

## PARTS MANUAL

# Hydra-Cell<sup>®</sup>

## INDUSTRIAL PUMPS

### IMPORTANT

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

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

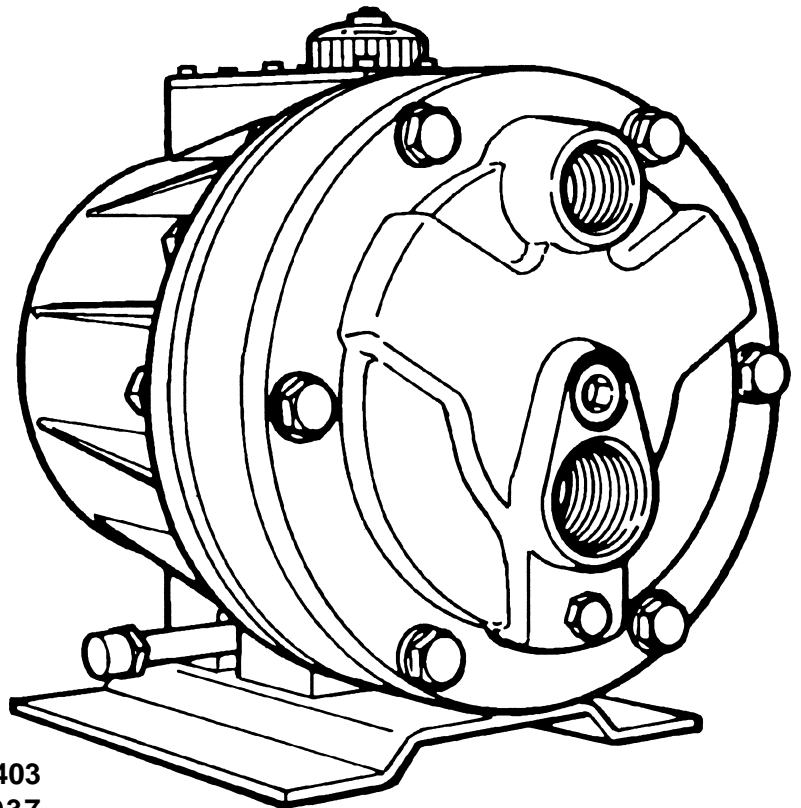
Serial No. \_\_\_\_\_

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

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

## MODEL: D-10

### WITH METALLIC PUMP HEAD



**WANNER ENGINEERING, INC.**

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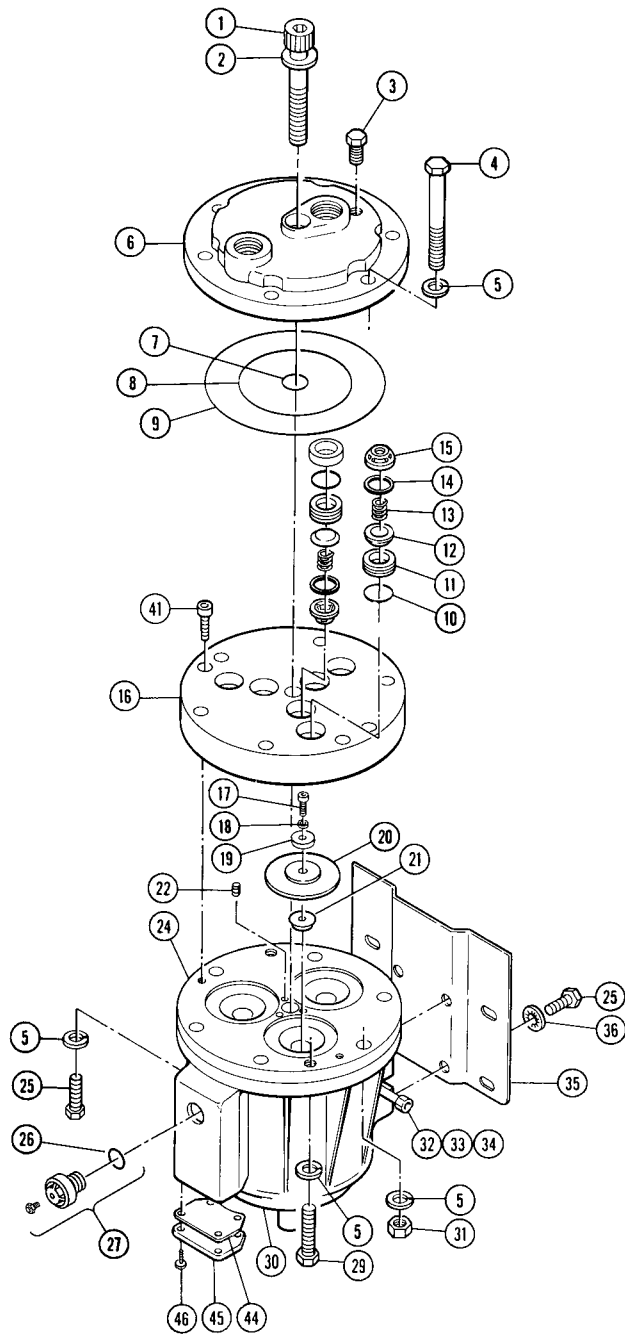
[www.hydra-cell.com](http://www.hydra-cell.com)

email: [sales@wannereng.com](mailto:sales@wannereng.com)

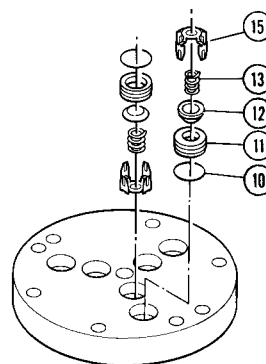
Document Fax Back System (510) 745-0440

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

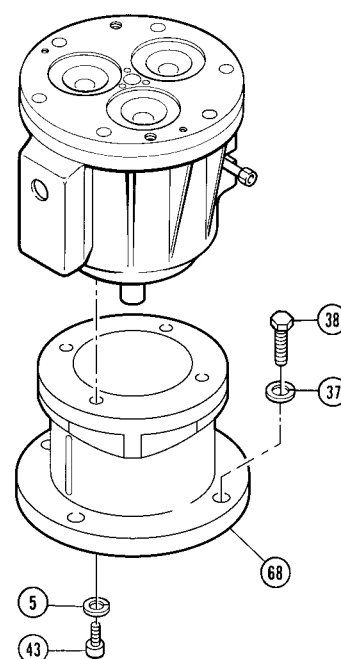
**Model D-10  
with Metallic Pump Head**



**Valve Assemblies with  
Metal Retainers**



**Pump Housing with  
Motor Adapter**



Note: The pump/motor adapter is not supplied with the pump and is purchased separately. The Motor Adapter Kit includes all screws, washers and pins required to connect the adapter to the pump and motor. The kit does not include a shaft coupling.

Ref #	Part Number	Description	Quantity/ Pump
1	D10-081-2012	Cap Screw, socket head, 2-3/4" .....	1
2	D10-084-2010	Washer, 1/2", flat .....	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, 3-1/2" hex-head .....	6

Ref #	Part Number	Description	Quantity/ Pump
5	D10-048-2010	Washer, 3/8" split lock .....	14
6	D10-004-1002	Manifold, 316 SST, NPT .....	1
	D10-004-1008	Manifold, brass, NPT .....	1
	D10-004-1017	Manifold, nickel alloy, C series, NPT ...	1
	D10-004-1034	Manifold, cast iron, NPT .....	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
	D10-083-2118	O-ring, centerbolt, Teflon .....	1

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

Ref #	Part Number	Description	Quantity/ Pump	Ref #	Part Number	Description	Quantity/ Pump
8	D10-073-2110	O-ring, inner manifold, Buna .....	1	19	D10-017-1010	Follower, 316 SST .....	3
	D10-073-2111	O-ring, inner manifold, Viton .....	1		D10-017-1011	Follower, Hastelloy C .....	3
	D10-073-2112	O-ring, inner manifold, Neoprene .....	1	20	D10-018-2310	Diaphragm, Buna .....	3
	D10-073-2113	O-ring, inner manifold, EPDM .....	1		D10-018-2311	Diaphragm, Viton .....	3
	D10-073-2118	O-ring, inner manifold, Teflon .....	1		D10-018-2312	Diaphragm, Neoprene .....	3
9	D10-074-2110	O-ring, outer manifold, Buna .....	1		D10-018-2313	Diaphragm, EPDM .....	3
	D10-074-2111	O-ring, outer manifold, Viton .....	1		D10-018-2315	Diaphragm, Viton XT .....	3
	D10-074-2112	O-ring, outer manifold Neoprene .....	1		D10-018-2318	Diaphragm, Teflon .....	3
	D10-074-2113	O-ring, outer manifold EPDM .....	1		D10-018-2320	Diaphragm, Buna-N-XS .....	3
	D10-074-2118	O-ring, outer manifold, Teflon .....	1	21	D10-016-1010	Plunger .....	3
10	D10-035-2110	O-ring, valve seat, Buna .....	6	22	D10-082-2010	Set Screw, 3/8" .....	3
	D10-035-2111	O-ring, valve seat, Viton .....	6	24	D10-002-1010	Cylinder Housing .....	1
	D10-035-2112	O-ring, valve seat, Neoprene .....	6		D10-002-1210	Cylinder Housing Assembly <sup>1</sup> .....	–
	D10-035-2113	O-ring, valve seat, EPDM .....	6		K10-002-1010	Cylinder Housing, Kel-Cell <sup>2</sup> .....	–
	D10-035-2118	O-ring valve seat, Teflon .....	6		K10-002-1210	Cylinder Housing Assembly, Kel-Cell <sup>1,2</sup> .....	–
11	D10-020-1010	Valve seat, 17-4 SST, HT .....	6	25	D10-029-2010	Cap Screw, hex-head .....	5
	D10-020-1011	Valve seat, 316 SST .....	6	26	D10-080-2110	O-ring, oil fill, Buna .....	1
	D10-020-1016	Valve seat, tungsten carbide .....	6	27	D03-039-1210	Cap, oil fill (includes breather and O-ring) .....	1
	D10-020-1017	Valve seat, Hastelloy C .....	6	29	D10-087-2010	Cap Screw, hex-head, 1-1/8" .....	1
	D10-020-3300	Valve seat, ceramic .....	6	30	D10-001-1214	Pump Housing <sup>3</sup> .....	1
12	D10-021-1010	Valve, 17-7 SST, stamped, HT .....	6		D10-001-1215	Pump Housing Assembly <sup>4</sup> .....	–
	D10-021-1011	Valve, Nitronic .....	6	31	D10-028-2010	Nut, hex, 1/2" .....	6
	D10-021-1015	Valve, 17-4 SST, machined, HT .....	6	32	D10-076-2210	Elbow, brass, 1/8" .....	1
	D10-021-1016	Valve, tungsten carbide .....	6	33	D10-077-2210	Pipe, brass, 1/8" .....	1
	D10-021-1017	Valve, Hastelloy C .....	6	34	D10-078-2210	Cap, brass, 1/8" .....	1
	D10-021-3300	Valve, ceramic .....	6	35	D10-025-1010	Base .....	1
13	D10-022-3116	Valve Spring, 17-7 SST, HT .....	6	36	D10-054-2010	Washer, shakeproof, 3/8" .....	4
	D10-022-3117	Valve Spring, Elgiloy .....	6	37	M10-111-2100	Washer, lock, 1/2" .....	4
	D10-022-3123	Valve Spring, Hastelloy C .....	6	38	M10-110-2000	Bolt, 1-1/2" .....	4
14	D10-092-2110	Tetra Seal, Buna .....	6	41	D10-088-2010	Cap Screw, socket-head .....	2
	D10-092-2111	Tetra Seal, Viton .....	6	43	D10-128-2010	Cap Screw, socket-head .....	4
	D10-092-2112	Tetra Seal, Neoprene .....	6	44	D10-106-2310	Gasket, cover .....	1
	D10-092-2113	Tetra Seal, EPDM .....	6	45	D10-105-1010	Cover/Nameplate .....	1
	D10-092-2118	Tetra Seal, Teflon .....	6	46	G10-090-2010	Screw, M4 x 12 .....	4
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, C series .....	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				
	D10-047-2118	O-ring, follower, Teflon .....	3				

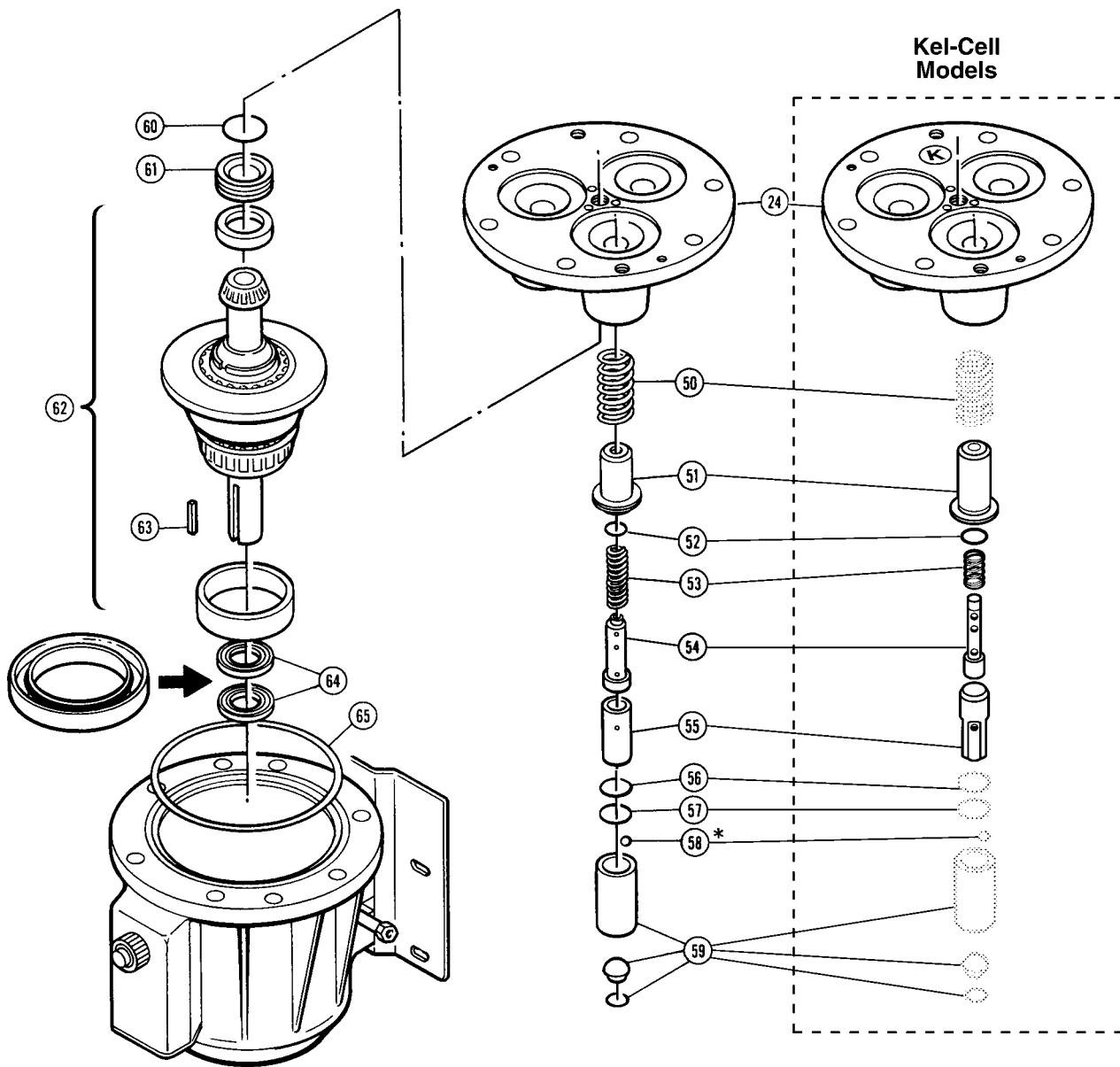
<sup>1</sup> Cylinder Housing Assembly includes casting (24), bearing, adjusting plate (61), O-ring (60), and set screws (22).

<sup>2</sup> Parts used in Kel-Cell version pump.

<sup>3</sup> Pump housing includes housing (30), cover (45), gasket (44), and screws (46).

<sup>4</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 metallic pump head)



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

Ref #	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 <sup>5</sup> .....	3
52	D10-046-2110	O-ring, valve cylinder, Buna .....	3
	C23-009-2110	O-ring, valve cylinder, Buna, Kel-Cell <sup>5</sup> .....	3
53	D10-045-3110	Spring, sleeve valve .....	3
	D10-045-3111	Spring, sleeve valve, Teflon diaphragm .....	3
	K10-045-3110	Spring, sleeve valve, Kel-Cell <sup>5</sup> .....	3
54	D10-044-1010	Valve Plunger .....	3
	K10-044-1010	Valve Plunger, Kel-Cell <sup>5</sup> .....	3
55	D10-043-1010	Cylinder, valve .....	3
	K10-043-1010	Cylinder, valve, Kel-Cell <sup>5</sup> .....	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 <sup>6</sup> .....	–
	K10-014-1210	Piston Assembly, Kel-Cell <sup>5,6</sup> .....	–
60	D10-075-2110	O-ring, bearing adjusting plate, Buna	1
61	D10-012-1010	Bearing Adjusting Plate .....	1

Ref #	Part Number	Description	Quantity/ Pump
62	D10-007-1210	Cam Assembly, 8 gpm @ 1450 rpm <sup>7</sup> .....	–
	D10-007-1211	Cam Assembly, 4 gpm @ 1750 rpm <sup>7</sup> .....	–
	D10-007-1212	Cam Assembly, 6 gpm @ 1750 rpm <sup>7</sup> .....	–
	D10-007-1214	Cam Assembly, 8 gpm @ 1750 rpm <sup>7</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
68	A04-001-1200	Motor Adaptor, D10, 56C 143/145TC .....	1
	A04-002-1200	Motor Adaptor, D10, 182/184TC 213/215TC .....	1
–	D10-111-2401	Label, caution .....	1
	D10-111-2402	Label, caution .....	1

<sup>5</sup> Parts used in Kel-Cell version pumps (Kel-Cell version pumps are indicated by a “K” in the 5th digit of the pump model number).

<sup>6</sup> Piston Assembly includes cylinder, foot, valve plunger, O-rings, spring retainer, and springs (50-59).

<sup>7</sup> Cam Assembly includes cam, shaft, wobble plate, and bearings. It is only available as an assembly.

# D-10 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
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Digit	Order Code	Description
<b>1-3</b>		<b>Pump Configuration</b>
	<b>D10</b>	For all D-10 Pumps
<b>4</b>		<b>Kit Designator</b>
	<b>K</b>	Complete Fluid End Kit
	<b>D</b>	Diaphragm Kit
	<b>V</b>	Valve Kit (diaphragm not included)
<b>5-6</b>		<b>Pump Head Version</b>
	<b>51</b>	Low-Flow Version (discontinued)
	<b>52</b>	Metallic Pump Head Version
	<b>55</b>	Non-Metallic Pump Head Version
<b>7</b>		<b>Diaphragm &amp; O-ring Material</b>
	<b>E</b>	EPDM
	<b>G</b>	Viton®-XT
	<b>J</b>	Teflon® (used with metallic heads only)
	<b>N</b>	Buna-N
	<b>P</b>	Neoprene
	<b>T</b>	Buna-N-XS
	<b>V</b>	Viton®
<b>8</b>		<b>Valve Seat Material</b>
	<b>C</b>	Ceramic
	<b>D</b>	Tungsten Carbide
	<b>H</b>	17-4 PH Stainless Steel
	<b>S</b>	316 Stainless Steel
	<b>T</b>	Hastelloy® C
	<b>X</b>	Not included in Diaphragm Kit
<b>9</b>		<b>Valve Material</b>
	<b>C</b>	Ceramic
	<b>D</b>	Tungsten Carbide
	<b>F</b>	17-4 PH Stainless Steel – Machined
	<b>H</b>	17-7 PH Stainless Steel – Stamped
	<b>N</b>	Nitronic 50
	<b>T</b>	Hastelloy® C
	<b>X</b>	Not included in Diaphragm Kit
<b>10</b>		<b>Valve Springs</b>
	<b>E</b>	Elgiloy®
	<b>H</b>	17-7 PH Stainless Steel
	<b>T</b>	Hastelloy® C
	<b>X</b>	Not included in Diaphragm Kit
<b>11</b>		<b>Valve Spring Retainers</b>
	<b>C</b>	Celcon
	<b>H</b>	17-7 PH Stainless Steel (used with metallic heads only)
	<b>M</b>	Kynar®
	<b>P</b>	Polypropylene
	<b>T</b>	Hastelloy® C (used with metallic heads only)
	<b>Y</b>	Nylon (Zytel)
	<b>X</b>	Not included in Diaphragm Kit

## Kit Contents

Part Number*	Description	Qty	Kit Designator		
			K	D	V
<b>D10-018-__</b>	Diaphragm	3	•	•	
<b>D10-047-__</b>	O-ring, follower	3	•	•	
<b>D10-074-__ or</b>					
<b>D10-109-__</b>	O-ring, outer manifold <sup>1</sup>	1	•	•	•
<b>D10-073-__</b>	O-ring, inner manifold	1	•	•	•
<b>D10-083-__</b>	O-ring, center bolt	1	•	•	•
<b>D10-035-__</b>	O-ring, valve seat	6	•		•
<b>D10-020-__</b>	Valve seat	6	•		•
<b>D10-021-__</b>	Valve	6	•		•
<b>D10-022-__</b>	Valve spring	6	•		•
<b>D10-092-__</b>	Tetra seal <sup>2</sup>	6	•		•
<b>D10-023-__</b>	Retainer, valve spring	6	•		•
<b>D10-125-__</b>	Washer, dampening <sup>3</sup>	6	•		•
<b>A01-113-3400</b>	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.



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