

SERVICE MANUAL (ANSI)

TELEHANDLERS

MODELS SJ643 TH SJ843 TH

190128AE August 2026

SKYJACK

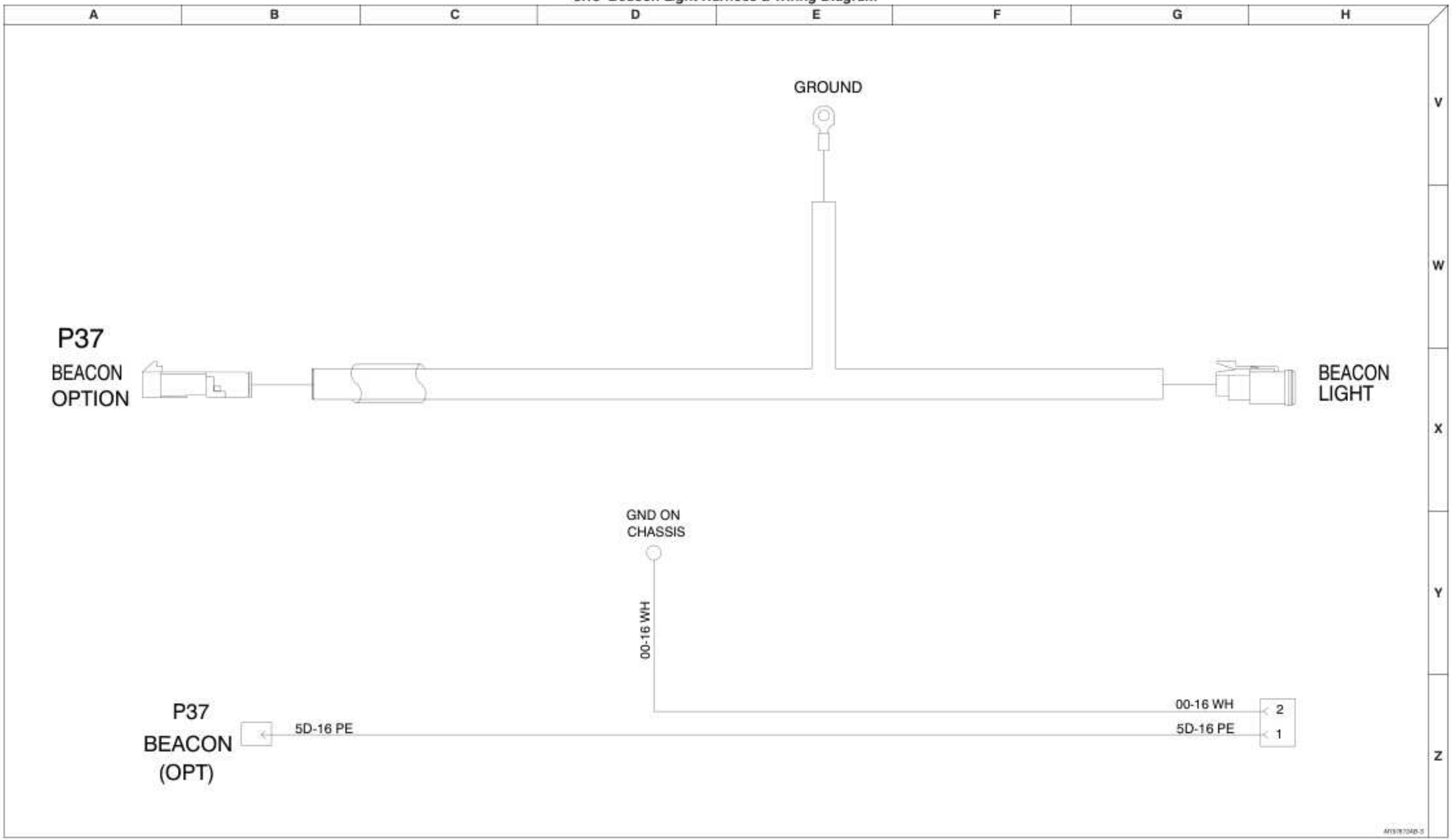
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Section 1
SCHEDULED MAINTENANCE

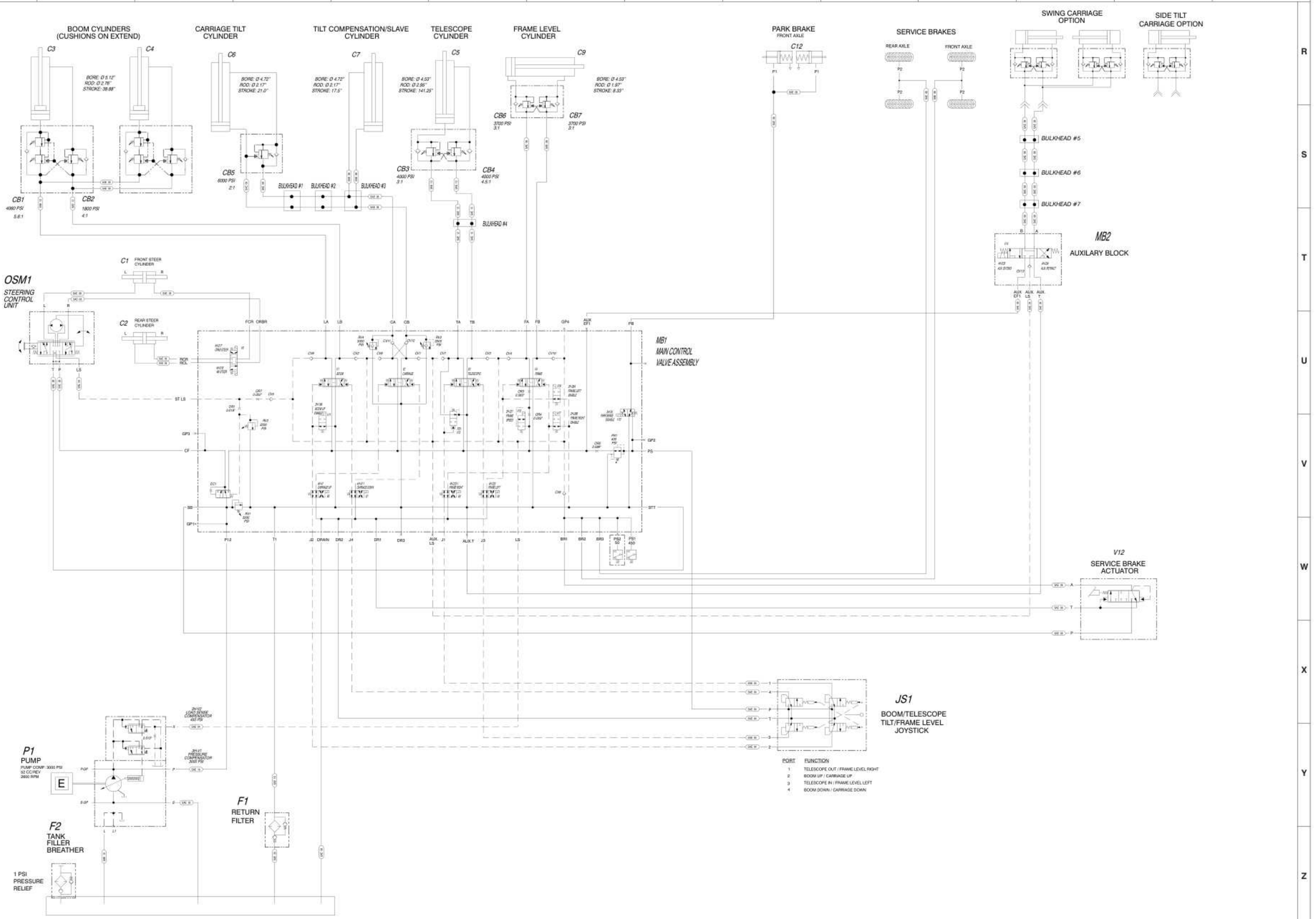
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4.2-8 No carriage Tilt Down

1. Stuck or defective joystick JS1
   - Clean valve. Check operation of valve. Repair or replace valve as required.
2. 4H-47-1 stuck or defective.
   - Clean valve. Check operation of valve. Repair or replace valve as required.
3. Stuck or defective carriage tilt valve V2.
   - Clean valve. Check operation of valve. Repair or replace valve as required.
4. LS check valve CV1 blocked or defective
   - Clean valve. Check operation of valve. Repair or replace valve as required
5. Pilot operated check valve CV11 and or CV12 blocked or defective
   - Clean valve. Check operation of valve. Repair or replace valve as required
6. RV3 misadjusted or defective
   - Adjust pressure, replace if defective
7. Stuck or defective lift counterbalance valves CB5
   - Clean valve. Check O-rings on valve. Repair or replace valve as required.
8. Defective carriage tilt cylinder C6
   - Check seals on cylinder. Replace as necessary. Replace cylinder if defective
9. Defective tilt compensation cylinder C7
   - Check seals on cylinder. Replace as necessary. Replace cylinder if defective

4.2-9 No Frame Level Right

1. Stuck or defective joystick JS1
   - Clean valve. Check operation of valve. Repair or replace valve as required.
2. 4H-223-1 stuck or defective.
   - Clean valve. Check operation of valve. Repair or replace valve as required.
3. Frame right enable valve 2H-28 stuck or defective.
   - Clean valve. Check operation of valve. Repair or replace valve as required
4. Orifice OR3 and/or OR4 plugged
   - Remove and inspect, clean or replace as required
5. Stuck or defective frame level valve V4.
   - Clean valve. Check operation of valve. Repair or replace valve as required.
6. LS check valve CV10 blocked or defective
   - Clean valve. Check operation of valve. Repair or replace valve as required
7. Stuck or defective frame level counterbalance valve CB7
   - Clean valve. Check O-rings on valve. Repair or replace valve as required.
8. Stuck or defective frame level counterbalance valve CB6
   - Clean valve. Check O-rings on valve. Repair or replace valve as required.
9. Defective frame level cylinder C9
   - Check seals on cylinder. Replace as necessary. Replace cylinder if defective

4.2-10 No Frame Level Left

1. Stuck or defective joystick JS1
   - Clean valve. Check operation of valve. Repair or replace valve as required.
2. 4H-223 stuck or defective.
   - Clean valve. Check operation of valve. Repair or replace valve as required.
3. Frame right enable valve 2H-28A stuck or defective.
   - Clean valve. Check operation of valve. Repair or replace valve as required
4. Orifice OR3 and/or OR4 plugged
   - Remove and inspect, clean or replace as required
5. Stuck or defective frame level valve V4.
   - Clean valve. Check operation of valve. Repair or replace valve as required.

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8. Install spring retainer, spring and regulator valve in sleeve against inner cross pin as shown in Figure 5-100.

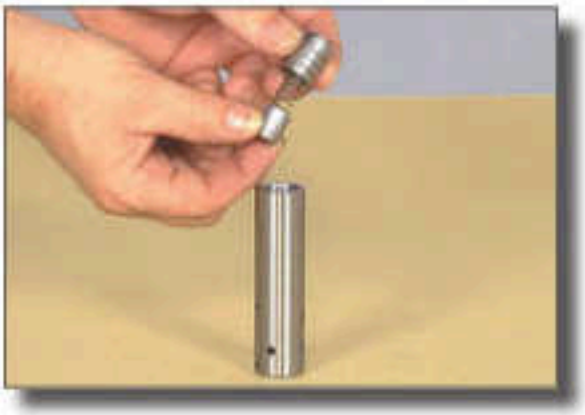


Figure 5-100. Install Component in Sleeve

9. Compress regulator spool and spring in sleeve far enough to install cross pin as shown in Figure 5-101.



Figure 5-101. Compress Components in Sleeve

10. Install cross pin as show in Figure 5-102.



Figure 5-102. Install Cross Pin

11. From opposite end, position accumulator spool in sleeve as shown in Figure 5-103.



Figure 5-103. Position Accumulator Coil

12. Install outer accumulator spring as shown in Figure 5-104.



Figure 5-104. Install Outer Accumulator Spring

13. Install middle spring as shown in Figure 5-105.



Figure 5-105. Install Middle Spring

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **DRIVE UPHILL LOADED.** When holding a load, driving uphill decreases potential for load to slip out.



- **LEVEL FRAME ON SLOPES** before elevating the boom.



- **WHEN TRANSPORTING LOADS** fully retract the boom, keep the load low to the ground and forks tilted back slightly. This is the most stable position possible for the vehicle.



- **KEEP** forks close to the ground when in motion to increase telehandler stability and decrease potential for injury to others. When fully stopped, lower forks completely to the ground.



- **TILT** forks backward slightly when traveling to decrease potential of load slipping off.



- **SECURE** loose loads with chains or straps to decrease potential of spills or injury to others.



- **TETHER LOADS** that may swing, keeping them close to the ground. Provide ample clearance for personnel to guide the load safely.



- **SLINGING LOADS** is acceptable only when the load is appropriately attached to the lifting hook, a jib boom or the heel of a tilted fork, and the precautions outlined in Section 2.13 of the operator's manual are followed.



- **BE AWARE** of the telehandler's travel envelope, especially when turning. Keep sufficient clearance at all times between the telehandler and any obstacles or people.



- **KEEP OTHERS AWAY** at all times during operation.



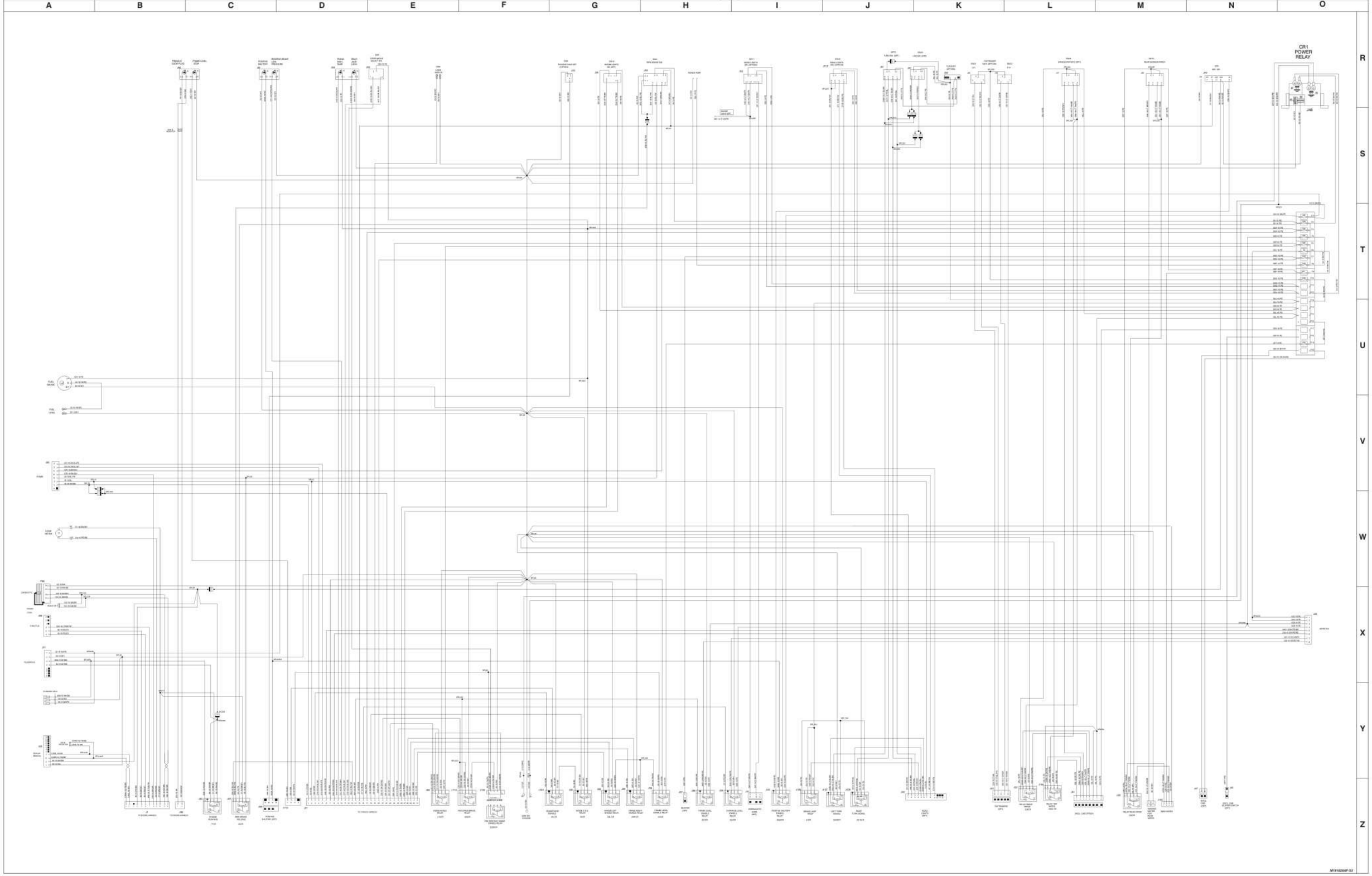
- **CHECK** lights for proper function before operating.



- **ENSURE ALL** tires are in good condition and lug nuts are properly tightened.



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