

Dispersion Parts List



THE WILLIAMS - CARVER COMPANY, INC.

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**Waukesha
Cherry-Burrell**

® An SPX Process Equipment Operation

Effective 3/1/05

Dispersion Parts

PL5081

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DISPERSION EQUIPMENT PARTS PRICE LIST

Pricing in U.S. Dollars

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Pricing in U.S. Dollars

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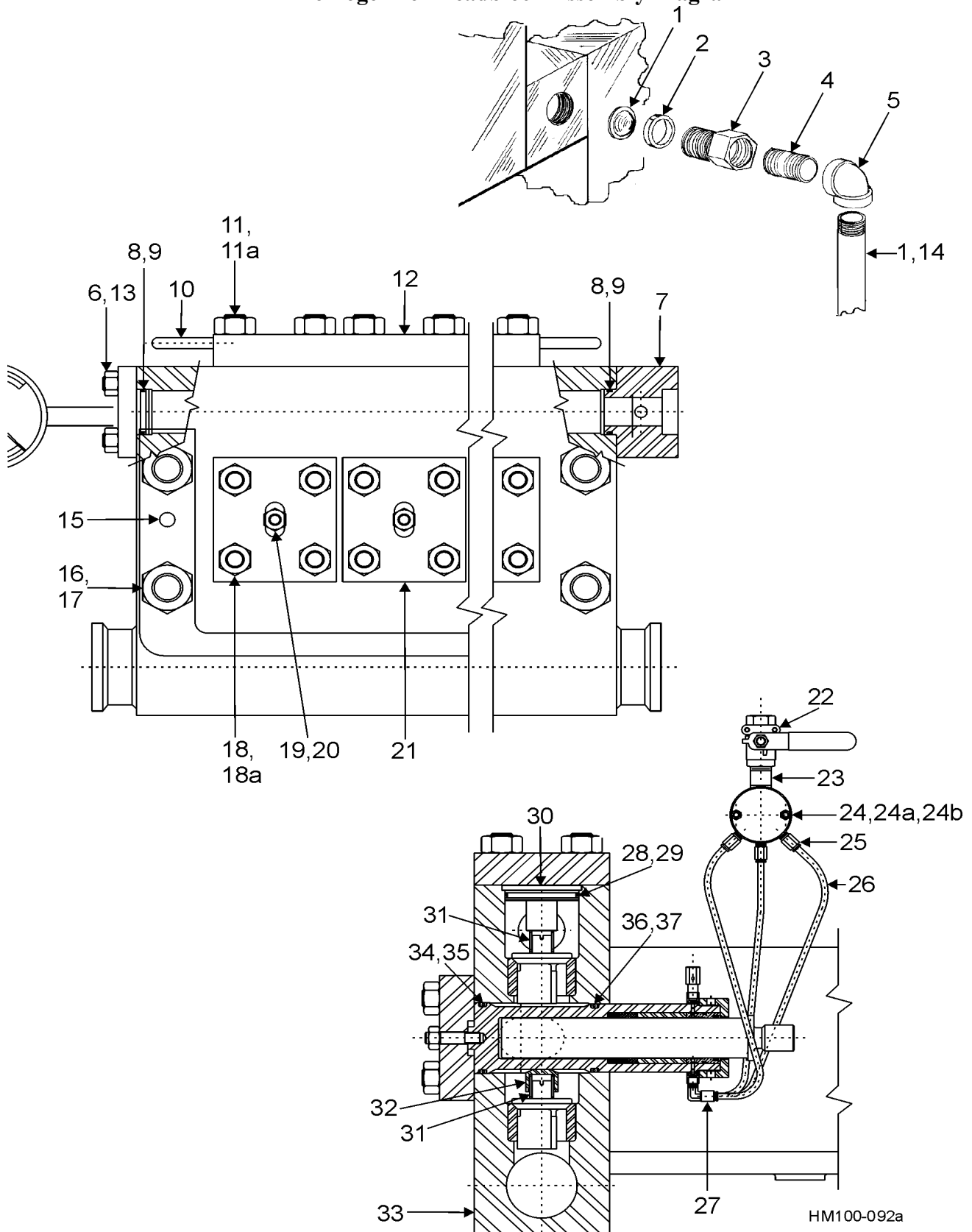
Homogenizer Headblock Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Rupture Disc - Sized to Headblock Design Limitation	1	100998	
2	Ring - Rupture Disc (For less than 7500 psi)	1	101002	
	Ring - Rupture Disc (7500 to 10000 psi)	1	105164	
3	Nut - Rupture Disc Holddown	1	100266	
4	Nipple	1	11-131	
5	Elbow	2	78-112	
6	Hex Nut	4	107482	
7	Adapter - Rupture Disc	1	101358	
	Adapter - Rupture Disc and Pressure Transducer	1	111010	
8	Backup Ring	2	BUR214	
9	O-ring	2	N70214	
10	Handle - Headblock Cover, Top	-	-	
11	Hex Nut	6	107483	
11a	Stud - .625-11 x 2.38" LG	6	100465	
12	Cover - Headblock, Top	1	100272	
13	Stud - Gauge (Homogenizers only)	4	100281	
14	Nipple	1	11-135	
14a	Nipple	1	11-142	
14b	Caution Label	1	33-85	
15	Dowel Pin	2	30-500	
16	Hex Nut	4	107485	
17	Stud - Headblock and Crankcase	4	100278	
18	Hex Nut	12	107483	
18a	Stud - .625-11 x 2.38" LG	12	100465	
19	Hex Nut	3	107482	
20	Stud - Cylinder Puller	3	100281	
21	Cover - Headblock, Front (Not Aseptic)	3	103935	1
22	Ball Valve	1	312-1402X	
23	Nipple	1	11-116	
24	Header - Seal Flush	1	100288	
24a	Screw	2	30-287	
24b	Lockwasher, 1/4"	2	43-106	
25	Male Connector (Not Aseptic)	3	78-88	
26	Tubing - Clear (Not Aseptic)	60	87-1023	
27	Elbow - 90° Male (Not Aseptic)	3	78-87	
28	Backup Ring	3	BUR217	
29	O-ring	3	N70217	
30	Plug - Headblock Top (Poppet Valve only)	3	100294	
31	Spring - Coil (Poppet Valve only)	6	4483710	
32	Cap - Suction Valve Spring	3	4483720	
33	Headblock - Integral Seat	1	100298	1
	Headblock - Hardened Seat	1	104603	1
34	Backup Ring	3	BUR328	1
35	O-ring	3	N70328	1
36	O-ring	3	N70327	1
37	Backup Ring	3	BUR327	1

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

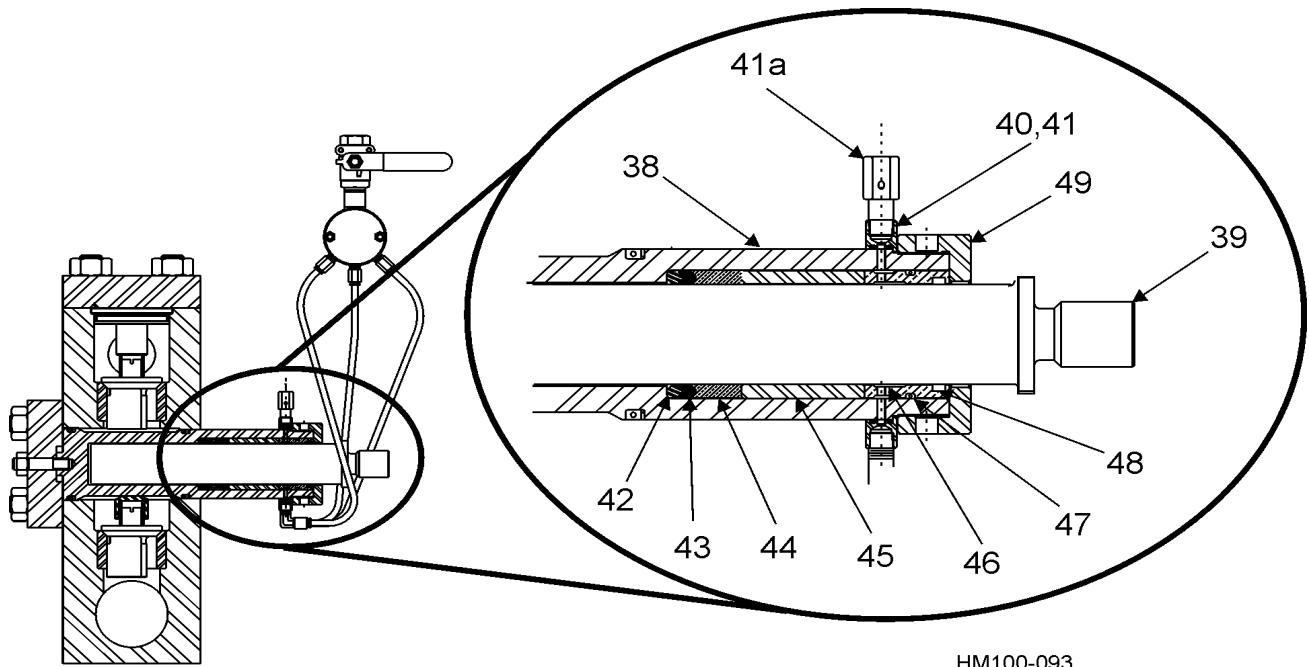
Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
38	CYLINDER			
	.750" Plunger Diameter	3	100315	
	.875" Plunger Diameter	3	100316	
	1.000" Plunger Diameter	3	100701	
	1.125" Plunger Diameter	3	100703	
	1.1875" Plunger Diameter	3	100318	
39	PLUNGER - TUNGSTEN CARBIDE			
	.750" Diameter	3	100629	
	.875" Diameter	3	100631	
	1.000" Diameter	3	100633	
	1.125" Diameter	3	100635	
	1.1875" Diameter	3	100636	
	PLUNGER - CERAMIC - OPT			
	.750" Diameter	3	100580	
	.875" Diameter	3	100582	
	1.000" Diameter	3	100584	
	1.125" Diameter	3	100586	
	1.1875" Diameter	3	100587	
40	Ring - Seal Flush	3	100325	
41	O-ring	6	N70034	
41a	Snubber	3	104130	
42	ADAPTER - BOTTOM			
	.750" Plunger Diameter	3	100830	
	.875" Plunger Diameter	3	100329	
	1.000" Plunger Diameter	3	100833	
	1.125" Plunger Diameter	3	100835	
	1.1875" Plunger Diameter	3	100330	
43	SEAL - PLUNGER			
	.750" Plunger Diameter	6	105131	
	.875" Plunger Diameter	6	105133	
	1.000" Plunger Diameter	6	105135	
	1.125" Plunger Diameter	6	105137	
	1.1875" Plunger Diameter	6	105138	
	SEAL - PLUNGER, FDA - OPT			
	.750" Plunger Diameter, FDA	6	101010	
	.875" Plunger Diameter, FDA	6	101012	
	1.000" Plunger Diameter, FDA	6	101014	
	1.125" Plunger Diameter, FDA	6	101016	
	1.1875" Plunger Diameter, FDA	6	101017	

Homogenizer Headblock Assembly Diagram



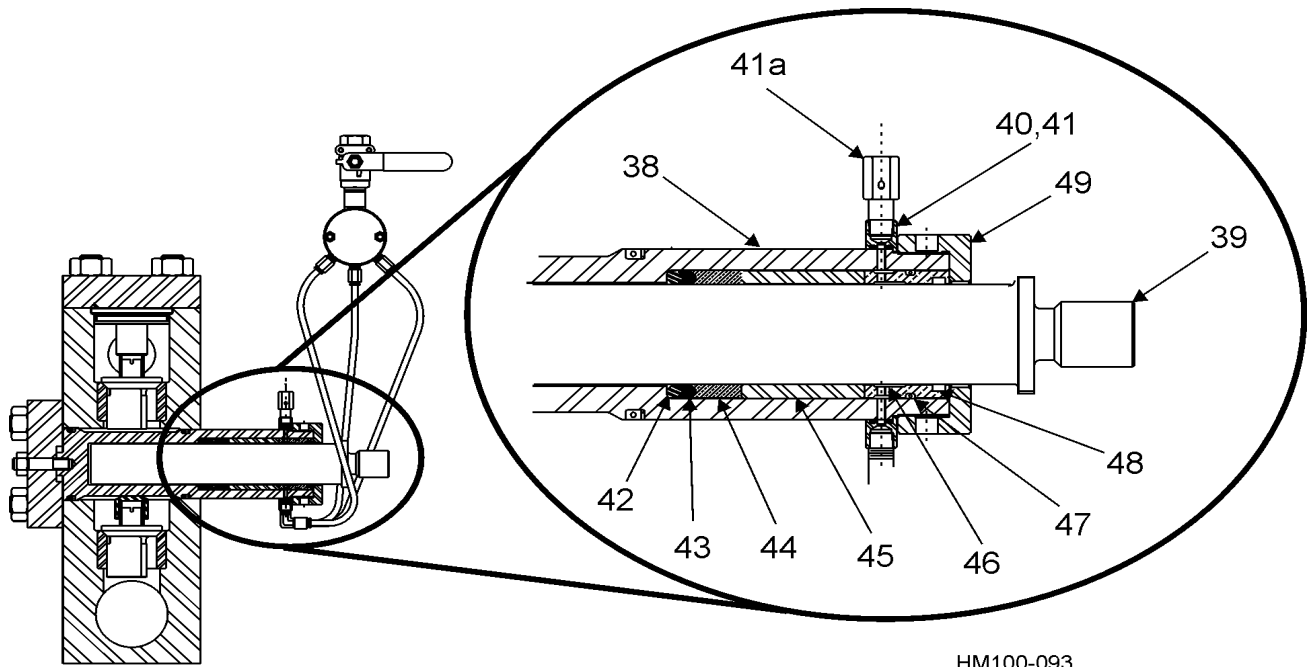
Homogenizer Headblock Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
44	ADAPTER - TOP, DOUBLE SEAL			
	.750" Plunger Diameter	3	105922	
	.875" Plunger Diameter	3	105924	
	1.000" Plunger Diameter	3	105926	
	1.125" Plunger Diameter	3	105928	
	1.1875" Plunger Diameter	3	105929	
	ADAPTER - TOP, SINGLE SEAL - OPT			
	.750" Plunger Diameter	3	101109	
	.875" Plunger Diameter	3	101111	
	1.000" Plunger Diameter	3	101113	
	1.125" Plunger Diameter	3	101115	
	1.1875" Plunger Diameter	3	101116	
45	SPACER			
	.750" Plunger Diameter	-	-	
	.875" Plunger Diameter	-	-	
	1.000" Plunger Diameter	-	-	
	1.125" Plunger Diameter	-	-	
	1.1875" Plunger Diameter	-	-	
46	RING - LANTERN			
	.750" Plunger Diameter	3	100344	
	.875" Plunger Diameter	3	100337	
	1.000" Plunger Diameter	3	100803	
	1.125" Plunger Diameter	3	100805	
	1.1875" Plunger Diameter	3	100338	
47	O-RING			
	.750" Plunger Diameter	3	N70121	1
	.875" Plunger Diameter	3	N70123	1
	1.000" Plunger Diameter	3	N70125	1
	1.125" Plunger Diameter	3	N70127	1
	1.1875" Plunger Diameter	3	N70128	1
48	SEAL - WIPER			
	.750" Plunger Diameter	3	101065	1
	.875" Plunger Diameter	3	101067	1
	1.000" Plunger Diameter	3	101069	1
	1.125" Plunger Diameter	3	101071	1
	1.1875" Plunger Diameter	3	101072	1
49	NUT			
	.750" Plunger Diameter	3	100345	
	.875" Plunger Diameter	3	100346	
	1.000" Plunger Diameter	3	100758	
	1.125" Plunger Diameter	3	100760	
	1.1875" Plunger Diameter	3	100348	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer Headblock Assembly Diagram

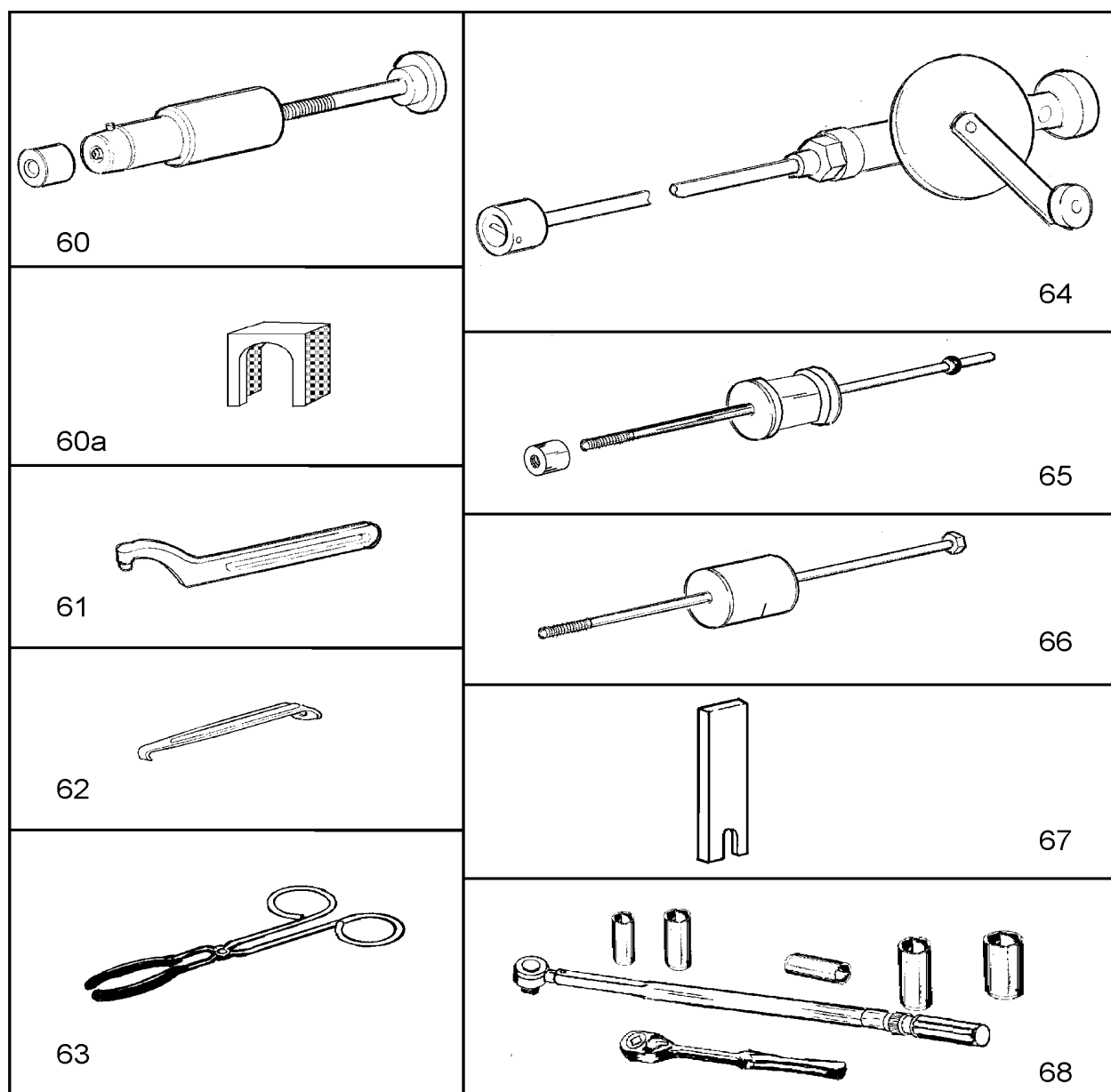


HM100-093

Homogenizer Headblock Assembly Tools - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
60	SEAL PULLER			
	.750" Plunger Diameter	1	101153	
	.875" Plunger Diameter	1	101155	
	1.000" Plunger Diameter	1	101157	
	1.125" Plunger Diameter	1	101159	
	1.1875" Plunger Diameter	1	101160	
60a	Plunger Removal Tool	1	107351	
61	Spanner Wrench - Fixed Head	1	100976	
62	O-ring Tool	1	AD0096001	
63	Valve Tongs - Neoprene Cushioned Prongs	1	101344	
64	Valve Regrinding Tool - Oscilating Hand Grinder	1	101390	
65	Slide Hammer - Cylinder Remover	1	101334	
66	Slide Hammer - Headblock Top Plug Remover	1	101342	
67	Cylinder Alignment Tool	1	101377	
68	Torque Wrench Kit	1	101639	

Homogenizer Headblock Assembly Tools Diagram



HM100-094a

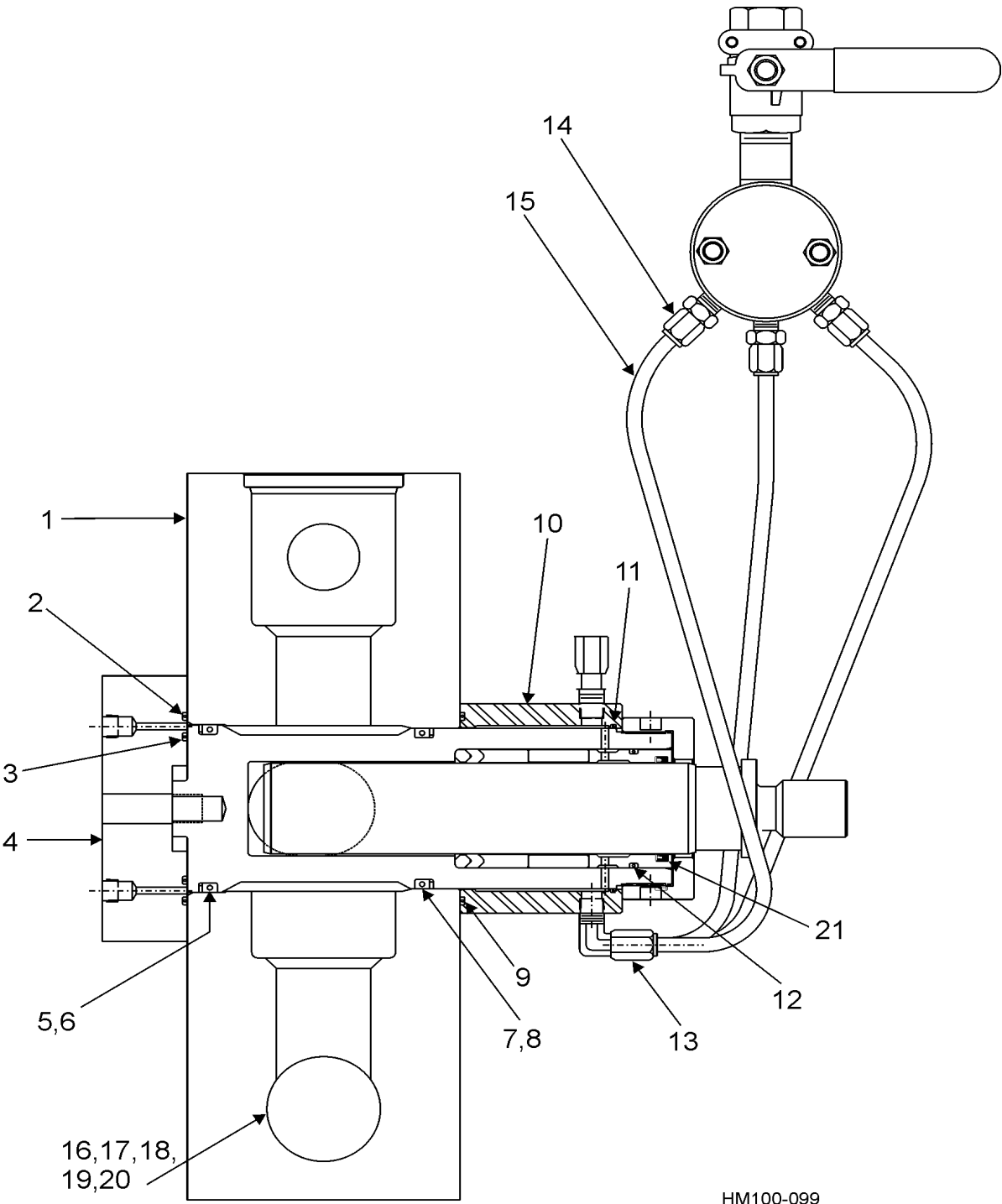
Homogenizer Aseptic Flush Option - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Headblock - Integral Seat Poppet Valve Only	1	105378	
	Headblock - Hardened Seat Poppet Valve Only	1	105379	
2	O-ring, EPDM	3	E70036	
3	O-ring, EPDM	3	E70031	
4	Cover - Headblock, Front, Aseptic	3	112798	
5	O-ring, EPDM	3	E70328	
6	Backup Ring, Teflon	3	BRT328	
7	Backup Ring, Teflon	3	BRT327	
8	O-ring, EPDM	3	E70327	
9	O-ring, EPDM	3	E70144	
10	Collar - Aseptic Cylinder	3	112799	
11	O-ring, EPDM	3	E70034	
12	O-RING, EPDM			
	.750" Plunger Diameter	3	E70121	
	.875" Plunger Diameter	3	E70123	
	1.000" Plunger Diameter	3	E70125	
	1.125" Plunger Diameter	3	E70127	
	1.1875" Plunger Diameter	3	E70128	
13	Elbow	3	78-137	
14	Adapter	6	78-136	
15	Tubing - 1/4" OD, Teflon Green	260	87-1138	
16	Ferrule, #14WNI 316L SS	2	29-640X	
17	Gasket, #4OIV, FKM	2	20-104V	
18	O-ring, FKM	2	V70227	
19	Clamp, #13IS	2	3023011	
20	Adapter	4	78-71	
21	SEAL - WIPER, EPDM			
	.750" Plunger Diameter	3	104515	
	.875" Plunger Diameter	3	104517	
	1.000" Plunger Diameter	3	104519	
	1.125" Plunger Diameter	3	104521	
	1.1875" Plunger Diameter	3	104522	

Note:

** See Homogenizer Headblock Assembly for all parts not listed here.

Homogenizer Aseptic Flush Option Diagram

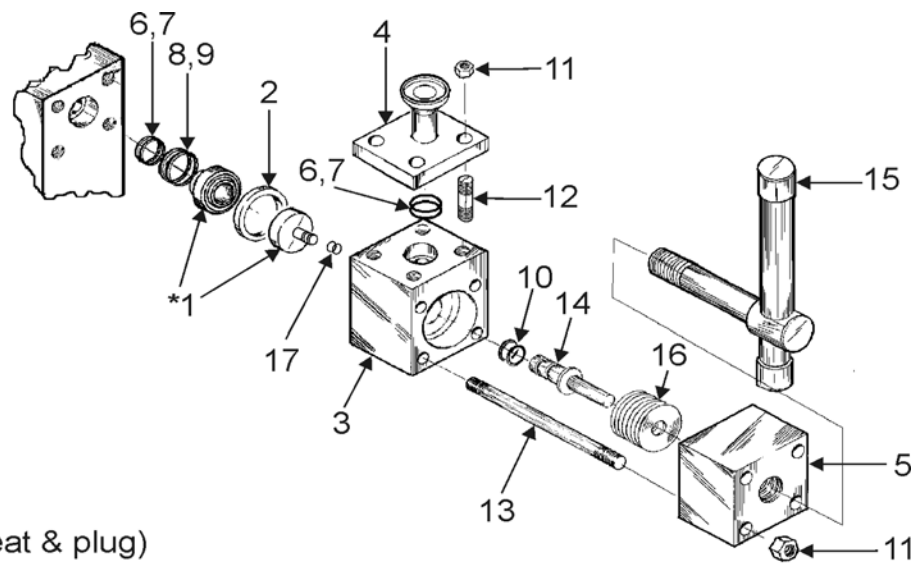


HM100-099

Homogenizer Single Stage Manual Homogenizing Valve Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	VALVE			
	(3) .180 Diameter Holes, 17-4PH SS	1	116406	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
2	RING			
	(3) .180 Diameter Holes, 17-4PH SS	1	100358	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	(3) .180 Diameter Holes, Tungsten Carbide	1	100224	
3	Flat Face Valve Option, Tungsten Carbide	1	100223	
	Body - Valve	1	105882	
4	Body - Valve, Aseptic	1	105885	
	Fitting - Product Discharge, #15I	1	100361	
5	Bonnet - Valve	1	100362	
6	O-ring	2	N70214	
7	Backup Ring	2	BUR214	
8	Backup Ring	1	BUR226	
9	O-ring	1	N70226	
10	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
11	Hex Nut	8	107482	
12	Stud - Product Discharge Fitting	4	100281	
13	Stud - Body	4	104006	
14	Stem - Valve	1	105876	
	Stem - Valve, Aseptic	1	105887	
	Stem - Valve (Capacity Less Than 1000 GPH)	1	-	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	1	-	
	Stem - Valve, Flat Face	1	113413	
	Stem - Valve, Aseptic, Flat Face	1	113414	
15	Screw - Valve Adjusting	1	100366	
16	Washer - Belleville Spring	8	104007	
17	O-ring	2	N70013	
18	Adapter - Seat, Flat Face Valve Option	1	111294	
19	O-ring, Flat Face Valve Option	1	N70220	
20	Backup Ring, Flat Face Valve Option	1	BUR220	
21	O-ring, Flat Face Valve Option	1	N70013	

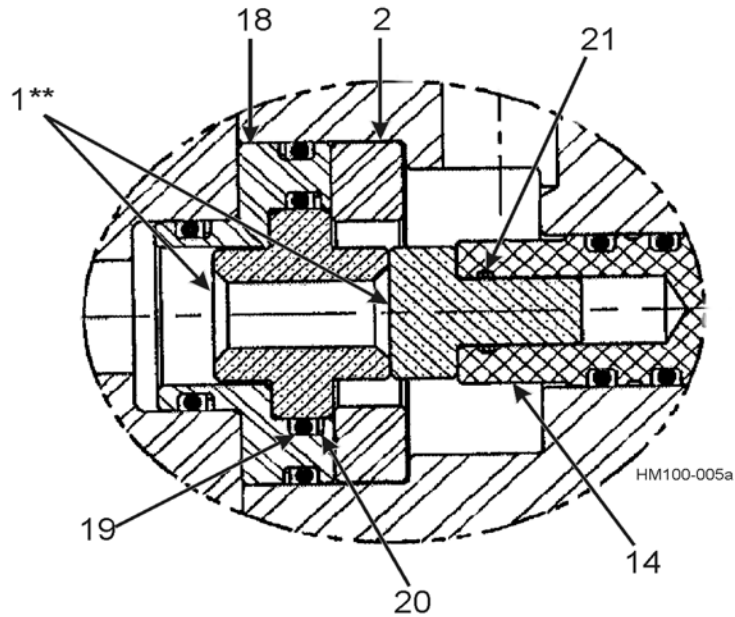
Homogenizer Single Stage Manual Homogenizing Valve Diagram



*Mated Pair (seat & plug)

HM100-101a

Flat Face Valve Option



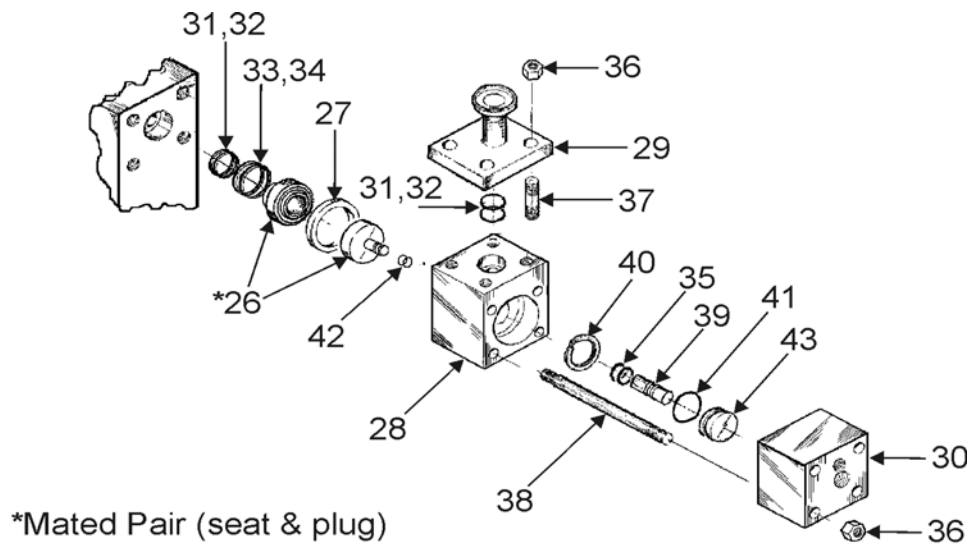
HM100-005a

**Seat & Plug Required

Homogenizer Single Stage Hydraulic Homogenizing Valve Assembly - Model 500/500LV

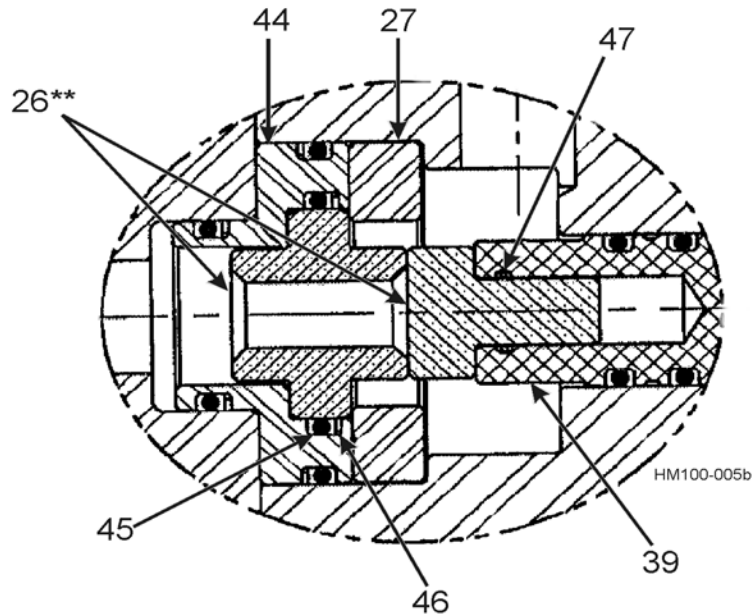
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	VALVE			
	(3) .180 Diameter Holes, 17-4PH SS	1	116406	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
27	RING			
	(3) .180 Diameter Holes, 17-4PH SS	1	100358	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	(3) .180 Diameter Holes, Tungsten Carbide	1	100224	
28	Flat Face Valve Option, Tungsten Carbide	1	100223	
	Body - Valve	1	105882	
29	Body - Valve, Aseptic	1	105885	
	Fitting - Product Discharge, #15I	1	100361	
30	Cylinder - Hydraulic Actuator	1	105873	
31	O-ring	2	N70214	
32	Backup Ring	2	BUR214	
33	Backup Ring	1	BUR226	
34	O-ring	1	N70226	
35	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
36	Hex Nut	8	107482	
37	Stud - Product Discharge Fitting	4	100281	
38	Stud - Body	4	100464	
39	Stem - Piston, Hydraulic Actuator	1	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	1	105897	
	Stem - Piston, Flat Face Valve Option	1	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	1	113411	
40	Retaining Ring	1	43-216	
41	T-Seal	1	100391	
42	O-ring, Style B	2	N70013	
43	Head - Piston, Hydraulic Actuator	1	105891	
44	Adapter - Seat, Flat Face Valve Option	1	111294	
45	O-ring, Flat Face Valve Option	1	N70220	
46	Backup Ring, Flat Face Valve Option	1	BUR220	
47	O-ring, Flat Face Valve Option	1	N70013	

Homogenizer Single Stage Hydraulic Homogenizing Valve Diagram



HM100-100a

Flat Face Valve Option

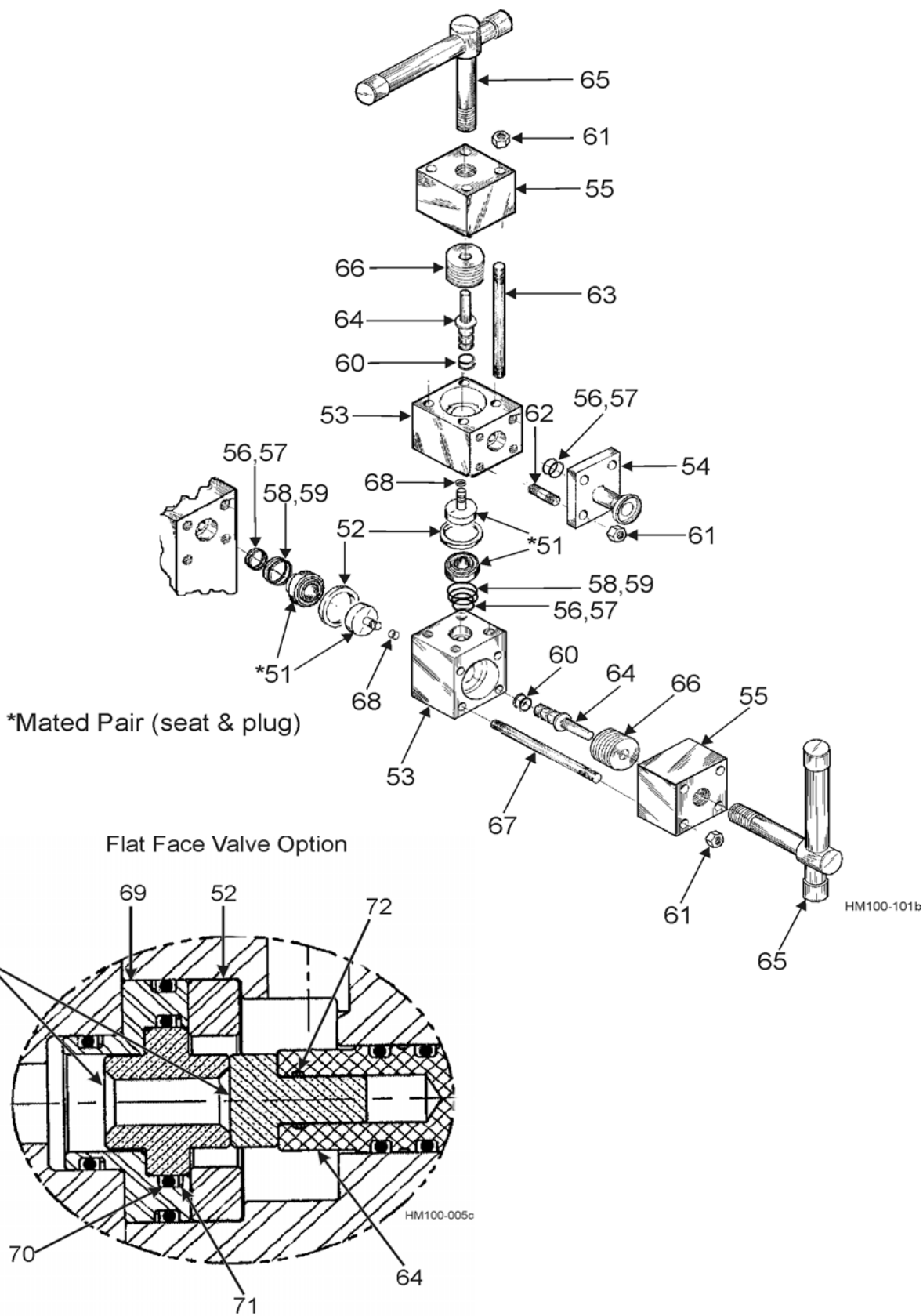


**Seat & Plug Required

Homogenizer Double Stage Manual Homogenizing Valve Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
51	VALVE			
	(3) .180 Diameter Holes, 17-4PH SS	2	116406	
	Seat - Flat Face Valve Option, 17-4PH SS	2	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	2	111296	
	Seat - Flat Face Valve Option, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	2	113404	
52	RING			
	(3) .180 Diameter Holes, 17-4PH SS	2	100358	
	Flat Face Valve Option, 17-4PH SS	2	100942	
	(3) .180 Diameter Holes, Tungsten Carbide	2	100224	
53	Flat Face Valve Option, Tungsten Carbide	2	100223	
	Body - Valve	2	105882	
54	Body - Valve, Aseptic	2	105885	
	Fitting - Product Discharge, #15I	1	100361	
55	Bonnet - Valve	2	100362	
56	O-ring	3	N70214	
57	Backup Ring	3	BUR214	
58	Backup Ring	2	BUR226	
59	O-ring	2	N70226	
60	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
61	Hex Nut	12	107482	
62	Stud - Product Discharge Fitting	4	100281	
63	Stud - Body	4	100364	
64	Stem - Valve	2	105876	
	Stem - Valve, Aseptic	2	105887	
	Stem - Valve (Capacity Less Than 1000 GPH)	2	-	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	2	-	
	Stem - Valve, Flat Face	2	113413	
	Stem - Valve, Aseptic, Flat Face	2	113414	
65	Screw - Valve Adjusting	2	100366	
66	Washer - Belleville Spring	16	104007	
67	Stud - Body	4	104006	
68	O-ring	4	N70013	
69	Adapter - Seat, Flat Face Valve Option	2	111294	
70	O-ring, Flat Face Valve Option	2	N70220	
71	Backup Ring, Flat Face Valve Option	2	BUR220	
72	O-ring, Flat Face Valve Option	2	N70013	

Homogenizer Double Stage Manual Homogenizing Valve Diagram



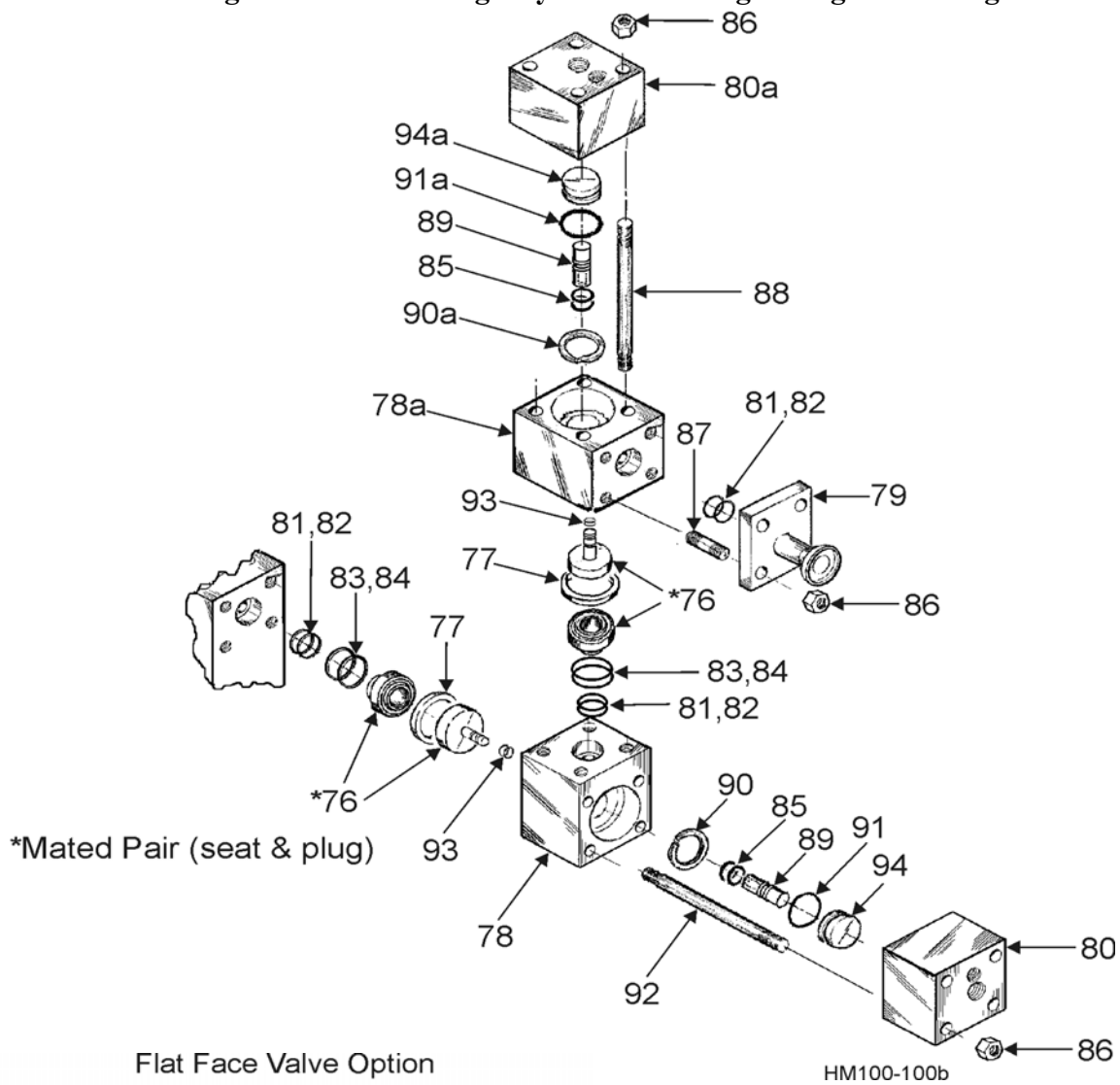
**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

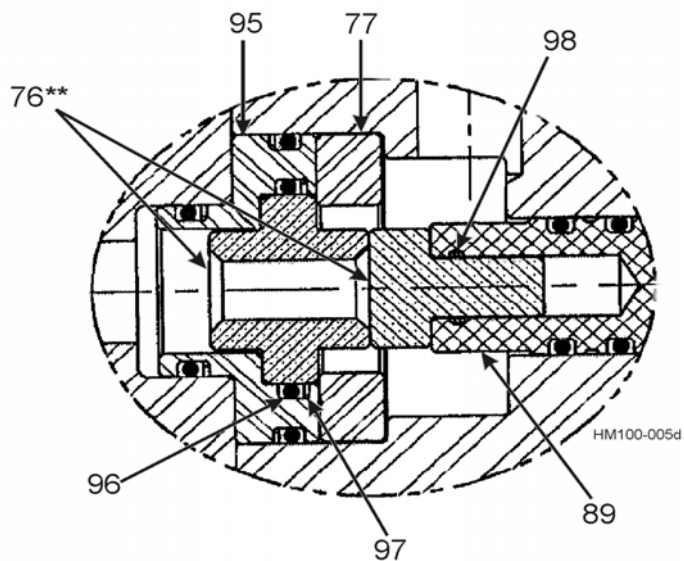
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
76	VALVE			
	(3) .180 Diameter Holes, 17-4PH SS	2	116406	
	Seat - Flat Face Valve Option, 17-4PH SS	2	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	2	111296	
	Seat - Flat Face Valve Option, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	2	113404	
77	RING			
	(3) .180 Diameter Holes, 17-4PH SS	2	100358	
	Flat Face Valve Option, 17-4PH SS	2	100942	
	(3) .180 Diameter Holes, Tungsten Carbide	2	100224	
78	Flat Face Valve Option, Tungsten Carbide	2	100223	
	Body - Valve - 1st Stage	1	105882	
78a	Body - Valve, Aseptic - 1st Stage	1	105885	
	Body - Valve - 2nd Stage	1	105881	
79	Body - Valve, Aseptic - 2nd Stage	1	105884	
	Fitting - Product Discharge, #15I	1	100361	
80	Cylinder - Hydraulic Actuator - 1st Stage	1	105873	
80a	Cylinder - Hydraulic Actuator - 2nd Stage	1	107386	
81	O-ring	3	N70214	
82	Backup Ring	3	BUR214	
83	Backup Ring	2	BUR226	
84	O-ring	2	N70226	
85	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
86	Hex Nut	12	107482	
87	Stud - Product Discharge Fitting	4	100281	
88	Stud - Body	4	100380	
89	Stem - Piston, Hydraulic Actuator	2	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	2	105897	
	Stem - Piston, Flat Face Valve Option	2	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	2	113411	
90	Retaining Ring - 1st Stage	1	43-216	
90a	Retaining Ring - 2nd Stage	1	43-217	
91	T-Seal - 1st Stage	1	100391	
91a	T-Seal - 2nd Stage	1	100392	
92	Stud - Body	4	100464	
93	O-ring	4	N70013	
94	Head - Piston, Hydraulic Actuator - 1st Stage	1	105892	
94a	Head - Piston, Hydraulic Actuator - 2nd Stage	1	107387	
95	Adapter - Seat, Flat Face Valve Option	2	111294	
96	O-ring, Flat Face Valve Option	2	N70220	
97	Backup Ring, Flat Face Valve Option	2	BUR220	
98	O-ring, Flat Face Valve Option	2	N70013	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

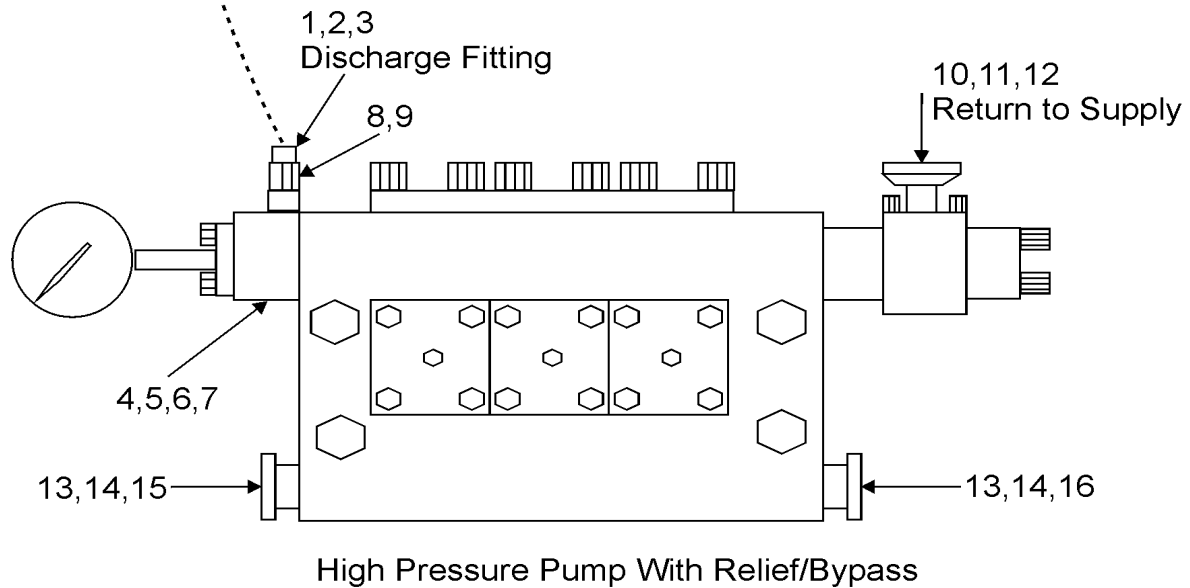
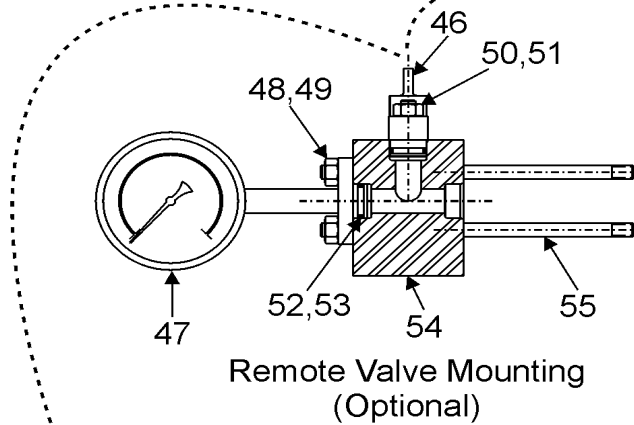
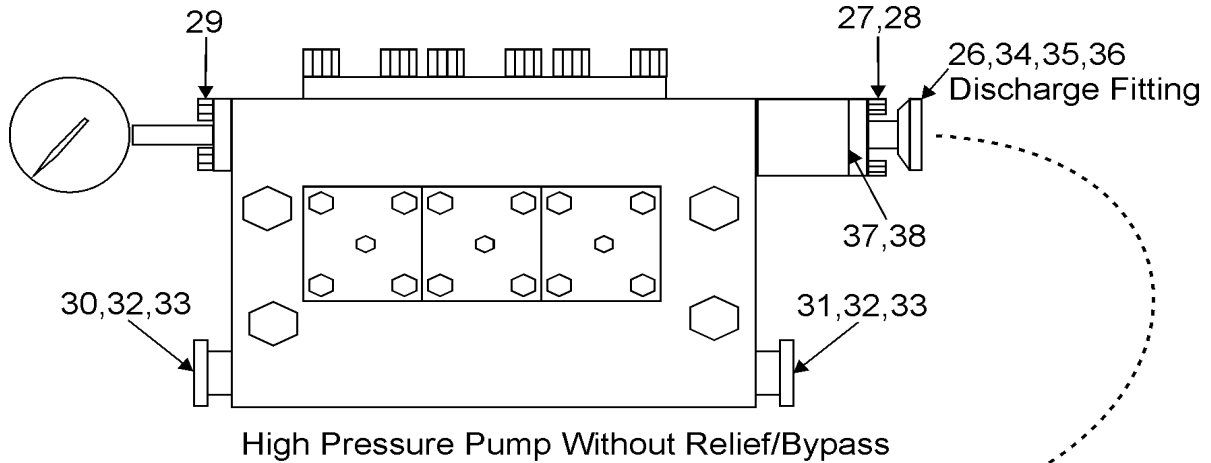
Homogenizer High Pressure Pump Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101372	
	3/8" OD, 6500 Max Working Pressure	1	101373	
	1/2" OD, 6200 Max Working Pressure	1	108005	
	5/8" OD, 6000 Max Working Pressure	1	101374	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4700 Max Working Pressure	1	101376	
2	O-ring	1	N70214	
3	Backup Ring	1	BUR214	
4	Adapter - Gauge and Outlet	1	100267	
5	O-ring	1	N70214	
6	Backup Ring	1	BUR214	
7	Stud - Gauge and Outlet	4	100704	
8	Stud - Product Discharge	2	100465	
9	Hex Nut - Cap	2	107483	
10	Clamp Assembly, 13IS	1	3023014	
11	Gasket, 40IH Buna	1	20-104	
12	Ferrule, 14WI	1	29-505XCB	
13	Clamp Assembly, 13IS	2	3023014	1
14	Gasket - 40IH Buna	2	20-104	1
15	Ferrule, 14WI	2	29-505XCB	1
16	Cap - Male, 16AI-14I	1	3-70X	
26	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101385	
	3/8" OD, 6500 Max Working Pressure	1	101386	
	1/2" OD, 6200 Max Working Pressure	1	108006	
	5/8" OD, 6000 Max Working Pressure	1	101387	
	3/4" OD, 5800 Max Working Pressure	1	101388	
	1.0" OD, 4200 Max Working Pressure	1	101389	
	1-1/2" #15I, 250 Max psi at 250°F	1	100361	
	2.0" #15I, 250 Max psi at 250°F	1	101001	
	2-1/2" #15I, 200 Max psi at 250°F	1	-	
27	Stud - Rupture Disc and Outlet	4	100704	
28	Hex Nut	4	107482	
29	Stud - Gauge	4	100281	
30	Ferrule, 14WI	2	29-505XCB	1
31	Cap - Male, 16AI-14I	1	3-70X	
32	Clamp Assembly, 13IS	2	3023014	1
33	Gasket - 40IH Buna	2	20-104	1
34	Ferrule, 14WI	1	29-505XCB	
35	Clamp Assembly, 13IS	1	3023014	
36	Gasket - 40IH Buna	1	20-104	
37	O-ring	1	N70214	
38	Backup Ring	1	BUR214	

Notes:

1. If for aseptic application, see Homogenzier Aseptic Flush Option instead.

Homogenizer High Pressure Pump Diagram

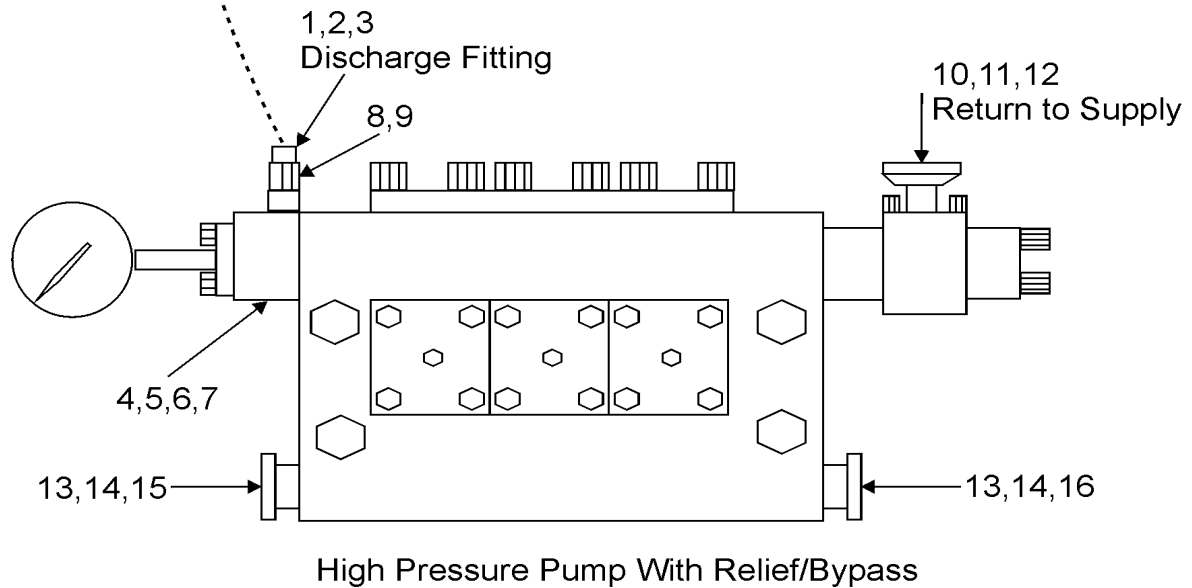
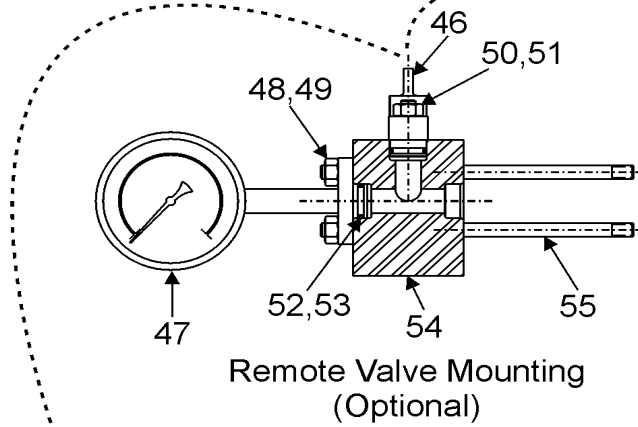
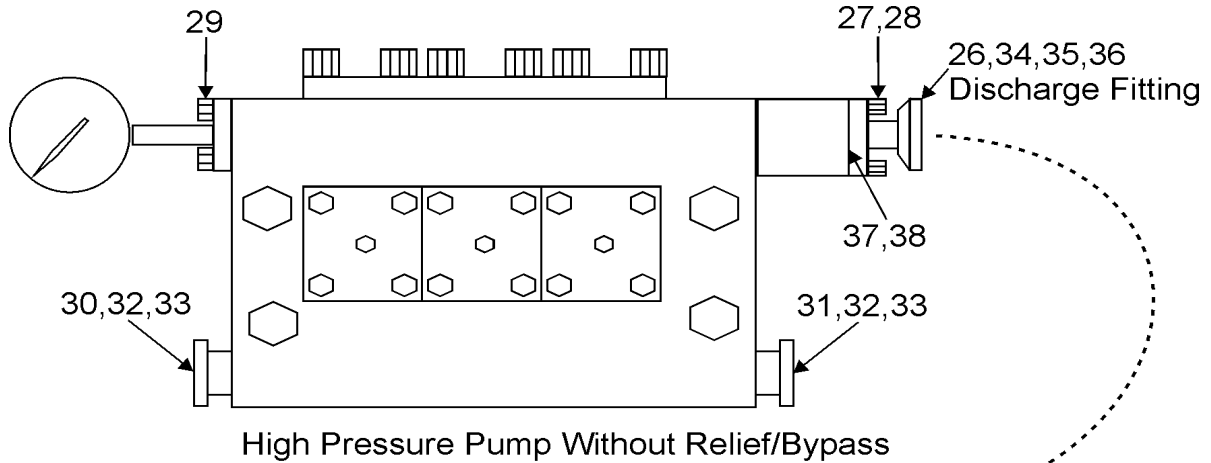


HM100-098

Homogenizer High Pressure Pump Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101372	
	3/8" OD, 6500 Max Working Pressure	1	101376	
	1/2" OD, 6200 Max Working Pressure	1	108005	
	5/8" OD, 6000 Max Working Pressure	1	101374	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4200 Max Working Pressure	1	101376	
47	GAUGE - PRESSURE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
48	Hex Nut	4	107482	
49	Stud - Gauge	4	100281	
50	Hex Nut	2	107483	
51	Stud - Product Inlet	2	100465	
52	O-ring	2	N70214	
53	Backup Ring	2	BUR214	
54	Adapter - Remote Valve Mounting	1	103948	
55	Stud - Body	4	100380	

Homogenizer High Pressure Pump Diagram

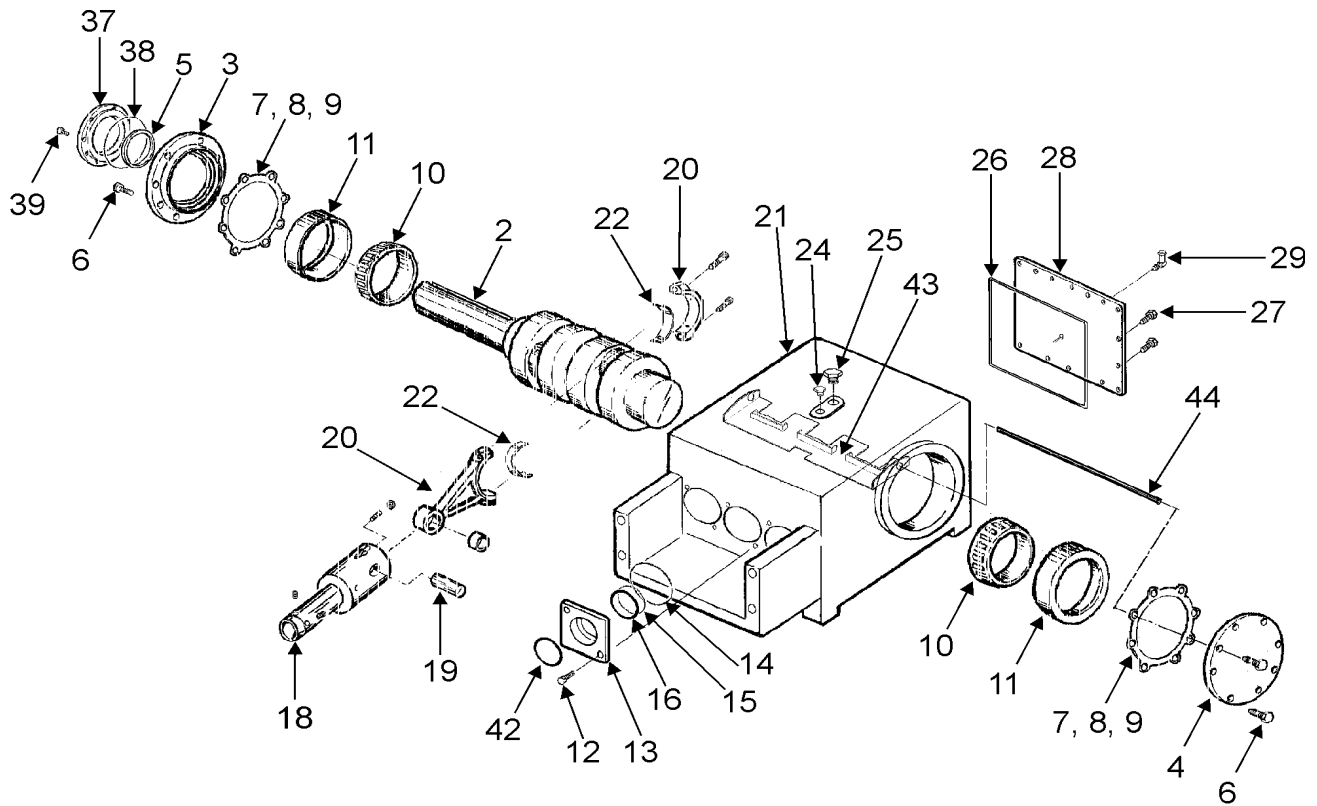


HM100-098

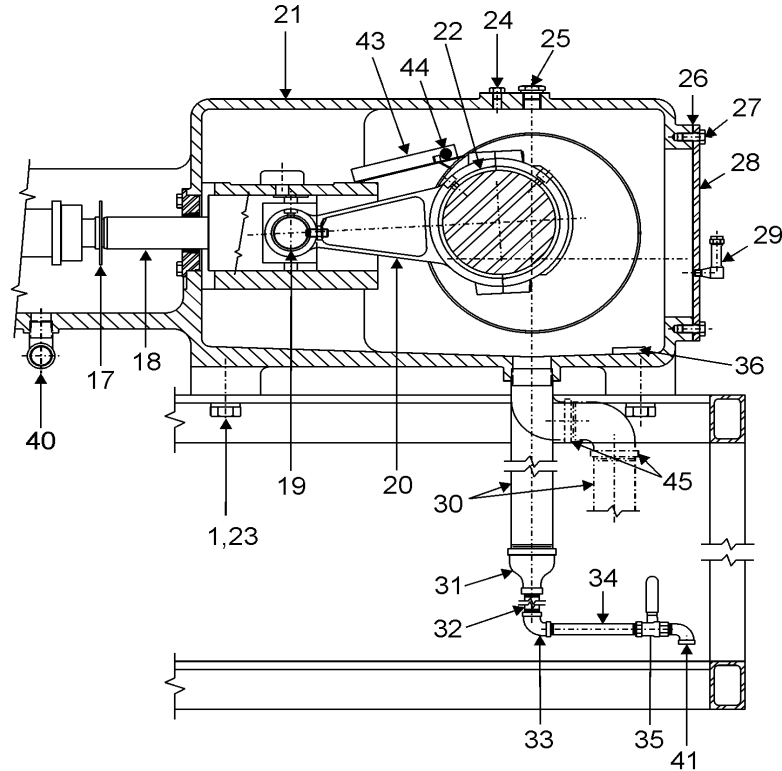
Homogenizer Crank Case Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Screw - Crankcase Mount, HH	4	30-419	
2	Crankshaft	1	100113	
	Crankshaft - 500LV only	1	111637	
3	Cap - Crankshaft Seal Holder	1	100118	
4	Cap - Crankcase	1	100122	
5	Seal, Crankshaft	1	100982	
6	Screw - Crankcase End Caps	12	30-461	
7	Shim - .005 Thick	-	100484	
8	Shim - .007 Thick	-	100489	
9	Shim - .020 Thick	-	100494	
10	Bearing - Cone	2	100499	
11	Bearing - Cup	2	100503	
12	Screw - Oil Seal Carrier, HH SS	6	30-361	
13	Carrier - Oil Seal	3	100126	
14	O-ring	3	N70149	
15	Retaining Ring	3	43-213	
16	Seal	3	100133	
17	Slinger - Water	3	100136	
18	Crosshead Assembly	3	100139	
19	Pin - Wrist	3	100143	
20	Connecting Rod Assembly	3	100147	
21	Crankcase	1	100151	
22	Journal Bearing (two per set)	6	100451	
23	Lockwasher - Crankcase Mount	4	43-146	
24	Vented Plug	1	CD0046100	
25	Drain/Level Plug	1	78-86	
26	Gasket	40	35850	
27	Screw - Crankcase Back Cover, HH	10	30-239	
28	Cover - Crankcase	1	100161	
29	Vented Oil Level Gauge	1	100981	
30	Oil Drain Pipe	1	11-118	
31	Reducer	1	78-109	
32	Oil Drain Pipe	1	11-146	
33	Elbow	1	78-110	
34	Oil Drain Pipe	1	11-143	
35	Brass Ball Valve	1	100984	
36	Magnet - Ceramic 5	3	100985	
37	Holder - Crankshaft Seal	1	100953	
38	O-ring	1	N70047	
39	Screw - Crankshaft Seal Holder, HH	4	30-496	
40	Elbow	1	107737	
41	Elbow	1	78-138	
42	Seal	3	105570	
43	Ramp - Oiling	1	100156	
44	Rod - Oiling Ramp Support	1	110116	
45	Elbow (use with oversize motors)	2	78-154	

Homogenizer Crank Case Assembly Diagram



HM100-057a

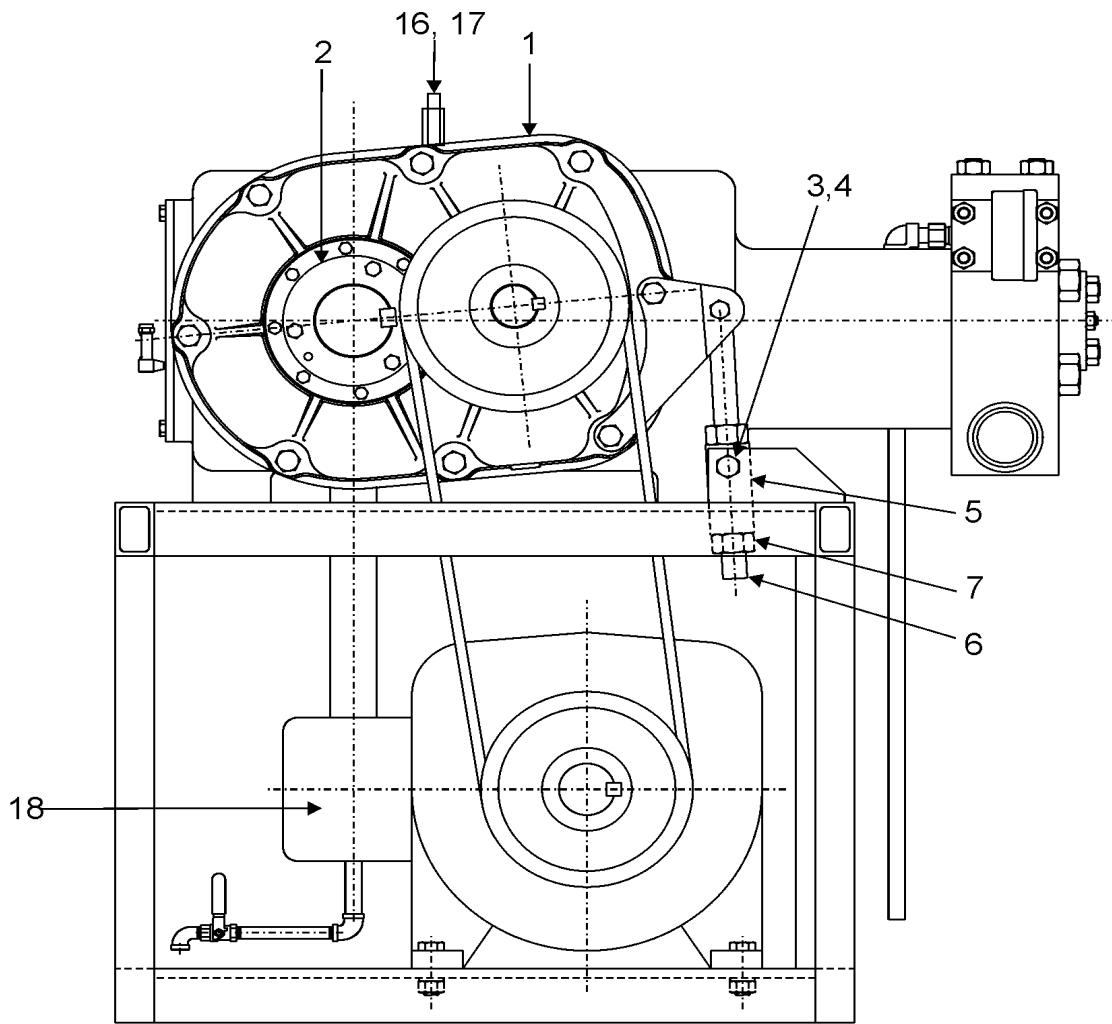


HM100-091a

Homogenizer Motor and Drive Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Speed Reducer - Single Reduction	1	100166	
2	Tapered Bushing Assembly	1	102853	
3	Screw, HH, ZP	2	30-285	
4	Lockwasher, ZP	2	43-140	
5	Pivot - Reducer/Tensioner	1	100170	
6	Rod End - Torque Arm	1	100971	
7	Hex Nut, ZP	2	36-96	
8	Label - Crankcase (not shown)	1	33-76	
9	Label - Crankcase (not shown)	1	33-77	
16	Nipple	1	11-150	
17	Coupling	1	11-151	
18	Meter - Hour, 60HZ 120VAC	1	112627	
	Meter - Hour, 50HZ 120VAC	1	112628	

Homogenizer Motor and Drive Assembly Diagram

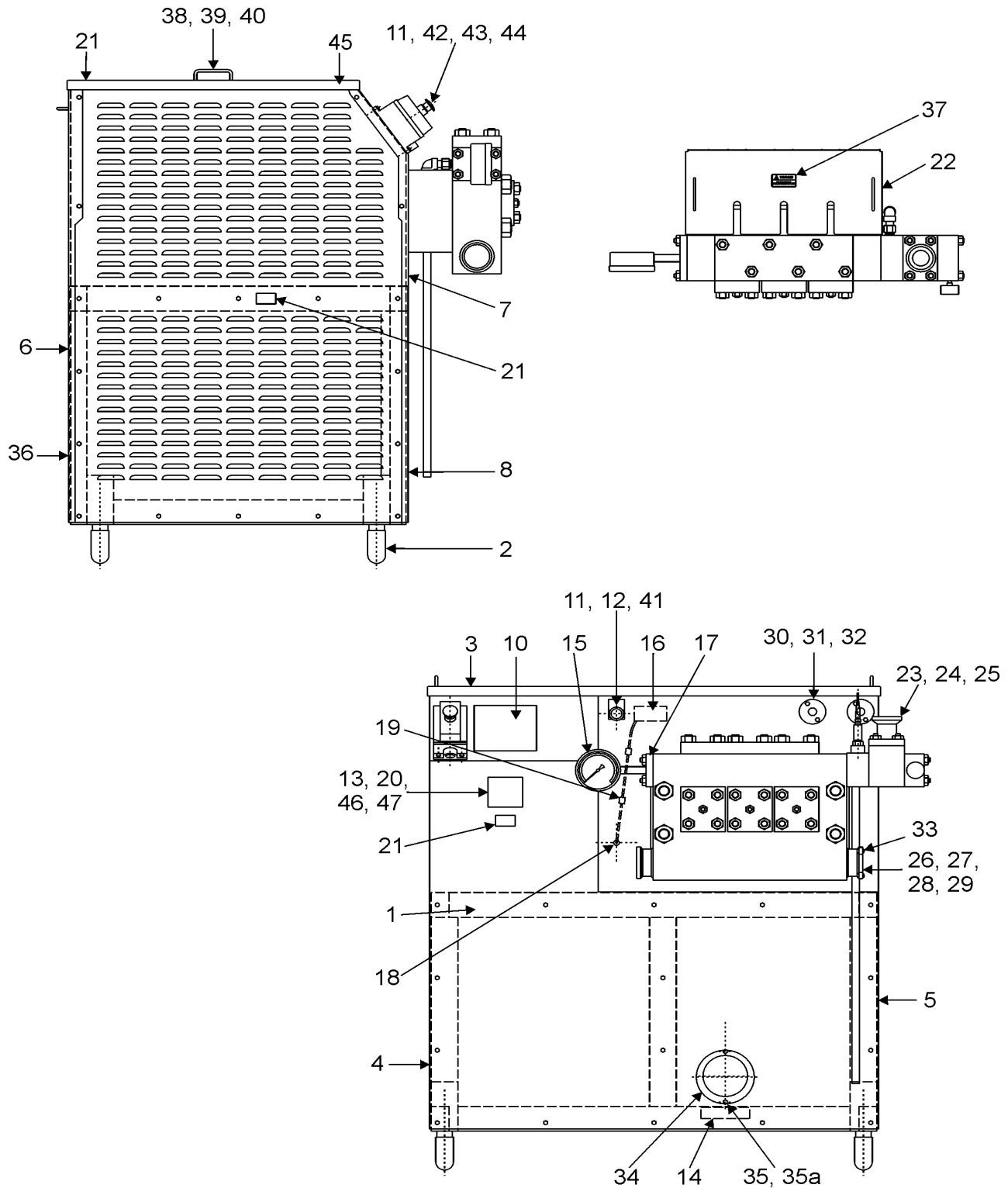


HM100-090a

Homogenizer Frame and Panel Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Frame Assembly	1	100072	
2	Leg - Adjustable	4	100077	
3	Panel - Housing, Top	1	100080	
4	Panel - Housing, Left Side	1	100085	
5	Panel - Housing, Right Side	1	100090	
6	Panel - Housing, Back	1	100095	
7	Panel - Housing, Front	1	100100	
8	Panel - Housing, Front Bottom (model 5000 only)	-	-	
9	Screw (not shown)	48	30-181	
9a	Washer (not shown)	48	43-144	
10	Label - Company Name and Machine Type	1	33-30A	
11	Switch - Emergency Stop, Standard	1	103994	
	Switch - Emergency Stop, Explosion Proof	1	105171	
12	Plate - Emergency Stop	1	103995	
13	Screw	4	30-608	
14	Nameplate - Drain	1	4487810	
15	PRESSURE GAUGE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
	PRESSURE TRANSDUCER/TRANSMITTER (Digital Pressure Meter Only) - OPT			
	0 to 1000 psi 3mV/V	1	100412	
	0 to 5000 psi 3mV/V	1	100413	
	0 to 7500 psi 3mV/V	1	100414	
	0 to 10000 psi 3mV/V	1	100415	
	0-5000 4-20mA 100 feet wire	1	111479	
16	Digital Pressure Meter - Optional	1	100108	
17	Clamp (Digital Pressure Meter only)	1	100109	
18	Grommet (Digital Pressure Meter only)	1	100111	
19	Cord Clip, Adhesive Backed (Digital Pressure Meter only)	3	100112	
20	Nameplate - Homogenizer	1	5902364	
	Nameplate - Plunger Pump	1	5902365	
21	Caution Plate	5	33-62	
22	Cover - Plunger/Cylinder Area	1	101337	
23	Ferrule, 14WI	1	29-505XCB	
24	Clamp, 13IS	1	3023014	
25	Gasket, 40IH Buna	1	20-104	
26	Ferrule, 14WI	2	29-505XCB	
27	Cap - Male, 16AI-14I	1	3-70X	
28	Clamp, 13IS	2	3023014	
29	Gasket, 40IH Buna	2	20-104	

Homogenizer Frame and Panel Assembly Diagram

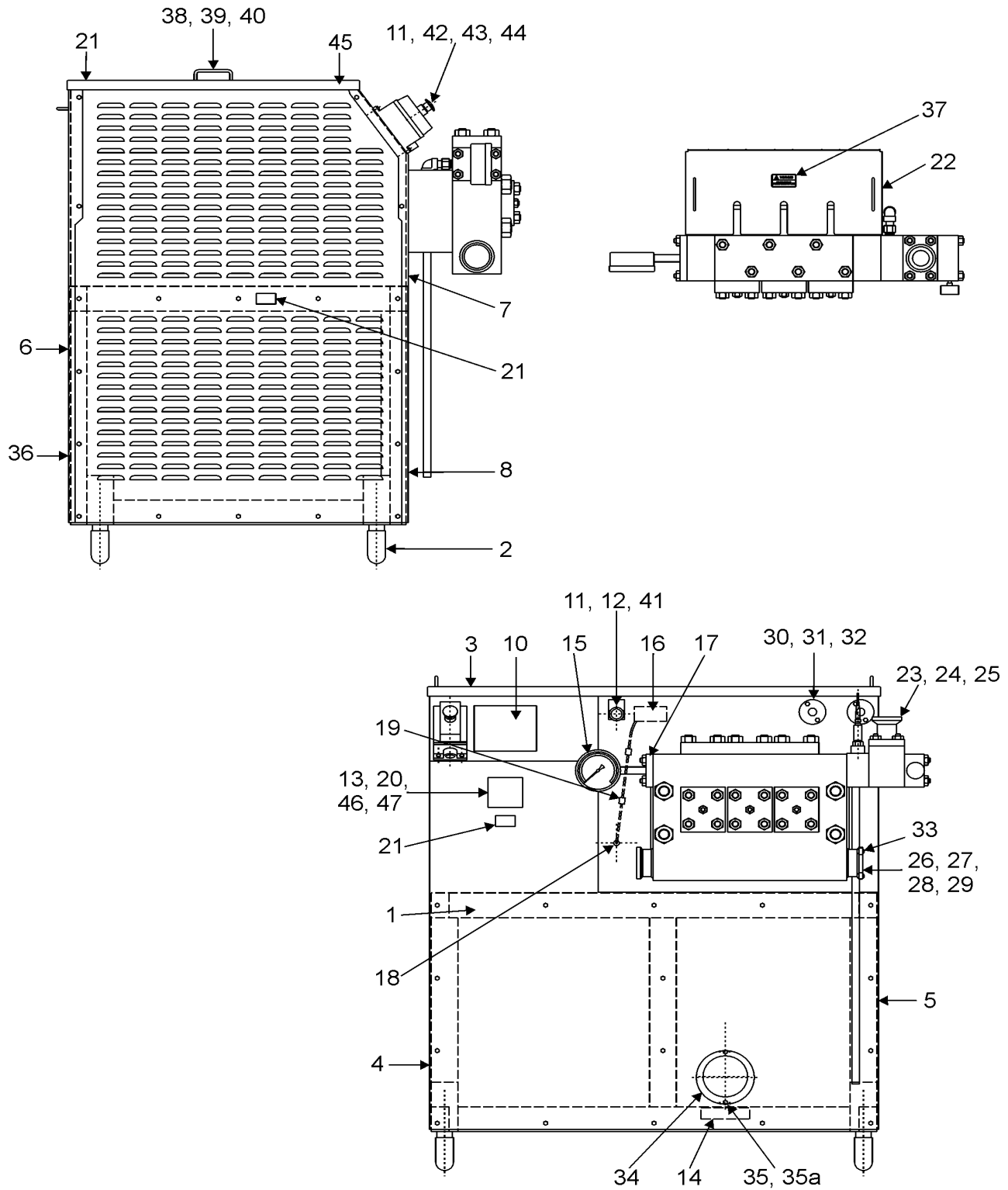


HM100-089a

Homogenizer Frame and Panel Assembly - Model 500/500LV

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
30	Cover	2	104001	
31	Screw, HHC SS	4	30-181	
32	Hex Nut SS	4	36-53	
33	Hole Plug	2	78-127	
34	Cover - Oil Hole	1	105173	
35	Screw	2	30-580	
35a	Washer, Plain 1/4" SS	2	43-144	
36	Panel - Housing Back Bottom (model 7500 only)	-	-	
37	Warning Label	1	33-84	
38	Handle with Mounting Screws	4	105899	
39	Lockwasher, #8	8	43-20	
40	Screw	8	30-593	
41	Hole Plug - SS (Explosion Proof Switch only)	1	78-147	
42	Screw, HHC (Explosion Proof Switch only)	4	30-206	
43	Lockwasher, SS (Explosion Proof Switch only)	4	43-22	
44	Hex Nut (Explosion Proof Switch only)	4	36-53	
45	Wear Shape, Snap-On	81	108311	
46	Lockwasher, #3 18-8SS	4	43-85	
47	Hex Nut, #3-48 18-8SS	4	36-134	

Homogenizer Frame and Panel Assembly Diagram



HM100-089a

Homogenizer Headblock Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Rupture Disc - Sized to Headblock Design Limitation	1	100997	
2	Ring - Rupture Disc (For less than 7500 psi)	1	101002	
	Ring - Rupture Disc (7500 to 10000 psi)	-	-	
3	Nut - Rupture Disc Holddown	1	100266	
4	Nipple	1	11-131	
5	Elbow	1	78-112	
6	Hex Nut	4	107482	
7	Adapter - Rupture Disc	1	101358	
	Adapter - Rupture Disc and Pressure Transducer	1	111010	
8	Backup Ring	2	BUR214	
9	O-ring	2	N70214	
10	Handle - Headblock Cover, Top	2	100271	
11	Hex Nut	6	107485	
11a	Stud - .875-9 x 3.59" LG	6	100468	
12	Cover - Headblock, Top	1	100273	
13	Stud - Gauge (Homogenizers only)	4	100281	
14	Nipple	1	11-135	
14a	Nipple	-	-	
14b	Caution Label	1	33-85	
15	Dowel Pin	2	30-501	
16	Hex Nut	4	107488	
17	Stud - Headblock and Crankcase	4	100279	
18	Hex Nut	12	107484	
18a	Stud - .750-10 x 3.0" LG	12	100467	
19	Hex Nut	3	107482	
20	Stud - Cylinder Puller	3	100282	
21	Cover - Headblock, Front (Not Aseptic)	3	103936	1
22	Ball Valve	1	312-1402X	
23	Nipple	1	11-116	
24	Header - Seal Flush	1	100288	
24a	Screw	2	30-287	
24b	Lockwasher, 1/4"	2	43-106	
25	Male Connector (Not Aseptic)	3	78-88	
26	Tubing - Clear (Not Aseptic)	60	87-1023	
27	Elbow (Not Aseptic)	3	78-87	
28	Backup Ring	3	BUR220	
29	O-ring	3	N70220	
30	Plug - Headblock Top (Poppet Valve only)	3	100295	
31	Spring - Coil (Poppet Valve only)	6	4483710	
32	Cap - Suction Valve Spring	3	101647	
33	Headblock - Integral Seat	1	100299	1
	Headblock - Hardened Seat	1	104605	1
34	Backup Ring	3	BUR330	1
35	O-ring	3	N70330	1
36	O-ring	3	N70329	1
37	Backup Ring	3	BUR329	1

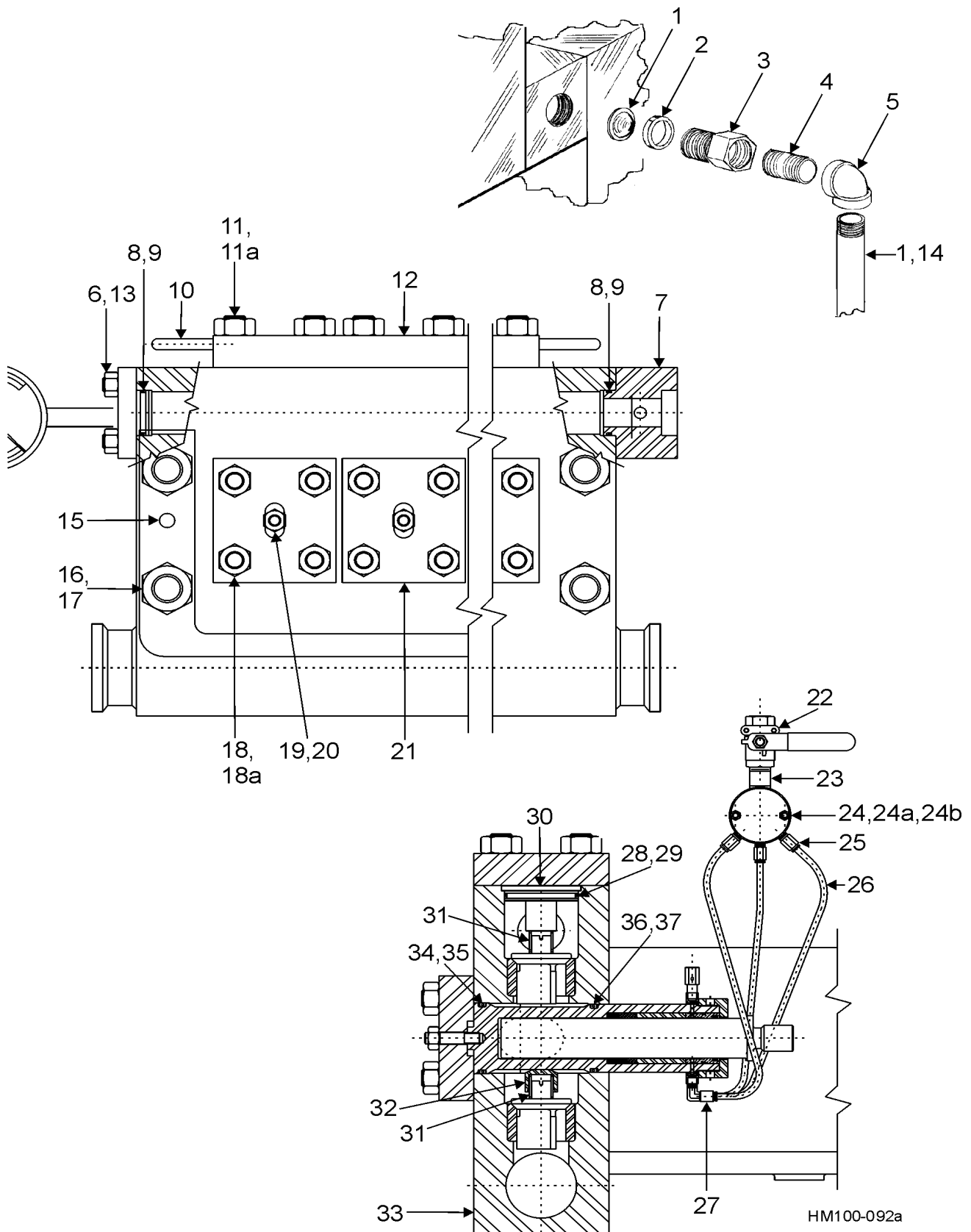
Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

PL5081 - Dispersion Equipment
Parts Price List



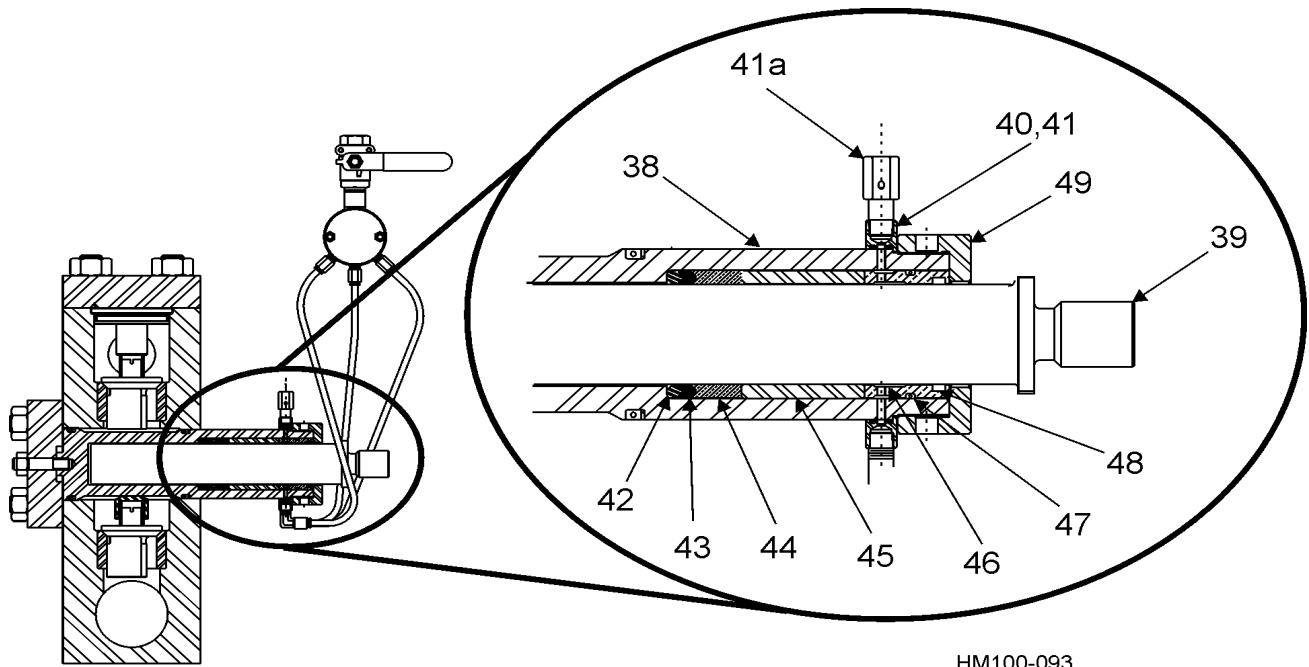
Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
38	CYLINDER			
	.875" Plunger Diameter	3	100317	
	1.000" Plunger Diameter	3	100707	
	1.125" Plunger Diameter	3	100709	
	1.250" Plunger Diameter	3	100711	
	1.375" Plunger Diameter	3	100320	
39	PLUNGER - TUNGSTEN CARBIDE			
	.875" Diameter	3	100637	
	1.000" Diameter	3	100639	
	1.125" Diameter	3	100641	
	1.250" Diameter	3	100643	
	1.375" Diameter	3	100645	
	PLUNGER - CERAMIC - OPT			
	.875" Diameter	3	100588	
	1.000" Diameter	3	100590	
	1.125" Diameter	3	100592	
	1.250" Diameter	3	100594	
	1.375" Diameter	3	100596	
40	Ring - Seal Flush	3	100326	
41	O-ring	6	N70036	
41a	Snubber	3	104130	
42	ADAPTER - BOTTOM			
	.875" Plunger Diameter	3	100329	
	1.000" Plunger Diameter	3	100833	
	1.125" Plunger Diameter	3	100835	
	1.250" Plunger Diameter	3	100836	
	1.375" Plunger Diameter	3	100331	
43	SEAL - PLUNGER			
	.875" Plunger Diameter	6	105133	
	1.000" Plunger Diameter	6	105135	
	1.125" Plunger Diameter	6	105137	
	1.250" Plunger Diameter	6	105139	
	1.375" Plunger Diameter	6	105141	
	SEAL - PLUNGER - FDA (OPT)			
	.875" Plunger Diameter, FDA	6	101012	
	1.000" Plunger Diameter, FDA	6	101014	
	1.125" Plunger Diameter, FDA	6	101016	
	1.250" Plunger Diameter, FDA	6	101018	
	1.375" Plunger Diameter, FDA	6	101020	

Homogenizer Headblock Assembly Diagram



HM100-093

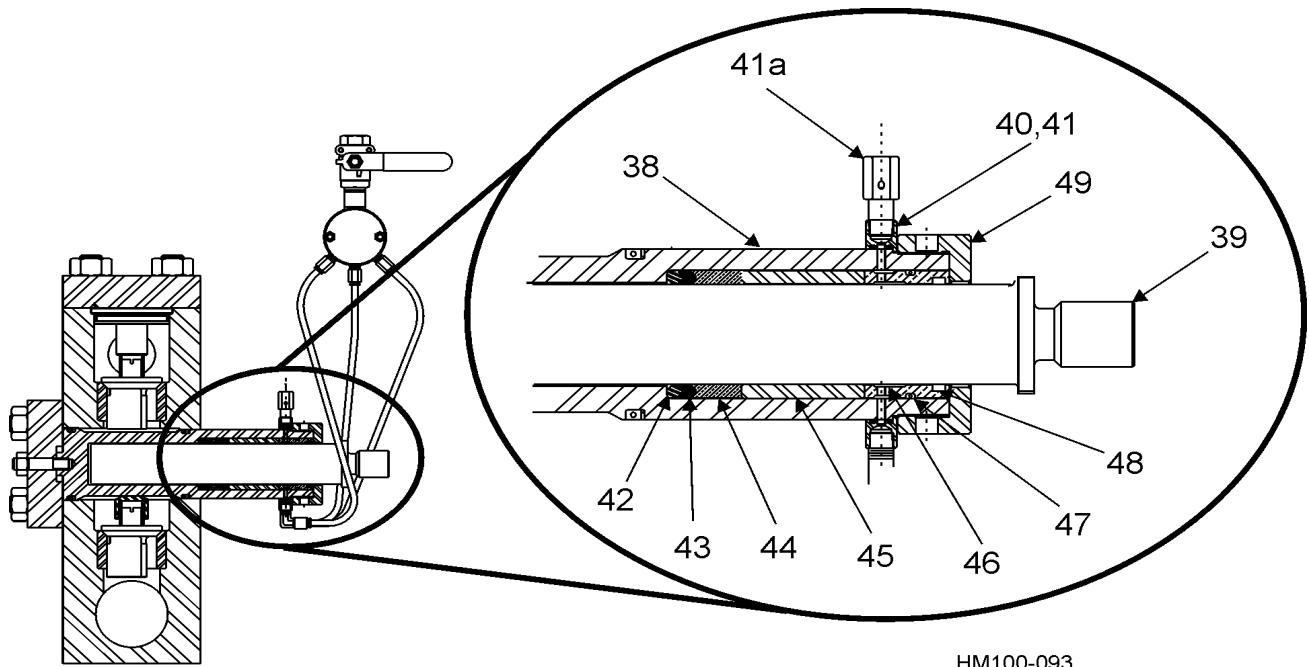
Homogenizer Headblock Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
44	ADAPTER - TOP, DOUBLE SEAL			
	.875" Plunger Diameter	3	105924	
	1.000" Plunger Diameter	3	105926	
	1.125" Plunger Diameter	3	105928	
	1.250" Plunger Diameter	3	105930	
	1.375" Plunger Diameter	3	105932	
	ADAPTER - TOP, SINGLE SEAL - OPT			
	.875" Plunger Diameter	3	101111	
	1.000" Plunger Diameter	3	101113	
	1.125" Plunger Diameter	3	101115	
	1.250" Plunger Diameter	3	101117	
	1.375" Plunger Diameter	3	101119	
45	SPACER			
	.875" Plunger Diameter	3	100854	
	1.000" Plunger Diameter	3	100856	
	1.125" Plunger Diameter	3	100858	
	1.250" Plunger Diameter	3	100860	
	1.375" Plunger Diameter	3	100342	
46	RING - LANTERN			
	.875" Plunger Diameter	3	100337	
	1.000" Plunger Diameter	3	100803	
	1.125" Plunger Diameter	3	100805	
	1.250" Plunger Diameter	3	100806	
	1.375" Plunger Diameter	3	100339	
47	O-RING			
	.875" Plunger Diameter	3	N70123	1
	1.000" Plunger Diameter	3	N70125	1
	1.125" Plunger Diameter	3	N70127	1
	1.250" Plunger Diameter	3	N70129	1
	1.375" Plunger Diameter	3	N70131	1
48	SEAL - WIPER			
	.875" Plunger Diameter	3	101067	1
	1.000" Plunger Diameter	3	101069	1
	1.125" Plunger Diameter	3	101071	1
	1.250" Plunger Diameter	3	101073	1
	1.375" Plunger Diameter	3	101075	1
49	NUT			
	.875" Plunger Diameter	3	100347	
	1.000" Plunger Diameter	3	100762	
	1.125" Plunger Diameter	3	100764	
	1.250" Plunger Diameter	3	100766	
	1.375" Plunger Diameter	3	100350	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

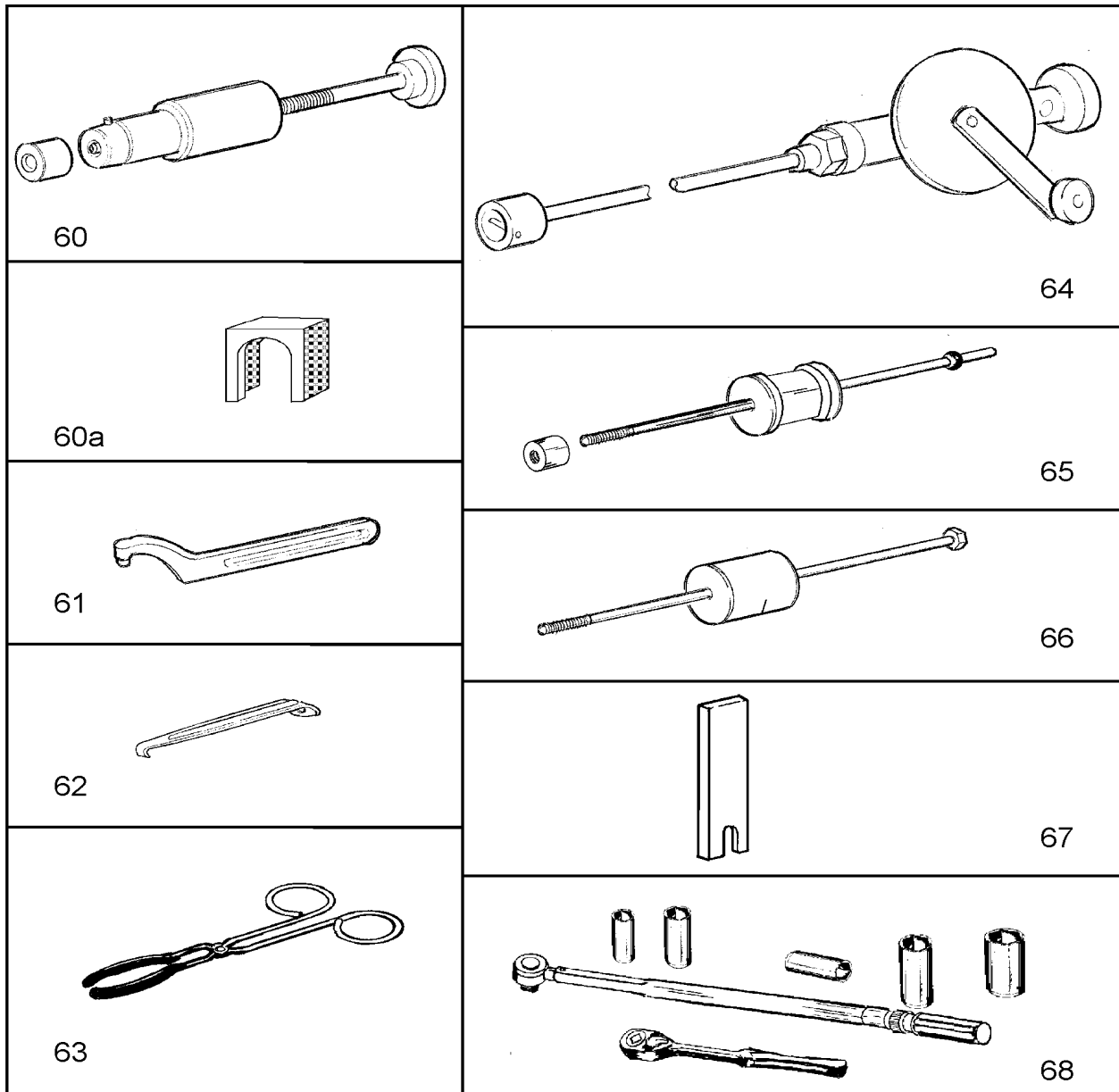
Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly Tools - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
60	SEAL PULLER			
	.875" Plunger Diameter	1	101161	
	1.000" Plunger Diameter	1	101163	
	1.125" Plunger Diameter	1	101165	
	1.250" Plunger Diameter	1	101167	
	1.375" Plunger Diameter	1	101169	
60a	Plunger Removal Tool	1	107352	
61	Spanner Wrench - Fixed Head	1	100977	
62	O-ring Tool	1	AD0096001	
63	Valve Tongs - Neoprene Cushioned Prongs	1	101344	
64	Valve Regrinding Tool - Oscilating Hand Grinder	1	101390	
65	Slide Hammer - Cylinder Remover	1	101334	
66	Slide Hammer - Headblock Top Plug Remover	1	101342	
67	Cylinder Alignment Tool	1	101378	
68	Torque Wrench Kit	1	101639	

Homogenizer Headblock Assembly Tools Diagram



HM100-094a

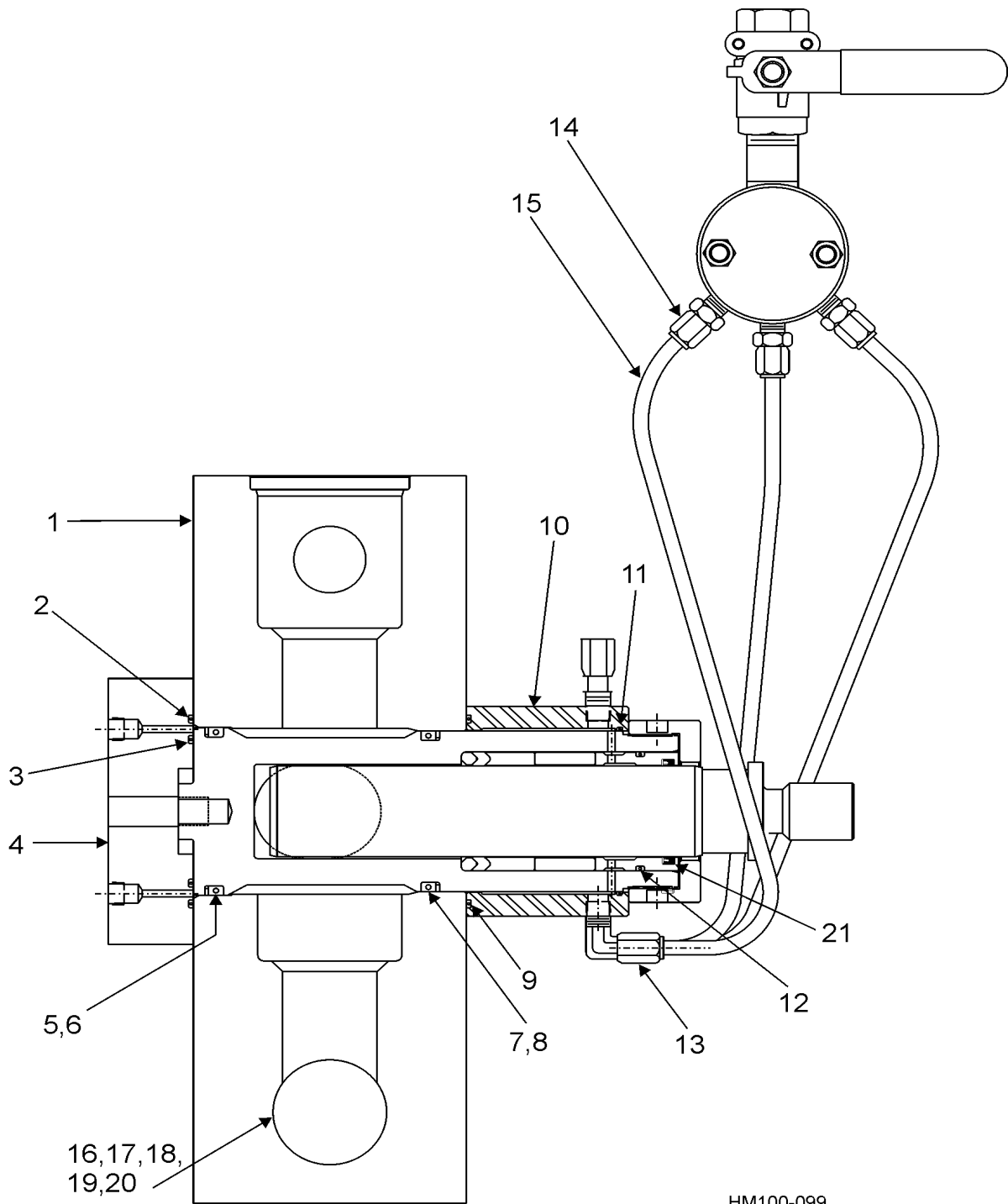
Homogenizer Aseptic Flush Option - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Headblock - Integral Seat Poppet Valve Only	1	105381	
	Headblock - Hardened Seat Poppet Valve Only	1	105382	
2	O-ring, EPDM	3	E70146	
3	O-ring, EPDM	3	E70135	
4	Cover - Headblock, Front, Aseptic	3	108849	
5	O-ring, EPDM	3	E70330	
6	Backup Ring, Teflon	3	BRT330	
7	Backup Ring, Teflon	3	BRT329	
8	O-ring, EPDM	3	E70329	
9	O-ring, EPDM	3	E70148	
10	Collar - Aseptic Cylinder	3	108850	
11	O-ring, EPDM	3	E70036	
12	O-RING, EPDM			
	.875" Plunger Diameter	3	E70123	
	1.000" Plunger Diameter	3	E70125	
	1.125" Plunger Diameter	3	E70127	
	1.250" Plunger Diameter	3	E70129	
	1.375" Plunger Diameter	3	E70131	
13	Elbow	3	78-137	
14	Adapter	6	78-136	
15	Tubing - 1/4" OD, Teflon Green	260	87-1138	
16	Ferrule, #14WNI 316L SS	2	29-640X	
17	Gasket, #4OIV, FKM	2	20-104V	
18	O-ring, FKM	2	V70227	
19	Clamp, #13IS	2	3023011	
20	Adapter	4	78-71	
21	SEAL - WIPER, EPDM			
	.875" Plunger Diameter	3	104517	
	1.000" Plunger Diameter	3	104519	
	1.125" Plunger Diameter	3	104521	
	1.250" Plunger Diameter	3	104523	
	1.375" Plunger Diameter	3	104525	

Note:

** See Homogenizer Headblock Assembly for all parts not listed here.

Homogenizer Aseptic Flush Option Diagram

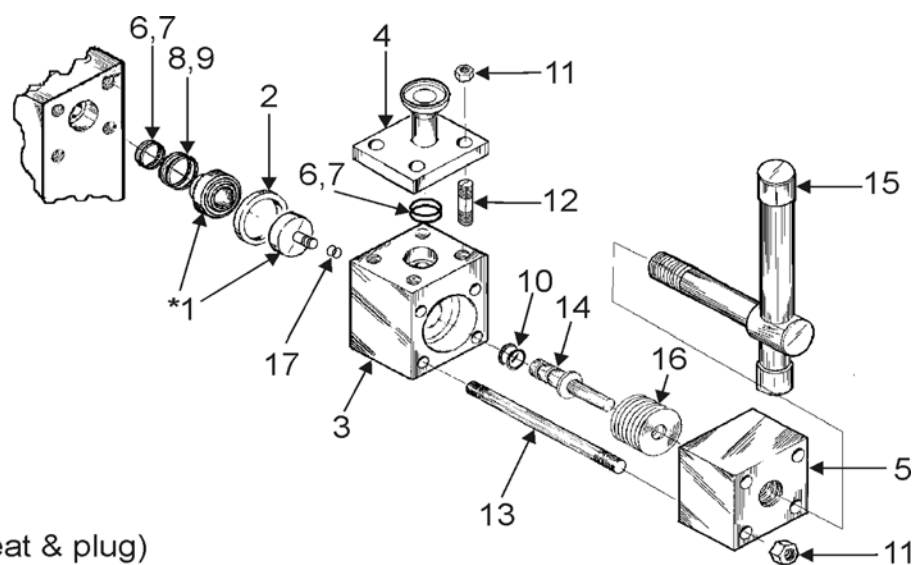


HM100-099

Homogenizer Single Stage Manual Homogenizing Valve Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	VALVE			
	500 GPH Capacity, 17-4PH SS	1	100355	
	1000 GPH Capacity, 17-4PH SS	1	100356	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	500 GPH Capacity, Tungsten Carbide	1	100176	
	1000 GPH Capacity, Tungsten Carbide	1	100177	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
2	RING			
	500 GPH Capacity, 17-4PH SS	1	100358	
	1000 GPH Capacity, 17-4PH SS	1	100359	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	500 GPH Capacity, Tungsten Carbide	1	100224	
	1000 GPH Capacity, Tungsten Carbide	1	100225	
3	Flat Face Valve Option, Tungsten Carbide	1	100223	
	Body - Valve	1	105882	
4	Body - Valve, Aseptic	1	105885	
	Fitting - Product Discharge, #15I	1	101001	
5	Bonnet - Valve	1	100362	
6	O-ring	2	N70214	
7	Backup Ring	2	BUR214	
8	Backup Ring	1	BUR226	
9	O-ring	1	N70226	
10	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
11	Hex Nut	8	107482	
12	Stud - Product Discharge Fitting	4	100281	
13	Stud - Body	4	104006	
14	Stem - Valve	1	105876	
	Stem - Valve, Aseptic	1	105887	
	Stem - Valve (Capacity Less Than 1000 GPH)	1	-	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	1	-	
	Stem - Valve, Flat Face	1	113413	
	Stem - Valve, Flat Face, Aseptic	1	113414	
15	Screw - Valve Adjusting	1	100366	
16	Washer - Belleville Spring	8	104007	
17	O-ring	2	N70013	
18	Adapter - Seat, Flat Face Valve Option	1	111294	
19	O-ring, Flat Face Valve Option	1	N70220	
20	Backup Ring, Flat Face Valve Option	1	BUR220	
21	O-ring, Flat Face Valve Option	1	N70013	

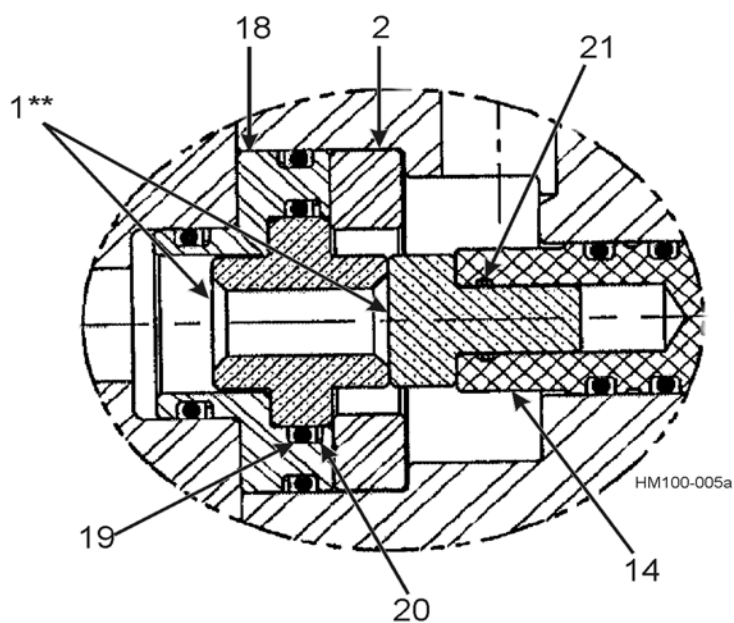
Homogenizer Single Stage Manual Homogenizing Valve Diagram



*Mated Pair (seat & plug)

HM100-101a

Flat Face Valve Option



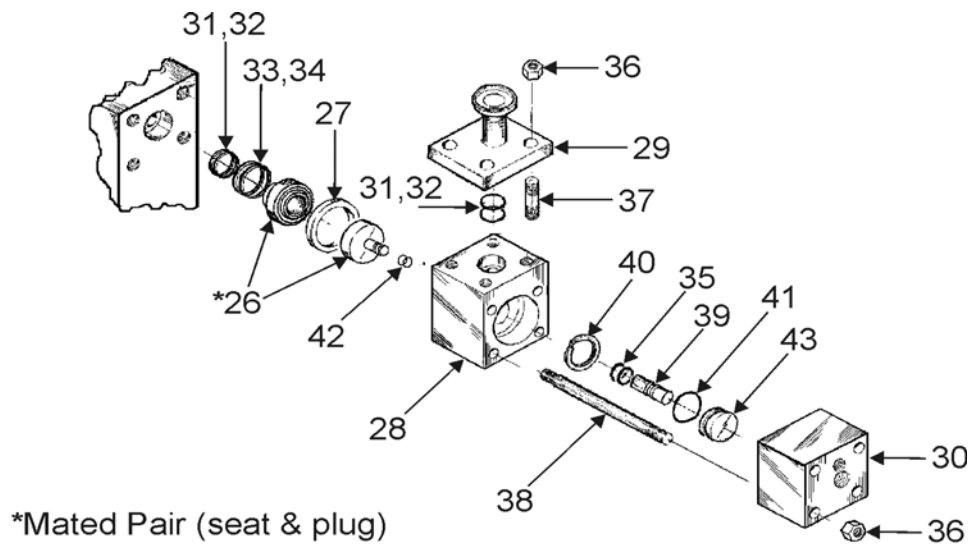
HM100-005a

**Seat & Plug Required

Homogenizer Single Stage Hydraulic Homogenizing Valve Assembly - Model 1000

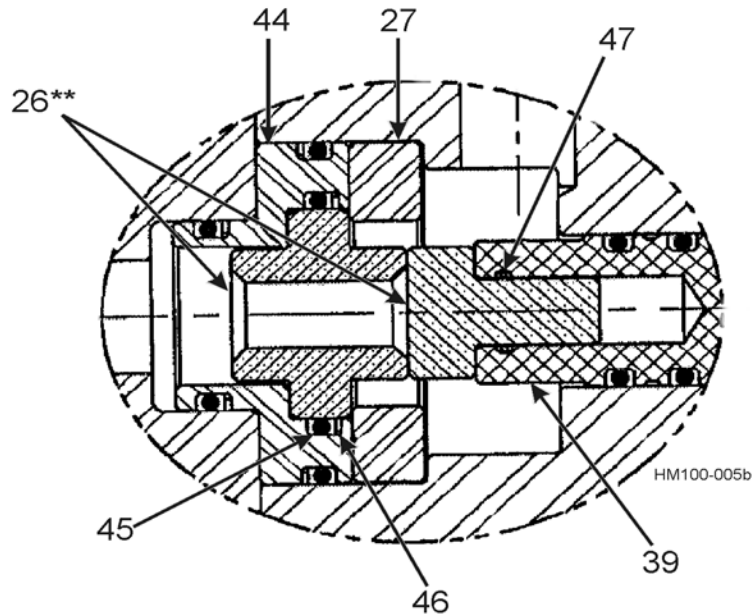
F	DESCRIPTION	QTY	PART NO.	NOTES
26	VALVE			
	500 GPH Capacity, 17-4PH SS	1	100355	
	1000 GPH Capacity, 17-4PH SS	1	100356	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	500 GPH Capacity, Tungsten Carbide	1	100176	
	1000 GPH Capacity, Tungsten Carbide	1	100177	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
27	RING			
	500 GPH Capacity, 17-4PH SS	1	100358	
	1000 GPH Capacity, 17-4PH SS	1	100359	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	500 GPH Capacity, Tungsten Carbide	1	100224	
	1000 GPH Capacity, Tungsten Carbide	1	100225	
28	Body - Valve	1	105881	
	Body - Valve, Aseptic	1	105884	
29	Fitting - Product Discharge, #15I	1	101001	
30	Cylinder - Hydraulic Actuator	1	105872	
31	O-ring	2	N70214	
32	Backup Ring	2	BUR214	
33	Backup Ring	1	BUR226	
34	O-ring	1	N70226	
35	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
36	Hex Nut	8	107482	
37	Stud - Product Discharge Fitting	4	100281	
38	Stud - Body	4	100464	
39	Stem - Piston, Hydraulic Actuator	1	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	1	105897	
	Stem - Piston, Flat Face Valve Option	1	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	1	113411	
40	Retaining Ring	1	43-218	
41	T-Seal	1	100393	
42	O-ring, Style B	2	N70013	
43	Head - Piston, Hydraulic Actuator	1	105891	
44	Adapter - Seat, Flat Face Valve Option	1	111294	
45	O-ring, Flat Face Valve Option	1	N70220	
46	Backup Ring, Flat Face Valve Option	1	BUR220	
47	O-ring, Flat Face Valve Option	1	N70013	

Homogenizer Single Stage Hydraulic Homogenizing Valve Diagram



HM100-100a

Flat Face Valve Option

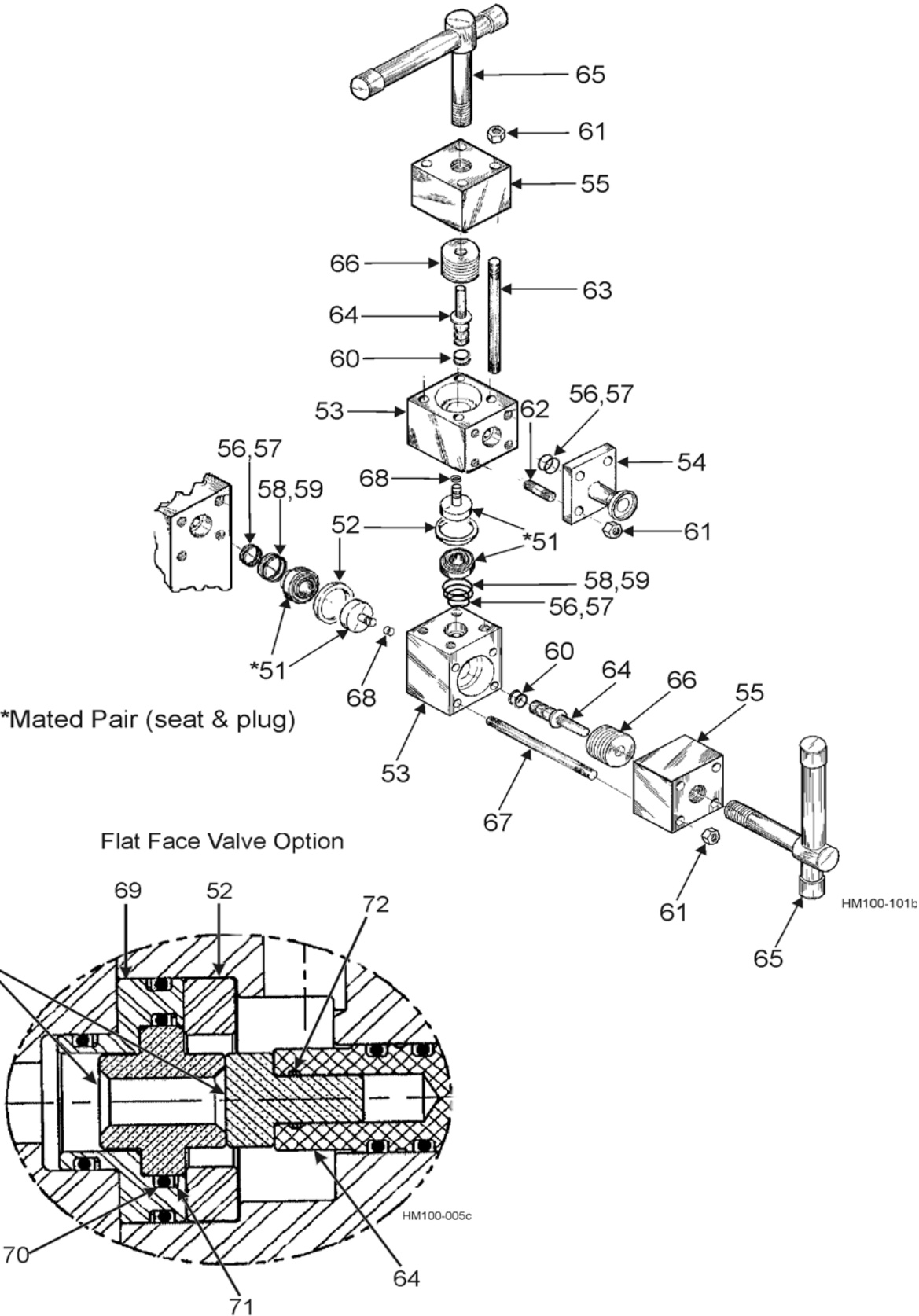


**Seat & Plug Required

Homogenizer Double Stage Manual Homogenizing Valve Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
51	VALVE			
	500 GPH Capacity, 17-4PH SS	2	100355	
	1000 GPH Capacity, 17-4PH SS	2	100356	
	Seat - Flat Face Valve, 17-4PH SS	2	111297	
	Plug - Flat Face Valve, 17-4PH SS	2	111296	
	500 GPH Capacity, Tungsten Carbide	2	100176	
	1000 GPH Capacity, Tungsten Carbide	2	100177	
	Seat - Flat Face Valve, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve, Tungsten Carbide	2	113404	
52	RING			
	500 GPH Capacity, 17-4PH SS	2	100358	
	1000 GPH Capacity, 17-4PH SS	2	100359	
	Flat Face Valve, 17-4PH SS	2	100942	
	500 GPH Capacity, Tungsten Carbide	2	100224	
	1000 GPH Capacity, Tungsten Carbide	2	100225	
53	Flat Face Valve, Tungsten Carbide	2	100223	
	Body - Valve	2	105882	
	Body - Valve, Aseptic	2	105885	
54	Fitting - Product Discharge, #15I	1	101001	
55	Bonnet - Valve	2	100362	
56	O-ring	3	N70214	
57	Backup Ring	3	BUR214	
58	Backup Ring	2	BUR226	
59	O-ring	2	N70226	
60	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
61	Hex Nut	12	107482	
62	Stud - Product Discharge Fitting	4	100281	
63	Stud - Body	4	100364	
64	Stem - Valve	2	105876	
	Stem - Valve, Aseptic	2	105887	
	Stem - Valve (Capacity Less Than 1000 GPH)	2	-	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	2	-	
	Stem - Valve, Flat Face	2	113413	
	Stem - Valve, Flat Face, Aseptic	2	113414	
65	Screw - Valve Adjusting	2	100366	
66	Washer - Belleville Spring	16	104007	
67	Stud - Body	4	104006	
68	O-ring	4	N70013	
69	Adapter - Seat, Flat Face Valve	2	111294	
70	O-ring, Flat Face Valve	2	N70220	
71	Backup Ring, Flat Face Valve	2	BUR220	
72	O-ring, Flat Face Valve	2	N70013	

Homogenizer Double Stage Manual Homogenizing Valve Diagram

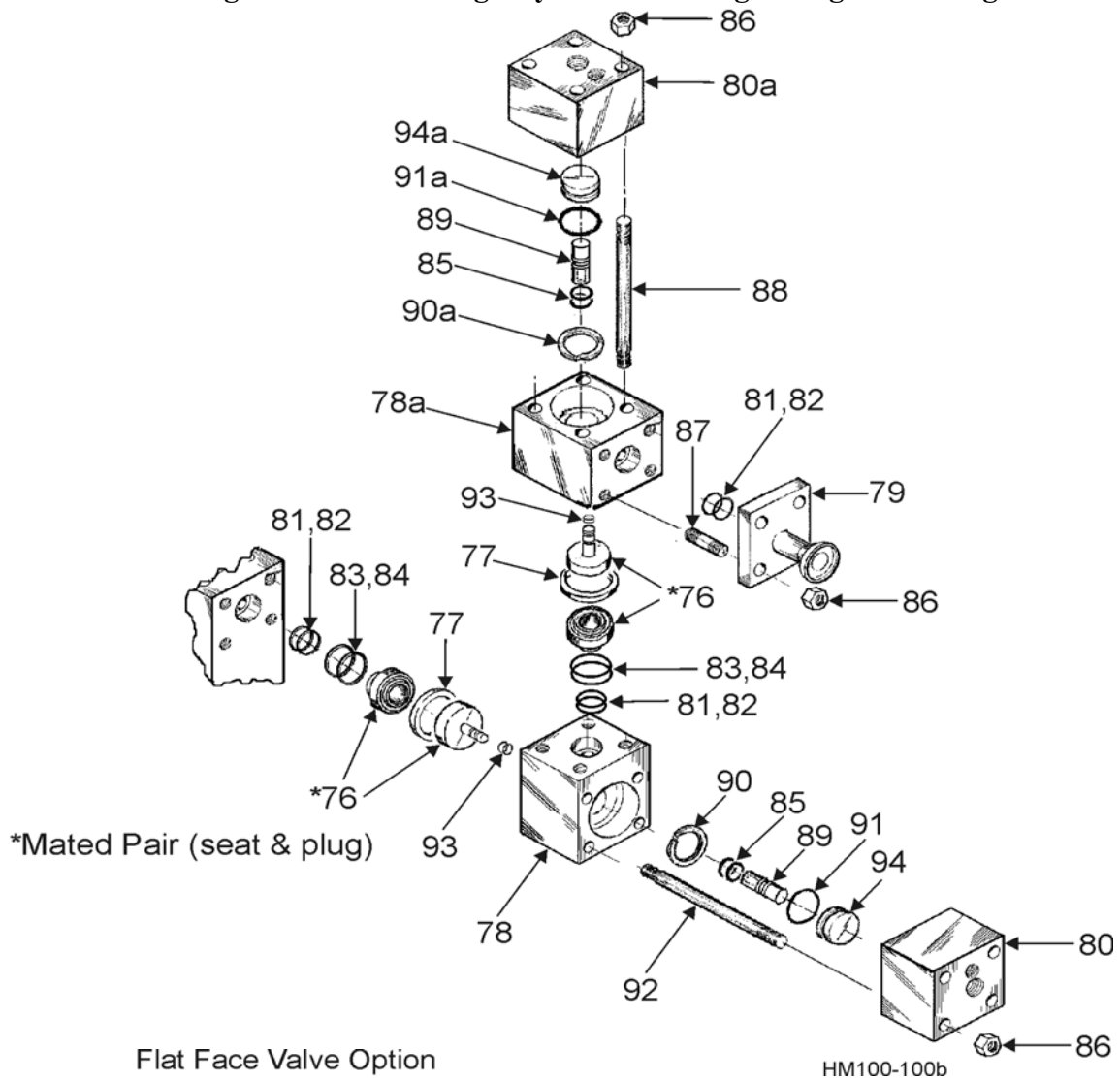


**Seat & Plug Required
PL5081 - Dispersion Equipment
Parts Price List

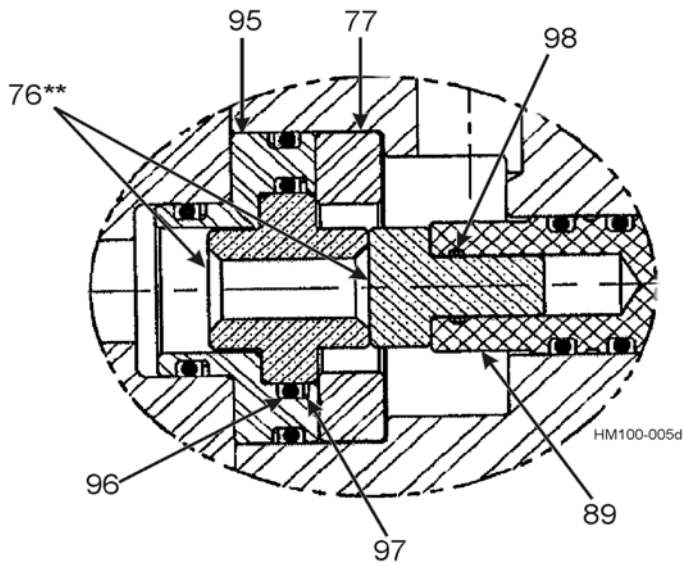
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
76	VALVE			
	500 GPH Capacity, 17-4PH SS	2	100355	
	1000 GPH Capacity, 17-4PH SS	2	100356	
	Seat - Flat Face Valve Option, 17-4PH SS	2	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	2	111296	
	500 GPH Capacity, Tungsten Carbide	2	100176	
	1000 GPH Capacity, Tungsten Carbide	2	100177	
	Seat - Flat Face Valve Option, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	2	113404	
77	RING			
	500 GPH Capacity, 17-4PH SS	2	100358	
	1000 GPH Capacity, 17-4PH SS	2	100359	
	Flat Face Valve Option, 17-4PH SS	2	100942	
	500 GPH Capacity, Tungsten Carbide	2	100224	
	1000 GPH Capacity, Tungsten Carbide	2	100225	
78	Body - Valve - 1st Stage	1	105881	
	Body - Valve, Aseptic - 1st Stage	1	105884	
78a	Body - Valve - 2nd Stage	1	105881	
	Body - Valve, Aseptic - 2nd Stage	1	105884	
79	Fitting - Product Discharge, #15I	1	101001	
80	Cylinder - Hydraulic Actuator - 1st Stage	1	105872	
80a	Cylinder - Hydraulic Actuator - 2nd Stage	1	105872	
81	O-ring	3	N70214	
82	Backup Ring	3	BUR214	
83	Backup Ring	2	BUR226	
84	O-ring	2	N70226	
85	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
86	Hex Nut	12	107482	
87	Stud - Product Discharge Fitting	4	100281	
88	Stud - Body	4	100380	
89	Stem - Piston, Hydraulic Actuator	2	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	2	105897	
	Stem - Piston, Flat Face Valve Option	2	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	2	113411	
90	Retaining Ring - 1st Stage	1	43-218	
90a	Retaining Ring - 2nd Stage	1	43-218	
91	T-Seal - 1st Stage	1	100393	
91a	T-Seal - 2nd Stage	1	100393	
92	Stud - Body	4	100464	
93	O-ring	4	N70013	
94	Head - Piston, Hydraulic Actuator - 1st Stage	1	105891	
94a	Head - Piston, Hydraulic Actuator - 2nd Stage	1	105891	
95	Adapter - Seat, Flat Face Valve Option	2	111294	
96	O-ring, Flat Face Valve Option	2	N70220	
97	Backup Ring, Flat Face Valve Option	2	BUR220	
98	O-ring, Flat Face Valve Option	2	N70013	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

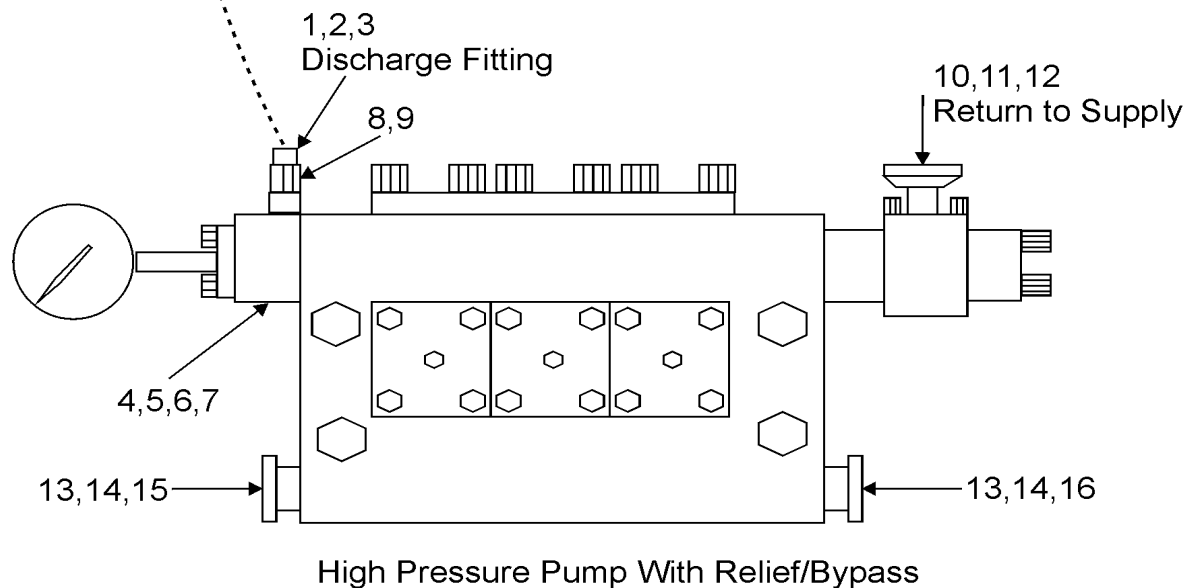
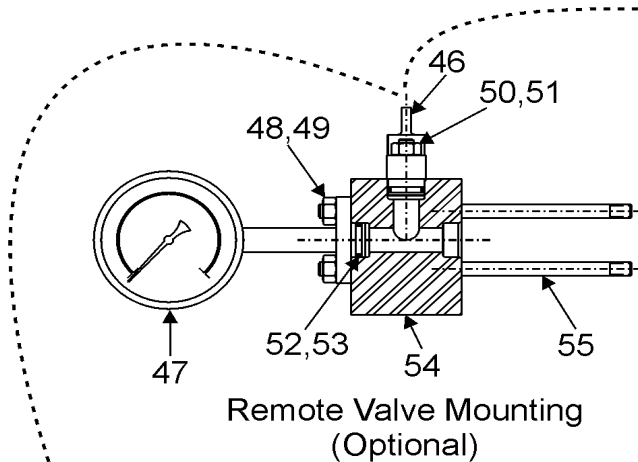
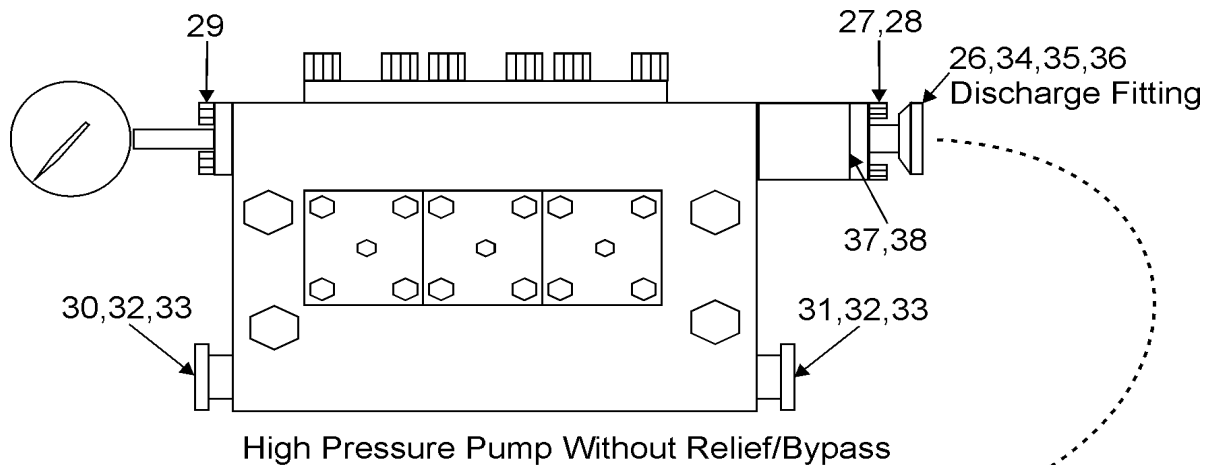
Homogenizer High Pressure Pump Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101372	
	3/8" OD, 6500 Max Working Pressure	1	101373	
	1/2" OD, 6200 Max Working Pressure	1	108005	
	5/8" OD, 6000 Max Working Pressure	1	101374	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4700 Max Working Pressure	1	101376	
2	O-ring	1	N70214	
3	Backup Ring	1	BUR214	
4	Adapter - Gauge and Outlet	1	100267	
5	O-ring	1	N70214	
6	Backup Ring	1	BUR214	
7	Stud - Gauge and Outlet	4	100704	
8	Stud - Product Discharge	2	100465	
9	Hex Nut - Cap	2	107483	
10	Clamp Assembly, 13IS	1	3023011	
11	Gasket, 40IH Buna	1	20-105	
12	Ferrule, 14WI	1	29-506XCB	
13	Clamp Assembly, 13IS	2	3023014	1
14	Gasket - 40IH Buna	2	20-104	1
15	Ferrule, 14WI	2	29-505XCB	1
16	Cap - Male, 16AI-14I	1	3-70X	
26	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101385	
	3/8" OD, 6500 Max Working Pressure	1	101386	
	1/2" OD, 6200 Max Working Pressure	1	108006	
	5/8" OD, 6000 Max Working Pressure	1	101387	
	3/4" OD, 5800 Max Working Pressure	1	101388	
	1.0" OD, 4200 Max Working Pressure	1	101389	
	1-1/2" #15I, 250 Max psi at 250°F	1	100361	
	2.0" #15I, 250 Max psi at 250°F	1	101001	
	2-1/2" #15I, 200 Max psi at 250°F	1	-	
27	Stud - Rupture Disc and Outlet	4	100704	
28	Hex Nut	4	107482	
29	Stud - Gauge	4	100281	
30	Ferrule, 14WI	2	29-505XCB	1
31	Cap - Male, 16AI-14I	1	3-70X	
32	Clamp Assembly, 13IS	2	3023014	1
33	Gasket - 40IH Buna	2	20-104	1
34	Ferrule, 14WI	1	29-506XCB	
35	Clamp Assembly, 13IS	1	3023011	
36	Gasket - 40IH Buna	1	20-105	
37	O-ring	1	N70214	
38	Backup Ring	1	BUR214	

Notes:

1. If for aseptic application, see Homogenzier Aseptic Flush Option instead.

Homogenizer High Pressure Pump Diagram

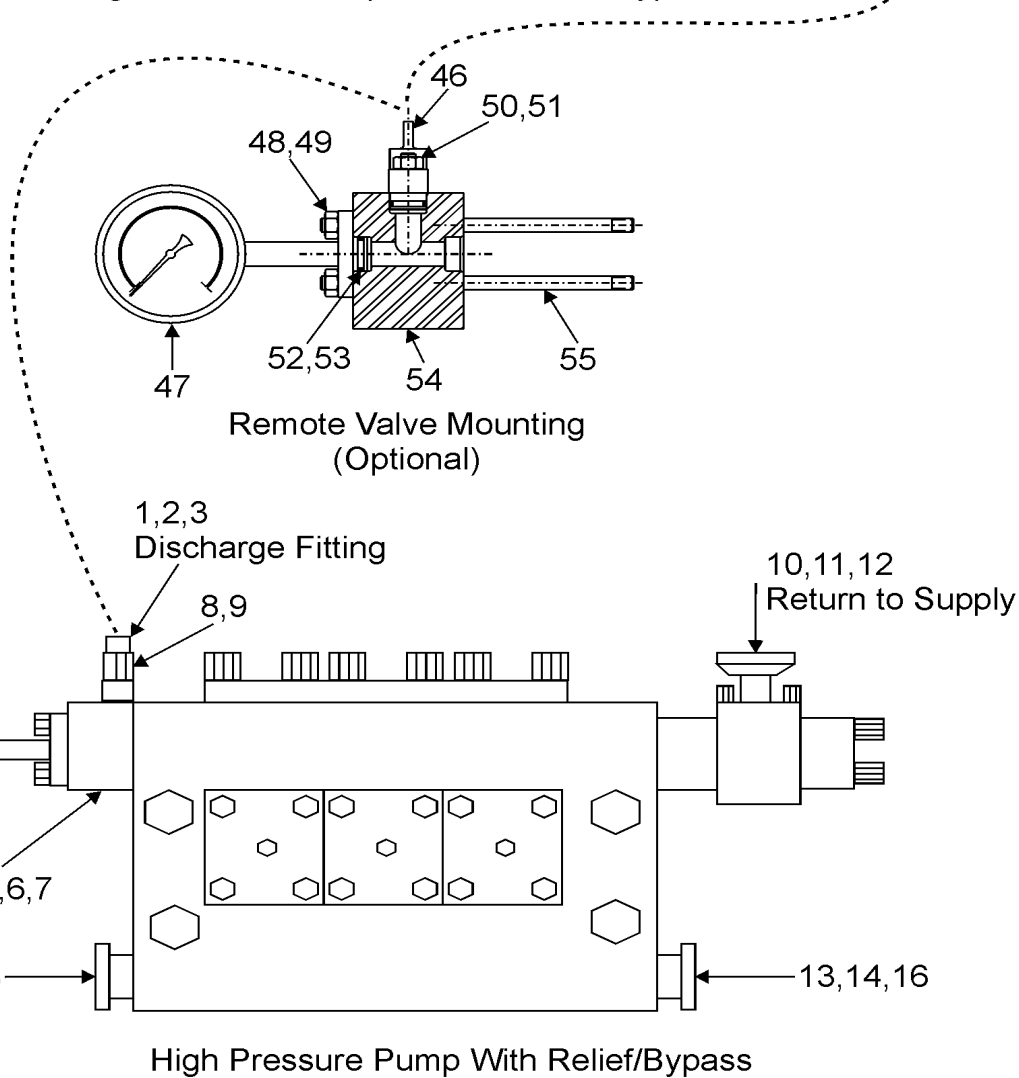
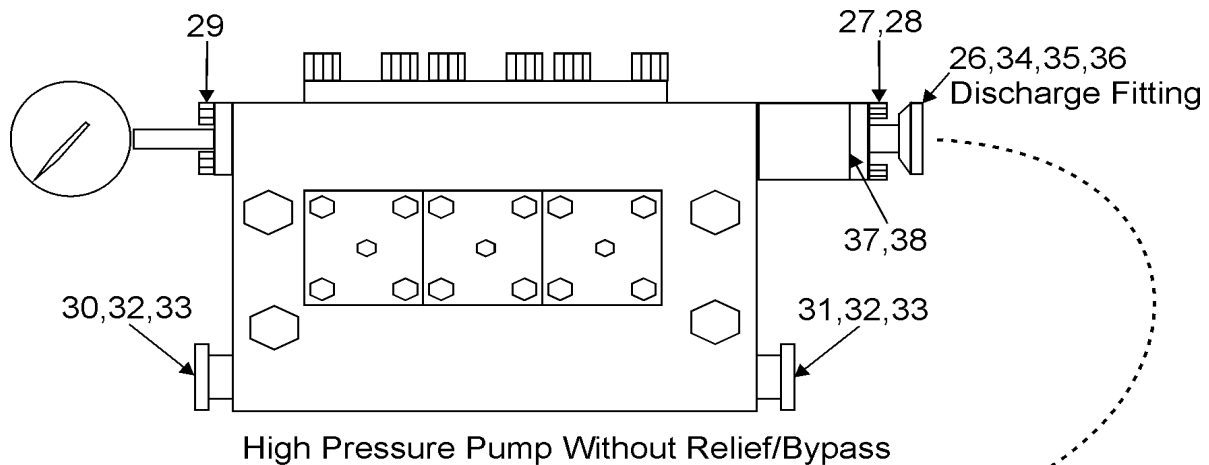


HM100-098

Homogenizer High Pressure Pump Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	101372	
	3/8" OD, 6500 Max Working Pressure	1	101373	
	1/2" OD, 6200 Max Working Pressure	1	108005	
	5/8" OD, 6000 Max Working Pressure	1	101374	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4200 Max Working Pressure	1	101376	
47	GAUGE - PRESSURE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
48	Hex Nut	4	107482	
49	Stud - Gauge	4	100281	
50	Hex Nut	2	107483	
51	Stud - Product Inlet	2	100465	
52	O-ring	2	N70214	
53	Backup Ring	2	BUR214	
54	Adapter - Remote Valve Mounting	1	103948	
55	Stud - Body	4	100380	

Homogenizer High Pressure Pump Diagram

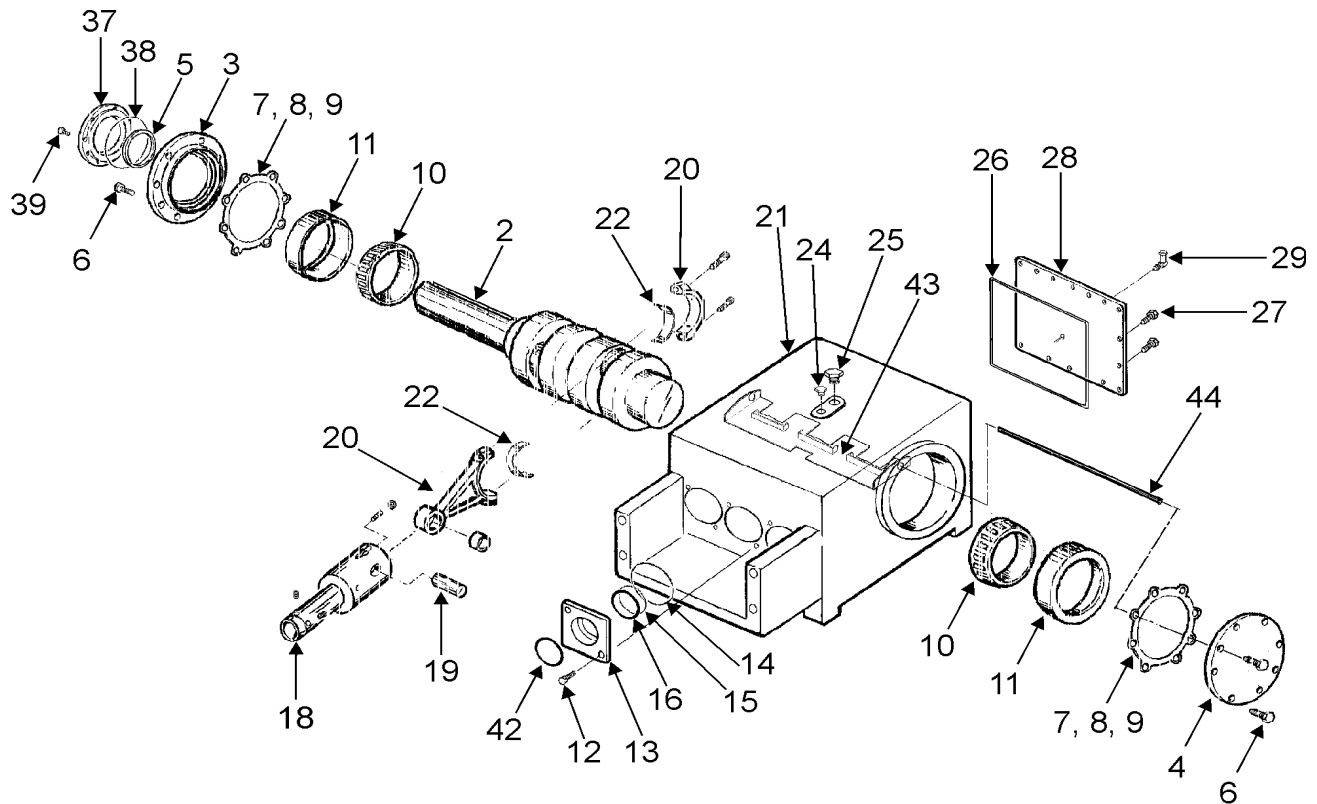


HM100-098

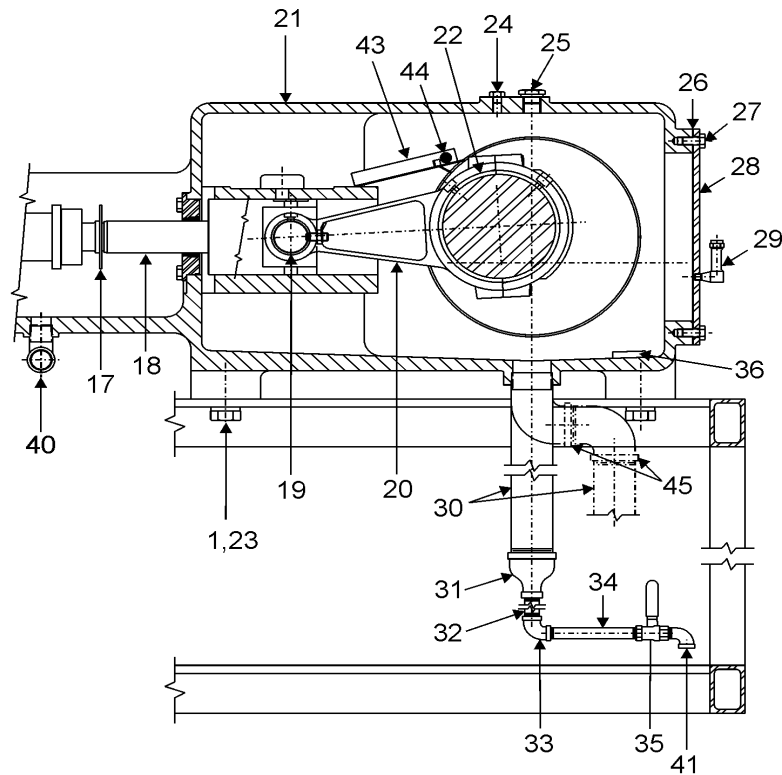
Homogenizer Crank Case Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Screw - Crankcase Mount, HH	4	30-419	
2	Crankshaft	1	100114	
	Crankshaft - 500LV only	-	-	
3	Cap - Crankshaft Seal Holder	1	100119	
4	Cap - Crankcase	1	100123	
5	Seal, Crankshaft	1	100983	
6	Screw - Crankcase End Caps	12	30-498	
7	Shim - .005 Thick	-	100485	
8	Shim - .007 Thick	-	100490	
9	Shim - .020 Thick	-	100495	
10	Bearing - Cone	2	100500	
11	Bearing - Cup	2	100504	
12	Screw - Oil Seal Carrier, HH SS	6	30-361	
13	Carrier - Oil Seal	3	100127	
14	O-ring	3	N70152	
15	Retaining Ring	3	43-214	
16	Seal	3	100134	
17	Slinger - Water	3	100137	
18	Crosshead Assembly	3	100140	
19	Pin - Wrist	3	100144	
20	Connecting Rod Assembly	3	100148	
21	Crankcase	1	100152	
22	Journal Bearing (two per set)	6	100452	
23	Lockwasher - Crankcase Mount	4	43-146	
24	Vented Plug	1	CD0046100	
25	Drain/Level Plug	1	78-86	
26	Gasket	51	35850	
27	Screw - Crankcase Back Cover, HH	14	30-239	
28	Cover - Crankcase	1	100162	
29	Vented Oil Level Gauge	1	100981	
30	Oil Drain Pipe	1	11-119	
31	Reducer	1	78-109	
32	Oil Drain Pipe	1	11-147	
33	Elbow	1	78-110	
34	Oil Drain Pipe	1	11-128	
35	Brass Ball Valve	1	100984	
36	Magnet - Ceramic 5	3	100985	
37	Holder - Crankshaft Seal	1	100954	
38	O-ring	1	N70163	
39	Screw - Crankshaft Seal Holder, HH	4	30-314	
40	Elbow	1	78-141	
41	Elbow	1	78-138	
42	Seal	3	105571	
43	Ramp - Oiling	1	100157	
44	Rod - Oiling Ramp Support	1	110117	
45	Elbow (use with oversize motors)	2	78-154	

Homogenizer Crank Case Assembly Diagram



HM100-057a

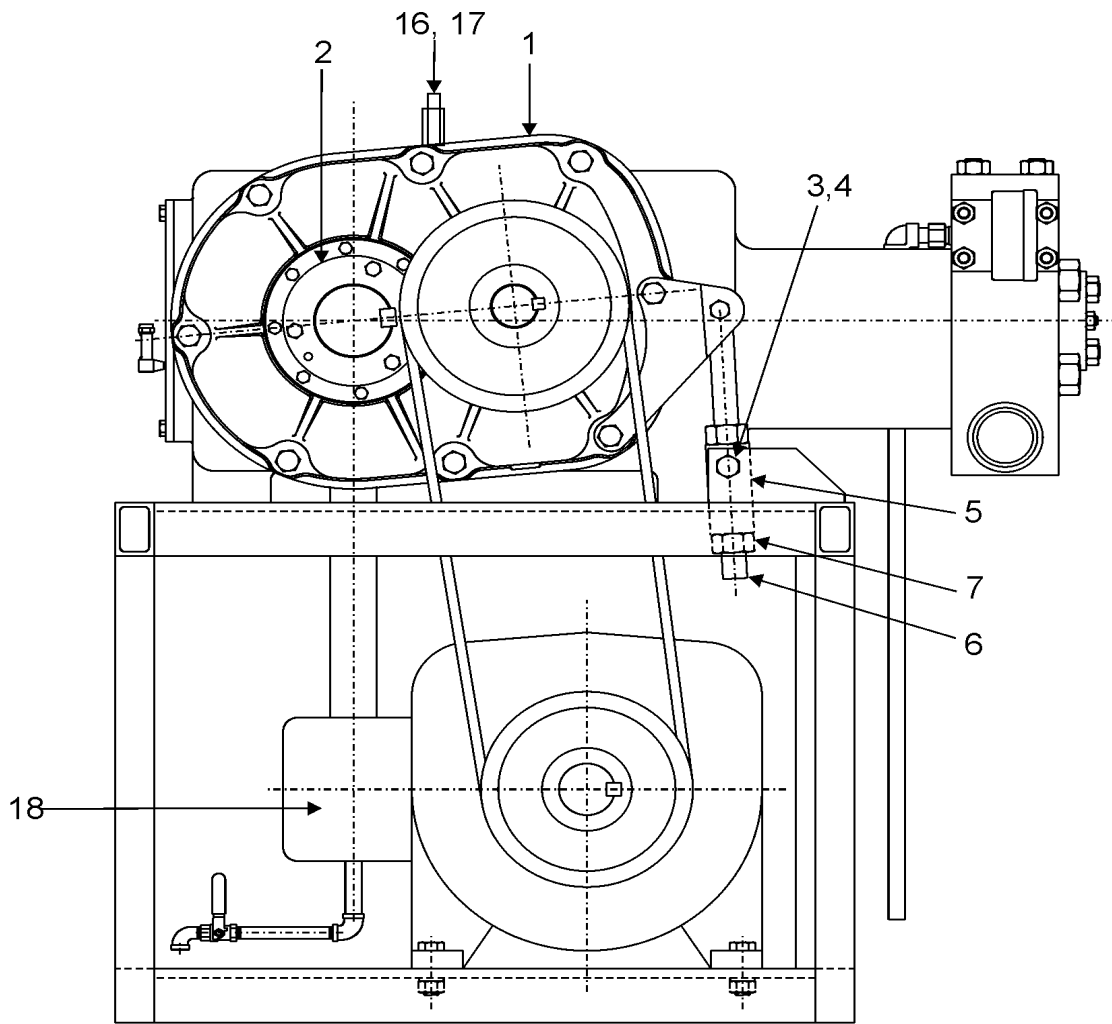


HM100-091a

Homogenizer Motor and Drive Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Speed Reducer - Single Reduction	1	100167	
2	Tapered Bushing Assembly	1	102854	
3	Screw, HH, ZP	2	30-285	
4	Lockwasher, ZP	2	43-140	
5	Pivot - Reducer/Tensioner	1	100170	
6	Rod End - Torque Arm	1	100971	
7	Hex Nut, ZP	2	36-96	
8	Label - Crankcase (not shown)	1	33-76	
9	Label - Crankcase (not shown)	1	33-77	
16	Nipple	1	11-152	
17	Coupling	1	11-153	
18	Meter - Hour, 60HZ 120VAC	1	112627	
	Meter - Hour, 50HZ 120VAC	1	112628	

Homogenizer Motor and Drive Assembly Diagram

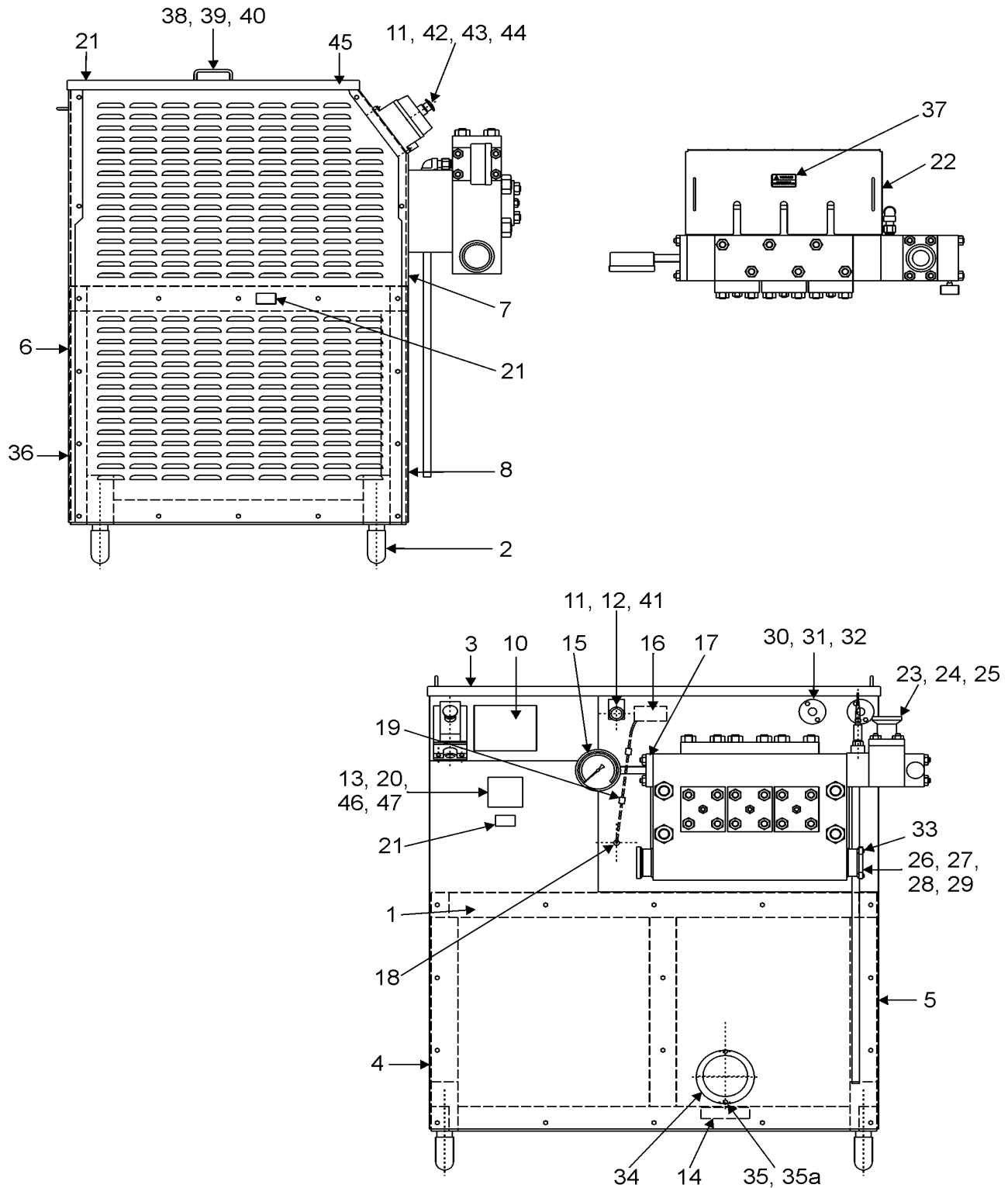


HM100-090a

Homogenizer Frame and Panel Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Frame Assembly	1	100073	
2	Leg - Adjustable	4	100078	
3	Panel - Housing, Top	1	100081	
4	Panel - Housing, Left Side	1	100086	
5	Panel - Housing, Right Side	1	100091	
6	Panel - Housing, Back	1	100096	
7	Panel - Housing, Front	1	100101	
8	Panel - Housing, Front Bottom (model 5000 only)	-	-	
9	Screw (not shown)	48	30-181	
9a	Washer (not shown)	48	43-144	
10	Label - Company Name and Machine Type	1	33-30A	
11	Switch - Emergency, Standard	1	103994	
	Switch - Emergency Stop, Explosion Proof	1	105171	
12	Plate - Emergency Stop	1	103995	
13	Screw	4	30-608	
14	Nameplate - Drain	1	4487810	
15	PRESSURE GAUGE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
	PRESSURE TRANSDUCER/TRANSMITTER (Digital Pressure Meter only) - OPT			
	0 to 1000 psi 3mV/V	1	100412	
	0 to 5000 psi 3mV/V	1	100413	
	0 to 7500 psi 3mV/V	1	100414	
	0 to 10000 psi 3mV/V	1	100415	
	0-5000 4-20mA 100 feet wire	1	111479	
16	Digital Pressure Meter - Optional	1	100108	
17	Clamp (Digital Pressure Meter only)	1	100109	
18	Grommet (Digital Pressure Meter only)	1	100111	
19	Cord Clip, Adhesive Backed (Digital Pressure Meter only)	3	100112	
20	Nameplate - Homogenizer	1	5902364	
	Nameplate - Plunger Pump	1	5902365	
21	Caution Plate	5	33-62	
22	Cover - Plunger/Cylinder Area	1	101338	
23	Ferrule, 14WI	1	29-506XCB	
24	Clamp, 13IS	1	3023011	
25	Gasket, 40IH Buna	1	20-105	
26	Ferrule, 14WI	2	29-505XCB	
27	Cap - Male, 16AI-14I	1	3-70X	
28	Clamp, 13IS	2	3023014	
29	Gasket, 40IH Buna	2	20-104	

Homogenizer Frame and Panel Assembly Diagram

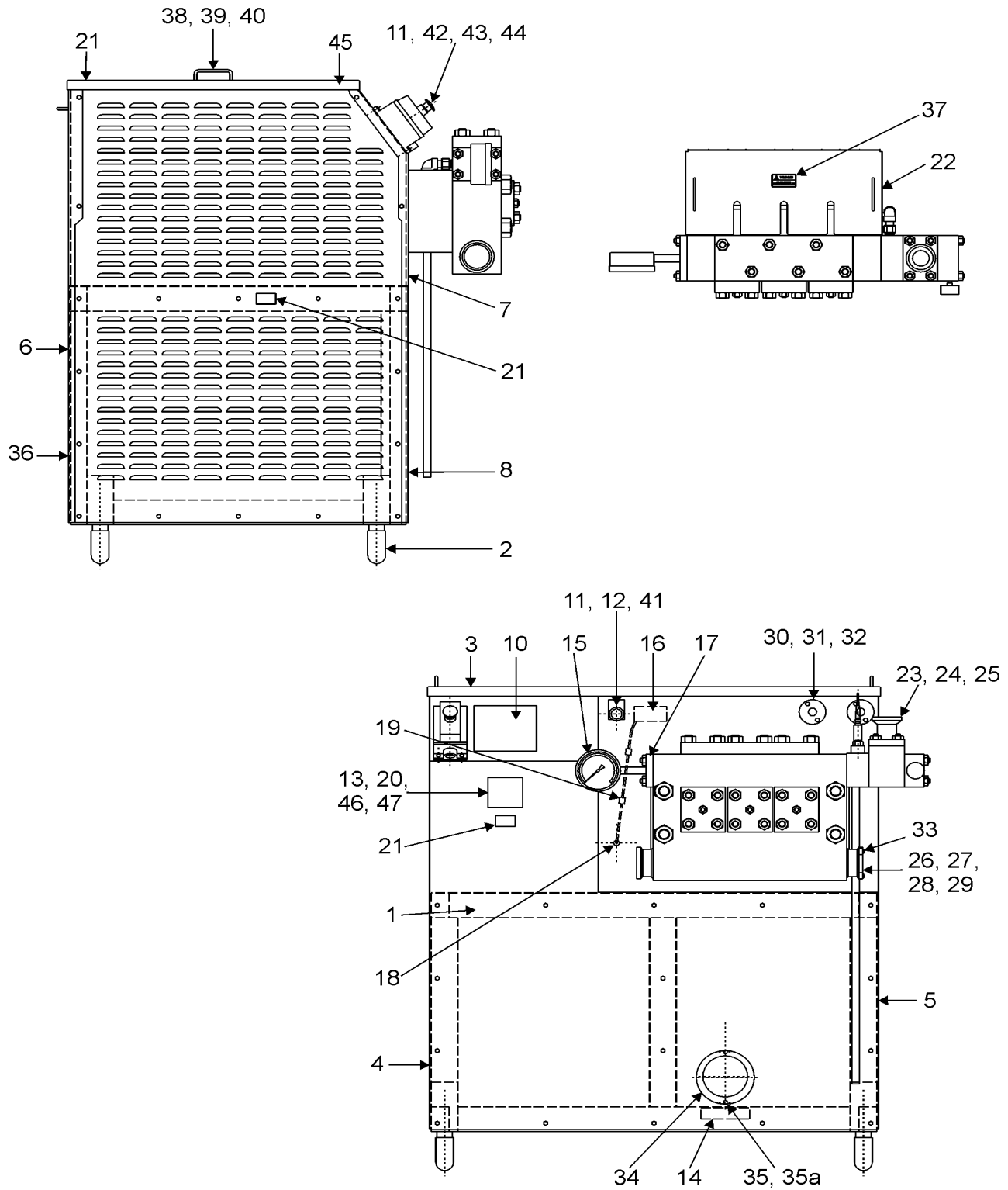


HM100-089a

Homogenizer Frame and Panel Assembly - Model 1000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
30	Cover	2	104001	
31	Screw, HHC SS	4	30-181	
32	Hex Nut SS	4	36-53	
33	Hole Plug	2	78-127	
34	Cover - Oil Hole	1	105173	
35	Screw	2	30-580	
35a	Washer, Plain 1/4" SS	2	43-144	
36	Panel - Housing Back Bottom (model 7500 only)	-	-	
37	Warning Label	1	33-84	
38	Handle with Mounting Screws	4	105899	
39	Lockwasher, #8	8	43-20	
40	Screw	8	30-593	
41	Hole Plug - SS (Explosion Proof Switch only)	1	78-147	
42	Screw, HHC (Explosion Proof Switch only)	4	30-206	
43	Lockwasher, SS (Explosion Proof Switch only)	4	43-22	
44	Hex Nut (Explosion Proof Switch only)	4	36-53	
45	Wear Shape, Snap-On	97	108311	
46	Lockwasher, #3 18-8SS	4	43-85	
47	Hex Nut, #3-48 18-8SS	4	36-134	

Homogenizer Frame and Panel Assembly Diagram



HM100-089a

Homogenizer Headblock Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Rupture Disc - Sized to Headblock Design Limitation	1	100996	
2	Ring - Rupture Disc (For less than 7500 psi)	1	101002	
	Ring - Rupture Disc (7500 to 10000 psi)	-	-	
3	Nut - Rupture Disc Holddown	1	100266	
4	Nipple	1	11-131	
5	Elbow	2	78-112	
6	Hex Nut	4	107482	
7	Adapter - Rupture Disc	1	101358	
	Adapter - Rupture Disc and Pressure Transducer	1	111010	
8	Backup Ring	2	BUR214	
9	O-ring	2	N70214	
10	Handle - Headblock Cover, Top	2	100271	
11	Hex Nut	6	107485	
11a	Stud - .875-9 x 3.59" LG	6	100468	
12	Cover - Headblock, Top	1	100274	
13	Stud - Gauge (Homogenizers only)	4	100281	
14	Nipple	1	11-136	
14a	Nipple	1	11-141	
14b	Caution Label	1	33-85	
15	Dowel Pin	2	30-501	
16	Hex Nut	4	107488	
17	Stud - Headblock and Crankcase	4	100279	
18	Hex Nut	12	107484	
18a	Stud - .750-10 x 3.0" LG	12	100467	
19	Hex Nut	3	107482	
20	Stud - Cylinder Puller	3	100282	
21	Cover - Headblock, Front (Not Aseptic)	3	103937	1
22	Ball Valve	1	312-1402X	
23	Nipple	1	11-116	
24	Header - Seal Flush	1	100288	
24a	Screw	2	30-287	
24b	Lockwasher, 1/4"	2	43-106	
25	Male Connector (Not Aseptic)	3	78-88	
26	Tubing - (Not Aseptic)	60	87-1023	
27	Elbow - (Not Aseptic)	3	78-87	
28	Backup Ring	3	BUR227	
29	O-ring	3	N70227	
30	Plug - Headblock Top (Poppet Valve only)	3	100296	
31	Spring - Coil (Poppet Valve only)	6	4480720	
32	Cap - Suction Valve Spring	3	4480730	
33	Headblock - Integral Seat	1	100300	1
	Headblock - Hardened Seat	1	104607	1
34	Backup Ring	3	BUR334	1
35	O-ring	3	N70334	1
36	O-ring	3	N70333	1
37	Backup Ring	3	BUR333	1

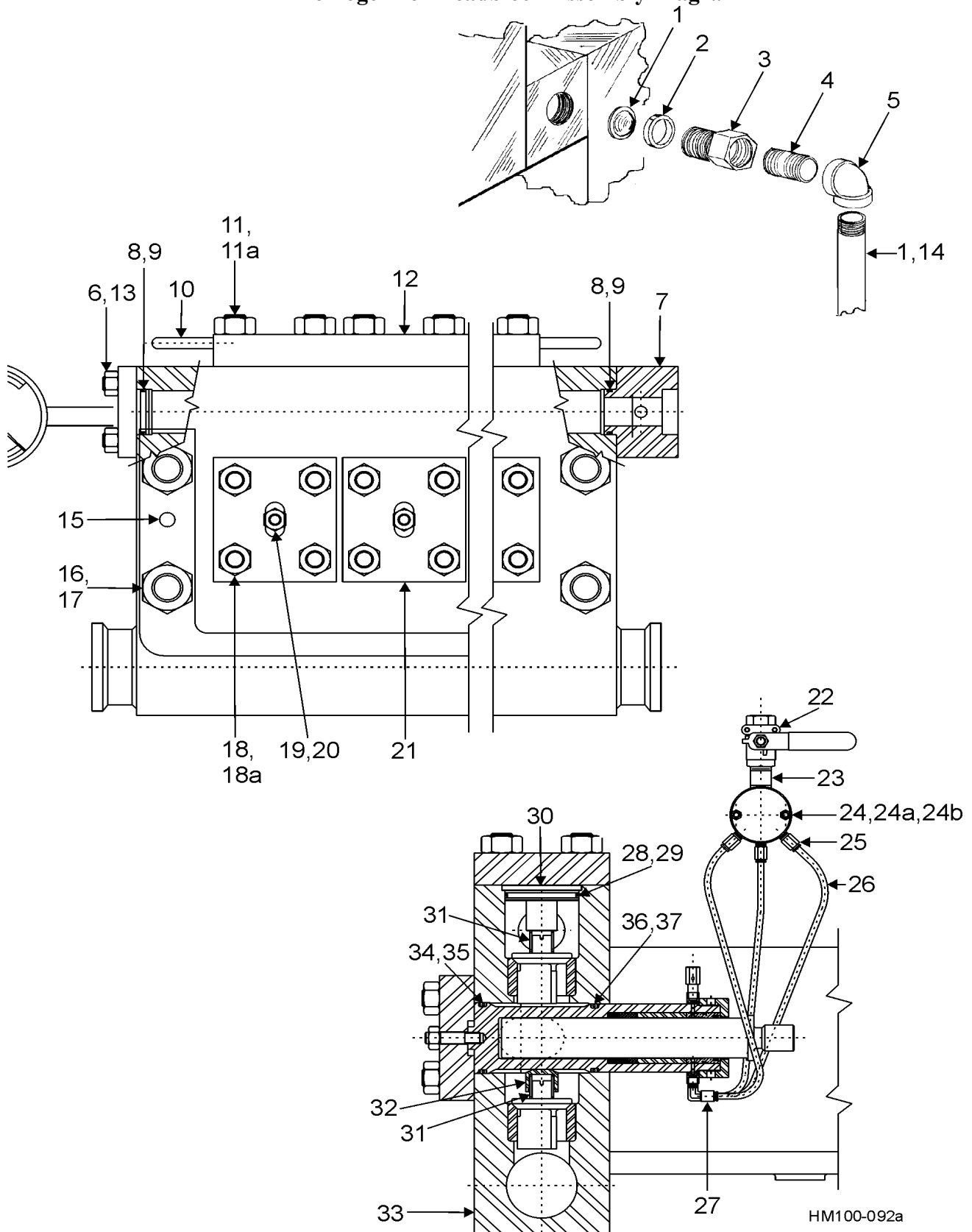
Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

PL5081 - Dispersion Equipment
Parts Price List



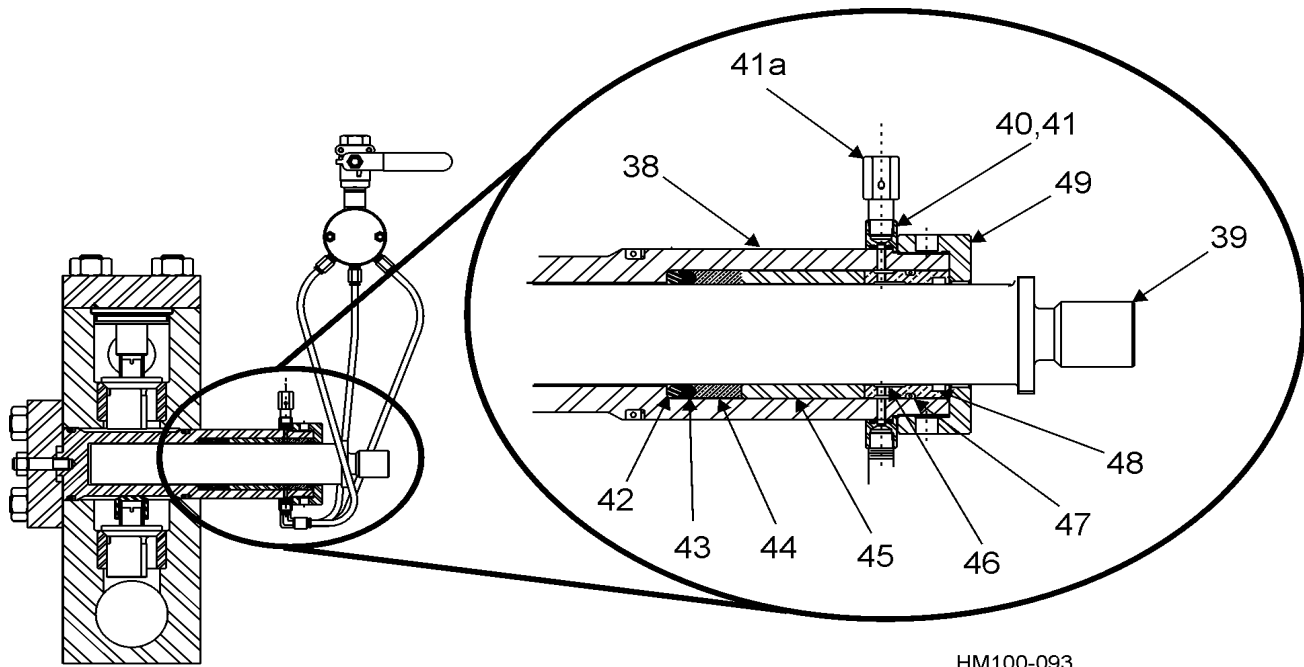
Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
38	CYLINDER			
	1.250" Plunger Diameter	3	100319	
	1.375" Plunger Diameter	3	100716	
	1.500" Plunger Diameter	3	100718	
	1.625" Plunger Diameter	3	100720	
	1.750" Plunger Diameter	3	100722	
	1.8125" Plunger Diameter	3	100723	
	1.875" Plunger Diameter	3	100724	
	1.9375" Plunger Diameter	3	100323	
39	PLUNGER - TUNGSTEN CARBIDE			
	1.250" Diameter	3	100643	
	1.375" Diameter	3	100645	
	1.500" Diameter	3	100647	
	1.625" Diameter	3	100649	
	1.750" Diameter	3	100651	
	1.8125" Diameter	3	100652	
	1.875" Diameter	3	100653	
	1.9375" Diameter	3	100654	
	PLUNGER - CERAMIC - OPT			
	1.250" Diameter	3	100594	
	1.375" Diameter	3	100596	
	1.500" Diameter	3	100598	
	1.625" Diameter	3	100600	
	1.750" Diameter	3	100602	
	1.8125" Diameter	3	100603	
	1.875" Diameter	3	100604	
	1.9375" Diameter	3	100605	
40	Ring - Seal Flush	3	100327	
41	O-ring	6	N70040	
41a	Snubber	3	104130	
42	ADAPTER - BOTTOM			
	1.250" Plunger Diameter	3	100836	
	1.375" Plunger Diameter	3	100331	
	1.500" Plunger Diameter	3	100839	
	1.625" Plunger Diameter	3	100841	
	1.750" Plunger Diameter	3	100843	
	1.8125" Plunger Diameter	3	100844	
	1.875" Plunger Diameter	3	100845	
	1.9375" Plunger Diameter	3	100332	

Homogenizer Headblock Assembly Diagram



HM100-093

Homogenizer Headblock Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
43	SEAL - PLUNGER			
	1.250" Plunger Diameter	6	105139	
	1.375" Plunger Diameter	6	105141	
	1.500" Plunger Diameter	6	105143	
	1.625" Plunger Diameter	6	105145	
	1.750" Plunger Diameter	6	105147	
	1.8125" Plunger Diameter	6	105148	
	1.875" Plunger Diameter	6	105149	
	1.9375" Plunger Diameter	6	105150	
	SEAL - PLUNGER - FDA (OPT)			
	1.250" Plunger Diameter	6	101018	
	1.375" Plunger Diameter	6	101020	
	1.500" Plunger Diameter	6	101022	
	1.625" Plunger Diameter	6	101024	
	1.750" Plunger Diameter	6	101026	
	1.8125" Plunger Diameter	6	101027	
	1.875" Plunger Diameter	6	101028	
	1.9375" Plunger Diameter	6	101029	
44	ADAPTER - TOP, DOUBLE SEAL			
	1.250" Plunger Diameter	3	105930	
	1.375" Plunger Diameter	3	105932	
	1.500" Plunger Diameter	3	105934	
	1.625" Plunger Diameter	3	105936	
	1.750" Plunger Diameter	3	105938	
	1.8125" Plunger Diameter	3	105939	
	1.875" Plunger Diameter	3	105940	
	1.9375" Plunger Diameter	3	105941	
	ADAPTER - TOP, SINGLE SEAL - OPT			
	1.250" Plunger Diameter	3	101117	
	1.375" Plunger Diameter	3	101119	
	1.500" Plunger Diameter	3	101121	
	1.625" Plunger Diameter	3	101123	
	1.750" Plunger Diameter	3	101125	
	1.8125" Plunger Diameter	3	101126	
	1.875" Plunger Diameter	3	101127	
	1.9375" Plunger Diameter	3	101128	
45	SPACER			
	1.250" Plunger Diameter	3	100860	
	1.375" Plunger Diameter	3	100342	
	1.500" Plunger Diameter	3	100863	
	1.625" Plunger Diameter	3	100867	
	1.750" Plunger Diameter	3	100871	
	1.8125" Plunger Diameter	3	100873	
	1.875" Plunger Diameter	3	100875	
	1.9375" Plunger Diameter	3	100343	

Technical drawing showing a cross-sectional view of a mechanical assembly. The main view on the left shows a vertical assembly with a horizontal component. A circular inset provides a detailed view of the horizontal component, which is a cross-section of a shaft or tube. The detailed view shows internal components, including a central shaft (41a) and a surrounding housing (40, 41). The shaft is supported by bearings (42, 43, 44, 45, 46) and a seal (47). A flange (39) is attached to the end of the shaft. The housing is secured with a bolt (48). The assembly is mounted on a base (38).

HM100-093

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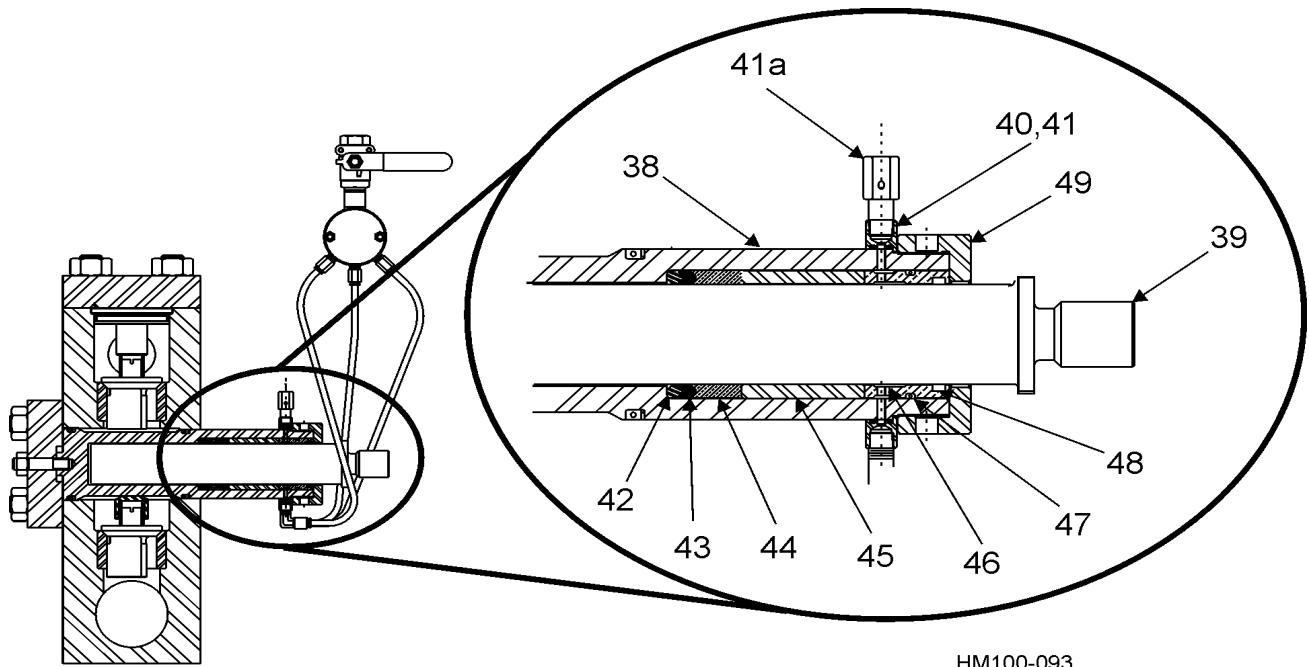
Homogenizer Headblock Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	RING - LANTERN			
	1.250" Plunger Diameter	3	100806	
	1.375" Plunger Diameter	3	100339	
	1.500" Plunger Diameter	3	100809	
	1.625" Plunger Diameter	3	100811	
	1.750" Plunger Diameter	3	100813	
	1.8125" Plunger Diameter	3	100814	
	1.875" Plunger Diameter	3	100815	
	1.9375" Plunger Diameter	3	100340	
47	O-RING			
	1.250" Plunger Diameter	3	N70129	1
	1.375" Plunger Diameter	3	N70131	1
	1.500" Plunger Diameter	3	N70133	1
	1.625" Plunger Diameter	3	N70135	1
	1.750" Plunger Diameter	3	N70137	1
	1.8125" Plunger Diameter	3	N70138	1
	1.875" Plunger Diameter	3	N70139	1
	1.9375" Plunger Diameter	3	N70140	1
48	SEAL - WIPER			
	1.250" Plunger Diameter	3	101073	1
	1.375" Plunger Diameter	3	101075	1
	1.500" Plunger Diameter	3	101077	1
	1.625" Plunger Diameter	3	101079	1
	1.750" Plunger Diameter	3	101081	1
	1.8125" Plunger Diameter	3	101082	1
	1.875" Plunger Diameter	3	101083	1
	1.9375" Plunger Diameter	3	101084	1
49	NUT			
	1.250" Plunger Diameter	3	100349	
	1.375" Plunger Diameter	3	100769	
	1.500" Plunger Diameter	3	100771	
	1.625" Plunger Diameter	3	100773	
	1.750" Plunger Diameter	3	100775	
	1.8125" Plunger Diameter	3	100776	
	1.875" Plunger Diameter	3	100777	
	1.9375" Plunger Diameter	3	100353	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer Headblock Assembly Diagram

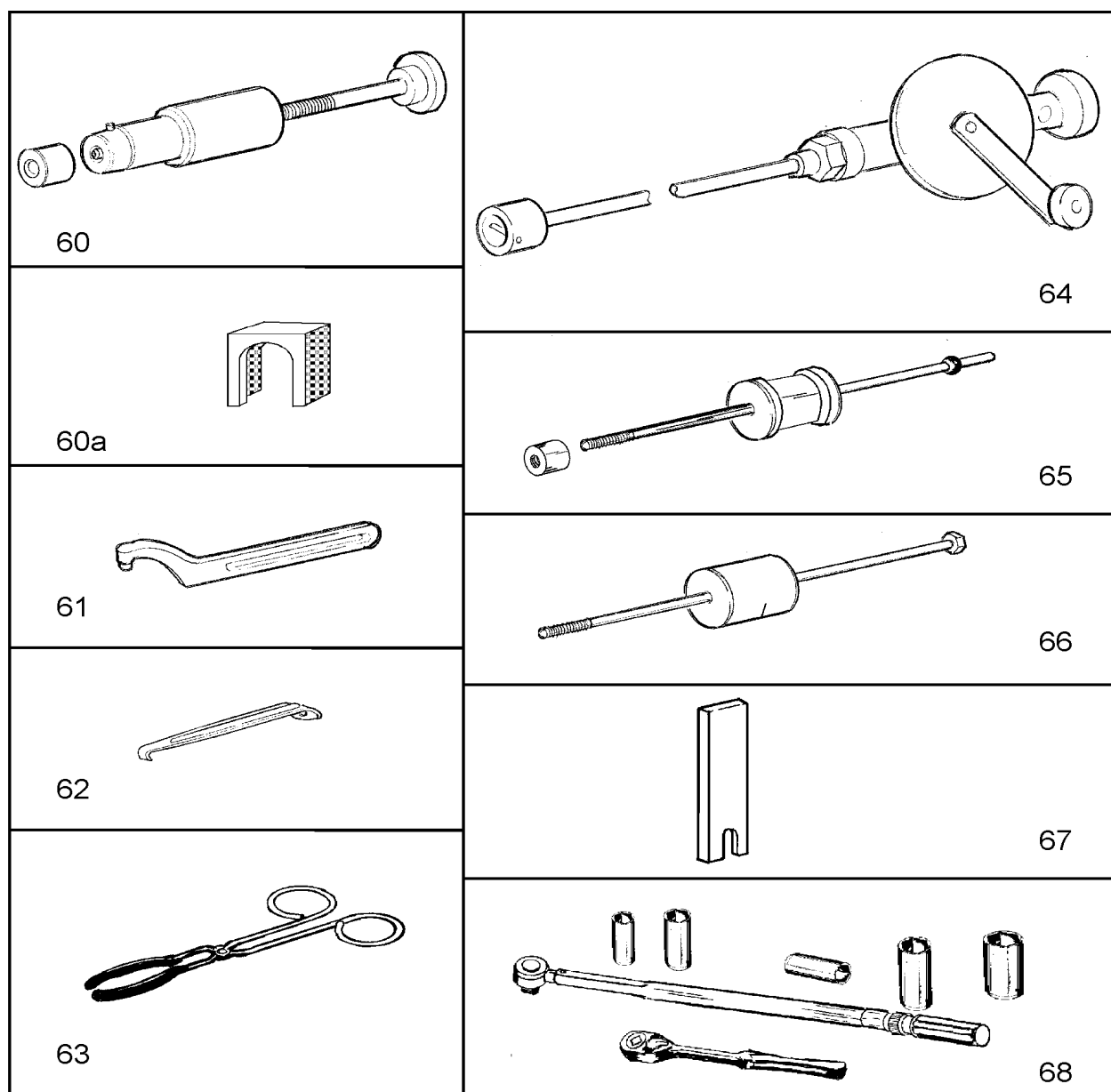


HM100-093

Homogenizer Headblock Assembly Tools - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
60	SEAL PULLER			
	1.250" Plunger Diameter	1	101167	
	1.375" Plunger Diameter	1	101169	
	1.500" Plunger Diameter	1	101171	
	1.625" Plunger Diameter	1	101173	
	1.750" Plunger Diameter	1	101175	
	1.8125" Plunger Diameter	1	101176	
	1.875" Plunger Diameter	1	101177	
	1.9375" Plunger Diameter	1	101178	
60a	Plunger Removal Tool	1	107352	
61	Spanner Wrench - Fixed Head	1	100978	
62	O-ring Tool	1	AD0096001	
63	Valve Tongs - Neoprene Cushioned Prongs	1	101344	
64	Valve Regrinding Tool - Oscilating Hand Grinder	1	101391	
65	Slide Hammer - Cylinder Remover	1	101334	
66	Slide Hammer - Headblock Top Plug Remover	1	101342	
67	Cylinder Alignment Tool	1	101379	
68	Torque Wrench Kit	1	101639	

Homogenizer Headblock Assembly Tools Diagram



HM100-094a

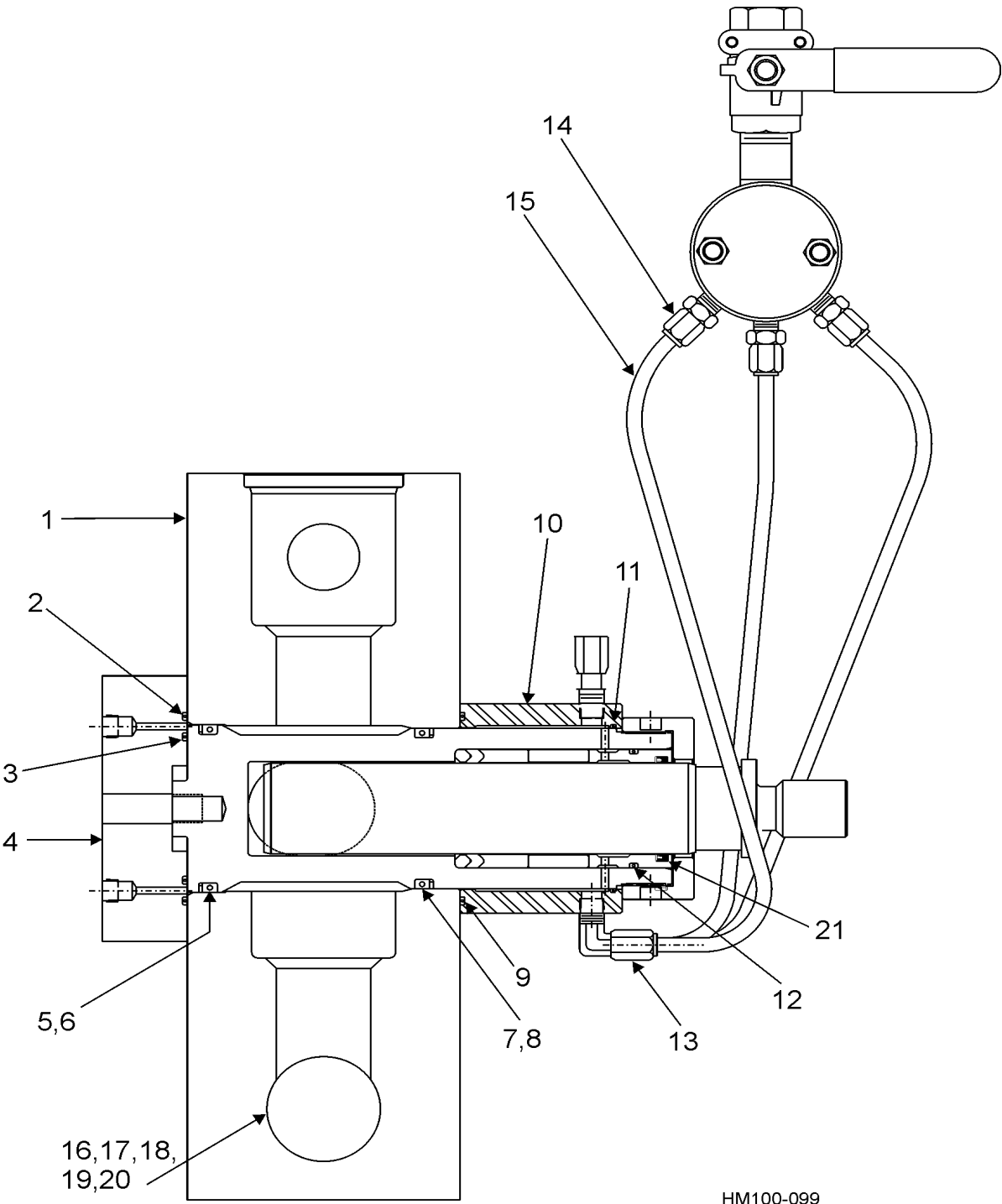
Homogenizer Aseptic Flush Option - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Headblock - Integral Seat Poppet Valve Only	1	105384	
	Headblock - Hardened Seat Poppet Valve Only	1	105385	
2	O-ring, EPDM	3	E70152	
3	O-ring, EPDM	3	E70143	
4	Cover - Headblock, Front, Aseptic	3	105399	
5	O-ring, EPDM	3	E70334	
6	Backup Ring, Teflon	3	BRT334	
7	Backup Ring, Teflon	3	BRT333	
8	O-ring, EPDM	3	E70333	
9	O-ring, EPDM	3	E70152	
10	Collar - Aseptic Cylinder	3	105400	
11	O-ring, EPDM	3	E70040	
12	O-RING, EPDM			
	1.250" Plunger Diameter	3	E70129	
	1.375" Plunger Diameter	3	E70131	
	1.500" Plunger Diameter	3	E70133	
	1.625" Plunger Diameter	3	E70135	
	1.750" Plunger Diameter	3	E70137	
	1.8125" Plunger Diameter	3	E70138	
	1.875" Plunger Diameter	3	E70139	
	1.9375" Plunger Diameter	3	E70140	
13	Elbow	3	78-137	
14	Adapter	6	78-136	
15	Tubing - 1/4" OD, Teflon Green	260	87-1138	
16	Ferrule, #14WNI 316L SS	2	29-641X	
17	Gasket, #4OIV, FKM	2	20-105V	
18	O-ring, FKM	2	V70232	
19	Clamp, #13IS	2	3023019	
20	Adapter	4	78-71	
21	SEAL - WIPER, EPDM			
	1.250" Plunger Diameter	3	104523	
	1.375" Plunger Diameter	3	104525	
	1.500" Plunger Diameter	3	104527	
	1.625" Plunger Diameter	3	104529	
	1.750" Plunger Diameter	3	104531	
	1.8125" Plunger Diameter	3	104532	
	1.875" Plunger Diameter	3	104533	
	1.9375" Plunger Diameter	3	104534	

Note:

** See Homogenizer Headblock Assembly for all parts not listed here.

Homogenizer Aseptic Flush Option Diagram

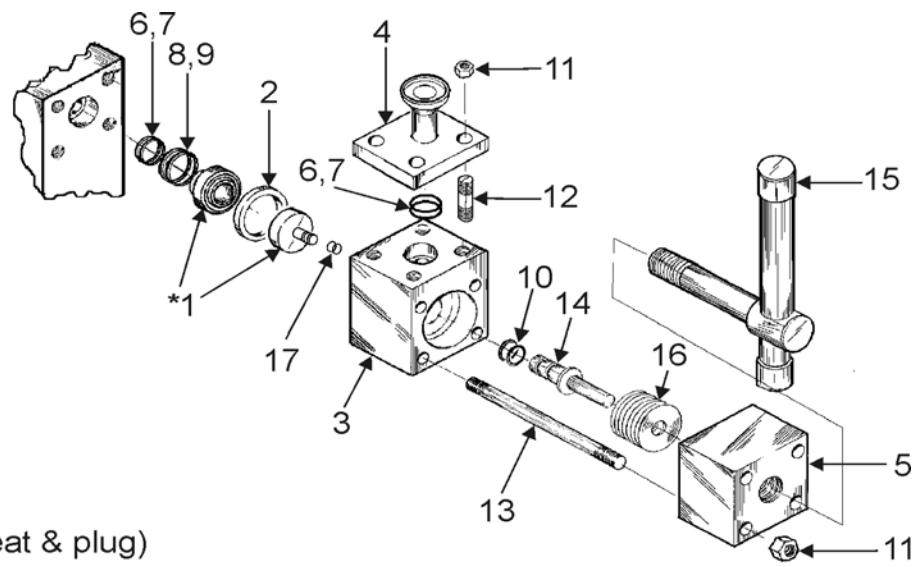


HM100-099

Homogenizer Single Stage Manual Homogenizing Valve Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	VALVE			
	1000 GPH Capacity, 17-4PH SS	1	100356	
	2000 GPH Capacity, 17-4PH SS	1	100357	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	1000 GPH Capacity, Tungsten Carbide	1	100177	
	2000 GPH Capacity, Tungsten Carbide	1	100178	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
2	RING			
	1000 GPH Capacity, 17-4PH SS	1	100359	
	2000 GPH Capacity, 17-4PH SS	1	100367	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	1000 GPH Capacity, Tungsten Carbide	1	100225	
	2000 GPH Capacity, Tungsten Carbide	1	100226	
3	Flat Face Valve Option, Tungsten Carbide	1	100223	
	Body - Valve	1	105882	
	Body - Valve, Aseptic	1	105885	
4	Fitting - Product Discharge, #15I	1	101001	
5	Bonnet - Valve	1	100362	
6	O-ring	2	N70214	
7	Backup Ring	2	BUR214	
8	Backup Ring	1	BUR226	
9	O-ring	1	N70226	
10	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
11	Hex Nut	8	107482	
12	Stud - Product Discharge Fitting	4	100281	
13	Stud - Body	4	104006	
14	Stem - Valve	1	105877	
	Stem - Valve, Aseptic	1	105888	
	Stem - Valve (Capacity Less Than 1000 GPH)	1	105876	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	1	105887	
	Stem - Valve, Flat Face	1	113413	
	Stem - Valve, Flat Face, Aseptic	1	113414	
15	Screw - Valve Adjusting	1	100366	
16	Washer - Belleville Spring	8	104007	
17	O-ring	2	N70013	
18	Adapter - Seat, Flat Face Valve Option	1	111294	
19	O-ring, Flat Face Valve Option	1	N70220	
20	Backup Ring, Flat Face Valve Option	1	BUR220	
21	O-ring, Flat Face Valve Option	1	N70013	

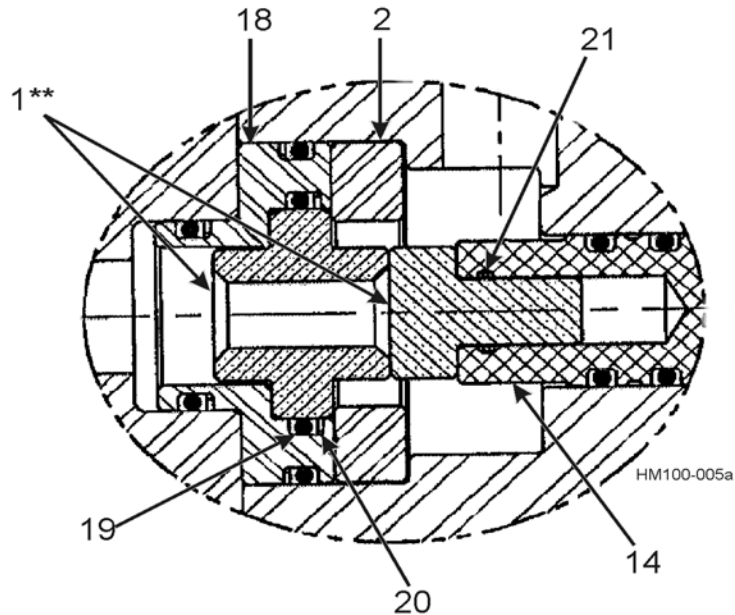
Homogenizer Single Stage Manual Homogenizing Valve Diagram



*Mated Pair (seat & plug)

HM100-101a

Flat Face Valve Option



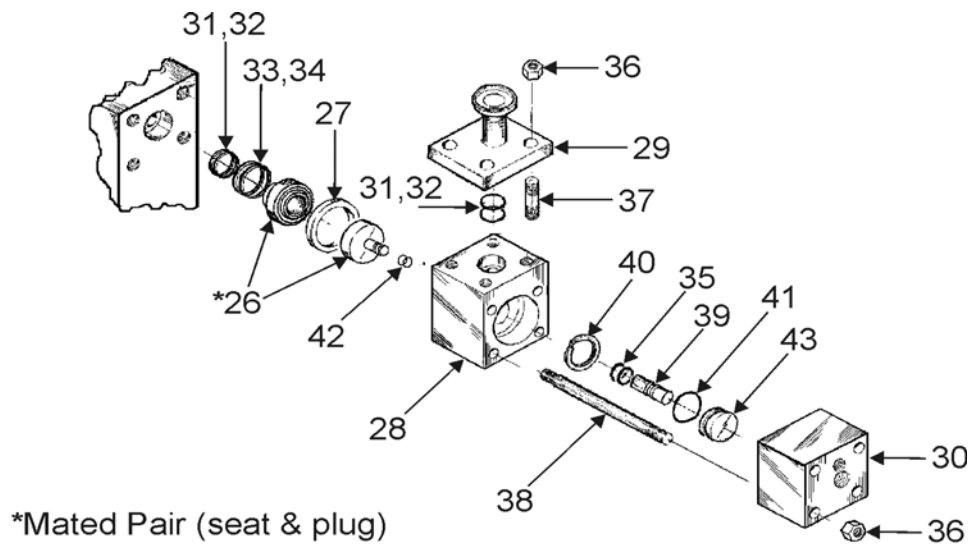
HM100-005a

**Seat & Plug Required

Homogenizer Single Stage Hydraulic Homogenizing Valve Assembly - Model 2000

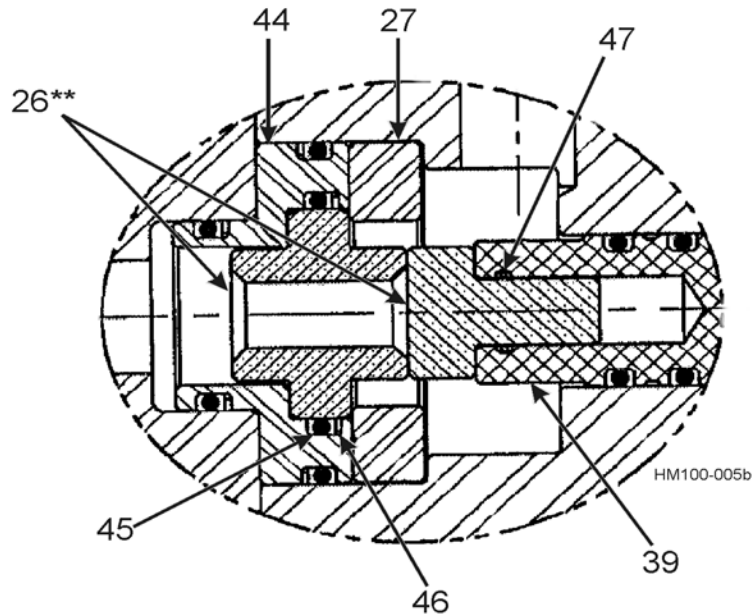
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	VALVE			
	1000 GPH Capacity, 17-4PH SS	1	100356	
	2000 GPH Capacity, 17-4PH SS	1	100357	
	Seat - Flat Face Valve Option, 17-4PH SS	1	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	1	111296	
	1000 GPH Capacity, Tungsten Carbide	1	100177	
	2000 GPH Capacity, Tungsten Carbide	1	100178	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113404	
27	RING			
	1000 GPH Capacity, 17-4PH SS	1	100359	
	2000 GPH Capacity, 17-4PH SS	1	100367	
	Flat Face Valve Option, 17-4PH SS	1	100942	
	1000 GPH Capacity, Tungsten Carbide	1	100225	
	2000 GPH Capacity, Tungsten Carbide	1	100226	
28	Body - Valve	1	105882	
	Body - Valve, Aseptic	1	105885	
29	Fitting - Product Discharge, #15I	1	101001	
30	Cylinder - Hydraulic Actuator	1	105873	
31	O-ring	2	N70214	
32	Backup Ring	2	BUR214	
33	Backup Ring	1	BUR226	
34	O-ring	1	N70226	
35	O-ring	2	N70210	
	O-ring, Aseptic, EPDM	2	E70214	
36	Hex Nut	8	107482	
37	Stud - Product Discharge Fitting	4	100281	
38	Stud - Body	4	100464	
39	Stem - Piston, Hydraulic Actuator	1	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	1	105897	
	Stem - Piston, Flat Face Valve Option	1	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	1	113411	
40	Retaining Ring	1	43-216	
41	T-Seal	1	100391	
42	O-ring, Style B	2	N70013	
43	Head - Piston, Hydraulic Actuator	1	105892	
44	Adapter - Seat, Flat Face Valve Option	1	111294	
45	O-ring, Flat Face Valve Option	1	N70220	
46	Backup Ring, Flat Face Valve Option	1	BUR220	
47	O-ring, Flat Face Valve Option	1	N70013	

Homogenizer Single Stage Hydraulic Homogenizing Valve Diagram



HM100-100a

Flat Face Valve Option

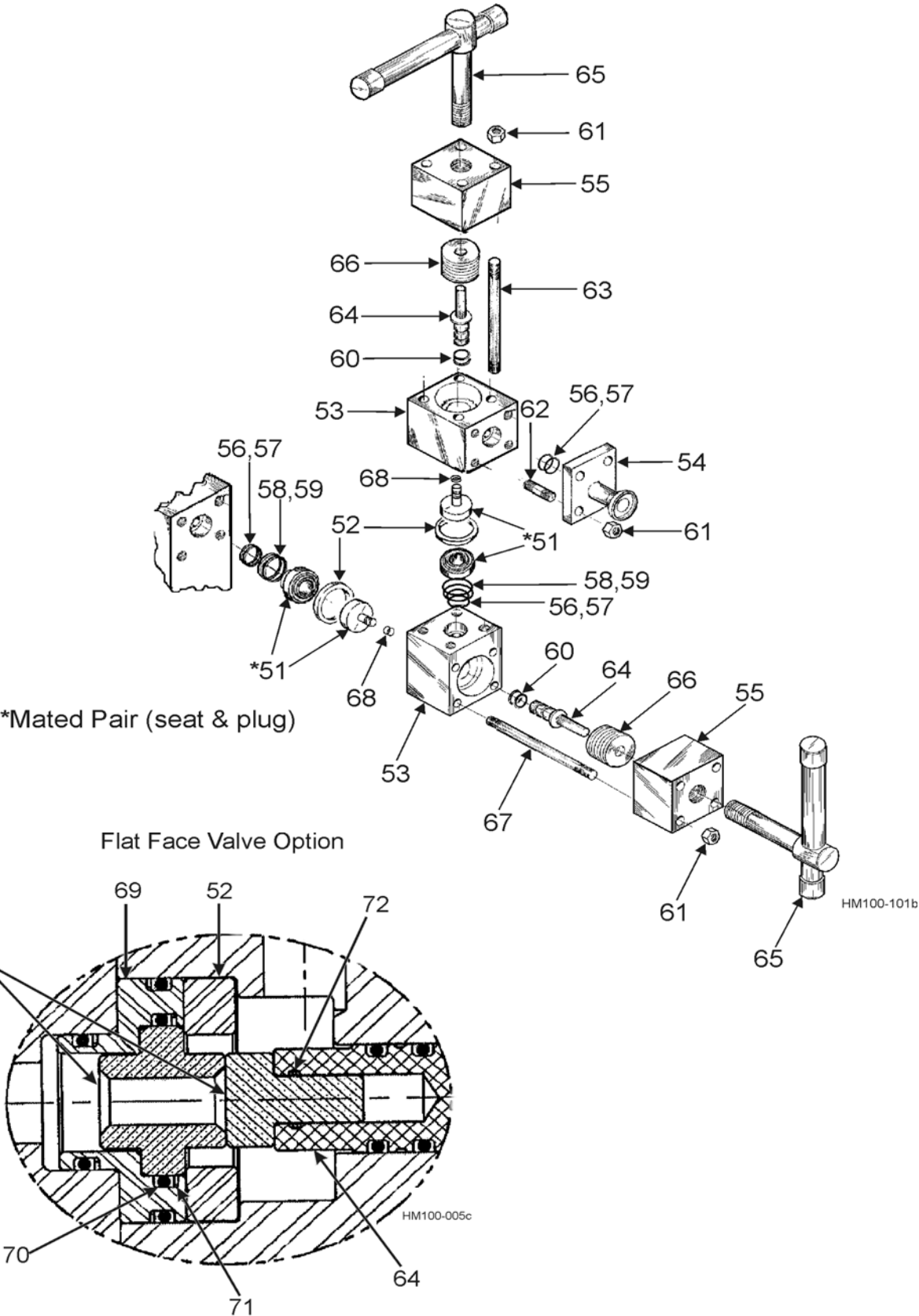


**Seat & Plug Required

Homogenizer Double Stage Manual Homogenizing Valve Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
51	VALVE			
	1000 GPH Capacity, 17-4PH SS	2	100356	
	2000 GPH Capacity, 17-4PH SS	2	100357	
	Seat - Flat Face Valve Option, 17-4PH SS	2	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	2	111296	
	1000 GPH Capacity, Tungsten Carbide	2	100177	
	2000 GPH Capacity, Tungsten Carbide	2	100178	
	Seat - Flat Face Valve Option, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	2	113404	
52	RING			
	1000 GPH Capacity, 17-4PH SS	2	100359	
	2000 GPH Capacity, 17-4PH SS	2	100367	
	Flat Face Valve Option, 17-4PH SS	2	100942	
	1000 GPH Capacity, Tungsten Carbide	2	100225	
	2000 GPH Capacity, Tungsten Carbide	2	100226	
53	Flat Face Valve Option, Tungsten Carbide	2	100223	
	Body - Valve	2	105882	
	Body - Valve, Aseptic	2	105885	
54	Fitting - Product Discharge, #15I	1	101001	
55	Bonnet - Valve	2	100362	
56	O-ring	3	N70214	
57	Backup Ring	3	BUR214	
58	Backup Ring	2	BUR226	
59	O-ring	2	N70226	
60	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
61	Hex Nut	12	107482	
62	Stud - Product Discharge Fitting	4	100281	
63	Stud - Body	4	100364	
64	Stem - Valve	2	105877	
	Stem - Valve, Aseptic	2	105888	
	Stem - Valve (Capacity Less Than 1000 GPH)	2	105876	
	Stem - Valve, Aseptic (Capacity Less Than 1000 GPH)	2	105887	
	Stem - Valve, Flat Face	2	113413	
	Stem - Valve, Flat Face, Aseptic	2	113414	
65	Screw - Valve Adjusting	2	100366	
66	Washer - Belleville Spring	16	104007	
67	Stud - Body	4	104006	
68	O-ring	4	N70013	
69	Adapter - Seat, Flat Face Valve Option	2	111294	
70	O-ring, Flat Face Valve Option	2	N70220	
71	Backup Ring, Flat Face Valve Option	2	BUR220	
72	O-ring, Flat Face Valve Option	2	N70013	

Homogenizer Double Stage Manual Homogenizing Valve Diagram



**Seat & Plug Required

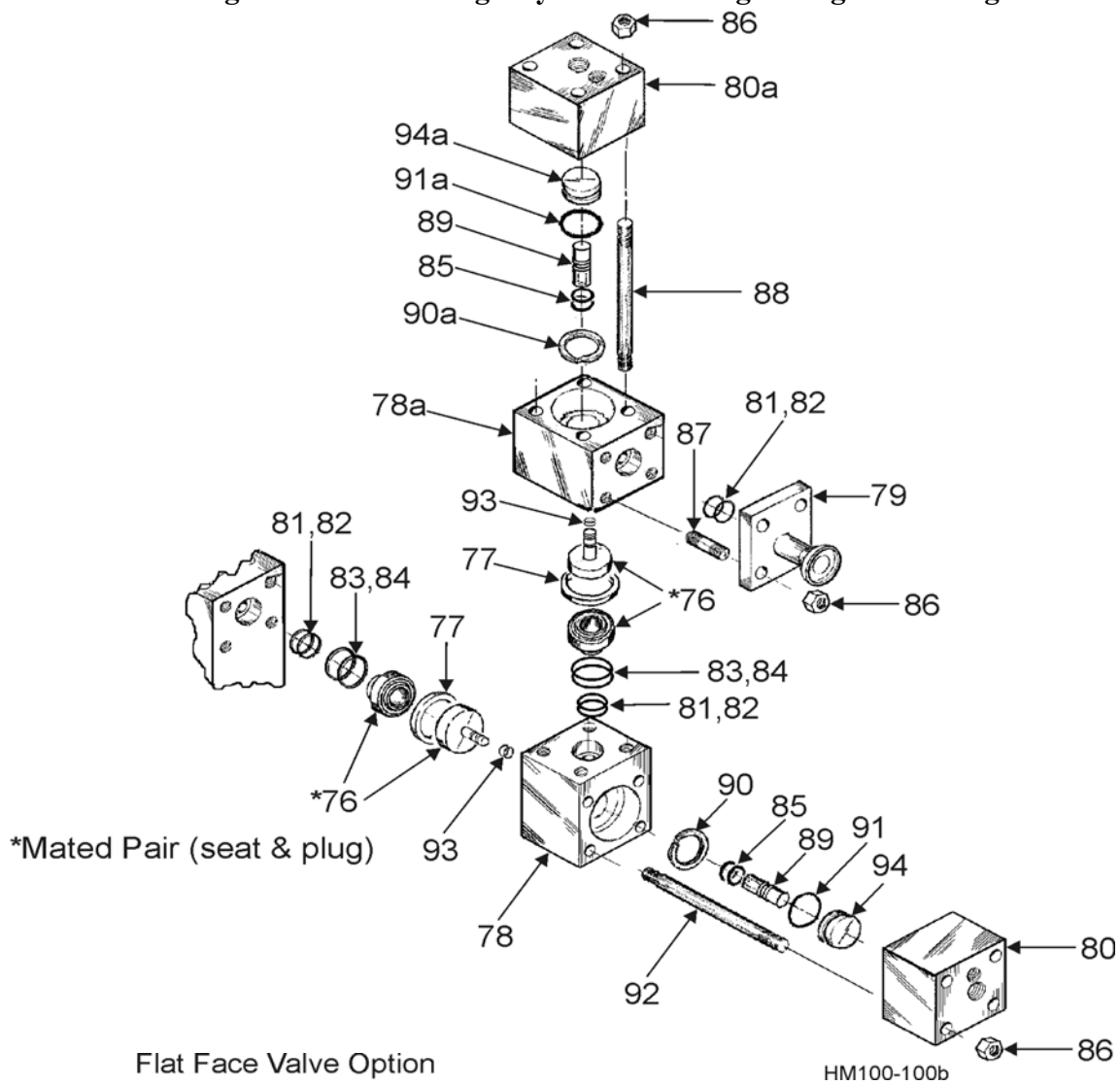
PL5081 - Dispersion Equipment

Parts Price List

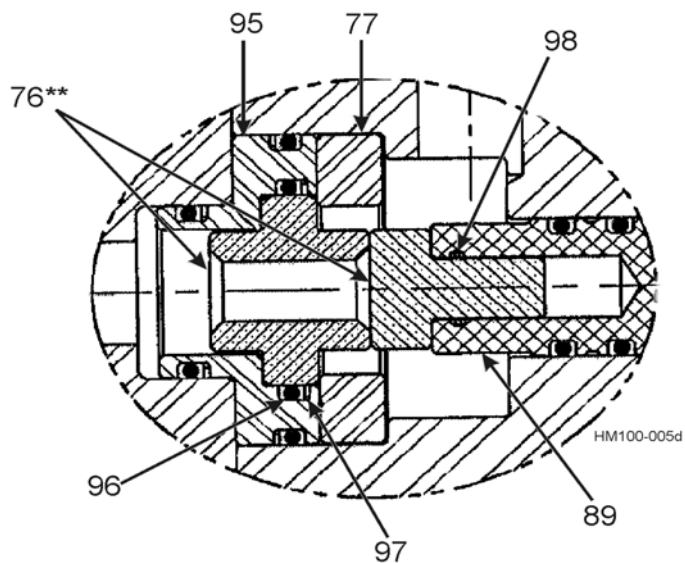
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
76	VALVE			
	1000 GPH Capacity, 17-4PH SS	2	100356	
	2000 GPH Capacity, 17-4PH SS	2	100357	
	Seat - Flat Face Valve Option, 17-4PH SS	2	111297	
	Plug - Flat Face Valve Option, 17-4PH SS	2	111296	
	1000 GPH Capacity, Tungsten Carbide	2	100177	
	2000 GPH Capacity, Tungsten Carbide	2	100178	
	Seat - Flat Face Valve Option, Tungsten Carbide	2	113406	
	Plug - Flat Face Valve Option, Tungsten Carbide	2	113404	
77	RING			
	1000 GPH Capacity, 17-4PH SS	2	100359	
	2000 GPH Capacity, 17-4PH SS	2	100367	
	Flat Face Valve Option, 17-4PH SS	2	100942	
	1000 GPH Capacity, Tungsten Carbide	2	100225	
	2000 GPH Capacity, Tungsten Carbide	2	100226	
78	Flat Face Valve Option, Tungsten Carbide	2	100223	
	Body - Valve - 1st Stage	1	105882	
78a	Body - Valve, Aseptic - 1st Stage	1	105885	
	Body - Valve - 2nd Stage	1	105882	
79	Body - Valve, Aseptic - 2nd Stage	1	105885	
	Fitting - Product Discharge, #15I	1	101001	
80	Cylinder - Hydraulic Actuator - 1st Stage	1	105873	
80a	Cylinder - Hydraulic Actuator - 2nd Stage	1	105873	
81	O-ring	3	N70214	
82	Backup Ring	3	BUR214	
83	Backup Ring	2	BUR226	
84	O-ring	2	N70226	
85	O-ring	4	N70210	
	O-ring, Aseptic, EPDM	4	E70214	
86	Hex Nut	12	107482	
87	Stud - Product Discharge Fitting	4	100281	
88	Stud - Body	4	100380	
89	Stem - Piston, Hydraulic Actuator	2	105895	
	Stem - Piston, Hydraulic Actuator, Aseptic	2	105897	
	Stem - Piston, Flat Face Valve Option	2	111295	
	Stem - Piston, Aseptic, Flat Face Valve Option	2	113411	
90	Retaining Ring, Smalley WH Series - 1st Stage	1	43-216	
90a	Retaining Ring, Smalley WH Series - 2nd Stage	1	43-216	
91	T-Seal - 1st Stage	1	100391	
91a	T-Seal - 2nd Stage	1	100391	
92	Stud - Body	4	100464	
93	O-ring	4	N70013	
94	Head - Piston, Hydraulic Actuator - 1st Stage	1	105892	
94a	Head - Piston, Hydraulic Actuator - 2nd Stage	1	105892	
95	Adapter - Seat, Flat Face Valve Option	2	111294	
96	O-ring, Flat Face Valve Option	2	N70220	
97	Backup Ring, Flat Face Valve Option	2	BUR220	
98	O-ring, Flat Face Valve Option	2	N70013	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

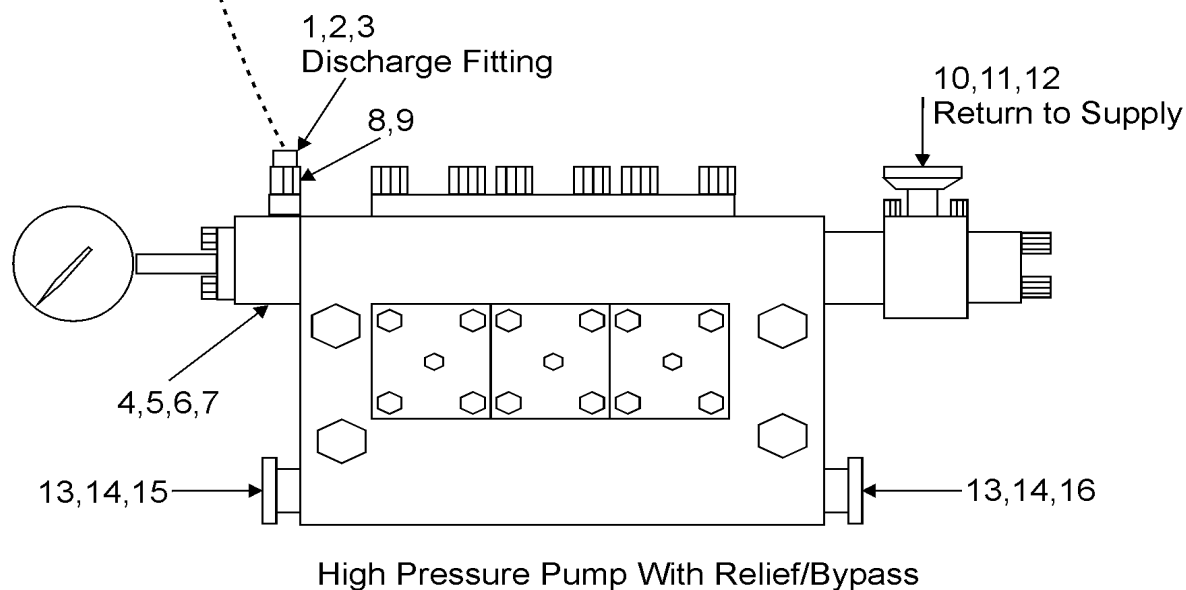
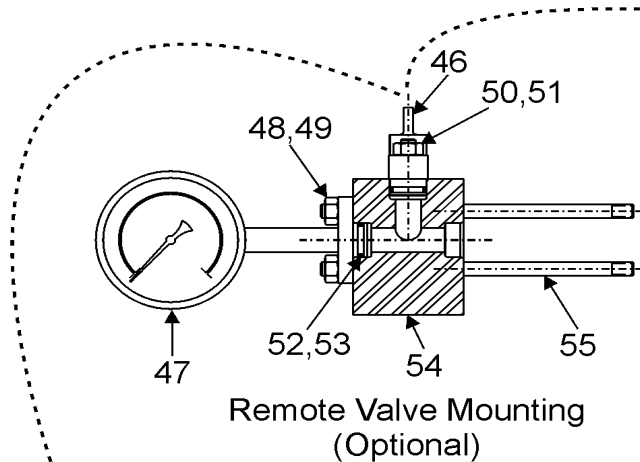
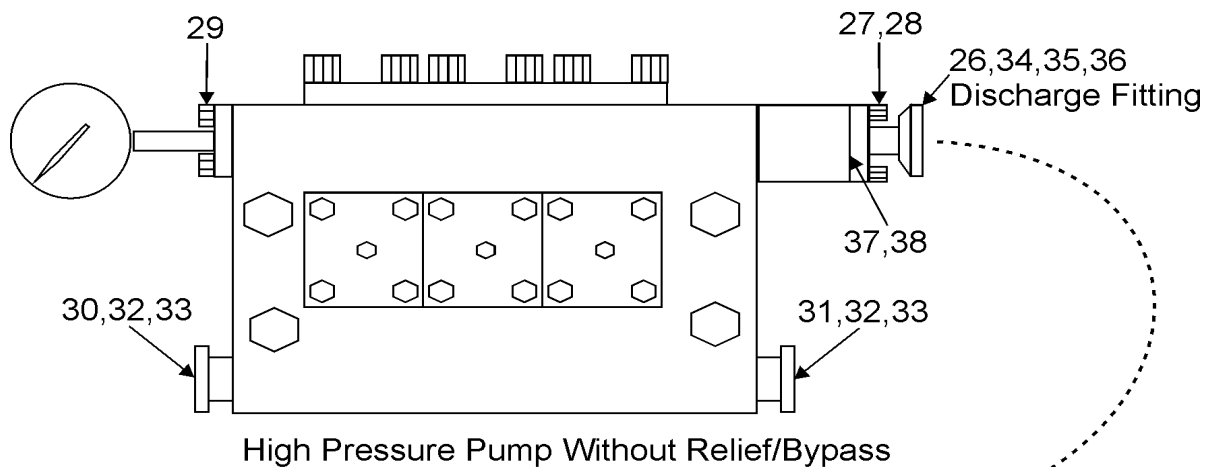
Homogenizer High Pressure Pump Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	101674	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4700 Max Working Pressure	1	101376	
2	O-ring	1	N70214	
3	Backup Ring	1	BUR214	
4	Adapter - Gauge and Outlet	1	100267	
5	O-ring	1	N70214	
6	Backup Ring	1	BUR214	
7	Stud - Gauge and Outlet	4	100704	
8	Stud - Product Discharge	2	100465	
9	Hex Nut - Cap	2	107483	
10	Clamp Assembly, 13IS	1	3023011	
11	Gasket, 40IH Buna	1	20-105	
12	Ferrule, 14WI	1	29-506XCB	
13	Clamp Assembly, 13IS	2	3023011	1
14	Gasket - 40IH Buna	2	20-105	1
15	Ferrule, 14WI	2	29-506XCB	1
16	Cap - Male, 16AI-14I	1	3-71X	
26	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	101387	
	3/4" OD, 5800 Max Working Pressure	1	101388	
	1.0" OD, 4200 Max Working Pressure	1	101389	
	1-1/2" #15I, 250 Max psi at 250°F	1	100361	
	2.0" #15I, 250 Max psi at 250°F	1	101001	
	2-1/2" #15I, 200 Max psi at 250°F		-	
27	Stud - Rupture Disc and Outlet	4	100704	
28	Hex Nut	4	107482	
29	Stud - Gauge	4	100281	
30	Ferrule, 14WI	2	29-506XCB	1
31	Cap - Male, 16AI-14I	1	3-71X	
32	Clamp Assembly, 13IS	2	3023011	1
33	Gasket - 40IH Buna	2	20-105	1
34	Ferrule, 14WI	1	29-506XCB	
35	Clamp Assembly, 13IS	1	3023011	
36	Gasket - 40IH Buna	1	20-105	
37	O-ring	1	N70214	
38	Backup Ring	1	BUR214	

Notes:

1. If for aseptic application, see Homogenzier Aseptic Flush Option instead.

Homogenizer High Pressure Pump Diagram

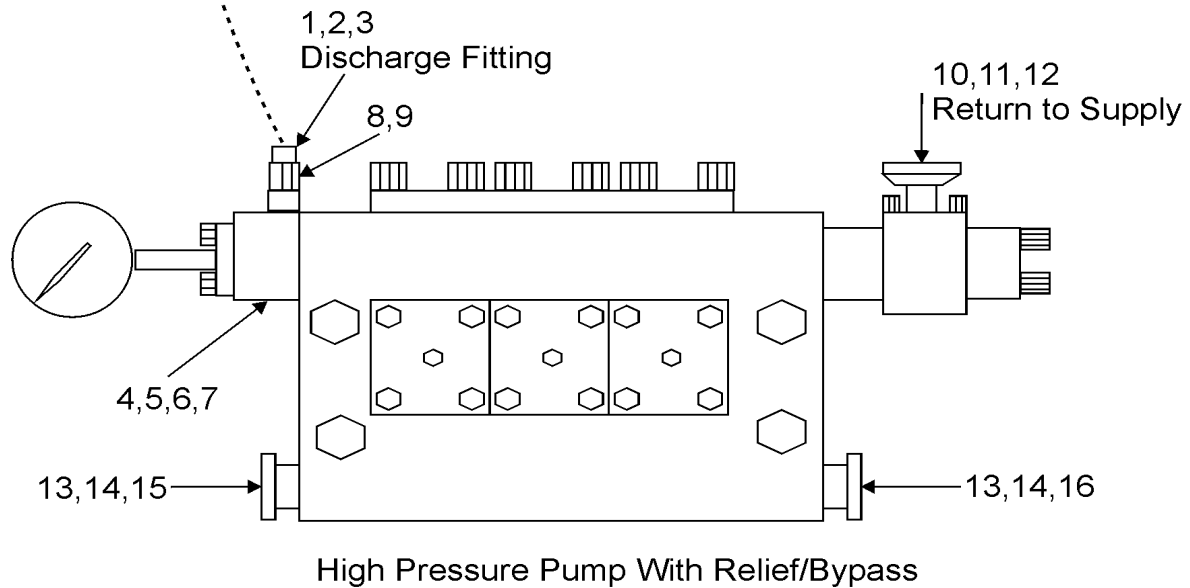
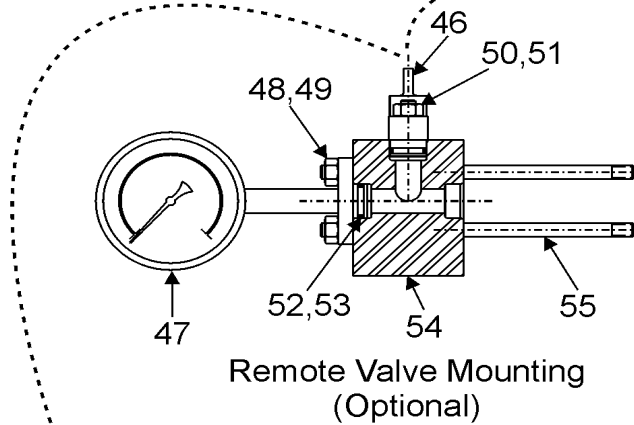
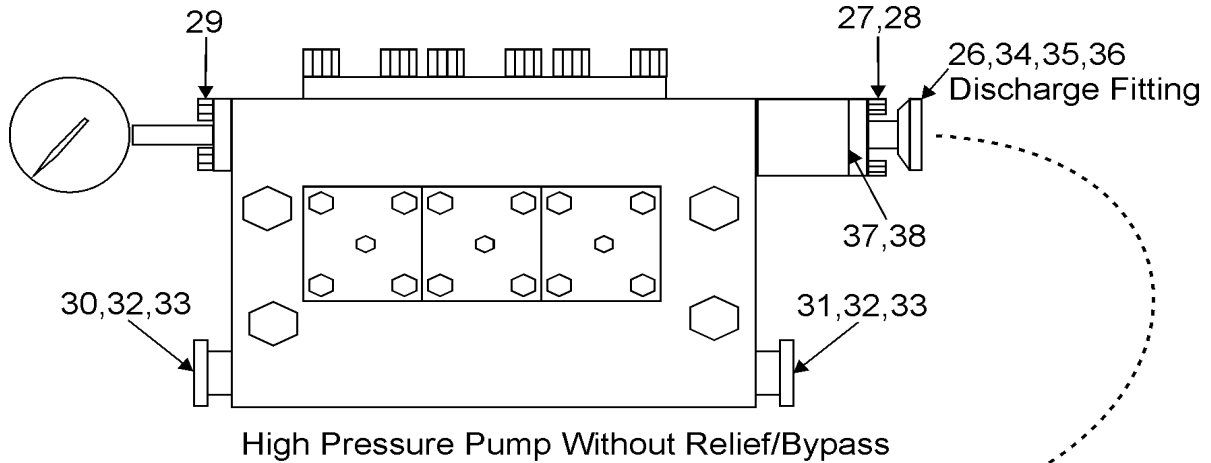


HM100-098

Homogenizer High Pressure Pump Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	101374	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4200 Max Working Pressure	1	101376	
47	GAUGE - PRESSURE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
48	Hex Nut	4	107482	
49	Stud - Gauge	4	100281	
50	Hex Nut	2	107483	
51	Stud - Product Inlet	2	100465	
52	O-ring	2	N70214	
53	Backup Ring	2	BUR214	
54	Adapter - Remote Valve Mounting	1	103948	
55	Stud - Body	4	100380	

Homogenizer High Pressure Pump Diagram

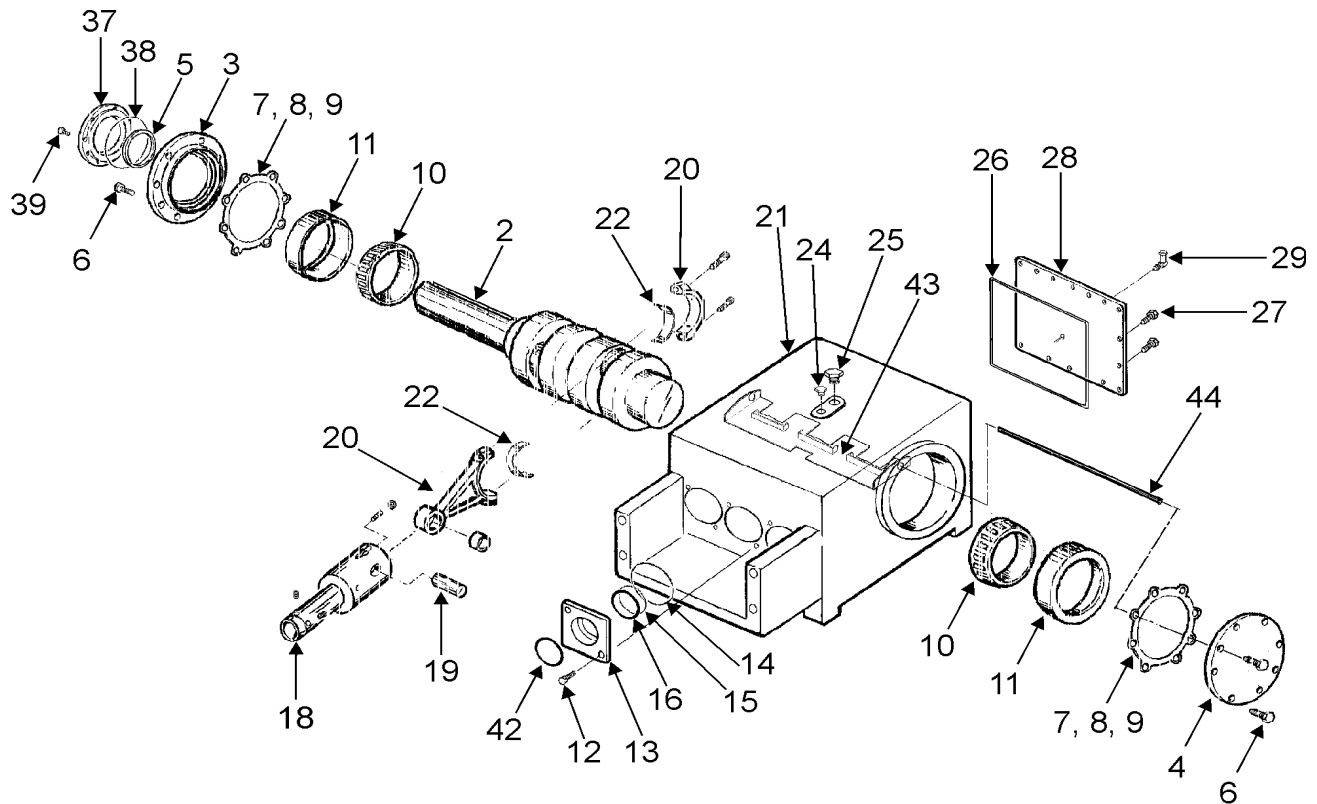


HM100-098

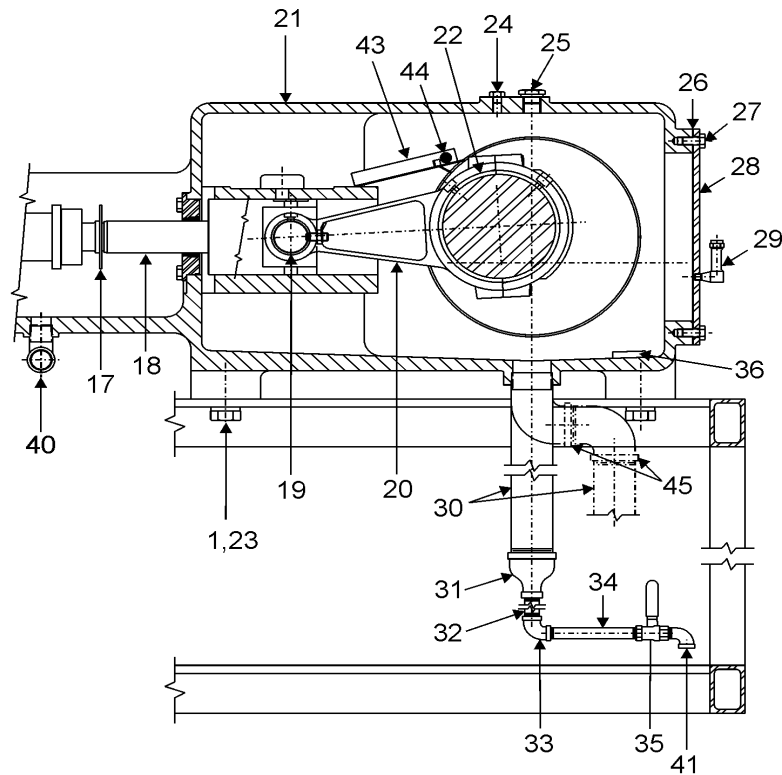
Homogenizer Crank Case Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Screw - Crankcase Mount, HH	4	30-419	
2	Crankshaft	1	100115	
	Crankshaft - 500LV only	-	-	
3	Cap - Crankshaft Seal Holder	1	100120	
4	Cap - Crankcase	1	100124	
5	Seal, Crankshaft	1	100983	
6	Screw - Crankcase End Caps	16	30-498	
7	Shim - .005 Thick	-	100486	
8	Shim - .007 Thick	-	100491	
9	Shim - .020 Thick	-	100495	
10	Bearing - Cone	2	100501	
11	Bearing - Cup	2	100505	
12	Screw - Oil Seal Carrier, HH SS	6	30-361	
13	Carrier - Oil Seal	3	100128	
14	O-ring	3	N70154	
15	Retaining Ring	3	43-214	
16	Seal	3	100134	
17	Slinger - Water	3	100137	
18	Crosshead Assembly	3	100141	
19	Pin - Wrist	3	100145	
20	Connecting Rod Assembly	3	100149	
21	Crankcase	1	100153	
22	Journal Bearing (two per set)	6	100453	
23	Lockwasher - Crankcase Mount	4	43-146	
24	Vented Plug	1	CD0046100	
25	Drain/Level Plug	1	78-86	
26	Gasket	57	35850	
27	Screw - Crankcase Back Cover, HH	14	30-239	
28	Cover - Crankcase	1	100163	
29	Vented Oil Level Gauge	1	100981	
30	Oil Drain Pipe	1	11-120	
31	Reducer	1	78-109	
32	Oil Drain Pipe	1	11-145	
33	Elbow	1	78-110	
34	Oil Drain Pipe	1	11-128	
35	Brass Ball Valve	1	100984	
36	Magnet - Ceramic 5	3	100985	
37	Holder - Crankshaft Seal	1	100954	
38	O-ring	1	N70163	
39	Screw - Crankshaft Seal Holder, HH	4	30-314	
40	Elbow	1	78-141	
41	Elbow	1	78-138	
42	Seal	3	105571	
43	Ramp - Oiling	1	100158	
44	Rod - Oiling Ramp Support	1	110118	
45	Elbow (use with oversize motors)	2	78-154	

Homogenizer Crank Case Assembly Diagram



HM100-057a

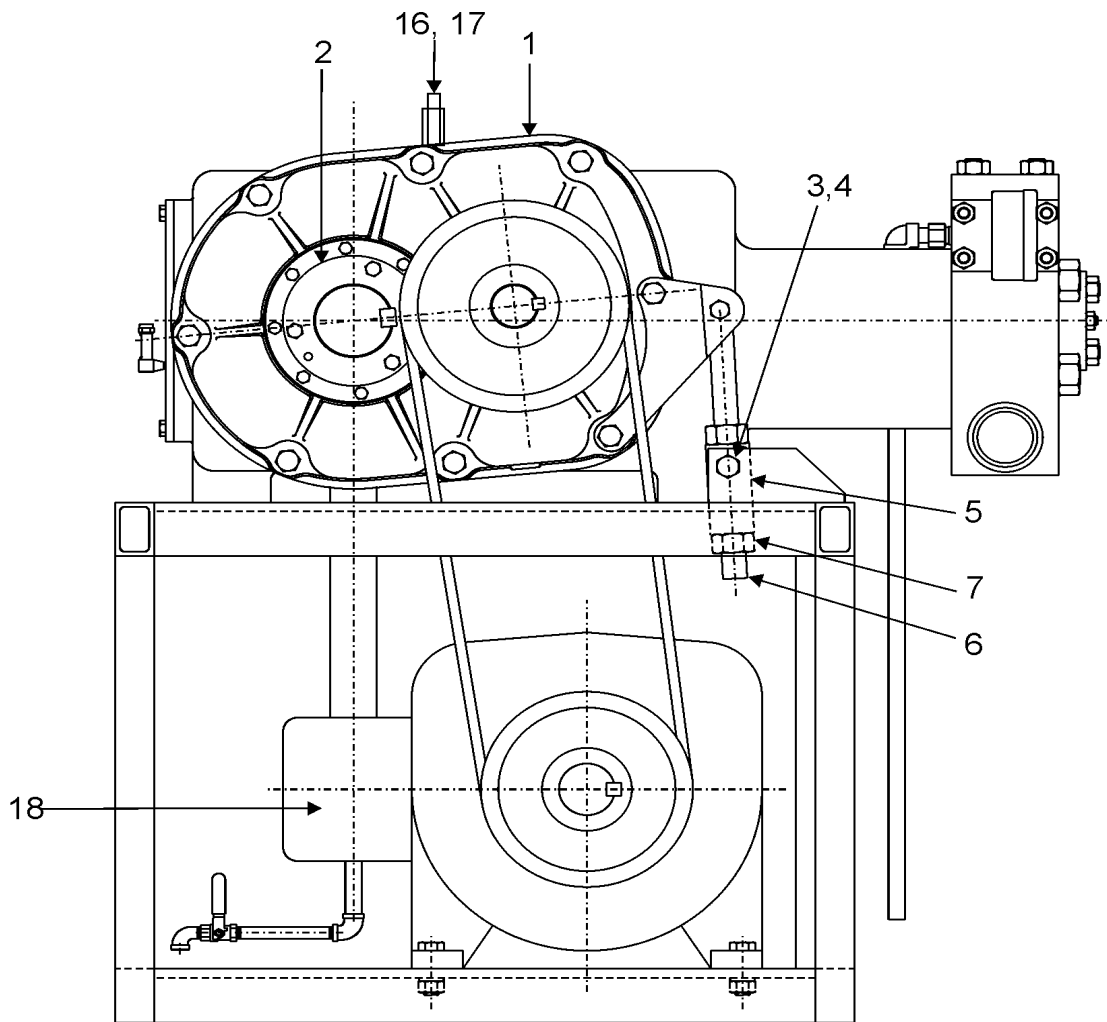


HM100-091a

Homogenizer Motor and Drive Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Speed Reducer - Single Reduction	1	100168	
2	Tapered Bushing Assembly	1	102855	
3	Screw, HH, ZP	2	30-285	
4	Lockwasher, ZP	2	43-140	
5	Pivot - Reducer/Tensioner	1	100171	
6	Rod End - Torque Arm	1	100972	
7	Hex Nut, ZP	2	36-105	
8	Label - Crankcase (not shown)	1	33-76	
9	Label - Crankcase (not shown)	1	33-77	
16	Nipple (not used)	-	-	
17	Coupling (not used)	-	-	
18	Meter - Hour, 60HZ 120VAC	1	112627	
	Meter - Hour, 50HZ 120VAC		112628	

Homogenizer Motor and Drive Assembly Diagram



HM100-090a

Homogenizer Frame and Panel Assembly - Model 2000

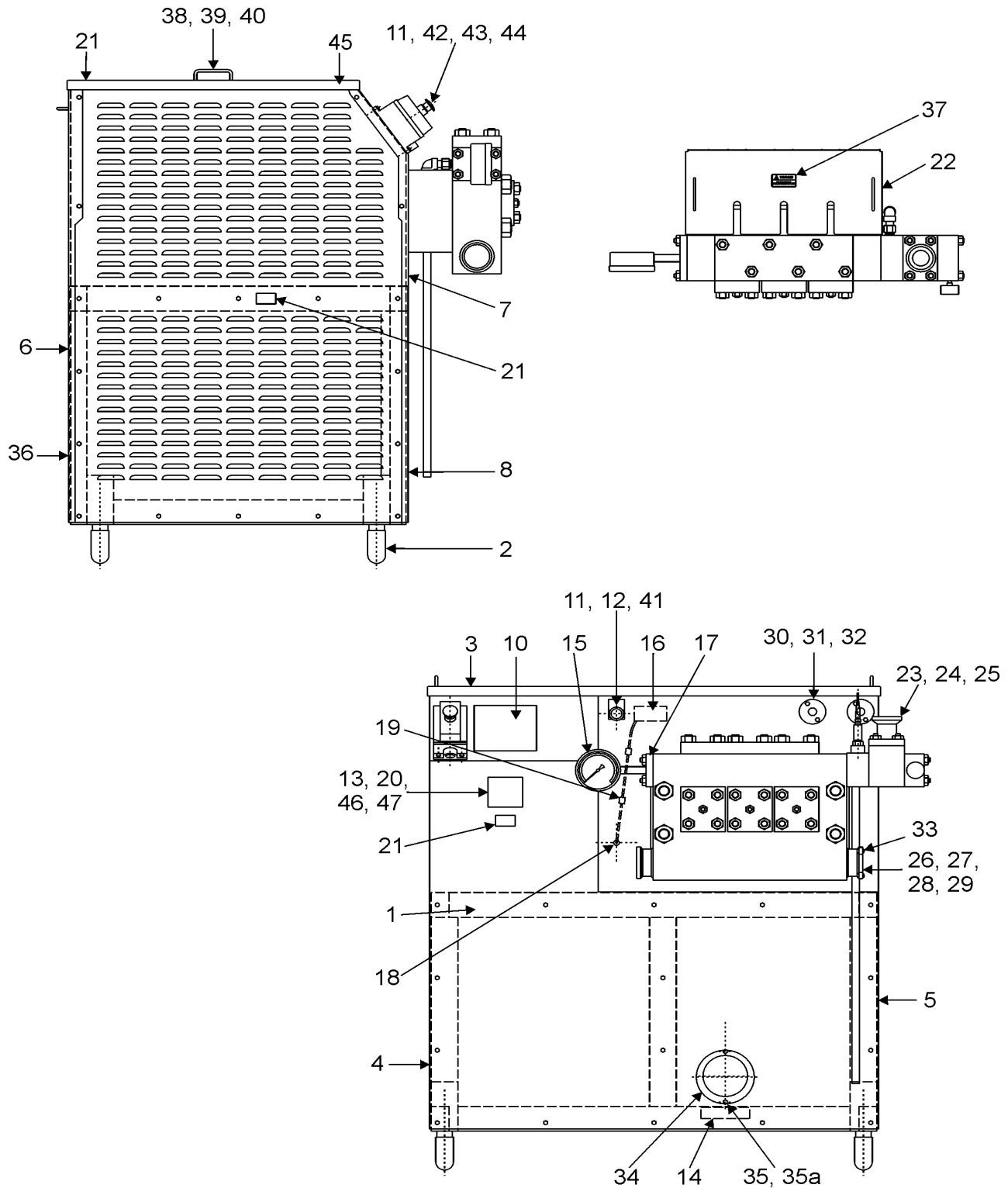
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Frame Assembly	1	100074	
2	Leg - Adjustable	4	100078	
3	Panel - Housing, Top	1	100082	
4	Panel - Housing, Left Side	1	100087	
5	Panel - Housing, Right Side	1	100092	
6	Panel - Housing, Back	1	100097	
7	Panel - Housing, Front	1	100102	
8	Panel - Housing, Front Bottom (model 5000 only)	-	-	
9	Screw (not shown)	48	30-181	
9a	Washer (not shown)	48	43-144	
10	Label - Company Name and Machine Type	1	33-30A	
11	Switch - Emergency Stop, Standard	1	103994	
	Switch - Emergency Stop, Explosion Proof	1	105171	
12	Plate - Emergency Stop	1	103995	
13	Screw, SRHM, #3-48 x 1/4" 18-8SS	4	30-608	
14	Nameplate - Drain	1	4487810	
15	PRESSURE GAUGE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	100410	
	PRESSURE TRANSDUCER/TRANSMITTER (Digital Pressure Meter only) - OPT			
	0 to 1000 psi 3mV/V	1	100412	
	0 to 5000 psi 3mV/V	1	100413	
	0 to 7500 psi 3mV/V	1	100414	
	0 to 10000 psi 3mV/V	1	100415	
	0-5000 4-20mA 100 feet wire	1	111479	
16	Digital Pressure Meter - Optional	1	100108	
17	Clamp (Digital Pressure Meter only)	1	100109	
18	Grommet (Digital Pressure Meter only)	1	100111	
19	Cord Clip, Adhesive Backed (Digital Pressure Meter only)	3	100112	
20	Nameplate - Homogenizer	1	5902364	
	Nameplate - Plunger Pump	1	5902365	
21	Caution Plate	5	33-62	
22	Cover - Plunger/Cylinder Area	1	101339	
23	Ferrule, 14WI	1	29-506XCB	
24	Clamp, 13IS	1	3023011	
25	Gasket, 40IH Buna	1	20-105	
26	Ferrule, 14WI	2	29-506XCB	
27	Cap - Male, 16AI-14I	1	3-71X	
28	Clamp, 13IS	2	3023011	
29	Gasket, 40IH Buna	2	20-105	

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Homogenizer Frame and Panel Assembly - Model 2000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
30	Cover	2	104001	
31	Screw, HHC SS	4	30-181	
32	Hex Nut SS	4	36-53	
33	Hole Plug	2	78-127	
34	Cover - Oil Hole	1	105173	
35	Screw	2	30-580	
35a	Washer, Plain 1/4" SS	2	43-144	
36	Panel - Housing Back Bottom (model 7500 only)	-	-	
37	Warning Label	1	33-84	
38	Handle with Mounting Screws	4	105899	
39	Lockwasher, #8	8	43-20	
40	Screw	8	30-593	
41	Hole Plug - SS (Explosion Proof Switch only)	1	78-147	
42	Screw, HHC (Explosion Proof Switch only)	4	30-206	
43	Lockwasher, SS (Explosion Proof Switch only)	4	43-22	
44	Hex Nut (Explosion Proof Switch only)	4	36-53	
45	Wear Shape, Snap-On	102	108311	
46	Lockwasher, #3 18-8SS	4	43-85	
47	Hex Nut, #3-48 18-8SS	4	36-134	

Homogenizer Frame and Panel Assembly Diagram



HM100-089a

Homogenizer Headblock Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Rupture Disc - Sized to Headblock Design Limitation	1	100994	
2	Ring - Rupture Disc (For less than 7500 psi)	1	101002	
	Ring - Rupture Disc (7500 to 10000 psi)	-	-	
3	Nut - Rupture Disc Holddown	1	100266	
4	Nipple	1	11-131	
5	Elbow	1	78-112	
6	Hex Nut	4	107483	
7	Adapter - Rupture Disc	1	101359	
	Adapter - Rupture Disc and Pressure Transducer	1	111011	
8	Backup Ring	2	BUR224	
9	O-ring	2	N70224	
10	Handle - Headblock Cover, Top	2	100271	
11	Hex Nut	6	107485	
11a	Stud - .875-9 x 3.59" LG	6	100468	
12	Cover - Headblock, Top	1	100275	
13	Stud - Gauge (Homogenizers only)	4	100379	
14	Nipple	1	11-136	
14a	Nipple	-	-	
14b	Caution Label	1	33-85	
15	Dowel Pin	2	30-501	
16	Hex Nut	4	107488	
17	Stud - Headblock and Crankcase	4	100280	
18	Hex Nut	12	107484	
18a	Stud - .750-10 x 3.0" LG	12	100467	
19	Hex Nut	3	107482	
20	Stud - Cylinder Puller	3	100282	
21	Cover - Headblock, Front (Not Aseptic)	3	103938	1
22	Ball Valve	1	312-1402X	
23	Nipple	1	11-116	
24	Header - Seal Flush	1	100288	
24a	Screw	2	30-287	
24b	Lockwasher, 1/4"	2	43-106	
25	Male Connector, 1/4" OD x 1/8" IPS (Not Aseptic)	3	78-88	
26	Tubing - (Not Aseptic)	60	87-1023	
27	Elbow - (Not Aseptic)	3	78-87	
28	Backup Ring	3	BUR232	
29	O-ring	3	N70232	
30	Plug - Headblock Top (Poppet Valve only)	3	100297	
31	Spring - Coil (Poppet Valve only)	6	4484680	
32	Cap - Suction Valve Spring	3	4484730	
33	Headblock - Integral Seat	1	100301	1
	Headblock - Hardened Seat	1	104609	1
34	Backup Ring	3	BUR335	1
35	O-ring	3	N70335	1
36	O-ring	3	N70334	1
37	Backup Ring	3	BUR334	1

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

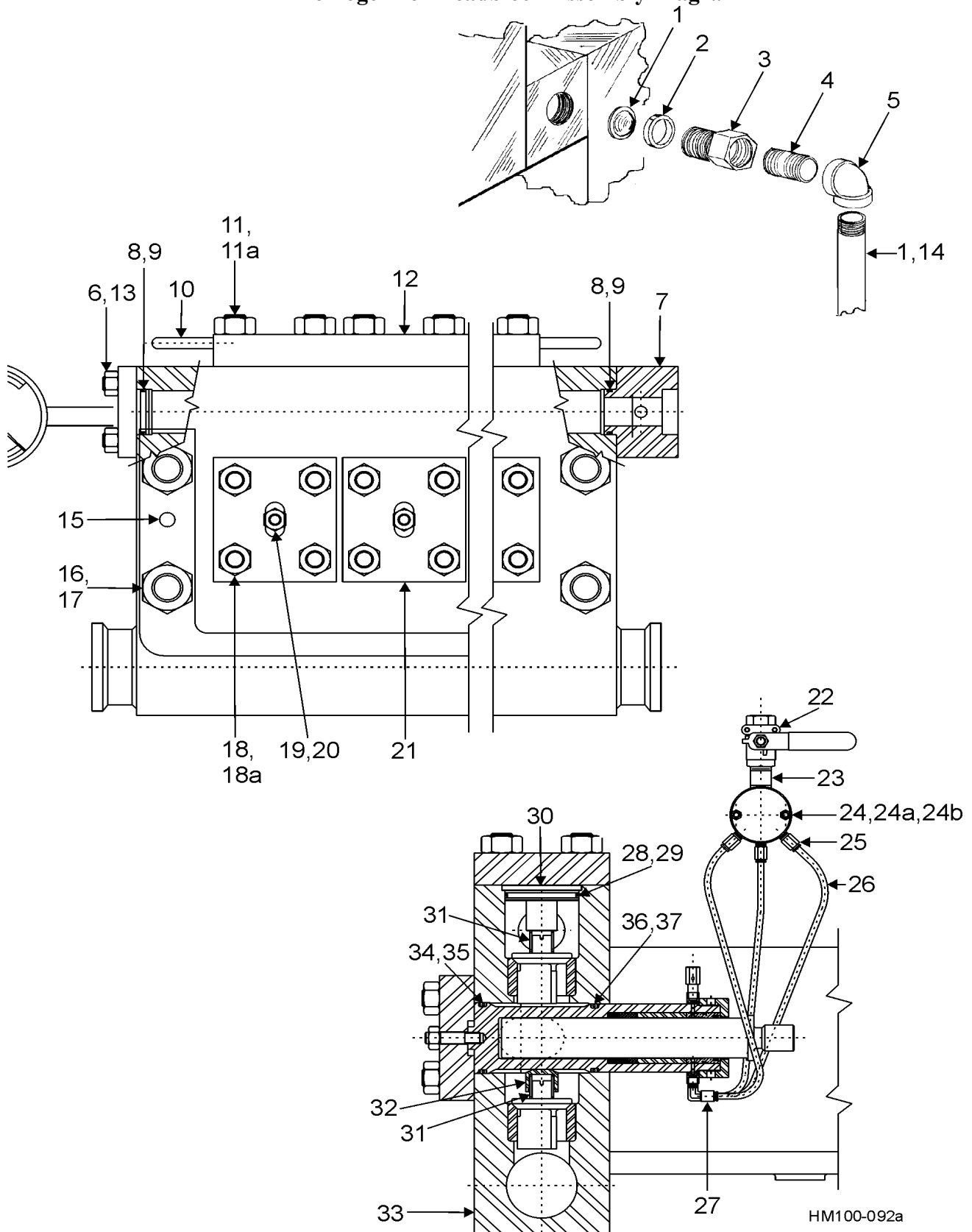
PL5081 - Dispersion Equipment
Parts Price List



**Waukesha
Cherry-Burrell**

® An SPX Process Equipment Operation

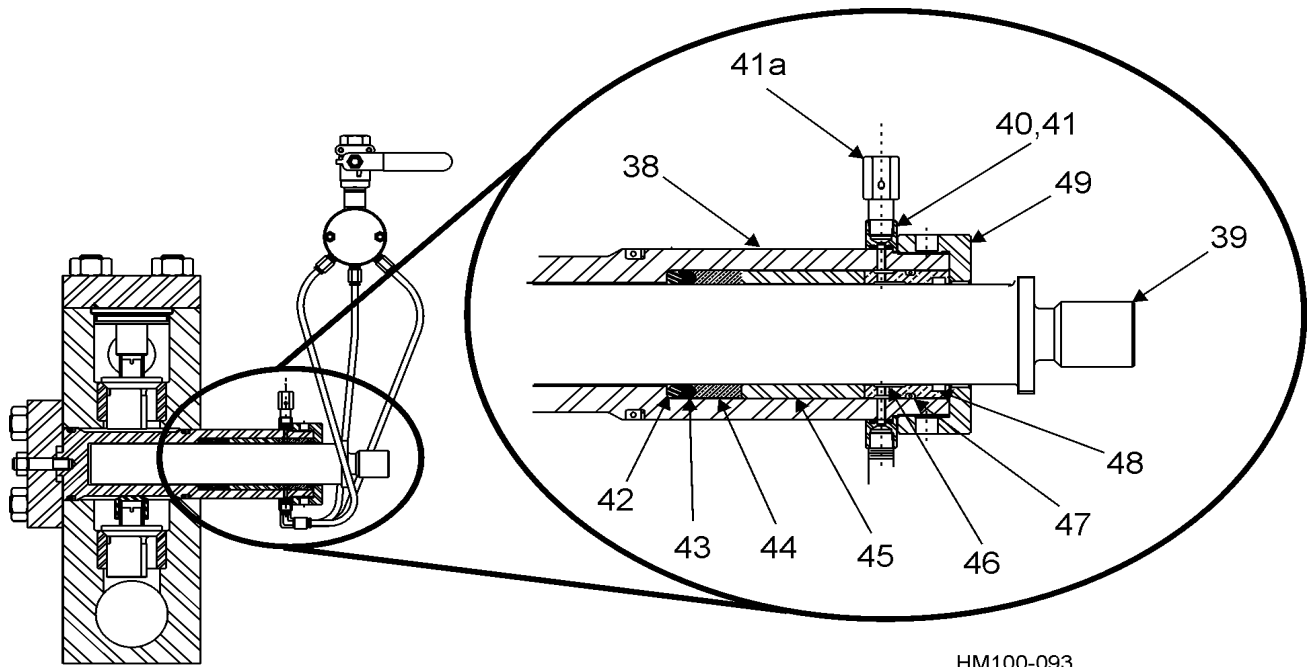
Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
38	CYLINDER			
	1.500" Plunger Diameter	3	100321	
	1.625" Plunger Diameter	3	100728	
	1.750" Plunger Diameter	3	100730	
	1.875" Plunger Diameter	3	100732	
	1.9375" Plunger Diameter	3	100733	
	2.000" Plunger Diameter	3	100734	
	2.0625" Plunger Diameter	3	100324	
39	PLUNGER - TUNGSTEN CARBIDE			
	1.500" Diameter	3	100655	
	1.625" Diameter	3	100657	
	1.750" Diameter	3	100659	
	1.875" Diameter	3	100661	
	1.9375" Diameter	3	100662	
	2.000" Diameter	3	100663	
	2.0625" Diameter	3	100664	
	PLUNGER - CERAMIC - OPT			
	1.500" Diameter	3	100606	
	1.625" Diameter	3	100608	
	1.750" Diameter	3	100610	
	1.875" Diameter	3	100612	
	1.9375" Diameter	3	100613	
	2.000" Diameter	3	100614	
	2.0625" Diameter	3	100615	
40	Ring - Seal Flush	3	100328	
41	O-ring	6	N70041	
41a	Snubber	3	104130	
42	ADAPTER - BOTTOM			
	1.500" Plunger Diameter	3	100839	
	1.625" Plunger Diameter	3	100841	
	1.750" Plunger Diameter	3	100843	
	1.875" Plunger Diameter	3	100845	
	1.9375" Plunger Diameter	3	100332	
	2.000" Plunger Diameter	3	100846	
	2.0625" Plunger Diameter	3	100333	

Homogenizer Headblock Assembly Diagram

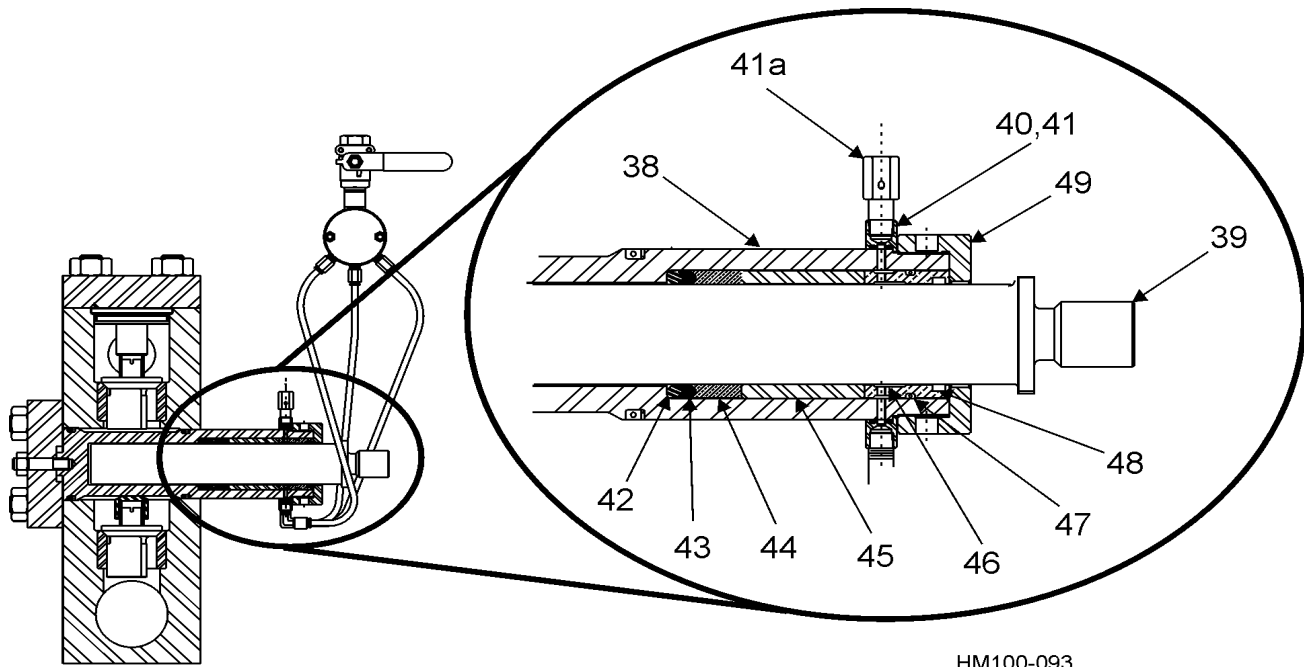


HM100-093

Homogenizer Headblock Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
43	SEAL - PLUNGER			
	1.500" Plunger Diameter	6	105143	
	1.625" Plunger Diameter	6	105145	
	1.750" Plunger Diameter	6	105147	
	1.875" Plunger Diameter	6	105149	
	1.9375" Plunger Diameter	6	105150	
	2.000" Plunger Diameter	6	105151	
	2.0625" Plunger Diameter	6	105152	
	SEAL - PLUNGER - FDA, OPT			
	1.500" Plunger Diameter, FDA	6	101022	
	1.625" Plunger Diameter, FDA	6	101024	
	1.750" Plunger Diameter, FDA	6	101026	
	1.875" Plunger Diameter, FDA	6	101028	
	1.9375" Plunger Diameter, FDA	6	101029	
	2.000" Plunger Diameter, FDA	6	101030	
	2.0625" Plunger Diameter, FDA	6	101031	
44	ADAPTER - TOP, DOUBLE SEAL			
	1.500" Plunger Diameter	3	105934	
	1.625" Plunger Diameter	3	105936	
	1.750" Plunger Diameter	3	105938	
	1.875" Plunger Diameter	3	105940	
	1.9375" Plunger Diameter	3	105941	
	2.000" Plunger Diameter	3	105942	
	2.0625" Plunger Diameter	3	105943	
	ADAPTER - TOP, SINGLE SEAL - OPT			
	1.500" Plunger Diameter	3	101121	
	1.625" Plunger Diameter	3	101123	
	1.750" Plunger Diameter	3	101125	
	1.875" Plunger Diameter	3	101127	
	1.9375" Plunger Diameter	3	101128	
	2.000" Plunger Diameter	3	101129	
	2.0625" Plunger Diameter	3	101130	
45	SPACER			
	1.500" Plunger Diameter	3	100864	
	1.625" Plunger Diameter	3	100868	
	1.750" Plunger Diameter	3	100872	
	1.875" Plunger Diameter	3	100876	
	1.9375" Plunger Diameter	3	100877	
	2.000" Plunger Diameter	3	100878	
	2.0625" Plunger Diameter	3	100879	

Homogenizer Headblock Assembly Diagram



HM100-093

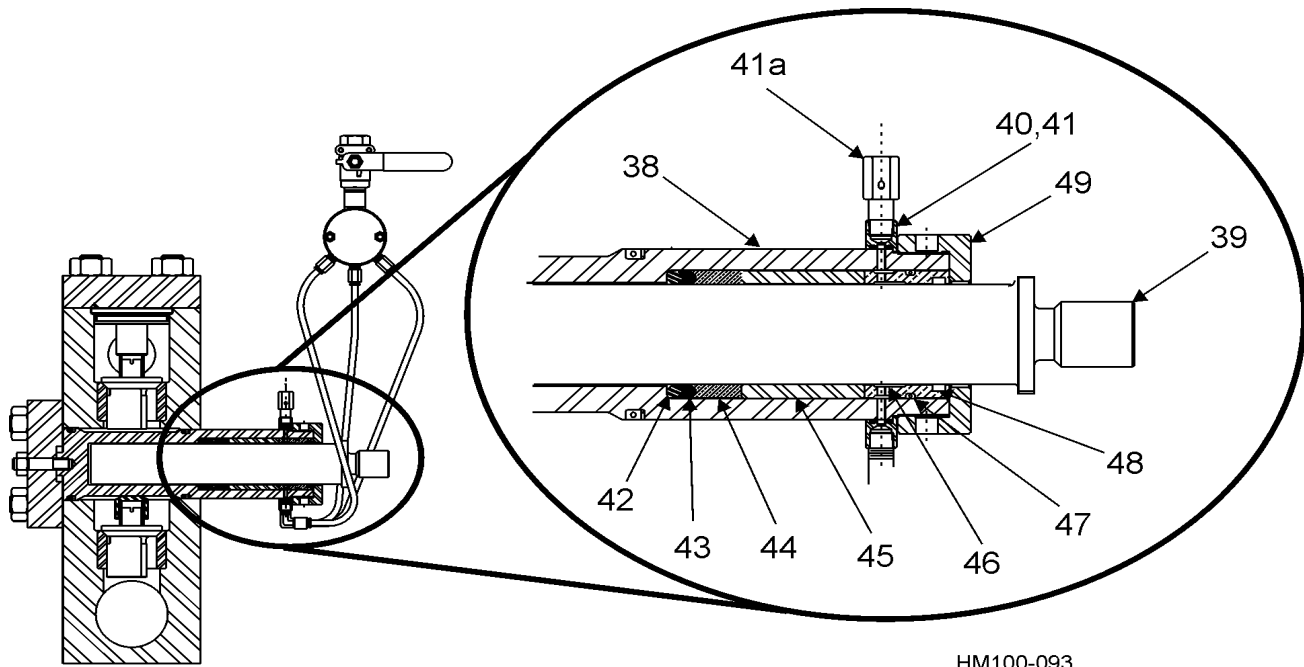
Homogenizer Headblock Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	RING - LANTERN			
	1.500" Plunger Diameter	3	100809	
	1.625" Plunger Diameter	3	100811	
	1.750" Plunger Diameter	3	100813	
	1.875" Plunger Diameter	3	100815	
	1.9375" Plunger Diameter	3	100340	
	2.000" Plunger Diameter	3	100816	
	2.0625" Plunger Diameter	3	100341	
47	O-RING			
	1.500" Plunger Diameter	3	N70133	1
	1.625" Plunger Diameter	3	N70135	1
	1.750" Plunger Diameter	3	N70137	1
	1.875" Plunger Diameter	3	N70139	1
	1.9375" Plunger Diameter	3	N70140	1
	2.000" Plunger Diameter	3	N70141	1
	2.0625" Plunger Diameter	3	N70142	1
48	SEAL - WIPER			
	1.500" Plunger Diameter	3	101077	1
	1.625" Plunger Diameter	3	101079	1
	1.750" Plunger Diameter	3	101081	1
	1.875" Plunger Diameter	3	101083	1
	1.9375" Plunger Diameter	3	101084	1
	2.000" Plunger Diameter	3	101085	1
	2.0625" Plunger Diameter	3	101086	1
49	NUT			
	1.500" Plunger Diameter	3	100351	
	1.625" Plunger Diameter	3	100778	
	1.750" Plunger Diameter	3	100780	
	1.875" Plunger Diameter	3	100782	
	1.9375" Plunger Diameter	3	100783	
	2.000" Plunger Diameter	3	100784	
	2.0625" Plunger Diameter	3	100354	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer Headblock Assembly Diagram

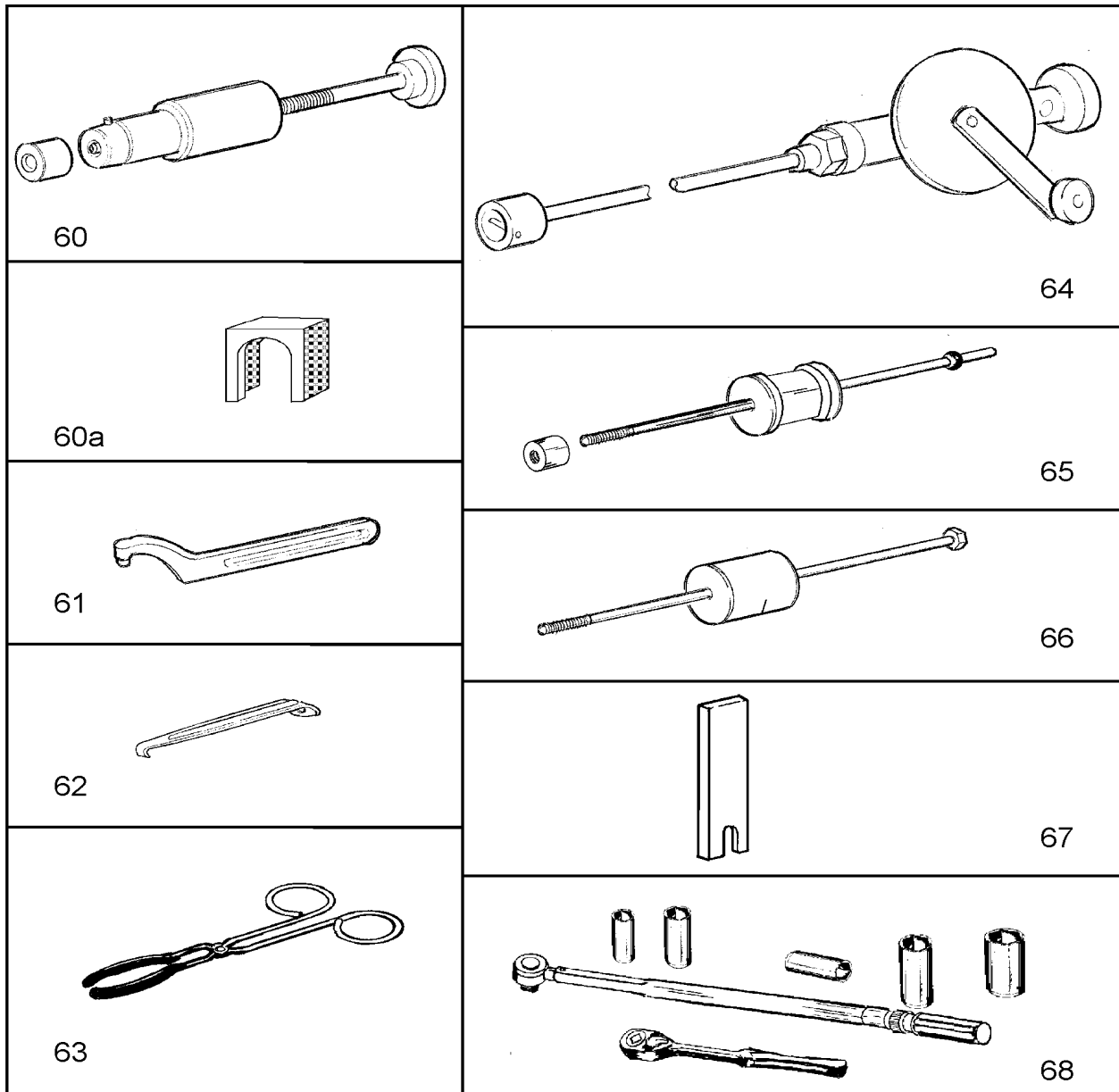


HM100-093

Homogenizer Headblock Assembly Tools - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
60	SEAL PULLER			
	1.500" Plunger Diameter	1	101179	
	1.625" Plunger Diameter	1	101181	
	1.750" Plunger Diameter	1	101183	
	1.875" Plunger Diameter	1	101185	
	1.9375" Plunger Diameter	1	101186	
	2.000" Plunger Diameter	1	101187	
	2.0625" Plunger Diameter	1	101188	
60a	Plunger Removal Tool	1	107353	
61	Spanner Wrench - Fixed Head	1	100979	
62	O-ring Tool	1	AD0096001	
63	Valve Tongs - Neoprene Cushioned Prongs	1	101344	
64	Valve Regrinding Tool - Oscilating Hand Grinder	1	101392	
65	Slide Hammer - Cylinder Remover	1	101334	
66	Slide Hammer - Headblock Top Plug Remover	1	101342	
67	Cylinder Alignment Tool	1	101380	
68	Torque Wrench Kit	1	101639	

Homogenizer Headblock Assembly Tools Diagram



HM100-094a

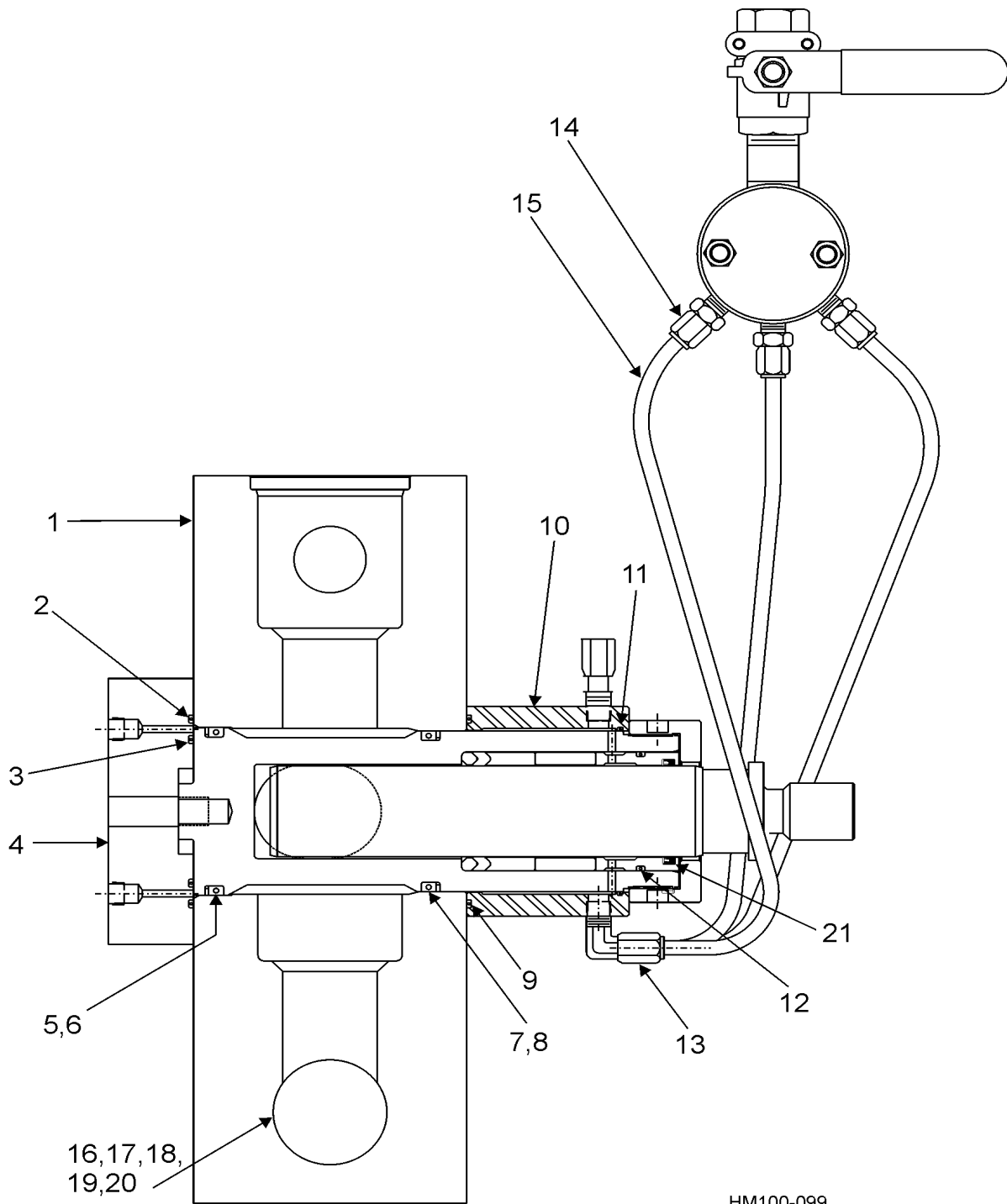
Homogenizer Aseptic Flush Option - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Headblock - Integral Seat Poppet Valve Only	1	105387	
	Headblock - Hardened Seat Poppet Valve Only	1	105388	
2	O-ring, EPDM	3	E70153	
3	O-ring, EPDM	3	E70144	
4	Cover - Headblock, Front, Aseptic	3	105858	
5	O-ring, EPDM	3	E70335	
6	Backup Ring, Teflon	3	BRT335	
7	Backup Ring, Teflon	3	BRT334	
8	O-ring, EPDM	3	E70334	
9	O-ring, EPDM	3	E70153	
10	Collar - Aseptic Cylinder	3	105859	
11	O-ring, EPDM	3	E70041	
12	O-RING, EPDM			
	1.500" Plunger Diameter	3	E70133	
	1.625" Plunger Diameter	3	E70135	
	1.750" Plunger Diameter	3	E70137	
	1.875" Plunger Diameter	3	E70139	
	1.9375" Plunger Diameter	3	E70140	
	2.000" Plunger Diameter	3	E70141	
	2.0625" Plunger Diameter	3	E70142	
13	Elbow	3	78-137	
14	Adapter	6	78-136	
15	Tubing - 1/4" OD, Teflon Green	260	87-1138	
16	Ferrule, #14WNI 316L SS	2	29-643X	
17	Gasket, #4OIV, FKM	2	20-107V	
18	O-ring, FKM	2	V70242	
19	Clamp, #13IS	2	3023025	
20	Adapter	4	78-71	
21	SEAL - WIPER, EPDM			
	1.500" Plunger Diameter	3	104527	
	1.625" Plunger Diameter	3	104529	
	1.750" Plunger Diameter	3	104531	
	1.875" Plunger Diameter	3	104533	
	1.9375" Plunger Diameter	3	104534	
	2.000" Plunger Diameter	3	104535	
	2.0625" Plunger Diameter	3	104536	

Note:

** See Homogenizer Headblock Assembly for all parts not listed here.

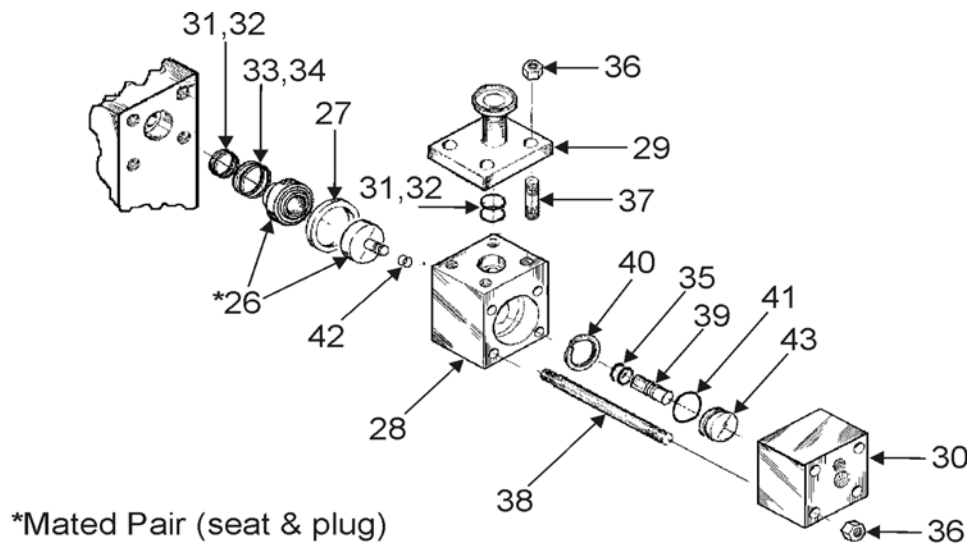
Homogenizer Aseptic Flush Option Diagram



Homogenizer Single Stage Hydraulic Homogenizing Valve Assembly - Model 3000

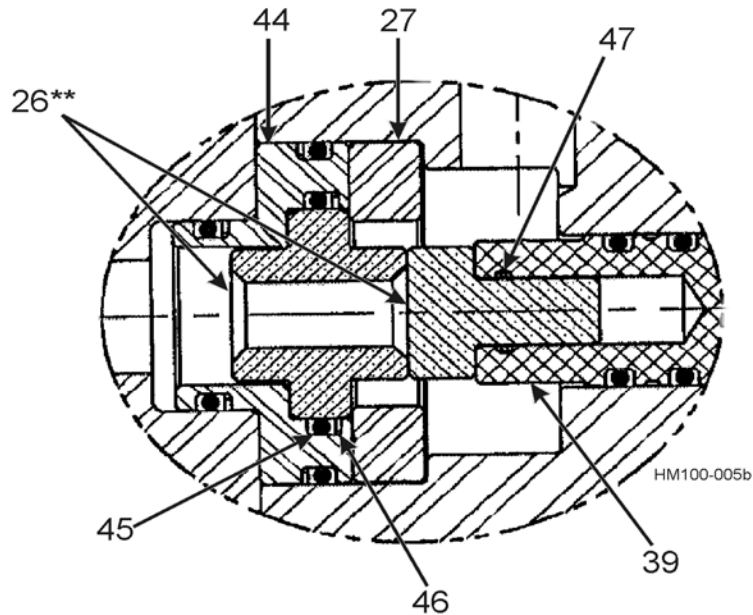
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	VALVE			
	1000 GPH Capacity, 17-4PH SS	1	100931	
	2000 GPH Capacity, 17-4PH SS	1	100932	
	3000 GPH Capacity, 17-4PH SS	1	100368	
	Seat - Flat Face Valve Option, 17-4PH SS	1	112765	
	Plug - Flat Face Valve Option, 17-4PH SS	1	112764	
	1000 GPH Capacity, Tungsten Carbide	1	100179	
	2000 GPH Capacity, Tungsten Carbide	1	100180	
	3000 GPH Capacity, Tungsten Carbide	1	100181	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113408	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113407	
27	RING			
	1000 GPH Capacity, 17-4PH SS	1	100943	
	2000 GPH Capacity, 17-4PH SS	1	100944	
	3000 GPH Capacity, 17-4PH SS	1	100370	
	Flat Face Valve Option, 17-4PH SS	1	100370	
	1000 GPH Capacity, Tungsten Carbide	1	100227	
	2000 GPH Capacity, Tungsten Carbide	1	100228	
	3000 GPH Capacity, Tungsten Carbide	1	100229	
28	Body - Valve	1	105883	
	Body - Valve, Aseptic	1	105886	
29	Fitting - Product Discharge, #15I	1	100373	
30	Cylinder - Hydraulic Actuator	1	105874	
31	O-ring	2	N70224	
32	Backup Ring	2	BUR224	
33	Backup Ring	1	BUR232	
34	O-ring	1	N70232	
35	O-ring	2	N70214	
	O-ring, Aseptic, EPDM	2	E70218	
36	Hex Nut	8	107483	
37	Stud - Product Discharge Fitting	4	100379	
38	Stud - Body	4	100466	
39	Stem - Piston, Hydraulic Actuator	1	105896	
	Stem - Piston, Hydraulic Actuator, Aseptic	1	105898	
	Stem - Piston, Flat Face Valve Option	1	112763	
	Stem - Piston, Aseptic, Flat Face Valve Option	1	113412	
40	Retaining Ring	1	43-219	
41	T-Seal	1	100394	
42	O-ring, Style B	-	-	
43	Head - Piston, Hydraulic Actuator	1	105893	
44	Adapter - Seat, Flat Face Valve Option	1	112762	
45	O-ring, Flat Face Valve Option	1	N70227	
46	Backup Ring, Flat Face Valve Option	1	BUR227	
47	O-ring, Flat Face Valve Option	1	N70013	

Homogenizer Single Stage Hydraulic Homogenizing Valve Diagram



HM100-100a

Flat Face Valve Option

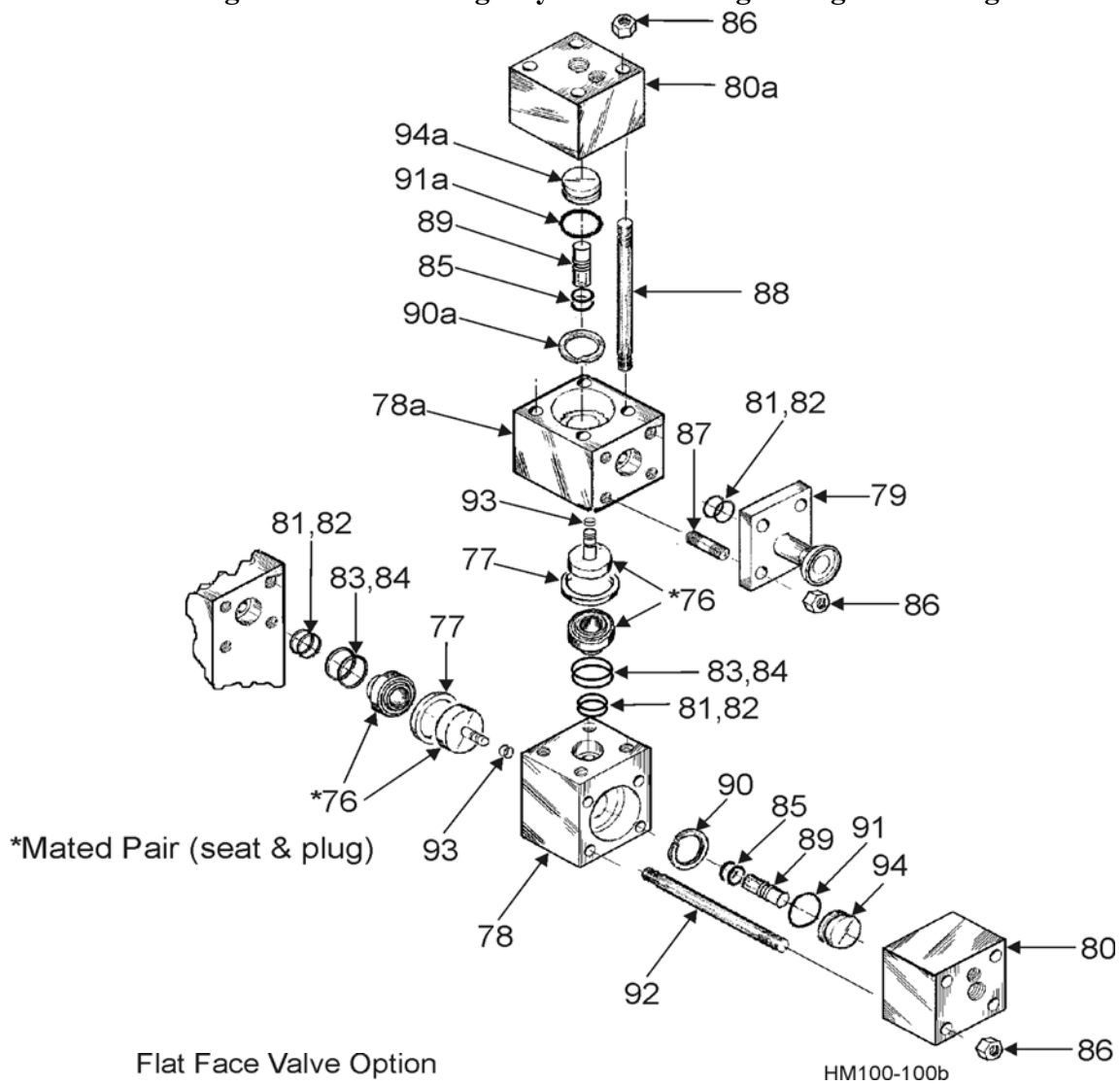


**Seat & Plug Required

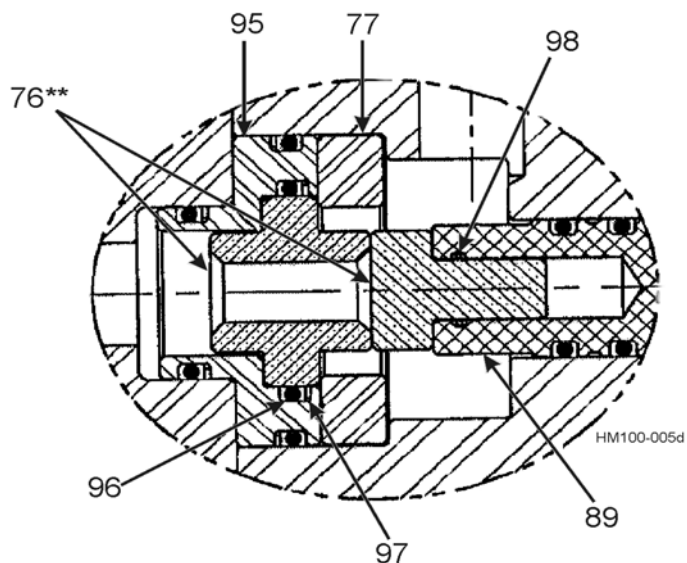
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
76	VALVE			
	1000 GPH Capacity, 17-4PH SS	2	100931	
	2000 GPH Capacity, 17-4PH SS	2	100932	
	3000 GPH Capacity, 17-4PH SS	2	100368	
	Seat - Flat Face Valve, 17-4PH SS	2	112765	
	Plug - Flat Face Valve, 17-4PH SS	2	112764	
	1000 GPH Capacity, Tungsten Carbide	2	100179	
	2000 GPH Capacity, Tungsten Carbide	2	100180	
	3000 GPH Capacity, Tungsten Carbide	2	100181	
	Seat - Flat Face Valve, Tungsten Carbide	2	113408	
	Plug - Flat Face Valve, Tungsten Carbide	2	113407	
77	RING			
	1000 GPH Capacity, 17-4PH SS	2	100943	
	2000 GPH Capacity, 17-4PH SS	2	100944	
	3000 GPH Capacity, 17-4PH SS	2	100370	
	1000 GPH Capacity, Tungsten Carbide	2	100227	
	2000 GPH Capacity, Tungsten Carbide	2	100228	
	3000 GPH Capacity, Tungsten Carbide	2	100229	
78	Body - Valve - 1st Stage	1	105883	
	Body - Valve, Aseptic - 1st Stage	1	105886	
78a	Body - Valve - 2nd Stage	1	105883	
	Body - Valve, Aseptic - 2nd Stage	1	105886	
79	Fitting - Product Discharge, #15I	1	100373	
80	Cylinder - Hydraulic Actuator - 1st Stage	1	105874	
80a	Cylinder - Hydraulic Actuator - 2nd Stage	1	105874	
81	O-ring	3	N70224	
82	Backup Ring	3	BUR224	
83	Backup Ring	2	BUR232	
84	O-ring	2	N70232	
85	O-ring	4	N70214	
	O-ring, Aseptic, EPDM	4	E70218	
86	Hex Nut	12	107483	
87	Stud - Product Discharge Fitting	4	100379	
88	Stud - Body	4	100396	
89	Stem - Piston, Hydraulic Actuator	2	105896	
	Stem - Piston, Hydraulic Actuator, Aseptic	2	105898	
	Stem - Piston, Flat Face Valve	2	112763	
	Stem - Piston, Aseptic, Flat Face Valve	2	113412	
90	Retaining Ring - 1st Stage	1	43-219	
90a	Retaining Ring - 2nd Stage	1	43-219	
91	T-Seal - 1st Stage	1	100394	
91a	T-Seal - 2nd Stage	1	100394	
92	Stud - Body	4	100466	
93	O-ring	-	-	
94	Head - Piston, Hydraulic Actuator - 1st Stage	1	105893	
94a	Head - Piston, Hydraulic Actuator - 2nd Stage	1	105893	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



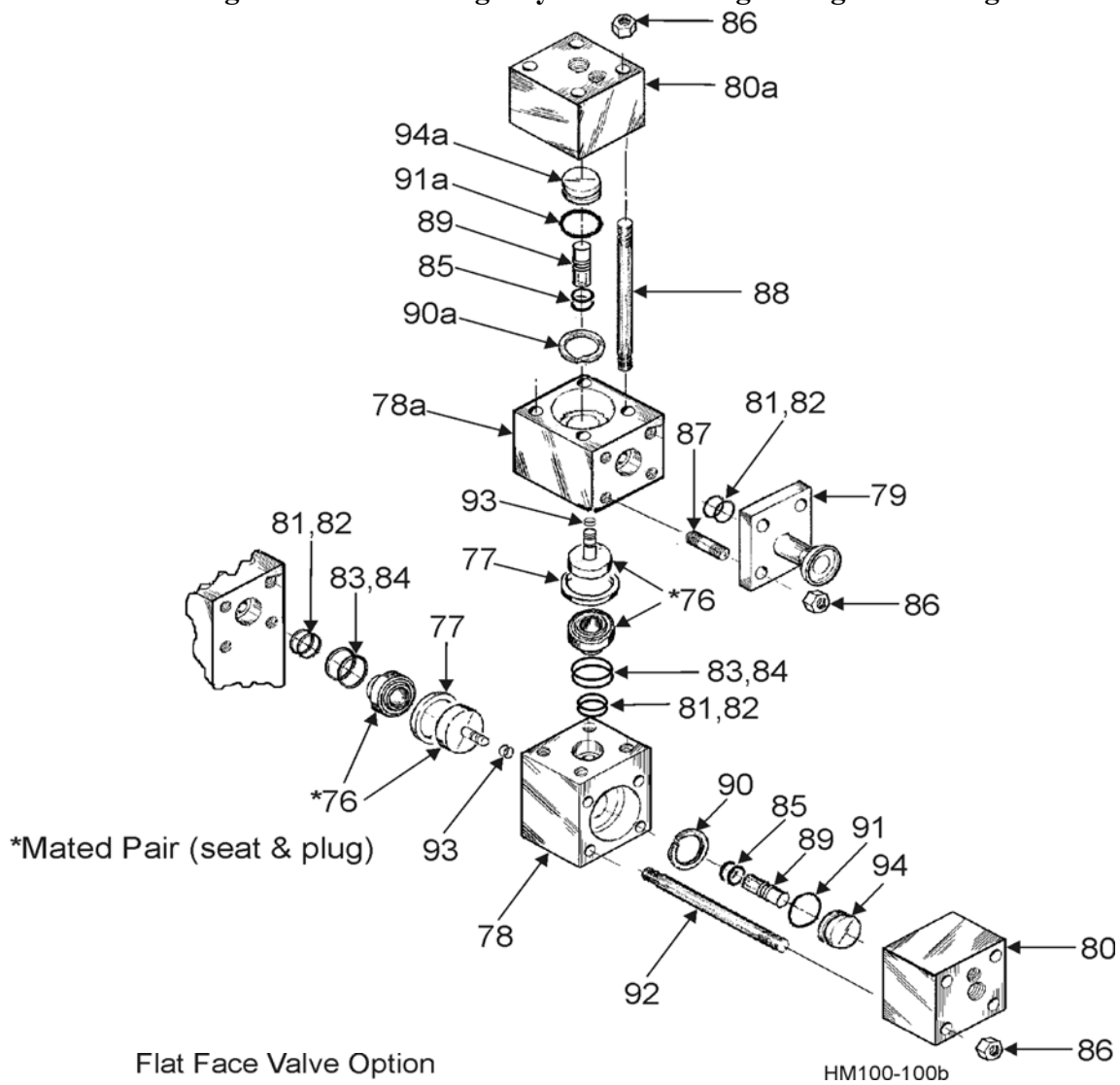
**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

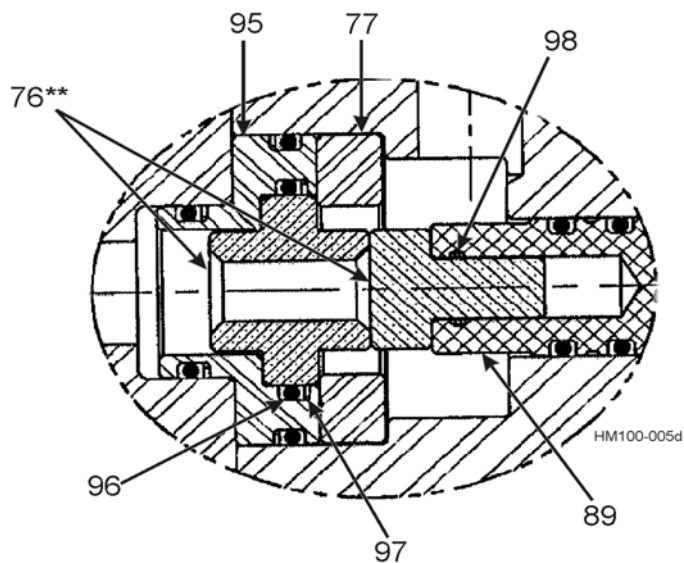
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
95	Adapter - Seat, Flat Face Valve	2	112762	
96	O-ring, Flat Face Valve	2	N70227	
97	Backup Ring, Flat Face Valve	2	BUR227	
98	O-ring, Flat Face Valve	2	N70013	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

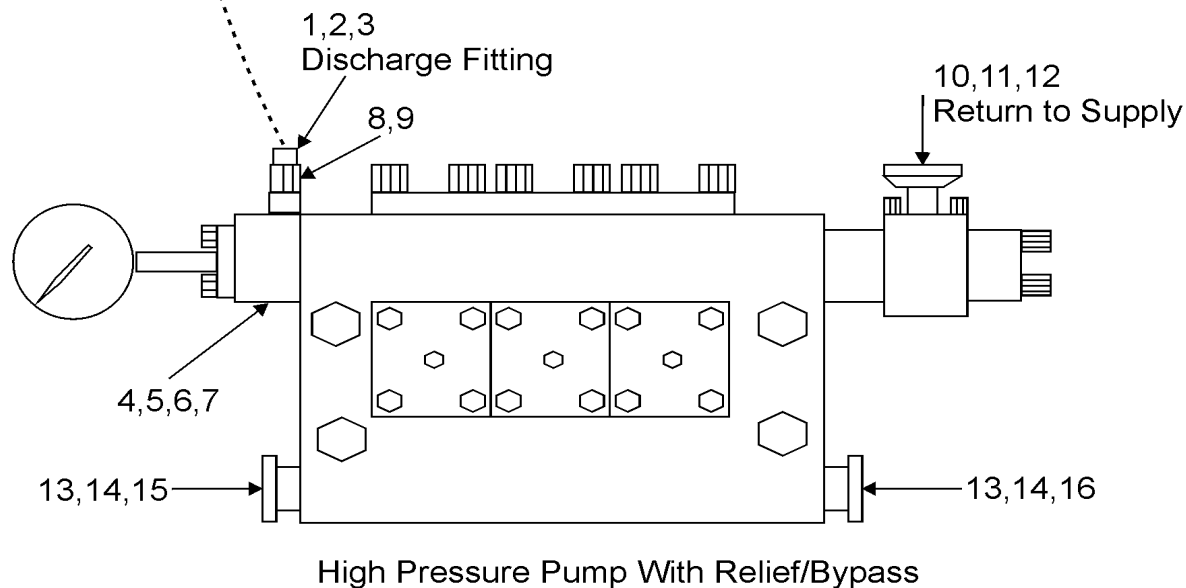
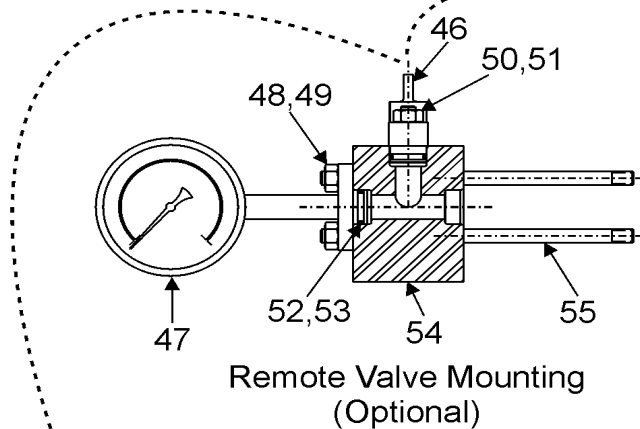
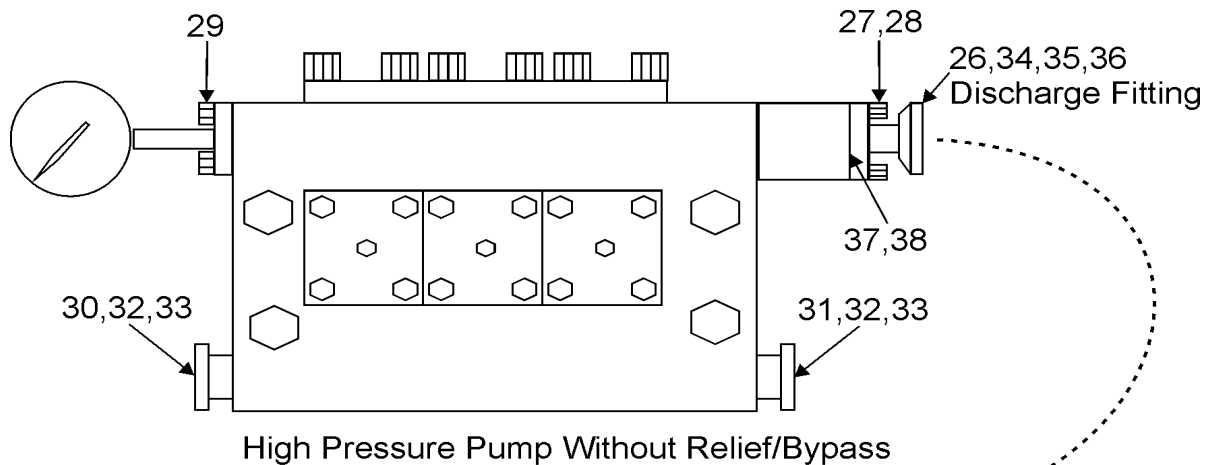
Homogenizer High Pressure Pump Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4700 Max Working Pressure	1	101376	
2	O-ring	1	N70214	
3	Backup Ring	1	BUR214	
4	Adapter - Gauge and Outlet	1	100268	
5	O-ring	1	N70224	
6	Backup Ring	1	BUR224	
7	Stud - Gauge and Outlet	4	100705	
8	Stud - Product Discharge	2	100465	
9	Hex Nut - Cap	2	107483	
10	Clamp Assembly, 13IS	1	3023019	
11	Gasket, 40IH Buna	1	20-106	
12	Ferrule, 14WI	1	29-507XCB	
13	Clamp Assembly, 13IS	2	3023022	1
14	Gasket - 40IH Buna	2	20-107	1
15	Ferrule, 14WI	2	29-508XCB	1
16	Cap - Male, 16AI-14I	1	3-73X	
26	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101361	
	1.0" OD, 4200 Max Working Pressure	1	101362	
	1-1/2" #15I, 250 Max psi at 250°F	1	-	
	2.0" #15I, 250 Max psi at 250°F	1	-	
	2-1/2" #15I, 200 Max psi at 250°F	1	100373	
27	Stud - Rupture Disc and Outlet	4	100705	
28	Hex Nut	4	107483	
29	Stud - Gauge	4	100379	
30	Ferrule, 14WI	2	29-508XCB	1
31	Cap - Male, 16AI-14I	1	3-73X	
32	Clamp Assembly, 13IS	2	3023022	1
33	Gasket - 40IH Buna	2	20-107	1
34	Ferrule, 14WI	1	29-507XCB	
35	Clamp Assembly, 13IS	1	3023019	
36	Gasket - 40IH Buna	1	20-106	
37	O-ring	1	N70224	
38	Backup Ring	1	BUR224	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer High Pressure Pump Diagram

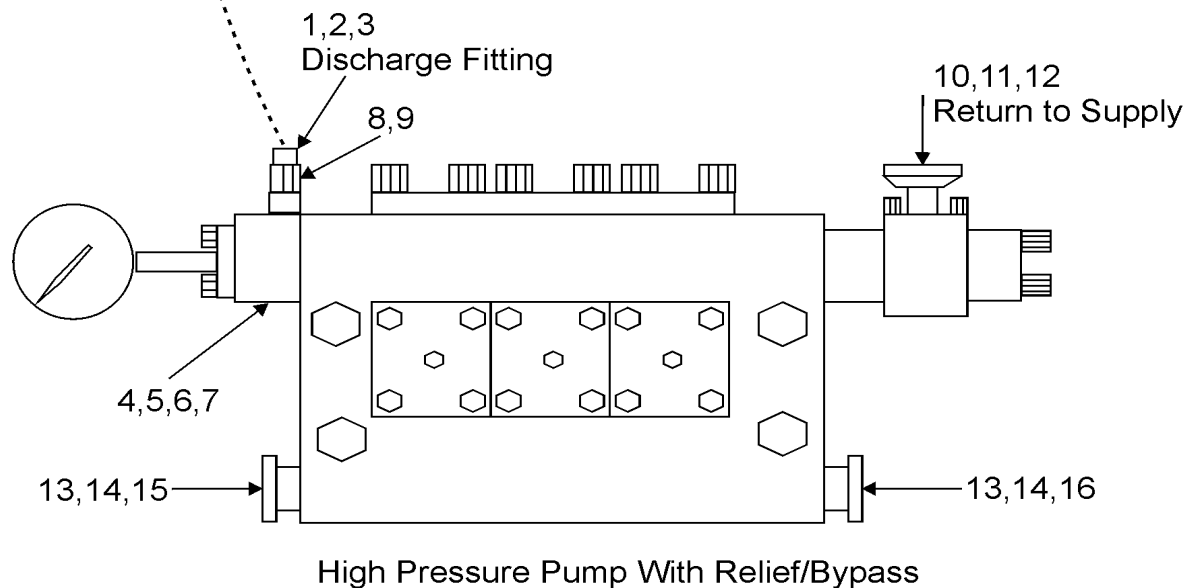
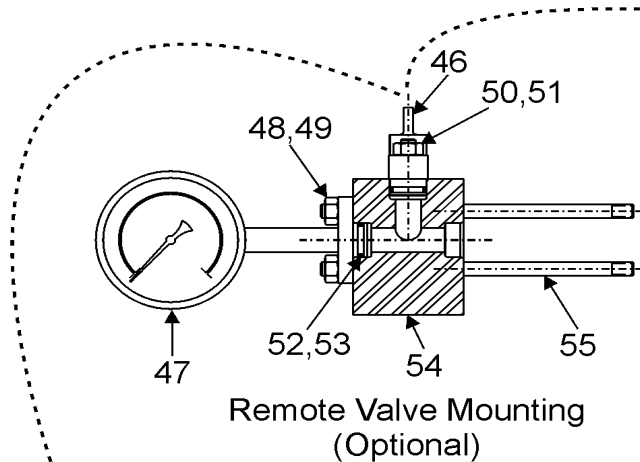
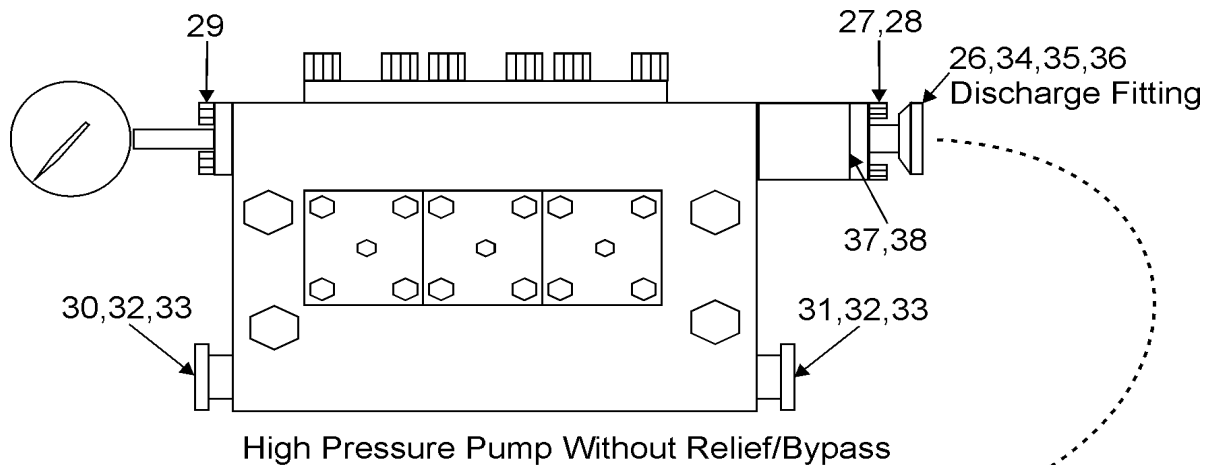


HM100-098

Homogenizer High Pressure Pump Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4200 Max Working Pressure	1	101376	
47	GAUGE - PRESSURE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	-	
	0 to 15000 psi	1	-	
48	Hex Nut	4	107482	
49	Stud - Gauge	4	100281	
50	Hex Nut	2	107483	
51	Stud - Product Inlet	2	100465	
52	O-ring	2	N70214	
53	Backup Ring	2	BUR214	
54	Adapter - Remote Valve Mounting	1	100269	
55	Stud - Body	4	100396	

Homogenizer High Pressure Pump Diagram

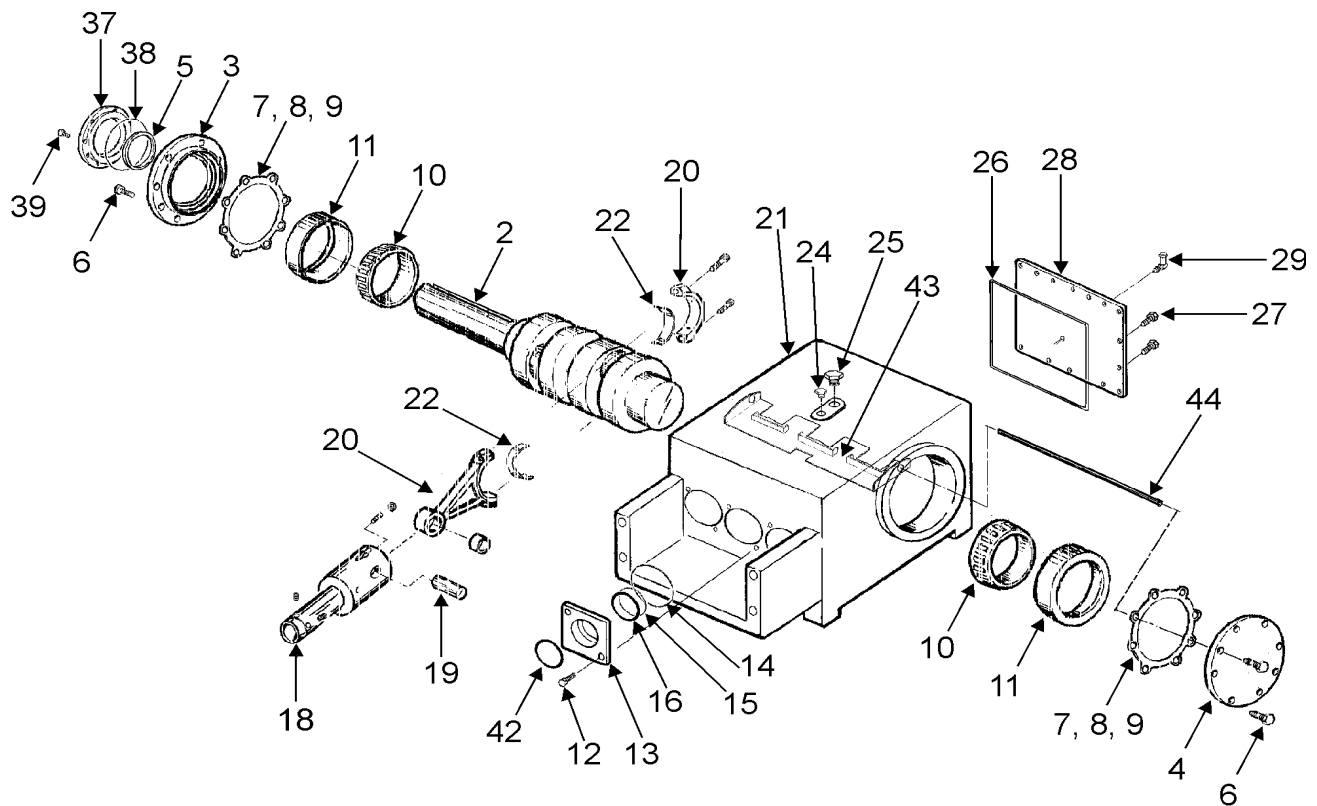


HM100-098

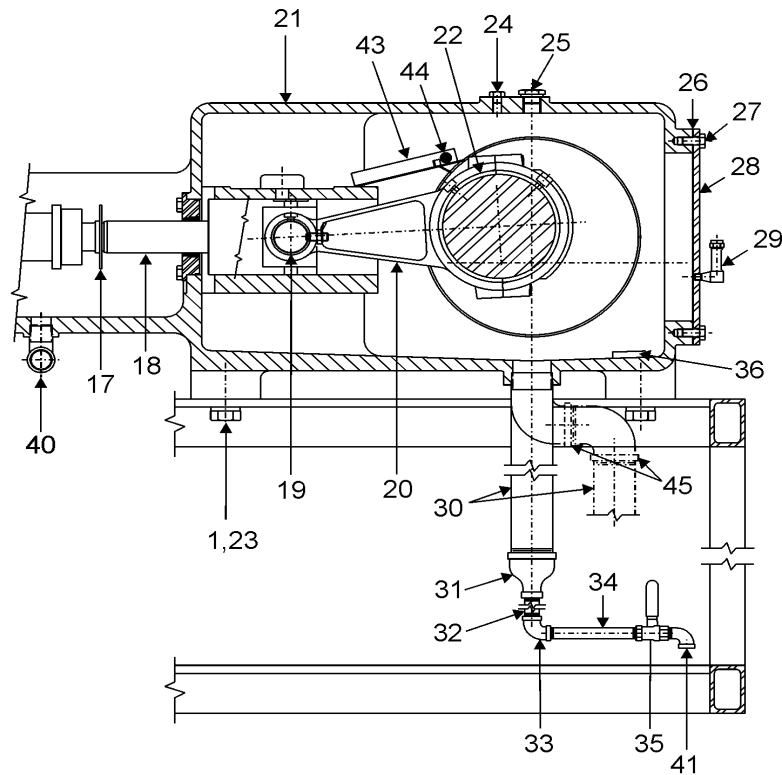
Homogenizer Crank Case Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Screw - Crankcase Mount, HH	1	30-459	
2	Crankshaft	1	100116	
	Crankshaft - 500LV only	-	-	
3	Cap - Crankshaft Seal Holder	1	100121	
4	Cap - Crankcase	1	100125	
5	Seal, Crankshaft	1	100986	
6	Screw - Crankcase End Caps	16	30-462	
7	Shim - .005 Thick	-	100487	
8	Shim - .007 Thick	-	100492	
9	Shim - .020 Thick	-	100497	
10	Bearing - Cone	2	100502	
11	Bearing - Cup	2	100506	
12	Screw - Oil Seal Carrier, HH SS	6	30-497	
13	Carrier - Oil Seal	3	100129	
14	O-ring	3	N70157	
15	Retaining Ring	3	43-215	
16	Seal	3	100135	
17	Slinger - Water	3	100138	
18	Crosshead Assembly	3	100142	
19	Pin - Wrist	3	100146	
20	Connecting Rod Assembly	3	100150	
21	Crankcase	1	100154	
22	Journal Bearing (two per set)	6	100454	
23	Lockwasher - Crankcase Mount	4	43-153	
24	Vented Plug	1	CD0046100	
25	Drain/Level Plug	1	78-86	
26	Gasket	64	35850	
27	Screw - Crankcase Back Cover, HH	14	30-241	
28	Cover - Crankcase	1	100164	
29	Vented Oil Level Gauge	1	100981	
30	Oil Drain Pipe	1	11-121	
31	Reducer	1	78-109	
32	Oil Drain Pipe	1	11-145	
33	Elbow	1	78-110	
34	Oil Drain Pipe	1	11-129	
35	Brass Ball Valve	1	100984	
36	Magnet - Ceramic 5	3	100985	
37	Holder - Crankshaft Seal	1	100955	
38	O-ring	1	N70169	
39	Screw - Crankshaft Seal Holder, HH	4	30-186	
40	Elbow	1	78-141	
41	Elbow	1	78-138	
42	Seal	3	105572	
43	Ramp - Oiling	1	100159	
44	Rod - Oiling Ramp Support	1	110119	
45	Elbow (use with oversize motors)	2	78-154	

Homogenizer Crank Case Assembly Diagram



HM100-057a

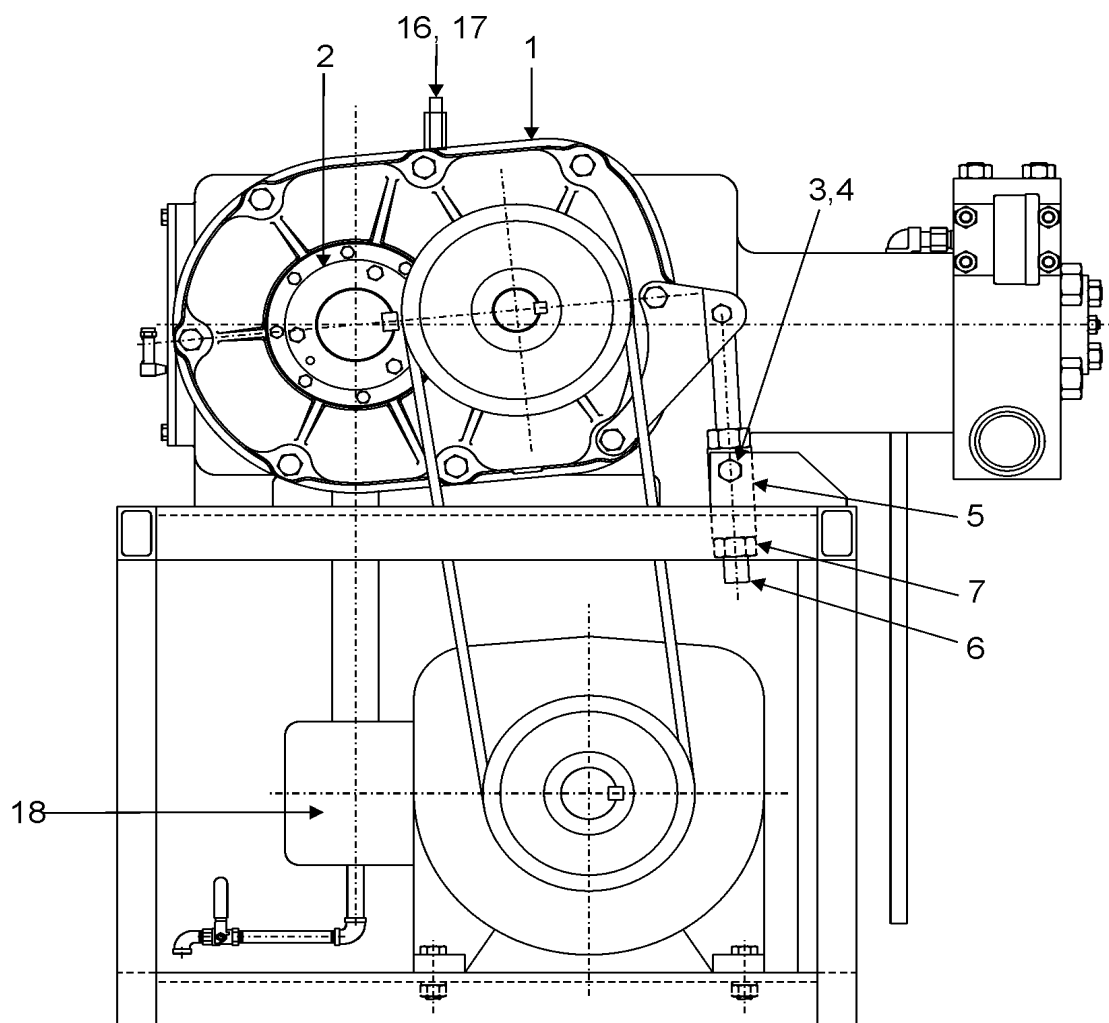


HM100-091a

Homogenizer Motor and Drive Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Speed Reducer - Single Reduction	1	100168	
2	Tapered Bushing Assembly	1	102855	
3	Screw, HH, ZP	2	30-412	
4	Lockwasher, ZP	2	43-146	
5	Pivot - Reducer/Tensioner	1	100172	
6	Rod End - Torque Arm	1	100972	
7	Hex Nut, ZP	2	36-105	
8	Label - Crankcase (not shown)	1	33-76	
9	Label - Crankcase (not shown)	1	33-77	
16	Nipple (not used)	-	-	
17	Coupling (not used)	-	-	
18	Meter - Hour, 60HZ 120VAC	1	112627	
	Meter - Hour, 50HZ 120VAC	1	112628	

Homogenizer Motor and Drive Assembly Diagram



HM100-090a

Homogenizer Frame and Panel Assembly - Model 3000

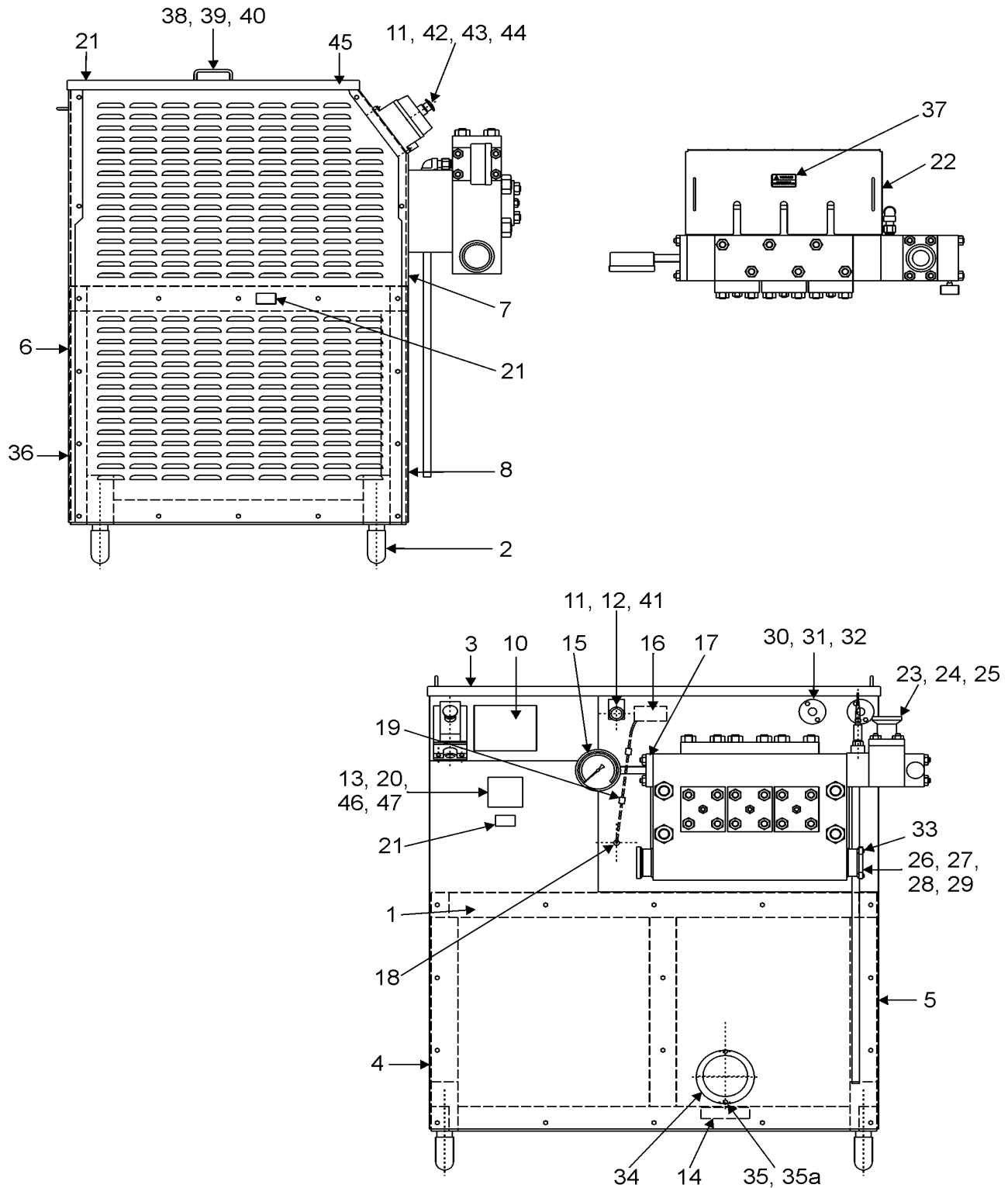
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Frame Assembly	1	100075	
2	Leg - Adjustable	4	100079	
3	Panel - Housing, Top	1	100083	
4	Panel - Housing, Left Side	1	100088	
5	Panel - Housing, Right Side	1	100093	
6	Panel - Housing, Back	1	100098	
7	Panel - Housing, Front	1	100103	
8	Panel - Housing, Front Bottom (model 5000 only)	-	-	
9	Screw (not shown)	66	30-181	
9a	Washer (not shown)	66	43-144	
10	Label - Company Name and Machine Type	1	33-30A	
11	Switch - Emergency Stop, Standard	1	103994	
	Switch - Emergency Stop, Explosion Proof	1	105171	
12	Plate - Emergency Stop	1	103995	
13	Screw	4	30-608	
14	Nameplate - Drain	1	4487810	
15	PRESSURE GAUGE			
	0 to 1000 psi	1	100405	
	0 to 5000 psi	1	100407	
	0 to 7500 psi	1	100409	
	0 to 10000 psi	-	-	
	0 to 15000 psi	-	-	
	PRESSURE TRANSDUCER/TRANSMITTER (Digital Pressure Meter only) - OPT			
	0 to 1000 psi 3mV/V	1	100417	
	0 to 5000 psi 3mV/V	1	100418	
	0 to 7500 psi 3mV/V	1	100419	
	0 to 10000 psi	-	-	
	0 to 15000 psi	-	-	
	0-5000 4-20mA 100 feet wire	1	111090	
16	Digital Pressure Meter - Optional	1	100108	
17	Clamp (Digital Pressure Meter only)	1	100110	
18	Grommet (Digital Pressure Meter only)	1	100111	
19	Cord Clip, Adhesive Backed (Digital Pressure Meter only)	3	100112	
20	Nameplate - Homogenizer	1	5902364	
	Nameplate - Plunger Pump	1	5902365	
21	Caution Plate	5	33-62	
22	Cover - Plunger/Cylinder Area	1	101340	
23	Ferrule, 14WI	1	29-507XCB	
24	Clamp, 13IS	1	3023019	
25	Gasket, 40IH Buna	1	20-106	
26	Ferrule, 14WI	2	29-508XCB	
27	Cap - Male, 16AI-14I	1	3-73X	
28	Clamp, 13IS	2	3023022	
29	Gasket, 40IH Buna	2	20-107	

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Effective: 3/1/05

Homogenizer Frame and Panel Assembly - Model 3000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
30	Cover	2	104001	
31	Screw, HHC SS	4	30-181	
32	Hex Nut SS	4	36-53	
33	Hole Plug	2	78-127	
34	Cover - Oil Hole	1	105173	
35	Screw	2	30-580	
35a	Washer, Plain 1/4" SS	2	43-144	
36	Panel - Housing Back Bottom (model 7500 only)	-	-	
37	Warning Label	1	33-84	
38	Handle with Mounting Screws	4	105899	
39	Lockwasher, #8	8	43-20	
40	Screw	8	30-593	
41	Hole Plug - SS (Explosion Proof Switch only)	1	78-147	
42	Screw, HHC (Explosion Proof Switch only)	4	30-206	
43	Lockwasher, SS (Explosion Proof Switch only)	4	43-22	
44	Hex Nut (Explosion Proof Switch only)	4	36-53	
45	Wear Shape, Snap-On	119	108311	
46	Lockwasher, #3 18-8SS	1	43-85	
47	Hex Nut, #3-48 18-8SS	1	36-134	

Homogenizer Frame and Panel Assembly Diagram



HM100-089a

Homogenizer Headblock Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Rupture Disc - Sized to Headblock Design Limitation	1	100994	
2	Ring - Rupture Disc (For less than 7500 psi)	1	101002	
	Ring - Rupture Disc (7500 to 10000 psi)	-	-	
3	Nut - Rupture Disc Holddown	1	100266	
4	Nipple	1	11-131	
5	Elbow	2	78-112	
6	Hex Nut	4	107483	
7	Adapter - Rupture Disc	1	101359	
	Adapter - Rupture Disc and Pressure Transducer	1	111011	
8	Backup Ring	2	BUR224	
9	O-ring	2	N70224	
10	Handle - Headblock Cover, Top	2	100271	
11	Hex Nut	10	107485	
11a	Stud - .875-9 x 3.59" LG	10	100468	
12	Cover - Headblock, Top	1	100276	
13	Stud - Gauge (Homogenizers only)	4	100379	
14	Nipple	1	11-136	
14a	Nipple	1	11-141	
14b	Caution Label	1	33-85	
15	Dowel Pin	2	30-501	
16	Hex Nut	4	107488	
17	Stud - Headblock and Crankcase	4	100280	
18	Hex Nut	20	107484	
18a	Stud - .750-10 x 3.0" LG	20	100467	
19	Hex Nut	5	107482	
20	Stud - Cylinder Puller	5	100282	
21	Cover - Headblock, Front (Not Aseptic)	5	103938	1
22	Ball Valve	1	312-1402X	
23	Nipple	1	11-116	
24	Header - Seal Flush	1	100289	
24a	Screw	2	30-287	
24b	Lockwasher, 1/4"	2	43-106	
25	Male Connector (Not Aseptic)	5	78-88	
26	Tubing - (Not Aseptic)	110	87-1023	
27	Elbow -(Not Aseptic)	5	78-87	
28	Backup Ring	5	BUR232	
29	O-ring	5	N70232	
30	Plug - Headblock Top (Poppet Valve only)	5	100297	
31	Spring - Coil (Poppet Valve only)	10	4484680	
32	Cap - Suction Valve Spring	5	4484730	
33	Headblock - Integral Seat	1	100302	1
	Headblock - Hardened Seat	1	104611	1
34	Backup Ring	5	BUR335	1
35	O-ring	5	N70335	1
36	O-ring	5	N70334	1
37	Backup Ring	5	BUR334	1

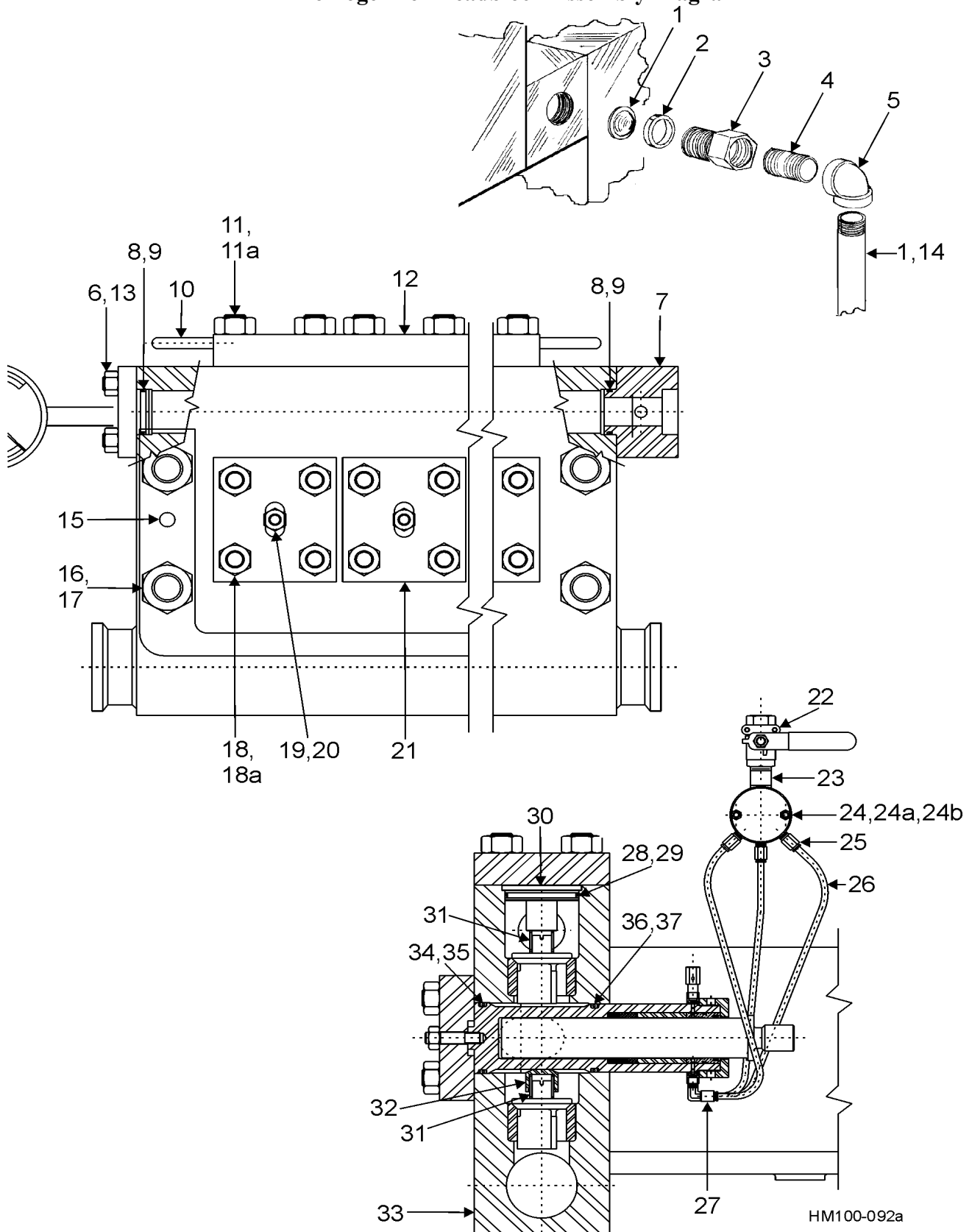
Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

PL5081 - Dispersion Equipment
Parts Price List



Homogenizer Headblock Assembly Diagram



Homogenizer Headblock Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
38	CYLINDER			
	1.500" Plunger Diameter	5	100321	
	1.625" Plunger Diameter	5	100728	
	1.750" Plunger Diameter	5	100730	
	1.875" Plunger Diameter	5	100732	
	1.9375" Plunger Diameter	5	100733	
	2.000" Plunger Diameter	5	100734	
	2.0625" Plunger Diameter	5	100324	
39	PLUNGER - TUNGSTEN CARBIDE			
	1.500" Diameter	5	100655	
	1.625" Diameter	5	100657	
	1.750" Diameter	5	100659	
	1.875" Diameter	5	100661	
	1.9375" Diameter	5	100662	
	2.000" Diameter	5	100663	
	2.0625" Diameter	5	100664	
	PLUNGER - CERAMIC - OPT			
	1.500" Diameter	5	100606	
	1.625" Diameter	5	100608	
	1.750" Diameter	5	100610	
	1.875" Diameter	5	100612	
	1.9375" Diameter	5	100613	
	2.000" Diameter	5	100614	
	2.0625" Diameter	5	100615	
40	Ring - Seal Flush	5	100328	
41	O-ring	10	N70041	
41a	Snubber	5	104130	
42	ADAPTER - BOTTOM			
	1.500" Plunger Diameter	5	100839	
	1.625" Plunger Diameter	5	100841	
	1.750" Plunger Diameter	5	100843	
	1.875" Plunger Diameter	5	100845	
	1.9375" Plunger Diameter	5	100332	
	2.000" Plunger Diameter	5	100846	
	2.0625" Plunger Diameter	5	100333	

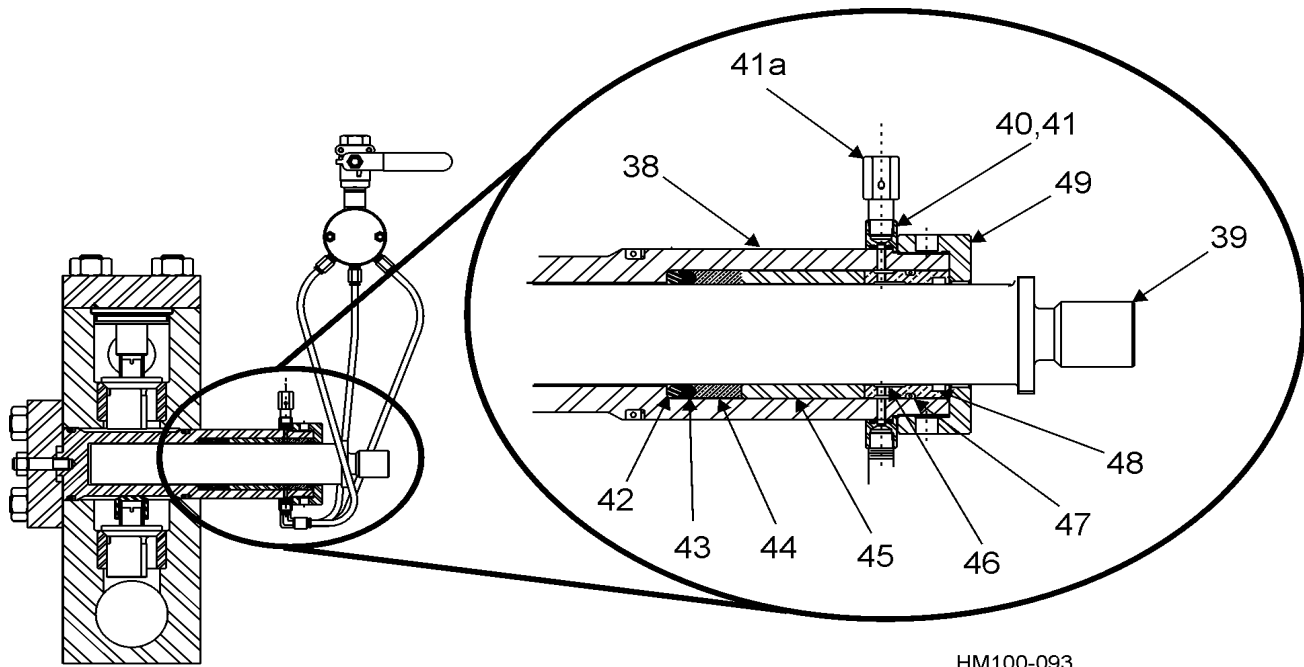
Technical drawing of a mechanical assembly, likely a valve or actuator. The drawing includes a side view on the left and a detailed cross-sectional view on the right, enclosed in a large oval. The side view shows a cylindrical component with a handle and a lever. The cross-sectional view shows the internal components, including a piston (38), a valve (40, 41), and a seal (42). Other labeled parts include 39, 43, 44, 45, 46, 47, and 48. The drawing is labeled with the number 41a at the top left and HM100-093 at the bottom right.

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Homogenizer Headblock Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
43	SEAL - PLUNGER			
	1.500" Plunger Diameter	10	105143	
	1.625" Plunger Diameter	10	105145	
	1.750" Plunger Diameter	10	105147	
	1.875" Plunger Diameter	10	105149	
	1.9375" Plunger Diameter	10	105150	
	2.000" Plunger Diameter	10	105151	
	2.0625" Plunger Diameter	10	105152	
	SEAL - PLUNGER - FDA, OPT			
	1.500" Plunger Diameter, FDA	10	101022	
	1.625" Plunger Diameter, FDA	10	101024	
	1.750" Plunger Diameter, FDA	10	101026	
	1.875" Plunger Diameter, FDA	10	101028	
	1.9375" Plunger Diameter, FDA	10	101029	
	2.000" Plunger Diameter, FDA	10	101030	
	2.0625" Plunger Diameter, FDA	10	101031	
44	ADAPTER - TOP, DOUBLE SEAL			
	1.500" Plunger Diameter	5	105934	
	1.625" Plunger Diameter	5	105936	
	1.750" Plunger Diameter	5	105938	
	1.875" Plunger Diameter	5	105940	
	1.9375" Plunger Diameter	5	105941	
	2.000" Plunger Diameter	5	105942	
	2.0625" Plunger Diameter	5	105943	
	ADAPTER - TOP, SINGLE SEAL - OPT			
	1.500" Plunger Diameter	5	101121	
	1.625" Plunger Diameter	5	101123	
	1.750" Plunger Diameter	5	101125	
	1.875" Plunger Diameter	5	101127	
	1.9375" Plunger Diameter	5	101128	
	2.000" Plunger Diameter	5	101129	
	2.0625" Plunger Diameter	5	101130	
45	SPACER			
	1.500" Plunger Diameter	5	100864	
	1.625" Plunger Diameter	5	100868	
	1.750" Plunger Diameter	5	100872	
	1.875" Plunger Diameter	5	100876	
	1.9375" Plunger Diameter	5	100877	
	2.000" Plunger Diameter	5	100878	
	2.0625" Plunger Diameter	5	100879	

Homogenizer Headblock Assembly Diagram



HM100-093

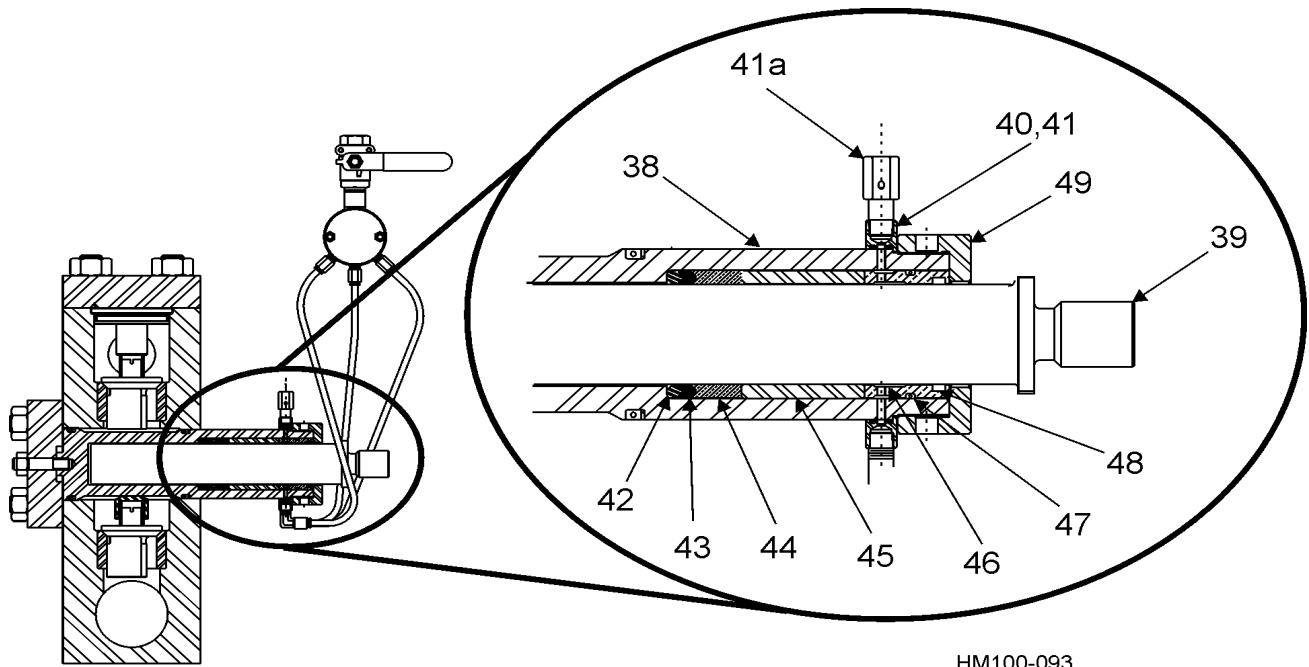
Homogenizer Headblock Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	RING - LANTERN			
	1.500" Plunger Diameter	5	100809	
	1.625" Plunger Diameter	5	100811	
	1.750" Plunger Diameter	5	100813	
	1.875" Plunger Diameter	5	100815	
	1.9375" Plunger Diameter	5	100340	
	2.000" Plunger Diameter	5	100816	
47	O-RING			
	1.500" Plunger Diameter	5	N70133	1
	1.625" Plunger Diameter	5	N70135	1
	1.750" Plunger Diameter	5	N70137	1
	1.875" Plunger Diameter	5	N70139	1
	1.9375" Plunger Diameter	5	N70140	1
	2.000" Plunger Diameter	5	N70141	1
48	SEAL - WIPER			
	1.500" Plunger Diameter	5	101077	1
	1.625" Plunger Diameter	5	101079	1
	1.750" Plunger Diameter	5	101081	1
	1.875" Plunger Diameter	5	101083	1
	1.9375" Plunger Diameter	5	101084	1
	2.000" Plunger Diameter	5	101085	1
49	NUT			
	1.500" Plunger Diameter	5	100351	
	1.625" Plunger Diameter	5	100778	
	1.750" Plunger Diameter	5	100780	
	1.875" Plunger Diameter	5	100782	
	1.9375" Plunger Diameter	5	100783	
	2.000" Plunger Diameter	5	100784	
	2.0625" Plunger Diameter	5	100354	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer Headblock Assembly Diagram

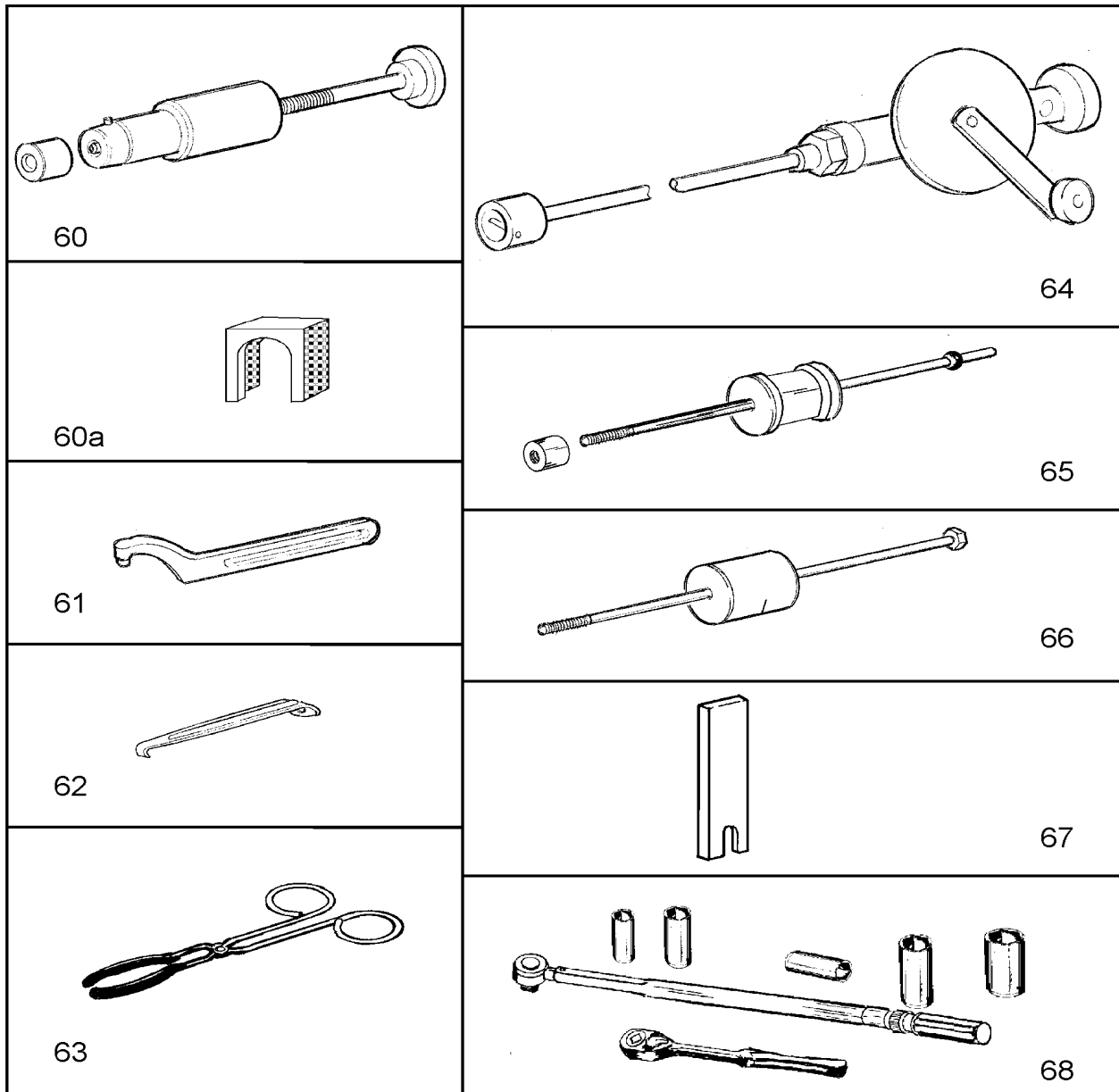


HM100-093

Homogenizer Headblock Assembly Tools - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
60	SEAL PULLER			
	1.500" Plunger Diameter	1	101179	
	1.625" Plunger Diameter	1	101181	
	1.750" Plunger Diameter	1	101183	
	1.875" Plunger Diameter	1	101185	
	1.9375" Plunger Diameter	1	101186	
	2.000" Plunger Diameter	1	101187	
	2.0625" Plunger Diameter	1	101188	
60a	Plunger Removal Tool	1	107353	
61	Spanner Wrench - Fixed Head	1	100979	
62	O-ring Tool	1	AD0096001	
63	Valve Tongs - Neoprene Cushioned Prongs	1	101344	
64	Valve Regrinding Tool - Oscilating Hand Grinder	1	101392	
65	Slide Hammer - Cylinder Remover	1	101334	
66	Slide Hammer - Headblock Top Plug Remover	1	101342	
67	Cylinder Alignment Tool	1	101380	
68	Torque Wrench Kit	1	101639	

Homogenizer Headblock Assembly Tools Diagram



HM100-094a

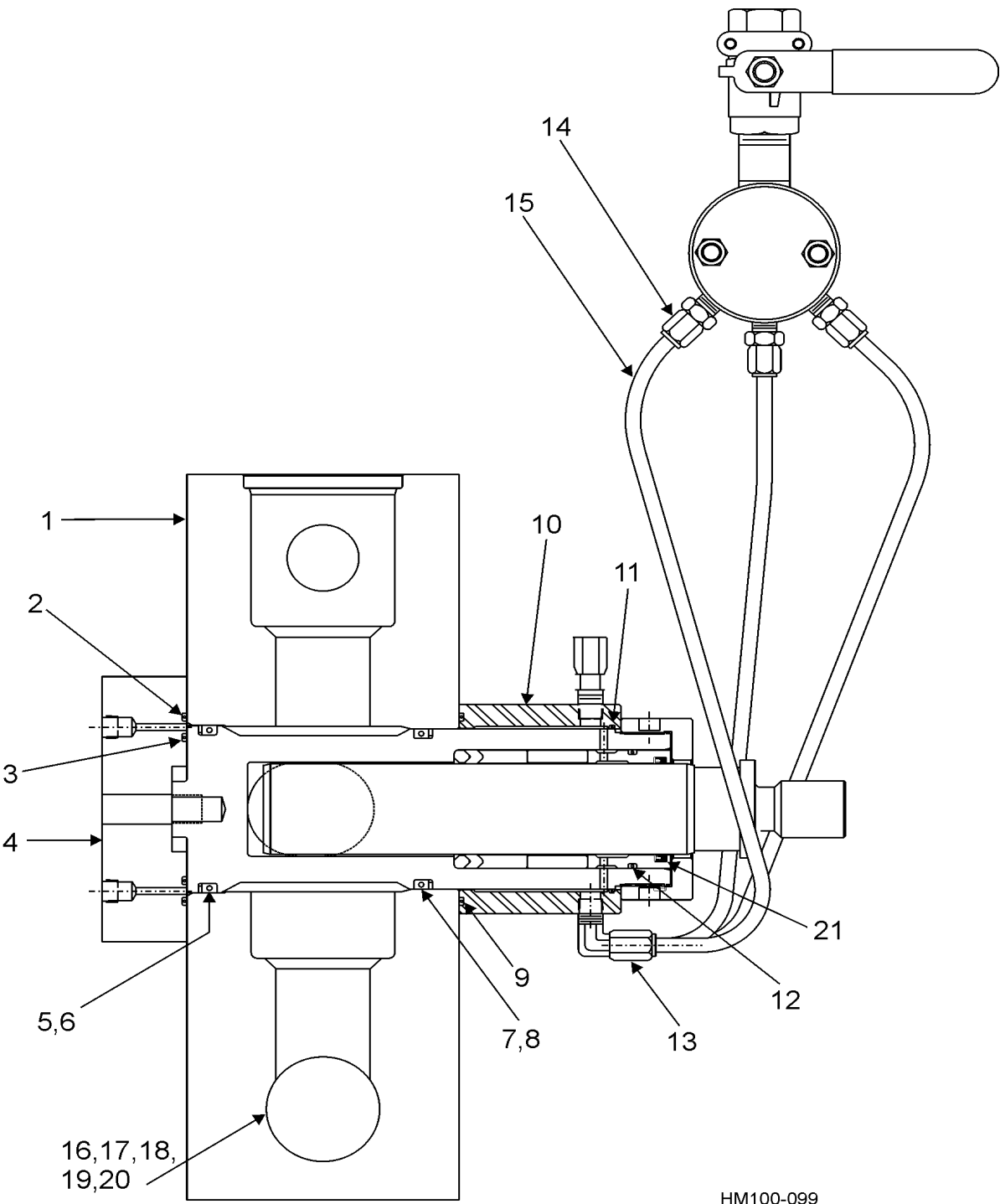
Homogenizer Aseptic Flush Option - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Headblock - Integral Seat Poppet Valve Only	1	105390	
	Headblock - Hardened Seat Poppet Valve Only	1	105391	
2	O-ring, EPDM	5	E70153	
3	O-ring, EPDM	5	E70144	
4	Cover - Headblock, Front, Aseptic	5	105858	
5	O-ring, EPDM	5	E70335	
6	Backup Ring, Teflon	5	BRT335	
7	Backup Ring, Teflon	5	BRT334	
8	O-ring, EPDM	5	E70334	
9	O-ring, EPDM	5	E70153	
10	Collar - Aseptic Cylinder	5	105859	
11	O-ring, EPDM	5	E70041	
12	O-RING, EPDM			
	1.500" Plunger Diameter	5	E70133	
	1.625" Plunger Diameter	5	E70135	
	1.750" Plunger Diameter	5	E70137	
	1.875" Plunger Diameter	5	E70139	
	1.9375" Plunger Diameter	5	E70140	
	2.000" Plunger Diameter	5	E70141	
	2.0625" Plunger Diameter	5	E70142	
13	Elbow	5	78-137	
14	Adapter	10	78-136	
15	Tubing - 1/4" OD, Teflon Green	460	87-1138	
16	Ferrule, #14WNI 316L SS	2	29-643X	
17	Gasket, #4OIV, FKM	2	20-107V	
18	O-ring, FKM	2	V70242	
19	Clamp, #13IS	2	3023025	
20	Adapter	4	78-71	
21	SEAL - WIPER, EPDM			
	1.500" Plunger Diameter	5	104527	
	1.625" Plunger Diameter	5	104529	
	1.750" Plunger Diameter	5	104531	
	1.875" Plunger Diameter	5	104533	
	1.9375" Plunger Diameter	5	104534	
	2.000" Plunger Diameter	5	104535	
	2.0625" Plunger Diameter	5	104536	

Note:

** See Homogenizer Headblock Assembly for all parts not listed here.

Homogenizer Aseptic Flush Option Diagram

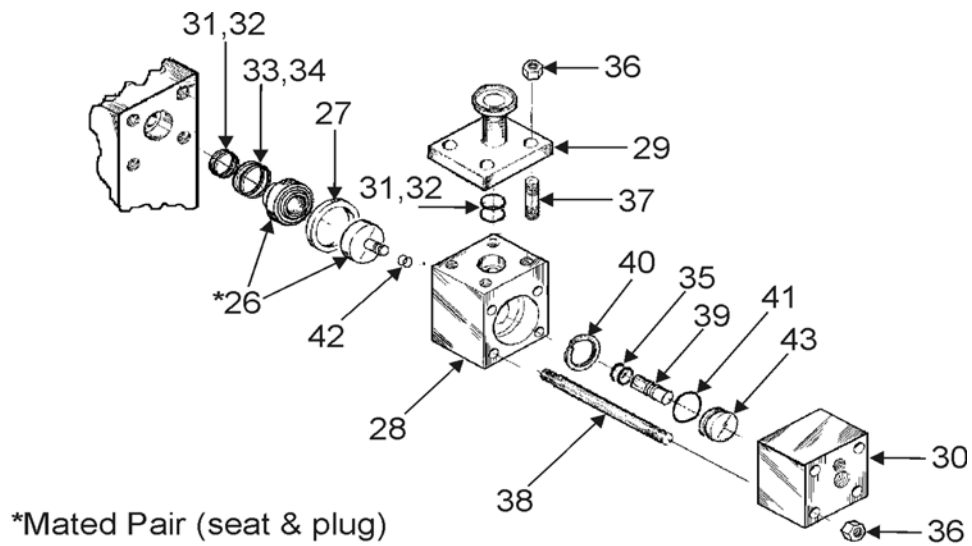


HM100-099

Homogenizer Single Stage Hydraulic Homogenizing Valve Assembly - Model 5000

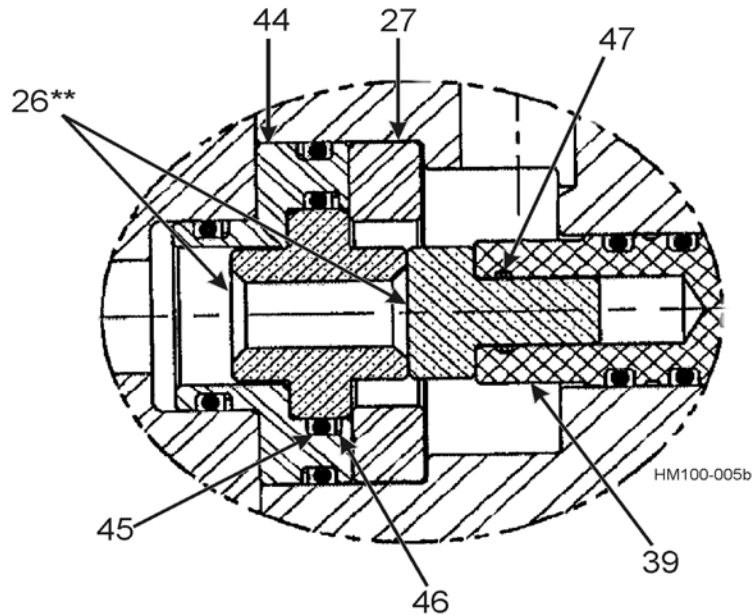
ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	VALVE			
	2000 GPH Capacity, 17-4PH SS	1	100932	
	3000 GPH Capacity, 17-4PH SS	1	100368	
	4000 GPH Capacity, 17-4PH SS	1	100933	
	5000 GPH Capacity, 17-4PH SS	1	100369	
	Seat - Flat Face Valve Option, 17-4PH SS	1	112765	
	Plug - Flat Face Valve Option, 17-4PH SS	1	112764	
	2000 GPH Capacity, Tungsten Carbide	1	100180	
	3000 GPH Capacity, Tungsten Carbide	1	100181	
	4000 GPH Capacity, Tungsten Carbide	1	100182	
	5000 GPH Capacity, Tungsten Carbide	1	100183	
	Seat - Flat Face Valve Option, Tungsten Carbide	1	113408	
	Plug - Flat Face Valve Option, Tungsten Carbide	1	113407	
27	RING			
	2000 GPH Capacity, 17-4PH SS	1	100944	
	3000 GPH Capacity, 17-4PH SS	1	100370	
	4000 GPH Capacity, 17-4PH SS	1	100945	
	5000 GPH Capacity, 17-4PH SS	1	100371	
	Flat Face Valve Option, 17-4PH SS	1	100370	
	2000 GPH Capacity, Tungsten Carbide	1	100228	
	3000 GPH Capacity, Tungsten Carbide	1	100229	
	4000 GPH Capacity, Tungsten Carbide	1	100230	
	5000 GPH Capacity, Tungsten Carbide	1	100231	
	Flat Face Valve Option, Tungsten Carbide	1	100229	
28	Body - Valve	1	105883	
	Body - Valve, Aseptic	1	105886	
29	Fitting - Product Discharge, #15I	1	100373	
30	Cylinder - Hydraulic Actuator	1	105875	
31	O-ring	2	N70224	
32	Backup Ring	2	BUR224	
33	Backup Ring	1	BUR232	
34	O-ring	1	N70232	
35	O-ring	2	N70214	
	O-ring, Aseptic, EPDM	2	E70218	
36	Hex Nut	8	107483	
37	Stud - Product Discharge Fitting	4	100379	
38	Stud - Body	4	100466	
39	Stem - Piston, Hydraulic Actuator	1	105896	
	Stem - Piston, Hydraulic Actuator, Aseptic	1	105898	
	Stem - Piston, Flat Face Valve Option	1	112763	
	Stem - Piston, Aseptic, Flat Face Valve Option	1	113412	
40	Retaining Ring	1	43-220	
41	T-Seal	1	100395	
42	O-ring, Style B	-	-	
43	Head - Piston, Hydraulic Actuator	1	105894	
44	Adapter - Seat, Flat Face Valve Option	1	112762	
45	O-ring, Flat Face Valve Option	1	N70227	
46	Backup Ring, Flat Face Valve Option	1	BUR227	
47	O-ring, Flat Face Valve Option	1	N70013	

Homogenizer Single Stage Hydraulic Homogenizing Valve Diagram



HM100-100a

Flat Face Valve Option

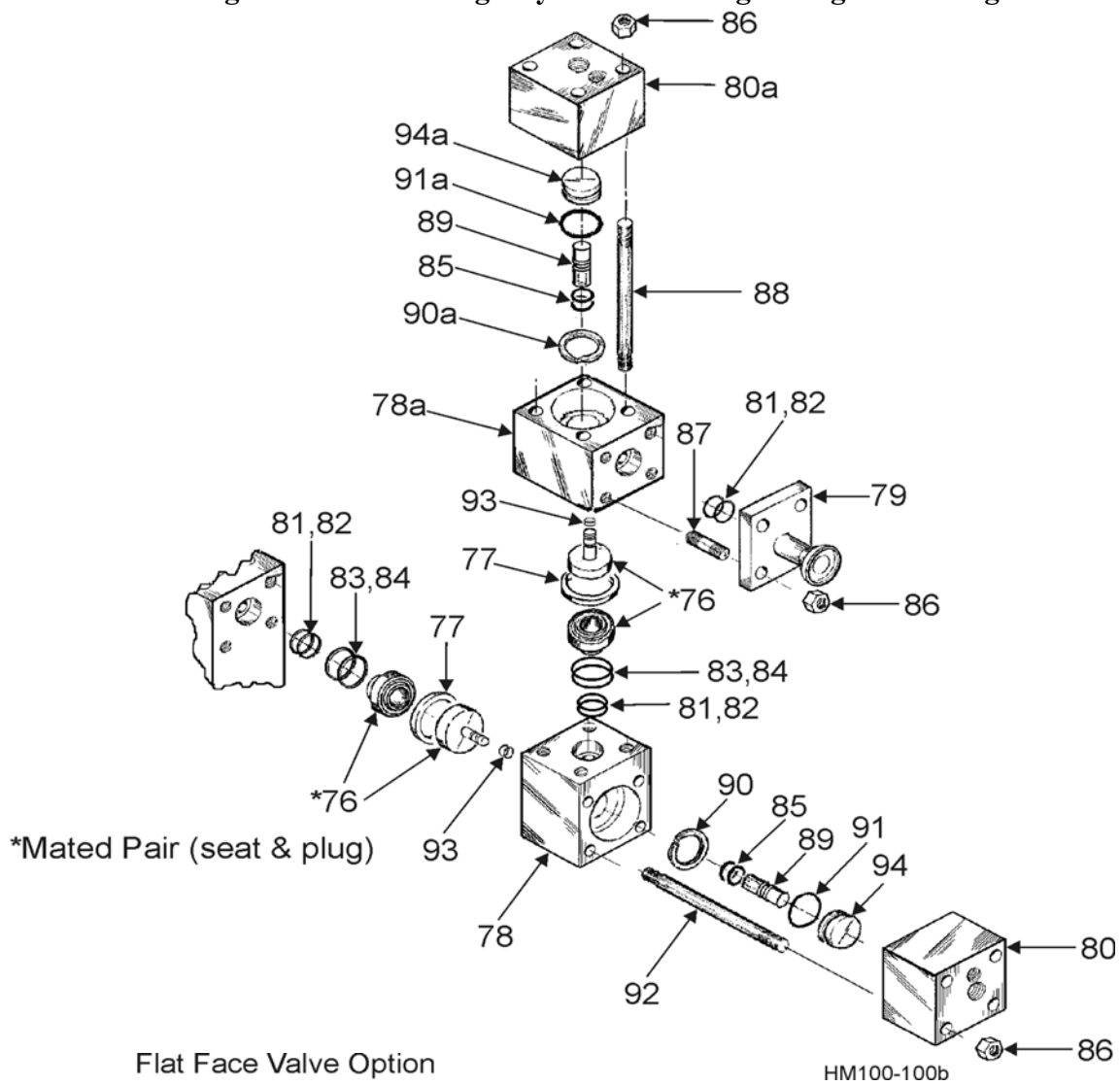


HM100-005b

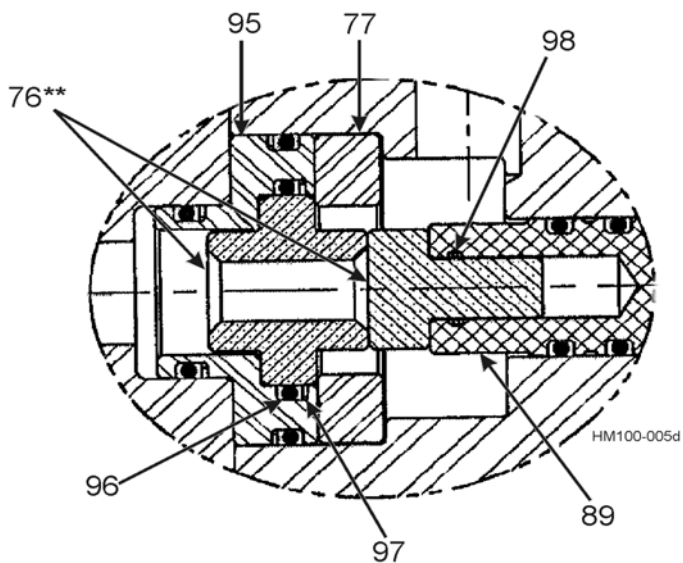
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
76	VALVE			
	2000 GPH Capacity, 17-4PH SS	2	100932	
	3000 GPH Capacity, 17-4PH SS	2	100368	
	4000 GPH Capacity, 17-4PH SS	2	100933	
	5000 GPH Capacity, 17-4PH SS	2	100369	
	Seat - Flat Face Valve, 17-4PH SS	2	112765	
	Plug - Flat Face Valve, 17-4PH SS	2	112764	
	2000 GPH Capacity, Tungsten Carbide	2	100180	
	3000 GPH Capacity, Tungsten Carbide	2	100181	
	4000 GPH Capacity, Tungsten Carbide	2	100182	
	5000 GPH Capacity, Tungsten Carbide	2	100183	
	Seat - Flat Face Valve, Tungsten Carbide	2	113408	
	Plug - Flat Face Valve, Tungsten Carbide	2	113407	
77	RING			
	2000 GPH Capacity, 17-4PH SS	2	100944	
	3000 GPH Capacity, 17-4PH SS	2	100370	
	4000 GPH Capacity, 17-4PH SS	2	100945	
	5000 GPH Capacity, 17-4PH SS	2	100371	
	Flat Face Valve, 17-4PH SS	2	100370	
	2000 GPH Capacity, Tungsten Carbide	2	100228	
	3000 GPH Capacity, Tungsten Carbide	2	100229	
	4000 GPH Capacity, Tungsten Carbide	2	100230	
	5000 GPH Capacity, Tungsten Carbide	2	100231	
	Flat Face Valve, Tungsten Carbide	2	100229	
78	Body - Valve - 1st Stage	1	105883	
	Body - Valve, Aseptic - 1st Stage	1	105886	
78a	Body - Valve - 2nd Stage	1	105883	
	Body - Valve, Aseptic - 2nd Stage	1	105886	
79	Fitting - Product Discharge, #15I	1	100373	
80	Cylinder - Hydraulic Actuator - 1st Stage	1	105875	
80a	Cylinder - Hydraulic Actuator - 2nd Stage	1	105875	
81	O-ring	3	N70224	
82	Backup Ring	3	BUR224	
83	Backup Ring	2	BUR232	
84	O-ring	2	N70232	
85	O-ring	4	N70214	
	O-ring, Aseptic, EPDM	4	E70218	
86	Hex Nut	12	107483	
87	Stud - Product Discharge Fitting	4	100379	
88	Stud - Body	4	100396	
89	Stem - Piston, Hydraulic Actuator	2	105896	
	Stem - Piston, Hydraulic Actuator, Aseptic	2	105898	
	Stem - Piston, Flat Face Valve	2	112763	
	Stem - Piston, Aseptic, Flat Face Valve	2	113412	
90	Retaining Ring, Smalley WH Series - 1st Stage	1	43-220	
90a	Retaining Ring, Smalley WH Series - 2nd Stage	1	43-220	
91	T-Seal - 1st Stage	1	100395	
91a	T-Seal - 2nd Stage	1	100395	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



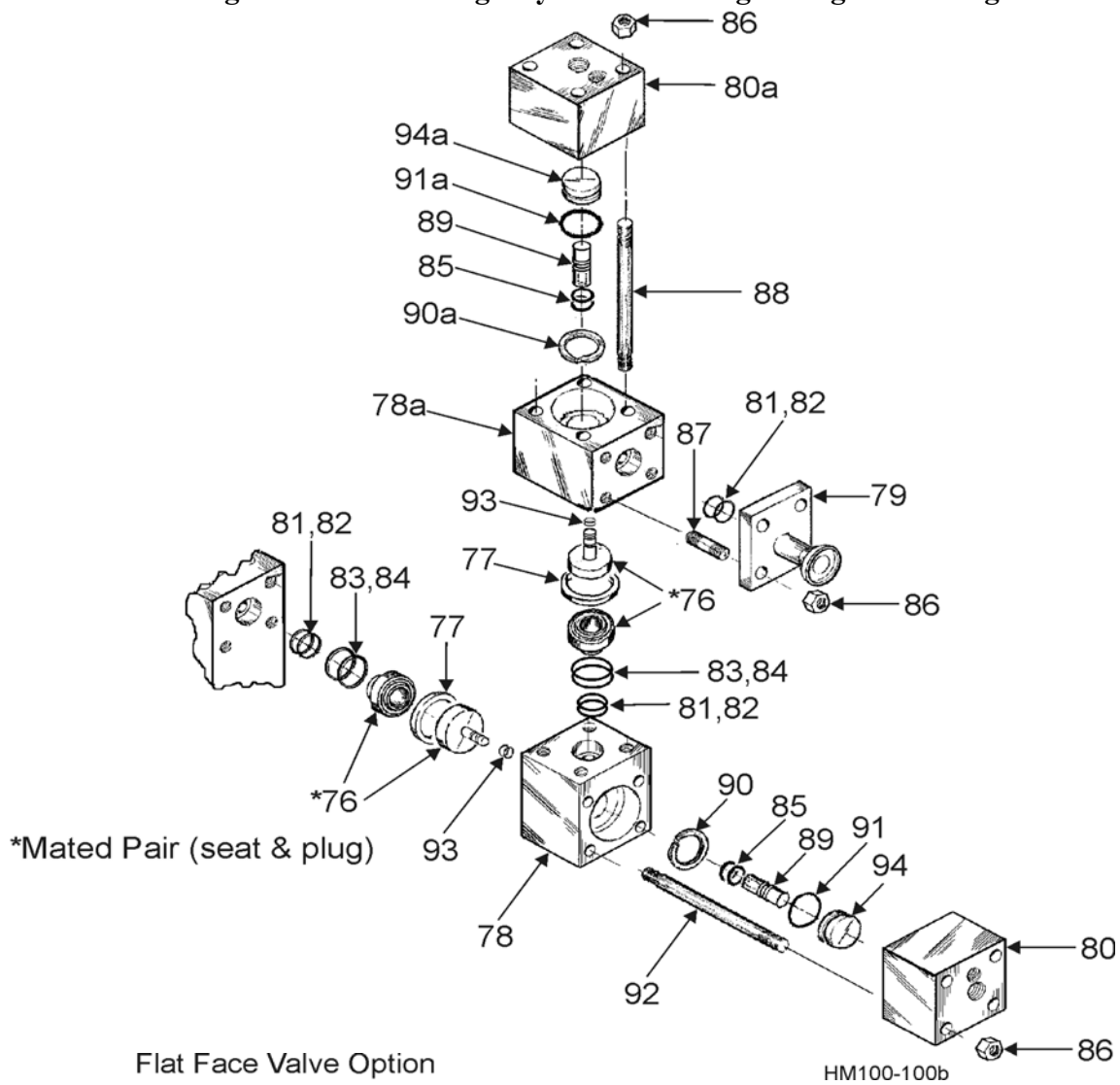
**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

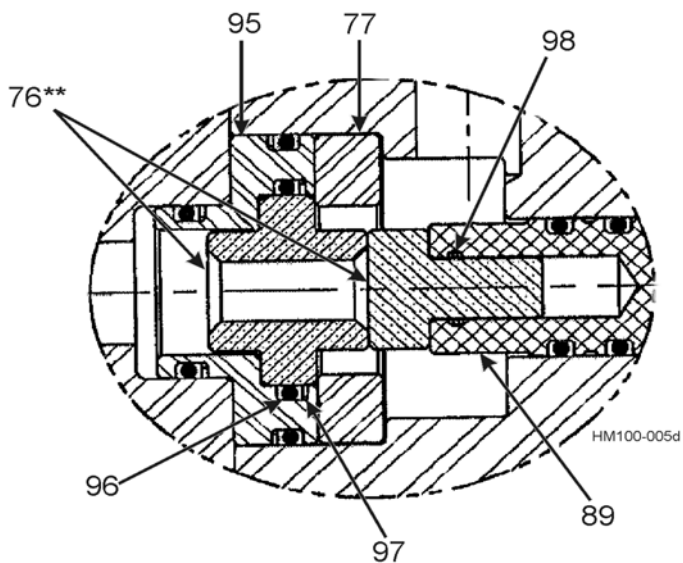
Homogenizer Double Stage Hydraulic Homogenizing Valve Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
92	Stud - Body	4	100466	
93	O-ring	-	-	
94	Head - Piston, Hydraulic Actuator - 1st Stage	1	105894	
94a	Head - Piston, Hydraulic Actuator - 2nd Stage	1	105894	
95	Adapter - Seat, Flat Face Valve	2	112762	
96	O-ring, Flat Face Valve	2	N70227	
97	Backup Ring, Flat Face Valve	2	BUR227	
98	O-ring, Flat Face Valve	2	N70013	

Homogenizer Double Stage Hydraulic Homogenizing Valve Diagram



Flat Face Valve Option



**Seat & Plug Required

PL5081 - Dispersion Equipment
Parts Price List

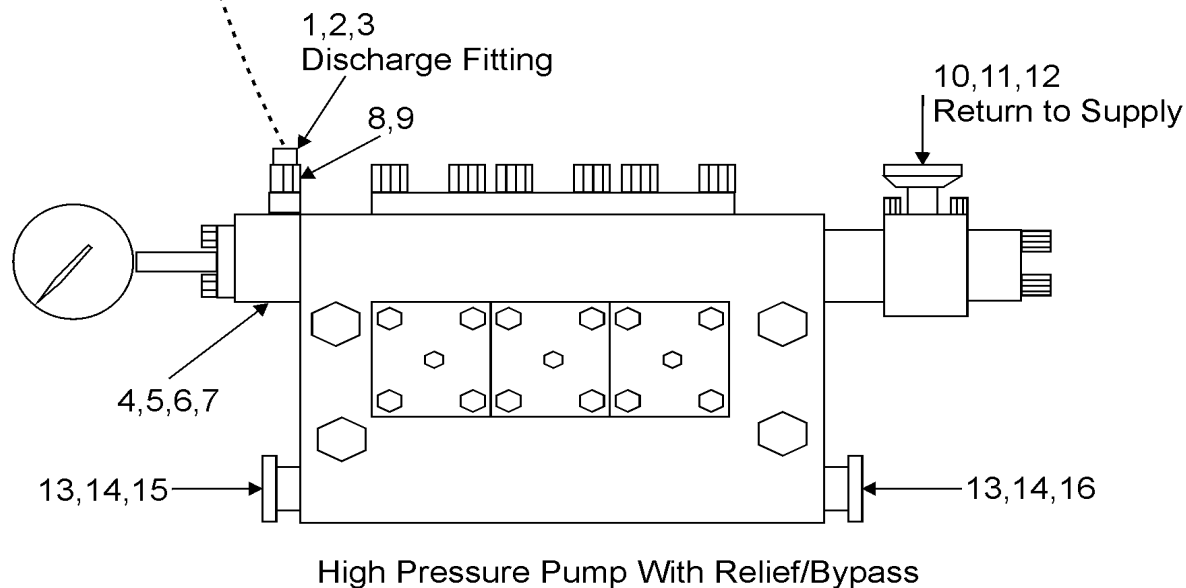
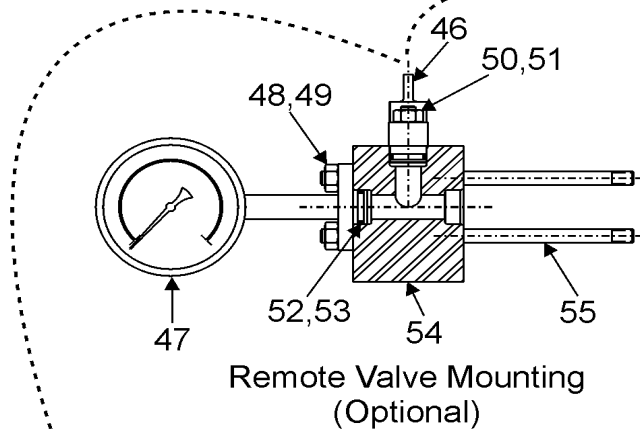
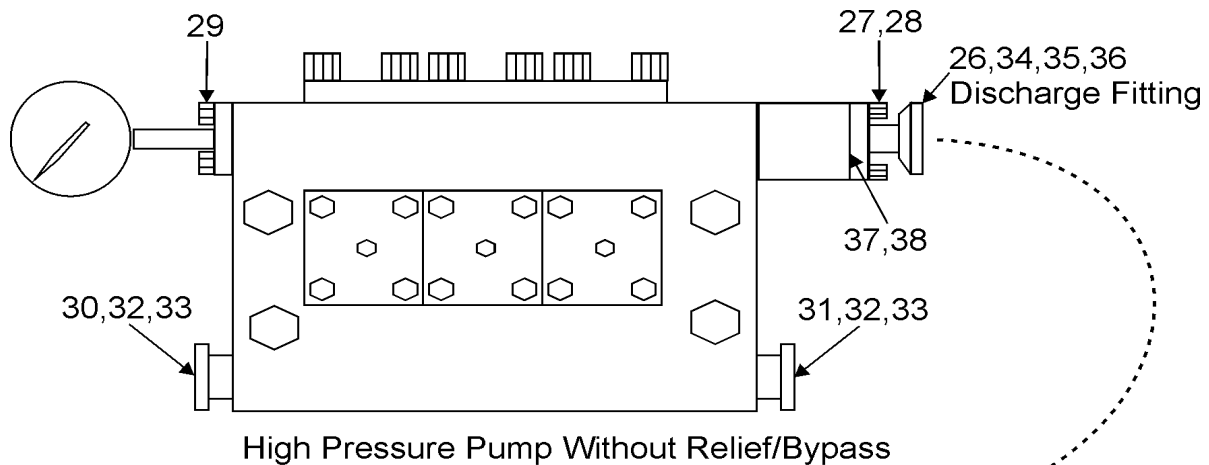
Homogenizer High Pressure Pump Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4700 Max Working Pressure	1	101376	
2	O-ring	1	N70214	
3	Backup Ring	1	BUR214	
4	Adapter - Gauge and Outlet	1	100268	
5	O-ring	1	N70224	
6	Backup Ring	1	BUR224	
7	Stud - Gauge and Outlet	4	100705	
8	Stud - Product Discharge	2	100465	
9	Hex Nut - Cap	2	107483	
10	Clamp Assembly, 13IS	1	3023019	
11	Gasket, 40IH Buna	1	20-106	
12	Ferrule, 14WI	1	29-507XCB	
13	Clamp Assembly, 13IS	2	3023022	1
14	Gasket - 40IH Buna	2	20-107	1
15	Ferrule, 14WI	2	29-508XCB	1
16	Cap - Male, 16AI-14I	1	3-73X	
26	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101361	
	1.0" OD, 4200 Max Working Pressure	1	101362	
	1-1/2" #15I, 250 Max psi at 250°F	1	-	
	2.0" #15I, 250 Max psi at 250°F	1	-	
	2-1/2" #15I, 200 Max psi at 250°F	1	100373	
27	Stud - Rupture Disc and Outlet	4	100705	
28	Hex Nut	4	107483	
29	Stud - Gauge	4	100379	
30	Ferrule, 14WI	2	29-508XCB	1
31	Cap - Male, 16AI-14I	1	3-73X	
32	Clamp Assembly, 13IS	2	3023022	1
33	Gasket - 40IH Buna	2	20-107	1
34	Ferrule, 14WI	1	29-507XCB	
35	Clamp Assembly, 13IS	1	3023019	
36	Gasket - 40IH Buna	1	20-106	
37	O-ring	1	N70224	
38	Backup Ring	1	BUR224	

Notes:

1. If for aseptic application, see Homogenizer Aseptic Flush Option instead.

Homogenizer High Pressure Pump Diagram

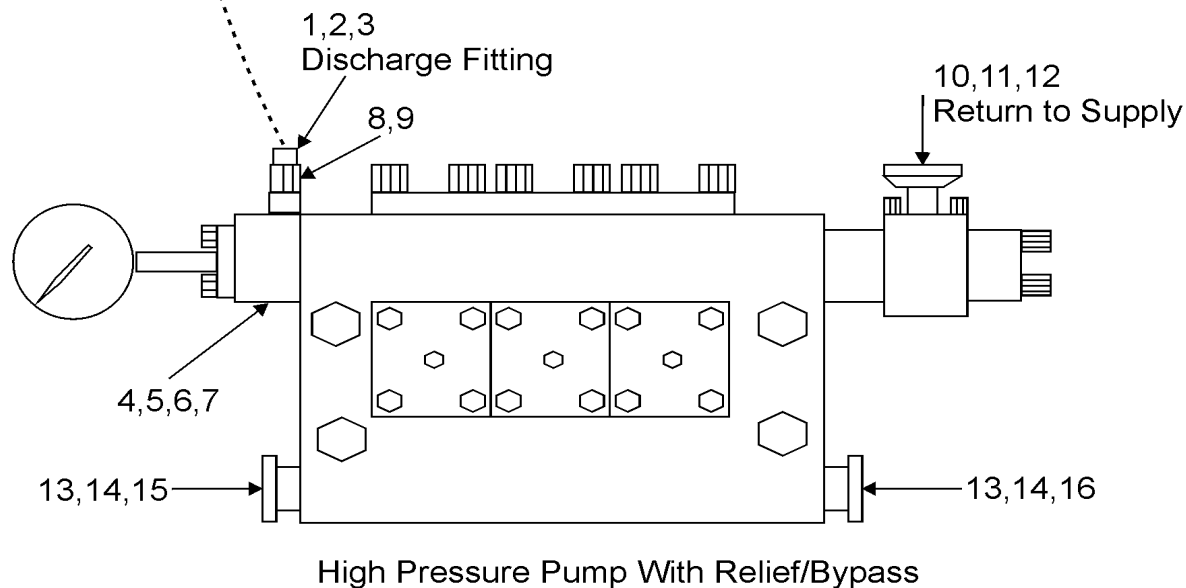
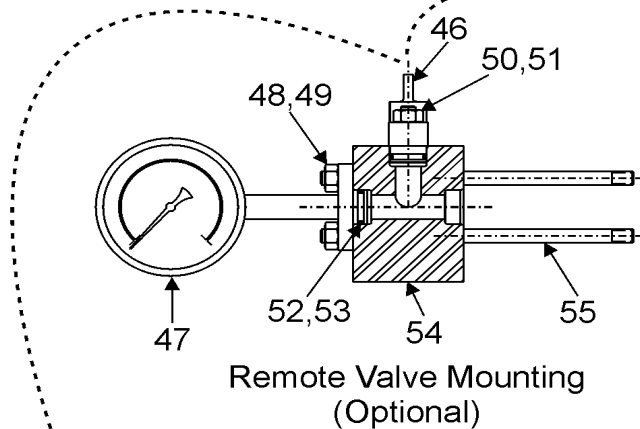
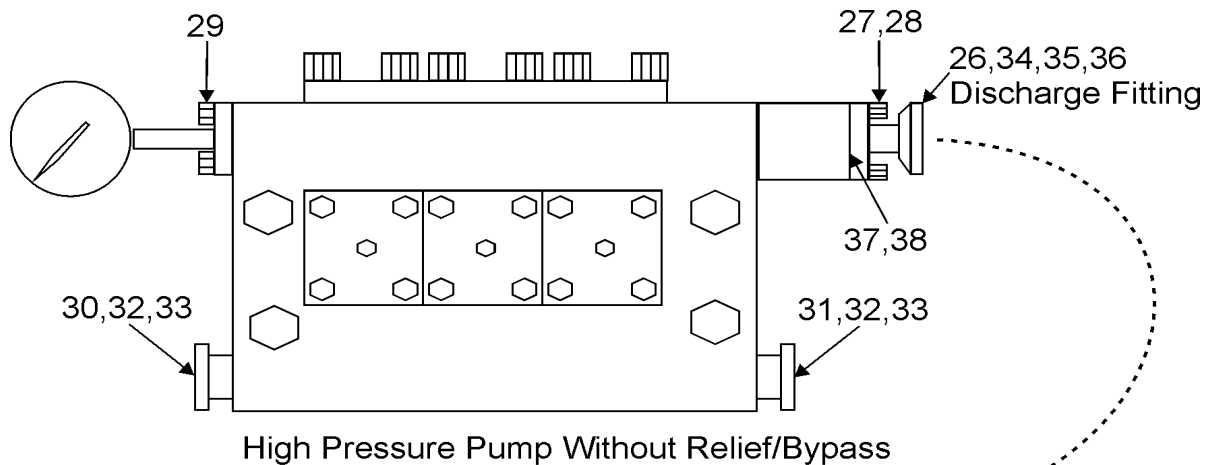


HM100-098

Homogenizer High Pressure Pump Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
46	FITTING			
	5/16" OD, 8000 Max Working Pressure	1	-	
	3/8" OD, 6500 Max Working Pressure	1	-	
	1/2" OD, 6200 Max Working Pressure	1	-	
	5/8" OD, 6000 Max Working Pressure	1	-	
	3/4" OD, 5800 Max Working Pressure	1	101375	
	1.0" OD, 4200 Max Working Pressure	1	101376	
47	GAUGE - PRESSURE			
	0 to 1000 psi	1	100404	
	0 to 5000 psi	1	100406	
	0 to 7500 psi	1	100408	
	0 to 10000 psi	1	-	
	0 to 15000 psi	1	-	
48	Hex Nut	4	107482	
49	Stud - Gauge	4	100281	
50	Hex Nut	2	107483	
51	Stud - Product Inlet	2	100465	
52	O-ring	2	N70214	
53	Backup Ring	2	BUR214	
54	Adapter - Remote Valve Mounting	1	100269	
55	Stud - Body	2	100396	

Homogenizer High Pressure Pump Diagram

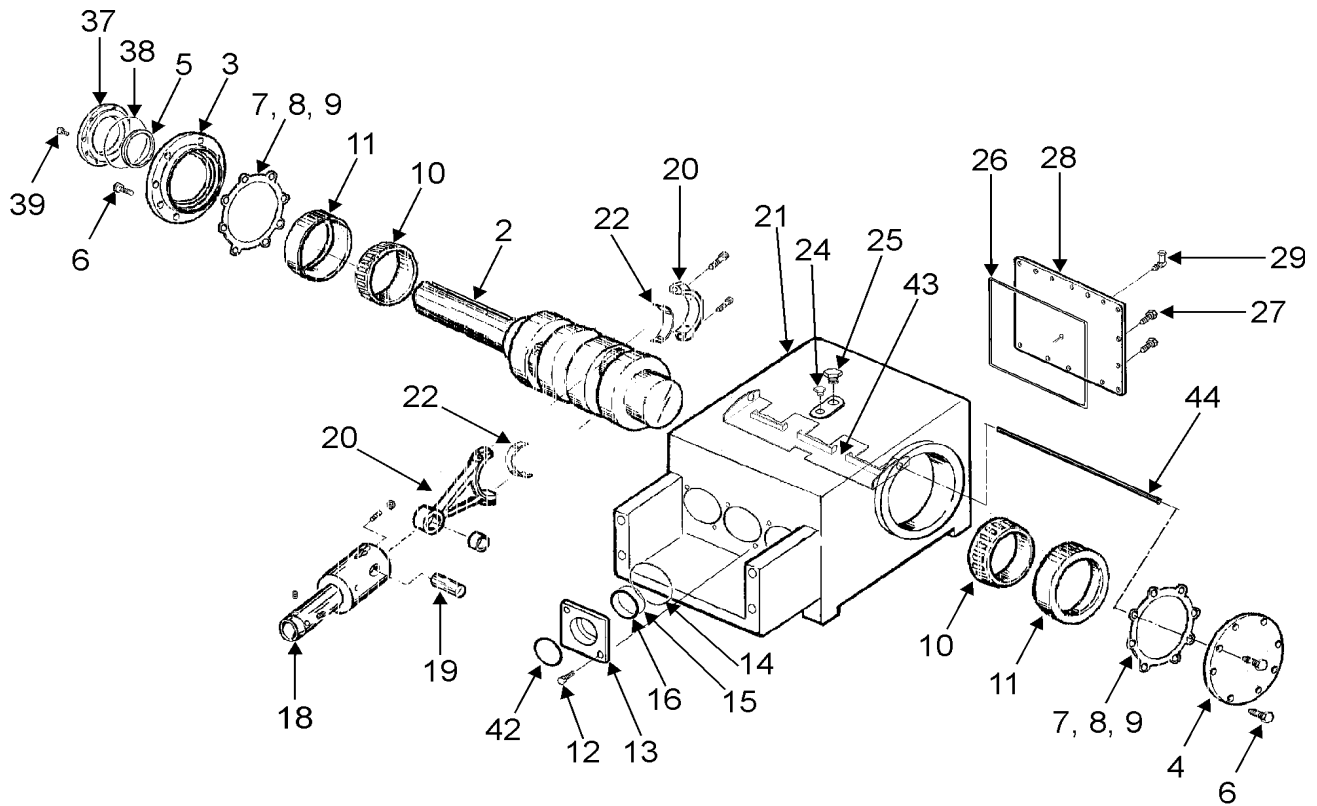


HM100-098

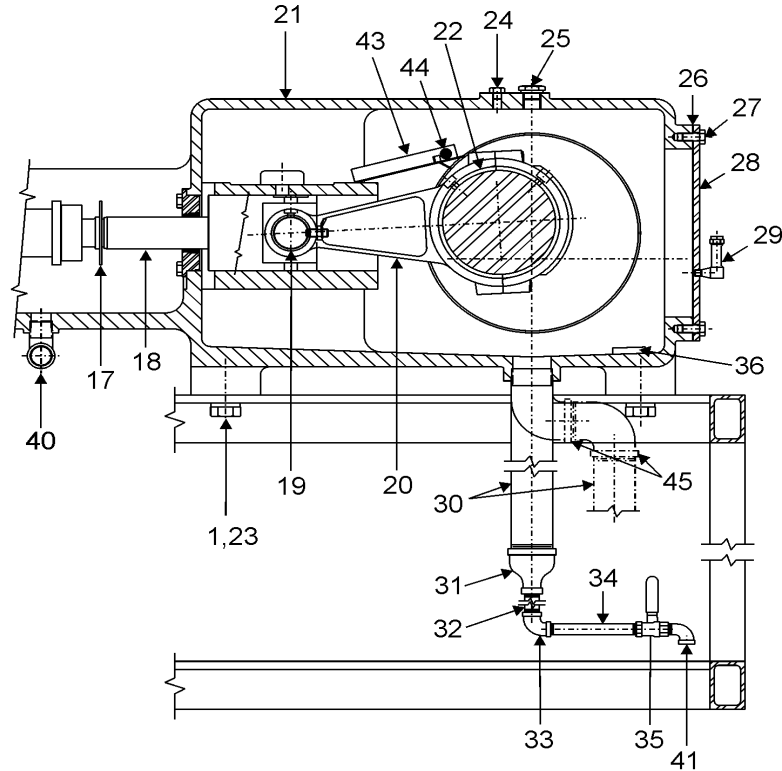
Homogenizer Crank Case Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Screw - Crankcase Mount, HH	4	30-459	
2	Crankshaft	1	100117	
	Crankshaft - 500LV only	-	-	
3	Cap - Crankshaft Seal Holder	1	100121	
4	Cap - Crankcase	1	100125	
5	Seal, Crankshaft	1	100986	
6	Screw - Crankcase End Caps	16	30-462	
7	Shim - .005 Thick	-	100487	
8	Shim - .007 Thick	-	100492	
9	Shim - .020 Thick	-	100497	
10	Bearing - Cone	2	100502	
11	Bearing - Cup	2	100506	
12	Screw - Oil Seal Carrier, HH SS	10	30-497	
13	Carrier - Oil Seal	5	100129	
14	O-ring	5	N70157	
15	Retaining Ring	5	43-215	
16	Seal	5	100135	
17	Slinger - Water	5	100138	
18	Crosshead Assembly	5	100142	
19	Pin - Wrist	5	100146	
20	Connecting Rod Assembly	5	100150	
21	Crankcase	1	100155	
22	Journal Bearing (two per set)	10	100454	
23	Lockwasher - Crankcase Mount	4	43-153	
24	Vented Plug	1	CD0046100	
25	Drain/Level Plug	1	78-86	
26	Gasket	85	35850	
27	Screw - Crankcase Back Cover, HH	18	30-241	
28	Cover - Crankcase	1	100165	
29	Vented Oil Level Gauge	1	100981	
30	Oil Drain Pipe	1	11-122	
31	Reducer	1	78-109	
32	Oil Drain Pipe	1	11-144	
33	Elbow	1	78-110	
34	Oil Drain Pipe	1	11-129	
35	Brass Ball Valve	1	100984	
36	Magnet - Ceramic 5	5	100985	
37	Holder - Crankshaft Seal	1	100955	
38	O-ring	1	N70169	
39	Screw - Crankshaft Seal Holder, HH	4	30-186	
40	Elbow	1	78-141	
41	Elbow	1	78-138	
42	Seal	5	105572	
43	Ramp - Oiling	1	100160	
44	Rod - Oiling Ramp Support	1	110120	
45	Elbow (use with oversize motors)	2	78-154	

Homogenizer Crank Case Assembly Diagram



HM100-057a

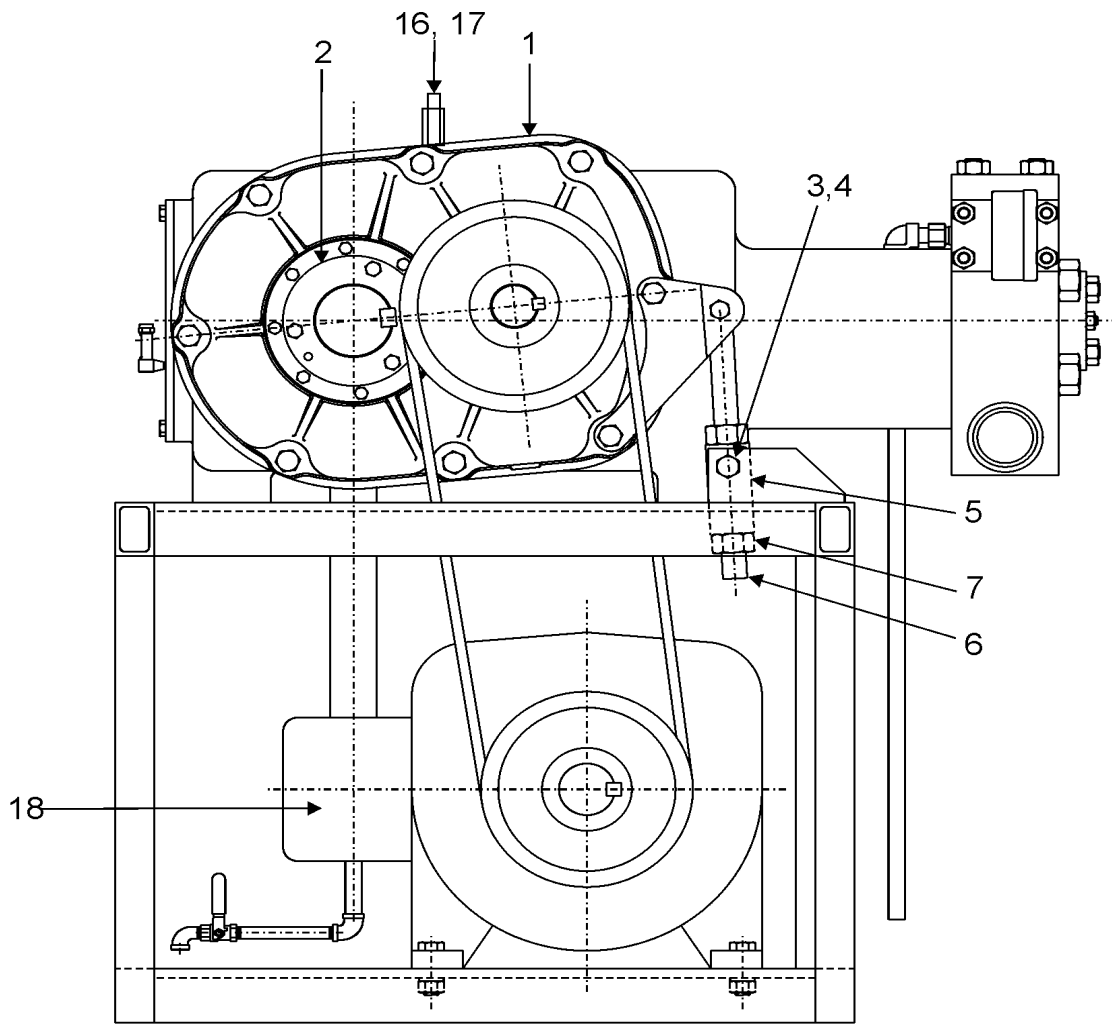


HM100-091a

Homogenizer Motor and Drive Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Speed Reducer - Single Reduction	1	100169	
2	Tapered Bushing Assembly	1	102856	
3	Screw, HH, ZP	2	30-412	
4	Lockwasher, ZP	2	43-146	
5	Pivot - Reducer/Tensioner	1	100173	
6	Rod End - Torque Arm	1	100973	
7	Hex Nut, ZP	2	36-119	
8	Label - Crankcase (not shown)	1	33-76	
9	Label - Crankcase (not shown)	1	33-77	
16	Nipple (not used)	-	-	
17	Coupling (not used)	-	-	
18	Meter - Hour, 60HZ 120VAC	1	112627	
	Meter - Hour, 50HZ 120VAC	1	112628	

Homogenizer Motor and Drive Assembly Diagram

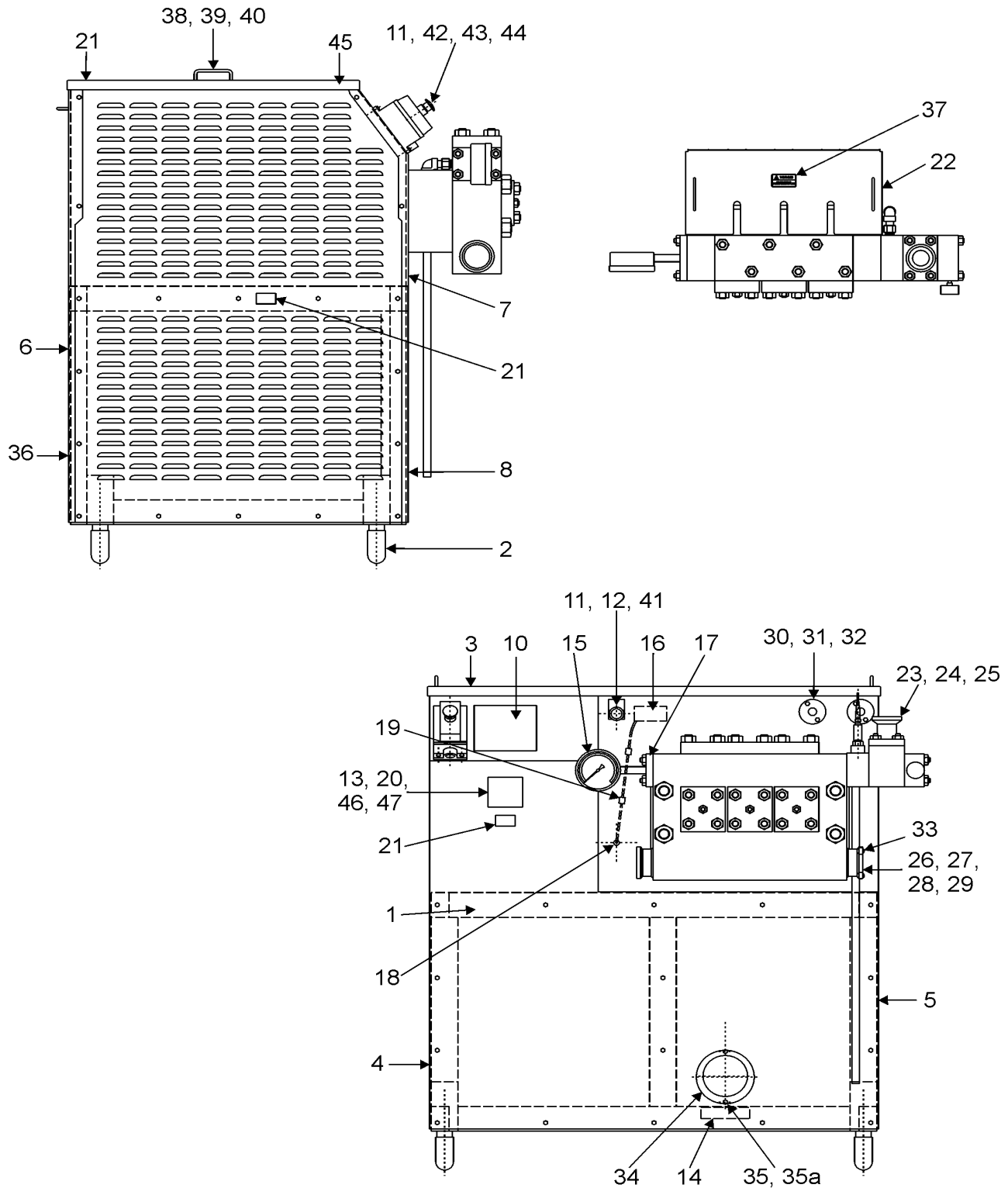


HM100-090a

Homogenizer Frame and Panel Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Frame Assembly	1	100076	
2	Leg - Adjustable	4	100079	
3	Panel - Housing, Top	1	100084	
4	Panel - Housing, Left Side	1	100089	
5	Panel - Housing, Right Side	1	100094	
6	Panel - Housing, Back	1	100099	
7	Panel - Housing, Front	1	100104	
8	Panel - Housing, Front Bottom (model 5000 only)	1	100105	
9	Screw (not shown)	74	30-181	
9a	Washer (not shown)	74	43-144	
10	Label - Company Name and Machine Type	1	33-30A	
11	Switch - Emergency Stop, Standard	1	103994	
	Switch - Emergency Stop, Explosion Proof	1	105171	
12	Plate - Emergency Stop	1	103995	
13	Screw	4	30-608	
14	Nameplate - Drain	1	4487810	
15	PRESSURE GAUGE			
	0 to 1000 psi	1	100405	
	0 to 5000 psi	1	100407	
	0 to 7500 psi	1	100409	
	0 to 10000 psi	-	-	
	0 to 15000 psi	-	-	
	PRESSURE TRANSDUCER/TRANSMITTER (Digital Pressure Meter only) - OPT			
	0 to 1000 psi 3mV/V	1	100417	
	0 to 5000 psi 3mV/V	1	100418	
	0 to 7500 psi 3mV/V	1	100419	
	0 to 10000 psi	-	-	
	0 to 15000 psi	-	-	
	0-5000 4-20mA 100 feet wire		111090	
16	Digital Pressure Meter - Optional	1	100108	
17	Clamp (Digital Pressure Meter only)	1	100110	
18	Grommet (Digital Pressure Meter only)	1	100111	
19	Cord Clip, Adhesive Backed (Digital Pressure Meter only)	3	100112	
20	Nameplate - Homogenizer	1	5902364	
	Nameplate - Plunger Pump	1	5902365	
21	Caution Plate	5	33-62	
22	Cover - Plunger/Cylinder Area	1	101341	
23	Ferrule, 14WI	1	29-507XCB	
24	Clamp, 13IS	1	3023019	
25	Gasket, 40IH Buna	1	20-106	
26	Ferrule, 14WI	2	29-508XCB	
27	Cap - Male, 16AI-14I	1	3-73X	
28	Clamp, 13IS	2	3023022	
29	Gasket, 40IH Buna	2	20-107	

Homogenizer Frame and Panel Assembly Diagram

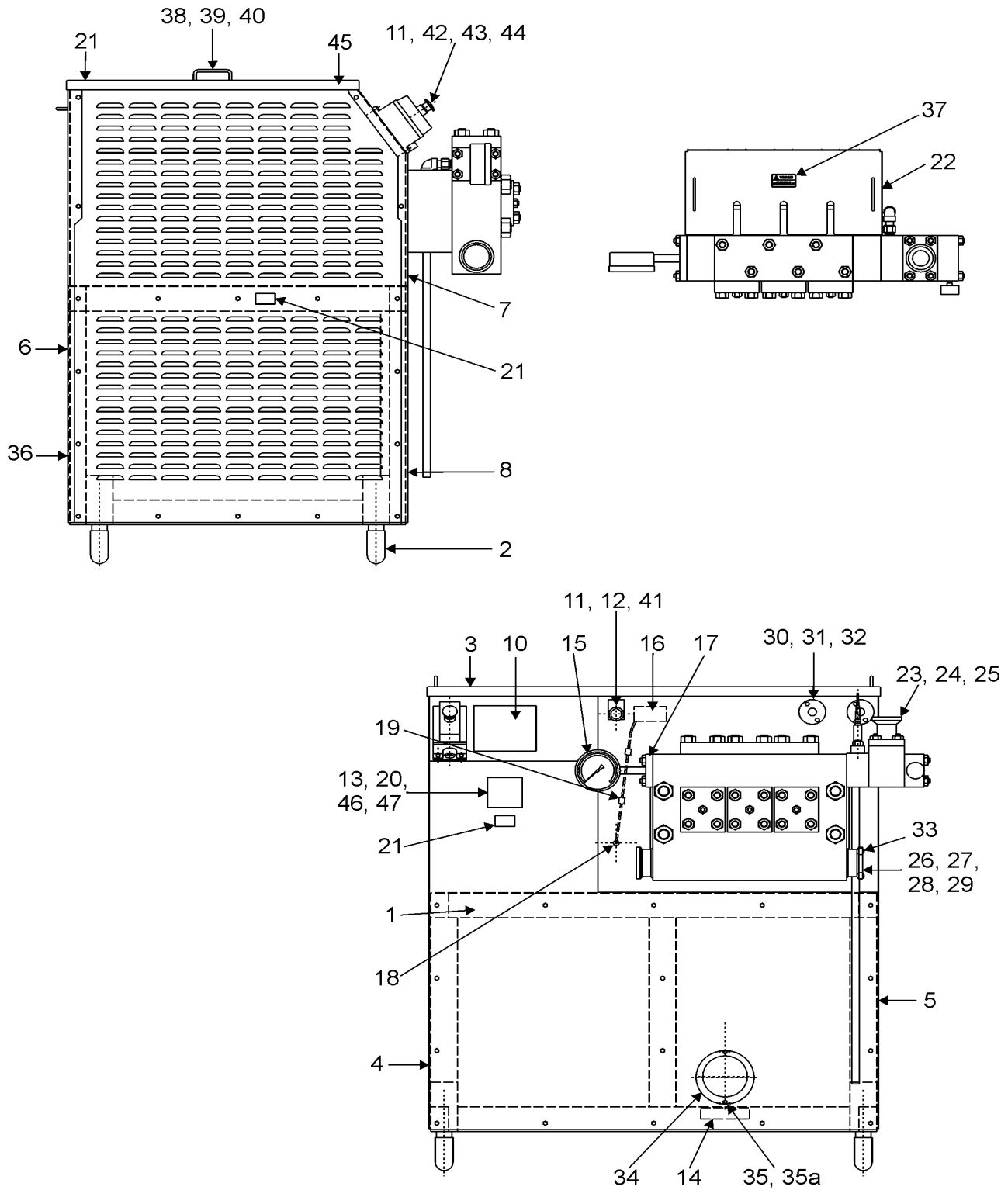


HM100-089a

Homogenizer Frame and Panel Assembly - Model 5000

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
30	Cover	2	104001	
31	Screw, HHC SS	4	30-181	
32	Hex Nut SS	4	36-53	
33	Hole Plug	2	78-127	
34	Cover - Oil Hole	1	105173	
35	Screw	2	30-580	
35a	Washer, Plain 1/4" SS	2	43-144	
36	Panel - Housing Back Bottom (model 7500 only)	-	-	
37	Warning Label	1	33-84	
38	Handle with Mounting Screws	4	105899	
39	Lockwasher, #8	8	43-20	
40	Screw	8	30-593	
41	Hole Plug - SS (Explosion Proof Switch only)	1	78-147	
42	Screw, HHC (Explosion Proof Switch only)	4	30-206	
43	Lockwasher, SS (Explosion Proof Switch only)	4	43-22	
44	Hex Nut (Explosion Proof Switch only)	4	36-53	
45	Wear Shape, Snap-On	136	108311	
46	Lockwasher, #3 18-8SS	4	43-85	
47	Hex Nut, #3-48 18-8SS	4	36-134	

Homogenizer Frame and Panel Assembly Diagram

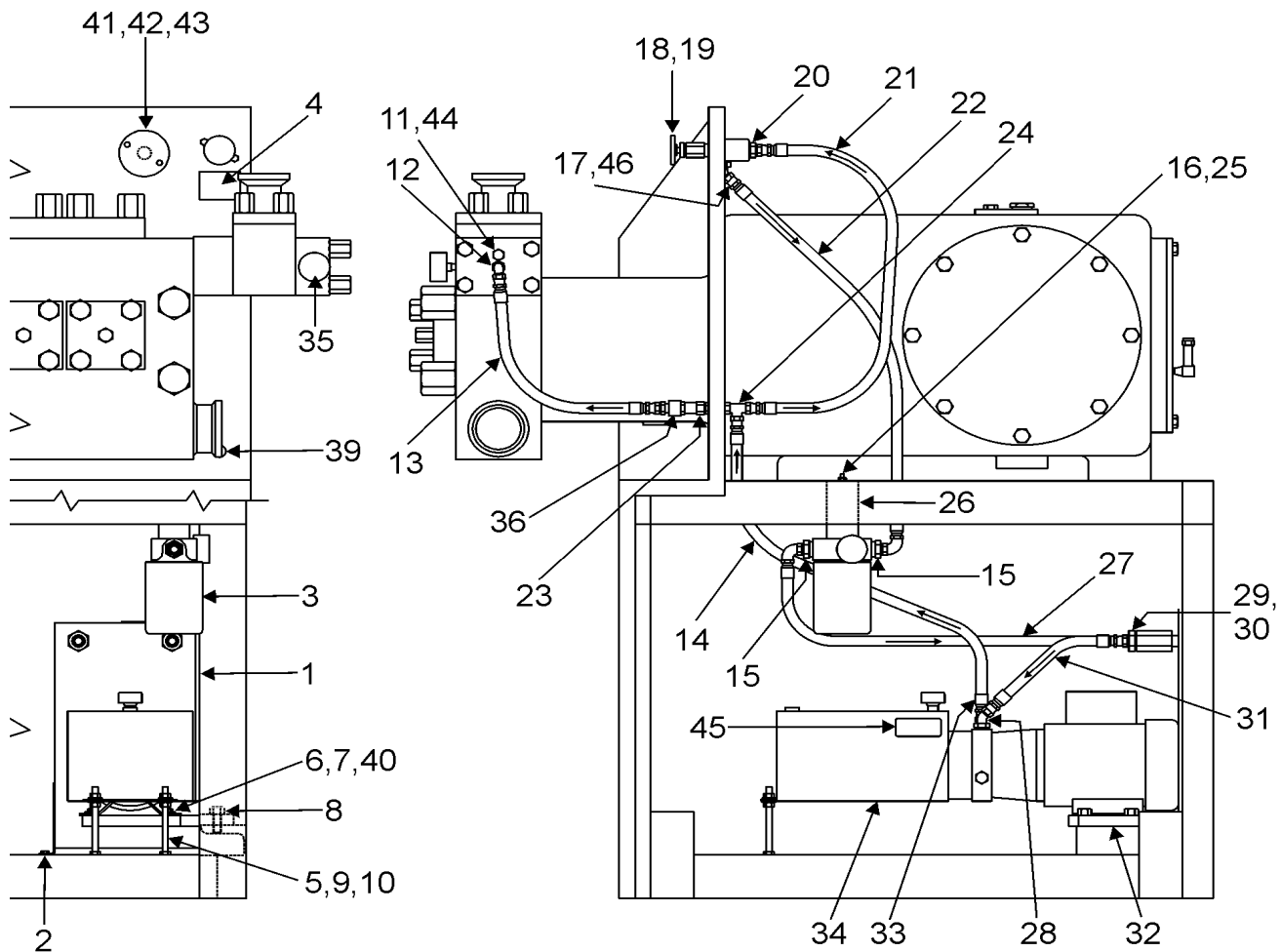


HM100-089a

Homogenizer Single Stage Hydraulic Actuation System - All Models

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Heat Exchanger	1	101039	
2	Screw	2	30-287	
3	Filter with Indicator	1	101040	
4	Label - 1st Stage Homogenizing Valve	1	33-67	
5	Washer - Flat, 3/8"	4	43-191	
6	Screw	4	30-347	
7	Washer - Flat, 5/16"	8	43-145	
8	Screw	2	30-192	
9	Screw	2	30-348	
10	Hex Nut	4	36-83	
11	Plug	1	78-102	
12	Elbow	1	78-103	
13	Hose - Length 16.5 (500, 500LV)	1	74-142	
	Hose - Length 20.0 (1000, 2000)	1	74-143	
	Hose - Length 23.0 (3000, 5000)	1	74-139	
14	Hose - Length 18.0 (500, 500LV)	1	74-7	
	Hose - Length 28.0 (1000, 2000)	1	74-14	
	Hose - Length 35.0 (3000, 5000)	1	74-25	
15	Adapter	2	78-92	
16	THREADED ROD - 1/4-20, UNC-2A 18-8 SS			
	Length 4.00" (500, 500LV)	2	104111	
	Length 2.63" (1000)	2	104110	
	Length 5.00" (2000, 3000, 5000)	2	104112	
17	Elbow	1	78-100	
18	Relief Valve	1	101041	
19	Screw	2	30-62	
20	Adapter	1	78-101	
21	Hose - Length 22.0 (500, 500LV)	1	74-6	
	Hose - Length 28.0 (1000, 2000, 3000, 5000)	1	74-14	
22	Hose - Length 25.0 (500, 500LV, 1000)	1	74-16	
	Hose - Length 29.0 (2000, 3000, 5000)	1	74-12	
23	Union	1	78-139	
24	Tee	1	78-126	
25	Hex Nut	2	36-100	

Homogenizer Single Stage Hydraulic Actuation System Diagram

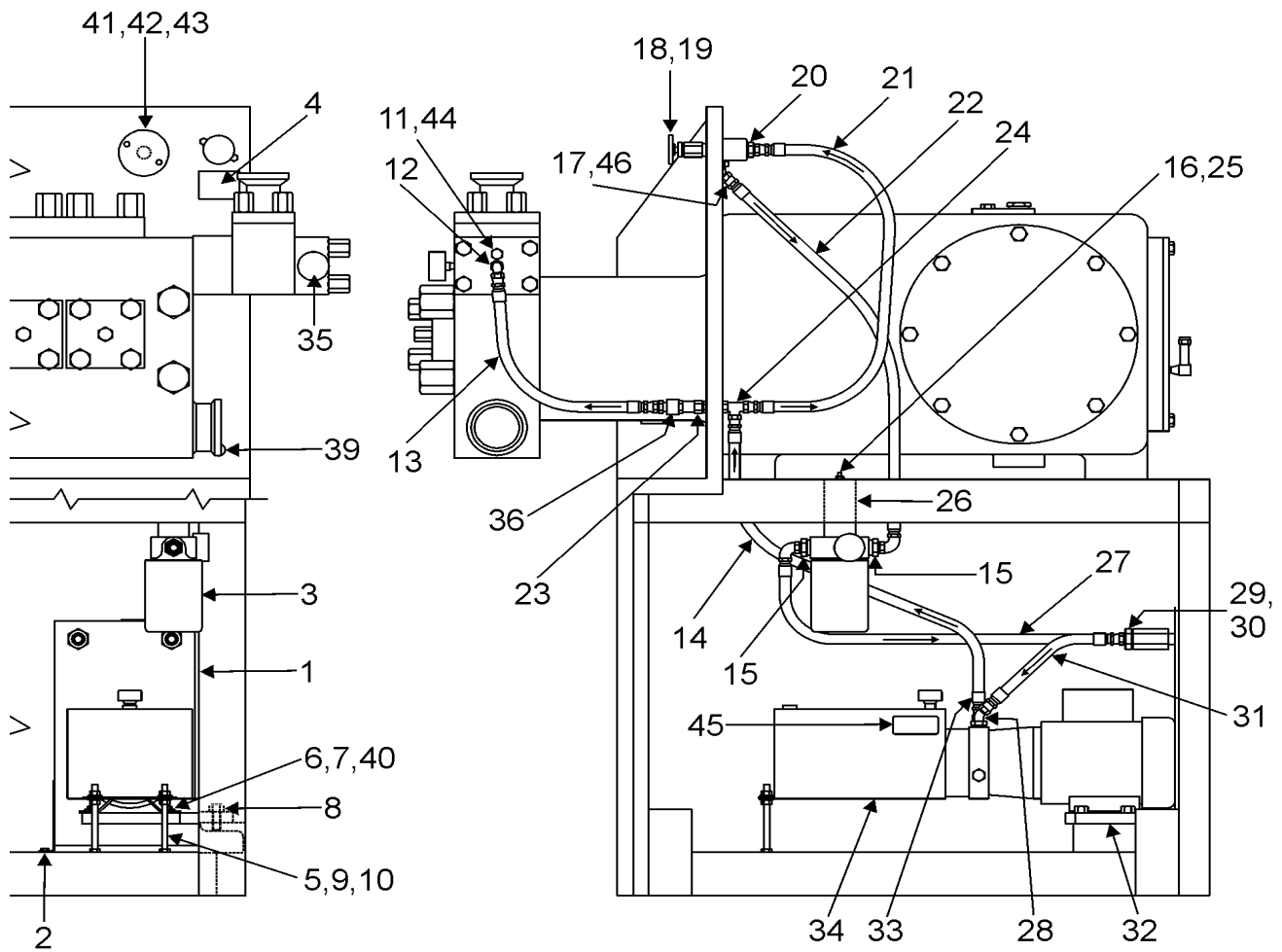


HM100-096

Homogenizer Single Stage Hydraulic Actuation System - All Models

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	Spacer - Filter - (500, 500LV)	1	100397	
	Spacer - Filter - (1000)	1	100398	
	Spacer - Filter - (2000, 3000, 5000)	1	100399	
27	Hose - Length 19.0 (500, 500LV)	1	74-15	
	Hose - Length 25.0 (1000, 2000)	1	74-16	
	Hose - Length 29.0 (3000, 5000)	1	74-12	
28	Elbow - (500, 500LV)	2	78-94	
	Elbow - (1000, 2000, 3000, 5000)	1	78-94	
29	Adapter	1	78-97	
30	Reducer Bushing (500, 500LV only)	1	78-98	
31	Hose - Length 18.0 (500, 500LV)	1	74-7	
	Hose - Length 12.0 (1000, 2000, 3000, 5000)	1	74-19	
32	Plate - Hydraulic Actuator Motor	1	100400	
33	Adapter	1	78-93	
34	HYDRAULIC POWER UNIT			
	1/60/115-208-230V	1	101042	
	1/50/110-220V	1	101003	
	3/60/208-230-460V	1	112830	
	3/50-60/208-230-460V (Explosion Proof)	1	105172	
	3/60/575V	1	114910	
35	Gauge - Oil Pressure, 0-2000 psi	1	105550	
36	Coupling - Quick Hyd, Male & Female Halves	1	78-140	
39	Hole Plug	1	78-127	
40	Hex Nut	4	36-101	
41	Cover	1	104001	
42	Screw	2	30-181	
43	Hex Nut, 1/4-20 SS	2	36-53	
44	O-ring	1	N90012	
45	Label - Hydraulic Power Unit	1	33-78	
46	Elbow	1	78-117	

Homogenizer Single Stage Hydraulic Actuation System Diagram

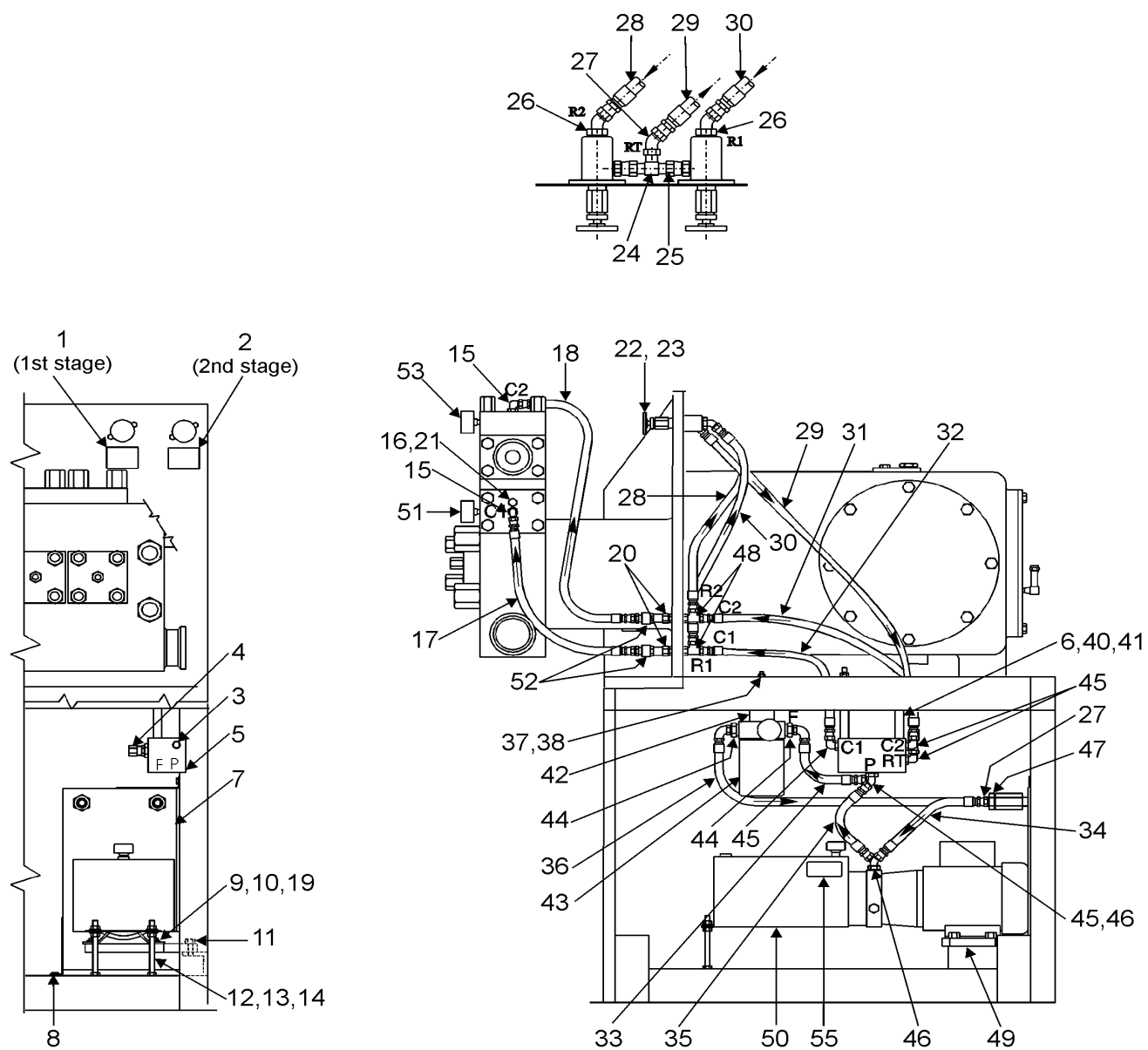


HM100-096

Homogenizer Double Stage Hydraulic Actuation System - All Models

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Label - 2nd Stage Homogenizing Valve	1	33-68	
2	Label - 1st Stage Homogenizing Valve	1	33-67	
3	Screw	2	30-560	
4	Valve - Pressure Relief	1	101638	
5	Manifold - 2 Stage Hydraulic Actuation	1	105670	
6	Hex Nut	2	36-83	
7	Heat Exchanger	1	101039	
8	Screw - (500, 500LV)	4	30-287	
	Screw - (1000, 2000, 3000, 5000)	2	30-287	
9	Screw	4	30-347	
10	Washer - Flat, 5/16"	8	43-145	
11	Screw	2	30-192	
12	Washer - Flat, 3/8"	4	43-191	
13	Screw	2	30-348	
14	Hex Nut	4	36-83	
15	Elbow	2	78-103	
16	Plug	2	78-102	
17	Hose - Length 16.5 (500, 500LV)	1	74-142	
	Hose - Length 20.0 (1000)	1	74-143	
	Hose - Length 23.0 (2000, 3000, 5000)	1	74-139	
18	Hose - Length 20.0 (500, 500LV)	1	74-143	
	Hose - Length 26.0 (1000)	1	74-140	
	Hose - Length 31.0 (2000, 3000, 5000)	1	74-141	
19	Hex Nut	4	36-101	
20	Union - Bulkhead	2	78-139	
21	O-ring	2	N90012	
22	Relief Valve	2	101041	
23	Screw	4	30-62	
24	Tee	1	78-119	
25	Adapter	2	78-115	

Homogenizer Double Stage Hydraulic Actuation System Diagram

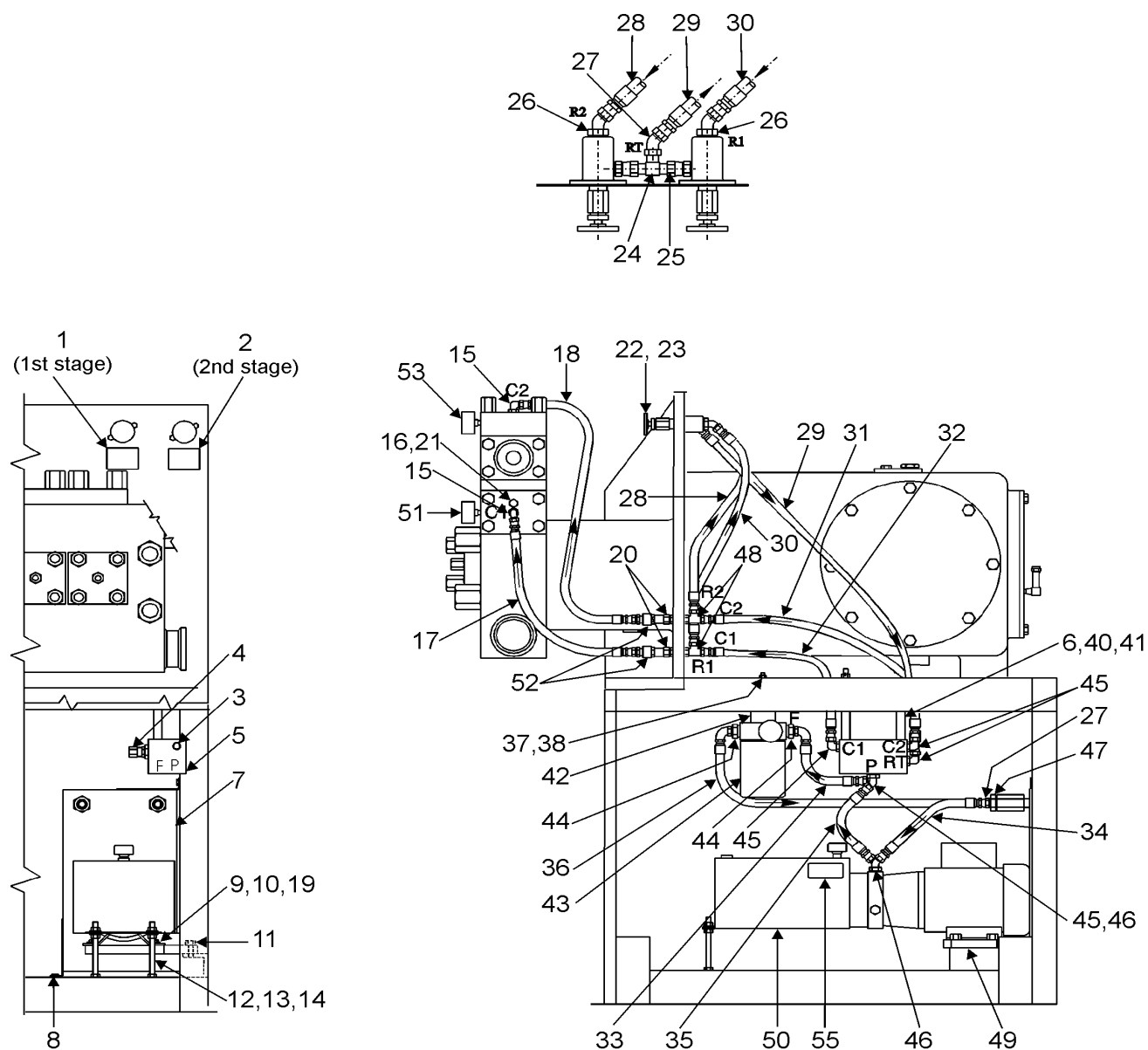


HM100-097

Homogenizer Double Stage Hydraulic Actuation System - All Models

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
26	Elbow - (500, 500LV)	2	78-101	
	Elbow - (1000, 2000, 3000, 5000)	2	78-100	
27	Elbow - (500, 500LV)	4	78-116	
	Elbow - (1000, 2000)	2	78-116	
	Elbow - (3000, 5000)	1	78-116	
28	Hose - Length 15.0 (500, 500LV, 1000)	1	74-17	
	Hose - Length 20.0 (2000, 3000)	1	74-18	
	Hose - Length 22.0 (5000)	1	74-6	
29	Hose - Length 22.0 (500, 500LV)	1	74-6	
	Hose - Length 28.0 (1000)	1	74-14	
	Hose - Length 35.0 (2000)	1	74-25	
	Hose - Length 40.0 (3000, 5000)	1	74-22	
30	Hose - Length 15.0 (500, 500LV, 1000)	1	74-17	
	Hose - Length 20.0 (2000, 3000)	1	74-18	
	Hose - Length 22.0 (5000)	1	74-6	
31	Hose - Length 35.0 (500, 500LV)	1	74-25	
	Hose - Length 20.0 (1000)	1	74-18	
	Hose - Length 23.0 (2000)	1	74-24	
	Hose - Length 28.0 (3000, 5000)	1	74-14	
32	Hose - Length 22.0 (500, 500LV)	1	74-6	
	Hose - Length 15.0 (1000, 2000)	1	74-17	
	Hose - Length 18.0 (3000, 5000)	1	74-7	
33	Hose - Length 12.0 (500, 500LV)	1	74-19	
	Hose - Length 19.0 (1000, 2000)	1	74-15	
	Hose - Length 25.0 (3000, 5000)	1	74-16	
34	Hose - Length 10.0 (500, 500LV)	1	74-27	
	Hose - Length 12.0 (1000, 2000, 3000, 5000)	1	74-19	
35	Hose - Length 12.0 (500, 500LV)	1	74-19	
	Hose - Length 18.0 (1000, 2000, 3000, 5000)	1	74-7	
36	Hose - Length 25.0 (500, 500LV, 1000, 2000)	1	74-16	
	Hose - Length 29.0 (3000, 5000)	1	74-12	

Homogenizer Double Stage Hydraulic Actuation System Diagram

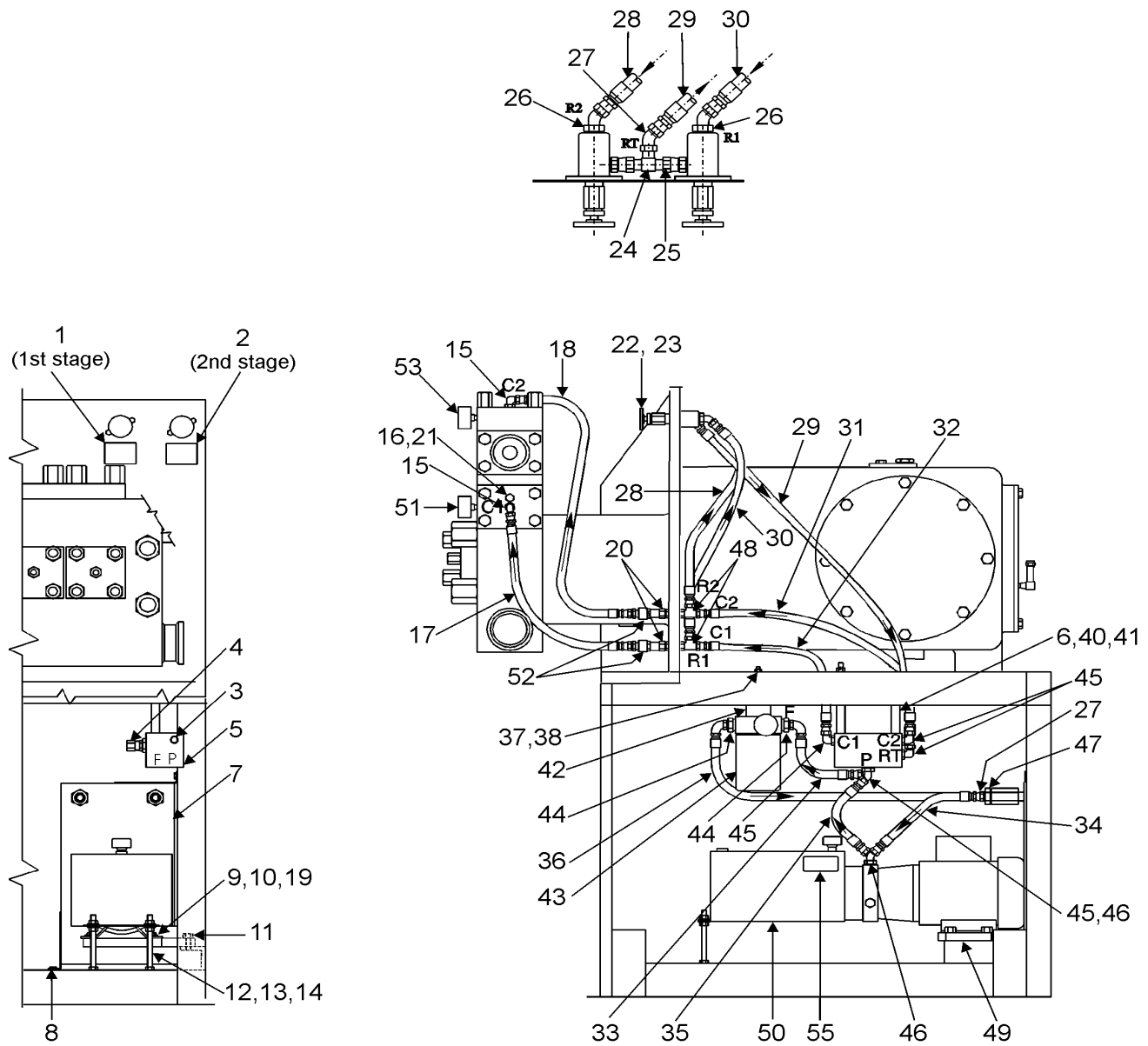


HM100-097

Homogenizer Double Stage Hydraulic Actuation System - All Models

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
37	Hex Nut - (500, 500LV)	-	-	
	Hex Nut - (1000, 2000, 3000, 5000)	2	36-100	
38	Threaded Rod - (500, 500LV)	-	-	
	Threaded Rod - Length 2.63" (1000)	2	104110	
	Threaded Rod - Length 5.00" (2000, 3000, 5000)	2	104112	
39	Bracket - Filter & Manifold (not shown - 500, 500LV only)	1	101636	
40	Threaded Rod - Length 5.50" (500, 500LV, 1000)	2	104113	
	Threaded Rod - Length 7.25" (2000, 3000, 5000)	2	104114	
41	Pipe - Length 3.00" (500, 500LV, 1000)	2	104115	
	Pipe - Length 5.25" (2000, 3000, 5000)	2	104116	
42	Spacer - Filter - (500, 500LV)	-	-	
	Spacer - Filter - (1000)	1	100398	
	Spacer - Filter - (2000, 3000, 5000)	1	100399	
43	Filter with Indicator	1	101040	
44	Adapter	2	78-92	
45	Elbow - (500, 500LV)	5	78-91	
	Elbow - (1000, 2000, 3000, 5000)	4	78-91	
46	Elbow - (500, 500LV)	2	78-94	
	Elbow - (1000, 2000, 3000, 5000)	3	78-94	
47	Adapter	2	78-97	
48	Tee	2	78-126	
49	Plate - Hydraulic Actuator Motor	1	100400	
50	HYDRAULIC POWER UNIT			
	1/60/115-208-230V	1	101042	
	1/50/110-220V	1	101003	
	3/60/208-220-460V	1	112830	
	3/50-60/208-230-460V (Explosion Proof)	1	105172	
	3/60/575V	1	114910	
51	Gauge - Oil Pressure, 0-2000 psi	1	105550	
52	Coupling - Quick Hyd, Male & Female Halves	2	78-140	
53	Gauge - Oil Pressure, 0-600 psi	1	114817	
55	Label - Hydraulic Power Unit	1	33-78	

Homogenizer Double Stage Hydraulic Actuation System Diagram



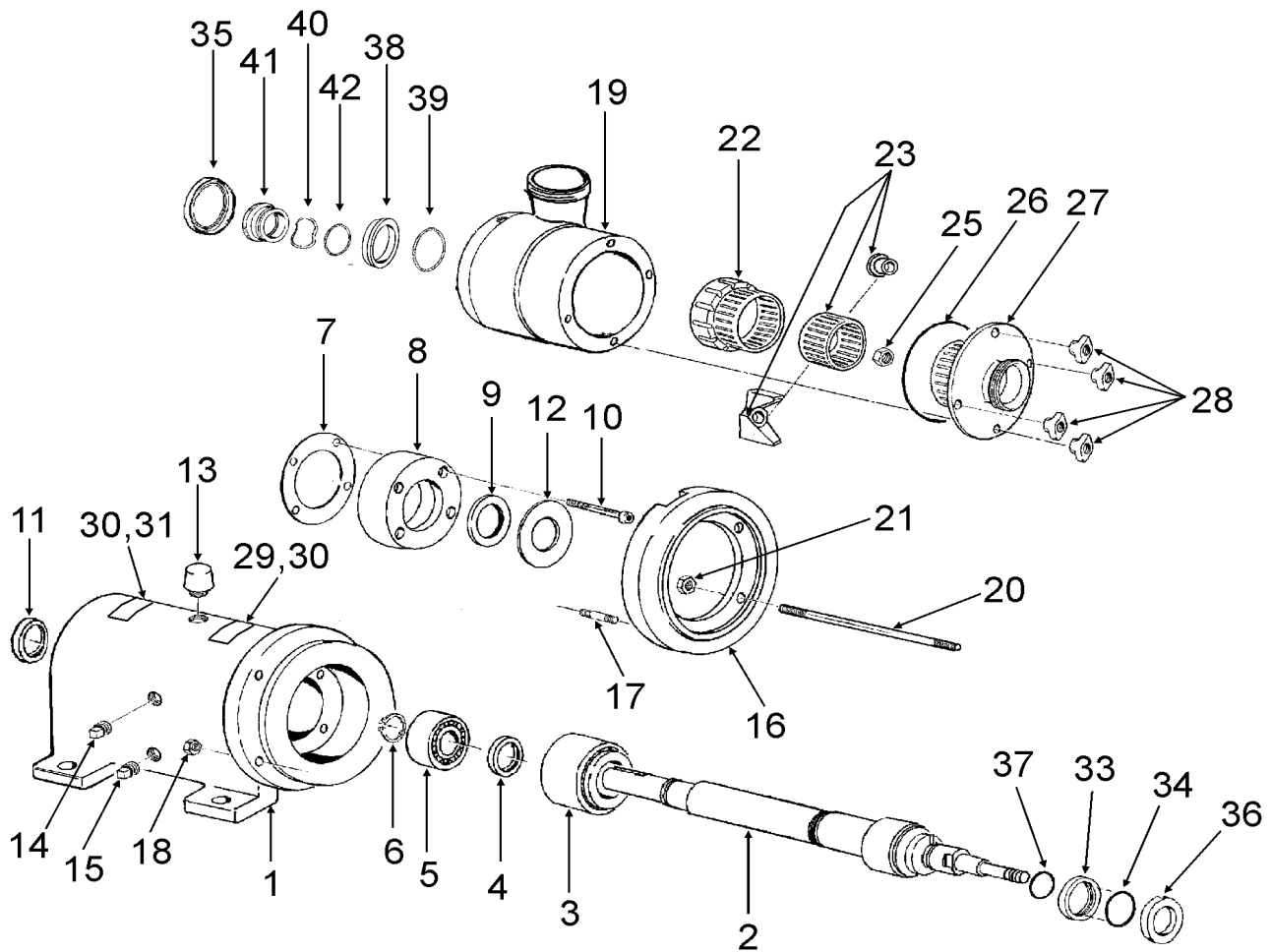
HM100-097

Shear Pump

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Gear Case	1	0MS005000	
2	Drive Shaft	1	SP4008M00	
3	Front Bearing	1	0MS036300	
4	Bearing Locknut	1	0MS036N00	
5	Rear Bearing	1	0MS036000	
6	Retaining Ring	1	BD0087R00	
7	Front Bearing Retainer Gasket	1	0MS042B00	
8	Front Bearing Retainer	1	0MS080000	
9	Pump End Shaft Seal	1	0MS030100	
10	Capscrew	4	30-274	
11	Drive End Shaft Seal	1	0MS030000	
12	Slinger	1	0MS045000	
13	Breather	1	115800	
14	Level Indicator	1	115799	
15	Drain Plug	1	115798	
16	Pump Body Adapter Support	1	SP4002M00	
17	Adapter Stud	4	0MS011000	
18	Hex Nut	4	36-70	
19	Pump Body, Bevel Seat	1	SP4003005	
20	Stud - Body	4	SP4015000	
21	Hex Nut	4	36-83	
22	Rotor, Outer, 1/4" Head Slots (12), 1/8" Shear Slots (24)	1	SP4005003	
	Rotor, Outer, 1/4" Head Slots (24), 1/8" Shear Slots (40)	1	SP4005008	
	Rotor, Outer, 1/4" Head Slots (24), 1/8" Shear Slots (40)	1	SP4005009	
	Rotor, Outer, 1/4" Head Slots (12), 5/8" Shear Slots (13)	1	SP4005011	
	Rotor, Outer, 5/8" Radius Head, 5/8" Shear Slots (13)	1	SP4005013	
23	Rotor, Inner, 1/8" Slots (26)	1	SP4012001	
	Spacer, Inner Rotor	1	SP4012005	
	Rotor Blade, Chopper 3"	1	SP4013000	
	Rotor Blade, Chopper 2-1/2"	1	SP4013S02	
25	Hex Nut, Inner Rotor	1	SP4018000	
26	O-ring - Cover, Buna	1	N70245	
	O-ring - Cover, EPDM	1	E70245	
	O-ring - Cover, FKM	1	V70245	
27	Cover Stator, 2" Dia, 1/8" Slots (25)	1	SP4007001	
	Cover Stator, 2" Dia, 1/4" Dia Holes (16)	1	SP4007003	
	Cover Stator, 2" Dia, 1/2" Dia Holes (16)	1	SP4007006	
	Cover Stator, 2" Dia, 1/4" Slots (25)	1	SP4007009	
	Cover Stator, 2" Dia, 3/4" Dia Holes (8)	1	SP4007S05	
28	Wing Nut	4	SP4032000	
29	Nameplate, Sanitary	1	001061002	
30	RHDS	6	30-355	
31	Caution Label - Yellow	1	33-62	
32	Key, 3/8" x 3/8" x 1.625" (not shown)	1	000037003	
33	Sleeve (Flush Option)	1	SP4098000	
34	O-ring - Sleeve, Buna (Flush Option)	1	N70132	
	O-ring - Sleeve, EPDM (Flush Option)	1	E70132	
	O-ring - Sleeve, FKM (Flush Option)	1	V70132	
35	Oil Seal	1	000030011	



Shear Pump Diagram



DP100-001

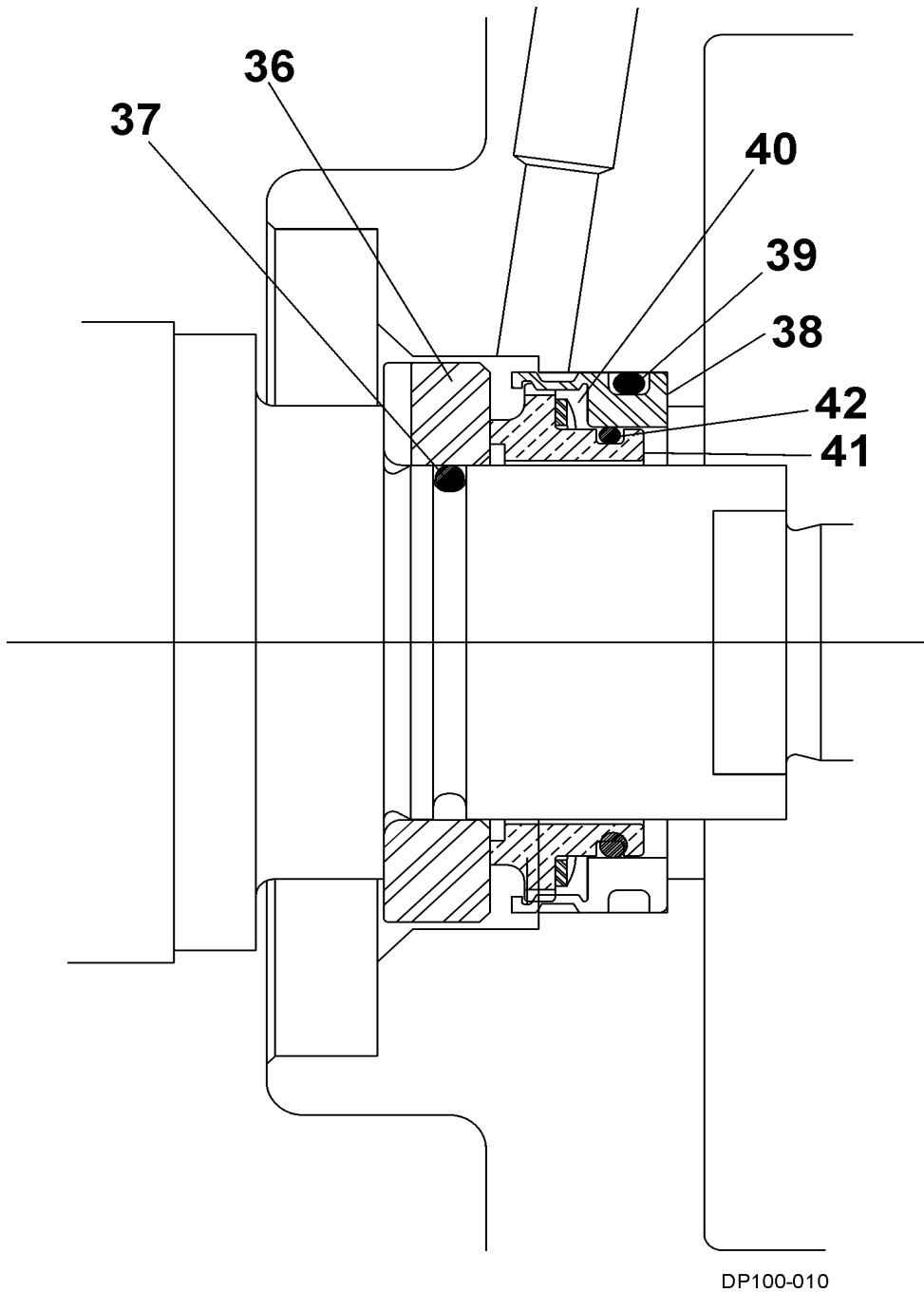
Shear Pump Seal Options

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
36	Seal Seat, Silicon Carbide	1	BGT014009	
	Seal Seat, Ceramic	1	BGT014000	
	Seal Seat, SS Lapped Insert	1	BGT014011	
37	O-ring - Shaft, Buna	1	N70122	
	O-ring - Shaft, EPDM	1	E70122	
	O-ring - Shaft, FKM	1	V70122	
38	Seal Case	1	BGT305000	
39	O-ring - Seal Case, Buna	1	N70133	
	O-ring - Seal Case, EPDM	1	E70133	
	O-ring - Seal Case, FKM	1	V70133	
40	Wave Spring	1	BGT304000	
41	Seal Carrier Assembly, Carbon	1	BGT306000	1
	Seal Carrier Assembly, Silicon Graphite	1	BGT306012	2
	Seal Carrier Assembly	1	BGT306013	3
42	O-ring - Seal Carrier, Buna	1	N70126	1, 2
	O-ring - Seal Carrier, Buna	1	N70028	3
	O-ring - Seal Carrier, EPDM	1	E70126	1, 2
	O-ring - Seal Carrier, EPDM	1	E70028	3
	O-ring - Seal Carrier, FKM	1	V70126	1, 2
	O-ring - Seal Carrier, FKM	1	V70028	3

Notes:

1. Seal Option C/SC SP4
2. Seal Option SG/SC SP4
3. Seal Option TC/SC SP4

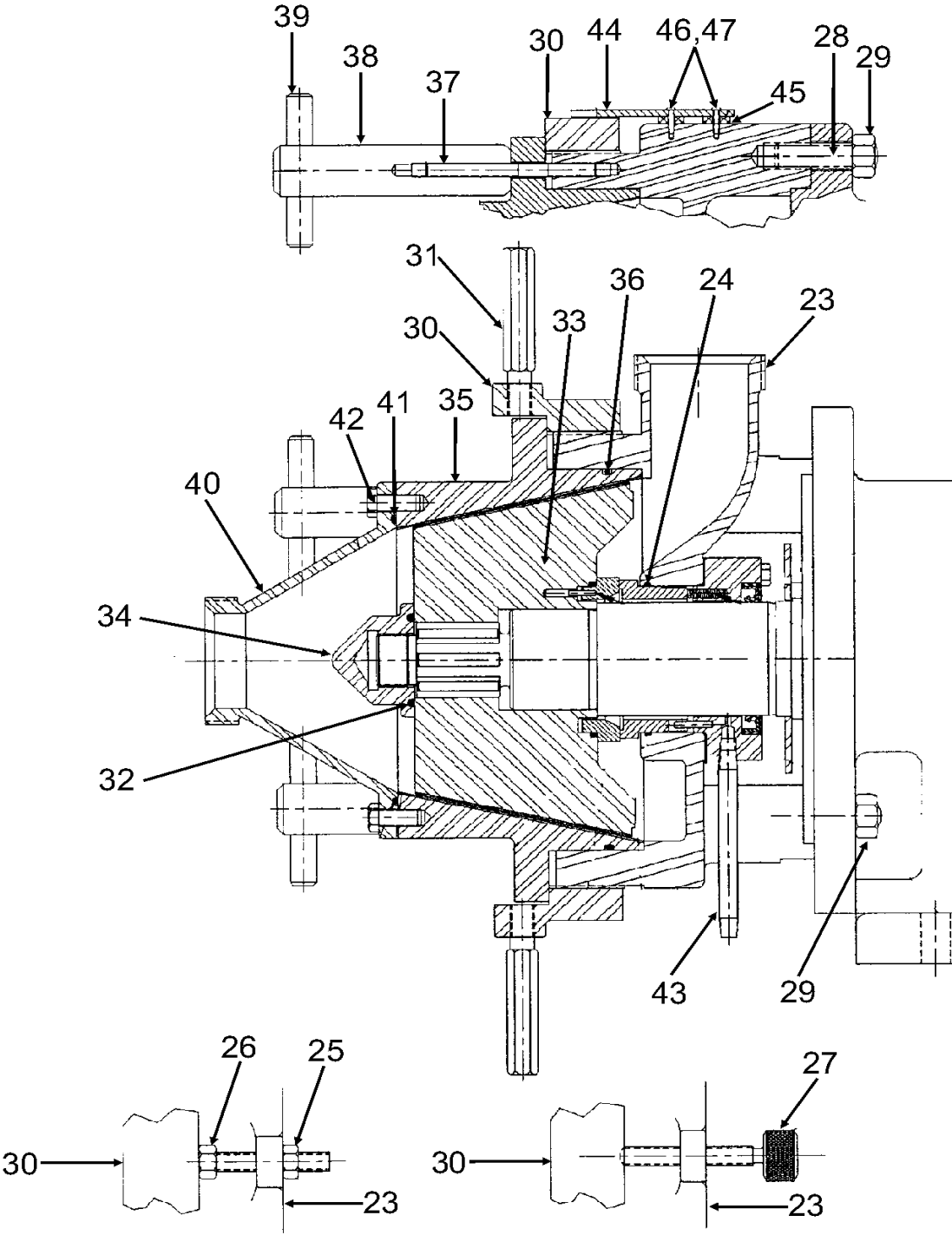
Shear Pump Seal Options Diagram



Colloid Mill Fluid Head

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
23	Body, 2" Bevel Seat	1	0MS001000	
	Body, 2" TCF	1	35886	
24	Seal Seat & Body O-ring, FKM	2	V70150	
	Seal Seat & Body O-ring, Silicone	2	S75150	
25	Hex Nut	1	36-55	
26	Capscrew	1	30-86	
27	Knurled Lock Screw	1	0MS129000	
28	Stud - Body	4	0MS011000	
29	Hex Nut	4	36-70	
30	Adjusting Ring	1	0MS003000	
31	Adjusting Ring Handle	2	0MS054000	
32	O-ring, Rotor Nut, FKM	1	V70222	
	O-ring, Rotor Nut, Silicone	1	S75222	
33	Rotor	1	0MS010000	
34	Rotor Retaining Nut	1	0MS052000	
35	Stator	1	0MS004000	
36	O-ring, Stator, FKM	1	V70263	
	O-ring, Stator, Silicone	1	S75263	
37	Stud, Handle Shaft	4	0MS011100	
38	Handle Shaft	4	0MS099000	
39	Handle Pin	4	0MS100000	
40	Cover, 2" Bevel Seat	1	0MS002000	
	Cover, 2" TCF	1	35887	
41	O-ring, Cover, FKM	1	V70253	
	O-ring, Cover, Silicone	1	S75253	
42	Capscrew	4	30-151	
43	Pipe Nipple	2	0MS018000	
44	Indicator	1	0MS056100	
45	Spacer	2	0MS454000	
46	Machine Screw	2	30-299	
47	Lockwasher, #10	2	43-21	

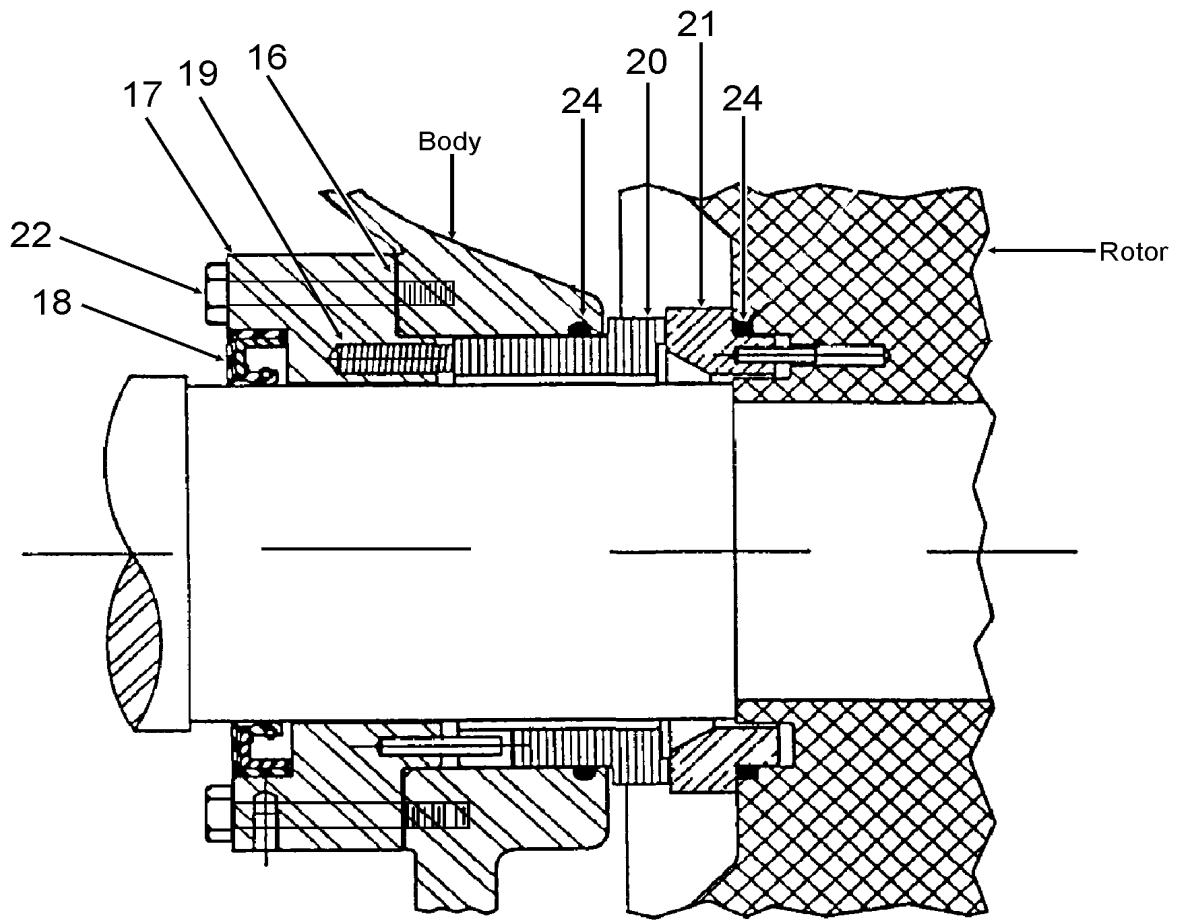
Colloid Mill Fluid Head Diagram



Colloid Mill Sanitary Seal

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
16	Gland Gasket	1	0MS042G00	
17	Gland Plate	1	0MS058200	
18	Gland Plate Seal	1	0MS030200	
19	Spring	6	0MS304200	
20	Stationary Seal, Carbon	1	0MS306003	
	Stationary Seal, Silicon Graphite	1	0MS306004	
	Stationary Seal, Silicon Carbide	1	0MS306009	
21	Rotating Seat, Silicon Graphite	1	0MS014002	
22	Capscrew	4	30-98	
24	Seal Seat & Body O-ring, FKM	2	V70150	
	Seal Seat & Body O-ring, Silicone	2	S75150	

Colloid Mill Sanitary Seal Diagram

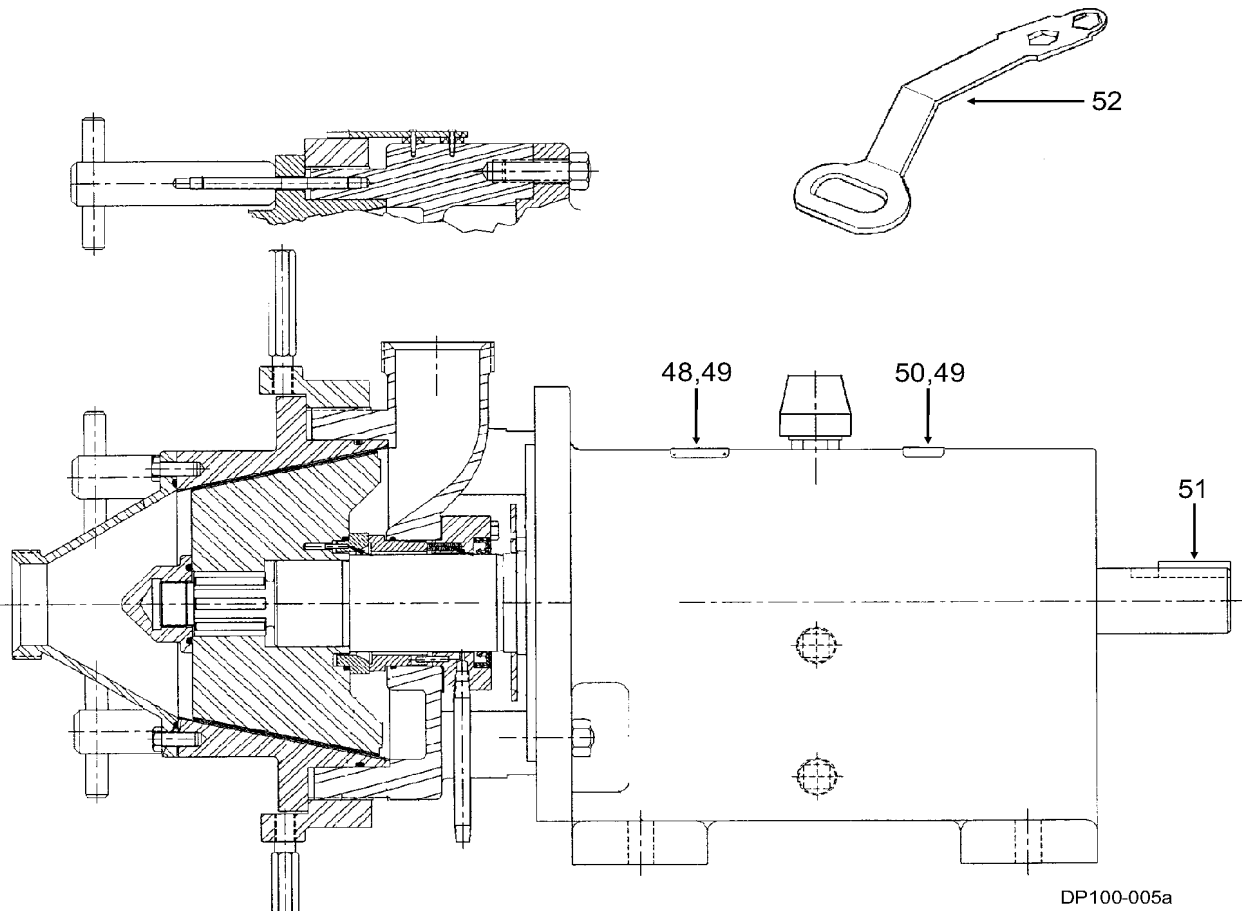
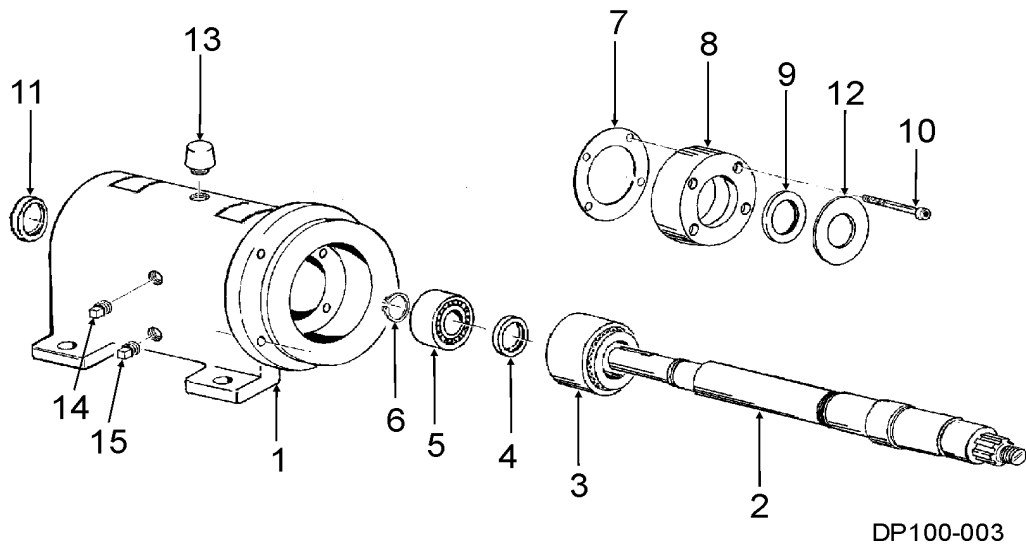


DP100-004

Colloid Mill Gear Case

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Gear Case	1	0MS005000	
2	Drive Shaft	1	0MS008000	
3	Front Bearing	1	0MS036300	
4	Bearing Locknut	1	0MS036N00	
5	Rear Bearing	1	0MS036000	
6	Retaining Ring	1	BD0087R00	
7	Front Bearing Retainer Gasket	1	0MS042B00	
8	Front Bearing Retainer	1	0MS080000	
9	Pump End Shaft Seal	1	0MS030100	
10	Capscrew	4	30-274	
11	Drive End Shaft Seal	1	0MS030000	
12	Slinger	1	0MS045000	
13	Breather	1	115800	
14	Level Indicator	1	115799	
15	Drain Plug	1	115798	
48	Nameplate, Sanitary	1	001061002	
49	RHDS	6	30-355	
50	Caution Label, Yellow	1	33-62	
51	Key	1	000037003	
52	Rotor Nut Wrench	1	109896	

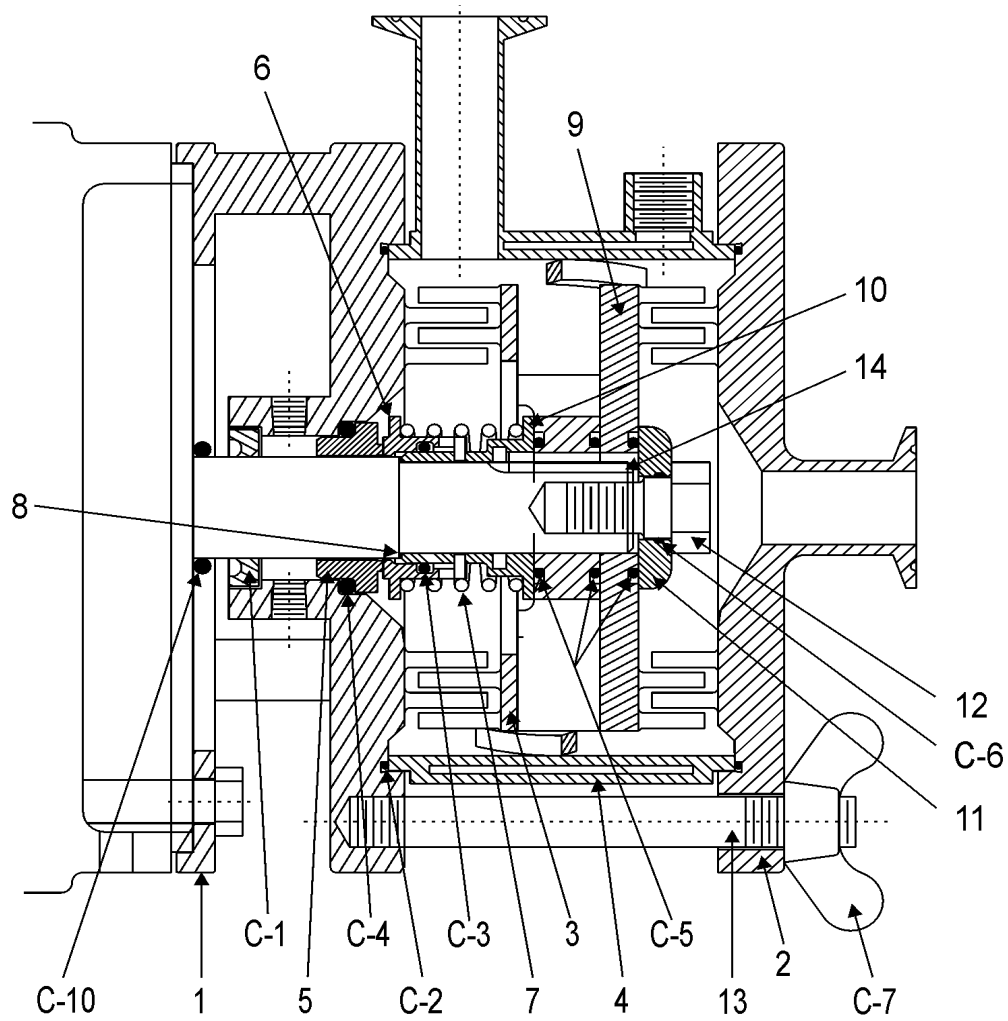
Colloid Mill Gear Case Diagram



6" CR Mixer

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
C-1	Shaft Seal	1	700030A87	
C-2	O-ring-164, FDA Nitrile/Buna	2	N70164	
	O-ring-164, FDA EPDM	2	E70164	
	O-ring-164, FDA FKM	2	V70164	
C-3	O-ring-220, FDA Nitrile/Buna	1	N70220	
	O-ring-220, FDA EPDM	1	E70220	
	O-ring-220, FDA FKM	1	V70220	
C-4	O-ring-327, FDA Nitrile/Buna	1	N70327	
	O-ring-327, FDA EPDM	1	E70327	
	O-ring-327, FDA FKM	1	V70327	
C-5	O-ring-222, FDA Nitrile/Buna	3	N70222	
	O-ring-222, FDA EPDM	3	E70222	
	O-ring-222, FDA FKM	3	V70222	
C-6	O-ring-018, FDA Nitrile/Buna	1	N70018	
	O-ring-018, FDA EPDM	1	E70018	
	O-ring-018, FDA FKM	1	V70018	
C-7	Wing Nut	4	710293	
C-10	O-ring-216, Buna (slinger ring)	1	N70216	
	O-ring-216, EPDM (slinger ring)	1	E70216	
1	Turbine Head	1	LL44927B	
2	6" CR Outlet Head, 1" S-line	1	LL34474C	
3	Turbine	1	LL34475B	
4	CR Mixer Tube, 1" S-line, with jacket	1	LL34477D	
	CR Mixer Tube, 1" S-line, no jacket	1	LL34477F01	
5	Seal Ring, carbon	1	LL18717A1	
	Seal Ring, ceramic	1	LL18717C1	
6	Seal Body, tungsten carbide faced	1	LL18747H	
	Seal Body, aluminum oxide faced	1	LL18747G	
7	Spring	1	117729	
8	Gasket	1	LL113220	
9	Turbine Disc	1	LL34476B	
10	Sleeve	1	LL23952B	
11	Retaining Washer	1	113805B	
12	Lock Bolt	1	113806B	
13	Special Stud	4	112270A33	
14	Key (supplied with motor)	1	-	
15	Non-code Nameplate	1	LL19566	

6" CR Mixer Diagram

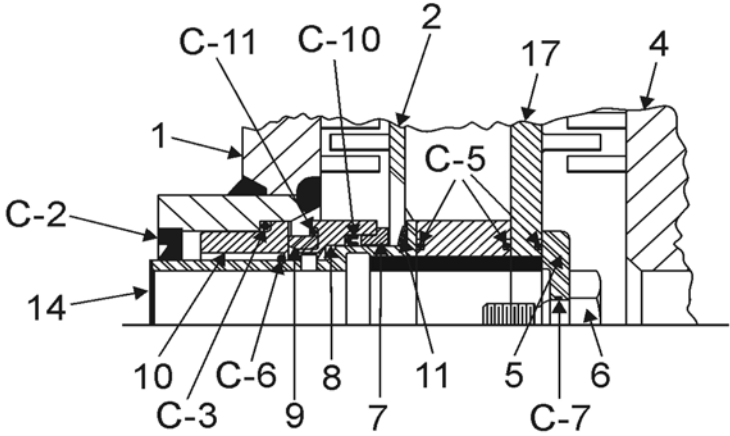
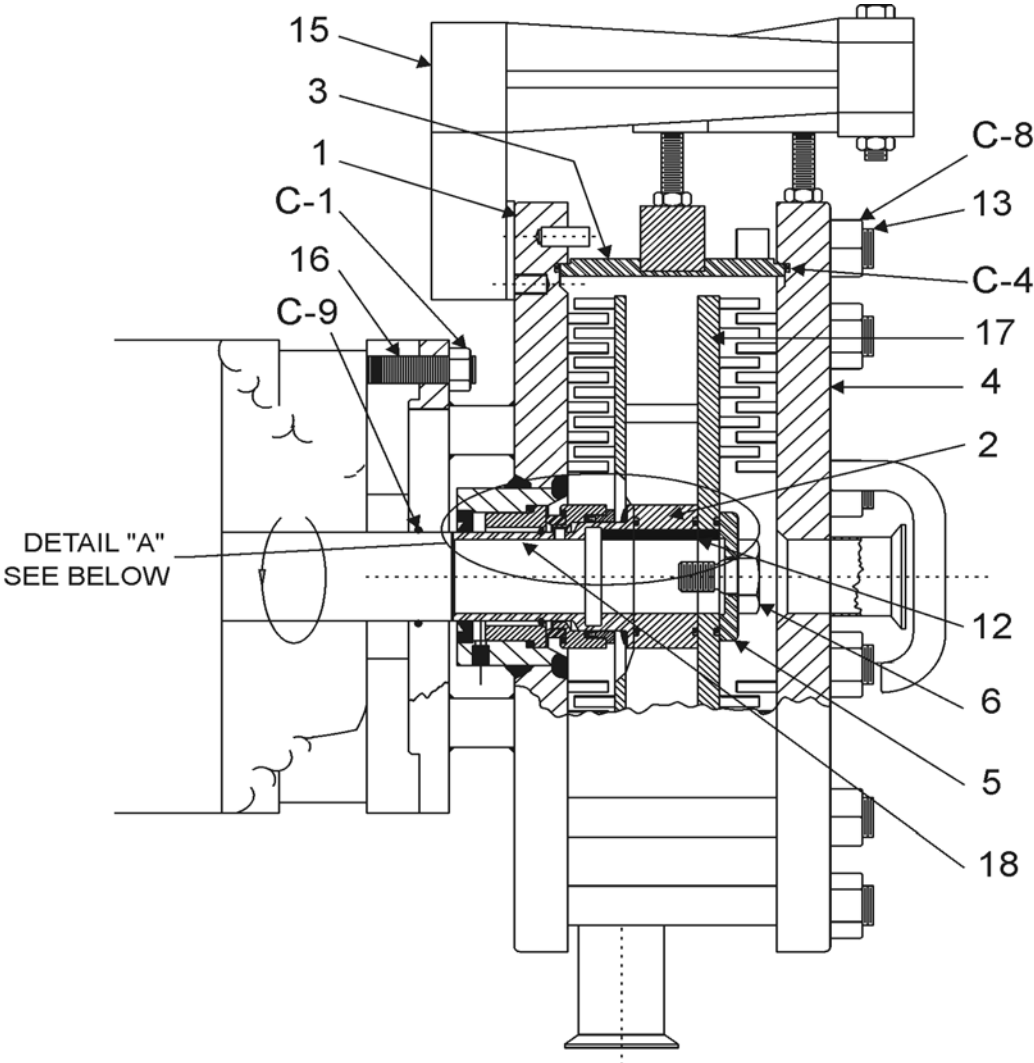


DP100-006

16" CR Mixer

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
C-1	Hexagon Nut	4	712585	
C-2	Shaft Seal, Nitrile/Buna	1	700030A42	
C-3	O-ring-339, FDA Nitrile/Buna	1	N70339	
	O-ring-339, FDA EPDM	1	E70339	
	O-ring-339, FDA FKM	1	V70339	
C-4	O-ring-281, FDA Nitrile/Buna	2	N70281	
	O-ring-281, FDA EPDM	2	E70281	
	O-ring-281, FDA FKM	2	V70281	
C-5	O-ring-231, FDA Nitrile/Buna	3	N70231	
	O-ring-231, FDA EPDM	3	E70231	
	O-ring-231, FDA FKM	3	V70231	
C-6	O-ring-226, FDA Nitrile/Buna	1	N70226	
	O-ring-226, FDA EPDM	1	E70226	
	O-ring-226, FDA FKM	1	V70226	
C-7	O-ring-020, FDA Nitrile/Buna	1	N70020	
	O-ring-020, FDA EPDM	1	E70020	
	O-ring-020, FDA FKM	1	V70020	
C-8	Hexagon Nut	12	300563	
C-9	O-ring-228, Nitrile/Buna (slinger ring)	1	N70228	
C-10	U-cup, FDA Nitrile/Buna	1	700014A05	
	U-cup, FDA EPDM	1	700014A03	
	U-cup, FDA FKM	1	700014A08	
C-11	O-ring-235, FDA Nitrile/Buna	1	N70235	
	O-ring-235, FDA EPDM	1	E70235	
	O-ring-235, FDA FKM	1	V70235	
C-12	Drive Screw (for nameplates, not shown)	8	920295	
1	Drive End Turbine	1	401802C	
2	Turbine Hub	1	LL44917A	
3	CR Mixer Tube, 2" S-line, no jacket	1	404218	
	CR Mixer Tube, 2" S-line, with jacket	1	402153B04	
4	Opposite Drive End Turbine Head, 2" S-line	1	402154D	
5	Retaining Washer	1	113794A	
6	Lock Bolt	1	113795A	
7	Seal Backup Ring	1	110203C1	
8	Seal Body	1	110893A	
9	Seal Body Insert, carbon	1	110892A5	
	Seal Body Insert, ceramic	1	110892C1	
10	Seal Head Insert, ceramic	1	110891A	
	Seal Head Insert, tungsten carbide	1	110891C	
11	Wavy Washer	2	LL19625A	
12	Key	1	LL102191	
13	Special Stud	12	112270A35	
14	Gasket	1	113300	
15	Hinge Link Assembly	1	402157	
16	Special Stud	4	112270A34	
17	Turbine Plate	1	LL44918A	
18	Mixer Sleeve	1	301802B	
19	Logo Nameplate (not shown)	1	123710	
20	Non-code Nameplate (not shown)	1	LL19566	

16" CR Mixer Diagram



DETAIL "A"

DP100-007

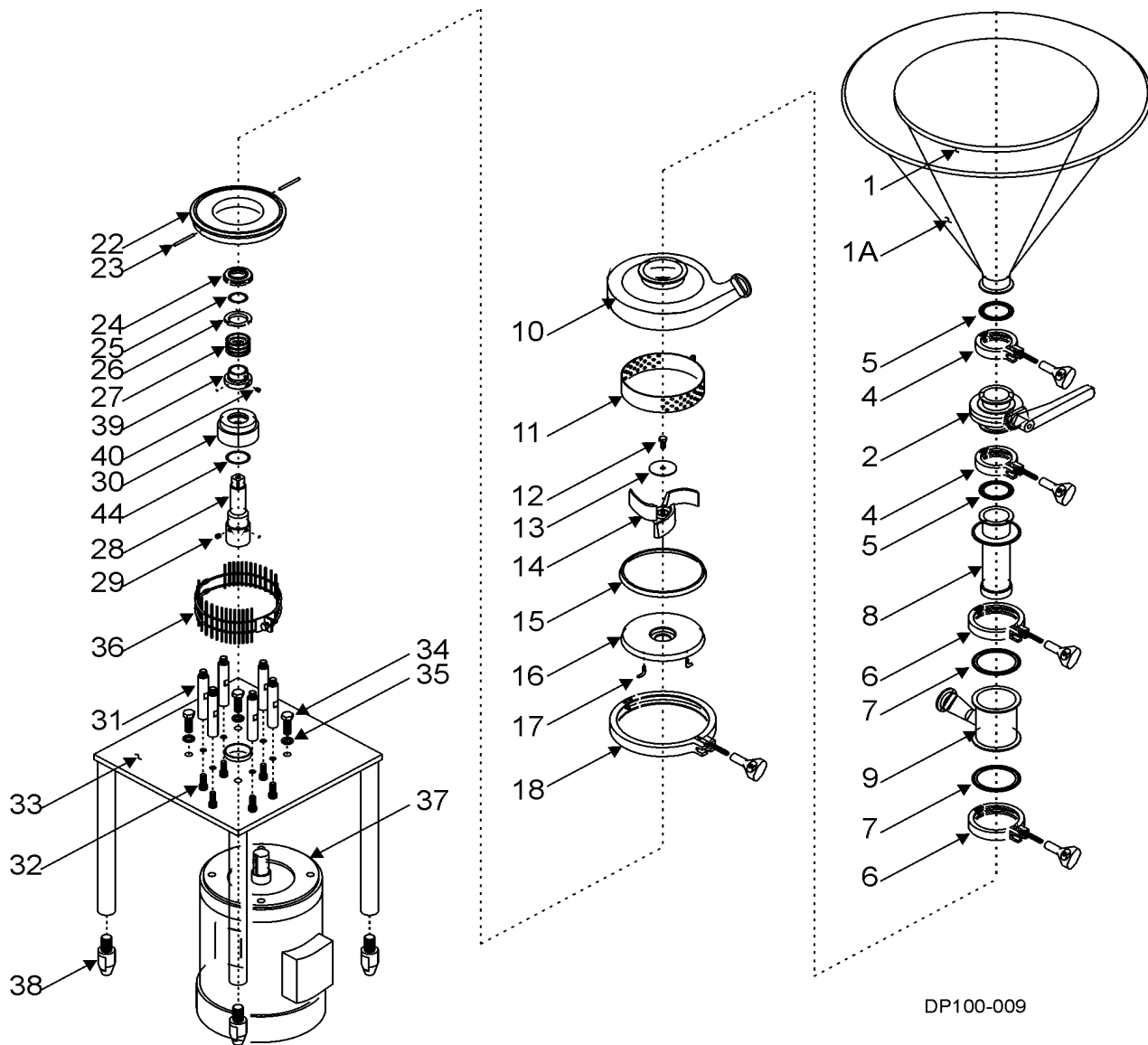
Puriti DTL Blender Model F2116MD

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Hopper, 40 Degree	1	60306	
1A	Hopper, 60 Degree	1	60307	
2	Butterfly Valve, Manual S-51	1	60685	
4	Clamp	2	119-30	
5	Gasket, BUNA 2"	2	20-3	
6	Clamp	2	P119-287	
7	Gasket, BUNA 3"	2	20-5	
8	Diffuser and Suction Tube	1	60309	
9	Inlet Adapter, 3" x 1"	1	60310	
10	Casing,	1	60868	
11	Screen	1	60869	
12	Capscrew, Impeller, 18-8SS	1	30-151	
13	Washer, Impeller	1	60314	
14	Impeller	1	60315	
15	Casing Gasket	1	60101	
16	Backplate "D"	1	60316	
17	Pin, Backplate	2	60013	
18	Clamp, Casing	1	60081	
22	Ring Adapter	1	60320	
23	Pin, 3/16 x 2", Adapter	2	60634	
24	Carbon Seal	1	60086	
25	O-ring Seal, BUNA	1	N70216	
26	Cup	1	60089	
27	Spring	1	60092	
28	Stub Shaft	1	60865	
29	Setscrew, Stub Shaft	2	30-436	
30	Deflector	1	60867	
31	Spacer	6	60324	
32	Capscrew, Spacer	6	30-30	
33	Base	1	60326	
34	Capscrew, Motor, 18-8SS	4	30-103	
35	Lockwasher, 1/2", Motor	4	43-16	
36	Seal Guard	1	60329	
37	Motor C- Face, Standard 4 Poles 3 H.P.	1	2116	
38	Leg, Adjustable	4	60611	
39	Drive Collar	1	60095R1	
40	Setscrew, Drive Collar	2	30-178	
44	O-ring, Seal, BUNA	1	N70222	

Notes:

1. Complete Assembly

Puriti DTL Blender Model F2116MD Diagram



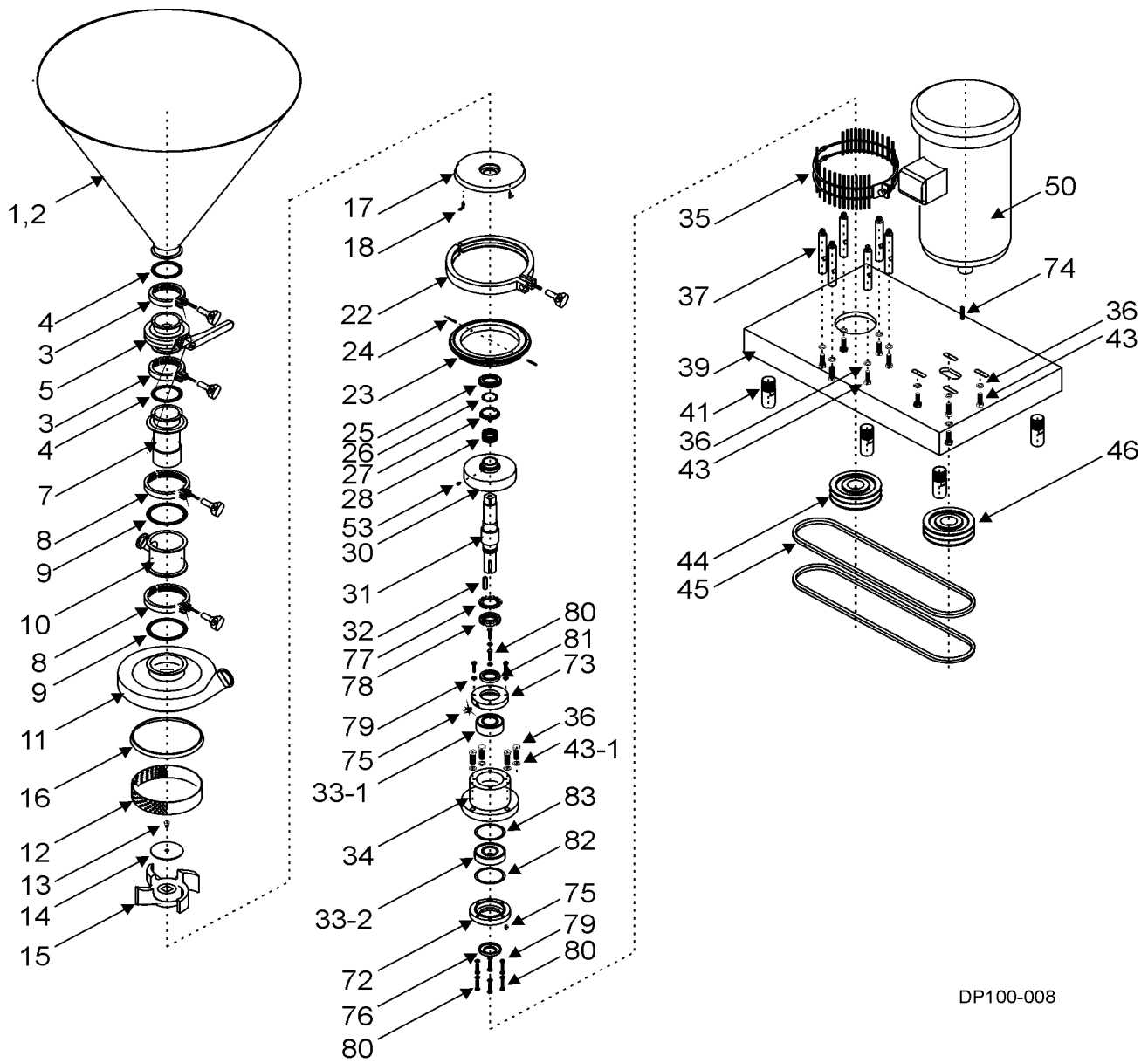
Puriti DTL Blender Model F3218MD

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
1	Hopper, 40 Degree	1	60343	
2	Hopper, 60 Degree	1	60344	
3	Clamp	2	119-34	
4	Diffuser Gasket	2	20-5	
5	Butterfly Valve, S-51	1	60686	
7	Diffuser and Suction Tube	1	60346	
8	Clamp	2	119-49	
9	Adapter Gasket	2	20-6	
10	Inlet Adapter Housing, 4" x 1-1/2"	1	60347	
11	Casing, 4" x 2"	1	60870	
12	Screen	1	60871	
13	Capscrew	1	30-656	
14	Washer, Impeller, Special	1	60351	
15	Impeller	1	60352	
16	Casing Gasket, BUNA	1	60103	
17	Backplate "D"	1	60353	
18	Pin, Backplate	2	60013	
22	Clamp	1	60082	
23	Adapter Ring	1	60354	
24	Pin, 3/16 x 2", Adapter	2	30-434	
25	Carbon Seal	1	60087	
26	O-ring Seal, BUNA	1	N70222	
27	Cup	1	60090	
28	Spring Seal	1	60093	
30	Collar Deflector	1	60355	
31	Shaft	1	60356	
32	Key Pulley/Shaft	1	60357	
33	Bearing, Sealed	1	030036000	
	Bearing, Sealed	1	60358	
34	Housing, Bearing	1	60359	
35	Seal Guard with capscrew and nut	1	60360	1
36	Lockwasher, 1/2", Housing Bearing	4	43-16	
	Lockwasher, 1/2", Spacer	6	43-16	
	Lockwasher, 1/2", Motor	4	43-16	
37	Spacer	6	60362	
39	Blender Base	1	60364	
41	Leg, Adjustable	4	60330	
43	Capscrew	6	30-103	
	Capscrew	4	30-103	
	Capscrew	4	60863	
44	Pulley	1	30-127	
45	Drive Belt	2	60367	
46	Pulley	1	60368	
50	Motor 254TC 15 HP, 1700 RPM	1	3218	
53	Setscrew	2	30-178	

Notes:

1. Complete Assembly

Puriti DTL Blender Model F3218MD Diagram



DP100-008

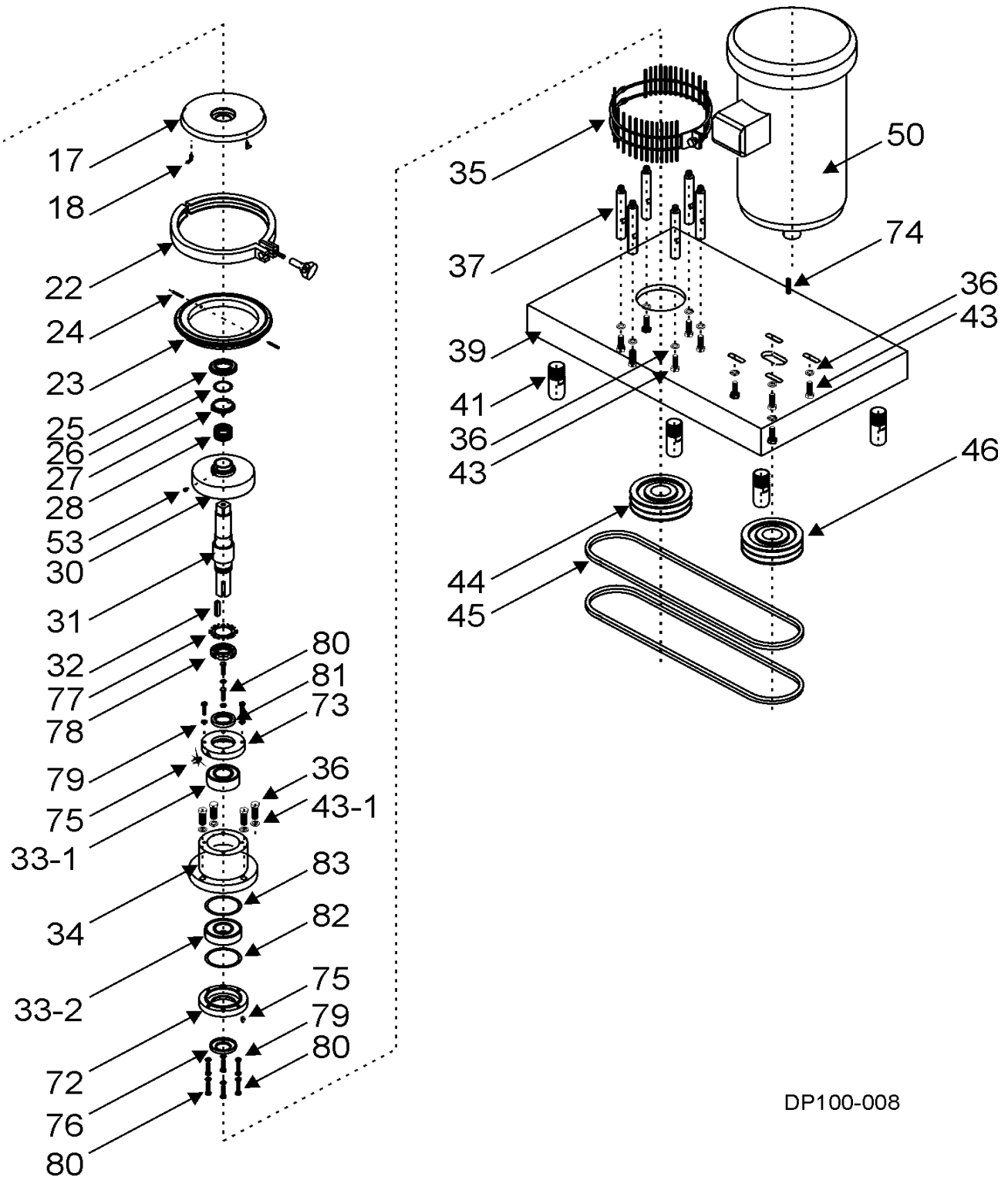
Puriti DTL Blender Model F3218MD

ITEM NO.	DESCRIPTION	QTY	PART NO.	NOTES
72	Posterior Plate	1	60603	
73	Interior Plate	1	60604	
74	Key Pulley/Motor	1	60701	
75	Greaser, 1/8"	2	BD0092001	
76	Retainer Posterior, 13844	1	60606	
77	Star Washer	1	60607	
78	Safety Nut	1	60608	
79	Lockwasher, Retainer Backplates, 1/4" SS	10	43-22	
80	Capscrew	10	30-102	
81	Retainer Interior	1	60883	
82	Shim O.D. 3.5" Thick 0.005"	*	60744	
83	Shim O.D. 3.5" Thick 0.010"	*	60747	

Notes:

* Variable

Puriti DTL Blender Model F3218MD Diagram



DP100-008

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