

OWNER'S MANUAL

23cc Hedge Trimmer






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WARNINGS

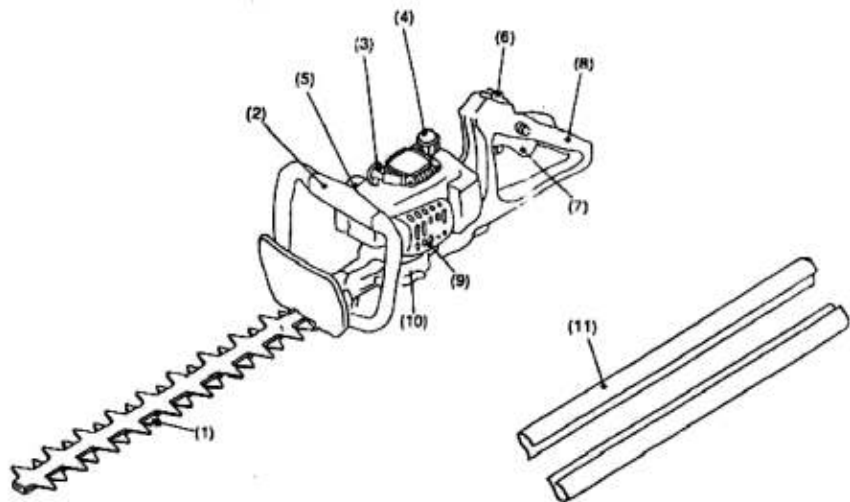
	<p>This symbol indicates important safety instructions which, if not followed, could endanger personal safety and/or property. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol—heed its warning.</p>
	<p>Read the owner's manual thoroughly before operating this machine. Ensure that you understand and follow all instructions on the machine and in the manual before attempting to assemble and operate.</p>
	<p>Wear ear & eye protection when operating this machine.</p>
	<p>Wear protective, sturdy, non-slip footwear when operating this machine.</p>
	<p>Wear safety gloves when operating this machine.</p>
	<p>CARBON MONOXIDE GAS</p> <p>Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.</p>

	<p>This machine has sharp cutting blades capable of causing injury to hands and feet. Keep hands and feet away from the blades when the machine is running, and ensure you wear protective gloves when handling the blades for maintenance purposes.</p>
	<p>Beware of thrown objects, which can ricochet causing serious injury to the eyes. Always wear eye & ear protection when operating.</p>
 <p>15m ←</p>	<p>Keep bystanders, helpers, pets, and children at least 15m from the machine while it is in operation. Stop machine if anyone enters the area.</p>
	<p>Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on you or your clothing, which can ignite. In the event of a gasoline spill, wash your skin and change clothes immediately.</p>
	<p>Never wear loose clothes or long jewelry and keep your long hair secured when operating machine. Never operate this machine in bare feet or sandals.</p> <p>Never use machine on a slope or hard smooth floor.</p>

Specifications

Model	BBT-HHHT
Engine Type	2-stroke 1hp
Displacement	23cc
Max. Engine Performance	0.74kw
Weight	5.8kg
Cutting Length	560mm
Max. Blade Speed	1.88m/s
Idling Speed	2600rpm
Fuel Type	Unleaded 95 octane or higher <i>(do not use ethanol in this machine)</i>
Fuel Tank Capacity	Approx. 600ml
Oil Type	Two Stroke
Fuel/Oil Mixture	25:1 (first 3 tanks) 40:1 thereafter
Starter Type	Recoil Start
Spark Plug Type	BMA7

Components



	NAME OF MAJOR PARTS		NAME OF MAJOR PARTS
1	Blade	7	Throttle lever
2	Front handle	8	Rear handle
3	Recoil starter	9	Muffler
4	Fuel tank cap	10	Gearbox
5	Carburetor	11	Blade cover
6	STOP Switch (ON-OFF)		

Safety Precautions

- Read this user manual in full before attempting to operate this machine.
- All users must ensure they understand how to operate all of the controls of the machine and learn how to stop the engine quickly in case of an emergency. Also make sure the user receives adequate instructions before operation.
- Do not allow children to operate this machine and keep children and pets away from the area when operating.
- The engines exhaust contains carbon monoxide, which is poisonous. Do not run engine without proper ventilation and never operate indoors.
- During operation, the engine and exhaust become very hot so users must exercise caution to avoid burns. Keep flammable materials away, and do not place anything on the engine while running. Keep the engine at least 1 meter (3 feet) away from building and other equipment during operation.
- Ensure the correct personal protective equipment is used during operation.
- Never stand on a ladder, or climb trees or any other existing structure to operate your hedge trimmer.
- Ensure the blade cover is fitted before transporting the unit.

INTENDED USE OF THIS MACHINE:

This unit is only designed for the purpose of trimming bushes & hedges, and must not be used for any other purpose.

Assembly Instructions

BEFORE OPERATING THIS UNIT:

Always check this unit is safe for operation before starting.



WARNING

Before starting your unit, ensure that the surrounding area is clear of any objects that may come into contact with the blade.

FUEL

We recommend that the use of ethanol fuels is avoided with your BBT Hedge Trimmer. To get the best possible performance from your engine, use premium unleaded fuel only.

WARNING

Petrol is highly flammable and explosive, and you can be burned or seriously injured when refueling.

- Stop engine and keep heat, sparks, and flame away.
- Refuel only outdoors.
- Wipe up spills immediately.

It is also a good idea to drain the fuel and give the fuel tank a good clean out every 3 months or after 25hrs of use.

ENGINE OIL

Oil is a major factor affecting the performance and service life of your BBT Hedge Trimmer. Use a good quality 2-stroke oil.

Operation Instructions

⚠ WARNING

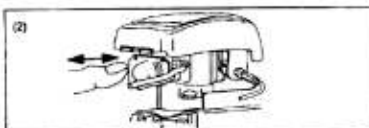
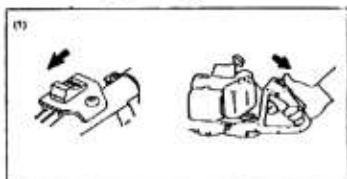
Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and even kill you.

Avoid any areas or actions that expose you to carbon monoxide.

STARTING THE ENGINE

To start a cold engine;

1. Push the STOP switch (1) to "1" position Prime the engine by pressing the primer bulb a few times.
2. Squeeze first the lock lever A and then the throttle lever B (fig 1).
3. Keeping the throttle lever B depressed, then press the throttle lock C inward (fig 2).
4. Keeping the throttle lever C depressed, release the throttle lever B this will lock the throttle lever B in position (fig 3).
5. Give a gentle push on the primer pump (2) repeatedly (7 to 10 times) until fuel comes into the primer pump.
6. Move the choke lever (3) to position →open
7. Hold the unit down firmly so you will not lose control while cranking the engine. If not held down properly, the engine could pull you off balance or swing the cutting blade into an obstruction or your body.
8. Slowly pull the starter grip until resistance is felt and continue with a smart pull until initial ignition is heard.
9. Depress the choke lever (3) to the position ←close—and pull the starter rope again until the engine starts.
10. As soon as the engine starts, immediately tap and release the throttle. thus releasing the half-throttle rock so that the engine can run in idle.
11. Run the engine for approximately one minute at a moderate speed before applying full speed.



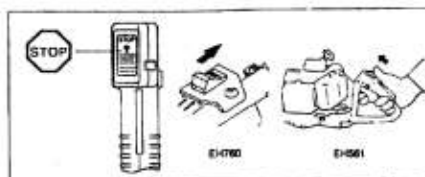
HOT RESTART (Starting immediately after the engine has stopped)

When restarting a hot engine, first try repeating steps 1, 7 & 8. If this does not start the engine, repeat steps 1-11.

NOTE: Do NOT pull the pull-start to its full extend. Do NOT allow starter grip to be retracted without control; ensure it retracts slowly.

STOPPING THE ENGINE

1. Release the throttle lever completely.
2. Push the on/off switch up to the STOP position (10); the engine rotation will slow down then stop.



OPERATING THE MACHINE

Always hold the hedge trimmer firmly with both hands on handles only.

Operate the hedge trimmer with a pendulous motion, swinging back & forth in an arc.

The hedge trimmer is not designed to run continuously for long periods of time. Ensure that you take a break of 10-20 minutes after every 50 minutes of operation.

NOTE: When you release the throttle, it will take a few seconds for the cutting blades to stop completely.



WARNING

Do not feed twigs or other material to be cut into the blade by hands, or reach over a moving blade for any reason.



WARNING

Should cutting blades hit a stone or other hard object, immediately switch off the engine & inspect the cutting blades for damage. Damaged blades must be replaced before re-commencing work



WARNING

Do not attempt to remove jammed cut material while the machine is running & the blades are moving. Turn machine off, place on a stable surface & remove necessary material.

Maintenance & Storage

		Each Use	Every 3 Months or 25hrs	Every 6 Months or 50hrs	Every 12 Months or 100hrs	Every 2 Years or 300hrs
Air Filter	Check & Clean	X				
Spark Plug	Replace				X	
Nuts & Bolts	Check & tighten	X				
Clutch Shoes	Check					X
Fuel Filter	Check & Clean				X	
	Replace if necessary					X
Fuel Tank	Clean				X	
Fuel Lines	Check & replace if necessary					X
Lubricate Blades	Lubricate Blades	X				



WARNING

Before carrying out any maintenance, turn off the engine & remove the spark plug connector.

BLADE SHARPENING

NOTE: For the best & safest performance of your Hedge trimmer, keep blades clean & sharp.



WARNING

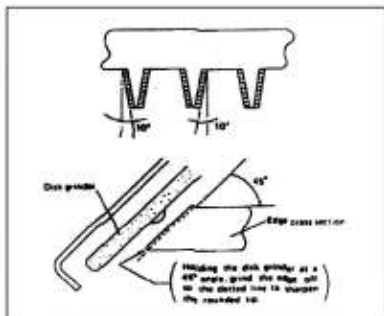
Never straighten or weld a damaged cutting blade. Always replace a damaged blade.

If the edges are rounded and do not cut well any more, you can sharpen the blades by grinding off only the shaded portion. Do not grind the contact surfaces (sliding surfaces) of the top and bottom edges.

Before grinding, be sure to secure the blade firmly and switch off the engine and remove the spark plug cap.

Wear gloves, protective glasses, etc.

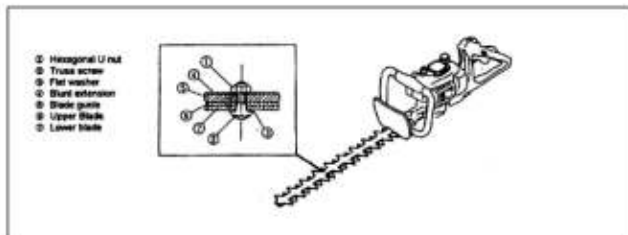
NOTE: A blade edge that has been ground too much at a time or ground many times will lose its hardened layer. It becomes rounded and dull very quickly in use.



BLADE ADJUSTMENT

The blades will wear with long use. When you find that trimming is not as good as when the blades were new, adjust them as follows

1. Turn nut ① loose.
2. Screw ② in with the driver lightly till it stops turning, and then screw it back one quarter to a half turn.
3. Turn nut ① tight, holding screw ② at the same time with a driver.
4. Lubricate the blades after adjustments above with light oil.
5. Start the engine and operate the engine throttle on and off for a minute.
6. If the engine is labouring or under-performing, give screw ② a little more turn-back and repeat 5 to see if they are properly adjusted.



CHECKING AND ADJUSTING THE IDLING SPEED

The cutting blade should not run when the control lever is fully released.

Idle speed should be set to 2,600 rpm. If necessary, correct it by means of the idle screw (the cutting blade must not run when the engine is on idle).

- Clockwise for faster rate of revolution.
- Counter-clockwise for a slower rate of revolution. Check that there is sufficient difference between idling and clutch engagement speed to ensure that the cutting tool is at a standstill while the engine is idling. (if necessary, reduce idling speed)
- The clutch should engage at minimum 3,250 rpm.
- Check the functioning of the STOP switch, the lock-off lever, the control lever, and the lock button.

CHECKING THE SPARK PLUG (every 8 hours)

Only use the supplied universal wrench to remove and install the spark plug

The gap between the two electrodes of the spark plug should be 0.6 to 0.7 mm. If the gap is too wide or too narrow, adjust it. If the spark plug is clogged with carbon or fouled, clean it thoroughly or replace it. Use an exact replacement.

AIR FILTER

A dirty air filter will restrict air flow to the carburettor, hindering engine performance & making the machine difficult to start. If operating in dusty conditions, clean the air filter more often than specified in the maintenance schedule

1. Remove the air cleaner cover.
2. Push the choke lever up to prevent dirt particles from entering the carburettor.
3. Take out the sponge element, wash it in lukewarm water and dry it completely.
4. After cleaning, put back the sponge element and the air cleaner cover.

LUBRICATION

Supply grease to the gear case through the grease hole every 10 to 20 hours.

Troubleshooting

ENGINE WILL NOT START		
	Possible Cause	Resolution
1. Check control positions	Choke open	Move lever to CLOSED position unless the engine is warm
	Engine switch in off position	Turn engine to on position
2. Check fuel	Out of fuel	Refuel
	Bad fuel; engine has been re-fuelled with bad petrol	Drain fuel tank & carburettor. Re-fuel with fresh petrol
3. Check coil for spark	Faulty Coil	Remove spark plug & place into coil lead (earth end of plug). Pull units pull start; if there is no spark, replace spark plug. Repeat start sequence; if unit still does not run, contact BBT Service.
4. Remove & inspect spark plug	Spark plug faulty, grimy or improperly gapped	Gap (0.6-0.7mm) or replace spark plug
	Spark plug is wet with petrol (flooded engine)	Allow the spark plug to dry. After drying, install the spark plug & repeat start sequence
5. Contact BBT Service for Assistance		
ENGINE LACKS POWER		
1. Check air filter	Filter element restricted	Clean or replace filter element
2. Check fuel	Bad fuel; engine has been re-fuelled with bad petrol	Drain fuel tank & carburettor. Refuel with fresh Petrol
3. Check Oil level	Not enough or too much oil	Unit operates with 80-100ml of oil. If you have over filled, drain & fill to this level. If you do not have enough, top up before proceeding with start sequence.
4. Contact BBT Service for Assistance		