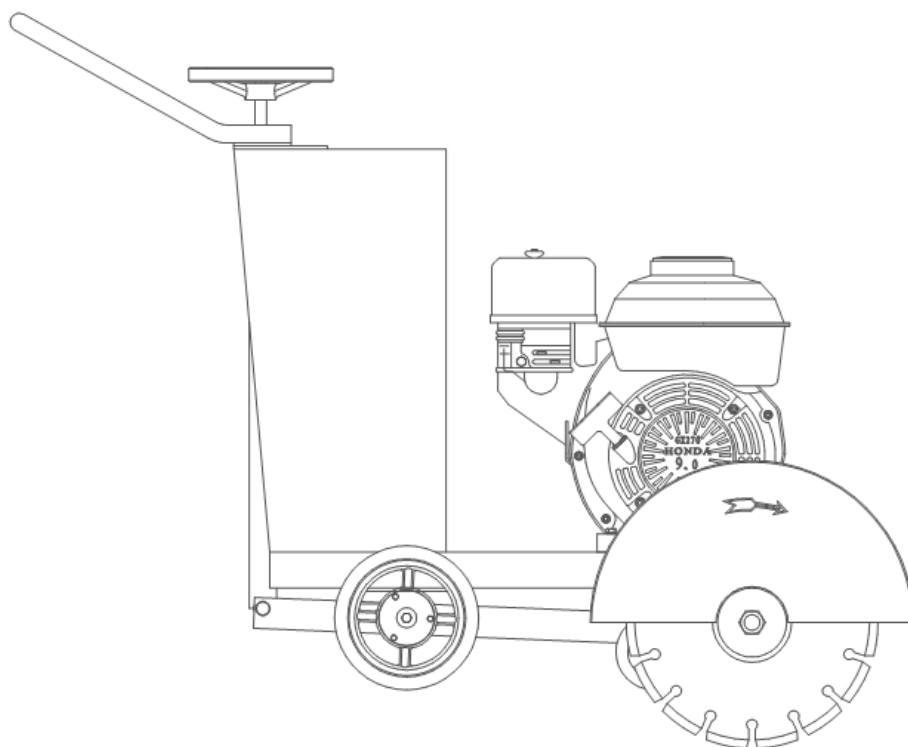




China Honway Machinery Co.,LTD

Operator's Instruction Manual
Concrete Cutter (HWC 18)



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CONTENTS

Contents	1
Forward	2
Feature	2
Technical specification	2
Safety precautions	2
Safety checks	3
Operation	3
Maintenance schedule	6
Engine oil	6
Spark plugs	7
Carburetor adjustment	7
Air filler service	8
Parts service	8
Transport	9
Troubleshooting	9
Diagram	10

FOREWARD

For your own safety and protection from bodily injuries, carefully read, understand and follow the safety instructions in this manual.

Please operate and maintain your machine in accordance with the instructions in this manual.

Defective machine parts are to be replaced as soon as possible.

Keep this owner's manual handy, so you can refer to it at any time.

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We expressly reserve the right to technical modifications- even without express due notice - which aim at improving our machines or their safety standards.

FEATURE

This machine is used of cutting the expansion joint on concrete floor. Meanwhile, it can cut and groove all standard manufactures of concrete, marble and granite. It is a necessary machine in the construction of road. Super-rigid box frame ensures straight cuts while resisting warping and vibration-prolongs saw life; extends blade life. Height adjustment handle with comfortable grip handles, easy crank for raising/lowing cutting depth. Hinged front lift-up blade guard is designed to provide easy blade replacement; easy-remove, rustless poly water tank provides an optimum flow and volume of water to the blade. It uses sheet diamond, which has the virtues of quick cutting speed, and even cut. Meanwhile, sheet diamond could cut the steal beams in concrete. It has simply, safety construction, easy and flexible operations.

TECHNICAL SPECIFICATION

Model	Numerical value	
	HWC18-1	HWC18-2
Sheet diamond diameter (mm)	350	500
Sheet diamond depth (mm)	3.5-8	3.5-8
Install dimension (mm)	26/50	26/50
Cutting speed (m/s)	35-50	35-50
Max. Cutting depth (mm)	120	180
Width (mm)	3-5	5-10
Engine type	HONDA GX270	HONDA GX390
Engine oil type	Recommended SAE10W—30	
Max. power output	9HP/3600rpm	13HP/3600rpm
Cooling water tank capacity (L)	38	38
Cooling form	Spray	Spray
Weight (kg)	90	101
Packing weight (kg)	105	115
Dimension (mm)	1360×670×1100	

SAFETY PRECAUTIONS

1. Before starting operation, the operator has to check that all control and safety devices function properly.
2. To prevent fire hazards and to provide adequate ventilation for stationary equipment applications keep the engine at least 3 feet (1 meter) away from building walls and other equipment during operation.
3. Don't allow children to operate the engine. Keep children and pets away from the area of operation.

4. Know how to stop the engine quickly, and understand the operation of all controls. Never permit anyone to operate the engine without prior instructions.
5. Do not place flammable objects close to the engine.
6. The max gradient of 30° must not be exceeded.
7. Wear safety shoes, and eye protection glasses in case of trench operation where falling sand stones maybe ejected.
8. Keep anyone away from the cutting sheet when the machine working.
9. It is possible that this cutting machine exceeds the admissible sound lever of 89 dB (A). According to the rules for the prevention of accidents regarding emission of noise, the employees have to wear protection if the sound levels reaches 89 dB (A) or more.
10. Be careful the handle can't keep away of the handle when operate the machine.
11. Refuel the engine must always be stopped, using all necessary safety precautions. When refilling fuel tank, do not allow fuel to come into contact with the hot parts of the engine or spill onto the ground.
12. The tank lid must fit tightly. Shut off fuel lever, if available when stopping the engine. For long distance transports of machine operated by fuel or fuel-mixtures, the fuel tank has to be drained completely.
13. Do not smoke or handle open fire near this machine.

SAFETY CHECKS

1. Before install the sheet saw, wipe up hole of the saw and plywood.
2. Keep the cutting blade guard in the bottommost location before the starting engine.
3. Keep the cutting blade away from roadblock when the starting engine.
4. Check V-belt tension-retension when the machine working.
5. The cutting blade is in proper condition before starting operation machine. Keep the machine balanced when the working.
6. Check the water lever when the machine working. Rewater the water tank when the water falling half of the water tank, or straight using another wellhead to water the cutting blade.
7. To avoid the machine librating from portrait swaying, the main shaft must be tie in with saw.
8. The sheet diamond is used for cutting bitumen, water concrete (from 48hrs to 28 days), sandstone, sandiness brick, hatchway brick, and sandiness limestone and so on. Do not cut material as follows: long-playing water concrete, rigidity brick or harden surface, savageness stone.
9. Make sure the cutting blade straight cuts forward.

OPERATION

1. Check the cutting blade

- 1) Check the cutting blade rotate way accord with direction indicator.
- 2) Check the cutting for arrow and nut tension-retension before start the machine.

2. Cutting

- 1) Open the switch of the water tank, and then check water whether it is spray the blade of side face or not, after filing up in the water tank. Make sure enough water in tank when operate the machine. Please water the cutting blade with another wellhead.
- 2) Downward pressure on the guide wheel.
- 3) Starting the engine

A. Before operation checks

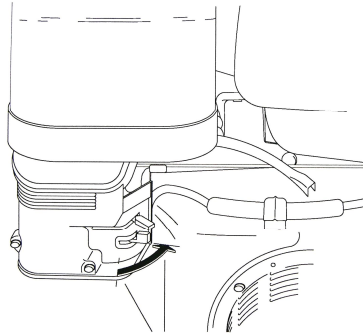
Before beginning your preoperational checks, be sure the engine is level and the engine switch is in the OFF. Remove the filler cap/dipstick and wipe it clean. Insert and remove the dipstick without screwing it into the filler hole. Check the oil level shown on the dipstick. If the oil level is low, remove the oil filler cap, and fill to the upper limit mark on the dipstick with recommended oil. Screw in the filler cap/dipstick securely.

Notice! Running the engine with a low oil level can cause engine damage.

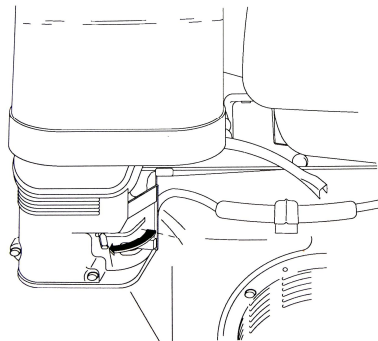
SAE 10W-30 is recommended for general use. The engine is certified to operate on unleaded gasoline with a research octane rating of 90 or higher. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life. Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

B. Starting the engine

1. Move the fuel valve lever to the ON position.

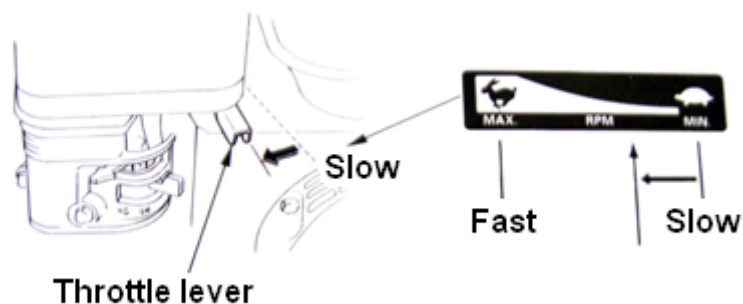


2. Move the choke lever to the CLOSE position.



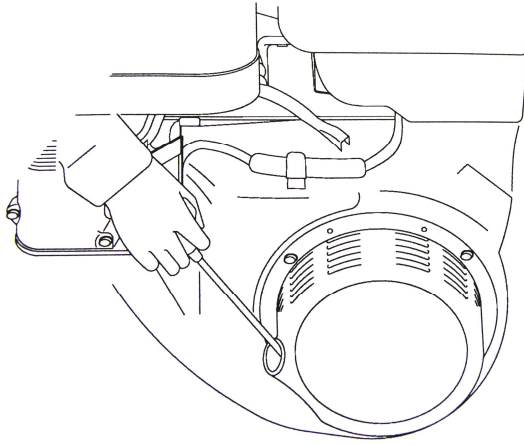
NOTICE! If the engine is warm or the air temperature is high, move the control lever away from the OPEN position as soon as the engine starts.

3. Move the throttle lever away from the SLOW position, about 1/3 of the way to toward the FAST position.



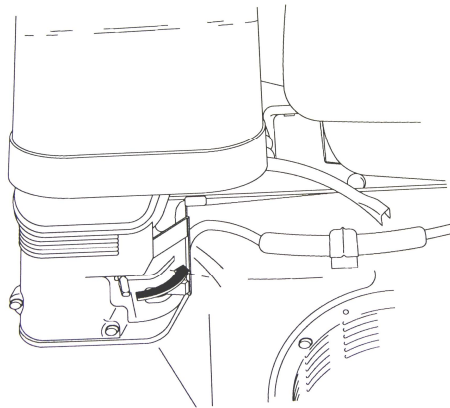
4. Turn the engine switch to the on position. Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.

CAUTION! Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

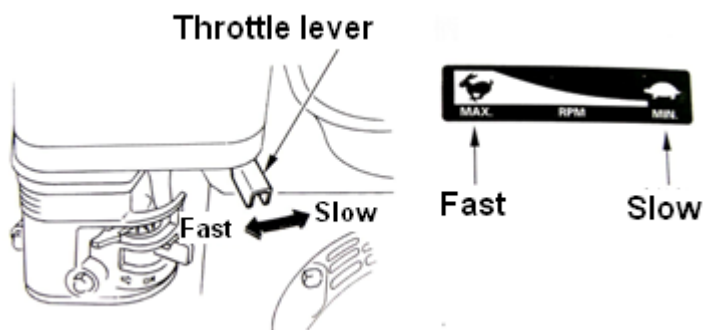


3. Operation

1) If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



2) Move the throttle lever to the FAST position.

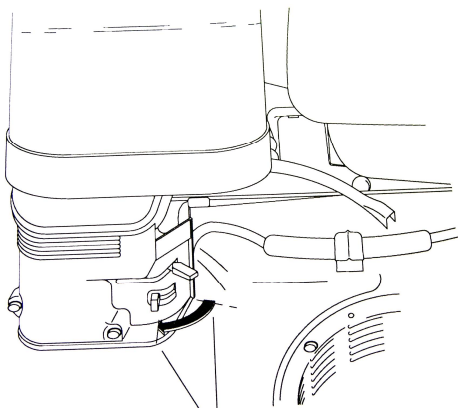


3) Andante turn handle, the blade will cut in one spot. The operator can low cutting depth through turn handle. (turn a handle with a lap the same as add the cutting depth about 9mm), Keep eyes on guide wheel forward and hold the handle, and then slowly force on the handle to make the machine forward. Make sure the cutting blade straight cuts forward while resting warping and vibration.

NOTICE! You must be stop or slow forward speed at once when the blade cutting extremely harden roadblock.

4. Stopping the engine

1. Clockwise turn wheel to keep the blade away from work position. The operator can step on the rod that is fixed on bedplate and then forcibly downward pressure on the handle if necessary the cutting stopping.
2. Turn the engine switch to the OFF position.
3. Turn the fuel valve lever to the OFF position.



Maintenance schedule

Parts	Maintenance Jobs	Maintenance Interval
Air filter	Check for external damage and tight fit. Check air filter elements and replace them if it is damaged	daily
Fuel tank	Check tank lid for tight fit, replace if necessary.	daily
Engine oil	Check oil level, top up if necessary.	daily
Other parts	Check cutting disc for damages and correct tightening. Change and adjust if necessary. Pay attention to the directional arrow on the protective hood Check all control and safety devices function properly. Control water supply.	daily
	Check fastening screws of protective frame for tight fit.	Every week
Engine oil	First oil change.	After 20hrs
Ignition system	Clean spark plug, check spark plug gap 0,7mm.	Every month
Engine oil	Further oil changes.	After 100 hrs
Valve clearance	Check, set -0,15 mm intake valve, 0,20mm exhaust valve.	After 300 hrs
V-belt	Check V-belt tension-retension, if need be.	Every week

ENGINE OIL

Check oil lever

The engine must be horizontally place when filling in oil or checking the oil level.

If oil level is to low, top up with brand quality oil recommended SAE 10W-30.

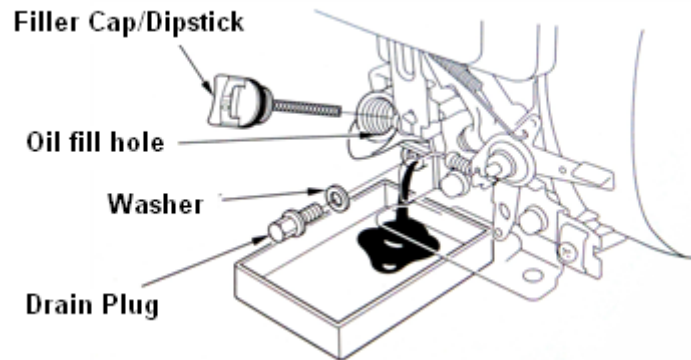
Engine oil capacity: 1.1L

Oil change

Drain the used oil when the engine is warm. Warm oil drains quickly and completely.

1. Please a suitable container below the engine to catch the used oil, and then remove the oil filler cap/dipstick, oil drain plug and washer.
2. Release the waist oil drain hose and collect the draining oil in an appropriate container.
3. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil.

4. Screw in the filler cap/dipstick securely.



NOTICE! Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash; pour it on the ground, or down a drain.

SPARK PLUGS

Recommended spark plugs: BPR6ES (NGK), W20EPR-U (INPPONDENSO). For good performance, the spark plug must be properly gapped and free of deposits.

1. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.

Warning: If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

2. Remove the spark plug with a 13/16-inch spark plug wrench.
3. Inspect the spark plug. Replace it if the electrodes are worn heavy carbon buildup is found, or if the insulator is cracked or chipped.
4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.028 - 0.031 in (0.70 - 0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.
5. Check that the spark plug washer is in good condition. Install the spark plug carefully, by hand, to avoid cross-threading.
6. After the spark plug seats, tighten with a 13/16-inch spark plug wrench to compress the sealing washer.
7. When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
8. After the spark plug seats, tighten with a 13/16-inch spark plug wrench to compress the sealing washer. If reinstalling the used spark plug, tighten 1/8 - 1/4 turn after the spark plug seats. If installing a new spark plug, tighten 1/2 turn after the spark plug seats.
9. Attach the spark plug cap.

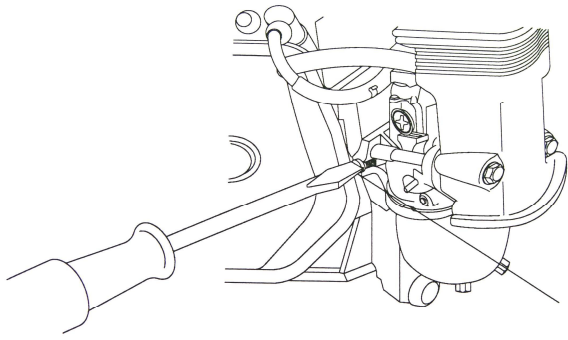
NOTICE! The recommended spark plug has the correct heat range for normal engine operating temperatures. A loose spark plug can overheat and damage the engine. Over tightening the spark plug can damage the threads in the cylinder head.

CARBURETTOR ADJUSTMENT

1. Start the engine outdoors, and allow it to warm up to operating temperature.
2. With the engine idling, turn the highest idle rpm screw in or out to the setting that produces the highest idle rpm. The correct setting will usually be approximately 2 and 1/4 turns from the fully closed position.
3. Turn the throttle stop screw to obtain the standard idle speed.

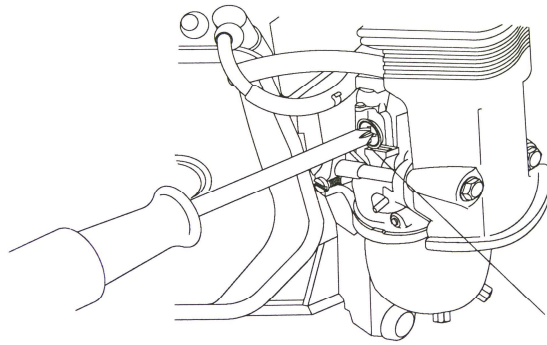
Caution: Do not tighten the highest idle rpm screw against its seat as this will damage the highest idle rpm screw or seat. After the highest idle rpm screw is correctly adjusted, turn the throttle stop screw to obtain the standard idle speed.

Standard idle speed: 1400 \pm 150 rpm



1

1. Highest idle rpm screw



2

2. Throttle stop screw

AIR FILTER SERVICE

A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dust areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

WARNING! Never use gasoline or low flammable point solvents for cleaning the air cleaner element. A fire or explosion could result.

NOTICE! Operating the engine without an air filter element, or with a damaged air filter element, will allow dirt to enter the engine, causing rapid engine wear.

1. Remove the wing nut from the air cleaner cover, and remove the cover.
2. Remove the wing nut from the air filter, and remove the filter.
3. Remove the foam air filter element from the paper filter.
4. Inspect both air filter elements, and replace them if they are damage.
5. Paper air filter element: Tap the filter element lightly several times on a hard surface to remove excess dirt, or blow compressed air through the filter element from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers.
6. Foam air filter element: Clean in warm soapy water, rinse, and allow to drying thoroughly. Or clean in nonflammable solvent and allow to drying. Dip the filter element in clean engine oil, and then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the foam.

PARTS SERVICE

V-belt

Check V-belt tension-retension at every week. The correct operation: Release bolts and nuts that they are setting engine, remove the engine to V--belt tension, and then tighten nuts.

Disassembly blade

Change the cutting blade with the engine stopped. Remove two bolts that are setting the protective hood, and then rotate protective hood. You need to use wrench lock the main shaft to prevent it from circumgyrating before clockwise sense remove the nut (Leftl). Clean the blade from dust and dunghill after the finish operation. Check the cutting blade whether it is normal use or not.

Assembly blade

Check new blade

Make sure the same new cutting blade of style as primary blade. Refer to the blade of style, please see operation manual.

NOTICE! Please pay attention to the blade rotate way accord with direction indicator. Clean the blade and

check the blade stability after assembly the blade, and then screw the nut.

TRANSPORT

Do not place the cutting blade on the ground, to avoid possible damages during transport of the same. To protect the cutting blade, swing the blade its maximum upward position by way of the height adjustment/cutting depth adjustment and lower down the protective hood as far as possible. If need be, take off cutting blade from protective hood.

When being transported on vehicles protective hood have to be secured against rolling, slipping or overturning.

ATTENTION! The engine must be stopped when using the integrated transport device. Lubrication of the engine is not guaranteed if the engine is running when the cutting is in transport position. This could lead to serious engine damages. Furthermore the danger exists that oil will spill out of the crankcase breather.

TROUBLESHOOTING

Won't start engine

Cause: - Fuel tank empty.

- Fuel shut-off valve dose.
- Air filter dirty.
- The engine switch to the OFF position.
- Recoil starter defective.
- Oil alert system has stopped engine.

Remedy: - Fuel up.

- Open.
- Clean.
- Repair.
- Open.
- Fill up with engine oil.

The cutting blade will can't operate machine

Cause: - Adjusting screw broken

- Threaded rod broken
- Bearing broken
- Bearing box UCP205 broken

Remedy: - Change

- Change
- Change
- Change

The cutting damaged

Cause: - The cutting style and dimension falseness

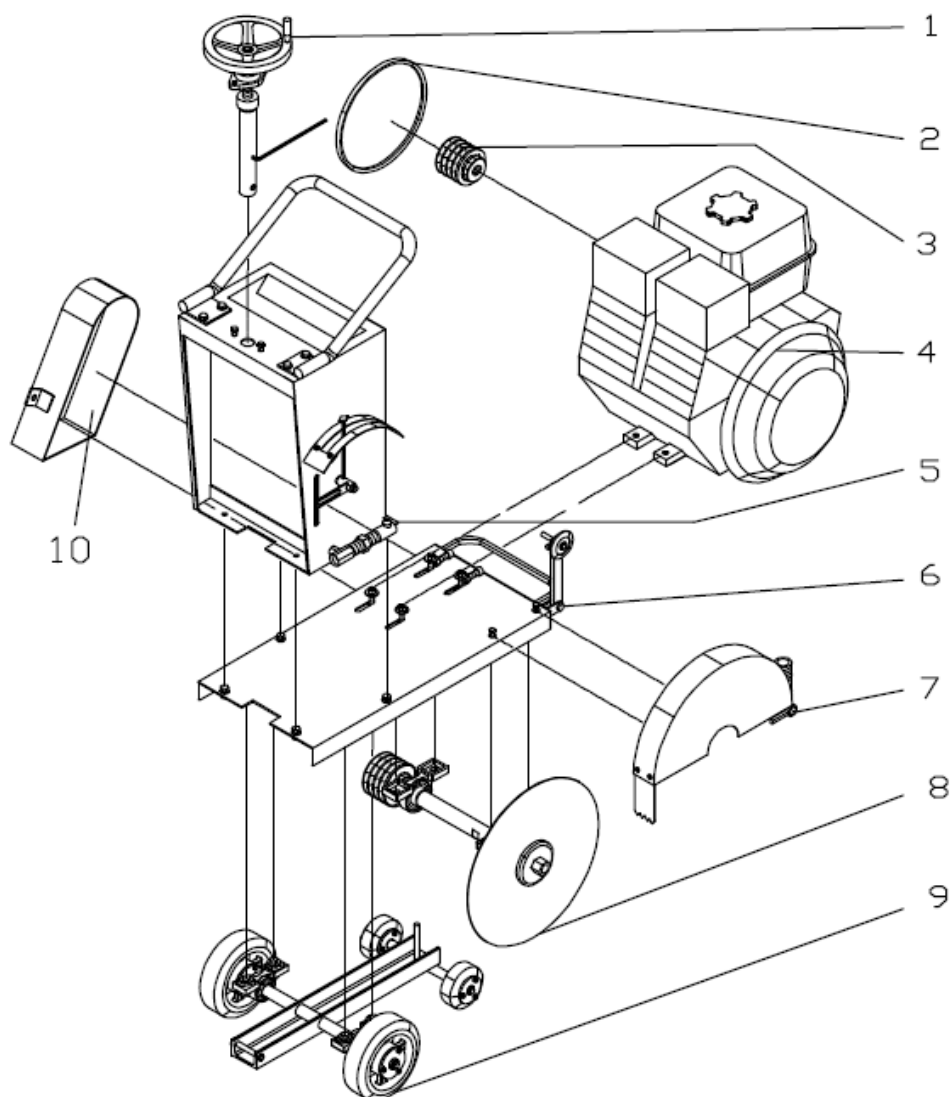
- Little water in the tank or water can't spray on the cutting blade
- The cutting jumped

Remedy: - Change

- Fill the water or adjust if necessary
- 1. Clean dunghill on cutting blade or supporting disc
- 2. Screw lock nut
- 3. Adjust cutting blade direction or change

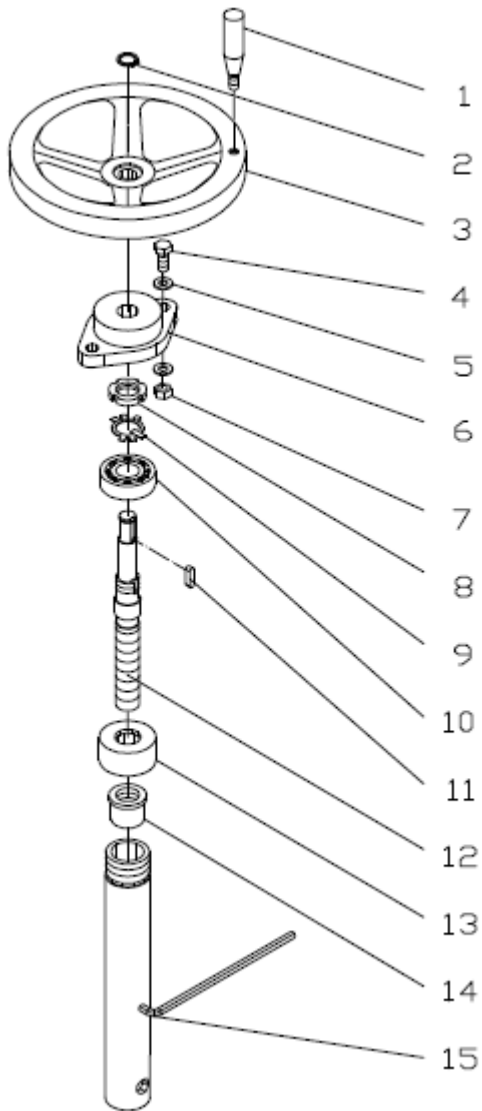
DIGRAME

1. Complete Reversible plate



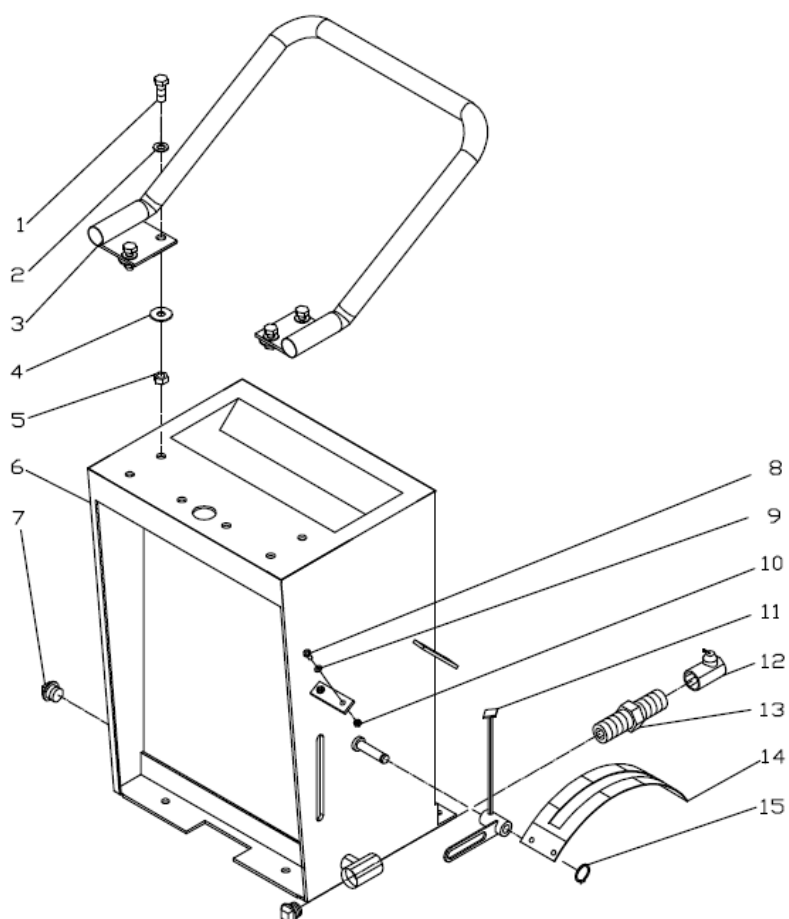
Item	Part	Description	Qty
1	101	Lifting assembly	1
2	102	V-belt	4
3	103	Pulley	1
4	104	Engine	1
5	105	Water tank assembly	1
6	106	Bedplate assembly	1
7	107	Protective hood	1
8	108	Main shaft	1
9	109	Wheel assembly	1
10	110	Belt guard	1

2. Lifting assembly



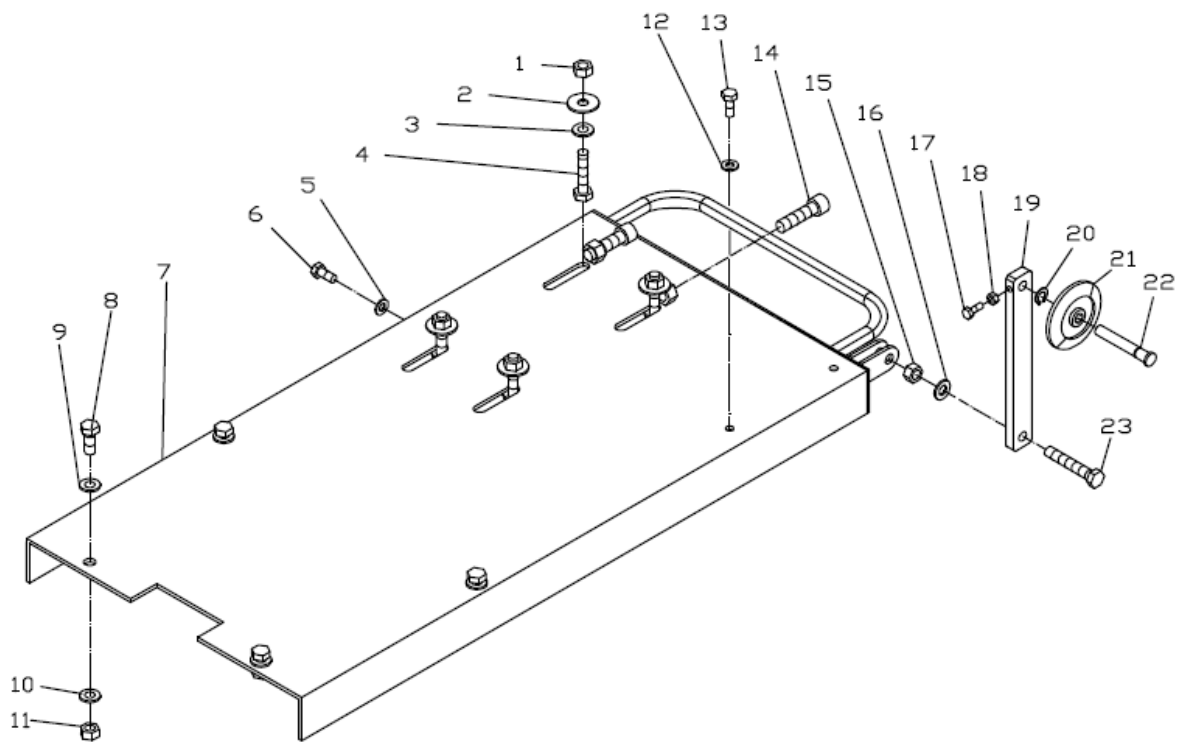
Item	Part	Description	Qty
1	10101	Handle	1
2	10102	Retaining ring 15	1
3	10103	Wheel	1
4	10104	Bolt M10	2
5	10105	Washer 10	4
6	10106	bearing box	1
7	10107	Nut M10	2
8	10108	Ring-nut M20×1.5	1
9	10109	Retaining washer 20	1
10	10110	Bearing 204	1
11	10111	Key 5×5×20	1
12	10112	Threaded rod	1
13	10113	Nut M37	1
14	10114	Copper nut M20	1
15	10115	Lifting tube	1

3. Water tank assembly



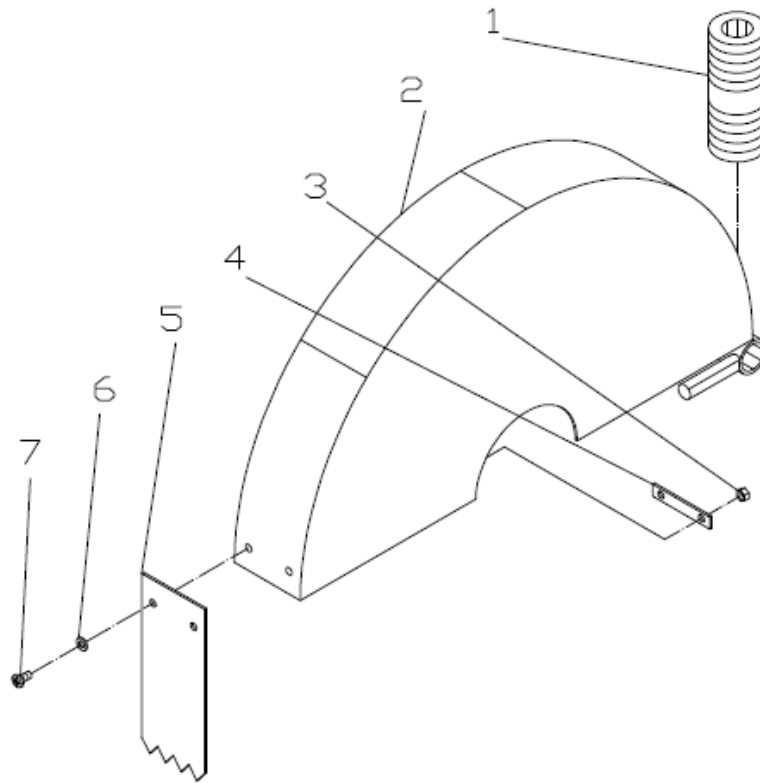
Item	Part	Description	Qty
1	10501	Bolt M10x28	4
2	10502	Washer 10	4
3	10503	Handle tube	1
4	10504	Washer 10	4
5	10505	Nut M10	4
6	10506	Box	1
7	10507	Plug	1
8	10508	Hemicycle bolt M5x12	2
9	10509	Washer 5	2
10	10510	Nut M5	2
11	10511	Rod	1
12	10512	Valve	1
13	10513	Dual tie-in	1
14	10514	Staff gauge	1
15	10515	Retaining ring 12	1

4. Bedplate assembly



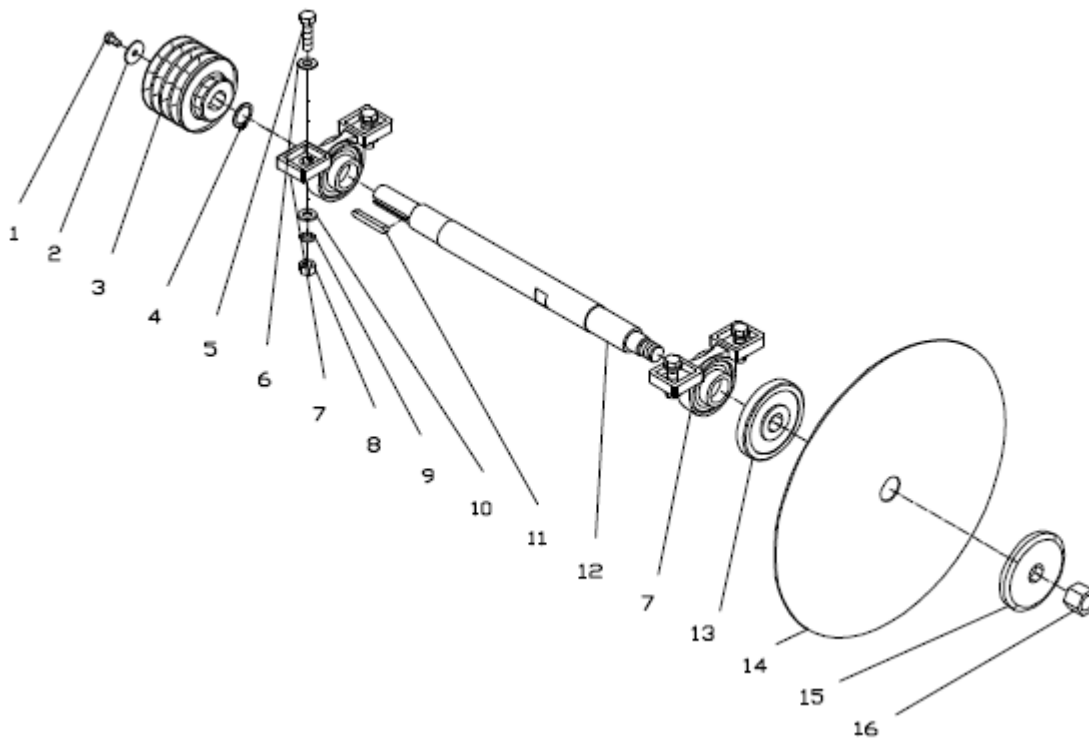
Item	Part	Description	Qty	Item	Part	Description	Qty
1	10601	Nut M10	4	13	10613	Bolt M8×16	2
2	10602	Washer 10	4	14	10614	Screw M12×45	2
3	10603	Washer 10	4	15	10615	Nut M10	1
4	10604	Bolt M10×45	4	16	10616	Washer 10	1
5	10605	Bolt M8×20	2	17	10617	Bolt M6×16	1
6	10606	Washer 8	2	18	10618	Nut M6	1
7	10607	Bedplate	1	19	10619	Plate	1
8	10608	Bolt M10×25	4	20	10620	Retaining 10	1
9	10609	Washer 10	4	21	10621	Guide wheel	1
10	10610	Washer 10	4	22	10622	Pin	1
11	10611	Nut M10	4	23	10623	Bolt M10×60	1
12	10612	Washer 8	2				

5. Protective hood assembly



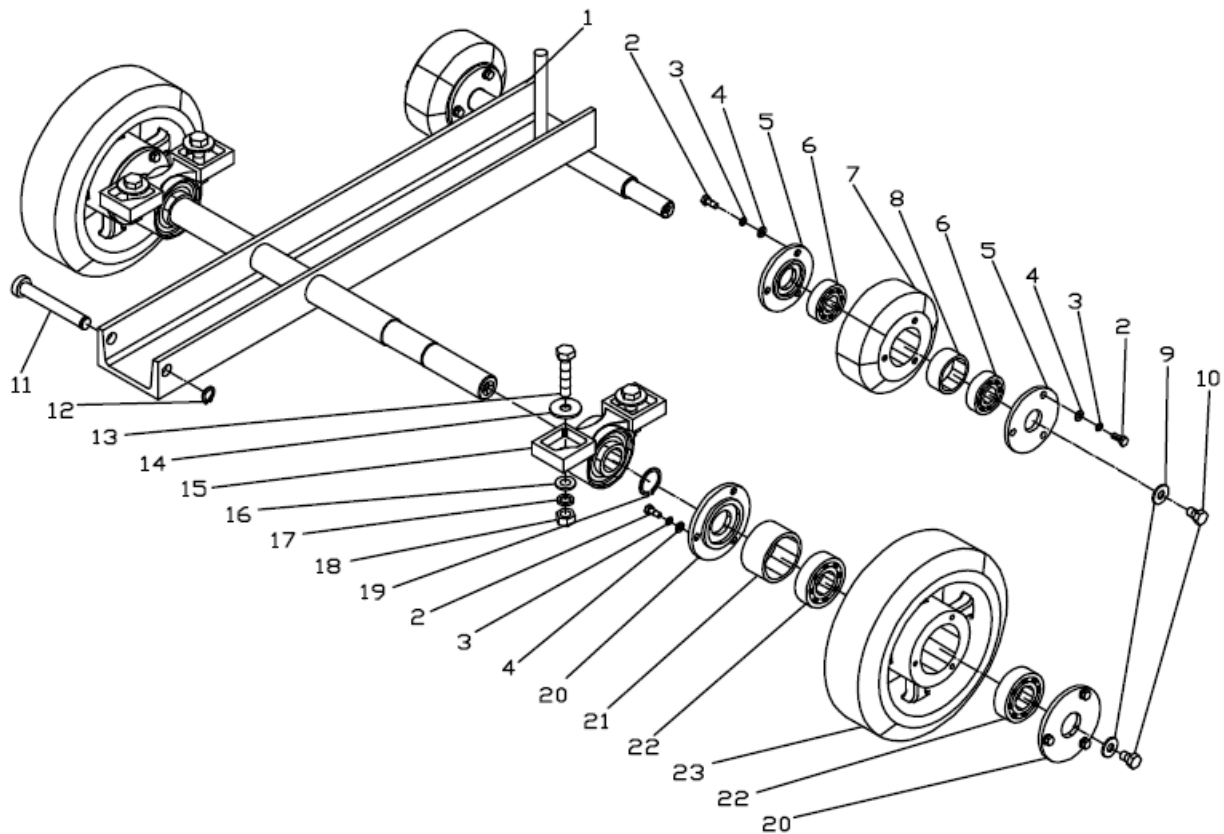
Item	Part	Description	Qty
1	10701	Dual tie-in	1
2	10702	Protective hood	1
3	10703	Nut M5	2
4	10704	Plate	1
5	10705	Rubber	1
6	10706	Washer 5	2
7	10707	Hemicycle bolt M5×10	2

6. Main shaft assembly



Item	Part	Description	Qty
1	10801	Bolt M8×15	1
2	10802	Washer 8	1
3	10803	Pulley	1
4	10804	Retaining 28	1
5	10805	Bolt M12×45	4
6	10806	Washer 12	4
7	10807	Bearing UCP207	2
8	10808	Nut M12	4
9	10809	Gasket 12	4
10	10810	Washer 12	4
11	10811	Key 8×7×60	1
12	10812	Main shaft	1
13	10813	Supporting disc 1	1
14	10814	Cutting blade	1
15	10815	Supporting disc 2	1
16	10816	Nut M22 (Left)	1

7. Wheel assembly



Item	Part	Description	Qty	Item	Part	Description	Qty
1	10901	Pedestal	1	13	10913	Bolt M10×45	4
2	10902	Bolt M5×12	24	14	10914	Washer 10	4
3	10903	Gasket 5	24	15	10915	Bearing UCP205	2
4	10904	Washer 5	24	16	10916	Washer 10	4
5	10905	Bearing cover	4	17	10917	Gasket 10	4
6	10906	Bearing 203	4	18	10918	Bolt M10	4
7	10907	Rubber wheel	2	19	10919	Retaining ring 25	2
8	10908	Bushing	2	20	10920	Bearing cover	4
9	10909	Washer 8	4	21	10921	Bushing	2
10	10910	Bolt M8×12	4	22	10922	Bearing 205	4
11	10911	Pin	1	23	10923	Rubber wheel	2
12	10912	Retaining ring12	1				