

Hydraulic Hose Replacement on Isolated Equipment - JSA - B

en-US · Technical failure review · v1.0 · 2026-10-14 · Sources: article section 9

Site: | Item ID: | Work area:

Approval	Work supervisor	Technical reviewer	Release / handover authority

1. Job details and team signatures

Date / time		Location / area		Assessor		Supervisor	
Team signatures							

2. Conditions and hold points

Stage	Time	Location / area	Environment / readings	Item / condition	Controls	Plant / tools	Approval / signature
HP-0 Start							
HP-1 Control residual pressure							
HP-2 Fit and route assembly							
HP-3 Hold and correct faults							
HP-4 Record and hand over							

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

Job stage	Hazards and effects	Failure factors	Technical and procedural controls	Site verification	P	S	R	A
1. Stop isolate and support	1. Unexpected pump start 2. Stored mechanical movement 3. Electrical restart	1. Remote start remains 2. Support unsuitable 3. Isolation unverified	1. Isolate all energy sources 2. Control associated movement 3. Verify authorized isolation	1. Energy points and locks 2. Remote and automatic sources 3. Safe-state verification				
2. Control residual pressure	1. Hose whip 2. Trapped-fluid spray 3. Pressure returns during work	1. Check valves overlooked 2. One gauge used alone 3. Load or accumulator recharges	1. Address both sides and traps 2. Control reaccumulation 3. Verify before opening	1. Accumulator and valve paths 2. Both hose ends assessed 3. Continued energy control				
3. Remove and protect ends	1. Contamination damage 2. Dropped component injury 3. Wrong connection restored	1. Ports left uncovered 2. Assembly unsupported 3. End labels lost	1. Contain fluid and cap ports 2. Support assembly removal 3. Retain connection identity	1. Clean caps and containment 2. Removed assembly condition 3. End labels and orientation				
4. Fit and route assembly	1. Fitting seal failure 2. Kink or twist rupture 3. Moving-part contact	1. Bend limit exceeded 2. Hose twisted on tightening 3. Motion clearance unchecked	1. Maintain specified bend route 2. Control twist and supports 3. Check full movement envelope	1. Fastening method and result 2. Bend twist and clamp condition 3. Motion and heat clearance				
5. Restore and test	1. Unexpected equipment motion 2. Hose burst strike 3. Undetected leakage	1. People remain in test area 2. Guards left open 3. Test conditions improvised	1. Clear and control test area 2. Use protected detection method 3. Apply authorized test procedure	1. Operating conditions recorded 2. Leak and movement observations 3. No personnel in hazard path				
6. Hold and correct faults	1. Repeated hose failure 2. Load descent during rework 3. Damaged assembly reused	1. Cause not determined 2. Isolation not repeated 3. Failed hose patched	1. Reverify support and pressure 2. Resolve seal and routing cause 3. Replace rejected assemblies	1. Cause and approved correction 2. Support and pressure recheck 3. Protected retest evidence				

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

☐ Energy points and locks	☐ Accumulator and valve paths	☐ Clean caps and containment
☐ Fastening method and result	☐ Operating conditions recorded	☐ Cause and approved correction
☐ Safe-state verification	☐ Motion and heat clearance	☐ Protected retest evidence