An Oshkosh Corporation Company

Service & Maintenance Manual

Model
80SL

3121325

March 24, 2011

ANSI

An Oshkosh Corporation Company

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SECTION 1. SPECIFICATIONS

1.1 OPERATING SPECIFICATIONS

Table 1-1. Operating Specifications

Parameter	80SL
Maximum Working Height: with outriggers deployed with outriggers stowed	 87 ft (26.5 m) 72 ft (22 m)
Maximum Platform Height: with outriggers deployed with outriggers stowed	 80 ft (24.5 m) 65 ft (19.8 m)
Turning Radius : Inside Outside	 14.5 ft (4.4 m) 20.3 ft (6.1 M)
Wheelbase	12.8 ft (3.9 m)
Maximum Work Load (Capacity) - Main Platform/Platform Extension	1650 lbs (750 kg)
Maximum Occupants	4
Tools and Equipment	1300 lbs (590 kg)
Maximum Horizontal Manual Side Force	200 lb force (890 N)
Tilt Sensor Setting	3°
Maximum Operating Wind Speed	28 mph (12.5 m/s)
Gross Machine Weight (Approximate)	36,960 lbs (16,765 kg)
Drive Speed (slow)	0.4 mph (0.6 ft/sec) (0.2 m/s)
Drive Speed (fast)	1.9 mph (0.86 m/s)
Sideslope (Machine Stowed)	5°
Gradeability (MachineStowed)	25%
Lift Speed (no load)	125 sec
Lowering Speed	80 sec
Maximum Operating Hydraulic Pressure	3046 psi (210 bar)
Power Supply	Diesel Engine
Maximum Ground Bearing Pressure: Outriggers Tires	 128 psi (9 kg/cm^2) 85 psi (6 kg/cm^2)
Maximum Outrigger Pad Load	17,020 lbs (7720 kg)
Maximum Tire Load Rating	14,595 lbs (6620 kg)
Electrical System Voltage	24 V
Ground Clearance	10.8 in. (27.4 cm)

1.2 DIMENSIONAL DATA

Table 1-2. Dimensional Data

Parameter	80SL
Machine Height (rails up)	13.9 ft (4.24 m)
Machine Height (rails down)	10.4 ft (3.16 m)
Machine Width	8.3 ft (2.53 m)
Machine Length	19 ft (5.78 m)
Platform dimensions (extension retracted)	8.2 x 17.8 ft (2.5 x 5.4 m)
Platform dimensions (extension extended)	8.2 x 25.6 ft (2.5 x 7.8 m)
Transport Dimensions (L x W x H))	19 x 8.3 x 10.4 ft (5.78 x 2.5 x 3.16 m)

1.3 CAPACITIES

Table 1-3. Capacities

Fuel Tank	23.8 gal (90 L)
Hydraulic Tank	68.7 gal (260 L)
Engine Crankcase with Filter without Filter	 11 qt (10.5 L) 10.6 qt (10 L)

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Service - Voltage Reading

⚠ CAUTION

DO NOT PIERCE WIRE INSULATION TO TAKE VOLTAGE READINGS.

It has been common practice in electrical troubleshooting to probe wires by piercing the insulation with a sharp point. This practice should be discouraged when dealing with the AMPSEAL plug assembly, or any other sealed connector system. The resulting pinholes in the insulation will allow moisture to invade the system by traveling along the wire strands. This nullifies the effectiveness of the connector seals and could result in system failure.

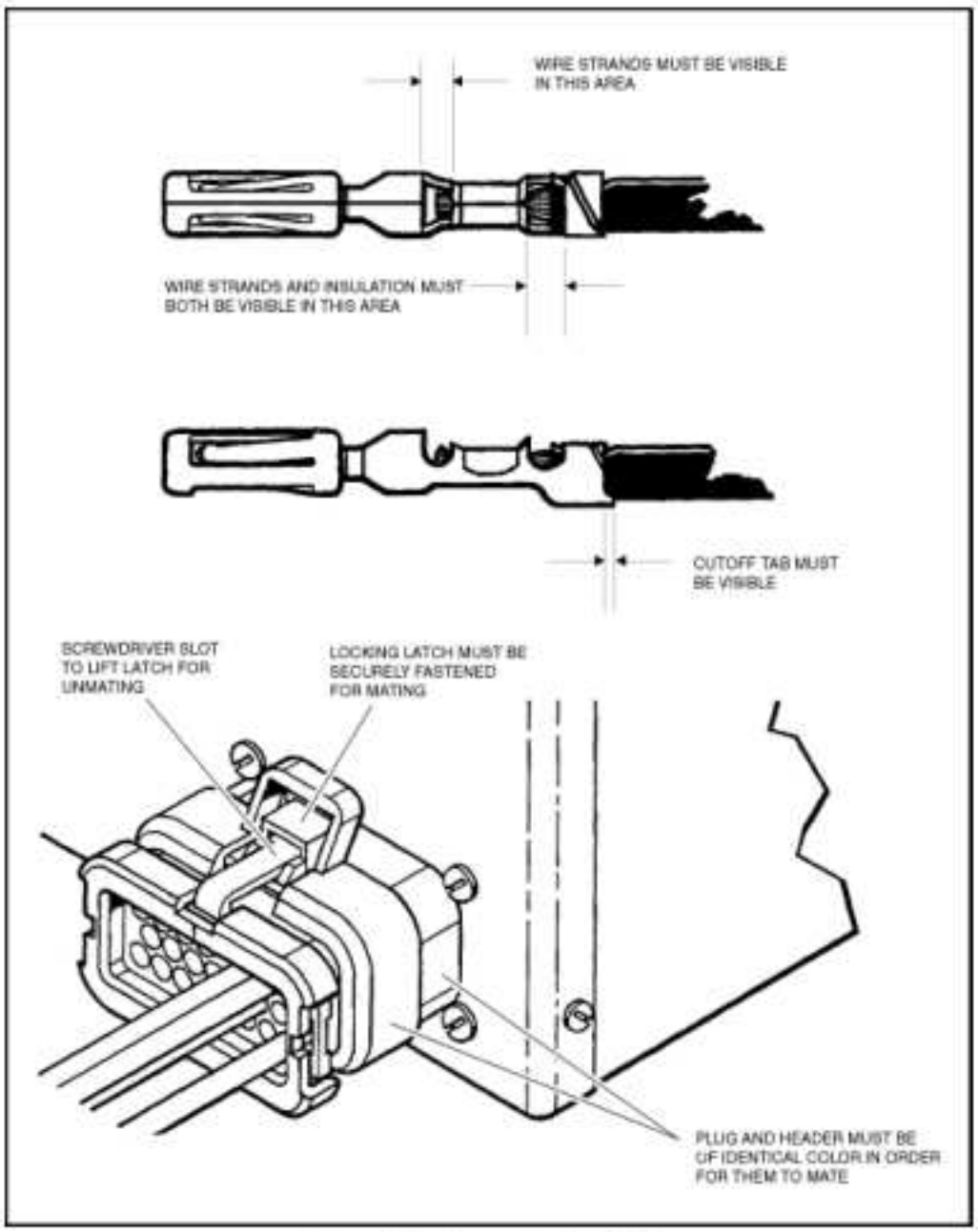


Figure 6-11. Connector Installation

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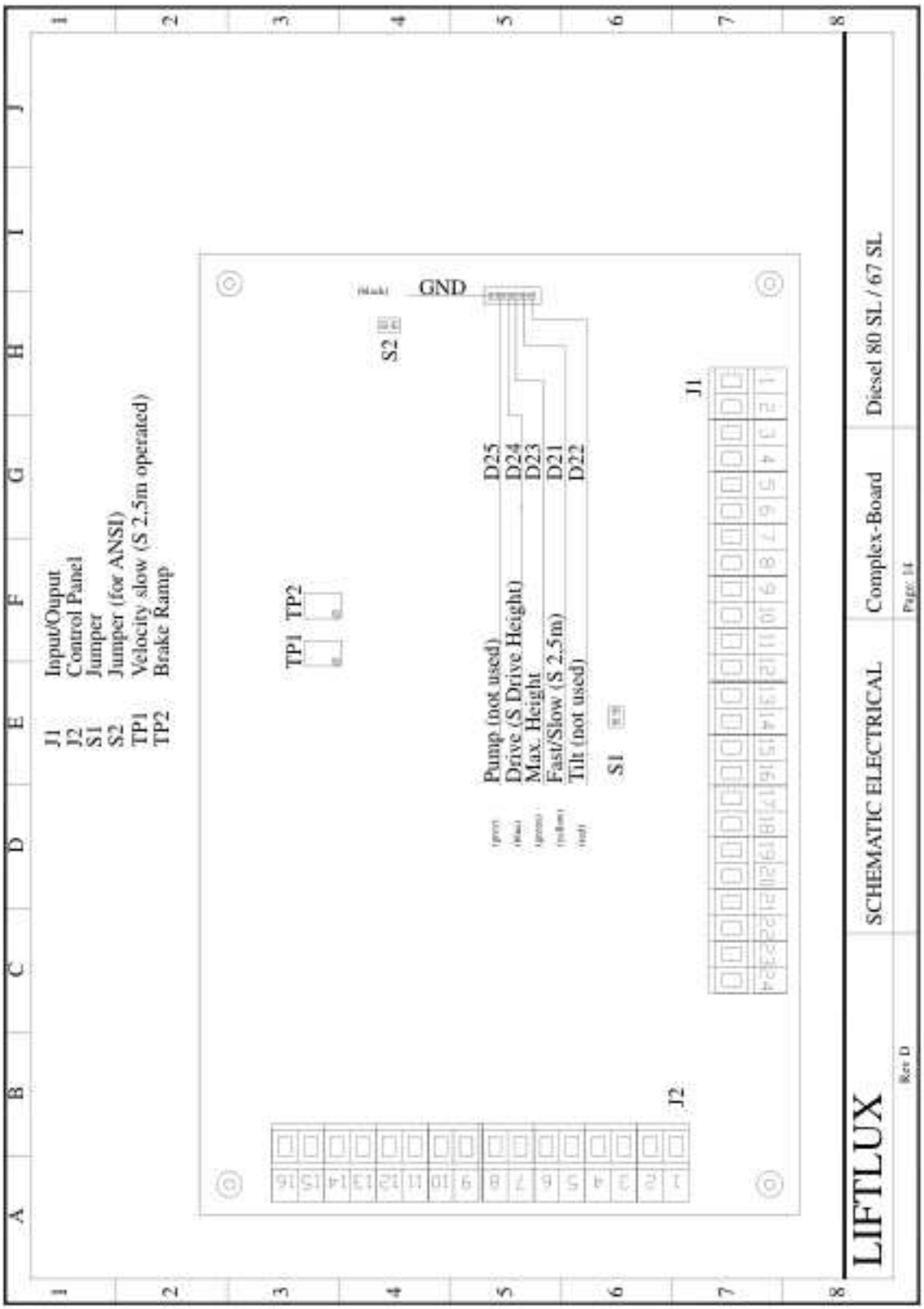


Figure 6-31. Electrical Schematic - Sheet 14 of 15

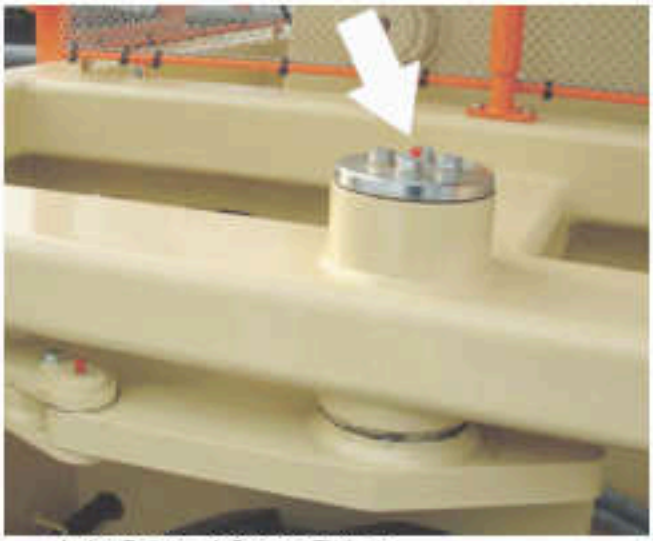
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4. Tie Rod Ends



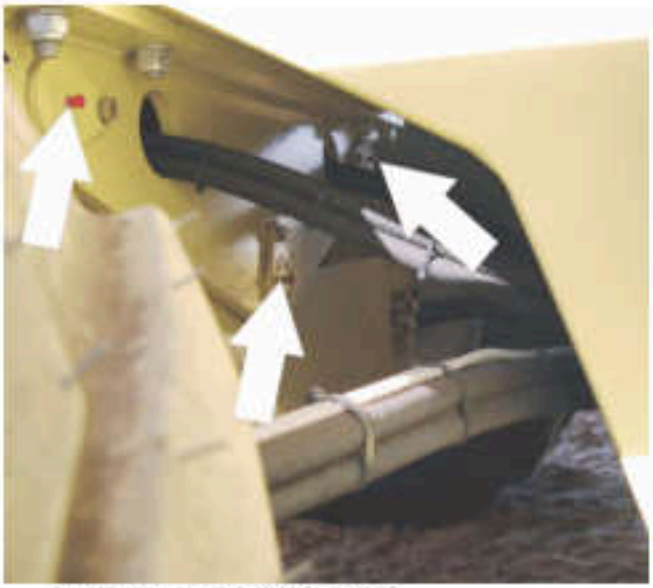
- Lube Points - 2 Grease Fittings
- Capacity - As Required
- Lube - MPG
- Interval - As Required

5. Spindles



- Lube Points - 2 Grease Fittings
- Capacity - As Required
- Lube - MPG
- Interval - As Required

6. Oscillating Axle



- Lube Points - 3 Grease Fittings
- Capacity - As Required
- Lube - MPG
- Interval - As Required

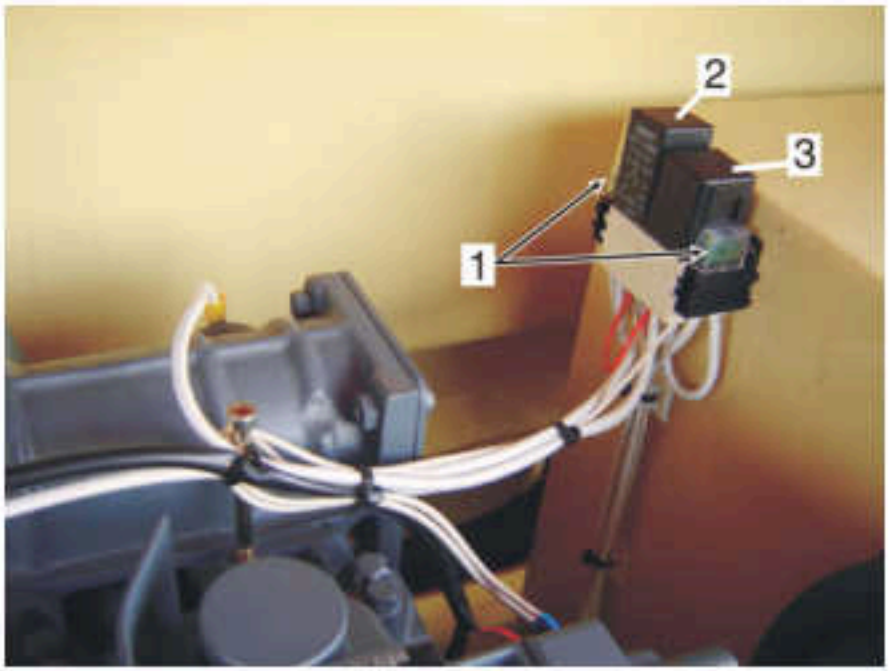
7. Lift Cylinder



- Lube Points - 2 Grease Fittings
- Capacity - As Required
- Lube - MPG
- Interval - As Required

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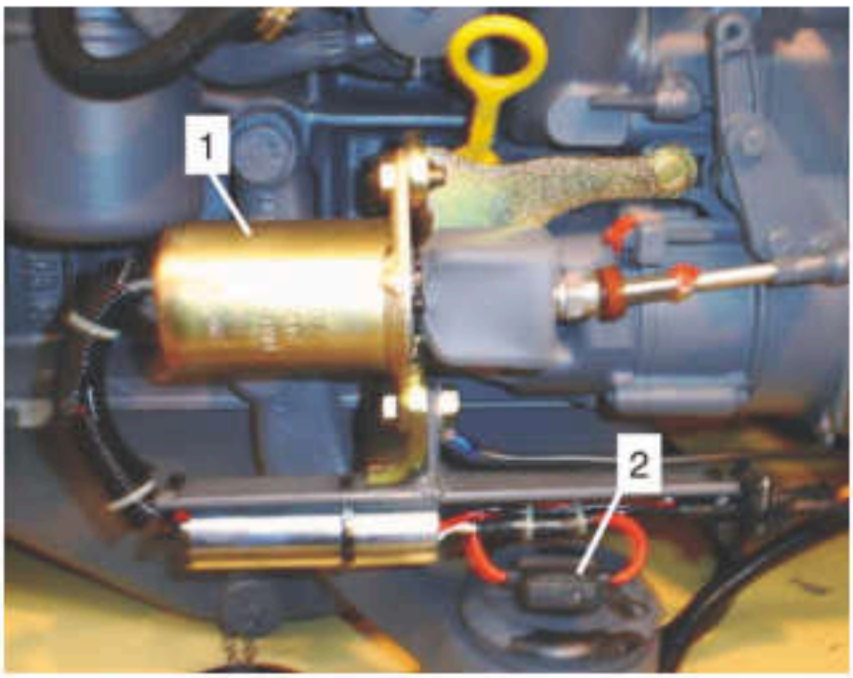
Glow Plugs



1. 30 amp Fuses
2. Timer Relay N6
3. Relay K3

Figure 3-13. Glow Plugs

Engine Solenoid Fuse



1. Solenoid
2. 30 amp Fuse

Figure 3-14. Engine Solenoid

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