

# AJ-01

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## MAINTENANCE MECHANIC TRAINING

### TRAINER'S GUIDE

Duty AJ: Air Motors

**AJ-01: Rebuild Air Motor (Graco Bulldog)**

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## **Instructions To The Trainer**

1. The Learner will contact you when ready to practice rebuilding a Graco Bulldog air motor.
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 request to rebuild a Graco Bulldog air motor, rebuild the air motor.

### Task Standards

1. The air motor must be reassembled using the specified parts.
2. All fasteners must be secured wrench-tight.
3. The distance from the top face of the nut to the top of the trip rod must be .031 inch, when checked with a caliper.
4. The air motor shield inlet hole must be aligned with the unplugged air manifold port.
5. All cleaning solutions must be disposed of per HAZMAT regulations.
6. 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 Bulldog air motor.

### 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 explosion 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.



- Amogel assembly lubricant
- blue loctite
- tank of solvent and solvent tray for cleaning parts
- tray with putty knife
- wire brush
- 1 1/4" wrench or 1 1/4" deep well socket (1/2" drive)
- 1" socket (1/2" drive)
- 7/16" wrench
- 7/8" wrench
- 3/4" wrench
- 9/16" wrench

- 1/2" drive ratchet
- air impact wrench (1/2" drive)
- rebuild kit
- vice
- caliper
- hammer



- Graco Bulldog Air Motor Operator's 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 Graco Bulldog air motor for the rebuilding activity. Ask the Learner to select the required repair kit. Check to ensure the proper kit is selected before beginning disassembly. Ask the Learner to:

- disassemble the air motor
- clean the air motor components
- reassemble the air motor

Observe as the Learner rebuilds the air motor to ensure that the air motor is disassembled and 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

The air motor must be reassembled using the specified parts. All fasteners must be secured wrench-tight. The distance from the top face of the nut to the top of the trip rod must be .031 inch when checked with a caliper. The air motor shield inlet hole must be aligned with the unplugged air manifold port. All cleaning solutions must be disposed of per HAZMAT regulations. 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.