

Well Service Pumps and Replacement Parts

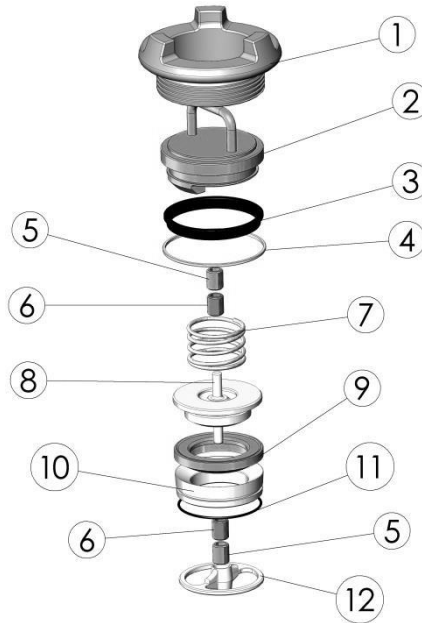
FLUID END ASSEMBLY

HT-400™



Shijiazhuang Dongli Petroleum Machinery Co.,Ltd

DISCHARGE VALVE SUBASSEMBLY

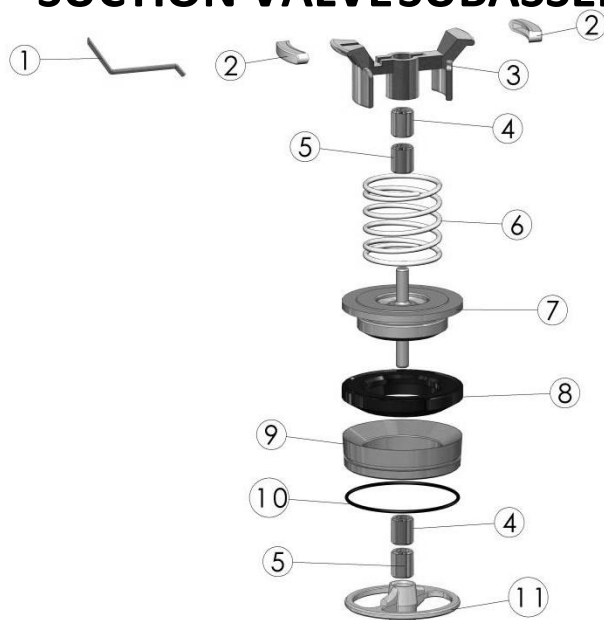


LOC	Part Description	QTY	Plunger Size/Part Number				
			3-3/8 In	4 In	4-1/2 In	5 In	6 In
1	RETAINER, COVER	3	316.2102.BOPM	316.2202.BOPM	316.2202.BOPM	316.2502.BOPM	316.2502.BOPM
2	COVER,DOUBLE GUIDE VALVE	3	316.2109.BOPM	316.23091.BOPM	316.23091.BOPM	316.24044.BOPM	316.24044.BOPM
3	GASKET, VALVE COVER	3	316.21052.BOPM	316.22052.BOPM	316.22052.BOPM	316.25052.BOPM	316.25052.BOPM
4	RING,SPACER, VALVE COVER	3	316.21051.BOPM	316.22051.BOPM	316.22051.BOPM	316.25051.BOPM	316.25051.BOPM
5	INSERT, 2 PC BUSHING, VALVE GUIDE	6	316.22004.BOPM	316.22004.BOPM	316.22004.BOPM	316.22006.BOPM	316.22006.BOPM
6	LINER, 2 PC BUSHING, VALVE GUIDE	6	316.22005.BOPM	316.22005.BOPM	316.22005.BOPM	316.22007.BOPM	316.22007.BOPM
7	SPRING, VALVE	3	316.2108.BOPM	316.2108.BOPM	316.2308.BOPM	316.27259.BOPM	316.27259.BOPM
8	VALVE, FRAC	3	316.21007.BOPM	316.21007.BOPM	316.22048.BOPM	316.24027.BOPM	316.24027.BOPM
9	INSERT, VALVE, STD, URETHANE	3	316.21006.BOPM	316.21006.BOPM	316.22049.BOPM	316.24037.BOPM	316.24037.BOPM
9	INSERT, VALVE, ACID, URETHANE	3	316.21048.BOPM	316.21048.BOPM	316.22046.BOPM	316.24026.BOPM	316.24026.BOPM
10	SEAT VALVE, TAPERED	3	316.21008.BOPM	316.21008.BOPM	316.22047.BOPM	316.24024.BOPM	316.24024.BOPM
11	O-RING	3	8.34037.BOPM	8.34037.BOPM	8.34041.BOPM	8.34045.BOPM	8.34045.BOPM
12	RETAINER, GUIDE BUSHING	3	316.21096.BOPM	316.21096.BOPM	316.23953.BOPM	316.24043.BOPM	316.24043.BOPM



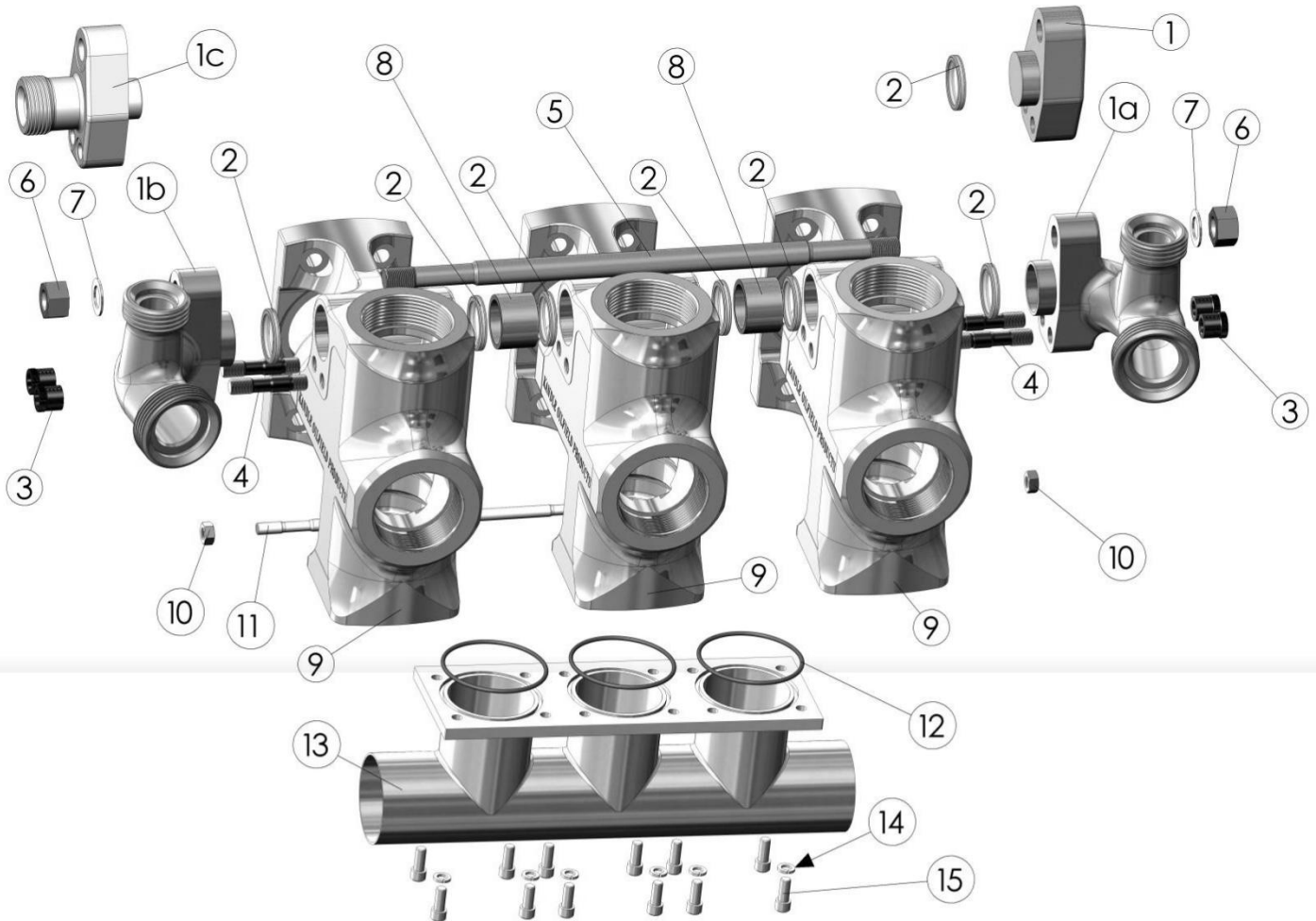
Well Service Pumps and Replacement Parts

SUCTION VALVE SUBASSEMBLY



LOC	Part Description	QTY	Plunger Size/Part Number				
			3-3/8 In	4 In	4-1/2 In	5 In	6 In
1	SPRING, LOCK, SUCTION STOP	3	316.2125.BOPM	316.2125.BOPM	316.22252.BOPM	316.22253.BOPM	316.22253.BOPM
2	BOOT, SUCTION AND STOP	6	316.25233.BOPM	316.25233.BOPM	316.25233.BOPM	316.25233.BOPM	316.25233.BOPM
3	RETAINER, STOP AND SPRING	3	316.22977.BOPM	316.22977.BOPM	316.22242.BOPM	316.25840.BOPM	316.25840.BOPM
4	INSERT, 2 PC BUSHING, VALVE GUIDE	6	316.22004.BOPM	316.22004.BOPM	316.22004.BOPM	316.22006.BOPM	316.22006.BOPM
5	LINER, 2 PC BUSHING, VALVE GUIDE	6	316.22005.BOPM	316.22005.BOPM	316.22005.BOPM	316.22007.BOPM	316.22007.BOPM
6	SPRING, VALVE	3	316.2108.BOPM	316.2108.BOPM	316.2308.BOPM	316.27259.BOPM	316.27259.BOPM
7	VALVE, FRAC	3	316.21007.BOPM	316.21007.BOPM	316.22048.BOPM	316.24027.BOPM	316.24027.BOPM
8	INSERT, VALVE, STD, URETHANE	3	316.21006.BOPM	316.21006.BOPM	316.22049.BOPM	316.24037.BOPM	316.24037.BOPM
8	INSERT, VALVE, ACID, URETHANE	3	316.21048.BOPM	316.21048.BOPM	316.22046.BOPM	316.24026.BOPM	316.24026.BOPM
9	SEAT VALVE, TAPERED	3	316.21008.BOPM	316.21008.BOPM	316.22047.BOPM	316.24024.BOPM	316.24024.BOPM
10	O-RING	3	8.34037.BOPM	8.34037.BOPM	8.34041.BOPM	8.34045.BOPM	8.34045.BOPM
11	RETAINER, GUIDE BUSHING	3	316.21096.BOPM	316.21096.BOPM	316.23953.BOPM	316.24043.BOPM	316.24043.BOPM

ID END ASSEMBLY



Shijiazhuang Dongli Petroleum Machinery Co.,Ltd

Well Service Pumps and Replacement Parts

FLUID END ASSEMBLY

LOC	Part Description	QTY	Plunger Size/Part Number				
			3-3/8 In	4 In	4-1/2 In	5 In	6 In
1	FLANGE, DISCHARGE, BLANK	1	316.21980.BOPM	316.22980.BOPM	316.22980.BOPM	316.22980.BOPM	316.22980.BOPM
1a	FLANGE, DISCH, RH	1	316.21676.BOPM	316.23019.BOPM	316.23019.BOPM	316.23019.BOPM	316.23019.BOPM
1b	FLANGE, DISCH, LH	1	316.21677.BOPM	316.23017.BOPM	316.23017.BOPM	316.23017.BOPM	316.23017.BOPM
1c	FLANGE, STRAIGHT	1	316.21013.BOPM	316.27482.BOPM	316.27482.BOPM	316.27482.BOPM	316.27482.BOPM
2	SEAL, DISCHARGE PASSAGE	6	315.27117.BOPM	316.2547.BOPM	316.2547.BOPM	316.2547.BOPM	316.2547.BOPM
3	NUT, 1-14 NF, INTERNAL WRENCHING	4	316.11621.BOPM	316.11621.BOPM	316.11621.BOPM	316.11621.BOPM	316.11621.BOPM
4	STUD, FLUID END TO DISCH. FLANGE *	4	316.23013.BOPM	---	316.23013.BOPM	316.23013.BOPM	316.23013.BOPM
5	BOLT, TOP, TIE	1	316.27488.BOPM	316.27488.BOPM	316.27488.BOPM	316.27488.BOPM	316.27488.BOPM
6	NUT, TOP TIE BOLT	2	316.25501.BOPM	316.25501.BOPM	316.25501.BOPM	316.25501.BOPM	316.25501.BOPM
7	WASHER, HARDENED	2	316.22493.BOPM	316.22493.BOPM	316.22493.BOPM	316.22493.BOPM	316.22493.BOPM
8	SPACER, INN, DISCH PASS SEAL	2	316.2145.BOPM	316.2545.BOPM	316.2545.BOPM	316.2545.BOPM	316.2545.BOPM
9	FLUID END SECTION	3	316.21951.BOPM	316.22982.BOPM	316.23951.BOPM	316.24951.BOPM	316.27951.BOPM
10	NUT, ELASTIC *	2	70.32760.BOPM	---	70.32760.BOPM	70.32760.BOPM	70.32760.BOPM
11	BOLT, BOTTOM, TIE *	1	316.23011.BOPM	---	316.23011.BOPM	316.23011.BOPM	316.23011.BOPM
**	BOLT, TIE, FLUID END, TOP	2		316.27489.BOPM	---	---	---
12	O-RING, SUCTION MODULE	3	Note: Suction manifold components (LOC12 – LOC15) are considered part of the unit that the pump is installed on rather than part of the fluid end assembly. These components are shown for information purposes only and can be provided by BOPM based on the customer's requirements.				
13	MANIFOLD, SUCTION	1					
14	WASHER, LOCK, SUCTION MANIFOLD	12					
15	BOLTS, SUCTION MANIFOLD	12					

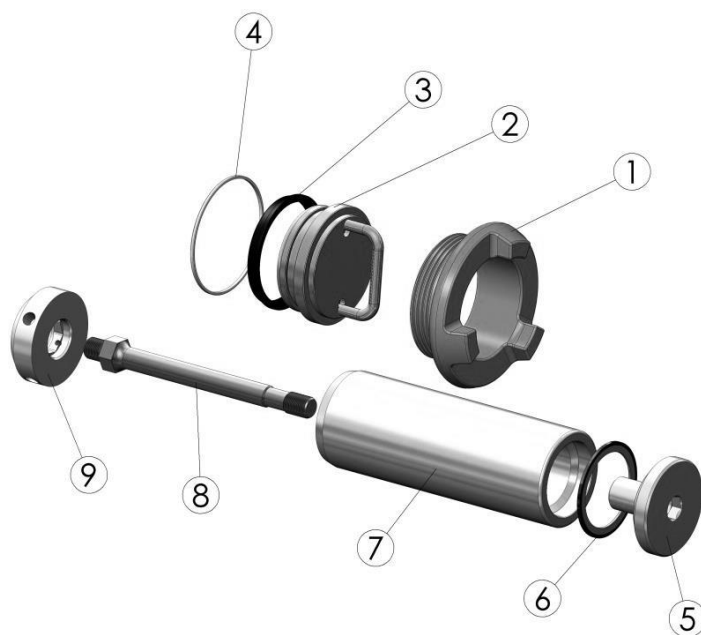
* Part not included on 4 In Fluid End Assembly

** Part not shown.



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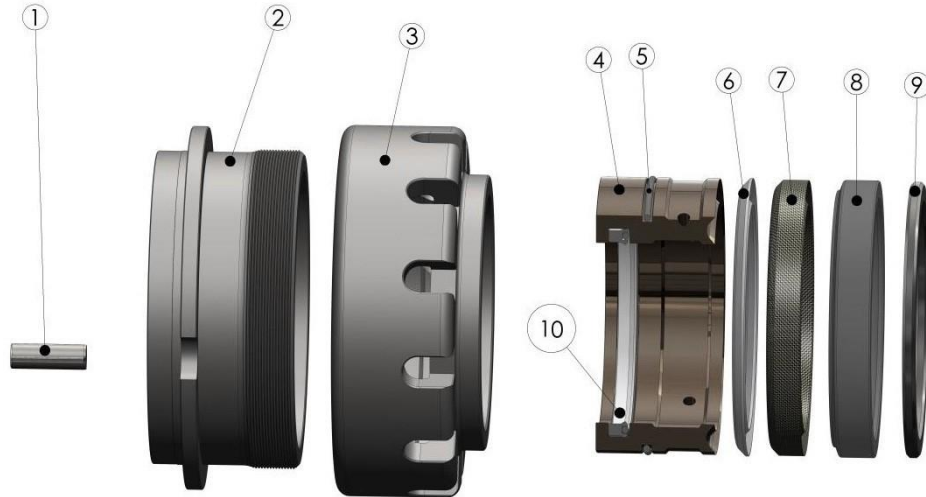
PLUNGER/CYLINDER HEAD COVER SUBASSEMBLY



LOC	Part Description	QTY	Plunger Size/Part Number				
			3-3/8 In	4 In	4-1/2 In	5 In	6 In
1	RETAINER, COVER	3	316.2102.BOPM	316.2102.BOPM	316.2202.BOPM	316.2502.BOPM	316.2506.BOPM
2	COVER,CYLINDER HEAD	3	316.2107.BOPM	316.2107.BOPM	316.2207.BOPM	316.2407.BOPM	316.2507.BOPM
3	GASKET, COVER	3	316.21052.BOPM	316.21052.BOPM	316.22052.BOPM	316.25052.BOPM	316.25074.BOPM
4	RING, SPACER, COVER	3	316.21051.BOPM	316.21051.BOPM	316.22051.BOPM	316.25051.BOPM	316.25073.BOPM
5	NOSE, PLUNGER	3	316.2131.BOPM	316.2231.BOPM	316.2331.BOPM	316.2331.BOPM	316.2331.BOPM
6	SEAL, PLUNGER NOSE ASSEMBLY	3	316.2130.BOPM	316.2230.BOPM	316.2330.BOPM	316.2330.BOPM	316.2330.BOPM
7	PLUNGER, HARD SURFACE	3	316.21026.BOPM	316.22294.BOPM	316.23085.BOPM	316.24296.BOPM	316.25162.BOPM
8	TIE ROD, PLUNGER	3	316.21028.BOPM	316.21028.BOPM	316.21028.BOPM	316.25165.BOPM	316.25165.BOPM
9	ADAPTER, PUSHROD	3	316.21059.BOPM	316.22302.BOPM	316.23089.BOPM	316.24336.BOPM	316.25172.BOPM



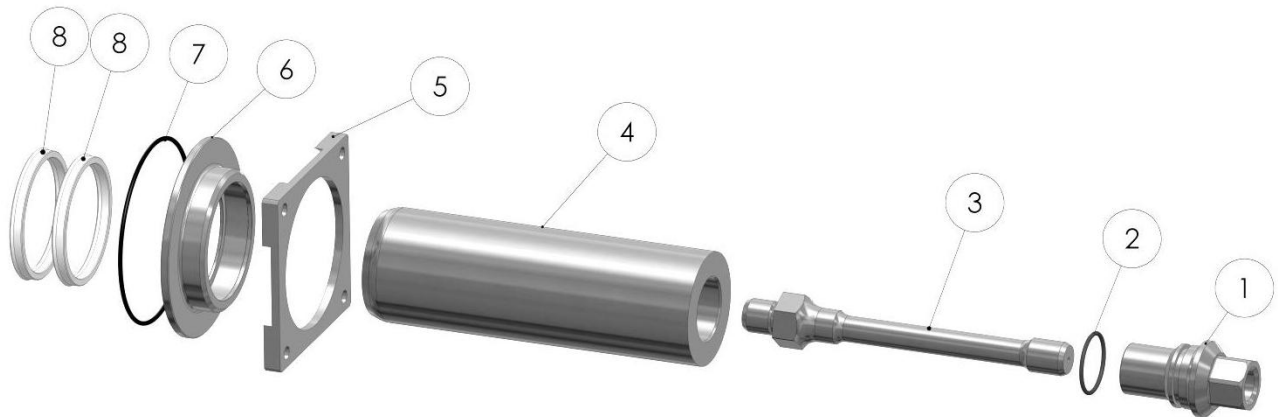
PACKING NUT AND PACKING SUBASSEMBLY



LOC	Part Description	QTY	Plunger Size/Part Number				
			3-3/8 In	4 In	4-1/2 In	5 In	6 In
1	PIN, GROOVE	3	70.35817.BOPM	70.35817.BOPM	70.35817.BOPM	70.35785.BOPM	70.35785.BOPM
2	SLEEVE, WIPER GLAND	3	316.2138.BOPM	316.2238.BOPM	316.2238.BOPM	316.2438.BOPM	316.2738.BOPM
3	NUT, PACKING ADJUSTMENT	3	316.2137.BOPM	316.22987.BOPM	316.2337.BOPM	316.2437.BOPM	316.2737.BOPM
4	CARRIER, SEAL & PACKING	3	316.21391.BOPM	316.22396.BOPM	316.23391.BOPM	316.24391.BOPM	316.27391.BOPM
5	O-RING, 90D	3	8.34040.BOPM	8.34045.BOPM	8.34049.BOPM	8.34053.BOPM	8.34058.BOPM
6	RING, BACKUP, PACKING	3	316.21393.BOPM	316.22393.BOPM	316.23393.BOPM	339.01527.BOPM	339.00036.BOPM
7	PACKING SET, STD SRV, 3 RINGS	1	316.21532.BOPM	316.22532.BOPM	316.23532.BOPM	316.24532.BOPM	316.27532.BOPM
7	PACKING SET, ACID SRV, 3 RINGS	1	316.21525.BOPM	316.22525.BOPM	316.23525.BOPM	316.24525.BOPM	316.27525.BOPM
8	RING, HEADER	3	316.21501.BOPM	316.22501.BOPM	316.23501.BOPM	316.24501.BOPM	316.27501.BOPM
9	ADAPTER, HEADER RING	3	316.21503.BOPM	316.22503.BOPM	316.23503.BOPM	316.24503.BOPM	316.27503.BOPM
10	SEAL, LUBE, PACKING	3	316.21395.BOPM	316.22395.BOPM	316.23395.BOPM	316.24395.BOPM	316.27395.BOPM



PUSH ROD SUBASSEMBLY



LOC	Part Number	Part Description	QTY
1	316.21066.BOPM	RETAINER, PUSH ROD HT-400, TWOPIECE NOSE	3
2	8.34020.BOPM	O-RING, 90 DURO	3
3	316.25166.BOPM	TIE ROD, PUSH ROD	3
4	316.21065.BOPM	PUSH ROD, TWO PIECE	3
5	316.10012.BOPM	RETAINER, PUSH ROD SEAL HOUSING	3
6	316.10013.BOPM	HOUSING, PUSH ROD SEAL	3
7	70.33739.BOPM	O-RING, 70 DURO	3
8	316.10014.BOPM	SEAL, PUSH ROD	6

