



COSTRUZIONE MACCHINE AGRICOLE
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USE AND MAINTENANCE BOOK

SCREW SEPARATOR



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Data and measures written in this book are merely indicative and can be changed without any advice.

DODA thanks you for buying an item included in its production range and invites you to read this book.

You will find herewith all necessary information for a correct use of the machine you bought; so, please carefully follow the directions contained herewith and read this book completely.

Please, also remember to keep this book in an adequate place, to preserve it unaltered. The content of this manual can be changed without notice or additional obligations, in order to include changes or improvements to the units already delivered.

No reproduction or translation of any part of this book is admitted unless previously authorized.

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EC CONFORMITY DECLARATION
ACCORDING TO MD/98/37/EC REGULATIONS
AND SUBSEQUENT MODIFICATIONS

The machine described in the following **"USE AND MAINTENANCE"** book is a screw press separator. It is a very simple but efficient machine for treating industrial or farming non homogeneous waste where the fluid part must be separated from the solid one.

It is based on compression and filtering of sewage with subsequent separation of fluids from the dry substance. The separator is fed by a SUPER chopping pump and powered by 4 or 5 KW motor. The entire structure is made of stainless steel.

From the technological point of view, the concept adopted for all other DODA products has been applied to this machine, too:

" Highest quality to obtain the maximum reliability and resistance "

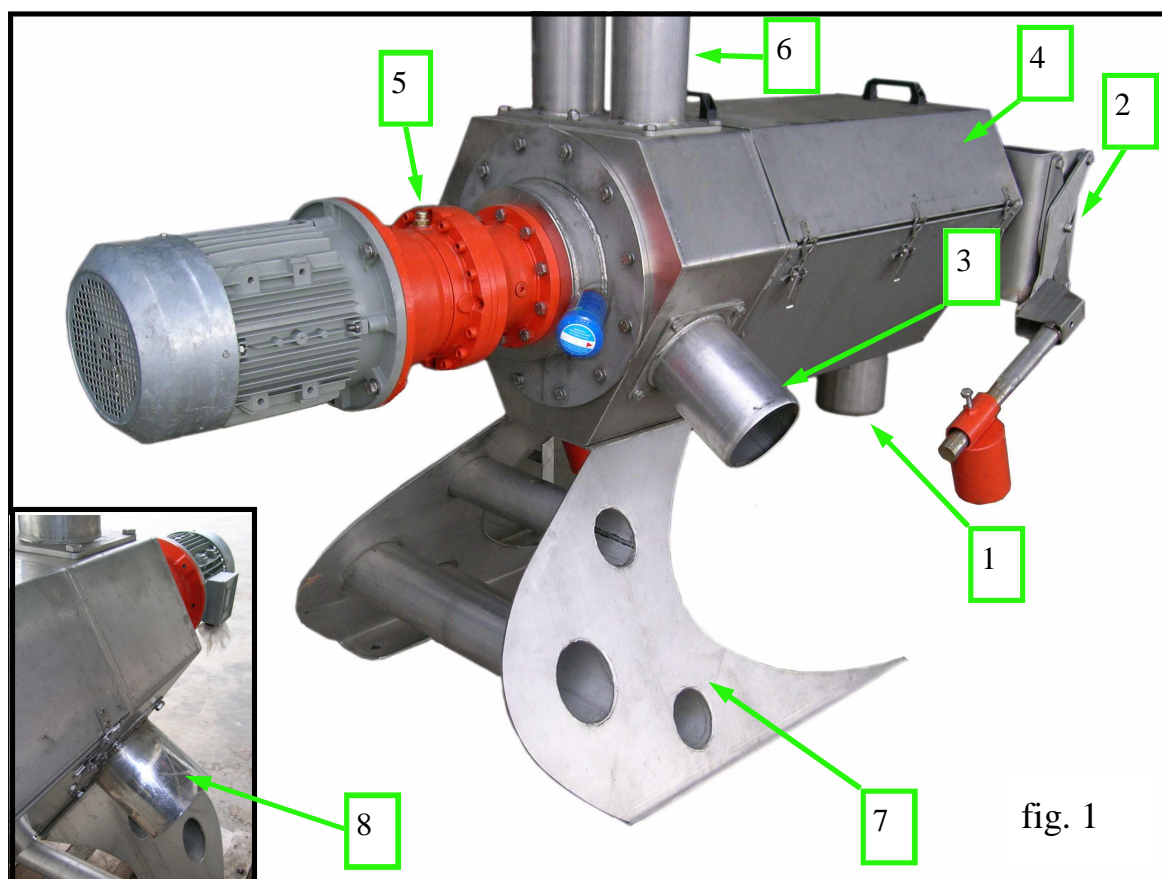


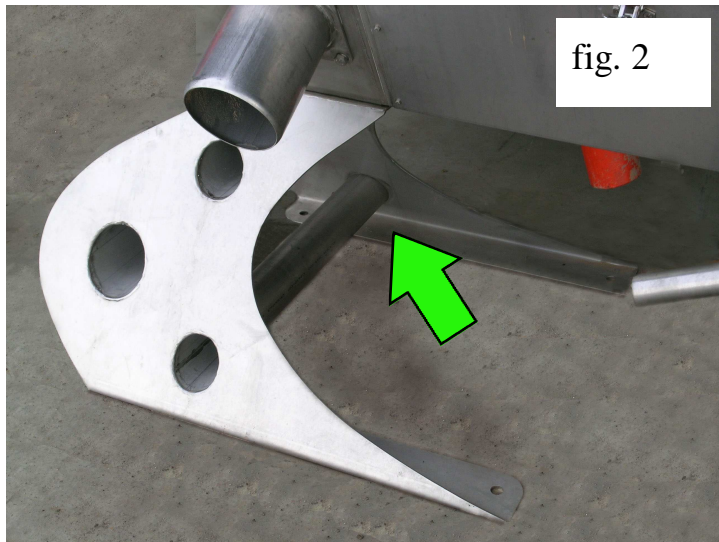
fig. 1

- 1) Fluid output pipe
- 2) Solid substance output
- 3) Overflow output
- 4) Upper protections

- 5) Geared motor
- 6) Overpressure pipe
- 7) Feet
- 8) Transport bearing

2. MACHINE LOADING AND UNLOADING

pag. 2



For transportation, place a pallet at the machine base and lift everything with a fork lift. If no pallet is available, the lifted must be provided with at least 1.2 m long forks suitable to reach stability indicate in points **fig. 2** If the machine is hoisted by a crane, use the special rings Do not fasten the machine structure to the base a permanent way.

WARNING: never move abruptly or bump stainless steel parts with the forks of the lift truck.

WARNING: the machine must operate on the horizontal plane



3. GENERAL WARNING

- 1) Check that no component has been damaged during transportation. If damages have occurred, call your dealer immediately.
- 2) The connection to supply must be carried out according to DODA instructions, by specialised staff

DODA is in no way responsible for any electric connection, (please follow instructions on the tag on motor as well as on the sticker showing the rotation sense).

- 3) Before starting the machine check that the rotary driving parts are adequately protected, as foreseen by their manufacturer.
- 4) If the protection of a rotary part is not on issue, it must be carried out by the operator in conformity with prevailing law.
- 5) DODA takes no responsibility for modifications altering the characteristics of the machine bought.
- 6) DODA machines must not be installed on structures not consistent with EC safety provisions.
- 7) Before operating the machine it is indispensable to carefully read all directions in the **“Instructions for Use and Maintenance”** booklet. In particular, be sure that you have completely understood the machine operation.
- 8) The machine has been designed and built to treat water and sewage, not for chemical products. Handling these substances can cause permanent damages to this machine.

The DODA separator can also be fed with other products, such as tomatoes and potatoes. Please contact manufacturer for all other utilisations.

4. PRELIMINARY CHECKS

-The reduction unit is self-lubricating and therefore needs no maintenance; the level must be right in the starting stroke.

Before the test check the automatic greaser. It must be at least on “3” fig. 5. The regulation produce the emptying time from 1 to 12 months.

The use, more or less heavy of the machine, you must set up 3 or 6 months for cartridge emptying.

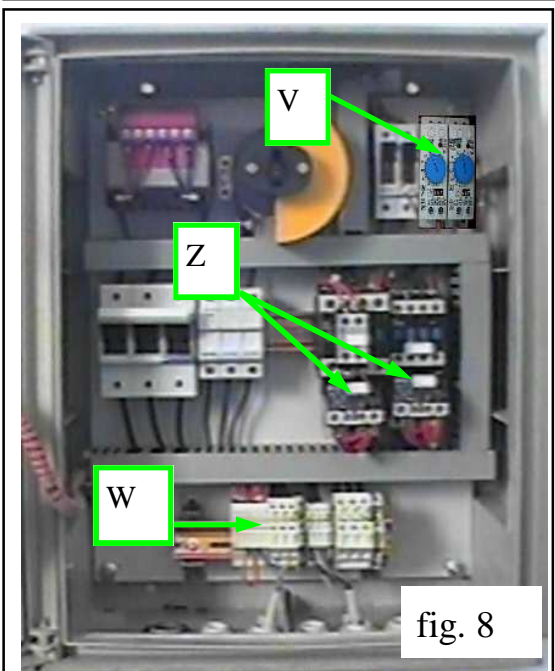
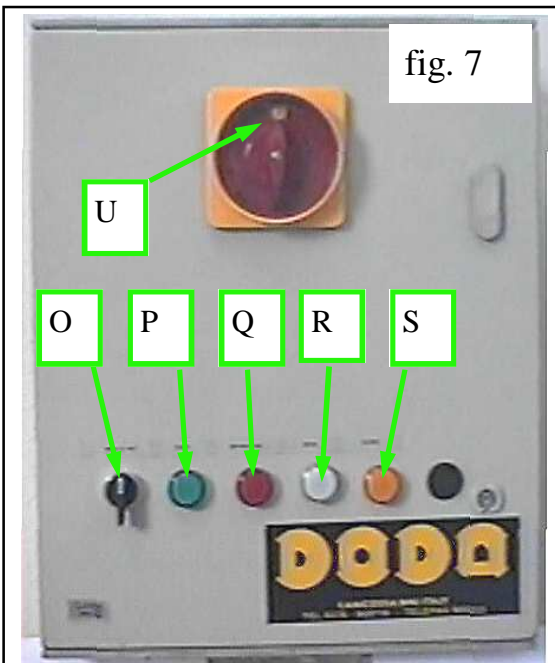
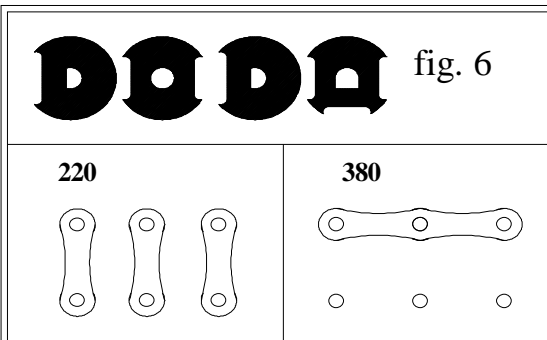


fig. 5

Before positioning the **Separator** arrange the proper structure on the tank edge.

The machine must work in a horizontal position. The plane supporting the feeding pump must be at a height adequate to its head, considering the loss of pressure due to friction caused by the feeding pipe. The plane correct height prevents excess accumulation of solid

medium close to the machine. This assures a better collection of the separated solid product with big sized machines (scrapers, shovels, etc...).



1) Open electric board **fig. 7** and connect the electric supply cables in the special terminal board **W** **fig. 8**.

Check the main voltage inside electrical board. It must be adequate to electric motor voltage (220 Volt only 3 or 380 Volt phases) **fig. 6**.

IMPORTANT: check that the rotation way of the electric motor is correct:

2) Check that the rotation way of the electric motor is correct. Keep "Manual- Automatic" knob **O** turned to manual position.

3) Turn the main switch **U** knob from **zero** position to **one** **fig. 7** only for one second, then put it again to zero (check at this point that the rotation of the electric motor is correct: see sticker on fan cover).

To avoid damaging the machine, strictly avoid motor rotation in the wrong direction for more than two seconds

- O)** "Manual Automatic" knob.
- P)** Pump warning light
- Q)** Separator warning light
- R)** Washing warning light.
- S)** Over heat warning light
- U)** General switch.
- V)** Timer.
- Z)** Over heat amperage regulator.
- W)** Over heat supply board.

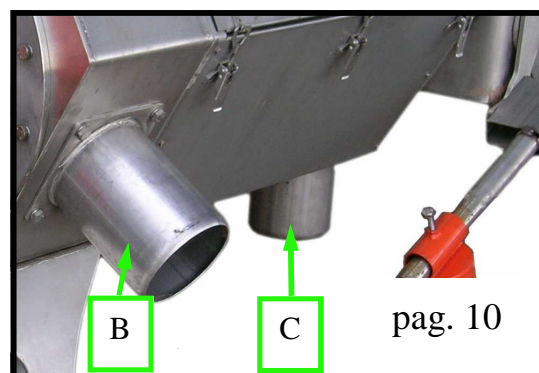
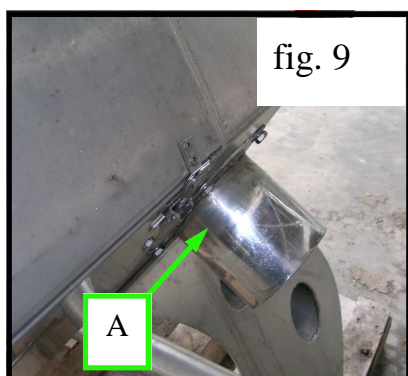
Any electric connection must be done by specialized operators.

DODA takes no responsibility for electric connections. Safety protections must not be removed in any case.

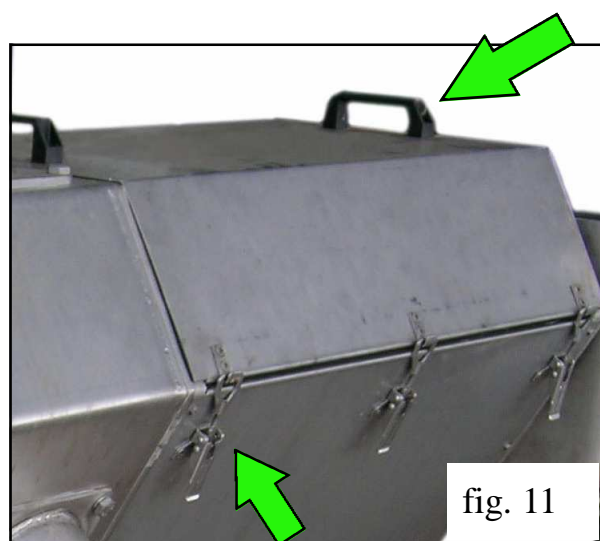
4) The *feeding pipe* (diameter 150) can be connected to input **A** **fig. 9** frontally or from the bottom, depending on which is more convenient. Apply a blind flange to the socket which is not used.

5) The *overflow pipe* (diameter 150), is connected to sockets **B** **fig. 10** in this case is utilised too the most convenient output, while the other is closed by means of a blind flange.

6) The *separated slurry outlet* (diameter 150) is located in the lower side of the machine at point **C** **fig. 10**



WARNING: Pipe connections are not load bearing: do not hang heavy parts to machine.



The screen can be inspected also through doors **G** **fig. 11**. By this slop it is possible to wash the machine from solid.



WARNING: read section “GENERAL INSTRUCTIONS” before starting machine.

After arranging and checking the machine’ s stability during normal functioning you can use it to check the correct electric motor rotation verse, and connect it to supply.

Rotate main switch **U fig. 7** to position **One** and knob **O** to “Automatic”. Now, *if the feeding pump is provided with a level probe* the pump feeding can start.

In case you want to stop the cycle, in any time, turn knob **O fig. 7** to Manual:

- The feeding pump stops
- The two-timer program starts.

WARNING: never operate the machine without manure

If the feeding pump is not provided with a level probe, proceed as follows:

- turn main switch **U fig. 7** to **One**
- turn knob **O** to “Automatic”
- start feeding pump
- when the waste reaches the sensor inside the loading tank, the separator starts up.
- to stop the plant, turn knob **O fig. 7** in central position
- stop the pump

turn knob **O** to Manual again: the liquid manure flows out and the machine washing cycle will start up.

PRODUCT QUALITY

Change compensators position (as detailed in **fig. 13**) in order to get more dry medium.

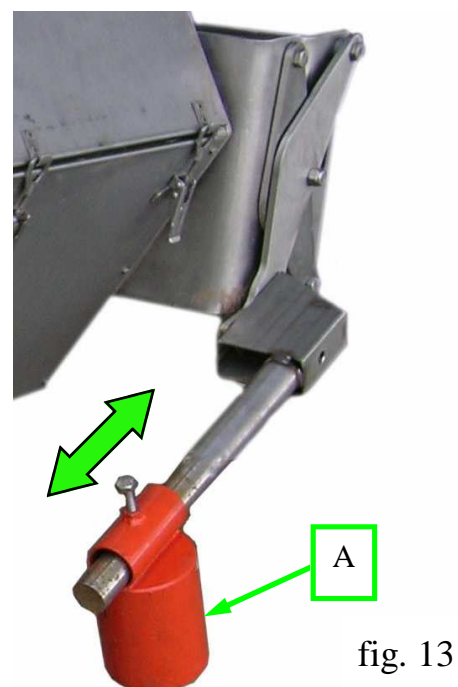


fig. 13

IT IS FORBIDDEN TO APPROACH THE MACHINE WHEN IT IS WORKING. SWITCH OFF ELECTRICITY BEFORE APPROACHING MACHINE AREA.

- 1) During machine inspections, in the work as well as in the inspection phases, always wear proper clothing (overalls, gloves, helmet, accident prevention shoes, fastened clothes, etc...).
- 2) The machine must always be utilised well lit.
- 3) Since gases released by non homogeneous waste are poisonous, check that:
 - the work area is adequately ventilated;
 - the machine is not operated in proximity to flames.
- 4) Never inspect the non homogeneous waste tank alone. If you loose your balance or if you feel faint due to fumes, ask for help immediately.
- 5) If you do not need to work in a tank, cover it.
- 6) The machine must be operated by accountable adults, while the place must not be accessible to children.
- 7) Do not carry out operations or regulations when the machine is working or when it is connected to supply.
- 8) The machine must only be employed with all protections correctly positioned, following instructions indicated in the previous paragraphs to avoid possible contact with moving parts. Do not damage or remove protections.
- 9) The machine must never be operated without having filled oil-tank (driving pipes and geared units).
- 10) Before starting work phases, be sure that the whole assembly is stable (machine and tractor).
- 11) During maintenance be sure that the machine is perfectly standing and disconnected from supply.
- 12) During operation, maintenance or regulation, avoid contact of machine rubber parts (gaskets, etc...) with oil, grease or oil derivatives.
- 13) Be sure that motor rotation is clockwise as indicated by the arrow on the motor (when envisaged).
- 14) As for electrically operated machines, connection must be carried out in a place protected from rainfall.
- 15) If delivery is connected to pipes or hoses, check that the special fastening joints are under perfect conditions; do not halt near them: hazard of bursting and tearing.
- 16) Do not go too close to front chute (detail 2 page 1) during machine work phases, to avoid accidents.
- 17) Do not climb over or lean out of separator screens; do not use ladders or similar tool on machine platforms.

Before any maintenance operation, stop the machine and switch off the electricity.

1) Replace the automatic lubricant cartridges when it is finished and set the new one according to separator's filled **fig 14** (read the paragraph 4 pag.3)

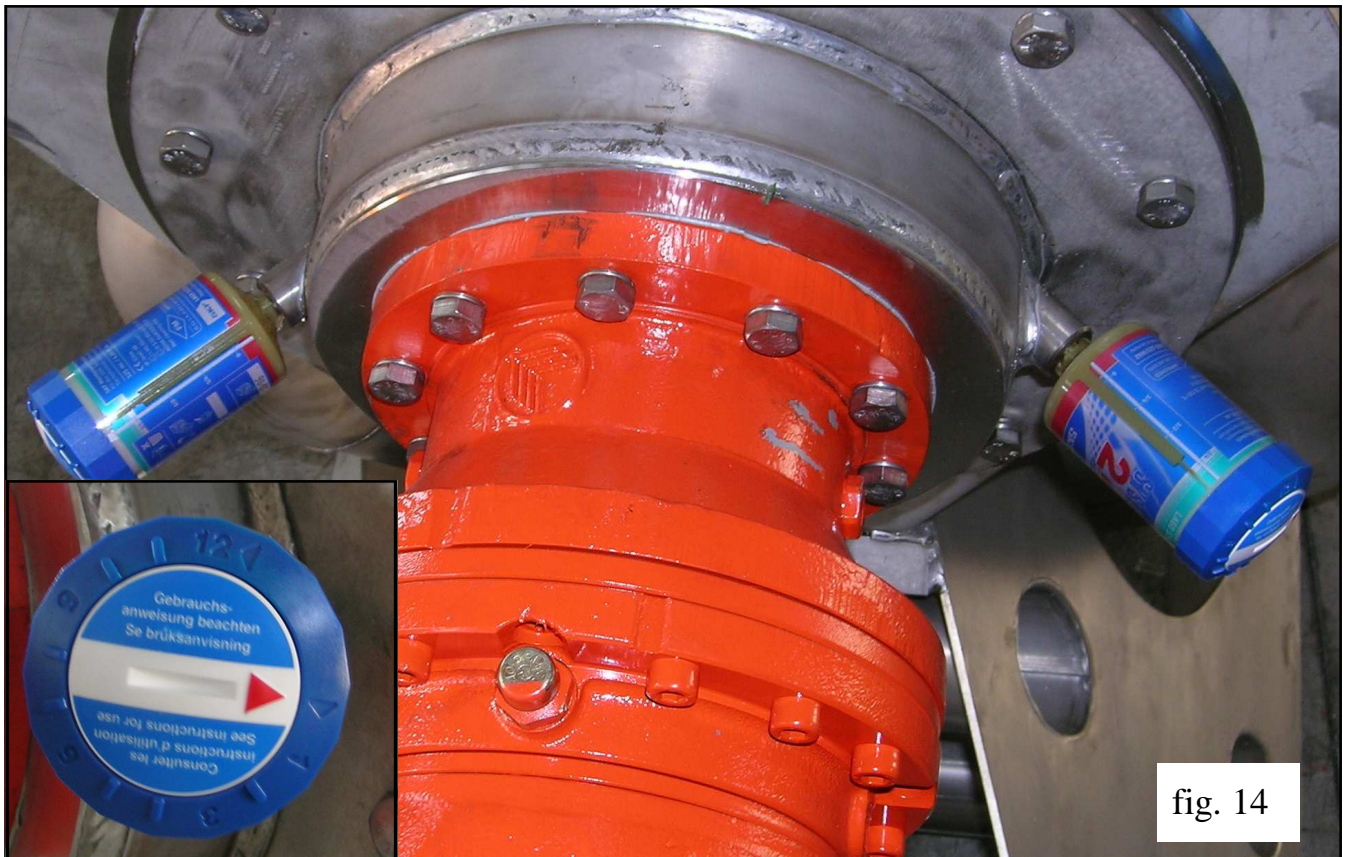
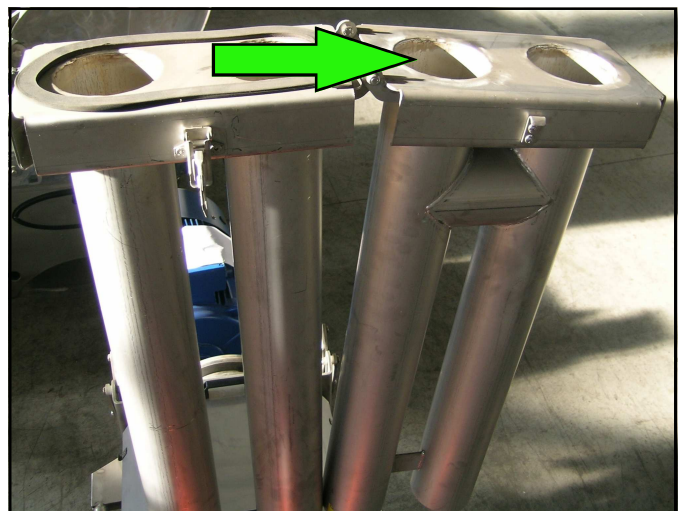
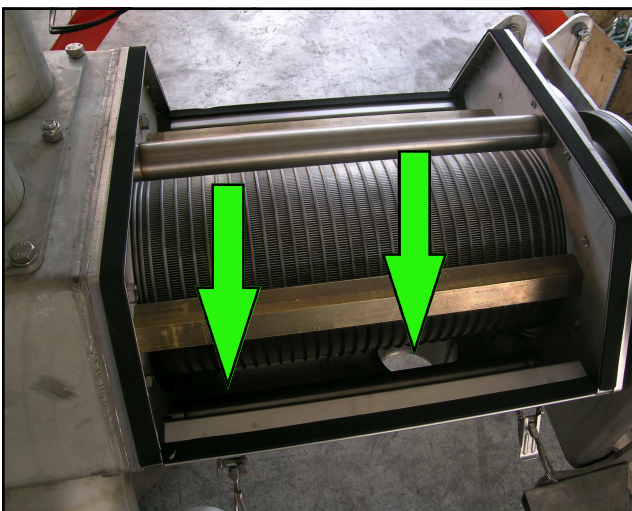


fig. 14

2) At the end of its utilisation, wash the machine to prevent non homogeneous waste from solidifying; this could cause damages.



As for all spare parts, address directly to DODA dealer.

3) Control, periodically, the oil level inside transmission pipes and gear pipes. Replace the oil after 50 working time and than every 1500 working time or every years (use SAE90 oil).

4) Every 3 months grease the rotary parts (joints, crowns, etc.)

WARNING!

When the machine is new, please, change the oil after 50 working hours.

9. STICKERS

The machine is provided with the following stickers that must be controlled and, when damaged or not readable, replaced.

IMPORTANTE

PRIMA DELL'USO RIEMPIRE D'OLIO

FINO A LIVELLO (SAE 90)

WARNING: fill with oil up to the maximum level before using the machine (SAE 90).

LIVELLO
OLIO


POSITION : ON THE GEAR BOX

CONTROL THE OIL LEVEL

ATTENZIONE

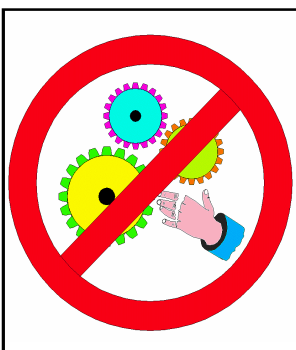
Prima di posizionare la macchina verificare che il motore sia collegato nel senso di rotazione indicato dalla freccia.

WARNING

Before placing the pump control the turning direction of the motor it must run as pointed out by the arrow. 

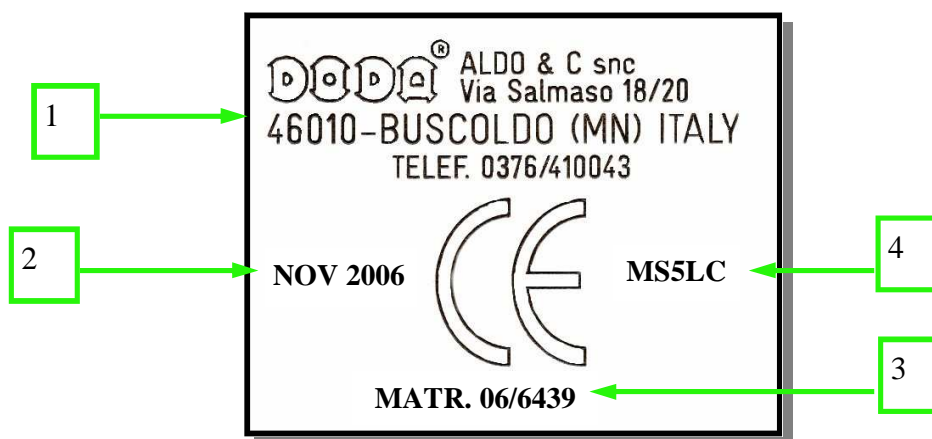
POSITION : ON ELETRIC MOTOR

THIS STICKER REMINDS YOU TO CHECK THE ROTATION SENSE OF THE MACHINE ELECTRIC MOTOR BEFORE STARTING THE MACHINE.



POSITION : ON THE COVER SIDE.

WARNING: DO NOT PUT YOUR HANDS ON OR GO CLOSE TO SEPARATORE'S SIDES WHEN PROTECTIONS ARE NON INSTALLED.



Sticker consistent with EC rules:

- 1) NAME OF PRODUCER**
- 2) MONTH AND YEAR OF PRODUCTION**
- 3) PRODUCT IDENTIFICATION CODE**
- 4) TYPE OF MACHINE**

10. PERFORMANCE AND TECHNICAL DATA

DODA separator is completely made of stainless steel AISI 304.

The DODA Separator performances depends upon the thickness of the manure treated and screen size.

Following data are indicative:

Liquid manure	500 l/min
Medium- density manure	350 l/min
Very thick manure	200 l/min

Data are not Binding for the manufacturer, who reserves the right to bring changes as he sees fit.

WARNING:

loading pressure must never exceed 0.3 MPa.

11. PROBLEMS AND REMEDIES

pag. 11

Before performing any maintenance, regulation or repair operation, stop the machine (main switch U, fig. 7 must be on position 0) and disconnect supply.

PROBLEMS	CAUSES	REMEDIES
The machine is fed but the separator do not starts.	<ul style="list-style-type: none">- The feeding pump does not load the medium.- The medium to separate is too much dense.- The feeding line from the pump to the separator is plugged.	<ul style="list-style-type: none">- Control the correct connection and operation of the feeding pump.- Dilute the medium.- Replace the feeding tube or clean plugged pipe.
No solid matter from scraper	The medium is too much liquid..	<ul style="list-style-type: none">- Mix the medium in order to have a thicker product.

EC DECLARATION OF CONFORMITY

WE

DODA owned by Doda Aldo & C. S.n.c.

Via Sante Salmaso 18/20
46010 Buscoldo (Mantova)

DECLARE UNDER OUR OWN EXCLUSIVE RESPONSIBILITY THAT THE FOLLOWING PRODUCTS,

SCREW SEPARATOR

TO WHICH THIS DECLARATION REFERS, ARE CONSISTENT WITH PROVISIONS CONTAINED IN GUIDE LINE MD 98/37/CEE :1998 AND SUBSEQUENT MODIFICATIONS.

BUSCOLDO (MANTOVA)

.....
(Nome, firma, timbro equivalente
di persona autorizzata)



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