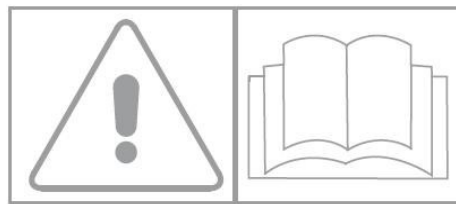




*COSTRUZIONE MACCHINE AGRICOLE di
DODALDO & C SNC*

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USE AND MAINTENANCE BOOKLET



MANURE BAND SPREADER



The data, images and performances identified in this booklet are purely indicative.

The manufacturer reserves the right to make any change or modification, without providing any notice to users.

GENERAL INFORMATION

HOW TO USE THIS MANUAL

The inclusion of a general table of contents on page two enables the reader to locate the relevant topic immediately, making it easier to consult the manual.

The chapters are organised sequentially based on topic, making it easier for the reader to find the desired information.

PURPOSE OF THE MANUAL

This manual was compiled by the manufacturer to provide the necessary information to all parties authorised to safely carry out transport, handling, installation, maintenance, repair, dismantling, disposal or storage operations relating to the machine or parts thereof.

Information relating to the electric motor can be found in the Use and Maintenance Booklet for the motor, issued by the manufacturer.

Failure to comply with the information provided may pose a risk to the health and safety of persons and may also cause economic damage. The manual must be stored carefully to ensure that it can always be located and consulted in perfect condition.

In the event of loss or damage, a replacement copy must be requested directly from DODA COSTRUZIONE MACCHINE AGRICOLE di Doda Aldo & C. s.n.c.

DODA COSTRUZIONE MACCHINE AGRICOLE di Doda Aldo & C. s.n.c. reserves the right to change, supplement or improve the manual; such changes shall not, however, constitute a reason to consider this copy inadequate.

WARRANTY GUIDELINES

Doda provides a 12 month warranty on its products, valid from the moment of commissioning but limited to an 18 month period from the date of shipping.

The warranty shall not apply if the problem or fault in question results from the incorrect or unsuitable use of the product, or if the aforementioned use does not correspond to that for which it was commissioned.

The warranty is limited to the repair or replacement of the product and/or the parts found to be defective, at the absolute discretion of the manufacturer, and subject to inspection by the latter.

DODA will not pay additional costs for transport or labour associated with the replacement of the defective parts.

The machines to which the manual relates must be used in environments and for uses that correspond to those provided for during the design phase.

Any improper use of the product is prohibited.

Any modification to or replacement of machine parts, without prior authorisation by the manufacturer, may constitute a risk factor for accidents and, in this case, the manufacturer shall be absolved of all civil and criminal liability, and the warranty shall be deemed void.

MANUFACTURER DETAILS




DODA COSTRUZIONE MACCHINE AGRICOLE di Doda Aldo & C. s.n.c.

Strada Sante Salmaso, 18/20 - Loc. Serraglio

46010 –Buscoldo di Curtatone (Mantua) ITALY

SYMBOLS USED IN THE MANUAL

The following symbols are used in the manual to highlight particularly important instructions and warnings:

<i>MEANING</i>	<i>NOTE</i>	<i>SYMBOL</i>
PROHIBITION	This symbol indicates that it is prohibited to perform manoeuvres and operations with the machine which may, under certain conditions, pose a risk to the safety of the operator, to the machine itself,	
DANGER	This symbol draws attention to important warning messages that are fundamental to the safety of the operator and of the machine.	
WARNING	This symbol draws attention to a particularly important warning	

DODA thanks you for purchasing a product in its range and invites you to read this booklet.

Inside you will find the necessary information for correct use of the machine you have purchased. Please, therefore, follow the instructions contained herein and read the booklet in all its parts.

Please also store the booklet in a safe place and keep it unaltered. The content of this manual may be changed without notice, and without additional obligations, in order to include changes and improvement to the units already provided.

Any reproduction or translation of any part of this booklet is prohibited without prior authorisation .

GENERAL INDEX

CHAPTER	DESCRIPTION	PAGE
1.	Introduction	pag. 1
2.	Machine loading and unloading	pag. 2
3.	General warnings	pag. 3
4.	Preliminary Checks	pag. 4
5.	Positioning and Transportation	pag. 5
6.	Operation	pag. 6-8
7.	Working and Safety Rules	pag. 9
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9.	Stickers	pag. 11
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1. INTRODUCTION

The machine described in the following **“Use and Maintenance”** booklet is a spreader for manure or for other substances that can be pumped onto the soil.

The injector consists in a load-bearing frame in stainless steel to be hooked to the tractor's three-point lifting system.

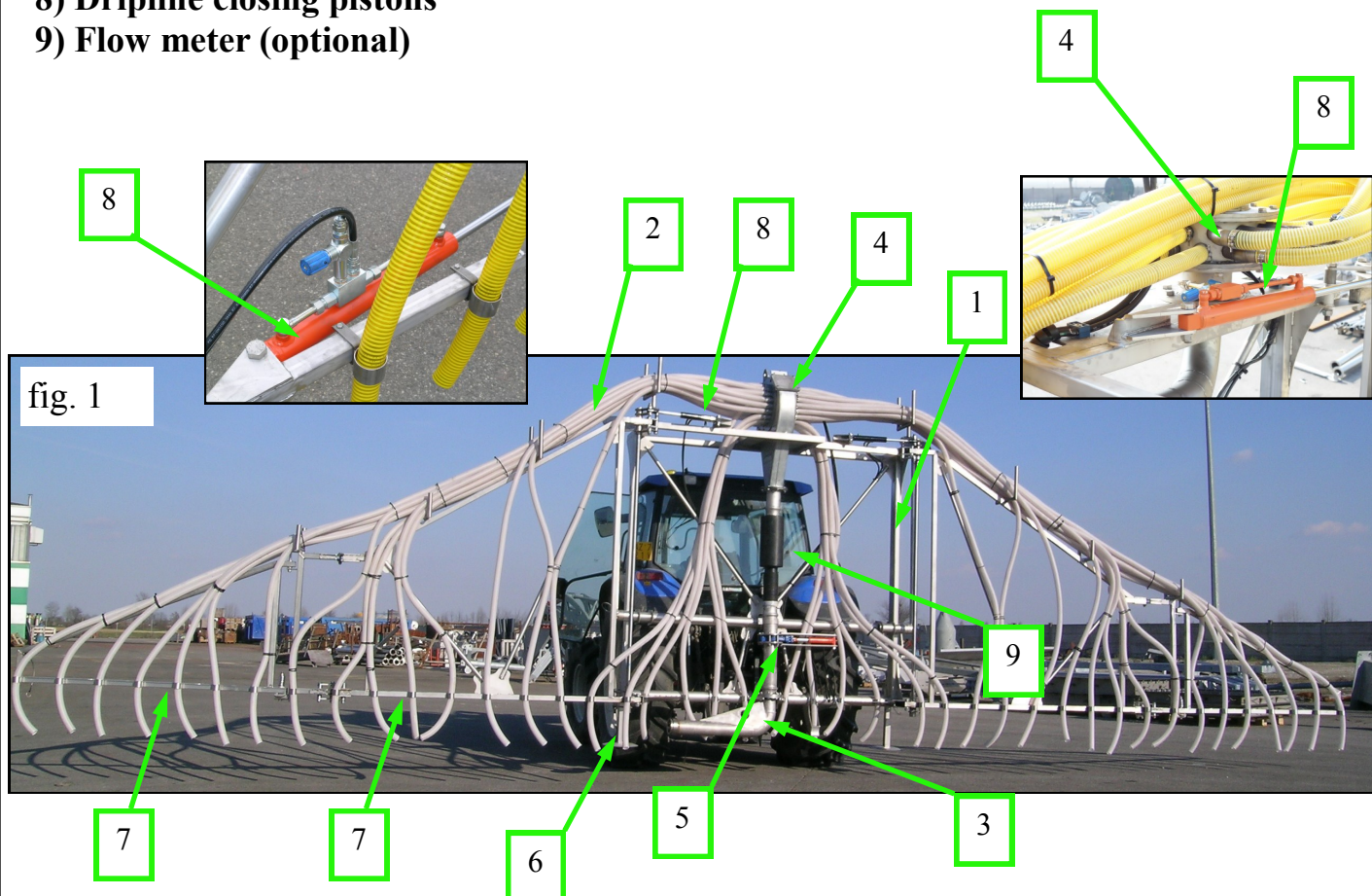
The main frame holds the double lateral foldable driplines that can be opened by a hydraulic system with pistons and centrally the inlet pivoting pipe for the umbilical system.

The product distribution is made through a series of hoses equidistantly distributed along the wings and connected to an hydraulic motor operated distributor.

Technologically, we have also applied to this machine the concept adopted for other DODA products:

“Highest quality to obtain the maximum reliability and durability”

- 1) Frame
- 2) Flexible liquid discharge pipes
- 3) Pivoting inflow pipes
- 4) Spreader
- 5) Flow valve with oil piston
- 6) Parking foot
- 7) Foldable driplines
- 8) Dripline closing pistons
- 9) Flow meter (optional)



2. MACHINE LOADING AND UNLOADING



The machine loading-unloading operation can be carried out:

- using a forklift truck;
- using a hoisting crane.

N.B.: the carrying capacity of the sling must be at least seven times the total weight of the machine (if it is made from textile fibre).

NOTE: in both cases, the machine must not be lifted by gripping the weakest parts of the structure (delivery pipes, etc.).

NOTE: before lifting, ensure that the structure is balanced

NOTE: do not make sudden manoeuvres, or knock the steel parts with the forks of the lift truck .



Never leave a suspended load unsupervised!



Do not make sudden manoeuvres, or knock the steel parts with the forks of the lift truck.



Never stand under the suspended load when lifting, transporting or unloading the machine!



Before lifting, ensure that the structure is balanced!



fig. 2



fig. 3

3. GENERAL WARNINGS



- 1) Check that no component has been damaged during transportation. If damage has occurred, contact your dealer immediately.
- 2) DODA accepts no responsibility for changes that alter the characteristics of the purchased machine .
- 3) Before operating the machine, it is essential to read the instructions contained in the **Use and Maintenance Booklet**. In particular, ensure that you have fully understood the operation of the machine.
- 4) The machine has been designed and built to spread wastewater and liquid manure: the treatment of some chemical substances may cause permanent damage.
- 5) When greasing the machine, keep all rubber parts away from oils, grease or petroleum derivatives.
- 6) During parking and use, avoid loading the full weight of the machine on the foldable driplines.
- 7) We recommend protecting the rubber and plastic parts from water and UV rays to guarantee long life.
- 8) Do not park the machine on slopes.
- 9) Do not stay near the machine manoeuvre area.
- 10) We recommend that all parts exposed to liquid manure be washed with plenty of water at the end of each use.

4. PRELIMINARY CHECKS



The machines are normally supplied ready to use; in any case, we recommend you check all parts that need greasing.

fig. 4

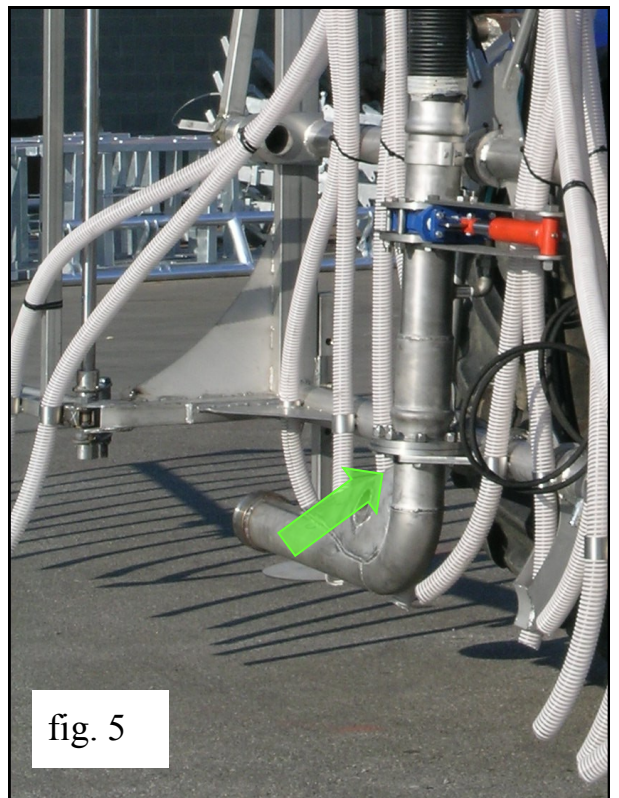
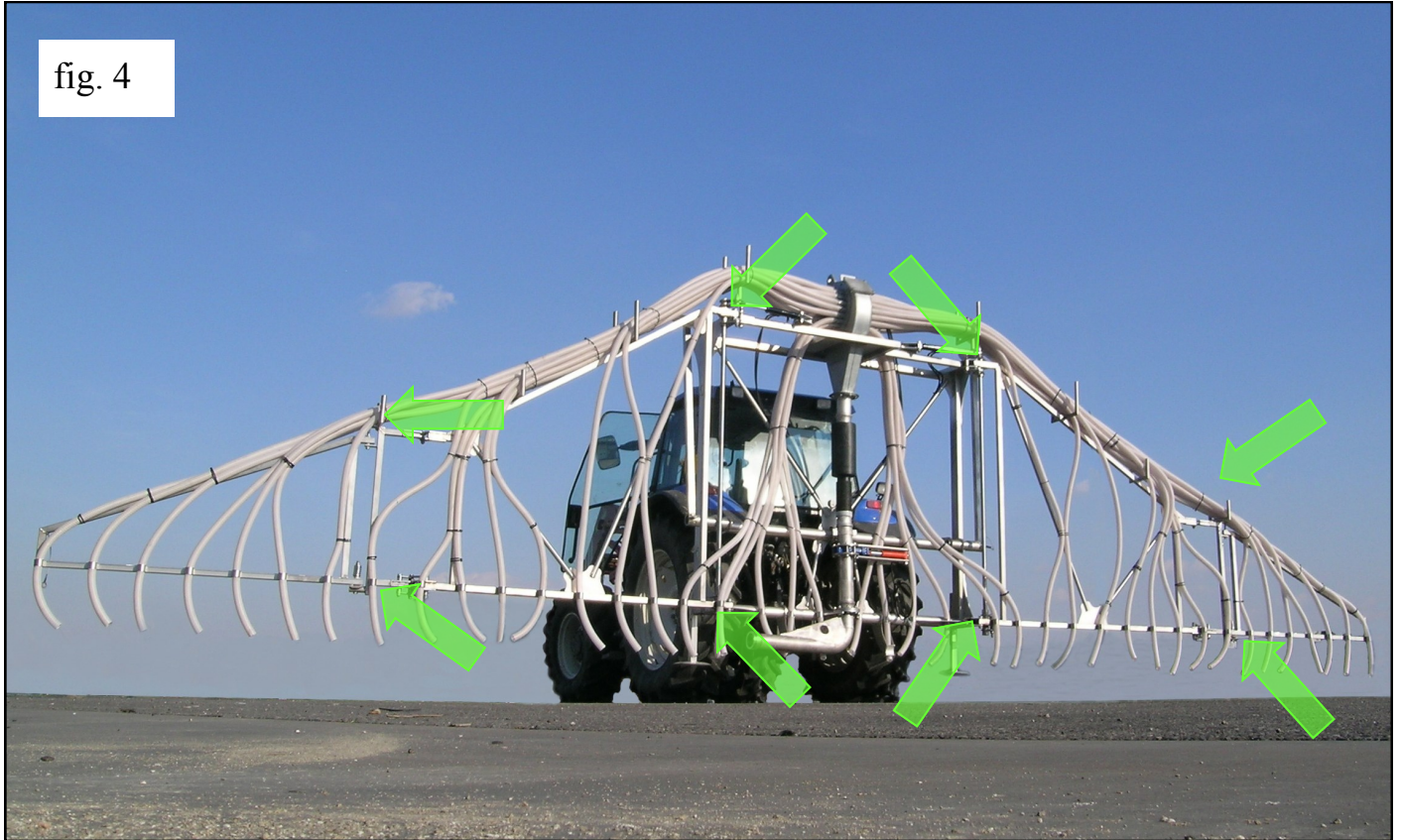


fig. 5

5. POSITIONING AND TRANSPORTATION

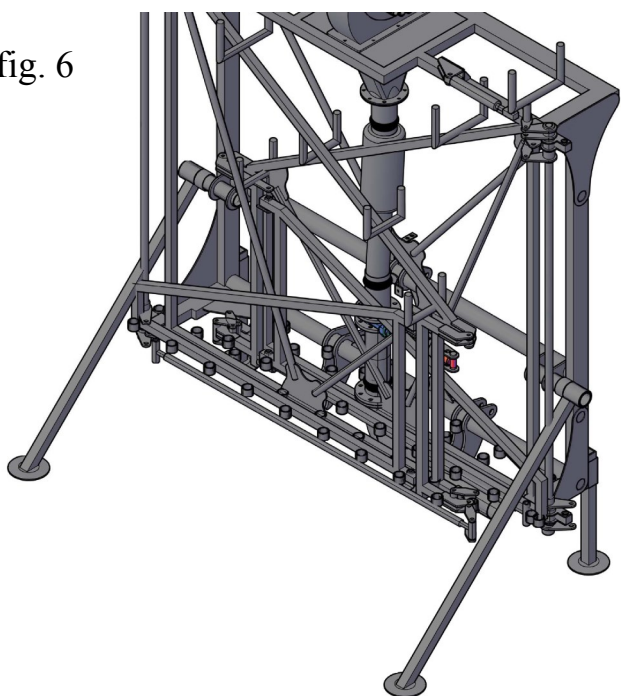
N.B.: the machine has been built to be lifted and towed with the tractor thanks to the three-point lifting system using the couplings of category 2 or 3.

N.B.: for transporting the machine over long distances, load it onto an appropriate vehicle, following the instructions in the paragraph “MACHINE LOADING AND UNLOADING”.

The bar cannot be transported with the tractor directly on the road.

To attach the machine to the tractor, follow the instructions below:

fig. 6



Connect the frame to the tractor lifter using the special hooks (fig. 7).

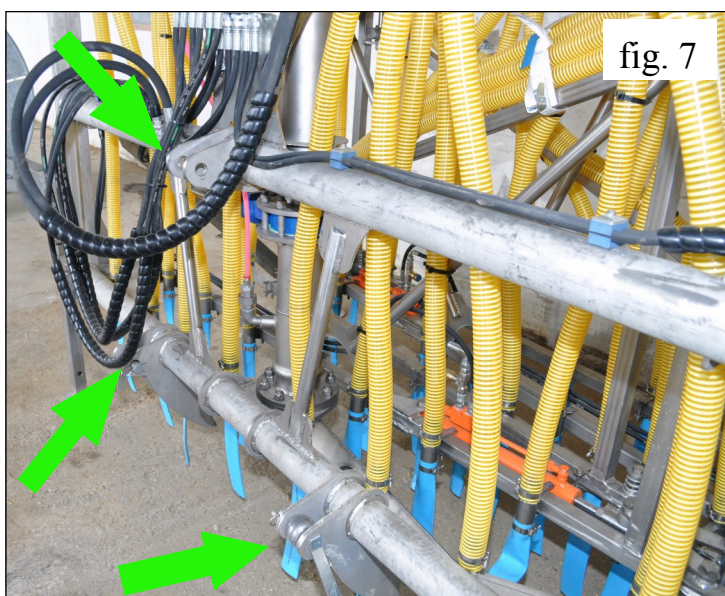


fig. 7

Lift or remove the parking feet as much as possible, slipping off the relative pins and using the special holes (fig. 8-9-10).



fig. 8

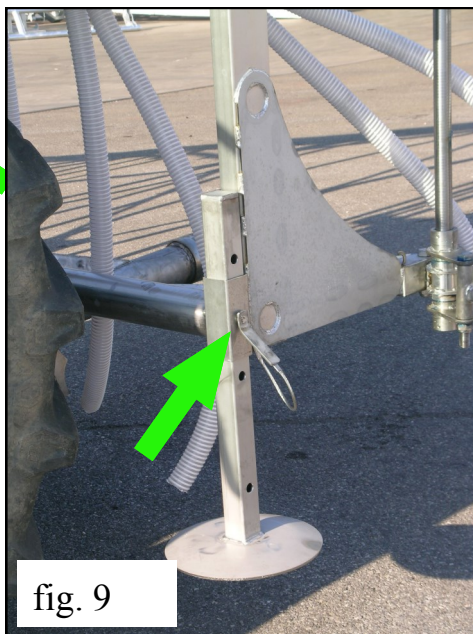
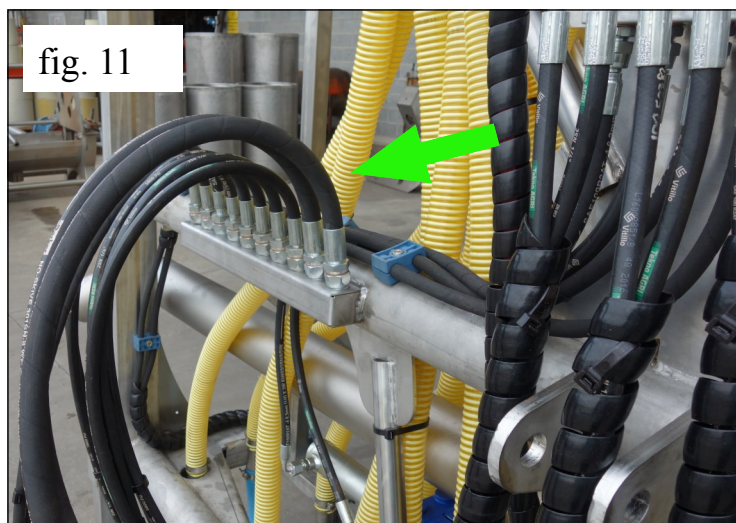


fig. 9



fig. 10

Connect all service hydraulic pipes to the tractor spreader.




6. OPERATION

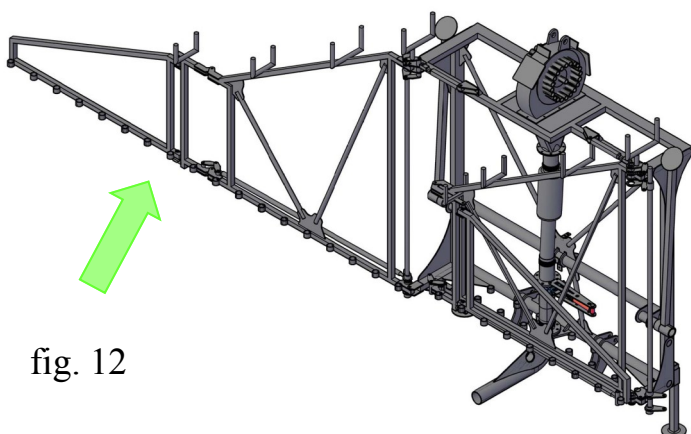
The bar is a machine that works with an umbilical system and therefore you should consider that:

- The manure transport pipe that is connected to the bar must in part move over the soil; therefore, it should be resistant and long enough to allow the machine to move over the entire surface to be treated.
- Obstacles present on the route may be dangerous for pipe's movement, therefore divide the areas up avoiding direct contact between the pipe and the obstacles
- The front manoeuvre may be carried out traditionally thanks to the special stainless pivoting inflow pipe



-  The flexible pipe must in no way cross over, the tractor must not be driven over it. In order to avoid kinking it is necessary to move hose always keeping it under pressure. Once arrived at starting point where to hook the umbilical pipe, it is necessary to open the dripline as indicated hereunder (see fig. 12-13)

1° Wing to be opened Left



2° Wing to be opened Right



Start up:

Connect the umbilical pipe to the machine (see fig. 14). Adjust the tractor lifter until there is at least 10cm between the discharge pipes and the soil.

- Check that the valve (fig.15) is open (the piston stem must be fully in).
- Start up the manure pumping system and wait until the entire plant is full (fig.18).

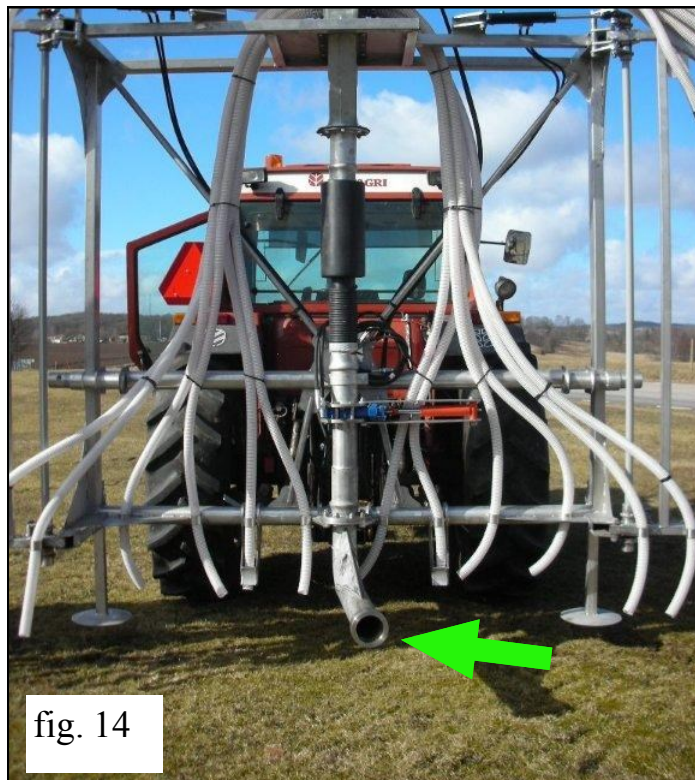


fig. 14

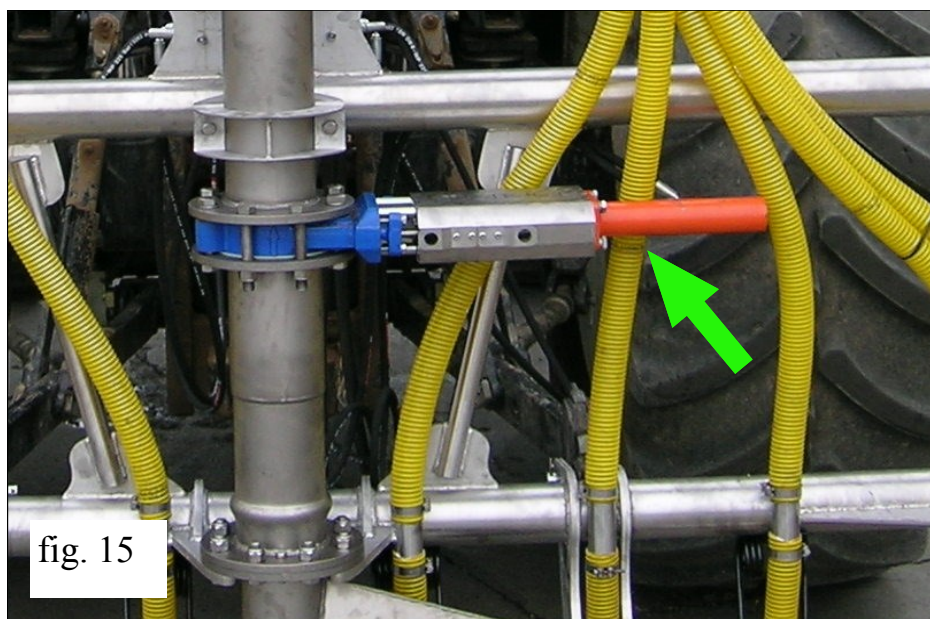


fig. 15

- As soon as some manure starts to leak out from the spreader, close the valve.
- Wait until the plant is under pressure (check the pressure on the manometer installed on the bar fig.16).
- Start the distributor hydraulic motor (fig. 17).



fig. 16

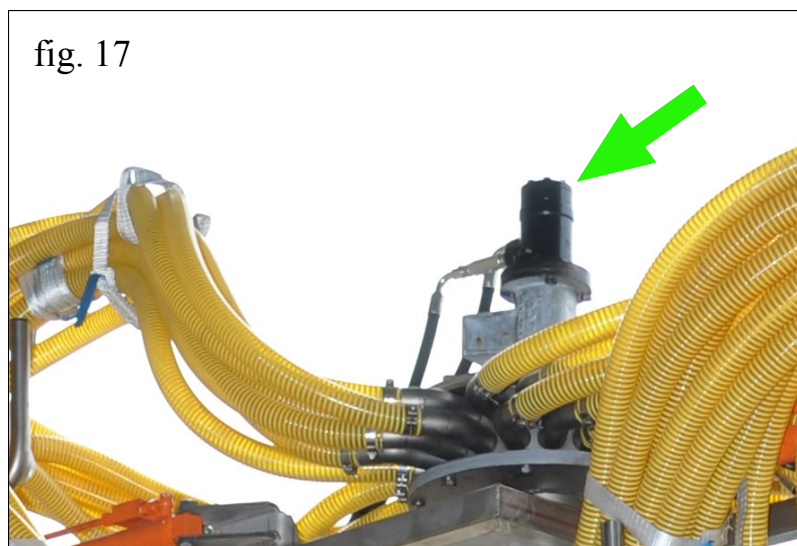


fig. 17

The quantity of product spread on the soil does not only depend on the pump capacity but also on how fast the tractor moves.

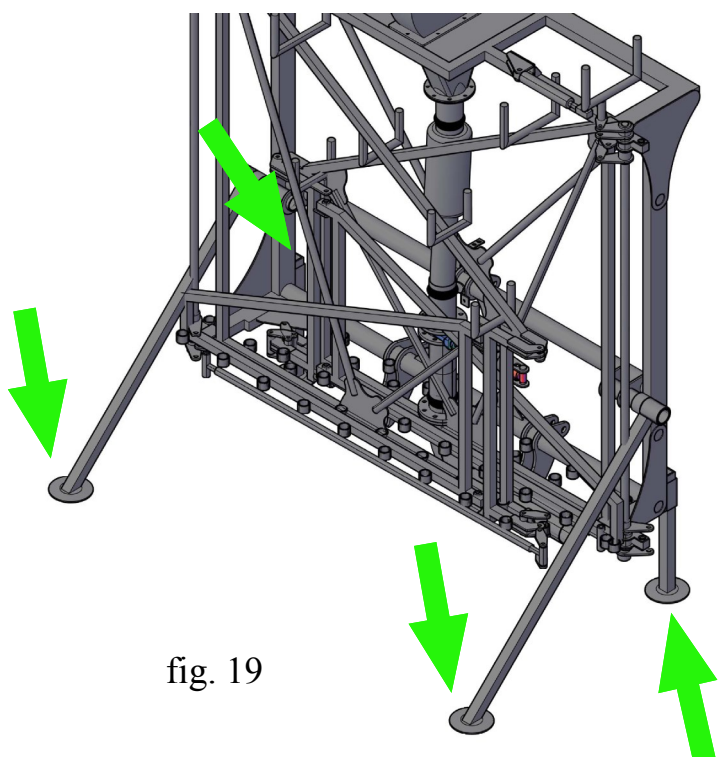
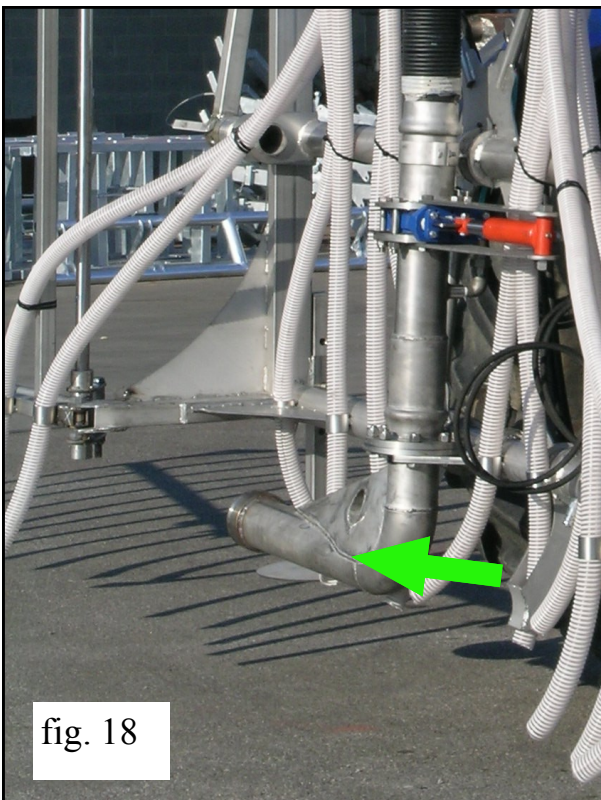
- Once you reach the end of the treatment area, at about 8-10 metres before the end of the field, close the flow valve (fig.15 pg.7).
- Carry out the front manoeuvre being careful not to drive over the umbilical pipe.

Shutdown:

At the end of each work cycle, we recommend washing the entire plant with water, machine included. .

Leave the flow valve open, the hydraulic motor of the spreader on and wait until the water passes through all the flexible pipes.

Once washing is completed, release the umbilical discharge pipe from the stainless steel one (rotate the stainless steel pipe 90° - see fig.18), close the driplines using the reverse sequence as opening (first the right wing and then the left one), detach the hydraulic services pipes and unhook the machine in the parking area using the four feet supplied (fig.19).



7. WORKING AND SAFETY RULES



- 1) During working and control of the machine, wear appropriate clothing (overalls, gloves, helmet, safety shoes, fastened clothes, etc..).
- 2) The machine should be used in appropriately lit areas.
- 3) Given the poisonous nature of the gases emitted from the manure, during machine maintenance check that:
 - the work area is adequately ventilated ;
 - there are no naked flames in the vicinity.
- 4) We recommend that the machine is used by responsible adults and kept away from children.
- 5) Do not perform repairs or adjustments when the machine is in operation.
- 6) Prior to starting the work phases, ensure that the entire working unit (machine and tractor) is stable.
- 7) During maintenance, ensure that the machine is perfectly stable and positioned so as not to compromise the safety of the operator.
- 8) During use, adjustment or maintenance, avoid the rubber or plastic parts of the machine coming into contact with oil, grease or oil derivatives.
- 9) Ensure that the hydraulic motor rotates in a clockwise direction.
- 10) If the outlet is connected to pipes or hoses, check that the fixing joints are in perfect condition; do not stand close to them due to the danger of explosions and lacerations.
- 11) In the event of prolonged disuse, wash the machine and store it in a dry place protected from the weather .
- 12) Regularly grease all moving parts.

8. MAINTENANCE

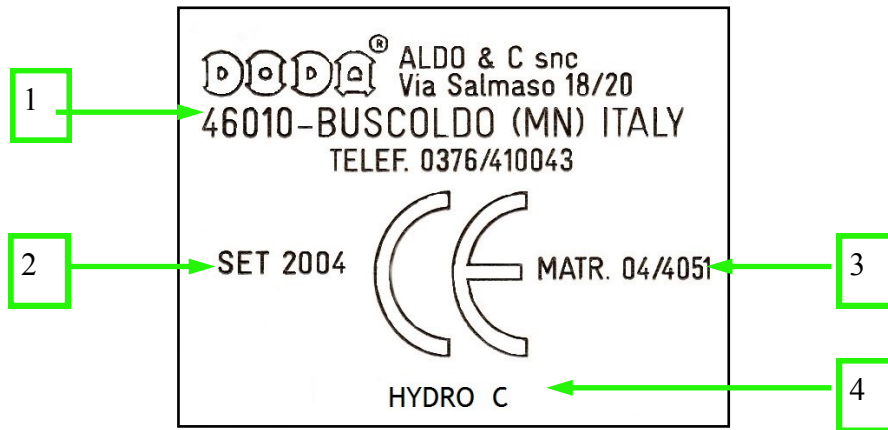


Before carrying out any maintenance operation, stop the machine.

- 1) Every 15 hours of work, grease the parts, as required, with greasers (dripline joints, piston couplings, liquid inflow pipe swivel joint (see pg. 4 fig.5) .
- 2) At the end of its use, wash the machine to prevent the manure from solidifying, causing damage over time.
- 3) Regularly check that the bolts holding the machine together are not loose; otherwise, tighten them. Replace when worn.
- 4) Regularly check the state of the spreader's flexible outflow pipes; replace if damaged.

Contact DODA authorised dealers directly for all spare parts.

9. STICKERS



Label for conformity with EEC regulations.

- 1) **COMPANY NAME**
- 2) **MONTH AND YEAR OF MANUFACTURE**
- 3) **REGISTRATION NUMBER**
- 4) **MACHINE CODE**

10. PERFORMANCE AND TECHNICAL DATA

The entire frame is in AISI 304 stainless steel.

When closed, the bar is approximately 2,74 metres; while completely opened is approximately 11.5 metres.

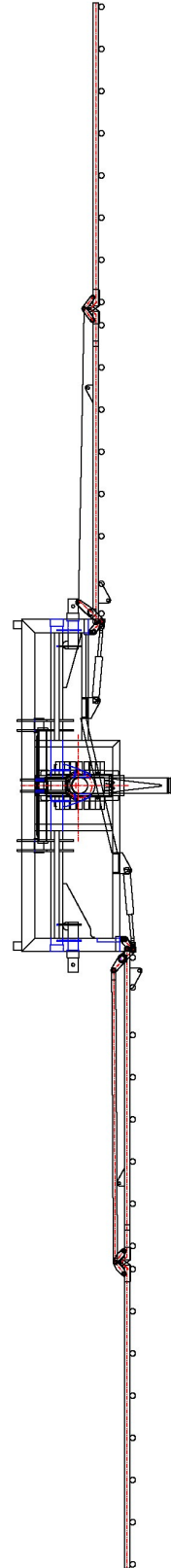
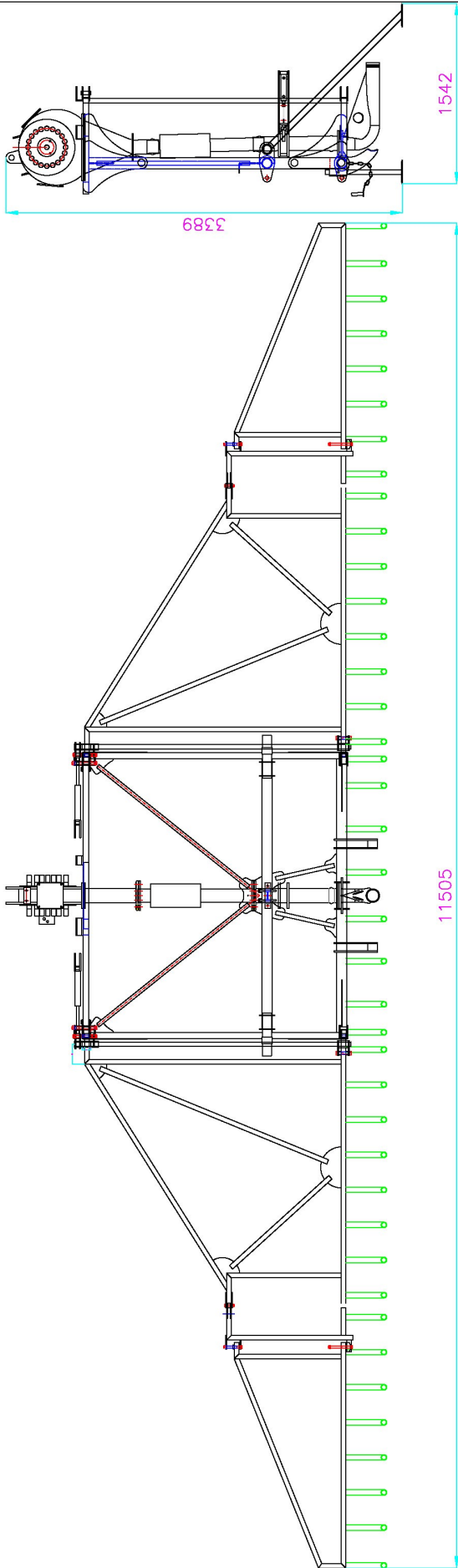
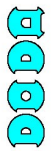
The dry weight of the machine is over 850 kg.

- The required power for these machines varies depending on the state of the soil and the type and length of the pipe to be towed.

With 400 metres of flexible 4" hose to be towed on flat soil, we recommend to use tractors of at least 110hp power and minimum 35q in weight, suitably ballasted on the front.

The quantity of product that the bar is able to spread varies depending on the capacity of the pump and the transfer circuit that must not exceed 10,000 l/min.

11. OVERALL SIZE



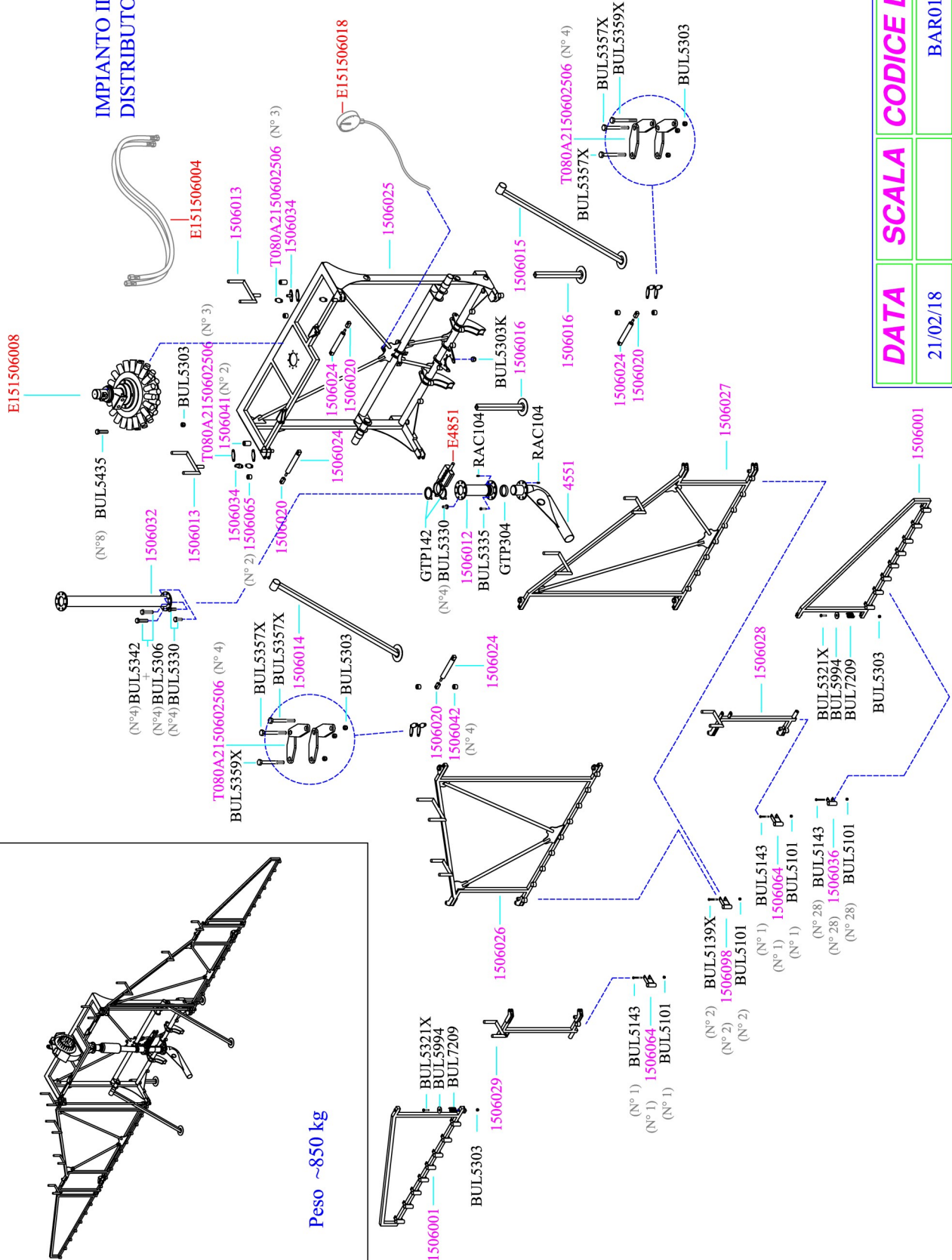
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26/10/05			INGB12

12. PARTS BREAKDOWN

BARRA 12 MT

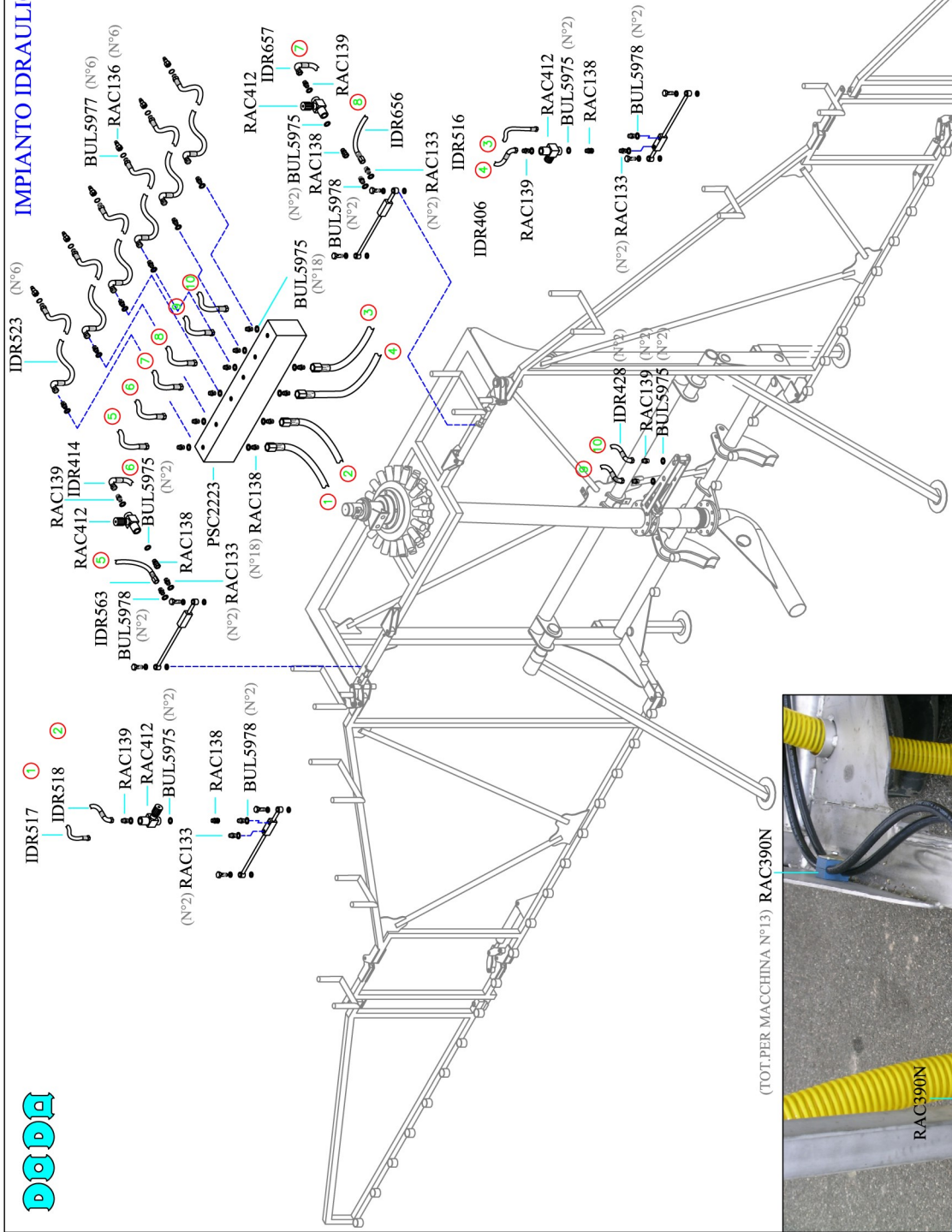
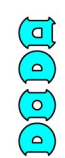
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 E151506009 TUBI DI DISTRIBUZIONE

IMPIANTO IDRAULICO
 DISTRIBUTORE

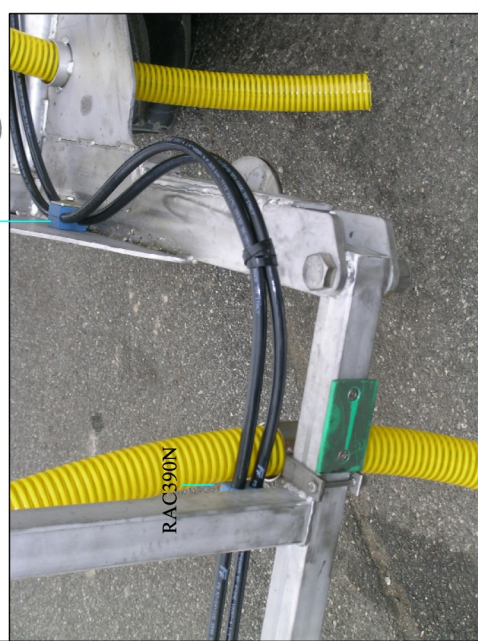


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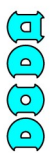
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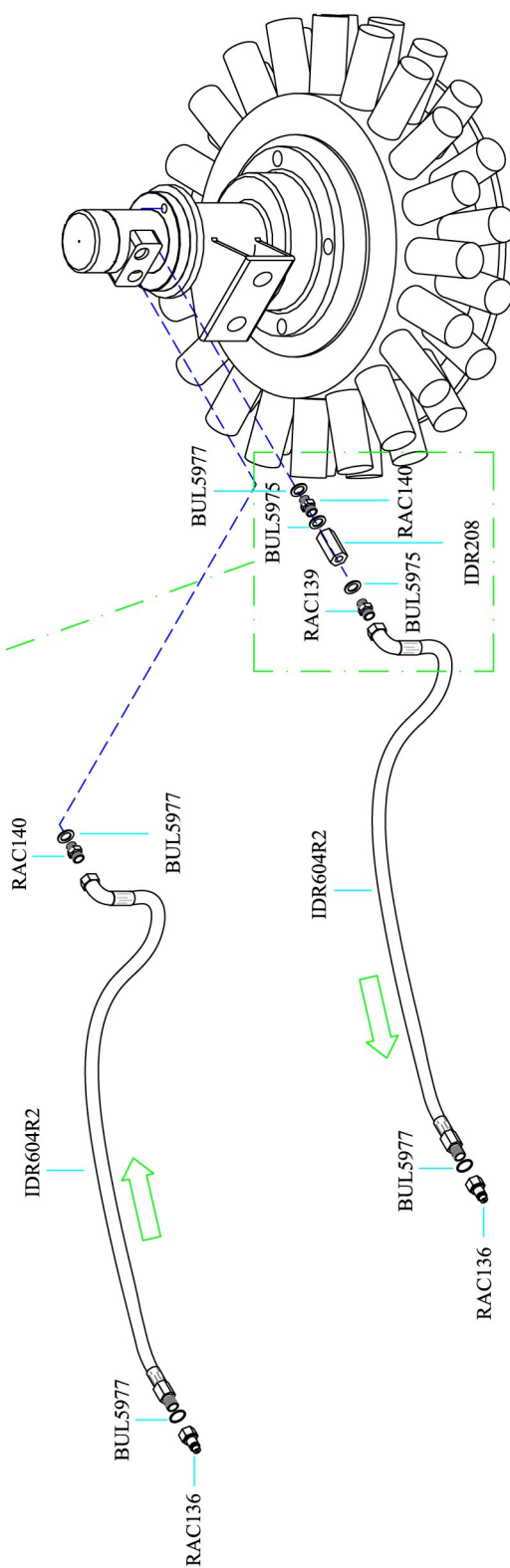
(TOT. PER MACCHINA N°13) RAC390N



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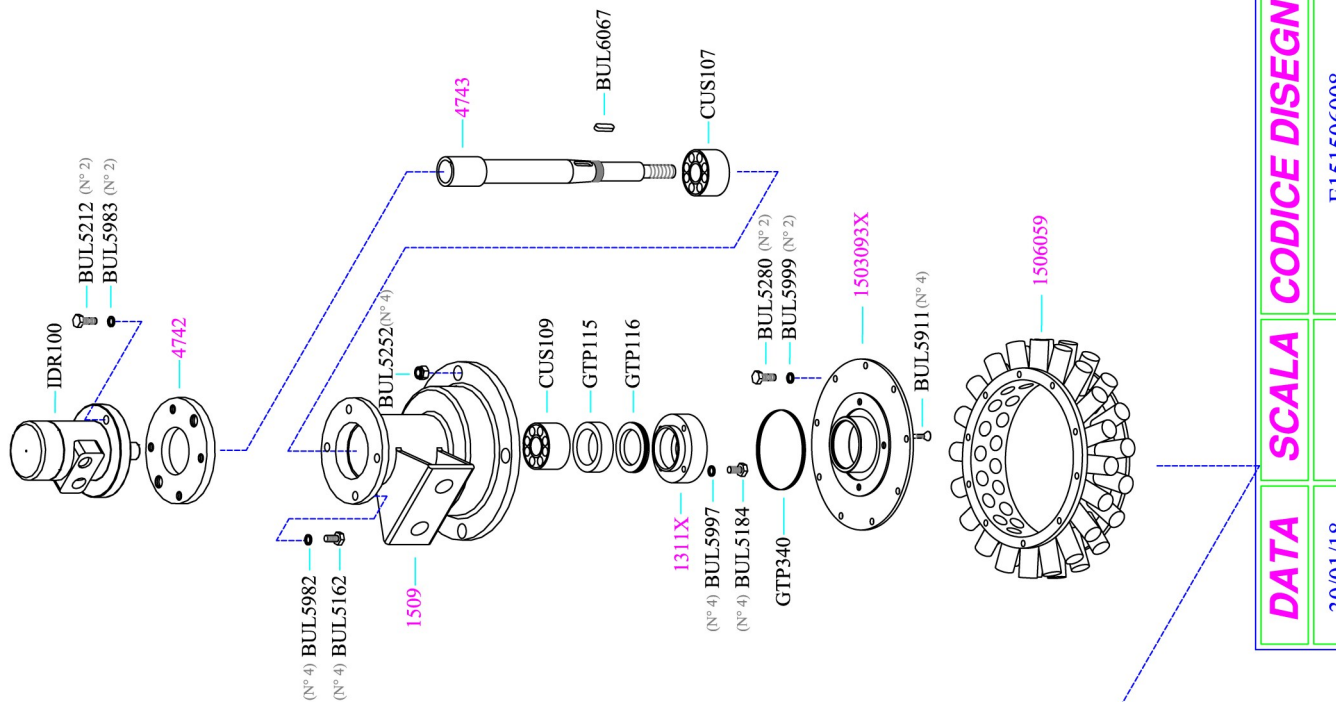
VALVOLA UNIDIREZIONALE



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BARRA 40 USCITE: DISTRIBUTORE INOX

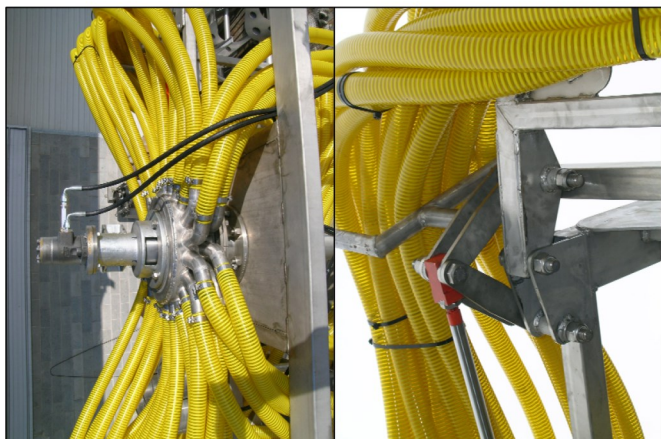
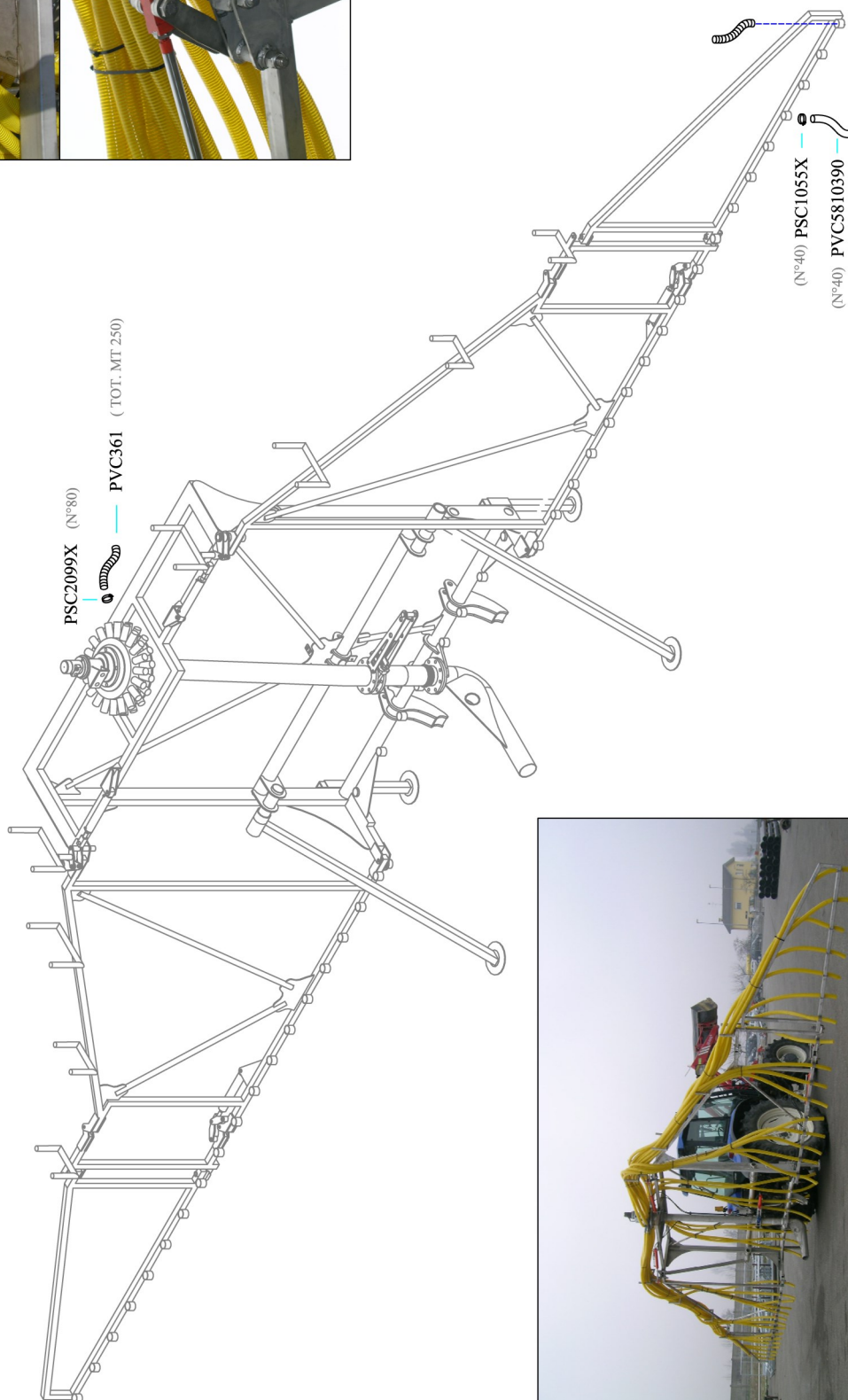


PER PORTATE SOPRA I 1000 L/MIN. **1506060**
 PER PORTATE SOTTO I 1000 L/MIN. **1506067**

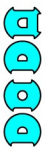
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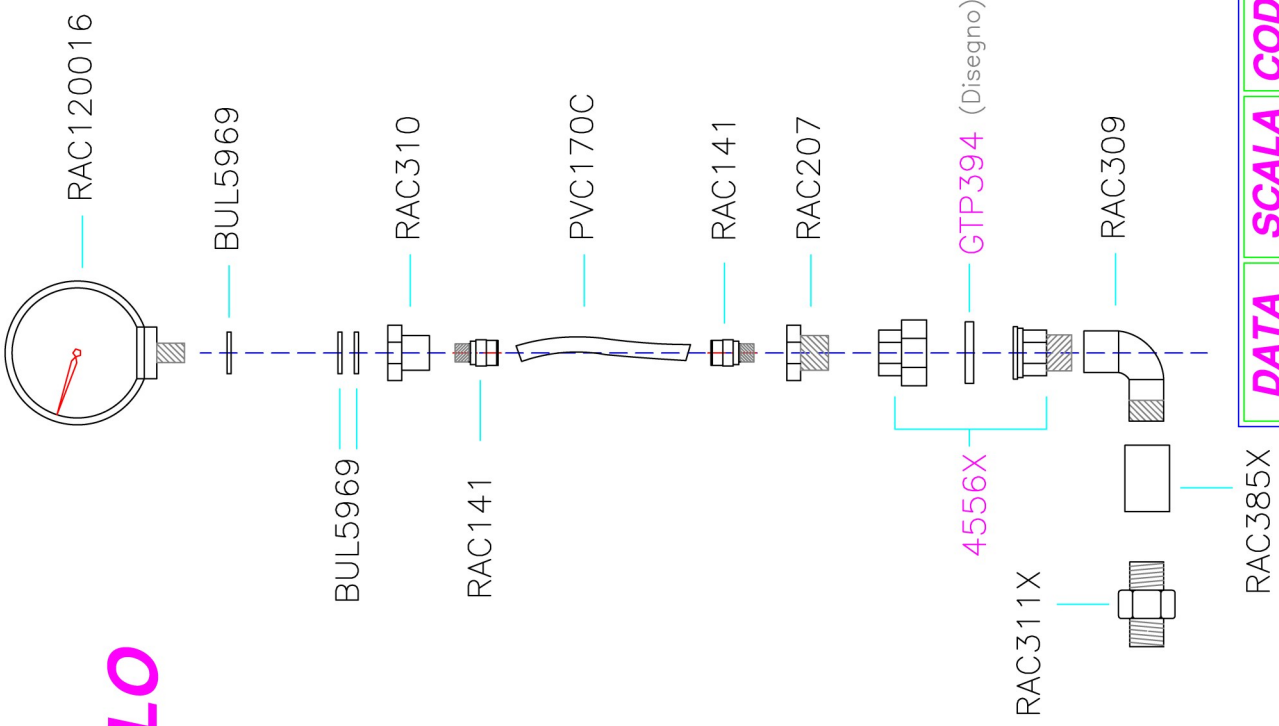
IMPIANTO TUBO DI DISTRIBUZIONE



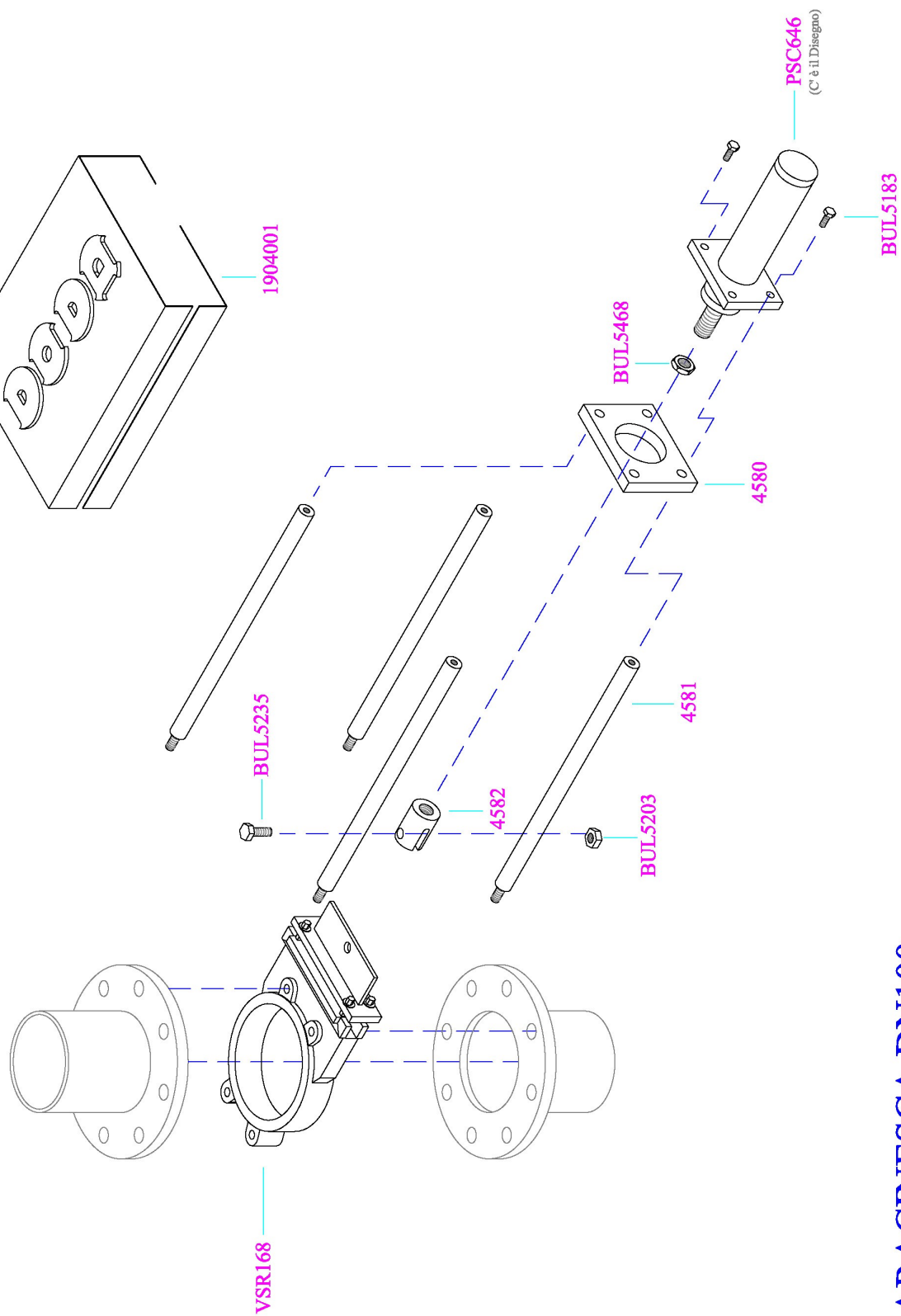
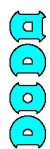
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IMPIANTO DI CONTROLLO DELLA PRESSIONE



DATA	SCALA	CODICE DISEGNO
21/04/17		E151506018



**SARACINESCA DN100
CON PISTONE IDRAULICO**

DATA	SCALA	CODICE DISEGNO
06/11/09		E4851

Note:

**EC DECLARATION OF CONFORMITY DIRECTIVE
2006/42/EC AS AMENDED**

WE

DODA di Doda Aldo & C. S.n.c.

Via Sante Salmaso, 18/20
46010 Buscoldo (Mantova)

DECLARE UNDER OUR EXCLUSIVE RESPONSIBILITY THAT THE PRODUCTS LISTED BELOW:

MANURE SPREADER BAR FOR UMBILICAL SYSTEMS

TO WHICH THIS DECLARATION REFERS CONFORM TO THE REQUIREMENTS OF DIRECTIVE 2006/42/EC AS AMENDED .

BUSCOLDO (MANTOVA)

...
(Name, signature, stamp equivalent
to authorised person)
)



COSTRUZIONE MACCHINE AGRICOLE
di DODA ALDO & C SNC

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