An Oshkosh Corporation Company

Service and Maintenance Manual

Model
600AJ

PVC 2001

31215031

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ANSI

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1.3 CAPACITIES

Fuel Tank	30 Gallons (113.6 L)
Hydraulic Oil Tank	30.6 Gallons (115.8 L)
Hydraulic System (Including Tank)	40 Gallons (151.4 L)
Torque Hub, Drive*	20 ounces (0.6L)
Engine Crankcase Deutz D2011L04 Deutz TD 2.9 L	 11 quarts (10.5 L) 2.4 Gallon (8.9 L) w/Filter
Swing Hub, Drive	32 ounces (0.9L)
*Torque hubs should be one half full of lubricant.	

1.4 ENGINE DATA

Table 1-1. Deutz TD 2.9L Specifications

Fuel	Ultra Low Sulfur Diesel (15 ppm)
Output	67 hp (50 kW)
Torque	173 ft. lbs. (234 Nm) @ 1800 rpm
Oil Capacity (Crankcase)	2.4 Gallon (8.9 L) w/Filter
Cooling System	3.3 Gallon (12.5 L)
Low RPM	1200 ± 50 rpm
High RPM	2600 ± 50 rpm
Alternator	95 Amp
Fuel Consumption	0.65 GPH (2.46 LPH)

Table 1-2. Deutz D2011L04

Fuel	Diesel
Oil Capacity Cooling System Crankcase Total Capacity	 5 Quarts (4.5 L) 11 Quarts (10.5 L) w/Filter 16 Quarts (15 L)
Idle RPM	1000
Low RPM	1800
High RPM	2500
Alternator	60 Amp, belt drive
Battery	950 Cold Cranking Amps, 205 Minutes Reserve Capacity, 12 VDC
Fuel Consumption	0.65 GPH (2.46 LPH)
Horsepower	49

Table 1-3. Ford DF 2.5L, MSG 425

Fuel	Gasoline/LP Gas
Oil Capacity	7 qt (6.6 L)
Coolant Capacity	0.63 Gallon (2.4 L)
Low RPM	1000 ± 50 rpm
High RPM	3200 ± 50 rpm
Alternator	150 Amp
Starter	64.4 Amp @ 3574 rpm
Fan Ratio	1:3
Fuel Consumption Gasoline LP	 1 GPH (3.79 LPH) 5.34 lb/h (2.42 Kg/h)
Max Output (Power) Gasoline LP	 84HP @ 3200 80HP @ 3200
Max Output (Torque) Gasoline LP	 142 ft. lbs. (192 Nm) @ 2400 RPM 145 ft. lbs. (197 Nm) @ 2400 RPM

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Fault group	Fault no. (in SERDIA)	Fault locality/ Fault description	SPN	FMI	Cause	Remarks	Help
Control unit hardware	80	Power supply (Actuator)	SID 254	2	Power supply for actuator not in the permissible range.	Fault message (disappears when power again in the normal range).	Switch ignition off and on again. Check again. If faulty inform DEUTZ Service.
	83	Reference voltage 1	SID 254	2	Reference voltage for actuator not in the permissible range.	Fault message (disappears when power again in the normal range). Auxiliary value 5 V	Check voltage supply. Switch ignition off and on again. Check again. If faulty inform DEUTZ Service.
	84	Reference voltage 2	SID 254	2			
	85	Reference voltage 4	SID 254	2			
	86	Internal temperature	171	12	Internal temperature for control unit not in permissible range.	Fault message (disappears when power again in the normal range).	Switch ignition off and on again. Check again. If faulty inform DEUTZ Service.
	87	Atmospheric pressure	108	12	Atmospheric pressure not in permissible range.	Fault message (disappears when power again in normal range). Atmospheric pressure monitoring function de-activated.	
Program logic	90	Parameter fault (EEPROM retrieval or checksum faulty).	SID 253	2	No data found or checksum of data is faulty (note: fault only occurs during setting of parameter / saving or reset.).	Engine cannot be started.	Check data for correct settings. Save parameters. Switch ignition off and on again. Check again. If faulty inform DEUTZ Service.
	93	Stack overflow	SID 240	2	Internal calculation fault (so-called "Stack overflow" fault)	Emergency switch-off. Engine cannot be started.	Note parameters (3897 and 3898). Switch ignition off and on again. Check again. If faulty inform DEUTZ Service.
	94	Internal fault	SID 254	2			

NOTE: SID is equal to 512. To get SPN #, add 512 + number. For example, SID 254 would be 512+254 or an SPN of 766.

Figure 3-89. EMR2 Fault Codes - Sheet 5 of 5

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7.9 WIRING HARNESS BREAKDOWN

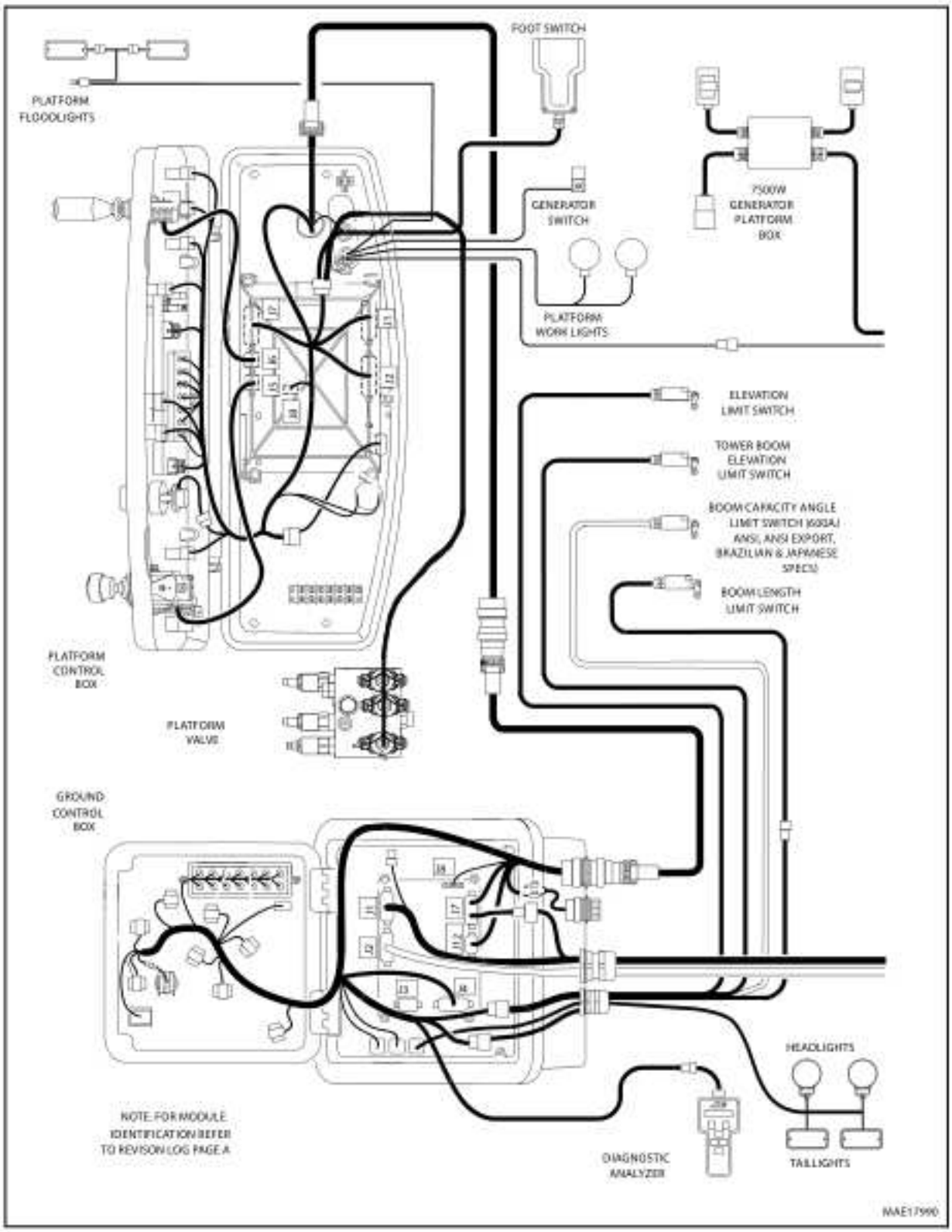
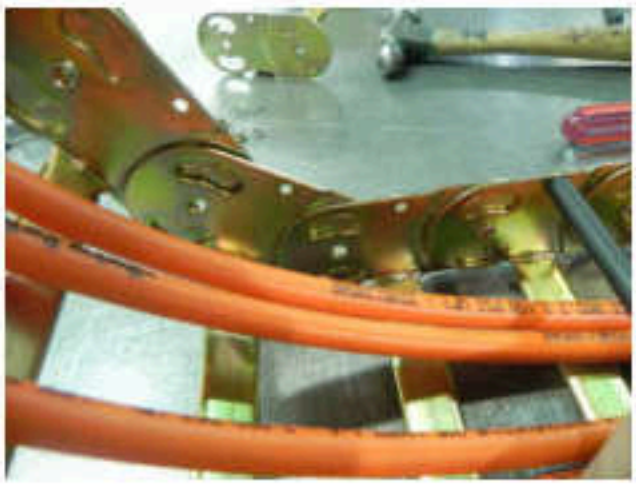


Figure 7-21. Electrical Components 1 of 2

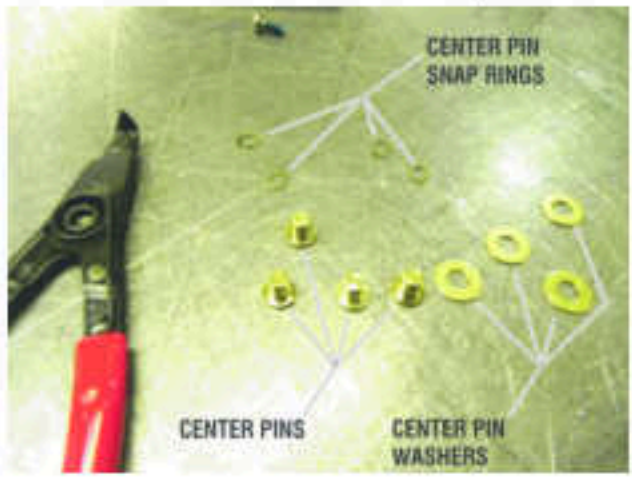
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4. Pull moving end over track so new connection is positioned in curve of powertrack. Round half-shears will rotate into cut-outs.





5. Parts shown below connect new link to powertrack.



6. Push pin through center hole. 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. BASIC HYDRAULICS INFORMATION & SCHEMATICS

5.1 LUBRICATING O-RINGS IN THE HYDRAULIC SYSTEM

When assembling connectors in the hydraulic that use o-ring fittings, it is necessary to lubricate all fittings with hydraulic oil prior to assembly. To lubricate the fittings, use one of the following procedures.

NOTE: *All O-ring fittings must be pre-lubricated with hydraulic oil prior to assembly.*

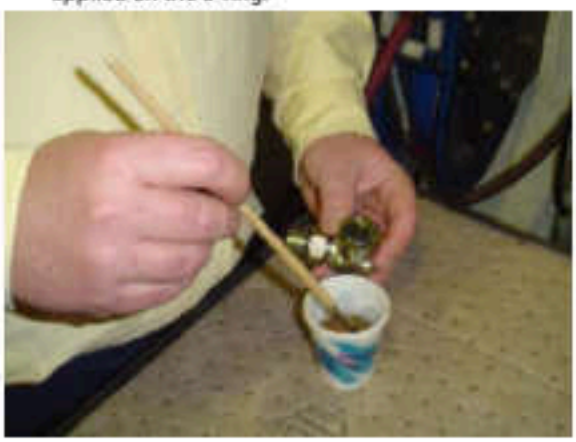
Cup and Brush

The following is needed to correctly oil the o-ring in this manner:

- Small container for hydraulic oil
- Small paint brush



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



2. Holding the fitting over the hydraulic oil container, brush an even film of oil around the entire o-ring in the fitting, making sure the entire o-ring is completely saturated.



3. Turn the o-ring on the other side of the fitting and repeat the previous step, ensuring the entire o-ring is coated with hydraulic oil.



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