



肯石重工
专业铸就品质

EXCAVATOR

PARTS

BOOK

挖掘机零件手册



前 言

本零件图册列出了【XN20 液压挖掘机】的主要零件。

1.如何订购零件

订购零件时，请参照示例详细写明下列事项。

例：1) 设备型号 : XN20 (标于铭牌上)

2) 发动机系列号 : 3TNV70-SSY (标于发动机缸体上)

3) 零件号 : 1.11

4) 零件名称 : 回转接头

5) 数量 : 1

2.怎样使用本零件图册

序号 : 标明零件图中的零件序号

零件号 : 由若干字母和数字组成，是图示零件的货号，也在订货时要标明的特定代号，非常重要。

名称 : 零件名称。部分名称中含技术规格。

数量 : 表明图中所用的零件数量。在由组装零件和零件组构成的零件中，表示其组装件的件数。

备注 : 提供查找页数或说明。

FOREWORD

This parts list is shown the equipment components parts of [EXCAVATOR XN75-9].

1.HOW TO ORDER PARTS

When ordering parts , please specify the following items as shown in the following example.

- EX. 1) Model of machine : XN20 (Shown on name plate on the side cover)
2)Engine Serial No : 3TNV70-SSY (Shown on Engine cylinder block)
3)Part No. : 1.11
4)Part Name : Revolving joint
5)Q'TY : 1

2.HOW TO USE THIS PARTS LIST.

- Item : It shows the part number of the parts which are included in an parts drawing.
- Part No. : It is made up of several numbers and letters. It is the code used when ordering that part , and very important that there be no mistake in this code number when ordering.
- Part Name : It shows the name of part. Some of the part name contains technical specifications.
- Q'TY : It shows the numbers of the part in this drawing. If one part is included in the assembly and/or component , the quantity per such assembly and/or component is specified.
- REMARK : Description

CONTENTS

MACHINE BOD 整机

1.0 LOWER FRAME 下车架

1.4 行走马达 Travel motor

1.11 回转接头 Swivel joint

2.0 MAIN FRAME ASSY 上车架

2.4 发动机总成 Engine assembly

2.4.1 发动机 The engine

2.4.1.1 气缸体 CYLINDER BLOCK

2.4.1.2 齿轮箱 GEAR HOUDING

2.4.1.3 飞轮壳和油底壳 FLYWHEEL HOUSING & OIL SUMP

2.4.2.4 气缸盖和阀盖 CYLINDER HEAD & BONNET

2.4.1.5 排气歧管 EXHAUST MANIFOLD

2.4.1.6 凸轮轴和传动齿轮 CAMSHAFT & DRIVING GEAR

2.4.1.7 曲轴和活塞 CRANKSHAFT & PISTON

2.4.1.8 润滑系统 LUB.OIL SYSTEM

2.4.1.9 冷却水系统 COOLING WATER SYSTEM

2.4.1.10 燃油泵 FUEL INJECTION PUMP

2.4.1.11 调速器 GOVERNOR

2.4.1.12 喷油阀 FUEL INJECTION VALVE

2.4.1.13 燃油管 FUEL PIPE

2.4.1.14 启动马达 STARTER MOTOR

2.4.1.15 发电机 GENERATOR

2.13 座椅调节板 Seat adjuster

2.41 回转马达 Rotary motor

2.42 操作罩 OERATING COVER

2.43 主泵总成 The main pump

2.44 主阀总成 Main Valve Assembly

2.51 柴油箱总成 Diesel fuel tank assembly

2.52 液压油箱总成 Hydraulic tank assembly

2.53 手油门 The hand throttle

3.0 FRONT ASSY 前部装置

3.1 动臂总成 Lift arm ASSY

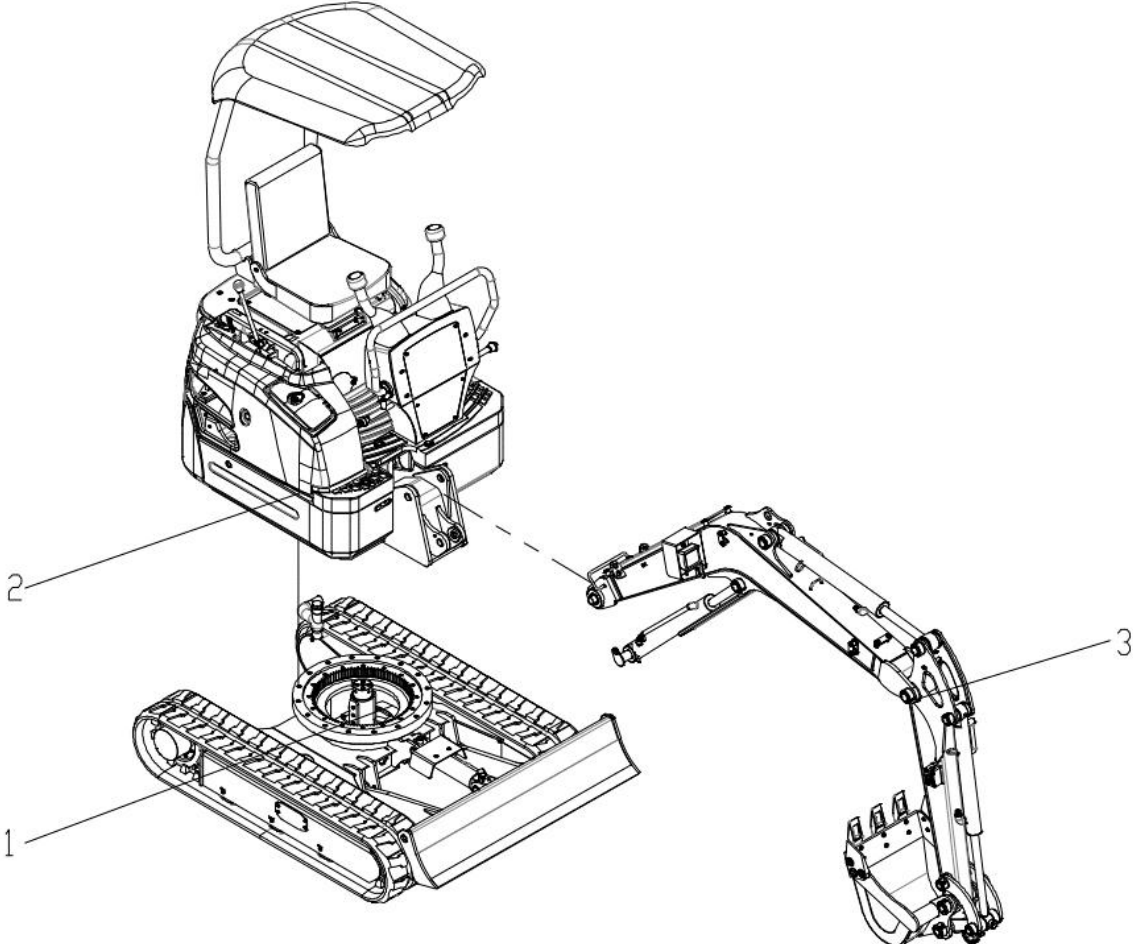
3.2 斗杆总成 Bucket rod ASSY

3.6 推杆总成 Pushing rod ASSY

MACHINE BODY 整机

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	1.0	Lower frame	下车架	1	
2	2.0	Swing body	回转体	1	
3	3.0	Front ASSY	前部装置	1	

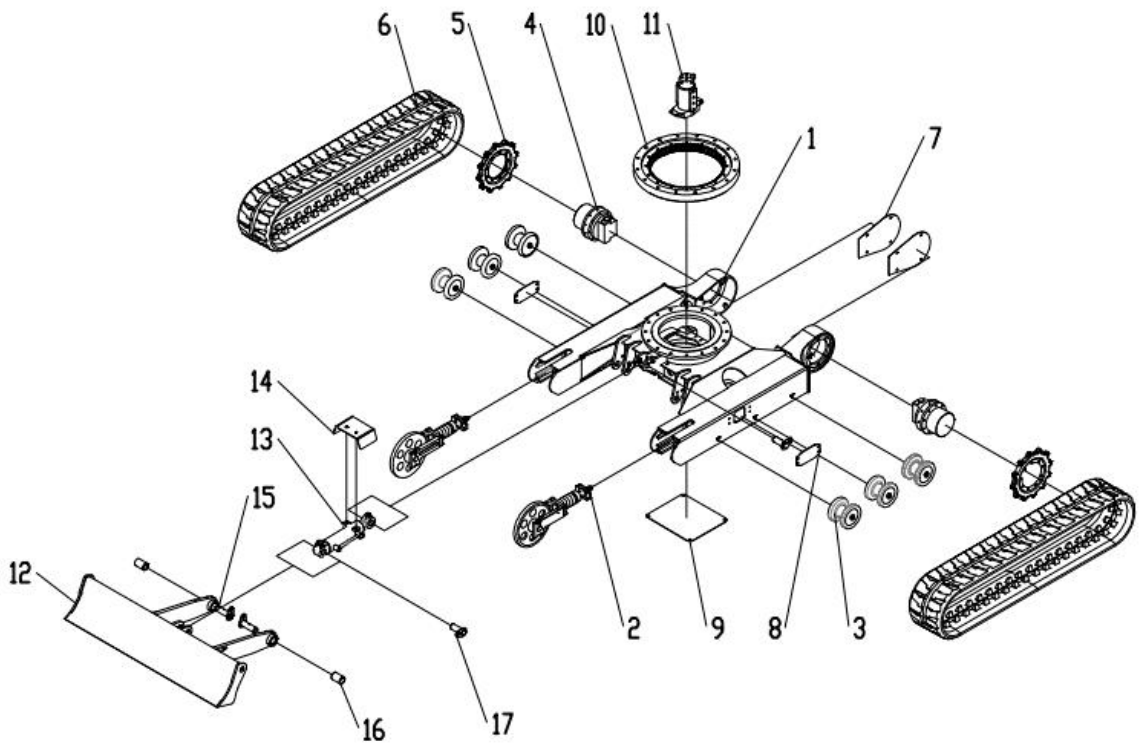
MACHINE BODY 整机




1.0 LOWER FRAME 下车架

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	1.1	Lower frame welding	下车架焊合	1	
2	1.2	Guide pulley	导向轮	2	
3	1.3	Thrust Wheel	支重轮	6	
4	1.4	Travel motor	行走马达	2	
5	1.5	Driving wheel	驱动轮	2	
6	1.6	Track chain Assy	履带总成	2	
7	1.7	The motor cover plate	马达盖板	2	
8	1.8	Cover plate	盖板	2	
9	1.9	Under the cover	下盖板	1	
10	1.10	Rotary support	回转支撑	1	
11	1.11	Swivel joint	回转接头	1	
12	1.12	Before the shovel	前铲	1	
13	1.13	Before the shovel cylinder	前铲油缸	1	
14	1.14	Protective cover	防护罩	1	
15	1.15	Before the shovel shaft	前铲轴	2	
16	1.16	Steel bushing	钢套	2	
17	1.17	Front shovel oil cylinder shaft	前铲油缸轴	2	

1.0 LOWER FRAME 下车架



1.4 Travel motor 行走马达

25	O-RING	G105-B		1	G0105-B	A	
24	SPRING			14	JMGC4009	B	
23	BACK UP RING	G95용		1	GOBUR95	A	
22	O-RING	G95-A		1	G095A	A	
21	BACK UP RING	G90용		1	GOBUR90	A	
20	O-RING	G90-A		1	G090A	A	
19	PARKING PISTON			1	JMGC4008	B	
18	PARKING PLATE			1	JMGC4007	B	
17	FRICITION PLATE			1	JMGC4006	B	
II-C-16	PISTON ASS'Y			7	JMGA1011	X	
II-B-15	SET PLATE			1	JMGA1010	X	
II-B-14	BALL GUIDE			1	JMGA1009	X	
II-A-13	PIN	ø2.4x18L		3	JMGA1008	X	
II-A-12	SNAP RING	ø28 (구멍용)		1	SR28CH	X	
II-A-11	SPRING			1	JMGA1007		
II-A-10	SPRING SEAT			2	JMGA1006	X	
II-A-9	CYLINDER BLOCK			1	JMGC4005	X	
II-A	CYLINDER BLOCK KIT					C	
II	ROTARY KIT					C	
8	SWASH PLATE			1	JMGC4004	B	
7	SWASH STEEL BALL	ø12		2	SB12	A	
I-6	SWASH PISTON ASS'Y			1	JMGC4003	B	
I	SWASH PISTON KIT					C	
5	SHAFT			1	JMGC4002	A	
4	BEARING	#16004		1	BB16004	B	
3	OIL SEAL	AP 0997 E0		1	OSAP0997E0	A	
2	PLUG	NPT 1/16		10	NPT116	A	
1	SHAFT CASING			1	JMGC4001	B	
번호 NO.	품명 PART NAME	규격 STANDARD	재질 MATERIAL	수량 Q'TY	비고 REMARK	RSP	
일반공차 GEN.TOL	—	표면다듬질SURF.TEXTURE		 도 명 DWG.NAME △ PTM-12/6-01-37 PTM-12/6-01-37 HYDRAULIC MOTOR & REDUCER ASSY 도면크기 DWG.SIZE 2 도 번 DWG.NO JMGC4000 A1 2 번째 OF 2 장중 SHEET			
각도공차 ANGLE TOL	—	제도 DRAW	L.Y.W				검도 CHECK
재질 MAT'L	—	설계 DESIGN					승인 APP'D
열처리 H.TREAT	—	날짜 DATE	2016. 04. 05				
표면처리 S.TREAT	—	척도 SCALE	N.S				단위 DIM

1.4 Travel motor 行走马达

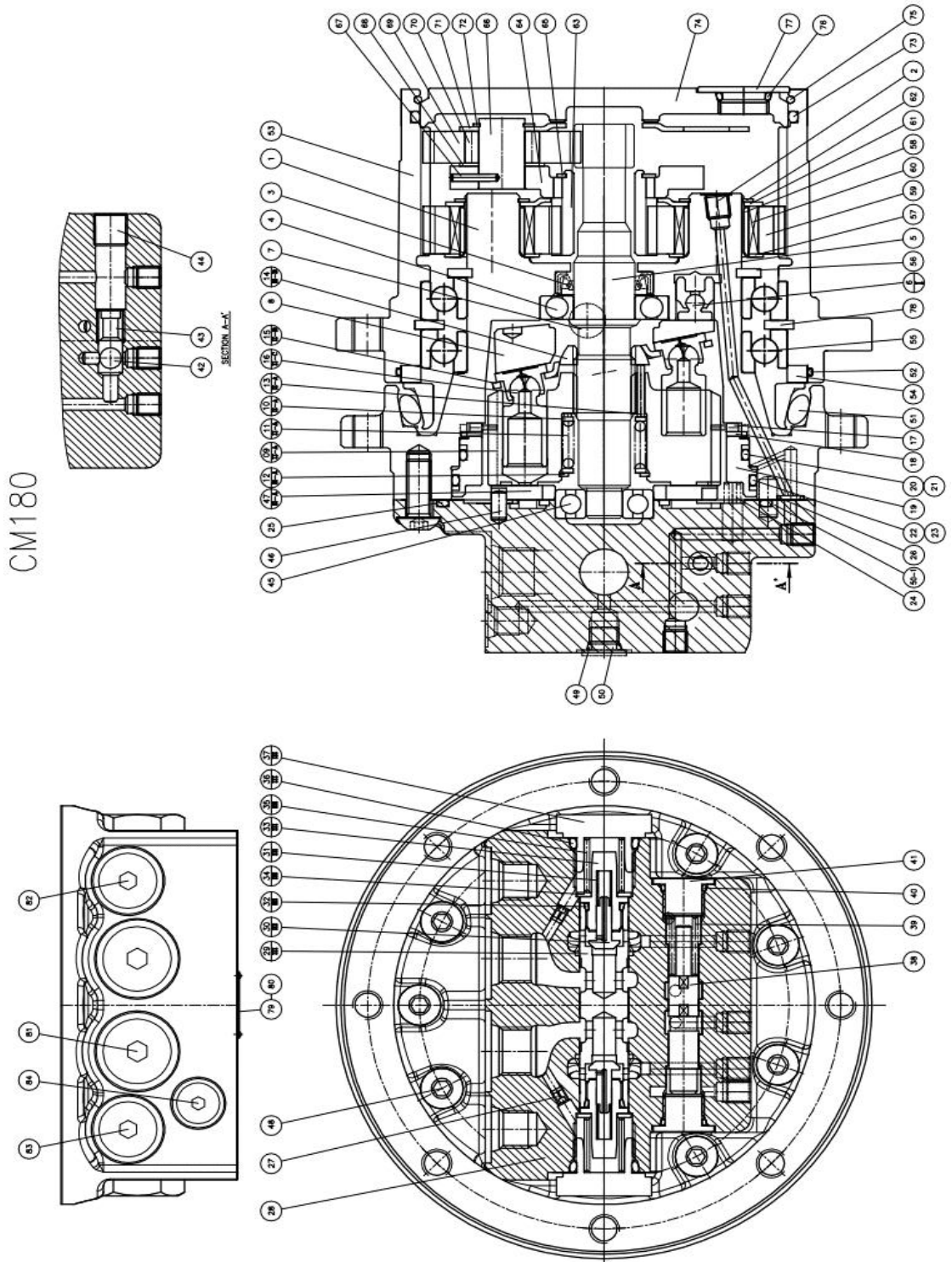
50-1	PIN	∅6x14L		2	P10000P3	B
50	PLUG	PF1/8		2	JTDG2008-16	B
49	O-RING	P8		2	PO 008	A
48	동근머리 BOLT	M8x20L		7	WBM0820	A
II-A-47	VALVE PLATE			1	JMGA1025	X
46	PIN	∅5x10L		1	JMGA1024	B
45	BALL BEARING	#6201		1	BB6201	A
44	PLUG	PT1/4		1	PT 1/4	A
43	CHECK SEAT			1	JMAA1030	B
42	STEEL BALL	9/32		1	SB932	A
41	PLUG			2	JMGA1023	B
40	O-RING	P12		2	PO 012	A
39	SPRING			1	JMGA1022	B
38	SPOOL			1	JMGA1021	B
III-37	PLUG			2	JMGA1020	B
III-36	O-RING	AS568-115		2	AO 115	A
III-35	SPRING			2	JMGA1019	B
III-34	SPRING SEAT			2	JMGA1018	X
III-33	PLUG			2	JMGA1017	B
III-32	O-RING	P10		2	PO 010	A
III-31	SPRING			2	JMGA1016	B
III-30	CHECK			2	JMGA1015	B
III-29	MAIN SPOOL			1	JMGA1014	X
III	MAIN SPOOL KIT					C
28	REAR COVER			1	JMGC4010	B
27	ORIFICE	∅0.5		2	JMGA1012	A
26	O-RING	P6		2	PO 006	A

1.4 Travel motor 行走马达

84	PLUG(플라스틱)	PF1/8		1	PP18	
83	PLUG(STEEL)	PF1/4		1	PP14	
82	PLUG(플라스틱)	PF1/4		1	PP14	
81	PLUG(플라스틱)	PF3/8		2	PP38	
80	RIVET			2	RVT175	B
79	NAME PLATE			1	JMGC4025	B
78	STOP RING			1	JMGC4028	B
77	PLUG			2	JMGA1042	B
76	O-RING	P14		2	PO 014	A
75	WIRE	φ2.5		1	JMGA1041	A
74	RING GEAR COVER			1	JMGA1040	A
73	O-RING	G120		1	GO 120	A
72	SNAP RING	C형 φ15(축용)		3	SR15CS	A
71	THRUST PLATE			1	JMGA1039	A
70	NEEDLE(B)	φ4.7x11		3x13	JMGA1038	A
69	PLANETARY GEAR(B)	Z:32		3	JMGA1037	B
68	WASHER(B)			3	JMGA1036	B
번호 NO.	품명 PART NAME	규격 STANDARD	재질 MATERIAL	수량 Q'TY	비고 REMARK	RSP

67	SPRING PIN	φ2.5x15L		3	SP2515	B
66	CARRIER PIN			3	JMGA1035	B
65	SNAP RING	C형 φ26(축용)		1	SR26CS	A
64	CARRIER			1	JMGA1034	A
63	SUN GEAR	Z:20		1	JMGA1033	A
62	SNAP RING	C형 φ18(축용)		4	SR18CS	A
61	PLATE			1	JMGC4024	B
60	NEEDLE(A)	φ3.2x16		4x23	JMGC4023	A
59	PLANETARY GEAR(A)	Z:27		4	JMGA1030	B
58	COLLAR			4	JMGC4022	A
57	WASHER(A)			4	JMGC4021	B
56	SNAP RING	C형 φ90(축용)		1	SR90CS	A
55	ANGULAR BAERING	φ90xφ120x15		2	AC 90120	A
54	FLOATING SEAL GUIDE			1	JMGA1027	A
53	RING GEAR			1	JMGA1026	B
52	O-RING	AS568-050		1	AO 050	A
51	FLOATING SEAL			1	JS1120SCB	A
번호 NO.	품명 PART NAME	규격 STANDARD	재질 MATERIAL	수량 Q'TY	비고 REMARK	RSP

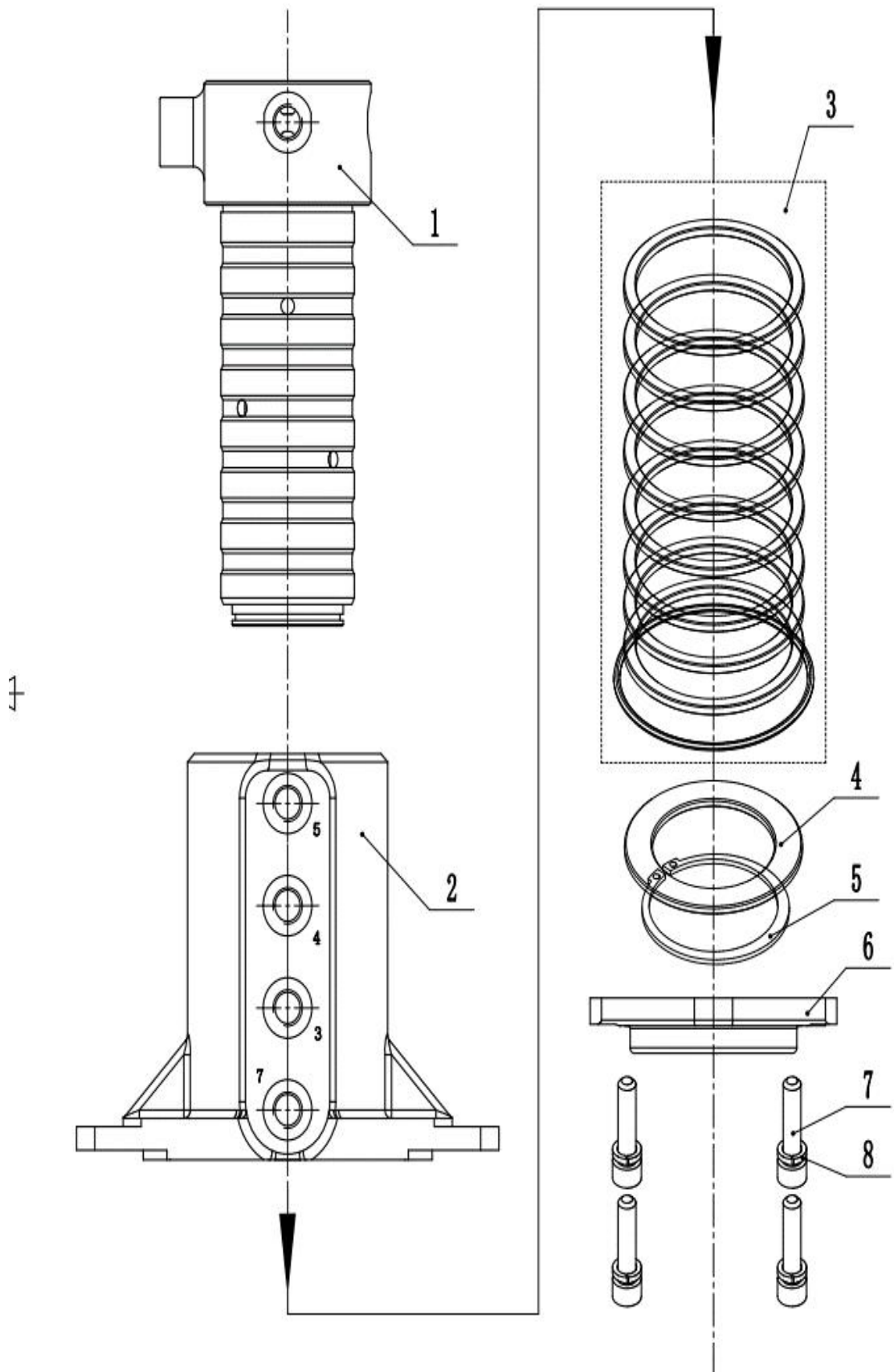
1.4 Travel motor 行走马达



1.11 SWIVEL JOINT 回转接头

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	FSJ20080-0000-00002	Oil distribution shaft assembly	配油轴组件	1	
2	FSJ20080-0000-00001	Solid of revolution	回转体	1	
3	FSJ20-31A-05000	Kit-seal	密封件修理包	1	
4	FSJ20-31A-00004a	Retaining ring	挡圈	1	
5	GB/T894.0-50	Shaft clamp	轴用卡簧	1	
6	FSJ20080-0000-00003	End cover	端盖	1	
7	GB/T70.1-M8X25-10.9	Inner Hexagon cylinder head	内六角圆柱头	4	
8	GB/T93-8	Spring washer	弹簧垫圈	4	

1.11 SWIVEL JOINT 回转接头



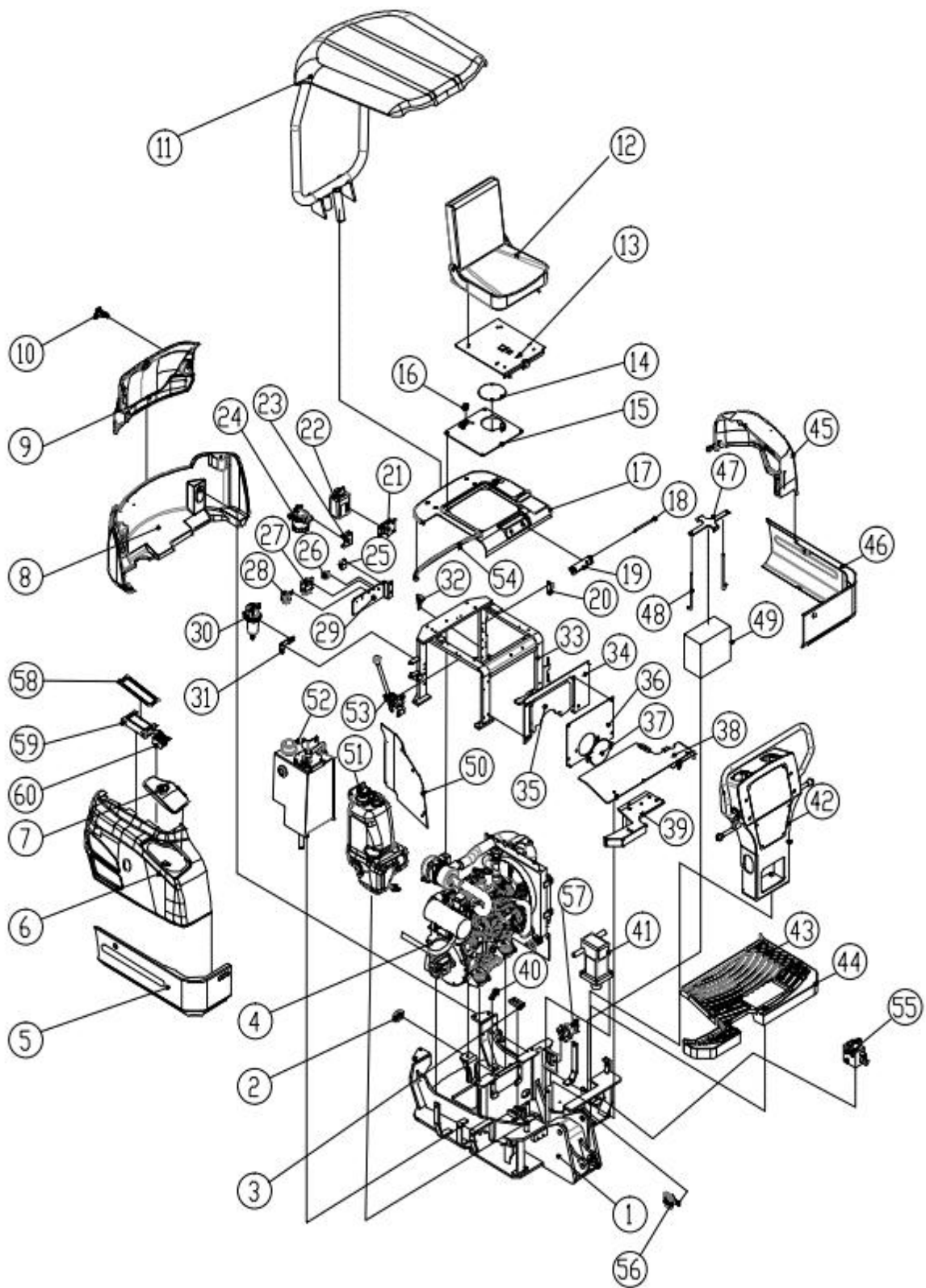
2.0 MAIN FRAME ASSY 上车架

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.1	Upper bracket welding	上支架焊合	1	
2	2.2	Rubber sheath	橡胶护套	1	
3	2.3	Snap-gauge	卡板	1	
4	2.4	Engine assembly	发动机总成	1	
5	2.5	Covering parts	覆盖件	1	
6	2.6	Covering parts	覆盖件	1	
7	2.7	Tank top lock	油箱上盖锁	1	
8	2.8	Weight	配重	1	
9	2.9	The back door	后门	1	
10	2.10	After the door lock	后门锁	1	
11	2.11	Ceiling	顶棚	1	
12	2.12	The seat	座椅	1	
13	2.13	Seat adjuster	座椅调节板	1	
14	2.14	Cover plate	盖板	1	
15	2.15	Seat plate	座椅固定板	1	
16	2.16	Glue the pier	胶墩	2	
17	2.17	Seat plate	座椅连接板	1	
18	2.18	Pin	销轴	1	
19	2.19	Pin board	销轴板	1	
20	2.20	The door lock after nasal	后门锁鼻	1	
21	2.21	Water bottle holder	溢水壶支架	1	
22	2.22	Excessive kettle	溢水壶	1	
23	2.23	Diesel filter holder	柴油滤芯支架	1	
24	2.24	Diesel fuel filter	柴油滤芯	1	
25	2.25	Wire harness	线束	1	
26	2.26	Wire harness	线束	1	
27	2.27	Wire harness	线束	1	
28	2.28	Wire harness	线束	1	
29	2.29	Wiring harness bracket	线束支架	1	
30	2.3	Oil-water separator	油水分离器	1	
31	2.31	Oil and water separator support.	油水分离器支架	1	
32	2.32	Hang the bridge	挂鼻架	1	
33	2.33	Seat stent	座椅支架	1	

2.0 MAIN FRAME ASSY 上车架

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
34	2.34	Cover plate	盖板	1	
35	2.35	Sound insulation cotton	隔音棉	1	
36	2.36	Cover plate	盖板	1	
37	2.37	Cover plate	盖板	1	
38	2.38	The pedals	脚踏板	1	
39	2.39	Right pedal	右踏板	1	
40	2.4	Water mouth	放水口	1	
41	2.41	Rotary motor	回转马达	1	
42	2.42	Operating cover	操作罩	1	
43	2.43	Foot pad	脚踏垫	1	
44	2.44	Foot pad	脚踏垫	1	
45	2.45	Covering parts	覆盖件	1	
46	2.46	Covering parts	覆盖件	1	
47	2.47	The battery holder	电瓶压板	1	
48	2.48	Hook	挂钩	2	
49	2.49	He battery	电瓶	1	
50	2.5	Covering parts	覆盖件	1	
51	2.51	Diesel fuel tank assembly	柴油箱总成	1	
52	2.52	Hydraulic tank assembly	液压油箱总成	1	
53	2.53	The hand throttle	手油门	1	
54	2.54	Rubber strip	橡胶条	1	
55	2.55	Solenoid valve	电磁阀	1	
56	2.56	The horn	喇叭	1	
57	2.57	The battery switch	电瓶开关	1	
58	2.58	Instrument cover	仪表护套	1	
59	2.59	Instrument	仪表	1	
60	2.6	Switch	开关	1	

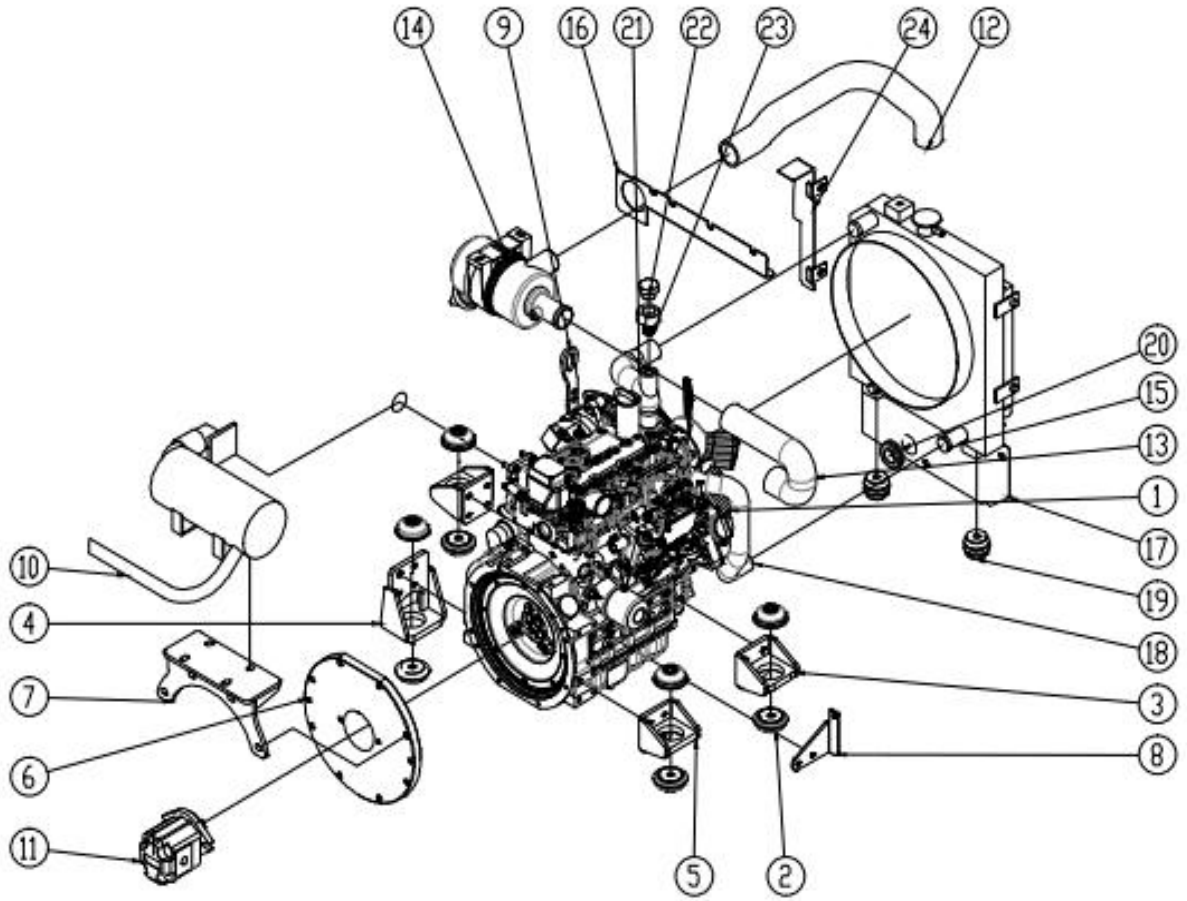
2.0 MAIN FRAME ASSY 上车架



2.4 ENGINE ASSY 发动机总成

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.4.1	The engine	发动机	1	
2	2.4.2	Engine block	发动机胶墩	4	
3	2.4.3	Engine front legs.	发动机前机器	2	
4	2.4.4	Engine left rear machine leg.	发动机左后机	1	
5	2.4.5	Engine right rear machine leg.	发动机右后机	1	
6	2.4.6	Pump disc	泵盘	1	
7	2.4.7	Silencer support	消音器支架	1	
8	2.4.8	Oil gate bracket.	油门线支架	1	
9	2.4.9	Hoisting ring	吊装环	1	
10	2.4.10	Silencer	消音器	1	
11	2.4.11	The main pump	主泵	1	
12	2.4.12	A empty filter tubes	空滤管 A	1	
13	2.4.13	B empty filter tubes	空滤管 B	1	
14	2.4.14	Air filter.	空气滤清器	1	
15	2.4.15	The radiator	散热器	1	
16	2.4.16	Every wind on board	上隔风板	1	
17	2.4.17	Under the wind plate	下隔风板	1	
18	2.4.18	Water inlet	进水管	1	
19	2.4.19	Radiator rubber block	散热器胶墩	2	
20	2.4.20	Sheath	护套	1	
21	2.4.21	The water breaks down the pipe -1	水散出水管-1	1	
22	2.4.22	The water breaks down the pipe -3	水散出水管-3	1	
23	2.4.23	The water breaks down the pipe -2	水散出水管-2	1	
24	2.4.24	Left every wind plate	左隔风板	1	

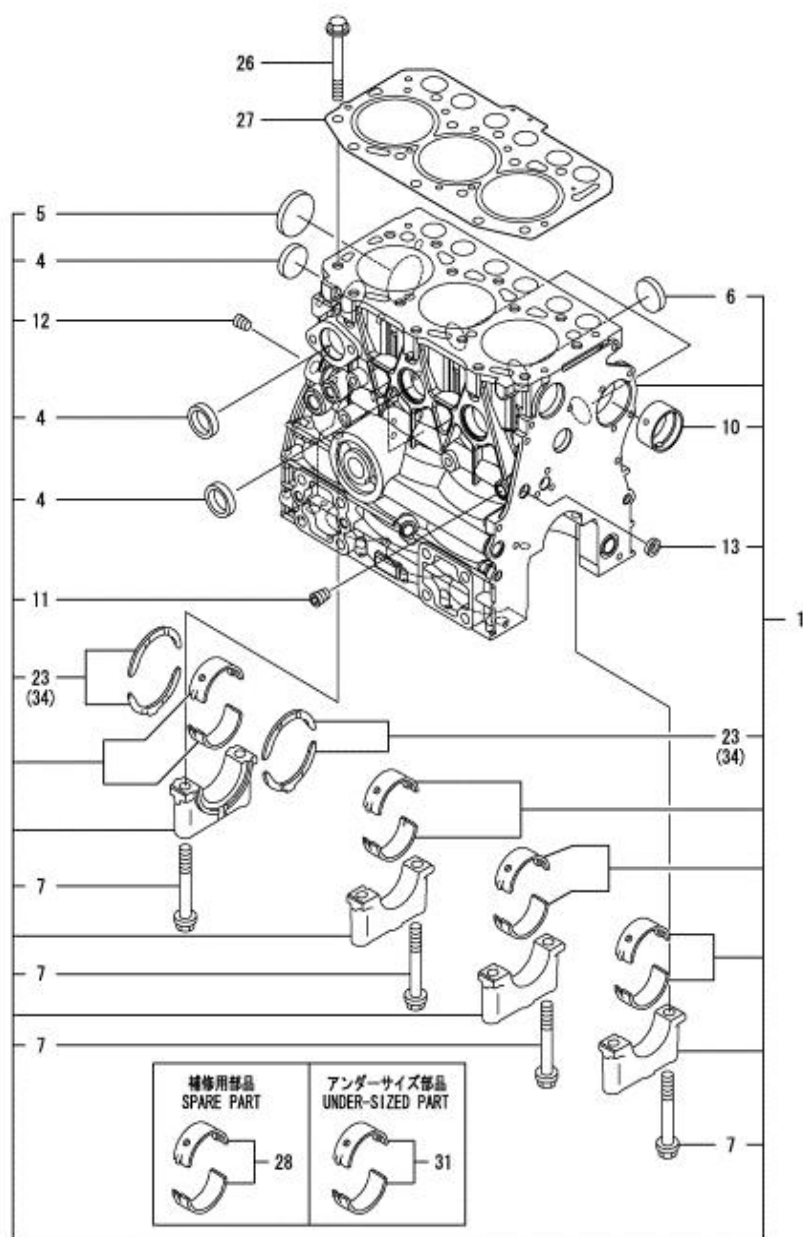
2.4 ENGINE ASSY 发动机总成



2.4.1 The engine 发动机 (3TNV70-SSY)

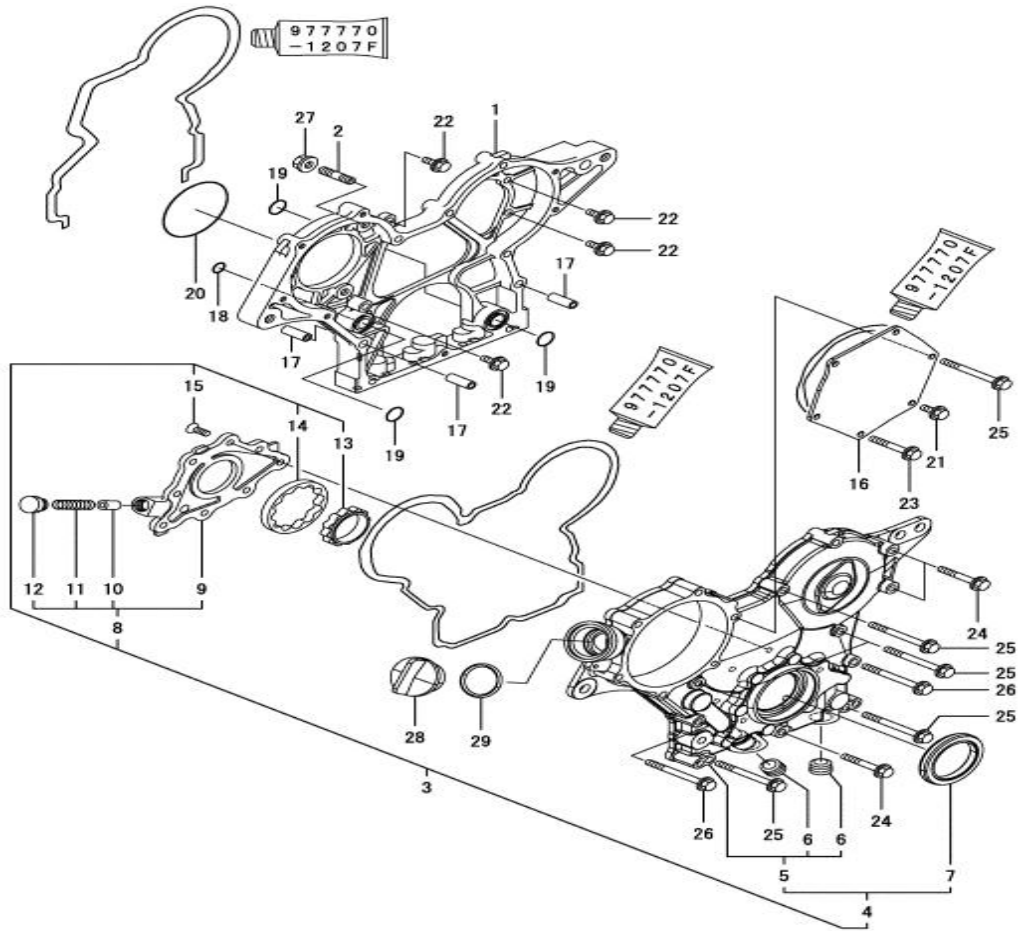
序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.4.1.1	CYLINDER BLOCK			
2	2.4.1.2	GEAR HOUDING			
3	2.4.1.3	FLYWHEEL HOUSING & OLI SUMP			
4	2.4.1.4	CYLINDER HEAD & BONNET			
5	2.4.1.5	EXHAUST MANIFOLD			
6	2.4.1.6	CAMSHAFT & DRIVING GEAR			
7	2.4.1.7	CRANKSHAFT & PISTON			
8	2.4.1.8	LUB.OIL SYSTEM			
9	2.4.1.9	COOLING WATER SYSTEM			
10	2.4.1.10	FUEL INJECTION PUMP			
11	2.4.1.11	GOVERNOR			
12	2.4.1.12	FUEL INJECTION VALVE			
13	2.4.1.13	FUEL PIPE			
14	2.4.1.14	STARTER MOTOR			
15	2.4.1.15	GENERATOR			

2.4.1 .1 CYLINDER BLOCK 气缸体



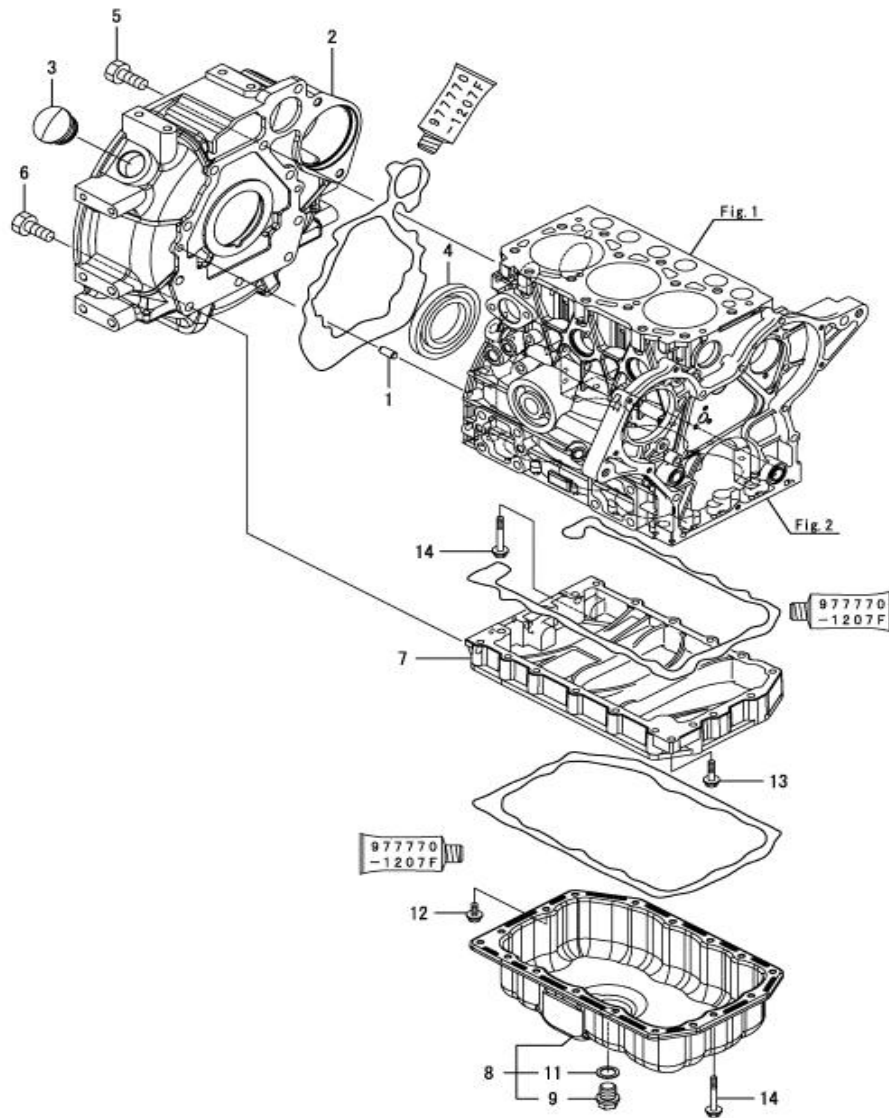
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-01560	BLOCK ASSY, CYLINDER	1							
4	2	105311-01090	PLUG, 30	4							
5	2	119623-01250	PLUG, 45	1							
6	2	119285-01990	PLUG, 25	3							
7	2	119620-02020	BOLT, METAL CAP	8							
10	2	119717-02411	BUSH, CAMSHAFT	1							
11	2	124060-01050	PLUG, PT1/8	1							
12	2	124160-01910	PLUG, PT1/4	1							
13	2	27241-120000	PLUG, 12	1							
23	2	119717-02930	BEARING, THRUST	2							
26	1	119515-01200	BOLT, HEAD	14							
27	1	119515-01331	GASKET, HEAD	1							
28	1	719717-02901	BEARING, MAIN	4							1
31	1	719717-02911	BEARING, 0.25 US	4							2
34	1	119810-02941	BEARING, THRUST 0.25	2							3

2.4 .1.2 GEAR HOUSING 齿轮箱



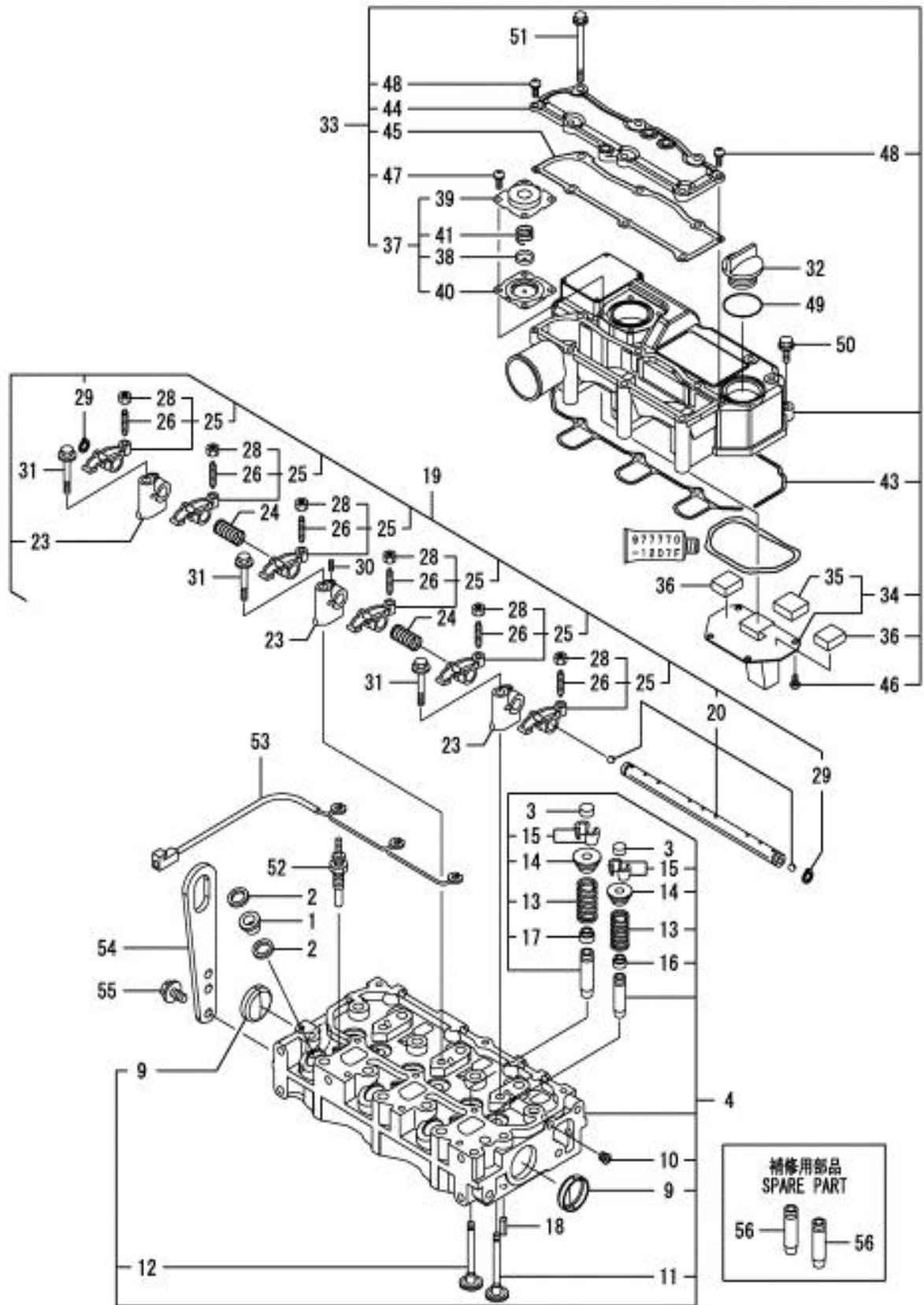
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119717-01501	CASE, GEAR	1							
2	1	119717-01570	STUD	3							
3	1	119734-01590	COVER ASSY, GEAR CASE	1							
4	2	719734-01500	COVER ASSY, GEAR CASE	1							
5	3	119717-01521	COVER, GEAR CASE	1							
6	4	23876-030000	PLUG, R03	2							
7	3	119717-01800	SEAL, OIL	1							
8	2	119717-32100	COVER ASSY	1							
9	3	119717-32080	COVER	1							
10	3	129900-32130	VALVE, RELIEF	1							
11	3	129001-32320	SPRING	1							
12	3	129001-32330	PLUG	1							
13	2	119717-32110	ROTOR, INNER	1							
14	2	119717-32120	ROTOR, OUTER	1							
15	2	119802-32130	SCREW, M6X16	8							
16	1	119717-01750	COVER	1							
17	1	119660-01911	PIPE, KNOCK	4							
18	1	119624-32040	O-RING, P12.0	1							
19	1	119717-32050	O-RING, P17.0	3							
20	1	121850-51960	O-RING	1							
21	1	26106-060122	BOLT, M6X 12 PLATED	1							
22	1	26106-060162	BOLT, M6X 16 PLATED	4							
23	1	26106-060402	BOLT, M6X 40 PLATED	4							
24	1	26106-060402	BOLT, M6X 40 PLATED	3							
25	1	26106-060602	BOLT, M6X 60 PLATED	7							
26	1	26106-060652	BOLT, M6X 65 PLATED	2							
27	1	26306-080002	NUT, M8	3							
28	1	124160-01751	COVER, FILLER	1							
29	1	24311-000320	O-RING, 1AP32.0	1							

2.4 .1.3 FLYWHEEL HOUSING & OIL SUMP 飞轮壳和油底壳



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, 8X16	2							
2	1	119515-01601	HOUSING, FLYWHEEL	1							
3	1	119620-01750	CAP	1							
4	1	119734-02220	SEAL, OIL	1							
5	1	26206-100252	BOLT, M10X 25 PLATED	7							
6	1	26206-100302	BOLT, M10X 30 PLATED	3							
7	1	119515-01720	SPACER, OIL SUMP	1							
8	1	119540-01770	SUMP ASSY, OIL	1							
9	2	105425-01690	PLUG, 16	1							
11	2	22190-160002	WASHER, SEAL 16	1							
12	1	26106-060122	BOLT, M6X 12 PLATED	1							
13	1	26106-060252	BOLT, M6X 25 PLATED	1							
14	1	26106-060452	BOLT, M6X 45 PLATED	17							

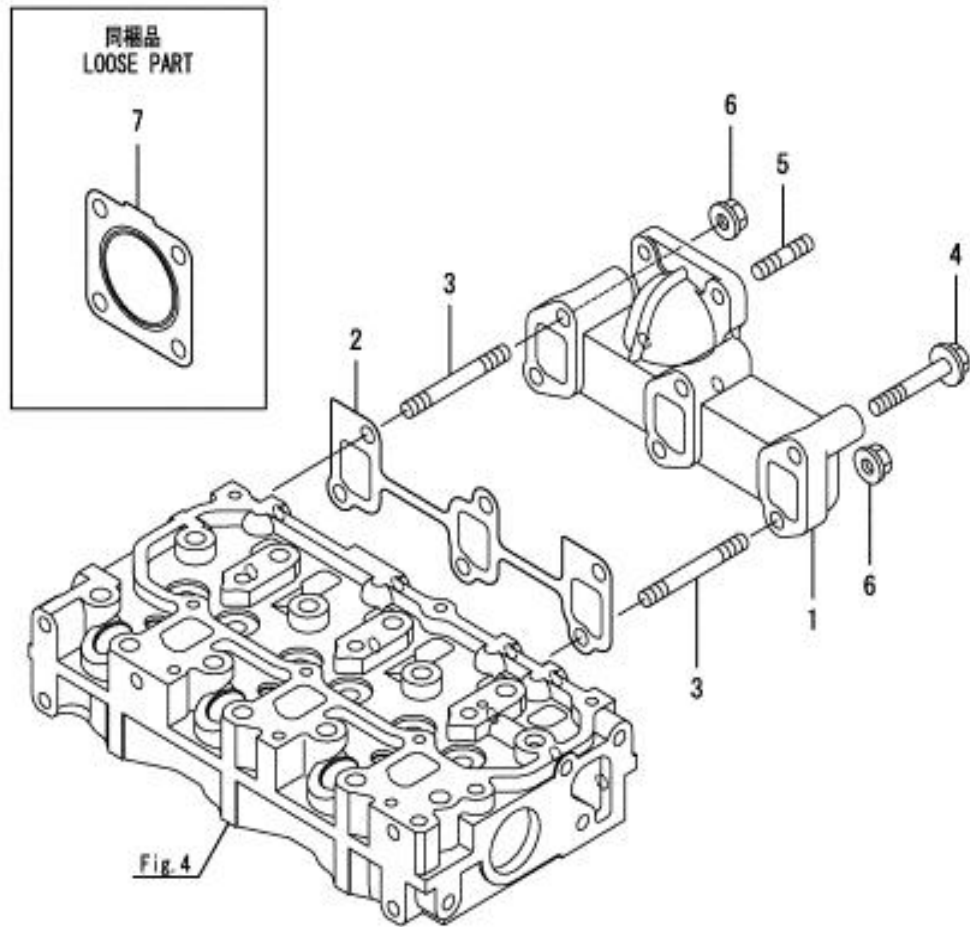
2.4 .1.4 CYLINDER HEAD & BONNET 气缸盖和阀盖



2.4 .1.4 CYLINDER HEAD & BONNET 气缸盖和阀盖

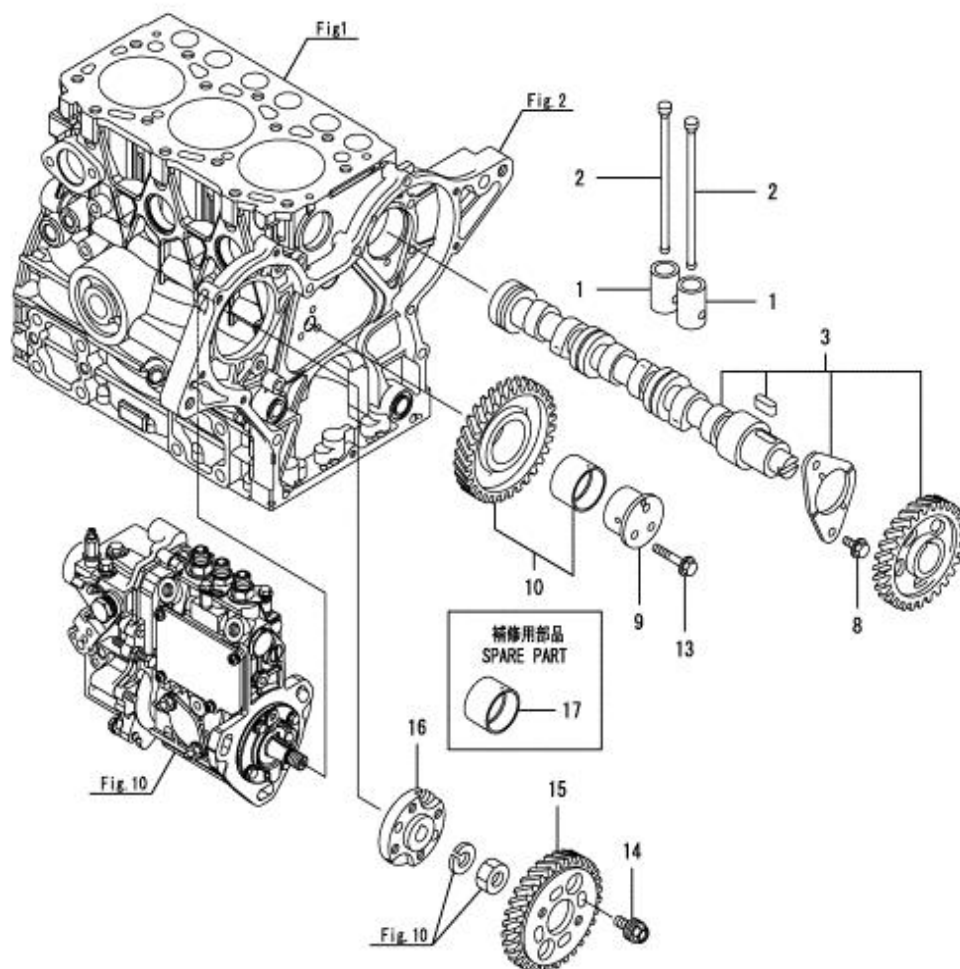
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129901-11450	PROTECTOR, NOZZLE	3							
2	1	119600-11460	GASKET, NOZZLE	6							
3	1	105010-11490	CAP, VALVE	6							
4	1	119515-11740	HEAD ASSY, CYLINDER	1							
9	2	119285-11990	PLUG, 35	2							
10	2	23876-005000	PLUG, R005	1							
11	2	119515-11101	VALVE, INTAKE	3							
12	2	119515-11110	VALVE, EXHAUST	3							
13	2	119717-11131	SPRING, VALVE	6							
14	2	129508-11180	RETAINER, SPRING	6							
15	2	119717-11190	COTTER	12							
16	2	119717-11340	SEAL, VALVE STEM	3							
17	2	119717-11350	SEAL, VALVE STEM	3							
18	1	22351-060012	PIN, SPRING 6.0X12	2							
19	1	119515-11200	SUPPORT ASSY, ARM	1							
20	2	119515-11240	SHAFT ASSY, ROCKER	1							
23	2	119717-11260	SUPPORT, ROCKER ARM	3							
24	2	119515-11280	SPRING	2							
25	2	119717-11650	ARM, ROCKER	6							
26	3	129150-11230	SCREW, VALVE ADJUST	6							
28	3	129150-11750	NUT, M8	6							
29	2	22242-000120	RING, 12	2							
30	2	26979-050162	SCREW, M5X16	1							
31	1	26106-080402	BOLT, M8X 40 PLATED	3							
32	1	124160-01751	COVER, FILLER	1							
33	1	119515-11380	BONNET ASSY, HEAD	1							
34	2	119717-03031	PLATE	1							
35	3	119717-03070	BAFFLE, BREATHER	1							
36	2	119717-03070	BAFFLE, BREATHER	2							
37	2	119802-03100	DIAPHRAGM ASSY	1							
38	3	119802-03110	PLATE	1							
39	3	119802-03121	COVER, DIAPHRAGM	1							
40	3	119802-03131	DIAPHRAGM	1							
41	3	119802-03141	SPRING, DIAPHRAGM	1							
43	2	119515-11310	GASKET, BONNET	1							
44	2	119515-11320	COVER, BONNET	1							
45	2	119515-11330	GASKET	1							
46	2	22857-500100	SCREW, 5X10	4							
47	2	22857-500100	SCREW, 5X10	4							
48	2	22857-500160	SCREW, 5X16	2							
49	1	24311-000320	O-RING, 1AP32.0	1							
50	1	26106-060202	BOLT, M6X 20 PLATED	3							
51	1	26106-060752	BOLT, M6X 75 PLATED	6							
52	1	119717-77801	PLUG, GLOW	3							
53	1	119717-77820	CONNECTOR, GLOW PLUG	1							
54	1	129900-07900	LIFTER	1							
55	1	26106-080162	BOLT, M8X 16 PLATED	2							
56	1	119515-11800	GUIDE, VALVE	6							1

2.4 .1.5 EXHAUST MANIFOLD 排气歧管



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119718-13100	MANIFOLD, EXHAUST	1							
2	1	119717-13110	GASKET	1							
3	1	119717-13600	STUD, M8X50	2							
4	1	119802-13620	BOLT, M8X50	4							
5	1	119131-18320	STUD, M8X22	4							
6	1	26306-080002	NUT, M8	2							
7	1	119515-13200	GASKET, SILENCER	1							

2.4 .1.6 CAMSHAFT & DRIVING GEAR 凸轮轴和传动齿轮



(A)≡3TNV70-SSY

(B)≡

(C)≡

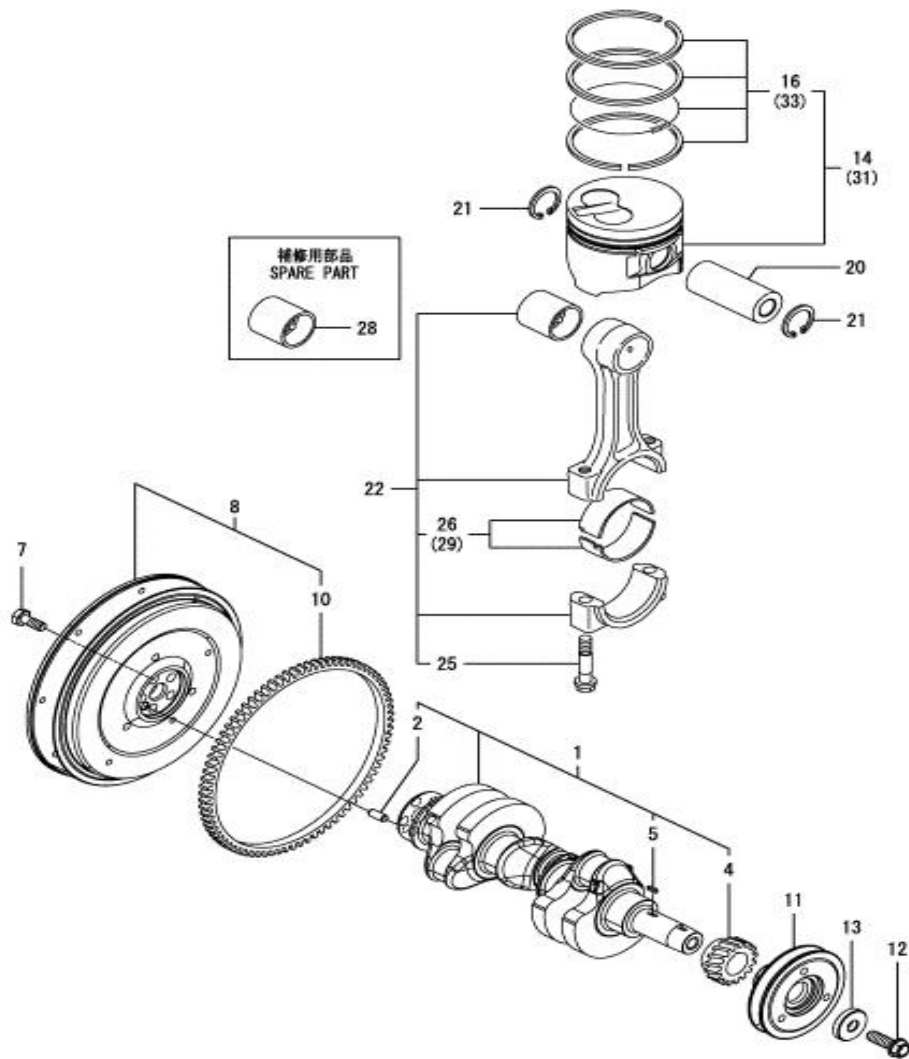
(D)≡

(E)≡

(F)≡

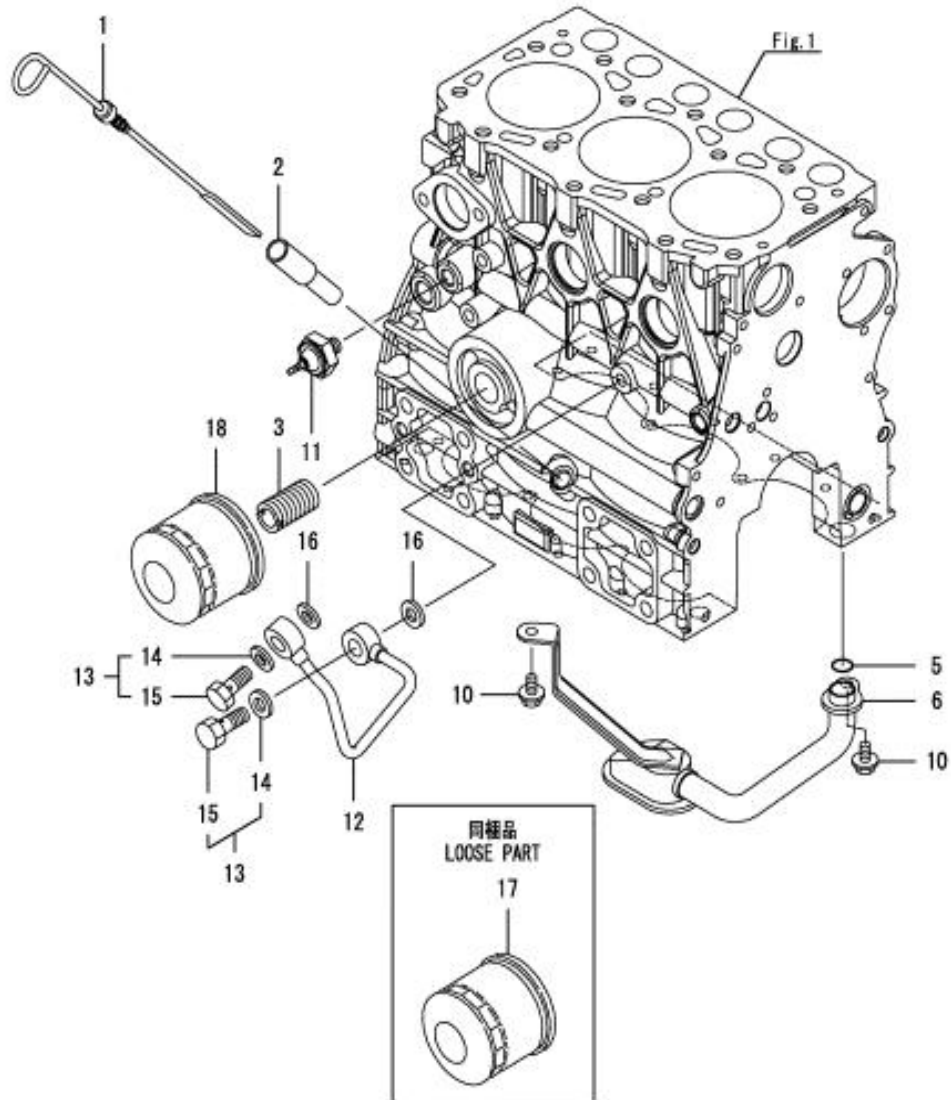
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119620-14200	TAPPET	6							
2	1	119515-14400	ROD, PUSH	6							
3	1	119515-14581	CAMSHAFT ASSY	1							
8	1	26106-060122	BOLT, M6X 12 PLATED	2							
9	1	119717-25050	SHAFT, IDLE	1							
10	1	119717-25101	GEAR ASSY, IDLE	1							
13	1	26106-060352	BOLT, M6X 35 PLATED	3							
14	1	129150-25301	BOLT	4							
15	1	119717-25930	GEAR, PUMP	1							
16	1	119717-51150	FLANGE	1							
17	1	119717-25911	BUSH, IDLE GEAR	1							1

2.4 .1.7 CRANKSHAFT & PISTON 曲轴和活塞



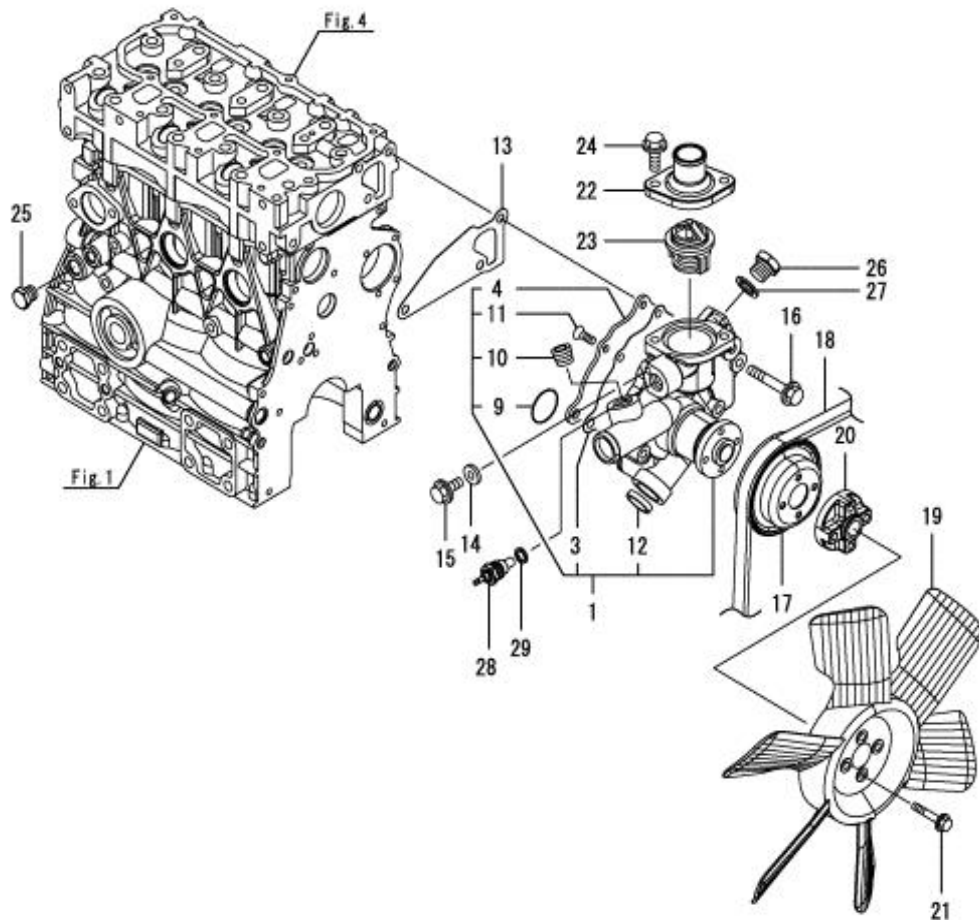
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-21700	CRANKSHAFT ASSY	1							
2	2	129100-01580	PIN, 8X16	1							
4	2	119717-21200	GEAR, CRANKSHAFT	1							
5	2	22512-040120	KEY, 4X 12	1							
7	1	119620-21500	BOLT, FLYWHEEL	5							
8	1	119515-21580	FLYWHEEL ASSY	1							
10	2	124950-21600	GEAR, RING	1							
11	1	119717-21650	V-PULLEY	1							
12	1	119621-21681	BOLT, FLANGE 12X1.25	1							
13	1	119620-21941	WASHER	1							
14	1	119515-22080	PISTON ASSY	3							
16	2	119515-22500	RING SET, PISTON	3							
20	1	119515-22300	PIN, PISTON	3							
21	1	22252-000220	RING, 22	6							
22	1	119515-23000	ROD ASSY, CONNECTING	3							
25	2	119717-23200	BOLT, CONNECTING ROD	6							
26	2	119515-23601	BEARING, CRANK PIN	3							
28	1	119717-23910	BEARING, PISTON PIN	3							1
29	1	119515-23611	METAL ASSY, 0.25	3							2
31	1	119515-22900	PISTON ASSY, 0.25 OS	3							3
33	2	119515-22550	RING SET, 0.25 OS	3							3

2.4 .1.8 LUB.OIL SYSTEM 润滑系统



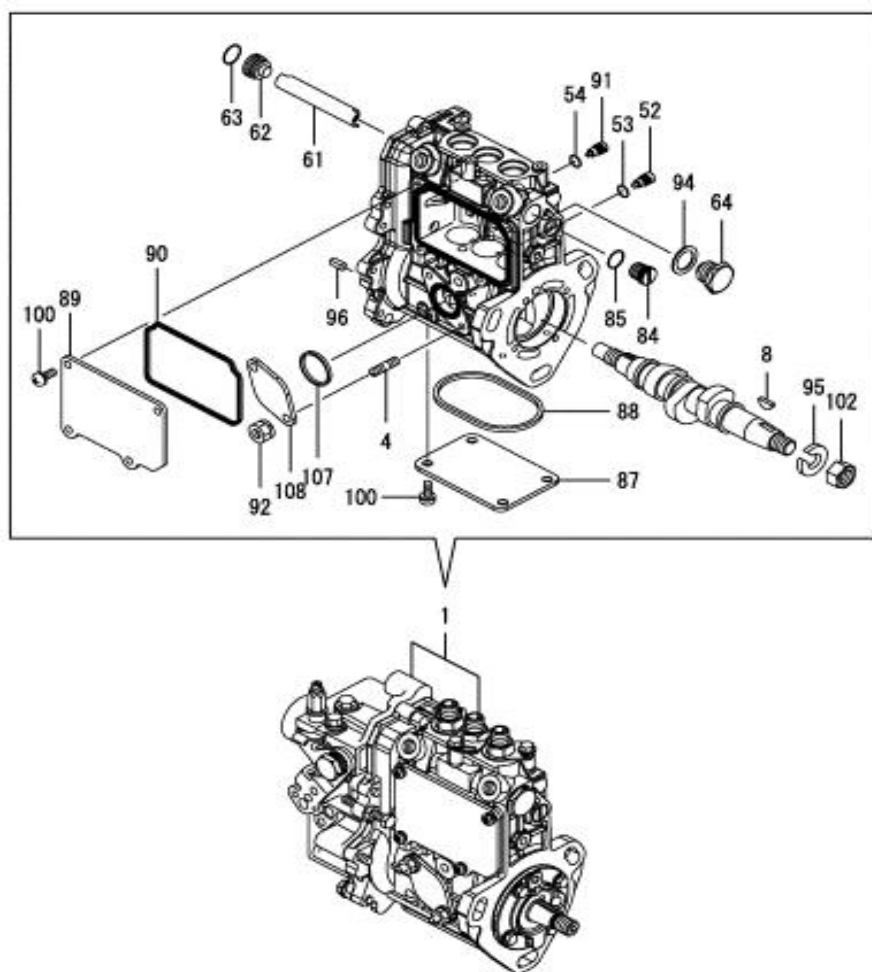
No.	Lev.	Parts No.	Description	Q'ty						
				(A)	(B)	(C)	(D)	(E)	(F)	
1	1	119515-34801	DIPSTICK, OIL	1						
2	1	121520-34810	GUIDE, DIPSTICK	1						
3	1	119717-35140	BOLT	1						
5	1	119717-32060	O-RING, P15.0	1						
6	1	119515-35080	PIPE ASSY, OIL INLET	1						
10	1	26106-060102	BOLT, M6X 10 PLATED	2						
11	1	114250-39450	SWITCH, 0.5KG	1						
12	1	119717-39210	PIPE, OIL	1						
13	1	129005-59830	BOLT ASSY, JOINT M8	2						
14	2	22190-080002	WASHER, SEAL 8	2						
15	2	23857-030000	BOLT, JOINT 3	2						
16	1	22190-080002	WASHER, SEAL 8	2						
17	1	119305-35151	FILTER ASSY, D68XL65	1						
18	1	119305-35151	FILTER ASSY, D68XL65	1						1

2.4 .1.9 COOLING WATER SYSTEM 冷却水系统



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119C10-42000	PUMP ASSY, WATER	1							
3	2	119717-42031	GASKET	1							
4	2	119515-42041	COVER	1							
9	2	119C10-42320	O-RING, 2028	1							
10	2	129916-49740	PLUG, R03	1							
11	2	26577-060122	SCREW, M6X12	4							
12	2	27241-250000	PLUG, 25	1							
13	1	119515-42020	GASKET, WATER PUMP	1							
14	1	23414-080000	GASKET, 8X1.0	1							
15	1	26106-080122	BOLT, M8X 12 PLATED	1							
16	1	26106-080502	BOLT, M8X 50 PLATED	3							
17	1	119717-42350	V-PULLEY, D=100	1							
18	1	119740-42370	V-BELT, A35.5	1							
19	1	119653-44740	FAN, COOLING D=320	1							
20	1	121267-44760	SPACER	1							
21	1	26106-060352	BOLT, M6X 35 PLATED	4							
22	1	129350-49530	COVER, THERMOSTAT	1							
23	1	119717-49800	THERMOSTAT, 71	1							
24	1	26106-080202	BOLT, M8X 20 PLATED	2							
25	1	171056-49120	PLUG, DRAIN	1							
26	1	121450-42450	PLUG, M16	1							
27	1	124465-44950	GASKET, 16	1							
28	1	124250-49351	SENSOR	1							
29	1	129150-49360	GASKET	1							

2.4 .1.10 FUEL INJECTION PUMP 燃油泵

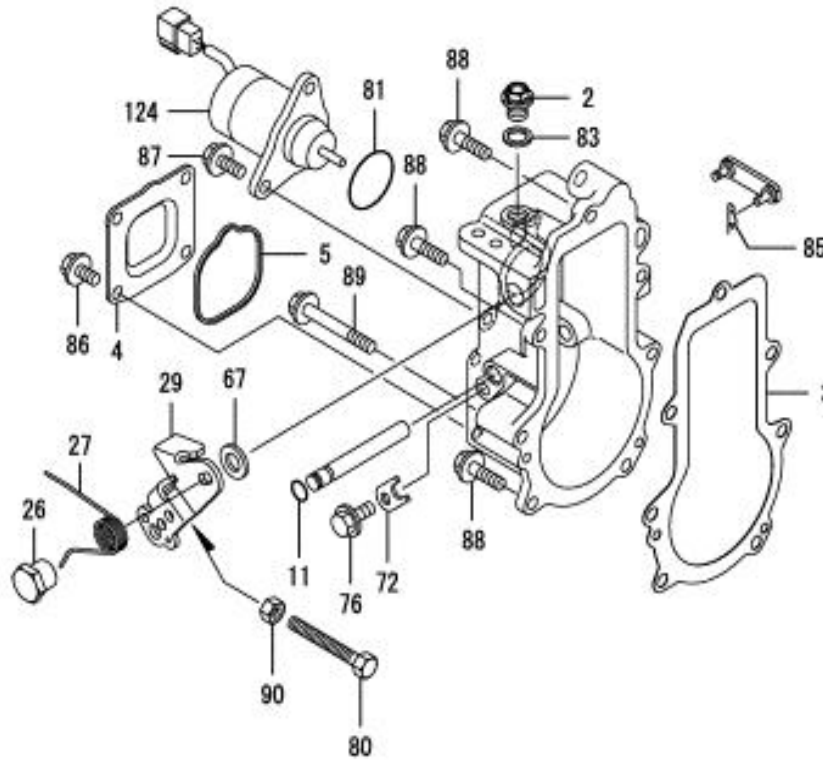


(A) 3TNV70-SSY
(B) 3TNV70-SSY
(C) 3TNV70-SSY

(D) 3TNV70-SSY
(E) 3TNV70-SSY
(F) 3TNV70-SSY

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719541-51300	FIE ASSY	1							1
4	2	129155-51020	STUD	2							
8	2	122710-51090	KEY	1							
52	2	158600-51270	STOPPER, TAPPET	3							
53	2	129155-51280	O-RING, S6	3							
54	2	129155-51280	O-RING, S6	1							
61	2	129155-51400	DEFLECTOR	1							
62	2	158600-51410	PLUG, DEFLECTOR	1							
63	2	119717-51420	O-RING	1							
64	2	158600-51420	PLUG, DEFLECTOR	1							
84	2	158600-51570	PLUG	1							
85	2	129155-51580	O-RING	1							
87	2	129155-51701	COVER	1							
88	2	119717-51711	GASKET	1							
89	2	119717-51750	COVER	1							
90	2	119717-51761	GASKET	1							
91	2	158600-51790	STOPPER, RACK	1							
92	2	119717-51860	NUT, M6	2							
94	2	22190-160002	WASHER, SEAL 16	1							
95	2	22217-120000	WASHER, SPRING 12	1							
96	2	22351-050010	PIN, SPRING 5.0X10	2							
100	2	26022-050122	SCREW, M5X12	8							
102	2	26716-120002	NUT, M12	1							
107	2	129155-52051	GASKET	1							
108	2	129100-52200	COVER	1							

2.4 .1.11 GOVERNOR 调速器



(A) 3TNV70-SSY
(B) 3
(C) 3

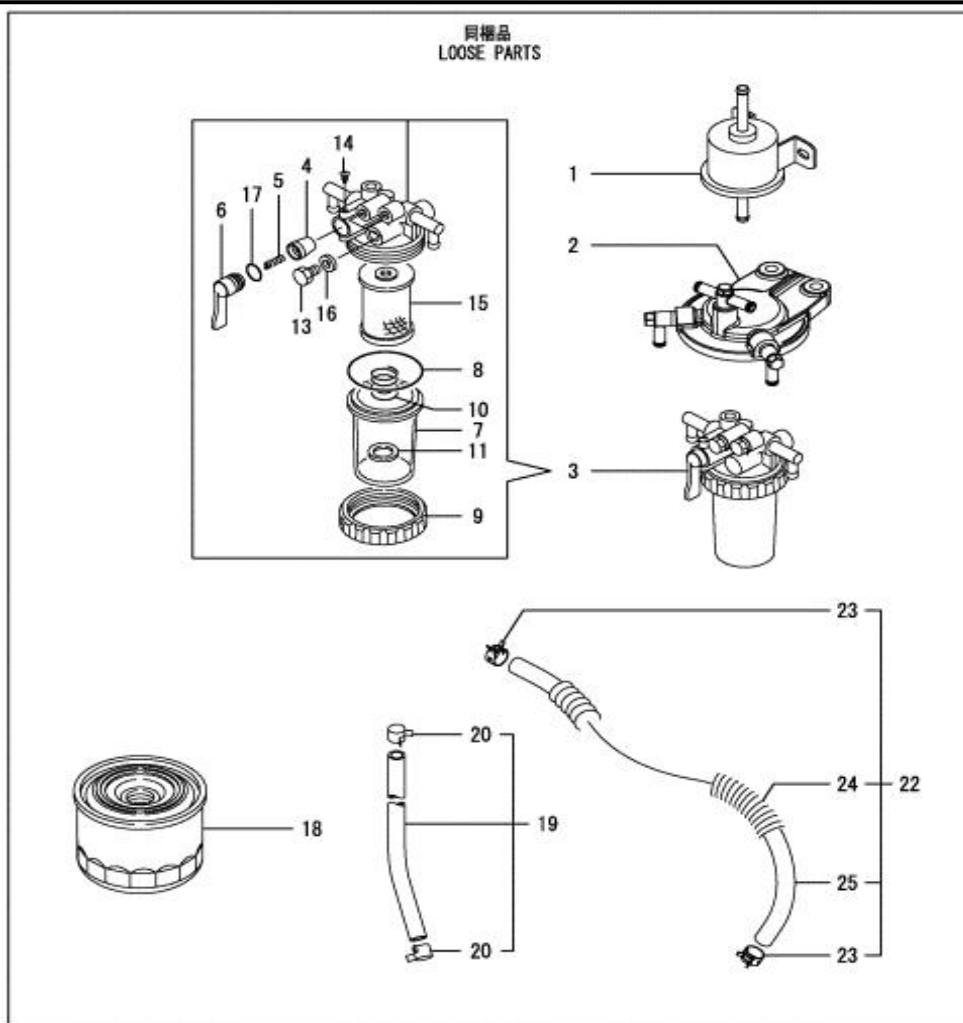
(D) 3
(E) 3
(F) 3

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
2	2	119717-51930	PLUG,M10	1							
3	2	119717-61050	GASKET	1							
4	2	119717-61060	COVER, GOVERNOR CASE	1							
5	2	119717-61070	GASKET	1							
11	2	129155-51280	O-RING, S6	1							
26	2	129255-61410	NUT, LOCK	1							
27	2	119534-61420	SPRING	1							
29	2	119515-61440	LEVER, CONTROL	1							
67	2	158552-61700	SHIM SET	1							
72	2	119660-61901	RETAINER, SHAFT	1							
76	2	26106-060102	BOLT, M6X 10 PLATED	1							
80	2	129155-61460	BOLT, IDLE	1							
81	2	158552-61900	O-RING	1							
83	2	22190-100002	WASHER, SEAL 10	1							
85	2	22372-040000	PIN, SNAP 4	1							
86	2	26106-060102	BOLT, M6X 10 PLATED	4							
87	2	26106-060142	BOLT, M6X 14 PLATED	2							
88	2	26106-060202	BOLT, M6X 20 PLATED	4							
89	2	26106-060452	BOLT, M6X 45 PLATED	3							
90	2	26756-060002	NUT, LOCK M6	1							
124	2	119233-77932	SOLENOID, STOP	1							

2.4 .1.12 FUEL INJECTION VALVE 喷油阀

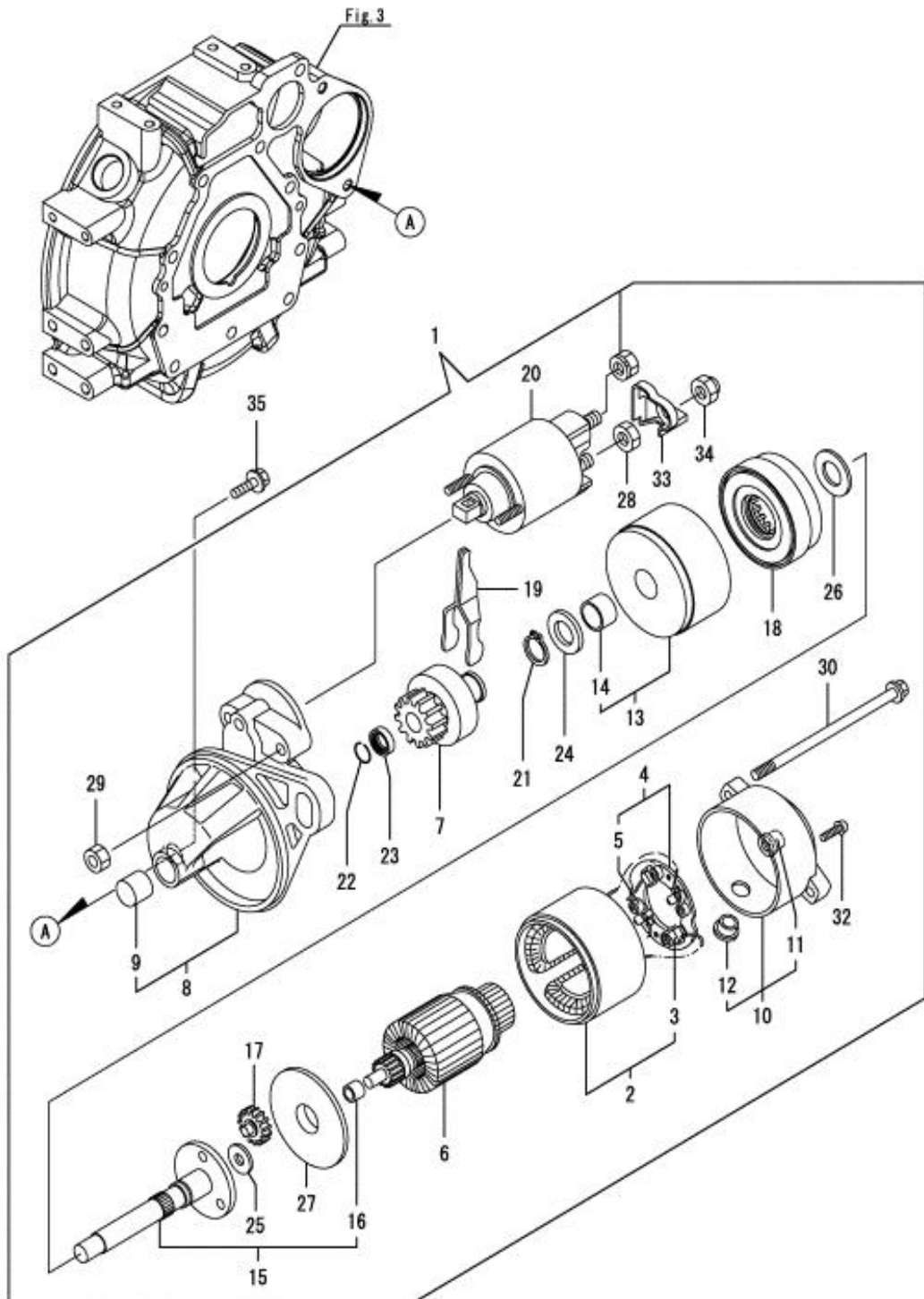
No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
				(A)≡3TNV70-SSY								
				(B)≡								
				(C)≡								
				(D)≡								
				(E)≡								
				(F)≡								
1	1	119517-53001	VALVE ASSY,INJECTION				3					
3	2	119517-53010	NOZZLE ASSY				3					
4	2	129901-53800	SHIM SET, ADJUSTING				3					1
15	1	129150-59120	RETAINER, PIPE				1					
18	2	129150-59131	BOLT, M4X14				2					
20	1	119546-59810	PIPE ASSY, INJECTION				1					
21	1	119546-59820	PIPE ASSY, INJECTION				1					
22	1	119546-59830	PIPE ASSY, INJECTION				1					
23	1	103854-39140	BOLT, PIPE JOINT				1					
24	1	101304-59020	JOINT, PIPE 12				1					
25	1	22190-120002	WASHER, SEAL 12				2					
26	1	119515-59540	PIPE ASSY, RETURN				1					
32	1	119744-59560	PIPE ASSY, RETURN				1					
33	2	124066-59100	CLIP, HOSE 8				2					
36	1	129901-59560	GASKET				3					
37	1	119740-59590	JOINT, OVER FLOW				1					
38	1	119620-59700	NUT, NOZZLE				3					
39	1	119813-59950	VALVE ASSY, CHECK				1					
45	1	22190-120002	WASHER, SEAL 12				2					

2.4 .1.13 FUEL PIPE 燃油管



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129612-52100	PUMP ASSY, FUEL FEED	1							
2	1	119934-55611	BRACKET, FILTER	1							
3	1	129335-55701	SEPARATOR ASSY, WATER	1							
4	2	104200-55321	VALVE, TAPER	1							
5	2	104200-55330	SPRING, VALVE	1							
6	2	104200-55341	HANDLE	1							
7	2	124064-55510	COVER	1							
8	2	102103-55520	O-RING	1							
9	2	110250-55610	RING, RETAINING	1							
10	2	121257-55720	SPRING	1							
11	2	121257-55731	FLOAT	1							
13	2	101720-55750	PLUG, 6	2							
14	2	104200-55750	SCREW, M4	1							
15	2	171081-55910	SCREEN	1							
16	2	23418-060000	GASKET, 6X1.0	2							
17	2	24311-240100	O-RING, 1AP10A	1							
18	1	129004-55801	FILTER, FUEL	2							
19	1	129210-59080	PIPE ASSY, FUEL	1							
20	2	124766-59050	CLIP, HOSE 11.5	2							
22	1	129950-59211	PIPE, FUEL	1							
23	2	124766-59050	CLIP, HOSE 11.5	2							
24	2	129950-59221	TUBE, CORRUGATED	1							
25	2	105025-59530	PIPE, FUEL D13X400	1							

2.4 .1.14 STARTER MOTOR 启动马达



2.4 .1.14 STARTER MOTOR 启动马达

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119717-77010	STARTER, P1.1	1							
2	2	X0281007750	YOKE ASSY	1							
3	3	X0280996180	STARTER KIT	2							
4	2	X0285105190	HOLDER ASSY	1							
5	3	X0285205030	SPRING	4							
6	2	X0282005991	ARMATURE ASSY	1							
7	2	X0283006960	CLUTCH ASSY	1							
8	2	X4284001590	HOUSING ASSY	1							
9	3	X9491050100	BEARING, NEEDLE	1							
10	2	X0285007030	FRAME ASSY	1							
11	3	X9491040990	BEARING	1							
12	3	X0280626010	COVER	1							
13	2	X0284105040	BEARING ASSY	1							
14	3	X9491034330	BEARING	1							
15	2	X0286105010	SHAFT ASSY	1							
16	3	X9491034320	BEARING	1							
17	2	X0286305010	GEAR	3							
18	2	X0286355010	GEAR	1							
19	2	X0287405140	LEVER	1							
20	2	X2534000090	SWITCH ASSY	1							
21	2	X9055715000	RING	1							
22	2	X9490721360	RING	1							
23	2	X0280210331	NUT	1							
24	2	X9490138110	WASHER	1							
25	2	X9490138090	WASHER	1							
26	2	X9490138100	WASHER	1							
27	2	X0284525010	PLATE	1							
28	2	X9490562360	NUT	1							
29	2	X9490560750	NUT	2							
30	2	X9490423420	BOLT, THROUGH	2							
32	2	X9490065670	SCREW, M4X6	2							
33	2	X1280330020	COVER, TERMINAL	1							
34	2	X1289510130	NUT	1							
35	1	26106-100252	BOLT, M10X 25 PLATED	2							

2.4 .1.15 GENERATOR 发电机

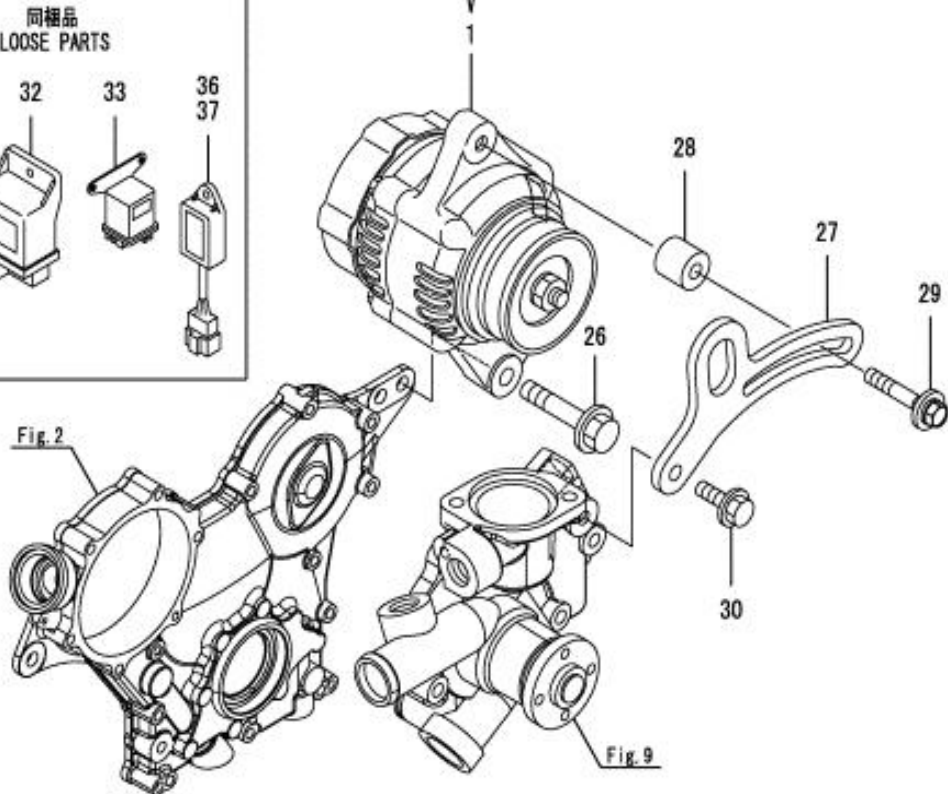
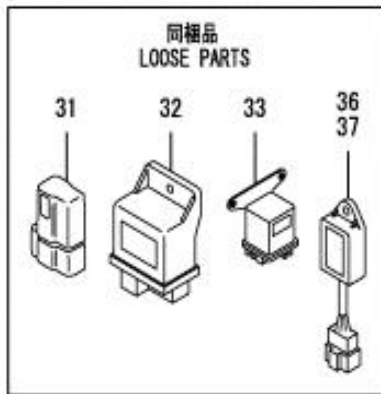
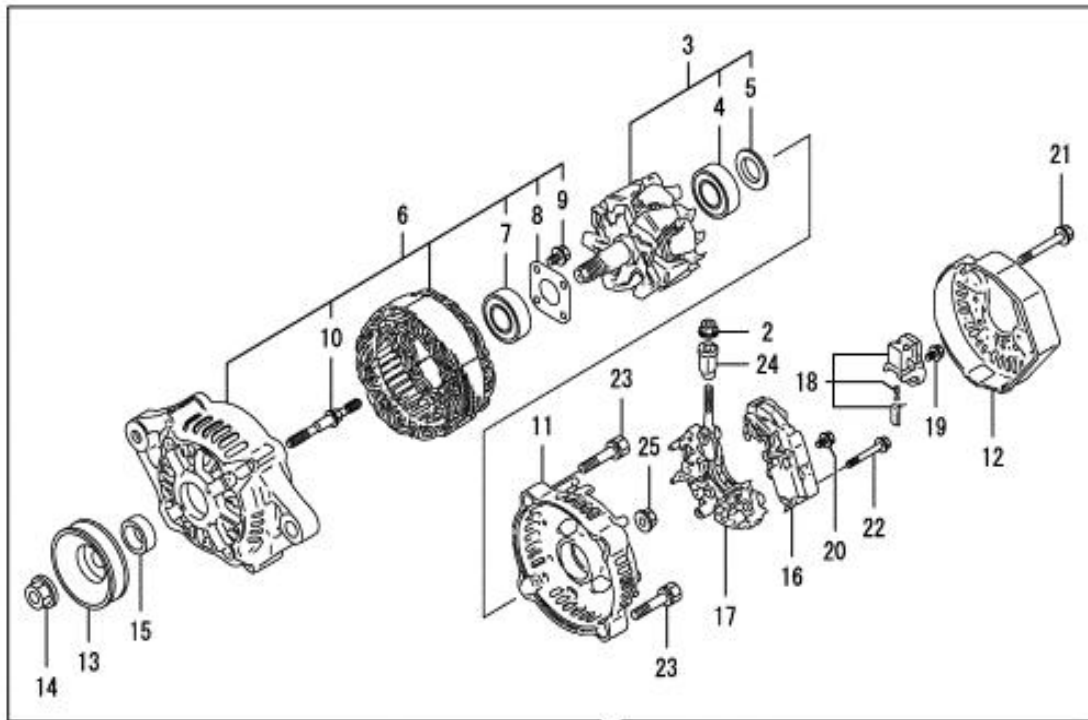


Fig. 2

Fig. 9

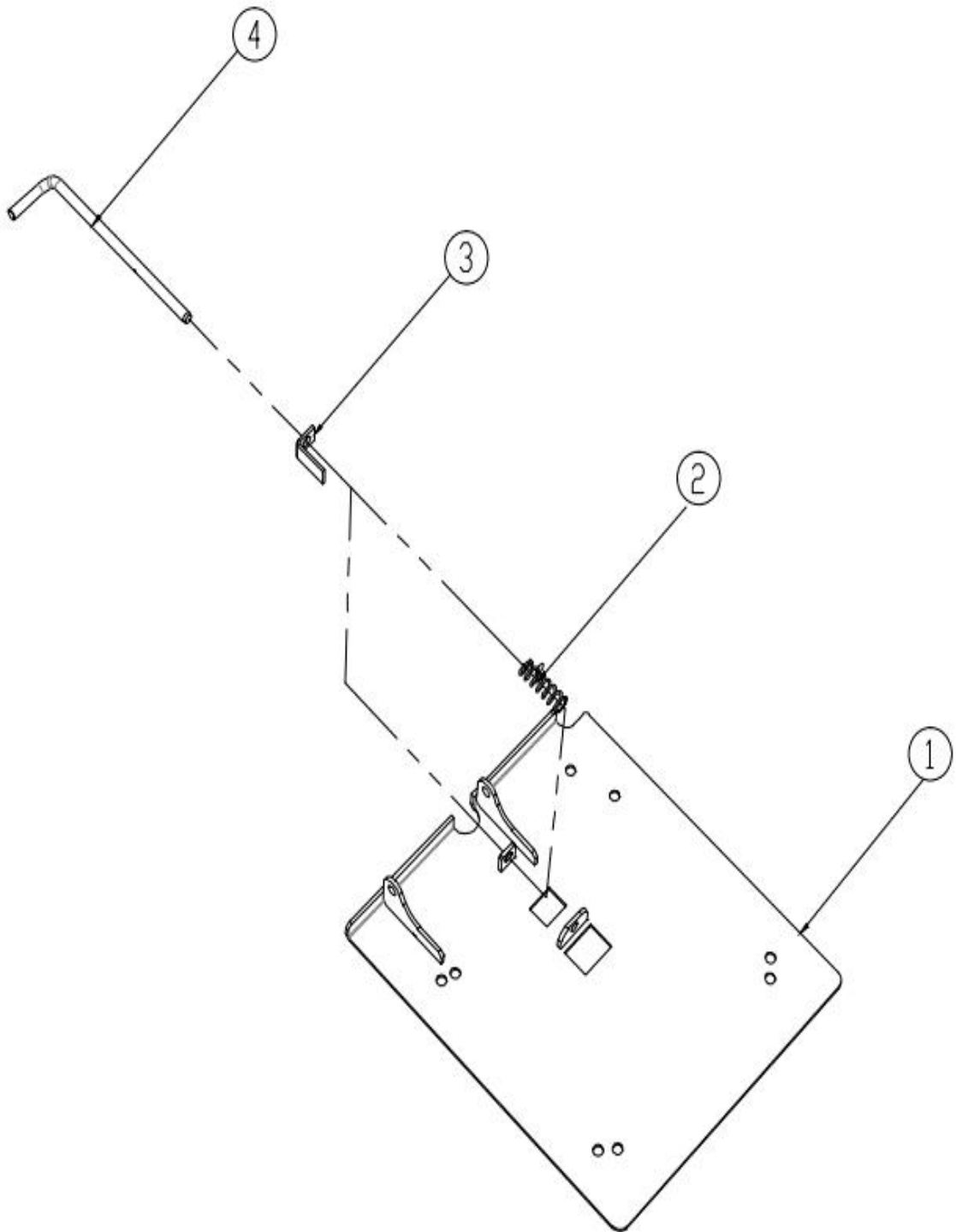
2.4 .1.15 GENERATOR 发电机

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119626-77210	ALTERNATOR, 12V-55A	1							
2	2	X9490561001	NUT	1							
3	2	129052-77380	ROTOR ASSY	1							
4	3	123501-79240	BEARING, BALL	1							
5	3	119620-79250	COVER	1							
6	2	129052-77422	FRAME ASSY	1							
7	3	119620-79200	BEARING, BALL	1							
8	3	119620-79210	PLATE, RETAINER	1							
9	3	119620-79220	SCREW	4							
10	3	119620-79230	STUD	2							
11	2	128401-77440	FRAME	1							
12	2	119626-77450	COVER	1							
13	2	119620-77461	PULLEY	1							
14	2	119620-77471	NUT	1							
15	2	119620-77490	COLLAR	1							
16	2	129423-77710	REGULATOR ASSY	1							
17	2	129052-79260	HOLDER	1							
18	2	129052-79270	HOLDER, BRUSH	1							
19	2	119620-79290	SCREW	6							
20	2	119620-79300	SCREW	1							
21	2	119620-79310	BOLT	3							
22	2	119620-79320	SCREW	2							
23	2	119620-79330	BOLT	2							
24	2	119620-79340	BUSH, INSULATION	1							
25	2	119620-79350	NUT	2							
26	1	26106-100502	BOLT, M10X 50 PLATED	1							
27	1	119230-77330	ADJUSTER	1							
28	1	124732-77340	SPACER	1							
29	1	129972-77341	BOLT, ADJUSTER L=50	1							
30	1	26106-080202	BOLT, M8X 20 PLATED	1							
31	1	119643-66900	DIODE	1							
32	1	119802-77200	RELAY, SAFETY	1							
33	1	119650-77911	RELAY ASSY, GLOW	1							
36	1	129155-77925	TIMER	1							
37	1	129211-77920	TIMER	1							

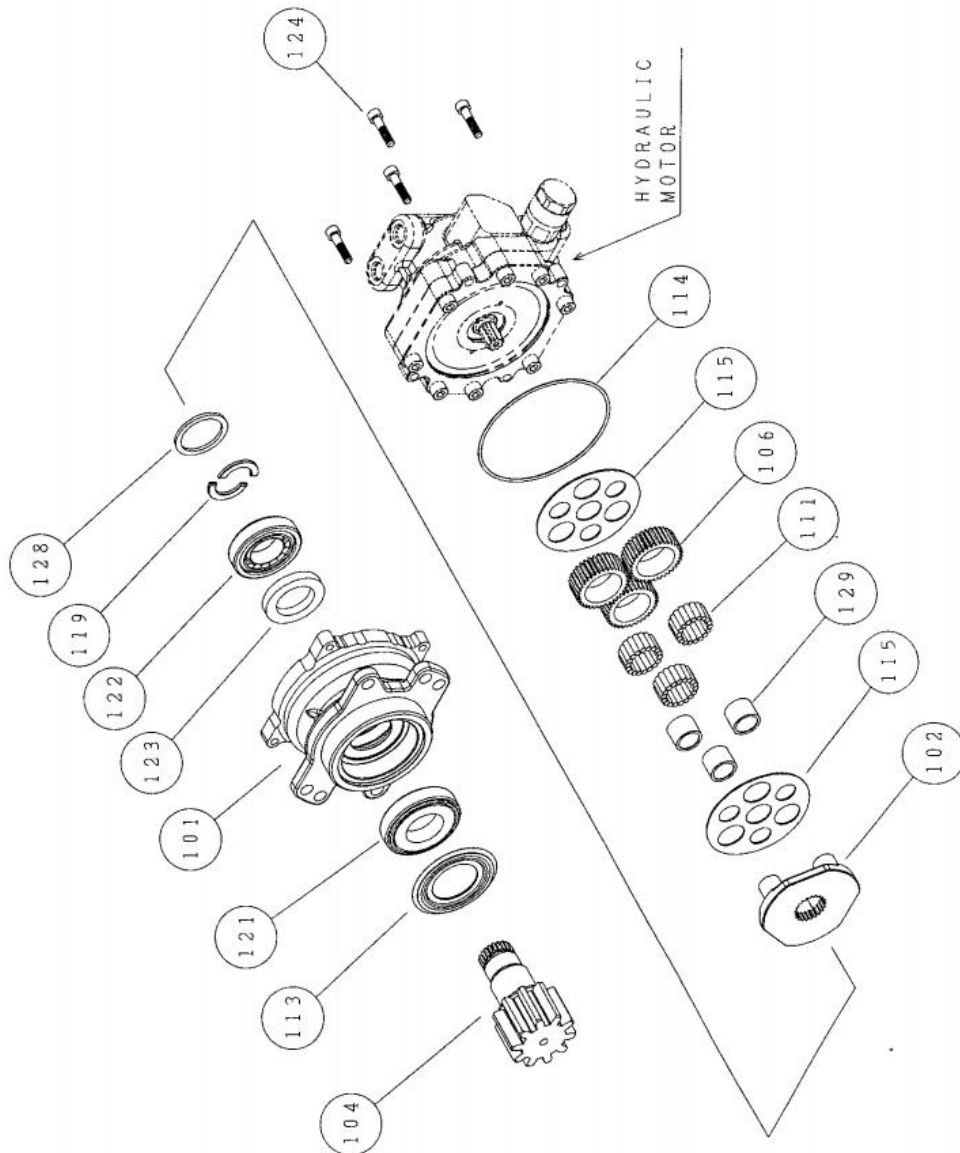
2.13 SEAT ADJUSTER 座椅调节板

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.13.1	Adjustment plate	调节板	1	
2	2.13.2	Spring	弹簧	1	
3	2.13.3	L plate	L 板	1	
4	2.13.4	Tie rod	拉杆	1	

2.13 SEAT ADJUSTER 座椅调节板



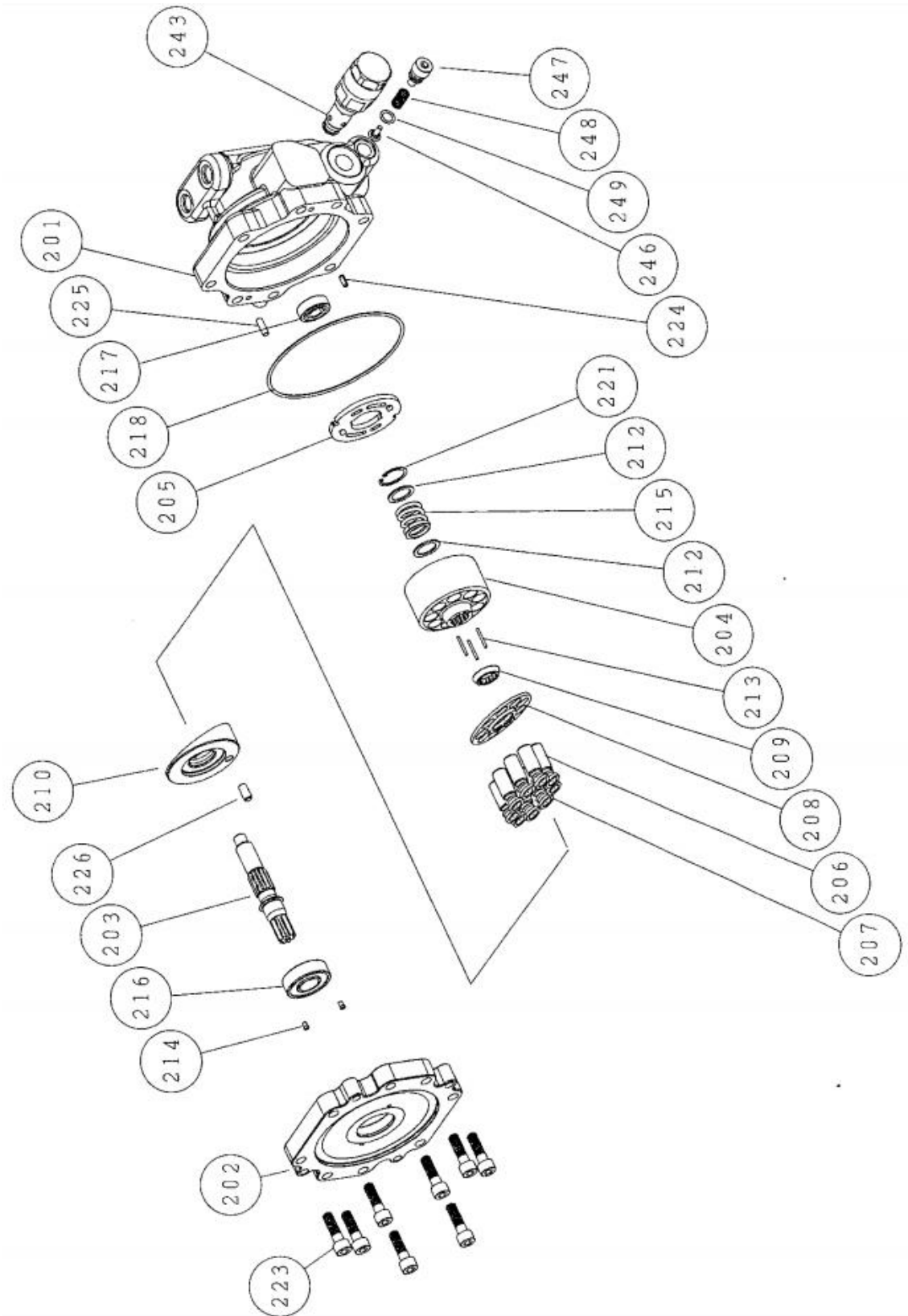
2.41 ROTARY MOTOR 回转马达



REDUCTION GEAR
SUB ASS'Y NO. **GCG-05-1-8486**
USER PART NO.

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
101	BODY	-		1	C1
102	CARRIER 1	-		1	
104	PINION SHAFT	-		1	C1
106	B1 GEAR	-		3	
111	NEEDLE	-		54	
113	RING SEAL	FZD-8239-5-13		1	B, C1
114	O RING	RO-G135-90		1	A, C1 JIS B2401 1種B G135
115	THRUST PLATE	-		2	
119	PRE-LOAD COLLAR	-		2	C1 *:組付け調整
121	BEARING	-		1	C1
122	BEARING	-		1	C1
123	OIL SEAL	-		1	C1
124	SCREW	TH-8X35		4	A JIS B1176 M8X35-6g-12.9
128	RING	FZD-8239-5-28		1	B, C1
129	RING	-		3	

2.41 ROTARY MOTOR 回转马达

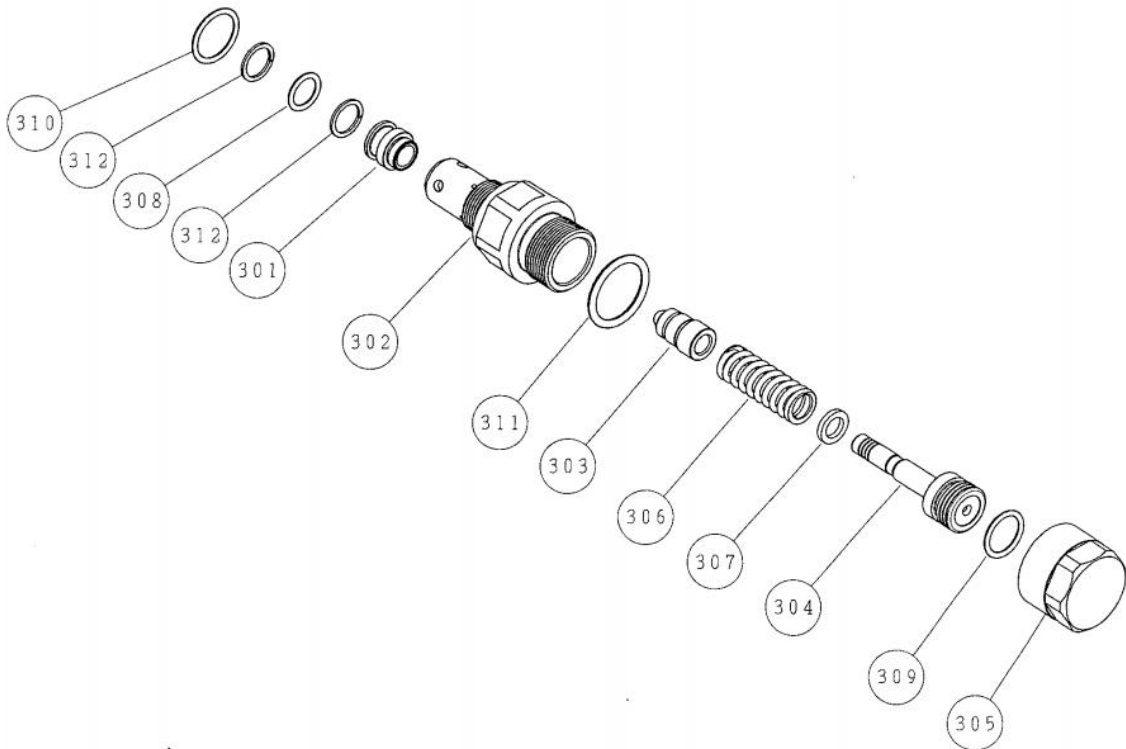


2.41 ROTARY MOTOR 回转马达

HYDRAULIC MOTOR
 SUB ASS'Y NO. PM-1B-24-S2-8486A
 USER PART NO.

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
201	BODY H	—		1	C3
202	PLATE S	—		1	
203	SHAFT	—		1	
204	CYLINDER BARREL	—		1	C4
205	VALVE PLATE	—		1	C4
206	PISTON	—		9	C4
207	SHOE	—		9	C4
208	SHOE HOLDER	—		1	C4
209	BARREL HOLDER	—		1	C4
210	SWASH PLATE	—		1	C5
212	RETAINER	—		2	C4
213	PIN	—		3	C4
214	FILTER	FZS-9480-1-06		2	B
215	SPRING C	—		1	C4
216	BEARING	6204Z		1	A JIS B1521 6004Z
217	BEARING	6201		1	A, C3 JIS B1521 6201
218	O RING	RO-G140-90		1	A, C3, C6 JIS B2401 1種B G140
221	SNAP RING	RH-28		1	A, C4 JIS B2804 穴用28
223	SCREW	TH-10X35		8	A JIS B1176 M10X35-6g-12.9
224	SPRING PIN	PPS-W-5X12		1	A, C3 JIS B2808 5X12 AW
225	PIN	—		1	
226	PIN	PP-m6-8X15		1	A, C5 JIS B1354 B 8X15
243	RELIEF VALVE	—		2	C
246	CHECK VALVE	—		2	C3
247	PLUG	—		2	C3
248	SPRING	—		2	C3
249	O RING	RO-P11-90		2	A, C3, C6 JIS B2401 1種B P11

2.41 ROTARY MOTOR 回转马达



RELIEF VALVE
SUB ASS'Y NO. **ZR-03-MB17-8002A**
USER PART NO.

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK	
301	SEAT	--		1		
302	RETAINER	--		1		
303	POPPET	--		1		
304	PISTON	--		1		
305	CAP	--		1		
306	SPRING	--		1		
307	SPACER	--		*		
308	O RING	RO-P14-90		1	A, C7	JIS B2401 1種B P14
309	O RING	RO-P18-90		1	A, C7	JIS B2401 1種B P18
310	O RING	RO-P22-90		1	A, C7	JIS B2401 1種B P22
311	O RING	RO-P28-90		1	A, C7	JIS B2401 1種B P28
312	BACK UP RING	RBO-P14		2	A, C7	JIS B2407 T P14

PINION KIT
SUB ASS'Y NO. **GCP-05-1-8486**
USER PART NO.

区分: C 1

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK	
(101)	BODY	--		1		
(104)	PINION SHAFT	--		1		
(113)	RING SEAL	--		1		
(114)	O RING	--		1		
(119)	PRE-LOAD COLLAR	--		2		
(121)	BEARING	--		1		
(122)	BEARING	--		1		
(123)	OIL SEAL	--		1		
(128)	RING	--		1		

2.41 ROTARY MOTOR 回转马达

BODY H KIT
SUB ASS'Y NO.
USER PART NO.

MCB-1-8486

区分：C 3

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
(201)	BODY H	—		1	
(217)	BEARING	—		1	
(218)	O RING	—		1	
(224)	SPRING PIN	—		1	
(246)	CHECK VALVE	—		2	
(247)	PLUG	—		2	
(248)	SPRING	—		2	
(249)	O RING	—		2	

CYLINDER BARREL KIT
SUB ASS'Y NO.
USER PART NO.

MHCB-1-4047

区分：C 4

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
(204)	CYLINDER BARREL	—		1	
(205)	VALVE PLATE	—		1	
(206)	PISTON	—		9	
(207)	SHOE	—		9	
(208)	SHOE HOLDER	—		1	
(209)	BARREL HOLDER	—		1	
(212)	RETAINER	—		2	
(213)	PIN	—		3	
(215)	SPRING C	—		1	
(221)	SNAP RING	—		1	

SWASH PLATE KIT
SUB ASS'Y NO.
USER PART NO.

MHSW-2180-24

区分：C 5

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
(210)	SWASH PLATE	—		1	
(226)	PIN	—		1	

SEAL KIT

①HYDRAULIC MOTOR
SUB ASS'Y NO.
USER PART NO.

GCS-1-4229

区分：C 6

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
(218)	O RING	—		1	
(249)	O RING	—		2	

②RELIEF VALVE
SUB ASS'Y NO.
USER PART NO.

GCS-2-8002

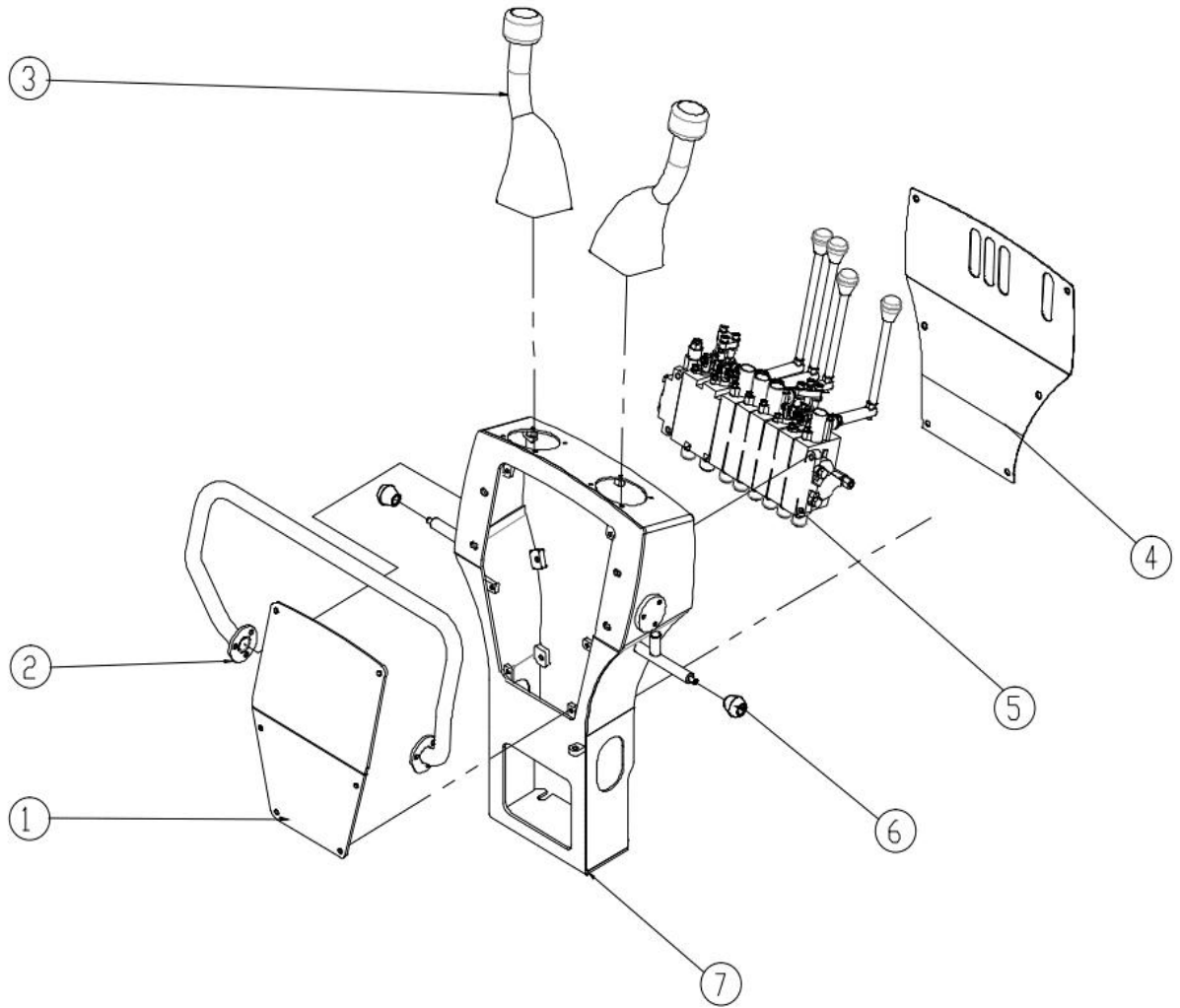
区分：C 7

No.	DESCRIPTION	PART No.	USER PART No.	Q' TY	REMARK
(308)	O RING	—		1	
(309)	O RING	—		1	
(310)	O RING	—		1	
(311)	O RING	—		1	
(312)	BACK UP RING	—		2	

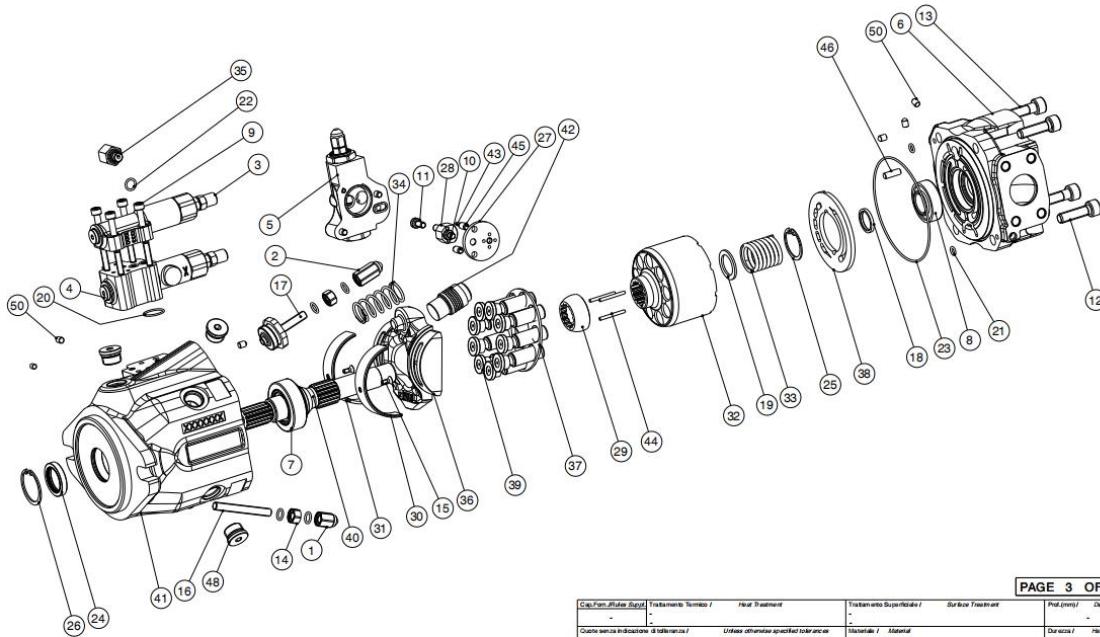
2.42 OPERATING COVER 操作罩

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.42.1	Blind flange	盖板	1	
2	2.42.2	Armrest	扶手	1	
3	2.42.3	Operation handle	操作手柄	2	
4	2.42.4	Blind flange	盖板	1	
5	2.42.5	Main Valve Assembly	主阀总成	1	
6	2.42.6	Balls.	球头	2	
7	2.42.7	Operation cover welding	操作罩焊合	1	

2.42 OPERATING COVER 操作罩



2.43 The main pump 主泵总成



PAGE 3 OF 6

Cap.Fem./Rifer. Suppl.	Trattamento Termico / Heat Treatment	Trattamento Superficiale / Surface Treatment	Profondità / Depth
-	-	-	-
Quote senza indicazione di tolleranza / Unless otherwise specified tolerances		Materiale / Material	Durezza / Hardness
GRADO DI PRECISIONE / ACCURACY LEVEL		-	-
Disegnato/Drawn	Approvato/Approved	Mod. Tiro / Release change	Programa/Project
20/10/2014	20/10/2014	9215	F443
Firma / Signature	Bertorelli A	Guidetti M	Stato / Process
			FINITO
			Scala/Scale
			1:3
			Formatore/Size
			A3
Descrizione / Description		Codice / Code	Int. Mod. / Inter. Rev.
POMPA MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)		65090021	3
PUMP MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)			
		Sebbene / If replace	-

Part No.	Part Name	QTY	Description	QTY
50	49591050	9	TAPPO KSA CVMS00631 10A (DIAM. 6 MM) PLUG KSA CVMS00631 10A (DIAM. 6 MM)	0
49	49591040	1	TAPPO KSA CVMS00531 10A (DIAM. 5 MM) PLUG KSA CVMS00531 10A (DIAM. 5 MM)	0
48	49478052	3	TAPPO TCEI SAE 8 (3/4UNF) PLUG TCEI SAE 8 (3/4UNF)	0
47	49477568	1	TAPPO TE 3/4 GAS CON OR PH 2-120 25,07X2,62 MVP 48 PLUG TE 3/4 GAS WITH OR PH 2-120 25,07X2,62 MVP 48	3
46	49271600	1	SPINA MM. 6X18 UNI 1707-M6-CEMENTATA-TESTA PIANA DOWEL PIN CASEHARDENED MM.6X18 UNI1707M6-FLAT HEAD	1
45	49271450	2	SPINA ELASTICA MM.6X12 UNI 6874 DOWEL PIN ELASTIC MM.6.X12 UNI 6874	0
44	49255502	3	SPINA MM. 3X29.8 DIN 5402-3/ISO 3096 (NRB 3X29.8G2) SPINA MM. 3X29.8 DIN 5402-3/ISO 3096 (NRB 3X29.8G2)	1
43	49255000	1	SPINA ELASTICA MM.3X12 UNI 6874 DOWEL PIN ELASTIC MM.3.X12 UNI 6874	0
42	48474105	1	ATTUATORE MVP 30 PISTON MVP 30	0
41	48416175	1	SCATOLA MVP 30/S5-OB-VRP (1) CASAPPA PUMP BODY MVP 30/S5-OB-VRP (1) CASAPPA	13
40	47556040	1	ALBERO MVP 30 VERSIONE 04 SHAFT MVP 30 VERSION 04	4


PAGE 6 OF 6

Cap.Fem./Rifer. Suppl.	Trattamento Termico / Heat Treatment	Trattamento Superficiale / Surface Treatment	Profondità / Depth
-	-	-	-
Quote senza indicazione di tolleranza / Unless otherwise specified tolerances		Materiale / Material	Durezza / Hardness
GRADO DI PRECISIONE / ACCURACY LEVEL		-	-
Disegnato/Drawn	Approvato/Approved	Mod. Tiro / Release change	Programa/Project
20/10/2014	20/10/2014	9215	F443
Firma / Signature	Bertorelli A	Guidetti M	Stato / Process
			FINITO
			Scala/Scale
			1:1
			Formatore/Size
			A4
Descrizione / Description		Codice / Code	Int. Mod. / Inter. Rev.
POMPA MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)		65090021	3
PUMP MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)			
		Sebbene / If replace	-

2.43 The main pump 主泵总成

39	46221010		9	PISTONE LVP 30 (ASSY) PISTON LVP 30 (ASSY)	2
38	45974520		1	PIATTO DISTRIBUTORE MVP 30 DX VALVE PLATE MVP 30 DX	3
37	45970218		1	PIATTO GUIDA PISTONI MVP 30 PISTONS GUIDE PLATE MVP 30	1
36	45970026		1	PIATTO OSCILLANTE MVP 30 VRP ISF (OMF) SWASH PLATE MVP 30 VRP ISF (OMF)	1
35	45381534		1	RACCORDO PL20/LS DIAFRAMMA D = 0.75 M1/8-F1/4 PER OR 2037(GIALLO) FITTING OREFICE PL20/LS D = 0.75 M1/8 - F1/4 FOR OR 2037(YELLOW)	3
34	45366822		1	MOLLA CONTROBILANCIAMENTO MVP 30 COUNTERBALANCING SPRING MVP 30	2
33	45340650		1	MOLLA SOSTENTAMENTO PISTONI LVP 28 PISTONS SPRING LVP 28	3
32	42450620		1	BLOCCO CILINDRI MVP 30 CYLINDERS BLOCK MVP 30	2
31	42137152		1	SEMIANELLO SUPPORTO PIATTO OSCILLANTE MVP 30 SX SEMI-RING SWASH PLATE SUPPORT MVP 30 SX	0
30	42137150		1	SEMIANELLO SUPPORTO PIATTO OSCILLANTE MVP 30 DX SEMI-RING SWASH PLATE SUPPORT MVP 30 DX	0
29	42137005		1	ANELLO SCANALATO MVP 30 SPLINED RING MVP 30	1
28	42136215		1	ECCENTRICO COMANDO LIMITATORE DI POTENZA MVP 30 ECCENTRIC DRIVE TORQUE LIMITER MVP 30	1
27	42136200		1	SUPPORTO COMANDO LIMITATORE POTENZA SUPPORT DRIVE TORQUE LIMITER	3
26	40690000		1	ANELLO 35 UNI 7437-DIN 472 RING 35 UNI 7437-DIN 472	0
25	40665100		1	ANELLO 32 UNI 7437-DIN 472 (AB) RING 32 UNI 7437-DIN 472 (AB)	0
24	39735000		1	PARAOILIO BABSL 25X35X6 SHAFT SEAL BABSL 25X35X6	1
23	39644994		1	ANELLO TOROIDALE PH 2-046 90 SH.A (107,67X1,78) O RING SEAL PH 2-046 90 SH.A (107,67X1,78)	0
22	37930000		1	ANELLO TOROIDALE OR 2037 70GRA SH.A(9,25X1,78) O-RING SEAL OR 2037 70GRA SH.A(9,25X1,78)	0
21	37890000		2	ANELLO TOROIDALE OR 2025 70GRA SH.A(6,07X1,78) O-RING SEAL OR 2025 70GRA SH.A(6,07X1,78)	0
20	37864004		1	ANELLO TOROIDALE ORM 70 SH.A N (19X1.5) O-RING SEAL ORM 70 SH.A N (19X1.5)	0

PAGE 5 OF 6

Cap.Fom./Rifer. Suppl. -		Trattamento Termico / Heat Treatment -		Trattamento Superficiale / Surface Treatment -		Prof.(mm) / Depth -	
Quote senza indicazione di tolleranza / Unless otherwise specified tolerances GRADO DI PRECISIONE ACCURACY LEVEL				Materiale / Material -		Durezza / Hardness -	
Disegnato/Drawn 20/10/2014		Approvato/Approved 20/10/2014		Mod.Tecn./ Release change 9215		Scala/Scale 1:1	
Firma Signature Bertorellia		GuidettiM		Progetto/Project F443		Stato / Process FINITO	
				File 65090021		Codice Grezzo / Master Code -	
 <p>The information hereon is the property of CASAPPA Spa. Without written permission, any copying, trasmittal to others and any use except that for which it's loaned, is prohibited.</p>		Descrizione / Description POMPA MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY) PUMP MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)				Ind. Mod./ Index Rev. 3	
Codice / Code 65090021				Sostituisce / Replaces -			

2.43 The main pump 主泵总成

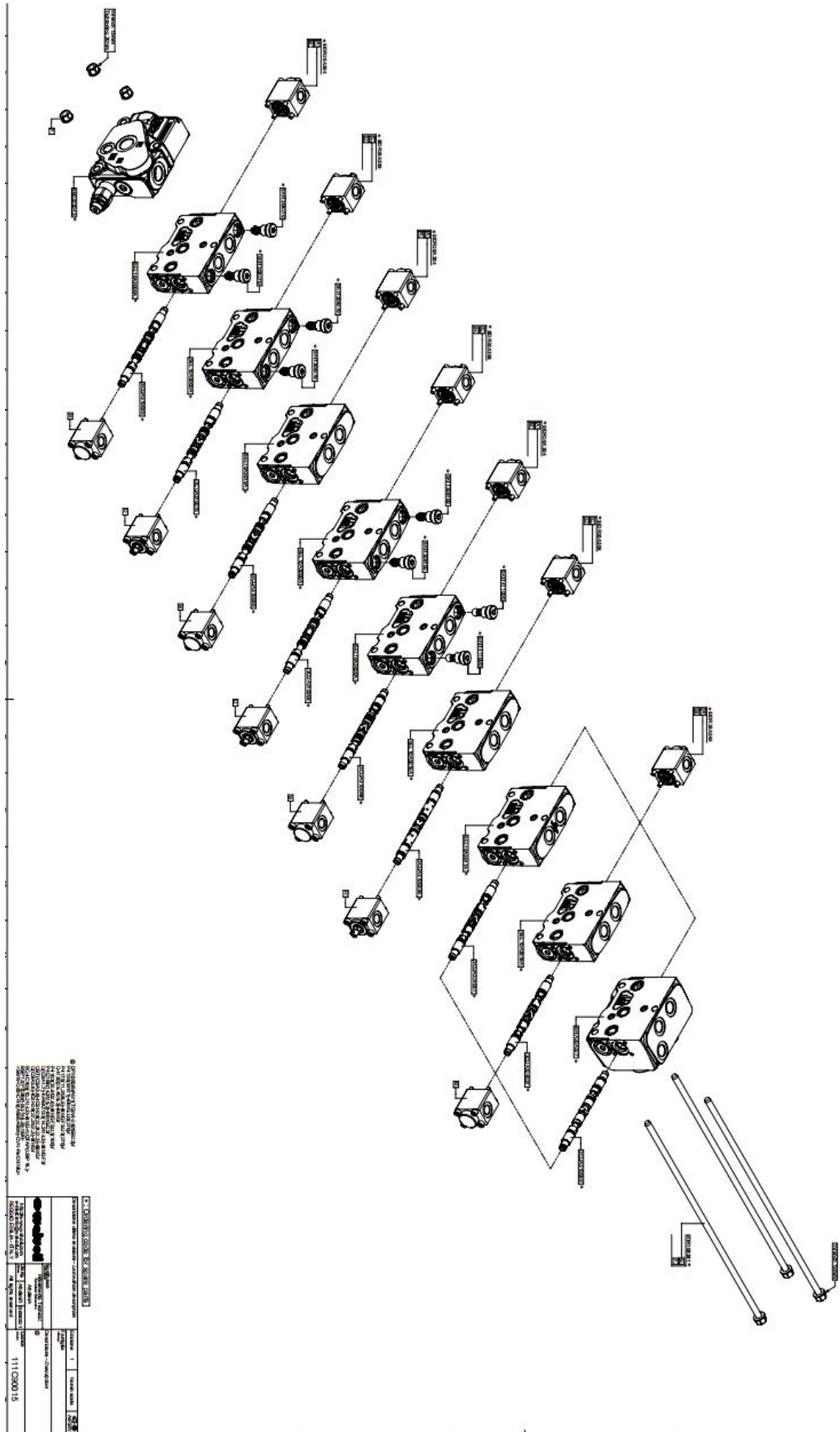
19	37852500		1	ROSETTA SPALLAMENTO BLOCCO CILINDRI LVP 30 SHOULDER WASHER CYLINDER BLOCK LVP 28	1
18	37851800		1	ROSETTA DI SPALLAMENTO ALBERO MVP 30 WASHER SHOULDER SHAFT MVP 30	0
17	37040040		1	GRANO M 8X55 - 5923 - 14.9 45H SCREW M 8X55 - 5923 - 14.9 45H	0
16	37040020		1	GRANO M 8X65 - 5923 - 14.9 45H SCREW M 8X65 - 5923 - 14.9 45H	0
15	36661130		2	VITE M 4X10 UNI 5933 - 8.8 SCREW M4x10 UNI 5933 - 8.8	0
14	36660003		2	DADO M8 LIMITATORE DI CILINDRATA MVP H = 8 -	0
13	35190000		2	VITE TCEI M 10X40 ISO4762-12.9 SCREW TCEI M 10X40 ISO4762-12.9	0
12	35180000		2	VITE TCEI M 10X35 5931-12.9 SCREW TCEI M 10X35 5931-12.9	0
11	35123005		1	VITE TCEI M 6X14 DIN 7984 - 8.8 SCREW TCEI M 6X14 DIN 7984 - 8.8	0
10	35122997		1	VITE TCEI M 6X7 - DIN 7984 - 8.8 SCREW TCEI M 6X7 - DIN 7984 - 8.8	0
9	34505002		4	VITE TCEI M 6X60 - 5931 - 12.9 SCREW TCEI M 6X60 - 5931 - 12.9	1
8	34244120		1	CUSCINETTO_32004_XIQ(MVP30) ROLLER_BEARING_32004_XIQ(MVP30)	0
7	34243000		1	CUSCINETTO_322/05B_(LVP28/75) ROLLER_BEARING_322/05B_(LVP28/75)	0
6	23398081		1	COPERCHIO MVP 30-LMD/MB CASAPPA COVER MVP 30-LMD/MB CASAPPA	3
5	06870050		1	REGOLATORE DI POTENZA MVP TORQUE LIMITER PUMP MVP	4
4	06870041		1	REGOLATORE DI PORTATA MVP LS2 FLOW COMPENSATOR MVP LS2	3
3	06870000		1	REGOLATORE DI PRESSIONE LVP/MVP RP0 PRESSURE COMPENSATOR LVP/MVP RP0	13
2	05000013		1	CONTRODADO M8 LIMITATORE DI CILINDRATA MAX. MVP L = 31 DISPLACEMENT LIMITER LOCK NUT MVP L = 31	0
1	05000010		1	CONTRODADO M8 LIMITATORE DI CILINDRATA MIN. MVP L = 22 MIN. DISPLACEMENT LIMITER LOCK NUT MVP L = 22	0
Pos.	Codice Code	Kit	Q.tà Q.ty	Descrizione Description	Indice modifica Index revision

PAGE 4 OF 6

Cap.Forn./Rules Suppl.	Trattamento Termico / Heat Treatment	Trattamento Superficiale / Surface Treatment	Prof.(mm) / Depth
-	-	-	-
Quote senza indicazione di tolleranza / Unless otherwise specified tolerances		Materiale / Material	Durezza / Hardness
GRADO DI PRECISIONE ACCURACY LEVEL		-	-
Designat/Drawn	Approvato/Approved	Mod.Tecn./ Release change	Progetto/Project
Date	20/10/2014	20/10/2014	F443
Firma Signature	Bertorellia	GuidettiM	Stato / Process
		9215	FINITO
		65090021	Codice Grezzo / Master Code
			-
			Ind. Mod./ Index Rev.
Description / Descrizione POMPA MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY) PUMP MVP 30.20D-04S5-LMD/MB-N-RN0-G (37/2200) (SANY)			3
Codice / Code		Sostituisce / Replaces	
65090021		-	

The information hereon is the property of CASAPPA Spa. Without written permission, any copying, transmittal to others and any use except that for which it's loaned, is prohibited.

2.44 Main Valve Assembly 主阀总成



2.44 Main Valve Assembly 主阀总成

CODE	DESCRIPTION	Q.tà	Wrench [mm]	Tightening [Nm]
3CUA310003	I103/DPX050 (30 l/min) SPOOL	1		
3CUA310030	I130/DPX050 (22.6\26.8) SPOOL ARM	1		
3CUA310033B	IVRBO133/DPX050 (14\14) SWING SPOOL	1		
3CUA310035	I135/DPX050 (46.7\61) ARM SPOOL	1		
3CUA310068	I168/DPX050(11.2\16.8) BOOM SWING SPOOL	1		
3CUA310069	I169/DPX050 (10.3\14) BLADE SPOOL	1		
3CUA310075	I175/DPX050 (18.5\24.5-290) BOOM SPOOL	1		
3CUA324037	IO2H37/DPX050 (30\30 l/m) TRAVEL SPOOL	2		
5EL10A3016A	DPX050/Q(CSA1.7)-BSP-IM-NBR WORKING SECTION KIT	1		
5EL10A3018A	DPX050/Q(CSA3.6)-BSP-IM-NBR WORKING SECTION KIT	1		
5EL10A3000A	DPX050/P-BSP-IM-NBR WORKING SECTION KIT	4		
5EL10A3017A	DPX050/QST(CSA3.6)-BSP-IM-NBR WORKING SECTION KIT	1		
5EL10A3010A	DPX050/Q-BSP-IM-NBR WORKING SECTION KIT	1		
5FIA20A327	DPX050/RQ OUTLET WORKING SECTION KIT	1		
5IDR20A304	8IMG/DPX050-BSP-NBR COMMAND KIT	6		
5IDR20A306	8IMGF3/DPX050-BSP-NBR COMMAND KIT	3		
5KIT308100	U100/SDM081-SDM110 VALVE	2	6	24
5KIT308270	U270/SDM081-SDM110 VALVE	4	6	24
5KIT411000	C/SDM110-SDM081 VALVE KIT	2	6	24
5TIR108381	DPX050/9 TIE ROD KIT	1		
660203043	DPX050/AM1(TGW4-210/SB23)-NOTAP(LS)-NBR INLET COVER KIT	1		

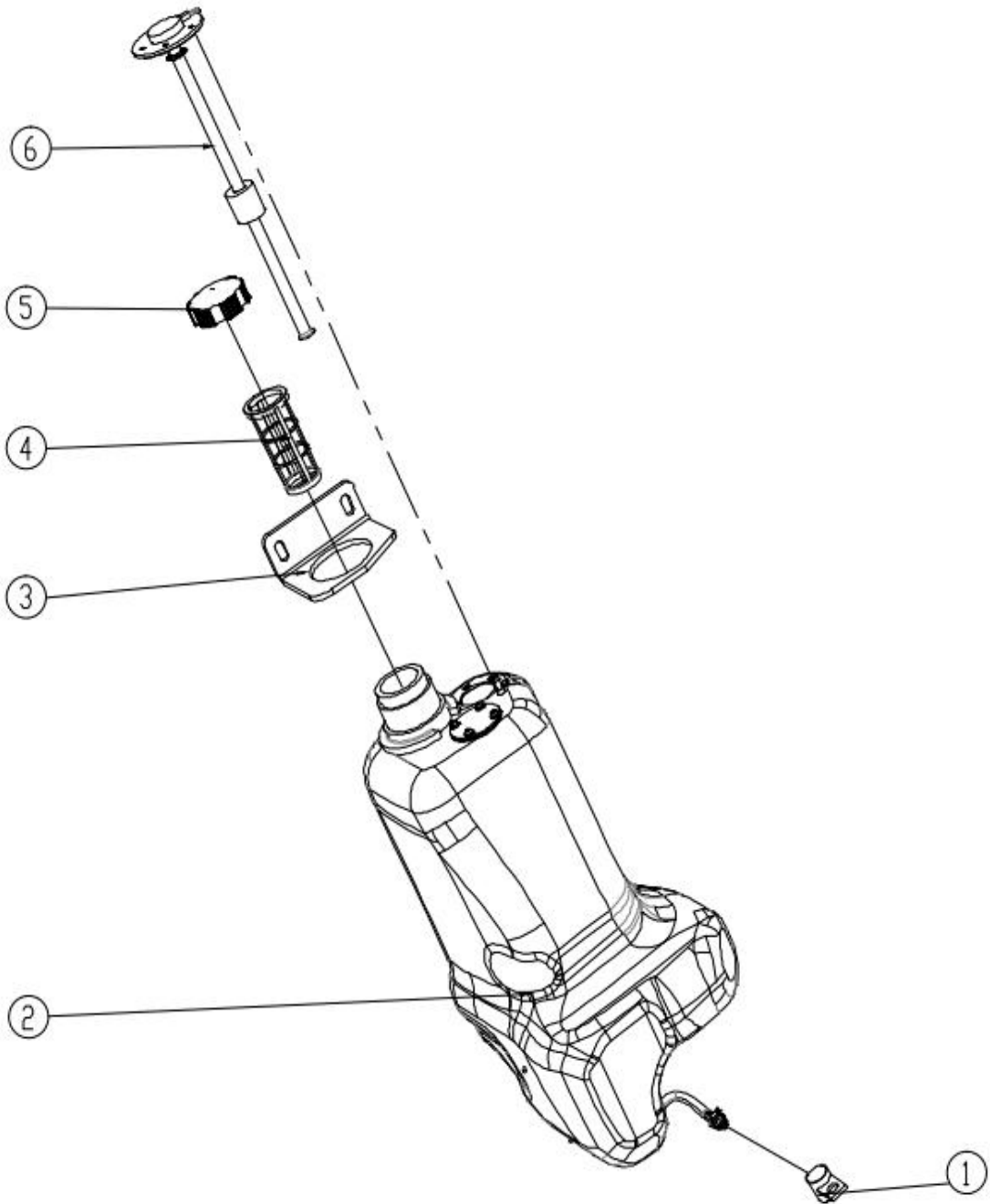
* : Ordering code for spare parts

Descrizione ultima revisione - <i>Last edition description</i>		Edizione 1	Non in scala	
		Famiglia <i>Group</i>		
	Sostituisce <i>Substitute</i>	Descrizione - <i>Description</i>		
	Riferimento Tecnico: <i>Technical Reference</i> AttoliniA	@		
http://www.walvoil.com e-mail: info@walvoil.com REGGIO EMILIA - ITALY	Diseg. <i>Draw.</i>	AttoliniR	13/09/2021	Codice <i>Code</i> 111C90015
	All rights reserved			

2.51 DIESEL FUEL TANK ASSEMBLY 柴油箱总成

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.51.1	Oil drain port	放油口	1	
2	2.51.2	Diesel fuel tank	柴油箱	1	
3	2.51.3	Fixed plate	固定板	1	
4	2.51.4	Screen	滤网	1	
5	2.51.5	Fuel tank cap	油箱盖	1	
6	2.51.6	Diesel sensor	柴油传感器	1	

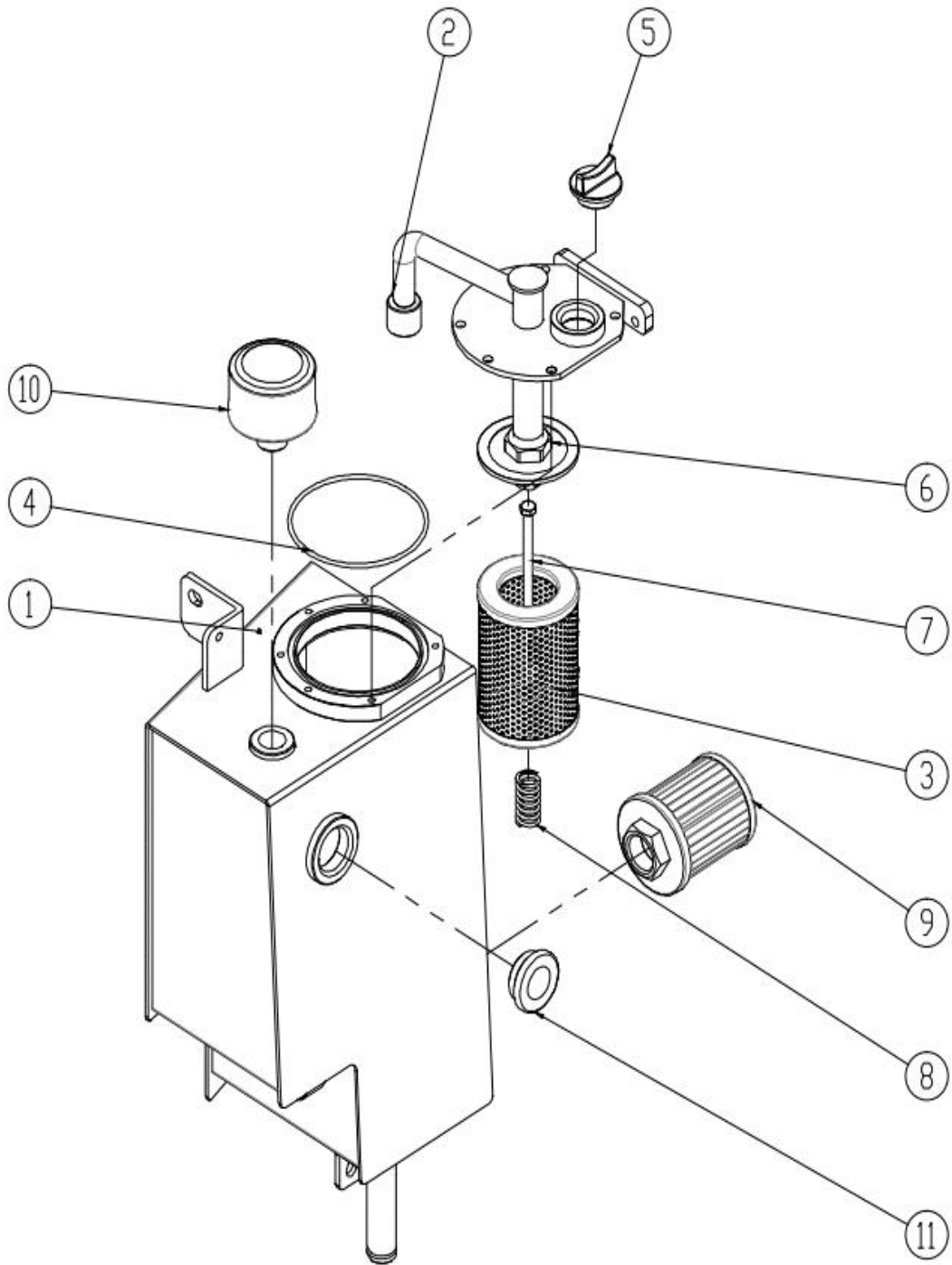
2.51 DIESEL FUEL TANK ASSEMBLY 柴油箱总成



2.52 HYDRAULIC TANK ASSEMBLY 液压油箱总成

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.52.1	Hydraulic tank welding	液压油箱焊接	1	
2	2.52.2	Oil return mouth	回油口焊合	1	
3	2.52.3	Back to the oil filter	回油滤芯	1	
4	2.52.4	O-rings	O 型圈	1	
5	2.52.5	Plastic tank cover.	塑料油箱盖	1	
6	2.52.6	Filter holder	滤芯座	1	
7	2.52.7	Bolt	螺栓	1	
8	2.52.8	Return oil filter core spring.	回油滤芯压簧	1	
9	2.52.9	Oil suction filter	吸油滤芯	1	
10	2.52.20	The cap	油箱盖	1	
11	2.52.21	Circular oil standard	圆形油标	1	

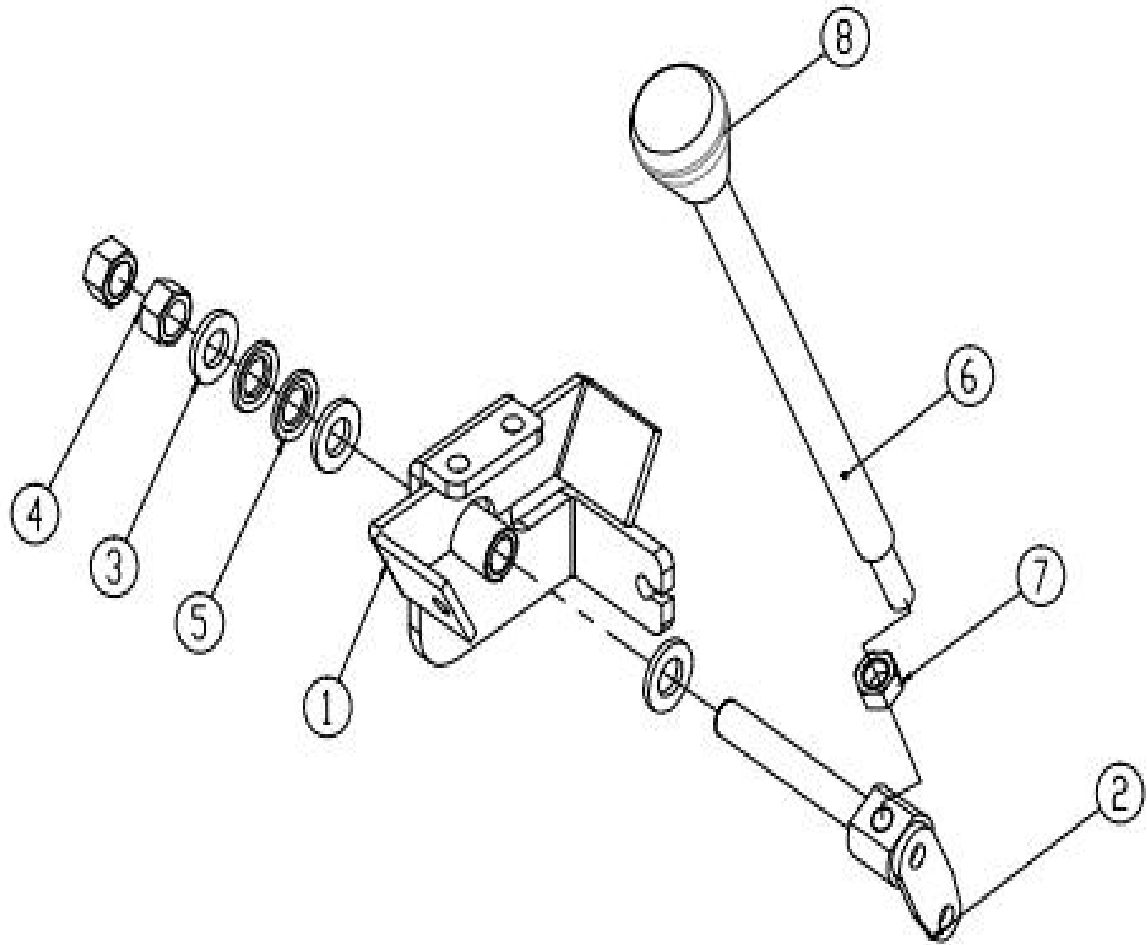
2.52 HYDRAULIC TANK ASSEMBLY 液压油箱总成



2.53 THE HAND THROTTLE 手油门

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	2.53.1	The hand throttle is welded	手油门架焊合	1	
2	2.53.2	Hand gas welding	手油门焊合	1	
3	2.53.3	The gasket	垫圈	3	
4	2.53.4	Nut M12	螺母 M12	2	
5	2.53.5	Butterfly spring	蝶形弹簧	2	
6	2.53.6	The throttle lever	油门拉杆	1	
7	2.53.7	Nut M10	螺母 M10	1	
8	2.53.8	Plastic ball head	塑料球头	1	

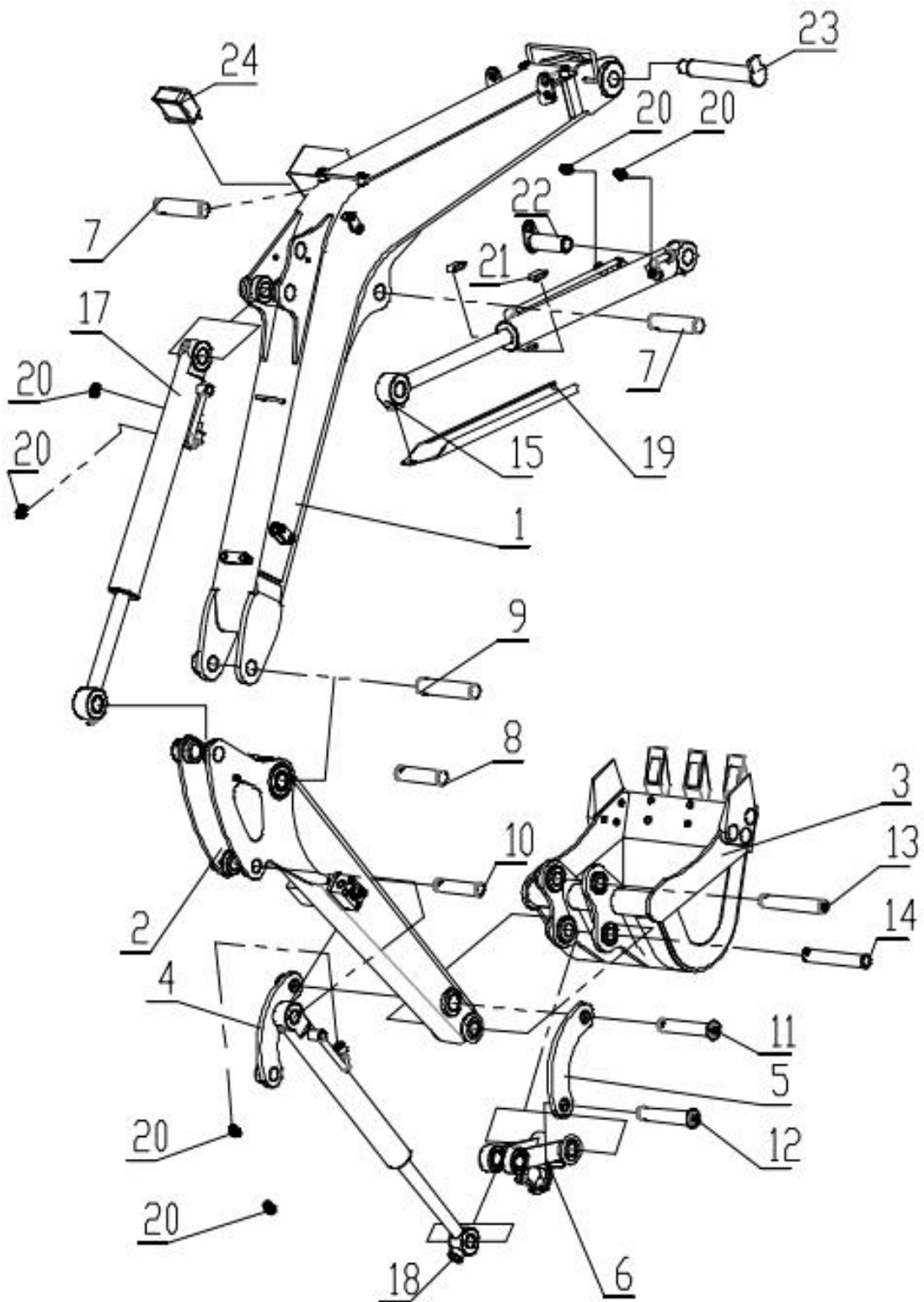
2.53 THE HAND THROTTLE 手油门



3.0 FRONT ASSY 前部装置

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	3.1	Lift arm ASSY	动臂总成	1	
2	3.2	Bucket rod ASSY	斗杆总成	1	
3	3.3	Bucket	铲斗	1	
4	3.4	Connecting rod welding	连杆焊合	1	
5	3.5	Connecting rod board	连杆板	1	
6	3.6	Pushing rod ASSY	推杆总成	1	
7	3.7	Axis A	轴-A	2	
8	3.8	Axis B	轴-B	1	
9	3.9	Axis C	轴-C	1	
10	3.10	Axis D	轴-D	1	
11	3.11	Axis G	轴-G	1	
12	3.12	Axis E	轴-E	1	
13	3.13	Axis H	轴-H	1	
14	3.14	Axis F	轴-F	1	
15	3.15	The boom cylinder	动臂缸	1	
16	3.16	Bucket cylinder rod	斗杆缸	1	
17	3.17	Bucket rod	铲斗缸	1	
18	3.18	Boom cylinder protector	动臂缸护罩	1	
19	3.19	Pipeline connection	油管接头	6	
20	3.20	Wear sleeve	耐磨套	2	
22	3.22	Back shaft of the arm cylinder	动臂缸后轴	1	
23	3.23	Back axle of the moving arm	动臂后轴	1	
24	3.24	Headlight.	大灯	1	

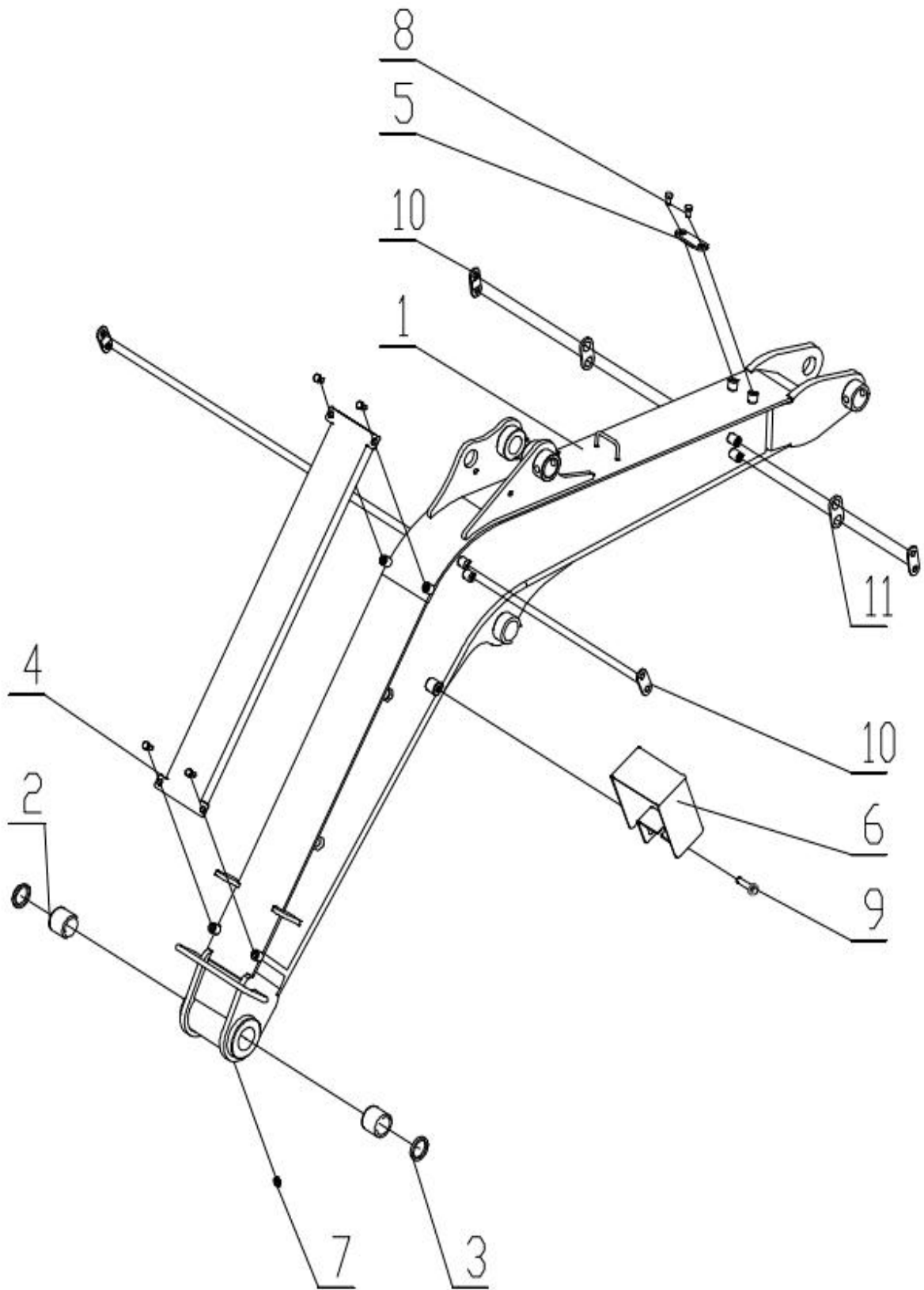
3.0 FRONT ASSY 前部装置



3.1 Lift arm ASSY 动臂总成

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	3.1.1	Wired arm	动臂焊合	1	
2	3.1.2	An arm Bushing.	动臂衬套	2	
3	3.1.3	Oil seal-A	油封-A	2	
4	3.1.4	Pipe Shields	油管护板	1	
5	3.1.5	Pipe press	油管压板	1	
6	3.1.6	Lamp-chimney	灯罩	1	
7	3.1.7	Oil cup M10X1	油杯 M10X1	1	
8	3.1.8	Bolt (M8X15 8.8)	螺栓	6	
9	3.1.9	Bolt (M10X40 8.8)	螺栓	1	
10	3.1.10	Pressing board	压板	4	
11	3.1.11	Rubber pads	橡胶垫	2	

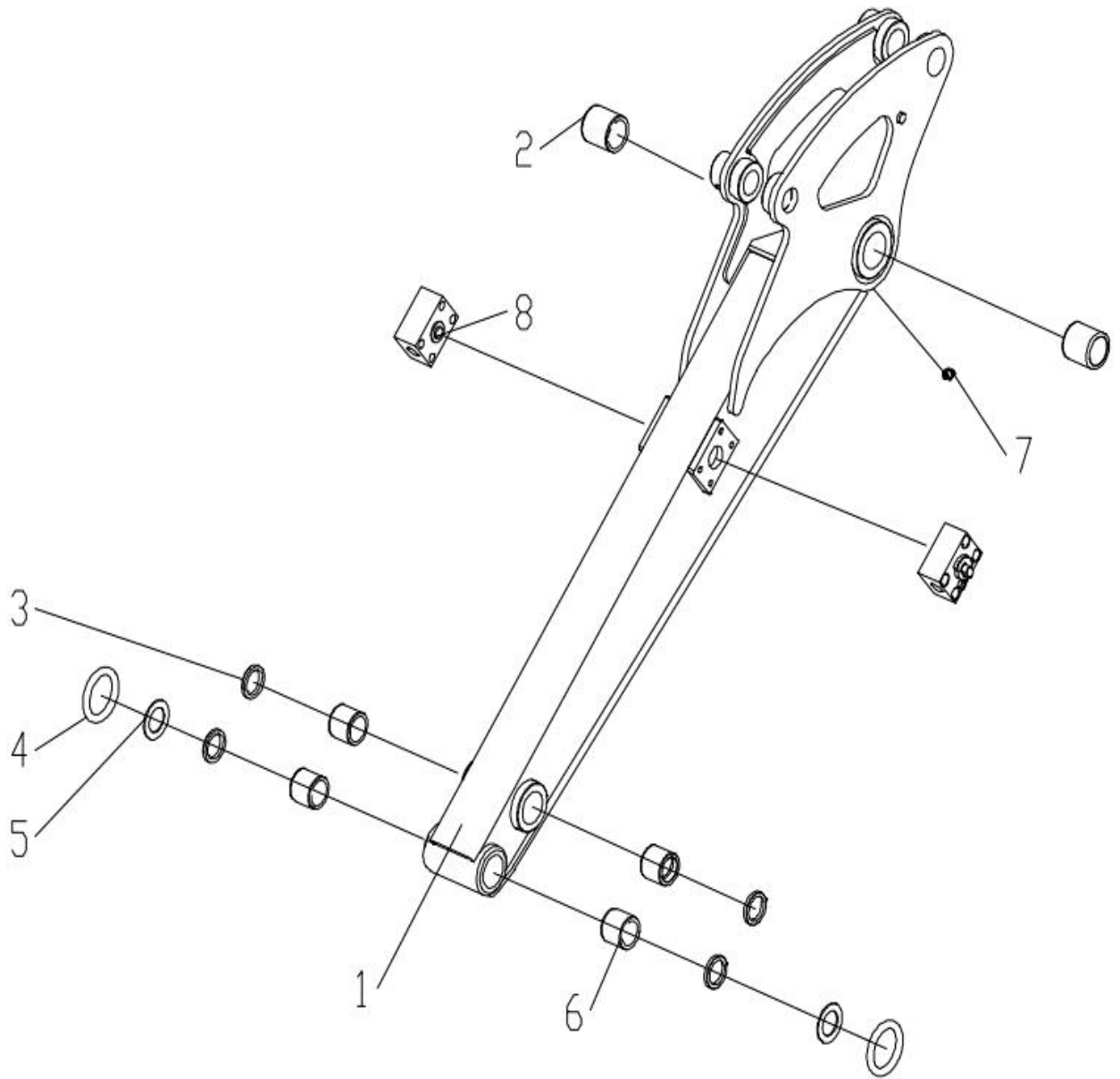
3.1 Lift arm ASSY 动臂总成



3.2 BUCKET ARM ASSY 斗杆总成

序号 ITEM	零件号 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	3.2.1	Column welding	斗杆焊合	1	
2	3.2.2	Column Bushing	斗杆衬套	2	
3	3.2.3	Oil seal-B	油封-B	4	
4	3.2.4	O-ring	O 型圈	2	
5	3.2.5	Washer	垫圈	2	
6	3.2.6	Column Bushing	斗杆衬套	2	
7	3.2.7	Oil cup M10X1	油杯 M10X1	1	
8	3.2.8	Turn valve	转阀	2	

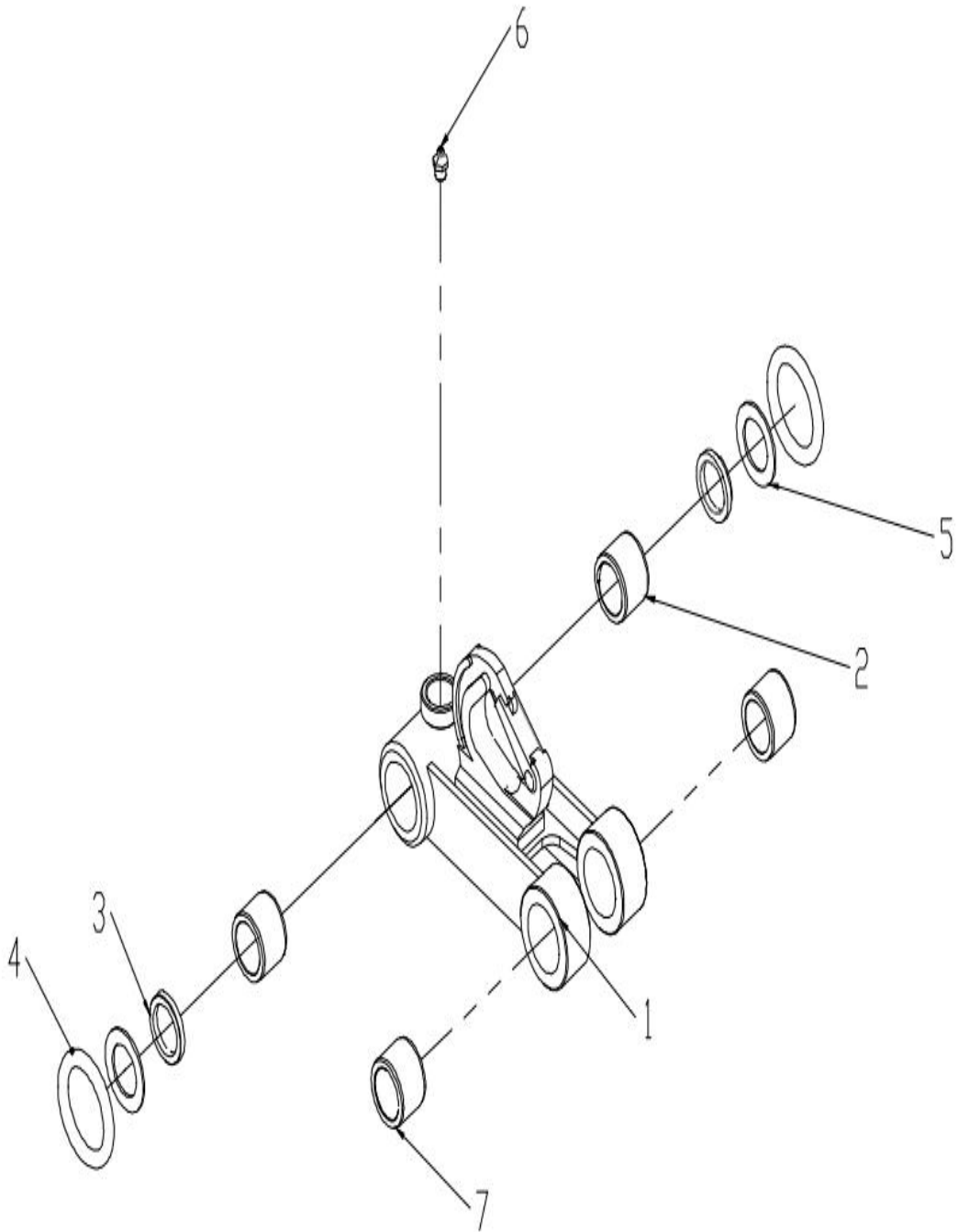
3.2 BUCKET ARM ASSY 斗杆总成



3.6 PUSHING ROD ASSY 推杆总成

序号 ITEM	零件 PART NO.	Part Name	零件名称	数量 Q'TY	备注 Remark
1	3.6.1	Pushing rod	推杆	1	
2	3.6.2	Pushing rod steel jacket-A	推杆钢套-A	2	
3	3.6.3	Oil seal-B	油封-B	2	
4	3.6.4	O-ring	O 型圈	2	
5	3.6.5	washer	垫圈	2	
6	3.6.6	Oil cup M10 x 1	油杯 M10x1	1	
7	3.6.7	Pushing rod steel jacket-B	推杆钢套-B	2	

3.6 PUSHING ROD ASSY 推杆总成



PARTSBOOK

XN20

山东肯石重工机械有限公司

SHANDONG KEN STONE HEAVY MACHINERY CO.,LTD

地 址：中国山东聊城西 18 公里（聊冠路）

热线电话：0635-5663 333

传 真：0635-5663 777

邮 编：252512

网 址：www.sdxiniu.com

Address : 18 km away from west of Liaocheng City,
(Liaoguan Road) , Shandong Province, China

Hotline : 0635-5663 333

Fax : 0635-5663 777

Postal :252512

Website : www.sdxiniu.com

