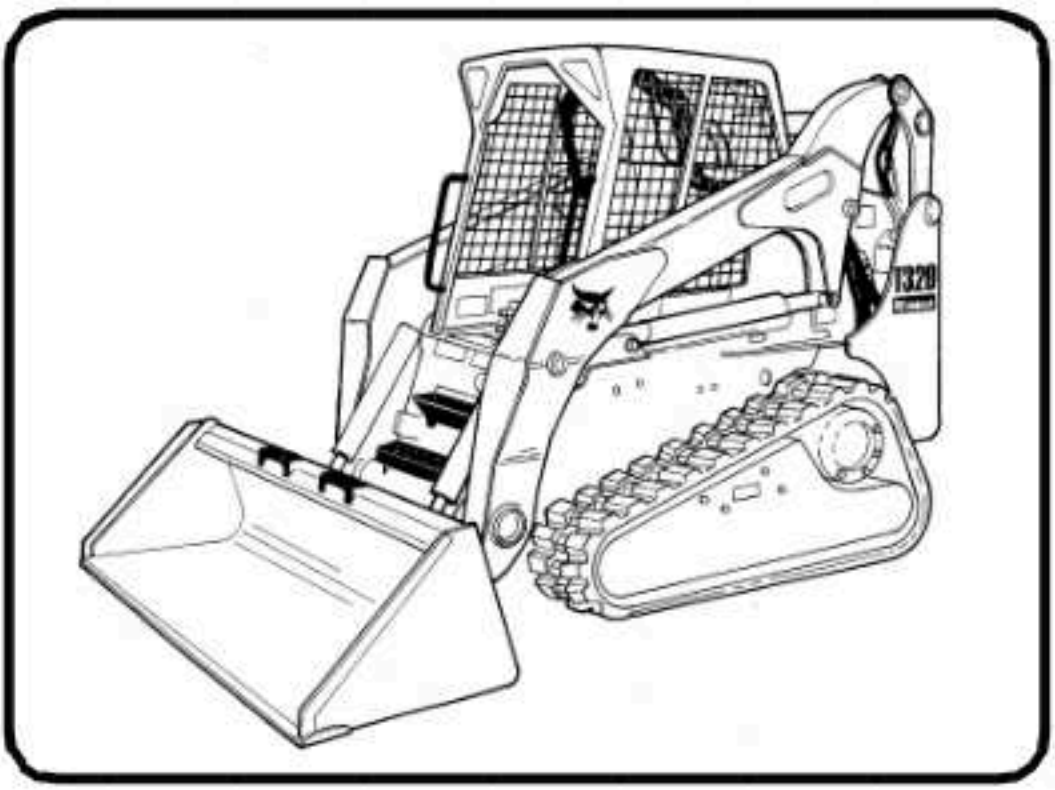
Bobcat®

Service Manual
T320 Compact Track Loader

S/N A7MP11001 - A7MP59999



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

6986558 (3-09)

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Switch Handle Installation (Cont'd)

Figure 60-130-17

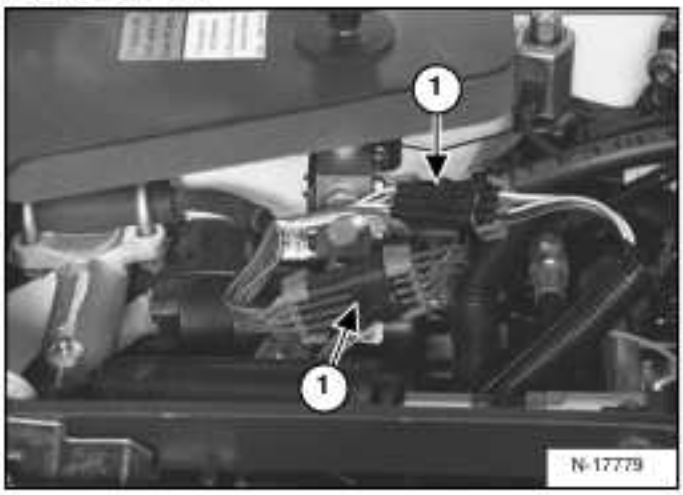
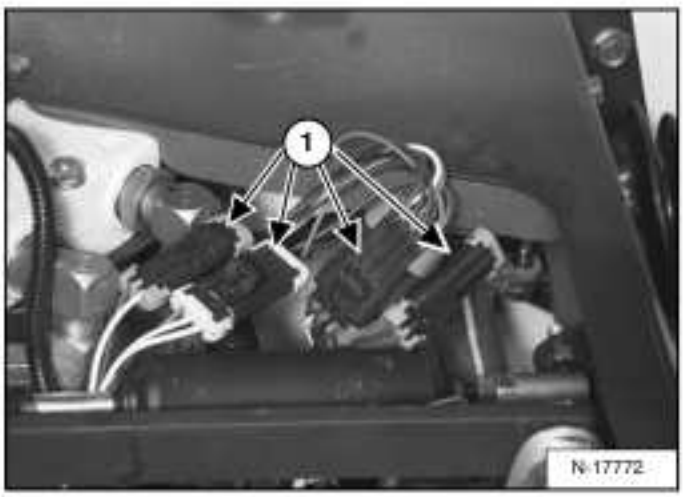
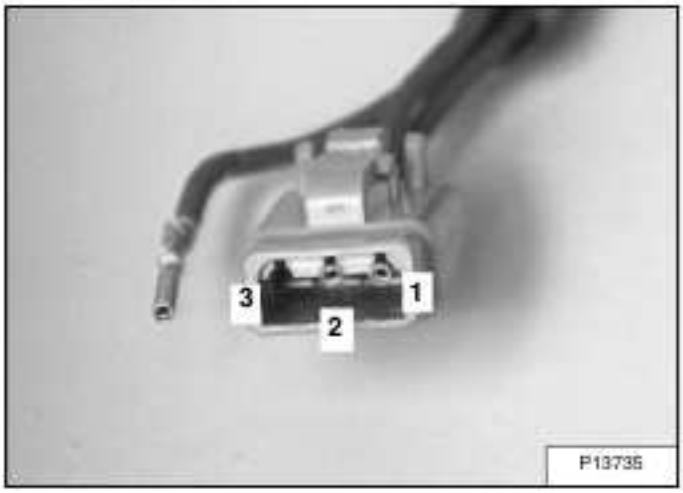


Figure 60-130-18



Connect the handle harness connectors (Item 1) **[Figure 60-130-17]** & **[Figure 60-130-18]** to the loader harness connectors.

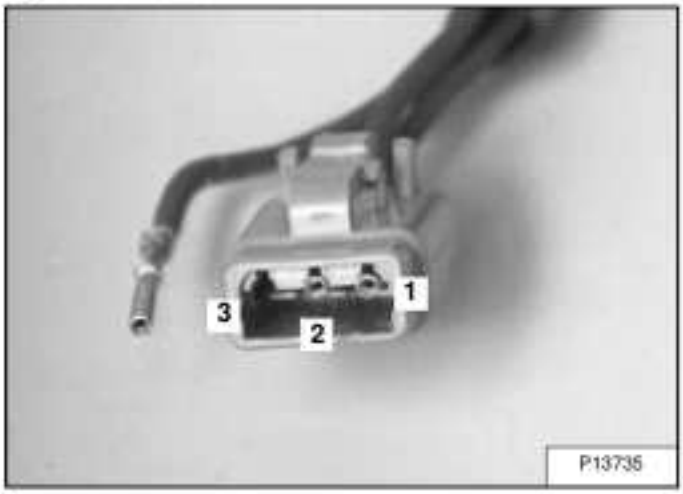
Figure 60-130-19



Install the wires into the connectors as listed below:

Left and Right Control Lever Switch Handle **[Figure 60-130-19]**
1-Terminal - Red/White
2-Terminal - Black/White
3-Terminal - Purple/White

Figure 60-130-20



Left and Right Control Lever Switch Handle **[Figure 60-130-20]**
1-Terminal - Yellow/Red
2-Terminal - Open
3-Terminal - Orange/Black

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Valve Guide - Checking

The tool described below is not provided. The tool is used for inserting and removing the valve guides.Use the dimensions below **[Figure 70-80-27]** and **[Figure 70-80-28]** to make this tool.

Figure 70-80-27

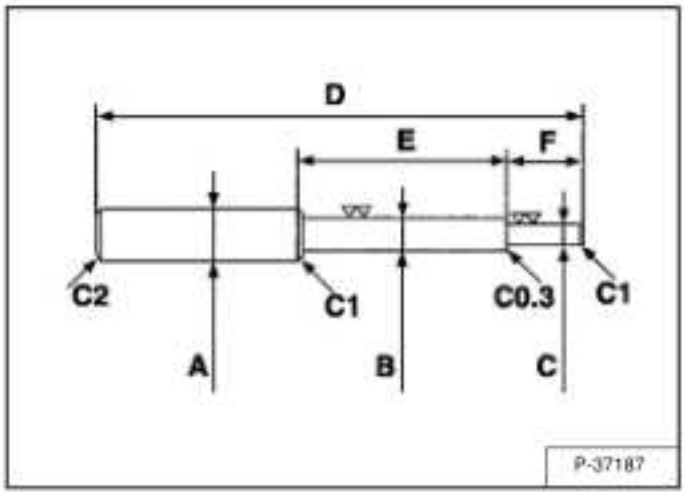
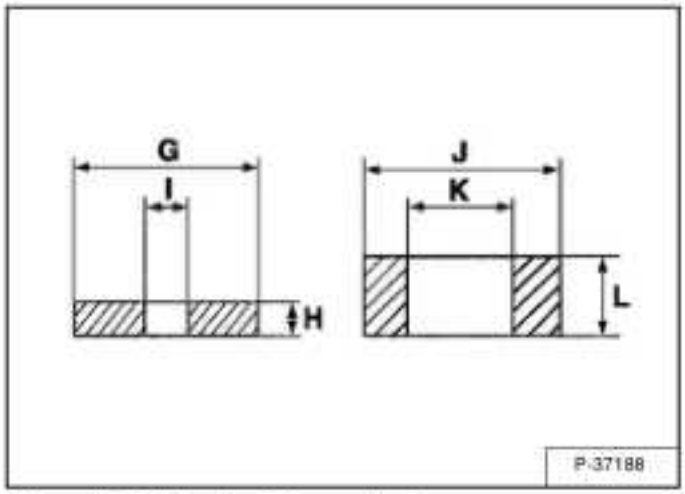
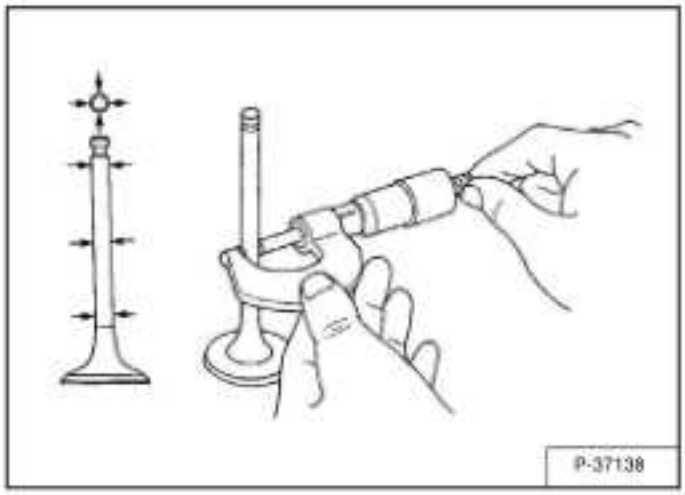


Figure 70-80-28



A	0.79 in. dia. (20 mm dia.)
B	0.460 - 0.468 in. dia. (11,7 - 11,9 mm dia.)
C	0.256 - 0.259 in. dia. (6,5 - 6,6 mm dia.)
D	8.86 in. (225 mm)
E	2.76 in. (70 mm)
F	1.77 in. (45 mm)
G	0.98 in. (25 mm)
H	0.197 in. (5 mm)
I	0.263 - 0.275 in. dia. (6,7 - 7,0 mm dia.)
J	0.787 in. dia. (20 mm dia.)
K	0.492 - 0.504 in. dia. (12,5 - 12,8 mm dia.)
L	0.350 - 0.3578 in. dia. (8,9 - 9,1 mm)
C1	Chamfer 0.039 in. (1,0 mm)
C2	Chamfer 0.079 in. (2,0 mm)
C0.3	Chamfer 0.012 in. (0,3 mm)

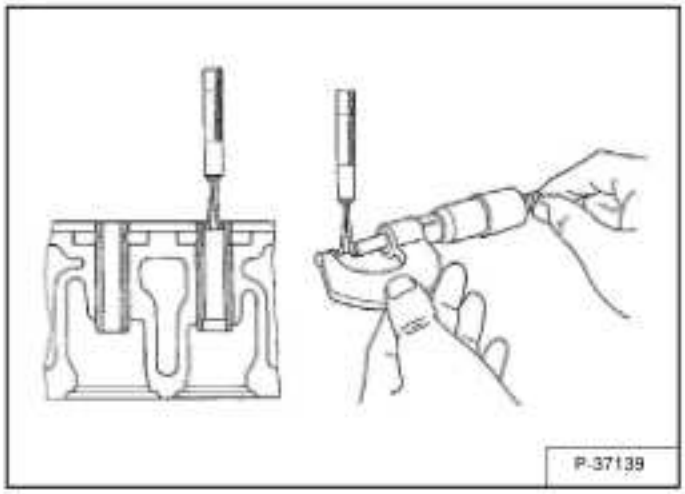
Figure 70-80-29



Remove carbon from the valve guide section.

Measure the valve stem O.D. with an outside micrometer **[Figure 70-80-29]**.

Figure 70-80-30



Measure the valve guide I.D. of the cylinder head at the most wear part as shown in **[Figure 70-80-30]** with a small hole gauge and calculate the clearance.

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Gauge Pressure Related Troubleshooting

Normal compressor suction (low side) and discharge (high side) pressure at ambient temperatures of 86-96 degrees F (30-38 degrees C) and compressor speed of approximately 2000 RPM are:

High pressure side pressure: 210-265 PSI

Low pressure side pressure: 15-33 PSI

As a rule of thumb the high side pressure will be around eight times greater then the low side pressure.

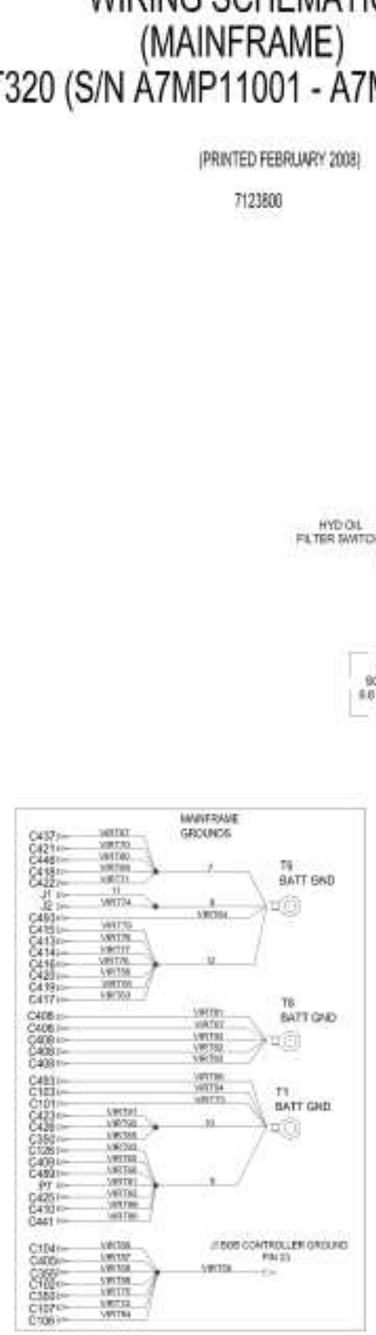
Possible Cause	Inspection	Solution
Low pressure side Too high.	The low pressure side pressure normally becomes too high when the high pressure side pressure is too high. As this is explained below, the following inspection is only used when the low pressure side is too high.	
1. Expansion valve opens too far.	Frost is present on the suction hose.	Replace expansion valve.
2. Defective compressor.	The high and low pressure side gauge pressures equalize when the magnetic clutch is engaged.	Replace compressor.
Low pressure side Too low.		
1. Low refrigerant charge.	The high side pressure will be low and bubbles may be present in sight glass on receiver drier.	Repair any leaks and recharge the refrigerant to the correct level.
2. Clogged or closed expansion valve.	The expansion valve's inlet side is frosted. Moisture or other Contaminants can be the cause.	Clean or replace the expansion Valve.
3. Restriction between drier and expansion valve.	Frost on the line between drier and expansion valve. A Negative low pressure reading may be shown.	Flush system or replace hose.
4. Thermostat malfunction.	The evaporator is frozen.	Adjust thermostat temperature setting or probe placement or replace thermostat.
5. Restriction in receiver drier.	Excessive frost on receiver drier.	Replace receiver drier.
High pressure side Too high.		
1. Poor condenser performance.	Dirty or clogged condenser fins. Condenser fans not Operating.	Clean fins, and/or repair the fan.
2. Excessive refrigerant.	The high pressure side pressure will be high.	Use refrigerant recovery equipment to capture excess refrigerant. Charge to the correct refrigerant level.
3. Excessive oil charge.	The high pressure side will be high.	Evacuate system. Remove oil from condenser and compressor. Measure oil from compressor and add correct oil charge back into compressor. Flush system with nitrogen. Replace drier.
4. Air in system.	Pressure is high on both high and low sides.	Evacuate and recharge with Refrigerant.
5. Restriction in drier, condenser or high pressure line.	High pressure side will be high, and low pressure side will be low.	Evacuate and flush system replacing defective parts.

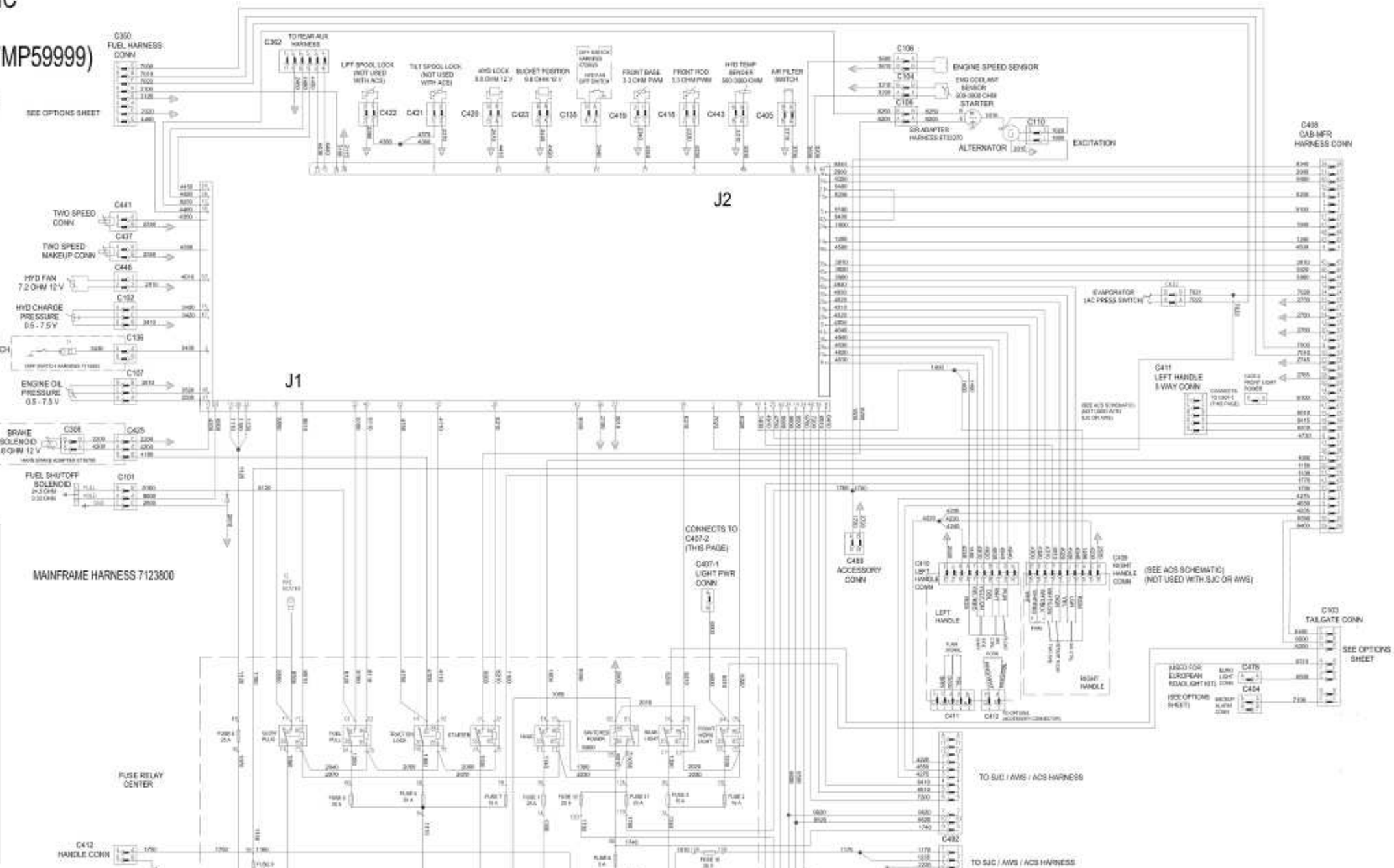
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