An Oshkosh Corporation Company

Service and Maintenance Manual

Models

400SC
460SJC

PVC 2001

31215019

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SECTION NO.	TITLE	PAGE NO.
SECTION A - INTRODUCTION - MAINTENANCE SAFETY PRECAUTIONS		
A	General	A-1
B	Hydraulic System Safety	A-1
C	Maintenance	A-1
SECTION 1 - SPECIFICATIONS		
1.1	Operating Specifications	1-1
1.2	Capacities	1-2
1.3	Engine Data	1-2
1.4	Hydraulic Oil	1-3
1.5	Critical Stability Weights	1-4
1.6	Maintenance and Lubrication	1-7
1.7	Threadlocking Compound	1-11
1.8	Torque Charts	1-12
	SAE Fastener Torque Chart	1-12
	SAE Fastener Torque Chart (Continued)	1-13
	SAE Fastener Torque Chart (Continued)	1-14
	SAE Fastener Torque Chart (Continued)	1-15
	SAE Fastener Torque Chart (Continued)	1-16
	SAE Fastener Torque Chart (Continued)	1-17
	Metric Fastener Torque Chart	1-18
	Metric Fastener Torque Chart (Continued)	1-19
	Metric Fastener Torque Chart (Continued)	1-20
	Metric Fastener Torque Chart (Continued)	1-21
SECTION 2 - GENERAL		
2.1	Machine Preparation, Inspection and Maintenance	2-1
	General	2-1
	Preparation, Inspection, and Maintenance	2-1
	Pre-Start Inspection	2-1
	Pre-Delivery Inspection and Frequent Inspection	2-1
	Annual Machine Inspection	2-1
	Preventive Maintenance	2-1
2.2	Service and Guidelines	2-2
	General	2-2
	Safety and Workmanship	2-2
	Cleanliness	2-2
	Components Removal and Installation	2-2
	Component Disassembly and Reassembly	2-3
	Pressure-Fit Parts	2-3
	Bearings	2-3
	Gaskets	2-3
	Bolt Usage and Torque Application	2-3
	Hydraulic Lines and Electrical Wiring	2-3
	Hydraulic System	2-3
	Lubrication	2-3
	Battery	2-3
	Lubrication and Servicing	2-3
2.3	Lubrication and Information	2-4
	Hydraulic System	2-4
	Hydraulic Oil	2-4
	Changing Hydraulic Oil	2-4
	Lubrication Specifications	2-4
2.4	Cylinder Drift	2-4
	Theory	2-4
	Cylinder Leakage Test	2-5
	Cylinder Thermal Drift	2-5

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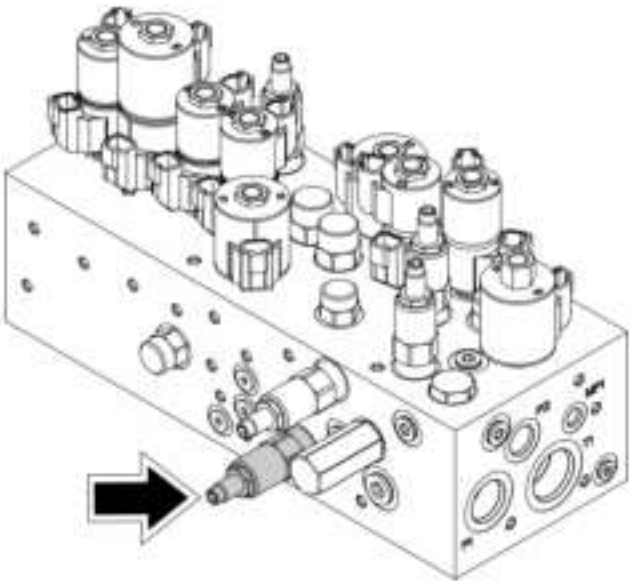
SECTION NO.	TITLE	PAGE NO.
2.5	Pins and Composite Bearing Repair Guidelines	2-5
2.6	Welding on JLG Equipment	2-5
	Do the Following When Welding on JLG Equipment	2-5
	Do Not Do the Following When Welding on JLG Equipment	2-5
SECTION 3 - CHASSIS & TURNTABLE		
3.1	Chassis Components and Servicing	3-1
	Track Tension	3-2
	Replace Rubber Track	3-3
	Replace Steel Track	3-5
	Track Shoes	3-8
	Track Pin	3-8
	Sprocket Wear	3-8
3.2	Chassis Tilt Indicator System	3-8
3.3	Swing Drive Hub	3-8
	Brake Test	3-9
	Spring Checking Procedure	3-9
	Brake Leak Repair Procedure	3-10
	Roll and Leak Test	3-10
	Tightening and Torquing Bolts	3-11
	Lubrication Information	3-12
	Motor Removal	3-12
	Input Brake Disassembly	3-14
	Main Disassembly	3-15
	Housing-Shaft Disassembly	3-16
	Carrier Disassembly	3-17
	Carrier Assembly	3-18
	Housing - Shaft Assembly	3-20
	Main Assembly	3-21
	Motor and Brake Assembly	3-23
	Motor Control Valve Installation	3-25
3.4	Swing Motor	3-34
	Disassembly and Inspection	3-34
	Assembly	3-41
	One Piece Stator Construction	3-48
3.5	Swing Bearing	3-49
	Swing Bearing Wear Tolerance	3-49
	Turntable Bearing Mounting Bolt Condition Check	3-50
	Swing Bearing Removal	3-53
	Swing Bearing Installation	3-53
3.6	Setting Swing Gear Backlash	3-54
3.7	Swing Bearing Torque Values	3-55
3.8	Rotary Coupling	3-57
3.9	Generator and Pulley	3-62
3.10	Generator	3-68
	Maintenance Schedule	3-68
	Overload Protection	3-68
	Inspecting Brushes, Replacing Brushes and Cleaning Slip Rings	3-68
	Generator Disassembly and Assembly	3-70
	Lead Connection List for Generator	3-78
3.11	Deutz Engine (D2011L03) - T4i	3-79
	Checking Oil Level	3-83
	Changing Engine Oil	3-83
	Changing Oil Filter	3-84
	Replace Fuel Filter	3-84
	Clean Fuel Strainer	3-85
	Deutz EMR 2	3-86

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SECTION NO.	TITLE	PAGE NO.
3.12	Deutz Engine (D2.9L4) - T4f	3-98
	Check Oil Level	3-102
	Change Engine Oil	3-102
	Change Oil Filter	3-103
	Change Fuel Filters	3-103
3.13	Deutz Engine (D2.9L4) - Stage V	3-104
	General Maintenance	3-108
	Check Oil Level	3-108
	Replacing Engine Oil	3-108
	Replacing the Oil Filter	3-108
	Replacing the Fuel Filters	3-109
	Deutz EMR5	3-110
3.14	HRC Engine Emission Characteristics	3-137
	Terminology for Removing Soot	3-137
3.15	Diesel Particulate Filter (If Equipped)	3-137
	Standstill Cleaning	3-137
	Maintenance Standstill Cleaning Initiation Methods	3-138
	Canceling Maintenance Standstill	3-138
	Unsuccessful Cleaning Event	3-138
	DPF Filter Replacement due to Ash Load	3-139
3.16	Engine Fault Codes	3-141
SECTION 4 - BOOM & PLATFORM		
4.1	Boom Systems	4-1
	Platform Control Enable System	4-1
	Platform Load Sensing System (LSS)	4-1
	Above Elevation (Above Horizontal) - Drive Speed Cutback System	4-1
	Transport Position Interlock System (CE Only)	4-1
	Function Speed Control System	4-1
	Emergency Decent System	4-1
	Main Boom Lift End of Stroke Damping	4-2
	Jib Lift End of Stroke Damping	4-2
	Machine Safety Override (MSSO) - (CE Market Only)	4-2
	Transport Position Sensing System	4-2
	Dual Capacity Selection and Indicator System	4-6
4.2	Platform	4-8
	Platform/Support Removal	4-8
	Platform/Support Installation	4-9
4.3	Main Boom Powertrack	4-11
	Removal	4-11
	Installation	4-11
	Powertrack Maintenance	4-13
4.4	Boom Maintenance	4-22
	Removal - 400SC	4-22
	Removal - 460SJC	4-26
	Disassembly	4-30
	Inspection	4-32
	Assembly	4-32
	Installation	4-33
4.5	Jib - 460SJC	4-33
4.6	Boom Cleanliness Guidelines	4-34
4.7	Boom Shimming Procedure	4-35

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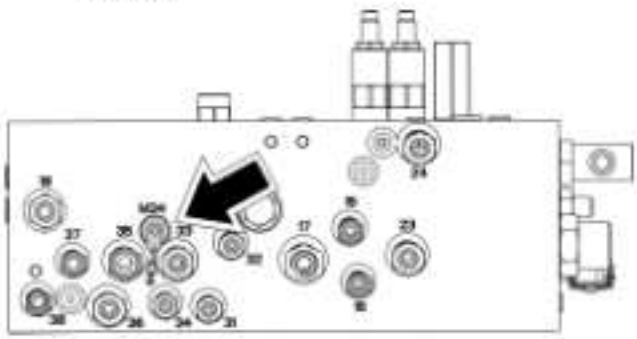
3. If necessary, loosen jam nut and adjust the Boom Swing Relief valve clockwise to increase and counterclockwise to decrease.



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)

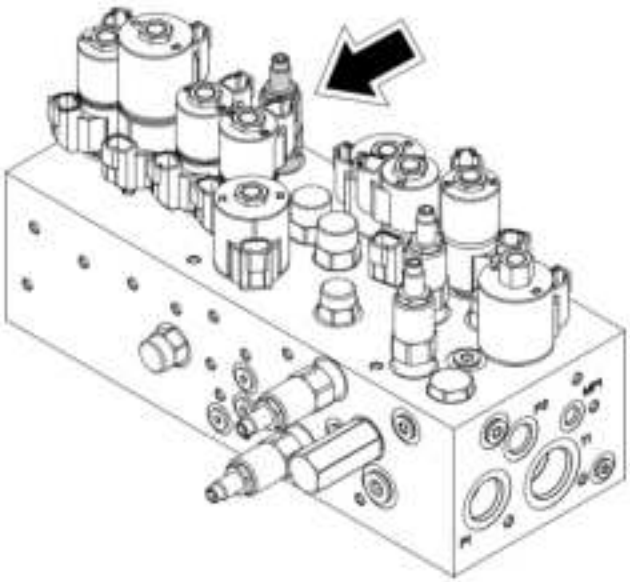


BOTTOM OF MAIN CONTROL VALVE

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.



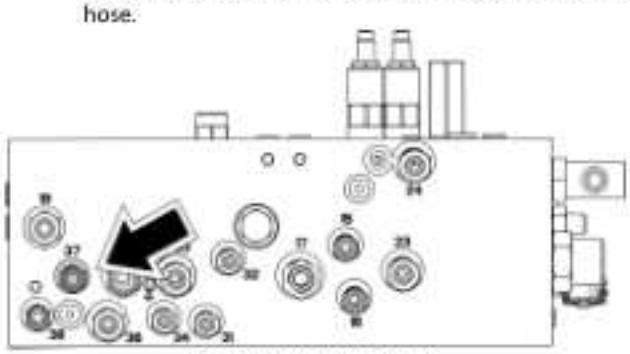
Platform Level Up Relief

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

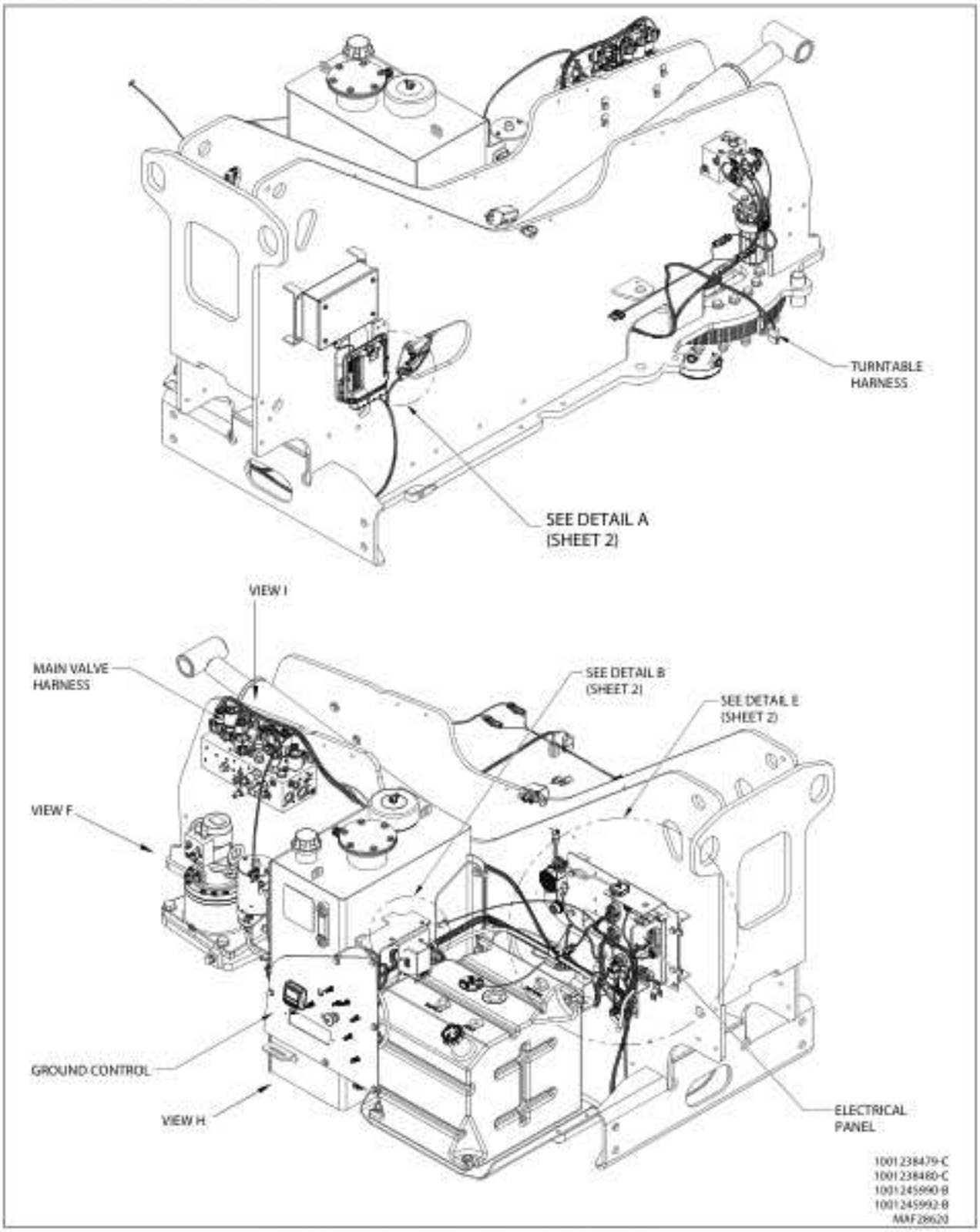
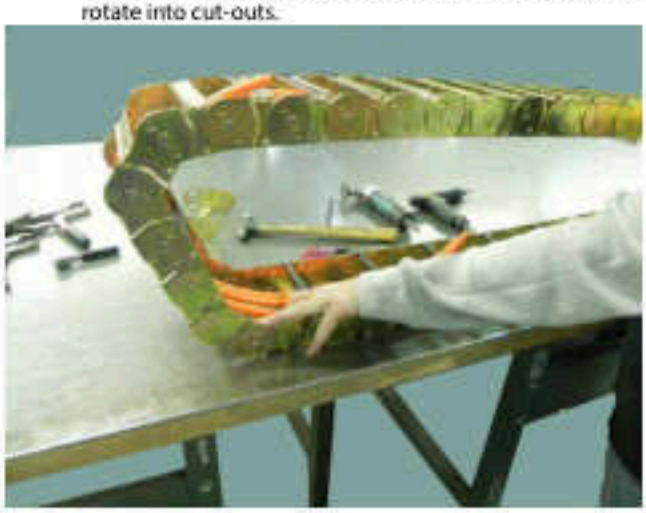
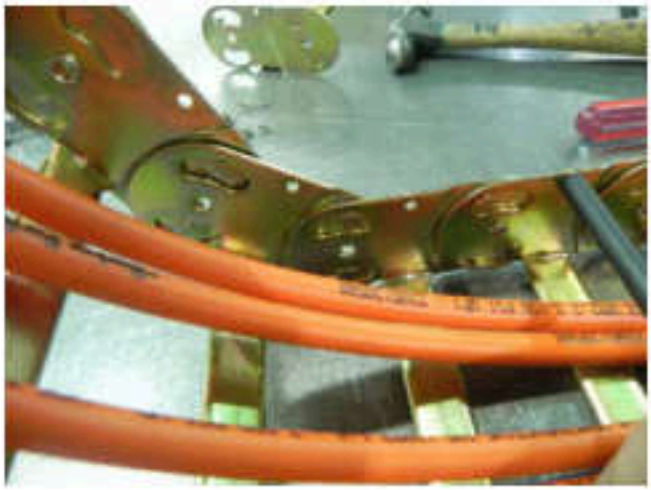


Figure 7-18. Electrical Installation - Sheet 1 of 6

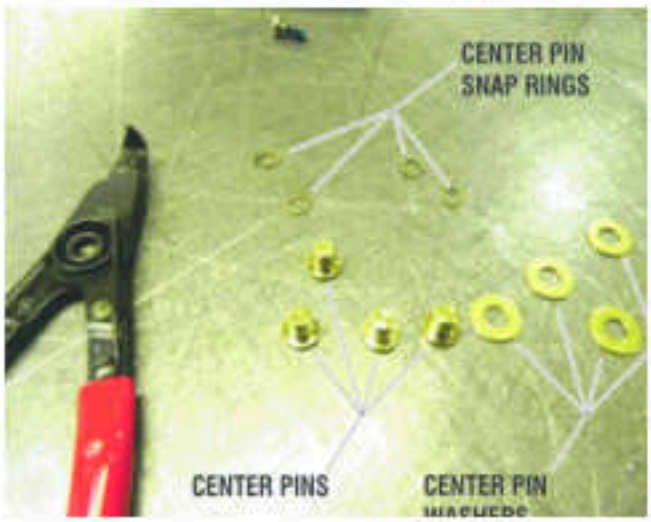
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4. Pull moving end over track so new connection is positioned in curve of powertrack. Round half-shears will rotate into cut-outs.





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

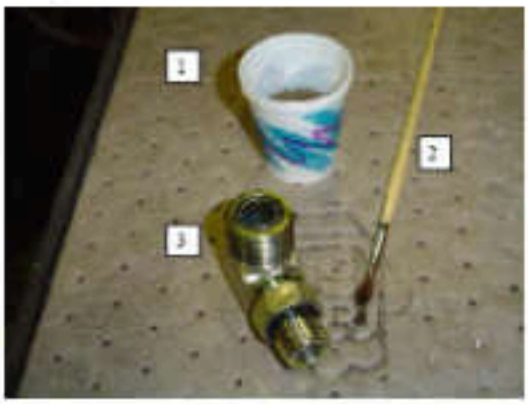
All fittings with O-rings must be lubricated with hydraulic oil before assembly using one of the following four methods:

- 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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