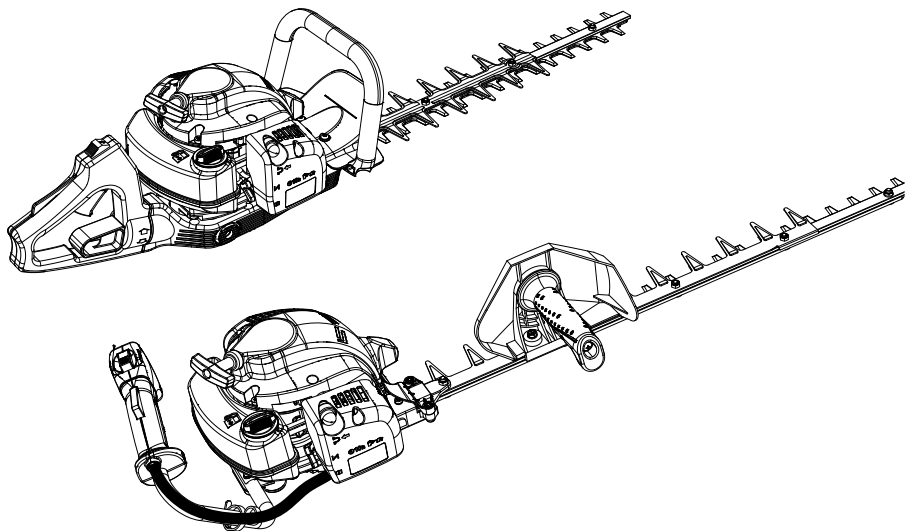
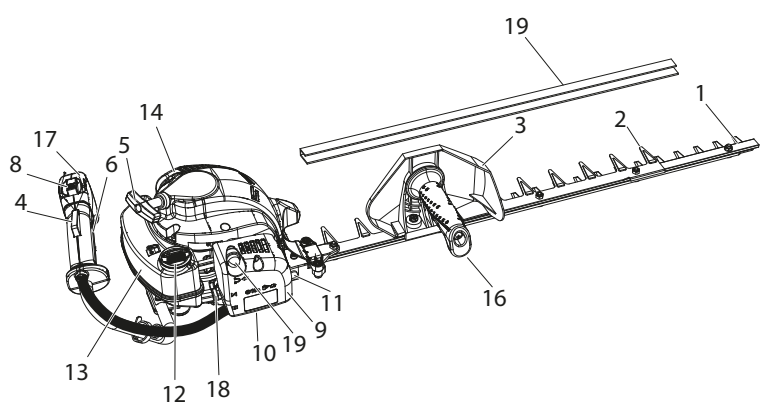
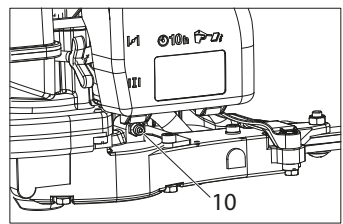
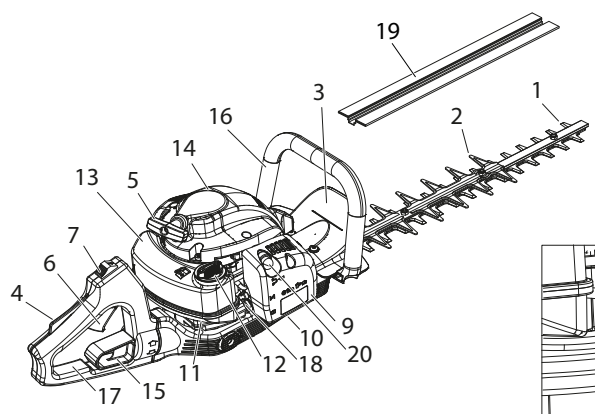
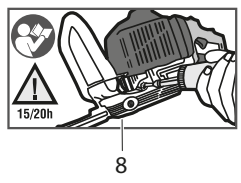
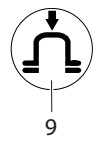
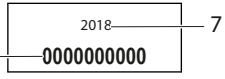
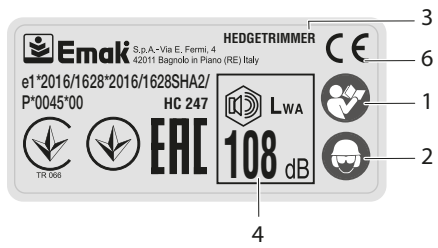


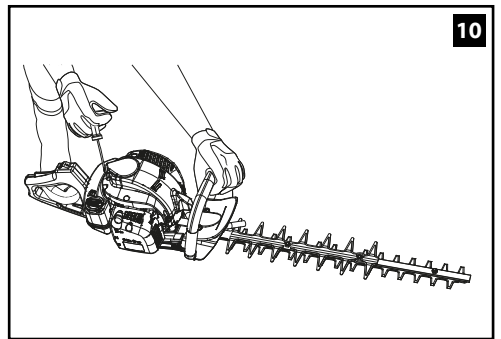
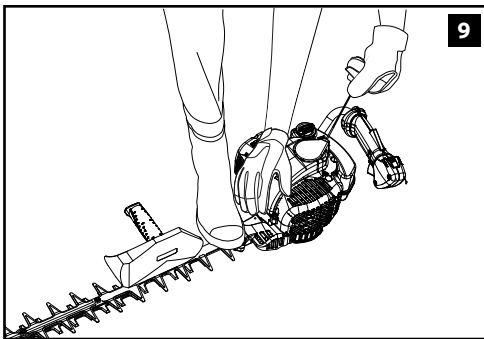
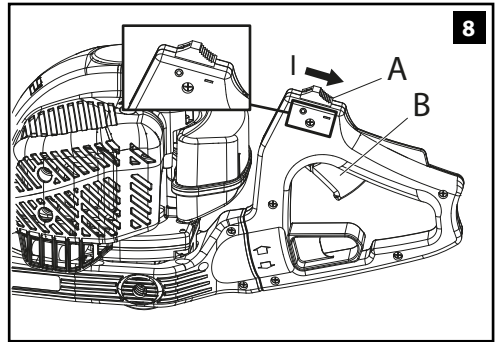
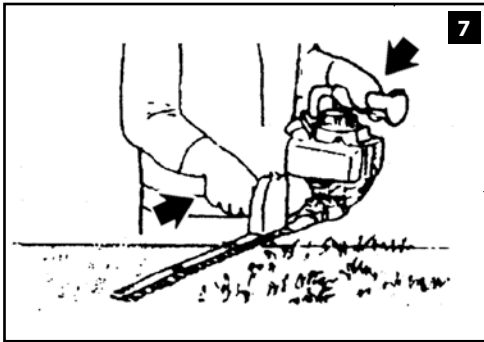
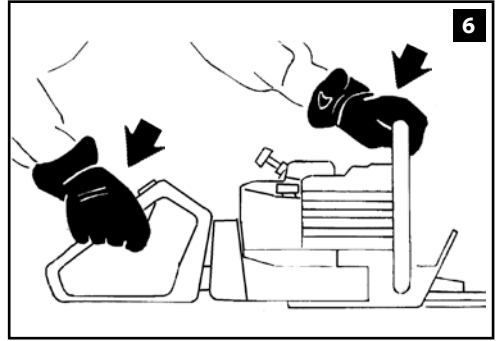
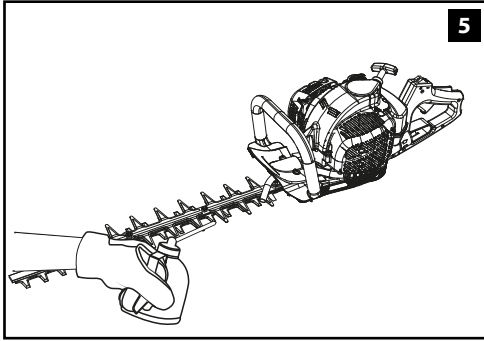
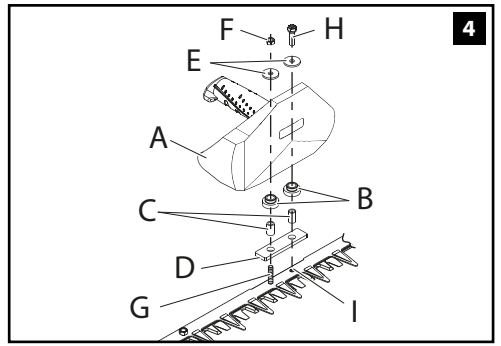
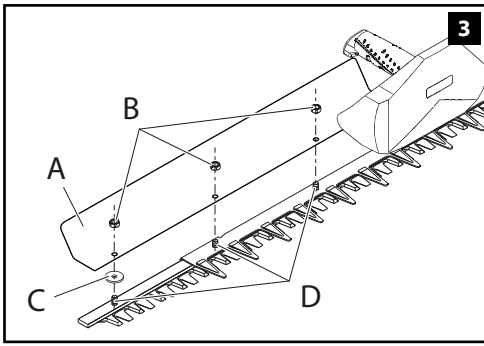
HC 246 P - HC 247 P - HCS 247 P (21,7 cm³) TG 2460 P - TG 2470 P - TGS 2470 P (21,7 cm³)

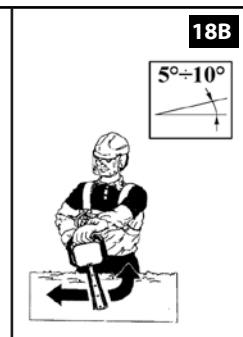
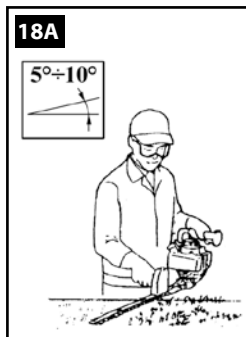
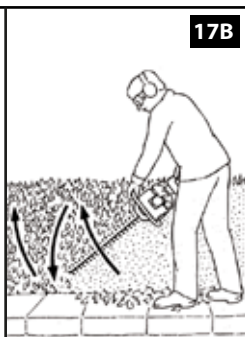
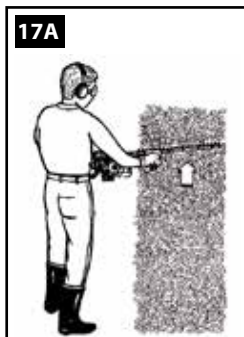
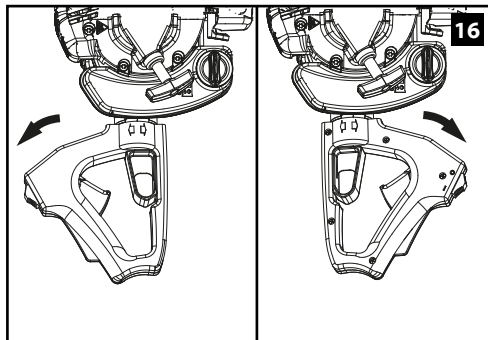
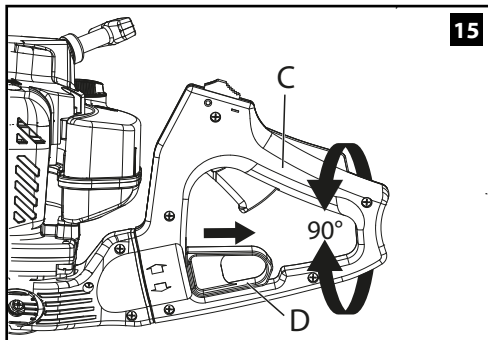
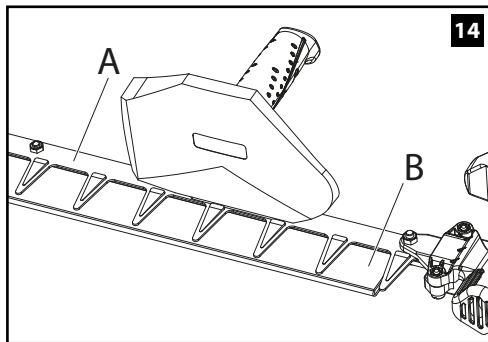
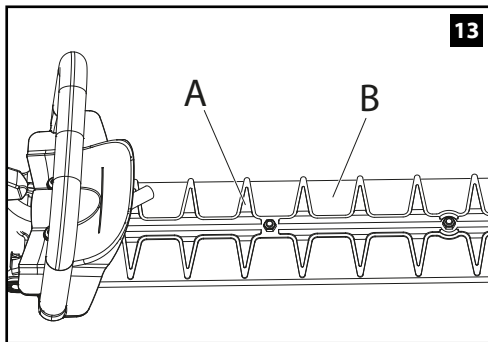
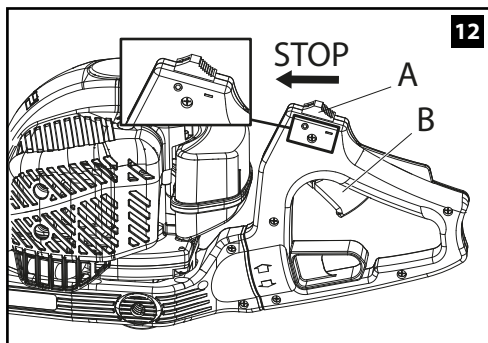
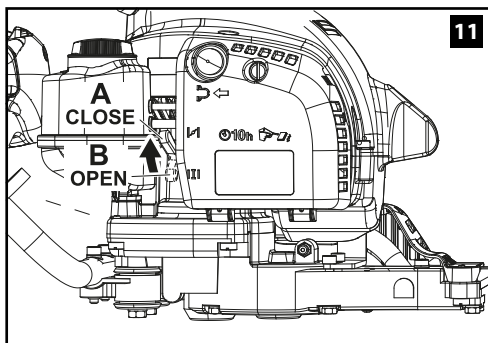
I	MANUALE DI USO E MANUTENZIONE
GB	OPERATOR'S INSTRUCTION BOOK
F	MANUEL D'UTILISATION ET D'ENTRETIEN
D	BEDIENUNGSANLEITUNG
E	MANUAL DE INSTRUCCIONES
NL	GEBRUIKSAANWIJZING

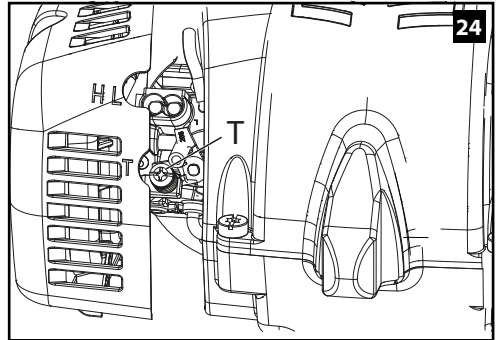
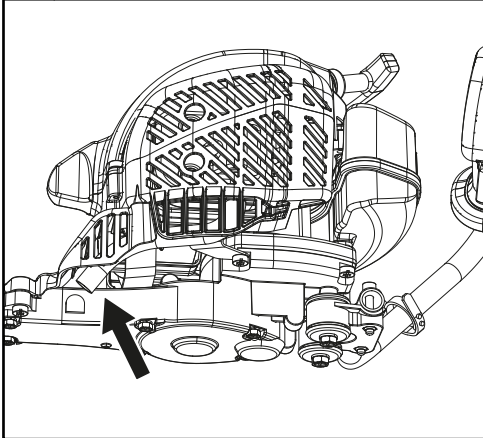
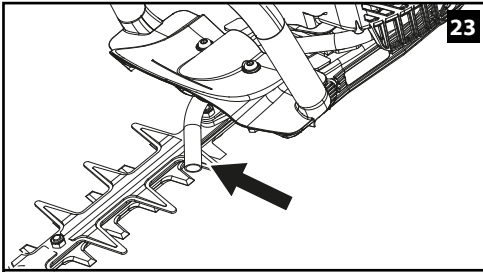
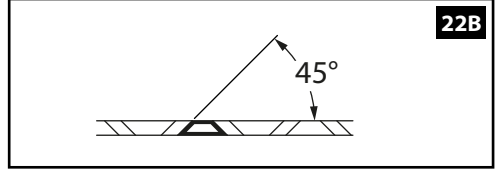
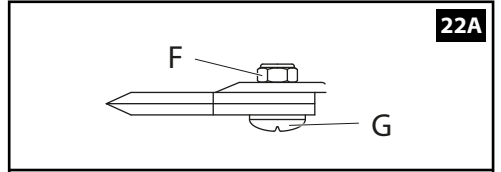
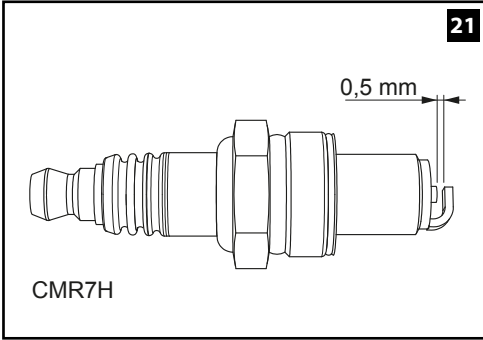
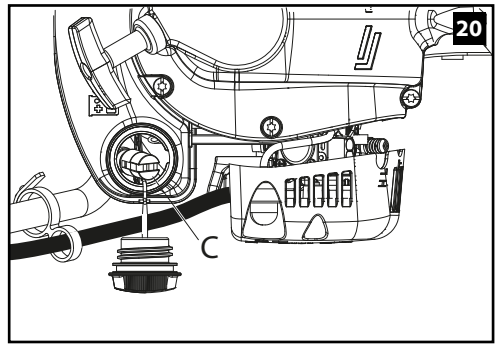
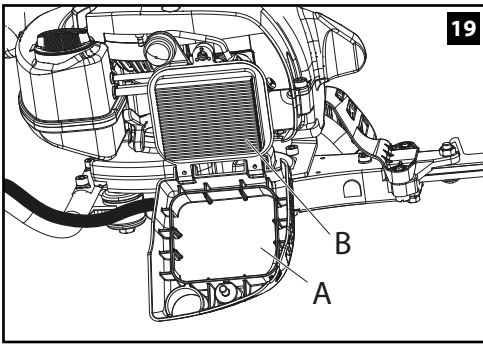
P	MANUAL DE INSTRUÇÕES
GR	ΕΓΧΕΙΡΙΔΙΟ ΧΡΗΣΗΣ ΚΑΙ ΣΥΝΤΗΡΗΣΗΣ
CZ	NÁVOD K POUŽITÍ A ÚDRŽBĚ
SK	NÁVOD NA POUŽITIE A ÚDRŽBU
RUS	UA РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ
PL	INSTRUKCJA OBSŁUGI I KONSERWACJI











Italiano	9
English	24
Français	38
Deutsch	52
Español	67
Nederlands	82
Português	97
Ελληνικά	112
Česky	127
Slovensky	142
Русский	157
Polski	172

TRANSLATION OF ORIGINAL INSTRUCTIONS

To our valued customers

Thank you for selecting an Emak product. Our network of dealers and authorized workshops will always be at your complete disposal for any need you may have.

INTRODUCTION

For correct use of the machine and to avoid accidents, do not start working until you have read this manual carefully. You will find explanations concerning the operation of the various parts plus instructions for necessary checks and relative maintenance.

NOTE: The descriptions and illustrations contained in this manual are not binding. The manufacturer reserves the right to undertake any modifications it deems necessary without revising this manual.

In addition to the operating instructions, this manual contains paragraphs that require your special attention. Such paragraphs are marked with the symbols described below:

WARNING: where there is a risk of an accident or personal, even fatal, injury or serious damage to property.

CAUTION: where there is a risk of damaging the machine or its individual components.

**WARNING
RISK OF HEARING DAMAGE**

IN NORMAL CONDITIONS OF USE, THIS MACHINE
MAY EXPOSE THE OPERATOR TO A PERSONAL DAILY
NOISE LEVEL EQUAL TO OR HIGHER THAN
85 dB (A)

CONTENTS

1. EXPLANATION OF SYMBOLS AND SAFETY WARNINGS _____	24
2. HEDGETRIMMER COMPONENTS _____	24
3. SAFETY PRECAUTION _____	25
4. ASSEMBLY _____	26
5. STARTING _____	26
6. STOPPING THE ENGINE _____	29
7. USE _____	29
8. MAINTENANCE _____	29
9. STORAGE _____	33

10. TECHNICAL DATA _____	34
11. DECLARATION OF CONFORMITY _____	35
12. WARRANTY CERTIFICATE _____	36
13. TROUBLE SHOOTING CHART _____	37

1. EXPLANATION OF SYMBOLS AND SAFETY WARNINGS (Fig.1)

1. Read operator's instruction book before operating this machine.
2. Wear head, eye and ear protection.
3. Type of machine: **HEDGETRIMMER.**
4. Guaranteed sound power level
5. Serial number
6. CE conformity marking.
7. Year of manufacture
8. Primer bulb
9. Refill gear housing every 20 working hours.

2. HEDGETRIMMER COMPONENTS (Fig. 2)

1. Blades
2. Blade-guard
3. Hand-guard
4. Throttle trigger lockout
5. Starter handle
6. Throttle trigger
7. On/off switch
8. STOP button
9. Air filter cover
10. Grease nipple
11. Reduction gear
12. Fuel tank cap
13. Fuel tank
14. Muffler
15. Handle locking lever (**HC 246 P-HC 247 P-TG 2460 P-TG 2470 P**)
16. Front handle
17. Rear handle
18. Choke lever
19. Cutting device guard
20. Primer bulb

3. SAFETY PRECAUTIONS

⚠ WARNING - If correctly used, the hedgetrimmer is a quick, easy to handle and efficient tool; if used improperly or without the due precautions it could become a dangerous tool. THE MACHINE CAN CAUSE SERIOUS INJURY. For pleasant and safe work, always strictly comply with the safety rules that follow and throughout this manual.

⚠ WARNING: The ignition system of your machine produces an electromagnetic field of very low intensity. This field could interfere with certain pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult their doctor or the manufacturer of the pacemaker before using this machine.

⚠ WARNING: – National regulations could limit use of the machine.

1. Do not operate the machine unless you have received specific instruction on its use. First time users must familiarise themselves thoroughly with the operation of the machine before working in the field.
2. The hedgetrimmer must only be used by adults in good physical condition with knowledge of the operating instructions. Do not allow children to use the hedgetrimmer.
3. Do not use the hedgetrimmer when you are tired or fatigued or if you have taken alcohol, drugs or medication.
4. Never wear scarves, bracelets or anything else which could be taken up by the machine or blades. Wear close-fitting safety clothing.
5. Wear protective non-slip safety shoes, gloves, glasses and ear protection.
6. Never allow bystanders, especially children, to remain within your working area when starting or cutting with the hedgetrimmer.
7. Do not start cutting until you have a clear work area. Do not cut near electric cables.
8. Always cut from a firm-footed and safe position, particularly when using steps and stools.
9. Only use the hedgetrimmer in well-ventilated places, do not operate the hedgetrimmer in explosive or flammable atmospheres or in closed environments.
10. Never touch the blades or attempt to service the hedge trimmer while the engine is running.
11. All labels with health hazards must be kept in good conditions. In case of damage or deterioration, immediately substitute them (Fig. 1).
12. Do not utilize the machine for uses different from the ones specified in the manual (see pag. 29).
13. Never leave the machine unattended with the engine running.
14. Always follow the manufacturer's instructions for the maintenance operations.
15. It is prohibited to fit any device other than that supplied by the manufacturer.
16. Check the hedgetrimmer each day to ensure that each device, whether for safety or otherwise, is functional.
17. Never use a damaged, modified, or improperly repaired or assembled hedgetrimmer. Do not remove, damage or deactivate any of the safety devices. Only use blades of the length indicated in the table.
18. Never carry out operations or repairs on your own that are other than routine maintenance. Call specialised and authorised workshops only. Always follow the manufacturer's instructions for the maintenance operations.
19. In the event of emergency, release the throttle lever immediately.
20. Please note that the owner or the user is responsible for any accidents or damage to third parties or their property.
21. If your hedgetrimmer is no longer usable, dispose of it properly without damaging the environment by handing it in to your local Dealer who will arrange for its correct disposal.
22. Only loan your hedgetrimmer to expert users who are completely familiar with hedgetrimmer operation and correct use. Give other users the manual with operating instructions, which they should read before using the hedgetrimmer.
23. All saw service, other than the operations shown in the present manual, should be performed by competent personnel.
24. Keep this manual on hand and consult it before each use of the tool.

SAFETY PROTECTIVE CLOTHING

⚠ While working with the hedgetrimmer always use safety protective approved clothing. The use of protective clothing does not eliminate injury risks, but reduces the injury effects in case of accident. Consult your trusted supplier to choose an adequate equipment.

The clothing must be proper and not an obstacle. Wear adherent protective clothing. **Protective jackets and dungarees are ideal.** Do not wear clothes, scarfs, ties or bracelets that can stuck into twigs. Tie up and protect long hair (example with foulards, caps, helmets, etc.).

Safety shoes having skid-proof sole and anti-piercing insert.

Wear protective goggles or face screens!

Use protections against noises; for example noise reduction ear guards or earplugs. The use of protections for the ear requests much more attention and caution, because the perception of danger audio signals (screamings, alarms, etc.) is limited.

Wear gloves that permit the maximum absorption of vibrations.

4. ASSEMBLY

FITTING THE HANDGRIP (Fig.3) (models HCS 247P and TGS 2470P only)

In the case of single sided blade models only, the front handle must be attached:

1. Fit the rubber antivibration mounts (B), the alignment bushes (C) and the rubber spacer (D) to the front handle;
2. Position the hand guard with the handle on the side facing away from the blade, aligning the screw G and the hole I on the blade;
3. Fit the screw H and the washer E to the hole I without tightening;
4. Snug the screw (G) without forcing, then slacken off by 1/4 of a turn;
5. Fit the washer (E) and tighten the nut (F) on the screw (G)
6. Tighten the nut F and the screw H

DEFLECTOR (Fig.4) (models HCS 247P and TGS 2470P only)

Hedgetrimmers with single sided blade can be fitted with a deflector (A), purchased separately (optional):

1. Remove the 3 nuts (B);
2. Fit the washer (C) to the screw where there is no blade guard;
3. Fit the deflector (A);
4. Fit the 3 nuts (B) without tightening;
5. Snug the 3 screws (D) without forcing, then slacken off by 1/4 of a turn;
6. Tighten the 3 nuts (B).

5. STARTING

FUELING

⚠ WARNING: Gasoline is an extremely flammable fuel. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near to the fuel or the machine.

- To reduce the risk of fire and burn injury, handle fuel with care. It is highly flammable.
- Mix and store fuel in a container approved for gasoline.
- Mix fuel outdoors where there are no sparks or flames.
- Select bare ground, stop engine, and allow to cool before refueling.
- Loosen fuel cap slowly to release pressure and to keep fuel from escaping around the cap.
- Tighten fuel cap securely after refueling. Unit vibration can cause an improperly tightened fuel cap to loosen or come off and spill quantities of fuel.
- Wipe spilled fuel from the unit. Move 3 meter away from refueling site before starting engine.
- Never attempt to burn off spilled fuel under any circumstances.
- Do not smoke when handling fuel or operating the machine.
- Store fuel in a cool, dry, well ventilated place.
- Never place the machine in a combustible area such as dry leaves, straw, paper, etc.
- Store the unit and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches,

furnaces, etc.



- Never take the cap off the tank when the engine is running.
- Never use fuel for cleaning operations.
- Take care not to get fuel on your clothing.

This product is powered by a 2-cycle engine and requires pre-mixing gasoline and 2-cycle oil. Pre-mix unleaded gasoline and 2-cycle engine oil in a clean container approved for gasoline.

RECOMMENDED FUEL: THIS ENGINE IS CERTIFIED TO OPERATE ON UNLEADED GASOLINE INTENDED FOR AUTOMOTIVE USE WITH AN OCTANE RATING OF 89 ((R + M) / 2) OR HIGHER. Mix 2-cycle engine oil with gasoline according to the instructions on the package.

We strongly recommend the use of **2% (1:50)** Oleo-Mac/Efco two cycle engine oil, which is specifically formulated for all air-cooled two-stroke engines.

The correct oil / fuel proportions shown in the table are suitable when using the Oleo-Mac/Efco **PROSINT 2** and **EUROSINT 2** or an equivalent high-quality engine oil (**JASO specification FD** or **ISO specification L-EGD**).

GASOLINE		OIL	
			
		2% - 50:1	
ℓ	ℓ	(cm ³)	
1	0,02	(20)	
5	0,10	(100)	
10	0,20	(200)	
15	0,30	(300)	
20	0,40	(400)	
25	0,50	(500)	

CAUTION: DO NOT USE AUTOMOTIVE OIL OR 2-CYCLE OUTBOARD OIL.

- CAUTION:**
- **Match your fuel purchases to your consumption; don't buy more than you will use in one or two months;**
 - **Store gasoline in a tightly-closed container in a cool, dry place.**

CAUTION - For the mixture, never use a fuel with an ethanol percentage higher than 10%; gasohol (mixture of gasoline and ethanol) up to 10% ethanol or E10 fuel are acceptable.

NOTE - Prepare only the quantity of mixture required for immediate use; do not leave fuel in the tank or a container for a long time. We recommend the use of the additive **Emak ADDITIX 2000** code 001000972 if the mixture is to be stored for 12 months.

Alkylate gasoline

CAUTIONS – Alkylate fuels have different density than normal fuel. Therefore engines, set with normal fuel, need different H jet regulation to avoid critical issues. For this operation it's necessary turned at a Licensed Service Dealer.

FILLING THE TANK

Stir the mixture well before refuelling.

WARNING: Follow safety instruction for fuel handling. Always shut off engine before fuelling. Never add fuel to a machine with a running or hot engine. Move at least 3 m from refuelling site before starting engine. DO NOT SMOKE!

1. Clean surface around fuel cap to prevent contamination.
2. Loosen fuel cap slowly.
3. Carefully pour fuel mixture into the tank. Avoid spillage.
4. Prior to replacing the fuel cap, clean and inspect the gasket.
5. Immediately replace fuel cap and hand tighten. Wipe up any fuel spillage.

WARNING: Check for fuel leaks, if any are found, correct before use. Contact a Servicing Dealer if necessary.

Oil blades each gas tank filling (Fig. 5). Correct lubrication of the blades during cutting minimises wear, ensuring longer blade life. Always use a good quality oil.

WARNING - Never use waste oil. Always use biodegradable lubricant.

Before starting make sure the blades are not locked and are not obstructed.

⚠ When the engine is idling the blades must not turn. Otherwise contact an Authorized Service Center to carry out a check and fix the problem.

⚠ Always hold the hedge trimmer with both hands when the engine is running. Use a firm grip with thumbs and fingers encircling the hedge trimmer handles. Do not operate a hedge trimmer with one hand! (Fig. 6).

HCS 247 P - TGS 2470 P: always firmly grip the front handle with your right hand and the rear handle with your left hand (Fig. 7). Check that all parts of the body are kept away from the blades and muffler.

⚠ Over exposure to vibrations can result in blood-vessel or nerve injury to persons suffering with blood circulation problems. Seek medical attention if you experience physical symptoms such numbness, lack of feeling, reduction in normal strength, changes in the colour of the skin. These symptoms normally appear in the fingers, hands or wrists.

Engine is Flooded

- Set the on/off switch to **O** (A, Fig. 12 - HC 246P - HC 247P - TG 2460P - TG 2470P).
- Pry off the spark plug boot.
- Unscrew and dry off the spark plug.
- Open the throttle wide.
- Pull the starter rope several times to clear the combustion chamber.
- Refit the spark plug and connect the spark plug boot, press it down **firmly**.
- Set the on/off switch to **I** (A, Fig. 8 - HC 246P - HC 247P - TG 2460P - TG 2470P), the starting position.
- Set the choke lever to OPEN position – even if engine is cold.
- Now start the engine.

STARTING THE ENGINE

⚠ WARNING – Never start the hedgetrimmer without the blades and reduction unit fitted – the clutch may **loosen** and cause **personal injury**.

1. Slowly push the purge bulb 6 times (20, Fig. 2).

2. Put the ON/OFF switch (A, Fig.8) in the "I" position (HC 246P - HC 247P - TG 2460P - TG 2470P models).
3. Pull the choke lever (18, Fig.2) in the CLOSE position [0] (A, Fig.11). In so doing, it also activates automatically half-throttle.
4. Lay the machine on the ground in a stable position. Make sure the cutting tool is free. Holding the hedgetrimmer down (Fig.9-10), pull the starter rope (no more than 3 times) until you hear the engine start to fire. A new unit may require additional pulls.
5. Push the choke lever (18, Fig.2) in OPEN (I) position (B, Fig.11).
6. Pull the starter cord to start the engine. Once the machine is started, warm up the machine for about few seconds, without touch the throttle lever. The machine could need more seconds to warm up with cold weather or at high altitudes. Finally, push the throttle lever (6, Fig.2) for deactivate the automatic half-throttle.

⚠ CAUTION:

- **Never wrap the starter cord around your hand.**
- **When pulling the starter rope, do not use the full extent of the rope as this can cause the rope to break.**
- **Do not let starter rope snap back. Hold the starter handle (5, Fig.2) and let the rope rewind slowly.**

⚠ WARNING - Once the engine is warmed up do not use the choke to start up again.

⚠ WARNING - Use the semi-acceleration device only in the phase of starting the engine.

BREAKING-IN THE ENGINE

The engine reaches the maximum power after 5÷8 hours of activity.

During this period of breaking-in do not use the engine at wide open throttle without load, to avoid excessive functioning stress.


⚠ WARNING! - During the breaking-in period do not vary the carburetion to obtain a presumed power increment; the engine can be damaged.

NOTE: It is normal for smoke to be emitted from a new engine during and after first use.

6. STOPPING THE ENGINE

1. Release the throttle lever (B, Fig. 12) and let the engine return to idle.
2. Turn off the engine:
 - HC 246P - HC 247P - TG 2460P - TG 2470P models: Put the ON/OFF switch (A, Fig.12) in the "O" position;
 - HCS 247P - TGS 2470P models: Press the STOP switch (8, Fig.2).

7. USE

 **WARNING!** - Do not start the hedgetrimmer without the blade-guard (A, Fig. 13-14). Do not use damaged or excessively worn blades. If the blade gets jammed, turn off engine before removing the obstruction.

HANDLE (HC 246P - HC 247P - TG 2460P - TG 2470P only)

To reduce fatigue when trimming hedges, the handle (C, Fig. 15) can be swivelled through 90° to the left or right (Fig. 16).

Do not press the throttle during this operation!

Proceed as follows:

1. Free the handle by pressing the locking lever (D, Fig. 15);
2. Turn the handle until the locking lever clicks into place;
3. When the handle is locked in its new position, you can apply the throttle again

You can swivel the handle even with the engine idling because the hedge trimmer is equipped with a blade brake that maintains the blades at a standstill.


HEDGE TRIMMING TECHNIQUES

Trim sides of a hedge first, and then the top.

Vertical cut: with the single-sided blade hedge trimmer, model **HCS 247P - TGS 2470P**, always cut from the bottom up (Fig. 17A). With the 2-sided blade model **HC 246P - HC 247P - TG 2460P - TG 2470P**, use an arcing cut from the bottom upwards, then downwards, to use both sides of the blades (Fig. 17B).

Horizontal cut: In order to get the best cutting results, slightly tilt the blade (5÷10°) towards the cutting direction (Fig. 18 A-B). Cut slowly, specially with thick hedges.

PROHIBITED USE

 **WARNING!** - Always follow the safety precautions. The hedgetrimmer must only be used to trim hedges or small bushes. It is forbidden to apply tools or applications that are not the ones indicated by the manufacturer onto the hedgetrimmer's power take-off . Do not use it for pruning trees or cutting grass. It is forbidden to cut other types of material. Do not use the machine as a lever to lift, move or break objects, nor clamp it on fixed supports.

PRECAUTIONS FOR THE WORK AREA

- Do not work near electrical cables.
- Work only in conditions offering sufficient visibility and light to see clearly.
- Stop the engine before setting the machine down.
- Be particularly cautious and alert when wearing ear protectors, as these can restrict your ability to hear sounds indicating danger (shouts, signals, warnings, etc.)
- Be extremely careful when working on slopes or uneven surfaces.
- Stop the hedgetrimmer if the blade strikes a foreign object. Inspect the hedgetrimmer and repair or replace parts as necessary.
- Keep the blade clean from dirt and sand. Even a small amount of dirt will quickly dull the blade.
- Always keep the handles dry and clean.
- When cutting a branch that is under tension, be alert for spring back so that you will not be struck when the tension in the wood fibres is released.

8. MAINTENANCE

EMISSIONS COMPLIANCE

This engine, including the emissions control system, must be operated, used and maintained in accordance with the instructions provided in the user's manual in order to maintain the emissions performance within the legal requirements applicable to non-road mobile machinery.

No deliberate tampering with or misuse of the engine emissions control system has to take place.

Incorrect operation, use or maintenance of the engine or of the non-road mobile machinery could result in possible malfunctions of the emissions control system to a point where the legal requirements applicable are not respected; in such case a prompt action must be taken in order to rectify the system's malfunctions and restore the applicable requirements.

Examples, not exhaustive, of incorrect operation, use or maintenance are:

- Forcing or breaking the devices for metering the fuel;
- Use of fuel and/or engine oil not fulfilling the characteristics shown in the chapter STARTER / FUELING;
- Use of not original spare parts, for example spark plug, etc. ;
- Missing or improper maintenance of the exhaust system, including incorrect timing of maintenance for muffler, spark plug, air filter, etc.

⚠ WARNING – Tampering with this engine makes the EU emissions certification no more valid.

The level of CO₂ of this engine can be found in the Emak's website (www.emak.com) under section "The Outdoor Power Equipment World".

⚠ WARNING! – Always wear protective gloves during maintenance operations. Do not carry out maintenance with the engine hot.

AIR FILTER - Every 8-10 working hours, remove the cover (A, Fig. 19), clean the filter (B). Blow with compressed air, at a distance. Renew the filter if heavily clogged or damaged.

FUEL TANK - Check fuel filter periodically (C, Fig. 20). Replace it if too dirty.

SPARK PLUG - Clean spark plug and check electrode distance periodically (Fig. 21). Use NGK CMR7H or of other brand with the same thermal grade.

ADJUSTMENTS (Fig. 22A): loosen nut (F): slightly tighten screw (G), then unscrew it 1/4 of a turn. Tighten nut (F). Occasionally disassemble and clean screw and nut (F and G).

SHARPENING (Fig. 22B): always keep the file or sharpener at an angle of 46° to the blade, and:

- Always grind in the direction of the cutting edge;
- Files cut only in one direction; lift the file from the blade when returning to start a new pass;
- Remove all burr from the edge of the blade with a slip stone;
- Remove as little material as possible;
- Before refitting the sharpened blades, remove filings and then apply grease.

Do not try to sharpen a damaged blade: change it or take it to a Service dealer.

⚠ Warning - Using the wrong blade increases the risk of accidents! Only use blades of the recommended length and follow the manufacturer's sharpening instructions.

REDUCTION GEARBOX - Refill gear housing every 20 working hours (9, Fig. 2). If necessary, add grease with molybdenum bisulphide.

Never use fuel for cleaning operations.

CARBURETOR

Before adjusting the carburetor, clean the starter cover, the air filter (B, Fig. 19) and warm up the engine.

Idle screw T (Fig. 24) is adjusted in order to ensure a good safety margin between idle running and clutch engagement.

This engine is designed and manufactured in order to comply with the applicable (EU) 2016/1628, (EU) 2017/654 and (EU) 2017/656 Regulations.

⚠ WARNING - Weather conditions and altitude may affect carburation. Do not allow anyone to stay close to the hedgetrimmer while working or while adjusting the carburetor.

MUFFLER

⚠ WARNING – This muffler incorporates a catalytic converter, needed in order to ensure the engine complies with current emissions standards. Never attempt to modify or remove the catalytic converter: in doing so, you will be breaking the law.

⚠ WARNING – **Mufflers with catalytic converters become very hot during operation, and retain heat for a long time after the engine has been stopped. This is the case even with the engine idling. Contact can burn the skin. Always remember the potential fire risk!**

⚠ CAUTION – **If the muffler is damaged, it must be replaced.** If the muffler frequently becomes blocked, this could be an indication that the efficiency of the catalytic converter is limited.

⚠ WARNING – **Do not operate your machine if the muffler is damaged, missing or modified. Operating the machine with an improperly maintained muffler will increase the risk of fire and hearing loss.**

⚠ WARNING! - Free the engine and silencer of twigs, leaves and excess lubricant to prevent the risk of fire (Fig. 23).

EXTRA MAINTANANCE ADVISABLE

It is advisable to inspect the machine by a specialized technician at an authorized service network at the end of season, if used intensively, and every two years if with normal use.

⚠ WARNING! – **Any maintenance operations not specifically dealt with in this manual must be carried out by an authorized service center.** To ensure that your hedgetrimmer continues to function correctly, use only **ORIGINAL REPLACEMENT PARTS.**

⚠ Any unauthorized changes and/or use of non-original replacement parts may result in serious injury or death to the operator or third parties.

TRANSPORTION

Carry the hedgetrimmer with the engine stopped, blades to the rear and blades cover on (Fig. 25).

⚠ WARNING - When transporting the hedgetrimmer on a vehicle, ensure that it is firmly and securely fastened using straps or belts. The hedgetrimmer must be transported in the horizontal position, also ensuring compliance with applicable transport regulations for such machines.

MAINTENANCE CHART

Please note that the following maintenance intervals apply for normal operating conditions only. If your daily work requires longer than normal or harsh cutting conditions are present the suggested intervals should be shortened accordingly.

		Before Each Use	After Each Refueling Stop	Weekly	If Damaged or Faulty
Complete Machine	Inspect (Leaks, Cracks, and Wear)	X	X		
Controls (Ignition Switch, Choke Lever, Throttle Trigger, Trigger Interlock)	Check Operation	X	X		
Fuel Tank	Inspect (Leaks, Cracks, and Wear)	X	X		
Fuel Filter	Inspect and Clean			X	
	Replace Filter Element				X
Blade	Inspect (Damage, Sharpness, and Wear)	X	X		
	Sharpen				X
Grease nipple	Inspect (Leaks, Cracks, and Wear)	X	X		
Clutch Drum	Inspect (Damage, and Wear)			X	
	Replace				X
All Accessible Screws and Nuts (not Adjusting Screws)	Inspect - Retighten			X	
Air Filter	Clean	X			
	Replace				X
Cylinder Fins and Starter System Vents	Clean			X	
Starter Rope	Inspect (Damage, and Wear)			X	
	Replace				X
Carburetor	Check Idle	X	X		
Spark Plug	Check Electrode Gap			X	
	Replace				X
Vibration Mounts	Inspect (Damage and Wear)			X	

9. STORAGE

If the machine is to be stored for long periods:

- Oil the blade to prevent rust (Fig. 5).
- Fit the blade cover (19, Fig. 2).
- Empty the fuel tank and put the cap back on.
- Store the brush cutter in a dry place, preferably not in direct contact with the floor and away from heat sources.
- Dispose of fuel according to the rules and respecting the environment.
- To drain the tank, start the engine and wait until the fuel is exhausted and the engine stops (leaving fuel mixture in the carburettor could damage the membranes).
- Thoroughly clean the air filter (B, Fig.19).
- The procedures for returning the machine to service following winter storage are the same as for starting up during everyday use (page 26-28).

ENVIRONMENTAL PROTECTION

Environmental protection should be a priority of considerable importance when using the machine, for the benefit of both social cohesion and the environment in which we live.

- Try not to cause any disturbance to the surrounding area.
- Scrupulously comply with local regulations and provisions for the disposal of oils, petrol, batteries, filters, deteriorated parts or any elements which have a strong impact on the environment. This waste must not be disposed of as normal waste, it must be separated and taken to specified waste disposal centers where the material will be recycled.

Demolition and disposal

When the machine reaches the end of its service life, do not dispose of it into the environment; instead take it to a waste disposal center.



Most materials used in the manufacture of the machine are recyclable; all metals (steel, aluminium, brass) can be delivered to a normal recycling station. For information contact your local waste recycling service. Waste disposal must be carried out with respect for the environment, avoiding soil, air and water pollution.

In all cases, applicable local legislation must

be complied with.

When the machine is scrapped also the CE mark label must be destroyed together with this manual.

10. TECHNICAL DATA

	HC 246 P TG 2460 P	HC 247 P TG 2470 P	HCS 247 P TGS 2470 P
Displacement	21.7 cm ³		
Engine	2 stroke Emak		
Power	0.77 kW		
Min. rpm	3.100±100 min ⁻¹		
Max. rpm	10.200±200 min ⁻¹		
Primer bulb	Yes		
Fuel tank capacity  + 	300 (0.3) cm ³ (ℓ)		
Blade speed (strokes / minute)	5000		
Blade length	600 mm (24 in)	750 mm (30 in)	
Blade pitch	35 mm (1.38 in)		
Weight	5.2 kg	5.4 kg	5.2 kg

			HC 246 P - HC 247 P TG 2460 P - TG 2470 P	HCS 247 P TGS 2470 P	
Pressure level	dB (A)	L_{pA} av EN 10517 EN 22868	98.8	98.8	*
Uncertainty	dB (A)		1.4	1.4	
Measured sound power level	dB (A)	2000/14/EC EN 22868 EN ISO 3744	105.8	105.8	
Uncertainty	dB (A)		2.0	2.0	
Guaranteed sound power level	dB (A)	L_{WA} 2000/14/EC EN 22868 EN ISO 3744	108.0	108.0	
Vibration level	m/s²	EN 10517 EN 22867 EN 12096	3.8 (sx) 4.5 (dx)	13.8 (sx) 7.6 (dx)	*
Uncertainty	m/s²	EN 12096	2.6 (sx) 2.0 (dx)	1.9 (sx) 2.4 (dx)	

* Weighted average values (1/5 minimum rpm, 4/5 at full load).

11. DECLARATION OF CONFORMITY

The undersigned, **EMAK spa via Fermi, 4 - 42011 Bagnolo in Piano (RE) ITALY**

declares under its own responsibility that the machine:

1. Type:	Hedgetrimmer
2. Trademark: / Type:	OLEO-MAC HC 246 P - HC 247 P - HCS 247 P / EFCO TG 2460 P - TG 2470 P - TGS 2470 P
3. serial identification	488 XXX 0001 ÷ 488 XXX 9999 (HC 246 P - TG 2460 P) 483 XXX 0001 ÷ 483 XXX 9999 (HC 247 P - TG 2470 P) 484 XXX 0001 ÷ 484 XXX 9999 (HCS 247 P - TGS 2470 P)
complies with the requirements established by Directive/Regulation	2006/42/EC - 2014/30/EU - 2000/14/EC - (EU) 2016/1628 - (EU) 2017/654 - (EU) 2017/656
conforms with the provisions of the following harmonized standards:	EN ISO 10517:2009 - EN ISO 10517:2009/A1:2013 - EN 55012:2007 - EN 55012:2007/A1:2009 - ISO 14982:1998
Conformity assessment procedure followed	Annex V - 2000/14/EC
Measured sound power level	105.8 dB(A)
Guaranteed sound power level:	108.0 dB(A)
Made at:	Bagnolo in piano (RE) Italy - via Fermi, 4
Date:	15/09/2018
Technical documentation available by:	the administrative headquarter. - Technical Department


 **Emak**[®] s.p.a.
Fausto Bellamico - President

12. WARRANTY CERTIFICATE

This machine has been designed and manufactured using the most modern techniques. The manufacturer guarantees its products for 24 months from the date of purchase, for private and hobby use. The warranty is limited to 12 months in case of professional use.

Limited warranty

- 1) The warranty period starts on the date of purchase. The manufacturer, acting through the sales and technical assistance network, shall replace free of charge any parts proven defective in material, machining or manufacturing. The warranty does not affect the purchaser's rights as established under legislation governing the consequences of defects in the machine.
- 2) Technical personnel will undertake the necessary repairs in the minimum time possible, compatible with organizational needs.
- 3) **To make any claim under the warranty, this certificate of warranty, fully completed, bearing the dealer's stamp and accompanied by the invoice or receipt showing the date of purchase, must be displayed to the personnel authorized to approve work.**
- 4) The warranty shall be null and void if:
 - the machine has evidently not been serviced correctly
 - the machine has been used for improper purposes or has been modified in any way,
 - unsuitable lubricants and fuels have been used
 - non-original spare parts and accessories have been fitted
 - work has been done on the machine by unauthorized personnel
- 5) The warranty does not cover consumables or parts subject to normal wear.
- 6) The warranty does not cover work to update or improve the machine.
- 7) The warranty does not cover any preparation or servicing work required during the warranty period.
- 8) Damage incurred during transport must be immediately brought to the attention of the carrier: failure to do so shall render the warranty null and void.
- 9) Engines of other manufacturers (Briggs & Stratton, Subaru, Honda, Kipor, Lombardini, Kohler, etc.) fitted to our machines are covered by the warranties of the engine manufacturer.
- 10) The warranty does not cover injury or damage caused directly or indirectly to persons or things by defects in the machine or by periods of extended disuse of the machine resulting from the said defects.

MODEL

SERIAL No

BOUGHT BY Mr.

DATE

DEALER

Do not send! Only attach to requests for technical warranties.

13. TROUBLESHOOTING CHART



WARNING: Always stop unit and disconnect spark plug before performing all of the recommended remedies below except remedies that require operation of the unit.

GB

When you have checked all the possible causes listed and you are still experiencing the problem, see your Servicing Dealer. If you are experiencing a problem that is not listed in this chart, see your Servicing Dealer for service.

PROBLEM	POSSIBLE CAUSE	SOLUTION
<p>Engine will not start or will run only a few seconds after starting. (Make sure Ignition switch is in start position "I" - HC246P-HC247P-TG2460P-TG2470P)</p>	<ol style="list-style-type: none"> 1. No spark 2. Flooded engine. 	<ol style="list-style-type: none"> 1. Watch for spark at spark plug tip. If there is no spark, repeat test with a new spark plug (CMR7H). 2. Follow procedure page 28 If engine still fails to start, repeat procedure with a new spark plug.
<p>Engine starts but will not accelerate properly or will not run properly at high speed.</p>	<p>Carburetor requires adjustment.</p>	<p>Contact a Servicing Dealer for carburetor adjustment.</p>
<p>Engine does not reach full speed and / or emits excessive smoke</p>	<ol style="list-style-type: none"> 1. Check oil fuel mixture. 2. Air filter dirty. 3. Carburetor requires adjustment. 	<ol style="list-style-type: none"> 1. Use fresh fuel and the correct 2-cycle oil mix. 2. Clean per instruction in Maintenance-Air Filter Section. 3. Contact a Servicing Dealer for carburetor adjustment.
<p>Engine starts, runs and accelerates but will not idle.</p>	<p>Carburetor requires adjustment.</p>	<p>Turn idle speed screw "T" (Fig. 24) clockwise to increase idle speed. See Operation-Carburetor Adjustment.</p>
<p>The engine starts and runs, but the blade doesn't move</p> <p> Warning: never touch the blade when the engine is running.</p>	<ol style="list-style-type: none"> 1. Blade incorrectly fitted 2. Blade damaged 3. Clutch damaged 	<ol style="list-style-type: none"> 1. Contact an Authorised Service Centre 2. Contact an Authorised Service Centre 3. Contact an Authorised Service Centre