



## GAS POWERED EPA 38CC T-POST DRIVER

ITEM: 81011-XP



## OWNER'S MANUAL AND SAFETY INSTRUCTIONS

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).

FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: (909) 628 0880 MON-FRI 9AM TO 3PM PST

# IMPORTANT SAFETY INFORMATION

**WARNING**

## GENERAL SAFETY WARNINGS

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

## SAFETY

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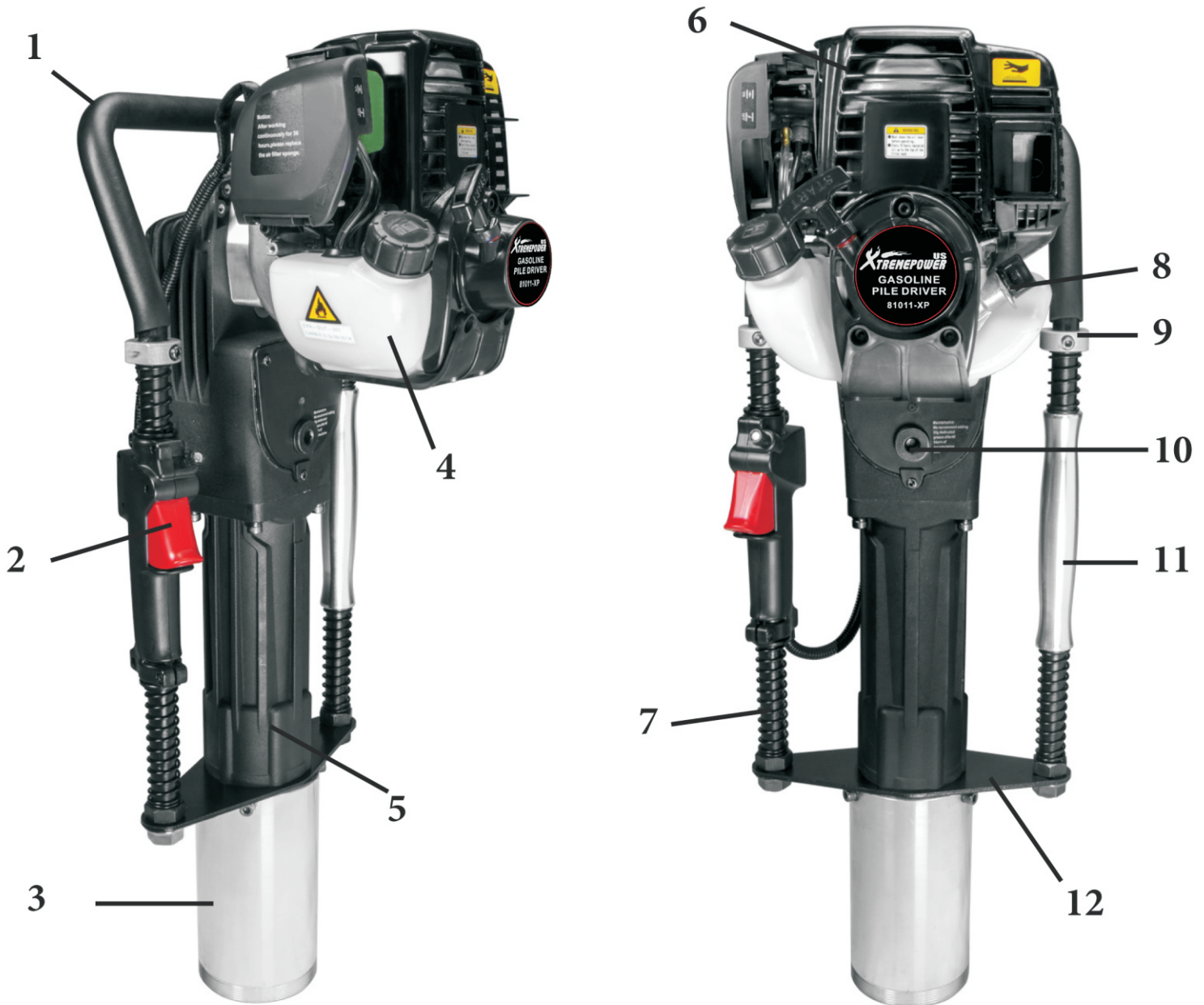
Please read this section carefully. Read entire operating and maintenance instructions AND the instructions for the equipment this engine powers. Failure to follow instructions could result in serious injury or death. Operate the auger according to the safety instructions outlined here and inserted throughout the text. Anyone who uses this auger must read the instructions and be familiar with the controls.

- The size, power, complexity and operating characteristics of this type of powered equipment would dictate that each operator must receive adequate, professional instruction regarding the proper operation of this Hole Digger before being allowed to utilize it. **BEFORE** attempting to utilize this Hole Digger, read this Operator Manual, to familiarize each operator with its correct operating procedures. Avoid the urge not to take the necessary time to read this Operator Manual before operating the Hole Digger. **DO NOT OPERATE THE HOLE DIGGER UNTIL EACH OPERATOR COMPLETELY COMPREHENDS THE CONTENTS OF THIS MANUAL, THE APPLICABLE SAFETY AND OPERATIONAL INFORMATION DVD, APPLICABLE SUPPLEMENTAL INFORMATION AND THE INFORMATION SUPPLIED BY THE ENGINE MANUFACTURER.**
- Develop a comprehensive program for the safe operation of the Hole Digger by its owner(s) and/or operator(s). Such a program will include, but is not limited to: instructional requirements for operation, applicable OSHA requirements, local laws and regulations, job site safety and a Hole Digger maintenance program. Constantly examine and upgrade this program to guarantee owner(s) and/or operator(s) safety.
- Determine that the Hole Digger is in its original, factory configuration and has not been modified in any manner. Many modifications can result in potentially dangerous configurations that can lead to property damage and/or personal injury.
- Minors should never be allowed to operate the Hole Digger. Bystanders, especially children and animals, should not be allowed in the area where the Hole Digger is in use. The hole digging process can result in flying particles being emitted at high velocity and striking the operator and/or onlookers. This can lead to the possibility of property damage and/or personal injury. Keep all body parts, loose clothing, foreign objects and onlookers clear of the rotating auger and/or auger extensions.
- Operators must be in proper physical condition, mental health and not under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgment. Working with the Hole Digger is strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor **BEFORE** operating the Hole Digger.
- Prolonged use of the Hole Digger (or other, similar machines) exposes the operator to vibrations which may produce Whitefinger Disease (Raynaud's Phenomenon). This phenomenon reduces the hand's ability to feel and regulate temperature, produces numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis. Anti-vibration systems do not guarantee that you will not sustain Whitefinger Disease. Therefore, continuous and regular users should closely monitor the condition of their hands and fingers. After each period of use, exercise to restore normal blood circulation. If any of the symptoms appear, seek medical advice immediately.
- Clothing must be sturdy and snug fitting, but allow complete freedom of movement. Never wear loose fitting jackets, scarves, neck ties, jewelry, flared or cuffed pants or anything that could become caught on controls or moving parts. Wear long pants to protect your legs. Protect your hands with heavy duty, non-slip gloves to improve your grip. Good footing is most important when operating the Hole Digger. Wear sturdy boots with non-slip soles. Steel-toed safety shoes are highly recommended.

# IMPORTANT SAFETY INFORMATION

- Flying debris, generated by the hole digging process, can cause eye injury. Eye protection is required while operating or when near operating equipment.
- Visually inspect the Hole Digger, auger(s), auger extension, and accessories for damaged or worn parts. Inspect each auger for the proper screw bit and blade. Look for loose and/or damaged handle grip areas. Check for loose and/or broken parts. Determine that operator controls work freely, all safety devices are operative and information/safety decals are readable. Check to determine that the Hole Digger and all related accessories are in good mechanical condition **BEFORE** utilization.
- Contact appropriate representatives to determine if/where electrical cables, gas lines and other hazardous items are buried under the work surface **BEFORE** utilization. The Hole Digger and related accessories are not classified as being insulated. Contact with buried electrical cables, gas lines and other hazardous items can result in electrocution and/or an explosion.
- Know how the controls operate. Know how to stop the engine quickly in an emergency. **ALWAYS** start the engine according to the instructions as outlined in this manual to minimize the possibility of unexpected or uncontrolled auger rotation. Unexpected auger rotation can cause loss of machine control, and the possibility of property damage and/or personal injury.
- Breathing Carbon Monoxide fumes while operating the Hole Digger can result in property damage and/or personal injury. The normal operation of the Hole Digger is outdoors where the potential effects of Carbon Monoxide to the operator are minimized. If the Hole Digger is operated in a closed area (indoors or outdoors), determine if supplemental ventilation is required to minimize the potential effects of Carbon Monoxide to the operator. Follow all current OSHA regulations pertaining to ventilation.
- Gasoline is an extremely flammable fuel. Use extreme caution when handling gasoline or mixing fuel. Always utilize UL®, CSA or CE approved containers for the storage and/or transportation of fuel. Do not smoke or bring any fire or flame near the fuel. Always shut off the engine and allow it to cool before refueling. Never remove the fuel tank filler cap while the engine is running. Never operate an engine without a fuel tank filler cap. Select bare ground for fueling and move at least 10 feet from the fueling spot before starting the engine. Wipe off any spilled fuel before starting the engine and check for leakage. If a fuel or oil leak is found, do not start or run the engine until the leak is fixed and the spillage has been wiped away. Take care not to get fuel or oil on your clothing. If this happens, change your clothing immediately.
- **DO NOT** operate the Hole Digger with onlookers close by. Caution all onlookers to stand clear. The hole digging process can result in flying particles being emitted at high velocity and striking the operator and/or onlookers, This can lead to the possibility of property damage and/or personal injury. Wear proper safety eyewear. Keep all body parts, loose clothing and foreign objects clear of the rotating auger.
- **DO NOT** utilize a shovel and/or foreign object to remove the loose soil from a hole area while the Hole Digger is in use. Such a practice can result in the shovel and/or foreign object to become entrapped by the rotating auger, leading to the possibility of property damage and/or personal injury.
- Start and operate the Hole Digger only in a well ventilated area. Carbon Monoxide fumes given off by an engine are poisonous. Breathing these fumes can result in property damage and/or personal injury. Operate the Hole Digger only when/where visibility and light are adequate for the job at hand. Work carefully. Always hold the Hole Digger firmly with both hands.
- Contact with a hot engine muffler and heat shield can cause property damage and/or personal injury. Remain clear of hot engine muffler and heat shield.
- Operate only when/where visibility and light are adequate for the job at hand.
- Stop the engine between each hole to minimize the possibility of property damage and/or personal injury. Normal operation is on level surfaces.
- THE ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. THIS STATEMENT IS MADE IN COMPLIANCE TO CALIFORNIA PROPOSITION 65.

# PRODUCT INFORMATION



## PARTS LIST

|   |                     |    |                    |
|---|---------------------|----|--------------------|
| 1 | Carrying Handle     | 7  | Dampening Spring   |
| 2 | Throttle Switch     | 8  | Oil Level Gauge    |
| 3 | Timber Guide Sleeve | 9  | Positioning Sleeve |
| 4 | Fuel Tank           | 10 | Grease Plug        |
| 5 | Hammer Case         | 11 | Handle             |
| 6 | Air Filter          | 12 | Support Plate      |

# PRE-OPERATION

## INSTALLING PILING SOCKET

Before use, install the correct piling socket sleeve for your applicaton as shown below:



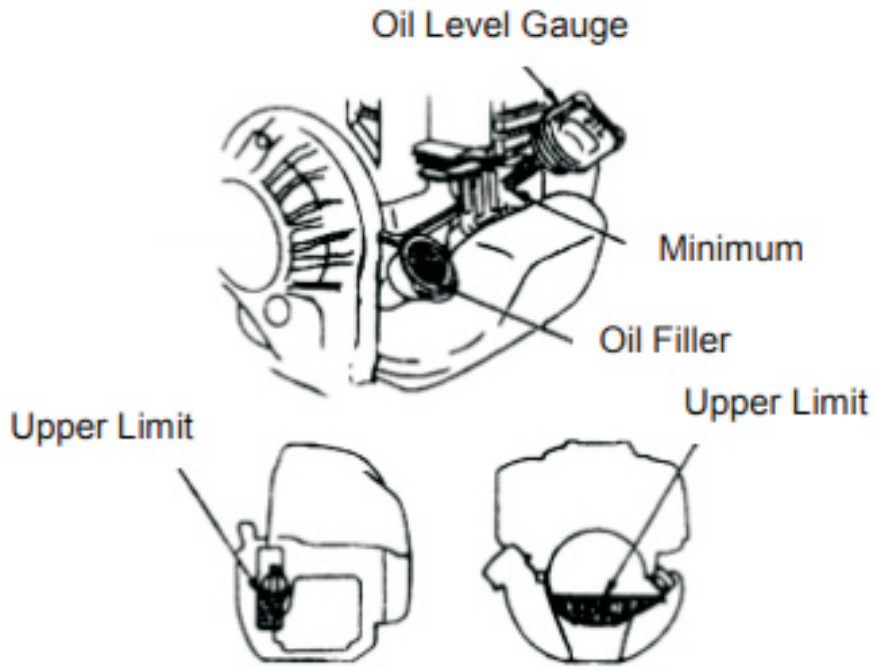
## ADDING FUEL

1. Always turn the engine off and allow adequate time for it to cool before refueling. Only use unleaded fuel with 86 octane or higher.
2. Never refuel your driver with the engine hot, running, or in an unventlated area. Fuel vapors are extremely flammable and can cause severe injury or death if ignited by a spark or excessive heat from a hot engine.
3. Do not add too much fuel. The fuel level should not exceed the neck of the filler fuel tank. If accidental overfilling occurs, pour fuel out until the fuel level is within the proper range within the fuel tank. There should not be any fuel on the surface of the machine. ALWAYS wipe your post driver clean after refueling. Only start the post driver after any excess fuel has evaporated completely.
4. After refueling, tighten the fuel tank lid.
5. This post driver uses pure gasoline as fuel. Do not use mixed gasoline and engine oil. This will result in poor starting performance and low function.

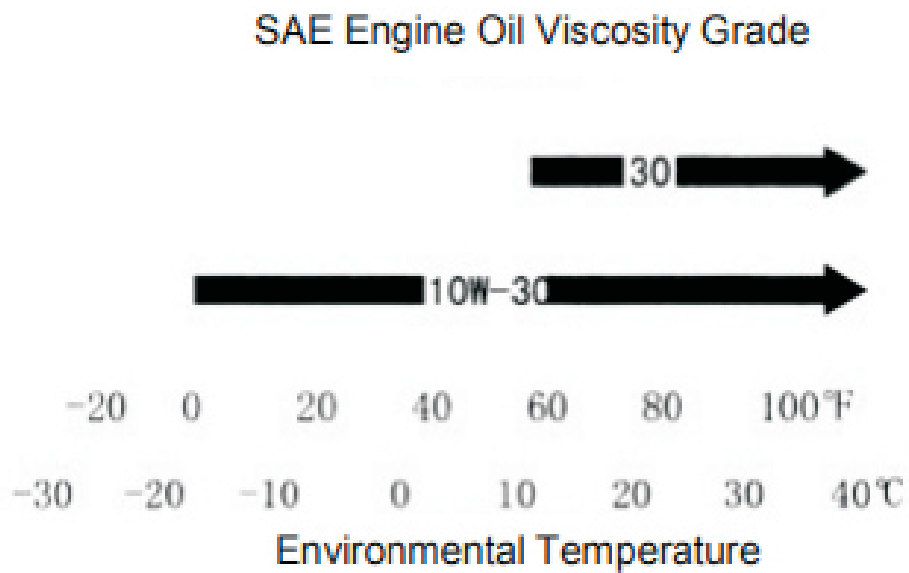
## ADDING ENGINE OIL

1. Before the first use, add engine oil. THE OIL IS NOT FILLED WHEN THE POST DRIVER IS ASSEMBLED. We recommend adding less than 80 cm<sup>2</sup> (2.7 US oz., 2.8 Imp. oz.), then checking. Add oil if required to fill to the bottom edge of the oil fill hole. Use 10W-30 oil. DO NOT OVERFILL. Always hold driver in upright position to check oil level. Proper oil level is essential for the correct operation of the post driver. Overfilling the oil will result in loss of power and could cause permanent damage to your engine.
2. To avoid damage to the engine, always check the engine oil before starting the driver. Be sure the engine oil level is adequate.
3. For every 10 hours of use, it is necessary to check the oil level.
4. To check the oil, place the driver in the vertical position by standing it on the piling socket. Unscrew the oil level gauge, and check the oil level as shown below. If the oil level is low, add oil. If the oil is dirty, change the oil.

# PRE-OPERATION



The recommended environmental temperature range of the machine is 5° to 105° F. We recommend the use of SAE 10W-30 engine oil, which equals to API classification SJ. See SAE Engine Oil Consistency Table below.

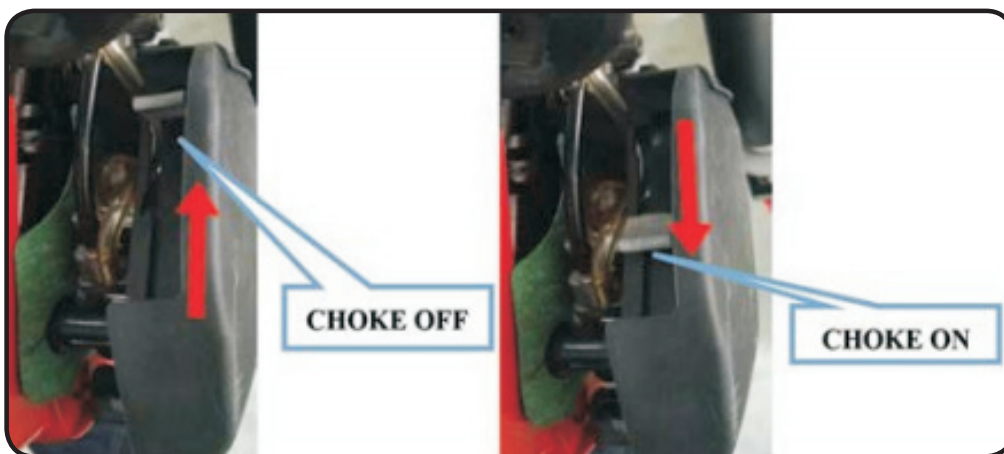


## CHECKING THE AIR FILTER

1. Remove the air filter cover, and check to see if the air filter is clean. If it is dirty, clean it.
2. After checking the air filter, reinstall the air filter cover.

# OPERATION

1. The engine is inclinable, which means it can be operated in any direction. BEFORE STARTING, the engine needs to be in the upright position for 5 minutes.
2. Before starting the post driver, press the transparent, semi-circle fuel bubble repeatedly until the carburetor is filled with fuel. If the engine is cool, close the choke. Open the choke after starting.
3. Set the machine upright as pictured below.
4. Hold the upper part of the handle tightly with one hand while pulling the starter rope about 20" quickly. Do not allow the starter rope to fling back freely, but hold it tightly to avoid injury.
5. Start the engine, and then open the choke completely. AFTER IDLING FOR 5 MINUTES, start normal work.
6. While the post driver is running, don't pull the starter rope. The high-speed rotating parts may damage the starter.

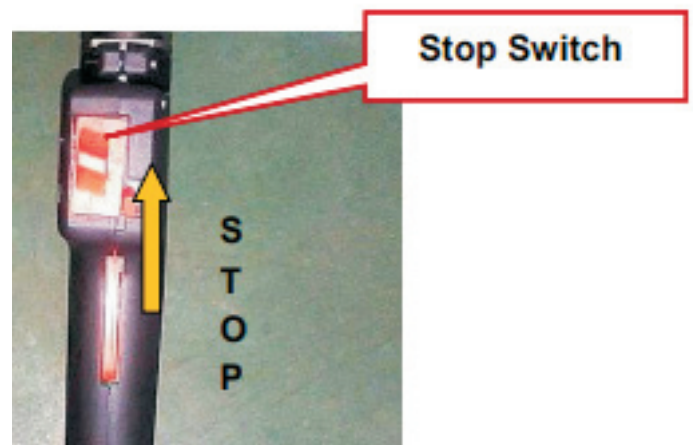


## OPERATING THE HOLE DIGGER

1. After the engine is started, ALLOW IT TO IDLE FOR 5 MINUTES BEFORE USE.
2. For a brand new driver, ONLY PERFORM LOW TO MEDIUM-SPEED WORK FOR THE FIRST 24 HOURS OF USE in order to break in the engine and prolong the life of the machine.
3. For a brand new driver, it may take 2 to 3 minutes of post driving for the machine to begin running at a normal performance level.
4. Do not operate the driver at a high speed when you are not driving posts.

## TURNING OFF THE MACHINE

1. Release the throttle trigger and ALLOW THE MACHINE TO IDLE FOR 3 TO 5 MINUTES.
2. Push the stop switch to the off position.



# MAINTENANCE

## AIR FILTER MAINTENANCE

Afer the air filter has been used for some tme, dirt atached to the filter element influences air intake and results in reduced power and increased oil consumption. It is necessary to clean the air filter regularly. The cleaning cycle is usually every 3 months or every 25 hours of operaton. When using the driver in extremely dusty environments, clean it every 10 hours or even every day.

## CLEANING THE AIR FILTER

1. Remove the air filter cover, and take out the air filter.
2. Put the air filter into water. Squeeze the water out of the filter and allow it to air dry.
3. Put it in clean oil and rub gently. Take it out and squeeze it dry.
4. Afer cleaning, assemble the air filter and the air filter cover.



## FUEL FILTER MAINTENANCE

If the fuel filter is blocked, the post driver will have reduced speed and weaker impact energy.

1. Open the tank lid.
2. Remove the fuel filter from the fuel tank with a metal hook and clean it.
3. When cleaning the fuel filter, clean the fuel tank at the same tme as shown below.



## CARBURETOR MAINTENANCE

The fuel tank and the carburetor generally have residual fuel. Over tme, the residual fuel can block up the fuel line causing the engine not to start. Therefore, when the machine is not used for more than one week, be sure to completely remove the fuel.

1. To remove fuel, pull out the fuel inlet pipe and press the rubber carburetor fuel bubble repeatedly for fuel discharge.
2. Press the fuel inlet pipe back into positon when the fuel in the fuel bubble and fuel return pipe is emptied.

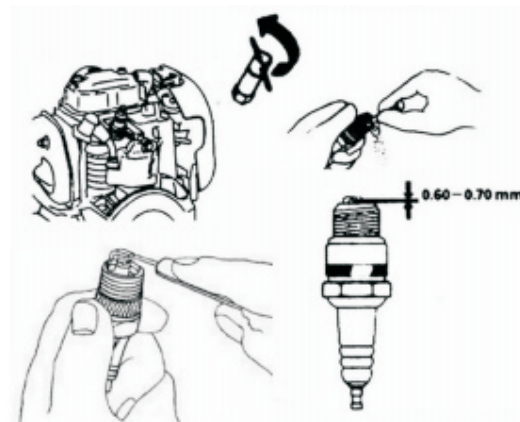


# MAINTENANCE

## SPARK PLUG MAINTENANCE

If the spark plug has too much carbon deposit, it will result in poor engine performance. It is necessary to regularly maintain and adjust the spark plug every year or every 100 hours of operation.

1. Take apart the spark plug as shown below.
2. Remove carbon deposit.
3. Adjust to 0.6 – 0.7 mm.
4. Screw spark plug tight.

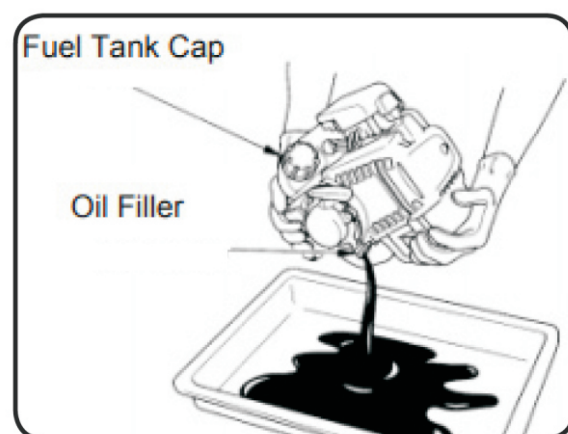


## REPLACING ENGINE OIL

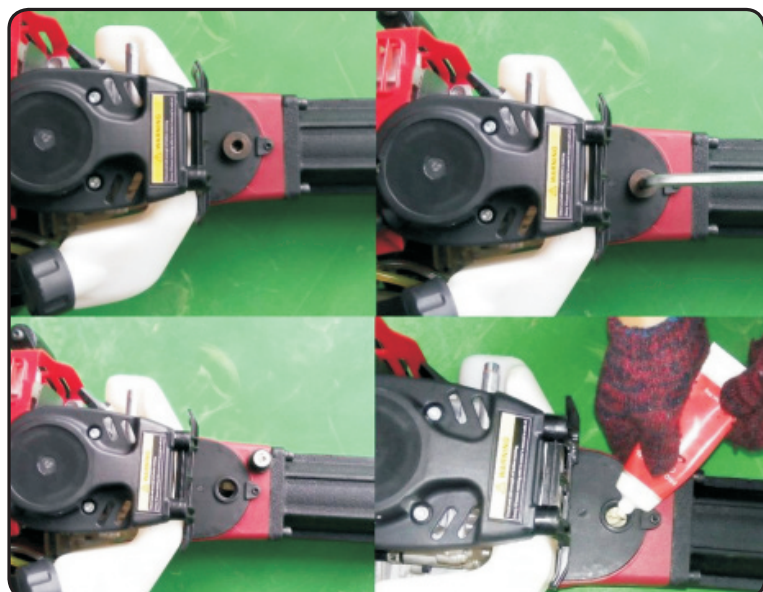
1. Unclean engine oil will result in reduced service life of moving engine parts. It is necessary to regularly replace engine oil and keep engine oil at proper levels.
2. Replace engine oil every 6 months or after 50 hours of operation.
3. Drain the oil when the engine is hot to guarantee that engine oil can be emptied quickly and completely.

### 4. REPLACING ENGINE OIL:

- a. Ensure that the cap of the fuel tank is screwed tight.
- b. Place a proper container near the engine for storing waste engine oil.
- c. Remove the engine oil gauge, lean the engine toward the engine oil filler, and discharge engine oil to the container as shown below.
- d. Place the engine horizontally and add the recommended oil to the bottom edge of the oil filler. Refer to page 6 for adding the correct amount of engine oil.
- e. After engine oil is discharged, there is some residual oil in the engine. If the residual oil is less than 100 mL, add new engine oil slowly to the bottom edge of the oil filler.



The recommended environmental temperature range of the machine is 5° to 105° F. We recommend the use of SAE 10W-30 engine oil, which equals to API classification SJ.



## LUBRICATION OF GEARBOX AND IMPACT PARTS

After 40 hours of use, open the gearbox cover, and add 75 Series Grease to the connecting rod to fully lubricate the machine as shown below.

# MAINTENANCE SCHEDULE

| This schedule is based on operating the post driver under normal conditions. Under more strenuous conditions, such as a dusty environment or long work hours, the maintenance cycle should be adjusted accordingly. |   | Before Each Use | After Each Use or Every Day | After Filling Oil | Every Week | Every Month | If Temporary Failure | If Necessary |
|---|---|-----------------|-----------------------------|-------------------|------------|-------------|----------------------|--------------|
| The Whole Machine   | Outlook Check<br>(state, tightness of screws) | √               |                             | √                 |            |             |                      |              |
|   | Clean   |                 | √                           |                   |            |             |                      |              |
| Control Handle/Stop Button  | Function Check                                | √               |                             | √                 |            |             |                      |              |
| Air Filter  | Clean   |                 |                             |                   | √          |             |                      | √            |
|   | Replace                                       |                 |                             |                   |            |             | √                    |              |
| Fuel Filter   | Check   |                 |                             |                   |            | √           |                      |              |
|   | Replace                                       |                 |                             |                   |            |             | √                    |              |
| Fuel Tank/Fuel Tank Lid   | Clean   |                 | √                           | √                 |            |             |                      |              |
|   | Check   | √               |                             | √                 |            |             |                      |              |
|   | Tighten                                       |                 |                             |                   |            |             |                      | √            |
| Reduction Gearbox/Impact Cylinder   | Clean   |                 |                             |                   |            | √           |                      |              |
|   | Add Grease                                    |                 |                             |                   |            |             |                      | √            |
| Muffler   | Check   |                 |                             |                   |            | √           |                      |              |
|   | Remove Carbon Deposit                         |                 |                             |                   |            |             |                      | √            |
| Cylinder Cooling Fin  | Check   |                 |                             |                   |            | √           |                      |              |
|   | Clean   |                 |                             |                   |            |             |                      | √            |
| Spark Plug  | Check/Adjust                                  |                 |                             |                   |            | √           |                      |              |
|   | Replace                                       |                 |                             |                   |            |             |                      | √            |
| Screw and Nut   | Check   | √               |                             | √                 |            |             |                      |              |
|   | Tighten                                       |                 |                             |                   |            |             |                      | √            |

# TROUBLESHOOTING

**Example 1:** Difficulty starting the engine in a cooled state.

1. Is the spark plug damp?
  - a. If yes, dry the spark plug.
2. If no, does the spark plug produce a spark?
  - a. If no, replace the spark plug.
3. If yes, check to see if too much fuel has been absorbed.
  - a. If too much fuel has been absorbed, reduce the fuel supply.

**Example 2:** Difficulty starting after a sudden stop.

1. Is the fuel tank empty?
  - a. If yes, add fuel.
2. If no, is the carburetor blocked?
  - a. If yes, clean carburetor.
3. If no, is the fuel filter blocked?
  - a. If yes, clean the fuel filter.
4. If no, is there too much carbon deposit on the spark plug?
  - a. If yes, clean the spark plug.

**Example 3:** Slow speed and weak power.

1. Is there too much carbon deposit on the cylinder or silencer?
  - a. If yes, clean the cylinder or silencer.
2. If no, is the fuel line and air vent of the fuel tank blocked?
  - a. If yes, clean the fuel line and air vent of fuel tank.
3. If no, is the air filter blocked?
  - a. If yes, clean the air filter.

**Example 4:** Post driver is making abnormal sounds.

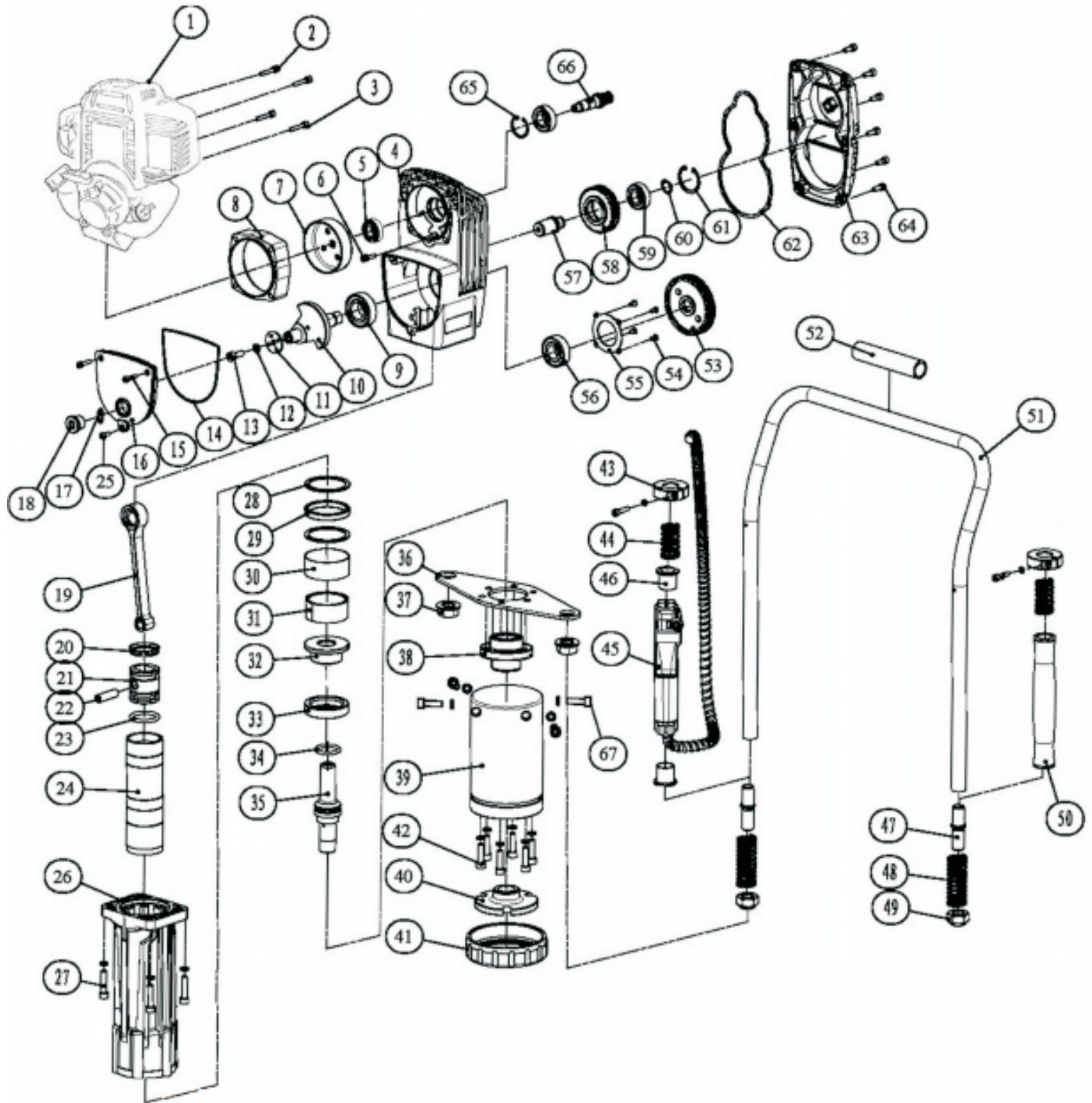
1. Is there too much carbon deposit in the combustion chamber?
  - a. If yes, clean the combustion chamber.
2. If no, is there serious abrasion on active components?
  - a. If yes, replace them.

**Example 5:** The post driver is working normally, but efficiency is low.

1. Is the rubber ring of the impact piston old and worn out?
  - a. If yes, replace the rubber ring of the impact piston.

|   |                                   |
|---|-----------------------------------|
| Engine Type                                 | 4-stroke,single-cylinder,air-cool |
| Model                                       | 81011-XP                          |
| Fuel  | Unleaded gasoline 90# or above    |
| Displacement                                | 38CC                              |
| Oil level                                   | 0.08L                             |
| Oil Capacity                                | 0.65L                             |
| Max power and Corresponding Rotating speed  | 1.0KW/6500r/min                   |
| Max torque and Corresponding Rotating speed | 1.65N.m/5500r/min                 |
| Idle speed                                  | 3000±250r/miin                    |
| Fuel consumption rate                       | ≤ 450g/kW.h                       |
| Impact frequency                            | 700-1350BPM                       |
| Impact energy                               | 20~55J                            |
| Starter system                              | Hand pull start                   |

# PARTS EXPLODED VIEW



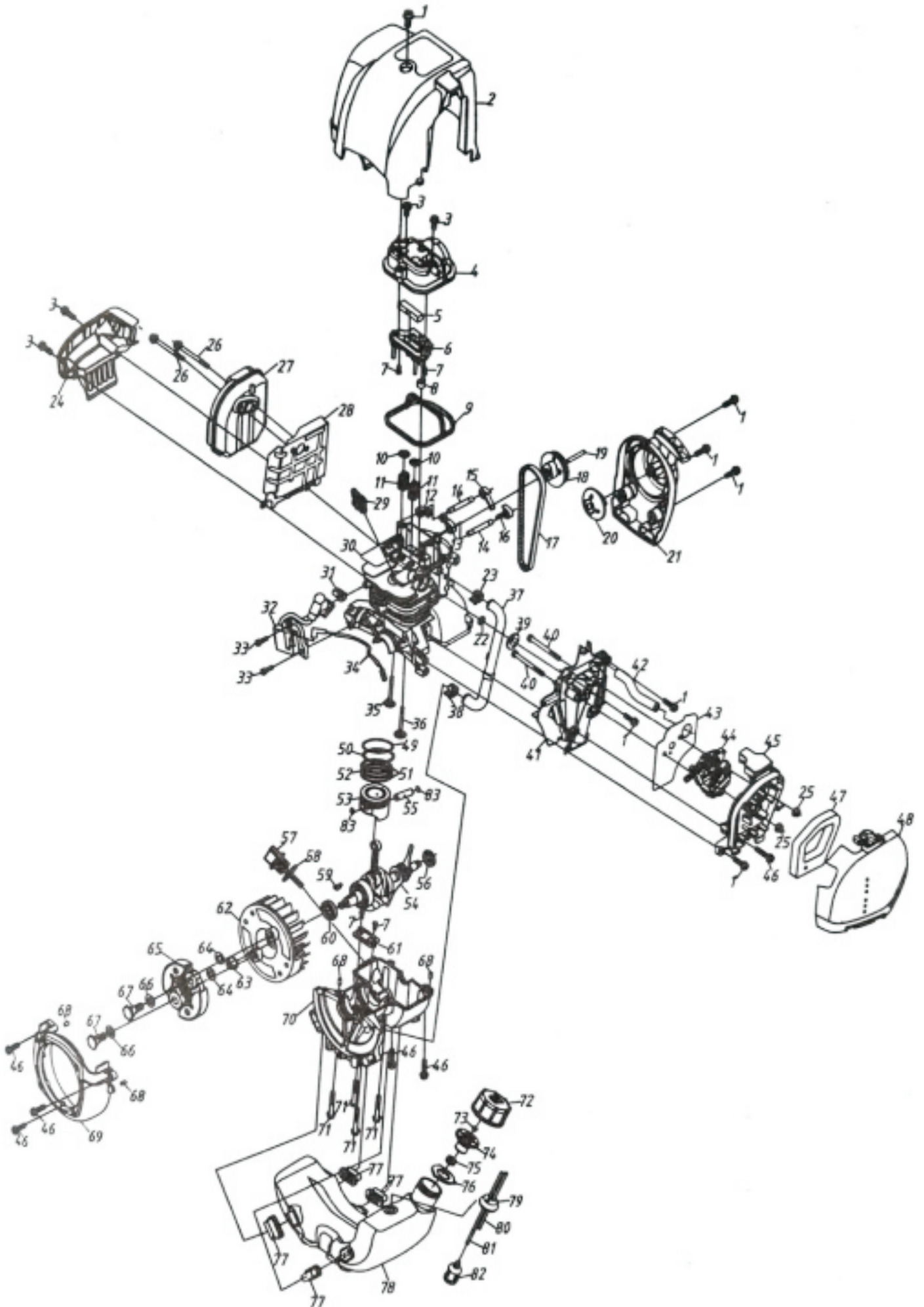
# PARTS LIST

| No. | Name                                  | Qty | No. | Name  | Qty |
|-----|---------------------------------------|-----|-----|---|-----|
| 1   | Huasheng 140FA Gasoline Engine        | 1   | 41  | Piling Socket Retainer                      | 1   |
| 2   | Inner Hexagon Cheese-head Screw M6×50 | 2   | 42  | Inner Hexagon Cheese-head Screw M8×40       | 6   |
| 3   | Inner Hexagon Cheese-head Screw M6×45 | 2   | 43  | Positioning Sleeve                          | 2   |
| 4   | Gearbox                               | 1   | 44  | Compression Spring<br>Φ22.5×Φ27.5×60        | 2   |
| 5   | Deep Groove Ball Bearings<br>6202-2RZ | 1   | 45  | Combination Switch                          | 1   |
| 6   | Inner Hexagon Cheese-head Screw M6×25 | 1   | 46  | Switch Handle Guide Sleeve                  | 2   |
| 7   | Driven Disk                           | 1   | 47  | Connecting Thread Head                      | 2   |
| 8   | Connection Block                      | 1   | 48  | Compression Spring<br>Φ22.5×Φ27.5×123       | 2   |
| 9   | Deep Groove Ball Bearings<br>6205-2RZ | 1   | 49  | Step Nut                                    | 2   |
| 10  | Impact Crankshaft                     | 1   | 50  | Handle Sleeve                               | 1   |
| 11  | Crankshaft Retainer                   | 1   | 51  | Steel Tube Handle                           | 1   |
| 12  | Elastic Washer 8×2.1                  | 1   | 52  | Handle Cushion                              | 1   |
| 13  | Inner Hexagon Cheese-head Screw M8×20 | 1   | 53  | Big Gear                                    | 1   |
| 14  | Grease Storage Box Seal               | 1   | 54  | Cross Recessed Countersunk Head Screw M5×10 | 4   |
| 15  | Inner Hexagon Cheese-head Screw M5×20 | 2   | 55  | Bearing Holder                              | 1   |
| 16  | Grease Storage Box Lid                | 1   | 56  | Deep Groove Ball Bearings<br>6204-2RZ       | 1   |
| 17  | O-ring Φ18×2.65                       | 1   | 57  | Gear Shaft                                  | 1   |
| 18  | Grease plug M20×1.5                   | 1   | 58  | Middle Gear                                 | 1   |
| 19  | Impact Connecting Rod                 | 1   | 59  | Deep Groove Ball Bearings<br>6203-2RZ       | 2   |
| 20  | Lip-shaped Ring<br>Φ35.5×Φ45.5×6      | 1   | 60  | Shaft Retainer 17                           | 1   |
| 21  | Impact Piston                         | 1   | 61  | Hole Retainer 40                            | 1   |
| 22  | Impact Piston Pin                     | 1   | 62  | Gearbox Cover Seal                          | 1   |
| 23  | O-ring Φ35.5×5                        | 1   | 63  | Gearbox Cover                               | 1   |
| 24  | Impact Cylinder                       | 1   | 64  | Inner Hexagon Cheese-head Screw M6×16       | 6   |

# PARTS LIST

|    |   |   |    |  |   |
|----|---|---|----|--|---|
| 25 | Inner Hexagon Cheese-head<br>ScrewM5×16 | 1 | 65 | Hole Retainer 35                         | 1 |
| 26 | Aluminum Hammer Case                    | 1 | 66 | Small Gear                               | 1 |
| 27 | Inner Hexagon Cheese-head<br>ScrewM8×35 | 4 | 67 | Inner Hexagon Cheese-head<br>Screw M8x20 | 4 |
| 28 | Iron Ring                               | 2 |    |  |   |
| 29 | Small Vibration Absorption Ring         | 1 |    |  |   |
| 30 | Opening Ring Rubber Circle              | 1 |    |  |   |
| 31 | Opening Ring                            | 1 |    |  |   |
| 32 | Iron Sleeve                             | 1 |    |  |   |
| 33 | Big Vibration Absorption Ring           | 1 |    |  |   |
| 34 | O-ring Φ33×4                            | 1 |    |  |   |
| 35 | Shock                                   | 1 |    |  |   |
| 36 | Support Plate                           | 1 |    |  |   |
| 37 | Hexagon Flange Nut M18×1.5              | 2 |    |  |   |
| 38 | Shock Guide Sleeve                      | 1 |    |  |   |
| 39 | Piling Socket                           | 1 |    |  |   |
| 40 | Inner Pile Head                         | 1 |    |  |   |

# EXPLODED VIEW



# PARTS LIST

| Parts No. | Name                    | Qty | Parts No. | Name                       | Qty |
|-----------|-------------------------|-----|-----------|----------------------------|-----|
| 1         | Socket M5X15            | 7   | 43        | Carburetor Gasket          | 1   |
| 2         | Cover                   | 1   | 44        | Carburetor                 | 1   |
| 3         | Socket M5×12            | 3   | 45        | Air Cleaner Housing        | 1   |
| 4         | Cylinder Head Cover     | 1   | 46        | Socket M5x22               | 6   |
| 5         | Filter                  | 1   | 47        | Filter Element             | 1   |
| 6         | Inner Head Cover        | 1   | 48        | Air Cleaner Cover          | 1   |
| 7         | Screw M4x8              | 4   | 49        | First Piston Ring          | 1   |
| 8         | Head Cover Grommet      | 1   | 50        | Second Piston Ring         | 1   |
| 9         | Head Cover Seal         | 1   | 51        | Oil Rings                  | 2   |
| 10        | Valve Spring Retainer   | 2   | 52        | Cushion Spring             | 1   |
| 11        | Valve Spring            | 2   | 53        | Piston                     | 1   |
| 12        | Exhaust Valve Rocker    | 1   | 54        | Crankshaft Assembly        | 1   |
| 13        | Intake Valve Rocker     | 1   | 55        | Piston Pin                 | 1   |
| 14        | Rocker Arm Pin          | 2   | 56        | Oil Seal                   | 1   |
| 15        | Exhaust Valve Lifter    | 1   | 57        | Oil Level Gauge            | 1   |
| 16        | Intake Valve Lifter     | 1   | 58        | O-Shaped Seal Ring 14x2.65 | 1   |
| 17        | Timing Belt             | 1   | 59        | Woodruff Key 3x5x13        | 1   |
| 18        | Cam Gear                | 1   | 60        | Oil Seal                   | 1   |
| 19        | Cam Pin Roller          | 1   | 61        | Oil Valve                  | 1   |
| 20        | Recoil Starter Pulley   | 1   | 62        | Flywheel                   | 1   |
| 21        | Starter Assembly        | 1   | 63        | Nut M8                     | 1   |
| 22        | Intake Pipe Flat Gasket | 1   | 64        | Spacer                     | 2   |
| 23        | Clamp                   | 1   | 65        | Clutch                     | 1   |
| 24        | Air Guide               | 1   | 66        | Clutch Washer              | 2   |
| 25        | Flange Nut M5           | 2   | 67        | Clutch Bolt                | 1   |
| 26        | Stud Bolt               | 2   | 68        | Pin B4x8                   | 4   |
| 27        | Muffler                 | 1   | 69        | Fan Cover                  | 1   |
| 28        | Air Exhaust Guide       | 1   | 70        | Lower Crankcase            | 1   |
| 29        | Spark Plug              | 1   | 71        | Socket M5x32               | 4   |
| 30        | Cylinder Block          | 1   | 72        | Fuel Tank Cap              | 1   |
| 31        | Ignition Wire Clamp     | 1   | 73        | Intake Nozzle              | 1   |
| 32        | Ignition Coil Assembly  | 1   | 74        | Inner Cap                  | 1   |
| 33        | Socket M4x14            | 2   | 75        | End Cap                    | 1   |
| 34        | Stop Wire               | 1   | 76        | Gasket                     | 1   |
| 35        | Exhaust Valve           | 1   | 77        | Rubber Shock Absorber      | 4   |
| 36        | Intake Valve            | 1   | 78        | Fuel Tank                  | 1   |
| 37        | Oil Tube                | 1   | 79        | Fuel Line Grommet          | 1   |
| 38        | Clamp                   | 1   | 80        | Fuel Return Tube           | 1   |
| 39        | Intake O-Ring           | 1   | 81        | Fuel Inlet Tube            | 1   |
| 40        | Bolt M5X55              | 2   | 82        | Fuel Filter                | 1   |
| 41        | Intake Shroud           | 1   | 83        | Piston Pin Retainer        | 2   |
| 42        | Breather Tube           | 1   |           |                            |     |



# OF NOTE

## PLEASE READ THE FOLLOWING CAREFULLY

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THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**Record Product's Serial Number Here:** \_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



**SAVE THESE INSTRUCTIONS.**

### Questions, problems, missing parts?



Before returning to your retailer, our exceptional customer service is here to help.

Call Us: 909.628.0880

Email Us: [customer@xtremepowerusa.com](mailto:customer@xtremepowerusa.com)

Hours of Operation: 9am - 4pm (Monday - Friday)

**PRODUCT MADE IN CHINA**