DHD-58
GASOLINE HAMMER/DRILL

INSTRUCTION MANUAL

User Manual

Congratulation on you for buying our product. This manual for our company produces DHD-58 hammer pick dual-purpose machine product instructions. Hammer pick dual-purpose machine produced by our company pays attention to ergonomics, small volume and light weight and simple operation, and in similar products with low emissions, compared with other brands, this hammer pick machine energy saving, environmental protection, convenient operation and maintenance, long service life, is the customer preferred products.

For your safety, please follow the instructions on the safe operation of the rules of operation and technical maintenance, or will cause harm to your personal safety or damage the machine.

Directory

1 Name of major part

No.	Parts Name	No.	Parts Name	No.	Parts Name
1	Slide clamp set	2	Reduction gearbox assy	3	Air filter
4	Ventilation Door	5	Stop button	6	Throttle button
7	Start handle	8	Fuel can	9	Fuel can bracket
10	Fuel oil bubble	11	Gear box cover	12	Bend plate
13	Adjusting knob	14	Joint lever	15	Muffler cover
16	Handle	17	Spark plug	18	Throttle rope
19	Grease lid	20	Side handle		

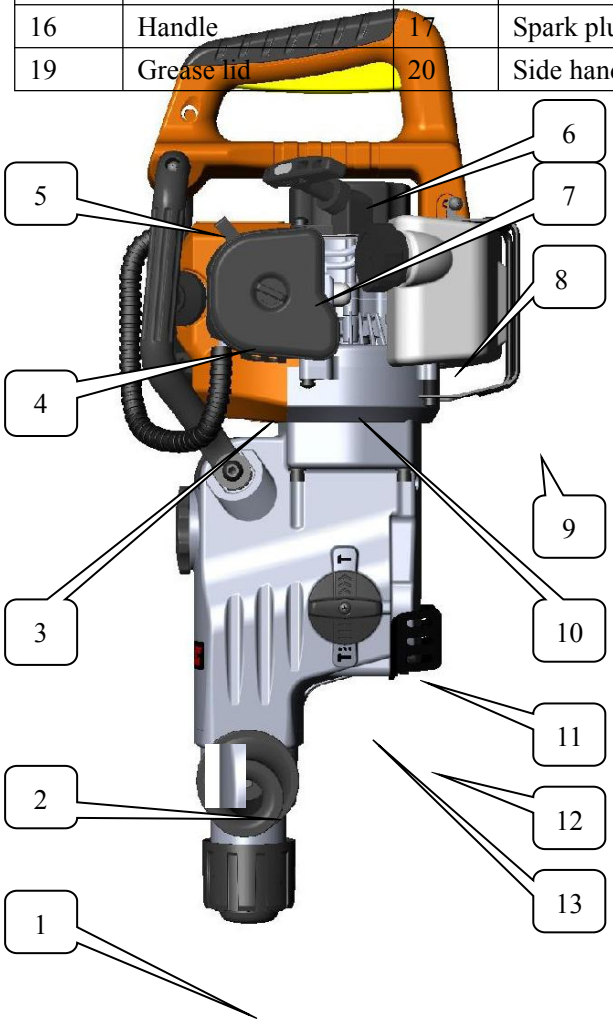


Figure 1

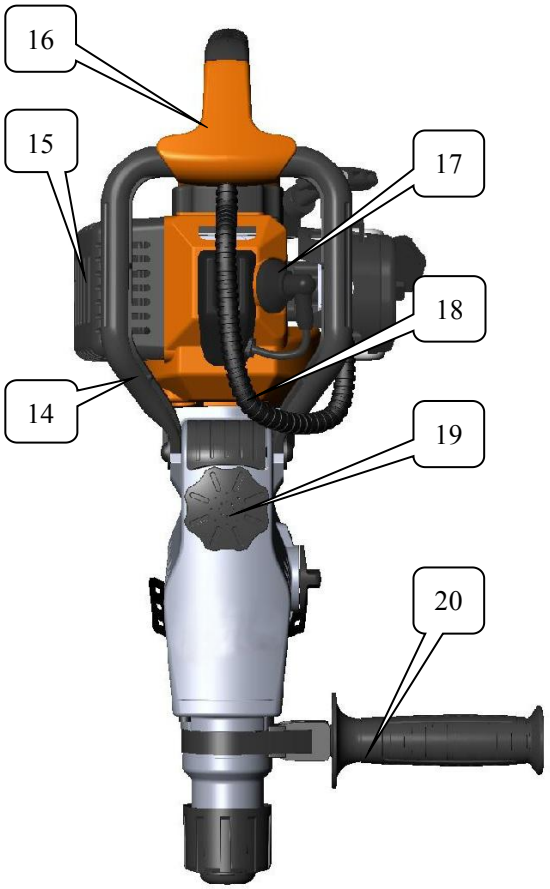


Figure 2

2 Instruction of safe operation

2.1 Work place

2.1.1 Keep the work place open and bright. Chaos, crowded and dark field can cause accidents.

2.1.2 Don't in flammable and explosive, such as a flammable liquid, gas or dust environment or use the machine operation. Machine sparks can ignite dust or gas.

2.1.3 Non-work personnel should stay away from the operating area in case of injury.

2.1.4 In the forests, mountains, grasslands and other wild field, when using the machine must be (caused by high temperature machine emissions) fire prevention measures.

2.2 Personal Safety

2.2.1 Stay alert, when operating the machine in operation and attention is in stay awake. Don't in the tired, drugs, alcohol, or treatment response under operating the machine. During the machine operation energy dispersion can cause serious personal injury.

2.2.2 Use safety equipment. Always wear goggles. Safety devices, such as the appropriate conditions of dust masks, antiskid safety shoes, safety helmet, hearing protection devices can reduce personal injury.

2.2.3 Dress appropriately. Don't wear loose clothes or accessories. The hair, clothes and sleeve away from moving parts. Loose clothing, accessories, and the hair will be involved in the moving parts.

2.2.4 Used as tools to provide the auxiliary handle. Miss operation can lead to personal safety.

2.2.5 Watch your step when using, keep body balance. After the machine start, shall not be one-handed operation of this machine.

2.3 The use of the gasoline engine and the matters needing attention

2.3.1 Gasoline flammable, should be in a well ventilated environment for refueling. Come on, please close the gasoline engine.

2.3.2 Please do not too much oil, shall not exceed the can filler neck. If there is a fuel oil spill, need fuel volatilization completely before start the machine.

2.3.3 In the storage area to store gasoline, must eliminate fire hazard source or Mars.

2.3.4 Oil refueling, tighten the cover of the fuel can, the work process often should check whether there is damage to oil gas, if damaged, immediately stop the machine and replace.

2.3.5 Every time before use, please be sure to check the fitting fastening screws are tight, if loose, must be to use screw fastening.

2.3.6 When improve machine, cannot throw the throttle handle, let the machine run idle.

2.3.7 Handle should be kept dry, clean, no oil or fuel mixture

2.3.8 If midway stop operation; Be sure to shut down the gasoline engine.

2.3.9 Fuel to ban the use of pure gasoline (no two-stroke engine oil), should be in proportion of 4.2 fuel recommend against the use.

2.3.10 In a closed area, such as tunnel, ditch and a deep ditch work environment when using the machine, must ensure that fresh air is enough. The waste gas containing carbon monoxide. Shall be provided with ventilating fan for ventilation.

2.3.11 Ban rapid acceleration or braking, avoid damage to the machine.

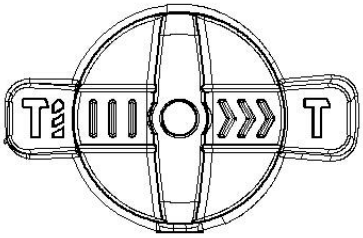
2.3.12 Before transportation, should be emptying the can fuel, prevent leakage.

2.3 Maintenance

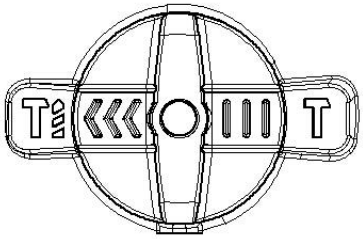
Non-professional maintenance personnel removal machine is forbidden, in order to avoid cause structural damage to parts, shorten the service life of the driver, or cause an accident.

2.3 Operating Mode

When switch from the hammer and hammer drill function knob in shown in “Figure 3”, rotate to receive the required operating mode. (note: must select operation mode under the condition of the engine stopped.)



Hammer



Drill

Figure 3

3 Main use and feature

3.1Use

This machine is suitable for the concrete and bricks and rock hammer drill or chisel on homework.

3.2Feature

3.2.1 This product is lighter in weight, low emissions of gasoline engine type hammer/drill.

3.2.2This product conforms to the man-machine engineering design, the greatest degree reduces the operator working strength, easy to operate, comfortable. Operator can achieve 360 - degree work.

3.2.3 Can adjust the impact energy and impact number, applicable to auger bit with diameter less than 40 mm and hollow boring bit with diameter of less than 50 mm.

3.2.4 Advantage: can save with heavy equipment, such as generator, air compressor, trucks.

4 Preparatory work before use

4.1 Fuel

Use more than 90 # gasoline and special two-stroke engine oil

Recommend the proportions

Condition	Gasoline：Engine oil
Run within 20 hours	20:1
Run after 20 hours	25:1

4.1.1 Banning the use of pure gasoline (without two-stroke engine oil) as a fuel.
4.1.2 Add fuel in a well ventilated place
4.1.3 Please do not too much oil in fuel tank, please do not over the neck of the fuel can filler. If fuel overflow, must remove the fuel or fuel volatilization completely restart the gasoline engine.
4.1.4 Go after tighten the fuel can lid.

5 Start

5.1 Before starting the new machine. Repeatedly press the transparent semicircular fuel oil bubble (Figure 3) to the status of full of fuel, fill the carburetor with fuel. (When the gasoline engine is cool, close the throttle; when the gasoline engine is hot, open the throttle.) (See Figure 4)

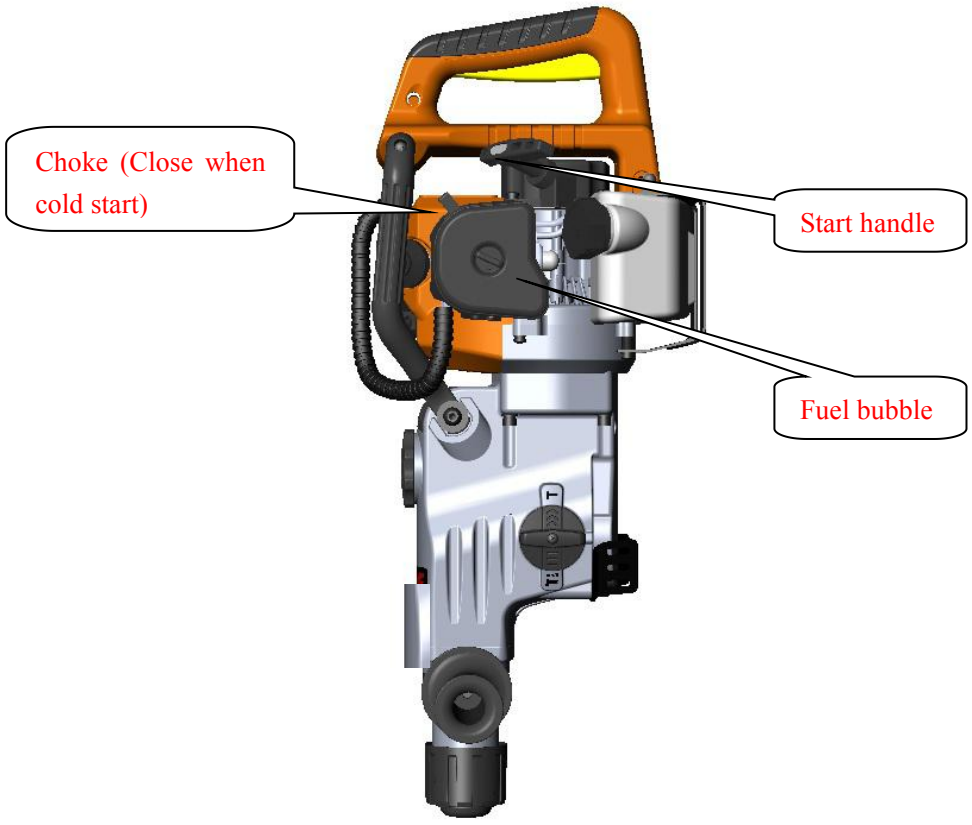


Figure 4

5.2 Machine lie flat on the ground, one hand operation handle, another hand quickly pull starter handle 50 centimeters. Please do not make the handle in the process of repeated pull rebound, hold the handle, to prevent the rapid rebound in order to protect the starter
5.3 After starting the gasoline engine, completely open the throttle.

6 Run

6.1 Idle speed gasoline engine starting and running for 3 to 5 minutes, preheat machine.
6.2 When gasoline engine has been preheated, according to the impact energy required, press the throttle button to the proper position.
Note: in the first 24 hours, using the machine work should give priority to with low speed, unavailability of maximum throttle; In order to prolong service life.

6.3 Gasoline engine speed control in medium speed gears.
6.4 Prohibited in the non-work state operating the machine at a high speed.

7 Stop machine

7.1 Loosen the throttle button, the machine idle for 3 to 5 minutes
7.2 Down by the flameout switch button until the engine stalled. Flame out switch position as shown in figure 1

8 Technical maintenance

8.1 Air Filter

Check the air filter regularly. Air filter cartridge dust jams will reduce gasoline engine power and shorten the service life of the cylinder. If the filter cartridge is dirty, you must use warm water and detergent, clean with a dry cloth to wipe dry after installation. If there is any breakage, the filter must be replaced. Especially in dusty work environment, maintenance cycle is shorten appropriately.

8.2 Fuel filter

If the fuel filter blockage, machine speed decline, impact can be reduced. Methods: (1) open the lid of fuel can, with a metal hook the hook out of the can and clean fuel filter (2) when clean fuel filter, and clean fuel can as shown in Figure 4, 5 and 6.

Figure 5

Figure 6

Image 7

8.3 Carburetor

The fuel can and carburetor often have residual oil. Over time, the residual oil into the oil. Residual oil can jam

the oil, the gasoline engine won't start. Therefore, when the machine idle for more than a week, you must put the fuel vent. Methods: pull into the carburetor fuel oil foam rubber tubing to repeat compressions bubble discharge of oil, fuel oil in the oil bubble and return pipe put dry after plugged into the tubing.

8.4 Spark plug

To ensure the normal operation of the gasoline engine, reasonable spark plug gap is 0.5 -0.7 mm. Use steel wire brush to clean carbon deposit. See Figure 8.

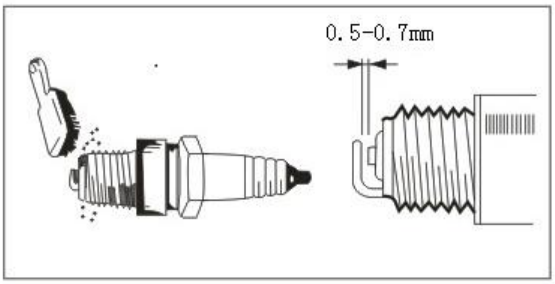


Figure 8

8.5 Muffler

Regular cleansing dirt or use detergent to clean the silencer muffler import and export in the dirt.

8.6 Lubrication of impact cylinder

Cylinder lubrication: unscrew grease cover counterclockwise (see figure 2), join 50 grams of special grease for cylinder hammer picks, then screw the grease cover clockwise to tighten.

8.7Cylinder cooling fin

Remove dust regularly, to ensure that the cylinder heat dissipation is good. The hammer pick dual-purpose machine is of air cooling type. Cylinder radiator dust will directly affect the heat dissipation effect.

9 Failure analysis and troubleshooting methods

Problems analysis and solving

Example1: difficulties in starting gasoline engine in cooling state.

Whether the spark plug is moisture.	→Dry the igniter plug
↓	
Whether the spark plug produces electric spark	→replace the igniter plug
↓	
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 can or clean the carburetor
↓	
Whether the fuel filter is blocked	→clean the fuel filter
↓	
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
↓	
Whether the fuel can and the air vent on the fuel can cover is blocked	→Clean
↓	
Blockage in air filter	→ Clean the filter

Example 4: abnormal sound

Carbon deposit found in combustion chamber	→ Remove carbon deposit
↓	
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	→Replace

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

10 Product key data

Gasoline engine type	36X32mm, Single cylinder, air cooling, 2 stroke
Type	DHD-58
L×W×H (mm)	630×240×240
Fuel	mixing oil(gasoline 25, two-stroke engine oil 1)
Fuel tank capacity	0.9L
Weight	≈10.5Kg

Displacement	32.7CC
Maximum power	1000W
Max torque and speed	1.5N.m/5000r/min
Engine no load speed	11000r/min
No load speed	400r/min
Impact frequence	3200 BPM
Consumption rate	≤0.50L/h
Impact energy	12J
Carburetor type	MZ10.7
Spark plug type	L6T
Drill ability	Concrete（auger bit）：MAX φ40mm Brick （hollow drill）：MAX φ50mm
Chisel	SDS-MAX
Start system	Hand pull start

11 Maintenance Cycle

以 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.		Before woke	After work or every day	After Filling oil	Every Week	Every Month	Broken Down	If necessary
The whole machine	outlook check (state, stabilities of screws)	√		√				
	Cleaning		√					
Control handle/stop button	function check	√		√				
Air Filter	Clean				√			√
	Replace						√	
Fuel Filter	Check					√		
	Replace						√	
Oil Can/Oil Can cover	Clean		√	√				
	Check	√		√				
	Tighten							√

Reduction Gearbox / Impact Cylinder	Clean					√		
	Add oil							√
Muffler	Check					√		
	Clean carbon deposit							√
Cylinder Cooling Fin	Check					√		
	Clean							√
Spark Plug	Check/Adjust Customize the distance between electrodes					√		
	Replace							√
Screw and Nut	Check	√		√				
	Tighten							√

12 Part list and exploded view of DHD-58 gasoline hammer/drill

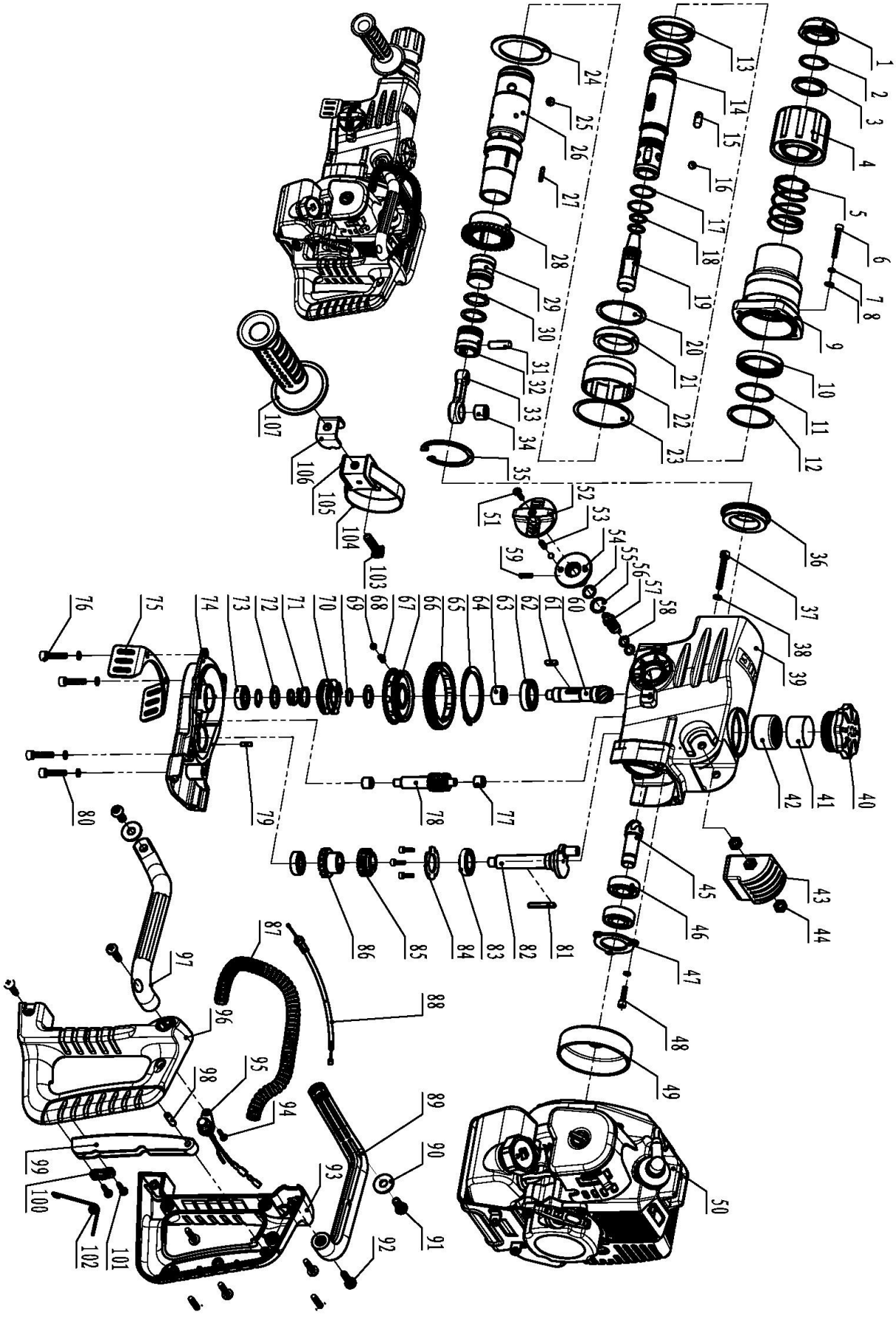
No.	Part Name	QTY		No.	Part Name	QTY
1	Front cover	1		39	Reduction gearbox	1
2	Round wire snap rings for shaft 32	1		40	Grease cover	1
3	Check ring	1		41	Exhaust sponge	3
4	Slide clamp set	1		42	Gas cap	1
5	Spring	1		43	Connecting base	1
6	Hexagon socket head cap screws M5X35	4		44	Hex nutM8	2
7	Spring washer 5	7		45	Cone tooth-6-2	1
8	Flat gasket 5	4		46	Deep groove ball bearing 6202-2RZ	2
9	Front placket	1		47	Bearing pressure plate	1
10	Oil seal 40X50X7	1		48	Hexagon socket head cap screws M5X20	6
11	Round wire snap rings for shaft42	1		49	Toggle plate	1
12	Plain washer	1		50	Gasoline engine	1
13	Deep groove ball bearing 61808	2		51	Hexagon socket head cap screws M4X10	1
14	Retainer socket	1		52	Adjusting knob	1
15	Steel column 8X19.2	2		53	Knob spring	2
16	Steel ball 7.14	3		54	Convention	1
17	O-ring 28X2	2		55	Rubber O seal ring 16X1.8	1
18	O-ring 19X2	2		56	Circlip for hole17	1
19	Deputy hammer	1		57	Transform head	1
20	Plain washer (48X56X1.5)	1		58	Rubber O seal ring8X1.8	2
21	Retainer	1		59	Hexagon socket set screw with flat point M5X16	1
22	Plastic jacket	1		60	Cone tooth-9-1.75	1
23	Seal ring 68x59x2.5	1		61	Flat key4X14	1
24	Big plain washer68x50x2	1		62	Deep groove ball bearing16003	1
25	Steel ball 9	3		63	Needle bearing HK152012	1
26	Cylinder	1		64	Shaft with elastic gasket 58	1
27	Flat key3x18	2		65	Flower hole gear	1
28	Cone tooth-35-1.75	1		66	Wheel core	1
29	Tup	1		67	Tripping spring	10
30	O-ring 28x3	2		68	Steel ball5.5	12
31	Piston pin	1		69	Shaft with elastic gasket 14	2

32	Piston	1		70	Clutch (58)	1
33	Connecting rod	1		71	Conical spring	1
34	Needle bearing	1		72	Small washer	2
35	Spring gasket56	1		73	Deep groove ball bearing 6000	2
36	Cylinder positioning ring	1		74	Reduction case cover	1
37	Hexagon socket head cap screws M6X40	4		75	Bend plate	1
38	Spring washer 6	8		76	Hexagon socket head cap screws M6X25	2

No.	Part Name	QTY		No.	Part Name	QTY
77	Needle bearing HK0810	2				
78	Transition gear	1				
79	Straight pin 5X20	2				
80	Hexagon socket head cap screws M6X22	2				
81	Flat key 4X28	1				
82	Crank	1				
83	Deep groove ball bearing 6002	1				
84	Crank bearing holder	1				
85	Small helical	1				
86	Cone tooth-15-2	1				
87	Guard tube	1				
88	Throttle wire	1				
89	Right connection rod	1				
90	Big washer 8X2	2				
91	Hexagon socket button head screws M8X20	2				
92	Cross trough pan head self-tapping screw ST5.5X16	8				
93	Right handle	1				
94	Cross trough pan head self-tapping screw - F type ST4.2X16	1				
95	Engine Stop Switch	1				
96	Left handle	1				
97	Left joint lever	1				
98	Straight pin 6X22	1				
99	Accelerator switch	1				
100	Wore pressing plate	1				
101	Cross-recessed countersunk head self-tapping screw ST4X14	2				
102	Torsional spring	1				
103	Square head screwM8X45	1				

104	Rand	1				
105	The handle holder	1				
106	fixed block	1				
107	Auxiliary control lever	1				

Exploded view of DHD-58 hammer/drill

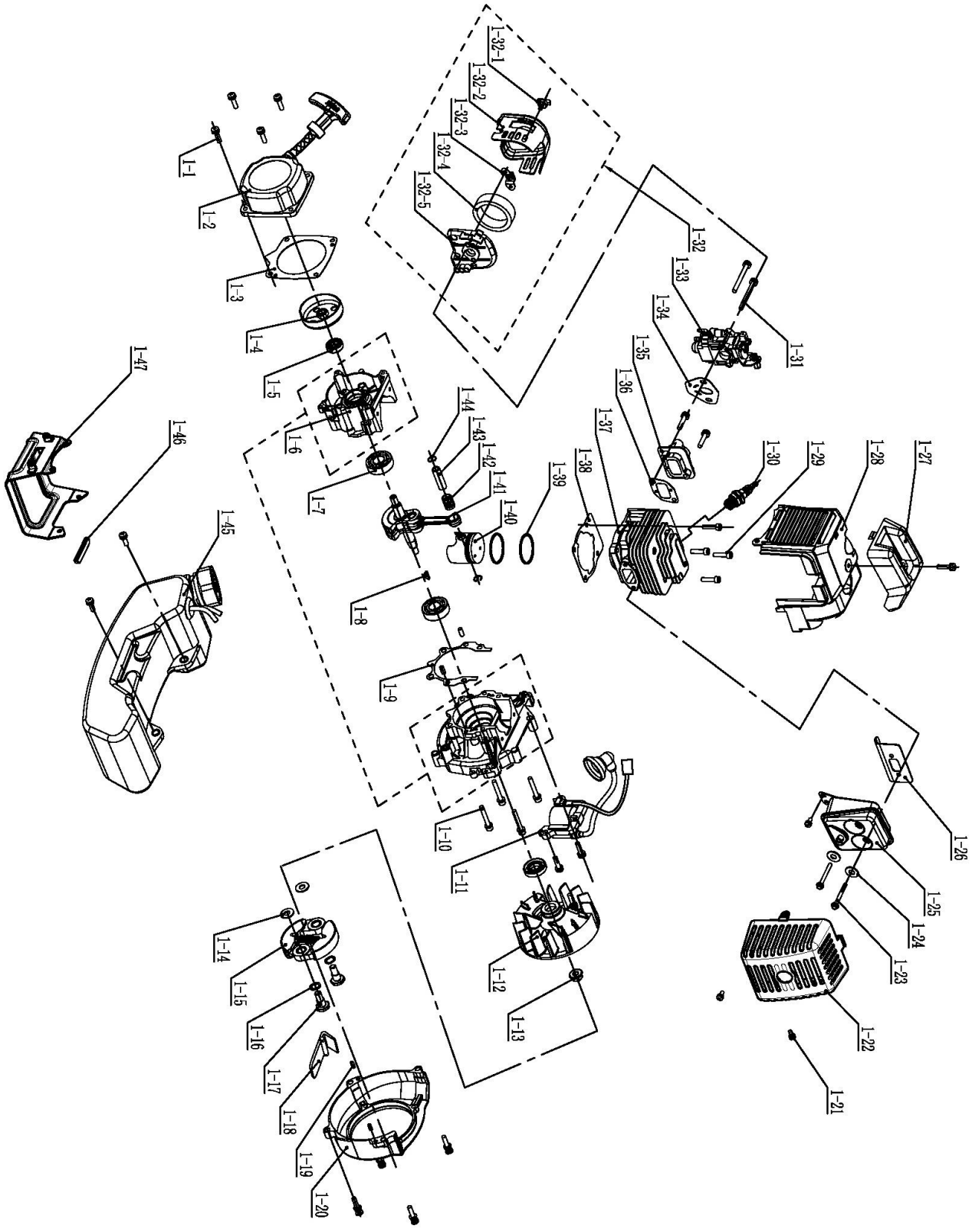


13 Part list and exploded view of DHD-58 gasoline engine

No.	Part Name	QTY		No.	Part Name	QTY
1-1	Hexagon socket head cap combination screws M5×20	13		1-34	Carburetor washer	1
1-2	Starter	1		1-35	Air inlet	1
1-3	Start aluminum pad	1		1-36	Air inlet washer	1
1-4	Pulling plate	1		1-37	Cylinder	1
1-5	Oil seal FB12X22X7	2		1-38	Cylinder washer	1
1-6	Left and right crankcases	1		1-39	Piston ring	2
1-7	Deep groove ball bearing 6201	2		1-40	Piston	1
1-8	Woodruff key 3X13X5	1		1-41	Crankshaft connecting rod assy	1
1-9	Crankcase mat	1		1-42	Needle bearing K9X12X12	1
1-10	Hexagon socket head cap combination screws M5×30	4		1-43	Piston pin	1
1-11	High pressure pack	1		1-44	Gudgeon pin circlip	2
1-12	Fly wheel	1		1-45	Fuel can assy	1
1-13	Hex flang locknut M8×1.25	1		1-46	Fuel can pressing plate protective jacket	1
1-14	Steel flat matφ8X1.5	2		1-47	Fuel can bracket	1
1-15	Clutch	1				
1-16	Wave washerφ10X15X0.5	2				
1-17	Clutch bolt M8×φ10	2				
1-18	Air deflector	1				
1-19	Locating pin 5×10	2				
1-20	Fan cover	1				
1-21	Hexagon socket head cap combination screws M5×14	3				
1-22	Muffler cover	1				
1-23	Hexagon socket head cap screws M5×55	2				
1-24	Flat washer C level 5X12X1	2				
1-25	Muffler	1				
1-26	Muffler washer	2				
1-27	Cylinder cover top lid	1				
1-28	Cylinder cover	2				
1-29	Hexagon socket head cap combination screws M5×20 (10.9 level)	4				
1-30	Spark plug	1				
1-31	Hexagon socket head cap screws M5×50	2				

1-32	Air filter assy	1				
1-32-1	Thumbscrew M5x9	1				
1-32-2	Air filter cover	1				
1-32-3	Air filter pressing plate	1				
1-32-4	Filter element	1				
1-32-5	Air filter base component	1				
1-33	Carburetor	1				

Exploded view of Gasoline Engine



13 DHD-58 product packing list

1. Jack hammer..... 1

2. Point chisel..... 1

3. Drill..... 1

4. Ratio oil can..... 1

5. Special grease for cylinder (60g).....1

6. Manual..... 1

7. Toolkit (including 1 spark plug, 1 5mm Allen wrench, 1 6mm Allen wrench, 1 straight screwdriver, 1spark plug handle, 1 8mm Allen wrench and 1 8-10 open wrench)