An Oshkosh Corporation Company

Service and Maintenance Manual

Models

400SC
460SJC

PVC 2007

31217143

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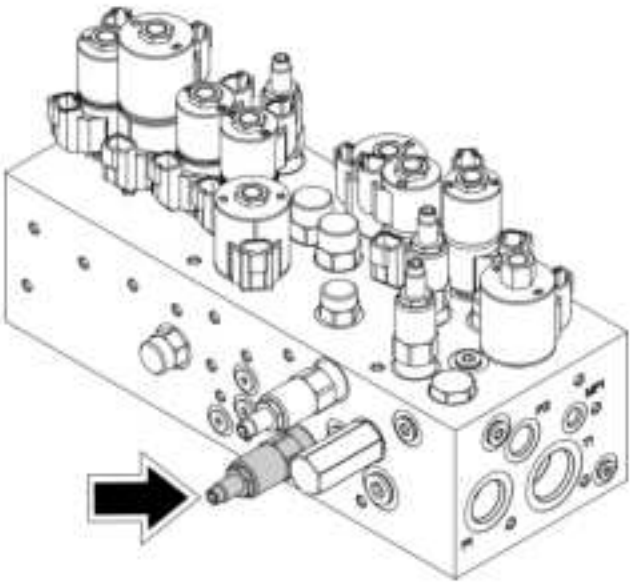
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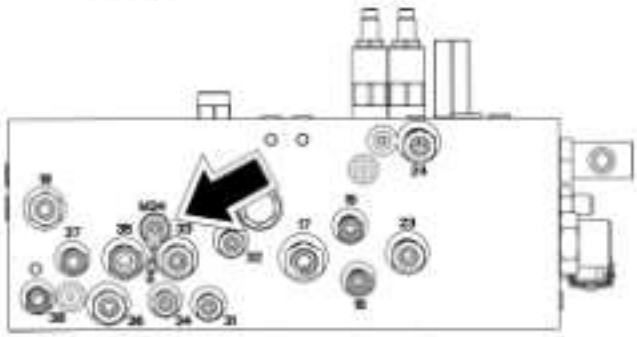
3. If necessary, loosen jam nut and adjust the Boom Swing Relief valve clockwise to increase and counterclockwise to decrease.



NOTE: *Boom Swing Right pressure at port 15 and Boom Swing Left pressure at port 16 is 1600 psi (110 bar); a gauge may be placed there for troubleshooting.*

Jib Lift Down Relief (460SJC)

1. Install a pressure gauge at port M34 of the Main Control Valve capable of reading pressures up to 3000 psi (207 Bar)

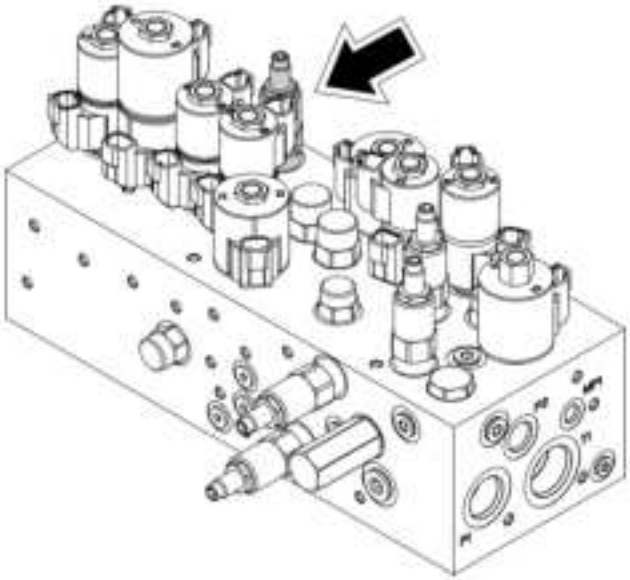


BOTTOM OF MAIN CONTROL VALVE

2. Activate Jib Lift Down function continuously at end of stroke. Observed pressure should be 1200 ± 50 psi (83 ± 4 Bar).



3. If necessary, loosen jam nut and adjust the Jib Lift Down Relief valve clockwise to increase and counterclockwise to decrease.



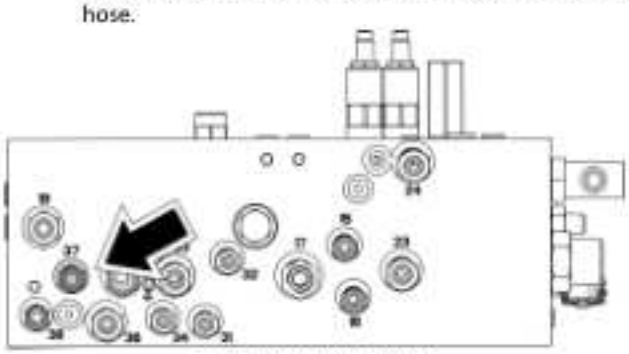
Platform Level Up Relief

The Platform Level Up relief is pre-set and does not normally need to be checked or adjusted. If necessary, the following procedure may be utilized for trouble shooting purposes:

1. Lift the main boom up enough to allow the platform to be fully leveled up.
2. Activate Level Up to end of stroke.



3. Remove hose from Level Up port on main control valve (Port 37) - "T" a pressure gauge capable of reading pressures up to 4000 psi (275 bar) to this port. Reconnect hose.



BOTTOM OF MAIN CONTROL VALVE

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Testing & Evaluation

Refer to Troubleshooting if the Load Sensing System fails to meet these guidelines.

1. Connect the JLG Analyzer.
2. Level the Platform. The platform should be approximately level for analysis, or the guidelines below will not be applicable. Level the platform from Ground Control (if necessary) to within ±5 degrees.
3. Observe the Empty Platform Weight. Proceed to the DIAGNOSTICS, PLTLOAD sub-menu and observe the measured platform load. All tools, debris, and customer-installed devices shall be removed during evaluation. Ideally, the PLTLOAD should be zero but can vary ±15lb (±7kg). Further, the reading should be stable and should not vary by more than ±2lb (±1kg) (unless there is heavy influence from wind or vibration).
4. Use the Technician's Weight to Evaluate. The technician should enter the platform and record the PLTLOAD reading while standing in the center of the platform.
5. Confirm Control System Warnings and Interlocks. Using the keyswitch, select Platform Mode and power-up. Start the vehicle's engine and ensure that all controls are functional and the Load Sensing System's Overload Visual and Audible Warnings are not active. Simulate an Overload by unplugging the Shear Beam Load Cell. The Overload Visual Warning should flash, and the Audible Warning (at Platform and Ground) should sound for 5 seconds On, and 2 seconds Off. With the engine running, all control should be prevented. Cycle the Platform EMS to stop the engine and then power-up again. The Overload Visual and Audible Warning should continue. Confirm that controls are responsive when using the Auxiliary Power Unit for emergency movement. Reconnect the Load Cell. The Overload Visual and Audible Warnings should cease and normal control function should return. Switch the vehicle's keyswitch to Ground Mode and repeat the above procedure. The Overload Visual Warning at the Ground Controls should flash, and the Audible Warning (at Platform and Ground) should sound for 5 seconds On, 2 seconds Off. However, the controls should remain functional when using the engine and the Auxiliary Power Unit (if the Control System's MACHINE SETUP, LOAD is set to "2=CUTOUT PLT". If set to "3=CUTOUT ALL", then Ground Controls will be prevented when using the engine as in the platform).
6. Confirm Control System Capacity Indication (optional for vehicles with Dual Capacity Ratings). For vehicles equipped with a Capacity Select switch on the Platform Console Box, it is necessary to examine an additional interface between the Load Sensing System and the Control System. Using the keyswitch, select Platform Mode and power-up. If necessary, put the boom in the transport position (completely stowed) and center the Jib Plus (if equipped). Place the Capacity Select switch in the unrestricted position and ensure that the proper indicator illuminates on the Platform Console Box. Plug the JLG Analyzer into the Analyzer connection and proceed to the DIAGNOSTICS, SYSTEM submenu. Ensure that the CAPACITY displays indicate OFF. Place the Capacity Select switch in the unrestricted position (if so equipped) and ensure that the proper indicator illuminates on the Platform Console Box (but does not flash). For vehicles with unrestricted capacity, ensure that the unrestricted CAPACITY display indicates ON but the restricted CAPACITY indicates OFF. For vehicles with restricted capacity, ensure that the unrestricted CAPACITY display indicates OFF but the restricted CAPACITY indicates ON.
7. Confirm Load Sensing System Performance with Calibrated Weights. Operate the vehicle from Ground Control and place the boom in the transport position (fully stowed) for safety. Plug the JLG Analyzer into the control system connection and proceed to the DIAGNOSTICS, PLTLOAD display. Place 500lb (230kg) in the platform and ensure that PLTLOAD is with ±5% of the actual weight. For Dual Capacity vehicles, do the same for the alternate capacity (unrestricted or restricted).

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7.8 ELECTRICAL INSTALLATION

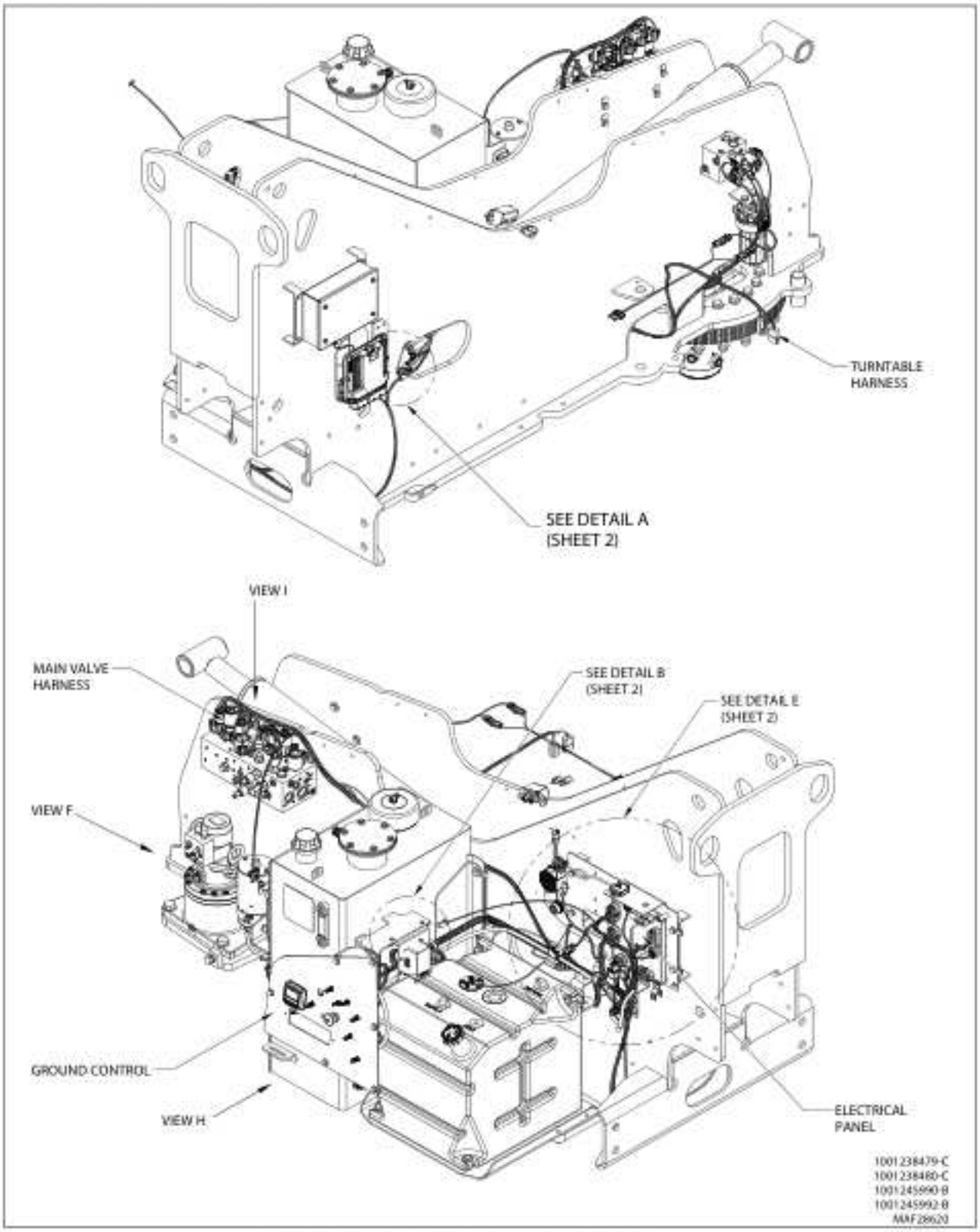
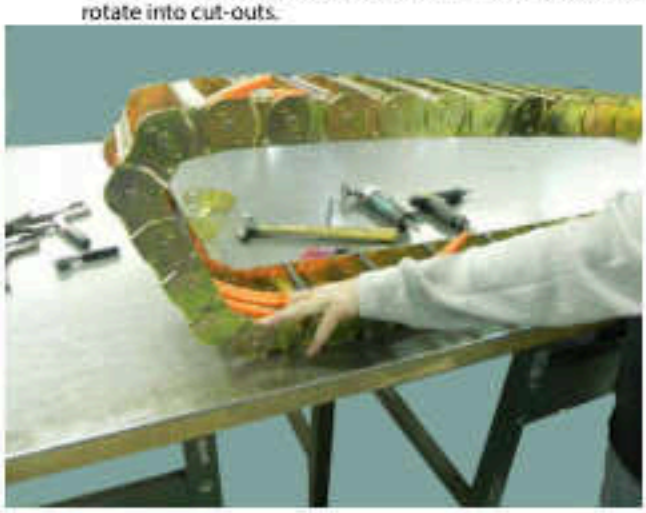
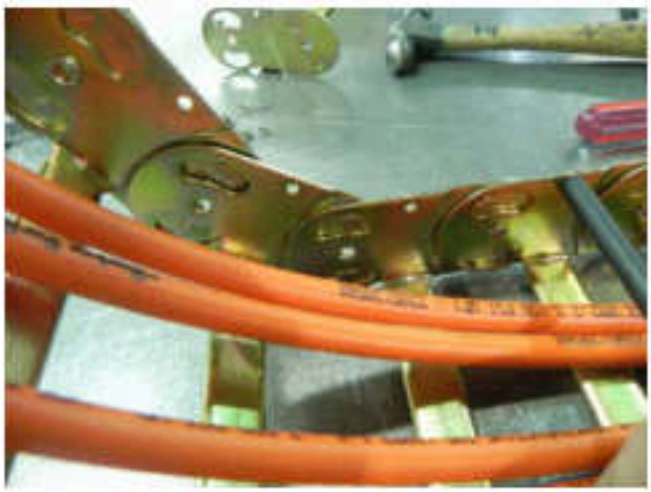


Figure 7-18. Electrical Installation - Sheet 1 of 6

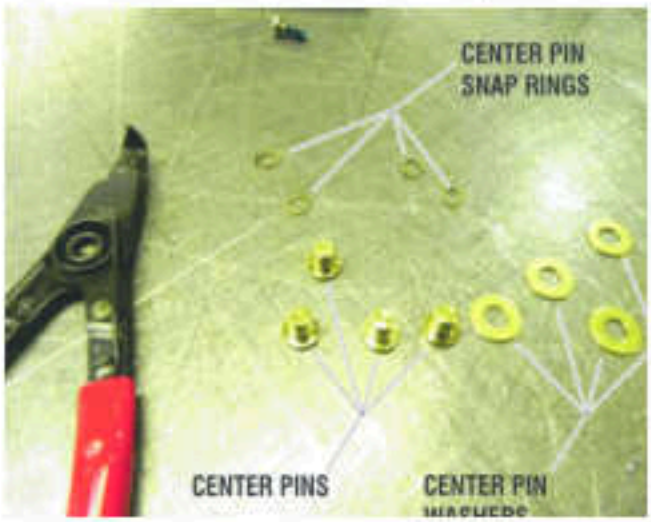
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4. Pull moving end over track so new connection is positioned in curve of powertrack. Round half-shears will rotate into cut-outs.





5. Parts shown below connect new link to powertrack.



6. Push pin through center hole then slide washer on pin.





7. Install snap ring in groove on pin. Repeat pin installation steps for all center holes with rivets removed.



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SECTION 5. HYDRAULICS AND HYDRAULIC SCHEMATICS

5.1 O-RING LUBRICATION

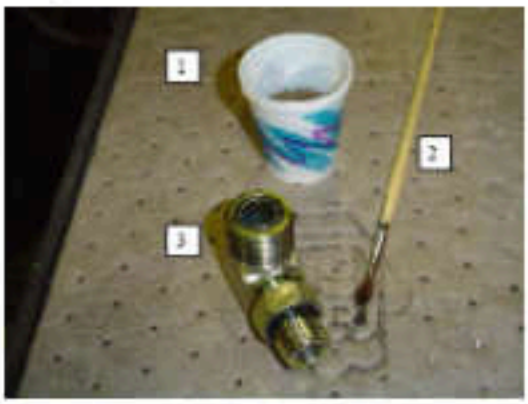
All fittings with O-rings must be lubricated with hydraulic oil before assembly using one of the following four methods:

- Cup and Brush
- Dip
- Spray

Cup and Brush

Tools needed:

- Small container for hydraulic oil
- Small paint brush



1. Hold fitting in one hand and dip brush into container with other hand. Remove excess hydraulic oil from brush so an even film of oil is applied to O-ring.



2. Hold fitting over hydraulic oil container and brush an even film of oil around entire O-ring in fitting. Make sure O-ring is completely saturated.



3. Turn over fitting and repeat previous step to O-ring on other side of fitting. Make sure entire O-ring is coated with hydraulic oil.



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