An Oshkosh Corporation Company

Service and Maintenance Manual

Models
E400AJP
E400A/AJPnarrow
M400AJP/AJPnarrow

SN 0300208530 to Present

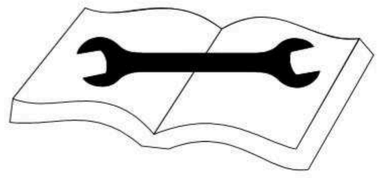
PN - 3121717

November 30, 2018 - Rev D

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1.8 MAJOR COMPONENT WEIGHTS

Table 1-10. Major Component Weights

Component	LB.	KG.
Platform and Support	215	97.5
Upper Boom Complete	450	204
Mid Boom Complete	419	190
Lower Boom Complete	419	190
Upper Lift Cylinder	97	44
Mid Lift Cylinder	60	27
Lower Lift Cylinder	130	59
Master Cylinder	405	184
Slave Cylinder	432	196
Telescope Cylinder	103	47
Upper Upright	222	101
Lower Upright	93	42
Turntable	948	430
Battery Box (incl. batteries)	600	272
Chassis (w/ pneu. tires)	4295	1948
Chassis (w/ foam-filled tires)	4695	2130
Counterweight	3850	1746
Machine Complete	14480	6568

1.9 SERIAL NUMBER LOCATIONS

For machine identification, a serial number plate is affixed to the left rear of frame, in front of left rear wheel. If the serial number plate is damaged or missing, the machine serial number is stamped on the top left side of the frame and the top left side of the turntable. In addition, the serial number is stamped on top of the end of the upper boom, mid boom, and lower boom at the left rear of the booms.



Figure 1-1. Serial Number Locations

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2. Use a soft mallet to tap a new wiper seal into the applicable cylinder head gland groove. Install a new retaining ring into the applicable cylinder head gland groove.

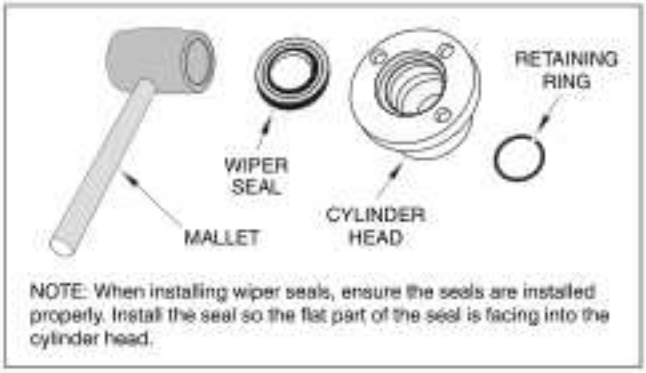


Figure 5-123. Wiper Seal Installation

3. Place a new o-ring and backup seal in the applicable outside diameter groove of the cylinder head.

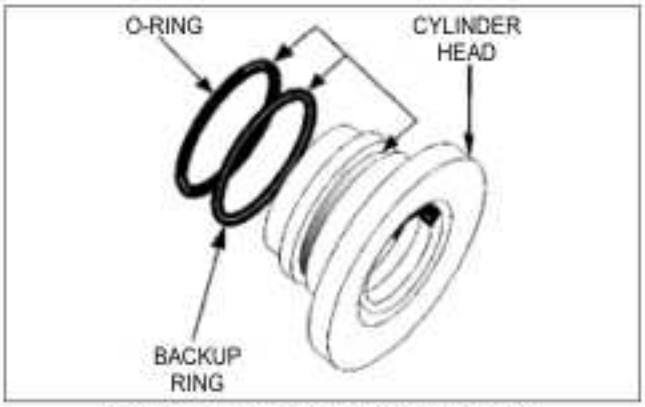


Figure 5-124. Installation of Head Seal Kit

4. Install o-ring onto the cylinder rod. Carefully install the head gland on the rod, ensuring that the wiper and rod seals are not damaged or dislodged.Push the head along the rod to the rod end.
5. Place a new o-ring in the inner piston diameter groove.
6. Using suitable protection, clamp the cylinder rod in a vise or similar holding fixture as close to piston as possible.
7. Carefully thread the piston on the cylinder rod hand tight, ensuring that the o-ring are not damaged or dislodged.
8. Thread piston onto rod hand tight and install the retainer.
9. Remove the cylinder rod from the holding fixture.
10. Place new piston seal and wear rings in the outer piston diameter groove. (A tube, with I.D. slightly larger than the O.D. of the piston is recommended to install the solid seal).

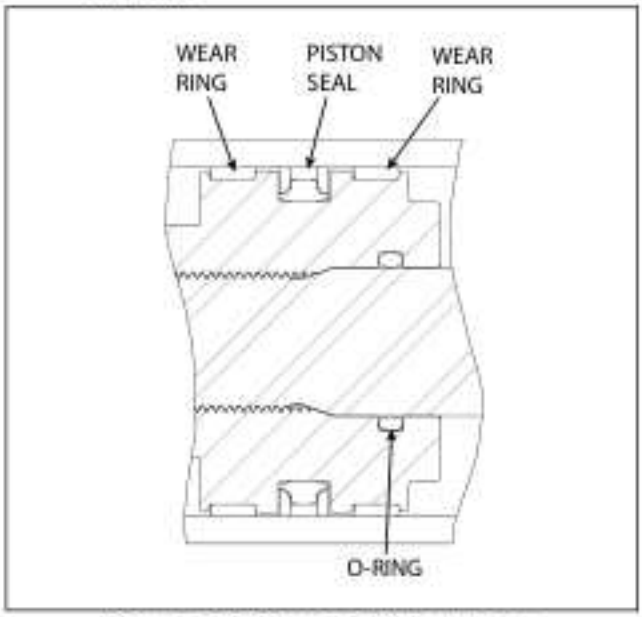


Figure 5-125. Piston Seal Kit Installation

11. Position the cylinder barrel in a suitable holding fixture.

NOTICE

EXTREME CARE SHOULD BE TAKEN WHEN INSTALLING THE CYLINDER ROD, HEAD, AND PISTON. AVOID PULLING THE ROD OFF-CENTER, WHICH COULD CAUSE DAMAGE TO THE PISTON AND CYLINDER BARREL SURFACES.

12. With barrel clamped securely, and while adequately supporting the rod, insert the piston end into the barrel cylinder. Ensure that the piston loading o-ring and seal ring are not damaged or dislodged.
13. Continue pushing the rod into the barrel until the cylinder head gland can be inserted into the barrel cylinder.
14. Screw the cylinder head gland into the barrel using a spanner wrench. Torque gland to 442 ft. lbs. (600 Nm).
15. After the cylinder has been reassembled, the rod should be pushed all the way in (fully retracted) prior to the re-installation of any holding valve or valves.

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X7B-13 - JUMP							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	1-SS1-3 JUMPER	18 AWG	GXL	N/A		SW2-1 (1)

X7B-12 - S.T. SIGNAL							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	124-5-2 ST SWITCH	18 AWG	GXL	N/A		SW2-2 (1)

X7B-9 - S.T. PWR							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	3-25-2 ST PWR	18 AWG	GXL	N/A		SW1-1 (1)

X7B-3 - JUMP							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	1-SS1-2 JUMPER	18 AWG	GXL	N/A		SW1-2 (1)

SW1-1 - RT SW PWR							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	3-25-2 ST PWR	18 AWG	GXL	N/A		X7B-9 (1)

SW1-2 - RT SW JUMP							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	1-SS1-2 JUMPER	18 AWG	GXL	N/A		X7B-3 (1)

SW2-1 - LT SW JUMP							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	1-SS1-2 JUMPER	18 AWG	GXL	N/A		X7B-3 (1)

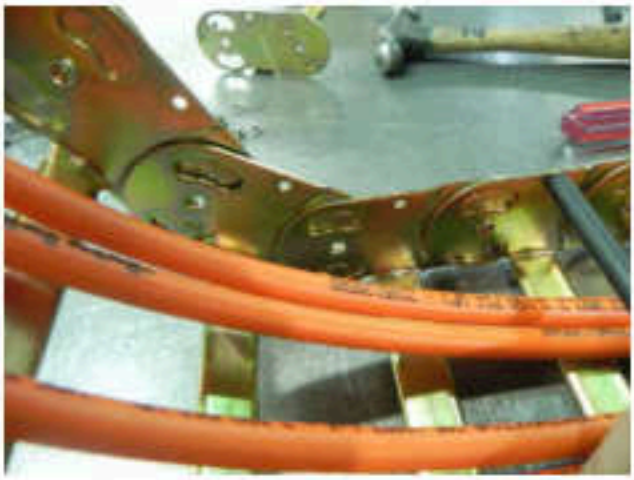
SW2-2 - LT SW SIG							
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TERMINAL P/N	SEAL P/N	TO
1	WHT	124-5-2 ST SWITCH	18 AWG	GXL	N/A		X7B-12 (1)

Figure 7-52. Soft Touch Harness - Sheet 2 of 2

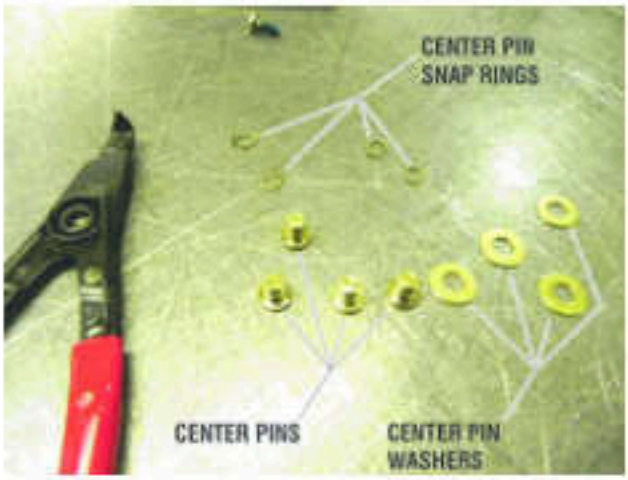
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4. Pull the moving end out over the track so that the new connection is positioned in the curve of the powertrack. In this position the round half-shears will rotate into the peanut cut outs.





5. The parts shown below will be used to connect the new link to the powertrack.



6. Push pin through center hole then slide washer on pin.





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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 1250AJP Rotary Angle Sensors are examples of components with the M12 connector system.





AMP JUNIOR TIMER

This type of connector uses 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 EMR2 engine control module from Deutz employs this connector system (for example).



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