

GASPARDO

MASCHIO GASPARDO S.p.A.



SP

HQ #USE AND MAINTENANCE

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FRANÇAIS

ESPAÑOL

TABLES DE MATIERES

INDICE

1.0 INTRODUCTION

This Instruction Manual for Operation (hereafter called “the Manual”) provides the operator with useful information on how to simplify SEEDING MACHINE use by operating it correctly and in safe conditions.

The sections below must not be considered as a long and burdensome list of warnings: they must be regarded as a number of instructions that improve machine performance and prevent damage to persons, objects or animals originating from incorrect machine operation and use.

It is essential that each operator in charge of transporting, installing, commissioning, operating, maintaining, repairing and dismantling the machine consults this manual and read it carefully before carrying out any operation. This will help him avoid incorrect manoeuvres and prevent inconveniences that may jeopardise the machine integrity and eventually result in risks for operators' safety.

If you are still in doubt or have points to clear on machine operation after reading this manual, do not hesitate to contact the Manufacturer who will be ready to assist you promptly and carefully for better and most efficient machine operation.

Finally, we would like to point out that existing regulations on safety, hygiene at work and environmental protection must always be adhered to during all the phases of machine operation. The operator must therefore check that the machine be operated exclusively in optimised safety conditions for both persons and objects.

This manual is to be considered as an integral part of the product. Therefore, along with the Declaration of Conformity, it must be stored in a safe place where it can be consulted during the entire machine life and passed on to the new owner.

This manual was drawn up according to the regulations existing at the time when it was printed.


The Manufacturer reserves the right to change the machine without having to promptly update this manual. In the event of disputes, the valid version is the Italian text.

Some of the pictures in this manual show details or accessories which may be different from those fitted in your machine. Components or guards may have been removed to make images more useful.

1.1 GENERAL

Conventional symbols:

To identify and make different danger types recognisable, the following symbols are used in the manual:

 WARNING! DANGER FOR OPERATORS' HEALTH AND SAFETY.	 WARNING! RISK OF DAMAGE TO MACHINE OR DRILL PRODUCT.
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In the text, symbols are accompanied by safety warning messages: these are short sentences to further exemplify the type of risk/danger. Warning texts guarantee the safety of operators and prevent damage to the machine or drill product.

The drawings, pictures and diagrams in this manual are not scaled. They exemplify the information provided in the text and are an addition to it: they are not meant to illustrate the supplied machine in details. For a more comprehensive overview of the machine, drawings, pictures and diagrams represent the machine, or parts of it, without the protections or guards in most cases.

Finally, a few words on annexes. As they are photocopies of catalogues, drawings, etc., they have the original ID and page numbers (when provided with it). If they are not originally provided with a numbering, they are not given one.

Definitions:

Below is a list of definitions of the main terminology used in this Manual. Read these definitions carefully before consulting the Manual.

- **OPERATOR:**..... The person/s charged with installing, starting up, adjusting, carrying out maintenance, cleaning, repairing or transporting a machine.
- **DANGER ZONE:**..... any area inside a/o near a machine in which the presence of an exposed person constitutes a risk for the safety and health of that person.
- **DANGER CONDITION:**..... Any condition in which an operator is exposed to one or several risks.
- **RISK:**..... A combination of likelihood and seriousness of possible injuries or damage to the operator's health in a danger condition.
- **PROTECTIONS** Safety measures consisting in installation of specific technical systems (guards and safety devices) to protect operators against dangers.
- **GUARD:** An element on the machine which is used in a specific way to protect the operator by means of a physical barrier. Depending on its construction, it can be a shroud, a cover, a shield, a door, a fence, a guard, a segregation unit, etc.
- **EXPOSED PERSON:**..... Any person who happens to be completely or partially in a danger zone.
- **USER:**..... The user is the person or the organization or the firm which has purchased or rented the machine and intends to use it for the purposes it was conceived for.
- **QUALIFIED PERSONNEL:** Those persons who have been specially trained and qualified to carry out interventions of maintenance or repair requiring a particular knowledge of the machine, its functioning, safety measures, methods of intervention - and who are in a position to recognize the potential dangers when using the machine and are able to avoid them.
- **TRAINED PERSONNEL:**..... These are operators that have been informed or trained on the operating tasks and relating risks.
- **AUTHORIZED SERVICE CENTER:** The authorized Service Center is a structure legally authorized by the manufacturer which disposes of personnel specialized and qualified to carry out all the operations of assistance, maintenance and repair - even of a certain complexity - found necessary to keep the machine in perfect working order.

Responsibility

The **Manufacturer declines any direct or indirect responsibility** in the following cases:

- incorrect machine operation for non-intended uses;
- machine operation by unauthorised operators who have not been trained and do not have a driving license;
- non-performance of scheduled maintenance;
- unauthorised changes or work;
- installation of non-genuine and specific spare parts;
- non-observance, either total or partial, of the instructions provided in this manual;
- non-observance, either total or partial, of the instructions provided in this manual;
- failure to apply regulations on safety, hygiene and health at work;
- unscheduled and unpredictable events.

**ATTENTION**

- Minors, illiterates and persons under altered physical or psychological conditions must not be allowed to operate the machine.
- Operators who do not have a suitable driving license, or who are not properly informed and trained, must not be allowed to operate the machine.
- The operator must check that the machine operates correctly, and must replace and repair parts subject to wear that may cause damage.
- The customer should instruct personnel on accident risks, on the operator safety devices provided, on noise emission risks and on general accident prevention regulations provided for by the international directives and by the law in the country in which the machines are used.
- In any case, the machine should be used exclusively by skilled operators who will be held to follow scrupulously the technical and accident-prevention instructions in this manual.
- The Customer is responsible for finding and selecting the category of suitable PPE (Personal Protection Equipment).
- The machine features pictograms which the operator must keep in perfect readable conditions. When no more readable, they must be replaced as instructed by European regulations.
- It is the user's responsibility to check that the machine is operated only in optimum conditions of safety for people, animals and property.
- Any change made on the machine without authorisation relieves the Manufacturer from any and all responsibility for damage to objects or injuries to operators or third parties.








The Manufacturer declines any and all responsibility for possible incorrect information in this manual if it is due to printing, translation or transcription errors. If the Manufacturer deems it necessary to provide the Customer with any additional information to the instruction provided in this instruction manual for operation must be stored with the manual which it is an integral part of.

List of personal protection equipment (PPE) to be used during all the phases of the machine life

Table 1 summarises the PPE (Personal Protection Equipment) to be used during the different phases of machine life (each phase requires mandatory use of and/or availability of PPE).

The Customer is responsible for finding and selecting the type and category of suitable PPE.

Table 1

Phase	Protection equipment 	Safety footwear 	Gloves 	Goggles 	Ear defenders 	Mask 	Hardhat or helmet 
Trasportation	○	●	○	○	○	○	○
Handling	●	●	●	○	○	○	●
Removal from packaging	●	●	●	○	○	○	○
Assembly	●	●	●	○	○	○	○
Routine operation	●	●	●	○	●	●	○
Adjustments	●	●	●	○	●	○	○
Cleaning	●	●	●	●	○	●	●
Maintenance	●	●	●	●	○	○	●
Disassembly	●	●	●	○	○	○	●
Demolition	●	●	●	○	○	○	●

● PPE required.

● PPE available or to be used if required.

○ PPE not required.

The utilised PPE must be CE-marked and be compliant with Directive 89/686/EEC.

The machine life phases (ref. to Table 1) are listed in the table below.

- **Transportation:**..... Machine transfer from one location to a new one on a suitable vehicle.
- **Handling** Machine transfer from and on the transportation vehicle and movements inside the plant.
- **Removal from packaging** Removal of all the packaging materials.
- **Assembly** All the assembly operations to initially prepare the machine for setup.
- **Routine operation** The machine intended (or usual) use according to its design, construction and function.
- **Adjustments** Adjustment, setup and calibration of all those devices that need to be adapted to normal machine operation.
- **Cleaning** Removal of dust, oil and work process residues which may jeopardise correct machine operation and use as well as the health/safety of operators.
- **Maintenance** Periodic checking of machine parts which are subject to wear or require replacement.
- **Disassembly** Complete or partial disassembly of the machine for any reason whatsoever.
- **Demolition** Permanent removal of all the machine parts for final machine dismantling in order to enable recycling or differentiated collection of components according to the methods envisaged by the existing regulations.

**ATTENTION**

Do not wear protective gloves which may get entangled in the machine moving parts.

1.2 GUARANTEE

The guarantee is valid for a year, against all defects of material, from the date of delivery of the equipment.

On delivery, check that the equipment has not been damaged during transport and that the accessories are integral and complete.

POSSIBLE CLAIMS MUST BE PRESENTED IN WRITING WITHIN EIGHT DAYS OF RECEIPT.

The purchaser will enforce his rights on the guarantee only when he has respected the conditions concerning the benefit of the guarantee, set out in the supply contract.

1.2.1 EXPIRY OF GUARANTEE

Besides what has already been set out in the supply contract, the guarantee expires:

- If the limits set out in the technical data table are overshot.
- If the instructions set out in this booklet have not been carefully followed.
- If the equipment is used badly, defective maintenance or other errors by the client.
- If modifications have been carried out without written authorization of the manufacturer and if non original spare parts have been used.

1.3 IDENTIFICATION

Each individual machine has an identification plate (Fig. 1) indicating the following details:

- 1) Mark and address of the Manufacturer;
- 2) Type and model of machine;
- 3) Unloaded mass, in Kilograms;
- 4) Mass full load, in Kilograms;
- 5) Registration of the machine;
- 6) Year of manufacture;
- 7) **CE** mark.

You are advised to note down your data on the form below, along with the date of purchase (8) and the dealer's name (9).

8) _____

9) _____

This information must always be quoted whenever assistance or spare parts are needed.



ATTENTION

Do not remove, tamper with or make the CE mark affixed on the machine illegible.

Refer to the information provided on the CE mark for the manufacturer's contact details (e.g. for requesting spare parts, etc.).

When the machine is demolished, destroy the CE marking.

fig. 1

MASCHIO (1) GASPARDO	
<small>MASCHIO GASPARDO Spa Via Marcello n.73-35011 Campodarsego (PD) - ITALY</small>	
<small>RECOMMENDED OIL:</small>	<small>AGIP ROTRA MP 85W/140 AGIP GR MU EP 2</small>
TIPO (2)	_____
PESO (kg) (3)	CARICO (kg) (4)
_____	_____
MATR. (5)	_____
F20200076 (7)	(6) ANNO DI FABBRICAZIONE
_____	_____

2.0 GENERAL SAFETY RULES

2.1 DANGER AND INDICATOR SIGNALS

The signs described are reproduced on the machine (Fig. 2). Keep them clean and replace them if they should come off or become illegible. Carefully read each description and learn their meanings by heart.

2.1.1 WARNING SIGNALS

- 1) Before operating, carefully read the instruction booklet.
- 2) Before carrying out maintenance, stop the machine and consult the instruction booklet.

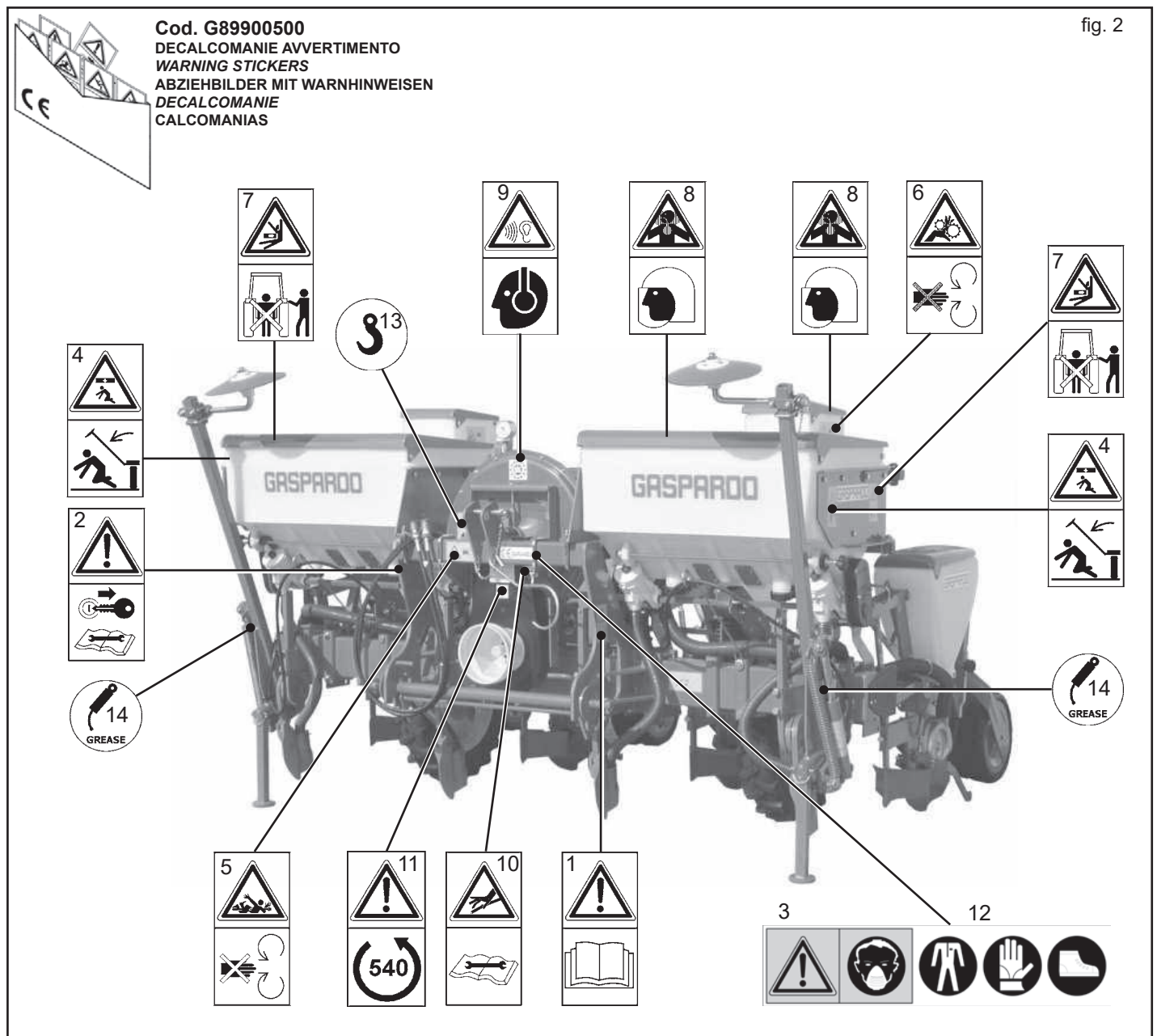
2.1.2 DANGER SIGNALS

- 3 Risk of inhaling harmful substances. Wear a dust mask
- 4) Danger of getting squashed during opening. Keep at a safe distance from the machine.
- 5) Danger of getting hooked by the Cardan shaft. Keep away from moving parts.

- 6) Danger of getting trapped. Keep away from moving parts.
- 7) Danger of getting squashed during closure. Keep at a safe distance from the machine.
- 8) When using anticryptogamic chemicals, use adequate protection.
- 9) High noise level. Use adequate acoustic protection.
- 10) Pipes with high pressure fluids. Take care if flexible pipes break as oil could spurt. Read the instruction manual.
- 11) Before engaging the pto, check that the rpm rate is that prescribed. Never exchange the 540 rpm rate for 1000 rpm.

2.1.3 INDICATOR SIGNALS

- 12) Wear safety clothing.
- 13) Signs the hooking points for lifting.
- 14) Greasing point.



The Manufacturer declines any and all responsibility in the event that the safety pictograms supplied with the machine are missing, illegible or moved from their original position.

2.2 SAFETY REGULATIONS AND ACCIDENT PREVENTION

Pay attention to danger signs, where shown, in this booklet.



There are three levels of danger signs:

- **DANGER:** This sign warns that the operations described **cause** serious lesions, death or long term health risks, if they are not carried out correctly.
- **ATTENTION:** This sign warns that the operations described **could cause** serious lesions, death or long term health risks, if they are not carried out correctly.
- **CAUTION:** This sign warns that the operations described **could cause** serious damage to the machine. if they are not carried out correctly.

In order to complete the various levels of danger, the following describe situations and specific definitions that may directly involve the machine or persons.

- **DANGER ZONE:** any area inside a/o near a machine in which the presence of an exposed person constitutes a risk for the safety and health of that person.
- **EXPOSED PERSON:** Any person who happens to be completely or partially in a danger zone.
- **OPERATOR:** The person/s charged with installing, starting up, adjusting, carrying out maintenance, cleaning, repairing or transporting a machine.
- **USER:** The user is the person or the organization or the firm which has purchased or rented the machine and intends to use it for the purposes it was conceived for.
- **SPECIALIZED PERSONNEL:** Those persons who have been specially trained and qualified to carry out interventions of maintenance or repair requiring a particular knowledge of the machine, its functioning, safety measures, methods of intervention - and who are in a position to recognize the potential dangers when using the machine and are able to avoid them.
- **AUTHORIZED SERVICE CENTER:** The authorized Service Center is a structure legally authorized by the manufacturer which disposes of personnel specialized and qualified to carry out all the operations of assistance, maintenance and repair - even of a certain complexity - found necessary to keep the machine in perfect working order.

Carefully read all the instructions before using the machine; if in doubt, contact the technicians of the Manufacturer's dealer. The manufacturer declines all responsibility for the non-observance of the safety and accident prevention regulations described below.

General norms

- 1) Pay close attention to the danger signs in this manual and on the seeder.
- 2) The labels with the instructions attached to the machine give abbreviated advice for avoiding accidents.
- 3) Scrupulously observe, with the help of the instructions, the safety and accident prevention regulations.
- 4) Avoid touching the moving parts in any way whatsoever.
- 5) Any work on and adjustment to the machine must always be done with the engine switched off and the tractor blocked.
- 6) People or animals must not, under any circumstances be transported on the equipment.
- 7) It is strictly prohibited to drive the tractor, or allow it to be driven, with the equipment attached by persons not in possession of a driver's license, inexperienced or in poor conditions of health.
- 8) Before starting the tractor and the equipment, check that all safety devices for transport and use are in perfect working order.
- 9) Before starting up the equipment, check the area surrounding the machine to ensure that there are no people, especially children or pets, nearby, and ensure that you have excellent visibility.
- 10) Use suitable clothing. Avoid loose clothing or garments with parts that could in any way get caught in the rotating or moving parts of the machine.
- 11) Before starting work, familiarize yourself with the control devices and their functions.
- 12) Only start working with the equipment if all the protective devices are in perfect condition, installed and in the safe position.
- 13) It is absolutely prohibited to stand within the machine's radius of action where there are moving parts.
- 14) It is absolutely forbidden to use the equipment without the guards and container covers.
- 15) Before leaving the tractor, lower the equipment hooked to the lifting unit, stop the engine, pull the hand brake and remove the key from the dashboard, make sure that the chemical substances safely out of reach.
- 16) The driver's seat must never be left when the tractor engine is running.
- 17) Before starting the equipment, check that the supporting feet have been removed from under the seeder; check that the seeder has been correctly assembled and regulated; check that the machine is in perfect working order, and that all the parts subject to wear and tear are in good condition.
- 18) Before releasing the equipment from the third point attachment, put the hoist command lever into the locked position and lower the support feet.
- 19) Only operate when visibility is good.
- 20) All operations must be carried out by expert personnel, equipped with protective gloves, in a clean and dust-free environment.

Tractor hitch

- 1) Hook the equipment to a suitable, sufficiently-powered tractor by means of the appropriate device (lifter), in conformity with applicable standards.
- 2) The class of the equipment attachment pins must be the same as that of the lifter attachment.
- 3) Take care when working within the range of the lifting arms as this is a very dangerous area.
- 4) Be very careful when hooking and unhooking the equipment.
- 5) It is absolutely forbidden to stand between the tractor and linkage for manoeuvring the lifting controls from the outside (Fig. 3).
- 6) It is absolutely forbidden to stand in the space between the tractor and the equipment (Fig. 3) with the engine running. It is possible to work between the tractor and the equipment only after the parking brake has been applied and a suitably sized blocking wedge or stone has been placed under the wheels.
- 7) The attaching of additional equipment onto the tractor brings about a different distribution of weight on the axles. Check the compatibility of the tractor performance with the weight that the seeder transfers onto the three-point linkage. If in doubt consult the tractor Manufacturer.
- 8) Comply with the maximum admissible weight for the axle, the total mobile weight, transport regulations and the highway code.

Transport on Road

- 1) When driving on public roads, be sure to follow the highway code of the country involved.
- 2) Any transport accessories must be provided with suitable signs and guards.
- 3) It is very important to remember that road holding capacity as well as direction and braking capacity can be influenced, sometimes considerably, by equipment being either carried or towed.
- 4) When negotiating curves, be aware of the variation in centrifugal force exerted in a position other than that of the center of gravity, with and without the equipment in tow. Also pay greater attention on sloping roads or ground.
- 5) For transport, adjust and fasten the lateral lifting arm chains of the tractor; check that the seed and fertilizer hopper covers are closed properly; lock the hydraulic lifting control lever; hook the seeders unit following the instructions referring on page 65.
- 6) Road movements must be performed with all tanks empty.
- 7) For displacements beyond the work area, the equipment must be placed in the transportation position.

- 8) Upon request the Manufacturer will supply supports and tables for signaling of dimensions.
- 9) When the dimensions of carried or partially-carried equipment conceal the tractor's signalling and lighting devices, these must also be installed on the equipment itself, in conformity with regulations of the highway code of the country involved. When in operation make sure that the lighting system is in perfect working order.

Cardan shaft

- 1) The equipment installed can only be controlled by means of the Cardan shaft complete with the necessary overload safety devices and guards fastened with the appropriate chain.
- 2) Only the Cardan shaft supplied by the Manufacturer must be used.
- 3) The engine must not be running when installing and removing the Cardan shaft.
- 4) Care must be taken regarding the safety and correct assembly of the Cardan shaft.
- 5) Use the chain provided to stop the Cardan shaft from rotating.
- 6) Always check carefully that the Cardan shaft guard is always in position, both during transportation and operation.
- 7) Frequently and set intervals check the Cardan shaft guard, it must always be in excellent condition.
- 8) Before engaging the power take-off, check that the set rpm corresponds to that indicated by the sticker on the equipment.
- 9) Before inserting the power take-off, make sure that there are no people or animals nearby and that the rpm selected corresponds to that permitted. Never exceed the maximum admissible speed.
- 10) Watch out for the rotating universal joint.
- 11) Do not insert the power take-off with the engine off or synchronized with the wheels.
- 12) Always disconnect the power take-off when the Cardan shaft is at too wide an angle (never more than 10° - Fig. 4) and when it is not being used.
- 13) Only clean and grease the Cardan shaft when the power take-off is disconnected, the engine is off, the hand brake pulled and the key removed.
- 14) When not in use, place the Cardan shaft on the support provided for it.
- 15) After having dismantled the Cardan shaft, place the protective cover on the power take-off shaft again.

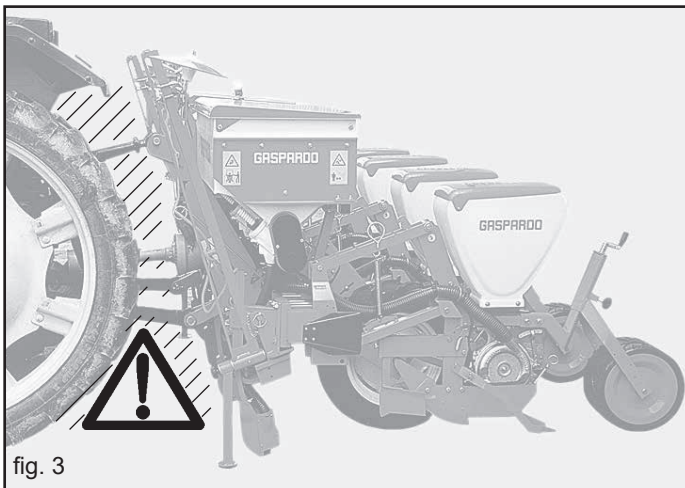


fig. 3

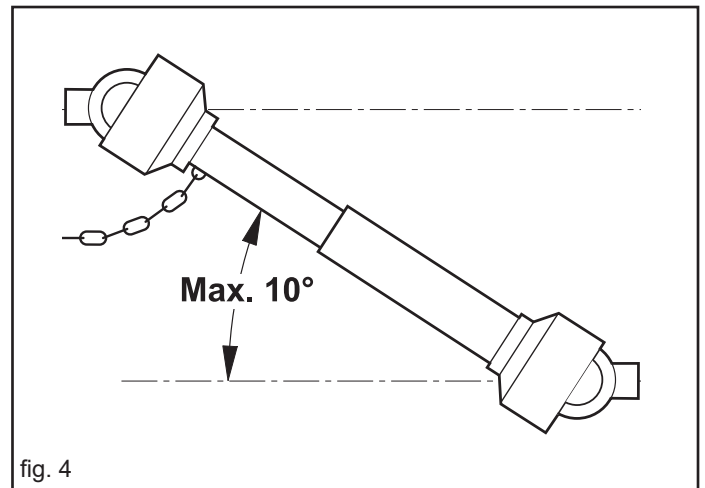


fig. 4

Safety measures concerning the hydraulics

- 1) At the moment of connecting the hydraulic tubes to the hydraulic system of the tractor, make sure that the hydraulic systems of the operating machine and the tractor are not under pressure.
- 2) For the operative hydraulic connections between tractor and operating machine, the sockets and plugs should be marked with colours to distinguish them, to avoid them being used wrongly. There would be a danger of accident if the connections were to be swapped round.
- 3) The hydraulic system is under high pressure; because of the accident risk, when searching for leakage points special auxiliary instruments should be used.
- 4) Not to never carry out the search losses with the fingers or the hands. The liquids that exit from the holes can be nearly not visible.
- 5) During transport by road the hydraulic connections between tractor and operating machine should be disconnected and secured to the support provided.
- 6) Do not use vegetable oils under any circumstance. These could cause a risk of damage to the cylinder gaskets.
- 7) The operating pressures of the hydraulic system should be between 100 bars and 180 bars.
- 8) Never exceed the indicated hydraulic system pressure levels.
- 9) Check that the quick hook-ups are coupled correctly; parts of the system could get damaged if they are not.
- 10) Oil escaping at high pressure can cause skin injury with the risk of serious wounds and infection. Call a doctor immediately if such an incident occurs. If the oil with surgical means is not removed quickly, can take place serious allergies and/or infections. Therefore, the installation of hydraulic components in the tractor driver's cab is strictly forbidden. All the components of the system should be positioned carefully to avoid parts being damaged during use of the equipment.
- 11) In case of participation on the hydraulic system, to unload the hydraulic pressure carrying all the hydraulic commandos in all the positions some times after to have extinguished the motor.

Maintenance in safety

During work and maintenance operations, use suitable personal protection gear:



- 1) Do not proceed with maintenance and cleaning if the power take-off has not been disconnected first, the engine power off, the hand brake pulled and the tractor blocked with a wooden block or stone of the right size under the wheels.
- 2) Periodically check that the bolts and nuts are tight, and if necessary tighten them again. For this it would be advisable to use a torque wrench, respecting the values of the *Table SV1*.
- 3) During assembling, main-tenance, cleaning, fitting, etc., with the seeding machine raised, place adequate supports under the equipment as a precaution.
- 4) The spare parts must correspond to the manufacturer's specifications. **Use only original spares.**

Table SV1

d x passo (mm)	Sezione resistente Sr (mm ²)	4,8		5,8		8,8		10,9		12,9	
		Precarico F kN	Momento M N-m	Precarico F kN	Momento M N-m	Precarico F kN	Momento M N-m	Precarico F kN	Momento M N-m	Precarico F kN	Momento M N-m
3 x 0,5	5,03	1,2	0,9	1,5	1,1	2,3	1,8	3,4	2,6	4	3
4 x 0,7	8,78	2,1	1,6	2,7	2	4,1	3,1	6	4,5	7	5,3
5 x 0,8	14,2	3,5	3,2	4,4	4	6,7	6,1	9,8	8,9	11,5	10,4
6 x 1	20,1	4,9	5,5	6,1	6,8	9,4	10,4	13,8	15,3	16,1	17,9
7 x 1	28,9	7,3	9,3	9	11,5	13,7	17,2	20,2	25	23,6	30
8 x 1,25	36,6	9,3	13,6	11,5	16,8	17,2	25	25	37	30	44
8 x 1	39,2	9,9	14,5	12,2	18	18,9	27	28	40	32	47
10 x 1,5	58	14,5	26,6	18	33	27	50	40	73	47	86
10 x 1,25	61,2	15,8	28	19,5	35	30	53	43	78	51	91
12 x 1,75	84,3	21,3	46	26	56	40	86	59	127	69	148
12 x 1,25	92,1	23,8	50	29	62	45	95	66	139	77	163
14 x 2	115	29	73	36	90	55	137	80	201	94	235
14 x 1,5	125	32	79	40	98	61	150	90	220	105	257
16 x 2	157	40	113	50	141	76	214	111	314	130	368
16 x 1,5	167	43	121	54	150	82	229	121	336	141	393
18 x 2,5	192	49	157	60	194	95	306	135	435	158	509
18 x 1,5	216	57	178	70	220	110	345	157	491	184	575
20 x 2,5	245	63	222	77	275	122	432	173	615	203	719
20 x 1,5	272	72	248	89	307	140	482	199	687	233	804
22 x 2,5	303	78	305	97	376	152	529	216	843	253	987
22 x 1,5	333	88	337	109	416	172	654	245	932	286	1090
24 x 3	353	90	383	112	474	175	744	250	1060	292	1240
24 x 2	384	101	420	125	519	196	814	280	1160	327	1360

3.0 DESCRIPTION OF THE SEEDER

This agricultural equipment, called «**SP Pneumatic Seeder**», can only operate by means of a Cardan shaft applied to the power take-off of an agricultural tractor equipped with a lifting unit, with a three-point universal joint.

The equipment is particularly suitable for precision seeding, for multi-purpose use and on any kind of tilled land. The seeding machine is pneumatically operated and may be equipped with various accessories, such as, for example, a manure spreader, granulate distribution, and additional seeding elements.

The fundamental concept of the “modularity” has been developed and combined with that of “simplicity”, not only for structure but also for practicality of use.



ATTENTION

The seeder is suitable only for the uses indicated. The recommended working speed is 6÷8 km/h. The planting unit must only be transported by road with the tanks and hoppers empty and at max speed of 25 km/h. Any other use different from that described in these instructions could cause damage to the machine and represent a serious hazard for the user.

This machine has been intended for professional use: it must be operated exclusively by preliminarily educated, trained and authorised operators who hold a regular driving license.

Operating instructions

- The machine was manufactured for dosing and distributing commercial seeds of standard quality.
- The machine is intended for professional users: operation must be allowed to skilled operators only.
- The machine must be operated by one operator only.
- The machine is not intended for purposes other than farming applications.

Conforming machine operation also includes:

- compliance with all the instructions provided in this manual;
- performance of inspection and maintenance operations described in this manual;
- exclusive use of genuine GASPARDO spare parts.

The Customer must ensure that Qualified Operators for routine machine operation are suitably trained and prove competent in carrying out the tasks assigned to them, taking care of their safety and that of third parties.

Depending on the qualification level and tasks assigned, qualified operators must be duly instructed on the machine functions so as to operate and manage it correctly and guarantee good machine efficiency.

Regular operation depends on the correct use and adequate maintenance of the equipment. It is advisable therefore to observe scrupulously what is described in order to prevent any inconveniences that could prejudice proper operation and duration. It is just as important to keep to what is described in this booklet since **the Manufacturer declines all responsibility due to negligence and non-observance of these rules**. At any rate the Manufacturer is available to assure immediate and accurate technical assistance and all that may be necessary for the improved operation and better performance of the equipment.

The machine user shall be liable for damage caused by non-compliance with the instructions hereby.



ATTENTION

The machine must be operated by qualified operators of the Customer. The operator must wear suitable personal protection equipment (safety footwear, overalls and gloves, etc.).

Precautions for use

Below is a list of precautions for use the machine:

- ensure that there are no remarkably big stones or rocks on the soil;
- ensure that there are no metal elements of any type whatsoever, but especially nets, cables, wire ropes, chains, pipes, etc. on the soil.

3.1 TECHNICAL DATA

	U.M.	SP							
Max. row number	[nr.]	2	6	4	5	8	6	8	12
Row distance	[cm]	75	45	75	75	45	75	75	45
Toolbar width	[m]	1,90	2,50	2,50	3,20	4,20	4,20	5,80	5,80
Seed hopper capacity	[l]	34	34	34	34	34	34	34	34
Fertilizer hopper capacity	[l]	90x2	160x2	160x2	160x2	280x2	280x2	160x4	160x4
PTO (rpm)	[g.p.m.]	540	540	540	540	540	540	540	540
Weight (*)	[kg]	330	670	550	615	890	700	930	1130
Working speed (max)	[Km/h]	6÷8							
No-load noise detection (**)	[dB]	$(L_{WA} = 112,7) - (L_{PA} = 91,7)$							
Tyres	[Type]	5.00-15			6.50/80-15			7.50-15	
Tyre inflation pressure	[bar-(Psi)]	2,2 - (32)			2,4 - (35)			3,25-(47)	
TRACTOR SPECIFICATIONS									
Power required	[HP-(kw)]	-	70(51)	60(44)	70(51)	90(66)	90(66)	100(74)	100(74)
Three- point universal joint (category)	[nr.]	II							
Battery voltage	[V]	12							
Tractor hydraulic connections (min.)	[nr.]	1							
Tractor pump pressure (max)	[bar]	180							

(*) Without fertilizer and microgranulator.

(**) L_{WA} = Acoustic power level uttered by machine (Weighed A);

L_{PA} = Continuous equivalent acoustic radiation pressure level (Weighed A) in the "worker's position".

The technical data and the models provided must be considered as non binding. We reserve the right to change them without notice.

3.2 ASSEMBLY DRAWING (Fig. 5)

- 1 Row marker disk;
- 2 Manure/fertilizer tank;
- 3 Fan;
- 4 Vacuum meter;
- 5 Air distributor;
- 6 Seed tank;
- 7 Seeder height adjuster;
- 8 Compression wheel;
- 9 Manure spreader driving wheel;
- 10 Seed distributor;
- 11 Lister;
- 12 Planter driving universal joint;
- 13 Supporting foot;
- 14 Frame;
- 15 Identification plate;
- 16 Manure/fertilizer distribution Adjuster (Minimax);
- 17 Row marker control;
- 18 Cardan shaft linkage;
- 19 Cardan shaft support;
- 20 Seed covering;
- 21 Sod breaker.

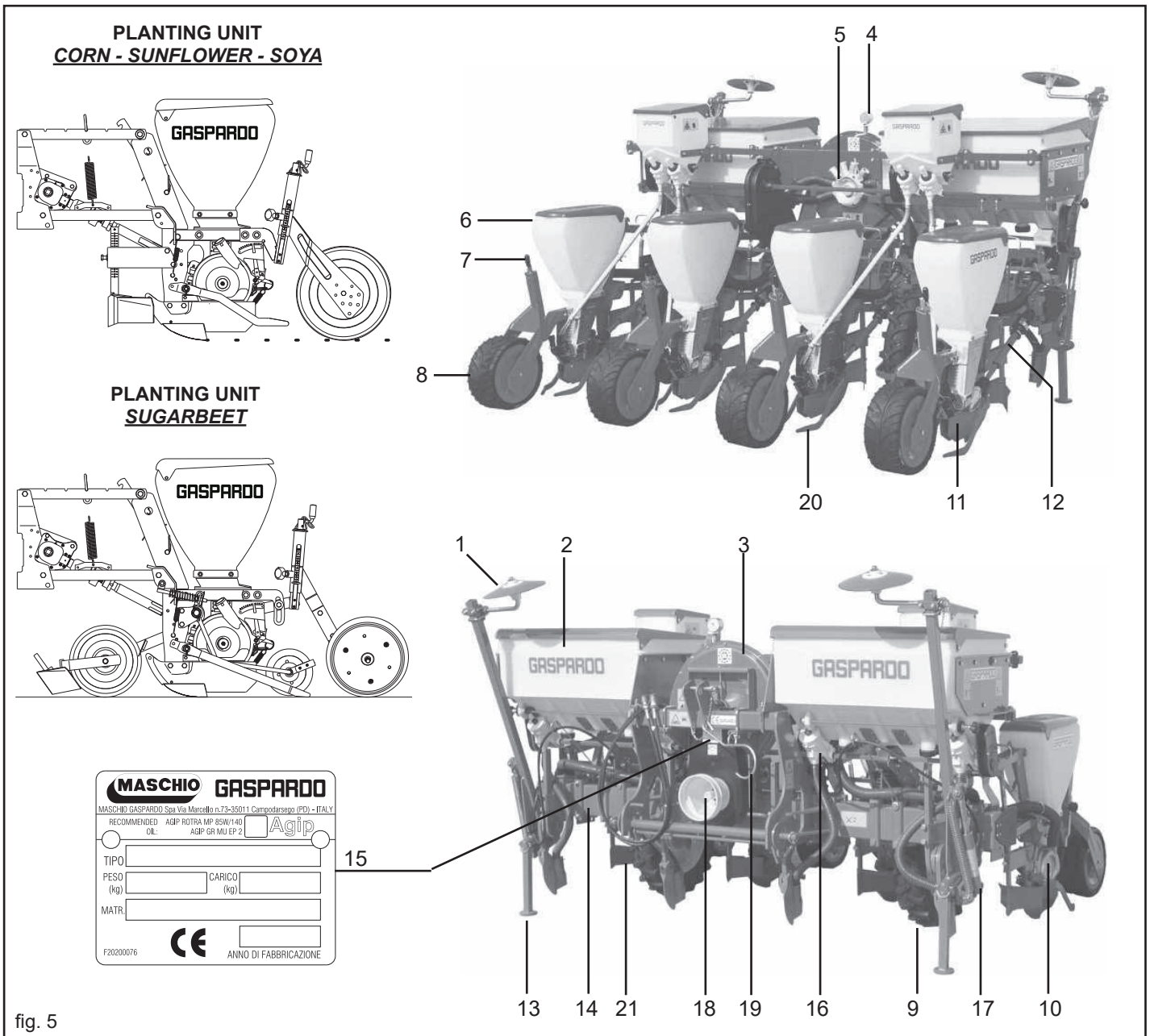


fig. 5

3.3 HANDLING



ATTENTION

The Customer must apply the rules envisaged in the European Directives EEC 391/89 and 269/90 and subsequent modifications on the possible risks for loading and unloading operators caused by manual handling of loads.

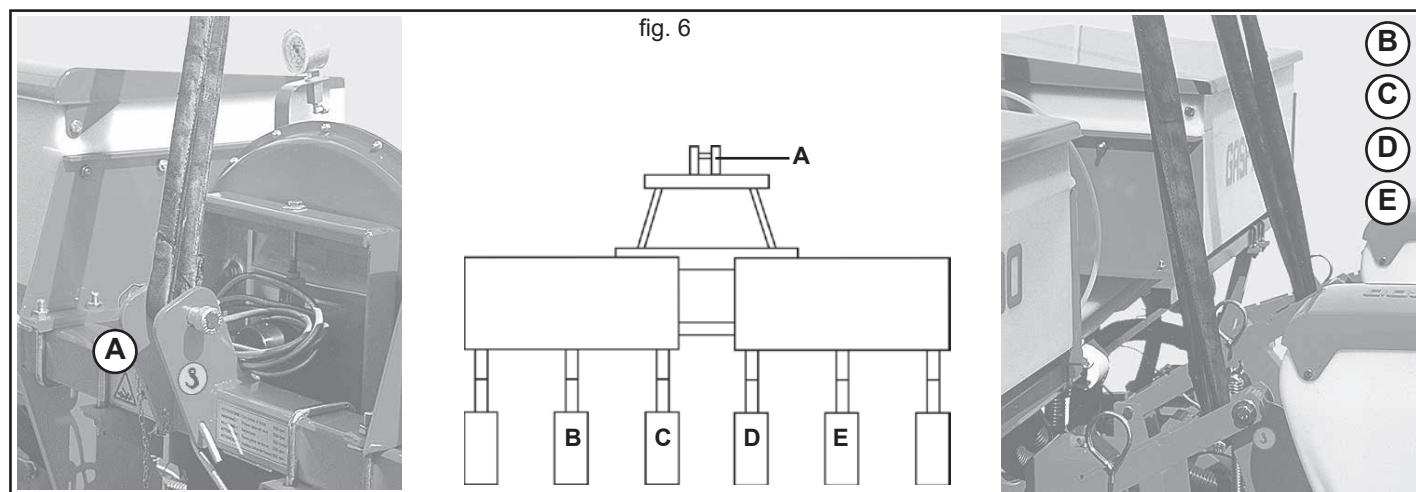
During handling operations wear suitable personal protection equipment:



If the machine has to be handled, it should be lifted by hooking cloth ropes to the attachment points provided and using a suitable hoist or crane with sufficient capacity (Fig. 6). Because of the danger involved, this operation should be carried out by trained and responsible personnel.

The mass of the machine is on the identification Plate (Fig. 1). Stretch the rope to keep the machine level.

The hook points can be detected by finding the "hook" symbol (13, Fig. 2). For machines of up to four rows, hook up at points: A, C and D. For machines of more than 4 rows hook up at points: A, B, C, D and E.



ATTENTION

- Packaging materials (pallets, cartons, etc.) must be disposed of as prescribed by the existing regulations through authorised disposal companies.
- Parts making up the machine must not be lifted by hooking them up from moving or weak parts such as guards, electrical runways, pneumatic parts, etc.
- Standing under suspended loads is not allowed; unauthorised personnel are not allowed access to the work sites; it is mandatory to wear overalls, safety footwear, gloves and a hardhat.

4.0 RULES OF USE

To obtain the best performance from the equipment, carefully follow what is set up below.



ATTENTION

All maintenance work, adjustments and preparation for operation, must be carried out with the power take-off of the tractor disconnected, the seeder on the ground on its supporting feet, the tractor not running, the wheels blocked and the key turned off.

4.1 ATTACHMENT THE TRACTOR

The seeder may be attached to any tractor fitted out with a three-point universal joint.



DANGER

The attachment to the tractor is a very dangerous phase. Be sure to follow the instructions carefully throughout the operation.

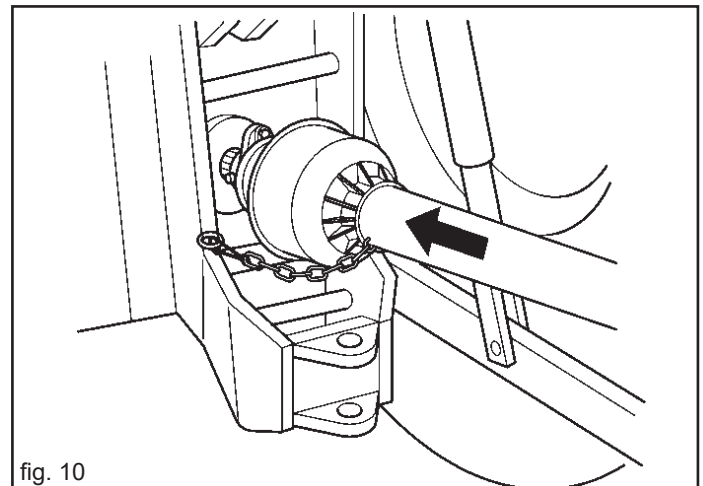
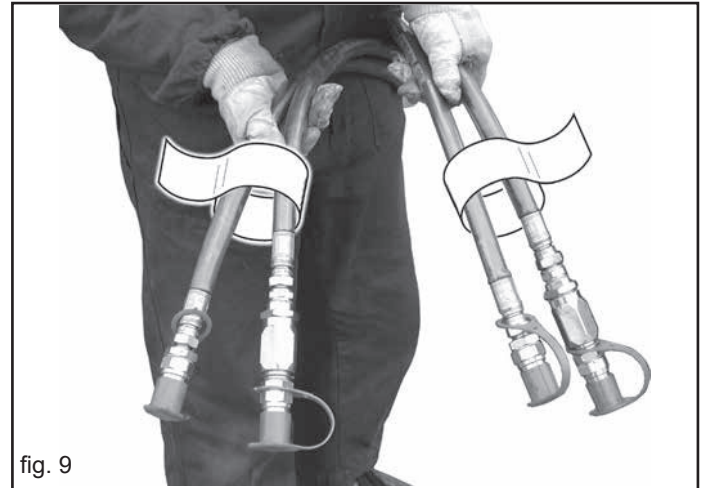
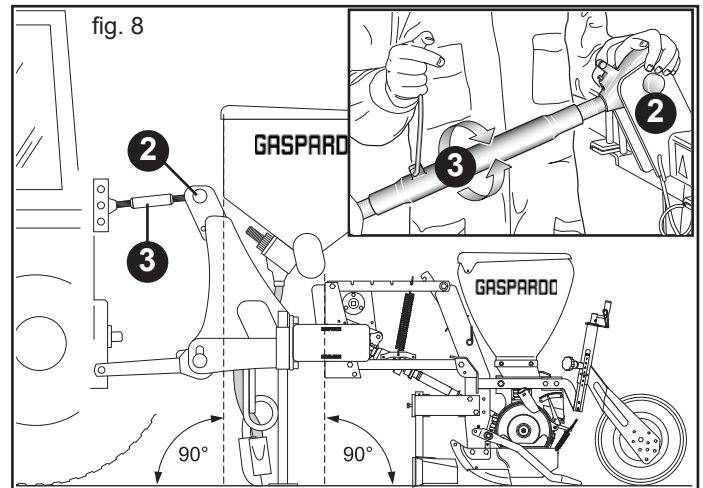
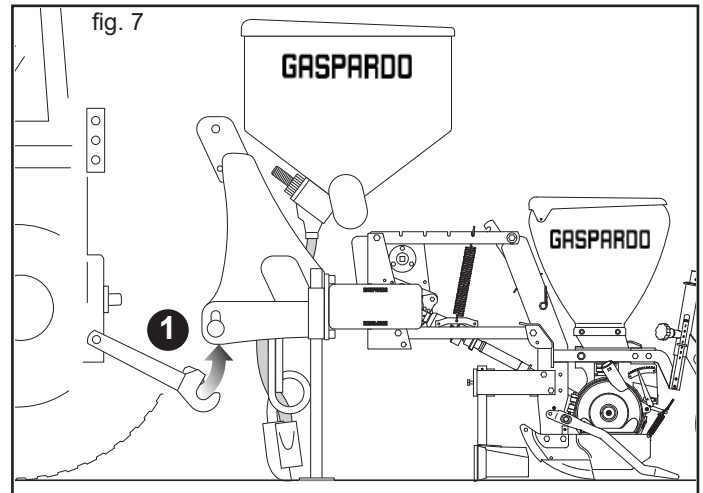
4.1.1 HOOKING

The correct tractor/seeder position, is determined by placing the equipment at a distance from the tractor so that the cardan joint remains extended by 5-10 cm from its maximum closing position. At this point, proceed as follows:

- 1) Hook the lifter bars onto the pins provided (1, Fig. 7) Block with the snap split pins. Hook the chains to the lifting bars
- 2) Connect the third upper point (2, Fig. 8); the pin will be blocked with the appropriate split pin; use the adjusting tierod (3, Fig. 8) to keep the seeder perpendicular to the ground (Fig. 8)
- 3) Block the movement of the parallels of the tractor on the horizontal plane using the stabilizers provided, so eliminating the side swaying of the equipment. Check that the tractor hoisting arms are positioned at the same height from the ground.
- 4) Adjust the height of the tractor lifting arms:
 - a) In the work position, adjust the path of the tractor hoisting arms to guarantee adequate downward movement of the planting unit. Otherwise, when hollows are encountered in the seedbed, seed distribution could be irregular due to the seed planting unit transmission wheels slipping (planing effect).
 - b) in the transporting position, adjust the arms so that the seeder does not, for any reason whatsoever, come into contact with the ground.
- 5) The hydraulic pipes must be connected correctly to the tractor distributors following the instructions on each pipe (Fig. 9).
- 6) Connect the Cardan shaft and make sure that it is perfectly blocked on the power take-off (Fig. 10). Check that the guard turns freely and fix it with the chain provided.

During the work, regularly check that the equipment is perpendicular.

ATTENTION: Always follow the indications recommended by the Manufacturer for the transport of the seeder.



4.1.2 UNHOOKING THE SEED DRILL FROM THE TRACTOR



DANGER

Unhooking the seed drill from the tractor is a very dangerous operation. Great caution must be used and the whole operation must be carried out following the instructions.

For a correct unhooking operation of the seed drill it is necessary to proceed on a horizontal level.

- 1) Lower the supporting base elements
- 2) Slowly lower the seed drill until it rests completely on the ground.
- 3) Disconnect the hydraulic pipes from the tractor distributors and protect the quick couplings with the caps.
- 4) Sganciare l'albero cardanico dalla trattrice, ed appoggiarlo al gancio predisposto.
- 5) Loosen and unhook the third point, following the first and second.

4.2 ADAPTING THE CARDAN SHAFT

The Cardan shaft, supplied with the machine, is of standard length. It might, therefore, be necessary to adapt the cardan shaft. Should this be the case, before proceeding, consult the Manufacturer.



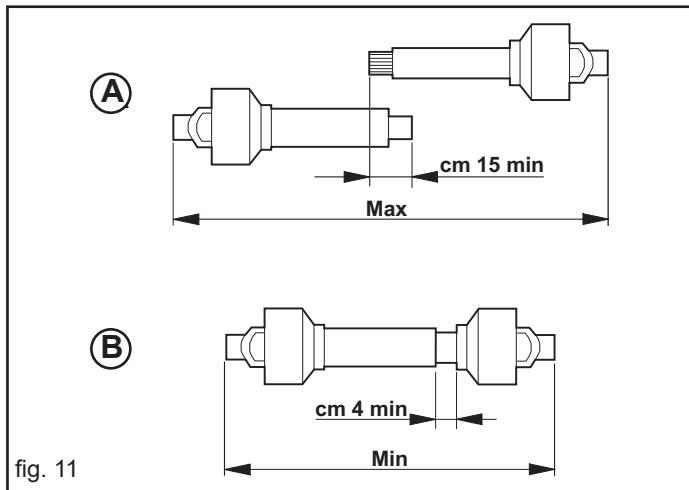
CAUTION

- When the Cardan shaft is with drawn to the end of its stroke, the two pipes should overlap by at least 15 cm (A Fig. 11). When it is inserted all the way, the minimum admissible play is 4 cm (B Fig. 11).
- When using the equipment on another tractor, check that conditions are as stated above and check that the guards completely cover the rotating parts of the Cardan shaft.



ATTENTION

For transportation of the seeder, always follow the Manufacturer's instructions.



4.3 STABILITY OF PLANTING UNIT AND TRACTOR DURING TRANSPORT

When a planting unit is coupled to a tractor, so becoming an integral part of it for the purposes of road travel, the stability of the planting unit-tractor complex may change and cause driving or operating difficulties (rearing up or side-slipping of the tractor). The condition of equilibrium can be restored by placing a sufficient number of ballasts on the front of the tractor so that the weights on the two tractor axles are distributed sufficiently evenly.

To work in safety the instructions given in the highway code should be followed; these prescribe that at least 20% of the weight of the tractor alone should be borne by the front axle and that the weight on the arms of the hoist should not be more than 30% of the weight of the tractor itself. These factors are summarized in the following formulas:

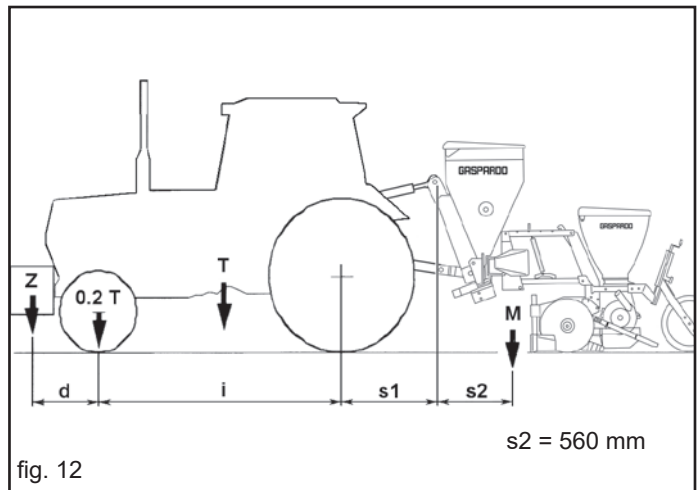
$$Z \geq \frac{[M \times (s1+s2)] - (0.2 \times T \times i)}{(d+i)}$$

The symbols have the following meanings (please see Fig. 12 for reference):

- M** (Kg) Mass weighing on arms off hoist with full load (weight + mass, see cap. 1.3 Identification).
- T** (Kg) Mass of tractor.
- Z** (Kg) Total mass of ballast.
- i** (m) Tractor wheelbase, that is, the horizontal distance between the tractor axles.
- d** (m) Horizontal distance between the centre of gravity of the ballast and the front axle of the tractor.
- s1** (m) Horizontal distance between the inferior point of attachment of the equipment and the posterior axle of the tractor (equipment supported to the ground).
- s2** (m) Horizontal distance between the barycentre of the equipment and the inferior point of attachment of the equipment (equipment supported to the ground).

The amount of ballast that should be applied according to the formula is the minimum required for circulation on the road. If for reasons of tractor performance or to improve the set-up of the planting unit during operation it is thought necessary to raise these values, please refer to the registration document of the tractor to check its limits.

When the formula for calculating the ballast gives a negative result it will not be necessary to add any weight. In any case, as long as the limits of the tractor are respected, a suitable quantity of weights may be applied in order to ensure greater stability during travel. Check that the tractor tyres are suitable for the load.



4.4 TRANSPORT

If it becomes necessary to transport the machine for a long distance, it can be loaded onto a railway wagon or a truck. For this purpose, consult «Technical Data» for weight and specific dimensions. The latter are very useful to check the possibility of driving along all types of roads.

The machine is generally supplied in a horizontal position with no packing material.

It is therefore necessary to use a system of hoisting with a crane and cables, or chains of adequate capacity, hooking onto the machine at the hoisting points marked with the «hook» symbol (13, Fig. 2).



CAUTION

Before proceeding to the hoisting operations, make sure that any any mobile elements of the machine are blocked. Make sure to use a crane with an adequate hoisting capacity to lift the machine. Hoist the machine with extreme caution and transfer it slowly, without jerks or abrupt movements.



DANGER

The operations of hoisting and transport can be very dangerous if not carried out with the maximum caution; persons not directly involved should be moved away. Clean, evacuate the area and delimit the transfer zone. Check the state, condition and suitability of the means at disposition. Do not touch suspended loads, keeping them at a safe distance.

It must be further ascertained that the operational area is free of obstacles and that there is sufficient «escape space», meaning an area which is free and secure into which one could move rapidly in case a load should fall. The surface on which the machine is to be loaded must be horizontal in order to prevent possible shifting.

Once the machine is positioned on the vehicle, make sure that it remains blocked in its position. Fasten the machine on the platform of the vehicle by means of cables suitable for the mass which must be blocked (see «Technical Data» for the weight).

The cables must be firmly fastened to the machine and pulled taut to the anchorage point on the platform. Once transport has been carried out and before freeing the machine from all its fastenings, make sure that its state and position are such as not to constitute danger. Remove the cables and proceed to unloading with the same means and methods used for loading.

Transit and transporting on the public highways

When driving on the public roads, fit on the rear reflector triangles, side lights and flashing beacon and always make sure that you comply with the Highway Code and any other applicable regulations.

Make sure that the machine dimensions during transfer phases allow for safe transport when travelling in subways, along narrow roads, near electrical lines, etc..



ATTENTION

The seed-drill must only be transported by road with the tanks and hoppers empty and at max speed of 25 km/h.

Before driving on to the public roads with the machine hitched to the tractor, make sure that the devices listed above and/or the slow vehicle signal and/or the projecting load signal operate correctly. These indicators must be affixed to the rear of the implement in a position where they can be clearly seen by any other vehicle that drives up behind.

The tractor used for transporting the equipment must have the powers shown in the **Technical Data** table; if necessary, redistribute the total weights with the addition of ballasts to return balance and stability to the whole assembly (page 56).

For displacements beyond the work area, the equipment must be placed in the transportation position:

- Lift and hook up the seeding elements (see Chap. 4.6.3).
- Where provided for, make all the moving parts come within the transport width, locking them with the safety devices (toolbars, row marker arms, row marker discs, etc.).
- Road movements must be performed with all tanks empty.
- Any transport accessories must be provided with suitable signs and guards.

Upon request the Manufacturer will supply supports and tables for signaling of dimensions.

4.5 SEED SELECTION

4.5.1 SEED DISTRIBUTOR

A disk (2, fig. 14), chosen according to the size of the seed, is assembled inside the distributors (1, fig. 14) (the seed should not enter the hole). Should suction cause some seeds to clog the holes of the disk, these will be left on the ground. The seeder is delivered to the customer with a single set of discs is equipment. The Manufacturer can supply the client with the following sets of disks (pag. 61).

REPLACING THE SEEDING DISK AND ADJUSTMENTS



CAUTION

All the operations described in this paragraph must be carried out by expert personnel, equipped with protective gloves, in a clean and dust-free environment.

- The seeder must be clean and dry, detached from the tractor and in a stable position.
- Only clean parts that are in good condition must be assembled.
- The disk must be assembled with the pegs (2, Fig. 14) pointing towards the inside of the distributor.
- If some pegs are bent or missing from the disk it means that foreign bodies have entered the distributor and so the disk must be replaced.
- If there are circular scratches, they must not be more than 1/3 of the disk thickness.
- Hand-tighten only the winged nut that closes the cover (A, fig. 14).

N.B. When the worn discs are replaced, the cover gaskets should also be replaced.

These are the operations to carry out:

- 1) Lift the single seeder from the ground in the following way:
 - Hook the spring the position 3 (Fig. 15)
 - Lift the seeder until it hooks,
 - Hook the spring the position 4 (Fig. 15);
- 2) If fitted, remove the antibounce bolt (5, Fig. 16);
- 3) Unhook the lister (6, Fig. 16) by removing the spring (7);
- 4) Unscrew and remove the winged nut (A, Fig. 14);
- 5) Open the distributor cover;
- 6) Insert or replace the disc;
- 7) If necessary, adjust the seed-spill prevention plate as described further on;
- 8) Close the cover, insert the spring washer and tighten with the wing nut, hook up the planter shoe again, put back the antibounce screw (if fitted);
- 9) Adjust the selector, as shown further on;
- 10) Lower the seeder in the opposite direction described at point 1.

REPLACING THE COVER SEAL

Check the whole of the seed distributor cover seal surface regularly (A, Fig. 17) for signs of wear.

The seal must be replaced before the surface «A» (Fig. 17), being worn down by the disc movement, reaches surface «B». Also check that no grooves have been made by the disk along surface «A».

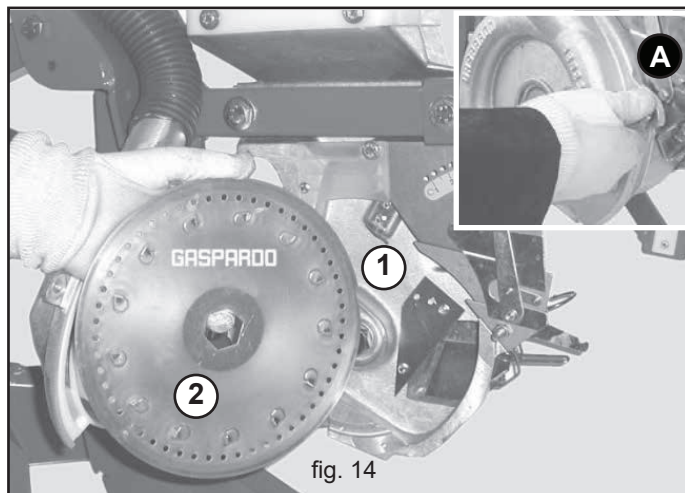


fig. 14

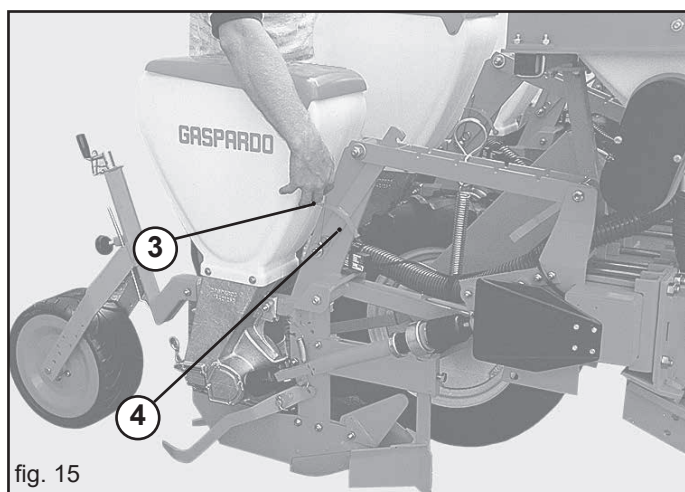


fig. 15

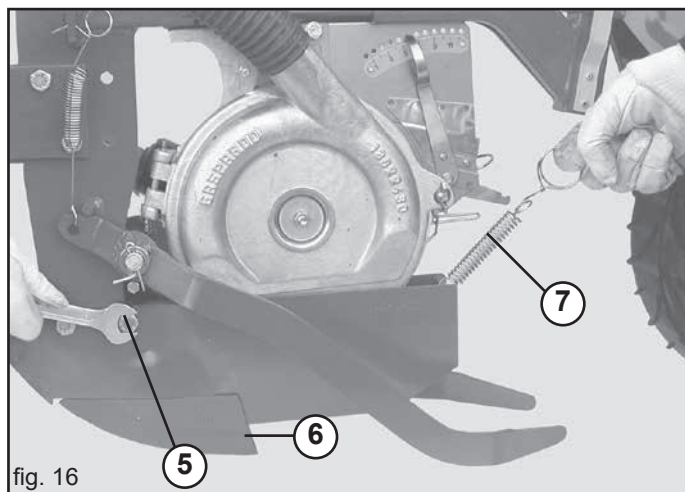


fig. 16

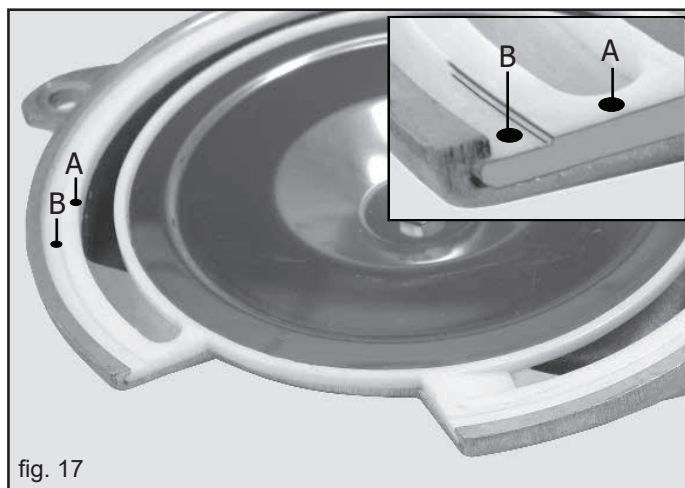


fig. 17

EXPELLER DEEDS

The seed expeller is to be used only with sugar beet seed.

Remove the expeller with large seed such as corn, sunflower, soybean, peanut, etc.

Loosen the screws (8, Fig. 18) and remove the expeller (9).

ASSEMBLY

Position the expeller (9) as shown in Figure 18.

keeping the expeller pressed against the edge, obtained in the relative seat (10, Fig. 18), block it by the screw (8) kit. The screw is to be mounted only as shown in the picture. Do not interpose any thickness between the expeller and its seat.

Make sure the expeller is flat against the seed disk but that it does not come in contact with the disk. Replace the expeller when worn.

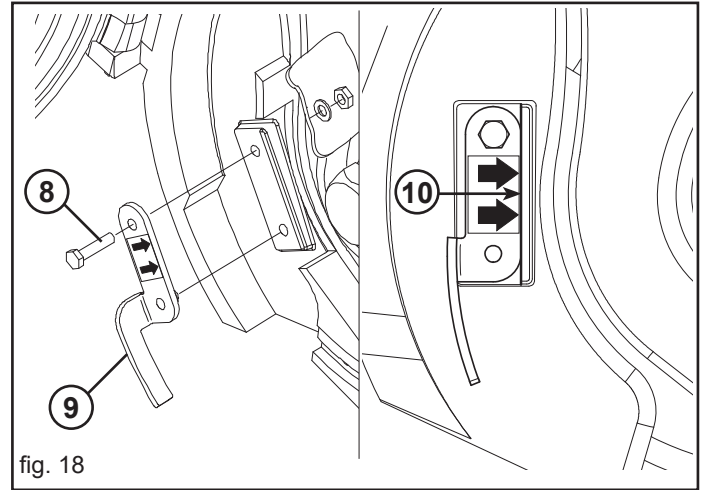


fig. 18

SELECTOR ADJUSTMENT

A cursor is controlled (11, Fig.19) by moving the indicator (12, Fig. 19); this slightly touches the disk near the holes, causing the excess seeds to fall.

The selector is adjusted at each change of seed and disk, towards the lower numbers for small seeds and vice versa for big seeds.

IMPORTANT: The selector does not adjust the air flow in the distributor.

ANTI-OVERFLOW PLATE ADJUSTMENT

The anti-overflow plate (13, Fig. 20) can be adjusted to 3 positions and defines the width of the seed inlet gap (14, Fig. 20), so that these cannot flow out of the distributor due to excessive feeding. Adjustment is particularly needed when the ground slopes steeply or when working with small seeds.

In this case, it might be necessary to replace the standard plate with a special one to be used exclusively with small seeds.

Spare part order code: G22270133.

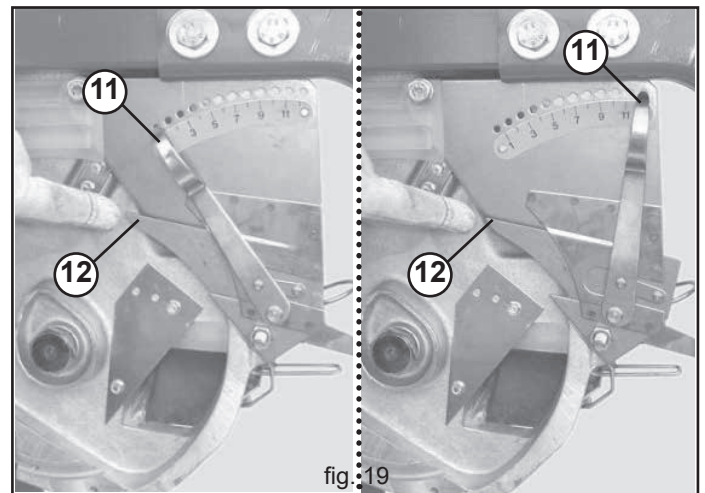


fig. 19

4.5.2 VACUUM PUMP

The aspirator (Fig. 21) creates a vacuum inside the distributors, so that the seeds are aspirated onto the holes in the plate. The tensioning and good condition of the belt are therefore of vital importance to ensure the good for the good operation of the aspirator and, hence, the success of the sowing. **The belt is correctly tensioned when it does not yield under the pressure of a hand.**



WARNING

Make sure that the universal joint is disconnected from the power take-off before carrying out the following operations:

Belt checking procedure:

- Remove the protective housing
- Loosen the 4 screws (1, Fig. 21)
- Loosen the nut (2, Fig. 21)
- If worn, replace the belt (4, Fig. 21).
- Tension the belt by tightening the screws (3, Fig. 21).
- Tighten the bolts loosened before and close the casing.

Vacuometer

The vacuometer (5, Fig. 21) is the vacuum measuring device. The one supplied shows aspiration values ranging from -0 to -100 mbar. The average approximate aspiration values are:

for large seeds: $-55 \div -60$ mbar;
for small seeds: $-40 \div -45$ mbar.

When necessary, remove the glass of the vacuometer to carry out a cleaning operation with a gentle jet of air or a cloth. If it is necessary to reset the indicator of the vacuum gauge, remove the glass cover and use a screwdriver to take out the screw as shown in Figure 21 (6).

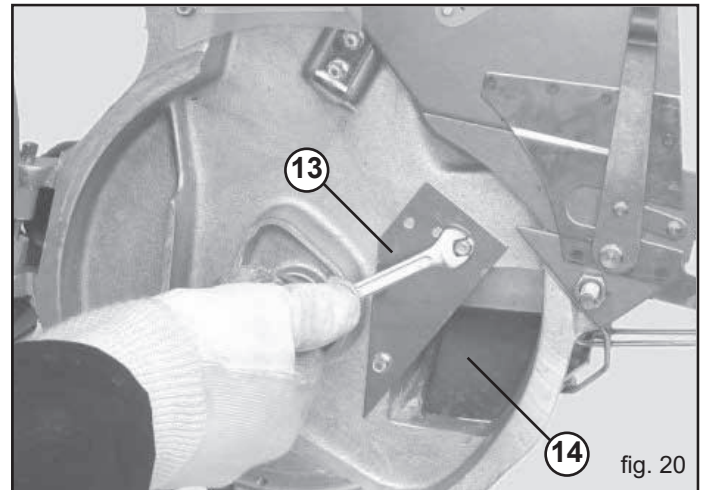


fig. 20

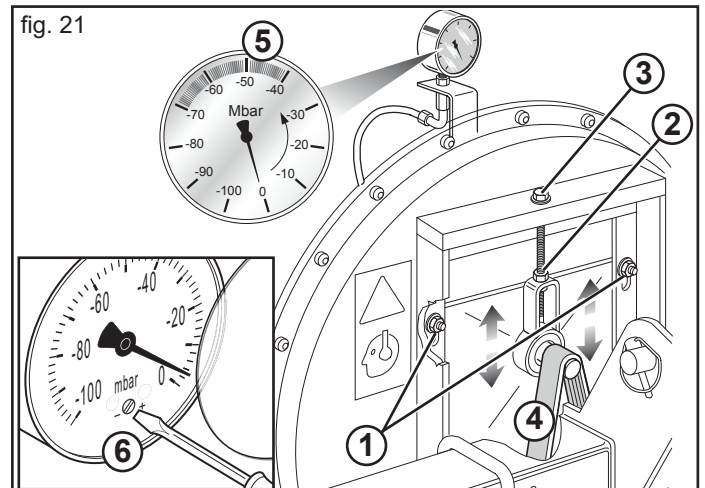


fig. 21

DISTRIBUTION ADJUSTMENT

Distribution adjustment must be done in compliance with:

- the kind of seed that has to be distributed;
- the longitudinal distance between one seed and another.

Kind of seed to be distributed:

Identify the diameter of the holes of the seed disk in *Table 3*, according to the type of seed to distribute.

SEED DISK TABLE

Table 3

Holes		SEEDS
Nr.	Ø (mm)	
26	5,0 / 5,5	Corn (big sizes), Beans
26	4,5	Corn
26	2,5	Sunflower
36	2,1	Beets, Sorghum, Melon, Squash
36 (*)	5,5	Beans
52	4,25	Soyabeans
72	3,5	Beans, Peas
72	1,5	Tomato (pilled), Spinach, Radish
72 (**)	1,1	Tomato

(*) Special for beans.

(**) The seed distributor cover should be replaced by a special one suitable for small seeds.

For special requirements make a specific order.

The values shown on the table are approximate. The definite choice of seed plates is completely up to the user. Complaints for imprecise sowing due to utilization of improper seed plates will not be accepted.

Longitudinal distance between one seed and another:

The longitudinal seeding distance is determined by the number of holes on the seed plate, by the number of teeth and position of the gears on the wheel which transmits the motion to the gearbox, and by how the gears are combined in the gearbox. On the cover of the gearbox there is a table for adjusting the seeding distance and a table that shows the drive fitted on the gear drive wheel.

1) From the Seed Investment Table:

Depending on both the row distance of the planter and the selected seed investment per hectare, calculate the longitudinal seed planting distance by using *Table 2* (Seed Investment Table).

Example:

- Seeding row distance 75 cm;

- number of seeds to be distributed per hectare: 72.000.

According to the "Seed investment Table", the longitudinal distance between one seed and another is 18,50 cm.

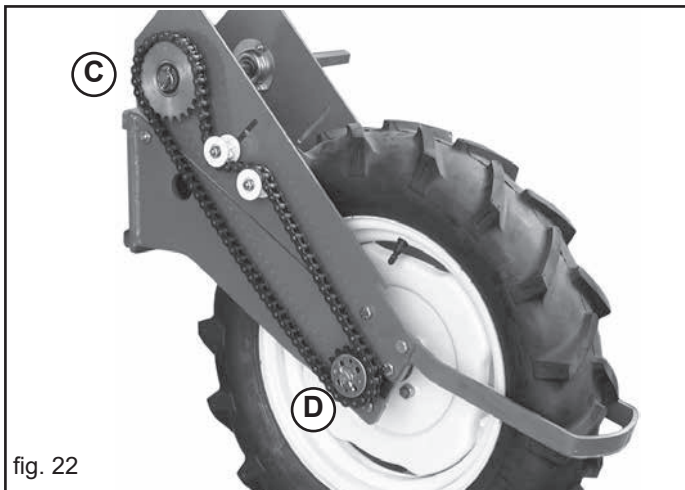


fig. 22

For row distances differing from those listed in the table, apply the following directions:

$$\text{Longitudinal seeding distance} = \left(\frac{\text{Ha}}{\text{Row distance}} \right) \times 100 \div \text{No. of seeds/ha}$$

Example:

- Ha = 10000 m²;

- Row distance = 0,90 m;

- No. of seeds to be distributed for hectare = 70.000

$$\text{Longitudinal seeding dist} = \left(\frac{10000\text{m}^2}{0,90} \right) \div 70000 \times 100 = 15,87 \text{ cm}$$

2) About the Seed Planter:

Verify which couple of pinions (Wheel) is to be found (C-D ill. no. 22) in the seed planter;

3) From the Table of Longitudinal Seed Planting Distances (Table 4):

- Look for the table that lists the couple of pinions equal to the seed planter's one;

- Seek the value of the longitudinal seed planting distance previously calculated. **Should there be two or more types of disks that assure the same longitudinal seed planting distance, prefer the disk with the largest number of holes.**

- Move left and see on which pair of gears (A-B, Fig.23) to place the gear chain;

4) About the Seed Planter:

- To move the chain, open the gearbox cover and loosen the chain (1, Fig. 23) by means of the lever (2);

- Place the chain on the located gears and align them (Fig. 24).

- Tighten the chain again with the lever (2, Fig. 23) and close the cover.

- If the seed planting distance is not obtained with the pinions (wheel C-D) fitted on the planting unit (Fig. 22), check with the table to see if they need to be replaced or have their positions reversed.

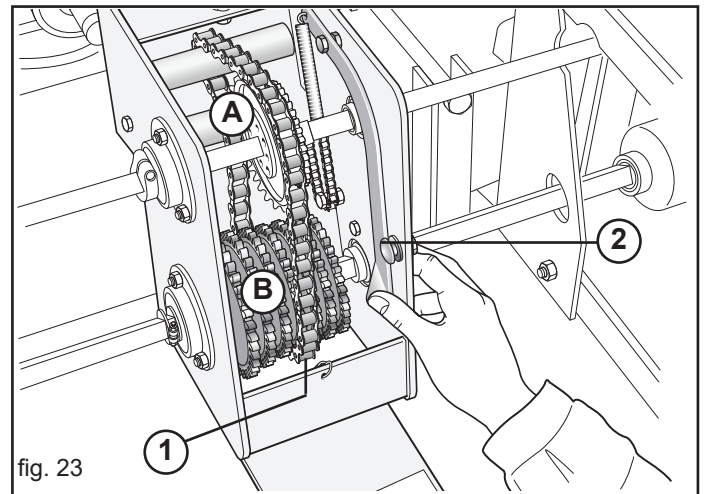


fig. 23

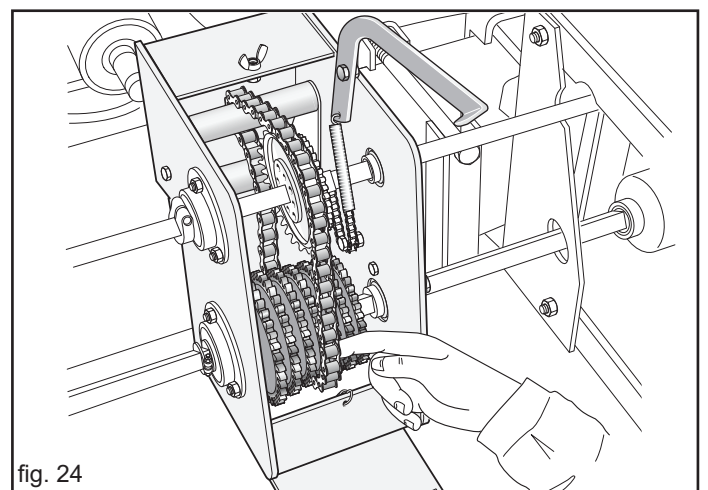


fig. 24

LONGITUDINAL SEEDING DISTANCE (Tables 4)

The planting distances reporting in the table are only meant as a guide, as they depend on the different operating conditions of the soil. Therefore, we recommend checking directly the actual distance between the seeds. It is recommended to do trial planting for a few metres to check that seed deposition is taking place as desired, and especially check that the amount of seeds per linear meter corresponds to that intended. The Manufacturer is not responsible for any inconsistencies between the values in the table and the actual values detected.

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		15.6	12.0	8.7	6.0	4.3
23 - 18		23 - 18		16.6	12.7	9.2	6.3	4.6
23 - 19		23 - 19		17.5	13.5	9.7	6.7	4.8
23 - 20		23 - 20		18.4	14.1	10.2	7.0	5.1
23 - 21		23 - 21		19.3	14.8	10.7	7.4	5.3
23 - 22		23 - 22		20.3	15.6	11.2	7.8	5.6
23 - 23		23 - 23		21.2	16.3	11.7	8.1	5.8
16 - 17		16 - 17		22.5	17.3	12.5	8.6	6.2
16 - 18		16 - 18		23.8	18.3	13.2	9.1	6.6
16 - 19		16 - 19		25.1	19.3	14.0	9.6	7.0
16 - 20		16 - 20		26.5	20.4	14.7	10.2	7.3
16 - 21		16 - 21		27.8	21.4	15.4	10.7	7.7
16 - 22		16 - 22		29.1	22.4	16.2	11.2	8.1
16 - 23		16 - 23		30.4	23.4	16.9	11.7	8.4

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		10.9	8.4	6.0	4.2	3.0
23 - 18		23 - 18		11.5	8.9	6.4	4.4	3.2
23 - 19		23 - 19		12.2	9.4	6.8	4.7	3.4
23 - 20		23 - 20		12.8	9.9	7.1	4.9	3.5
23 - 21		23 - 21		13.5	10.4	7.4	5.2	3.7
23 - 22		23 - 22		14.1	10.8	7.8	5.4	3.9
23 - 23		23 - 23		14.7	11.3	8.2	5.6	4.1
16 - 17		16 - 17		15.6	12.0	8.7	6.0	4.3
16 - 18		16 - 18		16.6	12.8	9.2	6.4	4.6
16 - 19		16 - 19		17.5	13.5	9.7	6.7	4.8
16 - 20		16 - 20		18.4	14.2	10.2	7.1	5.1
16 - 21		16 - 21		19.3	15.0	10.7	7.5	5.3
16 - 22		16 - 22		20.2	15.6	11.3	7.8	5.6
16 - 23		16 - 23		21.2	16.3	11.8	8.1	5.9

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		22.5	17.3	12.5	8.6	6.2
23 - 18		23 - 18		23.8	18.3	13.2	9.1	6.6
23 - 19		23 - 19		25.2	19.4	14.0	9.7	7.0
23 - 20		23 - 20		26.5	20.4	14.7	10.2	7.3
23 - 21		23 - 21		27.8	21.4	15.4	10.7	7.7
23 - 22		23 - 22		29.1	22.4	16.2	11.2	8.1
23 - 23		23 - 23		30.4	23.4	17.0	11.7	8.5
16 - 17		16 - 17		32.4	24.9	18.0	12.4	9.0
16 - 18		16 - 18		34.3	26.4	19.0	13.2	9.3
16 - 19		16 - 19		36.2	27.8	20.1	13.4	10.0
16 - 20		16 - 20		38.0	29.3	21.2	14.6	10.6
16 - 21		16 - 21		40.0	30.8	22.2	15.4	11.1
16 - 22		16 - 22		41.9	32.2	23.4	16.1	11.7
16 - 23		16 - 23		43.8	33.7	24.3	16.8	12.1

A
23 16

B
23 22 21 20 19 18 17

C
D

6.50-15
26.00-12

Cod. G19701414

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		14.9	11.5	8.3	5.7	4.2
23 - 18		23 - 18		15.8	12.2	8.8	6.1	4.4
23 - 19		23 - 19		16.7	12.8	9.3	6.4	4.7
23 - 20		23 - 20		17.6	13.5	9.8	6.7	4.9
23 - 21		23 - 21		18.4	14.2	10.2	7.1	5.1
23 - 22		23 - 22		19.3	14.9	10.7	7.4	5.4
23 - 23		23 - 23		20.2	15.5	11.2	7.7	5.6
16 - 17		16 - 17		21.4	16.5	11.9	8.2	6.0
16 - 18		16 - 18		22.7	17.5	12.6	8.7	6.3
16 - 19		16 - 19		24.0	18.5	13.3	9.2	6.7
16 - 20		16 - 20		25.2	19.4	14.0	9.7	7.0
16 - 21		16 - 21		26.5	20.4	14.7	10.2	7.4
16 - 22		16 - 22		27.8	21.4	15.4	10.7	7.7
16 - 23		16 - 23		29.1	22.5	16.1	11.2	8.1

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		10.4	8.0	5.8	4.0	2.9
23 - 18		23 - 18		11.0	8.5	6.1	4.2	3.0
23 - 19		23 - 19		11.7	9.0	6.5	4.5	3.2
23 - 20		23 - 20		12.2	9.4	6.8	4.7	3.4
23 - 21		23 - 21		12.9	9.9	7.1	4.9	3.5
23 - 22		23 - 22		13.5	10.3	7.5	5.1	3.7
23 - 23		23 - 23		14.0	10.8	7.8	5.4	3.9
16 - 17		16 - 17		15.0	11.5	8.3	5.7	4.1
16 - 18		16 - 18		15.8	12.2	8.8	6.1	4.4
16 - 19		16 - 19		16.7	12.9	9.3	6.4	4.6
16 - 20		16 - 20		17.6	13.5	9.8	6.7	4.9
16 - 21		16 - 21		18.5	14.2	10.3	7.1	5.1
16 - 22		16 - 22		19.4	14.9	10.8	7.4	5.4
16 - 23		16 - 23		20.2	15.5	11.3	7.7	5.6

Ruota Wheel C - D		Cambio Gearbox A - B		20	26	36	52	72
cm		cm		cm	cm	cm	cm	cm
23 - 17		23 - 17		21.4	16.5	11.9	8.2	5.9
23 - 18		23 - 18		22.7	17.5	12.6	8.7	6.3
23 - 19		23 - 19		24.0	18.4	13.3	9.2	6.6
23 - 20		23 - 20		25.2	19.4	14.0	9.7	7.0
23 - 21		23 - 21		26.5	20.4	14.7	10.2	7.3
23 - 22		23 - 22		27.8	21.3	15.4	10.6	7.7
23 - 23		23 - 23		29.0	22.3	16.1	11.1	8.0
16 - 17		16 - 17		30.8	23.7	17.1	11.8	8.5
16 - 18		16 - 18		32.7	25.1	18.1	12.5	9.0
16 - 19		16 - 19		34.5	26.5	19.1	13.2	9.5
16 - 20		16 - 20		36.2	27.9	20.1	13.9	10.0
16 - 21		16 - 21		38.1	29.3	21.1	14.6	10.6
16 - 22		16 - 22		39.9	30.7	22.1	15.3	11.0
16 - 23		16 - 23		41.7	32.1	23.2	16.0	11.6


A
23 16

B
23 22 21 20 19 18 17

C
D

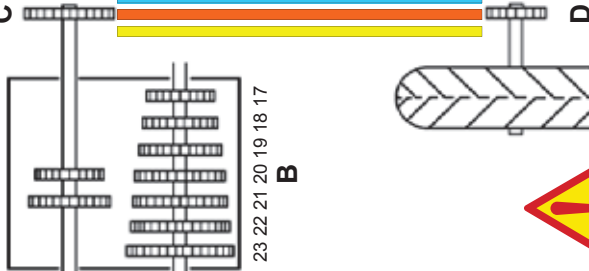
5.00-15

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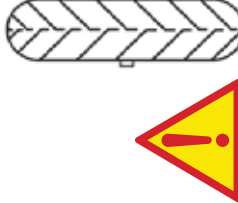


Cambio - Gearbox
Getriebe - Boîte vit.
Cambio - Смена



A
23 16




B
23 22 21 20 19 18 17



! 6.5-15
Ruota fuori carreggiata
Wheel out track
Rad assuerhalb schlepperspur
Roue hors voie du tracteur
Rueda exterior
Внешние колеса передачи

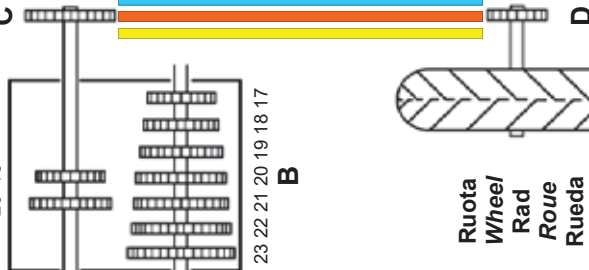
Ruota Wheel C - D	Cambio Gearbox A - B	20	26	36	52	72
		cm	cm	cm	cm	cm
	23 - 17	16,3	12,5	9,0	6,3	4,5
	23 - 18	17,2	13,2	9,6	6,6	4,8
	23 - 19	18,2	14,0	10,1	7,0	5,0
	23 - 20	19,1	14,7	10,6	7,4	5,3
	23 - 21	20,1	15,5	11,2	7,7	5,6
	23 - 22	21,0	16,2	11,7	8,1	5,8
	23 - 23	22,0	16,9	12,2	8,5	6,1
	16 - 17	23,4	18,0	13,0	9,0	6,5
	16 - 18	24,8	19,0	13,8	9,5	6,9
	16 - 19	26,1	20,1	14,5	10,0	7,3
	16 - 20	27,5	21,2	15,3	10,6	7,6
	16 - 21	28,9	22,2	16,0	11,1	8,0
	16 - 22	30,3	23,3	16,8	11,6	8,4
16 - 23	31,6	24,3	17,6	12,2	8,8	

Cod. G19703162

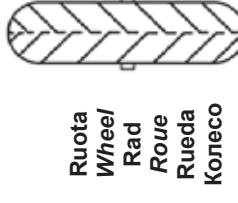


Cambio - Gearbox
Getriebe - Boîte vit.
Cambio - Смена



A
23 16



B
23 22 21 20 19 18 17



! 7.50-16

Ruota Wheel C - D	Cambio Gearbox A - B	20	26	36	52	72
		cm	cm	cm	cm	cm
	23 - 17	18,6	14,3	10,3	7,2	5,2
	23 - 18	19,7	15,2	11,0	7,6	5,5
	23 - 19	20,8	16,0	11,6	8,0	5,8
	23 - 20	21,9	16,8	12,2	8,4	6,1
	23 - 21	23,0	17,7	12,8	8,8	6,4
	23 - 22	24,1	18,5	13,4	9,3	6,7
	23 - 23	25,2	19,4	14,0	9,7	7,0
	16 - 17	26,8	20,6	14,9	10,3	7,4
	16 - 18	28,3	21,8	15,7	10,9	7,9
	16 - 19	29,9	23,0	16,6	11,5	8,3
	16 - 20	31,5	24,2	17,5	12,1	8,7
	16 - 21	33,1	25,4	18,4	12,7	9,2
	16 - 22	34,6	26,6	19,2	13,3	9,6
16 - 23	36,2	27,9	20,1	13,9	10,1	

Cod. G19701453

4.6 ADJUSTMENTS

4.6.1 FURROW OPENER DEPTH ADJUSTMENT

For the shoots to come up well it is important to place the seed at the right depth on the seeding bed.

- Loosen the nut (A, Fig. 25) and the knob (B);
- The handle (1, Fig. 25) varies the height of the furrow opener blade, and so determines the depth of the furrow on which to place the seed. The graduated indicator serves to adjust all the furrow openers at the same depth.

The pointer of the adjustment scale is purely progressive; it does not show a variation in cm on the depth on the seeding.

- Tighten the knob (B, Fig. 25) and the nut (A).

In the beet configuration check that the equalizer is centred on the seed planting furrow; if necessary adjust screw (2) in Figure 26.

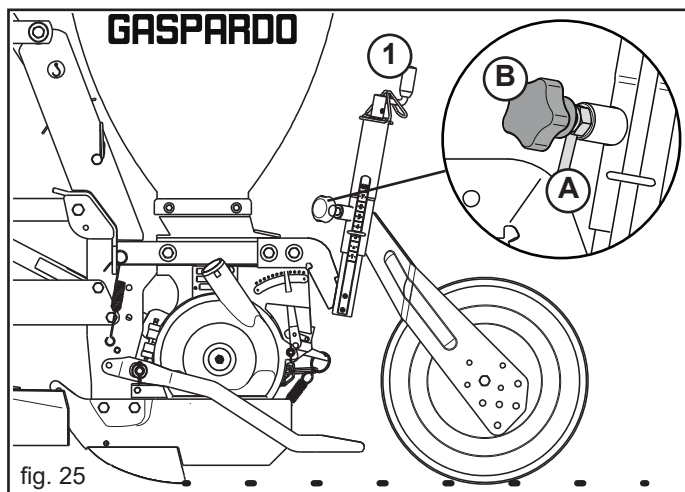


fig. 25

4.6.2 FURROW OPENER PRESSURE ADJUSTMENT

The sod-breaking by the furrow opener blade is made efficacious by the load of the said spring. Different working situation need different soil compression adjustment; varying the position of the spring forwards or backwards, greater or lesser penetration pressure is given (3, Fig. 27).

Vary the position of the spring at the base, on the three-holed plate, when the adjustments are not satisfactory.

In the beet configuration, the part may be fitted with a seed-pressing wheel. Rotate the spring (4, Fig. 28) to change the pressure of the wheel on the ground. On damp soils exclude the action of the wheel: lift it and lock it with the split-pin (5, Fig. 28).

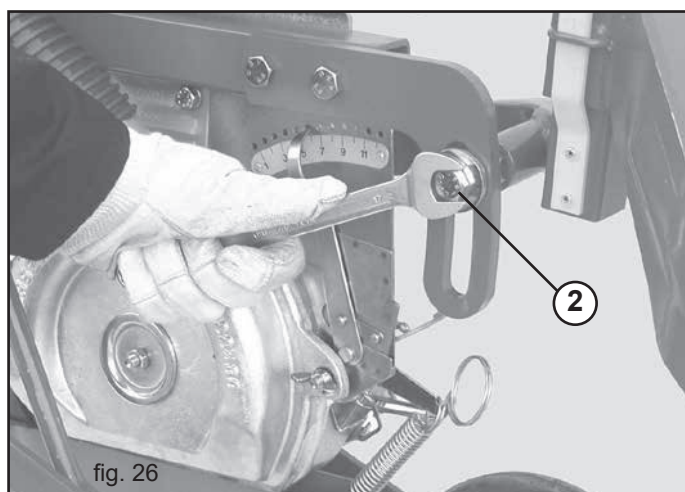


fig. 26

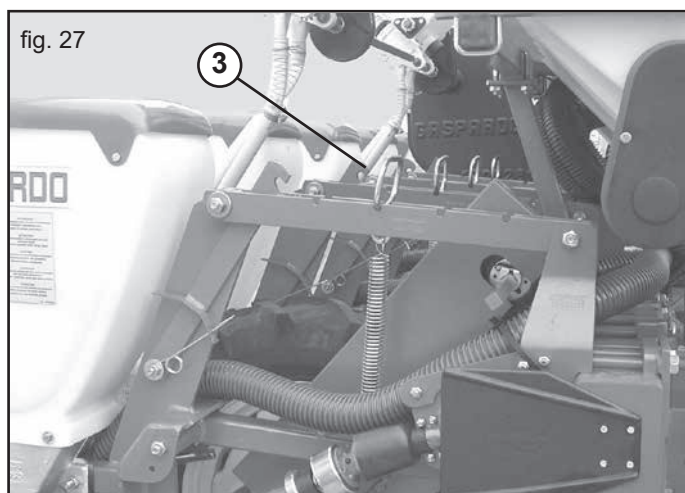


fig. 27

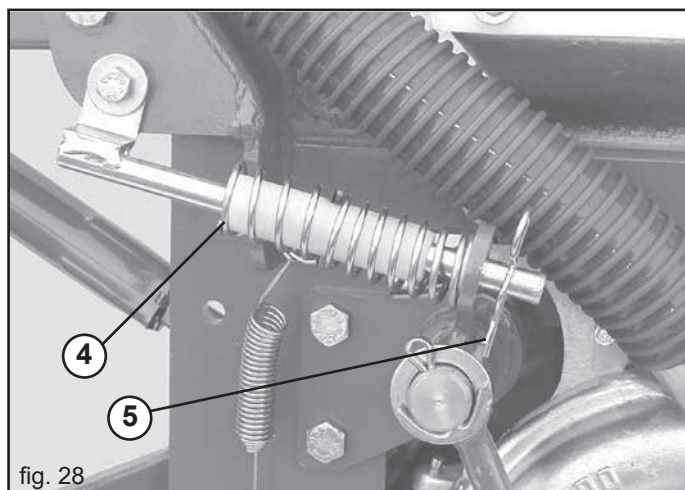


fig. 28

4.6.3 SEEDER EXCLUSION

Switch off the tractor and remove the key;

Lift the single seeder from the ground in the following way:

- Hook the spring the position 6 (Fig. 29),
- Lift the seeder until it hooks on,
- Hook the spring the position 7 (Fig. 29);

Disconnect the seeder drive shaft (Fig. 30) as follows:

- Push the coupling sleeve and keep it pressed (8) in the direction shown by the arrow, press forward and at the same time rotate the ring nut (9) until it is free of the iron pin;
- Pull the sleeve back at the end of its run (8).
- To render the drive operative again, push the sleeve forward and lock the ring nut again against the iron pin.

4.6.4 PLANTING UNIT TRANSMISSION

Each box has a safety pin (10, Fig. 31). When the rotation of the seed disc comes under strain or stops due to the entering of foreign bodies with the seeds (paper, string etc.), empty the seeds from the container, check and clean the distributor, check the disc pins and replace the safety pin.

Each transmission shaft has a torque limiter with a sound alarm (12, Fig. 31) that, when the pin breaks (10, Fig. 31), signals the anomaly or breakdown that has occurred in the distributor. If this happens, stop at once and remedy the situation; remove the broken pin and replace it (use the pin punch supplied).

IMPORTANT! Do not use metal pins.

CAUTION! Do not completely tighten the screws that hold the box (11, Fig. 31); oscillation is expected.

4.6.5 FRONT CLOD CLEARER

The action of the front clod clearer is crucial to correct and homogeneous sowing; it allows the track of the element's depth wheels (1, Fig. 25) to be cleared of the largest clods (H, Fig. 32) that could cause irregular planting depth.

IMPORTANT!

- Use the front clod clearer only where there are large clods.
- The use of the clod clearer must not create dips in the seedbed.
- **Not suitable for sowing on stony ground.**

ADJUSTMENT

- Identify a particularly cloddy area of the ground to be sown.
- Put the seed drill in its average working conditions with seed and fertilizer hoppers half full.
- Set the planting depth (see chapter 4.6.1) according to the agronomic choices dictated by the seed to be distributed.
- Fully raise all the front clod clearers.
- **With the tractor's power take-off disconnected** and the seed drill on the ground in its working position, move over the cloddy area for 4 to 5 metres.
- On the outer element only, lower the front clod clearer to 3 to 4 cm from the level created by the depth wheels of the seeding element (Fig. 32).
- Move for a short stretch with the seed drill and check the behaviour of the clod clearer and the whole seeding element.
- Once the best position of the clod clearer has been determined, set the other seeding elements to this position, using as reference the notches marked on the individual elements of the clod clearer.

Changing from one type of ground to another entails adjustment of the clod clearer's position.

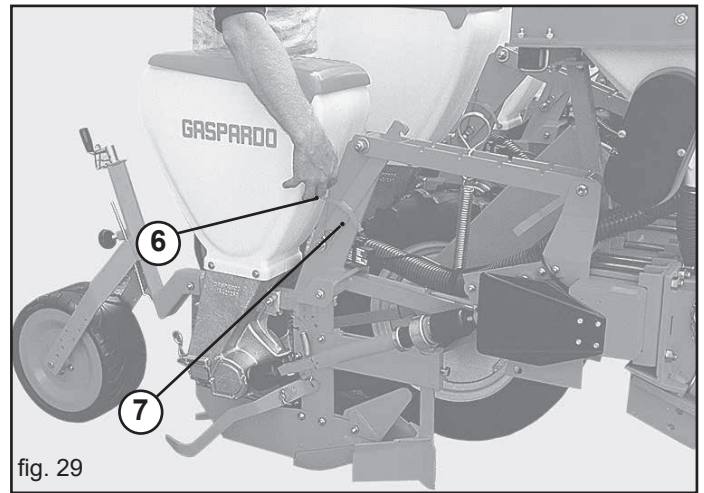


fig. 29

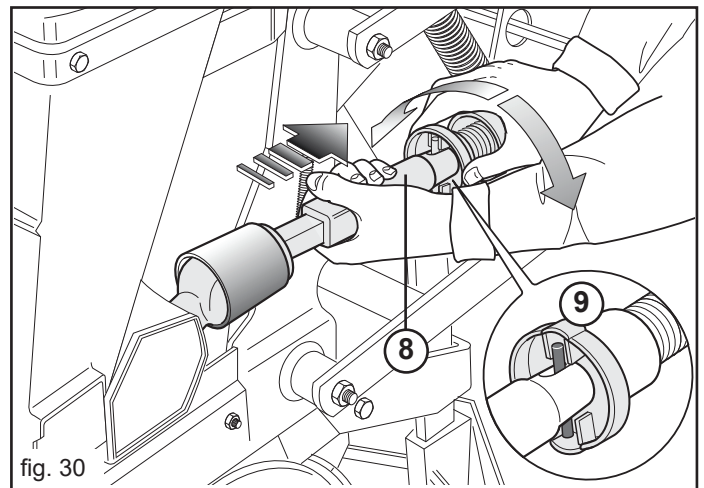


fig. 30

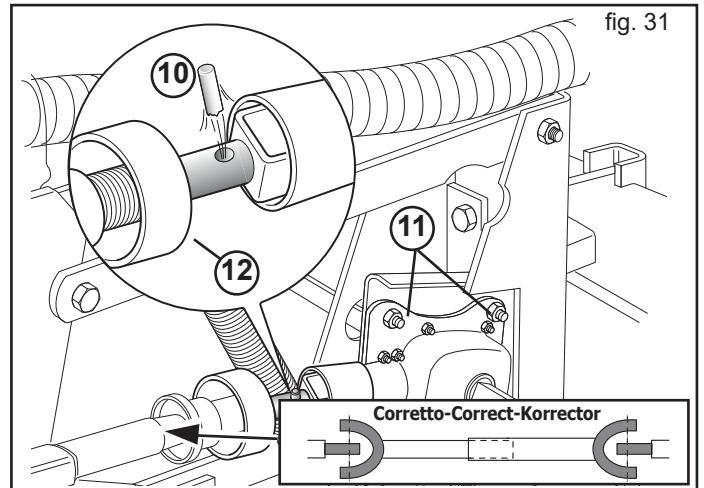


fig. 31

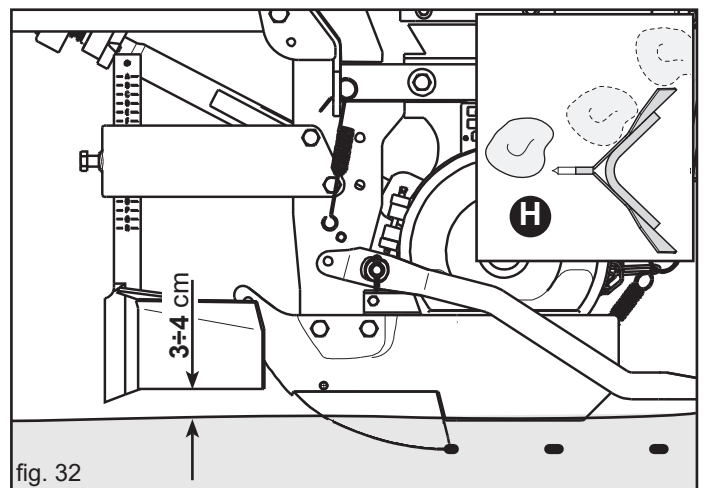


fig. 32

4.7 PREPARATION

In all the models the seeding elements are connected independently to the frame by means of hinged parallelogram mechanisms, though with some particular features depending on the type of seed to be distributed and the characteristics of the ground being worked on.

a) seeding elements for deep seed planting

two different types of element are available for the medium depth equipment in relation to the roughness of the seed planting bed:

- for finely prepared ground it is advisable to use cutter/planter shoes with sod breaker and press wheels (fig. 33);
- for rougher ground and where there are residues, it is more advisable to use double disc tools placed upstream of the cutter/planter shoes followed by press wheels (fig. 34);

For different soils, 2 different types of seed covering element are available (fig. 35):

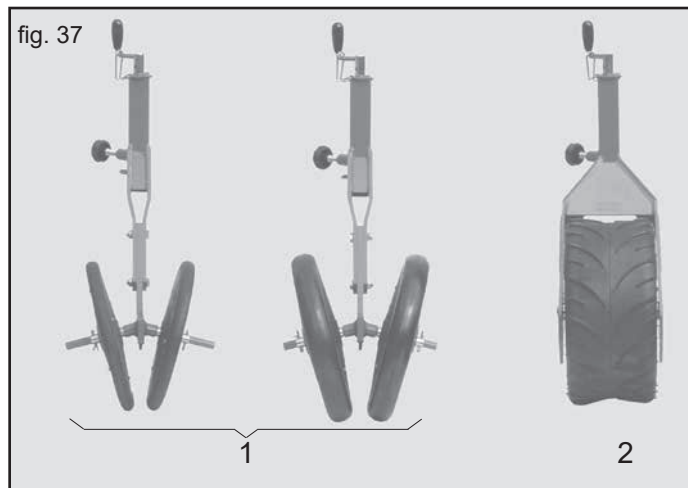
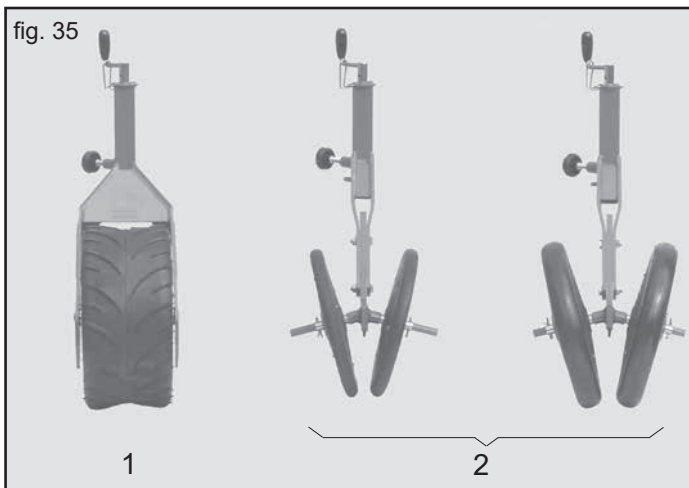
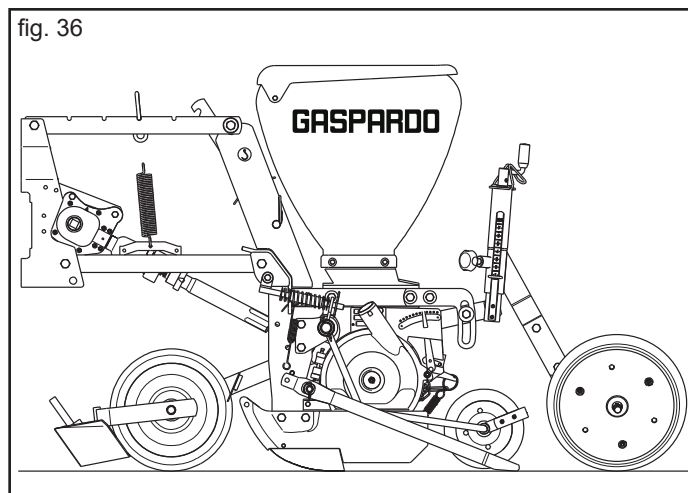
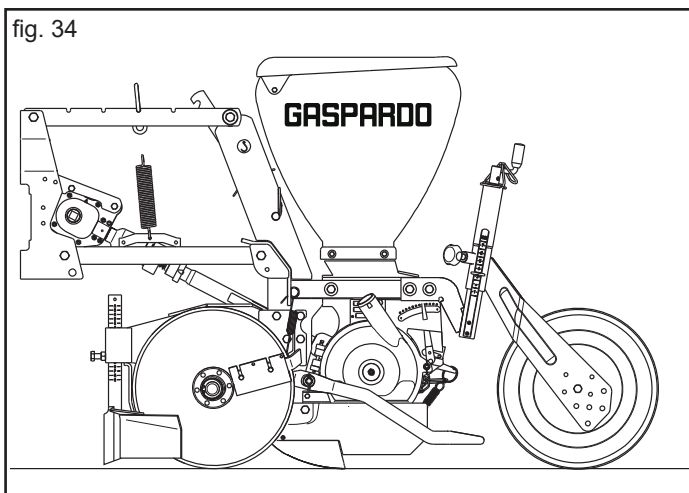
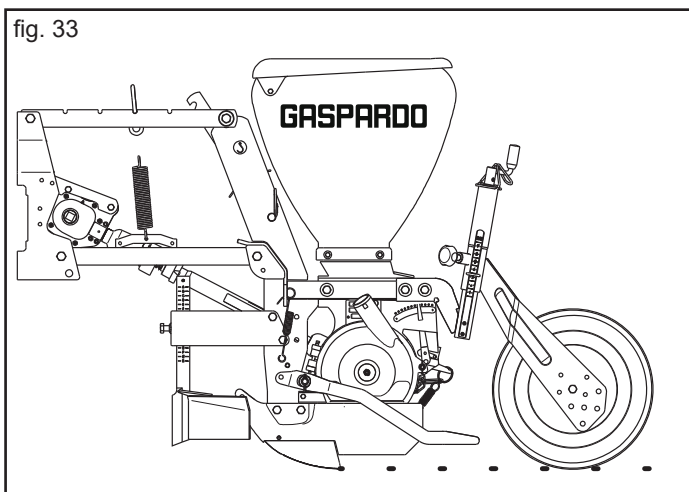
- 1) farmflex wheel (Ø=370 mm) recommended for damp and sandy soils;
- 2) rubber "V" wheels more suitable for damp and "difficult" soils.

b) seeding elements for surface seed planting

The seeding element for surface seed planting has a standard equalizer with rubber wheels: the one at the front is a "sod crusher" with a rounded shape (having Ø=280 mm), followed by the seed pressing wheel, also in rubber, with independent seed coverers (fig. 36).

For different soils, 2 different types of seed covering element are available (fig. 37):

- 1) rubber "V" wheels suitable for damp and difficult soils;
- 2) farmflex wheel (Ø=370 mm) suitable for damp and sandy soils.



RUBBER «V» WHEELS ASSEMBLY (fig. 38)

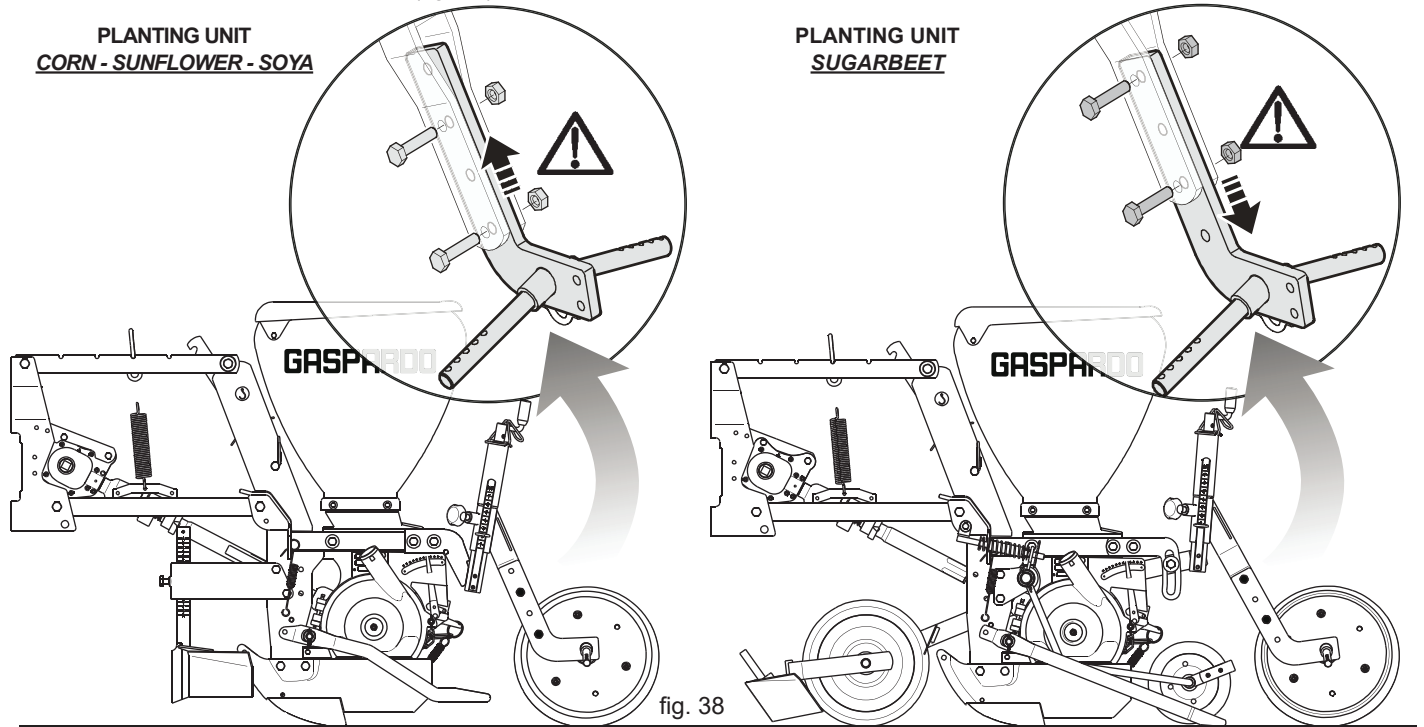


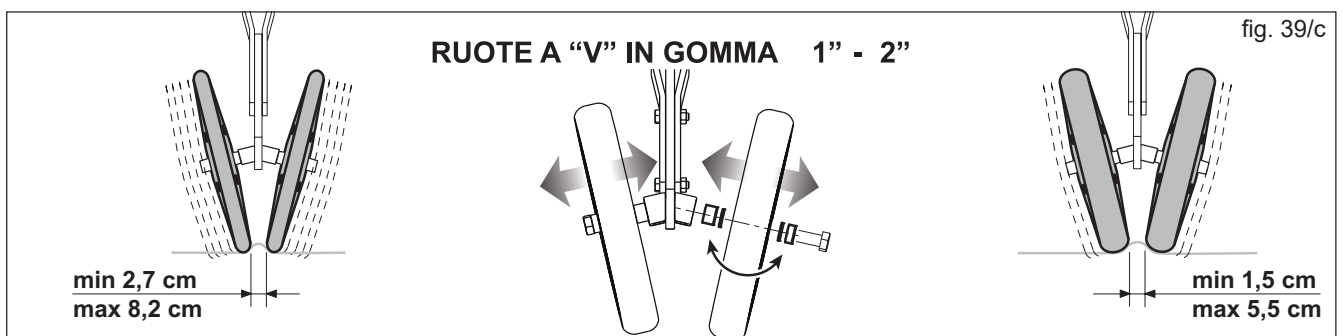
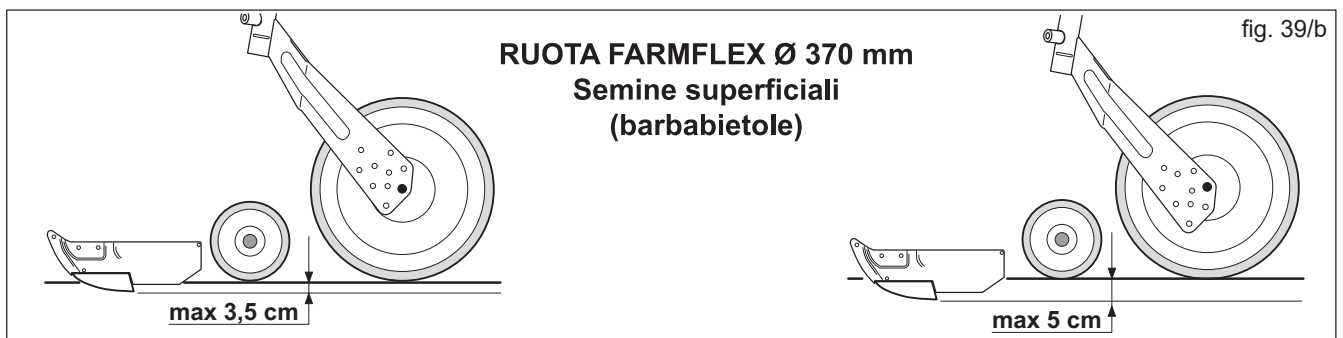
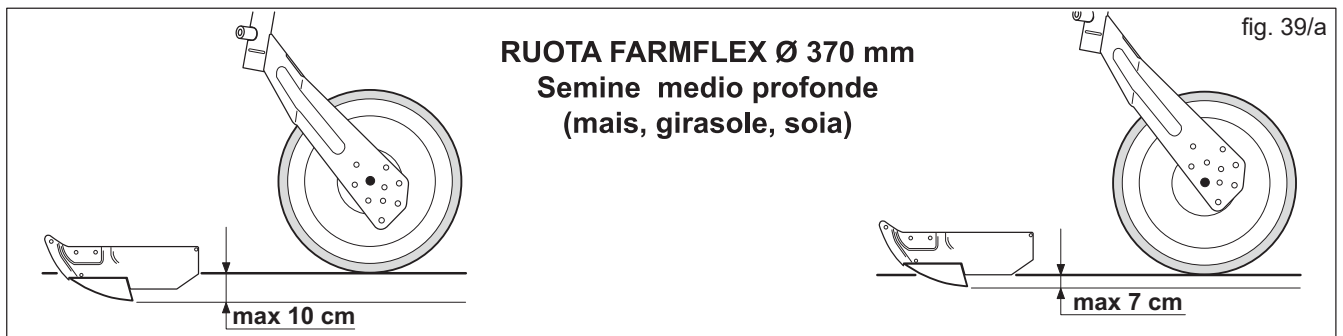
fig. 38

ADJUSTMENT OF REAR COMPRESSION WHEELS (fig. 39)

The rear equipment of the seeding elements is very important in quality seed planting.

These elements are crucial for the seed planting depth and the covering of the seeds after dropping.

They should therefore be adjusted correctly, according to the type of seed planting and the type of soil, by varying the position of the rear wheels on their support as shown in the following diagram.



4.8 ROW MARKER

The row marker is a device which tracers reference line on the ground parallel to the direction of the tractor. When the tractor will have finished its run and inverted its course, it will proceed with one of the front wheels on the reference line (Fig. 40). At each new passing the seeder will trace a reference line on the opposite side of the previous one. Row marker arm inversion is activated by the tractor's hydraulic distributor control. If requested it's possible to convert the row marker from hydraulic to mechanical.

4.8.1 HYDRAULIC ROW MARKER

The planting unit has a hydraulic row marker control device. The plungers should be connected by their hydraulic pipes to the ancillary hydraulic distributors of the tractor. Inside the hydraulic cylinder boss there is a calibrated grub screw that could be clogged by impurities in the oil. If there is malfunctioning, remove the nipple and clean the hole of the calibrated grub screw, and then put everything back paying attention to the direction of insertion of the grub screw in the boss. On request, the hydraulic row marker device can be fitted with a valve that alternately operates the two arms. In this case just one hydraulic tractor distributor is sufficient. When the system is not in use, protect the quick coupling with its cap. (Fig. 41).

System regulation:

The hydraulic systems provided come equipped with one-way flow regulators (Fig. 42) which allow for the regulation of the quantity of oil during opening or closing, depending on how the regulators have been installed:

Flow from A to B, free;

Flow from B to A, choked (regulated).

To regulate, loosen the lock nut (1) and turn the knob (2). Once this adjustment has been made, re-tighten the lock nut.



WARNING

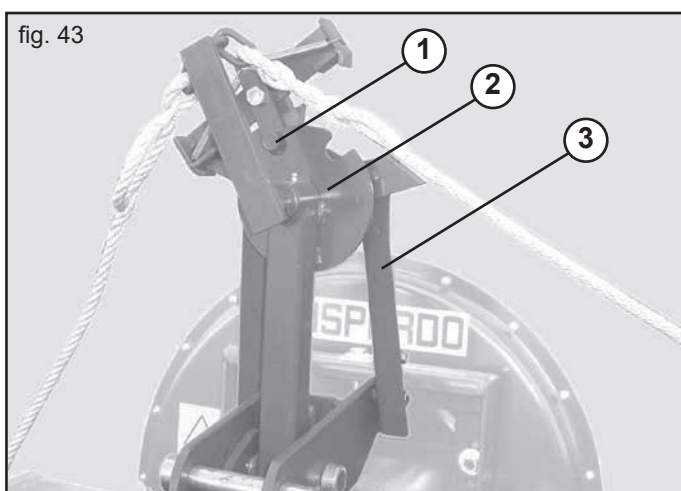
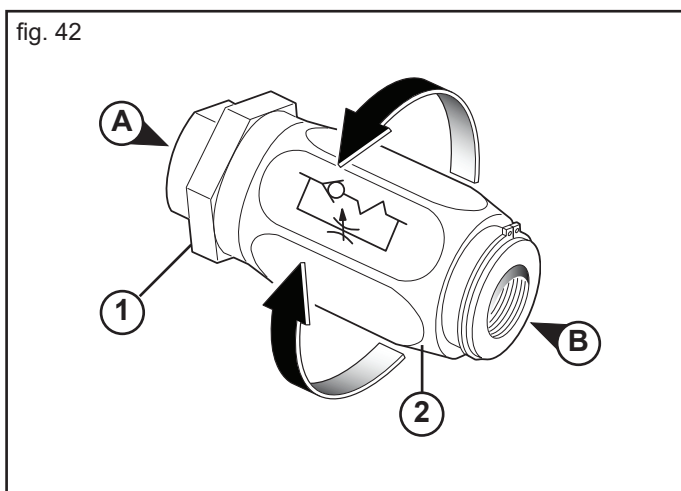
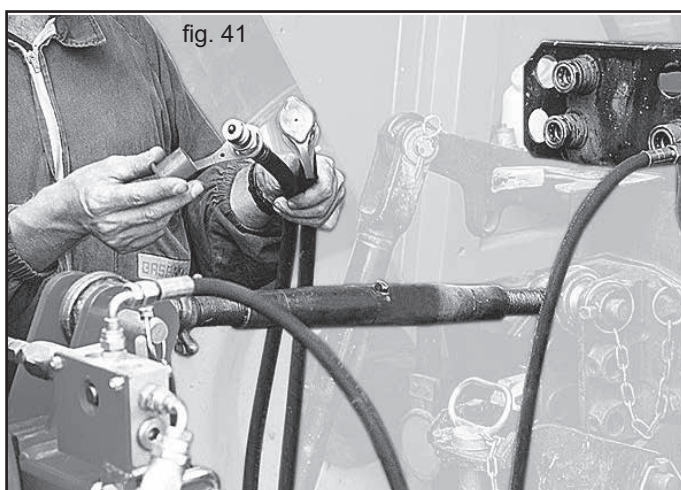
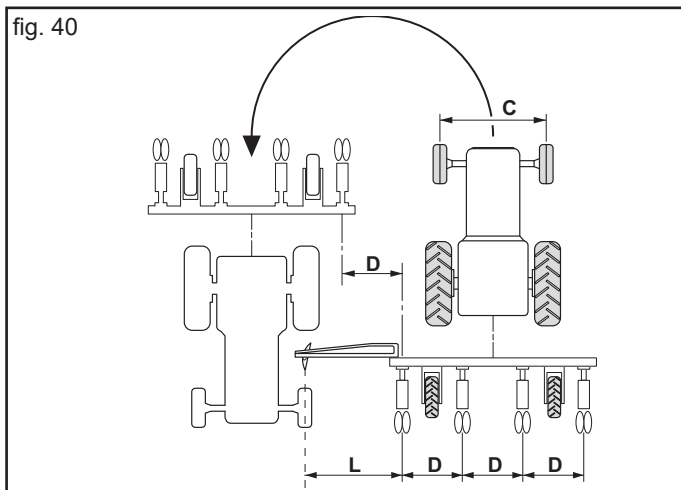
Make sure that the result of this adjustment does not cause the rising or descent speed to damage the structure itself. Never exceed the maximum admissible pressure for the hydraulic system.

4.8.2 MECHANICAL ROW MARKER AUTOMATIC CONTROL

If requested, the Manufacturer may supply a set for converting the row marker from mechanical to hydraulic. The request must be accompanied by the description of the type and model of the seeder possessed. For the conversion all the particulars already foreseen by the machine are re-used. The row marker is enabled on the right or left of the tractor with an automatic control (Fig. 43) triggered by the movement of the tractor lifter. To do this it is enough to lift and lower the tractor lifter once.

Set up

If the pin (1, fig. 43) does not hook the disk (2) or vice versa it does not unhook from it, adjust the height of the bars (3). When working, the ropes must be pulled tight.



4.8.3 ROW MARKER DISK ADJUSTMENT

Attach the disc holding sleeve (1, Fig. 44) onto the two arms of the row marker, without over-tightening the nuts, insert the disc and secure it in place by means of the snap pin. Using the *Table 5* shown, read the distance (L, Fig. 40) at which the disc is to draw the reference line.

Regulate the disc at the correct distance, tilt it slightly and firmly tighten the nuts (Fig. 45).

For normal soils the correct working position of the disc is that shown in Fig. 46 ref. A; for strong soils turn it over as shown in ref. B Fig. 46.

For distances not covered by the table, use the following rule:

$$L = \frac{D(N+1) - C}{2}$$

where:

L= the distance between the outer most unit and the row marker.

D= the distance between the rows.

N= the number of units operating.

C= the tractor's front wheelbase

Example:

D = 75 cm; N = 8 units; C = 190 cm.

$$L = \frac{75(8+1) - 190}{2} = 242,5 \text{ cm.}$$



WARNING

When travelling by road, turn the row-marker discs inwards towards the machine (Fig. 47).

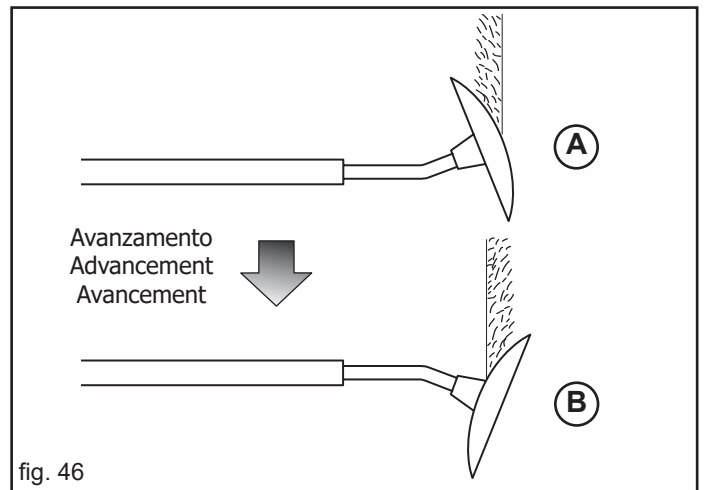
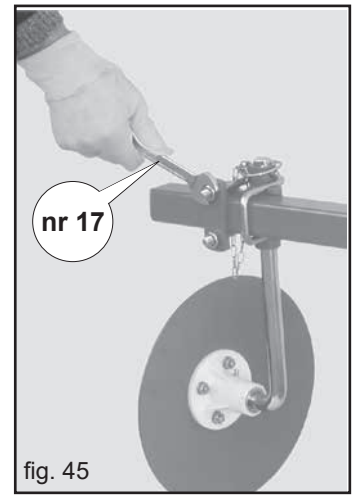
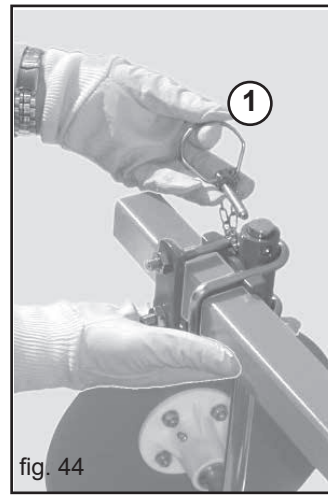


Table 5

C	D	n° di file - nr. of rows Reihenanzahl nr. Rangs - nr. hileras				C	D	n° di file - nr. of rows Reihenanzahl nr. Rangs - nr. hileras				C	D	n° di file - nr. of rows Reihenanzahl nr. Rangs - nr. hileras			
		2	4	5	6			2	4	5	6			2	4	5	6
140	45	42	65	87	160	45	32	55	77	180	45	22	45	67			
	50	55	80	105		50	45	70	95		50	35	60	85			
	60	20	80	110		140	60	10	70		100	130	60	0	60	90	120
	65	27	92	125		157	65	17	82		115	147	65	7	72	105	137
	70	37	106	140		175	70	25	95		130	165	70	15	85	120	155
	75	42	117	155		192	75	32	107		145	182	75	17	97	135	172
145	80	50	130	170	210	80	40	120	160	200	80	30	110	150	190		
	85	57	142	185	227	85	47	132	175	217	85	37	122	165	207		
	45	40	62	85	165	45	30	52	75	185	45	20	42	65			
	50	52	77	102		50	42	67	92		50	32	57	85			
	60	17	77	107		137	60	7	67		97	127	60	5	57	87	117
	65	25	90	122		155	65	15	80		112	145	65	5	70	102	135
70	33	102	137	172		70	23	92	127		162	70	13	82	117	152	
75	40	115	152	190		75	30	105	142		180	75	20	95	132	170	
150	80	48	127	167	207	80	38	117	157	197	80	28	107	147	187		
	85	55	140	182	225	85	45	130	172	215	85	35	120	162	205		
	45	37	60	82	170	45	27	50	72	190	45	17	40	62			
	50	50	75	100		50	40	65	90		50	30	55	80			
	60	15	75	105		135	60	5	65		95	125	60	5	55	85	115
	65	22	87	120		152	65	12	77		110	142	65	2	67	100	132
70	30	100	135	170		70	20	90	125		160	70	10	80	115	150	
75	32	112	150	187		75	27	102	140		177	75	17	92	130	167	
155	80	45	125	165	205	80	35	115	155	195	80	25	105	145	185		
	85	52	137	180	222	85	42	127	170	212	85	32	117	160	202		
	45	35	57	80	175	45	25	47	70	195	45	15	35	60			
	50	47	72	97		50	37	62	87		50	27	50	77			
	60	12	72	102		132	60	2	62		92	122	60	5	52	80	112
	65	20	85	117		150	65	10	75		107	140	65	0	55	85	115
70	28	97	132	167		70	18	87	122		157	70	8	77	105	137	
75	35	110	147	185		75	25	100	137		175	75	15	90	120	155	
155	80	43	122	162	202	80	33	112	152	192	80	23	102	140	182		
	85	50	135	177	220	85	40	125	167	210	85	30	115	150	192		

4.9 DISTRIBUTION OF CHEMICAL PRODUCTS

Fertilizers and insecticides are distributed by means of special dosers (1, Fig. 48) fitted under the corresponding hoppers. These dosers can be adjusted by turning the knob (2, Fig. 48). Depending on how the dosers are regulated please refer to the tables below you can determine the quantity of fertilizer and insecticide needed to cover a hectare of land.

HOPPER AND TANK FILLING

Hoppers and tanks can be filled by hand or using a lifter with a capacity of at least 200 kg, which must be regularly approved by the relative authorities. Remember that weights of more than 25 kg must either be lifted by more than one operator or the above-mentioned lifter must be used following the instructions included in the relative use and maintenance manual.



WARNING

- All fertilizer spreader tank loading and unloading operations must be carried out with the planting unit at a standstill, on the ground, with the frame open, with the hand brake on, with the motor switched off and the starter key removed from the control panel. Make sure that chemicals are kept out of harm's way.
- All operations must be carried out by trained staff wearing suitable protection (overalls, gloves, boots, masks etc) in a clean, dust-free environment.
- Do not place any bags of fertilizer or any other object on the fertilizer distributor container covers to avoid breaking them or endangering property or persons.
- Load from the outer sides of the machine.
- When filling the seed, fertilizer and insecticide hoppers, ensure that no foreign bodies (string, paper, etc.) enter them.
- The seeding machine can transport chemical substances. Do not allow children, people, pets to come near the seeding machine.

The plastic distributors do not require lubrication. On completion of the work, the hopper should be carefully cleaned. This particularly applies to the fertilizer hoppers. Unscrew the discharge pipe caps remove any residual product (Fig. 49) and wash thoroughly with water. Adhere to the ecological standards applicable for the disposal of polluting liquids.

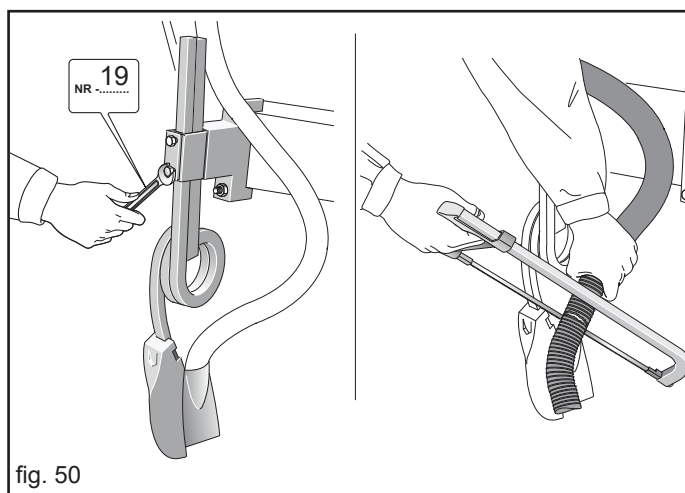
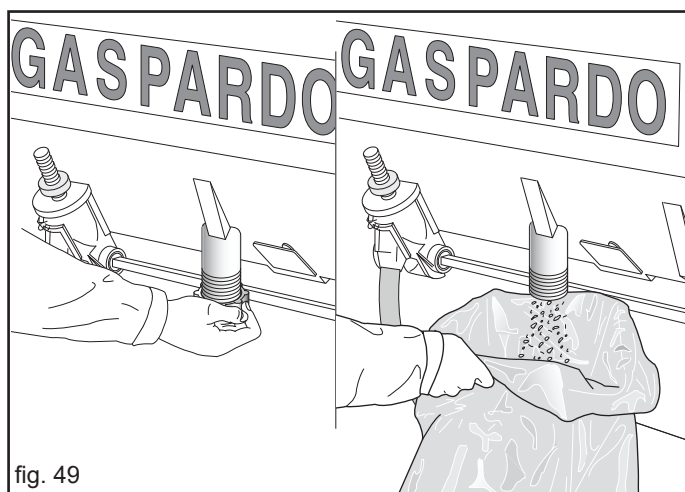
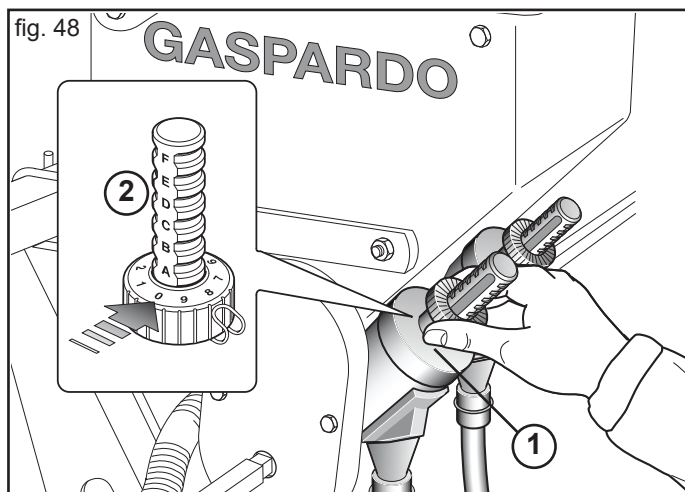
4.9.1 REGULATING THE FERTILIZER INTERRING HOE

The fertilizer interring hoes operate parallel to the row being sown, at a standard distance.

Before utilizing the seeder, ensure that this distance is suitable for the type of fertilizer to be distributed and the quantity to be distributed per hectare, so as to ensure that the crops will not be damaged.

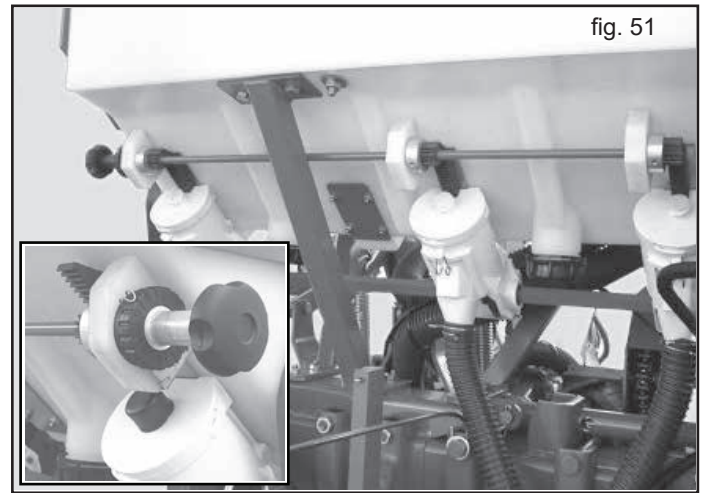
Change the distance if required.

Also regulate the depth at which the fertilizer is interred, by changing the height of the spring (Fig. 50). After completing this operation, cut any extra off the length of the tube so as to prevent the creation of folds which could obstruct the flow of the fertilizer (Fig. 50).



4.9.2 SPEEDY SET

The fertilizer spreader hopper can be equipped with the SPEEDY SET (Fig. 51), which allows the MINIMAX volume batchers (properly modified) to be adjusted on each hopper with just one operation. Regularly check that the sliding hatches are aligned. The distribution table suitable for this adjustment is shown further on.



4.9.3 FERTILIZER DISTRIBUTOR - Table of distribution quantity in kg/Ha

CAUTION: the MINIMAX batcher, adjusted to the first positions (B0=C0 or 1÷1.5 with SPEEDY SET) may become clogged because of the small opening, especially if fertilizers with irregular grain size are used. If the quantity of fertilizer to be delivered comes within the first positions (darkened lines on the table) get in touch with the manufacturer. The figures given in the table are approximate as the specific weight and size of the grains often vary. In any case, always refer to the specific weight shown on the product packaging; if this is not given, get in touch with the manufacturer. For specific weights that are different to those shown in the tables, get in touch with **Maschio Gaspardo S.p.A.**

GASPARDO

MASCHIO GASPARDO S.p.A.

Z30 Trasmissione ruota motrice
Transmission drive wheel
Übersetzung d'entrainemet

Z10 Transmission roue motrice
Transmisión de la rueda motriz

Spandiconcime - Tabella di distribuzione
Fertilizer - Distribution table
Düngerstreuer - Düngermengetabelle
Espandeur d'engrais - Tableaux de distribution
Abonadora - Prospectos de distribución

Z25 Trasmissione ruota motrice
Transmission drive wheel
Übersetzung d'entrainemet

Z15 Transmission roue motrice
Transmisión de la rueda motriz

Posizione regolazione distributore - Position of distributor adjustment - Einstellung Einstellvorrichtung - Position réglage distributeur
Posición regulación distribuidor

	Interfila - Row spacing - Reihenabstand Distance entre les lignes - Distancia entre las hileras																	
	45 cm			50 cm			60 cm			70 cm			75 cm			80 cm		
	Peso specifico - Specific weight - Spezifisches Gewicht Poids spécifique - Peso específico : Kg/dm³																	
	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2
B-0	55	69	83	50	62	75	41	52	62	35	44	53	33	41	50	31	39	47
B-5	81	102	122	73	92	110	61	76	92	52	65	78	49	61	73	46	57	69
C-0	107	134	161	97	121	145	81	101	121	69	86	104	64	81	97	60	76	91
C-5	137	171	205	123	154	184	102	128	154	88	110	132	82	102	123	77	96	115
D-0	163	203	244	146	183	220	122	153	183	105	131	157	98	122	146	92	114	137
D-5	189	236	283	170	212	255	142	177	212	121	152	182	113	142	170	106	133	159
E-0	215	269	322	193	242	290	161	202	242	138	173	207	129	161	193	121	151	181
E-5	244	305	366	220	275	329	183	229	275	157	196	235	146	183	220	137	172	206
F-0	270	338	405	243	304	365	203	253	304	174	217	261	162	203	243	152	190	228
F-5	296	370	444	267	333	400	222	278	333	190	238	286	178	222	267	167	208	250
G-0	325	407	488	293	366	439	244	305	366	209	261	314	195	244	293	183	229	275
G-5	351	439	527	316	395	475	264	330	395	226	282	339	211	264	316	198	247	297
G-10	378	472	566	340	425	510	283	354	425	243	303	364	227	283	340	212	266	319

Posizione regolazione distributore - Position of distributor adjustment - Einstellung Einstellvorrichtung - Position réglage distributeur
Posición regulación distribuidor

	Interfila - Row spacing - Reihenabstand Distance entre les lignes - Distancia entre las hileras								
	70 cm			75 cm			80 cm		
	Peso specifico - Specific weight - Spezifisches Gewicht Poids spécifique - Peso específico : Kg/dm³								
	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2
B-0	64	80	96	60	75	89	56	70	84
B-5	94	118	141	88	110	132	82	103	124
C-0	124	155	187	116	145	174	109	136	163
C-5	158	197	237	147	184	221	138	173	207
D-0	188	235	282	176	220	264	165	206	247
D-5	218	273	328	204	255	306	191	239	287
E-0	249	311	373	232	290	348	218	272	326
E-5	282	353	424	264	329	395	247	309	371
F-0	313	391	469	292	365	438	274	342	410
F-5	343	429	514	320	400	480	300	375	450
G-0	376	471	565	351	439	527	329	412	494
G-5	407	508	610	380	475	569	356	445	534
G-10	437	546	655	408	510	612	382	478	574

I valori della tabella costituiscono solo valori indicativi, in quanto il peso specifico e la grandezza dei granelli sono spesso diversi. - The chart values are only approximate, since the specific weight and the size of the granules often differ. - Die Tabellenwerte sind Richtwerte, da das spezifische Gewicht und die Größe der Körner oft unterschiedlich sind. - Les valeurs indiquées sur le tableau de réglage constituent simplement des valeurs données à titre indicatif car le poids spécifique et la grandeur des grains sont souvent différents. - Los valores de la tabla son sólo indicativos, ya que el peso específico y las dimensiones de los granos son, generalmente, diferentes.

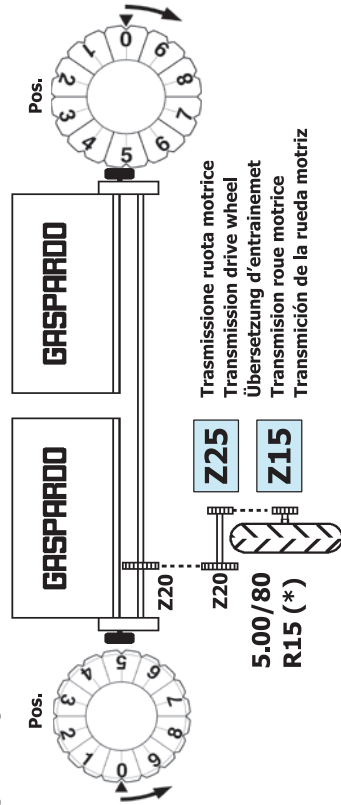
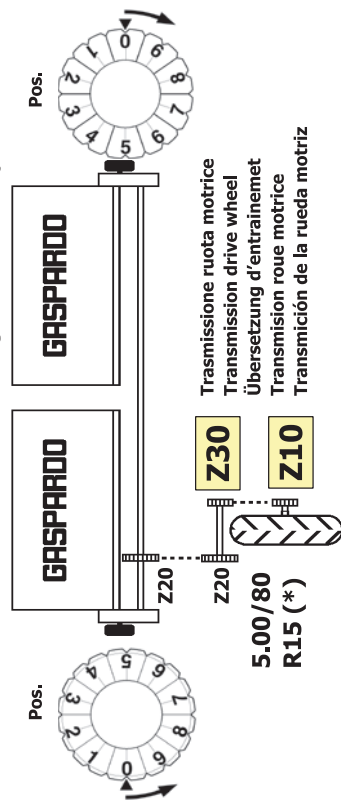
(*) Con ruote da 6.5-15 diminuire i valori della tabella del 4%. Con ruote 7.50-16 diminuire i valori della tabella del 20%.
 (*) With 6.5-15 wheels decrease distribution quantity by 4%. With 7.50-16 wheels decrease by 20%.
 (*) Mit Bereifung 6.5-15 die Mengen der Tabelle um 4% vermindern. Mit Bereifung 7.50-16 die Mengen der Tabelle um 20% vermindern. (*)
 Avec roues de 6.5-15 diminuer les données du tableau de 4%. Avec roues de 7.50-16 diminuer de 20%.
 (*) Con ruedas 6.5-15 disminuir los valores de la tabla del 4%. Con ruedas 7.50-16 disminuir los mismo del 20%.

4.9.4 SPEEDY SET - Table of distribution quantity in Kg/Ha

GASPARDO
 MASCHIO GASPARDO S.p.A.

Spandiconcime - Tabella di distribuzione **Fertilizer** - Distribution table
Espandeur d'engrais - Tableaux de distribution
Regolazione - Adjustment - Einstellung - Relage - Regulacion **SPEEDY SET**

Düngerstreuer - Düngermengetabelle
Abonadora - Prospectos de distribución



Posizione regolazione distributore - Position of distributor adjustment - Einstellung
 Einstellvorrichtung - Position réglage distributeur - Posición regulación distribuidor

Pos.	45 cm			50 cm			60 cm			70 cm			75 cm			80 cm		
	Interfila - Row spacing - Reihenabstand Distance entre les lignes - Distancia entre las hileras																	
	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	37	46	56	33	42	50	28	35	42	24	30	36	22	28	33	21	26	31
1,5	56	69	83	50	63	75	42	52	63	36	45	54	33	42	50	31	39	47
2	74	93	111	67	83	100	56	69	83	48	60	71	44	56	67	42	52	63
2,5	93	116	139	83	104	125	69	87	104	60	74	89	56	69	83	52	65	78
3	111	139	167	100	125	150	83	104	125	71	89	107	67	83	100	63	78	94
3,5	134	167	199	121	150	179	101	125	149	86	107	128	81	100	119	76	94	112
4	157	194	231	142	175	208	118	146	174	101	125	149	94	117	139	89	109	130
4,5	181	222	269	163	200	242	135	167	201	116	143	173	108	133	161	102	125	151
5	204	255	306	183	229	275	153	191	229	131	164	196	122	153	183	115	143	172
5,5	222	278	333	200	250	300	167	208	250	143	179	214	133	167	200	125	156	188
6	241	301	361	217	271	325	181	226	271	155	193	232	144	181	217	135	169	203
6,5	264	324	394	238	292	354	198	243	295	170	208	253	158	194	236	148	182	221
7	282	352	421	254	317	379	212	264	316	182	226	271	169	211	253	159	198	237
7,5	306	370	449	275	333	404	229	278	337	196	238	289	183	222	269	172	208	253
8	324	407	491	292	362	442	243	306	368	208	262	315	194	244	294	182	229	276
8,5	347	435	523	313	392	471	260	326	392	223	280	336	208	261	314	195	245	294
9	370	463	556	333	417	500	278	347	417	238	298	357	222	278	333	208	260	313

Posizione regolazione distributore - Position of distributor adjustment - Einstellung
 Einstellvorrichtung - Position réglage distributeur - Posición regulación distribuidor

Pos.	70 cm			75 cm			80 cm		
	Interfila - Row spacing - Reihenabstand Distance entre les lignes - Distancia entre las hileras								
	0,8	1	1,2	0,8	1	1,2	0,8	1	1,2
0	0	0	0	0	0	0	0	0	0
1	43	54	64	40	50	60	38	47	56
1,5	64	80	96	60	75	90	56	70	84
2	86	107	129	80	100	120	75	94	113
2,5	107	134	161	100	125	150	94	117	141
3	129	161	193	120	150	180	113	141	169
3,5	154	193	231	144	180	216	135	169	203
4	180	225	270	168	210	252	158	197	236
4,5	206	257	309	192	240	288	180	225	270
5	236	295	354	220	275	330	206	258	309
5,5	257	321	386	240	300	360	225	281	338
6	279	348	418	260	325	390	244	305	366
6,5	300	375	450	280	350	420	263	328	394
7	326	407	489	304	380	456	285	356	428
7,5	343	429	514	320	400	480	300	375	450
8	377	471	566	352	440	528	330	413	495
8,5	403	504	604	376	470	564	353	441	529
9	429	536	643	400	500	600	375	469	563

I valori della tabella costituiscono solo valori indicativi, in quanto il peso specifico e la grandezza dei granelli sono spesso diversi. - The chart values are only approximate, since the specific weight and the size of the granules often differ.
 - Die Tabellenwerte sind Richtwerte, da das spezifische Gewicht und die Größe der Körner oft unterschiedlich sind. - Les valeurs indiquées sur le tableau de réglage constituent simplement des valeurs données à titre indicatif car le poids spécifique et la grandeur des grains sont souvent différents. - Los valores de la tabla son sólo indicativos, ya que el peso específico y las dimensiones de los granos son, generalmente, diferentes.

(*) Con ruote da 6.50/80 R15 diminuire i valori della tabella del 4%. Con ruote 7.50 R16 diminuire i valori della tabella del 20%.
 (*) With 6.50/80 R15 wheels decrease distribution quantity by 4%. With 7.50 R16 wheels decrease by 20%.
 (*) Avec roues de 6.50/80 R15 diminuer les données du tableau de 4%. Avec roues de 7.50 R16 diminuer de 20%.
 (*) Mit Bereifung 6.50/80 R15 die Mengen der Tabelle um 4% vermindern. Mit Bereifung 7.50 R16 die Mengen der Tabelle um 20% vermindern.
 (*) Con ruedas 6.50/80 R15 disminuir los valores de la tabla del 4%. Con ruedas 7.50 R16 disminuir los mismos del 20%.

Cod. 19702952

4.9.5 MICROGRANULATOR - Table of distribution quantity in Kg/Ha

GASPARDO
 MASCHIO GASPARDO S.p.A.

Microgranulatore - Tabella di distribuzione
Microgranule - Distribution table
Microgranulator - Prospectos de distribución
Mikrogranulatmenge - Tabelle

Posizione regolazione distributore - Position of distributor adjustment - Einstellung Einstellvorrichtung
 Position réglage distributeur - Position regulación distribuidor

	50 cm			60 cm			70 cm			75 cm			80 cm					
	0,7	0,8	1	0,7	0,8	1	0,7	0,8	1	0,7	0,8	1	0,7	0,8	1			
B-0	3,1	3,6	4,5	2,8	3,2	4,0	2,4	2,7	3,4	2,0	2,3	2,9	1,9	2,2	2,7	1,8	2,0	2,5
B-5	4,7	5,4	6,7	4,2	4,8	6,1	3,5	4,0	5,0	3,0	3,5	4,3	2,8	3,2	4,0	2,6	3,0	3,8
C-0	6,3	7,2	9,0	5,6	6,5	8,1	4,7	5,4	6,7	4,0	4,6	5,8	3,8	4,3	5,4	3,5	4,0	5,0
C-5	7,8	9,0	11,2	7,1	8,1	10,1	5,9	6,7	8,4	5,0	5,8	7,2	4,7	5,4	6,7	4,4	5,0	6,3
D-0	9,4	10,8	13,4	8,5	9,7	12,1	7,1	8,1	10,1	6,1	6,9	8,6	5,6	6,5	8,1	5,3	6,1	7,6
D-5	10,9	12,4	15,6	9,8	11,2	14,0	8,2	9,3	11,7	7,0	8,0	10,0	6,5	7,5	9,3	6,1	7,0	8,8
E-0	12,5	14,2	17,8	11,2	12,8	16,0	9,3	10,7	13,4	8,0	9,2	11,4	7,5	8,5	10,7	7,0	8,0	10,0
E-5	14,0	16,0		12,6	14,4		10,5	12,0		9,0	10,3		8,4	9,6		7,9	9,0	
E-10	15,6	17,8		14,0	16,0		11,7	13,4		10,0	11,5		9,4	10,7		8,8	10,0	

Peso specifico - Specific weight - Spezifisches Gewicht - Poids spécifique - Peso específico : Kg/dm³

Trasmissione ruota motrice
 Transmission drive wheel
 Übersetzung d'entraînement
 Transmisión roue motrice
 Transmisión de la rueda motriz

Posizione regolazione distributore - Position of distributor adjustment - Einstellung Einstellvorrichtung
 Position réglage distributeur - Position regulación distribuidor

	70 cm			75 cm			80 cm											
	0,6	0,7	0,8	1	1,2	1,4	0,6	0,7	0,8	1	1,2	1,4						
B-0	3,2	3,8	4,3	5,4	6,5	7,6	3,0	3,5	4,0	5,0	6,0	7,0	2,9	3,3	3,8	4,7	5,7	6,7
B-5	4,9	5,6	6,5	8,1	9,7	11,4	4,5	5,3	6,0	7,6	9,0	10,5	4,2	5,0	5,7	7,1	8,5	9,9
C-0	6,5	7,6	8,6	10,8	13,0	15,0	6,0	7,0	8,0	10,1	12,0	14,0	5,7	6,6	7,6	9,5	11,4	13,3
C-5	8,1	9,5	10,8	13,5	16,2	18,9	7,5	8,7	10,0	12,6	15,0	17,5	7,1	8,3	9,4	11,8	14,2	16,5
D-0	9,7	11,3	13,0	16,2	19,4	22,7	9,0	10,5	12,0	15,1	18,0	21,0	8,6	10,0	11,5	14,2	17,3	20,0
D-5	11,3	13,2	15,0	18,8	22,7		10,5	12,2	14,0	17,5	21,0		10,0	11,1	13,1	16,4	18,5	
E-0	13,0	15,1	17,3	21,5			12,0	14,0	16,0	20,0			11,1	11,7	13,3	18,8	20,0	
E-5	14,6	17,0	19,4				13,5	15,8	18,0				12,5	14,6	16,7			
E-10	16,2	18,9	21,6				15,0	17,5	20,0				14,0	16,3	18,6			

Peso specifico - Specific weight - Spezifisches Gewicht - Poids spécifique - Peso específico : Kg/dm³

Trasmissione ruota motrice
 Transmission drive wheel
 Übersetzung d'entraînement
 Transmisión roue motrice
 Transmisión de la rueda motriz

I valori della tabella costituiscono solo valori indicativi. In quanto il peso specifico e la grandezza dei granelli sono spesso diversi. - The chart values are only approximate, since the specific weight and the size of the granules often differ. - Die Tabellenwerte sind Richtwerte, da das spezifische Gewicht und die Größe der Körner oft unterschiedlich sind. - Les valeurs indiquées sur le tableau de réglage constituent simplement des valeurs données à titre indicatif car le poids spécifique et la grandeur des grains sont souvent différents. - Los valores de la tabla son solo indicativos, ya que el peso específico y las dimensiones de los granos son, generalmente, diferentes.

(*) Con ruote da 6.50/80 R15 diminuirà i valori della tabella del 4%. Con ruote 7.50 R16 diminuirà i valori della tabella del 20%.
 (*) With 6.50/80 R15 wheels decrease distribution quantity by 4%. With 7.50 R16 wheels decrease by 20%.
 (*) Avec roues de 6.50/80 R15 diminuer les données du tableau de 4%. Avec roues de 7.50 R16 diminuer de 20%.
 (*) Mit Bereifung 6.50/80 R15 die Mengen der Tabelle um 4% vermindern. Mit Bereifung 7.50 R16 die Mengen der Tabelle um 20% vermindern.
 (*) Con ruedas 6.50/80 R15 disminuir los valores de la tabla del 4%. Con ruedas 7.50 R16 disminuir los valores de la tabla del 20%.

5.0 OPERATIONS FOR PUTTING THE MACHINE INTO SERVICE

4.1 WHEN THE MACHINE IS NEW

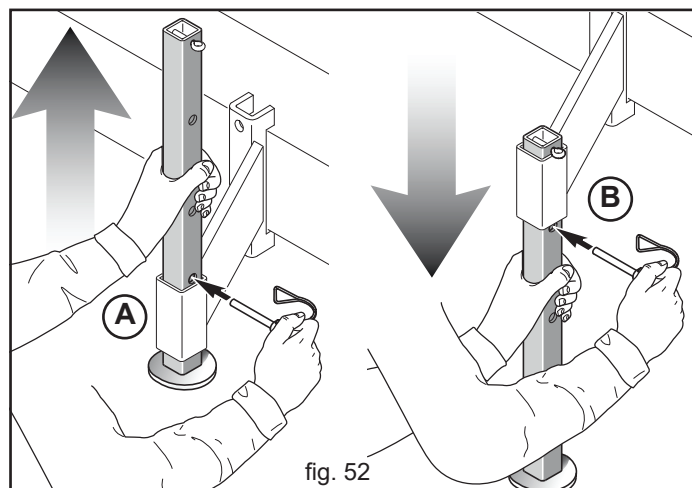
- Assemble onto the equipment any parts that may have been delivered disassembled for transport purposes (follow the instructions given in the assembly diagrams attached to these parts).

5.2 CHECKS AND PREVENTATIVE MAINTENANCE

- Check that the safety bolts are present on the pins:
 - a) 3-point linkage connecting pins;
 - b) pins for locking the row marker arms for road transport.
- Check that the pipes of the hydraulic system are undamaged.
- Check that all the screws are tight.
- Grease the universal joint spiders.
- Grease the row-marker disc pin.
- Grease the pin of the seeding depth control wheels.
- Check that all the suction tubes are well connected.
- Check that all the drive shafts are properly engaged.
- Carefully check moving parts, driving parts and seed distribution.

5.3 ATTACHMENT THE TRACTOR

- Connect the equipment to the third point of the tractor using the safety devices.
- Connect the cardan shaft.
- Connect the hydraulic pipes to the distributors of the tractor.
- Plug the visual signalling units into the socket of the tractor's electrical system.
- Remove the safety bolts of the row marker arms and the toolbar, and operate the hydraulic systems to check they are working correctly. If necessary, adjust the flow regulators where present.
- Lift the equipment off the ground and remove the support legs (A, Fig. 52).
- When travelling by road, lock the row marker arms and the toolbar in transport position with the safety bolts.

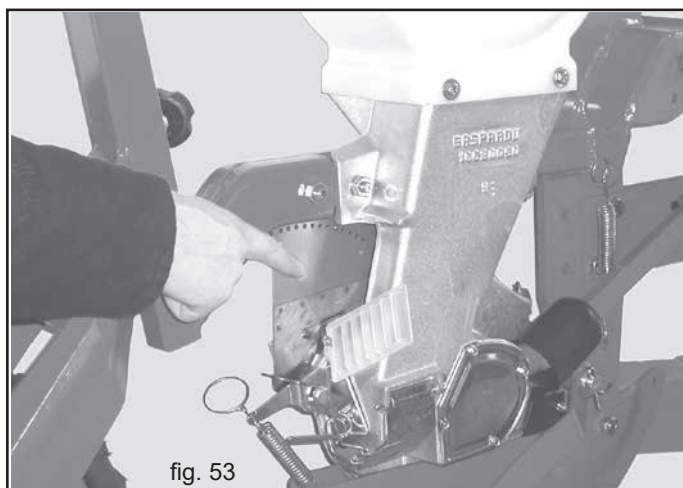


5.4 PREPARING FOR SEEDING

- **The type of configuration of the seed drill with the accessories use, whose selection is entirely at the user's discretion, must be suitable for the type of seed to be distributed and to the type of seed bed.**
- From the seed chart, according to the row spacing, obtain the distance between one seed and the next along the row.
- From the longitudinal sowing distance adjustment table, obtain the combinations of gears on the gearbox and on the drive wheel that will produce this distance.
- Insert the right seed discs in the distributors.
- If beet seed is to be distributed, use the seed ejector. In other cases, remove the ejector.
- Put a small quantity of seed in the hoppers.
- From the driver's seat of the tractor, raise the seeder;
- Operate the power take-off at 540 rpm;
- Using the gear lever, put the tractor engine into neutral;
- Brake the tractor and if necessary, secure it with wooden blocks sized according to the size of the wheels;
- Manually turn the seeder gear drive wheel in the direction in which the machine is moving;
- Adjust the selector and control through the grate that the plate is only holding one seed per hole (Fig. 53);
- Adjust the planting depth by turning the side wheels by means of the handle.
- According to the type of ground, adjust the distance of the rear wheels and their pressure on the ground for closing the seed furrow.
- Check the degree of preparation of the seedbed and adjust the height of the front clod clearer.
- Move along the seedbed for a few metres with the equipment in working position, and adjust the third point tie rod to obtain true perpendicularity between machine and ground.
- Proceed with the planting process: after a few metres check whether the distributors are placing one seed at a time and at the right distance.

5.5 DISTRIBUTION OF CHEMICAL PRODUCTS

- Hoppers and tanks can be filled by hand or using a lifter with a capacity of at least 200 kg, which must be regularly approved by the relative authorities.
- When filling the fertilizer and insecticide hoppers, be careful that foreign bodies do not enter (string, bag paper, etc.).
- Set the quantity to distribute following the information given in the table (the values given in the table are a rough guide only).
- Adjust the working depth and the distance of the fertilizer placement units from the sowing row, carefully following the specific agronomic instructions of each crop.

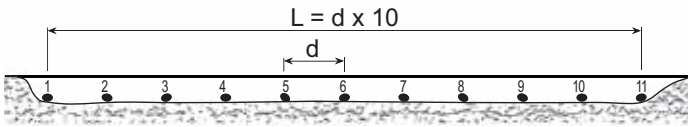


5.6 DURING SEEDING

- During seeding, periodically check that the seeds are distributed and planted properly and at the correct density. If necessary, take appropriate measures. Frequent seeding inspections ensure the quality of the final work. Choose a work speed that is suitable for the conditions and desired seeding regularity.

MASCHIO GASPARDO S.p.A. disclaims any liability for irregular seeding due to failure to adjust the seed drill, failure to carry out periodic inspections during seeding or on external seed drill elements (type, conformation, humidity level and preparation of the seed bed, weather, etc.).

- After having performed all the operations above, the seed drill is ready to work. However, it is recommended to do trial planting for a few metres to check that seed deposition is taking place as desired, namely check that the amount of seeds per linear meter corresponds to that intended. *Example: if the longitudinal planting distance set is « $d = 16\text{ cm}$ », this means that in 160 cm (L) there must be 11 seeds (10 spaces) as shown in the figure below.*



- During the planting process, check the distribution of the seeds often. If this is not accurate, check the selector and the transmission ratios.
- At the end of each run, during the direction change manoeuvre, the vacuum pump must always stay on to keep the seeds attached to the distributor discs.
- If there is a loss or decrease of suction, check that the pipes are not damaged or clogged; if so, replace or clean them, checking the aspirator belt also.
- During seed drilling, periodically check the pressure of the tyres in accordance with the values shown in the "TECHNICAL DATA" table. Flat tyres cause irregular seed planting.



CAUTION

- The shape, dimensions and material of the drive shaft elastic pins have been selected for reasons of safety. The use of non-original or more resistant pins could cause serious damage to the seeding machine.
- Start the power take-off gradually; sudden movements are harmful to the aspirator belt.
- Avoid curves with the machine grounded, and do not work in reverse. Always lift it when changing direction or reversing.
- Do not work with the power take-off synchronized with the wheels.
- Do not exceed the number of revolutions per minute indicated on the power take-off.
- Never push the tractor to maximum revs.
- Maintain a seed planting speed that is compatible with the type and preparation of the soil in order to avoid breakages or damage.
- Lower the seeding machine while the tractor is moving so as not to clog or damage the coulter parts. For the same reason it is inadvisable to manoeuvre in reverse with the seeder lowered.
- When filling the seed, fertilizer and insecticide hoppers, ensure that no foreign bodies (string, paper, etc.) enter them.



DANGER

The seeding machine can transport chemical substances. Do not allow children, people, pets to come near the seeding machine.



WARNING

Do not place any bags of fertilizer or any other object on the fertilizer distributor container covers to avoid breaking them or endangering property or persons. Load from the outer sides of the machine.

It is forbidden to come near the containers of the chemical substances or to open them when the seeding machine is operating or about to operate.

5.7 THE END OF OPERATION

- Disconnect the power take-off.
- Lock the row marker arms and the toolbar in transport position with the safety bolts.
- At the end of seeding, discharge the remaining seeds through the distributor door (Fig. 54).
- Carry out road transfers with the hoppers empty.
- During road transport, observe the Highway Code in force in your country.

5.8 DAILY REST PERIOD

- Put the support legs in the parking position (B, Fig. 52).
- Disconnect the cardan shaft.
- Unhook the equipment from the tractor.
- Wash the equipment with abundant water, giving special attention to the hoppers that contained chemical substances, and then dry it.
- On completion of the work, the hopper should be carefully cleaned. This particularly applies to the fertilizer hoppers. Adhere to the ecological standards applicable for the disposal of polluting liquids.
- Put it in a place where it will be out of the reach of unauthorized persons.



fig. 54

6.0 MAINTENANCE

Here follows a list of various maintenance operations to be carried out periodically. Lowered operating costs and a longer lasting seeding machine depend, among others, on the methodical and constant observation of these rules.

The maintenance periods listed in this booklet are only indicative and are for on normal conditions on use, therefore be varied depending the kind of service, the more or less dusty surroundings, seasonal factors, etc. For more serious conditions of service, maintenance will logically be done more often.

All operations must be carried out by expert personnel, equipped with protective gloves, in a clean and dust-free environment.

All maintenance operations must be carried out with the machine hooked up to the tractor, the parking brake engaged, the engine off, the ignition key removed and the equipment sitting on suitable supports on the ground.



USING OILS AND GREASES

- Before injecting grease, the nipples must be cleaned to avoid mud, dust and foreign bodies from mixing with the grease, otherwise they will reduce or even annul the effect of the lubrication.
- Always keep oils and grease out of reach of children.
- Always read warnings and precautions indicated on the containers carefully.
- Avoid skin-contact.
- After use wash the equipment thoroughly.
- Treat the used oils and polluting liquids in conformity with the laws in force.

RECOMMENDED LUBRICANTS

- For lubrication in general, we advise: **OIL SAE 80W-90**.
- For all greasing points we advise: **AGIP GR MU EP 2 GREASE** or equivalent (specifications: DIN 51825 (KP2K)).

CLEANING

- The products used for cleaning must be disposed of according to the laws in force.
- Clean and maintain the machine after putting any removed guards back in position. Replace them with new ones, if they are damaged.
- Clean the electrical components only with a dry cloth.

USING PRESSURISED CLEANING SYSTEMS (Air/Water)

- Always keep in mind the rules that regulate use of these systems.
- Do not pressure clean electrical components.
- Do not pressure clean chromium-plated components.
- Do not place the nozzle in contact with the parts of the equipment, especially the bearings. Keep it at a min. distance of 30 cm from the surface to be cleaned.
- Thoroughly lubricate the equipment, especially after cleaning it with pressurised systems.

HYDRAULIC SYSTEMS

- Hydraulic systems must be maintained exclusively by skilled operators.
 - The hydraulic system is under high pressure; because of the accident risk, when searching for leakage points special auxiliary instruments should be used.
 - In case of participation on the hydraulic system, to unload the hydraulic pressure carrying all the hydraulic commandos in all the positions some times after to have extinguished the motor.
 - Oil escaping at high pressure can cause skin injury with the risk of serious wounds and infection. Call a doctor immediately if such an incident occurs. If the oil with surgical means is not removed quickly, can take place serious allergies and/or infections. Therefore, the installation of hydraulic components in the tractor driver's cab is strictly forbidden. All the components of the system should be positioned carefully to avoid parts being damaged during use of the equipment.
 - At least once a year have the hydraulic pipes checked for wear by an expert.
 - Replace the hydraulic pipes if they are damaged or worn by aging.
 - Replace the hydraulic pipes every 5 years even if they have not been used (natural aging).
- Figure 55 (R) shows hydraulic pipes bearing the year of manufacture as an example.

After the first 10 hours of operation and then after every 50 hours, check that:

- all the elements of the hydraulic system are water-tight;
- all the joints are tight;

Before starting the machine up, check that:

- the hydraulic pipes are connected correctly;
- the pipes are positioned correctly, and they are free to move during standard manoeuvres;
- any damaged or worn part is replaced, if necessary.

Replace the hydraulic pipes in the following cases:

- when external damage is identified such as cutting, tearing and wear due to friction, etc.;
- when they are deteriorated on the outer surface;
- when they are deformed beyond their natural shape due to crushing, formation of bubbles, etc.;
- when leaks are identified near the pipe sheath (S, Fig. 55);
- when the sheath is corroded (S, Fig. 55);
- 5 years after their manufacture (R, Fig. 55).

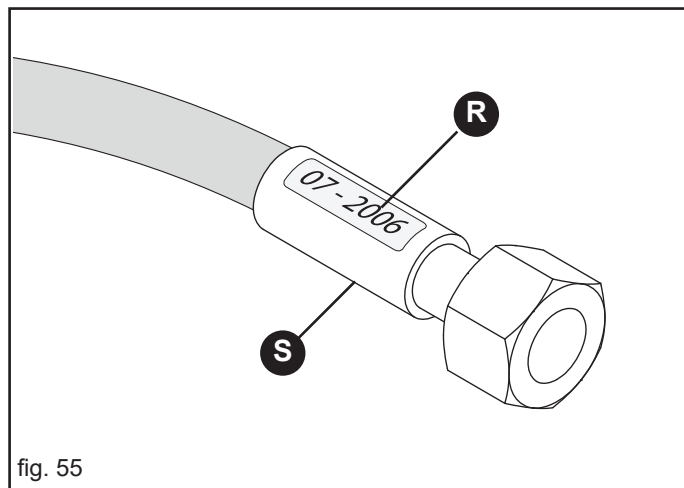


fig. 55

6.1 MAINTENANCE PLAN - Summary table

INTERVAL	TYPE OF WORK
WHEN THE MACHINE IS NEW	<ul style="list-style-type: none"> - Grease all parts indicated by transfer nr. 14 ('GRASE') at page 47 of this leaflet. - Lubricate all the transmission chains with mineral oil (SAE 80W-90). - After the first hours of work check that all the bolts are still tight. <p>WARNING! Do not over-tighten the screws holding the case (C, Fig. 56). It should be able to oscillate.</p>
AT THE BEGINNING OF THE SEEDING SEASON	<ul style="list-style-type: none"> - Check the pressure of the tyres (see technical data table). - Lubricate all the transmission chains with mineral oil (SAE 80W-90). - Check the fixing and the state of wear of all the suction tubes and the delivery tubes for fertilizer and other chemical products. - Run the seeding machine loadless, the airflow clears the pipes of condensation and removes any impurities. - Check the tensioning of the aspirator belt (Fig. 21).
EVERY 8 WORKING HOURS	<ul style="list-style-type: none"> - Lubricate all the transmission chains with mineral oil (SAE 80W-90). - Grease the universal joint spiders. - Grease the bevel gear pair of the cardan shaft of the planting units (1, Fig. 56).
EVERY 50 WORKING HOURS	<ul style="list-style-type: none"> - Inspect the condition of the seed plates; if any of the pegs are missing or bent, replace the plate with an original spare; if there are circular scratches on the plates they must not exceed 1/3 of the disc thickness. - Clean the seed distributor carefully and thoroughly; replace the cover seal if necessary. - Check the tensioning of the aspirator belt (Fig. 21). - Make sure the toothed wheels are properly aligned and the transmission chains are tensioned to prevent them from wearing out in little time or a failure affecting the transmission parts. - Check that all the bolts are still tight. - Grease all the joints of the row marker.
EVERY SIX MONTHS	<ul style="list-style-type: none"> - Oil the height adjust bolt (2, Fig. 56). - Grease the drive wheel oscillating bearings (3, Fig. 56).
EVERY PERIODICALLY	<ul style="list-style-type: none"> - Check the pressure of the seed drill tyres (see «3.1 Technical Data»).
EVERY FIVE YEARS	<ul style="list-style-type: none"> - To replace all the tubes of the hydraulic systems.
REST PERIODS	<p>At the end of the season, or if a long period of rest is foreseen it is advisable to:</p> <ol style="list-style-type: none"> 1) Wash the equipment thoroughly with water, especially the chemical substance hoppers, then dry them. Clean the electrical components only with a dry cloth. 2) Carefully check for worn or damaged parts and replace them where required. 3) Check the state of wear of the transmission chains and toothed wheels. Replace damaged or worn out parts, if required. Use solvent to clean the transmission chains, the toothed wheels and the chain stretchers. Lubricate with mineral oil (SAE 80W-90) when dry. 4) Adjust the belt of the diffusion air pump and and replace it if necessary. 5) Firmly tighten all screws and bolts. 6) Apply protecting oil to all unpainted parts. 7) Protect the equipment with a (nylon) cover. 8) Then position it stably in a dry place out of the reach of unauthorized people.

It is in the interests of the user to follow these instructions carefully, as when work recommences, he will find the equipment in perfect condition.

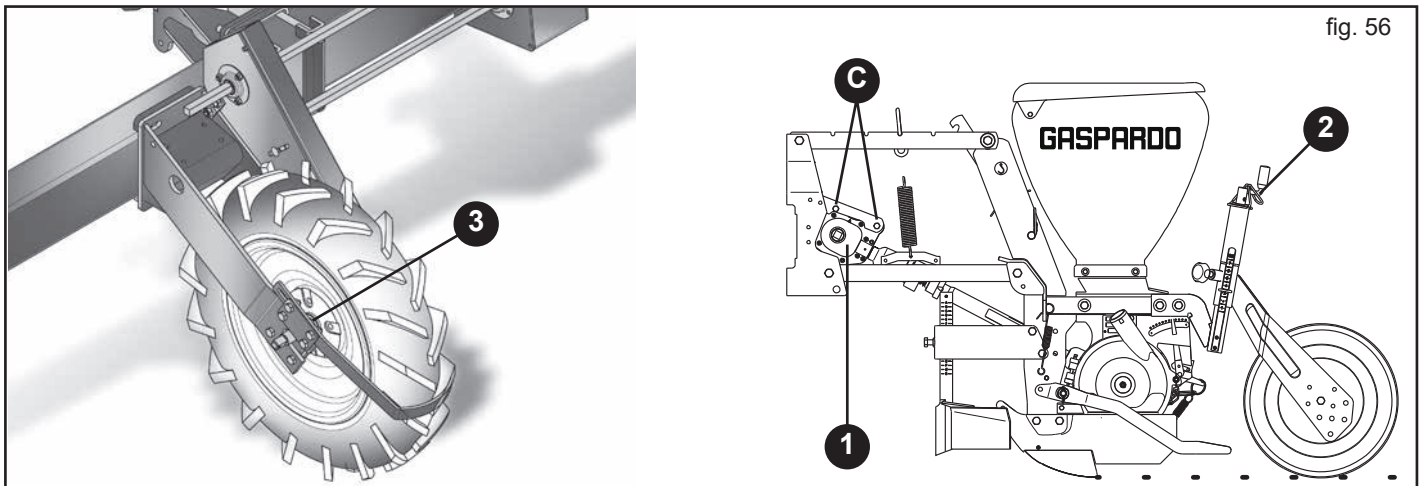


fig. 56

6.2 PROBLEMS, CAUSES AND SOLUTIONS

PROBLEMS	CAUSES	SOLUTIONS
Irregular seed drilling (inaccurate distance between seeds).	<ol style="list-style-type: none"> 1) Wear of furrow-opening coulter. 2) Excessively tense seed compression spring. 3) Unsuitable rear seed-covering wheels. 4) Deformed or worn seed disc (over 1/3 of its original thickness). 5) Deformed or missing seed disc pins. 6) Worn or broken seed disc gasket. 7) Badly adjusted moving selector. WARNING! The selector does not regulate the amount of air coming into the seed distributor. 8) Flat tyres: gear ratio is altered. 9) Forward speed is too fast. 10) Incorrect WHEEL-GEARBOX AXLE ratio and/or gearbox adjustment. 11) Drop in seed aspirator revs. 12) Wear of distributor drive shaft joints. 13) Use of small seeds or seeds with electrostatic charge (rape, beet). 14) The seed drill is not perpendicular to the ground and is pointing forwards. 15) The furrow opener discs fill up with earth because they are sloping backwards. 16) The furrow opener discs are not turning. 17) Bush clearance. 	<ol style="list-style-type: none"> 1) Replace 2) Loosen 3) Replace 4) Replace the seed disc. We advise replacing the gasket when replacing the seed disc. 5) Replace the seed disc. 6) Replace the gasket. 7) Adjust the selector: Small seeds (small numbers of selector). Large seeds (large numbers of selector). 8) Pump up according to technical data table. 9) Reduce the drilling speed. 10) Consult the WHEEL-GEARBOX table and change the ratios as necessary. 11) Check: <ol style="list-style-type: none"> a) belt tension b) tractor's power take-off revs c) breakage of air tubes to the seeding elements. 12) Replace 13) Use the ejector for coated seeds. 14) Lengthen third point linkage. 15) Shorten the third point. Remember to lower the machine with the tractor moving and never move it in reverse with the seed drill lowered. 16) Replace the bearing of the furrow opener disc. Ground too muddy and not suitable for the seed drill. 17) Replace.
Seeds spill over from the distributor.	Anti-spill-over plate too open.	Close or replace with G22270133.
Few seeds reach the distributor.	Anti-spill-over plate too closed.	Open
Seed disc does not rotate or does not work correctly.	<ol style="list-style-type: none"> 1) Seed distributor bevel gear is stuck. 2) Seed distributor bevel gear is worn or broken. 3) Disc feed hub has oxidized. 4) Seeds dressed with sticky products that increase the friction between disc and gasket. 5) Broken plastic safety bolt. 6) Moving selector is too closed. 7) Use of fixed selector with large seeds (beans, chickpeas, etc). 8) Fixed selector is bent and knocks against the disc. 9) Worn or broken transfer case. 10) Distributor transmission universal joint not hooked up. 	<ol style="list-style-type: none"> 1) Free it with anti-seize products. 2) Replace (replace bushings and gear axle). 3) Free it with anti-seize products. 4) Clean disc and gasket often. If possible, use other dressed products. 5) Replace 6) Open 7) Remove the fixed selector. 8) Replace 9) Replace 10) Hook up
The seeds fall off the seed disc.	<ol style="list-style-type: none"> 1) Insufficient suction <ol style="list-style-type: none"> a) Slack belt b) Broken belt c) Holes in air tubes d) Blocked air tubes 2) Rev speed not constant or not sufficient. 3) Seed disc holes of insufficient diameter. 	<ol style="list-style-type: none"> 1) <ol style="list-style-type: none"> a. Tension the belt b. Replace c. Replace d. Cleaning (check the suction in the tube with your palm at the seed distributor end). 2) Use the tractor's hand accelerator. 3) Replace the seed discs.
The seed furrow remains open and the seeds uncovered.	<ol style="list-style-type: none"> 1) Rear compression wheels not in line with furrow opened by shoe; equalizer inclined with respect to gear direction. 2) Rear seed-covering wheels not suitable for the ground. 	<ol style="list-style-type: none"> 1) Centre equalizer by adjusting front fork position. 2) Replace.
Irregular seed drilling depth.	Clod clearer set too low.	Raise the clod clearer: it must be set as shown in the instruction booklet.

PROBLEMS	CAUSES	SOLUTIONS	
Seeds on surface.	<ol style="list-style-type: none"> 1) Wrong seeding depth setting. 2) Obstructed shoe. 3) Wear of shoe. 4) Rear seed-covering wheels not suitable for the ground. 5) Insufficient parallel pressure. 6) Ground not suitably prepared. 7) Bent planting unit frame (example: caused by knocks from stones on the ground). 8) Seed drilling on steeply sloping ground. 	<ol style="list-style-type: none"> 1) Correct the depth setting. 2) Clean. 3) Replace. 4) Replace. 5) Tighten front spring. 6) Prepare the ground carefully. 7) Restore the planting unit frame. 8) Regular seed drilling is not guaranteed for slopes greater than 20%. 	
Seeds too deep.	<ol style="list-style-type: none"> 1) Wrong seeding depth setting. 2) Excessive parallel pressure. 3) Unsuitable rear seed-covering wheels. 	<ol style="list-style-type: none"> 1) Correct the depth setting. 2) Loosen front spring. 3) Replace 	
The gearbox chain jumps off the gears.	The two pinion axles are not parallel to each other.	Loosen the 3 axle fixing bolts and adjust the position of the axle support.	
Irregular distribution of chemical products (Fertilizers and Microgranulates)	<ol style="list-style-type: none"> 1) Wrong setting of the MINIMAX distributor and/or gear ratios. 2) Product with specific gravity different to those indicated in the table. 3) Use of non-granulated product (dusty). 4) Delivery tube bent sharply and/or blocked by deposits. 5) Obstructed furrower element. 6) Distributor dirty with deposits. 7) Protective grille fitted the wrong way round (after maintenance). 8) Fertilizer on surface. 	<ol style="list-style-type: none"> 1) See distribution table and correct. 2) Protract the values of the table to the new specific gravity. 3) Dusty products are not suitable for this type of distribution. Change product. 4) Check the length, shorten them and straighten them. Cleaning. 5) Cleaning 6) Cleaning 7) Check the position (a gap of about 1 cm must remain on the back). 8) Increase the penetration power of the disc and ballast the seed drill frame. 	
Row marker does not work or works irregularly.	<ol style="list-style-type: none"> 1) Impurities present in the hydraulic system. 2) The row marker arms rise too quickly (damage to the structure). 	<ol style="list-style-type: none"> 1) Clean the exchange valve and the nipple with calibrated hole fitted on the hydraulic cylinders of the row marker arms (where present). 2) Work on the flow regulators to correctly set the system during the upward movement of the row marker arms. 	

7.0 DEMOLITION AND DISPOSAL

This operation is to be carried out by the customer.

Before demolishing the machine, you are advised to carefully check its physical condition and ascertain whether there are any parts of the structure that may be susceptible to structural collapse or breakage during demolition.

The customer should operate in compliance with the environment protection laws in force in his/her country.



CAUTION

The machine demolition operations should be carried out by skilled personnel only, equipped with suitable protective clothing (safety footwear and gloves) and auxiliary tools and equipment. All the disassembly operations for demolition should be carried out with the machine stopped and detached from the tractor.

Before demolishing the machine, you are advised to render harmless all the parts that may be a source of danger and therefore:

- scrap the structure using specialized firms,
- remove any electrical apparatus according to the laws in force,
- collect oils and greases separately, to be disposed of through specialized firms, in accordance with the regulations of the country in which the machine was used.

When the machine is demolished the CE mark should be destroyed together with this manual.

Finally, we remind you that the manufacturer is always available for any and all necessary assistance and spares.

ITALIANO

Dichiarazione di Conformità CE

Dichiariamo sotto la nostra responsabilità che la macchina è conforme ai requisiti di sicurezza e salute previsti dalla Direttiva Europea 2006/42/CE e 2014/30/UE (ove applicabile), come riportato nella "Dichiarazione CE di Conformità" di cui ogni macchina è dotata.

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ENGLISH

EC Declaration of Conformity

We hereby declare under our own responsibility that the machine complies with the safety and health requirements established by European Directive 2006/42/EC and 2014/30/UE (where applicable), as shown in the "CE Declaration of Conformity" provided with every machine.

MASCHIO GASPARDO declines all liability arising from use of the machine on products that do not correspond to European standards.

If the machine should be sold to a third party, the declaration of conformity must be handed over together with it.

DEUTSCH

EG-Konformitätserklärung

Hiermit erklären wir unter unserer eigenen Verantwortung, dass die Maschine den Sicherheits- und Gesundheitsschutzanforderungen der Richtlinie 2006/42/EG und 2014/30/UE (wo anwendbar) entspricht. Dies wird in der „EGKonformitätserklärung“ bestätigt, mit der jede Maschine ausgestattet ist.

Die Firma MASCHIO GASPARDO übernimmt keine Haftung für Schäden, die sich aus der Nutzung der Maschine ergeben, wenn diese an andere Produkte angebracht wurde, die nicht den europäischen Standards entsprechen.

Sollte die Maschine von Ihnen an Dritte weiterverkauft werden, so muss die Konformitätserklärung diese begleiten.

FRANÇAIS

Déclaration de Conformité CE

Nous déclarons sous notre responsabilité que la machine est conforme aux prescriptions de sécurité et de santé prévues par la Directive Européenne 2006/42/CE et 2014/30/UE (le cas échéant), comme il est indiqué dans la « Déclaration de Conformité CE » dont chaque machine est pourvue.

MASCHIO GASPARDO décline toute responsabilité en cas d'utilisation de la machine appliquée à d'autres produits qui ne répondent pas aux normes européennes.

Si vous revendez la machine à des tiers, la déclaration de conformité doit être cédée avec celle-ci.

ESPAÑOL

Declaración de Conformidad CE

Declaramos bajo nuestra responsabilidad que la máquina respeta los requisitos de seguridad y salud previstos por la Directiva Europea 2006/42/CE y 2014/30/UE (cuando proceda), como se indica en la "Declaración CE de Conformidad" que lleva cada máquina.

MASCHIO GASPARDO no se asume ninguna responsabilidad en caso de uso de la máquina, aplicando a otros productos que no responden a las normativas europeas.

En caso de que se ceda la máquina a terceros, la declaración de conformidad debe cederse con la misma.

PORTUGUÊS

Declaração de Conformidade CE

Declaramos sob a nossa responsabilidade que a máquina está em conformidade com os requisitos de segurança e saúde previstos pela Directiva Europeia 2006/42/CE y 2014/30/UE (onde aplicável), como indicado na "Declaração CE de conformidade" com a qual cada máquina é dotada.

MASCHIO GASPARDO não se responsabiliza pelo uso da máquina aplicada a outros produtos não em conformidade com as normativas europeias.

Se a máquina adquirida for vendida a terceiros, a declaração de conformidade deve ser cedida juntamente com a máquina.

NEDERLANDS

EG Verklaring van Overeenstemming

Wij verklaren onder eigen verantwoordelijkheid dat de machine in overeenstemming is met de veiligheids- en gezondheidsvoorschriftenvolgens de Europese richtlijn 2006/42/EG en 2014/30/UE (waar van toepassing), zoals vermeld wordt in de "CE-Conformiteitsverklaring waarmee iedere machine uitgerust is.

MASCHIO GASPARDO stelt zich o generlei wijze aansprakelijk ingevolge het gebruik van de machine dat toegepast wordt op andere producten die niet aan de Europese normen voldoen.

Mocht u de machine aan anderen doorverkopen, dan moet de conformiteitsverklaring met de machine meegeleverd worden.



DANSK

EU-overensstemmelseserklæring

Vi erklærer på eget ansvar, at maskinen opfylder kravene vedrørende sikkerhed og arbejdsmiljø, der er fastsat i direktivet 2006/42/EF og 2014/30/UE (hvor det er relevant), som angivet i "EU-overensstemmelseserklæringen", som hver maskine er udstyret med.

MASCHIO GASPARDO påtager sig intet ansvar for brugen af maskinen, hvis denne anvendes på andre produkter, der ikke overholder de europæiske standarder.

Hvis maskinen videresælges til tredjepart, skal overensstemmelseserklæringen videregives med maskinen.

SVENSKA

Försäkran om EU-överensstämmelse

Vi försäkrar på eget ansvar att maskinen är i överensstämmelse med kraven på säkerhet och hälsa enligt direktivet 2006/42/EG och 2014/30/UE (i tillämpliga fall), såsom anges i den "EG-försäkran om överensstämmelse" med vilken varje maskin är försedd.

MASCHIO GASPARDO tar inget ansvar i samband med användning av maskin som har applicerats på andra produkter som inte uppfyller de europeiska standarderna.

Om maskinen vidareförsäljs till tredje part måste försäkran om överensstämmelse åtfölja denna.

NORSK

EU overensstemmelseserklæring

Vi erklærer under eget ansvar at maskinen er i samsvar med kravene for sikkerhet og helsevern foreskrevet i direktivet 2006/42/EF og 2014/30/UE (der det er aktuelt), som angitt i "EU-overensstemmelseserklæring" som hver maskin er utstyrt med.

MASCHIO GASPARDO påtar seg intet ansvar som følge av bruk av maskinen, anvendt på andre produkter som ikke overholder europeiske forskrifter.

Hvis maskinen videreselges av deg til en tredjepart, må samsvarserklæringen overleveres med maskinen.

SUOMI

Vakuutus EY yhdenmukaisuudesta

Vakuutamme omalla vastuullamme, että kone täyttää direktiivin 2006/42/EY ja 2014/30/UE (tarvittaessa) turvallisuutta ja terveyttä koskevat vaatimukset, kuten ilmoitettu jokaisen koneen mukana tulevassa "Vakuutus EY yhdenmukaisuudesta".

MASCHIO GASPARDO ei vastaa millään tavoin koneen käytöstä muiden tuotteiden kohdalla, jotka eivät vastaa EU-määräyksiä.

Jos myyt koneen kolmansille osapuolille, vaatimustenmukaisuusvakuutus on annettava koneen mukana.

ΕΛΛΗΝΙΚΑ

Δήλωση συμμόρφωσης ΕΚ

Δηλώνουμε, αναλαμβάνοντας πλήρως την ευθύνη αυτής της δήλωσης, ότι το μηχάνημα πληροί τις απαιτήσεις ασφαλείας και υγιεινής που προβλέπονται από την Ευρωπαϊκή Οδηγία 2006/42/ΕΚ μ 2014/30/ΕΕ (Όπου μπορεί να εφαρμοστεί), όπως φαίνεται στη "Δήλωση Συμμόρφωσης ΕΚ" που κάθε μηχάνημα διαθέτει.

Η MASCHIO GASPARDO δεν αναλαμβάνει καμία ευθύνη που προκύπτει από τη χρήση του μηχανήματος, όταν εφαρμόζεται σε άλλα προϊόντα που δεν πληρούν τις ευρωπαϊκές προδιαγραφές.

Αν το μηχάνημα μεταβιβαστεί από εσάς σε τρίτους, η δήλωση συμμόρφωσης πρέπει να μεταβιβαστεί με αυτό.

ČESKY

ES Prohlášení o shodě

Prohlašujeme na vlastní zodpovědnost, že stroj vyhovuje základním požadavkům na ochranu bezpečnosti a zdraví předpokládaným v Evropské Směrnici 2006/42/ES a 2014/30/UE (v příslušných případech), jak je uvedeno v „ES Prohlášení o shodě“, kterým je každý stroj vybaven.

Společnost MASCHIO GASPARDO nepřebírá žádnou odpovědnost za používání stroje na jiné výrobky, které neodpovídají evropským normám.

Pokud prodáte stroj třetím stranám, musí být prohlášení o shodě převedeno společně se strojem.

LIETUVIŠKAI

EG-Konformitāts deklarācija

Prisiimdami atsakomybę, deklaruojame, kad ši mašina atitinka Europos Direktyvoje 2006/42/EB ir 2014/30/UE (jei taikoma) numatytus saugumo ir sveikatos reikalavimus, kaip nurodyta „EG-Konformitāts deklarācija“, kurią turi kiekviena mašina.

„MASCHIO GASPARDO“ neprisiima jokios atsakomybės, jei mašina buvo naudojama prijungta prie kitų gaminių, kurie neatitinka Europos reglamentų.

Jei mašiną parduosite kitam naudotojui, atitiktis deklaracija turi būti perduota kartu su ja.

SLOVENŠČINA

ES Izjava o skladnosti

S polno odgovornostjo izjavljamo, da je stroj skladen z zahtevami za varnost in zdravje, ki so predvidene z evropsko direktivo 2006/42/ES in 2014/30/UE (v priloženih primerih), kot navedeno v „ES Izjava o skladnosti“, ki je priložena vsakemu stroju.

MASCHIO GASPARDO ne prevzema odgovornosti za uporabo stroja z izdelki, ki ne ustrezajo evropskim predpisom.

IČe bi stroj prodali tretji osebi, morate z njim izročiti tudi izjavo o skladnosti.

EESTI KEEL

EÜ vastavusdeklaratsioon

Kinnitame ja kanname vastutust selle eest, et masin vastab Euroopa direktiivi 2006/42/EÜ ja 2014/30/UE (vajaduse korral) sätestatud ohutus- ja tervise nõuetele. Vastavalt EÜ vastavusdeklaratsioonile, millega on varustatud kõik masinad, ei võta.

MASCHIO GASPARDO endale mingit masina kasutamiseast tulenevat vastutust juhul, kui seda kohaldatakse teiste toodetele, mis ei vasta Euroopa õigusaktidele.

Juhul kui müüte masina edasi kolmandatele isikutele, tuleb masinaga ühe anda ka EÜ vastavusdeklaratsioon.

ROMÂNĂ

Declarație de conformitate CE

Declarăm pe propria răspundere că mașina este conformă cerințelor de siguranță și sănătate prevăzute de Directiva Europeană 2006/42/CE și 2014/30/UE (unde se aplică), așa cum se menționează în "Declarația de Conformitate CE" livrată cu fiecare mașină.

MASCHIO GASPARDO nu își asumă răspunderea în cazul utilizării mașinii pentru produse neconforme cu standardele europene.

În cazul vânzării mașinii către o terță parte, declarația de conformitate se va preda împreună cu mașina.

LATVISKI

EK Atbilstības deklarācija

Paziņojam, ka uzņēmamies atbildību par mašīnas atbilstību Eiropas Savienības Direktīvas 2006/42/EK un 2014/30/UE (vajadzības gadījumā) prasībām par drošību un veselību, kā norādīts "EK atbilstības deklarācijā", ar kuru katra iekārta ir aprīkota

MASCHIO GASPARDO neuzņemas atbildību par iekārtas lietošanu, kas izmantota citiem produktiem, kuri neatbilst Eiropas standartiem.

Ja iekārtu tālāk pārdodot trešaj pusei, kopā ar to jānodod atbilstības deklarācija.

SLOVENSKY

ES Vyhlásenie o zhode

Vyhlasujeme na vlastnú zodpovednosť, že stroj vyhovuje základným požiadavkám na ochranu bezpečnosti a zdravia predpokládaným v Evropskej Smernici 2006/42/ES a 2014/30/UE (kjer pride to v poštev), ako je uvedené vo "Vyhlásení o zhode CE" priloženom ku každému stroju.

Spoločnosť MASCHIO GASPARDO neprijíma žiadnu zodpovednosť plynúcu z používania stroja spolu s inými výrobkami, ktoré nie sú v súlade s európskymi predpismi.

V prípade predaja stroja tretím stranám je treba priložiť aj vyhlásenie o zhode.

MALTI

Dikjarazzjoni tal-Konformità tal-KE

Niddikjaraw taht ir-responsabbiltà tagħna li l-magna tikkonforma mal-ftiitijietas-saħħa u ssgurtà stabbiltà mid-Direttiva Ewropea 2006/42/KE u 2014/30/UE (fejn applikabbli), kif irrapportat fid-"Dikjarazzjoni tal-Konformità CE" provduta fuq kull magna.

MASCHIO GASPARDO ma jassumi l-ebda responsabbiltà għall-użu tal-magna, applikat għal prodottii oħra li ma jikkonformawx mal-istandards Ewropej.

Jekk il-magna tinbiegħ mill-għdid lil partijiet terzi, id-dikjarazzjoni ta' konformità trid tiġi trasferita maħħa.

POLSKI

Deklaracja zgodności WE

Oświadczamy z pełną odpowiedzialnością, że maszyna jest zgodna z wymaganiami bezpieczeństwa i zdrowia przewidzianymi przez Dyrektywę Europejską 2006/42/CE i 2014/30/UE (gdzie ma zastosowanie), jak wskazano w „Deklaracji zgodności CE” wydanej dla maszyny.

MASCHIO GASPARDO nie ponosi żadnej odpowiedzialności za użytkowanie maszyny w zestawieniu z innymi produktami, które nie spełniają norm europejskich.

Jeśli będą Państwo sprzedawali maszynę osobom trzecim, należy przekazać im także deklarację zgodności.

MAGYAR

EK megfeleléségi nyilatkozat

Saját felelősségünk tudatában kijelentjük, hogy a gép megfelel az 2006/42/CE és 2014/30/UE (adott esetben) Európai direktívában rögzített egészségügyi és biztonságikövetelményeknek, ahogyan azt a gépekhez mellékelte „EK-megfeleléségi nyilatkozat” is tanúsítja.

A MASCHIO GASPARDO nem vonható felelősségre az olyan használatból eredő károkért vagy sérülésekért, amikor a gép olyan más egységekre kerül felszerelésre, amelyek nem felelnek meg az uniós előírásoknak.

Továbbértékesítés esetén a megfeleléségi nyilatkozatot mellékelni kell az új tulajdonosnak.

БЪЛГАРСКИ

ЕС Декларация за съответствие

Декларираме на своя отговорност, че машината отговаря на изискванията за безопасност и здраве, регламентираните в европейска Директива 2006/42/CE и 2014/30/UE (ако е приложимо), както е посочено в "ЕС Декларация за съответствие", с която е снабдена машината.

Фирма MASCHIO GASPARDO не поема никаква отговорност вследствие на използването на машината за други продукти, които не отговарят на европейската нормативна уредба.

В случай, че препродадете машината на трети лица, декларацията за съответствие трябва да се прехвърли заедно с нея.

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