

**Parts Manual**  
**D12-991-2402D**

# Hydra-Cell<sup>®</sup>

## INDUSTRIAL PUMPS

**Models: D-12, G-12**

**IMPORTANT**

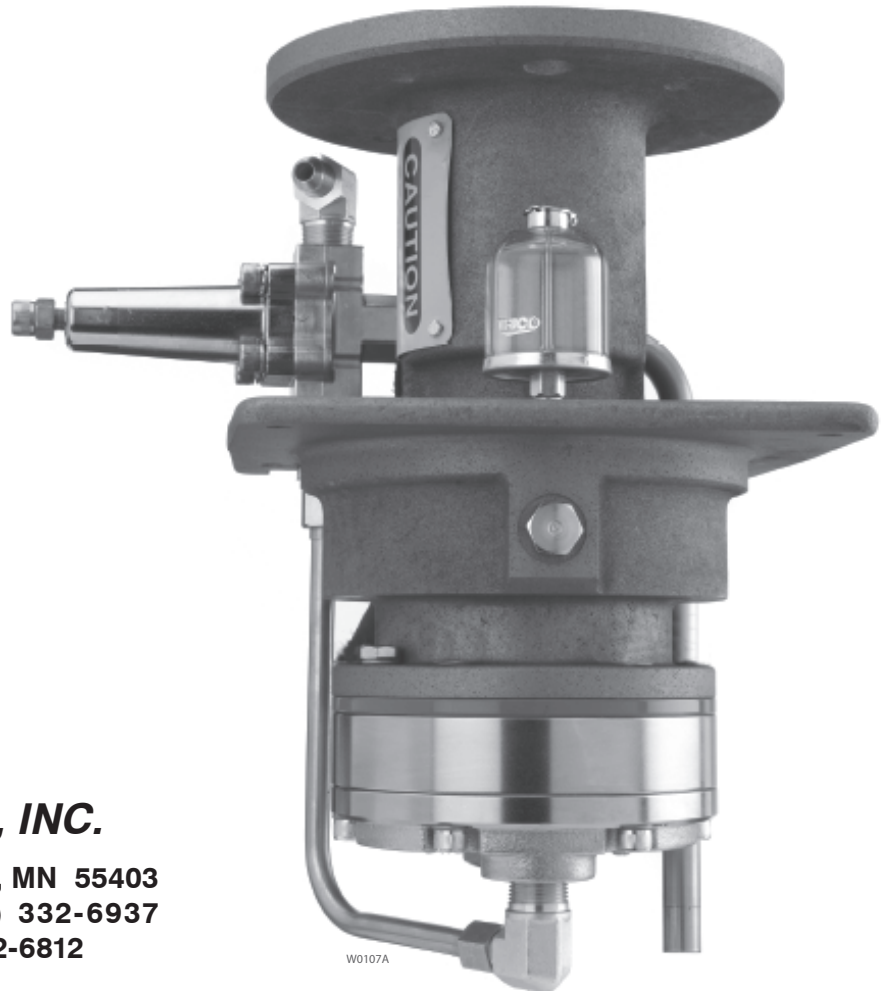
Record your pump model number and serial number here for easy reference:

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

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

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

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



W0107A

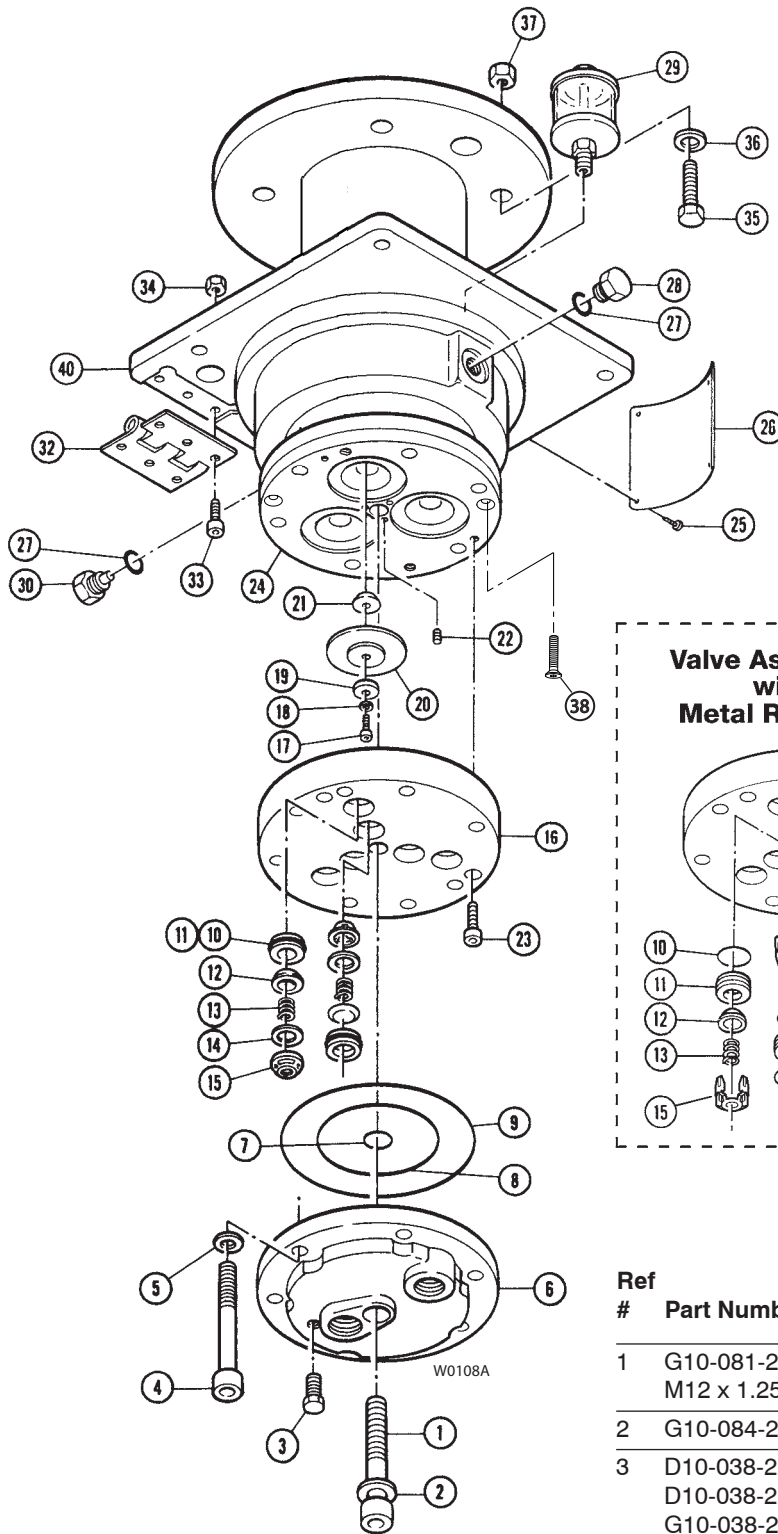


**WANNER ENGINEERING, INC.**

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](http://www.hydra-cell.com)  
email: [sales@wannereng.com](mailto:sales@wannereng.com)

# D/G-12 Fluid End



Ref #	Part Number	Description	Quantity/ Pump
1	G10-081-2010	Cap Screw, socket-head, M12 x 1.25 x 70 mm.....	1
2	G10-084-2010	Washer, flat.....	1
3	D10-038-2210	Plug, brass, NPT .....	1
	D10-038-2211	Plug, SST, NPT.....	1
	G10-038-2211	Plug, SST, BSPT .....	1
4	G10-024-2011	Cap Screw, socket-head, M10 x 1.5 x 90 mm .....	6
5	G25-048-2010	Washer, split-lock.....	6

# D/G-12 Fluid End

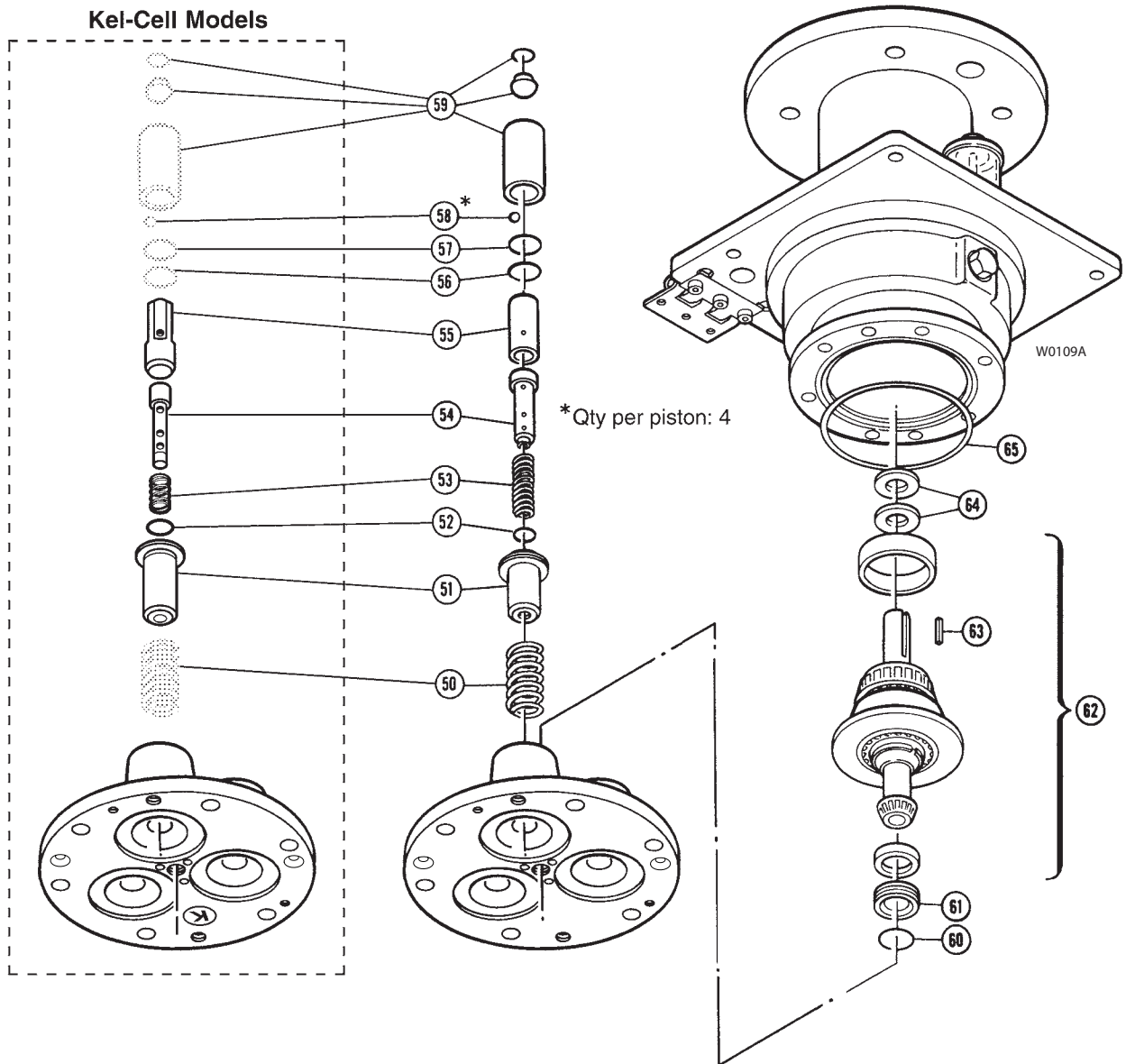
Ref. No.	Part Number	Description	Quantity/ Pump	Ref. No.	Part Number	Description	Quantity/ Pump				
6	D10-004-1002	Manifold, 316 SST, NPT .....	1	18	D10-047-2110	O-ring, follower, Buna-N .....	3				
	D10-004-1008	Manifold, brass NPT .....	1		D10-047-2111	O-ring, follower, Viton .....	3				
	D10-004-1034	Manifold, cast iron, NPT .....	1		D10-047-2112	O-ring, follower, Neoprene.....	3				
	G10-004-1002	Manifold, 316 SST, BSPT .....	1		D10-047-2113	O-ring, follower, EPDM .....	3				
	G10-004-1008	Manifold, brass, BSPT .....	1		D10-047-2118	O-ring, follower, Teflon .....	3				
	G10-004-1034	Manifold, cast iron, BSPT .....	1		19	D10-017-1010	Follower, 316 SST .....	3			
7	D10-083-2110	O-ring, center bolt, Buna .....	1	20		D10-018-2312	Diaphragm, Neoprene .....	3			
	D10-083-2111	O-ring, center bolt, Viton .....	1			D10-018-2313	Diaphragm, EPDM.....	3			
	D10-083-2112	O-ring, center bolt, Neoprene.....	1			D10-018-2315	Diaphragm, Viton-XT .....	3			
	D10-083-2113	O-ring, center bolt, EPDM .....	1			D10-018-2318	Diaphragm, Teflon .....	3			
	D10-083-2118	O-ring, center bolt, Teflon .....	1			D10-018-2320	Diaphragm, Buna-N-XS.....	3			
8	D10-073-2118	O-ring, inner manifold, Teflon .....	1		21	D10-016-1010	Plunger .....	3			
	D11-073-2120	O-ring, inner manifold, Buna .....	1	22		G10-082-2010	Set Screw, M6 x 1 x 10mm.....	3			
	D11-073-2121	O-ring, inner manifold, Viton.....	1			23	G10-088-2010	Cap Screw, socket-head, M6 x 1 x 30 mm .....	2		
	D11-073-2122	O-ring, inner manifold, Neoprene .....	1				24	G10-002-1010	Cylinder Housing .....	1	
	D11-073-2123	O-ring, inner manifold, EPDM .....	1					G10-002-1210	Cylinder Housing Assembly, Buna <sup>1</sup> ...	—	
9	D10-074-2118	O-ring, outer manifold, Teflon .....	1					K10-002-1020	Cylinder Housing, Kel-Cell.....	1	
	D11-074-2120	O-ring, outer manifold, Buna .....	1		K10-002-1220			Cylinder Housing Assembly, Kel-Cell <sup>1</sup> ...	—		
	D11-074-2121	O-ring, outer manifold, Viton .....	1	25	G20-090-2010	Screw, M4 x 10 mm .....		4			
	D11-074-2122	O-ring, outer manifold, Neoprene.....	1		26	D12-140-2410	Cover, caution.....	1			
	D11-074-2123	O-ring, outer manifold, EPDM .....	1			27	D12-121-2111	O-ring, Viton .....	2		
10	D10-035-2110	O-ring, valve seat, Buna.....	6				28	D12-111-2211	Plug .....	1	
	D10-035-2111	O-ring, valve seat, Viton .....	6					29	D12-116-2210	Reservoir, oil.....	1
	D10-035-2112	O-ring, valve seat, Neoprene .....	6						30	D12-111-2210	Plug, magnetic.....
	D10-035-2113	O-ring, valve seat, EPDM .....	6	31						G10-028-2010	Nut, hex, M10 .....
	D10-035-2118	O-ring, valve seat, Teflon.....	6		32					D12-115-2210	Hinge .....
	11	D10-020-1010	Valve Seat, 17-4 SST, HT .....			6				33	G03-088-2010
D10-020-1011		Valve Seat, 316 SST .....	6			34	G12-108-2010				Nut, lock, M6.....
D10-020-1017		Valve Seat, Hastelloy C .....	6				35	M10-110-2000			Bolt, 1/2" x 1-1/2" .....
D10-020-3300		Valve Seat, ceramic.....	6					A04-043-2010	Bolt, M12 x 40 mm <sup>2</sup> .....		4
12		D10-021-1011	Valve, Nitronic.....	6				36	M10-111-2000		Washer, lock, 1/2" .....
	D10-021-1015	Valve, 17-4 SST, machined, HT.....	6	37	A04-045-2010				Nut, M12 <sup>2</sup> .....		4
	D10-021-1017	Valve, Hastelloy C .....	6		38				G10-088-2020	Screw, Flathead, M10 x 30 mm.....	2
	D10-021-3300	Valve, ceramic .....	6			40			D12-001-1011	Pump Housing .....	1
	13	D10-022-3117	Valve Spring, Elgiloy .....				6		D12-001-1211	Pump Housing Assembly <sup>3</sup> .....	—
D10-022-3123		Valve Spring, Hastelloy C .....	6				G12-001-1012		Pump Housing <sup>2</sup> .....	1	
14		D10-092-2110	Tetra Seal, Buna .....				6	G12-001-1212	Pump Housing Assembly <sup>2,3</sup> .....	—	
		D10-092-2111	Tetra Seal, Viton .....	6			16	D10-003-1011	Valve Plate, brass.....	1	
		D10-092-2112	Tetra Seal, Neoprene.....	6	D10-003-1012			Valve Plate, 316 SST.....	1		
		D10-092-2113	Tetra Seal, EPDM .....	6	D10-003-1019	Valve Plate, cast iron.....		1			
	D10-092-2118	Tetra Seal, Teflon .....	6	17	D10-030-2010	Screw, flat-head, 316 SST.....		3			
	15	D10-023-1010	Retainer, valve spring, 17-7 SST.....		6	18		D10-047-2110	O-ring, follower, Buna-N .....	3	
D10-023-1017		Retainer, valve spring, Hastelloy C.....	6		D10-047-2111			O-ring, follower, Viton .....	3		
D10-023-2310		Retainer, valve spring, Celcon.....	6		D10-047-2112		O-ring, follower, Neoprene.....	3			
D10-023-2326		Retainer, valve spring, nylon .....	6		D10-047-2113		O-ring, follower, EPDM .....	3			
D10-023-2327		Retainer, valve spring, polypropylene .....	6		D10-047-2118		O-ring, follower, Teflon .....	3			
D10-023-2328		Retainer, valve spring, Kynar .....	6	19	D10-017-1010		Follower, 316 SST .....	3			

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

<sup>2</sup> For metric motors.

<sup>3</sup> Pump Housing Assembly includes housing (40) and bearing cup.

# D/G-12 Hydraulic End



# D/G-12 Hydraulic End

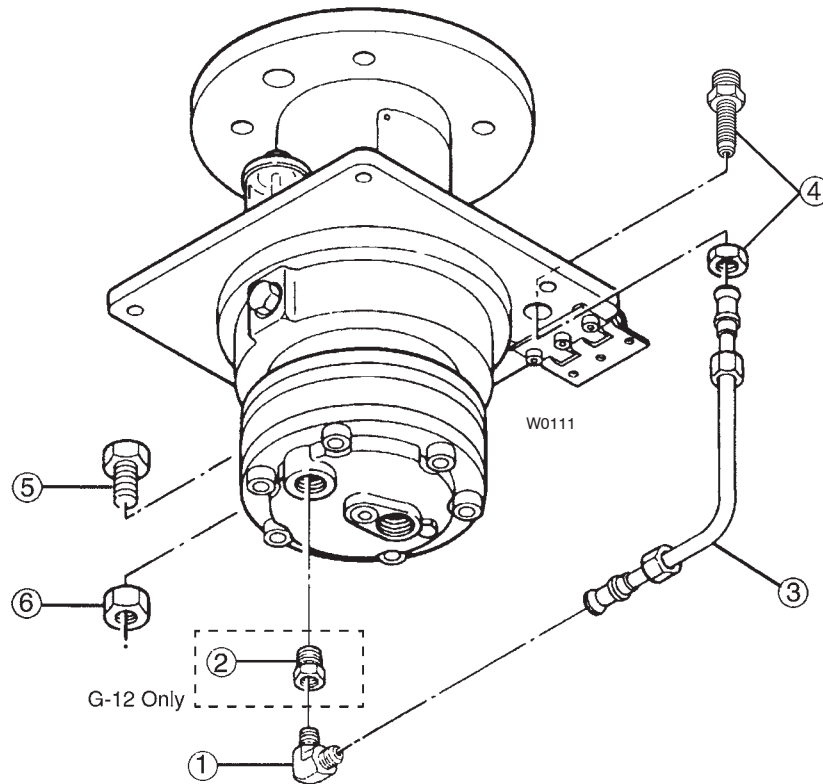
Ref. No.	Part Number	Description	Quantity/ Pump
50	D10-019-3110	Spring, piston return .....	3
51	D10-042-1010	Retainer, spring .....	3
	K10-042-1010	Retainer, spring, Kel-Cell <sup>1</sup> .....	3
52	D10-046-2110	O-ring, valve cylinder, Buna.....	3
	C23-009-2110	O-ring, valve cylinder, Buna, Kel-Cell <sup>1</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>1</sup> .....	3
54	D10-044-1010	Valve Plunger .....	3
	K10-044-1010	Valve Plunger, Kel-Cell <sup>1</sup> .....	3
55	D10-043-1010	Cylinder, valve .....	3
	K10-043-1010	Cylinder, valve, Kel-Cell <sup>1</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, Buna <sup>2</sup> .....	—
	K10-014-1210	Piston Assembly, Kel-Cell <sup>1, 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 (X) <sup>3</sup> , 8 gpm (30.3 lpm) @ 1450 rpm .....	—
	D10-007-1211	Cam Assembly (I) <sup>3</sup> , 4 gpm (15.1 lpm) @ 1750 rpm .....	—
	D10-007-1212	Cam Assembly (S) <sup>3</sup> , 6 gpm (22.7 lpm) @ 1750 rpm .....	—
	D10-007-1214	Cam Assembly (E) <sup>3</sup> , 8 gpm (30.3 lpm) @ 1750 rpm .....	—
63	D10-085-2210	Key, shaft.....	1
64	D10-031-2120	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> 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>2</sup> Piston Assembly includes cylinder, foot, valve plunger, O-rings, spring retainer, and springs (50-59).

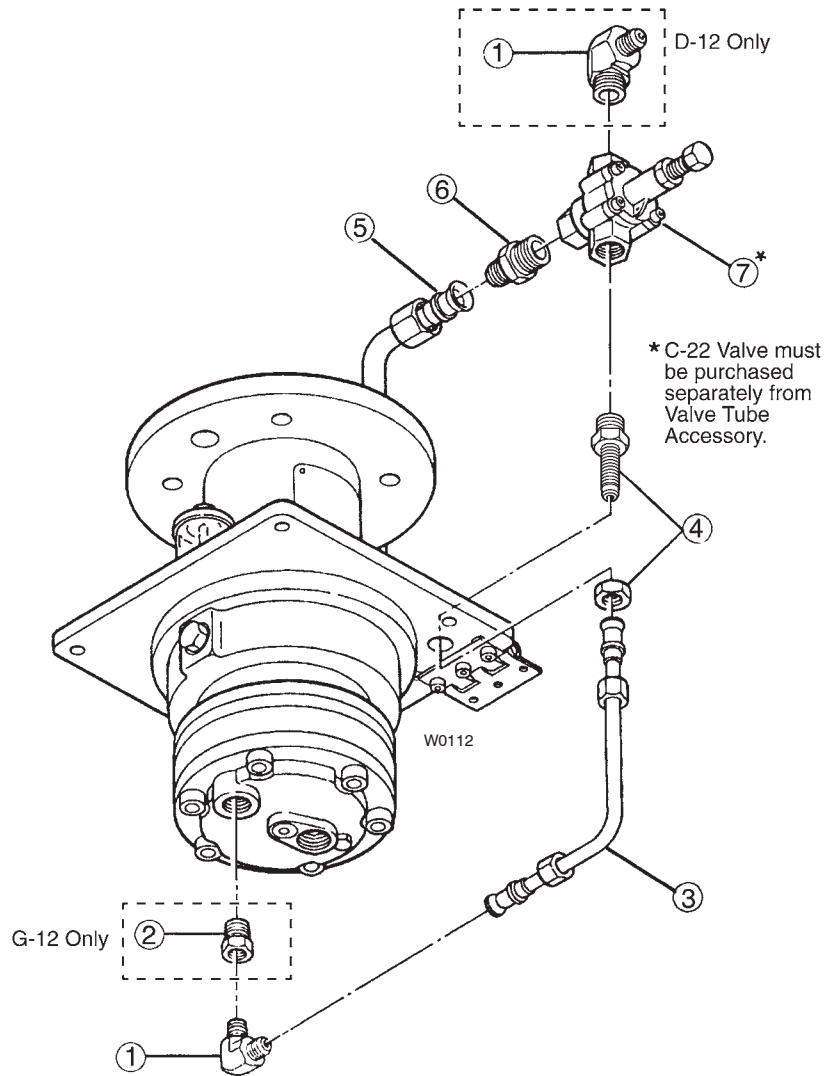
<sup>3</sup> Cam Assembly includes can, shaft, wobble plate, cups and bearings. It is only available as an assembly.

# D/G-12 Tube Accessory



Ref. No.	Part Number	Description	Quantity/ Pump
1	D12-112-2210	Elbow, 90°, flare, 3/4" NPT .....	1
	G12-112-2210	Elbow, 90°, flare, 1/2" BSPT .....	1
2	G12-122-2210	Bushing, reducer, 1/2" to 3/4" BSPT ....	1
3	D12-113-1210	Tube Assembly, pressure .....	1
4	D12-120-2210	Union, bulkhead, NPT, with nut.....	1
	G12-120-2210	Union, bulkhead, BSPT, with nut .....	1
5	D12-107-2010	Bolt, hex, 3/4" x 1-1/4" .....	1
6	D12-106-2010	Nut, hex, 3/4" .....	1

# D/G-12 Valve-Tube Accessory



Ref. No.	Part Number	Description	Quantity/ Pump
1	D12-112-2210	Elbow, 90°, flare, 3/4" NPT .....	2
	G12-112-2210	Elbow, 90°, flare, 1/2" BSPT .....	1
2	G12-122-2210	Bushing, reducer, 1/2" to 3/4" BSPT ....	1
3	D12-113-1210	Tube Assembly, pressure .....	1
4	D12-120-2210	Union, bulkhead, NPT, with nut.....	1
	G12-120-2210	Union, bulkhead, BSPT, with nut .....	1
5	D12-114-1210	Tube Assembly, bypass .....	1
6	D12-117-2210	Connector, male, flare, 3/4" NPT .....	1
	G12-117-2210	Connector, male flare, 3/4" BSPT .....	1
7	C-22 Valve	[Refer to Valve Parts List for breakdown] .....	—

# D/G-12 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		<b>Pump Configuration</b>
	D12	For all D-12 Pumps
	G12	For all G-12 Pumps
4		<b>Kit Designator</b>
	K	Complete Fluid End Kit
	D	Diaphragm Kit
	V	Valve Kit (diaphragm not included)
5-6		<b>Pump Head Version</b>
	52	Metallic Pump Head Version
7		<b>Diaphragm &amp; O-ring Material</b>
	E	EPDM
	G	Viton®-XT
	J	Teflon®
	P	Neoprene
	T	Buna-N-XS
8		<b>Valve Seat Material</b>
	C	Ceramic
	D	Tungsten Carbide
	H	17-4 PH Stainless Steel
	S	316 Stainless Steel
	T	Hastelloy® C
9		<b>Valve Material</b>
	C	Ceramic
	D	Tungsten Carbide
	F	17-4 PH Stainless Steel – Machined
	N	Nitronic 50
	T	Hastelloy® C
10		<b>Valve Springs</b>
	E	Elgiloy®
	T	Hastelloy® C
	X	Not included in Diaphragm Kit
11		<b>Valve Spring Retainers</b>
	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 <sup>1</sup>	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.

<sup>1</sup> Not included with metal 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