

**PARTS MANUAL**

# Hydra-Cell<sup>®</sup>

## INDUSTRIAL PUMPS

**IMPORTANT**

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

Model No. \_\_\_\_\_

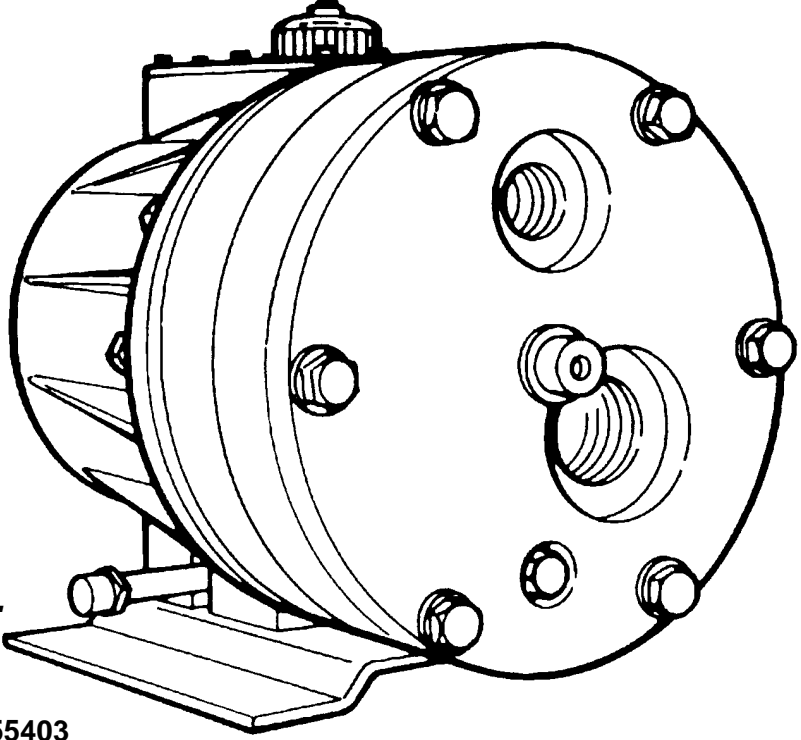
Serial No. \_\_\_\_\_

Date of Purchase \_\_\_\_\_

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

### **MODEL: D-10**

**WITH NON-METALLIC PUMP HEAD**

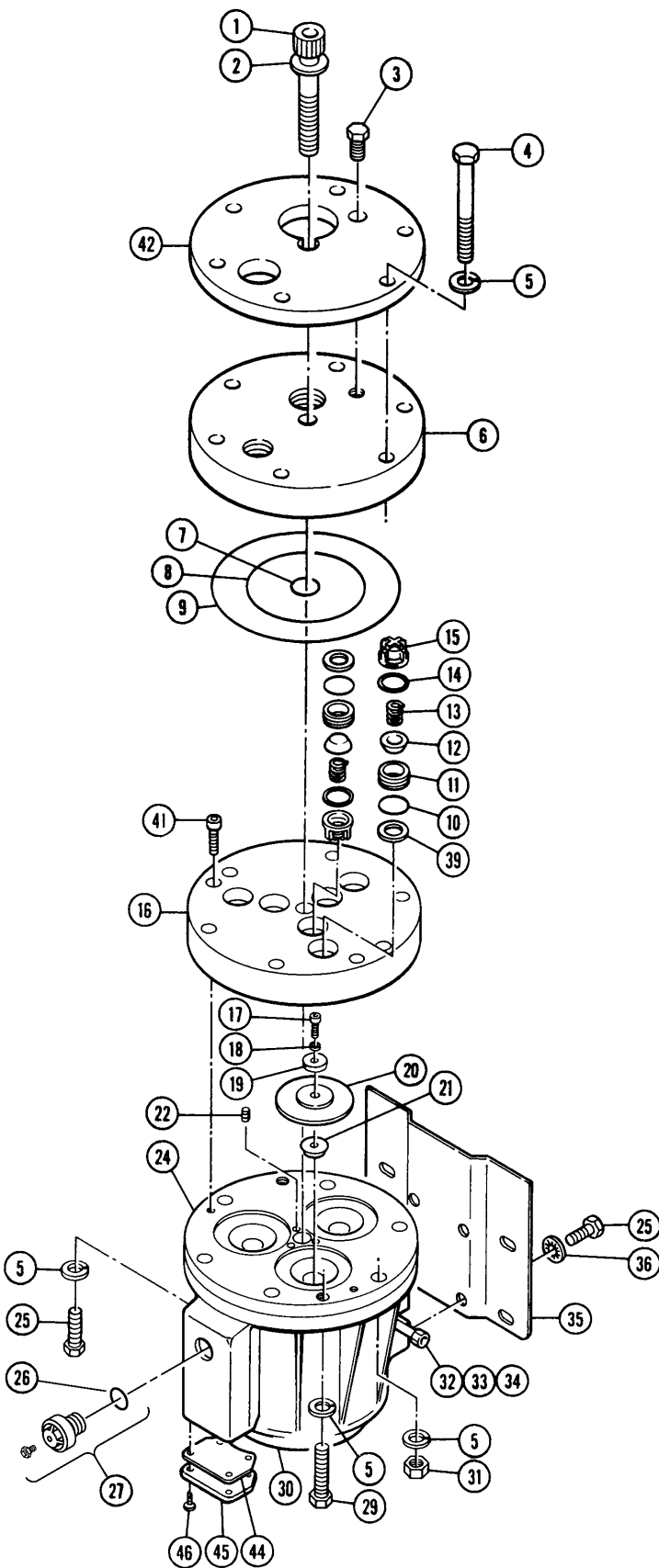


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# D-10 Fluid End (with non-metallic pump head)



Ref #	Part Number	Description	Quantity/ Pump
1	D10-081-2017	Cap Screw, socket head, 4" .....	1
2	D10-084-2010	Washer, 1/2", flat .....	1
3	D10-038-2017	Plug, nickel alloy .....	1
	D10-038-2211	Plug, 316 SST .....	1
4	D10-024-2017	Bolt, hex-head, 5" .....	6
5	D10-048-2010	Washer, split lock, 3/8" .....	14
6	D10-004-1050	Manifold, polypropylene .....	1
	D10-004-1051	Manifold, Celcon .....	1
	D10-004-1053	Manifold, Kynar .....	1
7	D10-083-2110	O-ring, centerbolt, Buna .....	1
	D10-083-2111	O-ring, centerbolt, Viton .....	1
	D10-083-2112	O-ring, centerbolt, Neoprene .....	1
	D10-083-2113	O-ring, centerbolt, EPDM .....	1
8	D10-073-2110	O-ring, inner manifold, Buna .....	1
	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
9	D10-109-2110	O-ring, outer manifold, Buna .....	1
	D10-109-2111	O-ring, outer manifold, Viton .....	1
	D10-109-2112	O-ring, outer manifold, Neoprene .....	1
	D10-109-2113	O-ring, outer manifold, EPDM .....	1
10	D10-035-2110	O-ring, valve seat, Buna .....	1
	D10-035-2111	O-ring, valve seat, Viton .....	1
	D10-035-2112	O-ring, valve seat, Neoprene .....	1
	D10-035-2113	O-ring, valve seat, EPDM .....	1
11	D10-020-1010	Valve seat, 17-4 SST, HT .....	6
	D10-020-1011	Valve seat, 316 SST .....	6
	D10-020-1017	Valve seat, Hastelloy C .....	6
	D10-020-3300	Valve seat, ceramic .....	6
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
	D10-021-1017	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
15	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

# D-10 Fluid End (with non-metallic pump head)

Ref #	Part Number	Description	Quantity/ Pump
16	D10-003-1050	Valve Plate, polypropylene .....	1
	D10-003-1051	Valve Plate, Celcon .....	1
	D10-003-1053	Valve Plate, Kynar .....	1
17	D10-030-2010	Screw, flat-head, SST, 3/8" .....	3
	D10-030-2011	Screw, flat-head, Hastelloy C, 3/8" ....	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
19	D10-017-1010	Follower, 316 SST .....	3
	D10-017-1011	Follower, Hastelloy C .....	3
20	D10-018-2310	Diaphragm, Buna .....	3
	D10-018-2311	Diaphragm, Viton .....	3
	D10-018-2312	Diaphragm, Neoprene .....	3
	D10-018-2313	Diaphragm, EPDM .....	3
	D10-018-2315	Diaphragm, Viton (XT) .....	3
	D10-018-2320	Diaphragm, Buna-N-XS .....	3
21	D10-016-1010	Plunger .....	3
22	D10-082-2010	Set Screw, 3/8" .....	3
24	D10-002-1010	Cylinder Housing .....	1
	D10-002-1210	Cylinder Housing Assembly, Buna <sup>1</sup> ..	–
25	D10-029-2010	Cap Screw, hex-head .....	5
	D10-080-2110	O-ring, oil fill, Buna .....	1

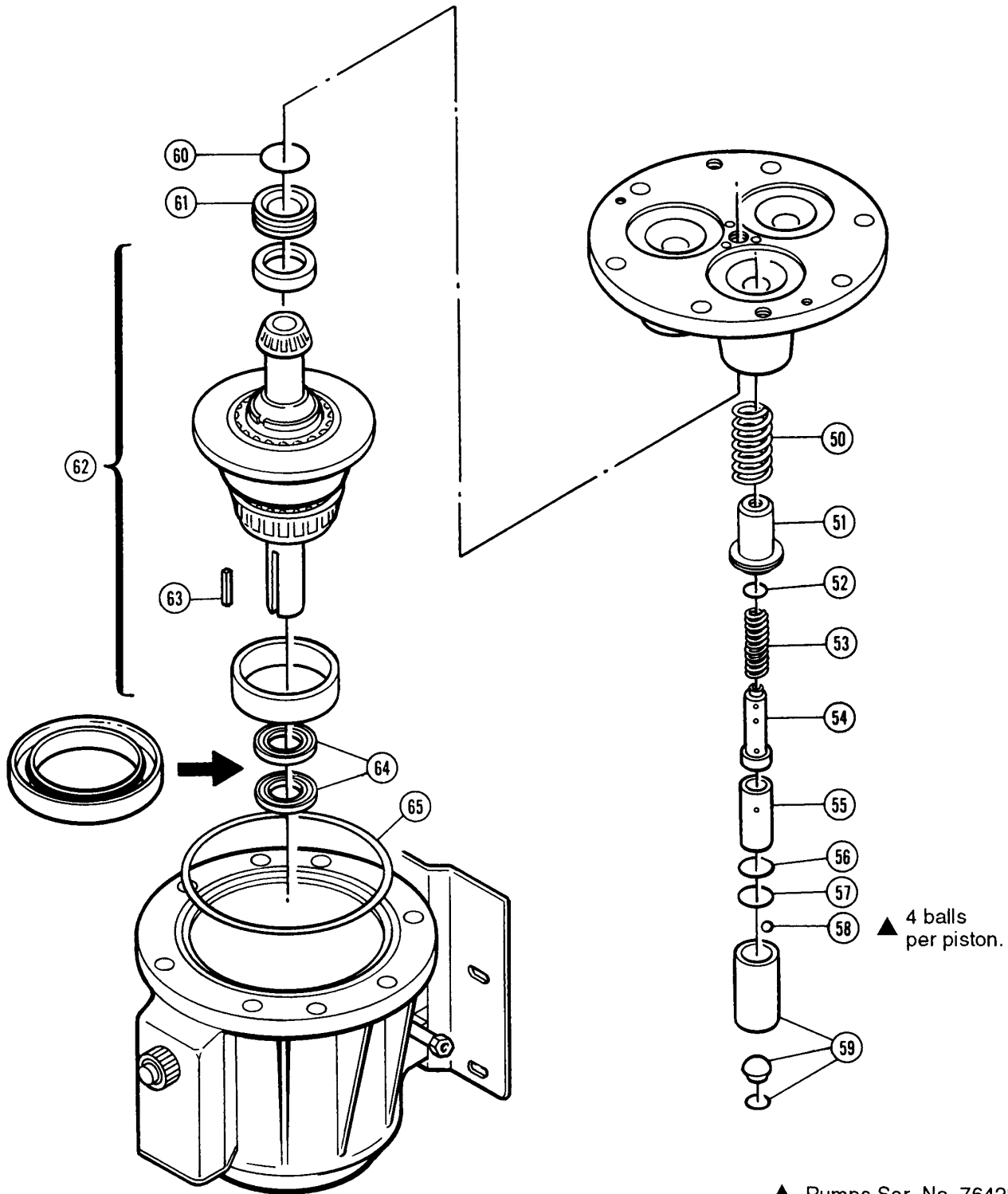
<sup>1</sup> Cylinder Casting Assembly includes casting (24), bearing, adjusting plate (61), O-ring (60), and set screws (22).

Ref #	Part Number	Description	Quantity/ Pump
27	D03-039-1210	Cap, oil fill (includes breather) .....	1
29	D10-087-2010	Cap Screw, hex-head, 1-18" .....	1
30	D10-001-1214	Pump Housing <sup>2</sup> .....	1
	D10-001-1215	Pump Housing Assembly <sup>3</sup> .....	–
31	D10-028-2010	Nut, hex, 1/2" .....	6
32	D10-076-2210	Elbow, brass, 1/8" .....	1
33	D10-077-2210	Pipe, brass, 1/8" .....	1
34	D10-078-2210	Cap, brass, 1/8" .....	1
35	D10-025-1010	Base .....	1
36	D10-054-2010	Washer, shakeproof, 3/8" .....	4
39	D10-125-2320	Washer, dampening, Celcon .....	6
	D10-125-2326	Washer, dampening, nylon .....	6
	D10-125-2327	Washer, dampening, polypropylene ..	6
	D10-125-2328	Washer, dampening, Kynar .....	6
41	D10-088-2010	Cap Screw, socket-head .....	2
42	D10-100-1010	Support, face plate .....	1
44	D10-106-2310	Gasket, cover .....	1
45	D10-105-1010	Cover/Nameplate .....	1
46	G10-090-2010	Screw, M4 x 12 .....	4

<sup>2</sup> Pump housing includes housing (30), cover (45), gasket (44), and screws (46).

<sup>3</sup> Pump Housing Assembly includes housing (30), drain plug (32, 33, 34), bearing cup, cover (45), gasket (44), and screws (46).

# D-10 Hydraulic End (with non-metallic pump head)



▲ Pumps Ser. No. 76428 & below may have 1 ball per piston.

# D-10 Hydraulic End (with non-metallic pump head)

Ref #	Part Number	Description	Quantity/ Pump
50	D10-019-3110	Spring, piston return .....	3
51	D10-042-1010	Retainer, spring .....	3
52	D10-046-2110	O-ring, valve cylinder, Buna .....	3
53	D10-045-3110	Spring, sleeve valve .....	3
54	D10-044-1010	Valve Plunger .....	3
55	D10-043-1010	Cylinder, valve .....	3
56	D10-034-2110	O-ring, Buna .....	3
57	D10-041-1010	Washer, ball retainer .....	3
58	D10-015-3010	Ball <sup>1</sup> .....	12
59	D10-014-1209	Piston, with foot and retainer .....	3
	D10-014-1210	Piston Assembly, Buna <sup>2</sup> .....	—
60	D10-075-2110	O-ring, bearing adjusting plate, Buna	1
61	D10-012-1010	Bearing Adjusting Plate .....	1
62	D10-007-1210	Cam Assembly, 8 gpm @ 1450 rpm <sup>3</sup> .....	—
	D10-007-1211	Cam Assembly, 4 gpm @ 1750 rpm <sup>3</sup> .....	—
	D10-007-1212	Cam Assembly, 6 gpm @ 1750 rpm <sup>3</sup> .....	—
	D10-007-1214	Cam Assembly, 8 gpm @ 1750 rpm <sup>3</sup> .....	—
63	D10-085-2210	Key, shaft .....	1
64	D10-031-2210	Seal , Buna .....	2
65	D10-037-2110	O-ring, pump housing, Buna .....	1
—	D10-111-2401	Label, caution .....	1
	D10-111-2402	Label, caution .....	1

<sup>1</sup> Pump serial numbers 76428 and lower many have one ball per piston.

<sup>2</sup> Piston Assembly includes cylinder, foot, valve plunger, O-rings, spring reatiner, and springs (50-59).

<sup>3</sup> Cam Assembly includes can, shaft, wobble plate and bearings. It is only available as an assembly.

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

## Ordering Information

A complete D-10 Replacement Parts Kit contains 11 digits including 6 customer-specified material options: for example D10K55GHHEP

**1** D **2** 1 **3** 0 **4** **5** 5 **6** 5 **7** **8** **9** **10** **11**

### 4 Kit Designator

- K** Complete Fluid End Kit
- D** Diaphragm Kit
- V** Valve Kit (diaphragm not included)

### 7 Diaphragm & O-ring Material

- E** EPDM
- G** Viton®-XT
- N** Buna-N
- P** Neoprene
- T** Buna-N-XS
- V** Viton®

### 8 Valve Seat Material

- C** Ceramic
- H** 17-4 PH Stainless Steel
- S** 316 Stainless Steel
- T** Hastelloy® C
- X** Not included in Diaphragm Kit

### 9 Valve Material

- C** Ceramic
- 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
- M** Kynar®
- P** Polypropylene
- 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-__ or					
D10-109-__	O-ring, outer manifold <sup>1</sup>	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 <sup>2</sup>	6	•		•
D10-023-__	Retainer, valve spring	6	•		•
D10-125-__	Washer, dampening <sup>3</sup>	6	•		•
D10-129-__	Spacer <sup>4</sup>	6	•		•
A01-113-3400	Threadlocker	1	•	•	

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

<sup>1</sup> D10-074 is provided for metallic heads; D10-109 is provided for non-metallic heads.

<sup>2</sup> Tetra seal is provided with non-metallic spring retainers only.

<sup>3</sup> Dampening washer is provided for non-metallic heads only.

<sup>4</sup> Spacer is provided with metallic spring retainers only.

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