

# Hand Pump Assembly; Gear Lube Dispensers; Automatic Transmission Fluid Dispenser

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For dispensing non-corrosive and non-abrasive oils and lubricants only. For professional use only.

#### Model 204867, Hand Pump Assembly

175psi (1.2 MPa, 12 bar) Maximum Working Pressure

### Gear Lube Dispensers

Hand-Operated, 120 lb. size.

175psi (1.2 MPa, 12 bar) Maximum Working Pressure

Model	Mounting	Cover	Meter
225376, Series B	Portable Base	Cover	In-line, electronic
225378, Series A	Portable Base	Cover	None
225380, Series A	None	Cover	None
225384, Series B	Portable Truck	Cover	In-line, electronic

### Model 225880, Series B Automatic Transmission Fluid Dispenser with Meter

Hand-Operated, 16 Gallon size.

175psi (1.2 MPa, 12 bar) Maximum Working Pressure

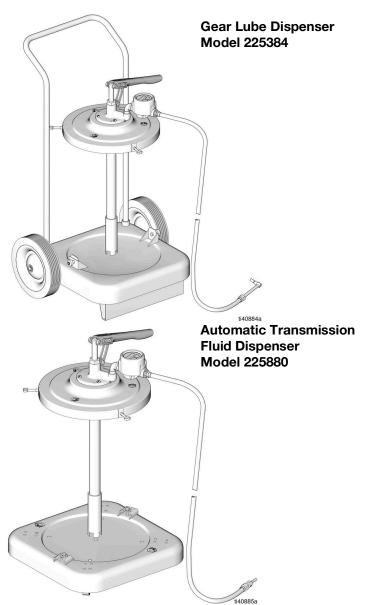


#### **Important Safety Instructions**

Read all warnings and instructions in this manual and in the Related Manuals before using the equipment. Save these instructions.

## **Related Manuals**

Manual in English	Description
3A5588	EM8, EM20 and IM20 Meters
306345	Lube Ranger Components



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## Installation



#### **Foot Crush Hazard**

A fully loaded cart adds weight, creating a potential foot crush hazard. To avoid a foot injury, keep feet away from the cart.

Reference Fig. 1 or Fig. 2, depending upon the model.

#### Models with a Portable Truck

Insert the truck handle (708) into the sockets in the truck base (701).

### **All Models**

Place a full container of fluid on the base. Carefully clean the container top before opening it to avoid fluid contamination. Secure the drum or shield (401) with the hardware provided.

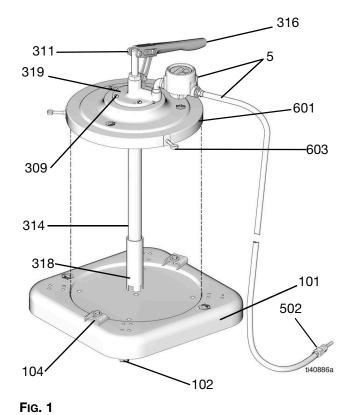
## **Models with Drum Cover**

Install the drum cover (601) on the opened drum and secure it with the thumbscrews (603).

### **All Models**

Slide the pump extension tube (318) all the way down on the riser tube (314). Insert the riser tube (314) into the opening in the top of the shield (401) or cover (601). Lower the pump until the outlet housing (319) rests on the shield (401) or cover (601), then secure it with the four (4) screws (309). Install the pump lever (316), clevis (311), and hose and meter assembly (2 or 5).

To prime the pump, open the nozzle (502) and operate the pump until fluid flows from the nozzle. Close the nozzle and place it in the opening in the outlet housing (319).



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Fig. 2

# **Operation**

#### **Pressure Relief Procedure**



Follow the Pressure Relief Procedure whenever you see this symbol.



#### PRESSURIZED FLUID HAZARD

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

#### 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.

- 1. Stop actuation of the manual pump.
- Place the nozzle back into the supply or waste drum.
- 3. Open the nozzle to relieve pressure.
- Allow the pressure to bleed off.

#### **NOTICE**

To avoid contamination when changing drums, do not let the pump's intake valve touch the floor or any dirty surface. Contamination can damage the pump and cause wear to the parts.

## **Pump Operation**

Reset the meter to zero by pressing the Reset button.

Insert the nozzle into the fill hole. Open the nozzle and operate the pump. When finished, close the nozzle and wipe off any excess fluid. Place the nozzle into the opening in the outlet housing.

If the meter fails to register, it may be due to a low battery. See the **Service** section of the Electronic Meter manual.

# Models with Non-Drip Nozzle 200348

The non-drip nozzle can be set in the automatic position by turning it two or more turns counter-clockwise.

## **Dimension Chart**

Model No.	Height	Width	Weight
225376	37 in.	19 in.	36 lb.
	(940 mm)	(483 mm)	(16 kg)
225378	37 in.	19 in.	34 lb.
	(940 mm)	(483 mm)	(15 kg)
225380	35 in.	16in.	18 lb.
	(889mm)	(406 mm)	(8 kg)
225384	39 in.	24 in.	49 lb.
	(991 mm)	(610 mm)	(22 kg)
225880	37 in.	19 in.	35 lb.
	(940 mm)	(483 mm)	(16 kg)

## Recycling and Disposal

#### **End of Product Life**

At the end of the product's useful life, dismantle and recycle it in a responsible manner.

- Follow the Pressure Relief Procedure, page 4.
- Drain and dispose of fluids according to applicable regulations. Refer to the material manufacturer's Safety Data Sheet.
- Deliver remaining product to a recycling facility.

## Repair

## **Pump**

**NOTE:** Clean all parts in non-flammable solvent. Dry all parts thoroughly before reassembly.

- 1. Remove the pump from the cover or shield.
- 2. Slide the extension (318) up the riser tube (314) and expose the intake valve (302).
- 3. Unscrew the intake valve (302) from the riser tube (314). Disassemble the intake valve. Clean and inspect the parts. Replace worn or damaged parts.
- 4. Unscrew the riser tube (314) from the outlet housing (319).
- 5. Pull the riser tube (314) down off the connecting rod (320) and piston (301).
- 6. Unscrew the piston (301) from the connecting rod (320). Disassemble the piston. Clean and inspect the parts. Replace worn or damaged parts.
- 7. Loosen the packing nut (312).
- 8. Disconnect the connecting rod (320) from the pump lever (316). Pull the connecting rod (320) down out of the outlet housing (319).
- Unscrew the packing nut (312) and remove the packings (313). Clean and inspect the parts.
   Replace worn or damaged parts.
- Reassemble the pump in reverse order, following the lubrication and sealant notes in Fig. 3. Tighten the packing nut (312) just enough to stop leakage.

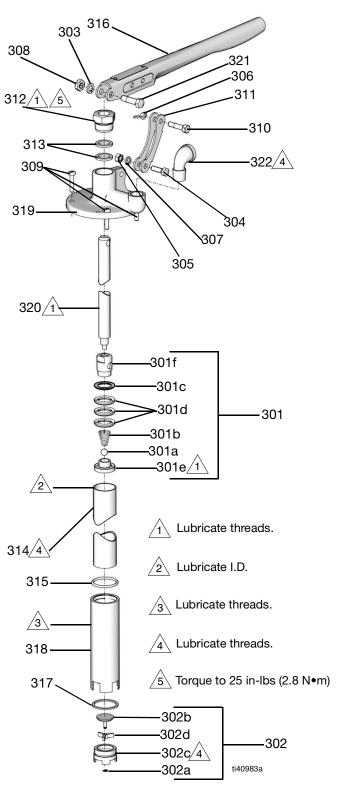


Fig. 3: Hand Pump Assembly, Model 204867, Series A

## **Parts**

# **Gear Lube Dispenser**

### Model 225378, Series A without meter

Includes items 1, 3, 6, 201

#### Model 225376, Series B with meter

Includes items 1, 2, 3, 6

Ref.	Part	Description	Qty.
1	203622	PORTABLE BASE ASSEMBLY, see Parts List, page <b>Ref 1, Part 203622,</b> <b>Series B Portable Base Assembly</b> , page 10	1
2	239705	HOSE AND METER ASSEMBLY, see Parts List, page Ref 2, Part 239705, Series A Hose and Meter Assembly, page 11	1
3	204867	HAND PUMP ASSEMBLY, see Parts List, page <b>Gear Lube Dispenser</b> , page 6	1
6	204574	COVER ASSEMBLY, see Lube Ranger Components manual	1
201	214658	HOSE ASSEMBLY, Model 225378 only. Includes items 201a - 201c; See Parts List, page Ref 2, Part 239705, Series A Hose and Meter Assembly, page 11.	1

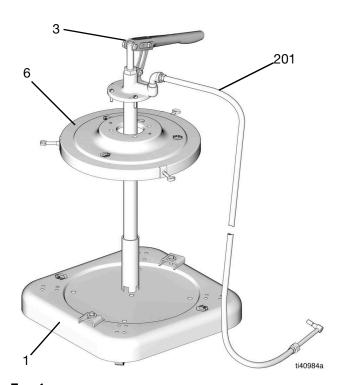


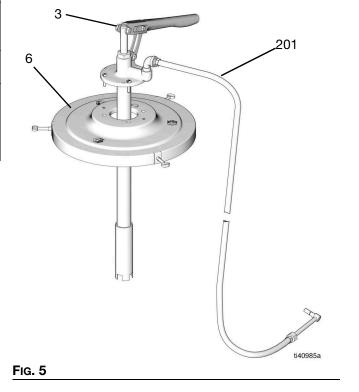
Fig. 4

# **Gear Lube Dispenser**

### Model 225380, Series A

Includes items 3, 6, 201

Ref.	Part	Description	Qty.
3	204867	HAND PUMP ASSEMBLY, see Parts List, page <b>Gear Lube Dispenser</b> , page 6	1
6	204574	COVER ASSEMBLY, see Lube Ranger Components manual	1
201	214658	HOSE ASSEMBLY, Model 225378 only. Includes items 201a - 201c; See Parts List, page Ref 2, Part 239705, Series A Hose and Meter Assembly, page 11.	1

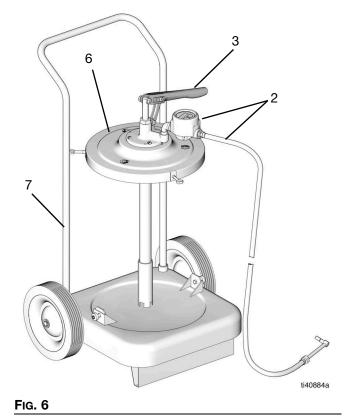


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# **Gear Lube Dispenser**

## Model 225384, Series B

Ref.	Part	Description	Qty.
2	239705	HOSE AND METER ASSEMBLY, see Parts List, page Ref 2, Part 239705, Series A Hose and Meter Assembly, page 11	1
3	204867	HAND PUMP ASSEMBLY, see Parts List, page <b>Gear Lube Dispenser</b> , page 6	1
6	204574	COVER ASSEMBLY, see Lube Ranger Components manual	1
7	203650	TRUCK ASSEMBLY. See Parts List, page <b>Model 204867</b> , page 8.	1



# **Automatic Transmission Fluid Dispenser**

## Model 225880, Series B

•	Ref.	Part	Description	Qty.
	1	203622	PORTABLE BASE ASSEMBLY, see Parts List, page <b>Ref 1, Part 203622,</b> <b>Series B Portable Base Assembly</b> , page 10	1
•	3	204867	HAND PUMP ASSEMBLY, see Parts List, page <b>Gear Lube Dispenser</b> , page 6	1
	5	239707	DISPENSE KIT, metered. See Parts List, page <b>Ref 5, Part 239707,</b> <b>Series A Metered Dispense Kit,</b> page 11	1
•	6	204574	COVER ASSEMBLY, see Lube Ranger Components manual	1

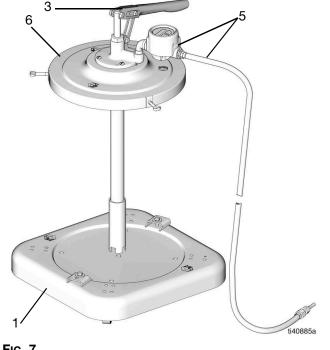
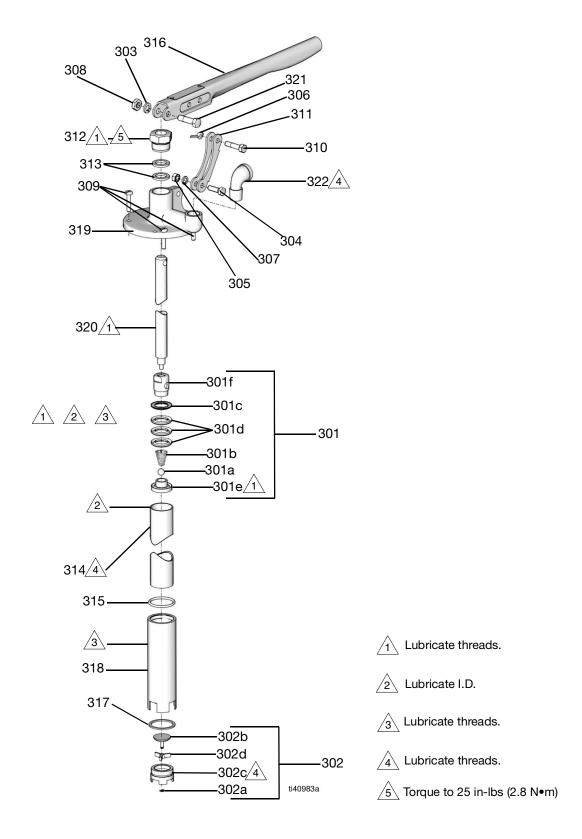


Fig. 7

# Model 204867



# Ref 3, Part 204867, Series A Hand Pump Assembly

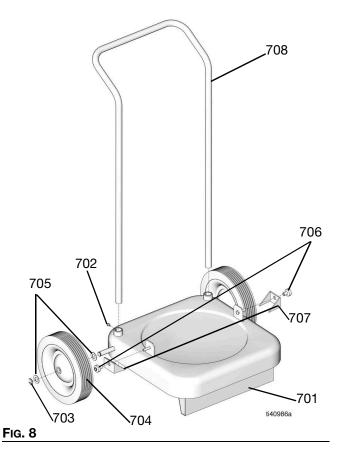
Reference **Parts**, page 6.

Ref.	Part	Description	Qty.
301	200753	PISTON ASSEMBLY, includes items 301a - 301f	1
301a	100114	BALL, steel, 7/16 in. dia.	1
301b	150134	SPRING, compression	1
301c	150463	GLAND, male	1
301d*	151464	V-PACKING, leather	3
301e	150465	SEAT, piston	1
301f	152559	HOUSING, piston	1
302	202162	INTAKE VALVE HOUSING, includes items 302a - 302d	1
302a	101021	RING, retaining	1
302b	156738	VALVE, poppet	1
302c	156739	BODY, valve	1
302d	156750	GUIDE, poppet	1
303	100133	LOCKWASHER, spring, 3/8 in.	1
304	100184	CAPSCREW, hex, 5/16-24 x 1 in.	1
305	100187	NUT, hex, 5/16-24	1
306	100191	NUT, wing, 5/16-18	1
307	100214	LOCKWASHER, spring, 5/16 in.	1
308	100340	NUT, hex, 3/8-16	1
309	101120	SCREW, rd hd, 1/4-20 x 1-1/4 in.	4
310	150662	SCREW, pivot	1
311	150726	CLEVIS	1
312	154513	PACKING NUT	1
313*	154514	PACKING, duck and neoprene	2
314	156511	RISER TUBE	1
315	156593	O-RING, nitrile rubber	1
316	158769	LEVER, pump handle	1
317	159487	SPACER	1
318	159488	TUBE, extension	1
319	159923	HOUSING, outlet	1
320	159930	CONNECTING ROD	1
321	159931	SCREW, pivot	1
322	100119	ELBOW, 1/2 npt	1

# Ref 7, Part 203650, Series A Truck Assembly

Ref.	Part	Description	Qty.
701	203651	TRUCK BASE	1
702	100609	SCREW, rd hd, 1/4 - 20 x 3/8 in.	2
703	101242	RETAINING RIGH	2
704	101251	WHEEL	2
705	154636	WASHER	4
706	159912	THUMBNUT	2
707	159913	HOLD DOWN CLAMP, steel drums only	2
	159952*	HOLD DOWN CLAMP, 5 gallon pail	2
708	159924	TRUCK HANDLE	1

<sup>\*</sup>Must be ordered separately.



# Ref 1, Part 203622, Series B Portable Base Assembly

Ref.	Part	Description	Qty.
101	191750	BASE, drum	1
102	113646	CASTER, polyurethane	4
103	102547	BOLT, hex hd; 5/16 in - 18 x 1.5 in.	2
104	191747	BRACKET	2
105	100214	WASHER, lock	2
106	100132	WASHER, flat	2
107	113660	RIVET	16

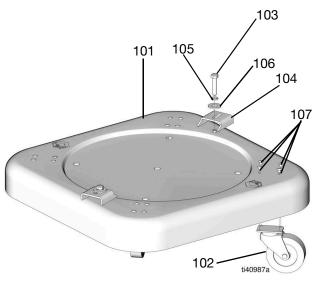
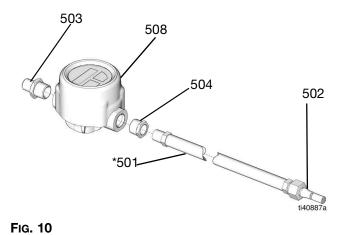


Fig. 9

# Ref 5, Part 239707, Series A Metered Dispense Kit

Ref.	Part	Description	Qty.
501*	214657	HOSE, fluid, cpld 1/2 npt(m) x 1/4 npt(f); 1/2 in. ID, 5 ft. long	1
502	203469	NON-DRIP NOZZLE	1
503	157191	NIPPLE, 1.2 npt x 3/4 npt	1
504	100896	FITTING, bushing pipe	1
508	25C841	METER, in-line electronic	1

<sup>\*</sup>Keep spare on hand to reduce down time.



Ref 2, Part 239705, Series A Hose and Meter Assembly

Ref.	Part	Description	Qty.
201	214658	HOSE ASSEMBLY, includes items 201a - 201c	1
201a	200348	NON-DRIP NOZZLE	1
201b*	214657	HOSE, fluid, cpld 1.2 npt(m) x 1/4 npt(f), 1/2 in. ID, 5 ft. long	1
201c	100200	NIPPLE, 1/4 npt, 6 ft. long	1
202	157191	NIPPLE, 1/2 npt x 3/4 npt	1
203	25C841	METER, in-line electronic	1
204	100896	FITTING, bushing pipe	1

\*Keep spare on hand to reduce down time

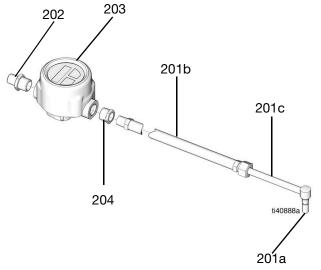


Fig. 11

# Ref 3, Part 204867, Series A Hand Pump Assembly

Reference **Parts**, page 6.

Ref.	Part	Description	Qty.
301	200753	PISTON ASSEMBLY, includes	1
		items 301a - 301f	
301a	100114	BALL, steel, 7/16 in. dia.	1
301b	150134	SPRING, compression	1
301c	150463	GLAND, male	1
301d*	151464	V-PACKING, leather	3
301e	150465	SEAT, piston	1
301f	152559	HOUSING, piston	1
302	202162	INTAKE VALVE HOUSING, includes items 302a - 302d	1
302a	101021	RING, retaining	1
302b	156738	VALVE, poppet	1
302c	156739	BODY, valve	1
302d	156750	GUIDE, poppet	1
303	100133	LOCKWASHER, spring, 3/8 in.	1
304	100184	CAPSCREW, hex, 5/16-24 x 1 in.	1
305	100187	NUT, hex, 5/16-24	1
306	100191	NUT, wing, 5/16-18	1
307	100214	LOCKWASHER, spring, 5/16 in.	1
308	100340	NUT, hex, 3/8-16	1
309	101120	SCREW, rd hd, 1/4-20 x 1-1/4 in.	4
310	150662	SCREW, pivot	1
311	150726	CLEVIS	1
312	154513	PACKING NUT	1
313*	154514	PACKING, duck and neoprene	2
314	156511	RISER TUBE	1
315	156593	O-RING, nitrile rubber	1
316	158769	LEVER, pump handle	1
317	159487	SPACER	1
318	159488	TUBE, extension	1
319	159923	HOUSING, outlet	1
320	159930	CONNECTING ROD	1
321	159931	SCREW, pivot	1
322	100119	ELBOW, 1/2 npt	1
	1		

<sup>\*</sup> Keep a spare on hand to reduce down time.

#### Wetted Parts

Buna, zinc alloy, steel, neoprene, polycarbonate, aluminum

# **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.

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Original instructions. This manual contains English. MM 306436

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