



**33cc Petrol Brush Cutter & Grass Trimmer**

**150-85-50379**



**INSTRUCTION MANUAL**



**Warning:** For your personal safety,

READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

Made in China



CE

## TECHNICAL DATA

MODEL		150-85-50379
Main unit	Remote type	Centrifugal Clutch; hard shaft
	Maximum speed of spindle/engine speed(r/min)	8,000/10,000
	Idle speed of engine(r/min)	3,000
	Centrifugal speed(r/min)	3,800
	Measured vibration emission value at each manipulation (m/s <sup>2</sup> ) (According to ISO 22867)	Brush cutter: - Left handle: 3.172 m/s <sup>2</sup> , - Right handle: 2.730 m/s <sup>2</sup> , Grass trimmer: - Left handle: 6.484 m/s <sup>2</sup> , - Right handle: 6.021 m/s <sup>2</sup> , K=1.5 m/s <sup>2</sup>
	Measured sound pressure level LpA dB(A) (According to ISO 22868)	Brush cutter: 95.41 dB (A) Grass trimmer: 96.33 dB (A) K=3 dB (A)
	Measured sound power level LwA dB(A) (According to ISO 22868)	Brush cutter: 108.87 dB (A) Grass trimmer: 109.87 dB (A) K=3 dB (A)
	Guaranteed sound power level (According to ISO 2000/14/EC)	115 dB (A)
	Line Max. Cutting Path /Diameter of line	44 cm(φ2.5mm, 7,500 min <sup>-1</sup> )
	Metal blade (Type/Diameter)	3-tooth, 1.4mmx230mm, φ25.4mm, 8,000 min <sup>-1</sup>
	Rotation direction of cutting device	Counter-Clockwise (seen from the top)
	Type of aluminum pole	2 pieces
	Weight when dry(kg)	6.45
Engine	Name of engine	SPK36F
	Type	Air-cooled; 2 cycle; vertical Piston valve; gasoline engine
	Displacement( cm <sup>3</sup> )	33
	Maximum output(kW/r/min) (in accordance with ISO 8893)	1.0 /7500
	Specific fuel consumption at max. engine performance (g/kWh)	≤520
	Carburetor	Diaphragm-type
	Ignition	Non-contact electronic ignition
	Method of starting	Recoil type
	Fuel used	Fuel mixed with lubricating oil (ratio of 40:1)
	Fuel tank capacity( cm <sup>3</sup> )	960

Technical Data subject to change without notice

## GRAPHIC WARNINGS

Because a trimmer/cutter is a high-speed, fast cutting power tool, special safety precautions must be observed to reduce the risk of personal injury. Read this manual carefully. Be familiar with the controls and the proper use of the unit. Know how to shut it off, and how to unhook a harnessed unit quickly.



• Warning



• Read the instruction manual



• Wear eye protection, ear muffs and helmet



• Wear foot protection



• Wear glove to protect your hands



• Beware of foot injury by cutting attachment



• Beware of thrown objects hit by cutting attachment.  
Never use without properly mounted guard.



• Beware of blade thrust



• Beware of falling objects



• Keep bystanders at least 15 m away



• Sharp blade on the safety guard, do not touch the cut off knife.



• Extremely hot surface. Do not touch a hot muffler, gear box or cylinder, you may get burned. These parts get extremely hot from operation and remain hot for a short time after the unit is turned off.

Choke control



• Start position (choke closed).



• Run position (choke open)





Always TURN OFF ENGINE and make sure the cutting tool has stopped before cleaning, removing or adjusting blade.



**WARNING!** Never modify a trimmer or cutter in any way. Improper use of the machine can cause **SERIOUS OR FATAL PERSONAL INJURY**.

**WARNING**  **DANGER**

The engine exhaust from this product contains chemicals that can be harmful. Ensure unit is used in well ventilated, outdoor areas.

Specifications, descriptions and illustrative material in this manual are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

## SAFETY RULES & PRECAUTIONS

**Proper safety precautions must be observed. Like all power equipment this unit must be handled carefully. DO NOT EXPOSE YOURSELF OR OTHERS TO DANGER.**

Follow these general rules. Do not permit others to use this machine unless they are thoroughly responsible and have read, and understand the machine manual and are trained in its operation.

- Secure the machine during transport to prevent loss of fuel, damage or injury.
- Always wear safety goggles for eye protection. Dress properly, do not wear loose clothing or jewelry that could become caught in moving parts of the unit. Safe, sturdy, nonskid footwear should always be worn. Long hair should be tied back. It is recommended that legs and feet be covered to protect from flying debris during operation.
- Inspect the entire machine for loose parts (nuts, bolts, screws, etc.) and any damage. Repair or replace as necessary before using the machine.
- **DO NOT USE** any attachment with this power head other than the ones recommended by our company. Serious injury to the operator or bystanders could result as well as damage to the machine.
- Keep the handles free from oil and fuel.
- Always use proper handles and shoulder strap when cutting.
- Do not smoke while mixing fuel or filling tank.
- Do not mix fuel in an enclosed room or near open flames. Assure adequate ventilation.
- Always mix and store the fuel in a properly marked container that is approved by local codes and ordinances for such usage.
- Never remove the fuel tank cap while the engine is running.
- Never start or run the engine inside a closed room or building. Fumes from the exhaust contain dangerous carbon monoxide.
- Never attempt to make engine adjustments while the unit is running and strapped to the operator. Always make engine adjustments with the unit resting on a flat, clear surface.
- Do not use the unit if it is damaged or poorly adjusted. Never remove the machine's guard. Serious injury to the operator or bystanders could result as well as damage to the machine.
- Inspect the area to be cut and remove all debris that could become entangled in the nylon cutting head. Also remove any objects that the unit may throw during cutting.
- Keep children away. Onlookers should be kept at a safe distance from the work area, at least 15 METRES (50 FEET).
- Never leave the machine unattended.
- Do not use this unit for any job other than those for which it is intended as described in this manual.
- Do not overreach. Keep proper footing and balance at all times. Do not run the unit while standing on a ladder or on any other unstable footing location.
- Keep hands and feet clear of the nylon cutting head or blade while unit is in use.
- Do not use this type of machine for sweeping away debris.
- Do not use the unit when you are tired, ill or under the influence of medication, drugs or alcohol.
- Only use nylon cutting head which is free of damage. If a stone or any other obstacle is hit, stop the engine and check the nylon cutting head. A broken or unbalanced nylon cutting head must never be used.



## FOLLOW INSTRUCTIONS FOR CHANGING ACCESSORIES

- Do not store in a closed area where fuel vapors can reach an open flame from hot water heaters, furnaces, etc. Store only in a locked, well ventilated area.
- Ensure safe and proper performance of your product. The use of any other accessories or attachments may cause a potential hazard or injury to the user, damage to the machine and void this warranty.
- Clean the machine completely, especially, the fuel tank, its surroundings, and the air cleaner.
- When refueling, be sure to stop the engine and confirm that it is cooled down. Never refuel when the engine is running or hot. When gasoline spills, be sure to wipe it up completely dispose of those materials before starting the engine.
- Stay clear of other workers or bystanders by at least 15 meters/50 feet.
- When ever approaching an operator of the machine, carefully call his attention and confirm that the operator stops the engine. Be careful not to startle or distract the operator which can cause an unsafe situation.
- Never touch the nylon cutting head or blade when ever the engine is running. If it is necessary to replace the protector or cutting attachment, be sure to stop the engine and confirm that the cutting device has stopped running.
- The engine should be turned off when the machine is moved between work areas.
- Be careful not to hit the nylon cutting head against stones, or the ground.
- Unreasonable rough operation will shorten the life of the machine as well as create an unsafe environment for yourself and those around you.
- Pay attention and be aware of loosening and overheating of parts. If there is any abnormality of the machine, stop operation immediately and check the machine carefully. If necessary, have the machine serviced by an authorized dealer. Never continue to operate a machine which may be malfunctioning.
- In start-up or during operation of the engine, never touch hot parts such as the muffler, the high voltage wire or the spark plug.
- After the engine has stopped, the muffler is still hot. Never place the machine in any places where there are flammable materials (dry grass, etc.), combustible gasses or combustible liquids.
- Pay special attention to operation in the rain or just after the rain as the ground may be slippery.
- If you slip or fall to the ground or into a hole, release the throttle lever immediately.
- Be careful not to drop the machine or hit it against obstacles.
- Before proceeding to adjust or repair the machine, be sure to stop the engine and detach the spark plug.
- When the machine is placed in storage for a long time, drain fuel from the fuel tank and carburetor, clean the parts, move the machine to a safe place and confirm that the engine is cooled down.
- Make periodic inspections to assure safe and efficient operation. For a thorough inspection of your machine, please contact a dealer.
- Keep the machine away from fire or sparks.
- When using the machine for a long period of time, if you experience discomfort, redness and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further use.
- Always wear ear protection, loud noise for long periods can make hearing debase and lead to lost hearing.
- Total face and head protection must be worn to prevent possible injury.
- Wear no-slip heavy duty work gloves to improve your grip on the brush cutter-handle. Gloves also reduce the transmission of machine vibration to your hands.
- **WARNING:** The cutter area is still dangerous while the machine is coasting to a stop.



- When transporting, this unit must be handled carefully. Do not expose yourself or others to danger.
- Envelop the blade before storage. Keep children away from it.
- Never remove the machine's guard.

- Do not store in a closed area where fuel vapors can reach an open flame from hot water heaters, furnaces, etc. Only store in a locked, well ventilated area.
- Never place the machine in any places where there are flammable materials (dry grass, etc.), combustible gasses or combustible liquids.
- When the machine is placed in storage for a long time, drain fuel from the fuel tank and carburetor, clean the parts, move the machine to a safe place and confirm that the engine is cooled down.

## Kickback and Related Warnings

- Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.
- For example, if an abrasive wheel is snagged or pinched by the work piece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.
- Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.
  - a) **Never place your hand near the rotating accessory.** Accessory may kickback over your hand.
  - b) **Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
  - c) **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

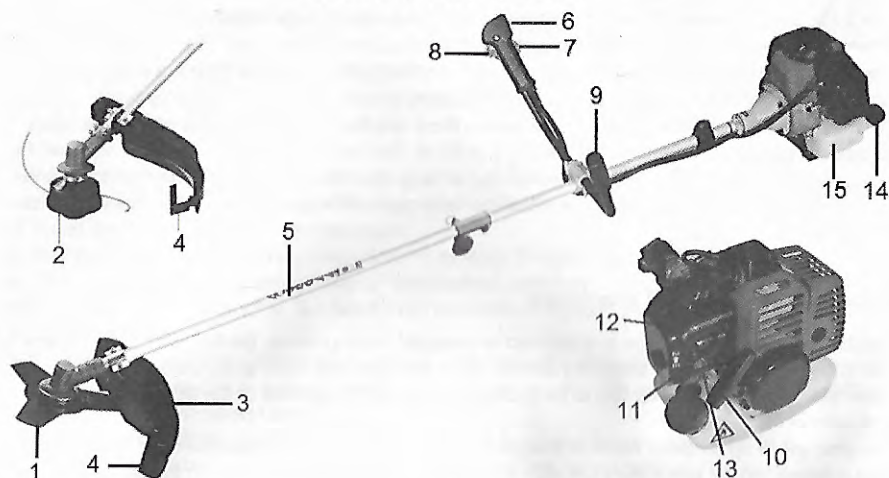
## OPERATION OF QUICK RELEASE MECHANISM

Pull the strip to release the machine from you in the case of an emergency.





## DESCRIPTION

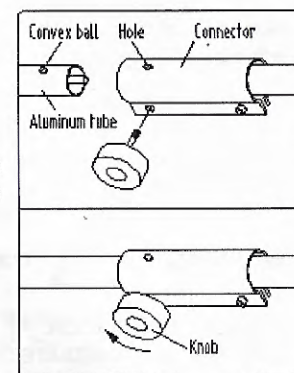


1. **BLADE** 3-tooth blade for grass, weed or brush cutting applications. Harness and metal shield are required for blade operation.
2. **NYLON CUTTER HEAD** Contains replaceable nylon trimming line that advances when the trimmer head is tapped against the ground while the head is turning at normal operating speed.
3. **DEBRIS SHIELD** Mounted just above the cutting attachment. Helps protect operator by deflecting debris produced during the trimming operation. Do not operate unit without shield.
4. **CUT-OFF KNIFE** Trims nylon filament to the correct length-7", head to end of line-when nylon trimming head is bumped on the ground during operation, line advance. If trimmer is operated without a cut-off knife the line becomes too long the engine, this will overheat or damage the engine.
5. **DRIVE SHAFT ASSEMBLY** Contains a specially designed liner flexible drive shaft.
6. **IGNITION SWITCH** "slide switch" mounted on top of the Throttle Trigger Housing. Move switch FORWARD to Run, BACK TO STOP.
7. **SAFETY LEVER** Before acceleration, compress it please.
8. **THROTTLE TRIGGER** Spring loaded to return to idle when released. When accelerating, press trigger gradually for best operating technique. Do not hold trigger while starting.
9. **HANDLE** this handle can be adjusted at you convenience for comfort.
10. **STARTER HANDLE** pull handle until engine starts, then return handle slowly. DO NOT let handle snap back or damage to starter will occur.
11. **CHOKE** the choke control is located on the top of the filter cover.
12. **AIR CLEANER COVER** Contains replaceable felt element.
13. **PRIMER BULB** Pushing primer bulb (7 to 10 times before starting), will remove all air and stale fuel from fuel system and bring fresh fuel to the carburetor.
14. **FUEL TANK LID.**
15. **FUEL TANK** Contains fuel and fuel filter.

## ASSEMBLY INSTRUCTIONS

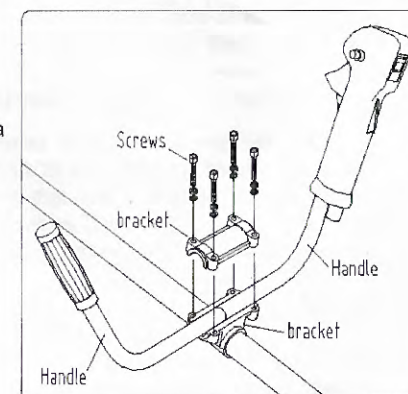
### INSTALLING THE LOWER SHAFT

Pack the aluminum tube into the connector inside. Make the convex ball aim at the hole on the connector and then turn the knob clockwise until it is tight.



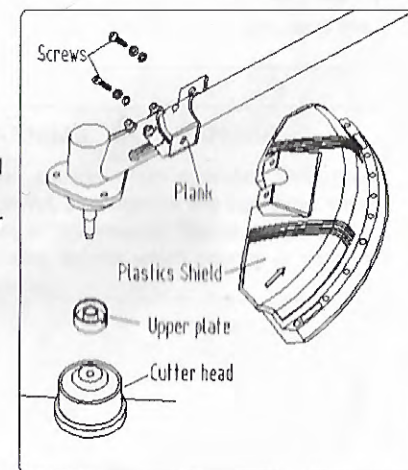
### INSTALLING HANDLE

Install handle in bracket. Position the handle in a comfortable operating position and tighten four bolts.



### INSTALLING NYLON LINE CUTTER HEAD

Align hole in adapter plate with hole in shaft and install locking tool.  
Thread cutter head onto shaft (turning it counter clockwise) until it is tight. Remove locking tool



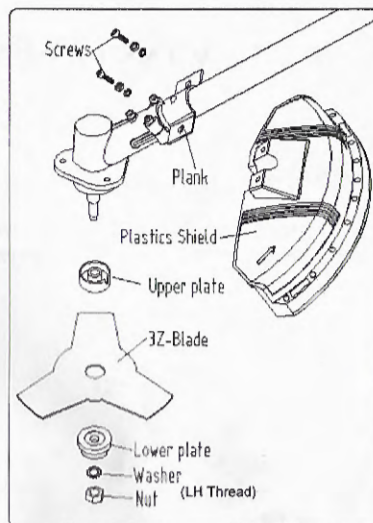
## INSTALLING BLADE

Secure metal blade between upper and lower plate with nut.

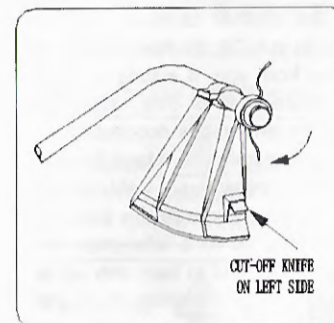
**WARNING**  **CAUTION**

### EXCESSIVE VIBRATION STOP ENGINE IMMEDIATELY

Excessive vibration of blade means that it is not properly installed-stop engine immediately and check blade. Blade not properly installed will cause injury



## CUTTING WITH A NYLON HEAD



**WARNING**  **DANGER**

The proper debris shield must be in place on the unit when nylon cutting line is used. The cutting line can flap around if too much line is exposed. Always use the plastic debris shield with cut-off knife when using nylon cutting heads.

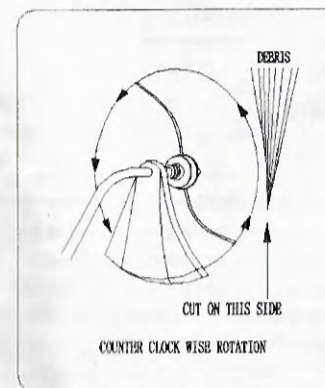
For nearly all cutting, it is good to tilt the line head so that contact is made on the part of the line circle where the line is moving away from you and the debris shield. (See appropriate) This results in the debris being thrown away from you.

**WARNING**  **DANGER**

Tilting the head to the wrong side will shoot the debris TOWARDS you. If the line head is held flat to the ground so that cutting occurs on the whole line circle, debris will be THROWN at you, drag will slow the engine down, and you will use up a lot of line.

**WARNING**  **DANGER**

Use only quality nylon monofilament line of the diameter 2.5mm. Never use wire or wire-reinforced line in place of nylon trimmer line. Load your nylon line cutting head only with nylon trimmer line of the proper diameter.

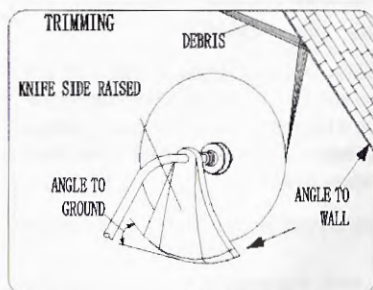


**WARNING**  **DANGER**

Use extreme caution when operating over bare spots and gravel, because the line can throw small rock particles at high speeds. Debris shields on the unit cannot stop objects which bounce or ricochet off hard surfaces.

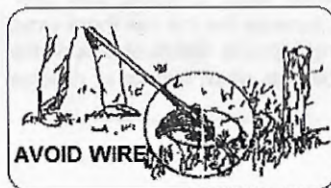
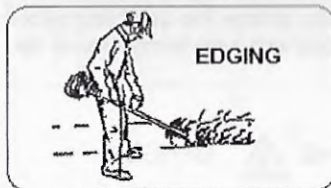
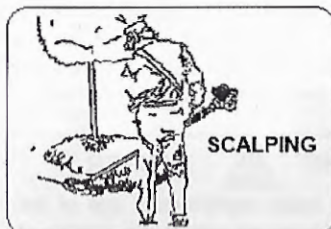


## CUTTING WITH A NYLON HEAD



### TRIMMING:

This is feeding the trimmer carefully into the material you wish to cut. Tilt the head slowly to direct debris away from you. If cutting up to a barrier such as fence, wall or tree, approach from an angle where any debris ricocheting off the barrier will fly away from you. Move the line head slowly until the grass is cut right up the barrier, but do not jam (overfeed) the line into the barrier. If trimming up to a wire mesh or chain linked fence be careful to feed only up to wire. If you go too far the line will snap off around the wire. Trimming can be done to cut through weed stems one at a time. Place the trimmer line head near the bottom of the weed-never high up which could cause the weed to chatter and catch the line. Rather than cut the weed right through, just use the very end of the line to wear through the stem slowly.



### WARNING DANGER

Do not use a steel blade for edging or scalping.

### SCALPING AND EDGING:

Both of these are done with the line head tilted at a steep angle. Scalping is removing top growth leaving the earth bare.

Edging is trimming the grass back where it has spread over a sidewalk or drive way. During both edging and scalping, hold the unit at a steep angle and in a position where the debris, and any dislodging dirt and stones, will not come back towards you even if it ricochets off the hard surface. Although the picture shows how to edge and scalp every operator must find for himself the angles which suits his body size and cutting situation.

### WARNING DANGER

Do not trim in any area where there are strands of fencing wire. Wear protective safety equipment. Do not cut where you cannot see what the cutting device is cutting.


## CUTTING WITH A BLADE


3-tooth metal blade is provided with the machine

**The metal blade** is used for cutting brush and weeds up to 3/4" in diameter.

Use of saw blade with this machine is prohibited.

**WARNING  DANGER**  
DO NOT USE A BRUSH CUTTER  
FOR CUTTING TREES.

**WARNING  DANGER**  
Use the shoulder harness at all times adjust both harness and harness clamp on the unit so that the unit hangs a few inches above ground level. The cutting head and the metal debris shield should be level in all directions. Harness the unit on the right side of your body.

**WARNING  DANGER**  
Do not cut with dull, cracked or damaged metal blade.

Before cutting growth, inspect for obstructions such as boulders, metal stakes or strands of wire from broken fences. If an obstruction can not be removed, mark its location so that you can avoid it with the blade. Rocks and metal will dull or damage a blade. Wire can catch on the blade head and flap around or be thrown into the air.

**SCYTHING WEEDS:** This is cutting by swinging the blade in a level arc. It can quickly clear areas of field grass and weeds. Scything should not be used to cut large, tough weeds or woody growths.

### NOTE

Do not use a brush blade to cut trees which exceed a diameter of 1/2 to 3/4 inches.

Scything can be done in both directions, or just in one way which results in the debris being thrown away from you.

That is using the side of the blade that it is rotating away from you. Tilt down the blade slightly on this same side. You will be hit by some debris if you scythe in both directions.

Cut only with the side of the blade that the debris is moving away from you.

If kickback occurs, the blade may be dull, or the material so thick and hard that you should use other tool instead of this machine.

Do not force the blade to cut. Do not change the angle of cut after into the wood. Avoid using any pressure or leverage which could cause the blade to bind or crack.



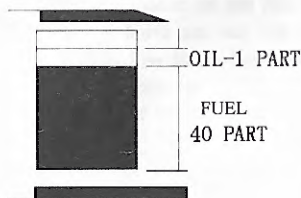
## FUEL & OIL MIXTURE



- Never fill the fuel tank to the very top.
- Never add fuel to the tank in a closed non-ventilated area.
- Do not add fuel to this unit close to an open fire or sparks.
- Be sure to wipe off spilled fuel before attempting to start engine.
- Do not attempt to refuel a hot engine.

Fuel used for this model is a mixture of unleaded gasoline and approved engine lubricant. When mixing fuel with two-cycle engine oil, use only fuel which contains NO ETHANOL or METHANOL (Types of Alcohol) Use Branded 89 octane or higher

Unleaded fuel is known to be of good quality. This will help to avoid possible damage to engine fuel lines and other engine parts.



MIXTURE RATIO IS 40:1

FUEL-40 PART OIL-1 PART

Fuel mixture at the rate other than 40:1 may cause damage to the engine. Ensure mixture ratio is correct.

### FUEL

The engine uses two-stroke fuel, a mixture of fuel and 2-stroke lubricant 40:1

**IMPORTANT** Two-stroke fuel may separate. Shake fuel container thoroughly before each use. Stored fuel ages. Do not mix more fuel than you expect to use within a month.

#### FUEL

Use branded 89 octane or higher unleaded fuel known to be of good quality.

#### FUEL AND OIL MIXTURE

Inspect fuel tank making sure that it is clean and fill with fresh fuel. Use a mixture of 40:1

#### STORING FUEL

Only store fuel in a clean, safe and approved container. Check and follow local ordinances on type and location of storage container.

## PREPARING FOR OPERATIONS

WHEN MIXING FUEL WITH TWO CYCLE ENGINE OIL, USE ONLY FUEL WHICH CONTAINS NO ETHANOL OR METHANOL (TYPES OF ALCOHOL). THIS WILL HELP TO AVOID POSSIBLE DAMAGE TO ENGINE FUEL LINES AND OTHER ENGINE PARTS. DO NOT MIX FUEL AND OIL DIRECTLY IN THE ENGINE FUEL TANK. USE THE MIXING BOTTLE PROVIDED.

**IMPORTANT:** Failure to follow proper fuel mix instructions may cause damage to the engine.

When preparing fuel mixture, mix only the amount needed for the job you are to do. Do not use fuel that has been stored longer than two months. Fuel mixture stored longer than this will result in poor performance and the engine being hard to start. If fuel mix has been stored longer than 2 months it should be removed and filled with a fresh mixture.

### WARNING DANGER

1. Never fill the fuel tank to the very top.
2. Never add fuel to the tank in a closed non-ventilated area.
3. Do not add fuel to this unit close to an open fire or sparks.
4. Be sure to wipe off spilled fuel before attempting to start engine
5. Do not attempt to refuel a hot engine.

### CHECK POINTS BEFORE OPERATION

1. Check for loose bolts. Nuts and fittings.
2. Check the air cleaner for dirt. Clean the air filter of all dirt etc., before operation.
3. Check to be sure that protector is securely in place.
4. Check to be sure that there are no leaks.

### WARNING DANGER

The engine exhaust from this product contains chemicals that can be harmful. Ensure unit is used in well ventilated, outdoor areas.



## OPERATIONS

### ENGINE STARTING AND STOPPING PROCEDURES

#### STARTING COLD ENGINE

Move the stop switch to "START" position.

1. Give a gentle push on the primer pump repeatedly (7-10 times) until fuel comes into the primer pump.

2. Cold Starts: Pull lever up to close choke.

3. Pull starter handle until engine flash fires.

4. Push choke lever downwards (excessive cranking with choke lever will cause flooding of the engine which will make it difficult to start).

5. Pull starter handle until engine starts.

6. Allow engine to warm up for a few minutes before using.

#### STARTING WARM ENGINE

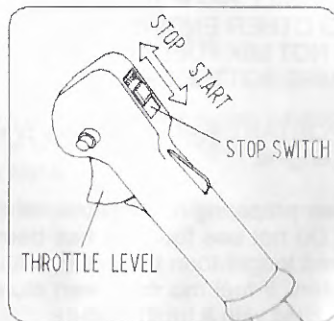
- If fuel tank is not run dry, pull starter one to three times and it should start.

#### DO NOT USE CHOKE

- If fuel tank was run dry, after refilling repeat steps 3 thru 7 in. STARTING COLD ENGINE.

#### STOPPING THE ENGINE

- Move switch to STOP position



## OPERATIONS

### IMPORTANT!

#### ⚠ CAUTION

Place the unit on a flat, firm place.

Keep the cutting head clear of everything around it.



#### ⚠ WARNING

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 trigger 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 trigger come into contact with any obstacle when the engine starts.

Please ensure that the cutting attachment stops turning when engine idles, if it is running while engine idles, please have it repaired by dealer or authorized technician.

## MAINTENANCE & CARE

### AIR FILTER

- Accumulated dust in the air filter will reduce engine efficiency. Increase fuel consumption and allow abrasive particles to pass into the engine. Remove the air filter as often as necessary to maintain in a clean condition.
- Light surface dust can readily be removed by tapping the filter. Heavy deposits should be washed out in suitable solvent.
- Remove filter cover by loosening air filter cover knob.

### ADJUSTING CARBURETOR

#### NOTE

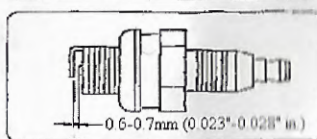
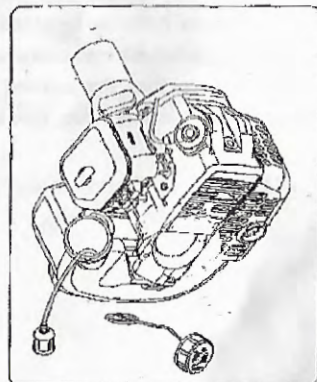
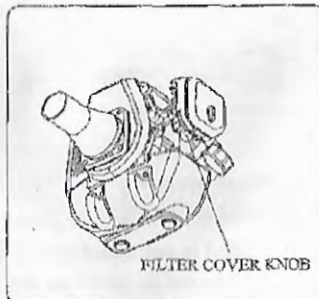
Do not adjust carburetor unless necessary. If you have trouble with the carburetor, see your dealer. Improper adjustment may cause engine damage and void warranty.

### FUEL FILTER

- Fuel tank is fitted with a filter. Filter is situated at the free end of fuel pipe and can be picked out through fuel port with a piece of hooked wire or the like.
- Check the fuel filter periodically. Do not allow dust to enter into fuel tank. Clogged filter will cause difficulty in starting engine or abnormalities in engine performance.
- When filter is dirty, replace the filter.
- When the inside of the fuel tank is dirty, it can be cleaned by rinsing the tank out with gasoline.

### CHECK SPARK PLUG

- Do not attempt to remove the plug from a hot engine in order to avoid possible damage to the threads and personal injury.



## TROUBLE SHOOTING

- Clean or replace the plug if fouled with heavy oily deposits.
- Replace the plug if the center electrode is worn rounded at the end.
- Spark gap 0.6-0.7mm (.023-.028")
- Fastening torque = 145-155kg.cm (125-135in.lb)

**WARNING:** Always cover the metal blade with the transportation guard while transportation and storage.

### TRANSPORT, HANDLING

- The engine should be turned off when the unit is moved between work areas.
- After the engine has stopped, the muffler is still hot. Never touch hot parts such as the muffler.
- Confirm that the fuel has not leaked from tank.

### EXTENDED STORAGE

- Inspect, clean and repair unit if necessary.
- Remove all fuel from tank before storage.
- Start engine-This will consume all fuel in fuel line and carburetor.
- Remove spark plug and pour one tea spoon of clean motor oil into spark plug hole of cylinder-replace spark plug.
- Store in clean, dry, dust free area.

**FAILURES** such as difficulty in starting engine, irregularity in functions and abnormality in performance can normally be prevented if careful attention is paid to all operating instructions and maintenance procedures.

Should the engine not function properly, check the following;

- That the fuel system is in good condition and fuel is flowing to the engine.
- The ignition system is in good condition and the spark plug, sparks correctly;
- Compression of the engine is adequate.

### FAILURE TO START

- Dispose of fuel in tank.
- Insure that fuel is fresh and clean.
- Check fuel filter to make sure it is clean. (Replace filter if necessary).
- Make sure air filter elements are clean.
- Install new, properly gapped spark plug.



## TROUBLE SHOOTING GUIDE

### 1. FAILURE TO START

symptom			probable cause	remedy
cylinder compress pressure normal	spark plug spark normal	fuel system abnormality	there is no fuel in tank. fuel filter obstruction.	Add fuel to tank Clean fuel filter
		fuel system normal	fuel is too dirty. there is water in fuel. there is too much fuel. mixture ratio is improper.	replace fuel take out spark plug and dry it. mixture proportion needs to be 40:1
	fuel system normal	spark plug	spark plug fouled with oil deposits. Spark plug insulation damage. Spark gap is too large or small.	clean the oil deposits replace spark plug adjust spark gap 0.6-0.7mm
		high voltage spark abnormality	high voltage wire break or broken off.  coil lead loose.	replace  re-tighten
fuel system normal	Ignition	Engine compression is low	spark plug loose. conjoint surface of the cylinder and crank housing leaking fuel.	retighten  eliminate by retightening
	System normal	Compress  normal	High voltage wire and spark.  Stop switch failure or short circuit	tighten the spark plug cap  repair or replace switch

## TROUBLESHOOTING GUIDE

### 2. LOW OUTPUT

symptom	probable cause	remedy
flameout when speedup	fuel filter blocked. short of fuel.	clean fuel filter. refill tank.
the smoke is thin, carburetor spout backward	muffler fouled with oily deposits.	clean the oily deposits.
engine leak	Conjoint surface of the cylinder and crank housing leak	Retighten both surfaces.
the end of two crank shaft leak	engine overheats.	avoid use & allow it to cool.
	cylinder head fouled with oily deposits.	clean the oily deposits.

### 3. ENGINE RUNNING UNSTABLE

symptom	probable cause	remedy
engine ignition breaking down	there is water in fuel spark gap is incorrect	instead fuel adjust spark gap 0.6-0.7mm

### 4. THE ENGINE SUDDENLY STOPPED

probable cause	remedy
spark plug fouled with oily deposits and short circuit high voltage wire disconnected.	clean the oily deposits re-connect

#### Warranty Against Defect

Electrical Agencies Pty Ltd ("us", "we" "wholesaler" or "our") guarantees this product for a full replacement or refund for:

12 months from date of purchase.

This guarantee covers material and workmanship defects only.

In order for the guarantee to be acted on, the consumer must use the products strictly in accordance with their operating manual and for the purpose for which they are intended to be used. This guarantee does not apply to defects arising from abuse, alteration, unauthorised or unreasonable use, nor does it cover general deterioration due to usage.

We will replace the product or provide a refund to the value of the purchase price if a defect is found in the product during the guarantee period of 12 months, subject to verification of the defect and the date, proof of purchase and purchase price. Furthermore, in order for the guarantee to be claimed, the defective goods must be returned to the point of purchase promptly from the point in time that the consumer becomes aware of the defect in the goods and in any case within 7 business days.

The procedure for the consumer to claim the guarantee is that the product must be returned to the point of purchase within 7 business days of the consumer becoming aware of the defect in the product and subject to the point of purchase being satisfied that it is a genuine claim within the time limits prescribed above, then the retailer will contact the wholesaler for review and determination as to whether a full refund is to be provided in relation to the product or whether the product is to be repaired and returned. The wholesaler reserves the right to reject the guarantee claim if it can be proved that the goods have not been used in accordance with their intended purpose or in accordance with the manual.

The benefits of this guarantee are additional to any other rights and remedies you may have under law.

Once we have received the product and you have complied with the guarantee requirements, our costs associated with the guarantee claim will be borne by us.

No responsibility will be taken for products lost, damaged or mislaid whilst in transit.

To the extent permitted by law, our total liability for loss or damage of every kind related to the product in any way whatsoever is limited to the amount paid to the retailer by you for the product or the value of the product.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensations for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

These terms and conditions supersede and exclude all former and other representations and arrangements relating to any guarantees on this product. This includes any representations not made by us relating to the performance of the product or the result that should be expected from using the product.

#### Address for the return of products: The Point of Purchase

##### Importer and organisation providing warranty:

Electrical Agencies Pty Ltd (trading as Electaserv Trading)

24 Archimedes Place, Metroplex Estate,

Murarie, Brisbane Queensland 4172

Telephone: 07 3906 2999

Email: [sales@electaserv.com.au](mailto:sales@electaserv.com.au)