

President® Air Motors

306982ZAE

EN

For use with Graco fluid handling pumps. For professional use only.

See your pump instruction manual for Maximum Working Pressure.

Model 205647, Series M

For in-line mounting, medium-pressure oil pump

Model 206078, Series M

For in-line mounting, high-pressure grease pump

Model 205038, Series N

For stanchion tube mounting

Model 207352, Series G

For divorced mounting

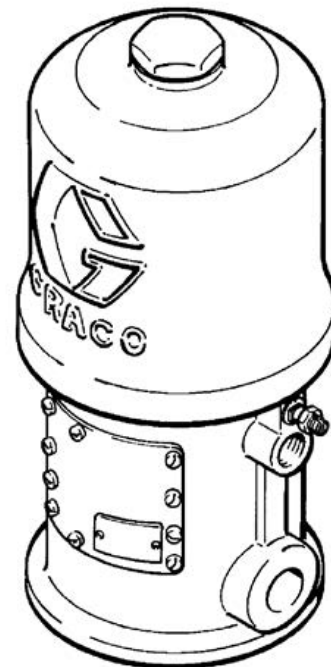
Model 222772, Series G

For divorced mounting



Important Safety Instructions

Read all warnings and instructions in this manual before using the equipment. Be familiar with the proper control and usage of the equipment. Save these instructions.













Model 207352 Shown

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Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 <h2 style="margin: 0;">WARNING</h2>	
   	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well-ventilated area. • Eliminate all ignition sources, such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking). • Ground all equipment in the work area. See Grounding instructions on page 5. • Never spray or flush solvent at high pressure. • Keep work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive. • Stop operation immediately if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.
    	<p>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from dispensing device, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.</p> <ul style="list-style-type: none"> • Engage trigger lock when not dispensing. • Do not point dispensing device at anyone or at any part of the body. • Do not put your hand over the fluid outlet. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Follow the Pressure Relief Procedure on page 6 when you stop dispensing and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses and couplings daily. Replace worn or damaged parts immediately.

WARNING

 	<p>EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Specifications on page 25 in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Specifications on page 25 in all equipment manuals. Read fluid and solvent manufacturer’s warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer. • Do not leave the work area while equipment is energized or under pressure. (If applicable.) • Turn off all equipment and follow the Pressure Relief Procedure on page 6 when equipment is not in use. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer’s replacement parts only. • Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. • Make sure all equipment is rated and approved for the environment in which you are using it. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations.
 	<p>MOVING PARTS HAZARD Moving parts can pinch, cut or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure on page 6 and disconnect all power sources.
	<p>TOXIC FLUID HAZARD Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> • Read Safety Data Sheets (SDSs) to know the specific hazards of the fluids you are using. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

United States Government safety standards have been adopted under the Occupational Safety and Health Act. You should consult these standards - particularly the General Standards, Part 1910, and the Constructions Standards, Pare 1926.

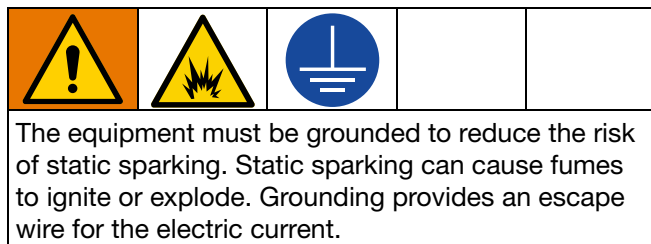
Installation

General Information

NOTE: Reference numbers and letters in parentheses in the text refer to the callouts in the figures and the parts drawing.

NOTE: Always use Genuine Graco Parts and Accessories, available from your Graco distributor.

Grounding



Pump: use a ground wire and clamp as shown in FIG. 1. Loosen the grounding lug locknut (A) and washer (B). Insert one end of a 12 ga (1.5 mm²) minimum ground wire (C) into the slot in lug (D) and tighten the locknut securely. Connect the other end of the wire to a true earth ground.

Model No. 206078: remove the ground screw (Z) and insert through the eye of the ring terminal at end of ground wire (Y). Fasten the ground screw back onto the pump and tighten securely. Connect the other end of the ground wire to a true earth ground. See FIG. 2. To order a ground wire and clamp, order Part No. 222011.

Air and fluid hoses: Use only electrically conductive hoses.

Air compressor: follow manufacturer's recommendations.

Spray gun / Dispense valve: ground through connection to a properly grounded fluid hose and pump.

Object being sprayed: follow local code.

Solvent pails used when flushing: follow local code. Use only conductive metal pails, placed on a grounded surface. Do not place the pail on a nonconductive surface, such as paper or cardboard, which interrupts grounding continuity.

To maintain grounding continuity when flushing or relieving pressure: hold metal part of the spray gun/dispense valve firmly to the side of a grounded metal pail, then trigger the gun.

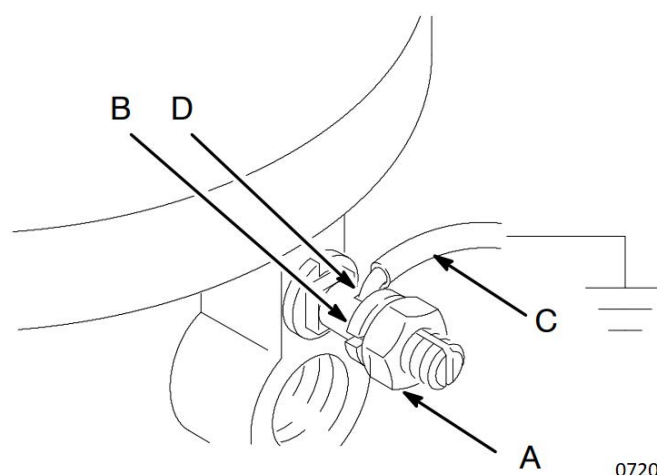


FIG. 1: Ground Wire

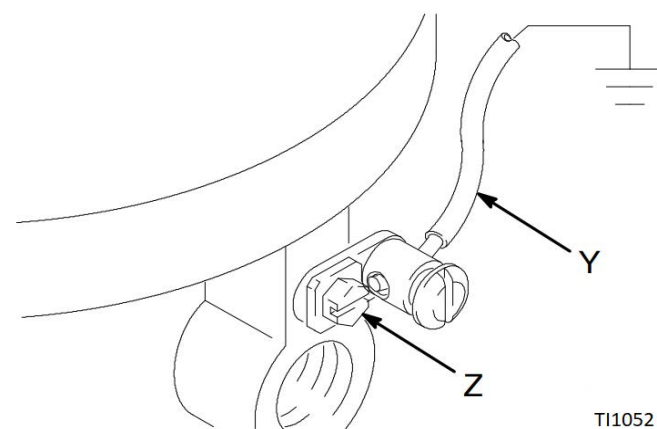
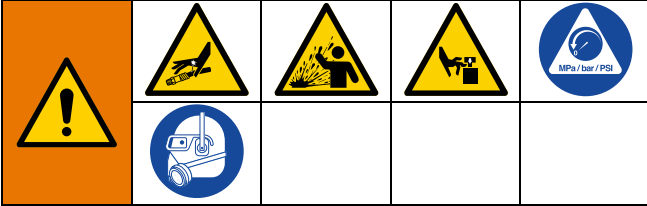


FIG. 2: Ground Screw

Pressure Relief Procedure



Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing the equipment.

A bleed-type master air valve is required in your system to reduce the risk of serious bodily injury from moving parts if you are adjusting or repairing the air motor.

The bleed-type master air valve relieves air trapped between this valve and the motor after the air regulator is shut off. Trapped air can cause the motor and pump to cycle unexpectedly. Install the valve between the pump air inlet and the air regulator within easy reach of the pump.

Moving parts can pinch or amputate your fingers or other body parts. When the pump is operating, the priming piston (located at the pump intake) and the air motor piston (located behind the air motor plates) move. **Never** Operate the pump with the air motor plates removed, and keep your fingers and hands away from the priming piston. See **MOVING PARTS HAZARD** page 4.

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

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

Operation

NOTE: See your separate pump manual for detailed operation instructions.

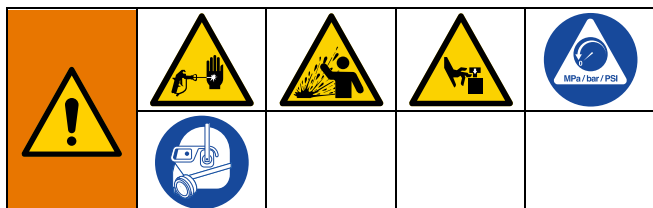
Restarting a Stalled Air Motor

NOTICE

Never exceed 180 psi (1.2 MPa, 12 bar) air supply pressure to the air motor. Exceeding this pressure may cause the air motor to stall with the air transfer valves stuck at mid position, making the air motor inoperative.

To reseal the air transfer valves and restart a stalled air motor, relieve the air supply pressure to the motor by closing the bleed-type master air valve. If the air transfer valves fail to reseal, screw the cap nut (F) out of the cylinder (G), pull up on the trip rod (H) and screw the cap nut back into the cylinder. See FIG. 2 on page 5. Be sure the air supply pressure is less than 180 psi (1.2 MPa, 12 bar) before opening the bleed-type master air valve.

Repair



Servicing the Air Motor

Before you Start

- Be sure you have all necessary parts on hand. **Air Motor Repair Kit 207385** includes repair parts for the motor. Use all the parts in the kit for best results. Parts included in the air motor kit are marked with double asterisks (**) in text and drawings. See **Parts** on page 13 for further information.
- Two accessory tools should be used. **Padded pliers, 207579** is used to grip the trip rod without damaging its surface. **Gauge, 171818**, is used to ensure the proper clearance between the poppets and seat of the transfer valve.

Disassembly

1. Flush the pump. Follow the **Pressure Relief Procedure** on page 6 before proceeding.
2. Disconnect the air hose from the motor. If necessary, disconnect the motor from the pump. Clamp the air motor base in a vise.
3. Manually push up on the piston rod to move the piston assembly to the top of its stroke. Unscrew the cylinder cap nut (F) from the cylinder (G). Pull up

on the cap nut. Grip the trip rod (H) with padded pliers 207579 and screw the cap nut off the trip rod. See FIG. 3.

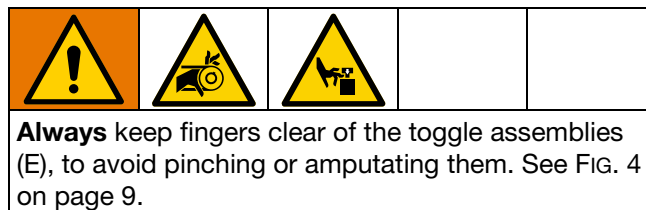
NOTICE

Do not damage the plated surface of the trip rod. Damaging the surface of the trip rod can result in erratic air motor operation. Use the special padded pliers, 207579, to grasp the rod.

4. Remove the eight screws (Z) holding the cylinder (G) to the base (J). Carefully pull the cylinder straight up off the piston. See FIG. 3.

NOTICE

To avoid damaging the cylinder wall, always lift the cylinder **straight up** off of the piston. **Never** tilt the cylinder as it is being removed.



Always keep fingers clear of the toggle assemblies (E), to avoid pinching or amputating them. See FIG. 4 on page 9.

5. Use a screwdriver to push down on the trip rod yoke (K) and snap the toggle assemblies (E) down. See FIG. 4 on page 9. Remove the lockwires (L) from the adjusting nuts (M and Q) of the transfer valves (N). Screw the top nuts (M) off. Screw the valve stems (O) out of the grommets (P) and lower adjusting nuts (Q). Take the valve poppets (R) off the stems and squeeze them firmly to check for cracks.

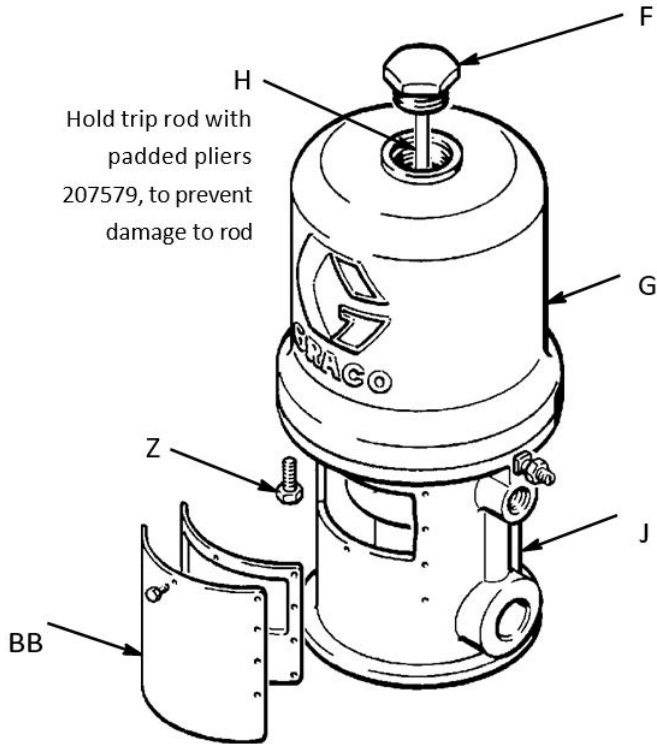


FIG. 3: Move the Piston Assembly

6. Grip the toggle rockers (S) with a pliers. Compress the springs (T) and swing the toggle assembly (E) up and away from the piston lugs (U), and remove the parts. Check that the valve actuator (V) is supported by the spring clips (W), but slides easily into them. See FIG. 4 on page 9.
7. Remove the trip rod yoke (K), valve actuator (V) and trip rod (H). Check the exhaust valve poppets (X) for cracks.

NOTE: See your separate pump manual for detailed operation instructions.

8. Pull the piston (Y) up out of the base (J) and inspect the piston o-ring (AA) and the o-ring in the base casting.

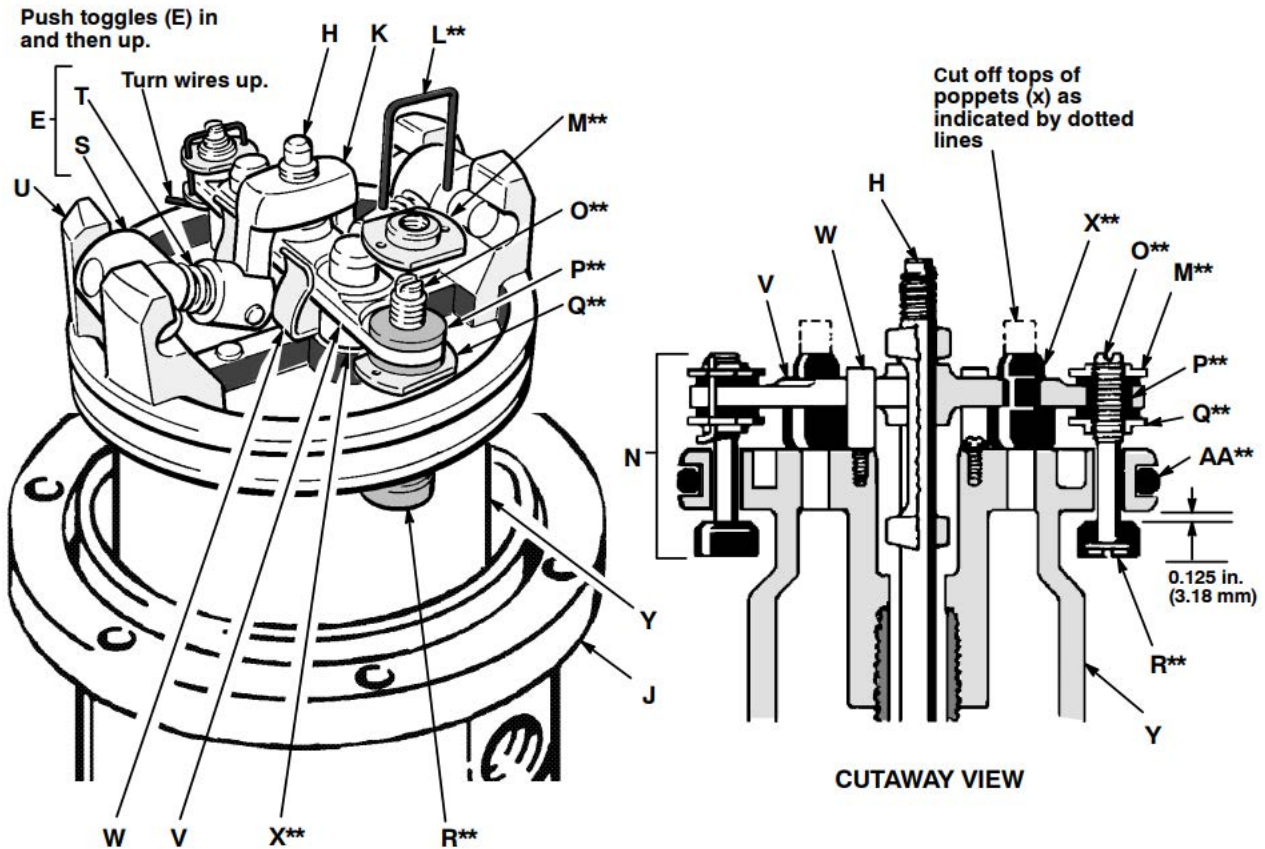


FIG. 4: Servicing the Air Motor

Reassembly

1. Clean all the parts carefully in a compatible solvent and inspect for wear or damage. Use all the repair kit parts during reassembly and replace other parts as necessary.
2. Check the polished surfaces of the piston, piston rod and cylinder wall for scratches or wear. A scored rod will cause premature packing wear and leaking.
3. Lubricate all parts with a light, waterproof grease.
4. Be sure the o-rings are in place. Slide the piston rod down through the throat bearing and lower the piston (Y) into the air motor base (J).
5. Pull the exhaust valve poppets (X**) into the valve actuator (V) and clip off the top part shown with dotted lines. See FIG. 4.
6. Install the transfer valve poppets (R**) onto the valve stems (O**), then reassemble the valve stems (O**), bottom adjusting nuts (Q**), grommets (P**), and top adjusting nuts (M**) on the piston (Y). Assemble the trip rod (H), valve actuator (V), trip rod yoke (K) and toggle assemblies (E) on the piston. See FIG. 4.
7. Set gap on inlet valve (N) using the 125 in. (3.18 mm) side of gauge 171818. Rotate valve stem (O**) until snug against gauge, then back off until valve stem slot is lined up with wire holes in valve nut (M**) (do not back off more than 1/2 turn). See FIG. 4 on page 9. Install lockwires (L**) in the adjusting nuts M** and Q**).
8. Snap the toggle assemblies (E) to the up position. Reinstall the cylinder (G) and hold the trip rod (H) in place with tool 207579. Apply a medium strength thread locking compound to the threads of the trip rod (H) and assemble the cap nut (F) to the trip rod (H). Torque the cap nut (F) to 60 lb-in (6.8) N-m). Install cap nut (F) into cylinder (G).
9. Before remounting the pump, connect an air hose and run the pump slowly, at about 40 psi (0.28 MPa, 2.8 bar) to ensure that it operates smoothly.
10. Reconnect the ground wire before regular operation of the pump.

Throat Packing Service for In-Line Pump Model 205647



To avoid fire and explosion, always ground equipment and waste container. To avoid static sparking and injury from splashing, always flush at the lowest possible pressure.

The piston in the air motor, located behind the air motor plates, moves when air is supplied to the motor. Moving parts can pinch or amputate your fingers or other body parts. Therefore, **never** operate the pump with the air motor plates removed.

NOTE: See FIG. 5 on page 11 and **Parts** on page 13.

1. Clamp the pump in a vise and unscrew the displacement cylinder (CC) from the air motor base (J). Pull the displacement cylinder away from the air motor until the cotter pin (DD) which secures the displacement pump connecting rod to the air motor piston rod (FF) is visible.
2. Remove the cotter pin (DD) and unscrew the pump connecting rod (EE) from the air motor piston rod (FF). Remove the cylinder (G) from the air motor base (J) as described under **Disassembly** on page 8.
3. Remove one louvered air exhaust plate (BB) and unscrew the throat packing nut (HH), using a spanner wrench or a 0.22 in. (5.6 mm) diameter rod. Remove the spacer and packing from the base and packing nut. Clean the throat packing area in the base and the packing nut. Clean and inspect all parts and replace as necessary.
4. Lubricate the packings, piston rod and piston flange with a light waterproof grease. Reinstall the spacer and packing in the base and packing nut. Be sure the lips of the v-packings face down. See Detail B. Screw the packing nut loosely into the base. Carefully slide the piston rod down through the throat packing and lower the piston into the base. Tighten the packing nut securely. Reinstall the plate (BB) and cylinder (G). Reassemble the air motor to the displacement pump.

NOTICE

When reinstalling cotter pin (DD), always spread and flatten the pin (both the head and prongs) around the rod to within a 1 in. (25 mm) total diameter. See Detail A in FIG. 5 on page 11.

**In-Line Pump Models
205647 and 206078**

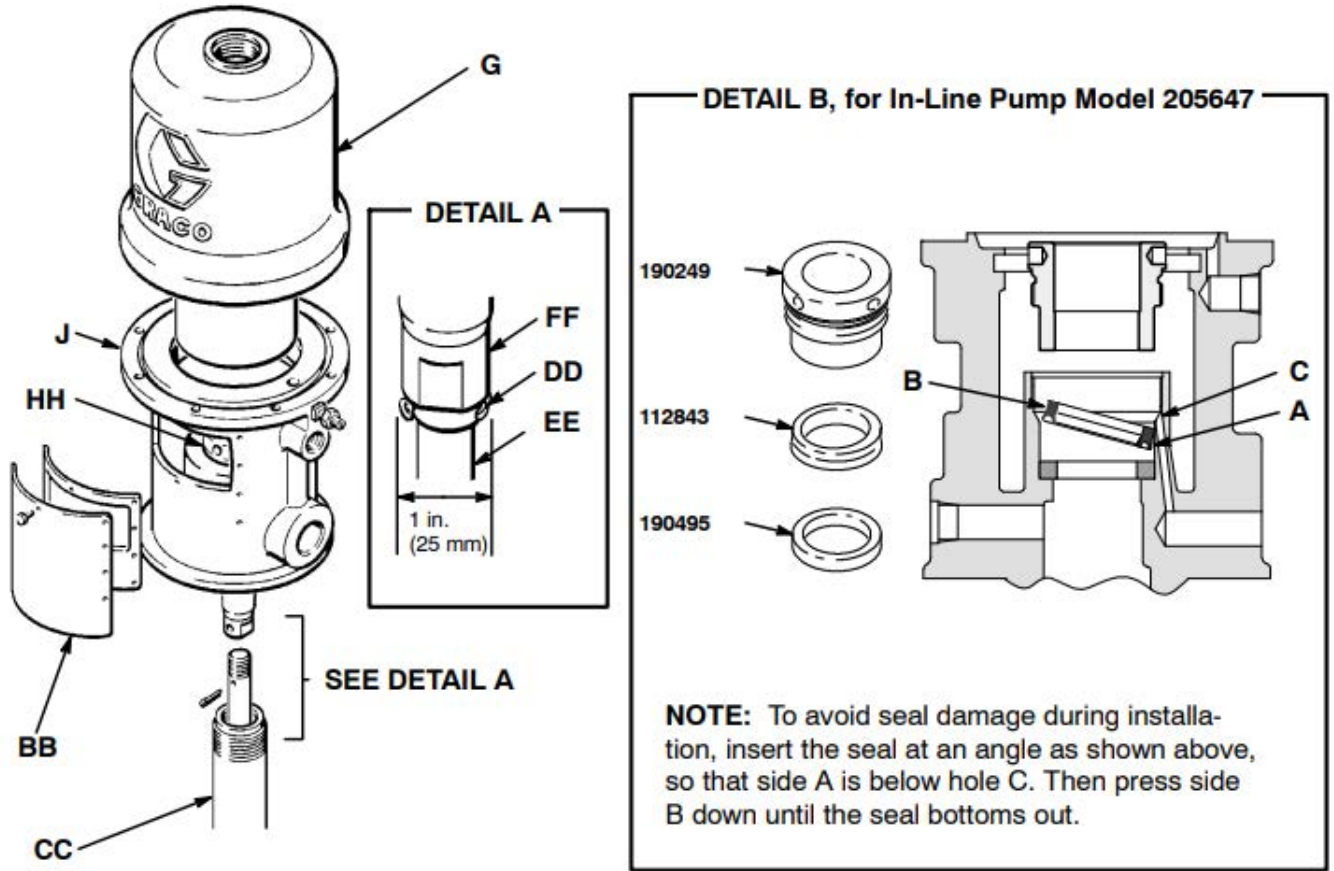


FIG. 5: In-Line Pump Model 205647 and 206078

Throat Packing Service for In-Line Pump Model 206078



To avoid fire and explosion, always ground equipment and waste container. To avoid static sparking and injury from splashing, always flush at the lowest possible pressure.

The piston in the air motor, located behind the air motor plates, moves when air is supplied to the motor. Moving parts can pinch or amputate your fingers or other body parts. Therefore, **never** operate the pump with the air motor plates removed.

NOTE: See FIG. 5 on page 11 and **Parts** on page 13.

1. Clamp the pump in a vise and unscrew the displacement cylinder (CC) from the air motor base (J). Pull the displacement cylinder away from the air motor until the cotter pin (DD) which secures the displacement pump connecting rod to the air motor piston rod (FF) is visible.
2. Remove the cotter pin (DD) and unscrew the pump connecting rod (EE) from the air motor piston rod (FF). Remove the cylinder (G) from the air motor base (J) as described under **Disassembly** on page 8.
3. Remove one louvered air exhaust plate (BB) and unscrew the throat packing nut (HH), using a spanner wrench or a 0.22 in. (5.6 mm) diameter rod.
4. Remove the packing nut (45), male and female glands (47, 48), v-packings (49), washer (44),

bearing (46), retainer (24), wiper (22), o-ring (23), u-cup (25), and washer (26) from the base.

5. Clean the throat packing area in the base and the packing nut. Clean and inspect all parts, and replace as necessary.
6. Lubricate the packings, piston rod and piston flange with a light waterproof grease.
7. Install the washer (26) into the base. Assemble the packing (25) and the wiper (22) into the retainer (24). Install the o-ring (23) onto the retainer, and insert the retainer assembly into the base.

NOTE: Make sure the packing (25) lips face down, and make sure the wiper (22) lips face up.

8. Insert the bearing (46) and the washer (44) into the base. Assemble the female gland (48), v-packings (49), and the male gland (47) into the packing nut (45).
9. Reinstall the spacer and packing in the base and packing nut (45). Screw the packing nut into the base, and tighten it securely. Carefully slide the piston rod (FF) down through the throat packing, and lower the piston into the base. Reinstall the plate (BB) and cylinder (G). Reassemble the air motor to the displacement pump.
10. Torque the outlet adapter (42) to 45 to 55 ft-lb (61 to 75 N-m).

NOTICE

When reinstalling cotter pin (DD), always spread and flatten the pin (both the head and prongs) around the rod to within a 1 in. (25 mm) total diameter. See Detail A in FIG. 5 on page 11.

Model 205647, Series M*for in-line mounting, medium-pressure oil pump*

Ref.	Part	Description	Qty.
1	207150	TRIP ROD	1
2	207391	PISTON; <i>includes items 3 to 5 (also includes 207385 repair kit when ordered as a replacement part)</i>	1
3	102975	SCREW, rd hd mach; 6-32 x 1/4 in.	2
4	158361*	CLIP, spring	2
5		BARE PISTON (<i>not sold separately</i>)	1
6	17M262	SCREW, hex head; 8-32 x 3/8 in.	20
7	101578	SCREW, hex head Nylock; 8-32 x 3/8 in.	8
8	150647	GASKET; copper	1
9	156698*	O-RING; Buna -N	1
10	112843*	PACKING, block, V	1
13	158359	ACTUATOR, valve	1
14	158360	YOKE, rod, trip	1
15	158362	PIN, toggle	2
16	158364	ROCKER, toggle	2
17	167585	SPRING, helical compression	2
18	158367**	GROMMET; rubber	2
19	158377	SEAL, flat ring; nitrile rubber	1
20	158378**	SEAL, o-ring; nitrile rubber	1
21	158379**	SEAL, o-ring; nitrile rubber	1
24	190495	SPACER, throat	1
25	190249	NUT, packing	1
27	160261**	NUT, adjusting	4
28	160618**	LOCKWIRE, transfer valve	2

Ref.	Part	Description	Qty.
29	160623	ARM, toggle	2
30	160896**	STEM, valve	2
31	161435	NUT, cylinder cap	1
32	162629	CYLINDER, motor, air	1
33	178270	PLATE, muffler	2
34	164924	BASE, motor, air	1
35	164925	ROD, piston	1
36	177844	PLATE, identification	1
37	170708**	POPPET, valve; urethane	2
38	170709**	POPPET, valve; urethane	2
53	104029	LUG, grounding	1
54	104582	WASHER, tab	1
57	180233	LABEL, warning	2
58▲	177843	PLATE, warning	1

* *Recommended spare parts to keep on hand.*

** *Included in Repair Kit 207385. Must be purchased separately.*

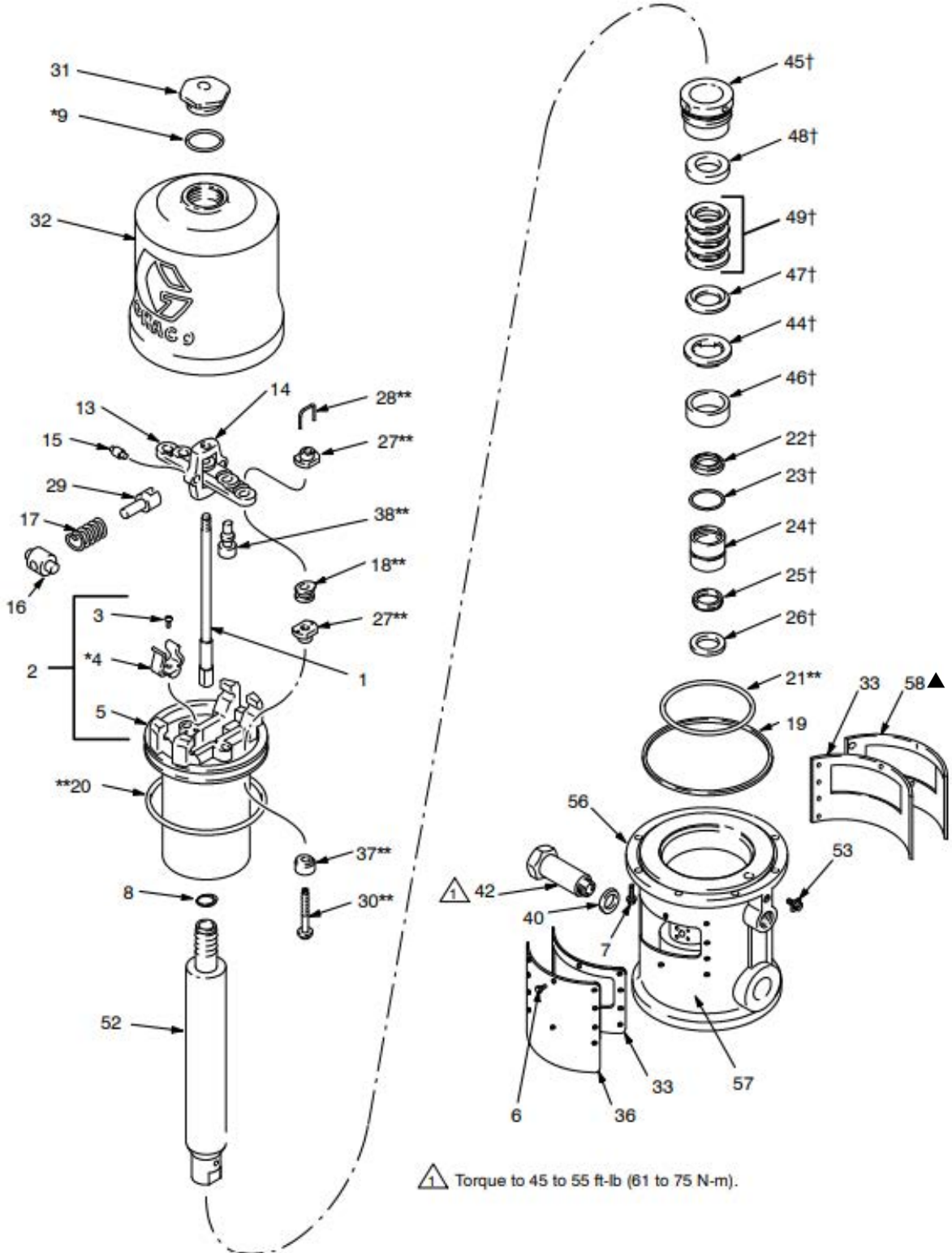
▲ *If users of this equipment do not read English, you may order one of the following labels to apply to your air motor. Apply the label over the matching label on the air motor plate for good visibility. Do not cover the air exhaust holes. Order the labels free of charge directly from Graco. Contact your distributor to order.*

- French 290466

- Spanish 290468

Model 206078, Series M

for in-line mounting, high-pressure grease pump



Model 206078, Series M

for in-line mounting, high-pressure grease pump

Ref.	Part	Description	Qty.
1	207150	TRIP ROD	1
2	207391	PISTON; <i>includes items 3 to 5 (also includes 207385 repair kit when ordered as a replacement part)</i>	1
3	102975	SCREW, rd hd mach; 6-32 x 1/4 in.	2
4*	158361	CLIP, spring	2
5	---	BARE PISTON (<i>not sold separately</i>)	1
6	17M262	SCREW, hex head; 8-32 x 3/8 in.	20
7	101578	SCREW, hex head Nylock; 8-32 x 3/8 in.	8
8	150647	GASKET; copper	1
9*	156698	O-RING; Buna -N	1
13	158359	ACTUATOR, valve	1
14	158360	YOKE, rod, trip	1
15	158362	PIN, toggle	2
16	158364	ROCKER, toggle	2
17	167585	SPRING, helical compression	2
18**	158367	GROMMET; rubber	2
19	158377	SEAL, flat ring; nitrile rubber	1
20**	158378	SEAL, o-ring; nitrile rubber	1
21**	158379	SEAL, o-ring; nitrile rubber	1
22†	113935	WIPER, rod	1
23†	113944	PACKING, o-ring	1
24†	192172	RETAINER, packing	1
25†	113936	PACKING, u-cup	1
26†	192173	WASHER, packing	1
27**	160261	NUT, adjusting	4
28**	160618	LOCKWIRE, transfer valve	2
29	160623	ARM, toggle	2
30**	160896	STEM, valve	2
31	161435	NUT, cylinder cap	1
32	162629	CYLINDER, motor, air	1
33	178270	PLATE, muffler	2
36	177844	PLATE, identification	1

Ref.	Part	Description	Qty.
37**	170708	POPPET, valve; urethane	2
38**	170709	POPPET, valve; urethane	2
40	150461	GASKET; copper	1
42	621201	ADAPTER, outlet	1
44†	158697	WASHER, thrust	1
45†	159047	NUT, packing	1
46†	159048	BEARING, brass	1
47†	159306	GLAND, male	1
48†	159307	GLAND, female	1
49†	159308	V-PACKING; nitrile rubber	4
52	162553	ROD, piston	1
53	116343	SCREW, grounding	1
56	15F570	BASE, motor, air	1
57	180233	LABEL, warning	2
58▲	177843	PLATE, warning	1

* Recommended spare parts to keep on hand.

** Included in Repair Kit 207385. Must be purchased separately.

† Service parts for air motor throat packing area. Must be purchased separately.

▲ If users of this equipment do not read English, you may order one of the following labels to apply to your air motor. Apply the label over the matching label on the air motor plate for good visibility. Do not cover the air exhaust holes. Order the labels free of charge directly from Graco. Contact your distributor to order.

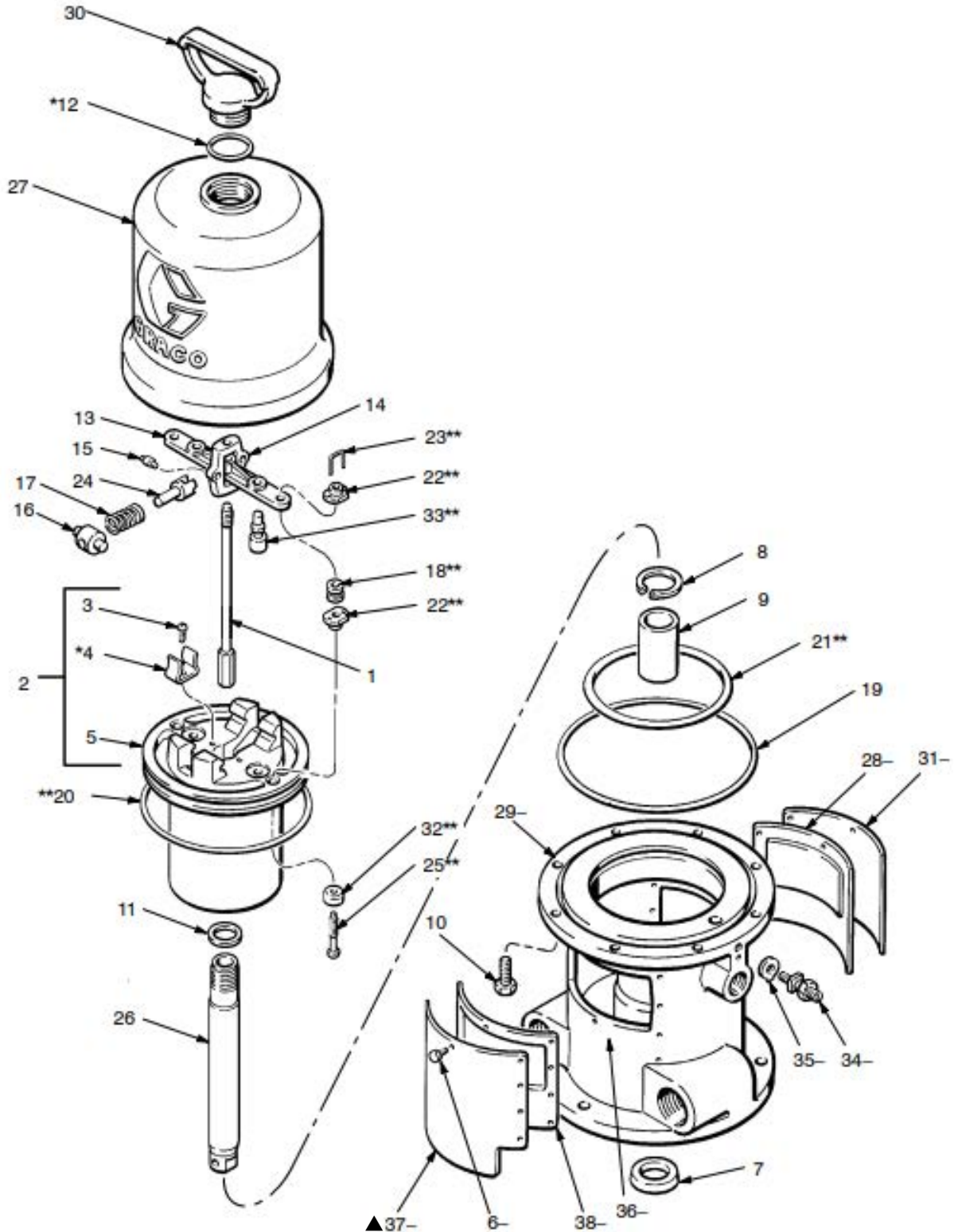
- German 290467

- French 290466

- Spanish 290468

Model 205038, Series N

for stanchion tube mountings



Model 205038, Series N

for stanchion tube mountings

Ref.	Part	Description	Qty.
1	207150	TRIP ROD	1
2	207391	PISTON; <i>includes items 3 to 5 (also includes 207385 repair kit when ordered as a replacement part)</i>	1
3	102975	SCREW, rd hd mach; 6 -32 x 1/4 in.	2
4	158361*	CLIP, spring	2
5	---	BARE PISTON (<i>not sold separately</i>)	1
6	17M262~	SCREW, hex head; 8 -32 x 3/8 in.	20
7	16H224*	SEAL, wiper; polyurethane	1
8	101525	RING, retainer	1
9	101526	BEARING; bronze	1
10	101578	SCREW, hex head Nylock; 8 -32 x 3/8 in.	8
11	150647	GASKET; copper	1
12	156698*	O-RING; Buna -N	1
13	158359	ACTUATOR, valve	1
14	158360	YOKE, rod, trip	1
15	158362	PIN, toggle	2
16	158364	ROCKER, toggle	2
17	167585	SPRING, helical compression	2
18	158367**	GROMMET; rubber	2
19	158377	SEAL, flat ring; nitrile rubber	1
20	158378**	SEAL, o-ring; nitrile rubber	1
21	158379**	SEAL, o-ring; nitrile rubber	1
22	160261**	NUT, adjusting	4
23	160618**	LOCKWIRE, transfer valve	2
24	160623	ARM, toggle	2
25	160896**	STEM, valve	2

Ref.	Part	Description	Qty.
26	162628	ROD, piston	1
27	162629	CYLINDER, motor, air	1
28	178270~	PLATE, muffler	1
29	162663~	BASE, motor, air	1
30	164704	NUT, cylinder cap	1
31	177844~	PLATE, identification	1
32	170708**	POPPET, valve; urethane	2
33	170709**	POPPET, valve; urethane	2
34	104029~	LUG, grounding	1
35	104582~	WASHER, tab	1
36	180233~	LABEL, warning	2
37▲	177841~	PLATE, warning	1
38	178269~	PLATE, muffler	1

* Recommended spare parts to keep on hand.

~ Included in Air Motor Base Replacement Kit 24F303. Must be purchased separately.

** Included in Repair Kit 207385. Must be purchased separately

▲ If users of this equipment do not read English, you may order one of the following labels to apply to your air motor. Apply the label over the matching label on the air motor plate for good visibility. Do not cover the air exhaust holes. Order the labels free of charge directly from Graco. Contact your distributor to order.

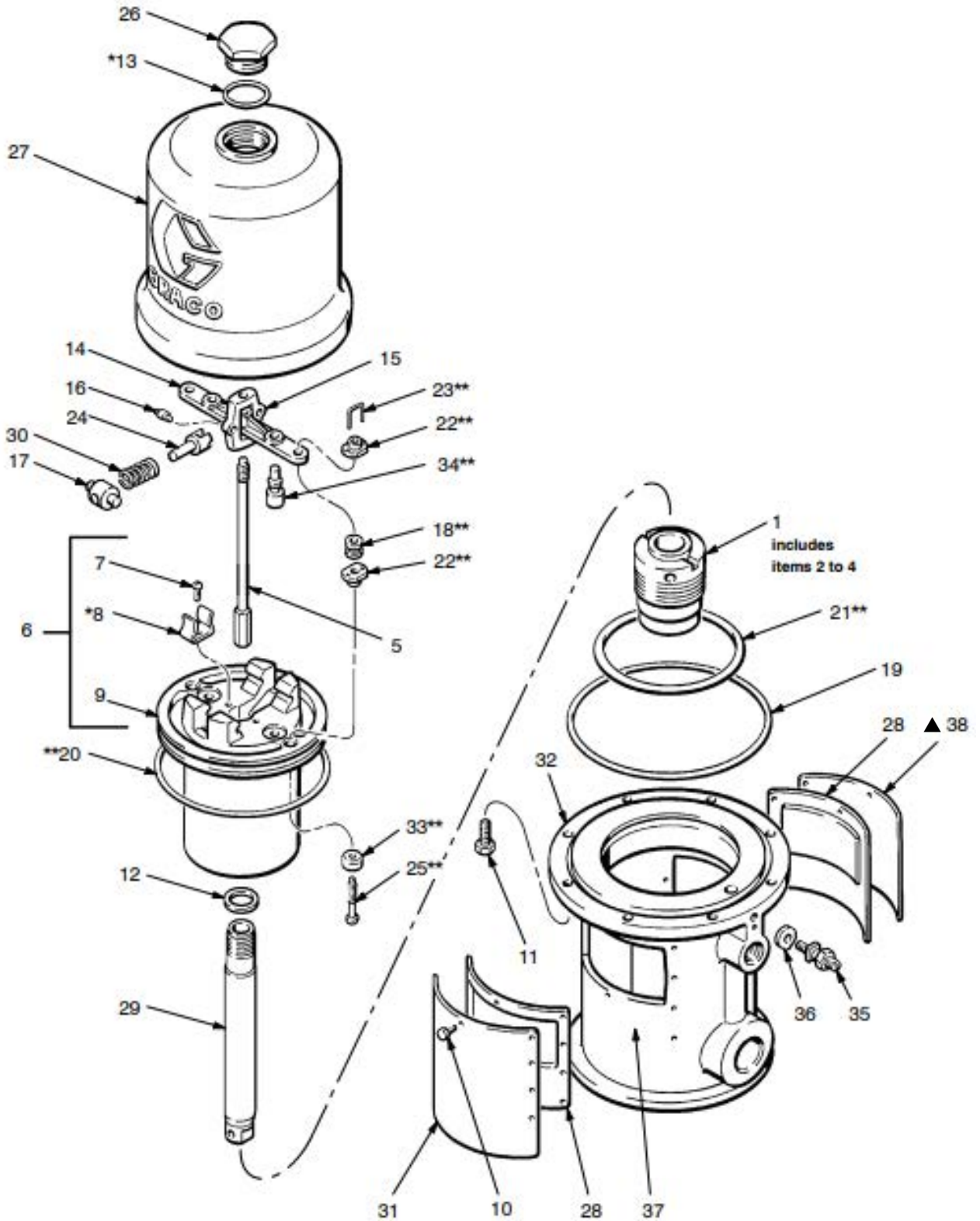
- German 290464

- French 290463

- Spanish 290465

Model 207352, Series G

for divorced mountings



Model 207352, Series G

for divorced mountings

Ref.	Part	Description	Qty.
1	205529	PACKING NUT; includes items 2 to 4	1
2	16H224*	SEAL, wiper; polyurethane	1
3	101526	BEARING; bronze	1
4	164701	NUT, packing	1
5	207150	TRIP ROD	1
6	207391	PISTON; <i>includes items 7 to 9 (also includes 207385 repair kit when ordered as a replacement part)</i>	1
7	102975	SCREW, rd hd mach; 6-32 x 1/4 in.	2
8	158361*	CLIP, spring	2
9	---	BARE PISTON (<i>not sold separately</i>)	1
10	17M262	SCREW, hex head; 8-32 x 3/8 in.	20
11	101578	SCREW, hex head Nylock; 8-32 x 3/8 in.	8
12	150647	GASKET; copper	1
13	156698*	O-RING; Buna -N	1
14	158359	ACTUATOR, valve	1
15	158360	YOKE, rod, trip	1
16	158362	PIN, toggle	2
17	158364	ROCKER, toggle	2
18	158367**	GROMMET; rubber	2
19	158377	SEAL, flat ring; nitrile rubber	1
20	158378**	SEAL, o-ring; nitrile rubber	1
21	158379**	SEAL, o-ring; nitrile rubber	1
22	160261**	NUT, adjusting	4
23	160618**	LOCKWIRE, transfer valve	2

Ref.	Part	Description	Qty.
24	160623	ARM, toggle	2
25	160896**	STEM, valve	2
26	161435	NUT, cylinder cap	1
27	162629	CYLINDER, motor, air	1
28	178270	PLATE, muffler	2
29	166235	ROD, piston	1
30	167585	SPRING, helical compression	2
31	177844	PLATE, identification	1
32	168656	BASE, motor, air	1
33	170708**	POPPET, valve; urethane	2
34	170709**	POPPET, valve; urethane	2
35	104029	LUG, grounding	1
36	104582	WASHER, tab	1
37	180233	LABEL, warning	2
38▲	177843	PLATE, warning	1

* *Recommended spare parts to keep on hand.*

** *Included in Repair Kit 207385. Must be purchased separately.*

▲ *If users of this equipment do not read English, you may order one of the following labels to apply to your air motor. Apply the label over the matching label on the air motor plate for good visibility. Do not cover the air exhaust holes. Order the labels free of charge directly from Graco. Contact your distributor to order.*

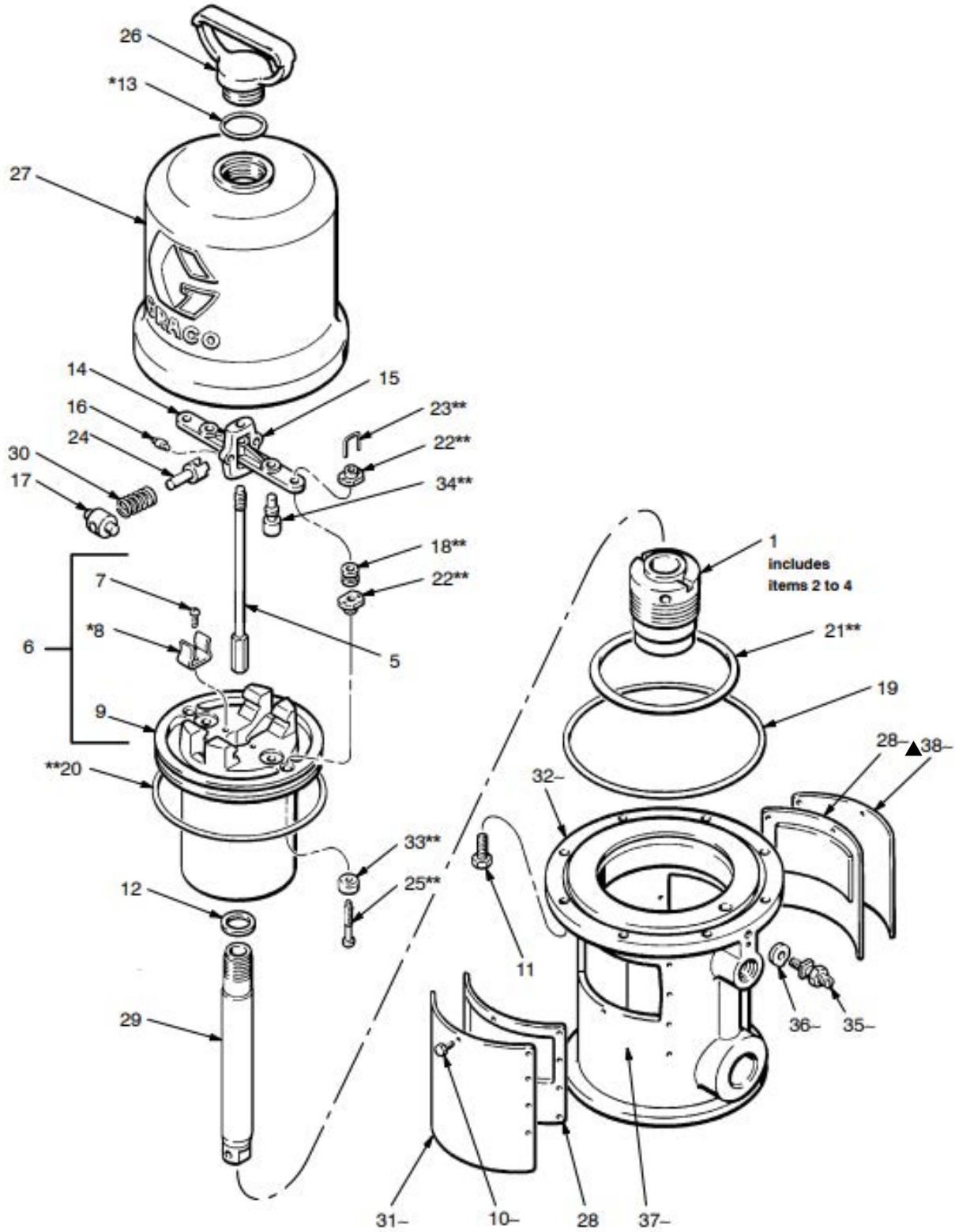
- German 290467

- French 290466

- Spanish 290468

Model 222772, Series G

for divorced mountings



Model 222772, Series G

for divorced mountings

Ref.	Part	Description	Qty.
1	205529	PACKING NUT; includes items 2 to 4	1
		includes items 2 to 4	1
2	16H224*	SEAL, wiper; polyurethane	1
3	101526	BEARING; bronze	1
4	164701	NUT, packing	1
5	207150	TRIP ROD	1
6	207391	PISTON; <i>includes items 7 to 9 (also includes 207385 repair kit when ordered as a replacement part)</i>	1
7	102975	SCREW, rd hd mach; 6-32 x 1/4 in.	2
8	158361*	CLIP, spring	2
9	---	BARE PISTON (<i>not sold separately</i>)	1
10	17M262~	SCREW, hex head; 8-32 x 3/8 in.	20
11	101578	SCREW, hex head Nylock;	
		8-32 x 3/8 in.	8
12	150647	GASKET; copper	1
13	156698*	O-RING; Buna -N	1
14	158359	ACTUATOR, valve	1
15	158360	YOKE, rod, trip	1
16	158362	PIN, toggle	2
17	158364	ROCKER, toggle	2
18	158367**	GROMMET; rubber	2
19	158377	SEAL, flat ring; nitrile rubber	1
20	158378**	SEAL, o-ring; nitrile rubber	1
21	158379**	SEAL, o-ring; nitrile rubber	1
22	160261**	NUT, adjusting	4
23	160618**	LOCKWIRE, transfer valve	2
24	160623	ARM, toggle	2
25	160896**	STEM, valve	2

Ref.	Part	Description	Qty.
26	164704	NUT, cylinder cap	1
27	162629	CYLINDER, motor, air	1
28	178270~	PLATE, muffler	2
29	166235	ROD, piston	1
30	167585	SPRING, helical compression	2
31	177844~	PLATE, identification	1
32	184120~	BASE, motor, air	1
33	170708**	POPPET, valve; urethane	2
34	170709**	POPPET, valve; urethane	2
35	104029~	LUG, grounding	1
36	104582~	WASHER, tab	1
37	180233~	LABEL, warning	2
38▲	177843~	PLATE, warning	1

* Recommended spare parts to keep on hand.

** Included in Repair Kit 207385. Must be purchased separately.

~ Included in Air Motor Base Replacement Kit 26D118. Must be purchased separately.

▲ If users of this equipment do not read English, you may order one of the following labels to apply to your air motor. Apply the label over the matching label on the air motor plate for good visibility. Do not cover the air exhaust holes. Order the labels free of charge directly from Graco. Contact your distributor to order.

- German 290467

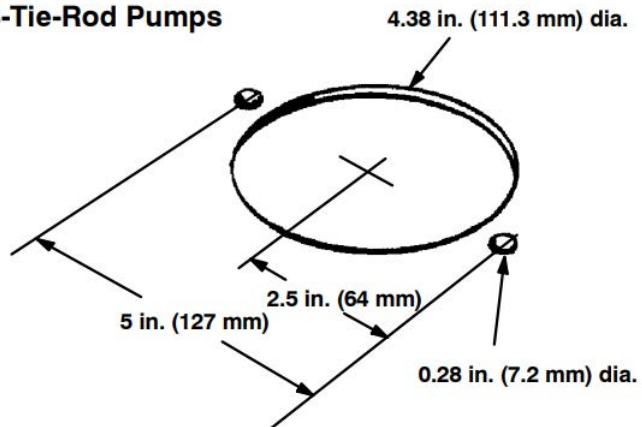
- French 290466

- Spanish 290468

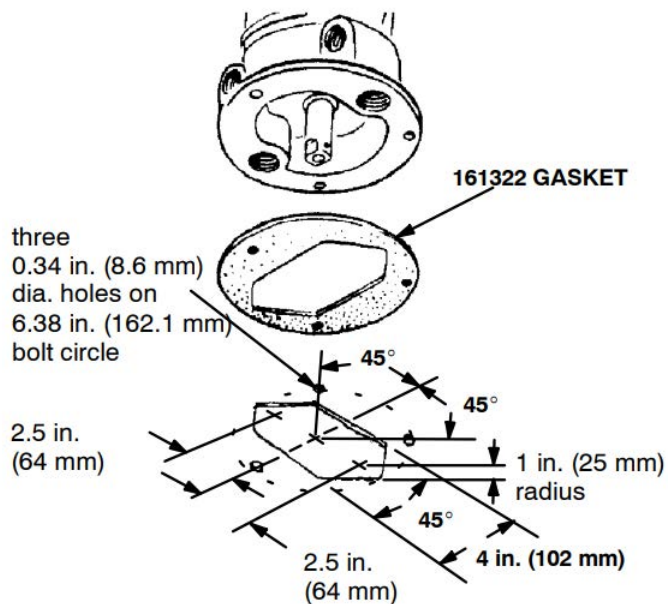
Dimensions and Mounting

Mounting Hole Layouts

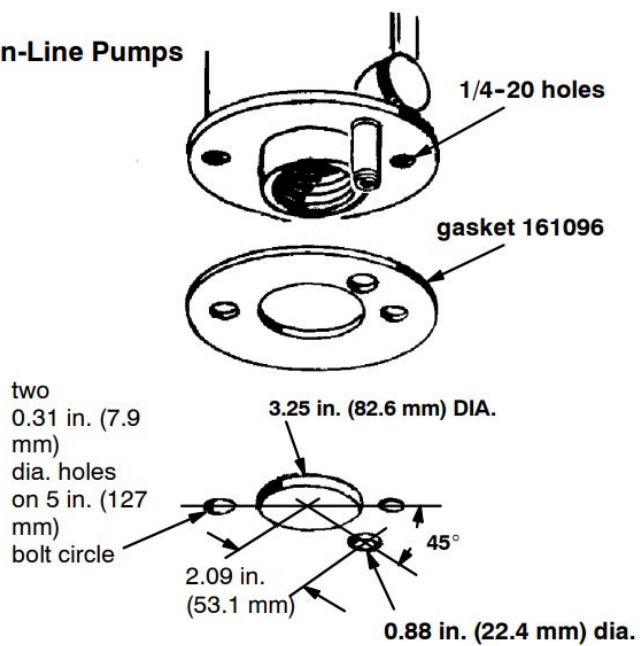
3-Tie-Rod Pumps



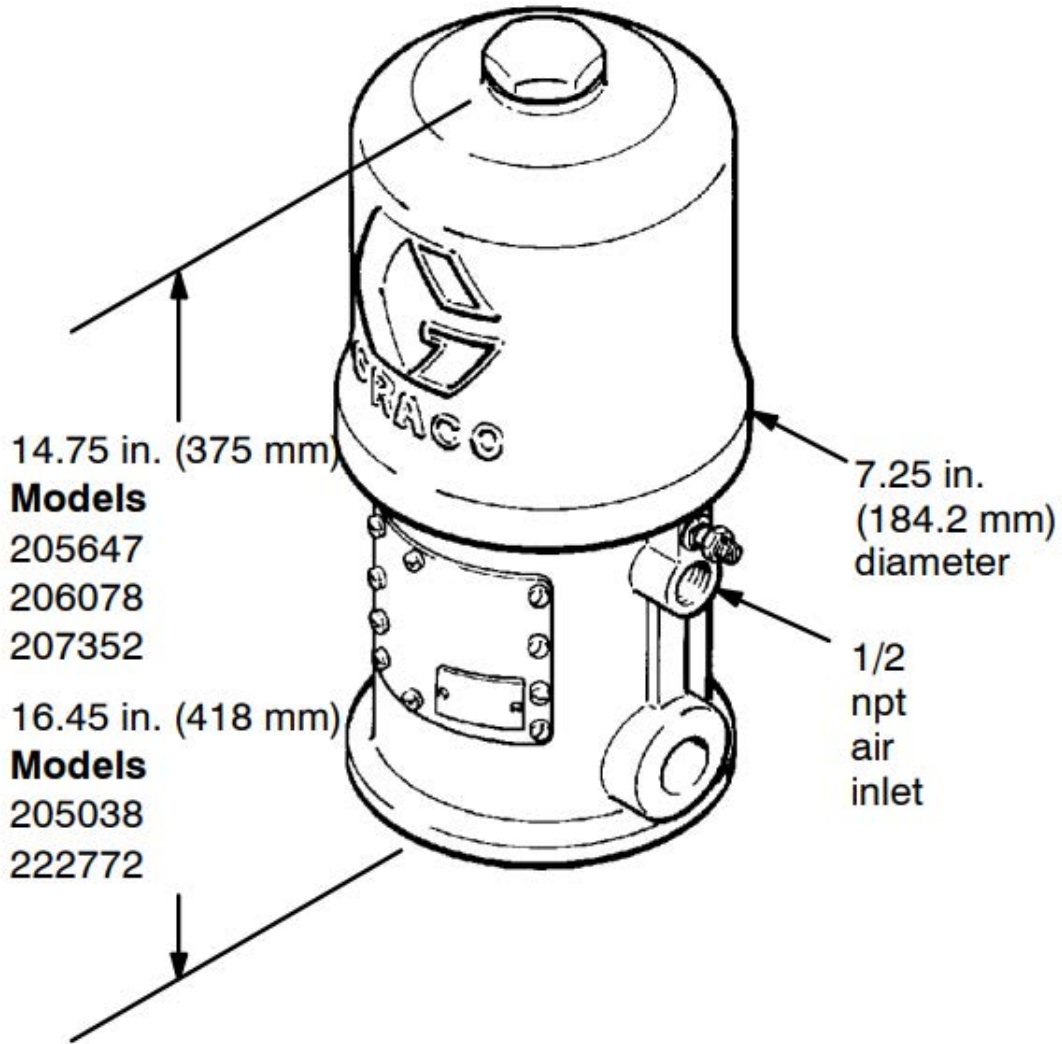
2-Stanchion-Tube Pumps



In-Line Pumps



Dimensional Drawing



Technical Specifications

President® Air Motors		
	US	Metric
Maximum inbound air pressure	180 psi	1.2 MPa, 12 bar
Effective piston area	14 sq. in.	90 cm ²
Effective piston diameter	4.25 in.	108 mm
Stroke	4 in.	102 mm
Air valves	Transfer: nitrile rubber Exhaust: urethane	
Valve mechanism	balanced, detented	
Seal	Nitrile rubber	
Weight	approx. 19 lb (8.6 kg)	
* Sound level at 180 psi (1.2 MPa, 12 bar), 25 cycles per minute	98 dBa	
* Sound power level at 180 psi (1.2 MPa, 12 bar), 25 cycles per minute	113 dBa	
Notes		
* Tested in accordance with ISO 3744.		

California Proposition 65

CALIFORNIA RESIDENTS

 **WARNING:** Cancer and reproductive harm – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6921 **or Toll Free:** 1-800-328-0211, **Fax:** 612-378-3505

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Original instructions. This manual contains English. MM 306982

Graco Headquarters: Minneapolis

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Revision ZAE, August 2023