

## High-Capacity Reel

### Description

#### WARNING



Should reel model 7342 be used to deliver gasoline or aircraft fuel, the:

- delivery and connecting hose must contain a grounding wire
- entire fuel delivery system must be properly grounded

This prevents the build-up of static electricity.

Personal injury can occur due to fire and/or explosion.

**NOTE:** The reel is grounded at the swivel with a wave washer. See **Figure 2**.

High-capacity hose reel model 7342 is designed to:

- deliver fuel (such as diesel fuel, aircraft fuel, and gasoline) and lubricating oils.
- mount to a lubrication truck or to a ceiling\* or wall.

This reel mounts as a single unit or in banks of as many as required. See **Figure 4** for details.

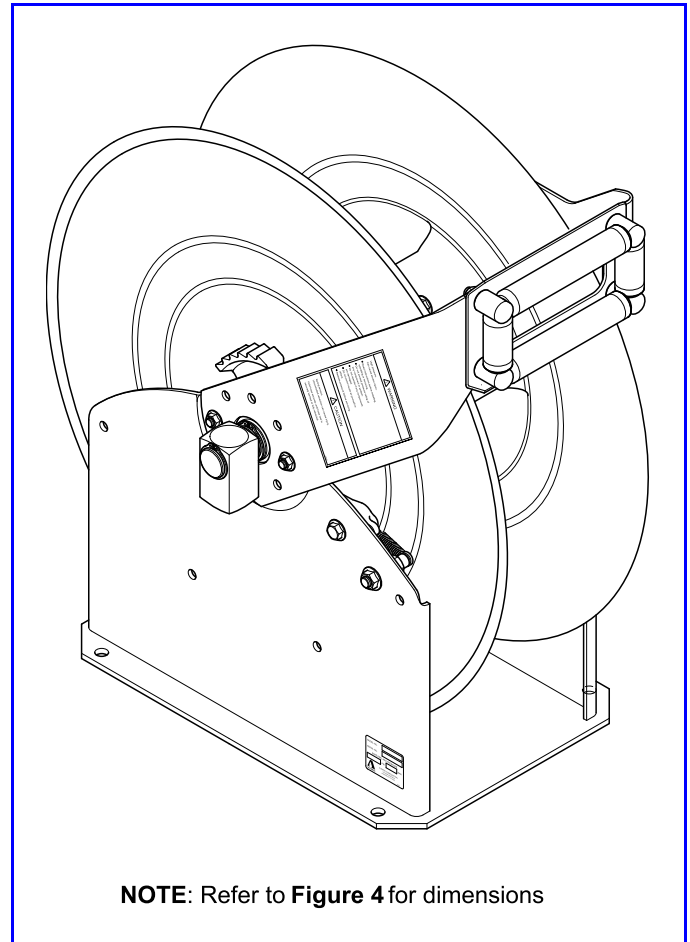
**NOTE:** The Hose Guide Arms can attach to the Base Assembly in five (5) different positions.

This model reel is spring-powered and self-retracting. When the hose is extended, the reel can be latched on either of two ratchet sections per revolution of the sheave. A pull releases the latch from the ratchet and allows the hose to retract onto the reel.

This model reel manages a maximum length of delivery hose as indicated in **Table 1**.

Delivery Hose Description	Maximum Length of Hose in Feet
3/4 " ID Single-Wire Braid	70
1 " ID Single-Wire Braid	50
1 " ID Fuel	

**Table 1** Delivery Hose Capacity for Reel Model 7342



**NOTE:** Refer to **Figure 4** for dimensions

Inlet (Swivel)	Outlet	Reel Max. Pressure	
		psi	Bars
1 " NPTF (f)	1 " NPSM (f) *	1000	69

\* A bushing (included) allows the outlet to be reduced to 3/4 " NPTF (f)

**Figure 1** High-Capacity Reel Model 7342

#### CAUTION

\* The base of the reel must be at a height no greater than 16 feet (4.9 m) from the floor to comply with the warranty.

Alemite LLC  
167 Roweland Drive, Johnson City, Tennessee 37601  
www.alemite.com

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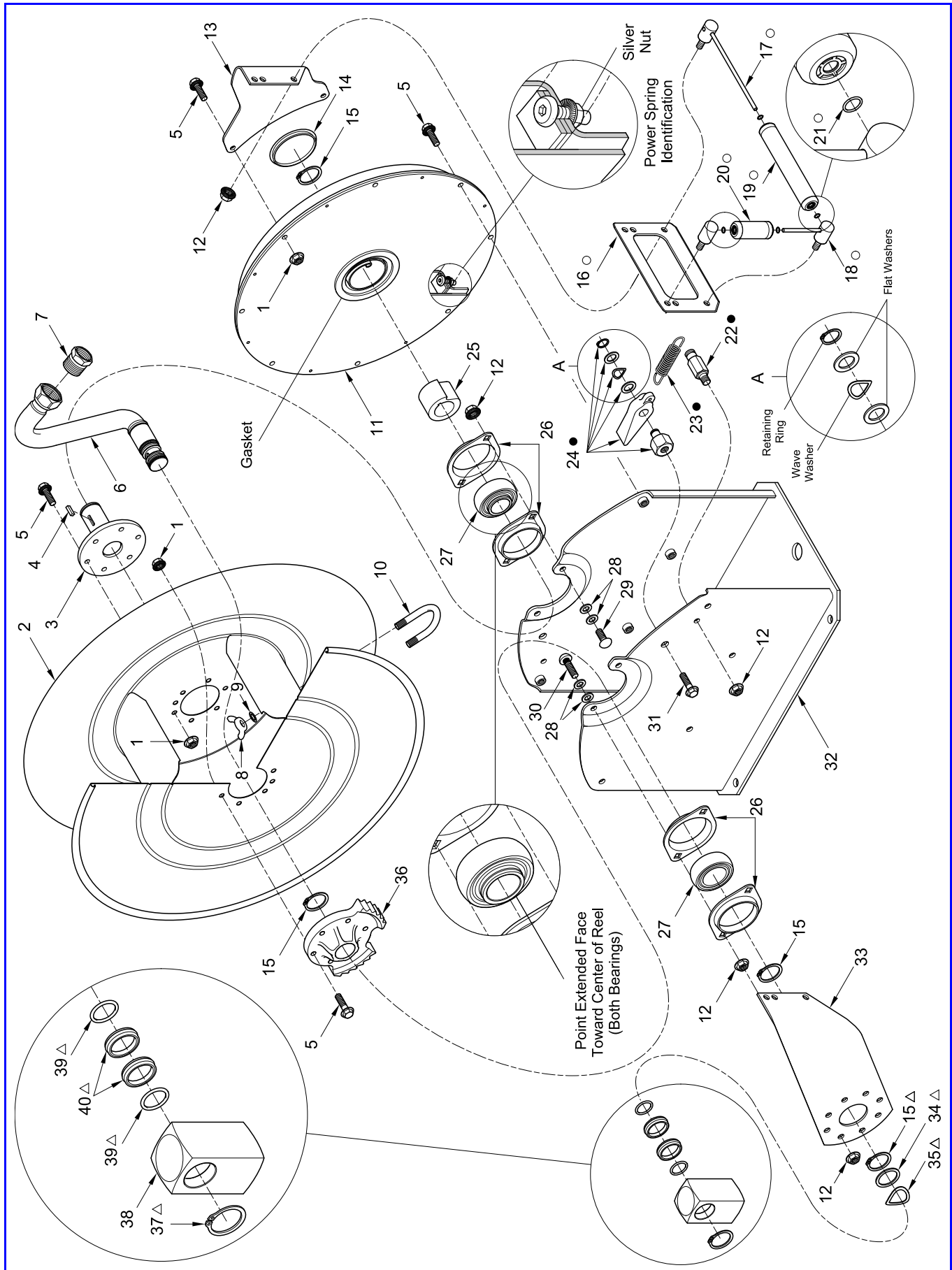


Figure 2 High-Capacity Reel Model 7342 - Exploded View

Item No.	Part No.	Description	Qty	Notes	Numeric Order Part # (Item #)
1		Nut, Flange 5/16 " -18	16		14534 (9)
2		Sheave Assembly	1		50876 (8)
3	339464	Shaft and Flange Assembly	1		171000-5 (21)
4	339521	Key, Square	1		171007-32 (37)
5		Screw, 5/16 " -18 x 3/4 "	20		171007-33 (15)
6	339476	Shaft and Riser Assembly	1		171009-13 (39)
7	320353	Bushing, 1 " NPTF (m) x 3/4 " NPTF (f)	1	Use w/ 3/4 " hose	320353 (7)
8		Nut, Wing, 1/4 " -20	2		339197 (25)
9		Washer, 5/16 "	2		339208 (28)
10	339219-1	U-Bolt, 1-1/8 "	1	Use w/ 3/4 " hose	339209 (34)
	339219-2	U-Bolt, 1-1/2 "	1	Use w/ 1 " hose	339210 (23)
	339219-3	U-Bolt, 1-1/4 "	1	Use w/ 1 " hose	339219-1 (10)
11	339469-2	Spring Assembly, Power	1	Includes Gasket	339219-2 (10)
12		Nut, Flange 3/8 " -16	11	○● 4 in ○ kit, 1 in ● kit	339219-3 (10)
13		Arm, Short	1		339435 (32)
14	339455	Plug, Button	1		339439 (24)
15	171007-33	Ring, Retaining	4	△ 1 in △ kit	339441 (22)
16		Plate, Hose Guide	1		339443 (2)
17		Post and Shaft Assembly, Long	2	○	339446 (13)
18		Post and Shaft Assembly, Short	2	○	339447 (33)
19		Roller Assembly, Long	2	○	339448 (16)
20		Roller Assembly, Short	2	○	339451-1 (20)
21		O-Ring, 1/4 " ID x 3/8 " OD	8	○	339451-2 (19)
22		Post, Spring	1	●	339455 (14)
23	339210	Spring, Extension	1	●	339456 (27)
24		Pawl and Shaft Assembly	1	●	339457 (26)
25	339197	Arbor, Spring	1		339460 (31)
26	339457	Housing, Bearing	2		339461 (5)
27	339456	Bearing	2		339462 (12)
28		Washer, 0.445 " ID x 0.75" OD	8		339463 (29)
29		Bolt, Ribbed-Neck, 3/8 " -16 x 3/4 "	2		339464 (3)
30		Bolt, Ribbed-Neck, 3/8 " -16 x 1-1/4 "	2		339467 (36)
31		Screw, 1/2 " -13 x 3/4 "	1	●	339469-2 (11)
32		Base Assembly	1		339476 (6)
33		Arm, Long	1		339481 (38)
34	339209	Washer	1	△	339483 (35)
35	339483	Washer, Wave	1	△	339484 (30)
36	339467	Ratchet	1		339516-1 (18)
37	171007-32	Ring, Retaining	1	△	339516-2 (17)
38	339481	Body, Swivel	1		339520 (40)
39		O-Ring, 1-3/16 " ID x 1-5/16 " OD	2	△	339521 (4)
40		T-Seal	2	△	387370 (1)

**Legend:**Part numbers left blank (or in *italics*) are not available separately

●○△ designates a repair kit item

**Repair Kits**

Part No.	Kit Symbol	Description
393727	○	Kit, Hose Guide
393724	●	Kit, Pawl and Shaft Assembly
393725	△	Kit, Swivel Repair

*IMPORTANT: Prior to performing any maintenance procedure, the following safety precautions must be observed. Personal injury may occur.*

**WARNING**



**Release all pressure within the system prior to performing any overhaul procedure.**

- **Disconnect the air supply line to the pump's motor.**
- **Into an appropriate container, operate the control valve to discharge remaining pressure within the system.**

**Read each step of the instructions carefully. Make sure a proper understanding is achieved before proceeding.**

**Overhaul**

*IMPORTANT: Make sure all pressure is released within the system.*

**NOTE:** Refer to **Figure 2** for component identification on all overhaul procedures.

**Disassembly**

*IMPORTANT: Prior to disassembly, release tension on the power spring.*

1. Remove the hose stop and the control valve from the delivery hose.
2. Pull on the delivery hose to unlatch the reel.
3. Allow the delivery hose to retract onto the reel.
4. Turn the reel in the same direction until the power spring bypasses Spring Arbor (25).
  - A pronounced "click" will sound.

**Swivel Assembly**

5. Remove Retaining Ring (37) that secures Swivel Body (38) to Shaft and Riser Assembly (6).
  - Remove the Swivel Body.
6. From the Shaft and Riser Assembly remove:
  - O-Ring (39) . . . . .Qty 2
  - T-Seal (40) . . . . .Qty 2
  - Wave Washer (35) . . . . .Qty 1
  - Washer (34) . . . . .Qty 1
  - Retaining Ring (15) . . . . .Qty 2

**Hose Guide Assembly**

7. Remove Nuts (12) that secure Post and Shaft Assemblies (17) and (18) to Hose Guide Plate (16).
  - Remove each Post and Shaft Assembly from the Hose Guide Plate.
8. Remove Roller Assemblies (19) and (20) from each Post and Shaft Assembly as required.
9. Remove O-Rings (21) from each Roller Assembly as required.

**HINT:** Use a small flat-head screwdriver.

**Arms and Power Spring Assembly**

10. Remove Nuts (12) that secure Long Arm (33) to Bolts (30).
  - Remove the Arm from the Bolts.
11. Remove Nuts (1) and Screws (5) that secure Short Arm (13) to Power Spring Assembly (11) as required.
  - Remove the Arm from the Power Spring Assembly.
12. Remove Screws (5) that secure the Power Spring Assembly to Base Assembly (32).
  - Remove the Power Spring Assembly from the Base Assembly.

**WARNING**



**Do not attempt to disassemble the Power Spring Assembly. Personal injury can occur.**

**Delivery Hose**

13. Pull the delivery hose from Sheave Assembly (2).
14. Remove Wing Nuts (8) and Washers (9) that secure U-Bolt (10) to the Sheave Assembly.
  - Remove the U-Bolt from the Sheave Assembly.
15. Disconnect the delivery hose from the Shaft and Riser Assembly.
  - Remove the delivery hose from the Sheave Assembly.
16. Remove Bushing (7) [if used] from the delivery hose as required.

**Arbor and Bearings**

17. Remove Retaining Ring (15) that secures Arbor (25) to Shaft and Flange Assembly (3).
  - Remove the Arbor from the Shaft and Flange Assembly.

18. Remove Square Key (4) from the Shaft and Flange Assembly.
19. Remove Nuts (1) that secure Bearing Housings (26) to the Base Assembly.
  - Remove each set of Bearing Housings and Bearings from the Base Assembly.

### Sheave Assembly

20. Remove the Sheave Assembly (with attached components) from the Base Assembly.

### Shaft and Riser Assembly

21. Remove Screws (5) and Nuts (1) that secure the Ratchet to the Sheave Assembly.
  - Remove the Ratchet (with Shaft and Riser Assembly) from the Sheave Assembly.
22. Remove the Shaft and Riser Assembly from the Ratchet.
23. Remove remaining Retaining Ring (15) from the Shaft and Riser Assembly as required.

### Ratchet

24. Remove Screws (5) and Nuts (1) that secure the Shaft and Flange Assembly to the Sheave Assembly.
  - Remove the Shaft and Flange Assembly from the Sheave Assembly.

### Base Assembly

#### Pawl and Shaft Assembly

25. Remove Nut (1) that secures Spring Post (22) to the Base Assembly.
  - Remove the Spring Post from the Base Assembly.
26. Remove Extension Spring (23) from Pawl and Shaft Assembly (24).
  - Remove the Extension Spring from the Spring Post.

27. Remove Screw (31) that secures the Pawl and Shaft Assembly to the Base Assembly.
  - Remove the Pawl and Shaft Assembly from the Base Assembly.
28. Remove Bolts (30 and 29), and Washers (28) from the Base Assembly as required.

## Clean and Inspect

**NOTE:** Use the appropriate repair kit for replacement parts. Make sure all the components are included in the kit before discarding used parts.

Clean all metal parts in a modified petroleum-based solvent. The solvent should be environmentally safe.

Make sure to remove the old sealant from the threads of all components.

## Assembly

**NOTE:** Prior to assembly, certain components require lubrication. Refer to **Table 2** for details.

### Base Assembly

**NOTE:** Refer to **Figures 2** and **3** for component identification on all of the assembly procedures.

### Pawl and Shaft Assembly

1. Apply Loctite 242 to the threads of Pawl and Shaft Assembly (24).

**NOTE:** Make sure to attach the Pawl and Shaft Assembly to the upright without the captive nuts.

2. Secure the Pawl and Shaft Assembly to Base Assembly (32) with Screw (31).
  - Tighten the Screw to 42 - 48 ft-lbs (57 - 65 Nm).

Item No.	Description	Item No.	Description
6	o-ring grooves and lands between grooves on Shaft and Riser Assembly	37	Retaining Ring
21	O-Ring, 1/4 " ID x 3/8 " OD	38	bore of Swivel Body
23	hooks of Pawl Spring	39	O-Ring, 1-3/16 " ID x 1-5/16 " OD
35	Wave Washer	40	T-Seal
36	teeth on Ratchet		

**Table 2** Components Lubricated in Lithium Grease

3. Install Extension Spring (23) into the eye on the Pawl and onto Spring Post (22).
4. Secure the Spring Post to the Base Assembly with Nut (1).
  - Refer to **Figure 2** for the proper hole location.
  - Tighten the Nut securely.

#### Ribbed-Neck Bolts

*IMPORTANT: Make sure the longer Bolts (30) mount on the Pawl Assembly side of the Base Assembly.*

5. Install Bolts (30 and 29) and Washers (28) onto the Base Assembly as required.

#### Sheave Assembly

6. Secure Shaft and Flange Assembly (3) to Sheave Assembly (2) with Screws (5) and Nuts (1).
7. Install Retaining Ring (15) into the furthest inward groove of Shaft and Riser Assembly (6).
8. Install the Shaft and Riser Assembly into Ratchet (36).
9. Secure the Ratchet assembly to the Sheave Assembly with Screws (5) and Nuts (1).
10. Position the Sheave Assembly (with attached components) onto the Base Assembly.
  - Make sure the Ratchet side faces the Pawl.

#### Bearings and Arbor

11. Install Bearing (27) into Bearing Housing (26).
 

*IMPORTANT: Make sure the extended portion of the Bearing faces inward. See **Figure 2**.*
12. Install the first Bearing and Housing assembly (extended side first) onto the Shaft and Riser Assembly and onto the Bolts.
13. Attach the Bearing and Housing assembly to the Base Assembly with Nuts (1).
  - Do not tighten the Nuts at this time.
14. Install the second Bearing and Housing assembly (extended side first) onto the Shaft and Flange Assembly and onto the Bolts.
15. Secure the Bearing assembly to the Base Assembly with Nuts (1).
  - Tighten the Nuts alternately and evenly.

16. Tighten the Nuts on the opposite Bearing alternately and evenly.
17. Install Retaining Ring (15) onto the Shaft and Riser Assembly.
18. Install and hold Square Key (4) into the slot of the Shaft and Flange Assembly.
19. Slide Spring Arbor (25) [flat side first] onto the Shaft and onto the Key.
20. Install Retaining Ring (15) onto the Shaft and Flange Assembly.

#### Power Spring Assembly and Arms

21. Remove Button Plug (14) from the Power Spring Assembly.
  - Use a blunt tool from behind the Plug to “pop” it from the case.

**HINT:** Orient the hook on the Power Spring’s inner coil to properly engage the recess in the Arbor. Lift and center the coil within the case during installation.

22. Install the Power Spring Assembly onto the Arbor.
  - Make sure the end of the power spring properly engages the Arbor.

*IMPORTANT: Use care not to damage the gasket.*

23. Align the bolt holes in the Power Spring Assembly with the Base Assembly.
24. Secure the Power Spring Assembly to the Base Assembly with Screws (5).
25. Install the Button Plug into the case of the Power Spring Assembly.

**NOTE:** The Hose Guide Arms can attach to the Base Assembly in five (5) different positions. Select the required relationship of the Guide to the mounting plate of the Base Assembly.

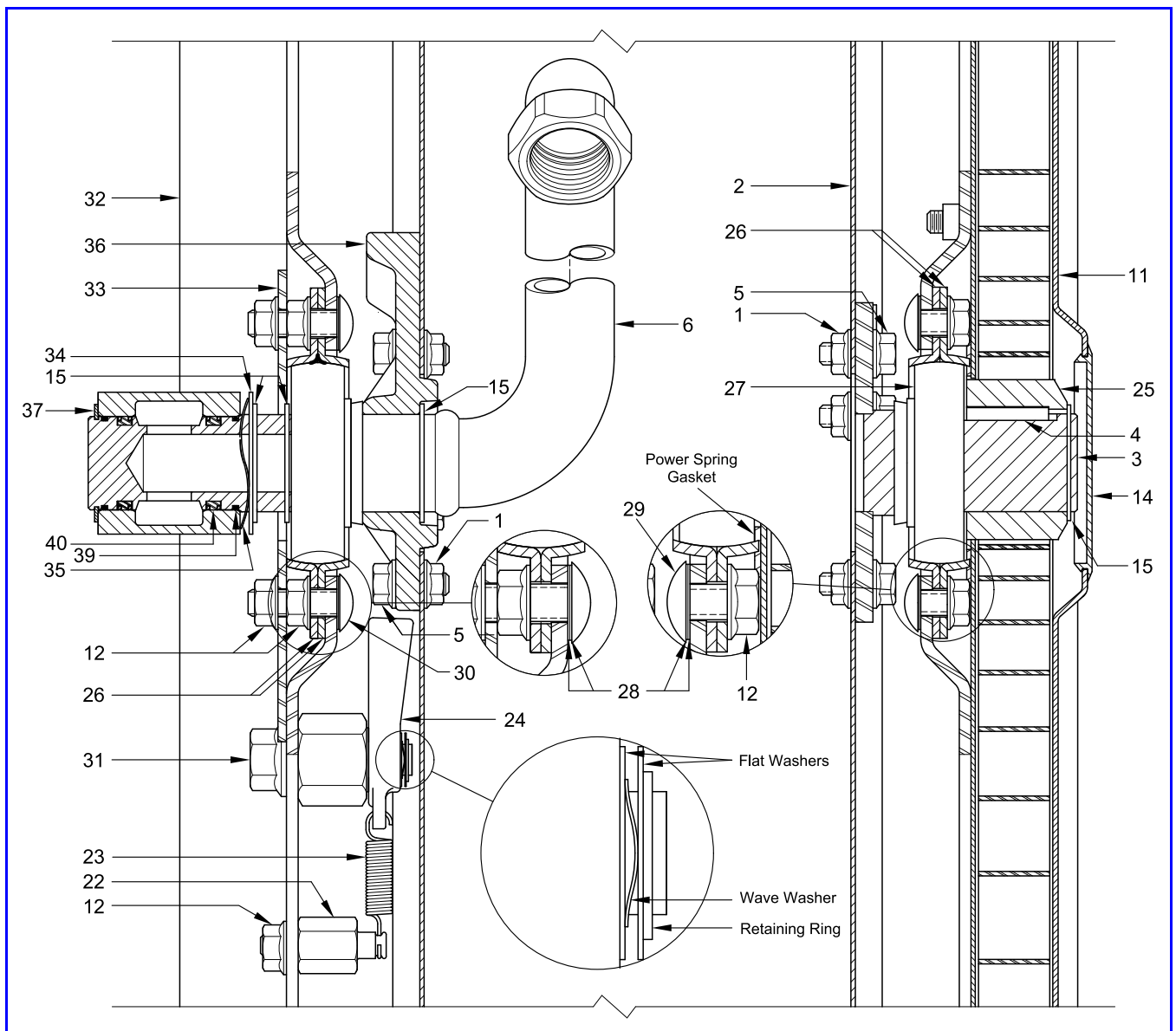
26. Secure Long Arm (33) to the Base Assembly with Nuts (12).
  - Do not tighten the Nuts at this time.
27. Secure Short Arm (13) to the Power Spring Assembly with Screws (5) and Nuts (1) as required.
  - Do not tighten the Screws at this time.

## Hose Guide

28. Install each Roller Assembly (19) onto each Post and Shaft Assembly (17).
29. Install each Roller Assembly (20) onto each Post and Shaft Assembly (18).
30. Install each Roller and Post subassembly into one another to create a rectangle.
31. Install the Roller and Post subassembly into Hose Guide Plate (16).
32. Install the hose guide assembly into each Arm.
33. Secure the hose guide assembly to the Arms with Nuts (12).
34. Tighten the Long Arm Nuts, the Short Arm Screws, and the hose guide assembly Nuts securely.

## Swivel Assembly

35. Onto the Shaft and Riser Assembly install:
  - Retaining Ring (15)Qty 1
  - Washer (34)Qty 1
  - Wave Washer (35)Qty 1
  - O-Ring (39)Qty 2
  - T-Seal (40)Qty 2
36. Install Swivel Body (38) onto the Shaft and Riser Assembly.
  - Use care not to damage the seals.
37. Install Retaining Ring (37) onto the Shaft and Riser Assembly.
38. Check to ensure the Swivel Body moves freely.



**Figure 3** High-Capacity Reel Model 7342 - Section View (w/o Reducing Bushing)


## Bench Test

While facing the Ratchet, turn the reel in a clockwise direction and allow the Ratchet to latch the Pawl.

If the reel does not tension or latch properly, refer to the **Troubleshooting Chart**.

## Installation

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### WARNING

**Do not exceed the lowest pressure rating of any component in the system.**

**Never point a control valve at any portion of your body or another person. Lubricant discharged at high velocity can penetrate the skin and cause severe injury. Should any fluid appear to puncture the skin, get medical care immediately.**

**Ensure all components are in operable condition. Replace any suspect parts prior to operation. Personal injury can occur.**

**Hold the delivery hose securely until the reel is securely latched or fully retracted. Uncontrolled retraction can result in personal injury.**

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## Reel Mount

**HINT:** Should the reel mount to the ceiling or a wall, it may be advantageous to lessen its weight with the removal of the Power Spring Assembly.

Follow the appropriate procedural steps within the section entitled **Overhaul**.

1. Mount the reel assembly with the proper hardware.

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### CAUTION

**Never connect rigid piping to the Swivel assembly. Damage to components can occur.**

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2. Screw a connecting hose (with thread sealant) into the Swivel Assembly.
3. Attach the connecting hose to the supply line.
 

*IMPORTANT: Anchor the connecting hose to a suitable surface to prevent the hose from flexing at the Swivel Assembly.*

*The anchor should be in-line with the inlet of the Swivel to minimize side loading. See **Figure 4**.*

## Setting Power Spring Tension

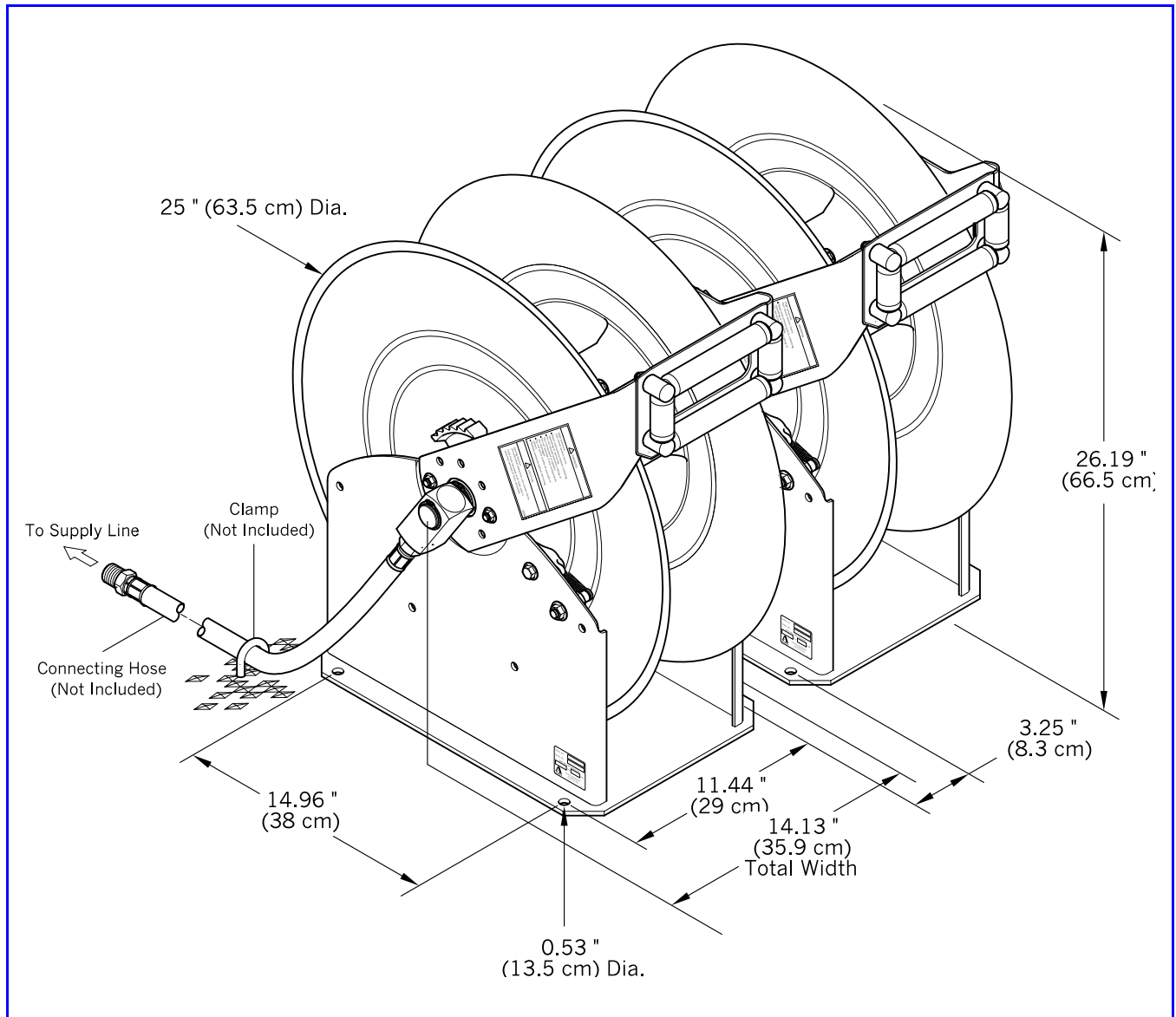
4. Make sure there is no tension on the Power Spring Assembly.

*IMPORTANT: Wear non-slip gloves when handling the Sheave Assembly.*

5. While facing the Ratchet, turn the Sheave Assembly clockwise to set the tension suggested for the type and length of delivery hose used.
  - See **Table 3** for details.
6. Allow the reel to latch.

Delivery Hose Description	Length of Hose in Feet	Number of Turns
3/4 " ID Single-Wire Braid	50	18
	70	19
1 " ID Single-Wire Braid	50	
1 " ID Fuel		





**Figure 4** Space Required for Banked Reels (with Bolt Pattern Dimensions)

### Delivery Hose Attachment

- Screw the delivery hose (with thread sealant) into Bushing (7) [if used] as required.



### WARNING

Precautions must be taken to ensure the Sheave Assembly remains engaged with the Ratchet. To prevent movement either:

- instruct an assistant to grip the Sheave securely with non-slip gloved hands or
- install a clamp on the Sheave. See Figure 5.

Personal injury can occur.

Once the Sheave Assembly is secure:

- Install the delivery hose through the guide assembly.
- Connect the delivery hose to the Shaft and Riser Assembly.
  - Make sure the connection is secure.

**HINT:** Orient the hose to allow its natural curve to match the Sheave.

This reduces torque load on the Power Spring Assembly and eliminates the tendency of the hose to stack on one side of the Sheave.

10. Install U-Bolt (10) onto the delivery hose and to the Sheave Assembly.
11. Install Washers (9) and Wing Nuts (8) onto the U-Bolt.
  - Tighten the Wing Nuts securely.

#### Accessories Attachment and Pressurization

12. Install the control valve onto the delivery hose.
13. Pressurize the system.
  - Check for leaks.
14. Install and secure the hose stop to the delivery hose at the desired position.
15. Make sure the reel is latched then:
  - instruct the assistant to let go of the Sheave Assembly  
or
  - carefully remove the clamp from the Sheave Assembly
16. Pull the delivery hose to disengage the Ratchet.
17. Allow the delivery hose to slowly retract onto the Sheave Assembly.

#### Checking Spring Tension

18. Check to ensure the tension on the power spring is sufficient to properly hold the hose stop against the hose guide.

Should the power spring tension require adjustment:

#### Adjusting Spring Tension

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### CAUTION

**Do not overwind the power spring. Too much tension reduces the life of the spring.**

**When the hose is fully extended from the reel, the power spring should be a minimum of 1/2 turn from a fully wound condition.**

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19. Release all pressure within the system.

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### WARNING



**Disconnect the air supply line to the pump's motor.**

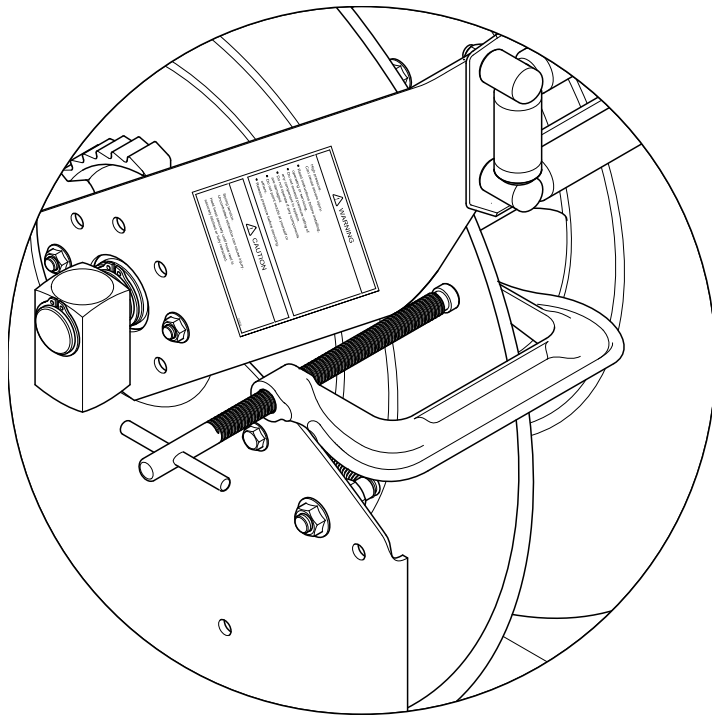
**Into an appropriate container, operate the control valve to discharge remaining pressure within the system.**

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20. Remove the control valve and the hose stop from the delivery hose.
21. Pull the free end of the delivery hose through the guide.
22. Rotate the Sheave Assembly in the required direction.
23. Install the control valve and the hose stop.
24. Pressurize the system.
25. Check to ensure the tension on the power spring is sufficient to properly hold the hose stop against the hose guide.
26. Repeat steps 19 - 25 until the proper tension is achieved.



**Figure 5** *Clamp Attached to Sheave Assembly*

## Reel Operation



### WARNING

**Do not exceed the lowest pressure rating of any component in the system.**

**Never point a control valve at any portion of your body or another person. Lubricant discharged at high velocity can penetrate the skin and cause severe injury. Should any fluid appear to puncture the skin, get medical care immediately.**

**Ensure all components are in operable condition. Replace any suspect parts prior to operation. Personal injury can occur.**

**Hold the delivery hose securely until the reel is securely latched or fully retracted. Uncontrolled retraction can result in personal injury.**

## Latch Lockout

### Over-Rotation of the Reel

*IMPORTANT: Do not extend the hose from the reel too rapidly. Too much velocity (when the hose is fully extended) can cause the reel to over-rotate and latch.*

Should latch lockout occur, pulling on the hose will not release the latch mechanism.

With the reel latch in this condition it will be necessary to have an assistant maintain tension on the hose while the latching mechanism is manually released.



### WARNING

**The reel is under maximum spring tension. Personal injury can occur.**

1. Instruct the assistant to grip the hose securely with both hands to prevent uncontrolled retraction.
2. Grip the Sheave Assembly securely with gloved hands.
  - Gloves should be non-slip.
3. Turn the Sheave Assembly just enough to allow the Pawl to be free of tension from the Ratchet.
4. While maintaining the position of the Sheave assembly with one hand, move the Pawl away from the ratchet.
  - Use a screwdriver or other suitable tool.
5. Instruct the assistant to allow the hose to retract slowly onto the Sheave Assembly.

# Reel Packages

Hose reel model 7342 is included in the reel packages listed below.

**IMPORTANT:** The Power Spring tension is preset at the factory for most installations. Once the reel package is installed and the system is pressurized, refer to the section entitled **Checking Spring Tension**.

Reel Package Model	Outlet Components			
	Delivery Hose *		Reducing Bushing	Hose Stop
	Part Number	Description		
8080-E	317868-50	3/4 " ID Single-Wire Braid 3/4" NPTF (m) x 3/4" NPTF (m)	320353	339389
8080-F	317868-70			
8080-FA	343069-70	3/4" ID Single-Wire Braid 3/4" NPTF (m) x 3/" BSPP (f)**		
8080-G	317869-50	1 " ID Single-Wire Braid 1" NPTF (m) x 1" NPTF (m)	Not Used	339389-1
8080-GA	343065-50	3/4 " ID Single-Wire Braid 1" NPTF (m) x 1" BSPP (f)**		339389-1
8080-J	339634-50	1 " ID Fuel 1" NPTF (m) x 1" NPTF (m)		339389-2

\* The length of the delivery hose is designated by the suffix in the part number. **Example:** 317868-50 is 50 feet long.  
 Hoses are electrically conductive and are suitable for dispensing diesel fuel and gasoline.  
 \*\* Swivel with 60° seat

## Troubleshooting Chart

Indications	Possible Problems	Solution
Reel does not latch	Extension Spring (23) broken or not attached to Pawl and Shaft Assembly (24)	Replace or secure Extension Spring (23)
Reel does not retract	1. Power spring broken* 2. Worn or damaged Swivel Body (38) and/or Shaft and Riser Assembly (6)	1. Replace Power Spring Assembly (11) 2. Replace Swivel Body (38) and/or Shaft and Riser Assembly (6)
Reel retracts partially	1. Improper power spring tension 2. Worn or damaged Swivel Body (38) and/or Shaft and Riser Assembly (6) 3. <i>Hose length greater than recommendation</i>	1. Set tension properly 2. Replace Swivel Body (38) and/or Shaft and Riser Assembly (6) 3. Refer to <b>Table 1</b>
Reel does not unlatch after maximum length of hose is removed	1. <i>Power spring wound solid</i> 2. <i>Hose removed from the reel too quickly (Over-Rotation of Reel)</i>	1. Decrease power spring tension 2. Pull the hose slowly when close to being fully extended
Material leakage at the Swivel Assembly	Worn or damaged O-Ring (39) and T-Seal (40)	Use Repair Kit 393725
Material leakage from Sheave Assembly (2) and/or delivery hose	1. Delivery hose connection [or Bushing (7)] not sufficiently tight into Shaft and Riser Assembly (6) 2. Delivery hose connection not sufficiently tight into Bushing (7) and/or thread sealant missing or inadequate	1. Tighten connection 2. Apply thread sealant to delivery hose and tighten into Bushing (7)

\* The possible causes for broken components are listed in *italics*

**Changes Since Last Printing**  
 Added 8080-FA Reel Package