



**VAL-LUBRIC**

# **HYDRAULIC SEALANT PUMP**

OPERATION AND MAINTAINANCE  
CATALOGUE

The High Pressure Hydraulic Sealant Equipment is rated at 10,000–11,000PSI (690 – 759 bar) and includes many features for meeting the exact demands of replacing Sealant in Lubricated Valves.

**One of the most outstanding features is the High Pressure Hydraulic Sealant Equipment's large Fluid capacity which permits long periods of operation between recharging.**

In the High Pressure Hydraulic Sealant Equipment, any air entrapment is eliminated by adding Fluid when recharging which automatically purges the system of air. The Equipment operates effectively in all positions.

The Floating Piston in the Equipment is Solid. There is no cap screw to cause Fluid Leakage and eventually operation failure.

By using Hydraulic Fluid in the pumping mechanism, the Equipment Pumps smoothly and with minimum effort. Its powerful Hydraulic Floating Piston forces Sealant out of the Pump with ease regardless of the Sealant Viscosity.

The High Pressure Hydraulic Sealant Equipment is equipped with a Giant button Head coupler for connection to the Button Head Sealant fitting of the valve. This Coupler has a Design feature which locks it to the Sealant Fitting when the Equipment is under Positive pressure. The Coupler cannot be connected to, or separated from the fitting with the Equipment under Pressure.

Due to the built in safety features, the High Pressure Hydraulic Sealant Equipment provides maximum safety both to the user and the equipment itself. The Hydraulic System of the Equipment is equipped with a Internal Relief Valve to protect the Operator, if Pumping continues after the equipment is depleted off the Sealant.

The Internal Relief Valve is tamperproof and is relatively un-affected by temperature change and relieves approximately the same pressure at temperatures between 0°F (18°C) and 80°F (27°C) assuring maximum Pump output throughout the variation.



**MAJOR REPAIR KIT #590031**

Quantity	Part #	Part Description
1	27524	Button Head Coupler Repair Kit
1	90040	Hydraulic Pump Cylinder With Piston 90041 and O-Ring 634005
1	90048	By-Pass Valve
1	90059	Check valve Assembly
1	50960	Hydraulic Fluid Bag
1	51251	Hydraulic Flic-1 pint can
2	2800011	Nylon Cup
1	2800027	Minor Repair Kit
1	934006	O-Ring
1	608705	Screw

**MINOR REPAIR KIT #590032**

Quantity	Part #	Part Description
1	634005	O-Ring
1	634006	O-Ring
1	634007	O-Ring
1	634015	O-Ring
2	634029	O-Ring
1	643102	O-Ring
1	2800013	O-Ring

**CHECK VALVE ASSEMBLY #90059**

Quantity	Part #	Part Description
1	90045	Screw
1	90046	Washer
1	90083	Screen
1	605151	Spring
1	630206	Ball

**LINKAGE ASSEMBLY #590034**

Quantity	Part #	Part Description
2	90039	Link
3	2619604	Washer
1	508683	Shoulder Screw
1	2618357	Lock Nut
1	2800065	Stop Link

**BODY ASSEMBLY #590036**

Quantity	Part #	Part Description
1	90040	Hydraulic Pump Cylinder
1	90045	Screw
1	90046	Washer
1	90047	By-Pass Stop Valve
1	90048	By-Pass Valve
1	90051	Body
1	90083	Screen
1	605151	Spring
2	508685	By-Pass Stop screw
1	630206	Ball
1	534007	By-Pass Valve O-Ring
1	534015	Pump Cylinder Top O-Ring
1	534029	O-Ring
1	543102	Pump Cylinder Bottom O-Ring
1	2800149	Internal Relief Valve

**FLOATING PISTON ASSEMBLY #590035**

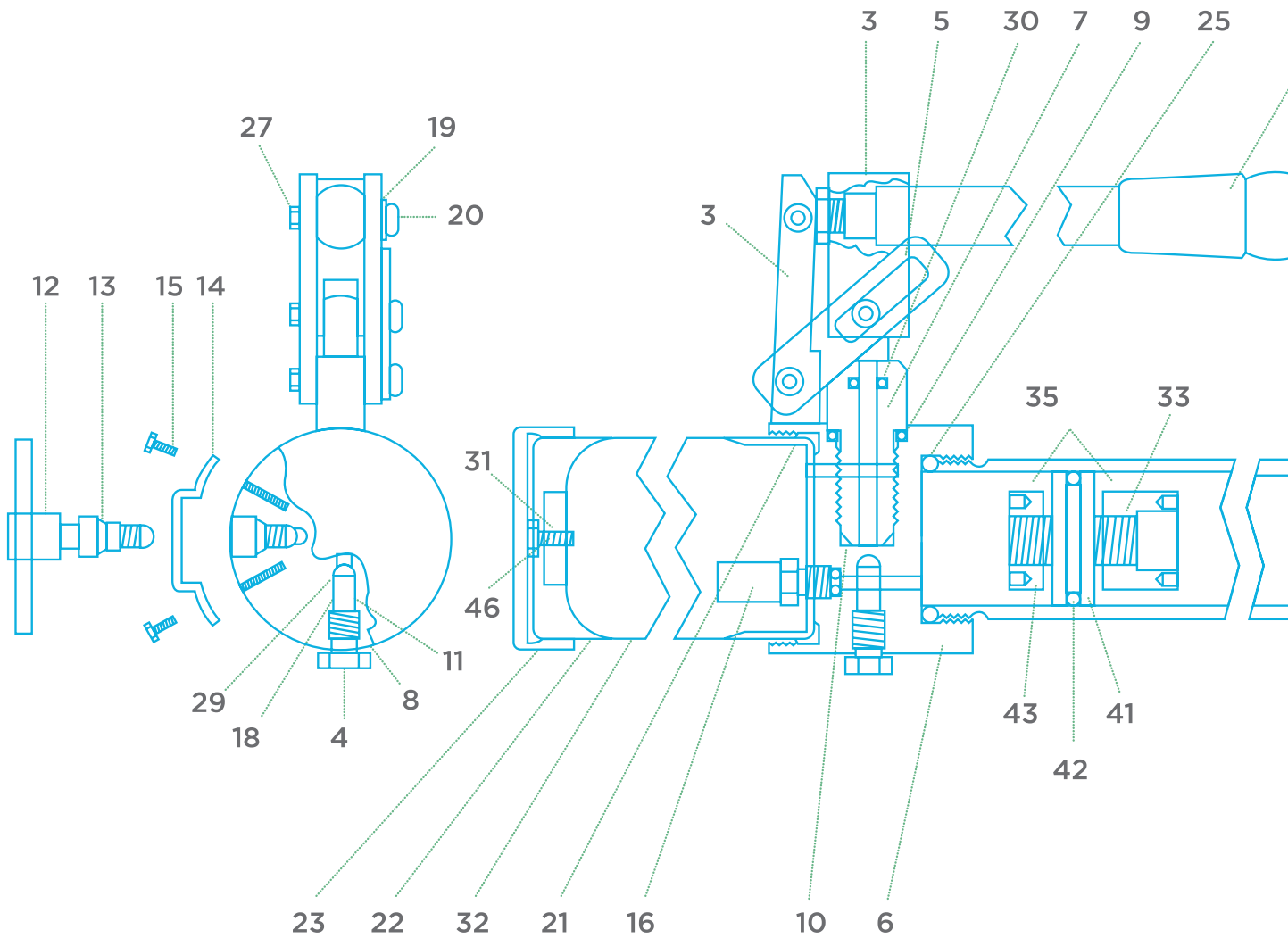
Quantity	Part #	Part Description
1	2800010	Sealant Side Nut
2	2800011	Nylon Cup
1	2800012	Body
1	2800013	O-Ring
1	2800014	Oil Side Nut

**HOSES BY LENGTH (1/4" NPT MALE AND 1/2-27 FEMALE)**

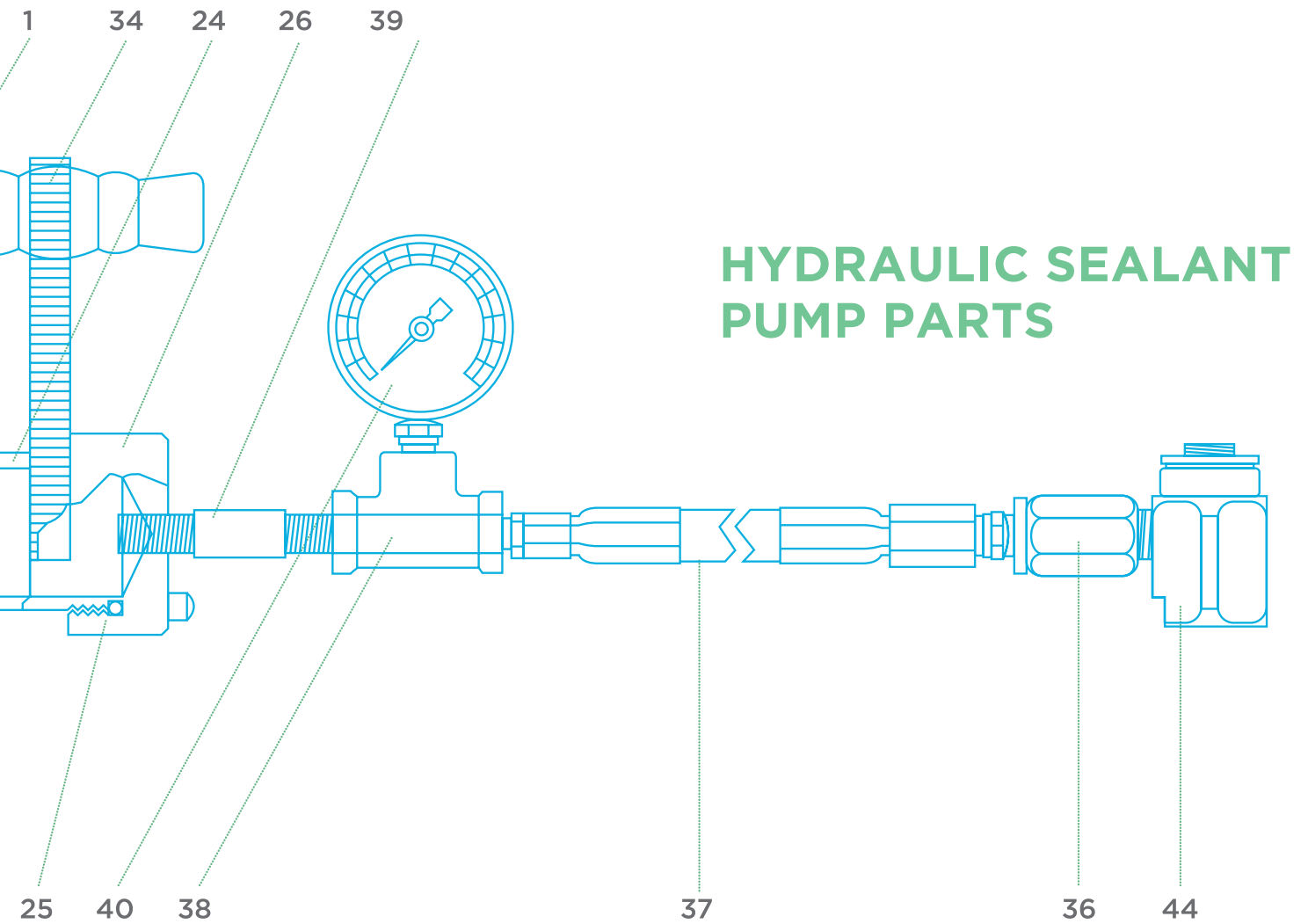
Hose Length	Part Description
1 Feet	90076
1.5 Feet	27501
2 Feet	27502
3 Feet	2800109
4 Feet	27503
6 Feet	27504

**BUTTON HEAD COUPLER REPAIR KIT #590033**

Consists of 1 each: Spring, Washer, O-Ring, Valve



Reference	Part Description	Part Number	Quantity
1	Handle With Grip	90033	1
2	Fulcrum	90036	1
3	Link	90039	2
4	Screw, Check Valve	90045	1
5	Stop Link	2800065	1
6	Body, Hand Pump	90051	1
7	Hydraulic Pump Cylinder With Piston	90040	1
8	Washer, Check Valve	90046	1
9	O-Ring, Pump Cylinder (top)	534015	1
10	O-Ring, Pump Cylinder (bottom)	543102	1
11	Screen, Check Valve	90083	1
12	By-Pass Valve	90048	1
13	O-Ring, By-Pass Valve	534007	1
14	By-Pass Stop	90047	1
15	By-Pass Stop Screw	508685	2
16	Internal Relief Valve	2800149	1
17	Gauge Cover		1
18	Spring, Check Valve	505151	1
19	Washer, Linkage	1919604	3
20	Shoulder Screw,Linkage	508683	3
21	Sealing Ring	90060	1
22	Fluid Bag Barrel	90054	1
23	Fluid Bag Barrel Cap	90055	1



## HYDRAULIC SEALANT PUMP PARTS

Reference	Part Description	Part Number	Quantity
24	Sealant Barrel	90028	1
25	O-Ring, Sealant Barrel	634029	1
26	Sealant Barrel Cap	90026	1
27	Lock Nut	614980	3
28	Z-Type Swivel (Optional Equipment)		1
29	Ball, Check Valve	630206	1
30	O-Ring, Pump Cylinder Piston	634005	1
31	O-Ring Fluid Bag	634006	1
32	Hydraulic Fluid Bag	50960	1
33	Nut, Sealant Side	2800010	1
34	Carry Strap	20070	1
35	Nylon Cup	2800011	2
36	Straight Swivel	590037	1
37	One Foot Hose	90076	1
38	Tee	2800074	1
39	Nipple	2800073	1
40	15,000 PSI Gauge	2800052	1
41	Body, Floating Piston	2800012	1
42	O-Ring Floating Piston	2800013	1
43	Nut, Oil Side	2800014	1
44	Giant Button Head Coupler	54584	1
45	Hydraulic Fluid (1 pint can)		1
46	Screw, Fluid Bag	608705	1

## PREPARING THE HIGH PRESSURE HYDRAULIC SEALANT EQUIPMENT FOR USE:

The High Pressure Hydraulic Sealant Equipment is packaged with the Sealant Barrel Cap and Hose assembly separate from the Equipment. To make the High Pressure Hydraulic operational, all you need to do is load the equipment with Sealant and attach the cap and Hose assembly.

## LOADING THE HIGH PRESSURE HYDRAULIC SEALANT EQUIPMENT WITH SEALANT:

The High Pressure Hydraulic Sealant Equipment is capable of pumping all viscosities of Valve Sealants, the Barrel is designed to accept a size "J" Sealant Stick (1.50" Diameter x 8.75" Length). Bulk grade Sealants can be manually loaded into the Equipment.

### CAUTION:

High Pressure Hydraulic Sealant Pump is capable of developing High Pressures. The following operating instructions should be read and followed closely to assure the safe and proper use if the shipment.

- Open the By-Pass Valve (12) by turning counter clockwise less than one full turn. It should not be tightened against the By-Pass stop (14). Backing out the By-Pass Valve too far will allow air to enter the Hydraulic System of the Equipment.
- Remove the Sealant Barrel Cap (26), complete with Hose assembly, using the Handle with Grip. (1). The Handle is detachable and has a hole drilled near one end. By unscrewing the Handle and placing the hole over the protruding pin on the Sealant Barrel Cap, the Cap may be easily removed and replaced.
- Using the Handle as a push Rod, return the Floating Piston (41) to the Bottom of the Sealant Barrel. (24)
- Clean and replace the Handle.
- Close the By-Pass Valve. Do not jam the By-Pass Valve in to the Seat as this may damage the seating member.
- Insert the J-Stick or Equipment Pak (heat sealed end first into the Sealant Barrel).

- Operate the Equipment until the J-Stick or Equipment Pak protrudes approximately 1/4" (6mm) from the end of the Sealant Barrel.
- Replace the Sealant Barrel Cap and tighten snugly using the Handle.
- Before attaching the Giant Button Head Coupler (44) to the Valve Sealant fitting, operate the Equipment until resistance is felt or the equipment begins to build pressure (the Hose will stiffen). Continue to pump until Internal Relief Valve releases and note the Pressure at which this occurs.

## LUBRICATING VALVES WITH THE HYDRAULIC SEALANT PUMP

- Slide the Giant Button Coupler (44) over the Button Head fitting on the Valve to be Injected with Sealant.
- Tighten the By-Pass valve (12).
- Begin Sealant Injection by pumping the Equipment Handle (1). It may take number of Strokes for the Equipment to prime itself and Inject Sealant into the Valve.
- As the Valve Sealant system becomes full, the Pump should become harder to operate and a pressure drop noted on the gauge. When the Valve is full of Sealant, open the By-Pass Valve and disengage the Giant Button Head Coupler. (Hydraulic Pressure must be removed from the Equipment before the coupler can be removed.)

### CAUTION:

Do not continue pumping the Pump after the Sealant Barrel has been emptied of Sealant as the Floating Piston assembly may be damaged or the Equipment Pak Bag may be pumped into the Hose.

### HINT:

To retain most of the Hydraulic Pressure in the Equipment when removing the Valve quickly open and close the By-Pass valve. This will relieve enough Hydraulic Pressure to allow for easy removal of the Coupler but maintain enough pressure to keep from re-priming the Equipment between Valves.

# CARE AND MAINTENANCE

## SUGGESTED EQUIPMENT CARE:

The following suggestions will ensure efficient and continued operation of the High Pressure Hydraulic Sealant Equipment.

- Do not carry the Equipment by the Handle unless secured with the carry strap. Carrying the Equipment with an unsecured Handle can damage the Piston.
- Keep the Piston area of the Pump free of debris.
- Do not un-screw the By-Pass Valve more than one complete turn. Doing so may allow air to enter the Hydraulic system of the Equipment.
- Protect the Gauge from damage.

## EQUIPMENT MAINTENANCE:

If the Operating instructions are carefully followed and Hydraulic Fluid is added at regular intervals, the Equipment will operate indefinitely without further maintenance. It is recommended a maintenance program be established where the number of hours the Pump is used determines when maintenance is required.

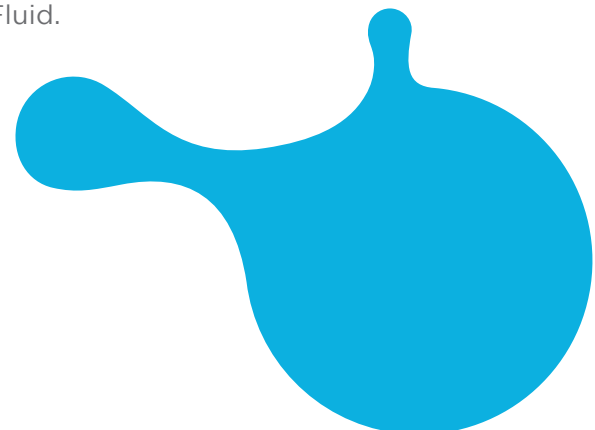
## RECHARGING AND BLEEDING THE HYDRAULIC SYSTEM OF AIR:

- Open the By Pass Valve (12) and remove the Handle (1) .
- Remove the Sealant Barrel Cap (26) and stand with the Equipment with the Sealant Barrel.(24) up.
- With the Handle, press the Floating Piston (41) to the Bottom of the Sealant Barrel. Make sure the Floating Piston bottoms out in the Sealant Barrel.
- Leave the Handle inside the Sealant Barrel and turn the Equipment so that the Sealant Barrel is pointing downwards and remove the Fluid Bag Barrel cap (23).
- Slowly remove the Screw (46) and O-Ring (31) from the Fluid Bag (32).

- Allow the weight of the Equipment to rest against the Handle and slowly fill the Fluid Bag with Hydraulic Fluid. Allow the Equipment to stand 15 Minutes to permit the air suspended in the Fluid to escape. (It is recommended to allow the Equipment to sit for 2-3 Hours after recharging the Hydraulic system with fluid to allow the Fluid Bag to regain its Original Shape.)
- Replace the Screw and O-Ring being careful not to entrap air.
- Remove the Handle and replace the Fluid Bag Barrel Cap 9. Reload the Pump with Sealant and replace the Sealant Barrel Cap.

## REPLACING THE HYDRAULIC FLUID BAG :

- Remove the Handle (1), Open the By-Pass Valve (12) and push the Floating Piston (41) to the bottom of the Sealant Barrel (24). Clean the Handle and replace.
- Place the Fluid Bag Barrel (22) end of the Pump in a vise.
- Place a suitable size Container below the vise to catch Hydraulic Fluid 4. Using Pump assembly Wrench 4, remove the body (6) and attached parts from the Fluid Bag Barrel. Hydraulic Fluid will spill from the Fluid Bag.
- If the Floating Piston (41) was not able to be returned to the bottom of the Sealant Barrel, return it now (see step 1).
- Remove the Damaged Fluid Bag (32) from the fluid Bag Barrel and clean the Barrel.
- Remove the Sealant Ring.(21).
- Place the Sealant Ring onto the new Fluid Bag. Loosen Fluid Bag Screw(45) and tighten Snug.
- Place the Fluid Bag into the Fluid Bag Barrel. Fill the Fluid Bag to within 3/4" of the top with Hydraulic Fluid.





## CAUTION:

Take Care to keep foreign matter from entering the Hydraulic Fluid. Debris in the Hydraulic system can prevent the Equipment from operating properly.

- Replace the Equipment assembly removed in step 4 and lighten by hand.
- Tighten the assembly to approximately 50 feet lbs. using the Equipment assembly wrench.

## CAUTION:

Over tightening the Fluid Bag Barrel to the Body may damage the Fluid Bag assembly.

- After equipping the Equipment with a new Fluid Bag, recharge the Equipment with Hydraulic Fluid as described in this Brochure.

## SEALANT BARREL REPLACEMENT:

- Open the By-Pass Valve (12) and push the Floating Piston (41) to the bottom of the Sealant Barrel (24).
- Close the By-Pass Valve.
- Place the Sealant Barrel end of the Equipment in a vise and with Equipment assembly. Remove the Body (6) and attached parts from the Sealant Barrel.
- Remove the Sealant Barrel from the vise and push the Floating Piston from the Sealant Barrel. Note the position of the assembly when removing.
- Using Floating Piston Guide, place the Floating Piston into the non-knurled end of the new Sealant Barrel. The Floating Piston should be flush with bottom of the Sealant Barrel.

## CAUTION:

Make sure the Sealant Barrel and Floating Piston assembly are free of contaminants prior to assembly.

- Replace the Sealant Barrel O-Ring(25).
- Place the Sealant Barrel onto the Body, with the knurled end furthest away from the body, and tighten hand tight.
- Place the Sealant Barrel end of the Equipment into the vise and tighten the Body using Equipment assembly Wrench.
- After Equipping the Pump with a new Sealant Barrel, recharge the Pump with Hydraulic Fluid as described in this Brochure.

## PUMP CYLINDER REPLACEMENT:

- Remove the Handle (1) open the By-Pass Valve (12) and push the Floating Piston (41) to the bottom of the Sealant Barrel (24). Clean the Handle and replace.
- With the Pump in the horizontal position, Handle up, remove the Shoulder Screw (20) from the Pump Piston.
- Tip the Linkage back
- Unscrew the Hydraulic Pump Cylinder (7) with Spanner Wrench. (The cylinder cavity will probably fill with Hydraulic Fluid. Do not disturb this condition.)
- Replace the O-Ring (10) in the bottom of the cylinder cavity of the Body.
- Install O-Ring (9) on the new Hydraulic Pump Cylinder. It is recommended that the cylinder be replaced as assembly 90040.
- Install the new Hydraulic Pump Cylinder in to the Body (6) and tighten with Spanner Wrench.
- Reconnect the Linkage.
- After equipping the Pump with a new Hydraulic Pump Cylinder, recharge the Pump Cylinder, recharge the Pump with Hydraulic Fluid as described in this Brochure.

## PUMP CYLINDER PISTON O-RING REPLACEMENT:

Remove the defective Pump Cylinder Piston O-Ring (30) using a sharp object. Pinch the O-Ring between the forefinger and thumb. Push the O-Ring into the top of the Pump Cylinder so that it partially enters the O-Ring groove. Use a blunt instrument to work the O-Ring completely into the groove.

## CHECK VALVE REPAIR:

Symptoms of Check Valve failure are easily recognizable when the Handle develops a spring like action where, under pressure, the Handle will spring back each time it is pushed down as the Check Valve is not seating properly. This is usually indicative of a foreign particle in the Valve Seat.

- Open the By-Pass Valve (12) and push the Floating Piston (41) to the bottom of the Sealant Barrel (24).
- Close the By-Pass Valve.
- Place the Equipment in a vise on a workbench and loosen the Check Valve Screw (4).
- Remove the Check Valve Screw and Washer (8) and turn the Equipment Check Valve down so the



Spring (18) Ball (29) and Filter (11) fall out.

- Using the pointed instrument, remove the Cylindrical Screen (11) from the check valve cavity.
- Thoroughly clean the check valve Seat and cavity with a lint paper free towel. The Cleaning must be thorough or the check valve may not seat.
- Position the Equipment on the work-bench with a Check Valve cavity up.
- Insert the Ball.
- With the Ball in position on the seat, place a short length of 1/4" Brass or cold rolled rod on the Ball and with a firm blow from a hammer, seat the Ball.
- Turn the Body over and remove the ball by tapping the Unit against your hand.
- Clean the Cavity and Seat the Ball again.
- Turn the Body upside down. If the Ball falls down, repeat the seating procedure until the ball does not fall out without assistance.
- Insert the Screen and Spring.
- Replace the Washer and Check Valve Screw and tighten the Screw snugly being careful not to over tighten.
- After equipping the Equipment with a new Check Valve assembly, recharge the Equipment with Hydraulic Fluid as described in the Brochure.

### BY-PASS VALVE REPLACEMENT:

- Remove the Handle (1) , Open the By-Pass Valve (12) and push the Floating Piston (41) to the Bottom of the Sealant Barrel (24). Clean the Handle and replace.
- Remove the By-Pass Stop Screw (15) and the By-Pass Valve stop (14). 3. Remove the damaged By-Pass Valve.
- Lubricate the By-pass Valve O-Ring (13) on the New By-Pass Valve.
- To avoid damage to the O-Ring, carefully screw the By-Pass Valve into the Body until the O-Ring engages the Body. Screw the valve in 1/2 turn, and un-screw 1/4 turn. Repeat this procedure until the O-Ring has entered the body and the By-Pass Valve has seated.

### CAUTION:

If Hydraulic Fluid is present in the By-Pass Valve cavity of the body, fluid back pressure may shear the O-Ring and the O-Ring must be replaced.

After installing a new By-Pass Valve, recharge the Equipment with Hydraulic Fluid as described in the Brochure.

### FLOATING PISTON REPLACEMENT:

1. Remove the Sealant Barrel Cap (26) and open the By-Pass Valve (12).
  2. Push Piston assembly to bottom of the Sealant Barrel (24) with Handle (1). Clean the Handle and replace.
- Remove the Sealant Barrel from the Equipment (see instructions listed in Sealant Barrel replacement.)
  - Remove the Floating piston (41) from the Sealant Barrel using a Pulling tool.
  - Place the Floating Piston into a vice and disassemble using Spanner Wrench.
  - Replace the O-ring (42) and Nylon Cups (35). 7. Tighten the assembly using 2 Spanner Wrenches.
  - Replace the Floating Piston using Piston Guide Tool .The assembly should be positioned flush with the bottom of the Sealant Barrel.
  - After installing the Floating Piston, recharge the Equipment with Hydraulic Fluid.

### SEALANT CHANGE OUT:

- Remove the Sealant Barrel Cap (26) complete with hose assembly.
- Force Piston Pulling Tool into the center of the Sealant Barrel (24) and push until the tool is in contact with the Floating Piston (41).
- Screw the Tool into the Floating Piston, open the By-pass valve (12), and pull the Piston out of the Barrel until the assembly is flush with end of the Barrel.
- Remove the Piston pulling tool and scrape the existing sealant from the end of the Floating Piston.
- Follow the instructions for loading the Equipment with Sealant as listed in this Brochure.
- Attach a Sealant fitting to the Giant Button Head Coupler (44) and purge old Sealant from the Hose by operating the Equipment until new Sealant is pumped through the Fitting.

# TROUBLESHOOTING GUIDE:

These troubleshooting tips are provided as a means of assisting the consumer in recognizing Operational difficulties sometimes associated with the High Pressure Hydraulic Sealant Equipment.

## WARNING:

Never attempt to repair High Pressure Hydraulic Sealant Equipment without relieving the Hydraulic Pressure.

## PROBLEM: THE EQUIPMENT WILL NOT PUMP.

**CAUSE 1:** Air has entered the Hydraulic System.

**SOLUTION 1:** Bleed the Hydraulic System, refer earlier pg. of this Brochure.

**TIP:** With the Fluid Bag end of the Equipment positioned vertically in a vice, the fluid bag full of oil, the Floating Piston pushed all the way into the Sealant Barrel, and the By-Pass Valve open full turns, pump the handle 10-15 times. This will ensure air entrapped in the Hydraulic System passages has been pumped into the Fluid Bag and allowed to escape to the atmosphere.

**CAUSE 2:** The Piston is broken.

**SOLUTION 2:** Replace the Pump Cylinder/Piston assembly. See earlier page of this Brochure.

**CAUSE 3:** The Equipment is void of Sealant.

**SOLUTION 3:** Refill the Equipment with Sealant. Refer details as per earlier Pages.

**CAUSE 4:** A Pump Pack has been forced into the Hose by attempting to Inject Sealant after the Pump is Void of Sealant.

**SOLUTION 4:** Remove the Hose assembly from the Equipment and remove the Bag from the Hose. You may attempt this by flipping the hose and pumping out the Bag replace the Hose if the Bag cannot be removed.

**CAUSE 5:** The Giant Button Head Coupler is damaged.

**SOLUTION 5:** Replace the Giant Button Head coupler or repair the coupler using repair kit 590033.

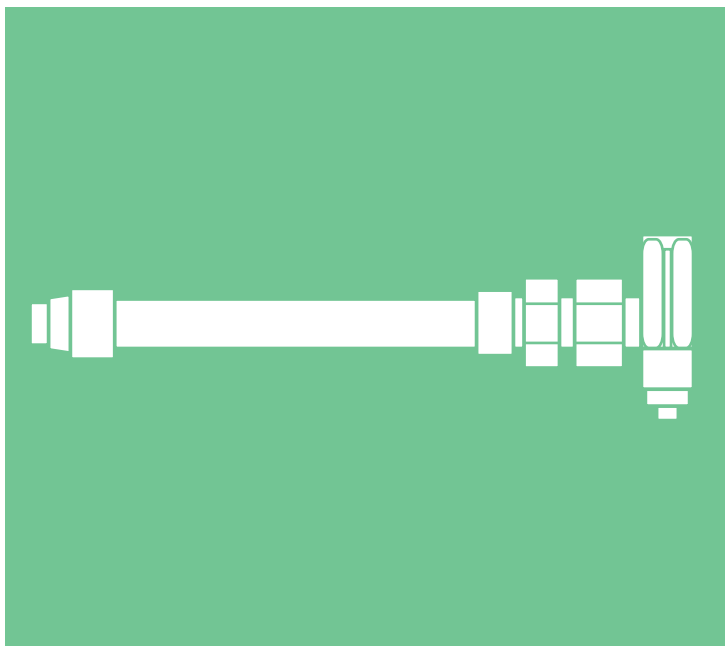
## PROBLEM: THE EQUIPMENT IS DIFFICULT TO PUMP.

**CAUSE 1:** The supply of Sealant is depleted.

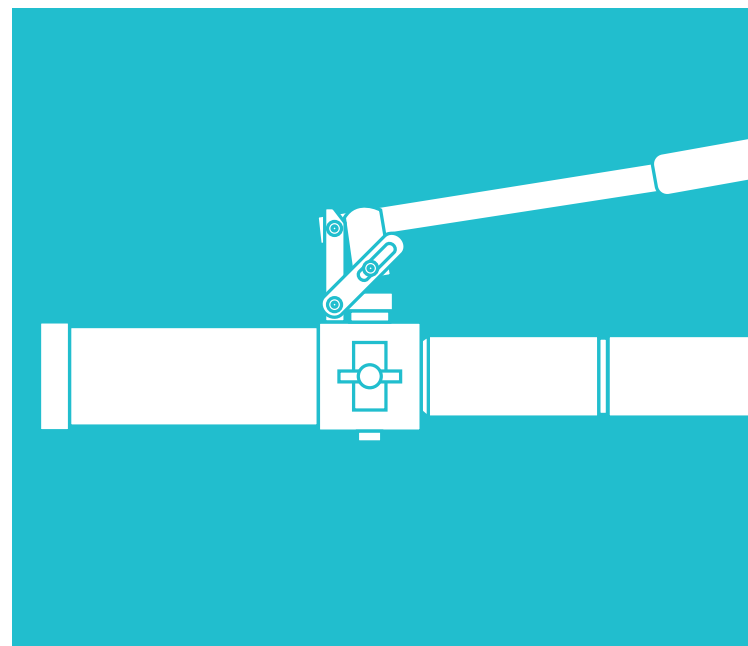
**SOLUTION 1:** Reload the Equipment with Sealant.

**CAUSE 2:** The Injection Pressure of the Sealant has not lifted the Plug from the seat of the Valve.

**SOLUTION 2:** Continue to Inject Sealant until the plug has been lifted from the seat of the Valve or until the Internal Relief relieves.



HOSE ASSEMBLY



HYDRAULIC SEALANT PUMP

**PROBLEM: HYDRAULIC FLUID LEAKAGE AROUND THE BODY AND FLUID BARREL THREADS.**

**CAUSE 1:** Hydraulic Fluid is leaking past the Screw and O-Ring in the Hydraulic Fluid Bag.

**SOLUTION 1:** Carefully tighten the Screw.

**CAUSE 2:** The Hydraulic Fluid Bag is damaged.

**SOLUTION 2:** Replace the Hydraulic Fluid Bag.

**PROBLEM: FLOATING PISTON ASSEMBLY WILL NOT RETURN TO THE BOTTOM OF THE SEALANT BARREL.**

**CAUSE 1:** Air in Hydraulic System.

**SOLUTION 1:** Bleed the Hydraulic System.

**CAUSE 2:** Excessive Hydraulic Fluid in Equipment.

**SOLUTION 2:** Remove the Sealant Barrel Cap and insert the Handle into Sealant Barrel against the Floating Piston. Turn Equipment upside down and let the weight of the Equipment reset on the Handle. Remove the Hydraulic Fluid Barrel cap. Slowly remove the screw and O-Ring located in the end of the Hydraulic Fluid bag while lightly pressing the Equipment down against the handle. This will force out excessive Hydraulic Fluid. This procedure should be performed over a basin to catch the excess Hydraulic Fluid. Once the Piston is all the way to the bottom of the Sealant Barrel Insert the Screw and O-Ring into the Fluid bag and replace the Fluid Barrel cap.

**PROBLEMS: HYDRAULIC FLUID LEAKAGE AT THE SEALANT BARREL TO BODY THREADS.**

**CAUSE 1:** The Hydraulic Fluid side Nylon Cup or O-Ring has been damaged allowing Hydraulic Fluid to enter the sealant side of the Hydraulic Piston.

**SOLUTION 1:** Clean and check the Nylon Cups for damage replace parts if required.

**CAUSE 2:** The Cylinder wall of the Sealant Barrel has been scored allowing Hydraulic Fluid to enter the Sealant side of the Hydraulic Piston.

**SOLUTION 2 :** Clean and the Sealant Barrel for damage replace the part.

**PROBLEM: THE EQUIPMENT WILL NOT DAMAGE.**

**CAUSE 1:** Air is present in the Hydraulic system.

**SOLUTION 1:** Bleed the Hydraulic system.

**CAUSE 2:** The check Valve assembly is Faulty.

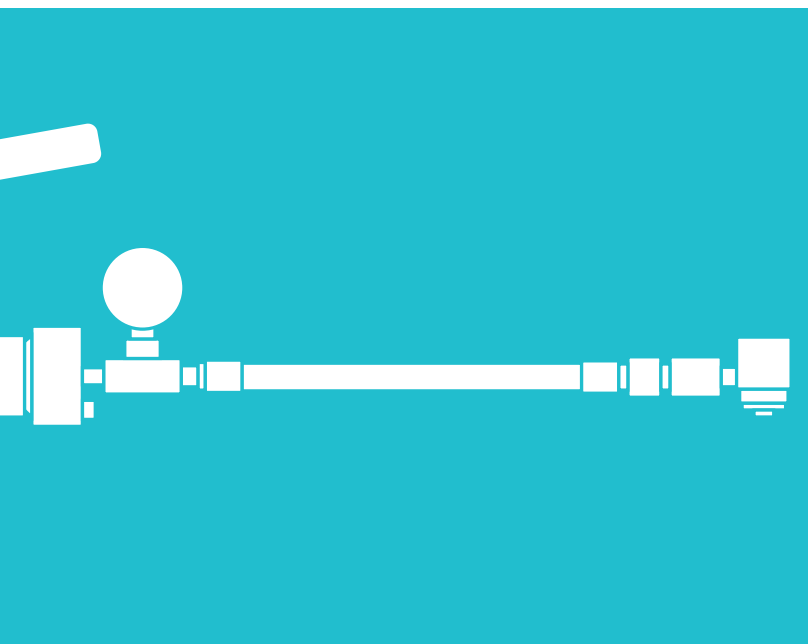
**SOLUTION 2:** Repair or replace the Check Valve assembly.

**CAUSE 3:** By-Pass Valve (12) is not Sealing.

**SOLUTION 3:** Tighten By-Pass Valve while lightly tapping with small Hammer.

**CAUSE 4:** The Internal Relief Valve (16) has failed.

**SOLUTION 4:** Replace the Internal Relief Valve.






**BUTTON COUPLER HEAD**



**VAL-LUBRIC**

**MANUFACTURED BY AM-PRODUCTS**

 [info@am-products.in](mailto:info@am-products.in)  +91 63797-48910  [www.am-products.in](http://www.am-products.in)