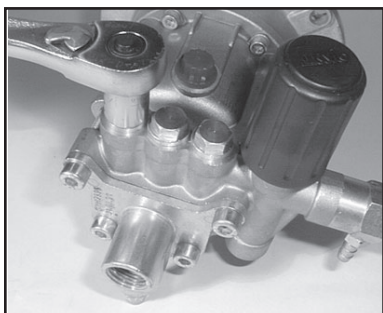


## REPAIR INSTRUCTIONS - GX SERIES



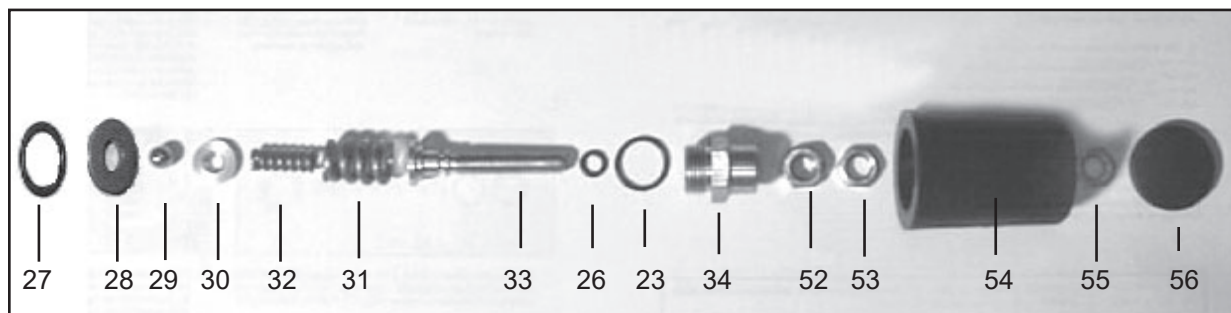
1. With a 14mm socket wrench, remove the three discharge valve plugs (22). Inspect the valve plug o-rings (23) for wear, and replace as necessary.



2. Remove the valve spring (18) and valve cone (36) from the manifold (35). Inspect the parts for wear and replace as necessary.

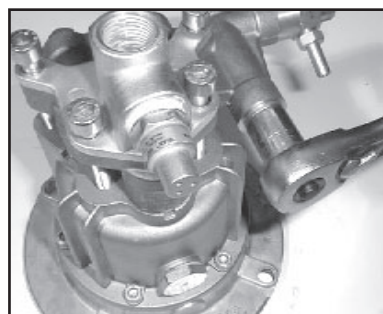


3. With a crescent wrench, remove the kickback valve spring retainer (47). Inspect the o-ring (46) for wear and replace as necessary. Remove the kickback valve spring (43), kickback valve cone (42), and the o-ring (41) from the manifold (35). Inspect the parts for wear and replace as necessary.

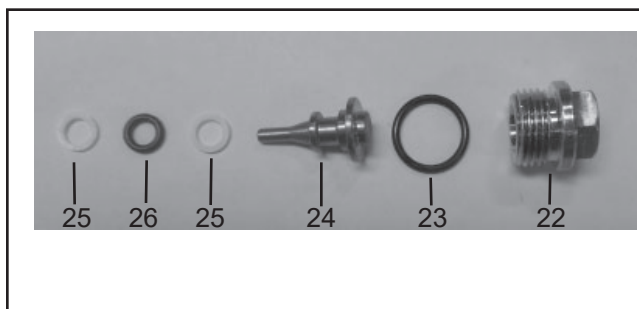


4. With a 19mm wrench, remove the adjusting screw plug (34). Unscrew the adjusting screw (33) from the adjusting screw plug (34). Inspect the o-rings (23 & 26) for wear and replace as necessary.
5. Remove the adjusting spring (31), pressure spring (32), washer (30) and by pass valve ball (29) from the manifold (35). Inspect the parts for wear and replace as necessary.

**Optional pump without handle - exclude items (52, 53, 54, 55, 56).**

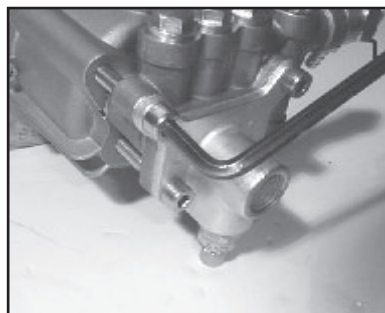


6. With a 14mm socket wrench, remove the guide plug (22) and o-ring (23).

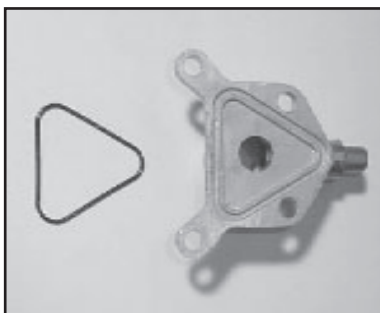


7. Remove the piston (24), o-ring (26), and backup rings (25). Remove the bypass valve seat (28). Inspect the parts for wear and replace as necessary. **IMPORTANT! Make sure that the shoulder on bypass valve seat (28) is facing the discharge plug (22).**

## REPAIR INSTRUCTIONS - GX SERIES

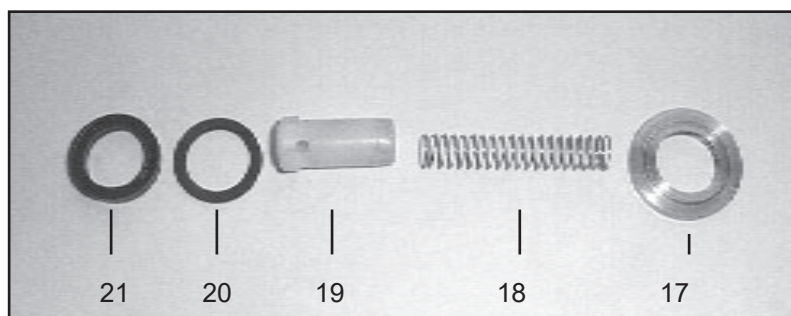


8. Next, remove the four manifold bolts (40) with a 6mm allen wrench.



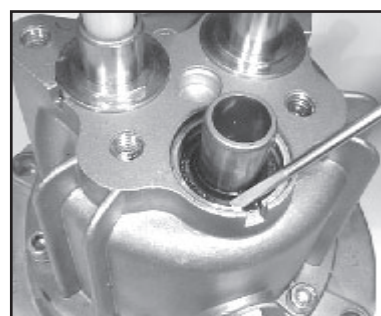
9. Remove the suction flange (39) and flange o-ring (38). Inspect the o-ring for wear and replace as necessary.

10. Tap the back of the manifold (35) with a rubber mallet to dislodge, and slide off the plungers. (8). Take note of the position of the discharge port so as to place the manifold in the same position during reassembly.



11. Remove the guided p-valve, (19), valve springs (18), v-sleeves (21) and pressure rings (20). Inspect for wear and replace as necessary. Remove the spacer ring (17) from the plungers (8).

13. Reassemble in reverse order. Fill the crankcase with the proper amount of oil (see specifications page 3). The pump is now ready for operation.



12. If the crankcase oil seals (15) are to be replaced, they can be removed by prying loose with a screwdriver. Take care not to make contact with the plunger (8) and pry out the oil seals from their housing. Seals should not be reinstalled until after step #13.

## GX Series Pump Part Numbering System

GX or HR Series	Flow	Pressure (in 100 psi increments)		Injector Size	Thermal Relief Valve	Wobble Plate Shaft Bore
Vertical	20=GPM	25=2500 PSI		1=2.1 mm	1=1/2"	2=7/8"
Horizontal	23=GPM			2=1.8mm		1=3/4"
	25=GPM			3=2.3mm		3=1"
						4=5/8"
GX or HR	2.5	25	-	1	1	1

For example, a GXV2525-112 is a GX pump that produces 2.5 GPM @ 2500 PSI, has a injector with a 2.1mm Oriface, 1/2" thermal relief valve and 7/8" wobble plate bore.