

Mechanical Bearing Puller Removal - 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 Support and shield							
HP-2 Set grip and alignment							
HP-3 Hold stuck assembly							
HP-4 Inspect and transfer							

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 and shield	1. Projected-part strike 2. Bearing fall 3. Bystander injury	1. Release path exposed 2. Catch support missing 3. Access uncontrolled	1. Provide specified shielding 2. Support released parts 3. Separate pulling zone	1. Release path and protection 2. Bearing and tool support 3. People clear of line of force				
2. Inspect puller	1. Screw seizure 2. Unbalanced pull 3. Unexpected grip loss	1. Lubrication omitted 2. Wrong jaw combination 3. Reach or rating unsuitable	1. Use specified lubrication 2. Match permitted configuration 3. Verify rating and reach	1. Jaws screw and links 2. Lubrication instructions 3. Configuration and reach				
3. Set grip and alignment	1. Shaft-end damage 2. Off-axis release 3. Weak-edge failure	1. Wrong screw-tip support 2. Screw not centered 3. Cover used as grip	1. Protect shaft end correctly 2. Align screw with shaft 3. Check load-bearing surface	1. Screw and shaft center 2. Tip and end condition 3. Grip surface suitability				
4. Apply manual force	1. Jaw deformation 2. Tool overload 3. Support displacement	1. Pipe extension used 2. Resistance ignored 3. Force path shifts	1. Apply controlled force 2. Observe alignment changes 3. Stop on abnormal resistance	1. Jaw and screw position 2. Support movement 3. Permitted drive method				
5. Recover released bearing	1. Residual-force release 2. Pinched hands 3. Puller fall	1. Tool loosened under load 2. Part caught by hand 3. Tool not restrained	1. Unload in specified sequence 2. Keep hands clear of release 3. Recover parts after unloading	1. Residual loading controlled 2. Tool stable for removal 3. Safe retrieval position				
6. Hold stuck assembly	1. Fragment injury 2. Heat-weakened tool 3. Damaged shaft reuse	1. Hammering added 2. Puller heated 3. Damage not assessed	1. Use approved unloading 2. Review alternative removal 3. Inspect affected parts	1. Unloading and restraint state 2. Damage and method review 3. Authorized restart basis				

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

4. Pre-work checklist

☐ Release path and protection	☐ Jaws screw and links	☐ Screw and shaft center
☐ Jaw and screw position	☐ Residual loading controlled	☐ Unloading and restraint state
☐ People clear of line of force	☐ Permitted drive method	☐ Authorized restart basis