

# EXPLODED VIEW & PARTS LISTING

## Air Operated Double Diaphragm Pump

Model: NDP-50BPT  
Model #: 852237  
(w/metal center body)



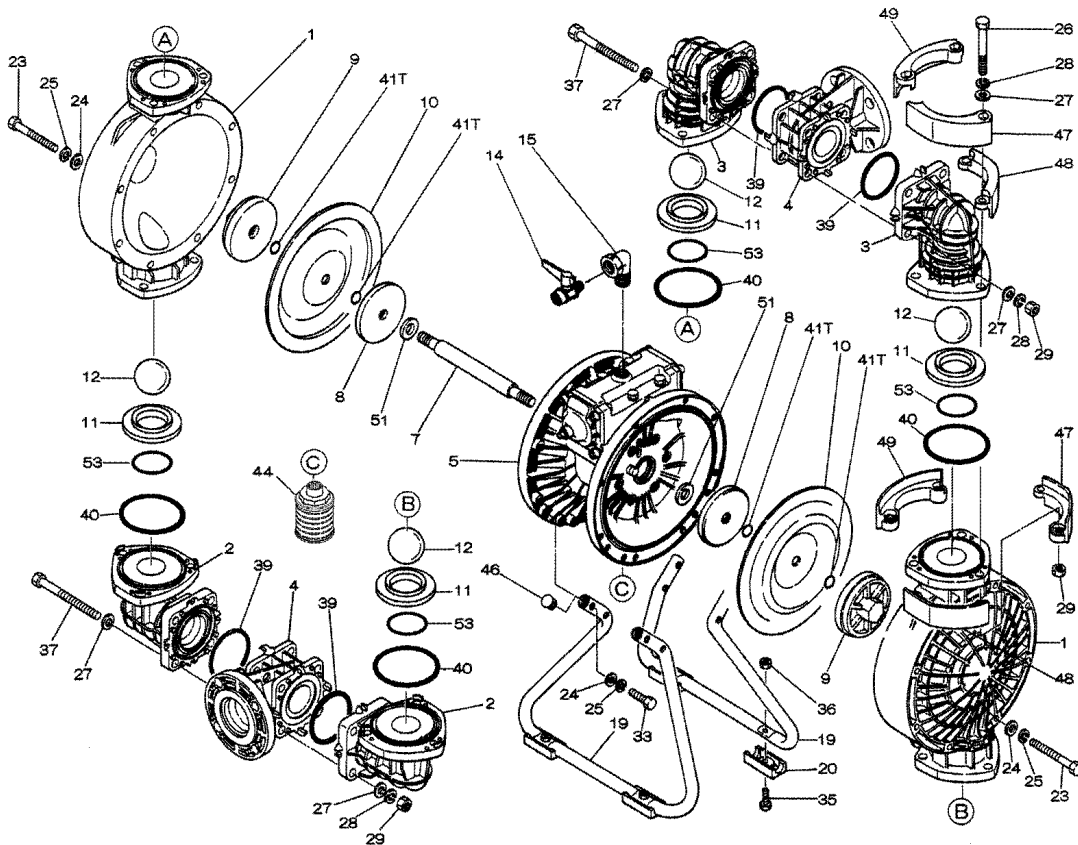
### To Purchase:

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

### More Information:

- YouTube: @yamadapump
- yamadapump.com
- Data Sheets | CAD Drawings | Manuals Literature | BOM | Performance Curves

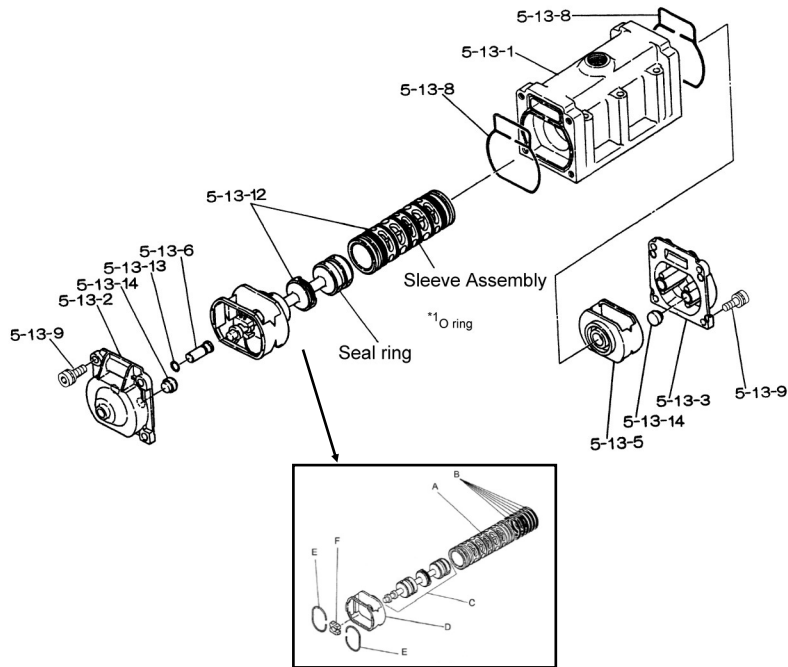
### Trial Program



■Body Assembly



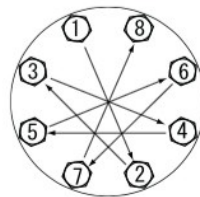
■Valve Body Assembly



Air Operated Double Diaphragm Pump (w/metal center body)

REF.NO.	PART NO.	DESCRIPTION	QTY	REORDER
1	780148	OUT CHAMBER 50PP-2	2	
2	780245	IN MANIFOLD 50PP	2	
3	780151	OUT MANIFOLD 50PP-2	2	
4	780249	CENTER MANIFOLD 50PP	2	
<b>5</b>	<b>803112</b>	<b>CENTER BODY ASSY 50</b>	<b>1</b>	
5- 1	711934	AIR CHAMBER 50	2	
5- 2	711936	BODY 40/50/80	1	
5- 3	772689	THROAT BEARING 40/50/8	2	
5- 4	711937	PILOT VALVE SPRING 40/	2	
5- 5	771740	PILOT VALVE SEAT 40/50	2	
5- 6	832162	PILOT VALVE ASSY 40/50	2	
5- 8	640020	O RING 21.82X3.53 (-21	2	
5- 9	685444	V-PACKING 40/50/80	2	
5-10	640029	O RING 29.75X3.53 (-21	2	
5-11	771742	GASKET 40/50/80	2	
5-12	683812	M8X1.25X20 FLAT SOCKET	12	
<b>5-13</b>	<b>802971</b>	<b>VALVE BODY ASSY</b>	<b>1</b>	
5-13- 1	711931	VALVE BODY 40/50/80	1	
5-13- 2	580999	CAP A 40/50/80 NEW	1	
5-13- 3	581000	CAP B 40/50/80 NEW	1	
5-13- 5	771735	SPRING RETAINER 40/50/	1	
5-13- 6	712976	RESET BUTTON 40/50/80	1	
5-13- 8	771738	GASKET 40/50/80 SPOOL	2	
5-13- 9	685036	SOCKET BOLT M8X20 W/ W	8	
<b>5-13-12</b>	<b>805084</b>	<b>C SPOOL ASSY 40/50/80</b>	<b>1</b>	
A	803675	SLEEVE ASSY.	1	
B	640036	O-RING	6	
C	805085	SPOOL ASSY.	1	
D	771735	SPRING RETAINER	1	
E	711932	C-SPRING	2	
F	771734	BLOCK	1	
5-13-13	640005	O RING 7.5MM X 2.0MM	1	
5-13-14	684128	CUSHION 40/50/80 CAP	4	
5-14	771712	GASKET FOR VALVE BODY	1	
5-15	684240	BOLT W/ WASHERS M8X85	6	
5-18	684987	WASHER 40/50/80 NEW	12	
7T	711939	CENTER ROD 40/50T	1	
8T	707822	CENTER DISK 50T INNER	2	
9T	780063	CENTER DISK 50PP-T	2	
10	770815	DIAPHRAGM (PTFE) 50	2	
11	772097	VALVE SEAT 50PP-2	4	
12	770693	BALL 50T -63MM PTFE	4	
14	684322	BALL VALVE 50/80 3/4"	1	
15	682523	ELBOW STRT 3/4" 90D 40	1	
19	711926	STAND 50PP	2	
20	771865	FOOT RUBBER 40/50/80 P	4	
23	686156	BOLT M10X1.50X105 HEX	16	

REF.NO.	PART NO.	DESCRIPTION	QTY	REORDER
24	631330	WASHER FLAT M10 SS	24	
25	680257	SPRING WASHER M10 SS D	24	
26	621213	BOLT M12X1.75X100 HEX	12	
27	631331	WASHER M12 SS FLAT	28	
28	680607	SPRING WASHER M12 SS	20	
29	628014	NUT M12X1.75 CT SS DIN	20	
33	621179	BOLT M10X1.5X40 HEX FT	8	
35	621149	BOLT M8X1.25X25 HET FT	4	
36	683837	NUT W/ FLANGE M8 X 1.2	4	
37	684592	BOLT M12 X 137 HEX HEA	8	
39	643064	O RING 84.6MM X 5.7MM	4	
40	643069	O RING 103 X6 M PTFE	4	
41T	643015	O RING 15.8MM X 2.4MM	4	
44	804764	SILENCER ASSY	1	
46	683641	CAP 40/50/80PP STAND	4	
47	771786	PROTECTOR A 50PP&PVDF	8	
48	771787	PROTECTOR B 50PP&PVDF	8	
49	771788	PROTECTOR C 50PP&PVDF	8	
53	643139	O RING PTFE	4	
KIT	K50-PT	LIQUID END KIT		
KIT	K45-AM	AIR MOTOR KIT		



**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.**  
 50BPT 18 ft-lbf {25 N-m}

**General Tools:**

- Socket wrenches - 13mm, 17mm, 19mm, 24mm
- Hexagonal box wrench - 5mm, 6mm
- Plastic hammer

**Special Tools (sold separately):**

- Sleeve remover (713180).
- PP wrench to remove the center disk (771868).

**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:	_____