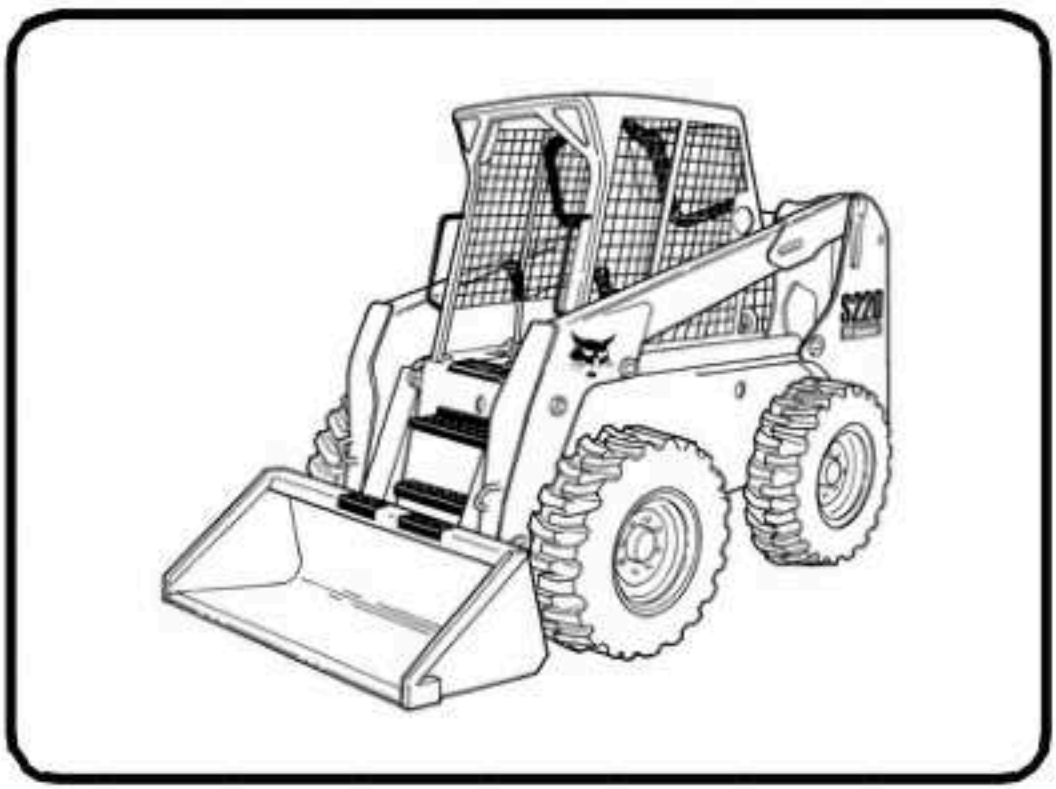
Bobcat®

Service Manual
S220 Skid-Steer Loader

S/N A5GK11001 - A5GK19999
S/N A5GL11001 - A5GL19999



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6986679 (3-09)

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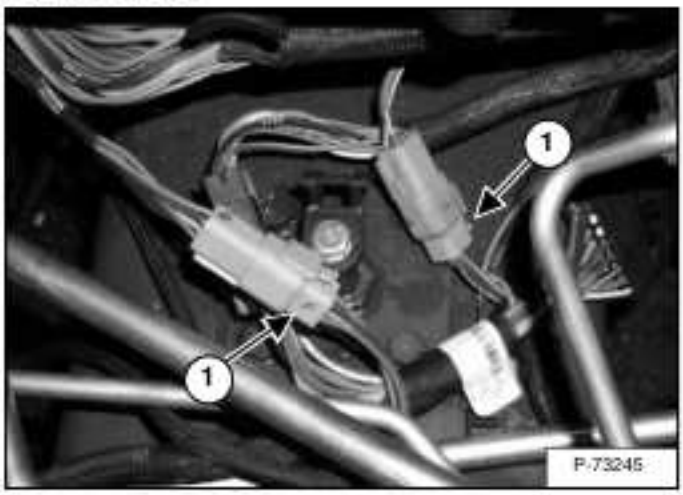
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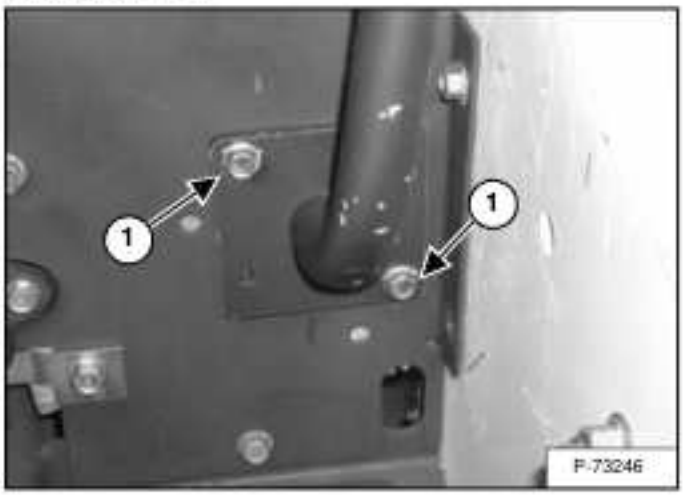
Joystick Mount Removal And Installation

Figure 50-112-8



Disconnect both of the electrical harness connectors from the loader harness (Item 1) **[Figure 50-112-8]**.

Figure 50-112-9

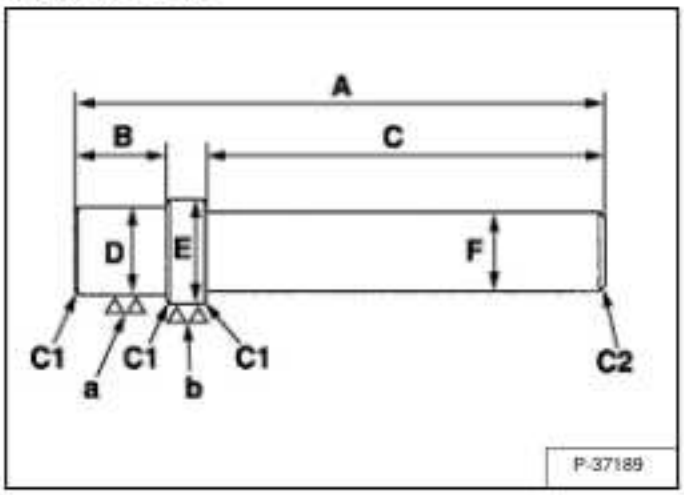


Remove the bolts (Item 1) **[Figure 50-112-9]** to remove the control lever from the loader.

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Idler Gear And Shaft - Servicing

Figure 70-100-13

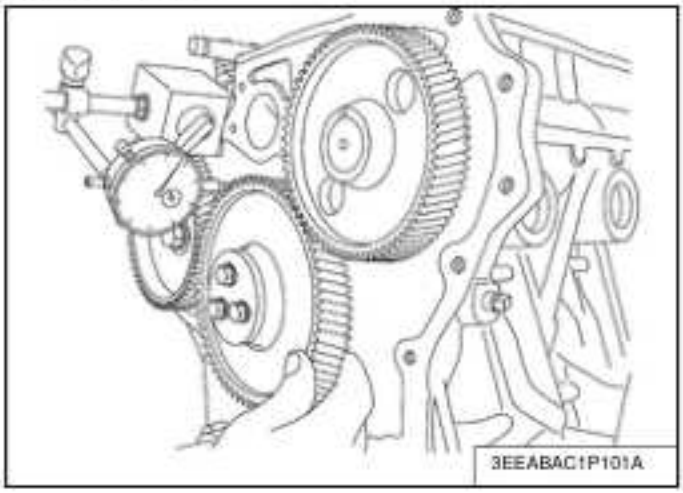


Bushing Replacing Tool
Application: Use to press out and press fit the bushing.
1. For idle gear bushing.

A	7.7165 in. (196 mm)
B	1.476 in. (37,5 mm)
C	5.9055 in. (150 mm)
D	1.8238 - 1.8307 in. dia. (46,325 - 46,500 mm dia.)
E	1.8937 - 1.8927 in. dia. (48,100 - 48,075 mm dia.)
F	0.7874 in. (20 mm)
a	0.00025 in. (0,0000063 mm)
b	0.00025 in. (0,0000063 mm)
C1	Chamfer 0.039 in. (1,0 mm)
C2	Chamfer 0.079 in. (2,0 mm)

Side Clearance

Figure 70-100-14



Set a dial indicator with its tip on the idle gear **[Figure 70-100-14]**.

Measure the side clearance by moving the idle gear to the front and rear.

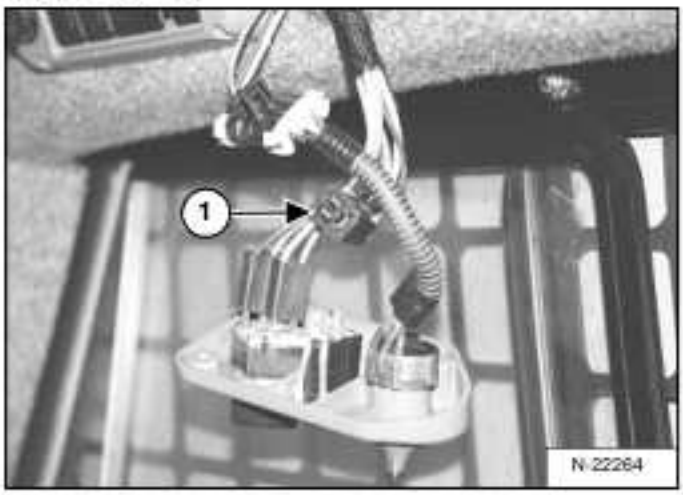
If the measurement exceeds the allowable limit, replace the idle gear collar.

Side clearance	Factory spec.	0.0059 - 0.0118 in. (0,15 - 0,30 mm)
	Allowable limit	0.0354 in. (0,9 mm)

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Electrical System (Cont'd)

Figure 80-30-21

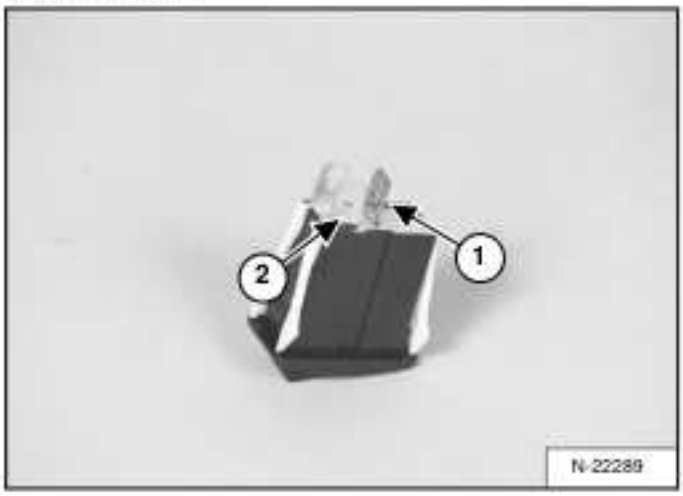


At the loader cab, disconnect the loader harness (Item 1) **[Figure 80-30-21]** from the A/C switch.

Check the harness for voltage. The voltage should be 12 volts.

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

Figure 80-30-22



If there is voltage at the wiring harness, check the A/C switch **[Figure 80-30-22]** for resistance.

With the switch in the OFF position there should be no resistance between any of the three terminals on the A/C switch.

With the switch in the ON position there should be resistance between terminal (Item 1) and terminal (Item 2) **[Figure 80-30-22]**.

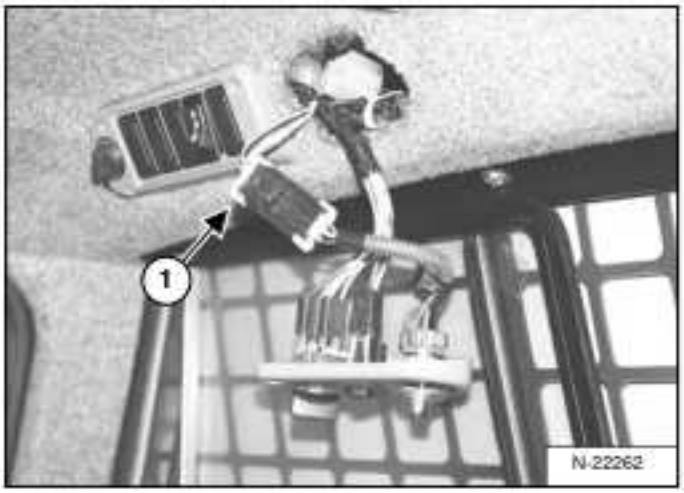
If no resistance value is found, replace the A/C switch.

If a resistance value is found, check the potentiometer.

The potentiometer will effect the A/C system and also effect the operation of the heater.

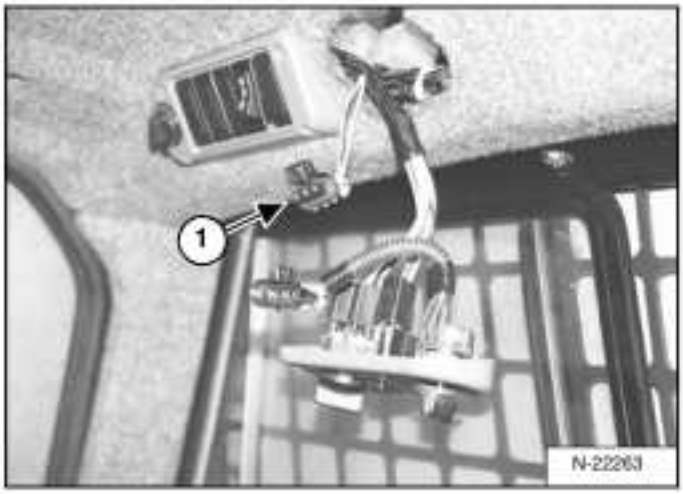
If heater valve does not open, or close, or the A/C does not work, check the potentiometer.

Figure 80-30-23



At the loader cab, disconnect the loader harness (Item 1) **[Figure 80-30-23]** from the potentiometer.

Figure 80-30-24



Check the loader harness (Item 1) **[Figure 80-30-24]** for voltage. The voltage should be 12 volts.

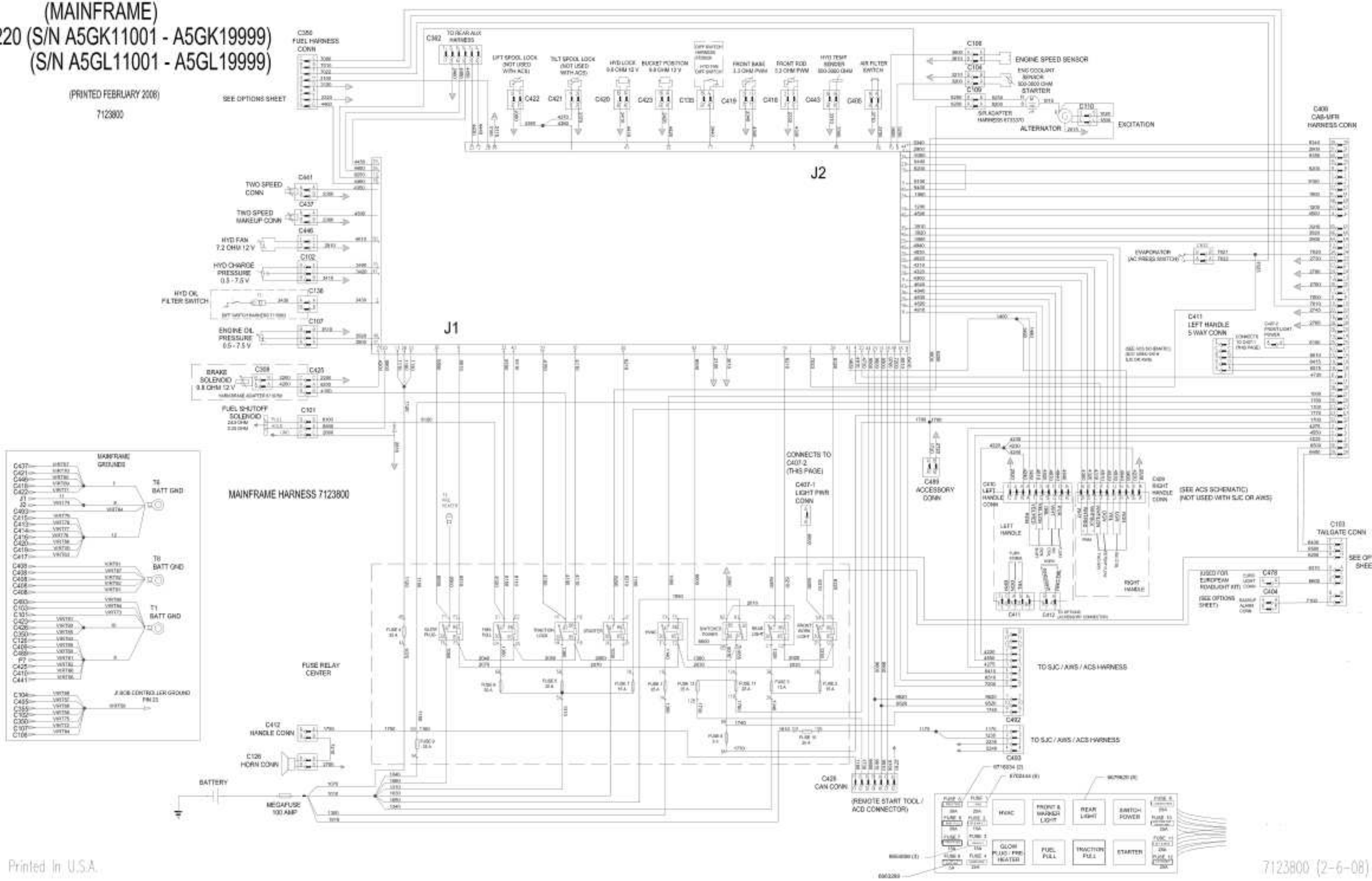
If there is no voltage at the wiring harness, check the harness for broken wires.

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WIRING SCHEMATIC
(MAINFRAME)
S220 (S/N A5GK11001 - A5GK19999)
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