

83SH 系列高压空气压缩机

83SH SERIES HIGH PRESSURE AIR COMPRESSOR

零部件手册

PARTS LIST

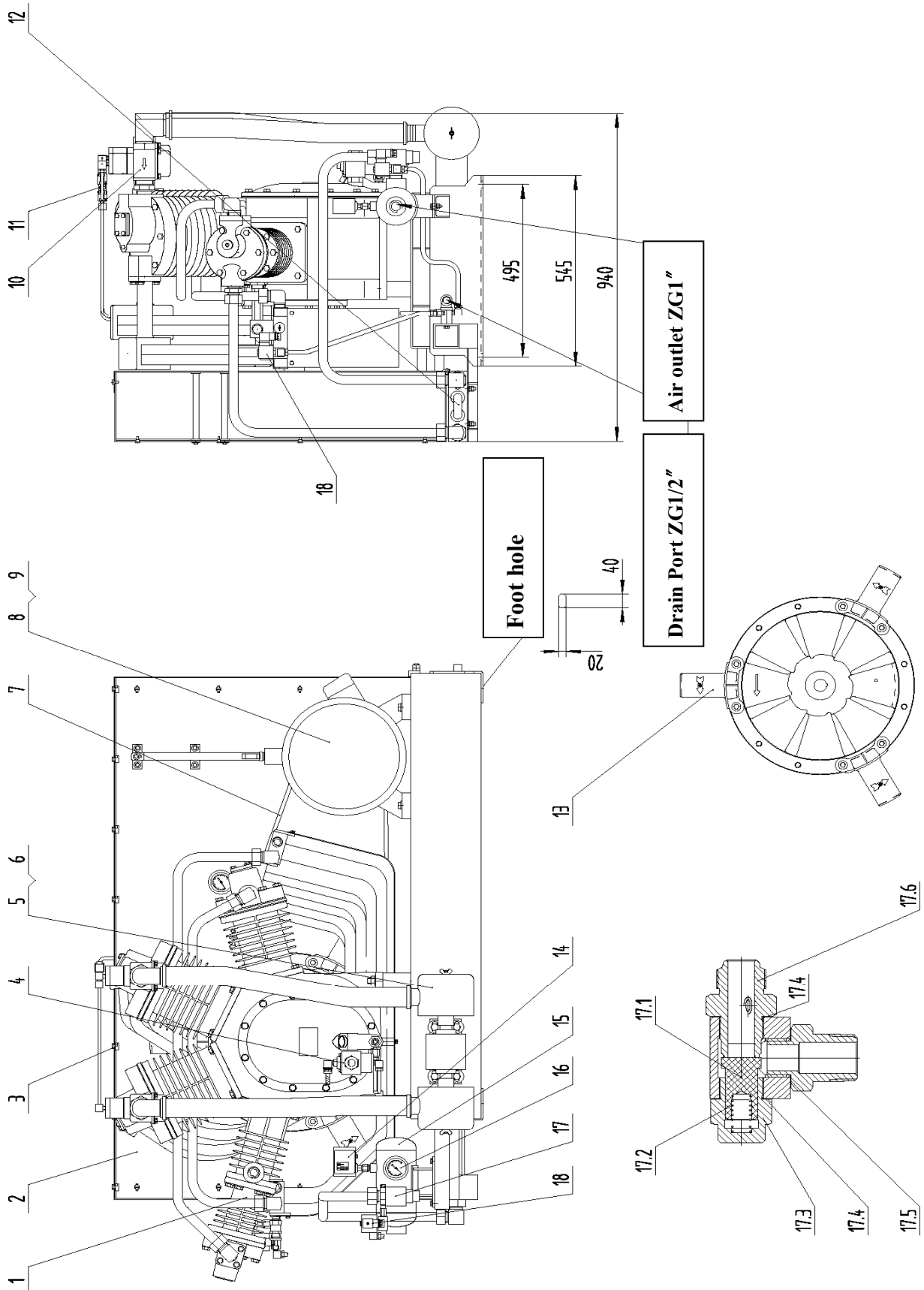
南京尚爱机械制造有限公司

Nanjing Shangair Machinery Manufacturing Co., Ltd.

Content

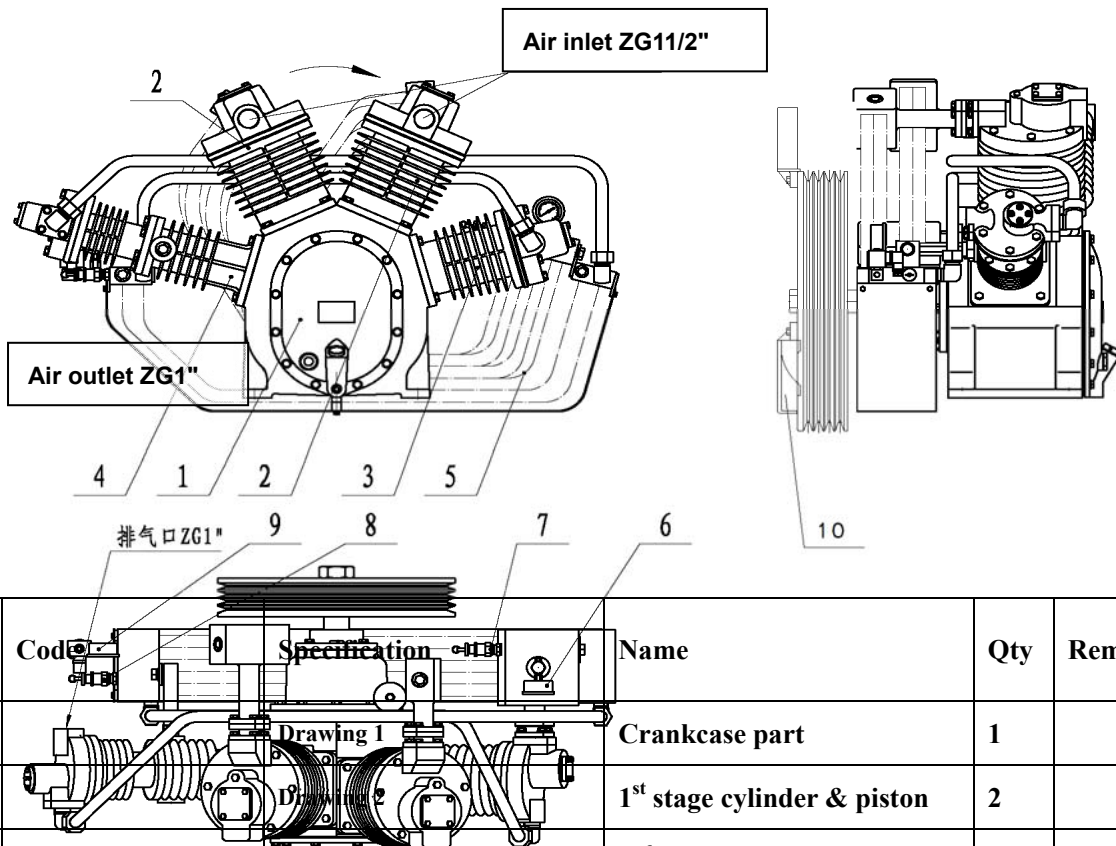
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Figure A: Outline Drawing of 83SH Single-Engine Unit



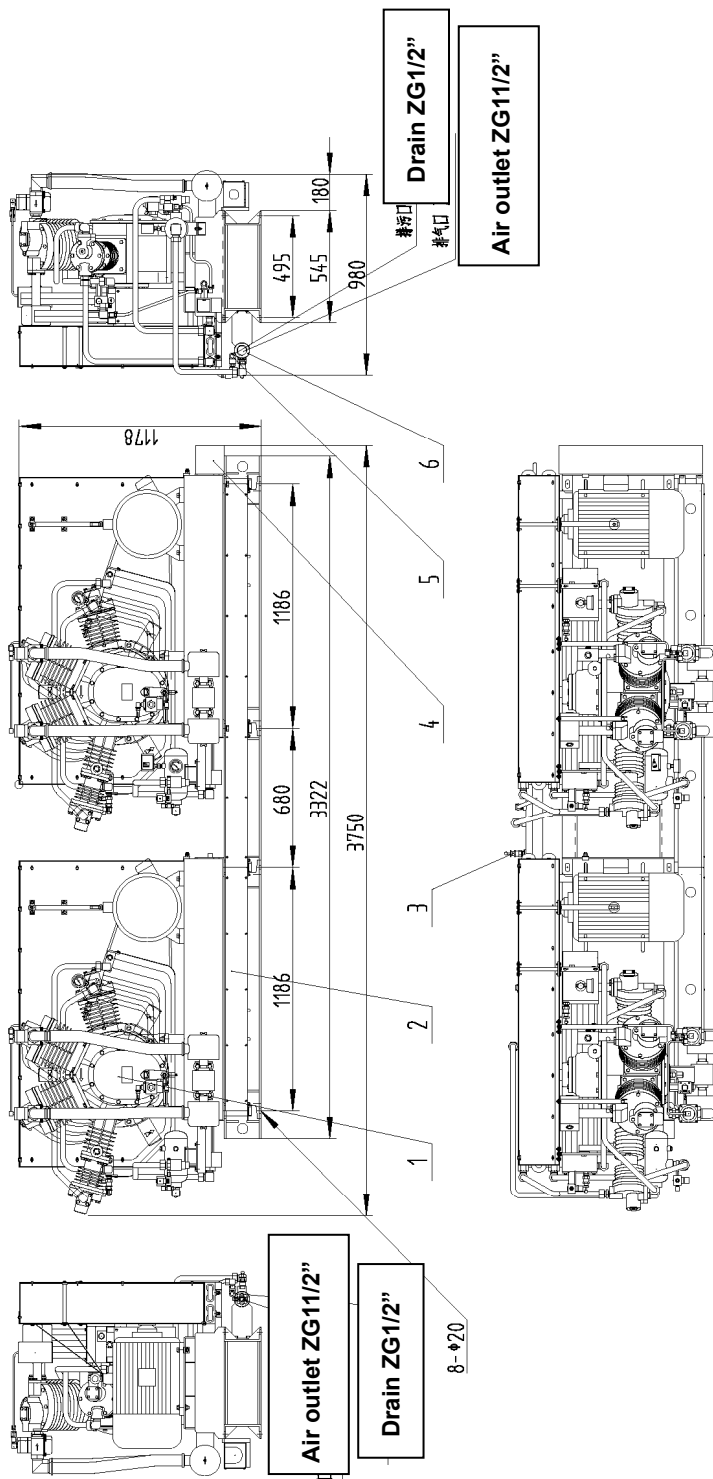
S/N	Code	Specification	Name	Qty	Remarks
A-01	2000-83SH	83SH machine head	Machine head	1	
A-02	3016-831H0001	83.1H.00.01	Protection net	1	
A-03	3017-JT090039	JT.09.00.39	Locking clasp	14	
A-04	2017-DY030000	DY.03.00.00	Low oil level switch	1	
A-04.1	3401-018	1045-G	Liquid switch	1	
A-05	3404-004	G11/2"-G11/2"	Suction filter	2	
A-06	3404-009	Filter core	Filter core	2	
A-07	3602-011	B2743	Belt	4	
A-08	3103-016	1TL0001-180L-4-22KW	Motor	1	
A-09	3020-PD030007	PDL.03.00.07	Belt Pulley	1	
A-10	2017-XF030000	XF.03.00.00	Inlet valve	2	
A-11	3402-002	5515-07-12GBV-SA11B-AC 220V	Solenoid valve	1	
A-12	3015-83060000	83.06.00.00	Aftercooler	1	
A-13	3002-83000009-01	83.00.00.09-01	Blade	3	
A-14	3401-001	KP5	Pressure switch	1	83SH-2230
A-14	3401-002	KP6(060-5190)	Pressure switch	1	83SH-2240
A-15	3015-YQ330100	YQ.33.01.00	Air collector	1	
A-16	3405-010	YZ60-6.0/M14*1.5	Pressure gauge	1	83SH-2230
A-16	3405-007	YZ60-10/M14*1.5	Pressure gauge	1	83SH-2240
A-17	3020-RD050A00	RD.05.0A.00	Check valve	1	
A-17.1	3020-RD050AA5	RD.05.0A.A5	Valve core	1	
A-17.2	3020-RD010004	RD.01.00.04	Spring	1	
A-17.3	3020-RD050A04	RD.05.0A.04	Guide way	1	
A-17.4	3020-RD050009	RD.05.00.09	Copper pad	2	
A-17.5	3020-RD050010	RD.05.00.10	Copper pad	1	
A-17.6	3020-RD050A01	RD.05.0A.01	Valve body	1	
A-18	3402-001	8.0Mpa-1/4NPT-220V	Solenoid valve	2	
A-19	3710-001	4503/68#	Lubricant	5.95L	

Figure B: Outline Drawing & Parts List of 83SH Main Engine



S/N	Code	Specification	Name	Qty	Remarks
B-1		Drawing 1	Crankcase part	1	
B-2		Drawing 2	1 st stage cylinder & piston	2	
B-3		Drawing 3	2 nd stage cylinder & piston	1	
B-4		Drawing 4	3 rd stage cylinder & piston	1	
B-5		Drawing 5	Intercooler part	1	
B-6	3405-006	YZ60-1.0/M14*1.5	Pressure gauge	1	
B-7	3403-AQ060404	AQ.06.04.04	Safety valve	1	
B-8	3403-AQ051014	AQ.05.10.14	Safety valve	1	
B-9	3405-004	Y60-4.0/M14*1.5	Pressure gauge	1	
B-10	3012-83000009-01	83.00.00.09-01	Blade	3	

Figure C: Outline Drawing of Double-Engine Unit



- 1、83SH Single-Engine Unit 2、Cable Tray 3、Safety Valve 4、External Wire Tray
5、Drain Pipe 6、Outlet Pipe

S/N	Code	Specification	Name	Qty	Remarks
C-3	3403-AQ013033	AQ.01.30.33	Safety valve	1	83SH-2230
	3403-AQ013044	AQ.01.30.44	Safety valve	1	83SH-2240

Figure D: Outline Drawing of Three-Engine Unit

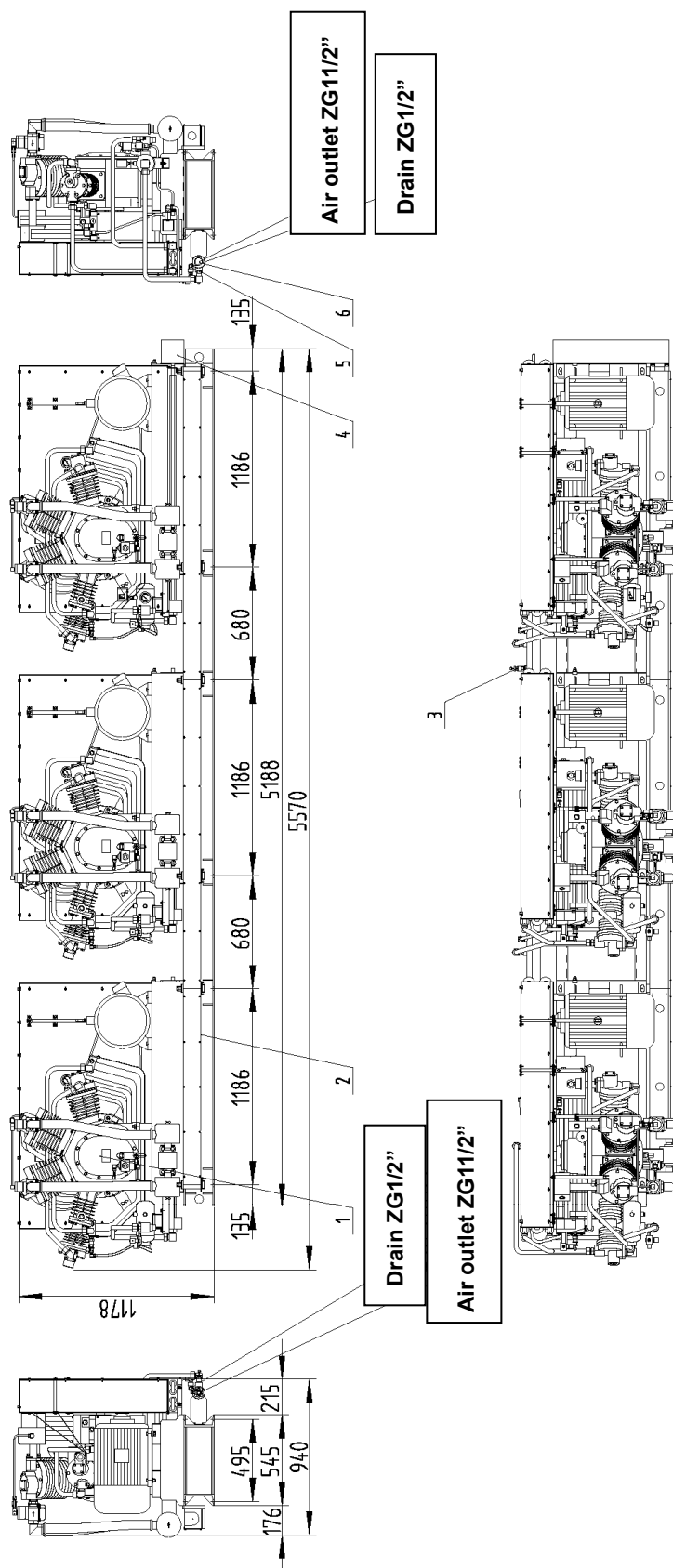
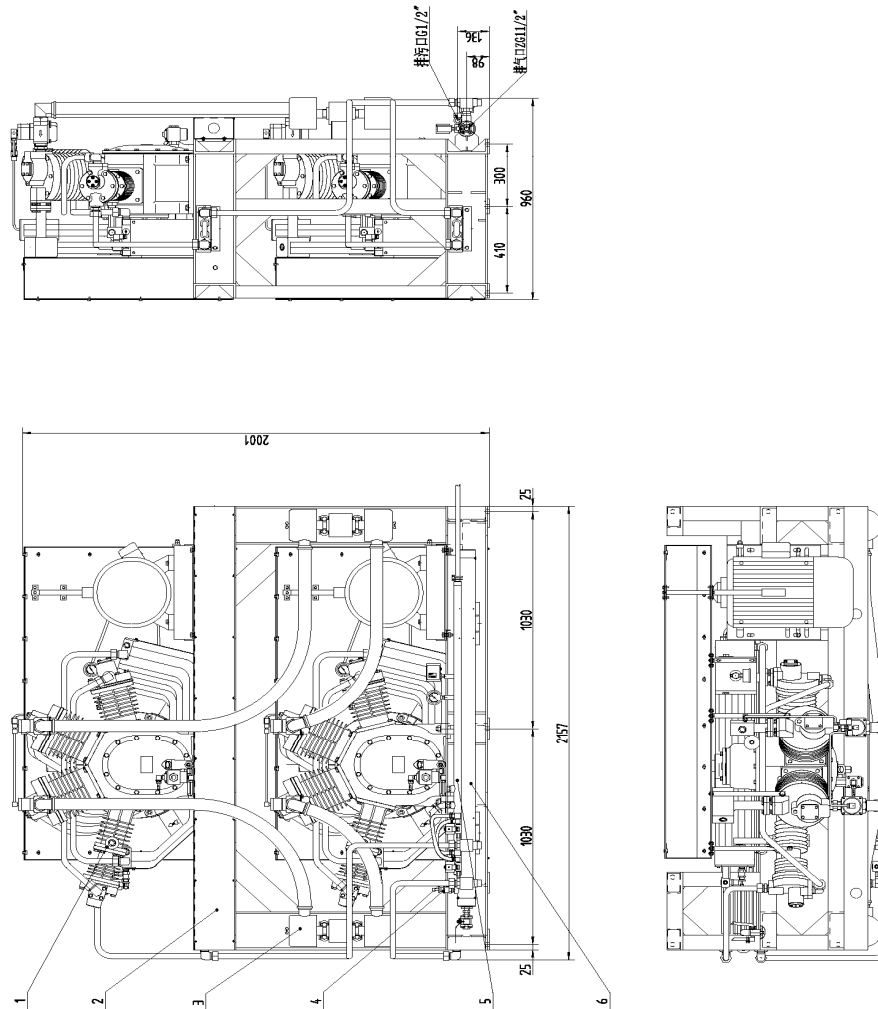


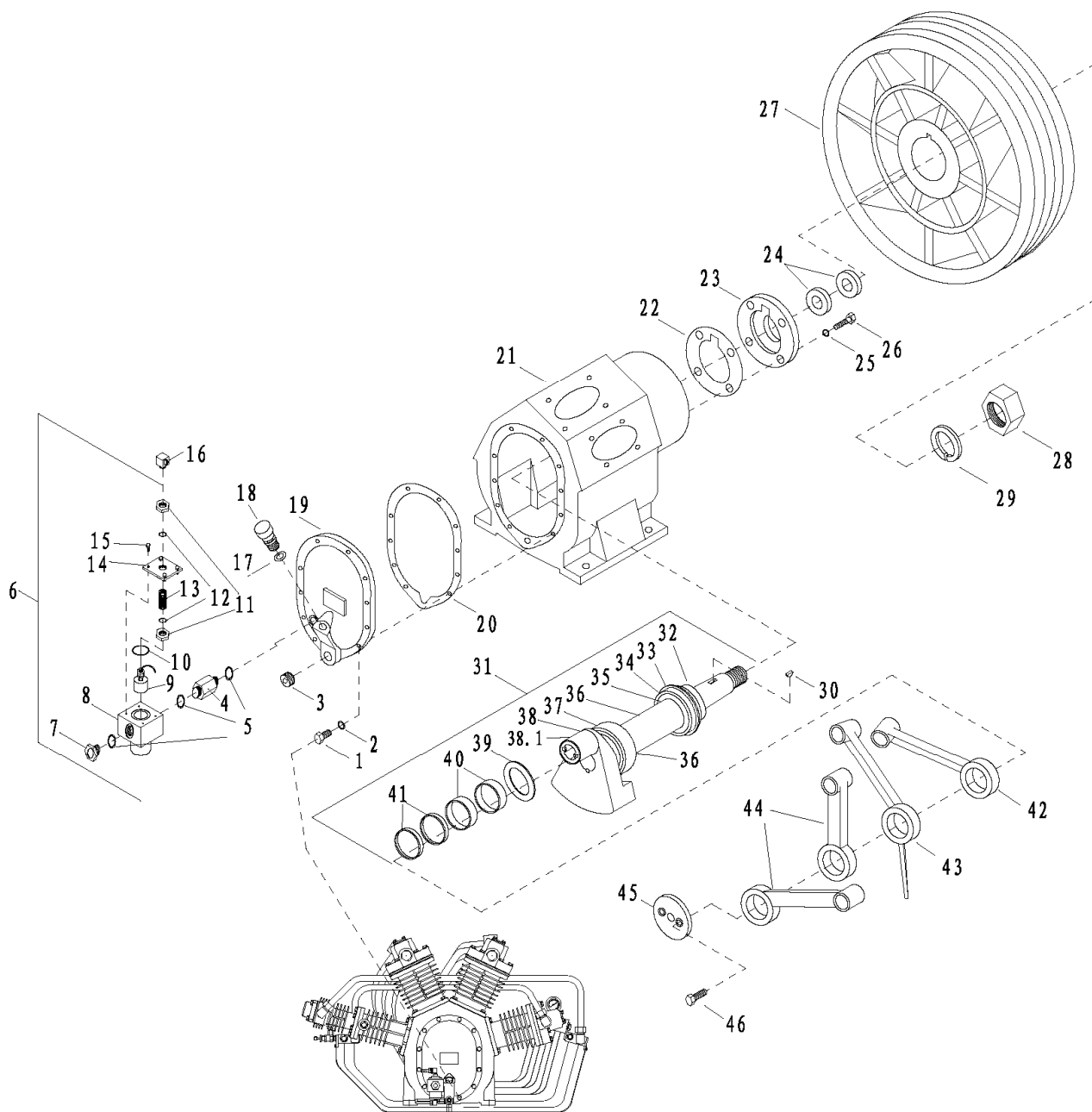
Figure E: Outline Drawing of 83SH Double-Deck Engines (Horizontal)



- 1、Machine Head 2、Cable Tray 3、Suction Filter 4、Safety Valve 5、Drain Pipe
6、Outlet Pipe

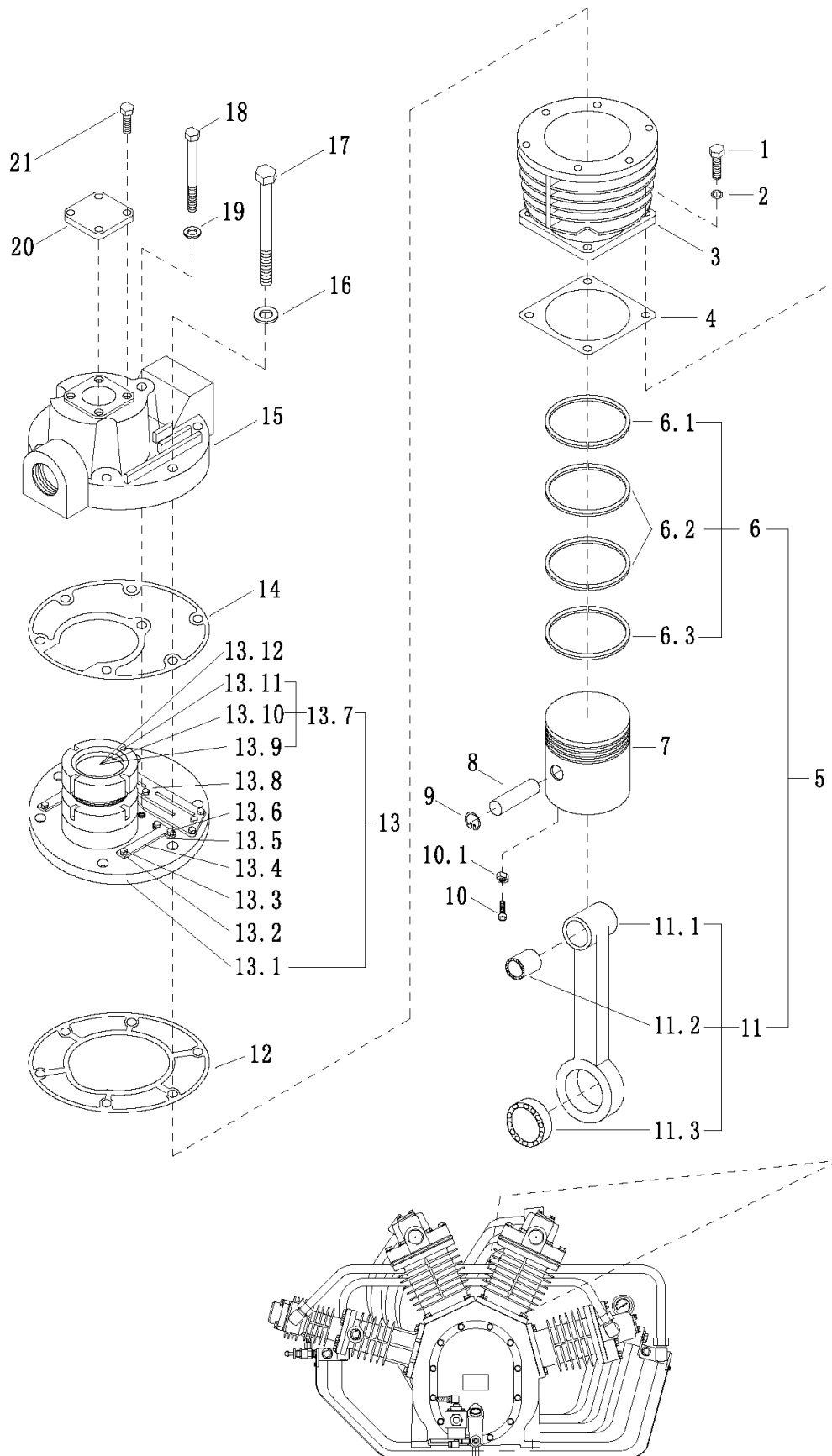
S/N	Code	Specification	Name	Qty	Remarks
E-3	3404-004	G11/2"- G11/2"	Suction filter	4	
E-4	3403-AQ013033	AQ.01.30.33	Safety valve	1	2I-83SH-2230
E-4	3403-AQ013044	AQ.01.30.44	Safety valve	1	2I-83SH-2240

Drawing 1: Crankcase Components (1 set)



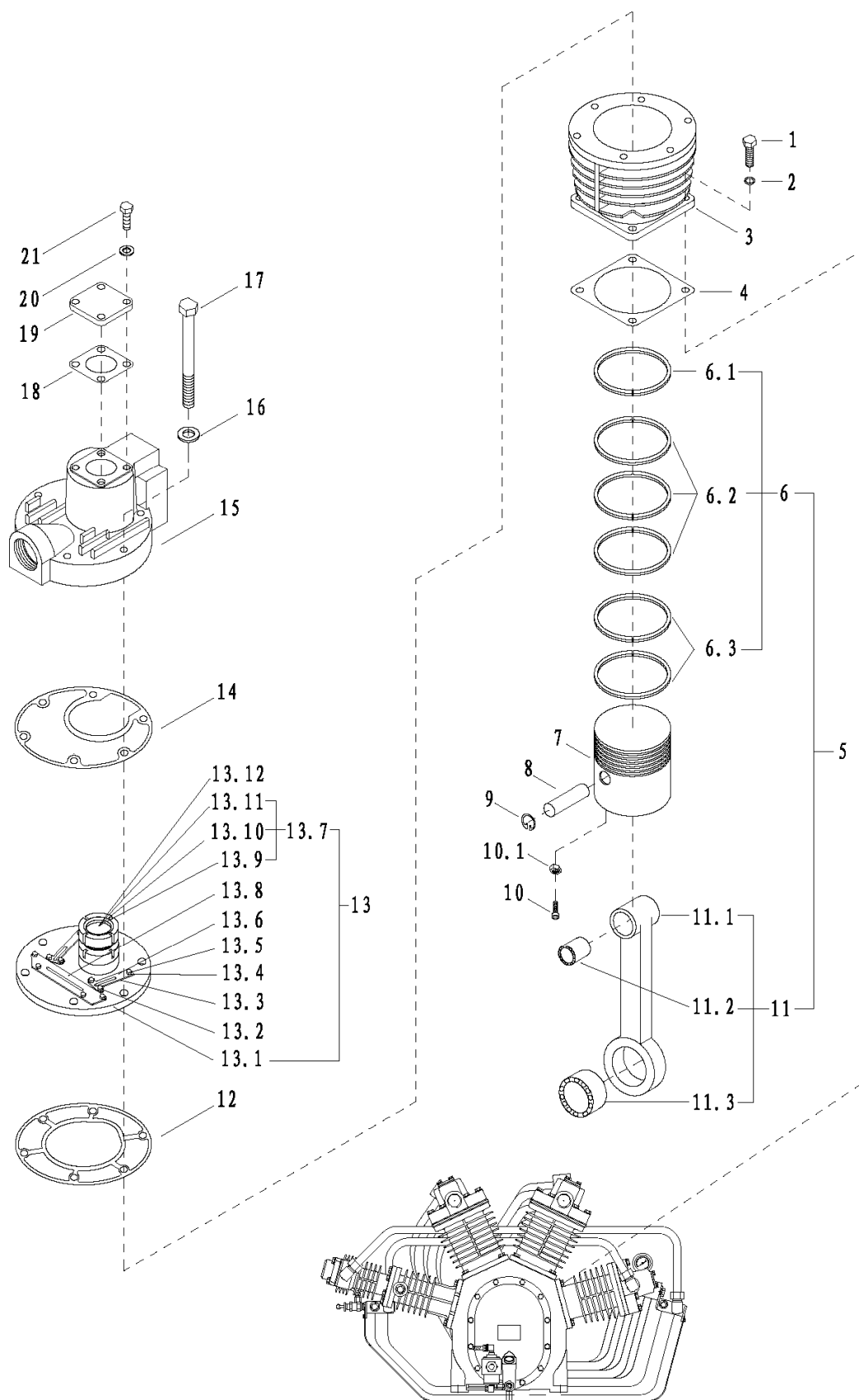
S/N	Code	Specification	Name	Qty	Remarks
1-01	3501-003	M10*30	Bolt	12	
1-02	3505-014	Flat washer	Flat washer	12	
1-03	3020-JT040012	JT.04.00.12	Screw plug	1	
1-04	3020-DY030006	DY.03.00.06	Union nut	1	
1-05	3603-011	25*3.55	O ring	3	
1-06	2017-DY030000	DY.03.00.00	Low oil level switch	1	
1-07	3020-YB010000	YB.01.00.00	Oil indicator	1	
1-08	3020-DY030001	DY.03.00.01	Valve body	1	
1-09	3401-018	1045-G	Liquid switch	1	
1-10	3603-015	43.7*1.8	O ring	1	
1-11	3020-DY030004	DY.03.00.04	Nut	2	
1-12	3603-002	15*2.65	O ring	2	
1-13	3020-DY030003	DY.03.00.03	Screw rod	1	
1-14	3020-DY030002	DY.03.00.02	Valve cap	1	
1-15	3501-035	M5*12	Bolt	4	
1-16	3020-JT020026	JT.02.00.26	Joint	1	
1-17	3603-010	23.5*3.55	O ring	1	
1-18	3012-09010006	09.01.00.06	Oil filling cap	1	
1-19	3003-80000001	80.00.00.01	Crankcase cover	1	
1-20	3014-80000002	80.00.00.02	Paper gasket for Crankcase cover	1	
1-21	3001-80000304	80.00.03.04	Crankcase assy	1	
1-22	3014-11010006	11.01.00.06	Paper gasket for bearing end cover	1	
1-23	2017-11010200	11.01.02.00	Bearing end cover	1	
1-24	3604-003	FB55*75*12	Lip-type sealing ring	2	
1-25	3505-014	Flat washer	Flat washer	4	
1-26	3501-003	M10*30	Bolt	4	
1-27	3002-110100A7	11.01.00.A7	Fan wheel	1	
1-28	3504-008	M39*2	Nut	1	
1-29	3505-006	Spring gasket 42	Spring gasket	1	
1-30	3506-002	8*11*28	key	1	
1-31	2011-80040000	80.04.00.00	Crankshaft assy	1	
1-32	3012-11040005	11.04.00.05	Hot pressing circlip	1	
1-33	3012-11040006	11.04.00.06	Stop circlip	1	
1-34	3601-015	NUP311EN	Bearing	1	
1-35	3012-11040007	11.04.00.07	Washer	2	
1-36	3012-11040004	11.04.00.04	Bushing	1	
1-37	3601-019	NUP411	Bearing	1	
1-38	2021-80040001	80.04.01.00	Crankshaft components	1	
1-38.1	3712-001	620	Glue	1 bottle	
1-39	3012-8004B102	80.04.B1.02	Stop ring	1	
1-40	3601-010	NKI72*102*25-02	Inner ring	2	
1-41	3601-008	NKI72*102*17-02	Inner ring	2	
1-42	2015-8002GGA3	80.02.GGA3	Connecting rod	1	
1-43	2015-8002GGA1	80.02.GGA1	Connecting	1	
1-44	2015-8002GGA2	80.02.GGA2	Connecting	2	
1-45	3019-80000006	80.00.00.06	Baffle, connecting rod	1	
1-46	3501-036	M10*20	Bolt	2	

Drawing 2: First-Stage Cylinder Piston Conrod Parts (2 sets)



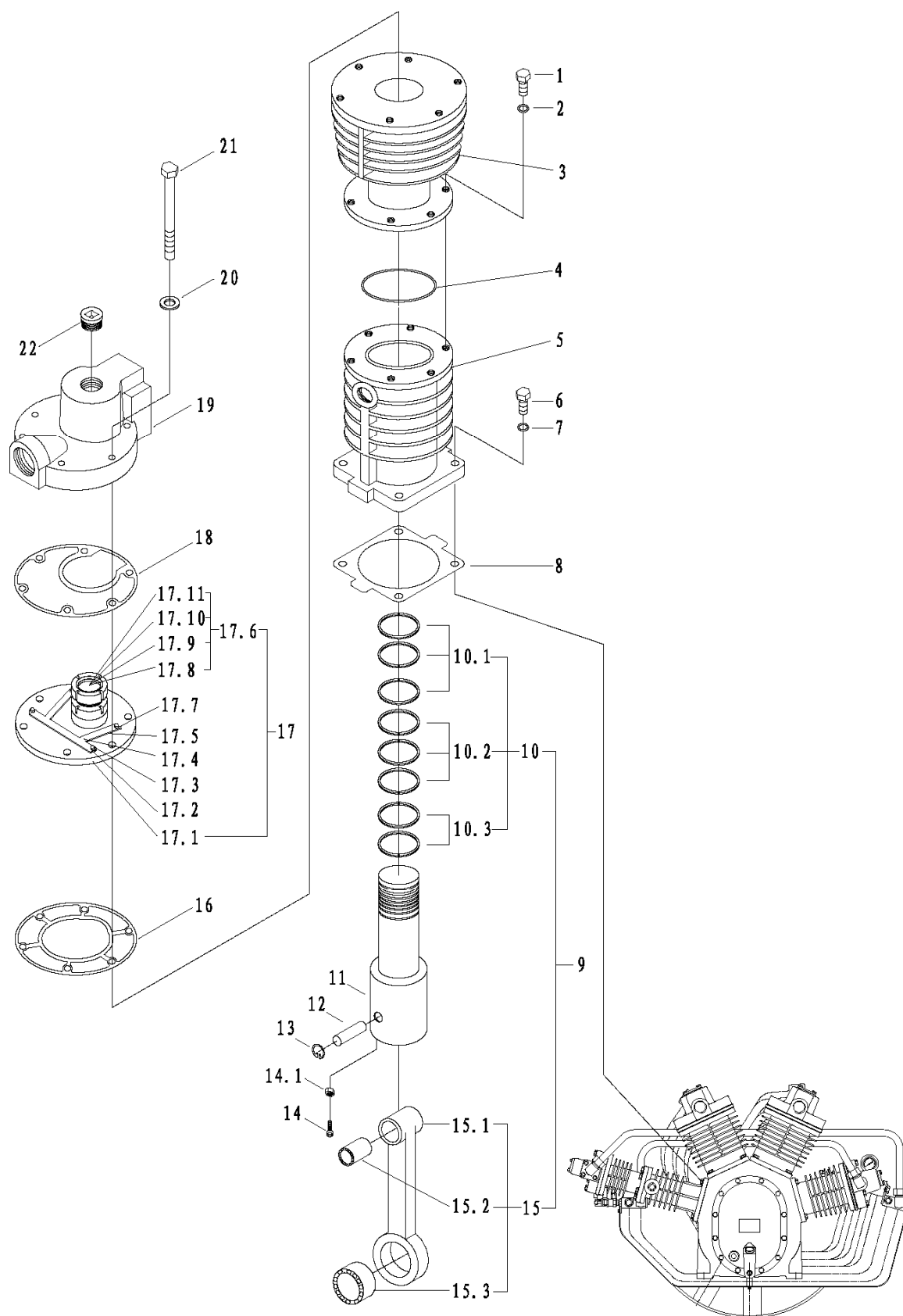
S/N	Code	Specification	Name	Qty	Remarks
2-01	3501-010	M12*40	Bolt	4	
2-02	3505-015	Flat washer 12	Flat washer	4	
2-03	3005-11010009	11.01.00.09	Cylinder	1	
2-04	3014-11010010	11.01.00.10	Cylinder gasket	1	
2-05	2012-83030100	83.03.01.00	1 st stage piston & connecting rod parts	1	
2-06	3605-H150-121	H150-121	Piston ring	1	
2-06.1	3605-H150-01	H150-01	Piston ring	1	
2-06.2	3605-H150-02	H150-02	Piston ring	2	
2-06.3	3605-H150-03	H150-03	Piston ring	1	
2-07	3009-11020001	11.02.00.03	Piston	1	
2-08	3011-11020006	11.02.00.06	Piston pin	1	
2-09	3506-006	Circlip 25	Circlip	2	
2-10	3502-008	M8*25	Bolt	2	
2-10.1	3504-012	M8	Nut	2	
2-11	2015-8002GGA2	80.02.GGA2	Connecting rod	1	
2-11.1	3010-800200A2	80.02.00.A2	Connecting rod shank	1	
2-11.2	3601-021	RNA25*37*35	Bearing	1	
2-11.3	3601-007	NKI72*102*17-01	Bearing	1	
2-12	3014-11010013	11.01.00.13	Bottom gasket of 1 st stage gas valve	1	
2-13	2013-11060000	11.06.00.00	Gas valve	1	
2-13.1	3006-11060001	11.06.00.01	1 st stage gas valve board	1	
2-13.2	3012-11060003	11.06.00.03	Lift retainer washer	10	
2-13.3	3501-022	M5*16	Bolt	15	
2-13.4	3021-09060003	09.06.00.03	Reed valve plate	10	
2-13.5	3012-11060004	11.06.00.04	Lift retainer washer	5	
2-13.6	3012-09070003	09.07.00.03	Lift retainer board	2	
2-13.7	3020-ZL040000	ZL.04.00.00	Direct flow valve	1	
2-13.8	3012-11060002	11.06.00.02	Lift retainer board	1	
2-13.9	2013-ZL040100	ZL.04.01.00	Valve core assy	1	
2-13.10	3021-ZL01A004	ZL.01.A0.04	Valve plate	14	
2-13.11	3501-059	M4*6	Bolt	14	
2-13.12	3603-023	71*2.8	O ring	1	
2-14	3014-11010012	11.01.00.12	Upper gasket of 1 st stage gas valve	1	
2-15	3007-11010008	11.01.00.08	1 st stage cylinder cover	1	
2-16	3505-015	Flat washer 12	Flat washer	6	
2-17	3501-014	M12*65	Bolt	6	
2-18	3501-001	M10*115	Bolt	1	
2-19	3505-014	Flat washer 10	Flat washer	1	
2-20	3019-46010006	46.01.00.06	1 st stage sealing cover	1	
2-21	3501-031	M8*20	Bolt	4	

Drawing 3: Second Stage Cylinder Piston Conrod Parts (1 set)



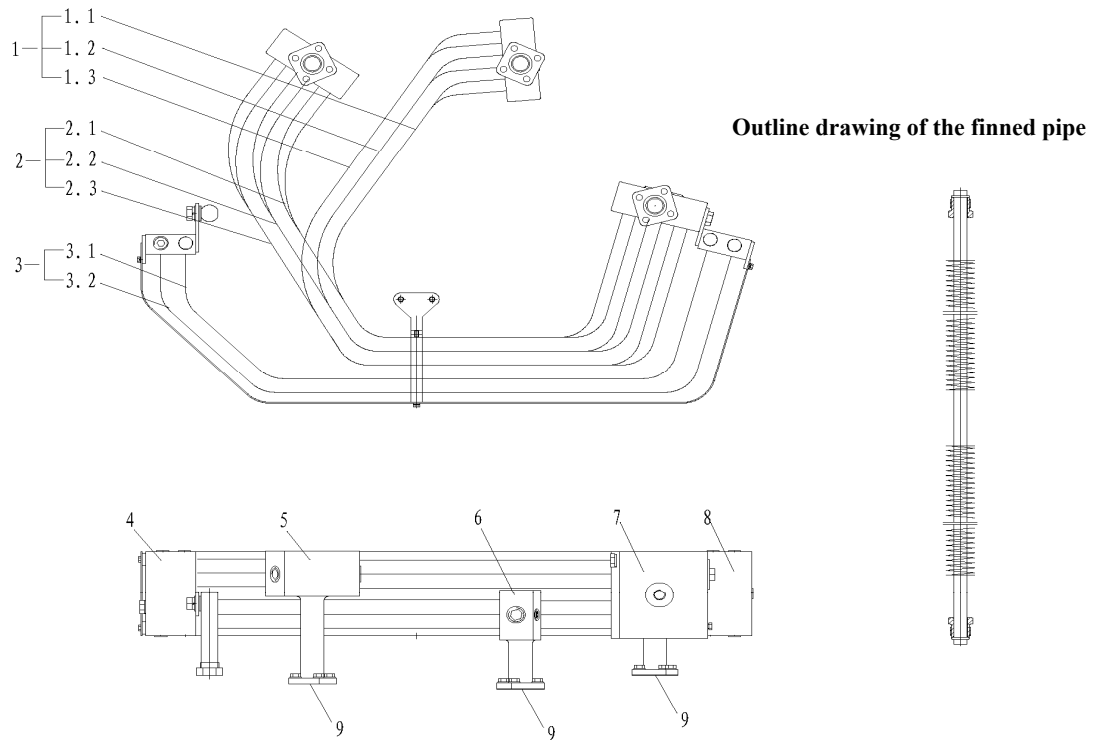
S/N	Code	Specification	Name	Qty	Remarks
3-01	3501-010	M12*40	Bolt	4	
3-02	3505-015	Flat washer 12	Flat washer	4	
3-03	3005-11010011	11.01.00.11	Cylinder	1	
3-04	3014-11010010	11.01.00.10	Cylinder gasket	1	
3-05	2012-83030200	83.03.02.00	2 nd stage piston & connecting rod part	1	
3-06	3605-H110-132	H110-132	Piston ring	1	
3-06.1	3605-H110-01	H110-01	Piston ring	1	
3-06.2	3605-H110-02	H110-02	Piston ring	3	
3-06.3	3605-H110-03	H110-03	Piston ring	2	
3-07	3009-11110001	11.11.00.01	Piston	1	
3-08	3011-11110002	11.11.00.02	Piston pin	1	
3-09	3506-006	Circlip 25	Circlip	2	
3-10	3502-008	M8*25	Bolt	2	
3-10.1	3504-012	M8	Nut	2	
3-11	2015-8002GGA1	80.02.GGA1	Connecting rod	1	
3-11.1	3010-800200A1	80.02.00.A1	Connecting rod shank	1	
3-11.2	3601-021	RNA25*37*35	Bearing	1	
3-11.3	3601-009	NKI72*102*25-01	Bearing	1	
3-12	3014-11010015	11.01.00.15	Bottom gasket of 2 nd stage gas valve	1	
3-13	2013-11070000	11.07.00.00	2 nd stage gas valve	1	
3-13.1	3006-11070001	11.07.00.01	Gas valve board	1	
3-13.2	3012-11060004	11.06.00.04	Lift retainer washer	5	
3-13.3	3021-09060003	09.06.00.03	Valve plate	7	
3-13.4	3012-11060003	11.06.00.03	Lift retainer washer	7	
3-13.5	3501-022	M5*16	Bolt	12	
3-13.6	3012-09070003	09.07.00.03	Lift retainer board	2	
3-13.7	3020-ZL020000	ZL.02.00.00	Direct flow valve	1	
3-13.8	3012-11070002	11.07.00.02	Lift retainer board	1	
3-13.9	2013-ZL020100	ZL.02.01.00	Valve core assy	1	
3-13.10	3021-ZL01a004	ZL.01.A0.04	Valve plate	8	
3-13.11	3501-059	M4*6	Bolt	8	
3-13.12	3603-016	43.7*2.8	O ring	1	
3-14	3014-09010019	09.01.00.19	Upper gasket of 2 nd stage gas valve	1	
3-15	3007-09010020	09.01.00.20	2 nd stage cylinder cover	1	
3-16	3505-015	Flat washer 12	Flat washer	6	
3-17	3501-014	M12*65	Bolt	6	
3-18	3014-XH030008	XH.03.00.08	Unloading gasket	1	
3-19	3019-07010013	07.01.00.13	Sealing cover	1	
3-20	3505-021	Flat washer 8	Flat washer	4	
3-21	3501-031	M8*20	Bolt	4	

Drawing 4: Third Stage Cylinder Piston Conrod Parts (1 set)



S/N	Code	Specification	Name	Qty	Remarks
4-01	3501-010	M12*40	Bolt	6	
4-02	3505-015	Flat washer 12	Flat washer	6	
4-03	3005-42010001	42.01.00.01	Cylinder	1	
4-04	3603-031	85*2.65	O ring	1	
4-05	3005-40010011	40.01.00.11	Guide cylinder	1	
4-06	3501-010	M12*40	Bolt	4	
4-07	3505-015	Flat washer 12	Flat washer	4	
4-08	3014-80010005	80.01.00.05	Gasket	1	
4-09	2012-83030300	83.03.03.00	3 rd stage piston & connecting rod part	1	
4-10	3605-H60-332	H60-332	Piston ring	1	
4-10.1	3605-H60-01	H60-01	Piston ring	3	
4-10.2	3605-H60-02	H60-02	Piston ring	3	
4-10.3	3605-H60-03	H60-03	Piston ring	2	
4-11	3009-42040101	42.04.01.01	Piston	1	
4-12	3011-40040003	40.04.00.03	Piston pin	1	
4-13	3506-006	Circlip 25	Circlip	2	
4-14	3502-002	M6*25	Bolt	2	
4-14.1	3504-011	M6	Nut	2	
4-15	2015-8002GGA3	80.02.GG.A3	Connecting rod	1	
4-15.1	3010-800200A3	80.02.00.A3	Connecting rod shank	1	
4-15.2	3601-021	RNA25*37*35	Bearing	1	
4-15.3	3601-009	NK172*102*25-01	Bearing	1	
4-16	3014-07010010	07.01.00.10	Gasket	1	
4-17	2013-07050000	07.05.00.00	Gas valve	1	
4-17.1	3006-07050001	07.05.00.01	Valve board	1	
4-17.2	3012-11060004	11.06.00.04	Lift retainer washer	1	
4-17.3	3501-022	M5*16	Bolt	4	
4-17.4	3012-07050002	07.05.00.02	Lift retainer board	1	
4-17.5	3021-30020001	30.02.00.01	Valve plate	3	
4-17.6	3020-ZLA30000	ZL.A3.00.00	Direct flow valve	1	
4-17.7	3012-11060003	11.06.00.03	Lift retainer washer	3	
4-17.8	2013-ZLA30100	ZL.A3.01.00	Valve core assy	1	
4-17.9	3021-ZL010004	ZL.01.00.04	Reed valve plate	6	
4-17.10	3501-059	M4*6	Bolt	6	
4-17.11	3020-ZLA30007	ZL.A3.00.07	Pad	1	
4-18	3014-34010001	34.01.00.01	Copper pad	1	
4-19	3007-83010002	83.01.00.02	3 rd stage cylinder cover	1	
4-20	3505-015	Flat washer 12	Flat washer	6	
4-21	3501-014	M12*65	Bolt	6	
4-22	3020-JT040002	JT.04.00.02	Screw plug	1	

Drawing 5: intercoolers & Parts List



S/N	Code	Specification	Name	Qty	Remarks
5-0	2014-83050000	83.05.00.00	Intercooler components	1	
5-1	3013-83050008	83.05.00.08	Finned pipe	1 set	
5-1.1	3013-83050008-01	83.05.00.08-01	Finned pipe	3	
5-1.2	3013-83050008-02	83.05.00.08-02	Finned pipe	3	
5-1.3	3013-83050008-03	83.05.00.08-03	Finned pipe	3	
5-2	3013-83050007	83.05.00.07	Finned pipe	1 set	
5-2.1	3013-83050007-01	83.05.00.07-01	Finned pipe	3	
5-2.2	3013-83050007-02	83.05.00.07-02	Finned pipe	3	
5-2.3	3013-83050007-03	83.05.00.07-03	Finned pipe	3	
5-3	3013-83050006	83.05.00.06	Finned pipe	1 set	
5-3.1	3013-83050006-01	83.05.00.06-01	Finned pipe	6	
5-3.2	3013-83050006-02	83.05.00.06-02	Finned pipe	6	
5-4	3019-83050004	83.05.00.04	Air collecting strip	1	
5-5	3008-83050010	83.05.00.10	Air collector	1	
5-6	3008-83050011	83.05.00.11	Air collector	1	
5-7	3008-83050012	83.05.00.12	Air collector	1	
5-8	3019-83050003	83.05.00.03	Air collecting strip	1	
5-9	3014-09050024	09.05.00.24	Gasket	3	

Table 6: Complete Sealing Gasket List of 83SH Machine Head

S/N	Code	Specification	Name	Qty	Remarks
6-01	3014-80000002	80.00.00.02	Crankcase cover gasket	1	Need to stock
6-02	3014-11010006	11.01.00.06	Bearing end cover gasket	1	Need to stock
6-03	3014-11010010	11.01.00.10	Cylinder gasket	3	Need to stock
6-04	3014-80010005	80.01.00.05	Bottom gasket of the guide cylinder	1	Need to stock
6-05	3014-09050024	09.05.00.24	Gas collector gasket	3	Need to stock
6-06	3014-11010013	11.01.00.13	Bottom paper gasket, 1 st stage valve board	2	Need to stock
6-07	3014-11010012	11.01.00.12	Upper paper gasket, 1 st stage valve board	2	Need to stock
6-08	3014-11010015	11.01.00.15	Bottom paper gasket, 2 nd stage valve board	1	Need to stock
6-09	3014-09010019	09.01.00.19	upper paper gasket, 2 nd stage valve board	1	Need to stock
6-10	3014-07010010	07.01.00.10	Bottom gasket	1	Need to stock
6-11	3014-34010001	34.01.00.01	Copper pad	1	Need to stock
6-12	3603-010	23.5*3.55	O ring	1	Need to stock
6-13	3603-031	85*2.65	O ring	1	Need to stock
6-14	3603-011	25*3.55	O ring	2	Need to stock

Table 7: Common Electric Components for 83SH Series

S/N	Code	Specification	Item	Brand	Remarks
7-01	3305-026	DZ158-125/3P/100A	Air switch	CHINT	
7-02	3305-028	DZ47-60/1P/D6A	Air switch	CHINT	
7-03	3301-014	LC1-D8011Q7C/380V	AC contactor	SCHNEIDER	
7-04	3302-011	LR2-3363C	Thermal relay	SCHNEIDER	
7-05	3304-001	JZX-22F(D)/2Z	Intermediate relay	CHINT	
7-06	3303-001	JSZ3/A-A/30S	Time relay	CHINT	
7-07	3305-025	NCF1-11C	Auxiliary Contact Module	CHINT	
7-08	3303-006	SK4-222	Air delay	DELIXI	
7-09	3305-004	NP2-ED21	Button switch	CHINT	
7-10	3305-024	ED101C,102C	Auxiliary contact	CHINT	
7-11	3305-036	ND16-22DS/4	Signal light	CHINT	
7-12	3305-018	6L2/0-450V	Voltmeter	CHINT	
7-13	3305-009	6L2/0-100A	Ammeter	CHINT	Singe unit
7-13	3305-010	6L2/0-200A/5A	Ammeter	CHINT	Double unit
7-13	3305-011	6L2/0-300A/5A	Ammeter	CHINT	Three-engine unit
7-14	3305-035	RT28-32/4AV	Fuser core	CHINT	
7-15	3305-013	BH1-0.66-100/5A/Φ30	Current transformer	CHINT	Singe unit
7-15	3305-015	BH1-0.66-200/5A/Φ30	Current transformer	CHINT	Double unit
7-15	3305-016	BH1-0.66-300/5A/Φ30	Current transformer	CHINT	Three-engine unit
7-16	3307-007	SH-892A/AC220V	Timer	Guangya	
7-17	3305-023	UK3N	Terminal	Phoenix	
7-18	3305-019	TC-1003	Terminal	CHINT	
7-19	3305-020	TC-1504	Terminal	CHINT	Single & double unit
7-19	3305-021	TC-2004	Terminal	CHINT	Three-engine unit