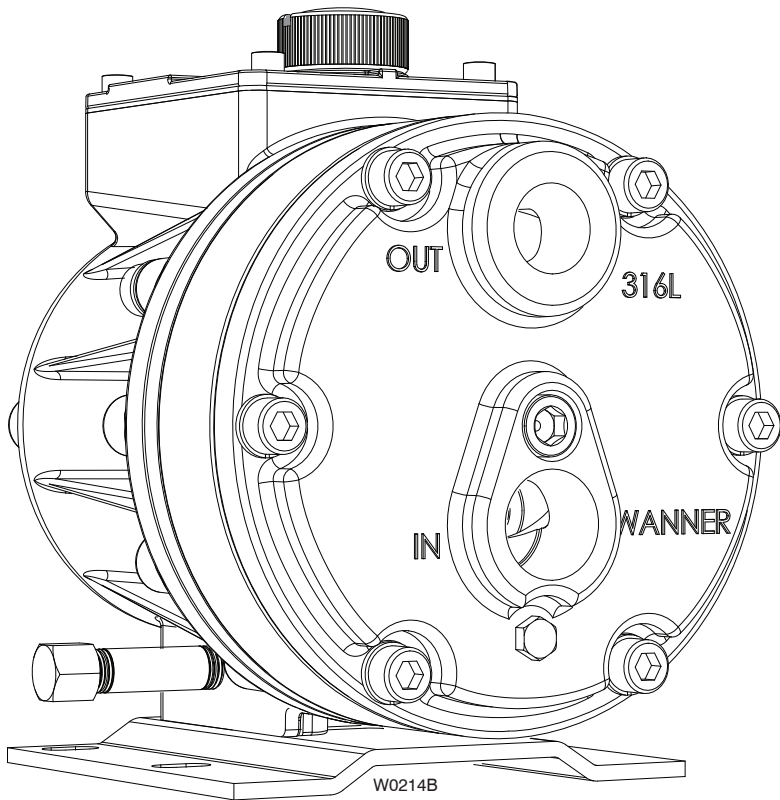


Parts Manual
D10-991-2402B

Hydra-Cell®

INDUSTRIAL PUMPS

Model: D-10
with metallic pump head



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.



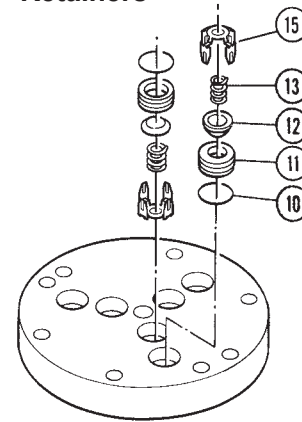
WANNER ENGINEERING, INC.

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

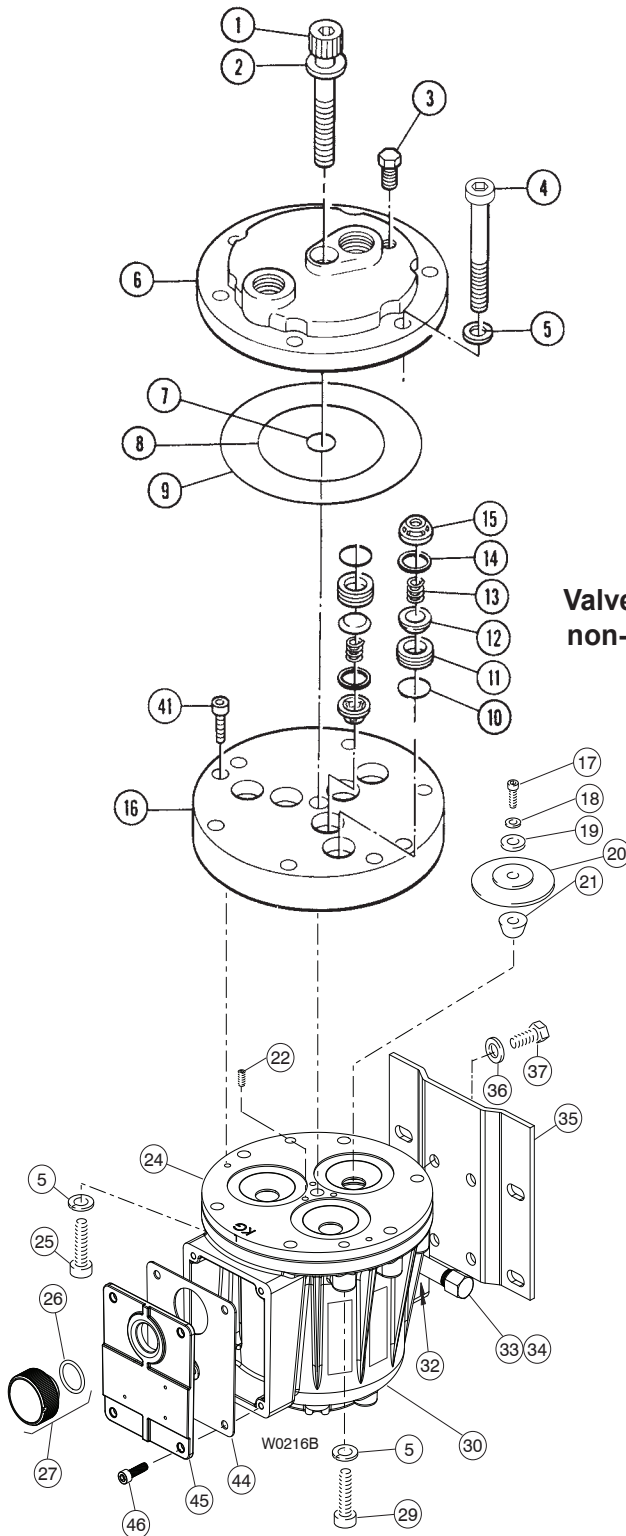
www.hydra-cell.com
email: sales@wannereng.com

D-10 Fluid End (with metallic pump head)

Valve Assemblies with Metal Retainers



Valve Assemblies with non-Metallic Retainers



D-10 Fluid End (with metallic pump head)

Ref. No.	Part Number	Description	Quantity/ Pump
1	D10-081-2012	Screw, Cap, soc-hd, 2-3/4 in. ¹	1
	G10-081-2010	Screw, Cap, soc-hd, 70 mm ²	1
2	D10-084-2010	Washer, Flat ¹	1
	G10-084-1010	Washer, Flat ²	1
3	D10-038-2017	Plug, Hastelloy C	1
	D10-038-2210	Plug, Brass	1
	D10-038-2211	Plug, 316 sst	1
4	D10-024-2010	Bolt, Hex-hd, 3-1/2 in. ¹	6
	G10-024-2011	Screw, Cap, soc-hd, 80 mm ²	6
5	D10-048-2010	Washer, Split lock ¹	8
	G25-048-2010	Washer, Split lock ²	8
6	D10-004-1002	Manifold, 316 sst, NPT	1
	D10-004-1008	Manifold, Brass, NPT	1
	D10-004-1017	Manifold, Nickel alloy, Hastelloy CW12MW, NPT	1
	D10-004-1034	Manifold, Cast iron, NPT	1
7	D10-083-2110	O-ring, Center bolt, Buna	1
	D10-083-2111	O-ring, Center bolt, Viton	1
	D10-083-2112	O-ring, Center bolt, Neoprene	1
	D10-083-2113	O-ring, Center bolt, EPDM	1
	D10-083-2118	O-ring, Center bolt, PTFE	1
	8	D10-073-2110	O-ring, Inner manifold, Buna
D10-073-2111		O-ring, Inner manifold, Viton	1
D10-073-2112		O-ring, Inner manifold, Neoprene	1
D10-073-2113		O-ring, Inner manifold, EPDM	1
D10-073-2118		O-ring, Inner manifold, PTFE	1
9	D10-074-2110	O-ring, Outer manifold, Buna	1
	D10-074-2111	O-ring, Outer manifold, Viton	1
	D10-074-2112	O-ring, Outer manifold Neoprene	1
	D10-074-2113	O-ring, Outer manifold EPDM	1
	D10-074-2118	O-ring, Outer manifold, PTFE	1
10	D10-035-2110	O-ring, Valve seat, Buna	6
	D10-035-2111	O-ring, Valve seat, Viton	6
	D10-035-2112	O-ring, Valve seat, Neoprene	6
	D10-035-2113	O-ring, Valve seat, EPDM	6
	D10-035-2118	O-ring Valve seat, PTFE	6
11	D10-020-1010	Valve seat, 17-4 sst, HT	6
	D10-020-1011	Valve seat, 316 sst	6
	D10-020-1016	Valve seat, Tungsten carbide	6
	D10-020-1017	Valve seat, Hastelloy C	6
	D10-020-3300	Valve seat, Ceramic	6

Ref. No.	Part Number	Description	Quantity/ Pump
12	D10-021-1010	Valve, 17-7 sst, stamped, HT	6
	D10-021-1011	Valve, Nitronic	6
	D10-021-1015	Valve, 17-4 sst, machined, HT	6
	D10-021-1016	Valve, Tungsten carbide	6
	D10-021-1017	Valve, Hastelloy C	6
	D10-021-3300	Valve, Ceramic	6
13	D10-022-3116	Valve Spring, 17-7 sst, HT	6
	D10-022-3117	Valve Spring, Elgiloy	6
	D10-022-3123	Valve Spring, Hastelloy C	6
14	D10-092-2110	Tetra Seal, Buna	6
	D10-092-2111	Tetra Seal, Viton	6
	D10-092-2112	Tetra Seal, Neoprene	6
	D10-092-2113	Tetra Seal, EPDM	6
	D10-092-2118	Tetra Seal, PTFE	6
15	D10-023-1010	Retainer, Valve spring, 17-7 sst, HT	6
	D10-023-1017	Retainer, Valve spring, Hastelloy C	6
	D10-023-2310	Retainer, Valve spring, Celcon	6
	D10-023-2326	Retainer, Valve spring, Nylon	6
	D10-023-2327	Retainer, Valve spring, polypropylene	6
	D10-023-2328	Retainer, Valve spring, Kynar	6
16	D10-003-1011	Valve Plate, Brass	1
	D10-003-1012	Valve Plate, 316 sst	1
	D10-003-1019	Valve Plate, Cast iron	1
	D10-003-1027	Valve Plate, Nickel alloy, Hastelloy CW12MW	1
17	D10-030-2010	Screw, Flat-hd, sst, 3/8 in.	3
	D10-030-2011	Screw, Flat-hd, Hastelloy C, 3/8 in.	3
18	D10-047-2110	O-ring, Follower, Buna-N	3
	D10-047-2111	O-ring, Follower, Viton	3
	D10-047-2112	O-ring, Follower, Neoprene	3
	D10-047-2113	O-ring, Follower, EPDM	3
	D10-047-2118	O-ring, Follower, PTFE	3
19	D10-017-1010	Follower, 316 sst	3
	D10-017-1011	Follower, Hastelloy C	3
20	D10-018-2312	Diaphragm, Neoprene	3
	D10-018-2313	Diaphragm, EPDM	3
	D10-018-2315	Diaphragm, Viton XT	3
	D10-018-2318	Diaphragm, PTFE	3
	D10-018-2320	Diaphragm, Buna-N-XS	3
21	D10-016-1010	Plunger	3
22	G10-082-2010	Set Screw, 10 mm	3

¹ Used on D10 models prior to S/N 216283.

² Used on D10 models S/N 216283 and above.

D-10 Fluid End (with metallic pump head)

Ref. No.	Part Number	Description	Quantity/ Pump	Ref. No.	Part Number	Description	Quantity/ Pump
24	K10-002-1010	Cylinder Housing ¹	1	29	D10-087-2010	Screw, Cap, hex-hd, 1-1/4 in. ¹	1
	K10-002-1020	Cylinder Housing, Metric ²			G10-087-2011	Screw, Cap, hex-hd, 45 mm ²	1
	K10-002-1210	Cylinder Housing Assembly ^{1,3}		30	G10-001-1050	Pump Housing, Metric ⁴	1
	K10-002-1220	Cylinder Housing Assembly, Metric ^{2,3}			G10-001-1215	Pump Housing Assembly, Metric ⁵	—
	K10-002-1232	Loaded Cylinder Housing, UNC, Neoprene ^{1,6}		31	D10-028-2010	Nut, Hex, 3/8 in. ¹	6
	K10-002-1233	Loaded Cylinder Housing, UNC, EPDM ^{1,6}		32	D10-076-2210	Elbow, Brass, 1/8 in. ¹	1
	K10-002-1234	Loaded Cylinder Housing, UNC, Buna N-XS ^{1,6}			D10-076-2250	Plug, Soc-hd, 1/4 in. ²	2
	K10-002-1235	Loaded Cylinder Housing, UNC, Viton XT ^{1,6}		33	D10-077-2210	Nipple, Brass, 3/8 in. ¹	1
	K10-002-1236	Loaded Cylinder Housing, UNC, PTFE ^{1,6}			D10-077-2250	Nipple, Brass, 1/4 in. ²	1
	K10-002-1242	Loaded Cylinder Housing, Metric, Neoprene ^{2,6}		34	D10-078-2210	Cap, Brass, 1/8 in. ¹	1
	K10-002-1243	Loaded Cylinder Housing, Metric, EPDM ^{2,6}			D10-078-2250	Cap, Brass, 1/4 in. ²	1
	K10-002-1244	Loaded Cylinder Housing, Metric, Buna N-XS ^{2,6}		35	D10-025-1010	Base	1
	K10-002-1245	Loaded Cylinder Housing, Metric, Viton XT ^{2,6}		36	D10-054-2010	Washer, Shakeproof ¹	4
	K10-002-1246	Loaded Cylinder Housing, Metric, PTFE ^{2,6}		37	D10-029-2010	Screw, Cap, hex-hd, 1 in. ¹	4
					G10-029-2010	Screw, Cap, hex-hd, 25 mm ²	4
25	D10-029-2010	Screw, Cap, hex-hd, 1 in. ¹	1	41	D10-088-2010	Screw, Cap, soc-hd ¹	2
	G10-089-2011	Screw, Cap, hex-hd, 38 mm ²	1		G10-088-2010	Screw, Cap, soc-hd, 30 mm ²	2
26	D10-080-2110	O-ring, Oil fill, Buna	1	44	G10-106-2350	Gasket, Cover ²	1
27	D03-039-1030	Cap with O-ring, Oil fill	1	45	G10-105-1050	Cover/Nameplate ²	1
				46	G03-088-2010	Screw, 20 mm ²	4

¹ Used on D10 models prior to S/N 216283.

² Used on D10 models S/N 216283 and above.

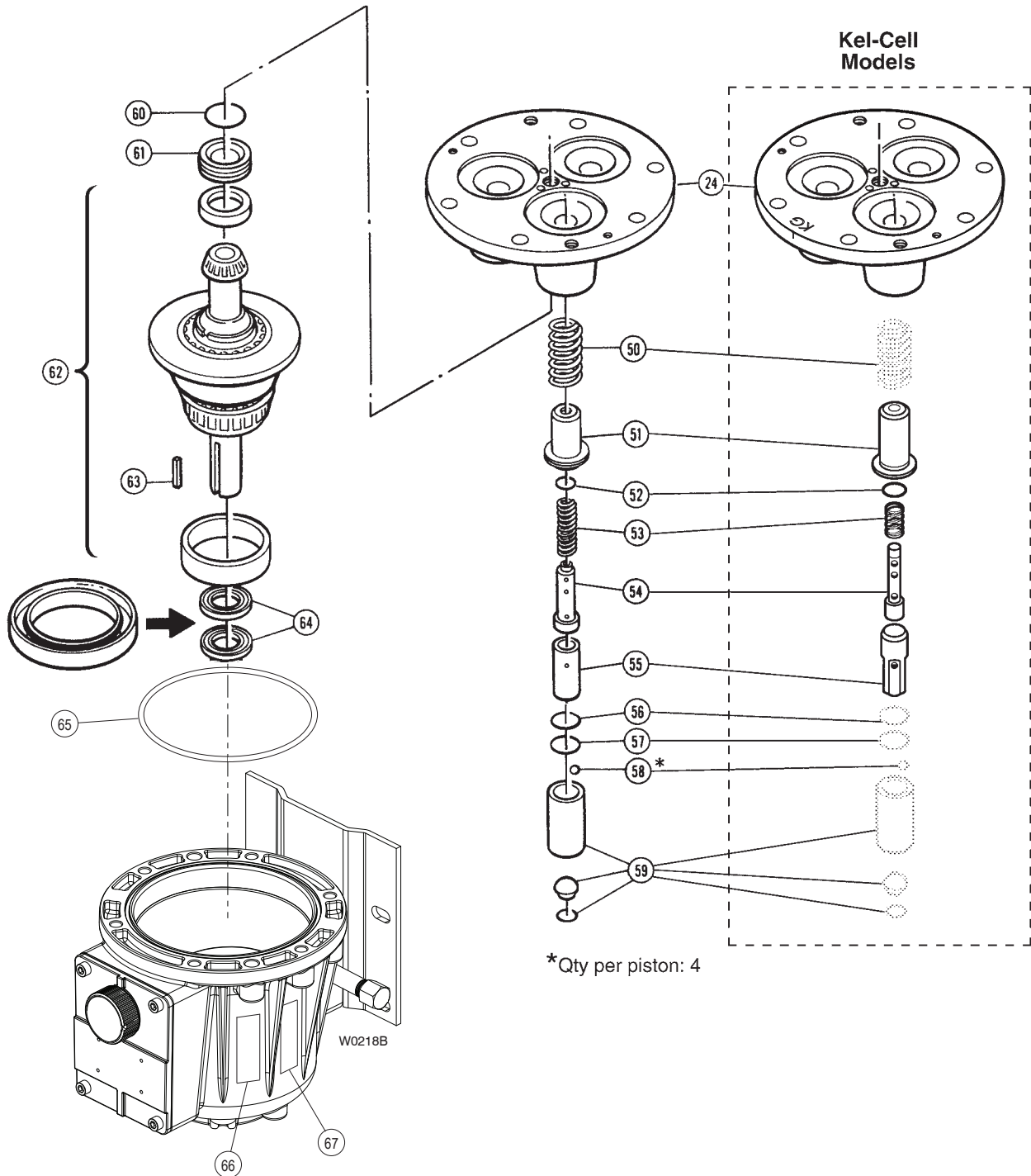
³ Cylinder Housing Assembly includes casting (24), bearing, adjusting plate (61), O-ring (60), and set screws (22).

⁴ Pump housing (metric) includes housing (30), cover (45), gasket (44), and screws (46). Requires new screws (4), washers (5), screws (25), and screw (29).

⁵ Pump Housing Assembly includes housing (30), oil drain/plugs (32, 33, 34), cover (45), gasket (44), and screws (46). Requires new screws (4), washers (5), screws (25), and screw (29).

⁶ Loaded Cylinder Housing includes Fluid End parts (17 - 22) and Hydraulic End parts (50 - 61).

D-10 Hydraulic End (with metallic pump head)



D-10 Hydraulic End (with metallic pump head)

Ref. No.	Part Number	Description	Quantity/ Pump
50	D10-019-3110	Spring, Piston return	3
51	D10-042-1010	Retainer, Spring	3
	K10-042-1010	Retainer, Spring, Kel-Cell ⁶	3
52	D10-046-2110	O-ring, Valve cylinder, Buna	3
	C23-009-2110	O-ring, Valve cylinder, Buna, Kel-Cell ⁶	3
53	D10-045-3110	Spring, Sleeve valve	3
	D10-045-3111	Spring, Sleeve valve, PTFE diaphragm	3
	K10-045-3110	Spring, Sleeve valve, Kel-Cell ⁶	3
54	D10-044-1010	Valve Plunger	3
	K10-044-1010	Valve Plunger, Kel-Cell ⁶	3
55	D10-043-1010	Cylinder, Valve	3
	K10-043-1010	Cylinder, Valve, Kel-Cell ⁶	3
56	D10-034-2110	O-ring, Buna.....	3
57	D10-041-1010	Washer, Ball retainer.....	3
58	D10-015-3010	Ball	12
59	D10-014-1209	Piston with foot and retainer	3
	D10-014-1210	Piston Assembly ⁷	—
	K10-014-1210	Piston Assembly, Kel-Cell ^{6,7}	—
60	D10-075-2110	O-ring, Bearing adjusting plate, Buna	1
61	D10-012-1010	Bearing Adjusting Plate.....	1
62	D10-007-1210	(X) Cam Assembly, 8 gpm @ 1450 rpm ⁸	—
	D10-007-1211	(I) Cam Assembly, 4 gpm @ 1750 rpm ⁸	—
	D10-007-1212	(S) Cam Assembly, 6 gpm @ 1750 rpm ⁸	—
	D10-007-1214	(E) Cam Assembly, 8 gpm @ 1750 rpm ⁸	—
63	D10-085-2210	Key, Shaft.....	1
64	D10-031-2110	Seal , Buna.....	2
65	D10-037-2110	O-ring, Pump housing, Buna	1
66	D10-111-2401	Label, Caution, freezing.....	1
67	D10-111-2402	Label, Caution, check oil.....	1

⁶ Parts used in Kel-Cell version pumps (Kel-Cell version pumps are indicated by a in.K in. in the 5th digit of the pump model number).

⁷ Piston Assembly includes cylinder, foot, valve plunger, O-rings, spring retainer, and springs (50-59).

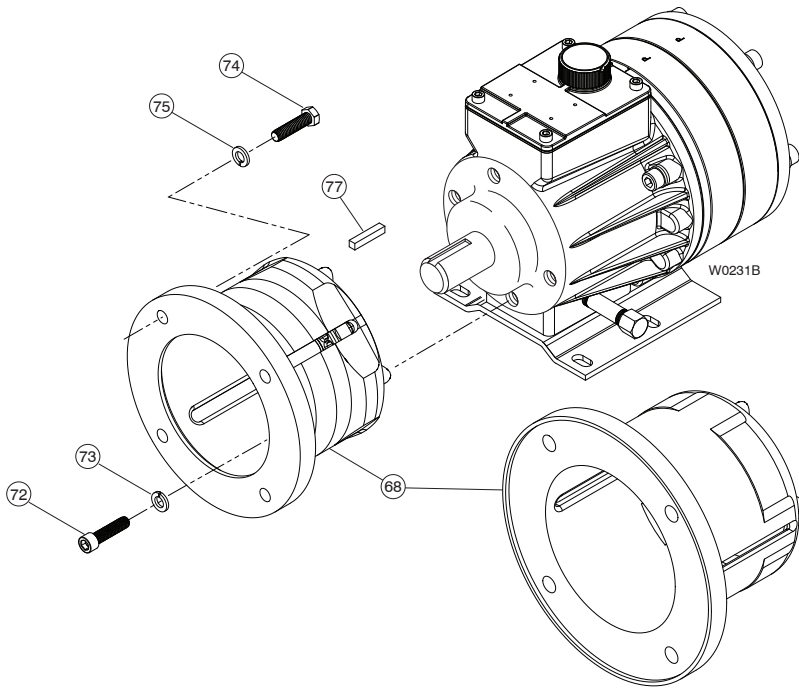
⁸ Cam Assembly includes cam, shaft, wobble plate, cups and bearings. It is only available as an assembly.

D-10 Adapter Kit (with metallic pump head)

D-10 Pump/Motor Adapter Kit

For 56C-145TC NEMA C-Face Motors (Complete Kit Part No. A04-001-1200)

For 182-215TC NEMA C-Face Motors (Complete Kit Part No. A04-002-1200)



Ref No.	Description	A04-001-1200	A04-002-1200	Qty/Kit
68	Pump/Motor Adapter	A04-031-1000 ¹	A04-030-1000 ¹	1
		A04-032-1050 ²	A04-033-1050 ²	1
69*	Adapter Baseplate	A04-025-1010 ¹	—	1
70*	Screw, Cap, Hex-hd	D10-029-2010 ¹	—	4
71*	Lockwasher, Internal tooth	D10-054-2010 ¹	—	4
72	Screw, Cap, Soc-hd	A04-041-2010 ¹	A04-041-2010 ¹	4
		G10-089-2010 ²	G10-089-2010 ²	4
73	Lockwasher, Split	D10-048-2010 ¹	D10-048-2010 ¹	4
		G25-048-2011 ²	G25-048-2011 ²	4
74	Screw, Cap, Hex-hd	D03-068-2010 3/8 in.	M10-110-2000 1/2 in.	4
75	Lockwasher, Split	D10-048-2010 3/8 in.	M10-111-2000 1/2 in.	4
77	Key, Short	A04-085-2210	A04-085-2210	1

¹ Used on D10 models prior to S/N 216283.

² Used on D10 models S/N 216283 and above.

* Not shown.

D-10 Series Replacement Parts Kits (with metallic pump head)

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	Code	Order Description
1-3	D10	Pump Configuration For all D-10 Pumps
4		Kit Designator
	K	Complete Fluid End Kit
	D	Diaphragm Kit
	V	Valve Kit (diaphragm not included)
5-6	52	Pump Head Version Metallic Pump Head Version
7		Diaphragm & O-ring Material
	E	EPDM
	G	Viton®-XT
	J	PTFE
	P	Neoprene
	T	Buna-N-XS
8		Valve Seat Material
	C	Ceramic
	D	Tungsten Carbide
	H	17-4 PH Stainless Steel
	S	316 Stainless Steel
	T	Hastelloy® C
	X	Not included in Diaphragm Kit
9		Valve Material
	C	Ceramic
	D	Tungsten Carbide
	F	17-4 PH Stainless Steel – Machined
	H	17-7 PH Stainless Steel – Stamped
	N	Nitronic 50
	T	Hastelloy® C
	X	Not included in Diaphragm Kit
10		Valve Springs
	E	Elgiloy®
	H	17-7 PH 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 (Zytel)
	X	Not included in Diaphragm Kit

Kit Contents

Part Number*	Description	Qty	Kit Designator		
			K	D	V
D10-018-___	Diaphragm	3	•	•	
D10-047-___	O-ring, follower	3	•	•	
D10-074-___	O-ring, outer manifold	1	•	•	•
D10-073-___	O-ring, inner manifold	1	•	•	•
D10-083-___	O-ring, center bolt	1	•	•	•
D10-035-___	O-ring, valve seat	6	•		•
D10-020-___	Valve seat	6	•		•
D10-021-___	Valve	6	•		•
D10-022-___	Valve spring	6	•		•
D10-092-___	Tetra seal **	6	•		•
D10-023-___	Retainer, valve spring	6	•		•
A01-113-3400	Threadlocker	1	•	•	

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

** Not included with metallic spring retainers.



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