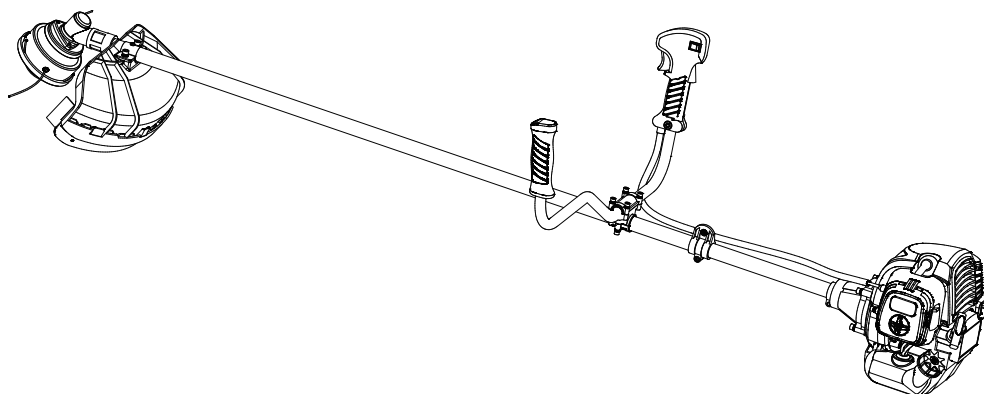




TT-BC520T



DEAR CUSTOMER



In order to achieve the best performance of your product, please read this instruction manual carefully before using, and keep it for future reference.



SAFETY FIRST

Instructions contained in warnings within this manual marked with a  symbol concern critical points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail.

WARNINGS IN THE MANUAL

WARNING

This mark indicates instructions which must be followed in order to prevent accidents which could lead to serious bodily injury or death.

IMPORTANT

This mark indicates instructions which must be followed, or it leads to mechanical failure, breakdown, or damage.

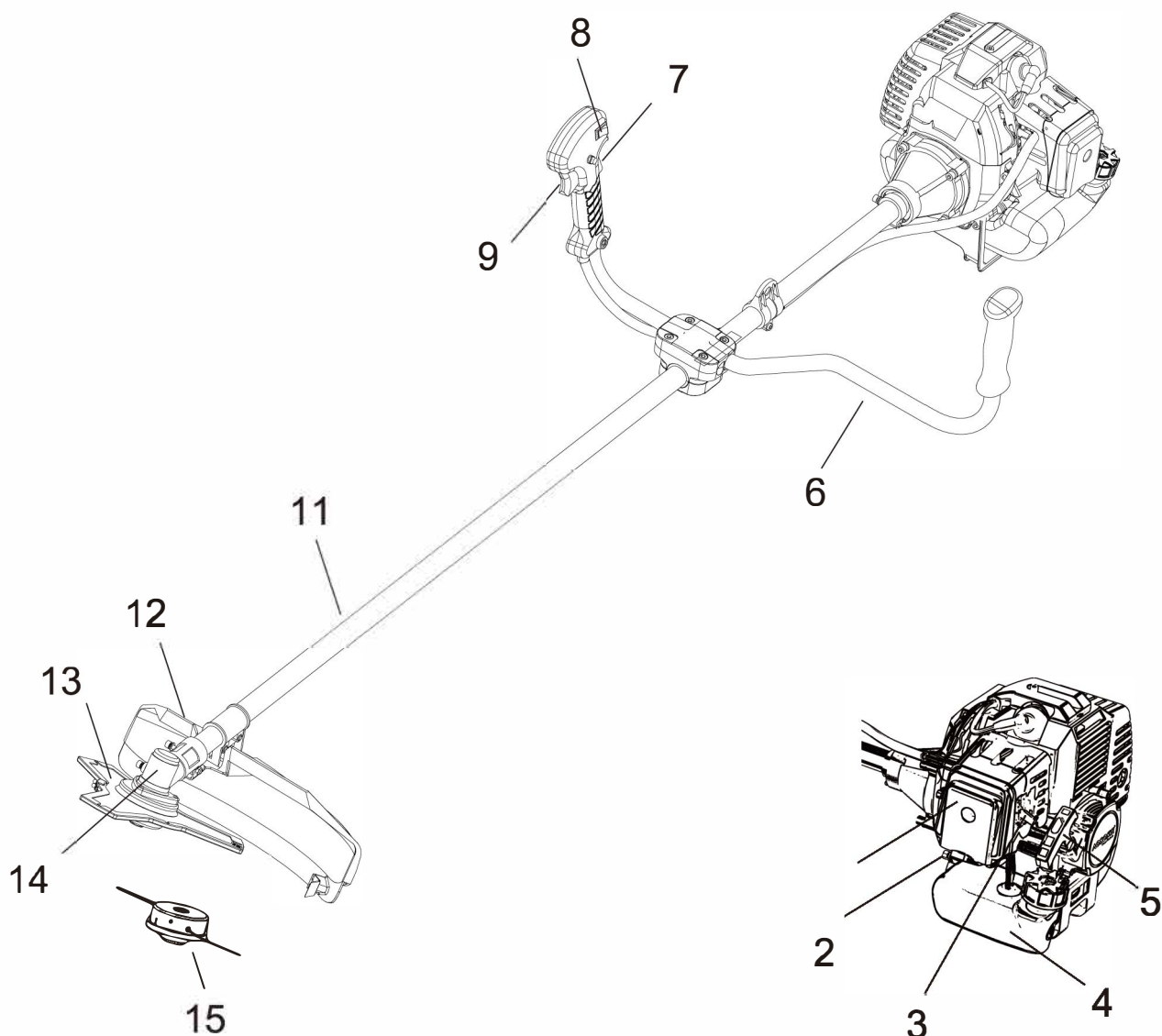
NOTE

This mark indicates hints or directions useful in the use of the product.

CONTENTS

1. Parts location	02
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3. Symbols and warning labels on the machine.....	04
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1. PARTS LOCATION



1. Air filter cover

2. Primer bulb

3. Choker lever

4. Fuel tank

5. Pull start

6. Handle

7. Throttle control

8. ON/OFF switch

9. Throttle trigger

11. Shaft

12. Guard

13. 3 Teeth blade

14. Gear case

15. Nylon spool

2. SPECIFICATIONS

Model	TT-BC520T
Engine Displacement	52cm ³ (air-cooled,2-stroke)
Max. Engine power	2.2 KW/7500/min
Max. Engine speed	9000/min
Recommend idling speed	3000/min
Type of carburetor	Diaphragm type
Fuel tank capacity	900 ml
Fuel mixture Ratio	Petrol 25 : Oil 1
Weight without fuel, harness, cutting attachment and guard	7.6 kg
Noise emission (see note 1)	Sound power level, measured dB(A): Equipped with trimmer head: 107,7 K=3 Equipped with blade: 105,4 K=3 Sound power level, guaranteed LwA dB(A): 113
Noise levels	Equivalent sound pressure level at the operator's ear, measured according to EN ISO 11806 and ISO 22868, dB(A): Equipped with trimmer head: 99,5 K=3 Equipped with blade: 98,4 K=3 Sound pressure level, guaranteed LpA dB(A): 102
Vibration levels	Equivalent vibration levels (ahv,eq) at handles, measured according to EN ISO 11806 and ISO 22867, m/s ² Equipped with trimmer head: Left Handle: 5,259 K=1,5 Right Handle: 4,938 K=1,5 Equipped with blade: Left Handle: 6,566 K=1,5 Right Handle: 9,661 K=1,5

Note 1: Noise emissions in the environment measured as sound power (LWA) in conformity with EC directive 2000/14/ EC. Reported sound power level for the machine has been measured with the original cutting attachment that gives the highest level. The difference between guaranteed and measured sound power is that the guaranteed sound power also includes dispersion in the measurement result and the variations between different machines of the same model according to Directive 2000/14/EC.

Recommended cutting attachment	Type	Cutting width (mm)	Thickness of blade/ diameter of cutting line (mm)	centre hole diameter (mm)
Blade	3 teeth, single piece, metal	255	1.6	25.4
Trimmer head	Non-metallic Flexible cutting line	440	2.4	



1. Only use accessories recommended by the manufacturer.
2. Never replace the nylon line with a metal wire. RISK OF INJURIES.

3. SYMBOLS AND WARNING LABELS ON THE MACHINE

For safe operation and maintenance, symbols are carved in relief on the machine. indications, please be careful not to make a mistake.

CHOKE OPERATION



Starting mode when the engine is hot (choke off).

Position: AIR CLEANER COVER



Starting mode when the engine is cold (choke on).

Position: AIR CLEANER COVER

	Warning / Attention		Danger: Risk of fire or explosion
	Read the instruction manual completely and carefully before using the tool.		Top speed of trimmer head is 6600 min ⁻¹
	Wear head, eye and ear protection.		Top speed of blade is 7100 min ⁻¹
	Wear protective gloves.		The port to refuel the "MIX FUEL"
	Wear safety footwear		The guaranteed noise level
	Danger: Touching the rotating blade is forbidden.		With this symbol the manufacturer confirms that this tool is in accordance with applicable European directives.
	Beware of thrown objects.		With this symbol the manufacturer confirms that this tool is in accordance with applicable European directives.
	Keep away from fire		Keep all children, bystanders and helpers 15 meters away from the brush cutter
	Hot surface: Risk of burn.		

4. FOR SAFE OPERATION

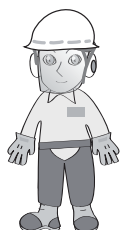


1. Read this manual carefully until you completely understand and follow all safety and operating instructions.
2. Keep this manual handy so that you may refer to it later whenever any questions arise. Also note, if you have any questions which cannot be answered herein, contact the dealer from whom you purchased the product.



3. Always be sure to include this manual when selling, lending, or otherwise transferring the ownership of this product.
4. Never allow children or anyone unable to fully understand the directions given in the manual to use the machine.

WORKING CONDITION



1. When using the product, you should wear proper clothing and protective equipment.
 - (1) Helmet.
 - (2) Ear protectors.
 - (3) Protection goggles or face protector.
 - (4) Thick work gloves.
 - (5) Non-slip-sole work boots.

2. And you should carry with you.

- (1) Attached tools.
- (2) Properly reserved fuel.
- (3) Spare blade.
- (4) Things to notify your working area (rope, warning signs).
- (5) Whistle (for collaboration or emergency)
- (6) Hatchet or saw (for removal of obstacles)



3. Do not wear loose clothing, jewelry, short trousers, sandals, or go barefoot. Do not wear anything which might be caught by a moving part of the unit. Secure hair so it is above shoulder length.

WORKING CIRCUMSTANCE



1. Never start the engine inside a closed room or building. Exhaust gases contain dangerous carbon monoxide.
2. Never use the product.
 - a. when the ground is slippery or when you can't maintain a steady posture.



- b. At night, at times of heavy fog, or at any other times when your field of vision might be limited and it would be difficult to gain a clear view of the working area.
- c. During rain storms, during lightning storms, at times of strong or gale-force winds, or at any other times when weather conditions might make it unsafe to use the product.

WORKING PLAN



1. You should never use the product when under the influence of alcohol, when suffering from exhaustion or lack of sleep, when suffering from drowsiness as a result of having taken cold medicine or at any other time when a possibility exists that your judgment might be impaired or that you might not be able to operate the product properly and in a safe manner.



2. When planning your work schedule, allow plenty of time to rest. Limit the amount of time over which the product is to be used continuously to somewhere around 30 ~ 40 minutes per session, and take 10 ~ 20 minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

WARNING



1. If you don't observe the working time, or working manner (See "USING THE PRODUCT"), Repetitive Stress Injury (RSI) could occur. If you feel discomfort, redness and swelling of your fingers or any other part of your body, see a doctor before getting worse.
2. To avoid noise complaints, in general, operate product between 8 a.m. and 5 p.m. on weekdays and 9 a.m. to 5 p.m. on weekends.

NOTE

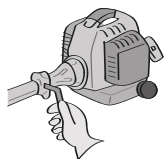
Check and follow the local regulations as to sound level and hours of operations for the product.

5. FOR SAFE OPERATION

BEFORE STARTING THE ENGINE



1. The area within a perimeter of 15 m of the person using the product should be considered a hazardous area into which no one should enter. If necessary, yellow warning rope, warning signs should be placed around the perimeter of the area. When work is to be performed simultaneously by two or more persons, care should also be taken to constantly look around or otherwise check for the presence and locations of other people working so as to maintain a distance between each person sufficient to ensure safety.
2. Check the condition of working area to avoid any accident by hitting hidden obstacles such as stumps, stones, cans, or broken glass.



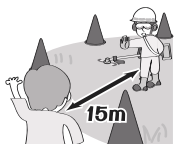
! IMPORTANT

Remove any obstacle before beginning work.



3. Inspect the entire unit for loose fasteners and fuel leakage. Make sure that the cutting attachment is properly installed and securely fastened.
4. Be sure the cutting attachment guard is firmly attached in place.
5. Always use the harness. Adjust the strap for comfort before starting the engine. The strap should be adjusted so the left hand can comfortably hold the handlebar grip approximately waist high.

STARTING THE ENGINE



1. Keep bystanders and animals at least 15 m away from the operating point. If you are approached, immediately stop the engine.
2. The product is equipped with a centrifugal clutch mechanism, so the cutting attachment begins to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, place the product onto the ground in a flat clear area and hold it firmly in place so as to ensure that neither the cutting part nor the throttle come

into contact with any obstacle when the engine starts.

! WARNING

Never place the throttle into the high-speed position when starting the engine.

3. After starting the engine, check to make sure that the cutting attachment stops rotating when the throttle is moved fully back to its original position. If it continues to rotate even after the throttle has been moved fully back, turn off the engine and take the unit to your authorized servicing dealer for repair.

USING THE PRODUCT

! IMPORTANT



Cut only materials recommended by the manufacturer. And use only for tasks explained in the manual.



1. Grip the handles firmly with both hands using your whole hand. Place your feet slightly apart (slightly further apart than the width of your shoulders) so that your weight is distributed evenly across both legs, and always be sure to maintain a steady, even posture while working.



2. Keep cutting attachment below waist level.
3. Maintain the speed of the engine at the level required to perform cutting work, and never raise the speed of the engine above the level necessary.



4. If the unit starts to shake or vibrate, turn off the engine and check the whole unit. Do not use it until the trouble has been properly corrected.

5. Keep all parts of your body away from rotating cutting attachment and hot surfaces.

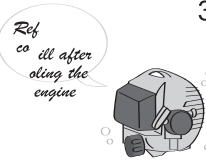
6. Never touch the muffler, spark plug, or other metallic parts of the engine while the engine is in operation or immediately after shutting down the engine. Doing so could result in serious burns or electrical shock.



5. FOR SAFE OPERATION

IF SOMEONE COMES

1. Guard against hazardous situations at all times. Warn adults to keep pets and children away from the area. Be careful if you are approached. Injury may result from flying debris.
2. If someone calls out or otherwise interrupts you while working, always be sure to turn off the engine before turning around.

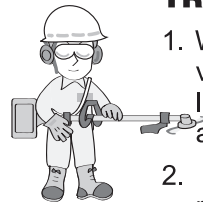


3. When refilling the tank, always turn off the engine and allow it to cool down. Take a careful look around to make sure that there are no sparks or open flames anywhere nearby before refueling.
4. Wipe spilled fuel completely using a dry rag if any fuel spillage occurs during refueling.
5. After refueling, screw the fuel cap back tightly onto the fuel tank and then carry the unit to a spot 3 m or more away from where it was refueled before turning on the engine.

MAINTENANCE



1. In order to maintain your product in proper working order, perform the maintenance and checking operations described in the manual at regular intervals.
2. Cleaning and maintenance machine before storage.
3. Use of a transport cover for metal blades during transport and storage.
4. Always be sure to turn off the engine and disconnect the spark plug wire before performing any maintenance or checking procedures.



TRANSPORTATION

1. When hand-carrying the product, cover over the cutting part if necessary, lift up the product and carry it paying attention to the blade.
2. Never transport the product over rough roads over long distances by vehicle without removing all fuel from the fuel tank. If doing so, fuel might leak from the tank during transport.

WARNING

The metallic parts reach high temperatures immediately after stopping the engine.

3. Under no circumstances should you ever take apart the product or alter it in any way. Doing so might result in the product becoming damaged during operation or the product becoming unable to operate properly.

HANDLING FUEL



1. The engine of the product we offer is designed to run on a mixed fuel, which contains highly flammable gasoline. Never store cans of fuel or refill the tank of the unit in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or any other source of heat or fire which might ignite the fuel.
2. Never smoke while operating the unit or refilling its fuel tank

5. FOR SAFE OPERATION

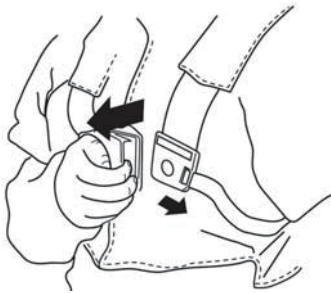
GENERAL WORKING INSTRUCTION

! IMPORTANT

QUICK RELEASE

There is an easily accessible, quick release fitted at the front as a safety precaution in case the engine catches fire, or in any other situation that requires you to free yourself from the machine and harness. See instructions under the heading Adjusting the harness and brush cutter.

Check that the harness straps are correctly positioned. Once the harness and machine have been adjusted, check that the harness quick release works correctly.



CUTTING ATTACHMENT GUARD

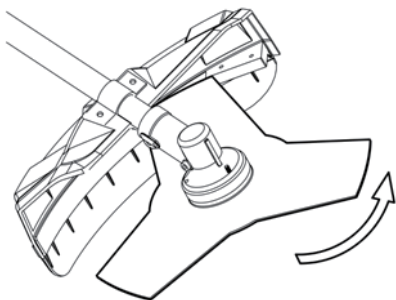
This guard is intended to prevent loose objects from being thrown towards the operator. The guard also protects the operator from accidental contact with the cutting attachment.

Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.

Always use the recommended guard for the cutting attachment you are using. See chapter on Technical data.

! IMPORTANT

Never use a cutting attachment without an approved guard. See the chapter on Technical



data. If an incorrect or faulty guard is fitted this can cause serious personal injury.

AVOID KICKBACK

The best protection is to avoid situations that lead to setbacks.

1. Keep the position of the upper guide rail always in mind.
2. Be especially careful when cutting in affected areas.
3. Cut only one branch at a time.

WARNING ABOUT SOUND AND VIBRATION

1. Wear ear-muffs

The impact of noise can cause damage to hearing.

2. Reduce noise generation and vibration to a minimum!

Use only equipment that is in perfect condition.

Maintain and clean the equipment regularly.

Adopt your way of working to the equipment.

Do not overload the equipment.

Have the equipment checked if necessary.

Switch off the equipment when not in use.

Wear gloves.

OTHER BASIC SAFETY RULES

! IMPORTANT

1. Please note that some national regulations may restrict the use of the machine.

2. Subject the brush cutter/grass trimmer to a visual inspection before each use.

Before starting work, after tank filling, after impact or dropping:

- Check the cutting tools for secure seating, general visual check for cracks and damage.
- Immediately replace damaged or blunt cutting tools, even in the event of minor hairline cracks.
- Sharpen cutting tools (also when required)

3. Parts replacement

- Only use original parts for accessories as well as for wearing and spare parts. Spare parts are available from your specialized dealer.
- Have your brush cutter/grass trimmer serviced only by qualified personnel and by use of original spare parts only. This ensures that the machine will work safely in the future.
- Replace damaged or worn parts with matching spare parts they are in the shape and size of the original parts as necessary.

! WARNING

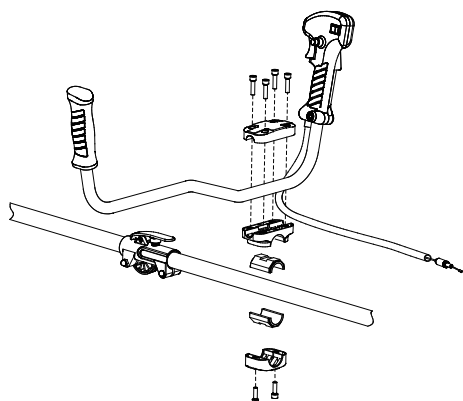
Never use without properly mounted blade guard!

5 . ASSEMBLY

Make sure unit is assembled correctly as shown in this manual. Be sure to follow all the assembly instructions.

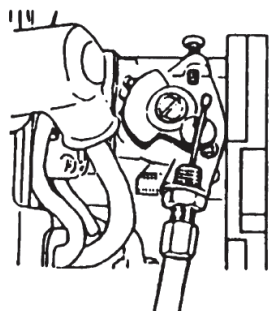
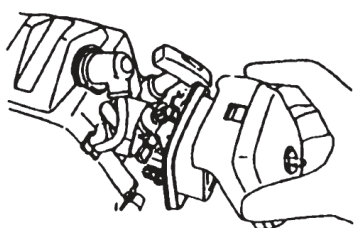


INSTALLING HANDLE



1. Loosen the 4 bolts on the upper cap and insert the handle. Retighten the bolts.
2. Put the handle assembly into the bracket and put the upper cap over it. Tighten the cap securely.
3. Insert the right handle into the switch assembly and tighten with bolt and nut.

CONNECTING THROTTLE WIRE



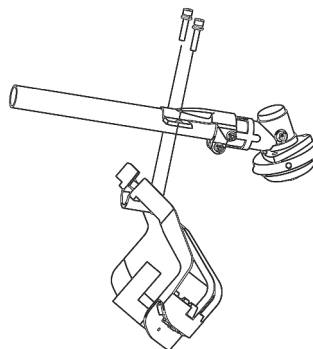
1. Remove the air cleaner cover.
2. Connect the end of the throttle wire to the joint on the top of the carburettor.

CONNECTING SWITCH WIRES

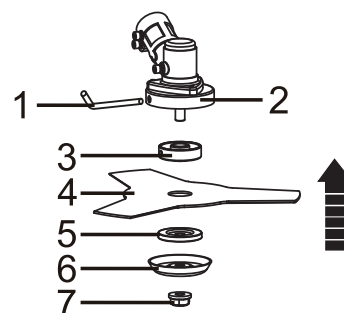
Connecting the switch wires between the engine and the main unit. Pair the wires of the same color.

INSTALLING CUTTING ATTACHMENT GUARD

Put the cutting attachment guard on the gearbox, attach it with the 2 screws and hardware provided.



INSTALLING BLADE

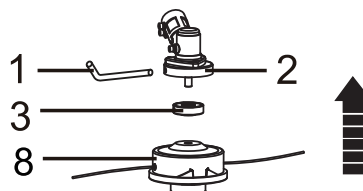


1. Insert the allen key (1) into the of the gear case (2) and plate (3) so as to fasten the axle.
2. Mount the blade (4) and the washer (5) onto the axle.
3. Mount the washer (6) and the nut (7) Fasten tightly anti clockwise.



WARNING Beware of blade thrust!

INSTALLING TRIMMER HEAD



1. Insert the allen key (1) into the hole of gear case (2), and plate (3) so as to fasten the axle.
2. Mount the trimmer head (8), by turning it anti-clockwise.
3. Fasten the trimmer head (8), tightly before use.

5. ASSEMBLY

BALANCING THE STRIMMER



1. Put harness on, and attach your trimmer to it.
2. Slide clamp up and down, till you feel comfortable with how the trimmer balances, and how you can manoeuvre it whilst working.



Make sure the trimmer unit is off, whilst doing this procedure, to ensure maximum balancing.

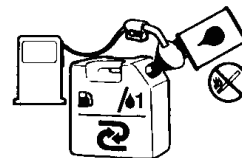
6. FILLING WITH OIL AND FUEL

WARNING

Petrol is flammable. Avoid smoking or bringing any flame or sparks near fuel. Make sure to stop the engine and allow it cool before refilling the unit. Select outdoor bare ground for filling with fuel and move at least 3 m (10 ft) away from the fuel filling point before starting the engine.



The engine is specially designed for air-cooled two stroke mixed fuel use. Do not use BIA or TCW (2-stroke water-cooling type) mixed oil.



**RECOMMENDED MIXING
RATIO PETROL 25: OIL 1**

6. FILLING WITH OIL AND FUEL

HOW TO MIX FUEL

1. Measure out the quantities of petrol and oil to be mixed.
2. Put some of the petrol into a clean, approved fuel container.
3. Pour in all of the oil and agitate well.
4. Pour in the rest of the petrol and agitate again for at least one minute. As some oils may be difficult to agitate depending on oil ingredients, sufficient agitation is necessary for engine protection. If the agitation is insufficient, there is an increased danger of early piston seizing due to abnormally lean mixture.
5. Put a clear indication on the outside of the container to avoid mixing up with petrol or other containers.

BFUELING THE UNIT

1. Untwist and remove the fuel cap. Rest the cap on a dustless place.
2. Put mixed fuel into the fuel tank to 80% of the full capacity.
3. Fasten the fuel cap securely and wipe up any fuel spillage around the unit.



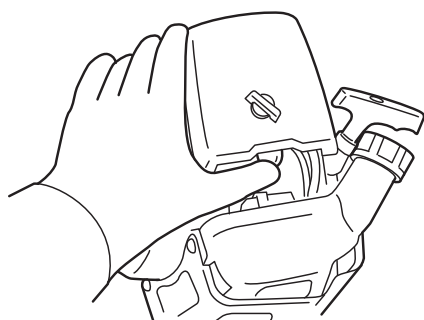
1. Select bare ground for filling with fuel.
2. Move at least 10 feet (3 metres) away from the fuel filling point before starting the engine.
3. Stop the engine before refilling the unit with fuel. At that time, be sure to sufficiently agitate the mixed fuel in the container.

FOR YOUR ENGINE LIFE, AVOID

1. FUEL WITH NO OIL (RAW PETROL) – It will cause severe damage to the internal engine parts very quickly.
2. 'GASOHOL' – It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
3. OIL FOR 4-STROKE ENGINE USE – It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.
4. Mixed fuels which have been left unused for a period of one month or more may clog the carburetor and result in the engine failing to operate properly.
5. In the case of storing the product for a long period of time, clean the fuel tank after rendering it empty. Next, start the engine and empty the carburettor of the composite fuel.
6. In the case of scrapping the used mixed oil container, scrap it only at an authorized repository site.

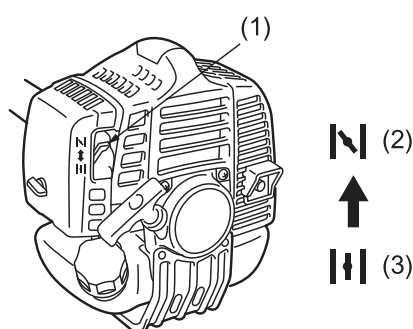
7. OPERATION

STARTING ENGINE



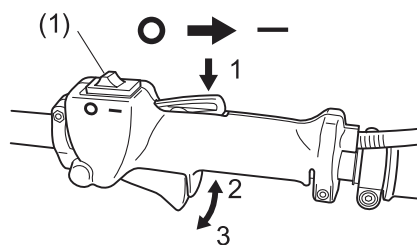
1. Rest the unit on a flat, firm place. Keep the cutting head off the ground and clear of surrounding objects, as it will start rotating upon starting of the engine.

2. Push the primer bulb several times until fuel flows out in the clear tube.



(1) Choke lever (2) Close (3) Open

3. Move the choke lever to the 'closed' position.



(1) Stop switch

4. Set the stop switch to the "-" position. Set the throttle trigger to the start position (1 → 2 → 3). Place the unit on a flat, firm place. Keep the cutting head clear of everything around it.

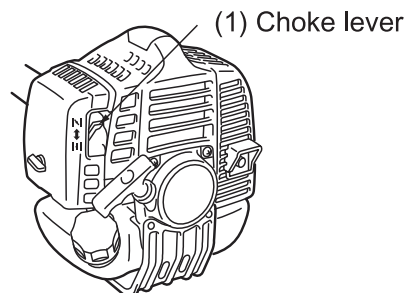


5. While holding the unit firmly, pull out the starter rope quickly until engine fires.



The product is equipped with a centrifugal clutch mechanism, so the cutting attachment begins to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, place the product onto the ground in a flat clear area and hold it firmly in place so as to ensure that neither the cutting part nor the throttle come into contact with any obstacle when the engine starts.

STOPPING ENGINE



Release the throttle lever and run the engine for half a minute. Then move the stop switch to the STOP position.



Except for an emergency, avoid stopping the engine while pulling the throttle lever.

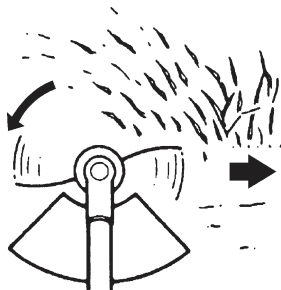


If engine doesn't stop at the stop switch, move the choke lever to the closed position.

7. OPERATION

OPERATING ADVICE

TRIMMING GRASS AND WEEDS

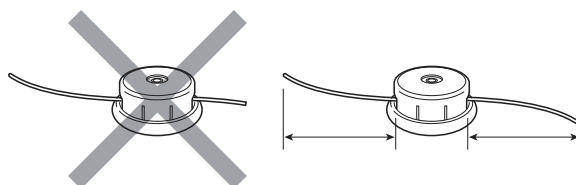


1. Hold the unit so the head is off the ground and is tilted about 20 degrees toward the sweep direction.
2. You can avoid thrown debris by sweeping from your left to the right.
3. Use a slow, deliberate action to cut heavy growth. The rate of cutting motion will depend on the material being cut. Heavy growth will require slower action than light growth.
4. Never swing the unit hard as you are in danger of losing your balance or control of the unit. Try to control the cutting motion with the hip rather than

placing the full workload on the arm and hands.

5. Take precautions to avoid wire, grass and dead, dry, longstem weeds from wrapping around the head shaft. Such materials can stall the head and cause the clutch to slip, resulting in damage to the clutch system if repeated frequently.

ADJUSTING THE LINE LENGTH



1. Your brush cutters are equipped with a semi-auto type nylon line head that allows the operator to advance the line without stopping the engine. When the line becomes short, lightly tap the head on the ground while running the engine at full throttle.
2. Each time the head is bumped, the line advances about 1 inch (25.4 mm). For better effect, tap the head on bare ground or hard soil.

8. MAINTENANCE

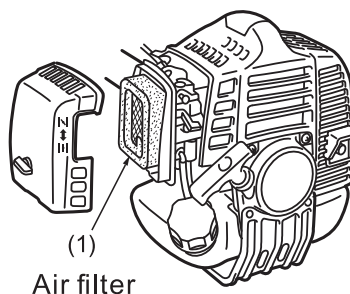
1. Make sure to maintain the machine in good working condition, carry out regular maintenance of the machine after each use and before storage.
2. Any breach of adequate maintenance reduces the life of the machine and increases the risk of breakdowns and accidents.
3. To preserve the security system throughout the life of the machine, it is important to perform maintenance and proper cleaning, DO NOT use non-compliant replacement parts and DO NOT dismantle the machine yourself or change the security features.



Make sure that the engine has stopped and is cool before performing any service to the machine. Contact with moving a cutting head or hot muffler may result in a personal injury.

AIR FILTER

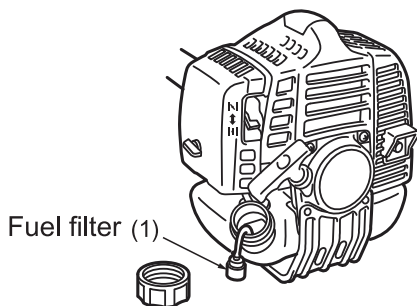
The air filter, if clogged, will reduce the engine performance. Check and clean the filter element in warm, soapy water as required. Dry completely before installing. If the element is broken or shrunk, replace with a new one.



8. MAINTENANCE

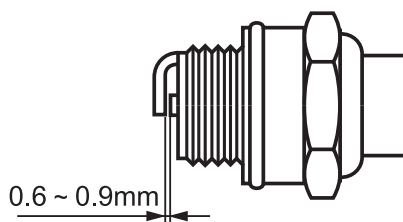
FUEL FILTER

When the engine runs short of fuel, check the fuel cap and the fuel filter for blockage.



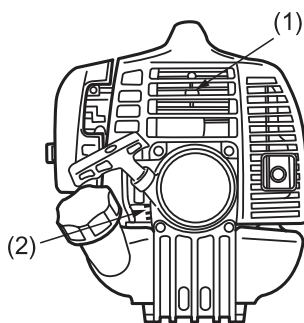
SPARK PLUG

Starting failure and misfiring are often caused by a fouled spark plug. Clean the spark plug and check that the plug gap is in the correct range. For a replacement plug, use the correct type.



CLEARING BLOCKAGES

If waste gets stuck and causes blockage around the intake air cooling vent or between the cylinder fins, it may cause the engine to overheat, and that in turn may cause mechanical failure on the part of the brushcutter. Make sure it is cleaned regularly.

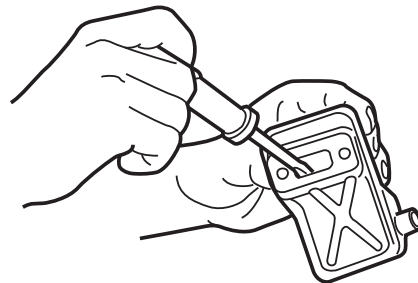


(1) Cylinder

(2) Intake air cooling vent (back)

AFTER EVERY 100 HOURS OF USE

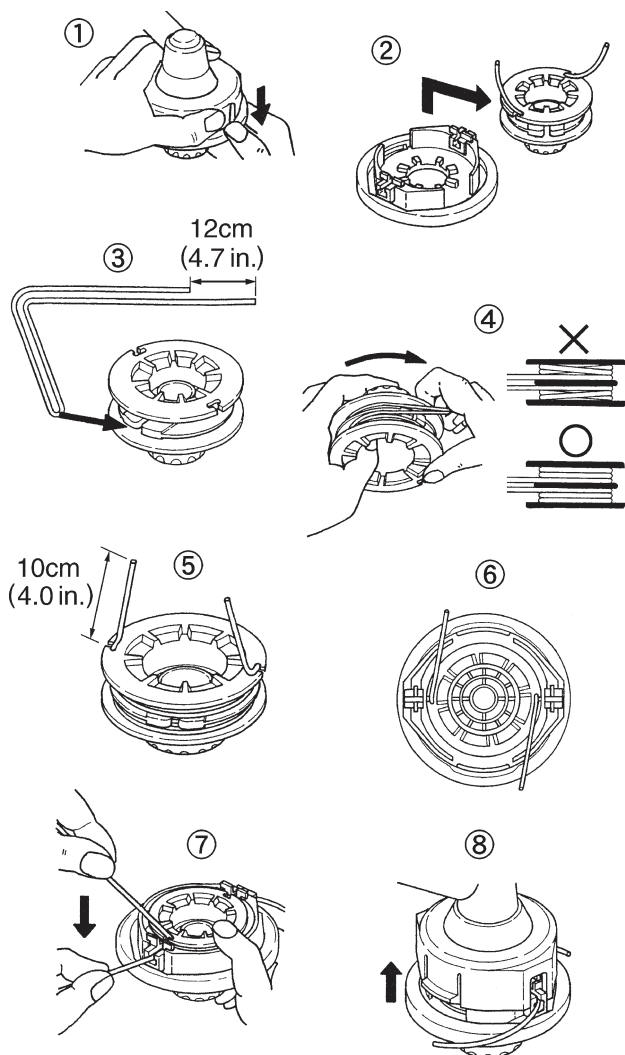
MUFFLER CLEANING



1. Remove the muffler, insert a screwdriver into the vent, and wipe away any carbon build up. Wipe away any carbon build up on the muffler exhaust vent and cylinder exhaust port at the same time.
2. Tighten all screws, bolts, and fittings.
3. Check to see if any oil or grease has worked its way in between the clutch lining and drum, and if it has, wipe it away using spirits.

8. MAINTENANCE

REFILLING TRIMMING LINE



1. For replacement line, use a line with diameter of 2.4mm (.095in). The spool is capable of holding up to 2.5m. Avoid using a larger line as it may reduce the trimming performance.
2. Pinch the slotted area on the both sides of the spool housing to unhook the bottom cap.
3. Take out the spool and pull off the old line. Put one end of new line through the spool holes and pull it until the length is equal between each part of the line.
4. Wind up the line in the correct direction as indicated on the spool.
5. Hook each end of the line in the slot on the edge of the spool, and then put the ends through the eyelets on the housing. Make sure that the spring and the washers are in place.
6. While holding the spool against the housing, pull the line ends to release them from the slot.
7. Line up the slot on the bottom cap with the hook on the housing, press the cap against the housing until it clicks.



For safety reasons, do not use metal reinforced line.

9. TRANSPORTATION



When you finish using the trimmer in one location and wish to continue work in another spot, turn off the engine, lift up the unit and carry it, paying attention to the hot engine.



Be careful not to spill any fuels during transportation to another spot.



When transporting the unit over long distances, ensure the engine is cool to the touch, and that any fluids cannot spill out.

10. TROUBLESHOOTING GUIDE

Case 1. Starting failure

CHECK	PROBABLE CAUSES	ACTION
fuel tank	→ incorrect fuel	→ drain it and with correct fuel
fuel filter	→ fuel filter is clogged	→ clean
carburetor adjustment screw	→ out of normal range	→ adjust to normal range
sparkign (no spark)	→ spark plug is fouled/wet	→ clean/dry
	→ plug gap is incorrect	→ correct (GAP: 0.6~0.7mm)
spark plug	→ disconnected	→ retighten

Case 2. Engine starts but does not keep running/Hard re-starting.

CHECK	PROBABLE CAUSES	ACTION
fuel tank	→ incorrect fuel or staled fuel	→ drain it and with correct fuel
carburetor adjustment screw	→ out of normal range	→ adjust to normal range
muffler,cylinder (exhaust port)	→ carbon is built-up	→ wipe away
air cleaner	→ clogged with dust	→ wash
cylinder fin, fan cover	→ clogged with dust	→ clean