

G-34

MAINTENANCE MECHANIC TRAINING

SKILL CHECK GUIDE

Duty G: Conveyor

G-34: Replace Headpulley/Tailpulley (Belt)

Issued 01/01/99

Rationale

This Skill Development Guide provides the knowledge a Learner needs to replace a headpulley/tailpulley. The Learner must be able to:

- remove the old headpulley or tailpulley assembly.
- disassemble the old headpulley or tailpulley assembly.
- assemble the new headpulley or tailpulley.
- install the new headpulley or tailpulley assembly.

Skill Check Set-Up

Identify a conveyor that requires a headpulley or tailpulley replacement. Check the crib to ensure a replacement belt is available.

The Evaluator will provide the tools, materials, and resources needed to demonstrate the task.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before replacing a headpulley or tailpulley.

SAFETY FIRST

**DON'T TAKE
CHANCES**

- Follow all Caterpillar facility safety standards when performing this task.
- The conveyor drive motor must be locked and tagged when the defective headpulley/tailpulley is removed and during the installation of the headpulley/tailpulley.
- Ensure that the conveyor is unloaded, with no possibility of material being dumped on it while the headpulley/tailpulley replacement procedure is in progress.
- Lock out other feed belts and equipment.
- If the conveyor is located in a dusty area, wear a protective mask, as necessary.
- If the conveyor is located overhead and a ladder, manlift, or scaffold is necessary, exercise caution when working aloft. Wear a harness, as necessary.
- Wear gloves to protect your hands. Conveyors and conveyor service equipment can present hazards such as pinch points, rotating and moving equipment.



- two belt clamps
- appropriate transport equipment
- air drive impact or air ratchet wrenches
- Mechanics Hand Tools
- Allen wrench set
- special air drive socket for adjusting the tailpulley

- clamps, come-a-longs, chains, cables, etc. as needed in difficult applications
- fork truck
- boom attachment may be needed
- gear puller
- remote conveyor jog switch (optional)
- anti-seize compound.
- Flexlo's
- belt cutter
- belt tape
- straight edge



- Repair Ticket (Service Order)
- machine parts list
- belt location map



Skill Check

Given a repair ticket to replace a defective headpulley/tailpulley on a conveyor, replace the headpulley/tailpulley.

Needs
Mastered Practice

Safe Work Practices

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Follow all Caterpillar facility safety standards when performing this task. |
| _____ | _____ | 2. The conveyor drive motor must be locked and tagged when the defective headpulley/tailpulley is removed and during the installation of the headpulley/tailpulley. |
| _____ | _____ | 3. Ensure that the conveyor is unloaded, with no possibility of material being dumped on it while the headpulley/tailpulley replacement procedure is in progress. |
| _____ | _____ | 4. Lock out other feed belts and equipment. |
| _____ | _____ | 5. If the conveyor is located in a dusty area, wear a protective mask, as necessary. |
| _____ | _____ | 6. If the conveyor is located overhead and a ladder, manlift, or scaffold is necessary, exercise caution when working aloft. Wear a harness, as necessary. |
| _____ | _____ | 7. Wear gloves to protect your hands. Conveyors and conveyor service equipment can present hazards such as pinch points, rotating and moving equipment. |

Task Standards

- | | | |
|-------|-------|---|
| _____ | _____ | 1. The power disconnect must be locked and tagged. |
| _____ | _____ | 2. The shaft must show no signs of scoring, ridges, or wear. |
| _____ | _____ | 3. The bearings must show no signs of breakage, wear, or scoring. |

- _____ 4. The taper-lock bushing must show no signs of scoring, ridges, wear, or cracks.
- _____ 5. The Allen head screw must show no signs of wear, and must have good threads.
- _____ 6. All required safe practices must be demonstrated.



Evaluator's Sign-Off

The Learner has demonstrated safe work practices and competent performance of the task.

Evaluator: _____ Date: _____

Learner: _____ Clock No: _____

