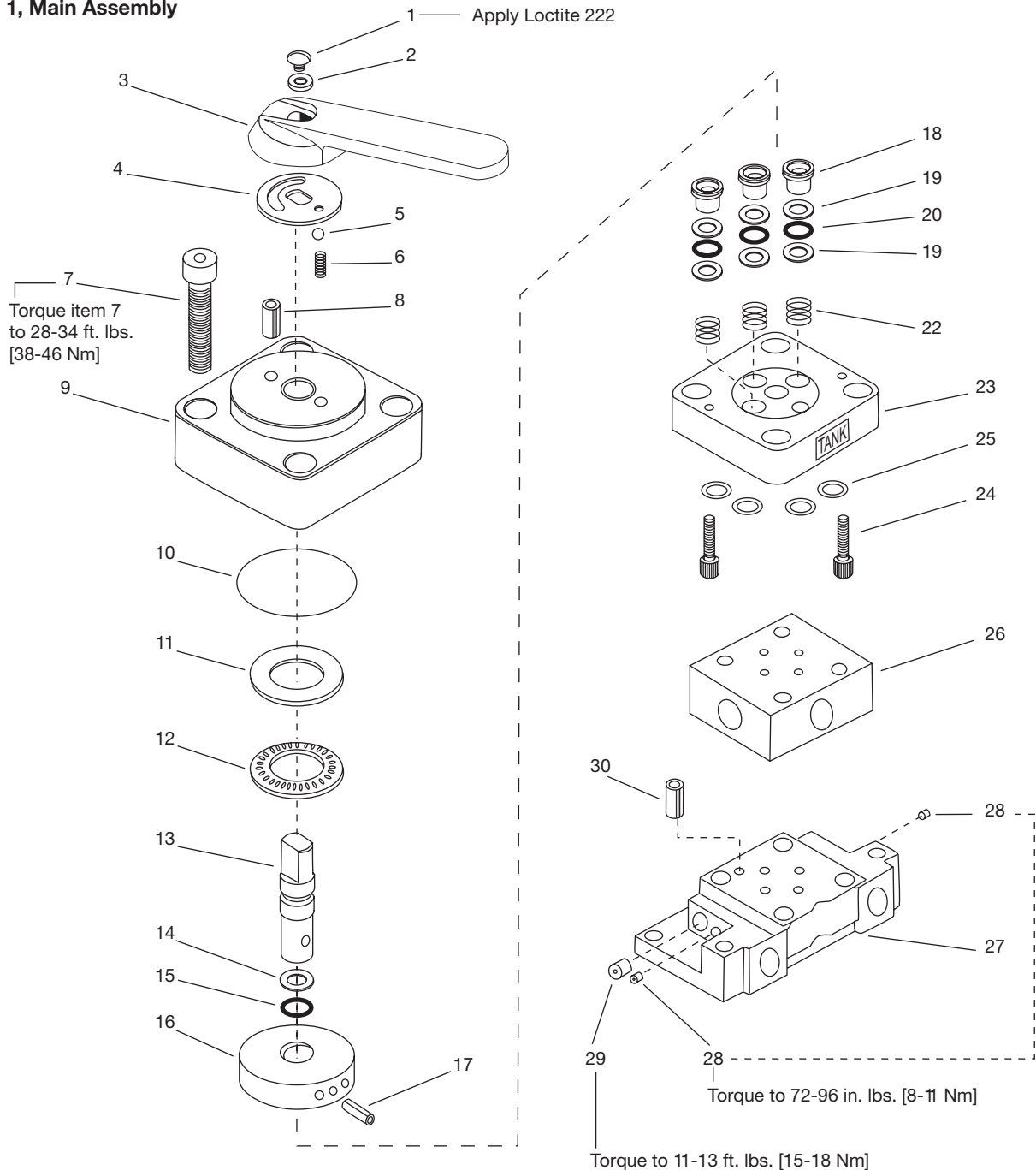


To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

Enerpac recommends that all kit components be installed to insure optimum performance of the repaired product.

Figure 1, Main Assembly



Identification - Early Production Manual Valves

Early production manual valves contain both a valve code letter and valve code number. This letter and number are used to identify the valve model. See Table A.

Example:

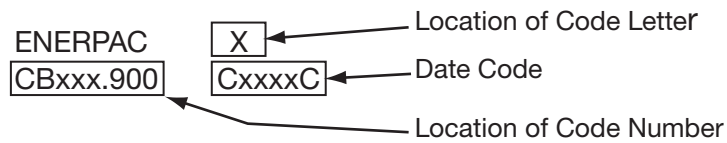


Table A - Valve Code Chart - Early Production Manual Valves

Model Number	Previous Valve Code		Equivalent Present Valve Code Number (see Table B)	Disc Assembly Fig. 1, Item 16		Model Number	Previous Valve Code		Equivalent Present Valve Code Number (see Table B)	Disc Assembly Fig. 1, Item 16
	Letter	Number					Letter	Number		
VM-4	A	CB317900	4-O-P-B-O	CH542950		VM-3	G	CB318900	3-O-P-B-O	CH538950
VC-4	B	CB317900	4-O-R-B-O	CH542950		VC-3	H	CB318900	3-O-R-B-O	CH538950
VM-4L	C	CB317900	4-O-P-B-X	CH542950		VC-20	I	CB319900	4-C-R-B-O	CH537950
VC-4L	D	CB317900	4-O-R-B-X	CH542950		VC-20L	J	CB319900	4-C-R-B-X	CH537950
VM-3L	E	CB317900	3-O-P-B-X	CH542950		VC-15L	K	CB319900	3-C-R-B-X	CH537950
VC-3L	F	CB317900	3-O-R-B-X	CH542950		VC-15	L	CB320900	3-C-R-B-O	CH541950

Identification - Recent Production Manual Valves

Recent production manual valves contain an alphanumeric valve code number. This number is used to identify the valve model.

See Table B for valve code number information. Then refer to Table A to determine the valve model number and disc assembly.

Example:

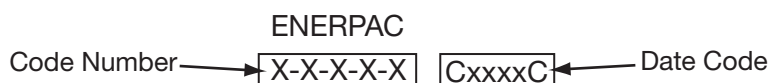


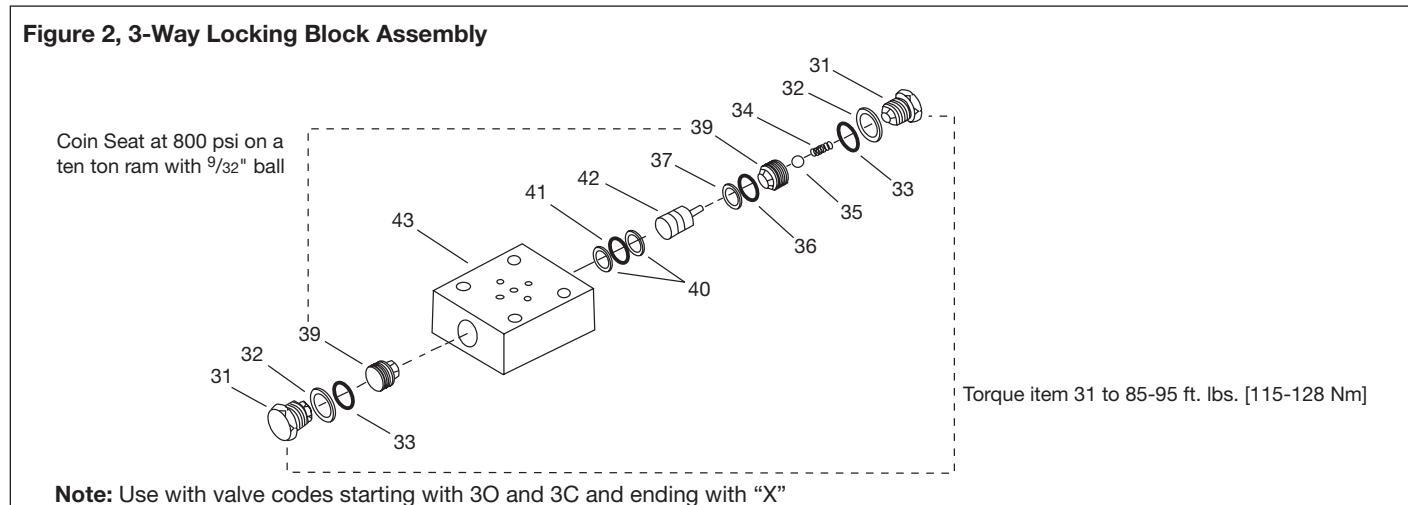
Table B - Valve Code Chart - Recent Production Manual Valves

1st Position		2nd Position		3rd Position		4th Position		5th Position	
3	3- Way Valve								
4	4-Way Valve								
		O	Open Center	P	Pump Mounted	B	Buna	X	Locking Valve Section
		C	Closed Center	R	Remote	V	Viton	O	No Locking Valve Section
						E	EPA		

Note: Refer to Table 1 to determine valve model number based on code.

Repair Parts List for Figure 1							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	★A8076048	1	Screw	16	CH537950SR	1	Disk Assembly (see chart on page 2)
2	★B1086108	1	Washer		CH541950SR	1	Disk Assembly (see chart on page 2)
3	Y325070	1	Handle	17	★B1109057	1	Roll Pin
4	A8005071	1	Disk	18	*DA9560041SR	3	Metal Seal (incl. items 10, 19, 20, 22)
5	★B1006016	1	7/32" Ball	19	**B1011564	6	Back-Up Washer
6	★A8039110	1	Spring	20	**B1006503	3	O-Ring
7	B1389028	4	Bolt (for non-locking valve)	22	**CB28110	3	Spring
	B1401028	4	Bolt (for locking valve)	23	CH539190	1	Body
8	★B1126057	1	Roll Pin	24	B1326028	2	Bolt
9	CB324001	1	Valve Cap	25	B1111803	4	O-Ring (non-locking valve)
10	**B1269503	1	O-Ring		★B1111803	8	O-ring (for locking valve)
11	CB327101	1	Bearing Plate	26	CB325005	1	Base (Remote mounted)
12	CB328281	1	Bearing	27	CB303038	1	Base (Pump mounted)
13	CH536104	1	Shaft	28	A1006245	2	Pipe Plug
14	★B1012564	1	Back-up Washer	29	A1007245	1	Pipe Plug
15	★B1007503	1	O-Ring	30	B1051057	1	Pin
16	CH542950SR	1	Disk Assembly (see chart on page 2)	31	★F786167	1	Gasket (not shown)
	CH538950SR	1	Disk Assembly (see chart on page 2)				

★ Items included in and available only as part of Repair Kit VM4K3.
 * Items included in and available only as part of Repair Kit DA9560041SR.

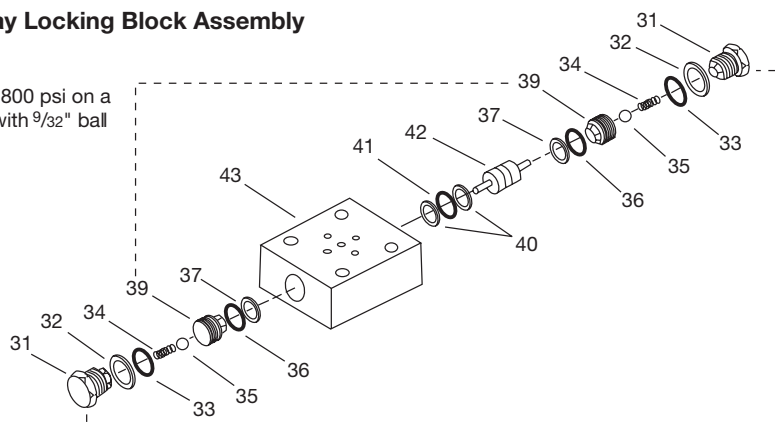


Repair Parts List for Figure 2							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
31	+★ CR356013SR	2	Spring Guide (Incl #32, 33)	37	+★ B1113564	1	Washer
32	+★ CR355167	2	Gasket	39	+ Y126290SR	2	Seat (Incl. #36, 37)
33	+★ B1116803	2	O-Ring	40	+★ B1111564	2	Back-Up Washer
34	+★ CJ656110	1	Spring	41	+★ B1009503	1	O-Ring
35	+★ B1008016	1	9/32" Ball	42	+ CK598900SR	1	Piston
36	+★ B1011503	1	O-Ring	43	+ DA1267900SR	1	Valve Body

★ Items included in and available only as part of Repair Kit VM4K3.
 + Items included in and available only as part of 3-Way Locking Block Service Kit Y383900SR.

Figure 3, 4-Way Locking Block Assembly

Coin Seat at 800 psi on a ten ton ram with 9/32" ball



Torque item 31 to 85-95 ft. lbs. [115-128 Nm]

Note: Use with valve codes starting with 4O and 4C and ending with "X"

Repair Parts List for Figure 2

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
31	**CR356013	2	Spring Guide	37	**B1113564	2	Washer
32	**CR355167	2	Gasket	39	*Y126290SR	2	Seat (Incl. #36, 37)
33	**B1116803	2	O-Ring	40	**B1111564	2	Back-Up Washer
34	**CJ656110	2	Spring	41	**B1009503	1	O-Ring
35	**B1008016	2	9/32" Ball	42	*Y128900W	1	Piston
36	**B1011503	2	O-Ring	43	*DA1268900SR	1	Valve Body

★ Items included in and available only as part of Repair Kit VM4K3.

* Items included in and available only as part of 4-Way Locking Block Service Kit Y123900SR.

[illegible]

[illegible]

[illegible]

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