

Portable Hand-Operated Pump

Description

The major components of the pump assembly in the 7530 model series consist of a:

- hand-operated reciprocating pump
- drum cover assembly
- nozzle assembly with delivery hose (model 7533-4)
- loader coupler and follower plate (model 7537-4)

Models 7533-4 and 7537-4

Pump model 7533-4 is accessorized to dispense gear oils from their original 5-gallon containers.

Model 7537-4 contains a loader coupler and follower plate to dispense grease from 35-pound containers. See **Figure 1**.

A loader fitting is also included. It must be used in place of an existing fitting to ensure compatibility.

Pump Delivery

Oil versus Grease

The pump delivers approximately 1 quart (0.95 liter) of oil in ten strokes.

Grease is delivered in a quantity of approximately 1 pound (0.45 kg) in six strokes.*

Model Assembly

Refer to **Figure 2** for details on the assembly of all packaged components.

* In cold environments, the delivery is approximately 1 pound (0.45 kg) in ten strokes.

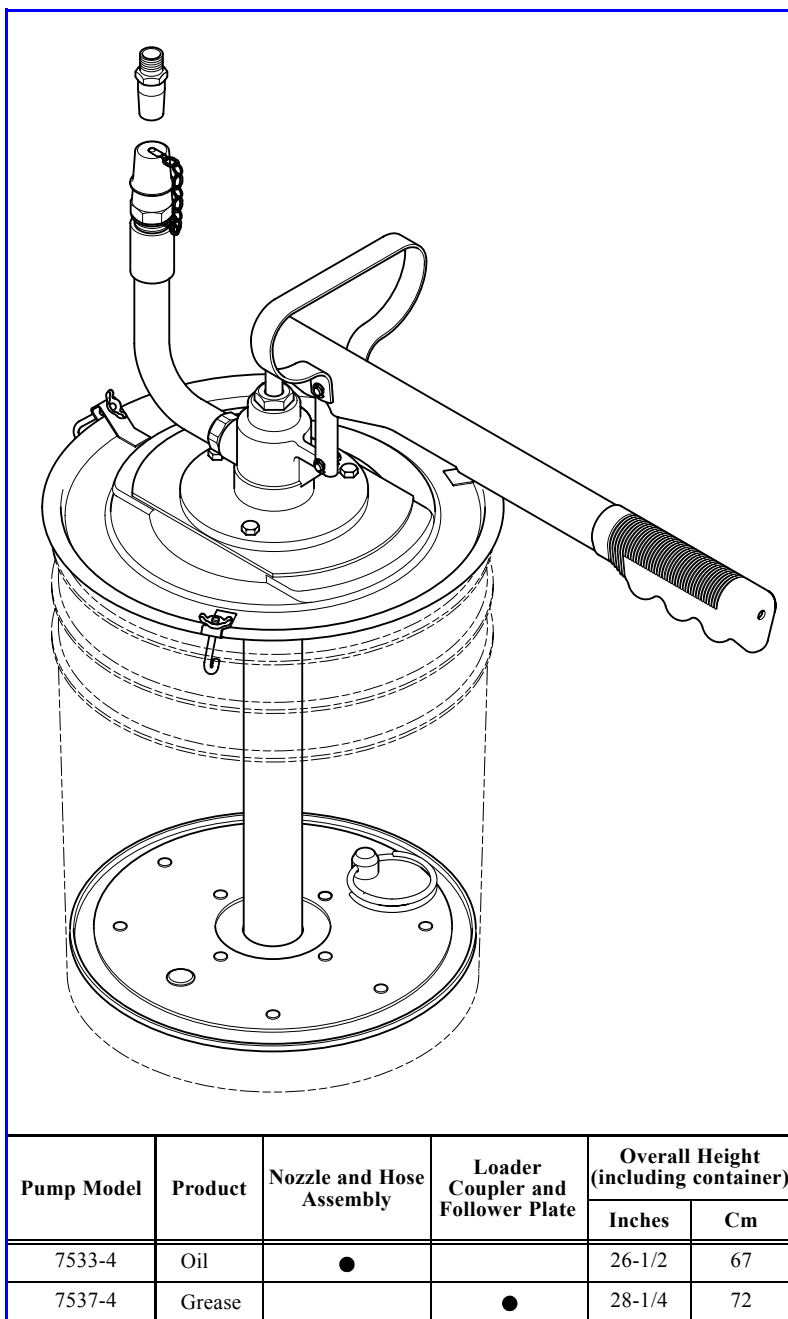


Figure 1 Portable Hand-Operated Pump Models 7533-4 and 7537-4
Model 7537-4 Shown

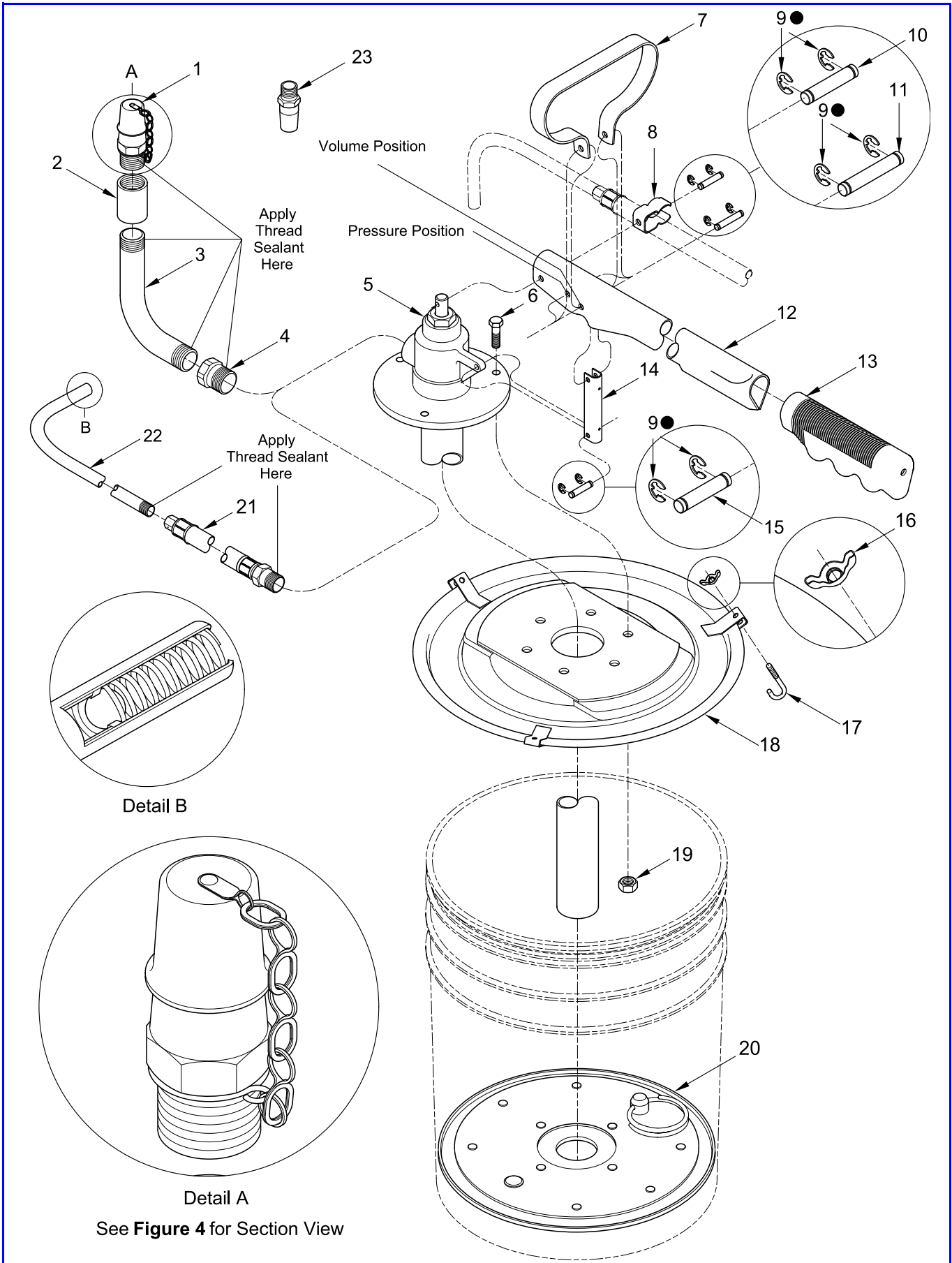


Figure 2 Portable Hand-Operated Pump Model 7530 Series - Exploded View

Item No.	Part No.	Description	Qty	Notes	Numeric Order Part # (Item #)	
	317219	Adapter and Elbow Assembly, Loader	1	Model 7537-4 Only	77650	(19)
1	306741	Coupler Assembly, 3/8 " NPTF (m)	1	Model 7537-4 Only	77787	(6)
2		Coupling, 3/8 " NPTF (f)	1	Model 7537-4 Only	131586	(4)
3	317256	Elbow, 3/8 " NPTF (m)	1	Model 7537-4 Only	170837	(16)
4	131586	Bushing, 3/8 " NPTF (f) x 1/2 " NPTF (m)	1	Model 7537-4 Only	171606	(9)
5		Tube Assembly, Pump	1	See Figure 3	305378	(8)
6		Capscrew, 1/4 " -20 x 5/8 "	3		306610	(22)
7	318414	Handle	1		B306740	(23)
8		Clip, Spring	1	Model 7533-4 Only	306741	(1)
9		Ring, Retaining	6	●	309702	(2)
10	339961-2	Pin	1		316320	(12)
11	339961-3	Pin	1		317102	(17)
12	316320	Lever	1		317219	
13		Grip	1		317256	(3)
14	328253-3	Link	1		317809-5F	(21)
15	339961-1	Pin	1		318414	(7)
16	170837	Nut, Wing, 1/4 " -20	3		328253-3	(14)
17	317102	J-Bolt, 1/4 " -20	3		328255-B4	(5)
18	337729	Cover Assembly	1		337729	(18)
19		Nut, 1/4 " -20	3		338334	(13)
20	338825	Plate, Follower	1	Model 7537-4 Only	338825	(20)
21	317809-5F	Hose, Material, 1/2 " ID (5-1/2 ' Long)	1	Model 7533-4 Only	339961-1	(15)
22	306610	Nozzle Assembly	1	Model 7533-4 Only	339961-2	(10)
23	B306740	Fitting, Loader	1	Model 7537-4 Only	339961-3	(11)

Legend:

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

● designates a repair kit item

Repair Kit

Part No.	Kit Symbol	Description
394261-1	●	Kit, Repair (Includes items on Figure 2 and Figure 3)

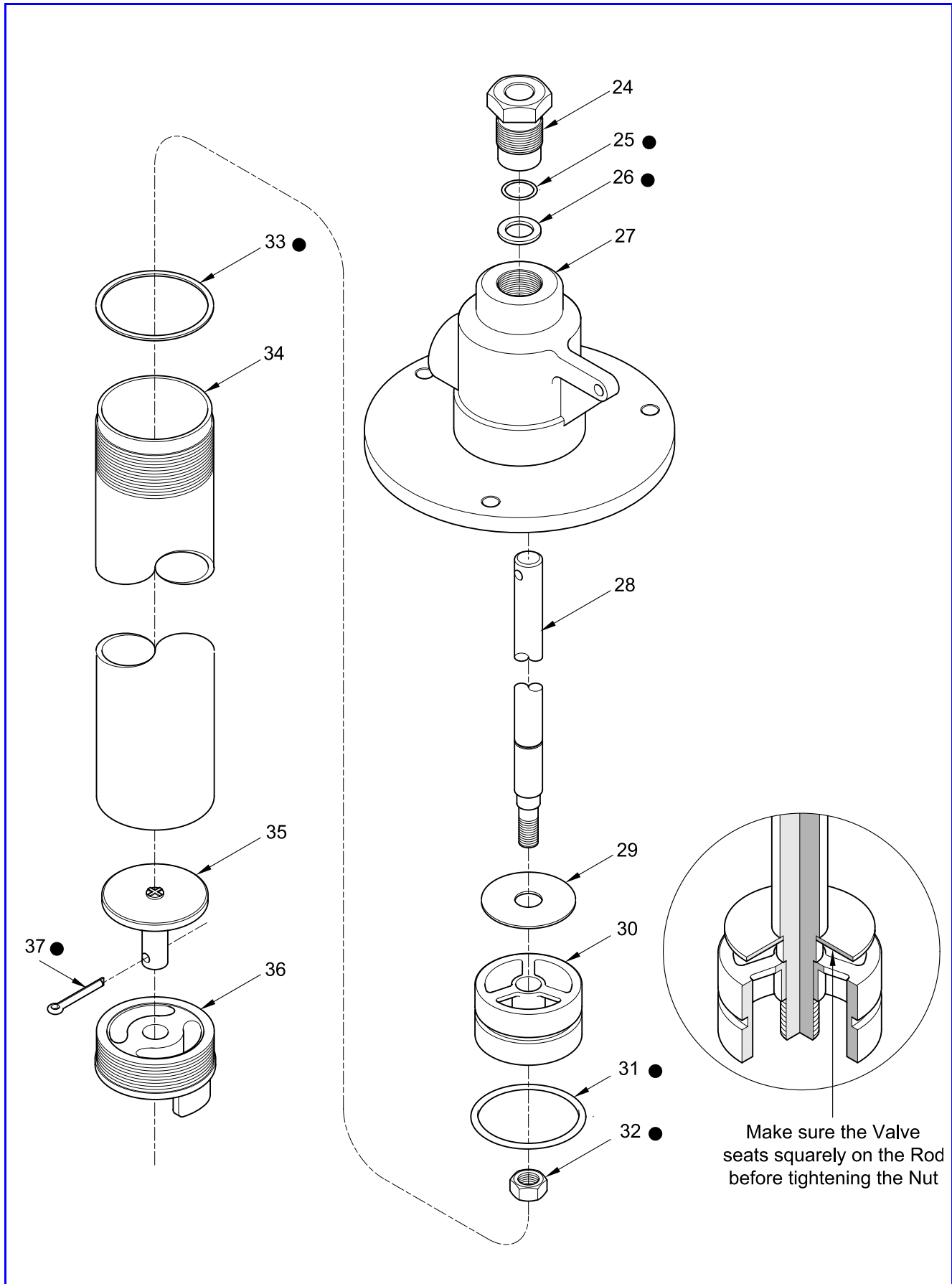


Figure 3 Pump Tube Assembly for Model 7530 Series - Exploded View

Item No.	Part No.	Description	Qty	Notes	Numeric Order Part # (Item #)
24	324733	Nut, Packing	1		<i>17070</i> (32)
25		O-Ring, 1/2 " ID x 5/8 " OD	1	●	50712 (36)
26		Gasket	1	●	131315 (35)
27	328254-4	Body, Outlet	1		<i>131472</i> (33)
28	328257-2	Rod	1		<i>171001-23</i> (31)
29	324747	Valve, Upper	1		<i>171009-2</i> (25)
30		Body, Plunger	1		<i>172212-14</i> (37)
31		O-Ring, 1-1/4 " ID x 1-1/2 " OD	1	●	<i>319320</i> (30)
32		Nut, Elastic Stop, 5/16 " -18	1	●	324733 (24)
33		Gasket	1	●	324747 (29)
34	328256-2	Tube	1		<i>326784</i> (26)
35	131315	Valve, Foot	1		328254-4 (27)
36	50712	Body, Foot Valve	1		328256-2 (34)
37		Pin, Cotter, 3/32 " x 5/8 " Long	1	●	328257-2 (28)
Legend: Part numbers left blank (or in <i>italics</i>) are not available separately ● designates a repair kit item					

Repair Kit

Part No.	Kit Symbol	Description
394261-1	●	Kit, Repair (Includes items on Figure 3 and Figure 2)

Hand-Operated Loader Pump

Hand-Operated pump model 7537-4 contains a loader coupler for loading lever-operated hand guns.

CAUTION

The Loader Fitting on the lever gun must mate with the Loader Coupler. The pump will not operate if the components are not compatible.

Lever guns equipped with an **Alemite** loader fitting can connect directly to the loader pump.

Non-compatible loader fittings must be replaced with the included loader fitting.

NOTE: Optional loader fitting B322610 is available for fibrous or heavy greases.

Loading Operation

1. Make sure the follower rod on the hand gun is engaged with the back-up plate.
2. Remove the cap on the pump's loader coupler.
3. Seat the Loader Fitting into the loader coupler. See **Figure 4**.
4. Operate the pump and view the movement of the follower rod.
5. Discontinue pump operation once the groove on the follower rod is visible.

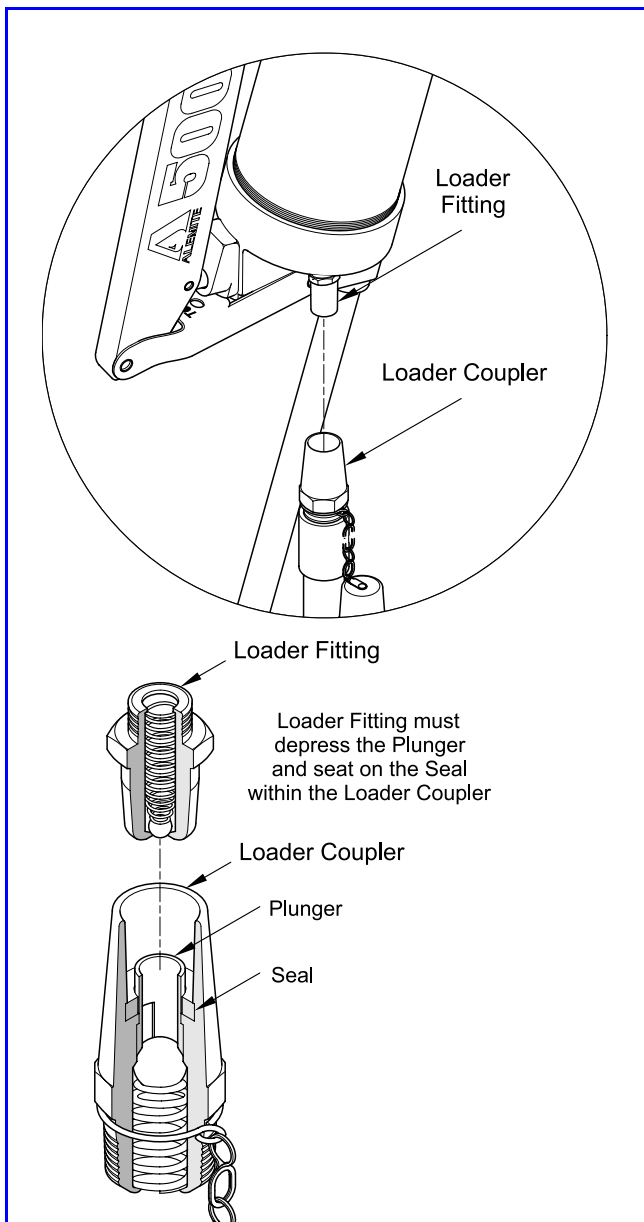


Figure 4 *Loader Fitting and Loader Coupler Section View*

Overhaul

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



WARNING

Do not use halogenated hydrocarbon solvents such as methylene chloride or 1,1,1-trichloroethane in this pump. An explosion can result within an enclosed device capable of containing pressure when aluminum and/or zinc-plated parts in the pump come in contact with halogenated hydrocarbon solvents.

Never point a control valve at any portion of your body or another person. Accidental discharge of pressure and/or material can result in injury.

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

Disassembly

NOTE: Refer to **Figure 2** for component identification on the following procedures.

Separate Pump Tube from Cover and Lever

1. Unscrew Material Hose (21) from Pump Tube Assembly (5) [model 7533-4 only].
 - Unscrew Nozzle Assembly (22) from the Material Hose as required.
2. Remove Capscrews (6) and Nuts (19) that secure the Pump Tube Assembly to Cover (18).
 - Remove the Pump Tube Assembly from the Cover.
3. Unscrew Elbow (3) from the Pump Tube Assembly [model 7537-4 only].
 - Disassemble the Loader Adapter and Elbow Assembly as required.
4. Remove Retaining Rings (9) from on end of Pins (10 and 11) and Pin (15).
5. Remove the Pins that secure Lever (12) to Pump Tube Assembly (5) and Link (14).
 - Remove Spring Clip (8) and Handle (7).
6. Remove the Pin that secures the Link to the Pump Tube Assembly.

Pump Tube

NOTE: Refer to **Figure 3** for component identification on the pump tube procedures.

7. Remove Bushing (4) from Outlet Body (27) as necessary [model 7537-4 only].
8. Unscrew Tube (34) from the Outlet Body.
9. Remove the Tube from the inner components of the Pump Tube Assembly.

Foot Valve Body

10. Unscrew Foot Valve Body (36) from the Tube.
11. Remove Cotter Pin (37) from Foot Valve (35).
12. Remove the Foot Valve from the Foot Valve Body.

Outlet Body

13. Remove the Rod assembly from the Outlet Body.
14. Remove Gasket (33) from the Outlet Body.
15. Unscrew Packing Nut (24) from the Outlet Body.
 - Remove Gasket (26) and O-Ring (25).

Rod Assembly

16. Unscrew Nut (32) from Rod (28).
17. Remove Plunger Body (30) and Valve (29) from the Rod.
18. Remove O-Ring (31) from the Plunger Body.

Clean and Inspect

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

1. Clean all metal parts in cleaning solvent. The solvent should be environmentally safe.
2. Inspect all parts for wear and/or damage.
 - Replace as necessary.
3. Inspect Rod (28) closely. Use a magnifying glass to detect any score marks.
 - Replace as necessary.
4. Closely inspect the mating surfaces of all check valve components for any imperfections. Ensure a smooth and clean contact is obtained when assembled.

Assembly

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

Foot Valve Body

NOTE: Refer to **Figure 5** for a section view of the pump tube assembly.

1. Install Foot Valve (35) into the top of Foot Valve Body (36).
2. Install Cotter Pin (37) into the Foot Valve.
3. Screw the Foot Valve Body assembly into the bottom of Tube (34).
 - Do not tighten at this time.

Rod Assembly

4. Install Valve (29) and Plunger Body (30) [ribs upward] onto the bottom of Rod (28).

CAUTION

Make sure Valve (29) seats properly on Rod (28). Damage to components can occur. See Figure 3.

5. Screw Nut (32) onto the Rod.
 - Tighten the Nut securely.
 6. Install O-Ring (31) onto the Plunger Body.
- ### Outlet Body
7. Install and seat Gasket (33) into the bottom of Outlet Body (27).
 8. Install the Rod assembly into the Outlet Body.
 9. Install and seat Gasket (26) into the Outlet Body.
 10. Install O-Ring (25) carefully past the cross-hole on the Rod.
 11. Screw Packing Nut (24) into the Outlet Body.
 - Tighten the Packing Nut securely.
 12. Install the Tube assembly over the Rod assembly and screw into the Outlet Body.

Item No.	Description
25	O-Ring, 1/2 " ID x 5/8 " OD
31	O-Ring, 1-1/4 " ID x 1-1/2 " OD

Table 2 Components Lubricated in Clean Oil

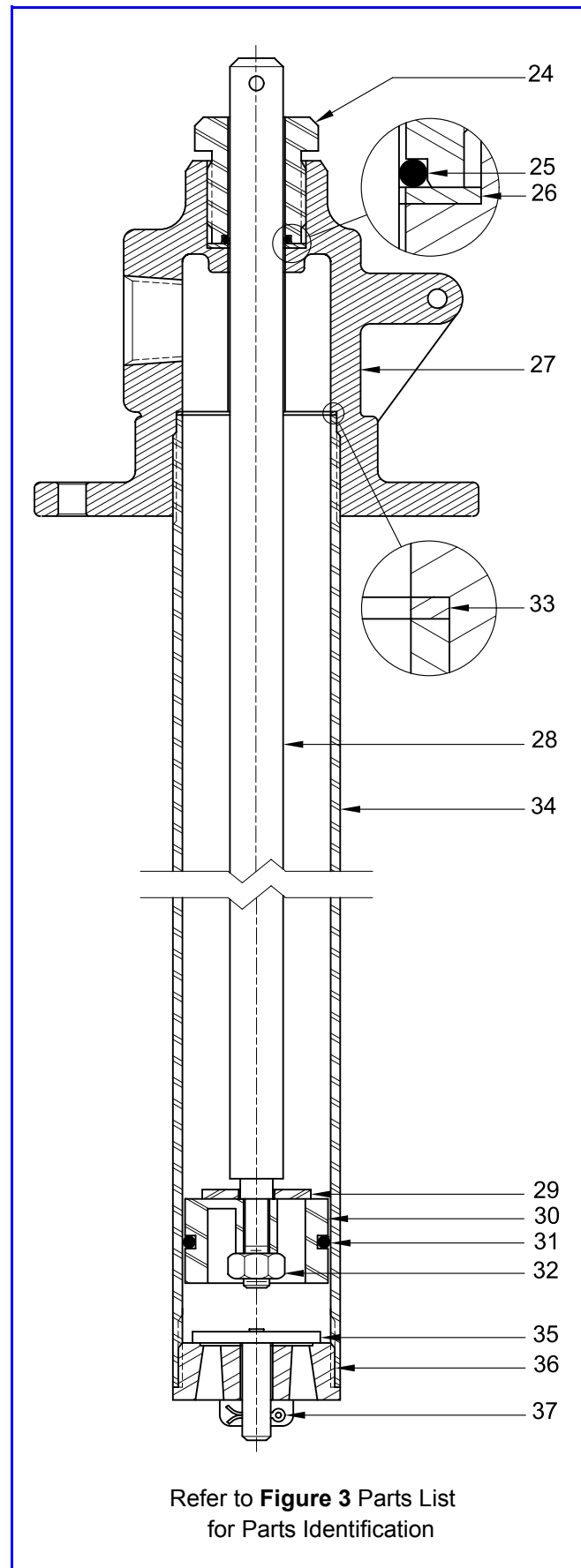


Figure 5 Pump Tube Assembly 328255-B4 - Section View

13. Tighten the Tube securely into the Outlet Body and at the same time the Foot Valve Body into the Tube.

Attach Pump Tube to Cover and Lever

14. Install Pin (15) that secures Link (14) to Pump Tube Assembly (5).
15. Install Pins (10 and 11) that secures Lever (12) to the Pump Tube and Link.
 - Make sure to install Spring Clip (8) and Handle (7) in the proper position on the Lever. See **Figure 2**.

NOTE: The longer Pin attaches the Handle to the Lever.

16. Install Retaining Rings (9) onto the ends of all Pins.

NOTE: Procedures 17 through 21 are applicable to model 7537-4 only.

17. Screw Bushing (4) [with thread sealant] into the Outlet Body.
 - Tighten the Bushing securely.
18. Screw Elbow (3) [with thread sealant on both ends] into the Bushing.
 - Tighten the Elbow securely.
19. Screw Coupling (2) onto the Elbow.
 - Tighten the Coupling securely.
20. Screw Coupler Assembly (1) [with thread sealant] into the Coupling.
 - Tighten the Coupler securely.
21. Place Follower Plate (20) onto the top of the product.
 - With a wobbling motion, eliminate any air that may be trapped underneath the Plate by forcing the product through the hole in the center.
22. Position the Pump Tube Assembly onto Cover (18).
 - Guide the pump tube into the Follower Plate [model 7537-4 only].
23. Install Nuts (19) and Capscrews (6) that secure the Pump Tube Assembly to the Cover.
 - Tighten the Nuts securely.
24. Fit the Cover onto the container.
 - Make sure J-Bolts (17) secure the container.
 - Tighten Wing Nuts (16) securely.
25. Screw Material Hose (21) [with thread sealant] into the Outlet Body [model 7533-4 only].
 - Tighten the Hose securely.
26. Screw Nozzle Assembly (22) [with thread sealant] into the Material Hose [model 7533-4 only].
 - Tighten the Nozzle Assembly securely.

Priming the Pump

NOTE: The following procedures are for priming grease (model 7537-4 only).

1. Remove the cap on Coupler Assembly (1).
2. With a suitable tool, depress the plunger in the Coupler Assembly. See **Figure 4**.
3. Cycle the Lever until grease is visible at the Coupler Assembly.

If the pump assembly does not prime, refer to the **Troubleshooting Chart** for details.

4. Continue to cycle the pump until the grease is free of air.

Troubleshooting Chart

Pump Indications	Possible Problems	Solution
Pump does not cycle	Pump tube jammed and/or contains loose components	Rebuild pump tube
Pump will not prime	Pump leaking internally	See Internal Leaks
Pump cycles easily	Product source empty	Replenish product
External Leaks		
Product leakage visible at Packing Nut (25)	<ol style="list-style-type: none"> 1. Worn or damaged O-Ring (25) 2. Damaged Gasket (26) 	<ol style="list-style-type: none"> 1. Replace O-Ring (25) 2. Replace Gasket (26)
Product leakage at bottom of Outlet Body (28)	<ol style="list-style-type: none"> 1. Tube (34) not sufficiently tight 2. Damaged Gasket (33) 	<ol style="list-style-type: none"> 1. Tighten Tube (34) into Outlet Body (27) 2. Separate Tube (34) from Outlet Body (27) and replace Gasket (33)
Internal Leaks		
Pump does not prime	<ol style="list-style-type: none"> 1. Foreign material between Valve (29) and Plunger Body (30) 2. Foreign material between Foot Valve (35) and Foot Valve Body (36) 3. Worn or damaged Valve (29) 4. Worn or damaged Plunger Body (30) 5. Worn or damaged Foot Valve (35) 6. Worn or damaged Foot Valve Body (36) 7. Worn or damaged O-Ring (31) 	<p>Locate and eliminate source of foreign material</p> <p>Disassemble pump tube, clean, inspect, and replace worn or damaged components</p>

Changes Since Last Printing

Replaced Cotter Pins with Retaining Rings