

LD Series Enclosed Hose Reels

313938K
EN

For dispensing air, water, antifreeze, windshield washer solvent, transmission fluid, oil and grease. Not recommended for outdoor use.

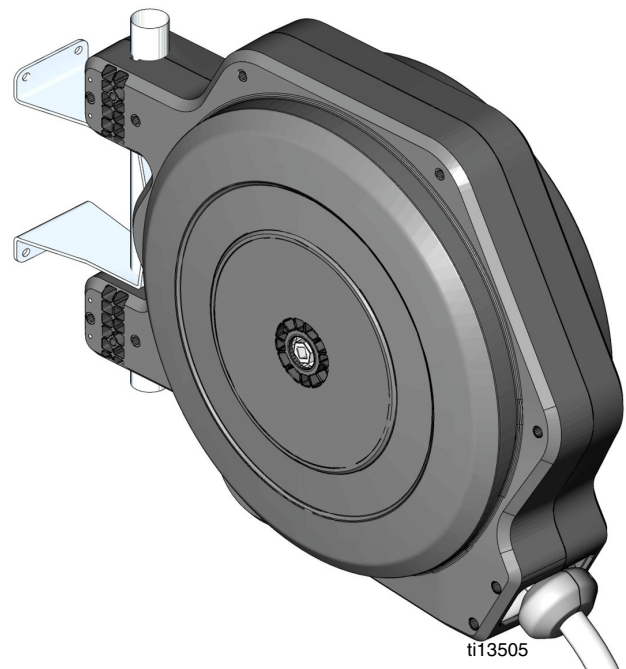
Not approved for use in European explosive atmosphere locations.

Part Numbers and Models: Pages 4-6








Important Safety Instructions

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



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 symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

 WARNING	
	<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. • 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. • Ground all equipment in the work area. • Use only grounded hoses. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.
	<p>EQUIPMENT MISUSE HAZARD</p> <p>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 Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. • Do not alter or modify equipment. • 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>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from dispense valve, 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 dispense valve at anyone or at any part of the body. • Do not put your hand over the end of the dispense nozzle. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
	<p>PRESSURIZED ALUMINUM PARTS HAZARD</p> <p>Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>

 **WARNING****MOVING PARTS HAZARD**

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

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** in this manual. Disconnect power or air supply.

**PRESSURIZED EQUIPMENT HAZARD**

Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.

- Follow **Pressure Relief Procedure** in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.

Models

*The last character of each Model No. indicates the hose reel color. For example: D = black. On the table below this last character is represented by the generic # symbol. For example, to show the complete model number for a black HEL13# model hose reel, the # symbol in the table is replaced with "D". The complete model number is: HEL13D.

Model No.*	Application	Hose Size	Maximum Pressure			Inlet Kit❖
			PSI	Bar	Mpa	
HEL13#	Air Only	6 mm x 10 m	250	17.2	1.7	24C437
HEL15#	Air Only	6 mm x 15 m	250	17.2	1.7	24C437
HEL23#	Air / Water	10 mm x 10 m	250	17.2	1.7	24C438
HEL25#	Air / Water	10 mm x 15 m	250	17.2	1.7	24C438
HEL33#	Air / Water	12 mm x 10 m	250	17.2	1.7	24C438
HEL34#	Air / Water	12 mm x 14 m	250	17.2	1.7	24C438
HEM23#	Oil	10 mm x 10 m	1800	124.0	12.4	24C440
HEM33#	Oil	12 mm x 10 m	1800	124.0	12.4	24C441
HEH13#	Grease	6 mm x 10 m	5000	345	34.5	24C442
24M275* 24M276*	Oil	12 mm x 10 m	750	52.0	5.2	24C441

❖ Must be ordered separately. See page 23 for additional information.

* Color choice option is not available for these models.

Replacement Hose Reels

NOTE: The replacement hose reel models listed in the following table are also used in the hose reel packages listed on page 5. Refer to this table for the related Application, Hose Size and Maximum Pressure data for both replacement hose reels and the related hose reel packages.

Additional Technical Data is provided on pages 24 and 25.

BSPT Model No.	BSPP Model No.	NPT Model No.	Application	Hose Size	Maximum Pressure		
					PSI	Bar	Mpa
24F789	24J126	24H655	Air Only	6 mm x 10 m	250	17.2	1.7
24F790	24J127	24H656	Air Only	6 mm x 15 m	250	17.2	1.7
24F791	24J128	24H657	Air / Water	10 mm x 10 m	250	17.2	1.7
24F792	24J129	24H658	Air / Water	10 mm x 15 m	250	17.2	1.7
24F793	24J130	24H659	Air / Water	12 mm x 10 m	250	17.2	1.7
24F794	24J131	24H660	Air / Water	12 mm x 14 m	250	17.2	1.7
24F795	24J132	24H661	Oil	10 mm x 10 m	1800	124.0	12.4
24F796	24J133	24H662	Oil	12 mm x 10 m	1800	124.0	12.4
24F797	24J134	24H663	Grease	6 mm x 10 m	5000	345	34.5

LD Enclosed Hose Reel Packages Model Numbers

Each hose reel package includes a replacement hose reel, mounting bracket and inlet kit. Application, hose size and maximum pressure rating details for each replacement hose reel are provided on the Replacement Hose Reels table on page 4. This information also pertains to the packages that include the replacement hose reel as listed on the tables below. See page 23 for Bracket and Inlet Kit descriptions.

Wall Mounted Hose Reel: Includes Wall Mount Bracket Kit 24G866

Model No.	Replacement Hose Reel	Inlet Kit★
NPT		
24F735	24H655	24C443
24F736	24H656	24C443
24F737	24H657	24C444
24F738	24H658	24C444
24F739	24H659	24C444
24F740	24H660	24C444
24F741	24H661	24C537
24F742	24H662	24C538
24F743	24H663	24C539
BSPT		
24F744	24F789	24C437
24F745	24F790	24C437
24F746	24F791	24C438
24F747	24F792	24C438
24F748	24F793	24C438
24F749	24F794	24C438
24F750	24F795	24C440
24F751	24F796	24C441
24F752	24F797	24C442
BSPP		
24J258	24J126	24J253
24J259	24J127	24J253
24J260	24J128	24J254
24J261	24J129	24J254
24J262	24J130	24J254
24J263	24J131	24J254
24J264	24J132	24J255
24J265	24J133	24J256
24J266	24J134	24J257

★Included in package.

Hose Reel with Fixed Bracket: Includes Fixed Mount Bracket Kit 24G865

Model No.	Replacement Hose Reel	Inlet Kit★
NPT		
24F753	24H655	24C443
24F754	24H656	24C443
24F755	24H657	24C444
24F756	24H658	24C444
24F757	24H659	24C444
24F758	24H660	24C444
24F759	24H661	24C537
24F760	24H662	24C538
24F761	24H663	24C539
BSPT		
24F762	24F789	24C437
24F763	24F790	24C437
24F764	24F791	24C438
24F765	24F792	24C438
24F766	24F793	24C438
24F767	24F794	24C438
24F768	24F795	24C440
24F769	24F796	24C441
24F770	24F797	24C442
BSPP		
24J267	24J126	24J253
24J268	24J127	24J253
24J269	24J128	24J254
24J270	24J129	24J254
24J271	24J130	24J254
24J272	24J131	24J254
24J273	24J132	24J255
24J274	24J133	24J256
24J275	24J134	24J257

★Included in package.

**Hose Reel with Swivel Bracket and Inlet Kit:
Includes Swivel Bracket Kit 24C772**

Model No.	Replacement Hose Reel	Inlet Kit★
NPT		
24F771	24H655	24C443
24F772	24H656	24C443
24F773	24H657	24C444
24F774	24H658	24C444
24F775	24H659	24C444
24F776	24H660	24C444
24F777	24H661	24C537
24F778	24H662	24C538
24F779	24H663	24C539
BSPT		
24F780	24F789	24C437
24F781	24F790	24C437
24F782	24F791	24C438
24F783	24F792	24C438
24F784	24F793	24C438
24F785	24F794	24C438
24F786	24F795	24C440
24F787	24F796	24C441
24F788	24F797	24C442
BSPP		
24J276	24J126	24J253
24J277	24J127	24J253
24J278	24J128	24J254
24J279	24J129	24J254
24J280	24J130	24J254
24J281	24J131	24J254
24J282	24J132	24J255
24J283	24J133	24J256
24J284	24J134	24J257

★Included in package.

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 electric shock 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 code.
- 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 valve to relieve pressure may not be sufficient.

Typical Installation Layout

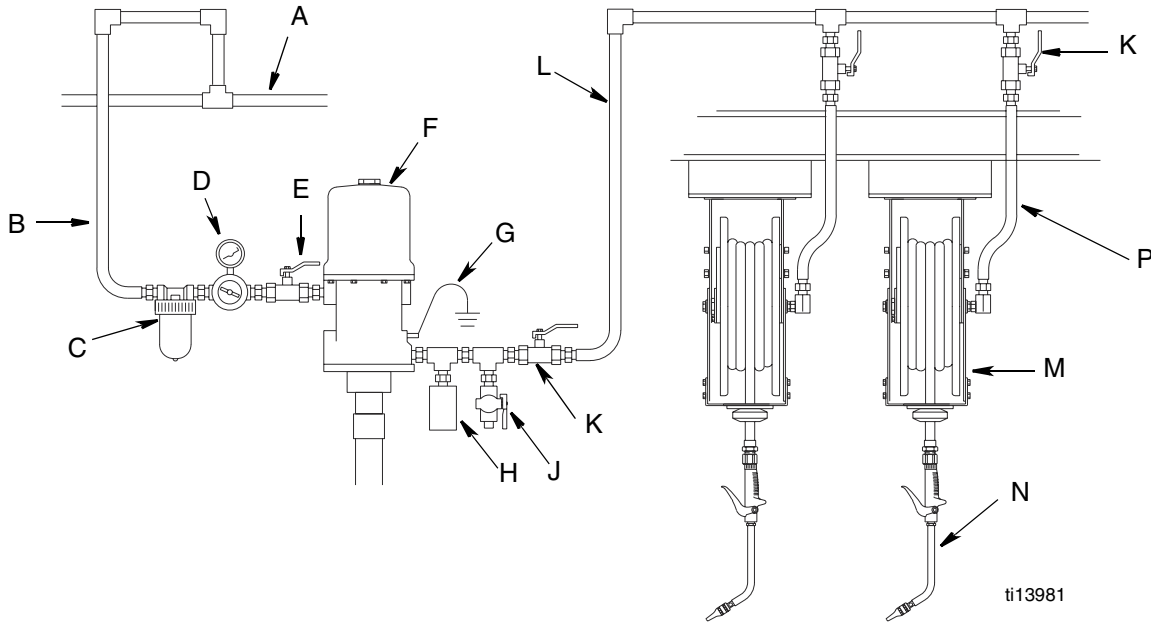


FIG. 1

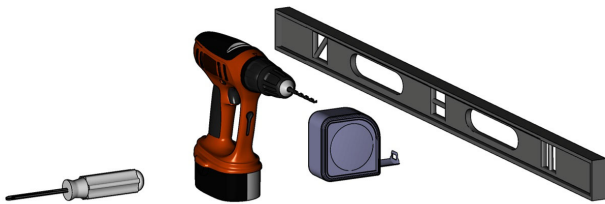
- | | | | |
|---|--|---|---------------------|
| A | Main air supply | L | Fluid line |
| B | Pump air supply | M | Hose reel |
| C | Air filter | N | Dispensing valve |
| D | Air regulator | P | Flexible inlet hose |
| E | Bleed-type master air valve (required) | | |
| F | Pump | | |
| G | Pump grounding wire (required) | | |
| H | Thermal relief valve (required) | | |
| J | Dump valve (required) | | |
| K | Fluid shut-off valve | | |

Wall Mounting



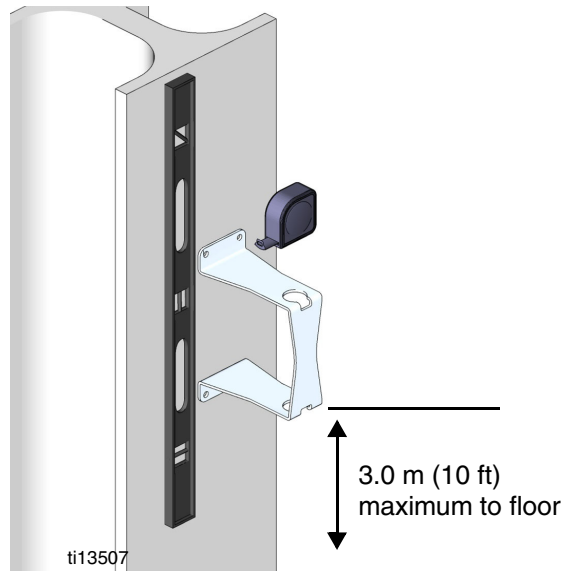
To reduce the risk of injury, be sure the mounting surface is strong enough to support the reels, weight of the lubricants and stress caused by hard pulls on the service hoses. See Technical Data, page 21 for weights of hose reel assemblies.

1.



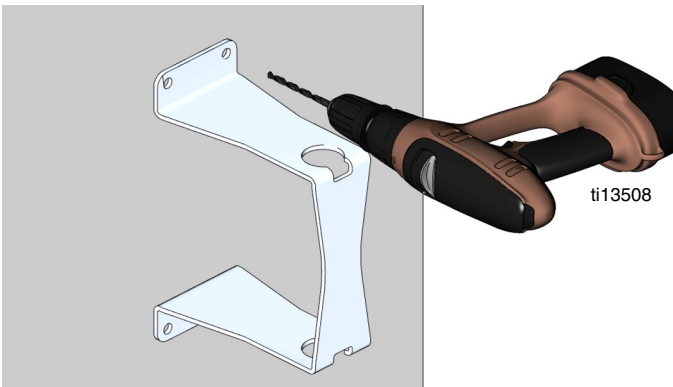
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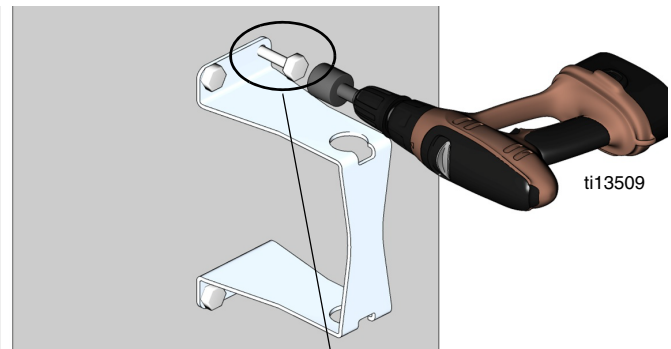
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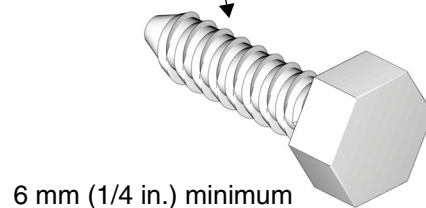


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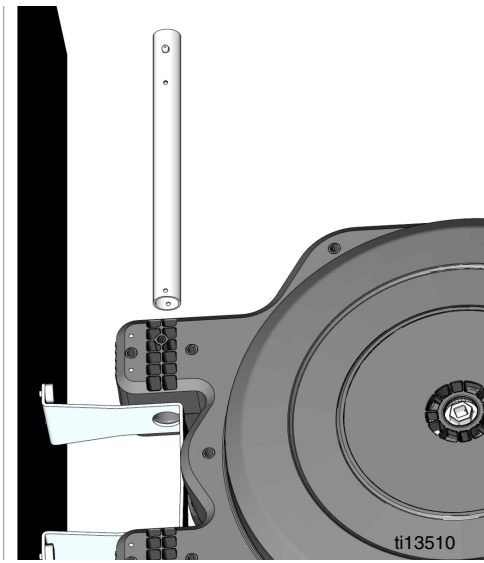


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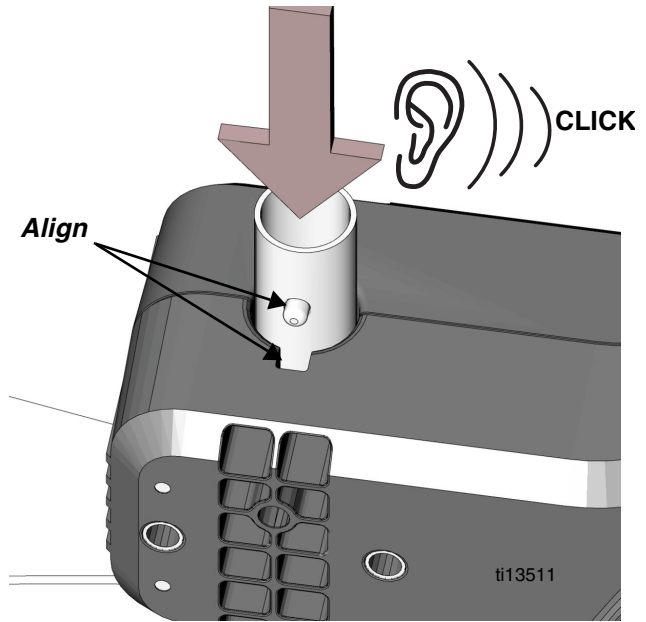


6 mm (1/4 in.) minimum

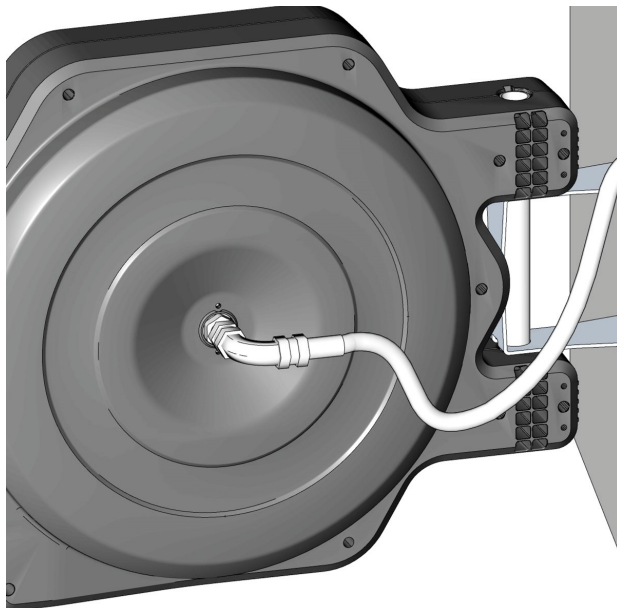
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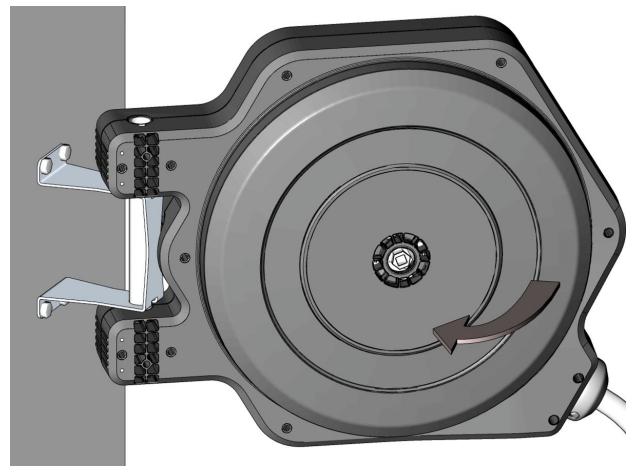
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7.



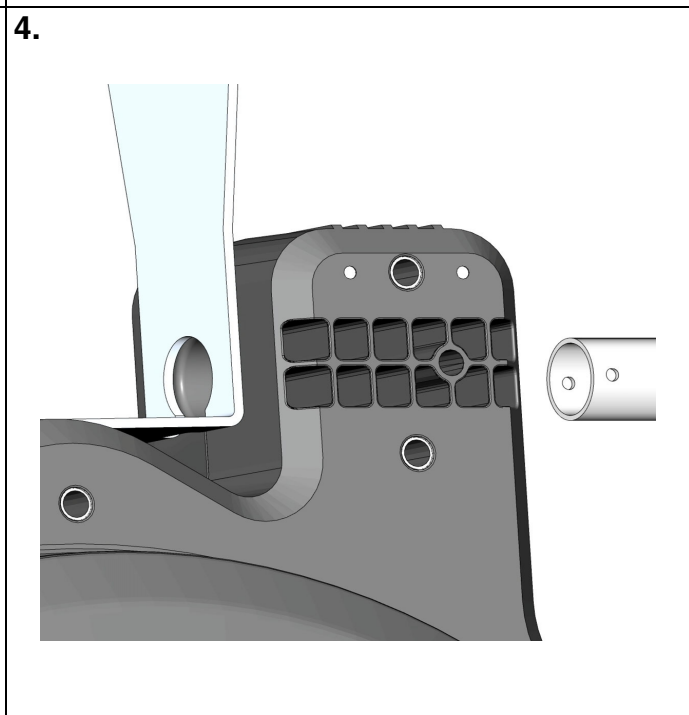
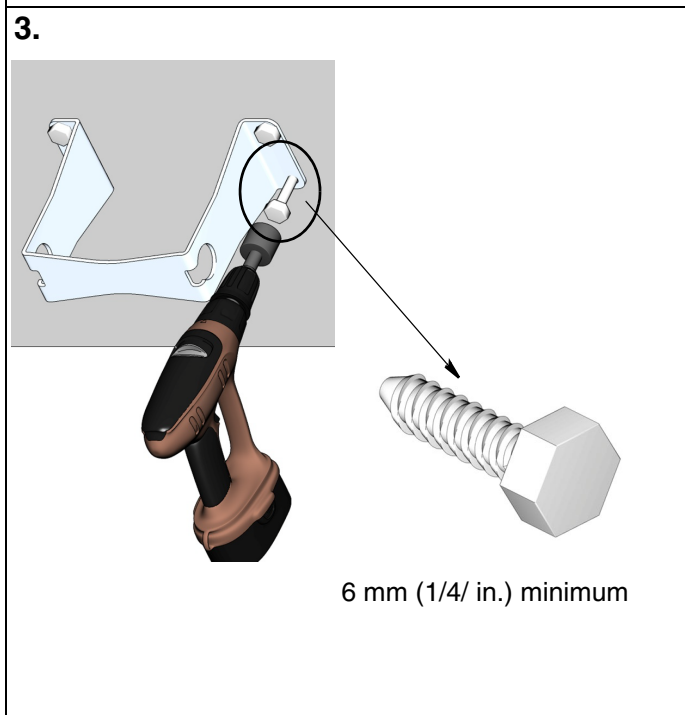
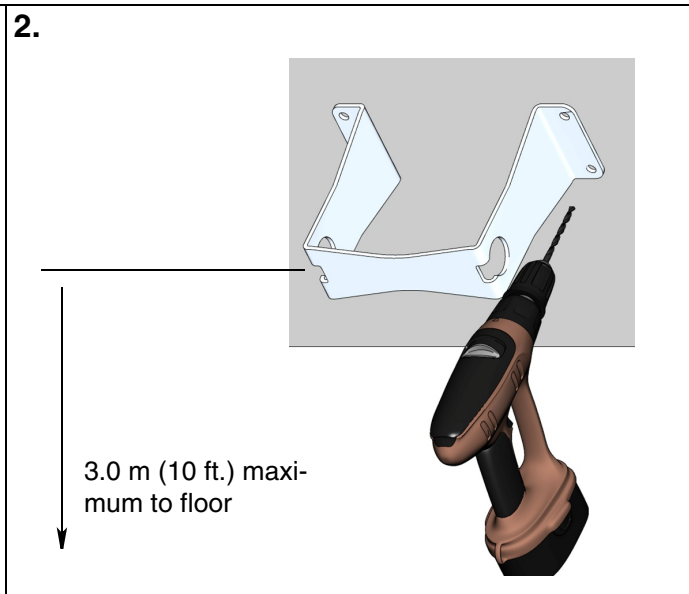
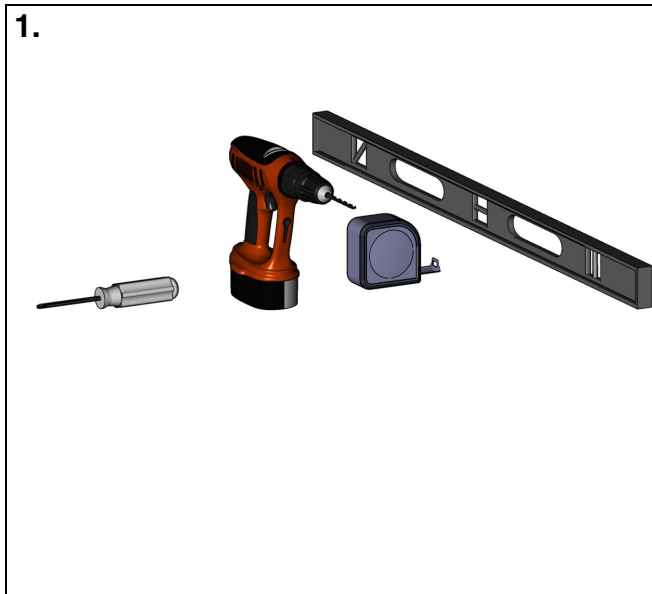
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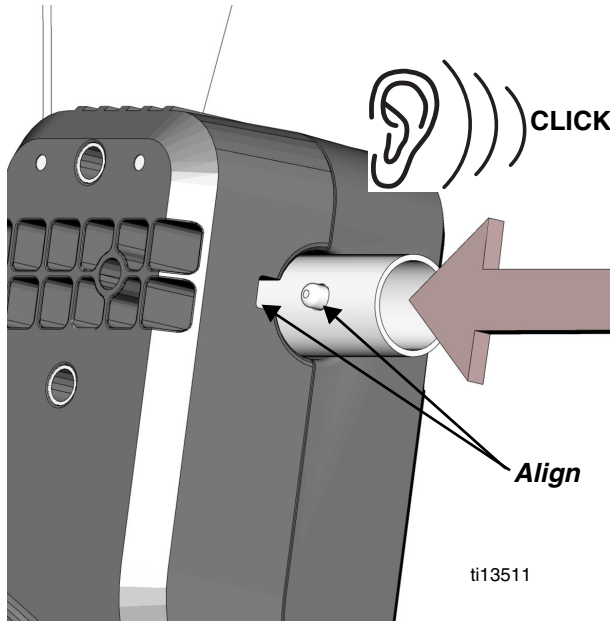
Overhead Mounting



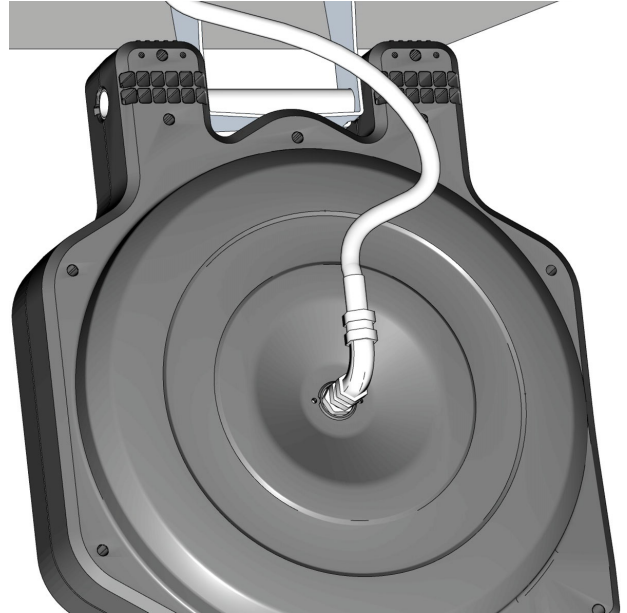
To reduce the risk of injury, be sure the mounting surface is strong enough to support the reels, weight of the lubricants and stress caused by hard pulls on the service hoses. See Technical Data, page 21 for weights of hose reel assemblies.



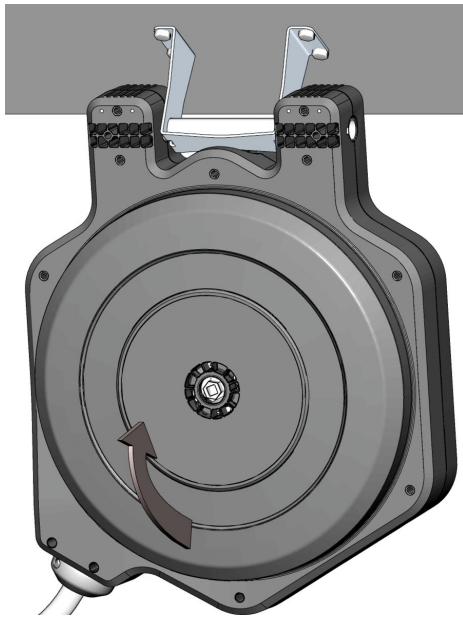
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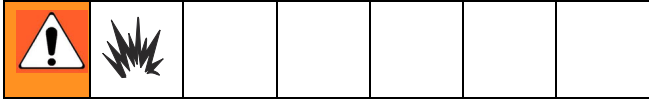
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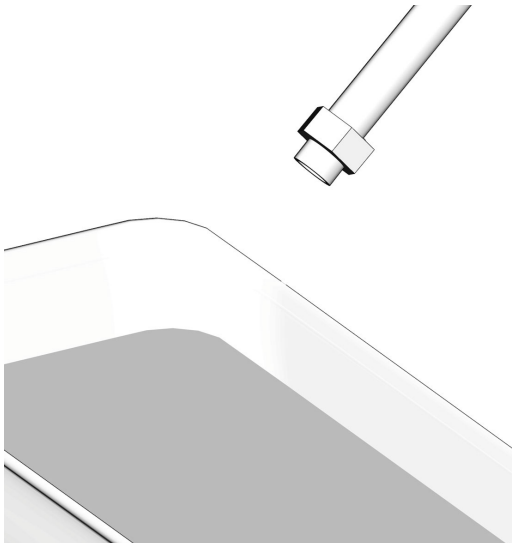
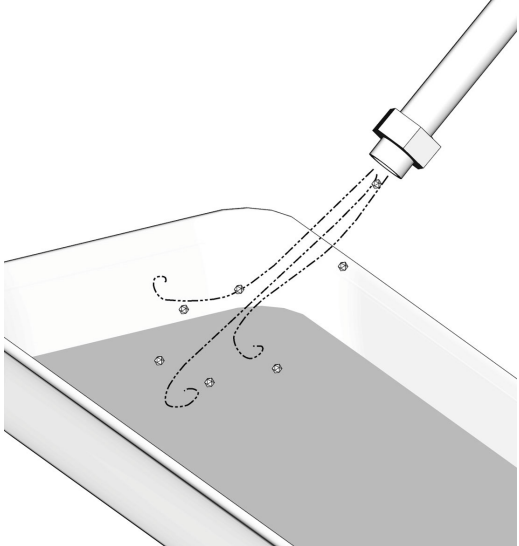
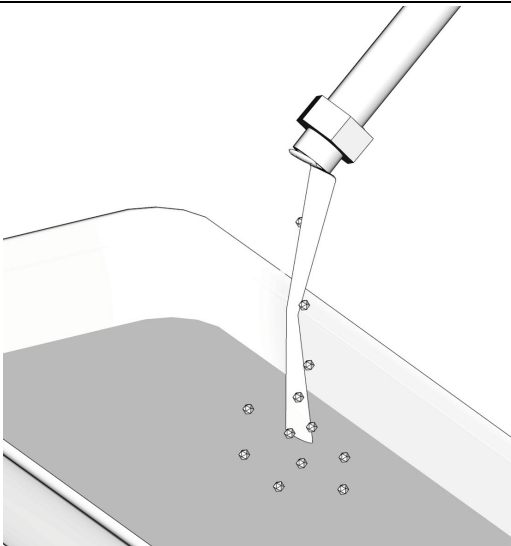
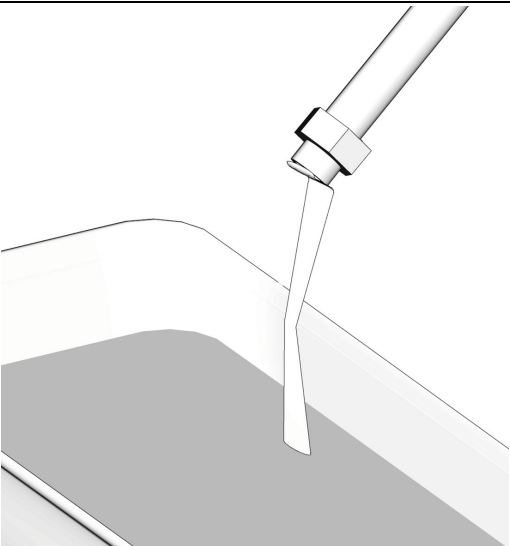
7.



Flushing

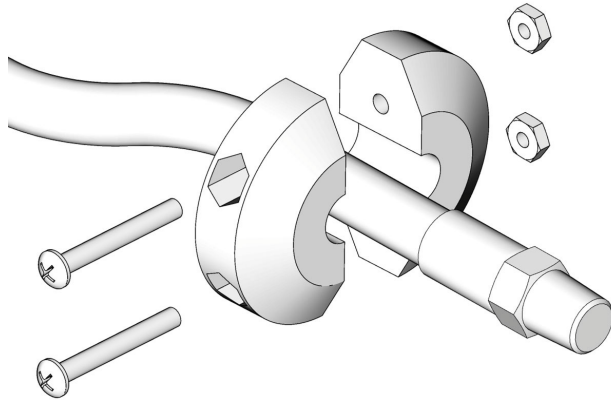


Before installing meter or dispense valve to end of hose, flush supply line with a compatible solvent such as Stoddard solvent or mineral spirits.

1. Place end of hose in waste container.	2. Blow out entire lubricant supply line with air
	
3. Flush equipment with a compatible solvent until fluid runs clear.	4. Pump dispensing lubricant through line until all solvent is flushed out.
	

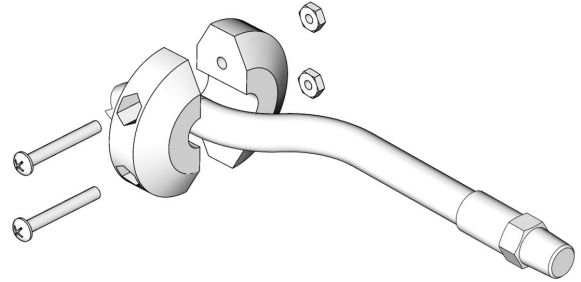
Repositioning Hose Stopper (optional)

1.

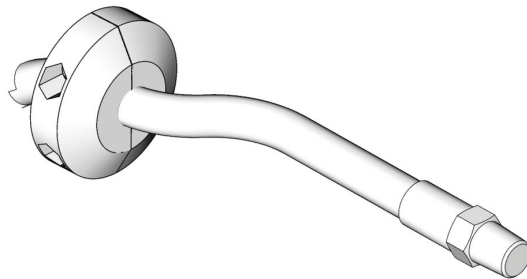


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2.

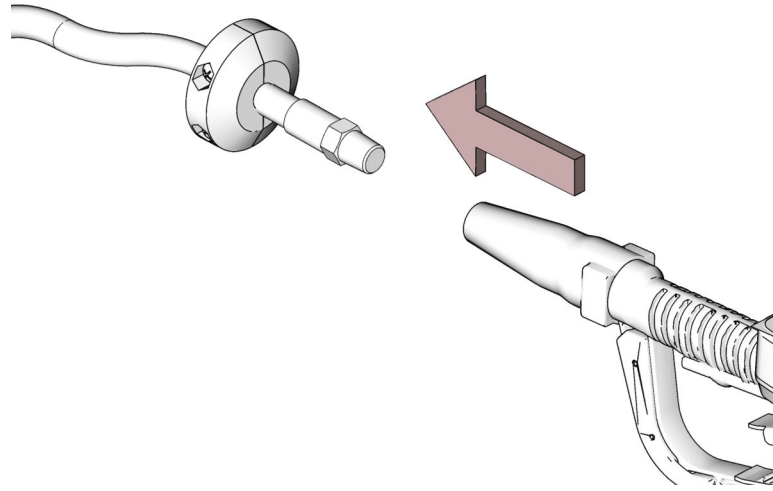


3.





Installing Meter

1.



Adjusting Spring Tension

IMPACT HAZARD

The spring is always under great tension and could be propelled or uncoil with enough force to cause serious injury.

- The hose reel spring is not a serviceable part. Do not attempt to replace or service the spring.
- Always grasp ratchet handle firmly with both hands when adjusting tension.
- When decreasing spring tension, never attempt to turn ratchet more than 1/4 turn with each push-in motion.

Uncontrolled spinning of the hose reel could cause serious injury if you are hit by the hose or a tool.

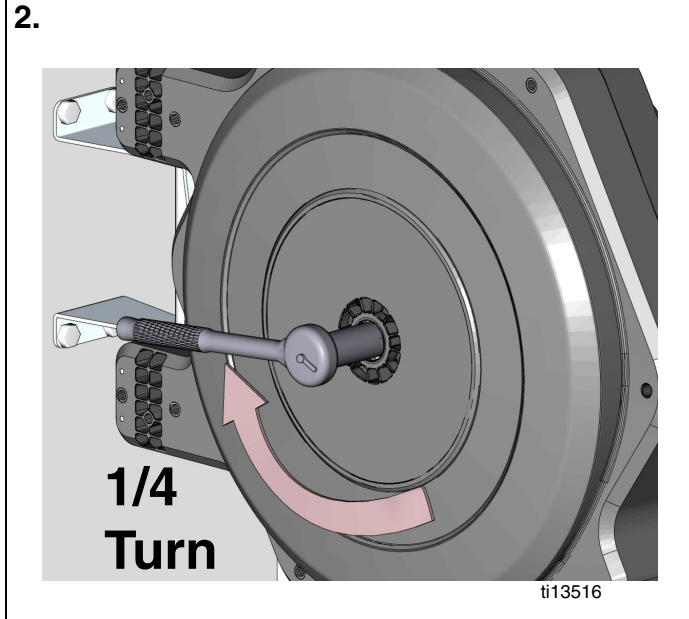
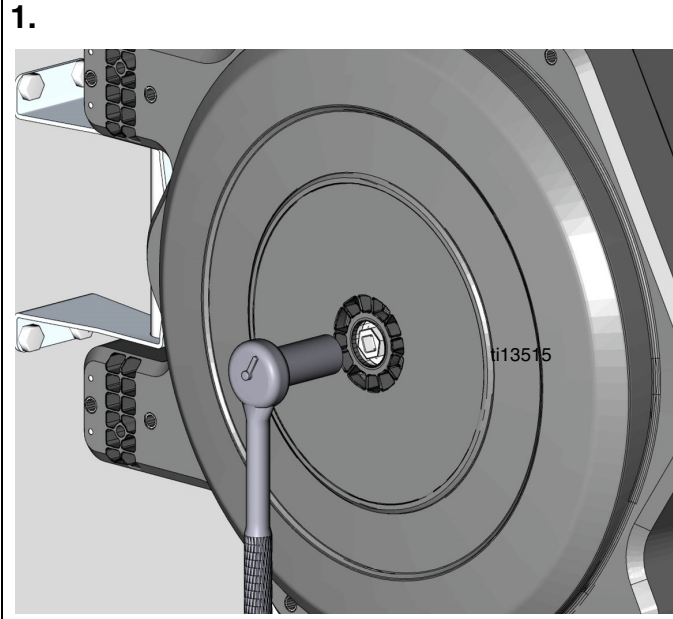
- Never allow reel to spin freely.
- The reel must be bolted securely in place when making adjustments.

Increasing Tension

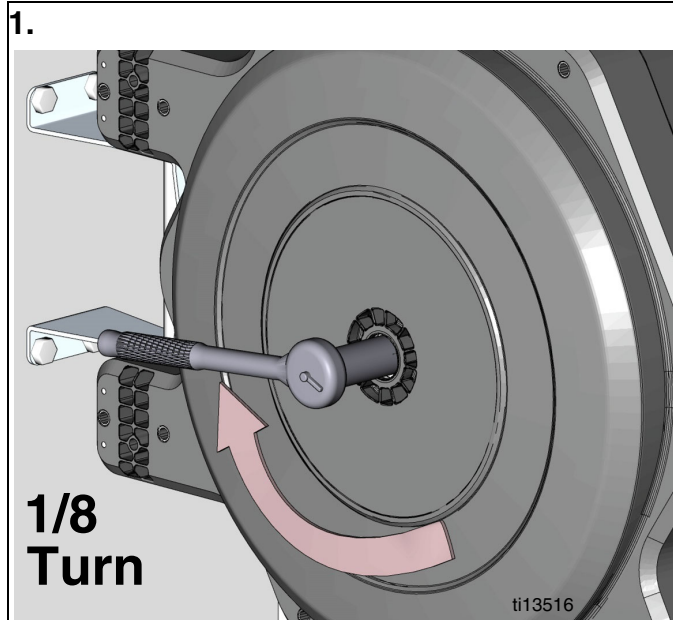
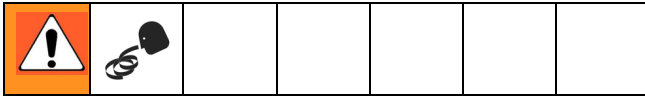
Table 1: Recommended Turns to Set and Decrease Spring Tension

Model	Approximate No. of Turns	
	Full Turns to Increase Spring Tension	1/4 Turns to Decrease Spring Tension
HEL13#, 24F735, 24F744, 24F753, 24F762, 24F771, 24F780, 24J258, 24J267, 24J276	4	16
HEL15#, 24F736, 24F745, 24F754, 24F763, 24F772, 24F781, 24J259, 24J268, 24J277	3	12
HEL23#, 24F737, 24F746, 24F755, 24F764, 24F773, 24F782, 24J260, 24J269, 24J278	4	16
HEL25#, 24F738, 24F747, 24F756, 24F765, 24F774, 24F783, 24J261, 24J270, 24J279	4	16
HEL33#, 24F739, 24F748, 24F757, 24F766, 24F775, 24F784, 24J262, 24J271, 24J280	4	16
HEM23#, 24F741, 24F750, 24F759, 24F768, 24F777, 24F786, 24J264, 24J273, 24J282	5	20
HEM33#, 24F742, 24F751, 24F760, 24F769, 24F778, 24F787, 24J265, 24J274, 24J283	7	28
HEH13#, 24F743, 24F752, 24F761, 24F770, 24F779, 24F788, 24J266, 24J275, 24J284	6	24
HEL34#, 24F740, 24F749, 24F758, 24F767, 24F776, 24F785, 24J263, 24J272, 24J281, 24M275, 24M276	4	16

Adjusting Spring Tension

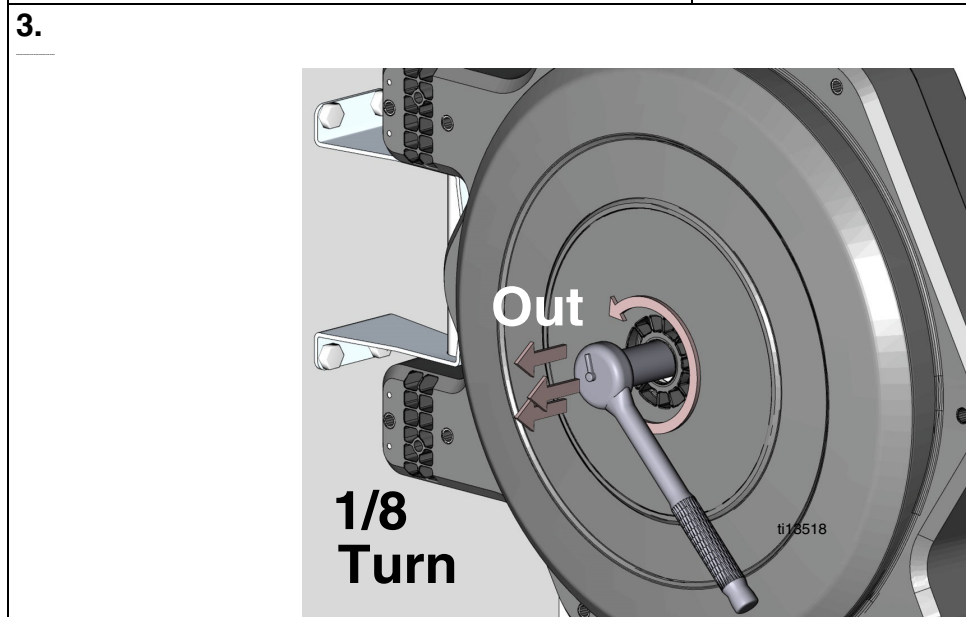
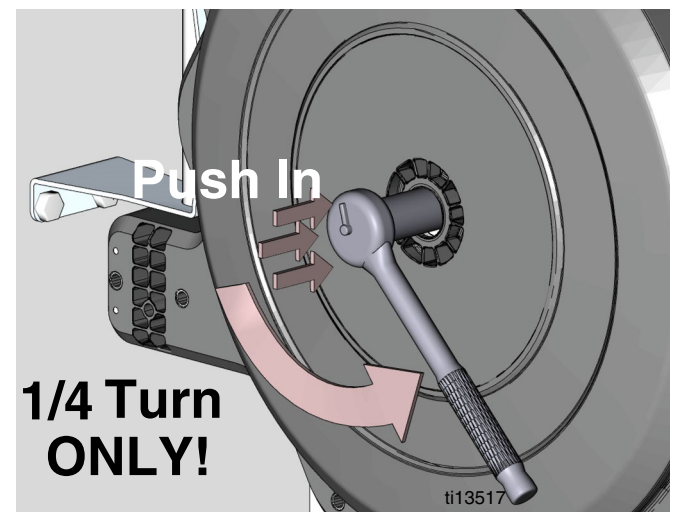


Decreasing Spring Tension

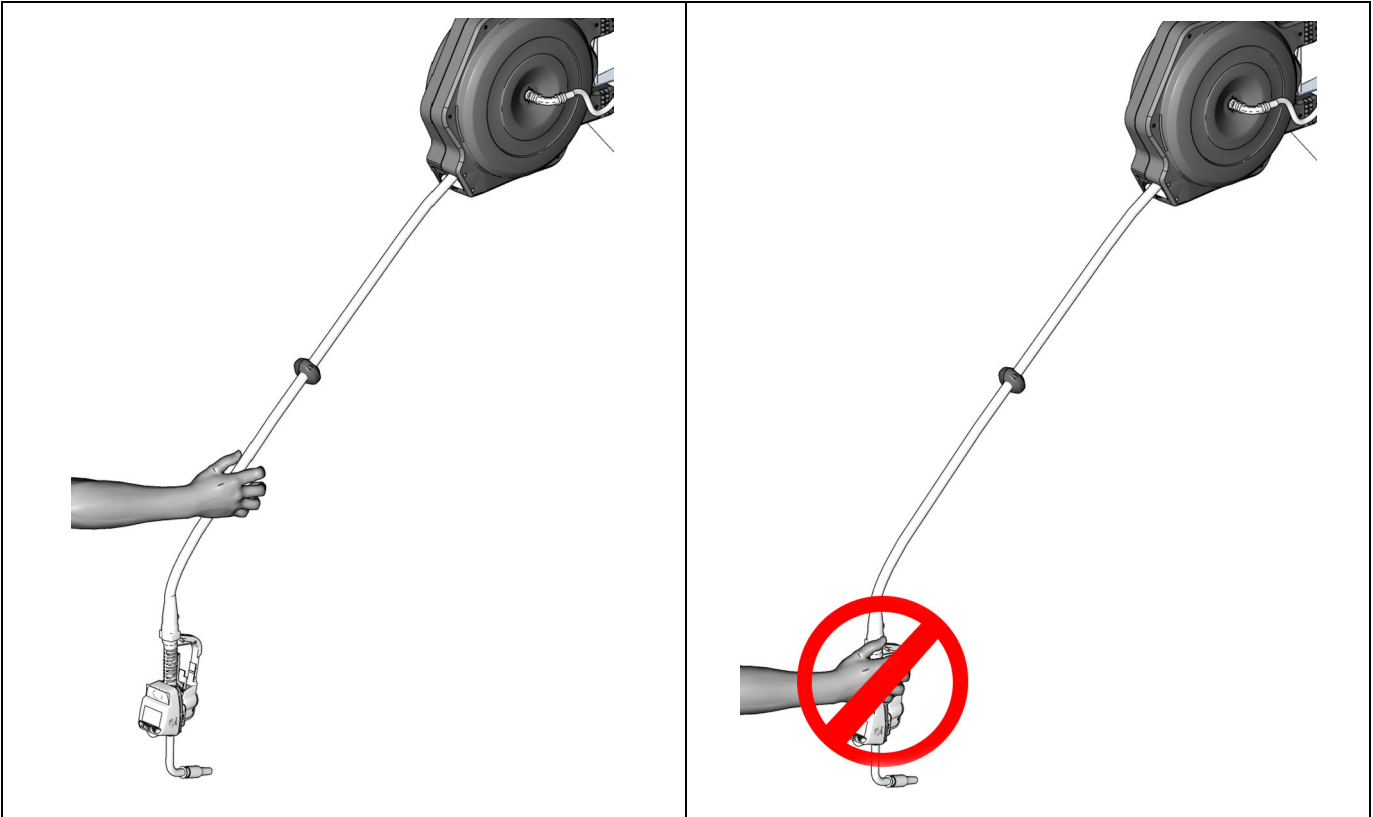


2. Push in on ratchet. Grasp handle firmly with both hands; then turn ratchet counter-clockwise 1/4 turn **ONLY**.

Repeat this procedure of pushing in and turning ratchet counter-clockwise, **ONLY** 1/4 turn at a time, until spring tension has been completely released. See Table 1, page 15 for the recommended number of 1/4 turns needed to completely release the spring tension.



Operation

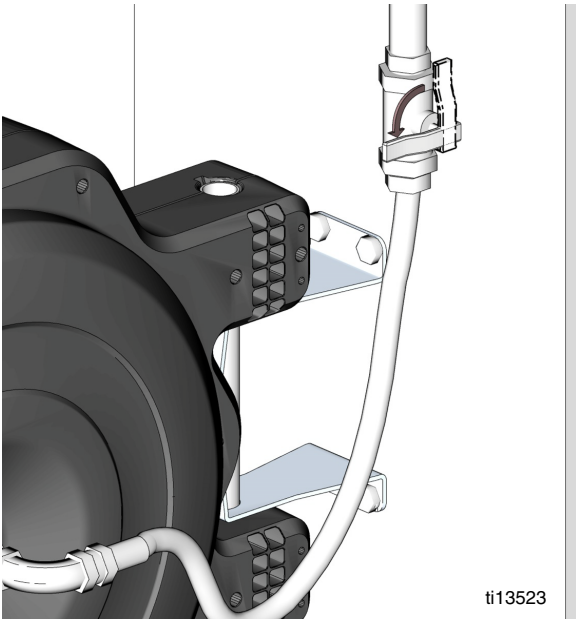


Repair and Maintenance

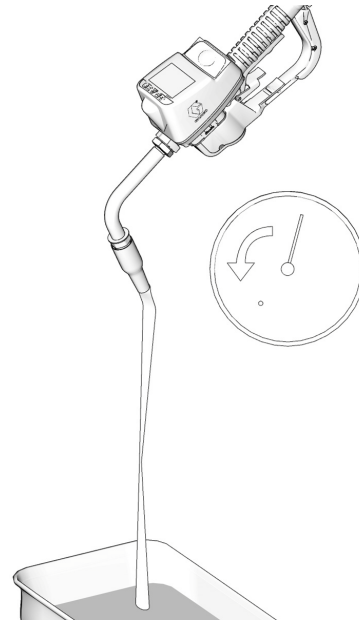
Pressure Relief Procedure



1.



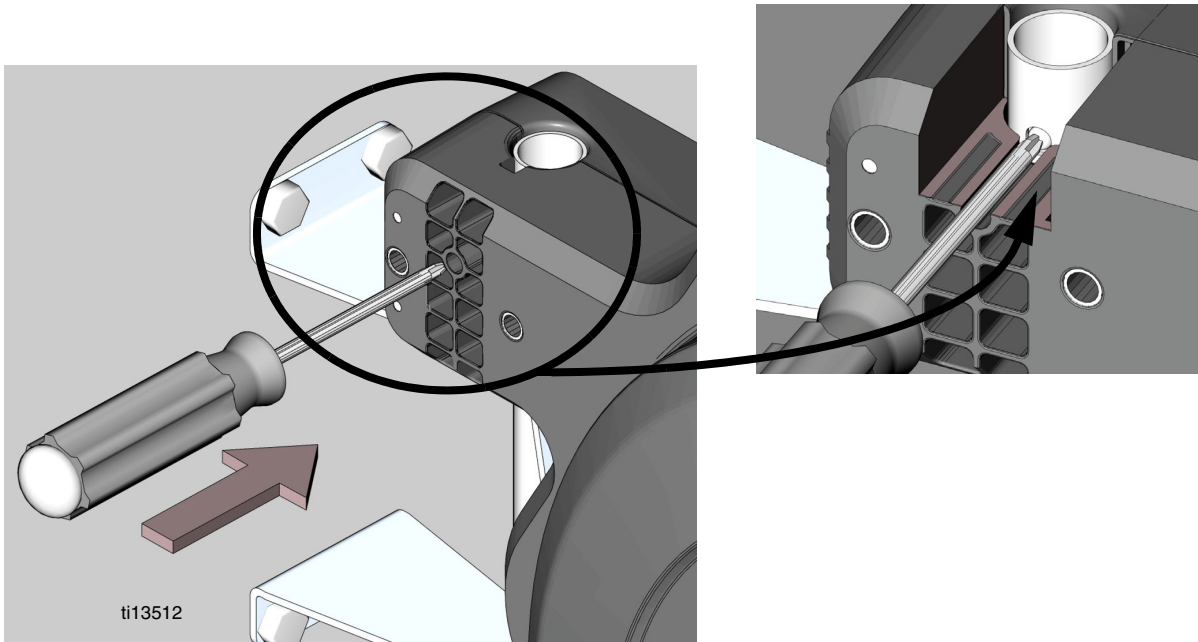
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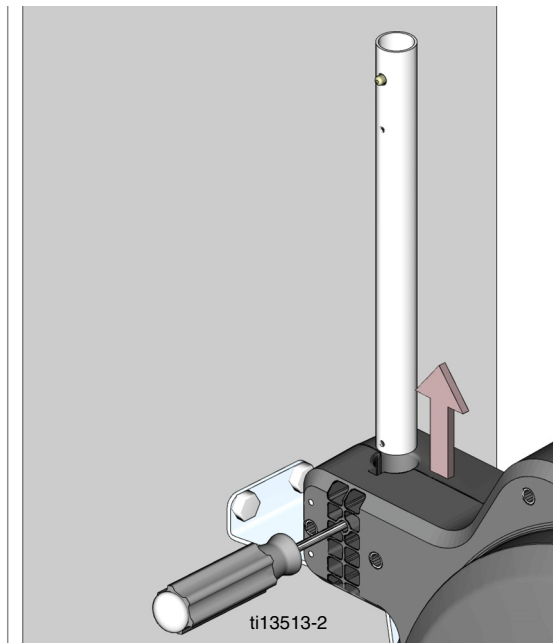
Disassembly



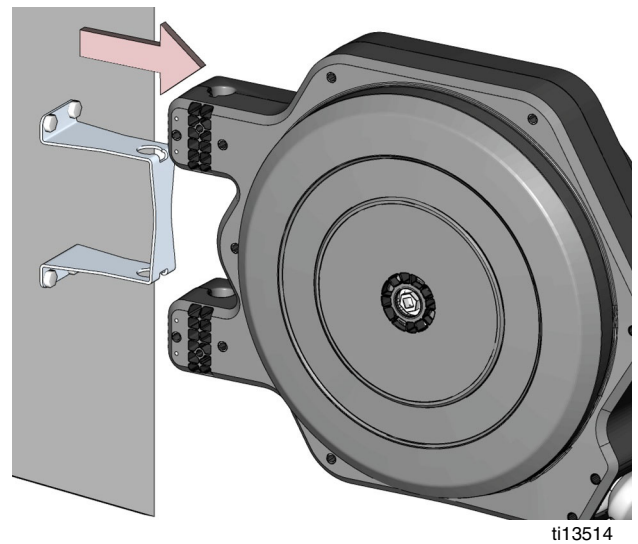
1.



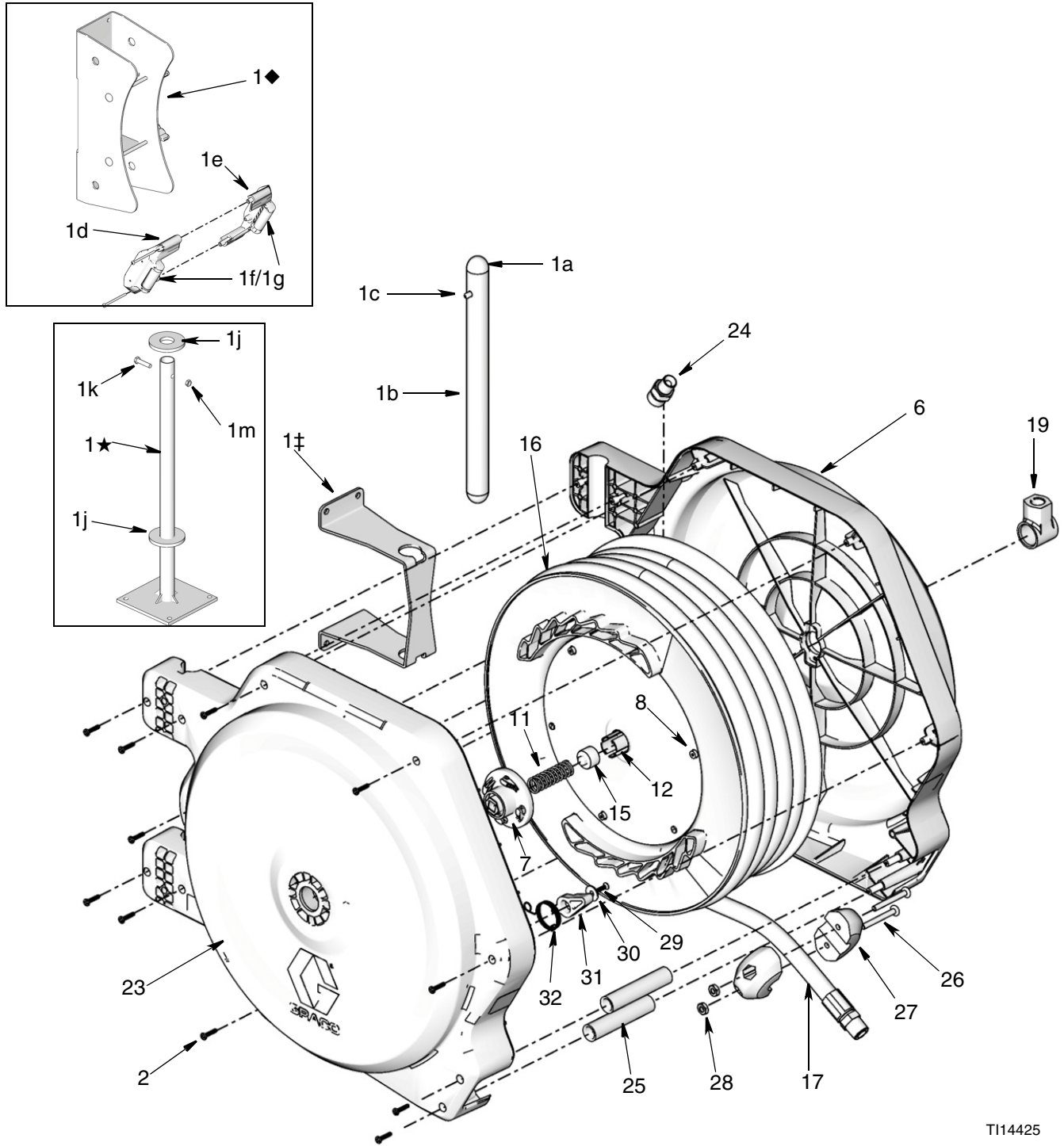
2.



3.



Parts



T114425

Ref	Part No.	Description	Qty
1‡	15Y706	BRACKET, swivel, included in all HEL, HEM and HEH models and models 24F735 - 24F752	1
1◆	24E319	BRACKET, fixed, included in models 24F753-24F770, 24M275, 24M276	
1★	16C019	BRACKET, fixed, bench mounted, included models 24F771-24F788	
1a‡◆		. CAP, mounting tube	2
1b‡◆		. TUBE, mounting	1
1c‡◆		. CLIP, button clip	1
1d◆		. BRACKET, roller A	1
1e◆		. BRACKET, roller B	1
1f◆		. PIN, roller	2
1g◆		. ROLLER, hose	2
1h★		. SCREW, machine, pan head	2
1j★		. WASHER	1
1k★		. BOLT	1
1m★		. NUT	1
2		SCREW, mach pan hd	11
6		ENCLOSURE (B)	1
7		ADJUSTER, power spring	1
8		SCREW, recessed pan hd	3
11		SPRING, adjuster	1
12		TUBE, shaft	1
15		CAP, shaft	1
16		SPOOL	1
17	262214	HOSE, 6 mm id x 10 m, BSPT	1
	262216	HOSE, 6 mm id x 15 m, BSPT	1
	262218	HOSE, 10 mm id x 10 m, BSPT	1
	262220	HOSE, 10 mm id x 15 m, BSPT	1
	262222	HOSE, 12 mm id x 10 m, BSPT	1
	262232	HOSE, 12 mm id x 14 m, BSPT	1
	262224	HOSE, 10 mm id x 10 m, BSPT	1
	262226	HOSE, 12 mm id x 10 m, BSPT	1
	262227	HOSE, 6 mm id x 10 m, BSPT	1
	262584	HOSE, 6 mm id x 10 m, NPT	1
	262585	HOSE, 6 mm id x 15 m, NPT	1
	262586	HOSE, 10 mm id x 10 m, NPT	1
	262587	HOSE, 10 mm id x 15 m, NPT	1
	262588	HOSE, 12 mm id x 10 m, NPT	1
17 (cont)	262589	HOSE, 10 mm id x 10 m, NPT	1
	262590	HOSE, 12 mm id x 10 m, NPT	1
	262591	HOSE, 6 mm id x 10 m, NPT	1
	262592	HOSE, 12 mm id x 14 m, NPT	1
	24J295	HOSE, 6 mm id x 10 m, BSPP	1
	24J296	HOSE, 6 mm id x 15 m, BSPP	1
	24J297	HOSE, 10 mm id x 10 m, BSPP	1
	24J298	HOSE, 10 mm id x 15 m, BSPP	1
	24J299	HOSE, 12 mm id x 10 m, BSPP	1
	24J300	HOSE, 12 mm id x 14 m, BSPP	1
	24J301	HOSE, 10 mm id x 10 m, BSPP	1

Ref	Part No.	Description	Qty
	24J302	HOSE, 12 mm id x 10 m, BSPP	1
	24J303	HOSE, 6 mm id x 10 m, BSPP	1
19	24C531	KIT, swivel, air, A/W (24F789, 24F790, 24F791, 24F792, 24F793, 24F794, 24J126, 24J127, 24J128, 24J129, 24J130, 24J131, and HEL models)	1
	24C532	KIT, swivel, oil (24F795, 24F796, 24J132, 24J133, and HEM models)	1
	24C533	KIT, swivel, grease (24H797, 24J134, and HEH models)	1
	24H474	KIT, swivel, air, A/W (models 24H655, 24H656, 24H657, 24H658, 24H659, 24H660)	1
	24H475	KIT, swivel, air, A/W (models 24H661 and 24H662)	1
	24H476	KIT, swivel, grease (model 24H663)	1
23		ENCLOSURE (A)	1
24		FITTING	1
25		ROLLER, hose guide	2
26		SCREW, mach, phil, pn hd	2
27	178029	STOP, hose, 1/2" od	2
	178030	STOP, hose, 5/8" od	2
	178031	STOP, hose, 3/4" od	2
28	101324	NUT, hex, jam	2
29		SCREW, countersunk head	1
30		WASHER, id 6.4, od 18	1
31		LATCH	1
32		SPRING, latch	1
33▲	15W036	LABEL, Warning	1

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

Mounting Bracket Kits

All HEL, HEM, HEH, 24M275 and 24M276 Models

- ‡ 24G866 KIT, Hose Reel Wall Mounting Bracket.
- ◆ 24G865 KIT, Hose Reel Fixed Installation Kit.
- ★ 24C772 KIT, Hose Reel Bench Mounting Bracket.

Inlet Kits

To determine the correct Mounting Bracket and/or Inlet Kit to order for your hose reel model, see tables on pages 4, 5, and 6.

Ordering the Correct Kit for Your Hose Reel

24C437	KIT, hose, 1/4", air, BSPT	24C443	KIT, hose 1/4", air, NPT
24C438	KIT, hose 3/8" and 1/2", A/W, BSPT	24C444	KIT, hose, 3/8", A/W, NPT
24C440	KIT, hose 3/8" and 1/2" oil, BSPT	24C537	KIT, hose, 3/8" oil, NPT
24C442	KIT, hose, 1/4", grease, BSPT	24C538	KIT, hose, 1/2" oil, NPT
24C441	KIT, hose 1/2", oil, BSPT	24C539	KIT, hose, 1/4", grease, NPT
		24J253	KIT, hose 1/4", air, BSPP
		24J254	KIT, hose, 3/8", A/W, BSPP
		24J256	KIT, hose, 3/8" oil, BSPP
		24J257	KIT, hose, 1/2" oil, BSPP
		24J253	KIT, hose, 1/4", grease, BSPP

Thread	Replacement Reel	Hose Kit (17)	Swivel Kit (19)	Stop (27)	Inlet Kit
BSPT	24F789, HEL13#	262214	24C531	178029	24C437
BSPT	24F790, HEL15#	262216	24C531	178029	24C437
BSPT	24F791, HEL23#	262218	24C531	178030	24C438
BSPT	24F792, HEL25#	262220	24C531	178030	24C438
BSPT	24F793, HEL33#	262222	24C531	178031	24C438
BSPT	24F794, HEL34#	262232	24C531	178031	24C438
BSPT	24F795,HEM23#	262224	24C532	178030	24C440
BSPT	24F796, HEM33#, 24M275, 24M276	262226	24C532	178031	24C441
BSPT	24F797, HEH13#	272227	24C533	178029	24C442
NPT	24H655	262584	24H474	178029	24C443
NPT	24H656	262584	24H474	178029	24C444
NPT	24H657	262585	24H474	178030	24C444
NPT	24H658	262586	24H474	178030	24C444
NPT	24H659	262587	24H474	178031	24C444
NPT	24H660	262588	24H474	178031	24C444
NPT	24H661	262592	24H475	178030	24C537
NPT	24H662	262590	24H475	178031	24C538
NPT	24H663	262591	24H476	178029	24C539
BSPP	24J126	24J295	24C531	178029	24J253
BSPP	24J127	24J296	24C531	178029	24J253
BSPP	24J128	24J297	24C531	178030	24J254
BSPP	24J129	24J298	24C531	178030	24J254
BSPP	24J130	24J299	24C531	178031	24J254
BSPP	24J131	24J300	24C531	178031	24J254
BSPP	24J132	24J301	24C532	178030	24J555
BSPP	24J133	24J302	24C532	178031	24J256
BSPP	24J134	24J303	24C533	178029	24J257

Technical Data

In the following table, Technical Data is provided for the HEL, HEM, HEH, 24M275 and 24M276 hose reel models and for the replacement hose reels. Refer to the Package Model Numbers table on page 5 to verify which replacement hose model is included in your hose reel package. Additional hose reel information, including Application, Hose Sizes and Maximum Working Pressure Ratings is provided on pages 4 and 5.

Models H/24F = BSPT	Temperature Range C° (F°)	Inlet (BSPT, NPT, BSPP)	Outlet (BSPT, NPT, BSPP)	Weight	Wetted Parts
HEL13#, 24F789, 24H655, 24J126	-10°C - 60°C (14°F - 140°F)	1/2 in.	1/4 in.	9.0 kg 19.8 lb	Aluminum, Buna-N Rubber, PVC
HEL15#, 24F790, 24H656, 24J127	-10°C - 60°C (14°F - 140°F)	1/2 in.	1/4 in.	9.5 kg 21 lb	Aluminum, Buna-N Rubber, PVC
HEL23#, 24F791, 24H657, 24J128	-17.8°C - 60°C* (0°F - 140°F)	1/2 in.	3/8 in.	10.4 kg 23 lb	Aluminum, Buna-N Rubber
HEL25#, 24F792, 24H658, 24J129	-17.8°C - 60°C* (0°F - 140°F)	1/2 in.	3/8 in.	11.0 kg 24.25 lb	Aluminum, Buna-N Rubber
HEL33#, 24F793, 24H659, 24J130	-17.8°C - 60°C* (0°F - 140°F)	1/2 in.	1/2 in.	10.5 kg 23.1 lb	Aluminum, Buna-N Rubber
HEL34#, 24F794, 24H660, 24J131	-17.8°C - 60°C* (0°F - 140°F)	1/2 in.	1/2 in.	11.4 kg 25.1 lb	Aluminum, Buna-N Rubber
HEM23#, 24F795, 24H661, 24J132	-17.8°C - 60°C (0°F - 140°F)	1/2 in.	3/8 in.	11.4 kg 25.1 lb	Carbon Steel, Buna-N Rubber, PTFE
HEM33#, 24F796, 24H662, 24J133, 24M275, 24M276	-17.8°C - 60°C (0°F - 140°F)	1/2 in.	1/2 in.	14.0 kg 30.8 lb	Carbon Steel, Buna-N Rubber, PTFE
HEH13#, 24F797, 24H663, 24J134	-17.8°C - 60°C (0°F - 140°F)	3/8 in.	1/4 in.	13.2 kg 29.1 lb	Carbon Steel, Buna-N Rubber

Sound Data All Models

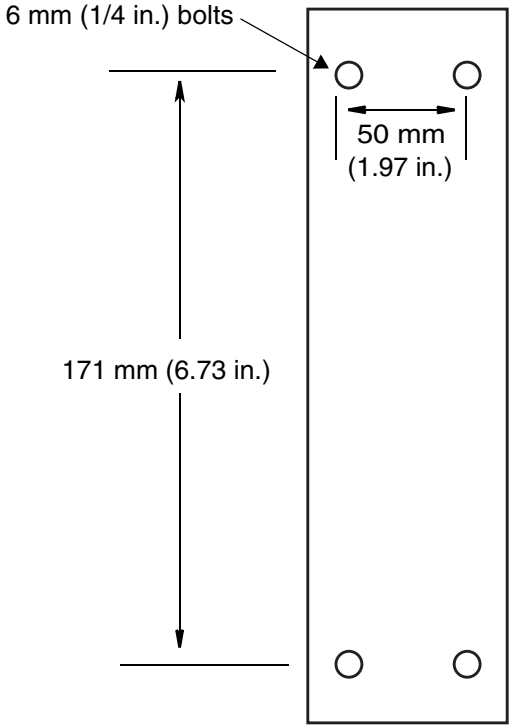
Sound Pressure: 69.3 dB(A)†

Sound Power: 75.3 dB(A)†

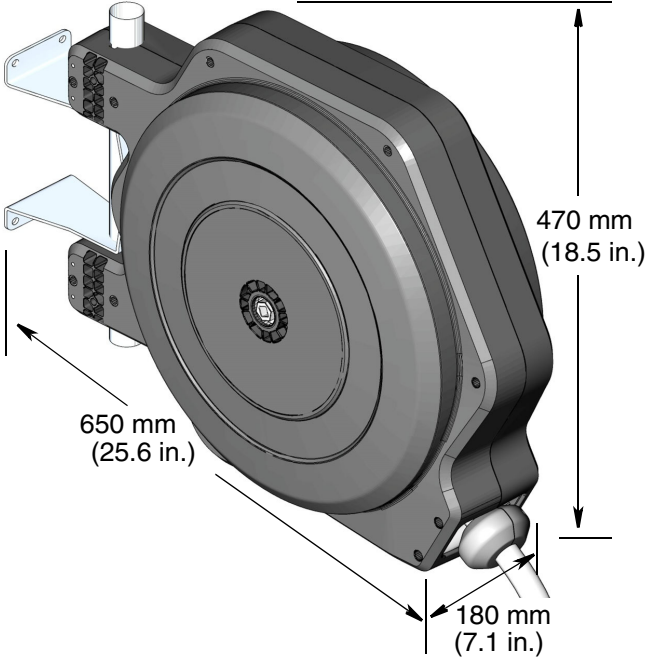
*0°C - 60°C (32°F - 140°F) for Water Applications.

† Tested in accordance with ISO9614-2 with an assumed operator position.

Mounting Pattern



Dimensions



Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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Original instructions. This manual contains English. MM 313938

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