



High Capacity Twin Hose Reel

Description

High capacity hose reel models 7343 and 7344 are designed to handle twin hose used for supply and return of hydraulic fluid to power portable hydraulic powered tools. These reels are suitable for outdoor applications.

Each 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.

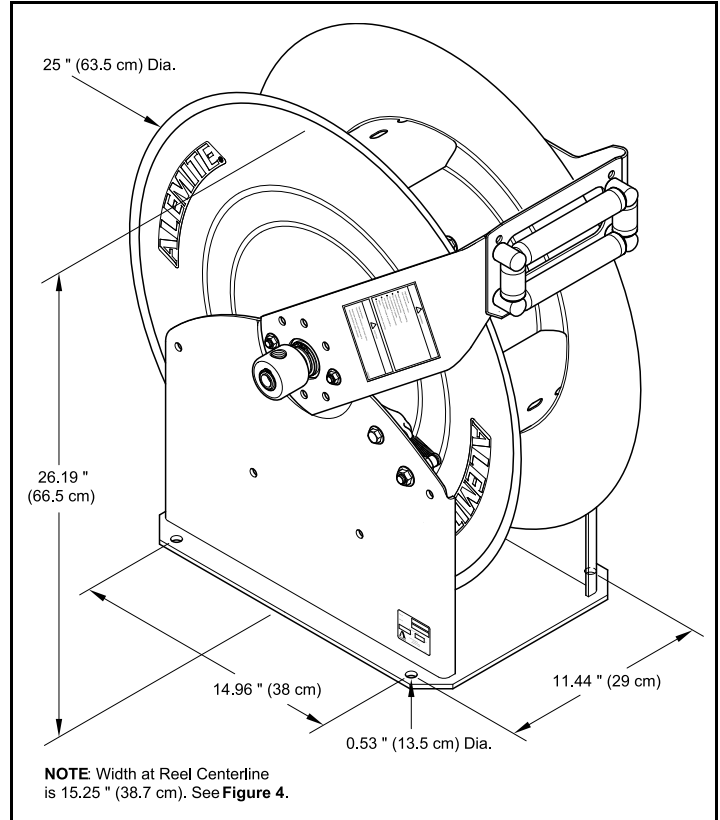
NOTE: The Hose Guide Arms can attach to the Base Assembly in five (5) different positions.

Optional Mount

CAUTION

Install these reels at a height no greater than 16 feet (4.9 m) from the floor to comply with the warranty.

These reels can also mount on a ceiling or to a wall.



Reel Model	Connecting Hose Ports	Delivery Hose Ports	Reel Max. Pressure	
			psi	bar
7343	3/8 " NPTF (f)	3/8 " NPSM (f)	3000	207
7344	1/2 " NPTF (f)	1/2 " NPSM (f)		

Figure 1 High-Capacity Twin Hose Reel Model 7343 and 7344

Reel Package Model	Hose Reel (Bare)	Delivery Hose		Hose Stop	Max. Pressure w/ Hose	
		Part #	Description		psi	bar
8080-K	7343	340326-80	3/8 " ID One-Wire Braid 3/8 " NPTF (m) x 3/8 " NPTF (m)	339389-3	2000	138
8080-L	7344	340328-80	1/2 " ID One-Wire Braid 1/2 " NPTF (m) x 1/2 " NPTF (m)	339389-4		

Delivery hose length is designated by the dash number. **Example:** 340326-80 is 80 feet long.

Table 1 Reel Packages

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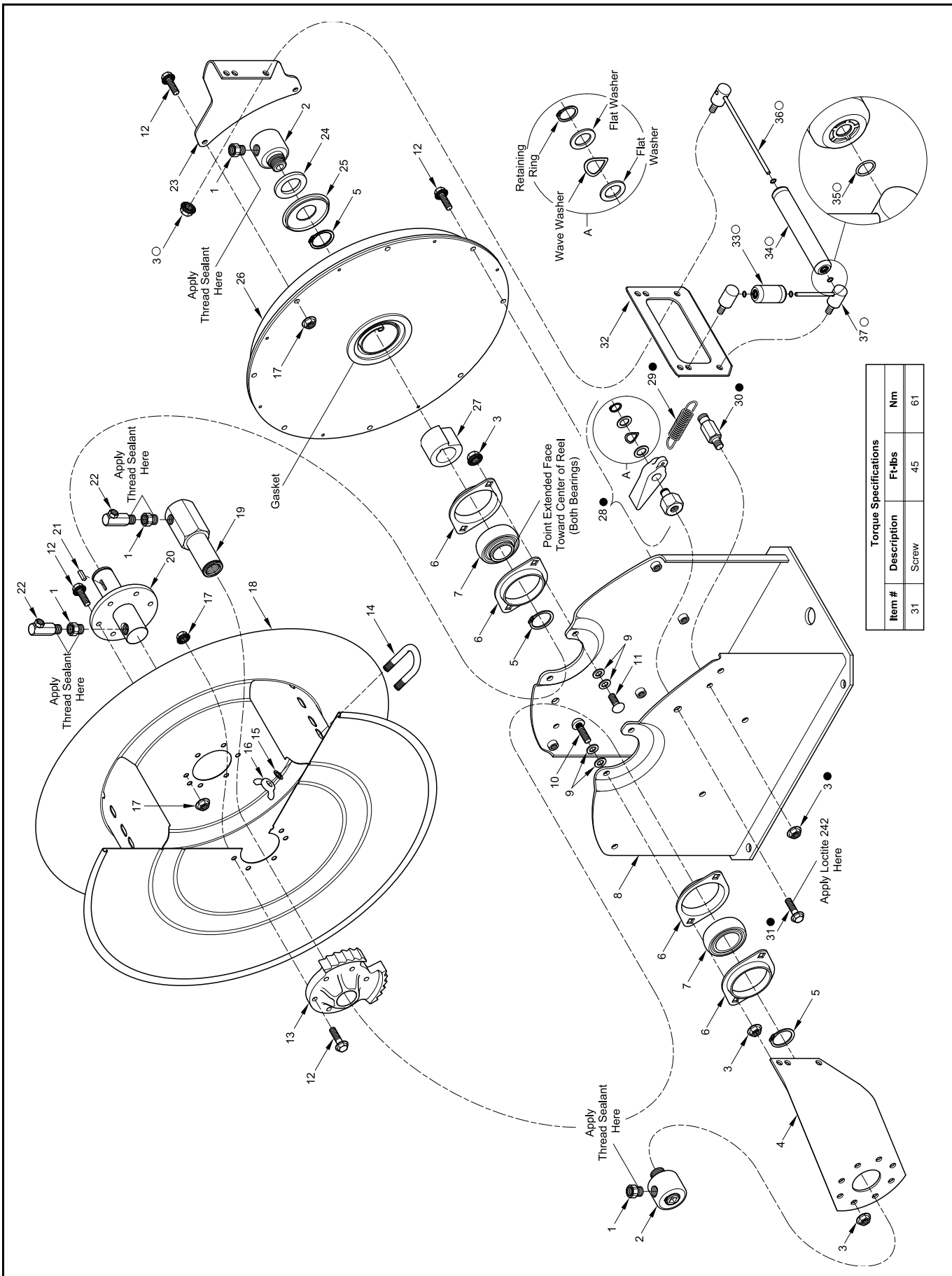


Figure 2 High Capacity Twin Hose Reel Model 7343 and 7344 - Exploded View

Item No.	Part No.	Description and Model	Qty	Notes	Numeric Order Part # (Item #)	
1	131586	Bushing	7343	4	14534 (15)	
2	340305	Swivel Assembly	All	2	See Figure 3 50876 (16)	
3		Nut, Flange 3/8 " -16		11	○ ● 4 in ○ Kit, 1 in ● Kit	131586 (1)
4		Arm, Long		1	w/o Decal	X171000-5 (35)
5	171007-33	Ring, Retaining		3		171007-33 (5)
6	339457	Housing, Bearing		2	Includes Two Halves	339197 (27)
7	339456	Bearing		2		339208 (9)
8		Base Assembly		1		339210 (29)
9		Washer, 0.445 " ID x 0.75" OD		8		339219 (14)
10		Bolt, Ribbed-Neck, 3/8 " -16 x 1-1/4 "		2		339219-4 (14)
11		Bolt, Ribbed-Neck, 3/8 " -16 x 3/4 "		2		339435 (8)
12		Screw, 5/16 " -18 x 3/4 "		20		339439 (28)
13	339467	Ratchet		1		339441 (30)
14	339219	U-Bolt		7343	2	339442 (18)
	339219-4	U-Bolt	7344	2	339446 (23)	
15		Washer, 5/16 "	All	4	339447 (4)	
16		Nut, Wing, 1/4 " -20		4	339448 (32)	
17		Nut, Flange 5/16 " -18		16	339451-2 (34)	
18		Sheave Assembly (w/o Decal)		1	339451-3 (33)	
19	339458	Shaft		1	339456 (7)	
20	340302	Shaft and Flange Assembly		1	339457 (6)	
21	339521	Key, Square		1	339458 (19)	
22	339459-1	Union, 90 °, 3/8 " NPTF x 3/8 " NPSM	7343	2	339459-1 (22)	
	339459-2	Union, 90 °, 1/2 " NPTF x 1/2 " NPSM	7344	2	339459-2 (22)	
23		Arm, Short	All	1	339460 (31)	
24	340250	Gasket		1	339461 (12)	
25	340251	Grommet		1	339462 (3)	
26	339469-2	Spring Assembly, Power		1	Includes Gasket 339463 (11)	
27	339197	Arbor, Spring		1	339467 (13)	
28		Pawl and Shaft Assembly		1	● 339469-2 (26)	
29	339210	Spring, Extension		1	● 339484 (10)	
30		Post, Spring		1	● 339516-2 (36)	
31		Screw, 1/2 " -13 x 3/4 "		1	● 339516-3 (37)	
32		Plate, Hose Guide		1	339521 (21)	
33		Roller Assembly, Short		2	○ 340250 (24)	
34		Roller Assembly, Long		2	○ 340251 (25)	
35	X171000-5	O-Ring, 1/4 " ID x 3/8 " OD		8	○ Pack of Ten 340302 (20)	
36		Post and Shaft Assembly, Long		2	○ 340305 (2)	
37		Post and Shaft Assembly, Short		2	○ 387370 (17)	

Legend:
 Part numbers left blank (or in *italics*) are not available separately
 ● ○ designates a repair kit item

Repair Kits

Part No.	Kit Symbol	Description
393723	○	Kit, Hose Guide
393724	●	Kit, Pawl and Shaft Assembly

WARNING

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

Turn off the power supply.

Operate the hydraulic tool to relieve the remaining pressure within the system.

Maintenance

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

Delivery Hose Replacement

1. Extend the delivery hose completely from the reel.

WARNING

Precautions must be taken to ensure the Sheave Assembly remains engaged with the Power Spring's ratchet. To prevent movement either:

- instruct an assistant to grip the Sheave Assembly securely with non-slip gloved hands or
- install a clamp on the Sheave Assembly

Personal injury can occur.

2. Remove the hydraulic tool and hose stop.
3. Disconnect the delivery hose from 90 ° Unions (22).
4. Remove Wing Nuts (16) and Washers (15) that secure U-Bolts (14) to the hose.
 - Remove the hose.
5. Feed the end of the new delivery hose through the Hose Guide Assembly.
6. Connect the delivery hose to the 90 ° Unions.

HINT: Orient the hose to allow its natural curve to match the Sheave. This reduces torque load on Power Spring Assembly (26).
7. Secure the delivery hose to the Sheave Assembly with U-Bolts (14), Washers (15) and Wing Nuts (16).
8. Install the hydraulic tool (with thread sealant) and hose stop to the delivery hose.

IMPORTANT: Allow some slack on the hose between the U-Bolt and the 90 ° Unions.
9. Pressurize the system and check for leaks.
10. Carefully release the Sheave Assembly and retract the hose onto the reel.
11. Check the Spring Tension.
 - Please refer to the section entitled **Installation** for details.

Disassembly

WARNING

Release the tension on the power spring. Personal injury can occur.

Power Spring, Arbor, and Sheave Removal

1. Remove the Arm and Hose Guide assembly from Base Assembly (8).
2. Unscrew Swivel Stem (2e) from Shaft and Flange Assembly (20).
3. Disassemble the Swivel Assembly as required.
 - See **Figure 3**.
4. Remove Screws (12) that secure Power Spring Assembly (26) to the Base Assembly.
 - Remove the Power Spring Assembly.
5. Remove Retaining Ring (5) that secures Spring Arbor (27) to the Shaft and Flange Assembly.
 - Remove the Spring Arbor and Key (21).
6. Remove Nuts (3) that secure the Bearing and Housing assembly to the Base Assembly.

Item #	Part No.	Description	Notes	Qty
2a		Ring, Retaining	▲	1
2b		Ring, Back-Up	▲	2
2c	X171009-17	O-Ring, 13/16 " ID x 1 " OD	▲	2
2d		Body, Swivel		1
2e	340304	Stem, Swivel		1
2f	X171009-18	O-Ring, 7/8 " ID x 1-1/16 " OD	▲	1

Legend:
 Part numbers left blank are not available separately
 Part number with an X prefix indicates a quantity of ten (10)
 ▲ designates the parts available in Repair Kit **393781**

Figure 3 Swivel Assembly 340305 - Exploded View

7. Remove Bearing Housing (6) and Bearing (7) from the Shaft and Flange Assembly.
8. Remove the Sheave Assembly from the Base Assembly.
9. Refer to **Figures 2** through **4** for further disassembly.



WARNING

Do not attempt to disassemble Power Spring Assembly (26). Personal injury can occur.

Assemble and Replace

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

Refer to **Figures 2** through **4** for any assembly not covered below.

Sheave and Arbor Assembly

1. Position the Sheave assembly [w/ Bearing (7) and Bearing Housing (6)] into Base Assembly (8).
2. Install Shaft (19) through Ratchet (13) and Bearing (7).
3. Install Nuts (3) that secure the Bearing Housing assembly to the Base Assembly.
 - Tighten the Nuts securely.
4. Install Retaining Ring (5) that secures Shaft (19) to the Bearing.
5. Install Key (21) into the slot of Shaft and Flange Assembly (20).
6. Slide Spring Arbor (27) [flat side first] onto the Shaft and Flange Assembly and Key.
7. Install Retaining Ring (5) that secures the Spring Arbor to the Shaft and Flange Assembly.

Power Spring Assembly

8. Remove Grommet (25) from the Power Spring Assembly.
9. Install Power Spring Assembly (26) onto the Spring Arbor.
 - Make sure the hook on the Power Spring's inner coil properly engages the recess in the Spring Arbor.

Hint: Lift and center the coil within the case during installation.

- Use care not to damage the gasket.

10. Align the Screw holes in the Power Spring Assembly with the Base Assembly.
11. Secure the Power Spring Assembly to the Base Assembly with Screws (12).
 - Tighten the Screws securely in an alternate pattern.
12. Install the Grommet into the case of the Power Spring Assembly.
13. Screw the Swivel Assembly into the Shaft and Flange Assembly.
 - Tighten Swivel Stem (2e) securely.

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.

14. Install the Arm and Hose Guide assembly onto the Base Assembly.

Bench Test

While facing the ratchet side of the reel, turn the reel in a counterclockwise direction and allow the ratchet to latch onto Pawl and Shaft Assembly (28).

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

Components Lubricated with NLGI 2 EP Lithium Grease		
Item No.	Description	Notes
2b	Rings, Back-Up	
2c	O-Rings, 5/8 " ID x 13/16 " OD	
2e	Land surfaces of Swivel Stem	See Figure 3
13	Teeth of Ratchet	
28	Bearing surface of Pawl Shaft	
28	Wave Washer	
29	Hooks of Pawl Spring	
Components Lubricated in Oil		
2f	O-Ring, 7/8 " ID x 1-1/16 " OD	
35	O-Ring, 1/4 " ID x 3/8 " OD	

Table 2 Lubricated Components

Installation



WARNING

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

Ensure all components are in operable condition.
Replace any suspect parts prior to operation.

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

1. Connect the delivery hose securely to 90 ° Unions (22).

HINT: Orient the hose to allow its natural curve to match the Sheave. This reduces torque load on Power Spring Assembly (26).

2. Secure the delivery hose to the Sheave Assembly with U-Bolts (14), Washers (15) and Wing Nuts (16).

IMPORTANT: Allow some slack on the hose between the U-Bolts and the 90 ° Unions.

3. Rotate the Sheave Assembly to wrap the hose completely onto the reel.
 - The clicking sound is the power spring bypassing the cam on Spring Arbor (27).

Setting Spring Tension

To adjust tension on the power spring:

4. Rotate the Sheave Assembly in the opposite direction 5 turns.
 - This sets the power spring tension.

IMPORTANT: 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.

5. Allow the reel to latch.
6. Feed the end of the delivery hose through the Hose Guide Assembly.
7. Install and secure the hose stop.
8. Mount the reel assembly with the appropriate hardware as required.
9. Adjust the hose stop to the desired position.

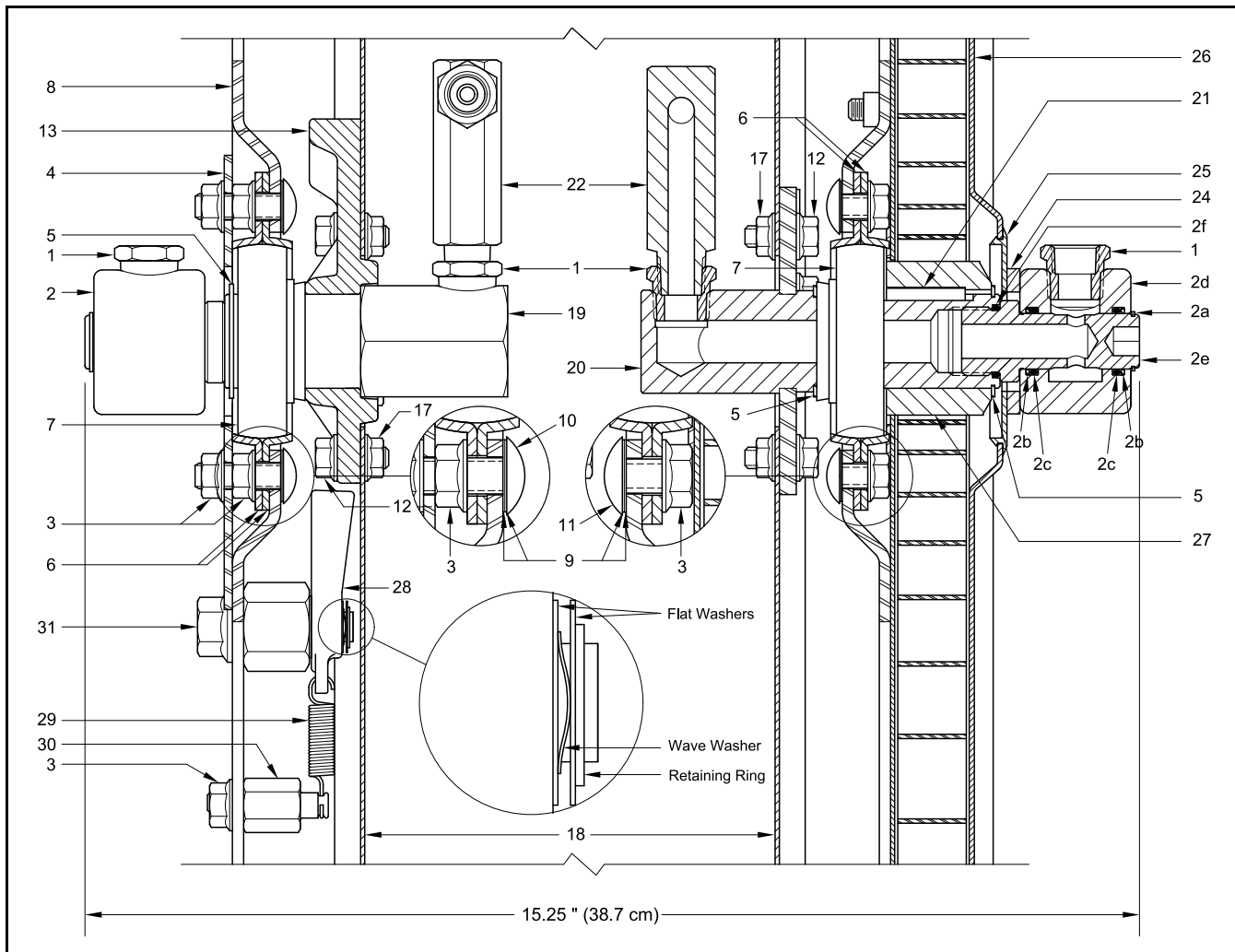


Figure 4 High Capacity Twin Hose Reel Model 7343 and 7344 - Section View

CAUTION

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

10. Attach the connecting hoses to the distribution system (with thread sealant) and to the inlets of the reel as required.

IMPORTANT: Anchor the connecting hoses 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.

11. Attach the hydraulic tool to the delivery hose (with thread sealant).
12. Pressurize the system and check for leaks.

Checking Spring Tension

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:

13. Release all pressure within the system.

**WARNING**

Turn off the power source.

Operate the hydraulic tool to relieve the remaining pressure within the system.

14. Remove the hydraulic tool and the hose stop from the delivery hose.
15. Unlatch the reel and allow the free end of the delivery hose to pass through the Hose Guide.

CAUTION

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

16. Rotate the Sheave Assembly in the required direction.
17. Pass the free end of the hose through the Hose Guide.
18. Install the hydraulic tool and the hose stop.
19. Pressurize the system and check for leaks.
20. Check to ensure the tension on the power spring is sufficient to properly hold the hose stop against the Hose Guide.
21. Repeat steps 13 - 20 until the proper tension is achieved.

Latch Lockout**Reel Over-Run**

IMPORTANT: Do not extend the hose from the reel too rapidly. Too much velocity can cause the reel to over-run 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 Sheave Assembly (18) securely with gloved hands.
3. Turn the Sheave Assembly in the direction just enough that allows Pawl and Shaft Assembly (28) to be free of tension from the ratchet on Power Spring Assembly (26).
 - This direction further increases tension on the power spring.
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.

Troubleshooting Chart

Indications	Possible Problems	Solution
Reel does not latch	Pawl Spring (29) broken or not attached to Pawl and Shaft Assembly (28)	Replace or secure Pawl Spring (29)
Reel does not retract	Power spring broken*	Replace Power Spring Assembly (26)
Reel retracts partially	1. Improper power spring tension 2. <i>Hose length greater than recommendation</i>	1. Adjust tension 2. See Table 1 .
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 (Reel Over-Run)</i>	1. Decrease power spring pre-wind 2. Remove hose slowly when close to being fully extended
Material leakage at Swivel Assembly (2)	1. Connection not sufficiently tight and / or thread sealant missing at Bushing (1) 2. Worn or damaged O-Rings (2c) 3. Worn or damaged O-Ring (2f) 4. Worn or damaged Swivel Stem (2e)	1. Apply sealant to male threads of Bushing (1) and tighten connections 2. Replace O-Rings (2c) 3. Replace O-Ring (2f) or use Repair Kit 393781 4. Replace Swivel Stem (2e)
Material leakage from delivery hose connections	1. Delivery hose connection not sufficiently tight 2. Thread sealant missing at Unions (22) or Bushings (1) and / or Unions and / or Bushings not sufficiently tight into Shaft (19) or Shaft and Flange Assembly (20)	1. Tighten connection 2. Apply thread sealant to Unions (22) or Bushings (1) and tighten into Shaft (19) or Shaft and Flange Assembly (20)
* The possible causes for broken components are listed in <i>italics</i>		

Changes Since Last Printing

339389-3 for 8080-K

339389-4 for 8080-L