

SD Series Hose Reels

3A7926B

EN

For dispensing air, water, antifreeze, windshield washer solvent, transmission fluid, oil and grease. For professional use only.

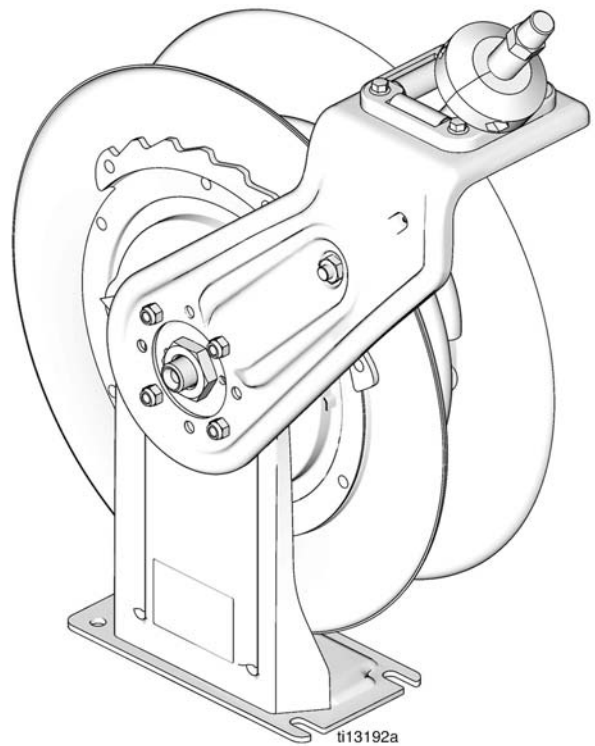
Not approved for use in European explosive atmosphere locations.

See page 3 for model information, including maximum working pressure.



Important Safety Instructions

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



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Models






Model	Size	Type	Maximum Working Pressure psi (MPa, bar)	Media	Connection Size		Line Size (inch)	Length (feet)	Dry Weight lb (kg)
					Inlet	Outlet			lb
25P951	10	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	3/8 npt (m)	3/8	35	37 (16.8)
25P952	10	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	3/8 npt (m)	3/8	50	42 (19.0)
25P953	10	Bare	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	N/A	3/8	50	32 (14.5)
25P954	20	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	3/8 npt (m)	3/8	65	45 (20.4)
25P955	20	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	3/8 npt (m)	3/8	65	45 (20.4)
25P956	10	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	1/2 npt (m)	1/2	35	42 (19.0)
25P957	20	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	1/2 npt (m)	1/2	50	47 (21.3)
25P958	20	Hose	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	1/2 npt (m)	1/2	50	47 (21.3)
25P959	20	Bare	300 (2.1, 20.7)	Air / Water	1/2 npsm (m)	N/A	1/2	50	35 (15.9)
25P960	10	Hose	2000 (13.8, 137.9)	Oil	1/2 npsm (m)	1/2 npt (m)	1/2	35	41 (18.6)
25P961	10	Bare	2000 (13.8, 137.9)	Oil	1/2 npsm (m)	N/A	1/2	35	32 (14.5)
25P962	20	Hose	2000 (13.8, 137.9)	Oil	1/2 npsm (m)	1/2 npt (m)	1/2	50	50 (22.7)
25P963	20	Hose	2000 (13.8, 137.9)	Oil	1/2 npsm (m)	1/2 npt (m)	1/2	50	50 (22.7)
25P964	20	Bare	2000 (13.8, 137.9)	Oil	1/2 npsm (m)	N/A	1/2	50	35 (15.9)
25P965	10	Hose	5000 (34.5, 344.7)	Grease	3/8 npsm (m)	1/4 npt (m)	1/4	50	44 (19.9)
25P966	10	Bare	5000 (34.5, 344.7)	Grease	3/8 npsm (m)	N/A	1/4	50	32 (14.5)
25P967	10	Hose	4800 (33.1, 330.9)	Grease	3/8 npsm (m)	1/4 npsm (m)	3/8	35	39 (17.7)
25P968	20	Hose	4800 (33.1, 330.9)	Grease	3/8 npsm (m)	1/4 npsm (m)	3/8	50	53 (24.0)
25P969	20	Hose	4800 (33.1, 330.9)	Grease	3/8 npsm (m)	1/4 npsm (m)	3/8	50	53 (24.0)
25P970	20	Bare	5000 (34.5, 344.7)	Grease	3/8 npsm (m)	N/A	3/8	50	35 (15.9)

Warnings

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

 <h2 style="margin: 0;">WARNING</h2>	
	<p>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from dispensing device, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.</p> <ul style="list-style-type: none"> • Do not point dispensing device at anyone or at any part of the body. • Do not put your hand over the fluid outlet. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses and couplings daily. Replace worn or damaged parts immediately.
	<p>FIRE AND EXPLOSION HAZARD</p> <p>When flammable fluids are present in the work area, such as gasoline and windshield wiper fluid, be aware that flammable fumes can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well-ventilated area. • Eliminate all ignition sources, such as cigarettes and portable electric lamps. • Ground all equipment in the work area. • Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline. • Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. • Use only grounded hoses. • 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.

! WARNING

 	<p>EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Specifications 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. • 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.
 	<p>MOVING PARTS HAZARD Moving parts can pinch, cut or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure and disconnect all power sources.
	<p>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:</p> <ul style="list-style-type: none"> • Protective eyewear, and hearing protection. • Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Typical Installation

Overhead-Mounted Hose Reel

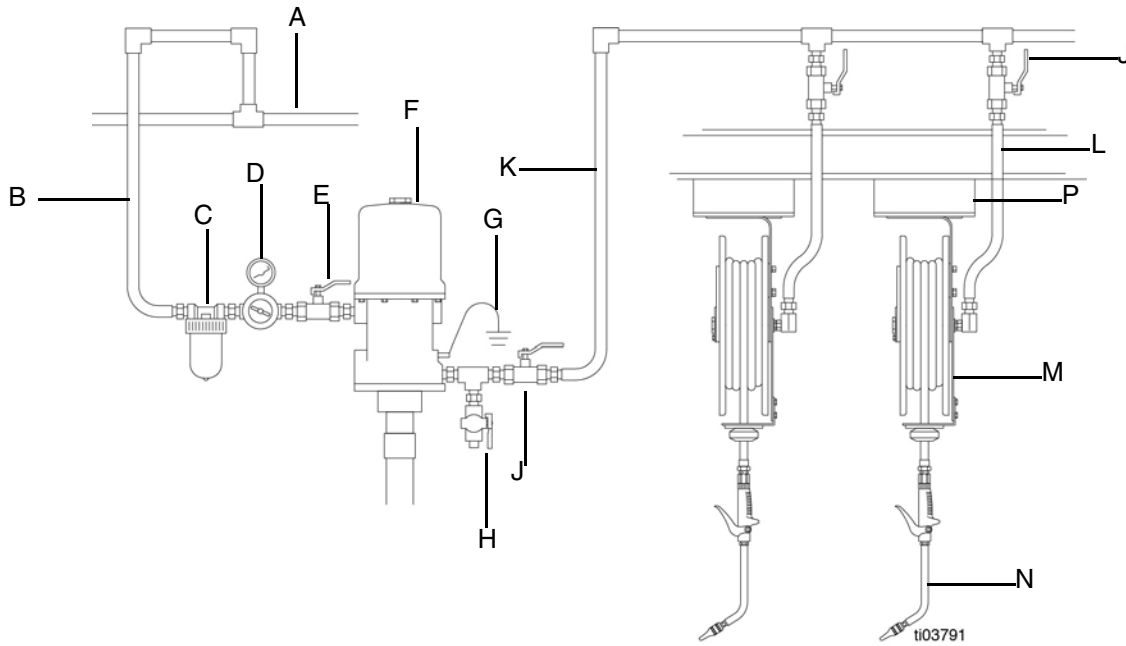


FIG. 1: Typical Installation

Key:

- A Main Air Supply Line
- B Pump Air Supply Line
- C Air Filter
- D Air Regulator
- E Bleed-type Master Air Valve (required)
- F Pump
- G Pump Grounding Wire (required)
- H Fluid Drain Valve (required)
- J Fluid Shutoff Valve
- K Fluid Line
- L Hose Inlet Kit
- M Hose Reel
- N Dispense Valve
- P Mounting Channel/Base







Installation

How to Use this Manual

This manual describes how to install Graco's SD Series Hose Reels. There are two different installation procedures:

1. Installation of the reels as part of a full dispensing system install; or
2. Replacement of pre-existing/addition of reels to an currently installed system.

Since the procedure for each is different, make sure to follow the instructions for the correct installation.




A ground wire (G), bleed-type master air valve (E), and fluid drain valve (H) are required in your system installation. These components help reduce the risk of serious injury, including fire and explosion, injection, and splashing in your eyes or on the skin.

- The ground wire must be connected to the pump grounding lug and to a true earth ground according to your local codes.
- 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 pump, hose, and dispense valve. Triggering the valve to relieve pressure may not be sufficient.

The typical installation shown in FIG. 1 is only a guide for selecting and installing a hose reel system. The components shown are the minimum requirements for all dispensing systems. However, it is not an actual dispensing system design. Contact your Graco Distributor for assistance in designing a system to suit your needs.

NOTE: The air and fluid accessories required for your pump must be properly sized to the pump. Refer to your pump manual for selecting pump accessories.

Grounding

				
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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.

Pump: use ground wire and clamp. Loosen grounding lug locknut and washer. Insert ground wire end into lug slot and tighten locknut securely. Connect ground clamp to a true earth ground.


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

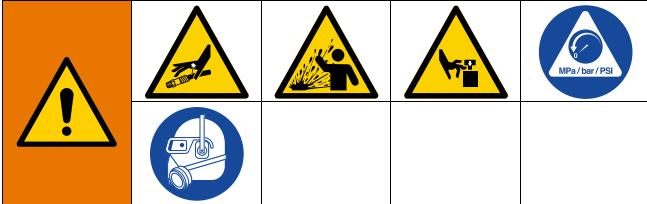
Required Components

Be sure to have the following components before beginning installation.

- Hose Inlet kits (L)
- Reel mounting Bases, Mounting Brackets, and Mounting Channels (P)
- Dispense valves (N)

Pressure Relief Procedure

 Follow the Pressure Relief Procedure whenever you see this symbol.



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

1. Turn off the power supply to the pump or close the upstream ball valve.
2. Trigger the dispense valve into a grounded waste container to relieve pressure.
3. Leave the drain valve open until ready to pressurize the system.

NOTE: If you suspect that the dispense valve is clogged, or that the pressure has not been fully relieved after following the above steps, very slowly loosen the coupler or hose end coupling to relieve the pressure gradually, then loosen completely. After doing this, the obstruction can be cleared (FIG. 2).

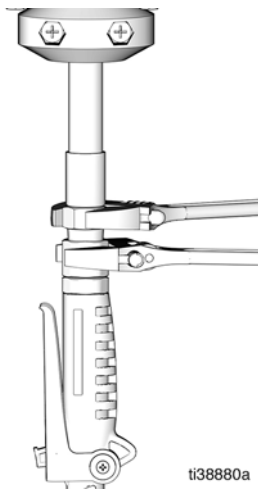


FIG. 2

Installation Mounting Options

Reel Bank Mounting Location

Select the reel bank mounting location (FIG. 3).

- For high ceilings, suspend a suitable support structure for the reels, so the hoses will be long enough to reach the service area.
- A reel bank mounted in a one-lift service bay should be at least 6 ft (1.9 m) from the center line of the lift.
- A reel bank mounted in a two-lift service bay should be mounted an equal distance between the lifts.
- A bank of all motor oil reels should be mounted about 5 ft (1.5 m) from the center of the lift, toward the front of the lift rails.

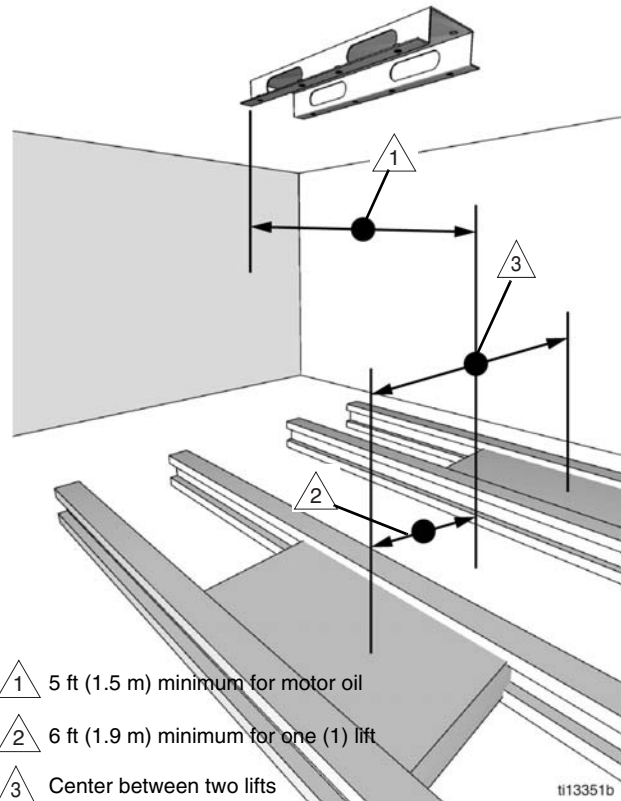
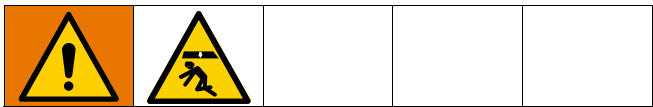


FIG. 3

Roller Support Arm Position's Selection



To reduce the risk of injury, be sure that the mounting surface is strong enough to support the reels, weight of the lubricants, and the stress caused by hard pulls on the hoses. See **Models**, page 3, for weights of the hose reel assemblies.

NOTE: Always use all four (4) large flat washers with four (4) bolts to mount the hose reel pedestal to any surface.

NOTE: The reels perform best when the arm allows the hose to pull straight off of the spool (FIG. 4).

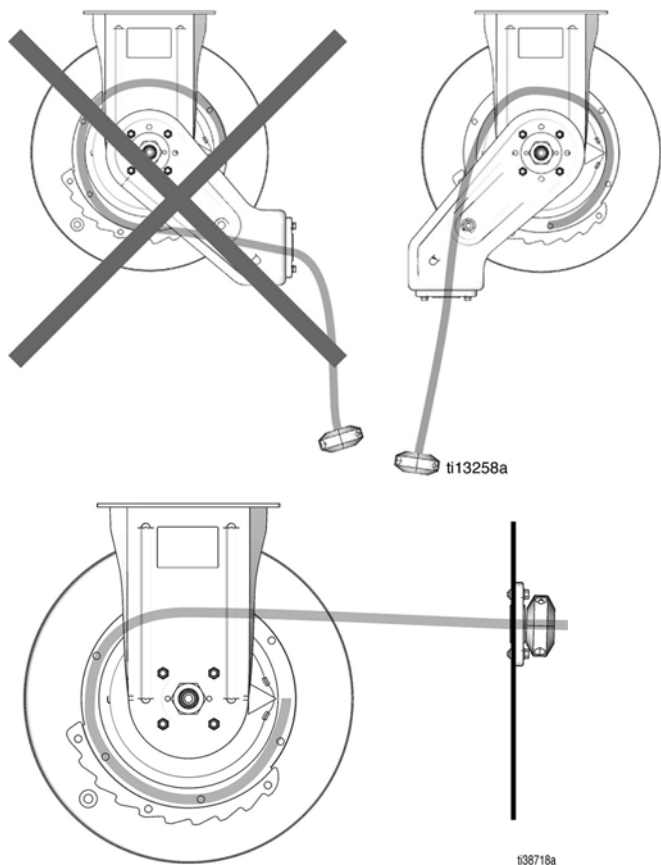


FIG. 4

1. Determine if the position of the roller guide arm (a) (FIG. 5) is in the desired installation position. If it is not in the desired installation position, skip to Step 2.

The hose reel is factory-assembled and shipped with the roller guide arm (a) in either the AA or EE position (FIG. 5).

Apply to AA Position	Apply to EE Position
25P951	25P955
25P952	25P958
25P953	25P963
25P954	25P969
25P956	
25P957	
25P959	
25P960	
25P961	
25P962	
25P964	
25P965	
25P966	
25P967	
25P968	
25P970	

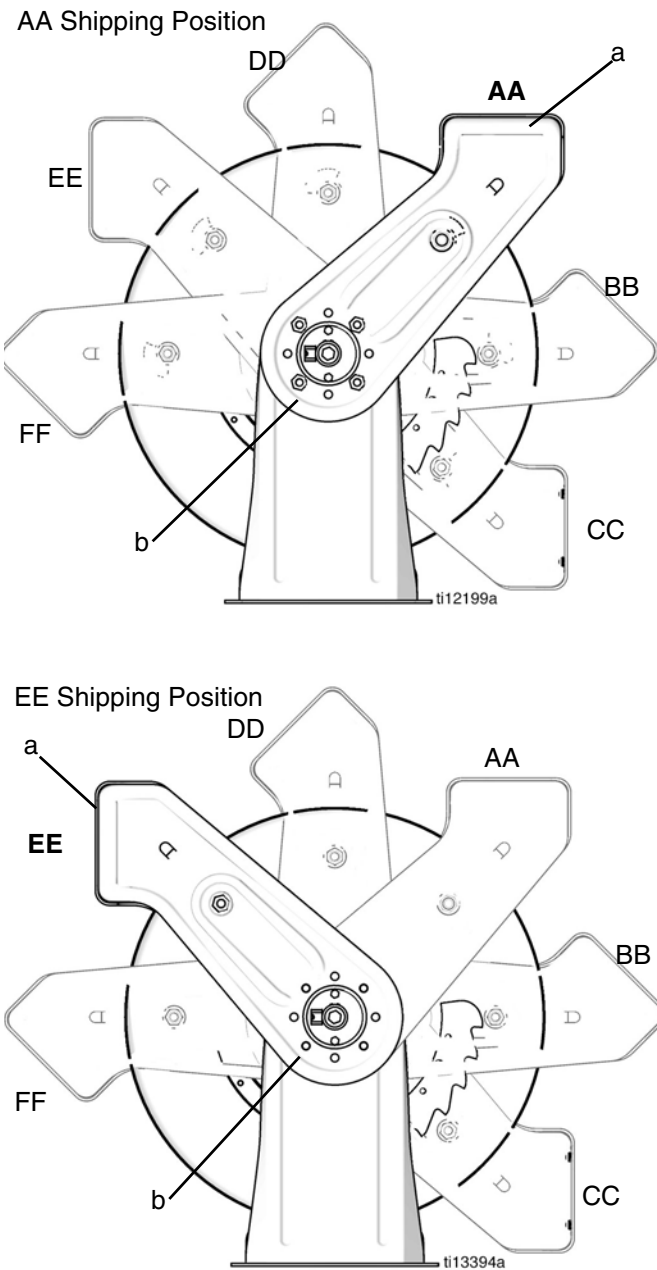


FIG. 5



2. To reposition the roller guide arm (a) to a position other than Shipping Position AA or EE:
 - a. Secure the reel to a solid surface with C-clamps (C) (FIG. 6).

- b. Attach a C-clamp (D) to the reel flange to prevent the reel from unintentionally becoming unlatched and spinning freely (FIG. 6).

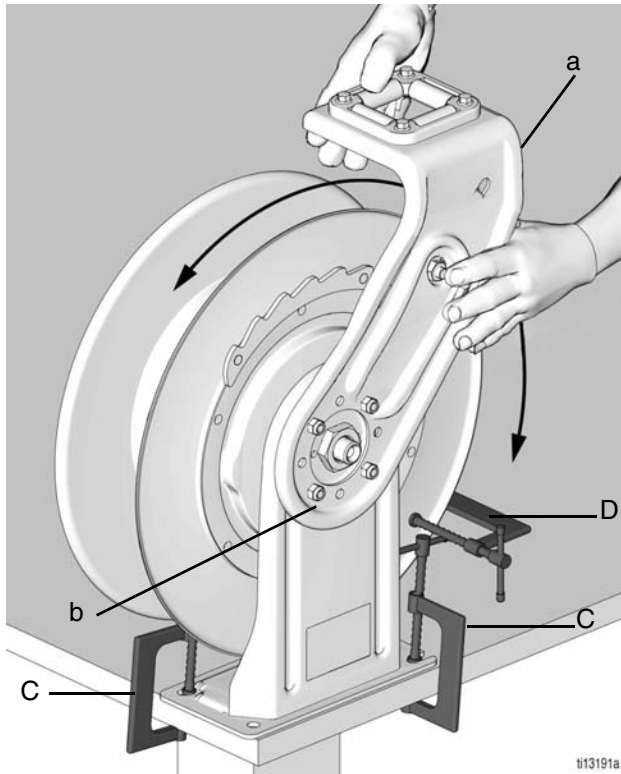


FIG. 6

- c. Remove the nuts (b) from each side and rotate arm (a) to the desired position.

NOTE: The reels have four (4) nuts.

- d. Check the pawl to make sure it is not wedged on the side of the ratchet (FIG. 7).

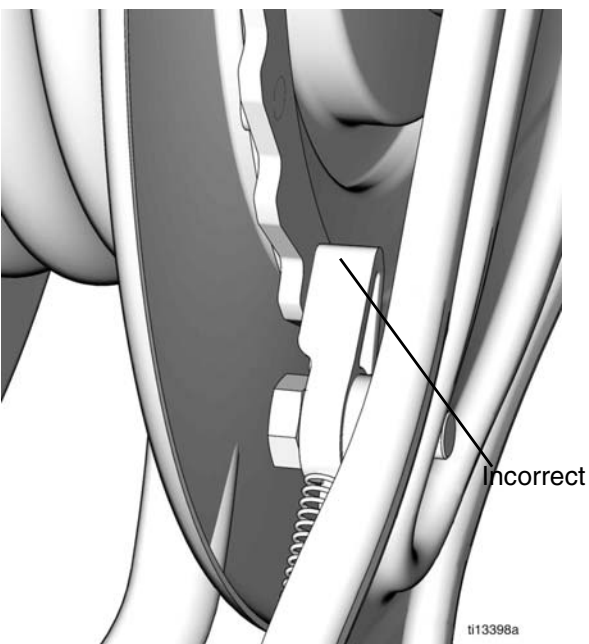
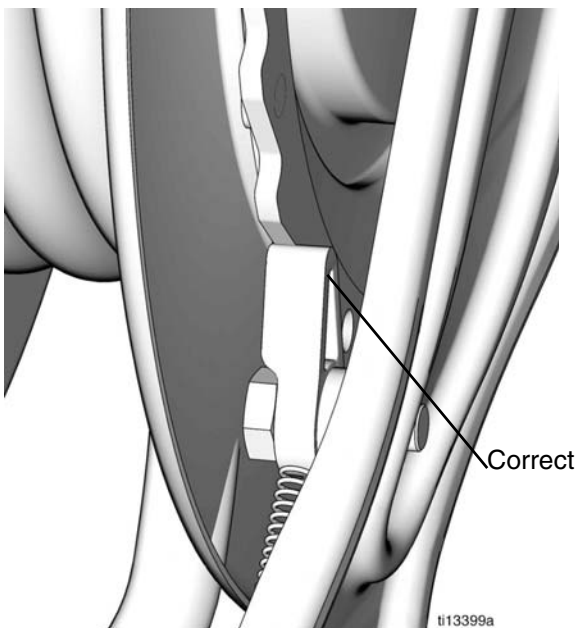


FIG. 7

- e. Replace and tighten nuts to secure the arm (torque 25 - 35 ft-lb/33.9 - 47.5 N•m).

Hose Installation

Installation of Hose on a Bare Reel

1. Locate the length of the hose in the table and note the number of revolutions the spool must be turned to properly pre-set the spring tension.

Hose Length	No. of Spool Turns
35 ft (10.7 m)	17
50 ft (15.2 m)	21
65 ft (19.8 m)	23



SPRING TENSION HAZARD

The hose reel spring is always under great tension, which if released in an uncontrolled manner could cause serious injury.

- Never allow the reel to spin freely. Uncontrolled spinning could cause serious injury if hit by the hose.
- Securely fasten the reel in place while making adjustments.
- The hose reel spring is not a serviceable part. Do not attempt to replace or service the hose reel spring.
- Always wear heavy gloves while adjusting the spring tension to protect your hands from being cut on the hose reel.

2. Secure the reel to a solid surface with C-clamps (C) (FIG. 8)
3. Place a piece of tape on the side of the reel flange as a visual reference to count the number of revolutions.

Installation

4. While wearing heavy gloves, firmly grasp the outside edge of the reel flange with both hands. Wind the spool the correct number of turns (see reference table from Step 1), rotating the reel in the direction shown in FIG. 8.
- Stop only at latching locations.
 - Stop the reel where there is access to the hose swivel (A) (FIG. 9), and where the reel is securely latched.
5. Before installation of the hose, attach a C-clamp (D, FIG. 9) to the reel flange to prevent the reel from unintentionally becoming unlatched and spinning freely.

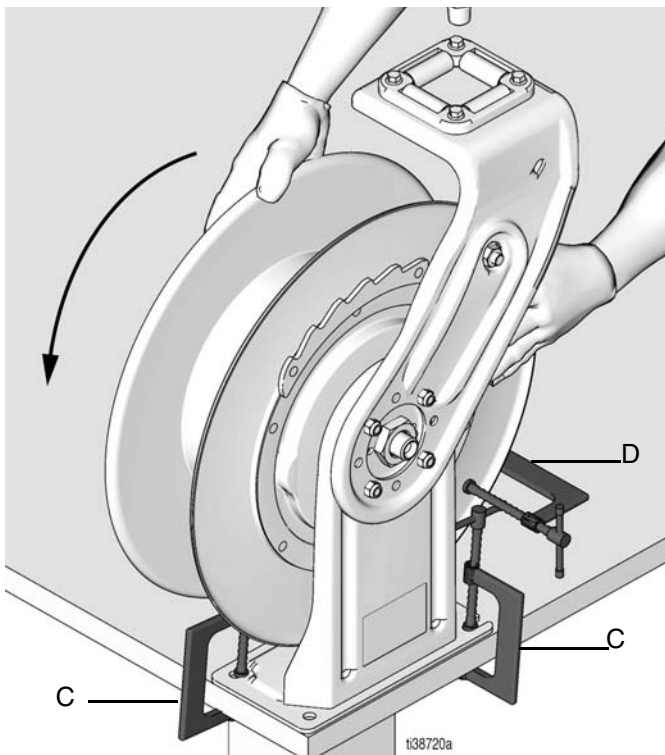


FIG. 8

6. Uncoil and extend the hose.
 7. Install the hose stop (C) (FIG. 9) to the end of the hose. If the hose has a warning tag (F), the hose stop should be installed on the same end of the hose as the warning tag.
- NOTE: If the hose is equipped with a spring guard, this end must be on the same end as the hose stop.
8. Run the end of the hose (B) through the hose guide (G) and then to the hole (E) in the reel (FIG. 9).

9. Attach the hose end (B) to the hose reel swivel (A).
10. Carefully remove the C-clamp (D) (FIG. 8),

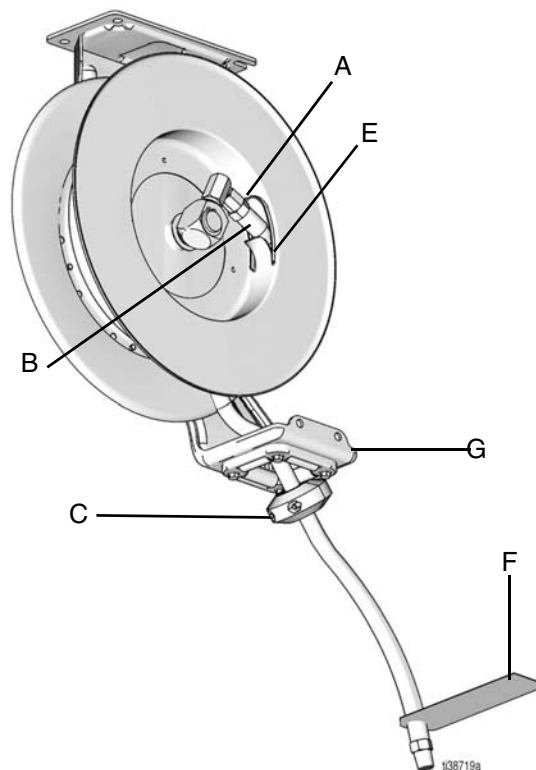



FIG. 9

11. Pull on the hose hard enough to release the latch, and slowly allow the hose to retract.
12. Re-position the hose stop so the hose extends far enough for all operators to reach the dispense valve.
13. Flush the hose reel following the **Flush the Equipment** instructions, page 17.

Ceiling Installations


				
To reduce the risk of injury, always use a man-lift platform or other type of lift while doing a hose reel ceiling installation.				

Ceiling Mount Without an I-Beam - Open Channel

- Order Mounting Kit: 24A934, 24A935, 24A936, 24A937, 24A938, or 24A939.
- See **Mounting Channel Dimensions**, page 30.

Open Channel Mounting Kits							
FN	Description	24A934 1 Reel	24A935 2 Reels	24A936 3 Reels	24A937 4 Reels	24A938 5 Reels	24A939 6 Reels
101	PLATE, hold down	1	2	3	4	5	6
102	SCREW, 3/8 in. -16 x 5/8 in.	5	10	15	20	25	30
103	WASHER, lock, 3/8 in.	5	10	15	20	25	30
104	BASE, reel	1	2	3	4	5	6
105	BASE, reel, channel	1	1	1	1	1	1

1. Install the mounting channel (105) and base plate (104), as shown in FIG. 10.

				
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2. Slide the hose reel into the base plate (104) and install the hold down plate (101), washer (103), and the cap screw (102). Tighten the screw firmly (FIG. 10).

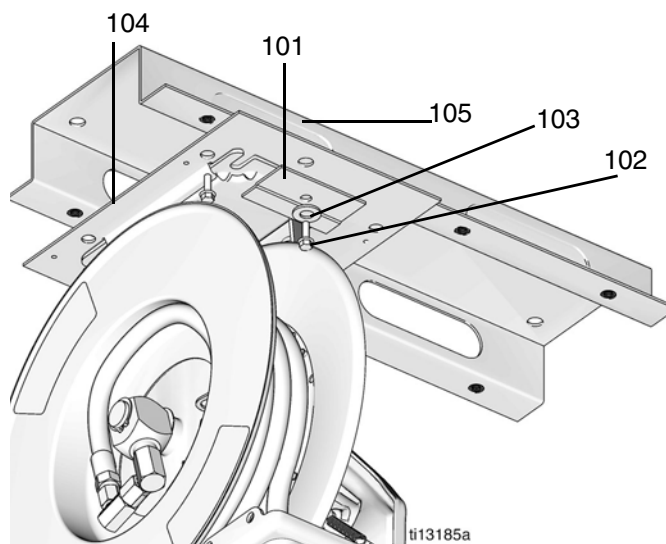


FIG. 10

3. When installing permanent fluid lines above the ceiling, drill 1.5 in. (38 mm) diameter holes through the ceiling toward the inlet side of the reels.
4. Bolt the hose reel to the mounting, making sure that it is secure before lowering the man-lift.
5. Connect the fluid line to the hose inlet kit of the reel. See FIG. 1: **Typical Installation**, page 6.

Installation

NOTE: None of the hose reels listed in this manual come with a Hose Inlet Kit. Hose Inlet Kits need to be ordered separately.

6. Flush the hose reel following the instructions in **Flush the Equipment**, page 17.
7. Re-position the hose stop, if needed, so the hose extends far enough for all operators to reach the dispense valve, then tighten the nuts to securely hold the hose stop in place.
8. Install the dispense valve to the end of the hose following the instructions provided with the dispense equipment.

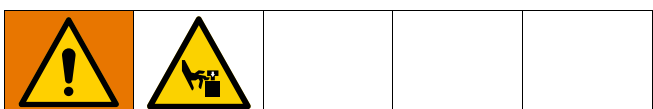
NOTE: if an enclosure is being installed around the hose reel, install it before installing the dispense valve or motor to the hose end.

Ceiling Mount Directly to an I-Beam without Drilling holes - All Models

NOTE: Order Mounting Bracket Kit: 204741 for open or enclosed reels.

NOTE:

- Two kits are required when mounting one to three reels.
- Three kits are required when mounting four to six reels.



MOUNTING BRACKET KIT: 204741

FN	Description	Qty
201	WASHER, lock, 1/2 in.	4
202	SCREW, 1/2 in. - 13 x 1 in.	2
203	SCREW, 1/2 in. 13 x 3/4 in.	2
204	NUT, 1/2 in. - 13	2
205	NUT, spring clamp (not shown)	2
206	CLAMP, beam	2
207	CHANNEL, strut	1

1. Secure mounting brackets (D) to the channel. Use two mounting brackets for each one to three capacity mounting channel (105). Use three mounting brackets for each four to six capacity mounting channel (105).
2. Position the adjustable clamps (206) for the mounting brackets over the I-Beam (A), then tighten securely (FIG. 11).
3. HP Model Reels only: See FIG. 10, page 13. Slide the hose reel onto the base plate (104) then install the hold down plate (101), washer (103), and cap screw (102). Tighten the screw firmly.
4. If installing permanent fluid lines above a ceiling, drill 1.5 in. (38 mm) diameter holes through the ceiling toward the inlet side of the reels.
5. Connect the inlet fluid line to the inlet hose of the reel. See FIG. 1: **Typical Installation**, page 6.

NOTE: The hose reels listed in this manual do not come with a Hose Inlet Kit.

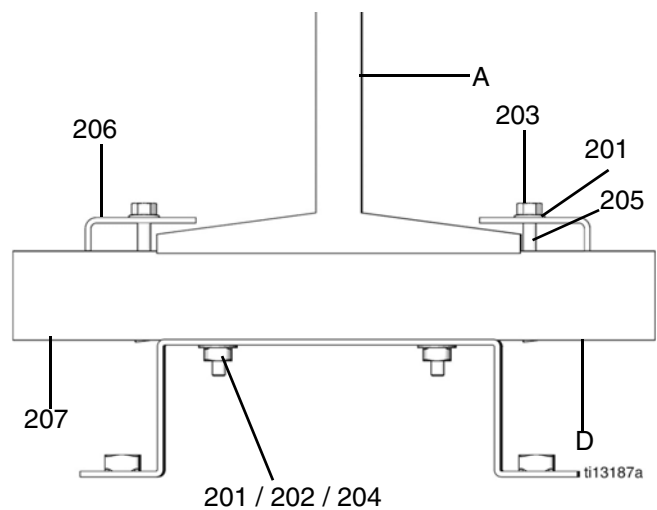
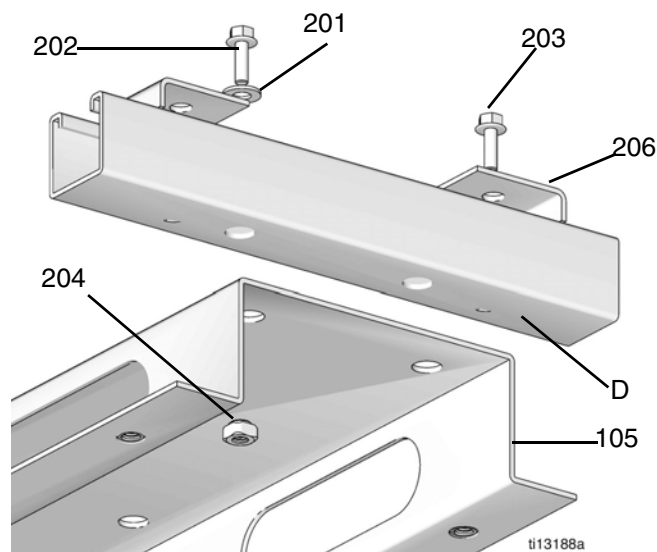


FIG. 11

6. Flush the hose reel following the instructions in **Flush the Equipment**, page 17.
7. Re-position the hose stop, if needed, so the hose extends far enough for all operators to reach the dispense valve, then tighten the nuts to securely hold the hose stop in place.
8. Install the dispense valve to the end of the hose following the instructions provided with the dispense equipment.

NOTE: if an enclosure is being installed around the hose reel, install it before installing the dispense valve or motor to the hose end.

Wall Installations

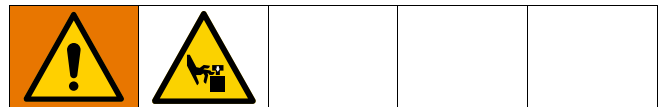
- For Model Reels Wall Mounting Bracket Kit with no channel order: 24H193.
- For Model Reels Open Channeling Mounting Kit order: 24A934, 24A935, 24A936, 24A937, 24A938, or 24A939.

Open Channel Mounting Kits							
FN	Description	24A934 1 Reel	24A935 2 Reels	24A936 3 Reels	24A937 4 Reels	24A938 5 Reels	24A939 6 Reels
101	PLATE, hold down	1	2	3	4	5	6
102	SCREW, 3/8 in. -16 x 5/8 in.	5	10	15	20	25	30
103	WASHER, lock, 3/8 in.	5	10	15	20	25	30
104	BASE, reel	1	2	3	4	5	6
105	BASE, reel, channel	1	1	1	1	1	1

1. Adjust the guide arm to the desired position, see FIG. 5, page 10.
2. Select the wall mounting location and style for the reel bank.

NOTE: The base plate (104) can be directly mounted to the wall for easier installation and removal of the hose reel for servicing (see FIG. 12 and FIG. 13).

- a. For mounting the reel directly to the wall, use the provided template (B) to lay out the holes for drilling.
- b. For mounting with kit 24H193, mount the base plate (104) to the wall, slide the hose reel onto the base plate (104), then install the hold down plate (101), the washer (103), and the cap screw (102). Tighten the screw firmly.
- c. For mounting with kits 24A934-24A939, mount the channel (105) to the wall, mount the base plate (104) to the channel (105), slide the hose reel onto the base plate (104), then install the hold down plate (101), the washer (103), and the cap screw (102). Tighten the screw firmly.



3. Slide the hose reel onto the base plate (104) then install the hold down plate (101), washer (103), and cap screw (102). Tighten the screw firmly.

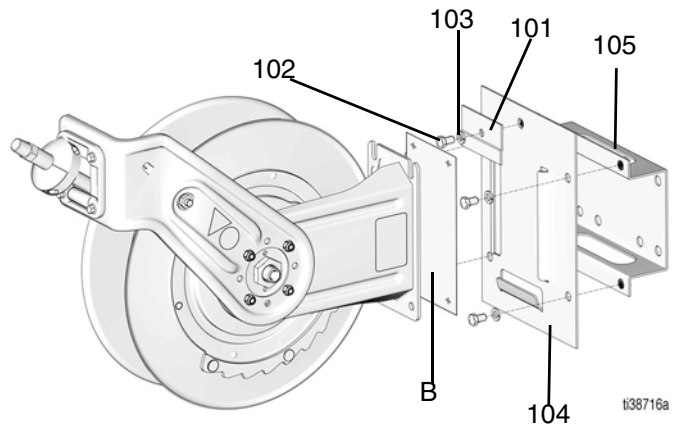


FIG. 12

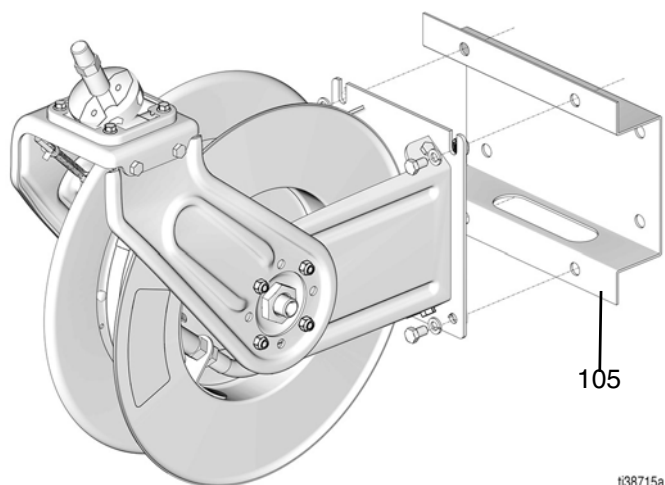


FIG. 13

4. Connect the fluid line to the hose reel inlet using the hose inlet kit (see FIG. 1: **Typical Installation**, page 6).

NOTE: The hose reels listed in this manual do not come with a Hose Inlet Kit.

5. Flush the hose reel following the instructions in **Flush the Equipment**, page 17.
6. Re-position the hose stop, if needed, so the hose extends far enough for all operators to reach the dispense valve, then tighten the nuts to securely hold the hose stop in place.
7. Install the dispense valve to the end of the hose following the instructions provided with the dispense equipment.

NOTE: if an enclosure is being installed around the hose reel, install it before installing the dispense valve or motor to the hose end.

Flush the Equipment



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

Before installation of the dispense valve to the end of the dispense hose, flush the line with the dispensing fluid.

1. Place the end of the dispense hose into a grounded metal waste container. Hold the hose firmly against the waste container throughout the flushing process (FIG. 14).

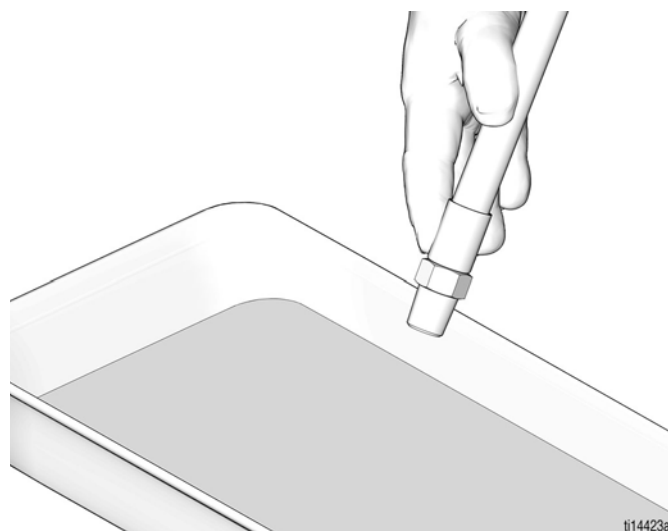


FIG. 14

2. Turn on the Bleed-Type Master Air Valve (E) and Fluid Drain Valve (H). See **Typical Installation**, page 6.

3. Flush the fluid being dispensed through the equipment until the fluid runs clear of particles or visible contaminants (FIG. 15).

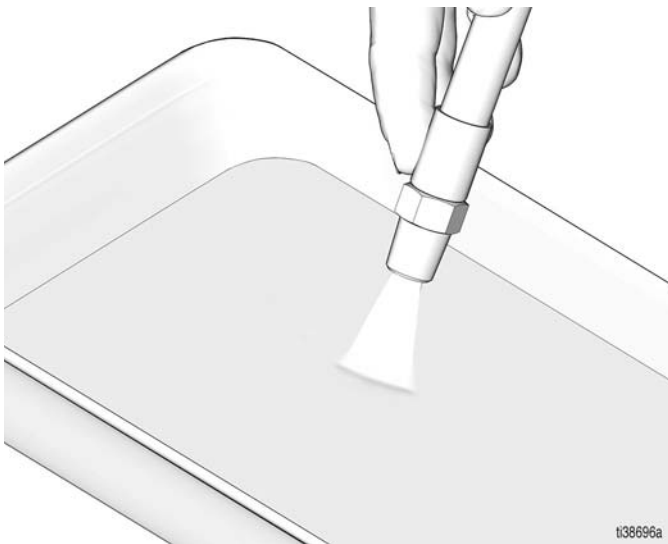


FIG. 15

Adjust Spring Tension

SPRING TENSION HAZARD				
<p>The hose reel spring is always under great tension, which if released in an uncontrolled manner could cause serious injury.</p> <ul style="list-style-type: none"> • Never allow the reel to spin freely. Uncontrolled spinning could cause serious injury if hit by the hose. • Securely fasten the reel in place while making adjustments. • The hose reel spring is not a serviceable part, Do not attempt to replace or service the hose reel spring. • Always wear heavy gloves while adjusting the spring tension to protect your hands from being cut on the hose reel. 				

Increase the spring tension if the spring is too loose, the hose does not retract completely, or if hose retraction is sluggish.

Decrease the spring tension if the spring is too tight, or if the hose retracts too fast.

Single Pedestal Model Hose Reels

Increase Spring Tension:

1. Pull the hose out one to two turns, then engage the latch.
2. Pull the hose back through the hose guides.
3. Wrap a loop of hose onto the reel flange.
4. 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 so that the spring winds up tightly before the hose is fully extended.

Decrease Spring Tension:

To decrease the spring tension, remove loops around the reel flange until tension is at the desired level.

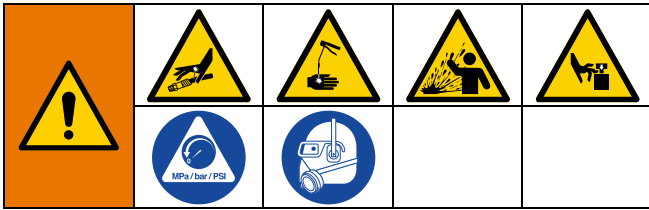
Recycling and Disposal

End of Product Life

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

- Perform the **Pressure Relief Procedure**, page 8.
- 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.

Troubleshooting



1. Follow **Pressure Relief Procedure**, page 8, before checking or repairing the equipment.
2. Check all possible problems and causes before disassembling.

Problem	Cause	Solution
The reel does not retract	Worn or broken spring	Replace spool. See pages beginning on page 21.
Oil leaking from hose reel swivel	Worn or damaged swivel seals	Replace swivel or swivel seals. See page 26 to determine the swivel or seal kit needed. See Hose Reel Swivel Kit and Swivel Seal Kit Manual for repair information.
Fluid delivery is slow	Pressure setting is too low	Increase pressure

Repair

Replace Spool - Single Pedestal Models

A complete list of replacement **Spool Assembly Kits** is available on page 26. Use all of the new parts included in the kit.



1. Follow the **Pressure Relief Procedure**, page 8.

NOTE: The reference letters in the following instructions refer to FIG. 16, FIG. 17 and FIG. 18.

2. Remove the cap screw (102), washer (103), and the hold-down plate (101).
3. Slide the hose reel out of the base plate (104) (FIG. 16).

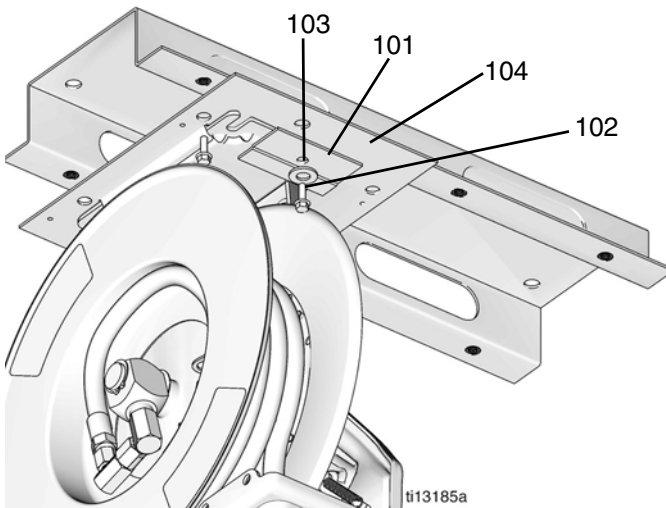


FIG. 16

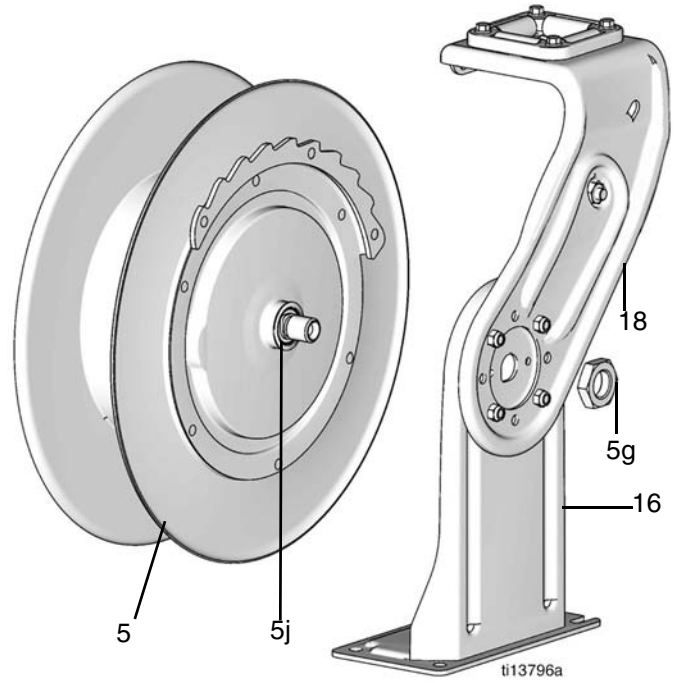


FIG. 17

4. Secure the reel to a solid surface with C-clamps (C) (FIG. 18).

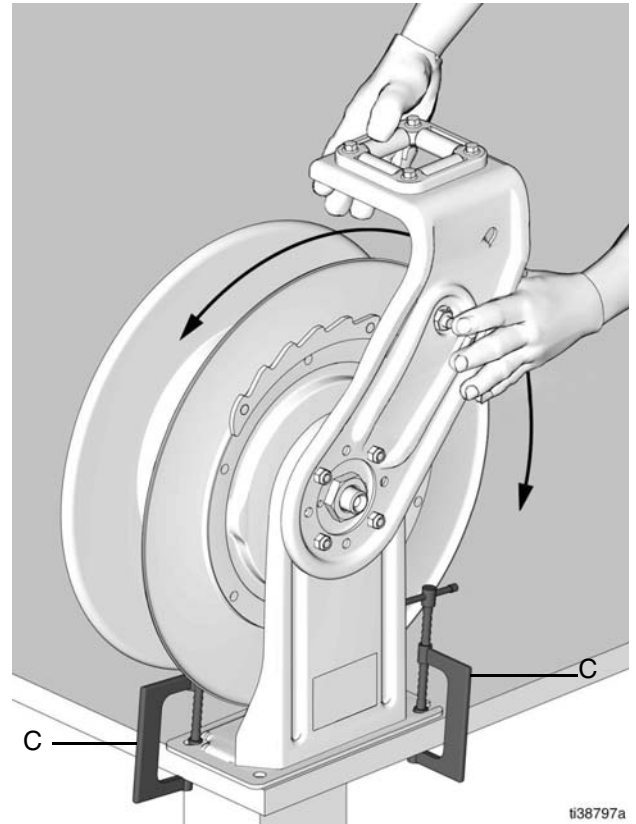


FIG. 18

5. Pull on the hose hard enough to release the latch, and slowly allow the hose to retract until the ball stop contacts the roller.
6. Remove the ball stop, then while holding the hose end, slowly retract the hose until the spool stops moving.
7. Completely remove the hose from the spool (5) and set it aside for re-installation on the new spool.
8. Remove and discard the nut (5g).
9. Completely remove, as one piece, the guide arm (18) and pedestal assembly (16) and set it aside for re-installation on the new spool.

NOTE: These parts do not have to be disassembled.

10. Detach the spool assembly (5).

NOTE: Check that the washer (5j) is not adhering to the inside of the pedestal assembly (16). Discard the washer (5j) with the old spool. A new washer (5j) is installed on the new spool (5) and is part of the new spool (5) assembly.

11. Install the new spool assembly (5).
12. Reinstall the guide arm (18) and pedestal assembly (16) over the spool (5) and install the nut (5g) and tighten (torque 85 - 105 ft-lb/115.2 - 142.4 N•m).
13. Slide the hose reel onto the base plate (104) and install the hold-down plate (101), the washer (103), and the cap screw (102). Firmly tighten the screw (102).
14. Install the hose onto the spool following the **Hose Installation** instructions, page 11.
15. Flush the hose following the **Flush the Equipment** instructions, page 17.
16. Set the spring tension following the **Adjust Spring Tension** instructions, page 18.

Replace the Hose



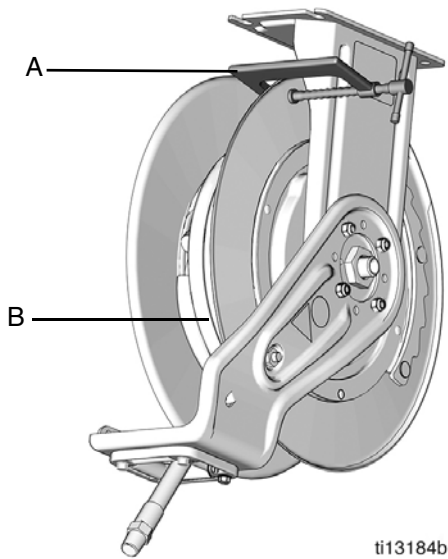
1. Follow the **Pressure Relief Procedure**, page 8.
2. Fully extend the hose (B) and latch the reel (FIG. 19).
3. Attach a C-clamp (A) to the reel flange to prevent the reel from unintentionally becoming unlatched and spinning freely (FIG. 19).



SPRING TENSION HAZARD

The hose reel spring is always under great tension, which if released in an uncontrolled manner could cause serious injury.

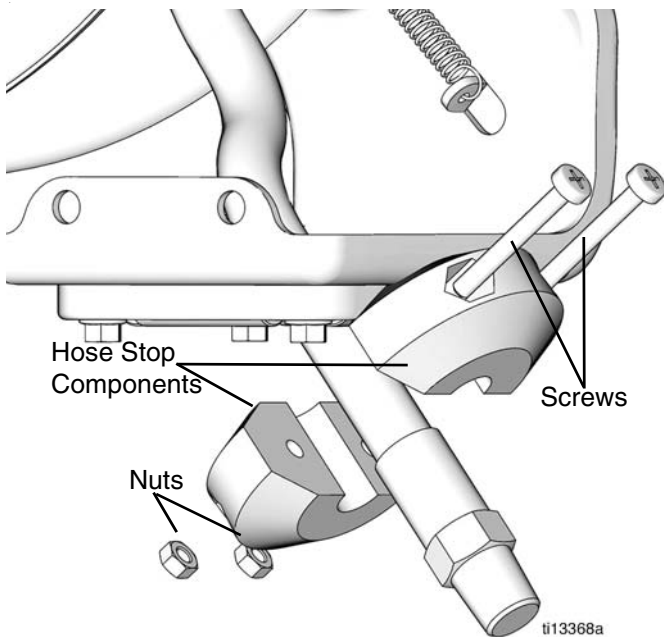
- Never allow the reel to spin freely. Uncontrolled spinning could cause serious injury if hit by the hose.
- Securely fasten the reel in place while making adjustments.
- The hose reel spring is not a serviceable part. Do not attempt to replace or service the hose reel spring.
- Always wear heavy gloves while adjusting the spring tension to protect your hands from being cut on the hose reel.



ti13184b

FIG. 19

4. Remove the hose stop from the hose end and put all of the parts in a secure place for re-installation on the new hose (FIG. 20).
 - a. Loosen and remove screws and nuts (FIG. 20).
 - b. Separate the two hose stop components to remove from the end of the hose (FIG. 20).



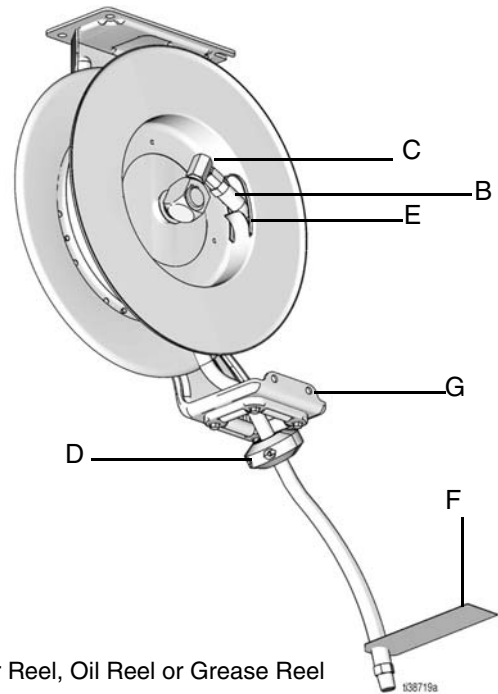
ti13368a

FIG. 20

5. Disconnect the hose (B) from the swivel (C) (FIG. 21).
6. Install the hose stop (D) to the end of the replacement hose. If the hose has a warning tag (F), the hose stop (D) should be installed on the same end as the warning tag (F) (FIG. 21).

NOTE: If the hose is equipped with a spring guard, this end must be on the same end as the hose stop.

7. Insert screws through the hose stop and hand tighten the nuts to hold the hose stop in place (FIG. 20).
8. Run the end of the hose (B) through the hose guide (G), and then through the hole (E) in the reel (FIG. 21).
9. Attach the hose end (B) to the hose reel swivel (C). Then carefully remove the C-clamp (A) (FIG. 19, page 23),

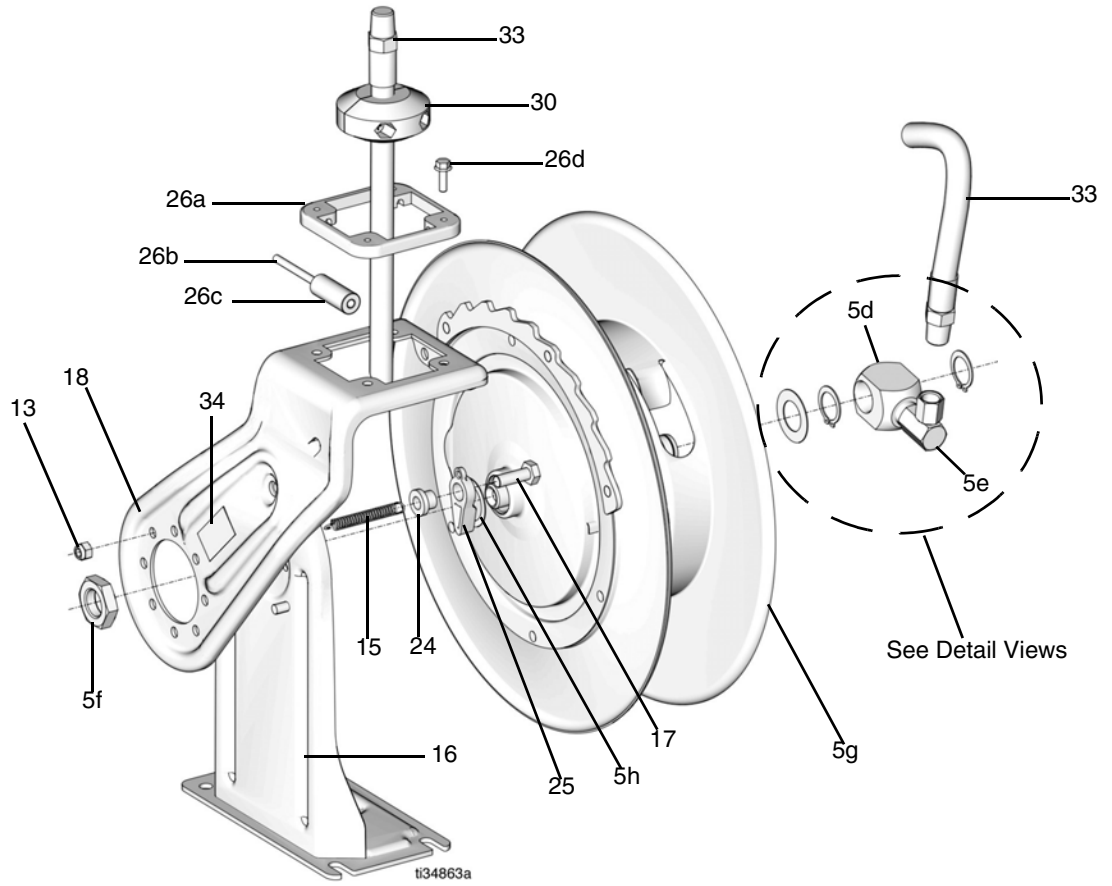


Air/Water Reel, Oil Reel or Grease Reel

FIG. 21

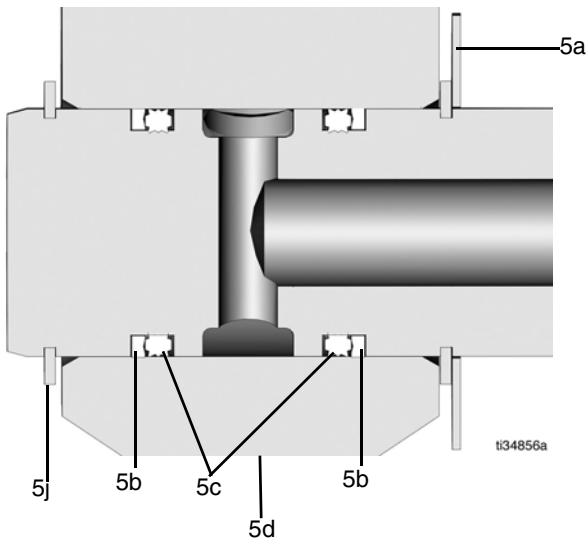
10. Pull the hose (B) hard enough to release the latch and slowly allow the hose to retract.
11. If used, re-assemble the hose reel enclosure.
12. Flush the hose reel following the **Flush the Equipment** instructions, page 17.

Parts

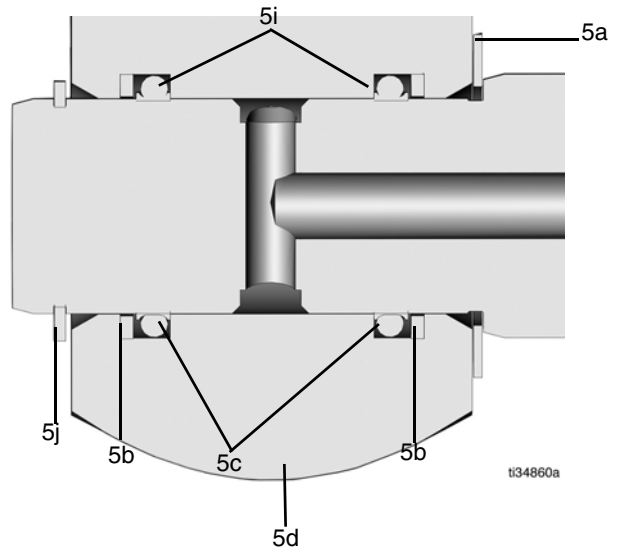


Detail Views

Low/Medium Pressure Models



High Pressure Models



Ref	Part No.	Description	Qty
5		KIT, spool (includes 5a-5j) (see page 26)	1
5a		WASHER, thrust	1
5b‡		RING, backup	1
5c‡		RING, seal	1
5d‡		SWIVEL, elbow	1
5e‡	155470	FITTING, swivel, 90°, npsm (Models HPL3B, HPL6D, HPL33, HPL65, HPM3B, HPM6D, HPM33, HPM65)	1
	161037	FITTING, swivel, 90°, npsm (Models HPL23, HPL25, HPL56)	1
	15Y397	FITTING, swivel, 90°, npsm (HPH Models)	2
5f	186579	NUT, hex, 3/8 in. x 18 npsm (25P965 - 25P970)	1
	186580	NUT, hex, 12 in. - 14 npsm (25P951 - 25P964)	1
5g		SPOOL	1
5h		WASHER, 30 mm	1
5i‡		RING, slipper (HP H Models)	1
5j‡		RING, snap	1
13		NUT, lock, M8 x 1.25	4
15		SPRING, ratchet, pawl	1
16		BASE	1
17		BOLT, M10 x 1.50 x 25	1
18	18B855	ARM, guide (White) (25P951 - 25P953, 25P956, 25P960, 25P961, 25P965 - 25P967)	
	18B857	ARM, guide (White) (25P954, 25P955, 25P957 - 25P959, w5P962 - 25P964, 25P968 - 25P970)	
24		BUSHING, prawl	1
25		PAWL, ratchet	1
26		KIT, roller (includes 25a-25d) (see page 28)	1
26a		BRACKET, roller	1
26b		PIN, roller	4
26c		ROLLER, hose	4
27		SCREW, M6 x 1.0 x 20	4
30		KIT, stop, hose (see page 28)	1

Ref	Part No.	Description	Qty
33	25R783	HOSE, 35 ft., npt (Models 25P951)	1
	25R784	HOSE, 50 ft., npt (Models 25P952)	1
	25R785	HOSE, 65 ft., npt (Models 25P954, 25P955)	1
	25R786	HOSE, 35 ft., npt (Models 25P956)	1
	26C852	HOSE, 50 ft., npt (Models 25P957, 25P958)	1
	24H011	HOSE, 35 ft., npt (Models 25P960)	1
	24H012	HOSE, 50 ft., npt (Models 25P962, 25P963)	1
	24H025	HOSE, 50 ft., npt (Models 25P965)	1
	24J078	HOSE, 35 ft., npt (Models 25P967)	1
	24J079	HOSE, 35 ft., npt (Models 25P968, 25P969)	1
34▲	15W036	LABEL, warning	1

‡ Included in **Swivel Replacement Kits**, page 26.

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

A complete list of all available **Kits** begins on page 26.

Kits

Spool Assembly Kits

Part No.	Model.	Models	Size	Media	Line Size (inch)	Length (feet)
15Y486	25P952 25P953	NPT	10	Air/Water	3/8	50
15Y487	25P957 25P958 25P959	NPT	20	Air/Water	1/2	50
15Y488	25P951	NPT	10	Air/Water	3/8	35
15Y489	25P954 25P955	NPT	20	Air/Water	3/8	65
15Y490	25P956	NPT	10	Air/Water	1/2	35
15Y491	25P960 25P961	NPT	10	Oil	1/2	35
15Y492	25P962 25P963 25P964	NPT	20	Oil	1/2	50
15Y493	25P965 25P966	NPT	10	Grease	1/4	50
15Y494	25P968 25P969 25P970	NPT	20	Grease	3/8	50
15Y495	25P967	NPT	10	Grease	3/8	35

Swivel Replacement Kits

NOTE:

- Swivel Replacement Kits (SRK) include all of the parts necessary to replace the swivel assembly, including the seals, which are provided in the Swivel Seal Kits (SSK).
- If only the swivel seals need replacement, use Swivel Seal Kit (SSK) 26C501 or 24A953. Swivel Seal Kits are not available for the new series High Pressure Reels. For these reels, the entire swivel assembly must be replaced.

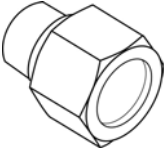
Swivel Repair Kits for High Pressure Reels		
Hose Reel Part No.	Swivel Replacement Kit (SRK)	Seal Replacement Kit (SSK)
25P965 25P966 25P967 25P968 25P969 25P970	26A155	24A953

Label, Fluid Identification: 24A223

ANTI-FREEZE	HYDRAULIC
SAE 10W-40	ATF
SAE 10W-30	DEXRON
SAE 5W-40	SYNTHETIC
SAE 10W	SAE 5W-30
SAE 20W	SAE 5W-40
SAE 30W	AIR

FIG. 22

NPT to BSPT/BSPP Adapter Table

	Part No.	Male End	Female End	Max PSI
	132778	1/4 bspp	1/4 npt	5000
	132781	1/4 bspt		
	132779	3/8 bspp	3/8 npt	5000
	132782	3/8 bspt		
	132780	1/2 bspp	1/2 npt	3500
	132783	1/2 bspt		

Latch Replacement Kit: 15Y503

(Instruction Manual: 406801)

Description	Qty
SCREW, M8 x 1.25 X 20	2
PAWL, ratchet	1
SPRING, ratchet, pawl	1
SCREW, M10 x 1.50 x 25	1
BUSHING	1
NUT, M8 x 1.25	4
SCREW, M8 x 1.50 x 40	1
NUT, M10 x 1.50	1

Enclosure Retrofit Kit: 24C100

(Instruction Manual: 313902)

Description	Qty
ARM, hose guide	1
BASE, reel, enclosed	1
NUT, lock	4
SCREW	4
WASHER, flat	3
BOLT, M10 x 40 lg	1
NUT, hex	1
WASHER, lock, spring	1
NUT, lock	4
SCREW	4
NUT, hex	5
WASHER, lock	1
SCREW, shoulder, #10	1

Hose Inlet Kit

(Instruction Manual 406741)

Description	Qty
1/4 NPT Inlet: 224417	
HOSE, coupled, 24 in.	1
FITTING, UNION, ADAPTER, 90°	1
3/8 Inlet: 218550	
HOSE, coupled, 24 in.	1
FITTING, union, adapter, 90°	1
1/2 NPT Inlet: 218549	
HOSE, coupled, 24 in.	1
FITTING, swivel, union, 90°	1

Mounting Adapter: 22A224

Description	Qty
BASE, adapter	1
SCREWS, 3/8 in. - 16 x 3/4 in.	4

Hose Guide Kits

Roller Bracket Repair: 218591

(Instruction Manual: 406743)

Description	Qty
BRACKET, hose guide	1
PIN, roller	4
ROLLER, hose	4
NUT, lock, #10 - 32	4
SCREW, #10 - 32 x 3/4 in.	4
SCREW, M6 x 1.0 x 20	4

Cabinet Mounting Kit: 15Y478

Description	Qty
BRACKET, hose guide	1
PIN, roller	4
ROLLER, hose	4
PLATE, mounting	1
NUT, lock, #10 - 32	4
SCREW, #10 - 32 x 3/4 in.	4

Hose Reel Stop Kit

(Instruction Manual: 406742)

3/8" ID Hoses: 17N581

Description	Qty
NUT, hex, jam	2
SCREW, machine, phillips	2
STOP, hose, 0.656" ID	2

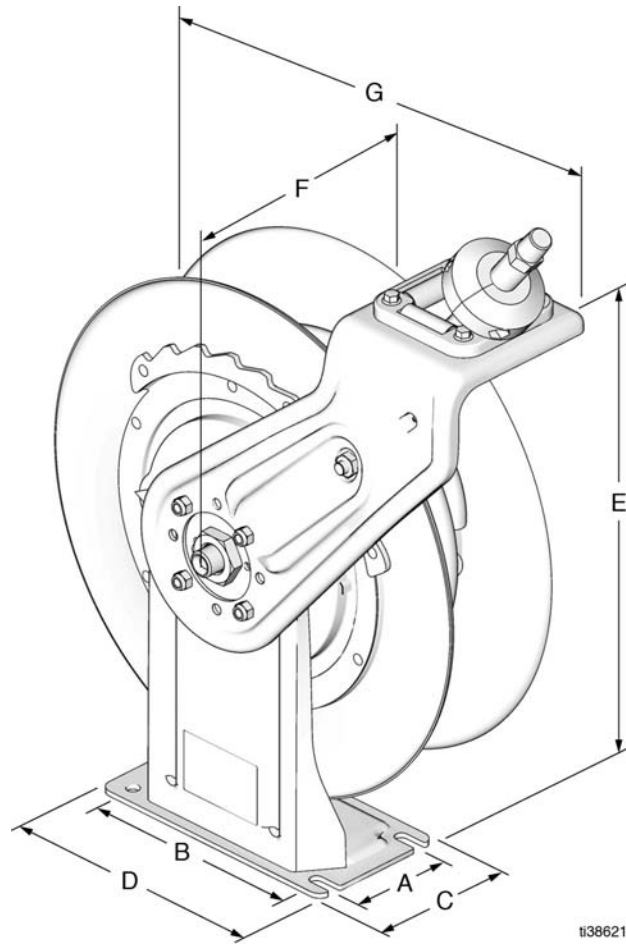
1/2" ID Hoses: 17N582

Description	Qty
NUT, hex, jam	2
SCREW, machine, phillips	2
STOP, hose, 0.782" ID Kit	2

1/4" ID Hoses: 17N583

Description	Qty
NUT, hex, jam	2
SCREW, machine, phillips	2
STOP, hose, 0.53" ID Kit	2

Dimensions



1138621a

Pressure	Size	A	B*	C	D	E†	F	G◆
Low	10	3.5 inches (89 mm)	7.5 inches (191 mm)	4.7 inches (120 mm)	9 inches (229 mm)	19.5 inches (498 mm)	7.0 inches (177 mm)	17.1 inches (435 mm)
Medium	10							
High	10							
Low	20	3.5 inches (89 mm)	7.5 inches (191 mm)	4.7 inches (120 mm)	9 inches (229 mm)	21.8 inches (554 mm)	7.0 inches (177 mm)	19.2 inches (487 mm)
Medium	20							
High	20							

* Measurement taken from center to center of bolt slot/hole.

† Measurement taken from base to top of bolts.

◆ Measurement taken from edge of spool to front of arm.

Mounting Channel Dimensions

(Side dimension for all kits, page 36)

1 Reel Base - Included in Kits 24A934/203521

2 Reel Base - Included in Kits 24A935/203522

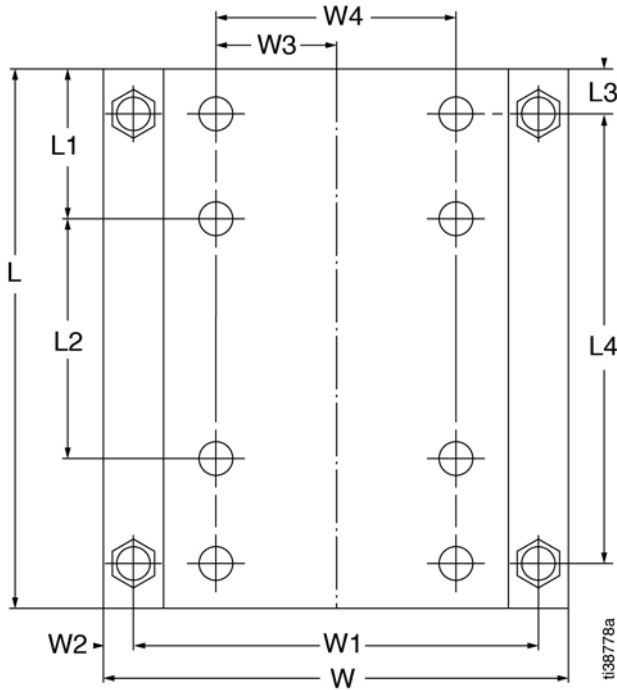


FIG. 23:

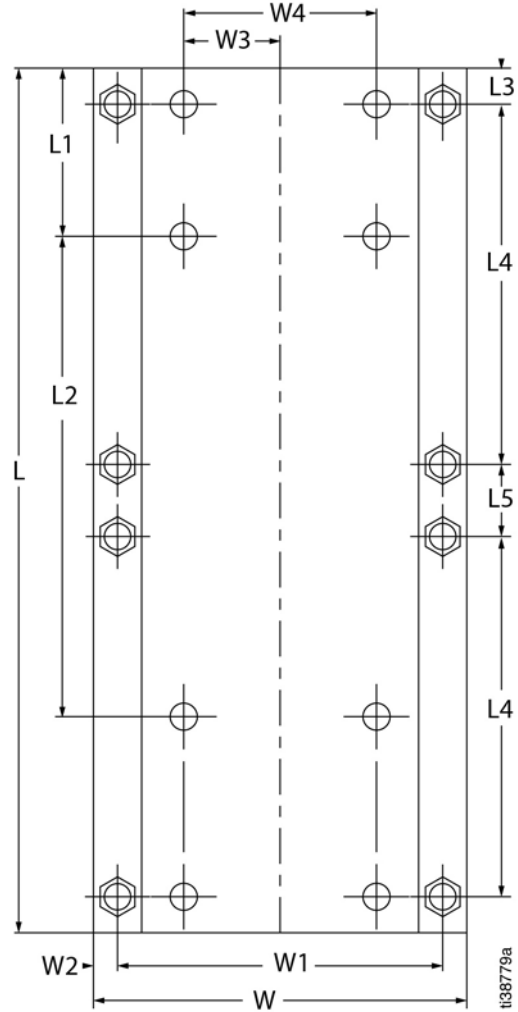


FIG. 24

MODEL	L (in./mm)	L1 (in./mm)	L2 (in./mm)	L3 (in./mm)	L4 (in./mm)	L5 (in./mm)
1 Reel Base	9.0 / 228.6	2.5 / 63.5	4.0 / 101.6	0.75 / 19.1	7.5 / 190.5	--
2 Reel Base	18.0 / 457.2	3.5 / 88.9	10.0 / 254.0	0.75 / 19.1	7.5 / 190.5	1.5 / 38.1

MODEL	W (in./mm)	W1 (in./mm)	W2 (in./mm)	W3 (in./mm)	W4 (in./mm)
1 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6
2 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6

3 Reel Base - Included in Kits 24A936/203523

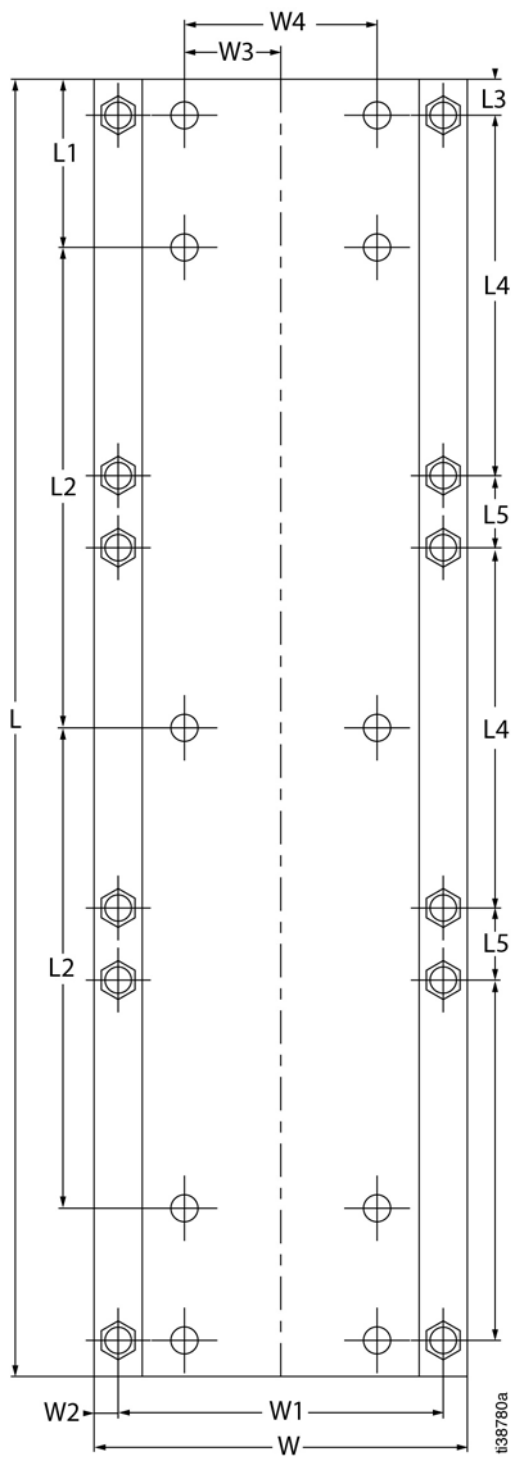


FIG. 25:

4 Reel Base - Included in Kits 24A937/203524

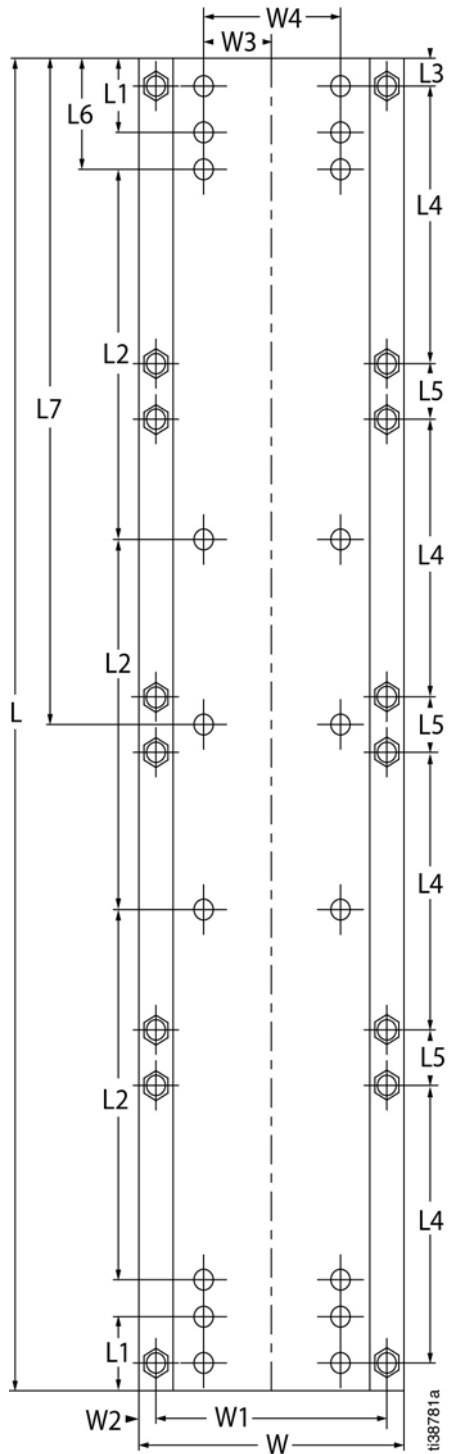


FIG. 26

**Dimensions - 3 Reel Base and 4 Reel Base
(see FIG. 25 and FIG. 26, page 31)**

MODEL	L (in./mm)	L1 (in./mm)	L2 (in./mm)	L3 (in./mm)	L4 (in./mm)	L5 (in./mm)	L6 (in./mm)	L7 (in./mm)
3 Reel Base	27.0 / 685.8	3.5 / 88.9	10.0 / 254.0	0.75 / 19.1	7.5 / 190.5	10.0 / 254.0	--	--
4 Reel Base	36.0 / 914.4	2.0 / 50.8	10.0 / 254.0	0.75 / 19.1	7.5 / 190.5	1.5 / 38.1	3.0 / 76.2	18.0 / 457.2

MODEL	W (in./mm)	W1 (in./mm)	W2 (in./mm)	W3 (in./mm)	W4 (in./mm)
3 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6
4 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6

5 Reel Base - Included in Kits 24A938/203525

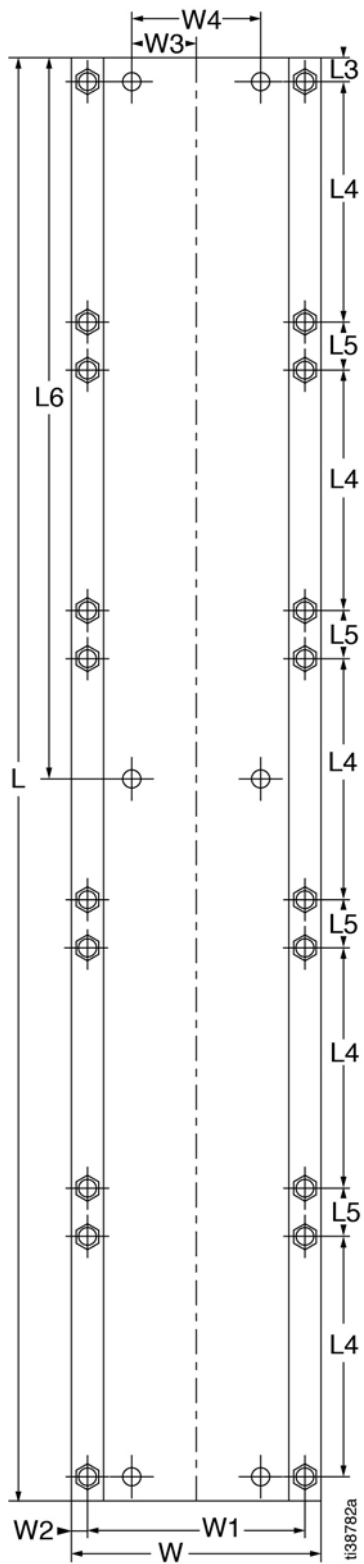


FIG. 27:

6 Reel Base - Included in Kits 24A939/203526

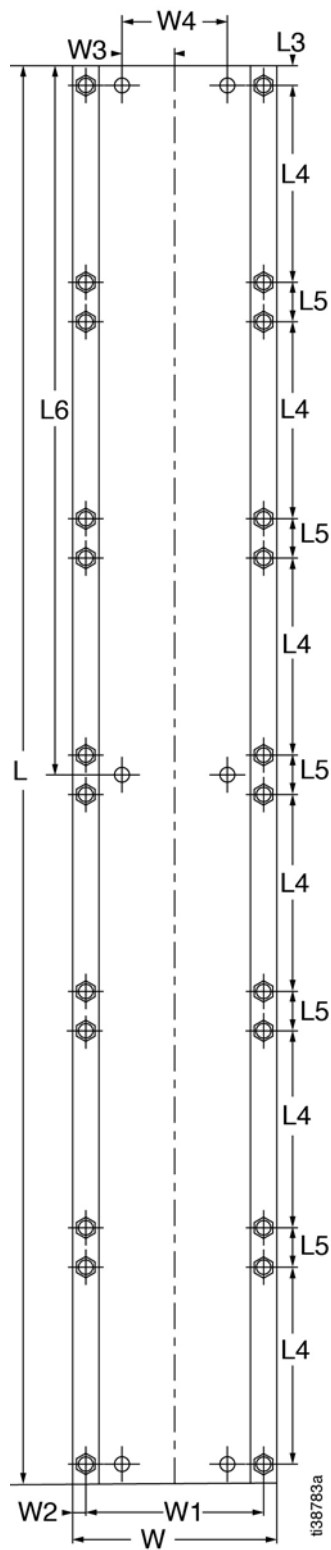


FIG. 28

**Dimensions - 5 Reel Base and 6 Reel Base
(see FIG. 27 and FIG. 28, page 33)**

MODEL	L (in./mm)	L1 (in./mm)	L2 (in./mm)	L3 (in./mm)	L4 (in./mm)	L5 (in./mm)	L6 (in./mm)
5 Reel Base	45.0 / 1143.0	--	--	0.75 / 19.1	7.5 / 190.5	1.5 / 38.1	22.5 / 571.5
6 Reel Base	54.0 / 1371.6	--	---	0.75 / 19.1	7.5 / 190.5	1.5 / 38.1	27.0 / 685.8

MODEL	W (in./mm)	W1 (in./mm)	W2 (in./mm)	W3 (in./mm)	W4 (in./mm)
5 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6
6 Reel Base	7.75 / 196.9	6.75 / 171.5	0.50 / 12.7	2.0 / 50.8	4.0 / 101.6

1 Reel Channel Base - Included in Kits 24A219

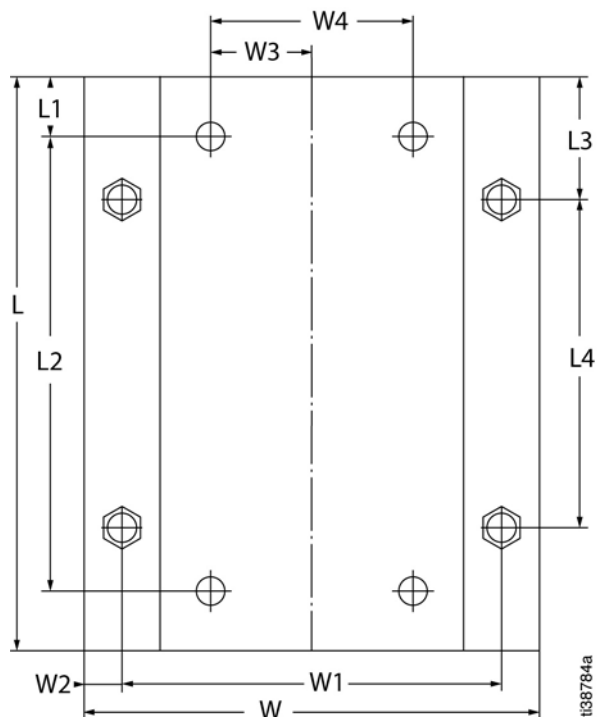


FIG. 29:

2 Reel Channel Base - Included in Kit 24A220

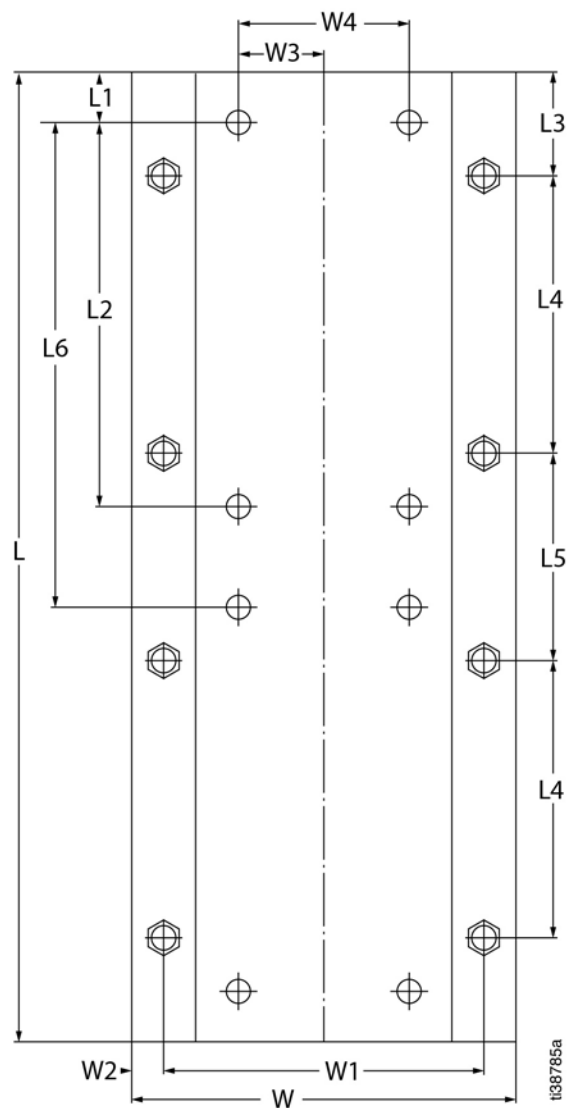


FIG. 30

MODEL	L (in./mm)	L1 (in./mm)	L2 (in./mm)	L3 (in./mm)	L4 (in./mm)	L5 (in./mm)	L6 (in./mm)
1 Reel	11.36 / 288.5	1.18 / 30.0	9.0 / 228.6	2.43 / 61.7	6.5 / 165.1	--	--
2 Reel	22.72 / 577.1	1.18 / 30.0	9.0 / 228.6	2.43 / 61.7	6.5 / 165.1	4.86 / 123.4	11.36 / 288.5

MODEL	W (in./mm)	W1 (in./mm)	W2 (in./mm)	W3 (in./mm)	W4 (in./mm)
1 Reel	9.0 / 228.6	7.5 / 190.5	0.75 / 19.1	2.0 / 50.8	4.0 / 101.6
2 Reel	9.0 / 228.6	7.5 / 190.5	0.75 / 19.1	2.0 / 50.8	4.0 / 101.6

Side Dimension (All Models)



Technical Specifications

	US	Metric
Low Pressure Hose Reels		
Maximum fluid working pressure (Air/Water, all hose diameters)	300 psi	2.07 MPa, 20.7 bar
Inlet size	1/2 npsm male	
Outlet size	1/2 or 3/8 npt male	
Operating temperature range	-20° – 190°F	-29° – 88°C
Wetted parts - Bare Hose Reel only	Zinc plated steel, anodized aluminum, Nitrile rubber	
Medium Pressure Hose Reels		
Maximum fluid working pressure (Oil)	2000 psi	13.8 MPa, 138 bar
Inlet size	1/2 npsm male; 1/2 bspp male	
Outlet size	1/2 or 3/8 npt male	
Operating temperature range	-20° – 190°F	-29° – 88°C
Wetted parts - Bare Hose Reel only	Zinc plated steel, anodized aluminum, Nitrile rubber	
High Pressure Hose Reels		
Maximum fluid working pressure		
Grease, 1/4 in. diameter hose	5000 psi	34.5 MPa, 345 bar
Grease, 3/8 in. diameter hose	4800 psi	33.1 MPa, 331 bar
Inlet size	3/8 npsm male	
Outlet size	1/4 npt male	
Operating temperature range	-40° – 200°F	-40° – 93°C
Wetted parts - Bare Hose Reel only	Zinc plated steel, polyurethane, steel	
Noise (dBa)		
Maximum sound pressure*		80 dB(A)
Maximum sound power**		87 dB(A)
*All readings taken at assumed retraction rate, from assumed operator position.		
**Sound power measured per ISO-9614-2.		
Notes		
All trademarks or registered trademarks are the property of their respective owners.		

California Proposition 65

CALIFORNIA RESIDENTS

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

Graco 7-Year Hose Reel 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 from the date of sale as defined in the table below, repair or replace equipment covered by this warranty and 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.

Graco 7-Year Hose Reel Extended Warranty	
Component	Warranty Period
Structural Components	7 years
Power Spring	3 years
Wear Parts - including but not limited to hose, seals, swivel seats and roller guides	1 year
Bare reels - all components	1 year

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 one (1) year past the warranty period or two (2) years for all other parts.

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

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

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Phone: 612-623-6928 or **Toll Free:** 1-800-533-9655, **Fax:** 612-378-3590

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Original instructions. This manual contains English. MM 3A7926

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