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garden equipment

Instruction manual

BIO-SHREDDER

R240T



Translation of the original instruction manual.

(I) Dichiarazione CE di Conformità
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TRITURATORE / BROYEUR / HÄCKSLER / TRIFURADORA / SHREDDER / HAKSELAAR

MODELLO/ MODÈLE/ MODELL/ MSDELO/ MODEL/ MODEL: R240T

Varianti/ Variantes/ Varianten/ Variantes/ Variants/ Varianten
R240TTT

Versione/ Version/ Version/ Versión/ Version/ Versie

03/17

è conforme alle disposizioni della direttiva macchine 2006/42/CE e successivi emendamenti e ai decreti di trasposizione nella legge nazionale
est conforme aux dispositions de la directive 2006/42/CE et aux amendements suivantes et aux décrets de transposition dans la loi nationale
entspricht den Bestimmungen der Maschinenrichtlinie 2006/42/EG und den folgenden Abänderungen und den Umsetzungsverordnungen im Nationalgesetz
es conforme a las disposiciones de la directiva 2006/42/CE y a las sucesivas enmiendas y a los decretos de transposición en la ley nacional
complies with the dispositions of the machinery directive 2006/42/EC and its following amendments and the transposition decrees into the national law
conform is met de beschikkingen van de machine richtlijn 2006/42/CE en erop volgende amendementen en met de overgangsdecreten naar de nationale wetgeving

Luogo/ Lieu/ Ort/ Lugar/ Place/ Plaats : Campitello (MN), ITALY

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Il Titolare **NEGRI MARCO**

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Firma

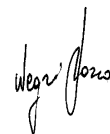


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1 INTRODUCTION

This instruction manual must be considered as a part of the machine. The suppliers of new and used machinery must prove through documentation that the present manual has been delivered with the machine. **THE OPERATOR MUST READ THE INSTRUCTION MANUALS OF THE MACHINE AND ITS COMPONENTS CAREFULLY AND IN ALL THEIR SECTIONS BEFORE PERFORMING ANY KIND OF OPERATION ON THE MACHINE.**

2 AIM OF THE MACHINE

The R240 bio-shredder is a machine used to shred in small pieces different kinds of vegetable waste. Shredding allows to reduce the volume of vegetable waste, to get some compost or to get some shredded material to be used as fuel for specific boilers.

The machine is provided with a combined cutting system, composed of blades and hammers, or with hammers only.

3 OPERATOR TRAINING

The instruction manual must be employed for training the operators who work with the machine. The machine must be used by qualified personnel who has received a sufficient and appropriate training in the field of safety and health, with particular reference to its role and tasks. During the training period, operators can work only if supervised by skilled personnel.

4 WARNINGS AND SAFETY DIRECTIONS

During the start up, working session and maintenance operations, the following warnings and safety directions must be followed:

4.1 OPERATOR SAFETY

- The operator's minimum age is defined by the law in force in the country where the machine has been sold.
- While using the machine, the user is responsible against third parties.
- While grinding, it is compulsory to wear gloves, protective spectacles or a protective screen, ear protectors, safety shoes, a dust mask, a helmet and long pants.
- Hair must be tied above the shoulders.
- Do not use the machine, if you are tired, ill or after having ingested alcoholic drinks, medicines or drugs.
- Do not enter the working area of the cardan-shaft transmission in motion.
- Use cardan-shaft transmissions with a free wheel to be connected to the shredder. They must also comply with the dispositions of the Machinery Directive.
- Never use stools, ladders, etc. to reach the hydraulic roller down the hopper if the machine has not been turned off.
- While using the machine on public roads, follow the safety regulations concerning road sites valid in the country where the machine is used.



THE USE OF THE MACHINE BY AN OPERATOR IN UNSUITABLE CONDITIONS OR NOT AUTHORIZED MAY CAUSE MECHANICAL DAMAGES TO THE MACHINE, DAMAGES TO THE OPERATOR AND TO OTHER PERSONS.

4.2 MACHINE SAFETY

- Before starting the tractor, make sure that all the parts of the machine are perfectly assembled and that the machine is correctly connected to the tractor.
- Replace the broken or damaged parts before using the machine.
- The machine has to be placed on a flat and sturdy base.
- Before leaving the shredder unattended, it is necessary to stop the tractor and disconnect the machine and the tractor transmission shaft.
- It is compulsory to use the machine with all safety devices correctly mounted.
- Before introducing any material into the bio-shredder, start the tractor PTO and make it reach 540 rpm.

- Before starting to introduce any vegetable waste, turn the discharge pipe to the opposite side of the hopper.
- Never modify the machine.
- Do not use the machine for aims different from the ones it has been designed for.



THE USE OF THE MACHINE IN UNSUITABLE CONDITIONS MAY CAUSE MECHANICAL DAMAGES TO THE MACHINE, DAMAGES TO THE OPERATOR AND TO OTHER PERSONS.

4.3 SAFETY DURING GRINDING

- During grinding the operator must be opposite the hopper where the control and safety handle is placed.
- Some further operators may be present; they can't use the machine but they can provide the material to be shredded to the only operator in charge of the machine use.
- During the use of the bio-shredder, all operators must wear the individual protective devices, always be close to the hopper where the material to be grinded is introduced and make sure that nobody, operators included, is within a 20 m radius from the ejection pipe, that is in the discharge area of the shredded material.
- Branches whose dimensions exceed those prescribed (90 mm as indicated by the pictogram on the hopper) must not be introduced.
- Do not introduce into the bio-shredder any stones, metal, glass, plastic, soil, packs of newspapers, etc. but vegetable waste only.



USING THE MACHINE WITH UNSUITABLE MATERIAL MAY CAUSE MECHANICAL DAMAGES TO THE MACHINE, DAMAGES TO THE OPERATOR AND TO OTHER PERSONS.

- When the machine is working, do not remove any protective guards and any accessories.
- During operation, the operator must never be close to the discharge pipe.
- No body part must be put within the protective guards.
- When the tractor is on, no body part must be close to the cardan shaft.
- The tractor PTO must rotate at a speed close to but not exceeding 540 rpm.
- Use cardan shafts that transmit a minimum power of 26 kW at 540 rpm.
- Make sure that the cardan shaft length can compensate for the machine movements; in any case the telescopic tubes must overlap for at least 1/3 of their length in the position of maximum extension.
- Connect the retainers (chains) to the specific hitch points on the tractor and on the machine.
- The assembly and disassembly operations of the screen must be executed EXCLUSIVELY when the machine is turned off (see paragraph *Maintenance – Cleaning of the Bio-Shredder*).
- Do not climb onto the hopper to remove the clogged material. Use the ejection function.

4.4 SAFETY DURING MAINTENANCE

- Maintenance concerning the removing of guards must be executed exclusively by authorized workshops.
- For maintaining the machine, please follow the procedures indicated in the paragraph *Maintenance*.
- Use original spare parts only.
- When replacing the blades or hammers and during the cleaning process be careful not to cut yourself.
- There is no device to avoid the involuntary movements of the cutting tools, while maintaining the machine.
- Wear protective gloves before carrying out any maintenance operations.
- Disconnect the tractor PTO, stop the engine and remove the keys from the tractor ignition switch; wait until the machine rotor has completely stopped and disconnect the cardan shaft.



CUTTING TOOLS ARE DANGEROUS, BE CAREFUL.

4.5 SAFETY DURING TRANSPORT AND STORAGE

- Make sure all the parts of the shredder are perfectly fixed to the machine, in order to avoid losing any objects during the transport.
- Before transporting the machine connected to the tractor, disconnect the PTO, remove the cardan shaft and position it in its place.
- Use the specific hook to lift the machine (see paragraph *Transportation*).
- At the end of every use, turn the tractor off, disconnect both the cardan shaft and the machine from the tractor and place the cardan shaft still inserted in the machine on the support hook (R240T) or in the specific support (R240TTT).



THE TRANSPORT OF THE MACHINE IN UNSUITABLE CONDITIONS MAY CAUSE MECHANICAL DAMAGES TO THE MACHINE, DAMAGES TO THE OPERATOR AND TO OTHER PERSONS.

4.6 RESIDUAL RISKS

The residual risks related to a machine are the risks remaining after the implementation of all the security measures taken by the manufacturer and then handled by the user. Following an analysis of the machine risks, here is the list of the residual risks:

RESIDUAL RISK	INSTRUCTIONS TO ELIMINATE OR REDUCE THE RISK
RISK OF ROLLOVER OR FALL OF THE MACHINE	<ul style="list-style-type: none"> • While working and during transport and maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • Use the machine on a flat and resistant base and appropriately fastened as described in paragraph <i>Start up</i>; • Lift the machine only as specified in paragraph <i>Transportation</i>; • Introduce into the machine suitable material only as specified in paragraph <i>Use</i>; • While transporting the machine, observe the norms in force.
RISK OF ABRASION AND DRAGGING WITH FEEDING TOOLS	<ul style="list-style-type: none"> • While working and during maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • While working, it is forbidden to go onto the loading hopper or lean over to get to the feeding roller; • During the transportation of the machine connected to the tractor, disconnect the PTO, wait until the rotor has completely stopped, disconnect the cardan shaft and position it in its place. During the machine maintenance operations disconnect the PTO, stop the engine and remove the keys from the tractor ignition switch. Wait until the rotor has completely stopped, disconnect the cardan shaft and position it in its place; • While working, all protections must be properly installed on the machine; • Before every use, check the correct functioning of the safety devices installed on the machine.
RISK OF ABRASION / CUTTING WITH CUTTING TOOLS	<ul style="list-style-type: none"> • While working and during maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • While working, it is forbidden to go onto the loading hopper or lean over to get to the feeding roller; • During the transportation of the machine connected to the tractor, disconnect the PTO, wait until the rotor has completely stopped, disconnect the cardan shaft and position it in its place. During the machine maintenance operations disconnect the PTO, stop the engine and remove the keys from the tractor ignition switch. Wait until the rotor has completely stopped, disconnect the cardan shaft and position it in its place; • During maintenance operations, handle the cutting tools carefully.
RISK OF COLLISION WITH MATERIAL EJECTED TO THE LOADING ZONE	<ul style="list-style-type: none"> • While working, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • Introduce into the machine suitable material only as specified in paragraph <i>Use</i>.
RISK OF COLLISION WITH MATERIAL EJECTED TO THE DISCHARGE ZONE	<ul style="list-style-type: none"> • While working wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • Before every use, check the discharge direction; • While working, do not operate or stay in the discharge area

	<p>and make sure there is no person;</p> <ul style="list-style-type: none"> • Introduce into the machine suitable material only as specified in paragraph <i>Use</i>.
RISK RELATED TO HOT SURFACES	<ul style="list-style-type: none"> • While working and during transport and maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • It is forbidden to touch those parts on which the pictogram "Attention - High Temperature" is stuck.
RISK RELATED TO HARMFUL GASES	<ul style="list-style-type: none"> • It is forbidden to use the machine in closed or badly ventilated places.
RISK RELATED TO NOISE	<ul style="list-style-type: none"> • While working and during maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>.
RISKS RELATED TO THE ILLEGIBILITY OF THE SAFETY PICTOGRAMS	<ul style="list-style-type: none"> • It is forbidden to remove or obscure the safety pictograms on the machine; • Check presence and integrity of the safety pictograms periodically, referring to paragraph <i>Safety Pictograms</i>.
RISKS RELATED TO THE MISSED PERIODIC MAINTENANCE	<ul style="list-style-type: none"> • Carry out all checks and maintenance operations indicated in this manual at the specified time.
RISKS RELATED TO THE MALFUNCTIONING, ALTERATION AND REMOVAL OF SAFETY DEVICES	<ul style="list-style-type: none"> • Before every use, check the correct functioning of the safety devices installed on the machine; • It is forbidden to alter, modify and remove the machine safety devices.
RISKS RELATED TO THE PTO USE	<ul style="list-style-type: none"> • While working and during transport and maintenance operations, wear personal protective devices as specified in paragraph <i>Operator Safety</i>; • Use CE certified cardan shafts only, of appropriate dimensions; • Respect the safety instructions in the cardan shaft and tractor manual.

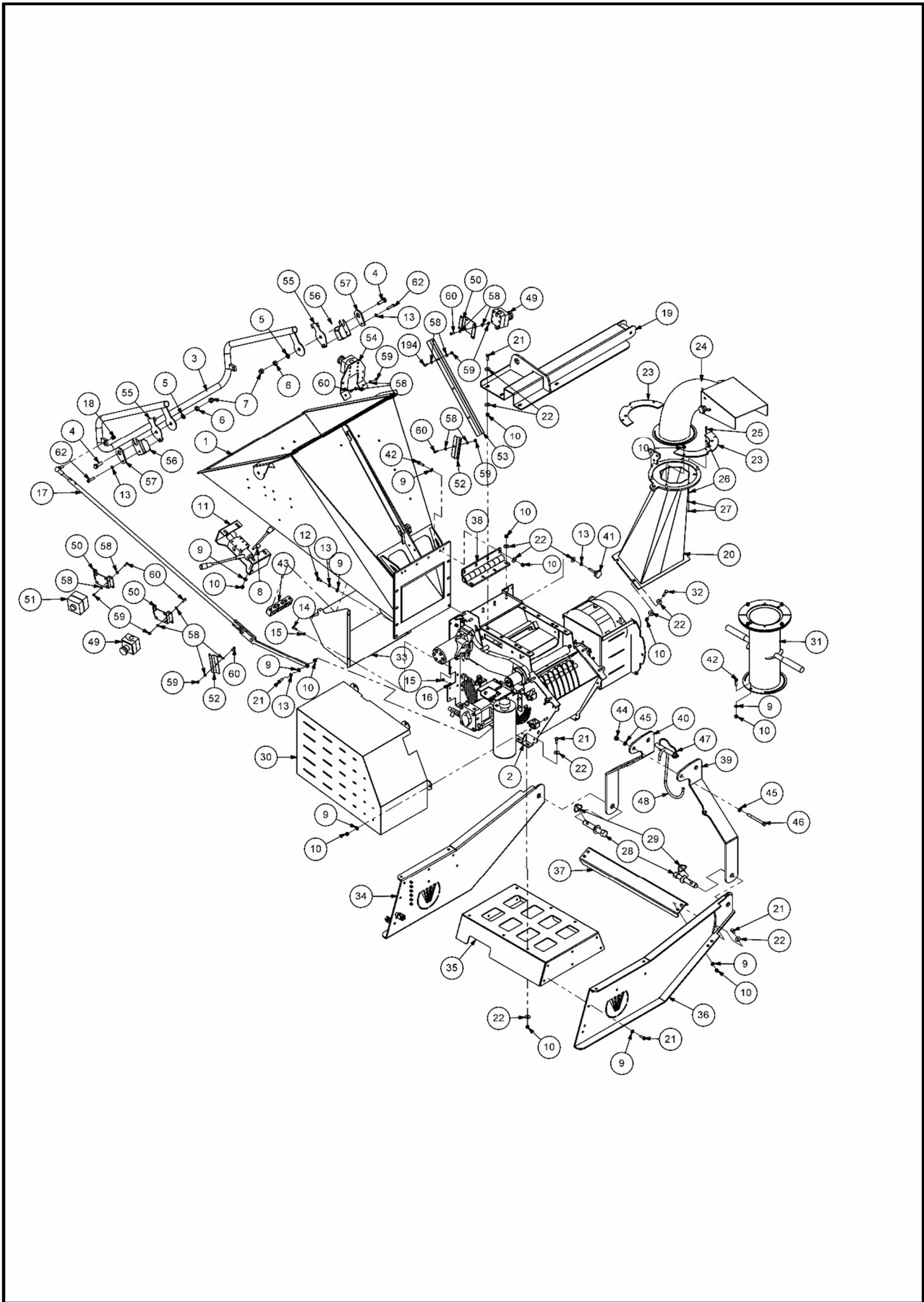
5 ASSEMBLY

The R240 shredder is usually delivered fully assembled and ready to use. If you are supplied with a disassembled machine (for packaging and/or shipping reasons), please wear protective gloves and safety shoes and use the exploded view and relative part list to assemble the machine correctly.

R240T (Pic. 1A):

1	Hopper	32	Captive screw TE M8x40
2	Rotor housing	33	Roller protection R240T
3	Control handle	34	Front support R240T
4	Galvanized screw M12x40	35	Base R240T
5	Galvanized flat washer 12	36	Rear support R240T
6	Galvanized nut M12	37	Rod for support connection R240T
7	Galvanized self-locking nut M12	38	Hopper hinge R240T
8	Galvanized screw M8x20 DIN603	39	Plate A support R240T
9	Galvanized flat washer 8	40	Plate B support R240T
10	Galvanized self-locking nut M8	41	Thermoplastic handwheel Ø40 M8x20
11	Safety valve	42	Galvanized screw M8x30
12	Galvanized screw M8x20	43	Clamp
13	Galvanized elastic washer 8	44	Galvanized self-locking nut M10
14	Galvanized screw M6x20	45	Galvanized flat washer 10
15	Galvanized flat washer 6	46	Galvanized screw M10x110

16	Galvanized self-locking nut M6	47	Gudgeon third point
17	Control handle rod	48	Short hook cardan support
18	Shear nut M10	49	Safety button
19	Tie rod 3 point linkage	50	Safety buttons/reset support
20	Ejection pipe	51	NGR0264A button (Reset)
21	Galvanized screw M8x25	52	"Short" rubber grommet
22	Galvanized flat washer 8x25	53	"Long" rubber grommet
23	Closing flange ejection pipe	54	Central support
24	Adjustable conveyor	55	Component 225.0329.17(screws protection)
25	Galvanized screw M4x30	56	Component 225.0328.17(nut protection)
26	Galvanized flat washer 4	57	Component 225.0326.17(plate)
27	Galvanized nut M4	58	Galvanized flat washer Ø6
28	Gudgeon for 3 point linkage	59	Galvanized self-locking nut M6
29	Click pin	60	Galvanized hexagonal button head screw M6X25
30	Guard	61	Galvanized button head torx screw M8X25 zincata
31	Extension		



Pic. 1A – Assembly R240T

Fix the base (35) to the front support (34) and the rear support (36) with the screws (21), washers (9) and nuts (10).

Fasten the plate A (39) to the rear support (36) with the gudgeon (28) and fasten the plate B (40) to the front support (34) the same way. Finally insert the click pins (29) in the gudgeons.

Then mount the connection rod (37) to the rear support (36) and to the front support (34) with the screws (21), the washers (22) and (9) and the nuts (10).

Once the 3 point linkage has been mounted, fix the rotor housing (2) to the base (35) with the screws (21), washers (22) and nuts (10).

Now install the tie rod (19) onto the rotor housing (2) with the screws (21), washers (22) and nuts (10). Once the plate A (39), the plate B (40) and the tie rod (19) have been mounted, fasten everything with the screw (46), washers (45) and nut (44). Finally insert the gudgeon (47) and the hook (48) between plate A (39) and plate B (40).

Place the rotor housing (2) with the relative three point linkage on a solid and flat base.

Mount the ejection pipe (20) onto the rotor housing (2) and pay attention that one part matches the other part as hermetically as possible. Fasten the two pieces with the 4 screws (21), washers (22) and nuts (10).

Fasten the adjustable conveyor (24) on the ejection pipe by means of the two closing flanges (23) and the self-locking nuts (10).

Once the conveyor has been fastened on the pipe, insert the screw (25), the washers (26) and the nuts (27) into the specific hole. The conveyor must be allowed to rotate. Through a slot, this system allows for the 270° rotation of the conveyor, in order to prevent the accidental throwing of shredded material towards the operator opposite the hopper (1).

Use the screws (12), elastic washers (13) and plain washers (9), to temporarily fasten the hopper (1) to the rotor housing (2). It is important that the bottom of the rotor housing and the bottom of the hopper form a single surface.

Position the hinge (38) in contact with the rotor housing (2) and the hopper (1), adjust it and fix it on the rotor housing (2) with the 4 nuts (10) and the washers (22) and on the hopper (1) with the 4 screws (42), the washers (9) and (22) and the nuts (10).

Disassemble the screws (12) and the elastic (13) and plain washers (9) that temporarily fixed the hopper (1) to the rotor housing (2). Block the hopper with the handwheel (41).

Mount the protection (33) using the screws (14), washers (15) and nuts (16).

With screw (55) and nut protections (56) mount the control handle (3) onto the specific joints out of the hopper and fasten it by means of screws (4), washers (5), galvanized nut (6) and self-locking nut (7). The operator must be allowed to operate the control handle with no excessive efforts and at the same time a stable position during the use of the machine must be granted. The control handle (3) must be adjusted in such a way that if pushed completely towards the hopper, it always remains above the hopper's edge, in order to allow the emergency stop activation (pos. E Pic. 4).

Mount the two screw protections (57) using the torx screws (62) and the washers (13).

Assemble the control handle rod (17); at one end it has a swivel head to be fastened to the handle with the nut (18); attention, fasten until it breaks. The other end will have to be fastened to the fork with the screw (21), the washer (13) and (9) and the nut (10) and it will be screwed on the control rod connected to the pump.

Mount the safety valve with the relative support (11) at the bottom of the hopper by means of four screws (8), washers (9) and self-locking nuts (10). Block the hydraulic pipes under the hopper (1) by using the specific clamps (43).

Cover the hydraulic part with the guard (30) and fasten it to the housing by means of nuts (10) and washers (9).

Install the emergency button support (54) onto the upper part of the hopper (1), by means of the screws (60), the washers (58) and the nuts (59). Protect the cable of the emergency button by positioning the cable protection (53) onto the hopper, fixing it by means of the screws (60), the washers (58) and the nuts (59).

Install the safety button supports (50) onto both sides of the hopper (1) by means of the screws (60), the washers (58) and the nuts (59). Protect the cables of the emergency buttons by positioning the cable protections (52) onto the hopper, fixing them by means of the screws (60), the washers (58) and the nuts (59).

Regarding the machines with electric start, mount the start button support (51) onto the lateral left side of the hopper (1) by means of the screws (60), the washers (58) and the nuts (59).

Connect the various cables as indicated in the paragraph *Electric Diagram*.

The R240T bio-shredder has an optional extension for the ejection pipe (31). It must be positioned between the ejection pipe (20) and the conveyor (24).

In order to assemble it, it is necessary to put it on the ejection pipe (20) and fix it to the pipe by means of the closing flanges (23) and the nuts (10). In order to avoid the complete rotation, the extension has a hole in its base - such hole has to match with the one on the ejection pipe. Put the screw (42) into this hole and fix it with the washers (9) and the nut (10). Put onto the higher part of the extension the adjustable conveyor (24) and fix it to the extension as described above.

R240TTT (Pic. 1B):

1	Hopper	11	Carriage
2	Wheels	12	Adjustable conveyor
3	Cover	13	Flange
4	Support wheel	14	Self-locking nut M8
5	Galvanized self-locking screw M10x25	15	Galvanized screw M4x30
6	Galvanized self-locking nut M10	16	Galvanized flat washer 5
7	Drawbar	17	Ejection pipe extension
8	Galvanized screw M12x40 DIN603	18	Galvanized screw M8x30
9	Galvanized flat washer 12	19	Galvanized nut m4
10	Galvanized self-locking nut M12	20	Galvanized flat washer 8

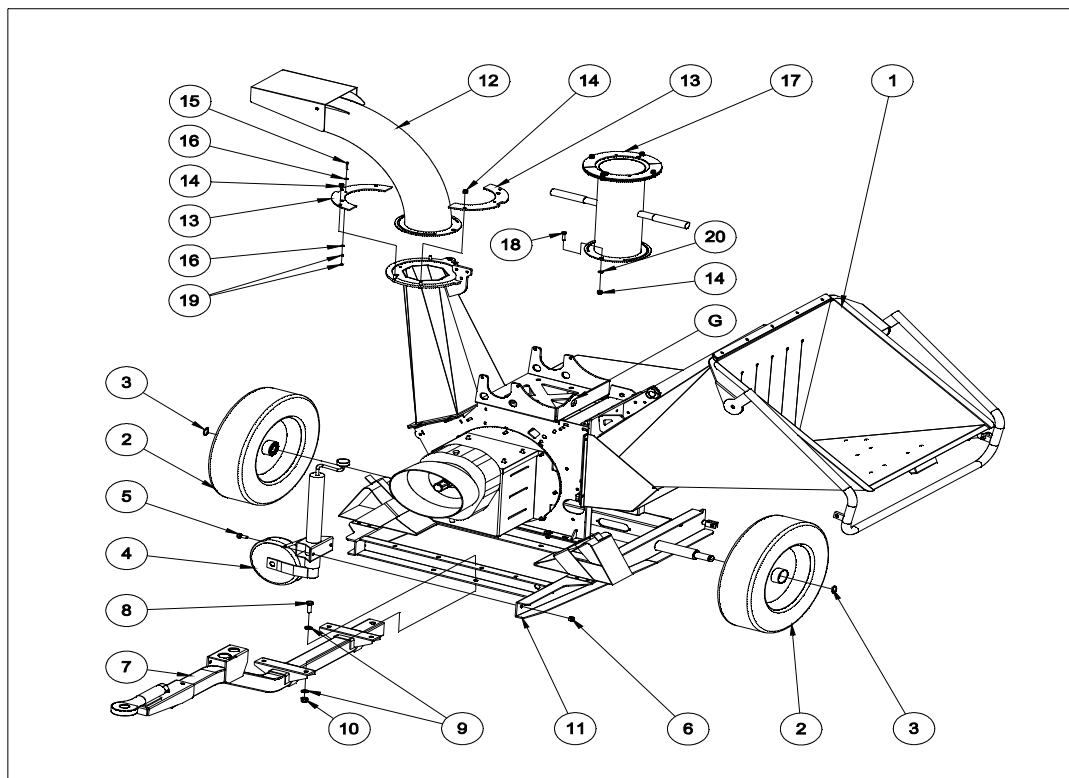
Check that the machine is stable and position the hopper (1) as explained in the picture. Hook the machine up using the specific hook (G) and lift it of 300 mm, then insert the 2 wheels (2) and block them using the 2 covers (3). Mount the support wheel (4) using the 2 screws (5) and the 2 nuts (6). Assembly the drawbar (7) fixing it with the two brackets to the carriage (11) using 4 screws (8), 8 washers (9) and 4 nuts (10). Lean the machine on the ground and check that it's stable. Fix the adjustable conveyor (12) on the ejection pipe using 2 closing flanges (13) and the self-locking nuts (14).

Once the conveyor has been fastened on the pipe, insert the screw (15), the washers (16) and the nuts (19) into the specific hole. The conveyor must be allowed to rotate. Through a slot, this system allows for the 270° rotation of the conveyor, in order to prevent the accidental throwing of shredded material towards the operator opposite the hopper (1).

The shredder R240TTT is equipped with an optional extension for the ejection pipe (17). It has to be fixed to the ejection pipe using the closing flanges (13) and the nuts (14). In order to avoid the complete rotation, the extension has a hole in its base - such hole has to match with the one on the ejection pipe. Put the screw (18) into this hole and fix it with the washers (20) and the nut (14). Put onto the higher part of the extension the adjustable conveyor (12) and fix it to the extension as described above.



Towing on road with the ejection pipe extension set up is severely forbidden!



Pic. 1B - Assembly R240TTT

6 TRANSPORT

The machine's transport can be carried out by authorized means only - the below instructions must be followed:

-Fasten the machine to the means of transport making sure that the profile of the machine does not exceed the limits allowed by the vehicle overall volume.

-Before transporting the machine connected to the tractor, disconnect the PTO and fold the hopper as per the following description.

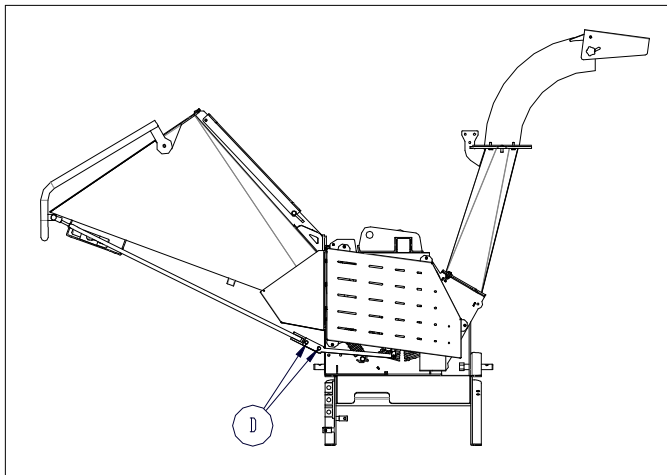
-The handling of the hopper must be carried out by two operators. Do not ever start up the bio-shredder if the hopper is not lowered.

-Disassemble the handwheel (E Pic. 2B) and the gudgeons (D Pic. 2A). While an operator folds the hopper, the other one hooks it through the rod (A Pic. 2C) to the ejection pipe using the handwheels (F Pic. 2C). Block the two rods with the gudgeons (D Pic. 2C).

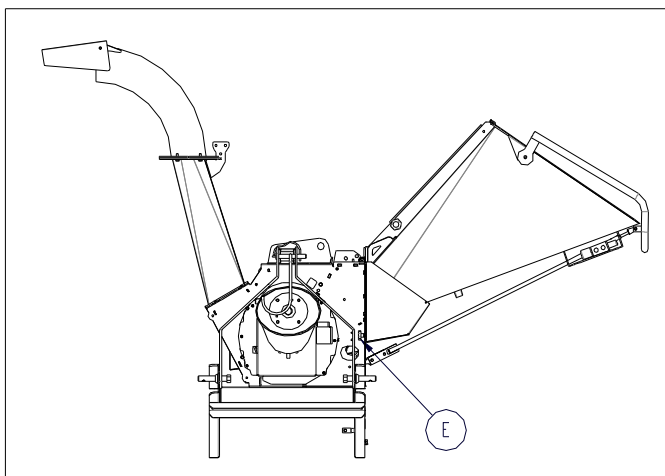
-Rotate the adjustable conveyor towards the hopper and block it by using the specific gudgeon (B Pic. 2C).

-Once the transport has been completed, it is extremely important to bring back the hopper to the working position. While an operator supports the hopper, the other one unhooks it from the ejection pipe unfastening the handwheels (F Pic. 2C). Now the operator holding the hopper must lower it up to the working position, blocking it with the handwheel (E Pic. 2B). Rotate the adjustable conveyor to the previous position, before starting to work. Reassemble the gudgeons (D Pic. 2C).

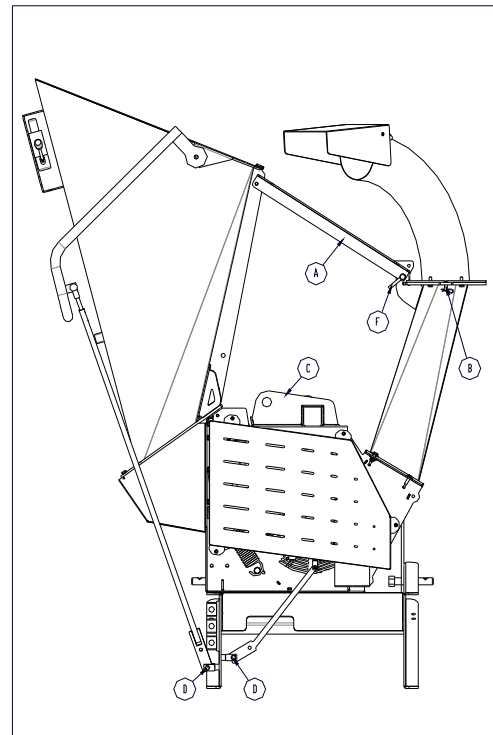
-Should the machine be lifted, position the hopper to the working position and use the lifting hook (C Pic. 2C R240T / G Pic. 1B R240TTT) on the structure.



Pic. 2a – Working position R240T

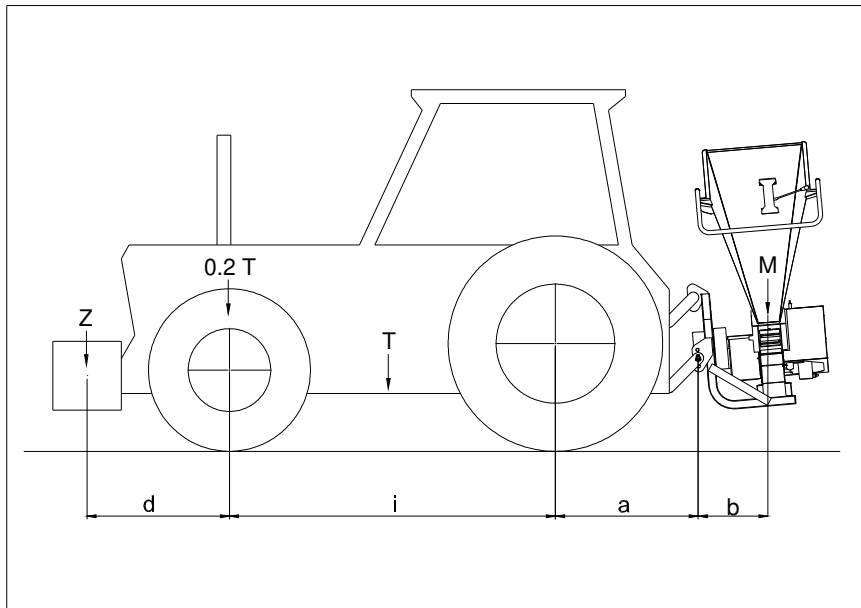


Pic. 2b – Working position R240T



Pic. 2c – Transport position R240T

It is possible to calculate precisely the ballast to be applied to the tractor for a safe transport of the machine, as shown in Pic. 3.



Pic. 3 – Ballast calculation

$$Z \geq \frac{M \cdot (a + b) - 0.2(T \cdot i)}{d + i}$$

- i = axle base tractor wheels
- d = distance between front axle and ballast
- a = distance between rear axle and fulcrum of the 3 point linkage of the machine
- b = distance between fulcrum of the 3 point linkage and barycenter of the machine
- T = tractor mass + operator of 75 kg
- M = machine mass
- Z = ballast

In the R240T bio-shredder “b” is 680 mm, “M” is 330 kg.

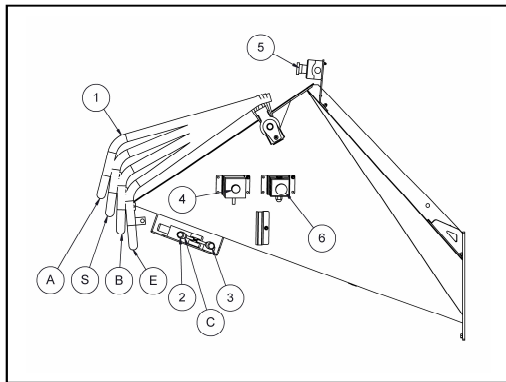
7 EMERGENCY STOP DEVICES

The R240 bio-shredder is equipped with different systems to stop the feeding component.

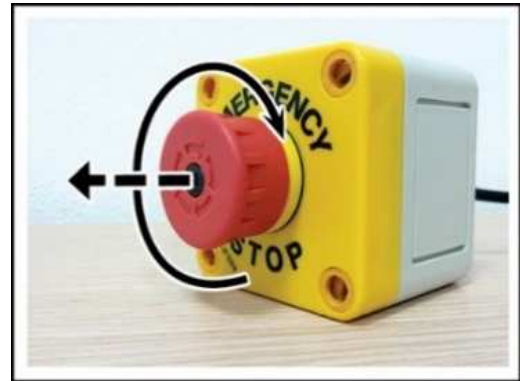
7.1 R240T AND R240TTT

- The control handle (1 Pic. 3A) has the function of lateral and lower protection device as well. By pushing it down to the emergency stop position (E Pic. 3A), the valve lever (C Pic. 3A) is automatically moved to the position (3 Pic. 3A) and the feeding component stops. To start working again, the control handle (1 Pic. 3A) must be moved from the emergency stop position (E Pic. 3A) to the working positions (A and B Pic. 3A) and move the valve lever (C Pic. 3A) from the position (3 Pic. 3A) to the position (2 Pic. 3A).
- The button (5 Pic. 3A) on the upper part of the hopper has the function of upper protection device. By pushing it, the feeding component stops. To start working again, rotate and release the button (Pic. 3B) and press the reset button (4 Pic. 3A).
- The buttons (6 Pic. 3A) at the hopper sides have the function of emergency stop. By pushing them, the feeding component stops. To start working again, rotate and release the buttons (Pic. 3B) and press the reset button (4 Pic. 3A).
- When the control handle (1 Pic. 3A) is in the position (S Pic. 3A), the feeding component is in normal stop, to start working again, move the control handle (1 Pic. 3A) to the working positions (A and B Pic. 3A).

Check the correct functioning of the emergency stop devices before any use. If they should not work, please contact an authorized technician.



PIC. 3A



PIC. 3B

8 INFORMATION ON USE

8.1 WORKING TIME

According to the regulations concerning protection against noise, shredders can be used in certain time slots only; these are predetermined by the norms in force in the country where the machine is used.

8.2 START UP

Place the bio-shredder on a dry and flat ground. Let it coupled to the tractor. Make sure that all protection guards are closed. Rotate the adjustable conveyor to the desired position.

Make sure the level of the hydraulic oil and of the gearbox oil (see paragraph *Maintenance*) are not below the allowed limit.


Connect the cardan joint to the tractor and make sure the safety locks insert themselves correctly into the specific housings. Then fasten the safety chains to a fix part of the shredder and of the tractor so that the external protection does not rotate. Connect the machine plug to the socket of the tractor lighting system and turn the position lights on.

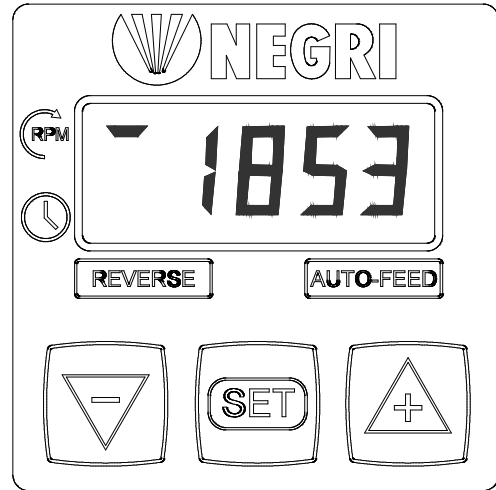
IN ORDER TO WORK THE MACHINE MUST BE ELECTRICALLY POWERED BY THE TRACTOR.

Turn the tractor on at minimum speed and insert the cardan PTO, release the clutch slowly so that the shredder starts to rotate slowly, then accelerate progressively so to reach 540 rpm at the PTO.

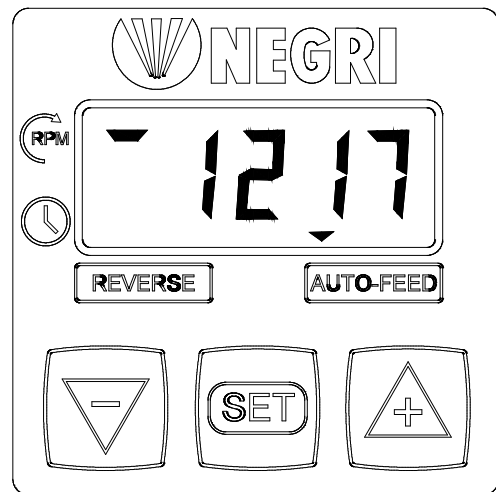
8.3 NOSTRESS DEVICE

The Notress device adjusts the action of the feeding component automatically in order to avoid any clogging of the cutting group. When turning on the tractor position lights, the Nostress starts automatically.


During the normal functioning of the device, on the display you can see the rotor rpm and the indicator is on next to the symbol  .

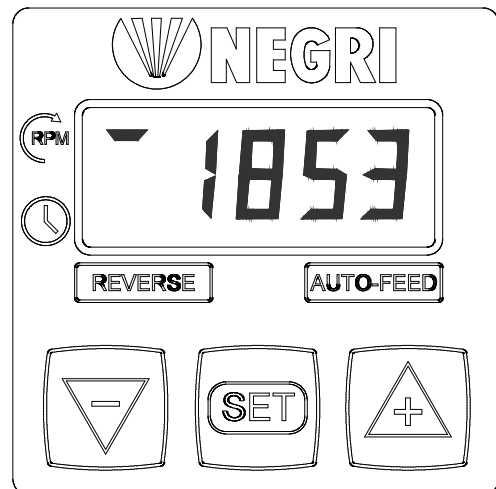


When the device starts to stop the roller, the indicator lights up next to the symbol  .

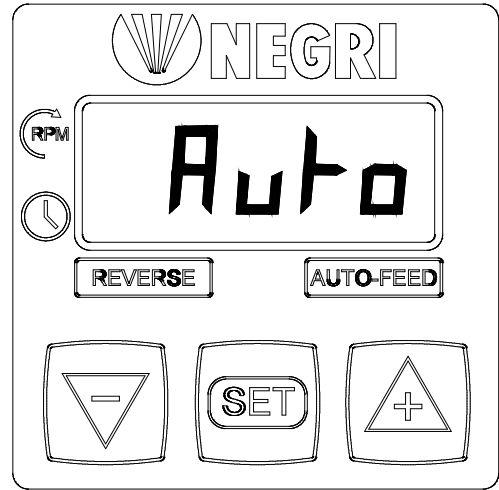


DEACTIVATION / ACTIVATION OF THE NOSTRESS DEVICE

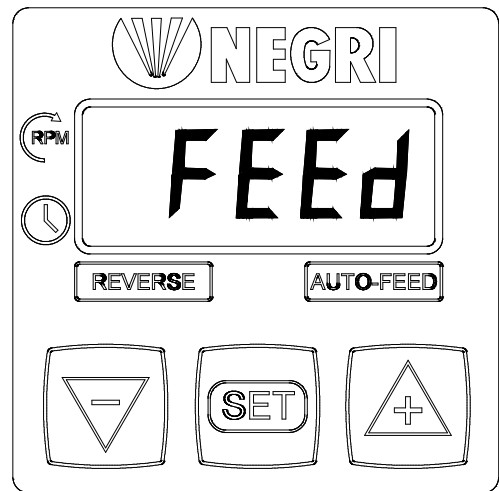
In order to deactivate the Nostress function, press the button  for at least 3 seconds.



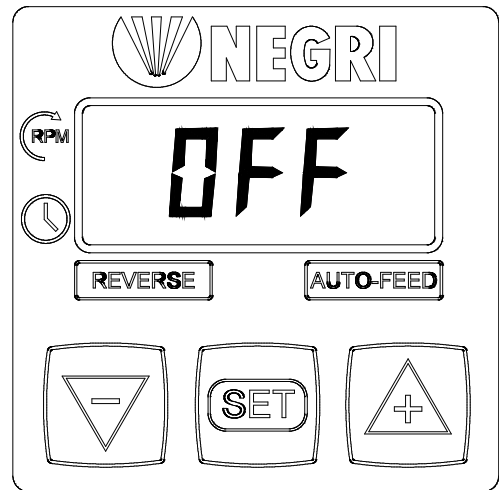
The word "AUTO" appears for about 0.5 seconds.



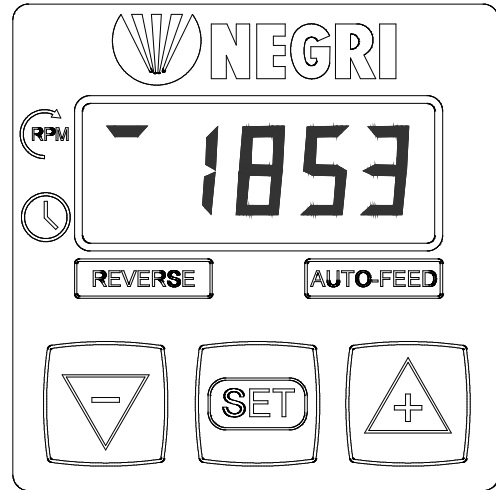
The word "FEED" appears for about 0.5 seconds.




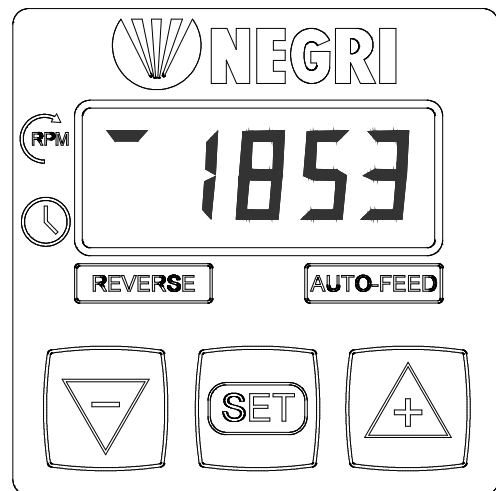
The word "OFF" appears for about 0.5 seconds.



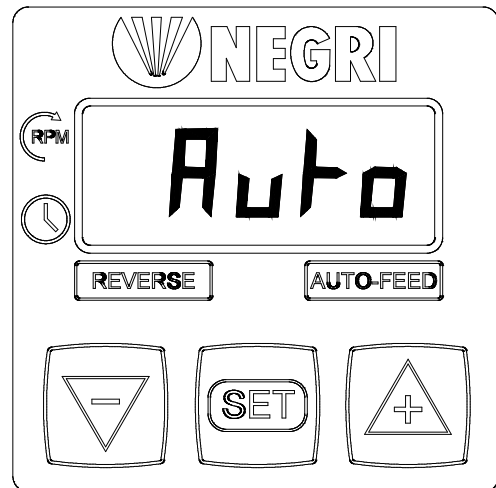
Finally the rotor speed appears again. In this condition the device works only as rpm counter and hour counter.



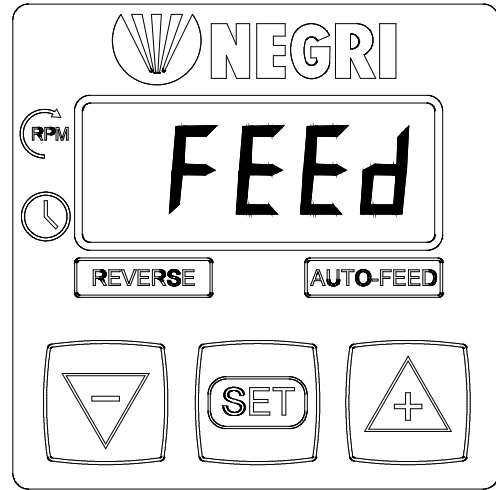
In order to start the Nostress function, press the button  for at least 3 seconds.



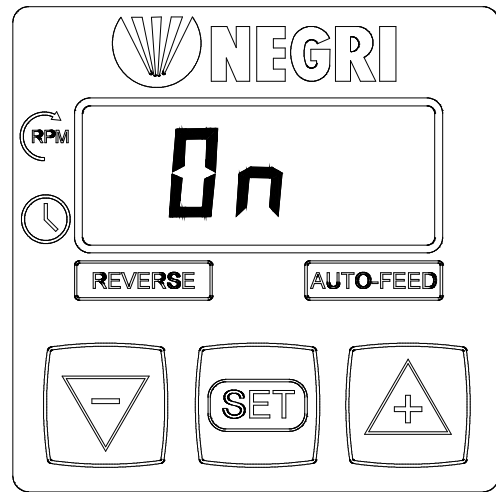
The word "AUTO" appears for about 0.5 seconds.



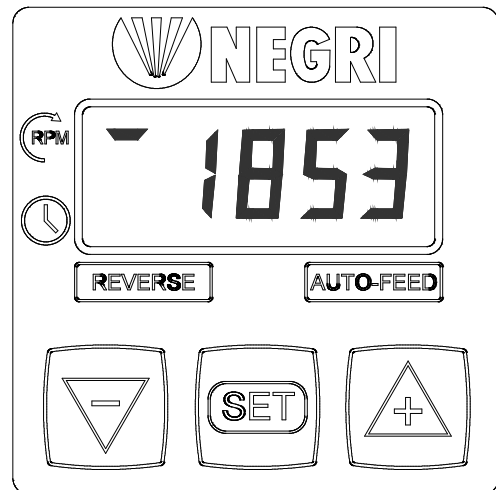
The word "FEED" appears for about 0.5 seconds.




The word "ON" appears for about 0.5 seconds.

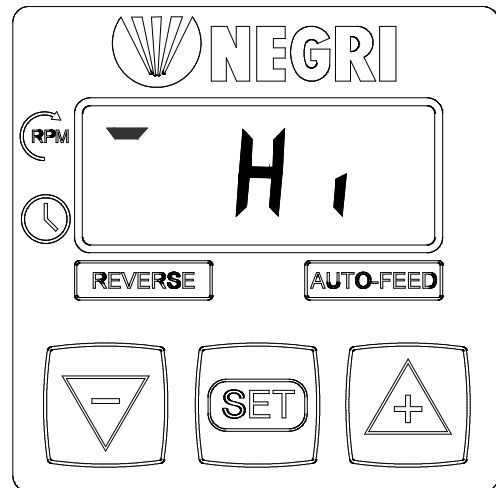





Finally the rotor speed appears again. In this condition the device works as rpm counter, hour counter and Nostress.

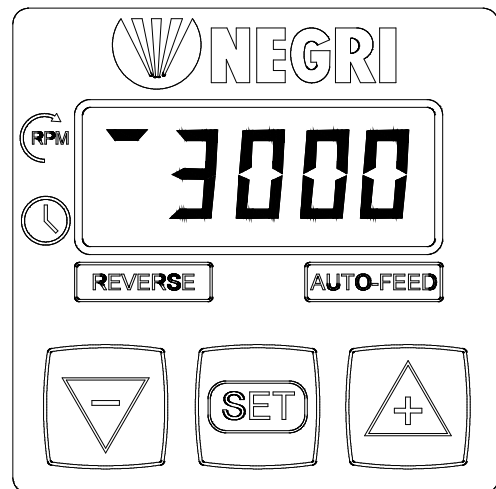


NOSTRESS DEVICE SETTING

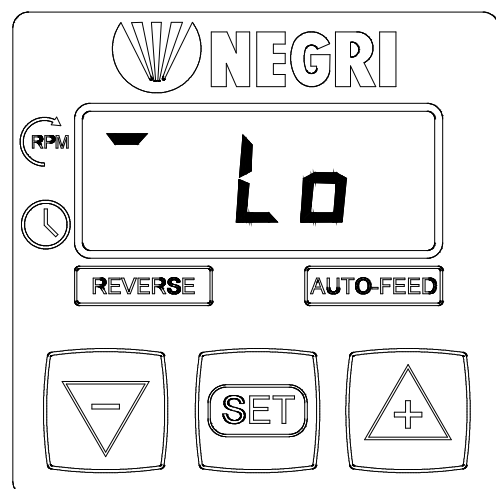
Press the button  for more than 2 seconds in order to enter the setting procedure. On the display the “HI” parameter (maximum speed) appears.






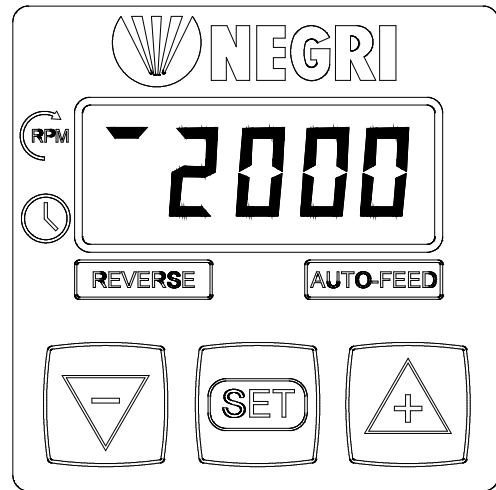
About one second after the value set up currently will appear (e.g. 3000 rpm). Press the buttons  and  in order to increase or reduce the value. Press the button  in order to memorize the value and go to the next parameter.



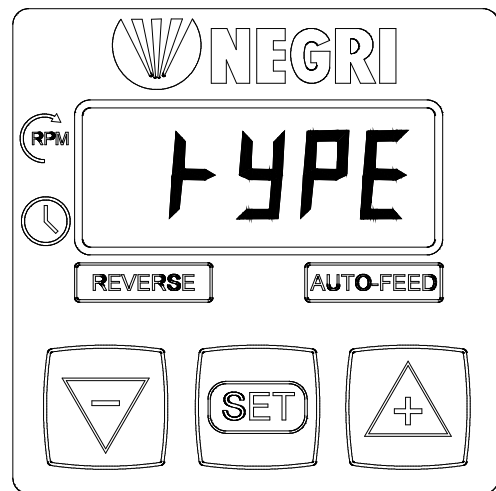
The “LO” parameter (minimum speed) appears on the display




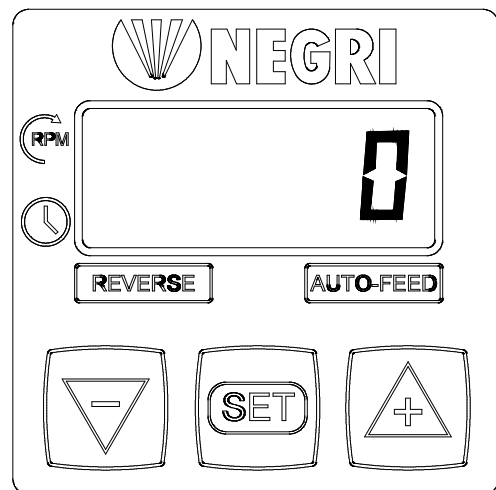
About one second after the value set up currently will appear (e.g. 2000 rpm). Press the buttons  and  in order to increase or reduce the value. Press the button  in order to memorize the value and go to the next parameter.



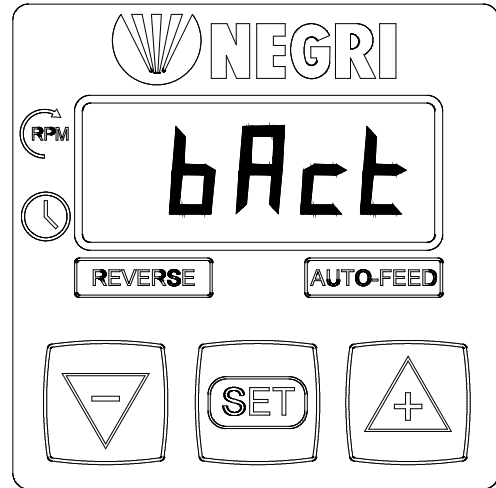
The "TYPE" parameter (type) appears on the display.




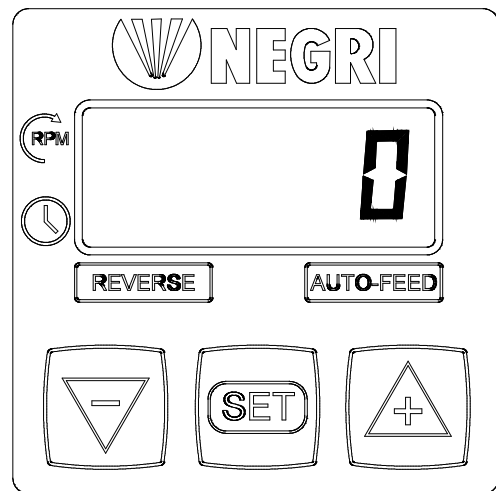
About one second after the value set up currently will appear. This parameter must not be changed, press the button  in order to confirm the value and go to the next parameter.



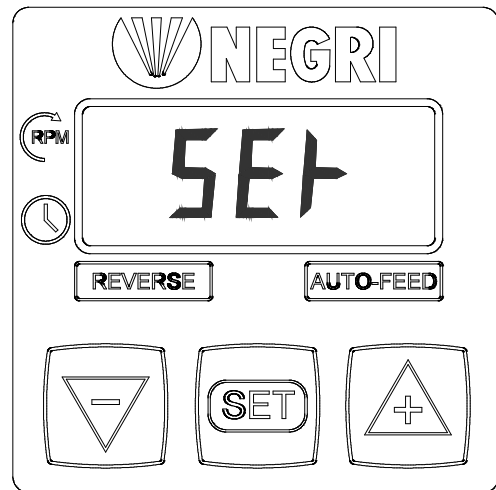
The "BACK" parameter (BACK) appears on the display.






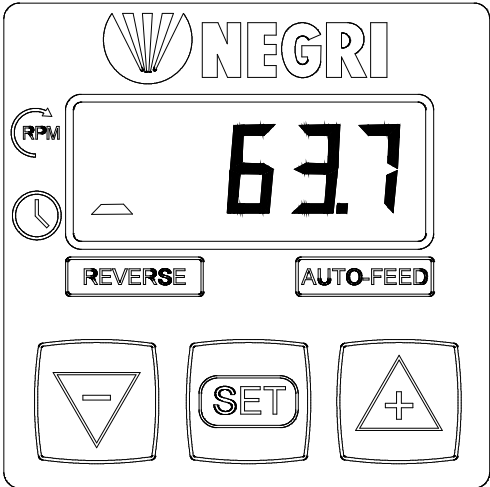
About one second after the value set up currently will appear. This parameter must not be changed, press the button  in order to confirm the value.



The word "SET" appears on the display for about one second and then the setting procedure is over.



ATTENTION! All the steps of the setting procedure must be followed, otherwise the parameters are not memorized by the device.

WORKING HOURS	
<p>In order to see the working hours, press the button  or  shortly. The value will light up next to the symbol  on the display and the working hours will appear for 3 seconds, indicated by a decimal number (e.g. 63.7 corresponds to 63 hours and $7 \times 60 / 10 = 42$ working minutes).</p>	

The Nostress is calibrated by Negri Srl with the following values:

Max. revolutions number: 2370

Min. revolutions number: 2350

8.4 USE

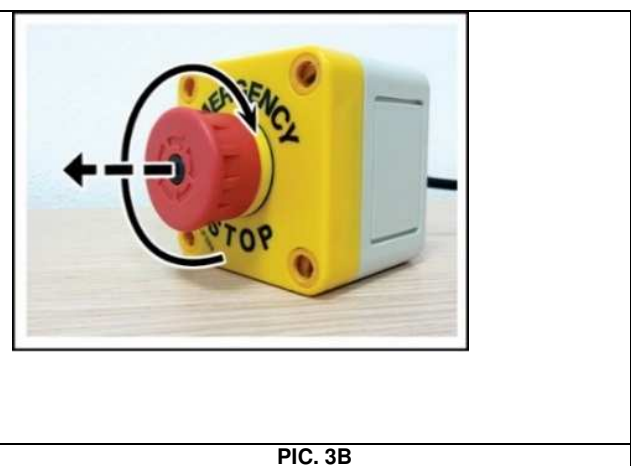
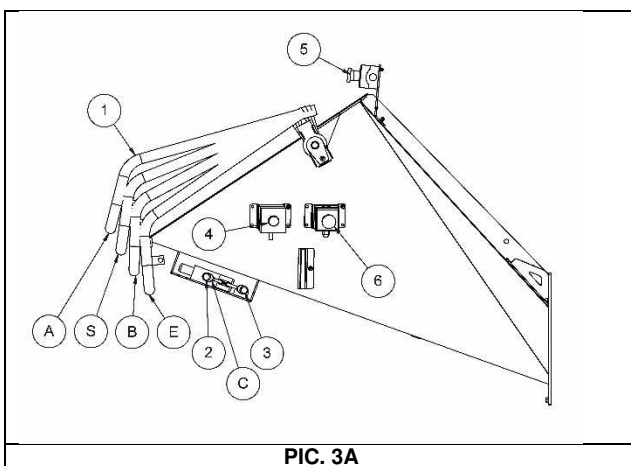
Use the machine at a temperature between -15°C and +40°C.

The operator must wear all the individual protection devices indicated in the paragraph *Warnings and Safety Directions – Operator Safety*.

Check that the button with function of upper protection device (5 Pic. 3A) or the buttons with function of emergency stop (6 Pic. 3A) are not pushed. If they are pushed, rotate and release (Pic. 3B) and push the reset button (4 Pic. 3A).

The operator has to move the control and emergency stop handle (1) towards himself (Pic. 3A), make sure that the safety valve rod (C) is in position (2) and push the reset button (4 Pic. 3A).

The control handle allows to determine the feeding component rotation direction and speed.



The possible positions are:

A → material introduction max. speed;

O → stop position;

B → material ejection max. speed;

E → emergency stop position.

Each time the control handle (1 Pic. 3A) is in emergency stop position (E Pic. 3A), the valve lever (C Pic. 3A) is automatically moved to position (3 Pic. 3A) and the feeding component stops. To start working again, the

control handle (1 Pic. 3A) must be moved from the emergency stop position (E Pic. 3A) to position (A Pic. 3A) and the valve lever (C Pic. 3A) must be moved from position (3 Pic. 3A) to position (2 Pic. 3A).

Each time the buttons with function of upper protection device (5 Pic. 3A) are pushed, the feeding component stops. To start working again, rotate and release the buttons (Pic. 3A) and push the reset button (4 Pic. 3A). Each time the buttons with emergency function (6 Pic. 3A) are pushed, the feeding component stops. To start working again, rotate and release the buttons (Pic. 3B) and push the reset button (4 Pic. 3A).

The operator can introduce into the hopper leaves and branches with a diameter not exceeding 90 mm. By 90 mm the maximum diameter to be shredded is meant, considering a medium-low hardness wood; it is obvious, therefore, that using high hardness woods, the diameter to be shredded decreases.

For an optimal performance of the machine, it is advisable to use an input speed that allows the tractor engine to always work above its maximum torque.

If wet or fibrous material has to be used, reduce the input speed to prevent the machine clogging and, if necessary, remove the refining screen as described in the paragraph *Accidental Cases*.

8.5 ACCIDENTAL CASES AND WHAT TO DO ACCORDINGLY

Maintenance entailing the removal of guards must be carried out exclusively by authorised workshops.

Before any check, maintenance or cleaning operation, turn off the tractor, disconnect the cardan shaft and wear safety gloves and shoes. Wait until the rotor has completely stopped.

The bio-shredder does not work loadless

Check that the cardan joint is correctly connected to the tractor and to the bio-shredder. The safety locks must be inserted into the specific housings. If the problem persists, please contact an authorized technician.

Stalling of the cutting system because of too much material inserted or because of the accidental falling of stones or metals

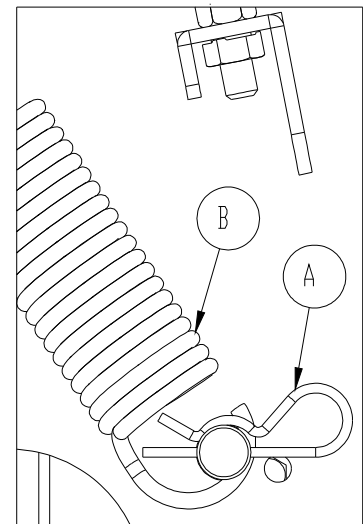
Turn off the tractor engine, remove the key from the ignition switch, wait until the rotor has completely stopped, disconnect the transmission shaft from the tractor PTO and wear safety gloves.

Proceed with the cleaning of the machine as indicated in the paragraph *Maintenance – Cleaning of the Bio-Shredder*.

Each time the shredder stops due to the above-mentioned causes, always check the efficiency of the transmission joint and of the cutting group and make sure that the blades, the hammers and the hammers' shafts are intact.

Blockage of the machine due to some material jammed between the feeding component and the rotor

Turn off the tractor engine, remove the key from the ignition switch, wait until the rotor has completely stopped, disconnect the transmission shaft from the tractor PTO and wear safety gloves. Remove the guard. Remove the pin (A) and unhook the spring (B) (Pic. 5). Lift the feeding component and remove the jammed material. Reassemble.



Pic. 5 – Releasing the roller

Blockage of the bio-shredder due to lack of fuel in the tractor

Fill the tank with the suitable fuel but DO NOT start up the machine immediately after, since the transmission might break.

Before starting the machine again, remove any material that might be jammed under the feeding component as indicated in the previous paragraph. If necessary, clean the bio-shredder as explained in the paragraph *Maintenance – Cleaning of the Bio-Shredder*.

Blockage of the feeding component

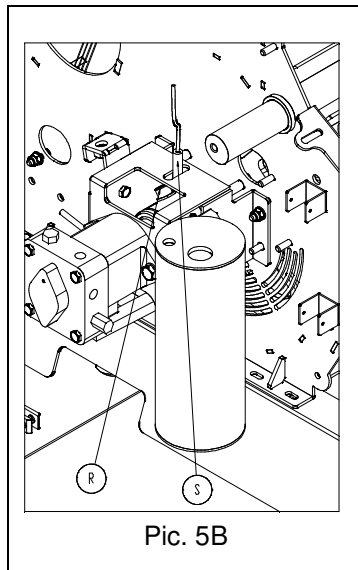
Check if the feeding component has been stopped through the lateral and lower protection device (control handle) or through the upper protection device (button on the upper part of the hopper) or through the emergency stop devices (buttons at the sides of the hopper). If necessary, start the feeding component again (see paragraph *Use*).

Make sure the rotor does not turn at a lower speed than the one prescribed, thus making the Nostress device activate. In this case, use the acceleration lever to restore the correct speed of the rotor.

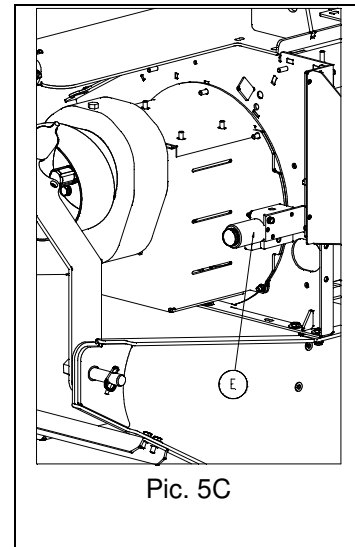
Make sure the feeding roller is not blocked due to the contact with other parts of the machine; in case it is blocked, lift the roller through the specific adjusting screw (see paragraph 9.8) so that there are 5 mm of light between the roller teeth and the bottom of the rotor housing.

If after such checks the problem is still not solved, make sure there are no leaks in the hydraulic system and

that the level of the hydraulic oil is correct (50/70 mm below the filling hole). Check that the elastic pin of the distributor control rod is not broken. Check that the elastic joint is in good condition and that it can transmit power to the pump. If the problem should persist, please contact an authorised technician.



Pic. 5B



Pic. 5C

Malfunction of the Nostress device

The malfunction of the feeding component can be caused by a failure of the Nostress electronic device. If the display is on, but it shows a wrong number of rotor rpm, make sure the sensor (S Pic. 5B) under the pump support is positioned in correspondence and at about 3 mm from the circumference described by the references (R Pic. 5B).

Check the setting of the Nostress device previously described in the paragraph *Nostress Device*. If it has been set wrongly, please carry on the correct adjustment.

Check that the electrovalve (E Pic. 5C) is not blocked or it has not burnt out.

Should any damages occur to the electronic board of the Nostress device or to the sensor, the operator can work manually through the control handle (disconnecting the Nostress). If the problem is not solved, please contact an authorised technician. Do not clean the device with pressurized water jets.

Excessive vibrations

Causes of excessive vibrations:

- displacement of the cutting assembly due to a strong impact;
- break of a blade or serious damage of the hammers;
- seizure of a support;
- loose transmission components.

Find out the exact cause of the problem and contact an authorised technician for the repair.

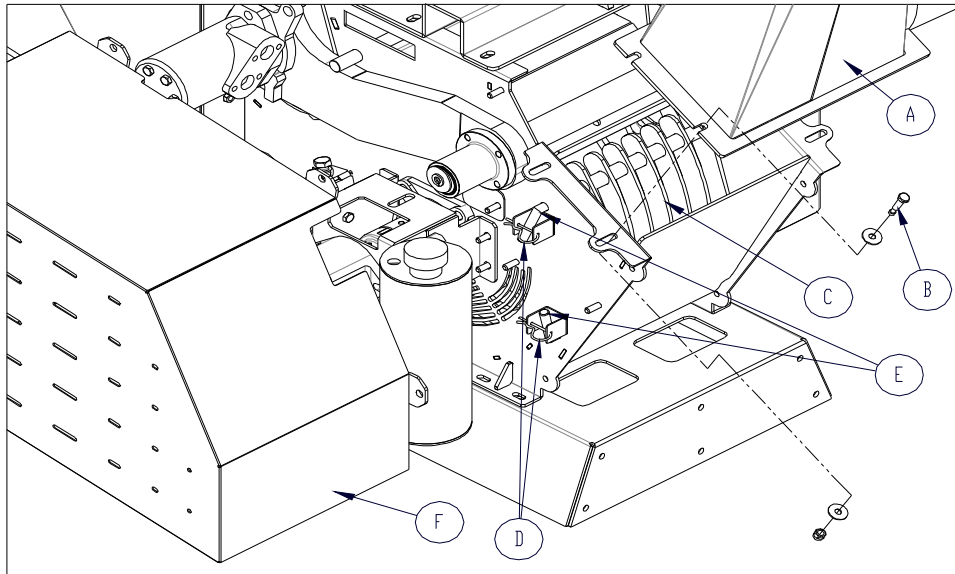
9 MAINTENANCE

Before any check, maintenance or cleaning activity to be carried out at the end of every working process, turn off the tractor engine, remove the keys from the ignition switch, wait until the rotor has completely stopped, disconnect the cardan shaft and wear safety gloves. Maintenance entailing the removal of guards must be carried out by authorized workshops only.

9.1 CLEANING OF THE BIO-SHREDDER

Remove the discharge pipe (A) by loosening and moving into the slots the four screws (B) and remove any eventual remains left between the refining screen and the discharge pipe paying attention to the cutting tools (Pic. 6).

If the cleaning of the rotor is necessary, disassemble the guard (F), disassemble the sieve (C), removing the 2 pins (D) and the gudgeons (E) (Pic. 6) first.



Pic. 6 – Cleaning of the bio-shredder R240T



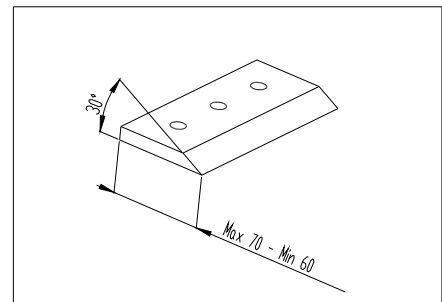
CUTTING TOOLS ARE DANGEROUS!

9.2 CHECKING AND REPLACING OR SHARPENING BLADES (COMBINED ROTOR)

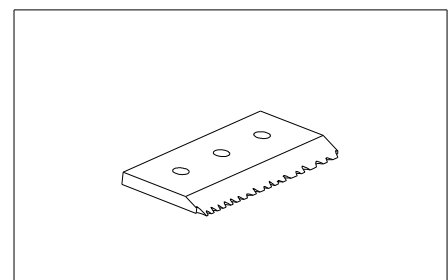
Blades must be checked before every use. In order to guarantee a good operation of the machine, to achieve the best working conditions and avoid any damage to the machine, blades must always be intact and sharp (Pic. 7). The duration of the cutting edge depends on the nature and type of the shredded material and it is therefore impossible to give a precise datum. If the machine is used to shred material containing dust, sand, soil, etc. the blades' cutting edge will deteriorate very quickly.

In order to check the blades' condition, you need to access the rotor as indicated in the paragraph *Maintenance - Cleaning of the Bio-Shredder*. When the blades look like in Pic. 8, they need to be sharpened.

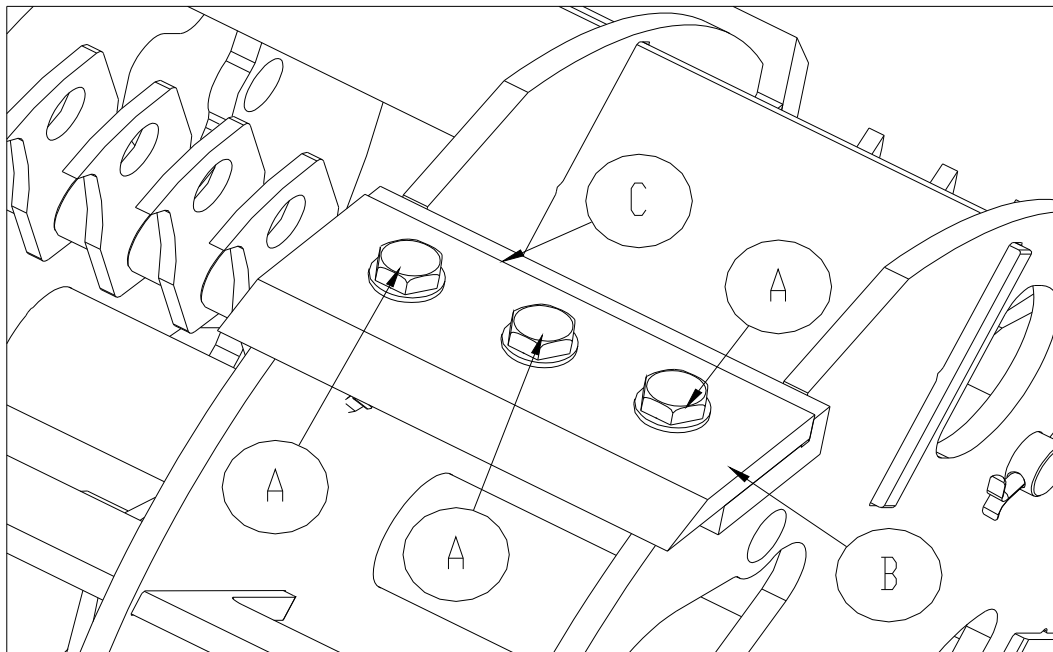
In order to disassemble the blades, it is necessary to unscrew the screws (A) by using a wrench of 17. Remove the blade and sharpen it (according to the measurements indicated in Pic. 7) or replace it. Reassemble the blade (B) by making it lean on the edge (C) making sure the supporting surface is perfectly clean and screw the screws (A) at 73 Nm. Should the screws (A) be worn, replace them by using screws with a resistance category of 10.9 or higher.



Pic. 7 – Sharpened blade



Pic. 8 – Worn blade



Pic. 8 – Replacing blades

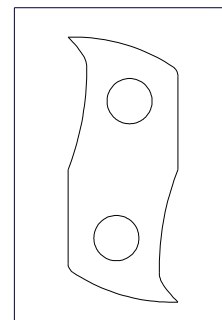
Use original spare parts only (Negri branded), easily available by Negri Srl. Should the blades be subject to strong impacts or hits, let an authorised technician examine them.



ATTENTION: USING THE MACHINE WITH BLADES IN BAD CONDITIONS CAN CAUSE MECHANICAL DAMAGES IMPUTABLE TO THE USER.

9.3 CHECKING AND REPLACING OR ROTATING HAMMERS (COMBINED ROTOR)

Hammers must be checked before every use. In order to guarantee a good operation of the machine, to achieve the best working conditions and avoid any damage to the machine, hammers must always be intact (Pic. 10). The duration of the hammers depends on the nature and type of the shredded material and it is therefore impossible to give a precise datum. If the machine is used to shred material containing dust, sand, soil, etc. the hammers will deteriorate very quickly.

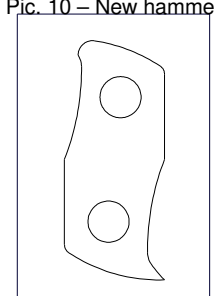


Pic. 10 – New hammer



ATTENTION: USING THE MACHINE WITH HAMMERS IN BAD CONDITIONS CAN CAUSE MECHANICAL DAMAGES IMPUTABLE TO THE USER.

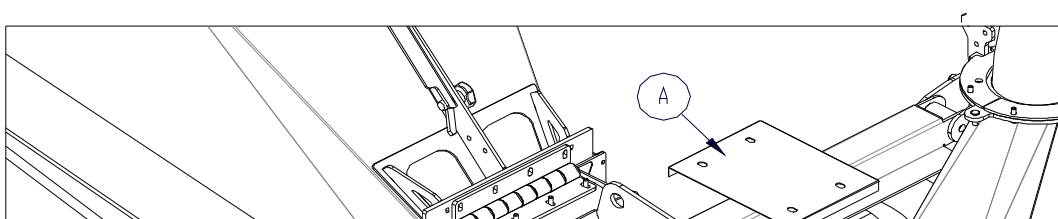
In order to check the hammers' condition, you need to access the rotor as indicated in the paragraph *Maintenance - Cleaning of the Bio-Shredder*. When the hammers look like in Pic. 11, they need to be rotated or replaced.

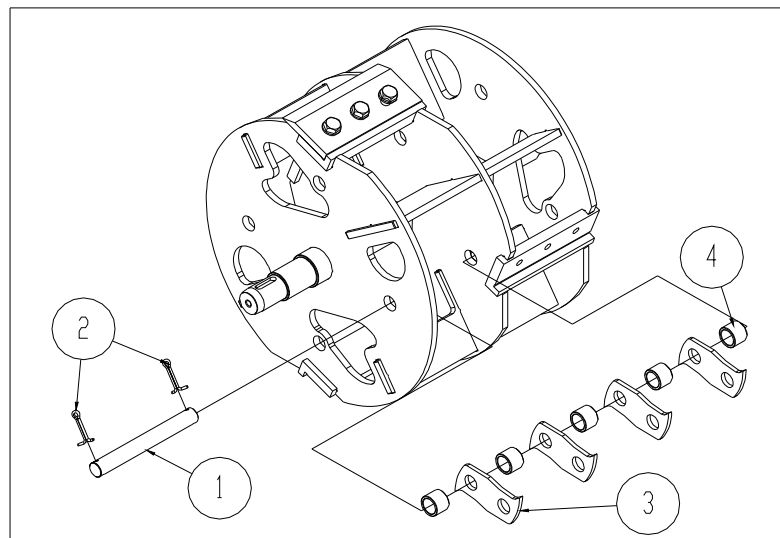


Pic. 11 – Worn hammer

To rotate or replace the hammers remove the group support cover (A Pic. 12), unscrewing the 4 nuts, remove the pump guard (B), disassemble the ejection pipe (D), remove the covers (E) on the rotor housing and disassemble the refining screen, removing the pins (C) and the gudgeons (F).

Using the two obtained holes block the gudgeon (1 Pic. 14) with a pliers and with another pliers extract the pin (2). By pulling off the gudgeon (1), all the hammers (3) and distance spacers (4) (Pic. 14) can be recovered.





Pic. 14 – Rotor assembly

9.4 CHECKING AND REPLACING OR ROTATING HAMMERS (ROTOR WITH HAMMERS)

Hammers must be checked before every use. In order to guarantee a good operation of the machine, to achieve the best working conditions and avoid any damage to the machine, hammers must always be intact (Pic. 10). The duration of the hammers depends on the nature and type of the shredded material and it is therefore impossible to give a precise datum. If the machine is used to shred material containing dust, sand, soil, etc. the hammers will deteriorate very quickly.

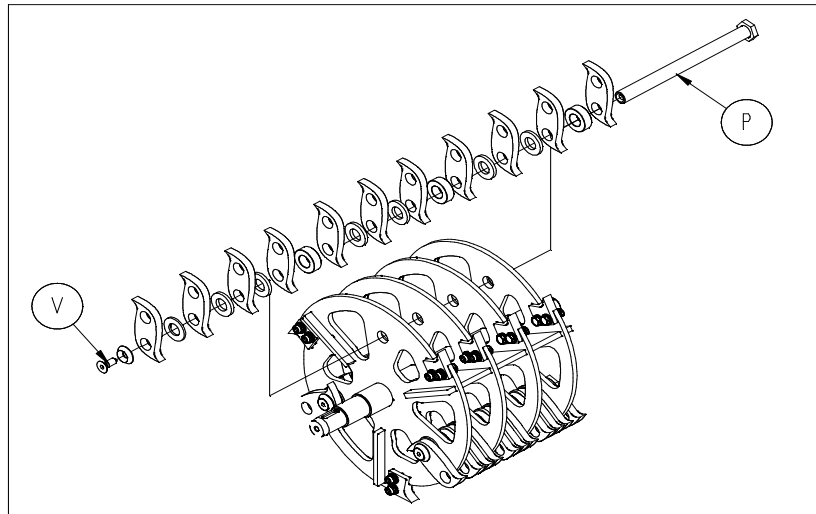


ATTENTION: USING THE MACHINE WITH HAMMERS IN BAD CONDITIONS CAN CAUSE MECHANICAL DAMAGES IMPUTABLE TO THE USER.

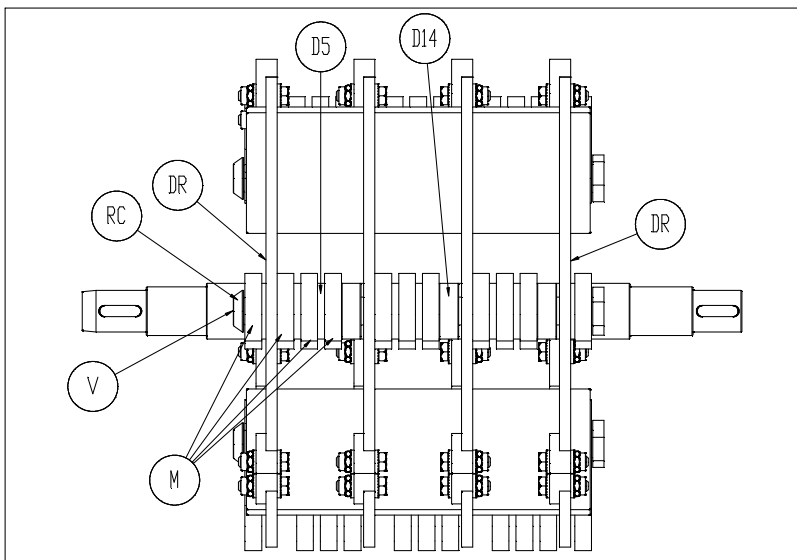
In order to check the hammers' condition, you need to access the rotor as indicated in the paragraph *Maintenance - Cleaning of the Bio-Shredder*. When the hammers look like in Pic. 11, they need to be rotated or replaced.

To rotate or replace the hammers remove the belt guard (A Pic. 13), remove the pump guard (B), disassemble the ejection pipe (C) and the two hole covers (D) on the rotor housing. Disassemble the refining screen (E) removing the two pins (F) and the gudgeons (G) (Pic. 13) first.

Unscrew the screw (V Pic. 13 bis) and unthread the gudgeon (P Pic. 13 bis) by recovering hammers and distance rings. If necessary heat the screw with a heat gun. Rotate or replace the hammers and mount again by following the instructions in reverse order. Look at picture 12ter to install the distance rings in the right sequence. A wrong assembly can cause damaging vibrations to the machine.



Pic. 12bis



Pic. 12ter

Key	
V	= screw
RC	= conical washer
M	= hammer
DR	= rotor disc
D2	= 2 mm distance ring
D3	= 3 mm distance ring
D5	= 5 mm distance ring
D8	= 8 mm distance ring
D14	= 14 mm distance ring

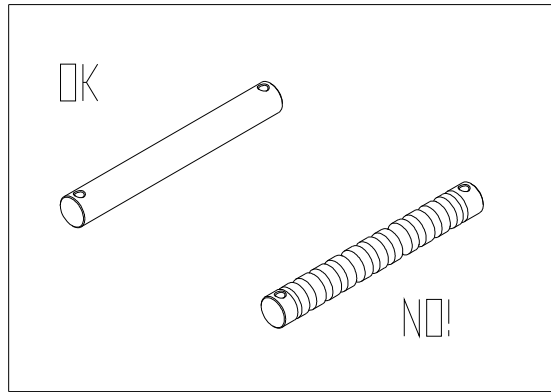
After rotating or replacing the hammers arrange the distance rings the following way:

Row 1: V-RC-M-D3-DR-M-D5-M-D5-M-D14-DR-M-D5-M-D5-M-D14-DR-M-D5-M-D5-M-D14-DR-D3-M.

Row 2: V-RC-M-D3-DR-D8-M-D5-M-D5-M-D5-DR-D8-M-D5-M-D5-M-D5-DR-D8-M-D5-M-D5-M-D5-DR-D3-M.

Row 3: V-RC-M-D3-DR-D14-M-D5-M-D5-M-D2-DR-D14-M-D5-M-D5-M-D2-DR-D14-M-D5-M-D5-M-D2-DR-D3-M.

Before rotating or replacing the hammers, check the surface condition of the gudgeons; if the hammers' friction reduces of 1 mm the diameter of the gudgeons, it is highly recommended to replace them (Pic. 13).



Pic. 13 – Gudgeon wear

9.5 CHECKING OR REPLACING TEETH

Teeth must be checked before every use. In order to guarantee a good operation of the machine, to achieve the best working conditions and avoid any damage to the machine, teeth must always be intact. The duration of the teeth depends on the nature and type of the shredded material and it is therefore impossible to give a precise datum. If the machine is used to shred material containing dust, sand, soil, etc. the teeth will deteriorate very quickly.



ATTENTION: USING THE MACHINE WITH TEETH IN BAD CONDITIONS CAN CAUSE MECHANICAL DAMAGES IMPUTABLE TO THE OPERATOR.

In order to check the condition of the teeth, you need to access the rotor as indicated in the paragraph *Maintenance - Cleaning of the Bio-Shredder*.

To replace the teeth (P Pic. 12bis) it's sufficient to unscrew the screws (V Pic. 12bis) and the washers (R Pic. 12bis). Mount all again fastening the screws through a torque wrench and a tightening torque of 37 Nm.

Use original spare parts only, easily available by Negri Srl. Should the teeth be subject to strong impacts or hits, let an authorised technician examine them.

To ask for spare parts or any technical information it is necessary to provide our after sales department with the MODEL, the SERIAL NUMBER and the CONSTRUCTION YEAR of the machine in order to make its identification easier and therefore provide a quick and precise service.

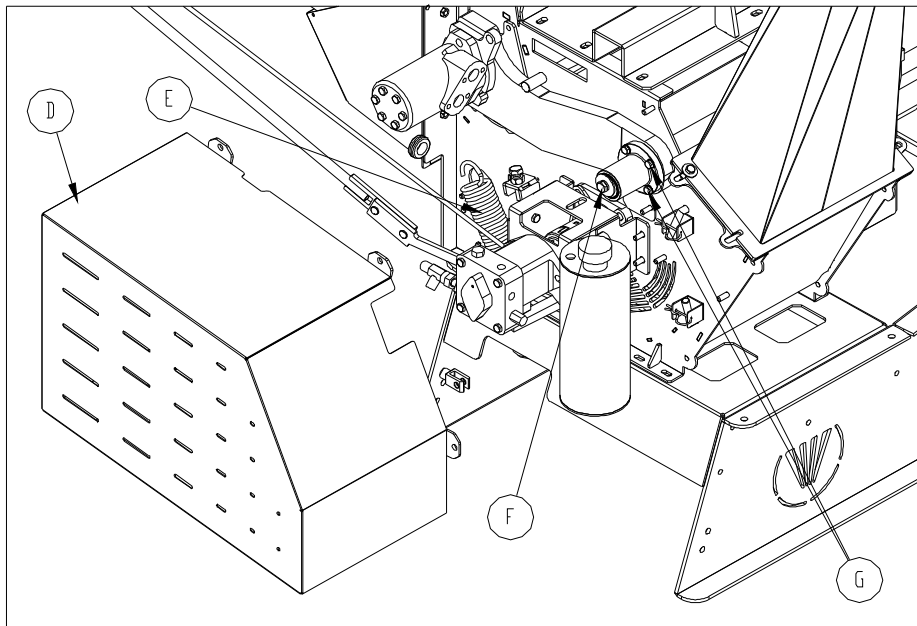
The above-mentioned information can be found on the identification plate (see label n. AD0028 in the paragraph *Safety Pictograms* at the end of the manual).

9.6 CHECKING THE CLEARANCE OF THE ROLLER ARM AND REPLACING THE BUSHES

Remove the pump guard (D Pic. 15) by unscrewing the four nuts and unhook the spring (E Pic. 15). Check, by pressing manually, whether the roller's arm has any axial and radial clearance that might cause some contact between the roller and the rotor housing. Should there be any interferences, replace the two bushes. Unscrew the screw (F Pic. 15) on top of the joint and the 4 screws (G Pic. 15) that keep it fastened to the arm, remove it and extract the two worn bushes.

Replace the two bushes and reassemble in reverse order.

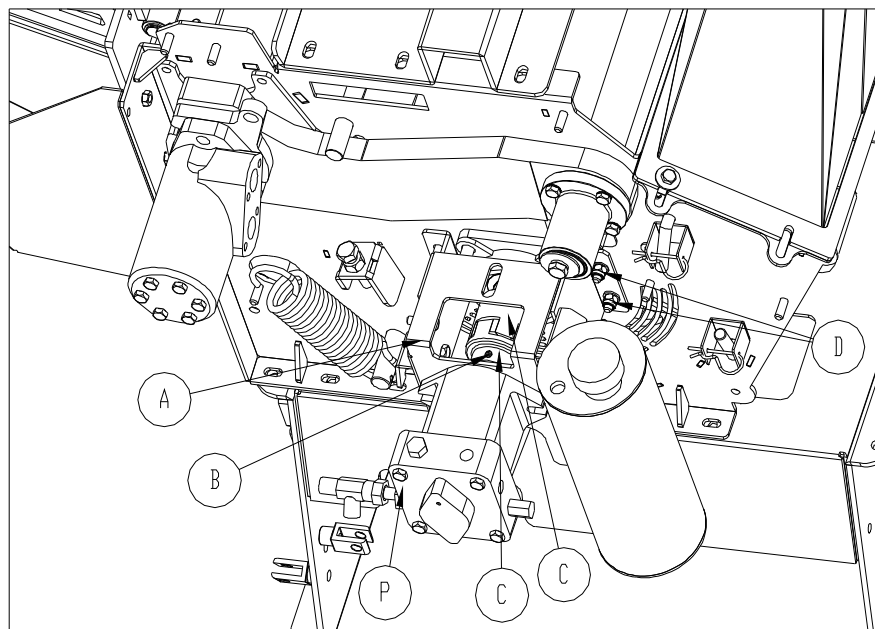
In case of replacement, it is highly recommended to use a press to introduce the bushes.



Pic. 15 – Replacing bushes R240T

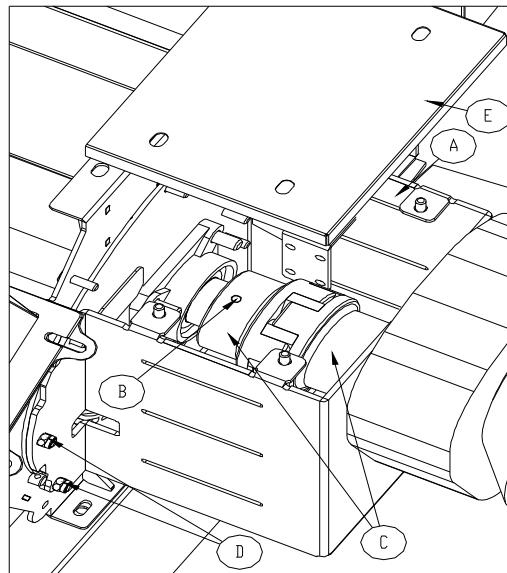
9.7 CHECKING THE ELASTIC JOINTS

In order to check the pump joint wear (C Pic. 16), disassemble the pump guard (see paragraph 9.1). Moving the joint manually, make sure there is no clearance. If there is any clearance, it must be replaced. In order to replace the elastic joint unscrew the 2 pegs (B), the 4 nuts (D), disassemble the pump support - the pump (P) is still connected - and extract the two joints (C). Replace the complete joint assembling all again by following the process in reverse order.



Pic. 16 – Checking the pump joint

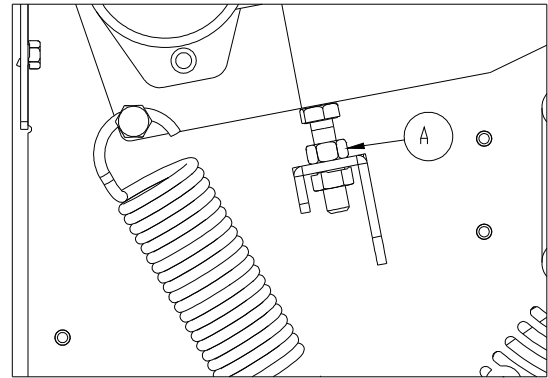
In case it must be replaced, disassemble the group support (A) unscrewing the 6 nuts (D), loosen the pegs (B), disassemble the group support (A) with the gearbox still connected and extract the 2 joints (C). Replace the complete joint, assembling all again in reverse order (Pic. 17).



Pic. 17 – Checking the elastic joint

9.8 CHECKING THE ROLLER HEIGHT

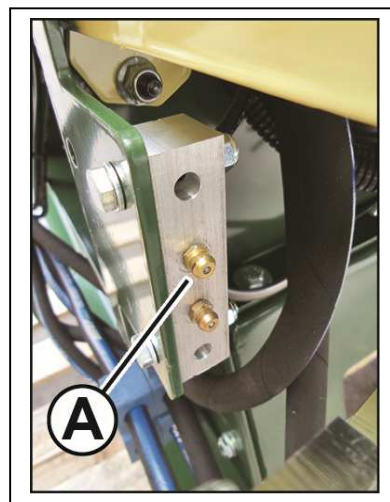
Every six months it is recommended to check, by looking inside the hopper, that there are at least 5 mm between the feeding roller and the hopper bottom. Should it be necessary to adjust the height, remove the guard and operate on the adjusting screw (A) at the machine side, by using a wrench of 22 (Pic. 18).



Pic. 18 – Adjusting the roller height

9.9 GREASING OF THE BEARINGS

Grease the bearings of the shredding group every 50 working hours and every 6 months as well. The machine has a lubrication system A (Pic. 19). Fill about 20 cm³ of grease type NLGI 2.



Pic. 19

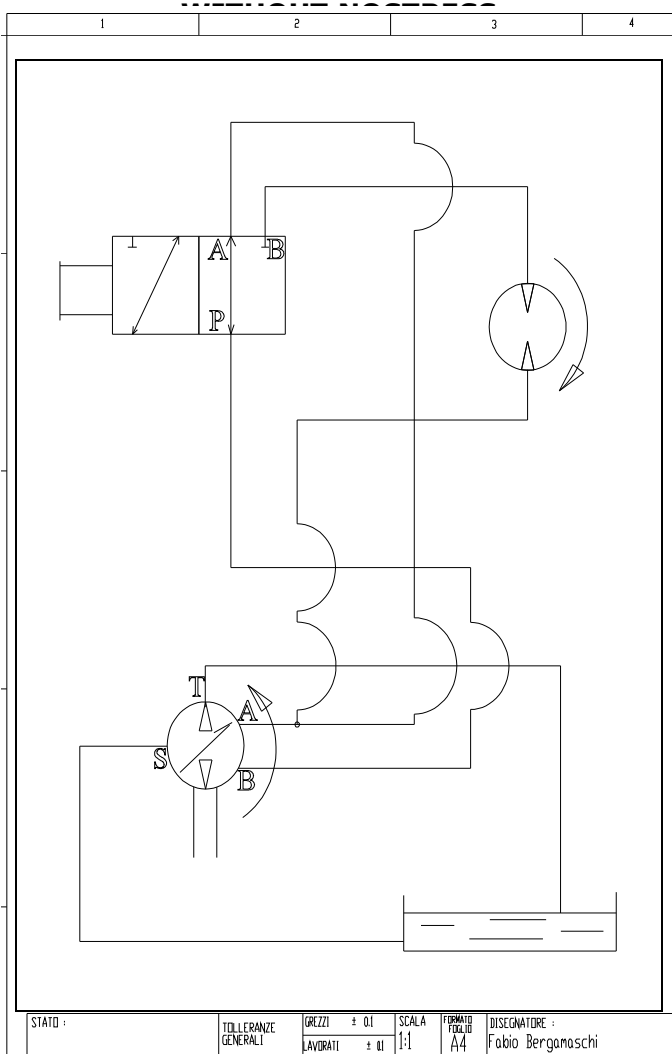
9.10 VARIOUS LEVELS

- Hydraulic oil: it is possible to check the oil level through the replenishing hole (50-70 mm below the replenishing hole). In case of replenishing, use an ISO VG 46 type oil. Capacity: about 3.5 l.
- Gearbox oil: it is possible to check the oil level through the inspection hole on the right of the shaft. In case of replenishing, use a SAE 80W-90 type oil. Capacity: about 0,45 l.

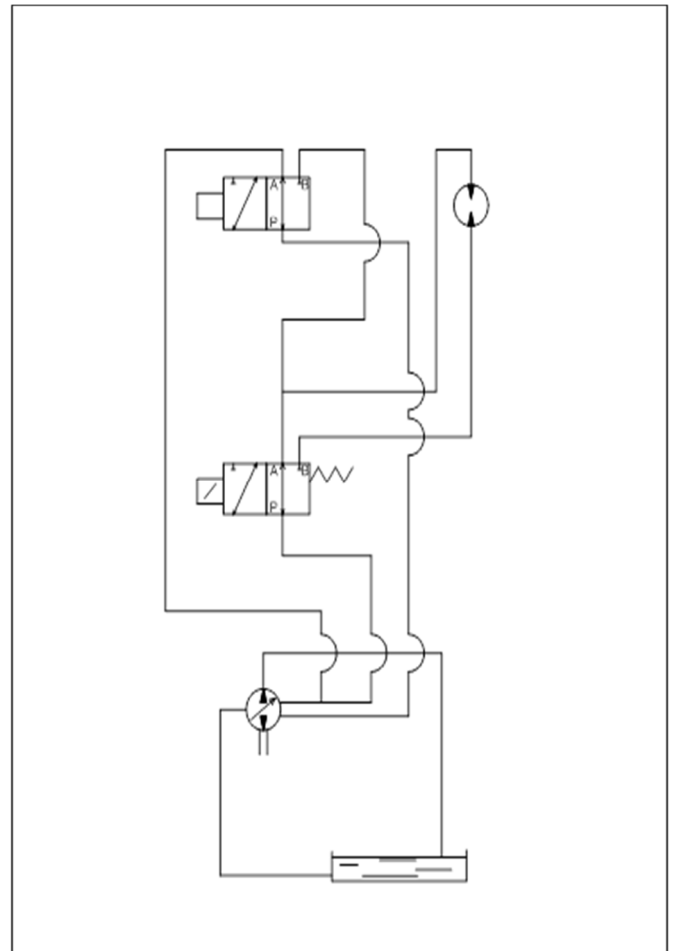
9.11 TABLE OF MAINTENANCE

	DAILY	50 H	100 H	600 H	6 MONTHS	1 YEAR	2 YEARS
Machine cleaning	■						
Check locking of screws and nuts	■						
Check guards	■						
Check hammers and teeth	■						
Check blades	■						
Check clearance of roller's arm			■				
Greasing of bearings		■			■		
Check wear and clearance of joints			■				
Replacing hydraulic oil ISO VG 46				■			■
Replacing gearbox oil SAE 80W-90				■			■

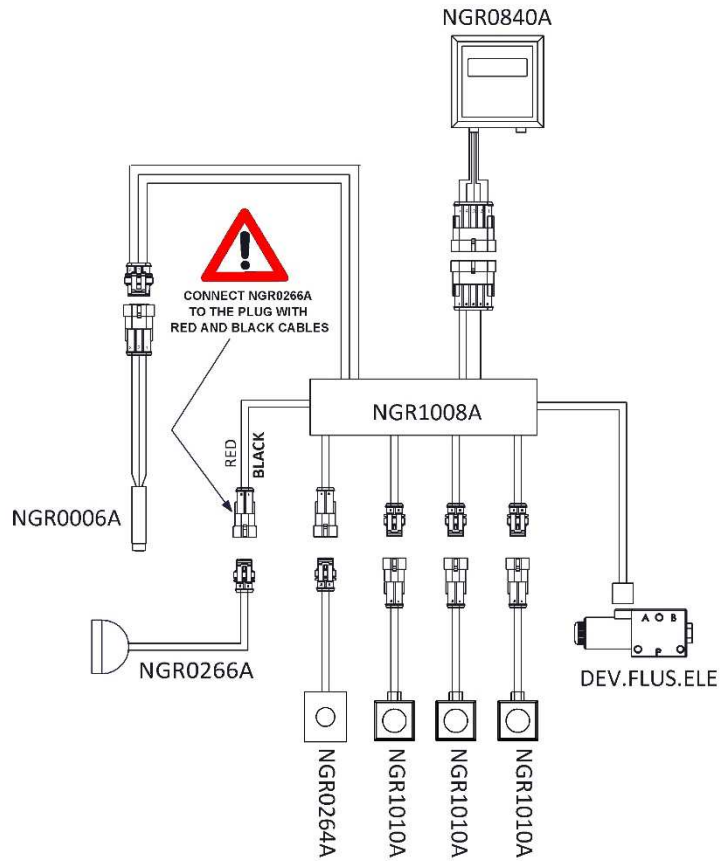
9.12 HYDRAULIC DIAGRAM



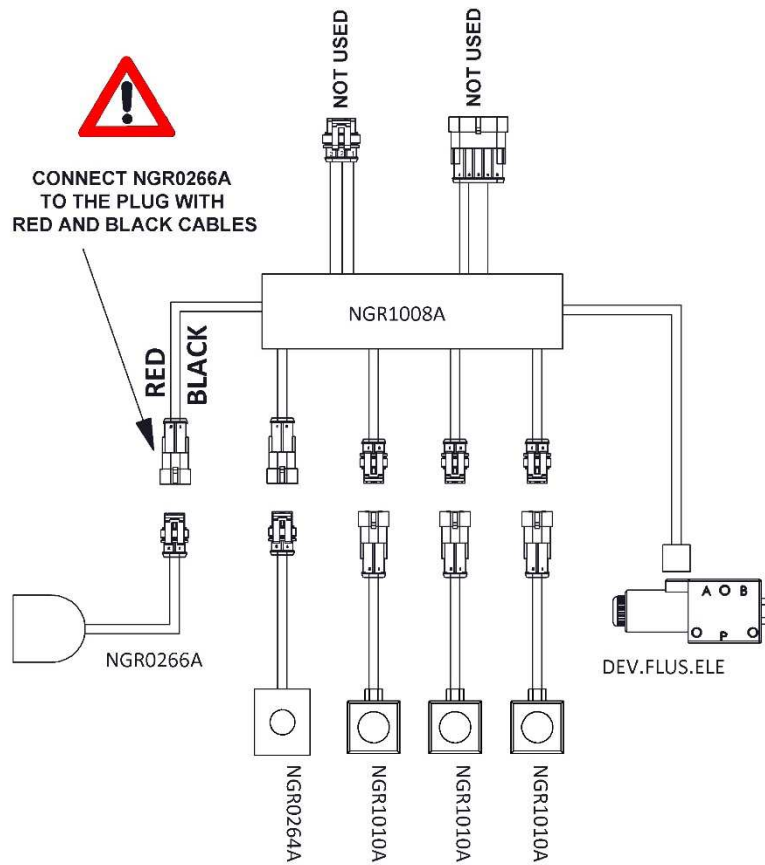
WITH NOSTRESS



9.13 ELECTRIC DIAGRAM WITH NOSTRESS



9.14 ELECTRIC DIAGRAM WITHOUT NOSTRESS



10 STORAGE

At the end of every use, turn the tractor off, disconnect the cardan shaft and the machine from the tractor and place the cardan shaft still inserted in the machine on the support hook (version R240T) or lean the disconnected cardan shaft on the cardan support above the rotor housing (version R240TTT). Clean the cutting group, check that screws and nuts are well fastened and that all the guards are intact and well fixed to the machine.

Store the machine in a dry and covered place.

11 WARRANTY

NEGRI SRL guarantees the machine against manufacturing and material defects for a period of 2 years from the purchase date, to any person that does not use the machine for their business or profession.

Guarantee conditions meet the European Directive 1999/44/CE.

One-year guarantee is granted to those people that use the product for a professional aim. The guarantee is valid only if shown together with the sales receipt or the certificate guarantee (enclosed to the present manual) filled in by the seller upon purchase and sent within 10 days from the purchase date.

As far as the engines/motors are concerned, the guarantee granted by their manufactures is valid for 1 year. The guarantee excludes any responsibility for direct or indirect damages to people or things and is no longer valid when the pieces given back appear to have been disassembled, manipulated or repaired in non-authorized centres. Damages due to the non-observance of the instructions are not covered by the guarantee.

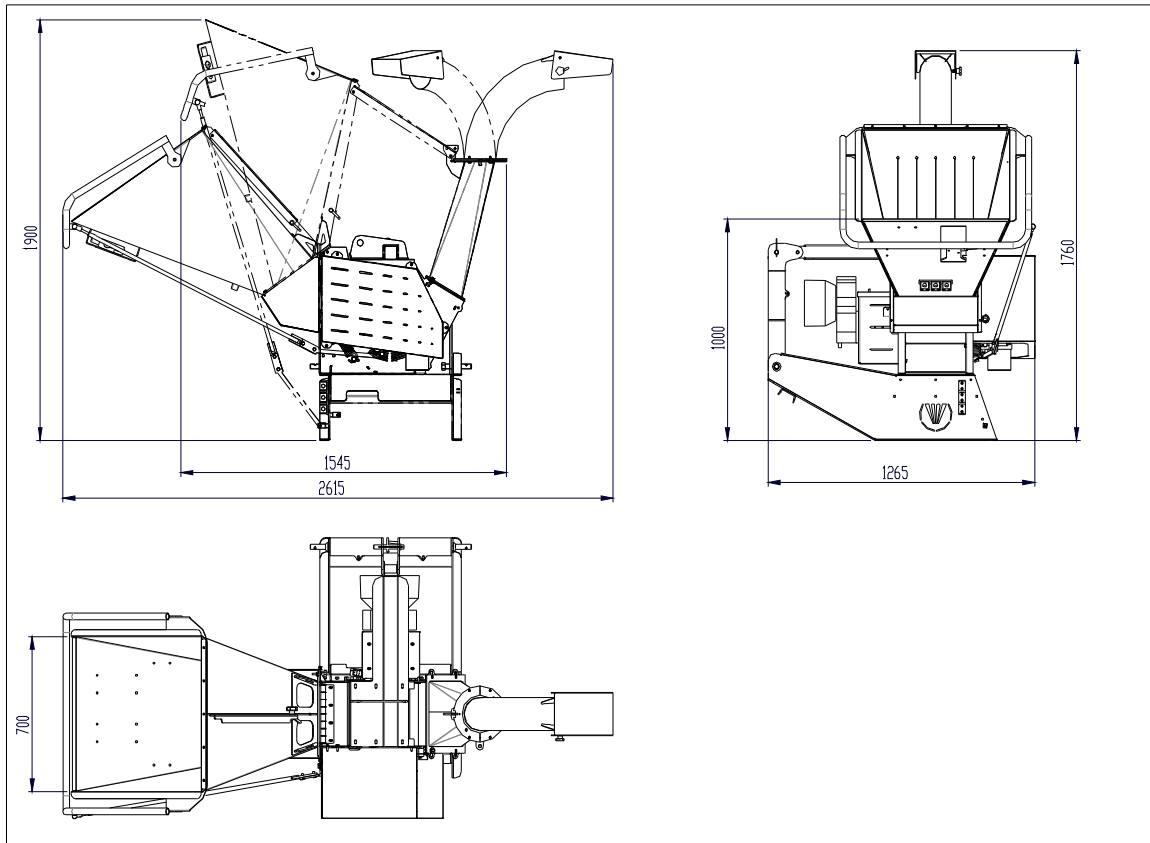
Those parts that are often used and therefore are subject to a rapid wear, such as gaskets, chains, belts, valves, bearings, hydraulic pipes, blades, etc., are not covered by the guarantee.

The guarantee excludes all transport, inspection, disassembly and reassembly costs due after the intervention of one of our/your technicians upon the client's request for defects we are not responsible for.

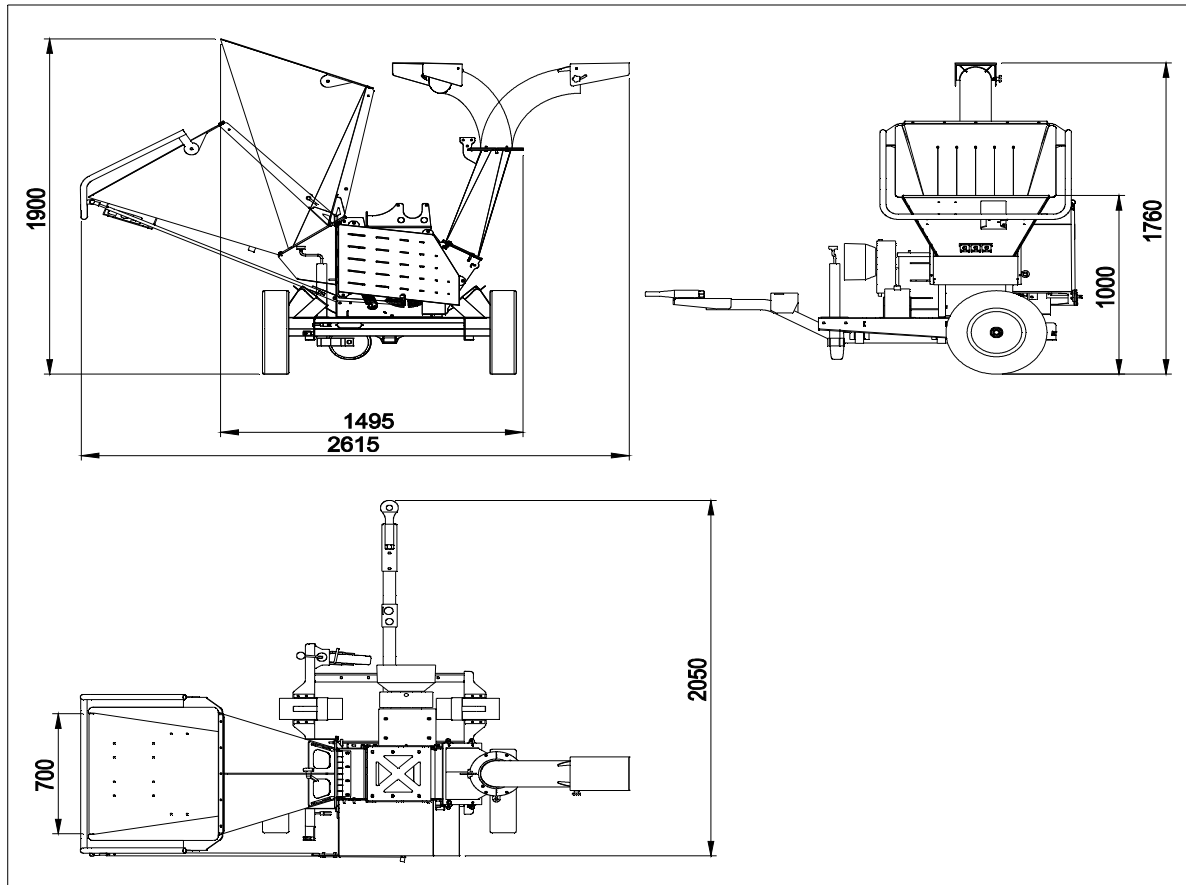
In case of damages, please contact an authorised centre and use original spare parts, by specifying model and version. If non-original parts are mounted, then the guarantee is no longer valid.

12 OVERALL DIMENSIONS DRAWING

R240T



R240TTT



13 TECHNICAL DATA

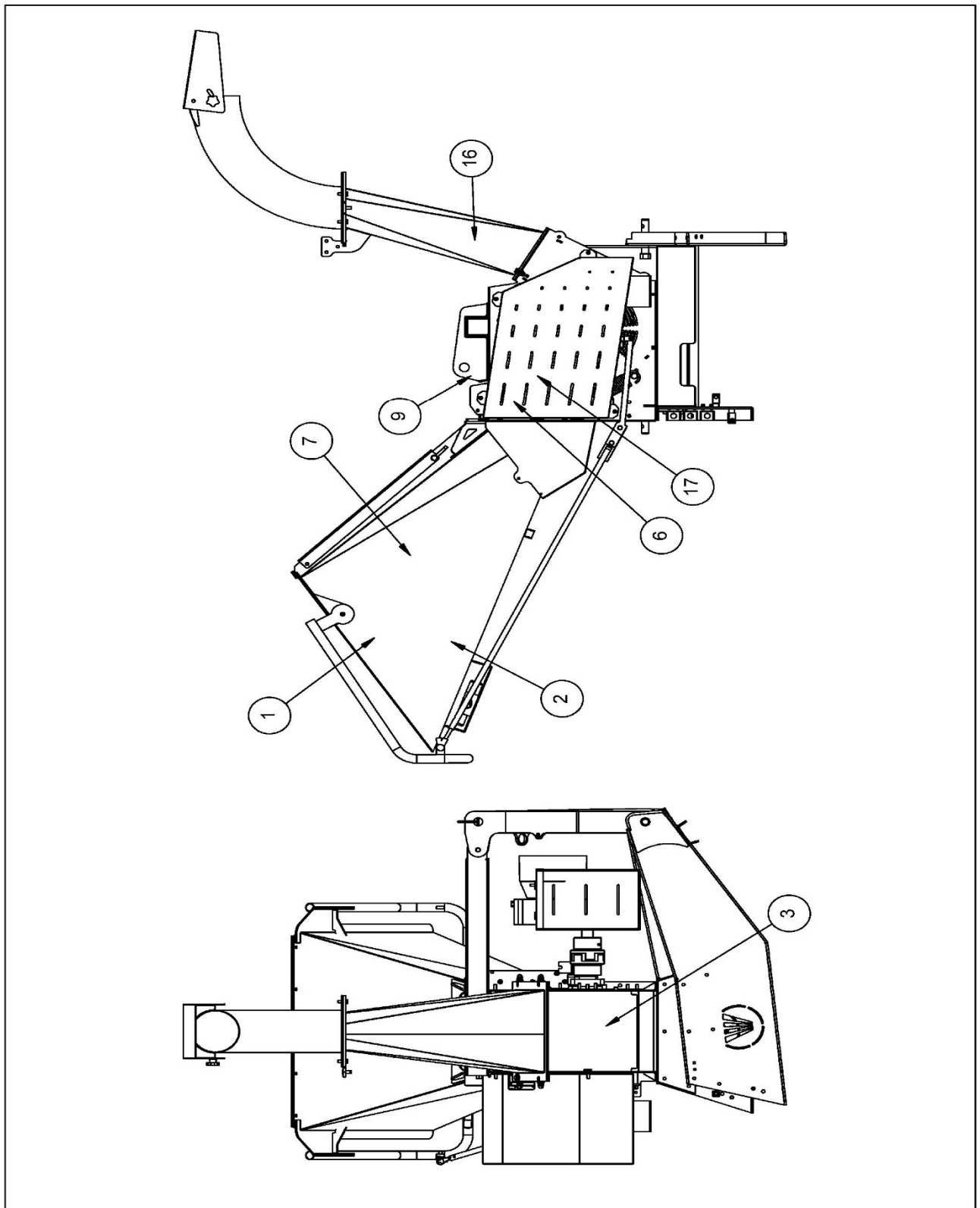
Air noise emission.

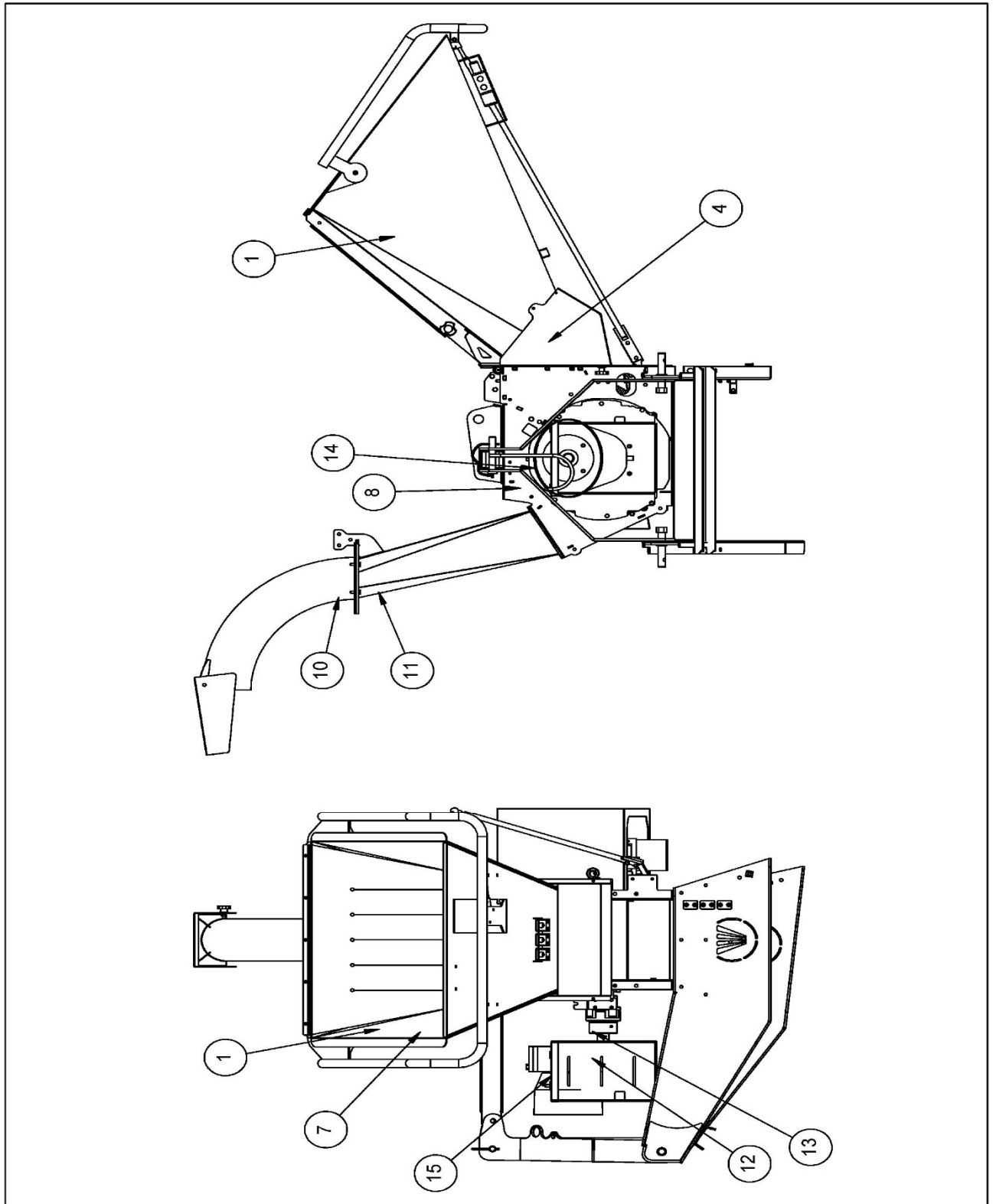
The A weighted acoustic emission level in the workplace is 117dB(A).





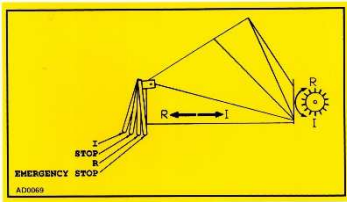
MODEL	R240T	R240TTT
Power [kW/hp]	9.6/13	9.6/13
Overall length [mm]	1265	2050
Overall width [mm]	1545/2615	1495/2615
Overall height [mm]	1760/1900	1760/1900
Introduction height [mm]	1000	1000
Discharge height [mm]	1760	1760
Introduction width [mm]	700	700
Mass [kg]	330	390
Number of blades	4	4
Number of hammers	16/33*	16/33*
Max. diameter to shred [mm]	90	90
Number of rotor rpm [rpm]	2780	2780
Introduction opening [mm]	700 x 570	700 x 570
Shredding opening [mm]	286 x 200	286 x 200

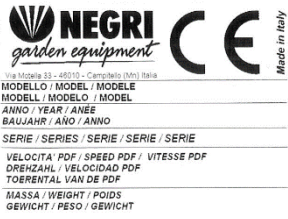





*machine with rotor with hammers

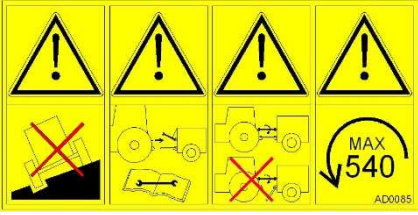

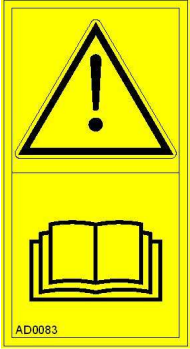
14 SAFETY PICTOGRAMS





N°	CODE	PICTURE	DESCRIPTION
1	AD0105		<p>Negri S.r.l. – Use personal protective equipment – Climbing forbidden – Read the instruction manual – Moving cutting tools – Rotating rollers – Use by more than one operator forbidden</p>
2	AD0073		<p>Reset</p>
3	AD0088		<p>Attention – Cutting tools</p>
4	AD0084		<p>Attention – Rotating rollers</p>
7	AD0069		<p>Loading system controls</p>

<p>8</p>	<p>AD0028</p>	 <p> NEGRI <i>garden equipment</i> <small>Via Molise 55 - 46019 - Castelnuovo (MO) Italia</small> MODELLO / MODEL / MODELE MODELL / MODELO / MODEL ANNO / YEAR / ANNE BAUJAHR / ANO / ANNO SERIE / SERIES / SERIE / SERIE / SERIE VELOCITA' PDF / SPEED PDF / VITESSE PDF DREHZAHL / VELOCIDAD PDF TOERENTAL VAN DE PDF MASSA / WEIGHT / POIDS GEWICHT / PESO / GEWICHT </p>	<p>Identification plate</p>
<p>9</p>	<p>AD0062</p>		<p>Lifting hook</p>
<p>10</p>	<p>AD0026</p>		<p>Transport position</p>
<p>11</p>	<p>AD0027</p>		<p>Transport position reference</p>
<p>12</p>	<p>AD0025</p>		<p>Oil level</p>
<p>13</p>	<p>AD0056</p>		<p>Gearbox oil</p>
<p>14</p>	<p>AD0024</p>		<p>Rotation direction</p>

<p>15</p>	<p>AD0085</p>		<p>Attention – Disconnect PTO for maintenance – Do not place the machine on a steep or soft ground – While working keep the machine fastened to the tractor – Maximum speed 540 rpm</p>
<p>16</p>	<p>AD0037</p>		<p>Attention – Throwing of objects</p>
<p>17</p>	<p>AD0083</p>		<p>Attention – Rea the instruction manual</p>

**CERTIFICATO DI GARANZIA/ CERTIFICAT DE GARANTIE
WARRANTY CERTIFICATE/ GARANTIEBESCHEINIGUNG
CERTIFICADO DE GARANTÍA / GARANTIECERTIFICAAT**

DA COMPILARE DA PARTE DEL RIVENDITORE
À REMPLIR PAR LE DÉTAILLANT
TO BE FILLED OUT BY THE DEALER
FÜR DEN VERKÄUFER: BITTE, FÜLLEN SIE DAS AUS
PARA SER COMPLETADO POR EL REVENDEDOR
VOOR DE VERKOPER: GELIEVE DIT IN TE VULLEN

NOME E INDIRIZZO DEL RIVENDITORE
NOM ET ADRESSE DU DÉTAILLANT
NAME AND ADDRESS OF THE DEALER
NAME UND ADRESSE DES VERKÄUFERS
NOMBRE Y SEÑAS DEL REVENDEDOR
NAAM EN ADRES VAN DE DEALER

NOME E INDIRIZZO DEL CLIENTE
NOM ET ADRESSE DU CLIENT
CUSTOMER'S NAME AND ADDRESS
NAME UND ADRESSE DES KUNDEN
NOMBRE Y DIRECCIÓN DEL CLIENTE
NAAM EN ADRES VAN DE KLANT

DATA DI VENDITA
DATE DE VENTE
DATE OF PURCHASE
VERKAUFSDATUM
DATA DE VENTA
DATUM VAN DE VERKOOP

MODELLO
MODÉLE
MODEL
MODELL
MODELO
MODEL

TIMBRO E FIRMA DEL RIVENDITORE
TIMBRE ET SIGNATURE DU DÉTAILLANT
STAMP AND SIGNATURE OF THE DEALER
FIRMENSTEMPEL UND UNTERSCHRIFT DES VERKÄUFERS
SELLO Y FIRMA DEL REVENDEDOR
STEMPEL EN HANDTEKENING VAN DE DEALE

La ditta NEGRI in qualunque momento si riserva il diritto di apportare alla propria produzione modifiche e miglioramenti ritenuti necessari a suo insindacabile giudizio.

At any time and at its incontestable discretion, NEGRI reserves the right to modify and improve its products, if considered necessary.

Dans n'importe quel moment et à son jugement sans appel, la maison NEGRI, se garde le droit d'apporter des modifications et des améliorations à ses produits, si considérées nécessaires.

En cualquier momento y a su incuestionable juicio, la empresa NEGRI tiene el derecho de aportar a su producción modificaciones y mejoras, considerados necesarios.

In jedem Moment und nach ihrem unanfechtbaren Urteil, bewahrt die Firma NEGRI das Recht auf, Änderungen und Verbesserungen an ihre Produktion zu bringen, die notwendig gehalten sind.

Op elk gewenst moment en naar haar onbetwistbare discretie, NEGRI behoudt zich het recht voor om te wijzigen en verbeteren van haar producten, indien nodig geacht.

Le immagini presenti in questo manuale di istruzioni hanno scopo puramente illustrativo.

The pictures shown in this instruction manual have an illustrative purpose only.

Les photos qui se trouvent dans ce manuel d'utilisation et d'entretien sont purement illustratives.

Las imágenes presentes en este manual de instrucciones tienen un fin exclusivamente ilustrativo.

Die in diesem Handbuch enthaltenen Bilder haben nur einen veranschaulichenden Zweck.

De afbeeldingen in dit instructieboekje hebben alleen maar een illustratieve betekenis.



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