# **Instructions – Parts List**



# AIR MOTOR REPLACEMENT KIT 223099

307977C

For replacing air motor 215963 on 1:1 ratio Fast–Flo® Pumps, Models 226940, 226941, 226942, 226943, 226944, 226945, 226947, 226948, 226951, 226952 and 226953.



## **Important Safety Instructions**

Read all warnings and instructions in this manual. Save these instructions.

See Fast–Flo Pump instruction manual 307427 for detailed repair instructions.

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## Installation

## **A** WARNING

#### **Pressure Relief Procedure**

To reduce the risk of serious bodily injury, including splashing fluid in the eyes or on the skin, or injury from moving parts, always follow this procedure whenever you shut off the pump, when checking or servicing any part of the system, when installing, cleaning or changing nozzles, and whenever you stop dispensing.

- 1. Shut off the air to the pump.
- 2. Close the bleed-type master air valve (required in your system).
- 3. Hold a metal part of the dispensing valve firmly to the side of a grounded metal pail, and trigger the valve to relieve pressure.
- Open the drain valve (required in your system), having a container ready to catch the drainage.
- 5. Leave the drain valve open until you are ready to dispense again.

If you suspect that the nozzle or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, very slowly loosen the hose end coupling and relieve pressure gradually, then loosen completely. Now clear the nozzle or hose.

### **Tools Needed**

- 10 mm open end wrench
- 13 mm open end wrench
- small ball peen hammer
- needle-nose pliers
- small metal scribe
- 2.5 mm Allen wrenches

### **Before You Start**

- Follow the Pressure Relief Procedure Warning above.
- Read the Pump Model No. and Series Letter from the designation plate on the air motor being replaced. Use a metal scribe to record this information on the designation plate (2) included in the kit. See Fig. 1.

Fasten the new designation plate (2) to the new air motor (1) with two drive screws (3).

## Removing the Old Air Motor

- 1. Clamp the pump (A) in a bench vise. Be careful to prevent damaging the pump.
- 2. Use a 13 mm open end wrench to unscrew the three tie rod locknuts (4).
- Use a 2.5 mm Allen wrench to remove the screw (5) from the threaded barrel (7). Then remove both parts from the connecting rod.

## **A** CAUTION

To prevent damaging the air motor connecting rod (C) or the pump displacement rod (D), do not use clamp—type wrenches on these parts.

- Pull the air motor (1) away from the pump. Unscrew the air motor connecting rod (C) from the pump displacement rod (D). Remove the air motor.
- 5. Remove the o-ring (6) from the pump displacement rod (D) and discard.

## **Installing the New Air Motor**

- Use a 10 mm open end wrench to make sure the three tie rods (E) are screwed tightly into the pump housing.
- Install the new o-ring (6) against the shoulder of the pump displacement rod (D).
- 3. Apply lithium base grease to the threads of the pump displacement rod (D).
- 4. Install the new air motor (1) onto the pump (A). Screw the air motor connecting rod (C) onto the pump displacement rod (D), hand tight.
- Install the barrel pin (7) through the air motor connecting rod (C) and the pump displacement rod (D).
   Turn the connecting rod to align the holes if necessary.
- 6. Use the 2.5 mm Allen wrenches to hand tighten the screw and barrel set (5 and 7).
- 7. Turn the air motor (1) so the air inlet (F) is oriented as shown in Fig. 1. Set the air motor in place on the tie rods (E).
- Apply thread sealant to the threads of the tie rods (E). Install three new locknuts (4) loosely onto the tie rods. Torque the locknuts evenly to 15 N.m (8 ft–lb).

# Installation

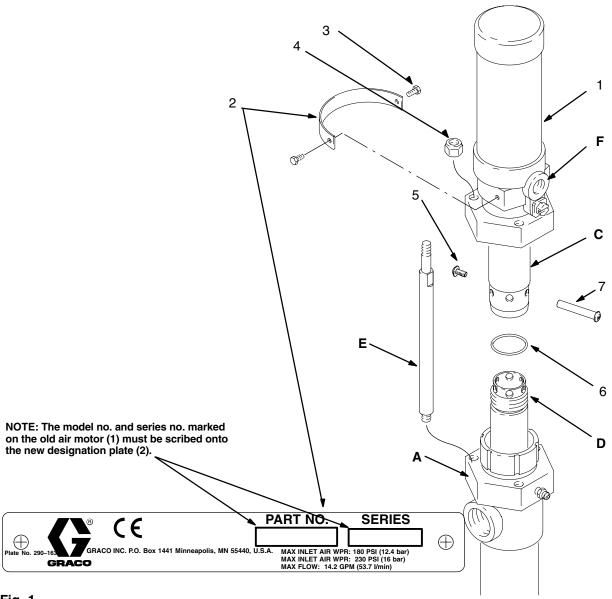
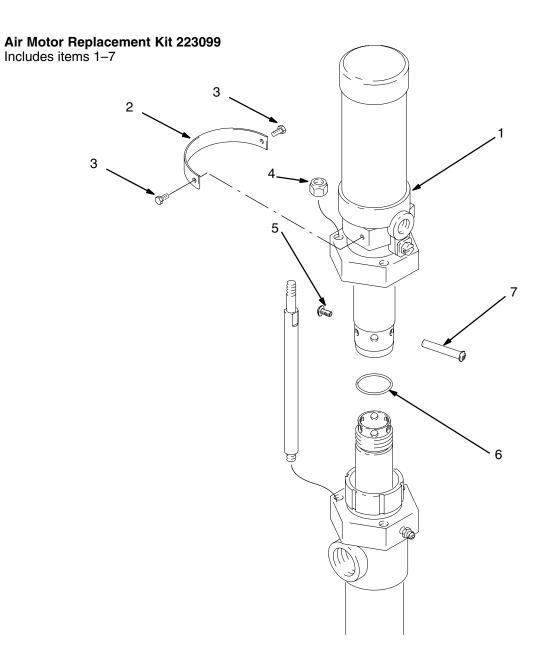


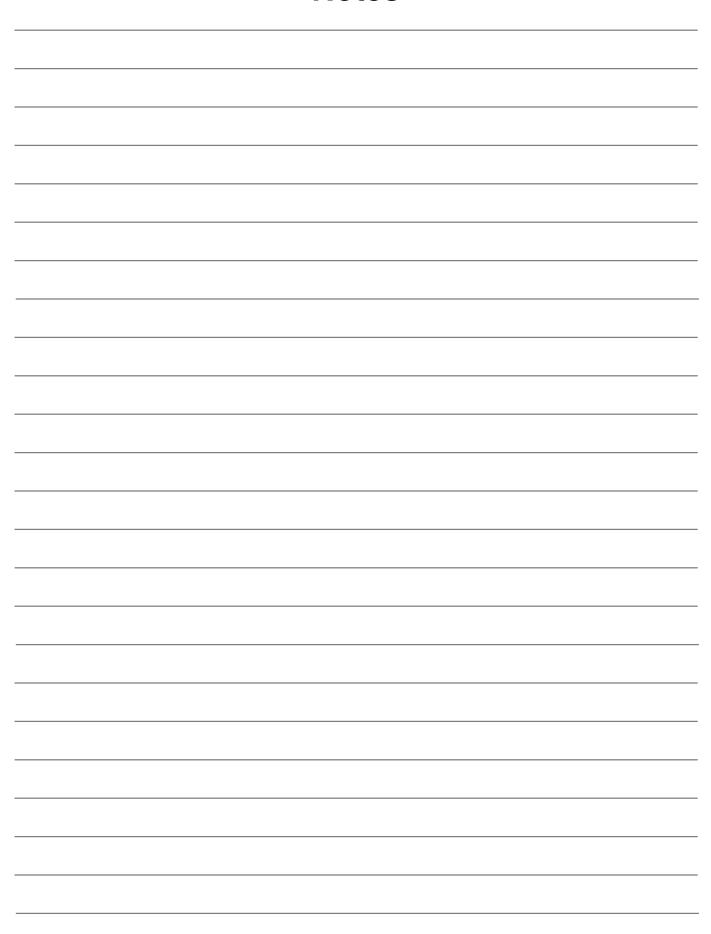
Fig. 1

# **Parts**



REF NO.		DESCRIPTION	QTY
1	215963	AIR MOTOR See manual 307456 for parts	1
2	290163	PLATE, designation	1
3	100508	SCREW, drive	2
4	104541	NUT, lock; M8; w/nylon insert	3
5	15B250	SCREW	1
6	177156	O–RING; fluoroelastomer	1
7	15B249	PIN, barrel	1

# **Notes**



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