



GAS POWERED EPA 52CC T-POST DRIVER
ITEM:81010-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



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

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, fared 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

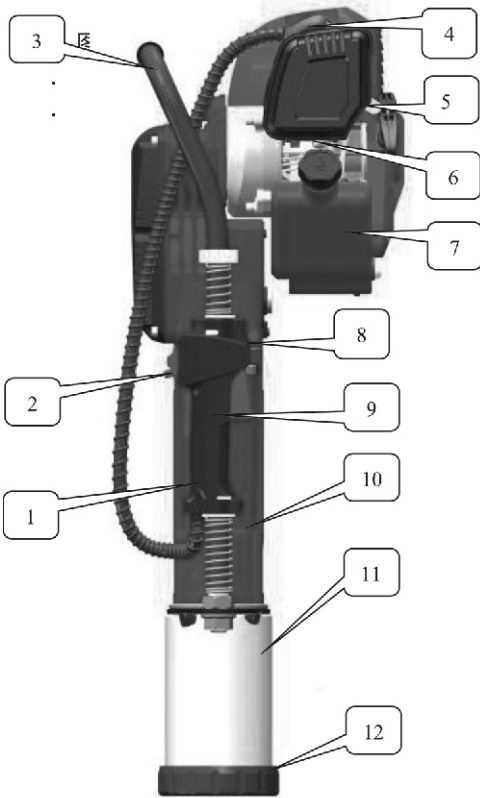


Fig. 1

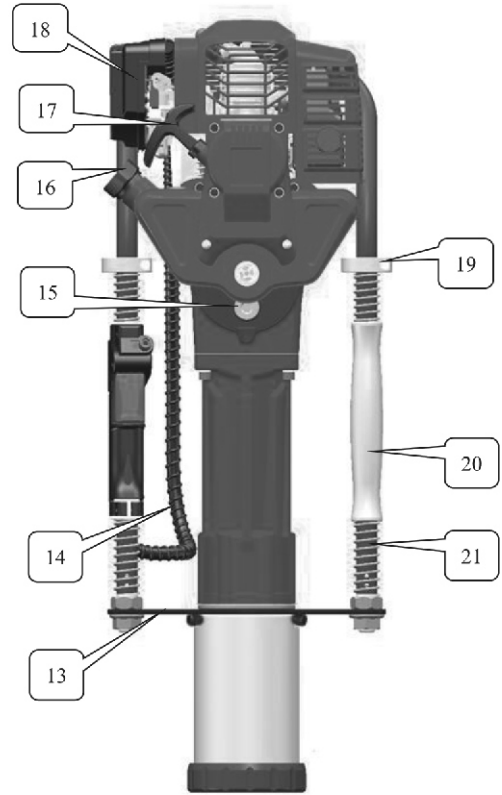


Fig.2

No.	Name of Part	No.	Name of Part	No.	Name of Part
1	Combination Switch	2	Stop Switch	3	Handle
4	Spark Plug	5	Intake Switch	6	Fuel Bubble
7	Fuel Tank	8	Regulating Switch	9	Throttle Switch
10	Hammer Case	11	Piling Socket	12	Piling Socket Cover
3	Support Plate	14	Throttle Cable	15	Lubricating Oil Filling Port
16	Fuel Tank Lid	17	Starter	18	Air Filter
19	Positioning Sleeve	20	Grip	21	Damping Spring

PRODUCT DATA

Main Purpose and Function

1 Purpose: It can be used for outside piling operation in farms, orchard fences or barriers.

2 Function:

2.1 It is a handheld gasoline pile driver which boasts light weight and low discharge capacity.

2.2 The product conforms to design of man-machine engineering, reduces working strength of the operator to the greatest extent, and boasts simple and comfortable operation. The operator can achieve 360° all-around operation.

2.3 It can regulate impact energy and impact frequency and be applied to a variety of piles less than 99mm in diameter.

2.4 Advantage: Save the trouble of using heavy machines such as generator, air compressor, and trucking-lorry.

2.5 The operating handle of the machine is rubber and plastic sponge handle which can greatly reduce the recoil force of the machine. It's installed with two-way Damping Spring which makes the user more comfortable.

Key Data of Product

Engineer type	Single cylinder, air cooling, 2 stroke, cylinder diameter × stroke: 44X34mm
Model	81010-XP
Fuel	Mixed oil (Gasoline: two-stroke engine oil=25:1)
Fuel tank capacity	1.3L
Weight	20.2Kg
Displacement	52CC
Max power and speed	1.25KW/7000r/min
Max torque and speed	2.5N.m/5000r/min
Fuel consumption rate	≤ 0.60L/h
Impact frequency	700~1350 RPM
Impact energy	20~55J
Starter system	Hand pull start

PRE-OPERATION

1. Piling Socket

Install Piling Socket Retainer of specifications of 20 ~ 49、 50 ~ 69、 70 ~ 99mm which are suitable for the pile size. See Fig.3 for the knob.

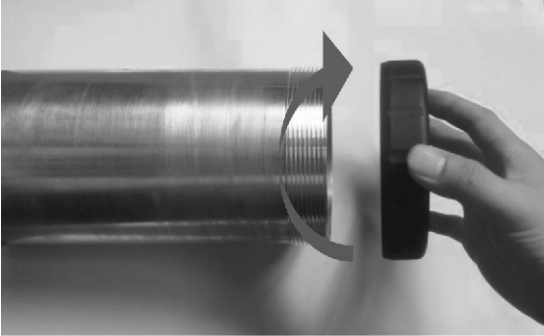


Fig. 3

2 Fuel

Use qualified gasoline above 90# and two-stroke special engine oil

Recommended mixing ratio

Condition	Gasoline :engine oil
Operation within 20 hours	20:1
Operation of over 20 hours	25:1

2.1 Pure gasoline (without two-stroke engine oil) is forbidden.

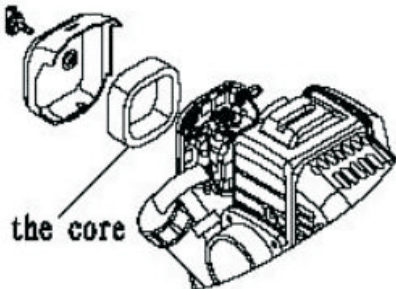
2.2 Add fuel in a well-ventilated place.

2.3 Do not add too much oil. The oil shall not exceed the neck of Fuel Tank Filling Port. If fuel spills, wait until the fuel is removed or volatilizes completely and then restart the machine.

2.4 After refueling, tighten the lid of Fuel tank.

3. Check and clean the air filter

The air filter must be often cleaned, or the polluted air filter will lower the output power of the engine. If the air filter is blocked by dusts, use gasoline to clean the air filter, then dip in the oil, wring oil out and put the air filter back.



OPERATION

1. Turn on the gasoline switch until the gasoline flows out of the clear plastic pipe.

(Graph 1)

2. Close the choke totally.(Graph 2)

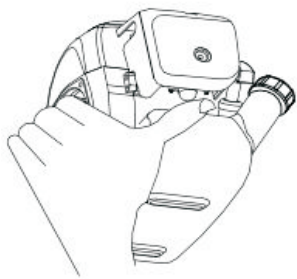
If the engine is heated, the choke must be totally opened.

3. Open the throttle half.

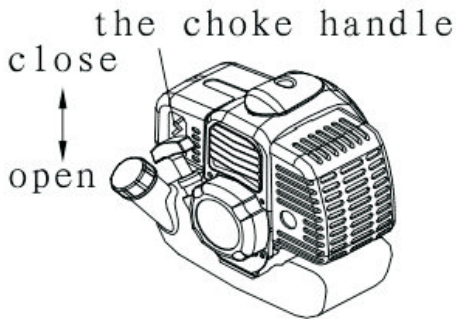
4. Draw the starter several times slowly, and then draw quickly.

Note: If the excessive gasoline causes the start difficulty, take down the ignition plug and the input pipe, open the choke and the throttle totally, draw the starter several times, then install the input pipe and start the engine.

After the startup,open the choke totally.



Graph1



Graph2

Running

1. After the gasoline engine is started, first carry out idle operation of 5 minutes to warm up the machine.

2. When the gasoline engine is warmed up, press throttle handle to the appropriate regulatory position according to the required impact energy.

Note: The new gasoline pile driver use shall mainly boast low or medium-speed for work in the first 20 hours of operation and the maximum throttle shall not be used in order to extend the service life.

3. Operating speed of gasoline engine shall be at medium speed.

4. High-speed operation of pile driver during non-piling is prohibited.

Turning off the Machine

1. Release throttle handle and carry out idle running of the machine for 3-5 minutes.

2. Pull Stop Switch to the position of flameout. See the position of Stop Switch in Fig.5.

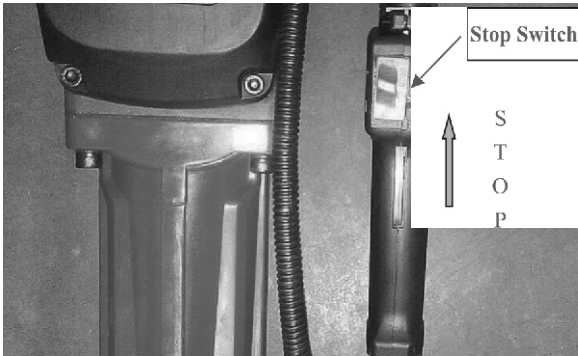


Fig. 5

Technical Maintenance

1. Air Filter

Check air filter regularly. Soot deposit blocking filter element of air filter will reduce power of gasoline engine and service life. If the filter has too much soot deposit, clean it with warm water and detergent, and then wipe dry it with dry cloth, and then install the air filter. Filter should be replaced if damaged. Particularly if it's in the environment of much dust, maintenance cycle shall be shortened properly.

2. Fuel filter

If the fuel filter is blocked, pile driver will have reduced speed and weaker impact energy. Method: ① Open the tank lid. Get out the fuel filter from Fuel tank with metal hook and clean it. ②When cleaning the fuel filter, clean the fuel tank at same time as it's shown in Fig.6, 7 and 8.



Fig. 6



Fig. 7



Fig. 8

3. Carburetor

Fuel tank and carburetor generally have residual oil. After some time, the residual oil will become greasy oil which block up the oil line, causing that the engine can't be started. Therefore, when the machine is not used for more than one week, be sure to completely take the fuel out. Method: Pull out the oil inlet pipe, press rubber bubble of Fuel Bubble of Carburetor repeatedly for oil discharge, and press the oil inlet pipe back to its position when fuel in Fuel Bubble and oil return pipe is emptied.

4. Spark Plug

MAINTENANCE

To ensure normal operation of the engine, spark plug gap must be proper. Remove sediment with a wire brush. Proper gap of Spark Plug is 0.5-0.7 mm. See Fig.9.

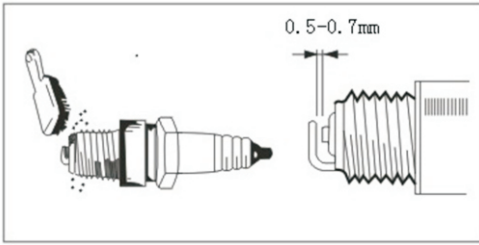


Fig.9

5. Muffler

Regularly remove dirt on inlet and outlet of muffler, or clean dirt in it with detergent.

6. Gearbox lubrication

Open the cover of the gear boxes, and lubricate the driving gear regularly with lubricating oil to guarantee full lubrication of the gear.

7. The cylinder heat sink

Regularly remove dust to ensure the cylinder cooling. The gasoline pile driver is air-cooling type. If dust accumulates on the cylinder heat sink, the cooling effect will be influenced directly, which will lead to failure of the cylinder.

8. Filling of impact cylinder lubrication

After working for an accumulated 50 hours, fill special lubrication of 50g for the impact cylinder. See Fig. 10,11,12 and 13.

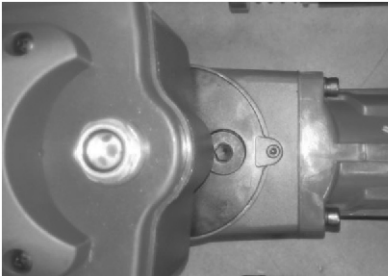


Fig. 10

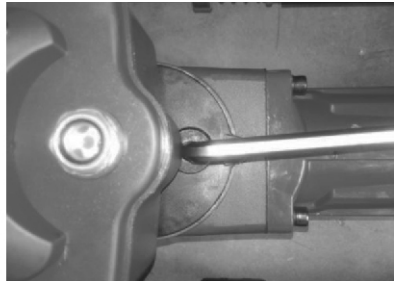


Fig. 11



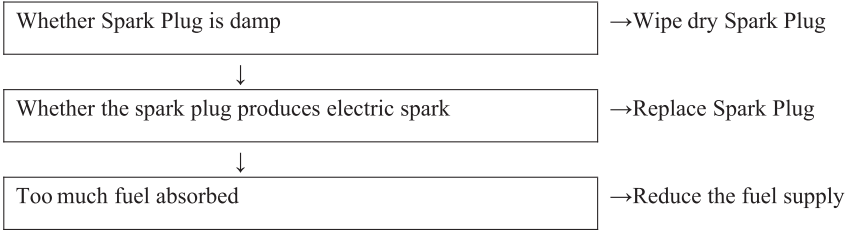
Fig. 12



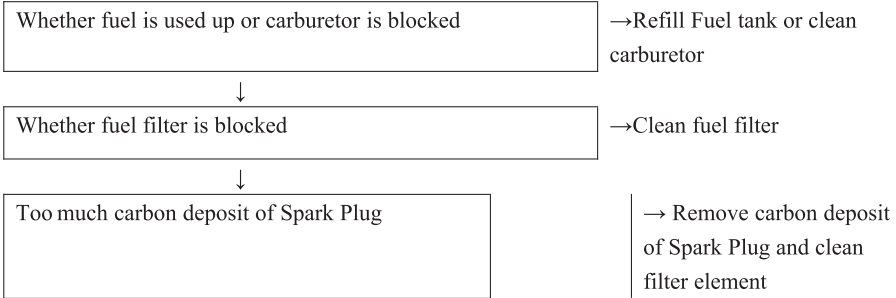
Fig. 13

TROUBLESHOOTING

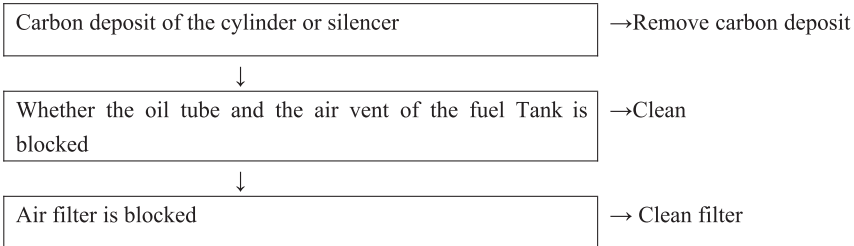
Example 1: Difficulties in starting engine in cooling state.



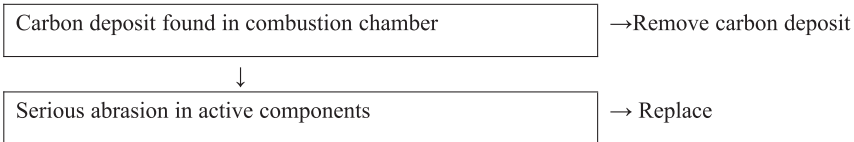
Example 2: Difficulties in restarting after a sudden stop



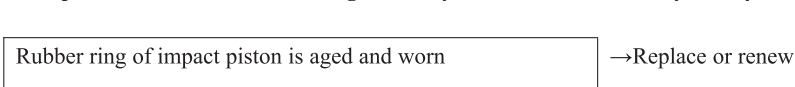
Example 3: Slow speed and weak power



Example 4: Abnormal sound



Example 5: The machine is working normally but the work efficiency is very low

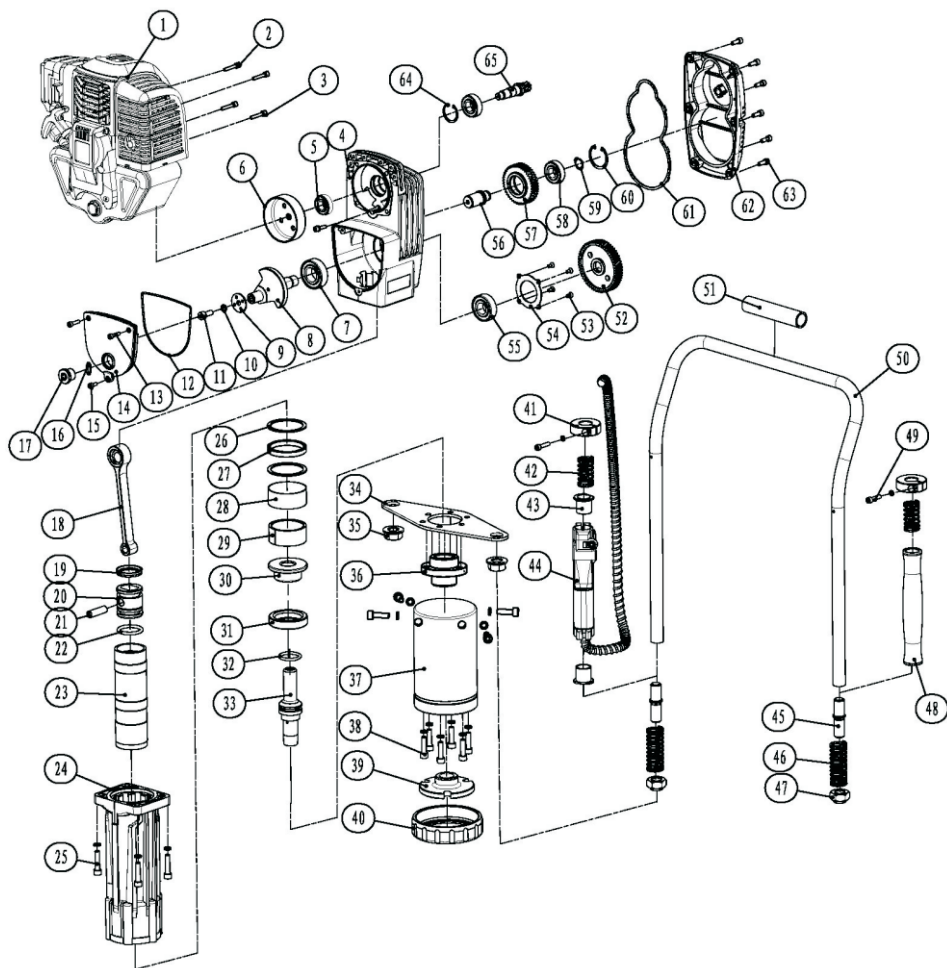


Please contact with local Sales Agent or contractual maintenance site for maintenance.

MAINTENANCE SCHEDULE

The following Data are common data of the product. Under worse working conditions such as thick dust or long work hours of pile driver, the maintenance cycle should be shortened correspondingly.		Before work	After work or every day	After Filling oil	Every Week	Every Month	Temporary Failure	If necessary
The whole machine	Outlook check (state, tightness of screws)	√		√				
	Clean		√					
Control handle/stop button	Function check	√		√				
Air Filter	Clean				√			√
	Replace						√	
Fuel Filter	Check					√		
	Replace						√	
Petrol Tank/Petrol Tank cover	Clean		√	√				
	Check	√		√				
	Tighten							√
Gear Box/Cylinder	Clean					√		
	Add oil							√
Silencer	Check					√		
	Remove carbon deposit							√
Cylinder Cooling Fin	Check					√		
	Clean							√
Spark Plug	Check/Adjust the distance between electrodes					√		
	Replace							√
Screw and Nut	Check	√		√				
	Tighten							√

PARTS EXPLODED VIEW



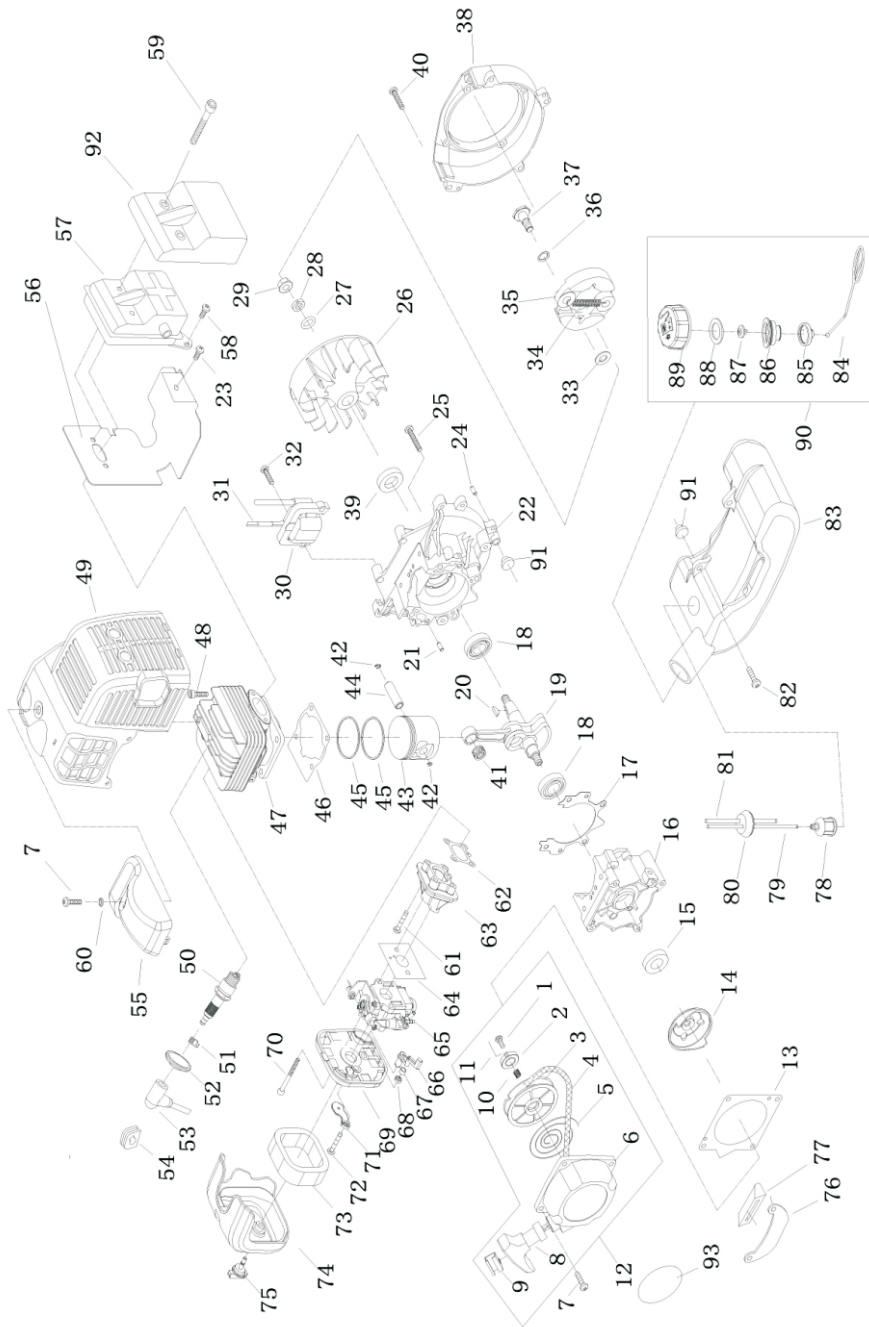
PARTS LIST

Parts No.	Name	Qty	Parts No.	Name	Qty
1	Gasoline Engine	1	29	Opening Ring	1
2	Inner Hexagon Cheese-head Screw M6X25	3	30	Iron Handle Sleeve	1
3	Inner Hexagon Cheese-head Screw M6X20	2	31	Big Vibration Absorption Ring	1
4	Gearbox	1	32	O-ring $\Phi 33 \times 4$	1
5	Deep Groove Ball Bearings 6202-2RZ	1	33	Shock	1
6	Driven Disk	1	34	Support Plate	1
7	Deep Groove Ball Bearings 6205-2RZ	1	35	Hexagon Flange Nut M18X1.5	2
8	Impact Crankshaft	1	36	Shock Guide Sleeve	1
9	Crankshaft Retainer	1	37	Piling Socket	1
10	Elastic Washer 8X2.1	15	38	Inner Pile Head	1
11	Inner Hexagon Cheese-head Screw M8X20	5	39	Inner Hexagon Cheese-head Screw M8X40	6
12	Oil Storage Box Seal	1	40	Piling Socket Retainer	1
13	Inner Hexagon Cheese-head Screw M5X20	2	41	Positioning Sleeve	2
14	Oil Storage Box Lid	1	42	Compression Spring $\Phi 22.5 \times \Phi 27.5 \times 60$	2
15	Inner Hexagon Cheese-head Screw M5X16	1	43	Switch Handle Guide Sleeve	2
16	O-ring $\Phi 18 \times 2.65$	1	44	Combination Switch	1
17	Oil Plug M20X1.5	1	45	Connecting Thread Head	2
18	Impact Connecting Rod	1	46	Compression Spring $\Phi 22.5 \times \Phi 27.5 \times 123$	2
19	Lip-shaped Ring $\Phi 35.5 \times \Phi 45.5 \times 6$	1	47	Step Nut	2
20	Impact Piston	1	48	Handle Sleeve	1
21	Impact Piston Pin	1	49	Inner Hexagon Cheese-head Screw M6X40	2
22	O-ring $\Phi 35.5 \times 5$	1	50	Steel tube handle	1
23	Impact Cylinder	1	51	Handle hose	1
24	Alluminum Hammer Case	1	52	Big Gear	1
25	Inner Hexagon Cheese-head Screw M8X35	4	53	Cross Recessed Countersunk Head Screw M5X10	4
26	Iron Ring	2	54	Bearing Holder	1
27	Small Vibration Absorption Ring	1	55	Deep Groove Ball Bearings 6204-2RZ	1
28	Opening Ring Rubber Circle	1	56	Gear Shaft	1

PARTS LIST

57	Middle Gear	1		62	Gearbox Cover	1
58	Deep Groove Ball Bearings 6203-2RZ	2		63	Inner Hexagon Cheese-head Screw M6X16	6
59	Shaft Retainer 17	1		64	Hole Retainer 35	1
60	Hole Retainer 40	1		65	Small Gear	1
61	Gearbox Cover Seal	1				

EXPLODED VIEW



PARTS LIST

No.	Part Name	Qty	No.	Part Name	Qty
1	Screw	1	26	Magneto Rotor Comp.	1
2	Ratchet	1	27	Washer 8	1
3	Starter Rope Reel	1	28	Washer 8	1
4	Starter Rope	1	29	Nut M8	1
5	Recoil Spring	1	30	Ignition Coil Comp.	1
6	Starter Cover ASSY	1	31	Cord Comp.	1
7	Screw M5X20	5	32	Bolt M5X20	2
8	Start Handle	1	33	Washer	2
9	Ring	1	34	Spring	1
10	Spring	1	35	Expander	2
11	Start Pole	2	36	Washer	2
12	Starter	1	37	Screw Pin	2
13	Gasket	1	38	Fan Cover	1
14	Start Reel	1	39	Oil seal	1
15	Oil seal	1	40	Screw M5X25	4
16	Grank Case	1	41	Bearing	1
17	Gasket	1	42	Ring	2
18	Bearing 6202/P6	2	43	Piston	1
19	Crank Shaft	1	44	Piston Pin	1
20	Key 3x5x13	1	45	Piston Ring	2
21	Pin B5x12	2	46	Gasket	1
22	Crank Case	1	47	Cylinder	1
23	Screw M4X8	1	48	Screw M5X20	4
24	Pin B4x10	2	49	Guide Cover ASSY	1
25	Screw M5X30	4	50	Spark Plug	1

PARTS LIST

No.	Part Name	Qty	No.	Part Name	Qty
51	Spring	1	76	Stand	1
52	Plug Cap	1	77	Rubber Cover	1
53	Cap	1	78	Cleaner Cover	1
54	Plug	1	79	Fuel Pipe 3x1.5x180	1
55	Cover	1	80	Plug	1
56	Gasket	1	81	Fuel Pipe 2.5x1.25x80	1
57	Muffler	1	82	Screw M5X16	2
58	Screw M5X12	2	83	Fuel Tank	1
59	Screw M6X60	2	84	Chain	1
60	Gasket	1	85	End Cover	1
61	Screw M5X25	4	86	Inside Cover	1
62	Gasket	1	87	Inlet	1
63	Admitting Pipe	1	88	Gasket	1
64	Gasket	1	89	Fuel Tank Lid	1
65	Carburetor	1	90	Lid ASSY	1
66	Choker Handle	1	91	Rubber washer	2
67	Stop ring	1	92	Cover	1
68	Nut M4	1	93	Label	1
69	Cleaner inside cover	1			
70	Screw M5X50	2			
71	Choker	1			
72	Screw ST4.2X12	1			
73	Filter Net	1			
74	Cleaner outside Cover	1			
75	Screw	1			

OF NOTE

PLEASE READ THE FOLLOWING CAREFULLY

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

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

PRODUCT MADE IN CHINA