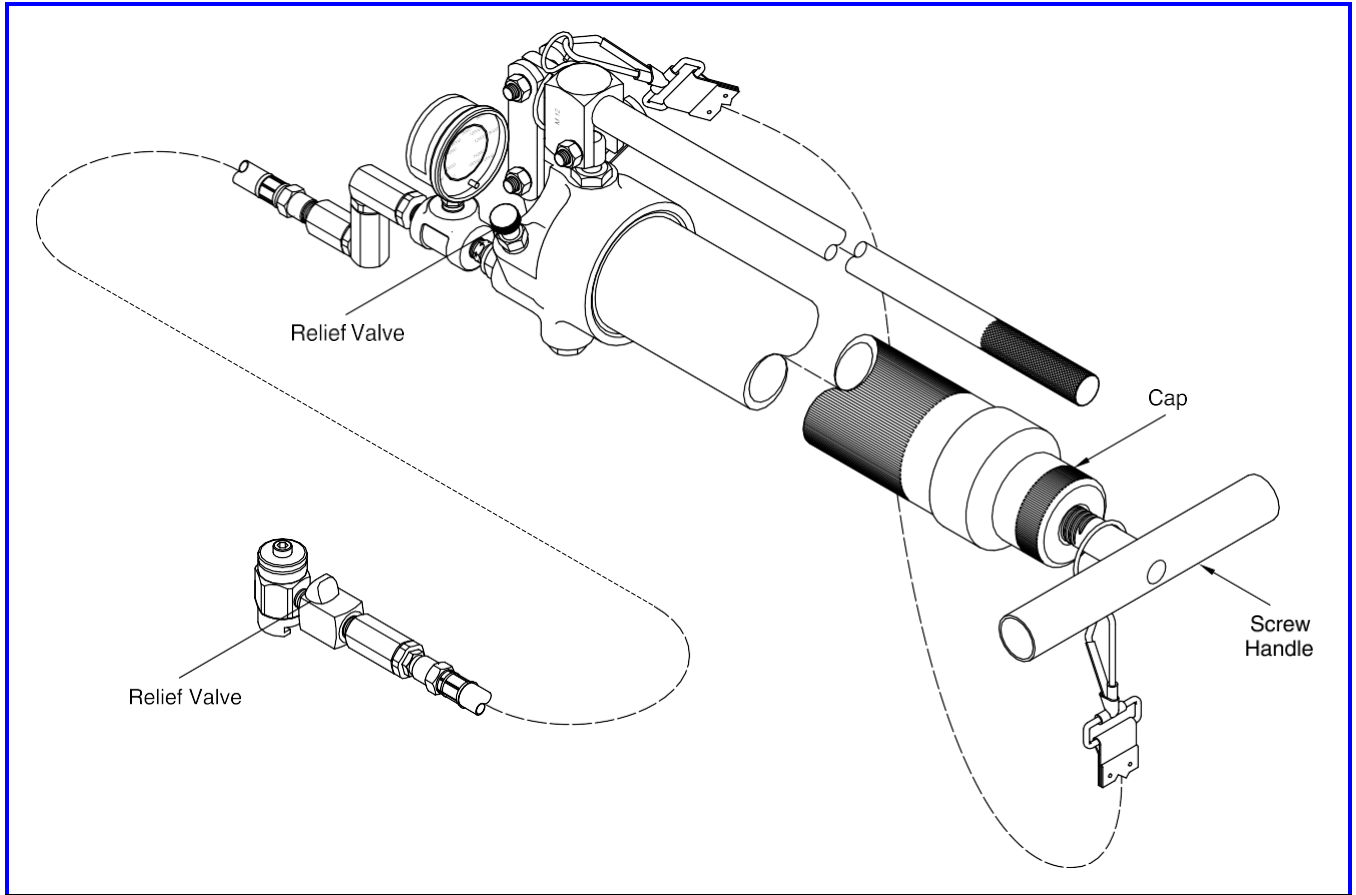


# Technical Manual

## Val- Lubric - Screw Prime Grease Injector



Gun and Delivery System Model	Coupler	Stripped Gun (See Figure 3-B)	Cylinder Capacity		Delivery/Stroke		Maximum Operating Pressure	
			Ounces	Grams	Ounce	Grams	psi	Bars
62888-1	Giant Button-Head	6299	12	341	0.04	18.2	15, 000	1035
62889-2	Saf-T-Vent Oil Field							

**Stripped Pump :** Screw Prime Grease Injector Model No 6299 is included in both the models of the Gun Assemblies (with delivery system).

**Pump with Delivery Systems :** Model No 6299

**Models 6299-1 and 6299-2**

The delivery system for each gun assembly model is identical up to the coupler assembly. See **Figures 1 and 2**. All gun models are designed for lubricating valves and other components with high-pressure requirements.

**Figure 1** Screw Prime Grease Injector – Model No : 6299

# Operation

## Warning

These guns can develop up to 15,000 psi (1035 Bars) pressure.

A check valve in the delivery system (or lubrication fitting) must be present to prevent back-pressure from entering the reservoir of the gun. Personal injury can occur.

*IMPORTANT: Check to ensure the relief valve on the gun is closed (fully seated). See Figure 1.*

1. Load the Gun as required.
  - Refer to the section entitled **Loading the Gun** for details.
2. Wipe the end of the Coupler and the fitting to be lubricated with a clean cloth.
3. Attach the Coupler to the lubrication fitting.
4. Make sure the relief valve on the delivery system is closed. See **Figure 2**.
5. Screw the Handle and Screw Assembly into the Cap as far as possible.

**NOTE:** The Handle and Screw Assembly screws into the Cap of the gun to compress the follower spring. See **Figure 3-B**. This action mechanically forces lubricant into the head of the gun.

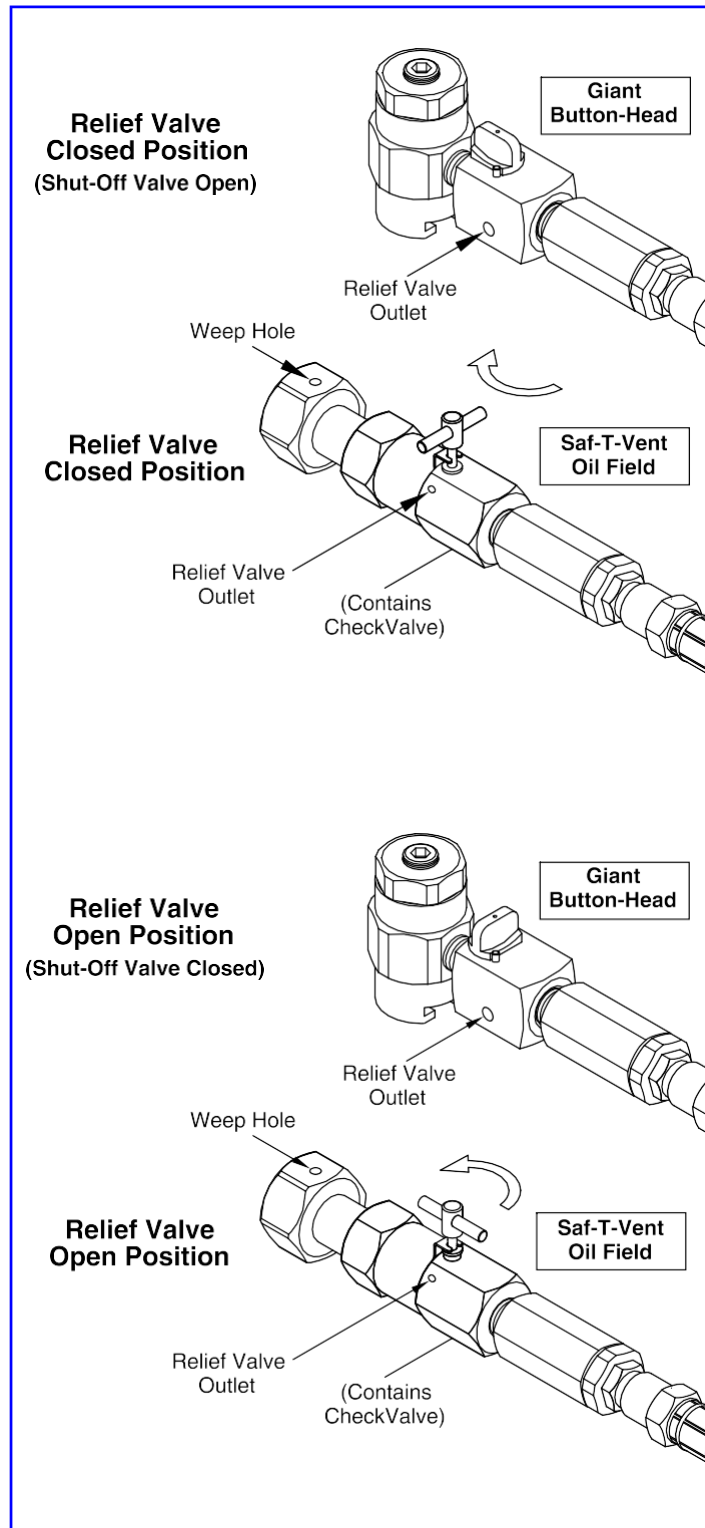
6. Operate the lever until the proper amount of lubricant is dispensed.

### Every 15 to 20 Strokes

During operation, the follower spring loses compression. To ensure full volume delivery on every stroke, the spring requires to be compressed after 20 strokes of the lever.

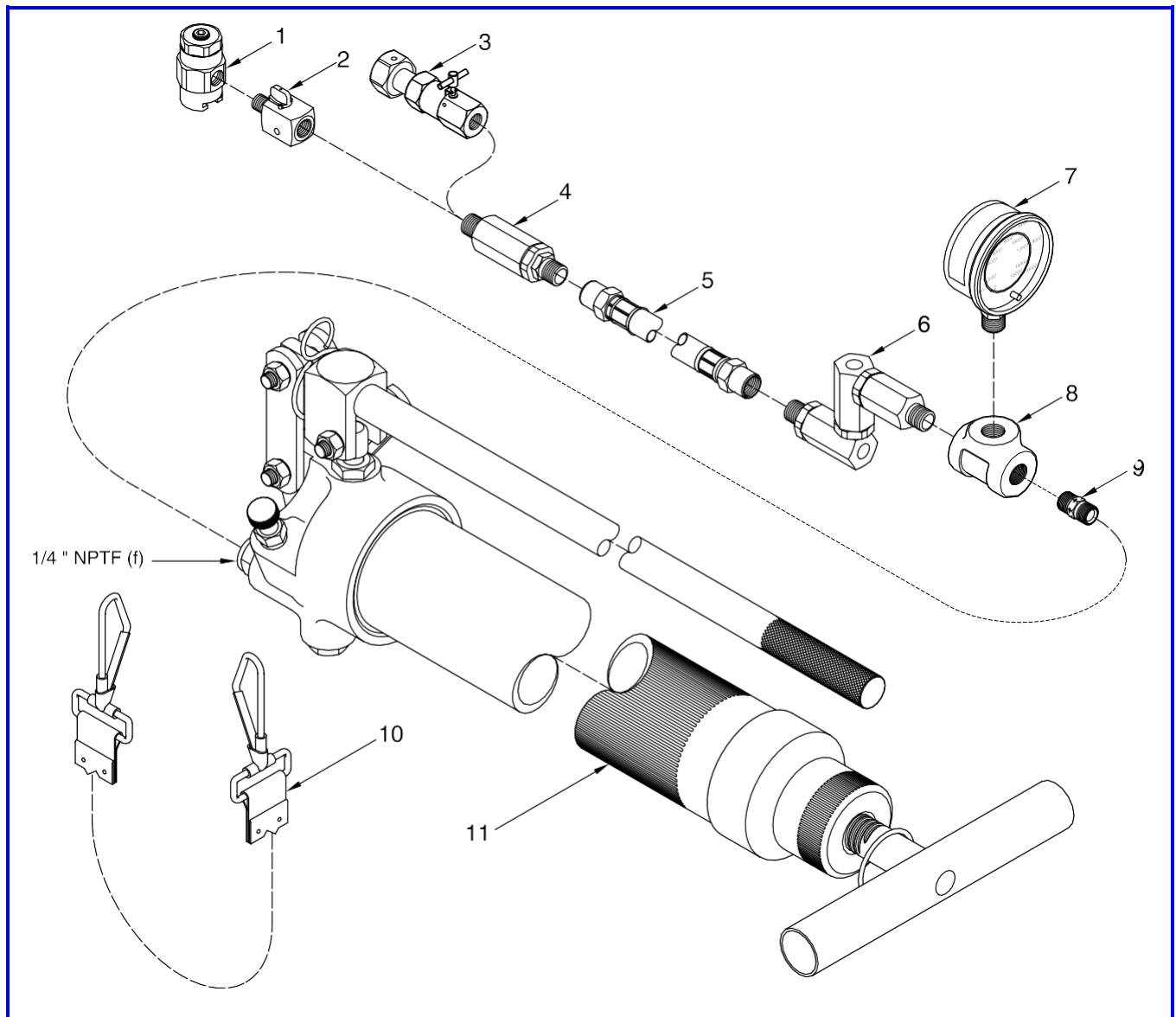
### Model Dependent Step

7. Release the pressure at the Coupler.
  - Rotate the Coupler assembly's relief valve handle one-quarter turn to the open position (Giant Button-Head Model 325540-1). See **Figure 2**.
  - Turn the Coupler's screw handle fully counterclockwise. (Saf-T-Vent Model 325540-2). See **Figure 2**.
  - Open the relief valve screw on the gun. (stripped gun model 6268-2)



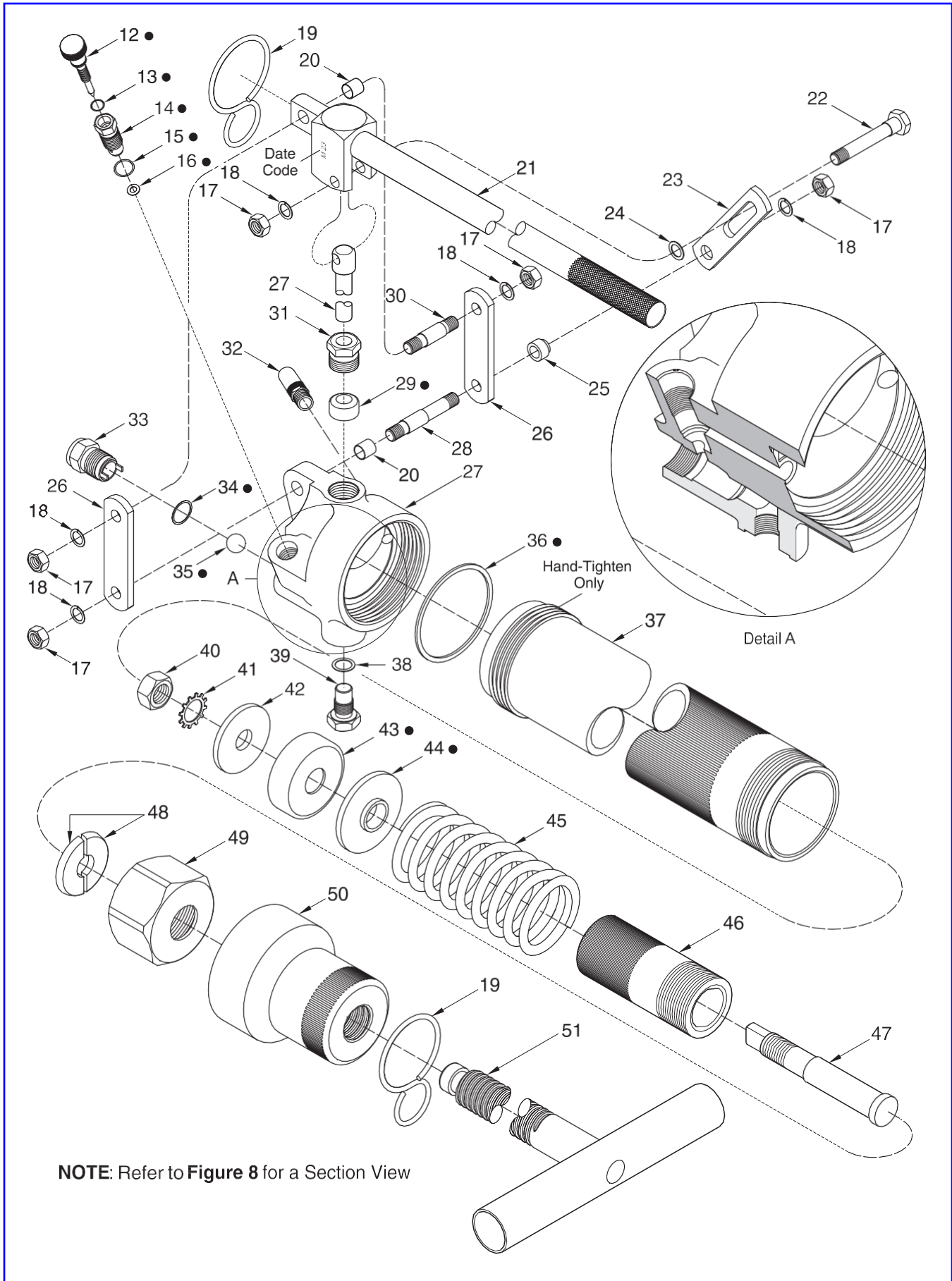
**Figure 2** Closed and Open Position of Relief Valve on Coupler Assembly

8. Remove the Coupler from the fitting.
9. Close the relief valve.



Item No.	Part No.	Description	Qty	Model	Notes
1	62990	Coupler, High-Pressure	1	Model 6299-1	See <b>Figure 7</b>
2	62991	Valve, Shut-Off and Relief	1		
3	62992	Coupler Assembly, High-Pressure	1	Model 6299-2	
4	62993	Swivel Assembly, Straight	1		See <b>Figure 6</b>
5	62994	Hose, High-Pressure (18 " Long)	1		
6	62995	Z-Swivel, High-Pressure	1		See <b>Figure 6</b>
7	62996	Gauge, High-Pressure	1		
8	62997	Tee, High-Pressure	1		
9	62998	Adapter, High-Pressure	1		
10	62999	Strap, Shoulder	1		
11	6299-2	Gun Assembly, High-Pressure	1		See <b>Figure 3-B</b>

**Figure 3-A** High-Pressure Screw Prime Injector - Model 6299 Series - Exploded View



**Figure 3-B** High-Pressure Screw Prime Injector – Model -- 6299-2 - Exploded View

Item No.	Part No.	Description	Qty	Notes
12		Screw, Relief Valve	1	●
13		O-Ring, 1/4 " ID x 3/8 " OD	1	●
14		Body, Relief Valve	1	●
15		O-Ring, 7/16 " ID x 9/16 " OD	1	●
16		Gasket (Copper)	1	●
17		Nut, 1/4 " -20	5	
18		Washer, Lock, 1/4 "	5	
19		S-Hook	2	
20		Bushing	2	
21		Lever Assembly	1	
22		Pin, Piston	1	
23		Stop, Piston	1	
24		Washer	1	
25		Spacer	1	
26		Link	2	
27	327603	Head and Piston Assembly, Cylinder	1	Includes item 20
28		Link, Pin	1	
29		Packing	1	●
30		Pin, Link	1	
31		Screw, Packing	1	
32		Fitting Assembly, Loader	1	
33		Adapter	1	
34		Gasket (Copper)	1	●
35		Ball, 7/16 " Dia.	1	●
36		Gasket (Fiber)	1	●
37		Cylinder	1	
38		Gasket (Copper)	1	
39		Plug	1	
40		Nut, 3/8 " -16	1	
41		Washer, Lock, 3/8 "	1	
42		Washer	1	
43		Cup (Leather)	1	●
44		Bushing and Washer Assembly	1	●
45		Spring	1	
46		Sleeve	1	
47		Screw, Shoulder	1	
48		Ring, Split	2	
49		Nut, Retaining	1	
50		Cap, Cylinder	1	
51		Handle and Screw Assembly	1	

**Legend:**

Part numbers left blank are not available separately

● designates a repair kit item

**Repair Kit**

Part No.	Kit Symbol	Description
62910	●	Kit, Repair

# Loading the Gun

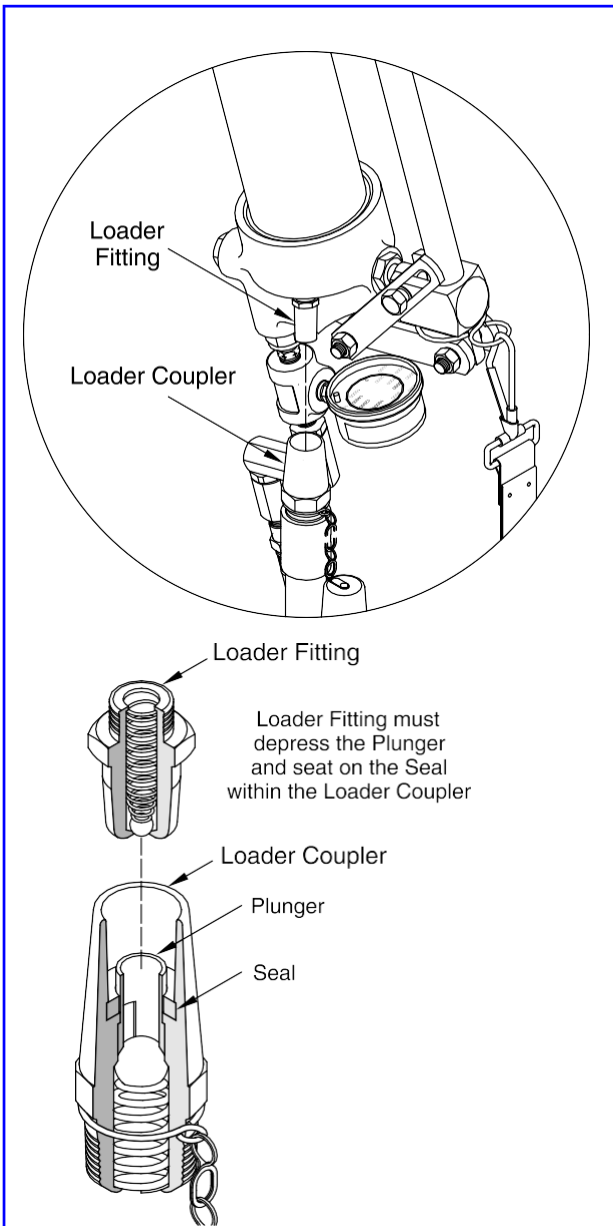
## Types of Lubricant

The gun is designed to dispense both stick (valve plug sealant) lubricants and grease.

### Stick Loading

**NOTE:** Refer to **Figure 3-B** for component identification of the following procedures.

1. Unscrew Cylinder (37) from Head Piston Assembly (27).



**Figure 4** Loader Fitting and Loader Coupler Section View

2. Unscrew Handle and Screw Assembly (51) as far as possible from Cylinder Cap (50).
3. Load the stick into the Cylinder.

*IMPORTANT: Hand-tighten the Cylinder into the Head Assembly.*

4. Screw the Cylinder onto the Head Assembly.
5. Screw the Handle and Screw Assembly into the Cylinder Cap until the Handle bottoms [Spring (45) is compressed].

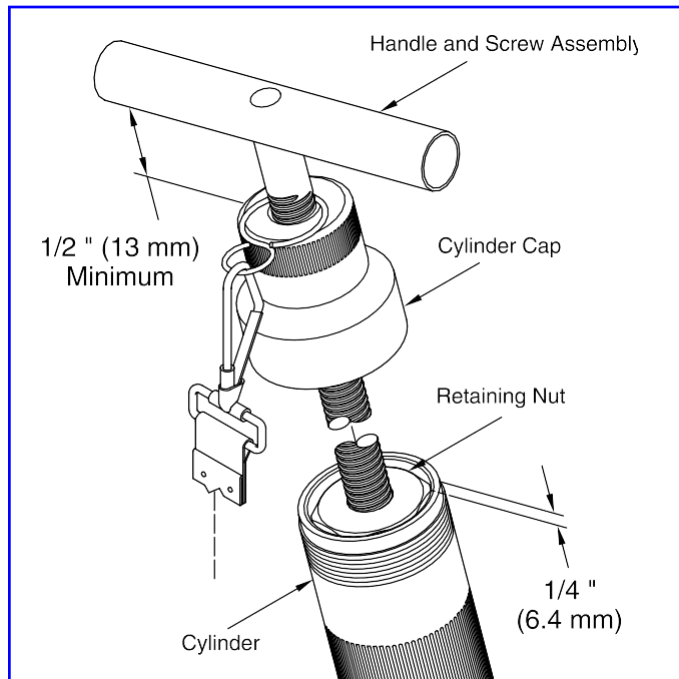
### Loading the Gun from a Loader Pump

Each gun is equipped with a Loader Fitting. This fitting allows the direct filling of grease from a hand-operated pump. See **Figure 4**.

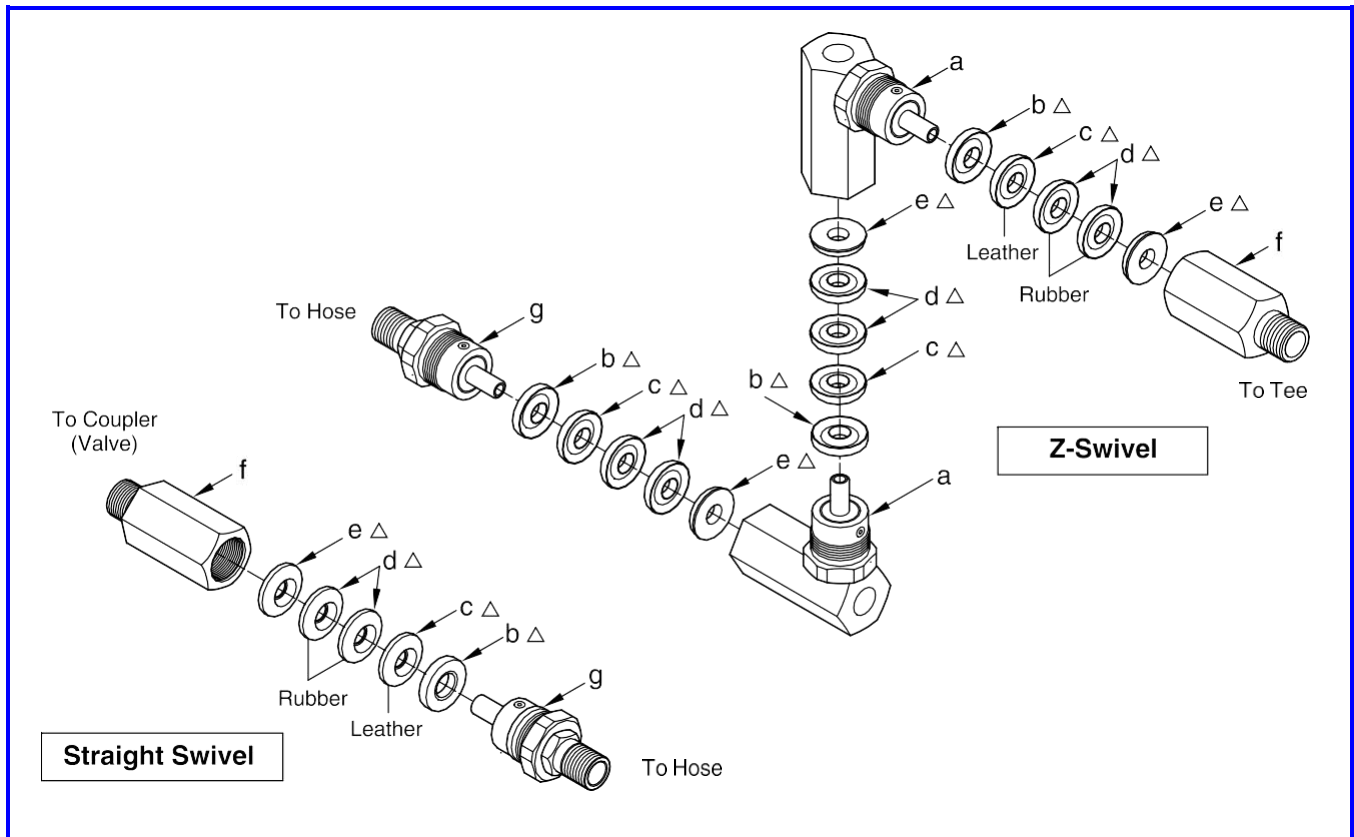
6. Unscrew the Handle and Screw Assembly at least 1/2-inch (13 mm) from the Cylinder Cap. See **Figure 5**.
7. Unscrew the Cylinder Cap from the Cylinder.
8. Wipe the Loader Fitting with a clean cloth.

## CAUTION

The Loader Fitting on the gun must mate with the loader coupler. The pump may not operate if the components are not compatible.



**Figure 5** Component Dimensions for Loader Pump Filling



Item No.	Note	Description	Qty		Item No.	Note	Description	Qty	
			Str	Z				Str	Z
a		Body and Stud Assembly	-	2	e	△	Ring, Support, Male	1	3
b	△	Ring, Support, Female	1	3	f		Adapter, Swivel, 1/4 " NPTF (m)	1	1
c	△	V-Packing (Leather)	1	3	g		Adapter, Swivel, 1/2 " -27	1	1
d	△	V-Packing (Rubber)	2	6					

**Legend:**  
 △ designates a repair kit item

**Repair Kit**

Part No.	Kit Symbol	Description
62911-1	△	Kit, Repair [Quantity for six (6) Straight Swivels and two (2) Z-Swivels]

**Figure 6** High-Pressure Straight and Z-Swivels - Exploded View

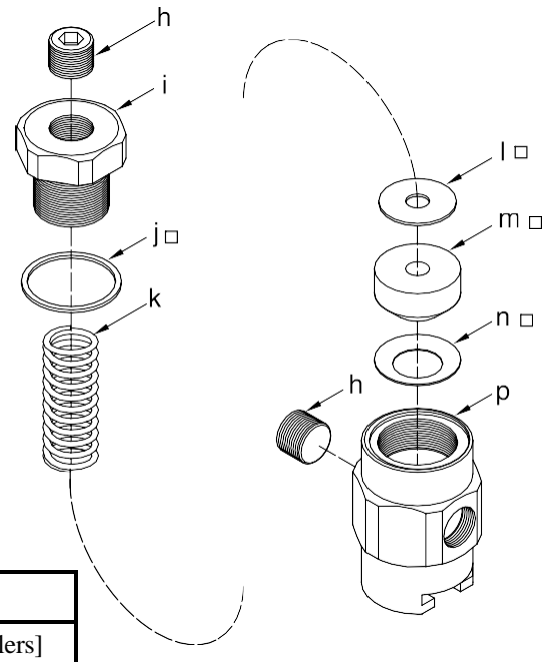
9. Operate the pump and view the movement of the Handle and Screw Assembly.
10. Seat the Loader Fitting into the loader coupler.
  - See **Figure 4**.
11. Discontinue pump operation once the Retaining Nut is 1/4 " (6.4 mm) from the end of the Cylinder.
  - See **Figure 5**.
12. Remove the gun from the loader coupler.
13. Screw the Cylinder Cap down the Handle and Screw Assembly and onto the Cylinder.

Item No.	Note	Description	Qty
h		Plug, Pipe, 1/4 " NPTF (m)	2
i		Screw, Retainer	1
j	□	Gasket (Aluminum)	1
k		Spring	1
l	□	Washer, 0.20 "	1
m	□	Bushing, Sealing (Rubber)	1
n	□	Washer, 0.40 "	1
p		Body, Coupling	1

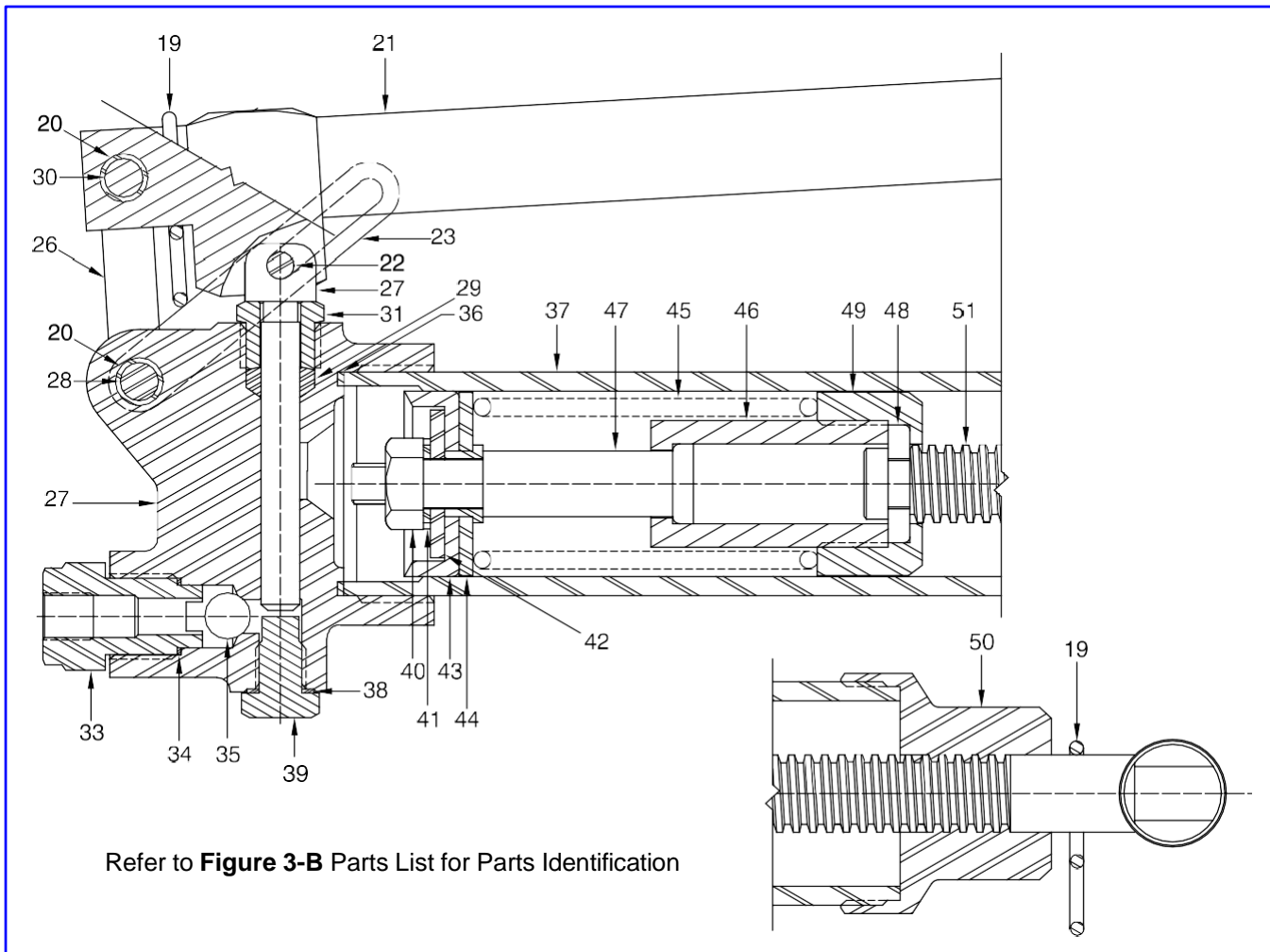
Legend:  
 □ designates a repair kit item

**Repair Kit**

Part No.	Kit Symbol	Description
398726	□	Kit, Repair [Quantity for ten (10) Couplers]



**Figure 7 High-Pressure Coupler - Exploded View**



Refer to **Figure 3-B** Parts List for Parts Identification

**Figure 8 High-Pressure Screw Prime Injector 6299 - Section View**



# Troubleshooting Chart

Gun Indications	Possible Problems	Solution
Gun does not pump	Air within Head Assembly (27)	Screw the Handle and Screw Assembly into the Cylinder Cap until the Handle bottoms (Spring (45) is compressed). Operate the lever of the gun.
Gun lacks pressure	<ol style="list-style-type: none"> <li>1. Initial tightening of Relief Valve Body (14) into Head and Piston Assembly (27) not sufficient</li> <li>2. Relief Valve Screw (12) in the open position (not seated)</li> <li>3. Worn or damaged Relief Valve Screw (12) and/or Relief Valve Body (14)</li> <li>4. Worn or damaged Gasket (16)</li> <li>5. Worn Piston and/or bore in Head and Piston Assembly (27)</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Relief Valve Body (14) into Head and Piston Assembly (27)</li> <li>2. Tighten Relief Valve Screw (12) into Head and Piston Assembly (27)</li> <li>3. Use Repair Kit 62910</li> <li>4. Use Repair Kit 62910</li> <li>5. Replace Head and Piston Assembly (27)</li> </ol>
Gun does not hold pressure (pressure falls when lever is raised)	<ol style="list-style-type: none"> <li>1. Foreign material between Ball (35) and seat in Head and Piston Assembly (27)</li> <li>2. Worn or damaged seat in Head and Piston Assembly (27)</li> <li>3. Worn or damaged ball (35)</li> </ol>	<ol style="list-style-type: none"> <li>1. Disassemble components and eliminate foreign material</li> <li>2. Hammer Ball (35) into Head and Piston Assembly (27) to recondition seat.</li> <li>3. Use Repair Kit 62910</li> </ol>
<b>External Leakage</b>		
Grease leakage visible at Cap (50)	<ol style="list-style-type: none"> <li>1. Worn or damaged Cup (43)</li> <li>2. Damaged Cylinder (37)</li> </ol>	<ol style="list-style-type: none"> <li>1. Use Repair Kit 62910</li> <li>2. Replace Gun</li> </ol>
Grease leakage visible between Cylinder (37) and Head and Piston Assembly (27)	<ol style="list-style-type: none"> <li>1. Initial tightening of Cylinder (37) into Head and Piston Assembly (27) not sufficient</li> <li>2. Worn or damaged Gasket (36)</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Cylinder (37) into Head and Piston Assembly (27)</li> <li>2. Use Repair Kit 62910</li> </ol>
Grease leakage visible at Plug (39)	<ol style="list-style-type: none"> <li>1. Plug (39) loose</li> <li>2. Worn or damaged Gasket (38)</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Plug (39)</li> <li>2. Use Repair Kit 62910</li> </ol>
Grease leakage visible at Head and Piston Assembly (27)	<ol style="list-style-type: none"> <li>1. Worn Relief Valve O-Ring (15)</li> <li>2. Initial tightening of Packing Screw (31) into Head and Piston Assembly (27) not sufficient</li> <li>3. Worn or damaged Packing (29)</li> </ol>	<ol style="list-style-type: none"> <li>1. Use Repair Kit 62910</li> <li>2. Tighten Packing Screw (31) into Head and Piston Assembly (27)</li> <li>3. Use Repair Kit 62910</li> </ol>
Grease leakage visible at delivery system components	Initial tightening of components not sufficient	Tighten components

### Changes Since Last Printing

Update Repair Parts