

Fan V-Belt Replacement and Tension Adjustment - JSA - B

en-US · Technical failure review · v1.0 · 2026-10-13 · 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 Isolate and restrain							
HP-2 Align and tension							
HP-3 Hold and recheck							
HP-4 Hand over drive							

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. Isolate and restrain	1. Airflow-driven rotation 2. Stored-motion contact 3. Unexpected energization	1. Other fan flow ignored 2. Coastdown incomplete 3. Isolation unverified	1. Control airflow motion 2. Wait for full stop 3. Verify safe energy state	1. Duct and wheel restraint 2. Complete stop confirmed 3. Authorized worker verification				
2. Remove guard and belt	1. Dropped heavy guard 2. Belt cord damage 3. Released belt tension	1. Tension not released 2. Belt pried over rim 3. Hand near moving sheave	1. Release tension as specified 2. Lift slack belt off 3. Maintain motion restraint	1. Adjustment mechanism 2. Slack belt condition 3. No remaining motion				
3. Inspect and replace	1. Unequal drive loading 2. Sheave-edge cuts 3. Belt misseating	1. Old and new belts mixed 2. Damaged parts handled 3. Wrong groove engagement	1. Replace specified full set 2. Handle edges safely 3. Seat belts without force	1. Set identity and condition 2. Contamination removed 3. Belt seating				
4. Align and tension	1. Bearing overload 2. Drive vibration 3. Motor base movement	1. Wrong span or units 2. Sheaves misaligned 3. Fasteners left loose	1. Record span and units 2. Align shafts and sheaves 3. Secure motor adjustments	1. Instrument and span 2. Alignment evidence 3. Fastening acceptance				
5. Guard and test	1. Loose-tool projection 2. Vibration damage 3. Guard rubbing	1. Tools remain inside 2. Fault ignored at start 3. Clearance not checked	1. Account for tools 2. Use controlled test 3. Stop for contact or vibration	1. Area and tools clear 2. Noise vibration and heat 3. Test conditions recorded				
6. Hold and recheck	1. Repeated belt failure 2. Unexpected windmilling 3. Unverified restart	1. Cause not resolved 2. Restraint omitted on return 3. Recheck not scheduled	1. Investigate measured cause 2. Restore motion control 3. Recheck at specified interval	1. Correction and measurement 2. Restored guard and test 3. Recheck owner and timing				

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

4. Pre-work checklist

☐ Duct and wheel restraint	☐ Adjustment mechanism	☐ Set identity and condition
☐ Instrument and span	☐ Area and tools clear	☐ Correction and measurement
☐ Authorized worker verification	☐ Fastening acceptance	☐ Recheck owner and timing