

# EXPLODED VIEW & PARTS LISTING

## Air Operated Double Diaphragm Pump

Model: DP-50BS[x]-HD (XDP)  
Stainless Steel Series



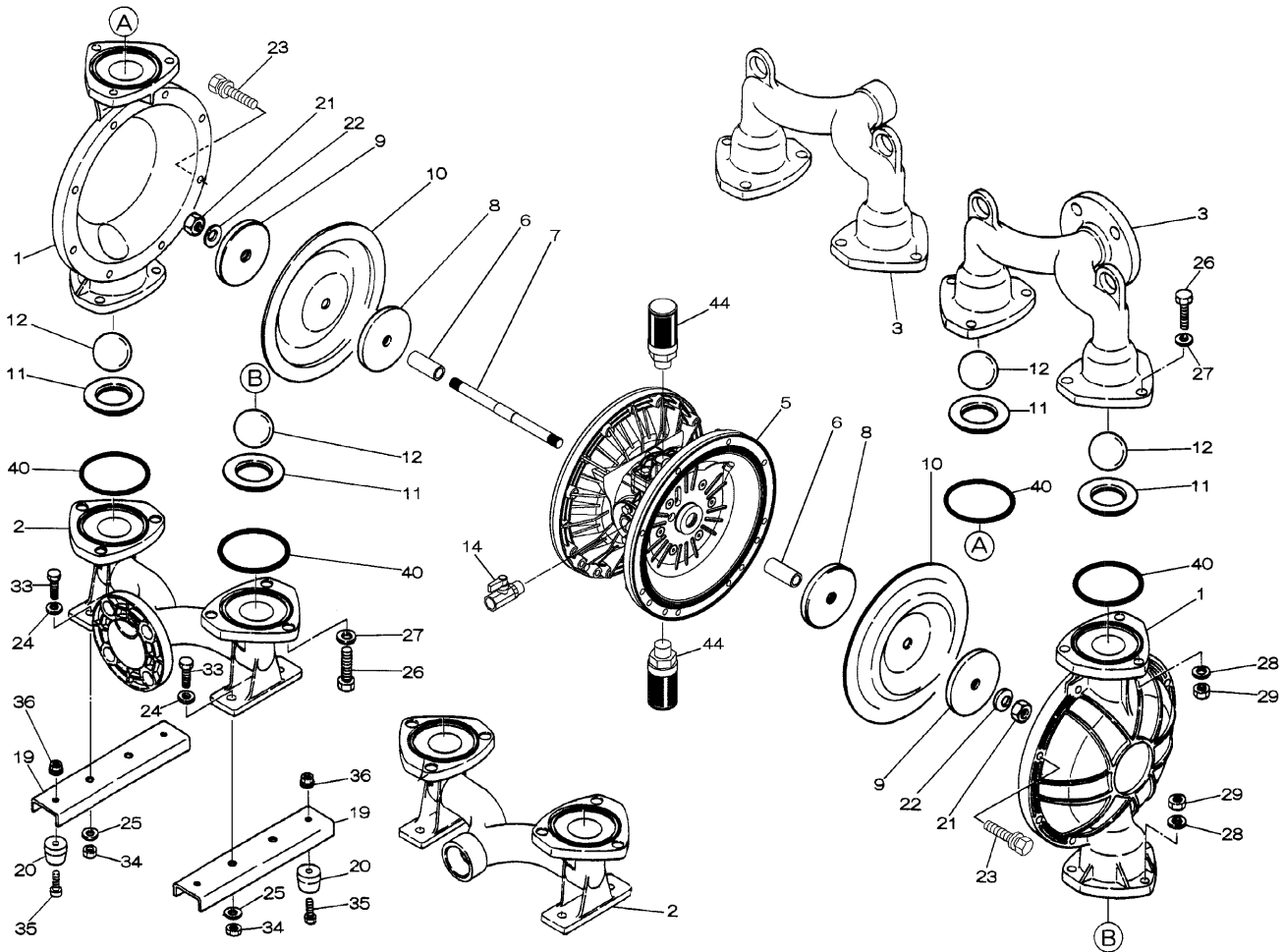
### To Purchase:

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

### More Information:

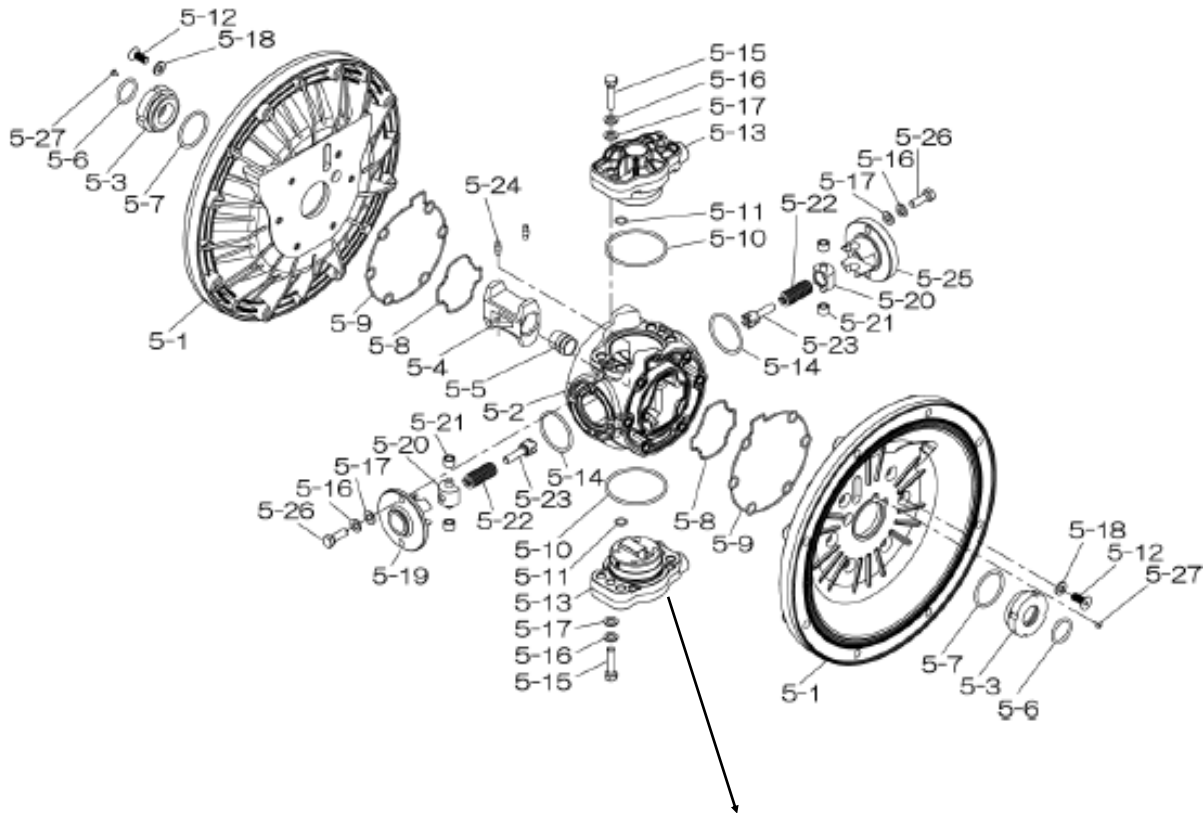
- ▶ YouTube: @yamadapump
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- Data Sheets | CAD Drawings | Manuals Literature | BOM | Performance Curves*

### Trial Program

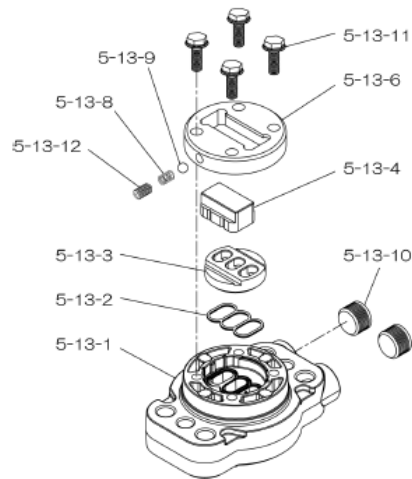


Air Operated Double Diaphragm Pump

804778 Center Body Assembly



804784 Valve Body Assembly



Air Operated Double Diaphragm Pump

	DP-50BSC-HD	DP-50BSN-HD	DP-50BSE-HD	DP-50BSV-HD	DP-50BSH-HD	DP-50BSS-HD			
NPT	854434	854435	854436	854437	854439	854440	**NPT PUMPS**		
FLANGE	852425	852232	852426	852304	854432	852718	**FLANGE PUMPS**		
REF. NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	DESCRIPTION	QTY.	REORDER
1	712932	712932	712932	712932	712932	712932	OUT CHAMBER	2	
2	712559	712559	712559	712559	712559	712559	IN MANIFOLD	1	
2	712557	712557	712557	712557	712557	712557	IN MANIFOLD	1	
3	712558	712558	712558	712558	712558	712558	OUT MANIFOLD	1	
3	712556	712556	712556	712556	712556	712556	OUT MANIFOLD	1	
5	804778	804778	804778	804778	804778	804778	CENTER BODY ASSY	1	
5-1	716247	716247	716247	716247	716247	716247	AIR CHAMBER	2	
5-2	716256	716256	716256	716256	716256	716256	BODY	1	
5-3	773048	773048	773048	773048	773048	773048	THROAT BEARING	2	
5-4	716214	716214	716214	716214	716214	716214	SHUTTLE	1	
5-5	773047	773047	773047	773047	773047	773047	CENTER ROD GUIDE	1	
5-6	640023	640023	640023	640023	640023	640023	O RING	2	
5-7	640133	640133	640133	640133	640133	640133	O RING	2	
5-8	773040	773040	773040	773040	773040	773040	GASKET	2	
5-9	773041	773041	773041	773041	773041	773041	GASKET	2	
5-10	640138	640138	640138	640138	640138	640138	O RING	2	
5-11	640007	640007	640007	640007	640007	640007	O RING	8	
5-12	683812	683812	683812	683812	683812	683812	FLAT SOCKET	12	
5-13	804784	804784	804784	804784	804784	804784	VALVE BODY ASSY	2	
5-13-1	715244	715244	715244	715244	715244	715244	VALVE BODY	1	
5-13-2	773042	773042	773042	773042	773042	773042	GASKET	2	
5-13-3	716246	716246	716246	716246	716246	716246	SEAT	1	
5-13-4	773425	773425	773425	773425	773425	773425	BLOCK	1	
5-13-6	773426	773426	773426	773426	773426	773426	GUIDE PLATE	1	
5-13-8	706612	706612	706612	706612	706612	706612	SPRING INK	1	
5-13-9	686271	686271	686271	686271	686271	686271	BALL	1	
5-13-10	772934	772934	772934	772934	772934	772934	PLUG	2	
5-13-11	602300	602300	602300	602300	602300	602300	TAPPING BOLT	4	
5-13-12	610025	610025	610025	610025	610025	610025	HEX. SOCKET HEAD SCREW	1	
5-14	640134	640134	640134	640134	640134	640134	O RING	2	
5-15	611153	611153	611153	611153	611153	611153	BOLT	4	
5-16	631420	631420	631420	631420	631420	631420	SPRING WASHER	8	
5-17	631013	631013	631013	631013	631013	631013	WASHER FLAT	8	
5-18	684987	684987	684987	684987	684987	684987	WASHER	12	
5-19	716249	716249	716249	716249	716249	716249	RETAINER	1	
5-20	613620	613620	613620	613620	613620	613620	SPRING GUIDE	2	
5-21	773067	773067	773067	773067	773067	773067	BUSH	4	
5-22	684537	684537	684537	684537	684537	684537	SPRING	2	
5-23	714446	714446	714446	714446	714446	714446	TRIP ARM	2	
5-24	700231	700231	700231	700231	700231	700231	PIN	2	
5-25	716216	716216	716216	716216	716216	716216	RETAINER	1	
5-26	611149	611149	611149	611149	611149	611149	BOLT	4	
5-27	686337	686337	686337	686337	686337	686337	TAPPING SCREW	2	
6	716219	716219	716219	716219	716219	716219	CENTER BUSH	2	
7	716218	716218	716218	716218	716218	716218	CENTER ROD	1	
8	711904	711904	711904	711904	711904	711904	CENTER DISK	2	
9	711905	711905	711905	711905	711905	711905	CENTER DISK	2	
10	771855	771702	771856	771800	771703	771976	DIAPHRAGM	2	
11	771957	771995	771949	771987	771794	772004	VALVE SEAT	4	
12	770627	770630	770633	770636	773143	773173	BALL	4	
14	686974	686974	686974	686974	686974	686974	BALL VALVE	1	
19	711928	711928	711928	711928	711928	711928	BASE	2	
20	771402	771402	771402	771402	771402	771402	FOOT RUBBER	4	

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REF. NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	DESCRIPTION		REORDER
21	683408	683408	683408	706128	683408	683408	NYLON NUT	2	
22	682740	682740	682740	682740	682740	682740	WASHER	2	
23	621180	621180	621180	621180	621180	621180	BOLT	16	
24	631174	631174	631174	631174	631174	631174	WASHER FLAT	4	
25	631937	631937	631937	631937	631937	631937	WAVE WASHER	20	
26	621202	621202	621202	621202	621202	621202	BOLT	12	
27	631175	631175	631175	631175	631175	631175	WASHER FLAT	12	
28	631938	631938	631938	631938	631938	631938	WAVE WASHER	12	
29	628014	628014	628014	628014	628014	628014	NUT	12	
33	621175	621175	621175	621175	621175	621175	BOLT	4	
34	628013	628013	628013	628013	628013	628013	NUT	4	
35	611149	611149	611149	611149	611149	611149	BOLT	4	
36	682276	682276	682276	682276	682276	682276	NUT W/FLANGE	4	
40	640069	640069	684122	642069	640069	684122	O RING	4	
44	804697	804697	804697	804697	804697	804697	MUFFLER	2	
KIT	K50-MC	K50-MN	K50-ME	K50-MV	K50-MH	K50-MS	LIQUID SIDE KIT		
KIT	K45-AM-DP-HD						AIR MOTOR KIT		

General Tools:

- Socket wrench - 24mm
- Hexagonal box wrench - 5mm, 6mm
- Small crowbars - 2 (B\_C, B\_N, B\_E, B\_V)
- Open-end wrenches - 19mm, 24mm
- Phillips head screw driver

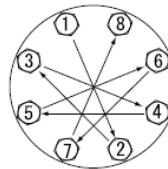
Special Tools:

- Socket (804129) for a guide to remove the throat bearing (sold separately)

Miscellaneous:

- Assembly Oil - Turbine oil class 1 - no additives (equivalent to ISO VG32 grade)
- Nuts - M16 x 1.5
- Thread locker
- Urea grease grade (NLGI) No. 2, Shell Alvania Grease S1

Torque Requirements:



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.

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

Customer Notes

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