

Crawler Bulldozer Grading - 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 edges and people							
HP-2 Enter and trial							
HP-3 Stop and address faults							
HP-4 Park 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. Control edges and people	1. Fall beyond edge 2. Soil strikes workers below 3. Spotter crushed	1. Edge limits undefined 2. Work continues below 3. Spotter position unsafe	1. Mark reviewed approach limits 2. Exclude lower affected area 3. Agree safe spotter positions	1. Rear path and sight lines 2. Lower-area exclusion 3. Signals and waiting positions				
2. Inspect machine	1. Hydraulic fire 2. Track derailment 3. Uncontrolled blade descent	1. Hose damage ignored 2. Track wear unreviewed 3. Protection damaged	1. Inspect blade and hydraulic parts 2. Verify warning devices 3. Use intended ROPS and restraint	1. Blade hoses and fasteners 2. ROPS belt and access condition 3. Horn and reversing protection				
3. Enter and trial	1. Unexpected tilt 2. Drainage-ditch fall 3. Unstable travel	1. Machine width overlooked 2. Ditch edge hidden 3. Old route assumed safe	1. Observe trial ground response 2. Check drains and boundaries 3. Stop for cracking or settlement	1. Trial track impressions 2. Drainage and edge location 3. Tilt and support changes				
4. Push and grade	1. Blade reaction overturn 2. Thrown material strike 3. Exposed-service damage	1. Cut depth exceeds plan 2. Exclusion breached 3. Service marks displaced	1. Monitor soil and machine response 2. Keep people outside work envelope 3. Hold newly exposed services	1. Ground and slope response 2. Marked services and obstructions 3. Exclusion and visibility				
5. Reverse turn and traverse	1. Person struck behind 2. Track slip 3. Blind-spot collision	1. Cross-slope change ignored 2. Rear route not checked 3. Signal lost	1. Check path before movement 2. Use agreed reversing controls 3. Stop when sight or signal is lost	1. Rear route and people 2. Warning and signal status 3. Steps and track support				
6. Stop and address faults	1. Recovery-line recoil 2. Further settlement 3. Towing-point failure	1. Recovery improvised 2. Recovery load unknown 3. Temporary connector used	1. Isolate and mechanically support 2. Separate recovery from grading 3. Exclude recoil and unstable areas	1. Isolation and support evidence 2. Separate recovery plan 3. Repair and restart authority				

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

4. Pre-work checklist

☐ Rear path and sight lines	☐ Blade hoses and fasteners	☐ Trial track impressions
☐ Ground and slope response	☐ Rear route and people	☐ Isolation and support evidence
☐ Signals and waiting positions	☐ Exclusion and visibility	☐ Repair and restart authority