An Oshkosh Corporation Company

Service and Maintenance Manual

Model
H800AJ

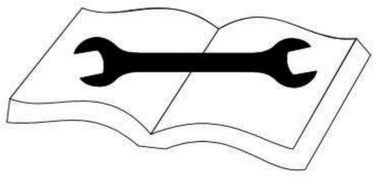
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4.6 UMS TROUBLESHOOTING AND FAULT MESSAGES

Backward Stability Concern Message

2/5 UMS SENSOR BACKWARD LIMIT REACHED

When the upright angle relative to the turntable is higher than +2.5° (away from the work platform), tower lift down will be disallowed immediately. Tower Lift Down will be re-allowed when the upright angle relative to the turntable is less than 2.0°. If Tower Lift Down is disabled for more than 1.5 seconds, the ground boom malfunction indicator lamp, upright tilted lamp and platform alarm will light/sound continually and a fault shall be raised. These conditions will be latched along with Tower Lift Down until the upright angle is less than 2.0° for 2 seconds and the Tower Lift Down command is returned to neutral.

Solution:

- Inspect sensor mounting.
- Verify sensor calibration on level pad.
- Follow the corrective action listed on decal 1702265 located near the red knob of the machine.
- Inspect machine hydraulics. Refer to Holding Valve Checks in Section 5 - Hydraulics.

Forward Stability Concern Message

2/5 UMS SENSOR FORWARD LIMIT REACHED

When the upright angle relative to the turntable is less than –4.0° for longer than 1.5 seconds, the ground control boom malfunction indicator lamp, the platform malfunction indicator lamp, and platform alarm will light/sound continually and a fault will be raised. The light/alarm signal will stop only when the upright angle reaches values greater than –3.0° for 2 seconds.

Solution:

- Inspect sensor mounting.
- Verify sensor calibration on level pad.
- Tower lift down.
- Inspect machine hydraulics. Refer to Holding Valve Checks in Section 5 - Hydraulics.

Auto Detection Input Low Message

2/5 AUTO DETECTION INPUT LOW

If the UMS detects a valid ground module software version but digital input 2 is not tied high the UMS module shall report a fault.

Solution:

- Inspect wire harness, there should be 12 volts going into pin J1-5 (black connector) of UMS module.

UMS Sensor Communications lost

6/6 UMS SENSOR COMMUNICATIONS LOST

If the UMS detects a valid ground module software version but digital input 2 is not tied high the UMS module shall report a fault.

Solution:

- Inspect wire harness; CANbus communications are on pins J2-9 & J2-10 (gray connector) of the UMS module.
- Using access level 1 of the UMS module, under "DIAGNOSTICS" CAN, EX/SEC and TX/SEC should be values greater than 0. Also "BUS OFF:" and "BUS ERR:" should be 0 and "PASSIVE:" should be a low value.

Out of Usable Range Message

8/1 UMS SENSOR OUT OF USABLE RANGE

When both the Chassis tilt sensor and the UMS sensor read greater than 10° in the same direction the UMS will be disengaged until the condition no longer exists and a fault shall be raised.

Solution:

- Verify the message clears when operating the machine on grade less than 10°.
- Inspect sensor mounting.
- Verify sensor calibration on level pad.

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12. Use the analyzer keys to select N for no or Y for yes. Press ENTER. The control system will default to an estimate of unrestricted capacity, which can be adjusted if necessary. Refer to Table 6-4, SkyGlazier Capacity Reductions and Table 6-5, Pipe Rack Capacity Reductions.

The screen will read:

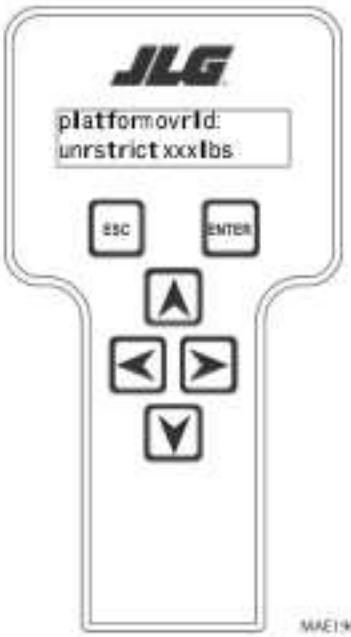


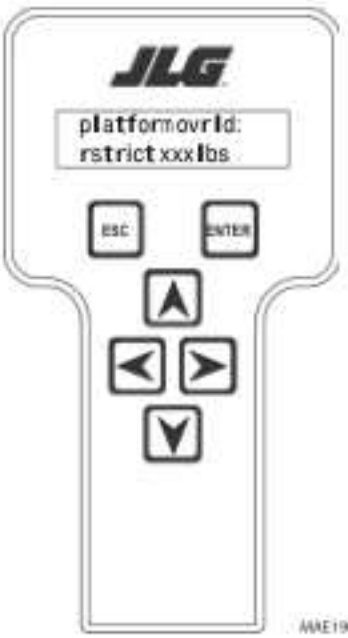
Table 6-4. SkyGlazier Capacity Reductions

Capacity	PLATFORM OVRLD	PLATFORM OVRLD RESTRICT
500 lb (227 kg)	400 lb (181 kg)	n/a
550 lb (250 kg)	400 lb (181 kg)	n/a
600 lb (272 kg)	400 lb (181 kg)	n/a
750 lb (340 kg)	n/a	590 lb (268 kg)
1000 lb (454 kg)	n/a	750 lb (340 kg)
Note: If both SkyGlazier and Pipe Racks are configured, capacity will be the lower of the two values.		

Table 6-5. Pipe Rack Capacity Reductions

Capacity	PLATFORM OVRLD	PLATFORM OVRLD RESTRICT
500 lb (227 kg)	400 lb (181 kg)	n/a
550 lb (250 kg)	450 lb (204 kg)	n/a
600 lb (272 kg)	500 lb (227 kg)	n/a
750 lb (340 kg)	n/a	650 lb (295 kg)
1000 lb (454 kg)	n/a	900 lb (408 kg)
Note: If both SkyGlazier and Pipe Racks are configured, capacity will be the lower of the two values.		

13. Press ENTER. The following screen will be displayed for restricted capacity, which can be adjusted if necessary. Refer to Table 6-4, SkyGlazier Capacity Reductions and Table 6-5, Pipe Rack Capacity Reductions.



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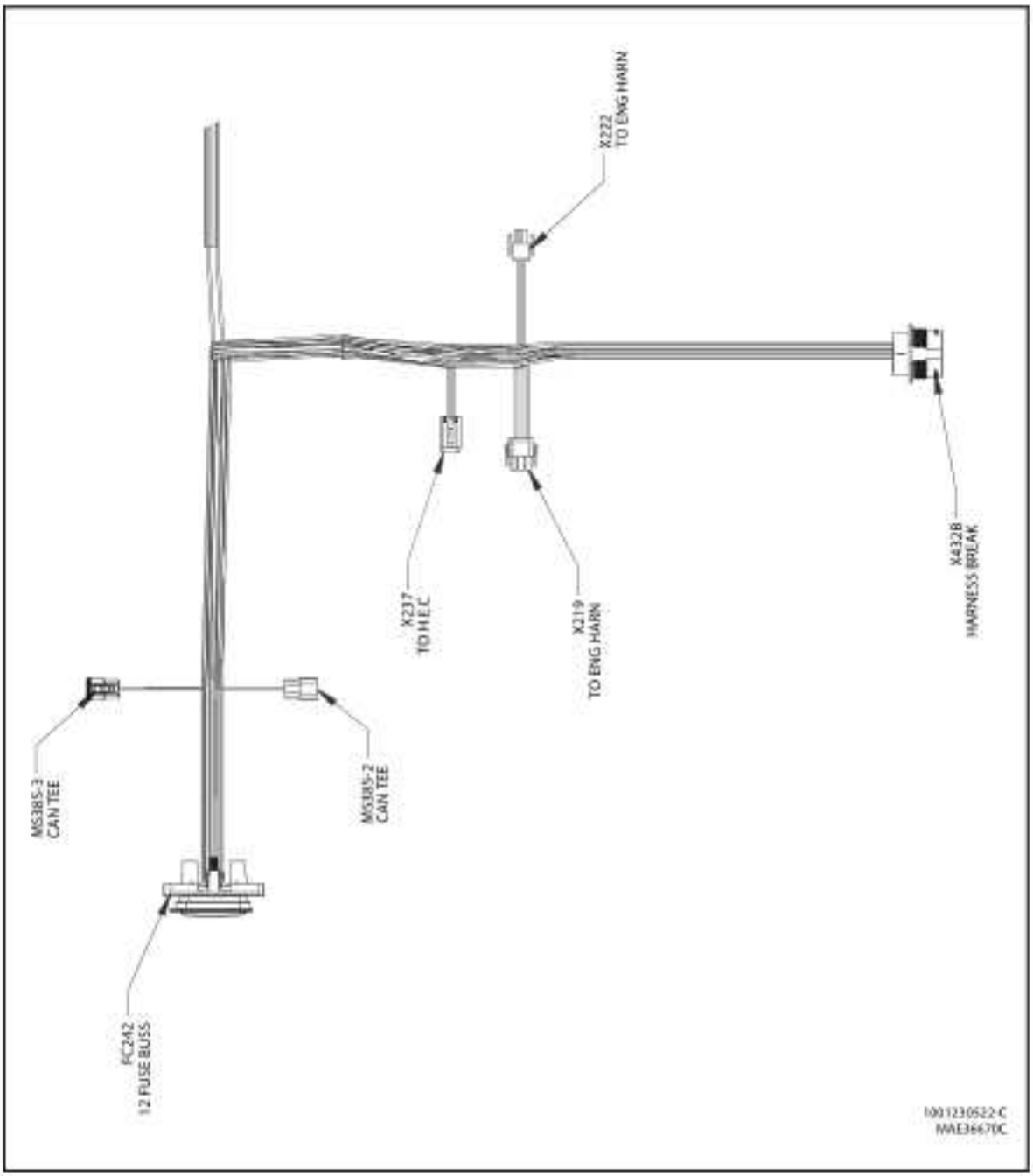


Figure 7-72. Turntable Fuse Panel Harness - Sheet 2 of 3

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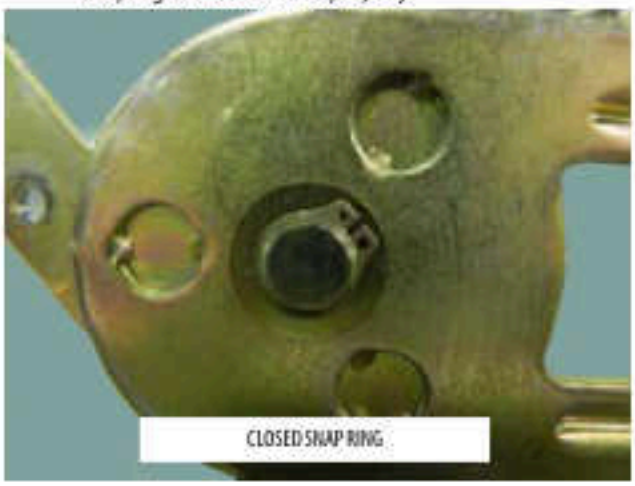
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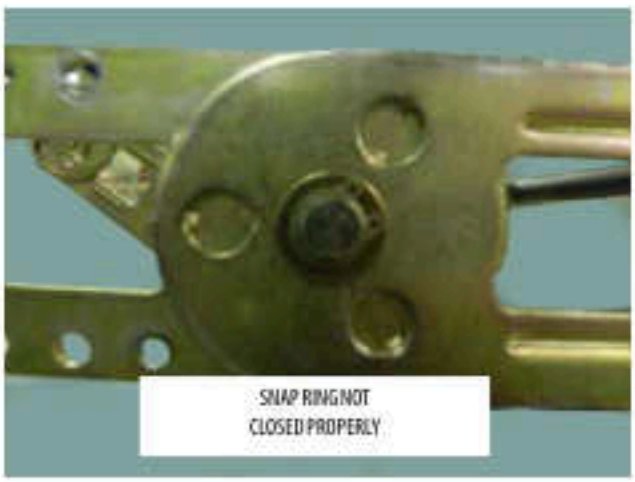
5. Install the pin into the center hole, then slide the washer over the pin. Install the snap ring into the groove in the pin.





NOTE: *When installing snap rings make sure they are seated in the pin groove and closed properly.*





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WH245 ENG FAN					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	0-14-9	10AWG	GXL	X247(1)
2	WHT	49-26 ENG FAN	10AWG	GXL	X466(1)

SN215 ENG SPD SNSR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	YEL	2-16-1	18AWG	TXL	X465(R)
2	WHT	48-21 ENG SPD SNSR	18AWG	TXL	X465(S)
3	BLK	0-16	18AWG	TXL	X465(T)

X223 PROP FUEL RACK ACT					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	60-5 THROTTLE RTN	18AWG	GXL	X465(N)
2	WHT	48-13 THR ACT	18AWG	GXL	X465(P)

X247 TO GROUND					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	0-14-9	10AWG	GXL	WH245(1)

X327 TO GROUND					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	BLK	0-27	16AWG	GXL	X465(O)

EC193 GLOW PLUGS					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	48-23GLOW	10AWG	GXL	X466(3)

SW196 OIL PRS SNSR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	48-20 OIL PRS	18AWG	GXL	X465(V)

EC194 ALTERNATOR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1					
2	WHT	48-16 ALT EXC	18AWG	GXL	X465(Q)
3					

SN197 COOL TEMP SNSR					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	48-19 TEMP SNSR	18AWG	GXL	X465(W)
2	BLK	0-19	18AWG	GXL	X465(X)

HV325 DRV FWD					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	25-1 DRV FWD	18AWG	GXL	X465(C)
2	WHT	60-4-1 DRIVE RTN	18AWG	GXL	S214(1)

HV326 DRV REV					
CONN POS	WIRE COLOR	WIRE LABEL	GAUGE	JACKET	TO
1	WHT	25-2DRVREV	18AWG	GXL	X465(B)
2	WHT	60-4-2DRIVERTN	18AWG	GXL	S214(1)

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