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Form No. 101938

## Parts List for:

PA9-HLIFT

AIR/HYDRAULIC PUMP
tUBE STYLE


| Item No. | Part No. | No. Req'd | Description |
| :---: | :---: | :---: | :---: |
| 1 | 252298 | 1 | Plug, Filler |
| 2 | 10807 | 3 | Screw, Socket HD (1/4-20 x 1/2; Torque to 60/80 in. lbs.) |
| 3 | *252303 | 2 | Clamp |
| 4 | 65695 | 1 | Housing, Pump |
| 5 | *421332 | . 50 | Bladder (Cut to 8.280 / 8.220 Lg.) |
| 6 | 65542 | 1 | Body, Pump |
| 7 | 351394 | 1 | Screw, Valve (1/2-20 x 25/32 Lg.; Torque to 380/400 in. Ibs.) |
| 8 | *14874 | 1 | Washer, Copper (.70 x .50) |
| 9 | *252373 | 1 | U-cup \& Backup (.375) |
| 10 | *13938 | 1 | Spring (1.45 OD $\times 4.4 \times .12 \mathrm{WS}$ ) |
| 11 | *351801 | 1 | Retainer (Note: See "INSTRUCTIONS FOR RETAINER REPLACEMENT" on back sheet 2 of 2.) |
| 12 | *252371 | 1 | Bumper |
| 13 | 252370 | 1 | Guide, Spring |
| 14 | *14265 | 2 | Ring, Piston ( $2.77 \times 2.54$ ) |
| 15 | *251835 | 2 | O-ring (2.50 $\times 2.31$ Nitrile) |
| 16 | *28239 | 1 | Gasket |
| 17 | 33822 | 1 | Casting, Piston End Plate |
| 18 | *28183 | 1 | Poppet, Piston |
| 19 | *205679 | 1 | Spring (. 49 OD $\times .92 \times .04 \mathrm{WS}$ ) |
| 20 | 205674 | 1 | Screw, Flat HD (8-32 $\times 3 / 8$; Torque to 12/18 in. Ibs.) |
| 21 | 211054 | 3 | Screw, Socket HD ( $10-24 \times 1 / 2$; Torque to 50/55 in. Ibs.) |
| 22 | 10241 | 3 | Washer, Lock (. $33 \times$.20) |
| 23 | 52390 | 1 | Body, Piston |
| 24 | 305475 | 1 | Stem, Exhaust Valve |
| 25 | *211052 | 1 | O-ring (. $90 \times .70$ Nitrile) |
| 26 | *12692 | 1 | Spring (. 18 OD $\times 1.70 \times .02 \mathrm{WS}$ ) |
| 27 | 58901 | 1 | Head, Rear |
| 28 | 10008 | 3 | Screw, Socket HD (1/4-20 $\times$ 3/4.; Torque to 120/140 in. lbs.) |
| 29 | *252349 | 1 | O-ring (2.75 $\times 2.65$ Nitrile) |
| 30 | 252372 | 1 | Piston (3/8") |
| 31 | *10444 | 1 | Spring (. 25 OD $\times .41 \times .02 \mathrm{WS}$ ) |
| 32 | *10375 | 1 | Ball (1/4" Dia., Steel; Seat at assembly) |
| 33 | *10378 | 1 | Ball (3/8" Dia., Steel; Seat at assembly) |
| 34 | 11084 | 1 | Fitting, Plug (1/16 NPTF) |
| 35 | 21278-35 | 1 | Valve, Relief (Set at 3,500/3,800 PSI) |
| 36 | 351409 | 1 | Cap, End Filler |
| 37 | *16684 | 1 | O-ring ( $1.18 \times 1.00$ Nitrile) |
| 38 | 253479 | 1 | Spring ( $.36 \mathrm{OD} \times 1.00 \times .05 \mathrm{WS}$ ) |
| 39 | *10266 | 1 | O-ring (. $37 \times .25$ Nitrile; Apply a small amount of grease at assembly.) |
| 40 | 351345 | 1 | Stem, Valve |
| 41 | *12522 | 1 | O-ring (. $37 \times 25$ Urethane; Apply a small amount of grease at assembly.) |
| 42 | 251486 | 1 | Screw, Button Hd (10-24 x 1/2; Torque to 45/55 in. Ibs.) |
| 43 | 14319 | 1 | Washer, Special (.31 x .19) |
| 44 | 14794 | 1 | Cap, Plastic |
| 45 | 250258 | 1 | Screw (1/2-13 x 1/2 Lg.; Apply Loctite 277 or equiv. Cure one hour before testing.) |
| 46 | 15279 | 1 | O-ring ( $.50 \times .37$ Nitrile) |

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300981.

## TOP \& SIDE VIEWS





Sheet No. 2 of 2
Rev. 5
Date: 12 Jan. 2000

| Item No. | Part No. | No. Req'd | Description |
| :---: | :---: | :---: | :---: |
| 1 | 253293 | 1 | Decal, Raise \& Lower |
| 2 | 351368 | 1 | Knob |
| 3 | *252300 | 2 | Muffler |
| 4 | 351346 | 1 | Knob |
| 5 | 14350 | 1 | Decal, Caution |
| 6 | 222142 | 1 | Decal, Warning |
| 7 | *12391 | 1 | Washer, Backup (.69 x .56) |
| 8 | *11284 | 2 | O-ring (. $68 \times .56$ Nitrile) |
| 9 | 351375 | 1 | Fitting, Swivel |
| 10 | *10300 | 2 | O-ring (. $62 \times .46$ Nitrile) |
| 11 | 11902 | 1 | Ring, Retain Ext (0.57 x .050) |
| 12 | 351450 | 1 | Block, Swivel |
| 13 | 16232 | 1 | Fitting, Plug (3/8 NPTF) |
| 14 | 214596 | 1 | Disc, Filter |
| 15 | 12201 | 1 | Ring, Retain Int (0.18 x .010) |
| 16 | 253643 | 1 | Retainer, Poppet |


| Item No. | Part <br> No. | No. <br> Req'd | Description |
| :---: | :---: | :---: | :---: |
| 17 | 252191 | 1 | Poppet |
| 18 | 10796 | 1 | Pin, Dowel (.13 x .50) |
| 19 | 252535 | 1 | Pin, Release |
| 20 | 253223 | 1 | Spring (. 49 OD $\times 1.00 \times 07 \mathrm{WS}$ ) |
| 21 | 351413 | 1 | Cam, Pivot (Torque to 280/300 in. lbs.) |
| 22 | *10265 | 1 | O-ring (. $31 \times .18$ Nitrile) |
| 23 | *10374 | 1 | Ball (7/32" Dia., Steel; Seat at assembly) |
| 24 | 252856 | 1 | Guide, Ball |
| 25 | *14282 | 1 | Spring (. 18 OD x . $50 \times .02 \mathrm{WS}$ ) |
| 26 | 252445 | 1 | Guide, Spring |
| 27 | 253663 | 2 | Washer |
|  |  |  | To Drawing |

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300981.

## INSTRUCTIONS FOR RETAINER REPLACEMENT

Your pump's retainer is locked into place by one of the two following methods. Determine which method was used on your pump's retainer, then follow the appropriate steps to remove the old and install and stake the new.

## Method 1 - Retainer shows no sign of stake marks

1. This retainer has been locked in place with a Loctite product. To replace it, a moderate amount of heat needs to be applied to the cylinder nut (in the area of the retainer) to soften the existing Loctite allowing it to be removed.
2. Install the new retainer into the cylinder nut and torque to $80 / 100 \mathrm{in}$. lbs. Note: Do not use a Loctite product this time but stake the new retainer in place according to instructions in Step 3.
3. To lock retainer into place, use a center punch positioned in the seam between the retainer and the cylinder nut and stake the new retainer in two places approximately $180^{\circ}$ apart.

## Method 2 - Retainer has two stake marks in the seam between the retainer and the cylinder nut

1. For replacement of this retainer, the stake marks must be removed. Using a $1 / 8$ " or larger diameter drill bit, remove the existing stakes by drilling a short distance into the stake marks. Remove the retainer.
2. Install the new retainer into the cylinder nut and torque to $80 / 100 \mathrm{in}$. Ibs.
3. To lock retainer into place, use a center punch positioned in the seam between the retainer and the cylinder nut and stake the new retainer in two places approximately $180^{\circ}$ apart.

NOTE: Do not stake in the old stake marks.

