An Oshkosh Corporation Company

Service and Maintenance Manual

Model
740AJ

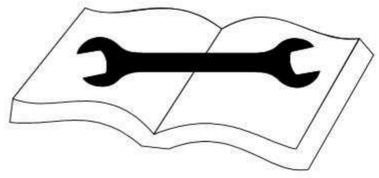
Prior to S/N 0300185827

P/N - 3121160

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Auxiliary Power Pump

Table 1-16. Auxiliary Power Pump Specifications (SN 0300069000 through 0300109066)

Pump Output	2.1 GPM (9.5 lpm) @ 1400 psi. (69 bar)
Pump Displacement	0.305 cu. in. (5 cm^3)
Valving	Non-Adj. Unloader Preset to 230 psi Adjustable Relief Set at 1800 psi.
Motor	12 V.D.C. 2T Extended EMC Protected Intermittent Duty
Rotation	Counterclockwise

Table 1-17. Auxiliary Power Pump Specifications (SN 0300109067 through 0300140000)

Pump Output	1.6 GPM (6.057 lpm) @ 1400 psi. (69 bar)
Pump Displacement	0.453 cu. in. (7.4 cm^3)
Valving	Non-Adj. Unloader Preset to 230 psi Adjustable Relief Set at 1800 psi.
Motor	12/24 V.D.C. 2T Extended EMC Protected Intermittent Duty
Rotation	Counterclockwise

Table 1-18. Auxiliary Power Pump Specifications (SN 0300140001 through 0300185827)

Pump Output	1.43 GPM (5.4 lpm) @ 1800 psi. (124 bar)
Pump Displacement	0.273 cu. in. (4.48 cm^3)
Motor	24 V.D.C. 5.0 Extended Duty
Rotation	Counterclockwise

Hydraulic Filter - In-line

Table 1-19. Hydraulic Filter Specifications

Return Filter	10 Microns Absolute
Charge Filter	10 Microns Absolute
Hydraulic Strainers (In Tank)	30 Microns

1.3 TORQUE REQUIREMENTS

Table 1-20. Torque Requirements

Description	Torque Value (Dry)	Interval Hours
Wheel Bolts	300 ft. lbs. (407 Nm)	150
Support to Rotator Bolts	85 ft. lbs. (116 Nm)	150
Rotator Center Bolt	480 ft. lbs. (651 Nm)	150
Swing Bearing Bolts	190 ft. lbs. (260 Nm)	50/600*
Starter or Aux Pump Solenoid Contacts Coil	 95 in. lbs. (10.5 Nm) 40 in. lbs. (4.5 Nm)	 As Required
Oxygen Sensor (Ford Engine)	29.5-40 ft. lbs. (40-54 Nm)	At Installation
Megajector Mounting Bolts (Ford Engine)	85 in. lbs. (97 Nm)	As Required
Lockoff Solenoid (Ford Engine)	8-12 ft. lbs. (11-16 Nm)	At Installation
*Check swing bearing bolts for security after first 50 hours of operation and every 600 hours thereafter. (See Swing Bearing in Section 3.)		
NOTE: *When maintenance becomes necessary or a fastener has loosened, refer to the Torque Chart to determine proper torque value.*		

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Fault- logic Trouble Shooting

Match the transmission symptoms with the problem statements and follow the action steps shown in the box diagrams. This will give expedient aid in correcting minor problems eliminating unnecessary machine down time.

Following the fault - logic diagrams are diagram action comments of the action steps shown in the diagrams. Where applicable, the comment number of the statement appears in the action block of the diagrams.

RECOMMENDED GAUGE LOCATIONS

Gauges Recommended

Inlet vacuum gauge: 30 psi to 14.8 psi (2 bar to 1 bar)

System pressure gauge: 10,000 psi (700 bar)

Charge pressure gauge: 0 to 600 psi (0 to 50 bar)

Case pressure gauge: 0 to 300 psi (0 to 25 bar)

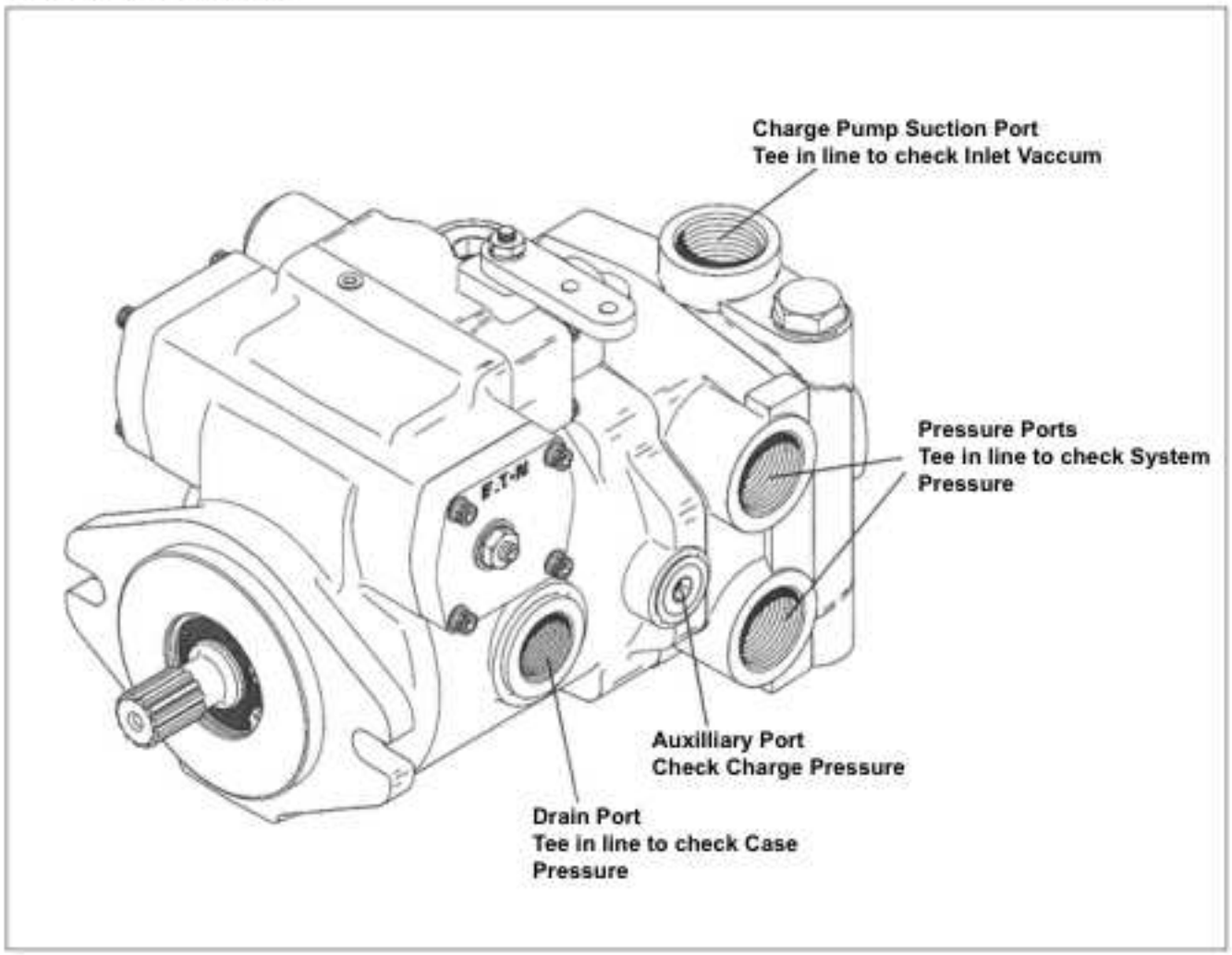


Figure 5-145. Gauge Locations

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7.6 ELECTRICAL SCHEMATICS

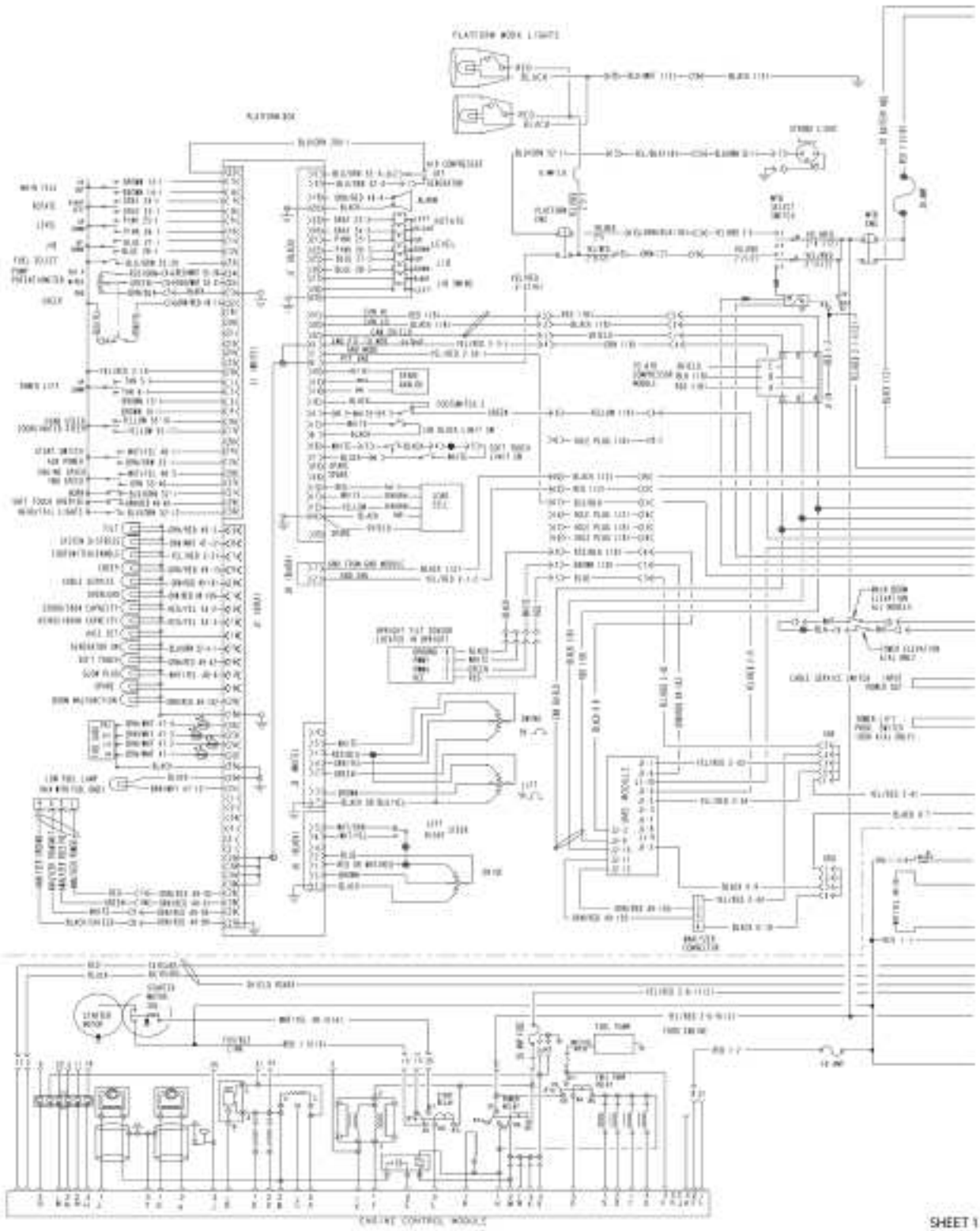
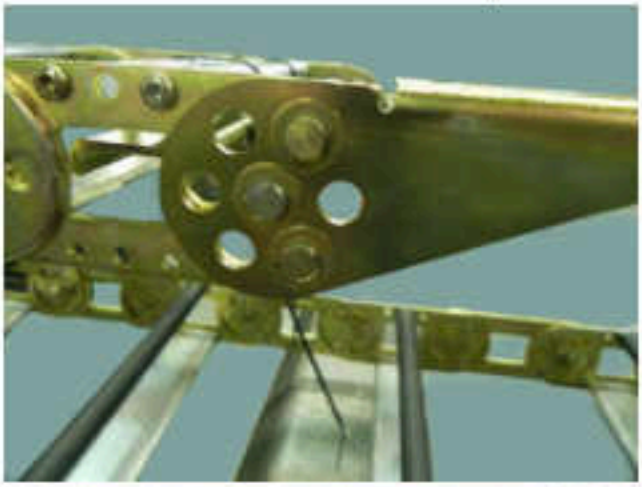


Figure 7-28. Electrical Schematic - Deutz & Ford Engines without UGM - Sheet 1 of 2

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Replacing a Moving End Bracket

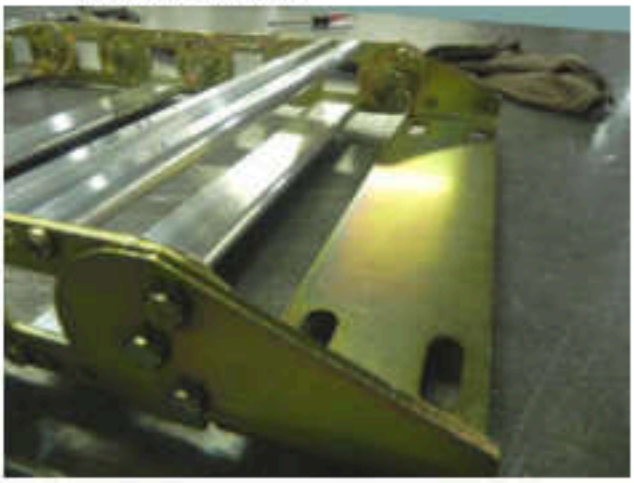
1. Remove bracket by removing all pins, washers, and snap rings. Replace with a new bracket and reinstall the pins, washers, and new snap rings. After installing a new bracket make sure that it rotates correctly.

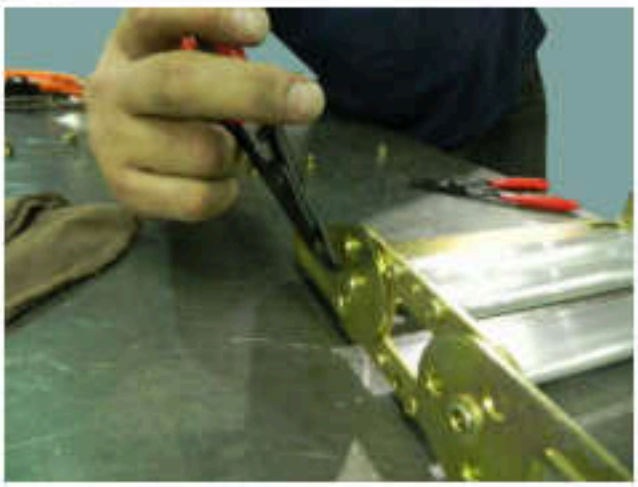


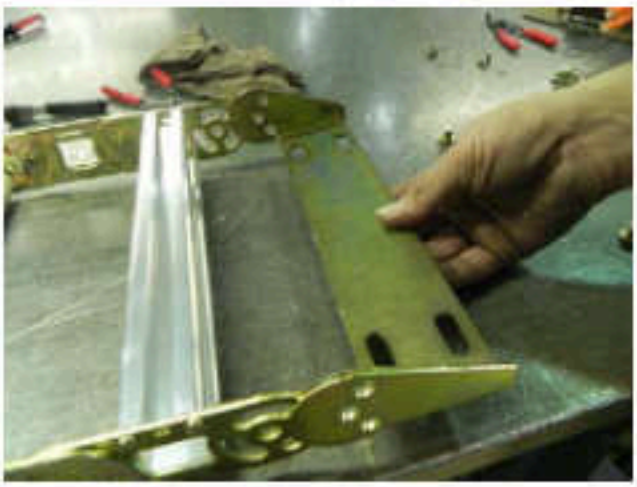


Replacing a One Piece Bracket

1. Remove all pins, washers, and snap rings and slide the bracket off of the links.







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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.



Figure 7-7. Brad-Harrison M12



Figure 7-8. Phoenix Contact M12

ENGINE CONTROL UNIT CONNECTORS

Many times, these types of connectors use 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 EMR4 engine control module from Deutz employs this connector system (for example).



SEALED ENCLOSURES

Application of dielectric grease is not required in properly sealed enclosures. To meet criteria, the enclosure must be rated to at least IP66 (dust tight; protected from powerful jets of water). The enclosure must be fitted with a high quality, continuous gasket and all wiring must pass through cable entrances.



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