

# EXPLODED VIEW & PARTS LISTING

## Air Operated Double Diaphragm Pump

Model: NDP-40BF

Cast Iron Series

(rubber fitted)



### To Purchase:

☎ 800-990-7867

✉ sales@yamadapump.com

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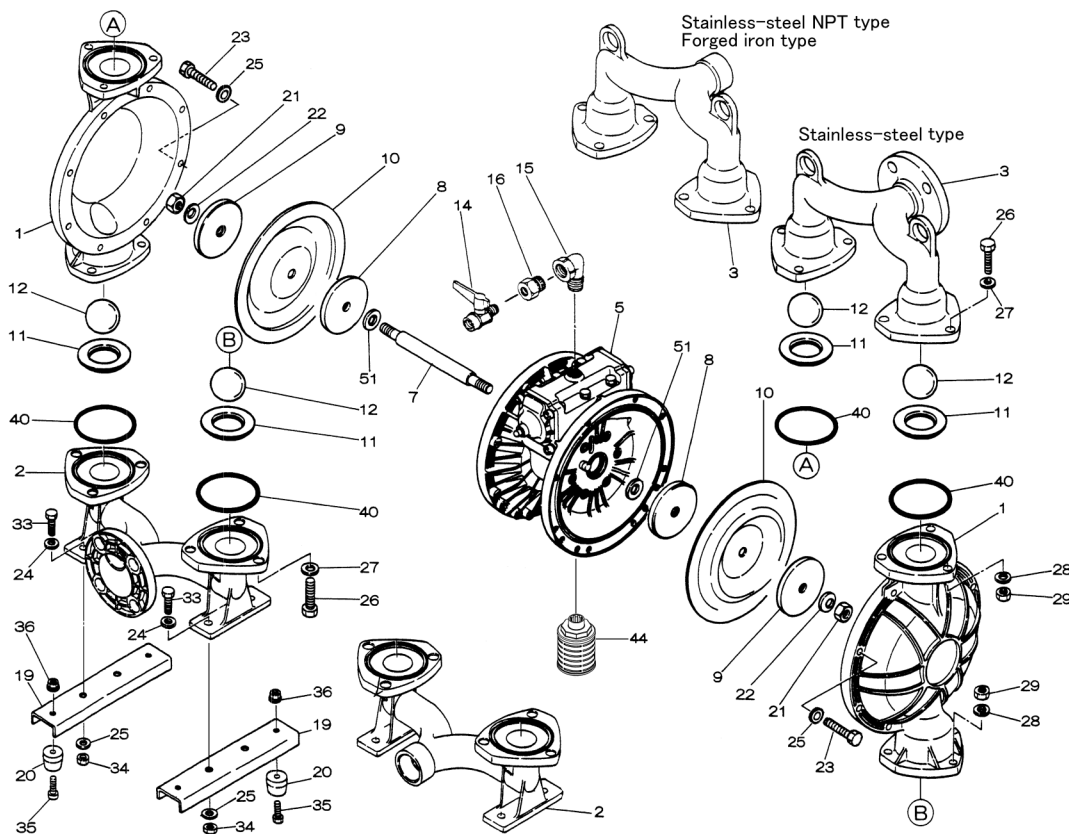
### More Information:

▶ YouTube: @yamadapump

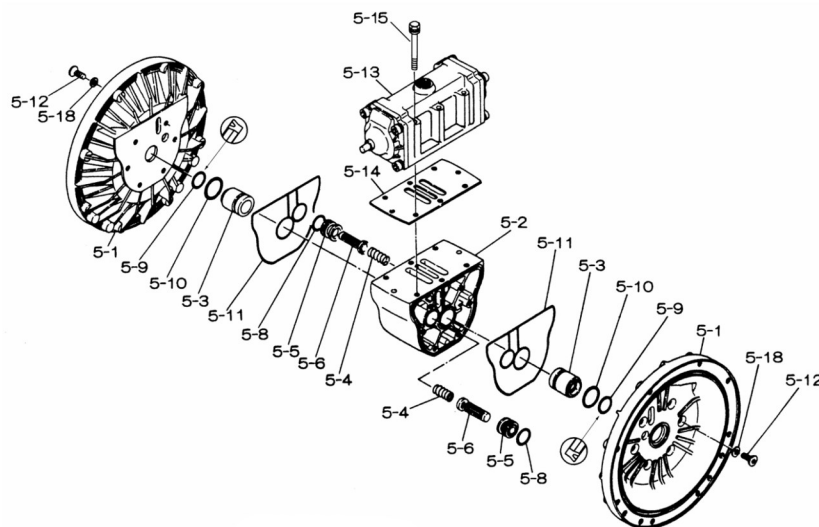
🌐 yamadapump.com

Data Sheets | CAD Drawings | Manuals  
Literature | BOM | Performance Curves

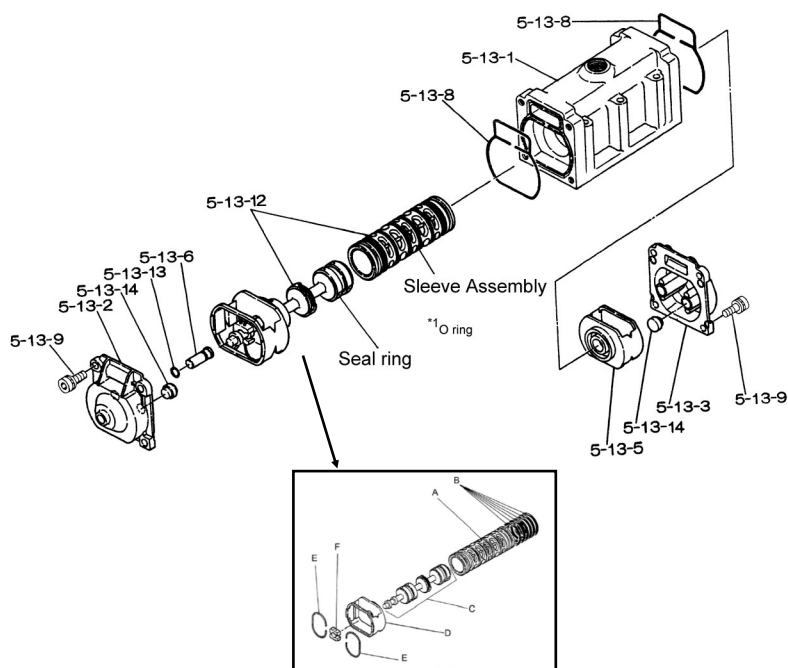
### Trial Program



■ Body Assembly

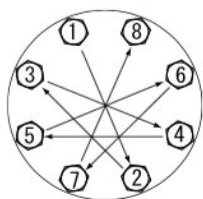


■ Valve Body Assembly



|          | NDP-40BFC | NDP-40BFE | NDP-40BFN | NDP-40BFH | NDP-40BFS | NDP-40BFV |                        |      |         |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|------|---------|
|          | 852873    | 852874    | 852869    | 852870    | 852875    | 852872    |                        |      |         |
| REF. NO. | PART NO.  | PART NO.  | PART NO.  | PART NO.  | PART NO.  | PART NO.  | DESCRIPTION            | QTY. | REORDER |
| 1        | 713156    | 713156    | 713156    | 713156    | 713156    | 713156    | OUT CHAMBER 40FC       | 2    |         |
| 2        | 713168    | 713168    | 713168    | 713168    | 713168    | 713168    | IN MANIFOLD 40FC       | 1    |         |
| 3        | 713165    | 713165    | 713165    | 713165    | 713165    | 713165    | OUT MANIFOLD 40FC      | 1    |         |
| 5        | 803111    | 803111    | 803111    | 803111    | 803111    | 803111    | BODY ASSY.             | 1    |         |
| 5- 1     | 711933    | 711933    | 711933    | 711933    | 711933    | 711933    | AIR CHAMBER 40         | 2    |         |
| 5- 2     | 711936    | 711936    | 711936    | 711936    | 711936    | 711936    | BODY                   | 1    |         |
| 5- 3     | 780325    | 780325    | 780325    | 780325    | 780325    | 780325    | THROAT BEARING         | 2    |         |
| 5- 4     | 711937    | 711937    | 711937    | 711937    | 711937    | 711937    | PILOT VALVE SPRING     | 2    |         |
| 5- 5     | 771740    | 771740    | 771740    | 771740    | 771740    | 771740    | PILOT VALVE SEAT       | 2    |         |
| 5- 6     | 832162    | 832162    | 832162    | 832162    | 832162    | 832162    | PILOT VALVE ASSY       | 2    |         |
| 5- 8     | 640020    | 640020    | 640020    | 640020    | 640020    | 640020    | O-RING                 | 2    |         |
| 5- 9     | 685444    | 685444    | 685444    | 685444    | 685444    | 685444    | V-PACKING              | 2    |         |
| 5-10     | 640029    | 640029    | 640029    | 640029    | 640029    | 640029    | O-RING                 | 2    |         |
| 5-11     | 771742    | 771742    | 771742    | 771742    | 771742    | 771742    | GASKET 40/50/80        | 2    |         |
| 5-12     | 683812    | 683812    | 683812    | 683812    | 683812    | 683812    | M8X1.25X20 FLAT SOCKET | 12   |         |
| 5-13     | 802971    | 802971    | 802971    | 802971    | 802971    | 802971    | VALVE BODY ASSY.       | 1    |         |
| 5-13- 1  | 711931    | 711931    | 711931    | 711931    | 711931    | 711931    | VALVE BODY 40/50/80    | 1    |         |
| 5-13- 2  | 580999    | 580999    | 580999    | 580999    | 580999    | 580999    | CAP A 40/50/80         | 1    |         |
| 5-13- 3  | 581000    | 581000    | 581000    | 581000    | 581000    | 581000    | CAP B 40/50/80         | 1    |         |
| 5-13- 5  | 771735    | 771735    | 771735    | 771735    | 771735    | 771735    | SPRING RETAINER        | 1    |         |
| 5-13- 6  | 712976    | 712976    | 712976    | 712976    | 712976    | 712976    | RESET BUTTON           | 1    |         |
| 5-13- 8  | 771738    | 771738    | 771738    | 771738    | 771738    | 771738    | GASKET 40/50/80 SPOOL  | 2    |         |
| 5-13- 9  | 685036    | 685036    | 685036    | 685036    | 685036    | 685036    | SOCKET BOLT            | 8    |         |
| 5-13-12  | 805084    | 805084    | 805084    | 805084    | 805084    | 805084    | C SPOOL ASSY.          | 1    |         |
| A        | 803675    | 803675    | 803675    | 803675    | 803675    | 803675    | SLEEVE ASSY.           | 1    |         |
| B        | 640036    | 640036    | 640036    | 640036    | 640036    | 640036    | O-RING                 | 6    |         |
| C        | 805085    | 805085    | 805085    | 805085    | 805085    | 805085    | SPOOL ASSY.            | 1    |         |
| D        | 771735    | 771735    | 771735    | 771735    | 771735    | 771735    | SPRING RETAINER        | 1    |         |
| E        | 711932    | 711932    | 711932    | 711932    | 711932    | 711932    | C-SPRING               | 2    |         |
| F        | 771734    | 771734    | 771734    | 771734    | 771734    | 771734    | BLOCK                  | 1    |         |
| 5-13-13  | 640005    | 640005    | 640005    | 640005    | 640005    | 640005    | O-RING                 | 1    |         |
| 5-13-14  | 684128    | 684128    | 684128    | 684128    | 684128    | 684128    | CUSHION                | 4    |         |
| 5-14     | 771712    | 771712    | 771712    | 771712    | 771712    | 771712    | GASKET FOR VALVE BODY  | 1    |         |
| 5-15     | 684240    | 684240    | 684240    | 684240    | 684240    | 684240    | BOLT W/WASHER          | 6    |         |
| 5-18     | 684987    | 684987    | 684987    | 684987    | 684987    | 684987    | WASHER                 | 12   |         |
| 7        | 711900    | 711900    | 711900    | 711900    | 711900    | 711900    | CENTER ROD 40/50       | 1    |         |
| 8        | 711902    | 711902    | 711902    | 711902    | 711902    | 711902    | CENTER DISK 40-R       | 2    |         |
| 9        | 713369    | 713369    | 713369    | 713369    | 713369    | 713369    | CENTER DISK 40FC       | 2    |         |
| 10       | 771853    | 771854    | 771700    | 771701    | 771975    | 771799    | DIAPHRAGM 40           | 2    |         |
| 11       | 771956    | 771921    | 771994    | 771793    | 772003    | 771997    | VALVE SEAT 40          | 4    |         |
| 12       | 770550    | 770593    | 770584    | 773142    | 773172    | 770602    | BALL 40                | 4    |         |

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|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------|------|---------|
|          | 852873    | 852874    | 852869    | 852870    | 852875    | 852872    |                       |      |         |
| REF. NO. | PART NO.  | PART NO.  | PART NO.  | PART NO.  | PART NO.  | PART NO.  | DESCRIPTION           | QTY. | REORDER |
| 14       | 686972    | 686972    | 686972    | 686972    | 686972    | 686972    | BALL VALVE 1/2"       | 1    |         |
| 15       | 682523    | 682523    | 682523    | 682523    | 682523    | 682523    | ELBOW STRT 3/4" 90D   | 1    |         |
| 16       | 684339    | 684339    | 684339    | 684339    | 684339    | 684339    | BUSHING 40            | 1    |         |
| 19       | 711911    | 711911    | 711911    | 711911    | 711911    | 711911    | BASE 40               | 2    |         |
| 20       | 771402    | 771402    | 771402    | 771402    | 771402    | 771402    | FOOT RUBBER           | 4    |         |
| 21       | 683408    | 683408    | 683408    | 683408    | 683408    | 706128    | M16X1.50 NYLON NUT SS | 2    |         |
| 22       | 682740    | 682740    | 682740    | 682740    | 682740    | 682740    | WASHER M16 SS CONICAL | 2    |         |
| 23       | 686160    | 686160    | 686160    | 686160    | 686160    | 686160    | BOLT                  | 16   |         |
| 24       | 631014    | 631014    | 631014    | 631014    | 631014    | 631014    | WASHER FLAT M10 ZINC  | 4    |         |
| 25       | 631917    | 631917    | 631917    | 631917    | 631917    | 631917    | WAVE WASHER           | 20   |         |
| 26       | 611202    | 611202    | 611202    | 611202    | 611202    | 611202    | BOLT                  | 12   |         |
| 27       | 631015    | 631015    | 631015    | 631015    | 631015    | 631015    | FLAT WASHER           | 12   |         |
| 28       | 631918    | 631918    | 631918    | 631918    | 631918    | 631918    | WAVE WASHER           | 12   |         |
| 29       | 627014    | 627014    | 627014    | 627014    | 627014    | 627014    | NUT M12X1.75 CT ZINC  | 12   |         |
| 33       | 611175    | 611175    | 611175    | 611175    | 611175    | 611175    | BOLT                  | 4    |         |
| 34       | 627013    | 627013    | 627013    | 627013    | 627013    | 627013    | NUT                   | 4    |         |
| 35       | 611149    | 611149    | 611149    | 611149    | 611149    | 611149    | BOLT                  | 4    |         |
| 36       | 682276    | 682276    | 682276    | 682276    | 682276    | 682276    | NUT W/FLANGE          | 4    |         |
| 40       | 640065    | 683999    | 640065    | 640065    | 683999    | 642065    | O-RING                | 4    |         |
| 44       | 804764    | 804764    | 804764    | 804764    | 804764    | 804764    | SILENCER ASSY         | 1    |         |
| 51       | 770582    | 770582    | 770582    | 770582    | 770582    | 770582    | CUSHION               | 2    |         |
| KIT      | K40-MC    | K40-ME    | K40-MN    | K40-MH    | K40-MS    | K40-MV    | LIQUID END KIT        |      |         |
| KIT      | K45-AM    |           |           |           |           |           | AIR MOTOR KIT         |      |         |

**Tightening torque for center rod and out chambers.**

Center Rod 43 ft-lbf {60 N-m}

Out Chambers 29 ft-lbf {40 N-m}

**Tightening torque for manifold retainer bolts.**

40BFC/N/E/H/S/V 18 ft-lbf {25 N-m}

**General Tools:**

- Socket wrenches - 13mm, 17mm, 19, mm 24mm
- Hexagonal box wrench - 5mm, 6mm
- Small crowbars - 2
- Open-end wrenches - 24mm
- Plastic hammer

**Special Tools (sold separately):**

- Sleeve remover (713180)

**Miscellaneous:**

- Assembly Oil - turbine oil none additional class 1 (equivalent to ISO VG32 grade)
- Nuts - M16 x 1.5
- Thread locker
- Urea grease grade (NLGI) No. 2

**Customer Notes**

Model #: \_\_\_\_\_  
 Description: \_\_\_\_\_  
 Serial #: \_\_\_\_\_  
 Date Installed: \_\_\_\_\_  
 Department Location: \_\_\_\_\_  
 Tag/Project: \_\_\_\_\_