

G-34

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty G: Conveyors

G-34: Replace Headpulley/Tailpulley (Belt)

Issued 01/01/99

Instructions To The Trainer

1. The Learner will contact you when ready to practice replacing a headpulley/
tailpulley.
2. Be prepared to demonstrate the steps for this task.
3. Ask the Learner to contact the Evaluator when ready for the Skill Check.



Skill Objective

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

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.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before replacing a headpulley/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 new 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



Practice Set-Up

The Learner may perform the following practice to help prepare for the Skill Check. Set up the practice for the Learner. Assist the Learner during the practice, if necessary; answer any questions concerning the task; and be prepared to demonstrate the task to the Learner. Make sure the Learner follows safe work practices while practicing the task.

Practice

You will designate a conveyor for replacing the headpulley or tailpulley. During the practice you will observe the Learner removing, disassembling, reassembling, and installing the headpulley or tailpulley. The Learner is required to follow all the recommended safe practices.

Practice Objective

The major components will be inspected for serviceably, showing no signs of wear, scoring, cracks, ridges or breakage. The headpulley or tailpulley must be reassembled before being install on the conveyor. The headpulley or tailpulley must be installed in the same position as the defective one. All safe practices must be demonstrated.

Next Step

Allow the Learner to continue practicing and developing skills needed to demonstrate the task. The Learner should ask the Evaluator to schedule a Skill Check when ready to demonstrate the task unaided and meet all the task standards and safe work practices.