

SYSTEM CAPACITIES

SYSTEM	U.S. MEASURE	METRIC MEASURE	IMPERIAL MEASURE
Engine Oil No Filter Change With Filter Change	5 Gal 5-1/2 Gal	19 L 21L	4.2 Gal 4.5 Gal
Cooling System All	7 Gal	26.5 L	5.8 Gal
Trans / Hydraulic System	45-1/2 Gal	172 L	38 Gal
Front Wheel Drive ^A 10 Bolt Axle Differential – Standard and Suspended FWD Differential – SuperSteer FWD Planetary - Each ^A 12 Bolt Axle Differential – Standard and Suspended FWD Differential – SuperSteer FWD Planetary - Each	13.0 Qts ^B 14.0 Qts ^C 3 Pints 12.5 Qts ^D 14.0 Qts ^C 7.0 Pints	12.3 L 13.25 L 1.4 L 11.8 L 13.25 L 3.3 L	21.6 Pints 23.3 Pints 2.5 Pints 20.8 Pints 23.3 Pints 5.8 Pints
Fuel Tank All	178 Gal	674L	148 Gal
^A = Bolt quantity can be determined by observing the wheel ends. ^B = 25 pints New Holland Ambra Hypoide 140 Gear Oil, SAE 85W140, plus 1 pint New Holland Limited Slip Additive (B96606) for 13 quarts total. ^C = 27 pints New Holland Ambra Hypoide 140 Gear Oil, SAE 85W140, plus 1 pint New Holland Limited Slip Additive (B96606) for 14 quarts total. ^D = 24 pints New Holland Ambra Hypoide 140 Gear Oil, SAE 85W140, plus 1 pint New Holland Limited Slip Additive (B96606) for 12.5 quarts total.			

INSTRUMENTATION CLUSTER - TRANSMISSION LEAKAGE CHECK

The regulated circuit pump is the front section of the tandem gear pump. The pump draws oil from the system reservoir through a 100 mesh suction screen. The pump flow passes through the regulated circuit filter housing and into the priority regulator valve. The priority regulator valve maintains the regulated pressure circuit at 22.4 to 24.5 bar (325 to 355 PSI). The regulated pump flow supplies the PTO/ Diff lock valve, transmission control valves and brake valve. Both the remote and hitch valves are also supplied with pilot pressure.

Once these circuits are satisfied the excess regulated pump flow is directed through the oil coolers and joins up with the charge pump flow at the downstream side of the main filter head.

The 27 GPM tandem gear pump is a fixed displacement pump, therefore the output flow will decrease as the engine speed is lowered. At low engine speeds, leaks in the regulated and transmission circuits are more noticeable.

BACKGROUND INFORMATION:

The transmission controller monitors the pressure through the system pressure transducer. The manifold pressure can be read from the display through the TRANS SYS PRESSURE screen.

- Start and run the engine.
- Press the INCR or DECR key on the programmable instrumentation until TRANS OIL TEMP screen is reached.

NOTE: Screen order is set by the operator. The TRANS OIL TEMP and TRANS SYS PRESURE screens could or could not be together depending on setup.

- Operate the engine at 1500 RPM until the transmission temperature displayed on the instrumentation reads at least 49° C (120° F).
- Press the INCR as required to display the TRANS SYS PRESSURE screen.
- With the engine at 1500 RPM, record the transmission system pressure with all hydraulic systems OFF, PTO and Diff Lock in the OFF position and the FWD switch in the ON position.
- Increase engine speed to 2000 RPM. Record the range powershift manifold pressure. Decrease engine speed.

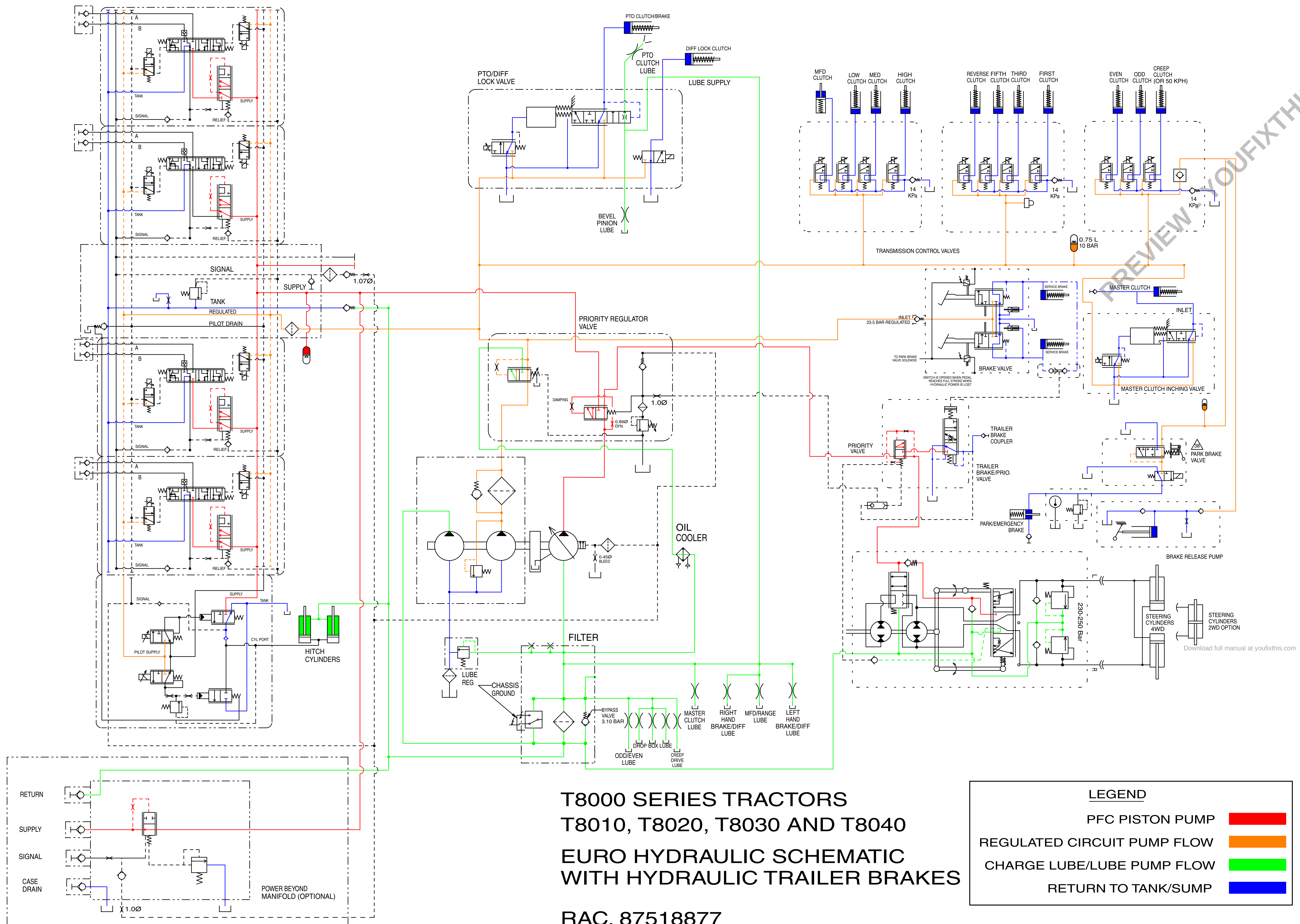
- **The Powershift System Manifold Pressure _____ kPa at 2000 RPM**

- A. If the pressure reading is greater than 310 PSI (2240 kPa) go to the regulated system leakage test. (Complete the regulated system leakage test before adjusting regulated pressure. See Hydraulic System How It Works And Troubleshooting)
- B. If the pressure reading is less than 310 PSI (2240 kPa) go to the regulated pump flow test (See Hydraulic System How It Works And Troubleshooting)..

NOTE: *Transducer Pressure Range: 2240 to 2250 kPa (325 to 355 PSI) at 2000 RPM and 120°F (49°C). To convert kPa to bar, move the decimal place over two places to left, i.e. 2240 kPa equals 22.4 bar.*

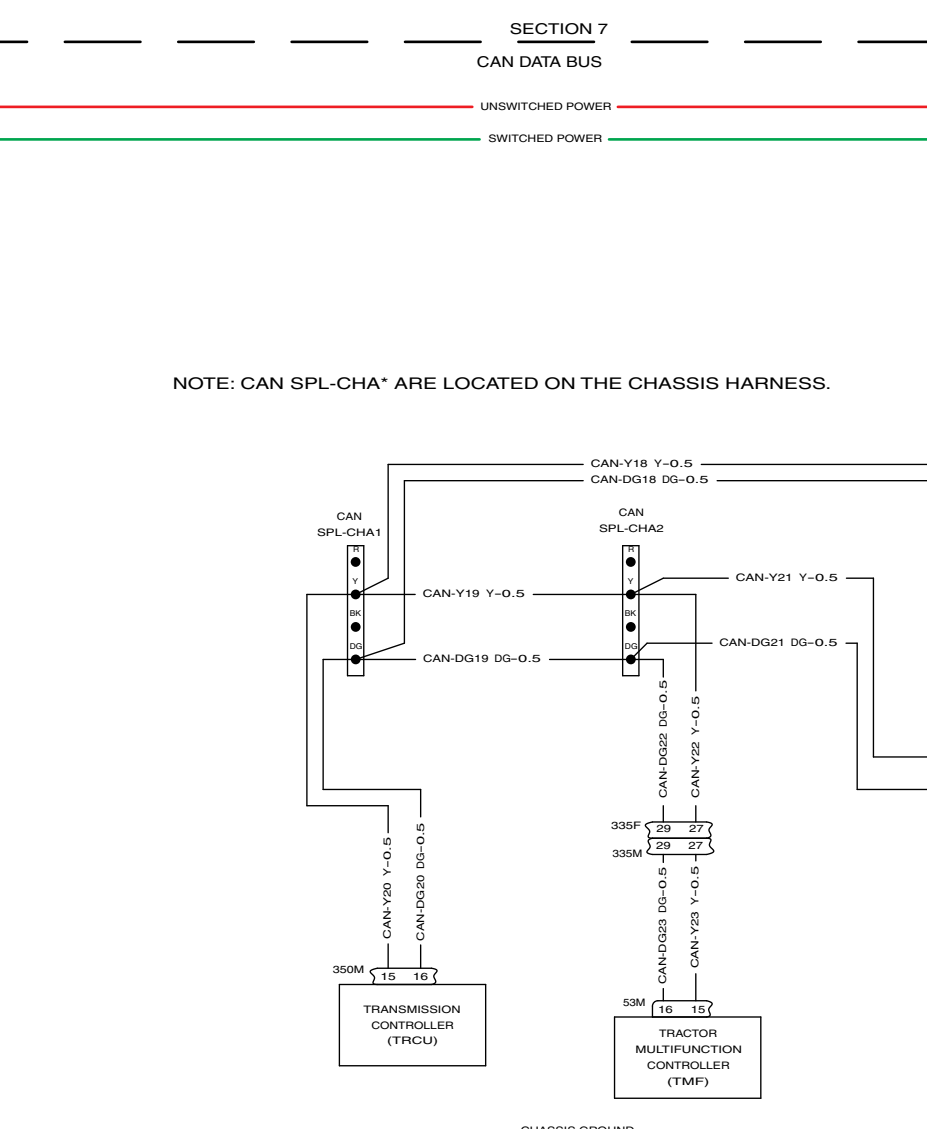
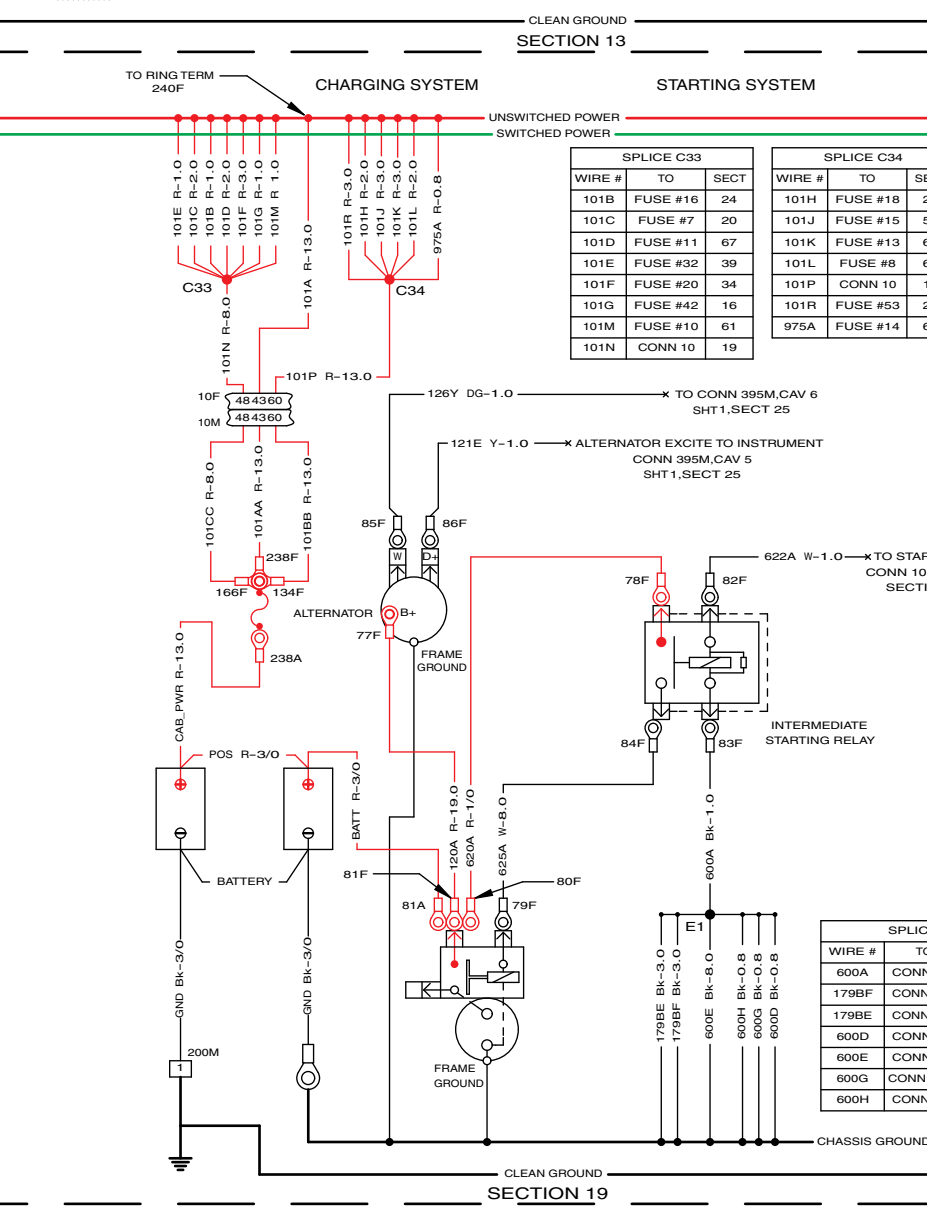
Fault codes will be generated if a problem is detected with the following components:

- System pressure transducer failure.
- Wire failed, or shorted between sensor and controller.
- Low regulated supply pressure to powershift valves.
- Low powershift manifold pressure due to leaking clutch.
- Wire failed, or shorted between powershift valve solenoid and controller.

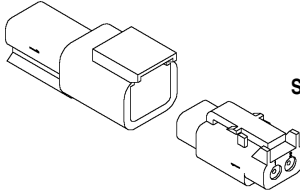


ELECTRICAL SCHEMATIC DIAGRAM EURO MX MAGNUM SERIES TRACTOR			
CIRCUIT DESCRIPTION	SECTION	CIRCUIT DESCRIPTION	SECTION
AIR CONDITIONING	58-61		
AUTOGUIDANCE	73-79	- OPTIONAL FRONT HITCH	27
AUTOTHROW	85	- OPTIONAL FRONT BELTLINE	31
ARMREST CONTROLLER	45-50	- OPTIONAL HIGH INTENSITY LAMP	38
AUXILIARY CONTROL SYSTEM	53-54		
AUTOMATIC TEMPERATURE CONTROL UNIT	59	- OPTIONAL REAR FENDER WORK	32-33
AUXILIARY POWER CONN. (IMPLEMENT)	68	- OPTIONAL ROOF WORK CAB	28
AUXILIARY POWER (7 PIN TRAILER)	83		
BLOWER MOTOR (ATCU OR CCU)	61		
BRAKE PEDAL SWITCHES	45	- STANDARD CAB FENDER	32-33
CHARGING SYSTEM	19	- STANDARD CAB FRONT ROOF	29
CAB/CONTROLLER POWER	20	- STANDARD FENDER WARNING LAMPS	32-33
CAN DATA BUS	12-18	- STANDARD BELTLINE WARNING LAMPS	N/A
CIGAR LIGHTER	66		
CLIMATE CONTROL UNIT	58	MECHANICAL FRONT DRIVE (MFD)	46
CRUISE CONTROL	57	PERFORMANCE MONITOR	27
DIFFERENTIAL LOCK	40	POWER WARNERS	64
FL ELECTRONIC ENGINE CONTROLLER	55-56	PTO CONTROLLER SYSTEM	44-45
ELECTRONIC PTO	44-45	RADIO ANTENNA	62
ETHER START	36	RADIO SOUND SYSTEM	62
FOOT THROTTLE	57	ROTARY LIGHT SWITCH	28
FOWARD/REVERSE/PARK	85	SCHEMATIC - LEGEND	1-10
HITCH CONTROL SYSTEM	51-52, 54	SCHEMATIC - SYMBOL DEFINITIONS	5
HEADLIGHT SWITCH	29	SEAT	67
INSTRUMENT CLUSTER	24-25	STARTING SYSTEM	19-20
ISO11783	69-72	SUSPENDED AXLE	43
LIGHTS - STANDARD HEAD LIGHTS	33	TRAILER CONNECTOR (7-PIN)	33
- BEACON	32-33	TRANSMISSION CONTROL SYSTEM	37-38
- BRAKE	32-33	WINDSHIELD WIPER/WASHER - FRONT	65
- COMB/CONSOL	63	WINDSHIELD WIPER/WASHER - REAR	65
- LICENSE PLATE	N/A		

REF. DES.	SECTION LOCATION	HARNESS	REF. DES.	SECTION LOCATION	HARNESS
301	19	ENGINE	301	32	FENDER
302	19	ENGINE	302	32	FENDER
303	19	ENGINE	303	32	FENDER
304	19	ENGINE	304	32	FENDER
305	19	ENGINE	305	32	FENDER
306	19	ENGINE	306	32	FENDER
307	27	ELECT ENGINE	307	27	ELECT ENGINE
308	27	ELECT ENGINE	308	27	ELECT ENGINE
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235M
PIN HOUSING
222136A1



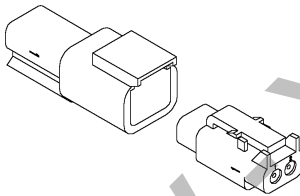
235F
SOCKET HOUSING
222135A1

222136A1 AND 135A1
A1

CONNECTOR 235F - 225135C1		
RIGHT FENDER REAR WORKLAMP		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	LAMP LEADS	WORK LIGHT B+
2	LAMP LEADS	GROUND

CONNECTOR 235M - 225136C1		
RIGHT FENDER REAR WORKLAMP		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	787	WORK LIGHT B+
2	174	GROUND

236F
PIN HOUSING
222136A1



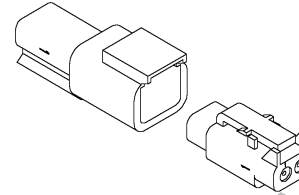
236M
SOCKET HOUSING
222135A1

222136A1 AND 135A1

CONNECTOR 236F - 222136A1		
LEFT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	751R	MARKER LIGHT B+
2	174X	GROUND

CONNECTOR 236M - 222135A1		
LEFT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	LAMP LEADS	MARKER LIGHT B+
2	LAMP LEADS	GROUND

237F
PIN HOUSING
222136A1



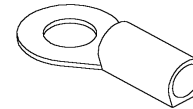
237M
SOCKET HOUSING
222135A1

222136A1 AND 135A1

CONNECTOR 237F - 222136A1		
RIGHT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	754F	MARKER LIGHT B+
2	174U	GROUND

CONNECTOR 237M - 222135A1		
RIGHT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	LAMP LEADS	MARKER LIGHT B+
2	LAMP LEADS	GROUND

**238A, 238F, 239F
AND 240F**
CAB HARNESS



200338.TIF

CONNECTOR 238A - RING TERM 7MM		
UNSWITCHED CAB B+		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	BATT	B+

CONNECTOR 238F - RING TERM 8MM		
UNSWITCHED CAB B+		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	101AA	B+

CONNECTOR 239F - 225072C1		
IGNITION FEED		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	104A	B+

CONNECTOR 240F - 19193-0219		
UNSWITCHED B+		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	101A	UNSWITCHED B+

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