# **PGH0052 Petrol Jack Hammer**

# **Instruction Manual**





## **Butts of Bawtry**

# **Symbols**



Read instruction manual and follow the warning and safety precautions!



Particular care and caution!



Wear protective helmet, eye and ear protection, and respiratory protection!



Wear protective gloves!



No smoking!



No open fire!

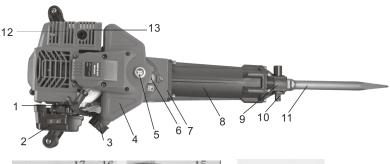


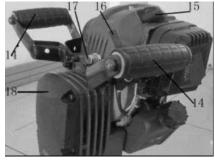
Fuel (Gasoline)

### I Name of major part

No.	Parts Name	No.	Parts Name	No.	Parts Name
1	Starter	2	Air Filter	3	Tank Cap
4	Fuel Tank	5	Fuel Standard	6	Gearbox Standard
7	Gearbox	8	Cylinder Block	9	Drill Seat
10	Drill rod	11	Drill	12	Muffler
13	Protect Cover	14	Handle Bar	15	Spark Plug
16	Oiler Cover	17	Flameout Button	18	Gearbox Cover
19	Ventilation Door				

Accessories: 1pc Tine Chisel, 1pc Flat Chisel







### II Instruction of safe operation

- The operator should wear slip-resistant safety shoes and appropriate clothing. Wear goggles and helmet, wear earplugs for a long time operation.
- 2. Balance the body when you operate the machine. Operating the machine in a right position as shown in Figure 1 instead of Figure 2
- 3. No smoking, eating or chatting when you operate the machine.
- 4. One-handed performance is not allowed after the machine is started.
- When you lift machine, the first control you need dial to reach the minimum scale, let the machine to slow down.

- Bystander and child keep away from the work area to avoid injury. The process of using machine may lead to gravel flying to non-staff.
- 7. Select medium-speed gasoline hammer to run for the best.
- 8. In the use of operation, the operator is not equal to the greater pressure crushing, tamping, compacting faster, try to use the weight of the machine itself, the force should be reasonable in order to achieve high efficiency and easy operation results.
- Gasoline hammer for crushing, tamping, compacting work, the work can not be used to pry the stone.
- 10. Maintain the handles dry and clean, no oil or fuel mixture.
- 11. Stop the operation midway; you must turn off the engine.
- 12. Please check normal fastening screws of the connector before using in each time. If loose, you must tighten the screws to use.
- 13. Pure gasoline (without two-stroke engine oil) for fuel is prohibited, match according to the proportion recommended in Chapter 4.2.
- 14. Gasoline is highly flammable, so to refuel in a well-ventilated environment. When you add fuel, please stop gasoline engine.
- 15. Do not add fuel too full; do not leave the fuel filler in neck part of machine. If overflow or spilled fuel .wait the fuel all volatilize, then you can start machine.
- 16. After refueling, tighten the fuel cap. Please check frequently whether the fuel tank is damaged to leak, if found damaged replace immediately.
- 17. Reserve fuel in storage areas. Remove all the root causes of fire or cause sparks.
- 18. In closed areas, such as tunnels, trenches and deep groove in the work environment when using gasoline hammer to ensure sufficient fresh air, exhaust gas containing carbon monoxide dangers, should bring electric fan for air flow.
- 19. Quickly acceleration or sudden braking is not allowed, so as not to damage the machine.
- 20. Avoid the impact of fragmentation work against the machine in the context of high speed operation.
- 21. Transfer site long-distance transport, should be emptying the tank.
- 22. Substandard maintenance staff should not dismantle the gasoline hammer to avoid structural damage to the parts, and further resulting in shortened life of gasoline hammer or accidents.
- 23. Do not continuously use for more than 30-40 minutes. Before use ensure all protection equipment, such as ear protection, safety glasses, working gloves, safety boats are all correct and fit for the application.



Figure 1 Right



Figure 2 Wrong

### III Main use and feature

#### Use

- 1 It can be used in crushing of building construction and road building project.
- 2 Break cornerstone for the railway road and tamp sleepers work.
- 3 Ditching works of embedded telecommunications cables
- 4 Icebreaking works in cold water and frozen region with digging shovel.

#### **Features**

- 1 It is the world's lightest weight, lowest emission engine type handheld gasoline hammer.
- 2 A perfect body and "V" linear operation, minimizing the hands of vibration, has significant control of convenience and comfortable, the operator can shovel digging a 360 degree rotation.
- 3 It can regulate the number of impact energy and impact, apply for a variety of materials suitable for construction.
- 4 Applications: Our machine is applicable to a variety of conditions, such as crashing project in road-building, electric power, telecom, and cable, ditch.

Advantage: If you use our machine, then you can ignore the trouble of the heavy equipment like diesel engine, air compressor, trucking-lorry, which will not limited by the pipe line, electric line, cable no matter how high and how far, we can work in kinds of environment.

### IV Prepared work before using

#### Installation

- 1. Take out the drill rod (head) and lubricate the drill.
- 2. Parallel the gap between the drill rod and the stop rod; pull the stop rod according to the direction of arrow, and lock or loosen the drill rod after rotating for  $180^{\circ}$  (see Figure 3).
- 3. Pull out the drill rod, insert the drill into the drill seat then make sure locked up the drill.

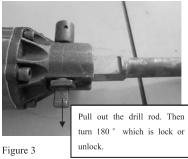




Figure 4

#### Fuel

The general gasoline and the two-stroke oil mix.

Recommended mixing ratio

Conditions	gasoline :engine oil		
Work within 20 hours	20:1		
Work after 20 hours	25:1		

- 1. Prohibit the use of pure gasoline (no refueling two-stroke engine oil )for fuel
- 2. Well-ventilated place to add fuel
- 3. Do not add too full fuel in the fuel tank. Do not leave fuel in the neck. If any fuel spill, please completely remove or evaporate before starting the gasoline engine
- 4. After refueling, tighten the fuel tank cap.

### Grease filling:

Machine after 50 hours of work, must be on the impact of the cylinder filling 50 grams of oil.



Figure 5



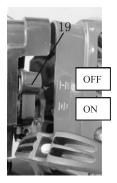
Figure6



Figure7

### V Start

- 1. Before first starting of the new machine, repeat press the transparent fuel bubble (See Figure 4) to fully fill the Carburetor with fuel. (When the refrigerator starts, turn off the ventilation door. When the gasoline engine starts, open the ventilation door and turn on the spanner)
- 2. Hold the operation handle with one of your hands and quickly pull the pulling handle for about 50cm with the other hand. Do not let the pulling handle go back freely in your repeat pulling, but hold it and put it down with its resilience to protect the starter.
- 3. Open the air vent completely when the gasoline engine is started.



Stop Button

Figure 8

Figure 9

#### VI Run

- 1. After the gasoline engine starts, it should run at low speed for 2 to 3 minutes to preheat the machine.
- 2. When the gasoline engine warm enough, according to the required impact energy to pull appropriate regulatory position.
- Note: ① the new gasoline hammer use of the first 24 hours, the workload should be in low-speed in order to extent the service life.
- ②Just start poor lubrication of gasoline, do not accelerate quickly.
- 3. Select medium-speed gasoline engine run for the best.
- 4. Do not use the gasoline hammer under the non-breaking with high speed operation.

### VII Stop machine

- 1. Loosen the accelerator switch, and idle running for 1-2 minutes.
- 2. Press the red button to stop. See the position of stop switch in Figure 6

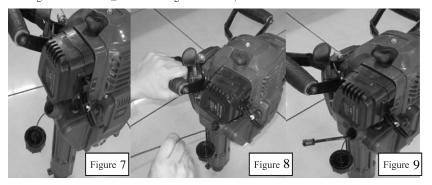
### VIII Technical maintenance

#### 1 Air Filter

Check the air filter regularly. Dust block on the cover of air filter will reduce engine power, causing short life of the cylinder. If the filter is very dirty, bur a mild detergent with warm water, wring dry, after cleaning the filter should drop a few of oil on the dry and then install the air filter. Filter should be replaced if damaged, particularly if in the environment of much dust should be shorted maintenance cycle.

2 Fuel filter

If the fuel filter is clogged, the machine will be slowed down and impact energy will be weakened. Method: ① Open the tank cap (See Figure 7) with metal hook (See Figure 8,9), take the fuel filter cleaning from the tank ② When cleaning the fuel filter, clean the fuel tank at same time.



#### 3 Carburetor

Fuel tank and carburetor will generally have left residual fuel. After a certain period, the residual fuel will come into rubbish. And the rubbish will plug the fuel line, causing the engine does not work. Therefore, when the machine is not used more than one week, be sure to completely take the fuel out. Method: processing the carburetor fuel bubble to drain the fuel again.

#### 4 Spark plug

To ensure normal operation of the engine, spark plug gap to be moderate, with a wire brush to remove sediment. Reasonable spark plug gap 0.5-0.7 mm. See Figure 10



Figure 10

#### 5 Muffler

Regular maintenance muffler, use a screwdriver to remove rubbish on the body or the rubbish on the coke muffler exhaust.

### 6 Gear box grease

Open the gear box cover, the eccentric shaft of the g is added regularly with grease.

#### 7 The cylinder cooling fin

Regularly to remove dust, to ensure the cylinder cooling, this gasoline hammer is air-cooler type, if the cylinder dust accumulates on the cooling fin will directly affect the cooling effect. Dust is easy to make

### IX Failure analysis and troubleshooting methods

### Problems analysis and solving

Example1: difficulties in starting engine in cooling state.	
Whether the spark plug is moisture.	→Dry the igniter plug
<u></u>	1
Whether the spark plug produces electric spark	→replace the igniter plug
<u></u>	•
Too much fuel absorbed	→lessen the fuel supply
Example 2: Difficulties in restarting after a sudden stop	
Whether fuel runs out or the Carburetor is blocked	→Refill fuel tank or clean the carburetor
↓	
Whether the fuel filter is blocked	→clean the fuel filter
<u> </u>	•
Too much carbon deposit in igniter plug	→ Remove carbon deposit
Example 3: Reluctance in speeding and weakness in power	
Carbon deposit cover the entrance of the cylinder or silencer	→ Remove carbon deposit
<u> </u>	1
Whether the fuel tube and the air vent on the fuel Tank cover is blocked	→Clean
Blockage in air filter	→ Clean the filter
	•
Example 4: abnormal sound	
Carbon deposit found in combustion chamber	→ Remove carbon deposit
<u></u>	
Serious abrasion in active components	→ Replace

### Example 5: The machine is working normally, but the efficiency of cracking is very low

The head of the chisel is attrited badly →replaced or renew

Please contact with Sales Agency of the Crusher if your machine needs further mending.

# X Product key data

Engine type	Single cylinder, air cooling, 2 stroke, X stroke
	of cylinder diameter; 44X34mm
Model number	CT2043
L×W×H(mm)	690×370×270
Fuel	gasoline:engine oil 20:1 (work within 20 hours) gasoline:engine oil 25:1 (work after 20 hours)
Fuel tank capacity	1.7L
Weight	20.50Kg
Displacement	52cc
Max power and speed	1700W/ 6500r/min
Consumption rate	≤ 0.8L/h
Impact frequency	700-1500r/min
Impact energy	25 ~ 55J
Noise level	
Measure sound pressure level	98,1 dB(A)
Measure sound power level	105,5 dB(A)
Guaranteed sound power level	108 dB(A)
Vibration level	
No load	14,358m/s²(right handle); 14,781m/s²(left handle); K=1,5m/s²
Load	21,636m/s <sup>2</sup> (right handle); 20,906m/s <sup>2</sup> (left handle); K=1,5m/s <sup>2</sup>
Total	20,389 m/s²(right handle); 19,833 m/s²(left handle); K=1,5m/s²

# XI Maintenance Cycle

The following Data are given common use of the product.  Suppose it is in worse working condition, such as thick dust in the air or much longer work hours for Crusher, the maintenance cycle should be shortened correspondingly.			After work or every day	After Filling fuel	Every Week	Every Month	Broken Down	If necessary
The whole machine	outlook check (state, stabilities of screws)	√		√				
	Cleaning		√					
Control handle/stop button	function check	V		V				
Air Filter	Clean				√			√
All Filter	Replace						V	
Fuel Filter	Check					√		
T del T ner	Replace						√	
Petrol Tank/Petrol Tank	Clean		√	V				
cover	Check	√		√				
Cover	Tighten							√
Gear Box/Hammer Box	Clean					√		
Gear Box/Hammer Box	Add fuel							√
	Check	√						
Lubricating fuel Tank	Clean					√		
	Fill fuel							√
	Check Sharpness	√						
Chisel	Sharpen or Forge							√
	Replace						√	
Silencer	Check					√		
	Remove carbon deposit							√
	Check					<b>√</b>		
Cylinder Cooling Fin	Clean							√
lignite Plug	Check/Adjust Customize the distance between electrodes					<b>V</b>		
	Replace							√
0 137	Check	1		1				
Screw and Nut	Tighten							√

### XII Part list of CT2043 GASOLINE JACK HAMMER

1	i laitiis	st of C
No.	Part Name	QTY
1	Start Handle	1
2	Screw M5x20	13
3	Elastic Washer 5	21
4	Washer 5	23
5	Cap Assembly	1
6	Fuel Return Pipe	1
7	Plug	1
8	Fuel Pipe	1
9	Filter	1
10	fuel immersion lens	1
11	Fuel Tank	1
12	Recoil Spring	1
13	Rope	1
14	Start Rope Reel	1
15	Start Spring	1
16	Start Claw Assembly	1
17	Nut M8	2
18	Start Reel	1
19	Gasket	1
20	Piston	1
21	Circlip	2
22	Piston Pin	1
23	Piston Ring	2
24	Crank Shaft	1
25	Needle bearing	1
26	Right Crank Case	1
27	Gasket	1
28	Fuel-seal 12x22x7	1
29	Bearing 6202	2
30	Woodruff key 3x5x13	1
31	Fuel-seal 15x30x7	1
32	Straight pin 5x10	2
33	Left Crank Case	1
34	Screw M5x35	4
35	Magneto Rotor Comp	1
36	Shoe Block Spring	1
37	Shoe Block	1
38	Axial screw	2
39	Straight pin	2
40	Fan Cover	1
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'2043 <b>(</b>	GASOLINE J	ACK
No.	Part Name	QTY
41	Washer 6	6
42	Elastic Washer 6	4
43	Screw M6x25	4
44	Screw M5x15	1
45	Screw M6x60	2
46	Muffler	1
47	Gasket	1
48	Ignition Coil Comp	1
49	Cord Comp	1
50	Outer cover buckle	1
51	Pan head screw	1
52	Outer cover	1
53	Spark Cap	1
54	Cylinder	1
55	Gasket	1
56	Gasket	1
57	Admitting Pipe	1
58	Screw M5x25	2
59	Carburetor Gasket	1
60	Carburetor	1
61	Screw M5x50	2
62	Filter Net	1
63	Air Filter Seat	1
64	Air Filter Cover	1
65	Screw M5x16	6
66	Washer 5	1
67	Throttling Cock Cover	1
68	Throttling Cock Spanner	1
69	Cable accelerator	1
70	Throttling Cock	1
	Spring	
71	Throttling Cock Base	1
72	Nut M5	1
73	Bolt M8x30	3
74	Washer 8	4
75	Nut M8	4
76	Handle Spring	4
77	Handle	2
78	Handle Rack	5
79	Stop Button	1
80	Washer 6	1
	1	

AMN	IER	
No.	Part Name	QTY
81	Screw M6x20	10
82	Bearing 6203	2
83	Pinion	1
84	Gear shaft	1
85	Circlip for Hole 40	1
86	Circlip for Axis	1
87	Intermediate	1
88	gear Bearing 6204	1
89	Bearing Plate	1
90	Screw M5x10	4
91	Big gear	1
92	Bearing 6202	1
93	Inflating Plate	1
94	Bearing 6205	1
95	Bent axle	1
96	Needle Bearing	1
97	Bent axle check ring	1
98	Bolt M8x20	1
99	Fuel plug	1
100	Fuel box cover	1
101	Fuel box seal ring	1
102	Gear Box	1
103	Real Gasket	1
104	Connecting Rod	1
105	Igniter Plug	1
106	Lip-shaped ring	1
107	0-shaped ring	1
108	Impact cylinder	1
109	Front placket	1
110	Washer 8	10
111	Bolt M8x35	4
112	Iron hoop	2
113	Small Damping Ring	1
114	Split Ring	1
115	Piston Pin	1
116	Split Ring Rubber Circle	1
117	Handspike cover	1
118	0-shaped ring	1
119	Big Damping	1
120	Ring Front Gasket	1
	1	

No.	Part Name	QTY
121	Iron head	1
122	Stop rod	1
123	Screw M8x30	6
124	Stop rod spring	1
125	Washer	1
126	Soft Washer	2
127	Lock sleeve	1
128	Straight pin 4x18	1
129	Gear box cover seal ring	1
130	Gear box cover	1
131	Screw M6x16	6

