

Instructions



XD Diesel Exhaust Fluid (DEF) Hose Reels

3A1767D

EN

For use with Diesel Exhaust Fluid only. For professional use only.

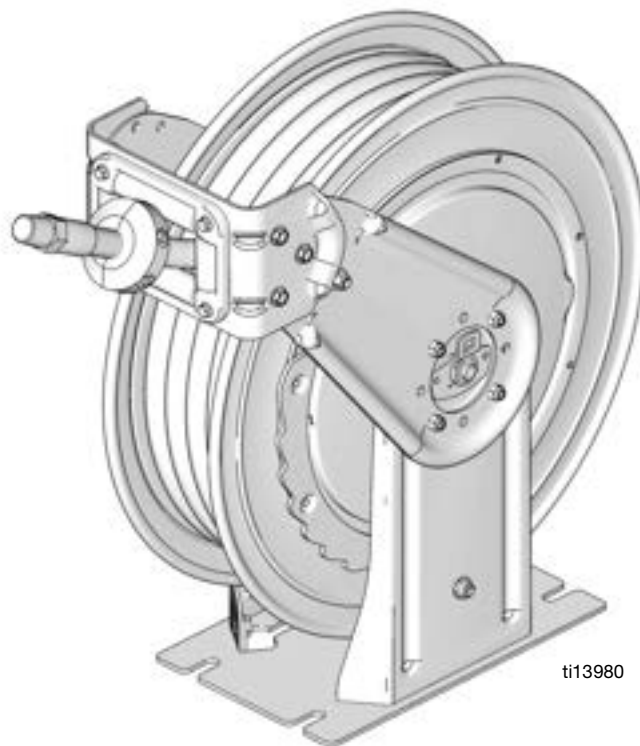
Not approved for use in European explosive atmosphere locations.

Application markets include: mobile equipment servicing and industrial plants.

Models: Page 3

**Important Safety Instructions**

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



ti13980



PROVEN QUALITY. LEADING TECHNOLOGY.

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 from distributor or retailer. • Do not leave the work area while equipment is energized or under pressure. 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. • 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>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow the Pressure Relief Procedure 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.

WARNING	
	MOVING PARTS HAZARD Moving parts can pinch, cut or amputate fingers and other body parts. <ul style="list-style-type: none"> 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 and disconnect all power sources.
	PERSONAL PROTECTIVE EQUIPMENT You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This equipment includes but is not limited to: <ul style="list-style-type: none"> Protective eyewear, and hearing protection. Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Models

Each model shown in the table below is available in several colors. The last character of each model no. indicates the hose reel color. A = white, B = Metallic Blue and F = Yellow. On the table below, this last character is represented by the generic # symbol. For example, to show the complete model number for a white HSDD5# model hose reel, the symbol # is replaced with "A". The complete model number is: HSDD5A.

Model No.	Application	Hose Size	Maximum Pressure		
			PSI	Bar	Mpa
HSDD5#	Diesel Exhaust Fluid	3/4 inch	50	3.4	0.34
HSDDD#	Diesel Exhaust Fluid	3/4 inch	50	3.4	0.34

Installation

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A **bleed-type master air valve (E)**, **thermal relief valve (H)** and **fluid drain valve (J)** are required in your system installation. These (user supplied) components help reduce the risk of serious injury.

- The hose reel must be **grounded**.
- The **bleed-type master air valve (E)** relieves air trapped between this valve and the pump after the air is shut off. Trapped air can cause the pump to cycle unexpectedly, therefore locate the valve close to the pump.
- The **thermal relief valve (H)** and **fluid drain valve (J)** assist in relieving fluid pressure in the displacement pump, hose and dispense valve. Triggering the **dispensing valve (N)** to relieve pressure may not be sufficient. Open the **fluid drain valve (J)** to relieve fluid pressure that may be captured elsewhere in the system.

Typical Installation Layout

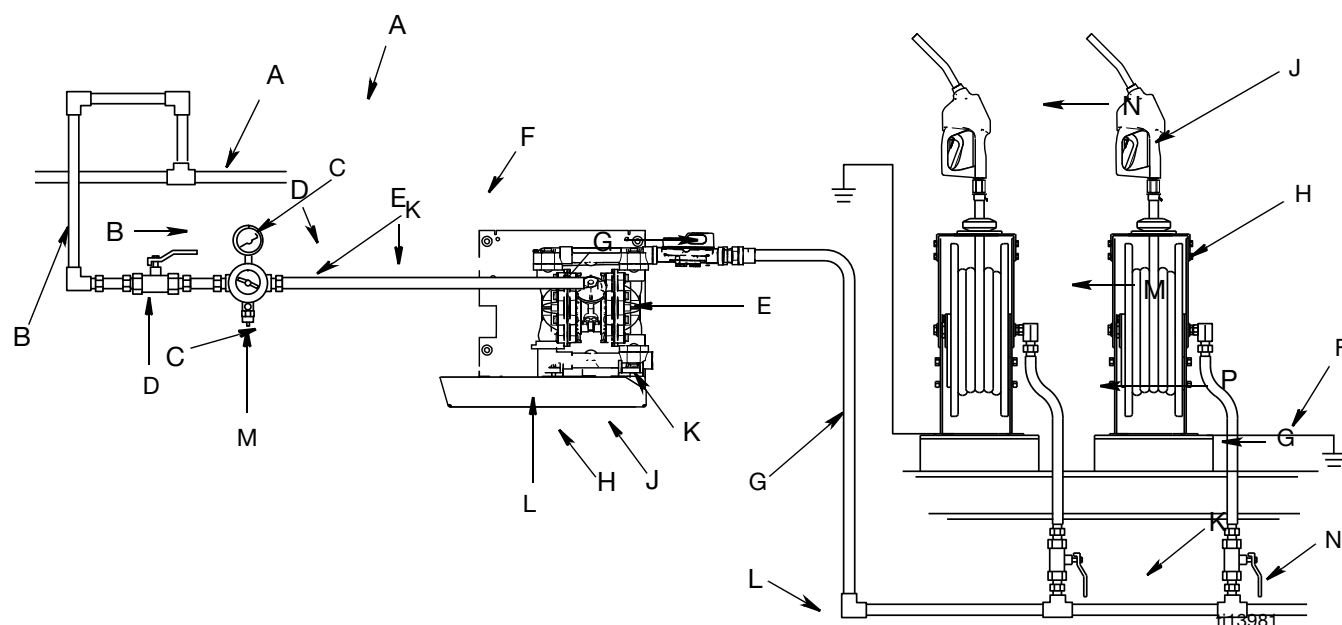


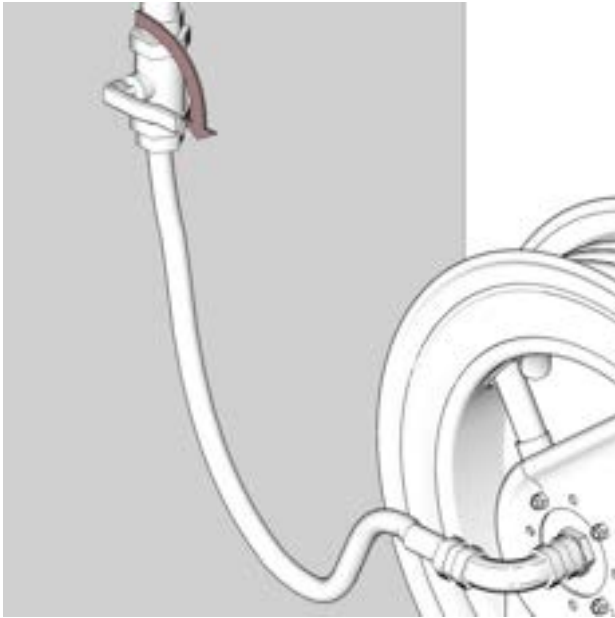
FIG. 1

- A Main air supply
- B Pump air supply
- C Air regulator
- D Bleed-type master air valve (user supplied, required)
- E Pump
- F Grounding wire (user supplied, required for pump and hose reel)
- G Fluid line
- H Hose reel
- J Dispensing valve
- K Air Supply Line
- L Nozzle Tray
- M Safety Valve (set to 50 psi (3.4 bar, 03.4 MPa))
- N Fluid Shutoff Valve

Pressure Relief Procedure



1.



2.



All Mountings



To reduce the risk of injury, be sure the mounting surface and mounting screws are strong enough to support the reels, weight of the fluids and stress caused by hard pulls on the service hoses. See Technical Data, page 16 for weights of hose reel assemblies.

NOTE: Reels perform best when arm allows hose to pull straight off the spool as shown in FIG. 2 and FIG. 3.

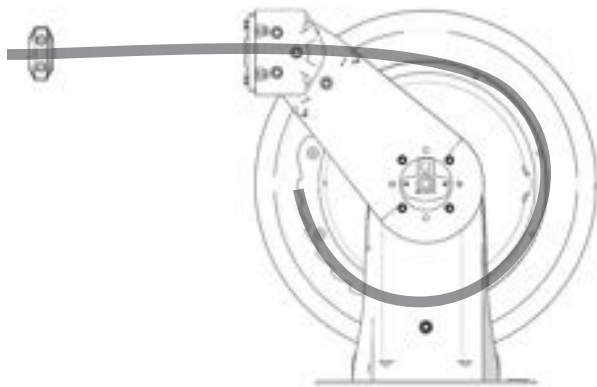


FIG. 2

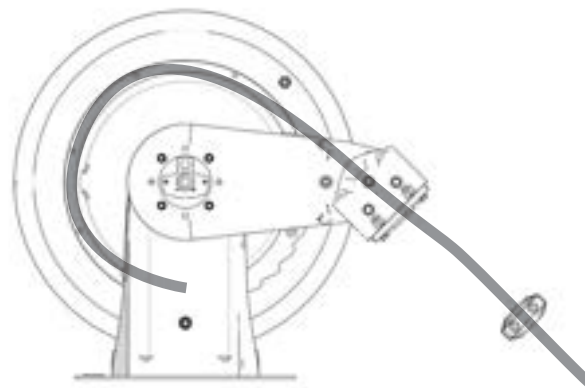
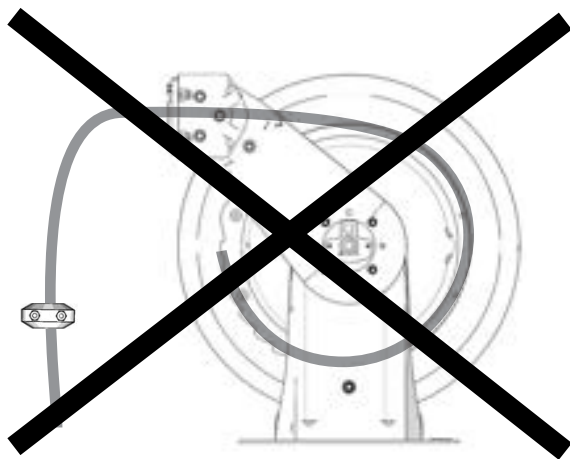
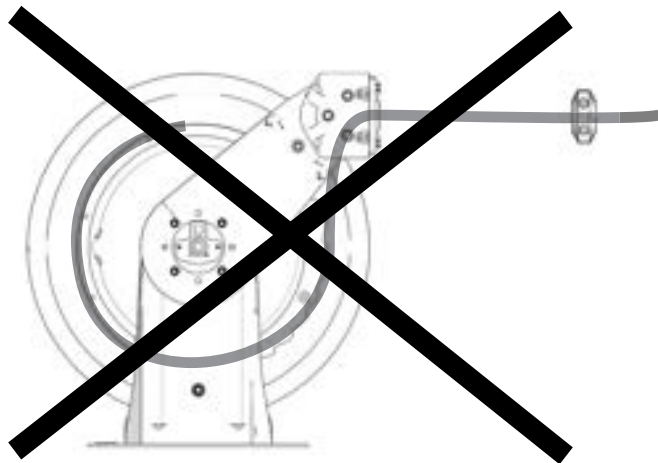
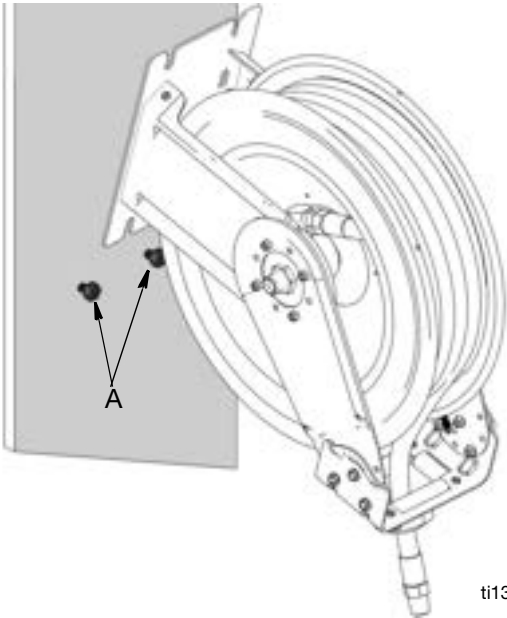
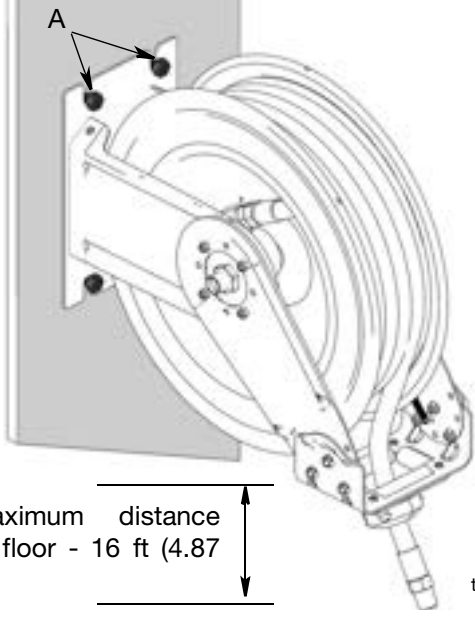
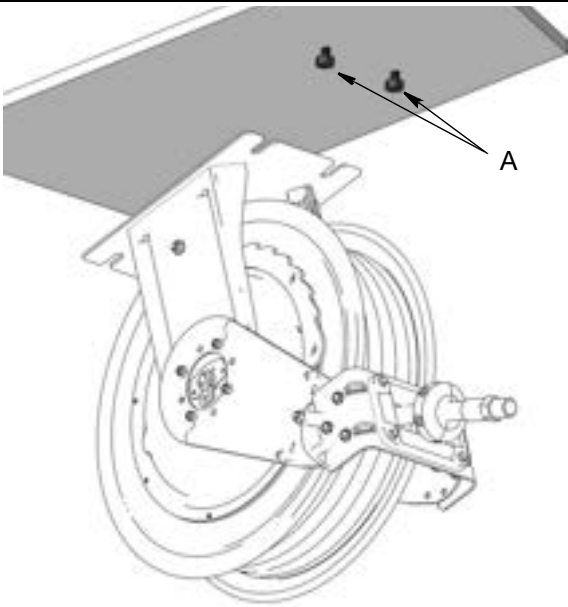
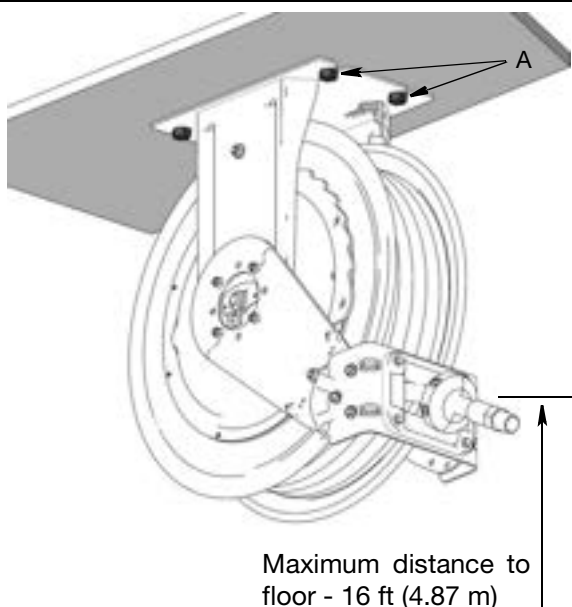


FIG. 3

Wall Mounting

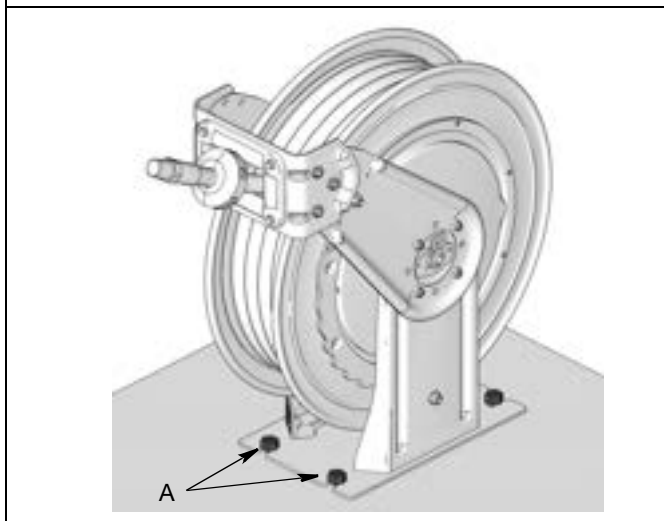
1. A = Screws	2. A = Screws
 <p>ti13982</p>	 <p>Maximum distance to floor - 16 ft (4.87)</p> <p>ti13983</p>

Ceiling Mounting

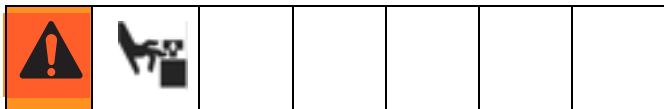
1. A = Screws	2. A = Screws
 <p>A</p>	 <p>Maximum distance to floor - 16 ft (4.87 m)</p>

Truck Bed Mounting

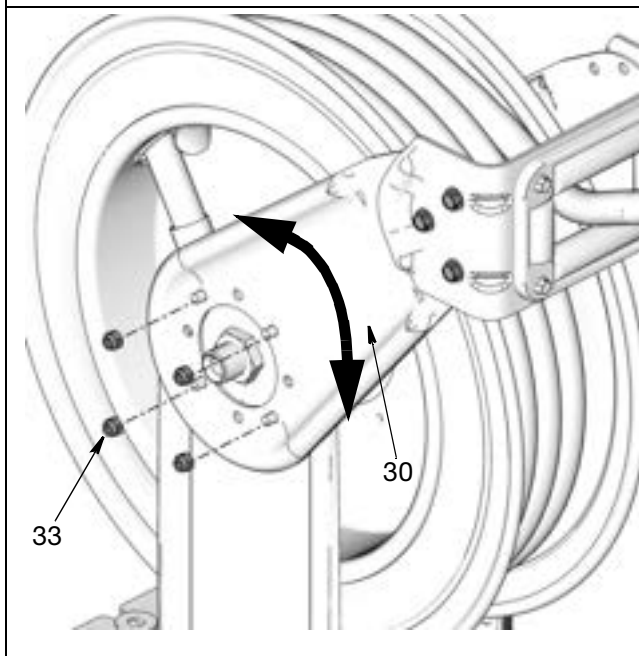
1. A = Screws



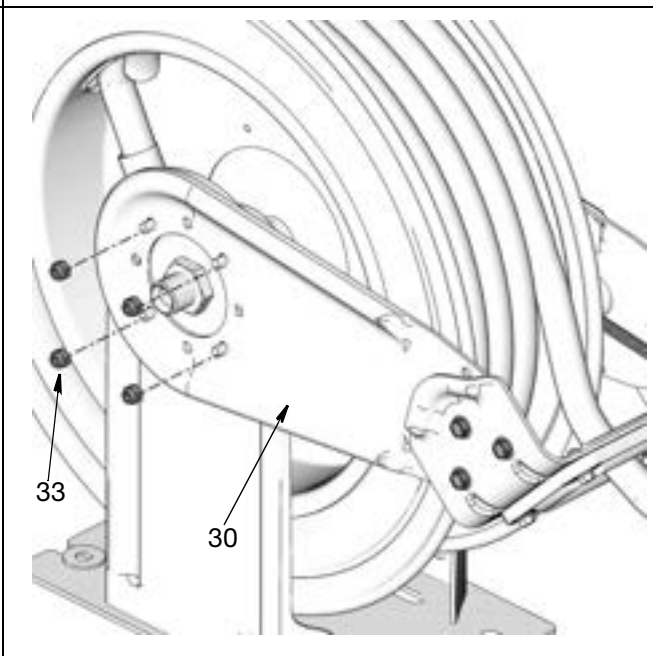
Changing Position of Guide Arms (30)



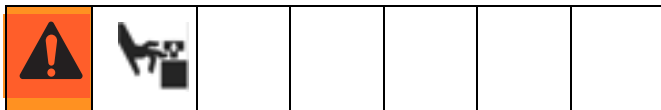
1. Remove nuts (33). Reposition guide arms (30) to new location.



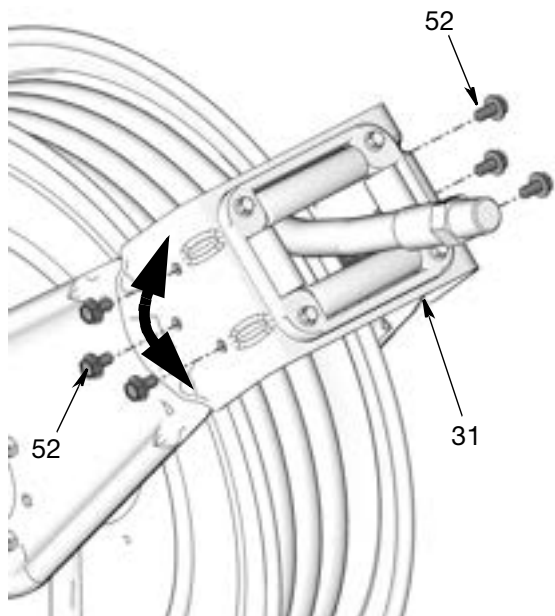
2. Reinstall nuts (33). Torque to 25 - 35 ft lbs (33.9 to 47.5 N·m).



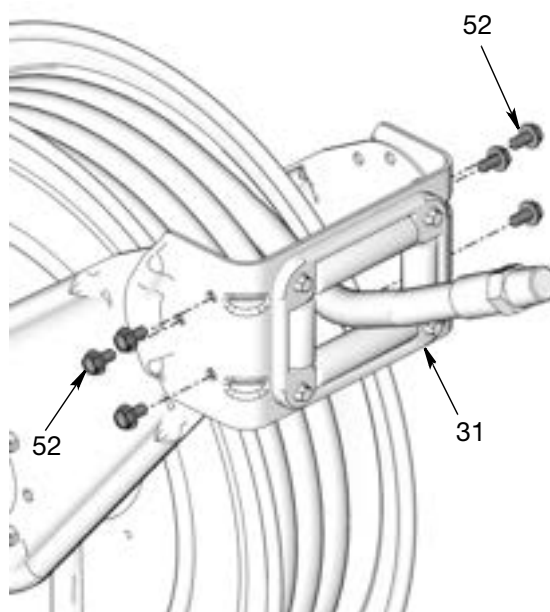
Changing Hose Guide (31) Position



1. Remove screws (52) and nuts (53) (not shown). Reposition hose guide (31) to new location.




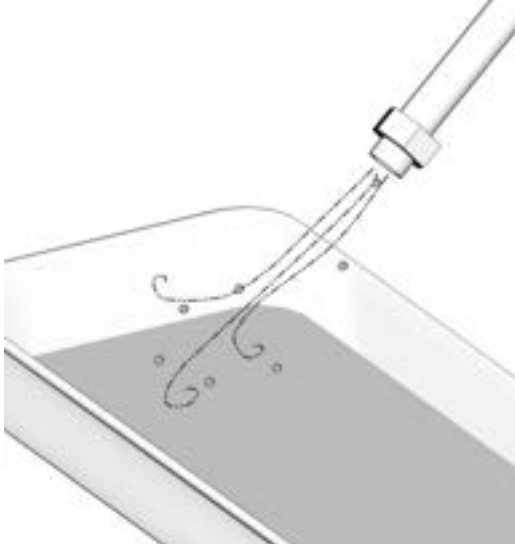

2. Reinstall screws (52) and nuts (53) (not shown). Torque to 25 - 35 ft lbs (33.9 to 47.5 N•m).



Flushing




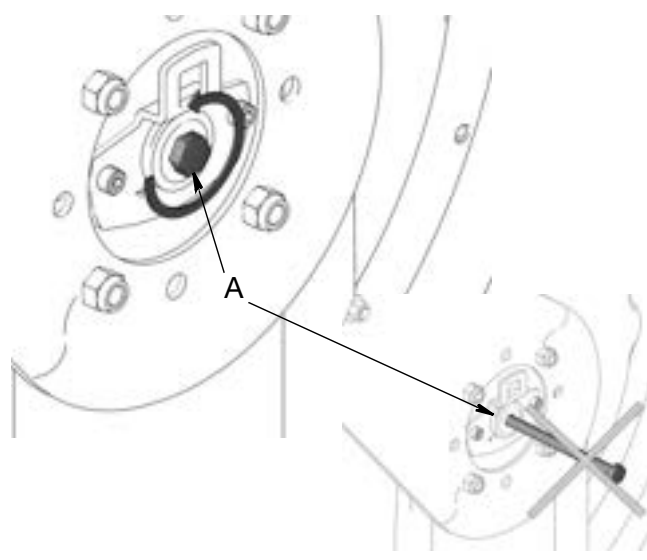
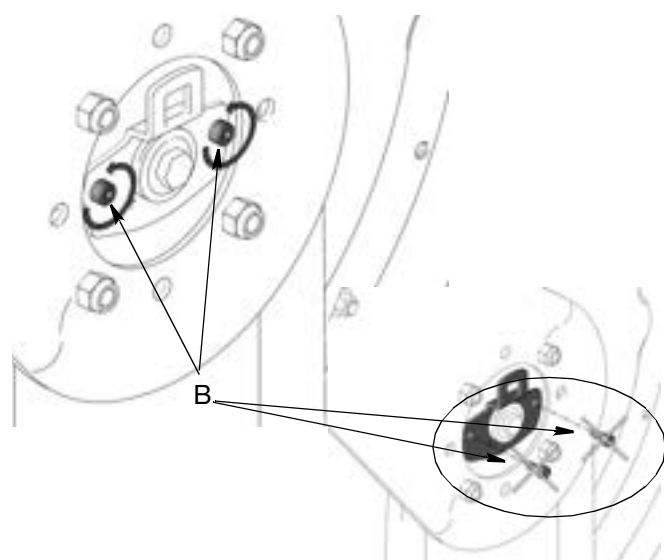
Before installing meter or dispense valve to end of hose, flush supply line with a solvent compatible with the fluid you are dispensing.

<p>1. Place end of hose in waste container.</p>	<p>2. Blow out entire supply line with air.</p>
	
<p>3. Flush equipment with DEF until fluid runs clear.</p>	
	

Adjusting Spring Tension

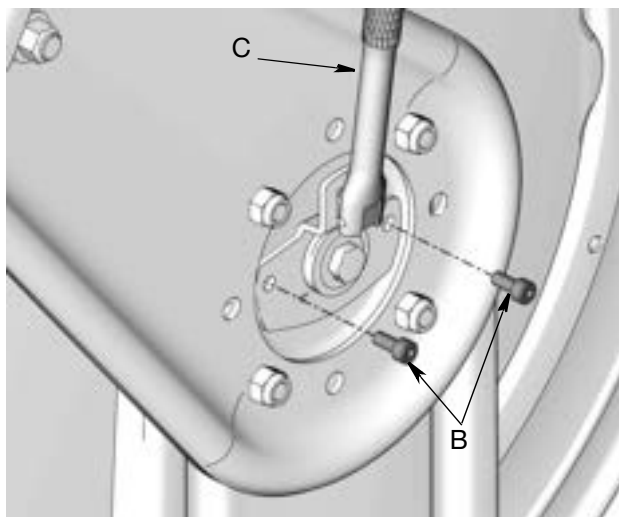
Increasing Spring Tension

						
<p>Uncontrolled spinning of the hose reel could cause serious injury if you are hit by the hose or the adjusting tool (C).</p> <ul style="list-style-type: none"> • Never allow the reel to spin freely. • Always grasp the tool firmly with both hands when adjusting tension. • The reel must be bolted securely in place when making adjustments. 						

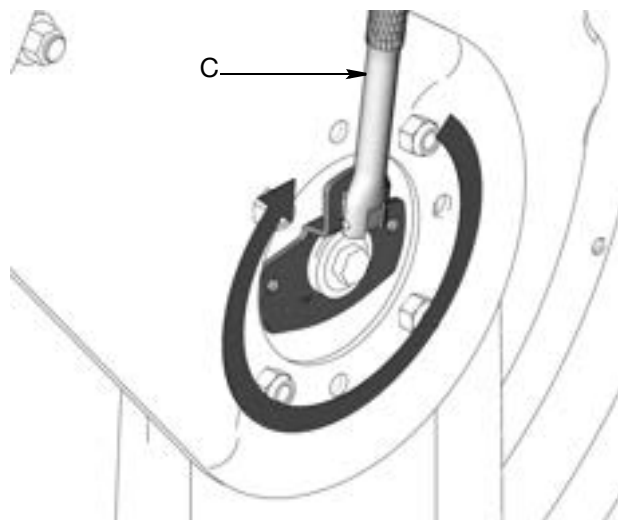
<p>1. Loosen (A) 3-5 turns. Do not remove (A)!</p> 	<p>2. Loosen (B) 3-5 turns. Do not remove (B) yet.</p> 
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Adjusting Spring Tension

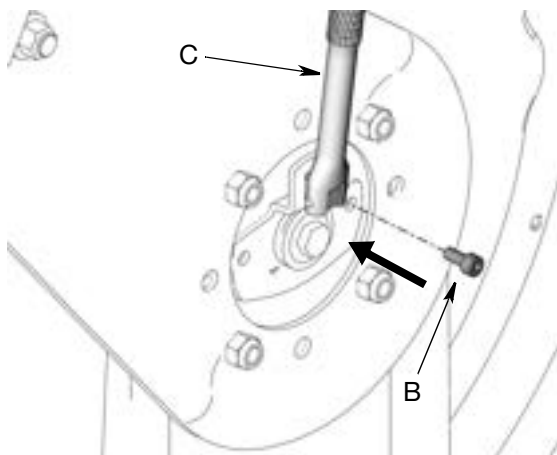
3. Insert tool (C) in opening. Hold tool (C) firmly to engage spring force before removing screws (B).



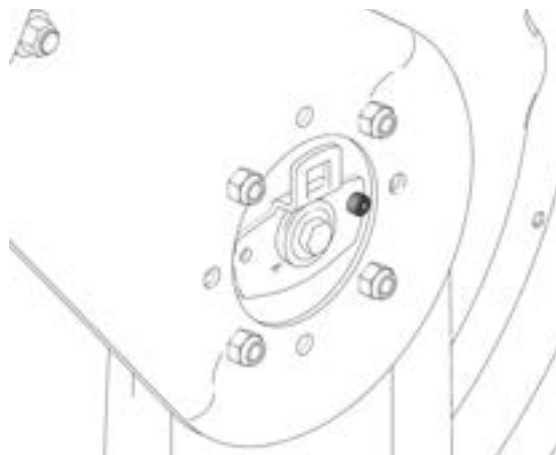
4. Turn tool (C) one full turn clockwise.



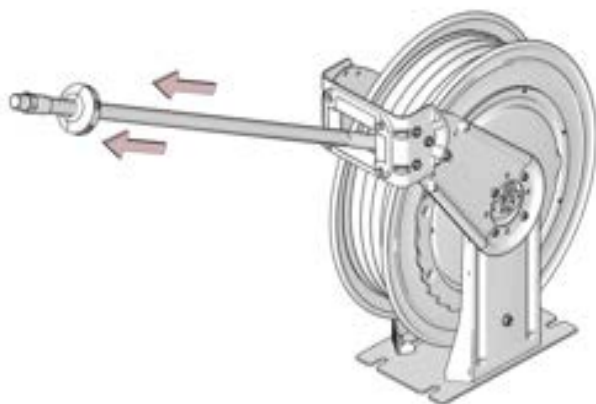
5. Replace one screw (B). Leave tool (C) in place.



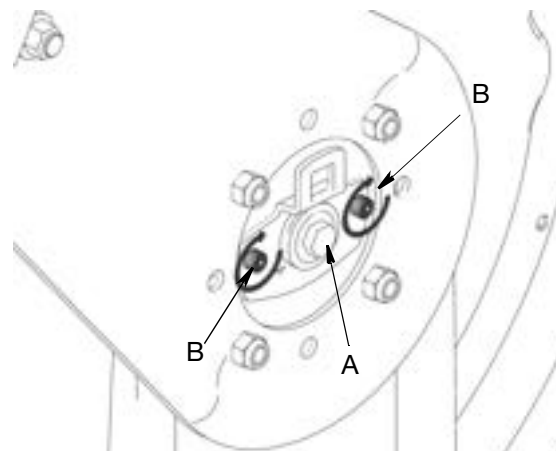
6. Remove tool (C).



7. Pull hose to test tension. Repeat 3 - 7 if necessary.

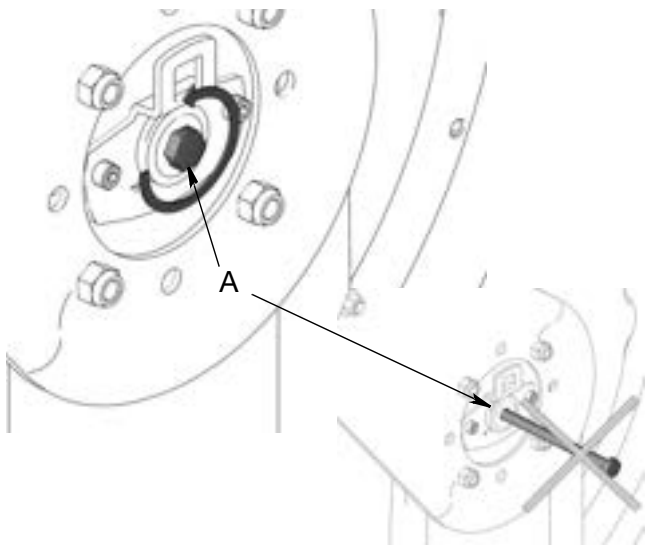
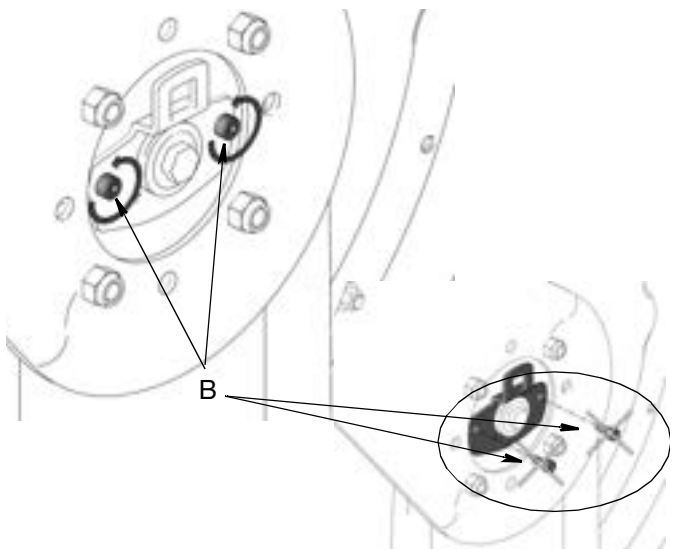
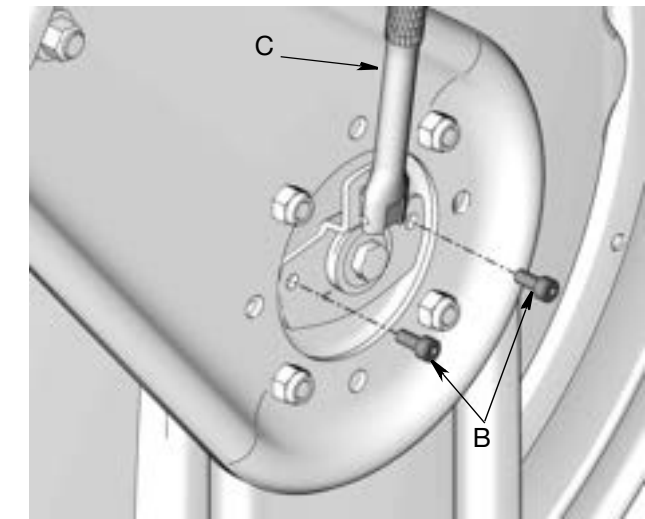
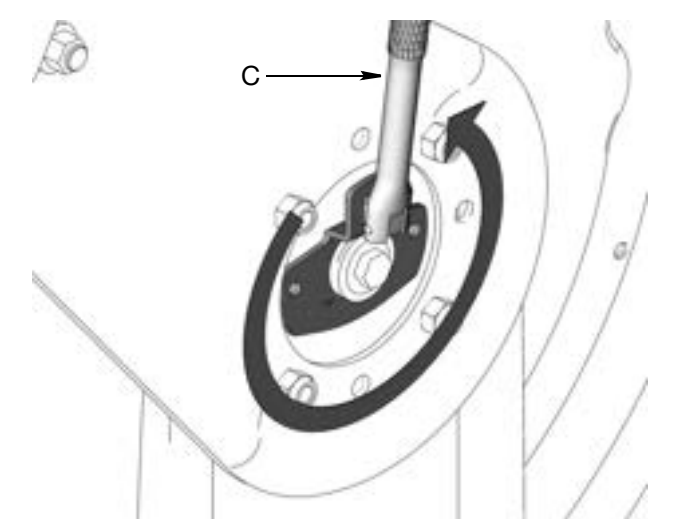


8. Replace and tighten screws (B) and (A).

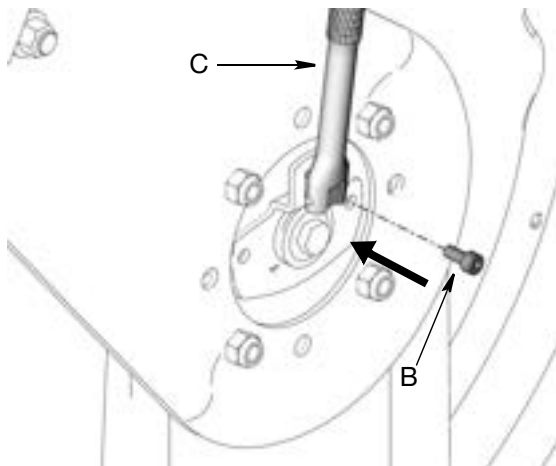
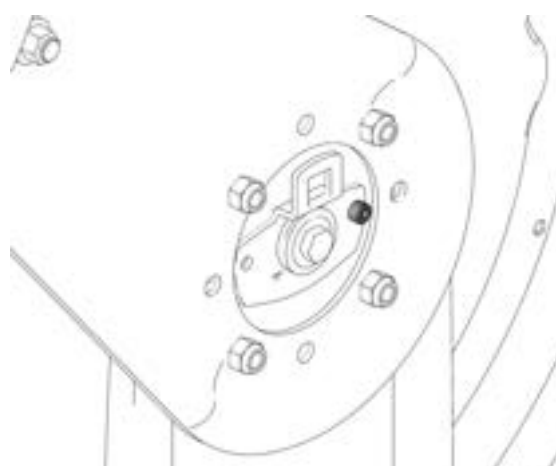
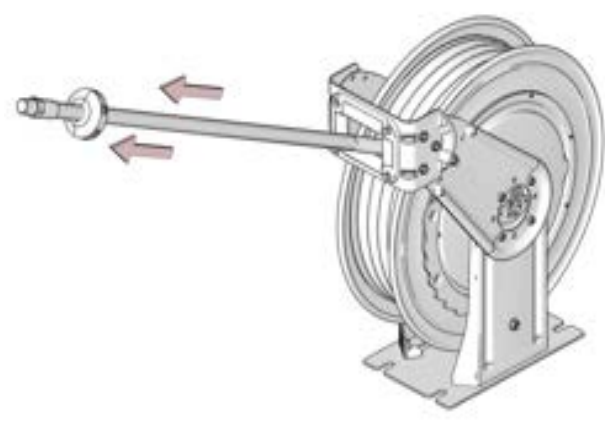
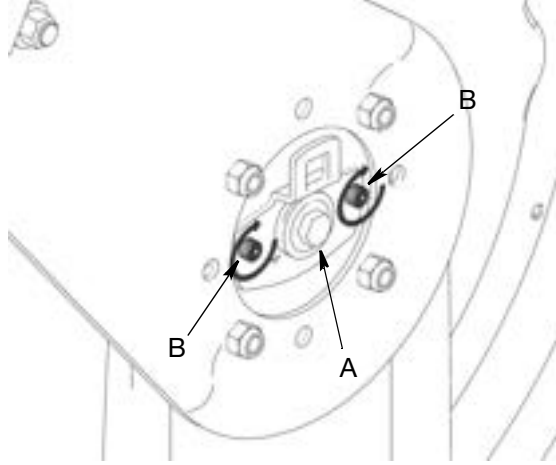


Decreasing Spring Tension

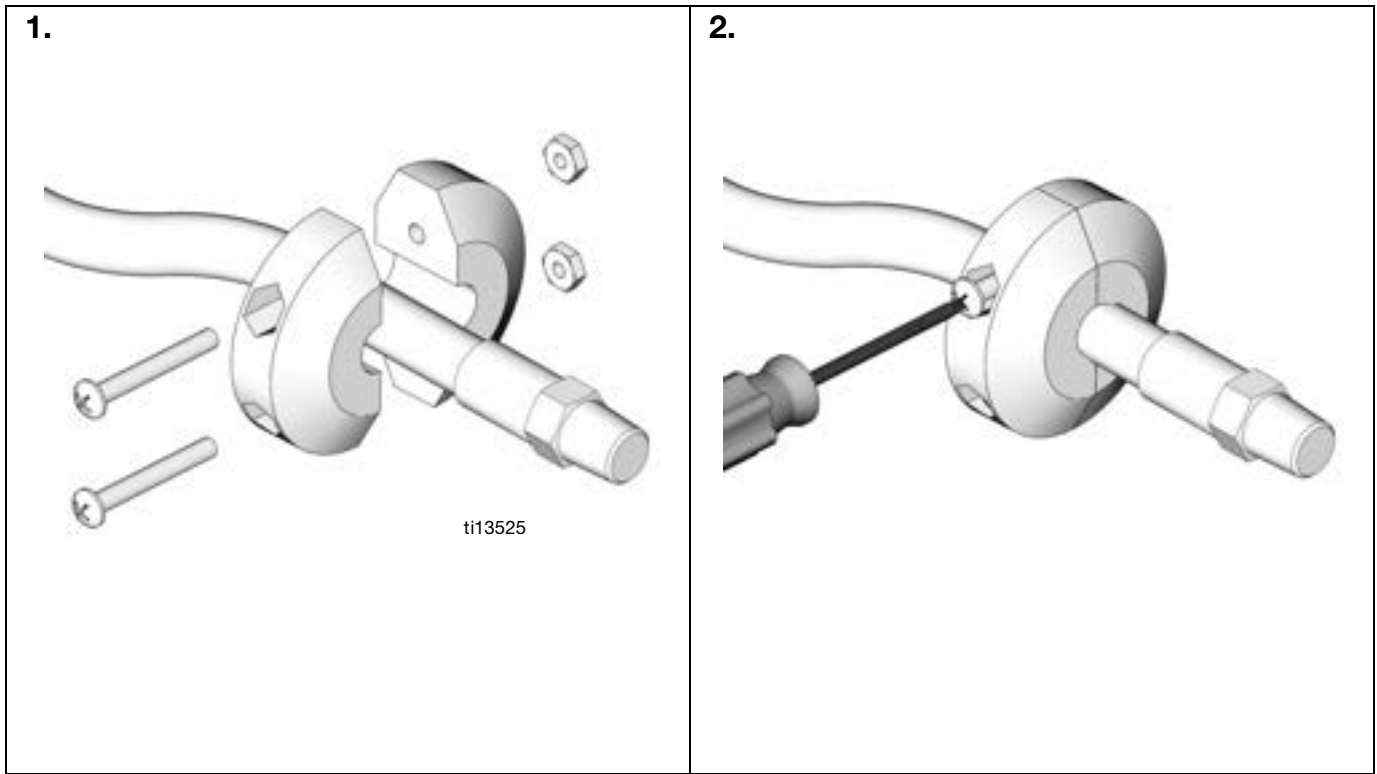
<p>Uncontrolled spinning of the hose reel could cause serious injury if you are hit by the hose.</p> <ul style="list-style-type: none"> • Never allow the reel to spin freely. • Always grasp the tool firmly with both hands when adjusting tension. • The reel must be bolted securely in place when making adjustments. 						

<p>1. Loosen (A) 3-5 turns. Do not remove (A)!</p> 	<p>2. Loosen (B) 3-5 turns. Do not remove (B) yet.</p> 
<p>3. Insert tool (C) in opening. Hold tool (C) firmly to engage spring force before removing screws (B).</p> 	<p>4. Turn tool (C) one full turn counter-clockwise.</p> 

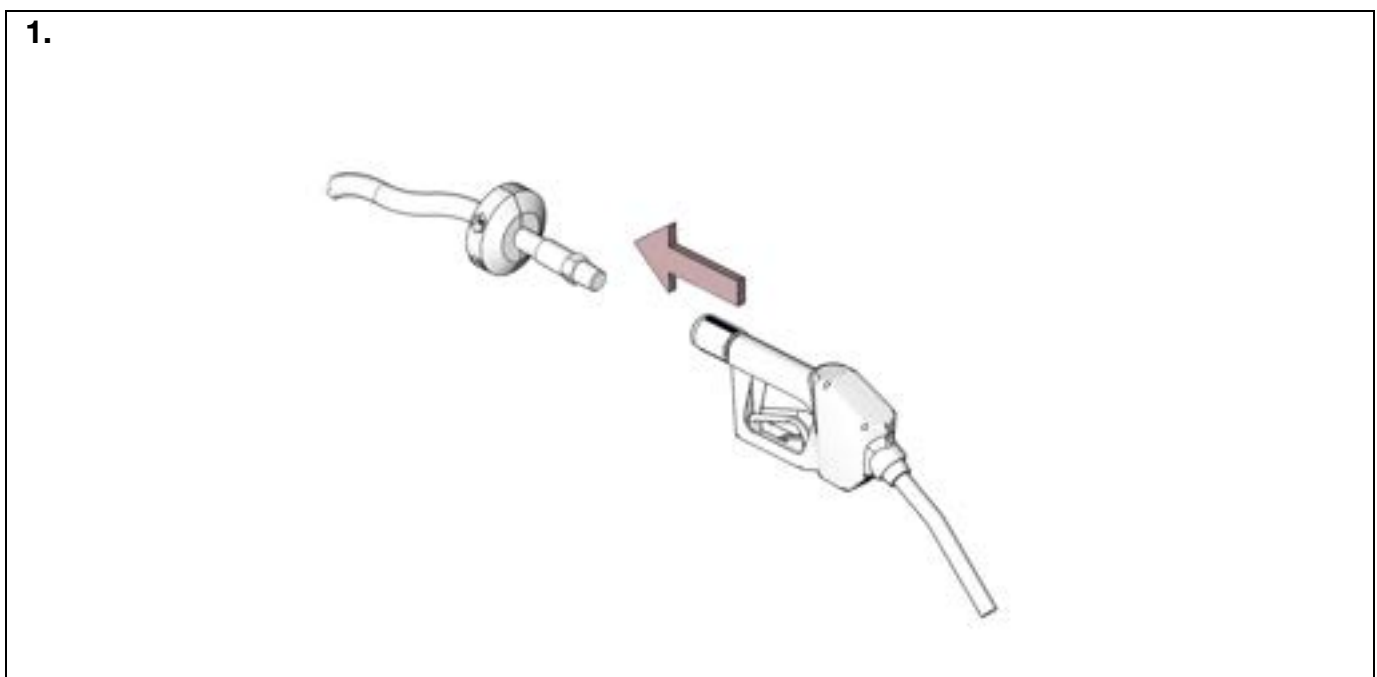
Adjusting Spring Tension

<p>5. Replace one screw (B). Leave tool (C) in place.</p>	<p>6. Remove tool (C).</p>
 <p>This diagram shows a close-up of a mechanical assembly. A screw, labeled 'B', is being inserted into a hole. A tool, labeled 'C', is positioned vertically in the center of the assembly. Arrows point from the labels 'B' and 'C' to their respective parts.</p>	 <p>This diagram shows the same mechanical assembly as in the previous step, but the tool 'C' has been removed. The screw 'B' is now in place. An arrow points from the label 'B' to the screw.</p>
<p>7. Pull hose to test tension. Repeat 3 - 7 if necessary.</p>	<p>8. Replace and tighten screws (B) and (A).</p>
 <p>This diagram shows a side view of the mechanical assembly. A hose is being pulled to the left, as indicated by two red arrows. The assembly is mounted on a base.</p>	 <p>This diagram shows a close-up of the mechanical assembly. Two screws, labeled 'A' and 'B', are being tightened. Arrows point from the labels 'A' and 'B' to their respective screws.</p>

Hose Stopper Installation



Installing Nozzle



Parts

Parts

Ref. No.	Part No.	Description	Qty
1†		SHAFT, spring (not shown)	1
2	15Y781	WASHER, flat (not shown)	1
3†		KIT, shaft, swivel	1
4†		KEY, square (not shown)	1
5†		HUB, power, spring (not shown)	1
7†		WASHER, flat, spring side (not shown)	1
9†		FLANGE, set, black	1
10†		SPRING, power, 21 turn (not shown)	1
11†		COVER, spring, black (not shown)	1
12†		GASKET (not shown)	1
14	15Y122	ADJUSTER, power spring	1
15		WASHER, flat, square center	1
16		WASHER, flat 31 id	1
17	16A719	WASHER, flat	1
18	278151	SCREW, swivel shaft	1
19	107100	SCREW, cap	2
20†	110956	PACKING, o-ring, buna-n	2
22†		SWIVEL, elbow	1
24	16A146	BASE, painted, all models white	1
	16A147	BASE, painted, all models metallic blue	1
	16A148	BASE, painted, all models yellow	1
	16A149	BASE, painted, all models desert sand	1
25		RING, retaining, ext, 22mm	1
26	16A134	PEDESTAL, arm, swivel side, all models white	1
	16A135	PEDESTAL, arm, swivel side, all models metallic blue	1
	16A136	PEDESTAL, arm, swivel side, all models, yellow	1
	16A137	PEDESTAL, arm, swivel side, all models desert sand	1
27	16A691	SCREW, socket head	2
28	125242	HOSE, DEF, 50 ft, 3/4 BSPP x 3/4 BSPP (HSDD5# models only)	1
30	16A121	ARM, guide, all models, white	2
	16A122	ARM, guide, all models, metallic blue	2
	16A123	ARM, guide, all models, yellow	2
	16A124	ARM, guide, all models, desert sand	2
31	16A140	GUIDE, hose, all models, white	1
	16A141	GUIDE, hose, all models, metallic blue	1
	16A142	GUIDE, hose, all models, yellow	1
	16A143	GUIDE, hose, all models, desert sand	1
32		NUT, hex, 3/4 x 14 BSPP	1
33	104541	NUT, lock	8
34◆★		BRACKET, roller	1
35◆★		PIN, roller	2
36◆★		BOLT, m6x 20 lg w/patch	4

Ref. No.	Part No.	Description	Qty
37◆★		ROLLER, hose	2
38◆★		PIN, roller	2
39◆★		ROLLER, hose	2
40◆		NUT, lock, hex	1
41◆		BUSHING, pawl (not shown)	1
42◆		KIT, pawl, ratchet	1
43◆		BOLT, m10 x 40 lg	1
44◆		SPRING, ratchet pawl	1
46▲	15W036	LABEL, Warning	1
48◆		SCREW, button head m6	4
49✓	218341	STOP, hose (HSDD5# models only)	2
50✓		SCREW, mach, phil, pn hd, (HSDD5# models only)	2
51✓		NUT, hex, jam (HSDD5# models only)	2
52	111799	SCREW, cap, hex hd	6
53	16A390	NUT, hex	6
59◆		RATCHET, Aluminum	1

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

† Included in Swivel and Seal Replacement Kit 24K259

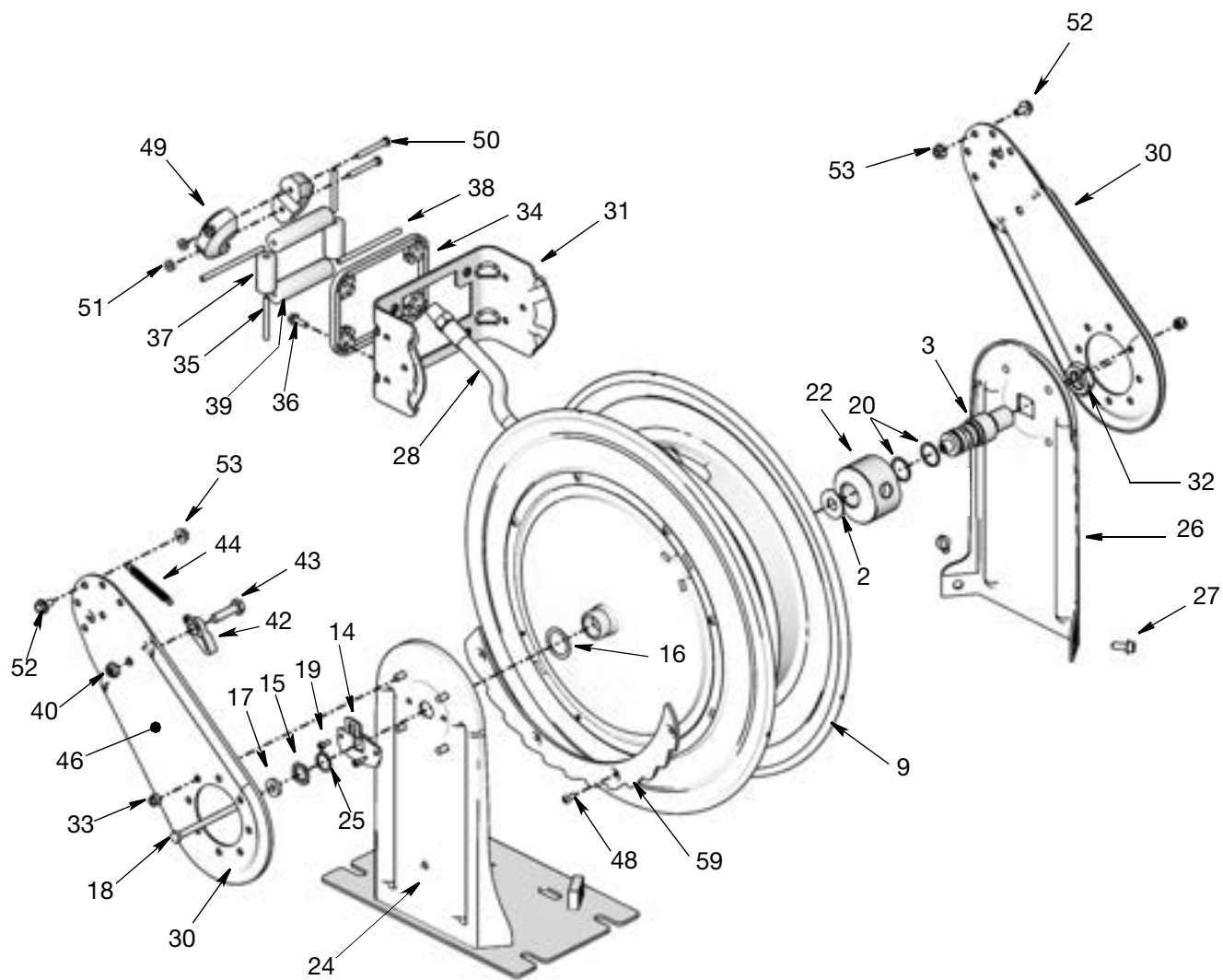
◆ Included in Ratchet and Latch Replacement Kit 24C995

◆ Included in Hose Guide Kit 24C996

★ Included in Bulk Head Hose Guide Kit 24C997

‡ Included in Spool Replacement Kit 24C998

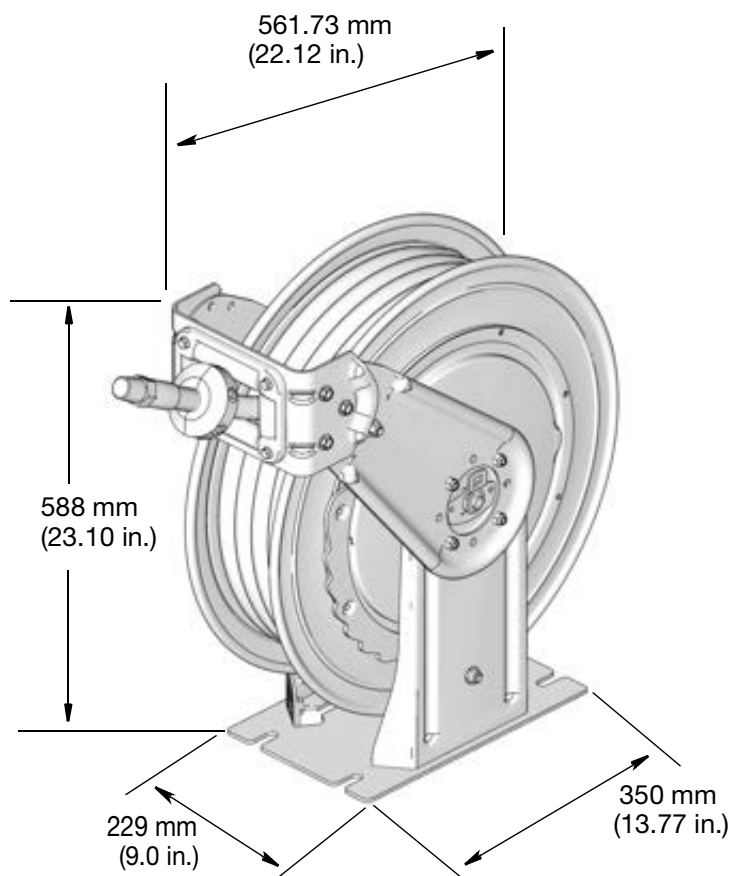
✓ Included in Hose Stop Replacement Kit 237873



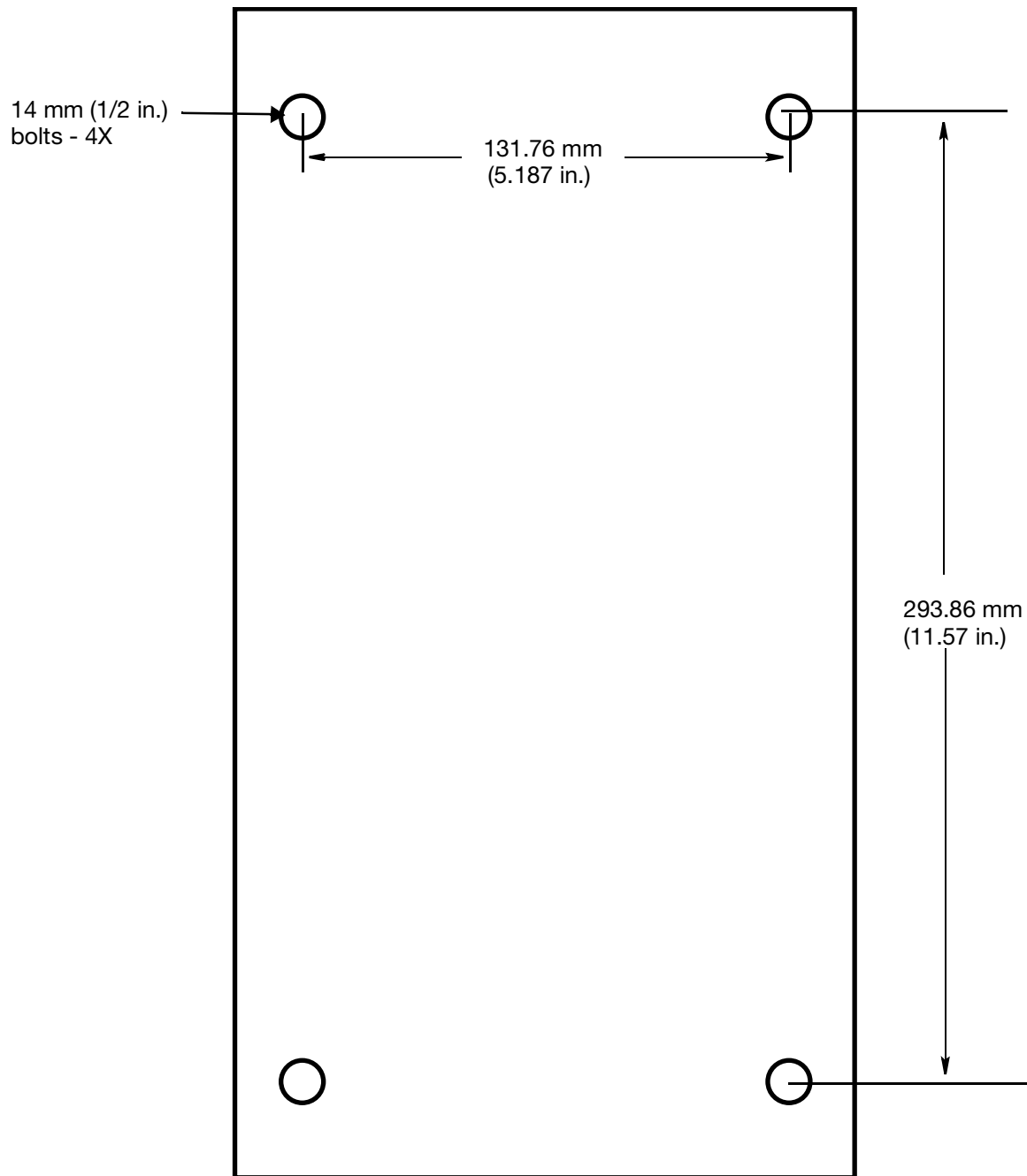
Technical Data

Model No.	Application	Hose Size	Maximum Pressure			Inlet (BSPP)	Outlet (BSPP)
			PSI	Bar	Mpa		
HSDD5# HSDDD#	DEF	3/4 in. x 50 ft. (19 mm x 1524 cm)	50	3.4	0.34	3/4 inch	3/4 inch
HSDD5# HSDDD#	Bare	N/A	50	3.4	0.34	3/4 inch	3/4 inch
Maximum Dry Weight (without hose)							
HS Models: 98 pounds (44.5 kg)							
Operating Temperature Range: 12°F (-11°C) to 140°F (60°C)							
Sound Data all models:							
Sound Pressure - 85.8 dB(A) calculated at 1 meter per ISO9614.2							
Sound Power - 94.9 dB(A) measured per ISO 9614-2							
Wetted Parts							
SST, Compatible Polyurethane, Fluoroelastomer							

Dimensions



Mounting Pattern



Graco 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 as defined in the table below from the date of sale, 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.

Component	Warranty Period
Wear parts, including but not limited to: hose, swivel seals, roller guide	12 months
Reel structural components and spring	36 months
Bare hose reels: all components	12 months

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

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

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within 48 months of the date of sale, or 24 months for all other parts.

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