



# CLH CABLE LAYER

**INTERRAFILO PROFESSIONALE**  
**PROFESSIONAL CABLE LAYER MACHINE**  
**MACHINE ENFOUISSEUSE DE CÂBLE PROFESSIONNELLE**  
**PROFESSIONELLER KABELVERLEGER**  
**MÁQUINA DE CABLEADO PROFESIONAL**  
**PROFESSIONELL KABELLÄGGARE**  
**KAAPELINLASKUKONE AMMATTIKÄYTTÖÖN**  
**PROFESJONALNA MASZYNA DO UKŁADANIA KABLI**

MODELLO - MODEL - MODÉLE - MODEL – MODELO - MODELL - MALLI - MODEL **NT 60**

- MANUALE DI USO E MANUTENZIONE - ESPLOSO RICAMBI
- MANUAL FOR USE AND MAINTENANCE - SPARE PARTS
- MANUEL D'UTILISATION ET DE MAINTENANCE - PIÈCES DETACHÉES
- HANDBUCH ZUR VERWENDUNG UND WARTUNG - ERSATZTEILE
- MANUAL DE USO Y MANTENIMIENTO - PIEZAS DE REPUESTO
- HANDBOK FÖR ANVÄNDNING OCH UNDERHÅLL - RESERVDELAR
- KÄYTTÖ- JA HUOLTO-OHJE - VARAOSAT
- INSTRUKCJA OBSŁUGI I KONSERWACJI- CZĘŚCI ZAMIENNE



Via Copernico, 85 47122 Forlì (FC) -ITALY-

**IMPORTANT!**

This machine is built in compliance with the EC Directives and is certified with the  marking

This manual contains indications and messages, followed by the warning symbol below, which can also be found upon the machine itself. These warnings indicate potential hazards. Therefore, in order to ensure maximum operator safety, as well as the safety of anyone within the machine's field of action, it is recommended to pay close attention to the indications and/or messages contained within these warnings.



Danger symbol

**DESCRIPTION OF THE SYMBOLS**

This user manual must be read and fully understood before activating and operating the machine.



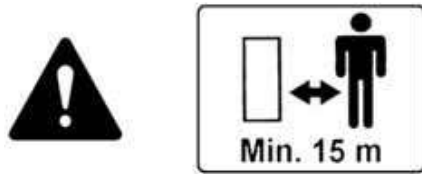
**ATTENTION!!!** The machine's fuel is highly flammable and must be handled with extreme caution. Fuel must never be added to the machine's fuel tank while the motor is running, while smoking, or in the presence of sparks or open flames.



The machine may project rocks, pieces of grass or other objects while in function. In order to avoid causing personal injury to any third parties who may be present, the operator must make sure that nobody is within 15 meters of the machine before activating it.



This machine is equipped with a sharp rotating element. Keep your hands and feet at a safe distance!!!



In order to avoid causing personal injury to any third parties who may be present, the operator must make sure that nobody is within 15 meters of the machine before activating it.



Always use a protective visor when operating the machine.



This label outlines all of the machine's potential hazards. It can be found upon the machine in a visible location.

**ATTENTION!!!** The machine is equipped with an extremely powerful cutting element. Always keep your hands and feet at a safe distance from this element and never perform any operations upon the machine while the motor is running. It is recommended to never use the machine in the presence of gravel, small rocks and/or foreign objects. Such elements could be projected by the cutting wires and pose an extreme danger to anyone or anything in the machine's vicinity. Keep people at least 30 meters away from the machine while it is in function. The operator must wear a protective face shield and rubber boots while operating the machine.

**ATTENTION!!!** The machine's swing-action mechanism represents a serious crushing hazard to the fingers. Keep your hands away from it at all costs.

Note

IT IS EXTREMELY IMPORTANT THAT THESE REGULATIONS BE RESPECTED!

THEIR APPLICATION SERVES TO PREVENT SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE, AS WELL AS TO ENSURE AN ADEQUATE LEVEL OF OPERATOR SAFETY.



MACHINE IDENTIFICATION PLATE AND CE MARKING

## **CLH CABLE LAYER – NT 60** PROFESSIONAL CABLE LAYER

Dear Customer, thank you for having chosen this ECOTECH ITALIA product. We are certain that this machine will fully meet your usage requirements. In order to obtain optimal performance from your cable layer, as well as to ensure its proper maintenance over time, be sure to read all of the indications and warnings contained within this manual. This manual must be preserved and must always remain with the machine for the duration of its working life.

**READ THE USER INSTRUCTIONS CAREFULLY BEFORE STARTING THE MACHINE!**

### **GENERAL ACCIDENT PREVENTION REGULATIONS**

Always use extreme caution when operating the machine.

This user manual must be read carefully before using the machine for any work operations.

Various safety labels can be found upon the machine: these are not decorative elements! They serve to continuously remind the operator of the damage and injuries which can result from improper machine use. Always pay special attention to the hazards and warnings indicated by them.

This machine is equipped with an extremely sharp, rotating, steel cutter.

**KEEP YOUR HANDS AND FEET AT A SAFE DISTANCE FROM THIS CUTTING DEVICE!!!**

If the machine is sold or transferred to a third party for any reason, the party in question must be informed of the above accident prevention regulations and must be provided with the machine's user instructions.

Before beginning any work operations, make sure that the terrain within the operating area does not contain any objects which could be projected by the machine. Such objects could pose a serious hazard to anyone in the vicinity. Keep people, animals and foreign objects at least 15 metres away from the machine while it is in function. In order to avoid being struck by any projected objects, the operator must wear: A PROTECTIVE VISOR, COVERALLS, SAFETY SHOES,

GLOVES AND A PROTECTIVE CAP.

Never perform maintenance upon the machine while the motor is running.

**THE MOTOR MUST ALWAYS BE SHUT OFF BEFORE PERFORMING ANY INTERVENTIONS.**

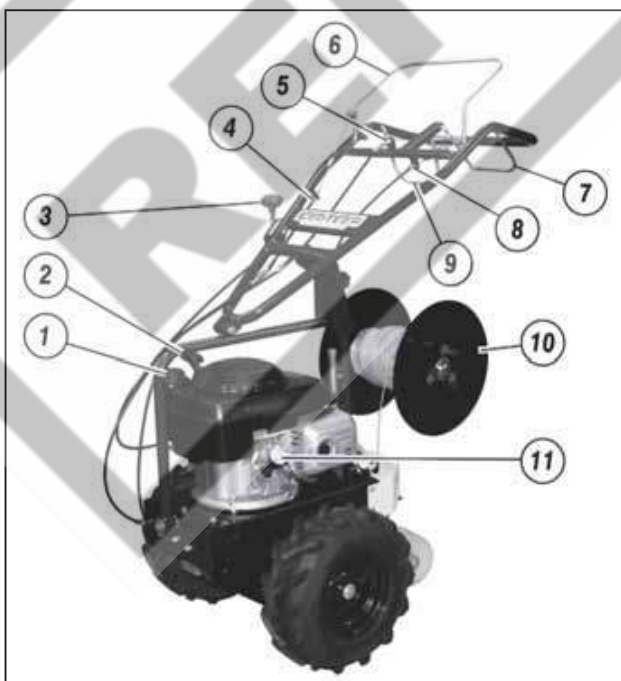
Do not tamper with or deactivate the machine's safety devices.

The operator shall always bear full responsibility for any injuries or damage caused to third parties.

The improper use of the machine on behalf of the operator shall void the machine's warranty and shall exonerate the manufacturer of any responsibility.

If any machine malfunctions are encountered during work operations, contact your reseller's service centre for assistance. NEVER ATTEMPT TO REPAIR THE MACHINE ON YOUR OWN. INEXPERIENCED REPAIR OPERATIONS CAN LEAD TO MORE SERIOUS DAMAGE.

Always use original spare parts which have been supplied by the manufacturer.



- 1- Fuel cap
- 2- Motor starter handle
- 3- Gas throttle
- 4- Cutter activation regulator
- 5- Advancement regulator
- 6- Cutter activation lever
- 7- Handlebar swing-action control lever
- 8- Swing-action control regulator
- 9- Advancement activation lever
- 10- Cable spool
- 11- Motor oil cap

Fig.1

## **USER INSTRUCTIONS**

Before starting the motor and before starting using it, carry out all the following controls:

- Check the integrity of the exit hole of the perimeter wire from the cable guide (feed) (fig. 2). In particular, check the integrity of the flexible tube inside the cable guide. In the case of any damage, it should be replaced, code 7571. Also check that there are no cuts along the contour of the hole of the cable guide, and that it does not have a sharp or jagged edge. If damaged, replace the cable guide, code 7456.

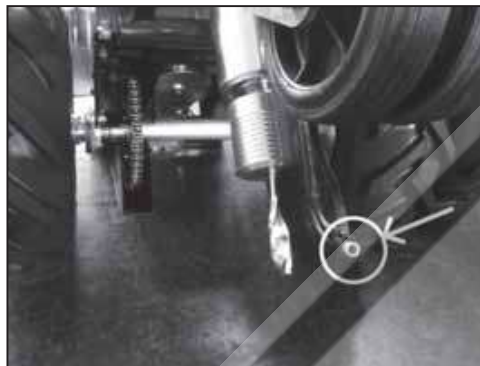


fig. 2

- Make sure that the oil level is not below minimum: Unscrew the cap (fig.1 no.11), use a rag to clean the dip stick and screw the cap back on. Unscrew the cap again and check whether the oil level falls within the minimum and maximum levels indicated. If the oil level is below minimum, add more oil until a suitable level is reached. (ask a trusted supplier for a suitable oil typology).

### **ATTENTION!!! THE MOTOR OIL DOES NOT COME SUPPLIED WITH THE MACHINE**

- Make sure that all of the screws are tightened properly.
- Make sure that all of the levers are in their neutral positions (fig.1 no.6/no.9).
- Clean the air filter of any obstructions (see the motor's manual).
- Refuel the machine through its filtered fuel opening.
- Open the fuel tap (see the motor's manual).
- If the motor is cold, the gas throttle (fig.1 no.3) must be set to its START position.
- Pull the motor's starter handle (fig.1 no.2) with force. Before using the machine, wait for a few minutes in order to allow the motor to reach its proper operating temperature.

**BE SURE TO ALSO FOLLOW THE INSTRUCTIONS DESCRIBED WITHIN THE MOTOR'S MANUAL.**

Before initiating any work activities, position the cable upon the spool, adjust the machine's cable laying depth and tie the loose end of the cable to a peg. Make sure that there are no people, animals or foreign objects within 15 metres of the machine. Start the motor and wait for it to reach its proper operating temperature before beginning. Bring the cutter activation lever (fig.1 no.9) and the advancement activation lever (fig.1 no.1) to their working positions and begin working. Use maximum caution while operating the machine. Be sure to carefully read the operation descriptions provided below. During the summer, or whenever operating upon dry terrain, it is recommended to water the operating area abundantly the day before the work is to be performed.

**THE MACHINE MUST BE SUBJECTED TO A TRAIL STAGE! THE BELTS WILL ADJUST DURING THE FIRST HOUR OF WORK. MAKE SURE THAT THE TENSION ADJUSTMENT SPRINGS ARE ALWAYS WORKING PROPERLY (fig.1 no.4/no.5).**

### CABLE GUIDE INSTALLATION OR REPLACEMENT

The cable guide is made up of several parts that must be assembled prior to attaching the guide to the machine. The assembly outline is shown in Fig. 3.

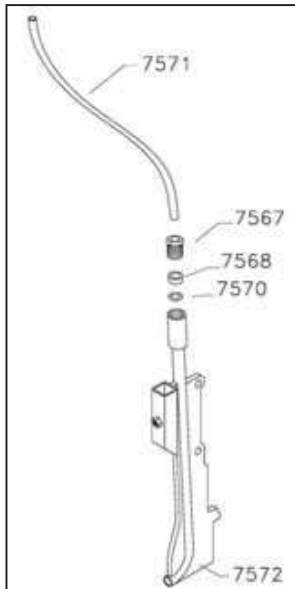


Fig. 3



Fig. 4

In the cable guide structure (cod. 7572) insert in the following order: O-ring (cod. 7570), spacer (cod. 7568) and lock nut (cod. 7567). With the nut slightly loose insert the tube (cod. 7571) until it exits at the bottom part for about 5 mm. At this point the nut is tightened with a n. 17 wrench and consequently the tube is locked. In Fig. 4 you can see the cable guide properly assembled. You can then proceed to secure the cable guide to the machine structure.

### POSITIONING THE CABLE UPON THE SPOOL

Given the various cable and spool typologies which are available on the market, it is recommended that the cable be wound upon the supplied cable spool (fig.1 no.10), using the appropriate handle upon the spool itself. This will facilitate the cable loading operations. In order to guarantee proper unwinding (fig.5), it is important that the cable be wound upon the spool in a clockwise direction. If the user should want to use a spool with cable already wound upon it, the left hand side of the supplied cable spool can be removed by loosening the three knobs (fig.6) and by slightly turning the side of the spool itself. Position the new spool over the supplied spool's central cylinder, using any adaptors as required, and reattach the side which was previously removed. Be sure to tighten the fastening knobs properly. Once the cable has been properly positioned upon the spool, the loose end of the cable must be inserted into the appropriate tube (fig.7) until a few centimetres of cable come out the bottom.

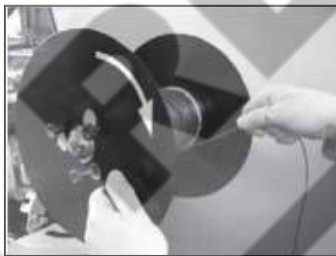


Fig.5

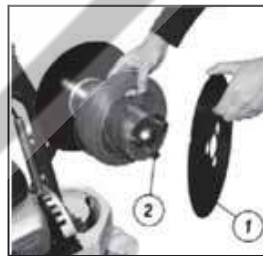


Fig.6

- 1- Removable plate
- 2- Knob



Fig.7

### INSTALLING OR REPLACING THE CUTTER

The machine is equipped with a mechanism which allows for the cutter to be quickly replaced without the need for tools (fig.8). In order to install or replace a cutter, push the support (fig.9) upwards and extract the worn cutter, if already present upon the support (fig.10). While keeping the support pressed upwards, insert the new cutter then release the support. A spring action mechanism will automatically reposition the support in its original position, thereby locking the new cutter in place. If replacing a worn cutter during work activities, it may be necessary to clean any residual grass and/or soil off of the support. Make sure that no debris enters the quick attachment mechanism while installing the new cutter. It is nevertheless recommended to clean and lubricate the quick attachment mechanism frequently (see also "CLEANING THE CUTTER SUPPORT").



Fig.8



Fig.9

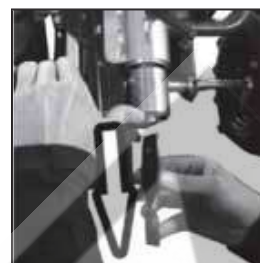


Fig.10

#### ADJUSTING THE CABLE LAYING DEPTH

In order to adjust the machine's cable laying depth, use the knob on the back of the pin (fig.11, no.1). Loosen the knob by a few turns counter-clockwise and raise or lower the support for the two rear wheels (fig.11, no.3), using the depth of the graduated bar beside the support (fig.11, no.2) as a reference. Once the desired depth has been obtained, turn the knob (fig.11, no.1) clockwise until it has been properly tightened. The numbers on the graduated bar correspond to centimetres in depth, and range from 1 to 6.



Fig.11

#### ADJUSTING THE SPEED

In order to adjust the cable layer's speed, use the accelerator's throttle (fig.1, no.3) to increase or decrease the motor's rpm value. NEVER adjust the speed by making the clutch disks for the transmission's gearbox slip. This can cause serious damage to the transmission's mechanical parts. The advancement lever must ALWAYS be pulled to its maximum extent, or rather until it makes contact with the handlebar unit.

#### ADJUSTING THE HEIGHT OF THE HANDLEBAR UNIT

The machine provides for five different handlebar heights. In order to adjust the height, loosen the handle at the back of the handlebar unit (fig.12 no.2) by turning it counter clockwise until the knob can be extracted (fig.12, no.1). Select the desired height and then reinsert the knob, turning it clockwise until the handlebar unit has been properly tightened.

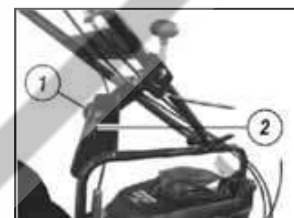


Fig.12

#### ADJUSTING THE TILT OF THE HANDLEBAR UNIT

When working around hedges, protruding branches, posts or any other type of lateral obstacle, the machine's handlebar unit can be tilted to the side opposite the obstacle (fig.13). In order to adjust the tilt angle, pull the lever on the lower left of the handlebar unit (fig.1 no.7) and insert the corresponding pin into one of the nine holes in the handlebar unit's support. The machine therefore allows for the handlebar unit to assume 4 different tilt angles, to the right as well as to the left.



Fig.13

#### BLOCKING THE ADJUSTABLE PIN

When laying cable for long straight tracts, the adjustable pin (fig.14) can be locked in place in order to provide for better management of the machine's advancement direction. In order to lock the pin in place, just tighten the handle on the right side of its support (fig.14, no.1).



Fig.14

#### ADJUSTING THE WIDTH OF THE WHEELBASE

Both of the wheels are equipped with half-axes which can be extended to 4 different positions. This system provides for the possibility of obtaining a distance of 25, 27, 29 or 31 cm between the cutter and the edge (fig.15). This ensures that the cable will be laid at an equal distance from any border, wall or hedge. In order to adjust this distance, just remove the locking pin (fig.15 no.2) and reposition it in one of the 4 holes along the half- axle (fig.15 no.1). Be sure to reset the safety spring.



Fig.15

#### STARTING WORK OPERATIONS

Once the cable has been mounted and the cutter has been installed, the cable must be tied to the ground. In order to perform this operation, just insert a spike or peg into the ground and tie the end of the cable, which is sticking out of the bottom of the pin, to it. This operation ensures that the cable will be properly laid within the groove created by the cutter for the first few meters.

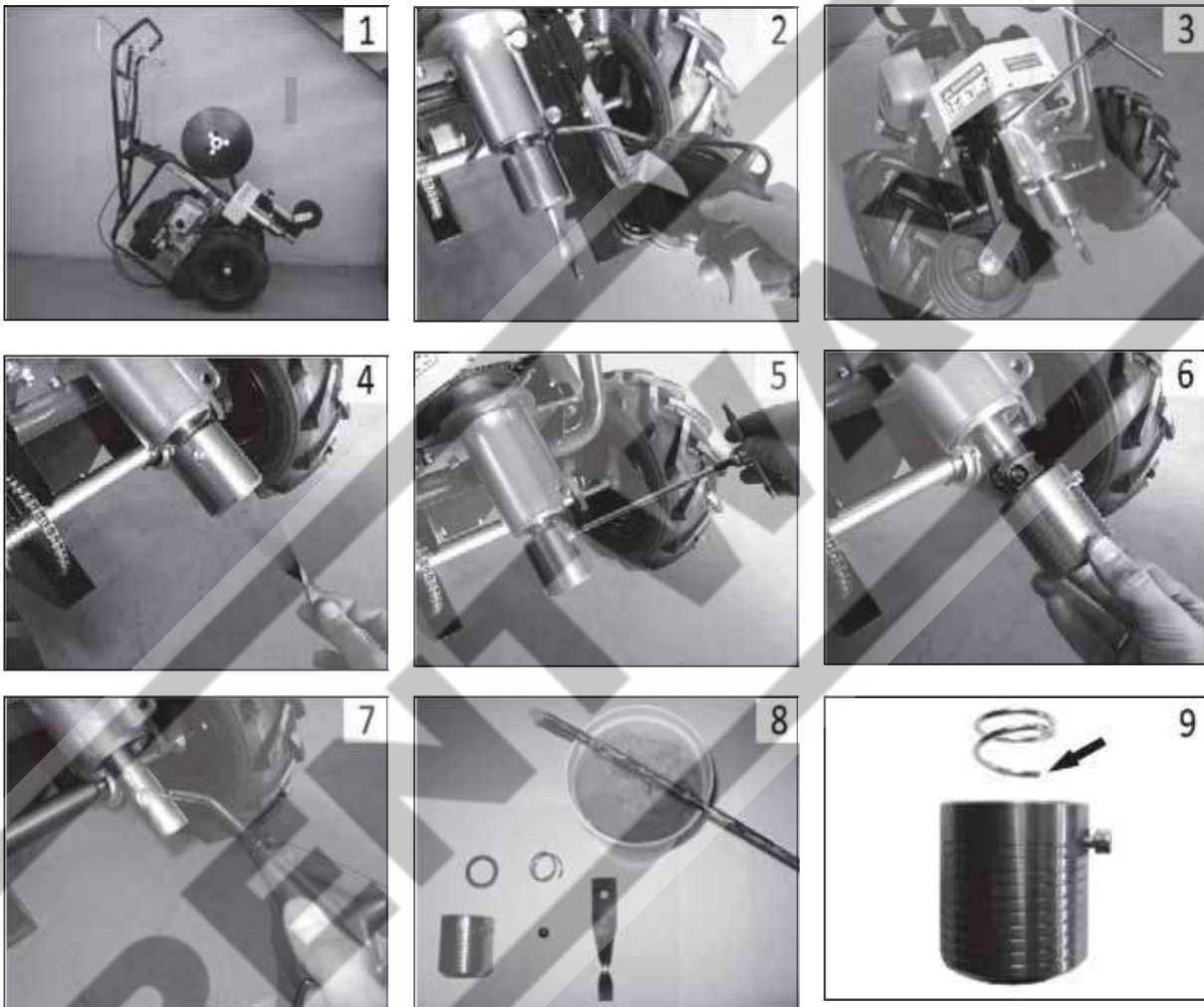
### FINISHING WORK OPERATIONS

Once the work operations have been completed, bring the gas throttle (fig.1 no.3) to its STOP position in order to shut off the motor (the motor can also be shut off by means of the stop switch, if installed, after having brought the motor's speed to minimum). Once the motor has been shut off, close the fuel tap. Once the machine has been brought to its storage location, the cutter's support must be cleaned and lubricated (see the following section).

It is recommended to properly clean the cable laying tube, removing any dirt residues from inside.

### CLEANING AND MAINTAINING THE CUTTER SUPPORT

When finished using the machine, the cutter support must be cleaned thoroughly. In order to perform this operation, follow the procedure below.



- 1- Tip the machine forward and rest it gently on the floor.
- 2- Remove any residual grass and soil and clean the unit thoroughly with compressed air.
- 3- Remove the two screws to detach the pin
- 4- Remove the cutter (see the section entitled "INSTALLING OR REPLACING THE CUTTER").
- 5- Unscrew the support's stopper screw.
- 6- Extract the support, the spring and the spacer and then remove the sphere.
- 7- Clean everything with compressed air, removing any residual soil and grass, and use a good solvent to clean away any greasy residues.
- 8- Clean all of the components with a good solvent and lubricate each piece thoroughly. Apply water-repellent grease to the cutter's shaft.
- 9- Reposition the sphere and insert the spacer, the spring and the support into the shaft. The spring must be positioned with its loose end downwards, or rather facing the support. Screw the support's stopper screw back in and reinstall the cutter.

### **POSSIBLE SETBACKS AND RELATIVE SOLUTIONS**

A. The motor does not start: make sure that

- there is fuel in the fuel tank (fig.1 no.1).
- the fuel tap, if present on the motor, is open.
- the gas throttle (fig.1 no.3) is set to its START position, if the motor is cold.
- the gas throttle is not set to its START position, if the motor is hot (this could flood the motor).
- the gas throttle is not set to its STOP position.
- the fuel arrives at the carburettor.
- the air filter is not obstructed (see the motor's manual).
- the vent hole on the fuel tap is not obstructed (fig.1 no.1).
- the sparkplug is capable of providing the necessary spark.

If these inspections should not resolve the problem, please contact your reseller.

B. The cutter, with its relative activation lever properly engaged, does not turn:

- check whether the belt is worn.
- check whether the belt has come off the pulleys.
- make sure that the lever is able to provide the belt with adequate traction.

C. The cutter, with its relative activation lever disengaged, continues to turn:

- check whether the pulley brake is engaged. If this is not the case, remove the cover and loosen the adjustment until the brake lining makes contact with the edge of the pulley.
- check whether the brake lining has been consumed.

D. The machine does not perform properly: check

- whether the cutter is excessively worn.
- that the cutter is installed and that it is not broken.
- whether the air filter (see the motor's manual) is obstructed, resulting in a significant decrease in motor power. If this is the case, clean it with compressed air or replace it with a new air filter supplied by your trusted reseller.
- whether the fuel tank is almost empty.
- whether the motor oil level is below its minimum level (fig.1 no.11).

E. With the advancement lever properly engaged, the machine does not move:

- if the advancement mechanism's wire is too loose, adjust it using the appropriate regulator (fig.1 no.5).
- check whether the transmission belts are excessively worn.
- check whether the chain is broken or too loose.
- check whether the clutch disks inside the gearbox are excessively worn.

F. The machine is abnormally difficult to steer:

- check whether the handle (fig.12 no.1) is loose.

G. The cutter's support does not slide, thereby impeding the replacement of the cutter itself:

- Clean the mechanism and remove any residues present. (See the section entitled "CLEANING AND MAINTAINING THE CUTTER SUPPORT").
- Make sure that no rust has formed within the system after a certain period of use. (See the section entitled "CLEANING AND MAINTAINING THE CUTTER SUPPORT").

H. The insulation of the buried cable results to be jeopardized:

- The cable exit hole of the laying tube is damaged. Replace the tube.
- The tube in which the cable passes through, which is part of the laying tube, is dirty. Proceed to clean it properly.

**NEVER MAKE ANY ADJUSTMENTS TO THE WIRE REGULATORS IF YOU DO NOT KNOW THEIR PURPOSE! SUCH OPERATIONS COULD COMPROMISE THE MACHINE'S PROPER FUNCTION!**

### **MACHINE MAINTENANCE**

During long periods of machine downtime it is a good idea to: clean and lubricate the cutter support (see the section entitled "CLEANING AND MAINTAINING THE CUTTER SUPPORT"); empty the fuel tank (fig.1 no.1); lubricate the cylinder with an appropriate lubricant supplied by your reseller; clean the air filter (see the motor's manual); empty the carburettor bowl of any residual fuel; lubricate any of the machine's painted parts which have been scratched or dented, as well as any of its galvanised parts, in order to prevent the formation of rust; dry any wet portions of the machine. The use of a pressure washer is absolutely not recommended.

For any maintenance operations to be performed upon the motor, please follow the indications provided in the motor's manual, which comes supplied with the machine.

It is generally a good idea to check the level of the motor oil after every 8 hours of use and to clean the air filter after every 4 hours of use. These operations should be performed more frequently if working in extremely dusty environments. Never force the machine's motor; if white smoke comes out of the exhaust, slow down.

### **SPECIFICATIONS**

|                              |                         |
|------------------------------|-------------------------|
| MOTOR.....                   | HONDA GCV 160 4 stroke. |
| MAX POWER.....               | 4,5 kW.                 |
| STARTING.....                | self-winding pull.      |
| TRASMISSION.....             | with belt.              |
| CLUTCH.....                  | multidis with oil.      |
| MAX SPEED.....               | 36 Mt./min.             |
| CABLE LAYING DEPTH.....      | from 1 to 6 cm.         |
| WIDTH OF THE WHEELBASE ..... | 25, 27, 29, 31 cm.      |
| DRY WEIGHT.....              | 49 kg.                  |