Service and Maintenance Manual

Models

100SX

110SX

110SXJ

120SXJ

P/N - 3121810

July 29, 2004

CE

NQA ISO9001 REGISTERED COMPANY

UKAS QUALITY MANAGEMENT 015

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Table 4-2.Boom Marking Tape Installation

w/o Boom Wipers			
Model	Dim. A	Dim. B	Dim.C
100SX Single Capacity (CE/Aus)	N/A	90 in. (228.6 cm)	123 in. (312.4 cm)
100SX Dual Capacity (CSA)	51-1/4 in. (130.2 cm)	90 in. (228.6 cm)	123 in. (312.4 cm)
110SXJ Single Capacity (CE/Aus)	N/A	58-3/8 in. (148.2 cm)	93-3/4 in. (238.1 cm)
110SXJ Single Capacity (CSA)	N/A	78-3/8 in. (199.1 cm)	129-3/8 in. (328.6 cm)
110SX Single Capacity (CE/Aus)	N/A	105-1/2 in. (267.9 cm)	140-1/2 in. (356.8 cm)
110SX Dual Capacity (CSA)	85-1/2 in. (217 cm)	122-1/2 in. (311.2 cm)	160-1/2 in. (407.7 cm)
120SXJ Single Capacity (CSA)	N/A	54-7/8 in. (139.4 cm)	90 in. (228.6 cm)
120SXJ Single Capacity (CE/Aus)	N/A	34-7/8 in. (88.5 cm)	70 in. (177.8 cm)
w/Boom Wipers			
Model	Dim. A	Dim. B	Dim. C
100SX Single Capacity (CE/Aus)	N/A	87-7/8 in. (223.2 cm)	120-7/8 in. (307.8 cm)
100SX Dual Capacity (CSA)	49-1/8 in (124.8 cm)	87-7/8 in. (223.2 cm)	120-7/8 in. (307.8 cm)
110SXJ Single Capacity (CE/Aus)	N/A	56-3/8 in. (143.2 cm)	91-3/4 in. (233.0 cm)
110SXJ Single Capacity (CSA)	N/A	76-3/8 in. (193.9 cm)	127-3/8 in. (323.5 cm)
110SX Single Capacity (CE/Aus)	N/A	103-3/8 in. (262.5 cm)	138-3/8 in. (351.5 cm)
110SX Dual Capacity (CSA)	83-3/8 in. (211.8 cm)	120-3/8 in. (305.8 cm)	158-3/8 in. (402.3 cm)
120SXJ Single Capacity (CSA)	N/A	52-7/8 in. (134.3 cm)	88 in. (223.5 cm)
120SXJ Single Capacity (CE/Aus)	N/A	32-7/8 in. (83.5 cm)	68 in. (172.7 cm)

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SECTION 6. SCHEMATICS

6.1 GENERAL

This section contains troubleshooting information to be used for locating and correcting most of the operating problems which may develop. If a problem should develop which is not presented in this section or which is not corrected by listed corrective actions, technically qualified guidance should be obtained before proceeding with any maintenance.

Troubleshooting and maintenance information pertaining to the engine that are not contained in this manual are contained in the applicable engine maintenance manual.

6.2 TROUBLESHOOTING

It should be noted that there is no substitute for a thorough knowledge of the equipment and related systems.

It should be recognized that the majority of the problems arising in the machine will be centered in the hydraulic and electrical systems.

The first rule for troubleshooting any circuit that is hydraulically operated and electrically controlled is to determine if the circuit is lacking hydraulic oil and electrical control power. This can be ascertained by overriding the bypass valve (mechanically or electrically) so that oil is available to the function valve, then overriding the function valve mechanically. If the function performs satisfactorily, the problem exists with the control circuit.

6.3 HYDRAULIC CIRCUIT CHECKS

The reference for improper function of a hydraulic system, where the cause is not immediately apparent, should be the Troubleshooting Chart. The best place to begin the problem analysis is at the power source (pump). Once it is determined that the pump is serviceable, then a systematic check of the circuit components, beginning with the control, would follow. For aid in troubleshooting, refer to the Illustrated Parts Manual for hydraulic diagrams of the various circuits

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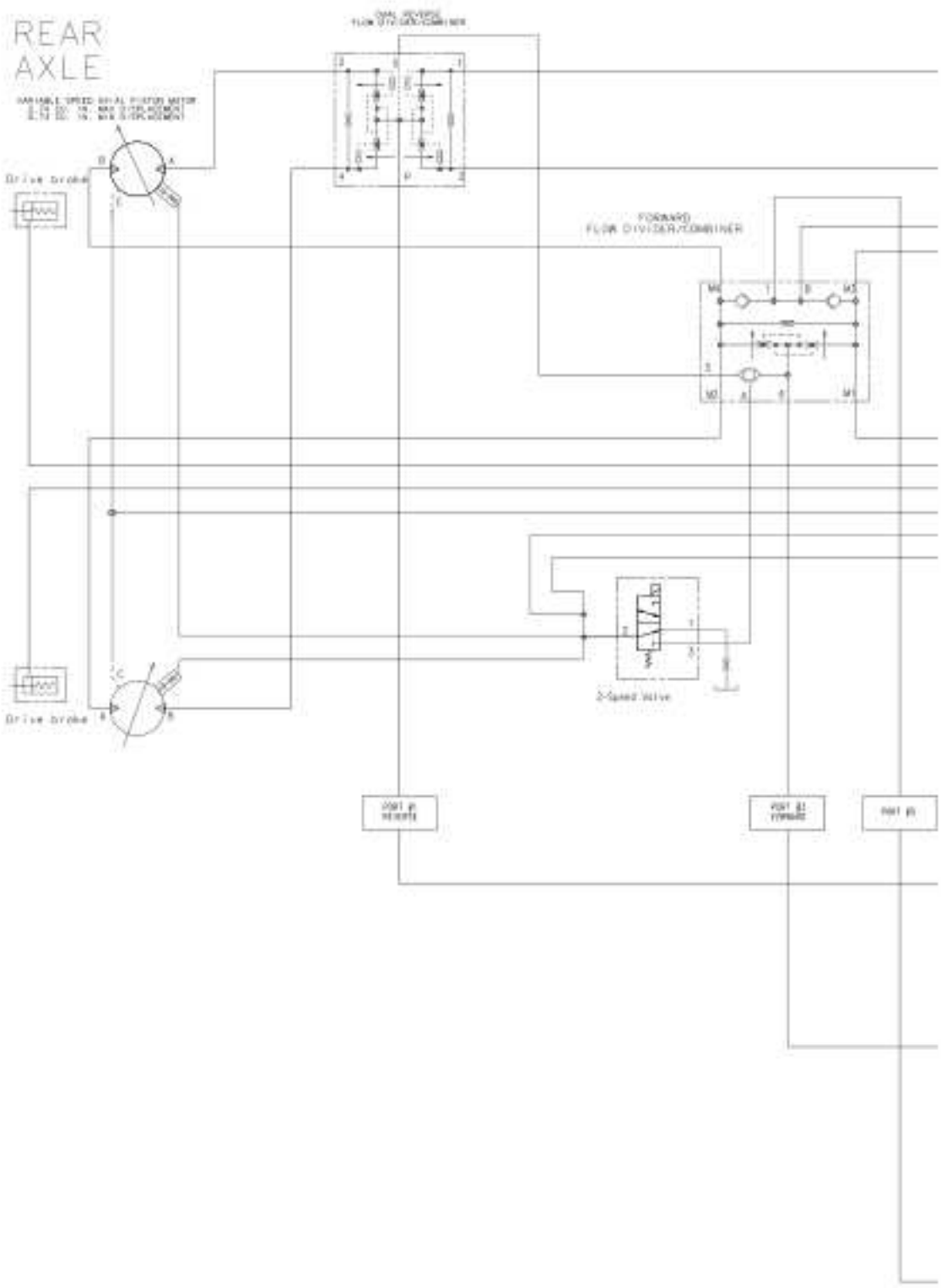


Figure 6-25. 120SXJ Hydraulic Schematic - Sheet 5 of 6

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2. Lift Down Relief.
   a. Monitor pressure gauge at quick-connect (G port) on main valve.
   b. Bottom out Lift Down function.
   c. Loosen nut at lift down relief and adjust pressure to 103 bar (1500 psi) using an Allen wrench. Tighten nut.
3. Swing Relief.
   a. Monitor pressure gauge at quick-connect (G port) on main valve.
   b. Ensure turntable lock is engaged.
   c. Bottom out Swing Right function.
   d. Loosen nut at swing right relief and adjust pressure to 83 bar (1200 psi) using an Allen wrench. Tighten nut.
   e. Bottom out Swing Left function.
   f. Loosen nut at swing left relief and adjust pressure to 83 bar (1200 psi) using an Allen wrench. Tighten nut.
4. Jib Relief.
   a. Monitor pressure gauge at quick-connect on main valve at Port 8.
   b. Bottom out Jib Up function.
   c. Loosen nut at jib up relief and adjust pressure to 207 bar (3000 psi) using an Allen wrench. Tighten nut.
   d. Monitor pressure gauge at quick-connect on main valve at Port 7.
   e. Bottom out Jib Down function.
   f. Loosen nut at jib down relief and adjust pressure to 97 bar (1400 psi) using an Allen wrench. Tighten nut.
5. Platform Rotate Relief.
   a. Monitor pressure gauge at quick-connect on main valve.
   b. Bottom out Rotate Right function.
   c. Loosen nut on rotate right relief and adjust pressure to 172 bar (2500 psi). Tighten nut.
   d. Bottom out Rotate Left function.
   e. Loosen nut on rotate left relief and adjust pressure to 172 bar (2500 psi). Tighten nut.
6. Platform Level Relief.
   a. Monitor pressure gauge at quick-connect on main valve at Port 11.
   b. Bottom out Platform Level Down function.
   c. Loosen nut on platform level down relief and adjust to 152 bar (2200 psi).Tighten nut.
   d. Monitor pressure gauge at quick-connect on main valve at Port 12.
   e. Bottom out Platform Level Up function.
   f. Loosen nut on platform level up relief and adjust to 172 bar (2500 psi). Tighten nut.
   Frame Mounted Valves

Frame Mounted Valves

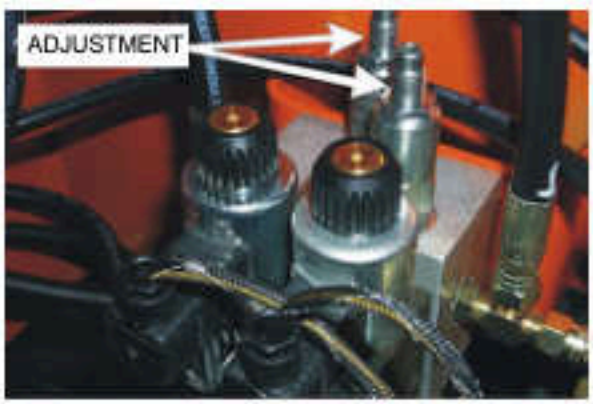
NOTE: *Steer/Axle Valve is located under front frame shield on axle.*



Back out steer adjustments to start setting pressures.

1. Rear Steer.

NOTE: *Rear Steer valve is located under the center of the frame.*



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