

Instructions – Parts List



FOR AIR AND FLUID

306864 rev. H

Heavy-Duty Dual Hose Reel

Model 206941, Series B

3000 psi (21 MPa, 207 bar) Maximum Working Pressure

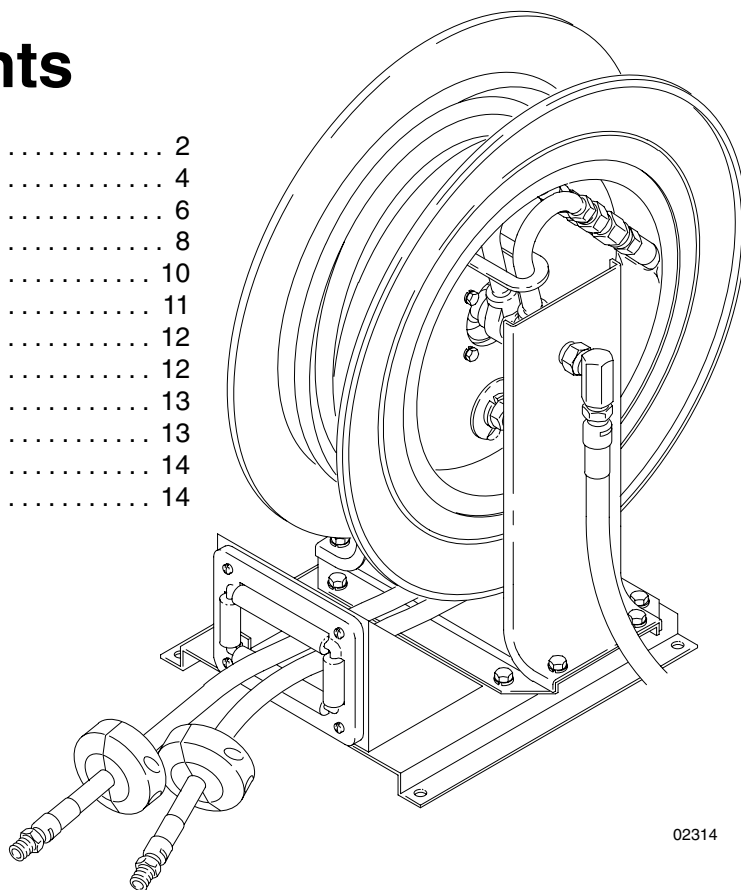


Important Safety instructions

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

Table of Contents

Warnings	2
Installation	4
Operation	6
Service	8
Parts Drawing	10
Parts List	11
Accessories	12
Technical Data	12
Dimensional Drawing	13
Mounting Hole Layout	13
Graco Standard Warranty	14
Graco Informationr	14



02314

PROVEN QUALITY. LEADING TECHNOLOGY.

Terms

Be sure you read and understand each of these terms before you read the rest of the manual:

FLEXIBLE EXTENSION

Flexible rubber hose extending from the dispensing valve to which a grease fitting coupler is attached

RIGID EXTENSION

Rigid tube extending from the dispensing valve to which a grease fitting coupler is attached

GREASE FITTING COUPLER

Device at the end of the flexible or rigid extension that connects to the parts to be lubricated

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



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.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated component in your system. This equipment has a **3000 psi (21 MPa, 207 bar) maximum working pressure**.
- Use fluids and solvents which 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.
- Hearing protection is recommended when using this equipment.
- Read and follow the fluid and solvent manufacturer's literature regarding the use of protective eyewear, gloves, clothing, respirator and other equipment.
- Handle hoses carefully. Do not pull on hoses to move equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 82°C (180°F) or below -40°C (-40°F).
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

! WARNING



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.



SKIN INJECTION HAZARD

Spray 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 just a 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 grease fitting coupler.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Use only extensions and grease fitting couplers which are designed for use with your dispensing valve.
- Do not use a low pressure flexible nozzle with this equipment.
- Follow the **Pressure Relief Procedure** on page 6 if the grease fitting coupler 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 high pressure couplings; you must replace the entire hose.
- Fluid hoses must have spring guards on both ends, to help protect them from rupture caused by kinks or bends near the couplings.

Installation

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

The reels are shipped assembled, with the spring tension relieved to allow for proper positioning and safe installation of the hose and hose reel.

Mounting

This hose reel is intended for a floor mounting, such as on a truck bed.

1. Mark and drill four, 7/16 in. (11 mm) holes using the **Dimensional Drawing** on page 13.
2. Bolt the reel with 3/8 in. (9 mm) screws.

CAUTION

Be sure the mounting surface is strong enough to support the reels, the weight of the fluids, and the stress caused by hard pulls on the service hoses. A dry reel weighs about 80 lb (36 kg).

Hose Connections

1. Connect the supply lines to the reel's inlet swivels. Swivel (41) is 3/8 npt, and swivel (37) is 1/2 npt.
2. Connect a service hose to each outlet swivel. Swivel (42) has a 3/8 npt(f) outlet, and swivel (55) has a 3/8 npt(f) outlet. Nylon or wire-braid covered hose up to 50 ft (15 m) at 1/2 in. (13 mm) ID, or 65 ft (20 m) at 1/4 in. (6 mm) ID can be used.

Adjusting the Spring Tension

1. Wrap the hose loosely around the flange.
2. Extend both hoses fully and latch the reel.
3. Wrap one or two loops of each hose around the reel, then retract the hose again.
4. Check the spring tension; the hoses must pull out fully and retract fully. Wrap one more loop of each hose; extend the hoses and latch the reel. Do this as many times as necessary until the spring has the desired tension.

CAUTION

Do not put so many loops onto the reel that the spring winds up tightly before the hose is fully extended. A spring that is wound too tightly stops rotating before the hose is fully extended. This puts excessive strain on the hose and reel spring, and could damage the reel.

To decrease tension, remove two or three loops of hose from the reel.

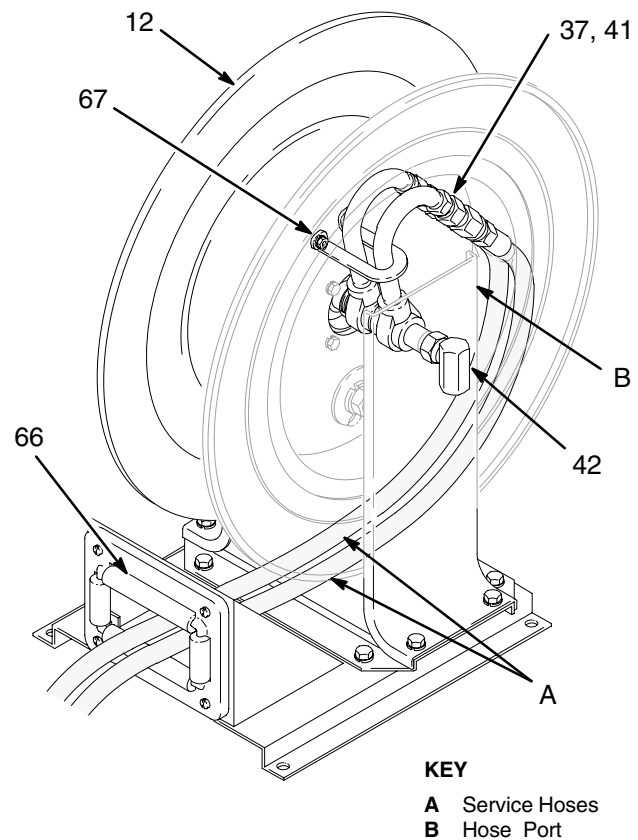


Fig. 1

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Installation

Installing the Ball Stop and Dispensing Valve

1. Position a ball stop (C) on each hose so the hose extends far enough for all operators to reach it.
2. Install a dispensing valve on the end of each hose. See Fig. 2.

NOTE: Do not use thread sealer on the swivels. Thread sealer prevents the swivels from moving freely.

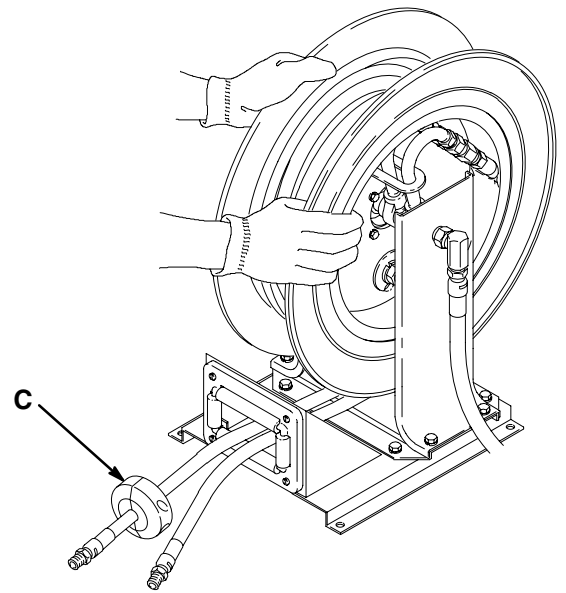


Fig. 2

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Operation

Pressure Relief Procedure

WARNING



INJECTION HAZARD

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

- Are instructed to relieve the pressure
- Stop dispensing
- Check or service any of the system equipment
- Install or clean dispensing devices

1. Close the supply pump's air regulator.
2. Close the supply pump's bleed-type master air valve (required in your system).
3. Open the dispensing valve until pressure is fully relieved.

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

Extending and Retracting the Hoses

1. Turn on the fluid and/or air supply to the hoses.
2. To use the hose, pull out the service hoses, and let them retract slowly until the reel latches. If the reel does not latch, pull the hoses out, and retract them again.
3. To fully retract the hoses, pull on the hoses to release the reel latch. Without letting go, allow the hoses to retract. When most of the hoses are retracted, slow down the reel so it latches before it pulls the hoses all the way in.

NOTE: To prevent the reel from pulling the hoses all the way in, you can install hose stop kits. See **Accessories** on page 12.

WARNING

PRESSURIZED EQUIPMENT HAZARD

To reduce the risk of serious injury, including fluid injection or injury from a reel spinning out of control, always follow these precautions:

- Never exceed the maximum working pressure of the lowest rated component in your system. The hose reel has a Maximum Working Pressure of 3000 psi (21 MPa, 207 bar). However, if your hose is rated for only 1000 psi (6.9 MPa, 69 bar), never supply fluid to the hose at a pressure higher than 1000 psi.
- Never allow the reel to "spin free." Doing so causes the hose to spin out of control, which could cause serious injury if you are hit by the hose.
- Always wear heavy gloves when unwinding the spring tension to protect your hands from cuts on the hose reel.

Operation

Increasing Spring Tension

1. Pull out the hose fully, and engage the latch.
2. Remove the dispensing valve and ball stop.
3. Pull the hose back through the hose rollers.
4. Wrap a loop of hose onto the reel flange.
5. Follow **Adjusting the Spring Tension** on page 4.

Replacing a Service Hose

1. Shut off the air and/or fluid supply.
2. Open the dispensing valve to relieve pressure from the hose.
3. Remove the dispensing valve and ball stop.
4. Hold the reel with **gloved** hands, and let it slide *slowly* through your hands until the reel stops. When the reel stops, the spring tension has been released and the hose can be unwrapped from the reel.
5. Install and adjust the hose as instructed in **Adjusting the Spring Tension**, page 4.

Lubrication

Apply one or two drops of light lubricating oil to the ends of the roller pins (64) every six months.

When installing a new shaft (69), be sure to grease the shaft and fill the hub cavity with high-grade, lithium-base, multi-purpose grease.

Service

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

If Swivel Elbow Leaks (See Fig. 3)

1. **Relieve the pressure.**
2. Pull the hose out fully, and engage the latch.
3. Unscrew the 90° swivel (42) from the shaft (69). Remove the screws and lockwashers (27, 18) from the support bracket (11). Remove the nuts (19), lockwashers (15) and clamp (67).
4. Remove retaining ring (31). Slide both swivel elbow assemblies off the shaft. Remove both backup washers (60) and o-rings (59) from each elbow (68).
5. Clean and inspect the parts. Replace worn or damaged parts.
6. Lubricate the new parts, and install them in the elbows.
7. Reassemble the reel.

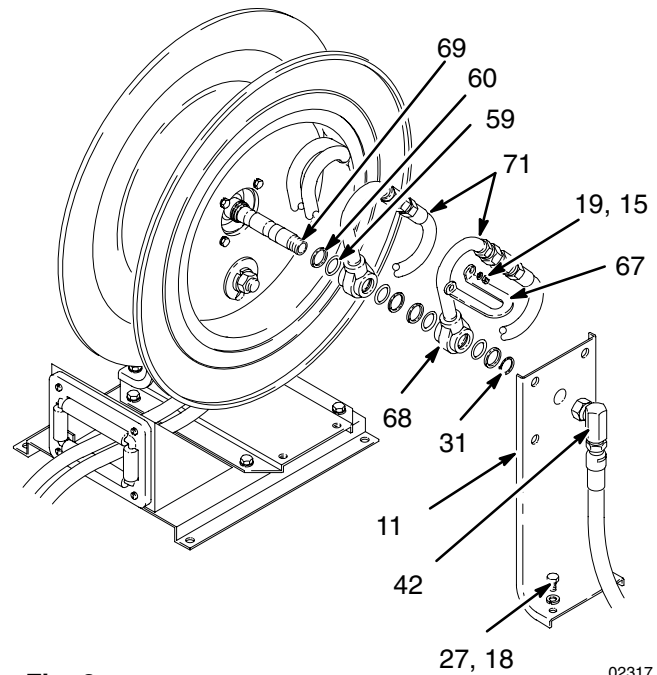


Fig. 3

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Service

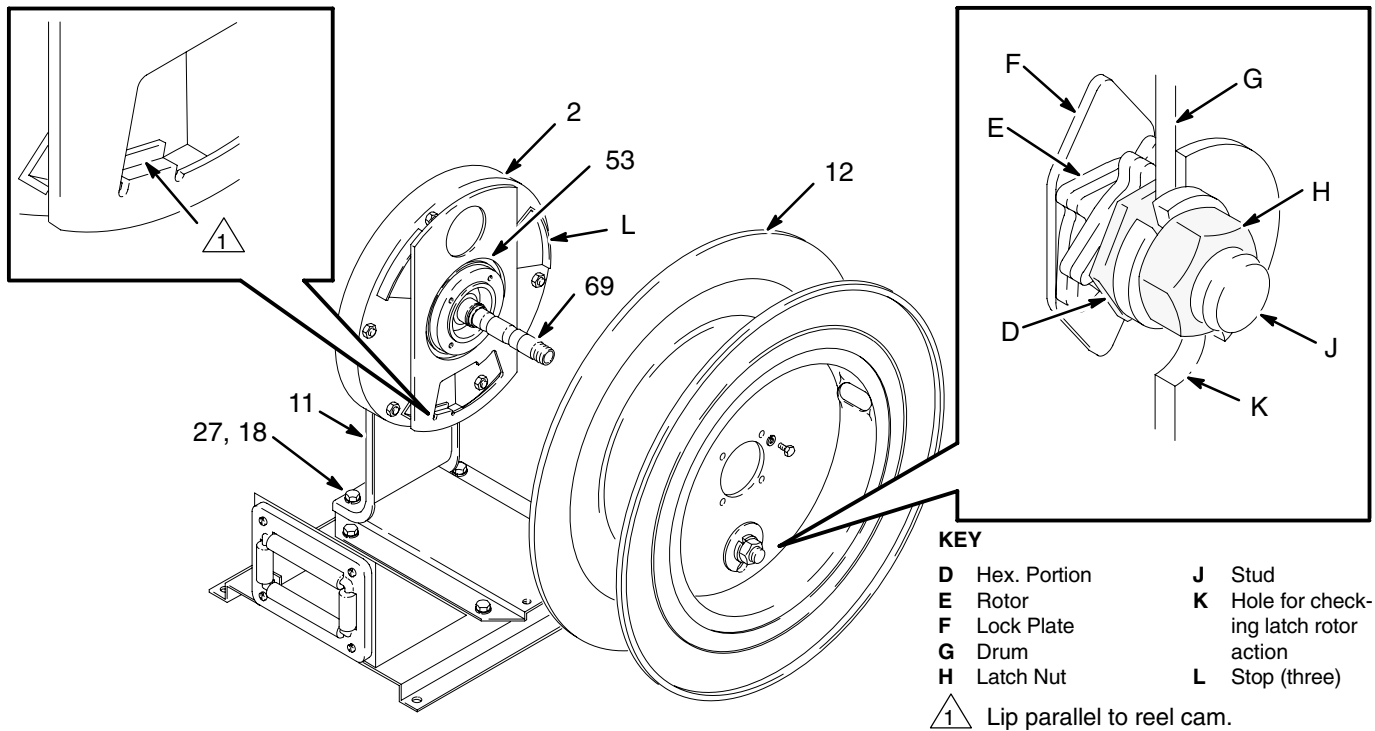


Fig. 4

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If Reel Latch Fails (See Fig. 4)

1. Relieve the pressure.

! WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

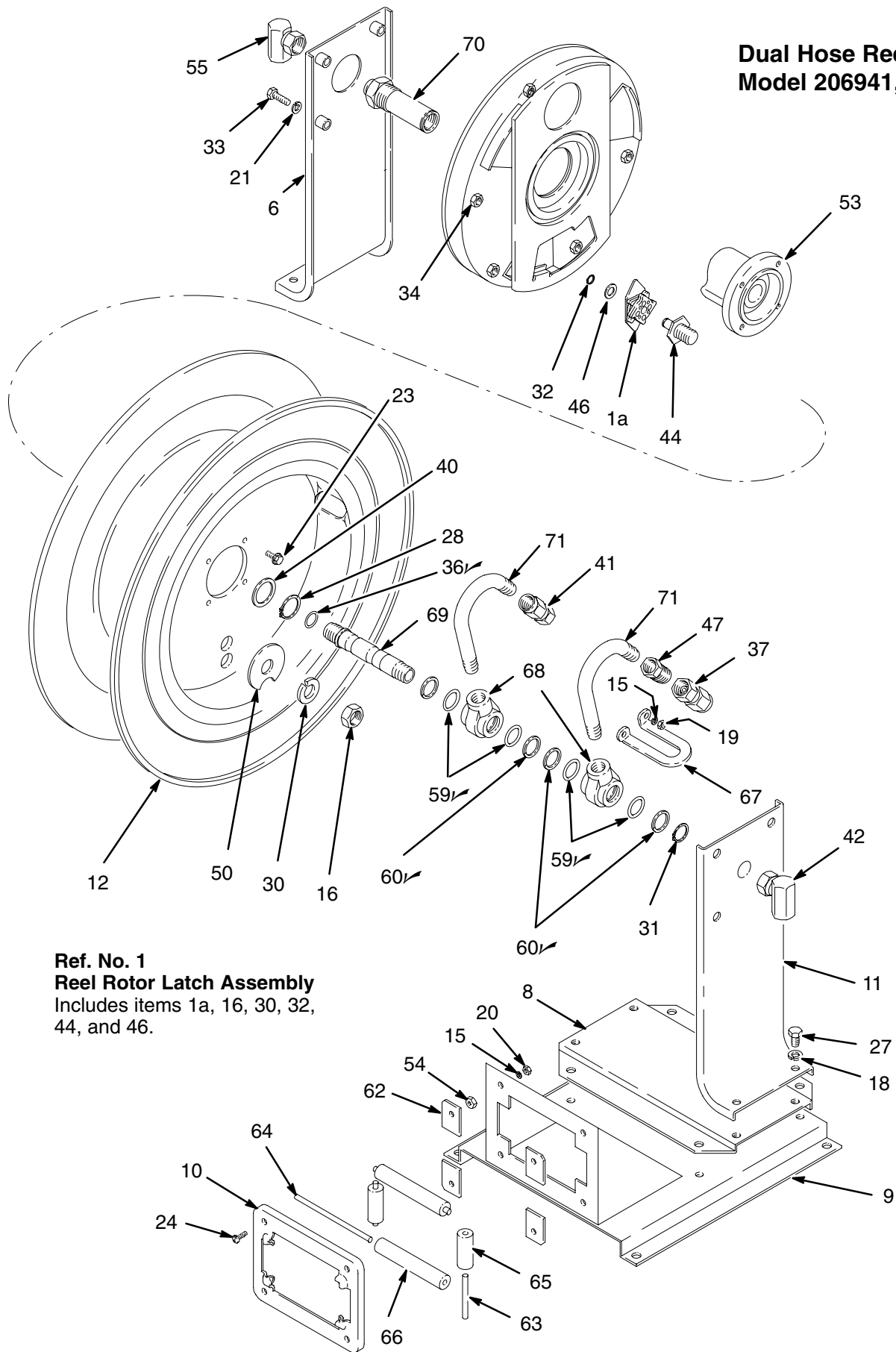
2. Unscrew the 90° swivel (42, see **Parts Drawing** on page 10) from the shaft (69).
3. Remove the screws and lockwashers (27, 18) and support bracket (11).
4. Remove the dispensing valves and ball stops.
5. Hold the reel with **gloved** hands, unlatch the reel, and let it slide slowly through your hands until the spring tension has been released. See Fig. 2.

Removing the Reel Spool (See **Parts Drawing** on page 10)

1. Unscrew the supply hoses from the swivel elbows (41 & 37).
2. Remove the nuts and lockwashers (19, 15) and clamp (67).
3. Remove the retaining ring, and pull the swivel elbows (68) off the shaft.
4. Pull the reel spool (12) off the shaft. See Fig. 3.
5. If the latch nut (16) is loose, hold the hex portion of the stud (44, located inside the spool) with a wrench, and turn the nut tightly onto the stud.
6. If the lip of the offset trip on the reel cam (2) is bent, bend it back until it is parallel to the reel cam. See the detail in Fig. 4.
7. Place the reel spool on the shaft. Look into the hole near the latch nut (16) while rotating the spool, and ensure that the offset lip is making contact with the tooth of the latch rotor (1).
8. Reassemble the remaining parts. Attach the supply hoses, and follow **Adjusting the Spring Tension** on page 4.

Parts Drawing

Dual Hose Reel Model 206941, Series B



Parts List

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	202599	REEL ROTOR LATCH ASSY Includes items 1a, 16, 30, 32, 44, 46, 50	1	42	157416	UNION, 90° swivel; 1/2 npt(fbe)	1
1a	202465	. LATCH ROTOR ASSY	1	44	157504	STUD, reel latch	1
6	206712	L.H. SUPPORT BRACKET ASSY	1	46	158019	SHIM, latch rotor; 0.0299" thick	3
8	206980	DUAL REEL BASE ASSY	1	47	158212	BUSHING, hex; 1/2" to 3/8" npt	1
9	206981	ROLLER BRACKET CHANNEL ASSY	1	50	159550	WASHER, special wrought; reel latch	1
10	206982	ROLLER FRAME ASSY	1	53	159553	HUB, reel	1
11	206983	R.H. SUPPORT BRACKET ASSY Includes item 72	1	54	159780	NUT, spacer; hose roller	4
12	206984	DUAL HOSE REEL SPOOL ASSY	1	55	159801	UNION, 90° swivel; 3/8" (f) x 1/2 npt(f)	1
15	100020	LOCKWASHER; spring; No. 10	6	59✓	166666	SEAL, o-ring; nitrile rubber	4
16	100071	NUT, hex jam; 3/4–16 thd size; latch	1	60✓	166667	BACKUP, PTFE; swivel o-ring seal	4
18	100133	LOCKWASHER, spring; 3/8"	8	62	167029	RETAINER, roller pin	4
19	100166	NUT, hex; No. 10–32 thd size	2	63	167030	PIN, short roller	2
20	100179	NUT, hex; No. 10–24 thd size	4	64	167031	PIN, long roller	2
21	100214	LOCKWASHER, spring; 5/16"	4	65	167032	ROLLER, short	2
23	113161	SCREW, hex, flanged 1/4–20 x 1/2" long	4	66	167033	ROLLER, long	2
24	102790	SCREW	4	67	167034	CLAMP, tube elbow	1
27	100575	CAPSCREW, hex; 3/8–16 x 5/8" long	8	68	167035	ELBOW, swivel; dual hose reel	2
28	100989	RING, retaining; external; 1–1/8"	1	69	167036	SHAFT, swivel; dual hose reel	1
30	101015	LOCKWASHER, spring; 3/4"	1	70	167037	SHAFT, dual hose reel	1
31	101076	RING, retaining; external; 7/8"	1	71	167661	ELBOW, tube; 3/8 npt(m) thd size	2
32	101222	RING, retaining; external; 7/16"	1	72▲	187034	WARNING LABEL	1
33	100450	SCREW	1	✓ Keep these spare parts on hand to reduce down time.			
34	101448	NUT, jam; 3/8–24 thd size	12				
36✓	155500	PACKING, nitrile rubber o-ring	1				
37	155865	UNION, str. swivel; 1/2 npt(fbe)	1				
40	156024	SHIM, reel hub; 0.0239" thick	1				
41	156173	UNION, str. swivel; 3/8 npt(fbe)	1				

Accessories

Use Only Genuine Graco Parts and Accessories

Hose Stop Kits

Includes hose stop, screws and nuts.

218340 For 1/4 to 7/16 in. (6 to 11 mm) diameter hoses.

218341 For 1/2 to 15/16 in. (12 to 23 mm) diameter hoses.

See a complete selection of air fittings and dispensing valves in instruction manuals 306390 and 306391.

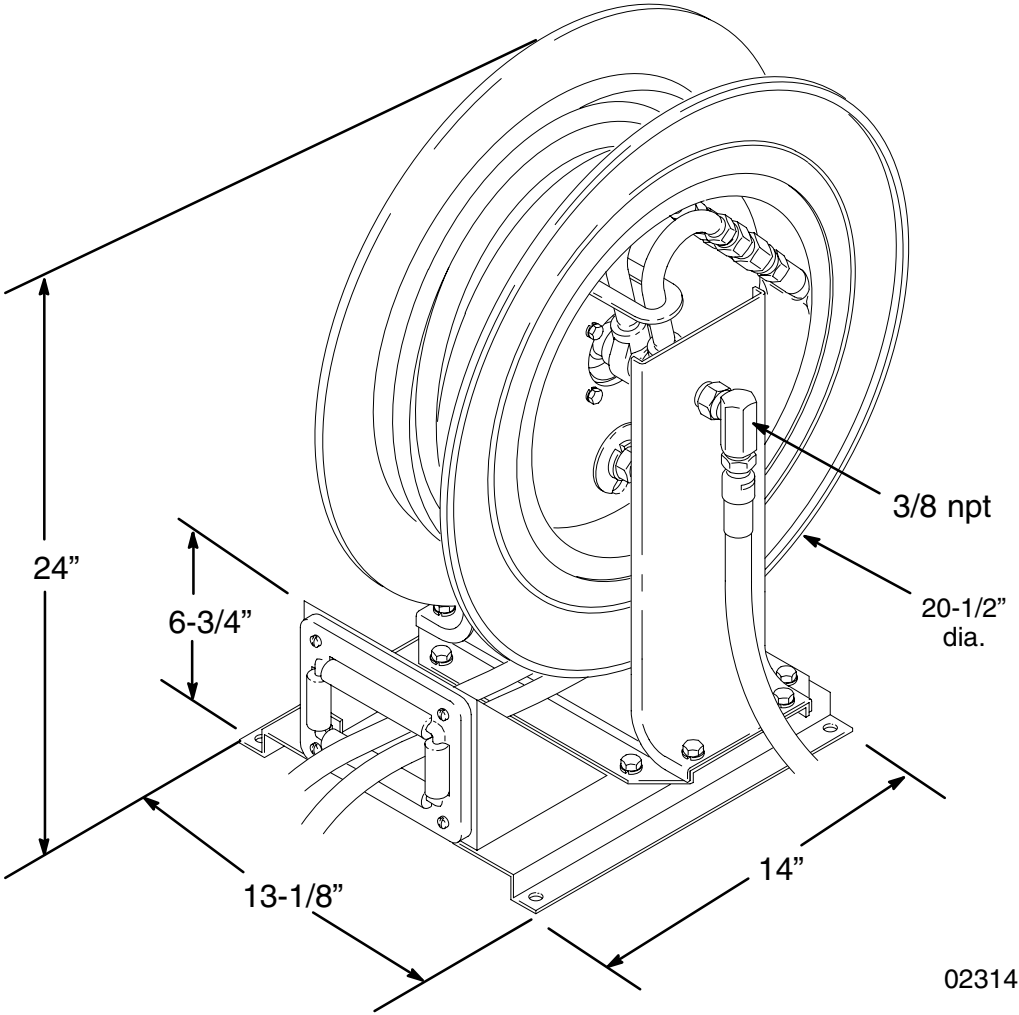
Technical Data

Maximum working pressure 3000 psi (21 MPa, 207 bar)

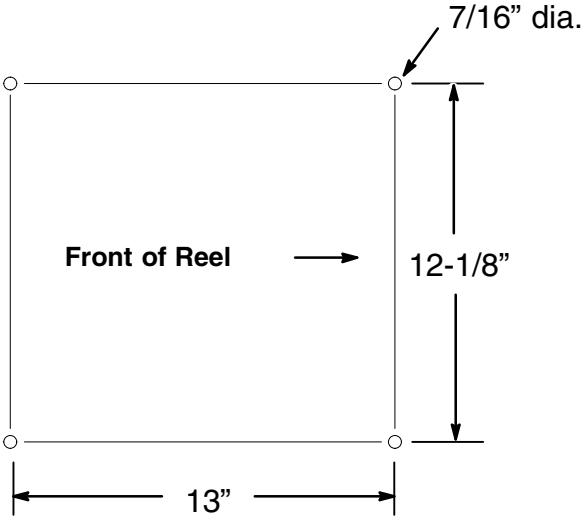
Inlet and outlet unions One 1/2 in. npt(f) and one 3/8 in. npt(f)

Wetted parts carbon steel, brass, PTFE, nitrile rubber

Dimensional Drawing



Mounting Hole Layout



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 twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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

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

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

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

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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

FOR GRACO CANADA CUSTOMERS

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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 reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

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