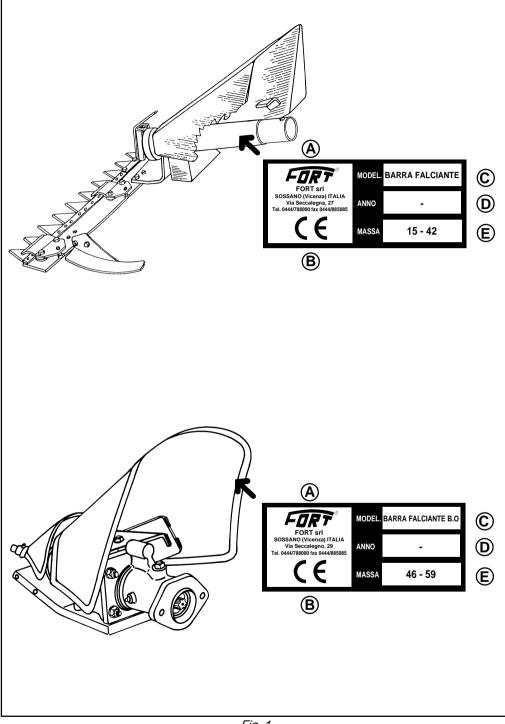
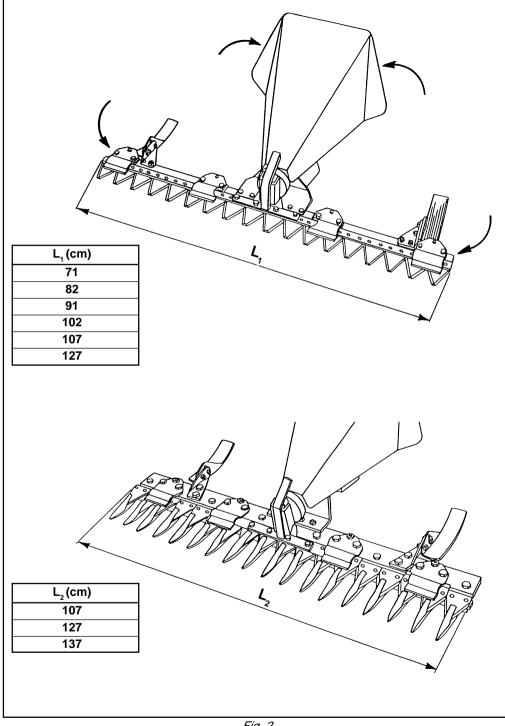
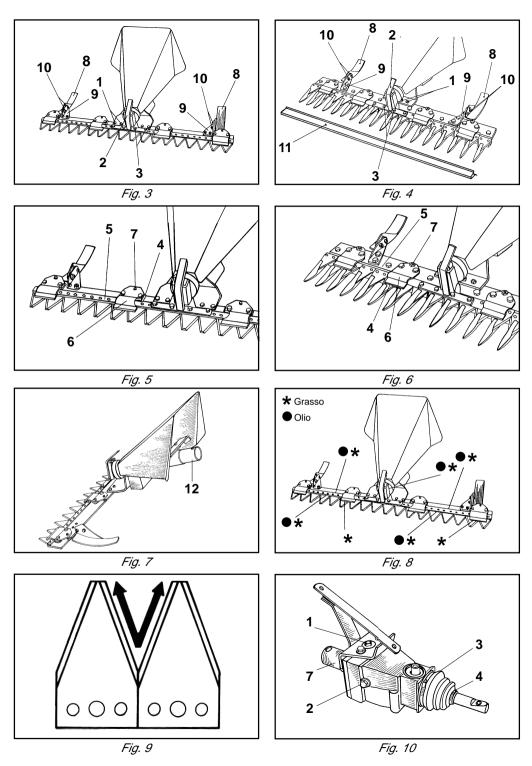
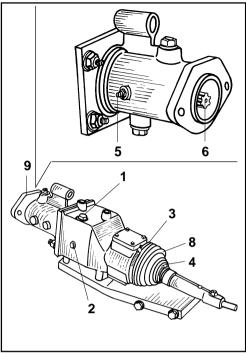


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- DK BRUG OG VEDIGEHOLDELSE
- S DRIFT OCH UNDERÅLL
- SF KÄYTTÖ JA HUOLTO
- N BRUK OG VEDLIKEHOLD









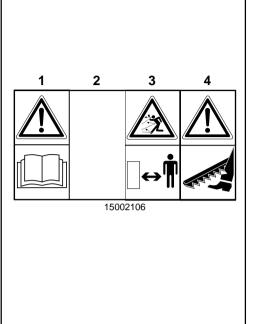


Fig. 11



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1.1 FOREWORD

This instruction manual describes the instructions to be followed for the use and the maintenance of the cutter bar.

It is an integral part of the attachment and it shall be made reference to before carrying out any intervention on the attachment or before using it (also before unpacking it).

1.2 WARRANTY

When you purchase it, we suggest you to check that the attachment is not damaged by informing of any anomaly or defect within eight days after the delivery of the cutter bar.

The cutter bar is covered by a 12-month warranty starting from the delivery date. Such warranty includes only the replacement of those parts which, after a careful inspection by the Technical Department of the Manufacturer, are defective.

The warranty does not cover those parts which are not manufactured by the Company and the tools.

You shall agree with the Manufacturer before returning any goods, and you shall ship them back ex works.

The purchaser, anyhow, shall bear the transport costs, the costs for the lubricants, the VAT and the customs duties, if any.

Anyhow, the repairs or the replacement of the parts shall not extend the warranty terms.

The purchaser, anyhow, will be entitled to claim the warranty only if he has complied with the terms listed in the supply contract.

1.2.1 WARRANTY EXCLUSIONS

The warranty, anyhow, shall not be valid:

- if the damage is due to an improper use of the attachment.
- if the damage is due to a poor maintenance of the attachment.
- if you exceed the max. permissible power
- if the trouble is due to unskillfulness, negligence or improper use of the attachment.
- if, after the user has carried out the repair without the Manufacturer's prior consent, or because non-original spare parts have been assembled on it, the attachment has been modified and the damage is attributable to such changes.
- if the instructions of this manual have not been complied with.

1.3 DESCRIPTION OF THE ATTACHMENT

The cutter bar has been designed and manufactured in compliance with the safety and health requirements included in the Annex I of the EEC 89/392 regulation and further amendments.

Each cutter bar has the «EC» («CE») brand on it and it has the «EC» («CE») declaration of conformity.

The cutter bar is an interchangeable attachment which, when it is assembled on special motor hoes and power mowers, must be used to cut natural grass only.

This attachment shall not be assembled on machines not complying with the safety and health requirements presently in force and, therefore, without the «EC» («CE») brand.



The Manufacturer shall not be held responsible for direct or indirect damages due to an improper use of the attachment or for a different use of it which does not comply with what is provided for in this manual.

The cutter bar is equipped with:

- «EC» («CE») brand
- «EC» («CE») declaration of conformity
- operator's manual

1.3.1 IDENTIFICATION

Each attachment has a name plate under the casing, according to the type of cutter bar (fig. 1), with the following data:

- A Trademark, name and address of the Manufacturer
- B «EC» («CE») brand
- C model of the attachment
- D year of manufacture
- E Max weight of the attachment in kg.

The code no. of the attachment shall always be quoted when spare parts are ordered.

1.3.2 CUTTING DIMENSIONS (Fig. 2)

Weight of the cutter bar:

Model with «Econ» movement: Kg min. 15 - max 42. Model with oil-bath movement: Kg. min. 46 - max. 59.

1.3.3 NOISE LEVEL

The noise level was taken while the attachment was idling; we here below list the results:

- acoustic radiation pressure LpAm (A) dB 81

1.4 HANDLING OF THE ATTACHMENT

The cutter bar is usually supplied in cartons. In case it is stored, we suggest not to put more than five cartons one on the other.

We remind you that the packing materials are recyclable and therefore, after using them, they shall be delivered to special centres in compliance with the law in force in the country where the attachment will be used.

During the transport, the attachment shall be firmly secured by means of special locks.

In case of manual handling, the package or the unpacked cutter bar shall be loaded and unloaded by two people. In this case, each person shall take the attachment by grasping the end of the side member with one hand and the end of the hood with the other hand (see the arrows of Fig. 2).



- Before handling the attachment, always assemble the guard.
- Always wear thick protective gloves when you handle the attachment.

The guard (11 Fig. 4) shall be removed only during the cutting operation. Otherwise it shall always be assembled (transport / storage).

SECTION 2

General safety regulations



PAY ATTENTION TO THE WARNING SIGN IN THIS INSTRUCTION MANUAL. IT SIGNALS A SITUATION OF POTENTIAL HAZARD.

Therefore, we suggest to read this manual very carefully and especially to read the safety regulations, by paying attention to those operations which are particularly dangerous.



The Manufacturer disclaims all and any responsibility for damages due to the noncompliance with the safety and the accident prevention regulations here below described. Moreover, he shall not be held responsible for damages due to an improper use of the machine or to changes which were carried out without the Manufacturer's prior approval.

2.1 SAFETY SIGNS (Fig.12)

(Make reference also to the instruction manual of the machine where this attachment will be assembled).



The attachment has adhesive labels with brief instructions on them in order to avoid incorrect operations and possible accidents:

- Before starting the machine, carefully read the instruction manual (this symbol is placed on the front cover of the instruction manual)
- 2) Before carrying out any maintenance, stop the engine and read the handbook.
- Hazard due to the possible flinging of blunt instruments. Make sure that there are no people or pets around the working area which could be hit by the blunt instruments.
- 4) Shearing hazard of limbs. While the machine is working, keep at a safe distance from the moving parts, in particular keep away from the cutter bar front for all its cutting length.

2.2 CLOTHES



- Do not wear loose-fitting and fluttering clothes as well as necklaces, scarves and ties: they could get entangled in the moving parts.
- Long hair shall be tied with a ribbon
- We recommend to wear suitable shoes; do not work with bare feet or with sandals or slippers.

2.3 ECOLOGY AND POLLUTION

- Keep the lubricants out of the children's reach. Read the warnings and the precautions marked on the containers of the lubricants carefully. After using them, wash your hands with plenty of water. Dispose of the used lubricants in compliance with the anti-pollution regulations in force.
- Comply with the laws in force in the country where the machine is used concerning the use and disposal of the products used to clean and maintain the attachment.
- If the attachment is dismantled, comply with the anti-pollution regulations in force in the country where the attachment is used.

2.4 SAFE OPERATION

- It is strictly forbidden to start the attachment or to have it started by anyone who has not read

and understood what is described in this manual, as well as by unskilled people, by people who are not in good health or who are less than 14 years old.

- Before starting to work, make sure that the cutter bar is secured properly, by checking all the connections (screws, nuts, Victaulic couplings). Then remove the guard.
- When the attachment is working, you shall prevent anybody from approaching the attachment front. It is strictly forbidden to stand in the operating range of the attachment.

The operator shall be responsible for any damages to third parties.

- Remove the visible foreign bodies, if any, from the area to be mown. During work, be careful not to hit any foreign body hidden in the grass.
- If the cutter bar clogs or stops, stop the engine and then remove the grass or the foreign body.
- If the cutter bar hits something accidentally, stop the engine and check if it is damaged; if it does not work properly, the cutter bar shall be inspected by a skilled technician.
- Remember that there is a serious hazard of injures to hands and feet, while using the cutter bar.
- While mowing on a sloping ground, be very careful. Be very careful with your feet. Cut the grass with a sideway movement across the sloping area, never mow uphill nor downhill, never mow when the ground is too steep because the machine could turn over.
- Do not position the machine on a sloping ground.
- Never use the cutter bar if the guards and the protections are defective or if the safety devices are disconnected or not in perfect working order.
- For safety reasons, the engine shall never exceed the number of revolutions marked on its name plate.
- During transport and during the handling operations and at the end of any work, reassemble the special guard.
- Do not touch the moving parts and do not go between them: keep at a safe distance.
- During the maintenance operations, operate the machine in airy rooms: the exhaust gas is harmful to the health.

2.5 MAINTENANCE OPERATIONS UNDER SAFETY CONDITIONS



 Periodically check that all the parts and the safety devices of the attachment are in good conditions.

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- Periodically check that the screws and the nuts are tightened and that the pipe fittings, if any, do not leak.
- Use the suggested oils and lubricants.
- The spare parts shall comply with the needs of the manufacturer. Use original spare parts only.
- It is strictly forbidden to remove or tamper the safety devices.
- The maintenance of the attachment shall be carried out only when the machine is off, by skilled personnel and according to the instructions listed in this manual.
- The lubrication and the greasing shall be carried out only when the engine is off and cool. During these operations do not smoke and keep away from free flames. If some lubricant is spilled, absorb it immediately before starting the attachment.

Store the lubricants in suitable rooms where authorized personnel only are admitted; keep them out of the children's reach.

- The safety signs on the attachment give brief instructions to avoid accidents. Clean them when they are dirty and replace them immediately if they come off or they are damaged.
- This instruction manual must be read, memorized and kept for the whole life of the attachment until it is completely dismantled. If it gets lost, contact the manufacturer immediately and ask for a new copy.

SECTION 3

Use of the cutter bar

3.1 CONNECTION TO THE MOTOR HOE

Please make reference to the INSTRUCTION MANUAL of the motor hoe, to the chapter entitled «REPLACEMENT OF ATTACHMENT».

Stop the engine and then:

- Put on a pair of thick protective gloves
- Two people shall lift the cutter bar by grasping the sides of the attachment: be careful not to crush and not to cut your hands.
- Insert the sleeve (12 Fig. 7 or 9 Fig. 11) in the housing of the power take off of the motor hoe. When you assemble the cutter bar, be careful not

to damage the sleeve of the power take off.

We suggest to swing the attachment slightly until it is completely fitted in.

- Lock the cutter bar unit with the special snap rings or with the nuts depending on the type of motor hoe to which it is connected.

3.2 ADJUSTMENT OF THE CUTTING HEIGHT

Adjust the cutting height of the cutter bar according to your needs. Keep always at a certain height from to prevent the cutter bar from collecting and then throwing stones or other foreign bodies. Such adjustment shall be carried out by operating the side slides as mentioned for each single bar.

3.2.1 STANDARD CUTTER BARS (Fig. 3-4)

In order to adjust the cutting height, carry out the following procedure:

- loosen the bolts (10)
- adjust the slides (8) by lifting and lowering these in order to achieve the desired cutting height.
- after this operation, tighten the bolts again (10).

3.2.2 ESM CUTTER BARS

(please make reference to the enclosed manual)

3.3 ADJUSTMENT OF THE KNIFE CLIPS

It is important to often check the adjustment of the moving parts. The adjustment shall be made when the slack between the knife and the counterknife is such that the grass may not be cut properly.

3.3.1 STANDARD CUTTER BARS (Fig. 5 - 6)

In order to take up slack, it is necessary to loosen the screw (7) and then to bring the wearing plates (4) near the blade-holding rod (5) until the slack is completely taken up. Then tighten the knife clip (6) against the blade by tightening the screw (7). It is necessary to make the blade slide manually whenever the wearing plate is adjusted.



Warning! Use protective gloves and make sure that the blade slides smoothly. The adjustment is correct when there is no slack between the knife and the counterknife.

If the wear between the blade and the knife clip is excessive, it is possible to take up slack by removing the spacer (4) under the knife clip (6). Then carry out the adjustment as above mentioned.

3.3.2 «ESM» CUTTER BARS (please make reference to the enclosed manual)

SECTION 4

Routine Maintenance

4.1 MAINTENANCE

We here below describe the maintenance and adjustment operations. A low operating cost and a long life of the machine depend also on a methodical and constant compliance with these instructions.

The operations of maintenance, adjustment and preparation for working shall be carried out when the engine is off and when the machine is locked.

Use original spare parts only.

In this way the warranty terms will not be declared void and the technical specifications of the machine will not be changed.

4.2 MAINTENANCE OF THE CUTTER BARS

- Stop the engine before any cleaning and maintenance operation.
- Make sure that all the nuts, screws and bolts are perfectly tightened, so that the safety conditions are complied with.
- Make sure that all teeth and the blades are straight.
- Replace the damaged or worn parts whenever necessary (knife clips, knives, blades, wearing plates).
- After mowing, wash and clean the cutter bar and remove the dirt (if necessary, extract the knife).
- Periodically check that the knife clip is adjusted properly (make reference to the manual of the cutter bar).
- Use original spare parts only, for any maintenance and adjustment operation. In this way the warranty terms will not be declared void and the technical specifications of the machine will not be changed.

4.3 CUTTER BARS WITH OIL-BATH MOVEMENT

Check the oil level according to the type of gearcase (Fig. 10 - 11).

Before using the machine, check the oil level in the gearcase and, if necessary, top it up. The oil level shall be checked as follows:

- Position the cutter bar on a flat surface.
- Unscrew the screw plug (2). When the oil

reaches the lower edge of the hole, the oil level is correct.

- If necessary, top it up through the hole (1) with oil EP 320 (IT IS NOT NECESSARY TO CHANGE THE OIL COMPLETELY).
- Then screw the plugs again.



Warning! Periodically check the seals (3) and (4). If they are loose, they might leak.

Moreover, make sure that the sleeve (8) is in perfect working order and that it is not damaged. Before inserting the attachment in the housing of the machine power take off, grease the part 7 (Fig. 10) and the part. 6 (Fig. 11) of the sleeves.

If your cutter bar is the one shown in Fig. 11, periodically grease part (5) with multipurpose lithium-based grease.

4.3.1 LUBRICATION

The lubrication is an easy operation but it is necessary so that the moving parts are not damaged.

- Every 2 or 3 working hours (always when the motor is off) we suggest to lubricate or grease the knifes in their slides or guides (as shown in Fig. 8).

4.3.2 KNIFE SHARPENING

We suggest to sharpen the knife every 3 - 5 working hours or as soon as you notice that they are worn out; this, however, depends on how often you use the attachment and how you use it.

Before sharpening the knife, remove it from the cutter bar and clean it.



Warning! Use protective gloves.

Make sure that the blade-holding rod (5) (Fig. 5 - 6) and the blades are not damaged or deformed because of some impacts. If so, it is necessary to straighten or replace them. Check also the counterknife blades. We remind you, in fact, that you get the best cutting only when the knife perfectly adheres to the counterknife. Now it is possible to sharpen the knife by means of a grinding wheel. Pay attention not to change the original sharpening angle of the single blades, by sharpening the blades starting from the bottom to the tip (see Fig. 9).

The same operations shall be carried out to sharpen the counterknife, but less frequently.

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4.4 STORAGE

If you do not intend to use the cutter bar for a certain period of time, we suggest to follow the here below listed instructions so that the attachment will be efficient when you use it again.

- Clean all the parts of the cutter bar carefully
- Check that the attachment is in perfect working order, otherwise replace the damaged or worn parts.
- Cover the attachment with a cloth and store it in a covered area, sheltered from bad weather, from frost and from moisture.
- If you do not intend to use the cutter bar for quite a long time, coat it with plenty of lubricant to prevent it from rusting.

4.5 **DISMANTLING**

If the attachment is dismantled, recover as many components as possible. Dispose of the remaining parts in compliance with the anti-pollution regulations of your country.

4.6 SPARE PARTS

The spare parts shall be ordered to the area concessionary agent.

The attachment shall be repaired by skilled technicians only.