

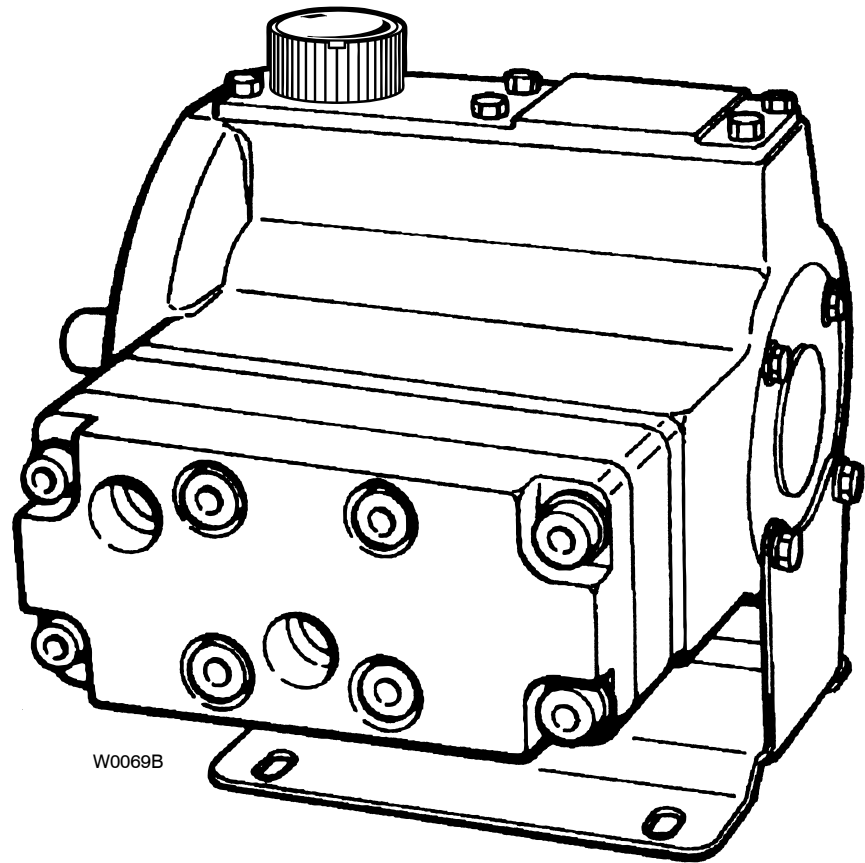
PARTS MANUAL

D04-991-2402B

Hydra-Cell[®]

INDUSTRIAL PUMPS

Model: D-04



W0069B

IMPORTANT

Record your pump model number and serial number here for easy reference:

Model No. _____

Serial No. _____

Date of Purchase _____

When ordering parts or making inquiries about this pump, please mention the model and serial numbers.

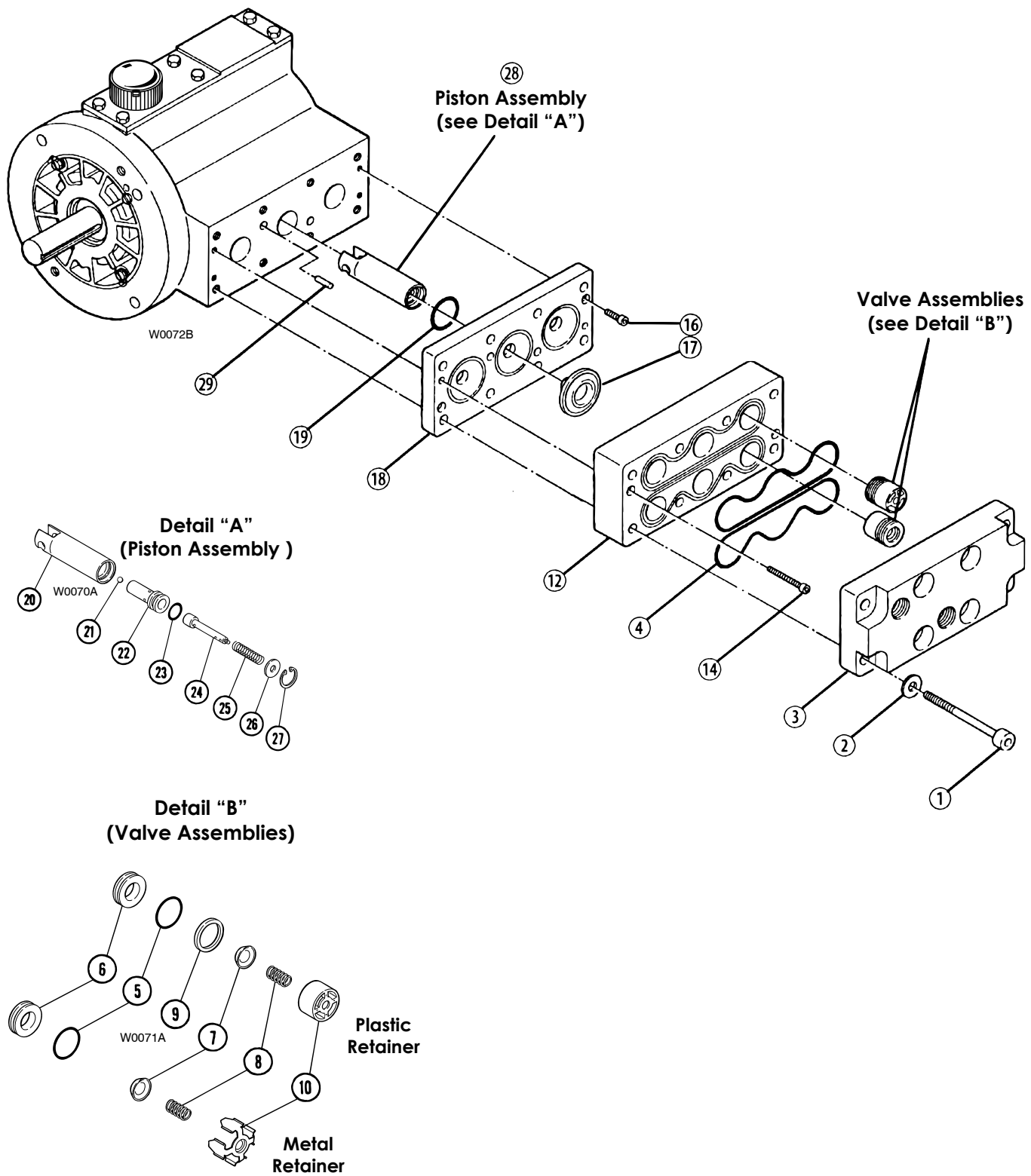


WANNER ENGINEERING, INC.

1204 Chestnut Avenue, Minneapolis, MN 55403
TEL: (612) 332-5681 FAX: (612) 332-6937
TOLL-FREE FAX [US only]: (800) 332-6812

www.hydra-cell.com
email: sales@wannereng.com

D-04 Fluid End



Bolt Torque Specifications

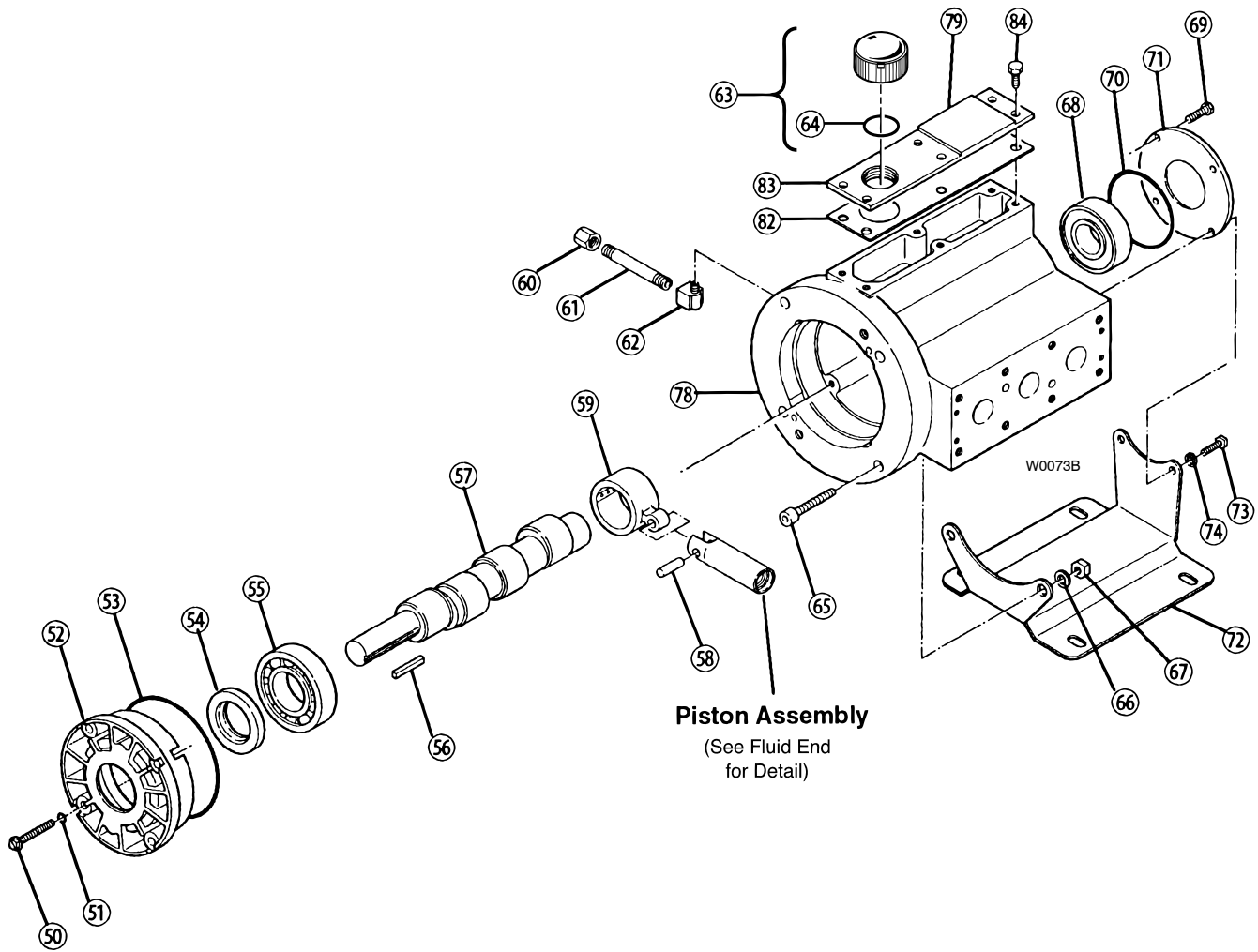
Ref. No.	D-04
1	50 ft-lbs
17	10 in-lbs

D-04 Fluid End

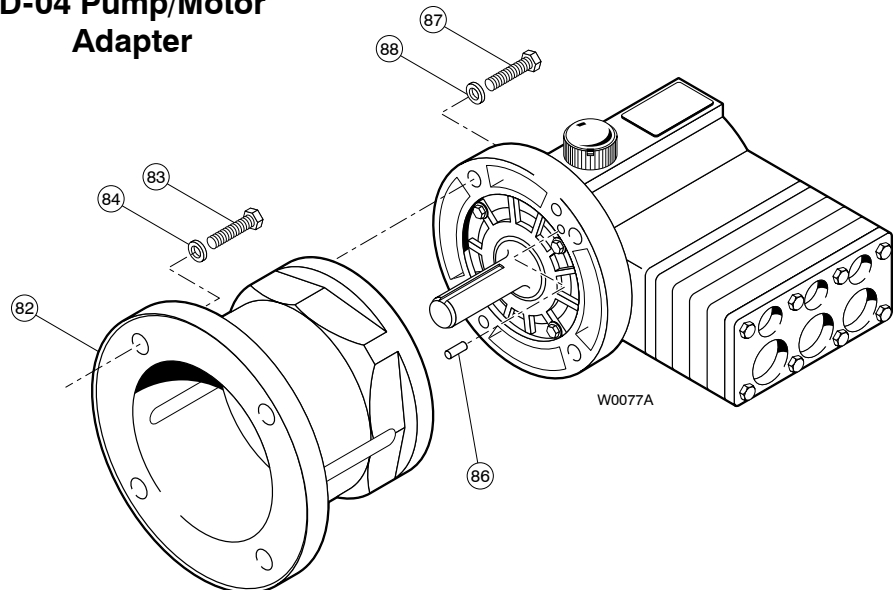
Ref. No.	Part Number	Description	Quantity/ Pump
1	G10-024-2010	Cap Screw, socket-head, M10 x 1.5 x 90 mm	8
2	D11-048-2011	Washer, flat, hardened	8
3	D03-004-1040	Manifold, brass	1
	D03-004-1034	Manifold, 304 SST	1
	D03-004-1036	Manifold, 316 SST	1
4	D03-073-2140	O-ring, manifold, Buna	2
	D03-073-2141	O-ring, manifold, Viton	2
5	D25-046-2110	O-ring, valve seat, Buna	6
	D25-046-2111	O-ring, valve seat, Viton	6
6	D15-020-2010	Valve Seat, Nitronic 50	6
	D15-020-2011	Valve Seat, 17-4 SST	6
	D15-020-2016	Valve Seat, tungsten carbide	6
	D15-020-2017	Valve Seat, Hastelloy C	6
7	D03-021-1011	Valve, Nitronic 50	6
	D03-021-1015	Valve, 17-4, machined	6
	D03-021-1016	Valve, tungsten carbide	6
	D03-021-1017	Valve, Hastelloy C	6
8	D03-022-3113	Valve Spring, Hastelloy C	6
	D03-022-3114	Valve Spring, Elgiloy	6
	D03-022-3118	Valve Spring, 316 SST	6
9	D03-092-2110	Tetra Seal, Buna	6
	D03-092-2111	Tetra Seal, Viton	6
10	D03-023-1010	Retainer, valve spring, 17-7 SST	6
	D03-023-1017	Retainer, valve spring, Hastelloy C	6
	D03-023-2310	Retainer, valve spring, Celcon	6
	D03-023-2316	Retainer, valve spring, Nylon	6
	D03-023-2317	Retainer, valve spring, polypropylene	6
	D03-023-2318	Retainer, valve spring, Kynar	6

Ref. No.	Part Number	Description	Quantity/ Pump
11	D03-125-1011	Washer, dampening, SST	6
12	D03-003-1030	Valve Plate, brass	1
	D03-003-1034	Valve Plate, 304 SST	1
	D03-003-1036	Valve Plate, 316 SST	1
14	G10-088-2010	Cap Screw, socket-head, M6 x 1.0 x 30 mm2	
16	G03-088-2010	Cap Screw, socket-head, M6 x 1.0 x 20 mm2	
17	D03-018-1240	Diaphragm, Buna-N-XS	3
	D03-018-1245	Diaphragm, Viton-XT	3
18	D03-002-1012	Diaphragm Plate, steel	1
19	D03-075-2110	O-ring, diaphragm plate, Buna	3
20	D03-014-1004	Piston	3
21	D10-015-3010	Ball	3
22	D03-043-1000	Valve Cylinder	3
23	D03-034-2110	O-ring, valve cylinder, Buna	3
24	D03-044-1000	Valve Plunger	3
25	D03-045-3110	Spring, sleeve valve	3
26	D03-049-1000	Washer	3
27	D03-048-2210	Snap Ring	3
28	D03-014-1210	Piston Assembly	3
29	D03-026-2210	Pin	2

D-04 Hydraulic End



D-04 Pump/Motor Adapter



D-04 Hydraulic End

Ref. No.	Part Number	Description	Quantity/ Pump	Ref. No.	Part Number	Description	Quantity/ Pump
50	G03-086-2010	Bolt, hex flange, M6 x 1.0 x 40 mm.....4		65	G03-068-2010	Cap Screw, socket-head, M10 x 1.5 x 40 mm ¹2	
51	D25-047-2110	O-ring, back cover screws, Buna.....4		66	G25-048-2010	Washer, M10 ¹2	
52	D03-131-1000	Back Cover.....1		67	G10-028-2010	Nut, hex, M10 ²2	
53	D03-037-2110	O-ring, back cover, Buna1		68	D03-010-2910	Front Bearing1	
54	D03-031-2110	Seal, Buna.....1		69	D03-087-2010	Cap Screw, hex-head, 1/2" ¹2	
55	D03-011-2910	Back Bearing.....1		70	D40-074-2110	O-ring, front cover, Buna.....1	
56	D10-085-2210	Key, shaft1		71	D03-130-1000	Front Cover1	
57	D03-009-1048	(S) Crank Shaft, shaft-driven, 7/8" O.D., 1.6 GPM @ 1750 RPM1		72	D03-025-1010	Base Plate.....1	
	D03-009-1042	(E) Crank Shaft, shaft-driven, 7/8" O.D., 2.1 GPM @ 1750 RPM1		73	D03-089-2010	Cap Screw, hex-head, 3/4" ¹2	
	D03-009-1040	(X) Crank Shaft, shaft-driven, 7/8" O.D., 2.9 GPM @ 1750 RPM1		74	D03-050-2010	Washer, lock ²2	
58	D03-133-1000	Pin3		78	G03-001-1218	Pump Housing Assembly ⁵—	
59	D03-132-1004	Connecting Rod, aluminum-bronze3			G03-001-1228	Pump Housing ⁵1	
60	D10-078-2210	Cap, brass, 1/8".....1		79	D10-040-2410	Name Plate.....1	
61	D10-077-2210	Pipe, brass, 1/8"1		82	G25-106-2318	Gasket, cover1	
62	D10-076-2210	Elbow, brass, 1/8".....1		83	H25-105-1018	Cover, housing1	
63	D03-039-1030	Cap with O-ring, oil fill.....1		84	G25-090-2010	Cap Screw, hex-head, M8 x 1.25 x 16 mm6	
64	D10-080-2110	O-ring, oil fill, Buna.....1		86	D03-026-2211	Pin ³2	

- ¹ Qty: 2 on pumps with baseplate (72); 4 on pumps with motor adapter (85).
- ² Qty: 2 on pumps with baseplate (72); not included on pumps with motor adapter (85).
- ³ Qty: 2 on pumps with motor adapter (85); 4 on pumps with baseplate (72).
- ⁴ Pump Housing Assembly includes housing (78), drain plug (60, 61, 62) and from bearing (68).
- ⁵ Motor adapter is not supplied with pump, and must be purchased separately. Motor Adapter Kit includes all screws, washers, and pins required to connect it to the pump and motor (but does not include shaft coupling.)

D-04 Pump/Motor Adapter Kit

For 56C-145TC NEMA C-Face Motors (Complete Kit Part No. A04-001-1202)

For 182-215TC NEMA C-Face Motors (Complete Kit Part No. A04-002-1202)

Ref No.	Description	A04-001-1202 Part Number	A04-002-1202 Part Number	Qty/ Kit
82	Pump/Motor Adapter	A04-032-1000	A04-033-1002	1
83	Cap Screw, hex-head	D10-087-2010	M10-110-2000	4
84	Lockwasher	D10-048-2010	M10-111-2000	4
86	Pin	D03-026-2211	D03-026-2211	2
87	Cap Screw, socket-head	G03-068-2010	G03-068-2010	4
88	Lockwasher	G25-048-2010	G25-048-2010	4

D-04 Series Replacement Parts Kits

TO ORDER REPLACEMENT PARTS KIT: A Replacement Parts Kit contains 11 digits corresponding to customer-specified design options.

1	2	3	4	5	6	7	8	9	10	11
---	---	---	---	---	---	---	---	---	----	----

Digit	Order Code	Description
1-3	D04	Pump Configuration For all D-04 Pumps
4		Kit Designator
	K	Complete Fluid End Kit
	D	Diaphragm Kit
	V	Valve Kit (diaphragm not included)
5-6	51	Pump Head Version Pump Head Version
7		Diaphragm & O-ring Material
	G	Viton [®] -XT
	T	Buna-N-XS
8		Valve Seat Material
	D	Tungsten Carbide
	H	17-4 PH Stainless Steel
	N	Nitronic 50
	T	Hastelloy [®] C
	X	Not included in Diaphragm Kit
9		Valve Material
	D	Tungsten Carbide
	F	17-4 PH Stainless Steel – Machined
	N	Nitronic 50
	T	Hastelloy [®] C
	X	Not included in Diaphragm Kit
10		Valve Springs
	E	Elgiloy [®]
	S	316 Stainless Steel
	T	Hastelloy [®] C
	X	Not included in Diaphragm Kit
11		Valve Spring Retainers
	C	Celcon
	H	17-7 PH Stainless Steel
	M	Kynar [®]
	P	Polypropylene
	T	Hastelloy [®] C
	Y	Nylon
	X	Not included in Diaphragm Kit

Kit Contents

Part Number* Description	Qty	Kit Designator		
		K	D	V
D03-018-___ Diaphragm	3	•	•	
D03-073-___ O-ring, manifold	2	•	•	•
D25-046-___ O-ring, valve seat	6	•		•
D03-020-___ Valve seat	6	•		•
D03-021-___ Valve	6	•		•
D03-022-___ Valve spring	6	•		•
D03-092-___ Tetra seal**	6	•		•
D03-023-___ Retainer, valve spring	6	•		•
D03-125-1011 Washer, dampening***	6	•		•
A01-113-3400 Threadlocker	1	•	•	

* Last four digits of part numbers with ___ refer to specific material of construction.

** Not included with metal spring retainers.

*** Dampening washer not used in newer models. The thickness of valve seat is increased on newer models to eliminate the need for the dampening washers.



WANNER ENGINEERING, INC.

1204 Chestnut Avenue, Minneapolis, MN 55403
 TEL: (612) 332-5681 FAX: (612) 332-6937
 TOLL-FREE FAX [US only]: (800) 332-6812

www.hydra-cell.com

email: sales@wannereng.com