



ROTARY TILLER "B" SERIES

Operation, Service & Parts Manual



Carefully read this manual
before using the machine

June 2006

No part of this manual shall be reproduced, copied or disseminated by any means, without manufacturer prior authorization in writing.
manufacturer reserves the right to make any necessary changes without giving prior notice, in order to optimize the quality and safety features and does not commit itself to updating this manual every time a change is made.

This booklet provides a thorough and accurate description of the instruction and maintenance activities to be carried out on the tiller you purchased. We congratulate you on your choice and urge you to thoroughly familiarize yourself with and follow the instructions contained in this manual. This will assure you a long, safe and trouble free working life for your tiller.

The Manufacturer shall not assume any responsibility should problems arise as a result of lack of compliance with the instructions and/or operator's negligence.

The manual is divided in chapters and paragraphs and the pages are numbered, thus offering accurate and precise information.
The requested information can be easily found by searching the key words or referring to the index.

Date of Purchase: _____

Model Number: _____

Serial Number _____

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GENERAL INFORMATION

GENERAL INFORMATION

SYMBOLS

This booklet contains three "safety pictograms" which highlight the relevant danger levels or important information:



It draws the operator's attention to special situations which may jeopardize people's safety.



It draws the attention to situations which unfavorably affect the machine efficiency, but not people's safety.



It is used for general information, when people's safety or the efficiency of the parts are not at risk.

SAFETY LABELS

SAFETY LABELS

The safety labels and information on the machine (picture 1, 2 and 3), must be complied with. Failure to comply with these warnings may result in severe injuries or even death. Make sure that the labels are always present and legible; should this not be the case, contact your nearest Gearmore dealer to request replacements

1



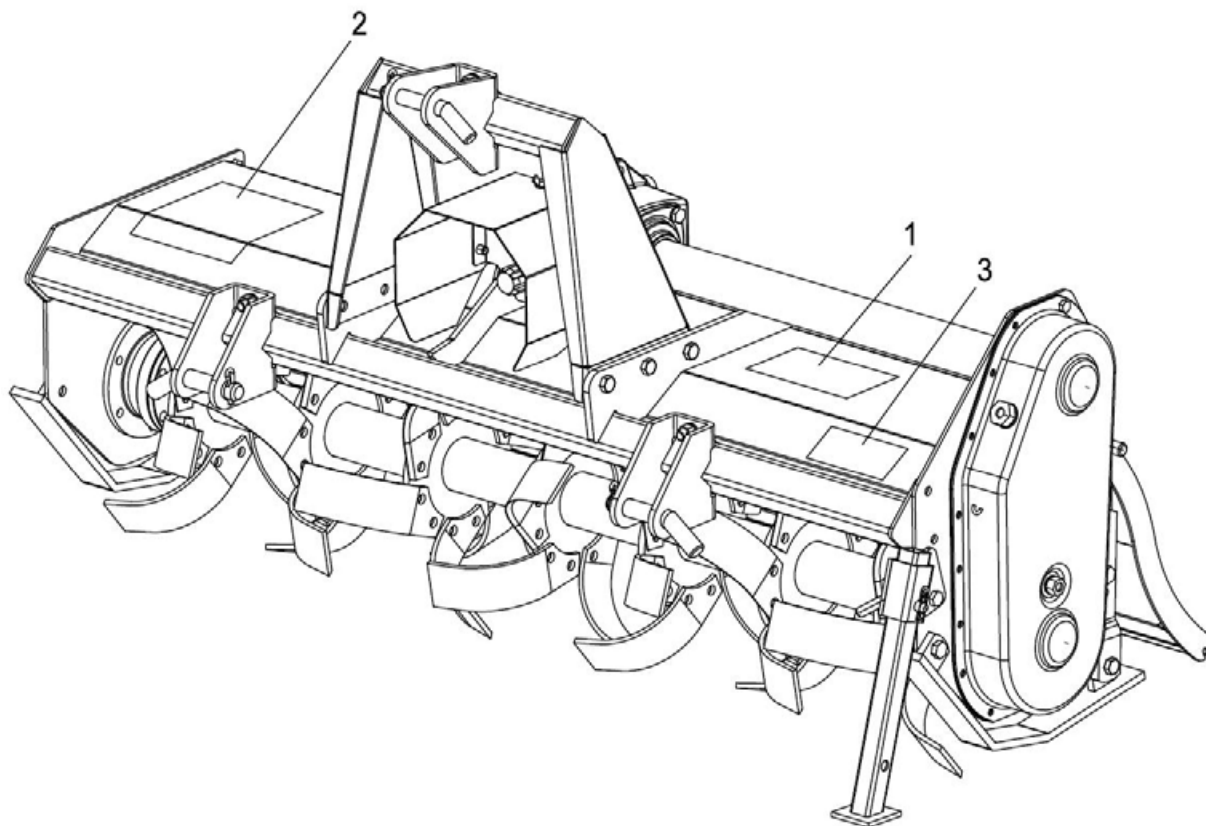
3



2



TECHNICAL DATA

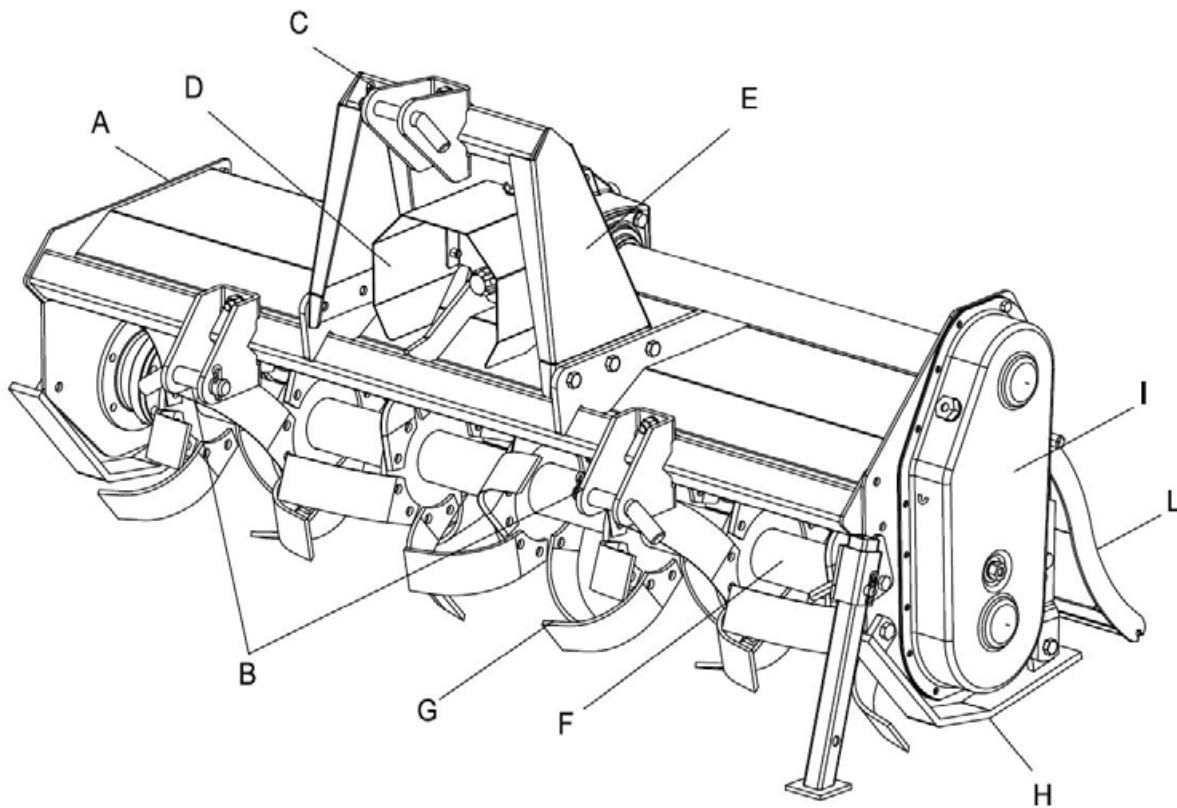


TECHNICAL DATA

| Model | Tilling Width | | HP | Weight (Approx.) | | Working Depth (Max) | | Side Drive | | Blades (Qty) | Blades | |
|-------|---------------|--------|-------|------------------|-----|---------------------|--------|------------|------|--------------|-----------------|--------|
| | cm | Inches | | kg | lbs | cm | Inches | Chain | Gear | | Blades/ /flange | Shape |
| B | 100 | 39 | 15-35 | 130 | 290 | 18 | 7 | * | | 30 | 6 | Curved |
| | 120 | 47 | 15-35 | 145 | 323 | 18 | 7 | * | | 36 | 6 | Curved |
| | 140 | 55 | 15-35 | 175 | 389 | 18 | 7 | * | | 42 | 6 | Curved |
| | 150 | 59 | 15-35 | 185 | 411 | 18 | 7 | * | | 42 | 6 | Curved |

MAIN PARTS TERMINOLOGY

MAIN PARTS TERMINOLOGY



- A) Main Frame
- B) Lower Hitch Brackets
- C) Top Link Bracket
- D) PTO Guard
- E) Top Mast
- F) Rotor
- G) Tines
- H) Skids
- I) Transmission case
- L) Rear Board



When asking for information or technical service, always specify the machine type and width.

INFORMATION

IDENTIFICATION PLATE

An identification plate is placed on each tiller and is structured as follows:

Serial number (sample):



RECOMMENDED USE

The tillers described in this instruction and maintenance manual, have been designed explicitly to till the land. Any other use jeopardizes the operator's safety and the machine integrity.

INAPPROPRIATE USE

The tillers shall not be used as follows:

- Connected to vehicles which do not have a suitable power or weight.
- Without being properly installed by securing the hitch brackets to all three points of the tractor lift unit.
- Tilling of extremely stony or unsuitable ground.
- In close proximity to person/s when power is engaged.
- Do not stand or step on the equipment when it is being operated or transported.
- Do not operate the machinery while wearing unsuitable (loose fitting) clothing.

TORQUE SPECIFICATIONS

For correct hardware tightening on the tiller, we suggest the use of suitable torque wrench and the applicable torque as listed in the table below:

M-THREADED SCREW/BOLTS
Bolt grade

| Thread | 8.8 | | 10.9 | |
|--------|-----|-------|------|-------|
| | Nm | Lb-ft | Nm | Lb-ft |
| M6 | 11 | 8.5 | 17 | 12 |
| M8 | 28 | 20 | 40 | 30 |
| M10 | 55 | 40 | 80 | 60 |
| M12 | 95 | 70 | 140 | 105 |
| M14 | 150 | 110 | 225 | 165 |
| M16 | 240 | 175 | 305 | 225 |
| M18 | 330 | 250 | 475 | 350 |

SAFETY

SAFETY IN THE WORKPLACE

Most of the accidents, which occur while the operator is using the machine or the equipment or carrying out maintenance and repair activities, are caused by the non-compliance with the main safety requirements.

Therefore the potential risks must be fully understood and special attention must be paid to the activity which is being executed.

**If potentially dangerous situations are known,
accidents can be prevented!**

USER'S REQUIREMENTS

The equipment user must have the following:

Physical: good sight, co-ordination and capability to execute all instructions in a safe manner.

Mental: the users must understand and follow the prescribed norms, rules and safety measures. They must be careful, pay attention to their own safety and the safety of other people and act properly and in a responsible way.

Training: the users must read and understand this manual, its pictures and charts, and the identification and hazard plates. They must be specialized, trained and qualified on any use and maintenance activities.

WORK CLOTHING

The following clothing and personal protective equipment must be used when working and executing maintenance and repair activities:

- Overalls or any other comfortable outfit; make sure that they are not too loose since they might be caught by moving parts.
- Protective gloves.
- Goggles or mask to protect the eyes and face.
- Safety helmet.
- Safety shoes.



Make sure that the personal protective equipment is properly stored and complies with the laws in force.

GENERAL SAFETY NORMS

The features of the area where work is taking place must always be taken into consideration:

- Do not stand in the working radius of the operating machinery or any other machine accessories when the equipment is running.

PREPARATION

Prepare the work:

- Do not drink alcohol, take drugs, or any other substances which may affect the your ability to use the equipment before or when working.
- Make sure that there is sufficient fuel in the tractor to prevent the machine from stopping during work.
- Do not use the equipment under unsafe conditions, e.g. do not make temporary repairs just to start or keep working; do not work at night if the area is not well illuminated.

When working or executing maintenance activities, remember:

- The labels and stickers providing instructions on the use of the equipment or information on dangers must not be removed or hidden, and must be legible.
- Do not remove the safety devices, covers and safety guards, unless maintenance activities are being carried out. If the safety devices must be removed, turn the engine off, remove them correctly and re-install them before turning the tractor on.
- Do not lubricate, clean or adjust moving parts.
- Use the appropriate tools to execute maintenance or adjustment activities on the equipment.
- Do not use damaged or unsuitable tools, e.g. pliers rather than wrenches etc.
- Prior to carrying out activities on hydraulic lines under pressure, or disconnecting their components, make sure that the line is no longer under pressure and that it does not contain any hot fluids.
- Check all the fittings and make sure that they are well connected before supplying pressure to the hydraulic lines.
- Make sure that no tools, clothes or any other materials are left in areas where moving parts are present when the maintenance and repair activities are completed.
- Do not give directions and make signals at the same time during a maneuver. Maneuver directions and signals must be given from one person only.
- Do not unexpectedly call an operator, if not necessary. Do not startle the operator, e.g. by throwing objects.
- Pay attention to people in the vicinity of the work area, especially children!
- Make sure that nobody is standing in the working range of the equipment.
- Do not use the equipment to lift people.
- When the equipment is not needed, turn the engine off, leave the vehicle on a flat surface, with the first gear and the parking brake engaged. Disengage the power take off.
- Do not execute any cleaning, lubrication, repair or adjustments when the engine is running and the equipment is in the raised position.
- Do not work on steep slopes, if the stability of the vehicle can be jeopardized.

Manufacturer shall not assume any responsibilities if these instructions are not strictly followed.

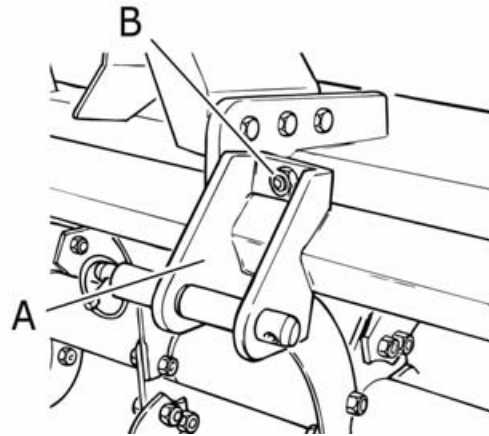
SET-UP

ATTACHMENT TO THE TRACTOR

Carefully read this instruction manual and the manuals of the tractor and PTO shaft manufacturer. All tillers are built to be attached to any tractor equipped with a three point hitch of the correct category and with suitable ball ends.

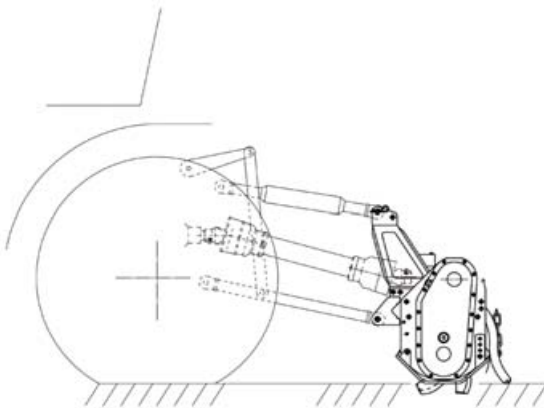
Before attaching the equipment to the tractor, make sure that the ground is smooth and flat and that nobody is standing between the tractor and the tiller; slowly move the tractor towards the tiller by aligning the tractor lower lift arms with the two tiller coupling side pins; turn the engine off and pull the brake.

It is possible to adjust the attachment position releasing the bolts **B**. (picture 1) and modifying the position of the plates **A**. Tighten the bolts after making any adjustment.



picture 1

After adjusting the couplers, connect the lower lift arms by removing the lynch pins from the pins located on the hitch brackets, inserting the lift arm pins through the hitch block and ball ends and secure them by means of the pins which were previously removed.



picture 2

Connect the tractor top link to the top mast by removing the pin located between the two plates, inserting the top link and securing it by means of the pin.

Adjust the top link so that the upper part of the frame is parallel to the ground. Block all the linking parts by means of the sway chains or arms.

Make sure that the central unit axis (gearbox assembly) is parallel to the ground, thus minimizing the stresses on the power take off and increasing the working life of the equipment.

 **Caution**

After executing all the above-mentioned activities, make sure that all the nuts and bolts are tightened.

SET-UP

PTO SHAFT CONNECTION

Before installing the PTO shaft make sure that the RPM rating and the direction of rotation match those of the tractor. Carefully read the PTO shaft and tractor instructions.

Furthermore, accurately read the instructions of the manufacturer of the PTO shaft and of the tractor.

Before starting any activity, make sure that the guards are installed on the power take off of the tractor and PTO shaft. Make sure that they cover the PTO shaft throughout its length.

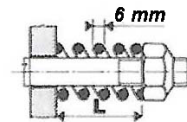


Caution

When fully extended, the plastic pipes must overlap by at least 1/3 of the length of the pipes (LT). When retracted, the minimum acceptable clearance is 2".

SLIP CLUTCH DRIVE SHAFT

This tiller has a drive shaft with a slip clutch, which has been calibrated for a certain overload. To adjust the clutch, tighten or loosen bolts equally. Don't over-tighten or clutch will lock and not slip under stress, which could cause damage during operation. The clutch assembly should get warm (normal temp. 104-122°F) under normal operation. If the clutch gets extremely hot, this is a sign of slippage. If the machine sits for an extended period of time with no usage, the bolts should be loosened and the PTO engaged. This will allow the clutch discs to become free again. After a few seconds, shut-off the tractor and retighten bolts equally. Recheck clutch assembly for temperature after using in tilling application. If it is too hot, the bolts need tightening. If it is too cool, loosen bolts.



WORKING LENGTH mm (in.)

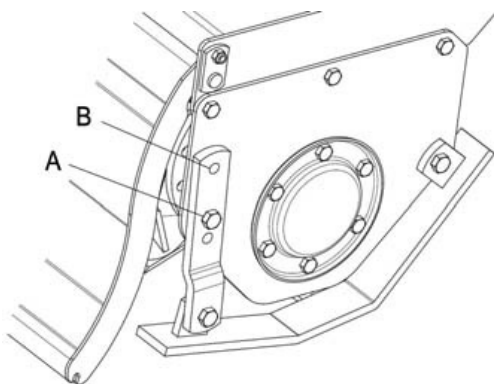
| SPRING HEIGHT | Nm |
|-----------------|------|
| FF-2 | |
| L=29.5 (1.161") | --- |
| L=29.0 (1.142") | 610 |
| L=28.5 (1.122") | 750 |
| L=28.0 (1.102") | 900 |
| L=27.5 (1.083") | 1050 |
| L=27.0 (1.063") | --- |
| L=26.5 (1.043") | --- |

WORKING DEPTH ADJUSTMENT

The working depth of the equipment depends on the position of the lateral skids. If the skids are raised, the working depth increases; if the skids are lowered, the working depth decreases.

IMPORTANT: Make sure that the skids are set at the same height on both sides.

picture 3

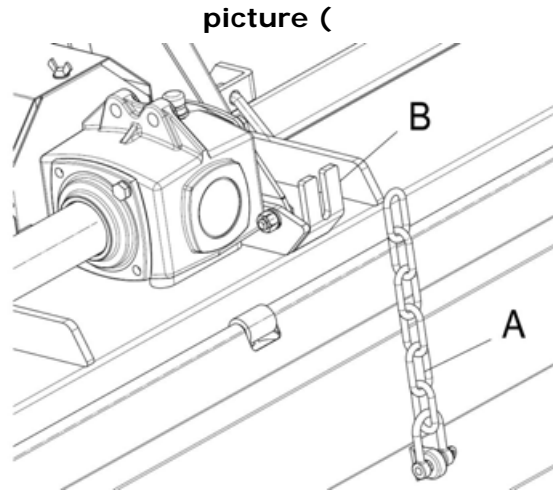


To adjust the working depth, loosen and remove nut **A** (picture 3) and adjust the skid height according to the holes **B**. When the adjustment is completed, tighten the screws.

SET-UP

LEVELING BOARD ADJUSTMENT

The height of the rear leveling board can be adjusted, making the ground more compact and smooth. Release the chain A from the bracket B (picture ()), and re-engage it according to the desired working height.



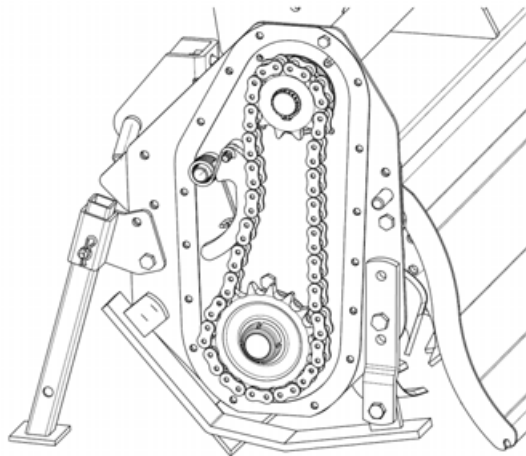
 **Danger**

These activities must be carried out with the engine off, the power take off disengaged and the hand brake applied. If needed, lift the equipment and place it on supports, thus preventing any injuries that might be caused by a sudden fall of the equipment.

CHAIN ADJUSTER

The B tillers are equipped with a self-loading chain drive system (picture)). The setting of the system is made during assembly; any adjustments when using the machines, must be carried out by an authorized dealer or work shop.

picture)



START UP

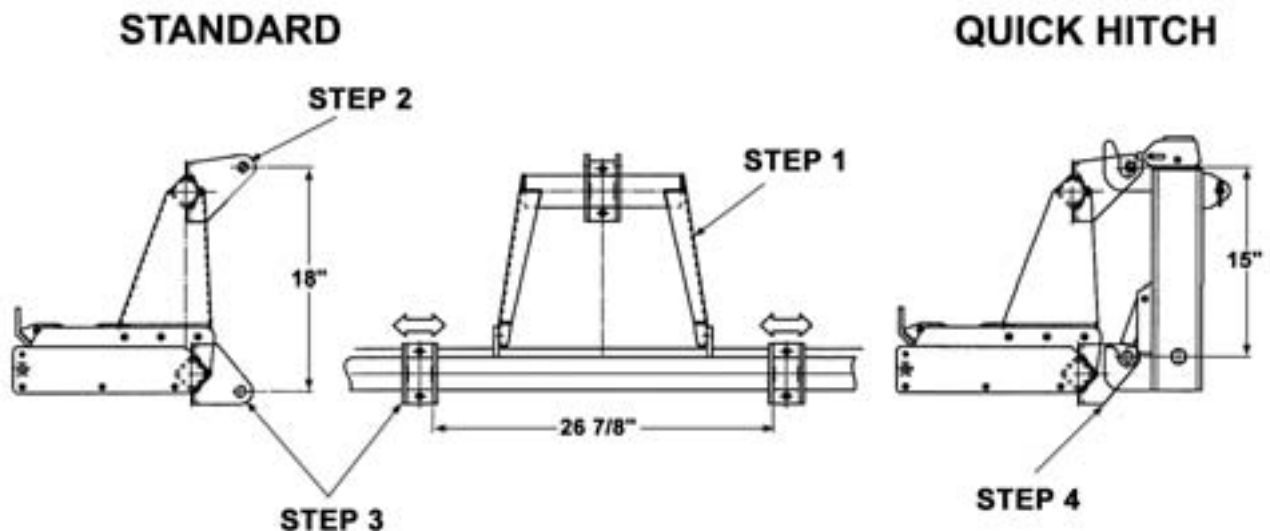
After carrying out these adjustments, the equipment is ready for use. When at the working area, do not start the power take off with the tiller in working position in the ground. Be sure to lift it by a few centimeters using the tractor lift. Start the engine, engage the power take off, lower the equipment to its working position and start.

SET-UP

ASSEMBLING B SERIES 3-POINT HITCH

- STEP 1:** Install the top mast to the tiller main frame as shown.
- STEP 2:** Install the top link bracket to the top mast with the hole in the highest position as shown.
- STEP 3:** Install the bottom link brackets with the holes facing down. This gives you the **standard** A.S.A.E. dimension of 18" if the tractor does not have a quick hitch.
- STEP 4:** If the tractor has an A.S.A.E. quick hitch, place the bottom brackets with the holes in the high positions to obtain the correct spacing to tractors with **quick hitches**.

NOTE: It is necessary to order a 3 bushing kit - part number 883303 - to make the tiller A.S.A.E. quick hitch compatible.



MAINTENANCE

ROAD TRANSPORT

With reference to road transport, follow local traffic regulations.

SHUT DOWN

The following activities are recommended if the tiller will not be used for a long period of time:

- 1 Clean and dry the equipment.
- 2 Inspect the equipment and replace the damaged or worn parts if necessary.
- 3 Tighten all the screws and nuts.

MAINTENANCE

Maintenance is crucial for the working life and efficiency of any agricultural equipment. If the equipment is properly maintained and operated, a long working life and operator safety are assured.

The maintenance intervals indicated in this booklet are provided as a mere reference and are related to normal working conditions; changes may occur depending on the type of activities, environmental dust, seasonal factors, etc.



Caution

- Before injecting lubricating grease into the grease fittings, clean the fittings to prevent mud, dust, or any other foreign matter from contaminating the grease and reducing the lubrication effect.
- When adding or changing the oil, use the same type of oil to prevent mixing oils with different features.
- All maintenance activities must be carried out with the tiller resting horizontally on the ground.
- After using the equipment for a few hours, make sure that all the bolts (especially tine bolts) are tightened; regularly check all the machine guards.

FIRST CHECK

- After 50 working hours, change the oil in the gearbox and make sure that all the screws and bolts are tightened.

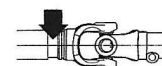
EVERY 8 WORKING HOURS

- Grease the PTO shaft crosses.

EVERY 20 WORKING HOURS

- Grease the PTO shaft inner drive tube.

20h

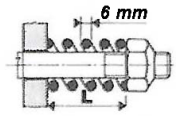


Inner tube
Tube intérieur

MAINTENANCE

EVERY 50 WORKING HOURS

- Remove the cover (A - pict. 6, pg. 13) and grease the rotor bearing inside.
- Check the oil level in the case/bevel gear pair (A - pict. 7, pg. 13) by removing gearbox's upper oil plug (A - pict. 7, pg. 13); oil level should be contained between the 2 nicks of MIN & MAX of the dip stick oil plug (B - pict. 7, pg. 13). If needed add SAE EP 80W90 oil.
- Check the oil level in the side transmission (A - pict. 8, pg. 13). If needed add SAE EP 80W90 oil.
- Make sure that all the screws and bolts, especially on the blades, are tightened.
- Check slip-clutch spring tension (1050 Nm).

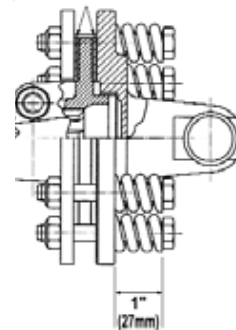
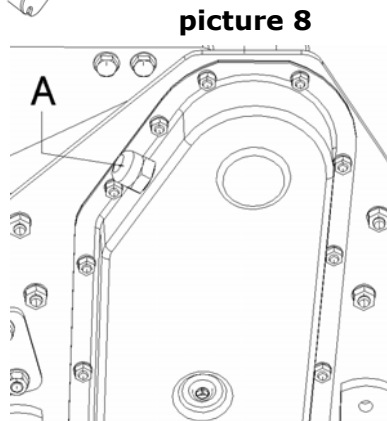
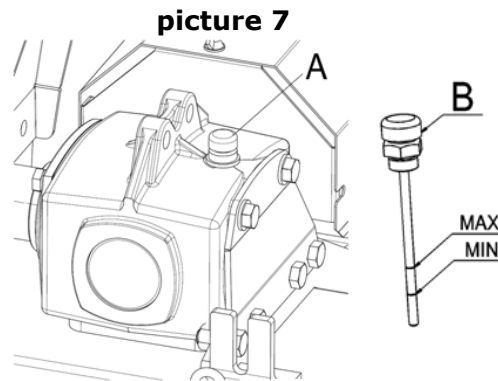
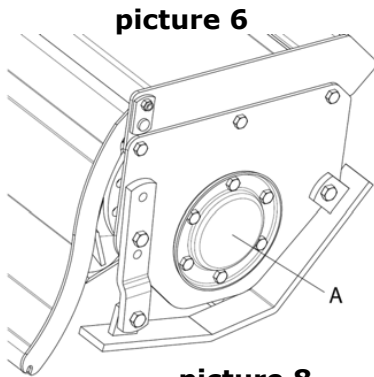


WORKING LENGTH mm (in.)

| SPRING HEIGHT | | Nm |
|---------------|----------|------|
| FF-2 | | |
| L=29.5 | (1.161") | --- |
| L=29.0 | (1.142") | 610 |
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| L=28.0 | (1.102") | 900 |
| L=27.5 | (1.083") | 1050 |
| L=27.0 | (1.063") | --- |
| L=26.5 | (1.043") | --- |

EVERY 500 WORKING HOURS

- Change the oil of the case/bevel gear pair, side transmission and rotor support; use SAE EP 80W90 oil. Contact the closest dealer for this maintenance activity.



Normal Spring Tension of Slip Clutch

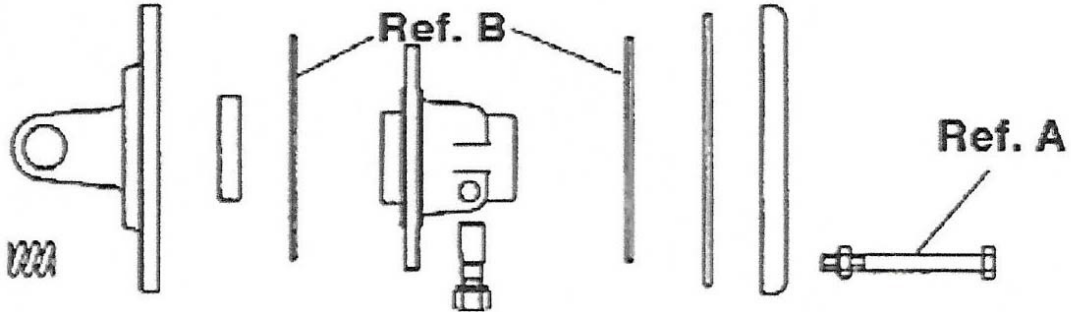
Caution

The old oil must be disposed of in compliance with the local laws where these activities are carried out; do not spill or dispose of waste oil on the ground.

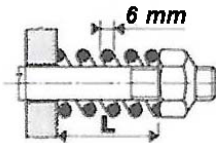
Danger

The maintenance activities must be carried out with the engine off, the power take off disengaged, the parking brake engaged, and the equipment placed on the ground.

REPLACING CLUTCH LININGS



1. Mount clutch assembly in vise.
2. Remove all bolts and nuts (**Ref. A**).
3. Disassemble all components.
4. Check the condition of all parts, friction plates especially.
5. Replace clutch linings (**Ref. B**).
6. Reassemble the components, install spring with their corresponding bolts and nuts.
7. Tighten nuts following an alternating cross pattern until reaching a height of 27.6 mm (1.083").
8. Check that the height is the same for all springs.
9. Reinstall driveline, making sure all shields are in place.



WORKING LENGTH mm (in.)

| SPRING HEIGHT FF-2 | Nm |
|-----------------------|------|
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SPARE PARTS

BLADES REPLACEMENT

To assure the optimum efficiency of the machine, make sure that the tiller blades are in a good working condition and that their bolts are tightened; replace them if they are broken or bent. The new parts must be installed in the original position.

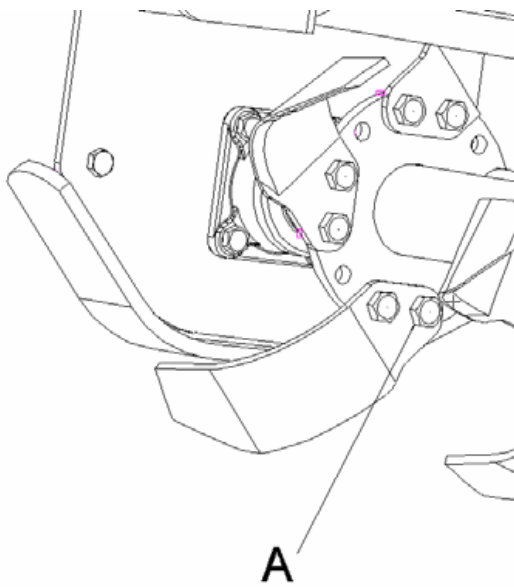


Before replacing the blades, turn the tractor engine off, pull the parking brake, disengage the power take off, raise the tiller using the tractor lift, and install supports to prevent accidental dropping of the machine.

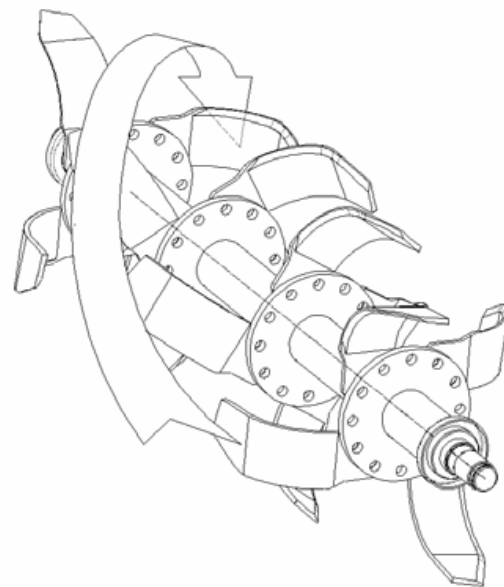
Pay special attention to the bolts **A** on the blades (*picture 9*): the screw head must be placed on the blade side, with the washer and the nut on the flange side, so that the bolts cannot loosen while the equipment is being used.

When several blades must be replaced, replace one blade at a time, so that the initial helical layout is maintained (*picture 10*).

picture 9



picture 10



HOW TO ORDER SPARE PARTS

For spare parts requests please refer to our spare parts catalogue.

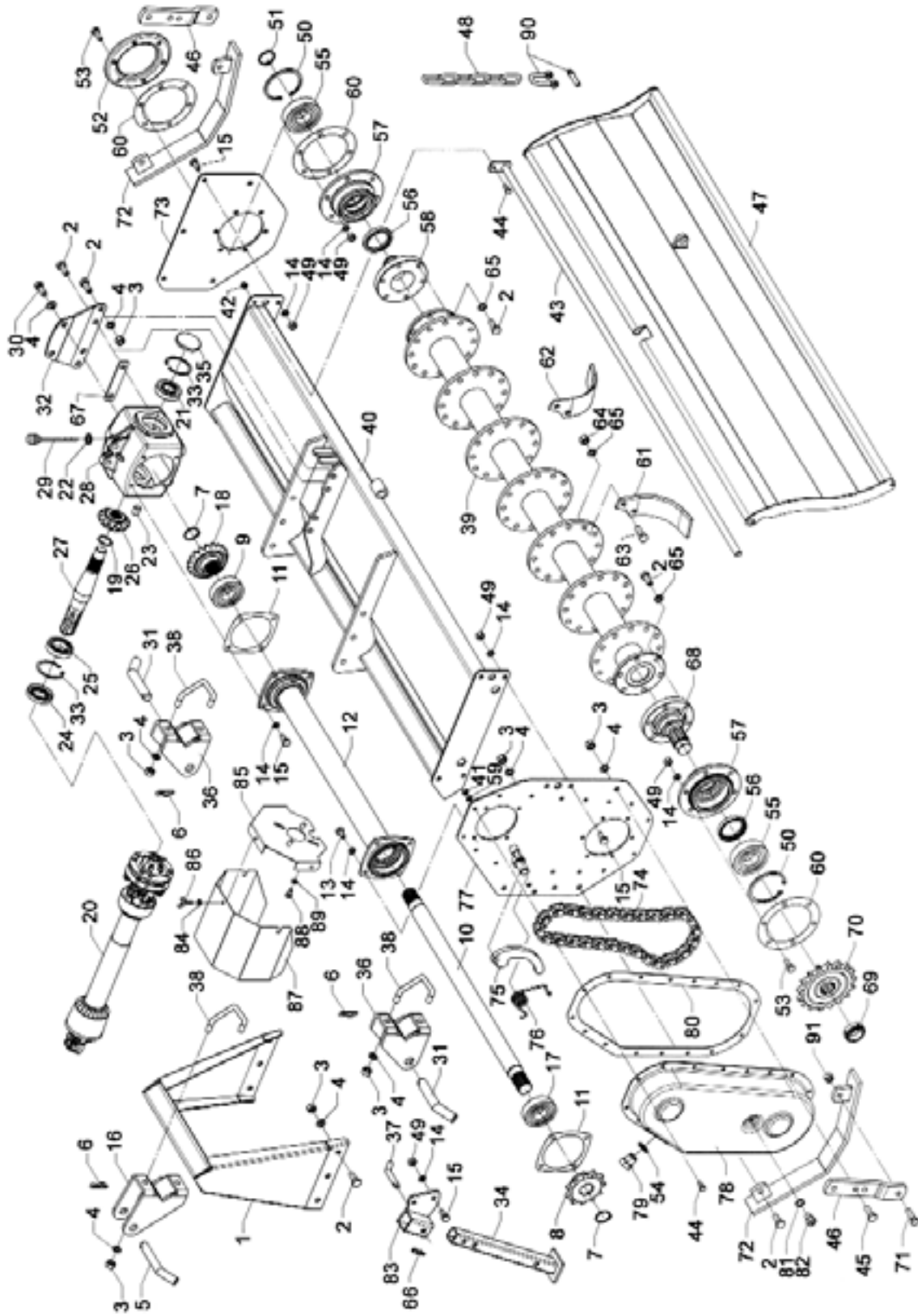
The spare parts can be ordered from the dealer or service center. The following data must always be specified:

- Equipment model and width.
- Part number of the requested component. If the code number is missing, indicate the reference number in which it is shown and the relevant reference.
- Description of the part and requested quantity.
- Requested type of transport. Should this information not be provided, the dealer or service center shall not be responsible for delays caused by circumstances beyond their control. The addressee shall be responsible for any transport charges.

TROUBLESHOOTING CHART

| PROBLEM | CAUSE | SOLUTION |
|----------------------------|--|--|
| Excessive vibration | Drive shaft damaged | Replace worn drive shaft |
| | Tines broken off | Replace damaged tines |
| | Bent rotor shaft | Replace rotor shaft |
| Rotor shaft does not turn | PTO Clutch slipping | Check slip clutch adjustment |
| | | Replace clutch discs |
| Tilling deeper on one side | Tractor lower lift arm out of adjustment | Adjust lift arm |
| | Tiller depth skid not properly adjusted | Adjust skids to level depth |
| Tiller bouncing | Trying to go too deep on first pass | Raise tiller so tilling 3" deep |
| | Tractor in too high a gear | Tiller runs smoother in first or second gear |
| Leaving tire tracks | Tires set out too wide | Set in tractor tires |
| | Tractor too large | Offset tiller to cover right tire tracks |
| PTO will not untelescope | Improper lubrication | Separate and grease both halves |
| | PTO twisted | Replace twisted parts |
| | Shields damaged | Replace shields |

"B" TILLER ASSEMBLY



TILLER ASSEMBLY

| <u>REF#</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-------------|-------------|-----------------|-------------------------------|
| 1 | 1 | 4001330 | Top Mast |
| 2 | 24 | 31512030 | Bolt UNI 5739 M12 x 30 8.8 |
| 3 | 18 | 34100012 | Nut UNI 5587 M12 |
| 4 | 22 | 34121012 | Washer UNI 1751 M12 |
| 5 | 1 | 4301589 | Pin, Top Hitch (Cat. 1) |
| 6 | 3 | 6351004 | Cotter Pin |
| 7 | 2 | 6320035 | Circlip External |
| 8 | 1 | 4701359 | Gear Z11 |
| 9 | 1 | 6307-2RS | Bearing |
| 10 | 1 | 4211203 | Shaft B100 |
| 10 | 1 | 4211205 | Shaft B120 |
| 10 | 1 | 4211207 | Shaft B140 |
| 10 | 1 | 4211208 | Shaft B150 |
| 11 | 2 | 4781265 | Gasket |
| 12 | 1 | 4001282 | Shaft Support B100 |
| 12 | 1 | 4001284 | Shaft Support B120 |
| 12 | 1 | 4001286 | Shaft Support B140 |
| 12 | 1 | 4001287 | Shaft Support B150 |
| 13 | 4 | 31510020 | Bolt UNI 5739 M10 x 20 8.8 |
| 14 | 29 | 34121010 | Washer UNI 1751 M10 |
| 15 | 13 | 31510025 | Bolt UNI 5739 M10 x 25 8.8 |
| 16 | 1 | 4001331 | Top Hitch Clevis |
| 17 | 1 | 6307 | Bearing |
| 18 | 1 | 17265-01 | Bevel Gear Z19 |
| 19 | 1 | 6320030 | Circlip External DIN471 |
| 20 | 1 | E8223400 | Driveline AX4 500/748 |
| 21 | 1 | 30305 | Bearing |
| 22 | 1 | 6470116 | Gasket M16 |
| 23 | 1 | 6481600 | Drain Plug M16 |
| 24 | 1 | 35X62X10 | Oil Seal |
| 25 | 1 | 6007 | Bearing |
| 26 | 1 | 17265-00 | Bevel Pinion Z13 |
| 27 | 1 | 4211212 | Input Shaft Z6 |
| 28 | 1 | 16565-00 | Gearbox Housing |
| 29 | 1 | 65316-05 | Plug with Level M16 |
| 30 | 4 | 31512025 | Bolt UNI 5739 M12 x 25 8.8 |
| 31 | 2 | 4301590 | Pin, Lower Hitch |
| 32 | 1 | 4931230 | Gearbox Plate Support |
| 33 | 2 | 6310062 | Internal Circlip D562 DIN 472 |
| 34 | 1 | 4001234 | Parking Stand Leg |
| 35 | 1 | 6100062 | Cap 062 |

TILLER ASSEMBLY

| <u>REF#</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-------------|-------------|-----------------|-------------------------------|
| 36 | 2 | 4001278 | Lower Hitch Clevis |
| 37 | 1 | 4236115 | Pin |
| 38 | 3 | 4201202 | "U" Bolt |
| 39 | 1 | 4011237 | Rotor B100 |
| 39 | 1 | 4011239 | Rotor B120 |
| 39 | 1 | 4011241 | Rotor B140 |
| 39 | 1 | 4011242 | Rotor B150 |
| 40 | 1 | 4001303 | Frame B100 |
| 40 | 1 | 4001305 | Frame B120 |
| 40 | 1 | 4001307 | Frame B140 |
| 40 | 1 | 4001308 | Frame B150 |
| 41 | 16 | 34100008 | Nut UNI 5587 M8 |
| 42 | 1 | 34106008 | Stop Nut M8 x 1.25 DIN 982 6S |
| 43 | 1 | 4002338 | Rod B100 |
| 43 | 1 | 4002340 | Rod B120 |
| 43 | 1 | 4002342 | Rod B140 |
| 43 | 1 | 4002343 | Rod B150 |
| 44 | 17 | 31508020 | Bolt UNI 5739 M8 x 20 8.8 |
| 45 | 2 | 31512035 | Bolt UNI 5739 M12 x 35 8.8 |
| 46 | 2 | 4831202 | Skid Support |
| 47 | 1 | 4001223 | Leveling Board B100 |
| 47 | 1 | 4001225 | Leveling Board B120 |
| 47 | 1 | 4001227 | Leveling Board B140 |
| 47 | 1 | 4001228 | Leveling Board B150 |
| 48 | 1 | 4508702 | Chain |
| 49 | 21 | 34100010 | Nut UNI 5587 M10 |
| 50 | 2 | 6310090 | Internal Circlip DIN 472 |
| 51 | 1 | 6320040 | Circlip External DIN 471 |
| 52 | 1 | 4141242 | Bearing Cover |
| 53 | 12 | 31510030 | Bolt UNI 5739 M10 x 30 8.8 |
| 54 | 1 | 6470118 | Gasket |
| 55 | 2 | 6308 | Bearing |
| 56 | 2 | 55X72X10 | Oil Seal |
| 57 | 2 | 4701202 | Rotor Support |
| 58 | 1 | 4701203 | Hub, Idler Side |
| 59 | 16 | 34121008 | Washer UNI 1751 M8 |
| 60 | 3 | 4788744 | Gasket |
| 61 | As Req'd | 4811285 | Tine, R.H. |
| 62 | As Req'd | 4811286 | Tine, L.H. |
| 63 | As Req'd | 31412035 | Bolt UNI 5738 M12 x 35 8.8 |
| 64 | As Req'd | 34101012 | Nut UNI 5587 M12 |

TILLER ASSEMBLY

| <u>REF#</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-------------|-------------|-----------------|-------------------------------|
| 65 | As Req'd | 34121012 | Washer UNI 1751 |
| 66 | 1 | 6351003 | Hair Pin |
| 67 | 1 | 4131217 | Gearbox Spacer |
| 68 | 1 | 4721201 | Hub, Drive Side |
| 69 | 1 | 34127035 | Locknut M35 GUP Type |
| 70 | 1 | 4701221 | Driven Sprocket Z17 |
| 71 | 2 | 31512040 | Bolt UNI 5739 M12 x 40 8.8 |
| 72 | 2 | 4001244 | Skid |
| 73 | 1 | 4131331 | End Plate, Idler Side |
| 74 | 1 | 6700025 | Chain ASA 80-S Type, 40 Links |
| 75 | 1 | 4001275 | Chain Adjuster |
| 76 | 1 | 4211263 | Spring |
| 77 | 1 | 4001312 | End Plate, Drive Side |
| 78 | 1 | 4111200 | Chain Cover |
| 79 | 1 | 3442022 | Plug M22 x 1.5 |
| 80 | 1 | 4781264 | Gasket |
| 81 | 1 | 6470114 | Gasket M14 |
| 82 | 1 | 3444014 | Level Plug M14 x 1.5 |
| 83 | 1 | 4001682 | Parking Stand Support |
| 84 | 3 | 34026008 | "Schnorr" Washer M8 |
| 85 | 1 | 4131295 | Support PTO Shield |
| 86 | 3 | 33108020 | Wing Screw M8 x 20 UNI 5449 |
| 87 | 1 | 4131294 | PTO Shield |
| 88 | 4 | 31508016 | Bolt UNI 5739 M8 x 16 8.8 |
| 89 | 4 | 34120008 | Washer UNI 6592 M8 |
| 90 | 1 | 3680010 | Hook 08 |
| 91 | 2 | 34106012 | Stop Nut M12 x 1.75 DIN 982 6 |

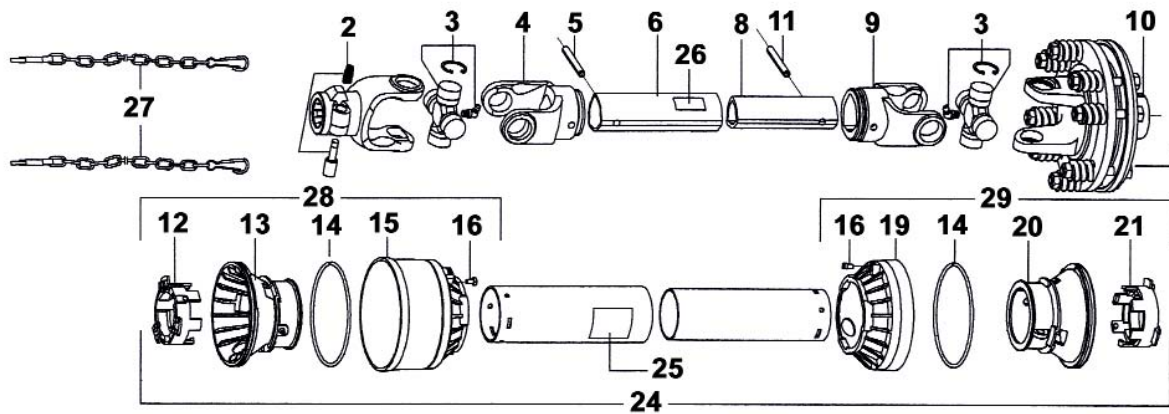
TINE CHART

| MODEL NO. | NUMBER OF TINES | | NUMBER OF BOLTS & NUTS |
|-----------|-----------------|------|------------------------|
| | R.H. | L.H. | |
| B100 | 15 | 15 | 60 |
| B120 | 18 | 18 | 72 |
| B140 | 21 | 21 | 84 |
| B150 | 21 | 21 | 84 |

DECAL CHART

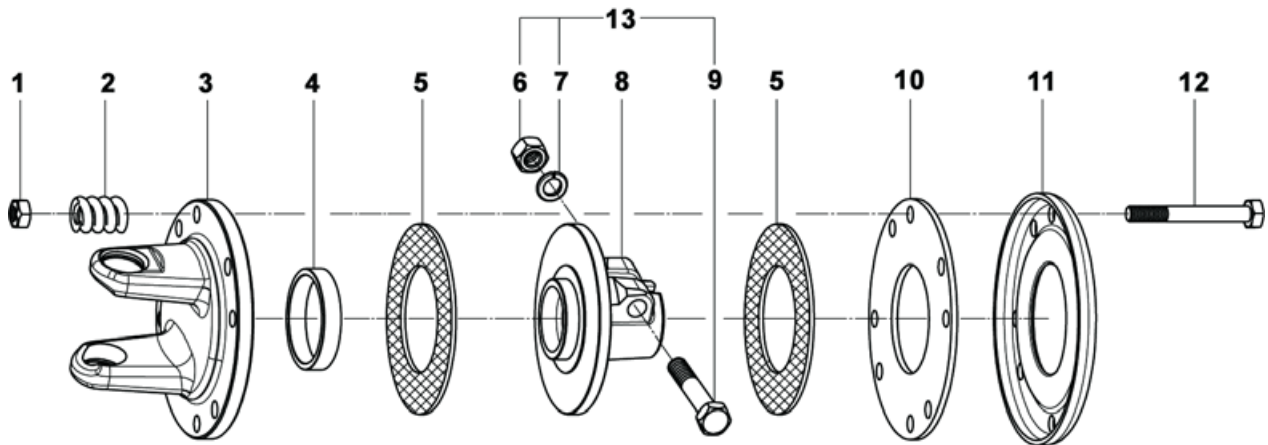
| QTY. | PART NO. | DECAL DESCRIPTION |
|------|----------|-----------------------------|
| 1 | 4781001 | "Danger" (PTO) |
| 1 | 4781002 | "Danger" (avoid injury) |
| 1 | 4781006 | "Warning" (rotating knives) |
| 3 | 4781350 | "Gearmore" |
| 1 | 4781351 | "Series B" |

DRIVESHAFT ASSEMBLY



| REF# | QTY. | PART NO. | DESCRIPTION |
|-------------|-------------|-----------------|--------------------------------------|
| 2 | 1 | 1581037 | Push Pin Kit |
| 3 | 2 | 1004020 | Cross Assembly |
| 4 | 1 | 1704027 | Outer Tube Yoke |
| 5 | 1 | 6330860 | Roll Pin 8 x 60 |
| 6 | 1 | 1524036 | Outer Tube |
| 8 | 1 | 1525036 | Inner Tube |
| 9 | 1 | 1704029 | Inner Tube Yoke |
| 10 | 1 | 1334030 | Clutch 2 Friction Discs |
| 11 | 1 | 6330855 | Roll Pin 8 x 55 (Inner Tube) |
| 12 | 1 | 1784210 | Tube Bearing (Outer Tube) |
| 13 | 1 | 1784201 | Outer Tube Rigid Cone |
| 14 | 2 | 1213233 | Stiffening Ring |
| 15 | 1 | 1784203 | Soft Standard Cone |
| 16 | 2 | 1784212 | Pin For Stop Rotation |
| 19 | 1 | 1784207 | Soft Extra Short Cone |
| 20 | 1 | 1784202 | Inner Tube Rigid Cone |
| 21 | 1 | 1784211 | Tube Bearing (Inner Tube) |
| 24 | 1 | 90SE4028 | Complete Protection |
| 25 | 1 | 1140001 | Outer Decal |
| 26 | 1 | 1140003 | Inner Decal |
| 27 | 2 | 1006065 | Anti-Rotation Chain |
| 28 | 1 | 1784233 | Standard Cone Assembly (Tractor End) |
| 29 | 1 | 1784247 | FDO Cone Assembly (Implement End) |

SLIP CLUTCH ASSEMBLY



| <u>REF#</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-------------|-------------|-----------------|------------------------------|
| 1 | 8 | 6411010 | Scrw Nut M10 |
| 2 | 8 | 1215012 | Spring |
| 3 | 1 | 1704021 | Flange With Yoke |
| 4 | 1 | 1704017 | Bushing |
| 5 | 2 | 1804000 | Friction Disc |
| 6 | 1 | 6410112 | Screw Nut M12 |
| 7 | 1 | 6412112 | Washer |
| 8 | 1 | 1704016 | Hub 1 3/8" Z6 |
| 9 | 1 | 6141265 | Bolt M12 x 65 |
| 10 | 1 | 1134008 | Inner Disc |
| 11 | 1 | 1134007 | Pressure Disc |
| 12 | 8 | 6001075 | Bolt M10 x 75 |
| 13 | 1 | 6761265 | Locking Bolt Kit Replacement |

LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.