

# Instructions – Parts List



## Series 500 Hose Reels

308109Z1

Used to dispense lubrication products, air, water, transmission fluid and antifreeze.



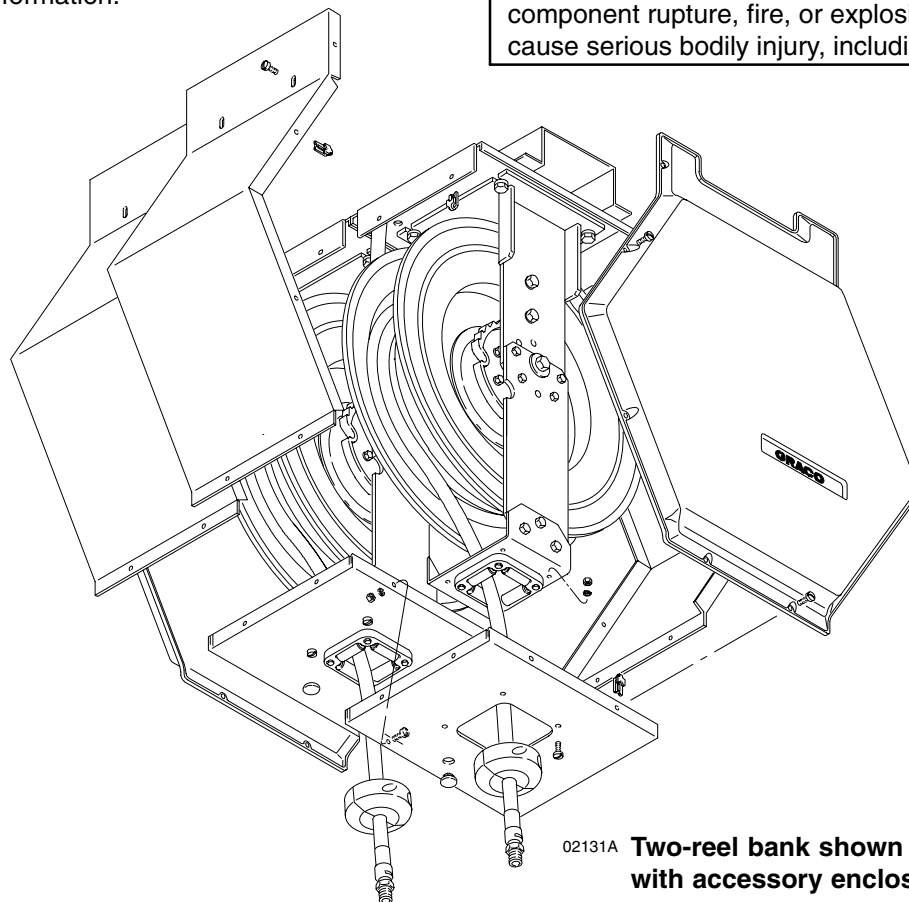
### Important Safety Instructions.

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

See page 2 for the **Table of Contents** and page 6 for hose reel part numbers, descriptions, and maximum working pressure information.

### **⚠ WARNING**

These hose reels are designed to dispense lube products, air, water, transmission fluid, or anti-freeze only. Any other use of these hose reels can cause unsafe operating conditions and result in component rupture, fire, or explosion, which could cause serious bodily injury, including fluid injection.



02131A **Two-reel bank shown with accessory enclosures**



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# Symbols

## Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

## Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

## WARNING



### SKIN INJECTION HAZARD

Fluid from the dispensing valve, leaks, or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might look like a minor cut, but it is a serious injury. **Get immediate surgical treatment.**
- Do not point the dispensing valve at anyone or at any part of the body.
- Do not put your hand or fingers over the dispensing valve nozzle.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** on page 17 if the dispensing valve clogs and before cleaning, checking, or servicing the equipment.
- Tighten all fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. Do not repair medium- or high-pressure couplings; you must replace the entire hose.
- Do not attempt to force lubricant into a fitting. If the lubricant is not flowing, stop dispensing immediately; the fitting may be clogged.



### FIRE AND EXPLOSION HAZARD

Improper grounding, poor ventilation, open flames, or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

- Be sure the entire fluid system is properly grounded. The hoses supplied with these hose reels are electrically conductive. The hose reel is grounded by connecting electrically conductive supply hoses to a properly grounded system. Refer to your pump instruction manual for complete details.
- If there is any static sparking or you feel an electric shock while using this equipment, **stop dispensing immediately.** Do not use the equipment until you identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being dispensed.
- Keep the dispensing area free of debris, including solvent, rags, and spilled gasoline.
- Do not smoke while dispensing flammable fluids.

# WARNING



## TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if inhaled, swallowed, splashed in the eyes, or splashed on the skin.

- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state, and national guidelines.
- Always wear protective eyewear, gloves, clothing, and a respirator as recommended by the fluid and solvent manufacturer.



## HOSE REEL SPRING HAZARD

The spring, which is located behind the flange, is always under great tension and could be propelled from the lower flange with enough force to cause serious injury.

To reduce the risk of serious injury:

- Do not attempt to remove spring from flange.
- Do not attempt to replace or service the hose reel spring.



INSTRUCTIONS

## EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories. Use only extensions that are designed for use with your dispensing valve. Modifying parts can cause a malfunction and result in serious bodily injury.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. The tables on page 6 give the maximum working pressures of the assemblies. The maximum working pressure of your hose reel assembly is indicated on the hose reel identification plate on the reel base. See also the **Technical Data** section on page 33.
- Use fluids and solvents that are compatible with the equipment wetted parts. Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Do not use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose hoses to temperatures above 82°C (180°F) or below -40°C (-40°F).
- Do not lift pressurized equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.
- If you are adding a service hose and dispensing valve to a bare hose reel, be sure you know the maximum working pressure of all the components.
- Never use a low-pressure flexible extension designed for low-pressure dispensing valves or hand-powered lubricating equipment on a medium- or high-pressure dispensing valve.

# Dry Weights

(approximate)

MODEL	Weight	
	Pounds	Kilograms
224050	56.5	25.7
224051	66.5	30.2
224055	64.8	29.4
224056	65.3	29.7
224058	65.8	29.9
224060	56.5	25.7
224352	64.0	27.2
224354	67.4	30.6
224362	69.8	31.7
224364	67.8	30.8
224366	68.3	31.0
224380	72.8	33.1
224382	72.8	33.1
224384	71.8	32.7
243982	66.4	30.2
247379	66.4	30.2
247380	65.8	29.9
247381	65.3	29.7
256985	66.5	30.2
256986	65.8	29.9
256987	65.3	29.7
257081	66.4	30.2

# Series 500 Open Hose Reels

Bare Reel Order No.	Hose	Dispensing Valve	Maximum Working Pressure	Parts Breakdown on Page:
<b>224050</b>	None	None	1800 psi (12.4 MPa, 124 bar)	22
<b>224060</b>	None	None	8000 psi (55.2 MPa, 552 bar)	24

Type of Service	<i>Order No. consists of Bare Hose Reel 224050, plus:</i>			Maximum Working Pressure	Parts Breakdown on Page:
	Order No.	Hose	Dispensing Valve		
OIL and LIGHT LUBRICANTS	<b>224058</b> <b>247380</b> <b>256986</b>	1/2" ID x 50' (12 mm x 15.2 m)	None	1800 psi (12.4 MPa, 124 bar)	26
MOTOR OIL	<b>224382</b>	1/2" ID x 50' (12 mm x 15.2 m)	238461	1000 psi (6.9 MPa, 69 bar)	26
ATF	<b>224384</b>	1/2" ID x 50' (12 mm x 15.2 m)	238462	1000 psi (6.9 MPa, 69 bar)	7
GEAR LUBE	<b>224362</b>	1/2" ID x 50' (12 mm x 15.2 m)	222412	1500 psi (10.3 MPa, 103 bar)	7
	<b>224380</b>	1/2" ID x 50' (12 mm x 15.2 m)	238463	1000 psi (6.9 MPa, 69 bar)	7

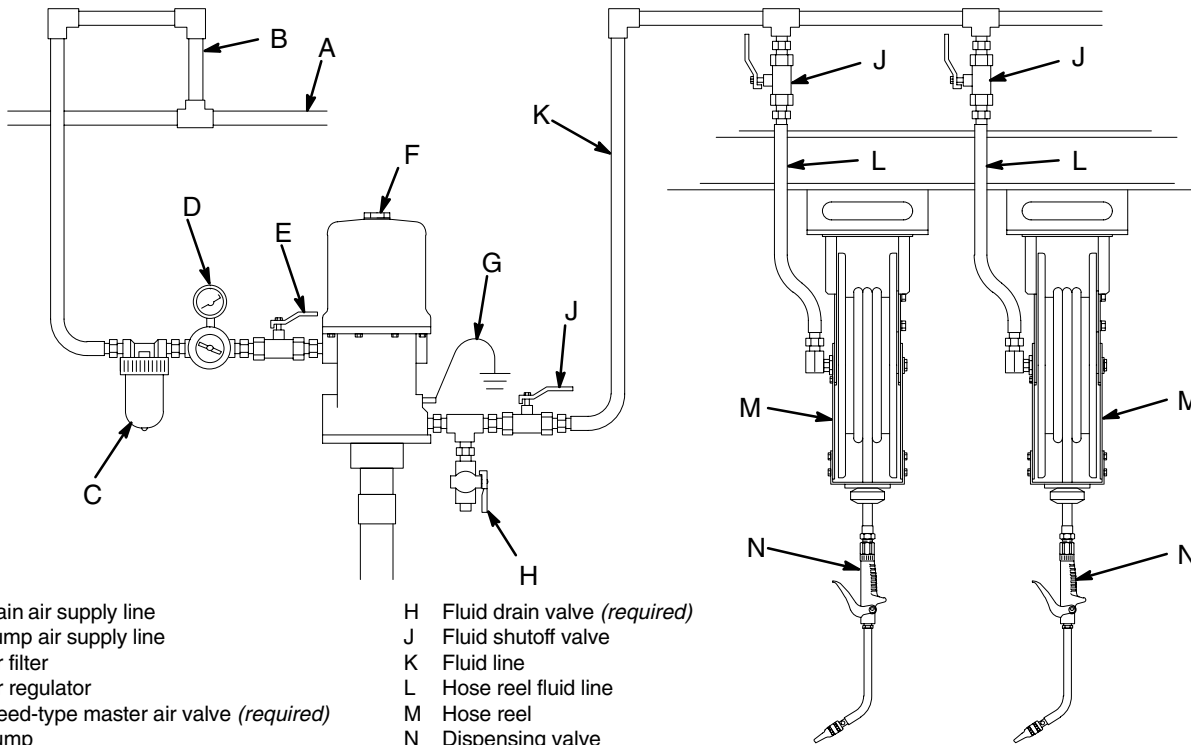
Type of Service	<i>Order No. consists of Bare Hose Reel 224050, plus:</i>			Maximum Working Pressure	Parts Breakdown on Page:
	Order No.	Hose	Dispensing Valve		
AIR OR WATER	<b>224051</b> <b>256985</b>	3/8" ID x 60' (9 mm x 18.3 m)	None	180 psi (1.2 MPa, 12 bar)	26
	<b>243982</b> <b>247379</b> <b>257081</b>	1/2" ID x 50' (12 mm x 15.2 m)	None	180 psi (1.2 MPa, 12 bar)	26
AIR	<b>224352</b>	3/8" ID x 60' (9 mm x 18.3 m)	218545	180 psi (1.2 MPa, 12 bar)	7
WATER	<b>224354</b>	3/8" ID x 60' (9 mm x 18.3 m)	180685	180 psi (1.2 MPa, 12 bar)	7

Type of Service	<i>Order No. consists of Bare Hose Reel 224060, plus:</i>			Maximum Working Pressure	Parts Breakdown on Page:
	Order No.	Hose	Dispensing Valve		
CHASSIS GREASE	<b>224055</b>	1/4" ID x 50' (6 mm x 15.2 m)	None	5000 psi (34.5 MPa, 345 bar)	28
	<b>224056</b> <b>247381</b> <b>256987</b>	3/8" ID x 50' (9 mm x 15.2 m)	None	4000 psi (27.6 MPa, 276 bar)	28
	<b>224364</b>	1/4" ID x 50' (6 mm x 15.2 m)	242056	5000 psi (34.5 MPa, 345 bar)	7
	<b>224366</b>	3/8" ID x 50' (9 mm x 15.2 m)	242056	4000 psi (27.6 MPa, 276 bar)	7

# Hose Reel and Dispensing Valve Assemblies

Low Pressure									
<b>Air Reel</b> <b>Model 224352</b> 180 psi (1.2 MPa, 12 bar) MAXIMUM WORKING PRESSURE				<b>Water Reel</b> <b>Model 224354</b> 180 psi (1.2 MPa, 12 bar) MAXIMUM WORKING PRESSURE					
<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	1	224051	BASIC HOSE REEL with 60 ft (18.3 m) hose; See page 27 for parts	1	1	224051	BASIC HOSE REEL with 60 ft (18.3 m) hose; See page 27 for parts	1	
	2	218545	CONTROL VALVE, low pressure, with tire chuck; Includes 4a to 4c	1	2	180685	CONTROL VALVE, low pressure for water	1	
	2a	150136	• CHUCK, tire; 1/4 npt(f)	1	3	150287	ADAPTER, 1/4 npt(m) to 3/8 npt(f)	1	
	2b	104531	• FITTING, air line; 1/4–18 npt	1					
	2c	104526	• COUPLING, air line; 3/8–18 npt	1					
Medium Pressure									
<b>Motor Oil</b> <b>Model 224382</b> 1000 psi (6.9 MPa, 69 bar) MAXIMUM WORKING PRESSURE				<b>Gear Lube</b> <b>Model 224362</b> 1500 psi (10.3 MPa, 103 bar) MAXIMUM WORKING PRESSURE					
<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	1	224058	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 27 for parts	1	1	224058	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 27 for parts	1	
	2	238461	CONTROL VALVE, medium pressure, EM5 with flexible hose See manual 309142 for parts	1	2	222412	CONTROL VALVE, medium pressure, with gear lube nozzle; See manual 307995 for parts	1	
<b>ATF</b> <b>Model 224384</b> 1000 psi (6.9 MPa, 69 bar) MAXIMUM WORKING PRESSURE				<b>Gear Lube</b> <b>Model 224380</b> 1000 psi (6.9 MPa, 69 bar) MAXIMUM WORKING PRESSURE					
<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	1	224058	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 27 for parts	1	1	224058	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 27 for parts	1	
	2	238462	CONTROL VALVE, medium pressure, EM5 with flexible hose See manual 309142 for parts	1	2	238463	CONTROL VALVE, medium pressure EM5 with gear lube tube See manual 309142 for parts	1	
High Pressure									
<b>Chassis Grease</b> <b>Model 224364</b> 5000 psi (34.5 MPa, 345 bar) MAXIMUM WORKING PRESSURE				<b>Chassis Grease</b> <b>Model 224366</b> 4000 psi (27.6 MPa, 276 bar) MAXIMUM WORKING PRESSURE					
<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Ref</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	1	224055	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 29 for parts	1	1	224056	BASIC HOSE REEL with 50 ft (15.2 m) hose; See page 29 for parts	1	
	2	242056	CONTROL VALVE, high pressure; See manual 309032 for parts	1	2	242056	CONTROL VALVE, high pressure; See manual 309032 for parts	1	
	3	202577	Z-SWIVEL ASSY	1	3	202577	Z-SWIVEL ASSY	1	

# Installation



## KEY

- |  |                                |
|--|--------------------------------|
| A Main air supply line                   | H Fluid drain valve (required) |
| B Pump air supply line                   | J Fluid shutoff valve          |
| C Air filter                             | K Fluid line                   |
| D Air regulator                          | L Hose reel fluid line         |
| E Bleed-type master air valve (required) | M Hose reel                    |
| F Pump                                   | N Dispensing valve             |
| G Pump grounding wire (required)         |                                |

Fig. 1

2135

The typical installation shown in Fig. 1 is only a guide for selecting and installing a hose reel system. It is not an actual system design. Contact your Graco distributor for assistance in designing a system to suit your particular needs.

## ⚠ WARNING

Two accessories are required in your system: a bleed-type master air valve (E) and a fluid drain valve (H). These accessories help reduce the risk of serious injury, including splashing in the eyes or on the skin.

The bleed-type master air valve relieves air trapped between this valve and the pump after the air is shut off. Trapped air can cause the pump to cycle unexpectedly. Locate the valve close to the pump.

The fluid drain valve assists in relieving fluid pressure in the displacement pump, hose, and gun. Triggering the gun to relieve pressure might not be sufficient.

## Air Line Accessories

Install the following accessories in the order shown in Fig. 1, using adapters as necessary:

- **Bleed-type master air valve (E):** required in your system to relieve air trapped between it and the air motor when the valve is closed. Be sure the bleed valve is easily accessible from the pump and is located downstream from the air regulator.
- **Air regulator (D):** controls pump speed and outlet pressure by adjusting the air pressure to the pump. Locate the regulator close to the pump but upstream from the bleed-type master air valve.
- **Air line filter (C):** removes harmful dirt and moisture from the compressed air supply.



# Installation

## Fluid Line Accessories

Install the following accessories in the order shown in Fig. 1, using adapters as necessary:

- **Fluid drain valve (H):** required in your system to relieve fluid pressure in the hose and gun. Install the drain valve pointing down but so the handle points up when the valve is opened.
- **Fluid shutoff valve (J):** shuts off fluid to the hose reel.
- **Dispensing valve (N):** dispenses the fluid or air.

## Installing the Hose Reels

1. **Select the reel bank mounting location.** If the ceilings are very high, suspend a suitable support structure for the reels, so the hoses will be long enough to reach your service area.

### CAUTION

Be sure the mounting surface is strong enough to support the reels, the weight of the lubricants, and the stress caused by hard pulls on the service hoses. See page 33 for the dry weights of the hose reel assemblies.

2. **Locate the mounting holes for drilling,** using the template (R) supplied. See Fig. 5.
3. **Before mounting the hose reels,** adjust the roller arm/bracket (U) and ratchet (29) if the desired roller arm position is other than the “as shipped” position. See Fig. 2.

### WARNING

Never adjust the roller arm and bracket (U) when the hose reel is mounted overhead. The hose reel must be on the floor or on a work bench when performing this adjustment to avoid the hose reel falling off the bracket and causing serious injury.

For all models except 247379, 247380, and 247381 the hose reel is factory assembled with the roller arm and bracket angled as shown in Fig. 3 for mounting without a reel enclosure. The ratchet (29) does *not* have to be rotated. See Fig. 2, views A and B.

If mounting with a reel enclosure, align the roller arm/bracket as shown in Fig. 8 on page 15. Rotate ratchet (29) clockwise one screw hole (60°). This will ensure retraction when the hose is at maximum extension. See Fig. 2, view C.

If mounting on a tank with hose being pulled from top or bottom of reel, rotate ratchet (29) clockwise two screw holes (120°). This will ensure retraction when the hose is at maximum extension. See Fig. 2 view D.

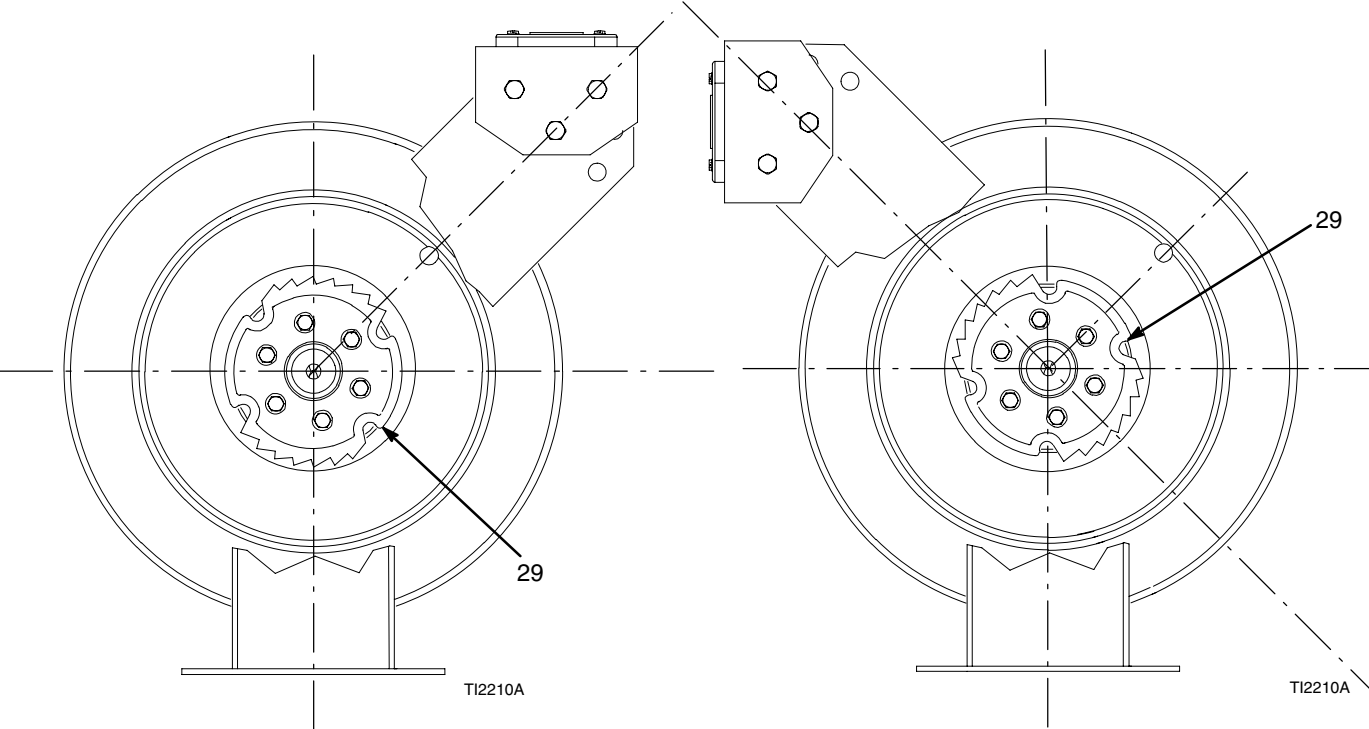
*To adjust the roller arm and bracket:*

- a. Loosen the screw (17) and the nut (7) about one turn **only**. See Fig. 3.

**Do not** remove the screw and nut as this will allow the reel to become misaligned.

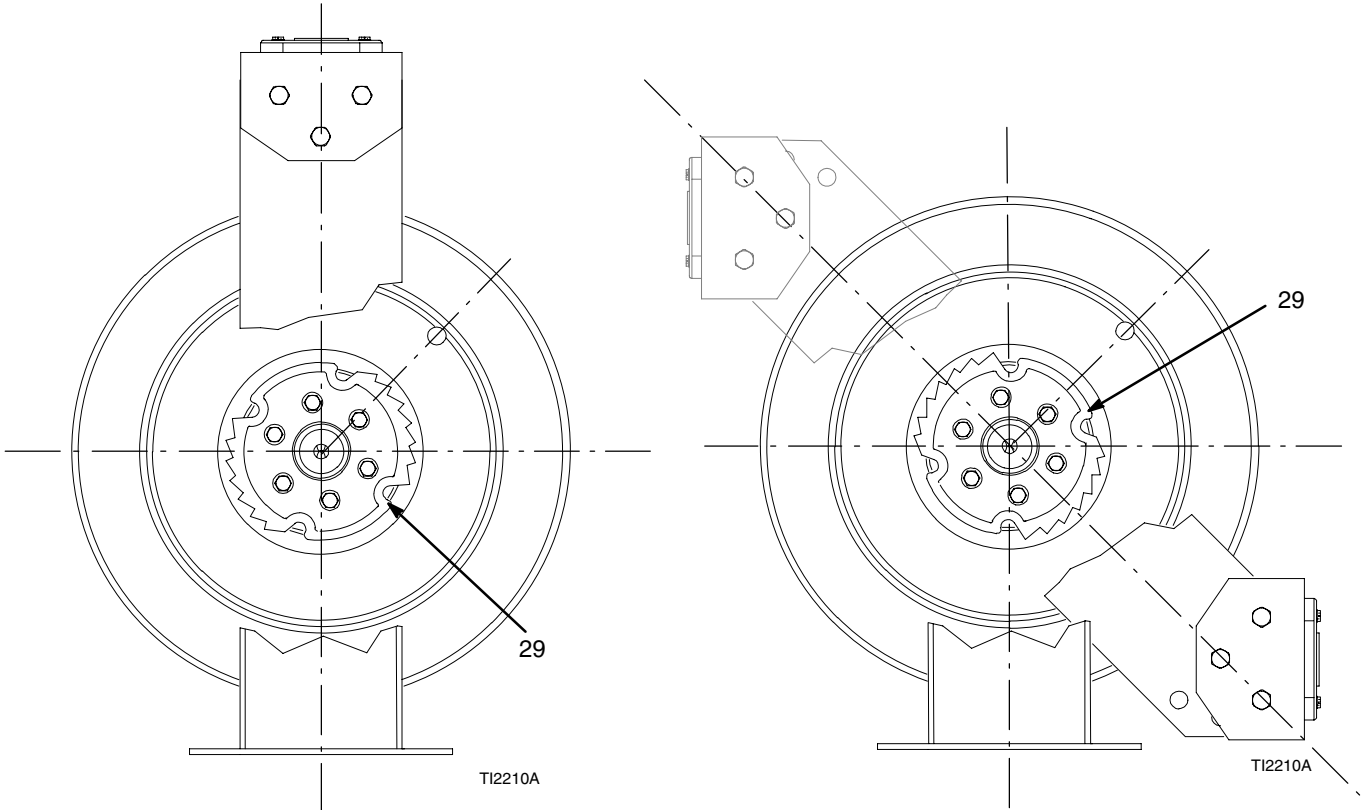
- b. Remove the four screws (18) from each side of the reel.
- c. Make sure the reel shaft (32) is still aligned as shown in Fig. 4 before you tighten the screw (17) and nut (7). Torque the screw (17) to 25–35 ft. lbs. and torque the nut (7) to 85–105 ft. lbs.
- d. After the screw (17) and nut (7) are tightened, secure the roller arm (U) to the reel base (21) with the screws (18). Torque the screws (18) to 25–35 ft. lbs. See Fig. 8, page 15, to install the screws in the proper holes for a straight roller arm and bracket position.

# Installation



**A. As-shipped position for all models except 247379, 247380, and 247381**

**B. As-shipped position for models 247379, 247380, and 247381**

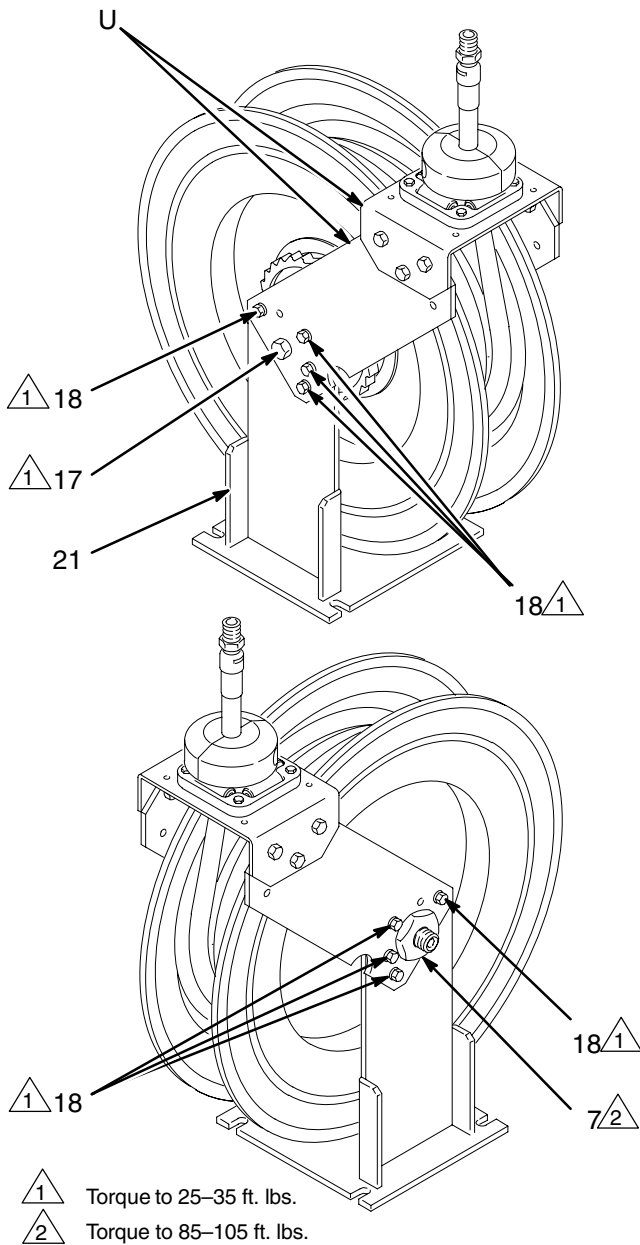


**C. Reel enclosure position**

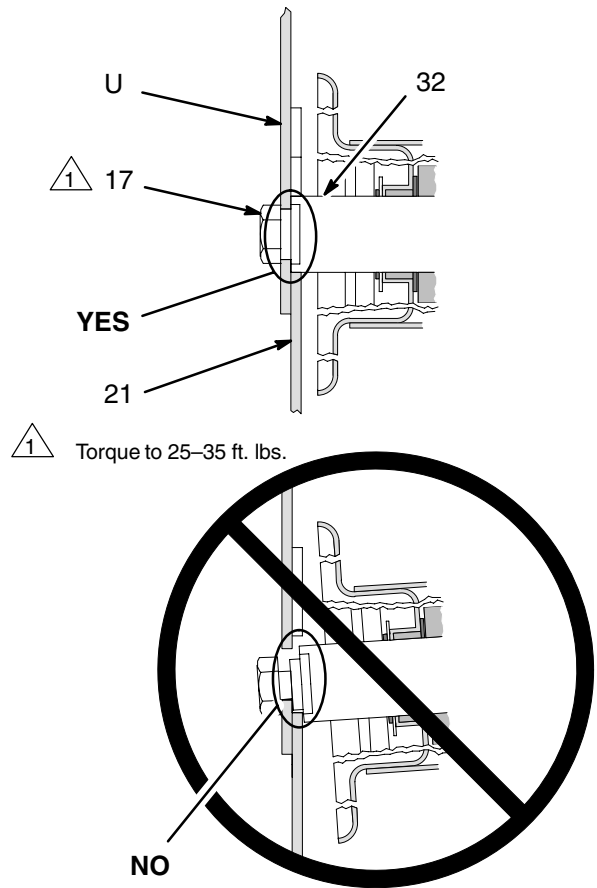
**D. Tank-mount positions**

**Fig 2**

# Installation



**Fig. 3** 02170A



1 Torque to 25-35 ft. lbs.

## Avoid Misalignment

**Fig. 4** 02152

4. **Start two bolts into the mounting holes in the mounting surface (Q).** The reel base is slotted (V) to allow two screws to be started before mounting the base to the support. See Fig. 5.
5. **Mount the hose reels.** Fig. 5 shows the reel being mounted to an I-beam. If you are installing a hose reel enclosure, see the procedure on page 14 before you attach the hose reel to the mounting surface.
6. **If you are installing permanent supply lines (L),** drill 1.5 in. (38 mm) diameter holes through the ceiling on the inlet side of the reels.

## **CAUTION**

When operating, do not fully extend the hose. Leave one to two turns of the hose on the reel to lengthen the life of the hose and reel spring.

# Installation

7. **Install a hose inlet kit.** See page 32 for ordering and installing the kit.
8. **Connect the supply line** to the inlet hose of the reel.

## Installing a Hose on a Bare Reel

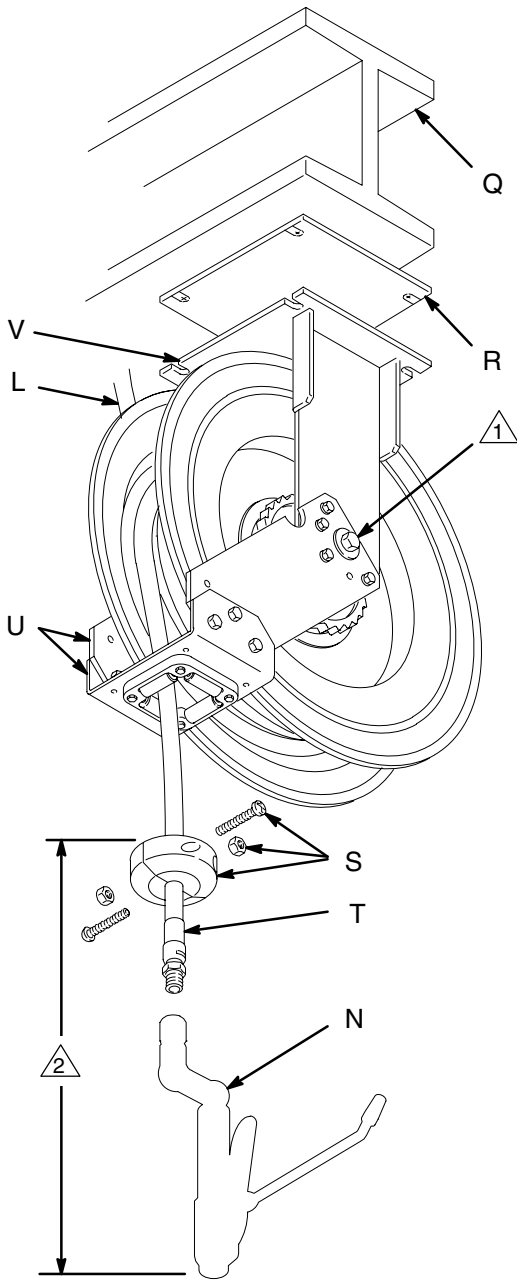
1. Locate the length and size of your hose in the chart below. Note how many times you must turn the reel to properly adjust the spring tension.

Hose Part No.	Description	No. Reel Turns
109158	50 ft (15.2 m), 1/4" ID	13
109170	50 ft (15.2 m), 3/8" ID	13
208594	50 ft (15.2 m), 1/2" ID	13
221093	50 ft (15.2 m), 1/2" ID	13
249182	60 ft (18.3 m), 3/8" ID	13

2. Place a piece of tape on the side of the reel flange for a visual reference point to help you count the number of reel turns.

## **⚠ WARNING**

Always wear heavy gloves when adjusting the spring tension to protect your hands from being cut on the hose reel.

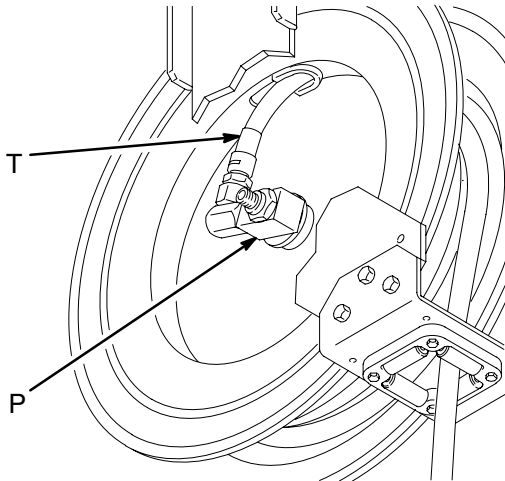


1. Position the hose stop (S) so the operator can reach the dispensing valve (N).
2. See Fig. 6 for a view of the hose swivel on the other side of the hose reel.

**Fig. 5** \_\_\_\_\_ 02137A

# Installation

3. Wearing heavy gloves, firmly grab the outside edge of the reel flange with both hands. See Fig. 7. Wind the reel the proper number of turns, rotating it clockwise and stopping only at latching locations. Stop the reel where there is access to the hose swivel (P) (see Fig. 6) and where the reel is securely latched.



Model 224050 shown

Fig. 6

02136

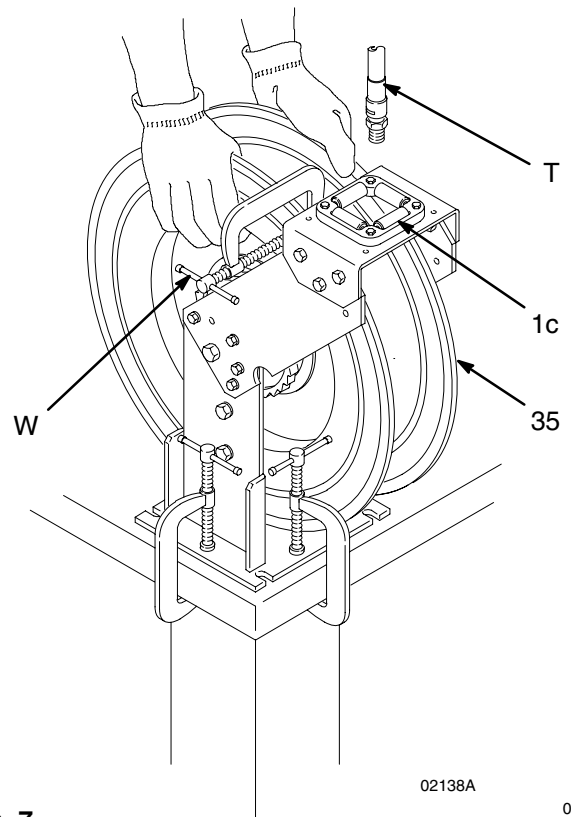


Fig. 7

02138

4. Before you install the hose, attach a c-clamp (W) to the reel flange to help prevent the reel from unintentionally becoming unlatched and spinning freely. See Fig. 7.

## **⚠ WARNING**

Never allow the reel to spin freely. Doing so causes the hose to spin out of control, which could cause serious injury if you are hit by the hose.

5. Uncoil and extend the hose. Assemble the hose stop (S) to the outlet end of the hose (T) and tighten. See Fig. 5.
6. Attach the hose (T) to the hose reel swivel (P). See Fig. 6, and carefully remove the c-clamp.
7. Pull the hose hard enough to release the latch, and slowly allow the hose to retract.
8. Position the hose stop (S) so the hose extends far enough for all operators to reach the dispensing valve (N). See Fig. 5.

# Installation

## Increasing Spring Tension

1. Pull the hose out fully, and engage the latch.
2. Remove the dispensing valve (N) and the hose stop (S). See Fig. 5.
3. Pull the hose (T) back through the hose rollers (1c). See Fig. 7.
4. Wrap a loop of hose onto the reel flange (35).
5. Check the spring tension; the hose must pull out fully and retract fully. Wrap more loops, one at a time, around the reel flange until the spring has the desired tension.

**NOTE:** Do not put so many loops onto the reel that the spring winds up tightly before the hose is fully extended. Remove loops to decrease tension.

### CAUTION

A spring that is wound too tightly prevents the hose from getting pulled out all the way, which puts excessive strain on the hose and reel spring and could damage the reel.

6. Route the hose through the hose rollers and reinstall the hose stop (S) and dispensing valve (N). See Fig. 5.

## Installing the Hose Reel Enclosures

**NOTE:** Order one side enclosure kit for each reel. Order one end enclosure kit for each reel bank. See page 30 for ordering the kits.

1. Mount the adapter plate (104) between the hose reel and I-beam or other mounting surface. See Fig. 8.
2. Secure the hose reel cap (102) to the roller bracket (11), using the screws (106), lockwashers (112) and nuts (111) as shown in Fig. 8. Push the button plug (109) into the hole in the cap (102).
3. For more than one reel, bolt the caps (102) together as shown in Fig. 8.
4. Hook the lip (X) of each side panel (101) inside the cap (102). Secure the panels to the adapter plate (104) and the cap, using the screws (106) and spring nuts (103).
5. Attach the end panels (201), using the screws (203) and spring nuts (204).

# Installation

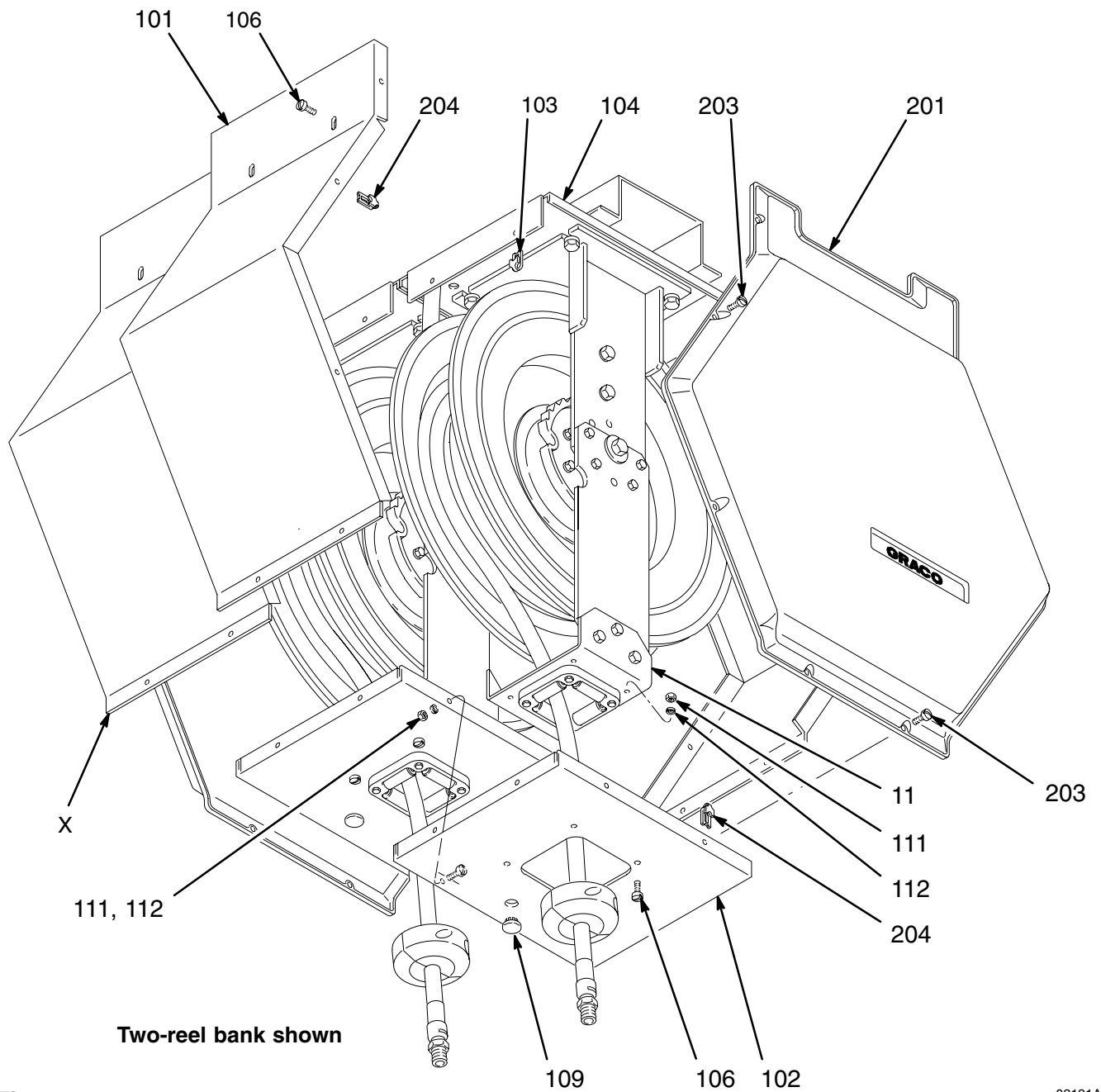


Fig. 8

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# Notes

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# Maintenance

## ⚠ WARNING

To avoid serious injury, never perform any repairs or maintenance requiring the detachment of the reel arms (15) from the reel base (21) while the hose reel is mounted overhead. If you must disassemble the hose reel, remove it from the mounting, and repair it at a work bench.

### Pressure Relief Procedure

## ⚠ WARNING



### SKIN INJECTION HAZARD

To reduce the risk of serious injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, always follow this procedure whenever you shut off the pump, and before inspecting, removing, cleaning or repairing any part of the pump or system.

1. Close the supply pump's bleed-type master air valve (required in pneumatic systems).
2. Open the dispensing valve until pressure is fully relieved.
3. Open the fluid drain valve at the pump fluid outlet. Leave the drain valve open until you are ready to use the system again.

*If you suspect that the dispensing valve, extension, or grease fitting coupler is clogged, or that pressure has not been fully relieved after you have followed the steps above, **very slowly** loosen the coupler or hose end coupling to relieve the pressure gradually, then loosen it completely. Then clear the clog.*

### Replacing the Service Hose

1. Relieve the pressure.

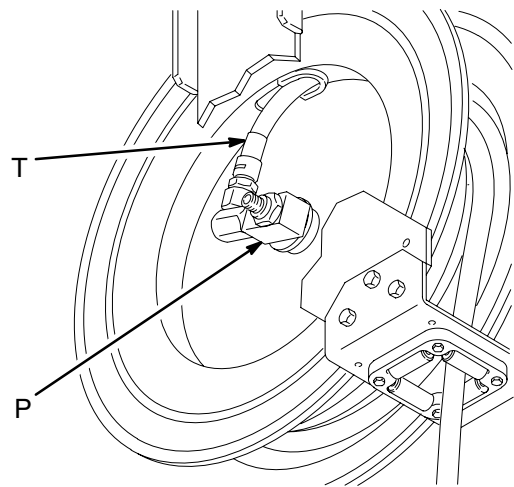
## ⚠ WARNING



### SKIN INJECTION HAZARD

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

2. Fully extend the hose and latch it.



Model 224050 shown

Fig. 9

02136

# Maintenance

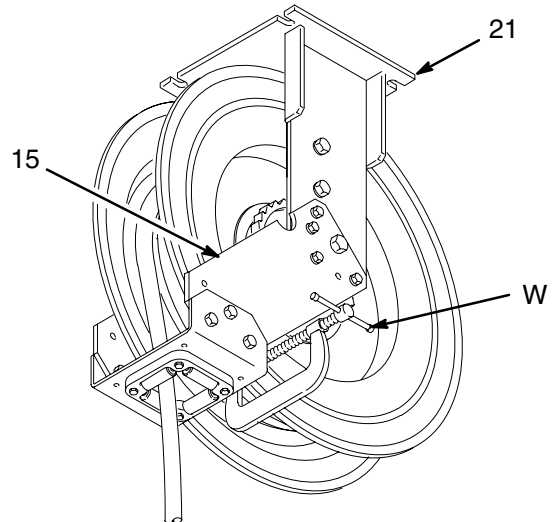
3. Attach a c-clamp (W) to the reel flange to help prevent the reel from unintentionally becoming unlatched and spinning freely. See Fig. 10.

## **⚠ WARNING**

Never allow the reel to spin freely. Doing so causes the hose to spin out of control, which could cause serious injury if you are hit by the hose.

4. Disconnect and remove the service hose.
5. Attach the hose (T) to the hose reel swivel (P) (see Fig. 9), and carefully remove the c-clamp.

6. Firmly grasp the hose and pull it, releasing the latch, and slowly allow the hose to retract.
7. Position the hose stop so the hose extends far enough for all operators to reach the dispensing valve.



**Fig. 10**

02139A

# Service

## Swivel

1. Relieve the pressure.

**⚠ WARNING**

**SKIN INJECTION HAZARD**  
To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 17.

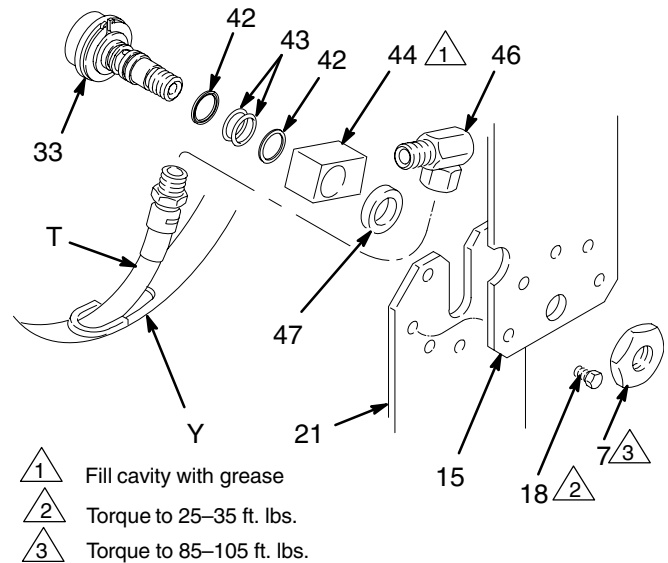
2. If the hose reel is mounted overhead, remove it from its mounting surface and take it to a work bench for further repair.

**⚠ WARNING**

To avoid serious injury, never perform any repairs or maintenance requiring the detachment of the reel arms (15) from the reel base (21) while the hose reel is mounted overhead. If you must disassemble the hose reel, remove it from the mounting, and repair it at a work bench.

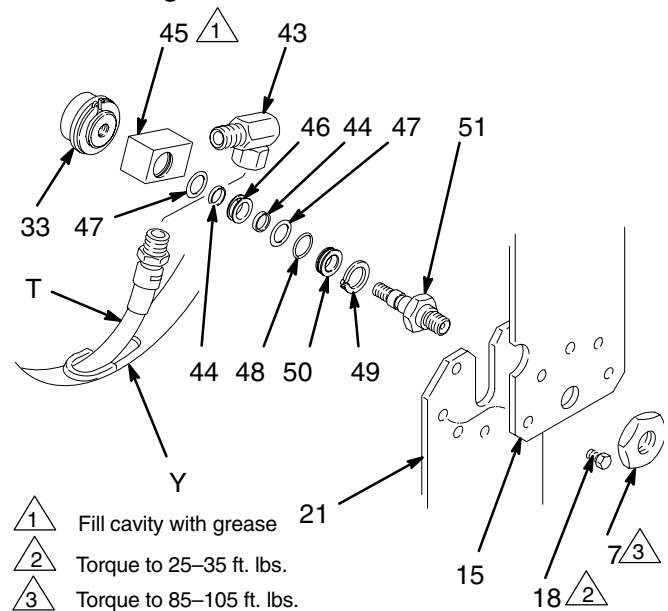
3. Pull the hose out only enough to latch the reel. Remove dispense valve and hose stop from hose. Pull hose to unlatch the reel and carefully allow the reel spring to unwind to a relaxed position.
4. To remove the roller arm assembly, remove screws (17a and 18) and nut (7), and lift the arm off the reel. See Fig. 13.
5. Disassemble the swivel assembly as shown in Fig. 11 or 12, depending on your hose reel model. Clean the parts, and inspect them for wear or damage.
6. Grease the new parts, and fill the cavity of the swivel assembly (44 or 45) with high-quality grease. Install the parts as shown in Fig. 11 or 12.

**Medium or Low Pressure Bare Reel 224050**



**Fig. 11** 02140

**High Pressure Bare Reel 224060**



**Fig. 12** 02141

# Service

## Latch

If the reel latch malfunctions or becomes sluggish, disassemble the latching mechanism. See Fig. 14. Clean and lubricate or replace the broken or worn components as necessary.

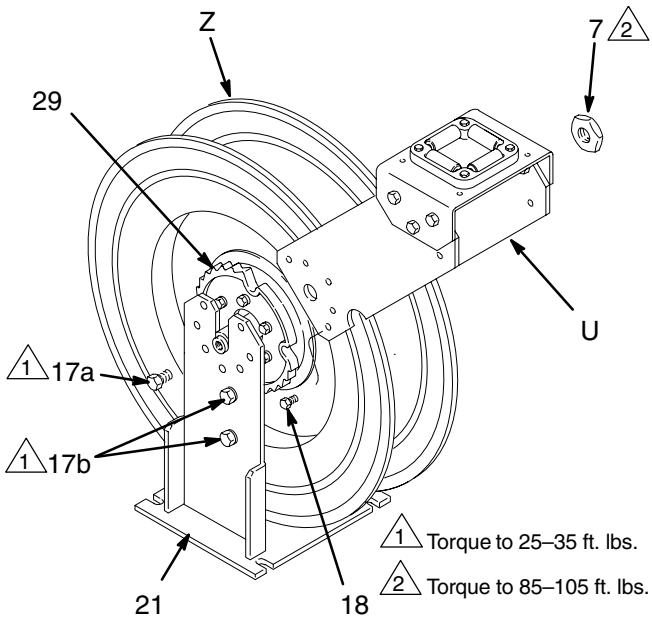


Fig. 13

02142A

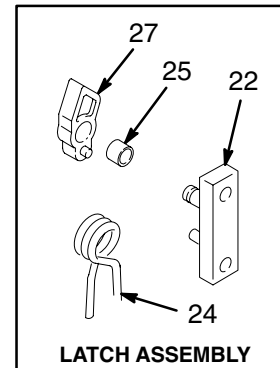
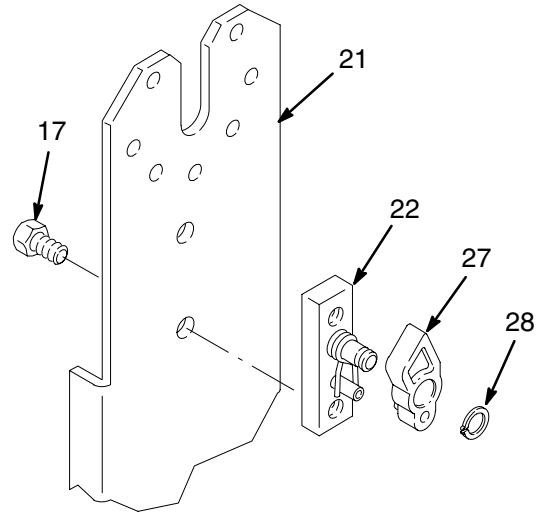


Fig. 14

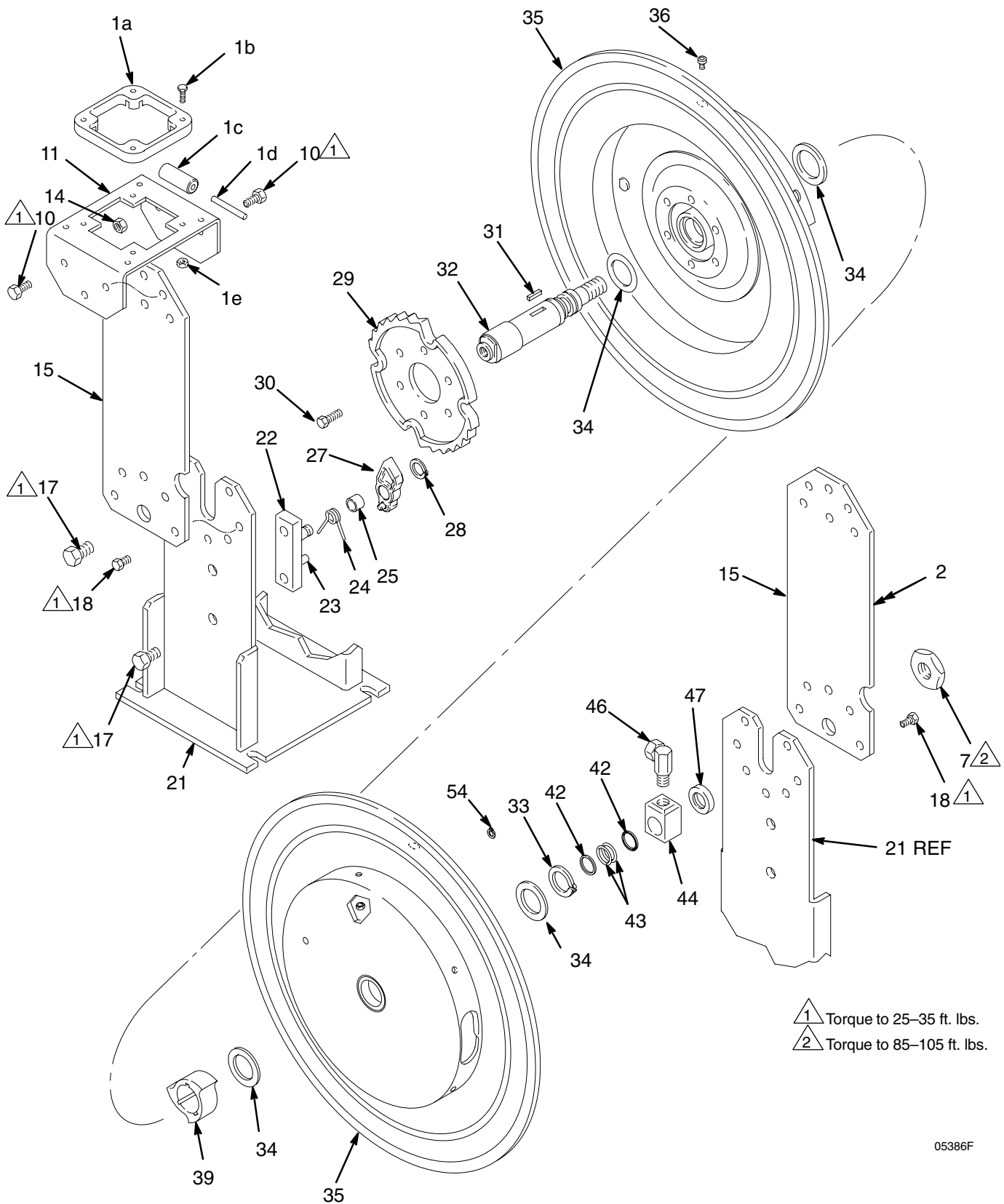
02143B



# Parts Drawing

## Bare Hose Reel (without hose) – Low/Medium Pressure

Model 224050, Series E



05386F

# Parts List

## Bare Hose Reel (without hose) – Low/Medium Pressure

*Use only genuine Graco parts and accessories.*

### Model 224050, Series E

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	218591	HOSE ROLLER KIT; Includes items 1a to 1e		31	113267	KEY, square, parallel; 3/16" x 1"	1
1a	178675	• BRACKET, roller	1	32	186592	SHAFT, reel	1
1b	107439	• SCREW, machine; #10 x 3/4"	4	33	106082	RING, retaining, external	1
1c	178670	• ROLLER, hose	4	34	177679	WASHER, retaining	8
1d	178705	• PIN, dowel	4	35		FLANGE SET, reel (may not be purchased separately)	1
1e	102920	• NUT, lock; #10	4	36	106084	SCREW, machine; M5 x 10	6
2▲	187034	LABEL, warning	1	39	178681	HUB, reel	1
7	186580	NUT, hex; 1/2 npsm	1	40	105332	NUT, lock, hex; M5 x 0.08"	6
10	111800	SCREW, cap; 5/16–18 x 5/8"	6	42*	108235	RING, back-up; 0.83 ID	2
11	186588	BRACKET, roller	1	43*	166702	O-RING; buna-N	2
14	110996	NUT, flanged, hex; 5/16–18	6	44	187559	ELBOW, swivel; 3/8 npt	1
15	186584	ARM, reel; Includes item 2	2	46	217430	SWIVEL, union; 3/8 npt(m) x 1/2 npsm(f)	1
17	111802	SCREW, cap; 1/2–13 x 3/4"	3	47	186598	SPACER, swivel	1
18	111801	SCREW, cap; 5/16–18 x 1/2"	8	54	111220	RING, retaining	1
21	223964	BASE, reel	1				
22	223962	LATCH	1				
23	102005	PIN, spring	1				
24	186583	SPRING, torsion	1				
25	110974	BEARING	1				
27	276382	DOG, ratchet	1				
28	101079	RING, retaining	1				
29	276386	RATCHET	1				
30	110963	SCREW, cap; 5/16–18 x 3/4"	6				

\* *These parts are also included in Repair Kit 224450, which may be purchased separately.*

▲ *Replacement Warning labels, tags and cards are available at no cost.*





# Parts List

## Bare Hose Reel (without hose) – High Pressure

*Use only genuine Graco parts and accessories.*

### Model 224060, Series E

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	218591	HOSE ROLLER KIT; Includes items 1a to 1e		32	186593	SHAFT, reel	1
1a	178675	• BRACKET, roller	1	33	106082	RING, retaining, external	1
1b	107439	• SCREW, machine; #10 x 3/4"	4	34	177679	WASHER, retaining	8
1c	178670	• ROLLER, hose	4	35		FLANGE SET, reel (may not be purchased separately)	1
1d	178705	• PIN, dowel	4	36	106084	SCREW, machine; M5 x 10	6
1e	102920	• NUT, lock; #10	4	39	178681	HUB, reel	1
2▲	187034	LABEL, warning	1	40	105332	NUT, lock, hex; M5 x 0.08"	6
7	186579	NUT, hex; 3/8 npsm	1	43	155494	UNION, swivel; 3/8 npt	1
10	111800	SCREW, cap; 5/16–18 x 5/8"	6	44*	110973	SEAL, rod; polyester elastomer	2
11	186588	BRACKET, roller	1	45	186595	HOUSING, swivel	1
14	110996	NUT, flanged, hex; 5/16–18	6	46*	186597	SEAL, spacer; nylon	1
15	186584	ARM, reel; Includes item 2	2	47*	155332	O-RING; buna-N	2
17	111802	SCREW, cap; 1/2–13 x 3/4"	3	48*	102620	O-RING; buna-N	1
18	111801	SCREW, cap; 5/16–18 x 1/2"	8	49*	110976	RETAINER, internal	1
21	223964	BASE, reel	1	50*	186596	RETAINER, gland	1
22	223962	LATCH	1	51	186594	STUD, swivel; 1/2–20 x 3/8 npsm	1
23	102005	PIN, spring	1	54	111220	RING, retaining	1
24	186583	SPRING, torsion	1				
25	110974	BEARING	1				
27	276382	DOG, ratchet	1				
28	101079	RING, retaining	1				
29	276386	RATCHET	1				
30	110963	SCREW, cap; 5/16–18 x 3/4"	6				
31	113267	KEY, square, parallel; 3/16" x 1"	1				

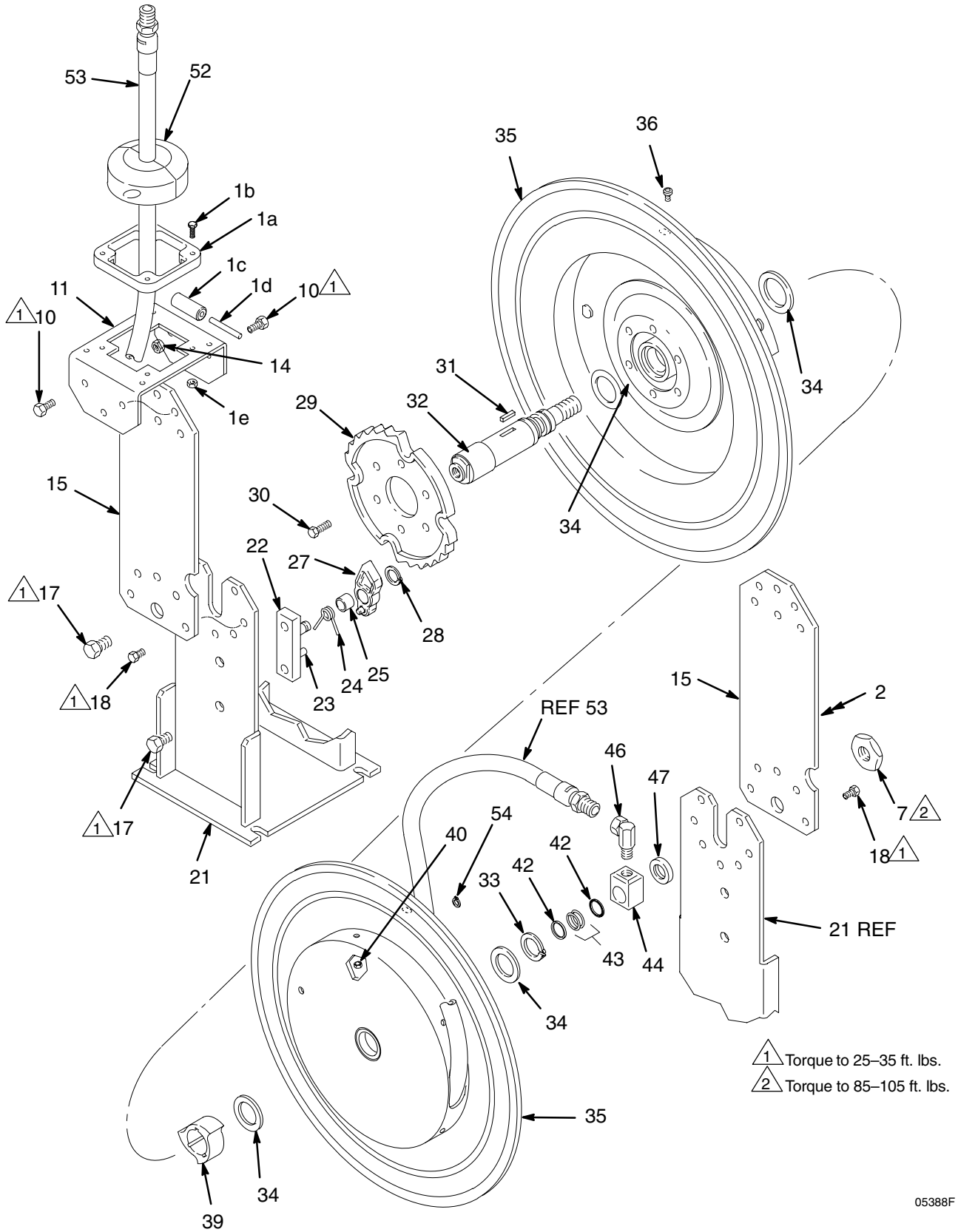
\* *These parts are also included in Repair Kit 224460, which may be purchased separately.*

▲ *Replacement Warning labels, tags and cards are available at no cost.*

# Parts Drawing

## Basic Hose Reel (with hose) – Low/Medium Pressure

Models 224051, 256985 Series F, 224058, 247380, 256986 Series E and 243982, 247379, 257081 Series D



05388F

# Parts List

## Basic Hose Reel (with hose) – Low/Medium Pressure

Use only genuine Graco parts and accessories.

Models 224051, 256985 Series F, 224058, 247380, 256986 Series E and 243982, 247379, 257081 Series D

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	218591	HOSE ROLLER KIT; Includes items 1a to 1e		33	106082	RING, retaining, external	1
1a	178675	• BRACKET, roller	1	34	177679	WASHER, retaining	8
1b	107439	• SCREW, machine; #10 x 3/4"	4	35		FLANGE SET, reel (may not be purchased separately)	1
1c	178670	• ROLLER, hose	4	36	106084	SCREW, machine; M5 x 10	6
1d	178705	• PIN, dowel	4	39	178681	HUB, reel	1
1e	102920	• NUT, lock; #10	4	40	105332	NUT, lock, hex; M5 x 0.08"	6
2▲	187034	LABEL, warning	1	42*	108235	RING, back-up; 0.83 ID	2
7	186580	NUT, hex; 1/2 npsm	1	43*	166702	O-RING; buna-N	2
10	111800	SCREW, cap; 5/16–18 x 5/8"	6	44	187559	ELBOW, swivel; 3/8 npt	1
11	186588	BRACKET, roller	1	46	217430	UNION, swivel; 3/8 npt(m) x 1/2 npsm(f); for Models 224058, 243982, 256986, and 257081	1
14	110996	NUT, flanged, hex; 5/16–18	6		155494	UNION, swivel; 3/8 npt(m) x 3/8 npsm(f); for Models 224051 and 256985	1
15	186584	ARM, reel; Includes item 2	2	47	186598	SPACER, swivel	1
17	111802	SCREW, cap, flng hd; 1/2–13 x 3/4"	3	52	218340	KIT, hose stop; for Models 224051 and 256985	1
18	111801	SCREW, cap, flng hd; 5/16–18 x 1/2"	8		218341	KIT, hose stop; for Models 224058, 243982, 256986, and 257081	1
21	223964	BASE, reel	1	53		HOSE, see hose chart below	1
22	223962	LATCH	1	54	111220	RING, retaining	1
23	102005	PIN, spring	1				
24	186583	SPRING, torsion	1				
25	110974	BEARING	1				
27	276382	DOG, ratchet	1				
28	101079	RING, retaining	1				
29	276386	RATCHET	1				
30	110963	SCREW, cap; 5/16–18 x 3/4"	6				
31	113267	KEY, square, parallel; 3/16" x 1"	1				
32	186592	SHAFT, reel	1				

\* These parts are also included in Repair Kit 224450, which may be purchased separately.

▲ Replacement Warning labels, tags and cards are available at no cost.

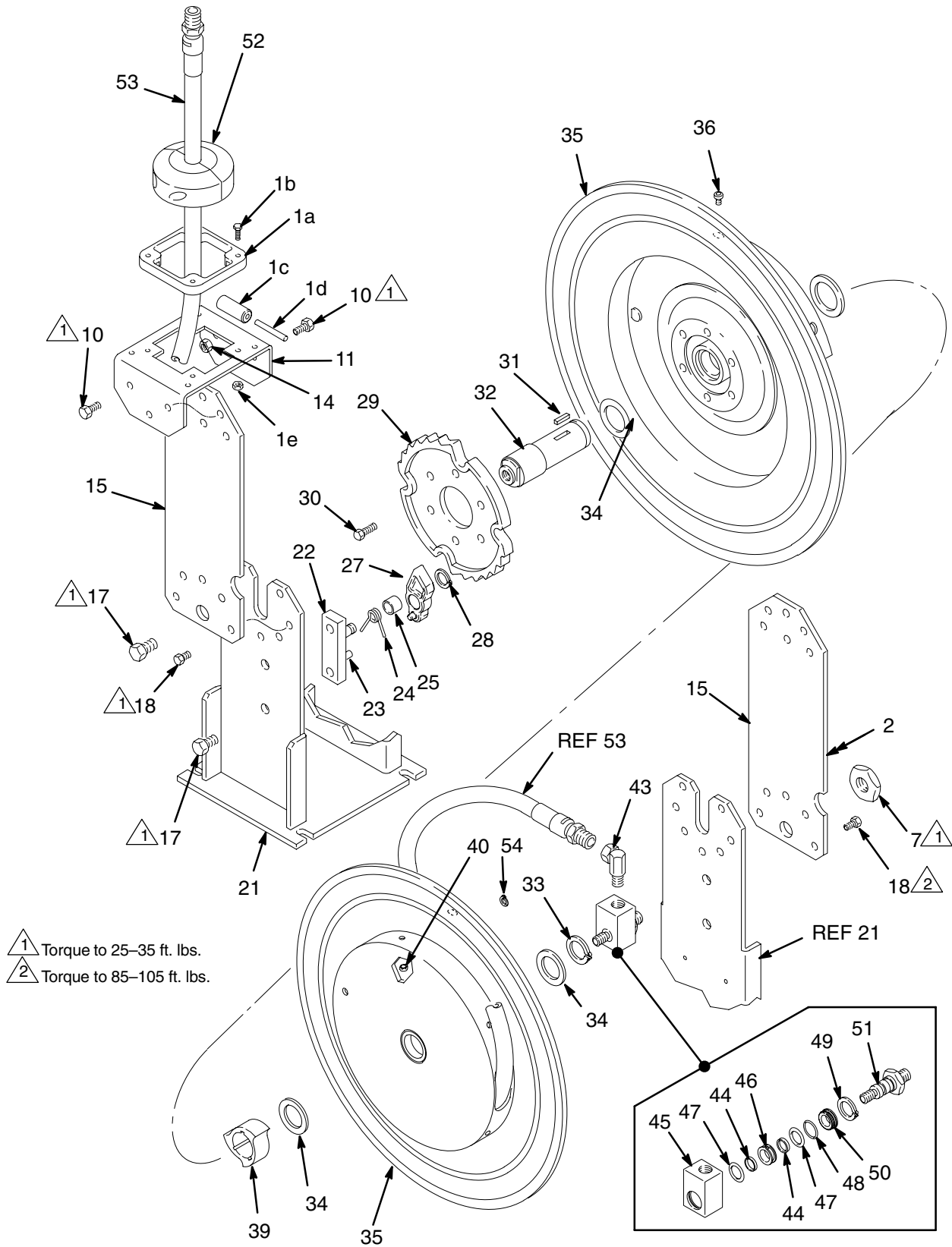
### Hose Chart

Hose Reel Model No.	Hose Part No.	Hose Description	Hose Stop Kit
224051 256985	249182	3/8" ID x 60' (9 mm x 18.3 m) synthetic RMA; cpld 3/8 x 3/8 npt(mbe)	218340
224058 256986	221093	1/2" ID x 50' (12 mm x 15.2 m) buna-N; cpld 1/2 x 1/2 npt(mbe)	218341
243982 257081	248313	1/2" ID x 50' (12 mm x 15.2 m) synthetic RMA; cpld 1/2 x 1/2 npt(mbe)	218341

# Parts Drawing

## Basic Hose Reel (with hose) – High Pressure

Models 224055, 224056, 247381 and 256987 Series E



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# Parts List

## Basic Hose Reel (with hose) – High Pressure

*Use only genuine Graco parts and accessories.*

**Models 224055, 224056, 247381 and 256987 Series E**

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	218591	HOSE ROLLER KIT; Includes items 1a to 1e		35		FLANGE SET, reel (may not be purchased separately)	1
1a	178675	• BRACKET, roller	1	36	106084	SCREW, machine; M5 x 10	6
1b	107439	• SCREW, machine; #10 x 3/4"	4	39	178681	HUB, reel	1
1c	178670	• ROLLER, hose	4	40	105332	NUT, lock, hex; M5 x 0.08"	6
1d	178705	• PIN, dowel	4	43	155494	UNION, swivel; 3/8 npt	1
1e	102920	• NUT, lock; #10	4	44*	110973	SEAL, rod; polyester elastomer	2
2▲	187034	LABEL, warning	1	45	186595	HOUSING, swivel	1
7	186579	NUT, hex; 3/8 npsm	1	46*	186597	SEAL, spacer; nylon	1
10	111800	SCREW, cap; 5/16–18 x 5/8"	6	47*	155332	O-RING; buna-N	2
11	186588	BRACKET, roller	1	48*	102620	O-RING; buna-N	1
14	110996	NUT, flanged, hex; 5/16–18	6	49*	110976	RETAINER, internal	1
15	186584	ARM, reel; Includes item 2	2	50*	186596	RETAINER, gland	1
17	111802	SCREW, cap; 1/2–13 x 3/4"	3	51	186594	STUD, swivel; 1/2–20 x 3/8 npsm	1
18	111801	SCREW, cap; 5/16–18 x 1/2"	8	52	218340	KIT, hose stop for Models 224056 and 256987	1
21	223964	BASE, reel	1		222225	KIT, hose stop for Model 224055	1
22	223962	LATCH	1	53		HOSE, see hose chart below	1
23	102005	PIN, spring	1	54	111220	RING, retaining	1
24	186583	SPRING, torsion	1				
25	110974	BEARING	1				
27	276382	DOG, ratchet	1				
28	101079	RING, retaining	1				
29	276386	RATCHET	1				
30	110963	SCREW, cap; 5/16–18 x 3/4"	6				
31	113267	KEY, square, parallel; 3/16" x 1"	1				
32	186593	SHAFT, reel	1				
33	106082	RING, retaining, external	1				
34	177679	WASHER, retaining	8				

\* *These parts are also included in Repair Kit 224460, which may be purchased separately.*

▲ *Replacement Warning labels, tags and cards are available at no cost.*

### Hose Chart

Hose Reel Model No.	Hose Part No.	Hose Description	Hose Stop Kit
224055	109158	1/4" ID x 50' (6 mm x 15.2 m) buna-N; cpld 1/4 x 3/8 npt(mbe)	222225
224056 256987	109170	3/8" ID x 50' (9 mm x 15.2 m) buna-N; cpld 1/4 x 3/8 npt(mbe)	218340

# Parts Drawing and List

## Side and End Enclosure Kits

*Kits must be purchased separately. Use only genuine Graco parts and accessories.*

### Side Enclosure Kit 218551

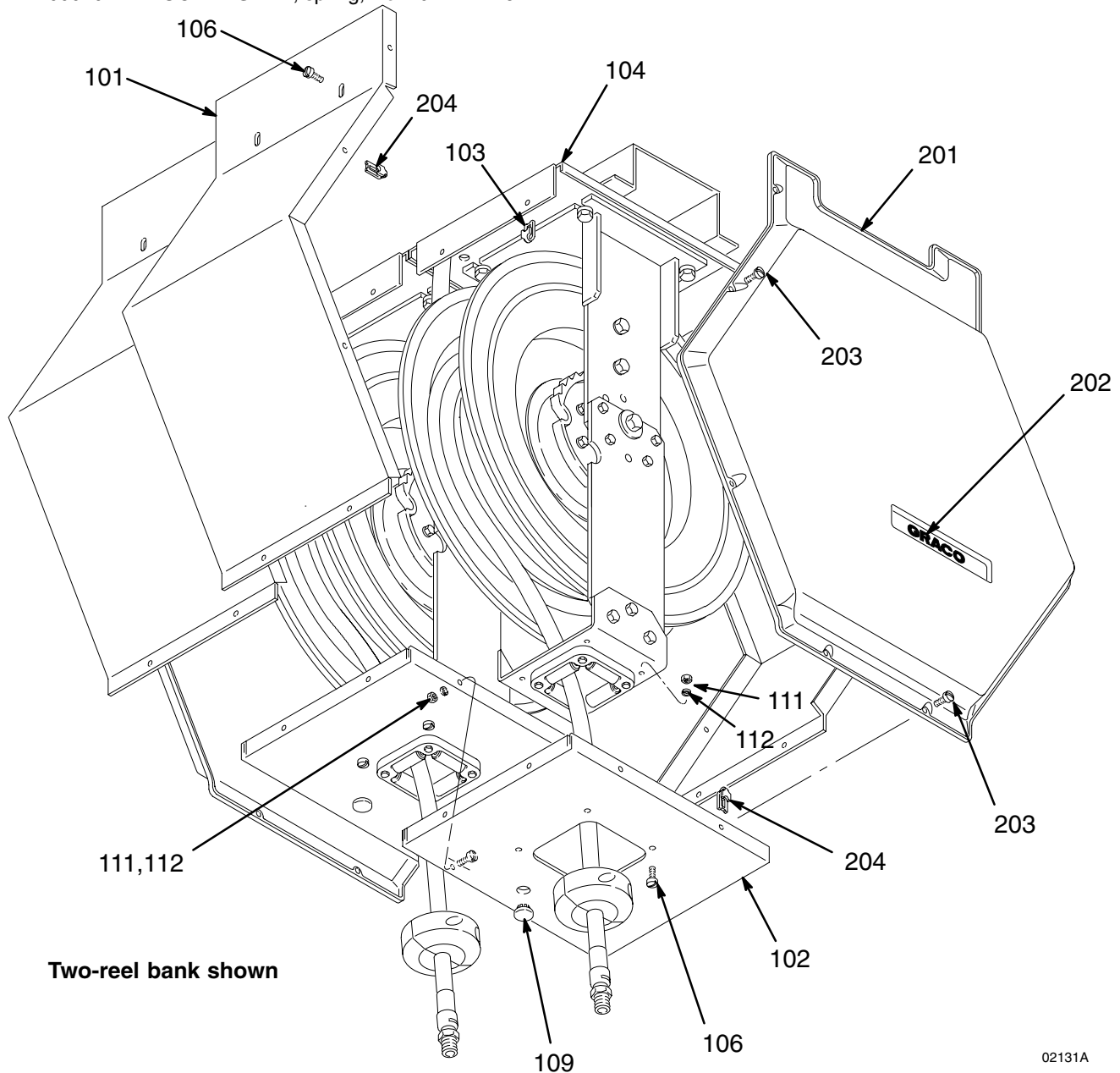
Order one for each bare or basic hose reel. Enclosed hose reels include one side kit per reel.

### End Enclosure Kit 218552

Order one for each bank of reels.

Ref No	Part No.	Description	Qty
101	180252	PANEL, side	2
102	180247	CAP, hose reel	1
103	107451	NUT, spring	8
104	180248	PLATE, hold down	1
106	107452	SCREW, machine; No. 10 x 5/8"	14
109	102521	PLUG, button	1
111	100179	NUT, hex, No. 10	6
112	100020	LOCKWASHER, spring; No. 10	6

Ref No	Part No.	Description	Qty
201	180244	PANEL, end	2
202	180679	LABEL, Graco	2
203	107452	SCREW, machine; No. 10 x 5/8"	16
204	107451	NUT, spring	16

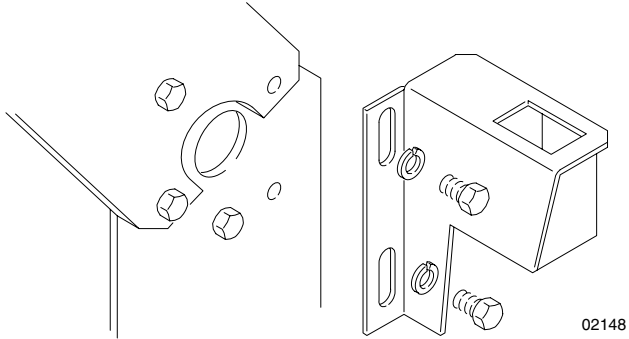


# Accessories

*Must be purchased separately. Use only genuine Graco parts and accessories.*

## Valve Hanger Kit 224444

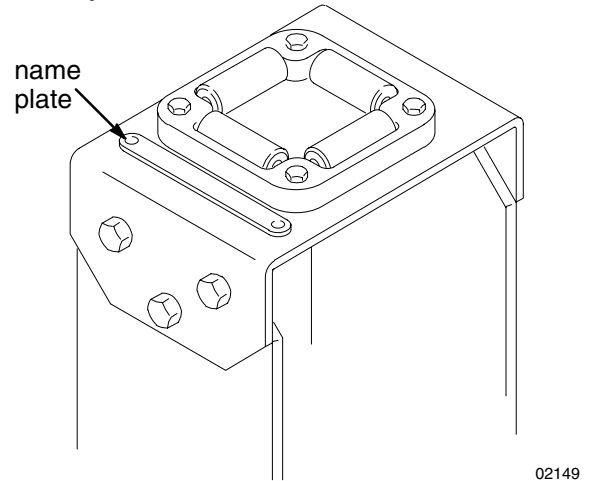
Mounts to side of hose reel for hanging dispensing valves.



## Name Plates For Hose Reels

Use rivets to attach.

<b>218670</b>	motor oil	<b>218675</b>	air
<b>218671</b>	grease	<b>218676</b>	water
<b>218672</b>	gear lube	<b>218677</b>	antifreeze
<b>218673</b>	ATF	<b>218678</b>	evacuation
<b>218674</b>	hydraulic oil		



## Mounting Channels

For mounting hose reels to ceiling. Includes capscrews (3/8-16 UNC-2a x 0.625"), lockwashers, and nuts.

<b>218679</b>	for 1 reel
<b>218680</b>	for 2 reels
<b>218681</b>	for 3 reels

# Accessories

*Must be purchased separately. Use only genuine Graco parts and accessories.*

## Hose Inlet Kit 218549

2000 psi (13.8 MPa, 138 bar) MAXIMUM WORKING PRESSURE

1/2" ID, 24" hose

Ref No.	Part No.	Description	Qty
301	214601	HOSE, fluid, buna-N; 1/2" ID; cpld 1/2 npt(mbe); 24" (609.6 mm) long	1
302	157416	UNION, swivel, 90°	1

## Hose Inlet Kit 218550

4000 psi (27.6 MPa, 276 bar) MAXIMUM WORKING PRESSURE

3/8" ID, 24" hose

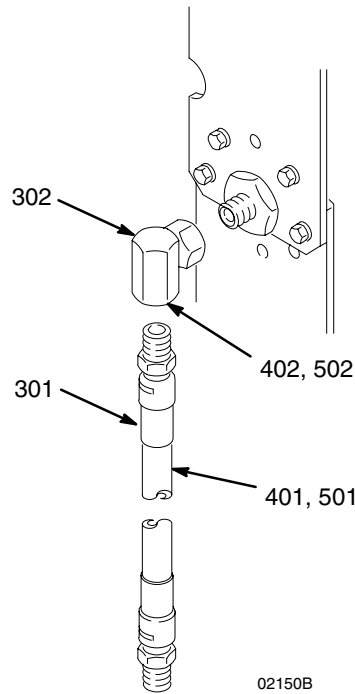
Ref No.	Part No.	Description	Qty
401	109161	HOSE, fluid, buna-N; 3/8" ID; cpld 3/8 npt(mbe); 24" (609.6 mm) long	1
402	155677	UNION, swivel, 90°	1

## Hose Inlet Kit 224417

5000 psi (34.5 MPa, 345 bar) MAXIMUM WORKING PRESSURE

1/4" ID, 24" hose

Ref No.	Part No.	Description	Qty
501	109147	HOSE, fluid, buna-N; 1/4" ID; cpld 3/8 npt(mbe); 24" (609.6 mm) long	1
502	155677	UNION, swivel, 90°	1



02150B



# Technical Data

## Model 224050 Bare Hose Reel

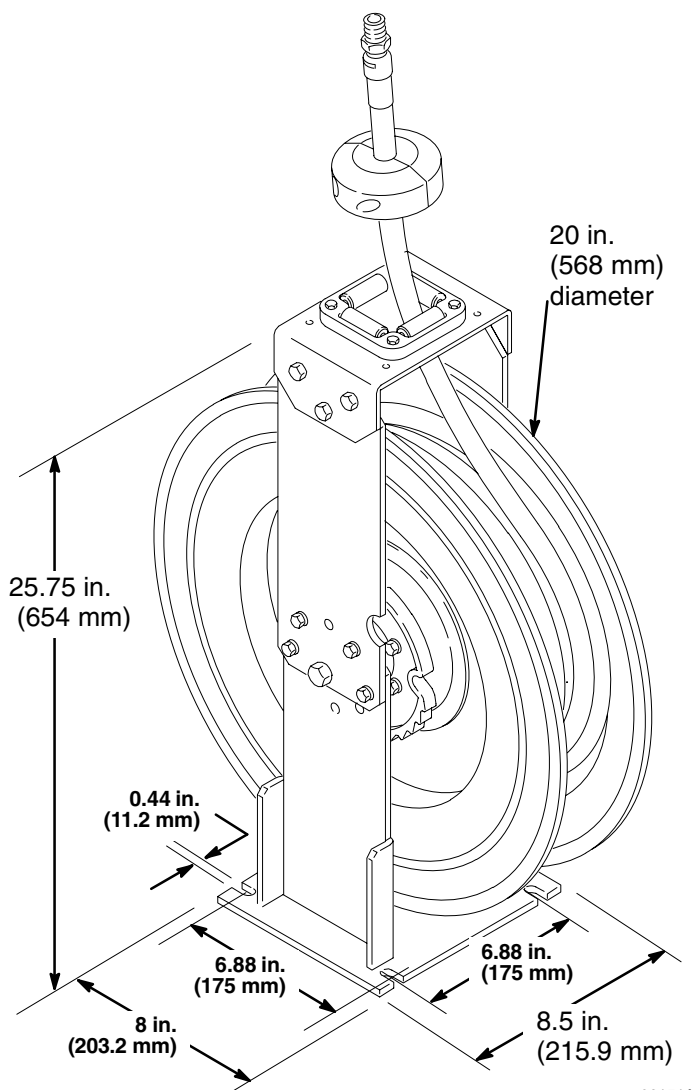
Inlet	1/2 npsm(m)
Outlet	1/2 npsm(f)
Bearings	oil-impregnated porous bronze
Maximum Working Pressure	1800 psi (12.4 MPa, 124 bar)
Wetted Parts	carbon steel, nitrile rubber
* Maximum sound pressure	85 dB(A)

## Model 224060 Bare Hose Reel

Inlet	3/8 npsm(m)
Outlet	3/8 npt(f)
Bearings	oil-impregnated porous bronze
Maximum Working Pressure	8000 psi (55.2 MPa, 552 bar)
Wetted Parts	carbon steel, nitrile rubber, polyester elastomer, nylon
* Maximum sound pressure	85 dB(A)

\* Sound data readings taken at assumed maximum retraction rate from assumed operator position (CAGI-PNEUROP-1969).

# Dimensions



02151A

# Graco Standard Warranty

Graco warrants all equipment 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 thirty–six 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.

## **FOR GRACO CANADA CUSTOMERS**

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

# Graco Information

**TO PLACE AN ORDER**, contact your Graco distributor, or call one of the following numbers to identify the distributor closest to you:

**1–800–533–9655 Toll Free**

**612–623–6928**

**612–378–3590 Fax**

*All written and visual data contained in this document reflect the latest product information available at the time of publication.  
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*This manual contains English. MM 308109*

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