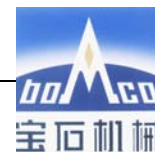


**F-1600 TRIPLEX PUMP**

# **PARTS BOOK**



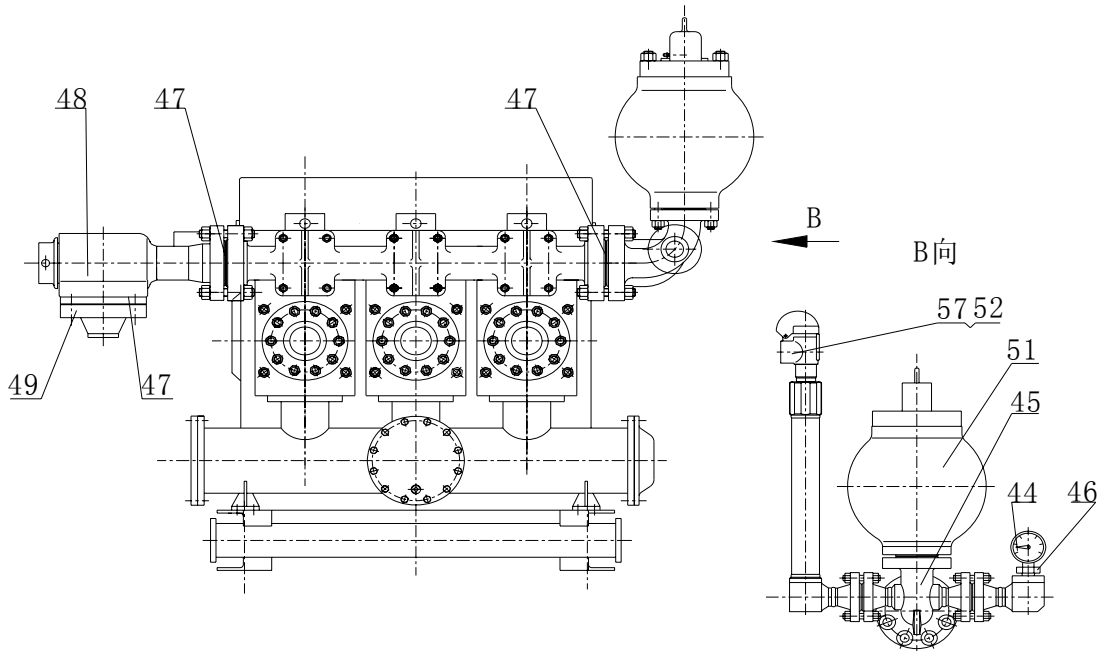
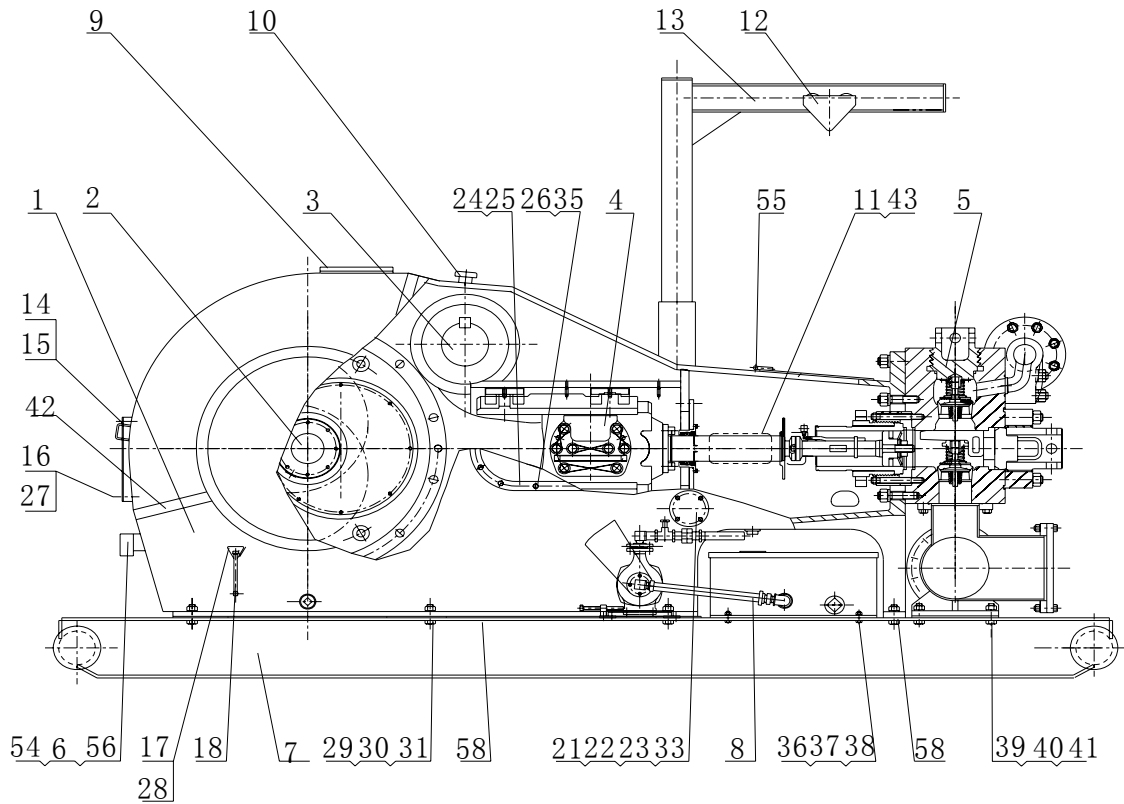
**December,2003**



## PARTS BOOK DRAWINGS LIST

DRAWING DESCRIPTION	DRAWING NO. OR PART NO.	PAGE
F-1300/1600 GENETAL ASSEMBLY	AH36001-00	3
	AH37001-00	
F-1300/1600 CRANKSHAFT ASSEMBLY	AH36001-02.00	6
	AH37001-01.00	
F-1300/1600 PINION SHAPE ASSEMBLY	AH36001-03.00	9
	AH37001-02.00	
F-1300/1600 CROSSHEAD ASSEMBLY	AH36001-04.00	11
F-1300/1600 FLUID END ASSEMBLY	AH36001-05A.00	13
F-1300/1600 LUBRICATION ASSEMBLY	AH36001-06C.00	16
F-1300/1600 PISTON & LINER WASH	AH36001-08C.00	19
F-1300/1600 SUCTION DESURGER	AH33001-05.35A.00	21
F-1300/1600 DISCHARGE ASSEMBLY & ACC' Y MANIFOLD		22
KB-75 PULSATION DAMPENER	AH33002-00	23
PULSATIN DAMPENER CHARGING HOSE & INSTRUCTIONS		
	AH33001-31.10.00	25
F-1300/1600 SPARE PARTS LIST		27
F-1300/1600 TOOL LIST		28

# F-1300/1600 GENERAL ASSEMBLY

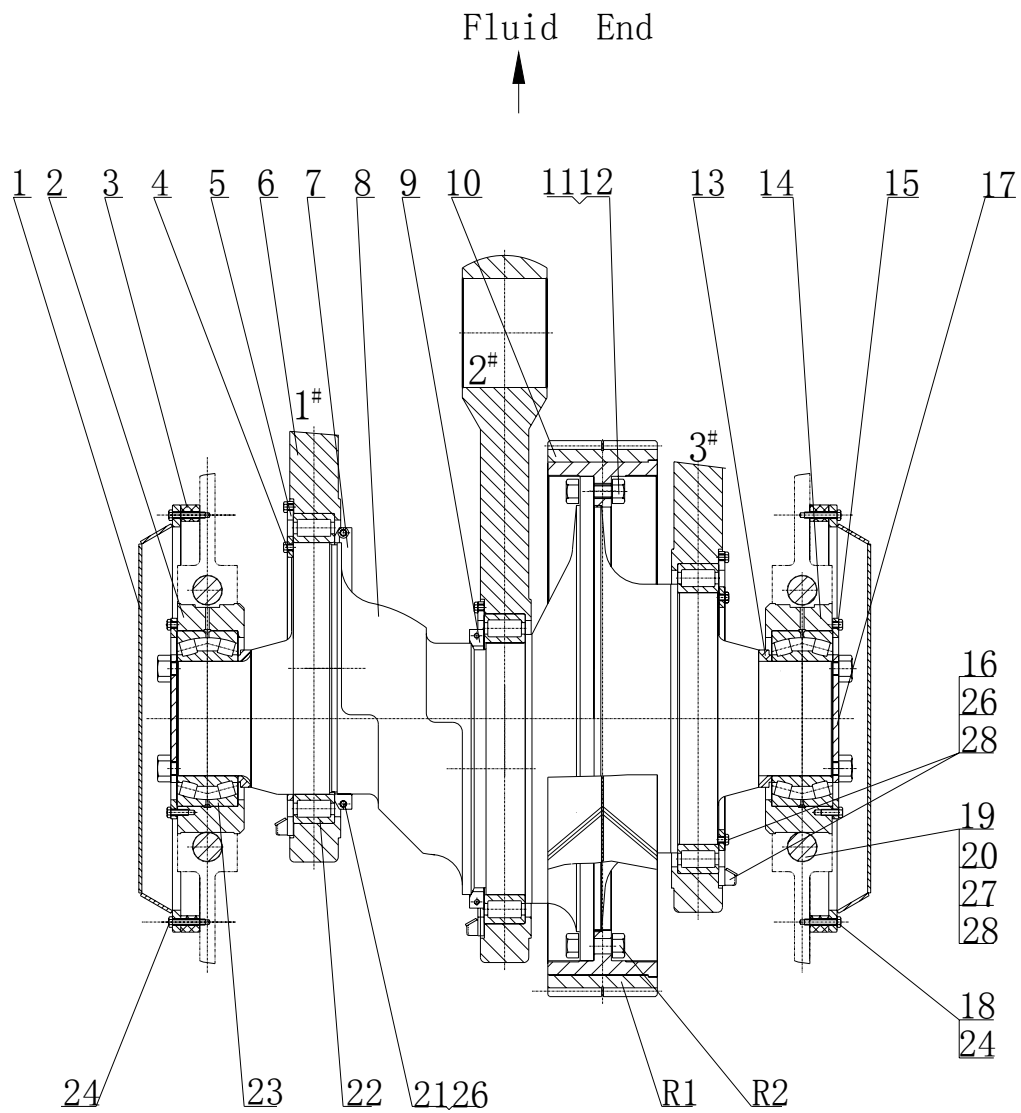


## F-1300/1600 MUD PUMP

ITEM No.	QTY.	DESCRIPTION	PART No.	
			F-1300	F-1600
1	1	Frame Assembly	AH36001-01.00D	AH3600-01.00D
2	1	Crank Shaft	AH36001-02.00	AH37001-01.00
3	1	Pinion Shaft	AH36001-03.00	AH37001-02.00
4	3	Crosshead Assembly	AH36001-04.00	AH36001-04.00
5	1	Fluid End Assembly	AH36001-05A.00	AH36001-05A.00
6	1	Lubrication Assembly	AH36001-06C.00	AH36001-06C.00
7	1	Skid	AH36001-07K.00	AH36001-07K.00
8	1	Piston & Liner	AH36001-08C.00	AH36001-08C.00
9	1	Gasket ,Inspect Door	AH33001-09	AH33001-09
10	1	Breather Cap	T515-1001.00	T515-1001.00
11	2	Bs Name Plate	AH36001-09A	AH37001-03A
12	1	Crane	AH36001-10.00	AH36001-10.00
13	1	Crane	AH36001-11A.00	AH36001-11A.00
14	1	Cover Plate	AH36001-12.00	AH36001-12.00
15	1	Gasket	AH36001-13	AH36001-13
16	14	Bolt M12×25	GB5780-86	GB5780-86
17	2	Oil Level Indication	AH33001-17	AH33001-17
18	2	Oil Lever Indicator	AH33001-18.00	AH33001-18.00
21	2	Clean Out Cover (III)	AH33001-22.00	AH33001-22.00
22	2	Gasket	AH36001-19	AH36001-19
23	8	Bolt M12×35	GB5780-86	GB5780-86
24	2	Crosshead Door	AH36001-15A	AH36001-15A
25	2	Gasket	AH36001-16	AH36001-16
26	28	Bolt M16×24	GB5780-86	GB5780-86
27	14	Washer 12	GB848-85	GB848-85
28	6	Rivet 3×10	GB827-76	GB827-76
29	28	Bolt M27×90	GB5780-86	GB5780-86

30	8	Nut M27	GB41-86	GB41-86
31	8	Washer 27	GB93-87	GB93-87
33	22	Washer 12	GB848-85	GB848-85
35	28	Washer 16	GB848-85	GB848-85
36	4	Bolt M16×60	GB5780-86	GB5780-86
37	6	Nut M16	GB41-86	GB41-86
38	4	Washer 16	GB93-87	GB93-87
39	8	Bolt M24×110	GB5780-86	GB5780-86
40	8	Nut M24	GB41-86	GB41-86
41	8	Washer 24	GB93-87	GB93-87
42	1	Rubber Bar	40×10×5800	
43	8	Cap Screw M4×16	GB818-85	GB818-85
44	1	Double Scale	Yk-150 ZG1 1/2"	Yk-150 ZG1 1/2"
45	1	Discharge Elbow	AH36003-11.00	AH36003-11.00
46	1	Screw Plug ZG1 1/2	Q/ZB286.6	Q/ZB286.6
47	3	Ring Gasket R44	T58-5002	T58-5002
48	1	Discharge Strainer	AH33014-04.00	AH33014-04.00
49	1	Flange	T58-1002	T58-1002
50	1	Tool	AH36001-17.00	AH36001-17.00
51	1	KB-75 Pulsation	AAH33002-00A	AAH33002-00A
52	1	JA-3shear Relief	AH33003-00	AH33003-00
53	1	Spare Parts	AH36001-18.00	AH36001-18.00
55	1	Cover Assy.	AH36001-21B.00	AH36001-21B.00
57	10ml	Glue for Screw Lock	243	243
58		Adjusting Shim	AH36001-23	AH36001-23

### F-1300/1600 CRANKSHAFT ASSY.



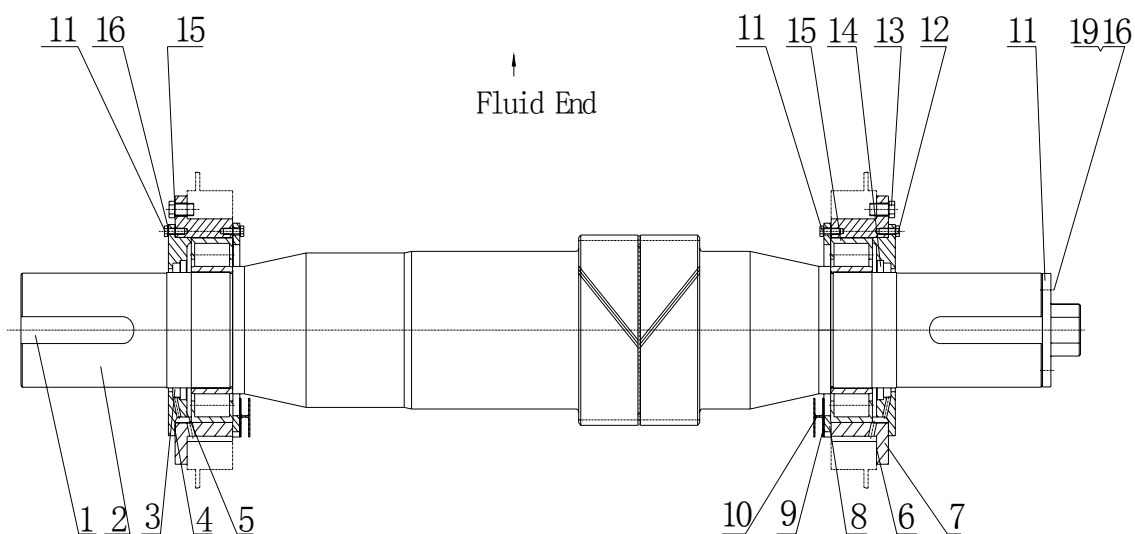
ITEM No.	QTY.	DESCRIPTION	PART No.	
			F-1300	F-1600
1	2	Main Bearing Cover	AH36001-02.01C.00	AH37001-01.01C.00
2	1	Bearing Carrier, Right	AH36001-02.02	AH37001-01.02
3	2	Gasket Main Bearing Cover	AH36001-02.03	AH36001-02.03
4	2	Inner Race Retainer	AH36001-02.04	AH36001-02.04
5	3	Outer Race Retainer	AH36001-02.05	AH37001-01.03
6	3	Eccentric Strap	AH36001-02.06	AH37001-01.04
7	1	Inner Race Retainer (I)	AH36001-02.07	AH36001-02.07
8	1	Crankshaft	AH36001-02.08A.00	AH36001-02.08A.00
9	1	Inner Race Retainer (II)	AH36001-02.09	AH36001-02.09
10	1	Eccentric Ring Gear	AH36001-02.10D.00	AH37001-01.05D.00
11	12	Capscrew M39× 3-6g×140	T52-3007	T52-3007
12	2	Spacer, Main Bearing	AH36001-02.12	AH36001-02.12
13	1	Bearing Carrier (Left)	AH36001-02.13	AH3701-01.06
14	2	Outer Race Retainer	AH36001-02.14	AH37001-01.07
15	2	Inner Race Retainer	AH36001-02.15	AH36001-02.15
16	4	Housing Bolt Main Bearing	AH36001-02.16C	AH36001-02.16C
17		Shim Set	AH36001-02.17	AH36001-02.17
18	2	Capscrew M16×120	T52-6006K	T52-6006K
19	12	Lock Nut M39×3-6H	T57-3005.0	T57-3005.0



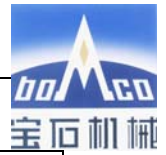
20	72	Capscrew M16×40	T57-7003K	T57-7003K
21	28	Capscrew M16×45	GB5780-86	GB5780-86
22	3	Eccentric Bearing	AH36001-02.19.00	AH37001-01.08.00
23	2	Bearing 3G3760HY	AH36001-02.20.00	AH37001-01.09.00
24	28	Washer 16	GB848-85	GB848-85
25	40m	Lock Wire $\Phi$ 1.5	GB343-82	GB343-82
26	3m	Lock Wire $\Phi$ 1.5	GB343-82	GB343-82
27	90ml	Loctite	243	243
28	2	Capscrew M16×100	T52-6004K	T52-6004K



## F-1300/1600 PINION SHAFT ASSY.

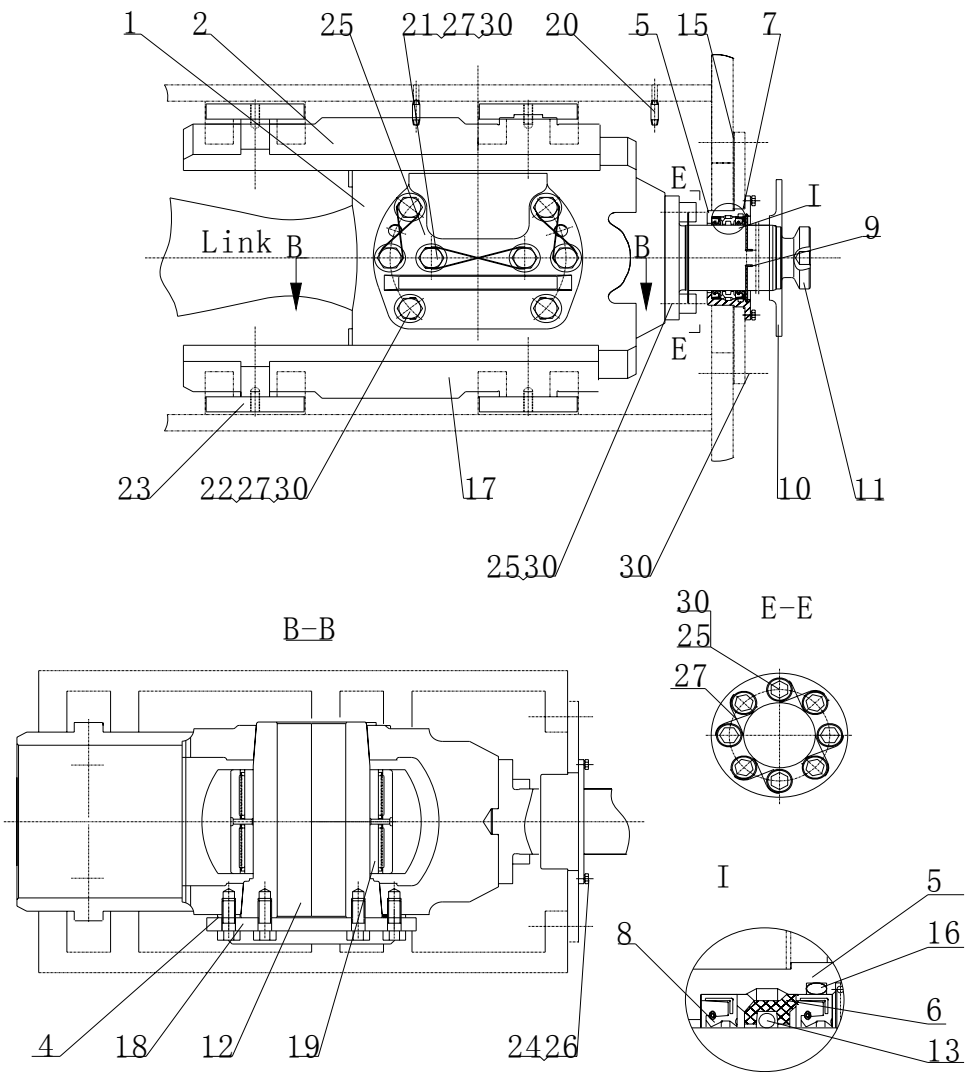


ITEM No.	QTY.	DESCRIPTION	PART No.	
			F-1300	F-1600
1	1	Key 2" × 2" × 11 3/8"	AH36001-03.01	AH36001-03.01
2	1	Pinion Shaft	AH36001-03.02	AH36001-02.01A
3	2	Oil Seal Wear Ring	AH36001-03.03	AH36001-03.03
4	2	Carrier	AH36001-03.04	AH36001-03.04
5	2	Gasket	AH36001-03.05	AH36001-03.05
6	2	Gasket	AH36001-03.06	AH36001-03.06
7	2	Bearing Carrier	AH36001-03.07A	AH36001-03.07A
8	2	Baffle	AH36001-03.10	AH36001-03.10
9	2	Gasket	AH36001-03.12	AH36001-03.12
10	2	Oil Collecting Box	AH36001-03.13.00	AH36001-03.13.00
11	24	Bolt M12×35	GB5782-86	GB5782-86
12	16	Bolt M22×50	GB5782-86	GB5782-86



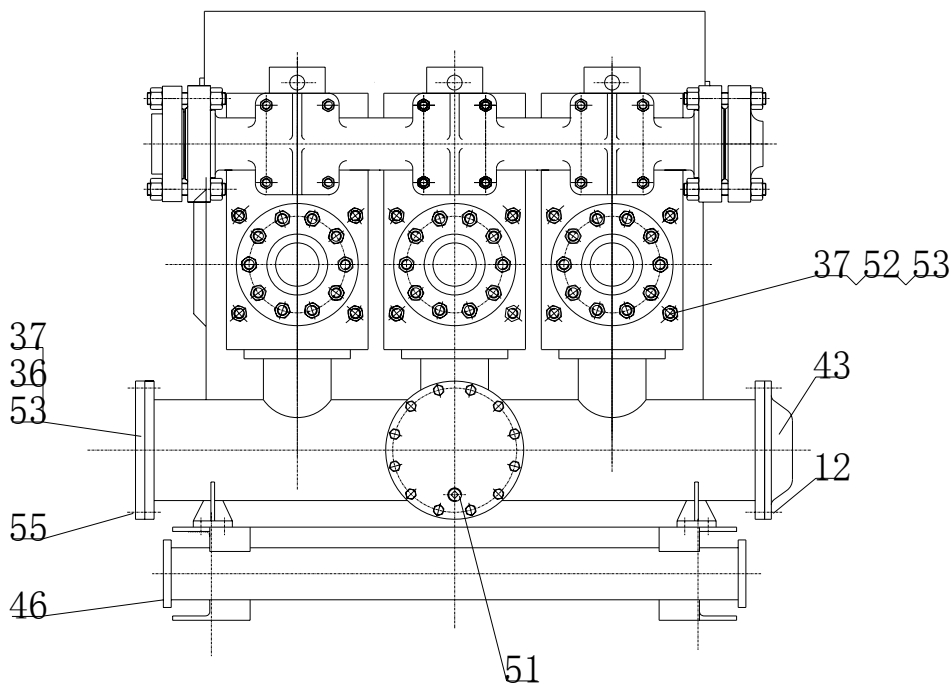
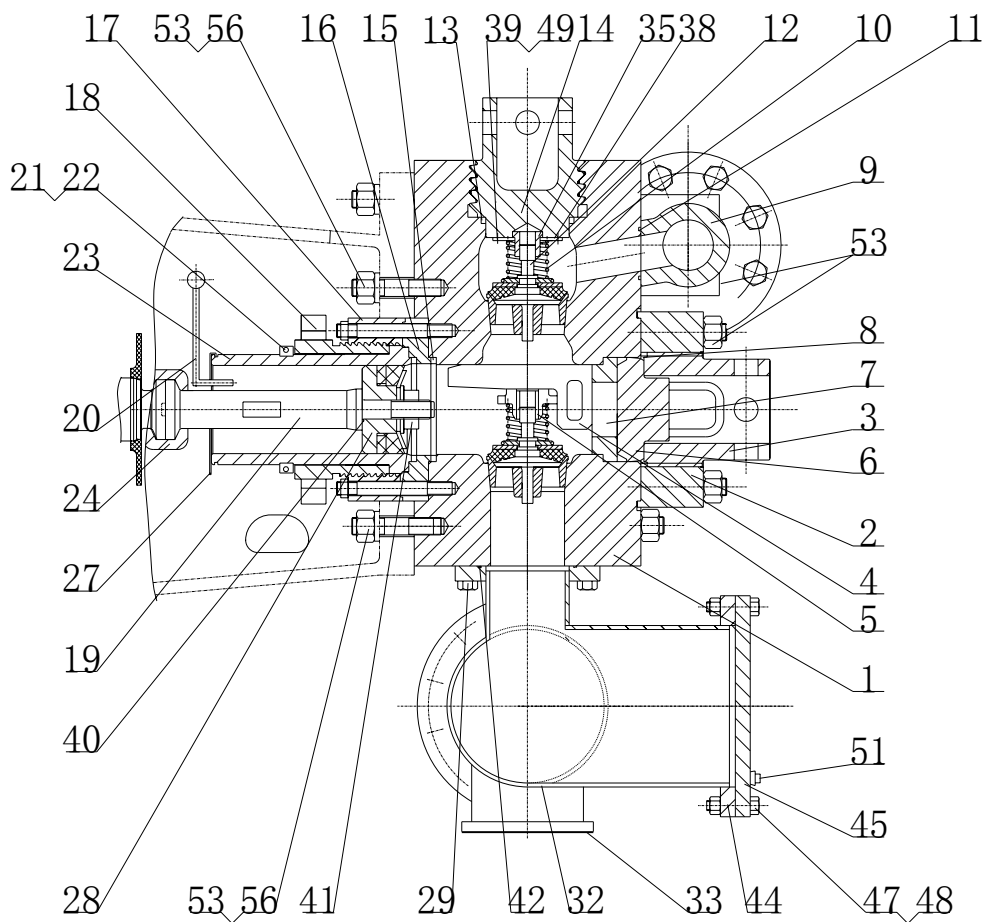
13	2	Oil Seal 9.125" ×10.375" ×0.625"	AH36001-03.08A	AH36001-03.08A
14	2	Bearing 4G32844H	AH36001-03.09	AH36001-03.09
15	16	Washer 22	GB93-87	GB93-87
16	24	Washer 12	GB93-87	GB93-87
17	1	Flange	AH36001-03.11	AH36001-03.11
18	3	Bolt M16×45	GB5783-86	GB5783-86
19	3	Washer 16	GB93-87	

### F-1300/1600 CROSSHEAD ASSY.



ITEM No.	QTY.	DESCRIPTION	PART No.
1	1	Crosshead	AH36001-04.01A
2	1	Crosshead Guide (Upper)	AH36001-04.02
3	8	Shim Set	AH36001-04.03A.00
4	2	Adjusting Shim	AH36001-04.04
5	1	Diaphragm Stuffing Box	AH360010-04.05
6	1	Sealing Ring	AH36001-04.21
7	1	O-Ring $\Phi 190 \times 3.55$	GB3452.1-82
8	2	Double Lip Oil Seal 5" $\times$ 6.25" $\times$ 0.625"	AH36001-04.08A
9	1	Lock Spring	AH36001-04.13
10	1	Fluid Baffle Back-Up Plate	AH36001-04.10
11	1	Crosshead Extension	AH36001-04.11
12	1	Crosshead Pin	AH36001-04.12A
13	1	O-Ring $\Phi 125 \times 7$	GB3452.1.-82
14	8	Bolt M20 $\times$ 65	T52-6005K
15	1	Gasket	AH36001-04.15
16	1	O-Ring $\Phi 160 \times 7$	GB3452.1-82
17	1	Crosshead Guide (Lower)	AH36001-04.17
18	1	Crosshead Pin Retainer	AH36001-04.18
19	1	Crosshead Bearing	AH36001-04.19
20	2	Male Connector NPT3/8" $\times$ 2	AH33001-04.07
21	2	Bolt M24 $\times$ 60	T52-7008K
22	6	Bolt M24 $\times$ 70	T52-7009K
23	8	Locking Plate	AH33001-04.13A
24	4	Bolt M10 $\times$ 25	GB5780-86
25	8	Bolt M24 $\times$ 65	GB70-85
26	4	Washer 10	GB93-87
27		Lock Wire $\Phi 1.6$	GB4240-84
30	25ml	Loctite ( Lock + Tight)	243

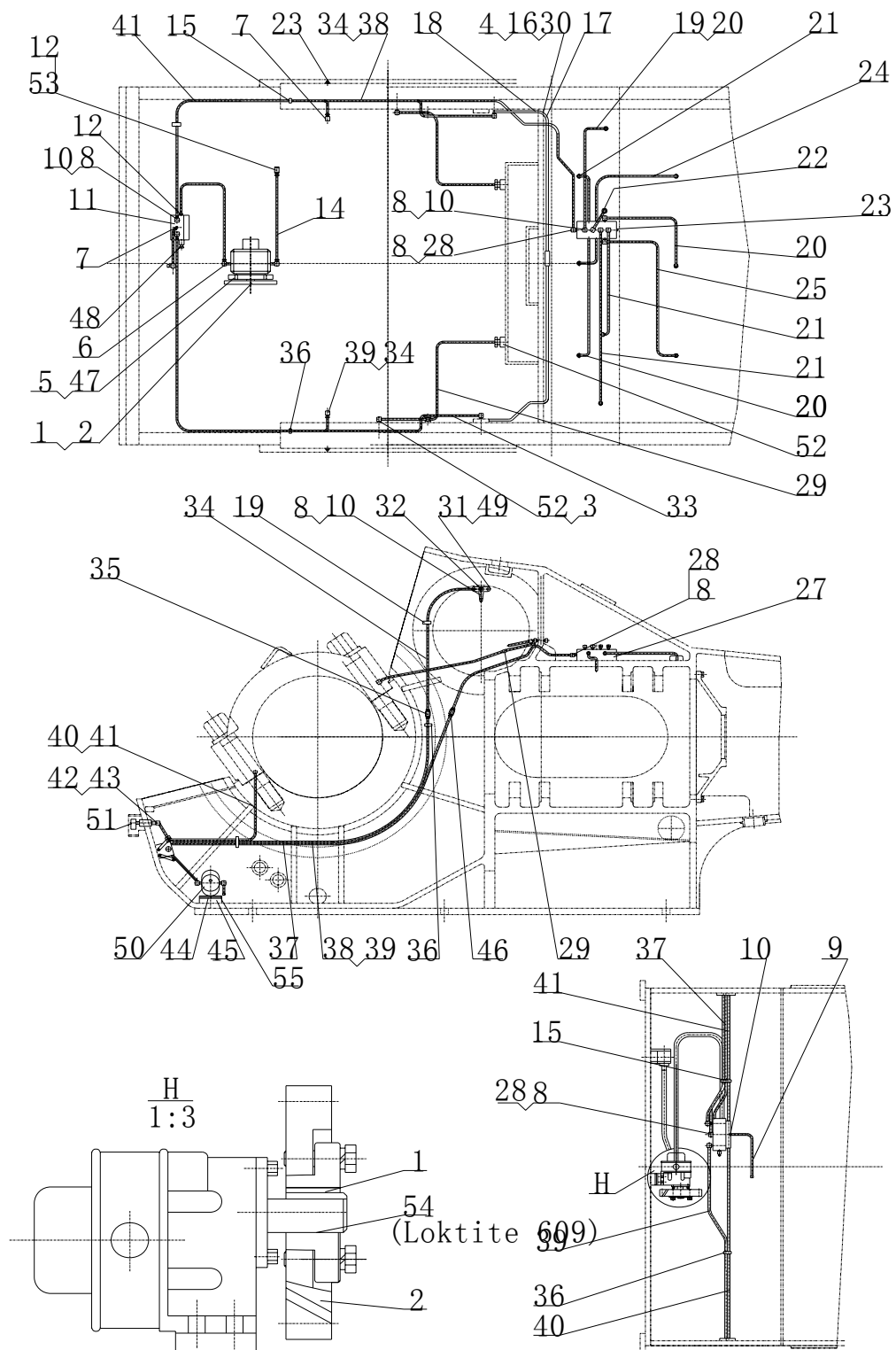
### F-1300/1600 FLUID END ASSY.



ITEM No.	QTY	DESCRIPTION	PART No.
1	3	Fluid End Studded Assy.	AH36001-05.01A.00
2	3	Thread Ring	AH36001-05.02
3	3	Cylinder Cover	AH36001-05.03
4	3	Flashboard Assy.	AH36001-05A.04.00
5	3	Valve Guide (Lower)	AH36001-05A.05.00
6	3	Cylinder Head	AH36001-05A.06.00
7	3	Alignment Ring	AH36001-05A.07
8	3	Cylinder Head Seal	AH36001-05.08
9	1	Discharge Manifold	AH36001-05.09
10	6	Valve Spring	AH33001-05.16A
11	3	O-Ring $\Phi 95 \times 5.3$	GB3452.1-82
12	6	Valve Assy.	AH36001-05.12A.00
13	3	Valve Cover Seal	AH36001-05.13
14	3	Valve Cover	AH36001-05.14A
15	3	Liner Seal	AH36001-05.15
16	3	Wear Plate	AH36001-05.16A
17	3	Liner Flange	AH36001-05.17
18	3	Liner Lock	AH36001-05.18.00
19	3	Piston Rod	AH36001-05.19A
20	1	Spray Pipe Assy.	AH36001-05.20A.00
21	3	O-Ring $\Phi 200 \times 7$	GB3452.1-82
22	3	Liner Locking Ring	AH36001-05.22
23	3	Liner	AH36001-05.23A.00
24	3	Piston Rod Clamp	AH36001-05.24.00
27	3	Liner End Cover	AH36001-05.27
28	3	Piston	AH36001-05.28.00
29	18	Bolt M22 $\times$ 65	GB5782-86
32	1	Suction Manifold	AH36001-05.32A.00
33	4	Shim Set	AH36001-05..33A.00
35	3	Valve Guide (Upper)	AH33001-05.12
36	16	Bolt M39 $\times$ 270	T53-1003
37	44	Nut M39 $\times$ 8	T57-2011
38	3	Retainer	AH33001-05.14
39	12	Bolt M10 $\times$ 20	AH33001-05.15A
40	3	Piston Seal	AH33001-05.20A
41	3	Piston Nut	T57-3005.0
42	3	O-Ring $\Phi 185 \times 7$	GB3452.1-82
43	1	Suction Damper	AH33001-05.35A.00
44	3	O-Ring $\Phi 345 \times 7$	GB3452.1-82
45	1	Suction Flange (I)	AH33001-05.39

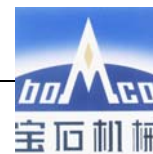
46	1	Suction Flange (II)	AH33001-05.40
47	36	Nut M27	8841-86
48	24	Bolt M27×90	GB5780-86
49	1	Stainless Wire $\Phi 1.6 \times 1830$	GB4240-84
51	1	Screw Plug NPT 1-1/2	T56-1007
52	12	Stud M39×563	AH36001-05.35B
53	190ml	Locitite 243	243
54	1	Suction Hole Baffle	T55-1006
55	1	Discharge Hole Baffle	T55-1008
56	30	Washer 39	AH36001-05.39
57	12	Bolt M27×80	GB5780-86

### F-1300/1600 LUBRICATION ASSY.



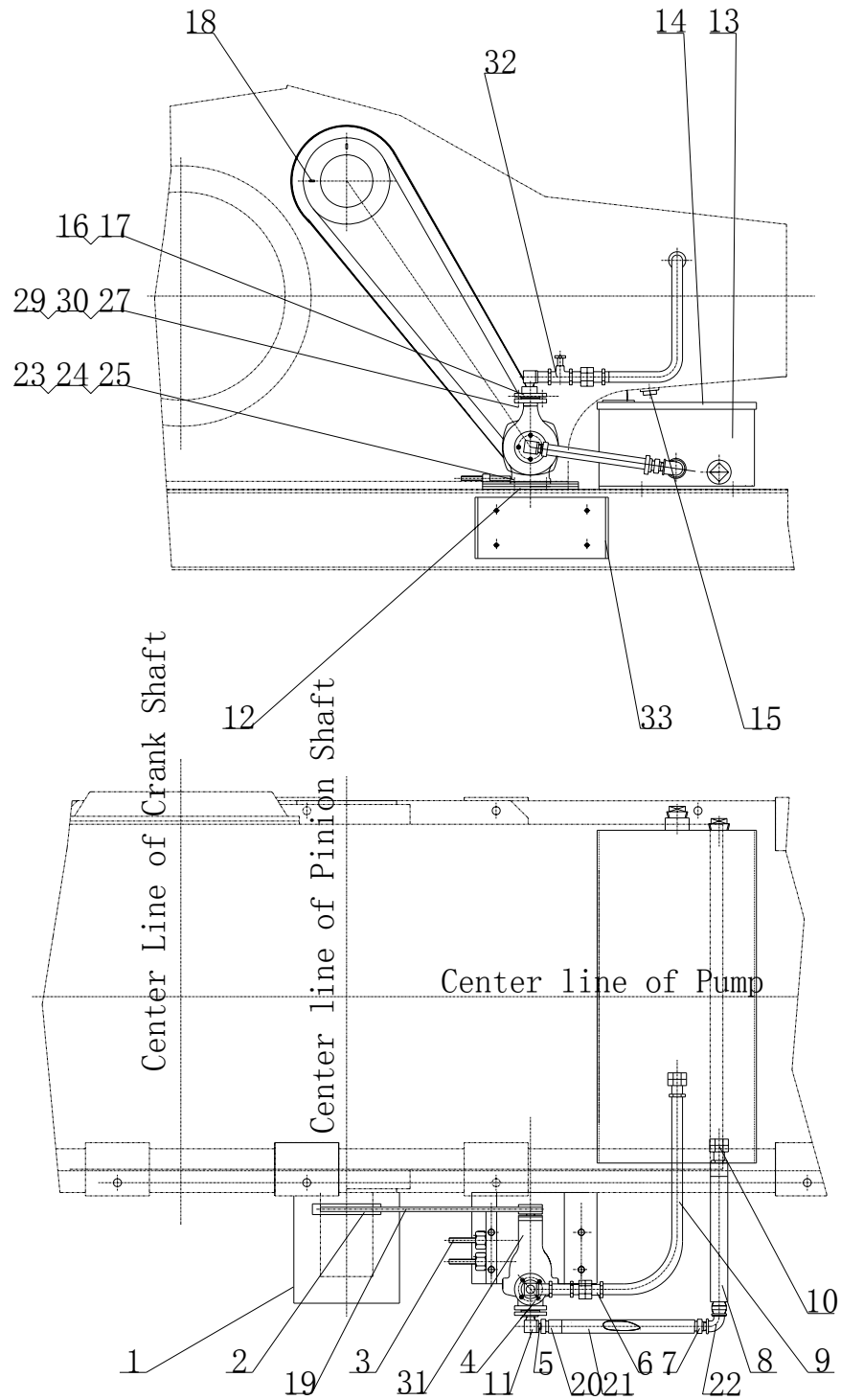


ITEM No.	QTY.	DESCRIPTION	PART No.
1	1	Key 3/16×3/16×1	T516-2001
2	1	Oil Pump Gear Assy.	AH36001-06.20A.00
3	2	90° Elbow NPT1/4×NPT 3/8	T511-3002
4	2	Bolt A12	GB5650-85
5	4	Screw M8×40	GB70-85
6	2	Connector A16	JB/ZQ4410-86
7	3	Connector A8	JB/ZQ4410-86
8	14	90° Elbow NPT1/4×NPT1/4	T511-3001
9	1	Copper Pipe Φ8×305	6B1527-87
10	17	Connector A8	JB/ZQ4408-86
11	1	Manifold (II)	AH33001-06.40
12	2	Connector A16	JB/ZQ4408-86
13	1	Copper Pipe Φ16×686	GB1527-87
14	1	Copper Pipe Φ16×331	GB1527-87
15	2	Pipe Clamp (IV)	AH33001-06.35.00
16	2	45° Connector	AH36001-06A.10
17	1	Copper Pipe Φ10×838	GB1527-87
18	2	Copper Pipe Φ12×305	GB1527-87
19	13	Pipe Clamp Φ8	AH33001-06.13.00
20	3	Copper Pipe Φ8×762	GB1527-87
21	2	Copper Pipe Φ8×508	GB1527-87
22	2	Copper Pipe Φ8×229	GB1527-87
23	5	Screw Plug NPT1/4"	T56-1002
24	1	Copper Pipe Φ8×915	GB1527-87
25	1	Copper Pipe Φ8×1194	GB1527-87
26	1	Copper Pipe Φ8×1016	GB1527-87
27	1	Manifold (I)	AH33001-06A.11
28	2	Connector A10	JB/ZQ4408-86
29	4	Pipe Clamp (I)	AH33001-06.01.00
30	2	Washer A12	GB5651-85
31	4	Bolt M6×20	GB5781-86
32	2	Oil Jet	AH36001-06.10
33	2	Copper Pipe Φ12×610	GB1527-87
34	2	Copper Pipe Φ8×813	GB1527-87
35	2	Connector A8	GB5628.1.85
36	3	Double Pipe Clamp Φ8	AH33001-06.04.00
37	1	Copper Pipe Φ10×1956	GB1527-87
38	1	Copper Pipe Φ8×1956	GB1527-87
39	1	Copper Pipe Φ8×2311	GB1527-87
40	1	Copper Pipe Φ8×1600	GB1527-87
41	1	Copper Pipe Φ8×1245	GB1527-87



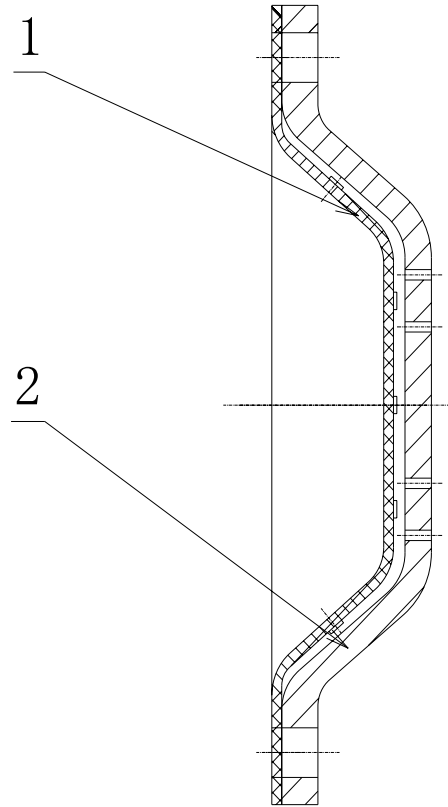
42	1	Connector NPT1/4×M14×1.5	T513-1006
43	1	Copper Washer 8	T514-1001
44	1	Shim Set	AH33001-06.06.00
45	1	Oil Pump Mtg. Plate	AH36001-06.19A
46	1	Connector A10	GB5628.1-85
47	4	Washer 8	GB93-87
48	1	Relief Valve	YYFJ-L20
49	4	Washer 6	GB93-87
50	1	2Sgeat Pump	
51	1	Pressure Gaugem14×1.5 0-1.6mpa	Y-60Z
52	4	Connector A12	JB/ZQ440B-86
53	1	Oil Filter Assy.	AH36001-06A.33.00
54		Glue	609 or 680
55	2	Orientation Block	AH36001-06C.01

## F-1300/1600 PISTON & LINER WASH



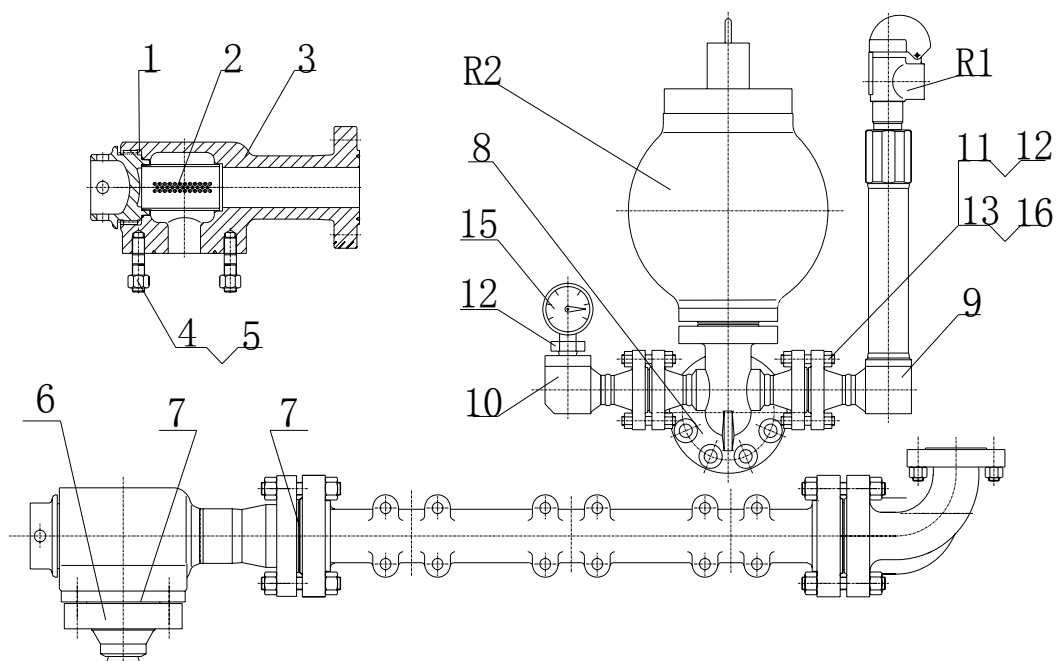
ITEM No.	QTY.	DESCRIPTION	PART No.
1	1	Belt Guard	AH36001-08B.01.00 AH36001-08B.01.00A
2	1	Sheave	AH36001-08B.02
3	1	Support Assy.	AH36001-08B.03.00
4	1	Connector NPT1" -G1"	AH36001-08B.02
5	1	Connector NPT1"	AH36001-08B.04
6	1	Connector G1" -M33×2	AH36001-08.03
7	1	Connector ZG2-1/2"	AH33001-08A.07
8	1	Connector ZG2-1/2" -NPT2-1/2"	AH36001-08C.04
9	1	Hose Φ22×Φ37	L=1500
10	2	Hose Connector Φ22×Φ37	AH33001-08.18.00
11	2	90° Elbow NPT1"	AH33001-08.16
12	2	Connection Plate	AH36001-08B.06
13	1	Water Tank	AH36001-08C.01.00
14	1	Tank Cover	AH36001-08C.02.00
15	1	Connector NPT2-1/2"	AH34001-08B.07
16	2	Gasket	AH36001-08B.09
17	2	NPT1" Flange	AH36001-08B.10
18	2	Capscrew M8×25	GB73-85
19	2	Belt A3708	GB1171-74
20	2	Pipe Clamp NO: 3	
21	1	Hose Φ38×Φ53	L=750
22	1	90° Elbow ZG2-1/2"	
23	4	Bolt M20×30	GB5780-86
24	4	Washer 20	GB93-87
25	8	Washer 20	GB95-85
26	4	Bolt M12×40	GB5780-86
27	12	Washer 12	GB93-87
28	4	Washer 12	GB96-85
29	8	Bolt M12×60	GB5780-86
30	8	Nut M12	GB41-86
31	1	Pump	AH36001-08B.11.00
32	1	Ball Valve G1"	Q11F-16
33	1	Support	AH36001-08C.03.00

## F-1300/1600 SUCTION DAMPENER



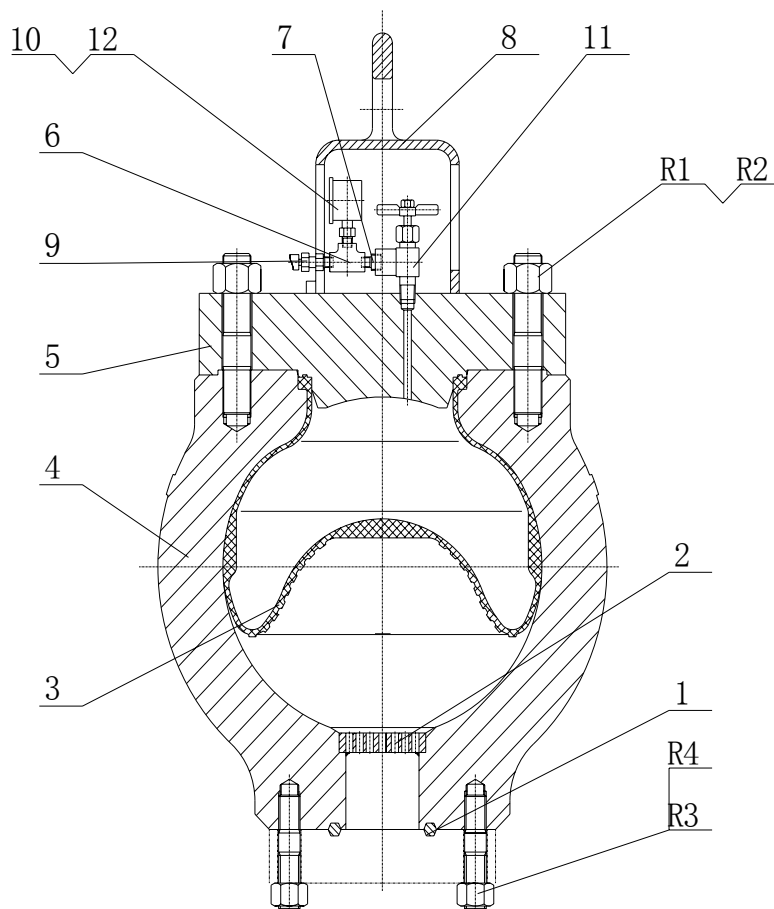
ITEM No.	QTY.	DESCRIPTION	PART No.
		Suction Dampener Assy.	AH33001-05.35A.00
1	1	Capsule	AH33001-05.35A.02
2	1	Cover	AH33001-05.35A.03

## F-1300/1600 DISCHARGE STRAINER & ACCESSORY' MANIFOLD

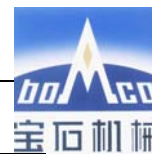


ITEM No.	QTY.	DESCRIPTION	PART No.
1	1	O-Ring $\Phi$ 165 $\times$ 7	GB3452.1-82
2	1	Strainer	AH36001-19.01.00
3	1	Strainer Housing	AH33014-04.01
4	8	Stud M39 $\times$ 2-M39 $\times$ 3 $\times$ 135	T53-4007
5	8	Nut M39 $\times$ 3	T57-2011
6	1	Flange 5 1/8 $\times$ 35mpa	T58-1002
7	3	Ring Gasket R44	T58-5002
8	1	Elbow Assy.	AH36003-05.02.00
9	1	Relief Valve Connection Pipe	AH36003-11.02.00
10	1	Pressure Gauge Seat	AH36003-11.01.00
11	16	Stud M27 $\times$ 170	T53-1004
12	16	Nut M27	T57-2005
13		Loctite	277
14	1	Connector R 1 1/2 $\times$ NPT2"	T512-1001
15	1	Pressure Gauge	YK-150(0-60MPa)
16	2	Ring Gasket R27	T58-5003
R1	1	JA-3shear Relief Valve	AH33003-00
R2	1	Pulsation Dampener	AH33002-00A(KB-75)

### KB-75 PULSATION DAMPENER



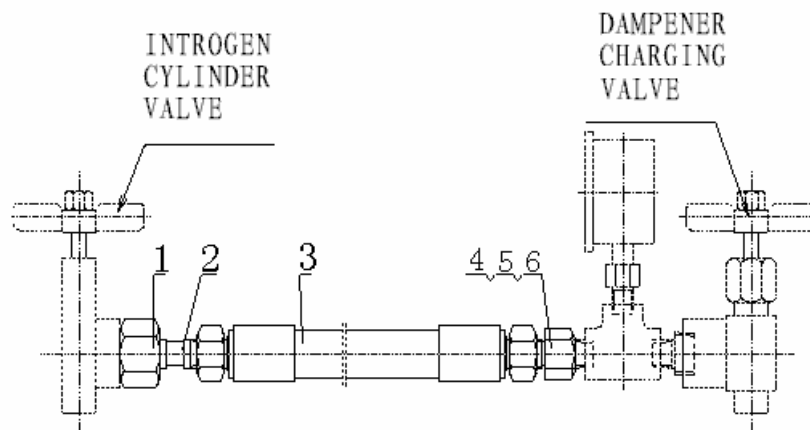
ITEM No.	QTY.	DESCRIPTON	PART No.
			AH33002-00A
1	1	Ring gasket R39	T58-5001
2	1	Bottom plug	AH33002-02
3	1	bladder	AH33002-03.00
4	1	Studded assy.	AH33002-04A.00
5	1	Cover	AH33002-05A
6	1	Steel pipe tee NPT 1/4"	AH33002-06
7	1	Connector NPT 1/4"	AH33002-07
8	1	Gauge cover	AH33002-08.00
9	1	Purge vavle	PJC <sub>1</sub> -L8



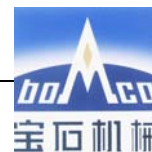
10	1	Double scale pressure gauge 0-25MPa 3630PSI	Y-60
11	1	Needle valve	JZR <sub>3</sub> -L8
12	1	Washer	T514-1001
R1	12	Stud AM39 × 2-M39×3×110	T53-4002
R2	12	Nut M39×3	T57-20011
R3	8	Stud AM33 × 2-M33×3×110	T53-4002
R4	8	Nut M33×3	T57-2009



## PULSATION DAMPENER CHARGING HOSE & INSTRUCTIONS



ITEM NO.	QTY	DESCRIPTION	PART NO.
1	1	Nut	AH33001-31.10.01A
2	1	Sealing Connector	AH33001-31.10.02A
3	1	Hose M14×1.5	JB1887-77
4	1	Connector	AH33001-31.10.03
5	1	Gasket	AH33001-31.10.04
6	1	Pipe Plug	AH33001-31.10.05



## **CHARGING INSTRUCTIONS**

1. Remove dampener gauge cover. Bleed off any existing pressure in gage area by turning purge valve cap approximately 1/4 to 1/2 turn. Remove purge valve.
2. Connect charging hose to dampener charging valve and nitrogen cylinder valve.
3. Open dampener charging valve.
4. Open cylinder valve slowly. Use this valve to regulate flow to dampener.
5. When dampener gauge shows desired charging pressure, close cylinder valve.
6. Close dampener valve.
7. Remove hose from dampener charging valve and replace gage cover.

For best results, dampener precharge pressure should be not more than 2/3 of pump discharge pressure. Maximum precharge 650 PSI.

**CAUTION: USE ONLY COMPRESSED NITROGEN OR AIR---DO NOT CHARGE WITH OXYGEN.**

## F-1300/1600 SPARE PART LIST

ITEM No.	QTY.	DESCRIPTION	PART No.
		Spare Part List	AH36001-18.00
1	3	Valve Cover Seal	AH36001-05.13
2	6	Liner Seal	AH36001-05.15
3	3	Ring Gasket R44	T58-5002
4	2	Gasket	AH33001-09
5	1	Capsule	AH33001-5.35A.02
6	1	Ring Gasket R39	T5B-5001
7	1	Buffer	AH33003-06
8	1	Bladder	AH33002-03.00
9	3	Cylinder Head Seal	AH36001-05.09
10	3	Oil Seal Ring	AH36001-04.21
11	2	Oil Seal 9.125" × 10.37" × 0.625"	AH36001-03.08A
12	6	Double Lip Oil Seal 5" × 6.25" × 0.625"	AH36001-04.08A
13	3	Piston Rubber Φ 170	AH33001-05.19.06.02A.00
14	6	Valve Rubber	AH36001-05.12A.03
15	10	Shear Pin	AH33003-11A
16	1	Piston Assy.	AH33003-03.00
17	3	Piston Seal	AH33001-05.20A
18	3	O-Ring Φ 190×3.55	GB3452.1-82
19	3	O-Ring Φ 160×7	GB3452.1-82
20	3	O-Ring Φ 95×5.3	GB3452.1-82
21	3	O-Ring Φ 200×7	GB3452.1-82
22	3	O-Ring Φ 185×7	GB3452.1-82
23	3	O-Ring Φ 345×7	GB3452.1-82
24	2	O-Ring Φ 125×7	GB3452.1-82

### F-1300/1600 TOOL LIST

ITEM No.	QTY.	DESCRIPTIN	PART No.
		Tool List	AH36001-17.00
1	1	Liner Lifting Tool	AH36001-17.03.00
2	1	Seat Lifting Tool	AH36001-17.15.00B
3	1	Air Charging Hose Assy.	AH33001-31.10.00
4	1	Manual Hydraulic Pump 70mpa	PSH-II
5	1	Valve Seat Removing Block	AH36001-17.24
6	1	SH1/2 Manual Chain Lifting Tool	JB560-64
7	1	Rob	AH36001-17.02A
8	1	Connector	AH36001-17.09
9	1	Connector 1"	AH36001-17.12
10	1	8" Lengthened Rod	AH36001-17.11
11	1	24" Rod	AH36001-17.13
12	1	19-5/8 Lengthened Rod	AH36001-17.10
13	1	Sleeve 2"	AH36001-17.05
14	1	Sleeve 2-3/8	AH36001-17.04
15	1	Sleeve 3-5/8	AH36001-17.06
16	1	Sleeve 1-1/2	AH36001-17.08
17	1	Long Sleeve	AH36001-17.20.00
18	1	Wrench	
19	1	Tape Sleeve	AH36001-17.17
20	1	Sleeve	AH36001-17.18
21	1	Bolt M24×160	AH36001-17.23
22	1	Flashboard Pulling Tool	AH36001-17.22.00
23	1	Screw Rod	AH36001-17.21.00