

# BRUSH CUTTERS CG260/CG330/CG430/CG520

# **USER'S MANUAL**





PLEASE READ THIS MANUAL CARREFULLY BEFORE ANY

**OPERATION** 

WARNING: THIS SYMBOL REMINDS YOU TO NOTE THE SAFETY PRECAUTIONS.

# **SECURITY RULES: Before starting**

This brushcutter is only made for cutting grass, bush, arborescent shrub, and clumps. Any other use of the brushcutter unmentioned in this manual could involve danger for your personal security.

- Read carefully the security advises in this manual before any use of the machine. Store this manual securely in order to be able to have it at hands in case of problem.
- The brushcutter you just bought have to be use only for the cutting of grass, bushes and arborescent shrubs.
- The brushcutter must be only used by adult and competent people who have been correctly trained on its functioning working by qualified person or by your local dealer.
- As the user of the brushcutter you are responsible toward any person or any object that could be inside the working area.
- All people, animals and delicate property must be kept at least 15 meters away from the machine and the area of working.
- While working, try to be always in the best conditions, you should not use of alcohol drogues or medication that could lessen you attention.
- The machine must be operated only under conditions of good visibility and in natural daylight.
- Always wear adequate clothes, adequate protections such as: closed working shoes or high boots with nonslipping soles, protecting helmet and gloves. Always use protecting glasses or face shields and in order to protect

your ears wear from high noises use head plugs. Thigh your hair as it is not reaching your shoulders.

- Never use cutting devices other than those supplied by die manufacturer, and use only original spare parts supplied by die manufacturer. Never unset all security devices, this could be dangerous for your security.
- Always use cutting tools in good conditions. Do not use broken, wornout, deformed, dented or cracked cutting tools.
- Never start and/or use the machine in a close area or inside a structure, as there is some risk of intoxication due to exhaust gas. Mix and handle the fuel in the open air only far away from all source of heat, sparks or flames with the engine switch off. Refrain from smoking while handling or mixing the fuel.
- Make sure that all security devices and/or protection device are in good operating conditions. All maintenance, repair and component replacement operations must always be done with the engine switch off and all rotating cutting devices stopped.
- Be aware of prolonged vibrations effects. We recommend stopping working and taking some short pauses from time to time.
- Chopped grass and shrubs sprayed into the air can cause allergy reactions.

# PICTOGRAMMES DE SECURITE

1. Warning, Danger, Caution



Read documentation and safety instructions which are provided in this user manual.



3. During the use of the machine, use protective equipment to protect the hearing and eyesight Wear a protective helmet



4. Wear security shoes as well as gloves.



5. Beware, do not put hands and feet next to the parts in rotation. Always stay at a safe distance from the cutting devices.



6. Beware of projection of possible objects.



7. Warning: no persons, no animals, no objects damageable in a diameter of 15 meters around the working zone.



8. Accordingly to the Directive 2000-14/CE. Guarantied noise level

**CG 260** 

**CG 330** 

CG 430





112 dB

9. Danger, risk of intoxication



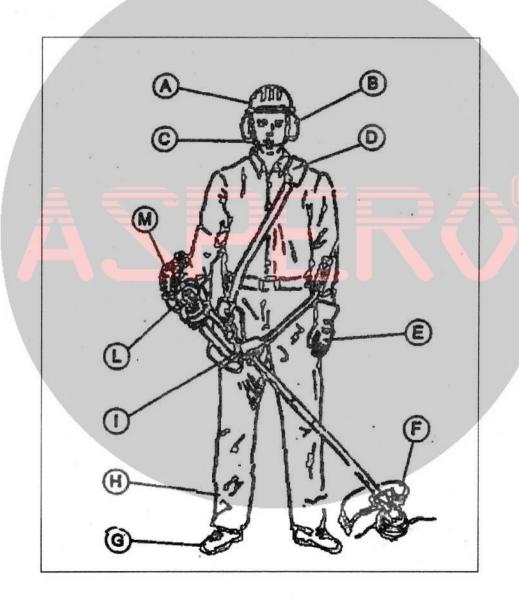
10. Danger, risk of fire or explosion



# Security pieces description.

- A) Security helmet
- B) Head-phones
- C) Face shield against possible projections
- D) Harness
- E) Gloves
- F) Cutting device protection
- G) Security shoes

- H) Heavy duty work suit
- I) Anti vibrating support
- L) Accelerator handle with stop switch M) Engine with overheating protection



# TECHNICAL CHARACTERISTICS

MODELES	CG 260	CG 330	CG 430	CG 520
Diy weight(KG)	5.5	6.7	7.8	7.8
Fuel tank capacity (L)	0.75	0.95	1,2	1,2
Three-teeth blade diameter(mm)	255			
Nylon head cutting diameter(mm)	415			
Max. blade rotation speed rpm	8000			
Rotation direction (as seen from above)	Right	Right	Right	Right
Cylinder (cm <sup>3</sup> )	25.4 cc	33 ec	43 cc	52 cc
Max. Power (kw//r/min )	0.75/7500	0.9/6500	1.25/6500	1.4/6500
Carton Size Engine part (cm)	32x25.5x37			
Carton Size shaft part (cm)	159x11x10.5			

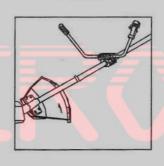
### **ASSEMBLY**

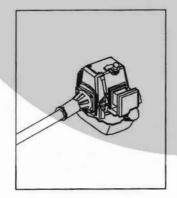
Before starting to work, make sure that all parts have been correctly assembled.

# SHAFT AXLE

Orientate the rod, link it to the engine and fix it by tightening strongly the screw with the furnish tool.

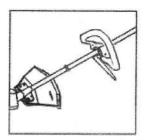
### HANDLE BAR (HB)





switch with your right hand and the other half handle with your left hand and put in position in the inferior handle support. Then place in position the superior handle support fix it with the four respective fixing screws. Before fixing the handle bar in place, make sure it is fastened so that your arms and wrists are flexed slightly in normal work position.

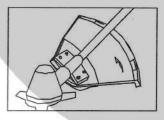
OTHER TYPE HANDLE (LH Loop handle)



Position the vibrating damping grip by keeping the longer part facing left. Before tightening definitively the fixing screws, adjust the handle in a position that permits ergonomic use of the machine.

WARNING: THE CUTTING DEVICE SHOULD NOT BE IN ROTATION DURING THE START OF THE ENGINE AND WHILE THE ENGINE TURNS AT LOW SPEED.

**PROTECTION Safety guard** 



This protection must be fastened directly on the gear pair case with the four screws and nuts provided. At the fixed distance from the cutting tool. The type of safety accessory to be assembled (provided) depends of the cutting toll you are using.

**Security harness:** The security harness provided will depend on the type of handle you are going to use.

In model equipped with HANDLE BAR. The safety harness is composed of a shoulder strap with a side protection for

your right hip. The length of the belt must be adjusted to your height using the passthrough buckle positioned near the shoulder element. So that the side protection is in a correct position to protect you hip.

In model equipped with LOOP HANDLE: The safety harness is composed of a fixed shoulder element and a machine support clips that permits the machine to be discarded immediately. It must be positioned as explain above.

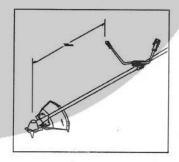
### **Balancing** of your machine

Before any use, you must adjust the safety belt in order to balance the machine as follow: Place the safety belt on your shoulder and hook the machine to the safety belt.

On the machine with nylon head, you must adjust the belt in a way that the distance between the ground and the nylon head is in between 0 and 300mm.

On the machines, which are equipped with blade, you must adjust the security harness in a way that the distance between the ground and the blade is between 100 and 300mm.

The security distance between the cutting tool and the hooking point must be 750 mm.



Safe and economical operations require that you are using the appropriate type of cutting tools.

Provided or on option, depending of the machine you bought, you have the possibility to work with the most appropriate tool. In case of nylon wire, use

only the nylon wire recommended by the manufacturer (never use wire made of steel or other materials). Make sure that all tools mounted are original. And are recommended by the manufacturer.

### **NYLON HEAD**



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nut. Screw the cutting head until the cutting tool is completely and safely lock.

able then to tighten all the elements together using the provided wrench (tightening torque  $\equiv 30\text{Nm} +- 2.5 \text{ or } 3 \text{ Mkg} +- 0.25$ )

Make sure that all different parts of the cutting tool are securely fastened as above.



If the blade is not correctly positioned it can involve SERIOUS DAMAGE AND INJURY TO PERSONS AND PROPERTY.

### **BLADE THREE TEETH**



### **Fixation:**

Remove the blind nut, the self-locking nut, the flange and the ring nut from the gear pair case.

As shown on the picture above insert the three blade teeth onto the threaded shaft, then insert the centring ring nut, the disk fixing flange and the support cap (if any) and lock in place using the self locking nut.

In order to block the blade, you must prevent the rotation of the smaller shaft by inserting the hexagonal wrench provided or a screwdriver in the slot in the gear pair case and the hole in ring nut. You will be

# MAIN PARTS OF THE BRUSHCUTTER:

- 1. Mixture tank.
- 2. Gas control.
- 3. Carburator / air filter.
- 4. Handle bar
- 5. Anti-vibration.
- Gas control lever with safety disposition.
- 7. Transmission axle.
- 8. Gear box
- 9. Cutting tool
- 10. Safety protection

Never use nylon heads and/or three teeth blade other than those provided by the manufacturer. Always use tools in perfect condition, free of deformation, dents, broken or deformed teeth that could cause the breakage of the cutting tools.

In high-speed rotation, parts could be projected at very high speed and could involve serious injury and damages to persons and properties. The

manufacturer declines all responsibility in case of faulty use of the machine.

### **BEFORE STARTING**

Before any work with the machine, make sure that it has been perfectly positioned on a clean, flat and free from obstacles area. The machine must be on a horizontal position in a way that the cutting tool does not reach the soil or any other object.

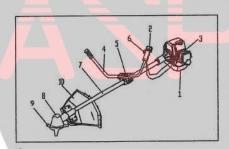
Make sure that all nuts and screws are securely tightened. Make sure both the safety protection and the cutting tools used are correctly assembled.

Whenever it is possible, clean the working area from all foreign objects such as nails, metal wire, stones or broken glass that might be thrown or become tangled up in the cutting tools.

Use fresh unleaded gasoline (SUPER), having an octane rate of minimum 90. You must use 100 % synthetics oil specially made for heavily stressed two stroke engines, mix it in a percentage of 4%.

By using synthetic oil specially made for two-stroke engine, it will reduce the formation of ashes and carbon deposits in the spark plug, in the piston, in the muffler and in the cylinder as well as reducing emission of exhaust gas. Lubrification will be at best and it will give a longer life to your engine.

It is important to use exclusively good quality gasoline, use as well only branded oil. You must use the mixing during the three weeks that follows its preparation.



It is prohibited to start the machine in an enclosed area or into buildings. The breathing of exhaust gas can involve dangerous intoxication.

Whenever cutting toxic grass, pay special attention as the spraying of chopped grass and vegetal matters can lead to intoxication. Use appropriate protections for breathing.

### STARTING

**MOTOR FUEL: MIX 4% ONLY** 

You can now proceed with the filling of the fuel tank, unscrew the cap of the fuel tank and pour the mixing oil/gasoline using a filler, be careful not to spill any mixing around and/or on your clothing, if that should happens, wipe the spilling with a clean rag.

Start the engine at least three meters away from the area where the fuel tank had been filled up in order to avoid any risks of potential fire.

# Never fill up the gasoline tank while the engine is hot.

# ENGINE STARTING

To start the engine proceed as follow:

- 1. Carefully proceed to all the different steps of preparation and fuel supply, set the gas control lever and the red button in the "START" position.
- With your left hand, grip the brushcutter and press the transmission shaft in order to keep firmly positioned the machine on the ground, and with the right hand slowly pull the starting cord until the pawls hook onto the flywheel.
- 3. Following the instructions on carburator provided hereafter firmly pull the recoil starter until the engine starts. Never pull the recoil starter in all its way in order to avoid damaging the engine connections mechanism.

# CARBURATOR WITH "PRIMER"

Whenever the engine is cold, press the PRIMER 5 to 6 times until the mixing oil/gasoline flows out the discharge hose situate near the filling ball, in order to fill up completely the carburator chambers.

Position the air lever into the close position, and pull on the recoil starter 2 to 3 times maximum until you obtain the first sign of engine starting, then put the air lever into the open position.

Pull the recoil starter once again until the engine starts. If the engine does not start at the third try, repeat the operations from the beginning.

If the engine fails to start despite different attempts it means that the combustion chamber is flooded. In this event, unscrew the spark-plug, wipe and dry it and pull the recoil starter several times without the spark-plug in place in order to clean and ventilated the combustion chamber.

IMPORTANT: Whenever the engine is hot all these operations are not necessary, pull only the recoil starter until the engine starts.

#### GRINDING

During the first ten hours of work, run the engine at a moderate rpm. We advise you, in any case to not maintain your engine at a high-speed regime as the different components must adjust one with the others during grinding. It is at the end of the grinding that the engine will reach its maximum power.

After the two first hours of work, make a pause and check that all nuts and screws are securely fastened, tighten if necessary.

#### USE OF THE BRUSHCUTTER

# Which protection to use with which cutting tool?

This protection is bicolor (principal protection red and small blade holder black).

- 1. If you whish to use the nylon head.

  The protection must be use with its two parts, main protection red + small blade holder black.
- 2. If you wish to use the 3 teeth blade.

  You must dismount the small black blade holder. (with a screwdriver) and use only the red main protection.

This brushcutter is only made to cut grass, bushes, arborescent shrubs and bulky.

\* Be sure that the weight of the machine is perfectly balanced, evenly distributed and in the axe in a way that the cutting organ is parallel to the ground and does not require to be supported from the grip.

\* Operate a few accelerations, without reaching the max rpm and without working to make sure that everything is working in good condition and regularly.

\* When the nylon head or the 3 teeth blade is at complete stop, go to your working zone by carrying the machine in a way that the cutting tool is under your waist level and far apart from your body. Make sure there are no other people within a 15 meters radius.



Place yourself in a well-balanced and stable position, on both feet.

#### **Grass cutting**

Cut the grass like if you were in a corridor of 1.5 meter wide, move step by step balancing the machine right and left, and vice-versa. Make sure at each step that you are still well balance on your feet. If you are using the teeth blade for the grass always cut from right to left and leave a pile of cut grass on the left for later gathering.

If possible, avoid stones even small ones, piles of earth, small piece of wood or anything that could be hidden or poorly visible in the grass. If you hit a large object by accident, or if you block the cutting tool due to overloading, or overload of grass or stringy vegetal material wrapped in the cutting tool you must: reduce the speed to the min. and disengage the clutch. Make sure that the cutting tool is at complete stop, if it still turns use the ground (non dangerous area) as a brake to stop it and then stop the engine.

Put the brushcutter on the ground and check that the cutting toll has not been damage such as breakage of teeth for the blade, cracking, if necessary change the cutting tool. If the tool is only wrapped by vegetal material, with your pair of gloves remove the vegetal material and clean the cutting tool. Always wear security gloves for this operation.

All protective devices of the machine as well as protection equipments must be maintained in good operation condition during the period of use.

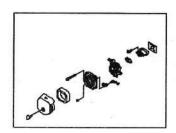
The engine of the machine must be at complete stop during assembling, repair and cleaning operations that could be necessary.

Brushcutters transmit vibrations to the user during its use. These vibrations can generate an increased tiredness. For this reason, we recommended taking regular pauses during work. The machine is equipped with an antivibrating device. We recommend as well that after a few hours of work to take a pause (a few minutes) and leave the engine at minimum rpm in order to let the engine cool down by the air current created by the flywheel.

### **MAINTENANCE**

#### Carburator adjustment.

During a normal use, the carburator may have some slight changes, especially, when there are some changes of working conditions, after many hours of work or because of variation of temperatures or pressures in the surrounding.



If the carburator needs adjustment proceed as follow:

- Screw gently clockwise the carburator screw until it comes to the base, never force on it.
- From this position unscrew it by one turn.
- Start the engine and without accelerating, find the point where the engine it at maximum level by screwing or unscrewing at around 1/8 eme of turn at each time.
- When you found the maximum level, unscrew 1/8 of a turn the screw and grease.
- Use the butterfly screw until the engine is at around 2800 rpm. This adjustment allows a rotation at minimum.

In order to obtain a correct adjustment, do this operation while the engine is hot.

Be sure that the cutting tool is at complete stop while the engine is running at minimum.

# MAINTENANCE AND STORAGE AFTER USE.

When you finish working, clean completely the brishcutter from any grass or dirt, make sure there is any grass material wrapped in the cutting tools, put it back in its packing in order to avoid to injury yourself or other people during transport.

Be aware not to hit or cut the fuel tank while you put it to the ground. Do not let the brushcutters fall down to the floor it may damage the machine.

Whenever the machine is not used for a long period of time, proceed as follow:

- Empty completely the tank from the mixing fuel/oil.
- Protect all engine metal parts from corrosion by provided those with a thin coat of oil.
- Remove the spark-plug, put some drops of oil in the cylinder then pull the recoil starter 2 to 3 times in order to distribute evenly the oil, put back the spark-plug.
- We advise you to start the engine during a few minutes every 60 days of inactivity.

#### **PROBLEMS**

# Power loss or sudden stopping of the engine.

- Check that the tank is not empty.
- The mixing does not reach the carburator. Clean the fuel filter in the fuel tank.
- There is water in the mixing. Clean all the alimentation system.
- The air filter is dirty. Clean the air filter.
- There are carbon deposits in the cylinder exhaust pipe or the muffler, clean those.

#### **Bad qualify cut**

- Overloaded cutting due to too high grass or to thick for engine power.
- Wrapped vegetal material on the cutting tool.
- If blade is used: blade worn out or not sharp enough.

### WARNING

We do not guaranty the use of the brushcutter with a blade so called "Saw blade" Use the machine only with the cutting tools provided by the manufacturer.

- Nylon head TOPOWER3 teeth blade XT 26-17

