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Many of our products have BIS: ISI certification.



User Manual



All '**FarmBoy**' products are sold without any warranty or guarantee. Please satisfy yourself before buying this product. No returns, exchanges or refunds allowed.

Note: The purchase is not contingent upon a product demonstration. The purchaser shall satisfy himself with the product, including any product demonstration or verification of any function, before buying. KisanKraft Limited or its authorized dealers, including online sellers, shall not be liable to give any on-site demonstration after purchase of any of the product.

KisanKraft Limited

(Formerly known as KisanKraft Machine Tools Pvt Ltd)

Sri Huchhanna Tower, #4, 1st Main, 7-A Cross, Maruthi Layout, Dasarahalli,
HAF Post, Hebbal, Bangalore 560024, Karnataka, INDIA

- ♦ Bangalore (HO) ♦ Ahmedabad ♦ Bhopal ♦ Bhubaneswar ♦ Coimbatore ♦
- ♦ Guwahati ♦ Hubli ♦ Hyderabad ♦ Jaipur ♦ Karnal ♦
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KisanKraft has a large range of products to serve the farmers. A list of our products is given below:

<p>Brush Cutters and Accessories</p> <ul style="list-style-type: none"> Brush Cutter/Power Weeder Backpack Brush Cutter Tea Pruner Pole pruner with Engine Reaper Attachment Blades-Circular Blades (2 & 3 points) Baffle Nylon Rope Tap & Go <p>Chainsaws</p> <ul style="list-style-type: none"> Petrol Chainsaw Electric Chainsaw Chain Sharpening Machine <p>Engines and Water Pumps</p> <ul style="list-style-type: none"> Engine –Diesel-(Horizontal) Engine –Diesel(Vertical) Engine-Kerosene Water Pump with Petrol Engine Water Pump with Kerosene Engine Water Pump with Diesel Engine <p>Hand Tools</p> <ul style="list-style-type: none"> Secateurs Folding Saw Garden Rake Garden Shovel Hedge Shear Lopper Telescopic Hedge Shear Telescopic Lopping Shear Tree Pruner Telescopic Steel Pipe & Fruit Picker Bag Sheep Shear <p>Garden Tools</p> <ul style="list-style-type: none"> Electric Pressure Washer Hedge Trimmer Lawn Mower (Electric, Petrol & Manual) Leaf Blower 	<p>Cultivators and Accessories</p> <ul style="list-style-type: none"> Petrol and Diesel <p>Sprayers and Accessories</p> <ul style="list-style-type: none"> Battery Sprayer Portable Power Sprayer Trolley Sprayer Manual Knapsack Sprayer Manual Pressure Sprayer Rose Cans Hose Crimping Machine HTP Sprayer HTP Delivery Hose HTP Hose Reel HTP Stand HTP Gun / Lance(Brass Rod) Knapsack Power Sprayer Mister / Duster / Granuel Spreader HTP Sprayer Set with Diesel Engine HTP Sprayer Set with Kerosene Engine Fogging Machine <p>Milking Machine</p> <ul style="list-style-type: none"> Wood Shredder Fodder Ensiling Chaff Cutter Fodder Grinder Chaff Cutter Fodder Mini Chaff Cutter <p>Harvester</p> <ul style="list-style-type: none"> Maize Sheller Maize Sheller + Dehusker Maize Combine Harvester Onion Digger Carlotti Italy Tea Leaf Harvester Sugarcane Combine Harvester Sugarcane Leaf Stripper <p>Transplanter and Post Hole Digger</p> <ul style="list-style-type: none"> Paddy Transplanter (2 & 8 Rows) Transplanter-Vegetable & Tobacco Post Hole Digger(4" to 14" Augers)
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Spark Ignition Internal
Combustion Piston Engines
for Agriculture
FB-PE4-106/166/226

SL-No	KK-No	KK-Name	Qty
1	E15-01	Fuel outlet joint	1
2	E15-02	Sleeve Fuel pipe	1
3	E15-03	Fuel tank cap	1
4	E15-04	Gasket Fuel tank Cap	1
5	E15-05	Fuel tank	1
6	E15-06	Fuel Filter	1
7	E15-07	Fuel Tube M4.5x140	1
8	E15-08	Clip Fuel tube	2
9	E15-09	O-ring 14mm(Fuel outlet joint)	1
10	E15-10	Nut M6 Flanged	2
11	E15-11	Bolt M6x30 Flanged Hex	1



Spark Ignition Internal
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CONTENTS

BEFORE GETTING STARTED	4
SAFETY LABELS	4
SAFETY INSTRUCTIONS	4
PRE-OPERATION CHECKS	5
A. Check the oil level	5
B. Fuel level	6
C. Air cleaner	7
STARTING THE ENGINE	8
STOPPING THE ENGINE	9
MAINTENANCE	10
STORAGE	12
TRANSPORTATION	12
TROUBLESHOOTING	12
TECHNICAL SPECIFICATIONS	13
PARTS DIAGRAM & LIST-FB-PE4-106	14
PARTS DIAGRAM & LIST-FB-PE4-166/226	27

BEFORE GETTING STARTED

Thank you for your purchase and use of our products. In order to avoid accidents or injury, **please read this manual carefully** before using the machine. After reading, preserve it for further reference. This manual is a part of the gasoline engine and should be transferred when the machine is resold.

SAFETY LABELS



Indicates a hazard, if not avoided, can result in human injury or death.



Indicates a hazard, if not avoided, could result in human injury and/or property damage.



Indicates a hazard, if not avoided, might result in slight injury and/or property damage.



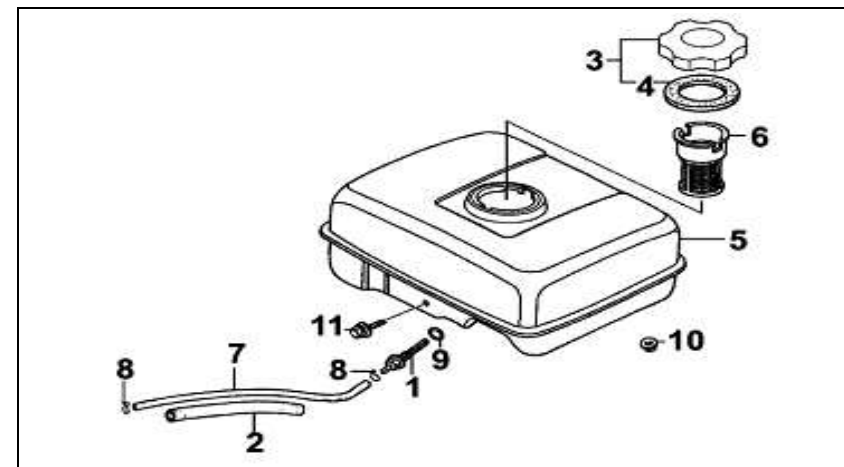
Please read and understand this owner's manual before operation of the engine to avoid accidents by familiarizing yourself with your engine's controls and safe operation procedures.

SAFETY INSTRUCTIONS

1. Please perform some pre-operation checks before operation to avoid human injury and equipment damage.
2. Keep the engine in good ventilated places at least 1 meter away from buildings and other equipment's during operation and keep the flammable substances away from the engine to avoid fire.
3. Keep children and pets away from the operation area.
4. Make sure that the person who operates the engine receives proper instruction.
5. Keep the flammable substances (gasoline, matches) away from the operating engine.
6. As gasoline is extremely flammable and explosive under certain conditions, please refuel in a well-ventilated area with the engine stopped.
7. Do not fill above the shoulder of the fuel strainer.
8. Make sure the fuel cover is tightened.
9. Make sure that any spilled fuel has been wiped off before starting the engine.
10. Do not smoke or allow flames or sparks where the engine is refueled or where gasoline is stored.
11. Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death. Do not operate the engine without good ventilation or in enclosed room.
12. If you run the engine in an area that is confined, or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. Provide adequate ventilation so as to keep exhaust gas from accumulation.

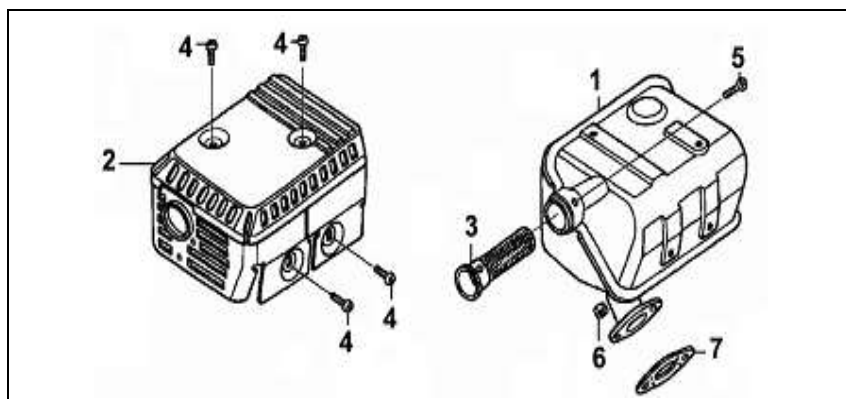
SL-No	KK-No	KK-Name	Qty
1	E14-01	Muffler Assy	1
2	E14-02	N/A	1
3	E14-03	N/A	1
4	E14-04	Screw M5 x 8	4
5	E14-05	N/A	1
6	E14-06	Nut M8	2
7	E14-07	Gasket Muffler	1

Fuel tank



SL-No	KK-No	KK-Name	Qty
7	E13-07	N/A	2
8	E13-08	N/A	1
9	E13-09	Air Cleaner Seat Assy	1
10	E13-10	Butter Fly nut M6	2
11	E13-11	Nut M6	2
12	E13-12	ST Screw M4 x 12	1
13	E13-13	N/A	1
14	E13-14	N/A	1
15	E13-15	N/A	1
16	E13-16	N/A	1
17	E13-17	N/A	1

Muffler



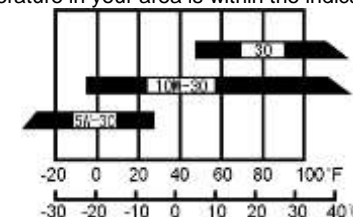
- Place the engine on flat (level) surface, tilting angle of the engine should not be more than 20°, otherwise it will lead to fuel spilling out.
- Do not cover the engine so as to avoid fire occurrence.
- The muffler becomes very hot during and immediately after operation. Be careful not to touch the muffler while it is hot. Let the engine cool down before storing the engine indoor.

PRE-OPERATION CHECKS

A. Check the oil level

Lubricating oil:

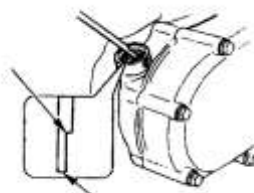
- Engine lubricant oil is a major factor affecting engine performance and service life.
- The use of the lubricating oil free of cleaning agent or the lubricating oil for the two-stroke engine will shorten the life of the gasoline engine.
- The operating temperature range recommended for the gasoline engine is -5°C~40°C.
- Use 4-stroke motor lubricant oil. 20W-40 is recommended in general, at all temperature use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.



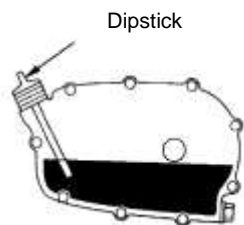
Ambient temperature →

- Before checking engine lubricant oil, place the engine on level surface
- Turn out the oil filler cap and clean the dipstick with a clean cloth.
- Insert the dipstick back into the oil filler hole without turning it in.
- If oil level is below the lower mark of the dipstick, fill oil to the upper level of the dipstick.
- Reinstall the oil filler cap properly.

Upper level

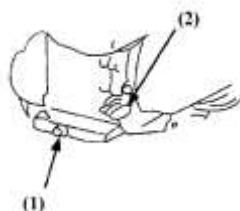


Lower level

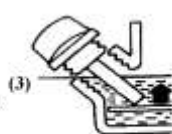


Engine oil alert system (optional function):

The oil alert system is designed to prevent engine damage caused by insufficient oil in the crankcase. When the oil level in the crankcase falls below the safe limit, the oil alert system will automatically stop the engine even if the engine switch remains at the ON position. If the engine stops and cannot be restarted, check the engine oil level before troubleshooting in other areas.



(1) Drain plug



(2) Engine switch



(3) Lower level

B. Fuel level

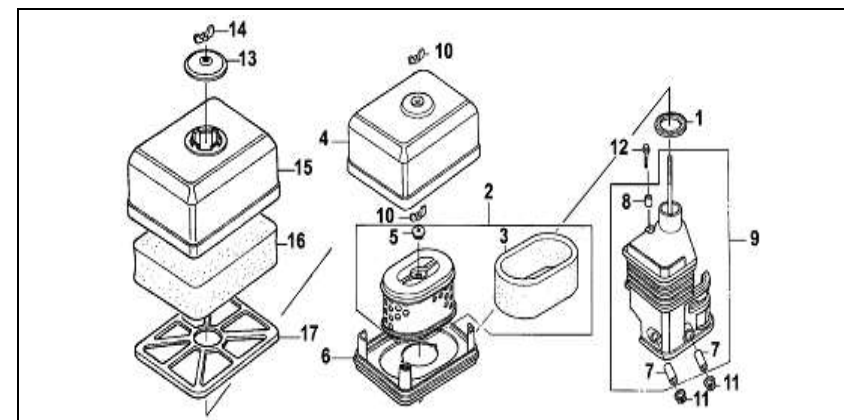
- Check the fuel gauge, and refill the tank if the fuel level is low. Do not fill above the shoulder of the fuel strainer. The fuel 90# gasoline is recommended.
- Unleaded gasoline produces less engine and spark plug fouling and extends exhaust system life.
- Never use stale or contaminated gasoline or oil/gasoline mixture. Avoid dirt, rubbish and water from getting into the fuel tank.
- If spark knock or pinging occurs at a steady engine speed under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized dealer.

! WARNING:

- Running the engine with persistent spark knock or pinging can cause engine damage.

SL-No	KK-No	KK-Name	Qty
7	E12-07	Fly Wheel Assy	1
8	E12-08	Bolt 6 x 25	2
9	E12-09	Nut M14 Fly wheel Assy	1

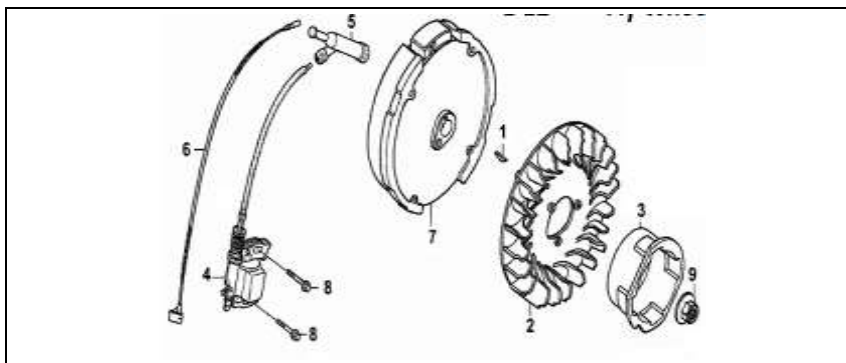
Air Cleaner



SL-No	KK-No	KK-Name	Qty
	E13	Air Cleaner Assy	1
1	E13-01	Seal Ring 32x47x3	1
2	E13-02	Air Filter Element	1
3	E13-03	N/A	1
4	E13-04	Filter Case	1
5	E13-05	Rubber Fixer	1
6	E13-06	Cover board	1

SL-No	KK-No	KK-Name	Qty
13	E11-13	Return Spring	1
14	E11-14	Fine Adjustment Spring	1
15	E11-15	N/A	1
16	E11-16	Nut M6 Flanged Nylon	1
17	E11-17	Adjustment Screw	2

Fly Wheel



SL-No	KK-No	KK-Name	Qty
1	E12-01	Woodruff key	1
2	E12-02	Fly Wheel Fan	1
3	E12-03	Starter Sleeve	1
4	E12-04	Ignition Coil Assy	1
5	E12-05	Spark Plug Cap	1
6	E12-06	Stop lead	1

- If persistent spark knocks or pinging is caused by improper usage of the unit, the Distributor's Limited Warranty does not cover parts damaged by that.



(1) Fuel tank

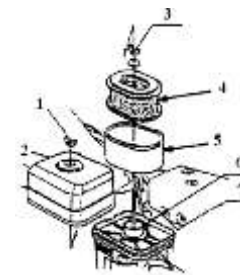
(2) Fill in hole

(3) Red line level

C. Air cleaner

The air cleaner is a dry type including paper element and foam element.

- Remove the clip and dismantle the air cleaner housing or remove the wing nuts and air cleaner cover.
- Wash the element in solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly



- 1) Butterfly nut
- 2) Air cleaner cover
- 3) Butterfly nut
- 4) Paper element
- 5) Foam element
- 6) Seal washer
- 7) Silencer plate

! WARNING:

Do not run the engine without air cleaner.

! DANGER

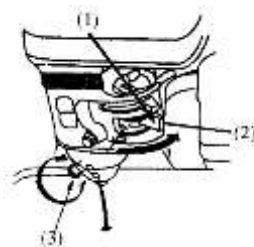
Using gasoline or flammable solvent to clean the filter element can cause a fire or explosion.

! CAUTION:

Do not run the engine without air cleaner core, otherwise dust and/or other foreign matters may get into the engine through carburetor, and results in rapid engine worn-out.

STARTING THE ENGINE

- Turn the fuel valve to ON position, unscrew the drain plug on carburetor bottom, and fasten the drain plug until oil spills out.
- Pull the choke rod to the CLOSE position. Adjust throttle to proper position. Pull the starter grip lightly until resistance is felt, then pull it rapidly



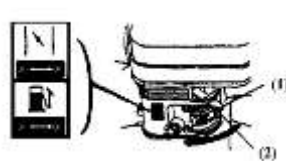
(1) Fuel Valve

(2) Start Level

(3) Drain Plug

NOTE:

- Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.
- Once the engine got started, let it run for 1~3 minutes at idle speed, check whether it is balanced, cracked, then pull the throttle to open position, adjust choke rod to OPEN.



(1) Auto-Throttle

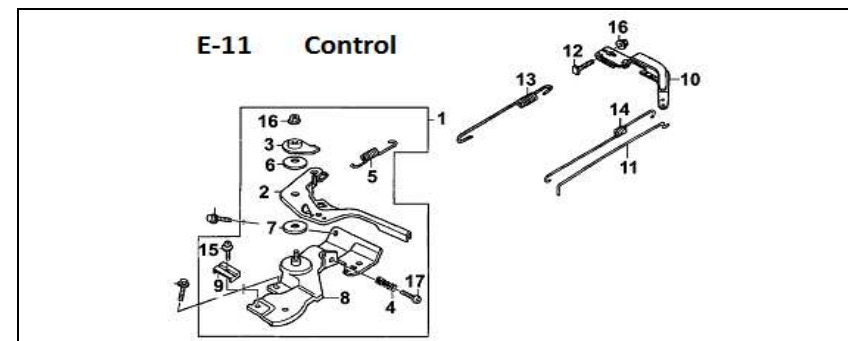


(2) Off Position



(3) Starter Knob

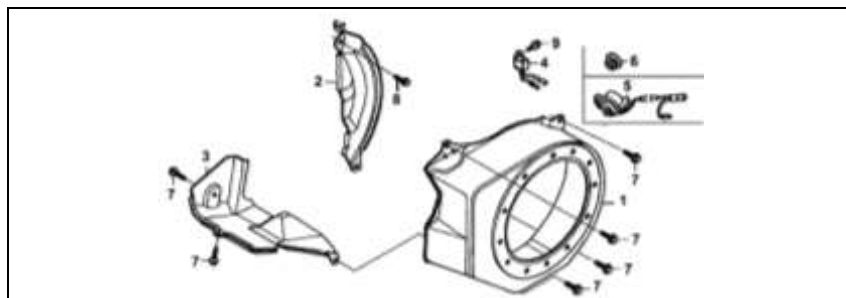
Control



SL-No	KK-No	KK-Name	Qty
1	E11-01	Speed Adjustment Base Ass.	1
2	E11-02	N/A	1
3	E11-03	N/A	1
4	E11-04	Adjustment Spring	1
5	E11-05	Throttle spring	1
6	E11-06	N/A	1
7	E11-07	N/A	2
8	E11-08	N/A	1
9	E11-09	N/A	1
10	E11-10	Speed Adjustment arm	1
11	E11-11	Pulling Rod	1
12	E11-12	Quadrate bolt M6x21	1

SL-No	KK-No	KK-Name	Qty
8	E9-08	Ratchet Spring	2
9	E9-09	Pivot Bolt	1
10	E9-10	Starter spring	1
11	E9-11	Friction Spring 16x1	1
12	E9-12	Bolt M6x12 Flanged Hex	3

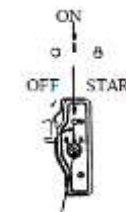
Fan Cover



SL-No	KK-No	KK-Name	Qty
1	E10-01	Fan cover	1
2	E10-02	Side Plate	1
3	E10-03	Wind guide	1
4	E10-04	Current Amplifier	1
5	E10-05	Engine switch	1
6	E10-06	N/A	1
7	E10-07	Bolt M6x12 Flanged Hex	6
8	E10-08	Bolt M6 x 20 Flanged Hex	1

Electrical Starting:

Turn the engine switch to START position and hold a while until the engine started

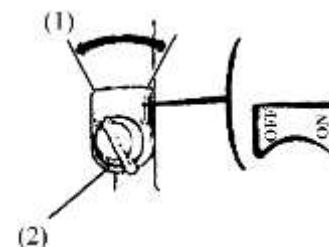


ENGINE SWITCH

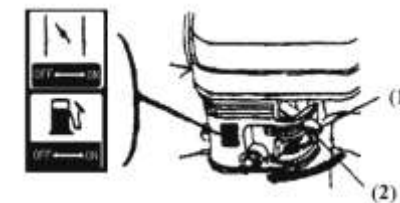
NOTE: Restrict the starting time within 5 seconds to avoid engine damage. If engine cannot be started, release starter knob, retry after 10 seconds.

STOPPING THE ENGINE

Adjust throttle to proper position. Reduce engine speed, close the choke. Turn engine switch to OFF position.



(1) Throttle knob



(2) Throttle is at OFF

! DANGER:

- Gasoline is extremely flammable and explosive under certain conditions.
- Refuel in well-ventilated places with the engine stopped. Do not smoke or allow flames or sparks near the places where the engine is refueled or gasoline is stored.
- Do not add fuel over the shoulder of strainer. After fueling, tighten the tank cover.

- Fuel vapors are extremely flammable and may ignite after the engine has started. Make sure that any fuel spillage has been wiped off before starting the engine.
- Avoid skin coming in contact with gasoline for a long time, avoid breathing in gasoline vapors. Keep children away from them.

NOTE:

Fuel can damage paint and plastics. Be careful when refueling. Damage caused by spilling fuel is not covered under warranty.

MAINTENANCE

Do periodic maintenance to keep the engine in good condition. Always follow the inspection and maintenance recommendation and schedules given in this manual.

! WARNING:

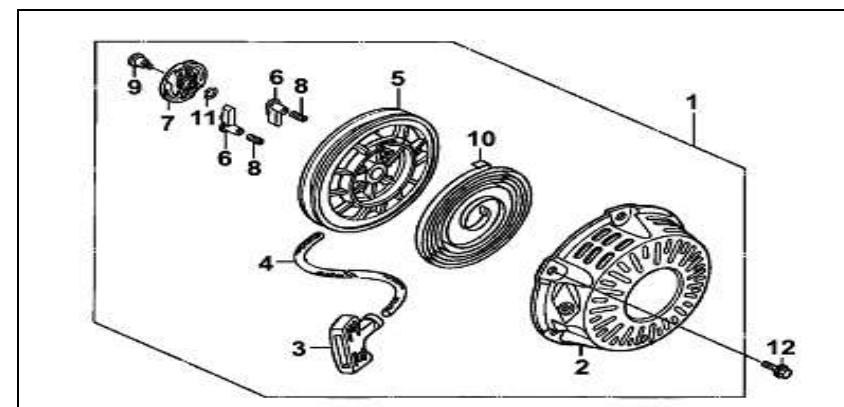
Stop the engine before doing any maintenance work. If the engine must be operated, provide adequate ventilation. Breathing in exhaust can cause loss of consciousness and even lead to death.

Everyday Maintenance:

- Air cleaner:** A dirty air cleaner will restrict air flow into the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dusty areas.
 - Check air cleaner core, get rid of fouling, and keep the core clean.
 - Check bolts, fasten the loose ones.
 - Check whether lubricant oil level is within the limits.
- Clean the core after 25hrs of engine run
- Clean carbon fouling of the spark plug after working up to 50hrs. Check the clearance, and adjust the gap to 0.6-0.7mm (see figure 4-1). Check radiator, and clean fouling among radiators.
 - Drain the oil while the engine is warm to assure rapid and complete draining.
 - Remove the drain plug and sealing washer, remove the oil filler cap, and drain the oil.
 - Reinstall the drain plug and sealing washer. Tighten the plug securely.
 - Refill with the recommended oil and check the oil level.

SL-No	KK-No	KK-Name	Qty
25	E8-25	Main jet	1
26	E8-26	Measure hole Assy idle speed	1
27	E8-27	N/A	1
28	E8-28	N/A	1

Recoil Starter

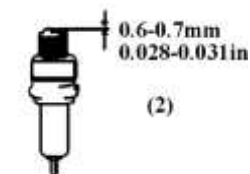


SL-No	KK-No	KK-Name	Qty
1	E9-01	Recoil Starter Assy	1
2	E9-02	Starter cover	1
3	E9-03	Pulling handle	1
4	E9-04	Rope	1
5	E9-05	Roller/Rope Reel	1
6	E9-06	Ratchet	2
7	E9-07	Ratchet guide	1

SL-No	KK-No	KK-Name	Qty
3	E8-03	Fuel Floater	1
4	E8-04	Fuel cup	1
5	E8-05	Adjustment screw Idle speed	1
6	E8-06	Screw(Fuel Cup)	1
7	E8-07	Tighten bolt (Fuel cup)	1
8	E8-08	Chock Valve Assy	1
9	E8-09	Carburetor Assy	1
10	E8-10	Adjustment Screw Assy (mixture ratio)	1
11	E8-11	Main Nozzle	1
12	E8-12	O-ring 21x2(Sediment cup)	1
13	E8-13	Block, Carburetor/Insulator	1
14	E8-14	Gasket, inlet port	1
15	E8-15	Steel gasket	1
16	E8-16	Gasket carburetor	1
17	E8-17	Hand grip chock valve assy	1
18	E8-18	Handle Bar Fuel on/off	1
19	E8-19	Upper cover(Fuel on/off)	1
20	E8-20	Spring Washer-(Fuel on/off)	1
21	E8-21	Fuel Valve	1
22	E8-22	Sediment cup	1
23	E8-23	Screw M3x7	2
24	E8-24	N/A	1

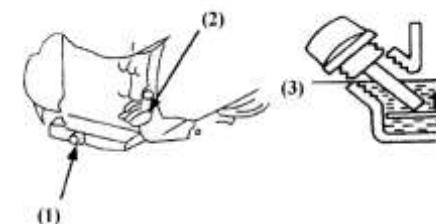


(1) Dismantle Spark Plug



(2) Adjust Clearance

4. Clean the fuel tank and filter when working time reaches 100hrs: Remove the fuel cover, drop out filter, and wash it with brush slightly. Remove fuel tank, clean the fouling and water inside fuel tank. Reinstall fuel tank, place filter from fill-in hole, filling the clean fuel to red line level.



1) Drain plug 2) Engine switch 3) Lower level

Check aging of fuel pipe every 2 years. If ageing, hardening and cracking is detected, have it replaced. Tighten the joints, and check leakage.

Before storing the unit for an extended period:

1. Make sure the storage area is free of excessive humidity and dust.
2. Service according to the table below.

Storage Time	Recommended Service Procedure To Prevent Hard Starting
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner

2 months to 1 year	<ul style="list-style-type: none"> Fill with fresh gasoline and add gasoline conditioner Drain the carburetor float bowl Drain the fuel sediment cup
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STORAGE

If the engine is not used for a long time, do the necessary maintenance before its storage.

- Firstly, take off the fuel tank, drain out all fuel, and clean the dirt and water inside the tank. Open the fuel cock, unscrew the drain plug at the bottom of carburetor, drain out fuel in carburetor thoroughly, and then tighten the drain plug.
- Secondly, unscrew the drain plug at the bottom of the crankcase and drain out the lubricant oil in the crankcase thoroughly, then tighten the drain plug.
- Finally, clean the surface of the engine with clean cloth, remove the dirt and dust etc. Then store the engine in a well-ventilated, dirt-free place.

TRANSPORTATION

- Contact with the hot engine or exhaust system can cause serious burns or fires. Allow the engine to cool down before transporting or storing the engine.
- During transport of the engine, turn the engine switch and the fuel valve to OFF. Keep the engine cool.

TROUBLESHOOTING

1. The Engine Can't Startup

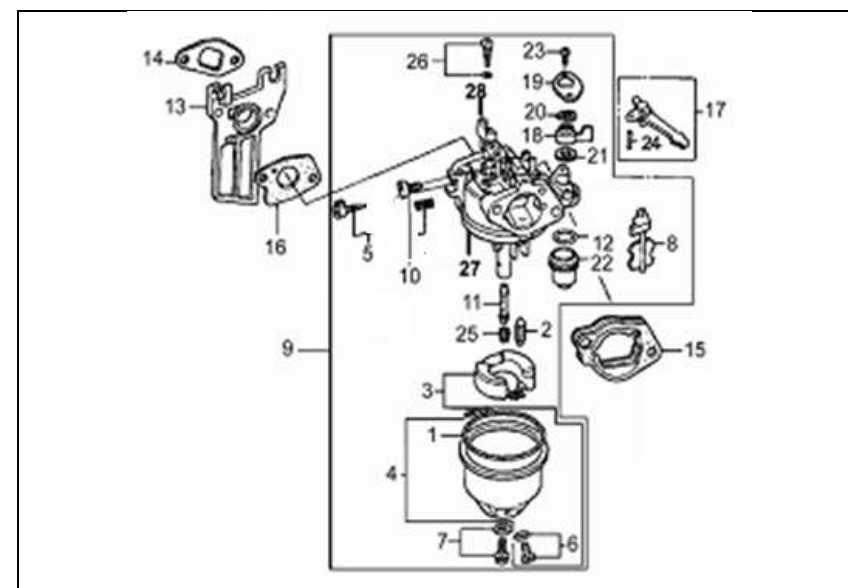
- Have the engine checked if it is hard to or cannot be started.
- Firstly, check the fuel level of the fuel tank. Turn fuel valve to (2), Fuel should flow from the drain when the fuel valve is turned ON. Tighten the drain plug. (Refer to starting of the engine)

2. Spark Plug

Check the spark plug. Remove the spark plug cap and clean any dirt around it. If the engine still cannot be started after repeating several times, please see the authorized dealer. Users are not allowed to dismantle or reassemble the unit by themselves.

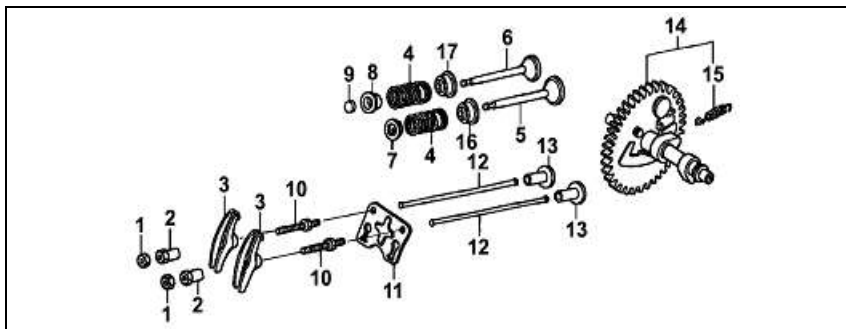
SL-No	KK-No	KK-Name	Qty
13	E7-13	Tappet	2
14	E7-14	Cam Shaft Assy	1
15	E7-15	N/A	1
16	E7-16	N/A	1
17	E7-17	Inlet valve oil seal	1

Carburetor



SL-No	KK-No	KK-Name	Qty
1	E8-01	Rubber seal (Fuel cup)	1
2	E8-02	Needle Valve	1

Camshaft



SL-No	KK-No	KK-Name	Qty
	E7-1,2,3,10	Rocker Assy	1
1	E7-01	Buy Rocker Assy	
2	E7-02	Buy Rocker Assy	
3	E7-03	Buy Rocker Assy	
4	E7-04	Valve Spring	2
5	E7-05	Intake Valve	1
6	E7-06	Exhaust Valve	1
7	E7-07	Spring seat Intake Valve	1
8	E7-08	Spring Seat Exhaust Valve	1
9	E7-09	Cap Exhaust Valve	1
10	E7-10	Buy Rocker Assy	2
11	E7-11	Pusher guide	1
12	E7-12	Pusher	2

3. Not Enough Power

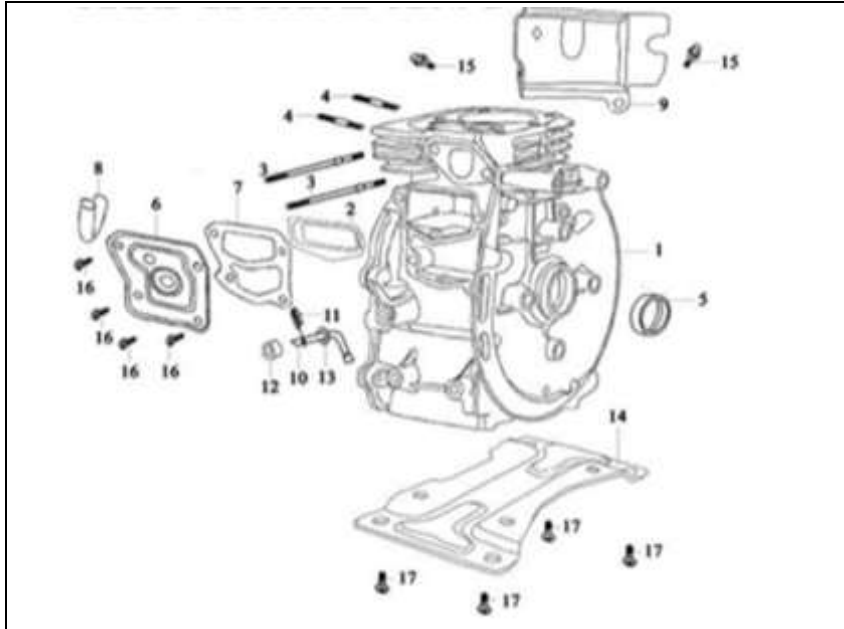
- Check the air-cleaners. Please refer the maintenance inspection book to clear the air-cleaner.
- Check the fuel. Please strain out the gasoline in fuel tank and in carburetor, and fill in new gasoline.
- For any other trouble, please contact our dealer.

TECHNICAL SPECIFICATIONS

Model	FB-PE4-106	FB-PE4-166	FB-PE4-226
Engine Type	OHV, Single-cylinder, 4-stroke , forced air cooling		
Displacement	98 cc	163 cc	210 cc
Rated power	1.9kW (3.2hp) / 3600	4.1 kW(5.4 hp) /3600	5.1 kW(7 hp) /3600
Fuel tank capacity	1.4 L	3.6 L	
Engine oil capacity	0.3 L	0.5L	
Max. torque	11.5N.m / 3600RPM	12.5 N m /3600RPM	14 N m /3600RPM
Net weight	8.5 kg	14 kg	14.2 kg
Bore × Stroke	52*46 mm	68*45 mm	70*55 mm

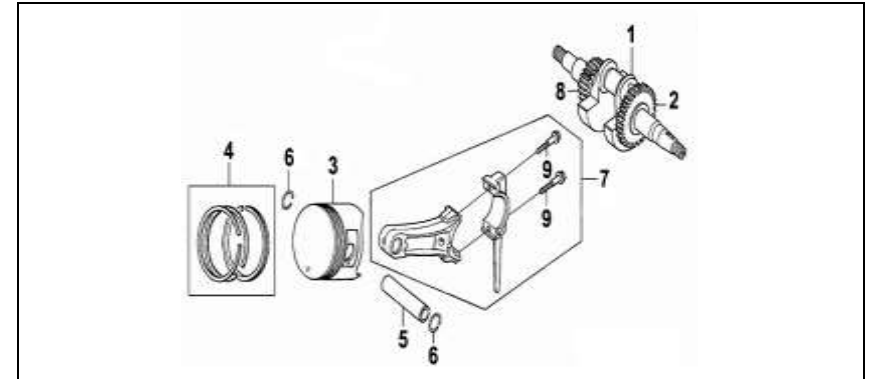
PARTS DIAGRAM & LIST-FB-PE4-106

CRANKCASE ASSEMBLY



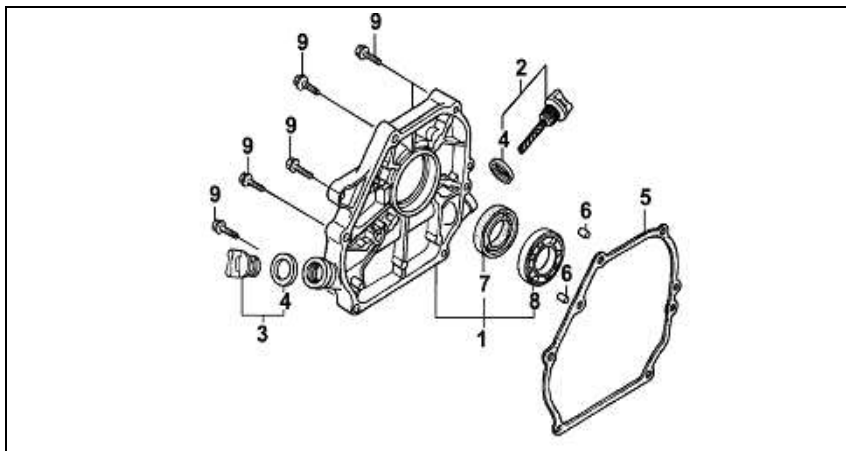
SI No	Part No.	Description
1	1-1	Crankcase
2	1-2	Valve chamber clapboard sub-Assembly
3	1-3	Stud M5×118
4	1-4	Stud M6×52
5	1-5	Oil seal(17×30×6), crankshaft
6	1-6	Cover, oil filter
7	1-7	Gasket-Cover Oil Filter
8	1-8	Return pipe

Crankshaft Piston



SL-No	KK-No	KK-Name	Qty
1	E6-01	Crankshaft Assy	1
2	E6-02	Governor Gear	1
3	E6-03	Piston	1
4	E6-04	Piston Ring Assy	1
5	E6-05	Piston Pin	1
6	E6-06	Clip Piston Pin	2
7	E6-07	Connecting rod Assy	1
8	E6-08	Timing Gear	1
9	E6-09	Bolt connecting rod M7x35	2

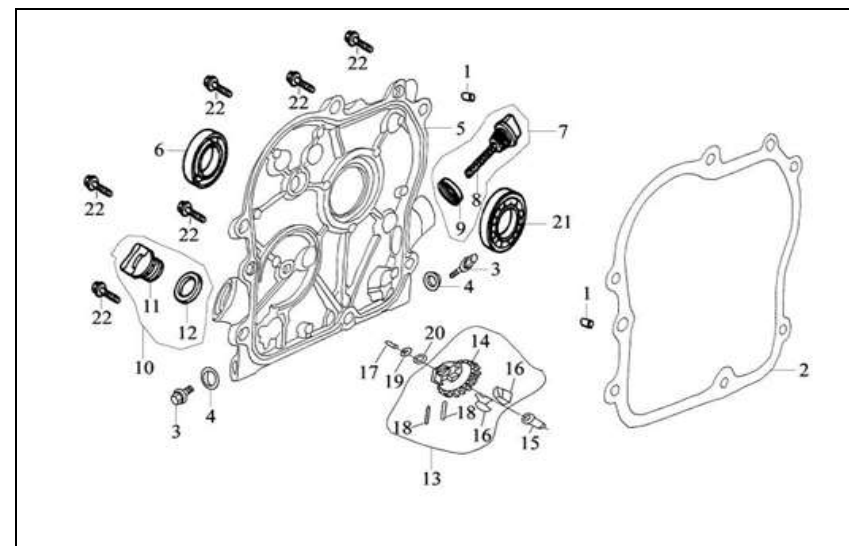
Crankcase Cover



SL-No	KK-No	KK-Name	Qty
1	E5-01	Crankcase cover	1
2	E5-02	Oil Gauge	1
3	E5-03	Oil Plug assembly	1
4	E5-04	seal-oil gauge	2
5	E5-05	Gasket crankcase	1
6	E5-06	Set pin 8X14	2
7	E5-07	Oil Seal 25x41.25x6	1
8	E5-08	Ball Bearing 6205	1
9	E5-09	Bolt M8 x 30	6

SI No	Part No.	Description
9	1-9	Flow guard, lower
10	1-10	Sway bar
11	1-11	Keeper, sway bar
12	1-12	Oil seal, sway bar
13	1-13	Washer, sway bar
14	1-14	Bottom plate
15	1-15	Bolt M6 × 14
16	1-16	Bolt M5 × 10
17	1-17	Bolt M8 × 14
18	1-18	Oil Sensor

CRANKCASE COVER ASSEMBLY

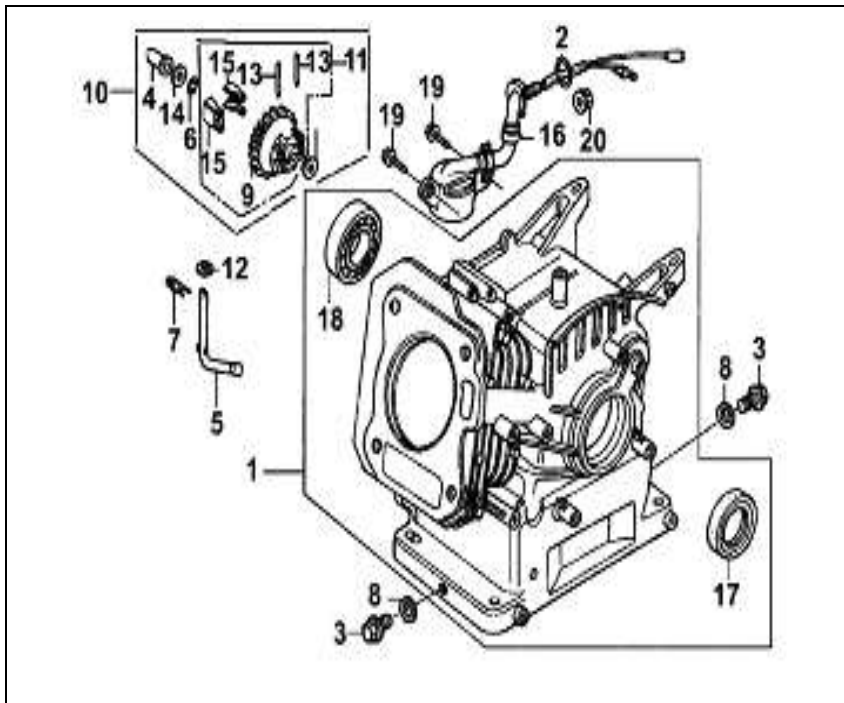


SI No	Part No.	Description
1	2-1	Set pin $\phi 8 \times 14$
2	2-2	Gasket, crankcase
3	2-3	Drain plug
4	2-4	Washer -Drain Plug
5	2-5	Crankcase cover
6	2-6	Oil seal(17 \times 30 \times 6), crankshaft
7	2-7	Dipstick sub-Assembly
8	2-8	OIL Dipstick
9	2-9	Seal, dipstick
10	2-10	Oil plug sub-Assembly
11	2-11	Oil plug
12	2-12	Seal, oil plug
13	2-13	Driven gear sub-Assembly, governor
14	2-14	Driven gear, governor
15	2-15	Sliding sleeve
16	2-16	Flyweight
17	2-17	Governing shaft
18	2-18	Pin, flyweight
19	2-19	Snap ring
20	2-20	Washer, driven gear
21	2-21	Bearing 6203
22	2-22	Bolt M6 \times 29

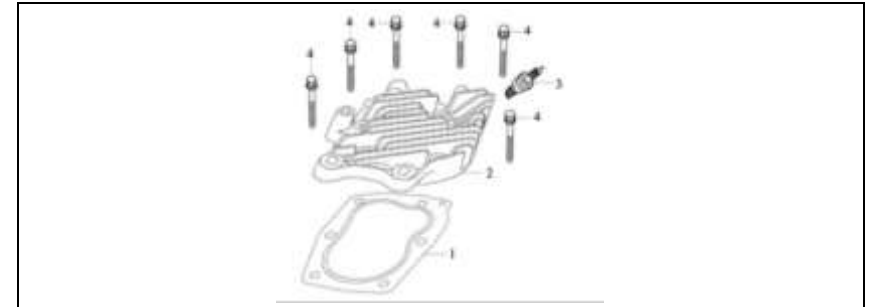
SL-No	KK-No	KK-Name	Qty
1	E4-01	Crankcase Body	1
2	E4-02	O-ring 14mm	1
3	E4-03	Drain bolt	2
4	E4-04	N/A	1
5	E4-05	Sway bar	1
6	E4-06	N/A	1
7	E4-07	Split Clip	1
8	E4-08	Washer Drain bolt	2
9	E4-09	N/A	1
10	E4-10	Centrifugal gear Parts	1
11	E4-11	N/A	1
12	E4-12	Plain washer 6mm	2
13	E4-13	N/A	2
14	E4-14	N/A	1
15	E4-15	N/A	2
16	E4-16	Oil sensor Assy	1
17	E4-17	Oil seal crankcase(25*41.25*6)	1
18	E4-18	Ball Bearing 6205	1
19	E4-19	Bolt M6 x 14	2
20	E4-20	Nut M10	1

SL-No	KK-No	KK-Name	Qty
9	E3-09	Air duck/Pipe	1
10	E3-10	Stud Intake Port M6 x 113	2
11	E3-11	Stud Exhaust Port M8 x 32	2
12	E3-12	Set pin 10x14	2
13	E3-13	Bolt M6x12	4
14	E3-14	Bolt M8 x 60,	4

Crankcase Assembly

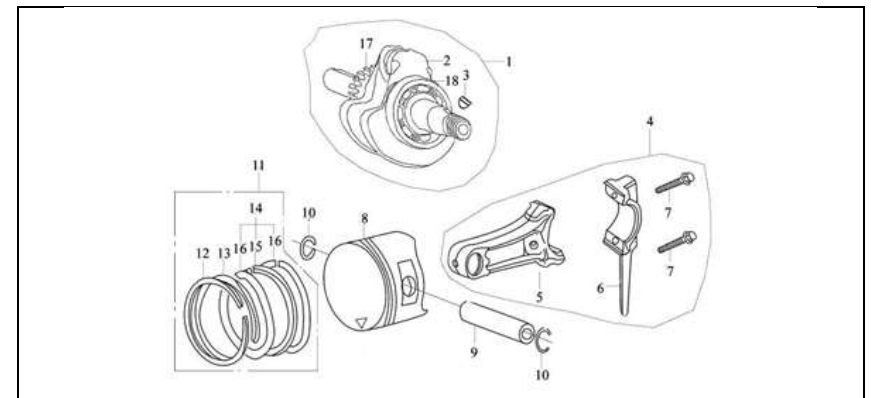


CYLINDER COVER



SI No.	Part No.	Description
1	3-1	Gasket, cylinder head
2	3-2	Cylinder cover
3	3-3	Spark plug
4	3-4	Bolt M6x35

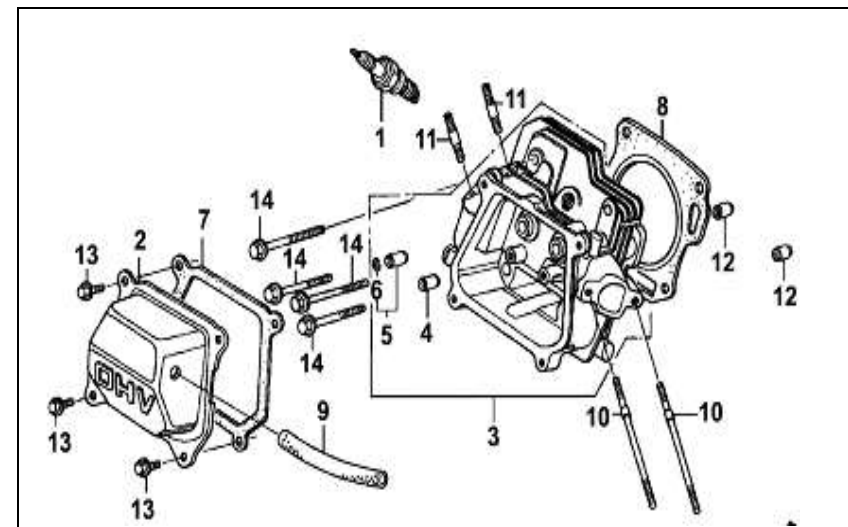
CRANKSHAFT, PISTON & CONNECTING ROD



SI No.	Part No.	Description
1	4-1	Crankshaft sub-Assembly
2	4-2	Crankshaft
3	4-3	Woodruff key
4	4-4	Connecting rod
5	4-5	Shank
6	4-6	Cap connecting rod
7	4-7	Bolt M5x24
8	4-8	Piston
9	4-9	Piston pin
10	4-10	Circlip, piston pin
11	4-11	Piston ring set
12	4-12	N/A
13	4-13	
14	4-14	
15	4-15	
16	4-16	
17	4-17	Timing driving gear
18	4-18	Bearing 6203
19	4-19	Key(pulley) 5x5x35

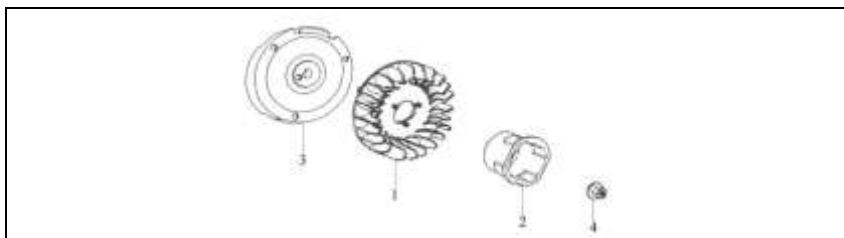
PARTS DIAGRAM & LIST-FB-PE4-166/226

Cylinder Head



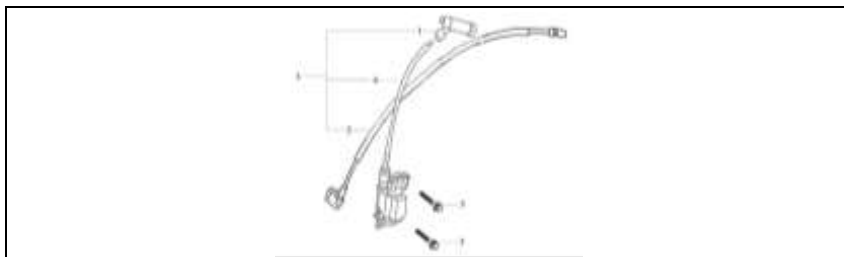
SL-No	KK-No	KK-Name	Qty
1	E3-01	Spark plug	1
2	E3-02	Cylinder head cover	1
3	E3-03	Cylinder head Assy	1
4	E3-04	In. valve guide	1
5	E3-05	Ex. valve guide	1
6	E3-06	Valve guide clip	1
7	E3-07	Gasket Cylinder head cover	1
8	E3-08	Gasket Cylinder head	1

FLYWHEEL



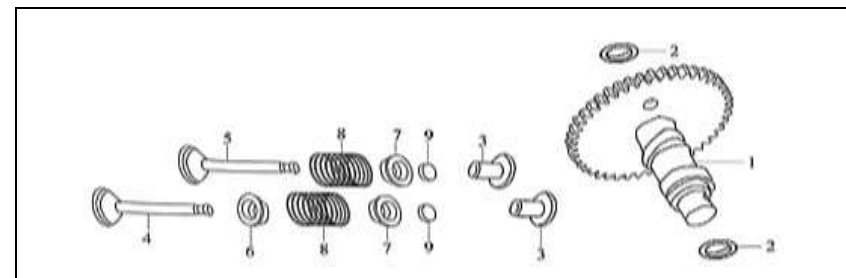
SI No.	Part No.	Description
1	12-1	Fan, flywheel
2	12-2	Starter Sleeve /flange
3	12-3	Flywheel
4	12-4	Nut M12x1.25

IGNITION COIL



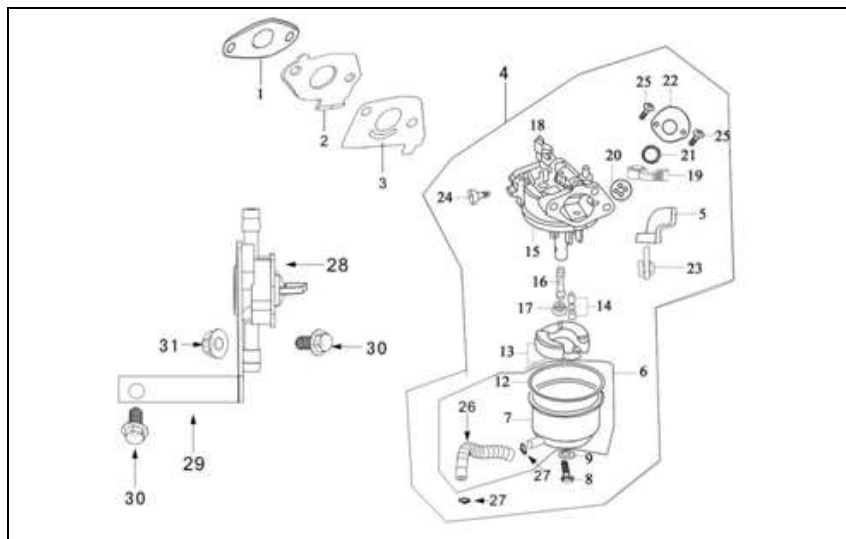
Sl. No.	Part No.	Description
1	13-1	Cap, spark plug
2	13-2	Cable, engine stop
3	13-3	Ignition coil sub-Assembly
4	13-4	Ignition coil
5	13-5	Bolt M6x25

COMBINATION OF CAMSHAFT & VALVE



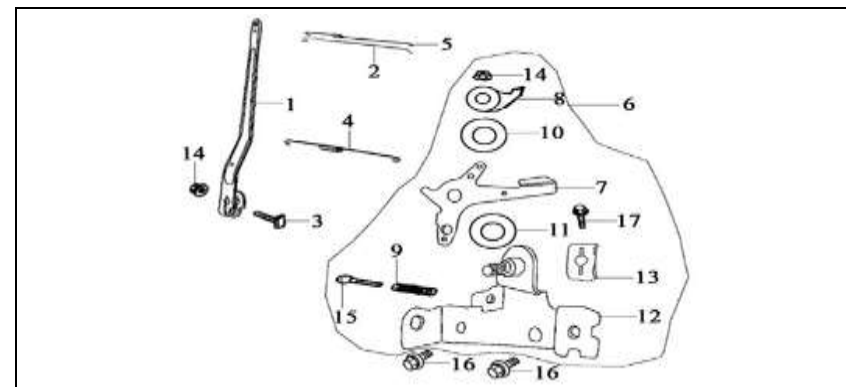
SI No.	Part No.	Description
1	5-1	Camshaft
2	5-2	Washer, camshaft
3	5-3	Tappet
4	5-4	Intake valve
5	5-5	Exhaust valve
6	5-6	Oil seal, valve stem
7	5-7	Spring seat, valve
8	5-8	Valve spring
9	5-9	Cap (Valve)

CARBURETOR ASSEMBLY



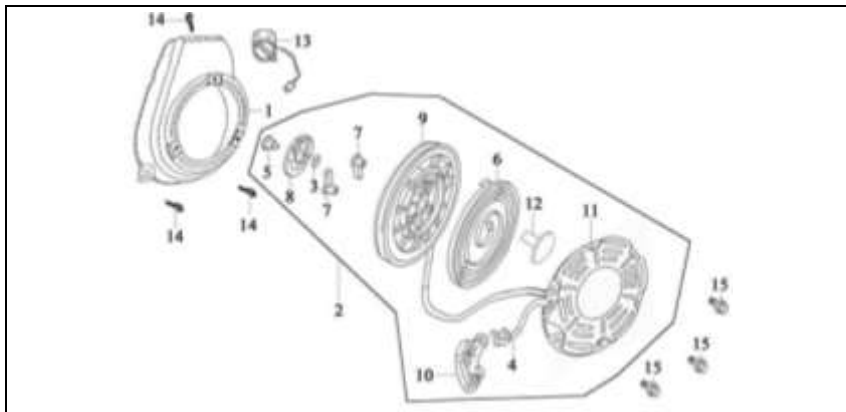
S/N	Part No.	Description
1	6-1	Gasket, intake port
2	6-2	Connecting block
3	6-3	Gasket, carburetor
4	6-4	Carburetor Assembly
5	6-5	Choke lever
6	6-6	Float chamber sub-Assembly
7	6-7	Float chamber
8	6-8	Screw
9	6-9	Seal, screw
12	6-12	Gasket, float chamber
13	6-13	Float sub-Assembly
14	6-14	Needle valve

GOVERNING CONTROL SYSTEM



SI No.	Part No.	Description
1	11-1	Governor arm
2	11-2	Pull-rod, governor
3	11-3	Lock bolt
4	11-4	Return spring
5	11-5	Assistant spring, governor
6	11-6	Mount, governor
7	11-7	Handle
8	11-8	Positioning plate
9	11-9	Spring, governor
10	11-10	Wave washer
11	11-11	Washer
12	11-12	Supporting plate unit
13	11-13	Pressure plate
14	11-14	Nut M6
15	11-15	Bolt M5x25
16	11-16	Bolt M6x14
17	11-17	Bolt M5x16

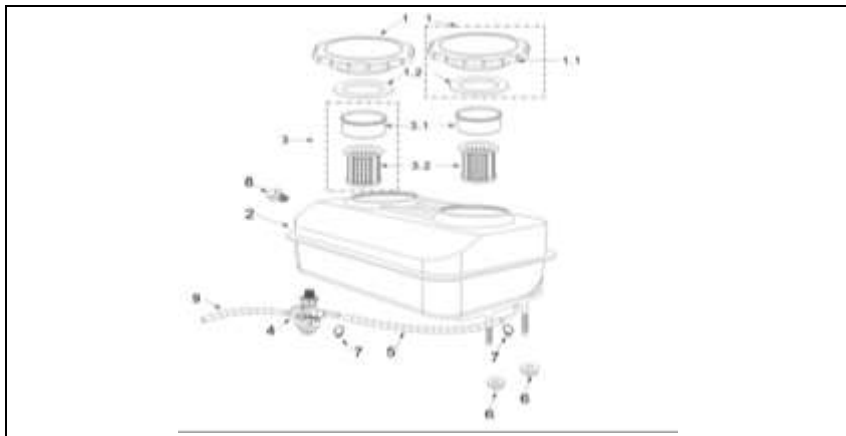
RECOIL STARTER



SI No.	Part No.	Description
1	10-1	Fan Cover
2	10-2	Recoil starter Assembly
3	10-3	Friction spring
4	10-4	Rope
5	10-5	Shoulder screw
6	10-6	Recoil Spring/Spiral spring
7	10-7	Ratchet
8	10-8	Guide Plate
9	10-9	Rope Reel
10	10-10	Starter Handle
11	10-11	Starter Cover
12	10-12	N/A
13	10-13	Engine switch
14	10-14	Bolt M6x10
15	10-15	Bolt M6x14
16	10-16	Ratchet Spring

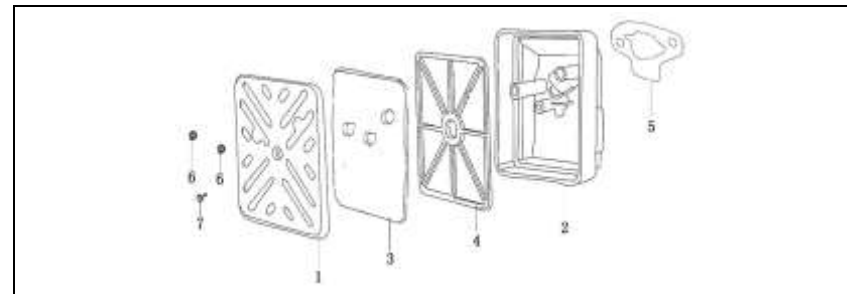
S/N	Part No.	Description
15	6-15	Mixture chamber body
16	6-16	Main nozzle
17	6-17	Main jet
18	6-18	Throttle unit
19	6-19	Throttle lever
20	6-20	Airproof washer
21	6-21	Washer
22	6-22	Cover
24	6-24	Idle adjusting screw
25	6-25	Screw M4x6
26	6-26	Tubing
27	6-27	Pipe clamp
28	6-28	Oil switch
29	6-29	A mounting block
30	6-30	Bolt M6x14
31	6-31	Nut M6

FUEL TANK ASSEMBLY



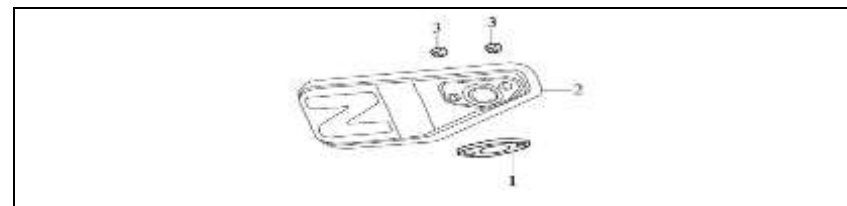
SI No.	Part No.	Description
1	7-1	Fuel filler cap sub-Assembly
1.1	7-1.1	Fuel filler cap
1.2	7-1.2	Packing ring
2	7-2	Fuel tank
3	7-3	Fuel Filter(Upper)
4	7-4	Fuel Cock
5	7-5	Fuel Tube 200mm
6	7-6	Nut M6
7	7-7	Pipe clamp
8	7-8	Bolt M4x6
9	7-9	Fuel Tube 130mm

AIR CLEANER ASSEMBLY



SI No.	Part No.	Description
1	8-1	Cover, air cleaner
2	8-2	Housing, air cleaner
3	8-3	Foam, air cleaner
4	8-4	Bracket, air cleaner
5	8-5	Gasket, air cleaner
6	8-6	Nut M5
7	8-7	Self-tapping screw ST4x10

MUFFLER



SI No.	Part No.	Description
1	9-1	Gasket, exhaust port
2	9-2	Exhaust muffler
3	9-3	Nut M6
4	9-4	Muffler Protector (Wire Net)