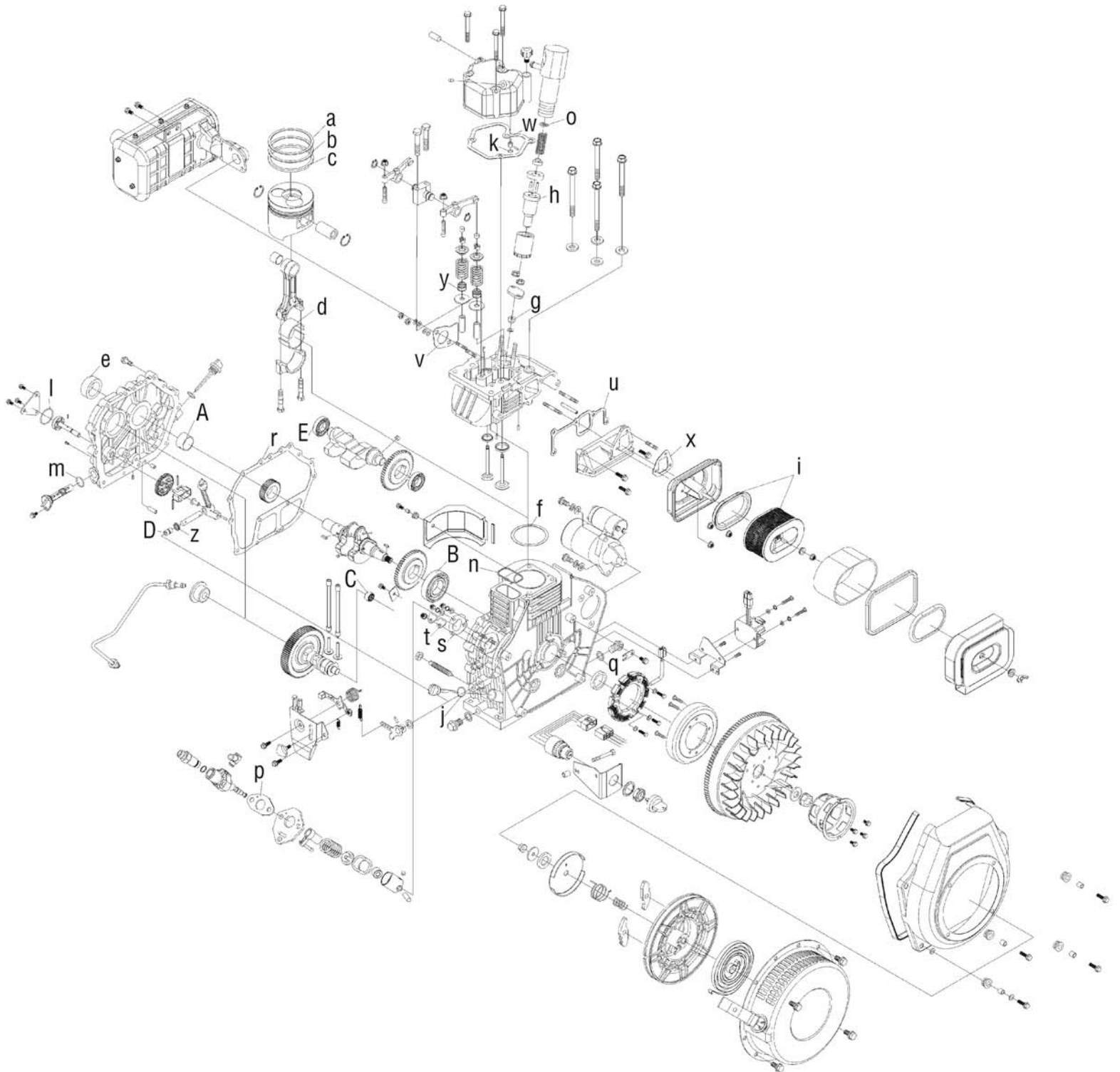


# ASSEMBLY AND PARTS DRAWING

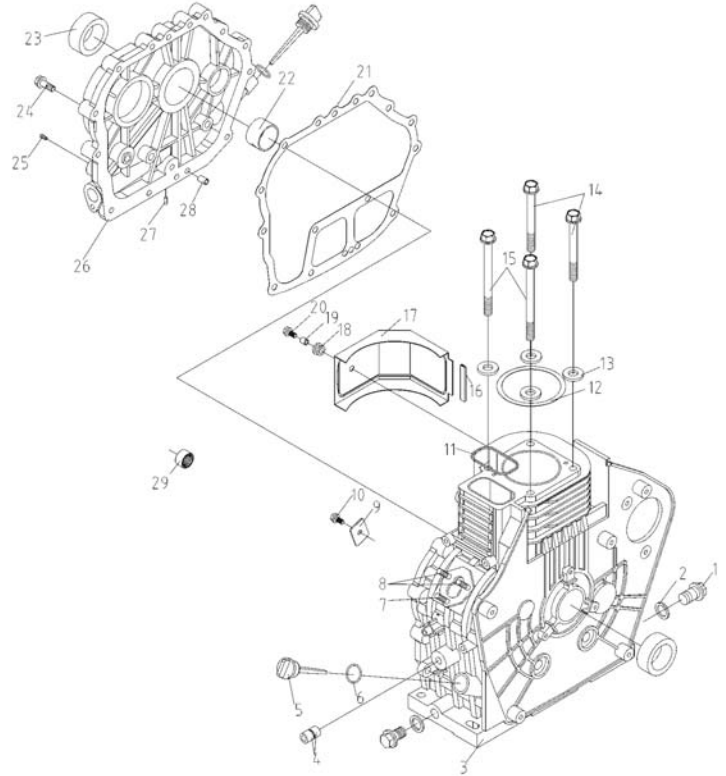
## KIPOR

### KM186FA



# KM186F-C Diesel Engine Parts Listing

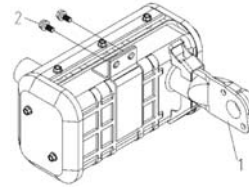
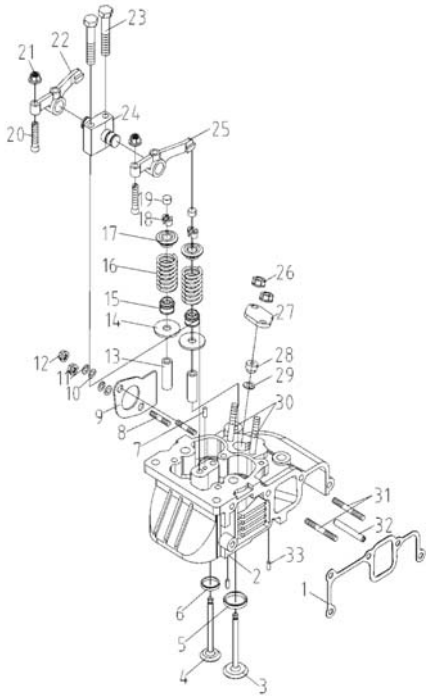
No.	Manf. #	Order #	Description	Qty.
<b>EASY DESTROYED PARTS</b>				
a	KM186F-04001		First Air Ring	1
b	KM186F-04002		Second Air Ring	1
c	KM186F-04100		Oil Ring Assem	1
d	KM186F-01005		Connection Rod Bushing	2
e	KM186F-01022		Oil Seal35x50x8	2
f	KM186F-01013a	66682	Cylinder Head Gasket	1
g	KM170FA-02011		Heat Insulator	1
h	KM186FA-13000	66721	Fuel Injector	1
i	KM186F-07100	66713	Air Filter Element Assem	1
<b>OIL RING</b>				
j	KM168F-01024		Oil Ring22.5x2.4	1
k	KM168F-03009		Oil Ring12x1.9	1
l	KM168F-09006		Oil Ring34x1.8	1
m	KM168F-09005		Oil Ring25x2.4	1
n	KM186F-01008		OIL RING	1
<b>Washer</b>				
o	KM170FA-13004(A)		Adjuster Washer	1
p	KM170F-12004		Pump Connecting Plate Adjuster Washer	1
q	KM170F-01023		Oil Drain Plug Washer	2
r	KM186F-01015		Crankcase Cover Washer	1
s	KM168F-01014		Injection Pump Washer	1-2
t	KM168F-01016		Seal Washer	1
u	KM186F-02014		Inlet Pipe Washer	1
v	KM186F-02015		Exhaust Pipe Washer	1
w	KM186FA-03003		Cylinder Cover Washer	1
x	KM186F-07001		Air Cleaner Washer	1
y	KM186F-02019		Valve Conduct Pipe Oil Seal	2
z	KM168F-11008		Level Shaft Oil Seal	1
<b>BEARING</b>				
A	KM186F-01014		Sliding Bearing	1
B	GB/T276-1994		Rolling Bearing 6308/P5	1
C	GB/T290-1998		Roller Bearing HK1516	1
D	GB/T290-1998		Roller Bearing HK0810	2
E	GB/T276-1994		Rolling Bearing 6203/P5	2
Main nut, bolt tighten torque unit: n.m				
1	Connection Rod Bolt		38-42	
2	Cylinder Cover Bolt		54-58	
3	Flywheel Nut		130-150	
4	Injection Pressure Plate Nut		10-12	
5	Rocker Arm Base Tighten Bolt		43-47	
6	Standard M6 Bolt/Nut		10-12	
7	Standard M8 Bolt/Nut		18-20	



**Cylinder Block Assembly KM186FA-01000 (A)**

No.	Manf. #	Order #	Description	Qty.
1	KM168F-01018	66676	Drain Plug	2
2	KM170F-01023	66677	Drain Plug Gasket	2
3	KM186FA-01001(A)		Cylinder Block	1
4	GB/T290-1998		Needle Roller Bearing HK0810	2
5	KM178F-01002	66679	Oil Dipstick	2
6	KM168F-01024	66680	O-Seal Ring 22.5X2.4	2
7	KM168F-01012		Thrust	1
8	KM168F-01011		Bolt M8X12	2
9	KM168F-01009		Seal Ring	1
10	GB/T5789-1986		Cylinder Cover Bolt (Short)	1
11	KM186F-01008		Cylinder Cover Nut Washer	1
12	KM186F-01013a	66682	Cylinder Cover Gasket	1
13	KM186F-01005		Cylinder Cover Bolt (Long)	4
14	KM186FA-01003(A)		Tighten Screw (Short) of Fuel Injection Pump	2
15	KM186FA-01006(A)		Tighten Screw (Long) of Fuel Injection Pump	2
16	KM178F-01203		Vibration Insulation Strip	1
17	KM186FA-01211(A)		Air Conduct Plate	1
18	KM178F-01201		Vibration Insulation Gasket	1
19	KM178FA-01202		Bushing	1
20	GB/T5789-1986		Bolt M6X18	1
21	KM186F-01015	66683	Crankcase Cover Gasket	1
22	KM186F-01014		Sliding Bearing	1
23	KM186F-01022		Oil Seal 35X50X8	2
24	GB/T5789-1986		Bolt M8X33.5	16
25	KM168F-01017		Inner Hexagonal Plug	1
26	KM186F-01016a		Crankcase Cover	1
27	KM168F-01021		Blockage	2
28	GB/T1192-2000		Pin 8X12	2
29	GB/T290-1998		Needle Roller Bearing HK1516	1

# KM186F-C Diesel Engine Parts Listing, continued



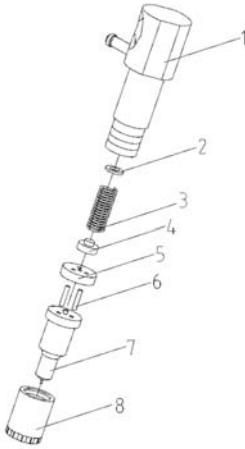
## Exhaust System KM186FA-08000 (A)

No.	Manf. #	Order #	Description	Qty.
1	KM186FA-01008(A)		Muffler Parts	1
2	GB/T5789-1986		Bolt M6X14	2

## Cylinder Cover Assembly KM186FA-02000 (A)

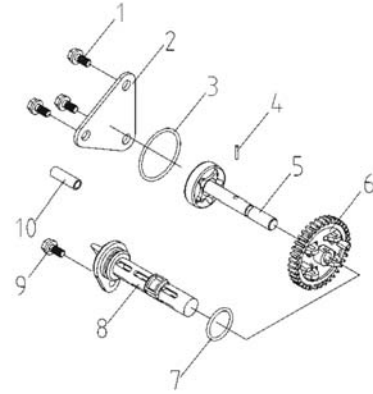
No.	Manf. #	Order #	Description	Qty.
	KM186FA-02000(A)	66686	Cylinder Head Assembly	1
1	KM186F-02014		Inlet Pipe Gasket	1
2	KM186FA-02202		Cylinder Cover	1
3	KM186F-02004a		Inlet Valve	1
4	KM186F-02003a		Exhaust Valve	1
5	KM186F-02203		Inlet Valve Seat	1
6	KM186F-02204		Exhaust Valve Seat	1
7	GB/T119.2-2000		Pin 4X8	1
8	GB/T899-1988		Screw AM8X20	2
9	KM186F-02015	66828	Exhaust Pipe Gasket	1
10	GB/T97.1-2002		Washer 8	2
11	GB/T93-1987		Washer 8	2
12	GB/T6170-2000		Nut M8	2
13	KM186F-02201		Valve Guide Pipe	2
14	KM186F-02007		Valve Spring Washer	2
15	KM186F-02019		Valve Pipe Oil Seal	2
16	KM186F-02005		Valve Spring	2
17	KM186F-02002a		Valve Spring Seat	2
18	KM186F-02001		Valve Lock Clip	4
19	KM186F-02016		Valve Adjusting Gasket	2
20	KM186F-02008		Valve Adjusting Screw	2
21	KM186F-02019	66693	Valve Adjusting Tighten Nut	2
22	KM186FA-02012	66691	Exhaust Valve Rocker Arm	1
23	KM186FA-02017		Tighten Bolt of Rocker Arm Bracket	2
24	KM186FA-02006		Rocker Arm Bracket	1
25	KM186FA-02013	66692	Inlet Valve Rocker Arm	1
26	GB/T6177.1-2000		Nut M6	2
27	KM186F-02009		Fuel Injector Pressure Plate	1
28	KM170FA-02011		Heat Insulation Sleeve	1
29	KM186FA-02018(A)		Heat Insulation Sleeve Washer	1
30	GB/T900-1988		Screw AM6X55	2
31	GB/T900-1988		Screw AM6X75	2
32	KM186FA-02205(A)		Waste Gas Circulating Pipe	1
33	GB/T119.2-2000		Pin 4X8	2

# KM186F-C Diesel Engine Parts Listing, continued



**Fuel Injector Assembly KM186FA-13000 (A)**

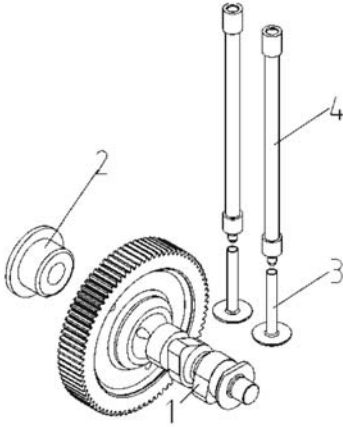
No.	Manf. #	Order #	Description	Qty.
	KM186FA-13000	66721	Fuel Injector	1
1	KM170FA-13200		Fuel Injector Subassembly	1
2	KM186FA-13004(A)		Pressure Adjusting Gasket	1
3	KM170F-13006		Pressure Adjusting Spring	1
4	KM186FA-13003(A)		Top Rod	1
5	KM186FA-13002(A)		Middle Body of Fuel Injector	1
6	KM170F-13004		Location Pin	2
7	KM186FA-13100(A)		Oil Nozzle Parts	1
8	KM170FA-13002		Oil Nozzle Tighten Cap	1



**Lubrication System KM186F-09000**

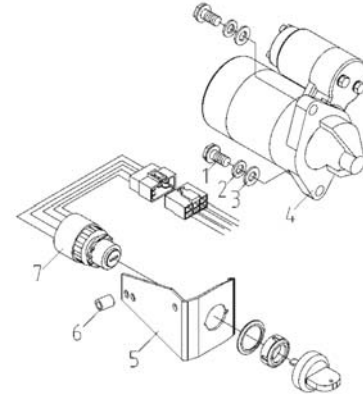
No.	Manf. #	Order #	Description	Qty.
	KM186F-09000	66724	Oil Pump Assembly	1
1	GB/T5789-1986		Bolt M6X12	3
2	KM168F-09003		Oil Pump Cover Plate	1
3	KM168F-09006		O-Seal Ring 34X1.8	1
4	GB/T119.2-2000		Pin 3X18	1
5	KM186F-09100		Oil Pump Parts	1
6	KM178F-09002		Drive Cam of Oil Pump	1
7	KM168F-09005		O-Seal Ring 25X2.4	1
8	KM178F-09200	66725	Oil Filter Parts	1
9	GB/T5789-1986		Bolt M6X14	1
10	KM178F-09003		Oil Inlet Pipe	1

# KM186F-C Diesel Engine Parts Listing, continued



**Camshaft Assembly KM186FA-a-06000 (A)**

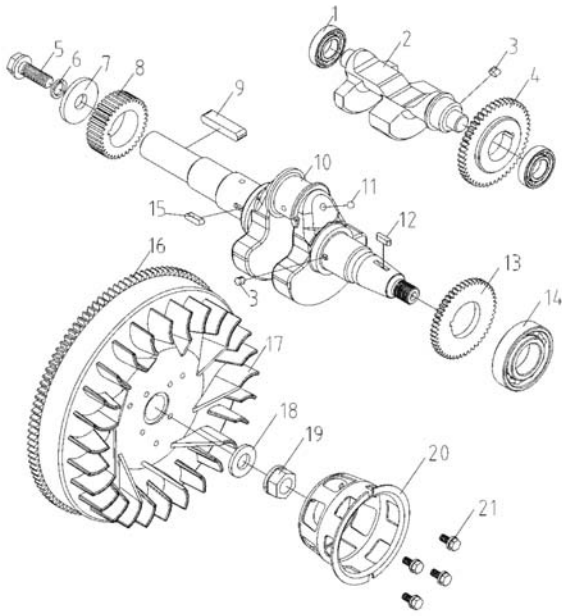
No.	Manf. #	Order #	Description	Qty.
1	KM186FA-a-06200(A)		Camshaft and Timing Gear Parts	1
2	KM186FA-a-06004		Camshaft Sleeve	1
3	KM186F-06003		Valve Tappet	2
4	KM186FA-06100(A)		Valve Pushing Rod Parts	2



**Starting Motor Assembly KM170FE-15000**

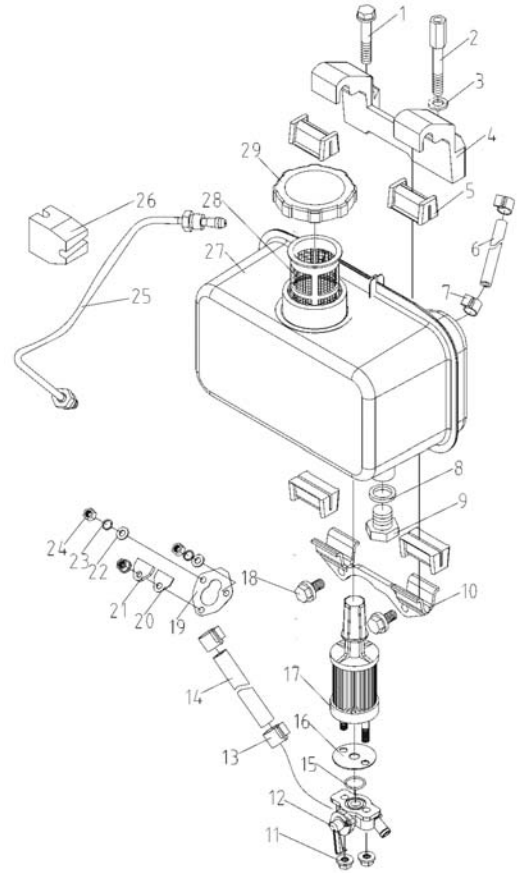
No.	Manf. #	Order #	Description	Qty.
	KM186FE-15100	66487	Upgraded Hitachi Starter	1
	KM170FE-15000	66736	KDE6500/6700 Starter	1
1	GB/T5782-0986		Bolt M10X30	2
2	GB/T93-1987		Washer 10	2
3	GB/T97.1-2002		Washer 10	2
4	KM168FE-15100		Starting Motor Parts	1
5	KM168FE-15001		Long Washer	1
6	KM168FE-15002		Electric Starting Switch Board	2
7	KM168FE-15200		Starting Motor Switch Parts	1

# KM186F-C Diesel Engine Parts Listing, continued



**Crankshaft Flywheel Assembly KM186FA-05000 (A)**

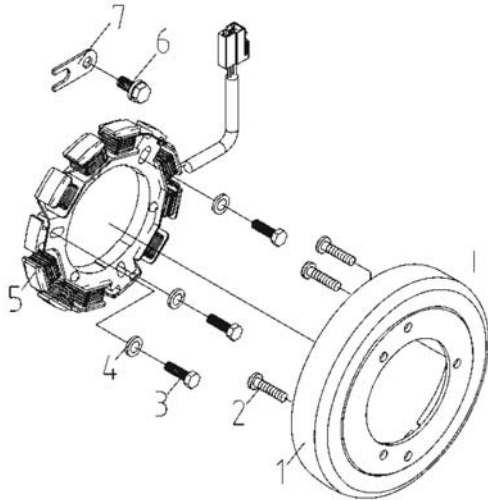
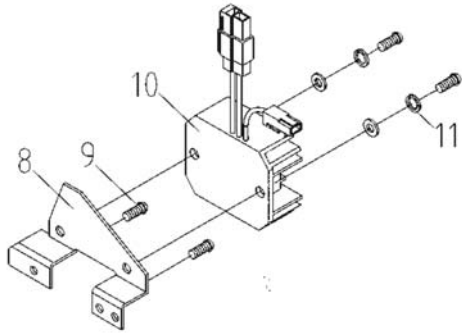
No.	Manf. #	Order #	Description	Qty.
1	GB/T276-1994		Roller Bearing 6203/P5	2
2	KM186F-05301		Balance Shaft	1
3	KM186F-05006		Key	2
4	KM186F-05004b		Timing Gear of Balance Shaft	1
5	KM186F-05007		Tighten Bolt of Output Terminal	1
6	GB/T93-1987		Washer 10	1
7	KM178F-05008		Output Terminal Washer	1
8	KM186F-05203		Crankshaft Timing Cam	1
9	GB/T1096-2003		Key 6X50	1
10	KM186AF-05201(A)		Crankshaft	1
11	GB/T308-2002		Steel Ball 6.35	1
12	GB/1096-2003		Key 5X12	1
13	KM186F-05004		Drive Gear of Balance Shaft	1
14	GB/T276-1994		Roller Bearing 6308/P5	1
15	GB/T1096-2003		Key 5X14	1
16	KM186FE-05102		Flywheel Gear Ring	1
17	KM186F-05101		Flywheel	1
18	KM186F-05003		Flywheel Nut Washer	1
19	KM186F-05002		Flywheel Nut	1
20	KM186F-05001	66710	Starting Claw Disc	1
21	GB/T5789-1986		Bolt M6X12	4



**Fuel System KM186FA-10000 (A)**

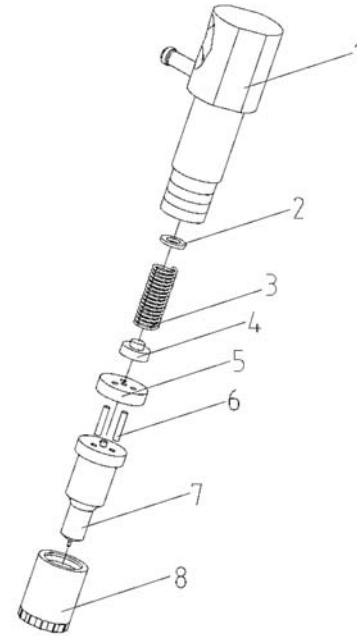
No.	Manf. #	Order #	Description	Qty.
2	KM168F-10003		Washer 8	1
3	GB/T97.1-2002		Fuel Tank Upper Bracket	1
4	KM186F-10001		Shock Pad	1
5	KM168F-10002		Fuel Return Pipe	4
6	KM170FA-10012		Fuel Return Pipe Clip	1
7	KM168F-10013	66541	Fuel Pipe Clamp	2
8	KM168F-10008	66482	Drain Plug Gasket	1
9	GB/T5786-2000		Fuel Tank Lower Bracket Parts	1
10	KM186FA-10600(A)		Nut M6	1
11	KM168F-10400	66643	Fuel Tank Switch Parts	3
12	GB/T6177.1-2000		Clip	1
13	KM168F-10011		Fuel Supply Pipe	2
14	KM168F-10009		O-Seal Ring 14X1.6	1
15	KM168F-10017		Diesel Filter Gasket	1
16	KM168F-10007	66647	Seal Washer 2	1
17	KM186F-10300		Bolt M6X14	1
18	GB/T5789-1986		Fuel Injection Pump Gasket	2
19	KM168F-10014		Seal Gasket	1-2
20	KM168F-10016		Seal Plate	1
21	KM168F-10015		Washer 6	1
22	GB/T97.1-2002		Washer 6	2
23	GB/T93-1987		Nut M6	2
24	GB/T6170-2000		High Pressure Fuel Pipe Parts	2
25	KM186FA-10500(A)		Shock Pad	1
26	KM186F-10014		Fuel Tank Welding Parts	1
27	KM186F-10200		Filling Filter Net	1
28	KM168F-10004	66277	Fuel Strainer	1
29	KM168F-10100		Tighten Bolt of Fuel Tank Upper Bracket	1

# KM186F-C Diesel Engine Parts Listing, continued



**Flywheel Generator Assembly KM168FE-16000**

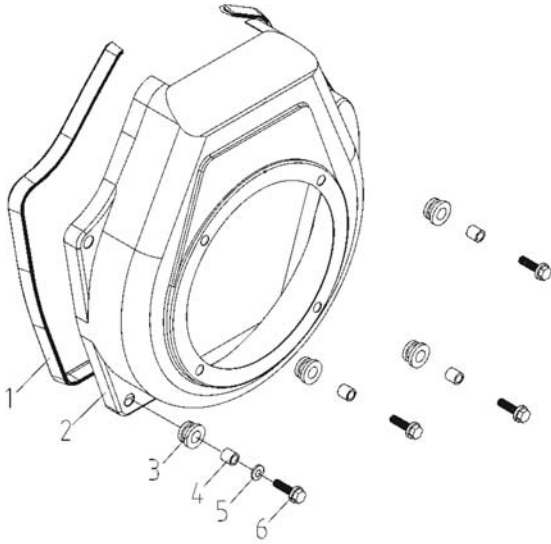
No.	Manf. #	Order #	Description	Qty.
	KM186FE-16000	66738	Flywheel Alternator Assembly	1
1	KM168FE-16100		Generator Magnet Rotor Parts	1
2	GB/T819.1-2000		Screw M6X14	3
3	GB/T5782-2000		Bolt M6X20	3
4	GB/T97.1-2002		Washer 6	5
5	KM168FE-16200		Generator Stator Winding Parts	1
6	GB/T5789-1986		Bolt M6X12	1
7	KM168FE-16001		Pressure Plate	1
8	KM168FE-16301		Regulator Bracket	1
9	GB/T818-2000		Screw M6X14	4
10	KM168FE-16400		Regulator Parts	1
11	GB/T93-1987		Washer 6	2



**Fuel Injecting Pump Assembly KM186FA-12000 (A)**

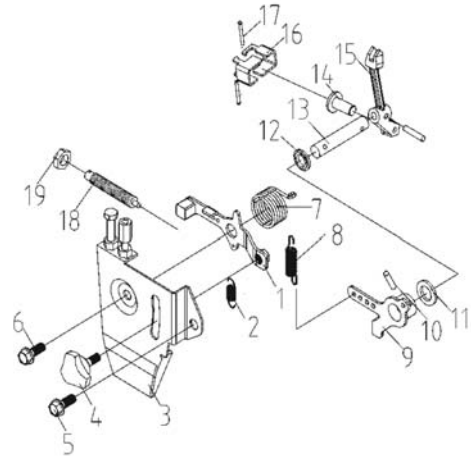
No.	Manf. #	Order #	Description	Qty.
	KM186FA-12000	66726	Fuel Injection Pump Assembly	1
1	KM186FA-12200(A)		Oil Outlet Valve Subassembly	1
2	KM170F-12011		High Pressure Seal Washer	1
3	KM186FA-12300(A)		Fuel Injecting Pump and Plug Parts	1
4	KM170F-12014		Oil Inlet Pipe	1
5	KM170F-12004		Adjusting Gasket of Pump Connection Plate	1
6	KM170F-12005		Fuel Injecting Pump Connection Plate	1
7	KM186FA-12004(A)		Oil Level Controlling Sleeve	1
8	KM186FA-12003(A)		Plug Spring	1
9	KM186FA-12005(A)		Spring Lower Seat	1
10	KM170F-12007		Spring Bracket	1
11	KM186FA-12101(A)		Roller	1
12	KM186FA-12103(A)		Roller Body	1
13	KM186FA-12104(A)		Location Pin of Tappet	1
14	KM186FA-12102(A)		Roller Pin	1

# KM186F-C Diesel Engine Parts Listing, continued



**Air Conduct Cover Assembly KM186FA-17000 (A)**

No.	Manf. #	Order #	Description	Qty.
1	KM178F-17003		Shock Pad	1
2	KM186FA-17100(A)		Shock Pad	1
3	KM168F-17002		Bushing	4
4	KM168F-17001		Washer 6	4
5	GB/T96.1-2002		Bolt M6X22	4
6	GB/T5789-1986		Air Conduct Cover Welding Part	4

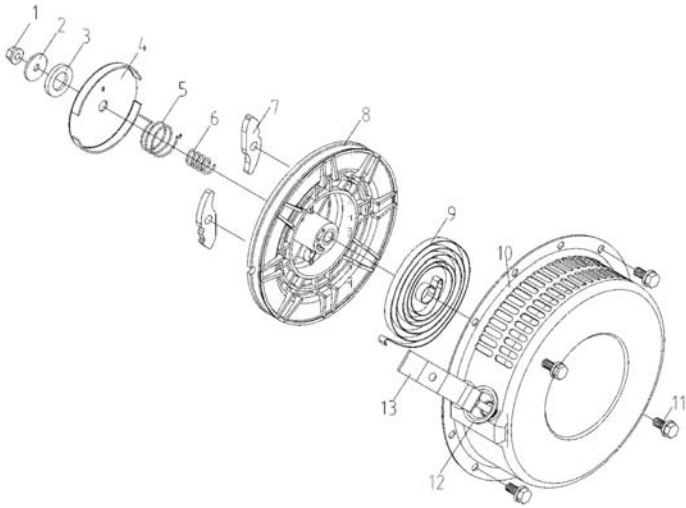


**Speed Regulating and Operating System KM186F-11000**

No.	Manf. #	Order #	Description	Qty.
	KM168F-11000	66727	Speed Regulating System	1
1	KM168F-11300	66728	Speed Regulating Handle Parts	1
2	KM168F-11006	66731	Return Spring	1
3	KM168F-11400		Welding Part of Operation Handle Bracket	1
4	KM168F-11301	66730	Handle	1
5	GB/T5789-1986		Bolt M6X14	1
6	GB/T5789-1986		Bolt M6X18	1
7	KM168F-11005	66733	Return Spring	1
8	KM186F-11007	66734	Speed Regulating Spring	1
9	KM168F-11110		Welding Part of Speed Regulating Lever	1
10	GB/T117-2000		Pin 3X22	1
11	KM168F-11003		Washer	2
12	KM168F-11008		Oil Seal of Lever Shaft	1
13	KM168F-11102		Lever Shaft	1
14	KM186F-11004		Speed Regulating Panel	1
15	KM186F-11101		Fork	1
16	KM168F-11001		Fly-ball	2
17	KM168F-11002		Fly-ball Pin	2
18	KM186F-11200		Oil Level Controller Parts	1
19	GB/T6173-2000		Nut M10X1.25	1

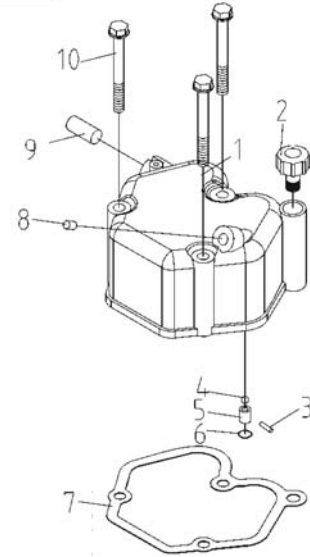
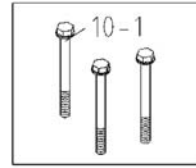


# KM186F-C Diesel Engine Parts Listing, continued



## Recoil Starter Assembly KM186F-14000

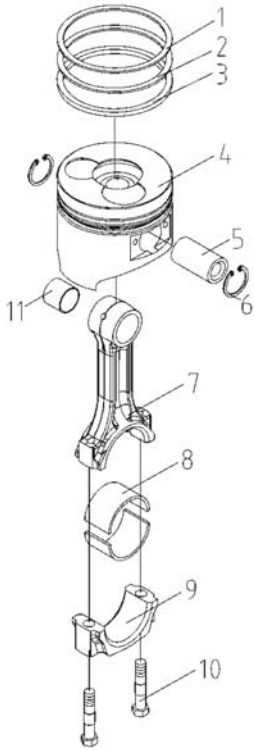
No.	Manf. #	Order #	Description	Qty.
	KM186F-14000	66735	Recoil Starter Assembly	1
1	GB/T6187.1-2000		Nut M6	1
2	KM186F-14003		Washer	1
3	KM186F-14002		Friction Sheet	1
4	KM186F-14004		Starting Claw Pressure Plate	1
5	KM186F-14011		Torsion Spring	1
6	KM186F-14009		Compression Spring	1
7	KM186F-14008		Starting Claw	2
8	KM186F-14001		Starting Pull Panel	1
9	KM186F-14006		Plane Volute Spring	1
10	KM186F-14100		Outer Shell Subassembly	1
11	GB/T5789-1986		Bolt M6X8	4
12	KM178F-14005		Starting Pull Rope	1
13	KM178F-14007		Starting Handle	1



## Cylinder Cover Assembly KM186FA(E)-03000

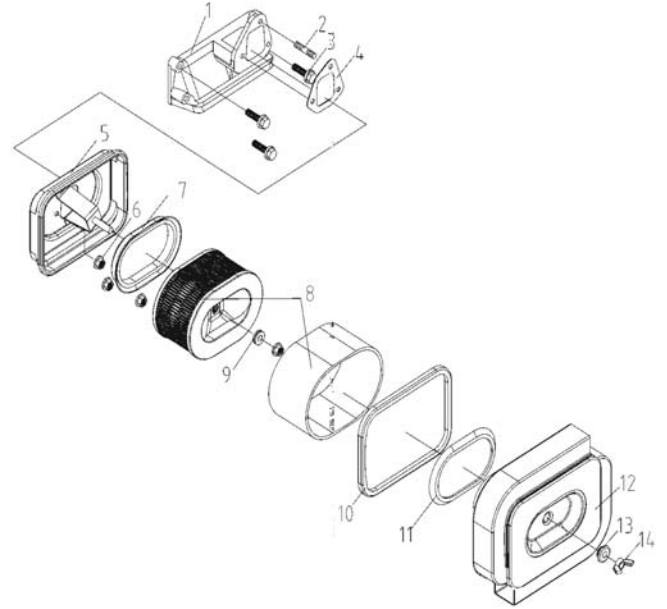
No.	Manf. #	Order #	Description	Qty.
	KM186FA-03000	66694	Cylinder Head Assembly	1
1	KM186FA-03001		Cylinder Cover	1
2	KM168F-03005	66695	Filling Plug	1
3	KM168F-03008	66701	Pin	1
4	KM168F-03006	66703	Ball	1
5	KM168F-03007	66706	Breather Seat	1
6	KM168F-03009	66708	O-Seal Ring 12X1.9	1
7	KM186FA-03003	66709	Cylinder Cover Gasket	1
8	KM168F-01021		Blockage	1
9	KM186FA-03002		Bolt M6X70	1
10	GB/T5789-1986		Bolt M6X83	3
10-1	GB/T5789-1986		Decompression Shaft Hole Blockage	3

# KM186F-C Diesel Engine Parts Listing, continued



**Piston Connection Rod Assembly KM186FA-04000 (A)**

No.	Manf. #	Order #	Description	Qty.
1	KM186F-04001		The 1st ring	1
2	KM186F-04002		The 2nd ring	1
3	KM186F-04100		Oil Ring Parts	1
4	KM186F-04003(A)		Piston	1
5	KM186F-04004		Piston Pin	1
6	GB/T893.1-1986		Retainer Ring 23	2
7	KM186FA-04202(A)		Connection Rod	1
8	KM186F-04005		Connection Rod Cover	2
9	KM186FA-04203(A)		Connection Rod Bolt	1
10	KM186FA-04204(A)		Connection Rod Bushing	2
11	KM186FA-04201(A)		Connection Rod Bearing Bushing	1



**Inlet System KM186F-07000**

No.	Manf. #	Order #	Description	Qty.
	KM186F-07000	66711	Inlet System	
1	KM186F-07401		Inlet Pipe	1
2	KM186F-07402		Tighten Bolt of Air Filter	1
3	GB/T5789-1986		Bolt M6X25	3
4	KM186F-07001		Air Filter Gasket	1
5	KM186F-07300		Nut M6	1
6	GB/T6177.1-2000		Shockproof Seal Ring	4
7	KM186F-07303	66718	Shockproof Seal Ring I	1
8	KM186F-07100		Shockproof Part	1
9	KM186F-07101		Seal Ring	1
10	KM186F-07201	66720	Shockproof Seal Ring	1
11	KM186F-07203	66717	Shockproof Seal Ring II	1
12	KM186F-07200		Nut M8	1
13	KM186F-07210		Shockproof Seal Subassembly	1
14	GB/T62.1-2004		Bottom Case Part of Air Filter	1