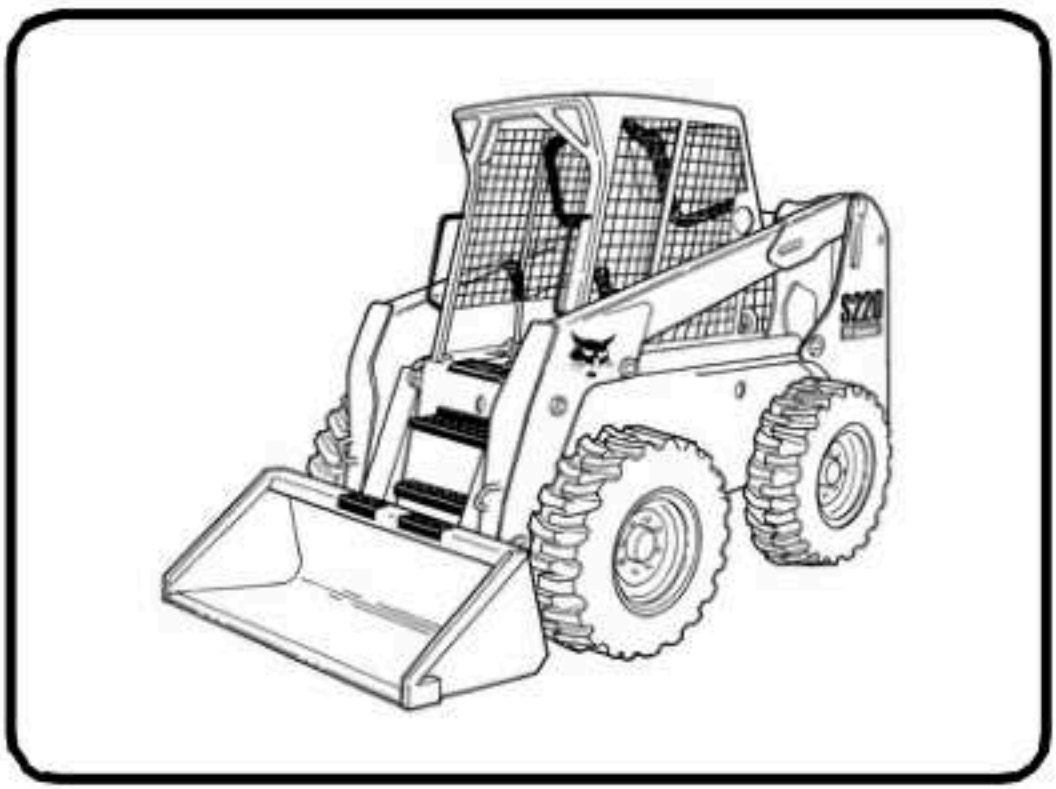
Bobcat®

Service Manual
S220 Skid-Steer Loader

S/N 530711001 & Above
S/N 530811001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS)

6904154 (1-08)

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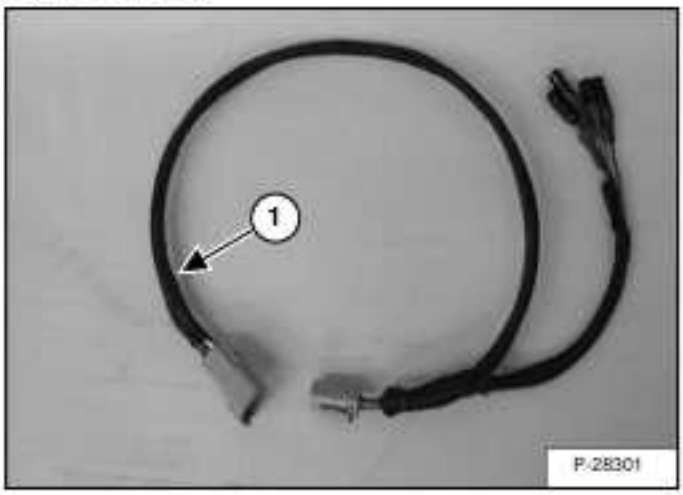
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JOYSTICK CONTROL (CONT'D)

Testing (Earlier Models And Later Models)

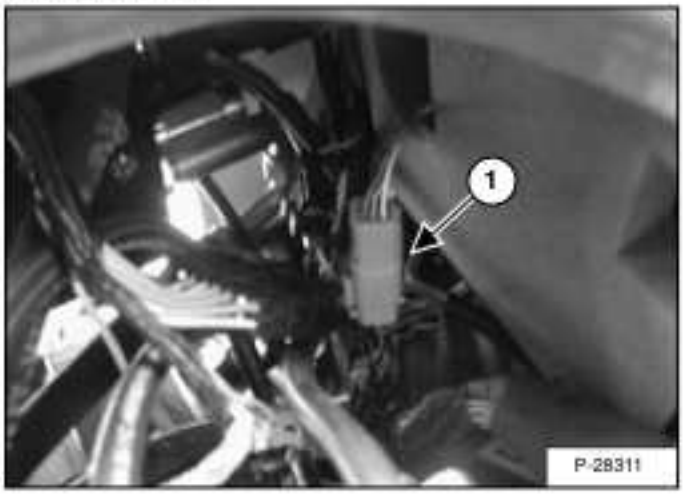
Figure 50-112-1



The tools listed will be needed to do the following procedure:

MEL1608-Joystick Test Harness **[Figure 50-112-1]**
MEL1563 or 6689779-Remote Start Tool
Multimeter

Figure 50-112-2



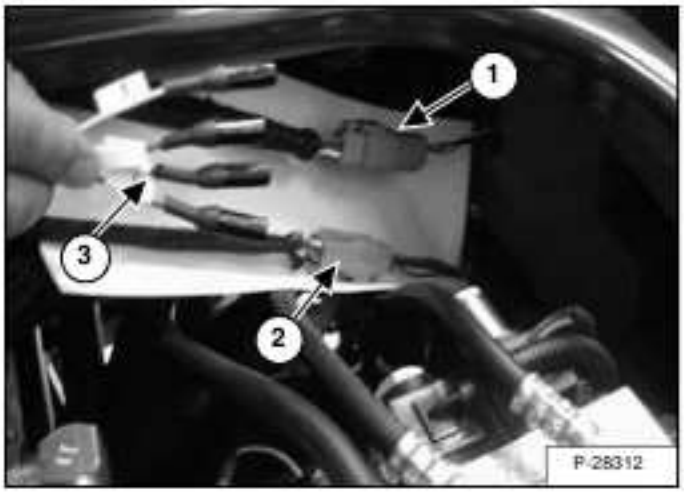
Raise the lift arms and install an approved lift arm support device. (See Installing on Page 10-20-1.)

Raise the operator cab. (See Raising on Page 10-30-1.)

Connect the remote start tool to the loader. (See REMOTE START TOOL KIT-MEL1563 on Page 10-60-1.)

At the back side of the control panel, locate the left joystick wire connector (Item 1) **[Figure 50-112-2]**.

Figure 50-112-3



Disconnect the joystick harness connector (Item 1) from the loader wiring harness (Item 2) **[Figure 50-112-3]**.

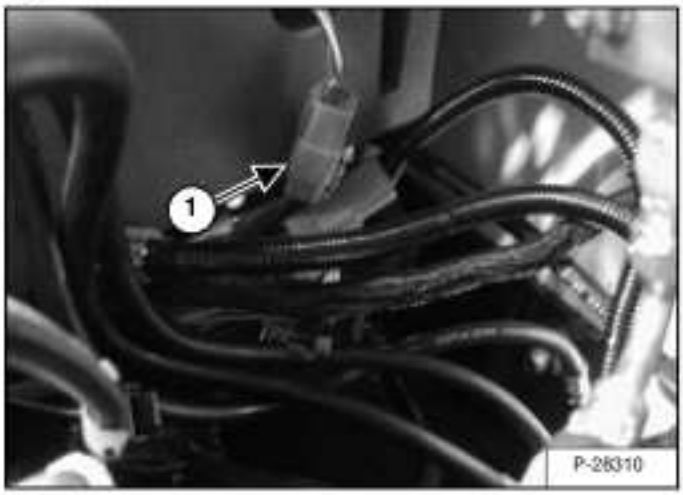
Install the test harness (Item 3) **[Figure 50-112-3]** between the two connectors.

Turn the remote start key to ON position without starting the loader.

Check the voltage between pin 3 and pin 5 on the joystick test harness (Item 3) **[Figure 50-112-3]**.

The voltage should be between 2.45 and 2.55 volts.

Figure 50-112-4



Repeat the procedure at the right joystick wiring harness connector (Item 1) **[Figure 50-112-4]**. (If needed.)

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Troubleshooting (Standard And ACS)

The following troubleshooting chart is provided for assistance in locating and correcting problems which are most common. Many of the recommended procedures must be done by authorized Bobcat Service Personnel only.

⚠ WARNING

AVOID INJURY OR DEATH

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0807

PROBLEM	CAUSE
Back-up alarm will not sound when the operator moves both steering levers in the reverse position.	1, 2, 3, 4, 5, 6, 7
Back-up alarm sounds when steering levers in neutral / forward position.	2, 6, 7

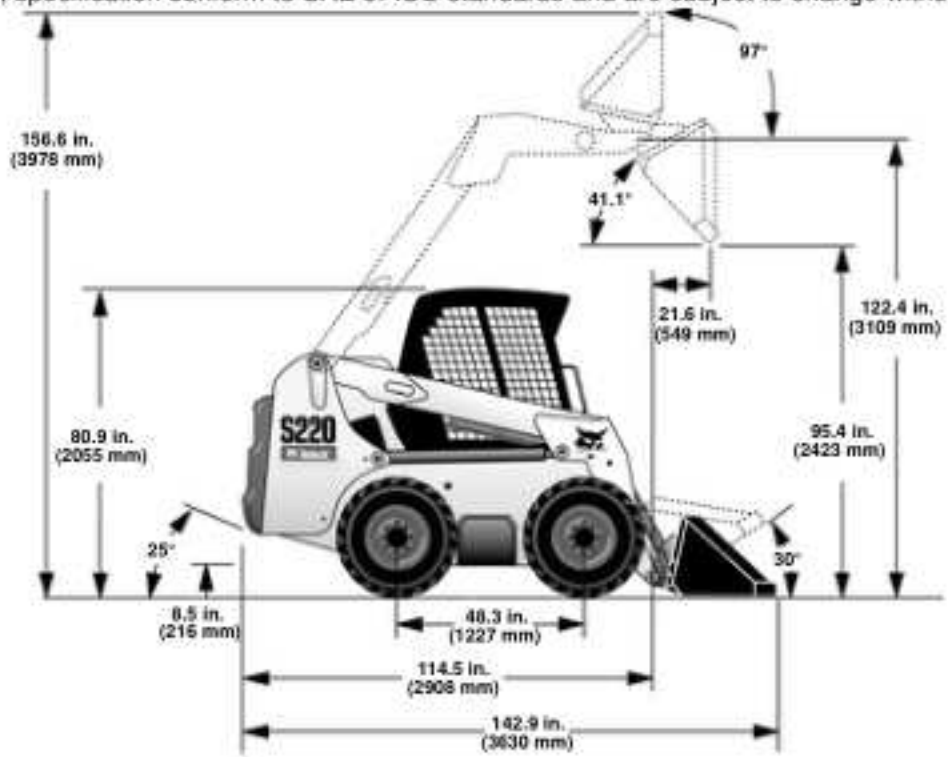
KEY TO CORRECT THE CAUSE
1. The ground connection is not making a good contact. 2. The back-up alarm switches are damaged. 3. The alarm is damaged. 4. The alarm or back-up switch wires are disconnected. 5. Check the fuses. 6. The wiring is damaged. 7. The back-up alarm switches need adjusting.

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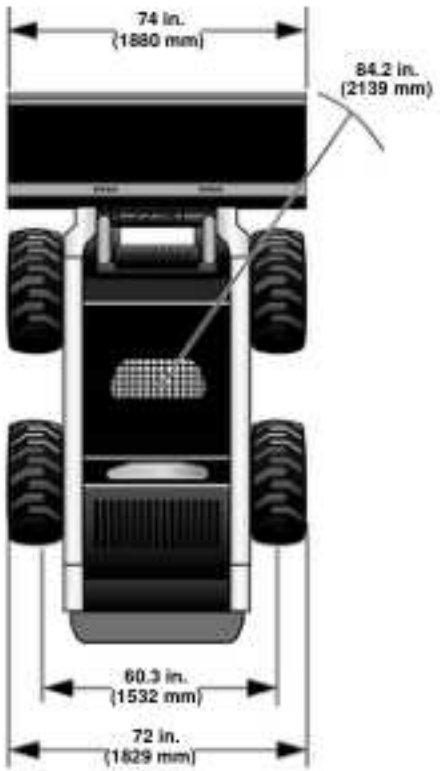
(S220) LOADER SPECIFICATIONS

Dimensions

- Dimensions are given for loader equipped with standard tires and 74 inch Construction & Industrial bucket and may vary with other bucket types. All dimensions are shown in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.
- Where applicable, specification conform to SAE or ISO standards and are subject to change without notice.



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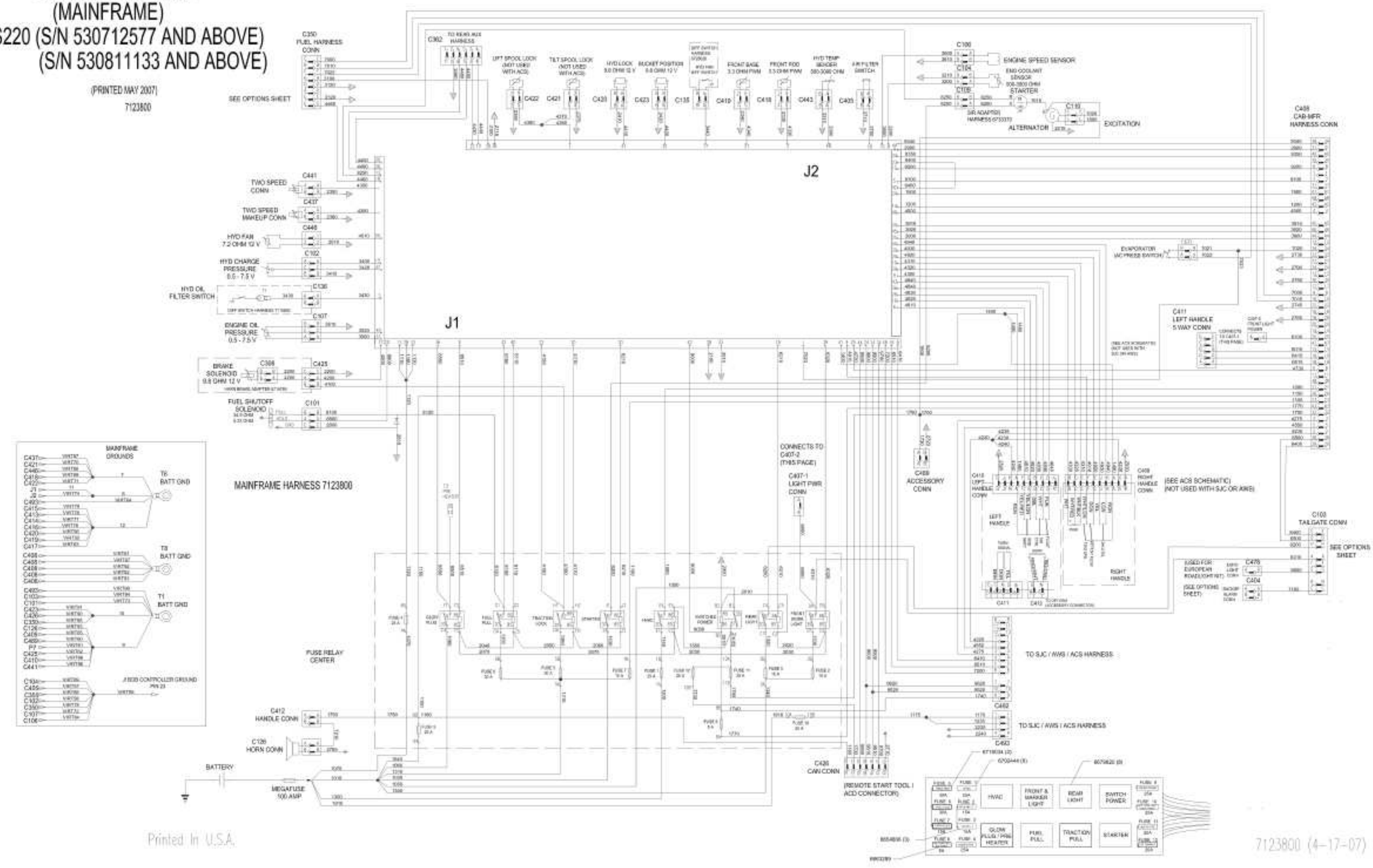
Changes of structure or weight distribution of the loader can cause changes in control and steering response and can cause failure of the loader parts.

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WIRING SCHEMATIC
(MAINFRAME)
S220 (S/N 530712577 AND ABOVE)
(S/N 530811133 AND ABOVE)

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