

Parts Manual
D10-991-2403B

Hydra-Cell®

INDUSTRIAL PUMPS

Model: D-10
with non-metallic pump head

IMPORTANT

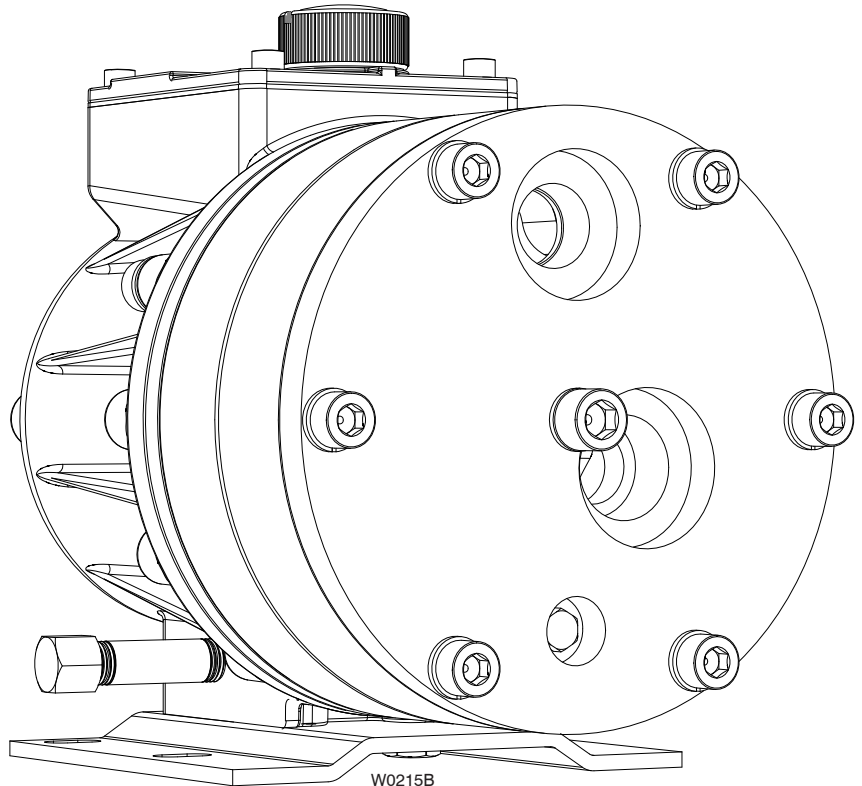
Record your pump model number and serial number here for easy reference:

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

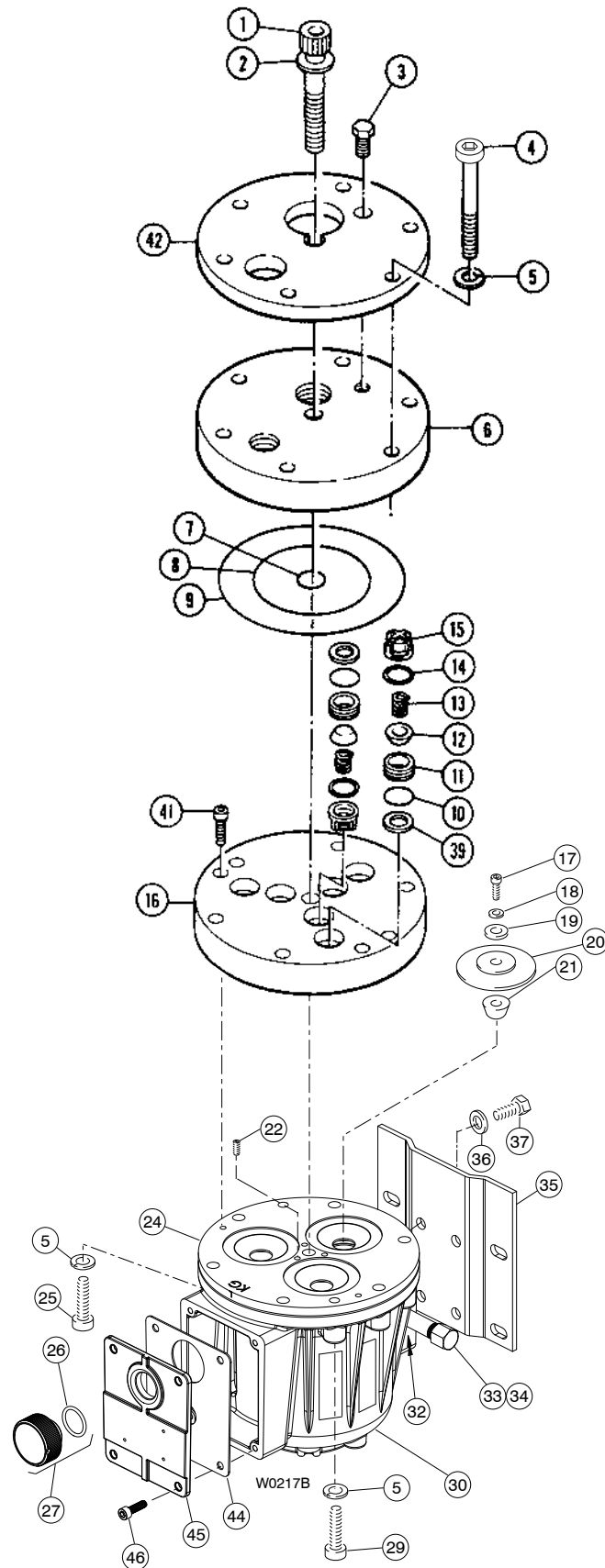
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D-10 Fluid End (with non-metallic pump head)



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

| Ref. No. | Part Number | Description | Quantity/ Pump |
|----------|--------------|---|-------------------|
| 1 | D10-081-2017 | Screw, Cap, soc-hd, 4 in. ¹ | 1 |
| | G10-081-2017 | Screw, Cap, soc-hd, 102 mm ² | 1 |
| 2 | D10-084-2010 | Washer, Flat ¹ | 1 |
| | G10-084-1010 | Washer, Flat ² | 1 |
| 3 | D10-038-2017 | Plug, Nickel alloy, Hastelloy CW12MW | 1 |
| | D10-038-2211 | Plug, 316 SST | 1 |
| 4 | H25-024-2040 | Bolt, Hex-hd, 5 in. ¹ | 6 |
| | G10-024-2017 | Screw, Cap, soc-hd, 130 mm ² | 6 |
| 5 | D10-048-2010 | Washer, Split lock ¹ | 8 |
| | G25-048-2010 | Washer, Split lock ² | 8 |
| 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, Center bolt, Buna | 1 |
| | D10-083-2111 | O-ring, Center bolt, Viton | 1 |
| | D10-083-2112 | O-ring, Center bolt, Neoprene | 1 |
| | D10-083-2113 | O-ring, Center bolt, 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 |
| | D10-020-1016 | Valve Seat, Tungsten carbide | 6 |
| | D10-020-1017 | Valve Seat, Hastelloy C | 6 |
| | D10-020-3300 | Valve Seat, Ceramic | 6 |

| Ref. No. | Part Number | Description | Quantity/ Pump |
|--------------|-------------------------------|---------------------------------------|----------------------------|
| 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 |
| | D10-021-1016 | Valve, Tungsten carbide | 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 | |
| | 16 | D10-003-1050 | Valve Plate, Polypropylene |
| D10-003-1051 | | Valve Plate, Celcon | 1 |
| D10-003-1053 | | Valve Plate, Kynar | 1 |
| 17 | D10-030-2010 | Screw, Flat-hd, SST, 3/8 in. | 3 |
| | D10-030-2011 | Screw, Flat-hd, Hastelloy C, 3/8 in. | 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 | D10-018-2312 | 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 in. | 3 |

¹ Used on D10 models prior to S/N 216283.

² Used on D10 models S/N 216283 and above.

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

| Ref. No. | Part Number | Description | Quantity/ Pump |
|----------|--------------|---|-------------------|
| 24 | K10-002-1010 | Cylinder Housing ¹ | 1 |
| | K10-002-1020 | Cylinder Housing, Metric ² | |
| | K10-002-1210 | Cylinder Housing Assembly ^{1,3} | |
| | K10-002-1220 | Cylinder Housing Assembly, Metric ^{2,3} | |
| | K10-002-1232 | Loaded Cylinder Housing, UNC, Neoprene ^{1,6} | |
| | K10-002-1233 | Loaded Cylinder Housing, UNC, EPDM ^{1,6} | |
| | K10-002-1234 | Loaded Cylinder Housing, UNC, Buna N-XS ^{1,6} | |
| | K10-002-1235 | Loaded Cylinder Housing, UNC, Viton XT ^{1,6} | |
| | K10-002-1242 | Loaded Cylinder Housing, Metric, Neoprene ^{2,6} | |
| | K10-002-1243 | Loaded Cylinder Housing, Metric, EPDM ^{2,6} | |
| | K10-002-1244 | Loaded Cylinder Housing, Metric, Buna N-XS ^{2,6} | |
| | K10-002-1245 | Loaded Cylinder Housing, Metric, Viton XT ^{2,6} | |
| 25 | D10-029-2010 | Screw, Cap, hex-hd, 1 in. ¹ | 1 |
| | G10-089-2011 | Screw, Cap, hex-hd, 38 mm ² | 1 |
| 26 | D10-080-2110 | O-ring, Oil fill, Buna | 1 |
| 27 | D03-039-1030 | Cap with O-ring, Oil fill | 1 |

| Ref. No. | Part Number | Description | Quantity/ Pump |
|----------|--------------|--|-------------------|
| 29 | D10-087-2010 | Screw, Cap, hex-hd, 1-1/4 in. ¹ | 1 |
| | G10-087-2011 | Screw, Cap, hex-hd, 45 mm ² | 1 |
| 30 | G10-001-1050 | Pump Housing, Metric ⁴ | 1 |
| | G10-001-1215 | Pump Housing Assembly, Metric ⁵ | — |
| 31 | D10-028-2010 | Nut, Hex, 3/8 in. ¹ | 6 |
| 32 | D10-076-2210 | Elbow, Brass, 1/8 in. ¹ | 1 |
| | D10-076-2250 | Plug, Soc-hd, 1/4 in. ² | 2 |
| 33 | D10-077-2210 | Nipple, Brass, 3/8 in. ¹ | 1 |
| | D10-077-2250 | Nipple, Brass, 1/4 in. ² | 1 |
| 34 | D10-078-2210 | Cap, Brass, 1/8 in. ¹ | 1 |
| | D10-078-2250 | Cap, Brass, 1/4 in. ² | 1 |
| 35 | D10-025-1010 | Base | 1 |
| 36 | D10-054-2010 | Washer, Shakeproof ¹ | 4 |
| 37 | D10-029-2010 | Screw, Cap, hex-hd, 1 in. ¹ | 4 |
| | G10-029-2010 | Screw, Cap, hex-hd, 25 mm ² | 4 |
| 39 | D10-125-2320 | Washer, Dampening, Celcon | 6 |
| | D10-125-2327 | Washer, Dampening, polypropylene...6 | |
| | D10-125-2328 | Washer, Dampening, Kynar | 6 |
| 41 | D10-088-2010 | Screw, Cap, soc-hd ¹ | 2 |
| | G10-088-2010 | Screw, Cap, soc-hd, 30 mm ² | 2 |
| 44 | G10-106-2350 | Gasket, Cover ² | 1 |
| 45 | G10-105-1050 | Cover/Nameplate ² | 1 |
| 46 | G03-088-2010 | Screw, 20 mm ² | 4 |

¹ Used on D10 models prior to S/N 216283.

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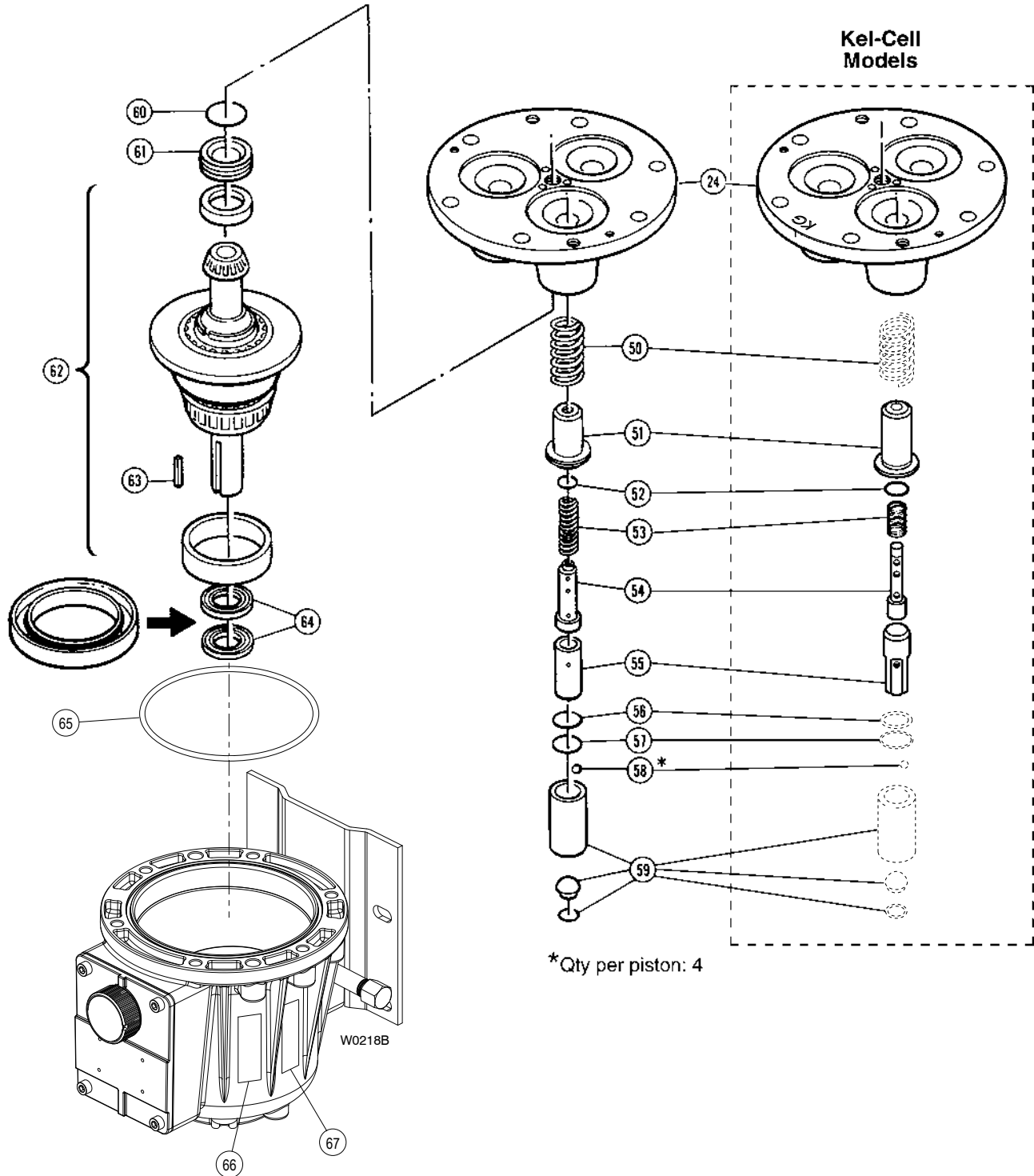
³ Cylinder Housing Assembly includes casting (24), bearing, adjusting plate (61), O-ring (60), and set screws (22).

⁴ Pump housing (metric) includes housing (30), cover (45), gasket (44), and screws (46). Requires new screws (4), washers (5), screws (25), and screw (29).

⁵ Pump Housing Assembly includes housing (30), oil drain/plugs (32, 33, 34), cover (45), gasket (44), and screws (46). Requires new screws (4), washers (5), screws (25), and screw (29).

⁶ Loaded Cylinder Housing includes Fluid End parts (17 - 22) and Hydraulic End parts (50 - 61).

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



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

| 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 ⁵ | 3 |
| 52 | D10-046-2110 | O-ring, Valve cylinder, Buna | 3 |
| | C23-009-2110 | O-ring, Valve cylinder, Buna, Kel-Cell ⁵ | 3 |
| 53 | D10-045-3110 | Spring, Sleeve valve | 3 |
| | D10-045-3111 | Spring, Sleeve valve, PTFE diaphragm | 3 |
| | K10-045-3110 | Spring, Sleeve valve, Kel-Cell ⁵ | 3 |
| 54 | D10-044-1010 | Valve Plunger | 3 |
| | K10-044-1010 | Valve Plunger, Kel-Cell ⁵ | 3 |
| 55 | D10-043-1010 | Cylinder, Valve | 3 |
| | K10-043-1010 | Cylinder, Valve, Kel-Cell ⁵ | 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 ⁶ | - |
| | K10-014-1210 | Piston Assembly, Kel-Cell ^{5,6} | - |
| 60 | D10-075-2110 | O-ring, Bearing adjusting plate, Buna | 1 |
| 61 | D10-012-1010 | Bearing Adjusting Plate..... | 1 |
| 62 | D10-007-1210 | (X) Cam Assembly, 8 gpm @ 1450 rpm ⁷ | - |
| | D10-007-1211 | (I) Cam Assembly, 4 gpm @ 1750 rpm ⁷ | - |
| | D10-007-1212 | (S) Cam Assembly, 6 gpm @ 1750 rpm ⁷ | - |
| | D10-007-1214 | (E) Cam Assembly, 8 gpm @ 1750 rpm ⁷ | - |
| 63 | D10-085-2210 | Key, Shaft..... | 1 |
| 64 | D10-031-2110 | Seal , Buna..... | 2 |
| 65 | D10-037-2110 | O-ring, Pump housing, Buna | 1 |
| 66 | D10-111-2401 | Label, Caution, freezing..... | 1 |
| 67 | D10-111-2402 | Label, Caution, check oil..... | 1 |

⁵ 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).

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

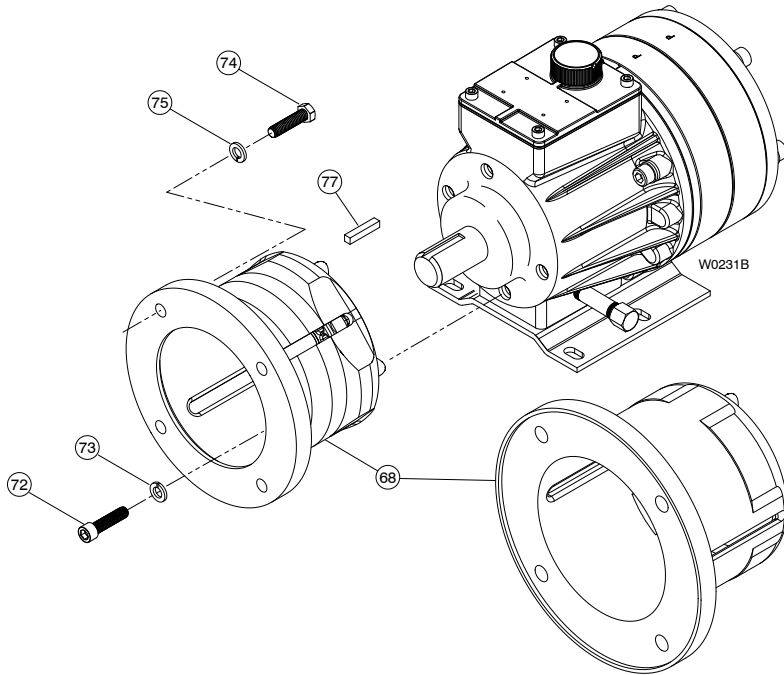
⁷ Cam Assembly includes cam, shaft, wobble plate, cups and bearings. It is only available as an assembly.

D-10 Adapter Kit (non-metallic pump head)

D-10 Pump/Motor Adapter Kit

For 56C-145TC NEMA C-Face Motors (Complete Kit Part No. A04-001-1200)

For 182-215TC NEMA C-Face Motors (Complete Kit Part No. A04-002-1200)



| Ref No. | Description | A04-001-1200 | A04-002-1200 | Qty/Kit |
|---------|----------------------------|---------------------------|---------------------------|---------|
| 68 | Pump/Motor Adapter | A04-031-1000 ¹ | A04-030-1000 ¹ | 1 |
| | | A04-032-1050 ² | A04-033-1050 ² | 1 |
| 69* | Adapter Baseplate | A04-025-1010 ¹ | — | 1 |
| 70* | Screw, Cap, Hex-hd | D10-029-2010 ¹ | — | 4 |
| 71* | Lockwasher, Internal tooth | D10-054-2010 ¹ | — | 4 |
| 72 | Screw, Cap, Soc-hd | A04-041-2010 ¹ | A04-041-2010 ¹ | 4 |
| | | G10-089-2010 ² | G10-089-2010 ² | 4 |
| 73 | Lockwasher, Split | D10-048-2010 ¹ | D10-048-2010 ¹ | 4 |
| | | G25-048-2011 ² | G25-048-2011 ² | 4 |
| 74 | Screw, Cap, Hex-hd | D03-068-2010 3/8 in. | M10-110-2000 1/2 in. | 4 |
| 75 | Lockwasher, Split | D10-048-2010 3/8 in. | M10-111-2000 1/2 in. | 4 |
| 77 | Key, Short | A04-085-2210 | A04-085-2210 | 1 |

¹ Used on D10 models prior to S/N 216283.

² Used on D10 models S/N 216283 and above.

* Not shown.

D-10 Series Replacement Parts Kits

(with non-metallic pump head)

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 | D10 | Pump Configuration For all D-10 Pumps |
| 4 | | Kit Designator |
| | K | Complete Fluid End Kit |
| | D | Diaphragm Kit |
| | V | Valve Kit (diaphragm not included) |
| 5-6 | 55 | Pump Head Version Non-Metallic Pump Head Version |
| 7 | | Diaphragm & O-ring Material |
| | E | EPDM |
| | G | Viton®-XT |
| | J | PTFE |
| | P | Neoprene |
| | T | Buna-N-XS |
| 8 | | Valve Seat Material |
| | C | Ceramic |
| | D | Tungsten Carbide |
| | H | 17-4 PH Stainless Steel |
| | S | 316 Stainless Steel |
| | T | Hastelloy® C |
| | X | Not included in Diaphragm Kit |
| 9 | | Valve Material |
| | C | Ceramic |
| | D | Tungsten Carbide |
| | 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 |
| | Y | Nylon (Zytel) |
| | X | Not included in Diaphragm Kit |

Kit Contents

| Designator | Part Number* | Description | Qty | K | D | V | Kit |
|------------|--------------|------------------------|-----|---|---|---|-----|
| | D10-018-___ | Diaphragm | 3 | • | • | | |
| | D10-047-___ | O-ring, Follower | 3 | • | • | | |
| | D10-109-___ | 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 | 6 | • | | • | |
| | D10-023-___ | Retainer, Valve spring | 6 | • | | • | |
| | D10-125-___ | Washer, Dampening | 6 | • | | • | |
| | A01-113-3400 | Threadlocker | 1 | • | • | | |

* Last four digits of part numbers with - ___ refer to specific material of construction.



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