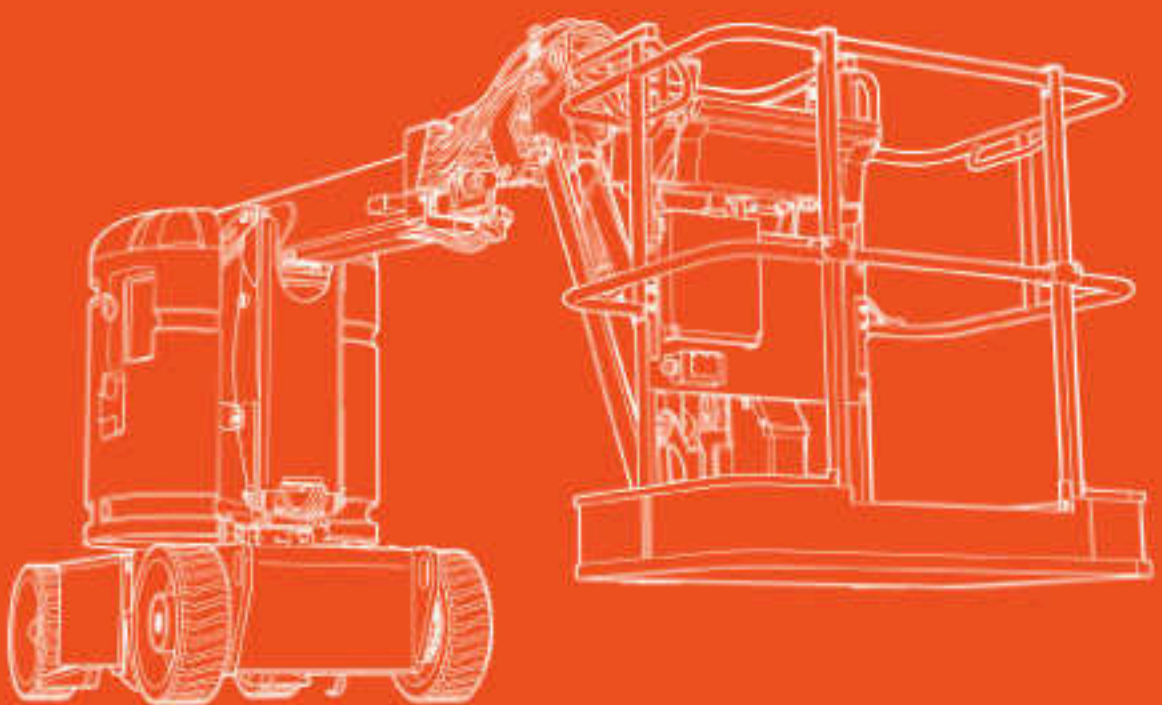
SKYJACK

SERVICE MANUAL

SJ30 AJE, SJ30 ARJE

ARTICULATING BOOM



196274AK
April 27 2026
ANSI/CSA, CE, AS, KC

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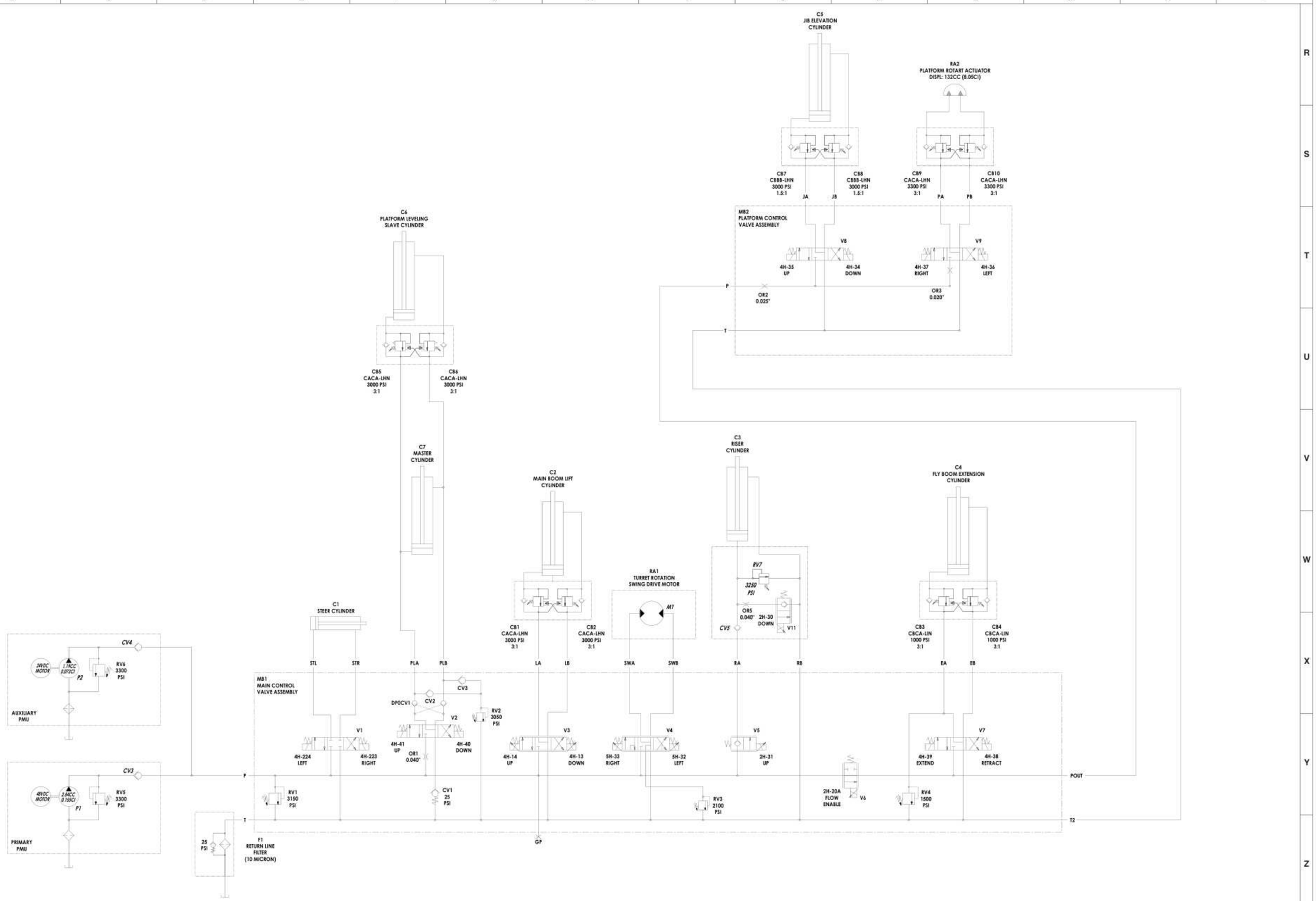
Table 2.4 Torque Specifications for Fasteners (Metric)

Size	Torque Type	8.8		10.9	
		Dry	Lubed	Dry	Lubed
M5 x 0.80	(in-lb)	(54)	(41)	(78)	(59)
	Nm	6.1	4.6	8.8	6.7
M6 x 1.00	(in-lb)	(92)	(69)	(133)	(99)
	Nm	10.4	7.8	15	11.2
M7 x 1.00	(in-lb)	(156)	(116)	(222)	(167)
	Nm	17.6	13.1	25.1	18.9
M8 x 1.25	(in-lb)	(225)	(169)	(333)	(242)
	Nm	25.4	19.1	37.6	27.3
M10 x 1.50	ft-lb	37	28	53	40
	Nm	50	38	72	54
M12 x 1.75	ft-lb	65	49	93	69
	Nm	88	66	126	94
M14 x 2.00	ft-lb	104	78	148	111
	Nm	141	106	201	150
M16 x 2.00	ft-lb	161	121	230	172
	Nm	218	164	312	233
M18 x 2.50	ft-lb	222	167	318	238
	Nm	301	226	431	323
M20 x 2.50	ft-lb	314	235	449	337
	Nm	426	319	609	457
M22 x 2.50	ft-lb	428	321	613	460
	Nm	580	435	831	624
M24 x 3.00	ft-lb	543	407	776	582
	Nm	736	552	1052	789
M27 x 3.00	ft-lb	796	597	1139	854
	Nm	1079	809	1544	1158
M30 x 3.50	ft-lb	1079	809	1543	1158
	Nm	1463	1097	2092	1570
M33 x 3.50	ft-lb	1468	1101	2101	1576
	Nm	1990	1493	2849	2137
M36 x 4.00	ft-lb	1886	1415	2699	2024
	Nm	2557	1918	3659	2744

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

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3.25 Hydraulic Schematic - SJ30AJE

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ZAPI MDI-CAN Controller Master Codes (continued)

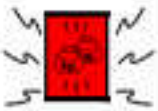
Track unit Code	MDI Code	MDI Description	Probable Cause	Remedy
53	53	STBY I HIGH	Internal Controller check	1. Cycle keyswitch (If code remains see next) Cause: The current transducer or the current feedback circuit is damaged in the Controller Troubleshooting: This type of fault is not related to external components so, when it is present, it is necessary to replace the controller
252	53	WRONG ZERO	The outputs of the amplfiers (used to measure motor voltage) are checked. This alarm occurs when voltage signals >3V or <2V.	1. Cycle keyswitch 2. Factory reset (Clear Eeprom) 3. Replace controller.
19	54	LOGIC FAILURE #1	Over voltage/ under voltage condition has been detected	1. Check battery for load induced voltage drop. Low voltage could be causing an under voltage condition. Check battery cables. 2. Factory reset (Clear Eeprom) 3. Replace controller.
18	55	LOGIC FAILURE #2	Motor voltage feedback circuits are damaged	1. Cycle keyswitch 2. Factory reset (Clear Eeprom) 3. Replace controller.
217	56	PUMP I NO ZERO	Pump current sensor feedback is out of permitted standby range	1. Cycle keyswitch 2. Factory reset (Clear Eeprom) 3. Replace controller.
60	60	CAPACITOR CHARGE	Startup test	1. Check battery voltage 2. Check battery and motor cables
250	61	THERMIC SENS. KO	Controller	Cause: The output of the controller thermal sensor is out of range. Troubleshooting: This type of fault is not related to external components; replace the controller.
62	62	TH. PROTECTION	Controller High temp alarm, if high temp is not real proceed to remedy	Cause: This alarm occurs when the temperature of the base plate is higher than 85°. Then the maximum current decreases proportionally with the temperature increases from 85° up to 105°. At 105° the Current is limited to 0 Amps. Troubleshooting: It is necessary to improve the controller cooling. In case of thermal dissipation realised with the controller base plate installed on chassis it is important the thickness of frame and the planarity and roughness of its surface. If the alarm is signalled when the controller is cold, the possible reasons are a thermal sensor failure or a failure in the logic card. In this case, it is necessary to replace the controller.

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5.3-1 Verify Proper Operation of the Load-sensing System

Overload Status Chart

Weight	Indicator Light	Load Cell LED Display	Audible Alarm	MEWP Functions
 (Zero)	 OFF	Error - OFF Alarm - OFF Zero/Tare - ON (orange) Power - FLASHING (green)	 OFF	 ENABLED
 (Work Mode @ 244+)	 FLASHING	Error - OFF Alarm - FLASHING (red) Zero/Tare - OFF Power - FLASHING (green)	 PULSING	 DISABLED
 (Travel Mode @ 244+)	 FLASHING	Error - OFF Alarm - FLASHING (red) Zero/Tare - OFF Power - FLASHING (green)	 PULSING	 ENABLED

1. Ensure that the MEWP is on firm, level ground.
2. Fully retract and lower the boom .
3. Pull out both emergency stops .
4. Turn the keyswitch to the base position .
5. Activate the enable switch .

   Result: The overload indicator light pulses two times and the audible alarm sounds two times.
6. Ensure that the platform is unloaded and is free from any surface contact.

   Result: The green power LED flashes, the orange LED turns on, the red alarm LED turns off, and the red error LED turns off.
7. Place a 244 kg (538 lb) load on the platform.

   Result: The platform indicator light flashes, the load cell red alarm LED turns on, and the audible alarm pulses.
8. Using the base controls, extend the boom more than 30 cm (1 ft).

   Result: All drive and boom functions become disabled.
9. Remove the load from the platform.

   Result: All drive and boom functions are enabled and all warning indicators turn off.

NOTE

Refer to section 4 for load sensing system troubleshooting.

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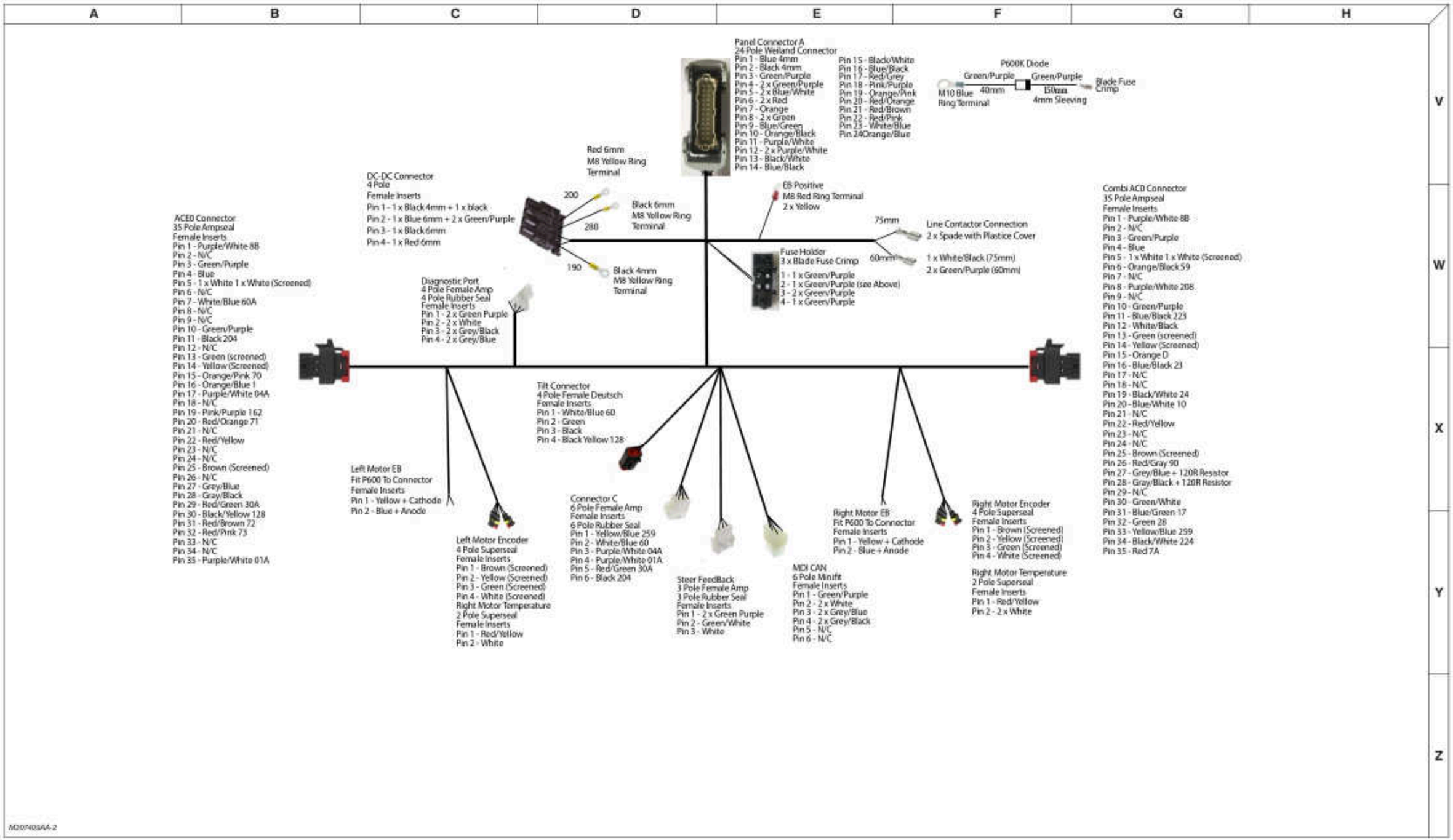
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3.24 Motor Controller Harness



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