SKYJACK

SERVICE MANUAL

SJ45 AJ+

ARTICULATING BOOMS



238274AGA
June 11 2026
ANSI/CSA, CE, AS

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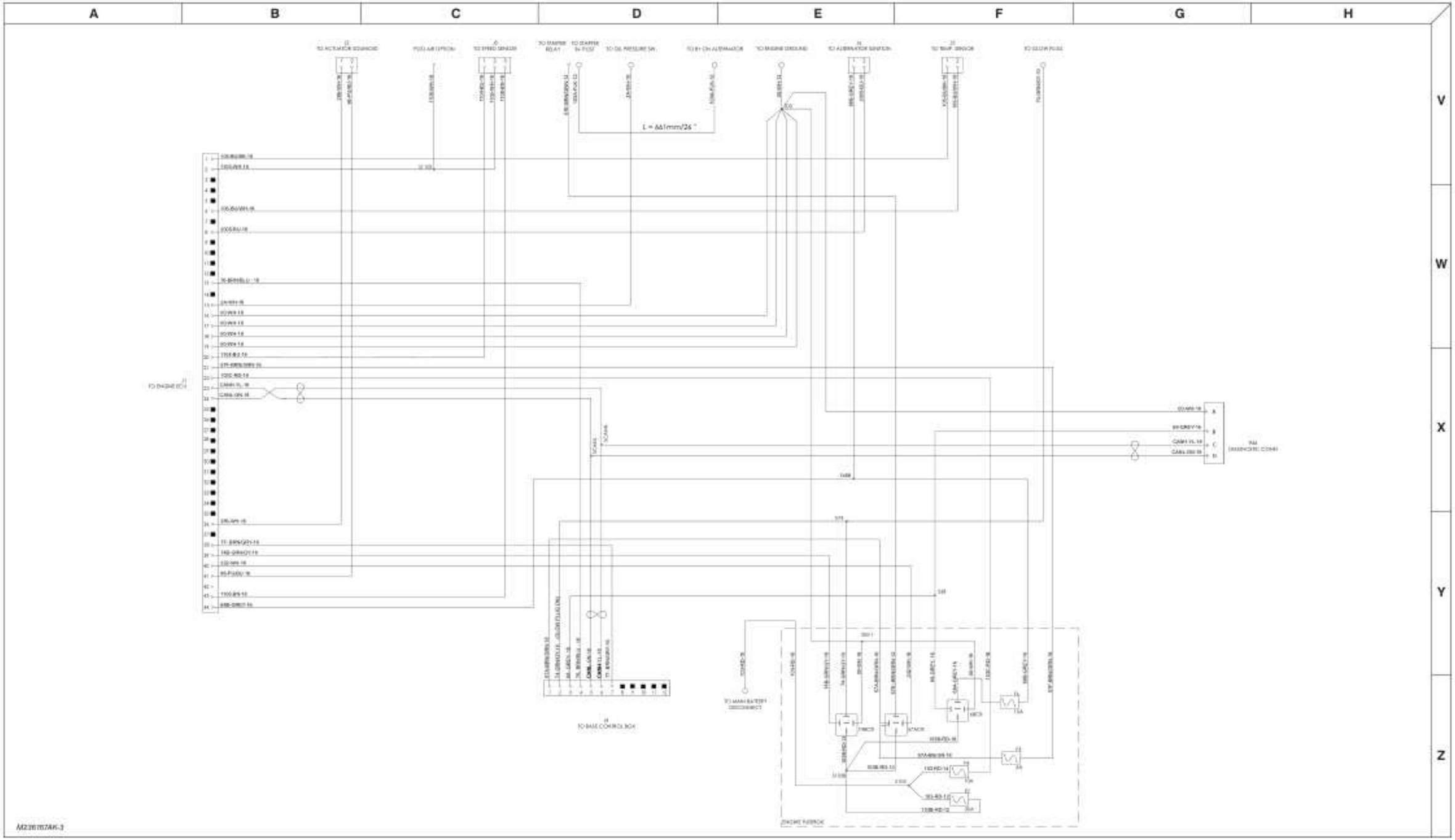
2.8 Hydraulic Specifications

Description		Metric	US
Pumps			
Drive Pump	Displacement - 2000 rpm	46 CC	2.8 CIR 24.3 gpm @ 2000 rpm
	Drive Pump Pressure	345 bar	5000 psi
	Charge Pump Displacement	13.9 CC	0.85 CIR
	Charge Pump Pressure	22 bar	313 psi
System Pump	Displacement - Static	11 CC	0.67 CIR / 5.8 gpm @ 2000 rpm
	System Pump Pressure	207 bar	3000 psi
Filters			
Charge Pump Filter	Max. Operating Pressure	9 µm/35	50 psi
High Pressure Filter	Max. Operating Pressure	10 µm/25	87 psi
Return Filter	Max. Operating Pressure	10 µm/40	22 psi
Motors			
Drive Motor	Displacement - Low	21 CC	1.55 CIR
	Displacement - High	38 CC	2.32 CIR
Swing Motor	Motor Displacement	65.56 CC	4 CIR
	Maximum Swing Pressure	121 bar	1750 psi
Cylinders			
Extension Cylinder	Bore	5.1 cm	2 in.
	Rod Diameter	3.2 cm	1.25 in.
	Stroke	1.7 m	67 in.
	Maximum Boom Pressure	207 bar	3000 psi
Main Lift Cylinder	Bore	10.2 cm	4 in.
	Rod Diameter	4.5 cm	1.75 in.
	Stroke	64.6 cm	25.44 in.
	Maximum Lift Pressure	207 bar	3000 psi
Riser Cylinder	Bore	6.4 cm	2.5 in.
	Rod Diameter	4.5 cm	1.75 in.
	Stroke	92 cm	36.21 in.
	Maximum Lift Pressure	207 bar	3000 psi
	Maximum Lower Pressure	190 bar	2750 psi
Steering Cylinder	Maximum Steering Pressure	207 bar	3000 psi

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3.16 Engine Harness Wiring Diagram - D1305



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5.2-15 CANbus troubleshooting

SMB1-x06 Slave 1 ID 8 (upper controller)		
Error	**Possible cause**	**Remedy**
PRE OPER	A partial CAN communication error to that node caused by a short or open circuit on the CAN lines between the upper and lower controller.	1. To check for a short, disconnect the load cell CAN lines from the terminal strip in the upper control box. 2. With the wire to the load cell disconnected, check and see if SMB1-x06 Slave node 8 has changed to "OPERATING". 3. If it has changed to "OPERATING" the issue is within the load cell or load cell wiring. Follow the procedure *5.2-16 Verify the CANbus line* on the load cell CAN lines.
	The lower controller has not been set up and is in factory mode.	Check that the lower controller has the correct model, region, and engine.
	The P1 connector on the lower controller is unplugged.	Plug in the P1 connector.
	SMB1-x06 Slave 1 still reads "PRE OPER".	Do the procedure *5.2-16 Verify the CANbus line* on the CAN lines between the upper and lower controllers.
NO DATA	There is no communication from the lower SCM to the upper controller.	1. Verify you have proper power to the controllers and the upper and lower e-stops are pulled out. 2. Check for good connections on the CAN lines at the terminal strips of the upper and lower control boxes. 3. Follow the procedure *5.2-16 Verify the CANbus line* on the CAN lines between the upper and lower controllers. found at the end of this procedure.
	The lower controller will also show LOAD CELL 2 LOST on the start up screen if there is no communication.	
	LOAD CELL 2 LOST shows when the P11 connector in the upper control box is unplugged.	Plug in the P11 connector.

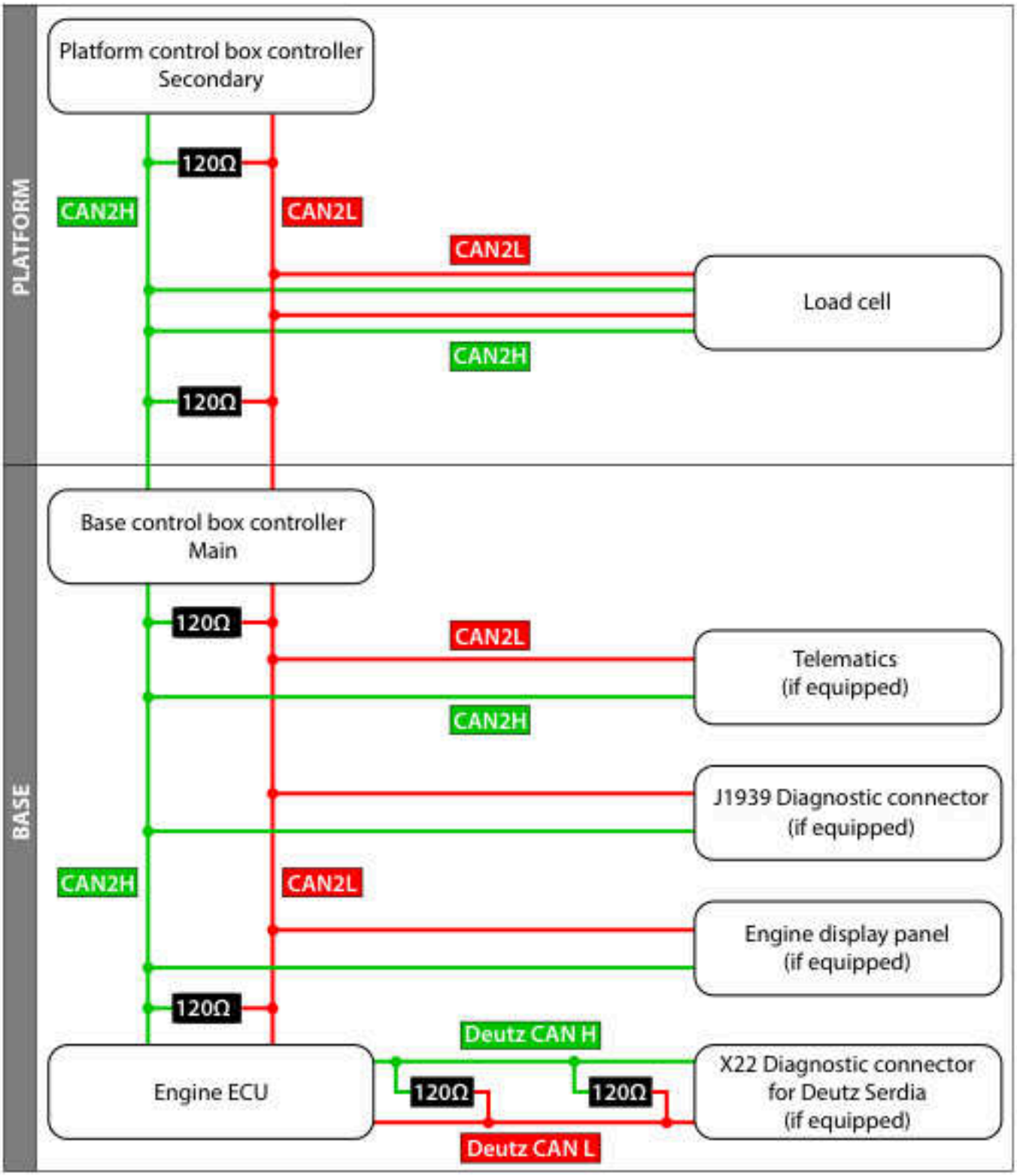
SMB1-x08 Main ID 1 (lower controller)			
Error		**Possible Cause**	**Remedy**
SMB1-x08	**PRE OPER**	The lower controller is in factory mode and has not been set up yet.	1. Follow the *5.2-9 SCM Model Select* flowchart.
MRW-1 and/or MRW-2 (load cell)	**NO DATA**	No communication from one or both nodes of the load cells.	1. Make sure the upper and lower e-stops are pulled out. 2. Verify you have the power to the controllers. 3. Verify the dipswitches are set to 2 and the load cell green lights are on. 4. If all of the above are true and the error continues, follow the procedure *5.2-16 Verify the CANbus line* to check the load cell CAN lines.
	LOAD CELL 1 or 2 LOST		

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5.2-17 CANbus connections diagram

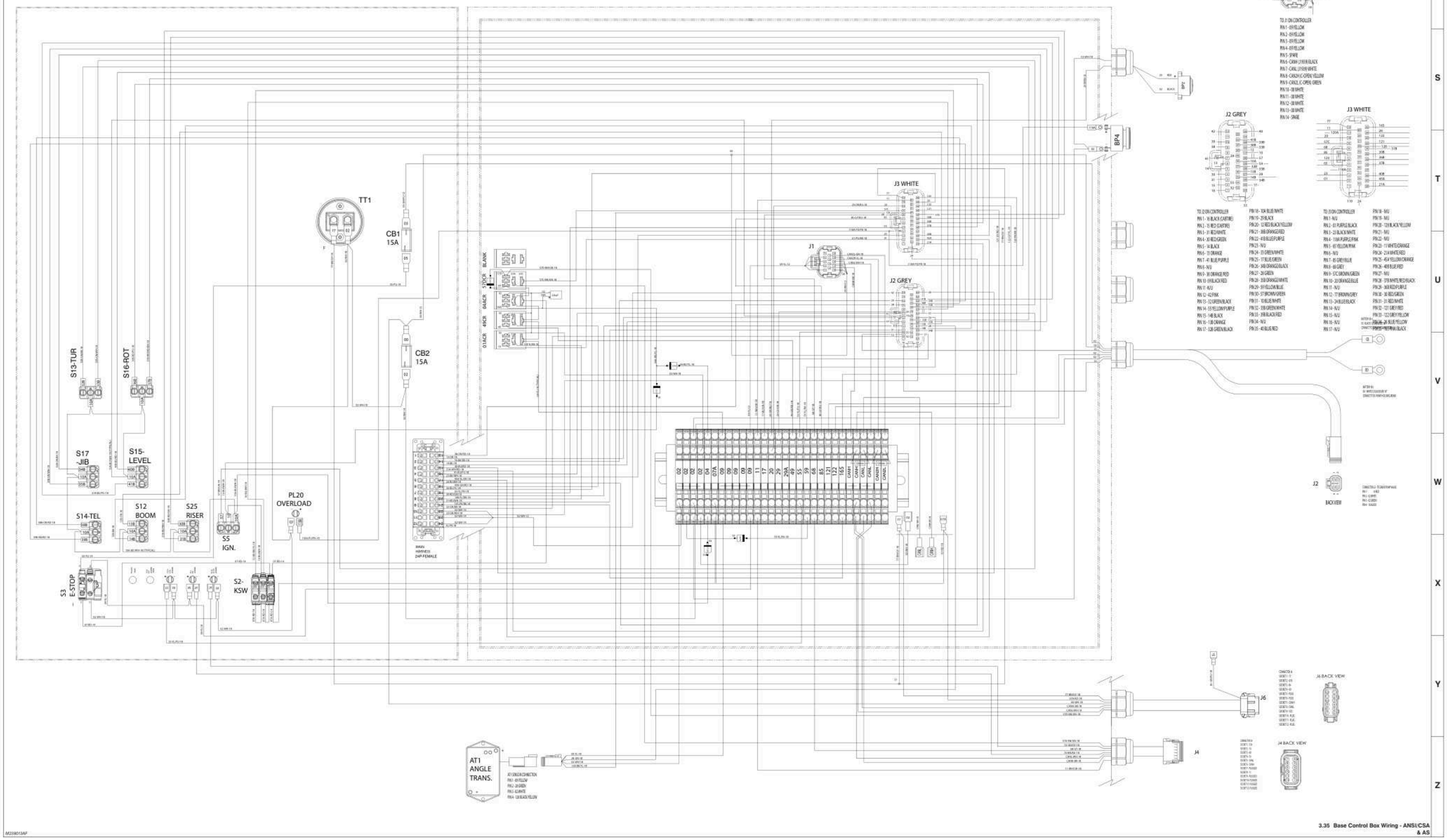


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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O

Wire Number and Colour Chart

Relay diagrams



M2280613AF

3.35 Base Control Box Wiring - ANSI/CSA & AS

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