SKYJACK

SERVICE MANUAL

SJ45 AJ+

ARTICULATING BOOMS



264830ABA
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ANSI/CSA, CE, AS

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2.3 Torque Specifications for Fasteners (US Imperial)

When specific torque values are not provided within this manual for a task, use the torque values given in the table below.

Size	Torque Type	SAE 2		SAE 5		SAE 8	
		Dry	Lubed	Dry	Lubed	Dry	Lubed
4-40	(in-lb)	(5)	(4)	(8)	(6)	(12)	(9)
	Nm	0.6	0.5	0.9	0.7	1.4	1.0
4-48	(in-lb)	(6)	(5)	(9)	(7)	(13)	(10)
	Nm	0.7	0.6	1.0	0.8	1.5	1.1
6-32	(in-lb)	(10)	(8)	(16)	(12)	(23)	(17)
	Nm	1.1	0.9	1.8	1.4	2.6	1.9
6-40	(in-lb)	(12)	(9)	(18)	(13)	(25)	(19)
	Nm	1.4	1.0	2.0	1.5	2.8	2.1
8-32	(in-lb)	(19)	(14)	(30)	(22)	(41)	(31)
	Nm	2.1	1.6	3.4	2.5	4.6	3.5
8-36	(in-lb)	(20)	(15)	(31)	(23)	(43)	(32)
	Nm	2.3	1.7	3.5	2.6	4.9	3.6
10-24	(in-lb)	(27)	(21)	(43)	(32)	(60)	(45)
	Nm	3.1	2.4	4.9	3.6	6.8	5.1
10-32	(in-lb)	(31)	(23)	(49)	(36)	(68)	(51)
	Nm	3.5	2.6	5.5	4.1	7.7	5.8
1/4-20	(in-lb) ft-lb	(66)	(50)	8	(75)	12	9
	Nm	7.5	5.6	11	8.5	16	12
1/4-28	(in-lb) ft-lb	(76)	(56)	10	(86)	14	10
	Nm	8.6	6.3	14	9.7	19	14
5/16-18	ft-lb	11	8	17	13	25	18
	Nm	15	11	23	18	34	24
5/16-24	ft-lb	12	9	19	14	25	20
	Nm	16	12	26	19	34	27
3/8-16	ft-lb	20	15	30	23	45	35
	Nm	27	20	41	31	61	47
3/8-24	ft-lb	23	17	35	25	50	35
	Nm	31	23	47	34	68	47
7/16-14	ft-lb	32	24	50	35	70	55
	Nm	43	33	68	47	95	75
7/16-20	ft-lb	36	27	55	40	80	60
	Nm	49	37	75	54	108	81
1/2-13	ft-lb	50	35	75	55	110	80
	Nm	68	47	102	75	149	108
1/2-20	ft-lb	55	40	90	65	120	90
	Nm	75	54	122	88	163	122

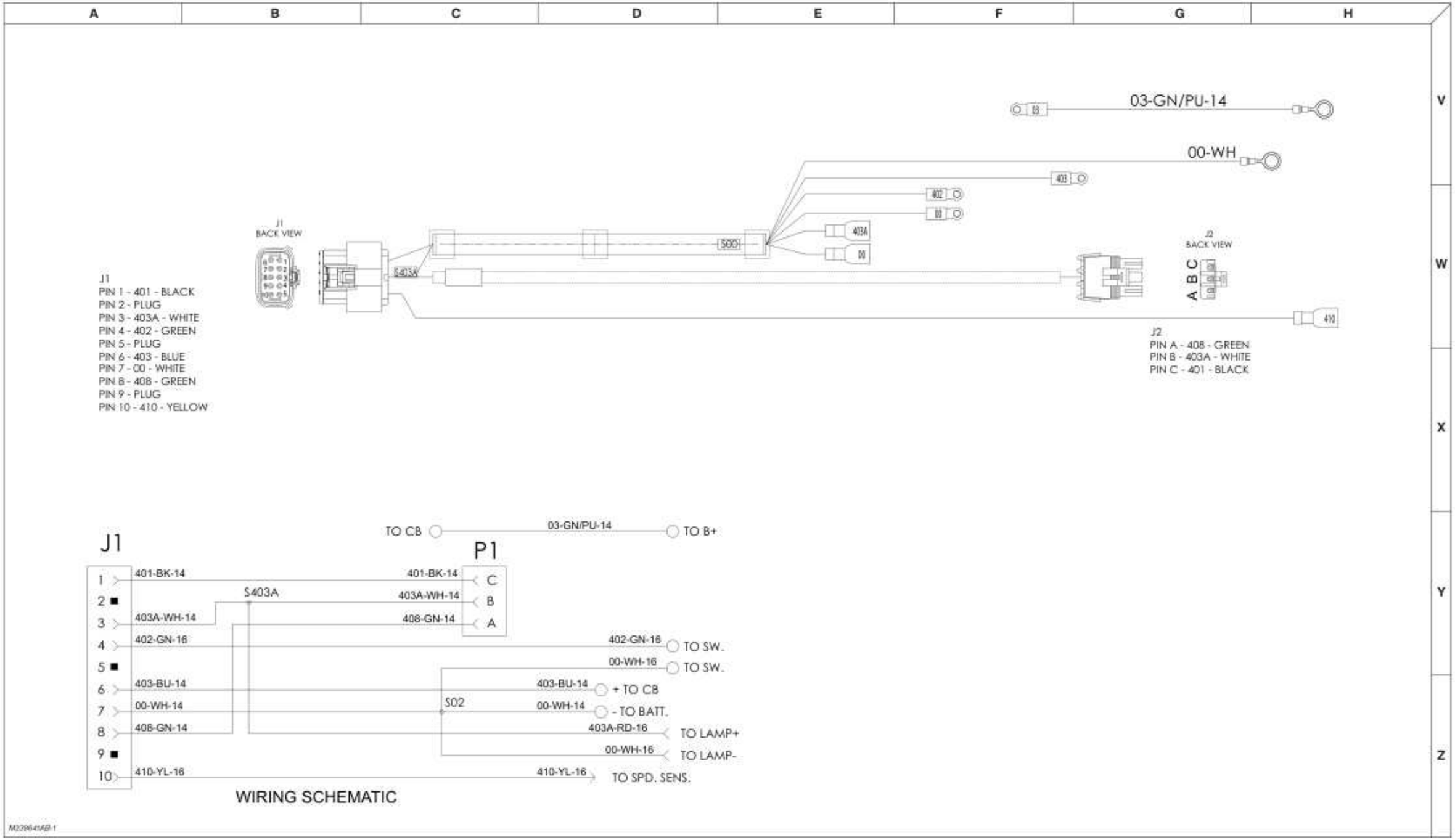
Size	Torque Type	SAE 2		SAE 5		SAE 8	
		Dry	Lubed	Dry	Lubed	Dry	Lubed
9/16-12	ft-lb	70	55	110	80	150	110
	Nm	95	75	149	108	203	149
9/16-18	ft-lb	80	60	120	90	170	130
	Nm	108	81	163	122	230	176
5/8-11	ft-lb	100	75	150	110	220	170
	Nm	136	102	203	149	298	230
5/8-18	ft-lb	110	85	180	130	240	180
	Nm	149	115	244	176	325	244
3/4-10	ft-lb	175	130	260	200	380	280
	Nm	237	176	353	271	515	380
3/4-16	ft-lb	200	150	300	220	420	320
	Nm	271	203	407	298	569	434
7/8-9	ft-lb	170	125	430	320	600	460
	Nm	230	169	583	434	813	624
7/8-14	ft-lb	180	140	470	360	660	500
	Nm	244	190	637	488	895	678
1-8	ft-lb	250	190	640	480	900	680
	Nm	339	258	868	651	1220	922
1-12	ft-lb	270	210	710	530	1000	740
	Nm	366	285	963	719	1356	1003
1-14	ft-lb	280	210	730	540	1020	760
	Nm	380	285	990	732	1383	1030
1 1/8-7	ft-lb	350	270	800	600	1280	960
	Nm	475	366	1085	813	1735	1302
1 1/8-12	ft-lb	400	300	880	660	1440	1080
	Nm	542	407	1193	895	1952	1464
1 1/4-7	ft-lb	500	380	1120	840	1820	1360
	Nm	678	515	1519	1139	2468	1844
1 1/4-12	ft-lb	550	420	1240	920	2000	1500
	Nm	746	569	1681	1247	2712	2034
1 3/8-6	ft-lb	670	490	1460	1100	2360	1780
	Nm	908	664	1979	1491	3227	2413
1 3/8-12	ft-lb	750	560	1680	1260	2720	2040
	Nm	1017	759	2278	1708	3688	2766
1 1/2-6	ft-lb	870	650	1940	1460	3160	2360
	Nm	1180	881	2630	1979	4284	3200
1 1/2-12	ft-lb	980	730	2200	1640	3560	2660
	Nm	1329	990	2983	2224	4827	3606

NOTE: *Lubed includes lubricants such as lubrizing, oil, grease, and some uncured thread lockers. Refer to the specific thread locker manufacturer's instructions for specific torque adjustments.*

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3.29 Positive Air Shut-off Harness - Kubota D1305



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4.2-3 All Functions Inoperative from Platform Control Console

1. Loose or broken wire 04 from platform e-stop S4. to platform control box terminal strip.	**Check for 12 V on 04 at terminal strip. Repair or replace if defective.**
2. Loose or broken wire 02 from platform control box terminal strip to B- ground.	**Check for ground on 02 at terminal strip. Repair or replace if defective.**
3. CAN comminication error.	**Check CANH and CANL wiring fron platfrom terminal strip to machine controller TTC_510 pins 209 and 222 Check 120 ohm termination resistors. Check CANH and CANL wiring to platform control box joysticks, I/O expander module and load cell. Refer to CAN troubleshooting in section 5.**
4. Loose or broken wire 04 from platform control box terminal strip to boom/turret joystick pin 16 and drive/steer joystick pin 16.	**Check for 12 V on pin 16 at both joysticks. Repair or replace if defective.**
5. Loose or broken wire 04 from platform control box terminal strip to foot switch S11.	**Check for 12 V on wire 04 at foot switch. Repair or replace if defective.**
6. Defective/Open foot switch S11.	**Depress foot switch. Check for 12 V on wire 08A at foot switch. Replace if defective.**
7. Loose or broken wire 08A from foot switch S11 to Boom/Turret joystick pin 19.	**Check for 12 V on wire 08A on pin 19. Repair or replace if defective.**
8. SGE Sensor bar depressed or shorted closed.	**Check that there is no voltage on wire 61 at pin 5 of Drive/Steer joystick**
9. Loose or broken wire 07A between contact blocks on key switch S2.	**Check for 12 V on all 07A wires on S2. Repair or replace if defective.**
10. Defective/Open key switch S2.	**select platform at keyswitch. Check for 12 V on wire 12 at key switch. Replace if defective.**
11. Loose or broken wire 12 from contact block on key switch S2 to machine cotroller TTC_510 pin 147.	**Check for 12 V on pin 147 of machine controller. Repair or replace if defective.**

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5.2-6 NVR display module (base control box)



Maintaining proper calibration is essential for good performance of the MEWP.

The lower main controller is located on the base control box door. Open the platform control box to access the upper secondary controller.

The controller has an integrated multi segment, four line display with membrane keys that allow it to be used as the main interface to system controls and adjustments. The display serves as your window into the application software to allow you to monitor or adjust the following information:

- Active function in use
- Part number and serial number
- Restore the factory default settings
- Output calibrations (Thresh, Max, Ramp.etc)
- I/O status
- CANBus status

5.2-5 NVR display - User interface keys

Button	Function
▲ ▼	**UP** and **DOWN** buttons Select or scroll through through menus.
◀ ▶	**LEFT** and **RIGHT** buttons Change settings and move through menus.
↩	**ESC** button Return to the previous screen.
↵	**ENTER** button Select or save.

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5.4-5 Master Cylinder Replacement

1. Ensure the MEWP is parked on a firm and level surface.

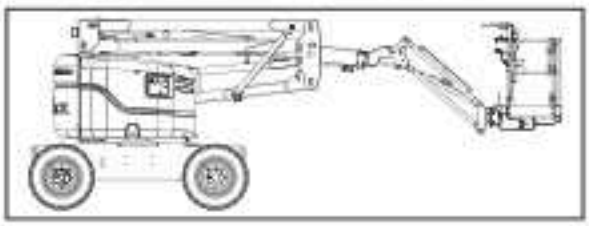
⚠ WARNING

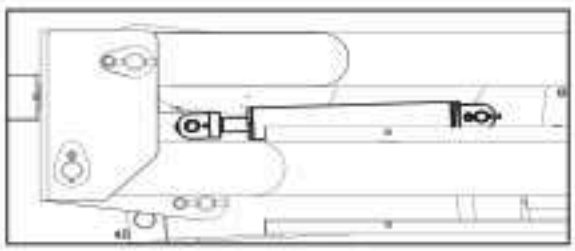
Ensure that there is sufficient room for boom to swing and elevate.

⚠ WARNING

Be aware of overhead obstructions or other possible hazards around the machine when lifting.

2. By using the base controls, position the machine as below to allow for easy work access to the basket/jib boom and the master cylinder.





3. Turn the main disconnect switch to the off position ◯. Lock the switch to prevent unauthorized use during this procedure.

NOTE

Ensure all components are secured before lifting or removing them.

4. Using straps, secure the main boom on suitable lifting equipment such as a crane.

5. Secure the master cylinder with straps. See below for an example.



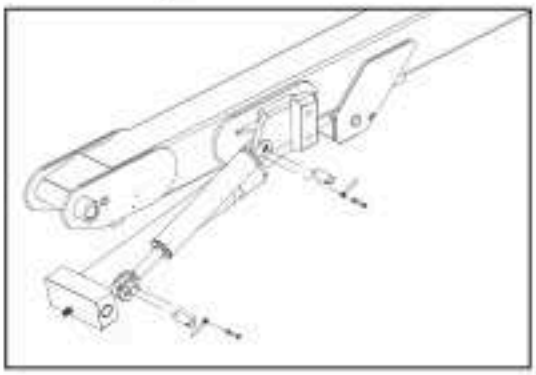
⚠ CAUTION

Label all electrical cables and hydraulic hoses before removal

⚠ CAUTION

To prevent hydraulic system contaminations, cap all hydraulic hoses and fittings after removal.

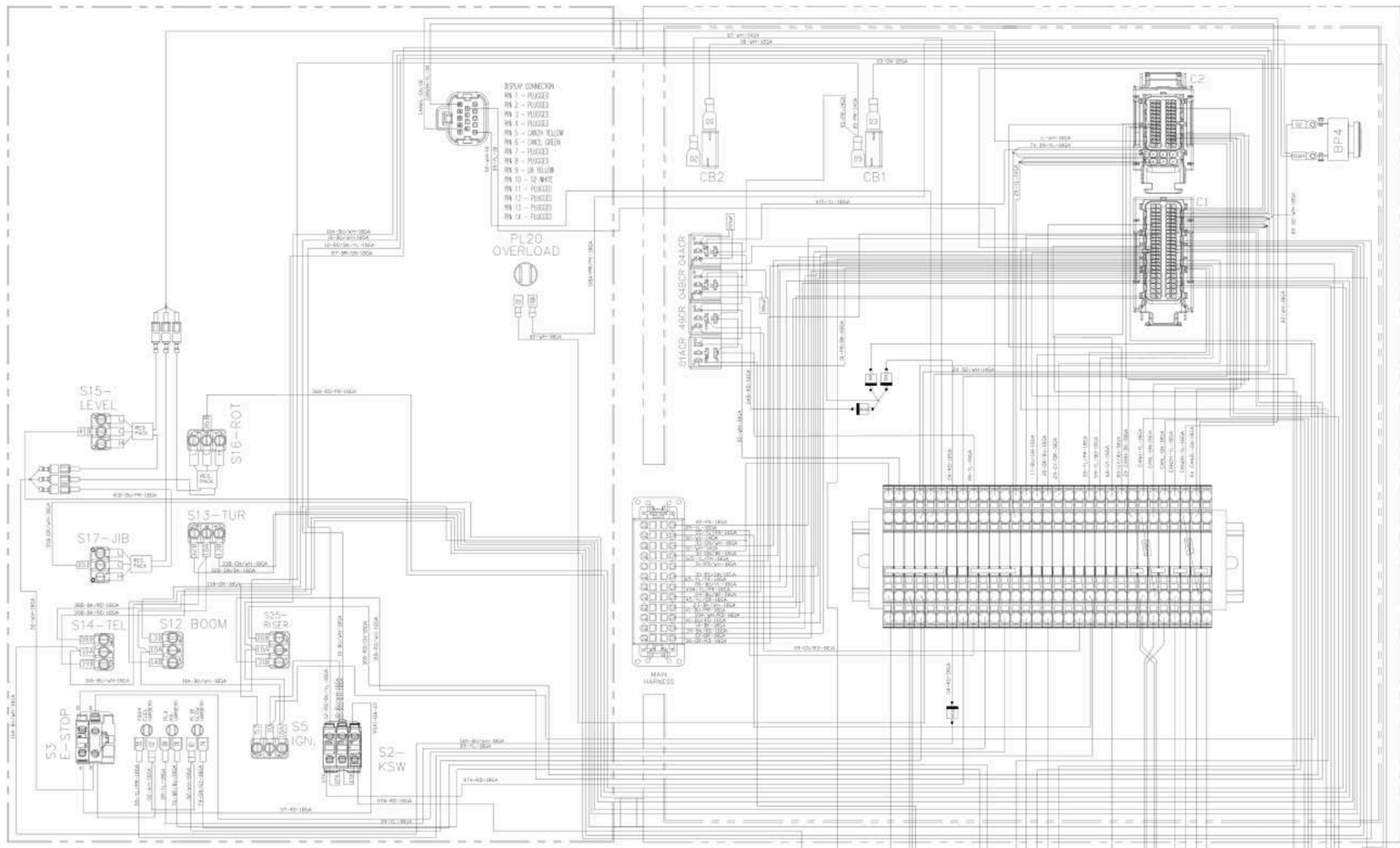
6. Remove the hydraulic hoses and fittings on the master cylinder. Replace any worn or damaged components.
7. Disconnect the master cylinder from the main boom by removing the connecting pin, see below. Set all parts aside for reuse.

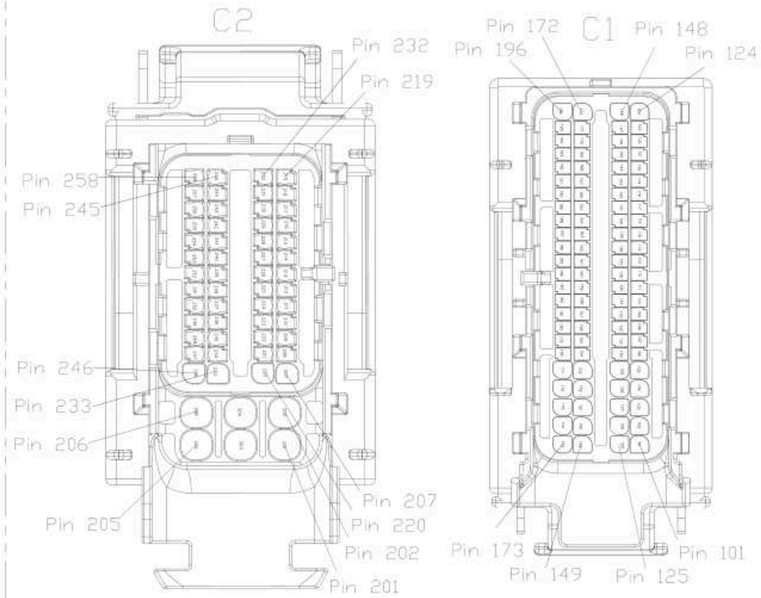


8. Install the new master by installing the cylinder pins as shown above. Secure the keeper pin and the bolt with Loctite 242 (Blue) or equivalent.
9. Install the hydraulic hoses and fittings on the master cylinder.

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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	R
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															T
															U
															V
															W
															X
															Y
															Z





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