

## 4-Way Valves

Allows both Liquid Transfer and Vapor Recovery

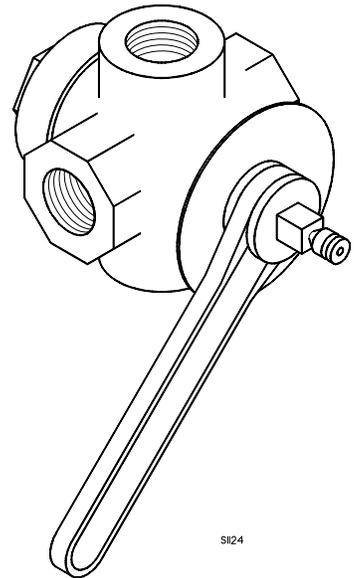
Reverses the flow direction

1" NPT and 1.25" NPT Sizes Available

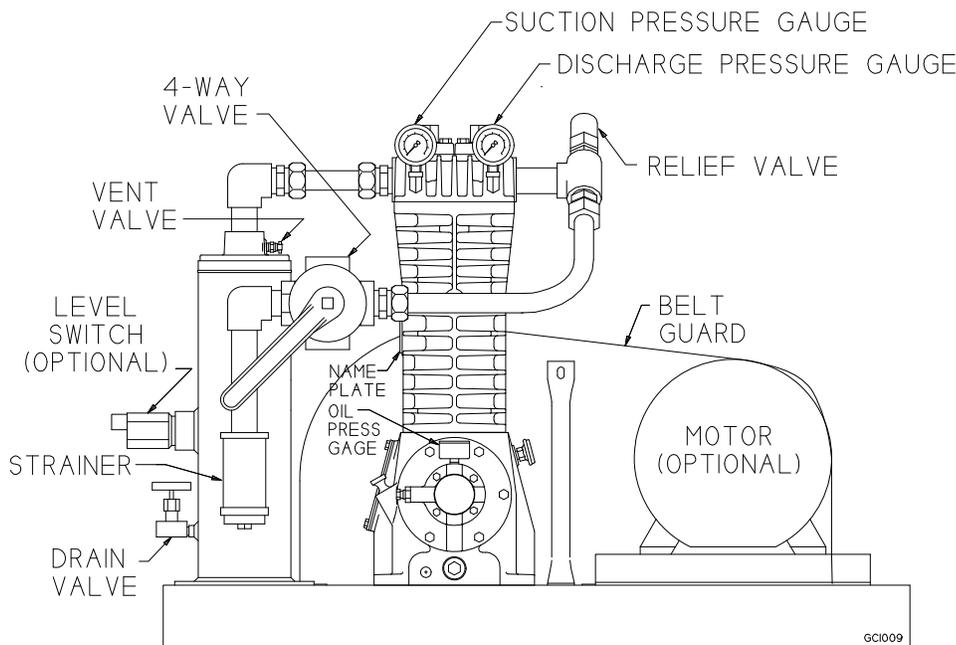
90° Rotation Reverses Flow Direction

Ductile Iron Body (ASTM A536, 60-40-18)

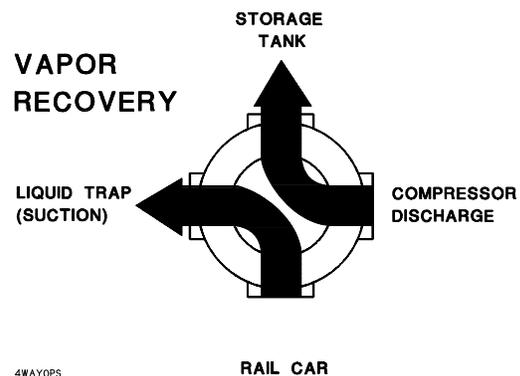
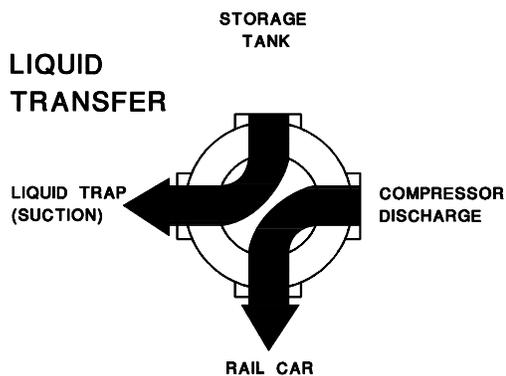
400 psig (27.6 bar) Working Pressure



SH24



GCI009



4WAYOPS

## **4-WAY VALVE MAINTENANCE:**

The 4-way valves are factory serviced with general purpose LPG sealant. After installation, it is recommended that the valve be serviced with the proper sealant. The new sealant will renew the lubricant seal and replace any sealant that may have been lost in transit or storage.

Periodic application of sealant to the 4-way valve is the only recommended maintenance necessary under normal operation conditions. The stick sealant is essential to proper operation of the valve and requires replacement when depleted due to conditions of pressure, temperature, and frequency of operation.

Valves that remain in a fixed position should be re-lubricated at least once every six months so that the sealant in the valve is kept fresh and pliable. Moreover, working the valve handle will aid in keeping the valve in satisfactory operating condition.

Compressors operated several times a week, may need additional sealant on a monthly basis. Machines operated less often, should be lubricated every six months.

## **TROUBLE SHOOTING SEALING PROBLEMS:**

- 1) Install new sealant sticks until a sealant ring appears around the valve stem at the valve body.
- 2) Ensure that the proper stick lubricant is being used.
- 3) If problems persist, disassemble the valve and check the condition of the valve body's interior and of the plug.

## **INSTALLING SEALANT STICK SERVICE PROCEDURE:**

- 1) Rotate the valve handle to one of the stop positions.
- 2) Remove the Sealant Screw and insert a sealant stick into the stem.
- 3) Replace the Sealant Screw and slowly turn the screw until a ring of sealant is observed around the valve stem at the neck of the valve body. Note: More than one sealant stick may be required.
- 4) Rotate the valve handle to the opposite stop and repeat Steps 2 and 3.
- 5) Rotate the valve handle between the stops several times to properly distribute the sealant.

## **DISASSEMBLY and ASSEMBLY PROCEDURES:**

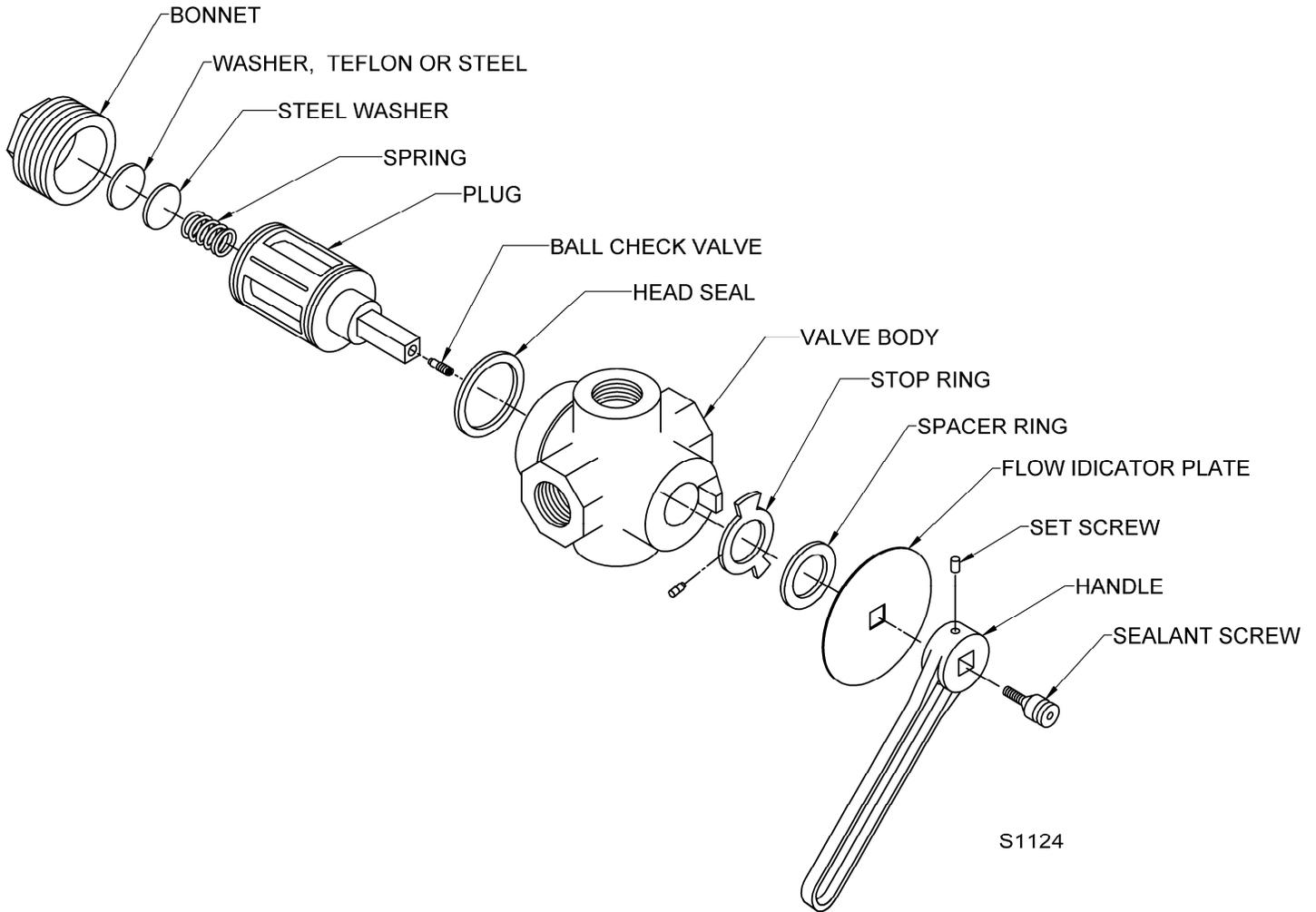
Disassembly:

- 1) Remove the valve handle, indicator plate, and stop ring from the valve shaft.
- 2) Remove the bonnet and associated spring, PTFE washer and steel disc from the bottom of the valve. The bonnet is securely tightened at the factory, so an impact wrench or mallet may be required to loosen it. Caution: Care must be exercised to prevent damage to the valve itself.
- 3) Remove the valve plug and PTFE head seal. If the plug is difficult to remove, place a piece of hard wood across the top of the stem. Taking care not to damage the plug, tap the wood with a mallet to drive the plug out.
- 4) Clean or inspect parts as necessary.

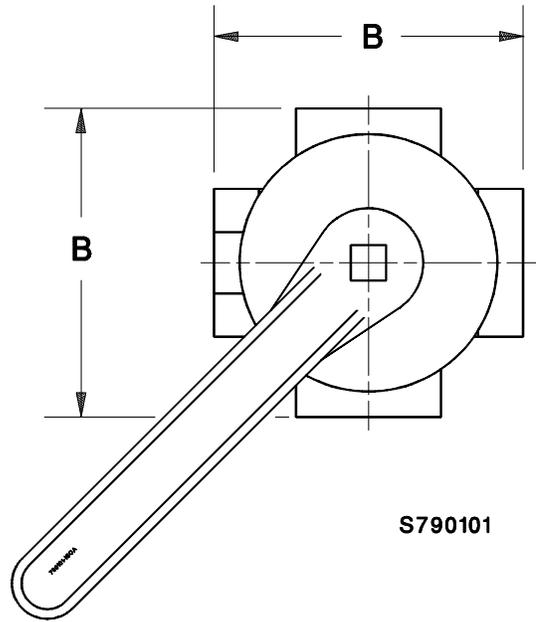
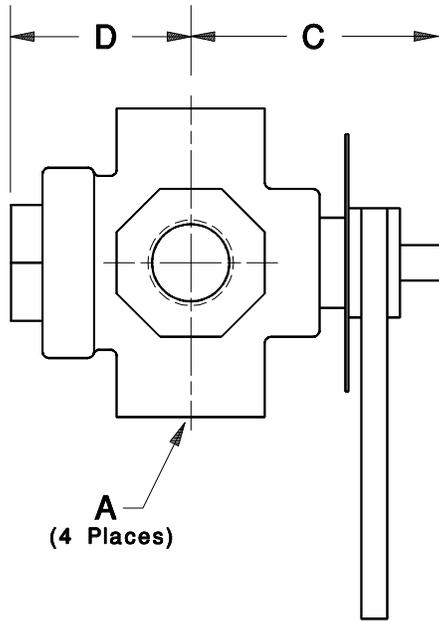
Assembly:

- 1) Install the PTFE head seal on the plug; ensure that the wider surface contact area of the seal is positioned against the plug surface.
- 2) Install the plug in the valve body.
- 3) Install the PTFE and steel discs in the bonnet recess. Ensure that the PTFE disc is against the bonnet surface followed by the steel disc.
- 4) Position the spring on top of the steel disc.
- 5) Install the bonnet assembly in the valve body against the valve plug. Use an impact wrench or mallet to properly seal the bonnet/body joint.
- 6) Install the stop ring, indicator plate, and handle onto the valve shaft.
- 7) Load the valve with sealant sticks per the 'INSTALLING SEALANT STICK SERVICE PROCEDURE'.





Description	Part Number
1" NPT Valve Assembly w/ Handle	790102
1.25" NPT Valve Assembly w/ Handle	790101
Handle w/ Set Screw	790032
Flow Indicator Plate	790063
Stop Ring w/ Set Screw	790594
Spacer Ring	790634
LPG Lubricant/Sealant (24 sticks)	790093
NH <sub>3</sub> Lubricant/Sealant (24 sticks)	790154
Lubricant/Sealant for other services	Consult Factory



Part #	A	B	C	D
790102	1" NPT	4.38 (11.11)	5.03 (12.78)	2.69 (6.83)
790101	1.25" NPT	6.00 (15.24)	5.78 (14.68)	3.47 (8.81)

Dimensions are Inches (cm).