



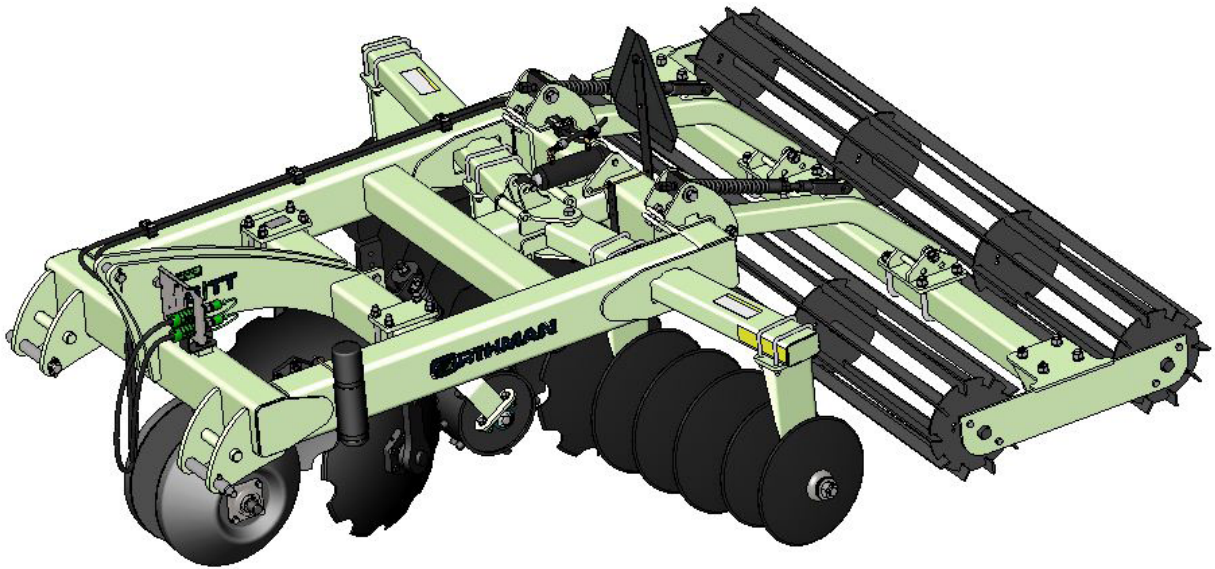
**5|TT TRACK TILLr®  
Operator's Manual**

**Part #125-026-01**





The Orthman 5|TT TRACK TILLr® is the ultimate machine for fixing tracks and ruts caused by center pivots. The TRACK TILLr® uses an entirely new set of tooling to bust up hard ruts, fill the track with soil (not residue), pack it, and feather out the soil surface up to 100" wide. Just like the time-tested dependability of all Orthman products, the TRACK TILLr® is designed to provide satisfactory results, year after year.



### **5|TT TRACK TILLr® shown with all options**

The 5|TT TRACK TILLr® base unit is equipped with the guide wheel, side wall busters, and angle-adjustable rear disc gangs, but can also be equipped with the optional packer wheel and dual rear rolling baskets. For added convenience and "on-the-fly" adjustability, a hydraulic cylinder may be added to adjust the angle of the rear disc gangs with changes in field conditions while the TRACK TILLr® is being operated.

This manual is considered to be an integral component of the 5|TT TRACK TILLr® and is designed to educate the owner and/or operator(s) regarding safety, operation, maintenance, troubleshooting, and component identification. All personnel involved in the operation of this implement are responsible for reading and understanding entire manual content. This manual is designed to keep the operator safe and knowledgeable as well as prolong the life of the implement and maximize field efficiency. This manual should accompany the implement if it were ever to be sold.

We would like to thank you for placing your confidence in Orthman Mfg., Inc. Your 5|TT TRACK TILLr® is manufactured to meet the highest standards and is built with precision and strength to increase your agricultural operation's dependability and profitability.

***Thank you for choosing Orthman.***

## **INTRODUCTION**

To The Dealer:

Inspect the implement thoroughly after assembly to be certain it is functioning properly before delivering it to the customer. The following checklist is a reminder of points to cover. Check off each item as it is found satisfactory or after proper adjustment is made.

### ***Pre-Delivery Checklist***

- 1. All Hardware properly tightened.
- 2. Lubrication of grease fittings.
- 3. All decals properly located and readable.
- 4. All implement tools and options are installed and set.
- 5. Check overall condition of implement.
- 6. Make sure Operator's manual is included.

Date Set Up. \_\_\_\_\_ Signature. \_\_\_\_\_

### ***Delivery***

Review the operator's manual with the customer. Explain the following:

1. Introduce the machine to the customer. Give the customer this manual and encourage them to read it.
2. Make the customer aware of all the safety precautions that must be exercised when using and transporting this machine.
3. Make customer aware of the different tooling options available.
4. This machine does not come set to run in the field from the factory. The Field settings section in this manual is meant to help set the machine for optimal performance. Explain all operating adjustments.
5. Explain to the customer that the life expectancy of this machine depends on regular maintenance as directed in this manual.
6. Tell the customer to use the proper tools for service and make them aware of Orthman parts availability.
7. Write machine model number and serial number in the spaces provided below.

Date delivered. \_\_\_\_\_ Signature. \_\_\_\_\_

Model Number. \_\_\_\_\_

Serial Number. \_\_\_\_\_



## WARRANTY

Orthman warrants each new wholegood product to be free from defects in manufactured components and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed twenty-four (24) consecutive months from date of purchase of the new Orthman product to the original purchaser.

Purchased components installed by Orthman (blades, bearings, controls, hoses, wheels, coulters, cylinders, fittings, etc.) shall be warranted by the respective manufacturer for a period of twelve (12) consecutive months from date of delivery of the new Orthman product to the original purchaser.

A completed online Warranty Registration for the original purchaser must be received by Orthman to activate warranty coverage. Non-receipt of warranty registration may void warranty coverage. The Orthman warranty is non-transferable.

Genuine Orthman replacement parts and components will be warranted for ninety (90) days from date of purchase, or the remainder of the original equipment warranty period, whichever is greater.

All warranty work is to be performed by an authorized Orthman dealer at the repairing dealer's location, unless otherwise approved by Orthman.

Under no circumstances, will this warranty cover any merchandise or component thereof, which, in the opinion of Orthman, has been subjected to misuse, unauthorized modifications or alteration, accident, collision with obstruction/ground, or if repairs have been made with parts other than those obtainable through Orthman.

Orthman warranty policies do not cover travel expenses, after-hours field/service time, overnight expenses, or expenses not related to regular shop labor rates or parts replaced during actual warranty repair. Orthman reserves the right to adjust warranty labor credits to believed normal repair times as directed by state law(s).

This warranty shall be limited to repairing or replacing, free of charge to the purchaser, any part, which Orthman's judgment shows evidence of such defect. Additionally, the defective part(s) shall be returned within thirty (30) days from the date of failure to Orthman through the dealer or distributor from whom the product was purchased or repaired; transportation charges prepaid.

This warranty shall not be interpreted to render Orthman liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss of crops, loss of delay in harvesting/planting, or any expense or loss incurred for labor, substitute machinery, rental, or any subsequent reasons thereof.

Except as set forth above, Orthman shall have no obligation or liability of any kind on account of its equipment and shall not be liable for special or consequential damages. **Orthman makes no other warranty, expressed or implied, and, specifically disclaims any implied warranty or merchantability or fitness for a particular purpose.** Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply. This warranty is subject to any existing conditions of supply, which may directly affect ability to obtain materials or manufacture replacement parts.

Orthman reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold; to include, but not limit to engineering prototype machines. No one is authorized to alter, modify, or enlarge this warranty nor the exclusions, limitations, and reservations.

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Lexington, Nebraska  
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Orthman provides this manual without warranty of any kind, expressed or implied. This manual reflects the product at the time of publication. All information within is based upon current information on the publication date. Orthman assumes no responsibility for damages incurred due to the use of the illustrations, information, and specifications within this publication.

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## SAFETY INFORMATION

### Farm Safety

Contrary to the popular image of fresh air and peaceful surroundings, a farm is not a hazard-free work setting.

Every year, thousands of farm workers are injured and hundreds more die in farming accidents. According to the National Safety Council, agriculture is the most hazardous industry in the nation.

### How You Can Improve Farm Safety

You can start by increasing your awareness of farming hazards and making a conscious effort to prepare for emergency situations including fires, vehicle accidents, electrical shocks from equipment and wires, and chemical exposures. Be especially alert to hazards that may affect children and the elderly. Minimize hazards by carefully selecting the products you buy to ensure that you provide good tools and equipment. Always use seat belts when operating tractors, and establish and maintain good housekeeping practices. Here are some other steps you can take to reduce illnesses and injuries on the farm:

- Read and follow instructions in equipment operator's manuals and on product labels.
- Inspect equipment routinely for problems that may cause accidents.
- Discuss safety hazards and emergency procedures with your workers.
- Install approved rollover protective structures, protective enclosures, or protective frames on tractors.
- Make sure that guards on farm equipment are replaced after maintenance.
- Review and follow instructions in material safety data sheets (MSDSs) and on labels that come with chemical products and communicate information on these hazards to your workers.

### Health and Safety Hazards on Farms

Farm workers including farm families and migrant workers are exposed to hazards such as the following:

Danger	Potential Effect or Injury	Prevention
Chemicals/Pesticides	Skin and respiratory injury or death	MSDS and proper Personal Protective Equipment. Review Manufacturers data sheets
Cold	Illness, Frostbite or death	Dress properly for the day.
Dust	Respiratory injury or explosive combinations	Be aware of your surroundings and activity
Electricity	Shock, burns, fire, death	Use a qualified professional for wiring dangerous electrical devices. Never overload a circuit. Replace damaged electrical devices or cords. Electrical tape will not insulate you from injury.
Grain bins, Silos	Entrapment, Suffocation, Explosion from formation of dangerous gases and poisoning.	Make sure the bin is properly ventilated and maintained. Never walk the grain.
Hand tools	Injury including cuts abrasions, electrocution, strains, sprains and death	Make sure you hand tools are in good condition. Never leave a damaged tooling accessible for someone else to use.
Highway traffic	Collisions resulting in injury or death	Follow regulations, stay alert. Avoid alcohol and use of communication devices while driving
Lifting & lifting devices	Back injury, sprains, strains. Falling material resulting in being struck or crushed by heavy material	Use proper lifting technique. Get help when the load is too heavy. Inspect chains, straps or cables routinely to make sure they are in good condition.
Livestock handling	Serious injury or death resulting from being pinned struck or trampled.	Always make sure you have adequate room and an escape route
Machinery/Equipment	Cuts, abrasions, amputations, death.	Thoroughly read and understand your Owners Equipment Manual. Never operate the equipment without guards in place. Make sure the equipment can not be energized or otherwise put into operation while you are working on it.
Manure pits	Explosion from formation of dangerous gases. Suffocation. Poisoning	Proper maintenance.
Mud	Sprains, strains, entrapment and suffocation. Eye injury and skin irritation.	Proper Personal Protective Equipment. In some conditions a "Spotter" may be needed.
Noise	Hearing damage	Personal Protective Equipment.
Ponds	Drowning	Wear a life preserver and make sure help is readily available.
Slips/Trips/Falls	Sprains, strains, back and neck injury, bone breaks or death	Keep work area free from clutter and organized. If working on anything elevated make sure you have appropriate guarding and/or fall protection such as a harness and lanyard.
Sun/Heat	Sunburn, Heat Stroke, shock, death	Use common sense on excessively hot days, use sun screen, wear a hat and stay hydrated.
Toxic gases	Skin and respiratory injury or death. Explosion.	MSDS and proper Personal Protective Equipment. Review Manufacturers data sheets
Tractors	Cuts, abrasions, amputations, death.	Thoroughly read and understand your Owners Equipment Manual. Never operate the equipment without guards in place. Anti-roll over devices.
Wells	Electrocution, amputation, death	Avoid contact with water while working on an electrical device. Always be sure the equipment can/will not be energized during repair or maintenance. Make sure all guarding is in place.
Severe Weather	Electrocution, "struck by" injuries, death	Move to a safe place. Lightning, hail and tornadoes are unpredictable.

**Orthman Manufacturing, Inc. does not limit the potential effects or injuries nor prevention measures to those listed above. They are provided solely as a guideline to making your farm life safer. Always consult your Owner/Operators Manual for specific tool and equipment safety requirements.**

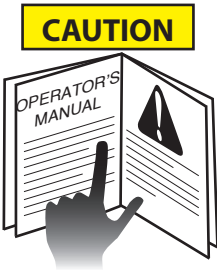
#### High Risk Factors on Farms

The following factors may increase risk of injury or illness for farm workers:

- Age – Injury rates are highest among children age 15 and under and adults over 65.
- Equipment and Machinery – Most farm accidents and fatalities involve machinery. Proper machine guarding and doing equipment maintenance according to manufacturers' recommendations can help prevent accidents.
- Protective Equipment – Using protective equipment, such as seat belts on tractors, and personal protective equipment (such as safety gloves, coveralls, boots, hats, aprons, goggles, face shields) could significantly reduce farming injuries.
- Take precautions to prevent entrapment and suffocation caused by unstable surfaces of grain storage bins, silos, or hoppers. Never "walk the grain."
- Be aware that methane gas, carbon dioxide, ammonia, and hydrogen sulfide can form in unventilated grain silos and manure pits and can suffocate or poison workers or explode.
- Take advantage of safety equipment, such as bypass starter covers, power take-off master shields, and slow-moving vehicle emblems.
- Medical Care – Hospitals and emergency medical care are typically not readily accessible in rural areas near farms.

#### The Benefits of Improved Safety and Health Practices

Orthman Manufacturing Provides this document in the hope that everyone that has a job to do, does it SAFELY. Our goal and yours should be to end each day in the best possible health. Better safety and health practices reduce fatalities, injuries, and illnesses as well as associated costs such as workers' compensation insurance premiums, lost production, and medical expenses. A safer and more healthful workplace improves morale and productivity.

**SAFETY INFORMATION****⚠ FOR YOUR PROTECTION**

**READ AND UNDERSTAND THE ENTIRE CONTENT OF THIS MANUAL BEFORE OPERATING OR SERVICING IMPLEMENT.** Read and understand all operator manuals for the machinery used in conjunction with your Orthman equipment.

- Carefully **READ ALL SAFETY DECALS** in this manual as well as on the implement. Keep implement clean so decals are easily visible. Keep all safety decals in good, clean, and legible condition. Immediately replace damaged and/or missing decals. Replacement decals are available from your Orthman dealer.
- Learn to operate the implement and all components properly. Do not let others operate implement without proper instruction. Unauthorized implement modifications may impair function and safety. If you do not understand any content in this manual or need assistance, contact your Orthman dealer.

**⚠ EQUIPMENT SAFETY GUIDELINES**

Operator safety is the primary concern when designing an Orthman implement. Orthman integrates as many safety features into the implement as possible. You can avoid many hazards and possible accidents by observing precautions in this safety section.

- Insist that yourself and personnel working with and around you follow all safety precautions. Be cautious when working with or around implement to avoid injury.

**SAFETY ALERT SYMBOL**

The **SAFETY ALERT SYMBOL** warns of potential hazards to personal safety and that extra precautions must be taken. When you see this symbol, carefully read the message(s) that follow. Follow all recommended precautions and safe operating practices in this manual.

NOTE: Hazard control and accident prevention are dependent upon the safety awareness and proper training of personnel involved in the operation of this implement.

### **BE AWARE OF SIGNAL WORDS**

**SIGNAL WORDS** designate a degree or level of **HAZARD** seriousness.

These signal words include:



**DANGER** indicates a hazardous situation that, if not avoided, will result in death or serious injury. **DANGER** is limited to extreme situations, typically for machine components which for functional purposes, cannot be guarded.



**WARNING** indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. **WARNING** includes hazards that are exposed when safety guards are removed. Warning may also be used to alert against unsafe practices.



**CAUTION** indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. **CAUTION** may also be used to alert against unsafe practices.

### **SHUTDOWN AND STORAGE**



**AVOID CRUSHING.** Make sure all personnel are clear of the implement. Lower implement to the ground, place tractor in park, turn off engine, and remove key.



**USE BAR STANDS AND CYLINDER STOPS TO SUPPORT THE IMPLEMENT.**

Store implement on a clean, dry, and level surface. An uneven surface could cause implement to shift or fall, resulting in injury or death, as well as implement damage. Securely support all implement components that must be raised. Store implement away from human activity.

## SAFETY INFORMATION

### **SAFE TRANSPORT**

- Engage transport locking devices prior to transport.
- Plan your route to avoid traffic. Yield to traffic in all situations.
- Maximum transport speed is 20 mph (32 kph). Various conditions will require reduced speed. Travel at speeds that allow for adequate control of stopping and steering.



**AVOID ELECTROCUTION.** Be aware of overhead power lines. Contact or close proximity to power lines can result in injury or death. Use extreme care when operating implement near power lines.



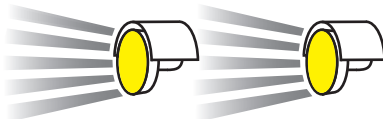
- Know implement transport height and gross weight. Avoid overhead obstructions not allowing your transport height. Do not use bridges rated below combined implement and tractor weight.
- Make sure a slow moving vehicle (SMV) placard is mounted to the implement and is easily visible to other motorists.
- Make allowances for implement size when transporting. Sudden braking can cause a towed load to swerve and/or rollover. Never use independent braking with implement in tow as loss of control and/or rollover can result. Reduce speed if towed implement is not equipped with brakes.
- Do not coast. Always keep tractor or towing device in gear to provide engine braking when traveling downhill.
- Comply with state and local laws governing implement transport.



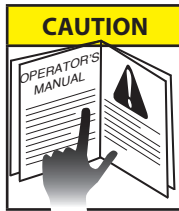
### **WARNING AND SAFETY LIGHTS**

- Oversized implements and slow moving vehicles create a hazard when transported on public roads.
- Make sure all warning, safety lights, and turning signals are working and clean. Use safety lighting when using public roads day and night. Replace missing or damaged lights immediately. Comply with state and local laws governing implement safety lighting.
- A safety lighting package, conforming to implement lighting standard ANSI/ASAE S279.12, if not supplied with, is available for addition to your equipment. Contact your Orthman dealer for safety lighting package information. Refer to toolbar operator's manual for safety lighting package installation and adjustment.

**CAUTION**





**⚠️ SAFE OPERATION****READ AND UNDERSTAND THE ENTIRE CONTENT OF THIS MANUAL BEFORE OPERATING OR SERVICING IMPLEMENT.**

Implement is to be operated by qualified personnel only. Never let children operate implement. A complete understanding of safety precautions, operation, and maintenance is mandatory before implement use.



**AVOID ELECTROCUTION.** Be aware of overhead power lines. Contact or close proximity to power lines can result in injury or death. Use extreme care when operating implement near power lines.

- Know implement transport height and gross weight. Avoid overhead obstructions not allowing your transport height. Do not use bridges rated below combined implement and tractor weight.



**AVOID ROLLOVER.** Do not fold or unfold implement and avoid sharp turns when on a hillside, as shift of weight could cause rollover. Operate implement at a safe distance from terrain irregularities and other obstructions that could cause rollover.



**AVOID CRUSHING.** Make sure all personnel are clear of implement at all times implement is in motion. Be aware of obstructions above, below, and around implement when in operation or transport. Injury or death can result from being struck by the implement.

**⚠️ NO RIDERS**

**NEVER ALLOW RIDERS ON TRACTOR OR IMPLEMENT.** Riders hinder operator visibility and can be thrown from the implement and/or be struck by foreign objects resulting in injury or death.

## SAFETY INFORMATION

### **PRACTICE SAFE MAINTENANCE**



Proper maintenance is your responsibility. Maintenance neglect and/or poor maintenance practices can result in injury or death. Always use the proper tools to maintain implement.

**AVOID CRUSHING.** Make sure all personnel are clear of the implement. Lower implement to the ground, place tractor in park, turn off engine, and remove key.



### **USE BAR STANDS AND CYLINDER STOPS TO SUPPORT THE IMPLEMENT.**

Store implement on a clean, dry, and level surface. An uneven surface could cause implement to shift or fall, resulting in injury or death, as well as implement damage. Securely support all implement components that must be raised. Store implement away from human activity.



**AVOID ENTANGLEMENT.** Never lubricate or service implement in motion. Keep away from power driven parts when in motion. Disengage power sources prior to maintaining implement. Injury or death can result from contact with power driven parts when in motion.



**AVOID CRUSHING.** Do not stand between the tractor and implement when connecting or disconnecting implement. Injury or death can result from being trapped between the tractor and implement.



Escaping pressurized hydraulic fluid can penetrate skin, resulting in injury or death. Relieve hydraulic system pressure before connecting or disconnecting tractor. Use cardboard or wood, **NOT BODY PARTS**, to check for suspected hydraulic leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. If an accident occurs, see a doctor immediately for proper treatment.

**⚠ PRACTICE SAFE MAINTENANCE**

- Never operate a combustion engine in an enclosed area. Make sure there is adequate ventilation. Exhaust fumes can cause asphyxiation.



- Service tires safely. Tire and rim separation can result in serious injury or death. Do not over inflate tires. Only mount or dismount tires if you possess the proper equipment, otherwise contact a trained professional. Always maintain correct tire pressure. Inspect tires and wheels daily. Do not operate tires with inadequate pressure, cuts, visible damage, or missing hardware.



- Be extremely careful working around unshielded sharp edges. Injury may result from contact with sharp edges.
- Keep all parts in good condition and properly installed. Replace damaged or missing parts immediately.
- Remove tools and unused parts prior to implement operation.

**⚠ PREPARE FOR EMERGENCIES**

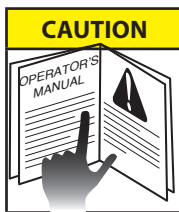
- Be prepared for a fire. Keep a readily accessible fire extinguisher at all times.
- Keep a readily accessible stocked first aid kit and emergency phone numbers for your doctor, hospital, ambulance, and fire department.
- Wear protective clothing and equipment. Wear clothing appropriate for the situation. Protect your eyes, ears, hands, and feet with the use of protective goggles, ear plugs, gloves, boots, etc.

**SAFETY INFORMATION****⚠ ANHYDROUS AMMONIA - NH<sub>3</sub>  
LIQUID FERTILIZER**

**ANHYDROUS AMMONIA (NH<sub>3</sub>) AND LIQUID FERTILIZER APPEARS HARMLESS. DIRECT EXPOSURE TO NH<sub>3</sub> OR LIQUID FERTILIZER IS EXTREMELY DANGEROUS AND CAN RESULT IN INJURY AND/OR DEATH.**

- Keep a clean supply of water readily accessible in case of exposure to NH<sub>3</sub> or liquid fertilizer.
- Wear protective goggles and gloves when working with NH<sub>3</sub> or liquid fertilizer. Be sure all persons involved in the operation are properly trained concerning the dangers and precautions involved in the application of NH<sub>3</sub> or liquid fertilizer.
- If you choose to apply NH<sub>3</sub> or liquid fertilizer, it is advisable to consult documented information regarding safe handling and application of NH<sub>3</sub> or liquid fertilizer. Information is available from the following recognized sources:

1. American National Standards Institute - [www.ansi.org](http://www.ansi.org) - (212) 642-4900
2. Material Safety Data Sheets - MSDS - [www.msdsonline.com](http://www.msdsonline.com)
3. National Safety Council - [www.nsc.org/necas](http://www.nsc.org/necas)
4. The Fertilizer Institute - [www.tfi.org](http://www.tfi.org)
5. United States Department of Transportation - D.O.T. - [www.dot.gov](http://www.dot.gov)
6. Compressed Gas Association - [www.cganet.com](http://www.cganet.com)

**⚠ SAFETY NEVER HURTS**

**READ AND UNDERSTAND THE ENTIRE CONTENT OF THIS MANUAL BEFORE OPERATING OR SERVICING IMPLEMENT.**

- Understand all implement functions.
- Never stand between tractor and implement when connecting or disconnecting implement.
- Be aware of all surroundings before moving implement.
- Operate implement from operator's seat only.
- Never mount or dismount a moving tractor.
- Never leave engine running when implement is unattended.
- Keep away from power driven parts when in motion.
- Make sure all personnel are clear before lowering implement to the ground.



## SAFETY DECALS

Safety decals promote awareness and knowledge concerning safe operation and maintenance of the implement.

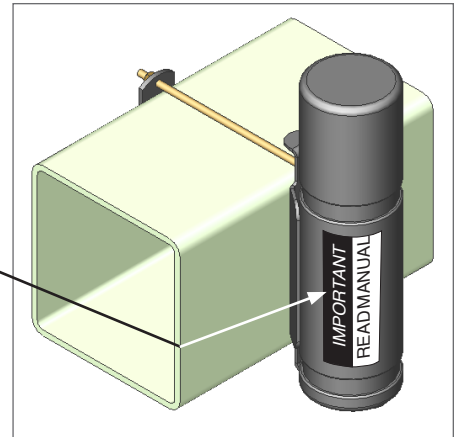
Carefully **READ ALL SAFETY DECALS** in this manual as well as on the implement. Keep implement clean so decals are easily visible. Keep all decals in good and legible condition. Immediately replace damaged and/or missing decals. Replacement decals are available from your Orthman dealer.

To install decals: Thoroughly clean area where decal is to be placed and attach decal void of bubbles. Refer to this safety information section for proper decal placement.

### IMPORTANT

Equipment operators should understand the enclosed manual before operating this equipment. Replacement manual, call 308-324-4654

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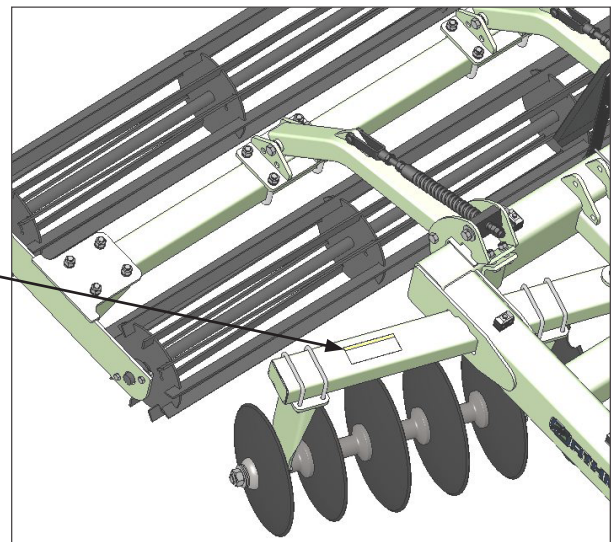


MANUAL ENCLOSURE

### CAUTION

1. Read and understand all operator manuals before implement use.
2. Follow all tractor or towing device operating procedures and safety guidelines.
3. Do not allow riders on implement.
4. Lower implement to the ground, place tractor in park, turn off engine, and remove key. Wait for all moving parts to come to a complete stop before working on implement.
5. Be extremely careful working around unshielded sharp edges.
6. Make sure all safety lighting and decals are clean. Use hazard lights when in transport.
7. Engage all safety devices before transporting or working beneath implement.
8. Contact or close proximity to power lines can result in electrocution.
9. Review all safety instructions with all operators on a frequent basis.

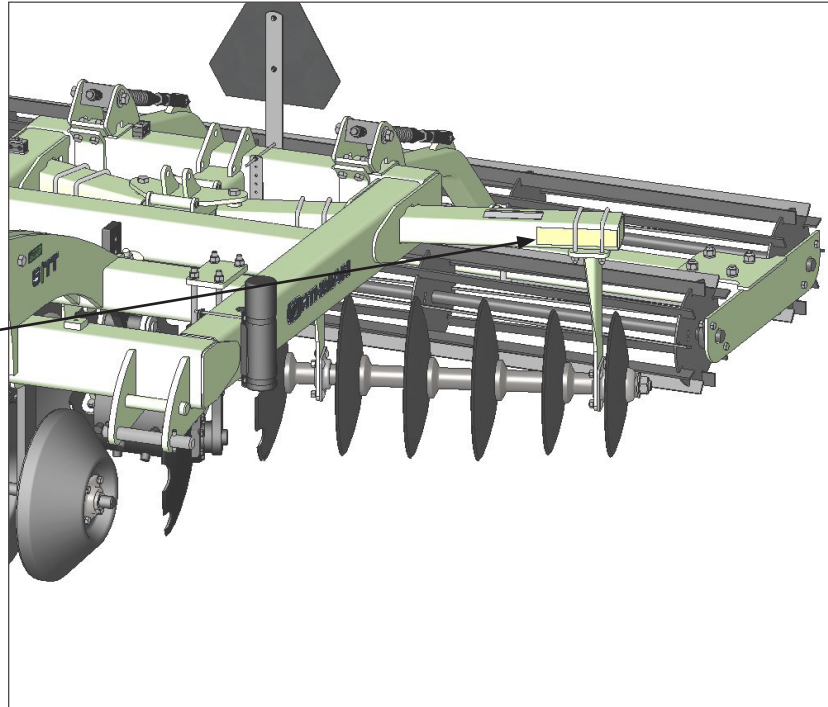
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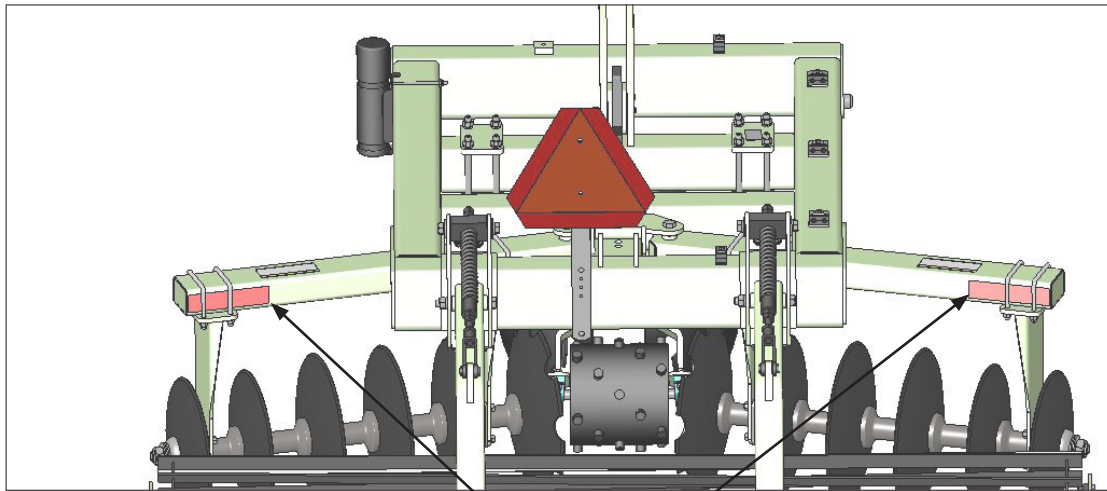
END OF DISC GANG FRAME

**SAFETY DECALS**

**153-172  
Amber Retro-reflective**



**FRONT OF MACHINE, END OF DISC GANG FRAME**

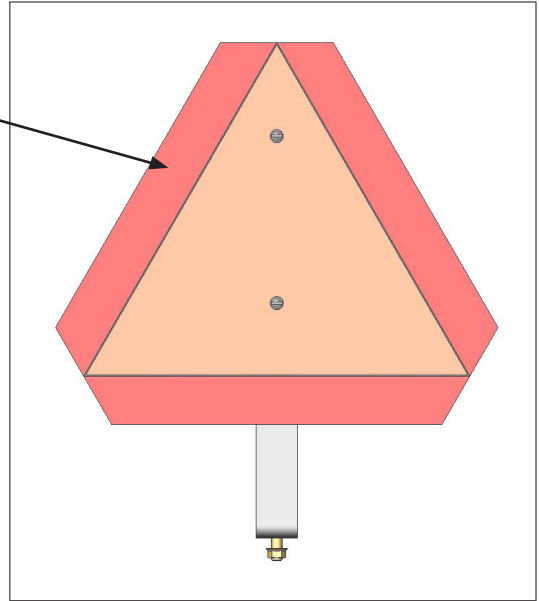


**REAR OF MACHINE, END OF DISC GANG FRAME**

**153-173  
Red Retro-reflective**

**SAFETY DECALS**

153-173  
Red Retro-reflective



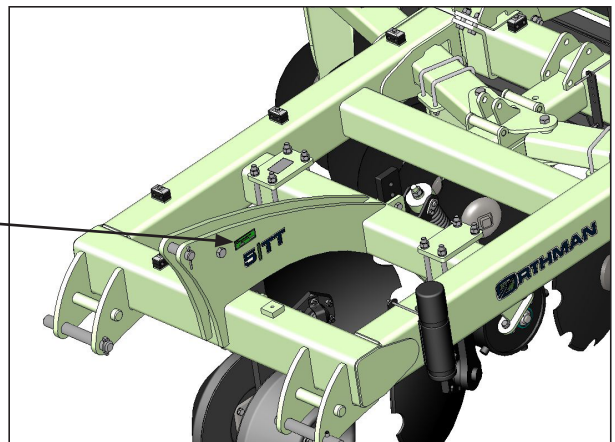
SMV SIGN

**ORTHMAN SERIAL TAG**

The Orthman serial tag contains valuable information. The model and serial numbers provide Orthman dealers and the Orthman Service Department with the exact specifications of your implement if any warranty or service issues need to be addressed.



153-011



3-POINT CENTER MAST PLATES



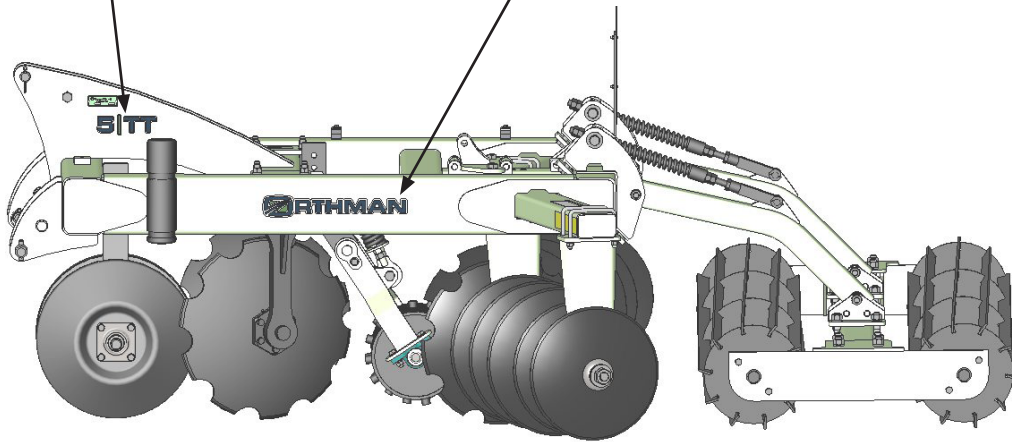
**ORTHMAN DECALS**

**5 | TT**

153-469

**ORTHMAN**

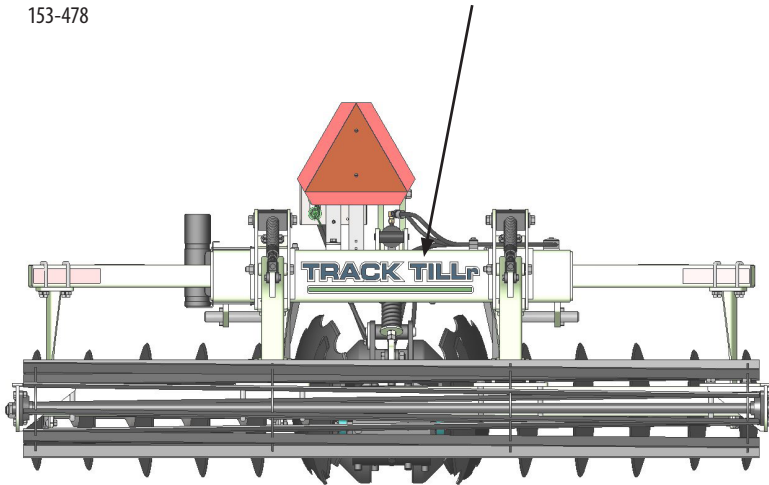
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**BOTH SIDES OF MACHINE**

**TRACK TILL<sub>r</sub>**

153-478

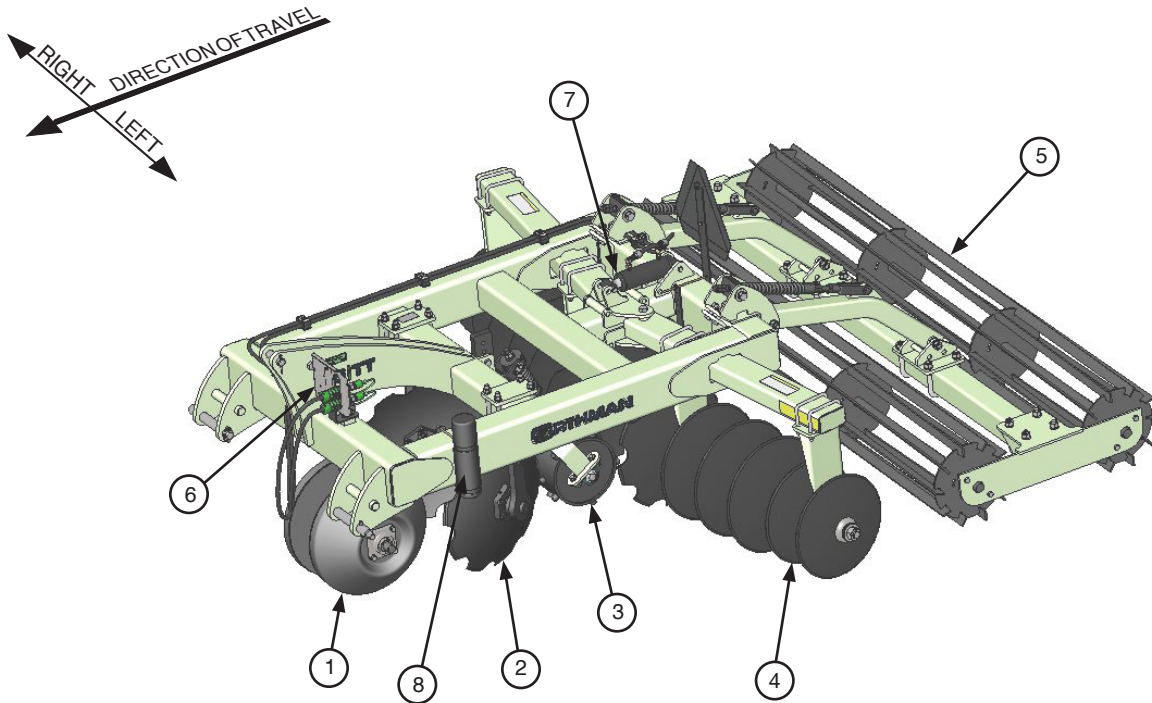


**REAR OF MACHINE**





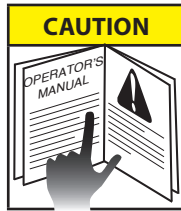
### IMPLEMENT COMPONENT IDENTIFICATION



**NOTE:** Right and left as illustrated above and referenced from this point on, is determined by facing the same direction the toolbar will travel while in use.

- 1. RECESSED-BEARING GUIDE WHEEL.** Centers the machine on the pivot track and controls tillage depth.
- 2. SIDE WALL BUSTERS.** 22" notched discs take down the side wall and fill the pivot track.
- 3. TRACK PACKER.** Optional tooling used to pack the soil in the pivot track to create a solid base.
- 4. ANGLE-ADJUSTABLE REAR DISC GANGS.** Feathers soil evenly in and around the previous pivot track.
- 5. REAR DUAL ROLLING BASKETS.** Optional tooling to enhance soil conditions and leave a final smooth soil surface.
- 6. HYDRAULIC HOSE STORAGE.** Storage plate for hydraulic hoses that coincide with the optional hydraulic angle adjustment.
- 7. HYDRAULIC ANGLE ADJUSTMENT.** Optional tooling to allow operator to make easier adjustments to the rear disc gang angle to adapt to changing soil and pivot track conditions.
- 8. MANUAL ENCLOSURE.** A safe place to store the implement operator's manual. Always keep the operator's manual with the implement.

### PREPARING THE IMPLEMENT



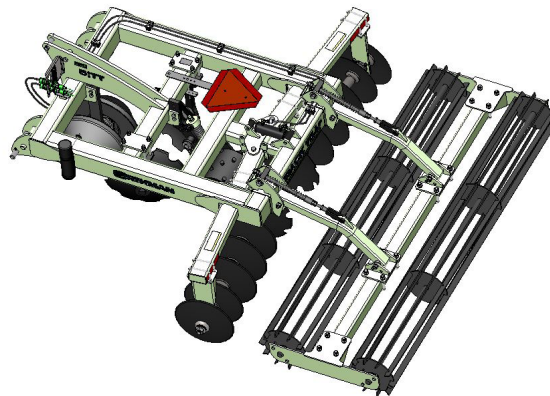
Tooling options available for added TRACK TILLr® versatility are illustrated and explained in the tooling options section of this manual. Field adjustments are illustrated and explained in the field settings section of this manual.



Before each use, check hardware for wear and proper torque. Replace damaged or missing hardware with hardware of an identical grade to restore implement to original specifications.

#### IMPLEMENT SMV SIGN ASSEMBLY

Due to shipping requirements, Orthman must ship all units with the SMV sign mounted down. It is the dealer/customer's responsibility to properly remove and re-mount the SMV sign to the track tiller frame in the upward and rear-facing orientation in order to comply with local laws.



### IMPLEMENT TO TRACTOR CONNECTION



**AVOID CRUSHING.** Do not stand between tractor and implement when connecting or disconnecting implement. Injury or death can result from being trapped between the tractor and implement.

**AVOID CRUSHING.** Make sure all personnel are clear of the implement. Lower implement to the ground, place tractor in park, turn off engine, and remove key.



#### CONNECT TRACTOR 3-POINT HITCH TO IMPLEMENT HITCH POINTS:

1. Position the rear of the tractor in front of the TRACK TILLr®.
2. Attach tractor 3-point draft links and center link to the implement hitch points. Refer to your tractor's operator's manual for information on tractor 3-point hitch.

### FIELD OPERATION



**AVOID CRUSHING.** Do not stand between tractor and implement when connecting or disconnecting implement. Injury or death can result from being trapped between the tractor and implement.

**AVOID CRUSHING.** Be sure the weight of the machine is fully supported by the tractor.



**PLACE TRACTOR IN PARK AND REMOVE KEY BEFORE DISMOUNTING TRACTOR TO ADJUST IMPLEMENT.**



**NEVER ALLOW RIDERS ON TRACTOR OR IMPLEMENT.** Riders hinder operator visibility and can be thrown from the implement and/or be struck by foreign objects resulting in injury or death.

**PLACE IMPLEMENT IN "FIELD READY" POSITION. MAKE NECESSARY ADJUSTMENT TO IMPLEMENT BY FOLLOWING ADJUSTMENT PROCEDURES IN THIS MANUAL. BELOW ARE ADJUSTABLE COMPONENTS OF THE IMPLEMENT.**



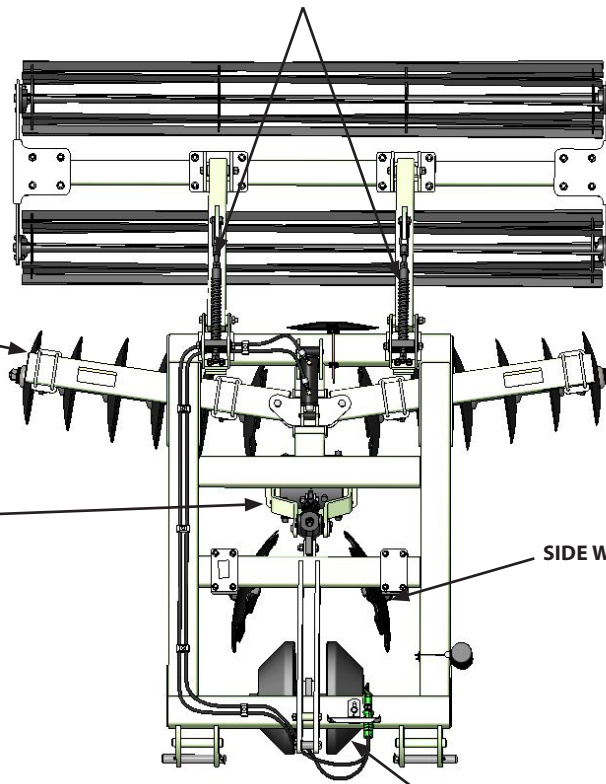
ROLLING BASKET DOWN PRESSURE

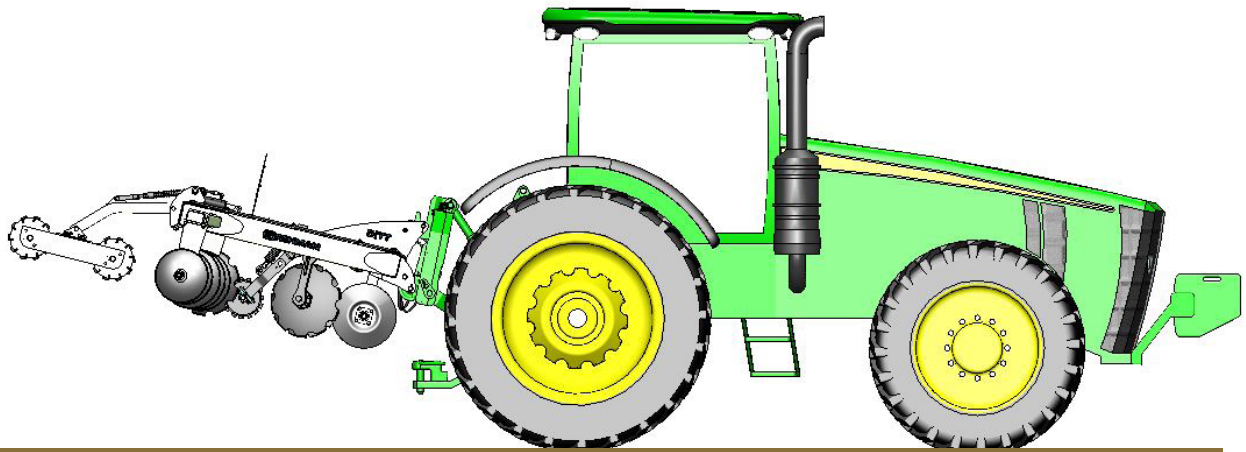
REAR DISC GANG ANGLE

TRACK PACKER DEPTH AND DOWN PRESSURE

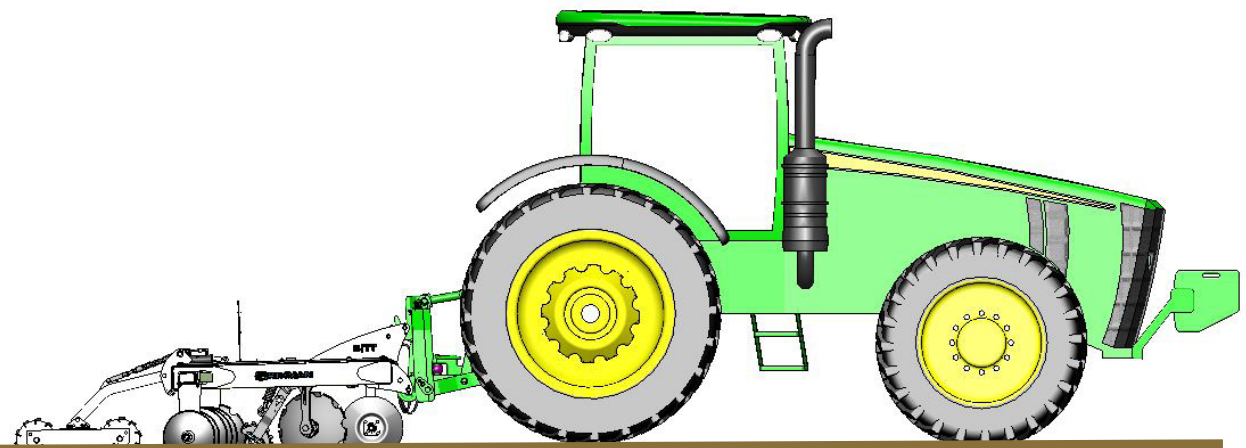
SIDE WALL BUSTER WIDTH

GUIDE WHEEL DEPTH



**FIELD OPERATION  
(CONTINUED)****Ground Surface**

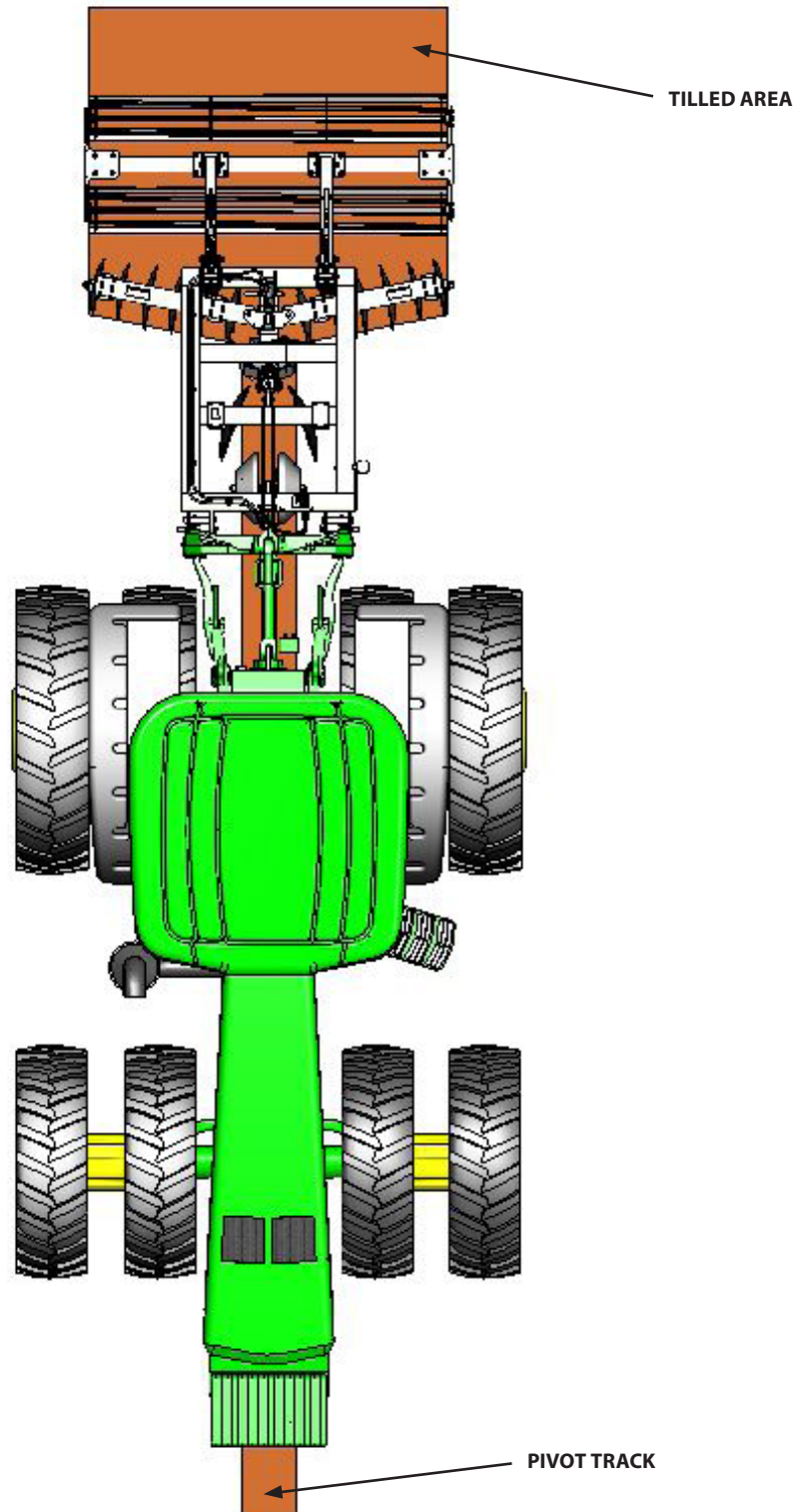
**TRANSPORT POSITION.** During transport, the tractor 3-point hitch should be in the fully raised position

**Ground Surface**

**FIELD POSITION.** Tractor 3-point hitch should be lowered to allow all implement tooling to operate as desired. Implement should run parallel with the ground surface. Make adjustments to tractor 3-point hitch accordingly. Refer to tractor operator's manual for more information.

### FIELD OPERATION (CONTINUED)

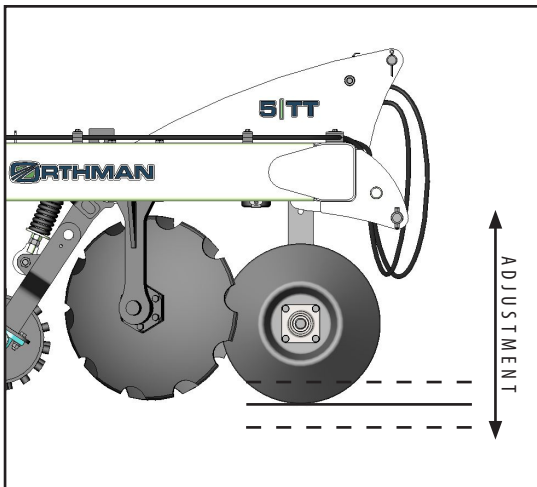
**IMPLEMENT ALIGNMENT.** The implement should be centered over the pivot track while in operation. Implement guide wheels should be adjusted to run in the pivot track and will assist with keeping the implement centered over the pivot track.



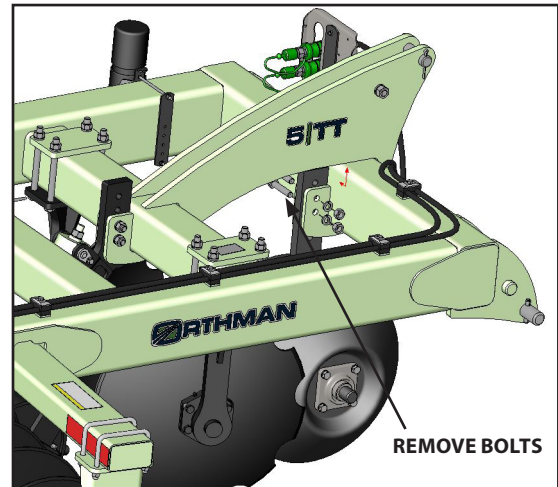


## FIELD ADJUSTMENTS

**GUIDE WHEEL DEPTH.** The depth setting of the guide wheels determine tillage depth. **NOTE:** Due to shipping requirements, the guide wheel's factory setting is **NOT** set for operation. Orthman recommends that the guide wheel be adjusted one hole upward, (deeper tillage direction) for optimum tillage results. To adjust, remove the two (2) bolts from the guide wheel mounting shank with 15/16" wrenches and adjust the guide wheels upward (for deeper tillage) or downward (for shallower tillage).

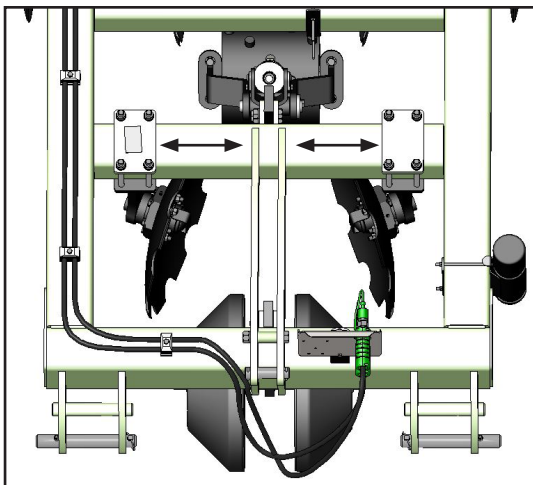


DEPTH ADJUSTMENT

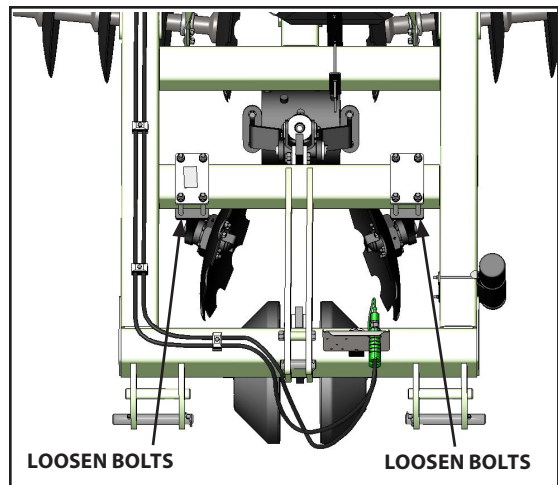


TO ADJUST GUIDE WHEEL

**SIDE WALL BUSTER DISC WIDTH.** The side wall buster discs may be adjusted to run narrow or wide, depending on the width of the pivot track. The sidewall buster discs should be set to allow them to destroy the pivot track side wall and move the soil into the pivot track. To adjust, loosen the disc hanger mounts at the frame with 15/16" wrenches and slide the entire disc assembly inward (for narrower pivot tracks) or outward (for wider pivot tracks).



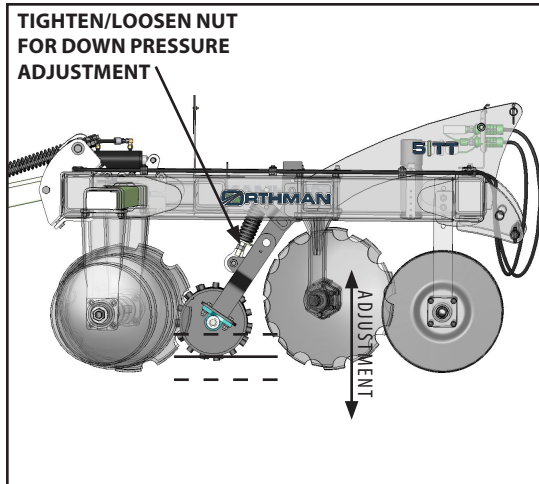
WIDTH ADJUSTMENT



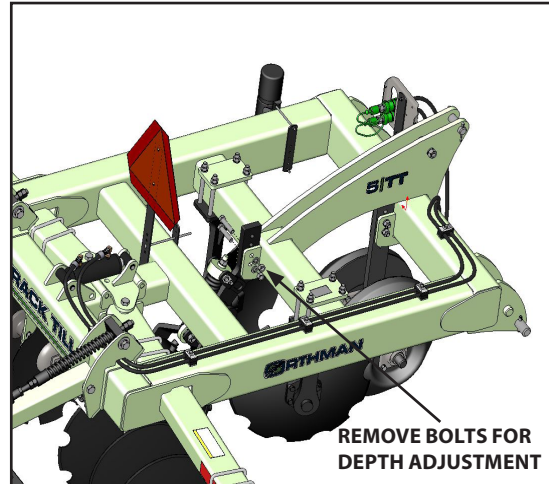
TO ADJUST SIDE WALL BUSTER DISCS

### FIELD ADJUSTMENTS (CONTINUED)

**TRACK PACKER DEPTH AND DOWN PRESSURE.** The track packer depth should be adjusted in conjunction with adjustment of the guide wheel. When the guide wheel is adjusted upward, the track packer should also be adjusted upward in the same manner. The track packer down pressure may be adjusted to achieve an optimum base foundation within the pivot track. Creating a solid foundation reduces the amount of soil “settling” that typically occurs during a post-tillage rain shower.

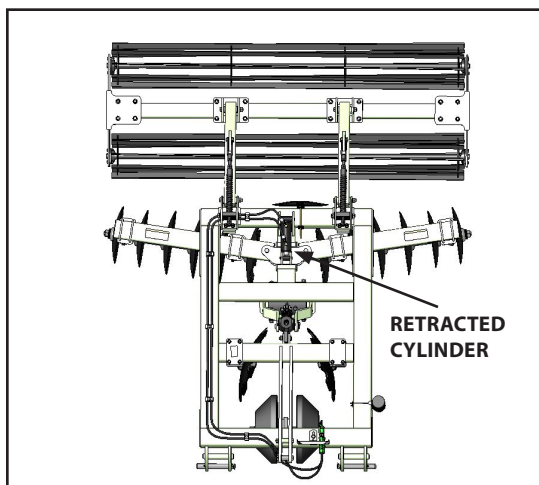


DOWN PRESSURE ADJUSTMENT

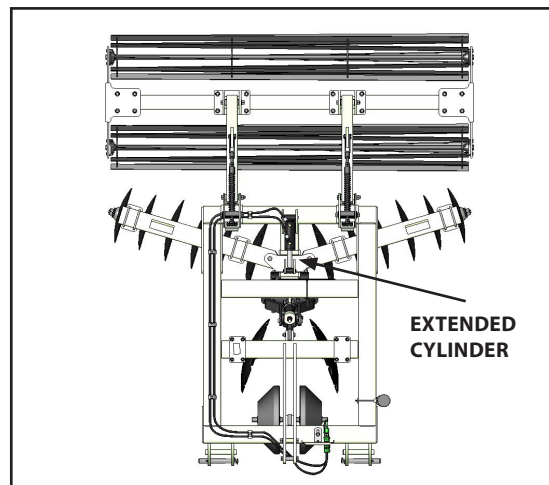


TO ADJUST TRACK PACKER

**REAR DISC GANG ANGLE.** The angle of the rear disc gangs may be adjusted when soil conditions demand more aggressive tillage. If equipped, the hydraulic angle adjustment system will allow for adjustment to be made while the implement is in operation. Standard units have a pin, that may be removed and replaced to lock in the new angle of the rear disc gangs.



BASE SETTING OF REAR DISC GANGS

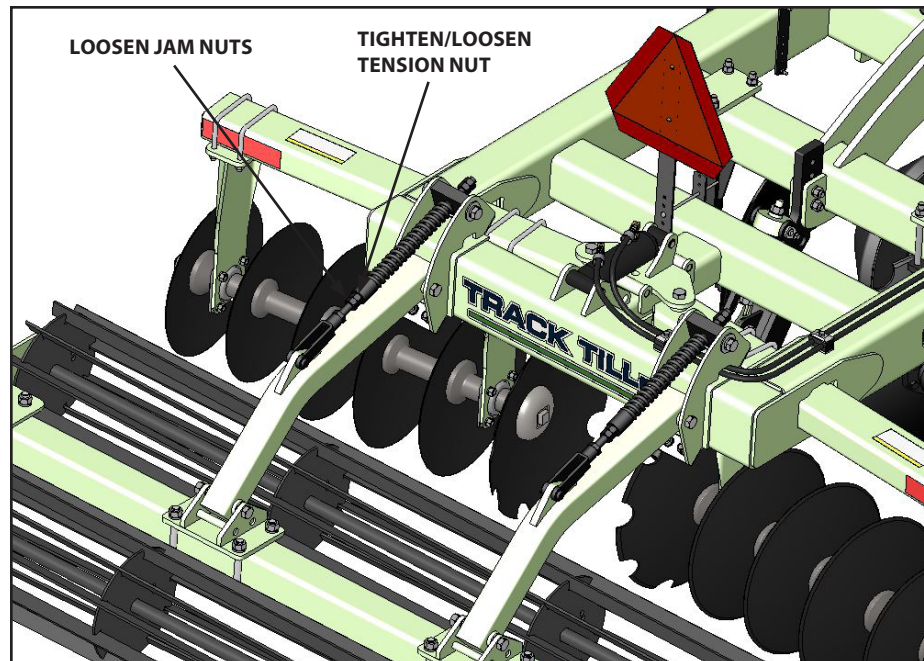


AGGRESSIVE SETTING OF REAR DISC GANGS



## **FIELD ADJUSTMENTS (CONTINUED)**

**ROLLING BASKETS DOWN PRESSURE.** The dual rear rolling baskets down pressure may be adjusted to achieve an optimum tillage bed. Be sure to adjust both arms evenly. Spring tension is adjusted by loosening the jam nut at the bottom of the spring stop and tightening/loosening the tension nut with a 1 1/8" wrench.



### **PRACTICE SAFE MAINTENANCE**

Proper maintenance is your responsibility. Maintenance neglect and/or poor maintenance practices can result in injury or death. Always use the proper tools to maintain implement.



#### **AVOID CRUSHING.**

Make sure all personnel are clear of the implement. Lower implement to the ground, place tractor in park, turn off engine, and remove key.



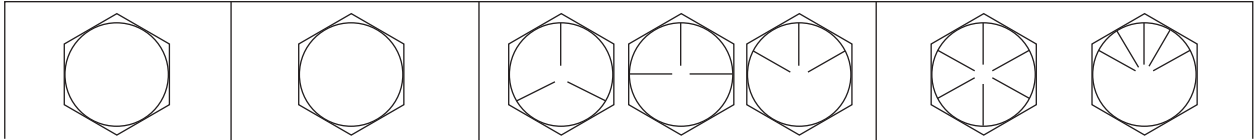
**AVOID CRUSHING.** Do not stand between the tractor and implement when connecting or disconnecting implement. Injury or death can result from being trapped between the tractor and implement.



**CAUTION.** Escaping pressurized hydraulic fluid can penetrate skin, resulting in injury or death. Relieve hydraulic system pressure before connecting or disconnecting tractor. Use cardboard or wood, NOT BODY PARTS, to check for suspected hydraulic leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. If an accident occurs, see a doctor immediately for proper treatment.

## TORQUE SPECIFICATIONS

Unified Inch Bolt and Screw Torque Values



Bolt or Screw Size	SAE Grade 1				SAE Grade 2 <sup>a</sup>				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Lubricated <sup>b</sup>		Dry <sup>c</sup>		Lubricated <sup>b</sup>		Dry <sup>c</sup>		Lubricated <sup>b</sup>		Dry <sup>c</sup>		Lubricated <sup>b</sup>		Dry <sup>c</sup>	
	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in
1/4	3.7	33	4.7	42	6	53	7.5	66	9.5	84	12	106	13.5	120	17	150
													N•m	lb-ft	N•m	lb-ft
5/16	7.7	68	9.8	86	12	106	15.5	137	19.5	172	25	221	28	20.5	35	26
									N•m	lb-ft	N•m	lb-ft				
3/8	13.5	120	17.5	155	22	194	27	240	35	26	44	32.5	49	36	63	46
			N•m	lb-ft	N•m	lb-ft	N•m	lb-ft								
7/16	22	194	28	20.5	35	26	44	32.5	56	41	70	52	80	59	100	74
	N•m	lb-ft														
1/2	34	25	42	31	53	39	67	49	85	63	110	80	120	88	155	115
9/16	48	35.5	60	45	76	56	95	70	125	92	155	115	175	130	220	165
5/8	67	49	85	63	105	77	135	100	170	125	215	160	240	175	308	225
3/4	120	88	150	110	190	140	240	175	300	220	380	280	425	315	540	400
7/8	190	140	240	175	190	140	240	175	490	360	615	455	690	510	870	640
1	285	210	360	265	285	210	360	265	730	540	920	680	1030	760	1300	960
1-1/8	400	300	510	375	400	300	510	375	910	670	1150	850	1450	1075	1850	1350
1-1/4	570	420	725	535	570	420	725	535	1280	945	1630	1200	2050	1500	2600	1920
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2140	1580	2700	2000	3400	2500
1-1/2	990	730	1250	930	990	730	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For plastic insert or crimped steel type lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application. Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Replace fasteners with the same or higher grade. If higher grade fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

<sup>a</sup> Grade 2 applies for hex cap screws (not hex bolts) up to 6 in. (152 mm) long. Grade 1 applies for hex cap screws over 6 in. (152 mm) long, and for all other types of bolts and screws of any length.

<sup>b</sup> "Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or 7/8 in. and larger fasteners with JDM F13C zinc flake coating.

<sup>c</sup> "Dry" means plain or zinc plated without any lubrication, or 1/4 to 3/4 in. fasteners with JDM F13B zinc flake coating.

DIBBZ

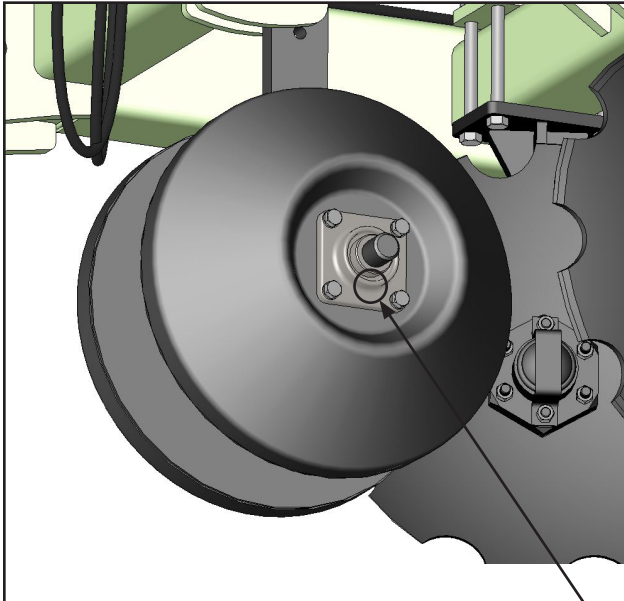
### LUBRICATION



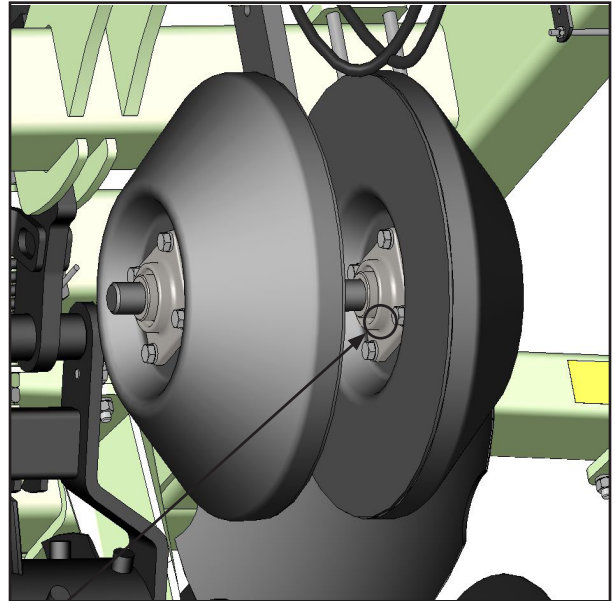
50 

- Grease - use high quality multi-purpose grease.
- Follow recommended 50 hour service interval illustrated below.

**OUTER GUIDE WHEEL BEARING**  
(GREASE BOTH SIDES)



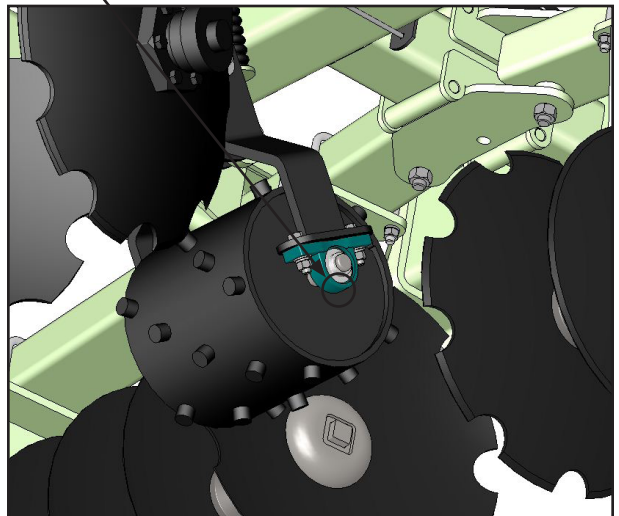
**INNER GUIDE WHEEL BEARING**  
(GREASE BOTH SIDES)



50 



**SIDE WALL BUSTER DISC BEARING**  
(GREASE BOTH SIDES)



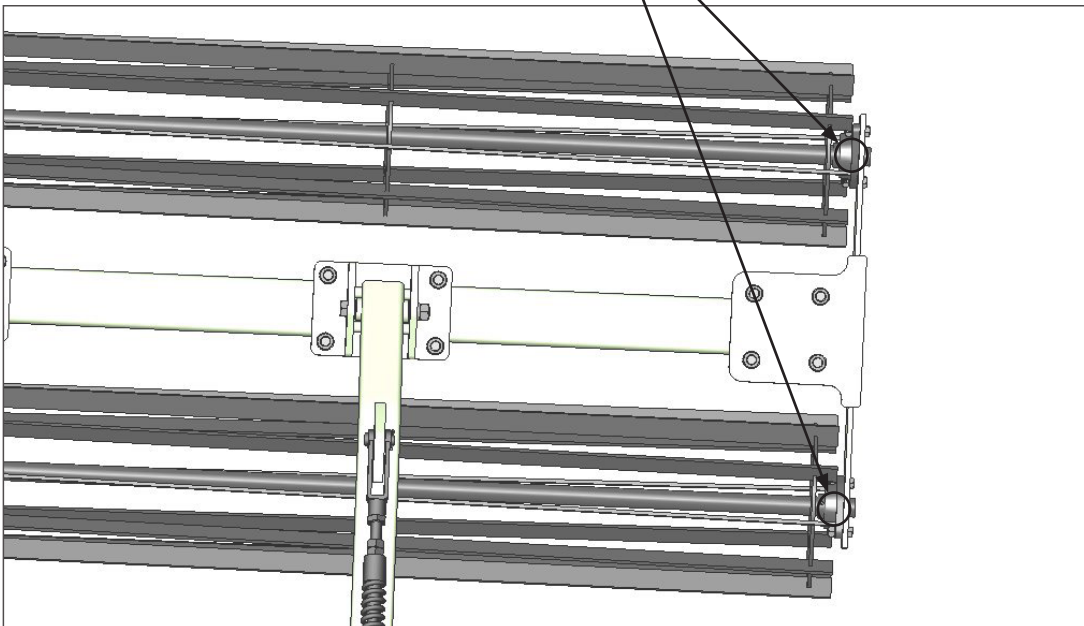
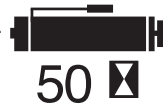
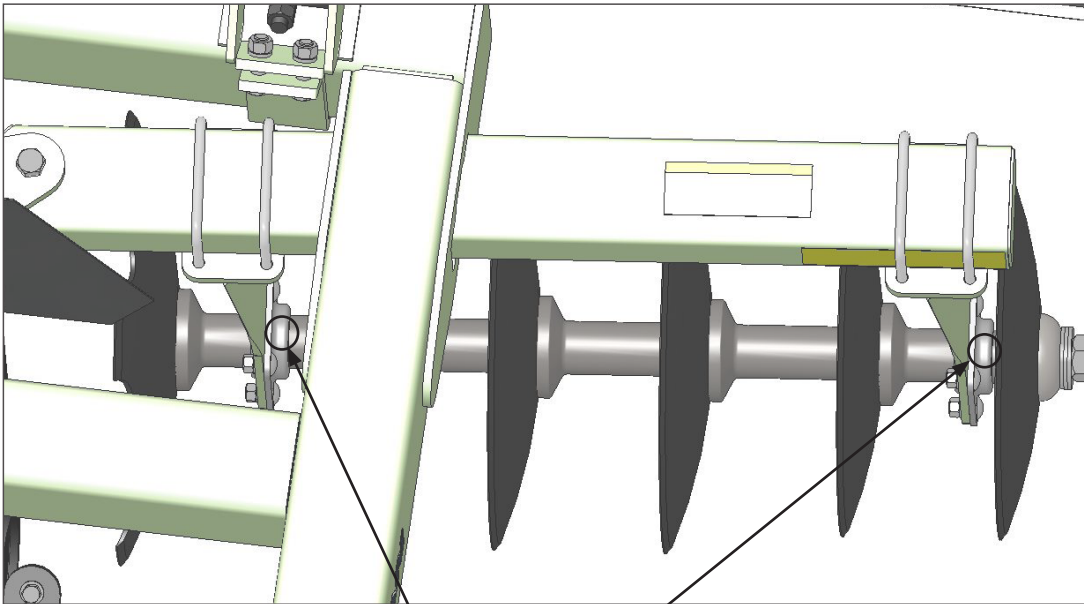
**TRACK PACKER BEARING**  
(GREASE BOTH SIDES)

### LUBRICATION



- Grease - use high quality multi-purpose grease.
- Follow recommended hourly service interval illustrated below.

**DISC GANG BEARINGS (GREASE BOTH SIDES)**



**ROLLING BASKET BEARINGS (GREASE BOTH SIDES)**



### **IMPLEMENT INSPECTION**

- When replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore implement to original specifications. Replace broken or worn parts immediately. Contact your Orthman dealer for replacement parts.
- During break-in (40 hours), check hardware for proper torque every 10 to 20 hours.
- Before each use, check hardware for wear and proper torque. Replace damaged or missing hardware with hardware of an identical grade to restore implement to original specifications.
- Do not allow debris to buildup on any surface of the implement.
- Replace all shields and guards. Be sure all tools, parts, and service equipment are removed prior to transporting equipment.



### **IMPLEMENT STORAGE**



- Clean and touch up paint seasonally to avoid corrosion and rust. Contact your Orthman dealer for touch up paint.
- Inspect all safety and Orthman decals and replace if missing or damaged. Contact your Orthman dealer for replacement decals.
- Grease all zerks regardless of hourly interval prior to storage.
- Check all hardware according to torque specifications prior to storage.
- Replace all worn or damaged parts prior to storage.
- Store inside if possible. Storing implement inside will prolong the life of the components.

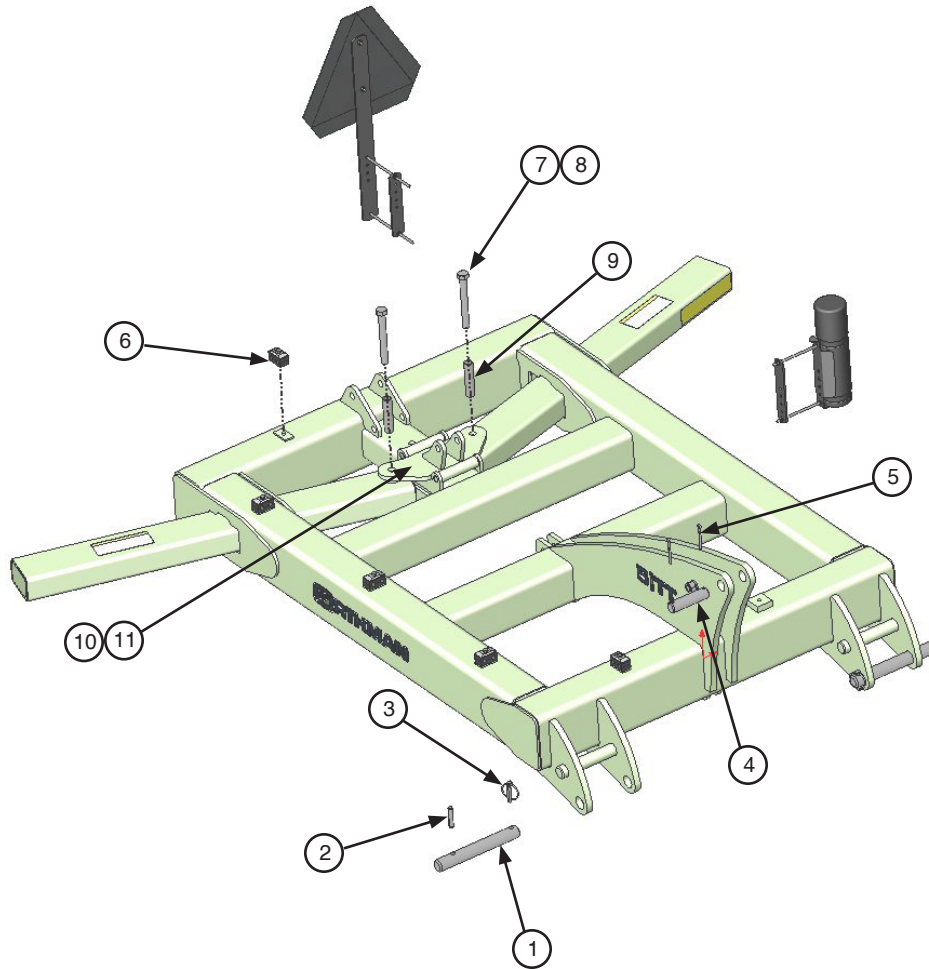


**AVOID CRUSHING.** Make sure all personnel are clear of the implement. Lower implement to the ground, place tractor in park, turn off engine, and remove key.

Storing implement on the ground will relieve the tractor three point hitch of hydraulic pressure.



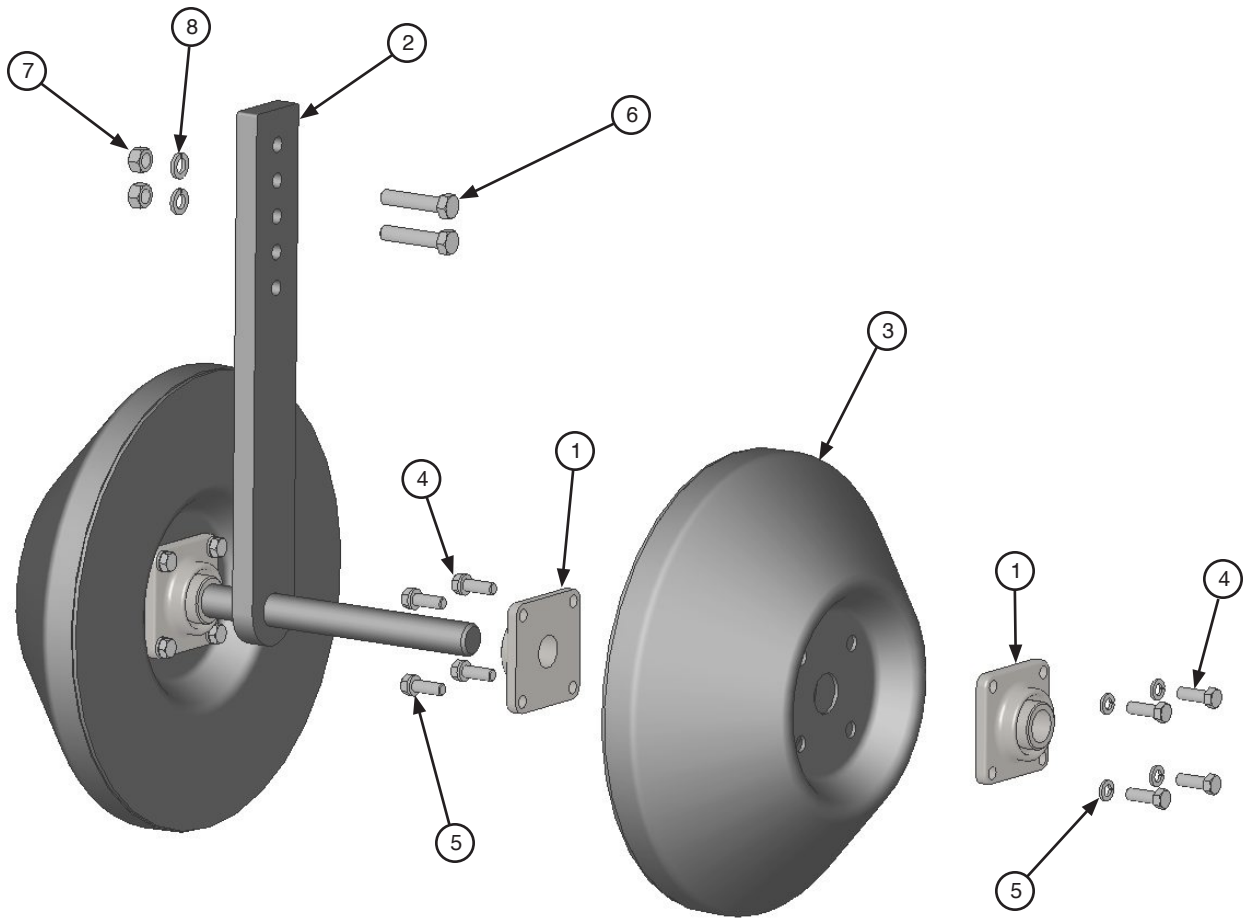
## PARTS IDENTIFICATION



### MAIN FRAME ASSEMBLY

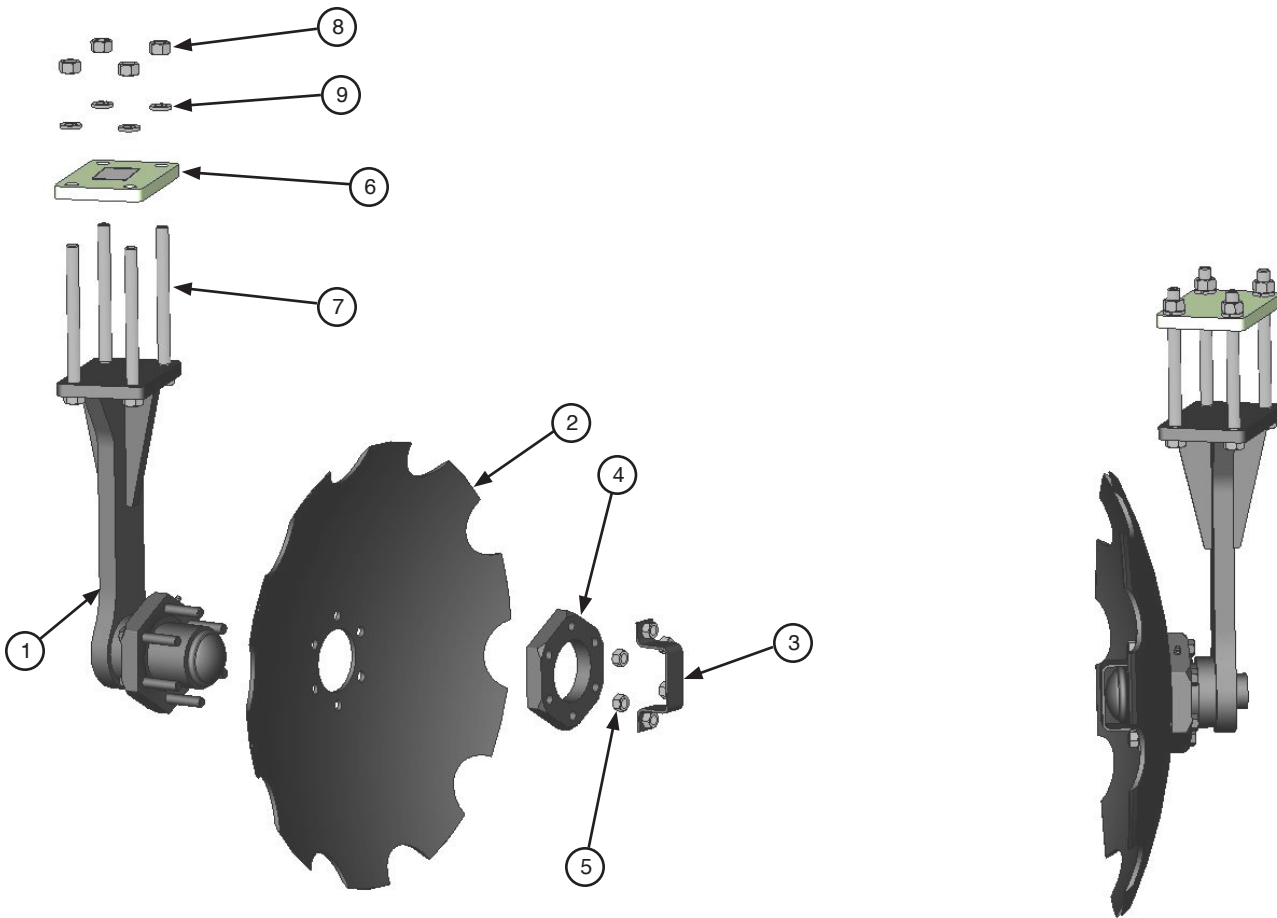
Key	Part #	Description	Qty	Notes
1	302-592	Pin	2	Lower tug pin
2	104-102	Roll pin	2	----
3	104-036	Lynch pin	2	----
4	302-591	Pin	1	Upper link
5	104-022	Cotter pin	2	----
6	152-679	Hose clamp	5	----
7	100-169	Bolt	2	----
8	102-031	Lock nut	2	3/4"
9	369-322	Pivot bushing	2	----
10	369-393	Roller, Top	1	----
11	369-394	Roller, Bottom	1	----




**GUIDE WHEEL ASSEMBLY**

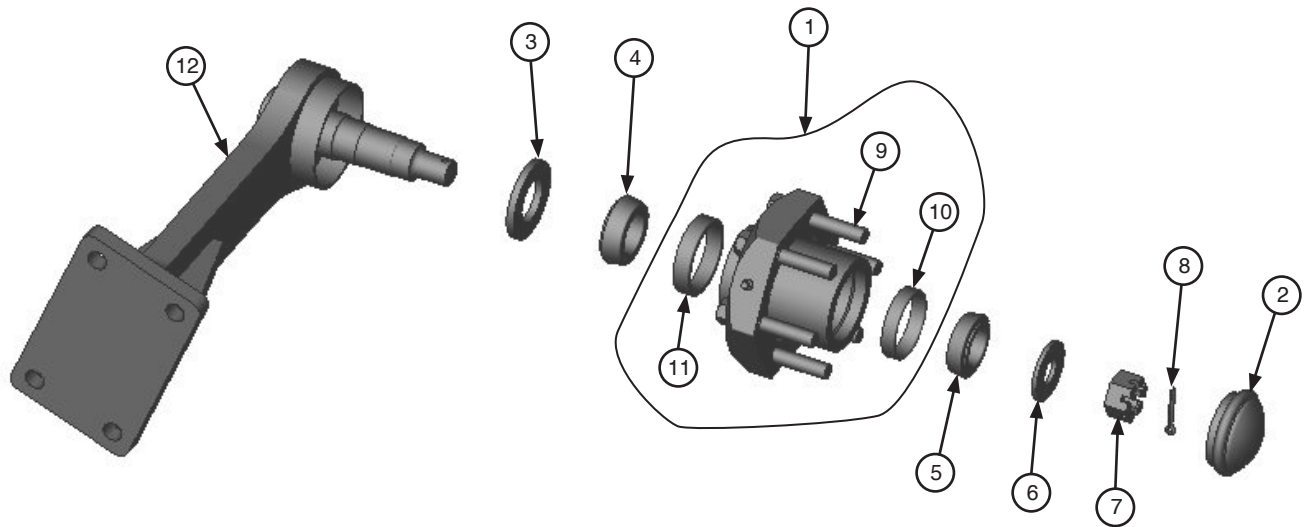
Key	Part #	Description	Qty	Notes
1	120-293	Bearing	4	----
2	369-351	Shank	1	----
3	369-358	Guide wheel	2	----
4	100-116	Bolt	16	1/2" x 1 1/2"
5	108-020	Lock washer	16	1/2"
6	100-138	Bolt	2	5/8" x 3"
7	102-008	Nut	2	5/8"
8	108-021	Lock washer	2	5/8"

## PARTS IDENTIFICATION



### SIDE WALL BUSTERS ASSEMBLY

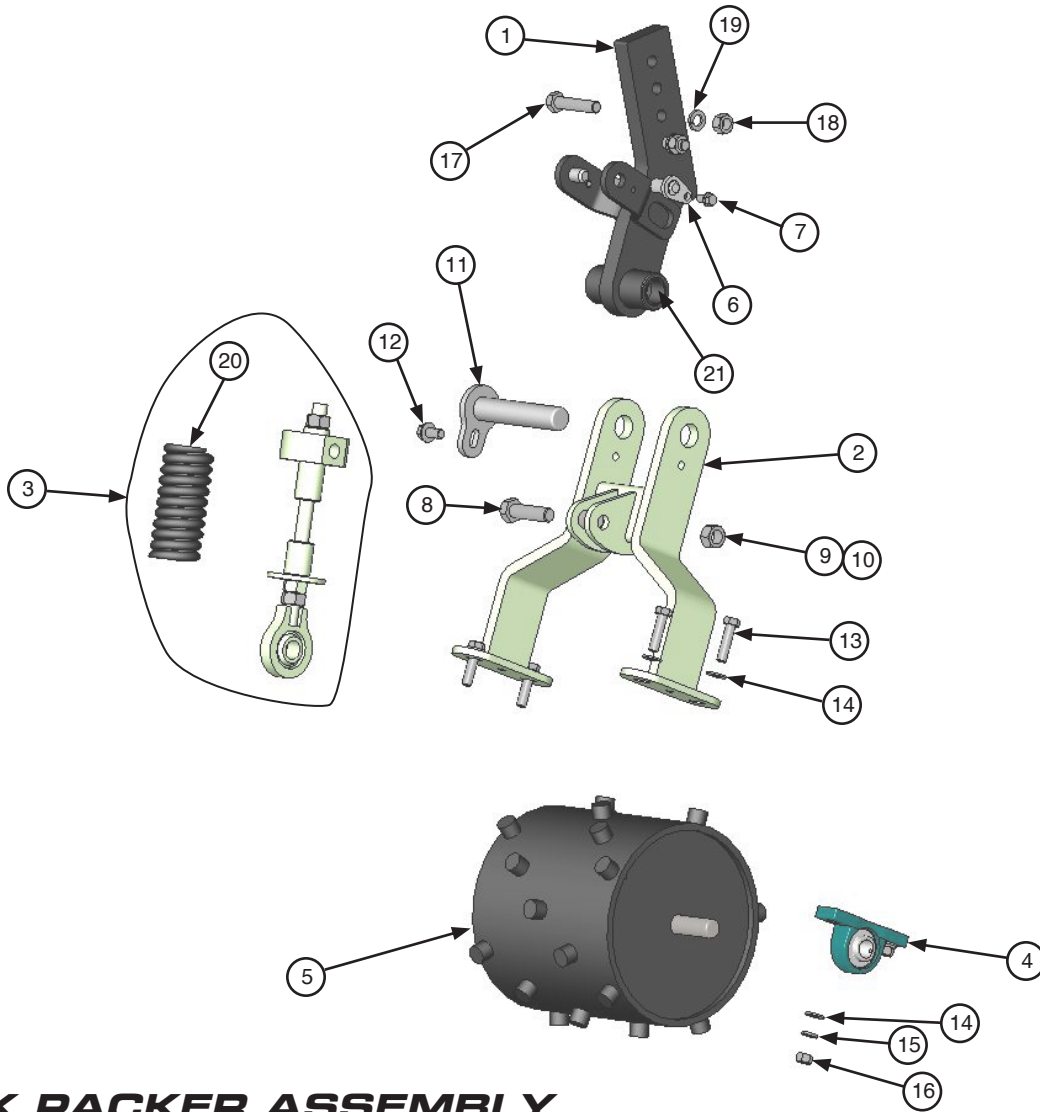
Key	Part #	Description	Qty	Notes
1	369-315	LH spindle hub assembly	1	----
	369-314	RH spindle hub assembly	1	----
2	311-343	Notched disc	2	----
3	311-347	Hub cap retainer	2	----
4	311-335	Hub plate	2	----
5	102-028	Nut	12	1/2"
6	369-319	Plate	2	----
7	100-147	Bolt	8	5/8" x 7 1/2"
8	102-008	Nut	8	5/8"
9	108-021	Lock washer	8	5/8"



**SIDE WALL BUSTER HUB & SHANK ASSEMBLY**

Key	Part #	Description	Qty	Notes
1	311-333	Hub	2	Includes 9-11
2	302-206	Dust cap	2	----
3	150-006	Seal	2	----
4	120-017	Bearing	2	----
5	120-018	Bearing	2	----
6	108-031	Flat washer	2	7/8"
7	102-036	Castle nut	2	7/8"
8	104-024	Cotter pin	12	----
9	100-122	Bolt	2	1/2" x 3"
10	120-015	Race	1	----
11	120-044	Race	1	----
12	369-316	Shank	1	Right
	369-317	Shank	1	Left

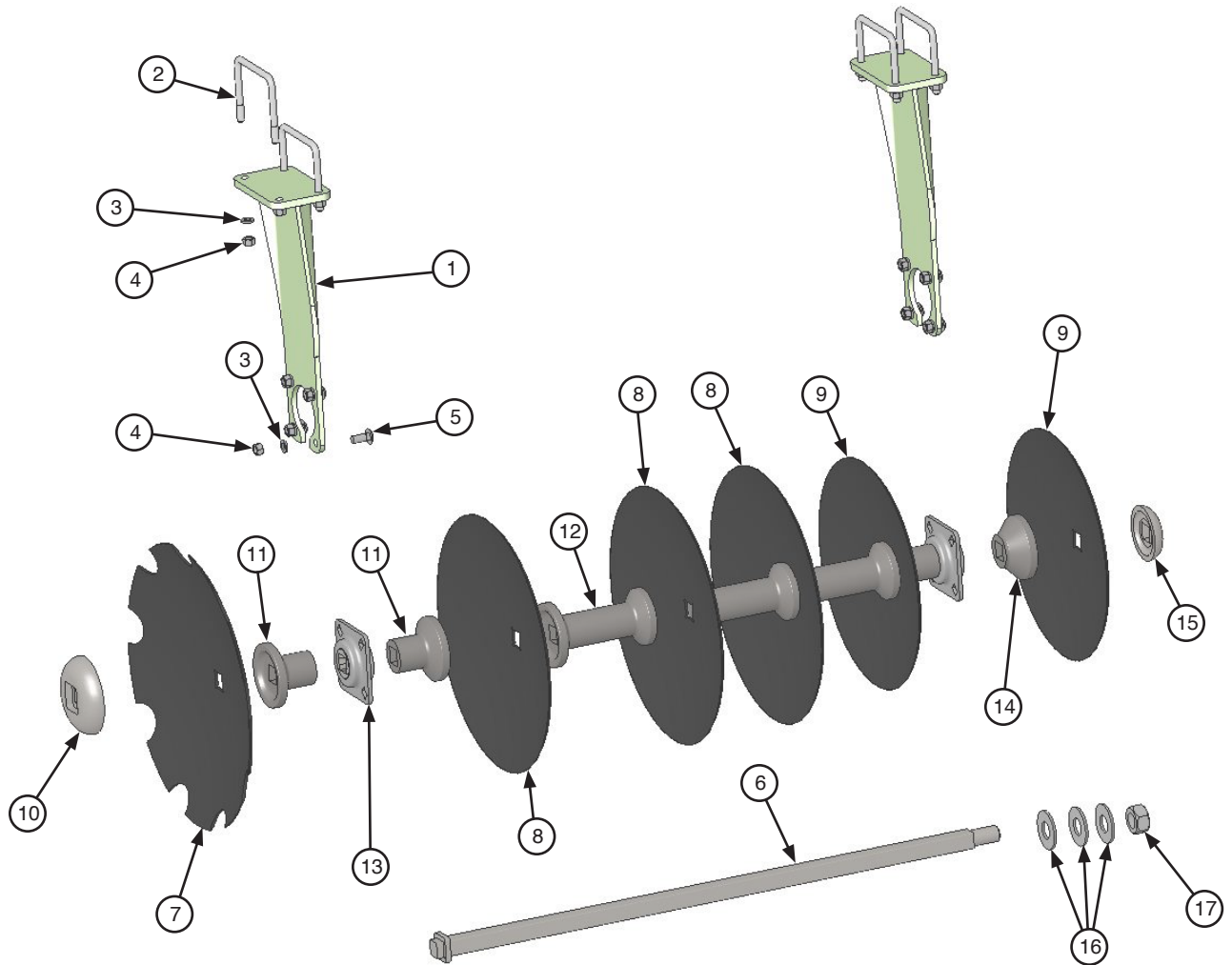
## PARTS IDENTIFICATION



### TRACK PACKER ASSEMBLY

Key	Part #	Description	Qty	Notes
1	369-331	Mounting shank	1	Includes #21
2	369-332	Fork mount	1	----
3	356-834	Tension assembly	1	Includins #20
4	120-217	Bearing	2	----
5	369-333	Roller	1	----
6	356-847	Pin	2	----
7	100-629	Bolt	2	3/8" x 3/4"
8	100-159	Bolt	1	3/4" x 2 3/4"
9	102-009	Nut	1	3/4"
10	108-022	Lock washer	1	3/4"
11	369-334	Pin	1	----

Key	Part #	Description	Qty	Notes
12	100-305	Bolt	1	1/2" x 1"
13	100-118	Bolt	4	1/2" x 2"
14	108-011	Flat washer	8	3/4"
15	108-020	Lock washer	4	1/2"
16	102-007	Nut	4	1/2"
17	100-138	Bolt	2	5/8" x 3"
18	102-008	Nut	2	5/8"
19	108-021	Lock washer	2	5/8"
20	148-105	Spring	1	----
21	134-044	Bushing	2	----

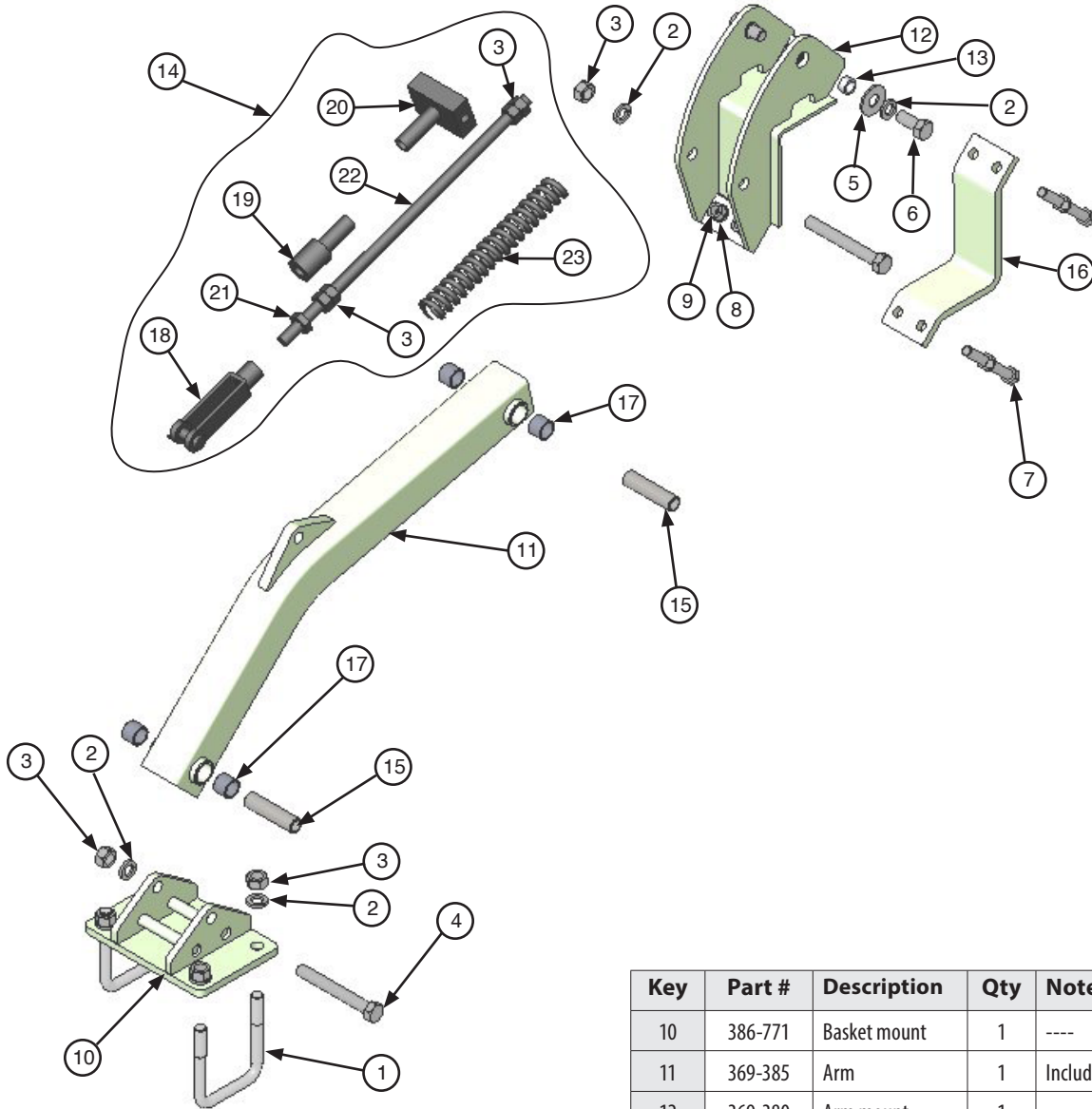


## DISC GANG ASSEMBLY

Key	Part #	Description	Qty	Notes
1	369-370	Gang hanger	4	----
2	315-208	U bolt	8	1/2"; 3 x 5 tube
3	108-020	Lock washer	32	1/2"
4	102-007	Nut	32	1/2"
5	100-012	Carriage bolt	16	1/2" x 1 1/4"
6	369-375	Rod	2	----
7	166-078	Notched disc	2	20"
8	166-077	Disc	6	18"
9	166-076	Disc	4	16"

Key	Part #	Description	Qty	Notes
10	166-072	Bumper washer	2	----
11	166-071	Spacer	6	----
12	166-070	Spacer	6	----
13	120-292	Bearing	4	----
14	166-073	Spacer	2	----
15	166-074	Bumper washer	2	----
16	108-076	Flat washer	6	1 1/8"
17	102-206	Nut	2	1 1/8"

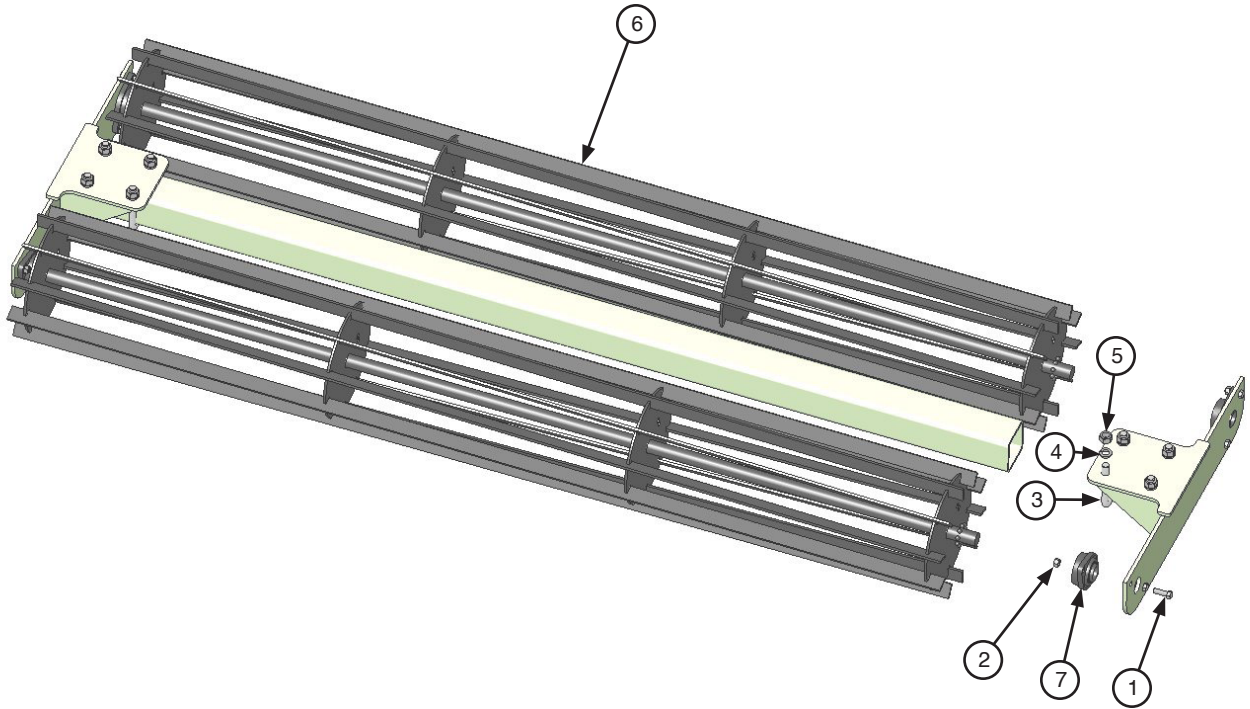
## PARTS IDENTIFICATION



### BASKET MOUNT ARM

Key	Part #	Description	Qty	Notes
1	150091	U bolt	2	3/4"; 4 x 4 tube
2	108-022	Lock washer	8	3/4"
3	102-009	Nut	10	3/4"
4	100-167	Bolt	2	3/4" x 6"
5	108-011	Flat washer	2	3/4"
6	100-155	Bolt	2	3/4"
7	100-134	Bolt	4	5/8" x 2 1/4"
8	108-021	Lock washer	4	5/8"
9	102-008	Nut	4	5/8"

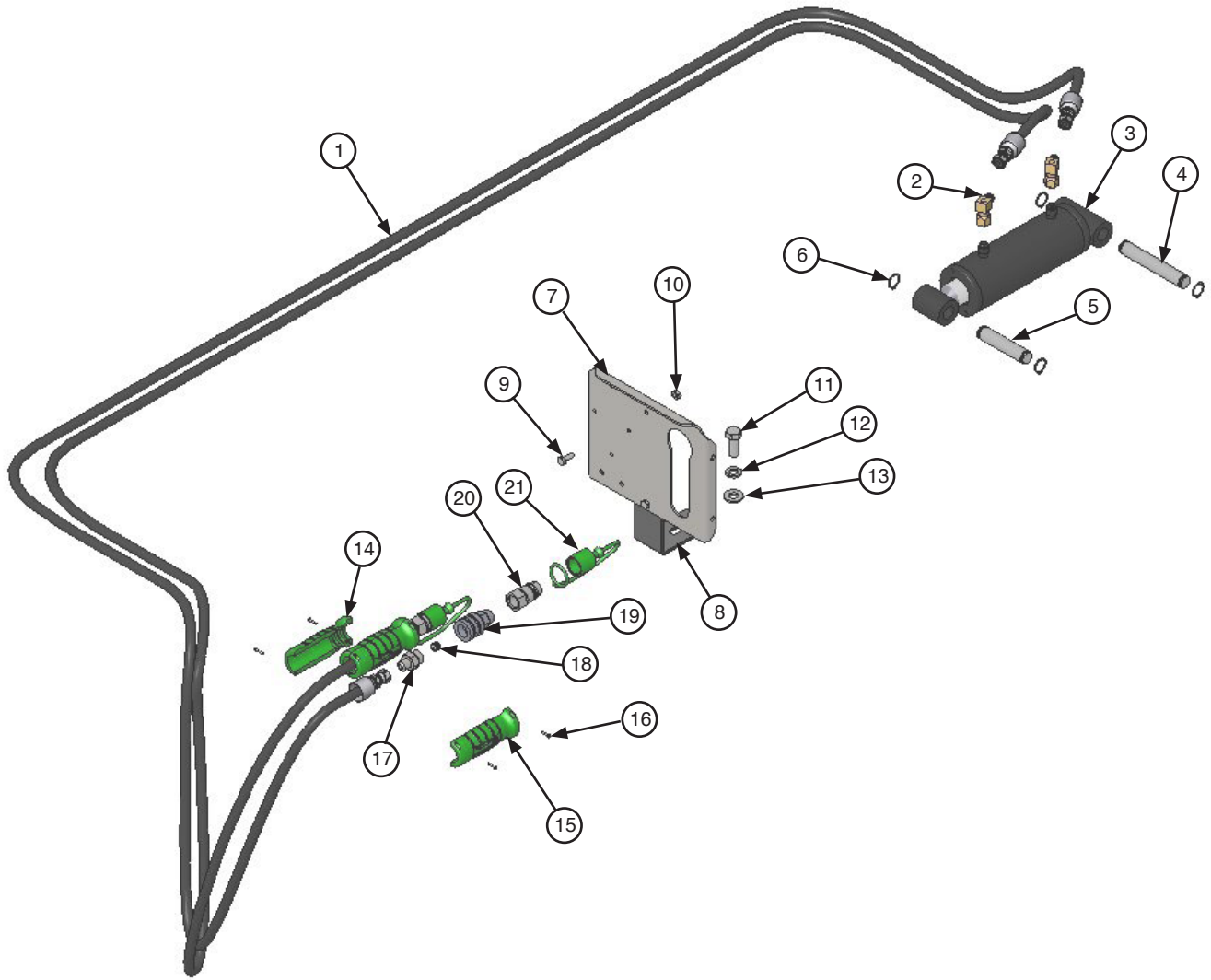
Key	Part #	Description	Qty	Notes
10	386-771	Basket mount	1	----
11	369-385	Arm	1	Includes #17
12	369-380	Arm mount	1	----
13	302-096	Bushing	2	1/2"
14	386-781	Spring assembly	1	----
15	369-387	Bushing	2	----
16	302-148	Mount strap	1	----
17	134-138	Bushing	4	----
18	386-786	Clevis	1	includes pin
19	356-864	Bushing	1	----
20	356-866	Mount	1	----
21	102-018	Jam nut	1	3/4"
22	386-782	Threaded rod	1	3/4"
23	361003	Spring	1	----



**ROLLING BASKET ASSEMBLY**

Key	Part #	Description	Qty	Notes
1	100-116	Bolt	8	1/2" x 1 1/2"
2	102-028	Lock nut	8	1/2"
3	150091	U bolt	4	3/4"; 4 x 4 tube
4	108-022	Lock washer	8	3/4"
5	102-009	Nut	8	3/4"
6	386-905	Basket	2	----
7	120-295	Bearing	4	w/ housing

## PARTS IDENTIFICATION



### HYDRAULIC ASSEMBLY

Key	Part #	Description	Qty	Notes
1	196-454	Hose	2	1/4" X 156" 9/16FJX ends
2	198-058	Elbow	2	9/16" MJ X 9/16FJ 90deg
3	194-593	Cylinder	1	2 1/4" x 4"
4	369-347	Pin	1	4 3/4" long
5	369-345	Pin	1	3 1/2" long
6	104-108	Snap ring	4	3/4" external
7	341-826	Holder	1	---
8	341-827	Mount	1	---
9	100-253	Bolt	2	1/4" x 3/4"
10	102-002	Nut	2	1/4-20
11	100-115	Bolt	1	1/2" x 1 1/4"

Key	Part #	Description	Qty	Notes
12	108-020	Lock washer	1	1/2"
13	108-001	Flat washer	2	1/2" SAE
14	198-224	Grip half	2	green - orthman
15	198-226	Grip half	1	green - extend
	198-225	Grip half	1	green - retract
16	198-227	Screw	8	6-19
17	340-520	Adaptor	2	3/4MB - 9/16MJ tapped
18	340-070	Restrictor	2	.031
19	198-313	Adaptor core	2	for grips
20	140-092	ISO tip	2	Pioneer 3/4-16 ORB
21	152-712	Dust cap	2	green











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