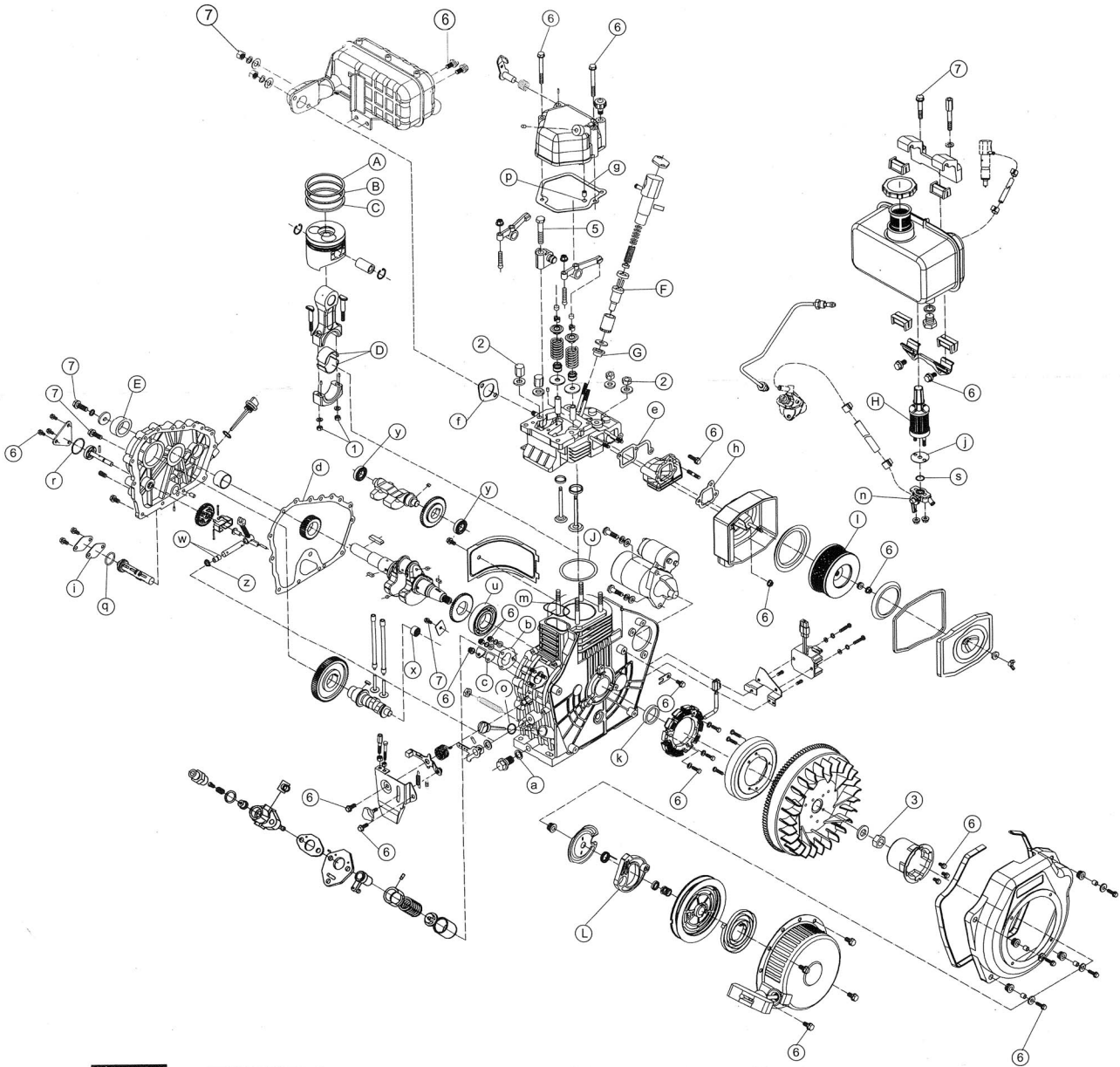


This catalog covers:
KM170

PARTS CATALOG

AIR-COOLED DIESEL ENGINE KM170

BOKE



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.

WARNING
This light diesel fuel is a common fire hazard. Use only clean, dry fuel. Do not use kerosene or other petroleum products. Do not use fuel with a flash point below 60°C (140°F). Do not use fuel with a cetane number below 40. Do not use fuel with a sulfur content above 0.05%.

CAUTION
Do not touch the engine or its parts when it is hot. Do not touch the engine or its parts when it is running. Do not touch the engine or its parts when it is under repair. Do not touch the engine or its parts when it is being tested.

READ MANUAL CAREFULLY BEFORE OPERATION

DANGER Do not touch the engine or its parts when it is hot. Do not touch the engine or its parts when it is running. Do not touch the engine or its parts when it is under repair. Do not touch the engine or its parts when it is being tested.

WARNING: EXTREMELY FLAMMABLE
Diesel fuel is extremely flammable. Do not use open flames, matches, or cigarettes near the engine. Do not use fuel with a flash point below 60°C (140°F). Do not use fuel with a cetane number below 40. Do not use fuel with a sulfur content above 0.05%.

TAGS

Ref No.	Part No.	Description	Qty.
1	KM168F-18003	Trademark Tag I	1
2	KM168F-18004	Starting Operation Tag	1
3	KM168F-18005	Caution Tag	1
4	KM170F-18007	Model Tag II	1
5	KM168F-18009	Warning Tag	1
6	KM168F-18012	Air Cleaner Tag	1
7	KM168F-18013	Air Cleaner Tag	1

EASY DESTROYED PARTS

Ref No.	Part No.	Description	Qty.	Mounted to
A	KM170F-04001	First Air Ring	1	(4)Piston & Connecting Rod Assem
B	KM170F-04002	Second Air Ring	1	(4)Piston & Connecting Rod Assem
C	KM170F-04100	Oil Ring Unit	1	(4)Piston & Connecting Rod Assem
D	KM168F-04005	Connecting Rod Bushing	2	(4)Piston & Connecting Rod Assem
E	GB/T9877.1-1988	Oil Seal SG35 x 42 x 8(front)	1	(1)Cylinder Block Assem
F	KM170F-02011	Nozzle	1	(8)Fuel Injection Valve Assem
G	KM170F-02010	Heat Insulator	1	(2)Cylinder Head Assem
H	KM168F-10300	Element Unit	1	(1)Fuel System
I	KM168F-07100	Air Cleaning Element Unit	1	(7)Air Intake System
J	KM170F-01013	Cylinder Head Gasket	1	(1)CylinderBlock Assem.
K	GB/T9877.1-1988	Oil Seal SG30 x 45 x 8(rear)	1	(1)CylinderBlock Assem.
L	KM168F-14001	Ratchet	1	(14)Manual Starting Assem.

RINGS

Ref No.	Part No.	Description	Qty.
m	KM168F-01008	Sheet Gasket	1
n	GB/T1235-1976	O-Ring 11 x 1.9	1
o	GB/T1235-1976	O-Ring 22.5 x 2.4	2
p	GB/T1235-1976	O-Ring 12 x 1.9	1
q	GB/T1235-1976	O-Ring 25 x 2.4	1
r	GB/T3452.1-1992	O-Ring 34 x 1.8	1
s	GB/T3452.1-1992	O-Ring 13.2 x 1.8	1

FASTENING TORQUE OF MAIN BOLTS & NUTS

Ref No.	Description	Torque
①	Connecting Rod Nut	18-21
②	Cylinder Head Nut	28-32
③	Flywheel Nut	100-120
④	Nozzle Retainer Nut	10-12
⑤	Set Bolt of Rocker Arm Seal	20-23
⑥	Standard Bolt / Nut M8	10-12
⑦	Standard Bolt / Nut M6	18-20

BEARINGS

Ref No.	Part No.	Description	Qty.
U	GB/T276-1994	Ball Bearing 6306/P5	1
w	GB/T290-1989	Needle Bearing 7941/8	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	KM168F-10008	Lever Shaft Oil Seal	1

WASHER KIT

Ref No.	Part Number	Description	Qty.
a	KM168F-01100	Washer Unit of Drain Plug	1
b	KM168F-10014	Fuel Injection Pump Washer	2-3
c	KM168F-10016	Joint Washer	1
d	KM168F-02014	Crankcase Cover Washer	1
e	KM168F-02015	Intake Pipe Washer	1
f	KM168F-02015	Muffler Washer	1
g	KM168F-03003	Cylinder Head Cover Washer	1
h	KM168F-07001	Air Cleaner Washer	1
i	KM168F-09002	Washer of Engine Oil Filter Cover Board	1
j	KM168F-10007	Fuel Filter Washer	1

(1) Cylinder Block Assembly (KM170F(E)-0100)

Ref No.	Parts No.	Description	Qty.
1	KM168F-01018	Drain Plug Screw	1
2	KM168F-01100	Washer Unit of Drain Plug	1
3	GB/T8077.1-1988	Oil Seal 52X35.45X(8year)	1
4	KM170F-01001	Cylinder Block	1
5	KM170F-01001	Cylinder Block	1
6	GB/T2924-1988	Needle Bearing204/18	2
7	GB/T1235-1976	O-Ring 22.5X2.4	2
8	KM168F-01002	Oil Dipstick	1
9	KM168F-11200	Fuel Controller Assem.	1
10	KM168F-01012	Forcing Stud of Fuel Injection Pump (short)	1
11	KM168F-01011	Forcing Stud of Fuel Injection Pump (long)	1
12	KM168F-10014	Fuel Injection Pump Washer	1
13	KM168F-10016	Joint Washer	1
14	KM168F-10015	Seal Plate	1
15	GB/T197.1-2000	Nut M6	1
16	GB/T93-1987	Gasket 6	2
17	GB/T93-1987	Gasket 6	2
18	GB/T197.1-2000	Nut M6	1
19	GB/T290-1989	Needle Bearing HK1512	1
20	KM168F-01009	Thrust Plate	1
21	GB/T5789-1986	Bolt M6x12	1
22	GB/T276-1994	Ball Bearing 6306P5	1
23	KM168F-01019	Air Cover	1
24	GB/T5789-1986	Bolt M6x12	1
25	KM168F-01008	Sheet Gasket	1
26	KM168F-01006	Cylinder Head Stud Bolt (long)	2
27	KM168F-01003	Cylinder Head Stud Bolt (short)	2
28	KM170F-01013	Cylinder Head Shim	1
29	KM170F-01013	Cylinder Head Shim	1
30	KM168F-01005	Crankcase Cover Washer	4
31	KM168F-01004	Cylinder Head Nut (Thin)	2
32	KM168F-01007	Cylinder Head Nut (Thick)	2
33	KM168F-01015	Crankcase Cover Washer	1
34	KM168F-01014	Ball Bearing	1
35	KM168F-01016a	Crankcase Cover	1
36	KM170F-01016	Crankcase Cover	1
37	GB/T5789-1986	Bolt M6x33.5	1
38	GB/T5789-1986	Bolt M6x33.5	1
39	KM168F-01017	Hexagonal Internal Screw Plug	1
40	GB/T197.1-2000	Nut M6	2
1	KM170F-01022	Block	1
2	GB/T276-1994	Ball Bearing 6205P5	1

(3) Cylinder Head Cover Assem. (KM168F-03000)

Ref No.	Parts No.	Description	Qty.
1	GB/T119-1986	Pin 3x16	1
2	KM168F-03001	Cylinder Head Cover	1
2-1	KM170F-03001	Cylinder Head Cover	1
3	KM168F-03007	Brass Washer	1
4	GB/T1235-1976	O-Ring 12x1.9	1
5	KM168F-03003	Cylinder Head Cover Washer	1
5-1	KM170F-03003	Cylinder Head Cover Washer	1
6	KM168F-01021	Plunger	1
7	KM168F-03004	Decompression Spring	1
8	KM168F-03100	Decompression Shaft Assem.	1
9	GB/T5789-1986	Bolt M6x55	2
10	KM168F-03005	Filler Screw Plug	1
1	KM168F-03000	Decompression Wire Sheath	2
2	KM168F-03100	Decompression Shaft Assem.	1
3	KM170F-G-03011	Decompression Wire	1
4	KM178F-G-03009	Outer Decompression Handle	1
5	KM178F-G-03008	Decompression Handle Support	1
6	GB/T5789-1986	Bolt M6x14	3
7	KM178F-G-03013	Outer Decompression Handle Sheath	1
8	GB/T170-2000	Nut M6	1
1	KM170F-03000	Decompression Wire Sheath	2
2	KM168F-03100	Decompression Shaft Assem.	1
3	KM170F-G-03011	Decompression Wire	1
4	KM178F-G-03009	Outer Decompression Handle	1
5	KM178F-G-03008	Decompression Handle Support	1
6	GB/T5789-1986	Bolt M6x14	3
7	KM178F-G-03013	Outer Decompression Handle Sheath	1
8	GB/T170-2000	Nut M6	1
1	KM170F-03000	Decompression Wire Sheath	2
2	KM168F-03100	Decompression Shaft Assem.	1
3	KM170F-G-03011	Decompression Wire	1
4	KM178F-G-03009	Outer Decompression Handle	1
5	KM178F-G-03008	Decompression Handle Support	1
6	GB/T5789-1986	Bolt M6x14	3
7	KM178F-G-03013	Outer Decompression Handle Sheath	1
8	GB/T170-2000	Nut M6	1

(6) Camshaft (KM168F-06000)

Ref No.	Parts No.	Description	Qty.
1	KM168F-06100	Valve Push Rod Assem.	2
2	KM168F-06003	Valve Tappet	2
3	KM168F-06002	Camshaft Timing Gear	1
4	GB/T1098-1979	Key 5x14	1
5	KM168F-06001	Camshaft	1
5-1	KM170F-06001	Camshaft	1
1	GB/T1098-1979	Key 5x30	1

(2) Cylinder Head Assem. (KM168F-02000)

Ref No.	Parts No.	Description	Qty.
1	KM168F-02014	Intake Pipe Shim	1
1-1	KM170F-02014	Intake Pipe Shim	1
2	KM168F-02002	Cylinder Cover	1
2-1	KM170F-02002	Cylinder Cover	1
3	KM168F-02004	Intake Valve	1
4	KM168F-02003	Exhaust Valve	1
5	KM168F-02004	Intake Valve Seat	1
6	KM168F-02004	Exhaust Valve Seat	1
7	GB/T197.1-2000	Pin 3x8	1
8	KM168F-02015	Muffler Shim	1
9	KM168F-02021	Valve Couddit	1
10	GB/T119-1-2000	Pin 3x8	1
11	KM168F-02007	Valve Spring Gasket	2
12	KM168F-02006	Valve Contact Oil Seal	2
13	KM168F-02005	Valve Spring	2
14	KM168F-02002	Valve Spring Seat	1
15	KM168F-02001	Valve Retaining Clip	4
16	KM168F-02019	Valve Clearance adjusting locking Nut	2
17	KM168F-02018	Valve Adjusting Cushion	2
18	KM168F-02017	Exhaust Valve Rocker Arm	1
19-1	KM170F-02017	Exhaust Valve Rocker Arm	1
20	KM170F-02017	Set Bolt of Rocker Arm Sea	1
21	KM168F-02014	Intake Valve Rocker Arm	1
21-1	KM170F-02100	Rocker Arm Seat Assem.	1
22	KM168F-02013	Intake Valve Rocker Arm	1
23	KM168F-02013	Intake Valve Rocker Arm	1
24	KM168F-02012	Fuel Injection Valve Retainer	1
25	KM170F-02011	Heat Insulator Gasket	1
26	KM170F-02011	Heat Insulator	1
26-1	GB/T900-1988	Stud AM6x55	1
27	GB/T900-1988	Stud AM6x55	1
27-1	GB/T900-1988	Stud AM6x55	1
28	GB/T5789-1986	Bolt M6x25	2
29	GB/T5789-1986	Bolt M6x25	2
30	KM170F-02000	Block	1
31	GB/T119-1-2000	Pin 3x8	2
32	GB/T5789-1986	Bolt M6x25	2

(4) Piston & Connecting Rod Assem. (KM170F-04000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-04001	First Air Ring	1
2	KM170F-04002	Second Air Ring	1
3	KM170F-04003	Piston	1
4	KM170F-04003	Piston	1
4-1	KM170F-04003	Piston	1
5	KM170F-04004	Piston Pin	1
6	GB/T309-1985	Ball Retainer Ring	2
7	KM168F-04008	Connecting Rod Bolt	2
7-1	KM170F-04024	Connecting Rod Bolt	2
8	KM168F-04007	Connecting Rod Bolt	1
8-1	KM170F-04202	Connecting Rod Bolt	1
9	KM168F-04005	Connecting Rod Shaft Bushing	2
10	GB/T197.1-2000	Pin 3x10	2
11	KM168F-04006	Connecting Rod Cover	1
11-1	KM170F-04203	Connecting Rod Cover	1
12	KM168F-04009	Connecting Rod Bolt Gasket	2
13	KM168F-04011	Connecting Rod Nut	2

(7) Air Intake System (KM168F-07000)

Ref No.	Parts No.	Description	Qty.
1	KM168F-07401	Intlet Pipe	1
1-1	KM170F-07401	Intlet Pipe	1
2	KM168F-07402	Tightening Bolt of Air Cleaner	1
3	KM168F-07001	Air Cleaning Washer	1
4	KM168F-07300	Air Cleaning Bottom Case Assem.	1
5	GB/T177-1-2000	Nut M6	4
6	KM168F-07303	Shockproof Sheet Gasket II	1
7	KM168F-07100	Air Cleaner Element Assem.	1
8	KM168F-07101	Shockproof Unit	1
9	KM168F-07203	Shockproof Sheet Gasket I	1
10	KM168F-07201	Sheet Gasket	1
11	KM168F-07202	Air Cleaner Cover	1
12	KM168F-07210	Shockproof Seal Assem.	1
13	GB/T62-1988	Nut M6	1

(5) Crankshaft & Flywheel Assem. (KM168F-05000)

Ref No.	Parts No.	Description	Qty.
1	GB/T276-1994	Ball Bearing 6202P5	2
2	KM168F-05001	Balance shaft	1
3	KM168F-05006	Key	2
4	KM170F-05004	Drive Gear of Balance Shaft	2
5	KM168F-05007	Output End Set Bolt	1
6	GB/T309-1985	Ball Retainer Ring	2
7	KM168F-05005	Output End Gasket	1
8	KM168F-05203	Crankshaft Timing Gear	1
9	GB/T1098-1979	Key 5x30	1
10	KM168F-05201	Crankshaft	1
11	KM168F-05201	Crankshaft	1
12	KM168F-05201	Crankshaft	1
13	KM170F-05201	Crankshaft	1
14	GB/T308-1989	Steel Ball 14	1
15	GB/T1098-1979	Key 5x12	2
16	KM168F-05102	Flywheel Tooth	1
17	KM168F-05101	Flywheel Tooth	1
18	KM170F-05101	Flywheel	1
19	KM168F-05003	Flywheel Nut Gasket	1
20	KM168F-05002	Flywheel	1
21	KM168F-05001	Starting Ratchet Reel	1
22	GB/T5789-1986	Bolt M6x12	3

(8) Fuel Injection Valve Assem. (KM168F-13000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-13200a	Fuel Injection Valve Block	1
2	GB/T879-1986	Pin 3x5	5
3	KM170F-13006	Volt-adjustment Washer	As Required
4	KM170F-13007	High-pressure Sheet Gasket 2	1
5	KM170F-13005	High-pressure Sheet Gasket 1	1
6	KM170F-13004	Intermediate Block	1
7	KM170F-13003	Locating Pin	2
8	KM170F-13100	Fuel Injection Nozzle	1
9	KM170F-13002	Nozzle Block Plunger Assem	1
1	KM170F-13000	Fuel Injection Valve Assem	1

(9) Muffler Assem. (KM168F-08000)

Ref No.	Parts No.	Description	Qty.
1	KM168F-08000	Muffler Assem.	1
2	GB/T6170-2000	Bolt M8	2
3	GB/T93-1987	Gasket 8	2
4	GB/T93-1-1985	Gasket 8	2
5	GB/T5789-1986	Bolt M6x14	2
1	KM168F-G-08000	Nut M8	2
2	GB/T93-1987	Gasket 8	2
3	GB/T93-1-1985	Gasket 8	2
4	KM168F-G-08000	Muffler Assem.	1
5	GB/T5789-1986	Bolt M6x14	2

(11) Fuel System (KM168F-10000)

Ref No.	Parts No.	Description	Qty.
1	GB/T5789-1986	Bolt M6x45	1
2	KM168F-10003	Set Bolt of Fuel Tank Upper Support	1
3	GB/T93-1-1985	Gasket 6	1
4	KM168F-10001	Fuel Tank Upper Support	1
5	KM168F-10002	Cushion	4
6	KM168F-10013	Fuel Return Pipe Clip	2
7	KM168F-10012	Fuel Return Pipe	1
8	KM168F-10012	Fuel Return Pipe	1
9	KM168F-10008	Drain Bolt Washer	1
9	GB/T5786-2000	Bolt M12x1.25x14	1
10	KM168F-10600	Fuel Tank Lower Support	1
11	GB/T5789-1986	Bolt M6x14	2
12	GB/T6171-1988	Nut M6	2
13	KM168F-10400	Fuel Tank Switch Assem.	1
14	GB/T3452.1-1992	O-Ring 13.2x1.8	1
15	KM168F-10011	Clip	2
16	KM168F-10009	Fuel Filter	1
17	KM168F-10007	Fuel Filter Washer	1
18	KM168F-10300	Element Assem.	1
19	KM168F-10200	Fuel Tank Weldment Assem.	1
20	KM168F-10004	Fuel Filter Screen	1
21	KM168F-10100	Fuel Tank Cap	1
22	KM168F-10500	High-pressure Fuel Pipe Unit	1
22-1	KM170F-10500	High-pressure Fuel Pipe Unit	1
1	KM170F-10500	High-pressure Fuel Pipe Unit	1
2	KDE5000E-3000A	Cushion	4
3	KDE5000E-3000S	Shaft	4
4	KDE5000E-31000	Fuel Tank Weldment Assem.	1
5	KM168F-10004	Fuel Filter Screen	1
6	KM168F-10004	Fuel Filter Screen	1
7	GB/T93-1987	Spring Gasket 5	2
8	GB/T93-1-1985	Gasket 5	2
9	GB/T618.1-2000	Plus Screw M5x12	2
10	KM168F-10300	Element Assem.	1
11	KM168F-10007	Fuel Cleaner Washer	1
12	KDE5000E-31007	Joint Washer	2
13	KDE5000E-31006	Sealing Plate	1
14	GB/T819.1-2000	Plus Screw M5x8	3
15	GB/T3452.1-1992	O-Ring 13.2x1.8	1
16	KM168F-10400	Throttle Switch Assem.	1
17	GB/T618-1986	Nut M6	2

(12) Manual Starting Assem. (KM168F-12000)

Ref No.	Parts No.	Description	Qty.
1	KM170F-12001	Fuel Delivery Valve Forcing Holder	1
2	KM170F-12002	Dumping Block	1
3	KM170F-12003	Fuel Delivery Valve Spring	1
4	KM170F-12011	High-pressure Sheet Gasket 2	1
5	KM170F-12100	Fuel Delivery Assembly	1
6	KM170F-12400a	Fuel Filled Pipe	1
7	KM170F-12200	PIP Block Plunger Assem	1
8	KM170F-12004	Adjusting Washer	As Required
9	GB/T879-1986	Pin 2x8	2
10	KM170F-12005	PIP Connecting Plate	1
11	KM170F-12006	Spring	1
12	GB/T879-1986	Pin 3x8	1
13	KM170F-12007	Support	1
14	KM170F-12008	Spring	1
15	KM170F-120		