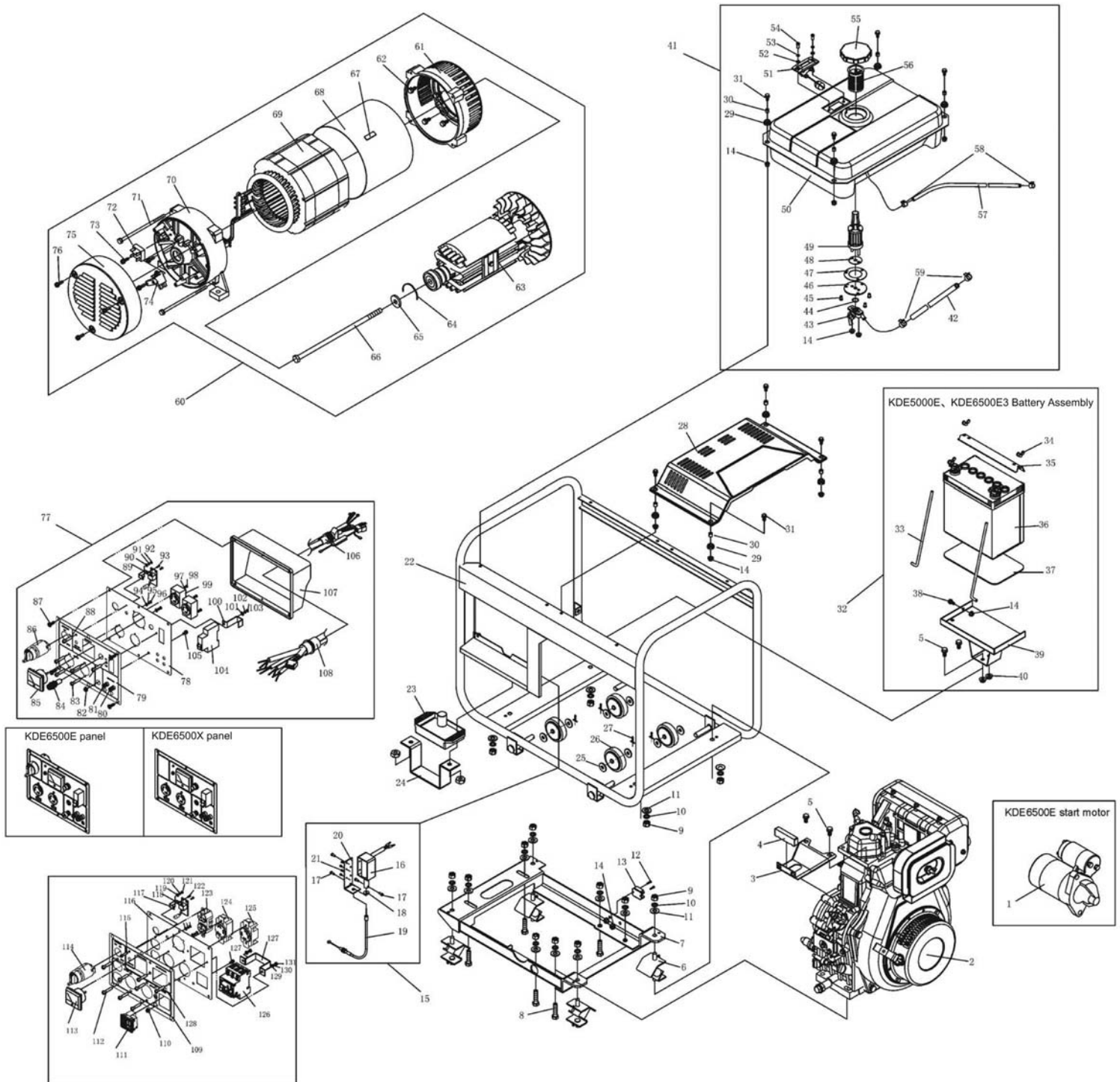


ASSEMBLY AND PARTS ALBUM

KDE5000E



KDE5000E Parts Listing

No.	Manf. #	Order #	Description	Qty.
1	KM186F-15100	66487	Upgraded Hitachi Starter	4
2	KM186FBGE-01000	66632	Air-cooled Diesel Engine	1
3	KDE5000E-01001		Auxiliary Bracket of Engine	1
4	KDE5000T-01301		Cushion Cover	1
5	GB/T5789-1986		Bolt M8X16	4
6	KDE5000T-03700		Shock Pad Subassembly	4
7	KDE6500E-03400		Welding Part of Housing Base	1
8	GB/T5783-2000		Bolt M10X40	6
9	GB/T41-2000		Nut M10	14
10	GB/T93-1987		Spring Washer 10	14
11	GB/T97.1-2002		Flat Washer 10	14
12	GB/T5789-1986		Bolt M6X16	2
13	36Ah.13.5V.7A	66669	Charging Regulator	1
14	GB/T6177.1-2000		Nut M6	15
15	KDE5000E-40000a		Electromagnet Assembly	1
16	DCT-12-C		Electromagnet	1
17	GB/T818-2000		Screw M4X8	4
18	KDE5000E-09003	66638	Electromagnet Gasket	1
19	KDE5000E-16100		Flexible Shaft Subassembly	1
20	KDE5000E-09010		Welding Part of Electromagnet Bracket	1
21	GB/T818-2000		Screw M3X8	4
22	KDE5000E-50000		Welding Part of Housing	1
23	PLY-DAVR-50S	66375	AVR	1
24	NPN		AVR Fixed Board	1
25	GB/T97.1-2002		Flat Washer 12	8
26	20-100-06	66506	Rubber Wheel	4
27	GB/T91-2000	66511	Cotter Pin 3.2X40	4
28	KDE5000X-40000		Decoration Plate Assembly	2
29	KDE5000E-11003		Shock Pad	8
30	KDE5000E-11004		Bushing	8
31	GB/T5789-1986		Bolt M6X25	8
32	KDE5000E-80000		Battery Assembly	1
33	KDE5000T-03003	66660	Battery Pull Rod	2
34	GB/T62-1988	66661	Butterfly Nut	2
35	KDE5000T-03004	66662	Battery Pressure Plate	1
36	BZW12-33	66025	Battery 12V	1
37	KDE5000T-03018	66665	Battery Pad	1
38	GB/T5789-1986		Bolt M6X12	1
39	KDE5000E-03010		Welding Part of Battery Braket	1
40	GB/T6177.1-2000		Nut M6	2
41	KDE5000E-11000		Fuel Tank Assembly	1
42	KDE5000X-30002	66641	Fuel Return Pipe	2
43	KM168F-10400	66643	Fuel Tank Switch Assembly	1
44	GB3452.1-92	66644	O-style Seal Ring	1
45	GB/T818-2000		Screw M5X12	3
46	KDE5000X-31006	66645	Seal Plate	1
47	KDE5000X-31007	66646	Seal Gasket	1
48	KM168F-10007	66647	Seal Gasket	1
49	KM168F-10300	66649	Fuel Filter Element	1
50	KDE5000X-31000	66650	Fuel Tank	1
51	KDE5000X-32000	66651	Fuel Gauge	1
52	GB/T93-1987		Spring Washer 5	2
53	GB/T97.1-2002	66513	Flat Washer 5	2
54	GB/T818-2000		Screw M5X8	1
55	KM168F-10002	66168	Fuel Tank Cover Assembly	1
56	KM168F-10003		Fuel Filler Filter Net	1
57	KM168F-10013	66654	Fuel Return Pipe Clip	1
58	KDE5000X-30001	66655	Fuel Supply Pipe	2
59	KM168F-30011	66642	Fuel Supply Pipe Clip	2
60	KT5	66633	Alternator Assembly	1
61	KT204-00002B	66543	Alternator Front Cover	1

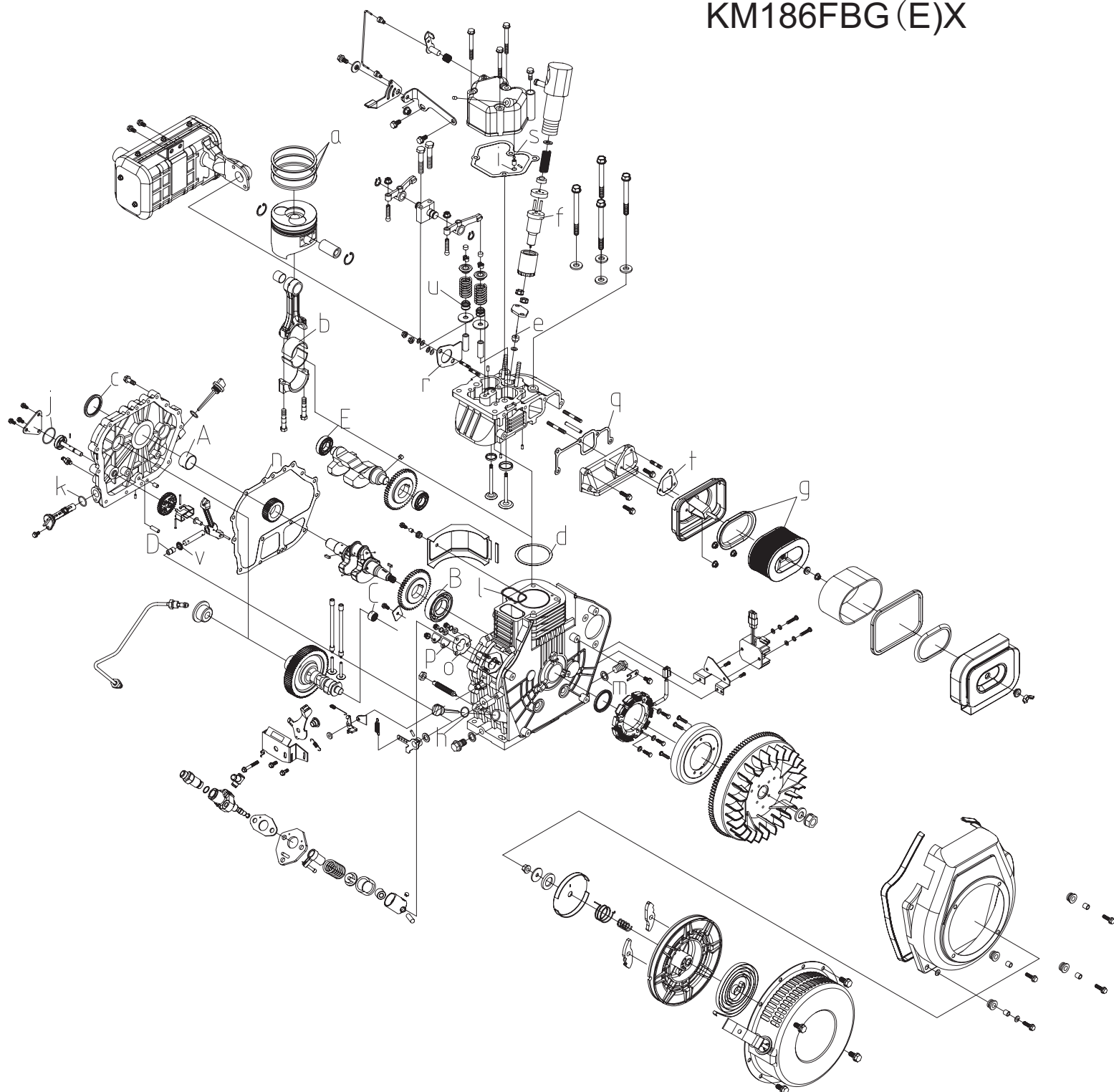
No.	Manf. #	Order #	Description	Qty.
62	GB/T16674.1-2004		Bolt M8X30	4
63	KT204-01000-95	66634	Rotor Assembly	1
64	6204DU	66507	Clip Ring	1
65	GB/T96.1-2002	66512	Washer 10	1
66	KT204-00006-95	66635	Alternator Bolt	1
67			Generator Set Code	1
68	KT204-00007-95	66636	Alternator Shroud	1
69	KT204-02000-95	66549	Stator Assembly	1
70	KT204-00001	66542	Alternator Rear Cover	1
71	KT204-00004-95	66637	Fixing Bolt	4
72	KBPC2510	66517	Rectifier	1
73	GB/T16674.1-2004		Bolt M5X20	2
74	D104	66508	Carbon Brush	1
75	KT204-00005	66545	Rear Cover Housing	1
76	GB/T16674.1-2004		Bolt M6X12	3
77	KDE6500E-13000		Panel Assembly	1
78	KDE6700TAR230CH-13110		Control Panel	1
79	KDE6700TAR230CH-13121		PVC Lable	1
80	JS910 RED		DC Terminal	1
81	JS910 BLACK		DC Terminal	1
82	GB/T6177.1-2000		Hexagonal Flange Nut M6	1
83	GB/T818-2000		Cross Plug Pan Screw M4X12	4
84	BX201C	66846	Fuse Holder	1
85	MU-45 0~300V	66667	Voltmeter	1
86	JK427	66515	Ignition Switch	1
86a	JK427-1	66914	Key for JK427	
87	GB/T818-2000		Cross Plug Falt Screw M6X22	6
88	GB/T818-2000		Cross Plug Pan Screw M4X12	4
89	GB/T6177.1-2000		Hexagonal Flange Nut M6	2
90	GB/T97.1-2002		Flat Washer 4	1
91	GB/T93-1987		Spring Washer 4	1
92	GB/T6172.1-2000		Nut M4	1
93	GB/T818-2000		Cross Plug Flat Screw M6X22	2
94	GB/T97.1-2002		Flat Washer 6	2
95	GB/T93-1987		Spring Washer 6	2
96	GB/T6172.1-2000		Nut M6	2
97	GB/T93-1987		Spring Washer 4	4
98	GB/T6172.1-2000		Nut M4	4
99	AC250V 26A		H-Receptacle	2
100	KDE6700TAR230CH-13111		Fixed Part (Used for breaker)	1
101	GB/T97.1-2002		Flat Washer 4	1
102	GB/T93-1987		Spring Washer 4	1
103	GB/T6172.1-2000		Nut M4	1
104	HUM18-63/1 B21.7		Breaker	1
105	GB/T5789-1986		Hexagonal Flange Bolt M6X25	1
106	KDE5000X-70003		Fixed Sleeve of Wiring Harness	1
107	KDE5000X-70002		Rear Cover of Control Box	1
108	KDE5000X-70009		Fixed Sleeve of Wiring	1
109	KDE6700TA2S240JA-13121		PVC Lable	1
110	GB/T6177.1-2000		Hexagonal Flange Nut M6	1
111	DC12V 8.3A		Overflow T-style Receptacle	1
112	GB/T818-2000		Cross Plug Pan Screw M4X12	6
113	MU-45 0~300V		Voltmeter	1
114	NPN		Electric Start Key	1
115	GB/T818-2000		Cross Plugm Pan Screw M4X22	1
116	KDE6700TA2S240JA-13110		Control Panel	1
117	KDE6700TAR230CH-13111	66668	Oil Level Alarm Module (Homemade)	1

KDE5000E Parts Listing, continued

No.	Manf. #	Order #	Description	Qty.
118	GB/T6177.1-2000		Hexagonal Flange Nut M6	1
119	GB/T97.1-2002		Flat Washer 4	1
120	GB/T93-1987		Spring Washer 4	1
121	GB/T6172.1-2000		Nut M4	1
122	GB/T818-2000		Cross Plug Pan Screw M6X22	2
123	RU-22	66501	A-style Receptacle	1
124	L5-30	66279	A-style Receptacle	4
125	L14-30R	66551	A-style Receptacle	4
126	DZ47-63/3 C30		Breaker	1
127	KDE6700TAR230CH-13111		Fixed Part (Used for breaker)	1
128	GB/T818-2000		Cross Plug Pan Screw M4X22	2
129	GB/T97.1-2002		Flat Washer 4	2
130	GB/T93-1987		Spring Washer 4	2
131	GB/T6172.1-2000		Nut M4	2

ASSEMBLY AND PARTS DRAWING

KM186FBG (E)X



Assembly and Parts Drawing KM186FBG(E)**Wear Parts**

Ref. No.	Mfg No.	Order No.	Description	Qty.
a	KM186F-04100T		Piston Ring Set	1
b	KM186F-04005		Connecting Rod Bushing	2
c	KM186F-01022		Oil Seal 35x50x8	2
d	KM186F-01013a	66682	Head Gasket	1
e	KM170FA-02011		Heat Insulation Sleeve	1
f	KM186FB-13100		Injector Nozzle	1
g	KM186F-07100	66713	Air Filter Element	1

O-rings and Gaskets

h	KM168F-01024		O-ring Seal 22.5x2.4	1
i	KM168F-03009	66708	O-ring Seal 12x1.9	1
j	KM168F-09006		O-ring Seal 34x1.8	1
k	KM168F-09005		O-Ring Seal 25x2.4	1
l	KM186F-01008		Seal Ring	1
m	KM170F-01023	66677	Oil Drain Plug Gasket	2
n	KM186F-01015		Crankcase Cover Gasket	1
o	KM168F-10014	67229	Injection Pump Mounting Gasket	1
p	KM168F-10016	68598	Sealing Gasket	1
q	KM186F-02014		Intake Gasket	1
r	KM186F-02015	66828	Exhaust Pipe Gasket	1
s	KM186FA-03003	66709	Valve Cover Gasket	1
t	KM186F-07001		Air Filter Gasket	1

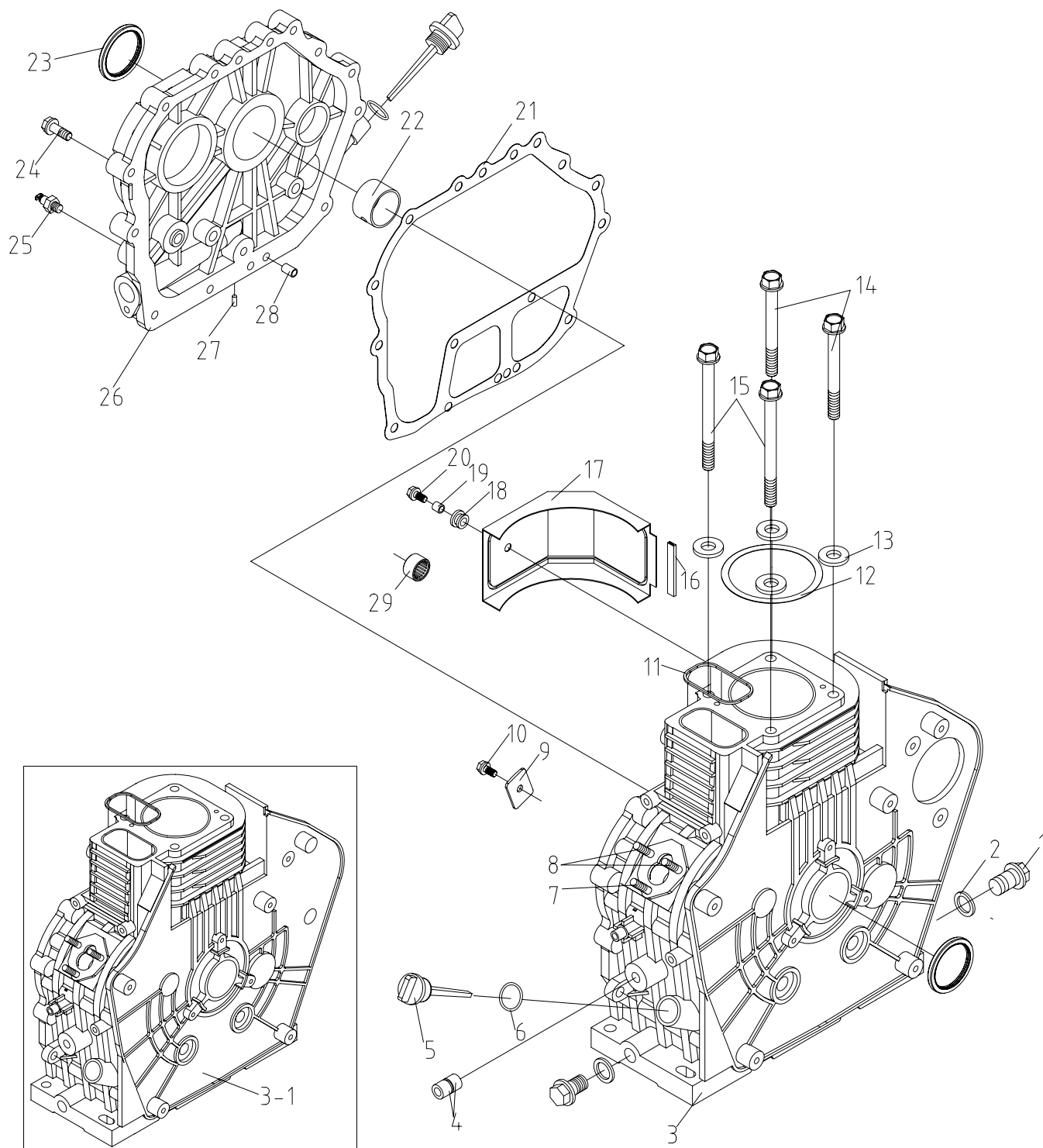
Oil Seal

u	KM186F-02019		Valve Stem Oil Seal	2
v	KM168F-11008		Shaft Oil Seal	1

Bearings

A	KM186F-01014		Slide Bearing	1
B	GB/T276-1994		Roller Bearing 6308/P5	1
C	GB/T290-1998		Roller Bearing HK1516	1
D	GB/T290-1998		Roller Bearing HK0810	2
E	GB/T276-1994		Roller Bearing 6203/P5	2

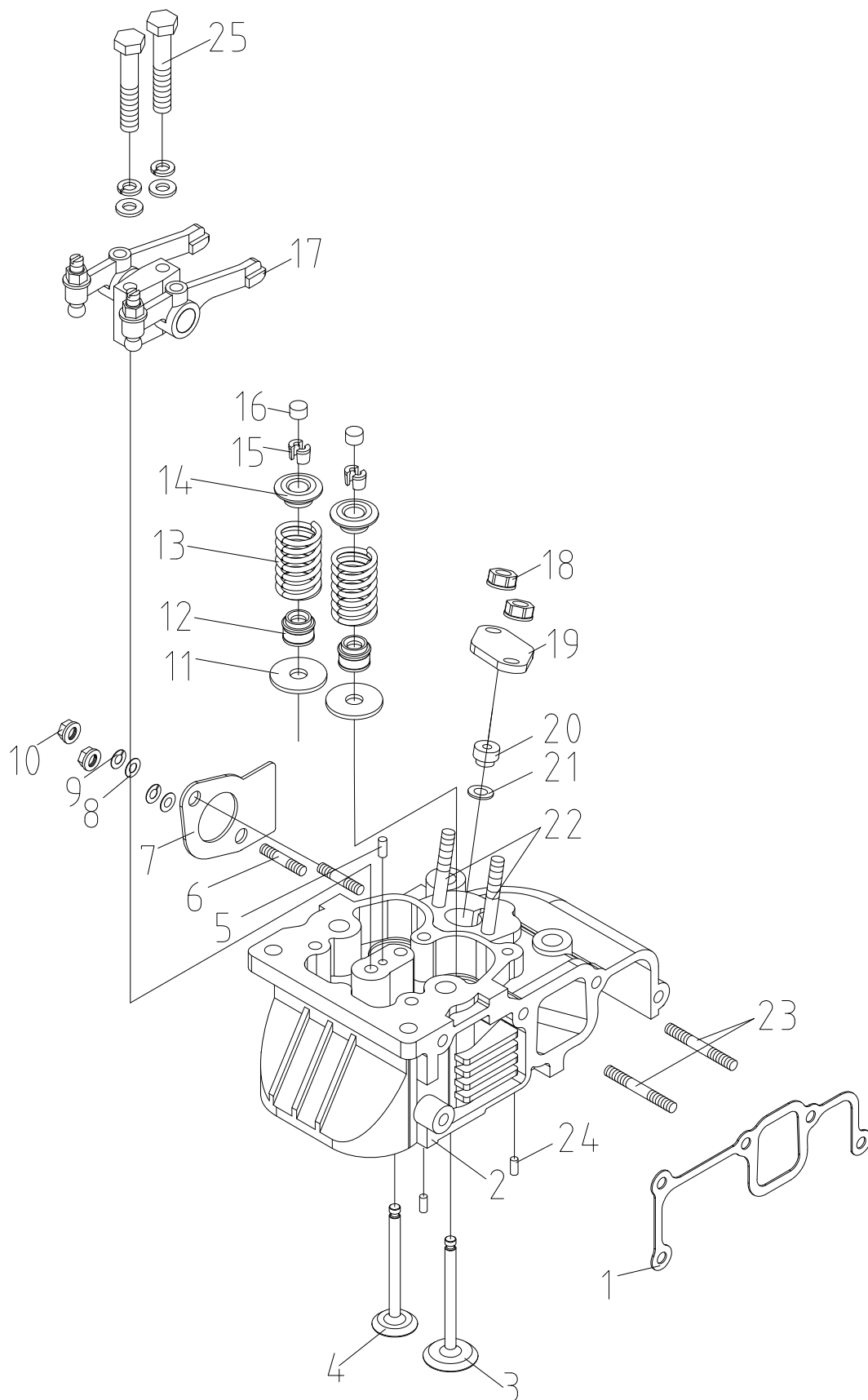
Cylinder Block Assembly KM186FBG(E)-01000



Cylinder Block Assembly KM186BG(E)-01000

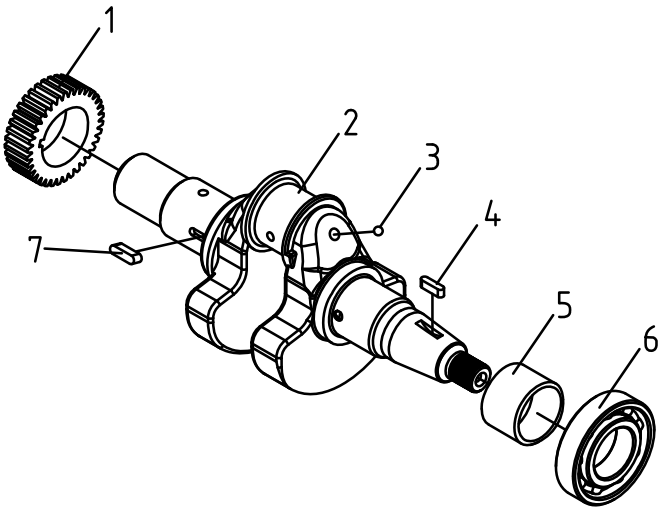
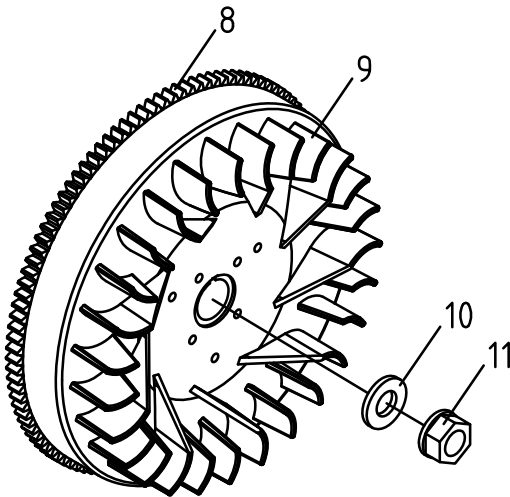
Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM168F-01018	66676	Oil Drain Plug	2
2	KM170F-01023	66677	Oil Drain Plug Gasket	2
3	KM186FBE-01001		Cylinder Block	1
4	GB/T290-1998		Roller Bearing HK0810	2
5	KM178F-01002	66679	Dipstick	2
6	KM168F-01024	66680	O-ring seal 22.5x2.4	2
7	KM168F-01012		Injection Pump Mounting Stud- short	1
8	KM168F-01011		Injection Pump Mounting Stud- long	2
9	KM168F-01009		Thrust Plate	1
10	GB/T5789-1986		Bolt M8x12	1
11	KM186F-01008		Seal Ring	1
12	KM186F-01013a	66682	Cylinder Head Gasket	1
13	KM186FB-01005		Cylinder Head Bolt Washer	4
14	KM186FB-01003		Cylinder Head Bolt- short	2
15	KM186FB-01006		Cylinder Head Bolt- long	2
16	KM178F-01023		Insulation Strip	1
17	KM186FB-01211		Air Conduct Plate	1
18	KM178F-01201		Insulation Gasket	1
19	KM178F-01202		Bushing	1
20	GB/T5789-1986		Bolt M6x20	1
21	KM186F-01015	66683	Crankcase Cover Gasket	1
22	KM186F-01014		Slide Bearing	1
23	KM186F-01022		Oil Seal 35x50x8	1
24	KM186F-01026		Crankcase Cover Bolt	16
25	KM178FG-01300a	67301	Low Oil Pressure Switch	1
26	KM186F-01016a		Crankcase Cover	1
27	KM168F-01021		Block Plug	2
28	GB/T119.2-2000		Pin 8x12	2
29	GB/T290-1998		Roller Bearing HK1516	1

Cylinder Head Assembly KM186FB-02000



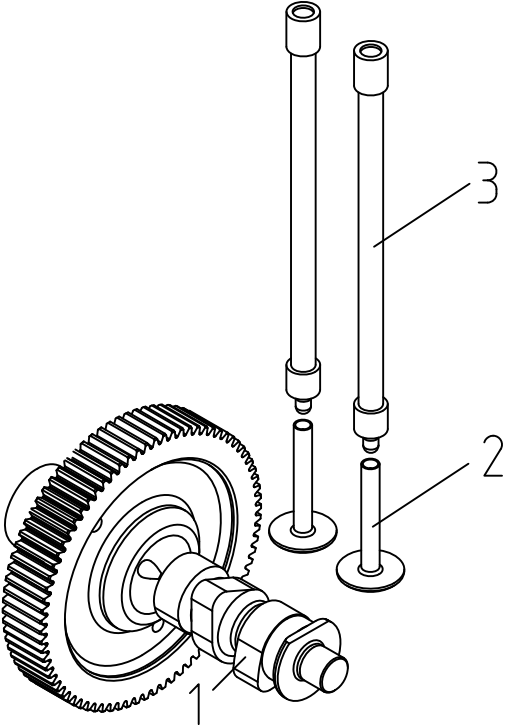
Cylinder Head Assembly KM186FB-02000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186F-02014		Intake Gasket	1
2	KB186FB-02200		Cylinder Head	1
3	KM186F-02004a		Intake Valve	1
4	KM186FB-02003		Exhaust Valve	1
5	GB/T119.2-2000		Pin 4x8	1
6	GB/T899-1988		Stud AM8x20	2
7	KM186F-02015	66828	Exhaust Pipe Gasket	1
8	GB/T97.1-2002		Washer 8	4
9	GB/T93-1987		Washer 8	4
10	GB/T6170-2000		Nut M8	2
11	KM186F-02007		Valve Spring Washer	2
12	KM186F-02019		Valve Stem Oil Seal	2
13	KM186F-02005		Valve Spring	2
14	KM186F-02002a		Valve Spring Seat	2
15	KM186F-02001a		Valve Lock Clip	4
16	KM186F-02016		Valve Adjustment Nut	2
17	KM186FA-02100T		Rocker Seat	1
18	GB/T6177.1-2000		Nut M6	2
19	KM168F-02009		Fuel Injector Pressure Plate3	1
20	KM170FA-02011		Heat Insulation Sleeve	1
21	KM186FB-02018		Heat Insulation Sleeve Washer	1
22	GB/T900-1988		Stud AM6x50	2
23	GB/T900-1988		Stud AM6x75	2
24	GB/T119.2-2000		Pin 4x8	2
25	KM186FA-02017		Rocker Bracket Tightening Bolt	2



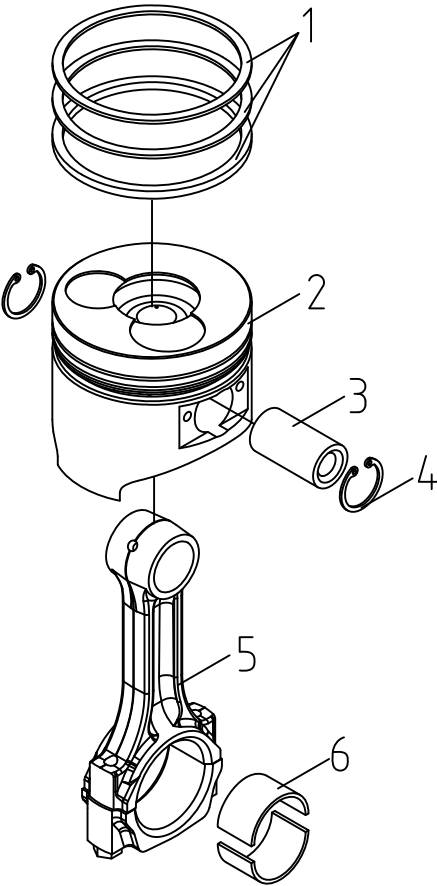
Crankshaft & Flywheel Assembly KM186FBG(E)-05000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	GB/T276-1994		Roller Bearing 6203 /P5	1
2	KM186F-05301		Balance Shaft	1
3	KM186F-05006		Key	1
4	KM186F-05004b		Balance Shaft Timing Gear	1
5	KM186F-05203		Crankshaft Timing Gear	1
6	KM186FBG-05201		Crankshaft	1
7	GB/T308-2002		Steel Ball 6.36	1
8	GB/T1096-2003		Key 5x12	1
9	KM186F-05004		Balance Shaft Drive Gear	1
9-1	KM186F-05004a		Bushing	1
10	GB/T276-1994		Roller Bearing 6308/P5	1
11	GB/T1096-2003		Key 5x14	1
12	KM186FE-05102		Flywheel Ring Gear	1
13	KM185F-05101		Flywheel Ring Gear	1
14	KM186F-05003		Flywheel Nut Washer	1
15	KM186F-05002		Flywheel Nut	1



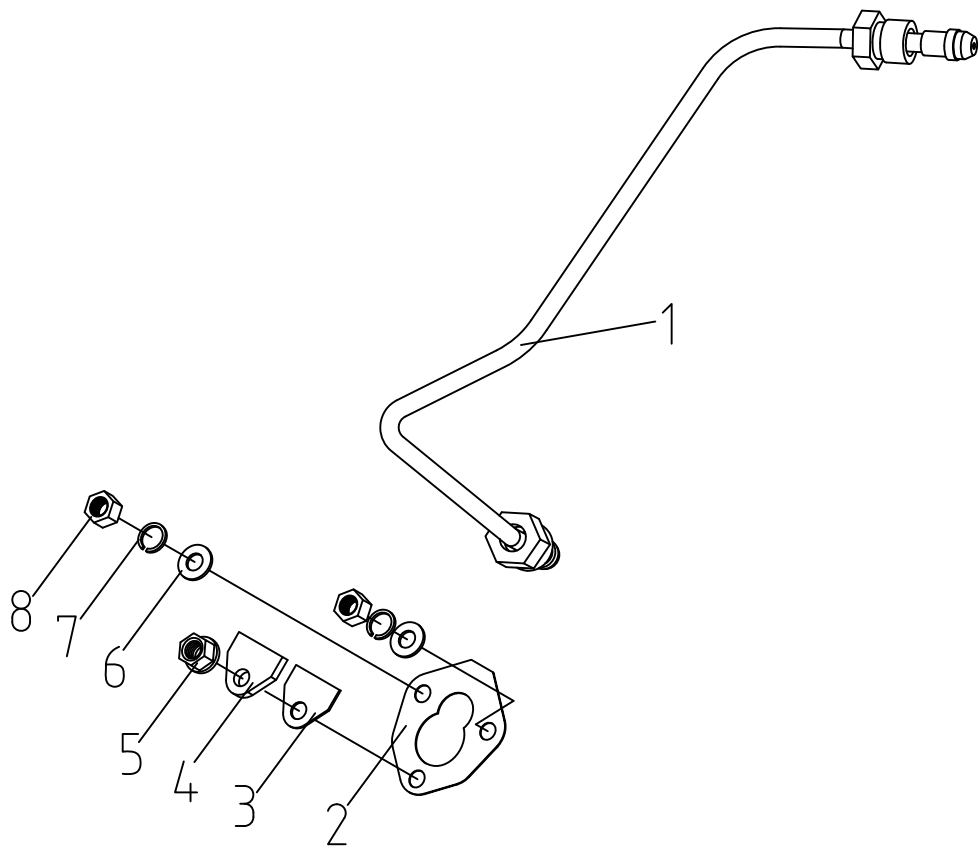
Camshaft Assembly KM186FB-a-06000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186FB-a-06200		Camshaft	1
2	KM186F-06003		Valve Tappet	2
4	KM186FB-06100		Push Rod	2



Piston and Connecting Rod Assembly KM186FB-11000

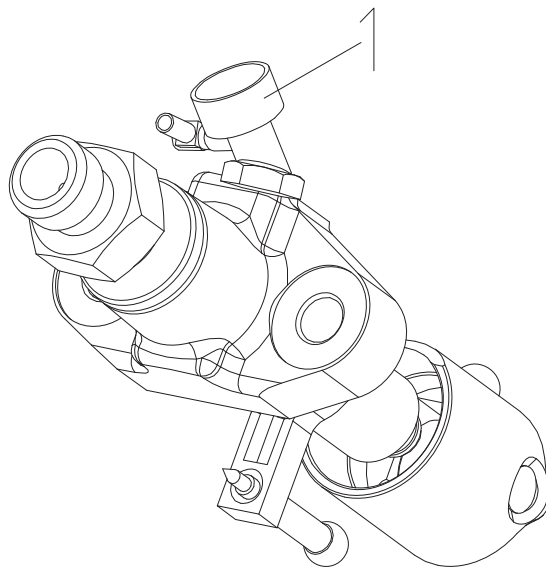
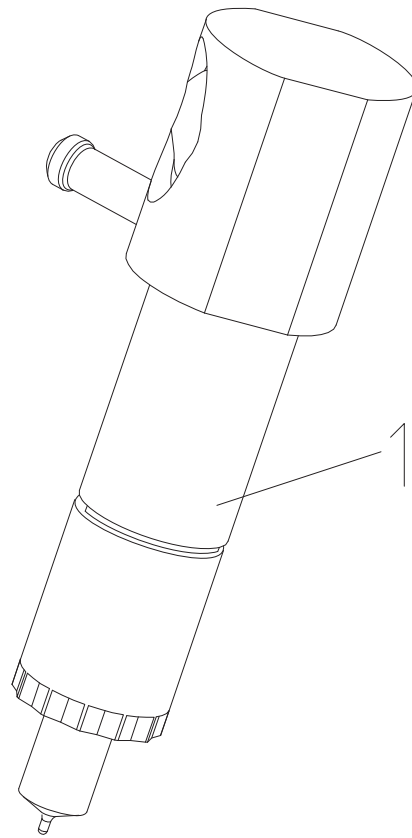
Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186F-04100T		Piston Ring Assembly	1
2	KM186FB-04003		Piston	1
3	KM186F-04004		Piston Pin	1
4	GB/T893.1-1986		Retaining Clip	2
5	KM186FB-04200		Connecting Rod	1
6	KM186F-04005		Connecting Rod Bearings	2



Fuel System KM186FBGET-10000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186FBGX-10500		High Pressure Fuel Line	1
2	KM168F-10014	67229	Injection Pump Gasket	1
3	KM168F-10016		Gasket	1
4	KM168F-10015		Seal Plate	1
5	GB/T6177.1-2000		Nut M6	1
6	GB/T97.1-2002		Washer 6	2
7	GB/T93-1987		Washer 6	2
8	GB/T6170-2000		Nut M6	2

Fuel Injector



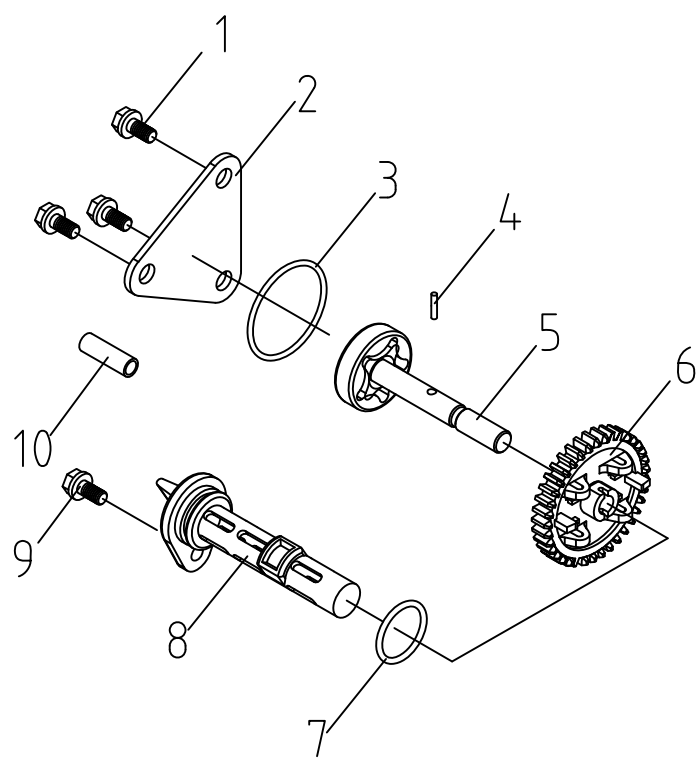
Injection Pump

Fuel Injection Pump

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186FBGX-12000	69158	Fuel Injection Pump Assembly	1

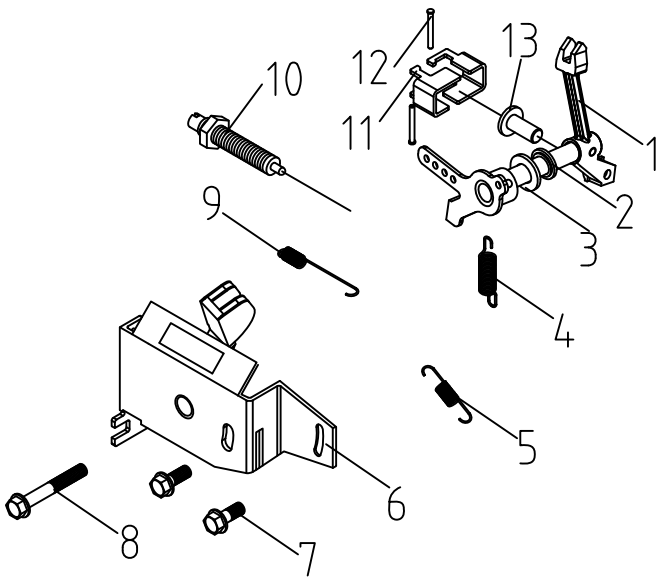
Injector Assembly

1	KM186FB-13000	69156	Injector	1
---	---------------	-------	----------	---



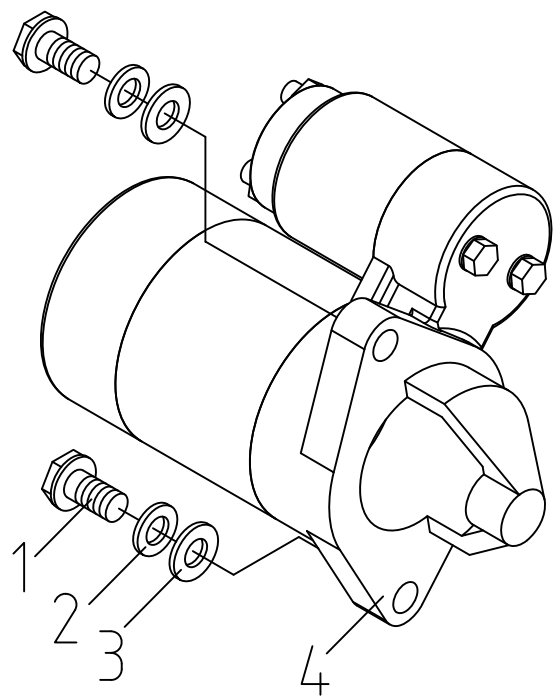
Lubrication System KM186F-09000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	GB/T5789-1986		Bolt M6x12	3
2	KM168F-09003		Oil Pump Cover	1
3	KM168F-09006		O-ring 34x1.8	1
4	GB/T119.2-2000		Pin 3x18	1
5	KM186F-09100		Oil Pump	1
6	KM178F-09002		Drive Gear	1
7	KM168F-09005		O-ring 25x2.4	1
8	KM178F-09200	66725	Oil Filter	1
9	GB/T5789-1986		Bolt M6x14	1
10	KM178F-09003		Oil Inlet Tube	1
1-10	KM186F-09000	66724	Lubricating System	1



Speed Regulation and Control System KM186FG-11000

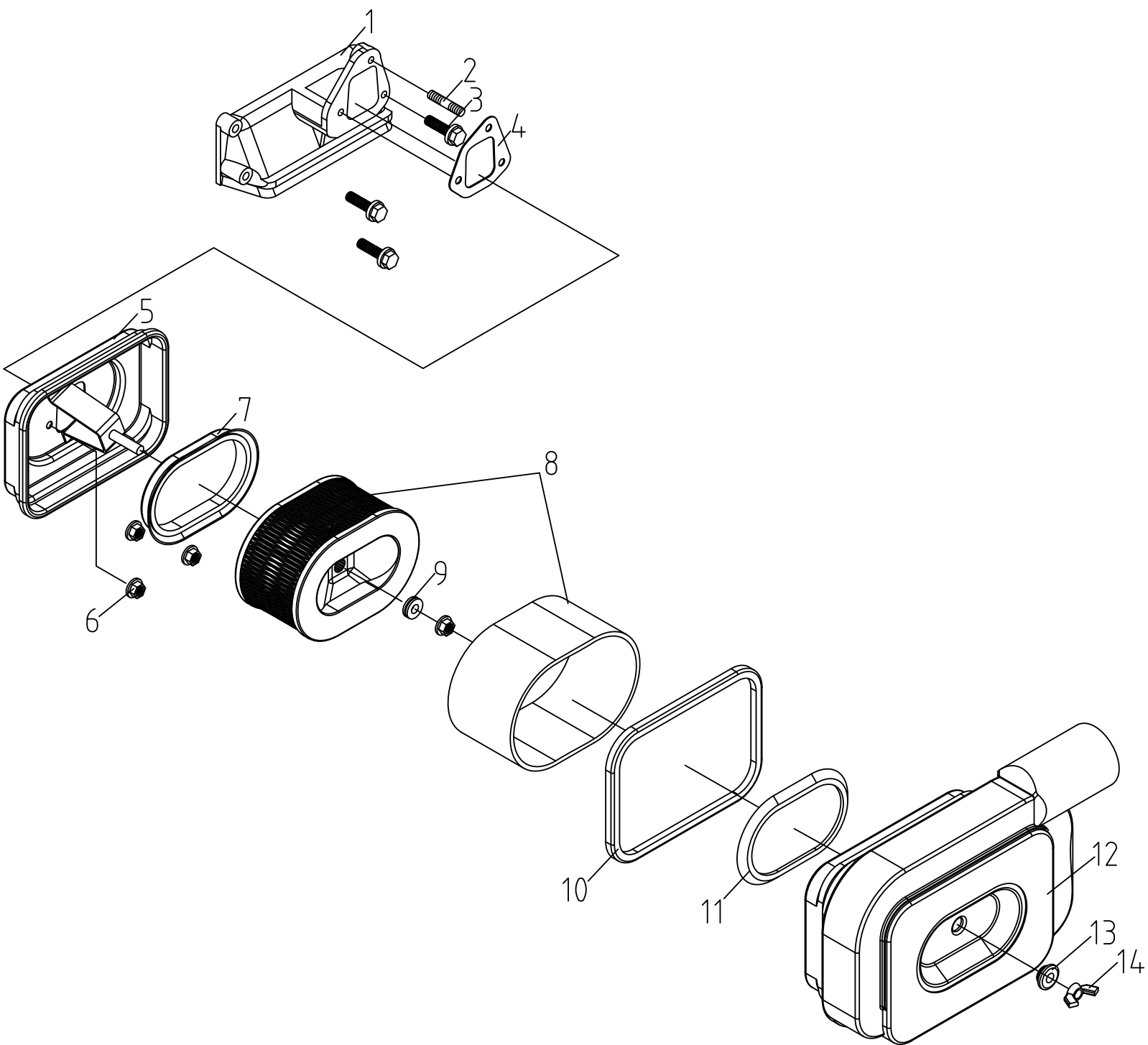
Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186F-11110		Fork	1
2	KM168F-11008		Level Shaft Oil Seal	1
3	KM168F-11003		Washer	2
4	KM186F-11007	66734	Speed Regulating Spring	1
5	KM168F-11006	66731	Return Spring	1
6	KM178FG-11300T	66728	Control Handle	1
7	GB/T5789-1986		Bolt M6x14	1
8	GB/T5789-1986		Bolt M6x18	1
9	KM178FG-11005	66733	Return Spring	1
10	KM186F-11200		Oil Level Controller	1
11	KM168F-11001		Flyball	2
12	KM168F-11002		Flyball Pin	2
13	KM186F-11004		Speed Regulator Panel	1
1-13	KM186FG-11000	66727	Speed Regulating System	1



Electric Starter Assembly KM170FE-15000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	GB/T5782-1986		Bolt-M10x30	2
2	GB/T93-1987		Washer 10	2
3	GB-T97.1-2002		Washer 10	2
4	KM168FE-15100		Starter Motor	1
1-4	KM170FE-15000	66736	Starter Motor Assembly	1

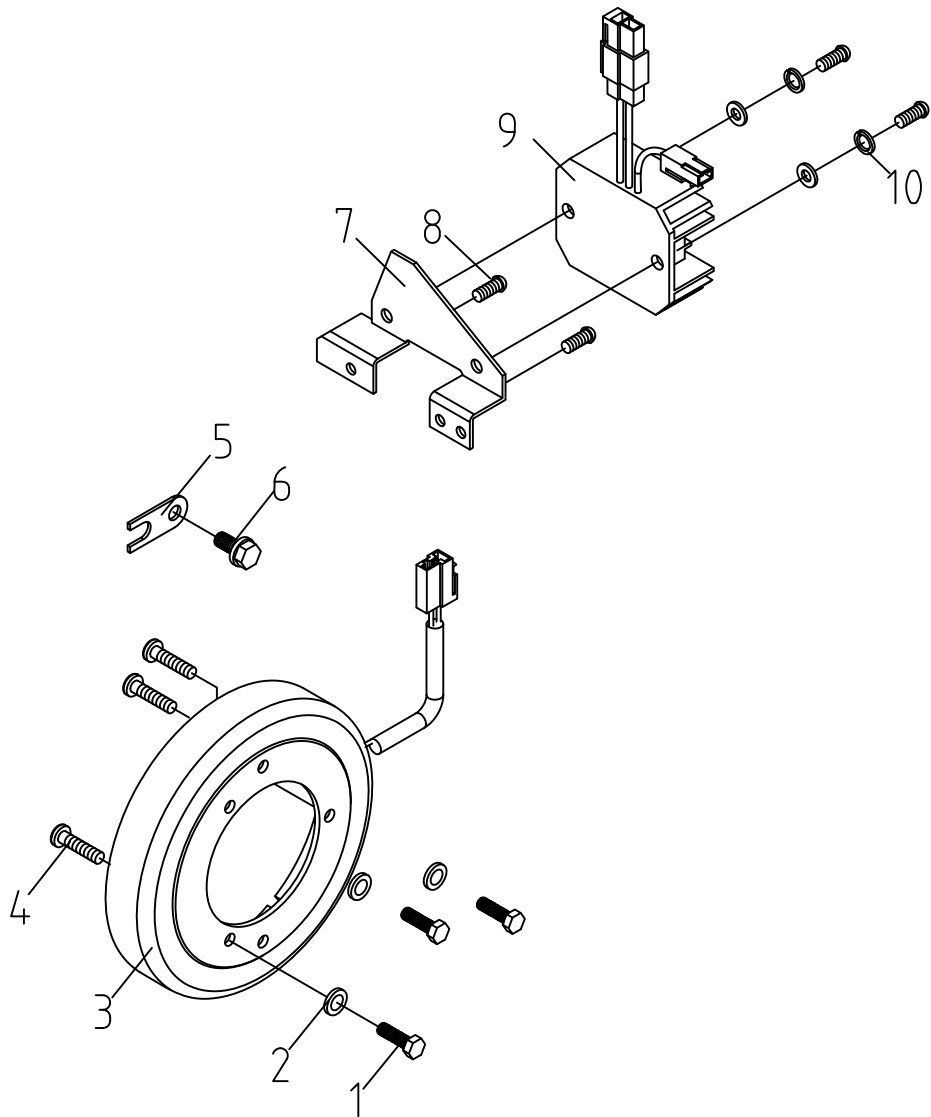
Air Intake System KM186FGET - 07000



Air Intake System KM186FGET-07000

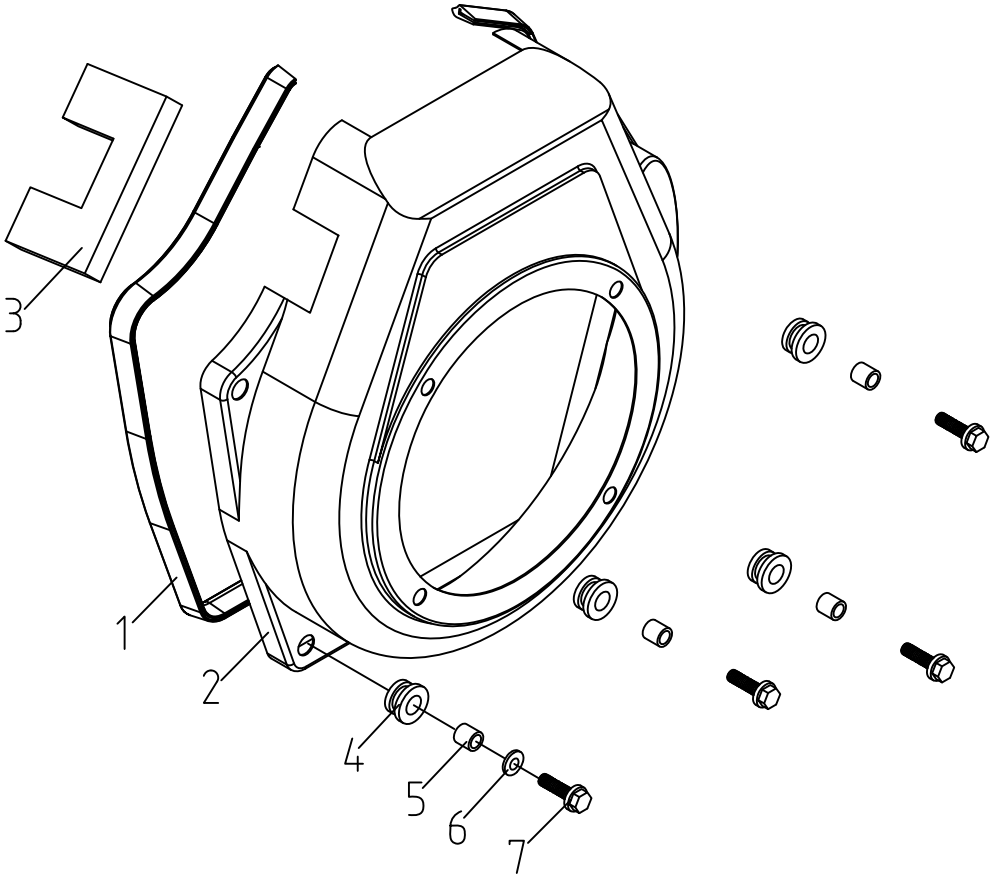
Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186F-07401		Inlet	1
2	KM168F-07402		Air Filter Tightening Bolt	2
3	GB/T5789-1986		Bolt M6x25	3
4	KM186F-07001		Air Filter Gasket	1
5	KM186F-07300		Bottom Case	1
6	GB/T6177.1-2000		Nut M6	4
7	KM186F-07303	66718	Shockproof Seal Ring II	1
8	KM186F-07100	66713	Air Filter Element	1
9	KM186F-07101		Shock Ring	1
10	KM186F-07201		Seal Ring	1
11	KM186F-07203	66717	Shockproof Seal Ring I	1
12	KM186FGET-07200		Air Filter Cover	1
13	KM186F-07210	66720	Washer	1
14	GB/T62.1-2004		Wingnut	1
1-14	KM186F-07000	66711	Air Intake System	1

Flywheel Alternator Assembly KM168FE-16000



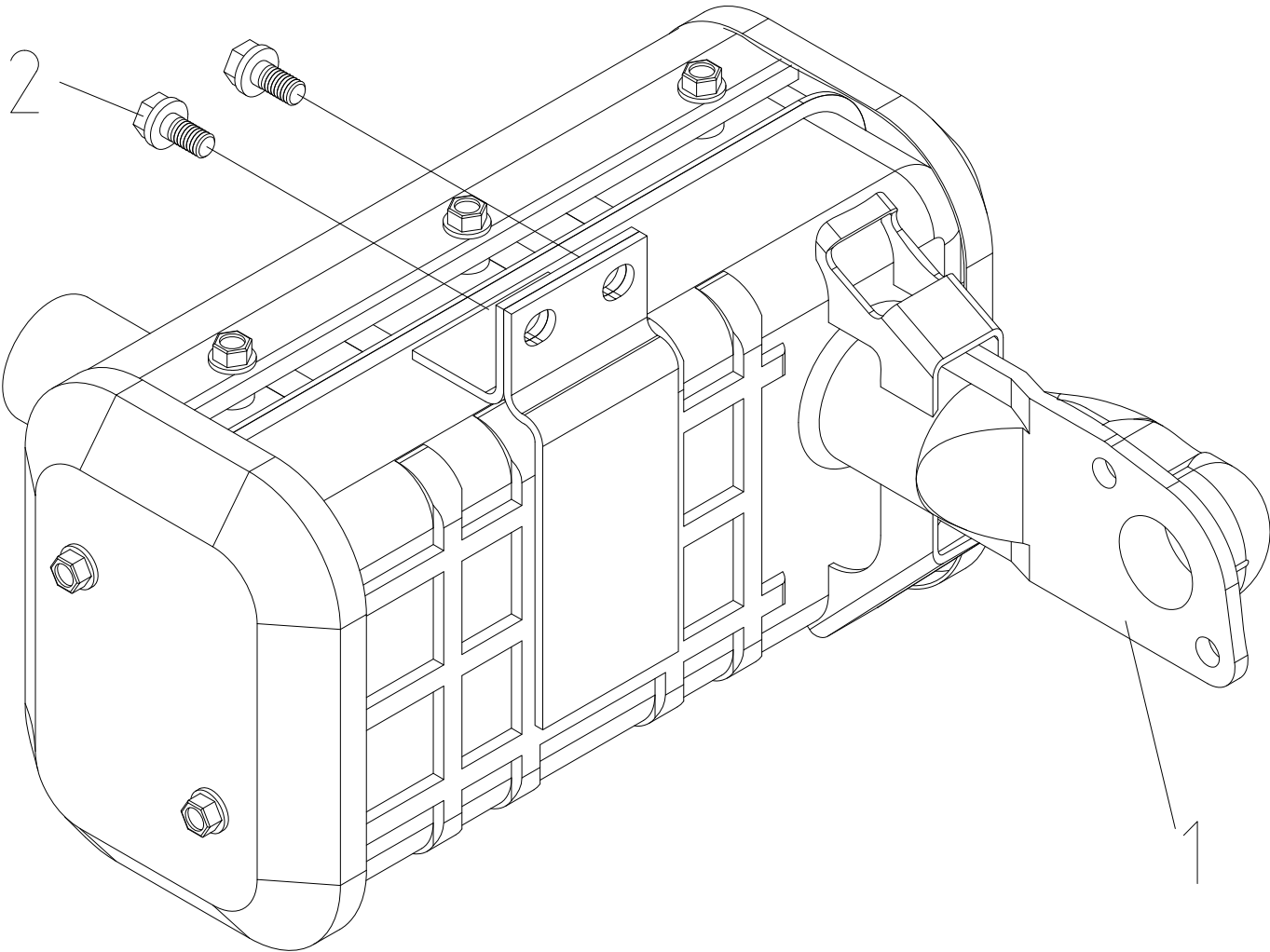
Flywheel Alternator Assembly KM168FE-16000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	GB/T5782-2000		Bolt M6x20	3
2	GB/T97.1-2002		Washer 6	5
3	KM168FE-16100T	68606	Alternator	1
4	GB/T819-2000		Screw M6x14	1
5	KM168FE-16001		Pressure Block	1
6	GB/T5789-1986		Bolt M6x14	1
7	GB/T5789-1986		Bolt M6x18	1
8	GB/T818-2000		Screw M6x14	4
9	KM186FE-16400	68607	Voltage Regulator	1
10	GB/T93-1987		Washer 6	2
1-10	KM168FE-16000	66738	Flywheel Alternator Assembly	1



Air Conduct Hood Assembly KM186FB-17000

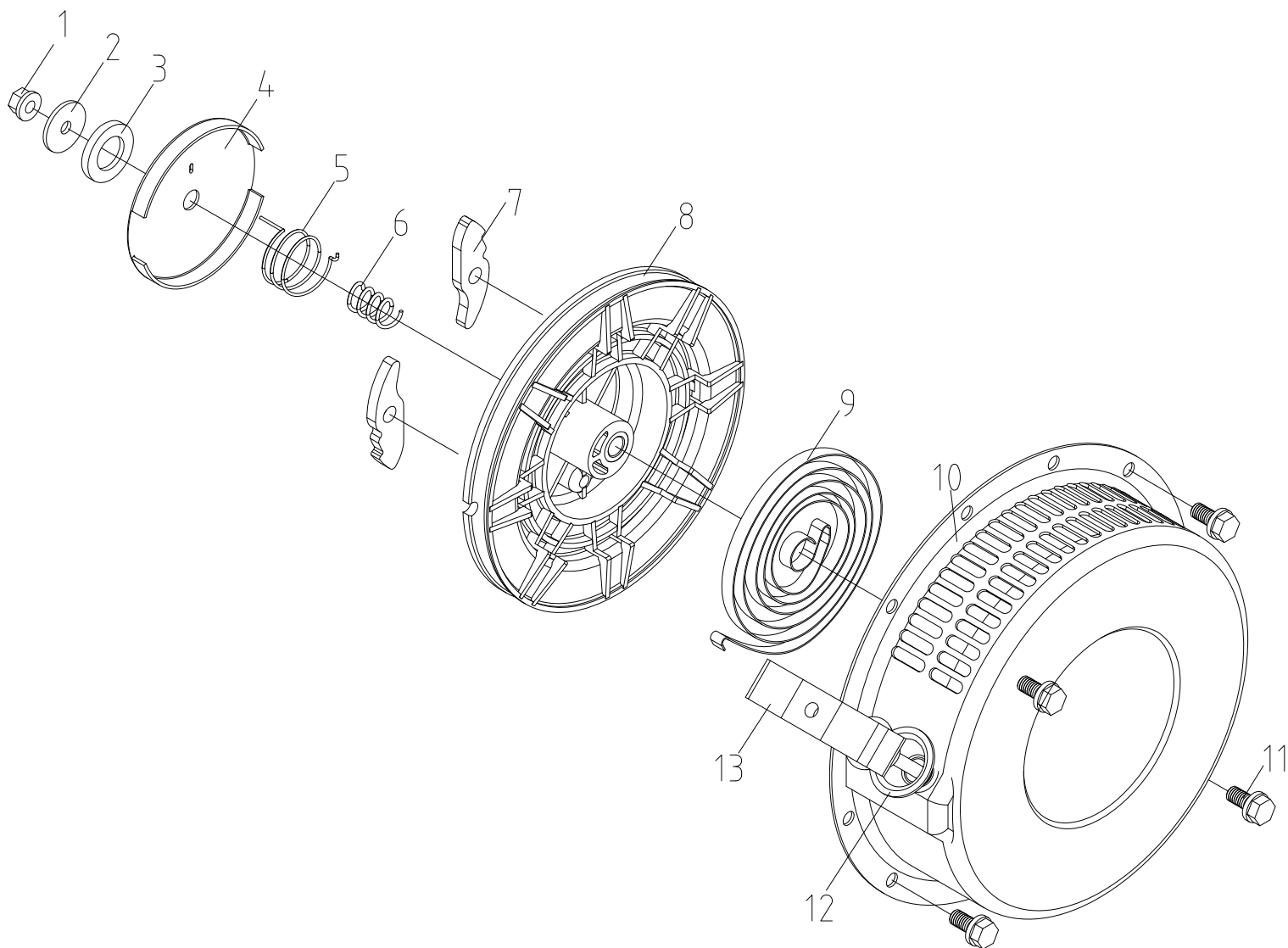
Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM178F-17003		Shock Pad	1
2	KM186FB-17100		Air Conduct Hood	1
4	KM168F-17002		Shock Insulation Sleeve	4
5	KM168F-17001		Bushing	4
6	GB/T96.1-2002		Washer 6	4
7	GB/T5789-1986		Bolt M6x22	4



Exhaust System KM186FB-08000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	KM186FB-08100		Muffler	1
2	GB/T5789-1986		Bolt M6x14	2
1-2	KM186FB-08000	68605	Muffler Assembly	1

Recoil Starter Assembly KM186F-14000



Recoil Starter Assembly KM186F-14000

Ref. No.	Mfg No.	Order No.	Description	Qty.
1	GB/T6187.1-2000		Nut M6	2
2	KM186F-14003		Washer	1
3	KM186F-14002		Friction Washer	1
4	KM186F-14004		Starter Claw Panel	1
5	KM186F-14011		Torsion Spring	1
6	KM186F-14009		Compression Spring	1
7	KM186F-14008		Starting Claw	1
8	KM186F-14001		Starting Panel	1
9	KM186F-14006		Spring	1
10	KM186F-14100		Cover	1
11	GB/T5789-1986		Bolt M6x8	4
12	KM178F-14005		Rope	1
13	KM178F-14007		Handle	1
1-13	KM186-14000	66735	Recon Starter Assembly	1

NOTE: Kipor no longer provides any individual starter parts and the entire assembly must be ordered. This drawing is for assembly information only.