

**Parts Manual**  
**D35-991-2402C**

# Hydra-Cell<sup>®</sup>

## INDUSTRIAL PUMPS

**Model: D/G-35**

**IMPORTANT**

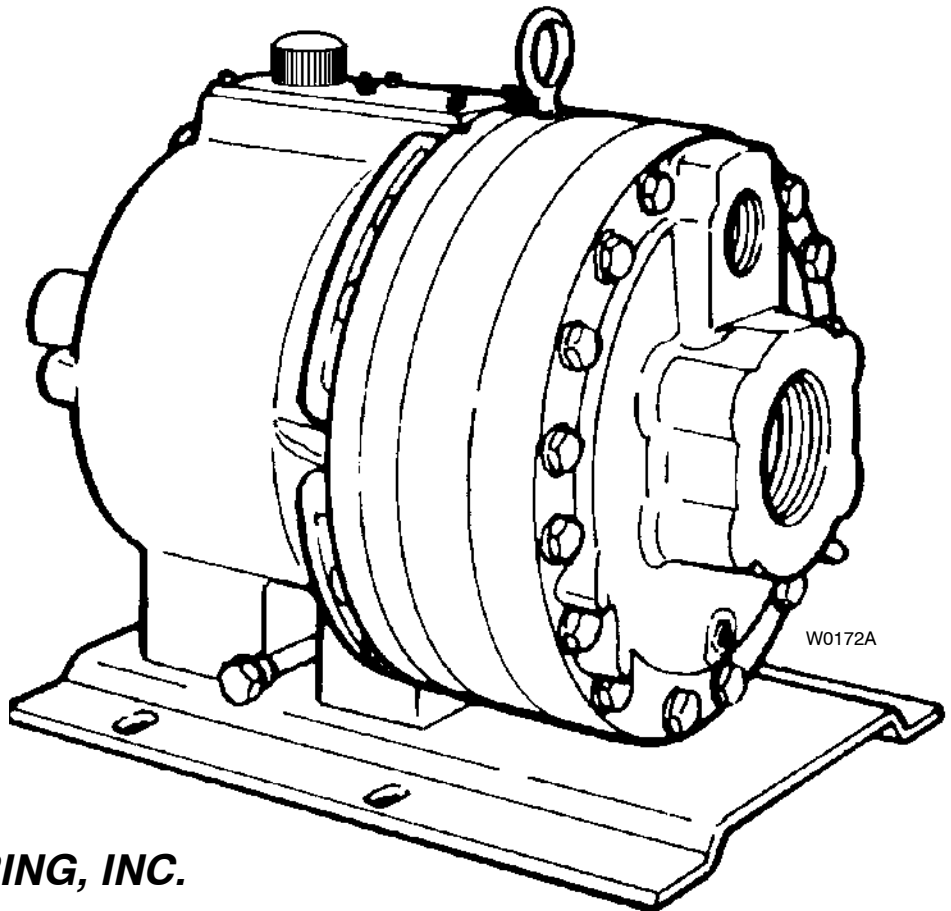
Record your pump model number and serial number here for easy reference:

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

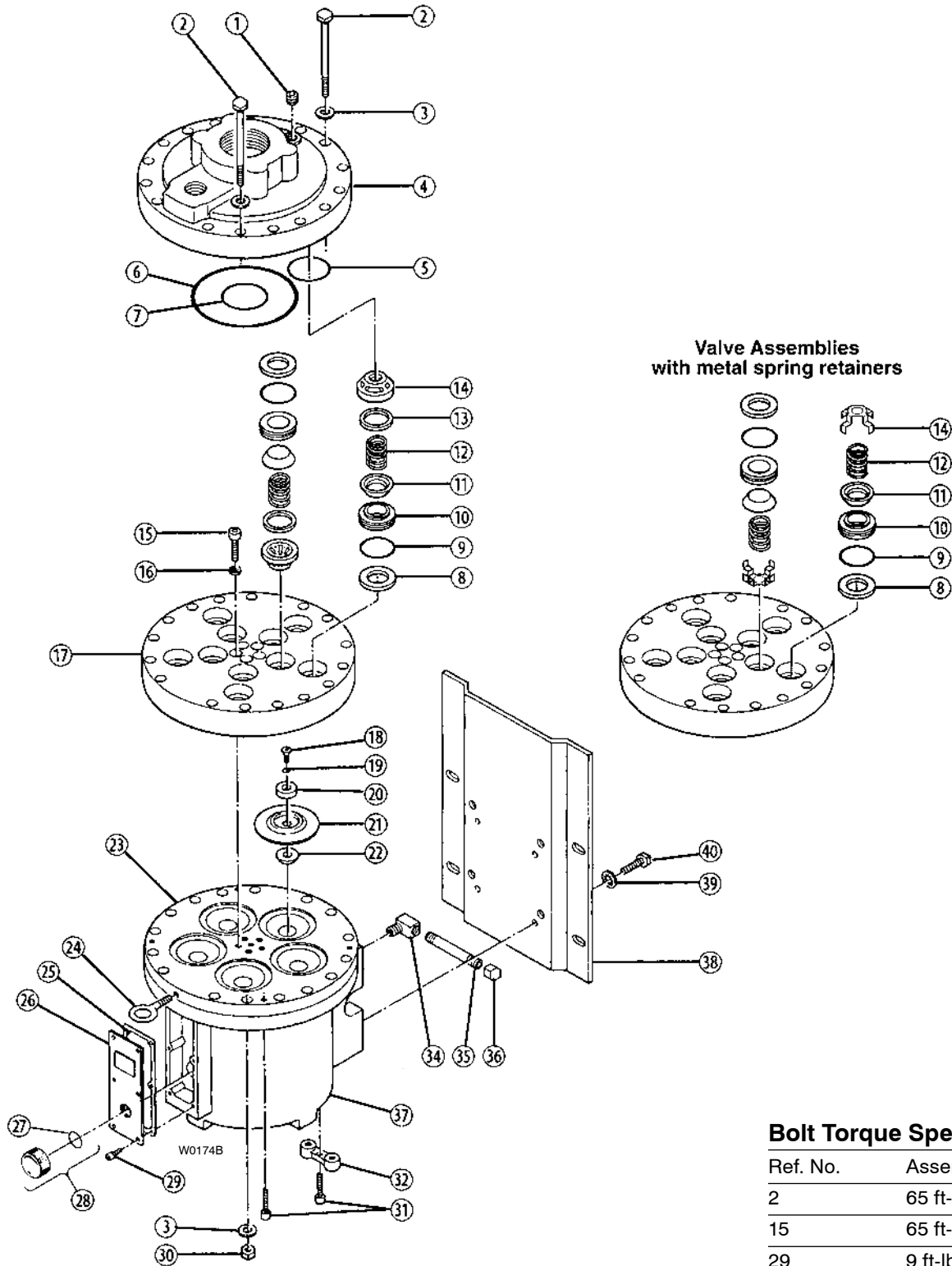
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[www.hydra-cell.com](http://www.hydra-cell.com)

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# D/G-35 Fluid End



## Bolt Torque Specifications

Ref. No.	Assembly Torque
2	65 ft-lbs (88 N-m)
15	65 ft-lbs (88 N-m)
29	9 ft-lbs (12 N-m)
31	25 ft-lbs (34 N-m)
40	45 ft-lbs (60 N-m)

# D/G-35 Fluid End

Ref. No.	Part Number	Description	Quantity/ Pump
1	D25-038-2017	Plug, Hastelloy C.....	1
	D25-038-2210	Plug, Brass.....	1
	D25-038-2211	Plug, 316 SST.....	1
2	G35-024-2010	Screw, Cap, hex-hd, 140 mm.....	16
3	D40-048-2010	Washer, Flat.....	30
4	D35-004-1002	Manifold, 316L SST, NPT.....	1
	D35-004-1007	Manifold, Ductile iron, NPT.....	1
	D35-004-1010	Manifold, Magn/bronze, NPT.....	1
	D35-004-1018	Manifold, Nickel alloy, Hastelloy CW12MW, NPT.....	1
	D35-004-1028	Manifold, Duplex alloy 2205, NPT.....	1
	D35-004-1030	Manifold, Magn/bronze, SAE flange...1	1
	D35-004-1032	Manifold, 316L SST, SAE flange.....	1
	D35-004-1037	Manifold D.I., SAE flange.....	1
	D35-004-1038	Manifold, Nickel alloy, Hastelloy CW12MW, SAE flange.....	1
	D35-004-1039	Manifold, Duplex alloy 2205, SAE flange.....	1
	G35-004-1022	Manifold, 316L SST, BSPT.....	1
	G35-004-1027	Manifold, Ductile iron, BSPT.....	1
	G35-004-1020	Manifold, Magn/bronze, BSPT.....	1
	G35-004-1028	Manifold, Nickel alloy, Hastelloy CW12MW, BSPT.....	1
	G35-004-1029	Manifold, Duplex alloy 2205, BSPT....	1
5	D25-074-2110	O-ring, Buna.....	5
	D25-074-2111	O-ring, Viton.....	5
	D25-074-2112	O-ring, Neoprene.....	5
	D25-074-2113	O-ring, EPDM.....	5
	D25-074-2118	O-ring, PTFE.....	5
6	D35-073-2110	O-ring, Buna.....	1
	D35-073-2111	O-ring, Viton.....	1
	D35-073-2112	O-ring, Neoprene.....	1
	D35-073-2113	O-ring, EPDM.....	1
	D35-073-2118	O-ring, PTFE.....	1
7	D35-080-2110	O-ring, Buna.....	1
	D35-080-2111	O-ring, Viton.....	1
	D35-080-2112	O-ring, Neoprene.....	1
	D35-080-2113	O-ring, EPDM.....	1
	D35-080-2118	O-ring, PTFE.....	1
8	D25-125-1011	Washer, Dampening, 316 SST.....	10
	D25-125-1017	Washer, Dampening, Hastelloy C.....	10
	D25-125-2310	Washer, Dampening, Celcon (Delrin)..	10
	D25-125-2316	Washer, Dampening, Nylon.....	10
	D25-125-2317	Washer, Dampening, polypropylene..	10
	D25-125-2318	Washer, Dampening, Kynar.....	10
9	D25-035-2110	O-ring, Buna.....	10
	D25-035-2111	O-ring, Viton.....	10
	D25-035-2112	O-ring, Neoprene.....	10
	D25-035-2113	O-ring, EPDM.....	10
	D25-035-2118	O-ring, PTFE.....	10

Ref. No.	Part Number	Description	Quantity/ Pump	
10	D25-020-1010	Valve Seat, 17-4 HT SST.....	10	
	D25-020-1012	Valve Seat, Nitronic 50.....	10	
	D25-020-1016	Valve Seat, Tungsten carbide.....	10	
	D25-020-1017	Valve Seat, Hastelloy C.....	10	
	D25-020-3300	Valve Seat, Ceramic.....	10	
11	D25-021-1011	Valve, Nitronic 50.....	10	
	D25-021-1015	Valve, 17-4 HT SST, machined.....	10	
	D25-021-1016	Valve, Tungsten carbide.....	10	
	D25-021-1017	Valve, Hastelloy C.....	10	
	D25-021-3300	Valve, Ceramic.....	10	
12	D25-022-3110	Valve Spring, 17-7 HT SST.....	10	
	D25-022-3114	Valve Spring, Elgiloy.....	10	
	D25-022-3115	Valve Spring, Hastelloy C.....	10	
13	D25-092-2110	Tetra Seal, Buna.....	10	
	D25-092-2111	Tetra Seal, Viton.....	10	
	D25-092-2112	Tetra Seal, Neoprene.....	10	
	D25-092-2113	Tetra Seal, EPDM.....	10	
	D25-092-2118	O-ring, PTFE.....	10	
14	D25-023-1010	Retainer, Valve spring, 17-7 HT SST	10	
	D25-023-1017	Retainer, Valve spring, Hastelloy C..	10	
	D25-023-2310	Retainer, Valve spring, Celcon.....	10	
	D25-023-2316	Retainer, Valve spring, Nylon.....	10	
	D25-023-2317	Retainer, Valve spring, polypropylene.....	10	
	D25-023-2318	Retainer, Valve spring, Kynar.....	10	
15	G35-081-2010	Screw, Cap, soc-hd, 40 mm.....	5	
16	G35-084-2010	Washer, High collar.....	5	
17	D35-003-1002	Valve Plate, 316 SST.....	1	
	D35-003-1003	Valve Plate, Brass.....	1	
	D35-003-1007	Valve Plate, Ductile iron.....	1	
	D35-003-1018	Valve Plate, Nickel alloy, Hastelloy CW12MW,.....	1	
	D35-003-1029	Valve Plate, Duplex alloy 2205.....	1	
18	D25-030-2010	Screw, Flat-hd, 316 SST.....	5	
	D25-030-2011	Screw, Flat-hd, Hastelloy C.....	5	
	19	D25-047-2110	O-ring, Buna.....	5
		D25-047-2111	O-ring, Viton.....	5
		D25-047-2112	O-ring, Neoprene.....	5
D25-047-2113		O-ring, EPDM.....	5	
D25-047-2118		O-ring, PTFE.....	5	
20	D25-017-1010	Follower, 316 SST.....	5	
	D25-017-1011	Follower, Hastelloy C.....	5	
21	D25-018-2312	Diaphragm, Neoprene.....	5	
	D25-018-2313	Diaphragm, EPDM.....	5	
	D25-018-2315	Diaphragm, Viton-XT.....	5	
	D25-018-2318	Diaphragm, PTFE.....	5	
	D25-018-2320	Diaphragm, Buna-N-XS.....	5	
D25-018-2325	Diaphragm, AFLAS.....	5		
22	D25-016-1010	Plunger.....	5	

# D/G-35 Fluid End

Ref. No.	Part Number	Description	Quantity/ Pump
23	K35-002-1010	Cylinder Housing, Kel-Cell.....	1
	K35-002-1210	Cylinder Housing Assembly, Kel-Cell <sup>1</sup> .....	1
	K35-002-1242	Loaded Cylinder Housing Assembly, Kel-Cell, Neoprene <sup>1</sup> .....	1
	K35-002-1243	Loaded Cylinder Housing Assembly, Kel-Cell, EPDM <sup>1</sup> .....	1
	K35-002-1244	Loaded Cylinder Housing Assembly, Kel-Cell, Buna N-XS <sup>1</sup> .....	1
	K35-002-1245	Loaded Cylinder Housing Assembly, Kel-Cell, Viton XT <sup>1</sup> .....	1
	K35-002-1246	Loaded Cylinder Housing Assembly, Kel-Cell, PTFE <sup>1</sup> .....	1
	K35-002-1247	Loaded Cylinder Housing Assembly, Kel-Cell, AFLAS <sup>1</sup> .....	1
24	D40-102-2010	Eyebolt .....	1
25	D35-106-2310	Gasket, Cover .....	1
26	D35-105-1010	Cover, Housing.....	1
27	D10-080-2110	O-ring, Buna, 118.....	1
28	D03-039-1030	Cap with O-ring, Oil fill .....	1
29	G35-088-2010	Screw, Cap, soc-hd, 20 mm.....	6
30	G35-028-2010	Nut, Hex .....	14
31	G35-029-2010	Screw, Cap, soc-hd, 35 mm.....	5
32	G35-140-1000	Bolting Bar, Double .....	1
34	D25-076-2210	Elbow, 90°, brass .....	1
35	D25-077-2210	Pipe, Brass .....	1
36	D25-078-2210	Pipe Cap, Brass .....	1
37	G35-001-1210	Pump Housing Assembly, Aluminum <sup>2</sup> ...	1
	G35-001-1215	Pump Housing Assembly, Ductile iron <sup>2</sup> ..	1
38	D40-025-1010	Baseplate .....	1
39	G35-054-2010	Washer, Internal tooth.....	4
40	G35-087-2010	Screw, Cap, hex-hd, 35 mm.....	4

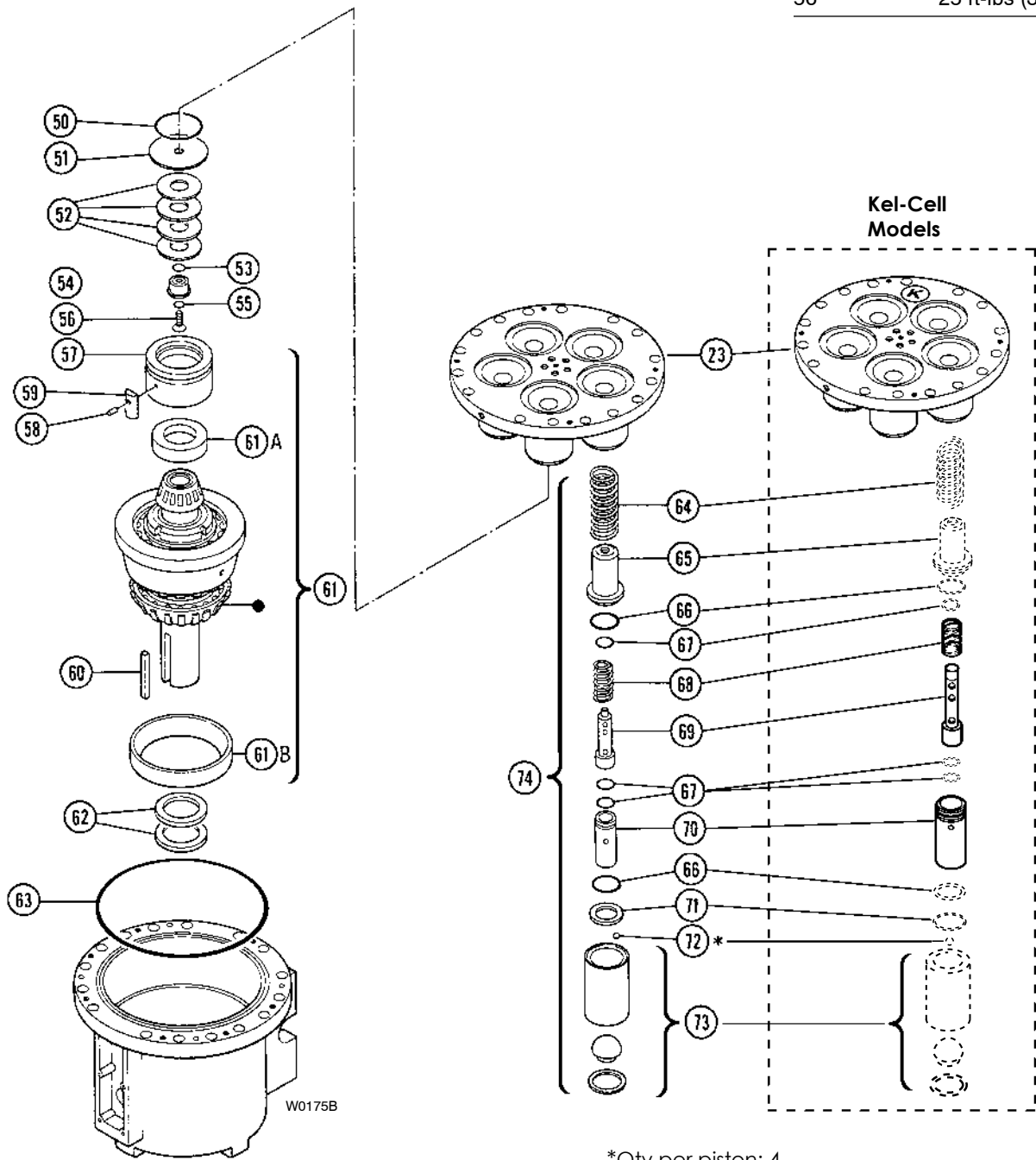
<sup>1</sup> Cylinder Housing Assembly includes housing (23) and bearing tension assembly (50-56).

<sup>2</sup> Pump Housing Assembly includes housing (37), gasket (25), cover (26), screws (29), plug (33), oil drain (34,35, 36), and bearing cup (61B).

# D/G-35 Hydraulic End

## Bolt Torque Specifications

Ref. No.	Assembly Torque
56	25 ft-lbs (34 N-m)



W0175B

\*Qty per piston: 4

# D/G-35 Hydraulic End

Ref. No.	Part Number	Description	Quantity/ Pump
50	D35-080-2110	O-ring, Buna.....	1
51	D35-116-1010	Washer, Backup.....	1
52	D40-075-3110	Spring, Disc.....	4
53	D10-083-2110	O-ring, Buna.....	1
54	D35-112-1011	Guide, Disc spring.....	1
55	D40-047-2110	O-ring, Buna.....	1
56	G35-115-2011	Screw, Flat-hd, 25 mm.....	1
57	D35-012-1010	Plate, Bearing adjustment.....	1
58	D35-110-2010	Pin, Dowel.....	1
59	D35-113-1010	Key.....	1
60	D40-085-1010	Key, Shaft.....	1
61	D35-007-1210	(X) Cam Assembly, 37 GPM @ 1050 RPM <sup>1</sup> .....	1
	D35-007-1212	(E) Cam Assembly, 35 GPM @1160 RPM <sup>1</sup> .....	1
62	D40-031-2110	Seal, Shaft.....	2
63	D35-037-2110	O-ring, Buna.....	1
64	D25-019-3111	Spring, Piston return.....	5
65	D25-042-1010	Retainer, Spring.....	5
66	D25-034-2110	O-ring, Buna.....	10
67	D25-046-2110	O-ring, Buna.....	15
68	D25-045-3110	Spring, Sleeve valve.....	5
	H25-045-3111	Spring, Sleeve valve for PTFE diaphragm.....	5
	K25-045-3110	Spring, Sleeve valve, Kel-Cell.....	5
69	D25-044-1010	Plunger, Valve.....	5
	K25-044-1010	Plunger, Valve, Kel-Cell.....	5
70	D25-043-1010	Cylinder, Valve.....	5
	K25-043-1010	Cylinder, Valve, Kel-Cell.....	5
71	D25-041-1010	Washer, Retaining.....	5
72	D25-015-3010	Ball, Steel.....	20
73	D25-014-1209	Piston, with foot and retainer.....	5
74	D25-014-1210	Piston Assembly <sup>2</sup> .....	5
	K25-014-1210	Piston Assembly, Kel-Cell <sup>2</sup> .....	5

<sup>1</sup> Cam Assembly includes cam, shaft, wobble plate, bearings, cups and bearing carrier (57-59). It is only available as an assembly.

<sup>2</sup> Piston Assembly includes cylinder, foot, valve plunger, O-rings, spring retainer, and springs (64-73).

# D/G-35 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
1-3		<b>Pump Configuration</b>
	D35	For all D-35 Pumps
	G35	For all G-35 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	Pump Head Version
7		<b>Diaphragm &amp; O-ring Material</b>
	A	AFLAS
	E	EPDM
	G	Viton®-XT
	J	PTFE
	P	Neoprene
	T	Buna-N-XS
8		<b>Valve Seat Material</b>
	C	Ceramic
	D	Tungsten Carbide
	H	17-4 PH Stainless Steel
	N	Nitronic 50
	T	Hastelloy® C
	X	Not included in Diaphragm Kit
9		<b>Valve Material</b>
	C	Ceramic
	D	Tungsten Carbide
	F	17-4 PH Stainless Steel – Machined
	N	Nitronic 50
	T	Hastelloy® C
X	Not included in Diaphragm Kit	
10		<b>Valve Springs</b>
	E	Elgiloy®
	H	17-7 PH Stainless Steel
	T	Hastelloy® C
X	Not included in Diaphragm Kit	
11		<b>Valve Spring Retainers</b>
	C	Gelcon
	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
D25-018-___	Diaphragm	5	•	•	
D25-047-___	O-ring, Follower	5	•	•	
D25-074-___	O-ring, Outlet valve	5	•	•	•
D35-073-___	O-ring, Outer manifold	1	•	•	•
D35-080-___	O-ring, Center manifold	1	•	•	•
D25-035-___	O-ring, Valve seat	10	•		•
D25-020-___	Valve seat	10	•		•
D25-021-___	Valve	10	•		•
D25-022-___	Valve spring	10	•		•
D25-092-___	Tetra seal <sup>1</sup>	10	•		•
D25-023-___	Retainer, Valve spring	10	•		•
D25-125-___	Washer, Dampening	10	•		•
A01-113-3400	Threadlocker	1	•	•	

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

<sup>1</sup> Tetra seal is provided with non-metallic spring retainers only.

### **Limited Warranty**

Wanner Engineering, Inc. extends to the original purchaser of equipment manufactured by it and bearing its name, a limited one-year warranty from the date of purchase against defects in material or workmanship, provided that the equipment is installed and operated in accordance with the recommendations and instructions of Wanner Engineering, Inc. Wanner Engineering, Inc. will repair or replace, at its option, defective parts without charge if such parts are returned with transportation charges prepaid to Wanner Engineering, Inc., 1204 Chestnut Avenue, Minneapolis, Minnesota 55403.

This warranty does not cover:

1. The electric motors (if any), which are covered by the separate warranties of the manufacturers of these components.
2. Normal wear and/or damage caused by or related to abrasion, corrosion, abuse, negligence, accident, faulty installation or tampering in a manner which impairs normal operation.
3. Transportation costs.

This limited warranty is exclusive, and is in lieu of any other warranties (express or implied) including warranty of merchantability or warranty of fitness for a particular purpose and of any non contractual liabilities including product liabilities based on negligence or strict liability. Every form of liability for direct, special, incidental or consequential damages or loss is expressly excluded and denied.



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