

## PARTS MANUAL

# Hydra-Cell<sup>®</sup>

## INDUSTRIAL PUMPS

### IMPORTANT

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

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

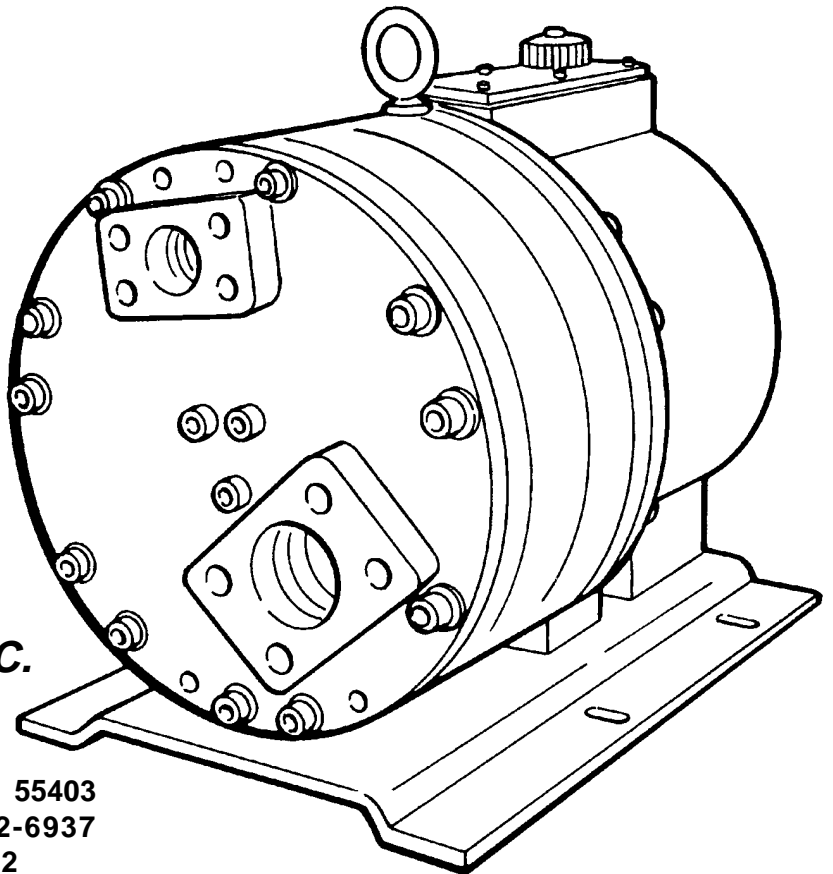
Serial No. \_\_\_\_\_

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

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

## MODEL: D-35-SD

### SLURRY DUTY PUMP



**WANNER ENGINEERING, INC.**

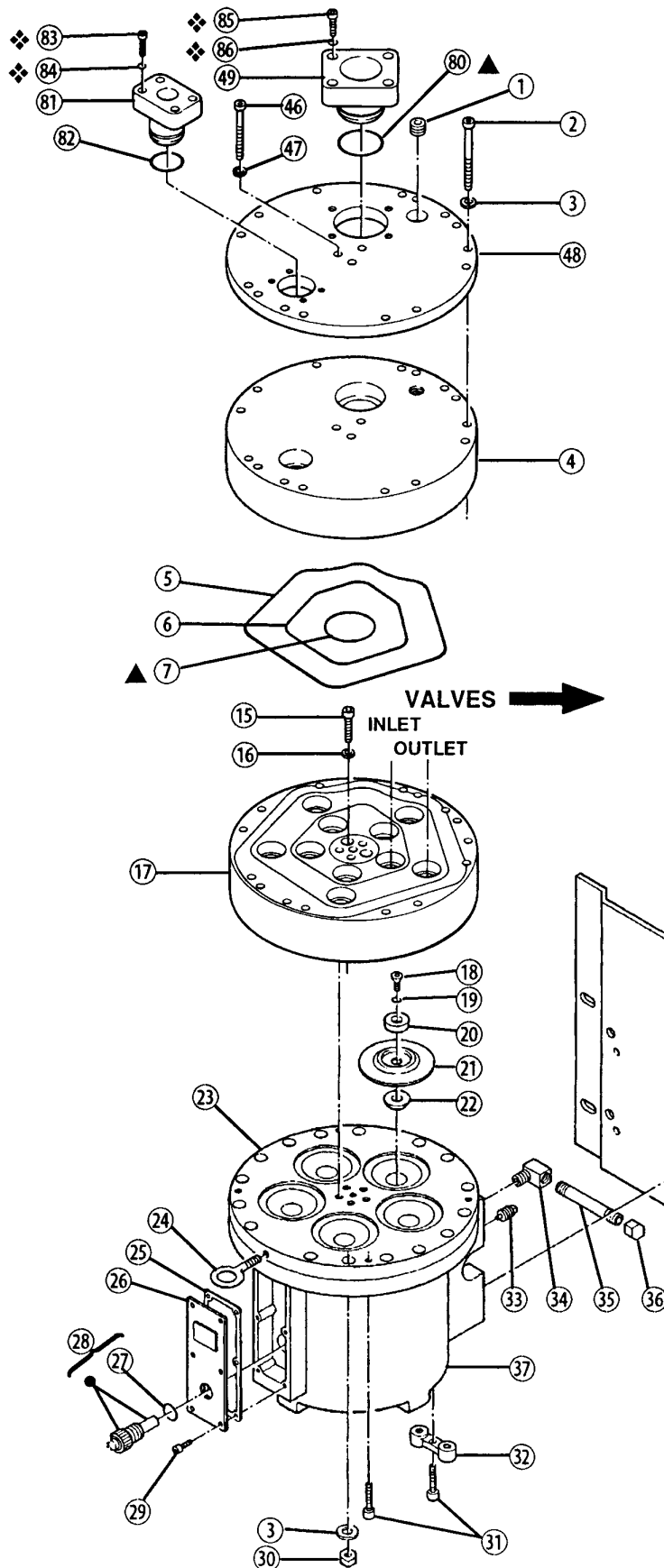
1204 Chestnut Avenue, Minneapolis, MN 55403  
TEL: (612) 332-5681 FAX: (612) 332-6937  
TOLL-FREE FAX [US only]: (800) 332-6812

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

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

Document Fax Back System (510) 745-0440

# D-35-SD Fluid End

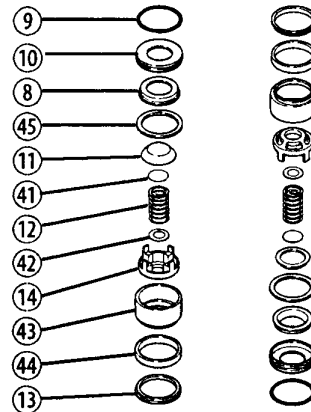


## Bolt Torque Specifications

Ref. No.	Assembly Torque
2	65 ft-lbs
15	9 ft-lbs
29	9 ft-lbs
31	25 ft-lbs
40	45 ft-lbs
46	65 ft-lbs
83	15 ft-lbs
85	20 ft-lbs

### INLET VALVES

### OUTLET VALVES



❖ Supplied only on pumps with NPT adapters.

▲ O-rings ⑦ and ⑩ are close to the same size; do not interchange them. ⑦ is slightly larger than ⑩.

# D-35-SD Fluid End

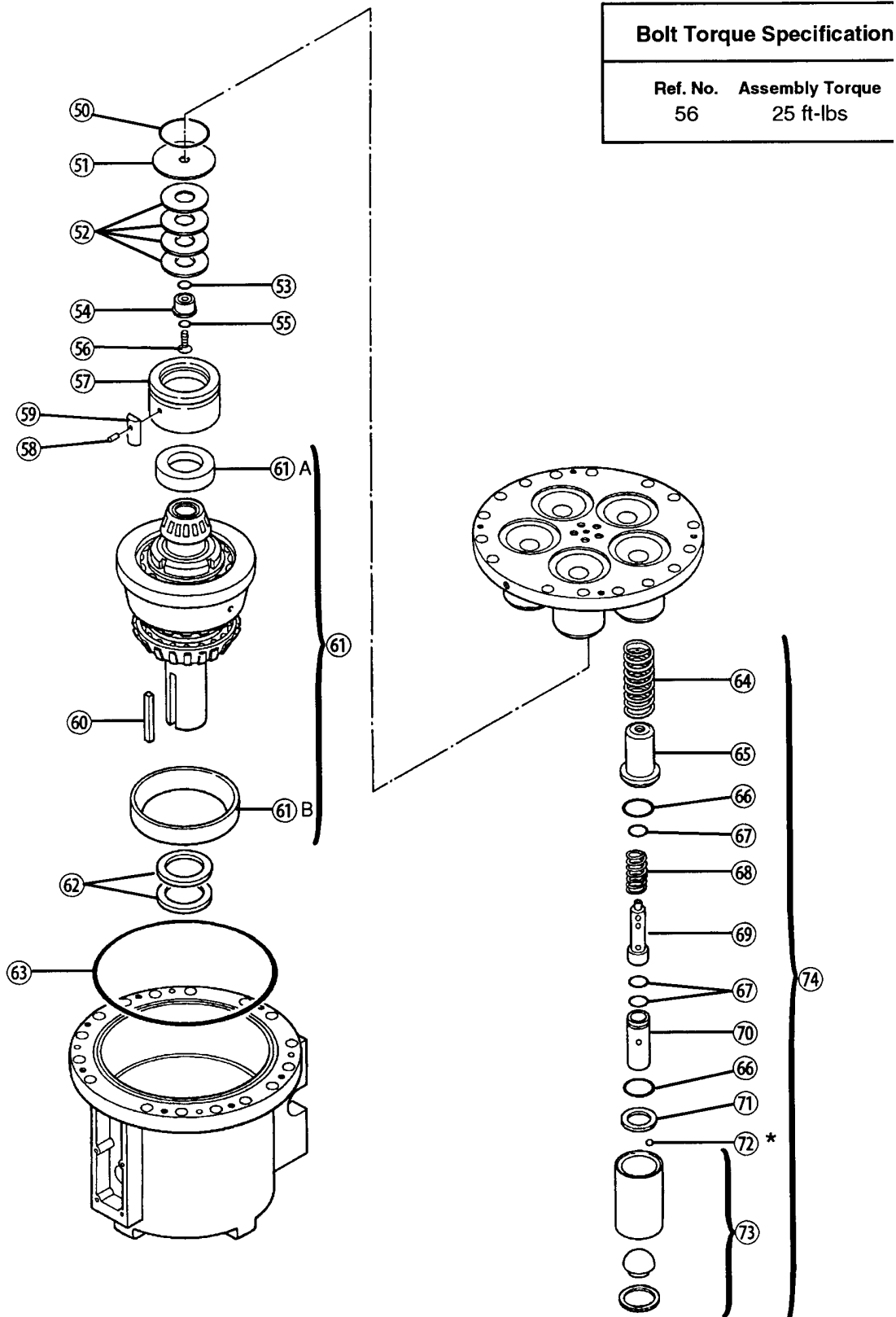
Ref #	Part Number	Description	Quantity/ Pump	Ref #	Part Number	Description	Quantity/ Pump
1	D25-038-2211	Plug, 316 SST	1	28	D03-039-1210	Cap, oil fill (includes breather & O-ring) ...	1
2	G35-024-2011	Screw, socket-head cap, M12 x 1.75 x 200 mm	11	29	G35-088-2010	Screw, socket-head cap, M6 x 1 x 20 mm	6
3	D40-048-2010	Washer, flat, special	20	30	G35-028-2010	Nut, hex, M12 x 1.75	9
4	D35-004-1061	Manifold, Celcon	1	31	G35-029-2010	Screw, socket-head cap, M10 x 1.5 x 35 mm	5
5	D35-074-2110	O-ring, outer manifold, Buna	1	32	G35-140-1000	Bolting Bar, double	1
	D35-074-2111	O-ring, outer manifold, Viton	1	33	D35-111-2010	Plug, magnetic	1
	D35-074-2112	O-ring, outer manifold, Neoprene	1	34	D25-076-2210	Elbow, 90°, brass	1
	D35-074-2113	O-ring, outer manifold, EPDM	1	35	D25-077-2210	Pipe, brass	1
6	D35-073-2120	O-ring, inner manifold, Buna	1	36	D25-078-2210	Pipe Cap, brass	1
	D35-073-2121	O-ring, inner manifold, Viton	1	37	G35-001-1210	Pump Housing Assembly, aluminum <sup>1</sup>	1
	D35-073-2122	O-ring, inner manifold, Neoprene	1		G35-001-1211	Pump Housing Assembly, ductile iron <sup>1</sup>	1
	D35-073-2123	O-ring, inner manifold, EPDM	1	38	D40-025-1010	Baseplate	1
7	D35-080-2120	O-ring, center manifold, Buna	1	39	G35-054-2010	Washer, int. tooth, M12	4
	D35-080-2121	O-ring, center manifold, Viton	1	40	G35-087-2010	Screw, hex-head cap M12 x 1.75 x 35 mm	4
	D35-080-2122	O-ring, center manifold, Neoprene	1	41	D25-140-2310	Washer, polyurethane	10
	D35-080-2123	O-ring, center manifold, EPDM	1	42	D25-141-2310	Washer, polyurethane	10
8	D25-135-2310	Valve Seat, polyurethane	10	43	D25-136-1010	Shell, 17-4 HT SST	10
9	D25-035-2160	O-ring, valve seat, Buna	10	44	D25-139-1010	Cush Seal, UHMW polyethylene	10
	D25-035-2161	O-ring, valve seat, Viton	10	45	D25-138-1010	Spacer, 17-7 HT SST	10
	D25-035-2162	O-ring, valve seat, Neoprene	10	46	G35-081-2011	Screw, socket-head cap, M12 x 1.75 x 150 mm	3
	D25-035-2163	O-ring, valve seat, EPDM	10	47	G35-084-2010	Washer, lock	3
10	D25-020-1020	Valve Seat Holder, 17-4 HT SST	10	48	D35-100-1011	Support, manifold	1
	D25-020-3300	Valve Seat, ceramic	10	49	D35-151-1061	Adapter, Celcon, 2" SAE	1
11	D25-021-3300	Valve, ceramic	10	49	D35-151-1071	Adapter, Celcon, 2" NPT	1
12	D25-022-3114	Valve spring, Elgiloy	10	80	D40-035-2110	O-ring, Buna	1
13	D25-137-1010	Spacer, 17-7 HT SST	10		D40-035-2111	O-ring, Viton	1
14	D25-023-2330	Retainer, valve spring, Celcon	10		D40-035-2112	O-ring, Neoprene	1
15	G35-081-2010	Screw, socket-head cap, M12 x 1.75 x 40 mm	2		D40-035-2113	O-ring, EPDM	1
16	D25-083-2110	O-ring, Buna	2	81	D35-150-1061	Adapter, Celcon, 1-1/4" SAE	1
17	D35-003-1061	Valve Plate, Celcon	1		D35-150-1071	Adapter, Celcon, 1-1/4" NPT	1
18	D25-030-2010	Screw, flat-head, 316 SST	5	82	D35-150-2110	O-ring, Buna	1
19	D25-047-2110	O-ring, Buna	5		D35-150-2111	O-ring, Viton	1
	D25-047-2111	O-ring, Viton	5		D35-150-2112	O-ring, Neoprene	1
	D25-047-2112	O-ring, Neoprene	5		D35-150-2113	O-ring, EPDM	1
	D25-047-2113	O-ring, EPDM	5	83	D35-152-2010	Screw, socket-head cap, 7/16-14 x 2 <sup>1/2</sup>	4
20	D25-017-1010	Follower, 316 SST	5	84	D03-034-2110	O-ring, Buna <sup>2</sup>	4
21	D25-018-2310	Diaphragm, Buna N	5	85	D35-153-2010	Screw, socket-head cap, 1/2-13 x 1 <sup>3/8</sup>	4
	D25-018-2311	Diaphragm, Viton	5	86	D25-083-2110	O-ring, Buna <sup>3</sup>	4
	D25-018-2312	Diaphragm, Neoprene	5				
	D25-018-2313	Diaphragm, EPDM	5				
	D25-018-2315	Diaphragm, Viton-XT	5				
	D25-018-2320	Diaphragm, Buna-N-XS	5				
22	D25-016-1010	Plunger	5				
23	G35-002-1010	Cylinder Housing	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				

<sup>1</sup> Pump Housing Assembly includes housing, gasket (25), cover (26), and screws (29).

<sup>2</sup> Included only on pumps with NPT adapter (81).

<sup>3</sup> Included only on pumps with NPT adapter (49).

# D-35-SD Hydraulic End



\* Qty per piston: 4

# D-35-SD Hydraulic End

Ref #	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	D35-075-2110	O-ring, Buna .....	1
54	D35-122-1011	Guide, disc spring .....	1
55	D40-047-2110	O-ring, Buna .....	1
56	G35-115-2011	Screw, flat socket cap, M10 x 1.5 x 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	Cam Assembly, 37 GPM @ 1050 RPM .....	1
	D35-007-1212	Cam Assembly, 35 GPM @ 1160 RPM .....	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
69	D25-044-1010	Plunger, valve .....	5
70	D25-043-1010	Cylinder, valve .....	5
71	D25-041-1010	Washer, retaining .....	5
72	D25-015-3010	Ball, steel .....	20
73	D22-014-1209	Piston, with foot and retainer .....	5
74	D25-014-1210	Piston Assembly, Buna .....	5

# D-35-SD Series REPLACEMENT PARTS KITS

ORDERING INFORMATION: 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	Price
<b>1-3</b>		<b>Pump Configuration</b>	
	<b>D10</b>	For all D-10-SD 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>W</b>	Spring and Seal Kit (diaphragm not included)	
<b>5-6</b>		<b>Pump Head Version</b>	
	<b>56</b>	Slurry Duty Pump Head Version	
<b>7</b>		<b>Diaphragm &amp; O-ring Material</b>	
	<b>E</b>	EPDM	
	<b>G</b>	Viton®-XT	
	<b>N</b>	Buna-N	
	<b>P</b>	Neoprene	
	<b>T</b>	Buna-N-XS	
<b>8</b>		<b>Valve Seat Material</b>	
	<b>C</b>	Ceramic	
	<b>R</b>	Urethane and Stainless Steel	
	<b>X</b>	Not included in Diaphragm Kit	
<b>9</b>		<b>Valve Material</b>	
	<b>C</b>	Ceramic	
	<b>X</b>	Not included in Diaphragm Kit or Spring and Seal Kit	
<b>10</b>		<b>Valve Springs</b>	
	<b>E</b>	Elgiloy®	
	<b>X</b>	Not included in Diaphragm Kit	
<b>11</b>		<b>Valve Spring Retainers</b>	
	<b>C</b>	Celcon	
	<b>X</b>	Not included in Diaphragm Kit	

## Kit Contents

Part Number*	Description	Qty	Kit Designator			
			K	D	V	W
<b>D25-018-__</b>	Diaphragm	5	•	•		
<b>D25-047-__</b>	O-ring, follower	5	•	•		
<b>D35-074-__</b>	O-ring, outer manifold	1	•	•	•	•
<b>D35-073-__</b>	O-ring, inner manifold	1	•	•	•	•
<b>D35-080-__</b>	O-ring, center manifold <sup>1</sup>	1	•	•	•	•
<b>D25-135-2310</b>	Valve seat, polyurethane	10	•		•	•
<b>D25-035-__</b>	O-ring, valve seat	10	•		•	•
<b>D25-020-1020</b>	Holder, valve seat	10	•		•	
<b>D25-021-3300</b>	Valve, ceramic	10	•		•	
<b>D25-022-3114</b>	Valve spring, Elgiloy	10	•		•	•
<b>D25-137-1010</b>	Spacer	10	•		•	
<b>D25-023-2330</b>	Retainer, valve spring	10	•		•	
<b>D25-140-2310</b>	Washer, polyurethane	10	•		•	•
<b>D25-141-2310</b>	Washer, polyurethane	10	•		•	•
<b>D25-136-1010</b>	Shell	10	•		•	
<b>D25-139-1010</b>	Crush seal	10	•		•	•
<b>D25-138-1010</b>	Spacer	10	•		•	
<b>D40-035-__</b>	O-ring, inlet adapter <sup>1</sup>	1	•	•	•	•
<b>D35-150-__</b>	O-ring, outlet adapter	1	•	•	•	•
<b>A01-113-3400</b>	Threadlocker	1	•	•		

\* Last four digits of part numbers with \_\_\_\_ refer to specific material of construction.  
<sup>1</sup> D35-080 O-ring and D40-035 O-ring are close to the same size; do not interchange them.  
D35-080 is slightly larger than D40-035.



## 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)

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