SKYJACK

SERVICE MANUAL

SJ12, SJ16

VERTICAL MAST

161917AH
June 12 2026
ANSI, CE & KC

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Table 2.4 Specifications and Features - CE

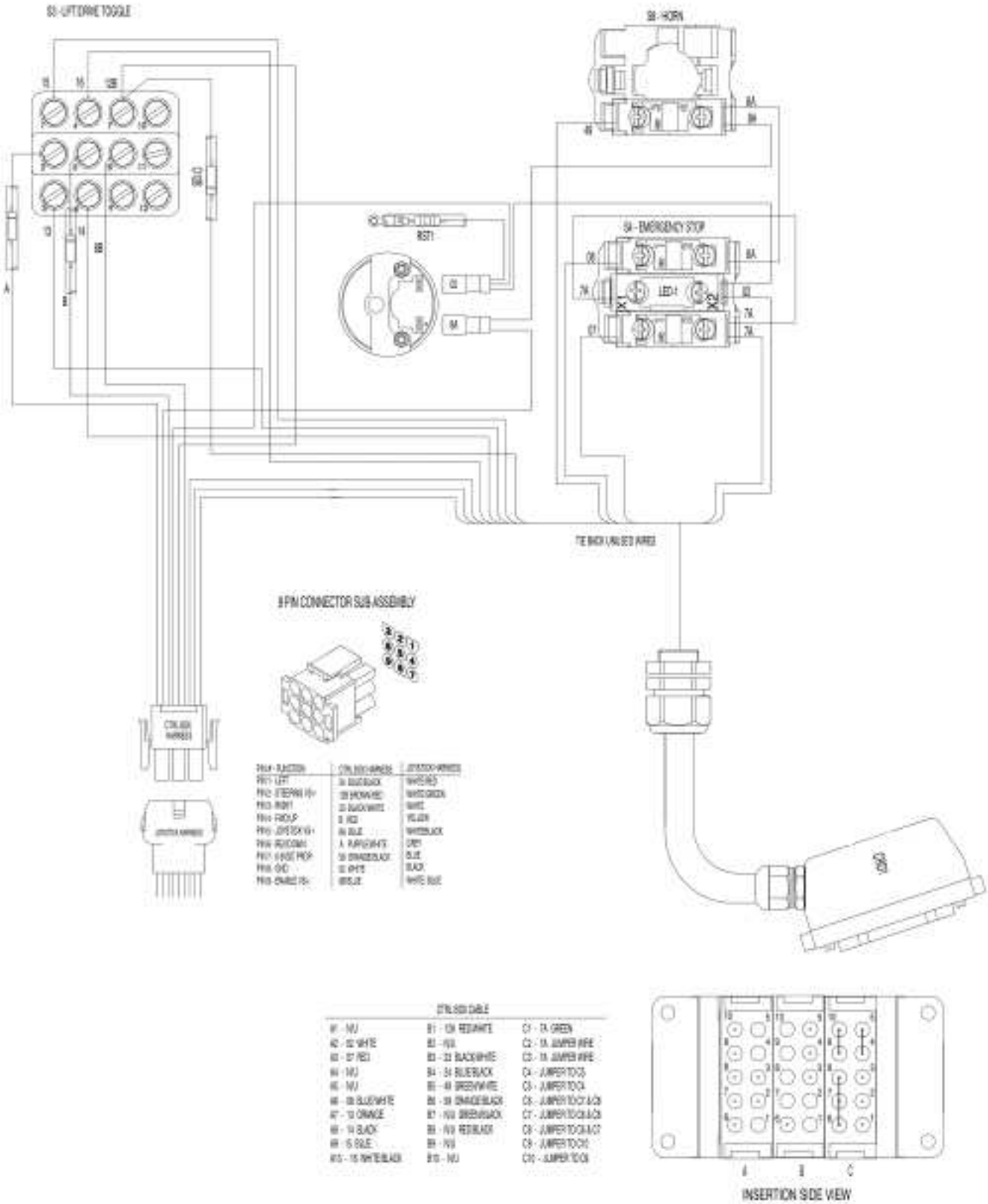
Model	SJ12	SJ16
Weight *	780 kg	966 kg
Overall Width	76.2 cm	76.2 cm
Overall Length	137 cm	137 cm
Platform Size (Inside)	68.5 x 93.5 cm	68.5 x 93.5 cm
Platform Traversing	40.6 cm	40.6 cm
Height		
Working Height	5.65 m	6.75 m
Platform Elevated Height	3.65 m	4.75 m
Stowed Height	179 cm	179 cm
Drive Height	Full	Full
Lowered Platform Height	45 cm	45 cm
Standard Operating Times		
Lift Time (Rated Load)	16 s	20 s
Lower Time (Rated Load)	14 s	18 s
Chassis		
Normal Drive Speed	4 km/h	4 km/h
Elevated Drive Speed	0.8 km/h	0.8 km/h
Gradeability (Ramp Angle)**	30% / 25%	30% / 25%
Tires (Solid Rubber)	309 x 100 mm	309 x 100 mm
Hydraulic Oil		
Type	ATF Dexron III	ATF Dexron III
Tank Capacity	4.92 L	4.92 L

** Weights are approximate; refer to serial nameplate for specific weight.* 1604

*** Refer to Section 3.9 Loading/Unloading in the Operator's Manual for more details.*

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3.9 Platform Control Console Wire Diagram



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4.2 Electrical System Troubleshooting

4.2-1 All Controls Inoperative

1. Battery charger plugged into external power source.	**Disconnect charger cord.**
2. Batteries disconnected.	**Connect batteries.**
3. Dirty or loose battery terminals.	**Clean and tighten connections.**
4. Battery charge low.	**Check each cell with a hydrometer. Reading should be 1.275 (fully charged). Recharge if low reading. Replace if reading difference between cells is 0.050.**
5. Main battery cables open or defective.	**Check continuity. Replace if defective.**
6. Fuse F1 defective.	**Replace fuse.**
7. Main battery disconnect switch S1 open or defective.	**Close switch. Check continuity. Replace if defective.**
8. Loose or broken wire #3 from motor contactor C1 to circuit breaker CB1.	**Check continuity. Replace if defective.**
9. Loose or broken wire #3A from circuit breaker CB1 to charger relay L1CR.	**Check continuity. Replace if defective.**
10. Defective or tripped circuit breaker CB1.	**Reset circuit breaker. Replace if defective.**
11. Defective battery charger relay L1CR.	**Check relay. Replace if defective.**
12. Loose or broken wire #5 from charger relay L1CR to base emergency stop switch S28.	**Check continuity. Replace if defective.**
13. Open or defective base emergency stop switch S28.	**Close switch. Check switch. Replace if defective.**
14. Loose or broken wire #5A from base emergency stop switch S28 to base key switch S10.	**Check continuity. Replace if defective.**
15. Open or defective base key switch S10.	**Select function with switch. Check switch. Replace if defective.**
16. Loose or broken wire #00 from motor controller to circuit breaker CB2.	**Check continuity. Replace if defective.**
17. Defective or tripped circuit breaker CB2.	**Reset circuit breaker. Replace if defective.**
18. Loose or broken wire #02 from circuit breaker CB1 to base terminal block.	**Check continuity. Replace if defective.**

4.2-2 All Controls Except for Down Function Inoperative

1. Loose or broken wire #59B from base terminal block to motor controller.	**Check continuity. Replace if defective.**

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3. Locate the chain assemblies inside the mast. Lubricate the entire length of chain and anchor points using spray on industrial "Moly based" chain lubricant (for example Crown Wire Rope, Chain and Cable Lube 7043).

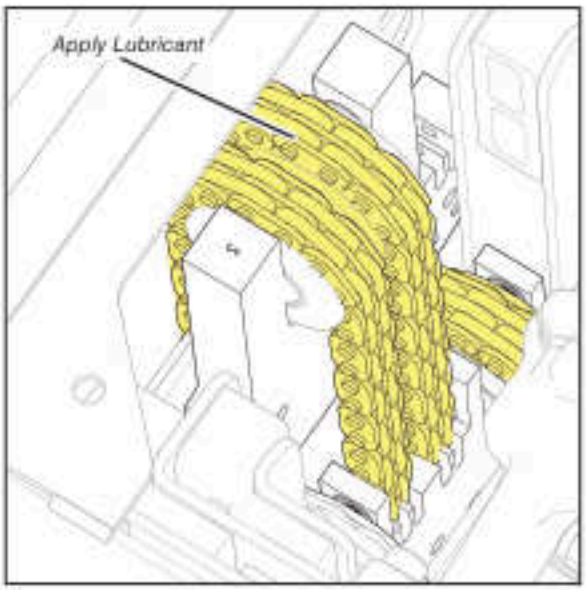


Figure 12 *Chain lubrication*

4. Exit the work platform.
5. From the base controls, fully raise and lower the platform three times to distribute the lubricant.
6. Install the mast cover at the top.

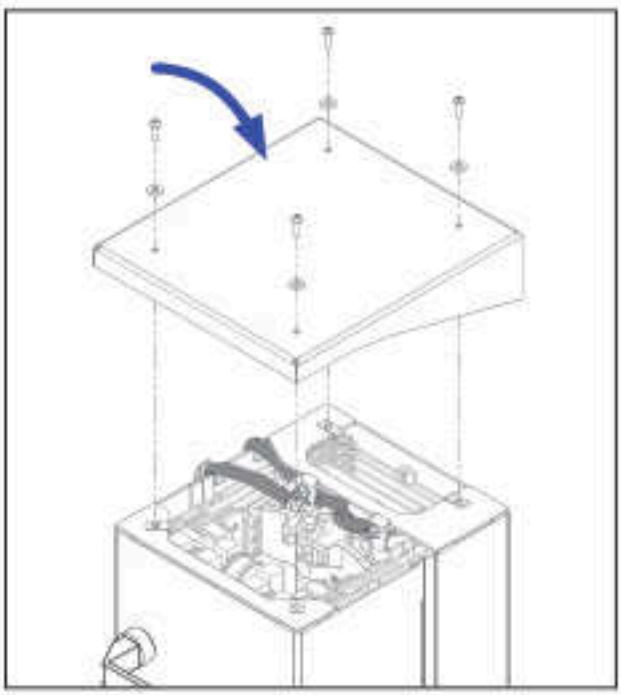


Figure 13 *Mast Top Cover Installation.*

5.11 Mast Roller Inspection/ Maintenance

5.11-1 Roller Operation Inspection

1. Using the base controls, fully retract the mast.

⚠ WARNING

Crushing/entrapment hazard due to moving chains/rollers and mast components. Keep all hands, other body parts and clothing away from moving parts.

2. Enter the platform and remove top mast cover.

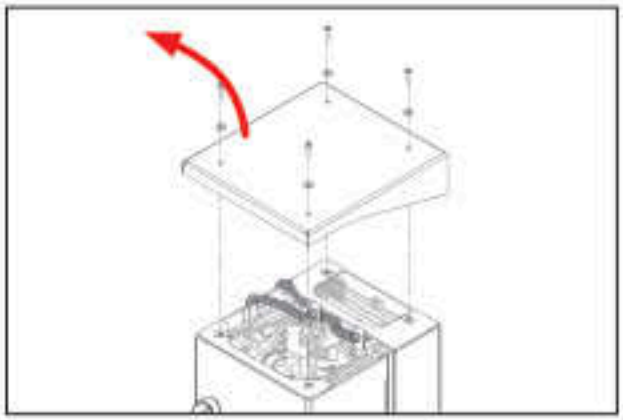
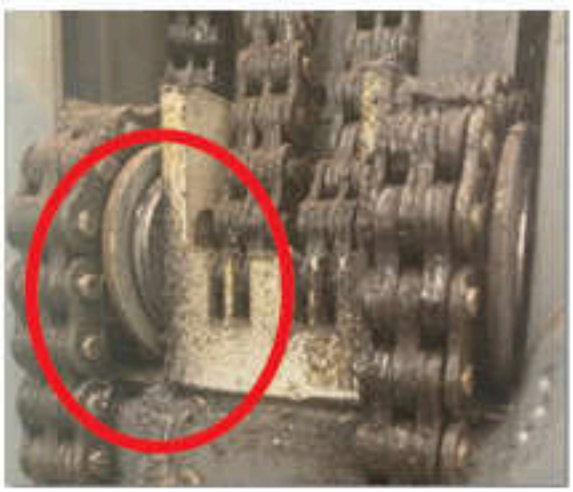


Figure 14 *Top Cover Removal.*

3. Inspect for metal shavings and dusty residue around the roller mounts and on the chain. This could indicate roller and/or chain erosion. Monitor for visible (magnetic) dusting and feel rollers for any grooving.

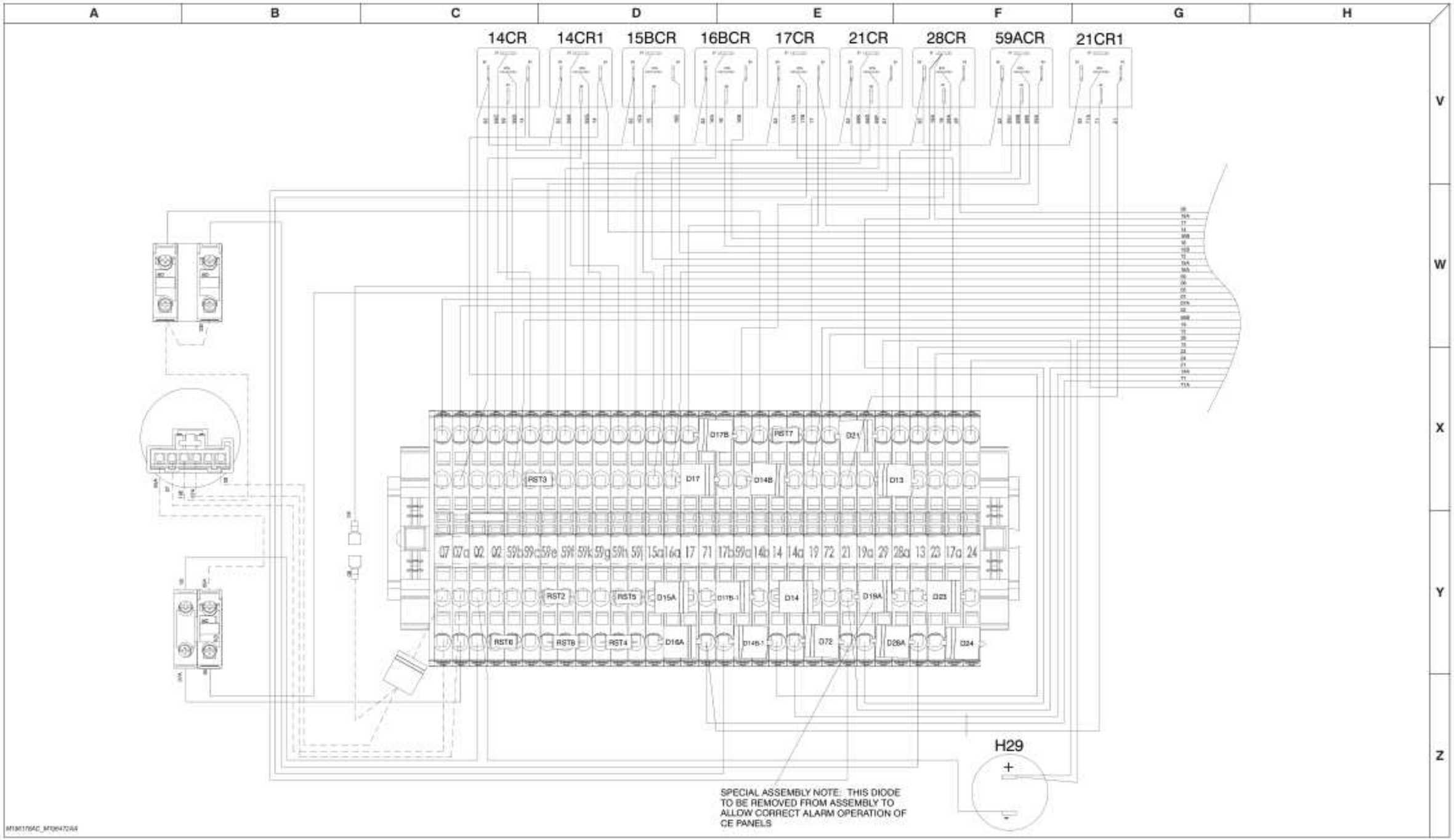


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3.17 Base Control Wiring Diagram (SJ12/SJ16 - CE/KC)



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