Read the Operator’s manual entirely before using the machine.
FERTILIZER SPREADER
MOD. FS/PFS

OWNERS’ MANUAL

Read the Operator’s manual entirely before using the machine

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Read the Operator’s manual entirely before using the machine

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1. INTRODUCTION

Fertilizer spreaders are machines used for the distribution of solid, granular fertilizers and seeds in the field. They can be used with tractors of small/medium power.

It is recommended to carefully read this operator’s manual of use and maintenance and follow the recommendations to help ensure safe and efficient operation.

This manual has been written, in order to give the customer the information and safety rules on the machine, as well as use and maintenance instructions that allow you to use the machine to its full potential.

The manual must always be handy, so as to consult it, in order to check the operational cycle. If it gets lost or damaged, it will be necessary to request a new copy.

In case of some difficulties of interpretation on texts or tables, or if the drawings/sketches are not clear enough, please get in touch with the manufacturer or dealer of the machine for clarification through the on proper operation/maintenance.

We are available for a real collaboration, in order to improve the understanding of the whole manual.

2. GENERAL INFORMATION

2.1. USING THIS MANUAL

This manual gives all the information for the use and maintenance of the machine. The optimal performance depends on proper maintenance and to the attention during the use.

Some pictures in this manual show details or accessories that could be different from those of your machine, some components could be removed, in order to assure the clearness of the pictures.

Some signal words are put on the machine and the operator should keep them in a perfect visual condition, replacing them when they are no longer readable.

The symbol on the left, joined to the words under shown:

DANGER!
ATTENTION!
WARNING!

are used in this manual to draw your attention to safety and proper operation work of the machine. Therefore, it is necessary to observe all the written rules.

We recommended to use only original equipment manufactured parts and accessories. Use of after market parts voids any warranty, could be dangerous, and reduces the life of the machine.
2.2. INFORMATION ON THE MACHINE

The models introduced in this manual have been designed and made exclusively allowing the distribution of solid, granular fertilizers and of seeds in the field. The machine is not indicated for being used in different applicants from the agricultural one.

These machines are usually used during the day. If it is required for nocturnal use or with poor visibility, it must use the lighting system of the tractor or of the equipments to which the machine is connected.

A different use, like the above mentioned one is considered improper.

Any arbitrary modification made to this machine relieves the manufacturer from any responsibility for damages or lesions, also serious, that can be caused to the operators, to third parties or to things.

2.2.1. NAME PLATE

On the hopper of every machine, a name plate is fixed showing the model, the number of series and the year of construction of the machine.

When replacement spare parts are required, it is always necessary to refer to the type of machine, the serial number and to the manufacturing year.

2.2.2. CHARACTERISTICS OF THE MACHINE

The strength the steel frame, together with the remarkable life of the plastic hopper, provide the highest quality level of pull type spreaders.

The painting is made by an epoxy varnish with successive backing at 150°C with the application of the primer bath, assuring great protection and a long life of the machine.
The fertilizer spreader FS model is a distributor of fertilizer completely in stainless steel equipped with a spreader disc with four adjustable vanes in four different positions, in order to obtain the maximum spreading precision and uniformity in the distribution, depending on the kind of product that must be spreaded.

![Spreader disc](image)

The feeding of the disc is by gravity through an opening, located on the bottom of the hopper, inside of which a mix/agitator is applied, in order to prevent the lumps of fertilizer to form. A sheet case is placed in front of the disc, in order to prevent the spreading in the front side of the machine. The fertilizer delivery is controlled by properly opening of the orifices in the hopper bottom, through lock devices operated by levers.

![Agitator](image)  ![Lever system](image)

The fertilizer spreader is connected through a gear box (1:1) with gears module 17 in order to provide power to turn the spreader disc. The PFS version has a plastic hopper instead of steel, perfectly interchangeable with all the models of FS version.
2.2.3. **TERMINOLOGY**

A. Regulating lever  
B. Third hitch point  
C. Sheet case  
D. Hitch pin  
E. PTO shaft hitch  
F. Hopper  
G. Steel frame  
H. Distributor vanes

2.2.4. **TECHNICAL DATA**

<table>
<thead>
<tr>
<th>TECHNICAL</th>
<th>FS</th>
</tr>
</thead>
</table>
| Hopper capacity (litres/gallons) (Kg/lbs) | 165/44  
                      | 213/470  
                      | 220/58  
                      | 265/628  |
| Weight of the machine (Kg/bs)        | 44/97  
| Loading height (meters/inches)       | 0.91/36  
| Hopper width (meters/inches)         | 0.90/35.43  
| Spreading width (meters/ft) Granular Crystalline | 12-14/39-46  
                      | 6-7/20-23  
                      | 12-14/39-46  
                      | 6-7/20-23  |
| Power required at 540 rpm (Kw/Hp)    | 8/6  
|                                     | 8/6  |
3. IMPORTANT SAFETY INFORMATION

THE FOLLOWING SAFETY RECOMMENDATIONS ARE TO SAFEGUARD YOURSELVES: THEREFORE IT IS NECESSARY TO READ THEM CAREFULLY, MEMORIZING AND ALWAYS APPLYING THEM.

The present warnings in this manual regard exclusively the allowed uses and reasonably foreseeable. All below instructions must be integrated by common sense and by the experience of the operator’s Indispensable measures to prevent accidents.

The machine must be used by a single operator. It is forbidden the use of the machine to under-ages. All the listed instructions must be carefully respected.

Possible changes on the machine, not preventively authorized by the manufacturer (by written copy), exclude his responsibility.

Check the correct functioning of the machine, before every use.

General advice
- Read carefully this manual before proceeding to start, operate, or maintenance on the machine.
- Watch, in addition to the warnings of this manual, all the safety, accident prevention rules and of general nature.
- The manual must always be handy, so as to consult it, in order to check working cycle and safety information. In case of loss or damage, it will be necessary to ask for a substitutive copy.

ATTENTION!
Any work of maintenance, regulation and cleaning must be done with the machine on the ground (in stable conditions), turning off the tractor engine and removing the key.

- Read carefully the safety signal words applied on the machine and follow the instructions, in case of wear and tear or insufficient readability of the safety signal words, clean them up or replace them, placing the signal words in the right position, as shown in paragraph 3.1.

ATTENTION! WARNING!
The operator, during the period of use, maintenance, repair, handling or storing of the machine, must wear accident-prevention shoes and safety gloves. Moreover, if it is necessary he must wear suitable hearing protections such as earmuffs or earplugs, dust masks and protective glasses.

- During loading phase, there is the danger of powders inhalation produced by fertilizer mixing. It is suggested to use tractors with filters on the ventilation system of the cabin, to use suitable safety systems of breathing, like powder masks or masks with filter.
• The machine is designed for being used by a single operator who, during the use, must always stay in the seat of the tractor.
• Never work with this machine if you are tired, sick or while under the influence of alcohol, drugs or medication.

**DANGER!**
It is forbidden to climb or to transport somebody when the machine is in motion.
Do not place any limbs inside the hopper for any reason.

• Keep the machine cleaned up from foreign bodies (debris, tools, miscellaneous), as they could damage the operations or the operator. Generally, the fertilizers are rather corrosive. For this reason, it is important that any particle of the fertilizer stay in the machine for a long period of time. Clean the hopper and the distributor after each use of the machine.
• If during cleaning operations, air or water with pressure are used, it is necessary to wear glasses and safety masks keeping away possible persons or animals from the machine.
• Before connecting the machine to the tractor or to other self-moving means check that this is in good conditions and that brakes work correctly, especially if you work on uneven.
• Turn off the machine from the tractor only on compact and even ground (with empty hopper), checking that the machine is stable.

**WARNING!**
During transport operations, stocking and employment of the fertilizers, the operators must follow all the label indications and particularly to the content of the written risks and the precaution suggestions.

**ATTENTION!**
The manufacturer does not answer to possible damages caused by an improper and unforeseen use of the machine.

The manufacturer is not responsible in case of:
- improper use of the machine, use by untrained staff;
- serious deficiencies in the routine maintenance;
- changes or not allowed interventions;
- use of non-original or specific replacement parts;
- total or partial inobservance of the instructions;
- inobservance of the common safety rules during work;
- unusual cases.
Connection of the machine to the tractor

- The third hitch point of the tractor and the fertilizer spreader must coincide or must be adapted.
- Make sure that the PTO shaft is engaged in correct way after every linkage operation of the machine and that it does not come uncoupled when the machine is lowered in order to fill the hopper.

**ATTENTION! DANGER!**
Check that the protections of the PTO shaft are complete and in good conditions.

- In case of breaking or deterioration of the PTO shaft protections, please replace them immediately.
- When the machine is not linked to the power unit, the PTO shaft must be placed on the appropriate support.
- The presence of the machine can influence the maneuverability of the tractor, in particular during transport.

**ATTENTION!**
Do not come, for any reason, between the tractor and the fertilizer spreader when the engine is running and the PTO is on.

Operation of the machine

- Check the machine before switching it on. Start to work only if the machine is in perfect working condition.
- Before using the machine, please be sure that all the safety devices are correctly placed and in good state; in case of breakdowns or damages to the protections, please replace them immediately.

**ATTENTION!**
During work, please be sure that for radius of 50 meters there are no people or animals. When you work in proximity of roads or public places, it is ABSOLUTELY necessary to keep away people and to increase the precautions.

**ATTENTION!**
Anybody who comes up to the machine is in a danger area, therefore they become "AN EXPOSED PERSON". The operator must prevent anybody from entering danger area and work with the maximum caution. If somebody enters, please stop the tractor engine immediately.

- Before every use spreader, please always check the wear of the vanes and of the spreader disc. Check that all the components (screws, bolts etc.) are in and tightened.
- The machine must never be unattended when it is moving.
- Always keep the machine in good operating conditions and perform regular maintenance.
ATTENTION!
Please follow all highway laws when travels on road.
During travel on public roads, it is not allowed to empty the hopper.

- Remember that when traveling on public roads, special attention must be done, besides to possible and special regulations noted on the registration book of the tractor, choosing an appropriate speed especially when the street is crowded, winding or sloping.

- If the spreader hides with its shape the back signaling lights of the tractor, it is necessary to put a lights bar and/or some back signaling signs.

- During traveling on the road, please clean tires or the working mechanism, in order to avoid the feather edge with earth or other material.

ATTENTION!
During the moving on the road, the warning flasher, yellow or orange, assembled on the tractor must always be in function also during the day.

ATTENTION!
During transport with raised machine, please always check that the control lever of the rear lifter is focked, in order to avoid the accidental lowering of the machine.
3.1. SAFETY SIGNAL

ATTENTION!

Be sure that the safety labels are readable. Clean them up using a cloth, water and soap. Replace the damaged labels placing them in the right position, as subsequently described.

The safety signs on the machine supply the most important indications: their observance helps your safety.

1. ATTENTION! Before making any operation on the machine, stop the engine of the tractor or of the self-moving means, remove the key, put on the parking brake and read carefully the operator’s manual.

2. ATTENTION! DANGER of entangling and dragging. Do not put hands near the running gear box.

3. ATTENTION! Check the sense of rotation and the number of revolutions (540 rpm) of the tractor power before placing the pto shaft.

4. ATTENTION! DANGER of crushing. Do not stop between the machine and tractor when the tractor engine is running.

5. ATTENTION! DANGER! Possible throwing of material and/or objects, please do not stop or come up to the machine. Keep a safety distance of 50 meters, at least, from the machine.

6. ATTENTION! DANGER of shearing. Do not approach limbs to the spreader disc when the machine is running.

7. ATTENTION! Use the individual Protection Devices, as required.

Placement of safety signals on the machine
4. CONNECTIONS

Before coupling the machine to the 3-point hitch, positioning the safety devices to the tractor, so that it is not possible to involuntary and/or accidental raising and lowering of the arms.

The 3-point hitch of the tractor and of the machine must coincide or must be adapted.

In proximity of arms rods of the 3-point hitch of the tractor, there is the danger of wounding, because of crushing and cutting points.

Do not use the external controls to lift the machine.

4.1. CHECK THE RAISING ABILITY OF THE TRACTOR

**DANGER!**

It is necessary to check the raising ability and the stability of the tractor (before carrying out the connection with the machine) in order to avoid overturning and/or the loss of traction.

Check the raising ability and the stability of the tractor through the following formula and if it is necessary please apply some ballasts on the back.

\[ M_s \leq 0.2T_i + Z(d + i) \]

\[ M \leq 0.3T \]

<table>
<thead>
<tr>
<th>i</th>
<th>Wheels base of the tractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>Distance of load ballast back axle</td>
</tr>
<tr>
<td>s</td>
<td>Bounce of the machine rear axle</td>
</tr>
<tr>
<td>T</td>
<td>Tractor load + 75 kg (operator)</td>
</tr>
<tr>
<td>Z</td>
<td>Load ballast</td>
</tr>
<tr>
<td>M</td>
<td>Machine load</td>
</tr>
</tbody>
</table>
4.2. CONNECTION TO THE 3-POINT HITCH OF THE TRACTOR

ATTENTION!

Every time that somebody comes down from the tractor, it is necessary to disconnect the PTO shaft, stopping the engine, and to put on the parking brake.

For the connection of the machine to the tractor, please operate in the following way:
- Step backwards with the tractor until arriving in proximity of the lower connections of the fertilizer spreader.
- Fix the lower connections of the tractor to the pins of the machine and lock them with the safety plugs.
- Connect the upper linkage of the machine to the 3-point hitch of the tractor putting the appropriate Pin and block the anti-unscrewing device of the 3-point hitch;
- Raise the machine of some centimetres by the ground and operate on the lateral ties of the lifter bars and on the two turnbuckles, in order to block the lateral movement, so as to prevent excessive oscillations during the working phase.

The machine must be positioned, through the raising of the lower connections of the tractor, so that the land distance from the lower extremity of the distributor disc is approximately of 70 cm. To obtain a regular distribution, it is important that the distributor disc is in horizontal position compared to the land.
- After having made these operations, the PTO shaft must be linked to the splined shaft of the gearbox of the machine (covered by a safety cowl) and after to the tractor PTO.

ATTENTION!

The PTO shaft must always be connected at last to the tractor power take off and disconnected at first, when you stop working.

4.3. DRIVE LINE INSTALLATION

Before using the PTO shaft, please consult the use and maintenance manual attached to the PTO shaft.

In case that the PTO shaft, supplied with the machine, is not used, please check that the cowlings of the machines and of tractors are overlapped to the PTO shaft’s shield of 5 cm at least.

For a correct and safe operation of the machine, please use exclusively PTO shafts with CE mark. Please use pto shafts with integral shields.
- Grease periodically, the PTO shaft following the instruction supplied by the PTO shaft manufacturer (see the use and maintenance manual of the PTO shaft).
- Observe the sense of assembly of the PTO shaft, as indicated by the manufacturer and shown on the outer cover of the shield for tractor drawing on the external tube of the PTO shaft towards the power take off of the same tractor.
• Fasten the anti-rotation chains and make sure that the safety anti-removing block (push connecting ring nut) is correctly placed and blocked in the right lodging.

**ATTENTION!**
Check the rotation sense and the speed regulation of the power take-off of the tractor to be at 540 rpm, as the machine is projected for this kind of speed.

The length of the PTO shaft must be adapted to the type of used tractor. When the PTO shaft is released from the PTO of the tractor must always be laid on the appropriate support.

There is no responsibility for the damages caused by an incorrect assembly and use of the PTO shaft.

5. FERTILIZER SPREADER USE

**ATTENTION!**
Before use, please check that gears are adequately greased (see paragraph 5.1).

**ATTENTION!**
During the use of the machine, please be sure that for a radius of 50 meters there are no persons or enters animals. If somebody enters, please stop immediately the tractor engine immediately.

**Suggestions for a correct spreading:**
• Before starting to spread please always test lb/acre ha you need to spread.
• Use a fertilizer in good conditions: a dump fertilizer cannot be spread properly and with uniformity.
• Do not connect the power take-off that operates the spreading disc when the tractor is picked up; low RPM until it idles and afterwards speed up gradually till you can achieve a speed of 540 RPM.
• Open the fertilizer outputs only when the desired speed is achieved.
• Do not spread fertilizer in windy days for improving the uniformity.
5.1. ADJUSTMENTS

It is not possible to have an exact spreading chart for equipments that make use of the centrifugal principle, giving that the distributed quantity depends on the feed speed, on the radius of distribution, on the quality and humidity of the fertilizer and on the roughness of the land.

The fertilizer must always be stored and conserved adequately, so as to keep its physical characteristics unchanged.

It is necessary to set the speed of the spreader, before starting the operation of distribution, trying in the possible limits, to keep it constant for all its duration.

The spreading charts contain the indicative information, in order to determine the quantity to spread in the field; these must be completed by the experience and competence of the operator.

5.1.1. ADJUST THE SPREADING VANES

The fertilizer spreader is delivered with vanes on the disc, position “3” is the ideal position in order to achieve uniformity in spreading with most of fertilizers available for sale.

In case the spreading width is not uniform (more fertilizer on one side than the other one) move the vanes until you achieve the right adjustment.

Usually you only need to move two opposite vanes to achieve good results.

If this correction is not enough make the same adjustment on the other two opposite vanes.

For instance, if you notice more fertilizer spread on the left side (as regards the tractor’s movement), move two opposite vanes in position “4”.

If after this adjustment the spreading width is not yet uniform, set the two opposite vanes in position “4” as well.

If there is more fertilizer spread on the spreading is higher on the right side, set the vanes in position “2” or “1”.

Regulation of the distributor vanes
The fertilizer spreading is regulated through the regulation lever that moves the opening section on the bottom of the hopper.

In order to carry out the regulation, after having consulted the spreading table, according to the type of product to spread and to the spreader speed, it is necessary to move the lever "A" along the graduated scale "E" and blocking it in the chosen position with the pin "D".

Before using the spreader make sure that the shutters could close the holes completely with lever in "closed" position. Otherwise adjust it through the nuts.

In order to spread from both sides (ref. I), "A" and "B" levers must be in the same position, connected through grip handle "C"

In order to carry out the spreading only through the left side (ref. II) it is necessary to disconnect the two levers removing the "C" grip handle, to set the lever "A" in the chosen position, given by the spreading chart, and to bring the lever "B" towards the higher part (position 1) in order to close the shutter of the left side.

In order to spread only on to the right side (ref. III) you have to move the lever "A" up (in position 1) and regulate the quantity to spread with the lever "B".

Distribution on right side (ref. III) Distribution on left side (ref. II)
5.2. HOPPER LOAD

It is advised not to carry out the hopper loading manually but using a loader or suitable mechanical means.

**ATTENTION!**
The hopper must be loaded only after having hitched the spreader to the tractor.

Do not drive for very long distances with a full load and do not put full bags on the fertiliser loaded in the hopper during the transport to the field or during the working, in order not to overload the capacity of the machine and to compress the fertiliser.

**WARNING!**
During the operations of transport, stock and use of fertilisers, the operator must be behaved in compliance with the indications on the label of the product and in particular with the content of the sentences of risk and the precaution advice.

5.3. SPREADING OF THE FERTILIZER IN THE FIELD

**ATTENTION! - WARNING!**
The operator, during the period of use, maintenance, repair, transport or storing of the machine, must wear accident-prevention shoes and safety gloves. If it is necessary, one will have, moreover, to wear headset, mask and glasses.

After having hitched the machine to the tractor and having carried out the necessary regulations, it is possible to begin to work.

**ATTENTION!**
Before disconnecting the spreader and before every operation of maintenance and regulation, set in action the parking brake, turn off the engine, remove the ignition key from the dashboard and wait for all moving parts to stop.
Engage the axle with the pin, so that the spreader can be set in action by the turning wheels, only when the spreading operation has to be carried out. There are various ways to spread the fertilizer in the field. One of the simplest methods is, as follows:

- Position the spreader at the beginning of the field you intend to fertilize, to a distance (D/2) that is the half of the working width that is used (point 1);
- Drive in the field, distributing the fertilizer on all the perimeter;
- Stop the tractor at one distance (D) from the point 1, equivalent to the set working width (point 2);
- Begin the spreading proceeding in line, straight to point 3. Turn the tractor and drive a D distance, equal to the working width (point 4);
- Repeat such procedure until all the plot is covered.
5.3.1. Spreading Mistakes

Mistakes of use
- Drive speed;
- Incorrect spreading width;
- The spreading disc is not in a horizontal position compared to the land;
- Drive speed is different to those suggested by the spreading tables, or not suitable for that particular type of fertilizer;
- Drive mistakes (lack of superimposition of the spreading surfaces);
- Lack of cleaning of distributing discs and the gates opening.

Mistakes due to the fertilizer
- Fertilizer of poor quality. Wet or excessive humid fertilizer;
- Incorrect fertilizer composition or it does not correspond to what was declared from the vendor;
- Presence of excessive fertilizer lumps or with particular great dimensions that influence negatively on the yield of the spreading;
- Foreign body in the fertilizer.

Mistakes due to the spreader
- Spreading exits clogged;
- Parts of the spreading disc worn away or damaged.
6. GENERAL MAINTENANCE

The ordinary maintenance criteria we suggest, are based on the company experience and on the advices and suggestions from our customers.
Such criteria are not exhaustive can be further integrated with the collaboration of the customers that we thank in advance.
A good ordinary maintenance keeps the operating costs of the machine low and provides an integral exploitation of its potentialities.

**ATTENTION!**
Whichever work of maintenance, regulation and cleaning must be carried out with the machine on the ground (in stable conditions), engine turned off, handbrake set, key of ignition off and removed from the ignition board.

In case of damage, the operator must stop the machine immediately, assess the entity of the problem and proceed with eventual actions on the machine.
If pressure water or compressed air is used for the cleaning of the machine, it is necessary to protect oneself with proper glasses or protection masks and to remove eventual persons or animals near the machine. Do not use inflammable fluids.

**ATTENTION!**
For the maintenance operations, always use the fit Individual Protection Devices (accident-prevention footwear and gloves) and to prepare all the accident-prevention steps for the type of operation in course.

Every 8 hours of effective job, check the tightness of all nuts and bolts.

In case of anomalous vibrations, verify the status of wear of the vanes of the spreading disc, the corrected tightness of all the nuts and bolts and the lubrication of the gear box.
The excessive vibration of the machine, besides the specific annoyance, is dangerous and damaging for the entire structure subjecting the mechanical parts to more and more stress cycles compared to the advice pictures.
As regards particular actions that the user does not know or regarding broken parts replacing which are not shown in this manual, it is necessary to consult specialized personnel, making use of the assistance service by the manufacturer or its distributors.
6.1. LUBRICATION

Before every use and after every 8 hours of effective work, carry out the greasing of the machine.

It is important that the greasing nipples are well cleaned from mud or other residuals before using them for inject lubricating grease. Lubricate with lithium grease the points, shown in the picture.

6.2. REPLACEMENT OF THE SPREADER VANES

In case the spreading vanes of the disc brake get damaged, it is necessary to replace them with new ones.

Unscrew the nut and replace the damaged vane. The (nuts and bolts) must be of the same type of those described from the manufacturer.
6.3. STORAGE

It is important not to wait before using the machine to carry out repairing and maintenance. To repair and to replace the parts that are broken or damaged before the storage, in order to always have the machine ready for use.

To store the machine in a sheltered place away from atmospheric agents and protect it in order to avoid deteriorations.

The fertilizers are generally corrosive. For this reason it is important that no particles of fertilizer remains on the machine for long period of time.

Before storing the machine for long periods, it is opportune to operate as follows:
- wash accurately the machine and the inside of the hopper;
- to carry out a general control by sight of the machine in order to check eventual structural damages, to find eventual deep abrasions on the paint;
- to check that the safety signals are presents in their positions, that they are integral and readable, and in case they are deteriorated or unreadable, carry out immediately their substitution (see par. 3.1);
- to grease all the mechanical parts (to see par. 5.1);
- to store, if possible, the machine in a sheltered place.

6.4. REPLACEMENT PARTS

For the replacement of parts of the spreader Mod. FS/PFS, the customer must use only original parts, ordering them directly from the manufacturer of the machine or authorized dealers.

Carrying out the order, it is necessary to specify what the identification label brings, in particular:
- serial number;
- model;
- manufacturing year;
- number of frame.
7. WARRANTY

All the manufactured machines, shown in this manual, are sold with one year warranty valid for a year from the date of purchase, subjected to the following clauses:

♦ In case a defect in a part is found (or in some parts) during a period of a year from the delivery date of the machine to the customer, the dealer commits himself to verify the defective part and, in case in the course of this verification it is assessed a defect which is due to the materials or to the manufacturing, he will repair the defective part or, to his discretion, to replace it free of charge.

♦ The customer, at the time of purchase, must confirm that the machine has not been damages during the transport, that is in compliance with the one ordered and that is complete with all the accessories received from the purchase contract. On the contrary, he must send a written claim within 8 days from its acceptance.

♦ The warranty is not applied in the following cases:
  a) normal wear;
  b) breaches or breaks deriving from negligence or due to the use of the machine in different conditions of the ones permitted;
  c) in case the machine has got unauthorized modifications (in written document) from the manufacturer or if unoriginal spare parts and accessories were mounted;
  d) when the serial number of the machine has been modified, removed or cancelled.

In any case, the purchaser has to face the wear or parts substitution, the labor, transport costs, the costs and the value-added tax.

Every responsibility for direct or indirect damages is declined when they are due to breaks or to the wear of the parts, the loss for those deriving from the proper or improper use of themselves.

♦ Defects that are not clearly attributable to the material or to the manufacturing, will be checked by Manufacturers’ Quality Dept. If the claim would turn out unjustified, all the repair costs and/or substitution of the damaged parts will be debited to the purchaser.

♦ All the parts will be billed at the shipment time and at the eventual acknowledgment of the guarantees (previous receipt and check of the damaged parts). This will give the right to get the credit.

The manufacturer or its retailer will not be responsible of the loss, neither of the damage, whichever it is and in whichever way it happened during the transport.

The aforementioned commitment refers to the person of the customer and it can not be yielded or be transmitted to others.
<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Description</th>
<th>Part #/Tic #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M10 Zinc Hex Nut</td>
<td>204N</td>
</tr>
<tr>
<td>2</td>
<td>10mm Zinc Lock Washer</td>
<td>198N</td>
</tr>
<tr>
<td>3</td>
<td>10mm Zinc Flat Washer</td>
<td>194N</td>
</tr>
<tr>
<td>4</td>
<td>M10 X 25 Zinc Snap Head Bolt</td>
<td>133B</td>
</tr>
<tr>
<td>5</td>
<td>M8 X 45 Zinc Hex Head Bolt</td>
<td>134B</td>
</tr>
<tr>
<td>6</td>
<td>M8 Zinc Self - Locking Nut</td>
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</tr>
<tr>
<td>7</td>
<td>Agitator</td>
<td>676M</td>
</tr>
<tr>
<td>8A</td>
<td>PFS Plastic Hopper Tub (5 bu)</td>
<td>674P</td>
</tr>
<tr>
<td>8B</td>
<td>Metal Hopper Tub (5 bu)</td>
<td>674M</td>
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<td>9</td>
<td>M8 X 16 Hex Head Bolt</td>
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<tr>
<td>10</td>
<td>Spreading Disc (Spinner)</td>
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<tr>
<td>11</td>
<td>Fan Vane</td>
<td>671M</td>
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<td>8mm Zinc Flat Washer</td>
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<td>14</td>
<td>M8 Zinc Hex Nut</td>
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<td>15</td>
<td>Frame</td>
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<td>16</td>
<td>M8 X 20 Zinc Hex Head Bolt</td>
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<tr>
<td>17</td>
<td>Cat # 1 Pin (Link Pin &amp; Nut)</td>
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<td>18</td>
<td>M12 X 35 Zinc Hex Head Bolt</td>
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<td>4.5mm Zinc Split Pin</td>
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<tr>
<td>20</td>
<td>Left Shutter</td>
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</tr>
<tr>
<td>21</td>
<td>Right Shutter</td>
<td>767M</td>
</tr>
<tr>
<td>22</td>
<td>Right Tie Rod</td>
<td>768M</td>
</tr>
<tr>
<td>23</td>
<td>Left Tie Rod</td>
<td>769M</td>
</tr>
<tr>
<td>24</td>
<td>Left Lever</td>
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<tr>
<td>25</td>
<td>M10 Zinc Self - Locking Nut</td>
<td>771M</td>
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<tr>
<td>26</td>
<td>Right Lever</td>
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<td>Lever Lock Knob</td>
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<td>8 X 40 Spring Pin</td>
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<td>Gearbox (Steel Housing)</td>
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<td>Complete PTO Assembly</td>
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<td>Hopper Washer</td>
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<td>32</td>
<td>Rubber Sleeve</td>
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