

BENASSI[®]

SpA



INSTRUCTION MANUAL

TILLER

BL 6000



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INTRODUCTION

- Dear user, we thank you for preferring a BENASSI product.
- We are confident that the top performance and the easy use of our machine will satisfy you.
- This machine is the result of a long experience working at the top quality standard and using first quality material.
- Carefully using and servicing this machine, you will certainly get satisfactory performances for a long time.
- Please read very carefully this booklet before using your tiller.
- Pay special attention to the instructions marked out by the following sign:



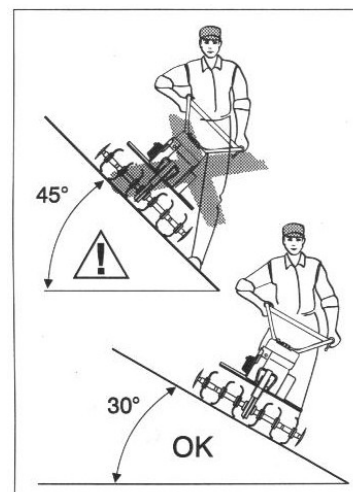
- Failure to comply with these instructions can cause fatal injury (TRANSLATED FROM THE ORIGINAL MANUAL).

SAFETY RULES



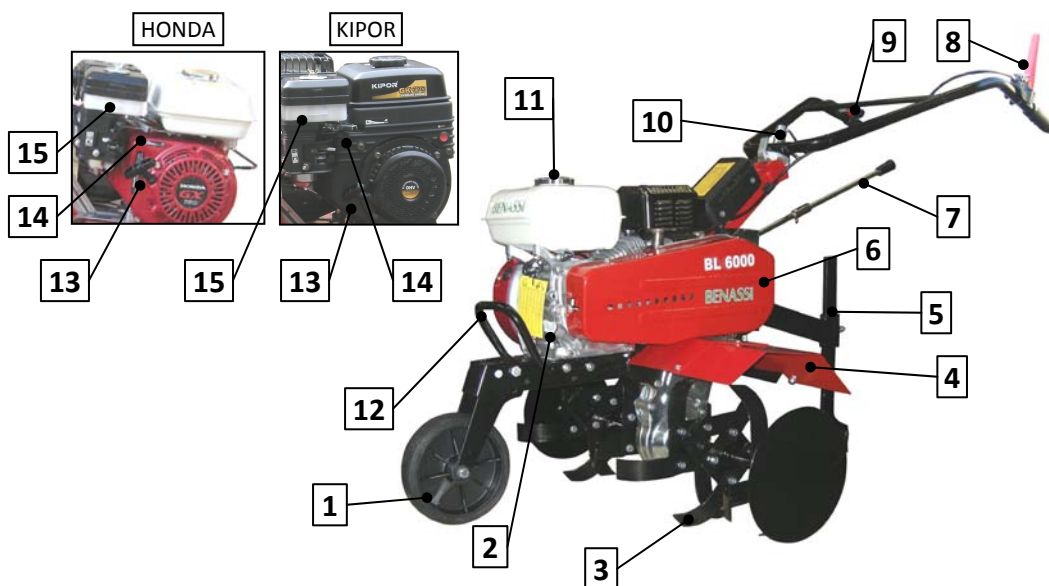
WARNING: Please, read very carefully this booklet before using your machine. Carefully using and servicing this machine, you will certainly get satisfactory performances for a long time. Failure to comply with these instructions may CAUSE fatal injury TO THE OPERATOR OR DAMAGE TO THE MACHINE.

- Please read carefully the operation and maintenance manual supplied with the machine.
- The use of the machine is forbidden to persons younger than 16 years.
- The operator is responsible of any possible damage and he should always drive the machine carefully and safely.
- Any person unfamiliar with the machine who has never used it is obliged to read first the instruction manual.
- Before carrying the machine always empty the fuel tank.
- Before leaving the machine be sure that it is fully stopped.
- Never use the machine barefoot or wearing sandals, always wear heavy shoes and long trousers. Always inspect the area where you want to work taking off stones, branches, wires and any other thing which could be dangerous.
- Before start working, make sure that a radius of minimum 5 mt. is completely free.
- Clean any possible leakage of fuel.
- Always fill up the tank when the engine is off in an open space far from fires or any heating source and don't smoke during this operation.
- Before starting the machine make sure that you can quickly stop the engine and that you are familiar with the control levers.
- Never allow the engine to run in enclosed spaces where the highly toxic carbon monoxide could not evacuate.
- Never start or use the machine if not completely assembled and equipped with the safety devices. Never work without the tiller protection guards.
- Never fix or clean the tiller blades or any other tools when the engine is running.
- Attention! Don't work on slopes exceeding 30%.
- **For accidents caused by failure of these rules we will not be held liable.**



KEY TO MACHINE PARTS

- 1- Transport wheel
- 2- Engine oil cap
- 3- Tillers
- 4- Tiller protection
- 5- Braking spur
- 6- Belt cover
- 7- Gear lever
- 8- Clutch lever
- 9- Throttle lever
- 10- Handlebar adjustment
- 11- Fuel tank cap
- 12- Handle
- 13- Recoil starter
- 14- Choke lever
- 15- Air cleaner



IDENTIFICATION AND TECHNICAL SPECIFICATIONS

ATTENTION: FOR THE ENGINE TECHNICAL SPECIFICATIONS, SEE THE ENCLOSED OWNER'S MANUAL OF THE ENGINE.

- Acoustic power level LwA = from 92 dB (A) to 105 dB (A)
- Noise level at operator's ear : LpA = from 81 dB (A) to 90 dB (A)
- Test condition: 1,6 mt at the centre of the handlebar
- Handlebar vibration according to ISO 1033: value from 4,76 m/sec² to 7,00 m/sec²

CHARACTERISTICS OF ALL THE ENGINES FITTED:

- Exhaust guard
- Recoil starter
- ENGINE LUBRICATION: see the owner's manual of the engine
- Engine oil quantity: see the owner's manual of the engine
- Engine fuel: unleaded petrol
- Safety device for both forward and backward gear stopping the tiller.
- The gear has got two forward speeds and one reverse, a belt joins the transmission to the engine and an oiled chain to the tiller.

SPECIFICATIONS WITH ENGINE RUNNING AT 3200 RPM

I forward = 82 rpm
II forward = 113 rpm
Reverse = 61 rpm

- Speed gear in oil bath
- Belt clutch with tightener
- Tiller with hexagonal shaft and reinforced blades

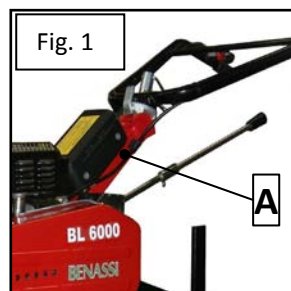
- Guidance handlebars can be adjusted in many positions (vertical and side adjustment).
- The tiller is 80 cm wide.
- The spur is adjustable

APPLICABLE ACCESSORIES

- Ridger with attachment
- Thin iron wheels (Ø 320) are suitable when using the ridger

CE MARK

To identify the machine (serial number, engine, weight, power) have a look at the number plate put on the machine as in (Picture 1 Ref. "A").



TILLING UNITS:

The blades are adjustable and provided with a protection mudguard. In picture number 2 you can see the possible working width: 60 – 80 cm with the extensions and the side plates fitted.

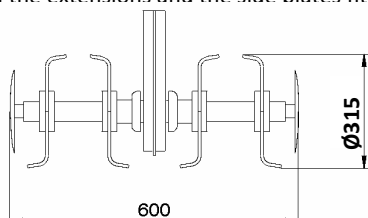
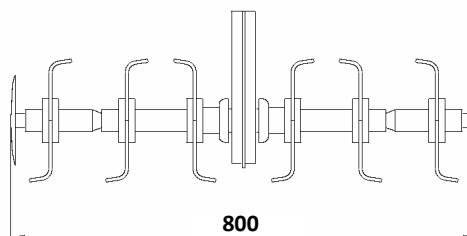
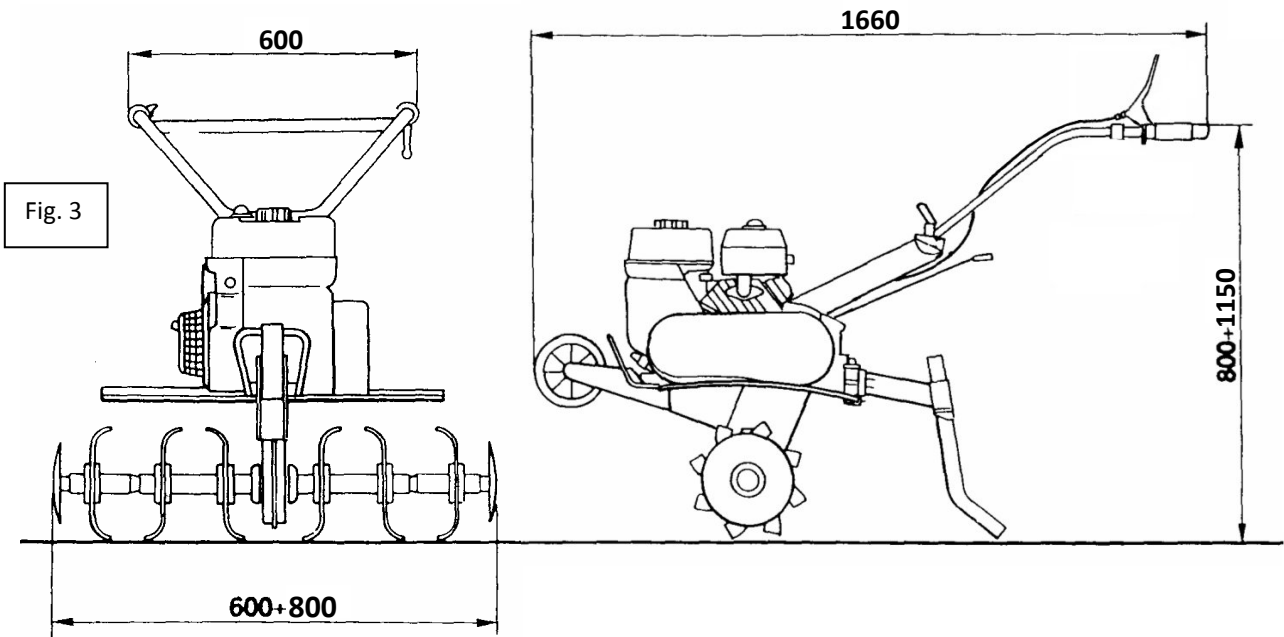


Fig. 2



DIMENSIONS

The dimensions of the tiller are shown in picture 3.

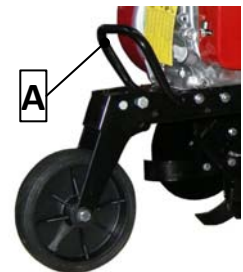


PACKING AND TRANSPORT

- ◇ Length: 80 cm.
- ◇ Width: 50 cm.
- ◇ Height: 70 cm.

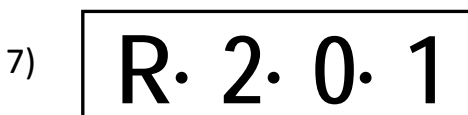
- Take the machine out of the carton box.
- Fit the two tilling units to the main shaft using the delivered pins already assembled on the tilling units.
- Fit the arm with spur in its place using the delivered pin.
- Fix the handlebar to the handlebar support using the parts already assembled on the handlebar support itself.
- The small wheel holder is fitted to the frame by means of a screw nut and a splint pin.
- Fit the two guard-extensions to the main tiller protections fitted on the body of the machine using the proper screws and nuts. The protection guards should reach a width of 60 cm according to the CE requirements.
- During the transport the handle can be left unassembled by means of the threaded bush that fix it to the handlebar support. The tiller is equipped with a front handle (see Pict.4 Ref. "A") in order to be able to lift and to transport the machine easily.

Fig. 4



STICKERS FOR INSTRUCTION AND SAFETY

Please find here below the stickers put on the machine. It is very important that they are always clearly legible to prevent any accident.



In case the stickers are damaged it is absolutely necessary to replace them by ordering the original spare parts.

STARTING AND STOPPING

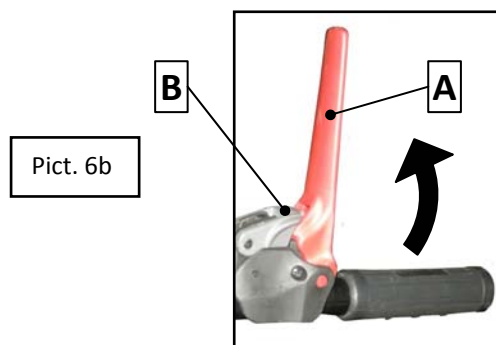
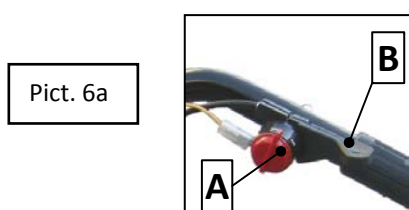
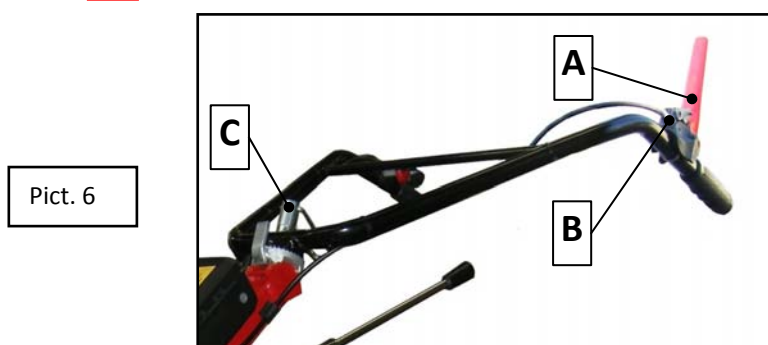
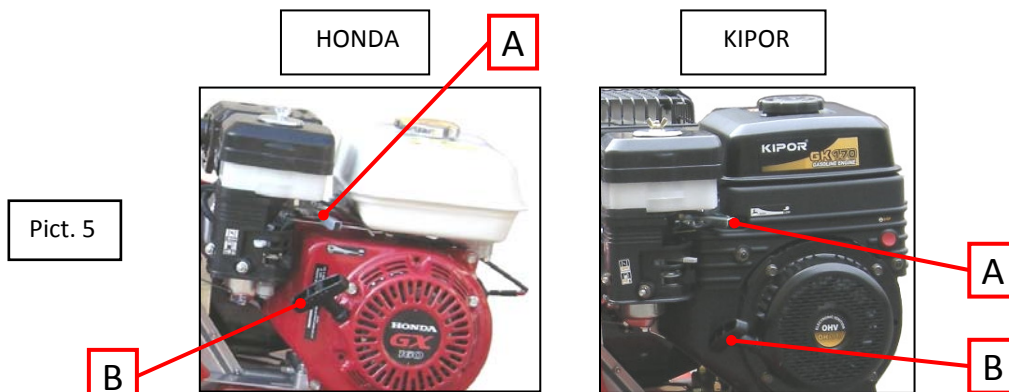
Whenever you are starting the engine of the machine, follow these instructions very carefully:

- Check the engine oil level: A BRAND NEW MACHINE IS DELIVERED WITHOUT OIL IN THE ENGINE, THEREFORE YOU SHOULD FILL IT UP TO THE LEVEL ON THE DIP STICK OF THE OIL CUP.
- Please read carefully on the booklet the ENGINE USE AND MAINTENANCE concerning the “operations before starting”.
- Start the engine only in open spaces.

CLUTCH LEVER PROVIDED WITH SAFETY DEVICE (see picture 6b)

- Lever (“A”) pulled: to get the lever working release the safety device (“B”), now the clutch is engaged (the tiller moves forward or backwards depending on the engaged gear)
- Lever (“B”) released: clutch lever disengaged (the tiller stops).

1. Pull the choke lever (Pict.5 Ref. “A”).
2. Turn the throttle lever to the “MAX” position (Pict. 6a Ref. “A”). The switch (Ref. “A” Pict.6a) must be “ON”.
3. The clutch lever (Pict. 6b Position “A”) must be disengaged.
4. Pull the starting rope by the handle (Pict. 5 Ref. “B”), firstly smoothly and then strongly: when you feel some resistance don’t leave the handle but help the recoiling of the rope with your hand.
5. When the engine runs move the choke lever to the initial position and the throttle lever in the mid-position (Pict. 6a Ref. “B”).
6. To stop the engine move the switch to the “OFF” position (Fig.6a Ref.”A”).

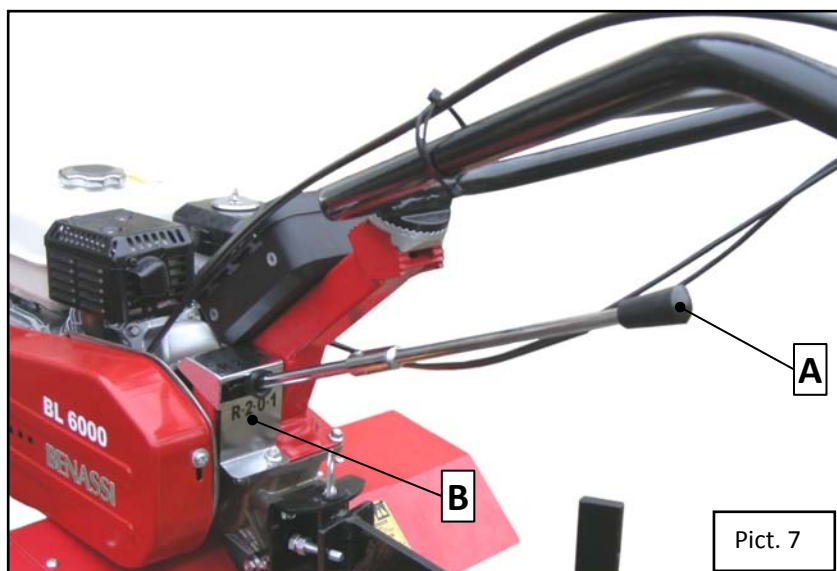


USE AND ADJUSTMENT

- The tiller is equipped with a mechanical transmission that allows two forward speeds and one reverse.
- When the machine is standstill to move forward simply engage the gear lever (Pict.7 Ref. "A") in the first or in the second speed (Pict.7 Ref. "B") and then press down completely the lever (Pict.6b Ref. "A") to start the movement.
- When the machine is standstill to move backwards engage the gear lever (Pict.7 Ref. "A") in the position "R" (Pict.7 Ref. "B") and then press down completely the lever (Pict.6b Ref. "A") to start the movement.
- The clutch cable must be adjusted in a way that allows the belt to be put under tension when the lever is situated at about 1 cm from the knob. To this purpose you have to regulate the register of the cable next to the lever (Ref. "B" Pict.6).
- When the lever (Pict.6b Ref. "A") is released the machine stops immediately while the engine is running.
- The handlebar can be adjusted by unscrewing the blocking lever (Pict.6 Ref. "C"). Adjust the handlebar in the desired position and then lock it again.
- The tiller is 80 cm wide, it is composed by 3 knives + protection plate on both sides. It can be reduced to 60 cm by removing one blade from each sides (see picture 2).
- The sharp side of the blades must be turned towards the front side of the machine.
- We recommend to use the tiller with the side plates because they improve the stability of the machine while working.
- The machine can fit an adjustable ridger which is an optional accessory delivered complete with its own support which should be fitted on the handlebar holder replacing the standard spur and using the same bolt.



CAUTION: IT IS ADVISED NOT TO KEEP THE MOTOR RUNNING WHEN THE MACHINE IS NOT BEING USED FOR ITS SPECIFIC PURPOSE.



Pict. 7

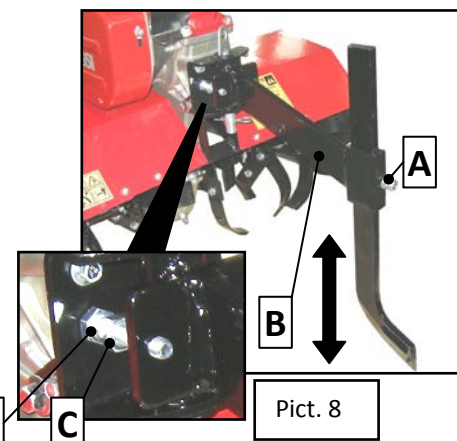
SPUR ADJUSTMENT

To get an optimal tilling work and a right advancement of the tiller adjust the spur as shown in picture 8, this adjustment has to be done on both sides of the machine:

- **Adjustment for hard soils:** loosen nut and screw (A) and lift the spur as to shift back the weight of the machine.
- **Adjustment for soft soils:** loosen nut and screw (A) and lower the spur as to move the weight of the machine towards the blades axle.

To enable the tiller to move slightly sideways during the tilling work, the spur holder arm (B) can be adjusted horizontally as follows:

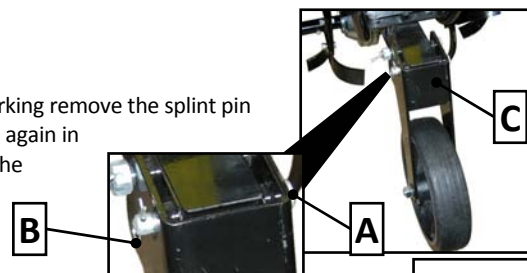
- loosen the nut (C) and adjust the screw (D) as desired, then tighten the nut again. By tightening the screw (D) the spur can move sideways.
- carry out the same adjustment also on the other side of the arm.



Pict. 8

TRANSFER WHEEL ADJUSTMENT

To transfer the machine the small transfer wheel has to be lowered (see picture 9). Before working remove the splint pin (B) and the clamping pin (A), lift up the small transfer wheel (C) and insert the clamping pin (A) again in the lower hole. The clamping pin always has to be locked in the desired position by means of the splint pin (B).



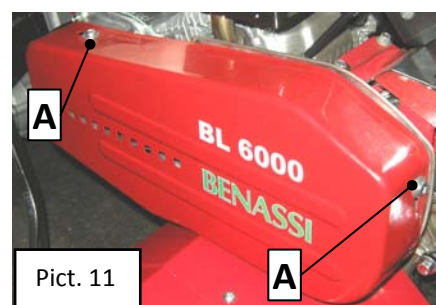
Pict. 9

SERVICING

For the usual engine servicing (oil, filter, spark plug and adjustments) read the engine manual delivered with the machine.

- It is necessary to check periodically the oil level in the gearbox by at least every 50 working hours. If necessary add MPS SAE 80/90 oil.
- The oil has to be changed every 200 working hours. Unscrew the cap (Ref. "B" Pict.10), drain out all the oil letting the cap (Ref. "A" Pict.10) open. Then put back the cap (Ref. "B" Pict.19) and top up with oil (about 1,3 litres).
- The frame has waterproof ball bearings. The transmission in the frame is engaged by two normal grease-lubricated chains.
- All the joints, the cables and the tightener support bolt should be oiled from time to time.
- Keep the machine and the blades clean. Check periodically, at least once a year, that all the screws and nuts are well tied, especially the screws of the tiller (always wear protection gloves while working on the tiller).
- In case of breaking or wear of the belt, you can replace it after taking off the side protection cover by unscrewing 2 knobs fixing the side protection cover (Pict. 11 Ref. "A").
- Take off the belt from the pulleys and install the new belt. After replacing the belt, adjust it to the correct tension following the instructions in the chapter "CLUTCH BELT", then reassemble the cover again.

For any technical repair especially during the guarantee period, it is suggested to apply to the specialised workshops of our dealers.



CLUTCH BELT

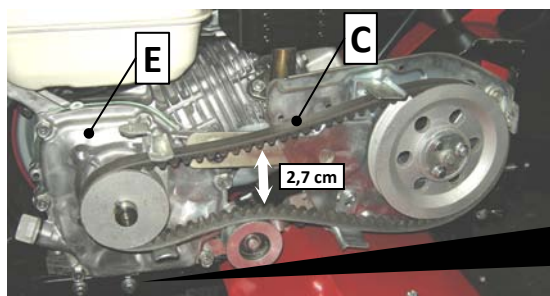
Clutch belt adjustment (see picture 12)

Remove the cover by unscrewing both fastening screws, a second operator will pull the clutch lever (A). Verify that the belt (C) has got a max distance of 2,7 cm and if it doesn't happen proceed as follows:

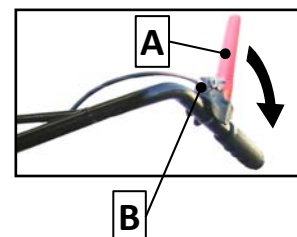
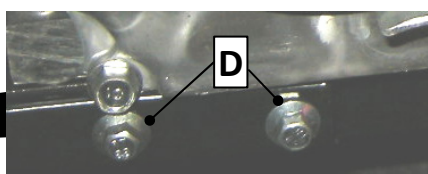
- adjust the belt tension by regulating the clutch lever (A) through the adjusting screw (B) on the left handlebar;
- if the belt distance (C) is still out of the mentioned tolerance, loosen the four bolts (D) clamping the engine and shift the engine (E) forwards till you get the right values.

Clutch belt replacement (see picture 12)

- loosen the adjusting screw (B) on the left handlebar and extract the belt from the pulleys.
- Install the new belt on the pulleys verifying that the max. distance is about 2,7 cm and that the clutch lever doesn't have any clearance otherwise carry out the adjustment described before.



Pict. 12



WARRANTY

Our machines and accessories are guaranteed for 2 years excluding electric and rubber parts.

All the defective parts will be replaced free of charge excluding cost of labour and transport fees which would be at customer's charge.

For any problem regarding the engine or any other part not of our production please refer to the guarantee conditions stated by the manufacturer and apply to their assistance centres.

For any kind of problem or repair please apply to the dealer where you bought the machine.

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