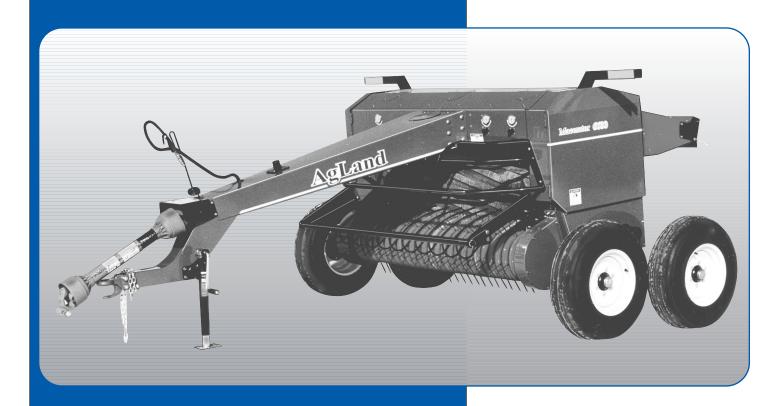
Assembly Instructions Operators Manual Parts Catalog



Macerator 6600™



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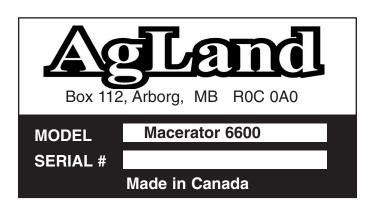
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Replacement Parts

To obtain prompt, efficient service, always remember to give the dealer the following information:

- 1. Correct part description
- 2. Model number of the machine
- 3. Serial number of the machine

The serial number is important in identifying your machine. It contains information for ordering replacement parts and options, which may vary, depending on the serial number identification.



(Serial # plate inside right side cover)

Measurements are given in U.S. units, followed by the equivalent in metric units. Hardware sizes are given in inches for the U.S. hardware and millimeter for metric hardware.



Congratulations, you have just purchased the AgLand Macerator 6600

To get the maximum benefit from your Macerator we suggest that you read the owners manual carefully.

The Macerator is designed to condition the hay for a super fast dry down while maintaining the maximum amount of nutrients and colour. The Macerator utilizes special steel macerator rollers, each running at a different speed allowing for a measured nicking or cutting of the top half of the stem or leaf for greater air exposure. The low profile, heavy-duty pickup, with extra width rollers allow for rapid operation with minimal leaf loss.

The roller system of the Macerator is designed, to allow for the right amount of maceration without cutting up the hay.

These operating and maintenance instructions have been compiled from extensive field experience and engineering data. Some information is general in nature due to unknown and varying conditions.

However, through experience and these instructions, you will be able to develop operating procedures suitable to your particular situation.

Please study this manual from the beginning to end BEFORE operating your new Macerator 6600. Pay special attention to the safety cautions in this book and on your equipment. Should anyone else operate this equipment be sure that they understand All Safety, Operating and Maintenance information presented in this manual



WARNING

Some pictures in this manual show the machine with shields removed to allow for a better view of the subject of the picture. The machine must never be operated with any of the shields removed!

"Right" and "Left", as used throughout this manual, are determined by facing the direction the machine will travel when in use.

The photographs, illustrations, and data used in this manual were current at the time of printing; but due to possible inline production changes, your machine can vary slightly in detail. the Manufacturer reserves the right to redesign and change the machine as necessary without notification.

Read this manual completely and understand all operating instructions and precautions <u>before</u> attempting to operate or service your machine.

Understand that your safety and the safety of other persons is measured by how you service and operate this machine. Know the positions and operations of all controls before you try to operate this machine. MAKE SURE YOU CHECK ALL CONTROLS IN A SAFE AREA BEFORE STARTING YOUR WORK.

The Safety Alert symbol identifies important safety messages on the machine and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Three Big Reasons

- 1. Accidents disable and kill.
- 2. Accidents cost.
- 3. Accidents can be avoided.

The safety information given in this manual does <u>not</u> replace safety codes, insurance needs, or state and local laws. Make sure your machine has the correct equipment needed as specified by the local laws and regulations!

SAFETY ALERT SYMBOL



This Safety Alert symbol means ATTENTION!
BE ALERT!
YOUR SAFETY IS INVOLVED!

WATCH OUT FOR THIS SYMBOL ON YOUR MACERATOR 6600 AND THROUGHOUT THE MANUAL.

SIGNAL WORDS:

DANGER - An immediate and specific hazard which WILL result in severe personal injury or death if the proper precautions are not taken.

WARNING - A specific hazard or unsafe practice which COULD result in severe personal injury or death if proper precautions are not taken.

CAUTION - Unsafe practices COULD result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

Model 6600 AgLand Macerator

Dimensions

 Width 10'6" (320 cm)

 Length 11'4" (345 cm)

 Height - operation transport
 3'6" (107 cm)

 4'10" (147 cm)

 Weight 3600 lbs (1633 Kg)

Tires (4)

 Tire size 8 ply 11L - 15SL

 Pressure 20 psi (138 kPa)

 Wheel hub 6 bolt

 Wheel torque 85 ft. lbs. (115.2 NM)

<u>Pickup</u>

Width (inside flare) - 5'11" (180 cm)
Clearance under pickup when raised -

14" to 16" (35.5 to 40.5 cm)

Tooth clearance when raised -

10" to 12" (25 to 30 cm)

Rollers

Width of rubber feed rollers 5'6" (168 cm)
RPM of rubber feed rollers 645

Width of steel Macerator rollers 5'6" (168 cm)
RPM of top steel Macerator roller 1372
RPM of bottom steel roller 1514

RPM of bottom steel roller 1514

Minimum spacing between bottom and top

Macerator roller 1/32" (1 mm)

Pickup tooth spacing - 2 3/4" (7 cm)

Some weights and measurements in this column are approximate.

Tractor Requirement

Suggested minimum tractor size -

80 HP(60 KW)

* Note: Tractor should be of sufficient size to maintain operator control in all situations.

Air System

Size of Air Pressure tank12 gallon (46L)Maximum Air Pressure in tank120 psiHydraulic outlets required -1

Suggested minimum underframe clearance -

15" (38 cm) to allow swath to flow freely under tractor

Operating speed

Approximate range - 5 to 10 mph (8 to 16 k/h), depending on crop conditions

Swath Size

Width up to - 5' (1.5m)

Cut Width

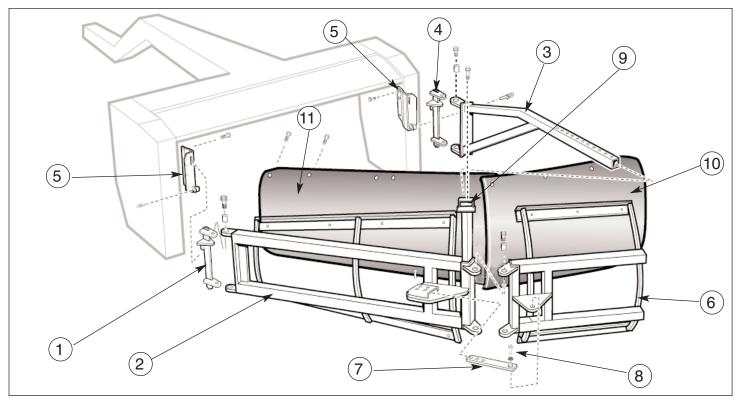
Maximum 14' (427")

Capacity

Up to - 2 1/2 ton/acre

NOTE: All specifications, statements and information shown in this manual are believed to be accurate at the time of printing. Specifications are subject to change without notice

SWATH INVERTER (MOLD BOARD)



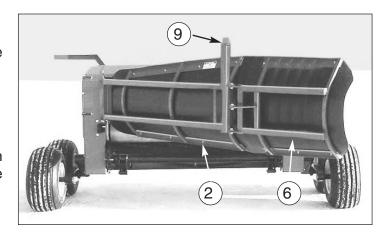
- 1. Attach Mold Board Attachment bracket L/H (1) to the Mold Board main frame (2) and attach main frame to Quick Attach bracket (5) (already installed) and insert lynch pin.
- 2. Attach Mold Board Attachment bracket R/H (4) to the adjustment bar (3) and attach bar to bracket (5) (already installed) and insert lynch pin.
- 3. Attach small frame (6) to the main frame (2) , using 1/2" x 1 1/2" hex bolts with bushing, washer and hex nut.
- 4. Attach extension adjustment bar (7) using 1/2" x 1 1/2" bolt and nut. Do not tighten adjustment bolt (8). Insert adjuster pin after unit completely assembled
- 5. Slide main frame adjustment bracket (3) through the adjustment bar (9) and insert 1/2" x 3" pin.

Mold board sheet installation

6. Install short mold board (10) to outside portion of main frame (6) using 5/16 x 3/4" carriage bolts and flange nuts. DO NOT tighten bolts at this time.

- 7. Install longer mold board sheet (11) on to the main frame (2) using 5/16" x 3/4" carriage bolts, overlapping the short mold board sheet.
- 8. All bolts holding the moldboard sheets can now be fully tightened.
- 9. Adjust angle of moldboard by moving adjustment bracket (3) in or out of adjustment bar (9) to preferred moldboard angle and insert 1/2" x 3" pin

The tighter angle will result in less inversion, The wider angle will give you a greater inversion.



SPREADER ATTACHMENT

The Spreader attachment allows the Macerator to spread a wider swath and leave a thinner layer on the field for greater sun and wind exposure.

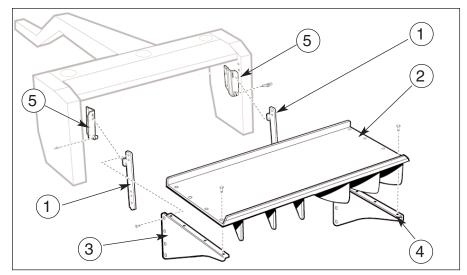
The Spreader attachment consist of only five pieces and quick attaches on to the rear of the main frame.

- 1. Insert 3/8" x 1" flange bolts through side panels (3 & 4) and attach quick mounting bracket(1).
- 2. Mount side panels (3 & 4) to top plate 2 with 5/16" x 3/4" flange bolts.
- 3. Tighten all bolts evenly.
- 4. Hook spreader attachment to the quick mounting bracket (5 on main frame and insert lynch pin.

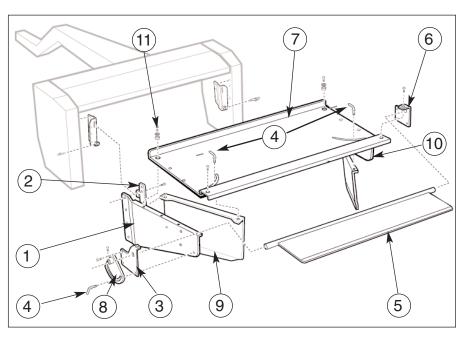
WINDROWER ATTACHMENT

The windrower attachment allows you to direct the cut hay down to keep a tighter windrow, or out for a wider swath width.

- 1. Insert 3/8" x 1" flange bolts through side panels (1) and attach quick mounting bracket (2).
- 2. Mount brackets (1) to top plate (7) with 5/16" x 3/4" flange bolts. Do not tighten bolts.
- 4. Mount side brackets (3) to bracket(1) with 3/8" x 3/4" flange bolts.
- 5. Insert windrow baffle (5) into hole of side brackets (3)
- 6. Mount the other side bracket (6) to side panel (10) with 3/8" x 3/4" flange bolts.
- 7. Mount adjustment bracket (8) using 5/16 x 1 1/2 socket head cap screw

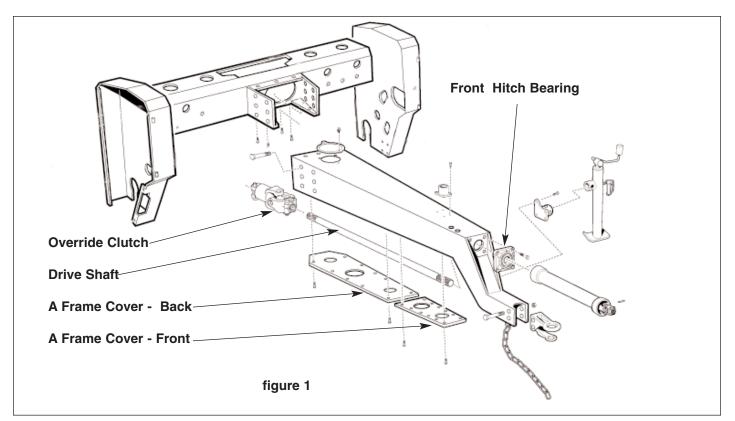


Spreader attachment



Windrower attachment

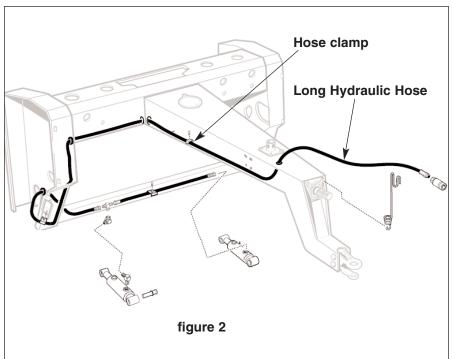
- 8. Install left & right side width adjusters (9 & 12) using 3/8" x 1" bolt & bushing (11) through top plate (7).
- 9. Insert wing bolt (4) through slot into width adjusters (9 & 12).
- 10. Tighten all bolts evenly.
- 11. Hook spreader attachment to the quick mounting bracket on main frame and insert lynch pin.



ATTACHING HITCH

Sometimes the hitch will be shipped detached from the unit to allow for a more compact shipping package.

- 1. Bolt Hitch to main frame, figure 1, using fourteen 5/8 x 1 1/2" carriage bolts. Be sure bolts are securely tightened all around
- 2. Remove bearing on front of hitch, slide drive shaft into Override Clutch through front bearing hole and reinstall bearing and tighten shaft bolts on Override Clutch.
- 3.Install the long hydraulic hose securely with clamps provided, as shown in figure 2.



The Macerator can easily be moved from location to location. When transporting follow this procedure.



TRANSPORT SAFETY

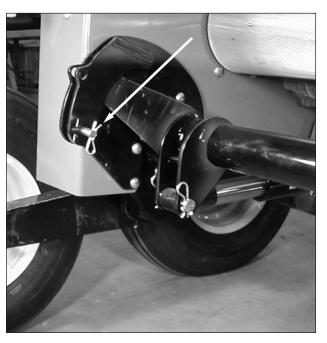
- 1. Make sure you are in compliance with all local regulations regarding transporting equipment on public roads and highways.
- 2. Make sure the SMV(Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
- 3. Do not allow anyone to ride on the Macerator or tractor during transport.
- 4. Do not exceed 32 km/h (20 mph). Reduce speed on rough roads and surfaces.
- 5. Use a retainer on the drawbar pin and install a safety chain before transporting.
- 6. Always use proper lighting on the tractor when transporting.
- 7. Stay away from overhead electrical wires. Electrocution can occur without direct contact.
- 8. When using a ball and socket, make sure the locking jaws are pinned securely in position.
- 9. Do not rely on the Macerator lift hydraulic cylinder to keep the machine raised! Be sure unit is in raised position and lever is secured with the lock-up pin provided.



Slow moving vehicle emblem



Hitch and safety chain



Lock travel pin in place

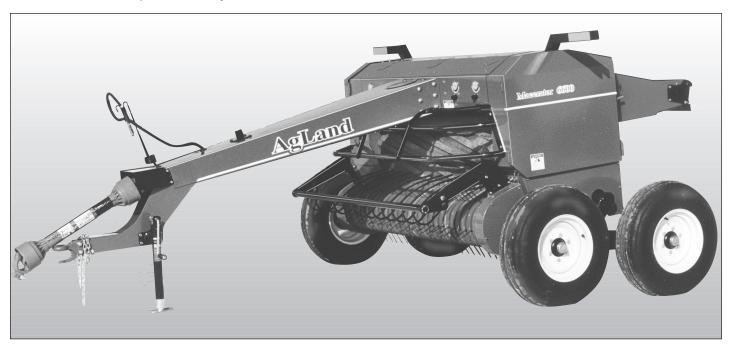


Operating Safety

- 1. REVIEW ALL SAFETY INSTRUCTIONS with all operators before allowing them to operate the equipment. Follow up at least once a year!
- 2. All shields and guards must be in position and securely fastened before operating the Macerator.
- 3. Only use a tractor with ROPS cab and seat belt. Be careful when operating close to a road or building, the machine can throw stones and other debris during operation.
- 4. Emphasize the importance of safety when working around and operating the machine.
- 5. Do not allow or carry riders on any part of the equipment or tractor at any time.
- 6. Always keep hands, feet, and clothing away from moving parts.
- 7. Always lower the Macerator to the ground when parking.
- 8. Use a retainer or draw pin to secure the lifting lever of the Macerator before transporting equipment.

- 9. Use safety chain at all times.
- 10. NEVER attempt to unclog the machine when the tractor is running and hydraulic system is operating.
- 11. Before servicing, adjusting, repairing, or unplugging, stop the tractor engine, remove the ignition key, set the park brake, disengage hydraulics, and wait for all moving parts to stop.
- 12. Keep hands, feet, and clothing away from the pickup area when in operation to avoid entanglement hazard. Do not open or remove shields or guards while machine is running.
- 13. Be sure to relieve all pressure from hydraulic lines before disconnecting them. Before applying pressure to the system, make sure all connections are tight and that hoses and lines have not been damaged.
- 14. Always use adequate safety warnings and lights when transporting the machine on public roads.
- 15. Be sure the Slow Moving Vehicle emblem is installed at the rear of the machine. Check with local law enforcement regarding any specific requirements.

Use with a tractor having a minimum of 80hp (59kw). Tractor should have sufficient ground clearance for swath to pass cleanly under it.

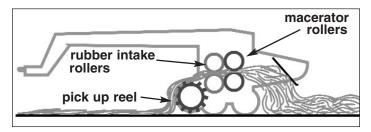


PTO SPEED

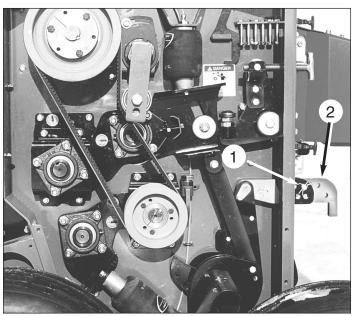
Unless otherwise specified, units are shipped with 1000 PTO speed. Units with 540 rpm PTO also available, contact dealer.

The PTO should be run at approximately 1000 rpm. The front rubber rolls run at 645 rpm and the upper steel roller runs at 1514 rpm at a tractor pto speed of 1000. The bottom steel roller runs at 1372 rpm at 1000 tractor pto speed. 540 runs at same speed.

PICKUP HEIGHT & ADJUSTMENT



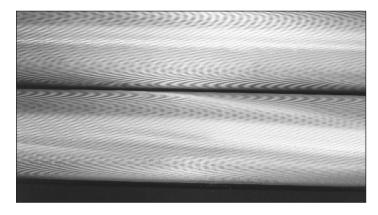
The Macerator 6600 pickup should be adjusted so that it will cleanly pick up all material of the field without gouging the soil. You may have to reset the height a few times to arrive at the best working height.



- 1. If your pickup is too low to the ground, use your tractor hydraulic cylinder control to raise the pickup approximately 1/2" 1" off the ground.
- 2. Remove pin (1) and slide adjuster bar (2) to desired height (Pushing bar in raises machine. Pulling bar out lowers the unit).
- 3. Reinsert pin and lock in place.

STEEL ROLLER ADJUSTMENT

For best results adjust the Macerator 6600 for your specific field conditions. The smaller the gap between the steel serrated rollers the more aggressive will be the maceration of the hay. Both the space between the rollers and the air pressure need to be adjusted for maximum efficiency.



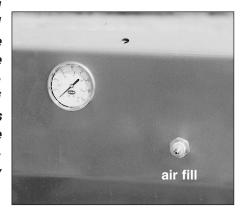
- 1. Raise the Macerator, using your hydraulics 2. Turn crank (a) clockwise to widen the gap, Counterclockwise to narrow the gap, 1 turn = .04" (1 mm)
- b a a

- 3. Be sure to set the gap exactly the same on both sides! (use gauge).
- 4. Put Crank Lock (b) in place.
- 5. To assure that the rollers do not touch, the safety stop is set by the factory at 1/32" or .8 mm.
- 6. If safety stop (d) needs adjusting, put travel safety pin (c) in place while unit is raised.
- 7. Adjust the safety stop bolt (d) as needed. Be sure the rollers don't touch during operation!
- 8. Repeat steps 1 to 4 to fine tune if necessary.

PREPARATION - AIR SYSTEM

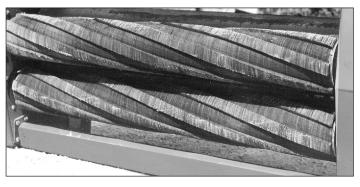
The purpose of the air system on the Macerator 6600 is to keep continuous pressure on the rolls.

Before heading out to the field make sure the air pressure tank has a minimum of 100 psi pressure. This should give the operator sufficient air supply for the day.



The pressure can make a difference on how well the machine performs on the field. While the pressure on the rubber rolls may not be as crucial too much pressure on the steel rolls will result in considerable leaf loss and some plugging may result in short wet hay.

RUBBER ROLLER ADJUSTMENT



The rubber rollers are designed to take the material from the pick-up and feed it into the steel rollers. The rubber rollers do not crush or crimp the hay.

Rubber Rollers continued...

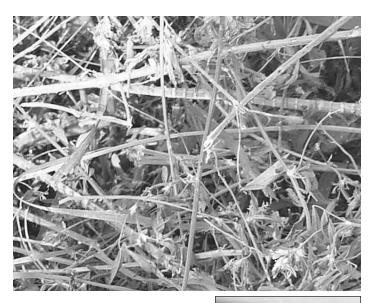
As a standard setting, we recommend 20-30 psi pressure on the rubber rollers. Regulate the pressure by pulling out the knob on the regulator marked **rubber rollers** and turning the knob clockwise or counter clockwise. When turning the knob counter clockwise you should hear the air escaping from the regulator.



In extreme conditions, increase or decrease the pressure. For example very heavy swaths may require less pressure.

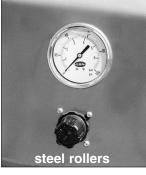
STEEL ROLLERS

The steel serrated rollers (rear) take the material from the rubber rollers and crack the stems.



To achieve the right setting some field testing may be necessary.

1. Pull out the knob on the air regulator marked steel rollers and turn the knob clock/counter clock wise to set the pressure to the steel rollers at approximately 30 psi.



FIELD TEST

- 2. If you experience too much leaf loss or the plants are crushed too intensely, lower the air pressure.
- 3. If there is not enough maceration increase pressure to the rollers by increasing the air pressure.

check list



USE GOOD SAFETY PRACTICES WHEN WORKING ON THIS MACHINE

Before doing any maintenance or service work on the machine, you must:

- ☐ Park machine on a solid level surface.
- ☐ Disengage all power
- ☐ Put the tractor transmission in PARK or apply the tractor parking brake.
- ☐ Stop the tractor engine and take the key with you.
- □ LOOK AND LISTEN! Make sure all moving parts have stopped.
- ☐ Install the cylinder safety stops, if applicable.
- □ Block the Macerator up securely before working

FIRST TIME USE

☐ Tighten hub bolts 1-4* after the first 1/2 hour of operation and repeat procedure after 1 1/2 hours and 3 hours.

*IMPORTANT

See figure 1 - page 14

Hub 1 - tighten to 60 Ft. Ibs

Hub 2 - tighten to 30 Ft. Ibs

Hubs 3 - (2 hubs) - tighten to 9 Ft. Ibs

Hub 4 - tighten to 6 Ft. Ibs

Hub 5 - tighten to 16 Ft. Ibs.

See figure 3 - page 15

Hub 12 - tighten to 60 Ft. lbs.

Hub 13 - tighten to 30 Ft. Ibs.

DAILY

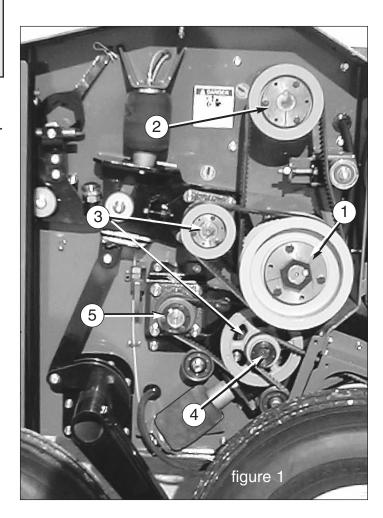
- ☐ Check and tighten all hub bolts.
- ☐ Remove all dirt and crop deposits from machine.

AFTER THE FIRST 25 HOURS OF USE

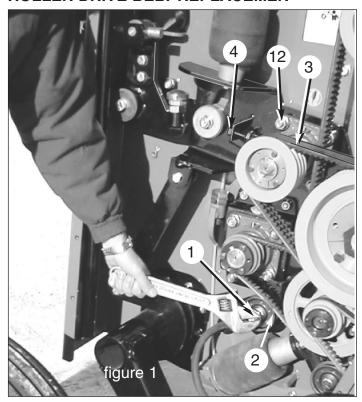
☐ Check bearing set screw tightness

AT THE BEGINNING OF EACH SEASON

- ☐ Review all safety instructions.
- ☐ Carefully inspect all components for excessive wear or hazardous conditions.
- ☐ Lubricate the machine at all lubrication points*.
- ☐ Check tires for correct inflation pressure.
- ☐ Tighten bolts.
- * SEE LUBRICATION SCHEDULE AND PROCEDURES ON PAGE 17

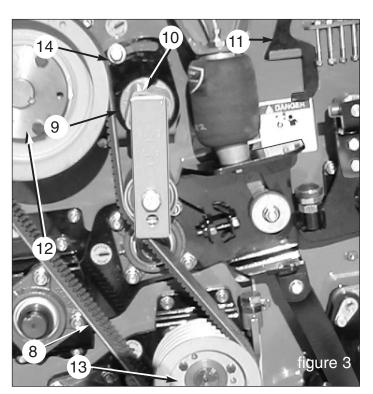


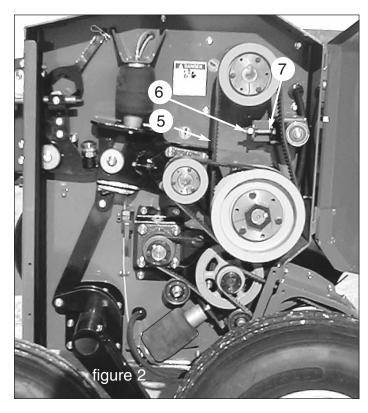
ROLLER DRIVE BELT REPLACEMEN





- 1. Raise Macerator, and secure travel safety pin.
- 2.To remove belt (2) loosen and turn flattened bolt (1) counterclock wise.



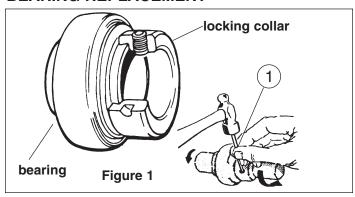


- 3. To remove belt (3) loosen 4 bolts (12) then loosen bolt (4) and slide roller forward (see note*).
- 4. To remove belt (5) loosen bolt (7) then loosen bolt(6) and slide tightener forward.
- 5. To replace belt (8) loosen bolt (9 behind tightener). 6. Take tightening wrench (11) (Use pipe (13) for leverage) and hold spring loaded tightener (10) firmly in place, while loosening bolt (14), now release tension slowly with wrench.
- 7.Replace all belts and tighten bolts (reverse sequence of points 2-5)

8. Reinstall covers!!

* Note: To maintain proper roller alignment, be sure to adjust the opposite tightener on the other side of the machine!

BEARING REPLACEMENT



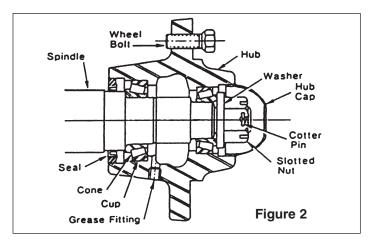
Sealed ball bearings are held in position on the shaft by a locking collar, figure 1, which is rotated to lock the assembly on the shaft and secured by a set screw. To remove Bearing:

- 1. Loosen set screw
- 2. Use a drift punch inserted in the drift pin hole to rotate and loosen the locking collar (1). Rotate the locking collar counter clock wise.
- 3. Remove the locking collar.
- 4. Support the shaft, for easier assembly later.
- 5. Remove the bolts for the bearing flanges.
- 6. Slide the bearing and the flanges from the shaft.

Note: Cleaning paint and corrosion from the shaft will make removal easier.

- 7. Put on the new bearings and flanges.
- 8. Replace locking collar on the shaft. Rotate the locking collar clockwise until lightly engaged. Tighten the collar by hitting it with a drift pin punch inserted in the drift pin hole rotating it further clockwise.
- 9. Tighten set screw.

REPLACING OR REPACKING WHEEL BEARINGS



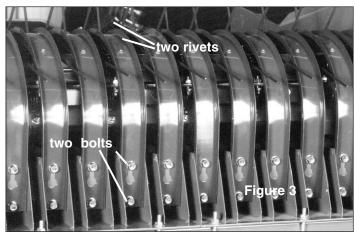
- 1. Remove wheel hubs and disassemble.
- 2. Clean bearings, seals, caps, washers, nuts and hubs with kerosene or other solvent.

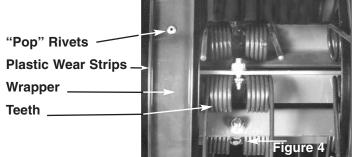
- 3. Replace bearings or seals if worn or damaged.
- 4. Pack bearing cones and seals with No. 2 multi-purpose lithium grease or equivalent.
- 5. Reassemble hub and bearings. (figure 2)
 - a. Press cups against the shoulder in the hub.
 - b. Press seal flush into hub after bearing.
 - c. Place hub on shaft taking care not to damage the seal!
 - d. Tighten the wheel bearing nut. Do not overtighten.
 - e. Secure nut with a cotter pin.
 - f. Be sure to replace hub cap.

PICKUP TEETH, WRAPPERS, WEAR STRIPS

Check for bent, broken or loose parts. If it is necessary to replace teeth or related parts, proceed as follows.

Ensure that your Macerator is blocked securely.
 Loosen the bolts, holding the wrapper(s) on pickup. (fig.
 Slide wrapper forward, and remove the wrapper from the bolts.





- 2. Should the plastic wear strip require removal and replacement, drill out or carefully grind off the "pop" rivets. Replace strip with new rivets (figure 4).
- 3. Install new teeth or wrapper(s).

General information

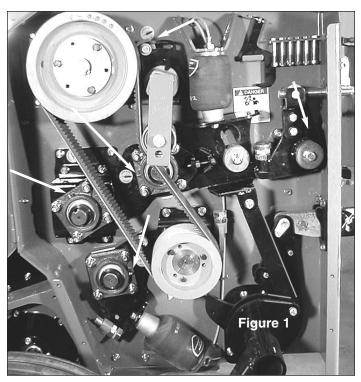
We recommend a good grade SAE multi-purpose high temperature grease.

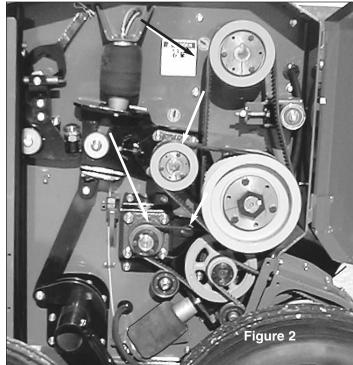
Use a manual grease gun for all greasing. Air powered grease guns may damage the seal on the bearings.

Wipe all grease fittings with a clean cloth before greasing to avoid injecting dirt or grit in the bearings.

At the beginning of the season

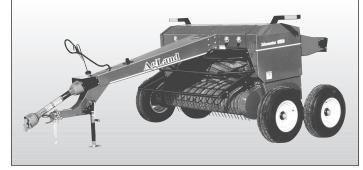
Grease all the sealed bearings, front rollers (two places), rear rollers (two places) and drive shaft one place, figures 1 and 2.





Note:

After lubricating, servicing, or adjusting the Macerator, make sure all tools and equipment are removed from Macerator to prevent damage.





HYDRAULIC AND AIR SAFETY

HYDRAULIC SAFETY

Make sure that all components in the hydraulic system are kept in good condition and are clean.

Replace any worn, cut, abraded, flattened or crimped hoses and metal lines.

Do not attempt any makeshift repairs to hydraulic lines, fittings, or hoses by using tape, clamps, or cements. The hydraulic system operates under extremely high pressure: 1600to 2300 PSI (11 033 to 15 859 kPa). Such repair will fail suddenly and create unsafe conditions.

A high pressure concentrated stream of hydraulic fluid can pierce the skin. If such happens, seek immediate medical attention as infection and toxic reaction could develop.

Wear proper hand and face protection (eg. face shield) when searching for a high pressure hydraulic leak. Use a piece of wood or cardboard as a backdrop instead of hands.

Before applying pressure to the system, make sure all connections are tight and that line, hoses, and couplings are not damaged.

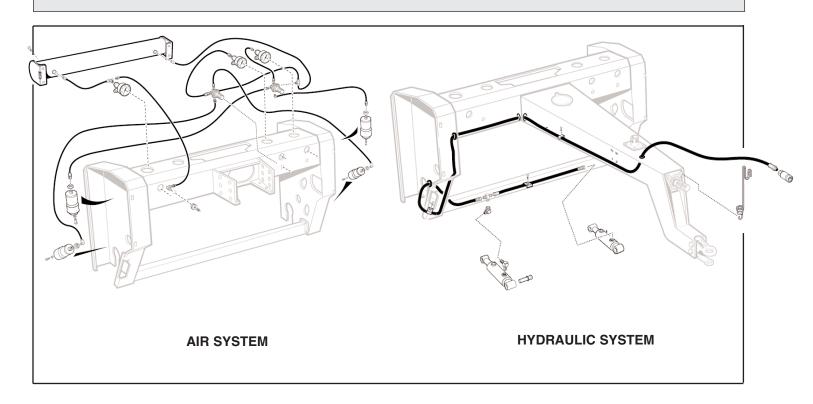
AIR SAFETY

Make sure all hoses and bellows are kept in good condition and are clean.

Replace any damaged lines or bellows.

Do not exceed 110 lbs air pressure in tank and 90 lbs. in air bags.

Think SAFETY! Work SAFELY!



PROBLEM	POSSIBLE CAUSE	SOLUTION
Pickup is skipping swath	Missing or broken pickup teeth	Replace missing teeth
or not picking cleanly	Pickup to high	Adjust pickup height
	Driving to fast for pickup speed	Use lower tractor gear with higher rpm
	Not following the same direction as swath was cut.	Follow the same direction as swath was cut
Material wrapping in pickup	Nylon wear plates missing or worn	Replace missing or worn nylon pads
	Pickup & travel speed not matched	Match pickup & ground speed as close as possible
Breakage or bending of	Running pickup to low	Adjust pickup height
pickup teeth	Excessive pickup rotation speed in rough or rocky conditions	Reduce pickup or ground speed
Excessive noise or	Insufficient oil in gear box	Top up gear oil as needed
heat from gear box	Worn or broken parts inside gear box	Replace parts as needed
Air pressure does not hold	Broken air line	Repair or replace line as needed
in air tank and air bags	Torn or punctured air bag	Replace air bag as needed
	Air regulator not working	clean or replace air regulator
Pickup does not rise or lower	Worn or punctured hydraulic cylinder or hydraulic oil line	Replace hydraulic lines & cylinders as needed
	Bushings to tight	Replace or clean bushings
Pickup height adjustment does not hold	Broken or worn parts on adjuster	Replace worn parts as needed
Rubber rolls not feeding properly	Air pressure to high or to low	Adjust air pressure using the regulator
	Gap between rollers to tight or to wide	Adjust gap width
Wax build up on steel rolls	Temperature & hay conditions cause the wax to come off the plant and stick to the rollers	The wax will come off after the rollers cool down. A thin layer of wax/leaves will build up on the rollers
Excessive leaf loss	Too much air pressure on steel rollers	Release air pressure
	Hay conditions to dry	Condition hay early in the morning
	The gap between steel rollers is to narrow or the rolls going to fast	Adjust gap between steel rollers

TROUBLE SHOOTING

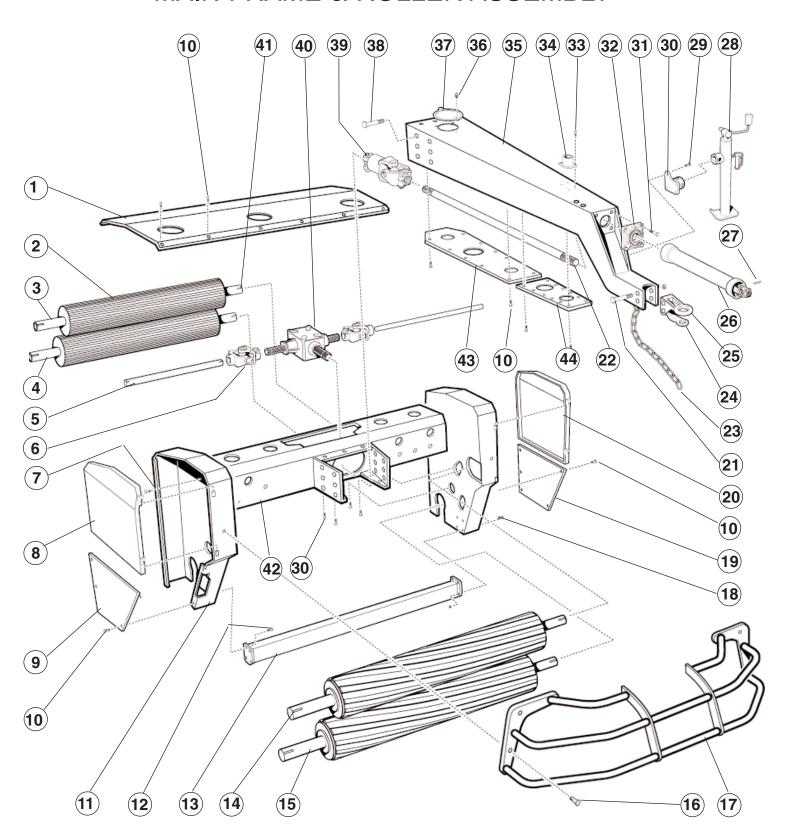
PROBLEM	POSSIBLE CAUSE	SOLUTION
Hay is not being macerated	Not enough air pressure on steel rolls Gap between rollers is to wide	Adjust air pressure as required Narrow the gap between steel rollers
	Windrow is to thick	Cut wider or thinner windows
	Steel rolls not running fast enough	Increase tractor rpm
Swath not being inverted completely	Moldboard not adjusted properly	Adjust moldboard angle. The tighter angle will result in less inversion, The wider angle will give you a greater inversion.

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IMPORTANT: When ordering parts, please specify model, serial number and ordering number.

MAIN FRAME & ROLLER ASSEMBLY

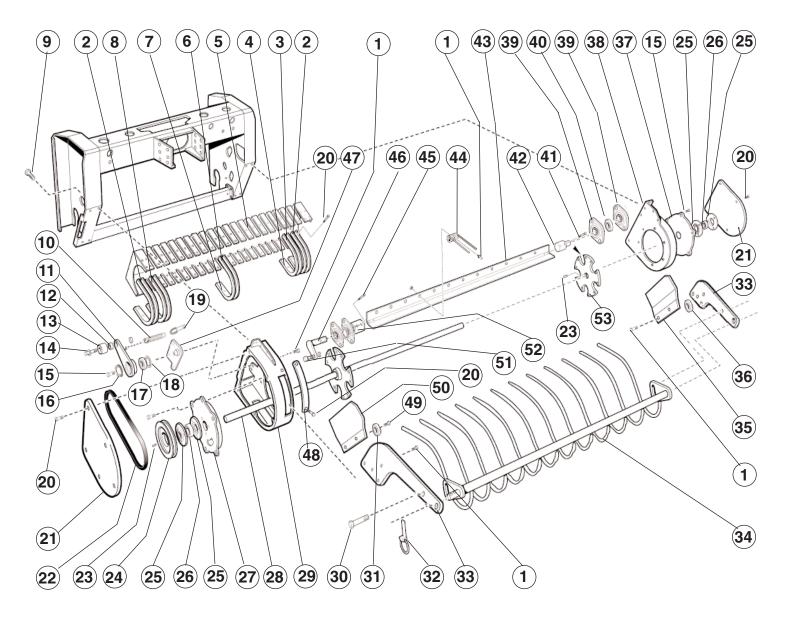


MAIN FRAME & ROLLER ASSEMBLY

Item	Ordering	No.	Description
No.	Number	Required	
1	MC241	1	Top Cover Steel Roller Tube Top Steel Roller Shaft Bottom Steel Roller Shaft Drive Stub Shaft
2	MC76W1	2	
3	MC761T	1	
4	MC760B	1	
5	MC2271	2	
6	MC616	2	U Joint 7/16 x 1" Std. Bolt Door - Right hand Bottom side cover - Right hand 5/16 x 3/4" Flange Bolt
7	BOS28045	8	
8	MC21W6AR	1	
9	MC216R	1	
10	BOC20035	46	
11 12 13 14 15	MC21W2 BOC28045 MC21W8 MC770 MC771	1 8 1 1	Main Frame - right hand 7/16 x 1" Carriage Bolt and Flange Nut Cylinder Cross Beam Top Rubber Roller Bottom Rubber Roller
16 17 18 19 20	BOC24035 MC31W1 MC21W1 MC216L MC21W6AL	4 1 1 1	3/8 x 3/4" Carriage Bolt Guard Main Frame - Left Hand Bottom side cover - Left hand Door - Left hand
21	BOS40185	2	5/8 X 4 1/2" Bolt, Lock Washer & Nut
22	MC615	1	Drive Shaft
23	MC740	1	Travel Safety Chain
24	MC631	1	Hitch clevis PP1-107 VR
25	MC630	1	Cast Hitch Top - PP1-126VR
26 26 27 28 29 30	MC612 MC612A BOSM10708 MC640 BOF24045 MC21W5C	1 1 1 1 4	PTO Drive Shaft for 1000 RPM PTO Drive Shaft for 540 RPM Shear Pin Side Wind Jack 3/8 X 1" Flange Bolt Jack Mount Bracket
31 32 33 34 35	BOS40065 MC512 BOF24035 MC21W5D MC21W5	8 1 4 1	5/8 X 1 1/2" Bolt 4 Bolt Flange Bearing 3/8 x 3/4 Flange Bolt Jack Storage Bracket Main Frame Hitch
36 37 38 39 40 40	BOS20085 MC215C BOC40065 MC617 MC611 MC611A	1 1 14 1 1	5/16 x 2" Hex Bolt With Spring And Nylon Locknut Over ride Clutch Service Cover 5/8 x 1 1/2" Carriage Bolt/ Nut Override clutch Gear Box for 1000 RPM Gear Box for 540 RPM
41	MC760H	4	Steel Roller Hub B-106 Main Cross Beam A-Frame Cover Back A-Frame Cover Front
42	MC21W3	1	
43	MC215B	1	
44	MC215A	1	

IMPORTANT: When ordering parts, please specify model, serial number and ordering number.

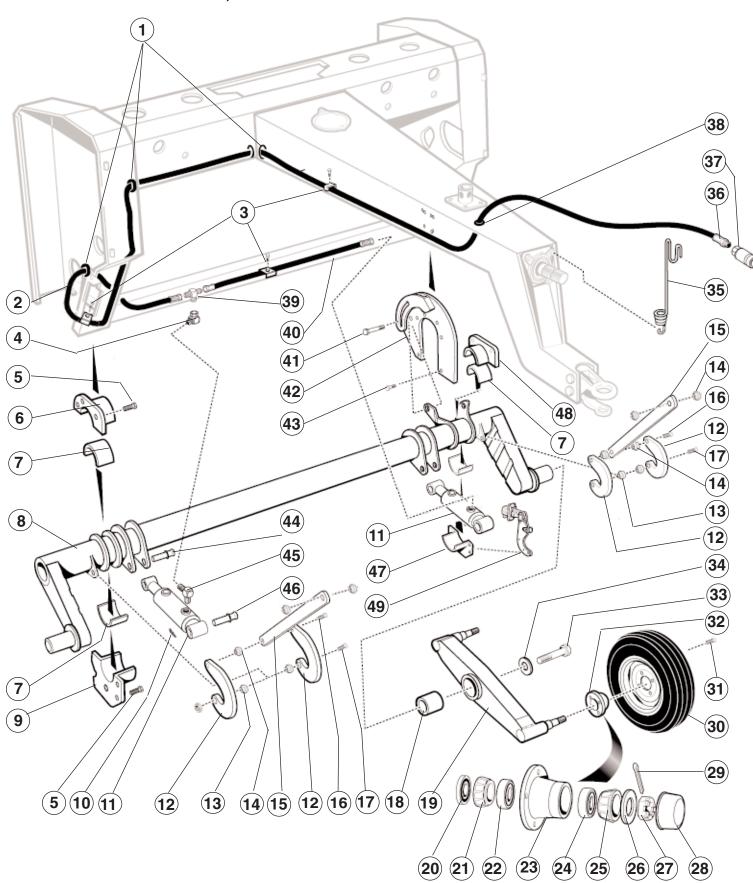
PICK UP



PICK UP

	FION UF			
Item	Ordering	No.	Description	
No.	Number	Required		
1 2 3 4 5	BOF24045 MC11W4 MC114SL MC114B MC11W1	68 2 1 2	3/8 x 1" Flange Bolt & Nut End Pickup Wrapper Pickup Wrapper - Short Pickup Wrapper - Small Pickup Crossing	
6 7 8 9 10	MC114 MC114A MC114SR BOF28045 MC832	23 27 1 8	Pickup Wrapper Pickup Wrapper Spacer Pickup Wrapper Spacer 7/16 x 1" Flange Bolt Spring	
11	MC12W5	1	Tightener Arm 5/8 ID Spacer AG2352 Idler Pulley 5/8 x 2" Hex Head Bolt and Nut 3/8 x 1" flange bolt	
12	MC125B	1		
13	MC830S	1		
14	BOS40085	1		
15	BOF24045	23		
16	WAF24	1	3/8" washer	
17	MC506	1	1630 Ball Bearing	
18	MC517	1	CR162 Snap Ring	
19	MC12W6	1	Eye Bolt	
20	BOF20035	126	5/16" x 3/4" Flange Bolt	
21	MC112	2	Pickup Cover BX53 V Belt 1/4 x 1 1/4" Key MBL127 Pulley 3 Bolt Press Steel Flange	
22	MC839	1		
23	KE1605	3		
24	MC827S	1		
25	MC516	4		
26	MC513	2	Bearing - 1 1/4" Self Aligning	
27	MC122	1	Cam Track	
28	MC134	1	Main Pickup Shaft	
29	MC11W3	1	Pickup Frame - Right hand	
30	BOSH40085	2	5/8 x 1" Socket Head Cap Screw & Nut	
31	MC115A	1	Spacer, pickup shield 7/16 x 1 9/16 Lynch Pin Comb Arm Comb Pickup Deflector - Left hand	
32	MC743	2		
33	MC141	2		
34	MC14W3	1		
35	MC115L	1		
36	MC248C	1	Spacer, Pickup Shield Bearing Holder Plate Pickup Frame - Left hand 2 Bolt Press Steel Flange 1" Bearing- Self Aligning	
37	MC12W1	1		
38	MC11W2	1		
39	MC515	20		
40	MC514	10		
41	BOS20105	10	5/16 x 2 1/2" Std. Hex. Head Bolt	
42	MC133A	5	Tooth Bar Shaft	
43	MC1311	5	Tooth Bar	
44	MC750	60	Tooth	
45	BOSH20085	10	5/16 x 2" Socket Head Cap Screw	
46 47 48 49 50	MC13W3 MC12W4 MC113 BOS24115 MC115R	5 1 1 1	Cam Arm Tightener Arm Bracket Access Cover 3/8 x 2 3/4" Std. Bolt & Nut Pickup Deflector- Right hand	
51	MC511	5	Stud Bearing (CRSB20), Spacer & Nut	
52	MC1312	5	Tooth Bar Block	
53	MC13W2	2	Bearing Bracket Wheel	

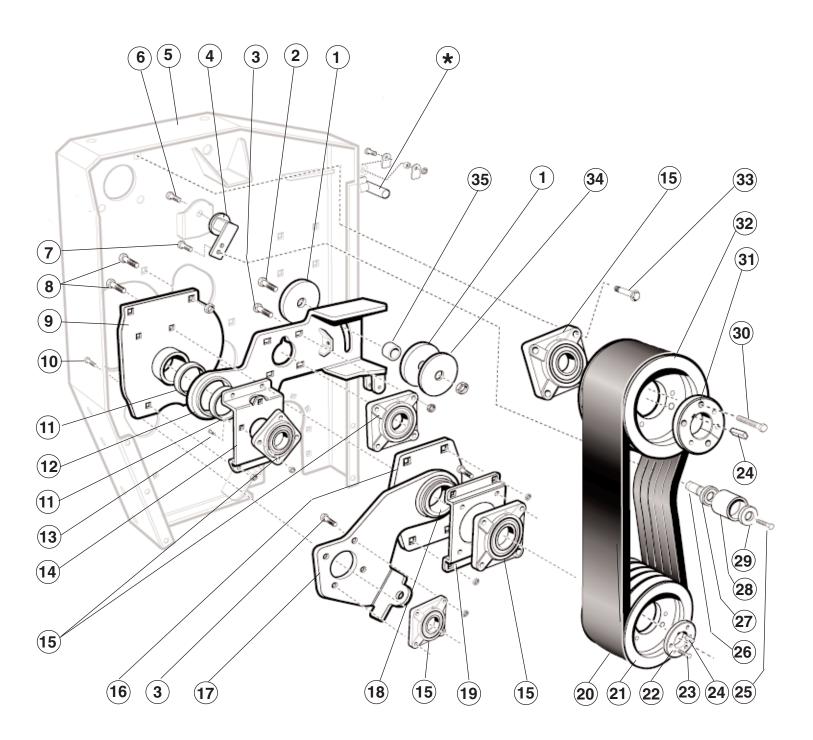
AXLE, WHEEL AND HYDRAULICS



AXLE, WHEEL AND HYDRAULICS

Item	Ordering	No.	Description
No.	Number	Required	
1	MC725	3	1.48 x .75 x .25" Grommet Hydraulic Hose - Long Hose Clamp 45° Elbow 7/16 x 1 1/4" Carriage bolt & Flange Nut
2	MC712	1	
3	MC215F	3	
4	MC714	1	
5	BOC28055	9	
6	MC21W7R	1	Axle Seat R/H Axle Bushing Axle Axle Axle Support R/H R Clip
7	MC217	4	
8	MC23W1	1	
9	MC21W4R	1	
10	MC722	8	
11	MC711	2	Hydraulic Cylinder
12	MC232	4	Roller Lift Bracket
13	MC232M	4	Lift Bracket Bushing
14	MC233M	8	Lift Arm Bushing
15	MC233	2	Roller Lift arm
16 17 18 19 20	BOS32108 BOS32118 MC235 MC23W5 MC552	4 2 2 2 2 4	1/2 x 2 1/2" Bolt & Nut 1/2 x 2 3/4" Bolt & Nut Walking Beam Bushing Walking beam Oil Seal
21 22 23 24 25	MC553 MC554 MC551 MC556 MC555	4 4 4 4	LM603049 Bearing Race Wheel Hub Race LM48548 Bearing
26 27 28 29 30	MC561 MC557 MC559 MC558 MC550	4 4 4 4	Washer Nut Hub Cap Cotter Pin Wheel, Tire And Rim
31	MC560	24	Wheel Bolt Wheel Hub Assembly 5/8 x 1 1/2" Hex Bolt Washer Hose Holder
32	MC551-9	4	
33	BOS40068	2	
34	MC237	2	
35	MC723	1	
36 37 38 39 40	MC718 MC717 MC726 MC716 MC713	1 1 1 1	Flow Restricter Quick Coupler 1.25 x .75 x.09" Grommet 3/8" NPT Tee Hydraulic Hose - Short
41	MC741	1	Travel Safety Pin Travel Safety Bracket 7/16 x 1 1/2" Carriage Bolt / Flange Nut 1 x 3 1/2" Cylinder Pin 90° Hydraulic Elbow
42	MC21W9	1	
43	BOC28065	7	
44	MC720	2	
45	MC715	1	
46 47 48 49	MC721 MC21W4L MC21W7L	2 1 1 1	1 x 5" Cylinder Pin Axle Support L/H Axle Seat L/H4 Height adjuster see page 28 for details

LEFT SIDE

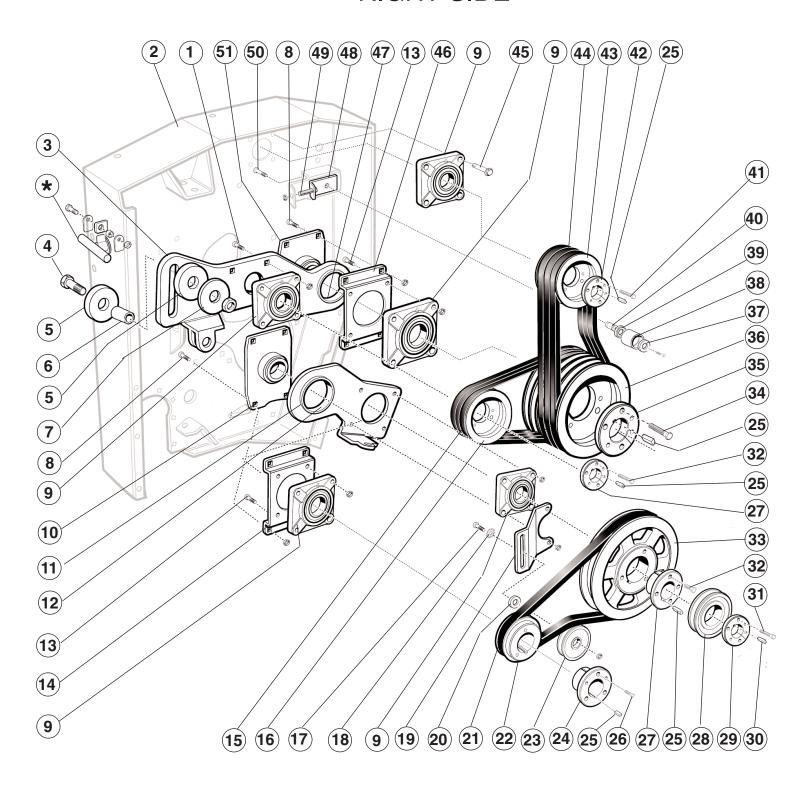


^{*} See Gap adjuster on page 33

LEFT SIDE

Item	Ordering	No.	Description
No.	Number	Required	
1	MC225	2	Guide Washer 5/8 x 3" Carriage Bolt & Nylon Lock Nut 5/8 x 2" Carriage Bolt & Flange Nut Tightener Main Frame L/H Side
2	BOC40125	1	
3	BOC40085	8	
4	MCSE38	1	
5	MC21W1	1	
6	BOSM16405	1	16mm x 40mm Bolt
7	BOS48055	1	3/4 x 1 1/4" Standard Bolt
8	BOC32045	4	1/2 x 1" Carriage Bolt & Flange Nut
9	MC22W2	1	Pivot Arm Holder
10	BOC32055	6	1/2 x 1 1/4" Carriage Bolt
11	MC221A	2	Pivot Bushing Steel Roller Pivot Arm L/H 5/8 x 1 1/2" Carriage Bolt & Flange Nut Rubber Roller Bearing Bracket 4 Bolt Flange bearing
12	MC22W5L	1	
13	BOC40065	8	
14	MC222A	1	
15	MC512	5	
16 17 18 19 20	MC22W1 MC22W4L MC221 MC223 MC837	1 1 1 1	Pivot Arm Holder Rubber Roller Pivot Arm L/H Pivot Bushing Roller Bearing Bracket 5VX780 5 Banded Drive Belt
21	MC825S	1	5-5V7.5 Pulley
22	MC816S	1	SF 1 3/4" Hub
23	BOS24085	3	3/8 x 2" Bolt
24	KE 2408	2	3/8 x 2" Key
25	BOS40045	1	5/8 x 1" Bolt & Flat Washer
26	MC226E	1	Idler Shaft 6208 Bearing Idler Roller 6307 Bearing 1/2 x 2 3/4" Grade 5 Bolt
27	MC508	1	
28	MC226F	1	
29	MC510	1	
30	BOS32115	3	
31	MC811S	1	E 1 3/4" Hub
32	MC824S	1	5-5V11.3 Pulley
33	BOS40085	4	5/8 x 2" Std Bolt
34	MC225A	1	2 3/4" Washer
35	MC225B	1	Spacer Pipe

RIGHT SIDE

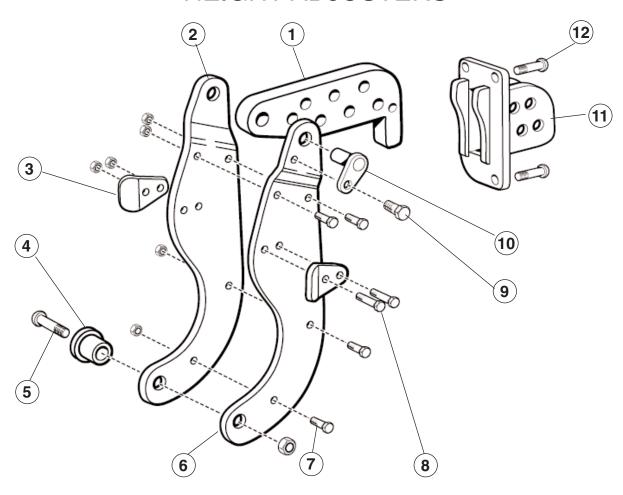


[★]See Gap Adjuster on page 33

RIGHT SIDE

Item	Ordering	No.	Description
No.	Number	Required	
1	BOC40085	8	5/8 x 2" Carriage Bolt / Reg Nut
2	MC21W2	1	Main Frame Right Hand Side
3	MC22W5R	1	Steel Roller Pivot Arm
4	BOC40125	1	5/8 x 3" Carriage Bolt / Reg Nut
5	MC225	2	Guide Washer
6	MC225B	1	Spacer Pipe 2 3/4" Washer 1/2 x 1 1/4" Carriage Bolt / Flange nut 4 Bolt Flange Bearing Pivot Arm Holder
7	MC225A	1	
8	BOC32055	8	
9	MC512	5	
10	MC22W1	1	
11	MC22W4R	1	Rubber Roller Pivot Arm R/H Pivot Bushing 5/8 x 1 1/2" Carriage Bolt/ Standard Nut Roller Bearing Bracket 5VX450 3 Banded Drive Belt
12	MC221	1	
13	BOC40065	8	
14	MC223	2	
15	MC835	1	
16 17 18 19 20	MC822S MC255B MC255A MC25W5 MC125B	1 1 1 1	3-5V5.2 Pulley Flattened Carriage Bolt Belt Tightener Sprocket Belt Tightening Bracket Spacer Belt Tightener
21	MC838	1	BX36 Belt
22	MC820S	1	1TB34 Pulley
23	MC830S	1	AG2352 Idler Pulley
24	MC814	1	P1 1 3/4" Hub
25	KE2408	5	3/8 x 2" Key
26 27 28 29 30	BOS20045 MC815S MC828S MC812S KE1605	3 2 1 1	5/16 x 1" Hex Head Bolt SDS 1 3/4" Hub MBL33 Pulley L 1 1/4" Hub 1/4 x 1 1/4" Key
31	BOS16045	2	1/4 x 1" Hex Head Bolt
32	BOS16055	6	1/4 x 1 1/4" Hex Head Bolt
33	MC821S	1	1B80 Pulley
34	BOS32115	3	1/2 x 2 3/4" Hex Head Bolt
35	MC811S	1	E 1 3/4" Hub
36 37 38 39 40	MC826S MC509 MC225H MC507 MC225G	1 1 1 1	6-5V10.9 Pulley 6305 Bearing Tube - Rubber Roller Drive, Idler 6206 Bearing Shaft - Rubber Roller Drive Tightener Spindle
41	BOS24085	3	3/8 x 2" Hex Head Bolt
42	MC816S	1	SF 1 3/4" Hub
43	MC823S	1	3-5V7.1 Pulley
44	MC836	1	5VX610 3 banded, Belt
45	BOS40085	4	5/8 x 2" Standard Bolt
46 47 48 49 50	MC222 MC221A MC225F BOC32145 BOC40145	1 2 1 1	Bearing Bracket - Rubber Roller Steel Roller Pivot Bushing Rubber Roller Drive Tightener Bracket 1/2 x 3 1/2" Carriage Bolt 5/8 x 3 1/2" Carriage Bolt

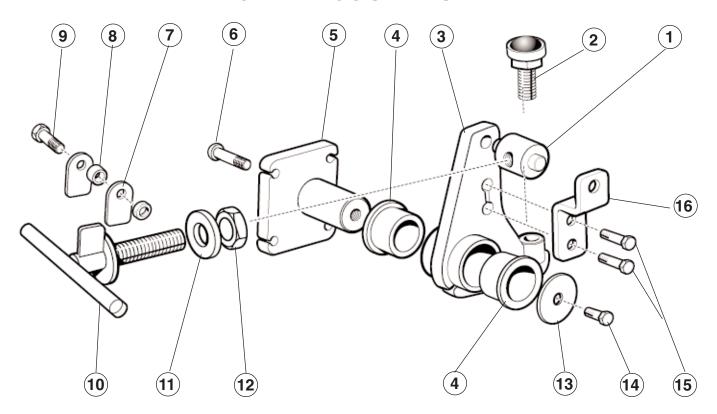
HEIGHT ADJUSTERS



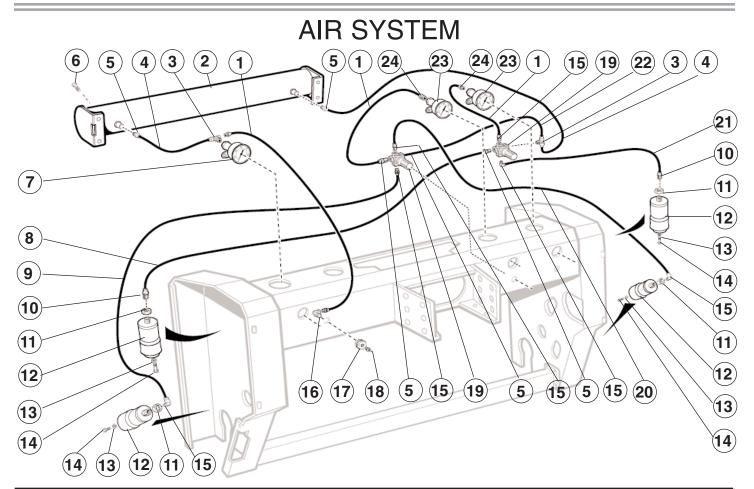
Item No.	Ordering Number	No. Required	Description
1	MC23W9	1	Height Adjuster Bar
2	MC238R	1	Height Adjuster Arm R/H
3	MC238A	2	Guide
4	MC238C	1	Height Adjuster Spacer Bushing
5	BOC40105	1	5/8 x 2 1/2" Carriage Bolt
6	MC238L	1	Height Adjuster Arm L/H
7	BOS24055	4	3/8 x 1 1/4" Hexagon Head Bolt and Nut
8	BOS24075	2	3/8 x 1 3/4" Hexagon Head Bolt and Nut
9	BOS32035	1	1/2 x 3/4" Standard Bolt
10	MC23W8A	1	Height Adjuster Arm Pin
11	MC23W8	1	Height Adjuster Bracket
12	BOC28045	3	7/16 x 1" Carriage Bolt

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GAP ADJUSTERS

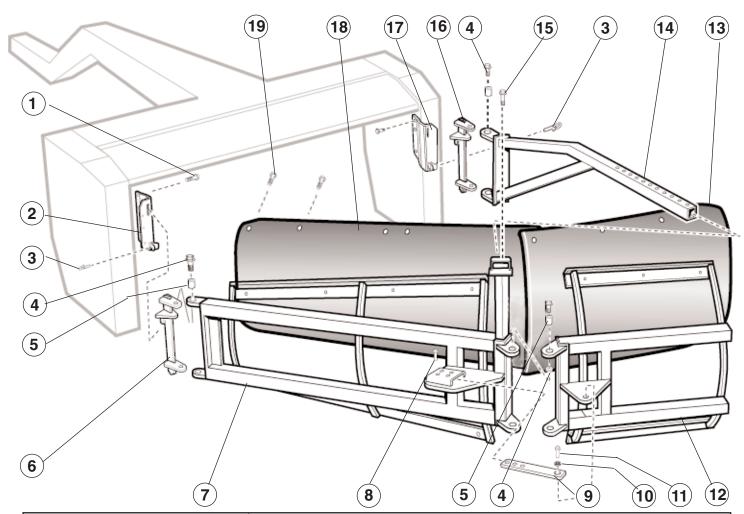


Item No.	Ordering Number	No. Required (Each Side)	Description
1	MC228D	1	Swivel Nut - Rubber Bumper Adjuster
2	MC22W3	1 1	Rubber Bumper
3	MC22W8R	1	Rubber Bumper Pivot Arm - R/H (Shown Above)
3	MC22W8L	1	Rubber Bumper Pivot Arm -L/H (Opposite side of machine - Not Shown)
4	MC228A	2	Bushings
5	MC22W9	1	Rubber Bumper Pivot
6	BOC32085	4	1/2 x 1 1/2" Carriage Bolt
7	MC254A	2	Crank Lock
8	MC248C	1	Spacer Bushing
9	BOS24055	1	3/8 x 1 1/4" Hexagon Head Bolt and Nut
10	MC25W4	1	Rubber Bumper Crank
11	MC254B	1 1	Spacer
12	NUTSJ64	1	1" Jam Nut
13	MC225A	1	Washer
14	BOS40045	1	5/8 x 1" Hexagon Head Bolt
15	BOS32075	2	1/2 x 1 3/4" Hexagon Head Bolt
16	MC228C	1	Swivel Nut Holder



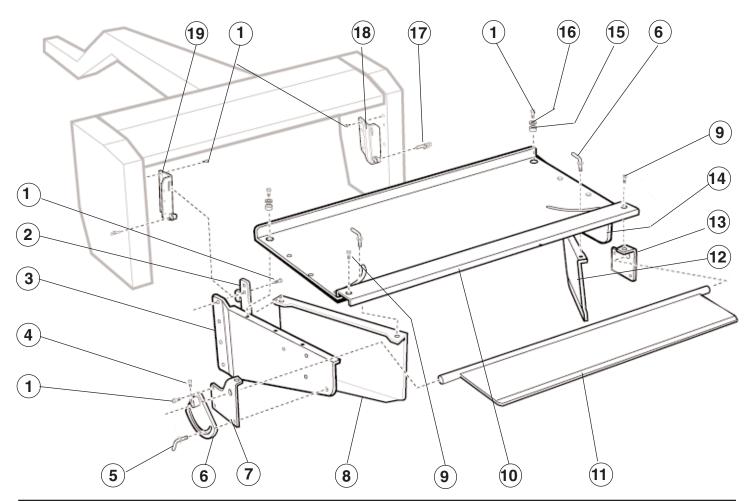
Item	Ordering	No.	Description
No.	Number	Required	
1	MC912A	3	8" Hose
2	MC24W3	1	Air Tank
3	MC922	2	Tee
4	MC912B	2	18" Hose
5	MC919	5	1/4 x 1/4" Straight Fitting
6	BOF24055	4	3/8 x 1" Flange Bolt/Nut
7	MC914	1	Air Tank Pressure gauge
8	MC912G	1	110" Hose
9	MC912F	1	83" Hose
10	MC918	2	1/8 x 1/4" Straight Fitting
11	MC923	4	3/4" Fine thread jam nut Air bag 1/2" Spring Washer 1/2 x 1 1/4" Standard Bolts 1/8" male x 1/4" hose end Elbow
12	MC910	4	
13	WAL32	4	
14	BOS32055	4	
15	MC920	6	
16	MC924	1	1/4 x 1/4" Elbow
17	MC915	1	Bulkhead Fitting
18	MC916	1	Shrader Valve
19	MC911	2	Regulator
20	MC912E	1	73" Hose
21	MC912D	1	29" Hose 14 1/2" Hose Roller Pressure Gauge 1/4" female end x 1/4" hose end Elbow Tubing (enough for replacement of all tubes, not cut)
22	MC912C	1	
23	MC913	2	
24	MC921	2	
25	MC912	30'6"	

MOLD BOARD ATTACHMENT



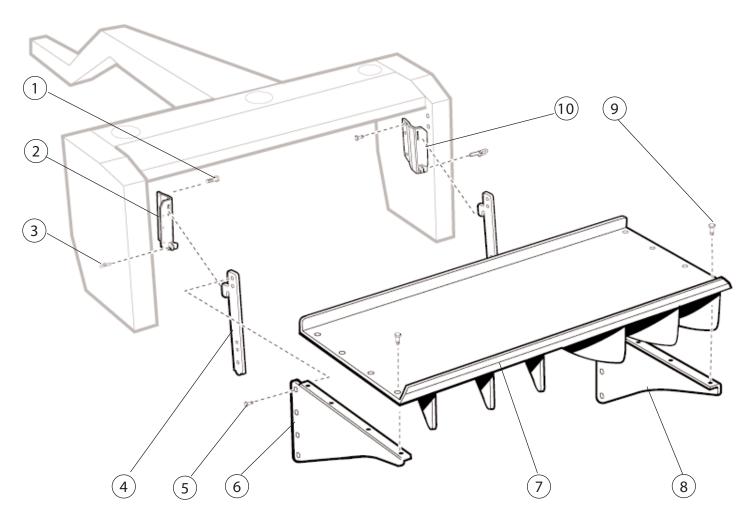
Item No.	Ordering Number	No. Required	Description
1	BOF24045	12	3/8 x 1" Flange Bolt
2	MC24W6L	1	Quick Attach Bracket L/H
3	MC743	2	Lynch Pin
4	BOS32055	6	1/2 x 1 1/4" Bolt & Nut
5	MB124	6	Pivot Bushing
6	MB12W2	1	Mold Board Quick Attach Hook L/H
7	MB12W3	1	Mold Board Main Frame
8	MB126P	1	Adjuster Pin 1/2" x 1 1/2"
9	MB126	1	Extension Adjuster Bar
10	MB123L	1	Bushing
11	BOS32065	1	1/2 x 1 1/2" Bolt And Nut
12	MB12W4	1	Mold Board Extension Frame
13	MB122E	1	Mold Board Extension
14	MB12W5	1	Adjuster Arm
15	MB125P	1	Adjuster Pin 1/2 x 4"
16	MB12W1	1	Mold Board Quick Attach Hook R/H
17	MC24W6R	1	Quick Attach Bracket R/H
18	MB122	1	Mold Board
19	BOC20035	14	5/16 x 3/4" Carriage Bolt

WINDROWER



Item	Ordering	No.	Description
No.	Number	Required	
1	BOF24045	27	3/8 x 1" Flange Bolt
2	MC248D	2	Quick Attach Hook
3	MC248A	1	Windrower Support - L/H
4	BOSH20065	1	5/16 x 1 1/2" Socket Head Cap Screw
5	MC24W8F	3	3/8 x 1" Wing Bolt
6	MC24W2	1	Shoot Adjuster Slide Shoot Adjuster Bracket - L/H Windrower Width Adjuster - L/H 5/16 x 3/4" Flange Bolt Windrower Top
7	MC24W8	1	
8	MC24W8CL	1	
9	BOF20035	10	
10	MC248	1	
11	MC24W1	1	Shoot Adjuster Plate
12	MC24W8CR	1	Windrower Width Adjuster - R/H
13	MC24W9	1	Shoot Adjuster Bracket - R/H
14	MC24W8B	1	Windrower Support - R/H
15	MC248C	2	Windrower Bushing
16	WAF28	5	7/16" Washer
17	MC743	2	Lynch Pin
18	MC24W6R	1	Quick Attach Bracket R/H
19	MC24W6L	1	Quick Attach Bracket L/H

SWATH SPREADER



Item No.	Ordering Number	No. R equired	Description
1 2	BOF24045 MC24W6L	12	3/8 x 1ÓF lange Bolts Quick Attach Bracket L/H
3	MC 743	2	Lynch Pin
4	MC 248D	2	Quick Attach Hook
5	BOF20035	8	5/16 x 3/4ÓFlange Bolt
6	MC24W7A	1	S preader S upport L/H
7	MC24W7	1	S preader Top
8	MC24W7B	1	S preader support R /H
9	BOF20035	8	5/16 x 3/4ÓFlange Bolt
10	MC 24W6R	1	Quick Attach Bracket R /H

LIMITED WARRANTY

Warranty service will be performed by an AgLand Dealer authorized to sell the Macerator

AgLand Warranty

AgLand Industries Inc. manufactures the AgLand Macerator. AgLand Industries Inc. ("Manufacturer") warrants each Macerator sold by it to be free of defects in material or workmanship under normal use and service. The sole obligation of the Manufacturer is limited to repairing or replacing, as the Manufacturer may elect, any part or parts that prove, in the Manufacturer's judgment, to be defective in material or workmanship within one year* after delivery to the original Retail Purchaser under normal farm use. (*3 months after delivery when purchased by a commercial operator.) The defective part or parts will be replaced or repaired only to the original Retail Purchaser. Warranty repair or replacement will be done at the location of the AgLand dealer who sold the Macerator. Defective parts must be returned to the Manufacturer or Dealer who sold the Macerator at the expense of the Retail Purchaser to be inspected by the Manufacturer. Purchaser must give written notice to the Dealer from whom the Macerator was purchased of any claimed defect and the Dealer will repair or replace the part or parts found to be defective.

Note: The sole remedy of The Purchaser for a claim under this warranty is the repair or replacement of defective parts.

This warranty does not extend to the drive components or tires, which are made by other manufacturers and carry warranties from said manufacturers. There are no representations, warranties, or conditions, express or implied, statutory or otherwise, except those herein contained and no agreement collateral otherwise except those herein contained, and no agreement collateral hereto shall be binding upon either party unless in writing hereon or attached hereto, signed by the Purchaser and accepted by the Manufacturer at its head office.

Service and Warranty Information

The Manufacturer's liability under this warranty is limited to the repairing or replacing of parts only, and the Manufacturer shall in no event be liable to the Retail Purchaser for consequential damage or loss of profits sustained by it as a result of any defect in material or workmanship on any of the equipment covered by this warranty.

The Macerator is warranted for agricultural use only. This warranty does not cover claims resulting from any use for other than agricultural applications.

Altering, modifying or adding additional equipment which is not approved for installation on the Macerator by the Manufacturer will void this warranty.

All warranties are subject to legislation of the state or province in which the Macerator is sold.

Note: There are no warranties, express or implied, by the Manufacturer or its Dealer regarding the Macerator except the warranty against defects in the material or workmanship expressed herein. No person is authorized to bind The Manufacturer to any other warranty whatsoever.

The Manufacturer reserves the right at any time to make changes in the design, material, parts or specifications of the Macerator without thereby becoming liable to make similar changes in equipment, machinery or parts previously manufactured.

AgLand Industries Inc.