An Oshkosh Corporation Company

Service and Maintenance Manual

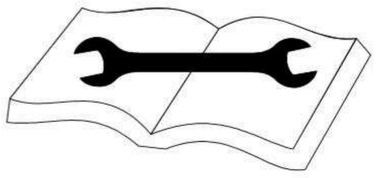
Model

1030S
1100SJ

3121755

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ANSI



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c. Loosen the fly boom extend Adjustment Nuts shown in Figure 4-14., Fly Boom Extend Rope Adjusters, moving them a distance equal to twice what the section needs to move to be within tolerance. (E.g. If the section must move ½ in. (12 mm) to fall within the dimension shown, loosen the nut such that it moves 1 in. (25 mm) closer to the exposed end of the adjustment stud).

d. Extend the boom assembly such that the platform moves 4-5 ft. (1.2-1.5 m) from the fully retracted position.

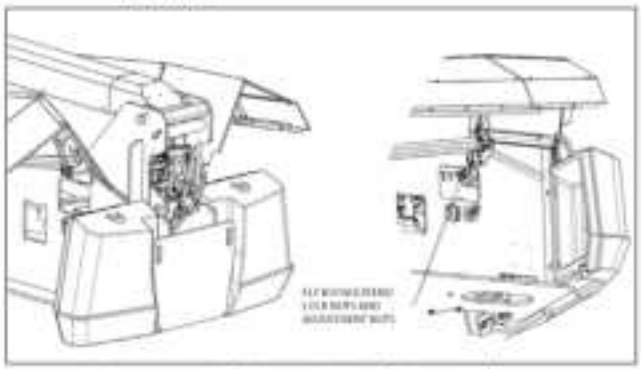


Figure 4-14. Fly Boom Extend Rope Adjusters

e. Tighten the Fly Boom Retract Adjustment Nuts shown in Figure 4-15., Fly Boom Retract Rope Adjusters, moving them a distance equal to what the section needs to move to be within tolerance. (E.g. If the section must move ½ in. (12 mm) to fall within the dimension shown, tighten the nut such that it moves ½ in. (12 mm) farther from the exposed end of the adjustment stud).

f. Fully retract the boom.

g. To remove slack resulting from the adjustment in step "c", tighten the Fly Boom Extend Adjustment Nuts shown in Figure 4-14., Fly Boom Extend Rope Adjusters until they contact the rope mount plate.

h. Extend the boom assembly such that the platform moves 4-5 ft. (1.2-1.5 m), then fully retract.

i. Repeat step "h" three times to equalize rope position.

3. If the section needs to be Extended (measured dimension less than dimension shown in Figure 4-12., Fully Retracted Boom Section Position Dimensions):

a. Remove any covers necessary to access the wire rope adjustment nuts. See Figure 4-13., Adjuster Covers.

b. Remove lock nuts from wire rope adjustment studs.

c. Extend the boom assembly such that the platform moves 4-5 ft. (1.2-1.5 m) from the fully retracted position.

d. Loosen the fly boom retract Adjustment Nuts shown in Figure 4-15., Fly Boom Retract Rope Adjusters, moving them a distance equal to twice what the section needs to move to be within tolerance. (E.g. If the section must move ½ in. (12 mm) to fall within the dimension shown, loosen the nut such that it moves 1in. (25 mm) closer to the exposed end of the adjustment stud).

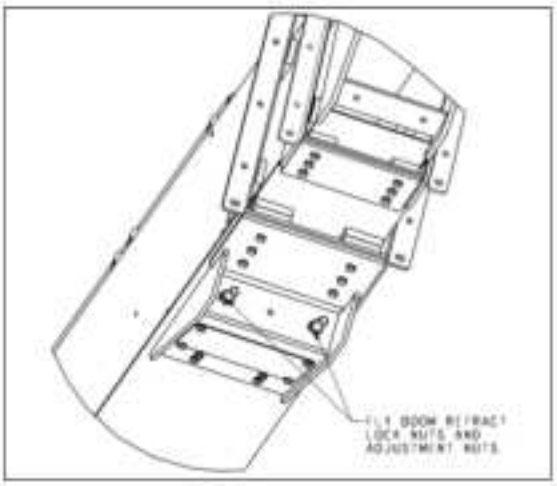


Figure 4-15. Fly Boom Retract Rope Adjusters

e. Retract the boom assembly such that the platform moves 2-3 feet (0.6-0.9 m) from the previous extended position in step "c".

f. Tighten the Fly Boom Extend Adjustment Nuts shown in Figure 4-14., Fly Boom Extend Rope Adjusters, moving them a distance equal to what the section needs to move to be within tolerance. (E.g. If the section must move ½ in. (12mm) to fall within the dimension shown, tighten the nut such that it moves ½ in. (12 mm) farther from the exposed end of the adjustment stud).

g. To remove slack resulting from the adjustment in step "d", tighten the Section #3 Retract Adjustment Nuts shown in Figure 4-15., Fly Boom Retract Rope Adjusters until they contact the rope mount plate.

h. Extend the boom assembly such that the platform moves 4-5 ft. (1.2-1.5 m), then fully retract.

i. Repeat step "h" three times to equalize rope position.

4. Fully retract the boom sections.

5. Verify that the exposed boom section dimensions meet the dimension and tolerance as shown in Figure 4-12., Fully Retracted Boom Section Position Dimensions.

a. If Fly Boom still does not fall within the dimension and tolerance of Figure 4-12., Fully Retracted Boom Section Position Dimensions, repeat the steps outlined in 3. Fly Boom Repositioning.

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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 ±15lbs (± 7kg). Further, the reading should be stable and should not vary by more than ±2lbs (±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 500lbs (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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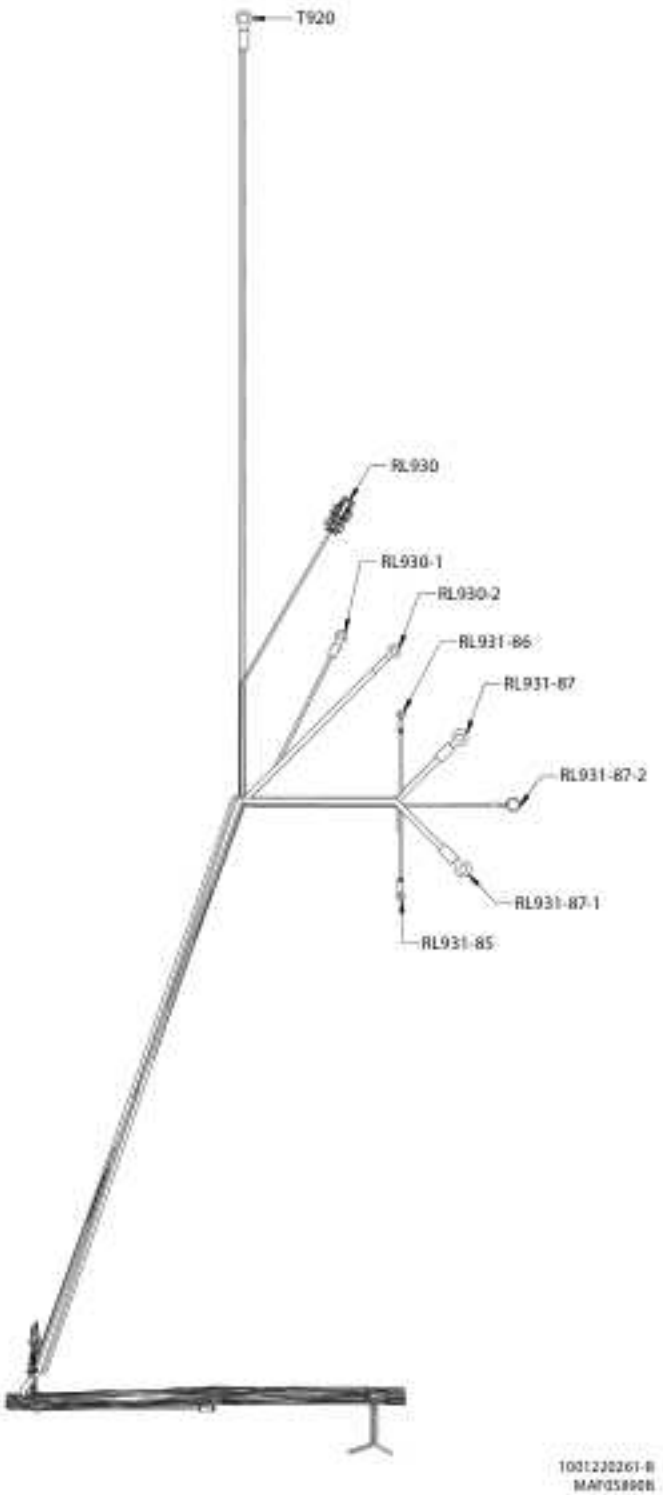


Figure 7-104. Engine Harness - Sheet 9 of 14

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BRAD HARRISON / PHOENIX CONTACT M12

The connector uses gold contact material to resist corrosion and an o-ring seal for moisture integrity. If dielectric grease is mistakenly applied to this connector system, the low-force contacts cannot displace the grease to achieve electrical contact. Once contaminated, there is no practical way to remove the dielectric grease (replacement of female contacts required). The JLG Load Sensing System and Rotary Angle Sensors are examples of components with the M12 connector system.





AMP JUNIOR TIMER

This type of connector uses back-seals for moisture integrity. However, the low-force contacts cannot displace dielectric grease and create electrical contact. It is possible to use solvents (i.e. contact cleaner or mineral spirits) for the removal of improperly applied dielectric grease. The EMR2 engine control module from Deutz employs this connector system (for example).



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i. Link Removal: Remove hub to disengage link.

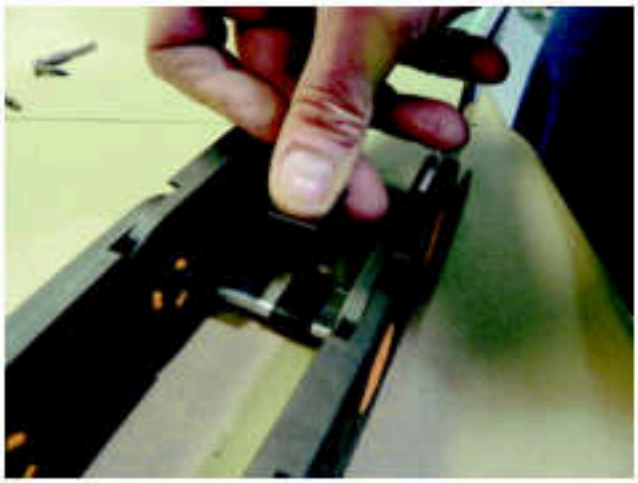


j. When installing bar align cavities in bar with raised detials in link.



k. Install separator by snapping over flat bar.





l. Screw is 8-32 x 0.75 button torx socket head with blue locking patch use t-20 torx bit.



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