An Oshkosh Corporation Company

Service and Maintenance Manual

Model
600AJ HC3

PVC 2001

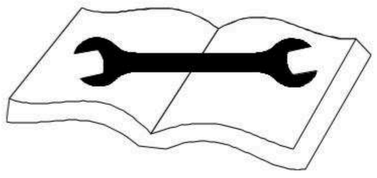
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1.4 ENGINE DATA

Table 1-1. Deutz TD2.9L Specifications

Fuel	Ultra Low Sulfur Diesel (15ppm)
Max Output (Power)	67 hp (50 kW) @ 2600 RPM
Max Output (Torque)	173 ft. lbs. (234 Nm) @ 1800 RPM
Oil Capacity	8.4 Quarts (8.0 L)
Cooling System Capacity	3.3 Gallons (12.5 L)
Low RPM	1200 ± 50 RPM
High RPM	2600 ± 50 RPM
Alternator	12 V; 95 Amp
Battery	950 Cold Cranking Amps, 205 Minutes Reserve Capacity, 12 VDC
Average Fuel Consumption	0.75 gph (2.84 Lph)

Table 1-2. Deutz D2011L04

Fuel	Diesel
Max Output (Power)	48.8 hp (36.4 kW) @ 2500 RPM
Max Output (Torque)	132.7 ft. lbs. (180 Nm) @ 1700 RPM
Oil Capacity	16 Quarts (15.1 L)
Low RPM	1000 ± 50 RPM
High RPM	2500 ± 50 RPM
Alternator	12V, 60 Amp
Battery	950 Cold Cranking Amps, 205 Minutes Reserve Capacity, 12 VDC
Fuel Consumption	0.65 gph (2.46 Lph)

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

Fuel	Unleaded Gasoline: 87-89 Octane Ethanol / Gasoline Mix: 10% Ethanol Max Propane: HD-5LPG
Max Output (Power) Gasoline LP	 84 hp (62 kW) @ 3200 RPM 80 hp (59 kW) @ 3200 RPM
Max Output (Torque) Gasoline LP	 142 ft. lbs. (192 Nm) @ 2400 RPM 145 ft. lbs. (197 Nm) @ 2400 RPM
Oil Capacity	7 Quarts (6.6 L)
Cooling System Capacity	2 Gallons (7.5 L)
Low RPM	1000 ± 50 RPM
High RPM	3200 ± 50 RPM
Alternator	12 V; 150 Amp
Average Fuel Consumption Gasoline LP	 1 gph (3.79 lph) 3.3 lbph (7.25 lbph)
Battery	950 Cold Cranking Amps, 205 Minutes Reserve Capacity, 12 VDC

1.5 TIRES

Size	IN355/D625	IN355/S5D625
Type	Foam Filled	Foam Filled Non Marking
Load Range	G	
Ply Rating	14	
Foam Fill	Foam/Crumb	
Diameter	36.9 in. (937.26 mm)	
Width	13.95 in. (354.33 mm)	
Rim Size	11.75 x 24.5 in. (298.5 X 622.3 mm)	
Max Tire Load	15,120 lb. (6858.31 Kg) - Static @ 100 psi (7 bar)	

1.6 TORQUE REQUIREMENTS

Description	Torque Value (Dry)	Interval Hours
Bearing To Chassis	190 ft. lbs. (260 Nm)	50/600*
Bearing To Turntable	190 ft. lbs. (260 Nm)	50/600*
Wheel Lugs	170 ft. lbs. (231 Nm)	150
Engine Mounting Bolts	165 ft. lbs. (231 Nm)	A/R
Engine Manifold Mounting Bolts	30 ft. lbs. (42 Nm)	A/R

*Check swing bearing bolts after first 50 hours of operation and every 600 hours thereafter. (See Swing Bearing in Section 3, Chassis & Turntable.)

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Table 3-7. Fault Code Cross Reference List (Ford Engine)

Original DTC Number	Fault Name	Corresponding DTC (Current)
11	Intake cam / distributor position	11
24	Exhaust cam position	24
111	CL high LPG	1151
112	EGO open/lazy pre-cat 1	134
113	EGO open/lazy pre-cat 2/post-cat 1	154
114	EGO open/lazy post-cat 1	140
115	EGO open/lazy post-cat 2	160
121	CL high gasoline bank1	1155
122	CL low gasoline bank1	1156
124	CL low LPG	1152
125	CL high NG	1153
126	CL low NG	1154
131	CL high gasoline bank2	1157
132	CL low gasoline bank2	1158
133	Gasoline cat monitor	420
134	LPG cat monitor	1165
135	NG cat monitor	1166
136	Gasoline cat monitor	430
141	AL high gasoline bank1	171
142	AL low gasoline bank1	172
143	AL high LPG	1161
144	AL low LPG	1162
145	AL high NG	1163
146	AL low NG	1164
147	AL high gasoline bank2	174
148	AL low gasoline bank2	175
161	Battery Voltage High	563
162	Battery Voltage Low	562
163	AUX analog PD1 high	1515
164	AUX analog PD1 low	1516
165	AUX analog PU3 high	1517
166	AUX analog PU3 low	1518
167	AUX analog PUD1 high	1541
168	AUX analog PUD1 low	1542
171	AUX analog PUD2 high	1543
172	AUX analog PUD2 low	1544
173	AUX analog PUD3 high	1545
174	AUX analog PUD3 low	1546
181	AUX DIG1 high	1551
182	AUX DIG1 low	1552
183	AUX DIG2 high	1553
184	AUX DIG2 low	1554

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7.8 WIRING HARNESS

Connector Labels

Connectors between harnesses are identified by the prefix "X" and a sequentially assigned number. An optional suffix (letters & numbers) may be added when multiple terminations occur at one device or when there are optional connections.

Examples:

X25 connects to X25 in another harness.

X65A, X65B connect to different portions of one device

X163 connects to X163A in ANSI and X163B in CE machines

Component Labels

Every component on the vehicle has a unique identification. A standard prefix letter is assigned according to the table below, followed by a unique sequential number. An optional suffix (letters & numbers) may be added when multiple terminations occur at one device.

Terminals that are not loaded into connectors are considered independent components and labeled in the same fashion.

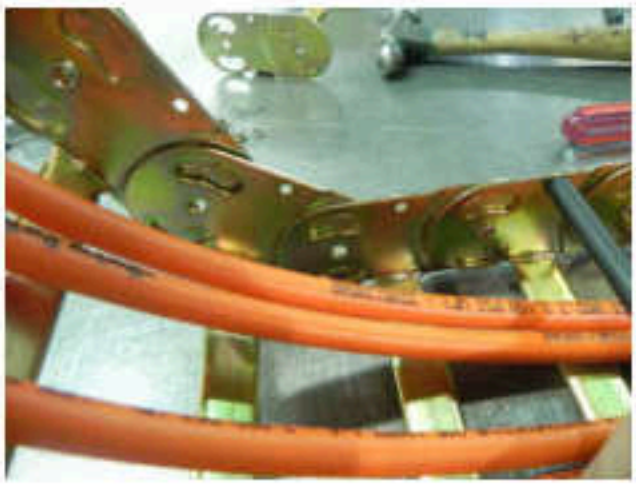
Table 7-1. Wiring Harness Connector Labels

Component	Category	Label
Audible	Alarms	AH
	Horns	
Battery	Batteries	BT
	Battery Terminals	
Control Module	Ground	CO
	LSS	
	Platform	
Engine	Alternator	EC
	Cold Start	
	Controller	
	Coolant Temp	
	Fuel Pump	
	Fuel Solenoid	
	Glow Plugs	
	Oil Pressure	
	Starter	
Fuse & CB Fuse FC	Fuse	FC
	Fusible Link	FC
	Circuit Breaker	CB
Gauge & Display	Board	GD
	Cluster	
	Hourmeter	
	LMI	
	Speedometer	
Inline	Resistor	R
	Diode	D
Joystick & Steering	Electronic	JS
	Hydraulic	
Lights	Dome	LB
	Headlights	
	Simple	
	Taillights	
Membrane Panel		MP
Miscellaneous	Radio	MS
	Speakers	
	Splice Blocks	
	T-Connectors	

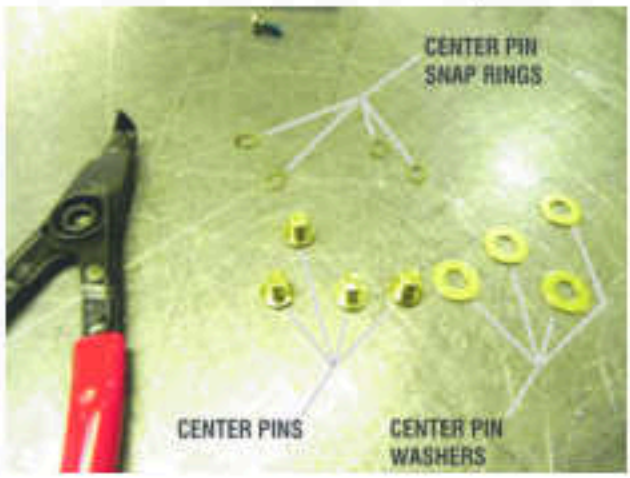
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4. Pull moving end over track so new connection is positioned in curve of powertrack. Round half-shears will rotate into cut-outs.





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

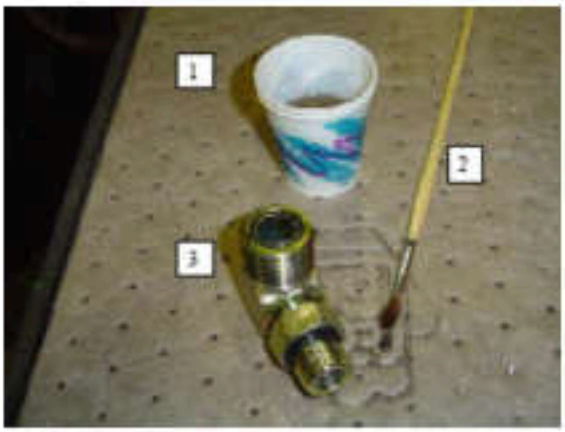
When assembling connectors in the hydraulic that use o-ring fittings, it is necessary to lubricate all fittings with hydraulic oil prior to assembly. To lubricate the fittings, use one of the following procedures.

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

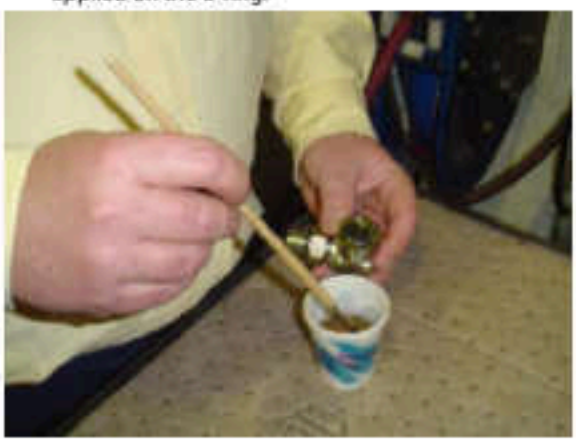
Cup and Brush

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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