

Sprinkler Grooved Coupling Assembly - 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 Inspect ends and gasket							
HP-2 Tighten coupling							
HP-3 Hold and reassemble							
HP-4 Hand over for testing							

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. Support pipe and access	1. Dropped pipe strike 2. Platform fall 3. Support movement	1. Temporary stand unstable 2. Reach exceeds platform 3. Lower area unprotected	1. Prevent pipe rolling 2. Use accepted work platform 3. Control below and hand positions	1. Pipe restraint and alignment 2. Platform and safe reach 3. Lower-area boundary				
2. Inspect ends and gasket	1. Sharp-edge cut 2. Groove disengagement 3. Gasket deterioration	1. Burr or damage ignored 2. Dimensions not checked 3. Lubricant incompatible	1. Check groove and end dimensions 2. Verify gasket grade and condition 3. Follow exact lubrication criteria	1. End condition and cleanliness 2. Gasket grade and damage 3. Lubricant and application basis				
3. Align and insert pipe	1. Pipe movement 2. Rolled gasket leakage 3. Partial engagement	1. Supports shift 2. Insertion forced 3. Model sequence ignored	1. Maintain independent supports 2. Follow insertion sequence 3. Check gasket and groove seating	1. Support remains stable 2. Pipe insertion and gasket 3. Housing-key engagement				
4. Tighten coupling	1. Housing fracture 2. Groove disengagement 3. Damaged bolt failure	1. One side over-tightened 2. Wrong completion rule 3. Fastening beyond criteria	1. Monitor actual housing engagement 2. Meet model completion criteria 3. Stop on damage or asymmetry	1. Specified tightening sequence 2. Housing and groove engagement 3. Model completion evidence				
5. Inspect and mark joint	1. Hidden gasket defect 2. Incomplete joint overlooked 3. Wrong inspection record	1. Visual checks omitted 2. Joint identity missing 3. Hold status unclear	1. Verify model fastening criteria 2. Link inspection to joint ID 3. Mark accepted and held joints	1. Gasket and housing condition 2. Required completion checks 3. Accepted or held status				
6. Hold and reassemble	1. Damaged part reused 2. Repeated seal failure 3. Pipe falls during repair	1. Cause not investigated 2. Same failed gasket retained 3. Supports not rechecked	1. Identify cause and affected parts 2. Replace rejected components 3. Restore support and reinspect	1. Pressure and support recheck 2. Replacement and reassembly 3. Repeat inspection evidence				

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

4. Pre-work checklist

☐ Pipe restraint and alignment	☐ End condition and cleanliness	☐ Support remains stable
☐ Specified tightening sequence	☐ Gasket and housing condition	☐ Pressure and support recheck
☐ Lower-area boundary	☐ Model completion evidence	☐ Repeat inspection evidence