

AJ-01

MAINTENANCE MECHANIC TRAINING

SKILL CHECK GUIDE

Duty AJ: Air Motors

AJ-01: Rebuild Air Motor (Graco Bulldog)

Issued 06/01/98

Rationale

This Skill Development Guide provides the knowledge a Learner needs to rebuild a Graco Bulldog air motor. The Learner must be able to select a repair kit, clean the air motor, disassemble and reassemble the air motor.

Skill Check Set-Up

Designate a Graco Bulldog air motor that needs to be rebuilt. Check to ensure that the kit required for the air motor is in stock. Arrange the availability of a cleaning area for use when air motor parts need to be cleaned.

Observe as the Learner reassembles the air motor. Check to ensure that all defective parts are replaced. The air motor fasteners must be secured wrench-tight. The distance between the top face of the nut and the top of the trip rod must meet specifications. The air motor shield hole must align with the unplugged air manifold port.

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 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



Skill Check

Given a request to rebuild a Graco Bulldog air motor, rebuild the air motor.

Needs
Mastered Practice

Safe Work Practices

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Follow all Caterpillar facility safety standards when performing this task. |
| _____ | _____ | 2. 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. |
| _____ | _____ | 3. An explosion hazard exists with cleaning solvents. Smoking is not permitted in the paint or cleaning areas. |
| _____ | _____ | 4. Know the location of the MSDS for the cleaning solutions. |
| _____ | _____ | 5. Solvents must be disposed of according to the HAZMAT regulations. |

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. |



Evaluator's Sign-Off

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

Evaluator:

Date:

Learner:

Clock No: