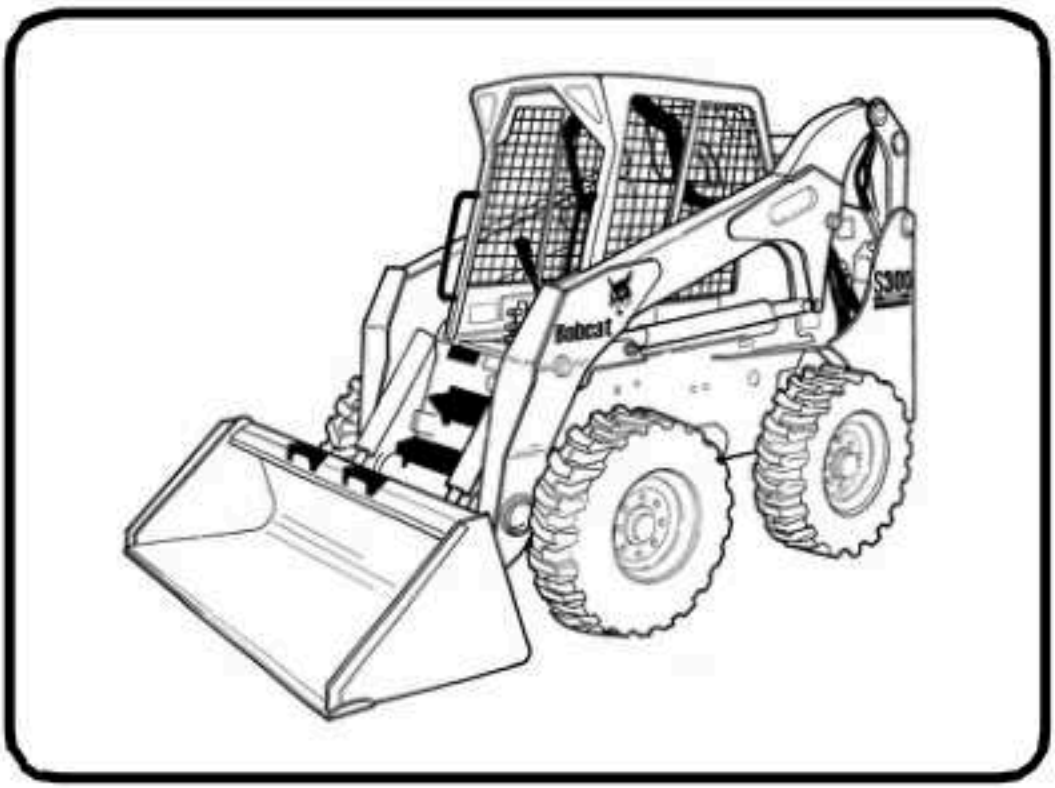
Bobcat®

Service Manual

S250, S300 Skid-Steer Loader

S/N A5GM11001 - A5GM19999
S/N A5GN11001 - A5GN19999
S/N A5GP11001 - A5GP19999
S/N A5GR11001 - A5GR19999



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS)

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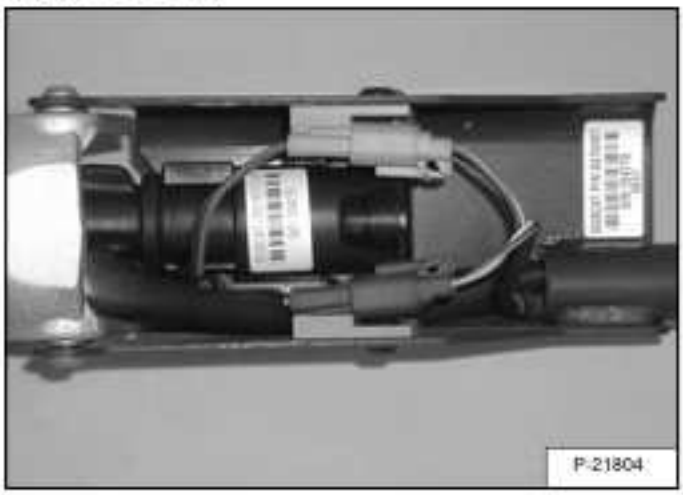
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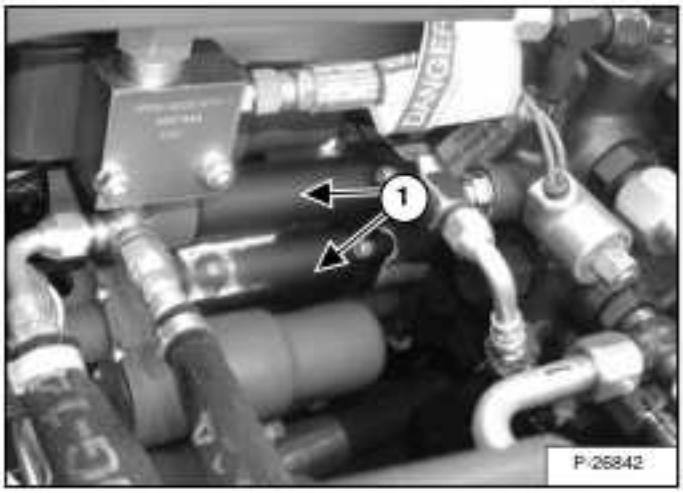
Figure 60-130-21



Connect the handle harness connectors to the sensor and lock solenoid connectors **[Figure 60-130-21]**.

Actuator Connector Disassembly And Assembly

Figure 60-130-22

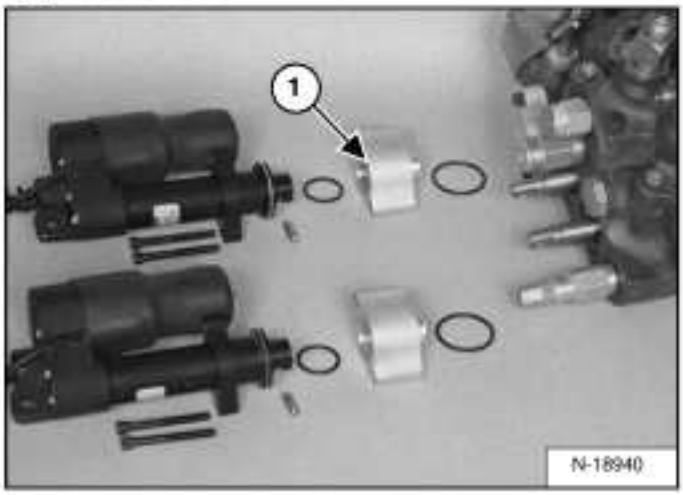


Remove the control panel. (See Removal And Installation on Page 50-100-2.)

Remove the actuator (Item 1) **[Figure 60-130-22]** from the hydraulic control valve. (See Actuator Removal And Installation (In Loader) on Page 20-41-6.)

Installation: Tighten the mount bolts to 90-100 in.-lb. (10.2-11.3 N•m) torque.

Figure 60-130-23

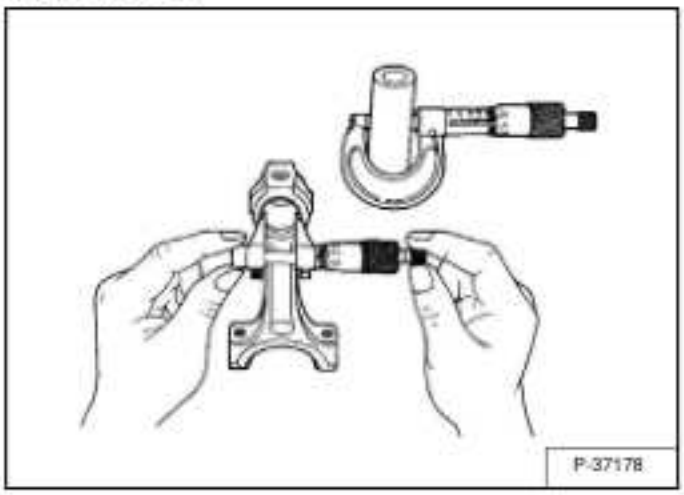


Check the mounting block (Item 1) **[Figure 60-130-23]** and bolts for wear and replace as needed.

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Piston And Connecting Rod - Servicing (Cont'd)

Figure 70-90-12



Measure the O.D. of the piston pin where it contacts the bushing with an outside micrometer **[Figure 70-90-12]**.

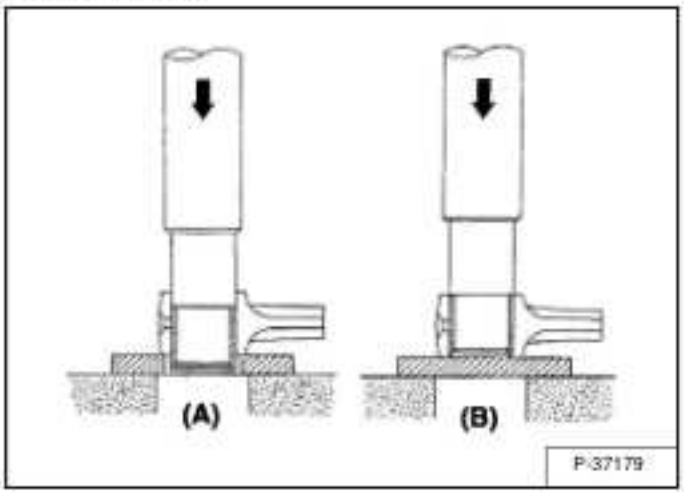
Measure the I.D. of the piston pin bushing at the connecting rod small end with a cylinder gauge **[Figure 70-90-12]**.

If the clearance exceeds the allowable limit, replace the bushing. If it still exceeds the allowable limit, replace the piston pin.

Oil clearance between piston pin and small end bushing	Factory spec.	0.00079 - 0.0015 in. (0,020 - 0,040 mm)
	Allowable limit	0.0059 in. (0,15 mm)

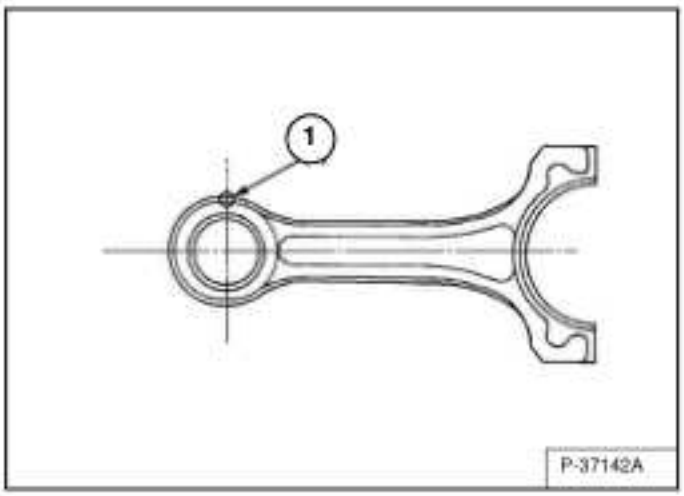
Piston pin O.D.	Factory spec.	1.1814 - 1.1815 in. (30,006 - 30,011 mm)
Small end bushing I.D.	Factory spec.	1.1824 - 1.1829 in. (30,031 - 30,046 mm)

Figure 70-90-13



Press out the used bushing using a small end bushing replacing tool **[Figure 70-90-13]**.

Figure 70-90-14



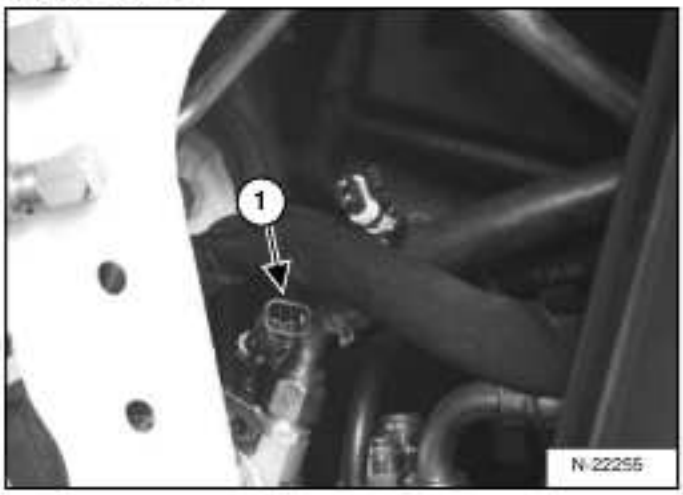
Clean a new small end bushing and bore, and apply engine oil to them.

Insert a new bushing onto the tool and press-fit it with a press so that the seam (Item 1) **[Figure 70-90-14]** of the bushing is flush with the connecting rod.

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Electrical System (Cont'd)

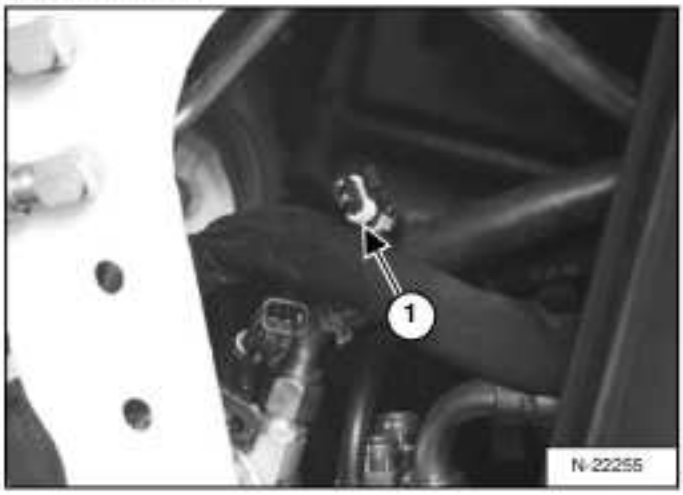
Figure 80-30-8



With a multi meter, check the resistance to the compressor clutch (Item 1) **[Figure 80-30-8]**.

If there is no resistance value, replace the compressor clutch. (See Clutch Disassembly And Assembly on Page 80-50-4.)

Figure 80-30-9



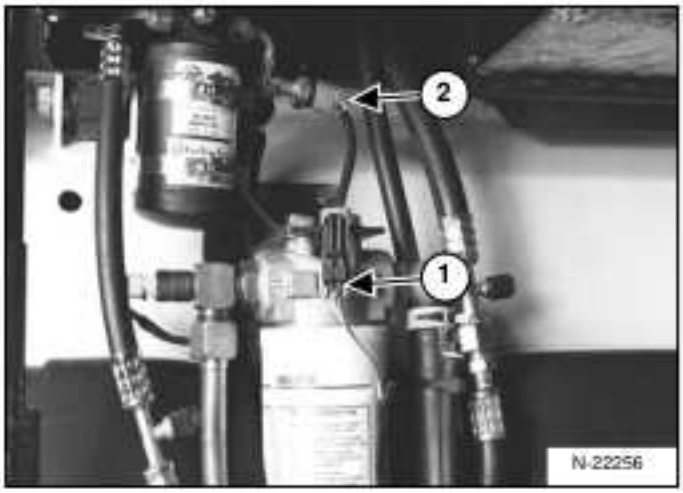
With a multi meter, check the voltage to the compressor clutch at the loader harness (Item 1) **[Figure 80-30-9]**.

The voltage reading should be around 12 volts.

If there is no power at the clutch, check the wiring harness for broken wires.

If there is power at the clutch, reconnect the wiring harness to the compressor clutch.

Figure 80-30-10



Disconnect the loader harness (Item 1) from the pressure switch (Item 2) **[Figure 80-30-10]**.

Figure 80-30-11



Using a multi meter check the loader wiring harness (Item 1) **[Figure 80-30-11]** for voltage.

The voltage should be around 12 volts.

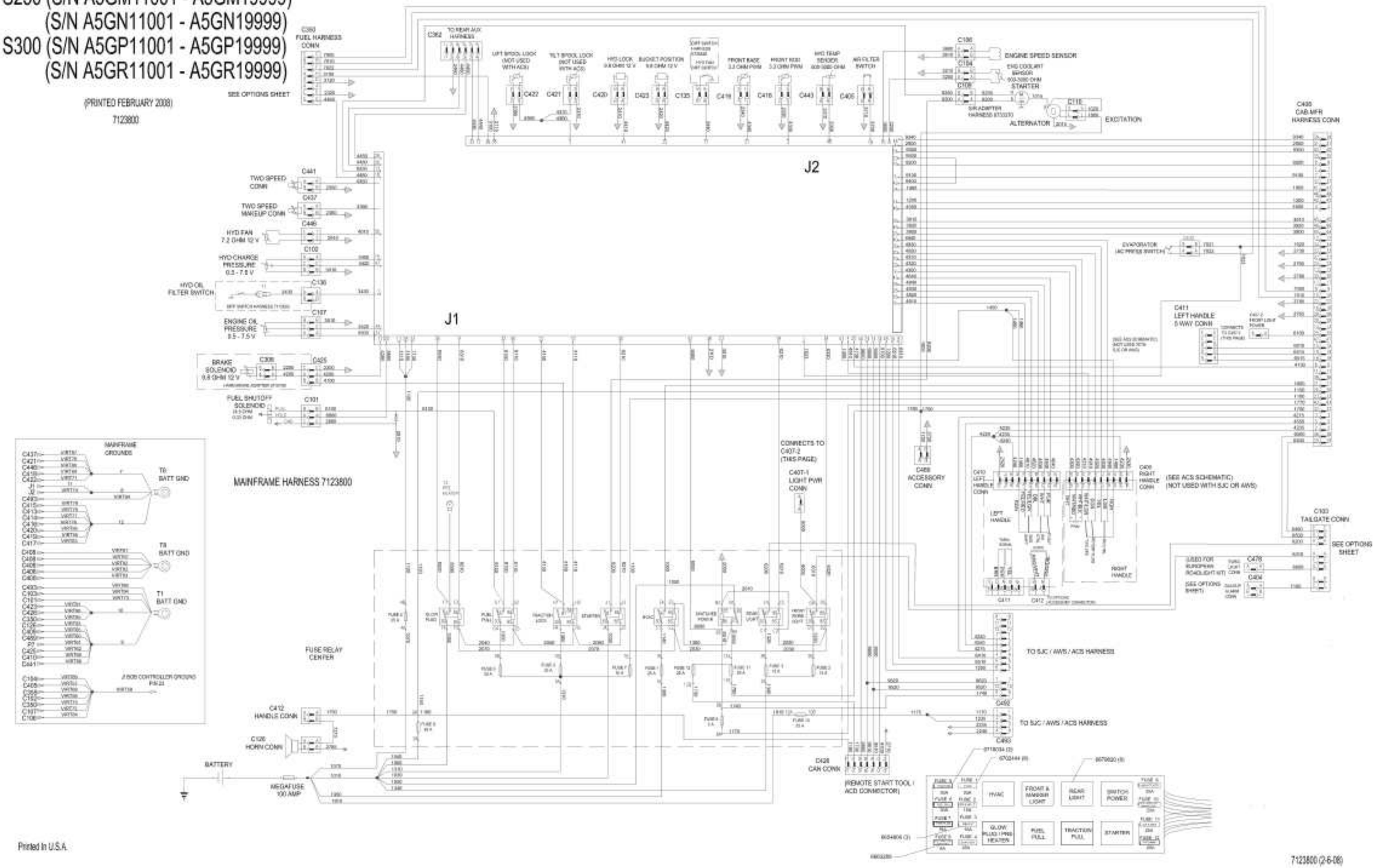
If there is no voltage at the wiring harness, check the harness for broken wires.

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WIRING SCHEMATIC
(MAINFRAME)
S250 (S/N A5GM11001 - A5GM19999)
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S300 (S/N A5GP11001 - A5GP19999)
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