

GB

BENASSI[®] S.p.A.

OPERATION AND MAINTENANCE MANUAL

**POWER HOE SERIES
BL 4500 – BL5000**



CONTENTS

- INTRODUCTION
 - LIST OF MACHINE PARTS
 - IDENTIFICATION AND TECHNICAL CHARACTERISTICS
 - PACKING AND TRANSPORT
 - SAFETY RULES AND LIMITS ON USE
 - STARTING, MOVING FORWARD AND STOPPING THE MACHINE
- OPERATING AND REGULATING THE MACHINE
 - MAINTENANCE
 - WARRANTY
 - TESTS FOR SAFETY
 - CERTIFICATION

INTRODUCTION

- ◇ Thank you for having selected our product. We would like to welcome you among our many customers.
- ◇ We are certain that you will appreciate the performance and the operating ease of this machine.
- ◇ Our wide experience in the sector, the use of top grade materials and the high quality production ensure the flawless efficiency of the machine, which is designed to give many years of use if operated and maintained correctly.
- ◇ We have therefore composed this manual to familiarize you with the use of the machine, its construction, operating features and applications, which will also facilitate maintenance.
- ◇ Pay special attention to the rules in this manual that are preceded by the symbol below:



CAUTION !

- ◇ This symbol indicates that the failure to comply with these rules may lead to personal injury.

LIST OF MACHINE PARTS – BL4500

1. Accelerator and motor stop
2. Safety motor stop
3. Cutter motion engagement-disengagement lever
4. Levers blocking button
5. Handle adjustment
6. Motor start
7. Transfer wheel
8. Cutters
9. Spur
10. Primer (for starting)
11. Tool box
12. Fuel cap
13. Motor oil cap for BL 4500 B

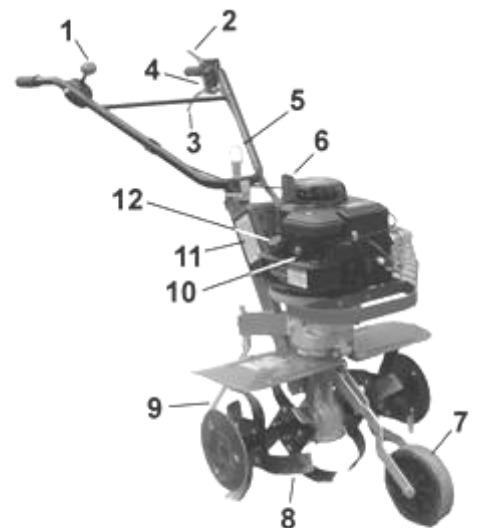


Fig. n. 1

LIST OF MACHINE PARTS – BL5000

1. Accelerator and motor stop
2. Safety motor stop
3. Cutter motion engagement-disengagement lever for forward and reverse
4. Blocking lever in neutral
5. Handle adjustment
6. Motor start
7. Transfer wheel
8. Cutters
9. Spur
10. Motor oil cap
11. Tool box
12. Fuel cap
13. Fuel tank cock

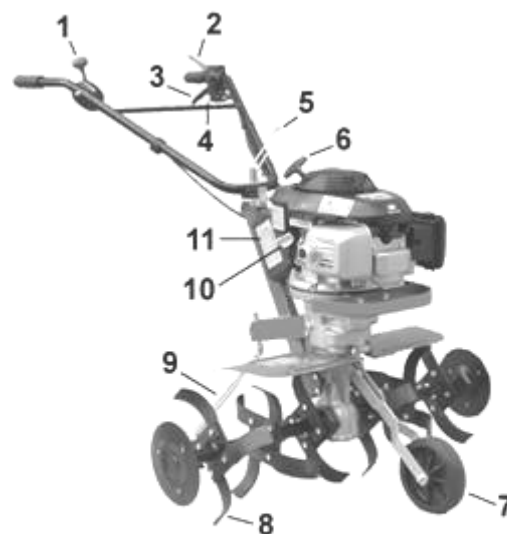
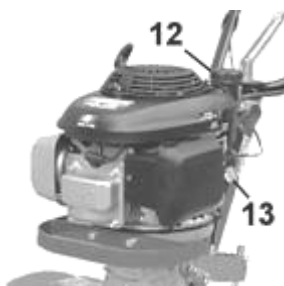
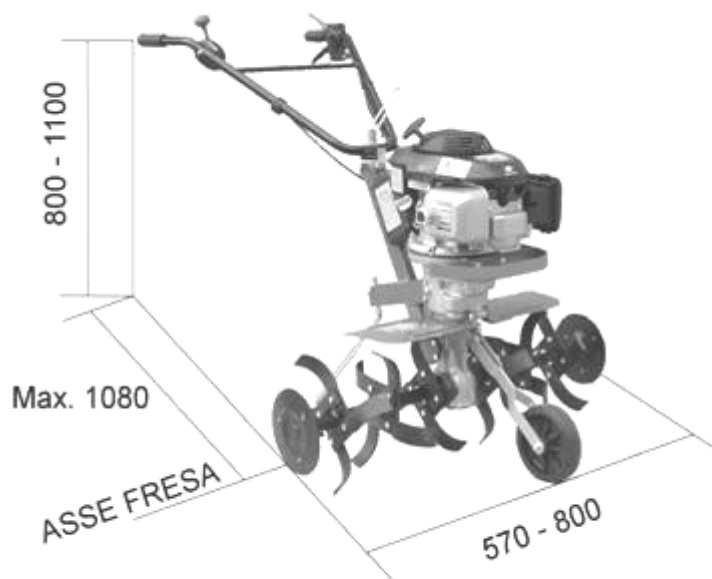


Fig. n. 2



Overall dimensions of BL4500 – BL5000 power hoes (mm)

Fig. n. 3

IDENTIFICATION AND TECHNICAL CHARACTERISTICS

For the engine features, see the engine instruction booklet delivered with the machines

- All motors installed on this power hoe are equipped with a pull start with self-winding cord and muffler protection.
- The 4 stroke engine needs AGIP SIGMA SAE 30 oil. Quantity of oil in motor: 0.6 l

POWER HOE GENERAL SPECIFICATIONS

1. **BL 5000** Oil bath transmission with gears : one forward gear + one reverse.
Oil ROTRA MP SAE 80W90. Oil quantity: 1 kg.
2. **BL 4500** Oil bath transmission with gears : one forward gear.
Oil ROTRA MP SAE 80W90. Oil quantity: 1 kg.
3. Engagement-disengagement lever fitted on the handle
Electric motor stop fitted on the handle.
4. Handle with vertical and horizontal adjustment.
5. Fixed spur.
6. Standard cutter cm.57 (BL 4500) and cm.80 (BL 5000) with protection side discs, possibility of extension to 80 cm for BL 4500, Ø cutter cm 30. The cutter turns at 123 revolutions per minute with engine turning at 3200 rev/min.

ACCESSORIES

- Adjustable ridger.
- Tool box.

For machine identification (serial number, motor, weight, power) read the data plate as shown in the photo..

See Ref. "A" in Fig. 4.



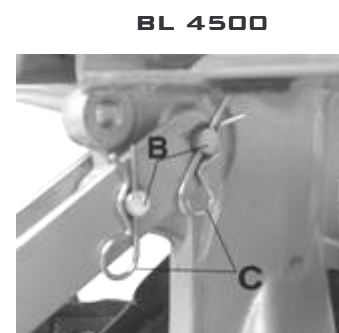
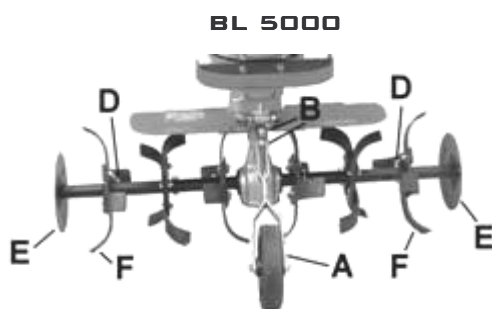
-Fig. n°4-

PACKING AND TRANSPORT

- ◇ **WIDTH: 79 cm.**
- ◇ **DEPTH: 62 cm.**
- ◇ **HEIGHT: 71 cm.**

- Remove the power hoe from its packing: it is delivered with the 57 cm. cutter and side discs already fitted.
- Fit the front transfer wheel (Fig.5, Ref.A) by means of both delivered bolts to be put in the fitting holes (Fig.5, Ref.B) and lock them through the splint pins (Fig.5, Ref.C). The small wheel can take two positions (see Fig.5 and Fig.6).
- To extend the cutter width to 80 cm, remove the side discs (Fig.5, Ref.E) after having removed the bolts, then fit the tines of the second position to get the extension to 80 cm (Fig.5, Ref.F).
- Ensure that the cutting direction of the cutter blades is correct, as there is a right hand and left hand one for each position.
- After inserting the lateral discs, lock the cutter with the bolts which are part of the equipment.
- When mounting the cutter blades, take care because they must be out of phase with each other.
- Fix the spur in its housing, at the rear of the cutter support using the pre-assembled bolt (Fig.1 and 2, Ref.9).
- Fix the handlebar to the handle support using the parts pre-mounted on the handlebar holder.
- In order to make the transport easier and to reduce the room occupied, it's possible to bend the handle on the motor, holding it blocked in the toothed part.

FIG. N. 5





SAFETY RULES



Please read carefully the operation and maintenance manual supplied with the machine.

- Persons under 16 years of age are prohibited from operating the machine.
- The operator is responsible for all damages as the machine is under his control.
- Persons unfamiliar with the machine and have never used it are obliged to read first the operation and maintenance manual.
- Empty the tank of petrol should the machine be transported.
- Should the machine be left unattended, ensure that it cannot start up again.
- Never work in bare feet or sandals. Wear sturdy shoes and long pants. First inspect the area to be cut and remove stones, sticks, metal wires and other extraneous objects.
- Before starting the machine, ensure that there is a 5-meter radius of free space around the machine.
- Dry petrol leaks.
- Always add fuel to the tank with the motor off. The supply and/or transfer of fuel must always take place outdoors, away from flames or heat sources. Do not smoke during this operation.
- **Before using the power hoe, the operator must learn how to shut off the motor quickly, and how to utilize the machine and the controls correctly.**
- Do not operate the motor where carbon monoxide exhaust may accumulate.
- Never use the motor hoe incomplete or without the safety device. Never hoe without the cutter protection cover.
- Never disassemble or clean the cutter or other implements with the motor running.
- Caution! Never work on slopes exceeding 50%.
- The manufacturer shall not be held liable for any damages resulting from the failure to comply with these rules.

STARTING, MOVING FORWARD AND STOPPING THE POWER HOE

- Before starting the motor, always make a careful check of the following:
- Check that there is fuel in the tank, and add it if necessary.
- Check the motor oil level IMPORTANT: MACHINES OUT OF THE FACTORY DO NOT CONTAIN OIL IN THE MOTOR. Add oil up to the oil level on the dipstick.
- **PLEASE REFER TO THE MOTOR OPERATION AND MAINTENANCE MANUAL UNDER THE HEADING "BEFORE START-UP"**
- Always start up the machine outdoors.

START-UP STEPS

1. The petrol cock must be open (Fig.2, Ref.13). For the engines with primer it is necessary to pump 4-5 times (Fig.1, ref.10).
2. **BL 4500:** shift the accelerator lever "A" in "MAX" position, Fig.7 (towards the operator)
BL 5000: shift the accelerator lever "A" in "START" position (Fig.8).
3. Ensure that the gearbox engagement lever is in neutral.
BL 4500 lock the motor stop lever: grip it with the knob (Fig.7 Ref. "B"), pull the engagement-disengagement lever (ref. "C") and block both levers with the button Ref. "D" Fig.7.
BL 5000: put the engagement lever (Fig.9, ref.B) in neutral position (intermediate position) as shown in picture 9. Pay attention to the position of the blocking lever (Fig.9, Ref.C).
4. Grip the start handle "A" with one hand (Fig. 10), pull slightly until feeling a some resistance, then pull harder. When the motor is running, the cord should not be released suddenly, but should be guided back until it is rewound completely.
5. Once the motor is running, for the version BL 5000 have the accelerator lever "A" return approximately halfway (Fig. 8). Warm up the motor sufficiently before starting work.

6. **BL 4500:** to then release the two levers (see fig. 7 ref. B and C) and move forward, grasp both levers and slightly lift the engagement-disengagement lever "C" Fig.7, in this way the button (ref. D Fig.7) is released, then let the lever down (ref. C Fig.11) and the transmission will be engaged by keeping pushed the motor stop lever (Ref.B) on the knob.
BL 5000: to move forward disengage the lever (Fig.12, ref.C) and release the engaging lever (Ref.B) by keeping pushed the motor stop lever (Fig.12, Ref.A).
 N.B.: Fig.12 shows the advancement position.
7. **BL 5000:** to engage the reverse gear, gradually lift the engaging lever (Fig.13, ref.B) till it touches the handle
 N.B.: Fig.13 shows the reverse position.
8. **BL 4500:** to stop the engine shift the acceleration lever (Fig.7, ref.A) in the "STOP" position and release the motor stop lever (Fig.11, Ref.B).
BL 5000: to stop the engine shift the acceleration lever (Fig.8, ref.A) in the "STOP" position. The motor stop lever (Fig.12, ref.A) stops the engine only when the lever "B" is completely pushed down for advancement. In the reverse position (Fig.13) if the levers are released, the machine stops with the engine running.
9. When the engine is switched off, close the petrol cock. Remember to never tie the "motor stop" lever to the handlebar knob while using the power hoe.



FOR BEST MACHINE START-UP, READ CAREFULLY THE MOTOR OPERATION AND MAINTENANCE MANUAL UNDER THE HEADING "START UP".

-Fig. n°7- (BL4500)

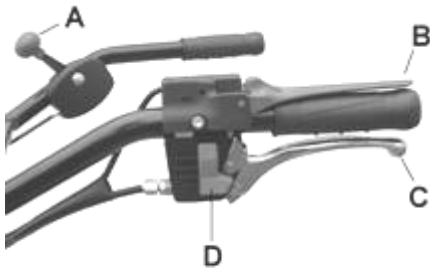
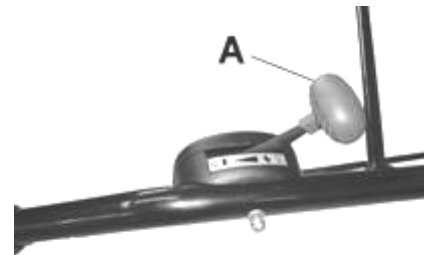
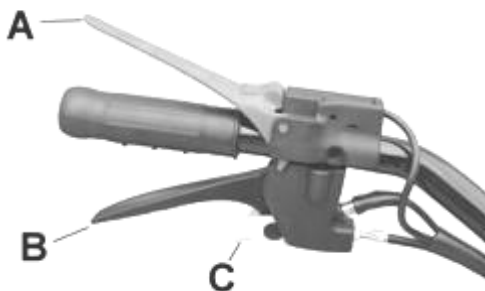


Fig. n° 8 (BL5000)



-Fig. n°9- (BL5000)



-Fig. n°10- (BL5000)

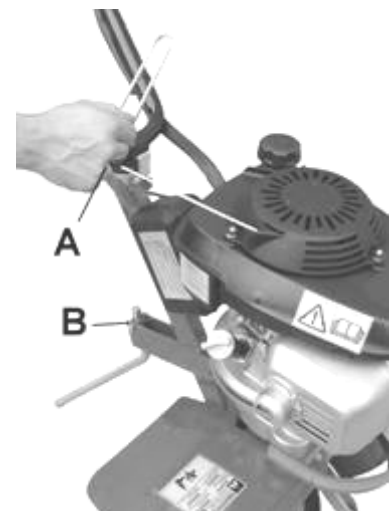


Fig.n° 11 – (BL4500)

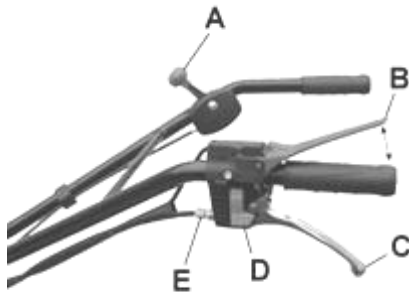


Fig.n° 12 – (BL5000)

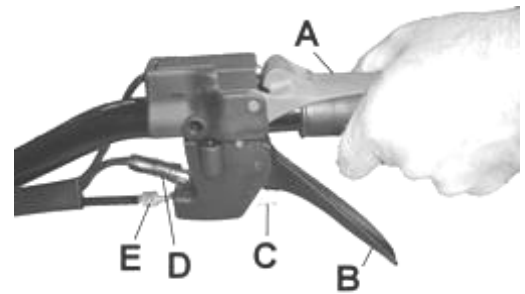
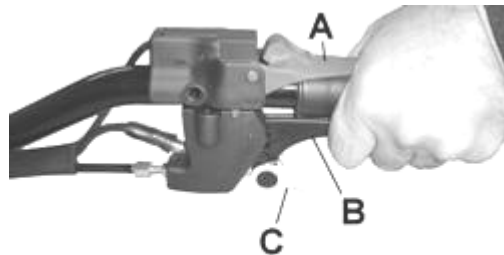
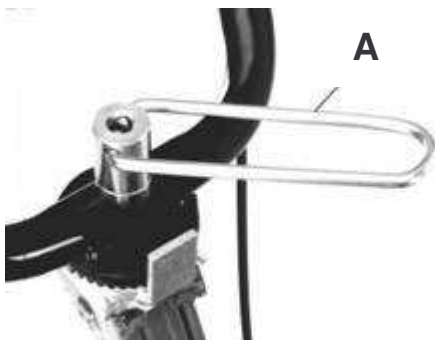


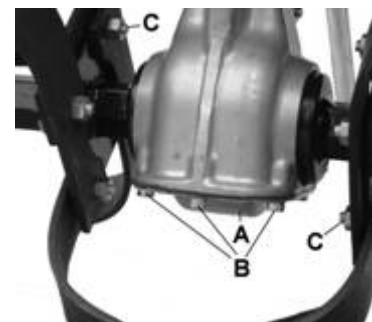
Fig. n° 13 - (BL5000)



OPERATING AND REGULATING THE MACHINE

- To have the power hoe move forward, engage the gearbox engagement-disengagement lever Fig.11 Ref."C" (BL4500) and Fig.12 Ref."B" (BL5000)".
- This operation should always be carried out with the motor running at the minimum r.p.m. In any case, release the lever slowly and always keep the "motor stop" lever pushed Fig.11 Ref."B" (BL4500) and Fig.12 Ref."A" (BL5000)", then increase the r.p.m. with the accelerator hand lever. Do not let the "motor stop" lever lift up or the machine will stop.
- **BL 4500:** in case the transmission engaging-and-disengaging lever needs adjustment, regulate the register "E" Fig.11.
- **BL 5000:** the perfect regulation when the lever (ref. "B" Fig.12) is in the working position is that the microswitch (ref."D" Fig.12) is well pushed. If not, adjust the register (ref."E" Fig.12) to remove the slack between the lever and the cable.
- The steering handles are adjustable in height and horizontally may be regulated by unscrewing the blocking lever Ref."A" in Fig. 14, positioning the handle in the desired position, and then tightening the lever.
- The cutter may have a width of 57 cm with 4 hoes (2 per side) and lateral discs. It can be widened to 80 cm with the addition of one cutter blade per side and by replacing the pin.
- The cutting part of the hoes must be turned toward the front of the machine. It is advised to leave the end discs mounted on the cutters to give the machine better stability during operation.
- The spur is fixed. It's locked by a through-screw. Fig.10 Ref."B".

-Fig. n°14-

-Fig. n°15-

-Fig. n°16-


MAINTENANCE

- To change the oil on the HONDA GCV 135 and B.& S. SPRINT 40 4 stroke engine and to perform other maintenance operations (spark plugs, air filter, regulations), read the motor manual supplied.
- All gearbox parts are with oil-bath. Make a regular check of the oil level by means of screw "A" Fig. 15 and top up if necessary, the right level is reached when the oil comes out and the machine is standing.
- When the oil in the gearbox is to be changed, empty the oil after removing the lower drain cap (Rif."A" Fig.16) after unscrewing the six socket head screws M6 by means of a spanner (also unscrew the oil filling cap ref. "A" Fig.15). When all the oil has come out, fit the drain cap and screw back all the screws (ref."B" Fig.16), finally add the oil necessary up to the level through the hole in the breather cap Rif."A" Fig.15.
- This operation must be performed after the first 50 hours of operation and every 200 hours thereafter (once two years at minimum).
- This operation must be carried out more frequently when working dusty terrain.
- At least once per season, check that nuts and bolts are tightened, specifically those on the cutter (Fig. 16 Ref."C").
- Always use gloves when working on the cutter.
- For any servicing, especially during the warranty period, seek the assistance of a dealer-authorized repair shop.

WARRANTY

The machines and accessories are guaranteed for 2 years, with the exception of electrical parts or parts in rubber. The manufacturer shall replace pieces recognized as defective free of charge. Labour and transport shall be at the expense of the purchaser. Warranty requests must be made through dealers authorized by the manufacturer. With regard to materials not of our manufacture, with special reference to the motor, the rules laid down by the respective manufacturers shall apply. Any requests for repair shall therefore be directed to the specific service centres in the respective areas. For any problem or repair, contact the dealer where the machine was purchased.

SAFETY TESTS AND CERTIFICATION

Declaration of CE conformity in accordance with EEC directive 98/37/CE and following modifications

BENASSI

40017 San Matteo della Decima BO Italy Via Lampedusa 1

We hereby declare that the machine conforms with the essential requirements for health and safety in accordance with EEC Directive 98/37/CE.

POWER HOE TYPE**MODEL BL 4500 B; BL 5000 H**

For verification of the conformity with the afore-mentioned Directives reference has been made to the following:
EN-ISO12100-1 EN-ISO12100-2 EN 709

CHAIRMAN OF THE BOARD

S. Matteo della Decima 01/06/2007

RESULT AND TESTS**POWER HOE TYPE****MODEL BL 4500 B**

Acoustic measured pressure: Lwa = 91 dB (A)

Acoustic guaranteed pressure: Lwa = 93 dB (A) (2000/14/CE)

Acoustic pressure to the operator's ear: LpA = 78 dB (A)

Test condition: 1,6 Mt height - middle of the handlebar

Vibration to handles with weighting UNI EN 1033 value 11,8 m/sec²**POWER HOE TYPE****MODEL BL5000 H**

Acoustic pressure to the operator's ear: LpA = 78 dB (A)

Test conditions: 1,6 Mt height - middle of the handlebar

Vibration to handles with weighting UNI EN 1033 value 7,9 m/sec²

BENASSI[®] S.p.A.

VIA LAMPEDUSA 1

40017 S. MATTEO DELLA DECIMA (BO) - ITALY

TEL. 0039 051 820534 TELEFAX 0039 051 820526

WEB: www.benassi.eu e-mail: export@benassispa.it

The Seller