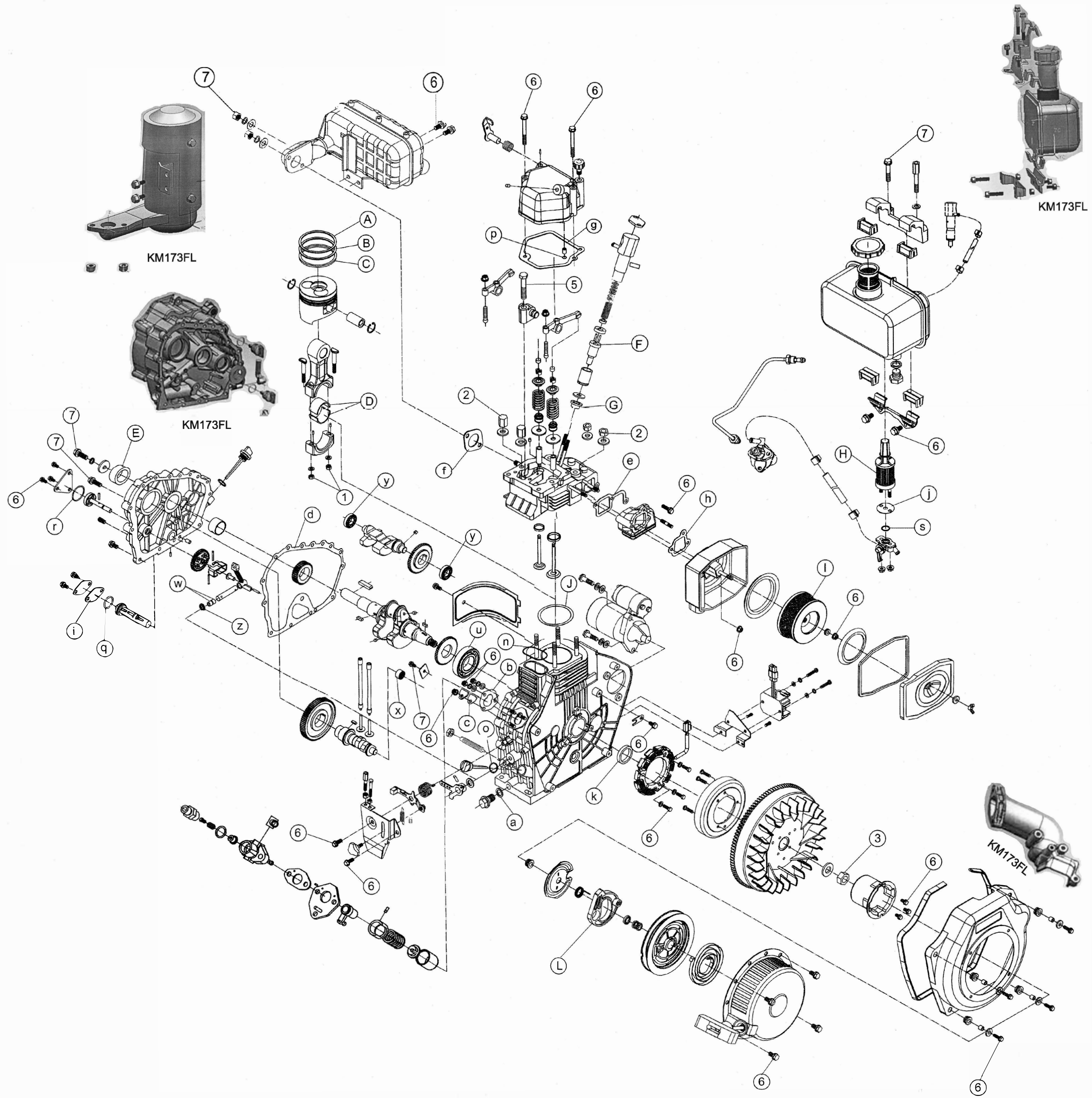


This catalog covers:
KM173

PARTS CATALOG

AIR-COOLED DIESEL ENGINE KM173F/173FL



CAUTION
The structure presented in this part catalog may be different somewhat from our improved types in future.
Then You'd better refer parts catalog to the operation manual when using.

Ref No.	Part No.	Description	Qty.
1	KM170F-18003	Trademark Tag I	1
2	KM170F-18004	Starting Operation Tag	1
3	KM170F-18005	Caution Tag	1
4	KM173F-18007	Model Tag II	1
5	KM173FL-18007	Model Tag II	1
6	KM170F-18009	Warning Tag	1
7	KM170F-18012	Air Cleaner Tag	1
8	KM170F-18013	Diesel Engine Tag	1

EASY DESTROYED PARTS

Ref No.	Parts No.	Description	Qty.	Mounted to
A	KM173F-04001	First Air Ring	1	(4)Piston & Connecting Rod Assem.
B	KM173F-04002	Second Air Ring	1	(4)Piston & Connecting Rod Assem.
C	KM173F-04100	Oil Ring Unit	1	(4)Piston & Connecting Rod Assem.
D	KM173F-04005	Connecting Rod Bushing	2	(4)Piston & Connecting Rod Assem.
E	GB/T9877.1-1988	Oil Seal SG25 × 42 × 8(front)	1	(1)Cylinder Block Assem.
F	11-433-172-001	Nozzle	One Pair	(8)Fuel Injection Valve Assem.
G	KM170F-02011	Heat Insulator	1	(2)Cylinder Head Assem.
H	KM170F-10300	Element Unit	1	(1)Fuel System
I	KM170F-07100	Air Cleaner Element Unit	1	(7)Air Intake System
J	KM173F-01013	Cylinder Head Gasket	1	(1)Cylinder Block Assem.
K	GB/T9877.1-1988	Oil Seal SG30 × 45 × 8(rear)	1	(1)Cylinder Block Assem.
L	KM170F-14001	Ratchet	1	(14)Manual starting Assem

RINGS

Ref No.	Part No.	Description	Qty.
m	KM170F-01008	Sheet Gasket	1
o	GB/T1235-1976	O-Ring 22.5 × 2.4	2
p	GB/T1235-1976	O-Ring 12 × 1.9	1
q	GB/T1235-1976	O-Ring 25 × 2.4	1
r	GB/T3452.1-1992	O-Ring 34 × 1.8	1
s	GB/T3452.1-1992	O-Ring 14 × 1.8	1

FASTENING TORQUE OF MAIN BOLTS & NUTS

Ref No.	Description	Torque Unit: N.m
Ⓚ	Connecting Rod Nut	18 - 21
Ⓛ	Cylinder Head Nut	28 - 32
Ⓜ	Flywheel Nut	100 - 120
Ⓨ	Nozzle Retainer Nut	10 - 12
Ⓩ	Set Bolt of Rocker Arm Seal	20 - 23
ⓐ	Standard Bolt /Nut M6	10 - 12
ⓑ	Standard Bolt /Nut M8	18 - 20

BEARINGS

Ref No.	Part No.	Description	Qty.
u	GB/T276-1994	Ball Bearing 6306/P5	1
v	GB/T276-1994	Ball Bearing 6205/P5	1
w	GB/T290-1989	Needle Bearing 794/8	2
x	GB/T290-1989	Needle Bearing HK1512	1
y	GB/T276-1994	Ball Bearing 6202/P5	2

OIL SEAL

Ref No.	Part No.	Description	Qty.
z	KM170F-11008	Lever Shaft Oil Seal	1

WASHER KIT

Ref No.	Part No.	Description	Qty.
a	KM170F-01100	Washer Unit of Drain Plug	1
b	KM170F-10014	Fuel Injection Pump Washer	1
c	KM170F-10016	Joint Washer	1
d	KM170F-01015	Crankcase Cover Washer	1
e	KM170F-02014	Intake Pipe Washer	1
f	KM170F-02015	Muffler Washer	1
g	KM173F-03003	Cylinder Head Cover Washer	1
h	KM170F-07001	Air Cleaner Washer	1
i	KM170F-09002	Washer of Engine Oil Filter Cover Board	1
j	KM170F-10007	Fuel Filter Washer	1

(1) Cylinder Block Assembly (KM173F-01000 / KM173FL-01000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-01018	Drain Plug Screw	1
2	KM170F-01100	Washer Unit of Drain Plug	1
3	GB/T9977.1-1988	Oil Seal SG30 * 45 * 8 (Stear)	1
4	KM173F-01001	Cylinder Block	1
5	GB/T290-1989	Needle Bearing 7941/8	2
6	GB/T1235-1976	O-Ring 22.5 * 2.4	2
7	KM170F-01002	Oil Dipstick	2
8	KM170F-11200	Fuel Controller Assem.	1
9	GB/T6173-2000	Nut M10 * 1.25	1
10	KM170F-01012	Forcing Stud of Fuel Injection Pump(Short)	1
11	KM170F-01011	Forcing Stud of Fuel Injection Pump(Long)	2
12	KM170F-10014	Fuel Injection Pump Washer	2
13	KM170F-10116	Joint Washer	1
14	KM170F-10015	Seal Plate	1
15	GB/T6177.1-2000	Nut M6	1
16	GB/T97.1-1985	Gasket 6	2
17	GB/T93-1987	Gasket 6	2
18	GB/T6170-2000	Nut M6	2
19	GB/T290-1989	Needle Bearing HK1512	1
20	KM170F-01009	Thrust Plate	1
21	GB/T5789-1986	Bolt M6 * 12	1
22	GB/T276-1994	Ball Bearing 6306/P5	1
23	KM170F-01019	Air Cover	1
24	GB/T5789-1986	Bolt M6 * 12	1
25	KM170F-01005	Sheet Gasket	4
26	KM170F-01006	Cylinder Head Stud Bolt(Long)	2
27	KM170F-01003	Cylinder Head Stud Bolt(Short)	2
28	KM173F-01013	Cylinder Head Shim	1
29	KM170F-01008	Cylinder Head Nut Gasket	4
30	KM170F-01004	Cylinder Head Nut(Thin)	2
31	KM170F-01007	Cylinder Head Nut(Thick)	2
32	KM170F-01015	Crankcase Cover Washer	1
33	KM170F-01017	Main Bearing	1
34	KM173F-01016	Crankcase Cover	1
35	GB/T9877.1-1988	Oil Seal SG25 * 42 * 8(front)	1
36	GB/T5789-1986	Bolt M6 * 33.5	1
37	KM170F-01017	Hexagonal Internal Screw Plug	1
37-1	KM178FG-01300	Oil Indicator	1
38	GB/T5789-1986	Bolt M6 * 25	14
39	KM170F-01021	Plunger	2
40	GB/T119.1-2000	Pin d = 12	2
41	KM173FL-01018	oil suction pipe	1
42	KM173FL-01019	thrust shaft Ax3047	1
43	KM173FL-01020	oil suction pipe Tie-in	1
1	KM170FS-01000	Block	1
2	GB/T276-1994	Rolling bearing 6205/P5	1

(3) Cylinder Head Cover Assem.(KM170F-03000)

Ref No.	Parts No.	Description	Qty.
1	GB/T119-1986	Pin 3 * 16	1
2	KM170F-03001	Cylinder Head Cover	1
3	KM170F-03007	Breather Seal	1
4	GB/T1235-1976	O-Ring 12 * 1.9	1
5	KM170F-03003	Cylinder Head Cover Washer	1
6	KM170F-01021	Plunger	1
7	KM170F-03004	Decompression Spring	1
8	KM170F-03100	Decompression Shaft Assem.	1
9	GB/T5789-1986	Bolt M6 * 55	2
10	KM170F-03005	Filler Screw Plug	1

(6) Camshaft Assem.(KM170F-06000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-06100	Valve Push Rod Assem.	2
2	KM170F-06003	Valve Tappet	2
3	KM170F-06002	Camshaft Timing Gear	1
4	GB/T1096-1979	Key 5 * 14	1
5	KM170F-06001	Camshaft	1
5-1	KM170FS-06001	Camshaft	1
1	KM170FS-06000	Camshaft	1
1	GB/T1096-1979	Key 5 * 30	1

(4) Piston & Connecting Rod Assem.(KM173F-04000 / KM173FL-04000)

Ref No.	Parts No.	Description	Qty.
1	KM173F-04001	First Air Ring	1
2	KM173F-04002	Second Air Ring	1
3	KM173F-04100	Oil Ring Assem.	1
4	KM173F-04003	Piston	1
5	KM173F-04003	Piston	1
6	GB/T893.1-1986	Retainer Ring 19	2
7	KM173F-04021	Connecting Rod Block	1
8	GB/T1096-1979	Connecting Rod Shaft Bushing	2
9	KM173F-04020	Connecting Rod Cover	1
10	KM173F-04023	Connecting Rod Bolt	2

(7) Air Intake System(KM170F-07000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-07401	Inlet Pipe	1
2	KM170F-07402	Tightening Bolt Of Air Cleaner	1
3	KM170F-07001	Air Cleaner Washer	1
4	GB/T1096-1979	Air Cleaner Bottom Case Assem.	1
5	GB/T6177.1-2000	NutM6	4
6	KM170F-07303	Shockproof Sheet Gasket II	1
7	KM170F-07100	Air Cleaner Element Assem.	1
8	KM170F-07101	Shockproof Unit	1
9	KM170F-07203	Shockproof Sheet Gasket I	1
10	KM170F-07201	Sheet Gasket	1
11	KM170F-07202	Air Cleaner Cover	1
12	KM170F-07210	Shockproof Seal Assem.	1
13	GB/T62-1988	NutM6	1

(2) Cylinder Head Assem (KM173F-02000 / KM173FL-02000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-02014	Intake Pipe Shim	1
2	KM173F-02202	Cylinder Head	1
3	KM170F-02004	Exhaust Valve	1
4	KM170F-02003	Exhaust Valve	1
5	KM170F-02004	Exhaust Valve Seat	1
6	KM170F-02003	Exhaust Valve Seat	1
7	GB/T989-1988	Stud AM6 * 20	2
8	KM170F-02015	Muffler Shim	1
9	KM170F-02201	Valve Conduit	2
10	GB/T119.1-2000	Pin d = 6	2
11	KM170F-02007	Valve Spring Gasket	2
12	KM170F-02008	Valve Conduit Oil Seal	2
13	KM170F-02005	Valve Spring	2
14	KM170F-02002	Valve Spring Seat	2
15	KM170F-02001	Valve Retaining Clip	4
16	KM170F-02016	Valve Adjusting Cushion	2
17	KM170F-02008	Valve Clearance Adjusting Screw 2	2
18	KM170F-02018	Valve Clearance Adjusting Screw 1	2
19	KM170F-02012	Exhaust Valve Rocker Arm	1
20	KM170F-02017	Set Bolt of Rocker Arm Seat	1
21	KM170F-02100	Rocker Arm Seat Assem.	1
22	KM170F-02013	Intake Valve Rocker Arm	1
23	GB/T6177.1-2000	Nut M6	2
24	KM170F-02009	Fuel Injection Valve Retainer	1
25	KM170F-02018	Heat Insulator Gasket	1
26	KM170F-02011	Heat Insulator	1
27	GB/T900-1988	Stud AM6 * 50	2
28	GB/T900-1988	Stud AM6 * 55	2
29	GB/T5789-1986	Stud M6 * 25	1
30	KM170FL-02012	Rocker arm insert	1

(5) Crankshaft & Flywheel Assem.(KM173F-05000 / KM173FL-05000)

Ref No.	Parts No.	Description	Qty.
1	GB/T276-1994	Ball Bearing 6202/P5	2
2	KM170F-05301	Balance Shaft	1
3	KM170F-05006	Key	2
4	KM170F-05004	Drive Gear of Balance Shaft	2
5	KM170F-05007	Output End Set Bolt	1
6	GB/T93-1987	Gasket 6	1
7	KM170F-05005	Output End Gasket	1
7-1	KM173FL-05005	Thrust bearing AXK3047	1
8	KM170F-05203	Crankshaft Timing Gear	1
9	GB/T1096-1979	Key 5 * 30	1
10	KM173F-05201	Crankshaft	1
11	KM173F-05201	Crankshaft	1
12	KM173F-05201	Crankshaft	1
13	KM173F-05201	Crankshaft	1
14	GB/T308-1989	Steel Ball 1/4"	1
15	GB/T1096-1979	Key 5 * 12	2
16	GB/T1096-1979	Key 5 * 10	2
17	KM170F-05102	Flywheel looth	1
18	KM170F-05101	Flywheel looth	1
19	KM170F-05101	Flywheel	1
20	KM170F-05003	Flywheel Nut Gasket	1
21	KM170F-05002	Flywheel Nut	1
22	KM170F-05001	Starting Ratchet Reel	1
23	GB/T5789-1986	Bolt M6 * 12	3

(8) Fuel Injection Valve Assem.(KM170F-13000)

Ref No.	Parts No.	Description	Qty.
1	11-435-127-003	Fuel Injection Valve Block	1
2	11-430-100-240	Washer	1
3	11-430-613-001	Volt-adjustment Spring	1
4	11-433-120-000	Mandril	1
5	11-430-136-000	Intermediate Block	1
6	11-433-261-004	Locating Pin	2
7	11-433-172-001	Fuel Injection Nozzle	1
8	11-433-314-009	Nozzle Forcing Nut	1
1	KM170FA-13000	Fuel Injection Valve Assem	1

(9) Muffler Assem (KM173F-08000 / KM173FL-08000)

Ref No.	Parts No.	Description	Qty.
1	KM173F-08000	Muffler assembly	1
2	KM173FL-08000	Muffler assembly	1
3	GB/T6170-2000	NutM8	2
4	GB/T97.1-1985	Gasket 6	2
5	GB/T5789-1986	BoltM6 * 14	2
6	GB/T5789-1986	BoltM6 * 14	2
1	KM170FG-08000	NutM8	2
2	GB/T6170-2000	NutM8	2
3	GB/T97.1-1985	Gasket 6	2
4	KM170FG-08000	Muffler assembly	1
5	GB/T5789-1986	BoltM6 * 14	2

(11) Fuel System (KM173F-10000 / KM173FL-10000)

Ref No.	Parts No.	Description	Qty.
1	GB/T5789-1986	Bolt M6 * 45	1
2	KM170F-10003	Set Bolt of Fuel Tank Upper Support	1
3	GB/T97.1-1985	Gasket 8	1
4	KM170F-10001	Fuel Tank Upper Support	1
5	KM170F-10002	Cushion	4
6	KM170F-10013	Fuel Return Pipe Clip	2
7	KM170F-10012	Fuel Return Pipe	1
8	KM170F-10008	Drain Bolt Washer	1
9	GB/T5786-2000	Bolt M12 * 1.25 * 14	1
10	KM170F-10000	Fuel Tank Lower Support	1
11	GB/T5789-1986	Bolt M6 * 14	2
12	GB/T6177.1-2000	NutM6	2
13	KM170F-10402	Fuel Tank Switch Assem.	1
14	GB/T3452.1-1992	O-Ring 13.2 * 1.8	1
15	KM170F-10011	Clip	2
16	KM170F-10009	Fuel Pipe	1
17	KM170F-10007	Fuel Filter Washer	1
18	KM170F-10300	Element Assem.	1
19	KM170F-10200	Fuel Tank Weldment Assem.	1
20	KM170F-10004	Fuel Filter Screen	1
21	KM170F-10100	Fuel Tank Cap	1
22	KM170F-10500	High-pressure Fuel Pipe Unit	1
1	KM170FG-10500	High-pressure Fuel Pipe Unit	1

(12) Fuel injection pump assembly (KM178F-12000)

(10) Lubricating System(KM170F-09000)

Ref No.	Parts No.	Description	Qty.
1	GB/T5783-1986	BoltM6 * 12	5
2	KM170F-09003	Lube Oil Pump Cover	1
3	GB/T3452.1-1992	O-Ring 34 * 1.8	1
4	KM170F-09100	Engine Oil Pump Unit	1
5	GB/T119.1-1986	Pin 3 * 1	1
6	KM178F-09002	Drive Gear of Lube Oil Pump	1
7	KM170F-11001	Flying Weight	2
8	KM170F-11002	Flying Weight Pin	2
9	KM170F-09001	Lube Oil Cleaner Cover	1
10	KM170F-09002	Lube Oil Cleaner Cover Washer	1
11	GB/T1235-1976	O-Ring 25 * 2.4	1
12	KM170F-09200	Lube Oil Filter Assem.	1

(13) Governor & Controller Assem.(KM170F-11000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-11300	Control Handle	1
2	KM170F-11006	Return Spring II	1
3	KM170F-11401	Control Handle Support	1
4	KM170F-11301	Handle	1
5	GB/T5789-1986	Bolt M6 * 14	1
6	GB/T5789-1986	BoltM6 * 18	1
7	GB/T119.1-2000	NutM6	2
8	KM170F-11403	Pull Bolt	1
9	KM170F-11402	High Speed Limit Screw	1
10	KM170F-11005	Return Spring I	1
11	KM170F-11007	Governor Spring	1
12	KM170F-11110	Governor Lever Weldment Assem.	1
13	GB/T117-2000	Pin 3 * 22	2
14	KM170F-11003	Gasket	2
15	KM170F-11008	Lever Shaft Oil Seal	1
16	KM170F-11102	Lever Shaft	1
17	KM170F-11004	Governor Push Reel	1
18	KM170F-11101	ForK	1

(18) Decorative panel (KM173FL-15000)

Ref No.	Parts No.	Description	Qty.
1	KM173FL-15001	Decorative panel	1
2	GB/T5789-1986	Hexagon bolt	1
3	KM173FL-15002	Decorative panel support	1
4	GB/T5789-1986	Hexagon bolt	2
5	GB/T5789-1986	Lock nut	2
6	KM173FL-15003	Decorative panel support	1
7	GB/T5789-1986	Hexagon bolt	2

(15) Starting Motor Assem.

Ref No.	Parts No.	Description	Qty.
1	KM170F-15100	Starting Motor Assem.	1
1	KM170FS-15100	Starting Motor Assem.	1
1-1	KM170F-15003	Engine motor hole cover board	1
2	GB/T5782-2000	BoltM6 * 30	2
3	GB/T93-1987	Spring Gasket10	2
4	GB/T97.1-1985	Gasket10	2

(14) Manual Starting Assem.(KM170F-14000)

Ref No.	Parts No.	Description	Qty.
1	GB/T6187-1986	Self locking nut	1
2	KM170F-14006	Friction Reel	1
3	KM170F-14005	Spiral Spring	1