

# MECCANICA BENASSI SPA

## MOTORHOE RL 3 (1+1)

### USER'S MANUAL



**READ THIS MANUAL CAREFULLY**

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## 1 – FOREWORD



This symbol is used to highlight an important safety information. If this information is ignored, people are in danger either of possible injuries – even serious ones – or death.

### IMPORTANT

This term highlight special precautions to be taken in order not to damage the machine.

## TABLE OF CONTENTS

1. FOREWORD	Pag. 0
2. IDENTIFICATION AND MARKING	Pag. 0
3. CONDITIONS AND USE LIMITS	Pag. 1
4. WARRANTY	Pag. 1
5. MACHINE START	Pag. 1
6. SAFETY RULES	Pag.2-3
7. PACKAGE OPENING	Pag.4
8. WARNING SIGNS	Pag. 5
9. CONTROL SIGNS	Pag. 5
10. TECHNICAL FEATURES	Pag.6
11. TECHNICAL DATA	Pag.6
12. PRECAUTIONS BEFORE STARTING	Pag.7
13. HANDLEBARS ASSEMBLING	Pag.7
14. ASSEMBLY	Pag.8
15. ENGINE START-UP	Pag.9
16. SAFETY DEVICES	Pag.9
17. CONTROLS WORKING	Pag.10
18. ADJUSTMENTS	Pag.11
19. MAINTENANCE	Pag.13

**ENGINE:** Use and maintenance instructions of this engine are mentioned in the relative manual, copy of which is always supplied with every machine.

## 2 – IDENTIFICATION AND MARKING

Machine serial number is printed on the drive box.

### IMPORTANT NOTE

Always mention the machine serial number when calling our technical service or when ordering spare parts.

### MARKING







### Marking Sample

CE mark is on the handle support.



## 3-CONDITIONS AND USE LIMITS

This manual gives you general information on how this machine should be used and maintained. For any technical problem, please, call Your confidential dealer.

-  This machine has been designed to be used in compliance with what specified in the machine descriptions and safety warnings of this instructions manual.
-  Any other use is not allowed. The manufacturer is not responsible for damages caused by any use then the intended use. The user is fully responsible for any possible risk.
-  Use, maintenance and repair clauses prescribed by the manufacturer are also integral part of the machine intended use.
-  Only people familiar with this machine and well aware of its hidden risks can use, repair and maintain it.
-  The manufacturer is not responsible for damages caused by non-authorized changes made on this machine.
-  Besides warnings mentioned in this manual, please, also comply with general regulations on safety and accident prevention of EEC and the country in which this machine will be operating.

## 3-WARRANTY

If in doubt on causes and possible solutions for a certain trouble, please, call our authorized dealer.

This should be absolutely done during the warranty period, since any repair made by non-authorized workshops makes this warranty null and void.

Bear always in mind that the authorized dealer has all special tools, technical specifications and spare parts necessary for properly fixing the machine.

Therefore, he should be called in case of any doubt on maintenance specifications and/or procedures. Some pages of this manual might not be perfectly right due to misprints or production changes. For this reason, call Your dealer before being perfectly familiar with this machine and personally maintaining this machine. For further information on use and maintenance of this machine, ask your authorized dealer for the proper technical manuals.

Our materials have 12 months warranty (coverings and electrical parts are not included). The manufacturer agrees on replacing those parts considered as faulty free of charge. Purchaser will be charged with labour costs – necessary for repairing the machine – and possible transport costs. Both the warranty claim and the returned piece should always be addressed to our Spare Parts Department and accompanied by regular freight bill mentioning all the machine details.

As far as materials available on the market – especially engines – are concerned, regulations of our supplier will apply and applications for possible technical service should be addressed to the local specialized technical service centres.

## 5 – MACHINE START

### **READ CAREFULLY THE WHOLE MANUAL BEFORE STARTING THIS MOTORHOE**

#### **NOTE:**

The manufacturer aims at ever improving both design and quality of his products. As a consequence, even though this manual includes latest and most up-dated information available when printed, there might be small differences between Your power hoe and the information reported in this manual. For any doubt or uncertainties on this manual, please call our authorized dealer. This manual is integral part of this power hoe and should always accompany this machine when sold.

## 6 - USE



### INFORMATION ON A SAFE USE OF THIS MACHINE



- 1) This machine has been designed and manufactured for being used by one operator only, and is driven by means of the appropriate handlebars. Any other use is not permitted.!
- 2) Before operating the machine, read the Use and Maintenance manual thoroughly, so that you are fully aware of all the operating controls and safety aspects of the machine.
- 3) Do not under any circumstances transport people or objects on the machine.
- 4) Always ensure that the machine's safety devices are correctly mounted and in perfect working condition..
- 5) Before use, check that all the controls, in particular the clutch, and the Motorstop are in good working order.
- 6) Any modifications or spurious parts being fitted without the Manufacturer consent will nullify the guarantee, and any possible resulting damage will not answered for.
- 7) This machine must not be used by children or inexperienced persons.
- 8) Before operating the machine, check that the area is clear and free of debris and that there are no people within the working area (danger zone). The operator, will be held responsible for the safety of third parties, if these are found within the working area of the machine. Do not use the machine under these conditions.
- 9) keep clear of cutting blades at all times while the machine is in operation. Pay particular attention when reversing; keep hands and feet clear.
- 10) Use the machine only with the handles in the correct working position. This allows a safe working distance between the operator and operating area.
- 11) Use only original accessories and spare parts to guarantee safety and correct operation of the machine.
- 12) Stop engine before refuelling and remove ignition key (if fitted).
- 13) Handle the fuel with care to avoid spilling on the machine; clean any spillage immediately.
- 14) Never refuel in confined places, in vicinity of open flames or near the source of sparks. No smoking!
- 15) Before starting the engine, check that all the controls are in the idle position.
- 16) Do not smoke when starting the engine!
- 17) Do not run the machine in a confined area as toxic exhaust gas can kill.
- 18) Plan your work before commencing.
- 19) Do not use the machine when you are tired.
- 20) Engage the clutch gradually; sudden engagement could cause the machine to rear up.
- 21) The area next to the engine exhaust will most likely reach temperatures above 80°. **Attention!** Danger of scalding.
- 22) Always wear close fitting clothes and anti-slip shoes or boots. For safety reasons avoid using loose clothing. .
- 23) Make regular checks that all bolts and nuts are well tightened.

- 24) Keep the area of work clear and clean.
- 25) Only use the machine in clear visibility.
- 26) Avoid working with blunt cutting blades. .
- 27) Pay maximum attention and use good sense when operating the machine.
- 28) If you hit any objects during work, stop the machine and check for any damage immediately.
- 29) During movement to and from the area of work, disengage the Power Take Off. (P.T.O).
- 30) Do not under any circumstance attempt to by-pass the motor-stop device or remove the disengagement device. The machine would result having no safety precautions and would be extremely dangerous.
- 31) The machine's speed must always suit the conditions and the environment.
- 32) Do not perform cleaning or maintenance operations of the machine when the engine is running.
- 33) Avoid sharps turns when travelling up hill, down hill or across steep slopes.
- 34) In steep descents, do not disengage the drive and do not change gear.
- 35) When possible, avoid working up or down hill .Always travel across the slope.
- 36) Do not work on very steep slopes (max.30%).
- 37)Avoid overfilling the fuel tank.
- 38) If there is fuel in the tank, avoid tilting the machine during maintenance or adjustment.
- 39) During use, keep the hot sections of the engine (i.e. cylinder head, exhaust, etc.) clean to avoid a build up of debris that will overheat the engine.
- 40) Whenever possible, stop the machine on level ground.
- 41) If leaving the machine for a long time, ensure it is inaccessible to children and inexperienced people. Close the fuel tap (if fitted).
- 42) Do not leave the machine with the engine running.
- 43) The maintenance instructions of the machine must always be carefully followed and worn parts replaced when necessary.
- 44) If the machine is to remain unused for some time, clean it accurately and insert the appropriate protections.
- 45) Apart from the previous items, it is necessary to take heed of the specific safety norms in force in the Country where the machine is operating.

## 7 – PACKAGE OPENING



**CRUSHING DANGER !!**

**NB: MACHINE NET WEIGHT  
Kgs. 40.**

- Open the carton from the upper side
- Keep away all the free elements (for the handlebars assembling see chapter 13 pag. 7, for the tiller set assembling see chapter 14 pag. 8)
- Keep away the machine's body

### **ATTENTION**

When You are keeping away the machine from the carton, pay attention to use adequate strips to the weight of the machine and **respect scrupulously the safety rules.**

**EFFECT THE CORRECT ASSEMBLING of the free elements on the machine's body**

(see chapters 13 et 14 for assembling



**Fig. 1**

## 8 – WARNING SIGNS



**“WARNING”** Comply with what specified in control warning and warning signs.



**“DANGER”**  
Risk of fire.



Read use instruction !!



**“DANGER”**  
Blades and rotating parts in operation. Keep hands and feet away...



**“DANGER”**  
Risk of burns.



**“DANGER”**  
Keep children away from the machine.

## 9 – CONTROL SIGNS



**Engage tiller movement**



ACCELERATOR HANDLE WITH ENGINE STOP AND STARTER.



FORWARD (F) AND REVERSE SPEED (R) SELECTOR  
(**NEUTRAL** in central position)

**ATTENTION**

THIS SELECTOR IS LOCATED DIRECTLY ON THE GEARBOX LEVER

## 10 – TECHNICAL FEATURES

### MAIN PARTS

1. Accelerator handle with STOP engine.
2. Transmission Engaging/Disengaging Lever – SAFETY DEVICE
3. Handlebars
4. Handlebars adjuster
5. Engine pull start
6. Tank – Fuel filler (See engine instruction booklet)
7. Front wheel (accessory)
8. Cover tiller protection
9. Tiller
10. Extension Cover tiller protection
11. Spur
12. Support spur
13. Gearbox lever

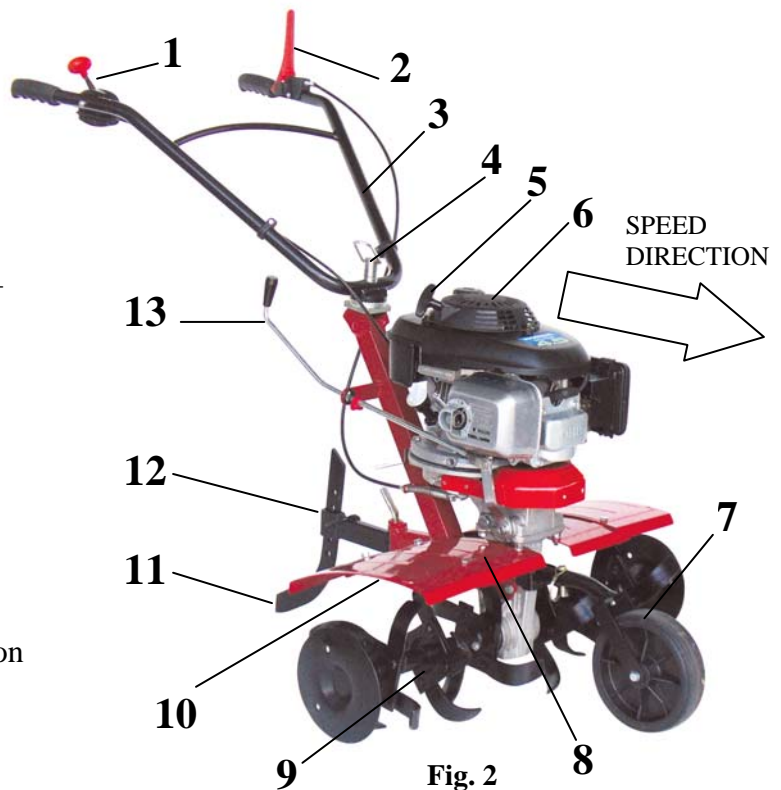


Fig. 2

## 11 – TECHNICAL DATA

### 4 stroke engine

Recoil starter – Transmission by gears – Clutch by belt with lever engaging/disengaging – 1 forward speed + 1 one reverse – Handlebars adjustable in any position – Tiller protection cover with extension – Safety device for advancement stopping if the operator is absent

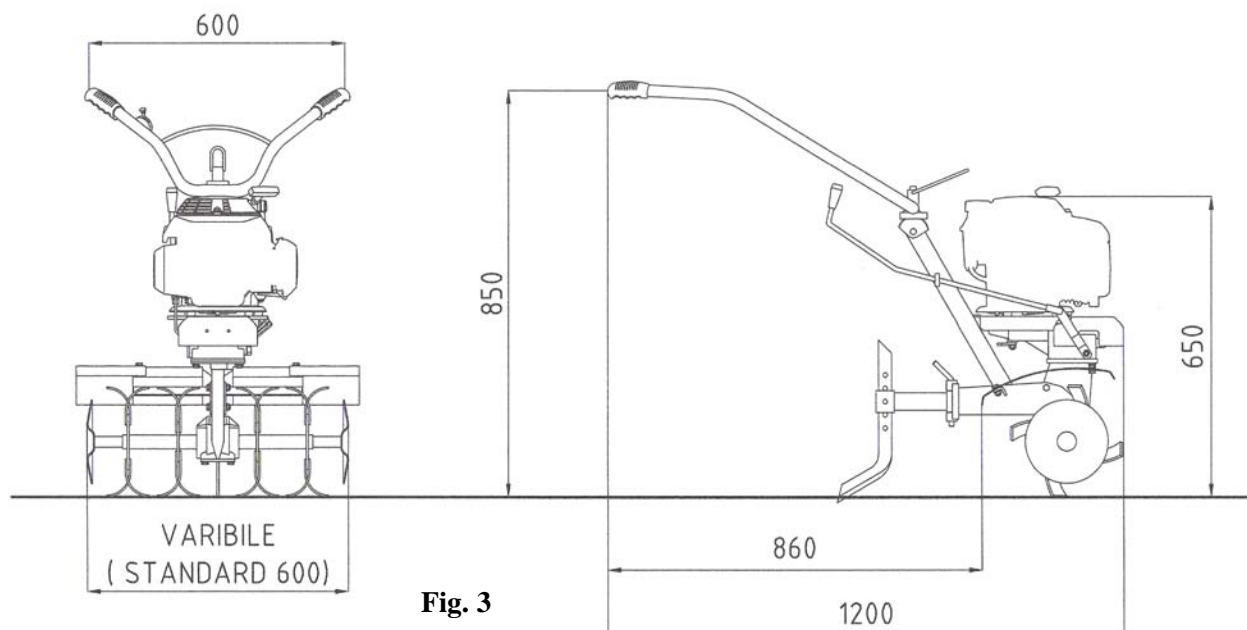


Fig. 3

## 12 – PRECAUTIONS BEFORE STARTING

1. Check the engine oil level; engine with no oil enough can be seriously damaged (please, **read the manufacturer's instruction-booklet to get more information**).
2. Always check if there is enough fuel in the tank.
3. Check the transmission oil level, cap “**B**” **fig. 5**.
4. Check the correct handlebars adjustment and blocking.
5. Assemble the tiller covers and extensions..
6. Assemble the tiller.
7. Assemble the spur support and spur.

For the points 4 and 7 see the successive paragraphs.



**N.B. Do always the above when the engine is switch off!!**

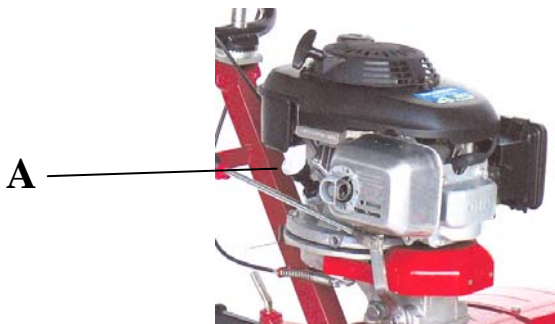


Fig. 4



Fig. 5

## 13 – HANDLEBARS ASSEMBLING

Is necessary thread into the pivot the support handlebars:

- the adjustment toothed support “**C**” **fig. 6**,
- handlebars
- washer “**RS**” **fig. 6**,
- and finally the fixing nut “**D**” **fig. 6**.

It is possible block the handlebars in the wished position closing the nut “**D**” by the handle.

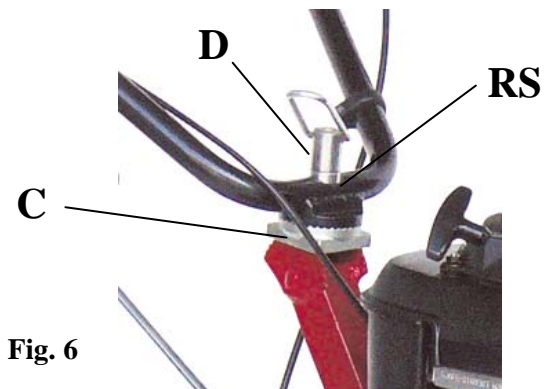


Fig. 6

**ATTENTION!**

The toothed support “**C**” must be turned with the round teeth upward. Furthermore the teeth on the support must joint with the teeth on the handlebars base.

## HANDLEBAR ADJUSTMENT

### IMPORTANT!

Handlebar is adjustable in height and on the side ways with the possibility to block it in the wished position : do this by the nut “**D**” **fig. 6**.,After blocking the handlebars, check that teeth of the blocking device are well connected.

**Check the correct blocking periodically, especially every time before starting the work.**





## 14 – ASSEMBLY

### TILLER PROTECTION COVERS



#### IMPORTANT!



The tiller is protected by a cover that **MUST BE ALWAYS FITTED DURING THE WORK WITH THE MACHINE.**

In compliance with safety and accident prevention regulations, protection covers must be always fitted before starting the use of the motorhoe by the **fixing screws, see fig. 7.**

During every use verify the correct fixing.



Fig. 7 Tiller protection covers and fixing nuts.

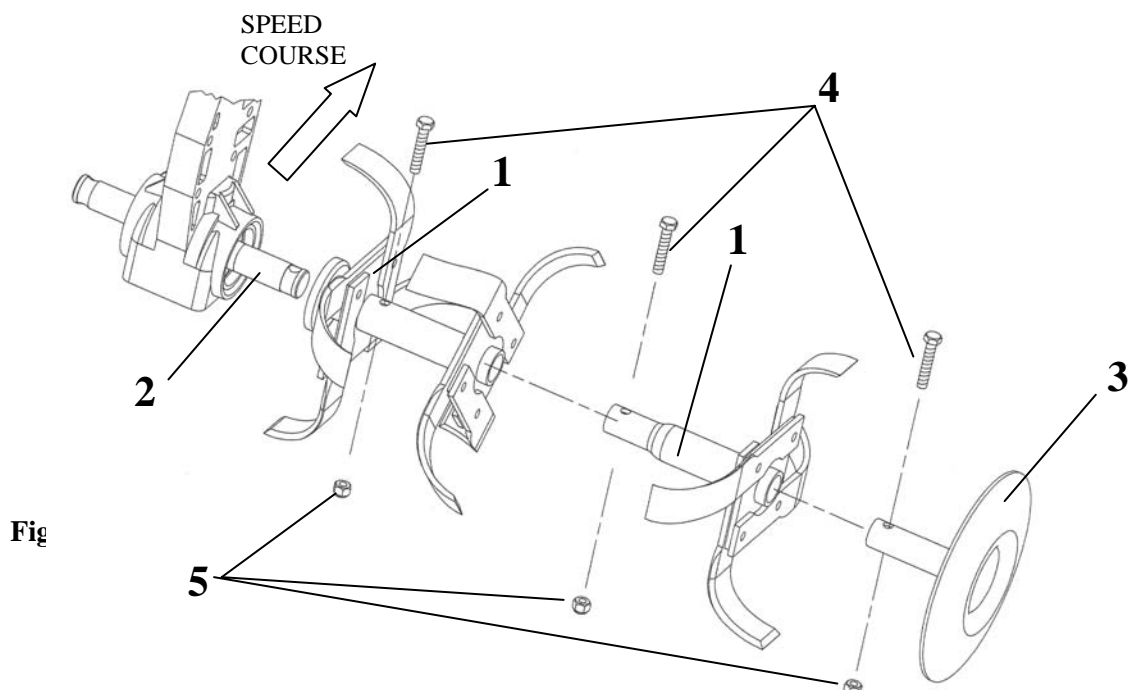
### TILLER

The tool-holder shaft has a got a cylinder profile so that the tiller may be quickly fitted. (see fig.8).

- Clean tiller-hubs (1), the tool-holder shaft (2) and lubricate with grease in order to make easy its assembly and disassembly.
- Fit tiller hubs (1) and disc (3) on the tool-holder shaft fixing them by screw (4) and nut (5).

#### NOTE

The cutting part of blades must be always put towards the running direction.  
Each time you start working verify that screws and nuts are well tightened.



## 15 – ENGINE START-UP

Follow the instructions contained in the engine's **USE AND MAINTENANCE** booklet..

Before starting the engine up, always check the following :

- There is fuel in the tank;
- oil is at the right level in the gear-box (**fig. 5 part. B**);
- **Hold the clutch control lever lifted (fig. 11 part.2), NEVER FASTEN UP OR BLOCK THIS LEVER!!**
  - **Make sure that the gear shift lever is in**
  - **NEUTRAL position (see control signs).**
- Put accelerator lever in starter (**fig. 10**, lever with correspondant sign) position ;
- Hold the start handle (**fig. 9 part. E**) of the recoil starter with one hand only and pull smoothly until the ratchet gear engages and pull sharply;
- Once the engine starts, the rope has to be left gently as far as completely wound;
- Once the engine starts – put the accelerator lever (**fig. 10**) to the lowest gear position and let the engine warm up.

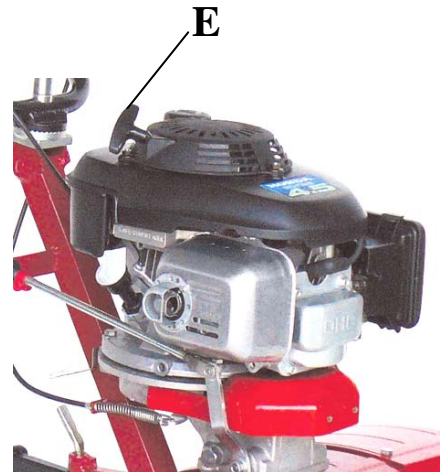


Fig. 9

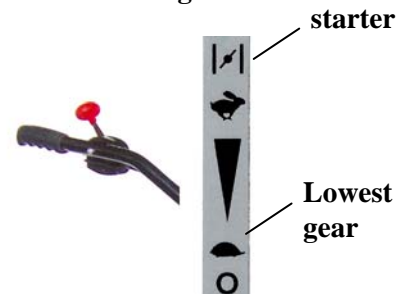


Fig. 10

## 16. SAFETY DEVICES

The main function of the lever “2” **fig. 11** is to put the tiller in movement.

This safety device disengage the tiller if the operator , for any possible reason, leave the hand “F” **fig. 11**.

**IS VERY IMPORTANT, BEFORE USING THE MOTORHOE, VERIFY CAREFULLY THE RIGHT FUNCTIONALITY OF THE SAFETY DEVICE (. IF YOU HAVE ANY DOUBT ABOUT THE CORRECT FUNCTIONALITY, CONTACT OUR AUTHORIZED AFTER SALE SERVICE POINT.**

**IS FORBIDDEN FASTEN UP OR BLOCK THE CLUTCH LEVER WITH THE HANDLE ”F”**



**IMPORTANT!**

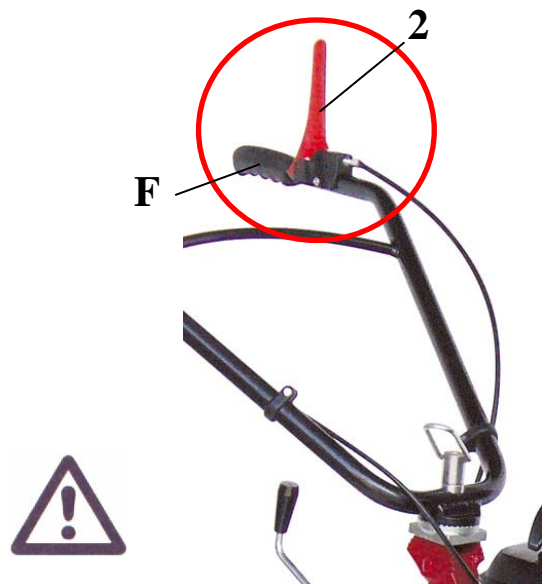


Fig. 11

## 17 – CONTROLS WORKING

### ACCELERATOR LEVER

For engine Honda GCV 135:

- Lever completely behind MIN
- Lever completely forward MAX
- Lever in MAX position and also in STARTER position
- Lever completely down stops the engine.

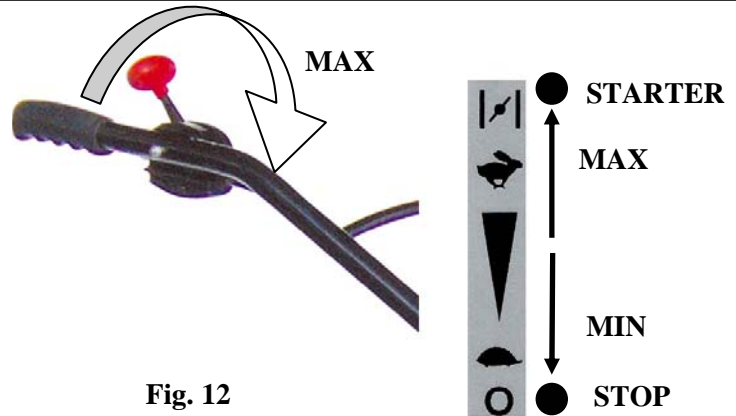


Fig. 12

### CLUTCH LEVER

- Lever (**part.2 fig.13**) down: transmission engaged, motorhoe goes **forward** or **back**, depending from the speeds **engaged**;
- Lever (**part.2 fig.13**) up: transmission disengaged, the motorhoe stops;
- For adjust the belt's tension, act on the adjuster (**part. 1 fig. 13**).

**IS VERY IMPORTANT BEFORE USING THE MOTORHOE, CHECK THE CORRECT FUNCTIONALITY OF THE SAFETY DEVICE.**

**DON'T FASTEN UP OR BLOCK THIS LEVER**

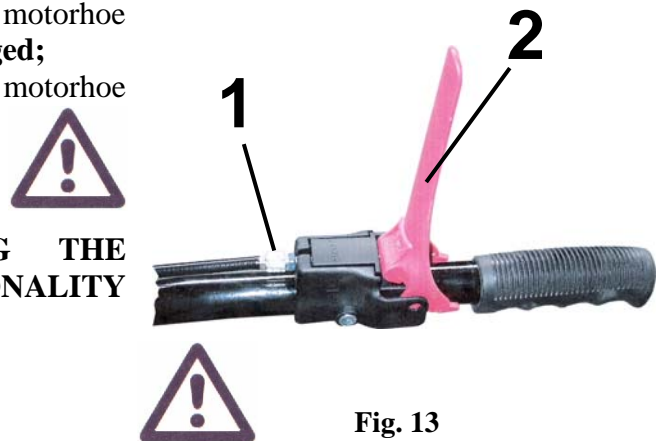


Fig. 13

### SPEEDS ENGAGEMENT

1. Keep the clutch lever (**part. 2 fig.13**) up.
2. Put the control speeds lever (**part. 3 fig.14**) in the wished position. See the speeds sticker on the gearbox rod (**fig.14** and control signs);
3. Speed up the engine by the red hand (**fig.12**) and put down gradually the clutch lever (**part. 2 fig.13**) for putting in movement the motorhoe..
4. Keep the clutch lever up for disengage the speeds and put the lever (**part. 3 fig.14**) in neutral position.

#### WARNING

**Is always necessary put the engine at the lowest gear for changing the speeds, leaving up the clutch lever.**

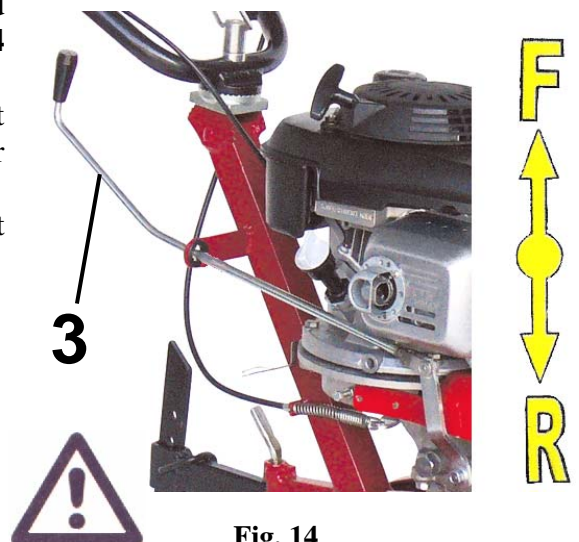


Fig. 14

## 18 - ADJUSTMENTS

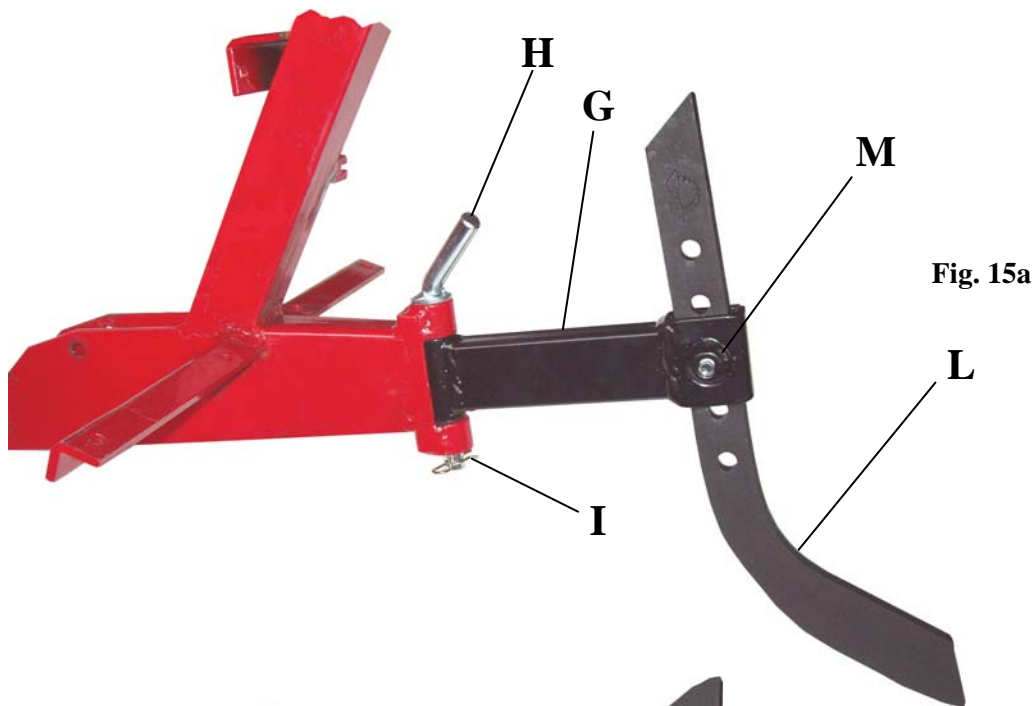
### SPUR AND SPUR COUPLING

The spur coupling “G” **fig. 15a** must be assembled to the rear part of the motorhoe’ body by the spline “H” **fig. 15a**, fixed with the key “I” **fig. 15a**.

The spur “L” **fig.15a** must be threaded inside the hole of the spur support and fixed by the screw M”.

The spur coupling can roll on the key so that the spur is free to swing for a certain angle.  
So is possible to adjust. :

- The spur’s deep.
- Turned spur solution, see **fig. 15b**.



## BELT TENSION AND CLUTCH LEVER

Remove protection cover (**fig. 16 Part. N**) unscrewing the 2 screws (**fig. 16 Part. O**). Verify that belt (**fig. 17b**) is well pulled with clutch lever down (**fig. 13 e 17a Part. 2**) while with the same lever up, belt is free to move inside pulleys (**fig. 17b Part. PM e PD**). On the contrary it is necessary put the engine in its right position unscrewing its screws (**fig. 16 Part. Q**) by sliding it along slots of its support. Done this adjustment fix the engine and fit the protection cover again (**fig. 16 Part. N**).

### IMPORTANT!

It is better that this adjustment is done by a specialized person.

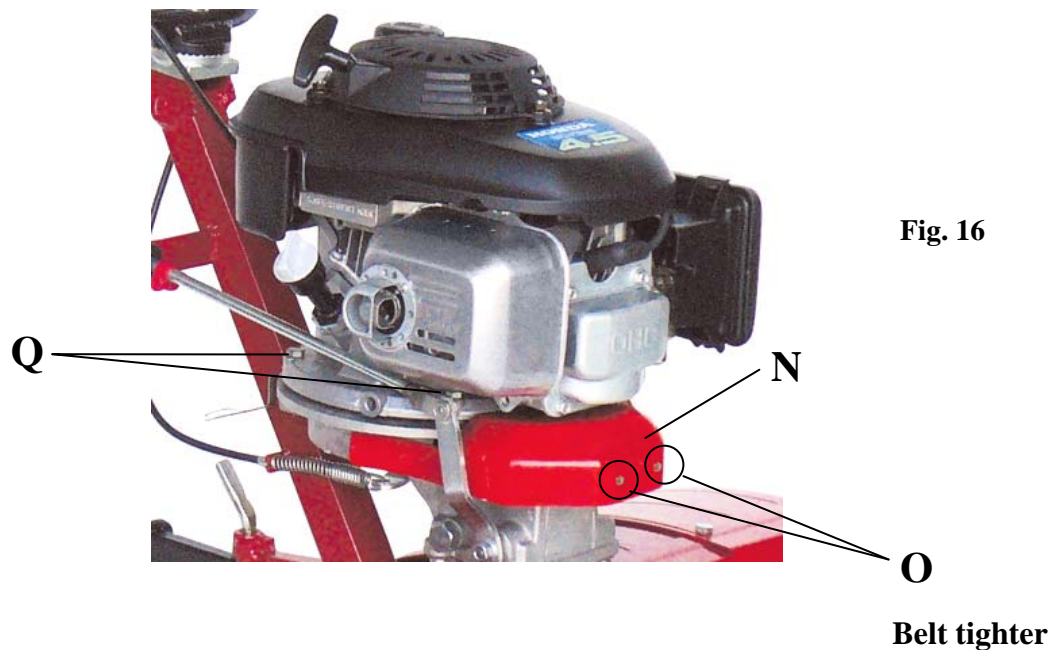


Fig. 16

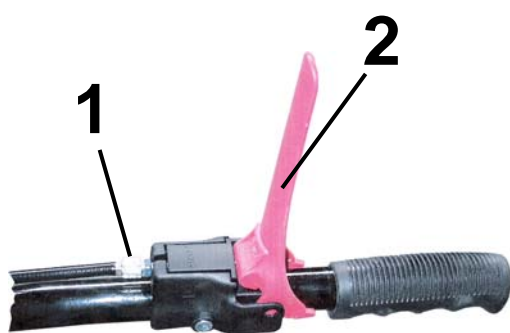


Fig. 17a

EP Engine pulley

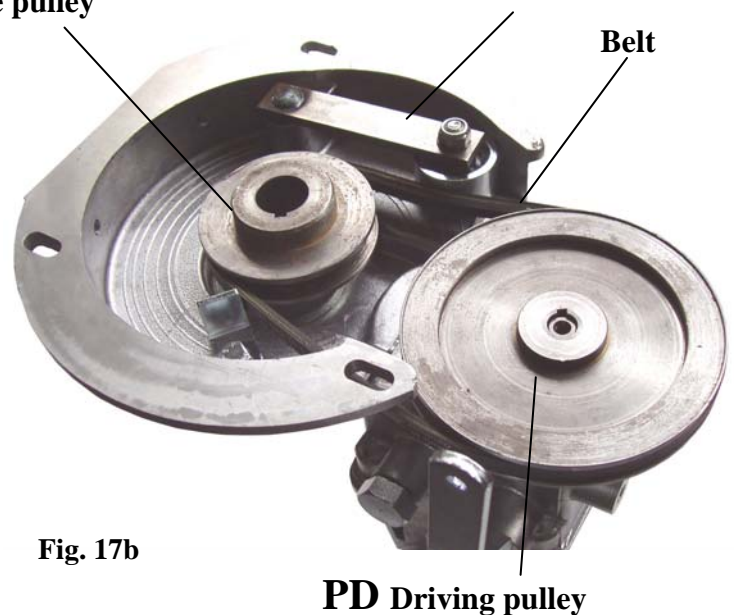


Fig. 17b

PD Driving pulley

The belt tension is granted during the working from the belt tighter, controlled by the lever (**part. 2 fig. 17a**). So, during the belt tension adjustment can be necessary act also on the lever's (**part. 2 fig. 17a**) adjuster (**part. 1 fig. 17a**).

# 19 - MAINTENANCE

## LUBRICANTS

### Lubricants types

**ENGINE:** Follow carefully the instructions contained in the relevant use and maintenance booklet.

**TRANSMISSION:** AGIP DIESEL SIGMA SAE 30.

## IMPORTANT!

### TRANSMISSION LUBRICATION

Check the transmission oil level by the screw “**B**” located on the left part on the gearbox (**fig. 5-18**). Never put oil beyond the level for the correct working of the clutch.

**CHECK THE OIL LEVEL EVERY TIME THAT YOU ARE GOING TO USE THE MOTORHOE.**

Change oil after 300 working hours, draining it by the cap “**S**”, located on the lower part on the support crown (**fig. 19**). For do this, is necessary unscrew the screws “**T**” that closes the cap. Put fresh oil by the cap “**U**” **fig. 18**, that is also a breather cap.

All the transmission and gearbox elements are in oil bath. So is necessary check the oil level by the screw “**B**” and add fresh oil by the cap “**U**”, located on the left part on the gearbox (from the driver’s side).

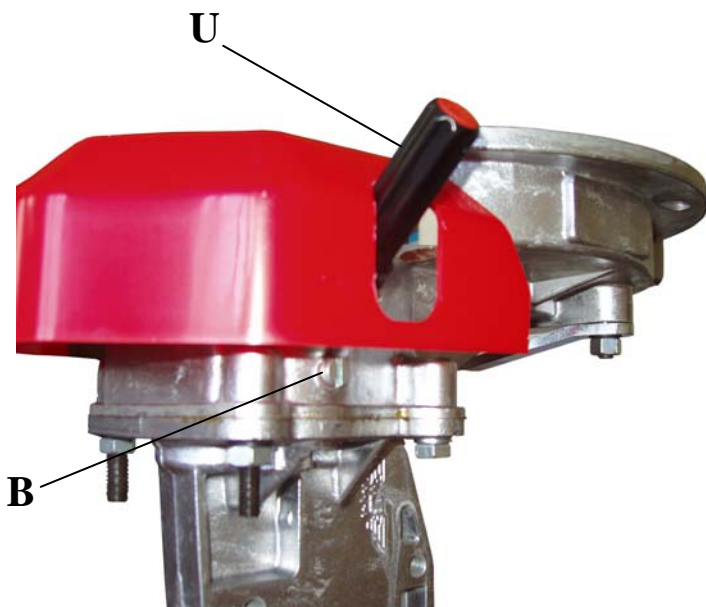


Fig. 18

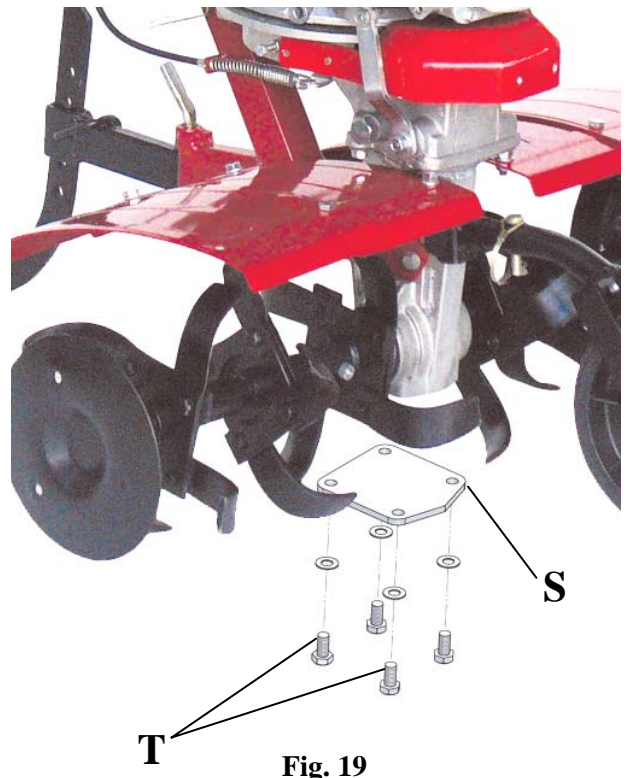


Fig. 19

**IF YOU NEED SPARE PARTS PLEASE PUT YOU IN TOUCH WITH**



## **HOW TO DO IT !!**

**CLEARLY SPECIFYING IN WRITING**

- a) **NAME OF THE MACHINE**
- b) **FRAME NUMBER**
- c) **POSITION, CODE NUMBER AND DESCRIPTION**
- d) **QUANTITY**

**FOR ANY SPAREPART YOU NEED CONSULTING  
THE RELEVANT SPAREPARTS BOOK.**