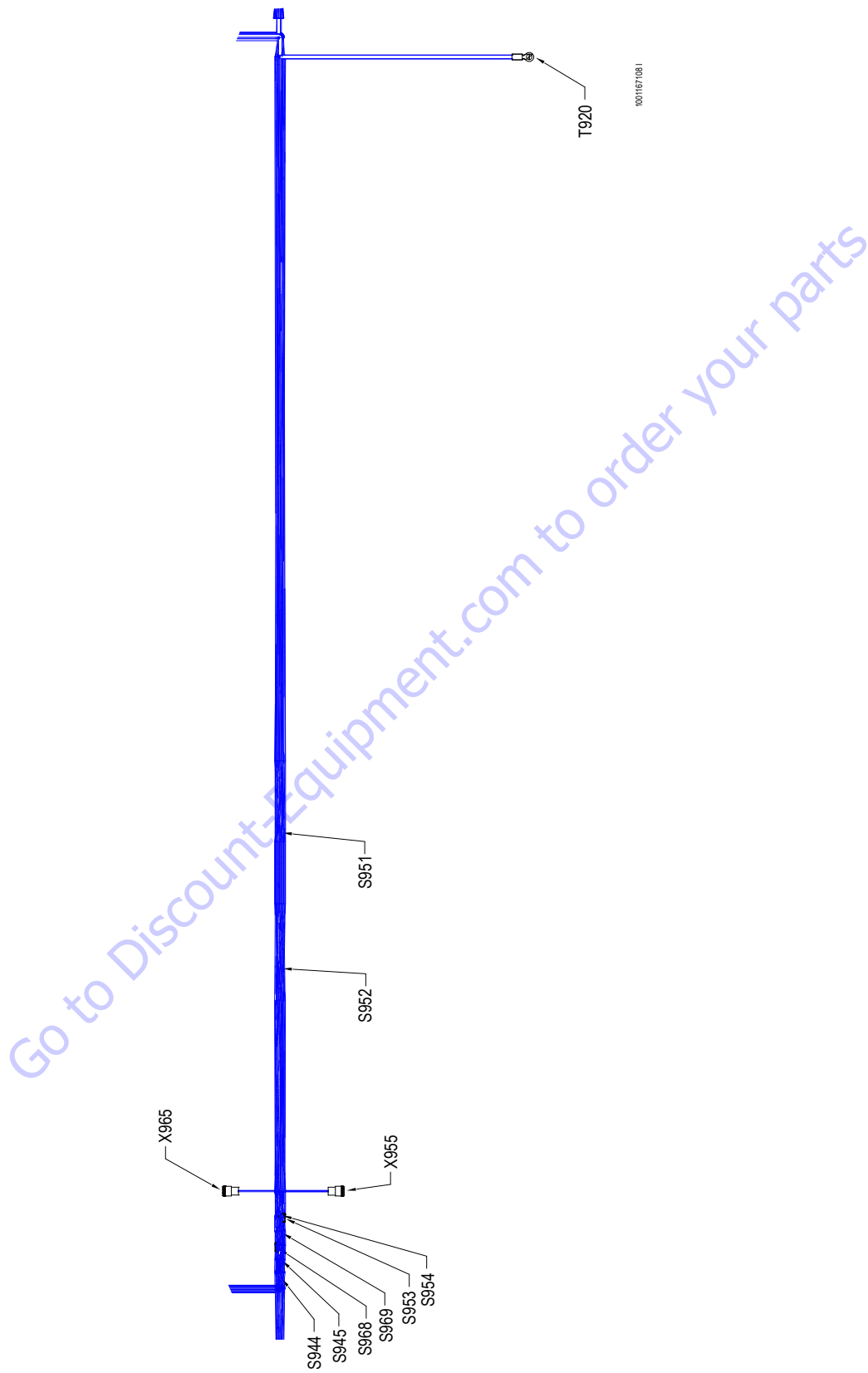


Figure 7-96. Deutz 2.9 Harness - Sheet 4 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

S951					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S953 (2)
2	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	X901 (3)
2	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	X950 (M)

S952					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	S954 (2)
2	GRN	CAN 1 LO CUSTOMER CAN LO	18 AWG	J1939 CABLE	X901 (4)
2	GRN	CAN 1 LO CUSTOMER CAN LO	18 AWG	J1939 CABLE	X950 (F)

S968					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	ECM-J1 (53)
2	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S963 (1)
2	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	X965 (B)

S969					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	ECM-J1 (75)
2	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S964 (1)
2	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	X965 (A)

S953					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	ECM-J1 (54)
2	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S951 (1)
2	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	X955 (A)

S954					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	ECM-J1 (76)
2	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	S952 (1)
2	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	X955 (B)

X955					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S953 (2)
B	GRN	CAN 1 LO CUSTOMER CAN LOW	18 AWG	J1939 CABLE	S954 (2)
C					

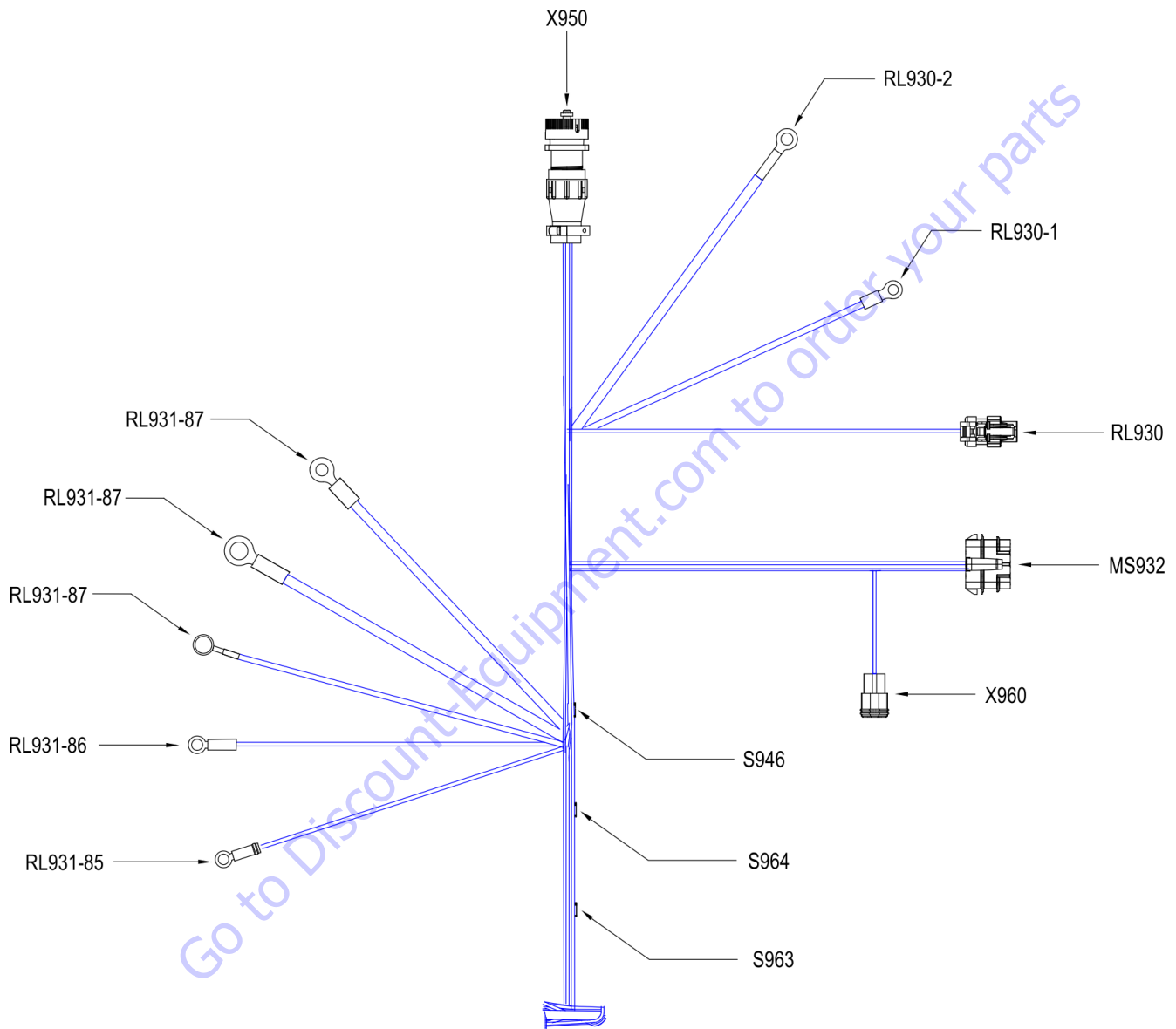
X965					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S969 (2)
B	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S968 (2)
C					

T920					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-148-246 ECM GND	8 AWG	GXL	S945 (1)
1	BLK	000-48-1 ENG GND	14 AWG	GXL	X941 (4)
1	BLK	000-48-2 ENG GND	18 AWG	GXL	X950 (B)
1	BLK	000-48-3 GND	18 AWG	GXL	X999 (2)

S944					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	1-148-135 ECM PWR	8 AWG	GXL	RL930-2 (1)
2	RED	148-1 ECM PWR	2.5 mm ²	FLRYW	ECM-J1 (1)
2	RED	148-3 ECM PWR	2.5 mm ²	FLRYW	ECM-J1 (3)
2	RED	148-5 ECM PWR	2.5 mm ²	FLRYW	ECM-J1 (5)

S945					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-148-246 ECM GND	8 AWG	GXL	T920 (1)
2	BLK	148-2 ECM GND	2.5 mm ²	FLRYW	ECM-J1 (2)
2	BLK	148-4 ECM GND	2.5 mm ²	FLRYW	ECM-J1 (4)
2	BLK	148-6 ECM GND	2.5 mm ²	FLRYW	ECM-J1 (6)

Figure 7-97. Deutz 2.9 Harness - Sheet 5 of 12



10011671081

Figure 7-98. Deutz 2.9 Harness - Sheet 6 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X950					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	2-48-2 IGNITION	18 AWG	GXL	S946 (1)
B	BLK	000-48-2 ENG GND	18 AWG	GXL	T920 (1)
C					
D					
E					
F	GRN	CAN 1 LOCUSTOMER CAN LO	18 AWG	J1939 CABLE	S952 (2)
G	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S963 (2)
H	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S964 (2)
J					
K					
L					
M	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S951 (2)

S946					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	2-48-1 IGNITION	16 AWG	GXL	MS932 (H)
1	YEL	2-48-2 IGNITION	18 AWG	GXL	X950 (A)
2	YEL	2-48-3 IGNITION	18 AWG	GXL	RL931-86 (1)
2	YEL	2-48-4 IGNITION	18 AWG	GXL	RL930 (1)
2	BLK	148-88 IGNITION	0.75 mm ²	FLRYW	ECM-J1 (88)

MS932					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A					
B					
C					
D					
E	BLK	248-23 GLOW SENSE	0.75 mm ²	FLRYW	ECM-J2 (23)
F	ORG	248-23-1 GLOW SENSE	18 AWG	GXL	RL931-87 (1)
G	YEL	2-1-99 IGNITION	18 AWG	GXL	X902 (1)
H	YEL	2-48-1 IGNITION	16 AWG	GXL	S946 (1)

S964					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S969 (2)
2	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	X950 (H)
2	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	X960 (A)

S963					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S968 (2)
2	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	X950 (G)
2	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	X960 (B)

RL930					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	2-48-4	18 AWG	GXL	S946 (2)
2	BLK	148-26	0.75 mm ²	FLRYW	ECM-J1 (26)

RL930-2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	1-148-135 ECM PWR	8 AWG	GXL	S944 (1)

RL930-1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	48-96 FUEL PUMP	14 AWG	GXL	X941 (3)

RL931-85					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	248-35 GLOW RELAY CONTROL GND	0.75 mm ²	FLRYW	ECM-J2 (35)

RL931-87					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	ORG	248-23-1 GLOW SENSE	18 AWG	GXL	MS932 (F)

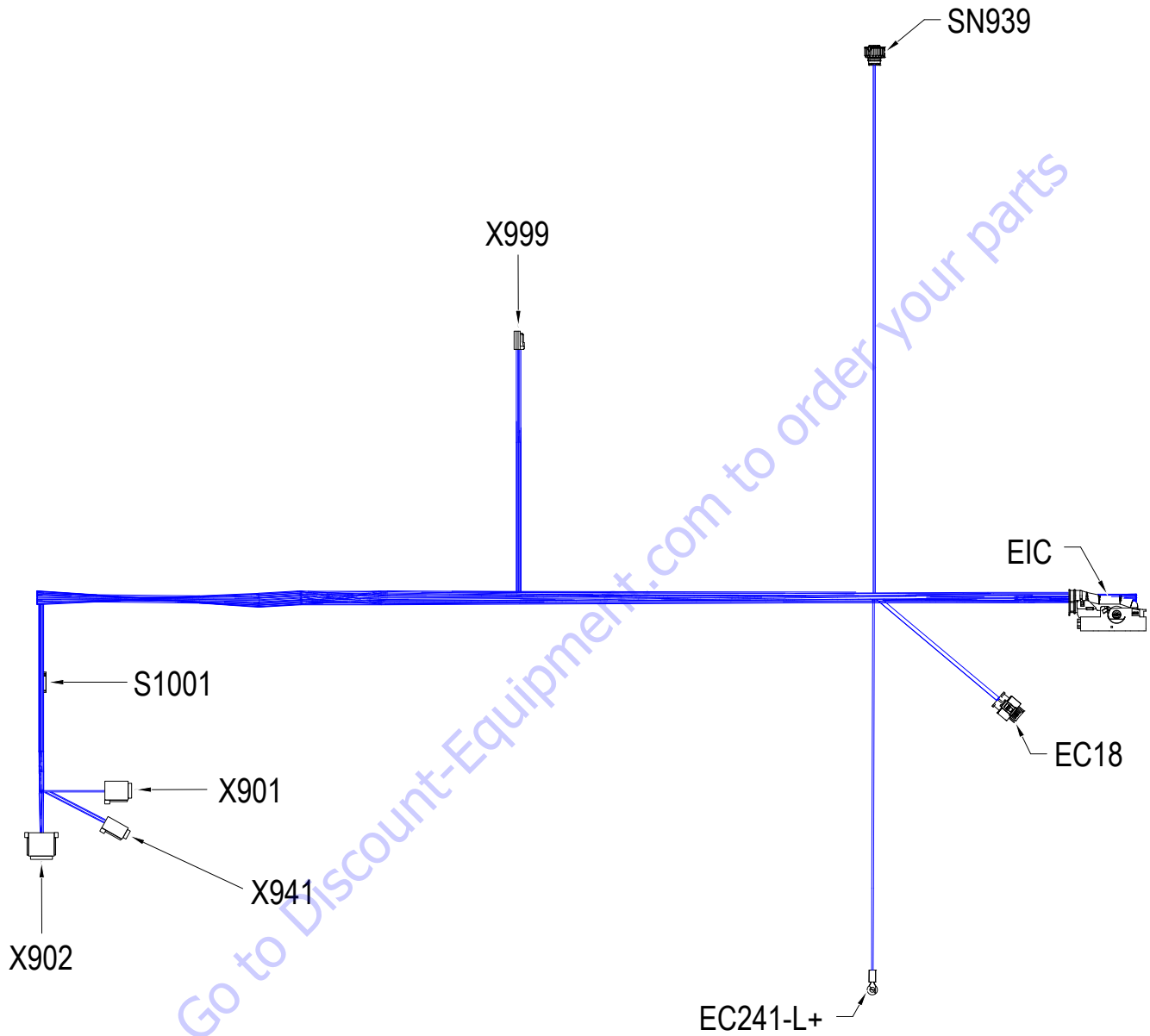
RL931-87					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	48-13 GLOW	8 AWG	GXL	EC18 (1)

RL931-87					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	48-14 GLOW	8 AWG	GXL	EC18 (2)

RL931-86					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	2-48-3 IGNITION	18 AWG	GXL	S946 (2)

X960					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	YEL	CAN 2 HI DIAG CAN HIGH	18 AWG	J1939 CABLE	S964 (2)
B	GRN	CAN 2 LO DIAG CAN LOW	18 AWG	J1939 CABLE	S963 (2)
C					

Figure 7-99. Deutz 2.9 Harness - Sheet 7 of 12



10011671081

Figure 7-100. Deutz 2.9 Harness - Sheet 8 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

EIC					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	SHLD	248-38	18 AWG	CABLE	ECM-J2 (38)
2	BLK	148-28	0.75 mm²	FLRYW	ECM-J1 (28)
3	BLK	148-73	0.75 mm²	FLRYW	ECM-J1 (73)
4					
5					
6					
7					
8					
9	SHLD	248-53	18 AWG	CABLE	ECM-J2 (53)
10					
11					
12					
13	WHT	248-52	18 AWG	CABLE	ECM-J2 (52)
14	BLK	248-37	18 AWG	CABLE	ECM-J2 (37)
15	BLK	248-39	18 AWG	CABLE	ECM-J2 (39)
16					
17	BLK	148-61	0.75 mm²	FLRYW	ECM-J1 (61)
18					
19	BLK	248-4	1.5 mm²	FLRYW	ECM-J2 (4)
20	BLK	248-5	1.5 mm²	FLRYW	ECM-J2 (5)
21	WHT	248-54	18 AWG	CABLE	ECM-J2 (54)
22	BLK	248-24	0.75 mm²	FLRYW	ECM-J2 (24)
23	BLK	248-43	0.75 mm²	FLRYW	ECM-J2 (43)
24	BLK	248-28	0.75 mm²	FLRYW	ECM-J2 (28)
25	BLK	248-26	0.75 mm²	FLRYW	ECM-J2 (26)
26	BLK	248-44	0.75 mm²	FLRYW	ECM-J2 (44)
27	BLK	248-29	0.75 mm²	FLRYW	ECM-J2 (29)
28	BLK	248-40	0.75 mm²	FLRYW	ECM-J2 (40)
29	BLK	248-27	0.75 mm²	FLRYW	ECM-J2 (27)
30					
31	BLK	248-25	0.75 mm²	FLRYW	ECM-J2 (25)
32	BLK	248-7	0.75 mm²	FLRYW	ECM-J2 (7)
33					
34	BLK	148-56	0.75 mm²	FLRYW	ECM-J1 (56)
35	BLK	248-16	1.5 mm²	FLRYW	ECM-J2 (16)
36					
37	BLK	248-18	1.5 mm²	FLRYW	ECM-J2 (18)
38	BLK	248-32	1.5 mm²	FLRYW	ECM-J2 (32)
39					
40	BLK	248-46	1.5 mm²	FLRYW	ECM-J2 (46)
41	BLK	248-3	1.5 mm²	FLRYW	ECM-J2 (3)
42	BLK	248-48	1.5 mm²	FLRYW	ECM-J2 (48)
43					
44					
45					
46	BLK	148-85	0.75 mm²	FLRYW	ECM-J1 (85)
47	BLK	248-19	1.5 mm²	FLRYW	ECM-J2 (19)
48	BLK	248-20	1.5 mm²	FLRYW	ECM-J2 (20)
49	BLK	148-72	0.75 mm²	FLRYW	ECM-J1 (72)
50	BLK	148-44	0.75 mm²	FLRYW	ECM-J1 (44)
51	BLK	148-82	0.75 mm²	FLRYW	ECM-J1 (82)
52	BLK	148-38	0.75 mm²	FLRYW	ECM-J1 (38)
53					
54					
55					
56					
57					
58					
59					
60					
61	BLK	248-2	1.5 mm²	FLRYW	ECM-J2 (2)
62	BLK	248-33	1.5 mm²	FLRYW	ECM-J2 (33)

X999					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	148-35-3 -	18 AWG	GXL	S1001 (1)
2	BLK	000-48-3 GND	18 AWG	GXL	T920 (1)

S1001					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	148-35-2 START	0.75 mm²	FLRYW	ECM-J1 (35)
1	BLK	148-35-3 -	18 AWG	GXL	X999 (1)
2	BLK	148-35-1 START	18 AWG	GXL	X901 (2)

X941					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	148-64 WATER IN FUEL SW	0.75 mm²	FLRYW	ECM-J1 (64)
2	BLK	148-57 WATER IN FUEL SW RTN	0.75 mm²	FLRYW	ECM-J1 (57)
3	WHT	48-96 FUEL PUMP	14 AWG	GXL	RL930-1 (1)
4	BLK	000-48-1 ENG GND	14 AWG	GXL	T920 (1)

X902					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	2-1-99 IGNITION	18 AWG	GXL	MS932 (G)

X901					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	BLK	148-35-1 START	18 AWG	GXL	S1001 (2)
3	YEL	CAN 1 HI CUSTOMER CAN HIGH	18 AWG	J1939 CABLE	S951 (2)
4	GRN	CAN 1 LO CUSTOMER CAN LO	18 AWG	J1939 CABLE	S952 (2)
5	RED	47-8 ALT EXCITE	16 AWG	GXL	EC241-L+ (1)
6	SHLD	CAN 1 SHLD CUSTOMER CAN SHIELD	18 AWG	J1939 CABLE	ECM-J1 (NC)

EC241-L+					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	47-8 ALT EXCITE	16 AWG	GXL	X901 (5)

EC18					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	RED	48-13 GLOW	8 AWG	GXL	RL931-87 (1)
2	RED	48-14 GLOW	8 AWG	GXL	RL931-87 (1)

SN939					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	148-29 COOLANT LEVEL PWR	0.75 mm²	FLRYW	ECM-J1 (29)
2	BLK	148-87 COOLANT LEVEL GND	0.75 mm²	FLRYW	ECM-J1 (87)
3	BLK	148-13 COOLANT LEVEL SIG	0.75 mm²	FLRYW	ECM-J1 (13)
4					

Figure 7-101. Deutz 2.9 Harness - Sheet 9 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

WIRE NO	COLOR	WIRE GAUGE	JACKET	LENGTH (mm)	FROM		TO	
					REFERENCE	PIN	REFERENCE	PIN
000-148-246 ECM GND	BLK	8	GXL	85	T920	1	S945	1
000-48-1 ENG GND	BLK	14	GXL	17	T920	1	X941	4
000-48-2 ENG GND	BLK	18	GXL	22	T920	1	X950	B
000-48-3 GND	BLK	18	GXL	40	T920	1	X999	2
1-148-135 ECM PWR	RED	8	GXL	96	RL930-2	1	S944	1
2-1-99 IGNITION	YEL	18	GXL	26	MS932	G	X902	1
2-48-1 IGNITION	YEL	16	GXL	11	MS932	H	S946	1
2-48-2 IGNITION	YEL	18	GXL	8	X950	A	S946	1
2-48-3 IGNITION	YEL	18	GXL	10	RL931-86	1	S946	2
2-48-4 IGNITION	YEL	18	GXL	13	RL930	1	S946	2
47-8 ALT EXCITE	RED	16	GXL	74	EC241-L+	1	X901	5
48-14 GLOW	RED	8	GXL	65	RL931-87	1	EC18	2
48-96 FUEL PUMP	WHT	14	GXL	25	RL930-1	1	X941	3
148-13 COOLANT LEVEL SIG	BLK	0.75	FLRYW	165	ECM-J1	13	SN939	3
148-15-68 CLUTCH SWITCH	BLK	0.75	FLRYW	1	ECM-J1	15	ECM-J1	68
148-1 ECM PWR	RED	2.5	FLRYW	11	S944	2	ECM-J1	1
148-26 FUEL PUMP RELAY CONTROL GND	BLK	0.75	FLRYW	109	RL930	2	ECM-J1	26
148-28 START RTN	BLK	0.75	FLRYW	149	ECM-J1	28	EIC	2
148-29 COOLANT LEVEL PWR	BLK	0.75	FLRYW	166	ECM-J1	29	SN939	1
148-2 ECM GND	BLK	2.5	FLRYW	12	S945	2	ECM-J1	2
148-35-1 START	BLK	18	GXL	5	X901	2	S1001	2
148-35-2 START	BLK	0.75	FLRYW	93	ECM-J1	35	S1001	1
148-35-3 -	BLK	18	GXL	33	S1001	1	X999	1
148-38 THROTTLE FLAP 4	BLK	0.75	FLRYW	148	EIC	52	ECM-J1	38
148-3 ECM PWR	RED	2.5	FLRYW	11	ECM-J1	3	S944	2
148-44 EHXAUST GAS RECIRCULATION	BLK	0.75	FLRYW	149	EIC	50	ECM-J1	44
148-4 ECM GND	BLK	2.5	FLRYW	12	ECM-J1	4	S945	2
148-56 AIR INLET TEMP	BLK	0.75	FLRYW	148	EIC	34	ECM-J1	56
148-57 WATER IN FUEL SW RTN	BLK	0.75	FLRYW	98	X941	2	ECM-J1	57
148-5 ECM PWR	RED	2.5	FLRYW	11	S944	2	ECM-J1	5
148-61 FUEL LOW PRESSURE	BLK	0.75	FLRYW	149	EIC	17	ECM-J1	61
148-64 WATER IN FUEL SW	BLK	0.75	FLRYW	97	X941	1	ECM-J1	64
148-6 ECM GND	BLK	2.5	FLRYW	12	S945	2	ECM-J1	6
148-72 THROTTLE FLAP 3	BLK	0.75	FLRYW	148	EIC	49	ECM-J1	72
148-73 START SIG	BLK	0.75	FLRYW	147	ECM-J1	73	EIC	3
148-82 EHXAUST GAS RECIRCULATION	BLK	0.75	FLRYW	150	EIC	51	ECM-J1	82
148-85 EHXAUST GAS RECIRCULATION	BLK	0.75	FLRYW	148	EIC	46	ECM-J1	85
148-87 COOLANT LEVEL GND	BLK	0.75	FLRYW	169	ECM-J1	87	SN939	2
148-88 IGNITION	BLK	0.75	FLRYW	97	ECM-J1	88	S946	2
248-16 INJECTOR 1	BLK	1.5	FLRYW	147	ECM-J2	16	EIC	35
248-18 INJECTOR 4	BLK	1.5	FLRYW	147	ECM-J2	18	EIC	37
248-19 EHXAUST GAS RECIRCULATION	BLK	1.5	FLRYW	146	ECM-J2	19	EIC	47
248-20 EHXAUST GAS RECIRCULATION	BLK	1.5	FLRYW	147	ECM-J2	20	EIC	48
248-23-1 GLOW SENSE	ORG	18	GXL	19	MS932	F	RL931-87	1
248-23 GLOW SENSE	BLK	0.75	FLRYW	109	MS932	E	ECM-J2	23
248-24 BOOST PRESSURE / TEMP	BLK	0.75	FLRYW	148	ECM-J2	24	EIC	22
248-25 RAIL PRESSURE FUEL	BLK	0.75	FLRYW	148	ECM-J2	25	EIC	31
248-26 RAIL PRESSURE FUEL	BLK	0.75	FLRYW	148	ECM-J2	26	EIC	25

Figure 7-102. Deutz 2.9 Harness - Sheet 10 of 12

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

WIRE NO	COLOR	WIRE GAUGE	JACKET	LENGTH (mm)	FROM		TO	
					REFERENCE	PIN	REFERENCE	PIN
248-27	BLK	0.75	FLRYW	148	ECM-J2	27	EIC	29
248-28	BLK	0.75	FLRYW	149	ECM-J2	28	EIC	24
248-29	BLK	0.75	FLRYW	146	ECM-J2	29	EIC	27
248-2	BLK	1.5	FLRYW	147	ECM-J2	2	EIC	61
248-32	BLK	1.5	FLRYW	148	ECM-J2	32	EIC	38
248-33	BLK	1.5	FLRYW	148	ECM-J2	33	EIC	62
248-35	BLK	0.75	FLRYW	106	RL931-85	1	ECM-J2	35
248-37	BLK	18	CABLE	148	ECM-J2	37	EIC	14
248-38	SHLD	18	CABLE	146	EIC	1	ECM-J2	38
248-39	BLK	18	CABLE	146	ECM-J2	39	EIC	15
248-3	BLK	1.5	FLRYW	147	ECM-J2	3	EIC	41
248-40	BLK	0.75	FLRYW	147	ECM-J2	40	EIC	28
248-43	BLK	0.75	FLRYW	146	ECM-J2	43	EIC	23
248-44	BLK	0.75	FLRYW	149	ECM-J2	44	EIC	26
248-46	BLK	1.5	FLRYW	147	ECM-J2	46	EIC	40
248-48	BLK	1.5	FLRYW	147	ECM-J2	48	EIC	42
248-4	BLK	1.5	FLRYW	146	ECM-J2	4	EIC	19
248-52	WHT	18	CABLE	147	ECM-J2	52	EIC	13
248-53	SHLD	18	CABLE	149	ECM-J2	53	EIC	9
248-54	WHT	18	CABLE	147	ECM-J2	54	EIC	21
248-5	BLK	1.5	FLRYW	147	ECM-J2	5	EIC	20
248-7	BLK	0.75	FLRYW	147	ECM-J2	7	EIC	32
48-13	RED	8	GXL	67	RL931-87	1	EC18	1
CAN 1 HI CUSTOMER CAN HIGH	YEL	18	J1939 CABLE	59	X950	M	S951	2
CAN 1 HI CUSTOMER CAN HIGH	YEL	18	J1939 CABLE	29	S953	2	S951	1
CAN 1 HI CUSTOMER CAN HIGH	YEL	18	J1939 CABLE	55	X901	3	S951	2
CAN 1 HI CUSTOMER CAN HIGH	YEL	18	J1939 CABLE	15	ECM-J1	54	S953	1
CAN 1 HI CUSTOMER CAN HIGH	YEL	18	J1939 CABLE	6	S953	2	X955	A
CAN 1 LO CUSTOMER CAN LO	GRN	18	J1939 CABLE	64	X901	4	S952	2
CAN 1 LO CUSTOMER CAN LO	GRN	18	J1939 CABLE	18	S954	2	S952	1
CAN 1 LO CUSTOMER CAN LO	GRN	18	J1939 CABLE	69	X950	F	S952	2
CAN 1 LO CUSTOMER CAN LO	GRN	18	J1939 CABLE	16	ECM-J1	76	S954	1
CAN 1 LO CUSTOMER CAN LO	GRN	18	J1939 CABLE	6	S954	2	X955	B
CAN 1 SHLD CUSTOMER CAN SHIELD	SHLD	18	J1939 CABLE	99	X901	6	ECM-J1	NC
CAN 2 HI DIAG CAN HIGH	YEL	18	J1939 CABLE	12	S964	2	X960	A
CAN 2 HI DIAG CAN HIGH	YEL	18	J1939 CABLE	10	X950	H	S964	2
CAN 2 HI DIAG CAN HIGH	YEL	18	J1939 CABLE	14	ECM-J1	75	S969	1
CAN 2 HI DIAG CAN HIGH	YEL	18	J1939 CABLE	79	S964	1	S969	2
CAN 2 HI DIAG CAN HIGH	YEL	18	J1939 CABLE	7	S969	2	X965	A
CAN 2 LO DIAG CAN LOW	GRN	18	J1939 CABLE	14	S963	2	X960	B
CAN 2 LO DIAG CAN LOW	GRN	18	J1939 CABLE	12	X950	G	S963	2
CAN 2 LO DIAG CAN LOW	GRN	18	J1939 CABLE	13	ECM-J1	53	S968	1
CAN 2 LO DIAG CAN LOW	GRN	18	J1939 CABLE	80	S963	1	S968	2
CAN 2 LO DIAG CAN LOW	GRN	18	J1939 CABLE	8	S968	2	X965	B

Figure 7-103. Deutz 2.9 Harness - Sheet 11 of 12

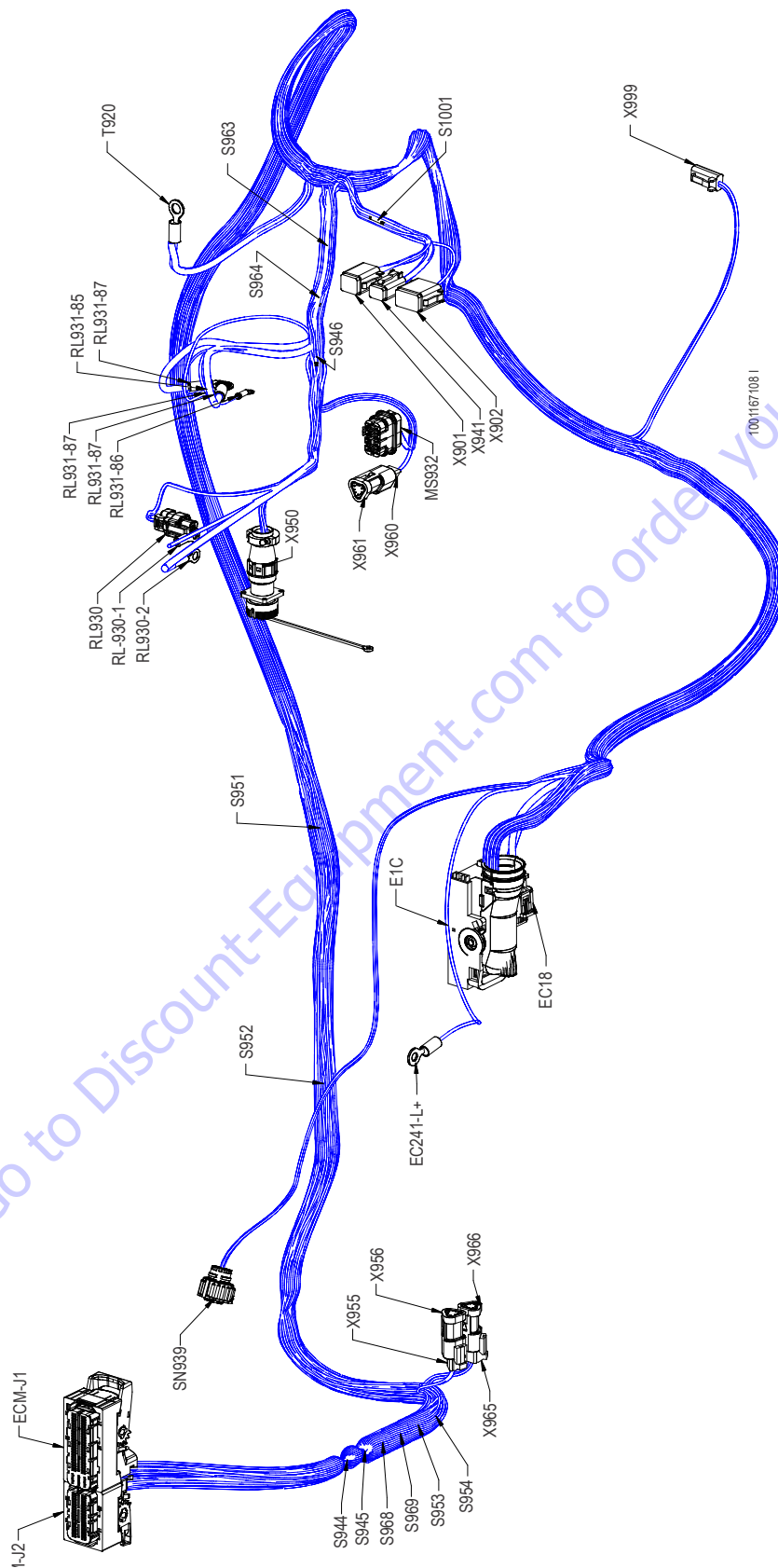


Figure 7-104. Deutz 2.9 Harness - Sheet 12 of 12

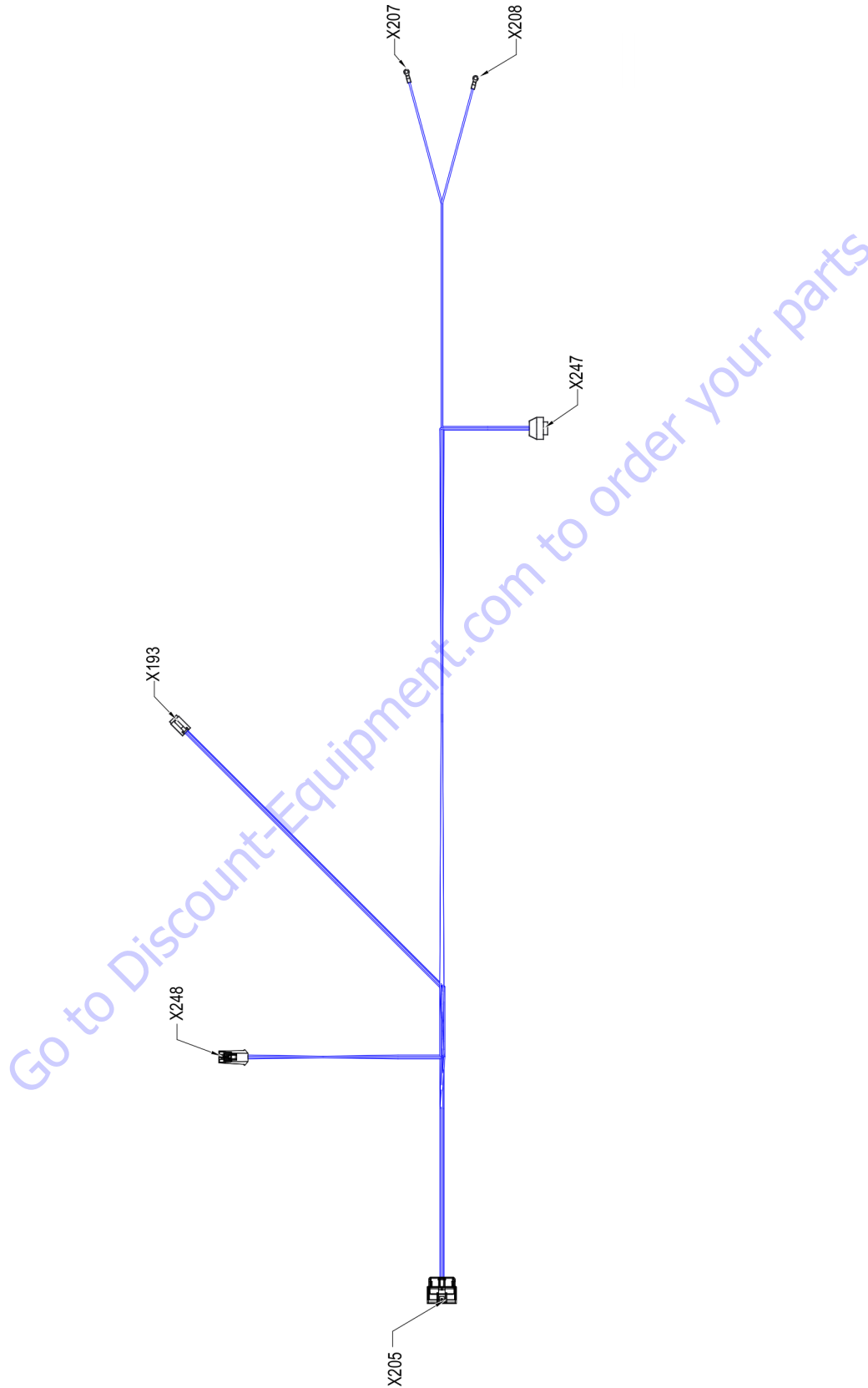


Figure 7-105. GM Engine Harness - Sheet 1 of 3

WIRE NO	COLOR	WIRE GAUGE	JACKET	LENGTH (mm)	FROM		TO	
					REFERENCE	PIN	REFERENCE	PIN
000-60-11	BLK	16	GXL	1965	X205	C	X208	1
6-12	WHT	18	GXL	1077	X193	2	X205	F
6-14	WHT	18	GXL	1076	X193	1	X205	A
6-19	BLK	18	GXL	1500	X247	1	X248	1
6-20	WHT	18	GXL	1505	X247	2	X248	2
6-21	RED	18	GXL	1507	X247	3	X248	3
6-22	GRN	18	GXL	1494	X247	4	X248	4
6-53	WHT	18	GXL	1079	X193	5	X205	B
6-54	WHT	16	GXL	1973	X205	D	X207	1
CAN HI	RED	18	CABLE	1076	X193	3	X205	N
CAN LO	BLK	18	CABLE	1074	X193	4	X205	P

Go to Discount-Equipment.com to order your parts

Figure 7-106. GM Engine Harness - Sheet 2 of 3

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

X205					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	WHT	6-14 IGNITION	18 AWG	GXL	X193 (1)
B	WHT	6-53 ALTERNATOR EXCITATION	18 AWG	GXL	X193 (5)
C	BLK	000-60-1 FUEL PUMP NEGATIVE	16 AWG	GXL	X208 (1)
D	WHT	6-54 FUEL PUMP POSITIVE	16 AWG	GXL	X207 (1)
E					
F	WHT	6-12 ENGINE START	18 AWG	GXL	X193 (2)
G					
H					
J					
K					
L					
M					
N	RED	CAN HI	18 AWG	CABLE	X193 (3)
P	BLK	CAN LO	18 AWG	CABLE	X193 (4)
R					
S					

X248					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	6-19	18 AWG	GXL	X247 (1)
2	WHT	6-20	18 AWG	GXL	X247 (2)
3	RED	6-21	18 AWG	GXL	X247 (3)
4	GRN	6-22	18 AWG	GXL	X247 (4)

X193					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-14 IGNITION	18 AWG	GXL	X205 (A)
2	WHT	6-12 ENGINE START	18 AWG	GXL	X205 (F)
3	RED	CAN HI	18 AWG	CABLE	X205 (N)
4	BLK	CAN LO	18 AWG	CABLE	X205 (P)
5	WHT	6-53 ALTERNATOR EXCITATION	18 AWG	GXL	X205 (B)
6					

X247					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	6-19	18 AWG	GXL	X248 (1)
2	WHT	6-20	18 AWG	GXL	X248 (2)
3	RED	6-21	18 AWG	GXL	X248 (3)
4	GRN	6-22	18 AWG	GXL	X248 (4)

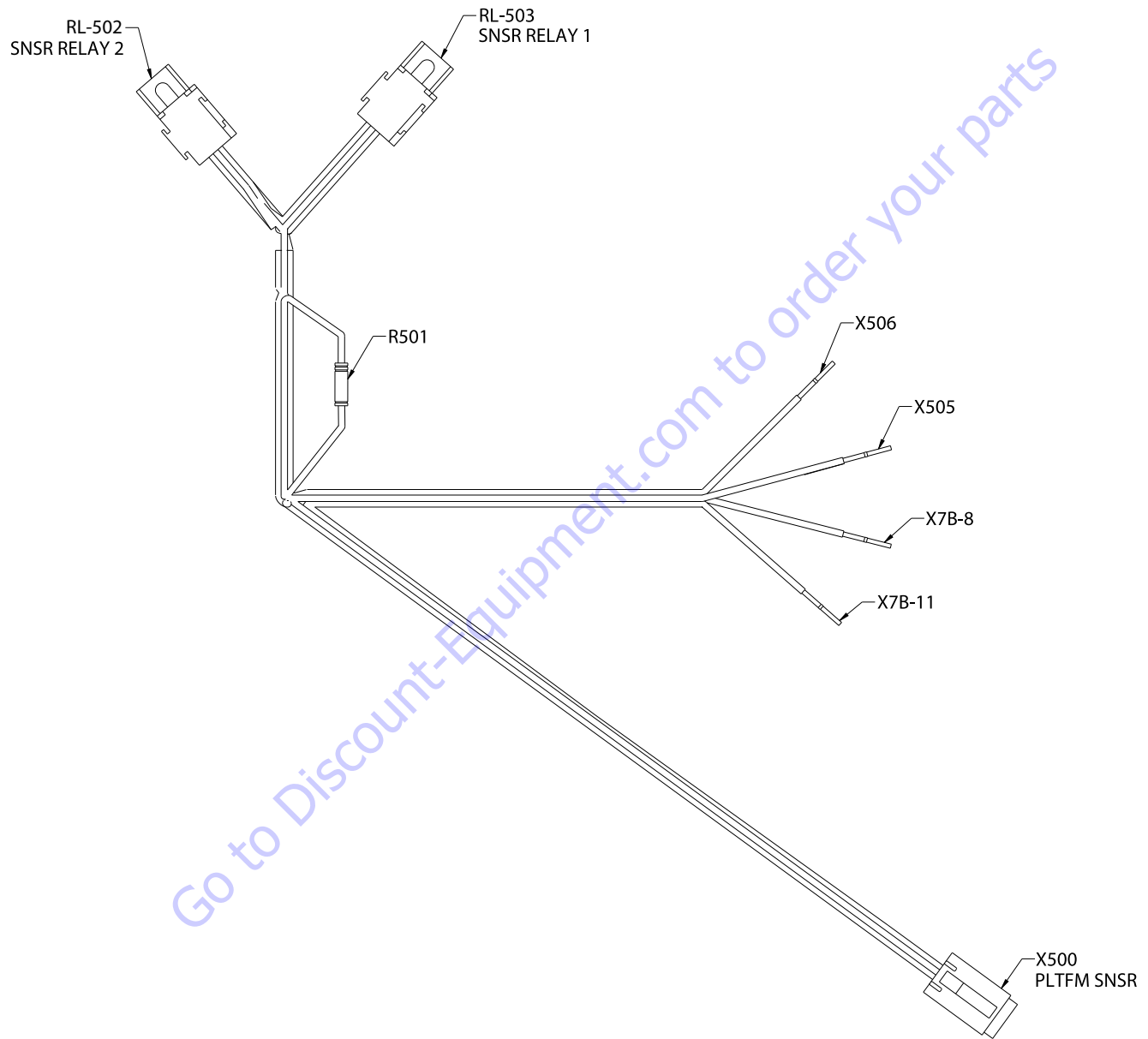
X208					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-60-1 FUEL PUMP NEGATIVE	16 AWG	GXL	X205 (C)

X207					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-54 FUEL PUMP POSITIVE	16 AWG	GXL	X205 (D)

Figure 7-107. GM Engine Harness - Sheet 3 of 3

This page left blank intentionally.

Go to Discount-Equipment.com to order your parts



1001192292 B

Figure 7-108. Skyguard Harness - Sheet 1 of 2

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

RL-503 - SNSR RELAY 1					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
30	WHT	P9	18AWG	GXL	X505 (1)
30	WHT	P9-1	18AWG	GXL	RL-502 (30)
85	WHT	P5-1	18AWG	GXL	RL-502 (85)
86	WHT	P4-1	18AWG	GXL	RL-502 (86)
87	WHT	P1	18AWG	GXL	X506 (1)
87a					

X506					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P1	18AWG	GXL	RL-503 (87)

X505					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P2	18AWG	GXL	R501 (1)
1	WHT	P9	18AWG	GXL	RL-503 (30)

R501					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P2	18AWG	GXL	X505 (1)
2	WHT	P10	18AWG	GXL	X500 (1)

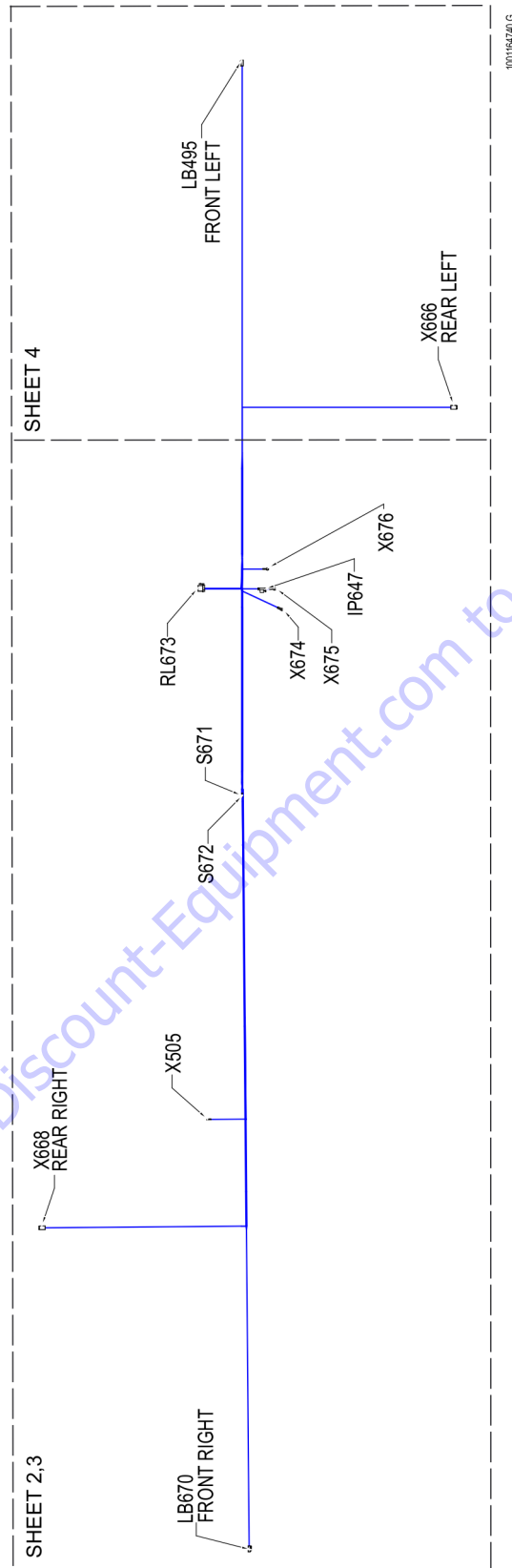
X7B-8					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P6	18AWG	GXL	X500 (2)

RL-502 - SNSR RELAY 2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
30	WHT	P9-1	18AWG	GXL	RL-503 (30)
85	WHT	P5	18AWG	GXL	X500 (4)
85	WHT	P5-1	18AWG	GXL	RL-503 (85)
86	WHT	P4	18AWG	GXL	X500 (3)
86	WHT	P4-1	18AWG	GXL	RL-503 (86)
87	WHT	P3	18AWG	GXL	X7B-11 (1)
87a					

X7B-11					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P3	18AWG	GXL	RL-502 (87)

X500 - PLTFM SNSR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	T0
1	WHT	P10	18AWG	GXL	R501 (2)
2	WHT	P6	18AWG	GXL	X7B-8 (1)
3	WHT	P4	18AWG	GXL	RL-502 (86)
4	WHT	P5	18AWG	GXL	RL-502 (85)

Figure 7-109. Skyguard Harness - Sheet 2 of 2



Go to Discount-Equipment.com to order your parts

Figure 7-110. Chassis Head and Tail Lights Harness - Sheet 1 of 5

This page left blank intentionally.

Go to Discount-Equipment.com to order your parts

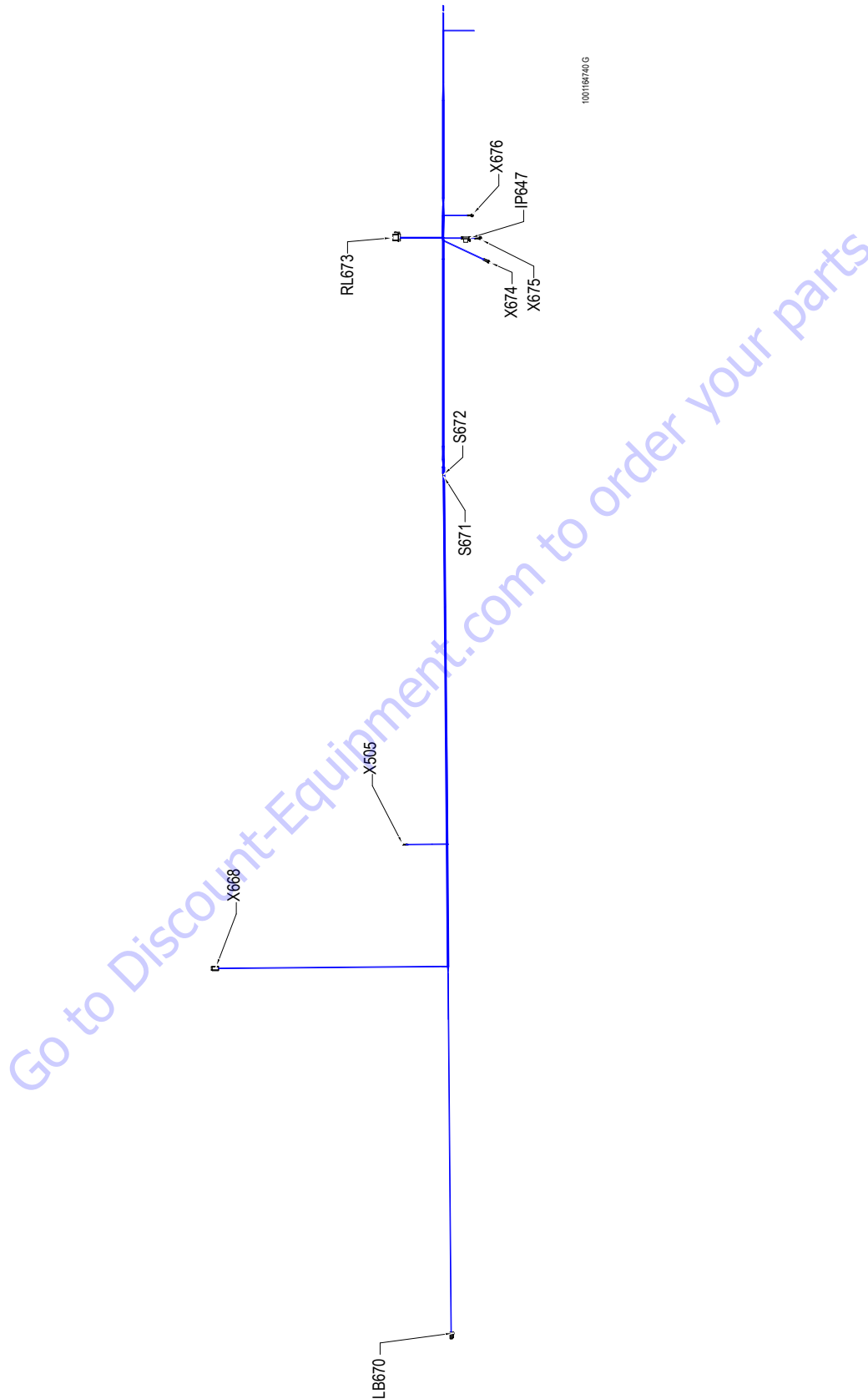


Figure 7-111. Chassis Head and Tail Lights Harness - Sheet 2 of 5

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

S671					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-11 12V+	16 AWG	GXL	LB495 (2)
1	WHT	6-29 12V+	16 AWG	GXL	LB670 (2)
2	WHT	6-13 12V+	16 AWG	GXL	X666 (3)
2	WHT	6-30 12V+	16 AWG	GXL	X668 (3)
2	WHT	6-8 12V+	14 AWG	GXL	RL673 (4)

X668 REAR RIGHT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	BLK	000-60-30 GND	16 AWG	GXL	S672 (2)
3	WHT	6-30 12V+	16 AWG	GXL	S671 (2)
4					

RL673					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-146 PWR	16 AWG	GXL	IP647 (2)
2	BLK	000-40-109 GND	16 AWG	GXL	X676 (1)
3					
4	WHT	6-8 12V+	14 AWG	GXL	S671 (2)
5	WHT	4-145	18 AWG	GXL	X505 (1)

LB670 FRONT RIGHT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-60-29 GND	16 AWG	GXL	S672 (1)
2	WHT	6-29 12V+	16 AWG	GXL	S671 (1)

X674 CONNECT TO CASE GROUND ON AUX PUMP RELAY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	4-122	14 AWG	GXL	S672 (2)

S672					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-60-11 GND	16 AWG	GXL	LB495 (1)
1	BLK	000-60-29 GND	16 AWG	GXL	LB670 (1)
2	BLK	000-60-12 GND	16 AWG	GXL	X666 (2)
2	BLK	000-60-30 GND	16 AWG	GXL	X668 (2)
2	BLK	4-122	14 AWG	GXL	X674 (1)

X675 CONNECT TO B+ OF AUX PUMP RELAY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	FUSE HOLDER LEAD	16 AWG	GXL	IP647 (1)

X676 CONNECT TO CASE GROUND ON AUX PUMP RELAY					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-40-109 GND	16 AWG	GXL	RL673 (2)

X505 CONNECT TO X434 PIN 2					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	4-145	18 AWG	GXL	RL673 (5)

IP647					
CONNECTOR MUST INCLUDE 7.5A MINI FUSE					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	FUSE HOLDER LEAD	16 AWG	GXL	X675 (1)
2	WHT	4-146 PWR	16 AWG	GXL	RL673 (1)

Figure 7-112. Chassis Head and Tail Lights Harness - Sheet 3 of 5



LB495					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	000-60-11 GND	16 AWG	GXL	S672 (1)
2	WHT	6-11 12V+	16 AWG	GXL	S671 (1)

X666					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	BLK	000-60-12 GND	16 AWG	GXL	S672 (2)
3	WHT	6-13 12V+	16 AWG	GXL	S671 (2)
4					

Figure 7-113. Chassis Head and Tail Lights Harness - Sheet 4 of 5

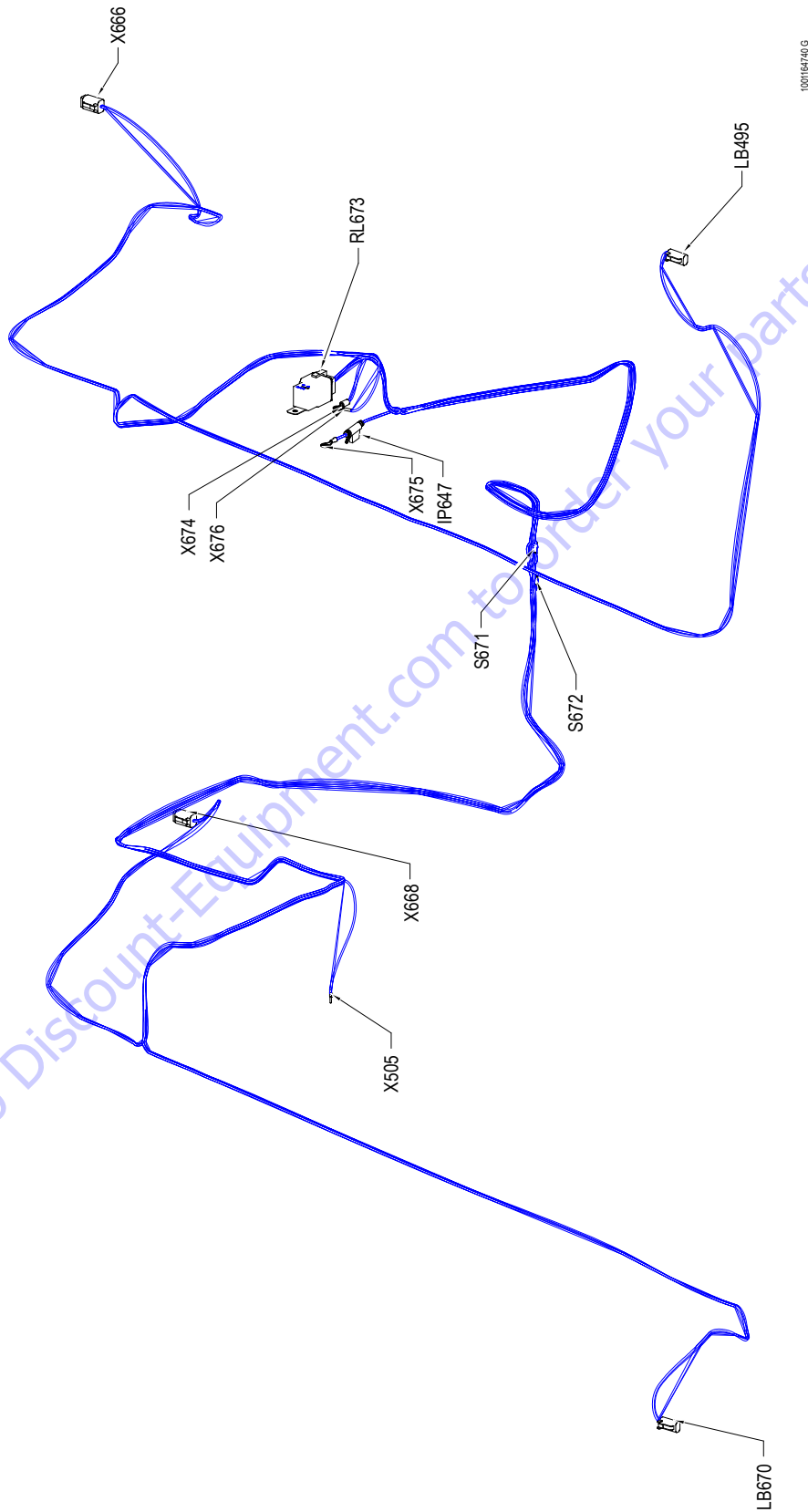
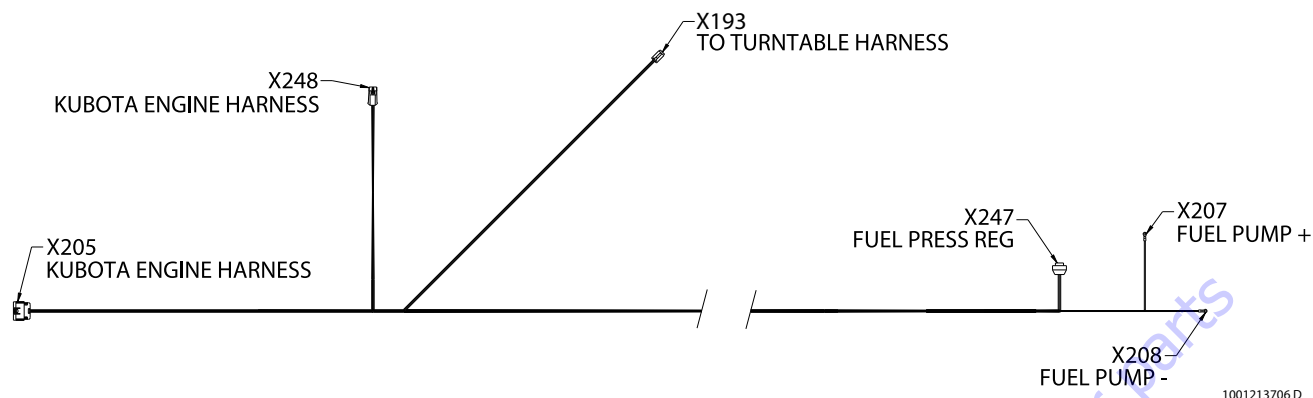


Figure 7-114. Chassis Head and Tail Lights Harness - Sheet 5 of 5

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS



X205 KUBOTA ENGINE HARNESS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
A	WHT	6-14IGNITION	18AWG	TXL	X193 (1)
B					
C	BLK	000-60-11 FUEL PUMP NEGATIVE	16AWG	TXL	X208 (1)
D	WHT	6-54 FUEL PUMP POSITIVE	16AWG	TXL	X207 (1)
E					
F	WHT	6-12 ENGINE START	18AWG	TXL	X193 (2)
G					
H					
J					
K					
L					
M					
N	RED	CAN HI	18AWG	CABLE	X193 (3)
P	BLK	CAN LO	18AWG	CABLE	X193 (4)
R					
S					

X247 FUEL PRESS REG					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	6-19	18 AWG	TXL	X248 (1)
2	WHT	6-20	18 AWG	TXL	X248 (2)
3	RED	6-21	18 AWG	TXL	X248 (3)
4	GRN	6-22	18 AWG	TXL	X248 (4)

X208 FUEL PUMP -					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK0	00-60-11 FUEL PUMP NEGATIVE	16 AWG	TXL	X205 (C)

X207 FUEL PUMP +					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-54 FUEL PUMP POSITIVE	16 AWG	TXL	X205 (D)

X193 TO TURNTABLE HARNESS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	6-14 IGNITION	18 AWG	TXL	X205 (A)
2	WHT	6-12 ENGINE START	18 AWG	TXL	X205 (F)
3	RED	CAN HI	18 AWG	CABLE	X205 (N)
4	BLK	CAN LO	18 AWG	CABLE	X205 (P)
5					
6					

X248 KUBOTA ENGINE HARNESS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	6-19	18 AWG	TXL	X247 (1)
2	WHT	6-20	18 AWG	TXL	X247 (2)
3	RED	6-21	18 AWG	TXL	X247 (3)
4	GRN	6-22	18 AWG	TXL	X247 (4)

Figure 7-115. Kubota Engine Harness

7.9 ELECTRICAL SCHEMATICS

SHEET 2: PLATFORM
CONSOLE BOX HARNESS

SHEET 3: PLATFORM AND BOOM COMPONENTS
PLATFORM VALVE HARNESS
LOW TEMP CUTOUT, LSS, 4 CELL LSS
BOOM LOWER - STANDARD, ARCTIC
BOOM UPPER - STANDARD, ARCTIC

SHEET 4: CHASSIS, TURNTABLE
TURNTABLE HARNESS
CHASSIS SOLENOID HARNESS

SHEET 5: GROUND USER INTERFACE
MAIN VALVE
UPPER UPRIGHT
GROUND CONTROL PANEL
CRIBBING OPTION HARNESS

SHEET 6: ENGINE SCHEMATICS DEUTZ T4I
DEUTZ ENGINE T4I
T4I ENG POS, T4I END NEG
POS BATTERY, NEG BATTERY, AUX TO AUX

SHEET 7: ENGINE SCHEMATIC DEUTZ T4F
DEUTZ ENGINE T4F, DEUTZ FUEL
T4F ENG POS, T4F ENG NEG
POS BATTERY, NEG BATTERY, AUX TO AUX

SHEET 8: ENGINE SCHEMATIC GM
ENGINE GM
GM ENG POS, GM ENG NEG
POS BATTERY, NEG BATTERY, AUX TO AUX

SHEET 9: SKYGUARD

SHEET 10: PLATFORM LIGHTS, CHASSIS HEAD AND TAIL LIGHTS, CLEARSKY

SHEET 11: KUBOTA ENGINE
KUBOTA ENGINE HARNESS
ALTERNATOR
POS BATTERY
NEG BATTERY
KUBOTA D/F PWR

Figure 7-116. Electrical Schematic - Sheet 1 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

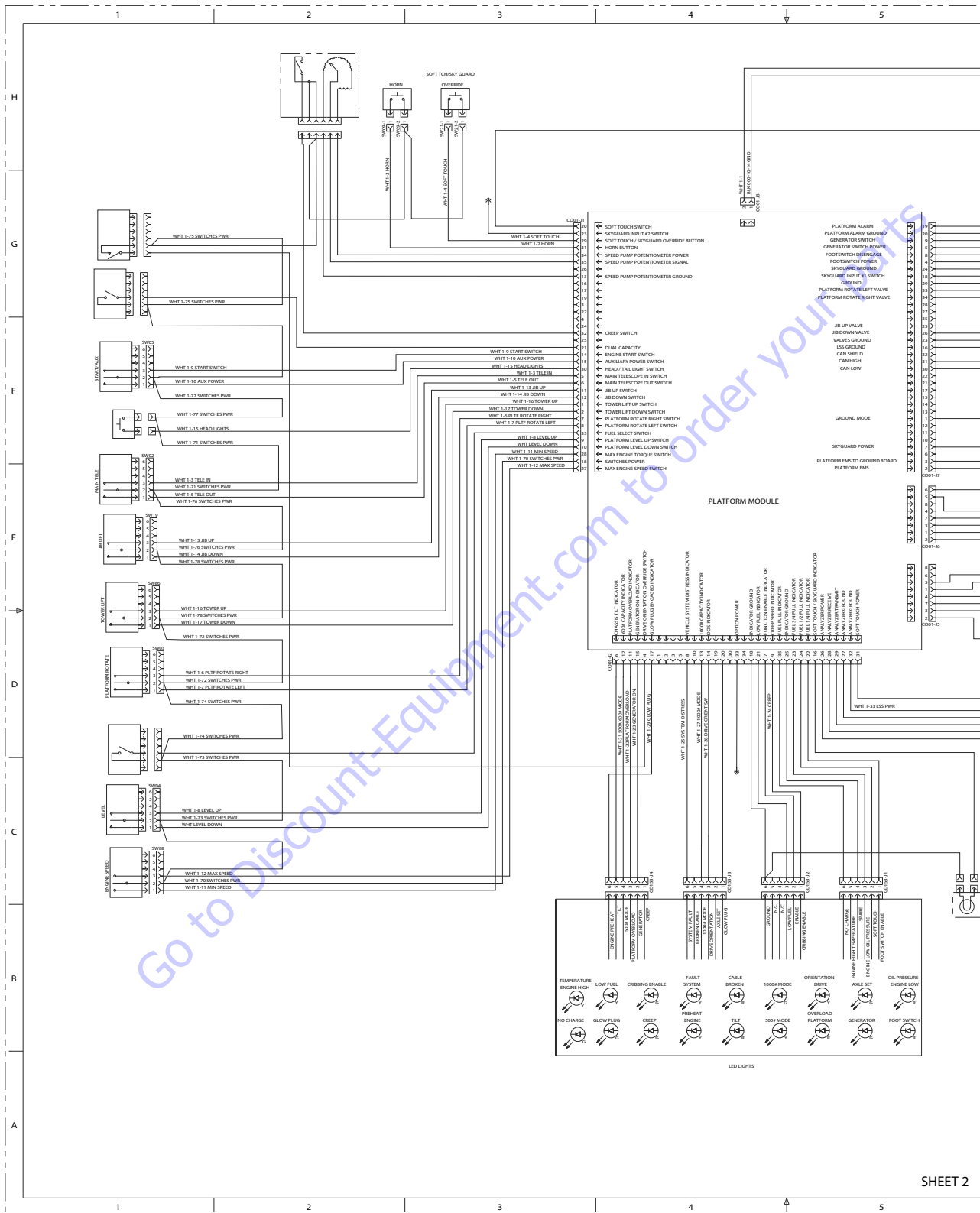


Figure 7-117. Electrical Schematic - Sheet 2 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

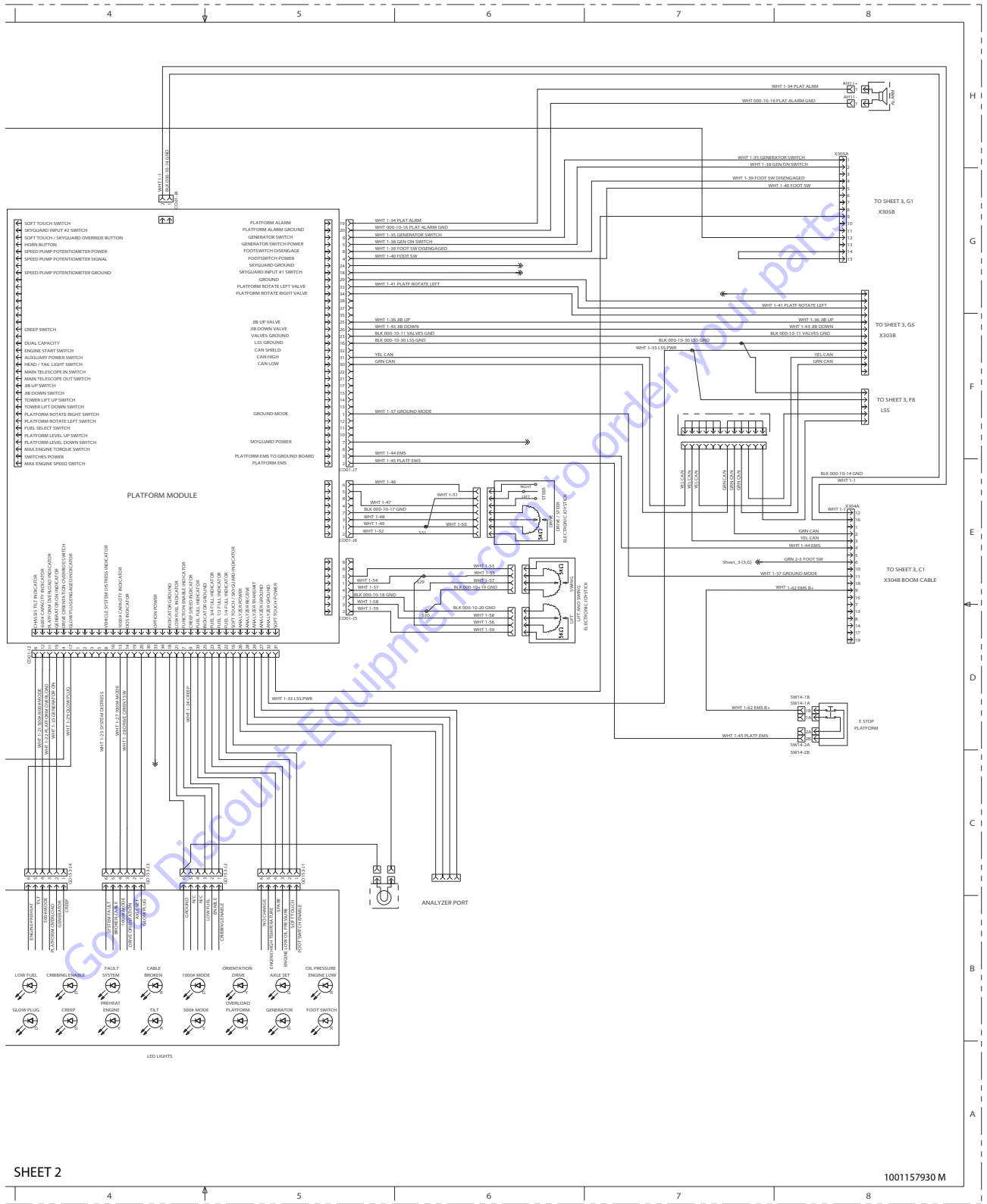


Figure 7-118. Electrical Schematic - Sheet 3 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

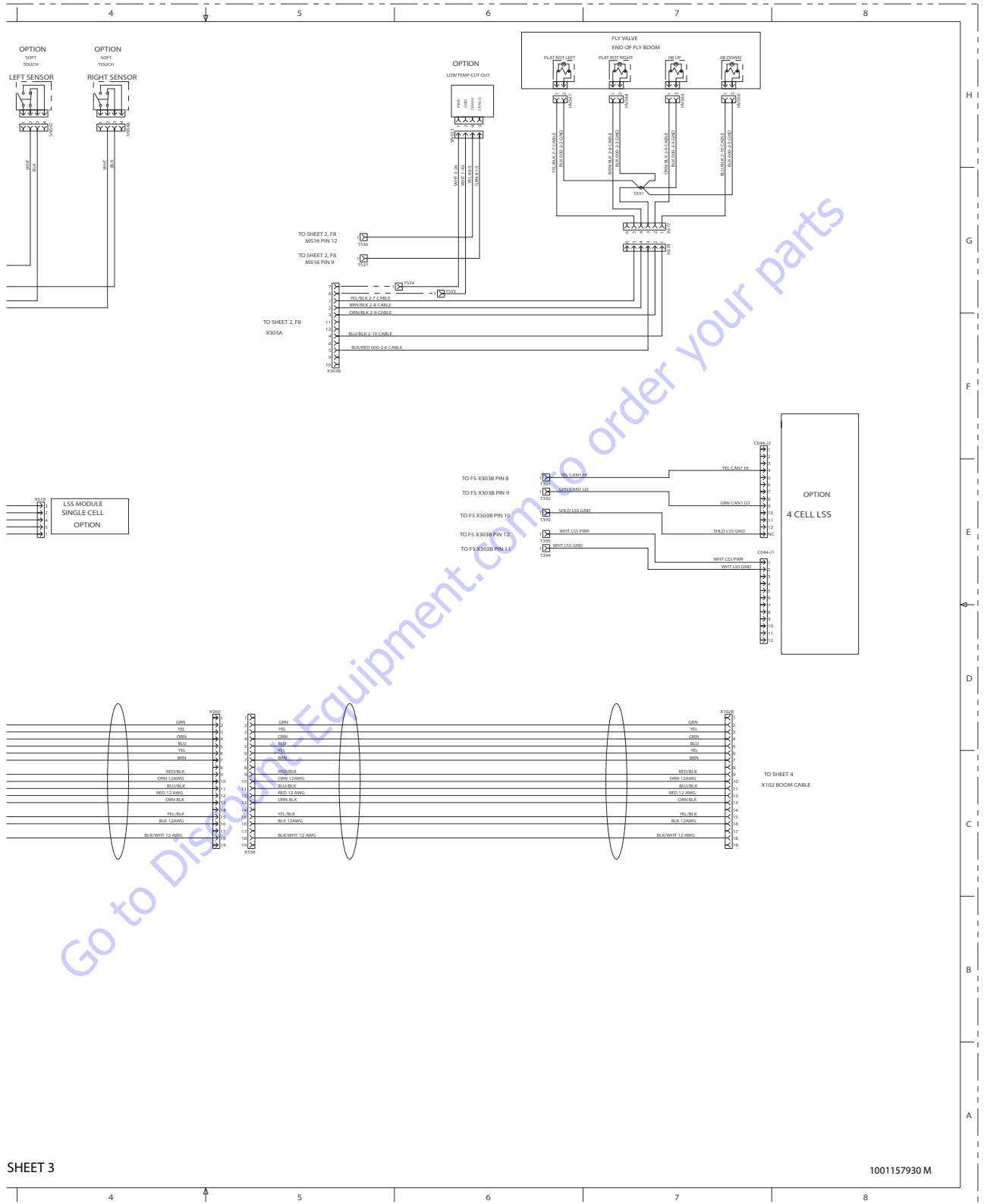


Figure 7-120. Electrical Schematic - Sheet 5 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

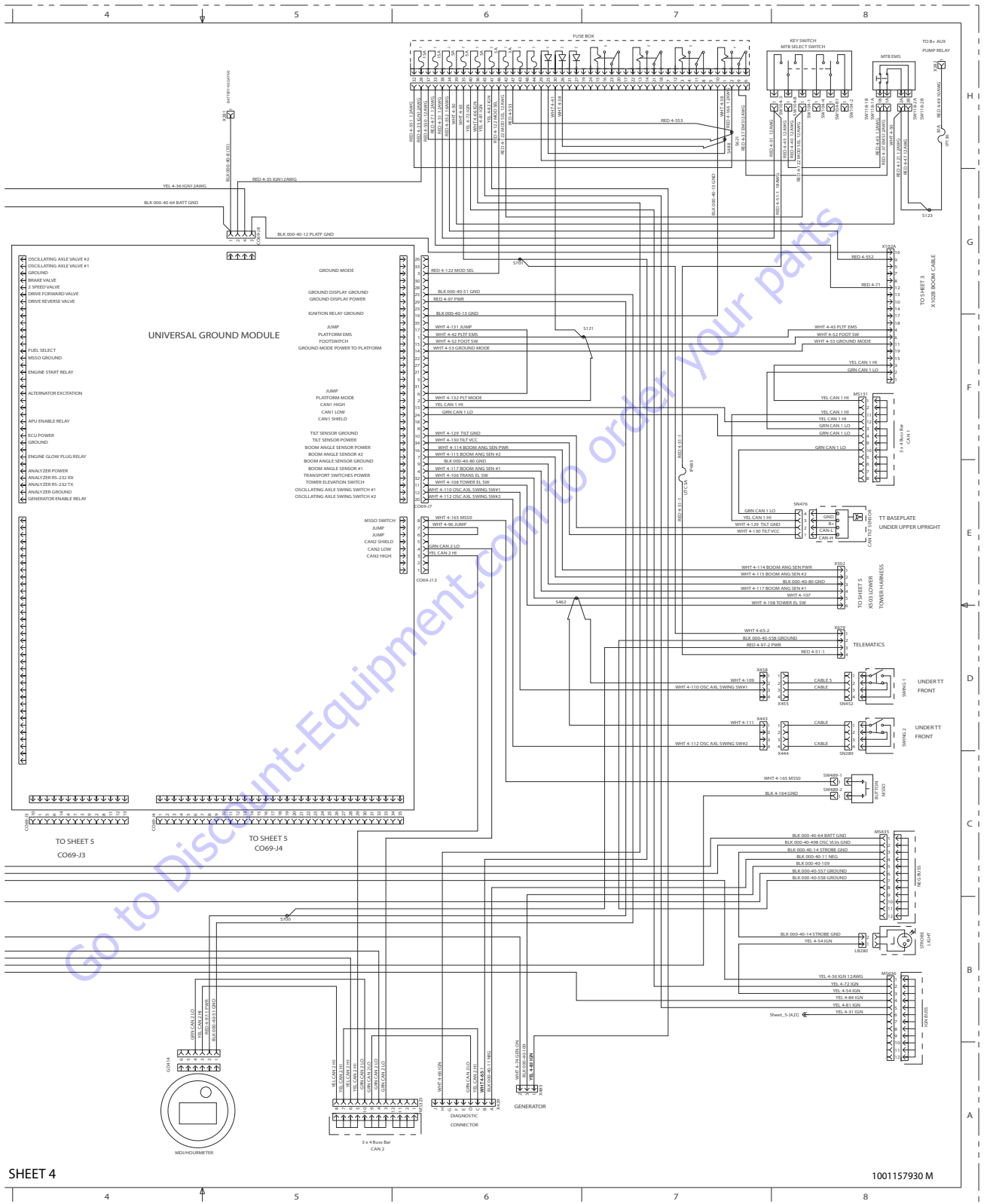


Figure 7-122. Electrical Schematic - Sheet 7 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

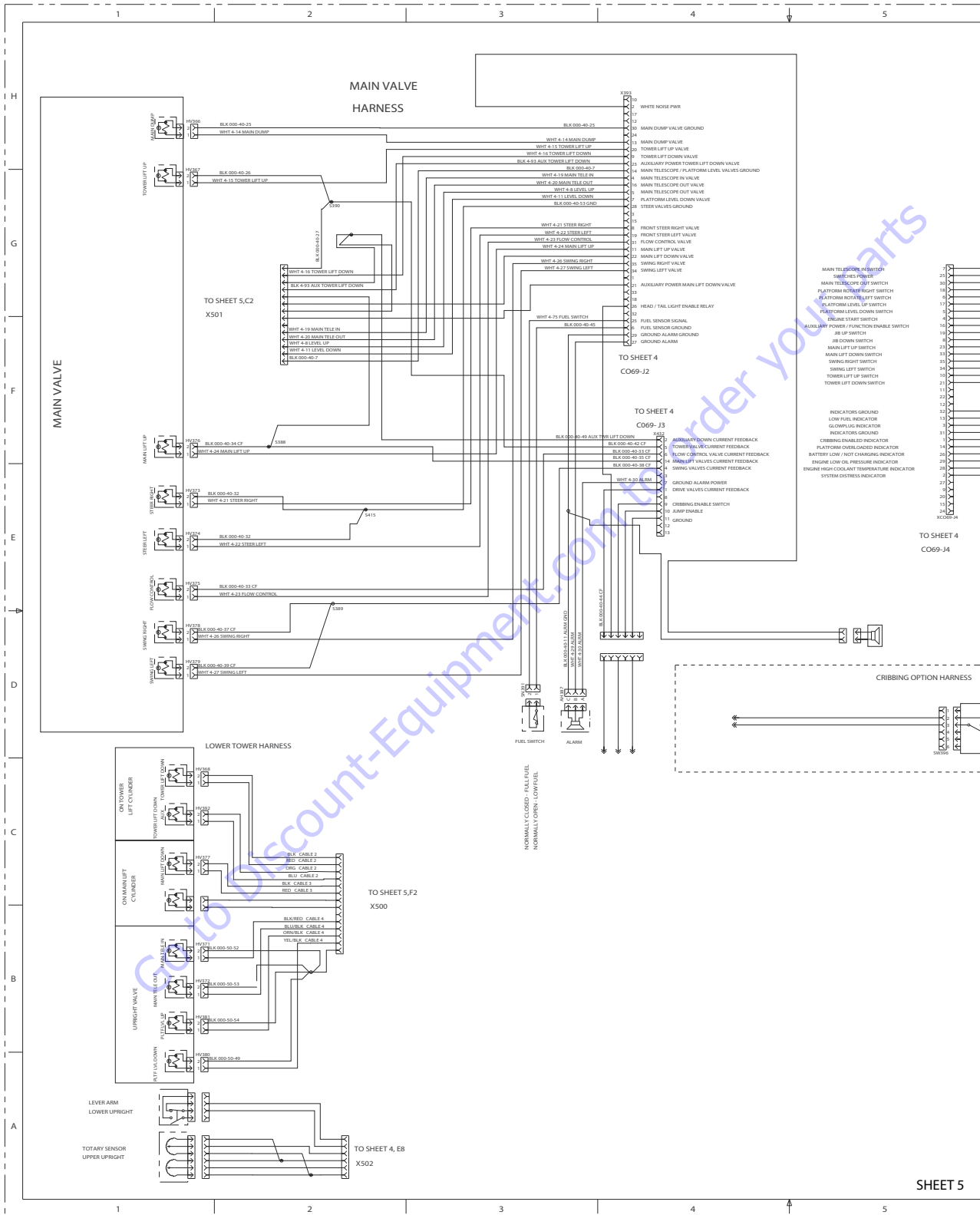


Figure 7-123. Electrical Schematic - Sheet 8 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

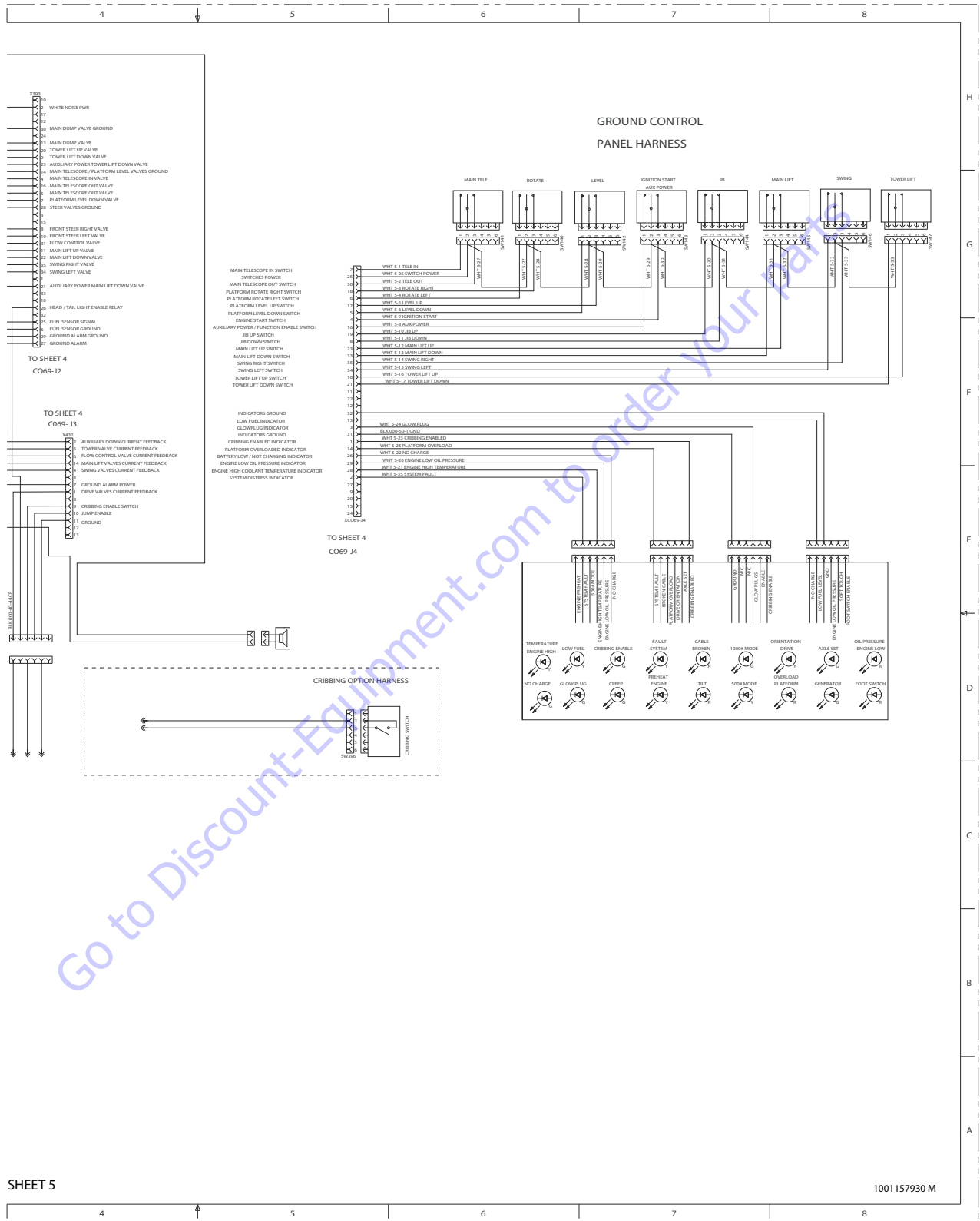


Figure 7-124. Electrical Schematic - Sheet 9 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

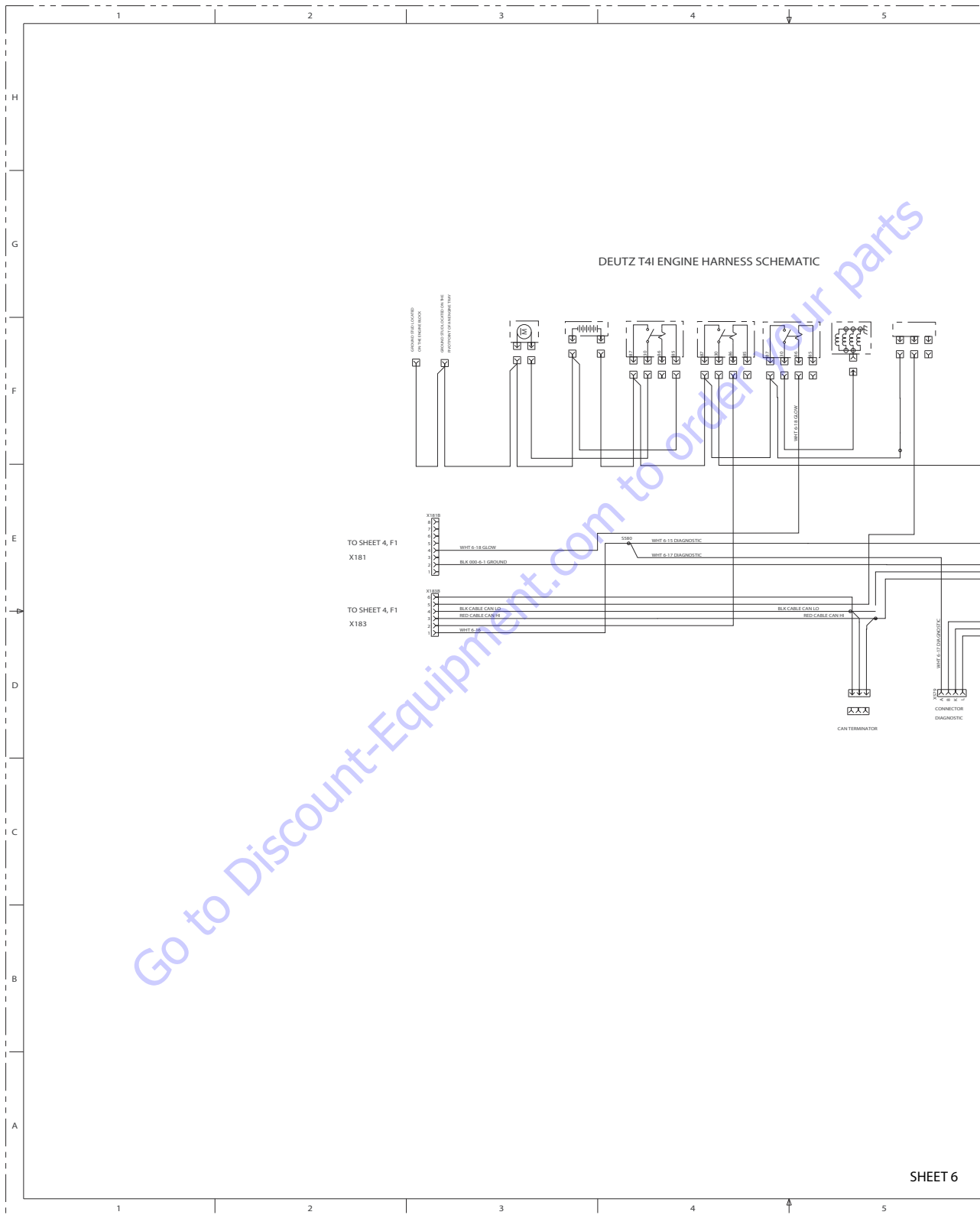


Figure 7-125. Electrical Schematic - Sheet 10 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

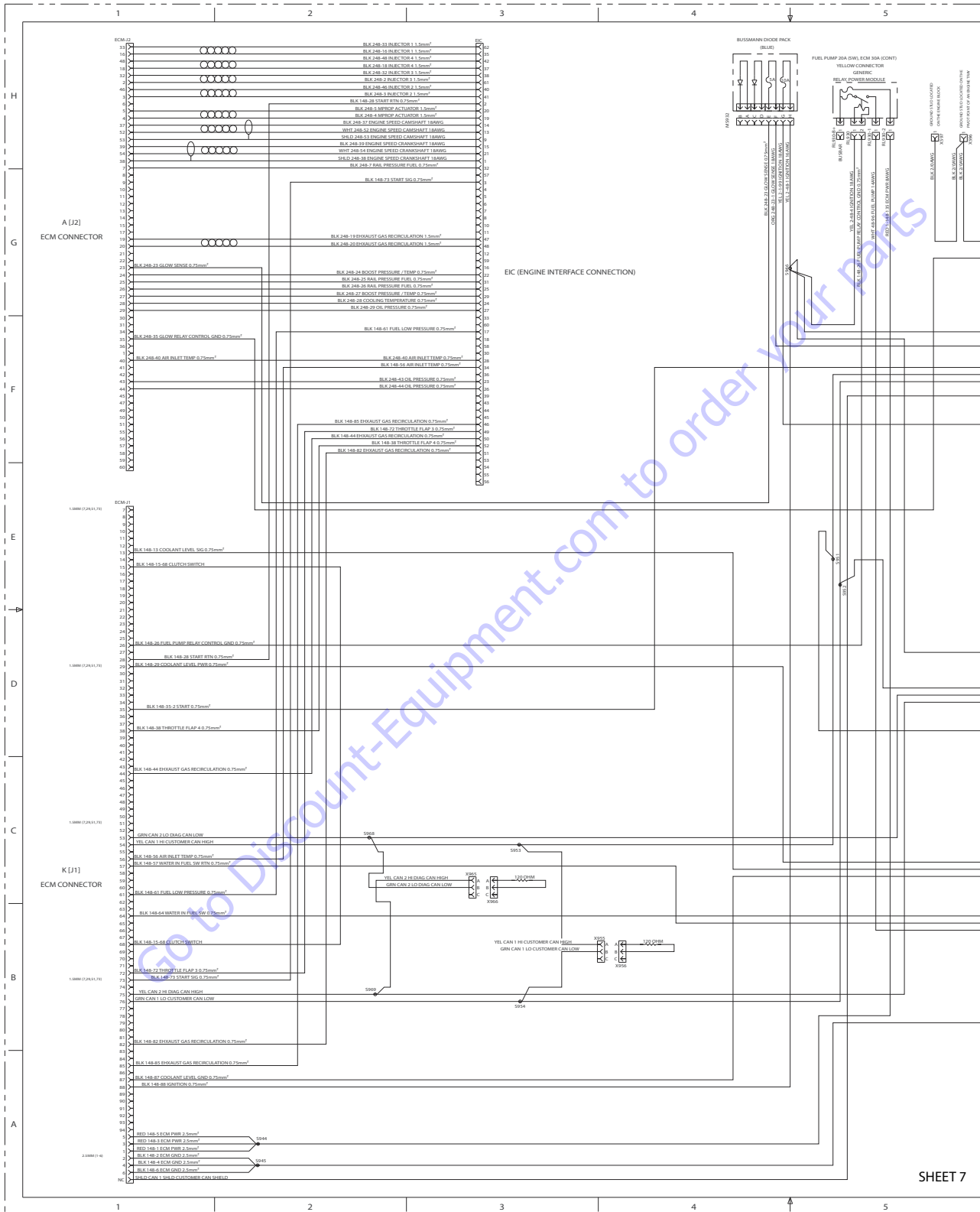


Figure 7-127. Electrical Schematic - Sheet 12 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

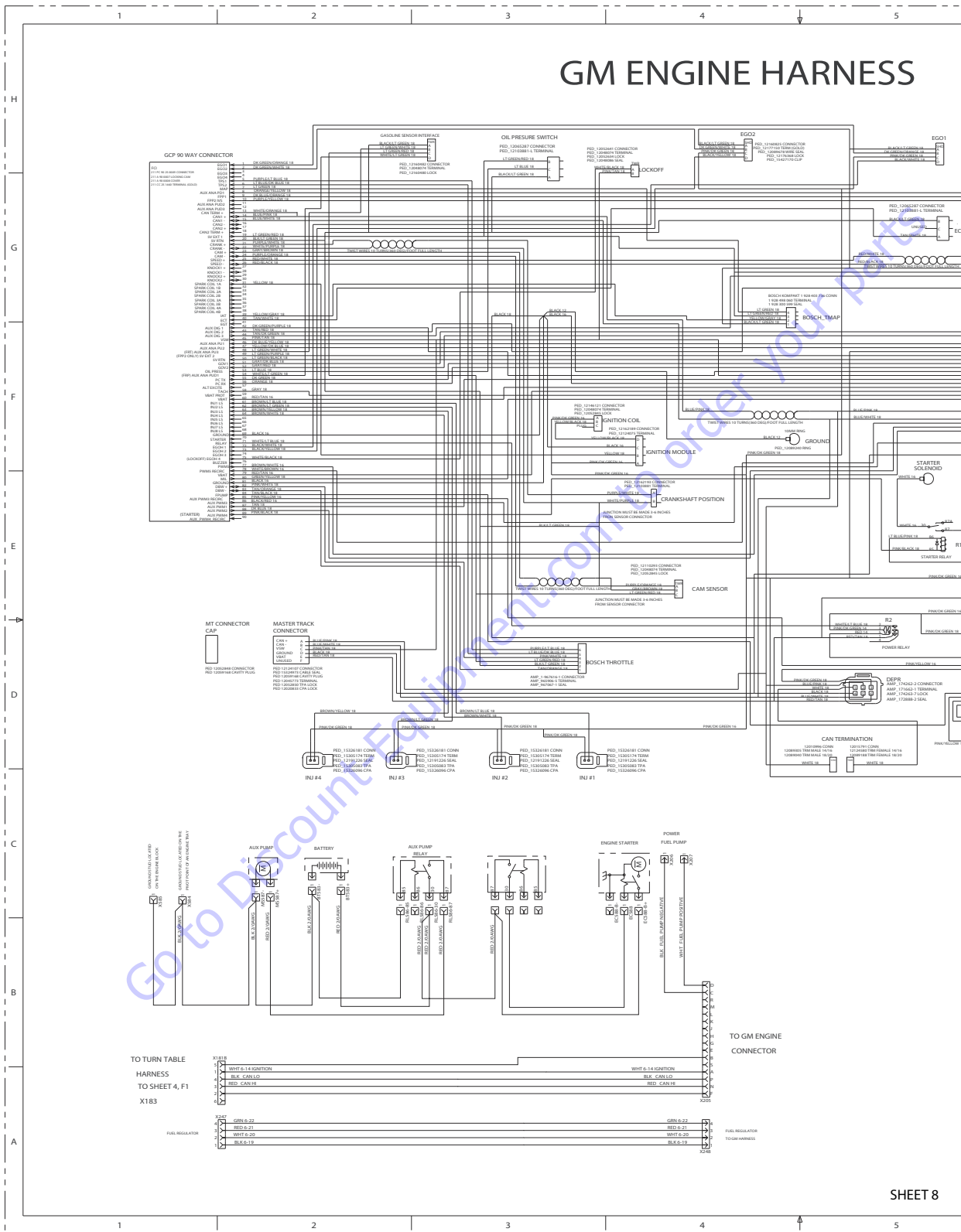


Figure 7-129. Electrical Schematic - Sheet 14 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

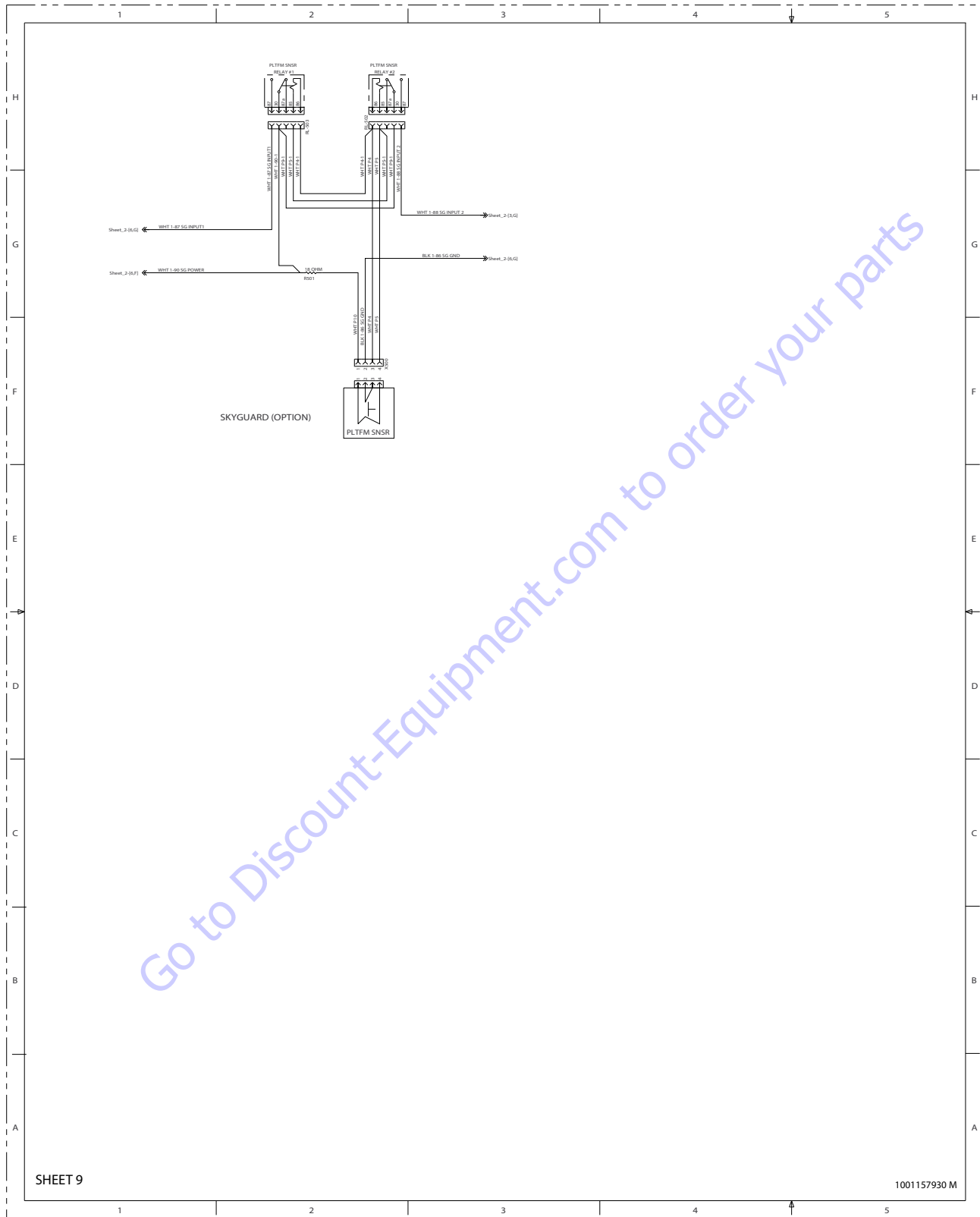


Figure 7-131. Electrical Schematic - Sheet 16 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

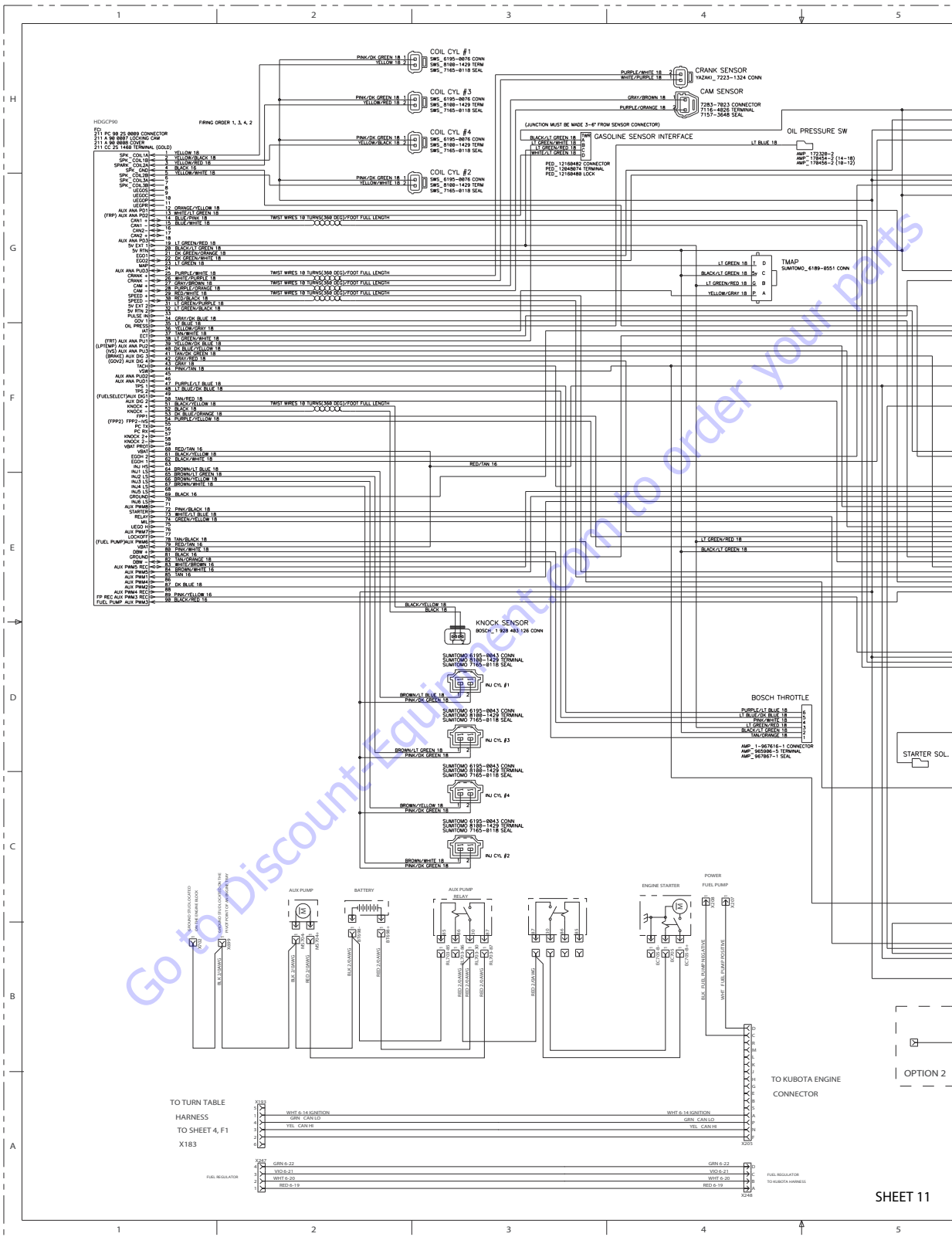


Figure 7-134. Electrical Schematic - Sheet 19 of 20

SECTION 7 - BASIC ELECTRICAL INFORMATION & SCHEMATICS

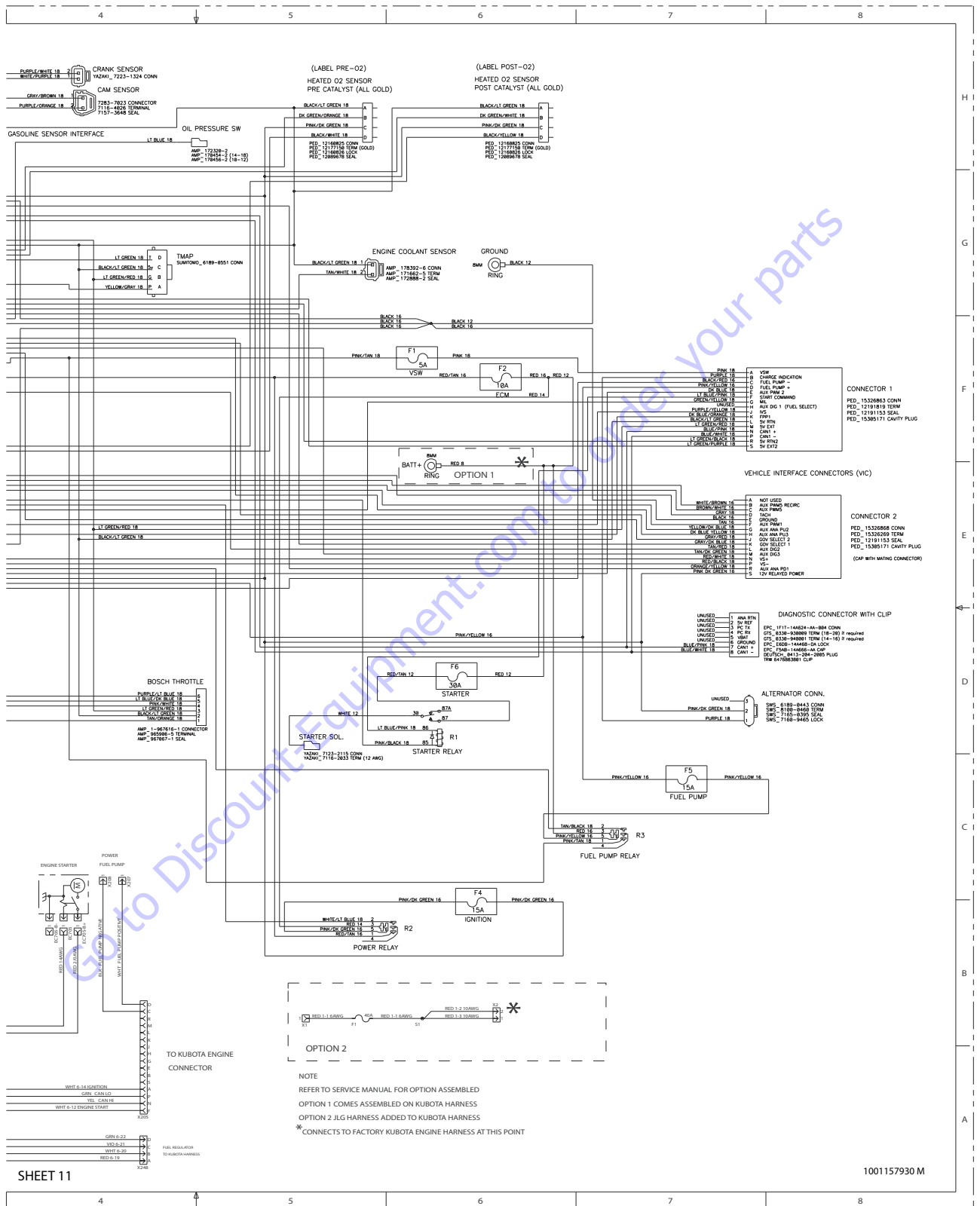


Figure 7-135. Electrical Schematic - Sheet 20 of 20



3121659



An Oshkosh Corporation Company

Go to Discount-Equipment.com to order your parts



www.Discount-Equipment.com

