

# EXPLODED VIEW & PARTS LISTING

## Air Operated Double Diaphragm Pump

Model: NDP-80BP  
Polypropylene Series



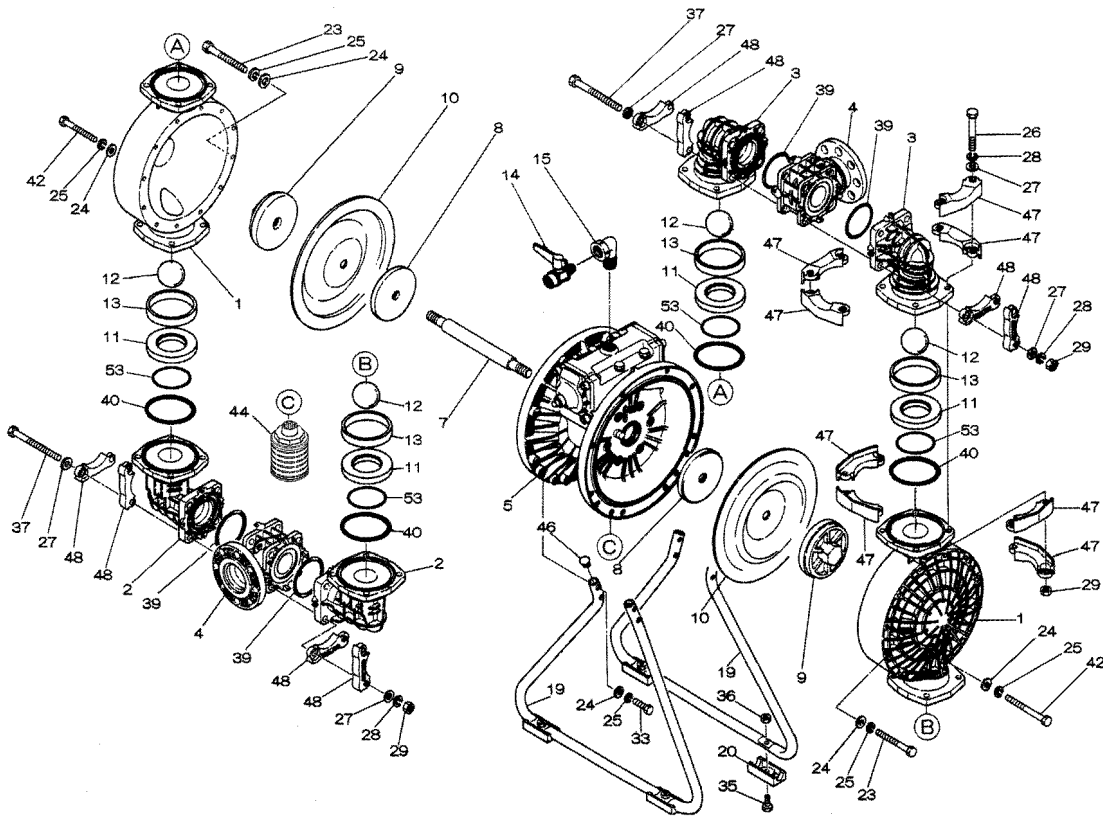
### To Purchase:

- ☎ 800-990-7867
- ✉ sales@yamadapump.com
- 📍 Find My Rep

### More Information:

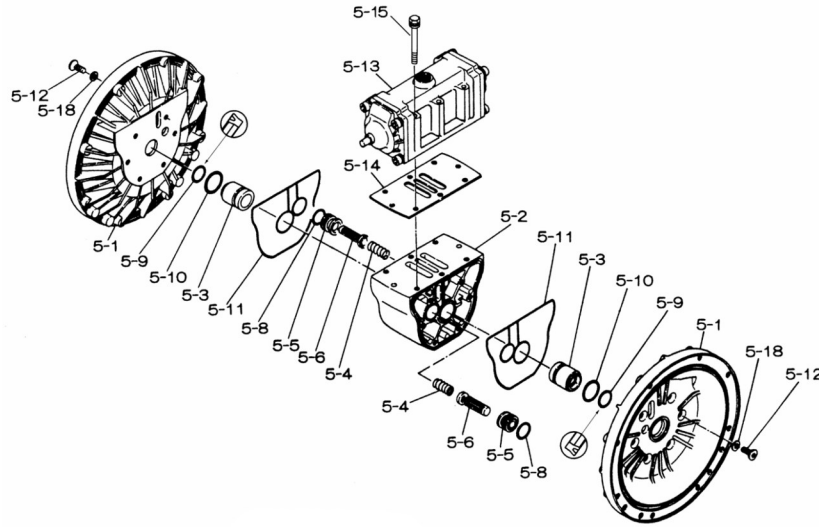
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- Data Sheets | CAD Drawings | Manuals Literature | BOM | Performance Curves*

### Trial Program

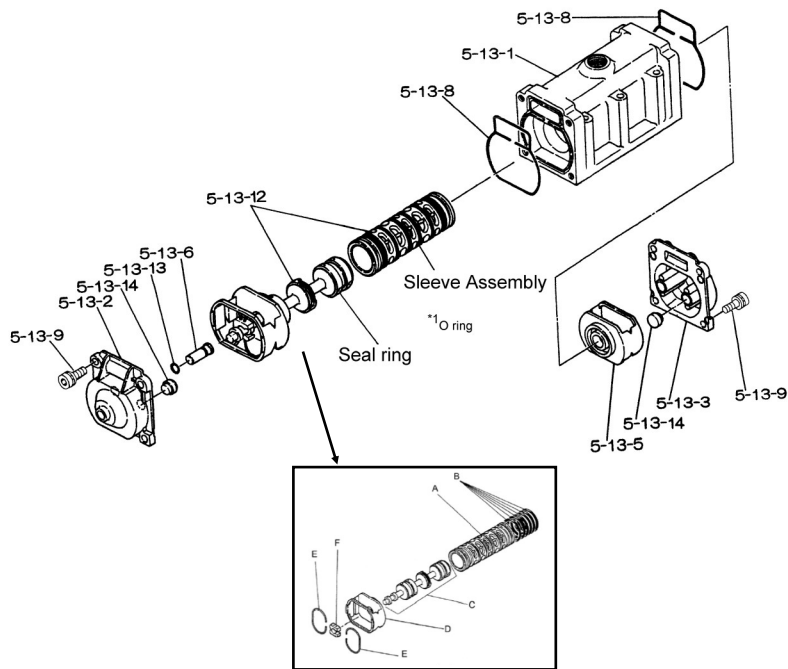


Air Operated Double Diaphragm Pump

■Body Assembly



■Valve Body Assembly

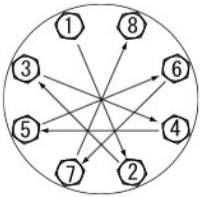


Air Operated Double Diaphragm Pump

|          | NDP-80BPC | NDP-80BPN | NDP-80BPE | NDP-80BPH | NDP-80BPS | NDP-80BPV |                    |      |         |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------|------|---------|
|          | 852433    | 852244    | 852434    | 852245    | 852727    | 852308    |                    |      |         |
| REF. No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | DESCRIPTION        | QTY. | REORDER |
| 1        | 780149    | 780149    | 780149    | 780149    | 780149    | 780149    | OUT CHAMBER        | 2    |         |
| 2        | 780246    | 780246    | 780246    | 780246    | 780246    | 780246    | IN MANIFOLD        | 2    |         |
| 3        | 780152    | 780152    | 780152    | 780152    | 780152    | 780152    | OUT MANIFOLD       | 2    |         |
| 4        | 780250    | 780250    | 780250    | 780250    | 780250    | 780250    | CENTER MANIFOLD    | 2    |         |
| 5        | 803113    | 803113    | 803113    | 803113    | 803113    | 803113    | CENTER BODY ASSY.  | 1    |         |
| 5- 1     | 711935    | 711935    | 711935    | 711935    | 711935    | 711935    | AIR CHAMBER        | 2    |         |
| 5- 2     | 711936    | 711936    | 711936    | 711936    | 711936    | 711936    | BODY               | 1    |         |
| 5- 3     | 772689    | 772689    | 772689    | 772689    | 772689    | 772689    | 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     | 832163    | 832163    | 832163    | 832163    | 832163    | 832163    | 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             | 2    |         |
| 5-12     | 683812    | 683812    | 683812    | 683812    | 683812    | 683812    | 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         | 1    |         |
| 5-13-2   | 580999    | 580999    | 580999    | 580999    | 580999    | 580999    | CAP A              | 1    |         |
| 5-13-3   | 581000    | 581000    | 581000    | 581000    | 581000    | 581000    | CAP B              | 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             | 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             | 1    |         |
| 5-15     | 684240    | 684240    | 684240    | 684240    | 684240    | 684240    | BOLT WWASHERS      | 6    |         |
| 5-18     | 684987    | 684987    | 684987    | 684987    | 684987    | 684987    | WASHER             | 12   |         |
| 7        | 711901    | 711901    | 711901    | 711901    | 711901    | 711901    | CENTER ROD         | 1    |         |
| 8        | 711906    | 711906    | 711906    | 711906    | 711906    | 711906    | CENTER DISC        | 2    |         |
| 9        | 780064    | 780064    | 780064    | 780064    | 780064    | 780064    | CENTER DISC        | 2    |         |
| 10       | 771857    | 771704    | 771858    | 771705    | 771977    | 771801    | DIAPHRAGM          | 2    |         |
| 11       | 772098    | 772098    | 772098    | 772098    | 772098    | 772098    | VALVE SEAT         | 4    |         |
| 12       | 770559    | 770587    | 770596    | 773144    | 773174    | 770605    | BALL               | 4    |         |
| 13       | 772099    | 772099    | 772099    | 772099    | 772099    | 772099    | VALVE SPACER       | 4    |         |
| 14       | 684322    | 684322    | 684322    | 684322    | 684322    | 684322    | BALL VALVE         | 1    |         |
| 15       | 682523    | 682523    | 682523    | 682523    | 682523    | 682523    | ELBOW              | 1    |         |
| 19       | 711927    | 711927    | 711927    | 711927    | 711927    | 711927    | STAND              | 2    |         |
| 20       | 771865    | 771865    | 771865    | 771865    | 771865    | 771865    | FOOT RUBBER        | 4    |         |
| 23       | 683543    | 683543    | 683543    | 683543    | 683543    | 683543    | BOLT               | 20   |         |

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|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------|---------|
|          | 852433    | 852244    | 852434    | 852245    | 852727    | 852308    |                |      |         |
| REF. No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | PARTS No. | DESCRIPTION    | QTY. | REORDER |
| 24       | 631330    | 631330    | 631330    | 631330    | 631330    | 631330    | FLAT WASHER    | 32   |         |
| 25       | 680257    | 680257    | 680257    | 680257    | 680257    | 680257    | SPRING WASHER  | 32   |         |
| 26       | 621213    | 621213    | 621213    | 621213    | 621213    | 621213    | BOLT           | 16   |         |
| 27       | 631331    | 631331    | 631331    | 631331    | 631331    | 631331    | WASHER         | 32   |         |
| 28       | 680607    | 680607    | 680607    | 680607    | 680607    | 680607    | SPRING WASHER  | 24   |         |
| 29       | 628014    | 628014    | 628014    | 628014    | 628014    | 628014    | NUT            | 24   |         |
| 33       | 621179    | 621179    | 621179    | 621179    | 621179    | 621179    | BOLT           | 8    |         |
| 35       | 621149    | 621149    | 621149    | 621149    | 621149    | 621149    | BOLT           | 4    |         |
| 36       | 683837    | 683837    | 683837    | 683837    | 683837    | 683837    | NUT W/FLANGE   | 4    |         |
| 37       | 683544    | 683544    | 683544    | 683544    | 683544    | 683544    | BOLT           | 8    |         |
| 39       | 640070    | 640070    | 684123    | 640070    | 684123    | 642070    | O-RING         | 4    |         |
| 40       | 640080    | 640080    | 684125    | 640080    | 684125    | 64280     | O-RING         | 4    |         |
| 42       | 683552    | 683552    | 683552    | 683552    | 683552    | 683552    | BOLT           | 4    |         |
| 44       | 804764    | 804764    | 804764    | 804764    | 804764    | 804764    | SILENCER ASSY. | 1    |         |
| 46       | 683641    | 683641    | 683641    | 683641    | 683641    | 683641    | CAP            | 4    |         |
| 47       | 771789    | 771789    | 771789    | 771789    | 771789    | 771789    | PROTECTOR A    | 32   |         |
| 48       | 771790    | 771790    | 771790    | 771790    | 771790    | 771790    | PROTECTOR B    | 24   |         |
| 53       | 640143    | 640143    | 685443    | 640143    | 685443    | 642143    | O-RING         | 4    |         |
| KIT      | K80-PC    | K80-PN    | K80-PE    | K80-PH    | K80-PS    | K80-PV    | LIQUID SIDE    |      |         |
| KIT      |           |           | K80-AM    |           |           |           | AIR MOTOR      |      |         |



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

- Center Rod 36 ft-lbf {50 N-m}
- Out Chambers 26 ft-lbf {35 N-m}

**Tightening torque for manifold retainer bolts.**

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

**General Tools:**

- Socket wrenches - 13mm, 17mm, 19mm
- Hexagonal box wrench - 5mm, 6mm
- Small crowbars - 2 (C/N/E/V)
- Plastic hammer

**Special Tools:**

- Disc remover (771868) used for removing the center disc. (sold separately)
- Sleeve remover (713180) used for removing the sleeve. (sold separately)

**Miscellaneous:**

- Assembly Oil - turbine oil none additional class 1 (equivalent to ISA VGA32 grade)
- Nuts - M16 x 1.5
- Thread locker
- Urea grease grade (NLGI) No. 2

| <b>Customer Notes</b> |       |
|-----------------------|-------|
| Model #:              | _____ |
| Description:          | _____ |
| Serial #:             | _____ |
| Date Installed:       | _____ |
| Department Location:  | _____ |
| Tag/Project:          | _____ |