Instructions – Parts List

Viscount® II Hydraulic Motor

307158ZAT

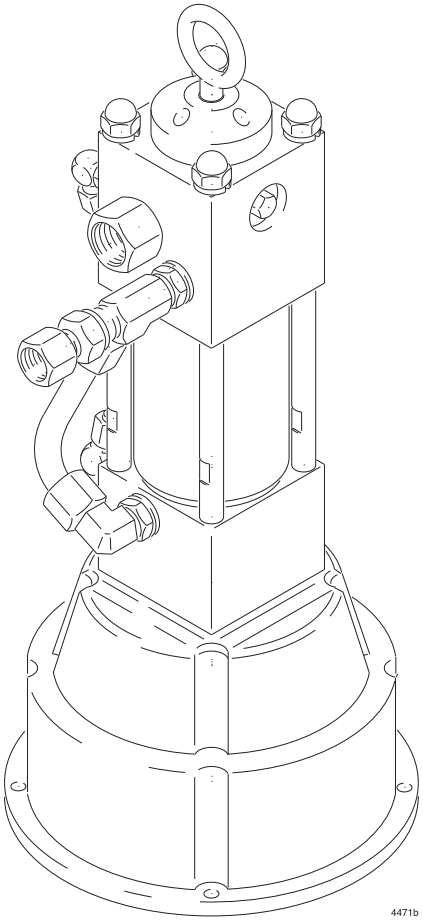
EN

Reciprocating hydraulic motor for use with Graco high-performance coating pumps. For professional use only.

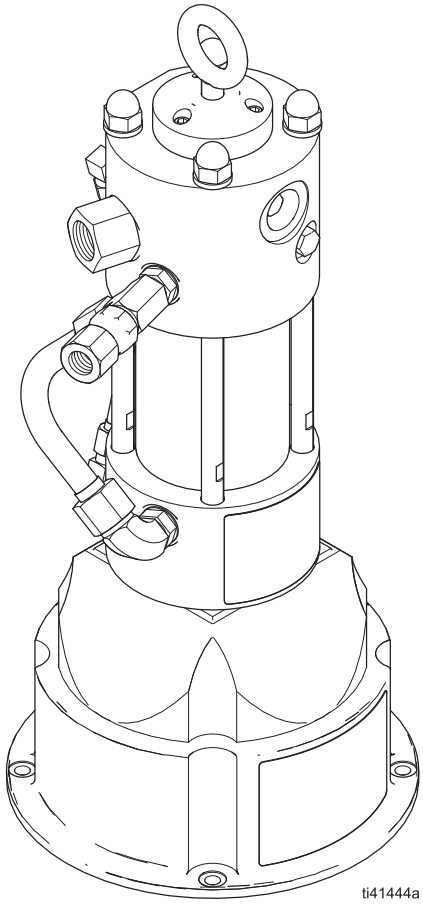
See page 3 for model information, including maximum hydraulic fluid input pressure.

Important Safety Instructions
Read all warnings and instructions in this manual before using the equipment. Save these instructions.

Model 235345
Series B



Model 235345
Series C



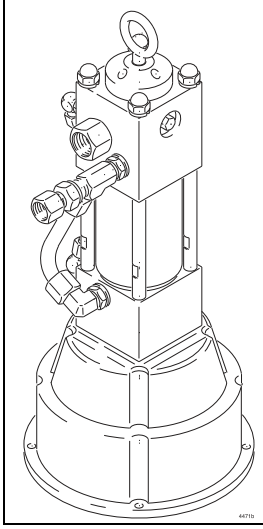
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Models

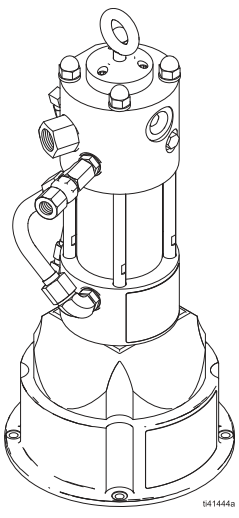
IMPORTANT
The design of the Viscount II hydraulic pump upper and lower motor housings has been updated. The cylindrical design replaces the square housing design previously used. There is no performance change associated with this update. If replacement of a square housing is necessary, both the upper and lower housings must be converted to the cylindrical design as it is not backwards compatible. If replacement housing 16F140 is needed, you must order replacement housing kit 20B232 to upgrade system to cylindrical housings design. All instructions in this manual apply to both the square and cylindrical series of models, unless otherwise noted.

Square Housings



Model	Series	Maximum Hydraulic Fluid Input Pressure	Description
217022	E	1500 psi (10 MPa, 103 bar)	Replacement motor for GH533, GH733, and GH833 Sprayers
217338	F	1500 psi (10 MPa, 103 bar)	Replacement motor for Viscount® II Plural Component Pump
235345	B	1500 psi (10 MPa, 103 bar)	Viscount® II Motor, Interchanges with King® Air Motor
262818	B	1800 psi (12 MPa, 124 bar)	Replacement motor for XP and Xtreme Sprayer, Interchanges with NXT 6500 NXT Air Motor and 8-in. tie rod diameter lowers
24W139	B	1900 psi (13.1 MPa, 131 bar)	Hydraulic motor for Hydra-Clean® Sprayers, Interchanges with NXT 6500 NXT Air Motor and 8-in. tie rod diameter lowers

Cylindrical Housings



Model	Series	Maximum Hydraulic Fluid Input Pressure	Description
217022	F	1500 psi (10 MPa, 103 bar)	Replacement motor for GH533, GH733, and GH833 Sprayers
217338	G	1500 psi (10 MPa, 103 bar)	Replacement motor for Viscount II Plural Component Pump
235345	C	1500 psi (10 MPa, 103 bar)	Viscount II Motor, Interchanges with King Air Motor
262818	C	1800 psi (12 MPa, 124 bar)	Replacement motor for XP and Xtreme Sprayer, Interchanges with NXT 6500 NXT Air Motor and 8-in. tie rod diameters lowers.
24W139	C	1900 psi (13.1 MPa, 131 bar)	Hydraulic motor for Hydra-Clean Sprayers, Interchanges with NXT 6500 NXT Air Motor and 8-in. tie rod diameter lowers.

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.

⚠ WARNING





EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- 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** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Specifications** 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.
- Turn off all equipment and follow the **Pressure Relief Procedure** 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.











SKIN INJECTION HAZARD

High-pressure fluid from gun, 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.**

- Do not spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- Do not point gun at anyone or at any part of the body.
- Do not put your hand over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** when you stop spraying 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.
- Use only Graco approved hoses. Do not remove any spring guard that is used to help protect the hose from rupture caused by kinks or bends near couplings.

⚠ WARNING





MOVING PARTS HAZARD

Moving parts can pinch, cut or amputate fingers and other body parts.

- 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** and disconnect all power sources.









FIRE AND EXPLOSION HAZARD

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:

- 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.
- 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.



TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- 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.



PERSONAL PROTECTIVE EQUIPMENT

Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:

- Protective eyewear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Installation

Maximum Hydraulic Input Pressure
The maximum safe hydraulic input pressure to this motor depends on the lower displacement pump to which it is connected.

With Graco Displacement Pump Models 207474, 207655, 210208, 217527, 217339, 222796, 222801, 222803, 222805, 222810, and 222811, use a maximum of 1500 psi (10 MPa, 103 bar) hydraulic input pressure.

For Graco Displacement Pump Models 24B923 and 687055, usa a maximum of 1900 psi (13.1 MPa, 131 bar) hydraulic input pressure.

Never exceed 1000 psi (7 MPa, 70 bar) hydraulic input pressure with the motor connected to any displacement pump other than those listed above; serious injury or damage to the equipment may result.



To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the Pressure Relief Procedure on page 8.

Be sure you always shut off the supply line shutoff valve (E) first, and then the return line shutoff valve. This is to prevent overpressurizing the motor or its seals. When starting up the hydraulic system, open the return line shutoff valve first.

NOTICE

Keep the hydraulic system clean
To reduce the risk of damaging the hydraulic power supply, blow out all hydraulic lines with air, flush thoroughly with solvent, and then blow out with air again before connecting the lines to the motor.

Always plug the hydraulic inlets, outlets and lines when disconnecting them to avoid introducing dirt and other contaminants into the system.

Carefully follow the manufacturer's recommendations on reservoir and filter cleaning, and periodic changes of hydraulic fluid.

Recommended Hydraulic Oil

Use Graco-approved Hydraulic Oil, Part No. 169236 (5 gal) or 207428 (1 gal)) or a premium, ISO grade 46 petroleum-based hydraulic oil containing rust and oxidation inhibitors and anti-wear agents.

Before using any other type of oil in this motor, contact your Graco distributor. Unauthorized use of lesser grade oil or substitutes may void the warranty.

Hydraulic Oil Working Temperature
Models 217022 and 217338
The recommended hydraulic oil operating temperature is 80 - 115° F (27 - 45° C). The motor seals will wear faster and leakage may occur if the pump is operated at higher oil temperatures.

If the hydraulic oil temperature approaches 130° F (54° C), check the hydraulic fluid supply cooling system, filters, etc. and clean or repair as needed.

Models 235435, 262818, and 24W139
The recommended hydraulic oil operating temperature is 80 - 160° F (27 - 71° C). The motor seals will wear faster and leakage may occur if the pump is operated at higher oil temperatures.

If the hydraulic oil temperature approaches 180° F (82° C), check the hydraulic fluid supply cooling system, filters, etc. and clean or repair as needed.

Refer to the complete pump manual for detailed installation information or contact your Graco distributor.

NOTE: A 1 in. npt seal (57) is supplied in a plastic bag with the motor. Thread the seal onto the threads of your hydraulic return line fitting (A). Thread the fitting into the upper housing (40) and torque as needed. Then tighten the seal (57) against the motor to provide a secure seal. See Fig. 1.

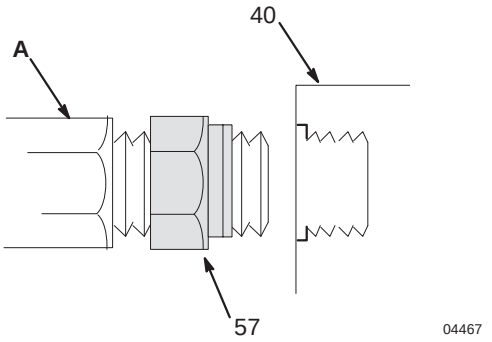


FIG. 1

Grounding



The equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

Proper grounding is an essential part of maintaining a safe system.

Check your local electrical code for detailed grounding instructions for your area and type of equipment. Be sure to ground all of this equipment:

- **Pump**: use a ground wire and clamp as shown to the right.
- **Hydraulic hoses and fluid outlet hoses**: use only electrically conductive hoses.
- **Hydraulic power supply and air compressor**: follow manufacturer's recommendations.
- **Spray gun**: obtain grounding through connection to a properly grounded fluid hose and pump.
- **Fluid supply container**: according to local code.
- **Object being sprayed**: according to local code.
- **Any pails used when flushing**: Use only metal, grounded pails when flushing. Make firm metal-to-metal contact between the metal part of the spray gun and the pail. Use the lowest possible pressure.
- To maintain grounding continuity when flushing or relieving pressure, always hold a metal part of the gun firmly to the side of a grounded metal pail, and then trigger the spray gun.

Models 217338, 235345, and 262818

Remove the ground screw (B) and insert through the eye of the ring terminal at the end of the ground wire (A). Fasten the ground screw onto the pump and tighten securely. See Fig. 2. Connect the other end of the wire to a true earth ground. To order a ground wire and clamp, order part number 222011.

Model 24W139

Remove the ground screw (B) and insert through the eye of the ring terminal at the end of the ground wire (A). Fasten the ground screw onto the pump and tighten securely. See Fig. 2. Connect the other end of the wire to a true earth ground. To order a ground wire and clamp, order part number 26B091.

Model 217022

The ground wire and clamp are supplied with your GH Sprayer. Connect the clamp to a true earth ground as recommended by your local code.

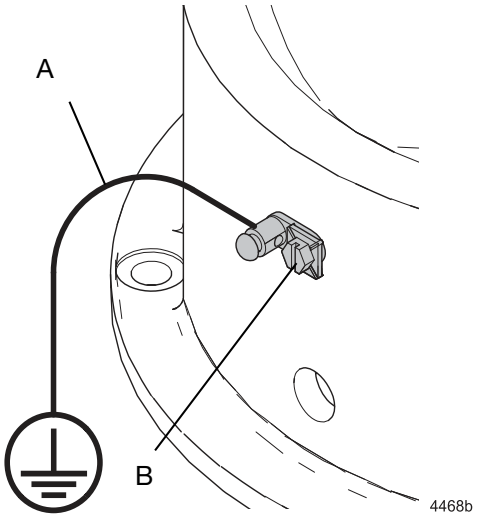
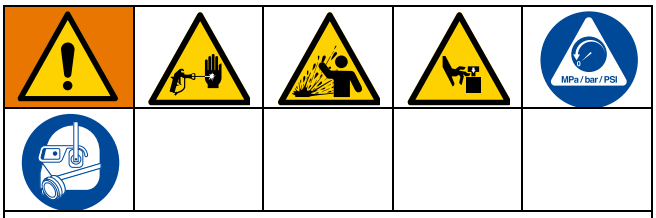


FIG. 2

Service

Pressure Relief Procedure



The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the Pressure Relief Procedure whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.

1. Lock the gun trigger safety.
2. Shut off the hydraulic power supply.
3. Close the supply line shutoff valve, and then the return line shutoff valve.
4. Unlock the gun trigger safety.
5. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
6. Lock the gun trigger safety.
7. Open the 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 again.

If you suspect that the spray tip 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. Now clear the obstruction.

Before you start:

Be sure you have all necessary parts on hand.

1. **Repair Kit 220457** is available for Models 217338.

   Repair Kit 223654 is available for Models 235345, 262818, and 24W139.

   Repair Kit 18B078 is available for Model 217022.

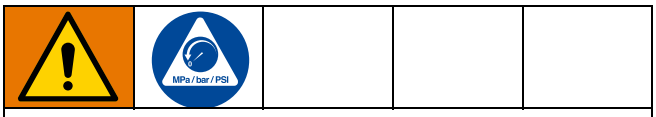
2. The repair kits must be purchased separately. An asterisk behind a reference number in the parts list, for example (25*), indicates that the part is included in the repair kit.

3. Clean all parts as you disassemble them and inspect them for wear or damage. Replace parts as necessary.

Disassembly (Refer to Fig. 3)

NOTE: Use all the replacement parts that are in the repair kit.

1. Flush the displacement pump if possible.



To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 8.

2. **Relieve the pressure.**

3. Stop the pump at the bottom of its stroke.

NOTICE

Avoid getting dust or dirt in the motor during service. Cleanliness is essential when repairing a hydraulic motor. Foreign particles like dust or dirt in the hydraulic fluid can increase friction between moving parts and increase component wear.

4. Disconnect the displacement pump hoses. Disconnect the hydraulic hoses and plug all hydraulic connections and lines to prevent contamination.

NOTICE

When removing the displacement pump, hold it securely. The pump is heavy and could fall off the motor if not held securely, causing damage to the outside of the pump.

5. Disconnect the displacement pump from the motor, as explained in your separate pump manual.

6. Place the hydraulic motor in a bench vise.

7. Push or lightly tap the piston (49a) up as far as possible.

NOTE: The tie rod nuts (3), socket screws (8), cap screws (24), and retainer (49b) are fastened with Loctite® TL--242. Heat may be used sparingly to soften adhesive sealant during disassembly.

Disassembly (continued -- refer to Fig. 3)

8. For Models 217022, 217338, 262818, and 24W139, loosen, but do not remove, the four tie rod nuts (3) and the nuts (B) on the hydraulic tube (48).

   For Model 235345, you need to remove the cap screws (21), the drip pan (26), the drip cover (31), and machine screw (42) before loosening the tie rod nuts. Then remove the four tie rod nuts (3). Loosen the nuts (B) on the hydraulic tube (48) and loosen the tie rods (35).

9. Remove the motor from the vise and lay it in a pan.

10. Remove one detent assembly: retaining plug (28), o-ring (25), spring (29), ball guide (27) and ball (7). If the ball or other parts stick in the upper housing (40), turn the motor over and tap lightly. Do not allow the parts to fall into the motor. Repeat the procedure for the other detent assembly.

11. Remove the tie rods (35), but do not remove the crown nuts (22).

12. Remove the socket screws (8) and the end cap (44). Pull the stop plug (43) from the upper housing (40).

13. Unscrew the top and bottom compression nuts (B) on the hydraulic tube (48). Rotate the upper housing (40) and remove the tube, being careful not to damage the flare (A). Allow the oil to drain from the motor into the pan.

NOTICE

With the tie rods removed, the assembly may separate at the joints between the cylinder (39) and the upper and lower housings (40 and 41). Hold motor and housings securely when removing parts to avoid premature separation of large parts and possible damage to parts from falls.

14. Rock the upper housing (40) to work it free and lift it about 3 inches off the cylinder (39). The cylinder can stay in the lower housing (41).

15. Hold the trip rod (36) with an adjustable wrench on the flats of the rod, and remove the top hex nut (20) from the trip rod.

16. Remove the upper housing (40).

17. Remove the trip rod guides (34), compression springs (38) and valve spool (37) from the upper housing. Inspect the bearing inside of the guide (51) in place. If bearing is damaged replace item 51.

NOTE: Inspect the trip rod (36) above the shoulder for damage. There must be no reduction in diameter. Replace if necessary.

18. Pull the trip rod and piston from the lower housing (41) and cylinder (39). Place the piston flats (49a) in a vise; tighten the vise on the flats of the piston. Remove retaining ring (49c) and use a face spanner to remove the retainer (49b). Remove the trip rod (36) from the piston (49a).

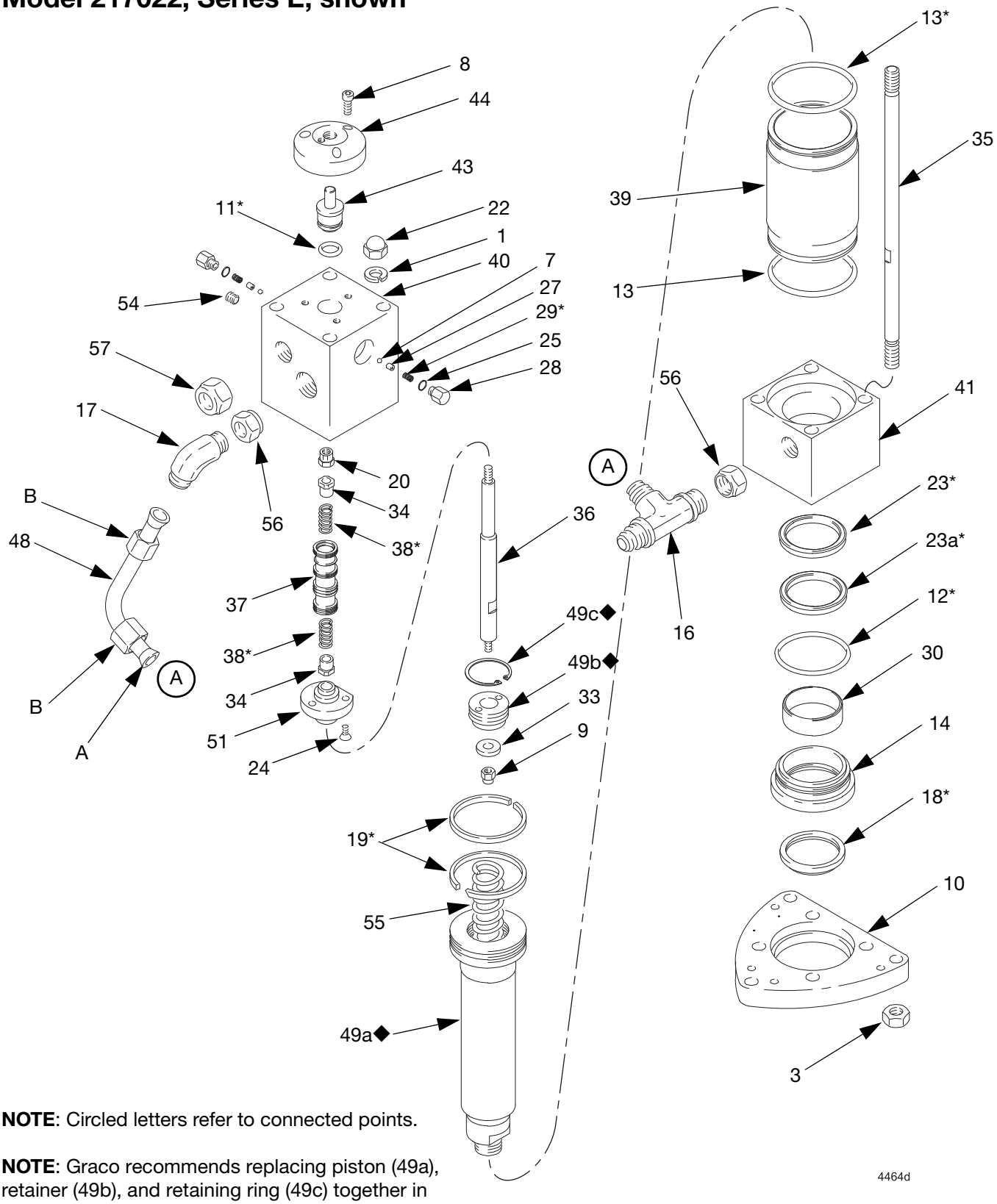
19. Remove the trip rod locknut (9) and piston stop (33). If the piston is replaced, remove the spring (55) to use in the new piston.

20. For Models 217022 and 217338, place the lower housing (41) on top of vice jaws. Pinch the adapter plate (14) in the jaws. Twist and remove. Inspect the bearing (30) and wiper (18) for wear. Replace if necessary.

21. Turn lower housing over and remove the seal (23) and backup seal (23a).

22. For Models 235345, 262818, and 24W139, remove the bearing (45), packings (23), and o-ring (12, Model 235345 only).

Model 217022, Series E, shown



NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing piston (49a), retainer (49b), and retaining ring (49c) together in kits appropriate to motor configurations. Find the kit number in the Parts section starting on page 13.

FIG. 3 _____ __

Reassembly (Refer to Fig. 4)

NOTE: Model 217022 uses one seal (23) and a backup seal (23a).

1. Lubricate the seal(s) (23) with hydraulic oil. Install them in the lower housing (41) *with the lips facing up toward the top of the motor.*
2. For Models 217022 and 217338, install the o-ring (12*) onto the adapter (14). Install the adapter (14) into the lower housing (41), making sure it seats properly. For Model 235345, install the o-ring (12) onto the lower housing (41).
3. Place the piston flats in a vise. Install the spring (55) inside the piston (49a). The compression rings (19) must be positioned with the joints about 180° opposed. Be sure the o-ring (26) is in place on Model 235345.
4. Install the piston stop (33) and locknut (9) on the trip rod. Torque the nut to 117--123 in-lb (13.2--13.9 N.m). Slide the trip rod (36) into the piston (49a). Apply thread sealant to the retainer (49b) threads. With the piston flats in a vise, tighten retainer (49b) until it is slightly below the retaining ring groove. Install retaining ring (49c). This is important to prevent the retainer from backing out during operation and damaging the motor.

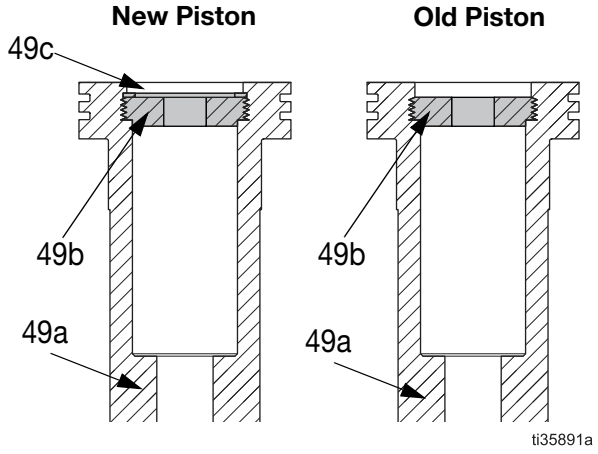


FIG. 4

NOTE: Graco recommends replacing piston (49a), retainer (49b), and retaining ring (49c) together in kits appropriate to motor configurations. See pages 14, 24, 26, or 28 depending on motor model. Retainer(49b) can be used on old pistons without retaining groove, but must be threaded in completely.

NOTE: For Models 235345, 262818, and 24W139, set base (2) on workbench during reassembly. For Models 217022 and 217338, place adapter (14) in vise jaws and lower housing (41) on top of jaws.

5. Install the o-ring (13) onto the cylinder (39). Install the cylinder (39) into the lower housing (41).
6. Install the trip rod and piston into the cylinder (39) and lower housing (41) so the piston is recessed at least 1 inch (25 mm) from the top of the cylinder.
7. If the bearing and guide (51) was removed, install it on the upper housing (40) with the three screws (24) (apply thread sealant).
8. Hold the flats of the trip rod with an adjustable wrench and install the upper housing (40). The trip rod will protrude from the top.
9. Slide the lower trip rod guide (34) and spring (38) onto the trip rod. Install the spool (37) with the detent at the top. Install the top spring (38) and guide (34) on the trip rod. Install the top hex nut (20). Torque the nut to 82--88 in-lb (9.3--9.9 N.m).
10. Remove the adjustable wrench. Seat the upper housing (40) onto the cylinder (39), so the tube fittings align with those on the lower housing.

    Reinstall the hydraulic tube (48) and **loosely** tighten the compression nuts. See the Parts Drawing for your motor.
11. Replace the o-ring (11) on the stop plug (43). Seat the plug into the upper housing (40).
12. Install the end cap (44), using thread sealant on the socket screws (8).
13. Lubricate the threads of the tie rods (35) and install them with lockwashers (1). If the crown nuts (22) were removed, reinstall them and torque them onto the rods to 70--80 ft-lb (95--108 N.m).
14. For Models 217022, 217338, 262818, and 24W139, take the motor out of the vise jaws and lay it on its side. Install the lower plate (10).

NOTE: For Model 217022, align the point of adapter plate (10) in the same direction as the fluid tube (16).

15. For Models 217022, 217338 and 262818, apply thread sealant to the lower threads of the tie rods (35) and torque the tie rod nuts (3) to 70--80 ft-lb (95--108 N.m).

    For Model 235345 and 24W139, torque tie rods into base, apply thread sealant, then torque the tie rod nuts (3) to 70--80 ft-lb (95--108 N.m).
16. With the motor on its side, install one detent assembly: the ball (7), guide (27) with the concave surface toward the ball, spring (29), o-ring (25*) and retaining plug (28). Torque the plug to 152--158 in-lb (17.2--17.9 N.m). Repeat for the other side of the motor.
17. For Model 235345, slide the drip cover (31) onto the piston (49a) up to the o-ring (30). Install screw (42) into the piston. Attach the drip pan (26) to the base using screws (21).

18. Snugly tighten the compression nuts on the hydraulic tube (48) and torque to 60--80 ft-lb (81--108 N.m).

19. Install the motor on the displacement pump. Reconnect all fluid lines. Be sure the ground wire is connected before operating the pump.

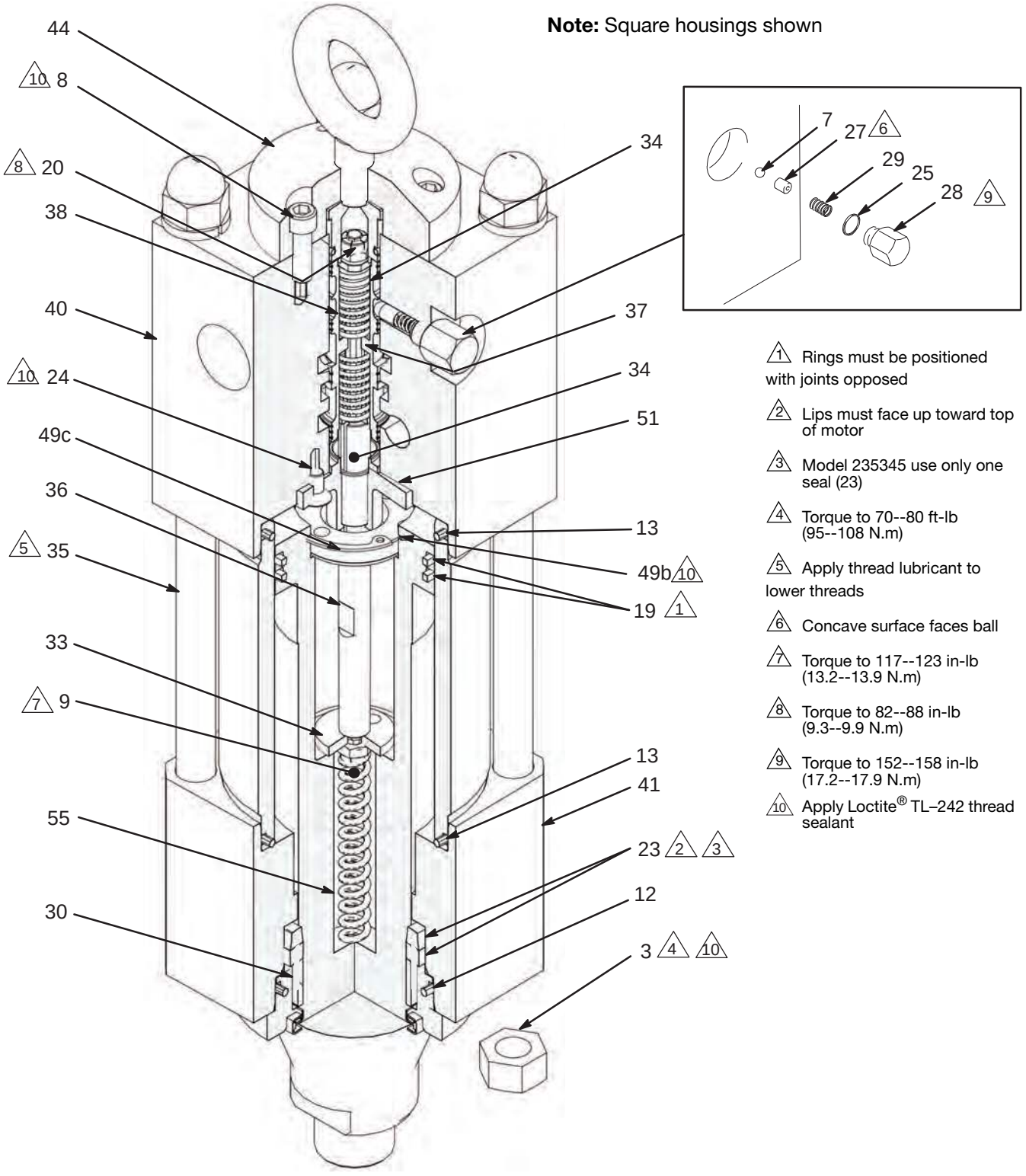
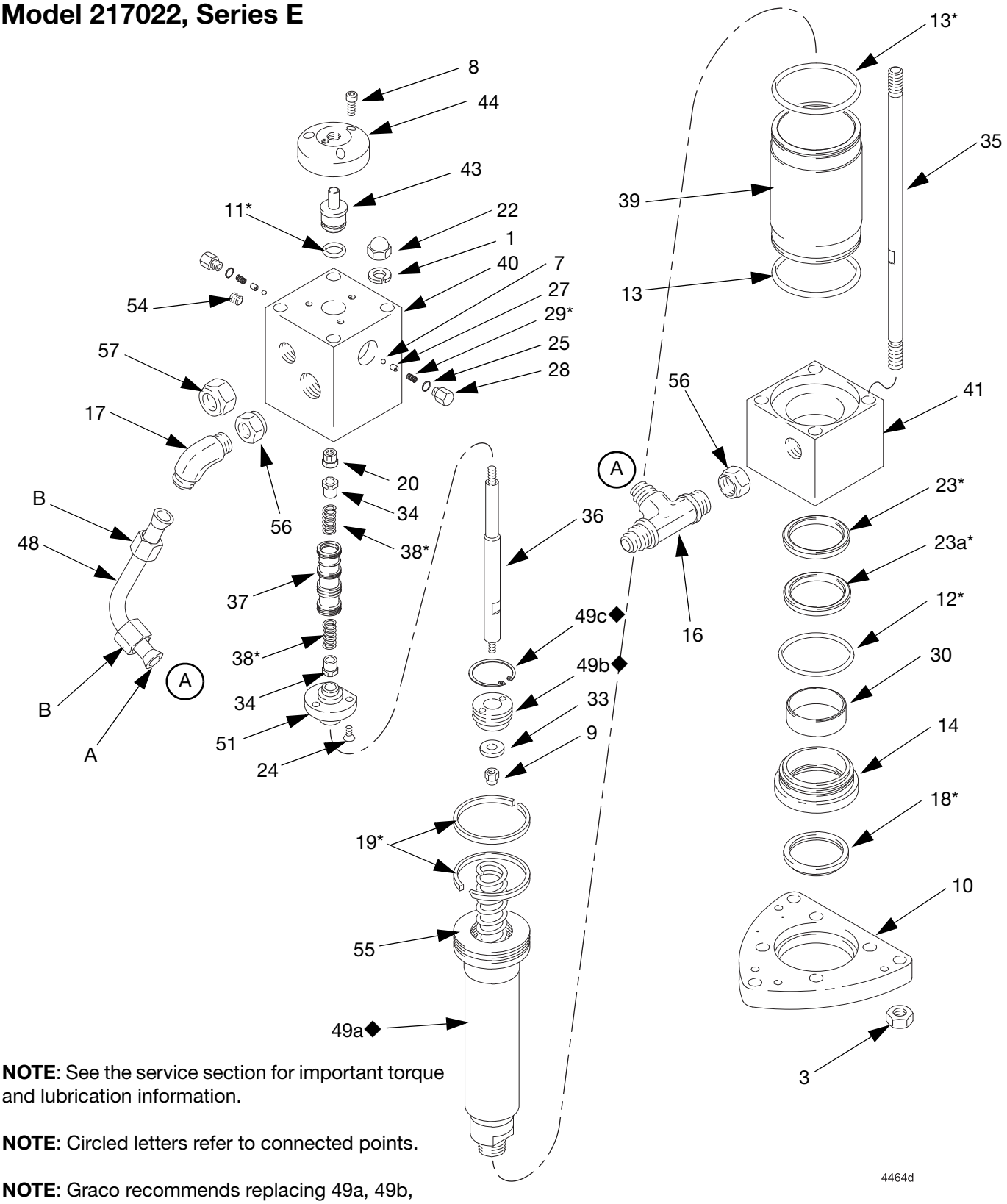


FIG. 5 _____

Parts - Square Housings

Model 217022, Series E



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in kit 26C141.

Model 217022, Series E

Includes items 1--57

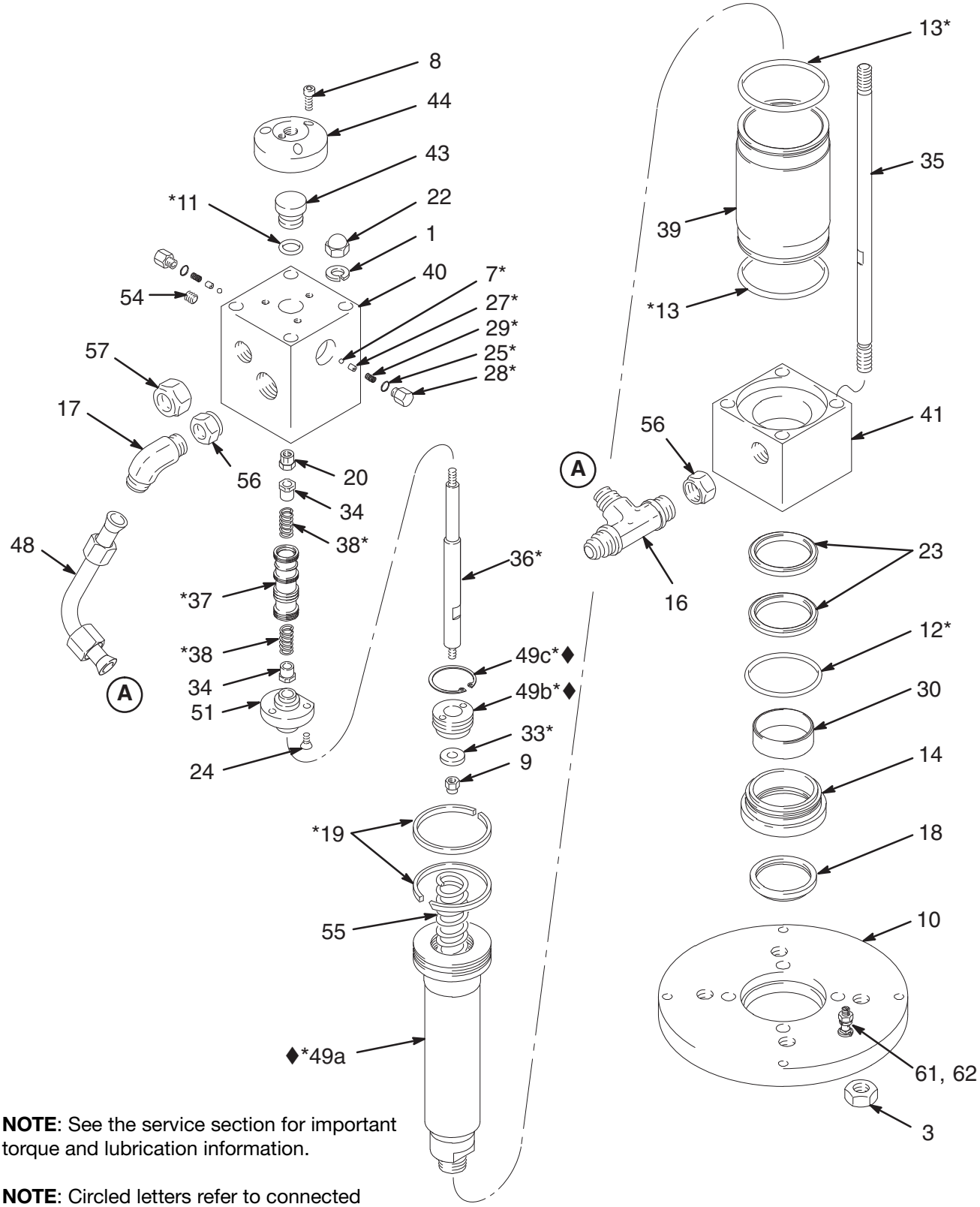
Ref. No.			Qty.
1		ER, spring, 5/8 in.	4
3	102087	NUT, hex jam, 5/8--18	4
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	609821	PLATE, tie	1
11*	104093	O-RING, nitrile rubber	1
12*	104280	O-RING, nitrile rubber	1
13*	104095	O-RING, nitrile rubber	2
14	609820	ADAPTER, plate	1
16	104098	TEE, tube, for 3/4 in. (19 mm) tube	1
17	104099	ELBOW, 90°, for 3/4 in. (19 mm) tube	1
18*	104102	WIPER	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23*	112130	SEAL, v-block, polyurethane	1
23a*	112762	SEAL, backup, modular, molythane	1
24	108538	SCREW, soc flat hd, self-locking, 1/4--20 x 1/2 in.	3
25		g	2
27	167210	GUIDE, ball	2
28	167431	PLUG, spring retaining	2
29*	108522	SPRING, helical compression	2
30	171395	BEARING, sleeve	1
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	177931	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	171412	CYLINDER	1
40	172814	HOUSING, upper	1
41	171414	HOUSING, lower	1
43	183252	PLUG, stop	1
44	183290	CAP, end	1
48	210108	TUBE	1
49	26C141	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
51	210292	BEARING and GUIDE	1
54	101754	PLUG, pipe, soc hd, 3/8 npt	1
55	104664	SPRING, compression	1
56	105429	NUT, seal, 3/4 npt	2
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1

* *These parts are also included in Repair Kit 18B078, which may be purchased separately.*

◆ *Graco recommends replacing 49a, 49b, and 49c all together in kit 26C141.*

Items marked ------ are not available separately.

Model 217338, Series F



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

4465c

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C141.

Model 217338, Series F

Includes items 1–62

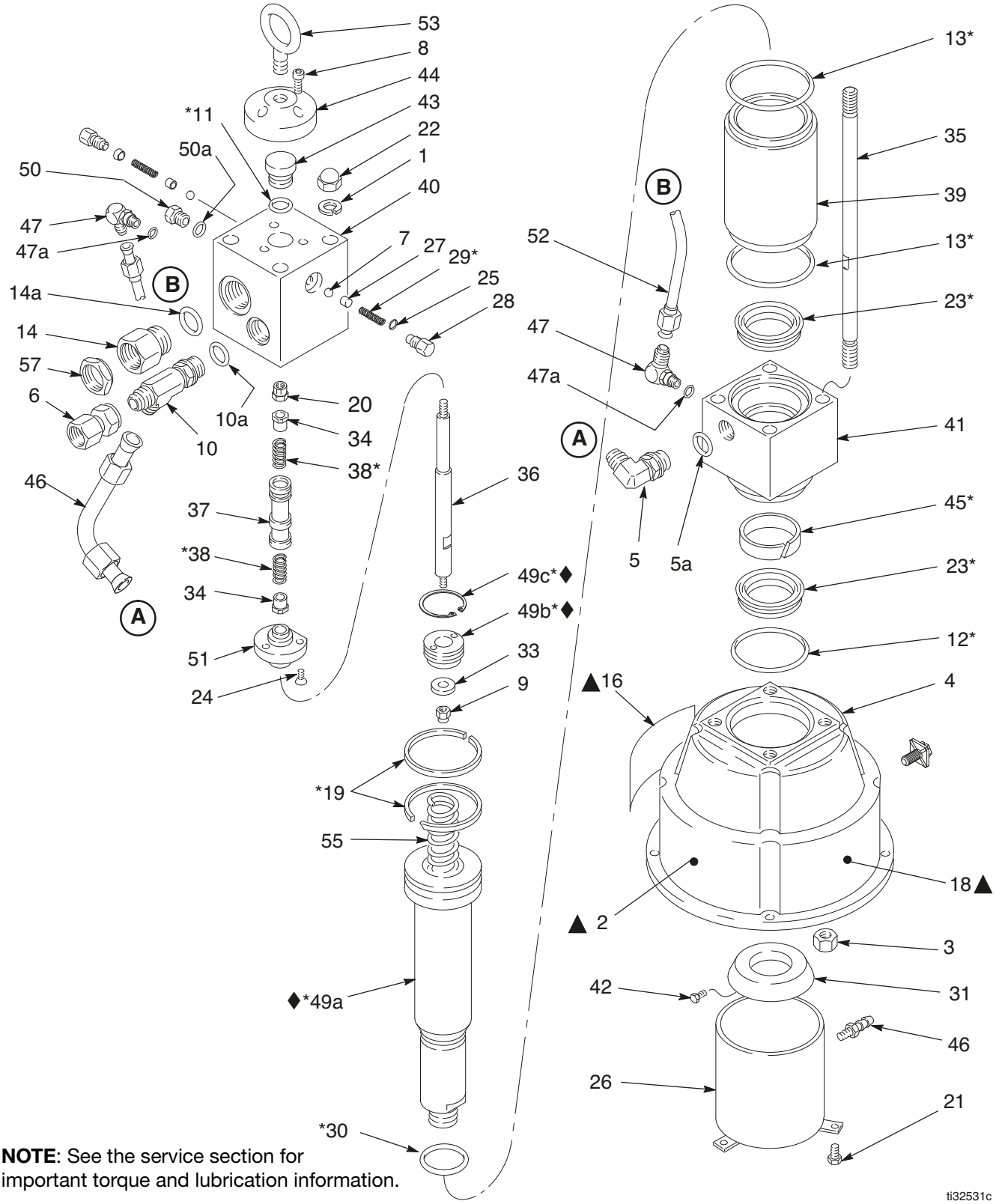
Ref. No.	Part No.	Description	Qty.
1	100128	LOCKWASHER, spring, 5/8 in.	4
3	100155	NUT, hex jam, 5/8--18	4
7*	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	609821	PLATE, tie	1
11*	104093	O-RING, nitrile rubber	1
12*	104280	O-RING, nitrile rubber	1
13*	104095	O-RING, nitrile rubber	2
14	609820	ADAPTER, plate	1
16	104098	TEE, tube, for 3/4 in. (19 mm) tube	1
17	104099	ELBOW, 90°, for 3/4 in. (19 mm) tube	1
18	104102	WIPER	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23	104203	SEAL, v-block, polyurethane	1
24	108538	SEAL, backup, modular, molythane	3
25*	150111	GASKET, plug	2
27*	167210	GUIDE, ball	2
28*	167431	PLUG, spring retaining	2
29*	108522	SPRING, helical compression	2
30	171395	BEARING, sleeve	1
33*	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	177931	ROD, tie	4
36*	171407	ROD, trip	1
37*	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	171412	CYLINDER	1
40	172814	HOUSING, upper	1
41	171414	HOUSING, lower	1
43	183252	PLUG, stop	1
44	183290	CAP, end	1
48	210108	TUBE	1
49	26C141	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
51	210292	BEARING and GUIDE	1
54	101754	PLUG, pipe, soc hd, 3/8 npt	1
55	104664	SPRING, compression	1
56	105429	NUT, seal, 3/4 npt	2
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1

* *These parts are also included in Repair Kit 220457, which may be purchased separately.*

◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C141.*

Items marked ------ are not available separately.

Model 235345, Series B



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C142.

Model 235345, Series B

Ref. No.			Qty.
1		R, spring, 5/8 in.	4
2▲	290331	LABEL, instruction, English	1
3	100155	NUT, hex jam, 5/8--18	4
4	186221	BASE	1
5	110797	ELBOW, male, 3/4 npt *Includes item 5a*	1
5a	110926	O-RING, nitrile rubber	1
6	112574	ADAPTER, 3/4 npt (f) x 1--1/16--12	1
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	110791	TEE, 7/8--14 unf--2a x 1 1/16--12un--2a, 37° flare for 3/4 in. dia.tube, *Includes item 10a*	1
10a	110926	O-RING, nitrile rubber	1
11*	104093	O-RING, nitrile rubber	1
12*	110800	O-RING, buna--N	1
13*	166071	O-RING, nitrile rubber	2
14	110876	ADAPTER, 1 --11-1/2 npt x1 5/16--12un--2a, *Includes item 14a*	1
14a	110927	O-RING, nitrile rubber	1
15	177756	LABEL, identification *(not shown)*	1
16▲	172975	LABEL, warning	1
17	100508	SCREW, type “u” drive, No. 4 x 0.188 in.	4
18▲	172815	PLATE, warning	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
21	100333	SCREW, cap, hex hd; 1/4--20 x .0.5 in.	1
22	104143	NUT, crown, 5/8--18	4
23*	110795	SEAL, u-cup, polyurethane	2
24	108538	SCREW, soc flat hd, self locking, 1/4--20 x 1/2 in.	3
25	110801	O-RING, nitrile rubber	2
26	210110	PAN, drip	1
27	167210	GUIDE, ball	2
28	186222	RETAINER, spring	2
29*	108522	SPRING, helical compression	2
30*	165295	O-RING, nitrile rubber	1
31			1
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	171405	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	186219	CYLINDER	1
40	186217	HOUSING, upper	1
41	186218	HOUSING, lower	1
42	101577	SCREW, machine, hex hd; No. 10--20 x 0.375 in.	1
43	171416	PLUG, stop	1
44	180953	CAP, end	1
45*	186223	BEARING, piston, bronze-filled PTFE	1
46	103875	ADAPTER, barbed hose, 1/8 npt x 0.25 in. (6.4 mm) ID hose	1
47	110792	ELBOW, 90°, 7/16--20 unf--2a(m) x 9/16--18 unf--2a(m), 37° flare for 3/8 in. dia. tube, *Includes item 47a*	2
47a	110801	O-RING, nitrile rubber	2
48	210108	TUBE	1
49	26C142	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
50	110799	PLUG, 9/16--18 unf--2b, *Includes item 50a*	1
50a	110925	O-RING, nitrile rubber	1
51	210292	BEARING and GUIDE	1
52	223608	TUBE, drain	1
53	108132	RING, lift	1
55	104664	SPRING, compression	1
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1

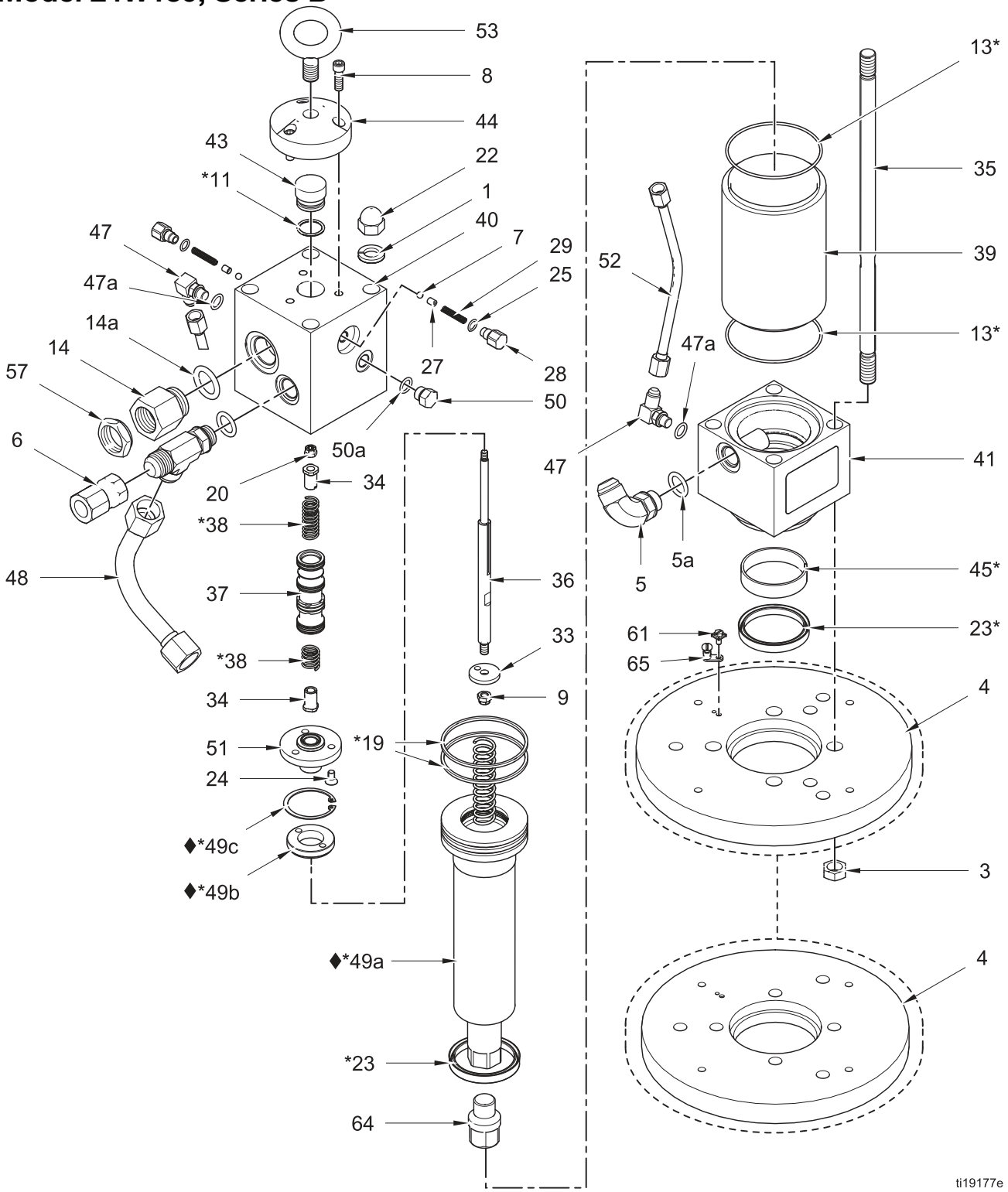
* *These parts are also included in Repair Kit 223654, which may be purchased separately.*

◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C142.*

▲ *Replacement safety labels, tags, and cards are available at no cost. Label 290331 is also available in the following languages:*
German (Part No. 290396)
French (Part No. 290397)
Spanish (Part No. 290398).

Items marked ------ are not available separately.

Model 262818, Series B
Model 24W139, Series B



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C139.

Model 262818, Series B

Model 24W139, Series B

Ref. No.			Qty.
1		ER, spring, 5/8 in.	4
3	100155	NUT, hex jam, 5/8--18	4
4	16M539	PLATE, for Model 262818	1
	17B757	PLATE, for Model 24W139	
5	110797	ELBOW, male, 3/4 npt *Includes item 5a*	1
5a	110926	O-RING, nitrile rubber	1
6	112574	ADAPTER, 3/4 npt (f) x 1--1/16--12	1
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	110791	TEE, 7/8--14 unf--2a x 1 1/16--12un--2a, 37° flare for 3/4 in. dia.tube, *Includes item 10a*	1
10a	110926	O-RING, nitrile rubber	1
11*	104093	O-RING, nitrile rubber	1
13*	166071	O-RING, nitrile rubber	2
14	110876	ADAPTER, 1 --11-1/2 npt x1 5/16--12un--2a, *Includes item 14a*	1
14a	110927	O-RING, nitrile rubber	1
15	177756	LABEL, identification *(not shown)*	1
17	100508	SCREW, type “u” drive, No. 4 x 0.188 in.	4
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23*	110795	SEAL, u-cup, polyurethane	2
24	108538	SCREW, soc flat hd, self locking, 1/4--20 x 1/2 in.	3
25	110801	O-RING, nitrile rubber	2
27	167210	GUIDE, ball	2
28	186222	RETAINER, spring	2
29*	108522	SPRING, helical compression	2
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	171405	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	186219	CYLINDER	1
40	186217	HOUSING, upper	1
41	186218	HOUSING, lower	1
43	171416	PLUG, stop	1
44	180953	CAP, end	1
45*	186223	BEARING, piston, bronze-filled PTFE	1
47	110792	ELBOW, 90°, 7/16--20 unf--2a(m) x 9/16--18 unf--2a(m), 37° flare for 3/8 in. dia. tube, *Includes item 47a*	2
47a	110801	O-RING, nitrile rubber	2
48	210108	TUBE	1
49		ncludes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
50	110799	PLUG, 9/16--18 unf--2b, *Includes item 50a*	1
50a	110925	O-RING, nitrile rubber	1
51	210292	BEARING and GUIDE	1
52	223608	TUBE, drain	1
53	108132	RING, lift	1
55	104664	SPRING, compression	1
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1
64	16M653	ADAPTER, hydraulic motor, Xtreme, 7/8--14 unf--2A x 3/4--16 unf--2B	1
65	111460	CONNECTOR, electric, ground	1

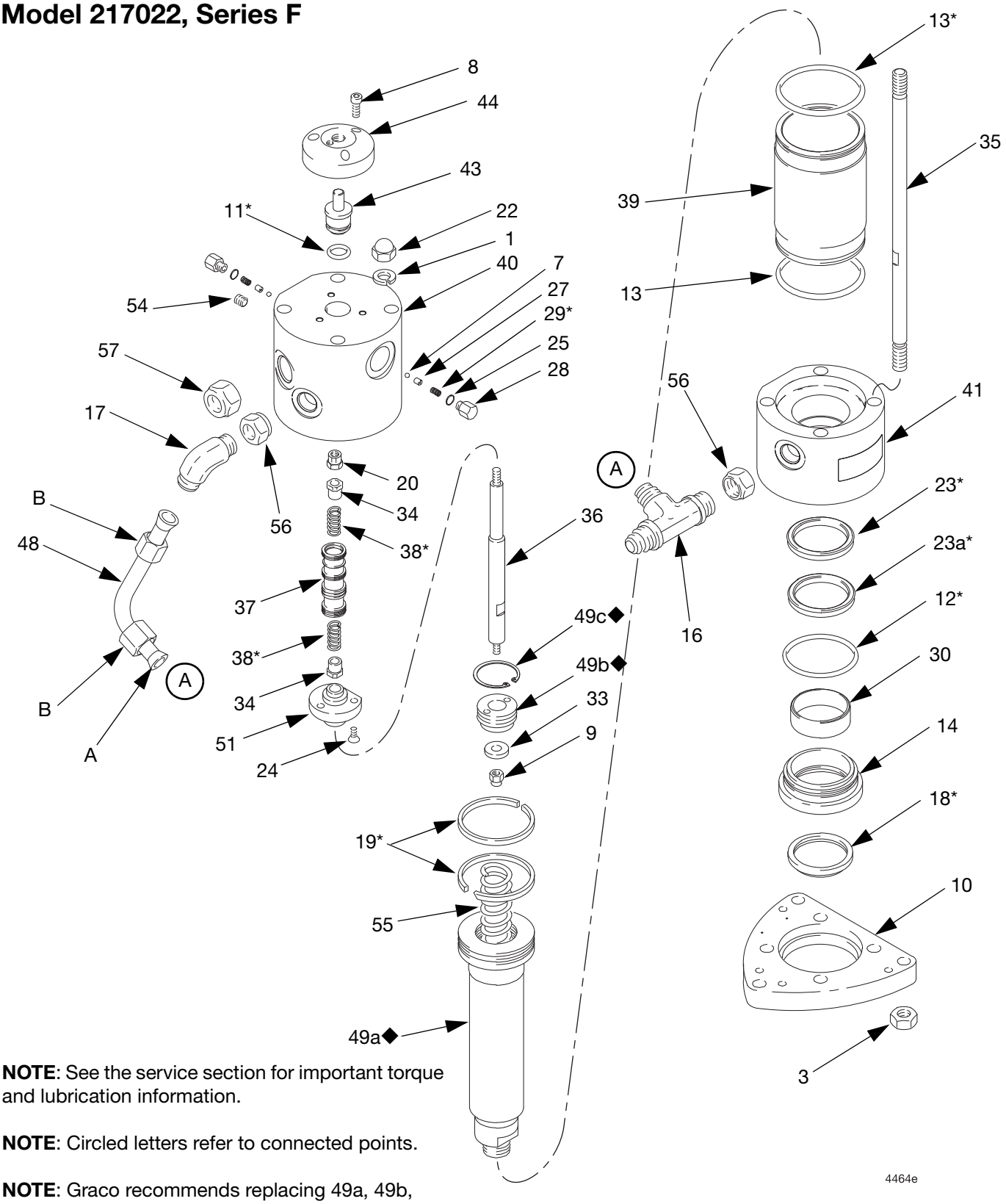
* *These parts are also included in Repair Kit 223654, which may be purchased separately.*

◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C139.*

Items marked ------ are not available separately.

Parts - Cylindrical Housings

Model 217022, Series F



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

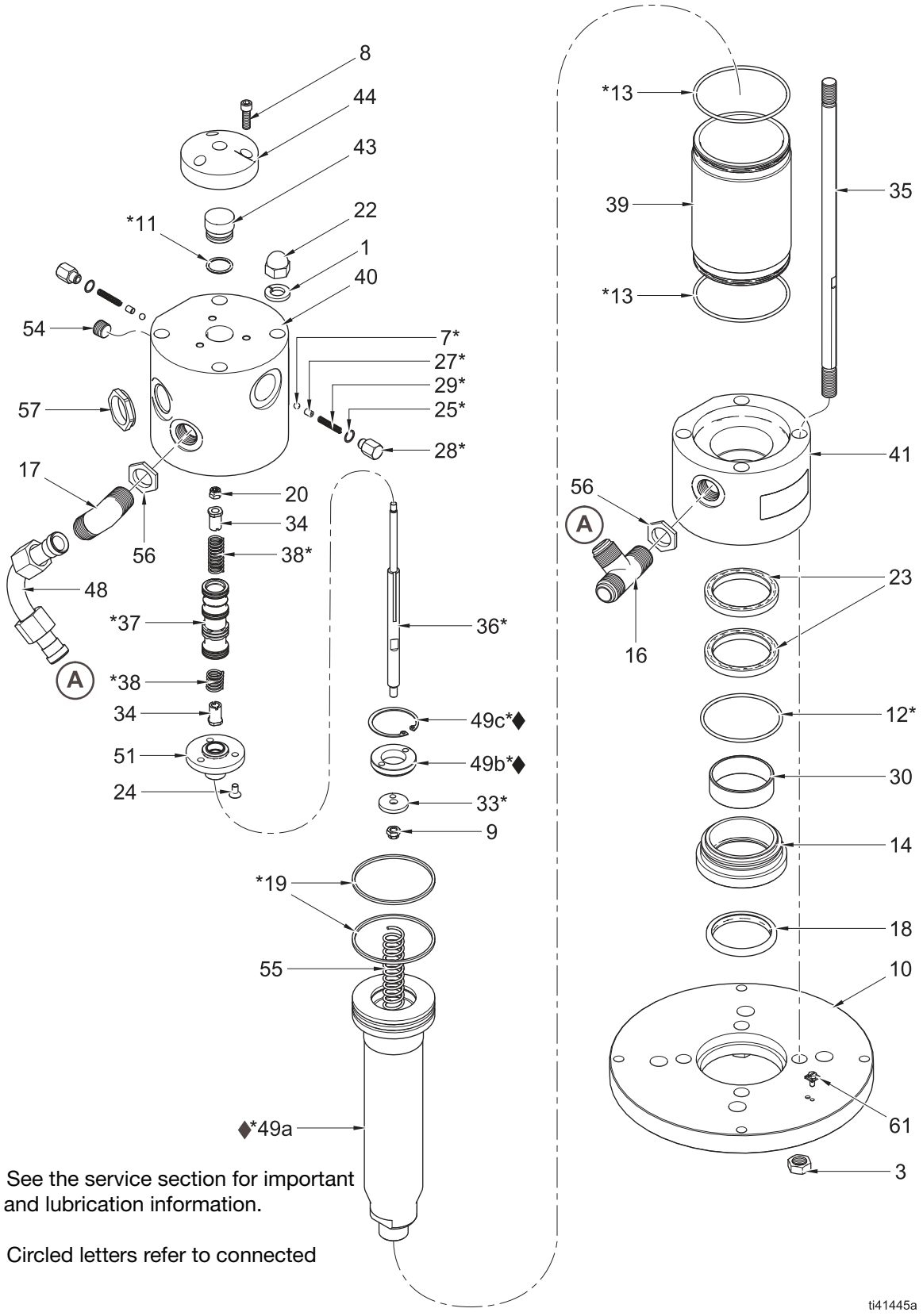
NOTE: Graco recommends replacing 49a, 49b, and 49c all together in kit 26C141.

Model 217022, Series F

Includes items 1--57

Ref. No.			Qty.
1		ER, spring, 5/8 in.	4
3	102087	NUT, hex jam, 5/8--18	4
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	609821	PLATE, tie	1
11*	104093	O-RING, nitrile rubber	1
12*	104280	O-RING, nitrile rubber	1
13*	104095	O-RING, nitrile rubber	2
14	609820	ADAPTER, plate	1
16	104098	TEE, tube, for 3/4 in. (19 mm) tube	1
17	104099	ELBOW, 90°, for 3/4 in. (19 mm) tube	1
18*	104102	WIPER	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23*	112130	SEAL, v-block, polyurethane	1
23a*	112762	SEAL, backup, modular, molythane	1
24	108538	SCREW, soc flat hd, self-locking, 1/4--20 x 1/2 in.	3
25		g	2
27	167210	GUIDE, ball	2
28	167431	PLUG, spring retaining	2
29*	108522	SPRING, helical compression	2
30	171395	BEARING, sleeve	1
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	177931	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	171412	CYLINDER	1
40	19D965	HOUSING, upper	1
41	19D964	HOUSING, lower	1
43	183252	PLUG, stop	1
44	183290	CAP, end	1
48	210108	TUBE	1
49	26C141	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
51	210292	BEARING and GUIDE	1
54	101754	PLUG, pipe, soc hd, 3/8 npt	1
55	104664	SPRING, compression	1
56	105429	NUT, seal, 3/4 npt	2
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1

Model 217338, Series G



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C141.

Model 217338, Series G

Includes items 1–62

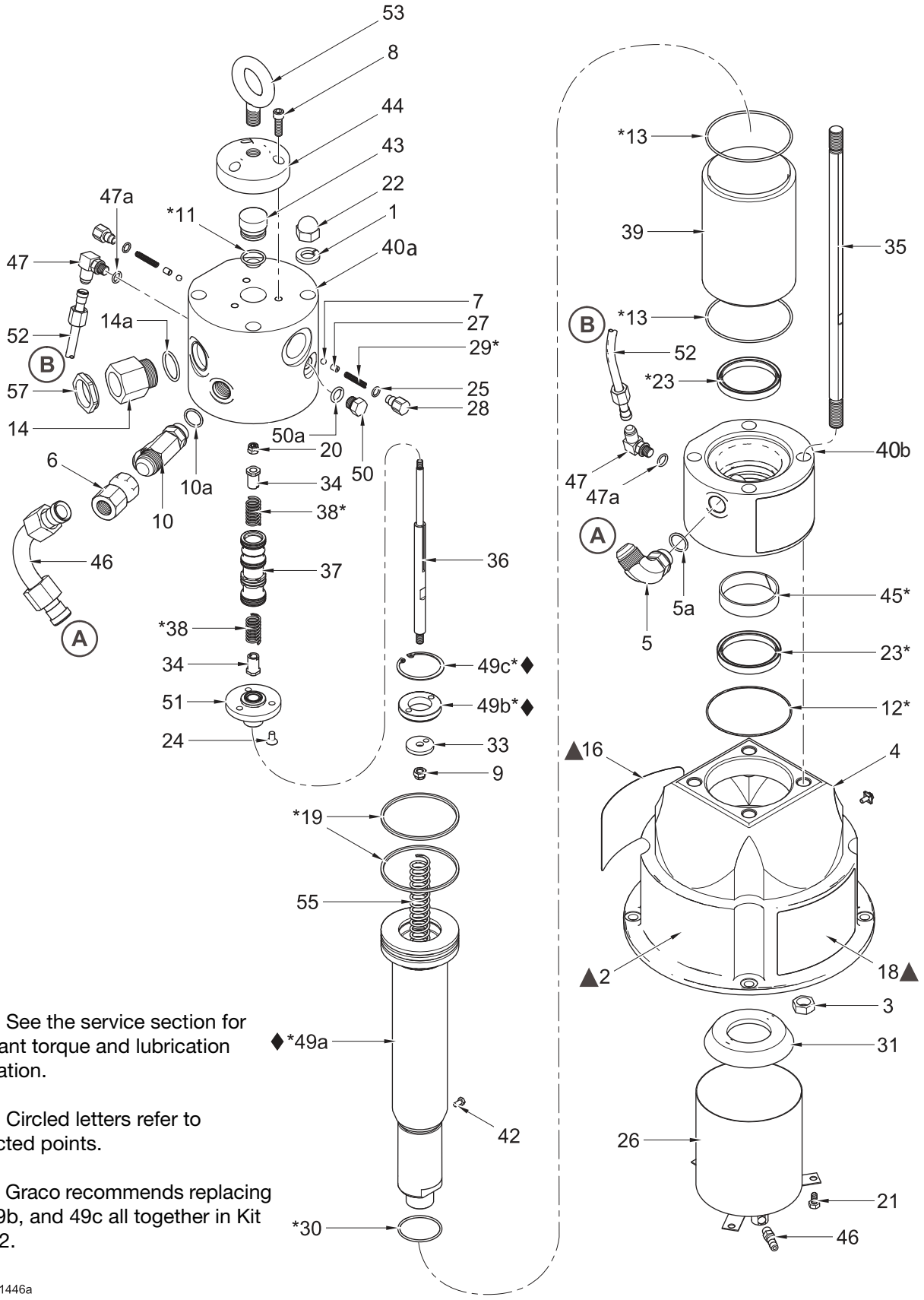
Ref. No.	Part No.	Description	Qty.
1	100128	LOCKWASHER, spring, 5/8 in.	4
3	100155	NUT, hex jam, 5/8--18	4
7*	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	609821	PLATE, tie	1
11*	104093	O-RING, nitrile rubber	1
12*	104280	O-RING, nitrile rubber	1
13*	104095	O-RING, nitrile rubber	2
14	609820	ADAPTER, plate	1
16	104098	TEE, tube, for 3/4 in. (19 mm) tube	1
17	104099	ELBOW, 90°, for 3/4 in. (19 mm) tube	1
18	104102	WIPER	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23	104203	SEAL, v-block, polyurethane	1
24	108538	SEAL, backup, modular, molythane	3
25*	150111	GASKET, plug	2
27*	167210	GUIDE, ball	2
28*	167431	PLUG, spring retaining	2
29*	108522	SPRING, helical compression	2
30	171395	BEARING, sleeve	1
33*	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	177931	ROD, tie	4
36*	171407	ROD, trip	1
37*	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	171412	CYLINDER	1
40	19D965	HOUSING, upper	1
41	19D964	HOUSING, lower	1
43	183252	PLUG, stop	1
44	183290	CAP, end	1
48	210108	TUBE	1
49	26C141	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
51	210292	BEARING and GUIDE	1
54	101754	PLUG, pipe, soc hd, 3/8 npt	1
55	104664	SPRING, compression	1
56	105429	NUT, seal, 3/4 npt	2
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1

* *These parts are also included in Repair Kit 220457, which may be purchased separately.*

◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C141.*

Items marked ------ are not available separately.

Model 235345, Series C



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C142.

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Model 235345, Series C

Ref. No.			Qty.
1		R, spring, 5/8 in.	4
2▲	290331	LABEL, instruction, English	1
3	100155	NUT, hex jam, 5/8--18	4
4	186221	BASE	1
5	110797	ELBOW, male, 3/4 npt *Includes item 5a*	1
5a	110926	O-RING, nitrile rubber	1
6	112574	ADAPTER, 3/4 npt (f) x 1--1/16--12	1
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	110791	TEE, 7/8--14 unf--2a x 1 1/16--12un--2a, 37° flare for 3/4 in. dia.tube, *Includes item 10a*	1
10a	110926	O-RING, nitrile rubber	1
11*	104093	O-RING, nitrile rubber	1
12*	110800	O-RING, buna--N	1
13*	166071	O-RING, nitrile rubber	2
14	110876	ADAPTER, 1 --11-1/2 npt x1 5/16--12un--2a, *Includes item 14a*	1
14a	110927	O-RING, nitrile rubber	1
15	177756	LABEL, identification *(not shown)*	1
16▲	172975	LABEL, warning	1
17	100508	SCREW, type “u” drive, No. 4 x 0.188 in.	4
18▲	172815	PLATE, warning	1
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
21	100333	SCREW, cap, hex hd; 1/4--20 x .0.5 in.	1
22	104143	NUT, crown, 5/8--18	4
23*	110795	SEAL, u-cup, polyurethane	2
24	108538	SCREW, soc flat hd, self locking, 1/4--20 x 1/2 in.	3
25	110801	O-RING, nitrile rubber	2
26	210110	PAN, drip	1
27	167210	GUIDE, ball	2
28	186222	RETAINER, spring	2
29*	108522	SPRING, helical compression	2
30*	165295	O-RING, nitrile rubber	1

Ref. No.			Qty.
31			1
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	171405	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	186219	CYLINDER	1
40	20B232	KIT, replacement housing	1
40a	--	HOUSING, motor, upper	1
40b	--	HOUSING, motor, lower	1
42	101577	SCREW, machine, hex hd; No. 10--20 x 0.375 in.	1
43	171416	PLUG, stop	1
44	180953	CAP, end	1
45*	186223	BEARING, piston, bronze-filled PTFE	1
46	103875	ADAPTER, barbed hose, 1/8 npt x 0.25 in. (6.4 mm) ID hose	1
47	110792	ELBOW, 90°, 7/16--20 unf--2a(m) x 9/16--18 unf--2a(m), 37° flare for 3/8 in. dia. tube, *Includes item 47a*	2
47a	110801	O-RING, nitrile rubber	2
48	210108	TUBE	1
49	26C142	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
50	110799	PLUG, 9/16--18 unf--2b, *Includes item 50a*	1
50a	110925	O-RING, nitrile rubber	1
51	210292	BEARING and GUIDE	1
52	223608	TUBE, drain	1
53	108132	RING, lift	1
55	104664	SPRING, compression	1
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1

* *These parts are also included in Repair Kit 223654, which may be purchased separately.*

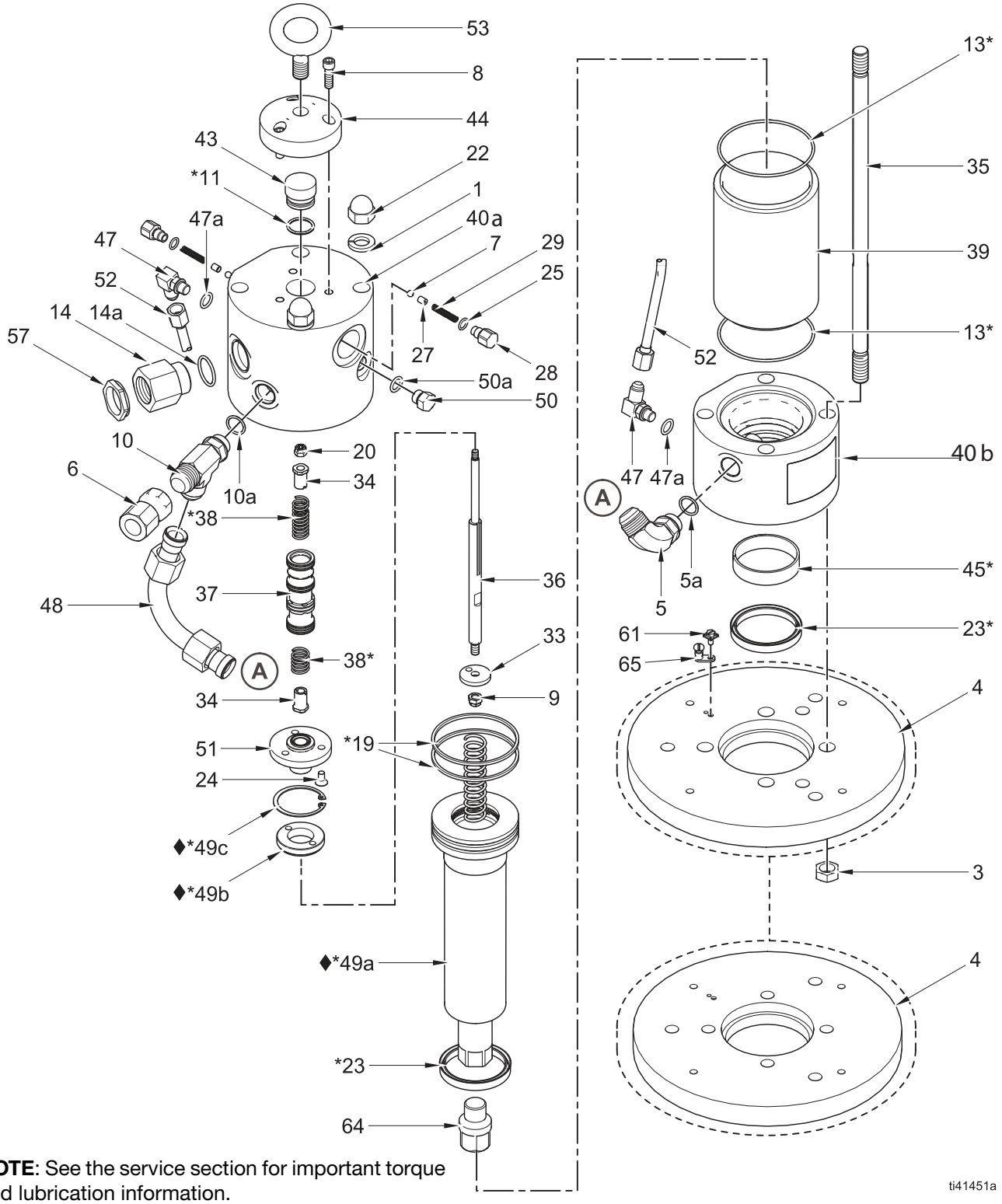
◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C142.*

▲ *Replacement safety labels, tags, and cards are available at no cost. Label 290331 is also available in the following languages:*
German (Part No. 290396)
French (Part No. 290397)
Spanish (Part No. 290398).

Items marked ------ are not available separately.

Model 262818, Series C

Model 24W139, Series C



NOTE: See the service section for important torque and lubrication information.

NOTE: Circled letters refer to connected points.

NOTE: Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C139.

Model 262818, Series C

Model 24W139, Series C

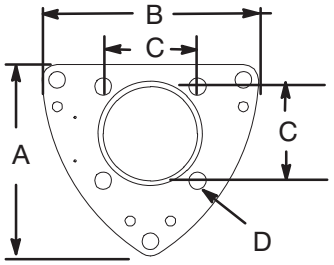
Ref. No.			Qty.
1		ER, spring, 5/8 in.	4
3	100155	NUT, hex jam, 5/8--18	4
4	16M539	PLATE, for Model 262818	1
	17B757	PLATE, for Model 24W139	
5	110797	ELBOW, male, 3/4 npt *Includes item 5a*	1
5a	110926	O-RING, nitrile rubber	1
6	112574	ADAPTER, 3/4 npt (f) x 1--1/16--12	1
7	101701	BALL, 1/4 in. dia.	2
8	101864	CAPSCREW, soc hd, 5/16--18 x 1 in.	3
9	103450	NUT, hex, self-locking, 5/16--18	1
10	110791	TEE, 7/8--14 unf--2a x 1 1/16--12un--2a, 37° flare for 3/4 in. dia.tube, *Includes item 10a*	1
10a	110926	O-RING, nitrile rubber	1
11*	104093	O-RING, nitrile rubber	1
13*	166071	O-RING, nitrile rubber	2
14	110876	ADAPTER, 1 --11-1/2 npt x1 5/16--12un--2a, *Includes item 14a*	1
14a	110927	O-RING, nitrile rubber	1
15	177756	LABEL, identification *(not shown)*	1
17	100508	SCREW, type “u” drive, No. 4 x 0.188 in.	4
19*	104103	RING, piston, compression	2
20	104105	NUT, hex lock, 1/4--20	1
22	104143	NUT, crown, 5/8--18	4
23*	110795	SEAL, u-cup, polyurethane	2
24	108538	SCREW, soc flat hd, self locking, 1/4--20 x 1/2 in.	3
25	110801	O-RING, nitrile rubber	2
27	167210	GUIDE, ball	2
28	186222	RETAINER, spring	2
29*	108522	SPRING, helical compression	2
33	181243	STOP, piston	1
34	183659	GUIDE, trip rod	2
35	171405	ROD, tie	4
36	171407	ROD, trip	1
37	181874	SPOOL, valve	1
38*	171411	SPRING, compression	2
39	186219	CYLINDER	1
40	20B232	KIT, replacement kit	1
40a	--	HOUSING, upper	1
40b	--	HOUSING, lower	1
43	171416	PLUG, stop	1
44	180953	CAP, end	1
45*	186223	BEARING, piston, bronze-filled PTFE	1
47	110792	ELBOW, 90°, 7/16--20 unf--2a(m) x 9/16--18 unf--2a(m), 37° flare for 3/8 in. dia. tube, *Includes item 47a*	2
47a	110801	O-RING, nitrile rubber	2
48			1
49	26C139	KIT, piston; includes items 49a, 49b, and 49c	1
49a◆	---	PISTON	1
49b◆	171398	RETAINER	1
49c◆	114962	RING, retaining	1
50	110799	PLUG, 9/16--18 unf--2b, *Includes item 50a*	1
50a	110925	O-RING, nitrile rubber	1
51	210292	BEARING and GUIDE	1
52	223608	TUBE, drain	1
53	108132	RING, lift	1
55	104664	SPRING, compression	1
57	105430	NUT, seal, 1 in. npt *supplied in a plastic bag*	1
61	116343	GROUNDING LUG	1
64	16M653	ADAPTER, hydraulic motor, Xtreme, 7/8--14 unf--2A x 3/4--16 unf--2B	1
65	111460	CONNECTOR, electric, ground	1

* *These parts are also included in Repair Kit 223654, which may be purchased separately.*

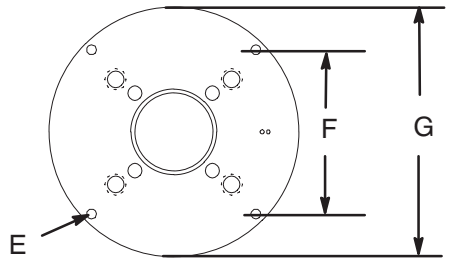
◆ *Graco recommends replacing 49a, 49b, and 49c all together in Kit 26C139.*

Items marked ------ are not available separately.

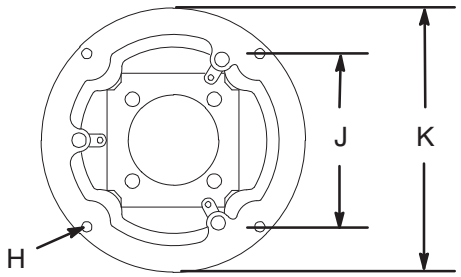
Mounting Hole Layout



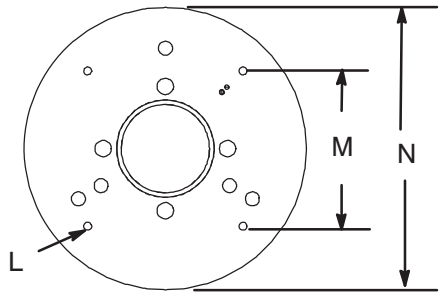
04469



04470



04508

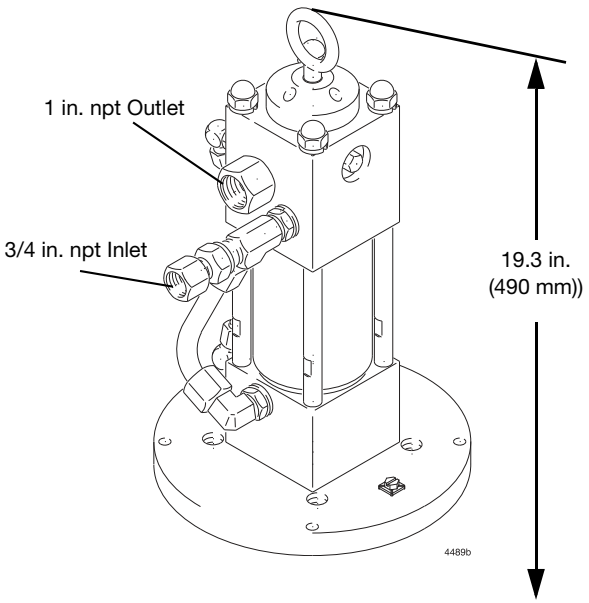


ti19178a

Model 217022			
A	7.2 in (182.8 mm)	C	3.5 in. (88.9 mm)
B	8.1 in. (205.7 mm)	D	0.641 in. (16.3 mm)
Model 217338			
E	0.438 in. (11.1 mm)	G	11.28 in. (286.5 mm)
F	7.42 in. (188.4 mm)		
Model 235345			
H	0.438 in. (11.1 mm)	K	11.31 in. (287.2 mm)
J	7.42 in. (188.4 mm)		
Model 262818 and 24W139			
L	3/8--16 in.	N	11.25 in. (285.7 mm)
M	6.186 in. (157.1 mm)		

Dimensions

Models 217022, 217338, 24W139, and 262818 *(square housings shown)*



NOTE: Height for Model 235345 is 25.4 in. (645.16 mm).

NOTE: Model 24W139 has a 3/4 in. #12 JIC pump inlet.

Technical Data

Viscount Hydraulic Motor		
	US	**Metric**
Maximum hydraulic fluid input pressure		
Also see the **WARNING** on page 6.		
Models 217022, 217338, 235345	1500 psi	10 MPa, 103 bar
Model 262818	1800 psi	12 MPa, 124 bar
Model 24W139	1900 psi	13.1 MPa, 131 bar
Maximum hydraulic fluid flow	12 gpm	45.6 liter/min
Hydraulic fluid consumption	1 gal. per 5 cycles	3.8 liter per 5 cycles
Effective piston area	4.9 sq. in.	31.6 cm^2
Piston rod diameter	2.5 in.	64 mm
Stroke length	4.69 in.	119.1 mm
Thrust at 1500 psi (10 MPa, 103 bar)	7300 lbs.	32 472 N
Weight (Square Housings Series Models)	approx. 96 lbs.	43.5 kg
Weight (Cylindrical Housings Series Models)	approx. 112 lbs.	50.8 kg

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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.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

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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