

**Important:** (1) Normal maintenance and adjustments to the product is the responsibility of the customer. (2) Normal wear and tear is not covered under warranty. (3) Rubber/plastic parts and consumables such as blades, clutch and clutch-bell, spark-plugs, nylon line, air-filters, fuel-filters, oil seals etc. are not covered under the warranty.

**No Warranty On Electrical Motor / Electrical Parts / Battery Etc.**

**Incidental / Consequential Loss:** KisanKraft Limited or its manufacturers will not be liable for general damages, including bodily injuries, or for incidental or consequential damages including, but not limited to, loss of use, loss of profits, loss of production, expense of substitute equipment or other commercial loss or damage.

**Limitation of Liability:** This limited warranty is in lieu of all other express warranties, obligations, or liabilities. Any implied warranties, obligations or liabilities, including, but not limited to, any implied warranty of merchantability shall be limited in duration to the applicable warranty period. Any action for breach of any warranty hereunder, including, but not limited to, any implied warranty of merchantability must be brought within the applicable warranty period.

**Modifications of Warranty:** No agent, representative, dealer, or employee of KisanKraft Limited or any of its manufacturers has the authority to increase or alter the obligations of this warranty.

**Assignment / Transfer of warranty:** The warranty cannot be assigned and shall not transfer if the product is resold by the first buyer. The above warranties are extended to the first end user (original purchaser), and no warranty is made, nor authorized to be made assignable on resale by the first end user.

**What you must do to obtain limited warranty service:** To obtain performance of any obligation under this warranty for failure during the applicable warranty period, deliver the defective product, to the nearest Authorized Dealer. KisanKraft Limited, its manufacturers and its dealers reserve the right to inspect the claimed defective part(s) to determine if the malfunction is the result of a defect covered by this warranty. Please note that the decision of KisanKraft Limited with respect to any warranty claim is final.

**Receipt is required for availing warranty services**

**Jurisdiction:** All disputes are subject to Bangalore court's jurisdiction.

<b>Our Products</b>	<ul style="list-style-type: none"> <li>◆Chainsaws◆Brush Cutters and Accessories◆Harvesters◆</li> <li>◆Engines and Water Pumps◆Hand Tools◆Garden Tools◆</li> <li>◆Cultivators and Accessories◆Sprayers and Accessories◆</li> <li>◆Transplanter and Post Hole Digger ◆Milking Machines◆</li> </ul>
---------------------	--

**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

Product	<b>Horticulture Plant Pit Digger</b>	KisanKraft Invoice Date	
Brand	<b>KisanKraft</b>	KisanKraft Invoice No.	
Model	<input type="checkbox"/> KK-PPDE-52 <input type="checkbox"/> KK-PPDE-71		
<b>WARRANTY PERIOD</b>	<b>6 MONTHS</b>	FOR THE SPECIFIED PERIOD FROM THE DATE OF SALE OR DELIVERY WHICHEVER IS EARLIER.	
Dealer's Invoice Date		Dealer's Invoice No.	
Buyer's Info (Name, Address, Phone, etc.):		Dealer's Stamp (Address, Phone, TIN, etc.):	
Buyer's Sign		Dealer's Sign	

**What is covered:** KisanKraft Limited and its manufacturers warrant this product to be free from defects in material or workmanship. All parts defective in material and workmanship are covered.

This warranty will only cover defects arising under normal usage.

This warranty is limited to repair or replacement by KisanKraft Limited or its manufacturers at the premises of Authorized Dealers, of such parts as appear to KisanKraft or its manufacturers, upon inspection, to be defective in material and/or workmanship. KisanKraft or its manufacturers make no warranty with respect to trade accessories not manufactured or sold by them.

**What is not covered:** The *warranty shall become null and void* and neither KisanKraft Limited nor any of its manufacturers, nor its authorized dealers assumes any responsibility, if the failure was caused by the following:

- (1) Operation of product with incorrect fuel or lubricants, (2) Incorrect usage of machine or misuse, (3) Lack of maintenance, (4) Negligence, (5) Accident or physical damage, (6) Repairs made by unauthorized parties and/or with unauthorized parts, (7) Improper set up, adjustments, tampering or altered products

**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

**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

**Important:** (1) Normal maintenance and adjustments to the product is the responsibility of the customer. (2) Normal wear and tear is not covered under warranty (3) Rubber/plastic parts and consumables such as blades, clutch and clutch-bell, spark-plugs, nylon line, air-filters, fuel-filters, oil seals etc. are not covered under the warranty.

**No Warranty On Electrical Motor / Electrical Parts / Battery Etc.**

**Incidental / Consequential Loss:** KisanKraft Limited or its manufacturers will not be liable for general damages, including bodily injuries, or for incidental or consequential damages including, but not limited to, loss of use, loss of profits, loss of production, expense of substitute equipment or other commercial loss or damage.

**Limitation of Liability:** This limited warranty is in lieu of all other express warranties, obligations, or liabilities. Any implied warranties, obligations or liabilities, including, but not limited to, any implied warranty of merchantability shall be limited in duration to the applicable warranty period. Any action for breach of any warranties hereunder, including, but not limited to, any implied warranty of merchantability must be brought within the applicable warranty period.

**Modifications of Warranty:** No agent, representative, dealer, or employee of KisanKraft Limited or any of its manufacturers has the authority to increase or alter the obligations of this warranty.

**Assignment / Transfer of warranty:** The warranty cannot be assigned and shall not transfer if the product is resold by the first buyer. The above warranties are extended to the first end user (original purchaser), and no warranty is made, nor authorized to be made assignable on resale by the first end user.

**What you must do to obtain limited warranty service:** To obtain performance of any obligation under this warranty for failure during the applicable warranty period, deliver the defective product, to the nearest Authorized Dealer. KisanKraft Limited, its manufacturers and its dealers reserve the right to inspect the claimed defective part(s) to determine if the malfunction is the result of a defect covered by this warranty. Please note that the decision of KisanKraft Limited with respect to any warranty claim is final.

**Receipt is required for availing warranty services**

**Jurisdiction:** All disputes are subject to Bangalore court's jurisdiction.

<b>Our Products</b>	<ul style="list-style-type: none"> <li>◆Chainsaws◆Brush Cutters and Accessories◆Harvesters◆</li> <li>◆Engines and Water Pumps◆Hand Tools◆Garden Tools◆</li> <li>◆Cultivators and Accessories◆Sprayers and Accessories◆</li> <li>◆Transplanter and Post Hole Digger◆Milking Machines◆</li> </ul>
---------------------	---

**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

🌐: [www.kisankraft.com](http://www.kisankraft.com)    ✉: [info@kisankraft.com](mailto:info@kisankraft.com)    ☎: +91.80.22178200

Product	<b>Horticulture Plant Pit Digger</b>	KisanKraft Invoice Date	
Brand	<b>KisanKraft</b>	KisanKraft Invoice No.	
Model	<input type="checkbox"/> KK-PPDE-52 <input type="checkbox"/> KK-PPDE-71		
<b>WARRANTY PERIOD</b>	<b>6 MONTHS</b>	FOR THE SPECIFIED PERIOD FROM THE DATE OF SALE OR DELIVERY WHICHEVER IS EARLIER.	
Dealer's Invoice Date		Dealer's Invoice No.	
Buyer's Info (Name, Address, Phone, etc.):		Dealer's Stamp (Address, Phone, TIN, etc.):	
Buyer's Sign		Dealer's Sign	

**What is covered:** KisanKraft Limited and its manufacturers warrant this product to be free from defects in material or workmanship. All parts defective in material and workmanship are covered.

This warranty will only cover defects arising under normal usage.

This warranty is limited to repair or replacement by KisanKraft Limited or its manufacturers at the premises of Authorized Dealers, of such parts as appear to KisanKraft or its manufacturers, upon inspection, to be defective in material and/or workmanship. KisanKraft or its manufacturers make no warranty with respect to trade accessories not manufactured or sold by them.

**What is not covered:** The *warranty shall become null and void* and neither KisanKraft Limited nor any of its manufacturers, nor its authorized dealers assumes any responsibility, if the failure was caused by the following:

- (1) Operation of product with incorrect fuel or lubricants,
- (2) Incorrect usage of machine or misuse,
- (3) Lack of maintenance,
- (4) Negligence,
- (5) Accident or physical damage,
- (6) Repairs made by unauthorized parties and/or with unauthorized parts,
- (7) Improper set up, adjustments, tampering or altered products

**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

**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

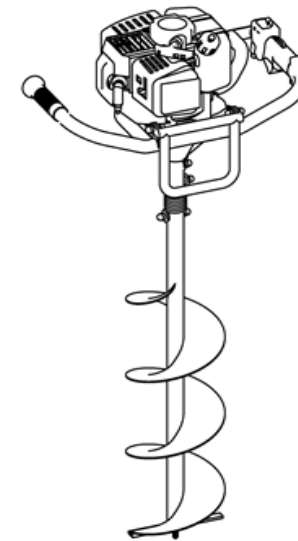
**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

🌐: [www.kisankraft.com](http://www.kisankraft.com)    ✉: [info@kisankraft.com](mailto:info@kisankraft.com)    ☎: +91.80.22178200

Wide Range of Products for Every Need



# User Manual



## KisanKraft Limited

(Formerly known as KisanKraft Machine Tools Pvt. Ltd.)

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

For more information give **MISSED CALL: 07676065555**



Many of our products have BIS: ISI certification.



- ◆ Bangalore (HO) ◆ Ahmedabad ◆ Bhopal ◆ Bhubaneswar ◆ Coimbatore ◆
- ◆ Guwahati ◆ Patna ◆ Hubli ◆ Hyderabad ◆ Jaipur ◆ Karnal ◆
- ◆ Kolkata ◆ Lucknow ◆ Jammu ◆ Pune ◆ Raipur ◆ Shimla ◆

**KisanKraft has a large range of products to serve the farmers. A list of our products is given below:**

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

**STORAGE**

When releasing the engine from operation for more than 30 days, it must be serviced and stored as follows with care to prevent the starting trouble or malfunction due to degeneration of fuel.

1. Drain the fuel from the fuel tank and start to run the engine till it is stopped due to use-up of fuel.
2. Wash the inside of fuel tank and fuel filter with white kerosene.
  - ▲ Use of fire is strictly prohibited
3. Removing the ignition plug, inject a small quantity of new engine oil through the plughole. After idling slowly for few revolutions operating the recoil starter, install the ignition plug. Pull the recoil starter again and stop it at the position where it is felt heavy.
4. Clean the external surfaces with soft cloth and store it at a dry place free from fires.

**NOTE:** If the unit is left over without draining fuel, impurities in the fuel could clog the fuel passages such as the carburetor, fuel filter, or others, and cause engine troubles. Make sure to drain the fuel when storing the unit for a long period of time.

- ▲ Sufficient care must be taken not to use fires at the vicinity when handling the fuel.

**CONTENTS**

**BEFORE GETTING STARTED .....8**

**SAFETY SYMBOLS .....8**

**SAFETY INSTRUCTIONS.....9**

**PARTS OVERVIEW .....12**

**OPERATION.....13**

**STARTING AND STOPPING THE ENGINE.....15**

**COLD ENGINE START .....15**

**WARM ENGINE START .....15**

**HOT ENGINE START .....16**

**TECHNICAL SPECIFICATIONS.....17**

**MAINTENANCE AND STORAGE.....17**

**SERVICE AND REPAIR .....19**

**TROUBLESHOOTING .....20**

**PARTS DIAGRAM & LIST- KK-PPD-E52 .....22**

**PARTS DIAGRAM & LIST- KK-PPD-E71 .....25**

**2 STROKE PETROL ENGINE- MANUAL .....29**

Product	Horticulture Plant Pit Digger	KisanKraft Invoice Date	
Brand	<b>KisanKraft</b>	KisanKraft Invoice No.	
Model	<input type="checkbox"/> KK-PPDE-52 <input type="checkbox"/> KK-PPDE-71		
WARRANTY PERIOD	6 MONTHS	FOR THE SPECIFIED PERIOD FROM THE DATE OF SALE OR DELIVERY WHICHEVER IS EARLIER.	
Dealer's Invoice Date		Dealer's Invoice No.	
Buyer's Info (Name, Address, Phone, etc.):		Dealer's Stamp (Address, Phone, TIN, etc.):	
Buyer's Sign		Dealer's Sign	

**What is covered:** KisanKraft Limited and its manufacturers warrant this product to be free from defects in material or workmanship. All parts defective in material and workmanship are covered.

This warranty will only cover defects arising under normal usage.

This warranty is limited to repair or replacement by KisanKraft Limited or its manufacturers at the premises of Authorized Dealers, of such parts as appear to KisanKraft or its manufacturers, upon inspection, to be defective in material and/or workmanship. KisanKraft or its manufacturers make no warranty with respect to trade accessories not manufactured or sold by them.

**What is not covered:** The *warranty shall become null and void* and neither KisanKraft Limited nor any of its manufacturers, nor its authorized dealers assumes any responsibility, if the failure was caused by the following:

(1) Operation of product with incorrect fuel or lubricants, (2) Incorrect usage of machine or misuse, (3) Lack of maintenance, (4) Negligence, (5) Accident or physical damage, (6) Repairs made by unauthorized parties and/or with unauthorized parts, (7) Improper set up, adjustments, tampering or altered products.

**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

**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

### Cleaning and service at respective sections

- Clean thoroughly around the muffler.
- Clean the cooling fins and the cooling air inlet.
- Inspect and retighten bolts and nuts.
- Inspect the fuel leakage.

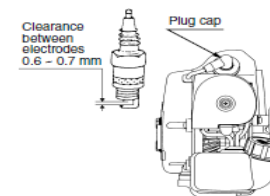
### INSPECTION AND SERVICE AT EVERY 50-HOUR

#### Cleaning and adjustment of ignition plug

After removing carbon accumulated on the electrodes and the insulator, adjust the clearance between the electrodes at 0.6 ~ 0.7 mm



When mounting the plug cap, push it in securely



#### Cleaning of fuel filter

Using a piece of wire, or the likes, pull out the fuel filter and wash with clean white kerosene. When it is fouled heavily, replace the filter and also wash the tank inside.



Use of fire is strictly prohibited

#### Carbon removal

Remove carbon from the muffler in-/outlet, cylinder and piston. This work requires engine servicing skill and some tools. Consult the dealer or nearest service center.



#### CAUTIONS DURING INSPECTION

- Disconnect the ignition plug wires before inspection or adjustment to prevent unexpected start of engine.
- Do not touch the engine immediately after operation to prevent burn.
- Use of fire is strictly prohibited when handling the fuel (gasoline).
- Make sure to clean spilled fuel sufficiently before using the engine.
- Do not wash the engine with water.
- Do not change the setting revolution speed carelessly. (Consult your dealer when changing the revolution speed.)



**INSPECTION AND SERVICE**

Table of regular inspections

Item \ Time	Before Each Operation	At Every 50-hours	At Every 100-hours	2 Years
Inspection and retightening of bolts, nuts	✓			
Inspection of fuel leakage	✓			
Inspection, cleaning of air cleaner	✓			
Cleaning at cooling air inlet, cooling fin and around muffler	✓			
Inspection, cleaning of ignition plug		✓		
Inspection, cleaning of fuel filter		✓		
Removal of carbon from muffler, cylinder		✓		
Cleaning of spark arrestor		✓		
Replacement of ignition plug			✓	
Replacement of fuel piping (fuel pipe and grommet)				✓

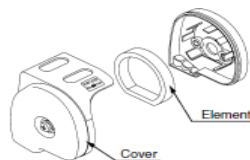
**INSPECTION AND SERVICE BEFORE EACH OPERATION**

**Cleaning of air cleaner**

Wash the element with white kerosene and then immerse it in engine oil. Squeeze it tightly with single hand.



**Use of fire is strictly prohibited**



**Important:** (1) Normal maintenance and adjustments to the product is the responsibility of the customer. (2) Normal wear and tear is not covered under warranty.

(3) Rubber/plastic parts and consumables such as blades, clutch and clutch-bell, spark-plugs, nylon line, air-filters, fuel-filters, oil seals etc. are not covered under the warranty.

**Incidental / Consequential Loss:** KisanKraft Limited or its manufacturers will not be liable for general damages, including bodily injuries, or for incidental or consequential damages including, but not limited to, loss of use, loss of profits, loss of production, expense of substitute equipment or other commercial loss or damage.

**Limitation of Liability:** This limited warranty is in lieu of all other express warranties, obligations, or liabilities. Any implied warranties, obligations or liabilities, including, but not limited to, any implied warranty of merchantability shall be limited in duration to the applicable warranty period. Any action for breach of any warranty hereunder, including, but not limited to, any implied warranty of merchantability must be brought within the applicable warranty period.

**Modifications of Warranty:** No agent, representative, dealer, or employee of KisanKraft Limited or any of its manufacturers has the authority to increase or alter the obligations of this warranty.

**Assignment / Transfer of warranty:** The warranty cannot be assigned and shall not transfer if the product is resold by the first buyer. The above warranties are extended to the first end user (original purchaser), and no warranty is made, nor authorized to be made assignable on resale by the first end user.

**What you must do to obtain limited warranty service:** To obtain performance of any obligation under this warranty for failure during the applicable warranty period, deliver the defective product, to the nearest Authorized Dealer. KisanKraft Limited, its manufacturers and its dealers reserve the right to inspect the claimed defective part(s) to determine if the malfunction is the result of a defect covered by this warranty. Please note that the decision of KisanKraft Limited with respect to any warranty claim is final.

**Receipt is required for availing warranty services**

**Jurisdiction:** All disputes are subject to Bangalore court's jurisdiction.

<b>Our Products</b>	<ul style="list-style-type: none"> <li>◆Chainsaws◆Brush Cutters and Accessories◆Harvesters◆</li> <li>◆Engines and Water Pumps◆Hand Tools◆Garden Tools ◆</li> <li>◆Cultivators and Accessories◆Sprayers and Accessories◆</li> <li>◆Transplanter and Post Hole Digger ◆ Milking Machines ◆</li> </ul>
---------------------	---









**This warranty is null & void, if you fail to register the warranty with KisanKraft by sending the KisanKraft Copy with dealer's stamp.**

**KisanKraft Limited** (Formerly known as KisanKraft Machine Tools P Ltd.)

**BEFORE GETTING STARTED**

We wish to thank you for choosing our Plantation Pit Diggers. We are confident that the high quality of our machine will meet your requirement and satisfaction and that your pit digger will give you long-lasting service. Before starting to use your machine, make sure to read this manual carefully, which has been purposely drawn up to provide you with all the necessary information for proper use, in compliance with basic safety requirements

**SAFETY SYMBOLS**

	Read all the instructions before operating the equipment		Warning
	Wear safety goggles, a face guard and ear protection		Wear sturdy, non-slippery footwear
	Wear safety gloves		Protect the equipment from rain and dampness
	Do not smoke or bring any fire or flame near the fuel		To reduce the risk of injury from inhalation of poisonous fumes, operate and start your unit only out doors in a ventilated area.
	Keep bystanders 15m away and be cautious of the objects thrown.		Take care of mechanical hazards

**ADJUSTING THE CARBURETOR**

**!** Engine revolution speed is adjusted at the optimum condition before shipping from the factory. It should be adjusted only when it fails to operate properly. (Consult your dealer when adjustment is necessary.)

- Use the slow speed adjusting screw to adjust the slow speed revolutions.
  - Right turns: Increase the revolution speed.
  - Left turns: Slow down the revolution speed.

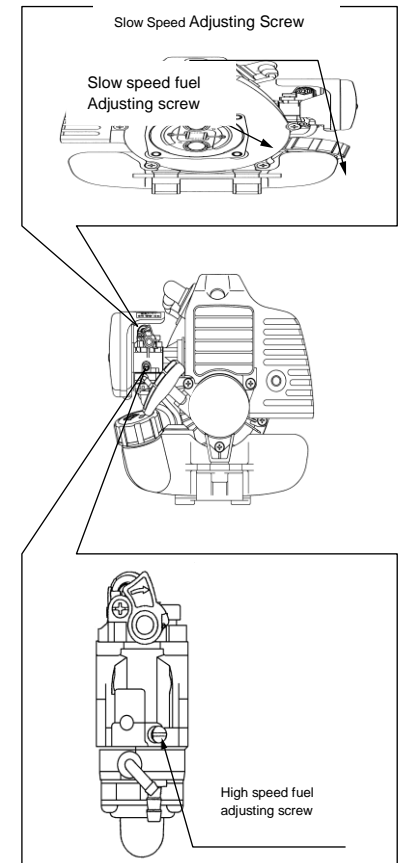
**!** Increasing the slow revolution excessively causes the driven equipment unable to stop even if the throttle lever is returned. The revolution speed should not be increased excessively.

- In case with the slow speed fuel adjusting screw Normal position is where it is returned by one turn from the fully closed position (right turn).
  - Right turns: Increase the thickness of fuel.
  - Left turns: Decrease the thickness of fuel.

- In case with the high speed fuel adjustment screw
  - Right turns: Decrease the thickness of fuel.
  - Left turns: Increase the thickness of fuel.

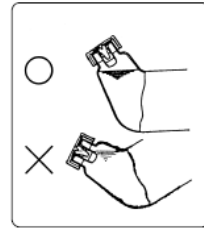
**!** Fuel adjustment for the carburetor is completed at the optimum condition before shipping from the factory. When it is necessary to adjust, consult your dealer.

**!** Do not decrease the thickness of fuel too much. (It could result in the seizure trouble of engine.)



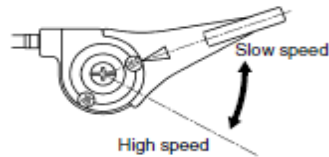


- ▲ Place the engine at a horizontal position when the driven equipment is not used at the rest time, or others, in summer season. (If the tank is tilted as much as the inside of fuel cap is submerged in the fuel, the fuel may leak.)
- ▲ Do not touch the engine body, especially the muffler, during or immediately after stopping the operation. (There is risk of burn.)



### PRECAUTIONS DURING OPERATION

- After starting the engine, set the throttle lever at the slow speed position and warm up the engine for approx. 2-3 minute. As the engine worms up, the engine will be accelerated smoothly.
- Do not attempt to raise the engine speed abruptly immediately after the start because the lubrication oil may not be distributed yet all over the engine.
- If the throttle lever is turned to the fully opened position, the revolution speed picks up to a considerably higher level, which could not only shorten the life of engine but also cause trouble. It should be avoided to race the engine at high speed under no load condition or raise the speed unnecessarily.
- Before starting operation, make sure to inspect the engine in accordance with the "Inspection before starting the engine".
- Do not operate the engine at the indoor or a place with poor ventilation. (Exhaust gas contains odorless and harmful carbon monoxide.)
- Do not insert in or approach hands or foot at the moving or rotating sections.
- Stop the engine immediately if it has been discovered any leakage of fuel or gas from the carburetor, muffler, fuel tank, crankcase, cylinder or mating face at respective sections. (Contact a dealer or service center for repair.)
- Do not change the setting revolution speed of engine unnecessarily.
- Be careful not to touch highly heated muffler or sections on the engine to avoid possible risk of burn.
- Do not operate the engine while withered grasses, leaves or other inflammable substances are sticking in or around the muffler cover.
- Do not touch the ignition plug cap or high-voltage cord during operation. (There is risk of electric shock or physical injury.)
- Do not operate the engine with the muffler or air cleaner cover removed



### SAFETY INSTRUCTIONS

Accurate assembly, safe and effective use of the auger is the owner's responsibility.

- Read and follow all the safety instructions.
- Operate and maintain the auger according to instructions and schedule included in this operation manual.
- Ensure that anyone who uses the auger is familiar with all the controls and safety precautions.

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

**NOTE:** General information is given throughout the manual that may help the operator in the operation or service of the machine.

<b>CAUTION</b>	It indicates you or your equipment can be hurt if the safety instructions are not followed.
<b>IMPORTANT</b>	It indicates helpful information for proper assembly, operation, or maintenance of your equipment.
<b>WARNING</b>	Engine exhaust from this product contains chemicals known to cause cancer, birth defects, or other reproductive harm.

- Do not carry the auger power head between the holes with the engine running.
- The auger should not rotate when the engine is idling. If it does rotate, contact dealer for instructions.
- Always keep your hands, feet, hair and loose clothing away from any moving parts of the engine and auger.
- Do not allow children to operate this power auger. Do not allow adults to operate the auger without proper instruction.
- Do not operate any power equipment under the influence of alcohol or drugs.
- Keep all screws, nuts and bolts tight.
- The engine should be turned off and must be cooled, also spark plug wire must be removed from spark plug before any repairs are attempted.
- Temperature of muffler and nearby areas may be hot. Avoid these areas.
- Never run an engine indoors or in an enclosed area. Engine exhaust contains carbon monoxide, an odourless, deadly gas.
- If the earth auger will not turn in a hole, turn engine off and allow to cool before attempting to remove it manually.
- Do not let the person who do not fully understands the manual thoroughly, operate the auger.
- When operating the auger make sure to keep bystanders 15m away.

### **⚠ WARNING--Carbon Monoxide Poisoning:**

All engines contain carbon monoxide in their exhaust. Carbon monoxide is a deadly, colourless, tasteless, odourless gas which may be present even if you do not smell or see any engine exhaust. Levels of carbon monoxide, which can be deadly, can be present for days in an enclosed area if it has poor ventilation. Any level of carbon monoxide, if inhaled, can cause headaches, drowsiness, nausea, dizziness, and eventually death. If you experience any of these symptoms, **seek fresh air and medical attention immediately.**

### **Preventing Carbon Monoxide Poisoning**

- Never run an engine indoors.
- Never try to ventilate engine exhaust indoors. Carbon monoxide can reach dangerous levels very quickly.
- Never run an engine in places where exhaust fumes may be pulled into a building.
- Never run an engine in a poorly ventilated area where the exhaust fumes may be trapped and not easily taken away. (Examples include: in a large hole or areas where hills surround your working area.)
- Never run an engine in an enclosed or partially enclosed area. (Examples include: buildings that are enclosed on one or more sides, under tents, car ports or basements.)
- Always run the engine with the exhaust and muffler pointed in the direction away from the operator.
- Never point the exhaust muffler towards anyone. People should always be far away from the operation of the engine and its attachments

### **Petrol Fires or handling Fuel Safely:**

Fuel and fuel vapors are highly flammable. Never use fuel where a spark or flame may be present. Never use fuel where a potential source of ignition could occur. (Examples include: hot water or room heaters, clothes dryer, electric motors, etc.) Keep flames and sparks away from the engine and fuel to prevent fires. Fuel fires spread very quickly and are highly explosive

### **Prevention of Petrol Fires:**

- Never fill your fuel tank with fuel indoors. (Examples include: basement, garage, barn, shed, house, porch, etc.)
- Always fill fuel tank outside in a well-ventilated area.
- Never remove the fuel cap or add fuel with the engine running. Stop the engine and allow to cool before filling.
- Never drain fuel from engine in an enclosed area.
- Always wipe up excess (spilled) fuel from engine before starting. Clean up spilled fuel immediately.
- Allow spilled fuel to dry, after wiping and before starting.
- Allow fuel fumes/vapours to escape from the area before starting the engine.
- Test the fuel cap for proper installation before starting and using the engine.

up operation for 2 to 3 minutes in this condition. Observing the condition of the engine, move the throttle lever to a desired engine speed.

### **START**

#### **⚠ CAUTION**

- Before starting the engine, confirm that the area of radius 15 m around the engine is completely evacuated.
- Do not operate the engine when any flammable material (gasoline, volatile chemicals, or others) is present around it.
- Driven equipment may start simultaneously with the start of engine. Carefully read the instruction manual of the equipment and start the engine carefully.
- When a class FC oil is used, a larger resistance may be felt when pulling the recoil starter grip under low temperature condition or at the initial operation at the next season. This is related to the characteristic of the oil and there is no problem on the engine. Once started, it will return to the normal condition

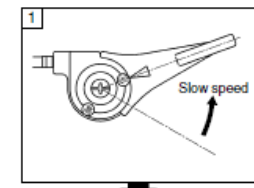
#### **Concerning New Start System**

It can start even if it is pulled slower than normal.

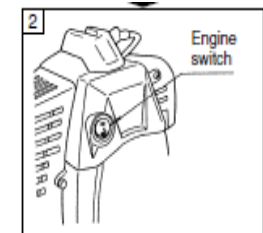
- If the rope is pulled (vigorously) till it will not come out any more, it could damage the recoil mechanism.
- Do not disassemble the recoil. It is dangerous to disassemble the inside of recoil. (Consult your dealer when it is necessary to replace related parts.)
- If the decompression slot of cylinder is clogged, the engine may start slower than normal. Clean the slot to restore the normal condition.

### **STOP**

1. Set the throttle lever at the slow speed position.



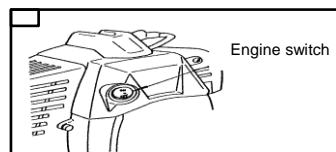
2. Turn the engine switch to the "OFF" position. (Switch position may vary depending on the specifications. Refer to the instruction manual of driven equipment.) In case of a push button type switch, keep pressing the push button till the engine stops completely.



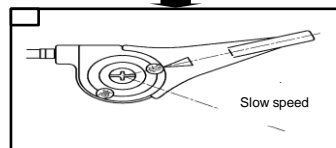
- Replenish the fuel before using up completely. It will make easier at the next starting.
- When there is no subsequent work, drain the fuel from the fuel tank and restart the engine to use up the fuel remaining in the carburetor.

### START (STARTER LEVER TYPE UNIT)

1. Turn the engine switch to the "ON" side.

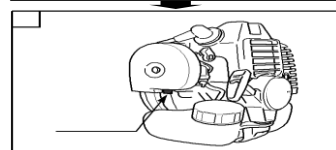


2. Set the throttle lever at the slowest speed position.



3. Push the priming button repeatedly with finger till it hits the top. (More than 10 times)

Pressing the priming button is necessary to prime the fuel to facilitate the start-up. Since any excess amount of primed fuel returns to the tank, there is no problem of over-priming. Prime the fuel rather more than sufficiently to avoid starting trouble.

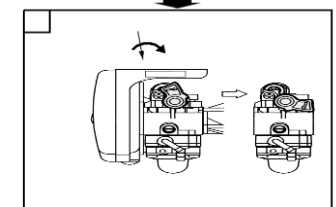


4. Turn down the starter lever of carburetor to set it at the start position.

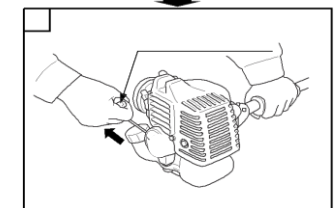
It is not necessary to operate the starter lever when the engine is warmed up (For about 15 minutes after stopping the engine.)

(To be left in the operating position)

Depending on specifications, the starter lever may be provided at the throttle wire side.



5. While holding down the engine firmly, grasp the recoil starter grip and pull vigorously



### ⚠ CAUTION:

- a) When the engine stops on the way after starting, or
- b) When the engine fails to start after trying the recoil operation for 7 to 8 times.

Return the starter lever to the operating position and try the recoil operation.

6. If you move the throttle lever to the high-speed side a little after the engine has started, the starter lever returns to the operating position. Continue the warm-

- Always run the engine with fuel cap properly installed on the engine and the petrol cap vent screw unscrewed.
- Replace fuel cap that allows the petrol to spill or leak.
- Never smoke while refilling engine fuel tank.
- Prevent fire and explosion caused by the static electric discharge. Use only approved, non-metal, portable fuel containers
- Do not store the engine with fuel in fuel tank indoors. Fuel and fuel vapors are highly explosive.
- When storing, screw down petrol cap vent screw tightly.
- Never pour fuel from the engine fuel tank.
- Never siphon fuel by mouth to drain the fuel tank.
- Always have an adult fill the fuel tank.
- Never allow an adult or anyone under the influence of drugs or alcohol to fill the engine.
- Never allow children to fill the engine

### BURNS AND FIRES:

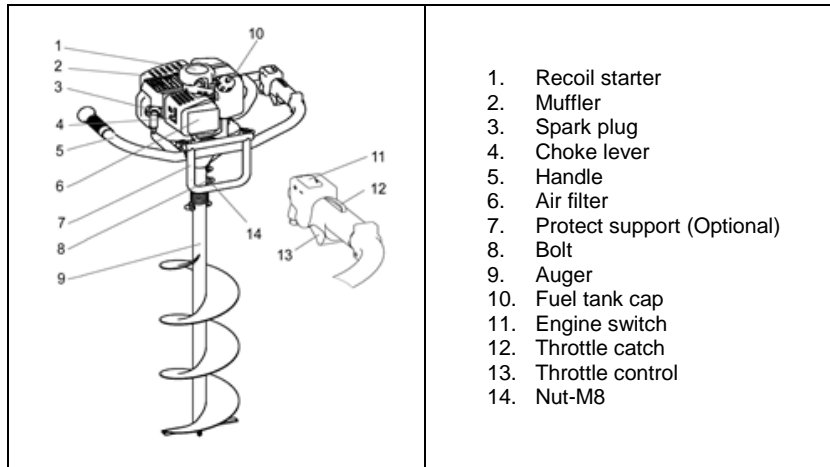
The muffler, muffler guard and other parts of the engine become extremely hot during the operation of the engine. These parts remain extremely hot even after the engine has stopped.

### Prevention of Burns and Fires

- Never remove the muffler guard from the engine.
- Never touch the muffler guard because it is extremely hot and will cause severe burns.
- Never touch parts of the engine that become hot after the operation.
- Always keep materials and debris away from the muffler guard and other hot parts of the engine to avoid fires.

**CAUTION: Hot Gases Are A Normal By-Product Of A Functioning Catalytic Converter. Follow All Safety Instructions to Prevent Burns and Fires**

PARTS OVERVIEW






1. Recoil starter
2. Muffler
3. Spark plug
4. Choke lever
5. Handle
6. Air filter
7. Protect support (Optional)
8. Bolt
9. Auger
10. Fuel tank cap
11. Engine switch
12. Throttle catch
13. Throttle control
14. Nut-M8

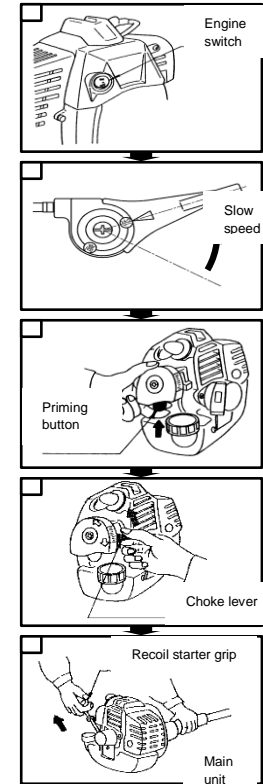
Auger bits are available separately with different diameter as given below:

Plantation Pit Digger	Auger Bit Model	Corresponding Diameter (in centimeter)
KK-PPDE-52	KK-PPDA-06	15
	KK-PPDA-08	20
	KK-PPDA-10	25
KK-PPDE-71	KK-PPDA-06	15
	KK-PPDA-08	20
	KK-PPDA-10	25
	KK-PPDA-12	30

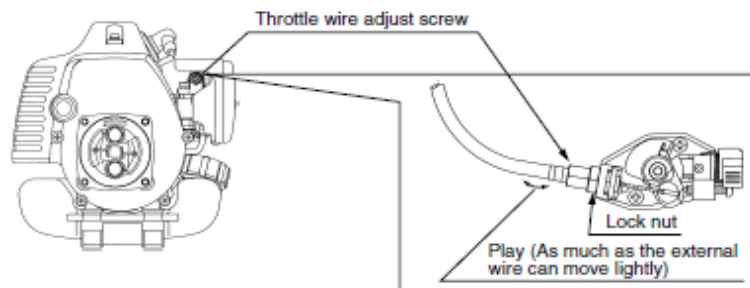
METHODS OF STARTING & STOPPING THE ENGINE

START (CHOKE TYPE UNIT):

1. Turn the engine switch to the "ON" side.
2. Set the throttle lever at the slow speed position.
3. Push the priming button repeatedly with finger till it hits the top. (More than 10 times) Pressing the priming button is necessary to prime the fuel to facilitate the start-up. Since any excess amount of primed fuel returns to the tank, there is no problem of over-priming. Prime the fuel rather more than sufficiently to avoid starting trouble.
4. Turn the choke lever to the fully closed position (at the  Mark). When sufficient fuel is retained and the engine is warm, set the choke lever at the fully opened position (at the  mark)
5. While holding down the engine firmly, grasp the recoil starter grip and pull vigorously
6. When the engine has started, return the choke lever gradually to the fully opened position (at the  Mark).



If only exploding sounds are heard, but it does not start, return the choke lever to the fully closed position and pull the starter grip vigorously once again.



**INSPECTION OF RESPECTIVE SECTIONS:**

Make sure to inspect these sections before operating the engine.

**Inspection of fuel**

- Is sufficient quantity of oil reserved?
- Is not the fuel degenerated?
- Use the proper fuel referring to the “Fuel” section.

**CAUTION**

- Sufficient care must be taken on the fire not only when replenishing but also handling fuel. It could cause fire or explosion.
- Securely close the oil tank cap. Fuel may leak if the cap is tightened aslant. It will never leak if the cap is tightened properly. (Excluding: TL tank cap breather type)

**Inspection of clogging**

- Check the cooling fins, around the muffler and cooling air inlet for trash or withered grasses trapped.
- Remove them if necessary

**Inspection of air cleaner**

- Is not fouled the air cleaner element?
- When the element is fouled or it is not impregnated with oil, inspect and service it in accordance with “Inspection and servicing before each operation”

**Inspection of screws and nuts**

- Check respective sections for loose or missing screws or nuts.
- Service them if necessary.

**Inspection of fuel pipes**

- Check for cracks or fissures on the fuel pipe and grommet, disconnection or fuel leakage from joints on the fuel tank and carburetor.

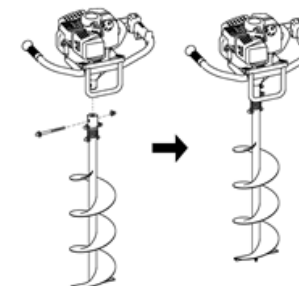
**CAUTION**

Cracks, fissures or disconnection from joints could cause fire or explosion by leaked fuel. Service or replace damaged fuel pipe and grommet.

**OPERATION**

**Assembly before use**

Set the auger on the output shaft, then insert the bolt and then lock it with the nut.



**Preparing Engine for Starting**

**Petrol and Oil:** To operate the engine, we recommend using 2 cycle oil to ensure that the engine operates correctly throughout the life of the engine. Use unleaded regular petrol only.

**Mixture:** Run earth auger with a 25:1 ratio.

**Mixing Fuel and Filling Petrol Tank**

**Mixing Fuel**

1. Fuel must be mixed in a container outside in a well-ventilated area.
2. Fill certified fuel container 1/4 full of recommended fuel.
3. Add recommended amount of 2 cycle oil.
4. Screw container cap on straight and tight.
5. Shake the container to mix fuel and oil.
6. Unscrew fuel cap slowly to vent, add the remainder of fuel requirements.
7. Wipe away any spilled fuel or oil and allow to evaporate before moving or transporting.

**CAUTION:**

**Do not alter/modify the engine or auger:**

- Never alter or modify the engine from the factory. Serious injury or death may occur if the engine is modified or altered.
- When working on or replacing parts for the engine or auger you must always disconnect spark plug wire from the spark plug and keep it away from the spark plug.
- Always wear hearing protection while operation the engine.
- Please do not start your earth auger until you have read the previous section of this manual. If you have read these, follow the steps below to start your earth auger.
- Never store engine with petrol in the tank indoors. Fuel and fuel vapors are highly flammable.



- Never mix fuel and oil directly in the engine petrol tank. Use only approved non-metal, portable fuel containers
- An adult must always handle and fill the engine with fuel.
- Always handle fuel in a well-ventilated area, outdoors, away from flames or sparks.

**IMPORTANT: This Engine Uses a Petrol/Oil Mixture. Do Not Run On Petrol Alone, As It May Cause Damage to the Engine**

### Filling Fuel Tank:

1. Shut-off the engine and allow it to cool completely before refilling the fuel tank.
2. Move to a well-ventilated area, outdoors, away from flames and sparks, before refilling.
3. Clean debris from the area around the fuel cap.
4. Loosen fuel cap slowly. Place the cap on a clean, dry surface.
5. Carefully add fuel without spilling.
6. Do not fill the fuel tank completely full, allow space for the fuel to expand.
7. Immediately replace fuel cap and tighten. Wipe off spilled fuel and allow it to dry before starting the engine.

### NORMAL OPERATION

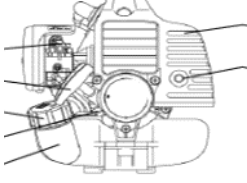
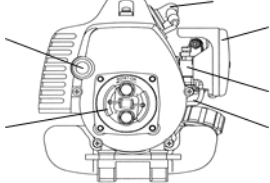
1. The clutch will transfer maximum power only after two hours of normal operation. During this break-in period clutch slippage may occur. The clutch should be kept free of oil or other moisture for efficient operation.
2. Drill holes without placing excessive body weight on the unit. The auger operates most efficiently with a shaving action caused by the weight of the unit itself.
3. Never run an engine indoors. Exhaust fumes are deadly.
4. Do not use an earth auger in the ice.
5. To attach auger to the power head, align holes at top of auger shaft with the output shaft hole. Insert 3/8-16 x 1-1/2" bolt and secure bolt with provided 3/8" bi-way lock nut using a wrench

**NOTE: The ends of the bolt should be even with the auger collar. Bolt head and thread end should never go beyond earth collar**

### Using the Screw Type Manual Venting Fuel Cap:

1. Your power earth auger is equipped with a screw type manual venting fuel cap.
2. Before starting the engine, turn the screw on the top of the fuel cap all the way open (counterclockwise) to its venting position. To ensure that the fuel will not spill during use, check that the fuel cap is screwed on tightly and the fuel cap screw is in the venting position.
3. After using the power earth auger and before putting away or transporting it in a vehicle, screw the fuel cap screw on (clockwise) tightly. This will prevent fuel from leaking during storage. (The fuel cap will not leak fuel during storage if the fuel cap is tight and the screw at the top is tight.)

### COMPONENTS OVERVIEW

	
<ol style="list-style-type: none"> <li>1. Recoil starter grip</li> <li>2. Starter lever</li> <li>3. Cooling air inlet</li> <li>4. Fuel tank cap</li> <li>5. Fuel tank</li> <li>6. Muffler</li> <li>7. Exhaust outlet (Types vary depending on the specifications.)</li> </ol>	<ol style="list-style-type: none"> <li>8. Engine switch (Types vary depending on the specifications.)</li> <li>9. Clutch</li> <li>10. Ignition plug cap</li> <li>11. Air cleaner</li> <li>12. Carburetor</li> <li>13. Priming button</li> </ol>

### INSPECTION BEFORE OPERATING THE ENGINE

**FUEL:** Use mixed oil of ordinary regular gasoline for vehicle and special 2-cycle engine oil with the proportion as shown by the following table.

Mixing ratio (Volumetric ratio):

Gasoline : 2-cycle engine oil
40: 1

- Do not use degenerated oil (with sour smell).
- (It could cause engine trouble such as the starting error, insufficient output, etc.)
- Make sure to clean spilled fuel. It could foul clothes or cause fire.
- Do not use 4-cycle engine oil. (It could cause fouled plug, bound piston ring, clogged muffler, or other problem.)
- Take care while handling gasoline. (As there is a risk of explosion.)

### ADJUSTMENT OF THROTTLE WIRE:

Adjust the play on the throttle wire to 0.5 ~ 1.0 mm.

### LARGER PLAY

- It could cause the starting trouble.
- Revolution speed could rise unexpectedly when the external wire of throttle wire comes off from the position.

### NO PLAY

- Driven equipment may fail to stop even if the throttle lever is returned.

- Do not adjust the setting engine speed unnecessarily.
- Do not check sparks while the ignition plug is removed.
- Do not operate the engine with the muffler or air cleaner cover removed. (Inspect particularly the muffler at regular intervals for loose mounting screws, breakage or leakage, and repair or replace it if any abnormality is observed.)
- Do not operate the engine when grass, leaves or inflammable substances are sticking in or around the muffler.
- Do not touch parts of muffler or engine at high temperatures. (There is risk of burns.)
- Do not touch the ignition plug or high-voltage cord during operation. (There is risk of electric shock or physical injury.)
- Make sure to stop the engine whenever the work is interrupted or moving the engine to another place.
- Do not operate the engine alone. (It must be connected to the driven equipment when it is operated).
- Check frequently the parts used on the fuel line for cracks or leakage, and replace them if necessary.
- Remove dirt, grass or other trash from the cooling fins and the cooling air inlet. (Make sure to stop the engine and the driven equipment before the cleaning.)
- Make sure to use always new gasoline. (Old gasoline may cause sticky substance adhering at the inside of carburetor causing trouble in operation.)
- Before starting the engine, confirm that the area of radius 15 m around it is evacuated and no tank filled with fuel, or others are not left over.
- Use only genuine parts supplied from the manufacturer. Use of parts other than the genuine parts could cause engine trouble or premature abrasion.

**Note:** Important safety items quoted in this manual do not necessarily cover all situations or conditions that could occur. Although sufficient care has been taken to assure the safety of the engine, operators or service personnel must observe necessary precautions to operate it safely and protect themselves from possible dangers.

**NOTE:** When storing unit in an upright position for pro-longed periods of time in warm weather, vent fuel cap to prevent fuel from leaking from the carburetor.

## STARTING AND STOPPING THE ENGINE

**COLD ENGINE START:** Starting the engine for the first time or after the engine has cooled off or after running out of fuel.

1. Open fuel cap vent screw all the way (counterclockwise).
2. Move choke lever to RUN or OFF position.  
**NOTE: Choke must be in the RUN or OFF position when pushing or using the primer bulb**
3. Prime unit until primer hose is filled with fuel.  
**NOTE: When using the primer bulb, allow the bulb to return completely to its original position between pushes**
4. Move choke lever to **CHOKE** or **ON** position.  
**NOTE: CHOKE position is defined by moving the choke lever as far to the ON position as possible.**
5. Push rocker switch to the **ON** position.
6. Squeeze throttle controls wide open with right hand. Grasp starter handle with left hand and pull out slowly, until it pulls slightly harder. Without letting the starter handle retract, pull rope with a rapid full arm stroke. Let it return to its original position very slowly until unit fires or runs. Repeat this step every time the starter rope is pulled.  
**NOTE: If engine fails to start after 5-6 pulls, push primer 1 time and pull the starter rope again.**
7. After the engine starts running, move choke lever to HALF CHOKE position until the unit runs smoothly  
**NOTE: HALF CHOKE is defined when the choke lever is between CHOKE and RUN or ON and OFF position.**
8. Move choke lever to RUN or OFF position and move the throttle to desired speed.  
**NOTE: Run at full throttle when possible. Do not let unit idle for extended periods of time.**
9. To stop the engine, push rocker switch to **OFF** position

## WARM ENGINE START:

1. Open fuel cap vent screw all the way (counterclockwise).
2. Move choke lever to **CHOKE** or **ON** position  
**NOTE: CHOKE position is defined by moving the choke lever as far to the ON position as possible.**
3. Continue with Step 5 of Cold Engine Start.

## CAUTION:

- If auger is mounted to engine, all safety guards must be securely on to avoid any serious injury.
- Starter rope can cause an unanticipated jerk towards the engine. Please follow instructions to avoid injury.

- Never leave the engine running unattended. Turn it off after every use
- Never carry power head and auger between holes while engine is running.

**WARNING:**

- Make sure the unit is in a stable position before pulling the starter handle.
- When the unit starts to fire or run, release the throttle control momentarily with your right hand and return your left hand to the handlebar position to maintain control and stability of the unit with both hands.

**HOT ENGINE START:**

1. Open fuel cap vent screw all the way (counterclockwise).
2. Continue with Step 5 of Cold Engine Starting.
3. If engine does not fire, refer to Step 2 of Warm Engine Starting.

**DO NOT attempt to start the engine in the following ways:**

- DO NOT use starting fluid DO NOT spray flammable liquids or vapors into air cleaner, carburetor or spark plug chamber.
- DO NOT remove spark plug and pull on the starter rope. Flammable fuel can spray out & ignite from a spark from the spark plug.

**2 STROKE PETROL ENGINE- MANUAL**



**BEFORE GETTING STARTED**

This manual describes various cautions necessary to operate the engine properly. Before starting the engine, read the manual and understand the proper method of use. (Improper use of the engine could result in accident or injury.)

Use the engine after reading and understanding also the manual of equipment driven by the engine.

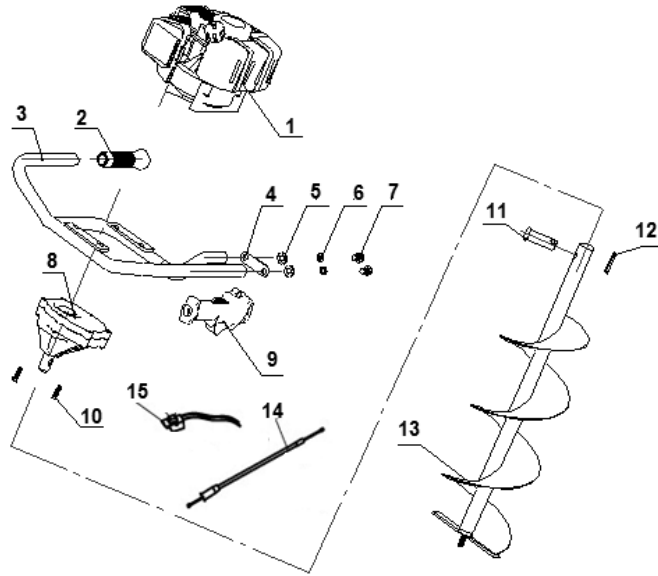
Keep the manual at a safe place where you can refer whenever needed.

**SAFETY INSTRUCTIONS**

	<p>You have to observe the descriptions indicated with this mark because they contain very important information to assure the safety</p>
--	---

- No person who does not understand the content of this manual should be allowed to operate the engine.
- Engine should not be operated indoors or in places with poor ventilation. (Exhaust gas contains odorless and harmful carbon monoxide.)
- Do not insert in or approach hands or foot near the moving or revolving sections.
- Do not store, spill or use gasoline at the vicinity of fire, stove, furnace or devices using the pilot flame or sparks like water heater or others. (There is risk of explosion.)
- Do not refill the fuel indoors or at a place not well ventilated.
- Do not smoke while filling the fuel.
- Do not remove the fuel tank cap or refill the fuel while the engine is still running or immediately after operation when the engine is still hot. (Wait for more than 2 minutes after terminating the operation before refilling the fuel.)
- Do not operate the engine when gasoline has spilled, smell of gasoline is felt as there is a risk of explosion.

**Body (KK-PPDE-52 / KK-PPDE-71)**



Part No	Part Name	Part No	Part Name
B-1	N/A	B-10	Bolt 1/4-20x19
B-2	Handle grip	B-11	Pin roll 10x40
B-3	Handle	B-11	Pin roll 10x50
B-4	Connection strap	B-12	Cotter PIN 2.5x30
B-5	Washer-12 plain	B-13	N/A
B-6	Washer-12 spring	B-13	N/A
B-7	Bolt M12x20	B-13	N/A
B-8	N/A	B-14	Throttle cable
B-9	Control handle	B-15	Switch on/ off

**TECHNICAL SPECIFICATIONS**

Model	KK-PPDE-52	KK-PPDE-71
Engine Type	Forced Air-cooled 2- Stroke	
Displacement	51.7cc	71cc
Max. Output	1.4kW	2.3kW
Fuel	Petrol And Oil Mixture(25:1)	
Fuel Tank Capacity	0.8L	
Ignition System	C.D.I.	
Starting System	Recoil	
Gear Ratio	30:1	
Max. Engine Speed	8500 rpm	
Clutch Engine Speed	3700 rpm	
Idle Engine Speed	2900 rpm	
Auger Speed	0-280 rpm	
Spark plug type /model	L7RTC/TORCH	

**Note: Specifications are subject to change without prior notice.**

**MAINTENANCE AND STORAGE**

**AUGER MAINTENANCE**

1. The gear case has 4 oz. of grease installed at the factory. It is recommended that once a year the gear case be split and the grease level checked. Add grease only if level of grease is below top of the gears. **DO NOT OVERFILL.**
2. Ensure all the screws, nuts, and bolts are tight.
3. During cold weather, store the unit in a cool environment. Transferring the unit from a warm to a cold place can cause the buildup of harmful condensation.

- If blade performance decreases, turn unit off and disconnect spark plug wire. Carefully inspect cutting edge of blade for any signs of wear. If blades show any of these signs, they need to be sharpened or replaced.

### ENGINE MAINTENANCE

**Cooling Fins:** Cooling fins, air inlets and linkages must be free from any debris before each use.

**Air Filter:** Never run engine without installing the air cleaner properly. Added wear and engine failure may occur if air cleaner is not installed. Service air cleaner every 3 months or after 20 hours of operation. **Clean filter daily in extremely dusty conditions.**

#### Steps for Cleaning Air Filter:

- Wash with warm water and mild soap until dirt and debris are removed. Press the filter when washing, do not twist.
- Rinse in warm water until soap and dirt are removed.
- Dry filter by wrapping in a clean cloth and pressing filter until it is dry.
- Apply oil to the entire filter.
- Remove excess oil.
- Attach the filter and air cleaner cover to the engine

### CAUTION

#### TO PREVENT ACCIDENTAL STARTING AND AVOID INJURY:

- Engine must be turned off and cool, and spark plug wire must be removed from spark plug before checking and adjusting engine or equipment.
- Temperature of muffler and nearby areas may exceed 150°F (65°C), so try to avoid these areas.
- Check auger often for loose nuts and bolts. Keep these items tightened.
- Never store engine with fuel in the tank, inside a building. Potential sparks may be present for ignition of fuel and fuel vapours.
- Maintenance and repair on engine and auger must be done only by an adult.
- Engine must be shut-off, cooled, and spark plug wire removed before any repair or maintenance is done.

### Spark Plug

- Check spark plug after every 50 hours of operation.
- Disconnect the spark plug cap, and clean any debris from around the spark plug area.
- Remove spark plug and replace if any of the following occur; pitted electrodes, burnt electrodes, cracked porcelain, or deposits around electrodes.
- After analysis, seat spark plug and tighten with spark plug wrench.
  - Reinstall original spark plug, tighten additional 1/2 turn.
  - Installing new spark plug, adjust spark plug gap to .030" and tighten additional 1/8 – 1/4 turn.

**NOTE: Loose spark plug may overheat and damage the engine. Over tightened spark plug may damage threads in the cylinder head.**

Part No	Part Name	Part No	Part Name
E-10	Clutch Bolt	E-47-4	Fuel pipe Grommet
E-11	Pin Locating $\Phi 5 \times 12.5$	E-48	Fuel Tank Cap
E-12	Mount Ring	E-49	Cushion Rubber (Fuel Tank)
E-13	BOLT W/WASHER M5x28(Allen)	E-50	BOLT M5x18 (Hex Flanged)
E-14	IGNITION COIL	E-51	N/A
E-15	BOLT HEX SKT HD M4x20(Allen)	E-52	N/A
E-16	Washer 4 Plain	E-53	N/A
E-17	Insulator	G/B-54	BOLT HH 1/4"-20x19
E-18	Gasket Insulator	G/B-55	Gear Case Top
E-19	BOLT W/WASHER M5x32 (Star/Allen)	G/B-56	Gear Case Bottom
E-20	BOLT W/WASHER M5x22(Star/Allen)	G/B-57	Gasket Gear Case
E-21	Gasket Carburetor	G/B-58	Ball Bearing Double Lip R12-2RS
E-22	Carburetor	G/B-59	Ball Bearing R10
E-23	Air Filter inside cover	G/B-59-1	BALL BEARING R10 3/8 INCH
E-24	BOLT W/ WASHER PPH M5x52(Star)	G/B-60	Gear 7T Pinion Threaded
E-25	Plate Reinforcement(Air filter)	G/B-61	Gear 44T
E-26	Air Filter Sponge	G/B-62	Gear 48T
E-27	Air Filter out side cover	G/B-63	Pinion 10T
E-28	Gasket Muffler	G/B-64	Snap Ring-19
E-29	Spacer Exhaust	G/B-65	Dowel Pin Steel
E-30	Muffler	G/B-66	Bolt (Allen) SKT HD 1/4"- 20x50
E-31	BOLT W/WASHER PPH M5x12(Allen)	G/B-67	Bolt (Allen) SKT HD 1/4"- 20x38
E-32	Washer 5 Plain	G/B-68	Clutch Drum
E-33	BOLT M5x65(Allen)	G/B-69	Shaft Out Put 7/8"



Part No	Part Name	Part No	Part Name
E-1-1	Cylinder	E-34	Cover Muffler
E-1-2	Gasket Cylinder	E-35	BOLT W/WASHER M5x12 (Hex)
E-1-3	Piston Ring	E-36	Starter reel
E-1-4	Piston	E-37	Gasket Starter
E-1-5	Piston Pin	E-38	Starter Assy
E-1-6	Circlip Piston Pin	E-38-1	Rope Lock
E-1-7	Needle Bearing Piston Pin	E-38-2	Starter Handle
E-1-8	Oil Seal (METAL) 15X26X6	E-38-3	Rope Starter
E-1-9	Crankcase (Small)	E-38-4	Starter Case
E-1-10	N/A	E-38-5	Recoil spring
E-1-11	Bearing 6202	E-38-6	Compression spring
E-1-12	Crankshaft	E-38-7	Rope Reel
E-1-13	Key (Crankshaft)	E-38-8	Ratchet Pin
E-1-14	Bearing 6202	E-38-9	Ratchet
E-1-15	Pin(Crankcase)	E-38-10	Screw Ratchet
E-1-16	Crankcase(Big)	E-39	BOLT W/WASHER M5x20 (Allen)
E-1-17	Oil Seal (METAL) 15X26X6	E-40	BOLT W/WASHER M5x25 (Allen)
E-1-18	Screw 5X38 (Allen)	E-41	Shroud, Engine
E-1-19	Screw 5X18(Allen)	E-42	Cover, Engine Shroud
E-2	Sparkplug	E-43	BOLT W/WASHER M5x16
E-3	Decompression Valve	E-44	Bracket Lower, Fuel Tank
E-4	N/A	E-45	Bracket upper, Fuel Tank
E-5	Flywheel	E-46	Fuel tank
E-6	Nut,M8 (Flanged)	E-47	FUEL LINE KIT ASSEMBLY
E-7	Washer-B	E-47-1	Petrol Filter
E-8	Clutch Shoe Assy	E-47-2	Fuel Pipe-Long
E-9	Washer-A	E-47-3	Fuel pipe-Short

**Carburetor**

Never tamper with factory setting of the carburetor.

**TRANSPORTING YOUR EARTH AUGER**

1. Never transport the engine inside a closed space or vehicle. Fuel or fuel vapors may ignite causing serious injury or death.
2. If fuel is present in the fuel tank, transport in an open vehicle in an upright position.
3. If a closed vehicle has be used, remove fuel into an approved red fuel container. **DO NOT siphon by mouth.**
4. Run the engine to use up the fuel in the carburetor and fuel tank. Always run the engine in a well-ventilated area.
5. Wipe away any spilled fuel from the engine and earth auger. Allow it to dry.

**LONG TERM STORAGE**

If your earth auger will not be used for more than one month, prepare it for long term storage.

**Steps for Long Term Storage:**

1. Add fuel stabilizer according to manufacturer's instructions.
2. Run the engine for 10-15 minutes to ensure that the stabilizer reaches the carburetor.
3. Remove the remaining fuel from the fuel tank into an approved fuel container.
4. Remove auger from power head and apply a thin layer of grease to the output shaft.
5. Store auger and power head (engine) in a vertical position.
6. Remove all debris from auger and power head (engine).

**SERVICE AND REPAIR**

**SERVICE INFORMATION**

We build quality and durability into the design of our products; but no amount of careful design by us, and careful maintenance by you, can guarantee a repair-free life for your auger. Most repairs will be minor, and easily fixed by observing the suggestions given in the troubleshooting guide in this manual.

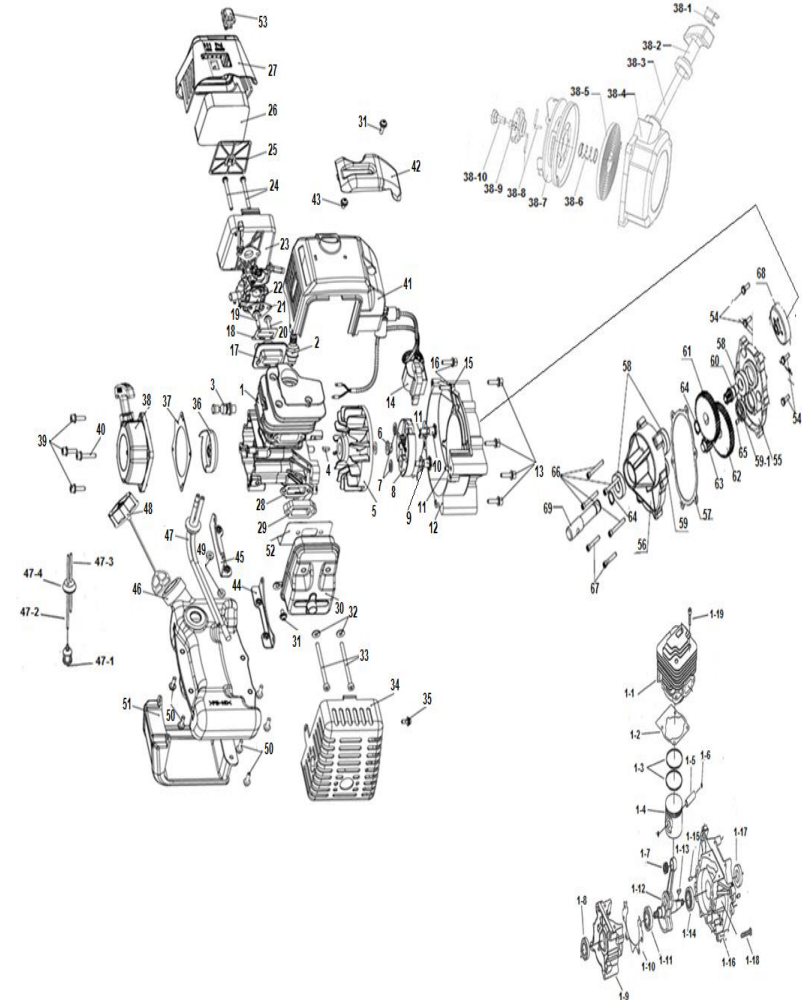
The guide will help you pinpoint the causes of common problems and identify remedies. For more complicated repairs, you may want to rely on your dealer, an authorized mechanic or. (Contact your dealer for a list of authorized mechanics in your area. We will always be glad to answer any questions you have, or help you find suitable assistance.

**TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	REMEDY / ACTION
Engine does not start	1. Power switch is off	1. Flip switch to <b>ON</b> position.
	2. Spark plug wire is disconnected	2. Connect spark plug wire to spark plug.
	3. Engine is Out of fuel	3. Refuel the Engine.
	4. Spark plug is wet, faulty or improperly gapped.	4. Clean, replace or adjust the gap of the spark plug.
	5. Throttle control is not held wide open	5. Hold throttle control wide open when pulling the recoil handle
	6. Fuel line hose is not positioned in the bottom of the fuel tank	6. Push fuel line down into fuel in the fuel tank
Engine runs rough	1. Dirty air filter	1. Clean or replace the air filter
Engine floods during operation	2. Choke partially engaged	2. Turn off choke
	3. Carburetor out of adjustment	3. Call the service personnel
Engine is difficult to start	1. Stale fuel	1. Drain old fuel and fill with fresh fuel .Use fuel stabilizer at the end of season
	2. Spark plug wire is loose	2. Make sure spark wire is securely attached to spark plug
	3. Dirty carburetor	3. Clean carburetor, use fuel stabilizer, new fuel can
	4. Throttle control not held wide open	4. Prime unit 3 more times, then hold throttle wide open when pulling recoil handle

**PARTS DIAGRAM & LIST- KK-PPDE-71**

Engine:

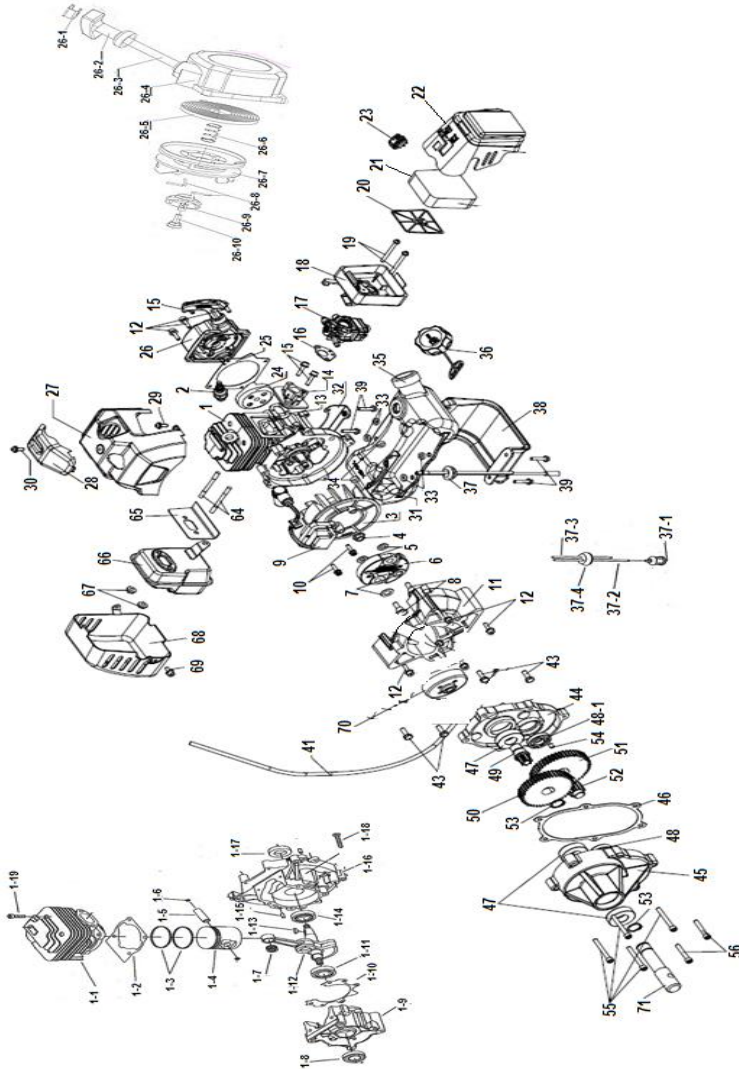


Part No	Part Name	Part No	Part Name
E-10	Screw M 5x20 (Hex)	G/B-45	Gear Case Bottom
E-11	Mount Ring	G/B-46	Gasket Gear Case
E-12	Bolt w/washer SKT HD M5x20	G/B-47	Ball Bearing Double Lip R12-2RS
E-13	Gasket Insulator	G/B-48	Ball Bearing R10
E-14	Insulator	G/B-48-1	BALL BEARING R10 3/8 INCH
E-15	Screw 5x28 (Allen)	G/B-49	Gear 7T Pinion Threaded
E-16	Gasket Carburetor	G/B-50	Gear 44T
E-17	Carburetor	G/B-51	Gear 48T
E-18	Air Filter inside cover	G/B-52	Pinion 10T
E-19	Screw 5x52 (Star)	G/B-53	Snap Ring-19
E-20	Plate Reinforcement(Air filter)	G/B-54	Dowel Pin Steel
E-21	Air Filter Sponge	G/B-55	Bolt (Allen) SKT HD 1/4"-20x50
E-22	Air Filter out side cover	G/B-56	Bolt (Allen) SKT HD 1/4"-20x38
E-23	N/A	E-64	Stud M6x62
E-24	Starter Reel	E-65	Gasket Muffler
E-25	Gasket Starter	E-66	Muffler
E-26	Starter Assy	E-67	Nut M6 Flanged
E-26-1	Rope Lock	E-68	Cover Muffler
E-26-2	Starter Handle	E-69	Screw 5x12 (Allen)
E-26-3	Rope Starter	G/B-70	Clutch Drum
E-26-4	Starter Case	G/B-71	Shaft Out Put 7/8"
E-26-5	Recoil spring		

PROBLEM	POSSIBLE CAUSE	REMEDY / ACTION
Engine misses or lacks power	1. Clogged fuel tank	1. Remove and clean the tank
	2. Clogged air filter	2. Clean or replace the air filter if necessary
	3. Carburetor out of adjustment or bad	3. Call the service personnel
	4. Spark plug wet, faulty or improperly gapped	4. Clean, replace or adjust the gap of the spark plug
Engine runs, then quits	1. Fuel cap not venting	1. Open manual venting fuel cap screw all the way open (counterclockwise)
	2. Plugged fuel filter	2. Clean or replace the filter
	3. Carburetor out of adjustment or bad	3. Call the service personnel
Engine revs too high	1. Carburetor out of adjustment	1. Call the service personnel
Auger turns at idle	1. Idle speed too high	1. Adjust idle speed to a lower value
	2. Broken clutch spring	2. Replace the spring
Auger turns, but has no power	1. Choke on	1. Turn off the choke after engine starts running
	2. Carburetor out of adjustment	2. Call the service personnel
	3. Broken transmission	3. Call the service personnel
	4. Worn clutch shoes	4. Replace clutch shoes and spring
	5. Worn engine lower seat	5. Call the service personnel
Auger jumps	1. Blade damaged	1. Replace with a new blade
Auger cuts slowly	1. Dull blade	1. Buy new blade, or have blade sharpened at the service centre
	2. Damaged fishtail point	2. Replace fishtail point

**PARTS DIAGRAM & LIST- KK-PPDE-52**

Engine:



Part No	Part Name	Part No	Part Name
E-1-1	Cylinder	E-26-6	Compression spring
E-1-2	Gasket Cylinder	E-26-7	Rope Reel
E-1-3	Piston Ring	E-26-8	Ratchet Pin
E-1-4	Piston	E-26-9	Ratchet
E-1-5	Piston Pin	E-26-10	Screw Ratchet
E-1-6	Circlip Piston Pin	E-27	Shroud, Engine
E-1-7	Needle Bearing Piston Pin	E-28	Cover, Engine Shroud
E-1-8	Oil Seal 12x22x7	E-29	Screw M5x16 (Allen)
E-1-9	Crankcase (Small)	E-30	Screw M5x20 (Star)
E-1-10	N/A	E-31	Bracket Lower, Fuel Tank
E-1-11	Bearing 6202	E-32	Bracket upper, Fuel Tank
E-1-12	Crankshaft	E-33	Cushion Rubber (Fuel Tank)
E-1-13	Key (Crankshaft)	E-34	N/A
E-1-14	Bearing 6202	E-35	Fuel Tank
E-1-15	Pin(Crankcase)	E-36	Fuel Tank Cap
E-1-16	Crankcase(Big)	E-37	Fuel line kit
E-1-17	Oil Seal 15x30x7	E-37-1	Petrol Filter
E-1-18	Screw 5X30 (Allen)	E-37-2	Fuel Pipe-Long
E-1-19	Screw 5X18 (Allen)	E-37-3	Fuel pipe-Short
E-2	Spark plug	E-37-4	Fuel pipe Grommet
E-3	Flywheel	E-38	N/A
E-4	Nut,M8 (Flanged)	E-39	Bolt M5x18 (Hex)
E-5	Washer-B	E-40	N/A
E-6	Clutch Shoe Assy	E-41	N/A
E-7	Washer-A	E-42	N/A
E-8	Clutch Bolt	G/B-43	BOLT HH 1/4"-20x19
E-9	IGNITION COIL	G/B-44	Gear Case Top