

A-07b

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty A: Pumps (Not Hydraulic)
A-07b: Rebuild Pump (Graco Displacement)

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Instructions To The Trainer

1. The Learner will contact you when ready to practice rebuilding a Graco displacement pump.
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 defective Graco displacement pump, rebuild the pump.

Task Standards

1. The pump must be reassembled using the specified parts.
2. The packing nut must be torqued to 51.66 ft-lb (70n/m).
3. The vented ball seat must be seated as designated by the warning tag on the pump.
4. All cleaning solutions must be disposed of per HAZMAT regulations.
5. All safe practices must be demonstrated.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before rebuilding a Graco displacement pump.

SAFETY FIRST

**DON'T TAKE
CHANCES**

- Follow all Caterpillar facility safety standards when performing this task.
- When working in the paint area, wear heavy industrial gloves and a respirator fitted with charcoal filter for protection against the hazards associated with the cleaning solvents.
- An explosive hazard exists with cleaning solvents. Smoking is not permitted in the paint or cleaning areas.
- Know the location of the MSDS for the cleaning solutions.
- Solvents must be disposed of according to the HAZMAT regulations.



- blue loctite
- tank of solvent and solvent tray for cleaning parts
- tray with putty knife
- wire brush
- 13mm wrench
- 13/16" wrench
- torque wrench
- channel locks
- soft mallet
- vise
- defective Graco 220-547 Displacement Pump

- rebuild kit
- Cabot Seal assembly lubricant



- Graco Parts Manual



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

Designate a pump for the rebuilding activity. Ask the Learner to select the required repair kit based on the pump application. Check to ensure the proper kit is selected before beginning disassembly. Ask the Learner to:

- disassemble the pump
- clean the pump components
- reassemble the pump

Observe as the Learner reassembles the pump to ensure that the pump is assembled properly. Check to make sure that the task standards are met.

The Learner is required to follow all the recommended safe practices associated with handling and disposing of cleaning solvents.

Practice Objective

Pump must be reassembled using the specified parts. Packing nut must be torqued to 51.66 ft-lb (70n/m). The vented ball seat must be seated as designated by the warning tag on the pump. Cleaning solutions must be disposed of per regulatory procedures. 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.