

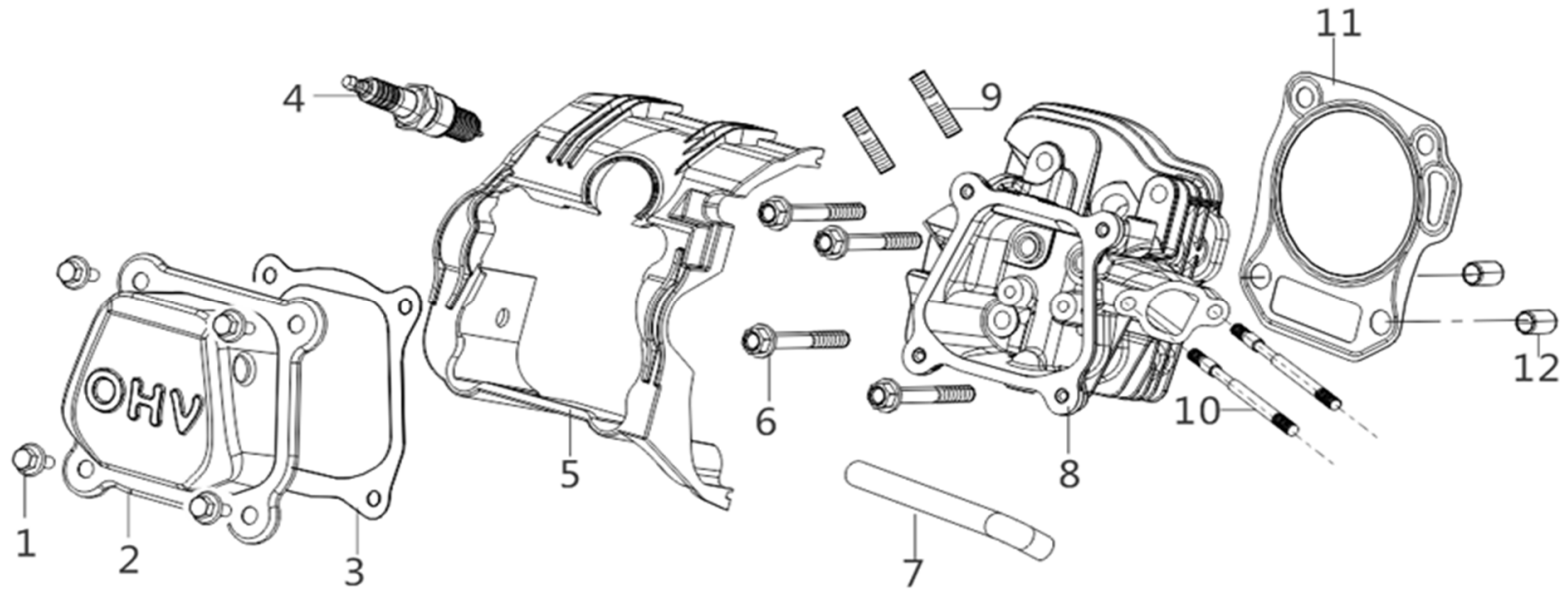
3000W INVERTER MITM GENERATOR



VENDOR:	RATO
MODEL:	GEN-3000-IMM0
DATE:	5/25/15
DRAWN BY:	JAY WESSELS

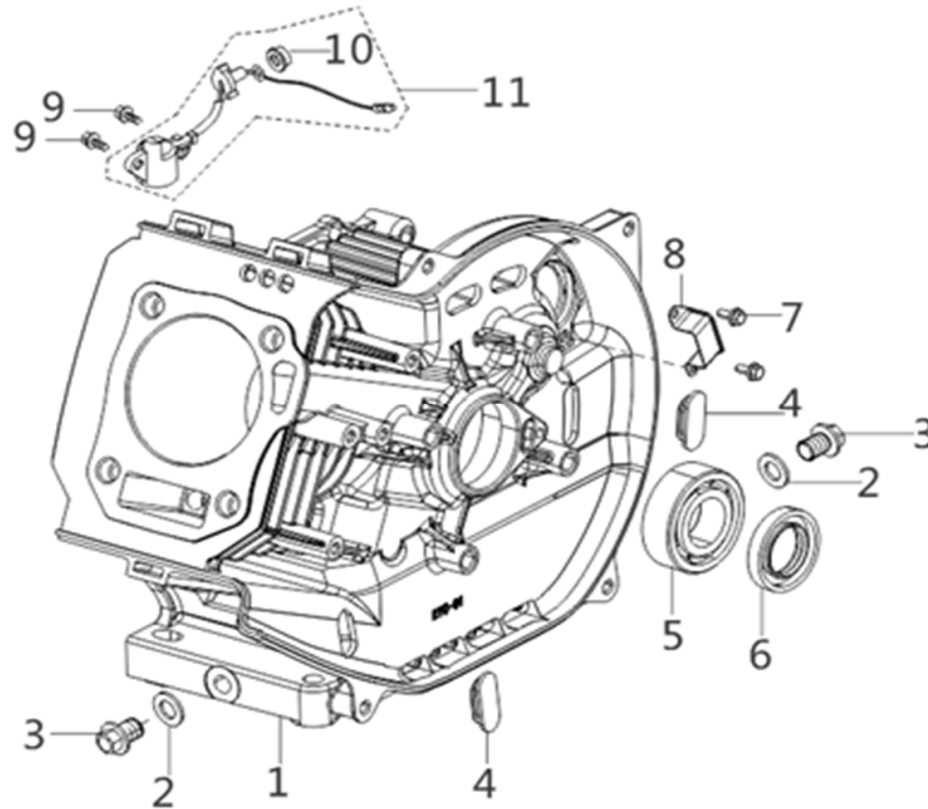
DATE:	DESCRIPTION:	BY:

FIG.1 CYLINDER HEAD SUBASSEMBLY



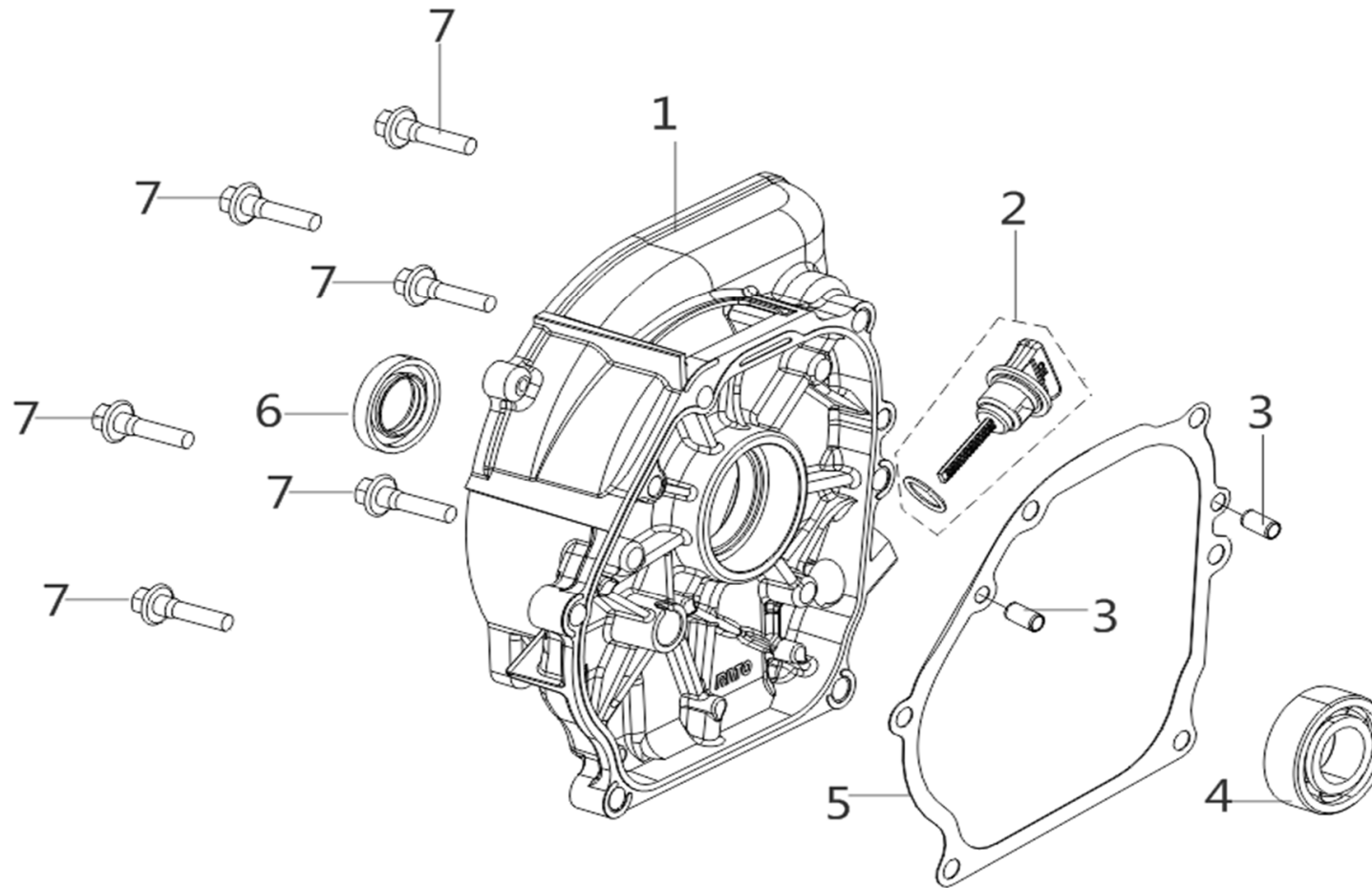
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
1-01	BOLT - CYLINDER HEAD COVER	4	45-0315	90001-0612-01
1-02	CYLINDER HEAD - COVER SUBASSEMBLY	1	45-0824	12410-Z300120-0000
1-03	GASKET - CYLINDER HEAD COVER	1	45-0825	12004-Z010110-0000
1-04	SPARK - PLUG	1	45-0471	30010-Z010110-0000
1-05	SHROUD - CYLINDER BODY	1	45-0826	19304HZ430110-0000
1-06	BOLT - CYLINDER HEAD	4	45-0470	12003-Z010110-0000
1-07	TUBE - BREATHER	1	45-0827	17004-Z430110-0000
1-08	CYLINDER HEAD SUBASSEMBLY	1	45-0828	12140-Z430110-0000
1-09	STUD - EXHAUST	2	45-0468	90203-Z010110-0000
1-10	STUD - CARBURETOR	2	45-0829	90204-Z430110-0000
1-11	GASKET - CYLINDER HEAD	1	45-0830	12131-Z140310-0000
1-12	PIN - CYLINDER HEAD	2	45-0602	90502-1014-00

FIG.2 CRANKCASE / GOVERNOR GEAR ASSEMBLY



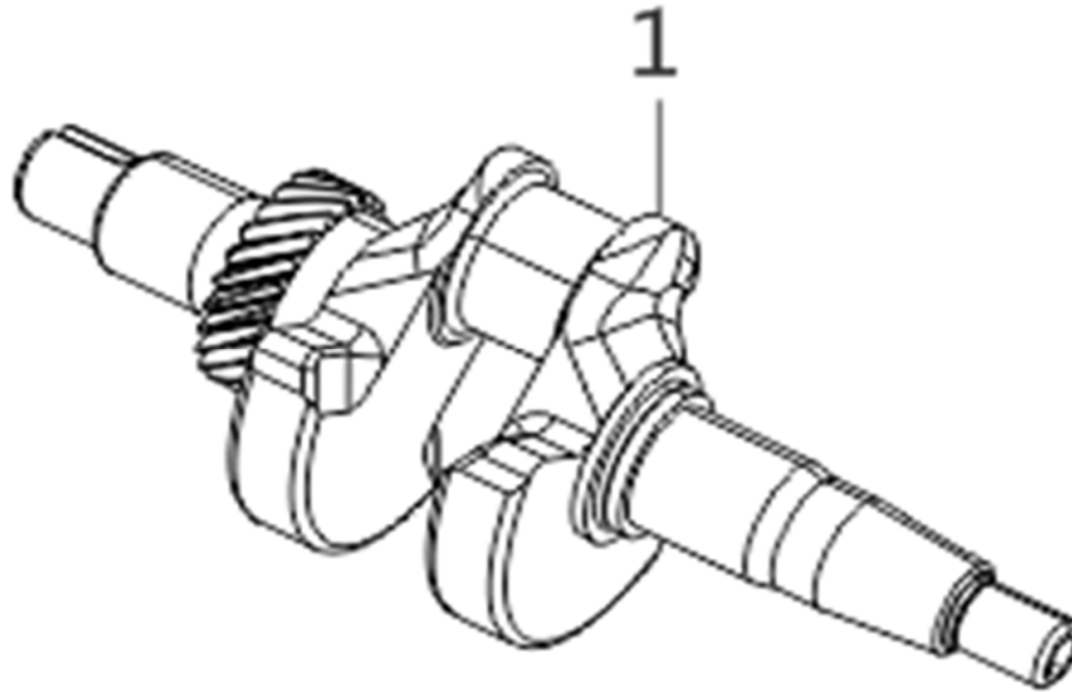
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
2-01	CRANKCASE SUBASSEMBLY	1	45-0831	11310-Z430110-0000
2-02	WASHER - DRAIN PLUG	2	45-0530	90408-Z010110-0000
2-03	BOLT - DRAIN PLUG	2	45-0477	11007-Z010110-0000
2-04	PLUG - CRANKCASE ASSY	2	45-0832	90722-Z430110-0000
2-05	BEARING - GOV GEAR	1	45-0833	90547-0205-KS
2-06	SEAL - OIL CRANKCASE	1	45-0834	90682-Z010110-0000
2-07	BOLT - OUTGOING CABLE PLATE	2	45-0835	90001-0510-01
2-08	PLATE - GENERATOR OUTGOING CABLE	1	45-0836	30033-Z150110-0000
2-09	BOLT - ENGINE OIL SENSOR	2	45-0316	90001-0616-01
2-10	NUT - ENGINE OIL SENSOR	1	45-0789	90305-Z010210-01
2-11	SENSOR - ENGINE OIL	1	45-0474	37060-Z010120-0000

FIG.3 CRANKCASE COVER SUBASSEMBLY



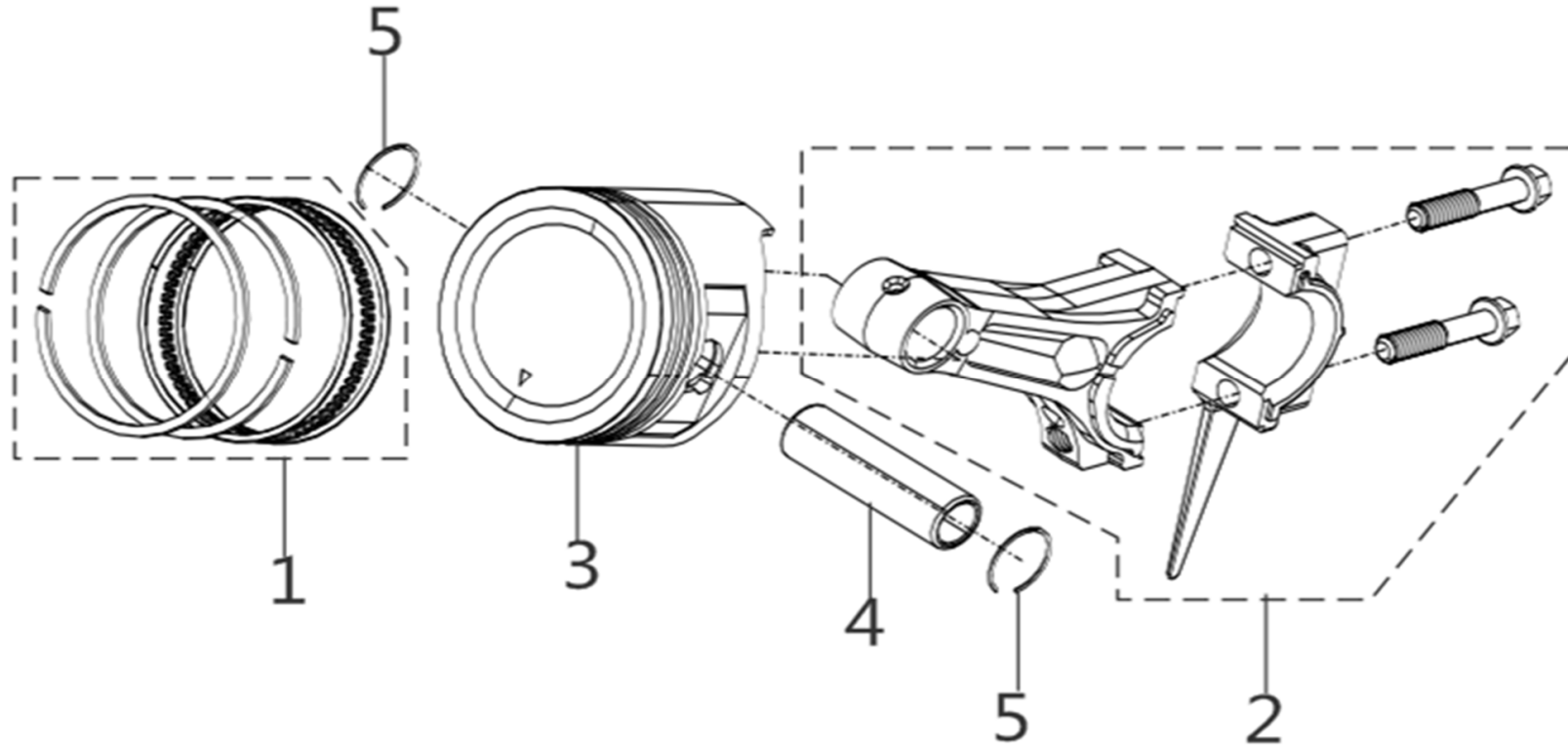
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
3-01	COVER - CRANKCASE	1	45-0837	11411-Z430110-0000
3-02	OIL DIPSTICK SUBASSEMBLY	1	45-0838	15010-Z010130-Q500
3-03	PIN - CRANKCASE COVER	2	45-0329	90502-0912-00
3-04	BEARING - GOV GEAR	1	45-0839	90547-0205-KS
3-05	GASKET - CRANKCASE	1	45-0840	11001-Z430110-0000
3-06	SEAL - OIL CRANKCASE	1	45-0834	90682-Z010110-0000
3-07	BOLT - CRANKCASE COVER	6	45-0532	90001-0832-01

FIG.4 CRANKSHAFT CONNECTING ROD



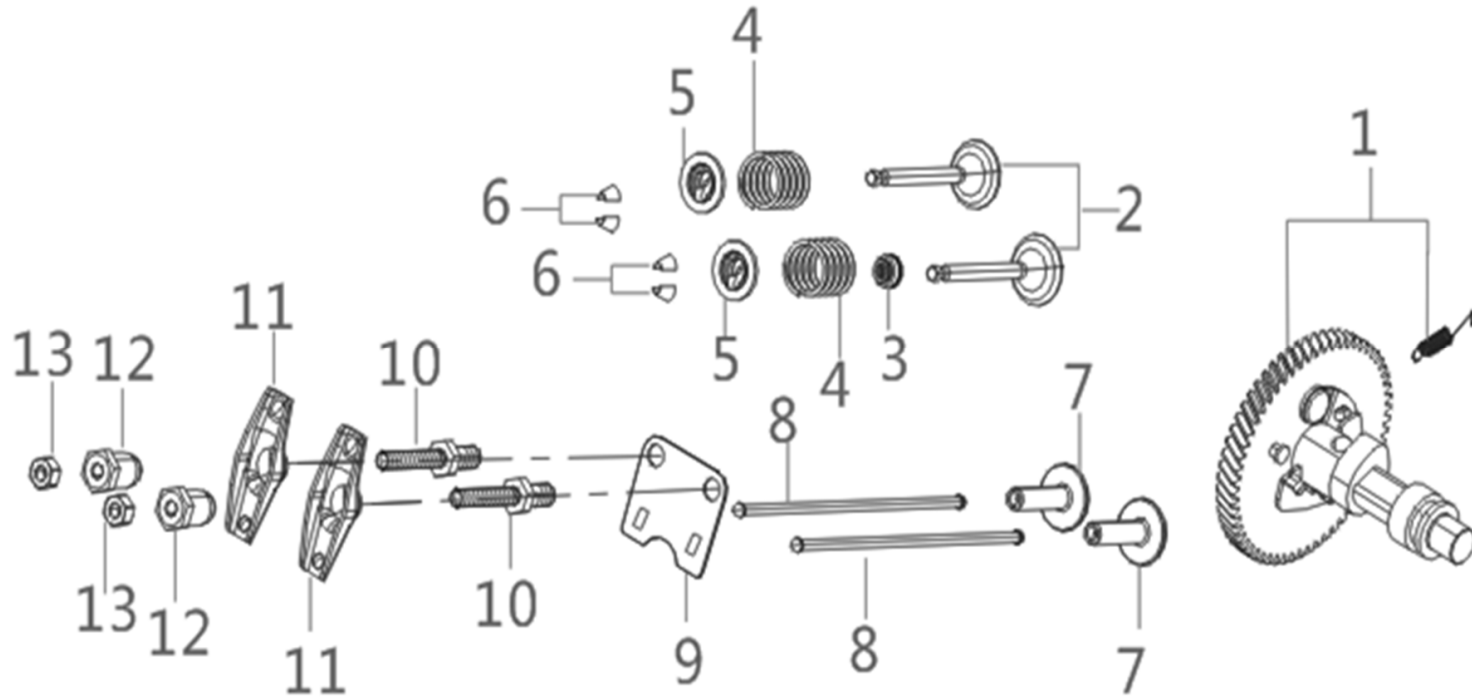
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
4-01	CRANKSHAFT ASSY	1	45-0842	13300-Z430210-0000

FIG.5 PISTON SUBASSEMBLY



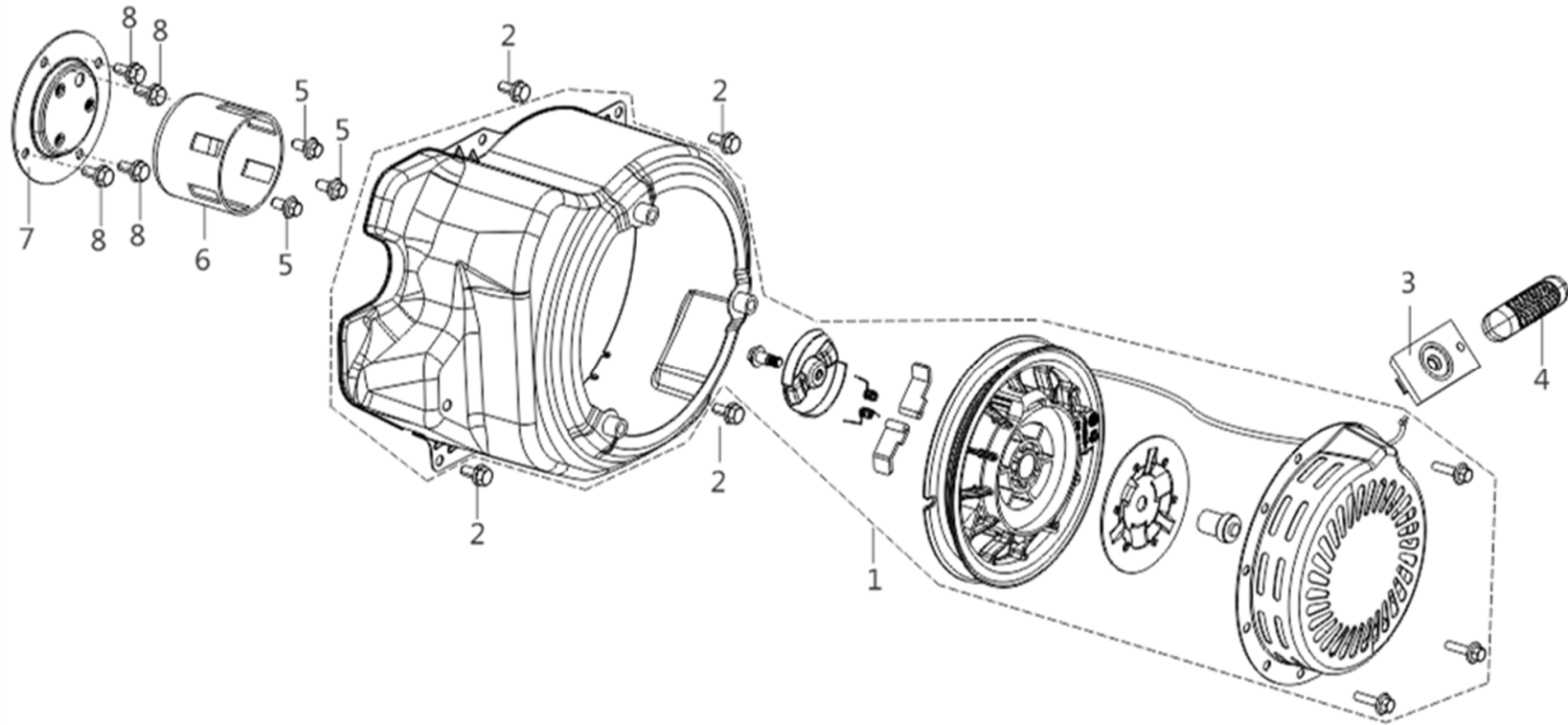
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
5-01	PISTON RING SET	1	45-0843	13200-Z140210-0099
5-02	CONNECTING ROD	1	45-0487	13010-Z440210-0099
5-03	PISTON	1	45-0485	13111-Z140220-0099
5-04	WRIST PIN	1	45-0486	13121-Z010110-0000
5-05	PISTON C-CLIP	2	45-0350	13122-Z010110-0000

FIG.6 VALVE TRAIN/CAMSHAFT SUBASSEMBLY



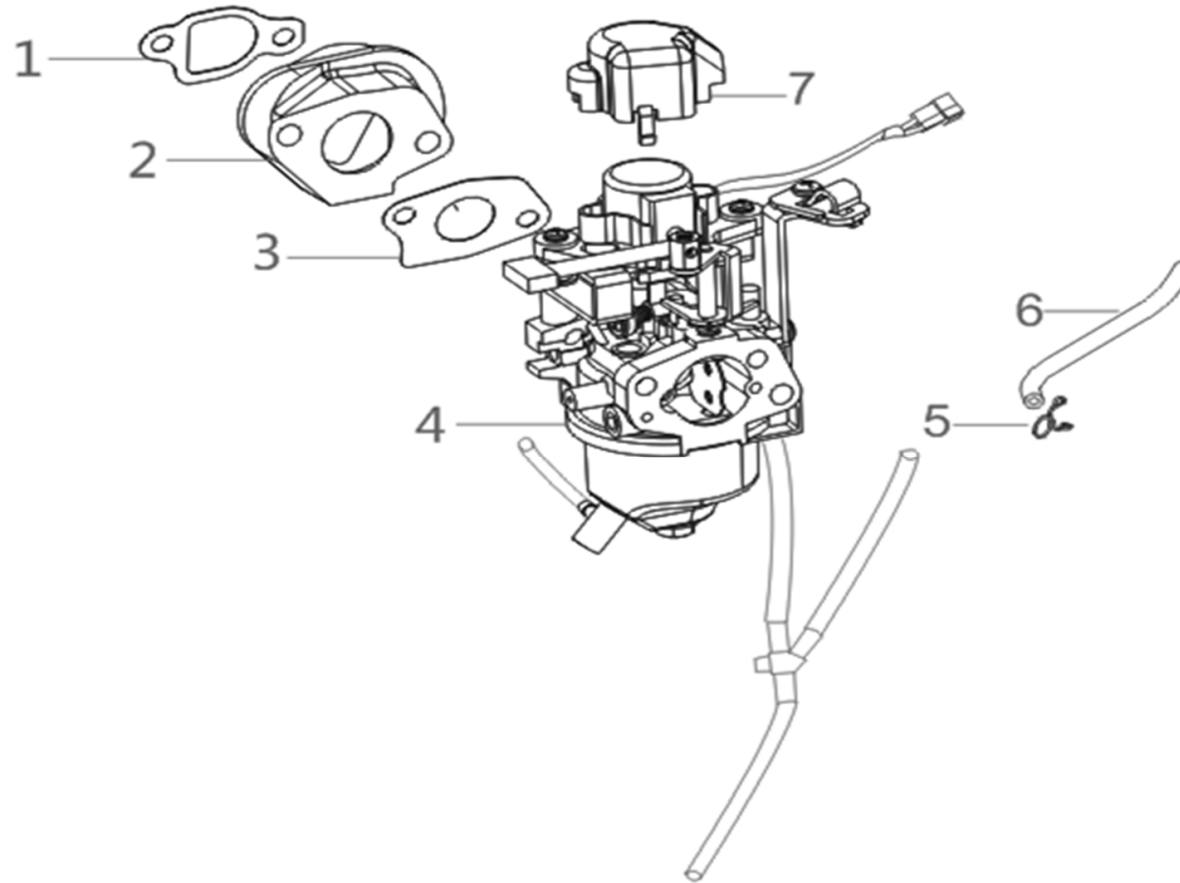
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
6-01	CAMSHAFT ASSY	1	45-0844	14200-Z530510-0099
6-02	VALVE SET EXHAUST/INTAKE	1	45-0845	12110-Z810120-0099
6-03	VALVE GUIDE - SEAL	1	45-0846	12101-Z810210-0000
6-04	VALVE - SPRING	2	45-0501	12103-Z010110-0000
6-05	VALVE SPRING - SEAT	2	45-0546	12112-Z810110-0000
6-06	VALVE LOCK - CLAMP	4	45-0547	12109-Z810110-0000
6-07	VALVE - TAPPET	2	45-0497	14081-Z040110-0000
6-08	VALVE - LIFTER	2	45-0498	14071-Z440110-0000
6-09	LIFTER STOP- PLATE SUBASSEMBLY	1	45-0499	14090-Z010110-0000
6-10	BOLT - VALVE ADJUSTING	2	45-0270	14313-Z010110-0000
6-11	VALVE ROCKER	2	45-0500	14311-Z010110-0000
6-12	NUT - VALVE ADJUSTING	2	45-0271	14314-Z010110-0000
6-13	NUT - VALVE LOCK	2	45-0269	14312-Z010110-0000

FIG.7 RECOIL STARTER



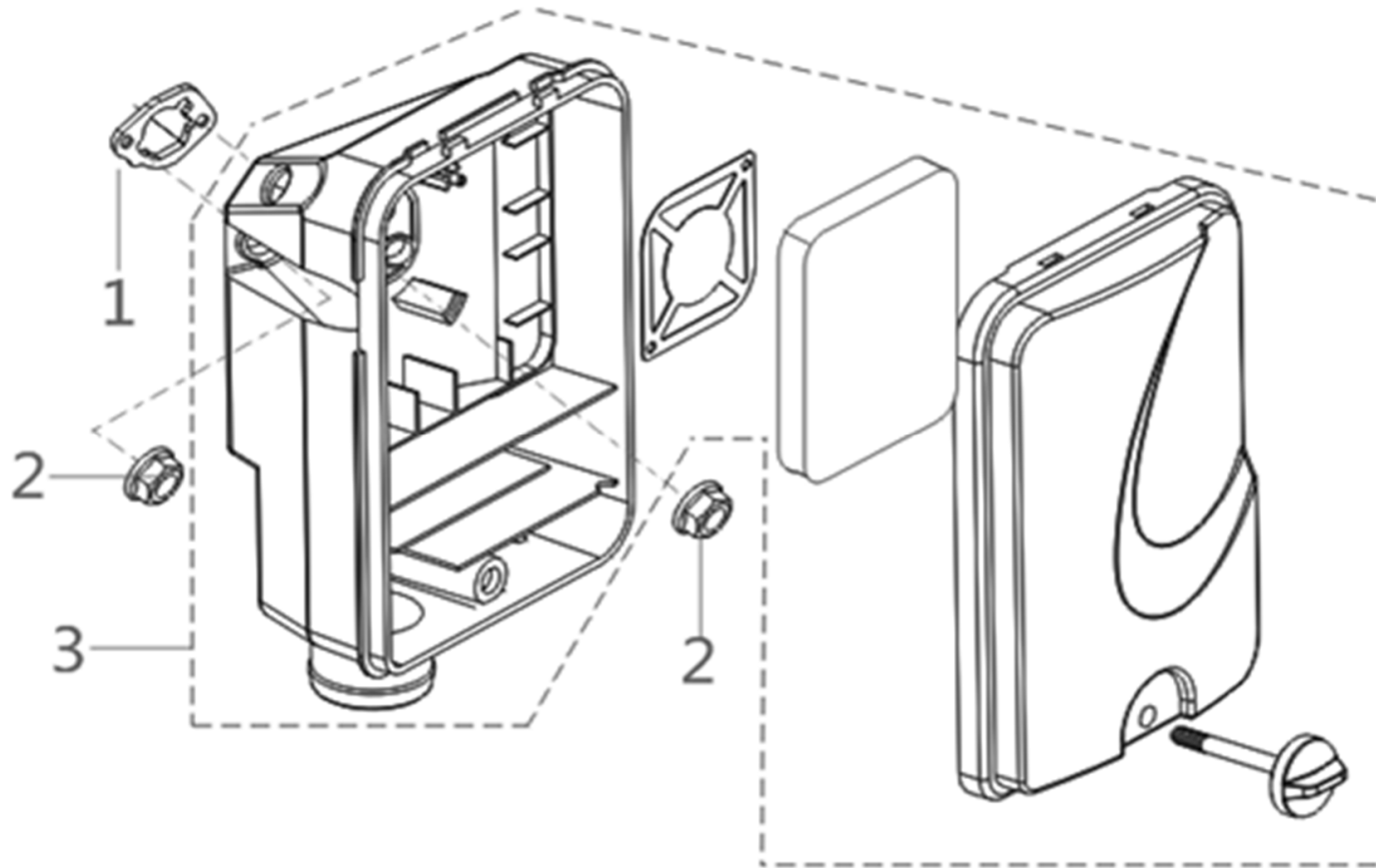
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
7-01	RECOIL STARTER ASSY	1	45-0847	28100-Z430110H6H6K
7-02	BOLT -RECOIL SHROUD	4	45-0315	90001-0612-01
7-03	STARTING ROPE SLEEVE	1	45-0848	28004-Y2P0210-0000
7-04	HANDLE - RECOIL STRATER CABLE	1	80-0160	28210-Y2V0110-0000
7-05	BOLT - PULLEY	3	45-0533	90001-0610-01
7-06	PULLEY - SLEEVE	1	45-0849	28002-Z150110-0000
7-07	STARTER CUP - SEAT	1	45-0850	28020-Z150110-0000
7-08	BOLT - STARTER CUP	4	45-0531	90001-0614-01

FIG.8 CARBURETOR ASSEMBLY



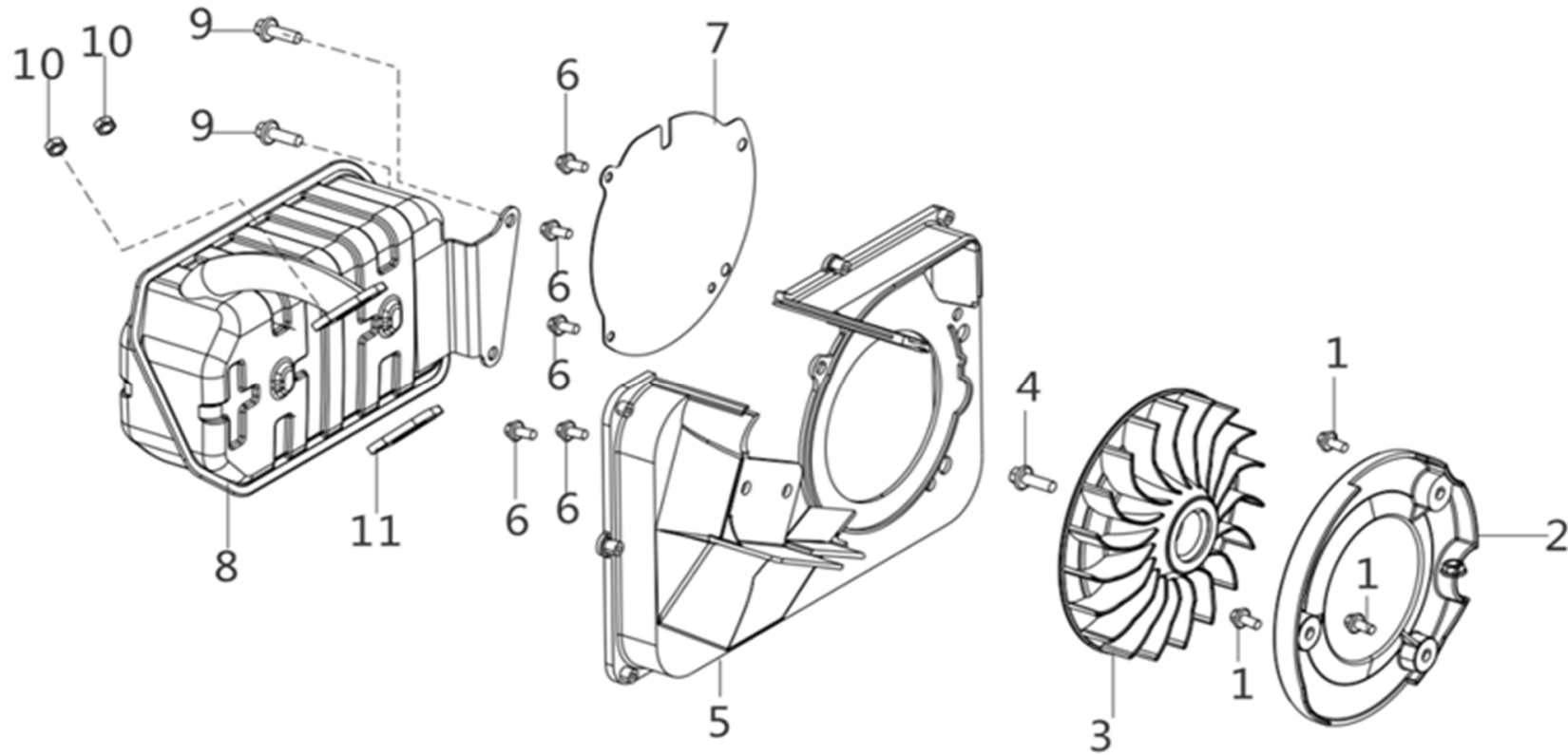
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
8-01	CARBURETOR INSULATOR - GASKET	1	45-0851	16002-Z010110-0000
8-02	CARBURETOR INSULATOR - PLATE	1	45-0852	16003-Z430110-0000
8-03	CARBURETOR - GASKET	1	45-0853	16001-Z430110-0000
8-04	CARBURETOR ASSY	1	45-0854	16100-Z430110-0000
8-05	CLAMP - FUEL HOSE	1	80-0216	90685-Z030510-0000
8-06	FUEL HOSE - OUTSIDE DIAMETER .25 IN	1	45-0855	90686-Z430110-0000
8-07	CAP - CARBURETOR ASSY	1	45-0222	14411-Y2V0110-0000

FIG.9 AIR CLEANER



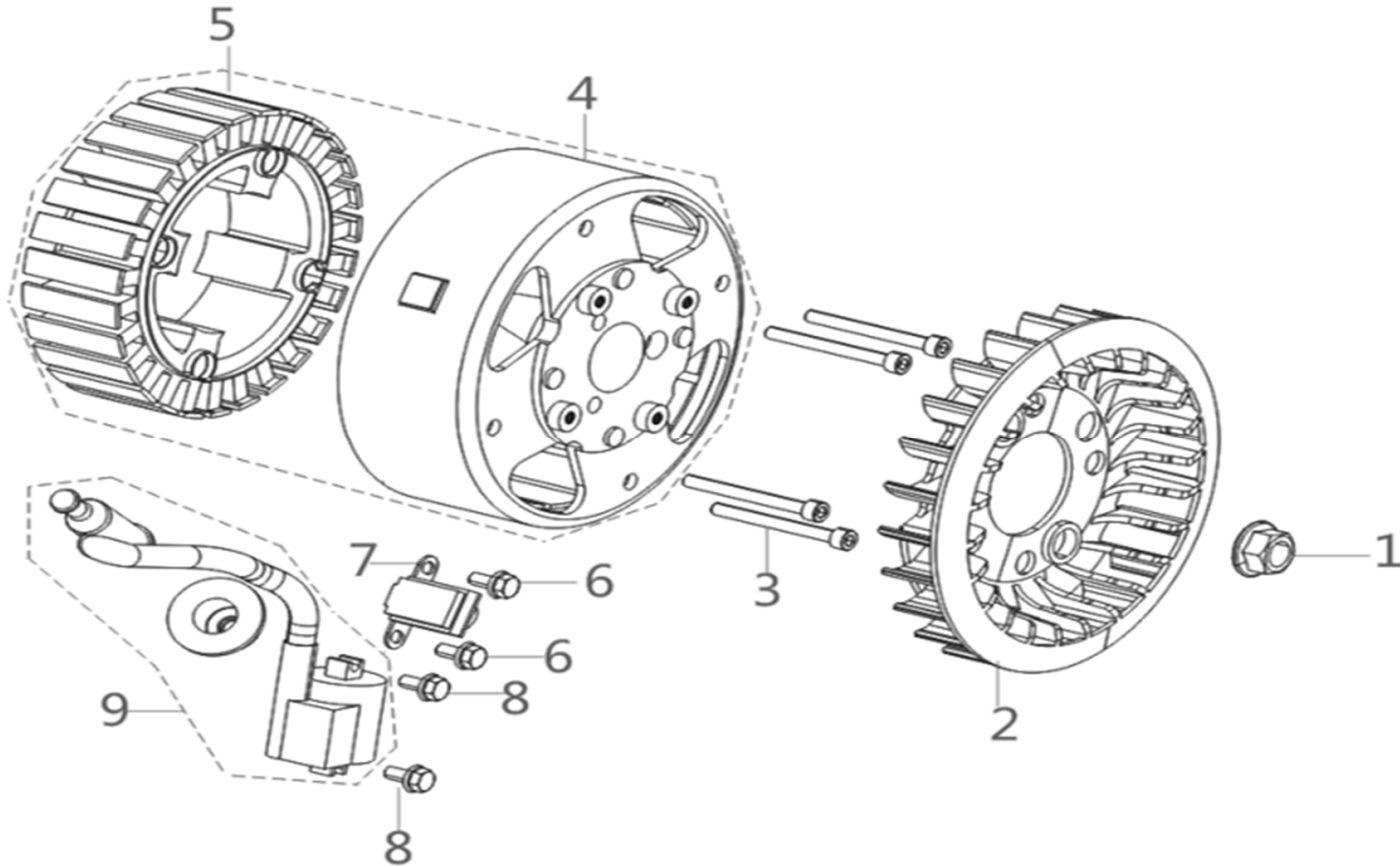
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
9-01	GASKET - AIR CLEANER	1	45-0551	17001-Z010110-0000
9-02	NUT - AIR CLEANER DUCT	2	45-0324	90305-0600-31
9-03	AIR CLEANER ASSY	1	45-0856	17100-Z430110-0001

FIG.10 MUFFLER ASSEMBLY



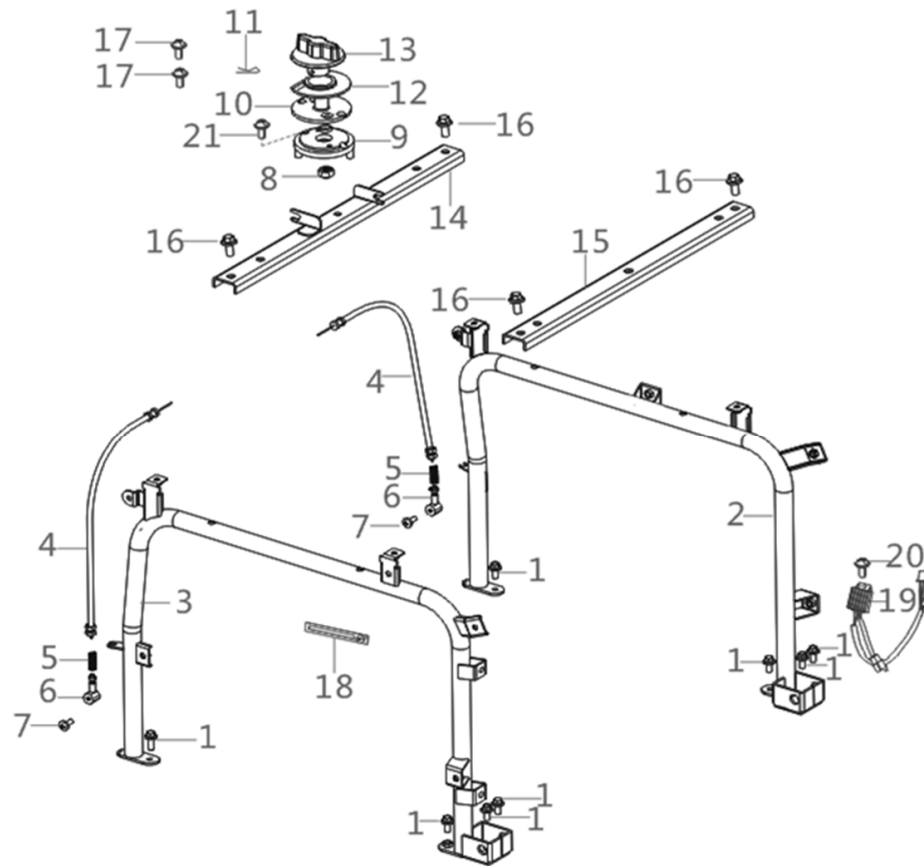
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
10-01	BOLT - MUFFLER SHROUD	3	45-0315	90001-0612-01
10-02	MUFFLER SHROUD	1	45-0857	28110-Y2P0110-0000
10-03	IMPELLER 3000 INVERTER	1	45-0858	19352-Y2P0110-0000
10-04	BOLT - IMPELLER	1	45-0320	90001-0820-01
10-05	SHROUD - MUFFLER INSULATOR	1	45-0859	18020-Y2P0110-0000
10-06	BOLT - SHROUD	5	45-0316	90001-0616-01
10-07	MUFFLER CLAPBOARD	1	45-0860	18192-Y2P0110-0000
10-08	MUFFLER	1	45-0861	18100-Y2P0310-0000
10-09	BOLT - MUFFLER ASSY	2	45-0788	90001-0816-01
10-10	NUT - EXHAUST OUTLET	2	45-0534	90303-0800-31
10-11	GASKET - EXHAUST OUTLET	1	45-0862	18001-Z010110-0000

FIG.11 FLYWHEEL / IMPELLER / STARTER PULLEY / IGNITION COIL



REF NO.	DESCRIPTION	QTY	MITM #	RATO #
11-01	NUT - FLYWHEEL	1	45-0520	13501-Z010110-0000
11-02	IMPELLER	1	45-0863	19352-Z150110-0000
11-03	SCREW - ROTOR	4	45-0864	90102-0660-06
11-04	ROTOR	1	45-0865	30110-Y2P0120-0000
11-05	STATOR	1	45-0866	30120-Y2P0210-0000
11-06	BOLT - TRIGGER ASSY	2	45-0445	90001-0516-01
11-07	TRIGGER ASSY	1	45-0867	30130-Z430110-0000
11-08	BOLT - IGNITION	2	45-0868	90001-0520-01
11-09	IGNITION COIL	1	45-0869	30400-Z430110-0000

FIG.12 FRAME ASSY

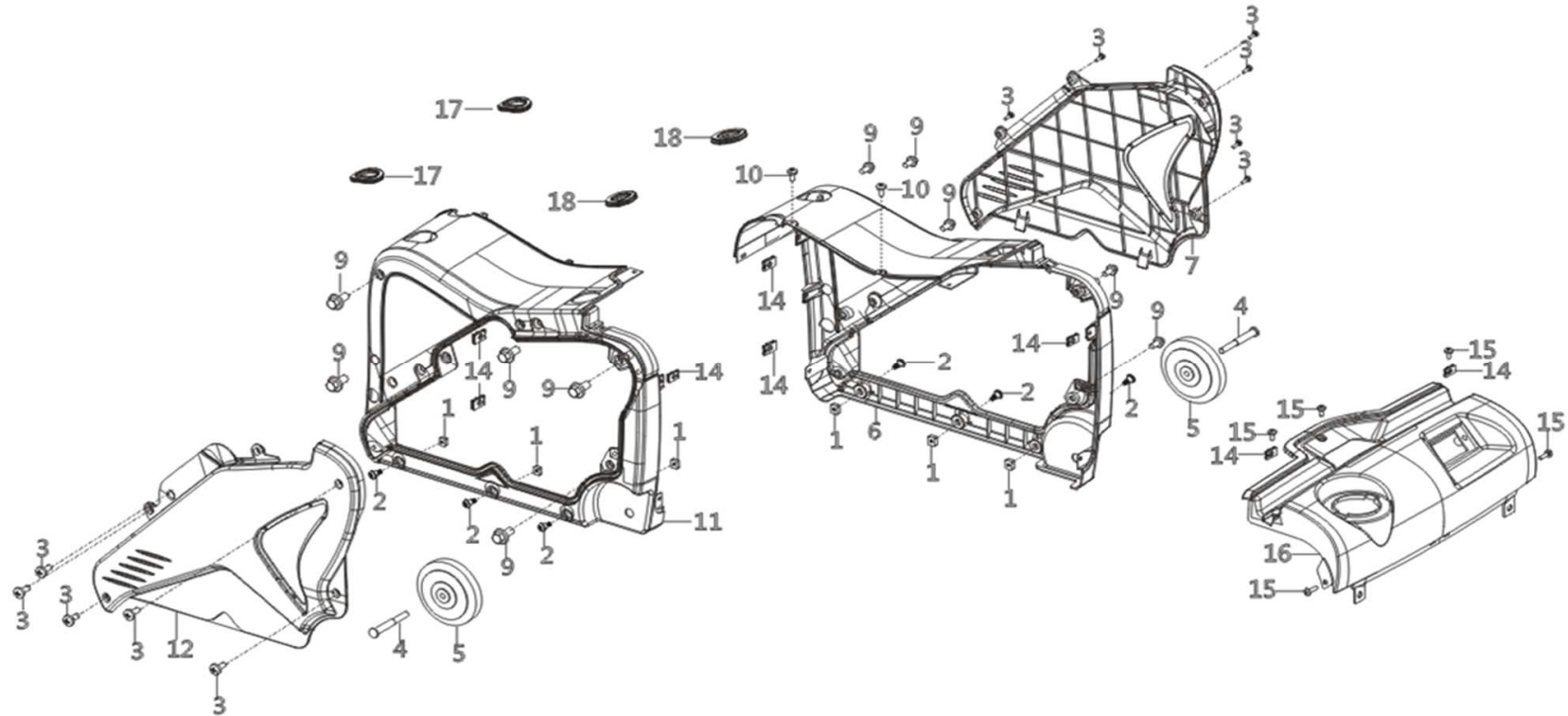


REF NO.	DESCRIPTION	QTY	MITM #	RATO #
12-01	BOLT	8	45-0316	90001-0616-01
12-02	LEFT FRAME ASSY - ENGINE	1	80-0224	51100-Y2P0410-QC00
12-03	RIGHT FRAME ASSY - ENGINE	1	80-0225	51100-Y2P0310-QC00
12-04	LIMITING CABLE ASSY	2	80-0226	54195-Y2P0110-0000
12-05	SPRING - LIMITING CABLE ASSY	2	80-0227	28224-Y2P0110-0000
12-06	PIN - LIMITING CABLE ASSY	2	80-0228	90504-Y2P0120-0000
12-07	BOLT - LIMITING CABLE ASSY	2	80-0229	90005-0412-01
12-08	BUSHING-HANDLE RELEASE	1	80-0230	90683-Y2P0110-0000
12-09	CONTROL ARM - LIMITED BLOCK	1	80-0231	16531-Y2P0210-Q200

FIG.12 FRAME ASSY CONTINUED

REF NO.	DESCRIPTION	QTY	MITM #	RATO #
12-10	CABLE ASSEMBLING SUPPORT	1	80-0232	16563-Y2P0210-Q200
12-11	PIN - CABLE ASSY	1	80-0233	90501-Y2P0110-0000
12-12	ISOLATOR - CABLE ASSY	1	80-0234	53006-Y2P0110-0000
12-13	KNOB - CABLE ASSY	1	80-0235	35643-Y2P0210-Q200
12-14	CONNECTION PLATE	1	80-0236	51131HY2P0210-QC00
12-15	CONNECTION PLATE - FRAME	1	80-0237	51131HY2P0110-QC00
12-16	BOLT - CONNECTION PLATE	4	45-0315	90001-0612-01
12-17	BOLT - LIMITING CABLE ASSY	2	80-0238	90129-0410-01
12-18	CLIP - FRAME ASSY	1	45-0335	90684-Z030120-0000
12-19	VOLTAGE REGULATOR	1	80-0169	30060-Y2V0110-0000
12-20	PAN HEAD SCREW AND WASHER ASSY	1	45-0719	90255-0516-53
12-21	PAN HEAD SCREW AND WASHER ASSY	1	45-0718	90255-0512-53

FIG.13 OUTER PANEL ASSY

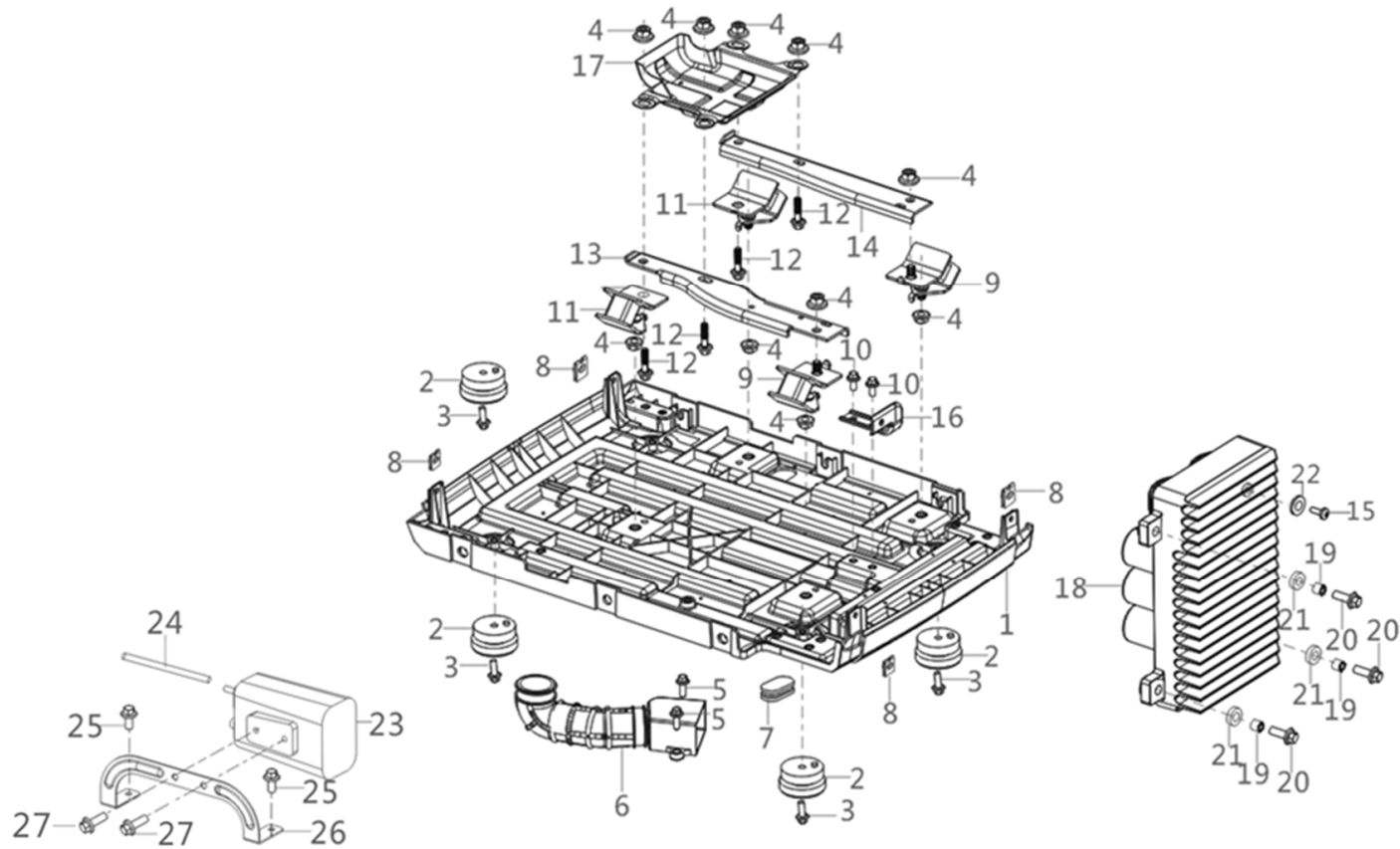


REF NO.	DESCRIPTION	QTY	MITM #	RATO #
13-01	NUT - INNER PANEL	6	45-0722	90326-Y2V0110-0000
13-02	BOLT - INNER PANEL	6	80-0146	90208-Y2V0110-0000
13-03	SCREW AND WASHER ASSY - PAN HEAD	11	45-0718	90255-0512-53
13-04	AXLE - FRONT WHEEL	2	80-0239	44020-Y2P0110-0300
13-05	FRONT WHEEL BODY	2	80-0240	44110-Y2P0110-0000
13-06	RIGHT SIDE HOUSING	1	80-0241	80095-Y2P0120-Q200
13-07	RIGHT SIDE COVER	1	80-0242	80096-Y2P0120-SK00
13-09	BOLT - INNER PANEL	10	45-0315	90001-0612-01
13-10	SCREW - TOP COVER	2	45-0723	90107-Y2P0110-0000

FIG.13 OUTER PANEL ASSY CONTINUED

REF NO.	DESCRIPTION	QTY	MITM #	RATO #
13-11	LEFT SIDE HOUSING	1	80-0243	80091-Y2P0120-Q200
13-12	LEFT SIDE COVER	1	80-0244	80092-Y2P0120-SK00
13-14	U-CLIP - INNER PANNEL	8	45-0720	17199-Y2V0110-0000
13-15	PAN HEAD SCREW AND WASHER ASSEMBLY	5	45-0719	90255-0516-53
13-16	FRONT COVER	1	80-0245	80094-Y2P0210-Q200
13-17	FRONT - HANDLE RUBBER SLEEVE	2	80-0246	80154-Y2P0210-0000
13-18	BACK - HANDLE RUBBER SLEEVE	2	80-0247	80154-Y2P0110-0000

FIG.14 INVERTER ASSY

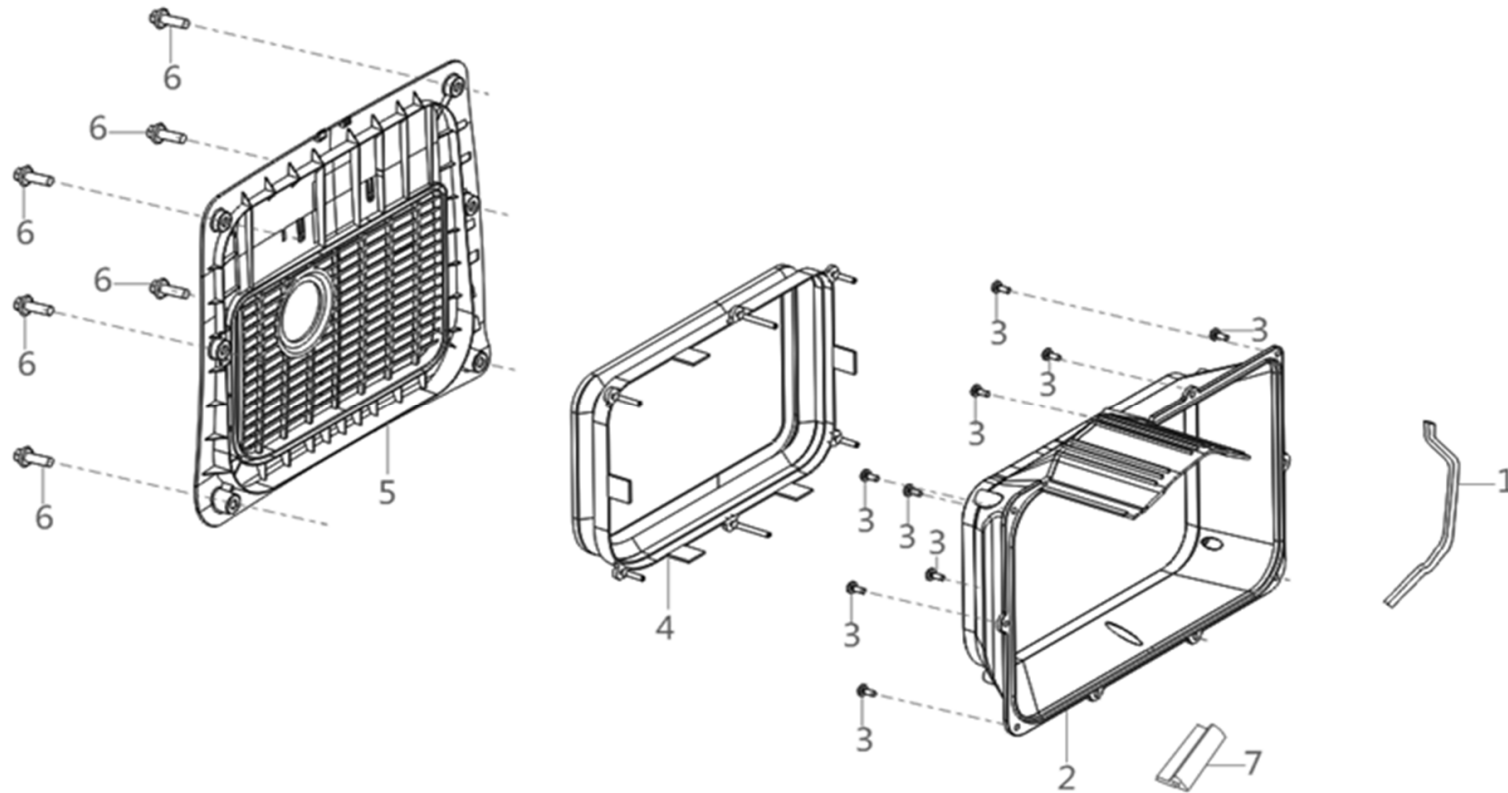


REF NO.	DESCRIPTION	QTY	MITM #	RATO #
14-01	INVERTER BOTTOM PLATE	1	80-0248	51140-Y2P0210-Q200
14-02	RUBBER ISOLATOR - VIBRATION ABSORBER	4	80-0249	51014-Y2P0110-0000
14-03	BOLT - VIBRATION ABSORBER	4	45-0316	90001-0616-01
14-04	NUT - ENGINE SUPPORT	10	45-0436	90305-0800-31
14-05	BOLT - ENGINE SUPPORT	2	45-0316	90001-0616-01
14-06	AIR CLEANER INTAKE DUCT	1	80-0250	17110-Z430210-0000
14-07	END PLUG - BOTTOM PLATE	1	80-0251	90722-Y2P0110-0000
14-08	NUT - INVERTER BOTTOM PLATE	4	45-0720	17199-Y2V0110-0000
14-09	BRACKET - SUPPORT ENGINE	2	80-0252	51009HY2P0110-0000

FIG.14 INVERTER ASSY CONTINUED

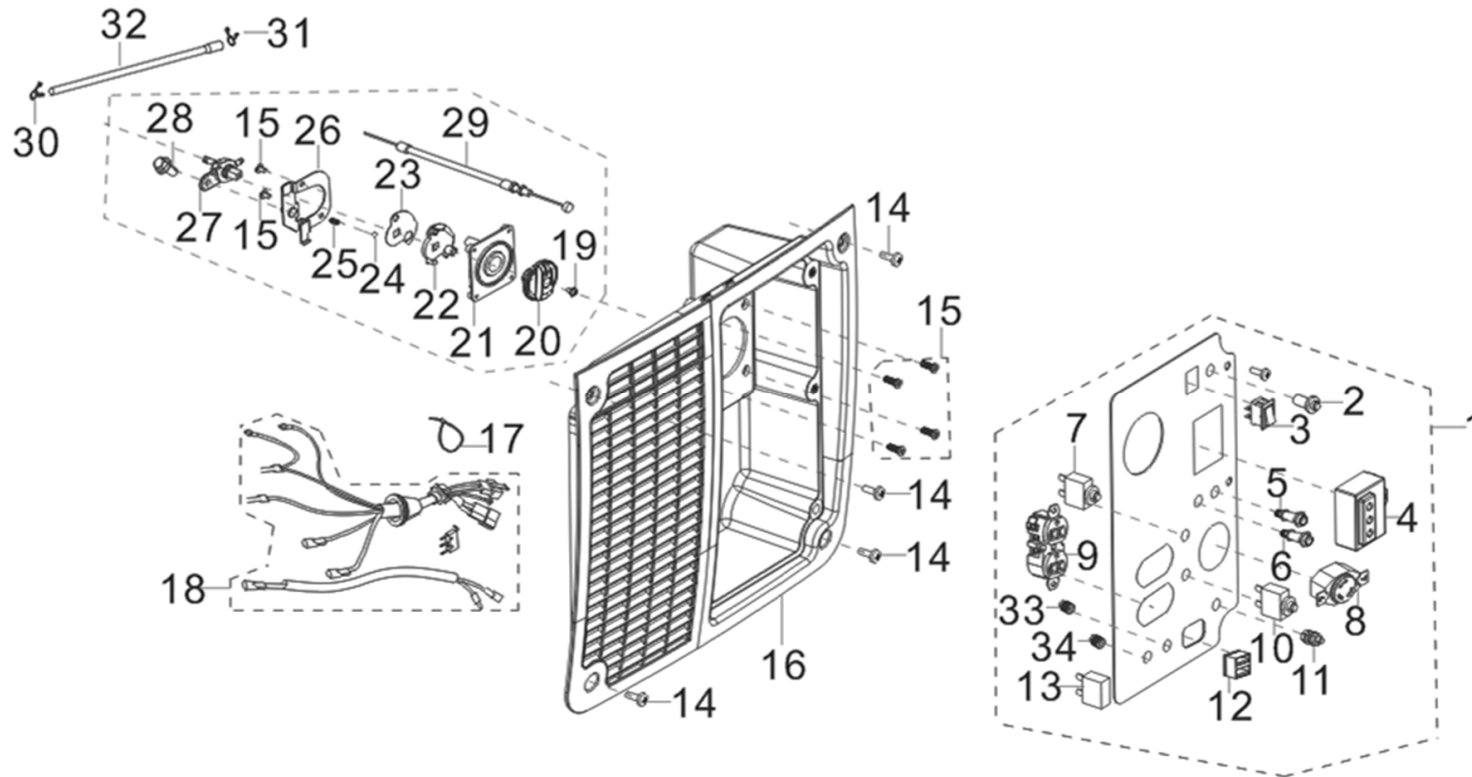
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
14-10	BOLT - LEFT ENGINE FRAME ISOLATOR	2	45-0315	90001-0612-01
14-11	ISOLATOR - RIGHT ENGINE FRAME	2	80-0253	51011HY2P0210-0000
14-12	BOLT - RIGHT ENGINE FRAME ISOLATOR	4	45-0321	90001-0840-01
14-13	LEFT ENGINE SUPPORT	1	80-0254	51188-Y2P0110-H700
14-14	RIGHT ENGINE SUPPORT	1	80-0255	51189-Y2P0110-H700
14-15	SCREW - INVERTER ASSY	1	80-0256	90103-0408-51
14-16	INVERTER FRAME ASSY	1	80-0257	30081-Y2P0110-H700
14-17	CRANKCASE AIR DEFLECTOR	1	80-0258	19306-Z430110-0000
14-18	INVERTER	1	80-0259	30043-Y2P0220-0000
14-19	BUSHING - INVERTER	3	80-0260	90683-Y2P0210-0000
14-20	BOLT - INVERTER ASSY	3	45-0535	90001-0625-01
14-21	RUBBER WASHER - INVERTER	3	80-0261	30431-Y2P0110-0000
14-22	FLAT WASHER - INVERTER	1	80-0262	90408-0500-E1
14-23	CARB CANISTER	1	80-0263	16801-Y110210-0000
14-24	HOSE - CARB CANISTER	1	80-0264	16804-Y2P0210-0000
14-25	BOLT - BRACKET	2	45-0315	90001-0612-01
14-26	BRACKET - CARB CANISTER	1	80-0265	51169-Y2P0110-H700
14-27	BOLT - CARB BOX	2	45-0533	90001-0610-01

FIG.15 MUFFLER PANEL ASSY



REF NO.	DESCRIPTION	QTY	MITM #	RATO #
15-01	STRIP - SHROUD SEAL	1	80-0266	19081-Y2P0110-0000
15-02	MUFFLER OUTER COVER	1	80-0267	18130-Y2P0110-Q200
15-03	BOLT MUFFLER OUTER COVER	9	80-0268	90107-0516-01
15-04	GASKET - MUFFLER	1	80-0269	18018-Y2P0110-0000
15-05	MUFFLER SIDE COVER	1	80-0270	18002-Y2P0210-Q200
15-06	PAN HEAD SCREW AND WASHER ASSY	6	45-0719	90255-0516-53
15-07	STRIP - SHROUD SEAL	1	80-0271	19081-Y2P0210-0000

FIG.16 PANEL CONTROL ASSY

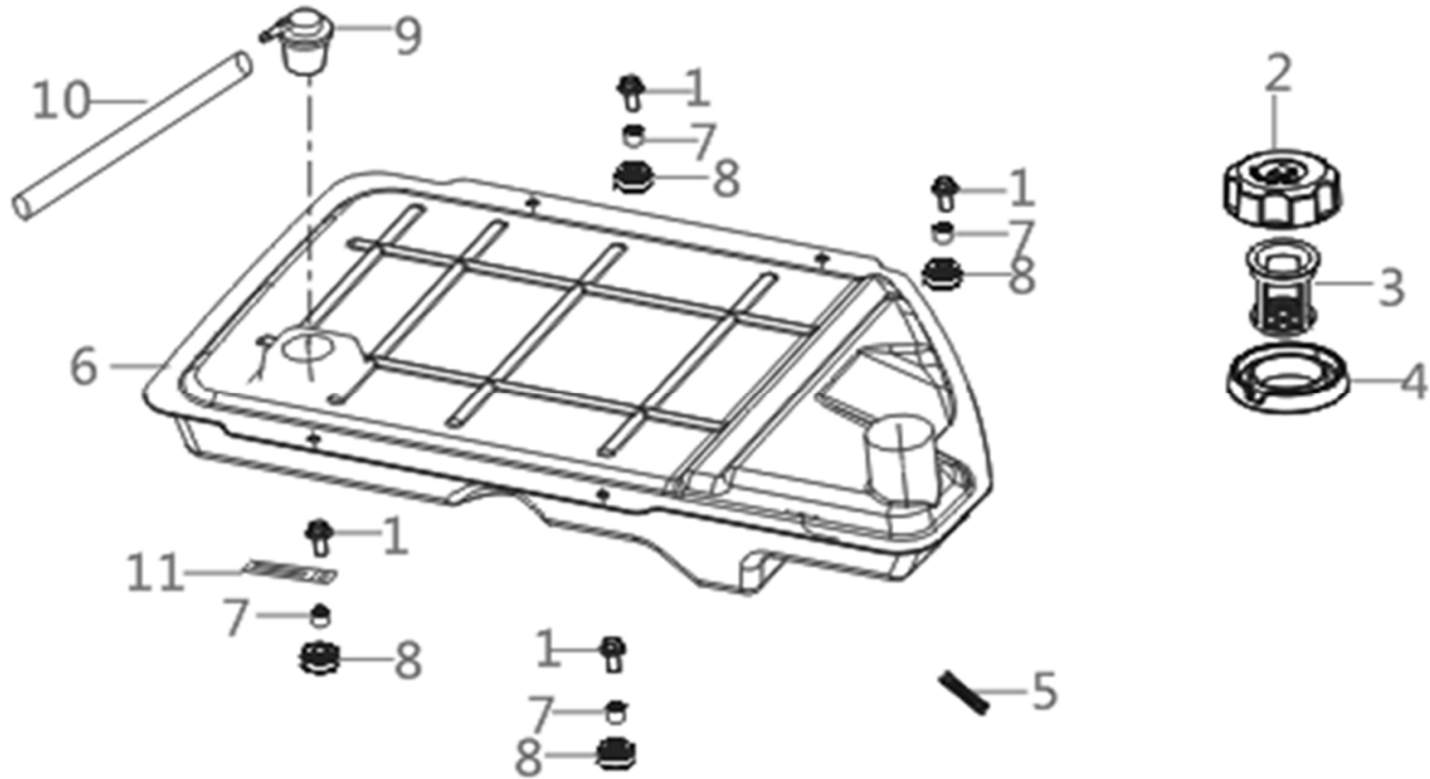


REF NO.	DESCRIPTION	QTY	MITM #	RATO #
16-01	CONTROL PANEL ASSY INCL SWITCH	1	80-0272	35610-Y2P1510-H300
16-02	AC RESET BUTTON	1	80-0273	35646-Y2V0210-0000
16-03	IDLE SPEED CONTROL SWITCH	1	80-0175	35540-Y2V0110-0000
16-04	LIGHT INDICATOR	1	80-0274	30700-Y2P0120-0000
16-05	PARALLEL OPERATION OUTLETS - NEGATIVE	1	80-0173	35614-Y2P0310-0000
16-06	PARALLEL OPERATION OUTLETS - POSITIVE	1	80-0174	35614-Y2P0210-0000
16-07	CIRCUIT BREAKER - 20 AMP	1	80-0275	31234-Y120110-0000
16-08	RECEPTICAL - AC 120V	1	80-0276	35614-Y090410-0000
16-09	RECEPTICAL - AC 120V	1	80-0181	35614-Y220110-0000
16-10	CIRCUIT BREAKER - 20 AMP	1	80-0277	31234-Y090110-0000
16-11	GROUNDING TERMINAL SUBASSY	1	80-0180	35629-Y2V0110-0000

FIG.16 PANEL CONTROL ASSY CONTINUED

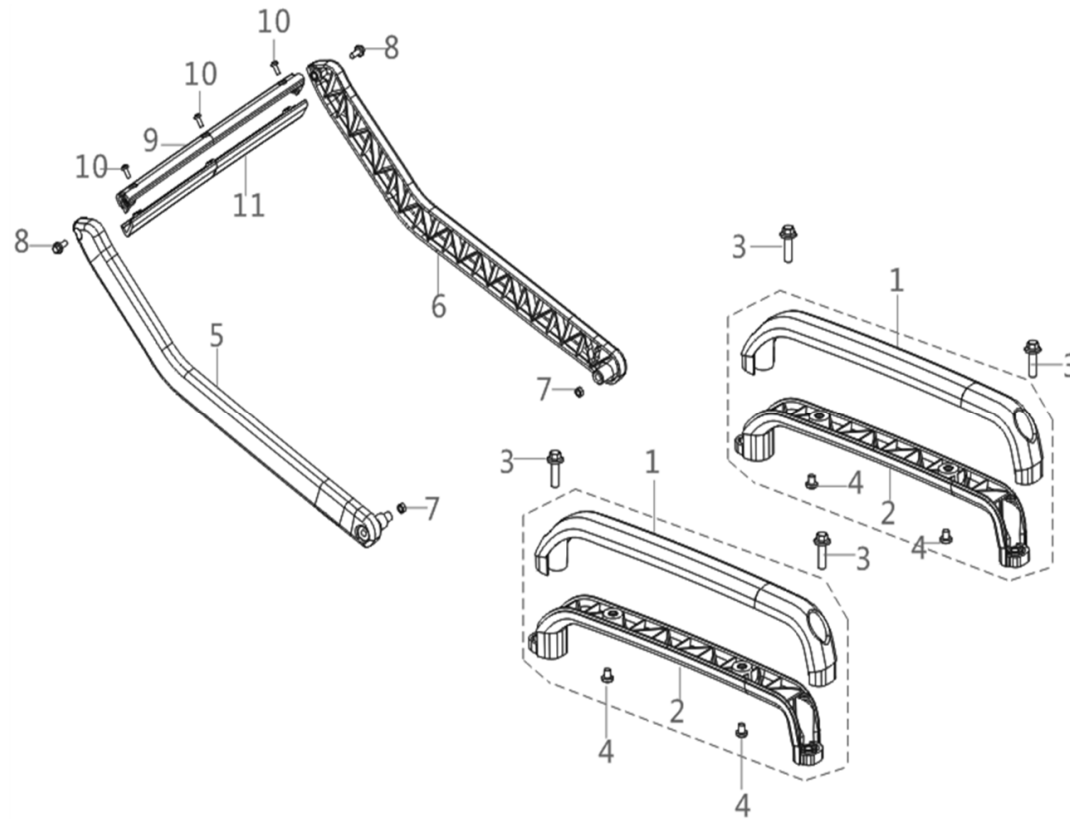
REF NO.	DESCRIPTION	QTY	MITM #	RATO #
16-12	DC 12V CHARGER / USB	1	80-0278	35619-Y2P0110-0000
16-13	CIRCUIT BREAKER - 20 AMP 1 POLE	1	80-0279	31234-Y020510-0000
16-14	PAN HEAD SCREW AND WASHER ASSY	4	45-0719	90255-0516-53
16-15	BOLT - FUEL SWITCH PANEL	6	80-0209	90129-0416-01
16-16	CONTROL PANEL	1	80-0280	35680-Y2P0120-Q200
16-17	CABLE TIE 4" NYLON	4	80-0281	90727-Y130110-0000
16-18	CONTROL PANEL WIRING HARNESS	1	80-0282	35660-Y2P0130-0000
16-19	SCREW - CHOKE PANEL	1	80-0199	90103-0416-51
16-20	KNOB - CHOKE	1	80-0283	35643-Y2V0210-Q200
16-21	CONTROL BOX	1	80-0185	35021-Y2V0120-Q200
16-22	CHOKE PANEL GUIDE	1	80-0204	94111-Y2V0130-Q200
16-23	CHOKE CABLE - STOPPER	1	80-0205	16144-Y2V0110-0000
16-24	CHOKE PANEL - STEEL BALL	1	80-0206	90543-0500-00
16-25	ADJUSTING CHOKE SPRING	1	80-0207	16527-Y2V0120-0000
16-26	BRACKET - FUEL VALVE	1	80-0284	50132-Y2P0110-0000
16-27	FUEL VALVE ASSY	1	80-0285	16750-Y2V0140-0000
16-28	BOLT - FUEL VALVE	1	80-0060	90007-0612-A1
16-29	CHOKE HANDLE SUBASSY	1	80-0286	16080-Y2P0110-0000
16-30	HOSE COLLAR - FUEL HOSE	1	45-0517	90740-Z010210-0000
16-31	HOSE COLLAR FUEL HOSE	1	80-0287	90685-1000-01
16-32	FUEL HOSE - VALVE TO FUEL TANK	1	80-0288	90686-Y2P0110-0000
16-33	NEGATIVE LINE OF COLUMN	1	80-0176	35634-Y020110-0000
16-34	POSITIVE LINE OF COLUMN	1	80-0177	35633-Y020110-0000

FIG.17 FUEL TANK ASSY



REF NO.	DESCRIPTION	QTY	MITM #	RATO #
17-01	BOLT - FUEL TANK	4	45-0317	90001-0620-01
17-02	CAP - FUEL TANK	1	80-0289	16730-Y2P0210-0000
17-03	STRAINER - FUEL	1	80-0290	16652-Y2P0210-0000
17-04	RUBBER FILLING SLEEVE	1	80-0291	16641-Y2P0110-0000
17-05	FUEL FILTER	1	80-0292	16652-Z800110-0000
17-06	FUEL TANK	1	80-0293	16620-Y2P0310-H700
17-07	FUEL TANK - BUSHING	4	80-0294	90683-Y2D0110-0000
17-08	SLEEVE - FUEL TANK	4	80-0295	16601-Y2D0110-0000
17-09	SEAT - ONE WAY VALVE	1	80-0296	15150-Y2P0110-0000
17-10	FUEL HOSE	1	80-0297	16804-Y2P0110-0000
17-11	CLIP - FUEL TANK	1	45-0335	90684-Z030120-0000

FIG.18 HANDLE ASSY



REF NO.	DESCRIPTION	QTY	MITM #	RATO #
18-01	HANDLE - TOP	2	80-0298	80153-Y2P0310-Q200
18-02	HANDLE - BOTTOM	2	80-0299	80153-Y2P0410-Q200
18-03	BOLT - HANDLE	4	45-0317	90001-0620-01
18-04	SCREW - HANDLE	4	45-0718	90255-0512-53
18-05	REVOLVING ARM - LEFT	1	80-0300	54912-Y2P0510-Q200
18-06	REVOLVING ARM - RIGHT	1	80-0301	54912-Y2P0610-Q200
18-07	NUT - REVOLVING BRIDGE	2	80-0211	90341-Y2D0210-0000
18-08	BOLT - REVOLVING BRIDGE	2	45-0317	90001-0620-01
18-09	GRIP-TOP - PULL HANDLE	1	80-0302	54913-Y2P0610-Q200
18-10	BOLT - REVOLVING BRIDGE	3	45-0718	90255-0512-53
18-11	GRIP-BOTTOM - PULL HANDLE	1	80-0303	54913-Y2P0510-Q200

FIG.19 DECAL KIT



REF NO.	DESCRIPTION	QTY	MITM #	RATO #
19-01	DANGER DECAL	1	34-1918	88001-Y2P0910-0000
19-02	WARNING DECAL	1	34-3397	88006-Y2P0810-0000
19-03	HANDLE RELEASE DECAL	1	34-3406	88006-Y2P0910-0000
19-04	LOGO DECAL RIGHT SIDE	1	34-3396	88017-Y2P1610-0000
19-05	LOGO DECAL LEFT SIDE	1	34-3395	88017-Y2P1510-0000
N/A	USER'S MANUAL	1	37-1367	93004-Y2P1510-0000
N/A	DECAL KIT - INCLUDES ALL DECALS	1	71-4032	N/A