An Oshkosh Corporation Company

Service and Maintenance Manual

Model

600SC

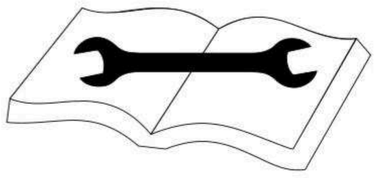
660SJC

S/N 0300074875 to
S/N 0300174703

P/N - 3121157

November 22, 2016

ANSI



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Dimensions

Table 1-10. Dimensions

Boom Elevation - 600SC	+60 ft. 2 13/16 in. (18.36 m) -6 ft. 1 11/16 in. (1.87 m)
Boom Elevation - 600SCJ	+60 ft. 5 3/4 in. (18.43 m) -9 ft. 9 3/16 in. (2.98 m)
Boom Elevation - 660SCJ	+66 ft. 7 5/8 in. (20.31 m) -11 ft. 5 1/4 in. (3.49 m)
Machine Height (Stowed)	Steel Track - 8' 4" (2.54 m) Rubber Track - 8' 6" (2.59 m)
Machine Length (Stowed)	35' 6" (10.8 m)
Machine Width	8 ft. (2.4 m)

1.6 TORQUE REQUIREMENTS

Table 1-11. Torque Requirements

Description	Torque Value (Dry)	Interval Hours
Bearing To Chassis	240 ft. lbs. (326 Nm) See Note	50/600*
Bearing To Turntable	240 ft. lbs. (326 Nm) See Note	50/600*
Wire Rope	15 ft.lbs. (20 Nm)	150
M16 Travel Motor mounting bolts	175 ±30 ft.lbs. (240 ± 40 Nm)	As required
M20 Final Drive mounting bolts	390 ±50 ft.lbs. (530 ± 70 Nm)	As required
M20 Track Roller mounting bolts	340 ±44 ft.lbs. (460 ± 60 Nm)	As required
M24 Carrier Roller mounting bolts	600 ±70 ft.lbs. (800 ± 100 Nm)	As required
*Check swing bearing bolts for security after first 50 hours of operation and every 600 hours thereafter. (See paragraph on Swing Bearing in Section 2.)		
NOTE: *When maintenance becomes necessary or a fastener has loosened, refer to the Torque Chart to determine proper torque value.*		

1.7 PRESSURE SETTINGS

Table 1-12. Pressure Settings

Main Relief	3000 PSI (206.85 Bar)
Upper Boom Lift Down	1500 PSI (103.4 Bar)
Swing	1700 PSI (117.2 Bar)
Platform Level - Forward	2800 PSI (193.06 Bar)
Platform Level - Backward	1800 PSI (124.11 Bar)
Jib Boom - Up	1500 PSI (103 Bar)
Jib Boom - Down	1200 PSI (82.7 Bar)

1.8 CYLINDER SPECIFICATIONS

Table 1-13. Cylinder Specifications

	BORE		STROKE		ROD DIA.	
	660SJ	600S	660SJ	600S	660SJ	600S
Lift	6.00 (152.4)	6.00 (152.4)	44.6875 (1135.1)	44.6875 (1135.1)	3 (76.2)	3 (76.2)
Telescope	3.5 (88.9)	3.5 (88.9)	168.437 (4278.3)	177.75 (4514.9)	2.5 (63.5)	2.5 (63.5)
Master	3.5 (88.9)	3 (76.2)	13.0625 (331.8)	8.5 (215.9)	1.5 (38.1)	1.5 (38.1)
Slave Level	3.5 (88.9)	3 (76.2)	13.0625 (331.8)	8.5 (215.9)	1.5 (38.1)	1.5 (38.1)
Lift (Jib Boom)	3 (76.2)	N/A	25.5 (647.7)	N/A	1.5 (38.1)	N/A

1.9 MAJOR COMPONENT WEIGHTS

Table 1-14. Major Component Weights

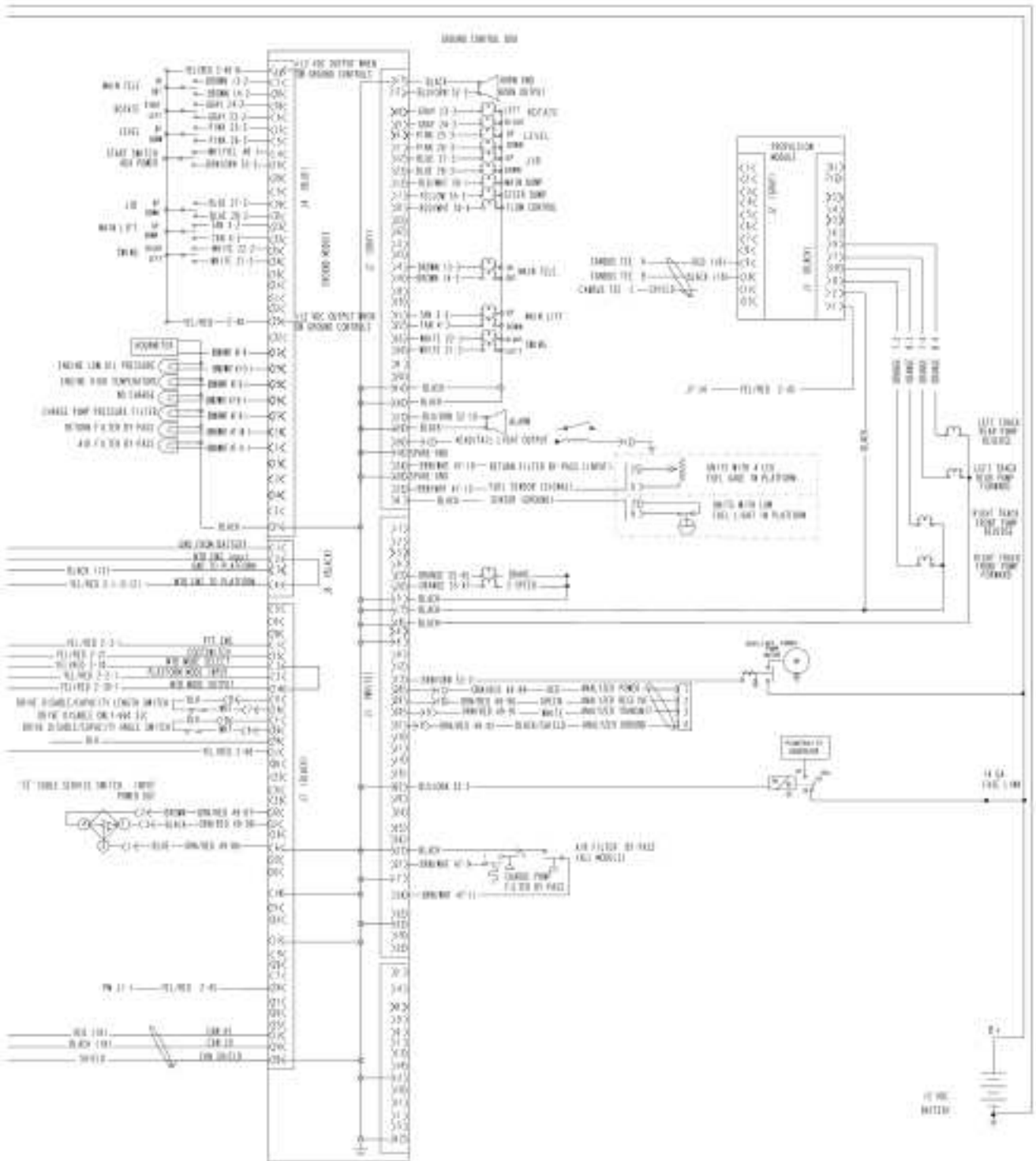
	660SJ		600S	
	LB.	KG.	LB.	KG.
Platform Control Console	250	113	250	113
Platform Level Cylinder	60	27	46	21
Main Boom (Includes Lift Cyl., Rotator, and Support)	3783	1716	3527	1600
Turntable Complete (including engine)	9065	4112	7315	3318

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Troubleshooting for Low Pressure Relief Valve

TROUBLES (TYPE OF FAILURE)	POSSIBLE CAUSES	CORRECTIVE ACTIONS
1. Rise in circuit temperature	Operation failure of relief valve; Spring is broken.	- Replace spring with new one. Then, remove foreign articles thoroughly. Repair damaged parts, and reassemble the parts after cleanup. If deep scratches or more than normal wear are found on the parts, the parts should be replaced with new ones.
2. Abnormal noises such as cavitation	Lowered set pressure of relief valve; 1) Seat failure due to foreign substance jamming 2) Spring is broken. 3) Wear-out of spring 4) Lack of necessary parts	- Remove foreign articles thoroughly. Repair damaged parts, and reassemble the parts after cleanup. If deep scratches or more than normal wear are found on the parts, the parts should be replaced with new ones. - Replace spring with new one. Then, remove foreign articles thoroughly. Repair damaged parts, and reassemble the parts after cleanup. If deep scratches or more than normal wear are found on the parts, the parts should be replaced with new ones. - Replace spring with new one. - Check the parts again.

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Figure 10-23. Electrical Schematic - Pre EMR2 Deutz, Caterpillar - Sheet 2 of 4

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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).



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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10. Pull out plunger sub assembly (33).

NOTE: *Slowly pull it out while turning it. Be careful not to damage the circumference.*



11. Loosen plug (55), and pull out spring seat (59), spring (58), and poppet (57).

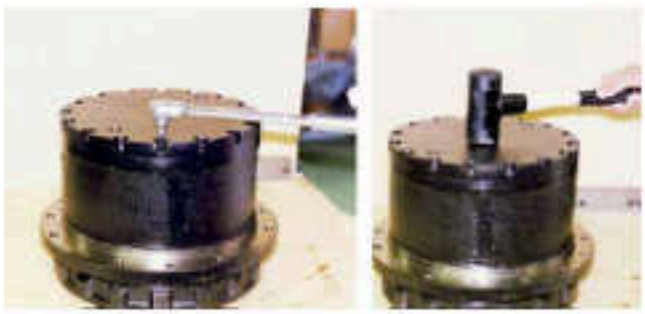


12. After removing pin (12), retainer holder (13), retainer plate (14), and piston sub assembly (15), remove snap ring (11) by making spring (9) flex using a jig or press.



13. Remove collar (10), spring (9), and collar (8).

Reduction Gear Disassembly



14. Remove plugs (1-8), (1-5) and bolt (1-29). Tap the center of cover (1-27) with plastic hammer. When cover (1-27) starts to float up, remove cover (1-27).



15. Remove thrust plate (1-23) and drive gear (1-22).

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