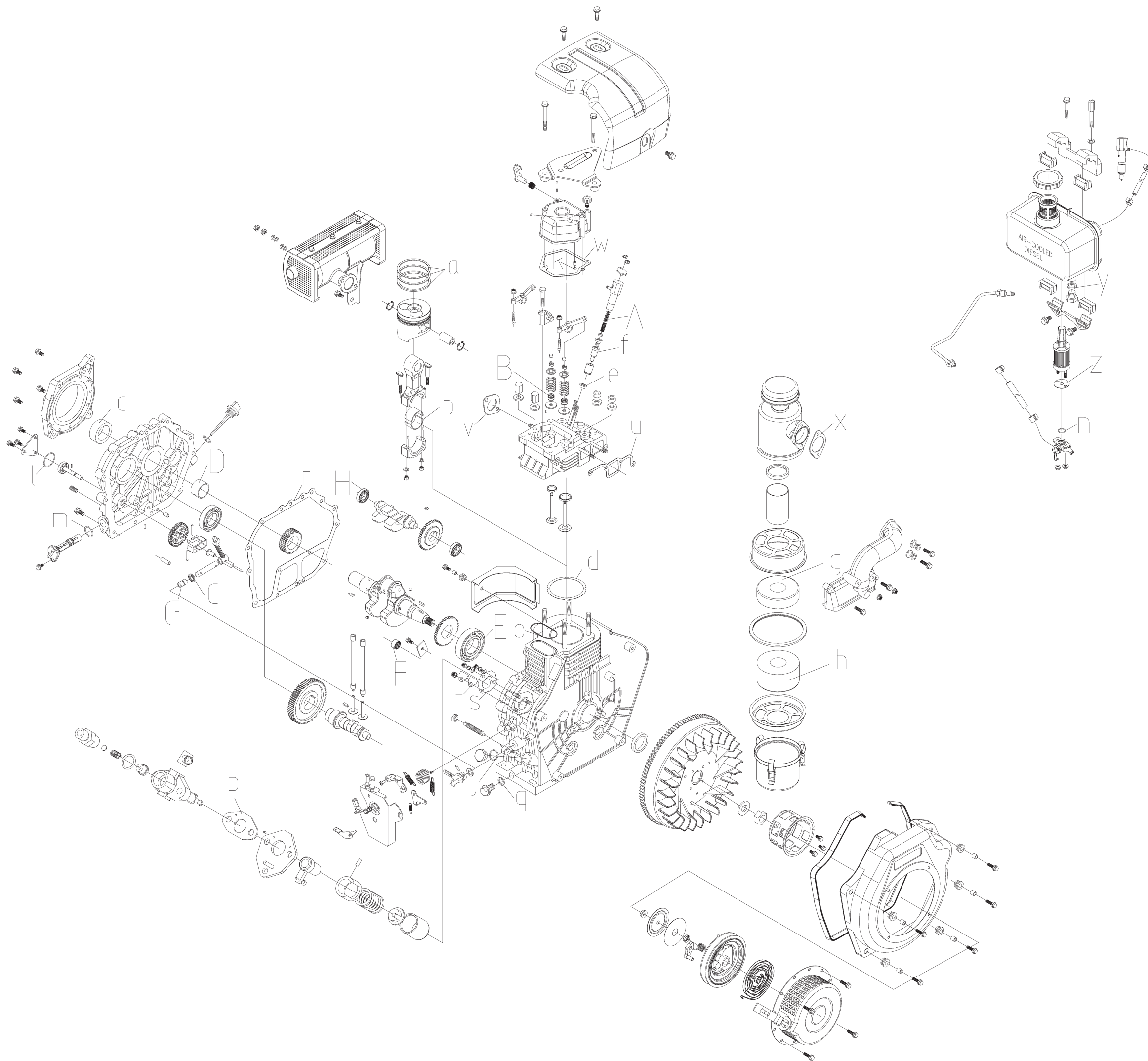


ASSEMBLY AND PARTS ALBUM

KM178FY



Easy-destroyed parts

No.	Part No.	Description	Qty.
a	KM178F-04100T	Piston ring	1
b	KM178F-04005	Connecting rod bearing shell	2
c	KM178F-01019	Oil seal 30X45X8	2
d	KM178F-01012a	Cylinder head gasket	1
e	KM170F-02011	Injector heat insulator	1
f	KM170F-13100	Fuel injection nozzles	1
g	KM186FS-07323	Fine filter element	1
h	KM186FS-07326	Coarse filter element	1

Seal ring

No.	Part No.	Description	Qty.
j	KM168F-01024	O seal ring 22.5X2.4	2
k	KM168F-03009	O seal ring 12X1.9	1
l	KM168F-09006	O seal ring 34X1.8	1
m	KM168F-09005	O seal ring 25X2.4	1
n	KM168F-10017	O seal ring 14X1.6	1
o	KM178F-01007	Seal ring	1

Gasket

No.	Part No.	Description	Qty.
p	KM170F-12004	Adjusting gasket	some
q	KM170F-01023	Oil drain plug gasket	2
r	KM178F-01013	Crankshaft housing cover gasket	1
s	KM168F-10014	Fuel injection pump gasket	2-3
t	KM168F-10016	Seal plate gasket	1
u	KM178F-02006	Air intake pipe gasket	1
v	KM168F-02015	Air exhaust pipe gasket	1
w	KM168F-03003	Cylinder head cover hood gasket	1
x	KM186FS-07002	Air filter flange gasket	1
y	KM168F-10008	Oil drain bolt gasket	1
z	KM168F-10007	Diesel filter gasket	1
A	KM170F-13007	Pressure adjusting gasket	some

Oil seal

No.	Part No.	Description	Qty.
B	KM178F-02015	Valve guide oil seal	2
C	KM168F-11008	Lever shaft oil seal	1

Bearing

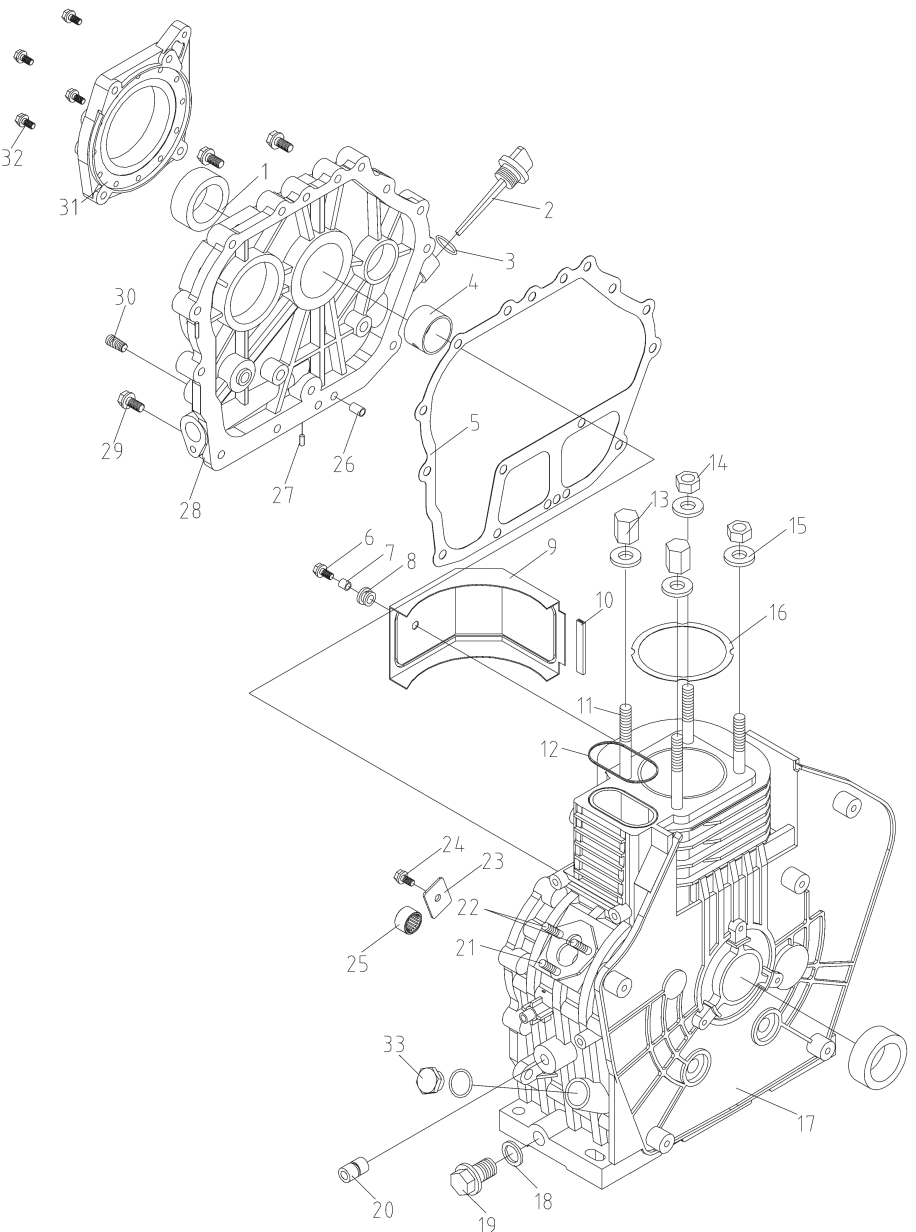
No.	Part No.	Description	Qty.
D	KM178F-01015	Sliding bearing	1
E	GB/T276-1994	Rolling bearing 6307/P5	1
F	GB/T290-1998	Needle bearing HK1512	1
G	GB/T290-1998	Needle bearing HK0810	2
H	GB/T276-1994	Rolling bearing 6202/P5	2

Tightening torque for main nuts and bolts

No.	Description	N.m
①	Connecting bolt	18-21
②	Cylinder head nut	42-46
③	Flywheel nut	100-120
④	Fuel injector pressing plate nut	10-12
⑤	Tightening nut of rocker arm seat	20-23
⑥	Standard M6 bolt/nut	10-12
⑦	Standard M8 bolt/nut	18-20

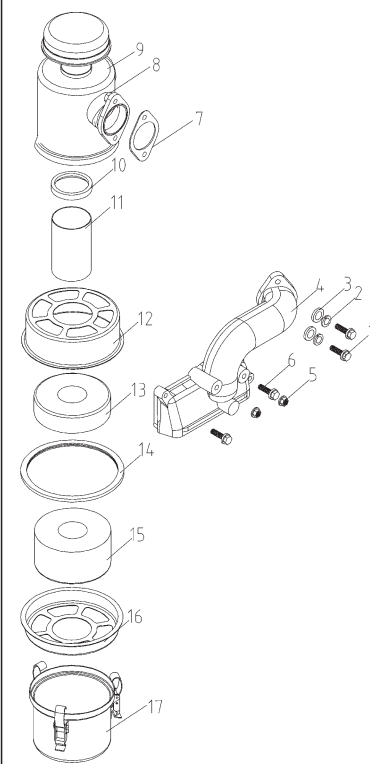
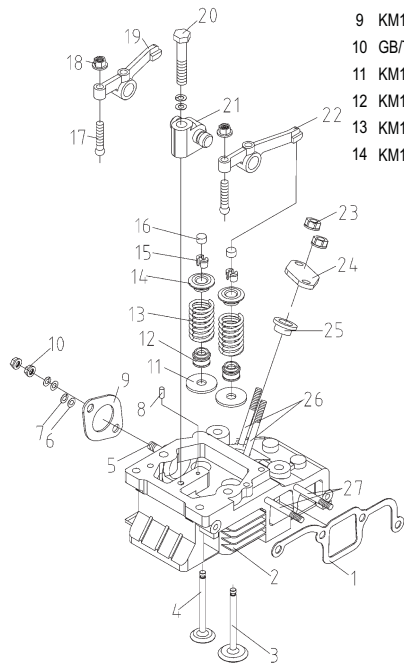
Engine block assy KM178FYE-01000

No.	Part No.	Description	Qty.
1	KM178F-01019	Oil seal 30X45X8	2
2	KM178F-01002	Oil dipstick	1
3	KM168F-01024	O seal ring 22.5X2.4	2
4	KM178F-01015	Sliding bearing	1
5	KM178F-01013	Crankshaft housing cover gasket	1
6	GB/T5789-1986	Bolt M6X20	1
7	KM178F-01202	Bushing	1
8	KM178F-01201	Shock pad	1
9	KM178F-01211	Air induced plate	1
10	KM178F-01203	Shock pad	1
11	KM178F-01004	Double-head stud for cylinder head	4
12	KM178F-01007	Seal ring	1
13	KM178F-01005	Cylinder head nut (thick)	2
14	KM178F-01003	Cylinder head nut (thin)	2
15	KM178F-01006	Cylinder head Nut washer	4
16	KM178F-01012a	Cylinder head gasket	1
17	KM178F-01001	Engine block	1



Cylinder head assy KM178F-02000

No.	Part No.	Description	Qty.
1	KM178F-02006	Air intake pipe gasket	1
2	KM178F-02100	Cylinder head	1
3	KM178F-02016a	Air intake valve	1
4	KM178F-02017a	Air exhaust valve	1
5	GB/T899-1988	Stud AM8X20	2
6	GB/T93-1987	Washer 8	3
7	GB/T97.1-2002	Washer 8	3
8	GB/T119.2-2000	Pin 4X8	1
9	KM168F-02015	Air exhaust pipe gasket	1
10	GB/T6170-2000	Nut M8	2
11	KM168F-02007	Valve spring washer	2
12	KM178F-02015	Valve guide oil seal	2
13	KM178F-02001	Valve spring	2
14	KM178F-02014a	Valve spring seat	2

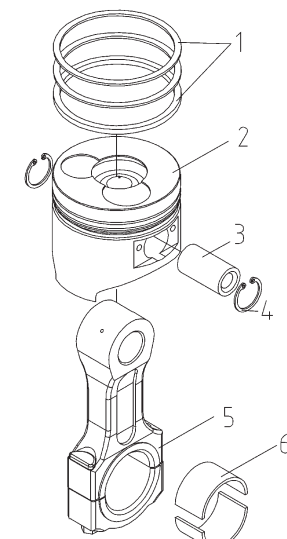
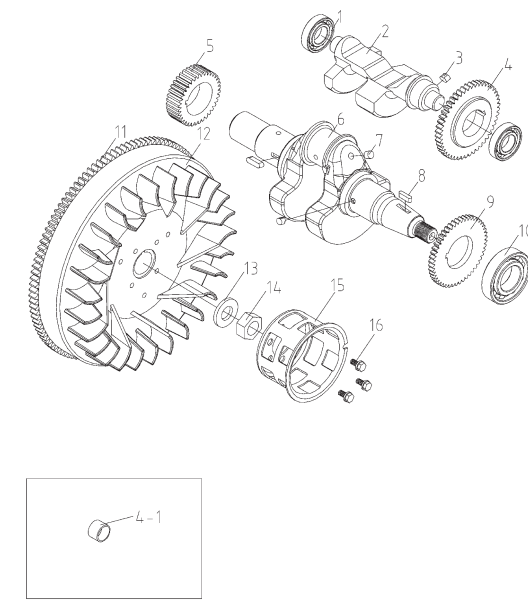


Air intake system KM178FY-07000a

No.	Part No.	Description	Qty.
1	GB/T5782-2000	Bolt M8X35	2
2	GB/T93-1987	Washer 8	2
3	GB/T848-2002	Washer 8	4
4	KM178FY-07001	Air intake pipe	1
5	GB/T6177.1-2000	Nut M6	2
6	GB/T5789-1986	Bolt M6X25	2
7	KM186FS-07002	Air filter flange gasket	1
8	GB/T6170-2000	Nut M8	2
9	KM186FS-07310	Upper part of air filter	1
10	KM186FS-07324	Rubber seal ring	1
11	KM186FS-07325	Air pipe	1
12	KM186FS-07322	Fine filter element cover	1
13	KM186FS-07323	Fine filter element	1
14	KM186FS-07321	Rubber seal ring	1
15	KM186FS-07326	Coarse filter element	1
16	KM186FS-07327	Coarse filter element cover	1
17	KM186FS-07330	Lower part of air filter	1

Crankshaft and flywheel assy KM178FYE-05000

No.	Part No.	Description	Qty.
1	GB/T276-1994	Rolling bearing 6202/P5	2
2	KM178F-05009	Balanced shaft	1
3	KM168F-05006	Key	2
4	KM178F-05014	Balanced shaft timing gear	1
4-1	KM178F-05012a	Bushing	1
5	KM178F-05007	Crankshaft timing gear	1
6	KM178FG(6)-05006	Crankshaft	1
7	GB/T308-2002	Steel ball S 6.35	1
8	GB/T1096-2003	Key 5X12	2
9	KM178F-05012	Balanced shaft driving gear	1
10	GB/T276-1994	Rolling bearing 6207/P5	1
11	KM178FE-05102	Flywheel ring gear	1
12	KM178F-05101	Flywheel	1
13	KM168F-05003	Flywheel nut washer	1
14	KM168F-05002	Flywheel nut	1
15	KM178F-05001	Starting claw	1
16	GB/T5789-1986	Bolt M6X12	3

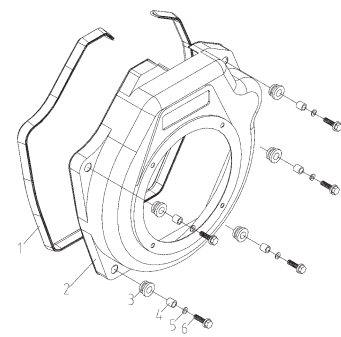


Piston and connecting rod assy KM178F-04000

No.	Part No.	Description	Qty.
1	KM170F-04100T	Piston ring	1
2	KM178F-04003	Piston	1
3	KM178F-04004	Piston pin	1
4	GB/T89.3-1986	Retainer 21	2
5	KM178F-04200T	Connecting rod	1
6	KM178F-04005	Connecting rod bearing bush	2

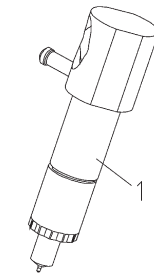
Windscooper assy KM178F-17000

No.	Part No.	Description	Qty.
1	KM178F-17003	Shock absorption cushion	1
2	KM178F-17100	Windscooper	1
3	KM168F-17002	Shock absorption sleeve	5
4	KM168F-17001	Bushing	5
5	GB/T96.1-2002	Washer 6	5
6	GB/T5789-1986	Bolt M6X22	5



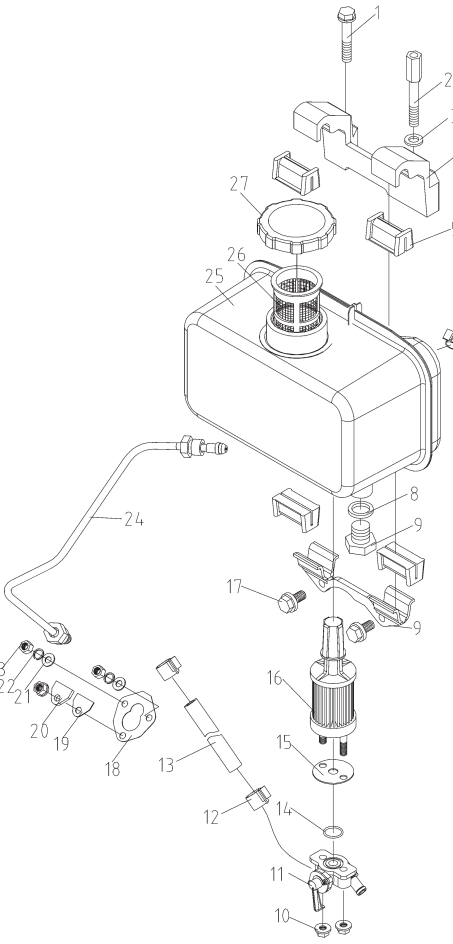
Fue injector assy KM178F-13000

No.	Part No.	Description	Qty.
1	KM178F-13000	Fue injector assy	1



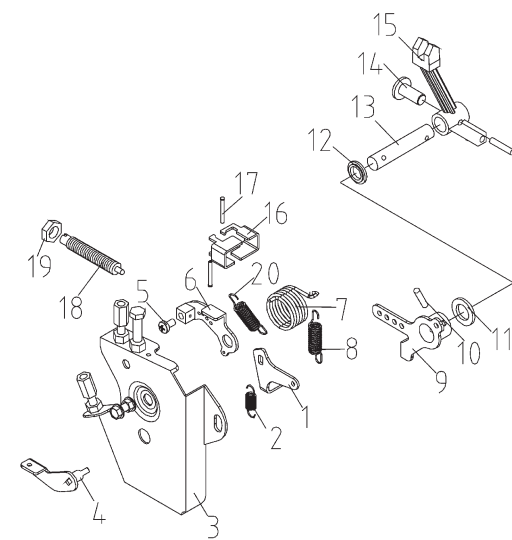
Fuel system KM178F-10000

No.	Part No.	Description	Qty.
1	GB/T5789-1986	Bolt M8X45	1
2	KM168F-10003	Tightening bolt for upper bracket of fuel tank	1
3	GB/T97.1-2002	Washer 8	1
4	KM178F-10001	Upper bracket of fuel tank	1
5	KM168F-10002	Shock pad	4
6	KM168F-10012	Oil returning pipe	1
7	KM168F-10013	Oil returning pipe clamp	2
8	KM168F-10008	Oil drain bolt gasket	1
9	KM168F-10600	Lower bracket of fuel tank	1
10	GB/T6177.1-2000	Nut M6	3
11	KM168F-10400	Fuel tank switch	1
12	KM168F-10011	Clamp	2
13	KM178F-10009	Fuel supply pipe	1
14	KM168F-10017	O seal ring 14X1.6	1
15	KM168F-10007	Fuel filter gasket	1
16	KM178F-10300	Filter element	1
17	GB/T5789-1986	Bolt M6X14	2
18	KM168F-10014	Fuel injection pump	2-3
19	KM168F-10016	Seal gasket	1
20	KM168F-10015	Seal plate	1
21	GB/T97.1-2002	Washer 6	2
22	GB/T93-1987	Washer 6	2
23	GB/T6170-2000	Nut M6	2
24	KM178F-10500a	High pressure fuel pipe	1
25	KM178F-10200	Fuel tank	1
26	KM168F-10004	Fuel filling strainer	1
27	KM168F-10100	Fuel tank cap	1



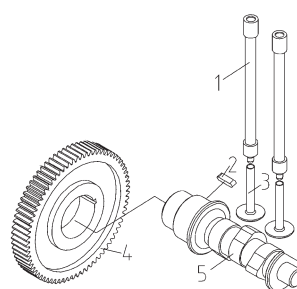
Speed regulating and operation system KM178FY-11000

No.	Part No.	Description	Qty.
1	KM178FY-11301a	Oil throttle shift lever	1
2	KM168F-11006	Returning spring II	1
3	KM170FY-11320	Steering lever bracket	1
4	KM178FY-11310	Steering lever shaft	1
5	GB/T29.2-1988	Bolt M5X8	1
6	KM170FY-11330	Speed regulating lever	1
7	KM168F-11005	Returning spring I	1
8	KM170FY-11007	Speed regulating spring	1
9	KM168F-11110	Speed regulating lever	1
10	GB/T117-2000	Pin 3X22	2
11	KM168F-11003	Washer	2
12	KM168F-11008	Lever shaft oil seal	1
13	KM168F-11012	Lever shaft	1
14	KM168F-11004	Speed regulating push disc	1
15	KM178F-11101	Fork	1
16	KM168F-11001	Flyweight	2
17	KM168F-11002	Flyweight pin	2
18	KM168F-11200	Fuel level controller	1
19	GB/T6173-2000	Nut M10X1.25	1
20	KM170FY-11009	Oil throttle thtension spring	1



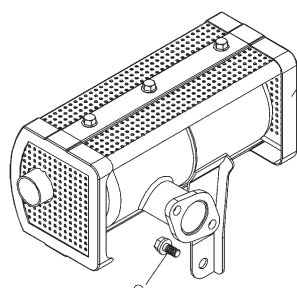
Camshaft assy KM178F-06000

No.	Part No.	Description	Qty.
1	KM178F-06100	Valve push rod	2
2	GB/T1096-2003	Key 4X12	1
3	KM178F-06003	Valve tappet	2
4	KM178F-06002	Camshaft timing gear	1
5	KM178F-06001	Camshaft	1
6	GB/T1096-2003	Key 8X40	1



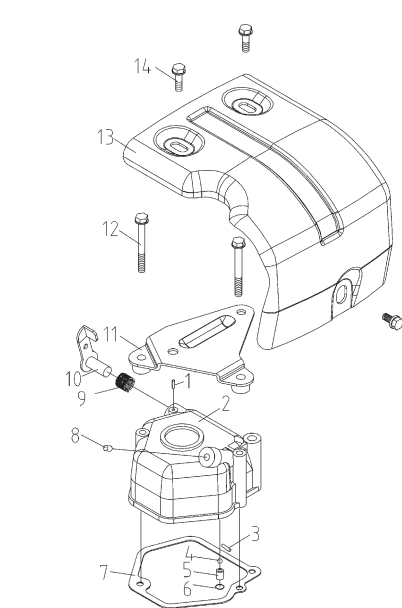
Air exhaust system KM170FY-08000

No.	Part No.	Description	Qty.
1	KM170FY-08100	Muffler	1
2	GB/T5789-1986	Bolt M8X14	1



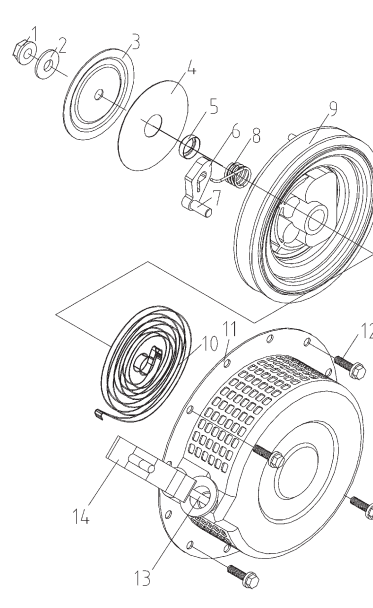
Cylinder head hood assy KM170FY-03000

No.	Part No.	Description	Qty.
1	GB/T119.2-2000	Pin 3X16	1
2	KM168F-03001	Cylinder head hood	1
3	KM168F-03008	Pin	1
4	KM168F-03006	Ball	1
5	KM168F-03007	Breather seat	1
6	KM168F-03009	O seal ring 12X1.9	1
7	KM168F-03003	Cylinder head hood gasket	1
8	KM168F-01021	Plug	1
9	KM168F-03004	Decompression spring	1
10	KM168F-03100	Decompression shaft	1
11	KM170FY-03200	Guard hood bracket welded	1
12	GB/T5789-1986	Bolt M6X55	2
13	KM170FY-03011	Guard hood	1
14	GB/T5789-1986	Bolt M6X12	3



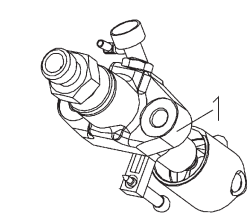
Recoil starter assy KM178F-14000

No.	Part No.	Description	Qty.
1	GB/T6187.1-2000	Nut M8	1
2	GB/T93-1987	Washer 8	1
3	KM178F-14004	Friction disc	1
4	KM178F-14002	Friction slice	1
5	KM178F-14003	Spring cover	1
6	KM178F-14201	Starting claw	1
7	KM178F-14202	Starting claw shaft	1
8	KM178F-14009	Returning spring	1
9	KM178F-14001	Starting pulling plate	1
10	KM168F-14009	Spiral spring	1
11	KM178F-14100	Shell	1
12	GB/T5789-1986	Bolt M6X8	4
13	KM178F-14005	Starting rope	1
14	KM178F-14007	Starting lever	1



Fuel Injection pump assy KM178F-12000

No.	Part No.	Description	Qty.
1	KM178F-12000	Fuel Injection pump	1



Lubrication system KM178F-09000

No.	Part No.	Description	Qty.
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	KM168F-09100	Oil pump	1
6	KM178F-09002	Oil pump driving gear	1
7	KM168F-09005	O seal ring 25X2.4	1
8	KM178F-09200	Oil filter	1
9	GB/T5789-1986	Bolt M6X14	1
10	KM178F-09003	Oil inlet pipe	1

