

WILDKAT ASSEMBLIES

NH T5. 95 - 115

Current as of 03/01/2021



PARTS LISTING WITH MOUNTING AND OPERATING INSTRUCTIONS

Tiger Corporation

3301 N. Louise Ave. Sioux Falls, SD 57107 1-800-843-6849 1-605-336-7900 www.tiger-mowers.com

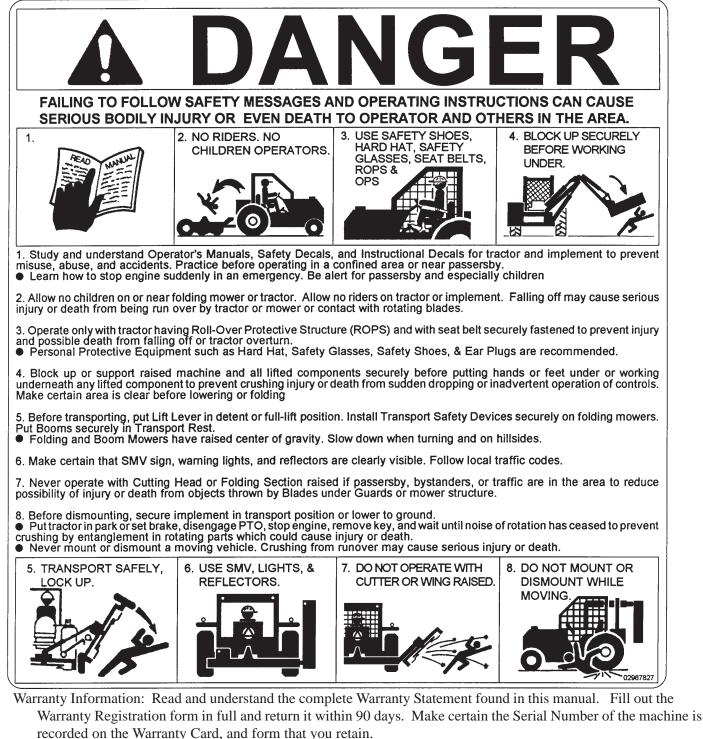
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TO THE OWNER / OPERATOR / DEALER

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached to minimize the chance of accidents.

BEFORE YOU START!! Read the safety messages on the implement and shown in this manual. Observe the rules of safety and use common sense!

READ AND UNDERSTAND THIS MANUAL! Non–English speaking operators will need to GET THE MANUAL TRANSLATED as needed!



FORWARD

This manual contains information about many features of the Tiger mowing and roadside maintenance equipment. Some of these include: Safety precautions, Assembly instructions, Operations, Maintenance and Parts. This manual will also assist you in the proper break-in, daily care, and troubleshooting of your new mower.

We recommend that you read carefully the entire manual before operating the unit. Also, time spent in becoming fully acquainted with its performance features, adjustments, and maintenance schedules will be repaid in a long and satisfactory life of the equipment.

Troubleshooting - Please, before you call, help us to help you!

Please look at the equipment to observe what is happening, then:

- Classify the problem
 - Hydraulic, electrical or mechanical Read the trouble shooting section
 - Tractor or Truck chassis Contact vehicle dealer
- If unable to correct the problem yourself, contact your local Tiger Dealer after gathering:
 - Machine model
 - Serial number _____
 - Dealer name
 - Detailed information about the problem including results of troubleshooting

Attention Owner / Operator / Dealer: It is your obligation to read, and understand, the warranty information section located at the back of this manual denoting that the purchaser understands the safety issues relating to this machine and has received and will read a copy of this manual.

If at any time, you have a service problem with your Tiger mower, Contact your local dealer for service and parts needed.

| MANUFACTURED BY: | DISTRIBUTED BY: | |
|-----------------------|-----------------|--|
| Tiger Corporation | | |
| 3301 N. Louise Ave. | | |
| Sioux Falls, SD 57107 | 1 | |
| 1-800-843-6849 | 1 | |
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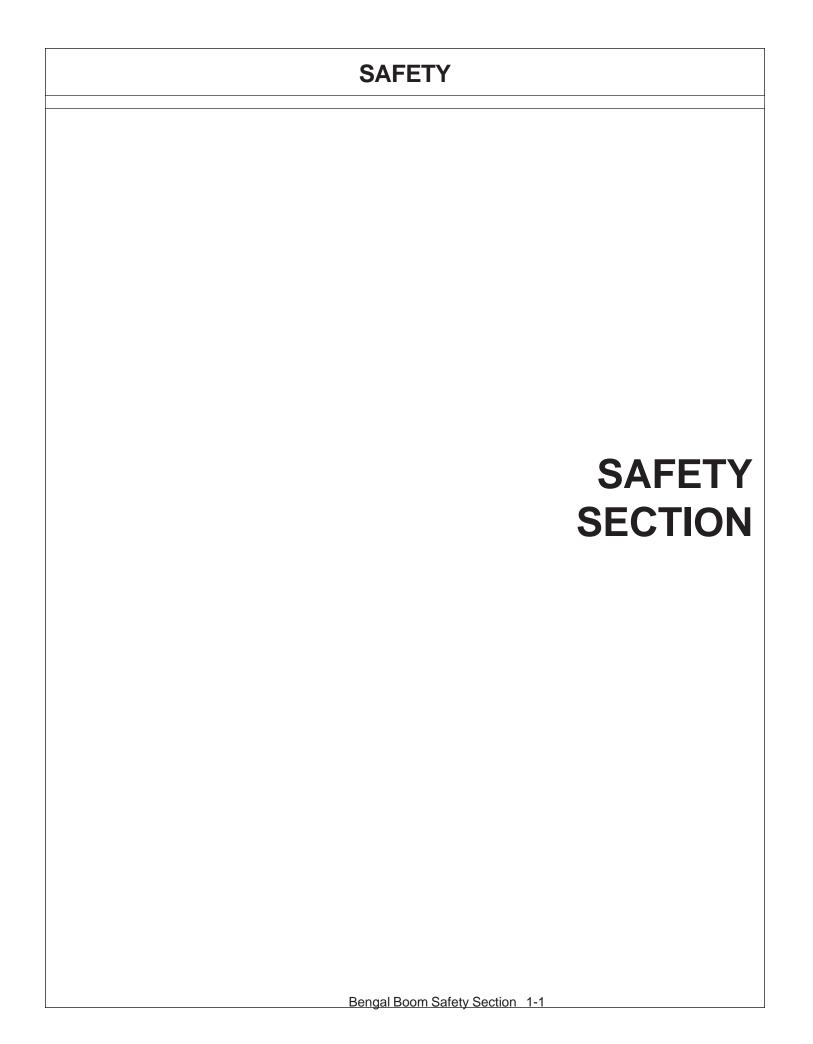


This symbol means: CAUTION – YOUR SAFETY IS AT RISK!

When you see this symbol, read and follow the associated instructions carefully or personal injury or damage may result.

Tiger is a registered trademark.





General Safety Instructions and Practices

A safe and careful operator is the best operator. Safety is of primary importance to the manufacturer and should be to the owner / operator. Most accidents can be avoided by being aware of your equipment, your surroundings, and observing certain precautions. The first section of this manual includes a list of Safety Messages that, if followed, will help protect the operator and bystanders from injury or death. Read and understand these Safety Messages before assembling, operating or servicing this mower. This equipment should only be operated by those persons who have read the Manual, who are responsible and trained, and who know how to do so safely and responsibly.

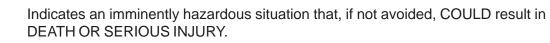


The Safety Alert Symbol combined with a Signal Word, as seen below, is used throughout this manual and on decals which are attached to the equipment. The Safety Alert Symbol means: "ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!" The symbol and signal word are intended to warn the owner / operator of impending hazards and the degree of possible injury when operating this equipment.

Practice all usual and customary safe working precautions and above all -- remember safety is up to <u>YOU</u>! Only <u>YOU</u> can prevent serious injury or death from unsafe practices.

Indicates an imminently hazardous situation that, if not avoided, WILL result in DEATH OR VERY SERIOUS INJURY.

WARNING!





Indicates an imminently hazardous situation that, if not avoided, MAY result in MINOR INJURY.

IMPORTANT! Identifies special instructions or procedures that, if not strictly observed, could result in damage to, or destruction of the machine, attachments or the enviroment.

NOTE: Identifies points of particular interest for more efficient or convienient operation or repair. (SG-1)

<u>READ, UNDERSTAND</u>, and <u>FOLLOW</u> the following Safety Messages. Serious injury or death may occur unless care is taken to follow the warnings and instructions stated in the Safety Messages. Always use good common sense to avoid hazards. (SG-2)



PELIGRO!



Si no lee Ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad. (SG-3)



i LEA EL INSTRUCTIVO!



Never operate the Tractor or Implement until you have read and completely understand this Manual, the Tractor Operator's Manual, and each of the Safety Messages found in the Manual or on the Tractor and Implement. Learn how to stop the tractor engine suddenly in an emergency. Never allow inexperienced or untrained personnel to operate the Tractor and Implement without supervision. Make sure the operator has fully read and understood the manuals prior to operation. (SG-4)



WARNING!



Always maintain the safety decals in good readable condition. <u>If the decals are missing, damaged, or unreadable, obtain and install replacement decals immediately.</u> (SG-5)



Make certain that the "Slow Moving Vehicle" (SMV) sign is installed in such a way as to be clearly visible and legible. When transporting the Equipment use the Tractor flashing warning lights and follow all local traffic regulations. (SG-6)





Operate this Equipment only with a Tractor equipped with an approved roll-over-protective system (ROPS). Always wear seat belts. Serious injury or even death could result from falling off the tractor--particularly during a turnover when the operator could be pinned under the ROPS. (SG-7)

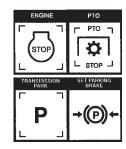


WARNING!

Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. $_{\rm (SG-8)}$



BEFORE leaving the tractor seat, always engage the brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)





Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in serious injury or death.





Never allow children to operate or ride on the Tractor or Implement. $$_{\rm (SG-11)}$$





Do not mount the Tractor while the tractor is moving. Mount the Tractor only when the Tractor and all moving parts are completely stopped. (SG-12)





Start tractor only when properly seated in the Tractor seat. Starting a tractor in gear can result in injury or death. Read the Tractor operators manual for proper starting instructions. (SG-13)



Start only from seat in park or neutral. Starting in gear kills.



Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SG-14)





Do not operate this Equipment with hydraulic oil leaking. Oil is expensive and its presence could present a hazard. Do not check for leaks with your hand! Use a piece of heavy paper or cardboard. Highpressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15)



WARNING!

The operator and all support personnel should wear hard hats, safety shoes, safety glasses, and proper hearing protection at all times for protection from injury including injury from items thrown by the equipment. (SG-16)

SE PERMA-



PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMA-NENT HEARING LOSS! Tractors with or without an Implement attached can often be noisy enough to cause permanent hearing loss. We recommend that you always wear hearing protection if the noise in the Operator's position exceeds 80db. Noise over 85db over an extended period of time will cause severe hearing loss. Noise over 90db adjacent to the Operator over an extended period of time will cause permanent or total hearing loss. *Note:* Hearing loss from loud noise [from tractors, chain saws, radios, and other such sources close to the ear] is cumulative over a lifetime without hope of natural recovery. (SG-I7)

WARNING!



Transport only at safe speeds. Serious accidents and injuries can result from operating this equipment at unsafe speeds. Understand the Tractor and Implement and how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.

Before transporting the Tractor and Implement, determine the safe transport speeds for you and the equipment. Make sure you abide by the following rules:

- 1. Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum safe transport speed for you and this Equipment.
- 2. Test the equipment at a slow speed in turns. Increase the speed through the turn only after you determine that it is safe to operate at a higher speed. Use extreme care and reduce your speed when turning sharply to prevent the tractor and implement from turning over. Determine the maximum safe turning speed for you and this equipment before operating on roads or uneven ground.
- **3.** Only transport the Tractor and Implement at the speeds that you have determined are safe and which allow you to properly control the equipment.

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes. When operating down a hill or on wet or rain slick roads, the braking distance increases: use extreme care and reduce your speed. When operating in traffic always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (SG-19) Bengal Boom Safety Section 1-5







Never attempt to lubricate, adjust, or remove material from the Implement while it is in motion or while tractor engine is running. Make sure the tractor engine is off before working on the Implement. (SG-20)

WARNING!

Periodically inspect all moving parts for wear and replace when necessary with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Make sure all pins are properly secured. Serious injury may occur from not maintaining this machine in good working order. (SG-21)



Always read carefully and comply fully with the manufacturers instructions when handling oil, solvents, cleansers, and any other chemical agent. (SG-22)





Never run the tractor engine in a closed building or without adequate ventilation. The exhaust fumes can be hazardous to your health.

(SG-23)



KEEP AWAY FROM ROTATING ELEMENTS to prevent entanglement and possible serious injury or death. (SG-24)





Never allow children to play on or around Tractor or Implement. Children can slip or fall off the Equipment and be injured or killed. Children can cause the Implement to shift or fall crushing themselves or others. (SG-25)



NEVER use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator's alertness and coordination and therefore affect the operator's ability to operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to operate the Equipment safely. **NEVER** knowingly allow anyone to operate this equipment when their alertness or coordination is impaired. Serious injury or death to the operator or others could result if the operator is under the influence of drugs or alcohol. (SG-27)



DANGER!

Operate the Tractor and/or Implement controls only while properly seated in the Tractor seat with the seat belt securely fastened around you. Inadvertent movement of the Tractor or Implement may cause serious injury or death. (SG-29)



Mow only in conditions where you have clear visibility in daylight or with adequate artificial lighting. Never mow in darkness or foggy conditions where you cannot clearly see at least 100 yards in front and to the sides of the tractor and mower. Make sure that you can clearly see and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects. If you are unable to clearly see this type of items discontinue mowing. (SGM-1)



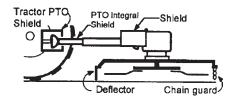
There are obvious and hidden potential hazards in the operation of this Mower. REMEMBER! This machine is often operated in heavy brush and in heavy weeds. The Blades of this Mower can throw objects if shields are not properly installed and maintained. Serious injury or even death may occur unless care is taken to insure the safety of the operator, bystanders, or passersby in the area. Do not operate this machine with anyone in the immediate area. Stop mowing if anyone is within 100 yards of mower. (SGM-2)



DANGER!



All Safety Shields, Guards and Safety devices including (but not limited to) - the Deflectors, Chain Guards, Steel Guards, Gearbox Shields, PTO integral shields, and Retractable Door Shields should be used and maintained in good working condition. All safety devices should be inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from thrown objects, entanglement, or blade contact. (SGM-3)



DANGER!

The rotating parts of this machine have been designed and tested for rugged use. However, the blades could fail upon impact with heavy, solid objects such as metal guard rails and concrete structures. Such impact could cause the broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the cutting blades to contact such obstacles. (SGM-4)



Extreme care should be taken when operating near loose objects such as gravel, rocks, wire, and other debris. Inspect the area before mowing. Foreign objects should be removed from the site to prevent machine damage and/or bodily injury or even death. Any objects that cannot be removed must be clearly marked and carefully avoided by the operator. Stop mowing immediately if blades strike a foreign object. Repair all damage and make certain rotor or blade carrier is balanced before resuming mowing. (SGM-5)





Many varied objects, such as wire, cable, rope, or chains, can become entangled in the operating parts of the mower head. These items could then swing outside the housing at greater velocities than the blades. Such a situation is extremely hazardous and could result in serious injury or even death. Inspect the cutting area for such objects before mowing. Remove any like object from the site. Never allow the cutting blades to contact such items. (SGM-6)

WARNING!



Mow at the speed that you can safely operate and control the tractor and mower. Safe mowing speed depends on terrain condition and grass type, density, and height of cut. Normal ground speed range is from 0 to 5 mph. Use slow mowing speeds when operating on or near steep slopes, ditches, drop-offs, overhead obstructions, power lines, or when debris and foreign objects are to be avoided. (SGM-7)



Avoid mowing in reverse direction when possible. Check to make sure there are no persons behind the mower and use extreme care when mowing in reverse. Mow only at a slow ground speed where you can safely operate and control the tractor and mower. Never mow an area that you have not inspected and removed debris or foreign material. (SGM-8)





Do not put hands or feet under mower decks. Blade Contact can result serious injury or even death. Stay away until all motion has stopped and the decks are securely blocked up. (SGM-9)



Replace bent or broken blade with new blades. NEVER ATTEMPT TO STRAIGHTEN OR WELD ON BLADES SINCE THIS WILL LIKELY CRACK OR OTHERWISE DAMAGE THE BLADE WITH SUBSE-QUENT FAILURE AND POSSIBLE SERIOUS INJURY FROM THROWN BLADES. (SGM-10)

WARNING!



Do not mow with two machines in the same area except with Cab tractors with the windows closed. $$_{\rm (SGM-11)}$$



Rotary and Flail Mowers are capable under adverse conditions of throwing objects for great distances (100 yards or more) and causing serious injury or death. Follow safety messages carefully. **STOP MOWING IF PASSERSBY ARE WITHIN 100 YARDS UN-LESS:**

- -Front and Rear Deflectors are installed and in good, working condition;
- -Mower Head is running close to and parallel to the ground without exposed Blades;
- -Passersby are outside the existing thrown-object zone;
- -All areas have been thoroughly inspected and all foreign material such as rocks, cans, glass, and general debris has been removed.
- NOTE: Where there are grass and weeds high enough to hide debris that could be struck by the blades, the area should be: inspected and large debris removed, mowed at an intermediate height, inspected closely with any remaining debris being removed, and mowed again at desired final height. (SBM-1)





DANGER!

Use extreme caution when raising the Mower head. Stop the Blades from turning when the Mower Head is raised and passersby are within 100 yards. Raising the Mower head exposes the Cutting Blades which creates a potentially serious hazard and can cause serious injury by objects thrown from the Blades or by contact with the Blades. (SBM-2)



Be particularly careful in transport. The Mower has raised the center of gravity for the tractor and has increased the possibility of overturn. Turn curves or go up slopes only at low speed and using a gradual turning angle. Slow down on rough or uneven surfaces. (SBM-3)



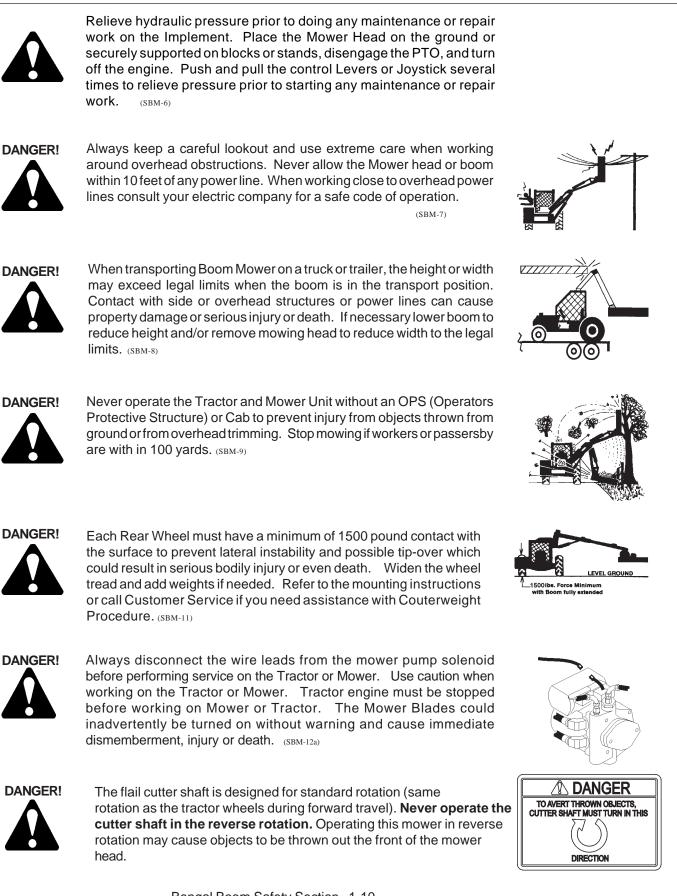


Never Leave the mower unattended while the head is in the raised position. The mower could fall causing serious injury to anyone who might inadvertently be under the mower. (SBM-4)





The rotating parts of this machine continue to rotate even after the Tractor has been turned off. The operator should remain in his seat for 60 seconds after the brake has been set, the PTO disengaged, the tractor turned off, and all evidence of rotation has ceased. (SBM-5) **"Wait a minute...Save a life!"**



WARNING!



Engine Exhaust, some of its constituents, and certain components contain or emit chemicals known to the state of California to cause cancer and birth or other reproductive harm.

WARNING!



Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and birth or other reproductive harm. **Wash hands after handling!**

Tiger mowers use balanced and matched system components for blade carriers, blades, cuttershafts, knives, knife hangers, rollers, drive-train components and bearings. These parts are made and tested to Tiger specifications. Non-genuine "will fit" parts do not consistently meet these specifications. The use of "will fit" parts may reduce mower performance, void mower warranties and present a safety hazard. Use genuine Tiger mower parts for economy and safety.



In addition to the design and configuration of this Implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the Tractor and Equipment Manuals. Pay close attention to the Safety Signs affixed to the Tractor and Equipment. (SG-18)



AWARNING DO NOT OPERATE WITH BELT SHIELD REMOVED. FINGER(S) MAY BE PINCHED OFF IF CAUGHT BETWEEN V-BELT AND PULLEY. 00758194 PART NO. LOCATION

00758194 MOWER DECK



02962764 MAIN BOOM, SECONDARY BOOM, MAIN FRAME



02962765 MAIN FRAME

02965262 HYDRAULIC TANK



KEEP AWAY - ROTATING BLADES BEING HIT BY THROWN OBJECTS OR CONTACTING ROTATING BLADES CAN CAUSE INJURY OR DEATH • Stop mowing if passersby enter the area of thrown objects. (See Operator's Manual) • Use special care when Flail or Wing is raised off the ground. (See Oper. Manual) • Operate only if all Guards-Deflectors are in place and in good condition.

PART NO. LOCATION

02967668 MOWER DECK

02971123 HYDRAULIC TANK



POLYCARBONATE WINDOW

REFER TO OPERATORS MANUAL FOR CLEANING INSTRUCTIONS

DO NOT LUBRICATE WITH AUTOMATIC GREASE GUN. GREASE WITH HAND GREASE GUN ONLY. 03200285 OUTSIDE OF CAB

22645 INSIDE OF CAB

22839 MOWER DECK



CONTACTED, SHUT CONTROL SWITCH OFF IMMEDIATELY. DO NOT RAISE CUTTER HEAD UNTIL ALL MOVING PARTS HAVE STOPPED.



INSPECT REAR FLAP FREQUENTLY TO BE SURE IT IS IN SAFE WORKING CONDITION. DO NOT OPERATE MOWER WITH FLAP REMOVED OR WORN.

24028

PART NO. LOCATION

22840 INSIDE OF CAB

24028 MOWER DECK

25387 INSIDE OF CAB



10" x 5.5" 31522 MOWER DECK, MAIN BOOM 18.25" x 10" 31523 HYDRAULIC TANK

A WARNING

Valve section TF3009 with detented float to be used with only Boom Flail mower. DO NOT operate a Boom rotary mower with the float section installed. PART NO. LOCATION

27001 INSIDE OF CAB



31935 INSIDE OF CAB



1. EACH REAR WHEEL MUST HAVE A MINIMUM OF 1500 POUNDS CONTACT WITH THE SURFACE TO PREVENT LATERAL INSTABILITY AND POSSIBLE TIP-OVER WITH BODILY INJURY. WIDEN WHEEL TREAD AND ADD WEIGHTS IF NEEDED. SEE MANUAL OR CALL TIGER CUSTOMER SERVICE FOR COUNTERWEIGHT PROCEDURE.

2. TRANSPORT CAREFULLY! SLOW DOWN EVEN MORE ON SLOPES AND WHEN TURNING; NEVER TURN UP A SLOPE SHARPLY OR AT HIGH SPEED; AND USE EXTRA CARE IN ROUGH OR BUMPY AREAS TO PREVENT OVERTURN AND POSSIBLE CRUSHING INJURY OR DEATH. IF YOUR VIEW TO THE REAR IS BLOCKED, IT IS YOUR RESPONSIBILITY TO INSTALL MIRRORS THAT PROVIDE A REAR VIEW TO PREVENT ACCIDENTS FROM BLIND SPOTS.

3. REAR-MOUNTED BOOM MOWERS MOVE CENTER OF GRAVITY TO THE REAR AND REMOVE WEIGHT FROM FRONT WHEELS. ADD FRONT BALLAST UNTIL AT LEAST 20% OF TRACTOR'S WEIGHT IS DN FRONT WHEELS TO PREVENT REARING UP, LOSS OF STEERING CONTROL. AND POSSIBLE INJURY.

4. NEVER OPERATE UNIT WITHOUT AN OPS (OPERATOR PROTECTIVE STRUCTURE) OR CAB TO PREVENT INJURY FROM OBJECTS THROWN FROM GROUND AND OVERHEAD TRIMMING. STOP CUTTING IF ANYONE IS WITHIN 100 YARDS.

5. KEEP THE BOOM AND CUTTERHEAD AT LEAST 10 FEET FROM ELECTRIC LINES AND PIPE LINES TO PREVENT ACCIDENTAL CONTACT AND POSSIBLE SERIOUS INJURY OR EVEN DEATH.

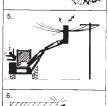
5. WHEN TRANSPORTING BOOM MOWERS ON A TRUCK OR TRAILER. THE HEIGHT OR WIDTH MAY EXCEED LEGAL LIMITS. CONTACT WITH SIDE OR OVERHEAD STRUCTURES OR POWER LINES CAN CAUSE SERIOUS INJURY OR DEATH.

LOWER BOOM TO REDUCE HEIGHT AND/OR REMOVE MOWING HEAD TO REDUCE WIDTH TO THE LEGAL LIMITS, IF NEEDED. 32707



3.





HYDRAULIC TANK

32707

42350 MOWER DECK

32708

ATTENTION

SERVICE HYDRAULIC SYSTEM WITH UNIVERSAL TRACTOR HYDRAULIC OIL. PART NO. LOCATION

32708 HYDRAULIC TANK

ACAUTION

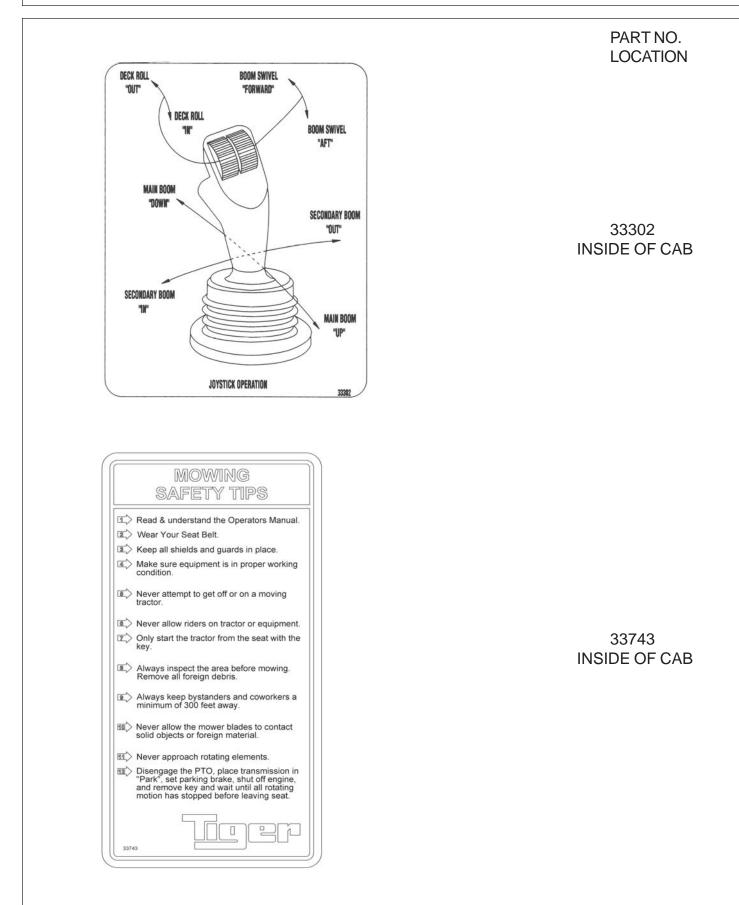
For your safety and to guarantee optimum product reliability, always use genuine TIGER replacement parts. The use of inferior "will-fit" parts will void warranty of your TIGER implement and may cause premature or catastrophic failure which can result in serious injury or death. If you have any questions concerning the repair parts you are using, contact TIGER, 3301 N. LOUISE AVE., SIOUX FALLS, SD 57107

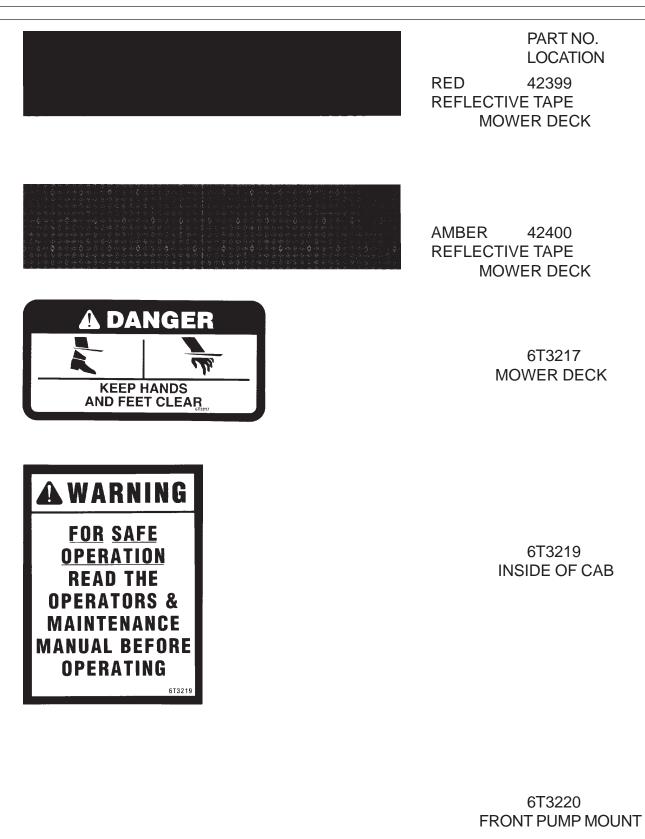
32709 INSIDE OF CAB

33224 MOWER DECK



33438 MAIN BOOM





ACAUTION

LUBRICATE SPINDLE DAILY OR EVERY 10 HOURS OF USE. WITH MOWER AND TRACTOR OFF, INJECT TWO PUMPS OF TIGER SPINDLE LUBRICANT INTO SPINDLE BEFORE USING.

NOTE: SEE OPERATORS MANUAL FOR SUBSTITUTE LUBRICANT AND MORE DETAILED INSTRUCTIONS. 613221 PART NO. LOCATION

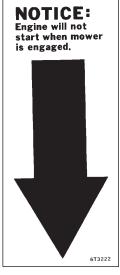
6T3221 INSIDE OF CAB

6T3222 INSIDE OF CAB

6T3224 MOWER DECK



6T3225 INSIDE OF CAB





A WARNING

DO NOT OPERATE THIS EQUIPMENT

WITH BYSTANDERS IN THE AREA! ROTARY MOWERS HAVE THE INHERENT ABILITY TO THROW DEBRIS CONSIDERABLE DISTANCES WHEN KNIVES ARE ALLOWED TO STRIKE FOREIGN OBJECTS. OPERATOR CAUTION MUST BE TAKEN OR SERIOUS INJURY CAN RESULT.



2. CENTER DECK BETWEEN FRONT AND REAR TIRES. 3. PLACE BOOM INTO TRAVEL POSITION.

3. PLACE BOOM INTO TRAVEL POSITION. FAILURE TO DO SO MAY RESULT IN TIRE DAMAGE

AND/OR INJURY. 6T3231

A CAUTION

DO NOT START OR RUN WITH VALVES CLOSED. (SERIOUS DAMAGE WILL OCCUR)

PART NO.

LOCATION

6T3230

INSIDE OF CAB

6T3231 INSIDE OF CAB

6T3233 HYDRAULIC TANK

A CAUTION

6T-3233

CHECK CRANKSHAFT ADAPTER DAILY FOR TIGHTNESS AND GROMMET WEAR

AS SERIOUS DAMAGE TO RADIATOR MAY RESULT FROM IMPROPER MAINTENANCE. 6T3234 6T3234 INSIDE OF CAB



6T3236 MOWER DECK

| A WARNING WHEN CUTTING HEAVY BRUSH BLADE BOLTS SHOULD BE INSPECTED HOURLY AND RETORQUED TO 600 FT. LBS. | 51-3237 | PART NO. LOCATION 6T3237 INSIDE OF CAB | |
|--|--|---|--|
| DOWN MAIN BOOM UP | DECK ROLL IN 6T3241 | 6T3241 INSIDE OF CAB | |
| | DUT FORWARD CLOSE | INSIDE OF CAB | |
| TI IS RECOMMENDED THAT THE BOLT AND LOCK NUT BE REPLACED WHENEVER BLADES ARE REPLACED, REPLACE THESE ANY TIME THEY ARE DAMAGED OR WORN AS FAILURE TO DO SO CAN LEAD TO BLADES COMING OFF CAUSING SERIOUS INJURY OR DEATH. | IMPORTANT • WHEN REPLACING BLADES, IT IS RECOMMENDED THAT ALL BLADES BE REPLACED FOR PROPER BALANCE TO AVOID EXCESSIVE VIBRATIONS WHICH CAN DAMAGE SPINDLE ASSEMBLY. • SEE YOUR OPERATOR'S MANUAL FOR PROPER INSTALLATION INSTRUCTIONS. 67-3243 | 6T3243 INSIDE OF CAB | |
| CUTTER SHAFT BEARI GREASE EVERY 8 HRS. OR D NOTE: If unusual environmental conditions exist-ex | GREASING INSTRUCTIONS CUTTER SHAFT BEARING GREASE EVERY 8 HRS. OR DAILY NOTE: If unusual environmental conditions exist-extreme temperatures, moisture, or contaminants-more frequent lubrication is required. | | |
| GREASING INSTRUCTIONS GROUND ROLLER BEARING GREASE EVERY 8 HRS. OR DAILY NOTE: If unusual environmental conditions exist-extreme temperatures, moisture, or contaminants-more frequent lubrication is required. 97201 | | | |
| Benga | Boom Safety Section 1-22 | | |

A WARNING

DO NOT OPERATE MOWER WITH SAFETY SHIELD REMOVED.

TB1011 MOWER DECK

0

0



Tiger Corporation

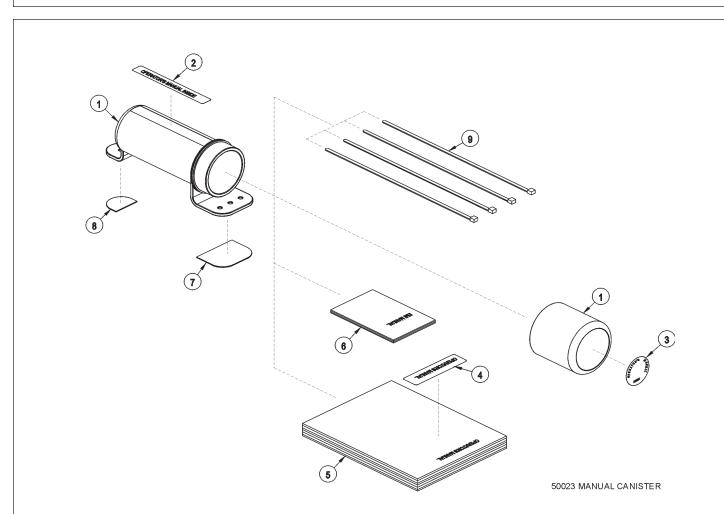
800-843-6849 www.tiger-mowers.com

| Description | Application | General Specification | Recommended Lubricant |
|---|-------------|--|--|
| Tractor Hydraulics | Reservoir | JD-20C | Mobilfluid [®] 424 |
| Mower Hydraulics Cold Temperatures 0°F Start-up Normal Temperatures 10°F Start-up Normal Temperatures 15°F Start-up High Operating Temperatures Above 90°F Ambient | Reservoir | ISO 46 Anti-Wear/ Low Temp JD-20C ISO 46 Anti-Wear ISO 100 Anti-Wear | Mobil DTE® 15M Mobilfluid® 424 Mobil DTE® 25 Mobil DTE® 18M |
| Flail Rear Gearbox | Reservoir | PAO Synthetic Extreme Pressure Gear Lube | Mobilube SHC [®] 75W-90, Mobil 1 Synthetic Gear Lubrican |
| Cutter Shaft and Ground Roller Shaft (Flail) | Grease Gun | Lithium Complex, NLGI 2 ISO 320 | Mobilgrease [®] CM-S |
| Drive Shaft Coupler (Rotary and Flail) | Grease Gun | Lithium Complex, NLGI 2 ISO 320 | Mobilgrease [®] CM-S |
| Boom Swivel, Boom Cylinder Pivots (Rotary and Flail Boom Type) | Grease Gun | Lithium Complex, NLGI 2 ISO 320 | Mobilgrease [®] CM-S |
| Deck Boom Pivot & Deck Stop Adjustment (Rotary and Flail) | Grease Gun | Lithium Complex, NLGI 2 ISO 320 | Mobilgrease [®] CM-S |
| Deck Spindle (Rotary) | Grease Gun | Tiger Spindle Lubricant | Mobilith SHC 220 |

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Tiger PN 34852 O

34852 HYDRAULIC TANK



| ITEM | PARTNO. | QTY. | DESCRIPTION |
|------|-----------------------------------|------------------------|---|
| 1 | 50023 00776031 33997 | AVAIL 1 1 | MANUAL CANISTER COMPLETE ROUND MANUAL CANISTER DECAL, SHEET, MANUAL CANISTER |
| 2 | | * | DECAL |
| 3 | | * | DECAL |
| 4 | | * | DECAL |
| 5 | * | AVAIL | SPECIFIC PRODUCT MANUAL |
| 6 | 33753 | 1 | E M I SAFETY MANUAL |
| 7 | 34296 | 1 | FRONT ADHESIVE PAD |
| 8 | 34297 | 1 | REAR ADHESIVE PAD |
| 9 | 6T1823 | 4 | ZIP TIE 14" LONG |

NOTE:

The manual canister can be bolted, zip tied or adhered to a variety of surfaces. Locate a protected area within the view of the operator. Then select an installation method and attach the canister. **CAUTION - AVOID DRILLING HOLES INTO UNKNOWN AREAS**, wires and other parts may be located behind these areas. When adhering the canister to a surface, thoroughly clean that surface before installing the canister.

FEDERAL LAWS AND REGULATIONS

This section is intended to explain in broad terms the concept and effect of federal laws and regulations concerning employer and employee equipment operators. This section is not intended as a legal interpretation of the law and should not be considered as such.

Employer-Employee Operator Regulations

U.S. Public Law 91-596 (The Williams-Steiger Occupational and Health Act of 1970) OSHA

This Act Seeks:

"...to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources..."

DUTIES

Sec. 5 (a) Each employer-

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA Regulations

OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved."

Employer Responsibilities:

To ensure employee safety during Tractor and Implement operation, it is the employer's responsibility to:

- 1. Train the employee in the proper and safe operation of the Tractor and Implement.
- 2. Require that the employee read and fully understand the Tractor and Implement Operator's manual.
- 3. Permit only qualified and properly trained employees to operate the Tractor and Implement.
- 4. Maintain the Tractor and Implement in a safe operational condition and maintain all shields and guards on the equipment.
- 5. Ensure the Tractor is equipped with a functional ROPS and seat belt and require that the employee operator securely fasten the safety belt and operate with the ROPS in the raised position at all times.
- 6. Forbid the employee operator to carry additional riders on the Tractor or Implement.
- 7. Provide the required tools to maintain the Tractor and Implement in a good safe working condition and provide the necessary support devices to secure the equipment safely while performing repairs and service.

Child Labor Under 16 Years of Age

Some regulations specify that no one under the age of 16 may operate power machinery. It is your responsibility to know what these regulations are in your own area or situation. (Refer to U.S. Dept. of Labor, Employment Standard Administration, Wage & Home Division, Child Labor Bulletin #102.)

ASSEMBLY SECTION

Assembly Section 2-1

ASSEMBLY

Before attempting to mount your Tiger mower, it is important to read and understand all of the safety messages in the Safety Section of this manual.

Check complete shipment list against the packing list to make sure there are no shortages. Make certain the tractor model is the appropriate one for the mower received!

Always use a floor jack, hoist or fork lift to lift and raise heavy parts.

Read and understand the entire Assembly Section instructions before attempting to mount your Tiger mower. Refer to the Parts Section of this manual for detailed illustrations to locate all parts. (*ASM-C-0001*)

TRACTOR PREPARATION

- A. Remove right and left hand steps.
- B. Disconnect battery cables from both batteries.
- C. Remove engine side panels, or raise hood to access front pulley.
- D. Remove plugs from tractor casting where mainframe and pump mount will be attached.
- E. Remove any front weights and weight supports.
- F. Raise the tractor onto jack-stands and remove the right and left rear wheels.

(ASM-C-0024)

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CRANKSHAFT ADAPTER

If necessary, remove the four capscrews from the crankshaft pulley. Then install the crankshaft adapter to the pulley with capscrews and lockwashers as shown in the Parts Section. (ASM-NH-0050)

ADJUSTING REAR WHEELS

Raise rear of tractor onto jack-stands. **Follow the instructions in the tractor owner's manual for adjusting tires and rims**. The back wheels MUST be adjusted to the widest setting. NOTE: This may require switching the wheels to opposite sides of tractor. Also take note of any width restrictions when transporting by trailer. (For ease of installation, it is best to leave the rear wheels removed during installation of the mower.) (*ASM-B-0001*)

ASSEMBLY

FRONT PUMP MOUNTING

Before installing the pump mounting bracket it will be necessary to cut holes in the front frame and hood to allow installation of the pump driveshaft (see photos below for location of holes).

Install the pump mounting bracket on the front of the tractor with capscrews and washers as shown in the Parts Section illustration. DO NOT tighten fasteners at this time.

Thread the pump driveshaft into the crankshaft adapter. The end with the splines should match up with the coupler.

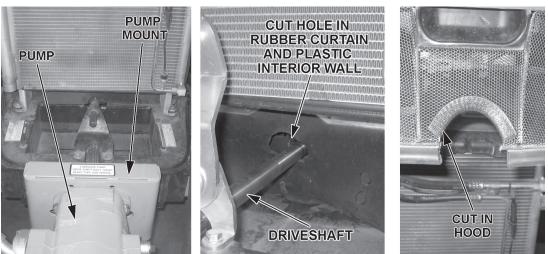
Slide the splined driveshaft coupler onto the pump driveshaft. Install the pump onto the mounting bracket. NOTE: The shaft is offset to one direction, the pump should be installed with the offset side on top. Install hardware for securing pump to the pump mount, DO NOT tighten.

Align pump so that splined coupling can be moved back and forth by hand. Tighten pump mounting bolts in succession, rechecking for spline coupling movement. Remove the pump mounting bracket bolts one at a time and apply a thread locking agent. Tighten these bolts in succession, again checking for free movement in the driveshaft. After all bolts are torqued, the end play on the driveshaft should



NOTE: On some T5 model tractors it will be necessary to cut a relief in the hood latch bracket to allow clearance for the driveshaft.

be 1/16" to 1/8", and the coupler should move freely with hand pressure. If end play is less than 1/16", grind the end of the shaft to achieve the proper end play. If there is more than 1/4" of end play, return the shaft with specifications for a longer shaft.



Note: The driveshaft coupler needs to be checked for free play in four positions: 0°, 90°, 180°, and 270°. This can be done by turning the engine over with a pipe wrench on the coupler.

CAUTION: DO NOT START THE TRACTOR UNTIL ALL HOSES ARE ATTACHED, TANK IS FILLED WITH PROPER OIL AND BALL VALVES ARE OPEN! STARTING AT THIS TIME WILL CAUSE SERIOUS DAMAGE TO THE PUMP.

Assembly Section 2-3

ASSEMBLY

POLYCARBONATE SAFETY WINDOW

For additional safety when using a boom mower the right side door and window must be replaced or protected with polycarbonate windows. This should be done before mounting the mainframe.

1. Disconnect gas shock at door. Remove the right side cab door/window glass from tractor cab by removing hinge pins.

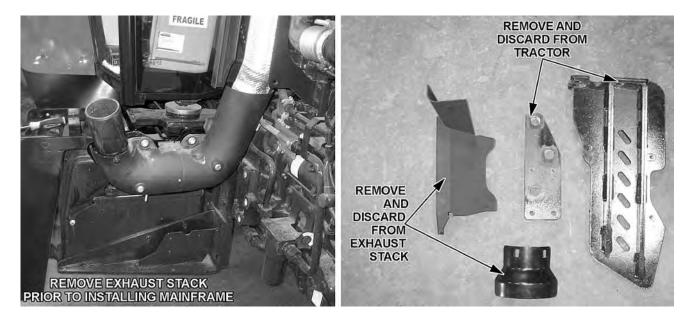
- 2. Remove existing hardware, door handle and bar handle and save. Discard factory glass door.
- 3. Place small bead of adhesive seal in the bottom of the trim lock bubble seal.
- 4. Install trim lock bubble seal on polycarbonate starting at the center bottom horizontal portion.
- 5. Install existing hardware removed from glass door on the polycarbonate.
- 6. Install the polycarbonate assembly in the cab with existing and supplied hardware.
- 7. Assemble the lower bracket and tighten the hardware to secure the polycarbonate.
- 8. Assemble the upper bracket clamp in the upper front corner by the mirror.

9. Adjust the clamp to achieve a secure hold. $_{(ASM-NH\mathchar`-0101\mspace{15}\mspa$



EXHAUST MODIFICATION

Installation of the mainframe requires modification of the tractor's exhaust. Remove exhaust stack and right side steps. Remove stack exhaust mount bracket and discard. Install new exhaust mount and right hand steps with supplied hardware. Reinstall exhaust prior to installing the mainframe. (ASM-NH5 115 EXHAUST)



RIGHT TURN SIGNAL RELOCATION

Installation of the mainframe requires modification of the right side turn signal light. Remove the turn signal and reverse the direction of the L-shaped tube so it faces up. Re-route the wires through the tube to the light assembly. The notch in the light assembly will be in the wrong place, so use a die grinder to grind out a new notch for the wires. Replace reflector pan, bulb and amber cover. New screws (Tiger # 06530547) will be needed for the rear of the light assembly. *(ASM-NH-148 light relocation)*



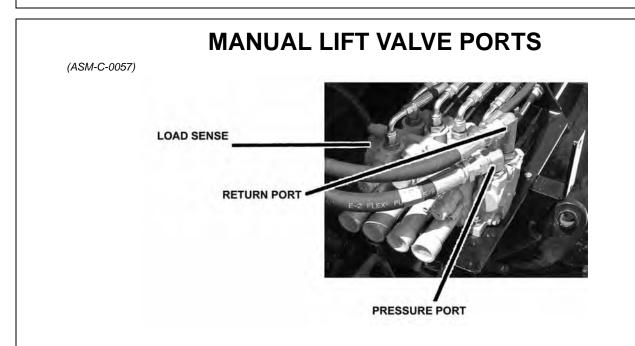
MAINFRAME INSTALLATION

With an overhead hoist and / or jack-stands, raise one side of the frame up to the correctly matching mounting holes. Install capscrews and other hardware to secure the sides of the mainframe to the tractor casting, as shown on the tractor mount kit page in the Parts Section. DO NOT tighten at this time. Remove the capscrews one at a time and apply a thread locking agent. Reinsert the capscrews and tighten / torque to values noted in the torque chart located in the Maintenance Section of this manual. (ASM-C-0003)

SWITCHBOX WIRING

Power and ground are pulled from the tractor's accessory socket using the keyed hot wire on the supplied plug for power and the black wire for ground. Use a test light to verify whether the red or orange wire is the hot wire.

The switchbox is to be secured to the cable control bracket as shown in the Parts Section. (ASM-NH-0121 T5 115)



TRACTOR LOAD SENSE, PRESSURE & RETURN

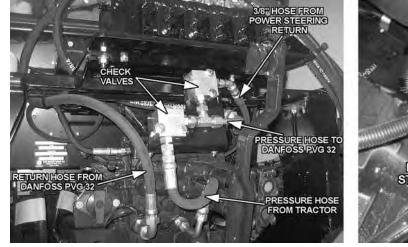
The lift valve uses the Pressure, Return and Load Sense on the tractor's rear remote stack. The ports used are directly under the valve mounting plate. To provide additional pressure, a hose from the tractor's power steering return and check valves are added.

The Pressure hose is routed from the tractor's remote stack to a check valve. A second hose runs from a tee on the check valve to the pressure port on the lift valve.

The Return hose runs from the return port of the lift valve to the tractor remotes.

The Load Sense line is routed from the load sense port of the lift valve to the load sense port at the rear of the tractor.

An additional hose runs from the tractor power steering return beneath the right side of the tractor to a check valve mounted below the lift valve plate. (See photos below). For more information refer to the Parts Section for a complete diagram of the tractor valve hookup. (ASM-NH-0125)





LIFT VALVE HOSE ROUTING

Attach clamps to the right lift valve stand and rear wheel well for proper hose routing. Holes for clamps should be Ø10mm or Ø3/8" reamed to accept 3/8" hardware. Refer to the images below to see the hole placement.

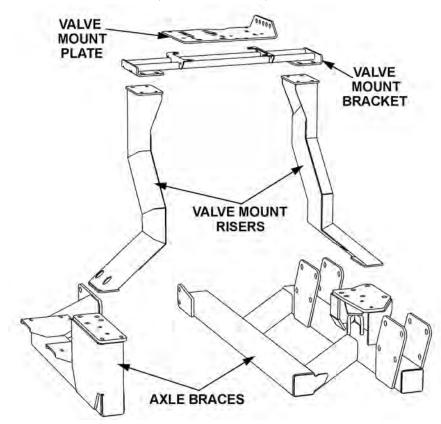
NOTE: DO NOT CUT INTO TUBES / HOSES / WIRES WHEN DRILLING THROUGH METAL OR PLASTIC!



Place as many hoses in the clamp that will fit without compromising pressure. Then secure the hose clamp (06520013) to the hole drilled with the capscrew, 3/8" X 1", NC (21630) and nylock nut,3/8",NC (21627). The hoses that don't fit into the clamp are to be secured to the others with zip ties. For protection of hoses in contact with metal edges, wrap hoses with split hose sections and fasten with hose clamps or zip ties as needed. (ASM-NH-0108 T5 115)

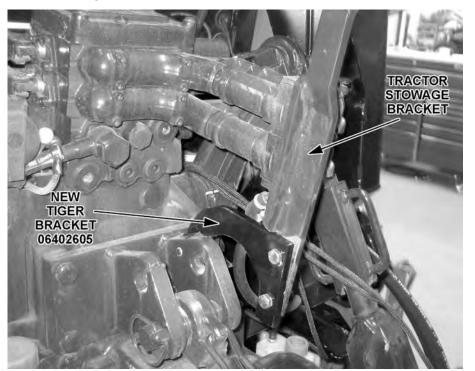
LIFT VALVE MOUNTING

Before mounting the lift valve, you will need to mount the lift valve stands, mounting bracket and lift valve mounting plate to the rear of the tractor as shown below. Refer to the Parts Section for details and hardware needed. (ASM-NH-0104 T5 115)



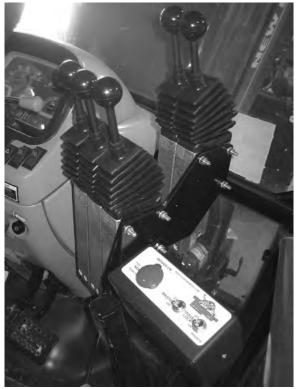
STOWAGE BRACKET RELOCATION

To prevent interference with the lift valve plate, the stowage bracket arm used with the tractor's three-point linkage system will need to be relocated. Install Tiger bracket #06402605 to secure the tractor's stowage arm in the new position. (ASM-NH-0151 T5 115 top link)



MANUAL SWITCHBOX MOUNTING

The switchbox is to be secured to the right side of the manual control bracket. Refer to the Parts Section for assembly and components needed. (ASM-NH-0122)

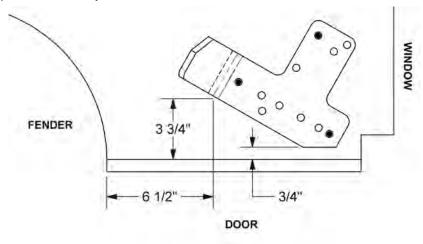


13

CABLE CONTROL/JOYSTICK STAND

Place the beveled edge of the support bracket 3/4" in parallel to the door. Locate the support bracket approximately 6-1/2" from the fender wall to the formed edge of the bracket as shown below. Be sure that the location of the stand will allow clearance between the cable control handles and all existing interior levers, etc. Also, watch out for wiring and brackets underneath the cab when placing the bracket for drilling.

Using the support bracket as a template, mark and drill the 3 holes highlighted below and secure with capscrews and nylock nuts noted in the Parts Section. (ASM-NH-0105)



NOTE ON HUSCO CONTROL VALVES

Manual, cable controlled (Husco control valve) boom mowers require check valves with integral restricting orifice (#06502036) installed in the control valve work ports that are connected to the gland ends of the main and secondary boom cylinders. This check valve allows oil to free flow into the gland end of the main and secondary boom cylinders, but restricts flow out of the cylinder, thereby providing proper boom control. This check valve, #06502036 (Vendor #1968R-.063) is similar in appearance to hose adapter #33271 and Adapter #34396, with.06 orifice. These components can be identified as follows, and are to be installed per Parts Section for the lift valve. *(ASM-HUSCO-0001)*

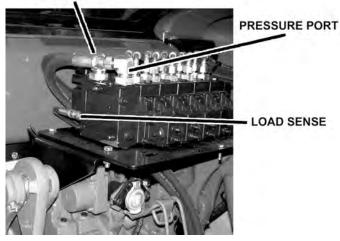


ELECTRONIC LIFT VALVE PORTS

(ASM-C-0089)

DANFOSS VALVE

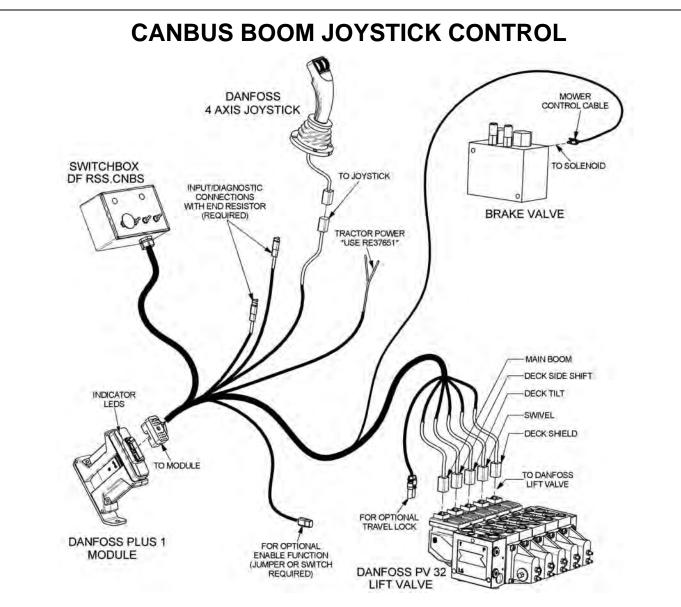
RETURN PORT



JOYSTICK SWITCHBOX MOUNTING

The joystick and switchbox are to be secured to the joystick/switchbox stand. Route wires between driver's seat and right side console, then out through the rubber grommet in the lower right corner of the rear window frame. Refer to the Parts Section for assembly and components needed. (*ASM-NH-0137 T5 115*)

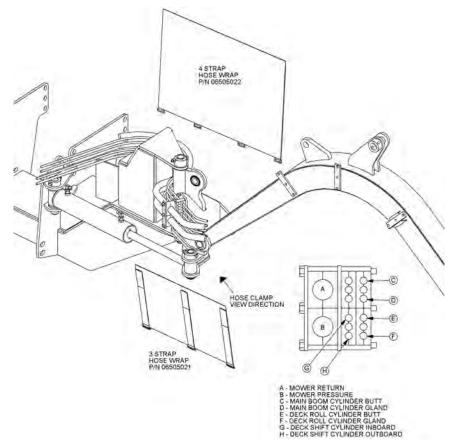




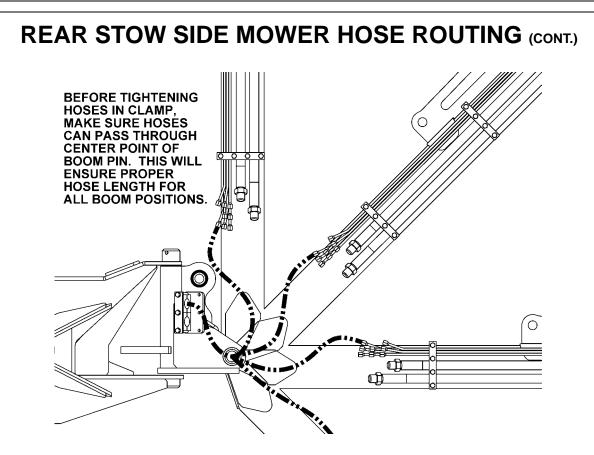
This Electronic control valve is equipped with high-resolution actuators on Boom, Side Shift, Deck Roll, and Boom Swivel functions. These actuators have active fault monitoring. The Deck Shield section does not have active fault monitoring. The joystick provides a signal to the Plus-1 Module and the Module provides a ratio-metric voltage signal. The neutral signal voltage is half or 50% of tractor supply voltage. A 25% signal voltage will shift the valve spool to full A-Port, and 75% signal voltage will shift the spool to full B-Port in the Boom, Side Shift, Deck Roll and Boom Swivel valve sections. If an actuator with active fault monitoring receives a signal from the joystick that is less than 15% or greater than 85% of supply voltage the actuator will fault out and shut down. Also, if there is an internal failure in the actuator or if the spool position is greater than that specified by the signal voltage from the joystick, the actuator will "fault out" and shut down. An active fault condition causes the actuator to drive the spool to neutral, shut down, and activate a red LED on the top of the actuator. The active fault can be canceled by simply cycling the Master Switch OFF and then ON, which resets the fault monitoring, and causes the LED on top of the actuator be green again. The Plus-1 Module has two LED indicators which are utilized for diagnostics. (See troubleshooting). **Note: The joystick is factory set and no adjustments are required.** *(ASM-DF CANBUS RSS).*

REAR STOW SIDE MOWER HOSE ROUTING

WARNING NOTE: The sudden release of hydraulic pressure could cause the sudden movement of very heavy parts. Anyone in the way of these parts could be severely hurt or killed. To prevent hydraulic failure, DO NOT ALLOW these hydraulic hoses to BREAK or BURST. Make sure the hoses do not pinch or stretch as boom moves. Measure TWICE, check TWICE, then proceed with caution.



Route the hoses through the space between the swivel and the boom mounting bracket. Connect the hoses to the boom hoses and move the boom arm to a few feet from full forward. Assemble the swivel clamp and place the return hose for the motor on top and the pressure line on the bottom. Place the ¹/₄" hoses in the hose clamp as shown above. Next, make sure there is enough slack for all hoses to pivot at the joint where the main boom arm bends in the swivel, as shown in the next image, and tighten the hoses in the clamp. (ASM-RSS HOSE ROUTING-0001A)

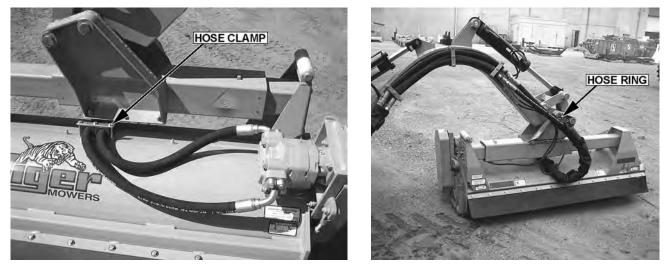


Arrange the hoses in the clamp that attaches to the boom mounting bracket as shown above. Pull the hoses snug from the swivel to the mounting bracket clamps, when main boom is still forward, and tighten the hoses in the clamp.

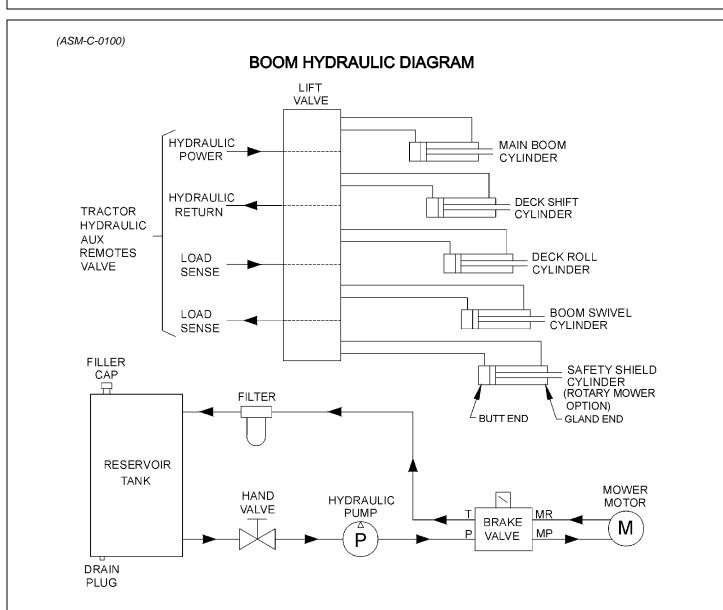
Make sure the 1" motor hoses do not kink as the boom arm is moved into the stowing position. If this happens the motor hoses will have to be shortened, because there is too much hose between clamps. (ASM-RSS HOSE ROUTING-0001B)

REAR STOW SIDE FLAIL HOSE ROUTING

WARNING NOTE: The sudden release of hydraulic pressure could cause the sudden movement of very heavy parts. Anyone in the way of these parts could be severely hurt or killed. In order to prevent hydraulic failure, DO NOT ALLOW these hydraulic hoses to BREAK or BURST. Make sure the hoses do not pinch or stretch as boom moves. Measure TWICE, check TWICE, then proceed with caution.



Route the hoses from the flail motor through the space between the slider assembly and the flail deck as shown above. Clamp the hoses with hose clamp P/N 35131, but <u>do not</u> tighten at this time. Next, route the hoses from the hose clamp through the hose ring and attach them to the boom hoses. Before tightening the hose clamp, make sure the hoses do not pinch, stretch or rub on any edges when the flail head moves through its articulation and sliding. Finally, attach the hose cover P/N 06505020 between the hose clamp and the hose ring. Refer to the Parts Section for hardware. (ASM-RSS HOSE ROUTING-0002)



WHEEL WELL HYDRAULIC TANK INSTALLATION

Install all fittings and tubes into tank and tank filter as shown in the Parts Section illustration. Insert tank sight glass onto the tractor side of the tank.

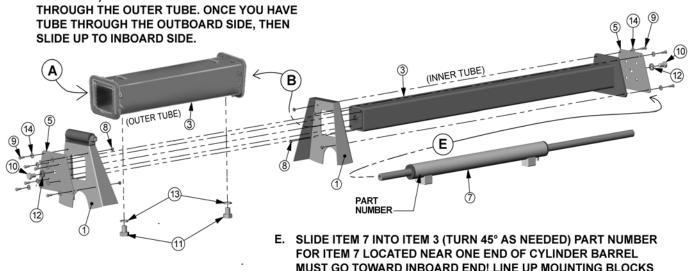
Place the tank in the mounting bracket on the axle brace as shown in the Parts Section. Secure the tank with the hardware provided.

Install the filter gauge into the filter housing so that it points to the rear of the tractor and is clearly visible to the operator. The tank breather cap is ready for use as the tank is filled. Some of these items may already be installed. (*ASM-C-0103*)

REAR STOW SIDE SLIDE ASSEMBLY

TIGER RECOMMENDS USING LOCTITE 271[™] ON ALL FASTENERS **BEFORE INSTALLING.**

- A. THE INNER AND OUTER TUBES ARE SUPPLIED AS AN ASSEMBLY. REMOVE THE INNER FROM THE OUTER TO ASSEMBLE TO MOWER HEAD.
- B. SLIDE THE INNER TUBE OF ITEM 3 INTO ITEM 1 FROM OUTBOARD SIDE (OPPOSITE ROLLER ASSEMBLY) AS SHOWN. SLIDE THE INNER TUBE THROUGH THE OUTER TUBE. ONCE YOU HAVE TUBE THROUGH THE OUTBOARD SIDE. THEN SLIDE UP TO INBOARD SIDE.
- C. ONCE ITEM 3 IS IN PLACE, SECURE INBOARD END CAP (ITEM 5) WITH ITEMS 9 (QTY 8), 14 (QTY 8) & 8 (QTY 4). LEAVE FASTENERS LOOSE TO ALLOW FOR NEXT STEP
- D. SLIDE OUTER TUBE ALL THE WAY OUTBOARD.



MUST GO TOWARD INBOARD END! LINE UP MOUNTING BLOCKS WITH HOLES IN OUTER TUBE. LOOSELY SECURE WITH ITEMS 11 (QTY 2) AND 13 (QTY 2). LOOSELY ASSEMBLE ITEMS TO OUTBOARD END WITH ITEMS 9 (QTY 4) AND 8 (QTY 4).

F. WITH ALL ITEMS IN PLACE, CENTER ITEM 3 IN OPENINGS IN ITEM 1 AT BOTH ENDS, THEN TIGHTEN FASTENERS. THEN TIGHTEN FASTENERS ON ROD ENDS. FINALLY, TIGHTEN BOLTS ON UNDERSIDE OF CYLINDER.

See the Slide Assembly page in the Common Parts Section for parts numbers and additional detail. (ASM-RSS SLIDE ASSEMBLY 2017)

FILLING HYDRAULIC RESERVOIR

Refer to the Maintenance Section for filling specifications and hydraulic oil requirements.

NOTE: Starting or running your Tiger mower before filling reservoir will cause serious damage to the hydraulic pump.

(ASM-C-0004hydro resrv)

INSTALLING O-RING FITTINGS

Installing straight, 45° and 90° O-rings requires that the O-ring and washer be up against the swivel body. Insert the swivel and turn in until the swivel is pointed in the desired direction and O-ring contact is made. Hold swivel in set direction with a wrench and turn the O-ring nut away from the swivel body and carefully tighten. (ASM-C-0056)

INSTALLING NATIONAL PIPE FITTINGS

Whenever installing a pipe fitting, wrap the threads clockwise (looking at the end) with teflon tape. In this way, the tape will be tightened when installed. NOTE: It is not necessary to tape O-ring fittings, or those installed in swivels. (ASM-C-0088)

GENERAL HOSE INSTALLATION

Refer to the Parts Section for detailed information about hoses and fittings for this application. (ASM-C-0011)

HOSE COVERING

Secure hoses together with zip ties wherever loose. Wrap the hoses between the swivel and main boom with the hose cover provided. Wrap the hoses between the main boom and secondary boom with the hose cover provided. Where hoses may contact the frame or other edges, wrap with split hose and secure with hose clamps or zip ties.

On non-cab units, the pressure and return hoses from the control valve will also need to be routed inside the protective hose wrap. Cover the valve and valve fittings with the hose cover and secure with the string provided. (ASM-C-0058)

SOLENOID BRAKE VALVE

Install a solenoid valve on the right riser plate of the mainframe with the supplied hardware as shown in the Parts Section in this manual. While installing the fittings to the brake valve, the electical coil on the spool may have to be removed to make room. When reinstalling the coil, it is important to use no more than 5 ft. lbs. (or 60in. lbs.) torque. **WARNING: OVER TORQUE TO THE COIL WILL RESULT IN HYDRAULIC FAILURE OF SPOOL.** (ASM-C-0106)

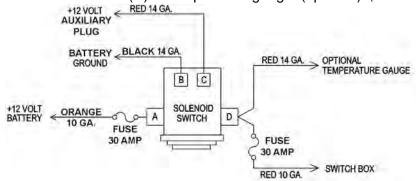
TEMPERATURE GAUGE MOUNTING (OPTIONAL)

Mount the temperature gauge where it is clearly visible to the operator. Attach the green (-) wire from the negative post on the gauge to a grounded bolt on the tractor frame. Remove paint if needed to make a good ground. Remove the pipe plug from the side of the hydraulic reservoir and install the temperature sensor using thread sealing tape. Run the white wire from the (s) sensor post of the gauge to the temperature sensor on the hydraulic reservoir tank. (ASM-C-0051)

CONTINUOUS DUTY SOLENOID SWITCH

Mount the solenoid switch, drill holes to match if necessary, in a dry and well protected area. Secure as shown in the Parts Section with provided 3/8" x 1" capscrews, lockwashers, and hex nuts.

- Route wires to and from the Continuous Duty Solenoid Switch as shown below.
- A.) ORANGE 10 GA. wire from terminal (A) to +12V battery fusible link.
- B.) RED 14 GA. wire from terminal (C) to tractor plug in cab.
- C.) BLACK 14 GA. wire from terminal (B) to -12V battery post.
- D.) RED 10 GA. wire from terminal (D) to switch box.
- E.) RED 14 GA. wire from terminal (D) to temperature gauge. (optional). (ASM-NH-0032)



SWIVEL BRACKET MOUNTING

Install the boom swivel bracket onto the mainframe with the swivel pin. Secure the pin in place using the capscrews, etc. through the hole in the boss and pin. NOTE: The head of the capscrew must be toward the front of the tractor.

Install all new swivels and fittings on the swing cylinder with swivel openings facing each other. Fittings will vary in type and direction depending on your application; refer to the Parts Section for more details.

Install bearings in the mainframe anchor for the swing cylinder. This may have already been done for you.

Install the swing cylinder between the boom mounting bracket cylinder anchor and the boom swivel with the pins. Insert roll pins through the top and the bottom hole in the pins.

Attach hoses from the control valve to the swing cylinder. (ASM-C-0015)

MAIN BOOM INSTALLATION

Using a hoist, install the boom swivel into the mainframe as shown in the Parts Section. Line up holes in swivel and mainframe for large swivel pin and insert pin. Secure with hardware as shown.

Attach the inner end of the main boom to the swivel bracket with the cylinder anchors positioned upward, and at a right angle to the tractor. Secure it with the horizontal hinge pin. Secure the hinge pin in the boss with capscrews, etc. (see Parts Section).

Attach the butt end of the main boom cylinder to the swivel with the cylinder pin and roll pins shown in the Parts Section.

Install the travel lock on the rod end of the main boom cylinder. This should be facing the butt end of the cylinder after installation.

Install the fittings and hoses to the main boom cylinder per Parts Section.

GREASE HINGE PIN ZERKS ON BOOM AFTER ASSEMBLY, ONCE UNDER LOAD WITH BOOM ELEVATED, AND AGAIN AT REST WITH BOOM SUPPORTED. (ASM-C-0013)

DECK ATTACHMENT

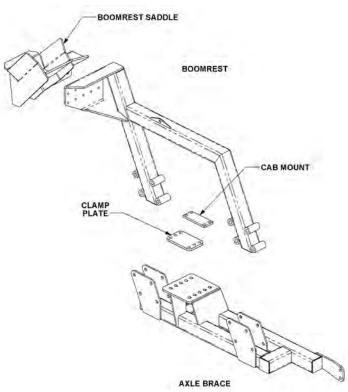
Attach the head to the secondary boom using the pins and hardware shown in the Parts Section. Install the deck pivot cylinder using the pins and hardware also shown in the Parts Section.

Connect the fittings and hoses from the pivot cylinder to the small hoses or preformed tubes on the boom arm. Connect the fittings and hoses from the motor to the large hoses or preformed tubes on the boom arm. If attaching a rotary mower make sure that the hose with the red stripe sticker is attached to the motor pressure port which is marked with a red dot sticker.

Connect all remaining hoses from the control valve to the cylinders and/or hoses or preformed tubes on the boom arm. (ASM-C-0086)

SINGLE COLUMN BOOMREST

Carefully lower the boomrest and align the holes with those of the axle brace. Now install all attaching hardware as shown in the Parts Section loosely, to allow for the alignment with the axle brace. Tighten / torque all hardware on the axle brace and the boomrest. Finally, add the Boomrest Saddle using the hardware provided and space the hardware apart as far as possible. (ASM-NH-0135)



FINAL PREPARATION FOR OPERATION

Place operator's safety and operation decals on the steering column and side console where they are clearly visible to the operator. These decals should be understood by each operator of the machine in conjunction with the Safety and Operation Sections of this book. The decals are to be maintained in good condition as a reminder to the operator, and should be replaced if damaged.

All bosses, pins and pivot points will need to be greased as instructed in the Maintenance Section of this manual. The hydraulic reservoir can also be filled with the recommended fluid (see Maintenance Section) and the filter installed in the top of the tank. Double check all fittings and fasteners BEFORE starting tractor. Also secure any loose hoses together with zip ties and wrap with split hoses where friction may occur on the hoses.

AWARNING

BEFORE starting or operating the tractor you must read and understand the Safety and Operation Sections of this manual completely.

BE SURE THE BALL VALVES ARE OPEN! Start tractor and allow instruments to stabilize. Using a piece of paper or cardboard as noted in the Safety and Maintenance Sections, check all fittings and connections for hydraulic leaks.

If a leak is found, you must shut down the tractor and set the cutter on the ground. Before attempting to fix the leak, you must actuate the lift valve handles several times to relieve any pressure in the lines.

Before operating the mower, the cutter head and boom should be slowly moved throughout the full range of motion. Watch for any condition that would cause pinching or excess stress on the hoses. The steering and front axle travel should also be carefully moved through their full range of motion. If any condition occurs in which the hoses contact the tires, the steering and / or front axle travel may need to be limited as described in the tractor operator's manual. This should also be done if the tires rub, or are extremely close to any other part of the mower, such as the hydraulic tank or draft beam. This may include adding shims or adjusting stop bolts in the tractor front to solve the problem. While checking motion, you should also check that the control circuits are connected according to the operator's decal for the valve handles.

MOWER TESTING

Take the tractor to a place free of loose objects on the ground. Operate the cylinders through their full range of motion again, to clear the lines of air. Follow the instructions in the Operation Section to operate the mower. Vibration of the mower should be minimal at all times. After a 5 minute test run, the knife bolts should be retorqued, and retorqued once again after the first few hours of operation.

If any parts of this Assembly Section, or any other section of this manual are not clearly understood you must contact your dealer or the address on the front of this manual for assistance!(ASM-C-0010)

OPERATION SECTION

Operation Section 3-1

TIGER BOOM MOWER OPERATING INSTRUCTIONS

Tiger Booms are manufactured with quality material by skilled workers. The Boom is designed to attach to a tractor and operate various heads for a wide range of vegetative maintenance applications. The boom and heads are equipped with safety warning decals, protective deflectors, shields, and other safety features to provide operator and passerby protection, however, no shielding is 100% accurate. ALL safety equipment and safety warning decals must be maintained on the unit in good operational condition at all times.

It is the operator's responsibility to be knowledgeable of all potential operating hazards and to take every reasonable precaution to ensure oneself, others, animals, and property are not injured or damaged by the boom unit, tractor or a thrown object. Do not operate the boom and attached head if bystanders, passersby, pets or livestock are within 300 feet of the unit.

This section of the Operator's Manual is designed to familiarize, instruct, and educate operators to the safe and proper use of the boom and attached head. Pictures contained in this section are intended to be used as a visual aid to assist in explaining the operation of a Boom and are not specific to a Boom. Some pictures may show shields removed to enhance visual clarity. NEVER operate the boom unit without all safety equipment in place and in good operational condition. The operator must be familiar with the boom unit and tractor operation and all safety practices before beginning operation. Proper operation, as detailed in this manual, will help ensure years of safe and satisfactory use of the Boom

READ AND UNDERSTAND THE ENTIRE OPERATING INSTRUCTIONS AND SAFETY SECTION OF THIS MANUAL AND THE TRACTOR MANUAL BEFORE ATTEMPTING TO USE THE TRACTOR AND IMPLEMENT. If you do not understand any of the instructions, contact your nearest authorized dealer for a full explanation. Pay close attention to all safety signs and safety messages contained in this manual and those affixed to the implement and tractor. (*OPS-U- 0001*)

<u>READ, UNDERSTAND, and FOLLOW</u> the following Safety Messages. Serious injury or death may occur unless care is taken to follow the warnings and instructions stated in the Safety Messages. Always use good common sense to avoid hazards. (SG-2)



A PELIGRO

Si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad. (SG-3)



| Operation | Section | 3-2 |
|-----------|---------|-----|
|-----------|---------|-----|

OPERATION

1.OPERATOR REQUIREMENTS

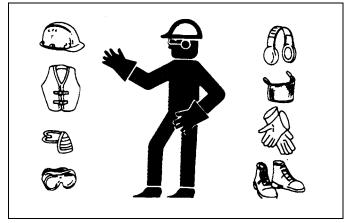
Safe operation of the unit is the responsibility of a qualified operator. A qualified operator has read and understands the implement and tractor Operator's Manuals and is experienced in implement and tractor operation and all associated safety practices. In addition to the safety messages contained in this manual, safety signs are affixed to the implement and tractor. If any part of the operation and safe use of this equipment is not completely understood, consult an authorized dealer for a complete explanation.

If the operator cannot read the manuals for themselves or does not completely understand the operation of the equipment, it is the responsibility of the supervisor to read and explain the manuals, safety practices, and operating instructions to the operator.

Safe operation of equipment requires that the operator wear approved Personal Protective Equipment (PPE) for the job conditions when attaching, operating, servicing, and repairing the equipment. PPE is designed to provide operator protection and includes the following safety wear:

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Always Wear Safety Glasses
- Hard Hat
- Steel Toe Safety Footwear
- Gloves
- Hearing Protection
- Close Fitting Clothing
- Respirator or Filter Mask (depends on operating conditions) (OPS-U- 0002)



A DANG ER

NEVER use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator's alertness and coordination and therefore affect the operator's ability to operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to operate the Equipment safely. NEVER knowingly allow anyone to operate this equipment when their alertness or coordination is impaired. Serious injury or death to the operator or others could result if the operator is under the influence of drugs or alcohol. (SG-27)



2.TRACTOR REQUIREMENTS

In addition to tractor horsepower and size required to operate the boom unit, the tractor must also be properly equipped to provide operator protection, to alert approaching vehicle drivers of the tractor's presence, and to ensure tractor stability when mowing with the boom fully extended.

Tractor Requirements and Capabilities

- ASAE approved Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt.
- Tractor Safety DevicesSlow Moving Vehicle (SMV) emblem, lighting,
- Tractor Ballast As required to maintain at least 1500 lbs. on left rear tire

2.1 ROPS and Seat Belt

The tractor must be equipped with a Roll-Over-Protective-Structure (ROPS) (tractor cab or roll-bar) and seat belt to protect the operator from falling off the tractor, especially during a roll over where the driver could be crushed and killed. Only operate the tractor with the ROPS in the raised position and seat belt fastened. Tractor models not equipped with a ROPS and seat belt should have these life saving features installed by an authorized dealer. *OPS-U- 0003*

AWARN ING

Operate this Equipment only with a Tractor equipped with an approved rollover-protective system (ROPS). Always wear seat belts. Serious injury or even death could result from falling off the tractor--particularly during a turnover when the operator could be pinned under the ROPS. (SG-7)



2.2 Tractor Lighting and SMV Emblem

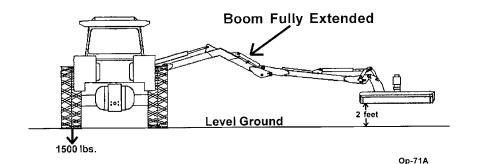
If the tractor will be operated near or traveled on a public roadway it must be equipped with proper warning lighting and a Slow Moving Vehicle (SMV) emblem which are clearly visible from the rear of the unit. Most tractor's have different settings for operating and transporting lighting. Refer to the tractor operator's manual for using the tractor's light switch and operating the turn signals.

OPS-B- 0017

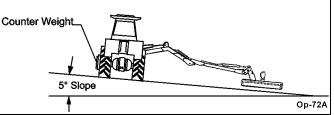


2.3 Tractor Ballast

To ensure tractor stability when operating on flat surfaces the left rear tractor tire MUST exert a minimum down force (weight) of 1500 lbs. on the ground when the tractor is on level ground, its boom is fully extended and the mower head is horizontal and two feet above the ground. For units which have the ability to operate on either side of the tractor, these requirements must also be met for the right side tire when the boom is extended to the left side as described above. A tractor that does not meet this criteria is DANGEROUS and should not be operated as upset of the unit can occur resulting in possible serious injury and property damage. NOTE: All factory mounted units are tested and meet the ballast requirement before shipment; further testing is not required unless the unit is operated in a manner other than what is considered standard operating conditions.



If the unit is operated on slopes greater than 5°, additional counterweight will be required. Operation of the unit on slopes greater than 11 percent (6.4 degrees) is not recommended under any circumstances. On a tractor with a 96" outside to outside tire spread, an 11 percent (6.4 degrees) slope occurs when one rear tractor tire is about 8" lower than the other rear tire. *OPS-B- 0018*



3.GETTING ON AND OFF THE TRACTOR

Before getting onto the tractor, the operator must read and completely understand the implement and tractor operator manuals. If any part of either manual is not completely understood, consult an authorized dealer for a complete explanation. *OPS-U- 0007*

AWARNING Do not mount or dismount the Tractor while the tractor is moving. Mount the Tractor only when the Tractor and all moving parts are completely stopped. (SG-12)



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3.1 Boarding the Tractor

Use both hands and equipped handrails and steps for support when boarding the tractor. Never use control levers for support when mounting the tractor. Seat yourself in the operator's seat and secure the seat belt around you.

Never allow passengers to ride on the tractor or attached equipment. Riders can easily fall off and be seriously injured or killed from falling off and being run over. It is the operator's responsibility to forbid all extra riders at all times. *OPS-U- 0008*

AANGER Never allow children to operate, ride on, or come close to the Tractor or Implement. Usually, 16-17 year-old children who are mature and responsible can operate the implement with adult supervision, if they have read and understand the Operator's Manuals, been trained in proper operation of the tractor and Implement, and are physically large enough to reach and operate the controls easily. (SG-11)

> Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in serious injury or death. (SG-10)

AWARNING Do not mount or dismount the Tractor while the tractor is moving. Mount the Tractor only when the Tractor and all moving parts are completely stopped. (SG-12)

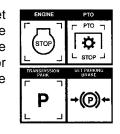
3.2 Dismounting the Tractor

Before dismounting the tractor, idle the tractor engine down, disengage the head and retract the boom arm to the transport position. Park the tractor on a level surface, place the transmission in neutral and set the parking brake. Shut down the tractor engine, remove the key, and wait for all motion to come to a complete stop before exiting the operator's seat. NEVER leave the seat until the tractor, its engine, and mower head movement have come to a complete stop.

Use hand rails and extra steps when exiting the tractor. Be careful of your step and use extra caution when mud, ice, snow, and other matter has accumulated on the steps and handrails. Never rush or jump off the tractor. *OPS-B- 0002*

BEFORE leaving the tractor seat, always set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)

Operation Section 3-6







Boom

A DANGER

4.STARTING THE TRACTOR

The operator must have a complete understanding of the placement, function, and operational use of all tractor controls before starting the tractor. Review the tractor operator's manual and consult an authorized dealer for tractor operation instructions if needed.

Essential Tractor Controls:

- Locate the ignition key/switch
- Locate the engine shut off control
- Locate the hydraulic control levers
- Locate the light control lever
- Locate the brake pedals and clutch
- Locate the PTO control
- Locate the 3 point hitch control lever
- Locate the boom operating controls (joystick or valve bank)

Before starting the tractor ensure the following:

- Conduct all pre-start operation inspection and service according to the tractor operator's manual.
- Make sure all guards, shields, and other safety devices are securely in place.
- The parking brake is on.
- The tractor transmission levers are in park or neutral.
- The boom operating controls are in the neutral and off position.
- The PTO control lever is disengaged.
- The hydraulic remote control levers are in the neutral position.

Refer to the tractor owner's manual for tractor starting procedures. Only start the tractor while seated and belted in the tractor operator's seat. Never bypass the ignition switch by short circuiting the starter solenoid. After the tractor engine is running, avoid accidental contact with the tractor transmission to prevent sudden and unexpected tractor movement. *OPS-B- 0003*



Never run the Tractor engine in a closed building or without adequate ventilation. The exhaust fumes can be hazardous to your health. (SG-23)



Start tractor only when properly seated in the Tractor seat. Starting a tractor in gear can result in injury or death. Read the Tractor operators manual for proper starting instructions. (SG-13)



5.CONNECTING ATTACHING HEADS TO THE BOOM

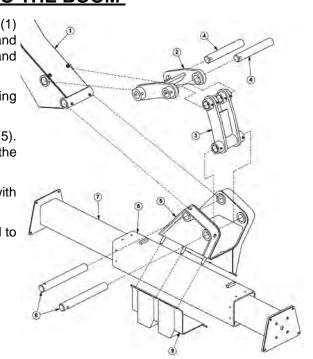
1. Start by attaching the pivot bracket(2) to the boom(1) using pin(4) and hardware. Next attach the cylinder and pivot bracket(2) to the pivot bracket(3) using pin(4) and hardware.

2. Then attach the tree(5) to the slide assembly(6) using clamp(9) and hardware.

3. Use a hoist to lower the boom(1) down to the tree(5). Insert the upper pin(8) through the tree(5) and the end of the boom(1). Attach with hardware.

4. Then align the tree(5) and the pivot bracket(3). Attach with pin(8) and hardware.

5. Finally make sure all bolts, nuts, and pins are tightened to recommended torque. *OPS-RSS-0001*



AWARNING

Avoid contact with hot surfaces including hydraulic oil tanks, pumps, motors, valves and hose connections. Relieve hydraulic pressure before performing maintenance or repairs. Use gloves and eye protection when servicing hot components. Contact with a hot surface or fluid can cause serious injury from burns or scalding. (SG-34)

AWARN IN G

Do not operate this Equipment with hydraulic oil or fuel leaking. Oil and fuel are explosive and their presence could present a hazard. Do not check for leaks with your hand! High-pressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. To check for a hose leak, SHUT the unit ENGINE OFF and remove all hydraulic pressure. Wear oil impenetrable gloves, safety glasses and use Cardboard to check for evidence of oil leaks. If you suspect a leak, REMOVE the HOSE and have it tested at a Dealer. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15)

Operation Section 3-8

6.PRE-OPERATION INSPECTION AND SERVICE

Before each use, a pre-operation inspection and service of the implement and tractor must be performed. This includes routine maintenance and scheduled lubrication, inspecting that all safety devices are equipped and functional, and performing needed repairs. DO NOT operate the unit if the pre-operation inspection reveals any condition affecting safe operation. Perform repairs and replacement of damaged and missing parts as soon as noticed. By performing a thorough pre-operation inspection and service, valuable down time and repair cost can be avoided. *OPS-U-0029*

AWARNING

A DANGER

Periodically inspect all moving parts for wear and replace when necessary with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Make sure all pins have attaching hardware. Serious injury may occur from not maintaining this machine in good working order. (SG-21_A)

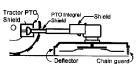
All Safety Shields, Guards and Safety devices including (but not limited to) - the Deflectors, Chain Guards, Steel Guards, Gearbox Shields, PTO integral shields, and Retractable Door Shields should

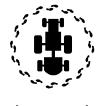
be used and maintained in good working condition. All safety devices should be since inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from thrown objects, entanglement, or blade contact. (SGM-3)

Operation Section 3-9

Boom

OPERATION





6.1 Tractor Pre-Operation Inspection/Service

Refer to the tractor operator's manual to ensure a complete pre-operation inspection and scheduled service is performed according to the manufacturers recommendations. The following are some of the items that require daily service and inspection:

- Tire condition/air pressure
- Wheel lug bolts
- Steering linkage
- PTO shield
- SMV sign is clean and visible
- Tractor's lights are clean and functional
- Tractor Seat belt is in good condition
- Tractor ROPS is in good condition
- ROPS is in the raised position
- No tractor oil leaks
- Radiator free of debris
- Engine oil level and condition
- Engine coolant level and condition
- Power brake fluid level
- Power steering fluid level
- Fuel condition and level
- Sufficient lubrication at all lube points
- Air filter condition OPS-U-0030

0p-13

6.2 Boom Unit Pre-Operation Inspection and Service

Inspect and service the boom arm and head prior to operation. Damaged and/or broken parts should be repaired and/or replaced immediately. To ensure the unit is ready for operation, conduct the following: *OPS-B- 0020*

AWARN IN G

Periodically inspect all moving parts for wear and replace when necessary with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Make sure all pins have attaching hardware. Serious injury may occur from not maintaining this machine in good working order. (SG-21_A)





Operation Section 3-10

The operator's manual and safety signs affixed on the unit contain important instructions on the safe and proper use of the equipment. Maintain these important safety features on the implement in good condition to ensure the information is available to the operator at all times.

• Ensure all safety signs are in place and legible. Replace missing, damaged, and illegible decals. *OPS-U- 0011_A*



FRAME ASSEMBLY

- Inspect condition of mounting frame weldment.
- Inspect condition of Swivel Assy.
- Ensure all bolts and screws are in position and are properly torqued.
- Ensure all pins are in place and fastened with screws.
- Ensure frame is properly mounted to tractor and hardware is propely installed and tightened. *OPS-RSS-0008*



OPERATION

Operation Section 3-11

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Relieve hydraulic pressure prior to doing any maintenance or repair work on the Implement. Place the Mower Head on the ground or securely supported on blocks or stands, disengage the PTO, and turn off the engine. Push and pull the control Levers or Joystick several times to relieve pressure prior to starting any maintenance or repair work. (SBM-6)



Never Leave the mower unattended while the head is in the raised position. The mower could fall causing serious injury to anyone who might inadvertently be under the mower. (SBM-4)



BOOM ARM ASSEMBLY

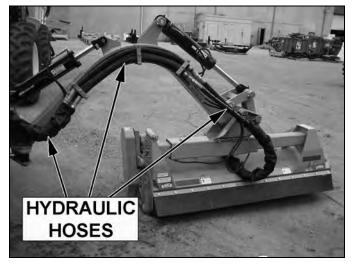
- Inspect condition of the boom arm weldment
- Ensure all pins are in place.
- Ensure all bolts, nuts and rollpins are properly installed.
- Check condition of bushings at boom pivot points and hydraulic cylinder tangs.
- Ensure each hydraulic cylinders are installed and retained correctly. Ensure the proper size pins are used to retain the cylinders in place and are secured properly. *OPS-RSS-0002*



AWARNING Never attempt to lubricate, adjust, or remove material from the Implement while it is in motion or while tractor engine is running. (SG-20)

HYDRAULIC LINE INSPECTION

- Check for hydraulic leaks along hoses, cylinders and fittings. IMPORTANT: DO NOT use your hands to check for oil leaks. Use a piece of heavy paper or cardboard to check for hydraulic oil leaks.
- Inspect the condition of the valve mounting.
- Ensure fittings are properly connected. *OPS-RSS-0005*



Operation Section 3-12

OPERATION

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AWARNING

Do not operate this Equipment with hydraulic oil or fuel leaking. Oil and fuel are explosive and their presence could present a hazard. Do not check for leaks with your hand! High-pressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. To check for a hose leak, SHUT the unit ENGINE OFF and remove all hydraulic pressure. Wear oil impenetrable gloves, safety glasses and use Cardboard to check for evidence of oil leaks. If you suspect a leak, REMOVE the HOSE and have it tested at a Dealer. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15)

HYDRAULIC PUMP/OIL RESERVOIR

- Check oil reservoir level and oil condition. (Add specific type oil if low)
- Change hydraulic oil filter and hydraulic oil according to maintenance schedule.
- Ensure there are no oil leaks and fitting are properly connected
- Inspect overall condition of hydraulic pump.
- Inspect pump drive shaft.



Check the fluid level in the Hydraulic Tank on the

Tractor, and add oil if required. As the air has been forced out of the Cylinders and Hoses, it goes into the Hydraulic Tank and reduces the volume of oil. Maintain the oil level within the sight gauge located on the side of the reservoir. Never fill the tank above the sight gauge to allow for the expansion of the oil. The tank maintains pressure after the mower has been run. Stand off to one side when removing the breather cap element to prevent possible injury. *OPS-B 0024_E*

AWARN IN G

Attention: Oil Filler Cap is also the Pressure Relief Cap.

Remove cap slowly to relieve pressure before removing cap completely. Stay clear to prevent being scalded with hot oil that may spray out of the tank that is still pressurized and may cause serious injury to eyes, face, and exposed skin. (Ops-0001-MISC)

AWARNING

Avoid contact with hot surfaces including hydraulic oil tanks, pumps, motors, valves and hose connections. Relieve hydraulic pressure before performing maintenance or repairs. Use gloves and eye protection when servicing hot components. Contact with a hot surface or fluid can cause serious injury from burns or scalding. (SG-34)

Boom



ROTARY HEAD INSPECTION

- Inspect blades and blade bolts for looseness and excessive wear. Rotate to 90° to make for checking easier. Replace damaged, worn, and missing blades as complete sets to maintain rotary balance.
- Ensure motor bolts and nuts are tightened to the appropriate torque.
- Ensure rubber deflectors are in position and not damaged. Replace worn, broken, and missing sections immediately.
- Ensure hydraulic lines are properly connected to the hydraulic motor. Check for hydraulic leaks along hoses and fittings. DO NOT use your hands to check for oil leaks. Use a piece of heavy paper or cardboard to check for hydraulic oil leaks.



• Inspect the condition of deck skid shoes and hardware. OPS-RSS-0003

AWARNING

OPERATION

Do not put hands or feet under mower decks. Blade Contact can result in serious injury or even death. Stay away until all motion has stopped and the decks are securely blocked up. (SGM-09)



🛦 DANG ER

All Safety Shields, Guards and other safety devices including (but not limited to) - Deflectors, Steel Guards and Gearbox Shields must be used and maintained in good working condition. All safety devices should be inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from thrown objects, entanglement, or blade contact. (SSM-07)

Boom

FLAIL HEAD INSPECTION

- Inspect blades and blade bolts for looseness and excessive wear. Rotate to 90° to make for checking easier. Replace damaged, worn, and missing blades as complete sets to maintain cuttershaft balance.
- Ensure rubber deflectors are in position and not damaged. Replace worn, broken, and missing sections immediately.
- Ensure the rollers are in good condition and rotate freely.
- Inspect that all bolts and screws are in position and are properly torqued.



- Ensure hydraulic lines are properly connected to the hydraulic motor. Check for hydraulic leaks along hoses and fittings. DO NOT use your hands to check for oil leaks. Use a piece of heavy paper or cardboard to check for hydraulic oil leaks.
- Inspect the condition of the drive belts.
- Ensure the drive belt shields are in place and in good repair.
- Remove any grass or other debris which may be wrapped around the cuttershafts ends.
- Inspect the condition of deck skid shoes and hardware. OPS-RSS-0004



Do not put hands or feet under mower decks. Blade Contact can result in serious injury or even death. Stay away until all motion has stopped and the decks are securely blocked up. (SFL-2)

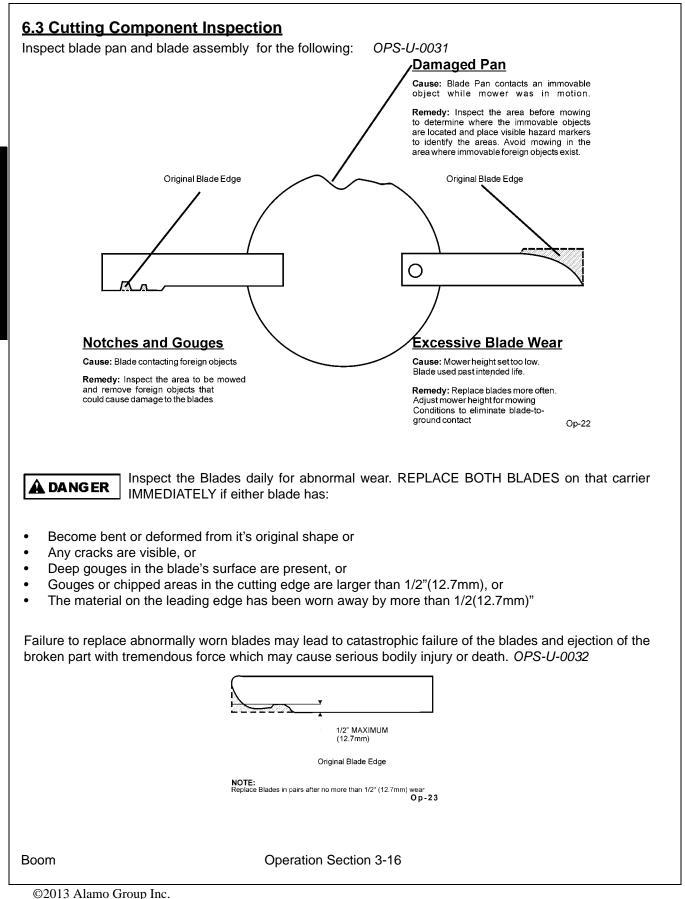


OPERATION

🛕 DANG ER

All Safety Shields, Guards and other safety devices including (but not limited to) - Deflectors, Steel Guards and Gearbox Shields must be used and maintained in good working condition. All safety devices should be inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from thrown objects, entanglement, or blade contact. (SSM-07)

Operation Section 3-15



Tractor PRE-OPERATION Inspection



Mower ID#_____

Make _____

Date:

Shift

Before conducting the inspection, make sure the tractor engine is off, all rotation AWARNING has stopped and the tractor is in park with the parking brake engaged. Make sure the mower is resting on the ground or securely blocked up and all hydraulic pressure has been relieved.

| Item | Condition at Start of Shift | Specific Comments if not O.K. |
|--|--------------------------------|-------------------------------|
| The flashing lights function properly | | |
| The SMV Sign is clean and visible | | |
| The tires are in good condition with proper pressure | | |
| The wheel lug bolts are tight | | |
| The tractor brakes are in good condition | | |
| The steering linkage is in good condition | | |
| There are no visible oil leaks | | |
| The hydraulic controls function properly | | |
| The ROPS or ROBS Cab is in good condition | | |
| The seatbelt is in place and in good condition | | |
| The 3-point hitch is in good condition | | |
| The drawbar pins are securely in place | | |
| The PTO master shield is in place | | |
| The engine oil level is full | | |
| The brake fluid level is full | | |
| The power steering fluid level is full | | |
| The fuel level is adequate | | |
| The engine coolant fluid level is full | | |
| The radiator is free of debris | | |
| The air filter is in good condition | | |

Operator's Signature:

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

This Inspection Form may be freely duplicated for extra copies.

Boom

Boom PRE-OPERATION Inspection



Mower ID#_____

Make _____



Date:

Shift

AWARNING

Before conducting the inspection, make sure the tractor engine is off, all rotation has stopped and the tractor is in park with the parking brake engaged. Make sure the mower is resting on the ground or securely blocked up and all hydraulic pressure has been relieved.

| Item | Condition at Start of Shift | Specific Comments if not O.K. |
|---|--------------------------------|-------------------------------|
| The Operator's Manual is in the tractor | | |
| All safety decals are in place and legible | | |
| The mounting frame bolts are in place and tight | | |
| The boom connection bolts & pins are tight | | |
| There are no cracks in boom | | |
| The hydraulic cylinders pins are tight | | |
| The hydraulic pump hose connections are tight | | |
| The hydraulic valve controls function properly | | |
| There are no leaking or damaged hoses | | |
| The hydraulic oil level is full | | |
| There is no evidence of hydraulic leaks | | |
| The blades are not chipped, cracked or bent | | |
| The blade bolts are tight | | |
| The deflectors are in place and in good condition | | |
| The boom shields are in place and in good condition | | |
| The skid shoes are in good condition and tight | | |
| There are no cracks or holes in boom deck | | |
| The hydraulic motor mounting bolts are tight | | |
| The boom head spindle housing is tight and lubricated | | |

Table 1:

Operator's Signature:

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

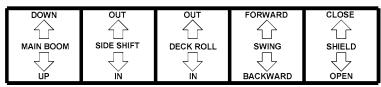
Boom

Operation Section 3-18

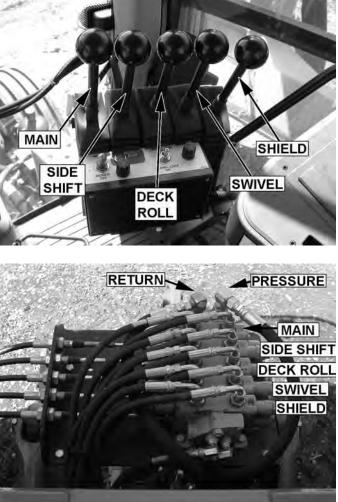
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Cable Controlled Mowers

A control lever decal similar to the one shown below should be near the control valve to remind the operator of the lever functions.



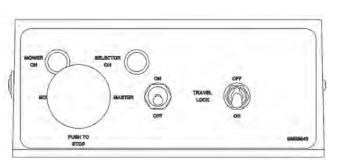
The main control valve on the Tiger Boom Mower has four or five sections with tapered spools, located near the right side of the steering wheel. The malfunction of a section of the valve does not necessitate the replacement of the entire "bank", only the faulty section. Each section of the valve controls a certain position of the boom or deck. Seated in the operators seat, the controls from left to right are #1-primary (main) boom, #2-side shift, #3 deck roll, #4- boom (swivel) swing), and #5- rotary boom (safety) shield.

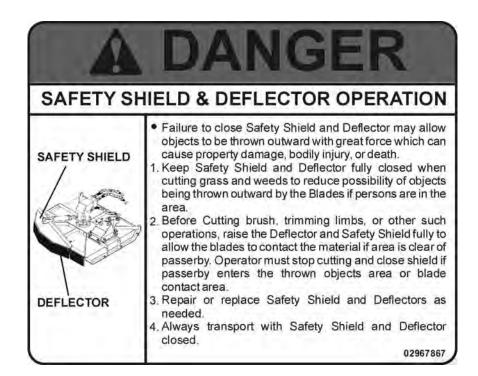


OPERATION

6.4 Switchbox

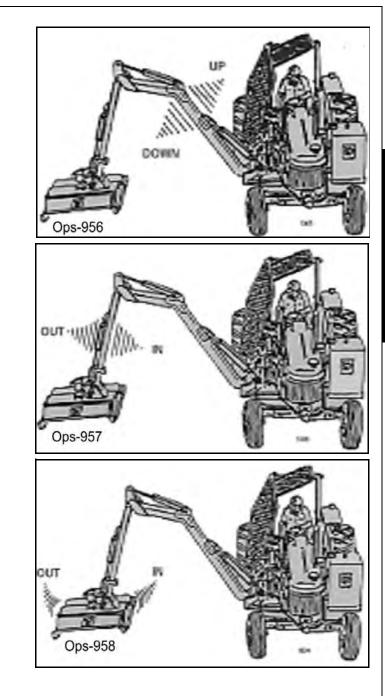
The Safety Shield lever opens and closes the shield located on the front of the cutter head. When moving at or near the ground, always have the shield in th closed position. When mowing in the brush or in trees above ground level the shield may be opened for easier cutting. Read and follow the warnings on the decal shown below. Do not run the cutter head into material larger than 6" diameter.





Operation Section 3-20

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LEVER #2 SIDE SHIFT

LEVER #1 MAIN BOOM

LEVER #3 DECK ROLL

Operation Section 3-21

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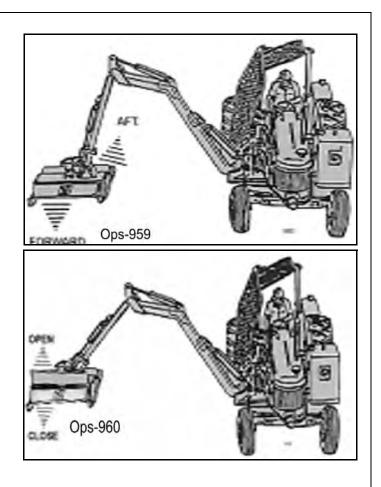
Boom

OPERATION

LEVER #4 BOOM SWIVEL

OPERATION

LEVER #5 BOOM SHIELD



Boom

Operation Section 3-22

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7.Joystick Controlled Mowers

AWARNING NOTE: **DO NOT** operate mower head while boom mower is in the boom rest, or in the stored position! Red "Mower Run" light indicates mower is "ON".

The boom functions are controlled by an electronic joystick. The Joystick Master Switch enables the joystick control for controlling the boom motion functions. This switch is to be in the "OFF" position when starting the tractor and when boom is stowed for transporting the machine.

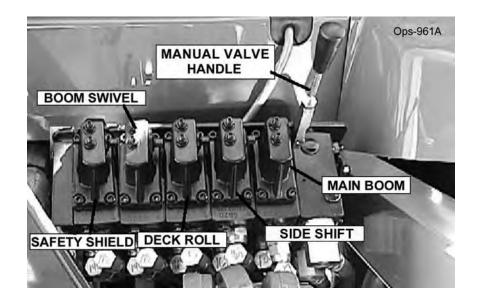
A CAUTION

If the joystick control is not operating properly, turn the master switchto the "OFF" position. Install the manual valve handle onto valve and operate the functions individually to stow boom. After boom is stowed in rest, transport the unit to the maintenance facility and contact your Tiger dealer for assistance.

A CAUTION

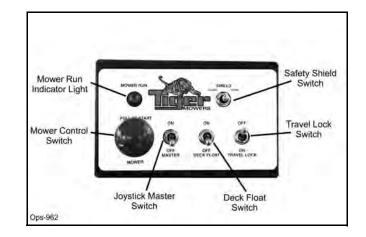
DO NOT attempt to operate the valve manually for mowing operations!

Note: Pushing manual valve handles "out" or "away" from the tractor cab will bring the main boom "up", side shift "out", roll deck "out", and swivel boom "aft". Pulling manual handles toward cab will let main boom "down", bring side shift "in", roll deck "in", and swivel boom "forward".

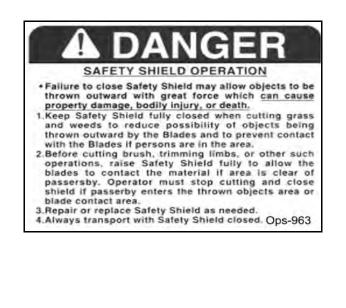


7.1 Switch Box and Joystick Control

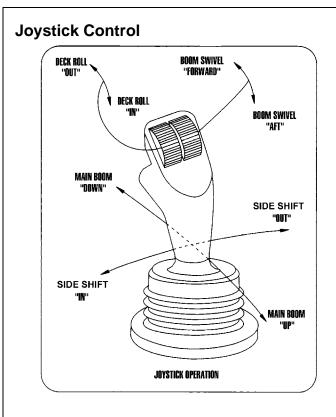
The diagrams below and on the next page show the functions that are performed through the use of the joystick controller.



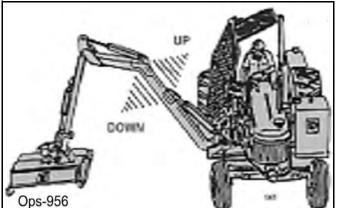
The Safety Shield switch opens and closes the shield located on the front of a rotary mower cutter head. When moving at or near the ground, always have the shield in the closed position. When moving in brush or in trees above ground level the shield may be opened for easier cutting. Read and follow the warnings on the decal shown below. **Do not run the cutter into material larger than 2**" diameter.



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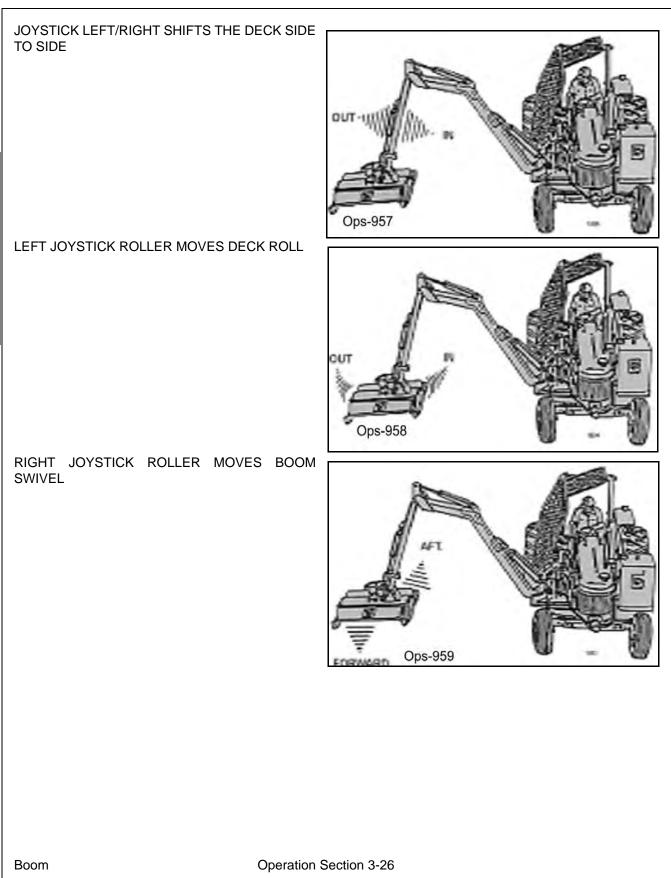
JOYSTICK FWD/BACK MOVES MAIN BOOM



OPERATION

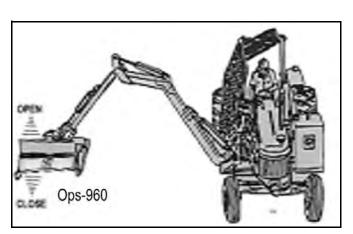
Operation Section 3-25

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OPERATION

SHIELD SWITCH(on switch box) OPERATES SAFETY SHIELD



8.DRIVING THE TRACTOR AND IMPLEMENT

Safe tractor transport requires the operator to possess a thorough knowledge of the model being operated and precautions to take while driving with an attached implement. Ensure the tractor has the capacity to handle the weight of the boom and the tractor operating controls are set for safe transport. To ensure safety while driving the tractor with a boom, review the following.

Read all safety instructions. Decals on the Boom warn you of particular and multiple hazards. Some decals are attached close to part of the Boom where there is a possible hazard. Read and make sure you understand the safety messages before you operate the implement. Keep all decals clean and readable. Replace lost or damaged decals, refer to safety section for more information.

Keep all person's well clear of mower since blades can throw objects with great velocity for a considerable distance! KEEP CLEAR! *OPS-B- 0005*

ADANGER Never operate the Tractor or Implement until you have read and completely understand this Manual, the Tractor Operator's Manual, and each of the Safety Messages found in the Manual or on the Tractor and Implement. Learn how to stop the tractor engine suddenly in an emergency. Never allow inexperienced or untrained personnel to operate the Tractor or Implement without supervision. Make sure the operator has fully read and understood the manuals prior to operation. (SG-4)



AWARNING

Always maintain the safety signs in good readable condition. If the safety signs are missing, damaged, or unreadable, obtain and install replacement safety signs immediately. (SG-5)

OPERATION

Operation Section 3-27

ADANGER BEFORE leaving the tractor seat, always set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)

AWARNING

Transport only at speeds where you can maintain control of the equipment. Serious accidents and injuries can result from operating this equipment at high speeds. Understand the Tractor and Implement and

how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.

Before transporting the Tractor and Implement, determine the proper transport speeds for you and the equipment. Make sure you abide by the following rules:

Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum transport speed not to exceed 20 mph (30 kph) for transporting this equipment.

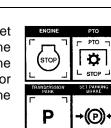
Test the equipment at a slow speed in turns. Increase the speed through the turn only after you determine that the equipment can be operated at a higher speed. Use extreme care and reduce your speed when turning sharply to prevent the tractor and implement from turning over. Determine the maximum turning speed for you and this equipment before operating on roads or uneven ground.

Only transport the Tractor and Implement at the speeds which allow you to properly control the equipment.

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes or worn tires. When operating down a hill or on wet or rain slick roads, the braking distance increases: use extreme care and reduce your speed. When operating in traffic always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (SG-19)



Boom



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8.1 Starting the Tractor

The procedure to start the tractor is model specific. Refer to the tractor operator's manual for starting procedures for your particular tractor. Consult an authorized dealer if the starting procedure is unclear. Ensure the 3-point control lever is in the lowered position and the PTO is disengaged before starting the tractor. OPS-U-0033



8.2 Brake and Differential Lock Setting

Make sure the tractor brakes are in good operating condition. Tractor brakes can be set to operate independently allowing single rear wheel braking action or locked together to provide simultaneous rear wheel braking. FOR MOST DRIVING AND **OPERATING CONDITIONS, THE BRAKE PEDALS** SHOULD BE LOCKED TOGETHER TO PROVIDE THE MOST EFFECTIVE BRAKING ACTION.

Always disengage the tractor differential lock when turning. When engaged the differential lock will prevent or limit the tractor from turning. During normal cutting conditions, locking the differential provides no benefit and should not be used.



OPS-U- 0013

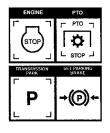


Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes. When operating down a hill or on wet or rain slick roads, the braking distance increases; use extreme care and reduce your speed in these conditions. When operating in traffic,

always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (Ops-0004-MISC)



BEFORE leaving the tractor seat, always set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)



OPERATION

Boom

8.3 Driving the Tractor and Boom

Start off driving at a slow speed and gradually increase your speed while maintaining complete control of the tractor. Never operate the tractor at speeds that cannot be safely handled or which will prevent the operator from stopping quickly during an emergency. If the power steering or engine ceases operating, stop the tractor immediately as the tractor will be difficult to control.

Perform turns with the tractor and mower at slow speeds to determine how the tractor with and attached implement handles a turn. Determine the safe speed to maintain proper control of the tractor when making turns. When turning with the implement the overall working length and width of the unit is increased. Allow additional clearance for the unit when turning or when passing large obstructions.

To avoid overturns, drive the tractor with care and at safe speeds, especially when operating over rough ground, crossing ditches or slopes, and turning corners. Use extreme caution when operating on steep slopes. Keep the tractor in a low gear when going downhill. DO NOT coast or freewheel downhill.

OPS-B- 0006



OPERATION

Boom

Operation Section 3-30

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AWARNING Never Leave the mower unattended while the head is in the raised position. The mower could fall causing serious injury to anyone who might inadvertently be under the mower. (SBM-4)



A DANGER

Always keep a careful lookout and use extreme care when working around overhead obstructions. Never allow the Mower head or boom within 10 feet of any power line. When working close to overhead power lines consult your electric company for a safe code of operation. (SBM-7)



9.OPERATING THE BOOM UNIT AND ATTACHED HEAD

THE OPERATOR MUST COMPLETELY UNDERSTAND HOW TO OPERATE THE TRACTOR AND MOWER AND ALL CONTROLS BEFORE ATTEMPTING TO MOW. The operator must read and understand the Safety and Operation Sections of this manual and the tractor operator's manuals. These manuals must be read and explained to any operator who cannot read. Never allow someone to operate the unit without complete operating instructions.

To ensure safety to the operator, bystanders, and equipment and before starting any mowing operation. The operator must become familiar with the area to be mowed, and any obstacles and hazards contained within. Special attention should be paid to foreign debris, overhead obstructions, rough terrain, steep slopes, passersby and animals in the area.

Only operate the mower head from the tractor operator's seat with the seatbelt securely fastened. Only operate a boom and equipped head on cabbed tractor that is equipped with a polycarbonate safety-protected right side window or a non cabbed tractor equipped with a ROPS and operator safety screen.

Avoid operating in the reverse direction when possible. In situations where the boom and mower must be backed to access areas to be cut, make sure there are no persons or other foreign debris behind the tractor. When backing, operate the tractor at a much reduced ground speed to ensure complete control of the unit is maintained. *OPS-B-0007*



Do not mow with two machines in the same area except with Cab tractors with the windows closed. (SGM-11)

AWARNING

Mow only in conditions where you have clear visibility in daylight or with adequate artificial lighting. Never mow in darkness or foggy conditions where you cannot clearly see at least 300 feet (90 m) in front and to the sides of the tractor and mower. Make sure that you can clearly see and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects. If you are unable to clearly see these type of items discontinue mowing. (SGM-01)

Boom

Avoid mowing in reverse direction when possible. Check to make sure there are no persons behind the mower and use extreme care when mowing in reverse. Mow only at a slow ground speed where you can safely operate and control the tractor and mower. Never mow an area that you have not inspected and removed debris or foreign material. (SGM-08)

AWARNING

Never operate the mower head tilted down where the operator can see the blades of the mower. The blade could throw an object toward the operator causing serious injury or death. Never operate the mower without an Operator Protective Structure. Always wear safety glasses and a hard hat. (Ops-0005-MISC)

9.1 Foreign Debris Hazards/Overhead Obstructions

An area to be cut must first be inspected for objects that could be thrown or that could damage the machine. Walk through the area looking for fences, boulders, rocks, culverts, stumps or metal objects. Mark the inspected area with flags. If the area is dense and cannot be walked thoroughly it may be necessary to inspect a smaller area as well as possible, then trim away the part that has been inspected and can safely be removed. Walk each new area again and repeat the inspection before cutting more away. Repeat as often as necessary until the area is cleared. It can be damaging and/or dangerous to work the cutter in an area that has not been visually inspected.

Place DANGER signs at least 300 feet beyond the perimeter of the area to be worked, not just 300 feet from where the machine started operating! It is convenient in many cases to work in 300 foot sections. Move the first Danger sign to the beginning of the freshly cleared area, place it, then take the first cutting area flag up to the end of the freshly cleared area 300 feet away. Walk and inspect the next 300 feet and place the second cutting area flag. Pick up the second DANGER sign, and take it a further 300 feet along the road or trail. Note that in many cases the DANGER area will extend in front of and behind the machine as well as along each side. Post signs accordingly. *OPS-B- 0008*

Extreme care should be taken when operating near loose objects such as gravel, rocks, wire, and other debris. Inspect the area before mowing. Foreign objects should be removed from the site to prevent machine damage and/or bodily injury or even death. Any objects that cannot be removed must be clearly marked and carefully avoided by the operator. Stop mowing immediately if blades strike a foreign object. Repair all damage and make certain rotor or blade carrier is balanced before resuming mowing. (SGM-05)



AWARNING

Many varied objects, such as wire, cable, rope, or chains, can become entangled in the operating parts of the mower head. These items could then swing outside the housing at greater velocities than the blades. Such a situation is extremely hazardous and could result in serious injury or even death. Inspect the cutting area for such objects before mowing. Remove any like object from the site. Never allow the cutting blades to contact such items. (SGM-06)

Mow at the speed that you can safely operate and control the tractor and mower. The correct mowing speed depends on terrain condition and grass type, density, and height of cut. Normal ground speed range is from 2 to 5 mph(3-8 kph). Use slow mowing speeds when operating on or near steep slopes, ditches, drop-offs, overhead obstructions, power lines, or when debris and foreign objects are to be avoided. (SGM-07)

9.2 Operating Speed and Ground Speed

Ground speed for mowing will depend upon the height, type, and density of vegetation to be cut. Do Not exceed 5 MPH while operating. Operate the mower at its full rated PTO speed to maintain blade speed for a clean cut. Refer to the tractor operator's manual or the tractor instrument panel for the engine speed and gear to provide the required operating and desired ground speed. Make sure that the mower is operating at its full rated speed before entering the vegetation to be cut. Always start and stop cutting blades with engine near idle.

Ground speed is achieved by transmission gear selection and not by the engine operating speed. The operator may be required to experiment with several gear range combinations to determine the best gear and range which provides the most ideal performance from the implement and most efficient tractor operation. As the severity of cutting conditions increase, the ground speed should be decreased. *OPS-B- 0009*

AWARNING

Mow at the speed that you can safely operate and control the tractor and mower. The correct mowing speed depends on terrain condition and grass type, density, and height of cut. Normal ground speed range is from 2 to 5 mph(3-8 kph). Use slow mowing speeds when operating on or near steep slopes, ditches, drop-offs, overhead obstructions, power lines, or when debris and foreign objects are to be avoided. (SGM-07)

9.3 Operating the Attached Mower Heads

The boom can attach to and operate multiple heads one at a time for a wide range of vegetation control applications. The attached heads are designed for different applications. The head should be selected based on the mowing application and the location that the unit is being operated.

Refer to the Assembly Section of this manual to ensure the head is properly attached to the boom hitch and hydraulic lines are properly connected. *OPS-B- 0010*

ADANGER There are obvious and hidden potential hazards in the operation of this Mower. REMEMBER! This machine is often operated in heavy brush and in heavy weeds. The Blades of this Mower can throw objects if shields are not properly installed and maintained. Serious injury or even death may occur unless care is taken to insure the safety of the operator, bystanders, or passersby in the area. Do not operate this machine with anyone in the immediate area. Stop mowing if anyone is within 300 feet of mower. (SGM-02)



Boom

9.4 Mower Operation

The rotating parts in this machine have been designed and tested for rugged use. However, they could fail upon impact with heavy solid objects-such as steel guard rails, concrete abutments,etc., causing them to be thrown at a very high velocity. Never allow cutter head to contact such objects. Inspecting the cutting area for such objects and removing them prior to mowing can help eliminate these potiential hazards.

Once on location, lower the mower deck slightly above the material to be cut, so the mower does not have to start under a load. With the tractor at an idle, engage mower. Bring tractor R.P.M. up to 1900-2200 R.P.M. and **slowly** lower deck to ground level.

A flail mower deck should be carried so that the part of the deck weight is carried by the boom and part carried by the ground roller, when moving on the ground. When the flail mower is carried this way, the ground roller follows the contour of the ground more easily during mowing operations.

The rotary mower deck should always be carried rather than dragged on the skid shoes when mowing on the ground. Dragging the rotary mower deck increases the side loads on the boom, decreases the horsepower available to the cutter head, and reduces the ability of the accumulator the carry part of the weight of the boom during mowing operations.



When rotating parts are in motion, serious injury may occur if caution is not used or danger is not recognized. Never allow bystanders within **300 feet** of the machine when in operation. Extreme care should be taken when operating near loose objects-such as gravel, rocks, and debris. These conditions should be avoided.

9.5 60" RSS Boom Rotary

The 60" RSS boom rotary brush mower was designed for cutting brush and foliage up to 2 inches in diameter or multiple branches that have a total cross section area equivalent to one 2 inch branch.

During mower operation, the hand throttle must be used to maintain engine speed at 1900-2200 R.P.M. This prevents radical changes in mower spindles speed, reducing the possibility of cutter assembly damage.

The horizontal positioning action of the boom is designed to position the cutting head and provide a limited pressure relief when excessive pressure is applied to the boom. Do not force the cutting head



into heavy branches or stumps. Damage to the unit may result.

A CAUTION

When using the rotary cutting head for trimming brush and shrubs, let the mower saw into them. Do not lower the mower head down directly into a tree or stump. The mower blades are designed to cut with the end, and misuse can cause damage to the blade and a hazardous situation for the operator.



Powering the boom down, forcing mower deck onto ground may damage mower deck and it's attachment to the boom, creating a potentially hazardous situation.

To ensure a clean cut, engine speed should be maintained at approximately 1900-2200 R.P.M. If the tractor slows to less than 1800 R.P.M., shift to the next lower gear. DO NOT ride the clutch, this will cause premature clutch failure. The engine should not be operated at any time at more than 2400 R.P.M. on the tractor tachometer.

Boom

For cutting brush, it is usually best to stop the tractor and swivel the boom and mower into foilage. The horizontal positioning action of the boom is designed to position the cutting head and provide a limited pressure relief when excessive pressure is applied to the boom.



DO NOT use excessive force when positioning cutting head into heavy branches or stumps. Damage to the unit may result. It is best to let the cutter head "eat away" slowly at heavy cutting jobs.



If foliage falls on top of mower deck causing tractor to become unstable, move the boom "Forward" and "Out" to relieve tipping of the tractor. Lower mower deck to ground and shut down unit. After all motion stops, remove foliage from mower deck.

The mower will operate more efficiently in tougher conditions and with less power if the knives are kept sharp. If the mower begins to vibrate, stop the tractor, check for wire wrapped in the spindle or damaged knives. When replacing knives, replace all knives with new knives to ensure proper balance so the mower will not vibrate. Severe vibration will result, if knives with unequal wear are used.

Begin a pass at the top side of the trees and work down with each consecutive pass. When cutting trees and shrubs, use a lower speed to allow the knives time to cut as well as mulch the foliage.

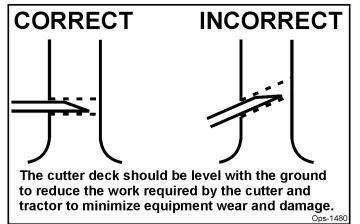


If bystanders approach within 300 feet while mower is in operation turn mower switch "OFF" immediately! After shutdown, never leave the tractor or allow bystanders to approach within **300 FEET** of the unit until all motion stops completely.

If cutter shaft jams and stops, turn mower switch to "OFF", and swivel boom "AFT". Normally this action will clear the cutter head. If not, roll mower deck until adjacent to the secondary boom, then lower boom to rest mower deck on ground. Shut off the tractor, set parking break, allow all motion to cease. At that point it is safe to leave the tractor and clear the cutter heads manually.

After the first day of operation, all bolts should be checked and tightened securely. This should be done periodically to ensure the bolts do not become loose and cause damage to the tractor or mower, or injury to the operator.

When cutting brush, approach material to be cut with the head perpendicular to material. The cutting edge of the blades should be the only elements in contact with material. The dish should not contact with material. The mower and blades should be head moved perpendicularly into the material rather lowering the mower head on top of material. The dish is not intended to cut material or to be a wear item like the blades. Do Not allow the blades or dish to contact the ground, rocks or solid objects. Contact with the ground can result in rocks and solid objects being thrown out from under the mower head which can cause serious injuries to the operator and bystanders. This type of operation can lead to bent or broken equipment, and hardware which can be dangerous to the operator and bystanders.



(OPS-R-220)

9.6 63" & 75" Boom Flail

The 63" & 75" boom flail mowers were designed for cutting grass. The cutter shaft speed must be maintained for proper cutting. To insure that the cutter shaft is rotating at maximum speed, run tractor at full throttle during mowing operations. If cutter shaft slows to the point that the knives are folding back against the cutter shaft, move the mower head away from the foliage and allow the cutter shaft to regain full speed.





Do not allow knives to cut down to the ground. Position ground roller to maintain knife arc at a minimum of 2 inches above the ground. Knife contact or lug contact with ground will cause permanent damage to cutter shaft, knives, and knife attachment parts.

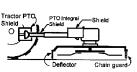
🛕 DANG ER

The rotating parts of this machine have been designed and tested for rugged use. However, the blades could fail upon impact with heavy, solid objects such as metal guard rails and concrete structures. Such impact could cause the broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the cutting blades to contact such obstacles. (SGM-4)



All Safety Shields, Guards and Safety devices including (but not limited to) - the Deflectors, Chain Guards, Steel Guards, Gearbox Shields, PTO integral shields, and Retractable Door Shields should

be used and maintained in good working condition. All safety devices should be inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from thrown objects, entanglement, or blade contact. (SGM-3)



AWARN ING

Many varied objects, such as wire, cable, rope, or chains, can become entangled in the operating parts of the mower head. These items could then swing outside the housing at greater velocities than the blades. Such a situation is extremely hazardous and could result in serious injury or even death. Inspect the cutting area for such objects before mowing. Remove any like object from the site. Never allow the cutting blades to contact such items. ^(SGM-06)

9.7 Shutting Down the Attached Head- For Standard Equipment

To shut down attached mower head, first bring the tractor to a complete stop. Decrease engine RPM to idle then disengage cutterhead. The mower head will come to a complete stop within a suitable amount of time. Do not engage or disengage the cutterheads at a high RPM unless there is an emergency situation.

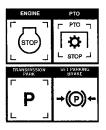
Park the tractor on a level surface, place the transmission in park or neutral and apply the parking brake, shut down the engine, remove the key, and wait for all motion to come to a complete stop before exiting the tractor. *OPS-B-0011_D*





A DANGER

BEFORE leaving the tractor seat, always set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)



10.TRACTOR, BOOM, AND ATTACHED HEAD STORAGE

Properly preparing and storing the unit at the end of the season is critical to maintaining its appearance and to help ensure years of dependable service. The following are suggested storage procedures:

Boom

- Thoroughly clean all debris from boom and head to prevent damage from rotting grass and standing water.
- Lubricate all grease points and fill oil levels according to the maintenance lubrication schedule.
- Tighten all bolts to the proper torque. Ensure all pins and other hardware are in place.
- Check the boom arm and head for worn and damaged parts. Perform repairs and make replacements so that the mower will be ready for use at the start of the next season.
- Store the unit in a clean and dry location.
- Use spray touch-up enamel where necessary on bare metal surfaces to prevent rust and to maintain the appearance of the mower. OPS-RSS-0006

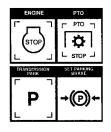


A DANG ER

Never allow children to play on or around Tractor or Implement. Children can slip or fall off the Equipment and be injured or killed. Children can cause the Implement to shift or fall crushing themselves or others. (SG-25)

A DANGER

BEFORE leaving the tractor seat, always set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)



AWARNING Perform service, repairs and lubrication according to the maintenance section. Ensure the unit is properly lubricated as specified in the lubrication schedule and all bolts and nuts are properly torqued. Failure to properly service, repair and maintain this Implement in good operating condition could cause component failure and possible serious injury or even death. (SG-35)

11.TRANSPORTING THE TRACTOR AND IMPLEMENT

Inherent hazards of operating the tractor and implement and the possibility of accidents are not left behind when you finish working in an area. Therefore, the operator must employ good judgement and safe operation practices when transporting the tractor and implement between locations. By using good judgement and following safe transport procedures, the possibility of accidents while moving between locations can be substantially minimized. *OPS-U- 0017*

Boom

11.1 Placing Boom Arm on Boom Arm Rest - For Standard Equipment

Before transporting tractor between locations, idle the tractor engine, disengage the attached head, and wait for all head motion to come to a complete stop. Place the boom in its storage cradle rest support and then turn the joystick master switch to the OFF position.

- Retract Deck Roll cylinder completely.
- Shift mower all the way out.
- Retract the Boom cylinder completely.
- Swing boom back slowly until it is straight back.
- Extend the Deck Roll cylinder until the mower is just above the saddle.
- Shift the mower in until the roller engages the bottom of the saddle.
- Lower the Boom until mower sits into saddle. The boom is now in the transport position.

To remove the boom from the Boom Rest, raise the Boom completely. Shift the mower out until the roller disengages the saddle. Retract the Deck Roll cylinder completely. Finally, Swing the Boom forward.

OPS-RSS-0009

11.2 Transporting on Public Roadways

Extreme caution should be used when transporting the tractor and mower on public roadways. The tractor must be equipped with all required safety warning features including a SMV emblem and flashing warning lights to alert drivers of the tractor's presence. Remember that roadways are primarily designed for automotive drivers and most drivers will not be looking out for you, therefore, you must look out for them. Check your side view mirrors frequently and remember that vehicles will approach quickly because of the tractor's slower speed. Be extremely cautious when the piece of equipment that you are driving, is wider than the tractor tire width and/or extends beyond your lane of the road. *OPS-B-0014*



The SMV (Slow-Moving Vehicle) emblem is universal symbol used to alert drivers of the presence of equipment traveling on roadways at a slow speed. SMV signs are a triangular bright orange with reflective red trim for both easy day and night visibility. Make sure the SMV sign is clean and visible from the rear of the unit before transporting the tractor and implement on a public roadway. Replace the SMV emblem if faded, damaged, or no longer reflective. *OPS-U- 0020*



Make sure that all tractor flashing warning lights, headlights, and brake/taillights are functioning properly before proceeding onto public roads. While newer model tractors have plenty of lighting to provide warning signals and operating lighting, most older models where only equipped with operating lights. Consult an authorized tractor dealer for lighting kits and modifications available to upgrade the lighting on older tractor models. *OPS-B-0015*



When operating on public roads. have consideration for other road users. Pull to the side of the road occasionally to allow all following traffic to pass. Do not exceed the legal speed limit set in your state or municipality for agricultural tractors. Always stay alert when transporting the tractor and mower on public roads. Especially in busy cities, the boom extends to right farther then the tractors width, so be careful there are no bystanders, poles, large obstructions or any vehicles that may be in path of the mower head or boom. Use caution and reduce speed if other vehicles or pedestrians are in the area. OPS-B-0016



A DANGER Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in serious injury or death. (SG-10)



AWARNING

Make certain that the "Slow Moving Vehicle" (SMV) sign is installed in such a way as to be clearly visible and legible. When transporting the Equipment use the Tractor flashing warning lights and follow all local traffic regulations. (SG-6)

Reduce speed before turning or applying the brakes. Ensure that both brake pedals are locked together when operating on public roads. *OPS-U- 0023*



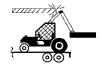
11.3 Hauling the Tractor and Implement

Before transporting a loaded tractor and implement, measure the height and width dimensions and gross weight of the complete loaded unit. Ensure that the load will be in compliance with the legal limits set for the areas that will be traveled through. *OPS-U- 0024*



🛦 DANG ER

When transporting Boom Mower on a truck or trailer, the height or width may exceed legal limits when the boom is in the transport position. Contact with side or overhead structures or power lines can cause property damage or serious injury or death. If necessary lower boom to reduce height and/or remove mowing head to reduce width to the legal limits. (SBM-8)



Boom

Use adequately sized and rated trailers and equipment to transport the tractor and implement. Consult an authorized dealer to determine the proper equipment required. Using adequately sized chains, heavy duty straps, cables and/or binders, securely tie down both the front and rear of the tractor utilizing the proper tie down locations as specified by the tractor manufacturer. *OPS-U- 0025*



Arrange the chains so that when tightened, the chains are pulling downward and against themselves. Carefully tighten the securing chains or other fasteners using boomers or binders to apply maximum tension. Use extreme care when attaching and removing the securing devices as the extreme tension involved when released has the potential to inflict serious injury.

While hauling the tractor and implement, make occasional stops to check that the tractor and implement have not moved or shifted and that the securing chains have maintained tension. If during transport a hard braking, sharp turning, or swerving action was performed, stop at the next safe location to inspect the security of the load. *OPS-U- 0026*





If trailer is not perfectly level, the boom will tend to swing towards the lower side. Have other personnel ready to control its swinging motion when cylinder pin is removed. Make sure the personel are not in a position to be hit or crushed by a swinging boom.

Retract swivel cylinder and secure to main frame. Pivot boom forward to the center of flat bed. Lower deck onto the trailer bed, and shut off the tractor. The tractor and the mower head should now be chained down securely to the trailer bed.



If any part of this operating section, or any other section of this manual is not completely understood, contact your Tiger dealer or the address on the cover of this manual for assistance!

Boom

MAINTENANCE SECTION

Maintenance Section 4-1

MAINTENANCE

General Instructions

Tiger Mowers are designed for high performance and rugged durability, yet with simplified maintenance. The purpose of this section of the manual is to help the operator in the regular servicing of the mower. Regular maintenance at the intervals mentioned will result in the maximum efficency and long life of the Tiger Mower.

When you purchase a Tiger Mower you also acquire another valuable asset, Tiger's parts organization. Our rapid and efficent service has guaranteed the customer satisfaction for many years. Tiger parts keep up with the demands for efficiency, safety and endurance expected of the Tiger Mower.

Maintenance Precautions

- Be sure end of grease gun and zerks are clean before using. Debris injected into bearings, etc. with grease will cause immediate damage.
- DO NOT use a power grease gun to lubricate bearings. These require very small and exact amounts of lubrication. Refer to the detailed maintenance section for specific lubrication instructions. DO NOT overgrease bearings.
- Be alert to maintenance indicators such as the in-tank filter pressure gauge, hydraulic reservoir sight gauge, etc. Take the required action to correct any problems immediately.
- <u>Release of energy from pressurized systems may cause inadvertent actuation of cylinders, or sudden</u> <u>release of compressed springs.</u> Before disconnecting any hoses relieve pressure by shutting tractor off, setting cutter on ground and actuating lift valve handles.
- **DO NOT** use hands to check for suspected leaks in hydraulic hoses! Hydraulic fluid escaping under pressure can have sufficent force to penetrate skin and cause serious injury. If fluid is injected into skin, it must be surgically removed within a few hours or gangrene may result. Use a small piece of wood or cardboard, not hands, to sear ch for pin hose leaks. Be sure all connections are tight and hoses and lines are not damaged before applying pressure.

Break in Period

In addition to following the break in instructions for your particular tractor, the in-tank hydraulic fluid filter should be replaced after the first 50 hours of service. The reafter the filter should be replaced every 500 hours, or yearly, which ever comes first.

Re-torque wheel lugs after first five hours of operation and periodically thereafter. See torque specifications listed in the tractor's service manual for your particular model. Wheel lugs must always be re-torqued whenever a wheel is removed and reinstalled.

DANGER Never work under the Implement, the fr amework, or any lif ted component unless the Implement is securely supported or blocked up to prevent s udden or inadvertent falling which could cause serious injury or even death. (SG-14)



AWARNING Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. (SG-8)

WildKat

Maintenance Section 4-2

MAINTENANCE

Relieve hydraulic pressure prior to doing any maintenance or repair work on the Implement. Place the Mower Head on the ground or securely supported on blocks or stands, disengage the PTO, and turn off the engine. Push and pull the control Levers or Joystick several times to relieve pressure prior to starting any maintenance or repair work. (SBM-6)



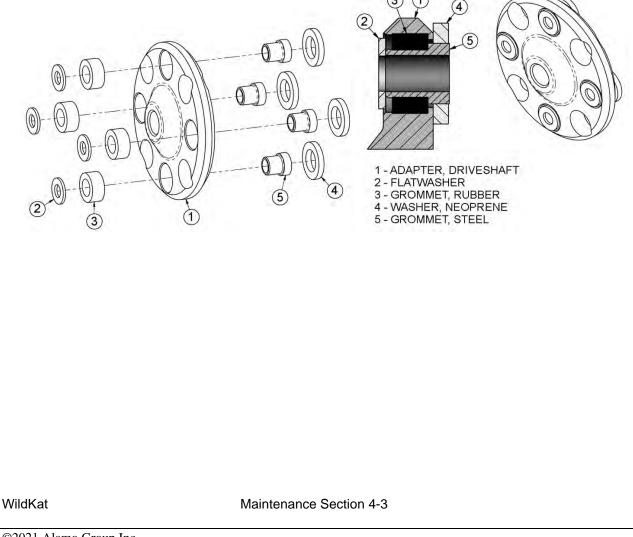
Always disconnect the wire leads from the mower pump solenoid before performing service on the Tractor or Mower. Use caution when working on the Tractor or Mower. Tractor engine must be stopped

before working on Mower or Tractor. The Mower Blades could inadvertently be turned on without warning and cause immediate dismemberment, injury or death. (SBM-12a)

e turned on

MAINTENANCE OF CRANKSHAFT ADAPTER ASSEMBLY (RIGID ENGINE MOUNT TRACTORS ONLY)

If replacement of components of the crankshaft adapter assembly is required, follow the assembly procedures shown below. Seat rubber grommet completely into counterbore, then seat steel grommet completely into rubber grommet while rubber grommet is supported. (ASM-JD-0051 CRANKSHAFT ADAPTER MAINTENANCE)



Regular Maintenance

The intervals at which regular servicing should be done are based on hours of operation. Use the tractors hour meter to determine when regular servicing is required.

Refer to the Det ailed Maintenance section for futher instructions on greasing. Copy and use the Daily Maintenance sheet located at the end of this section.

Daily or Every 8 Hours

| ITEM | SERVICE | COMMENTS |
|--|-----------------------|--|
| Drive Shaft Yoke, U-Joint & Stub Shaft | Grease | Grease as instructed in detailed maint. section |
| Pump Drive Shaft Coupler | Check and Lube | Insure drive shaft end play |
| Crankshaft Adapter | Check rubber grommets | Replace grommets if damaged or missing |
| Pivot Points | Lubricate | Inject grease until it appears at end |
| Hydraulic Fittings | Check for leaks | Tighten when needed. Do Not use hands to check for leaks, see maint. Precautions |
| Knives | Check | Inspect for missing or damaged knives, change as needed. |
| Spindle mouting bolts spindle to deck) | Check | Torque to 331ft. lbs. lubricated Torque to 357ft. lbs. dry |
| Knife mounting bolts (knife to disk or blade bar) | Check | Pre-lubricate threads, then torque to 800 ft. lbs. |
| Disk/Blade Bar mounting bolts (disk/blade bar to spindle) | Check | Torque to 184ft. lbs. lubricated Torque to 180ft. lbs. dry |
| Belts | Check/Adjust | Check if broken, tighten as required |
| Main Frame and Deck | Check | Retorque bolts to torque specifications in this section |
| Hydraulic Fluid Level | Check | Add if required per fluid recommendations |
| Rear Flail Drive(if applicable) Bear Flange and Shaft Coupler | Lubricate | Grease as instructed in detailed maint. section |
| Cutter Shaft and Ground Roller | Lubricate | Grease as instructed in detailed maint. section |
| WildKat | Maintenance Section 4 | 1-4 |

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MAINTENANCE

| | WEEKLY (| OR EVER | Y 40 HOURS | |
|---|------------------------------|----------------|--|--|
| ITEM | SERVICE | | COMMENTS | |
| Rotary Spindle | Lubricate | | Every 40 hours or weekly | |
| | WEEKLY (| OR EVER | Y 50 HOURS | |
| ITEM | SERVICE | | COMMENTS | |
| In Tank Hyd. Fluid Filter 10 micron filter) | Change | | Change after first 50 hours only, then every 500 hours or yearly | |
| In-Line High Pressure Filter (10 micron filter) | Change | | Change after first 50 hours only, then every 500 hours or yearly | |
| | MONTHLY | OR EVER | Y 150 HOURS | |
| ITEM | SERVICE | | COMMENTS | |
| Hydraulic Fluid Level | Check | | Add as needed | |
| Hyd. Tank Breather | Clean/Check/F | Replace | Clean or replace Element as required | |
| Rear Tire Type 480/80R38 18.4-34 18.4-38 | Max P.S.I. 29 26 26 | | | |
| | YEARLY O | R EVER | 500 HOURS | |
| ITEM | SERVICE | | COMMENTS | |
| Spindle Grease Hyd. Tank Fluid In Tank Hyd. Fluid Filter (10 micron filter) | Change Change Change | | | |
| In-Line HP Filter (10 micron filter) | Change | or | Change when indicated by restriction indicator. | |
| Hyd. Tank Breather | Change | | | |
| | | | | |
| WildKat | N 4 - 1 - 4 - | enance Section | | |

MAINTENANCE

MAINTENANCE

| TROUBLESHOOTING | | | |
|----------------------|------------------------|--|--|
| SYMPTOMS | CAUSE | REMEDY | |
| Vibration | 1. Loose Bolts | 1. Check all bolts and tighten to | |
| | 2. Cutter assembly | recommended torque specs. 2a. Check for damage blades, disc | |
| | Unbalanced | or cutter shaft. Replace if needed. | |
| | Chibalanood | 2b. Check for wire, rope, etc. | |
| | | entangled in the cutter assembly | |
| Mower will not lift | 1. Hyd. Fluid Low | 1. Check and refill Hyd Fluid | |
| | 2. Leaks in line ROU | 2. Tighten or replace fittings and hoses | |
| | 3. Faulty relief valve | 3. Check pressure in line. Line | |
| | , | pressure in Control Valve should be | |
| | | at least 2500 P.S.I. | |
| | 5. Faulty cylinder | 5. Inspect, repair or replace cylinder | |
| Mower will not start | 1. Blown fuse | 1. Check fuse between mower switch | |
| or run | | and ignition/replace | |
| | 2. Ball valves closed | 2. Make sure valves are open | |
| | 3. Low oil level | 3. Check Hyd. tank and fill | |
| | 4. Line leak | 4. Check all fittings and lines, | |
| | | re-tighten or replace | |
| | 5. Electronic | 5a. Without the tractor running, turn | |
| | solenoid faulty | the mower switch to on. A low | |
| | | audible click should be heard if the | |
| | | solenoid is engaging the solenoid | |
| | | spool. If click is not heard, leave | |
| | | switch in on position and with a | |
| | | screwdriver or other steel object, | |
| | | touch the small nut on the end of the | |
| | | solenoid. If the metallic object is not | |
| | | attracted to the nut, check the fuse | |
| | | and wiring for an open circuit. If the | |
| | | object is attracted but no "click" is | |
| | | heard, replace the solenoid. | |
| | | 5b. Remove the four bolts holding the | |
| | | small block to the main block. Lift | |
| | | and remove small block being | |
| | | careful not to damage O-rings/filter. | |
| | | Clean filter and re-install. | |
| | | 5c. Remove large nut on side of large | |
| | | valve block. Remove spring, and use | |
| | | needle nose vise grip to pull spool from | |
| | | block. Check block and spool | |
| | | for contaminates and scratches. | |
| | | Clean parts or replace if scratched. | |

TROUBLESHOOTING

WildKat

Maintenance Section 4-6

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| SYMPTOMS | CAUSE | REMEDY |
|--------------------------------------|--|--|
| Motor runs but will not cut. | 1. Belts | Inspect belts and pulleys. Replace belts and repair as needed. |
| | 2. Tensioner | Adjust tensioner nuts tension should be 106 freq cyl/sec. |
| Mower turns slowly or not at all. | 1. Contaminants restricting spool movement in valve body. | Remove large nut on side of large valve block. Remove spring, and use needle nose vise grip to pull spool from block. Check block and spool for contaminates and scratches. Clean parts or replace if scratched. |
| | 2. Suction lines obstructed | Check for kinks or obstructions in suction hose. |
| | 3. Low oil level | 3. Check Hyd. tank level and fill. |
| Pump will not work | 1. Excessive wear on internal parts | 1. Disassemble and repair. |
| Motor will not work | 1. Excessive wear on internal parts | 1. Disassemble and repair. |

TROUBLESHOOTING (CONTINUED)

NOTE: If flow meter is available, check pressure and flow volume for all suspected hydraulic problems.

If the solution to your problem cannot be found in this section, call the Technical Service representative at the number shown on the front cover of this manual.

| | 1 | 1 | 7 | | | K | Jor of | Standa | ard Fa | aster 77 | iers | | (\bigcirc) | | - |
|------------|---------------------------|--|--|---|--|--|--|---|---|---|--|--|---|--|--------------|
| Nominal | threads | 1 | 1 | · | Grade | V | 7 | Gra | 105 | VV | | Grade 8 | 100 | | Gra |
| Dia. | per | - | Tight | ening To | | | Tightening | | 16.5 | Tigh | tening Toro | | | ahtening Tor | |
| 12 | inch | Lube | | | Dry plain | n Lube | | ted Dry pl | ain Lu | | Dry Plated | | Lubed | Dry Plated | |
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| 1/4 5/16 | 20 | 49 in 101 | | 59 in-lbs 122 | 135 | is 76 in-1 | 178 | lbs 101 in 209 | | in-lbs | 251 | 143 in-lbs 295 | 126 in-lbs 259 | 143 in-lbs 294 | 168 in 34 |
| 3/8 | 16 | 15 ft- | _ | | 20 ft-lb | | | Ibs 31 ft | | | 37 ft-lbs | 44 ft-lbs | | | |
| 7/16 | 14 | 24 | 108 | 29 | 32 | 37 | 42 | 49 | | 52 | 59 | 70 | 61 | 70 | 82 |
| 1/2 | 13 | 37 | | 44 | 49 | 57 | 64 | 75 | | 80 | 90 | 106 | 94 | 106 | 12 |
| 9/16 | 12 | 53 | - | 63 | 70 | 82 | 92 | 109 | | 115 | 130 | 154 | 135 | 153 | 180 |
| 5/8 | 11 | 73 | | 87 | 97 | 113 | 128 | | | 159 | 180 | 212 | 196 | 211 | 24 |
| 3/4 | 10 | 129 |) | 155 | 172 | 200 | 227 | 267 | | 282 | 320 | 376 | 331 | 375 | 44 |
| 7/8 | 9 | 125 | | 150 | 167 | 322 | | | | 155 | 515 | 606 | 533 | 604 | 71 |
| 1 | 8 | 187 | | 225 | 250 | 483 | | | | 681 | 772 | 909 | 799 | 905 | 108 |
| 1 1/8 | 7 | 266 | | 319 | 354 | 596 | | | | 966 | 1095 | 1288 | 1132 | 1283 | 151 |
| 1 1/4 | 7 | 375 | | 450 | 500 | 840 | | | | 363 | 1545 | 1817 | 1597 | 1810 | 213 |
| 11/2 | 6 | 652 | | 783 | 869 | 1462 | 1657 | 195 | 0 2 | 371 | 2688 | 3162 | 2779 | 3150 | 370 |
| | | | | | | | Fine | Thread | Series | | | | | | |
| 1/4 | 28 | 56 in | | 68 in-Ibs | | s 87 in-l | | | | | | | | 163 in-lbs | |
| 5/16 | 24 | 112 | | 135 | 150 | 174 | | | | 245 | 278 | 327 | 287 | 325 | 383 |
| 3/8 | 24 | | Ibs 1 | _ | | _ | | lbs 35 A | | | 42 ft-lbs | 49 A-lbs | | | |
| 7/16 | 20 | 27 | | 32 | 36 | 41 | 47 | 55 | | 58 | 66 | 78 | 68 | 78 | 91 |
| 1/2 | 20 | 41 | - | 49 | 55 | 64 | 72 | 85 | | 90 | 102 | 120 | 105 | 120 | 141 |
| 9/16 | 18 | 59 82 | - | 71 99 | 78 | 91 | 103 | | | 128 | 146 204 | 240 | 151 211 | 171 239 | 201 |
| 5/8 | 16 | 144 | | 173 | 110 | 223 | | | | 315 | 357 | 420 | 369 | 418 | 492 |
| 7/8 | 14 | 138 | | 165 | 184 | 355 | | | | 02 | 568 | 669 | 588 | 666 | 784 |
| 1 | 14 | 210 | | 252 | 280 | 542 | | | | 765 | 867 | 1020 | 896 | 1016 | 119 |
| 1 1/8 | 12 | 298 | | 357 | 397 | 668 | | | | 083 | 1227 | 1444 | 1269 | 1439 | 169 |
| 1 1/4 | 12 | 415 | | 498 | 553 | 930 | | | | 509 | 1710 | 2012 | 1768 | 2004 | 235 |
| 11/2 | | | | | | | | | | | | | | | |
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| Torque val | ues for 1/4 | and S/I | 6-in se | ries are in | inch-pounds where Torqu | . All other | torque value | s are in foot | pounds. | K = 0.15 K = 0.17 K = 0.20 | for Tubricate for zinc plate for olain and ic Faste | d" conditions ad and dry co dry condition ners | : Inditions | D = No F = Cla | ninal Dia |
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| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 | Pitch 0.5 0.6 | ries are in la T=kDF, Lubed K = 0.15 (ft-lbs) 0.28 0.44 | Inch-pounds where Class 4.6 (4.6) Terning Tor Dry Plated K = 0.17 (ft-lbs) 0.32 0.50 | e-Tens | torque velue sion Re Lubed K = 0.15 (fft-lbs) 0.73 1.1 | s are in foot lationsi Class 8.8 8.8 tening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 | pounds. nip for Dry plain K = 0.20 (ftl-lbs) 0.97 1.5 | K=0.15 K=0.17 K=0.20 Metr Luber K=0.1 (ft-lbs 1.0 1.6 | for Tubricale for Zinc pilet for clain and ic Faste Class 10, to.9 ightening Tc Drg Plated 5 K = 0.17) (ft-lbs) 1.2 1.9 | d" conditions id and dry co dry condition eners s bry plain (ft-lbs) 1.4 2.2 | Class Class Tightening Lubed D K = 0.15 (fi-lbs) 1.2 1.2 | $\begin{array}{c} D = No \\ F = Cla \\ \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 4 5 6 | 6-in se tormu Pitch 0.5 0.6 0.7 0.8 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 | inch-pounds where Class 4.6 4.6 httening Tor Drg Plated K = 0.17 0.32 0.50 0.32 1.5 2.6 | aue aue aue Dry piein K = 0.20 (ft-lbs) 0.38 0.59 0.59 1.8 3.0 | torque value sion Re Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 | s are in foot lations Class 8.8 8.8 tening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 5.8 | pounds. nip for Dry plain K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 | K=0.15 K=0.17 K=0.20 Metr Luber K=0.1 (ft-lbs: 1.0 1.6 2.4 4.9 8.3 | for "tubricate for zinc plate for otein and ic Faste Class 10, 10,9 ightening Tc 3 Dry Plated 5 K = 0.17 1,9 2,7 5,5 9,4 | at conditions and dry co dry condition eners 9 0 0 0 1 1 4 2.2 3.2 6.5 11 | Class Class Class Tightening Lubed D (ft-lbs) 1.2 1.9 2.6 5.7 9.7 | D = No F = Cla 12.9 9 12.9 12.9 9 12.9 9 12.9 12.9 12. | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 4 5 6 8 | 6-in see 1 formu Pitch 0.5 0.6 0.7 0.8 1 1.25 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 | inch-pounds where Class 4.6 4.6 htening Tor Drg Plated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 2.3 | aue aue aue Dry plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 | torque value sion Re Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 | s are in foot lationsl Class 8.8 8.8 tening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 6.0 | pounds. nip for Dry plein K = 0.20 (fft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 | K=0.15 K=0.17 K=0.20 Metr Luber K=0.1 (ft-lbs 1.0 1.6 2.4 4.9 8.3 7.6 | for "lubricate for clain and ic Faste Class 10, 0.9 ghtening Tc 5 K = 0.17 (ft-lbs) 1.2 1.9 2.7 5 \$ 9.4 8.6 | d* conditions d and dry co dry condition mers 9 0 rque 0 ry plain K = 0.20 (ft-libs) 1.4 2.2 3.2 6.5 1 1 1 0 | Class Class Tightening Lubed D K = 0.15 1.2 1.9 2.6 5.7 8.8 | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ Torque \\ \hline \\ Ty \\ plain \\ K = 0.20 \\ (ft-lbs) \\ \hline \\ 1.8 \\ \hline \\ 2.5 \\ \hline \\ 3.8 \\ \hline \\ 7.6 \\ \hline \\ 13 \\ 12 \\ \hline \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | 4 and 5/1 ated from lominal Dia. (mm) 3 3.5 4 5 6 6 6 7 | 0.5 0.6 0.7 0.8 1 1.25 1 | Tigs are in is T=kDF, Tigs Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 | inch-pounds where Class 4.6 4.6 Therning Tor Dry Plated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 4.3 | que Ory piain K = 0.20 ((ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 | Tigb Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 | s are in foot lations Class 8.8 (B.8) tening Torco Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 0.0 11 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 | K=0.15 K=0.20 Metr Lubee K=0.1 (ft-lbs 1.0 1.6 2.4 4.9 8.3 7.6 14 | for "lubricate for zinc plate for othin and ic Faste Class 10, 10,9 ightening Tc Dry Plated 5 K = 0.17 1,2 1,2 1,2 5,5 9,4 8,6 16 | d* conditions id and dry co dry condition eners 9 0 0 0 1 4 2 2 3 2 6 5 11 10 19 | Class Class (12) Tightening Lubed [] K = 0.15 (ft-lbs) 1.2 1.9 2.8 5.7 9.7 9.7 8.8 16 | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ y \\ \hline \\ 107 \ y \ plain \\ K = 0.20 \\ \hline \\ (ff-lbs) \\ \hline \\ 1.8 \\ \hline \\ 2.5 \\ \hline \\ 3.8 \\ \hline \\ 7.6 \\ \hline \\ 13 \\ \hline \\ 12 \\ 22 \\ \hline \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | 4 and 5/11 ated from lominal Dia. (mm) 3.5 4 5 6 8 7 8 | 0.5 0.6 0.7 0.8 1 1.25 1 | Tigs Tigs Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 | Inch-pounds where Class 4.6 4.6 Terning Tor Dry Plated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 2.3 4.3 6.6 | aue aue Dry plein K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 | Tigr Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 | s are in foot lations Class 8.8 tening Torce Dry Plated Dry Plated 0.82 1.3 1.9 3.9 6.6 6.0 11 17 | pounds. nip for Dry plain K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 | K=0.15 K=0.15 K=0.20 Metr Luber K=0.1 (ft-lbs 1.0 1.6 2.4 4.9 8.3 7.6 14 22 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 ightening Tc 3 Dry Plated 5 K = 0.17 1.2 1.9 1.2 5.5 9.4 8.6 16 24 | d* conditions d and dry cc dry condition mers 9 Dry plein (ft-libs) 1.4 2.2 3.2 6.5 11 10 19 29 | Class | D = No F = Cla 12.9 9 0 170rque 0 18 18 2.5 3.8 7.6 13 12 22 34 | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.3.5 4 5 6 8 7 7 8 8 8 8 | 0.5 0.6 1.25 1 1.25 | Tigi Tigi Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 | Inch-pounds where Class 4.6 4.6 Intering Tor Dry Plated K = 0.17 (R-lbs) 0.32 0.50 0.74 1.5 2.6 2.3 4.3 6.8 6.2 | e-Tens ory plain K = 0.20 (ft-lbs) 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.78 7.3 | torque value sion Re Lubed K = 0.15 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 | s are in foot lations Class 8.8 tening Toro Dry Plated K = 0.17 1.3 1.9 1.9 6.6 6.0 11 17 16 | pounds. nip for Dry plain K = 0.20 (ft-libs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 | K = 0.15 K = 0.17 K = 0.20 Metr Luber K = 0.11 (ft-lbs: 1.0 1.6 1.0 1.6 3.7 6 14 22 20 | for "lubricate for zinc plate for otein and ic Faste Class 10, 10,9 ightening Tc Dry Plated 5 K = 0.17 1,2 1,9 2,5 5,5 9,4 8,6 16 24 23 | d* conditions d and dry cc dry condition prefers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline 12.9 \\ g \\ y \\ \hline 12.9 \\ y \\ y \\ \hline 100 \\ ry \\ plain \\ \hline 1.8 \\ 2.5 \\ 3.8 \\ 7.5 \\ 13 \\ 12 \\ 22 \\ 34 \\ 31 \\ \hline \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | 4 and 5/11 and 5/11 lominal Dia. (mm) 3 3 5 4 5 6 8 8 8 10 | 0.5 0.6 1.25 1 1.25 1 1.25 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.5 5.5 11 | Inch-pounds where Class 4.6 4.6 Terning Tor Drg Plated K = 0.17 (ft-lbs) 0.32 0.74 1.5 2.3 4.3 6.6 6.2 13 | aue Dry piein K = 0.20 (ft-lbs) 0.39 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 | torque value sion Re Tigh Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 15 14 29 | s are in foot lations Class 8.8 B.8 tening Torc Dry Plated K = 0.17 (ft.lbs) 0.82 1.3 1.9 3.9 6.0 11 17 16 33 | pounds. nip for Dry plain K = 0.20 (ff-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 | K = 0.15 K = 0.17 K = 0.20 Metr Lubee K = 0.1 (ft-lbs) 1.0 1.6 2.4 9 3.3 7.6 14 2.2 9 3.3 7.6 14 2.2 0 20 20 42 | for "lubricate for zinc plate for clain and ic Faste Class 10. 10.9 griterning Tc Dry Plated 5 K = 0.17) (ft.lbs) 1.9 1.9 2.7 5.5 9.4 8.6 16 24 24 24 24 | d* conditions id and dry co dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class Class (12) Tightening Lubed D K = 0.15 (ft-lbs) 1.2 2.8 5.7 9.7 8.8 16 25 24 49 | $\begin{array}{c} D=N0\\ F=Cls\\ \hline \\ 12.9\\ g\\ \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3 3.5 6 6 6 7 7 8 8 10 10 | 0.5 0.6 0.7 0.8 1 1.25 1.25 1.25 1.5 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 11 11 | Inch-pounds where Class 4.6 4.6 Terning Tor DryPlated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 6.8 6.2 13 12 | aue ory piain K = 0.20 ((ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 | Tiggi Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 15 14 29 28 | s are in foot lations Class 8.8 (lass 8.8) (lass | pounds. nip for Dry plain K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 | K = 0.15 K = 0.17 K = 0.20 Metr Luber K = 0.1 (ft-lbs 2.4 4.9 8.3 7 14 22 20 14 22 42 24 40 | for "lubricate for zinc plate for obin and ic Faste Class 10, 10,9 10,9 10,9 11,9 1,2 1,9 2,7 5,5 9,4 8,6 16 24 23 48 48 | d* conditions id and dry co dry condition mers 9 0 0 0 1 4 2 2 3 2 6 5 1 1 1 0 19 29 27 28 53 | Class Class (12) Tightening Lubed [] K = 0.15 (ft-lbs) 1.2 1.9 2.8 5.7 9.7 9.7 8.8 16 25 24 49 47 | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ 9 \\ \hline \\ 9 \\ \hline \\ 10 \\ r \\ r \\ r \\ 10 \\ 1$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | 4 and 5/11 and 5/11 lominal Dia. (mm) 3 3 5 4 5 6 8 8 8 10 | 0.5 0.6 1.25 1 1.25 1 1.25 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.5 5.5 11 | Inch-pounds where Class 4.6 4.6 Dry Plated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 2.3 6.8 8.2 13 12 23 | aue Dry piein K = 0.20 (ft-lbs) 0.39 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 | torque value sion Re Tigh Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 15 14 29 | s are in foot lations Class 8.8 B.8 tening Torc Dry Plated K = 0.17 (ft.lbs) 0.82 1.3 1.9 3.9 6.0 11 17 16 33 | pounds. nip for Dry plain K = 0.20 (ff-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 | K = 0.15 K = 0.17 K = 0.20 Metr Lubee K = 0.1 (fr.lbs 1.0 1.6 2.4 9 3.3 7.6 14 2.2 9 3.3 7.6 14 2.2 0 20 20 | for "lubricate for zinc plate for clain and ic Faste Class 10. 10.9 griterning Tc Dry Plated 5 K = 0.17) (ft.lbs) 1.9 1.9 2.7 5.5 9.4 8.6 16 24 24 24 24 | d* conditions id and dry co dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class Class (12) Tightening Lubed D K = 0.15 (ft-lbs) 1.2 2.8 5.7 9.7 8.8 16 25 24 49 | $\begin{array}{c} D=N0\\ F=Cls\\ \hline \\ 12.9\\ g\\ \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | loniinal Dia. (mm) 3.5 6 6 7 8 8 8 10 10 12 | 0.5 0.6 0.7 0.8 1 1.25 1.25 1.5 1.25 | Tigs are in. is T=kDF, is T=kDF, Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 11 11 21 | Inch-pounds where Class 4.6 4.6 Terning Tor DryPlated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 6.8 6.2 13 12 | aue aue Cry piein Cry piein 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 | Tigg Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 29 28 53 | s are in foot lations Class 8.8 tening Torc Dry Plated N=0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 33 32 60 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 | K = 0.15 K = 0.17 K = 0.20 Metr Metr Lubec K = 0.1 (ft-lbs 4.9 8.3 7.6 1.0 1.6 2.4 4.9 8.3 7.6 1.0 2.4 4.9 2.0 4.0 2.0 4.0 7.6 4.0 7.6 4.0 7.6 4.0 7.6 4.0 7.6 4.0 7.6 4.0 7.6 4.0 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 ightening Tc 3 Dry Plated 5 K = 0.17 1.2 1.9 4.2 9.4 8.6 16 24 23 48 48 55 86 | d* conditions d and dry cc dry condition mers 9 Dry plein (ft-libs) 1.4 2.2 6.5 11 10 19 29 27 56 53 101 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ \hline \\ 107 rque \\ ry plain \\ K = 0.20 \\ (ff-lbs) \\ \hline \\ 1.8 \\ 2.5 \\ 3.8 \\ \hline \\ 7.6 \\ 13 \\ 12 \\ 22 \\ 34 \\ 31 \\ 66 \\ 62 \\ 119 \\ \hline \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 6 6 6 7 7 8 8 8 10 10 10 12 12 | Pitch 0.5 0.6 0.7 1.25 1.25 1.5 1.5 1.5 | Tigl Tigl Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 11 11 11 20 | Inch-pounds where Class 4.6 4.6 httering Tor Dry Plated K = 0.17 (ft-lbs) 0.32 0.50 0.74 1.5 2.6 2.3 4.3 6.6 6.2 13 12 23 22 | e-Tens ory plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 | torque value sion Re Tig/ Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 29 28 53 51 | s are in foot lations Class 8.8 | pounds. nip for Dry plain K = 0.20 (ft-libs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 | K = 0.15 K = 0.17 K = 0.20 Metr Lubed K = 0.1 (ft-lbs; 1.0 1.6 8.3 7.6 1.4 4.9 9.3 7.6 1.4 4.9 9.3 7.6 1.4 2.4 4.9 9.3 7.6 1.4 4.9 2.2 20 4.2 4.2 7.6 7.7 3 | for "lubricale for zinc plate for othin and ic Faste Class 10. 10.9 ightening Tc 3 Dry Plated 5 K = 0.17 1 (ft-lbs) 1.2 1.9 5.5 9.4 8.6 16 24 23 48 45 86 82 | d* conditions d and dry cc dry condition prefers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ y \\ \hline \\ 12.9 \\ y \\ y \\ \hline \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 $ | ninal Dia |
| Torque val | ues for 1 A ues calcul | loniinal Dia. (mm) 3.55 6 6 7 7 8 8 8 10 10 12 12 12 12 12 14 14 | 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 1.25 1.5 1.25 1.5 1.25 1.5 1.25 1.5 1.25 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 111 21 20 19 26 28 | Inch-pounds where Class 4.6 4.6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | aue aue Crypiain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 25 34 37 | Tigg Tigg Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 5.7 15 14 29 53 51 49 53 51 49 66 67 2 | Istions Istions Class 8.8 Rening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 6.6 11 17 16 32 60 58 58 58 82 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 66 65 99 96 | K = 0.15 K = 0.17 K = 0.20 Metr Metr Lubec K = 0.1 (ft-lbs 1.0 1.6 2.4 4.9 8.3 7.6 1.0 1.6 2.4 4.9 8.3 7.6 1.0 2.4 4.9 2.0 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 10.9 11.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1. | at conditions and dry co- dry condition provession of the condition of the | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ \hline \\ 12.9 \\ \hline \\ y \\ p \\ p \\ \hline \\ 10 \\ r \\ $ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 6 6 6 7 7 8 8 8 10 10 10 12 12 12 12 12 14 14 | Pitch 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 1.25 1.5 1.5 2 | Tigs Tigs Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 11 11 11 121 20 19 26 28 30 | Inch-pounds where Class 4.6 4.6 0.7 0.7 0.7 0.7 0.3 0.5 0.5 0.5 0.5 0.5 0.5 0.7 0.7 0.7 0.7 0.3 2.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 | aue aue aue aue aue aue aue aue | torque value sion Re Tig/ Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 29 28 53 51 49 66 72 78 | s are in foot lations Class 8.8 tering Torc Dry Plated K = 0.17 (ft.lbs) 0.82 1.3 1.9 3.9 6.8 6.0 11 17 16 33 32 260 58 55 75 82 88 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 65 69 96 104 | K = 0.15 K = 0.17 K = 0.20 Metr Luber Luber 1.0 1.6 2.4 4.9 9.3 7.6 2.4 4.9 9.3 7.6 2.4 4.2 20 4.2 20 4.2 20 4.2 20 4.2 3 7.0 7.0 7.0 9.5 7.0 103 101 11 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 ightening Tc Dry Plated 5 K = 0.17 10. (ft-lbs) 1.2 1.3 5.5 9.4 8.6 16 24 23 48 45 85 82 79 108 117 126 | d* conditions id and dry cc dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ \hline \\ y \\ p \\ \hline \\ y \\ p \\ p \\ p \\ \hline \\ y \\ p \\ p$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.3.5 4 5 6 6 6 7 7 8 8 8 10 10 12 12 12 12 12 14 14 14 14 | Pitch 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 1.25 1.5 1.5 2 1.5 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.1 3.8 5.9 5.5 5.5 11 11 11 21 20 20 19 26 28 30 50 | Inch-pounds where Class 4.6 4.6 1200 Pieted K = 0.17 (ft-lbs) 0.32 0.74 1.5 2.3 4.3 6.6 8.2 13 12 23 22 21 29 32 21 29 32 21 29 32 34 57 | aue Dry plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 26 25 34 37 0 67 | torque value sion Re Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 15 14 29 28 53 9.7 15 14 29 28 53 51 14 29 28 53 51 15 14 29 28 53 51 15 14 29 28 53 51 15 14 29 28 53 51 12 28 53 51 12 28 53 51 12 28 53 51 51 51 51 51 51 51 51 51 51 | s are in foot lations Class 8.8 tening Torc Dry Plated K = 0.17 (ft.lbs) 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 33 32 80 55 75 82 88 146 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 19 39 37 71 68 65 69 96 104 171 | K = 0.15 K = 0.17 K = 0.20 Metr Image: Constraint of the second secon | for "lubricate for zinc plate for claim and ic Faste Class 10. 10.9 grittening Tc Dry Plated 5 K = 0.17 0 (ft-lbs) 1.2 1.9 2.7 5.5 16 24 24 8.6 16 24 24 48 45 86 85 85 85 22 79 108 117 128 208 | d* conditions id and dry co dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class Cl | $\begin{array}{c} D=N0\\ F=Cls\\ \hline \\ 12.9\\ g\\ \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3 3,5 6 6 6 7 7 8 8 8 10 10 12 12 12 12 12 14 14 14 16 16 | 0.5 0.6 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 1.25 1.5 2 1.5 2 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.24 0.66 1.3 2.3 0.44 0.66 1.3 2.1 3.8 5.9 5.5 11 11 11 21 20 19 26 28 30 50 47 | Inch-pounds where Class 4.6 4.6 0.50 0.74 1.5 2.6 6.6 6.2 13 12 23 22 21 21 29 32 34 357 53 | aue Crypiain K = 0.20 ((ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 25 34 37 40 67 62 | torque value sion Re Tigb Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 9.7 15 14 29 28 53 9.7 15 14 29 28 53 51 15 14 29 28 53 51 12 12 12 12 12 12 12 12 12 1 | s are in foot lations Class 8.8 B.8 tening Torco Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.0 11 17 16 6.0 6.0 11 17 16 83 32 60 55 55 75 82 88 146 137 | pounds. nip for Dry plain K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 711 68 65 69 96 104 171 161 | K = 0.15 K = 0.20 Metr I Lube K = 0.1 (ff-lbs) 1.0 1.6 2.4 4.9 8.3 7.3 73 103 111 112 103 | for "lubricate for zinc plate for obin and ic Faste Class 10. 10.9 ightening To Dry Plated 5 K = 0.17 0 (ft-lbs) 1.2 1.9 2.7 5.5 9.4 8.6 16 24 23 48 45 86 86 82 79 108 117 126 208 | d* conditions id and dry cc dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class Cl | $\begin{array}{c} D=No\\ F=Cle\\ \hline \\ 12.9\\ 9\\ \hline \\ 9\\ \hline \\ 107 \ plain\\ K=0.20\\ (ft-lbs)\\ \hline \\ 18\\ \hline \\ 2.5\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 2.5\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 12\\ \hline \\ 22\\ \hline \\ 34\\ \hline \\ 11\\ \hline \\ 106\\ \hline \\ 148\\ \hline \\ 161\\ \hline \\ 173\\ \hline \\ 287\\ \hline \\ 289\\ \hline \\ 289\\ \hline \end{array}$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | 4 and 5/11 and 5/11 borninal Dia. (mm) 3 3.5 6 6 8 8 10 10 12 12 12 12 12 12 12 14 14 16 16 18 | Pitch 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 2 1.5 2 1.5 | Tigs are in a T=kDF, Tigs Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 2.1 2.3 2.1 3.8 5.5 11 11 21 20 19 26 28 30 50 50 47 73 | Inch-pounds where Torqu Class 4.6 4.6 1.5 0.32 0.50 0.74 1.5 2.6 6.2 1.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.2 1.5 5.3 6.8 6.8 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 | aue Ory plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 25 34 37 40 67 97 | torque value sion Re Tigi Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 29 53 51 14 29 53 51 49 66 72 78 121 187 | Istions Intening Toro Ury Plated 8.8 tening Toro 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 33 32 60 56 56 56 58 56 137 137 212 212 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 65 69 96 104 171 161 249 | K = 0.15 K = 0.17 K = 0.17 Metr ILUbec K = 0.1 (ft-lbs) 1.0 1.6 2.4 49 9.3 7.6 1.4 22 40 76 73 70 95 103 111 184 173 268 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 10.9 10.9 11.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1. | d* conditions d and dry cc dry condition PREFS 9 0 0 1.4 2.2 6.5 11 10 19 29 27 56 53 101 97 93 27 56 53 101 97 93 27 56 53 101 97 93 27 53 53 101 97 93 27 53 53 101 97 93 27 53 53 101 97 28 27 53 53 101 53 53 53 53 53 53 53 53 53 53 53 53 53 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ \hline \\ 12.9 \\ \hline \\ y \\ p \\ p \\ \hline \\ 10 \\ r \\ $ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3.5 6 6 7 7 8 8 8 10 10 12 12 12 12 12 12 12 12 12 12 14 14 16 16 16 18 18 | Pitch 0.5 0.6 1 1.25 1.25 1.25 1.5 1.25 1.5 1.5 1.5 2 1.5 2 1.5 2.5 2.5 | Tigs are in a T=kDF, ia T=kDF, is a T=kDF, is a t-kDF, is a t-kDF | Inch-pounds where Class 4.6 4.6 0.7 0.7 0.7 0.3 0.5 0.5 0.7 0.3 0.5 0.5 0.7 0.7 1.5 2.6 0.7 0.7 1.5 2.6 2.3 4.3 6.6 6.2 13 12 23 22 21 29 32 34 57 53 53 62 73 | aue aue aue Dry plein (ft-lbs) 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 25 34 0 67 67 67 67 67 67 80 7.8 7.3 15 14 28 26 25 34 0 97 80 7.8 7.3 15 14 28 26 25 34 0 97 80 7.8 7.3 15 14 28 26 25 34 0 97 80 7.8 7.3 15 14 80 25 97 80 7.8 7.3 15 14 80 25 97 80 87 18 18 18 18 26 25 34 18 26 25 34 26 25 34 26 25 34 26 25 34 37 40 67 67 80 77 80 80 77 80 80 80 80 80 80 80 80 80 80 | torque value sion Re Tigr Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 9.7 15 14 29 28 53 51 49 66 53 51 49 66 72 78 129 121 187 167 | s are in foot lations Class 8.8 tening Torc Dry Plate 8.8 tening Torc Dry Plate 1.3 1.9 3.9 6.6 6.0 11 17 16 33 32 60 55 55 75 75 82 88 146 137 146 137 146 137 157 167 177 188 146 137 146 147 146 147 147 147 147 147 147 147 147 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 65 89 96 104 171 161 249 222 | K = 0.15 K = 0.17 K = 0.17 K = 0.20 Metr Lube K = 0.1 (rt-lbs) 1.0 1.6 2.4 4.9 9.3 7.6 1.2 20 42 40 76 7.3 70 76 103 111 184 173 239 | for "lubricate for zinc plate for othin and ic Faste Class 10. (10.9) (1 | d* conditions d and dry cc dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ p \\ \hline \\ y \\ p \\ r \\ r$ | ninal Dia |
| Torque val | ues for 1 A ues calcul | lominal Dia. (mm) 3 3,5 4 5 6 6 7 7 8 8 8 7 7 8 8 8 10 10 12 12 12 12 12 12 12 14 14 16 16 18 18 20 | 0.5 0.6 0.5 0.6 0.7 0.8 1 1.25 1.25 1.25 1.5 1.25 1.5 2 1.5 2.5 1.5 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 3.8 5.9 5.5 11 11 11 21 20 19 26 28 30 50 47 73 65 101 | Inch-pounds where Class 4.6 4.6 11 12 12 12 12 12 12 12 12 12 12 12 12 | aue Dry plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 26 25 34 37 15 14 26 25 34 37 67 62 97 86 135 | torque value sion Re Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.3 9.7 15 14 29 28 53 9.7 15 14 29 28 53 51 14 29 28 53 51 14 29 28 53 51 15 16 72 78 129 121 167 270 | s are in foot lations Class 8.8 tening Torc Dry Plated K = 0.17 (ft.lbs) 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 33 32 80 55 75 82 88 146 137 212 169 306 | pounds. nip for Dry plain K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 19 39 37 71 68 65 69 96 68 65 69 99 96 104 171 161 249 222 360 | K = 0.15 K = 0.17 K = 0.20 Metr Image: Constraint of the second secon | for "lubricate for zinc plate for claim and c Faste Class 10. (10.9) (1 | d* conditions id and dry co dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class Class Class (12) Tightening Lubed D K = 0.15 (ft-lbs) 1.2 2.8 5.7 9.7 8.8 16 25 24 49 47 89 83 81 111 121 215 202 313 279 437 | $\begin{array}{c} D=N0\\ F=Cls\\ \hline \\ 12.9\\ g\\ \hline \\ 9\\ \hline \\ 9\\ \hline \\ 12\\ g\\ \hline \\ 12\\ g\\ \hline \\ 12\\ \hline \\ 12\\ \hline \\ 25\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 12\\ \hline \\ 22\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 113\\ \hline \\ 106\\ \hline \\ 148\\ \hline \\ 161\\ \hline \\ 148\\ \hline \\ 173\\ \hline \\ 287\\ \hline \\ 289\\ \hline \\ 287\\ \hline \\ 289\\ \hline \\ 417\\ \hline \\ 287\\ \hline \\ 289\\ \hline \\ 372\\ \hline \\ 583\\ \hline \end{array}$ | ninal Diar |
| Torque val | less for 1A | lominal Dia. (mm) 3 3,5 6 6 6 7 7 8 8 8 10 10 12 12 12 12 12 14 14 14 14 16 16 18 18 20 20 | 0.5 0.6 0.5 0.6 0.7 0.8 1 1.25 1.5 1.25 1.5 2 1.5 2 1.5 2 1.5 2 5 5 2 5 5 2 5 5 2 5 5 2 5 5 2 5 5 2 5 5 2 5 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 0.44 0.66 1.3 2.1 3.8 5.9 5.5 5.9 5.5 111 11 21 20 26 28 30 50 47 73 65 50 47 73 65 | Inch-pounds where Class 4.6 4.6 0.50 0.74 1.5 2.6 6.6 8.2 13 12 23 22 21 29 32 22 21 29 32 34 34 57 53 82 73 3 115 104 | aue aue Dry piein K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 0.59 0.87 1.8 3.0 7.3 1.5 14 28 25 34 37 40 67 62 97 86 135 122 | torque value sion Re Tigb Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 9.7 15 14 29 28 53 9.7 15 14 29 28 53 51 14 29 28 53 51 129 121 187 167 270 236 | s are in foot lations Class 8.8 B.8 tening Torco tery Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.0 11 17 16 6.0 6.0 11 17 16 83 32 60 55 75 82 88 88 146 137 212 189 306 267 | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 711 68 65 69 96 104 171 161 249 222 360 314 | K = 0.15 K = 0.17 K = 0.27 Metr | for "lubricate for zinc plate for claim and ic Faste Class 10. 10.9 ightening To Dry Plated 5 K = 0.17 0 (ft-lbs) 1.2 1.9 2.7 5.5 9.4 8.6 16 24 23 48 45 86 86 86 86 879 79 108 117 128 208 117 128 208 117 128 208 117 128 208 | d* conditions id and dry cc dry condition mers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D=No\\ F=Cla\\ \hline \\ 12.9\\ g\\ \hline \\ 9\\ \hline \\ 9\\ \hline \\ 9\\ \hline \\ 12\\ \hline \\ 9\\ \hline \\ 9\\ \hline \\ 9\\ \hline \\ 12\\ \hline \\ 25\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 25\\ \hline \\ 3.8\\ \hline \\ 7.6\\ \hline \\ 13\\ \hline \\ 12\\ \hline \\ 22\\ \hline \\ 34\\ \hline \\ 112\\ \hline \\ 22\\ \hline \\ 34\\ \hline \\ 119\\ \hline \\ 113\\ \hline \\ 108\\ \hline \\ 148\\ \hline \\ 108\\ \hline 108$ | ninal Diar |
| Torque val | | lominal Dia. (mm) 3.5 6 8 8 10 10 12 12 12 12 12 12 12 12 12 12 12 12 12 | Pitch 0.5 0.6 0.7 0.8 1 1.25 1.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 2.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1 | Tigg Tigg Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 2.1 2.1 2.1 3.8 5.5 5.5 11 11 21 20 19 26 28 30 50 50 47 73 65 101 91 91 91 91 91 | Inch-pounds where Torqu Class 4.6 4.6 1.5 0.32 0.50 0.74 1.5 2.6 2.3 4.3 6.6 6.2 13 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 12 23 22 21 23 23 23 23 25 23 23 23 25 23 25 23 25 23 25 25 25 25 25 25 25 25 25 25 | aue Ory plain K = 0.20 (ft-lbs) 0.38 0.59 0.87 1.8 3.0 2.7 5.0 7.8 7.3 15 14 28 26 25 34 37 40 67 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 97 86 132 132 132 134 135 14 14 14 155 14 155 14 155 14 155 14 155 14 155 14 155 155 | torque value sion Re Tigb Lubed K = 0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 9.7 15 14 29 28 53 9.7 15 14 29 28 53 51 14 29 28 53 51 129 121 187 167 270 236 | s are in foot lations Class 8.8 B.8 tening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 6.0 50 55 55 82 88 148 137 212 169 306 267 Siffed bots. | pounds. nip for Dry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 65 69 96 104 171 161 249 222 360 314 K = 0.15 | K = 0.15 K = 0.17 K = 0.20 Metr ILubec K = 0.1 (ft-lbs) 1.0 1.6 2.4 4.9 9.3 1.03 337 for "Jubri" | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 10.9 10.9 11.2 12.7 5.5 9.4 16 24 23 46 86 82 82 79 108 117 128 208 117 128 208 117 128 208 117 128 208 117 128 208 109 1424 230 270 424 382 270 425 303 270 424 382 270 45 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | d* conditions d and dry cc dry condition eners 9 0 0 1.4 2.2 6.5 11 10 19 29 27 56 53 101 97 93 127 138 148 249 230 357 318 449 449 Stions | Class Cl | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ \hline \\ 16 \\ c \\ $ | 1164 |
| Torque val | les for 1A les calcul | loniinal Dia. (mm) 3.5 6 6 7 8 8 8 10 10 12 12 12 12 12 12 12 12 12 14 14 16 16 16 16 16 16 18 18 20 20 VI torque | Pitch 0.5 0.6 0.7 0.8 1 1.25 1.25 1.5 2.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1 | Tigs are in in a T=kDF, Tigs Lubed K = 0.15 (ft-lbs) 0.28 0.44 0.66 1.3 2.3 2.1 0.28 0.46 1.3 2.3 2.1 1.1 20 1.9 26 28 30 50 47 73 65 101 91 91 91 91 91 91 91 95 101 91 91 95 101 91 91 91 95 101 91 91 91 91 91 91 91 91 91 9 | Inch-pounds where Class 4.6 4.6 0.50 0.74 1.5 2.6 6.6 8.2 13 12 23 22 21 29 32 22 21 29 32 34 34 57 53 82 73 3 115 104 | aue aue Dry piein (fi-lbs) 0.38 0.59 0.38 0.59 0.87 1.8 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.0 2.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.7 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 | torque value sion Re Lubed K=0.15 (ft-lbs) 0.73 1.1 1.7 3.4 5.8 5.3 5.7 15 14 29 53 51 49 66 66 66 66 72 78 129 121 187 167 270 236 ad for spe | s are in foot lations Class 8.8 Lening Torc Dry Plated K = 0.17 (ft-lbs) 0.82 1.3 1.9 3.9 6.6 6.0 11 17 16 33 20 58 58 58 58 58 58 58 58 58 58 | pounds. nip for pry plein K = 0.20 (ft-lbs) 0.97 1.5 2.3 4.5 7.7 7.0 13 20 19 39 37 71 68 65 69 96 104 171 164 171 164 4.5 7.7 7.0 37 7.1 68 65 69 96 104 171 164 171 164 104 171 164 171 164 165 104 171 164 164 164 171 164 165 165 165 165 165 165 165 165 | K = 0.15 K = 0.17 K = 0.17 Metr Metr ILUbec K = 0.1 (ft-lbs) 1.0 1.6 1.0 1.6 1.0 1.6 1.7 2.4 4.9 8.3 7.6 1.2 4.2 2.0 4.2 2.0 4.2 2.0 4.2 2.4 4.2 2.4 4.2 2.0 4.2 2.4 4.2 2.4 4.2 2.4 4.2 2.3 103 111 184 2.33 3.374 3.374 3.374 | for "lubricate for zinc plate for othin and ic Faste Class 10. 10.9 10.9 10.9 11.2 12.7 5.5 9.4 16 24 23 46 86 82 82 79 108 117 128 208 117 128 208 117 128 208 117 128 208 117 128 208 109 1424 230 270 424 382 270 425 303 270 424 382 270 45 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | at conditions d and dry cc dry condition prefers 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Class | $\begin{array}{c} D = No \\ F = Cla \\ \hline \\ 12.9 \\ g \\ \hline \\ y \\ \hline \\ 16 \\ c \\ $ | ninal Diar |

| Description | Application | General Specification | Recomended Mobil Lubricant |
|--|---------------|--|--|
| Tractor Hydraulics | Reservoir | JD-20C MF M1135,M1141 FNHM2C134D (FNH201) | Mobilfluid 424 |
| Mower Hydraulics Cold Temperatures 0° F Start-Up | Reservoir | ISO 46 Anti-Wear-Low Temp | Mobil DTE 15M |
| Normal Temperatures 10° F Start-Up | | JD-20C MF M1135,M1141 FNH M2C134D(FNH201) | Mobilfluid 424 |
| Normal Temperatures 15° F Start Up | | ISO 46 Anti-Wear | Mobil DTE 25 |
| High Operating Temp. Above 90° F | | ISO 100 Anti-Wear | Mobil DTE 18M |
| Flail Rear Gearbox | Grease | PAO Synthetic Extreme Pressure Gear Lube | Mobil SHC 75W-90 Mobil 1 Synthetic Gear |
| Cutter Shaft & Ground Roller Shaft(Flail) | Grease Gun | Lithium-Complex Extreme Pressure NLGI-ISO 320 | Mobilgrease CM-S |
| Drive Shaft Coupler (Flail and Rotary) | Grease Gun | Lithium-Complex Extreme Pressure NLGI2-ISO 320 | Mobilgrease CM-S |
| Drive Shaft Yoke, U-joint & Stub Shaft | Grease Gun | Lithium-Complex Extreme Pressure NLGI2-ISO 320 | Mobilgrease CM-S |
| Boom Swivel Boom Cylinder Pivots (Rotary & Flail Boom) | Grease Gun | Lithium Complex Extreme pressure NLGI2-ISO 320 | Mobilgrease CM-S |
| Deck Boom Pivot & Deck Stop Adjustment Rotary & Flail) | Grease Gun | Lithium Complex Extreme Pressure NLGI-ISO 320 | Mobilgrease CM-S |
| Deck Spindle(Rotary) | Grease Gun | Tiger Spindle Lubricant part number 06540000 | Mobilith SHC 220 |

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Maintenance Section 4-9

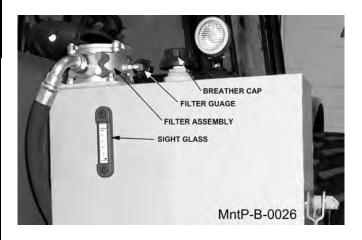
GRAFFITI REMOVAL

Butyl cellosolve (for removal of paints, marking pen inks, lipstick, etc.) The use of masking tape, adhesive tape or lint removal tools work well for lifting off old weathered paints.

To remove labels, stickers, etc., the use of kerosene or VM&P naphtha are generally effective. When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the adhesive and promote removal.

IMPORTANT: If a material is found to be incompatible in a short-term test, it will usually be found to be incompatible in the field. The converse, however, is not always true. Favorable performance is no guarantee that actual end-use conditions have been duplicated. Therefore, these results should be used as a guide only and it is recommended that the user test the products under actual end-use conditions.

RECOMMENDED FILLING INSTRUCTIONS FOR HYDRAULIC RESERVIORS



The reservior should be filled to the center of the sight glass on the side of the tank. Do not over-fill. If the tank has too much oil, the excess may be expelled through the pressurized breather.

DETAILED MAINTENANCE

REPLACING IN-TANK HYDRAULIC FILTER:

Loosen the four bolts on the top cover of the filter housing. Turn cover counter-clockwise until cover is free. Remove and replace filter. Replace top cover and cover bolts in opposite order as removed.



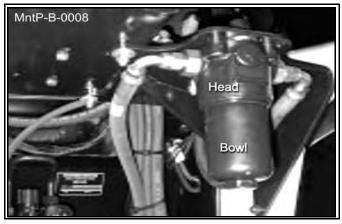
Maintenance Section 4-10

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DETAILED MAINTENANCE

REPLACING HIGH PRESSURE HYDRAULIC FILTER ELEMENT:

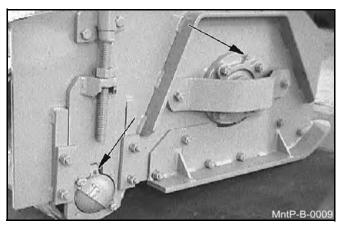
Ensure the system has been shut down and depressurized. Locate High Pressure Filter housing. Confirm that the element that is a bout to be installed matches the element p/n on the filter model tag. *Example: V3.0510-06 (world line 100, HD049 model)*. Locate the bottom of the High Pressure Bowl. Using the appropriate spanner wrench or ratchet and turning in a counterclockwise rotation, (looking at the bottom of the bowl) remove the bowl from the head. The first couple rotations will seem tight as the o-ring passes the sealing flats. Once the o-ring has cleared the sealing flats the



bowl should spin freely. Taking care not to drop the bowl, finish removing the bowl from the head. **WARNING: bowl will be full of oil!** Pour the oil from the bowl into a container. This oil should be considered contaminated due to the ou tside-in flow direction through the element. Clean the inside of the bowl if "dirt" is present. Remove the old element from the filter head by pulling with a rot ation motion. Dispose of the us ed element properly. Remove the new element from the packaging. Using your finger, dab and lubricate the o-ring in the top of the new element with oil. Install the new element into and on the mounting boss within the head. Ensure that the element is fully seated on the boss. Clean and inspect the o-ring that is affixed in the bowl and lubricate with oil. Using a clockwise rotation, screw the bowl back into the head, ensuring that the bowl has not been cross-threaded into the head. Continue to tighten the bowl into the head, using the spanner wrench or ratchet. The rotation of the bowl will become tighter once the o-ring engages the sealing flats. Once the bowl has bottomed out, back-off the bowl by 1/6 tur n. This ensures that the o-ring is seated properly within the sealing flats. Element change out and re-assembly is now complete. Start the machine and inspect the filter area, checking that there is no oil leaking from the filter assembly. Replace the filter element for the first time at 50 hours of operation, then yearly (500 hours) or when indicated by restriction indicator.

GREASING CUTTER SHAFT-FLAIL MOWERS

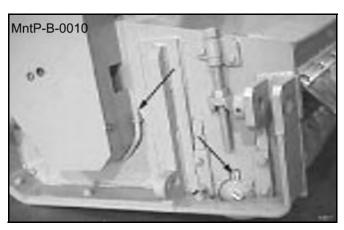
Locate grease zerks on each end of cutter shaft(s), these are located on the bearing cover. Normal conditions require one or two pumps in each bearing, using Lithium-Complex Extreme Pressure grease confirming to NLGI2-ISO 320 specifications. This is to be done with a standard grease gun daily or at 8 hour intervals. CAUTION: Over greasing may cause premature seal failure.



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GREASING GROUND ROLLER SHAFT-FLAIL

Locate grease zerks on eack end of roller tube at lower end of head. Normal conditions require one or two pumps in each bearing, using Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications. This is to be do ne with a standard grease gun daily or at **8 hour intervals. CAUTION: Over greasing may cause premature seal failure**.

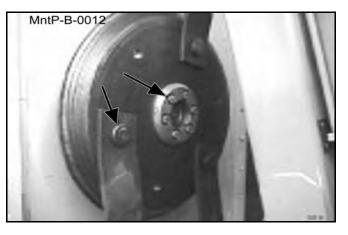


TIGHTENING KNIFE BOLTS AND DISK BOLTS:

After every 8 hours of operation or daily, the Knife Bolts and Disk Bolts should be tightened as follows:

Knife mounting bolts torque to 800 oiled ft. lbs.

Disk mounting bolts (6ea.) torque to 204 dry or 180 oiled ft. lbs.



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GREASING POINTS ON BOOM AND PIVOT

Locate grease zerks on deck pivot assembly, on the deck end of the boom, and at swivel end of main boom. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications until grease begins to protrude from ends.



GREASING SPINDLE

Locate grease fitting on inside of deck hou sing. Inject Tiger Spindle Lubricant, part number 06540000 into s pindle housing. Fill with lubricant until lubricant weeps out of to p spindle seal. Lubricate spindle weekly or every 40 hours of use.

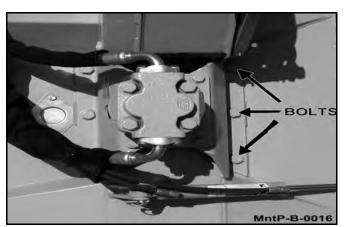


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Maintenance Section 4-13

TIGHTENING SPINDLE BOLTS

The spindle mounting bolts should be checked and retorqued daily or every 8 hours of service. Torque the (6) bolts shown below to 357 dry or 315 ft. lbs. lubricated.



GREASING PUMP DRIVE SHAFT COUPLER

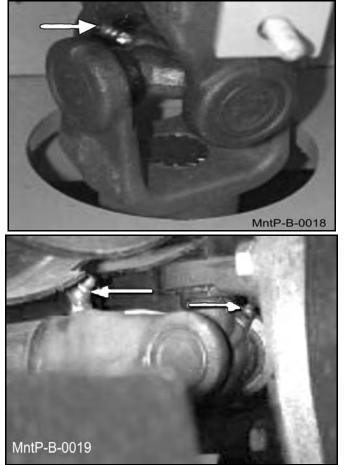
With engine stopped, ensure drive shaft alignment by grasping coupler and sliding back and forth. Coupler should slide freely with approximately 1/8" of end play. If coupler does not slide freely, inspect for loose pump mount bolts, or damaged or loose crank shaft adapter. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications into coupler until grease begins to protrude from ends. Grease daily or every 8 hours. Do not over grease.



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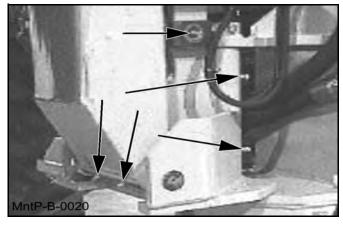
DRIVE SHAFT YOKE, U-JOINT STUB SHAFT

With engine stopped, inject Lithium-Complex extreme pressure grease confirming to NLGI2-ISO 320 specifications into universal joints and slip yoke until grease appears at the seal. Grease them daily or every 8 hours.



GREASING THE BOOM SWIVEL

Locate the zerks on the main swivel boss (if applicable), main boom pivot boss (if ap plicable) and on both ends of the boom swivel cyl inder. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specification until grease begins to protrude from ends.



Maintenance Section 4-15

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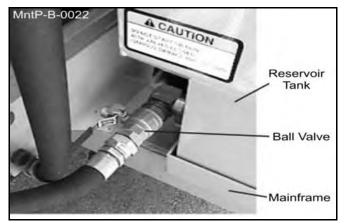
GREASING BOOM CYLINDER(S) PIVOT POINTS

Locate the zerk on the butt end tang of cylinder and on rod end tang. Inject Lithium-Complex Extreme Pressure grease confirming to NLGI2- ISO 320 specifications until grease begins to protrude from ends. This procedure is to be used on the main boom cylinder, secondary boom cylinder, deck pivot, and swivel cylinders daily or at 8 hour intervals.



BALL VALVES

The ball valve at the hydraulic reservoir may need to be closed during certain maintenance or repair procedures. THE BALL VALVES MUST BE OPEN (handle parallel with valve) WHEN TRACTOR IS RE-STARTED OR PUMP IS COUPLED TO MOTOR OR P.T.O.! Failure to do so will result in component failure!



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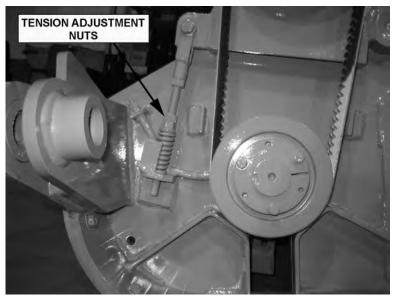
Maintenance Section 4-16

MAINTENANCE

BELT TENSION ADJUSTMENT

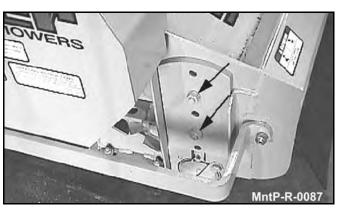
Locate the tensioning rod for the flail. Loosen the top tension adjustment nut. To tighten the belt, turn the bottom tension nut to compress the spring. To loosen the belt tension, turn the tension nut up to relax the spring. After adjustment, test the belt tension.

The tension should be 207Lbf or 106 freq cyl/sec. If the tension is as desired, turn the top tension nut down to lock the bottom tension nut into place.



ADJUSTING RSS FLAIL CUT HEIGHT

To adjust the cutting height of the Rear Side Stow flail head the two nuts on the roller shaft brackets must be t aken off and moved to the desired location/height. Be sure that both sides of the shaft are adjusted to corresponding holes so the shaft remains level.

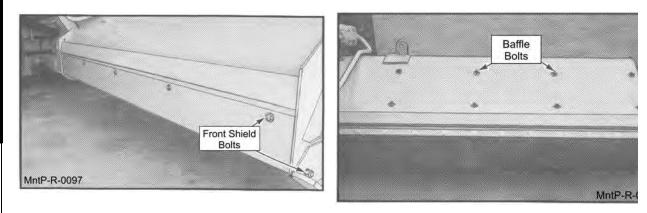


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REVERSING MOWER ROTATION OF RSS FLAIL MOWERS

To reverse the rotation of the Rear Side Stow flail, you need to switch the pressure and return motor hoses at the brake valve. Make sure the tractor is shut off and the ball valve is closed. Relieve the hydraulic pressure in the system first before removing any hoses. After switching the hoses, make sure you open the ball valve or serious damage can be done to the hydraulic pump.

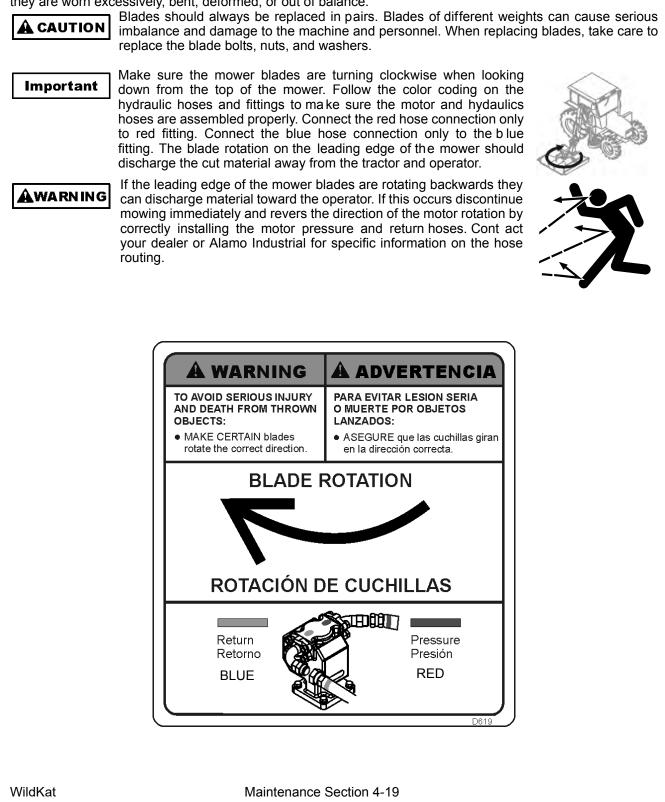
When operating in standard rotation, the front shield must be removed and the baffle installed. When operating in reverse rotation, remove the baffle and install the front shield. Finally, reposition the wear pads on the hoses and replace the zip ties as needed to prevent the hydraulic hoses from rubbing or chafing.



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Blades

Check the Blades for cracks and wear and Blade Bolts for tightness, daily. Blades should be replaced when they are worn excessively, bent, deformed, or out of balance.



ROTARY KNIFE REPLACEMENT

- 1. Be sure you have a complete matching set of new knives for replacement.
- 2. Remove knives and inspect holes for damage. Also watch for cracks in the disk (if applicable) around the holes.
- 3. Lube threads with anti-seize. Install bolts through knife and disk from bottom side of disk/blade bar. Install new self-locking nuts and torque them to 800 ft. lbs.
- 4. The knives should swing freely to absorb shocks from impact when striking objects.

WHEN CUTTING HEAVY BRUSH, KNIFE BOLTS SHOULD BE INSPECTED HOURLY AND RETORQUED TO 1070 DRY OR 800 OILED FT. LBS.

REPLACEMENT OF ROTARY DISK

A CAUTION Failure to follow the following warnings and instructions may result in serious injury or damage to the equipment or property!

- 1. The bolts that attach the disk to the spindle must be grade 8. These 5/8 inch bolts are to be torqued to 204 dry or 184 oiled ft. lbs.
- 2. A thread locking agent may be applied to threads of all mounting bolts before they are installed.
- 3. Disks must be inspected daily for hairline cracks between spindle mounting bolts or around the knife mounting bolts. These cracks indicate metal fatigue caused by severe abuse. If cracks are present the disk must be replaced.
- 4. Inspect the disk mounting bolts daily when checking tightness of knife mounting bolts. If a disk mounting bolt is loose, it must be removed, threads cleaned, fresh thread locking agent applied, and tightened to proper torque value.
- 5. If a knife mounting bolt is loose, the self locking nut must be replaced as a safety precaution. Lubricate threads with an ti-seize. Install bolts through knife and disk/blade bar from bottom side. Install self locking nuts and torque them to 800 ft. lbs.

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Flail Blades Inspection

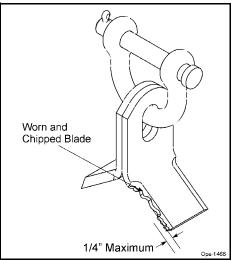
A DANGER

Inspect the Blades daily for ab normal wear. REPLACE ALL BLADES on the carrier IMMEDIATELY if any blades have:

- · Become bent or deformed from its original shape, or
- Wear inside the blade bolt hole, or
- Any cracks are visible, or
- Deep gouges in the blade's surface are present, or
- Gouges or chipped areas in the cutting edge are larger than 1/4"(8mm), or
- The material on the leading edge has been worn away by more than 1/4"(8mm)

DO NOT straighten, sharpen, weld or hard-face blades

Failure to replace worn or damaged blades may lead to catastrophic failure of the blades and ejection of the broken part with tremendous force which may cause serious bodily injury or death.



Always replace blades in sets

- Blades that are damaged may indicate severe service or abuse. If one blade is worn or damaged other blades on the same shaft will have been subjected to the same severe service or abuse.
- The Flail rotor turns at speeds exceeding 2000 RPM and is dynamically balanced at the factor y. Differences in blade weight between used blades with loss of material from gouges or wear as compared to new blades can cause severe vibration and damage to the Flail rotor. Always replace blades as complete sets.

Important

Use only genuine Alamo Industrial replacement blades and fasteners. Other blades and fasteners may not meet the Alamo Industrial requirements and could fail during operation. resulting in part being thrown out from under the mower.



Never attempt to sharpen blades. OPS-U-0044

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Maintenance Section 4-21

Blade Pins and D-Ring Inspection

Inspect Blade Pins and D-Rings daily for wear or damage as follows:

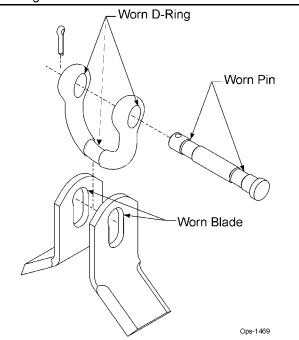
A DANGER

Inspect the Blade pins and D-Rings daily for abnormal wear. Make sure the cotter pins are in place and properly spread. REPLACE BLADE Pins and D-Rings IMMEDIATELY if they have:

- Visible cracks or
- If a Pin or D-Ring has visible worn areas, or
- If a Pin or D-Ring has gouges or chipped areas

Failure to replace abnormally worn pins or D-Rings may lead to catastrophic failure and ejection of the broken part, which may cause serious bodily injury or death.

Always replace the pins and D-Rings whenever excessive wear is noticed.



Important

If the cotter pins are broken by contact with other flail blades, remove the pin and reverse the direction the pin is inserted through the D-Ring so that the cotter pin is on the opposite side of the D-Ring. This will prevent the next set of blades from swinging back and hitting the cotter pin. *ops-u-0045*

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Maintenance Section 4-22

MAINTENANCE

BOOM FLAIL KNIFE REPLACEMENT

- 1. If knives are damaged or badly worn, they will need to be replaced as a set. Replacing a single knife can cause severe vibration and possible damage to the mower.
- 2. Assemble knives, clevis, bolts and nuts as shown in part section of manual.
- 3. Install locking hex nut so that the flat face of nut is towards the knife.
- 4. Apply loctite "271" or equivalent to threads.
- 5. Torque nut to 35 FT. LBS. Knife must swing freely.

AWARNING

DO NOT re-use the locking hex nuts for mounting the knives. If hex nut become loose, or require removal for knife replacement or any other reason, they must be discarded and replaced with new nuts.

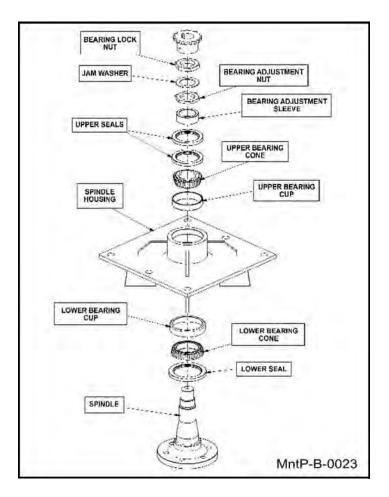
AWARN IN G

Knives should not be welded on for any reason.

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THE SPINDLE ASSEMBLY

See the diagram below for identification of spindle parts, while servicing.



MAINTENANCE

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Maintenance Section 4-24

BEARING INSTALLATION

- 1. Press upper bearing cup in to the spindle housing.
- 2. Turn the spindle housing over and press in the lower bearing cup.
- 3. Place the lower bearing cone in the bearing cup. Next press t he seal into the s pindle housing. The inner lip of the seal must be DOWN, towards the bearing, so lubricant is sealed inside the housing.
- 4. Install the spindle in the housing. Lightly press the spindle to seat the cone onto the spindle.
 - spindle.
 Support the bottom of the spindle and press
 the upper bearing cone and bearing adjustment sleeve onto the spindle
- the upper bearing cone and bearing adjustment sleeve onto the spindle.
- 6. NOTE: The spindle housing must turn freely when seating the bearing cone and sleeve.
- 7. Press the two upper seals into the spindle housing. The inner lip of the seals must be UP, away from the bearing, so excess lubricant can escape.
- 8. Install the bearing adjustment nut (thin nut) so there is 1-1/6" clearance between the nut and the sleeve. Install the jam washer, placing the tab into the key-way. Install the bearing lock nut (thin nut) and hand tighten against jam washer and adjustment nut. See the following section for bearing adjustment.
- 9. Position the spindle housing horizontally with the drain hole oriented "up". Grease through the zerk with Tiger Spindle Lubricant (part number 06540000) until the grease purges from the drain hole.
- 10. Install the plug into the drain hole.

BEARING ADJUSTMENT

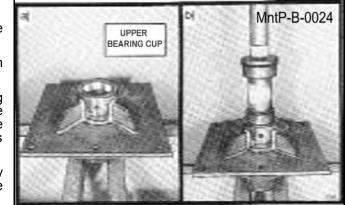
- 1. Clamp the bottom end of the spindle securely in a v ise so the spindle housing turns freely.
- 2. Position a magnetic base dial indicator on the outer diameter of the spindle housing. Locate the end of the dial indicator against the flat end of the spindle shaft. The dial indicator will now measure ac curately bearing end play.
- 3. Tighten the bearing adjustment nut until there is .012 inch mov ement when the spindle housing is pried upward away from the vise jaws.
- Spindle housing can turn freely Dial indicator set to read end play
- 4. When there is .012 inch free play between the spindle and housing, install the bearing lock nut (thick nut). Hold the adjusting nut securely and tighten the lock nut to 300 ft. lbs. of torque.
- 5. After the lock nut is tightened, there must be .001 inch to .003 inch of free play when lightly prying up on the spindle housing.

If the end play is correct, .001 inch to .003 inch, bend tabs up on jam washer to prevent the lock nut from loosening.

If the end play is NOT correct, loosen the lock nut and turn the adjustment nut as required and re-tighten the lock nut. Repeat first part of step 5.

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5.



Boom Cylinder Removal and Replacement Instructions

- 1. Clear the area of all personnel before lowering the boom mower head.
- 2. From the tractor seat with your seat belt fastened around you, Lower the boom mower head to the ground. Extend the boom to the furthest reach and lower the mower head flat on the ground. DO NOT attempt to replace the cylinders with the boom in the raised or transport position.
- 3. Shut off the tractor, engage the parking brake, place the tractor transmission in the park position, and remove the key before dismounting.
- 4. Allow the system to cool to room temperature before removing any hydraulic components
- 5. Wear safety glasses and impenetrable gloves when working with hydraulic hoses and fittings.
- 6. Release all oil pressure from the hydraulic circuit by manually stroking each valve section with the tractor engine off. Utilize the Manual Override function if the unit is equipped with an electric over hydraulic valve.
- 7. Utilize blocks, jack stands or a suitable over head hoist to support the weight of the boom section and remove pressure form the cylinder mounting pins.
- 8. Check to see that the cylinder to be replaced is not under pressure by moving the cylinder pins by hand. The pins should be loose and should slide from the pin bore easily. If the pins are tight and cannot be moved, the cylinder may be under pressure. Make sure the boom components are properly supported and that the pressure is relived from the circuit.
- 9. Cylinder assemblies are heavy and can fall when the pins are removed. Support the hydraulic cylinder with a suitable hoist or jack.
- 10. Slowly loosen the hydraulic connections to the cylinder. Carefully unscrew hose fitting and allow any remaining pressure to bleed off. Use Extreme Care. Oil must be cool, and the technician should stand to the side to prevent exposure to any hydraulic oil. Always consult the Material Safety Data Sheet and wear any required Personal Protective Equipment. A catch pan may be required to retain any spilled oil.
- 11. Cap both ends of the fitting with suitably sized metal caps.
- 12. Remove the cylinder pins starting with the ROD end cylinder pin. Make sure the cylinder is properly supported, and remove the base end cylinder pin. The cylinder may be heavy, use proper lifting techniques to lift and handle the cylinder. If needed, get assistance from another person to safely lift the cylinder from the machine.
- 13. Measure the distance between the cylinder pin holes and extend the new cylinder the correct length prior to attempting an installation.
- 14. Install the new cylinder in place and install both cylinder pins and retaining hardware.
- 15. Remove the metal caps, and re-install the hydraulic hoses.
- 16. Check the hydraulic reservoir of the boom mower to ensure there is sufficient oil. Follow the manufactures recommendations for proper oil type and filtering techniques and requirements to add oil to the system.
- 17. Clear the area of all persons prior to starting the tractor.
- 18. Consult the Operator's Manual for instruction in regard to the proper operating procedure.
- 19. From the tractor seat, with the seat belt fastened, operate the boom to ensure proper operation of the boom function.
- 20. From the tractor seat, with the seat belt fastened, operate the boom controls to fully extend and retract the new cylinder several times to purge any trapped air from the system.
- 21. From the tractor seat, with the seat belt fastened, look for signs of and oil leak. If an oil leak is observed, shut the tractor down and follow the steps to remove pressure from the hydraulic circuit. Identify the source of the leak and resolve the issue.
- 22. Upon completion of the required repairs, return to Step # 16 to recheck the cylinder for proper operation.

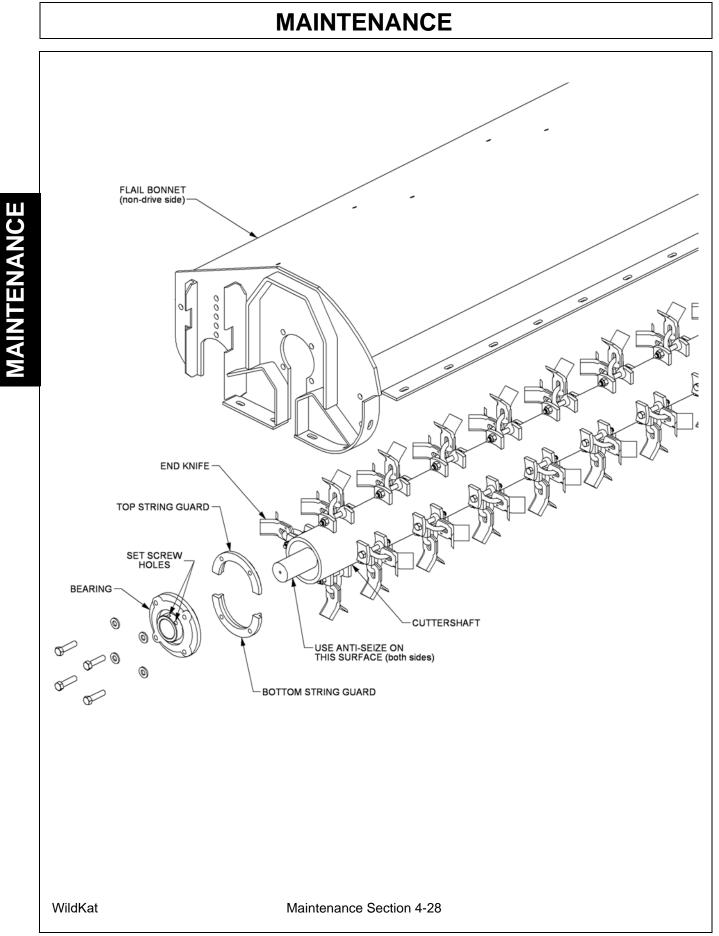
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CUTTERSHAFT BEARING REPLACEMENT

- 1. Remove existing cuttershaft, bearings and string guards.
- 2. Make sure that the end knives on each end of the cuttershaft are oriented as shown.
- 3. Apply anti-seize on cuttershaft as shown on next page.
- 4. Before installation the bearings must be fully greased per the following protocol: 1.Add 2 or 3 pumps of grease, 2. Spin the bearing 2 or 3 times. 3. Add 2 or 3 pumps of grease. 4. Spin the bearing 2 or 3 times. 5. Add 2 or three pumps of grease. Continue this procedure until you can visually confirm that grease is purging from the entire circumfrence of the seal.
- 5. Install non-drive side bearing first.
- 6. Install the top of the string guard on the non-drive side first. Use Loctite 271 or equivalent and torque (95 ft-lb or 104ft-lb if you use an extension).
- 7. Install the bearing and top string guard on the drive side.
- 8. Center the cuttershaft between the string guards. Use Loctite 271 or equivalent and torque (95ft-lb or 104ft-lb if you use an extension) the top string guard on the drive side.
- 9. Install, use Loctite 271 or equivalent, and torque (95ft-lb or 104ft-lb if you use an extension) the bottom string guard on both sides.
- 10. Make sure the cuttershaft is centered. On the non-drive side, tighten one set-screw in the bearing onto the cuttershaft.
- 11. Remove the other set screw and drill a 5/16" hole into the cuttershaft 3/16" deep through the hole in the bearing. BE CAREFUL NOT TO DAMAGE THE THREADS IN THE BEARING HOLE.
- 12. Replace the set screw in the bearing, use Loctite 271 or equivalent, and tighten onto the cuttershaft through the new hole.
- 13. Remove the other set screw and repeat the drilling procedure (Step 10). Replace the set screw as stated in Step 11.
- 14. Repeat steps 9 through 12 on the drive side.

See illustration on next page

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GROUND ROLLER BEARING REPLACEMENT

- 1. Remove existing ground roller brackets, bearings, and ground roller.
- 2. Remove bearings from stub shafts and ground roller brackets.
- 3. Clean stub shafts thoroughly, and apply anti-seize to O.D. of outer end.
- 4. Before installation, bearings must be fully greased per the following protocol: 1.Add 2 or 3 pumps of grease, 2. Spin the bearing 2 to 3 times. 3. Add 2 or 3 pumps of grease. 4. Spin the bearing 2 to 3 times. 5. Add 2 or 3 pumps of grease. Continue this procedure until you can visually confirm that grease is purging from the entire circumference of the seal.
- 5. Install bearing onto ground roller brackets using existing hardware and Loctite 271.
- 6. Slide bearing-ground roller bracket assemblies onto stub shafts of ground roller.
- 7. Install ground roller brackets onto flail bonnet using existing hardware.
- 8. Insure that ground roller brackets are set to the same elevation on both sides.
- 9. Center ground roller in bearings.
- 10. Tighten one setscrew in one bearing onto stub shaft of ground roller.
- 11. At the other end, remove the setscrew collar and drill 5/16" holes in both setscrew locations into the stub shaft 3/16" dear (or align setscrew holes in bearing collar with existing countersinks in stub shaft.
- 12. Reinstall setscrew collar on drilled-end. Remove both setscrews, apply Loctite 271 or equivalent, and tighten setscrews into stub shaft.
- 13. Then remove setscrew collar from other end, and repeat the drilling procedure from Step 11. Reinstall setscrew collar and install setscrews per Step 12.

See illustrations in the Common Parts Section.

| DAILY MAINTENANCE SCHEDULE | |
|--|-------------------------------|
| The following services should be performed daily or every 8 hours of services maintenance instructions in the operator's manual. | ice, following the detailed |
| Pump driveshaft: If required with drive shaft/coupler check for end play a | nd lubricate at zerks. |
| Crankshaft adapter: If equipped with rubber grommets check condition, re | eplace if missing or |
| damaged. | |
| Pivot points: Inject grease until it appears at ends. | |
| Hydraulic fittings: Check for leaks with paper or cardboard. Tighten immediately. | fittings or replace hoses |
| Knives: Inspect for missing or damaged knives, change (only complete s | ets) as needed. |
| Belts: Check/tighten/replace belts as needed. | |
| Mainframe/deck: Unless otherwise specified retorque bolts according to section. | torque specifications in this |
| Hydraulic fluid level: Add, if required, per fluid recommendations. | |
| Rear flail drive, bearing flange and shaft couplers: Grease as instructed i section. | n the detailed maintenance |
| Cuttershaft and ground roller: Grease as instructed in the detailed mainter | enance section. |
| **This page may be copied and used as part of the daily maintenance routine. | |
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| | |
| WildKat Maintenance Section 4-30 | |

D5 FHG'SECTION

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PART NAME INDEX

ECP DWU'GNGE VTQP KE 'NKHV'XCNXG'UY KVEJ DQZ(())

PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delay and error in processing purchase orders for the equipment in this manual.

1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.

2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.

3. The purchase order must clearly list the quantity of each part, the complete and correct part number, and the basic name of the part.

4. The manufacturer reserves the right to substitute parts where applicable.

 Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a purchase order.

6. The manufacturer reserves the right to change prices without prior notice.

NOTE: When ordering replacement decals, refer to the part numbers and descriptions listed in the safety section in the front of this manual.

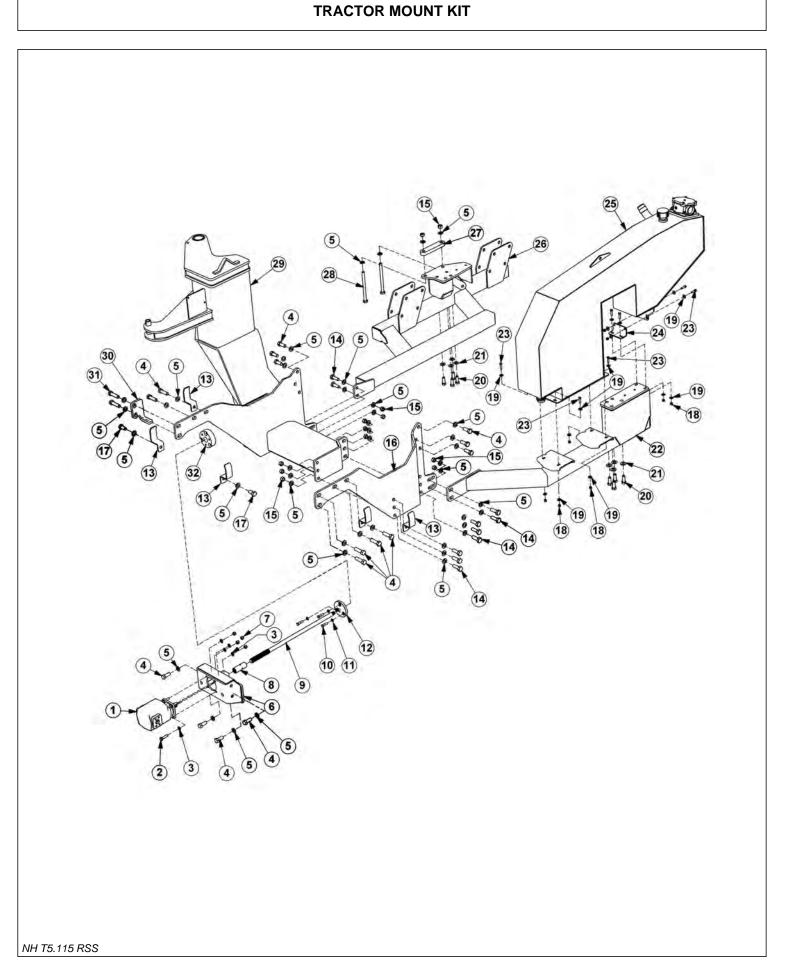


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

Tiger Corporation

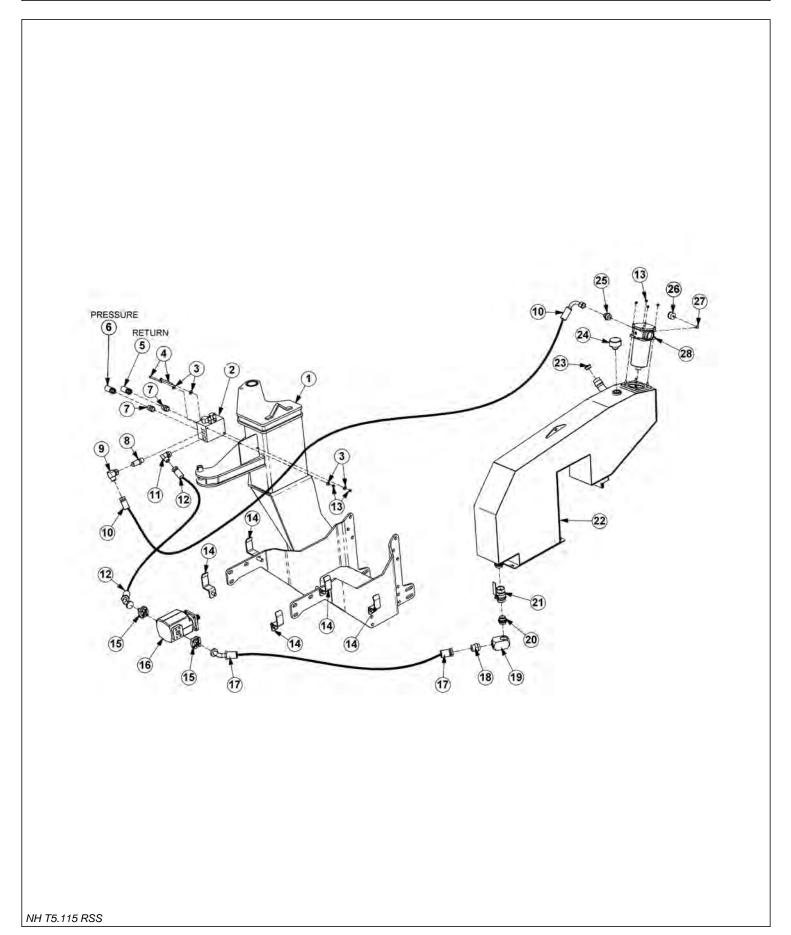
3301 N. Louise Ave. Sioux Falls, SD 57107 1-800-843-6849 1-605-336-7900



Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|----------------------------------|
| 1 | 23152 | 1 | PUMP,P350-1 3/4" GEAR |
| 2 | 21733 | 4 | CAPSCREW,1/2" X 2", NC |
| 3 | 06533004 | 8 | FLATWASHER,1/2",SAE,GR 8 |
| 4 | 31731 | 8 | CAPSCREW,20MM X 50MM,(2.5),10.9 |
| 5 | 33880 | 44 | FLATWASHER,3/4",GR 8,SAE |
| 6 | 06380076 | 1 | MNT,PUMP,NHT5.115 |
| 7 | 21727 | 4 | NYLOCK NUT,1/2", NC |
| 8 | 6T0375B | 1 | COUPLING,14 SPLINE,W/ZERK |
| 9 | 06420174 | 1 | DRV SHFT,32.63,LH,T5.115 |
| 10 | 6T2508 | 3 | CAPSCREW,12MM X 45MM(1.25 PITCH) |
| 11 | 27724 | 3 | LOCKWASHER,12MM |
| 12 | 06700043 | 1 | ADPTR,DRV SHFT,KUB,ASSY |
| 13 | 32382 | 5 | BRACKET,HOSE |
| 14 | 21833 | 10 | CAPSCREW,3/4" X 2-1/4", NC |
| 15 | 21825 | 10 | HEX NUT,3/4", NC |
| 16 | 06412229 | 1 | UPRIGHT,LH,T5.115 |
| 17 | 24860 | 2 | CAPSCREW,20MMX40MM(2.5P)10.9 |
| 18 | 21627 | 8 | NYLOCK NUT,3/8", NC |
| 19 | 22016 | 16 | FLATWASHER,3/8",GR8 |
| 20 | 06530531 | 8 | CAPSCREW,18MM X 50MM(1.5P)GR10.9 |
| 21 | 06533005 | 8 | FLATWASHER,18MM,GR10.9 |
| 22 | 06300353 | 1 | AXL BRC,LH,NH T5.115 |
| 23 | 21632 | 8 | CAPSCREW,3/8" X 1-1/2", NC |
| 24 | 06412268 | 1 | MNT,06380077 |
| 25 | 06700206 | 1 | TANK,RES,ASSY,T5.115 |
| 26 | 06300352 | 1 | AXL BRC,RH,NH T5.115,SC |
| 27 | 06402514 | 1 | BAR,AXLE BRC |
| 28 | 21847 | 2 | CAPSCREW,3/4" X 10", NC |
| 29 | 06300350 | 1 | MNFRM,NH T5.115 |
| 30 | 06412287 | 1 | STOP.OSS,RH,T5.115 |
| 31 | 24879 | 2 | CAPSCREW,20MM X 65MM2.5P,GR10.9 |
| 32 | 06420091 | 1 | SPACER, DRV SHFT, NHT4.85 |

TRACTOR MOUNT KIT - HYDRAULICS

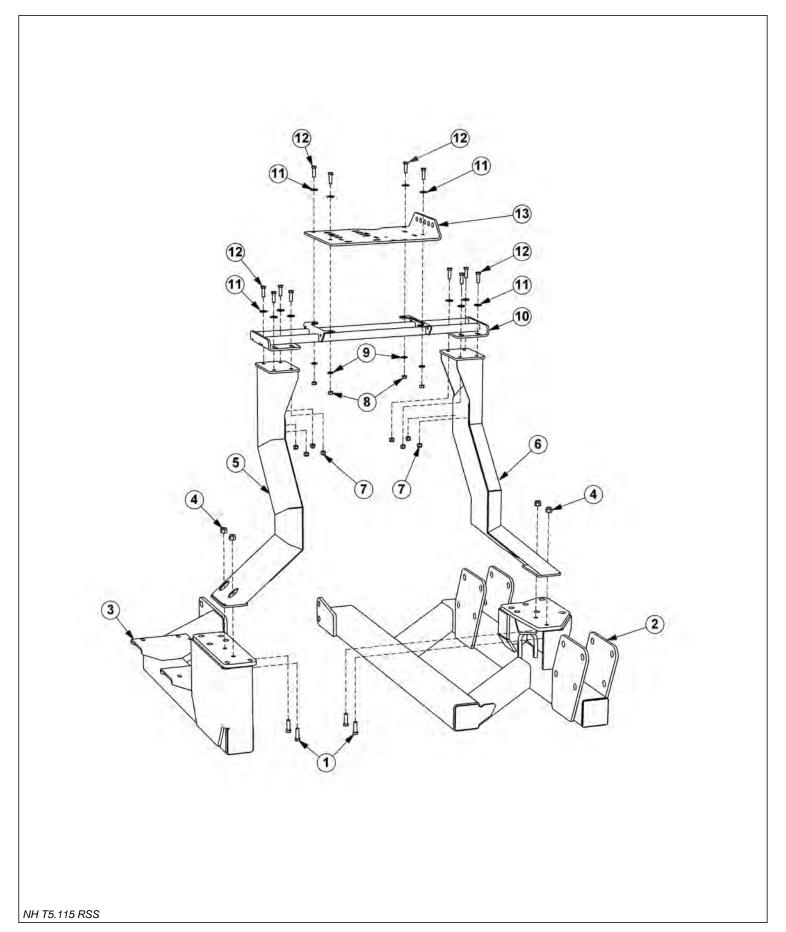


Continued...

| 1 MAINFRAME*REFER TO TRACTOR MOUNT KIT* 2 06510083 1 VALVE,BRAKE,SOL,3000PSI 3 22016 4 FLATWASHER,3/8",GR8 4 21644 2 CAPSCREW,3/8" X 5", NC 5 06500754 1 HOSE ,1" X 105" (RETURN FROM HEAD) 6 06500753 1 HOSE ,1" X 103" (PRESSURE TO HEAD) 7 33555 2 ADAPTER,1"MB X 1"MJ 8 32869 1 NIPPLE,MALE LONG,1" MOR X 1"MJ | |
|---|---|
| 3 22016 4 FLATWASHER,3/8",GR8 4 21644 2 CAPSCREW,3/8" X 5", NC 5 06500754 1 HOSE ,1" X 105" (RETURN FROM HEAD) 6 06500753 1 HOSE, 1" X 103" (PRESSURE TO HEAD) 7 33555 2 ADAPTER,1"MB X 1"MJ | |
| 4 21644 2 CAPSCREW,3/8" X 5", NC 5 06500754 1 HOSE ,1" X 105" (RETURN FROM HEAD) 6 06500753 1 HOSE, 1" X 103" (PRESSURE TO HEAD) 7 33555 2 ADAPTER,1"MB X 1"MJ | |
| 5 06500754 1 HOSE ,1" X 105" (RETURN FROM HEAD) 6 06500753 1 HOSE ,1" X 103" (PRESSURE TO HEAD) 7 33555 2 ADAPTER,1"MB X 1"MJ | |
| 6 06500753 1 HOSE, 1" X 103" (PRESSURE TO HEAD) 7 33555 2 ADAPTER,1"MB X 1"MJ | |
| 7 33555 2 ADAPTER,1"MB X 1"MJ | |
| | |
| 8 32869 1 NIPPLE,MALE LONG,1" MOR X 1"MJ | |
| | |
| 9 33259 1 ELBOW,1"MJ X 1"FJX 90° | |
| 10 06500700 1 HOSE,1" X 180" | |
| 11 34117 1 ELBOW,1"MB X 1"MJ,FORGED | |
| 12 06500274 1 HOSE,1" X 74" | |
| 13 21627 6 NYLOCK NUT,3/8", NC | |
| 14 BRACKET,HOSE*REFER TO TRACTOR MOUNT KIT* | |
| 15 TF4852 2 KIT,FLANGE,#20 | |
| 16 23152 1 PUMP | |
| 17 06500802 1 HOSE,1 1/2" X 107" | |
| 18 34710 1 ADAPTER,1 1/2" ORB X 1 1/2" MJ | |
| 19 06503084 1 ELBOW,1 1/2" FB X 1 1/2" FB | |
| 20 06503083 1 ADAPTER,1 1/2" ORB X 1 1/2" ORB | |
| 21 34309 1 BALL VALVE,1 1/2" FOR | |
| 22 HYDRAULIC TANK*REFER TO TRACTOR MOUNT KIT | * |
| 23 06505127 1 PLUG,SAE 3/4" | |
| 24 06505077 1 CAP,BREATHER,O-RING | |
| 25 34064 1 ADAPTER,1 1/4MOR X 1MJ | |
| 266T06491FILTER GAUGE | |
| 27 TF4888 1 STREET ELBOW,1/8 X 90 | |
| 28 06505044 1 FLTR ASSY,IN-TANK CPLT,SAE10MP | |

NH T5.115 RSS

AXLE BRACES TO LIFT VALVE

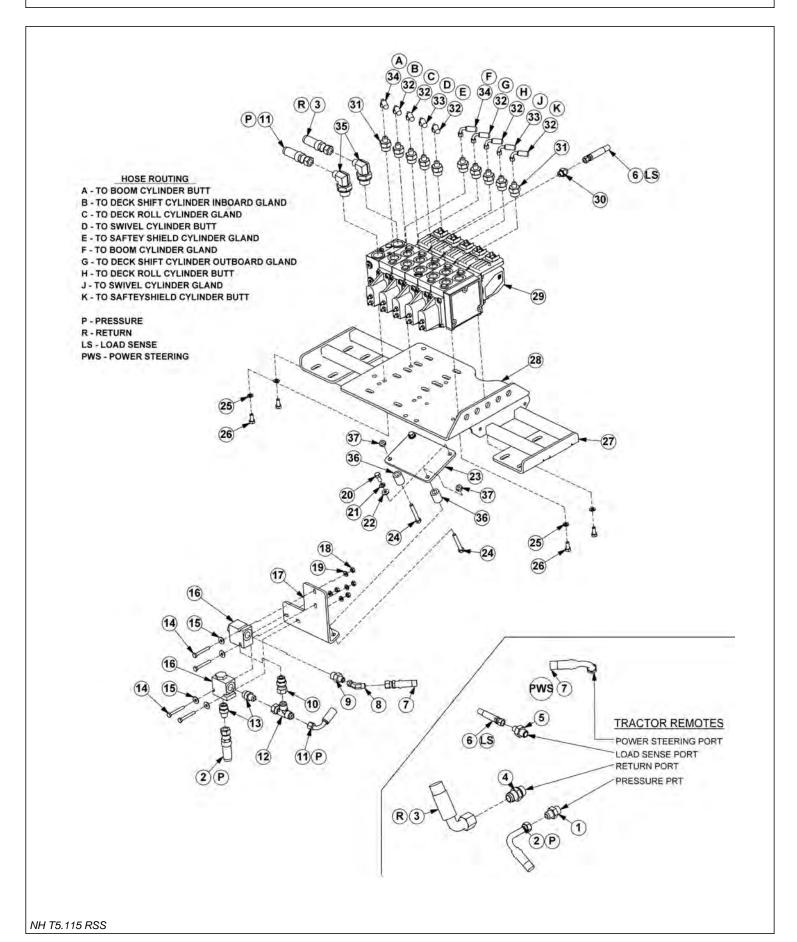


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| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 21681 | 4 | CAPSCREW, 7/16" X 1-1/2", NC |
| 2 | | - | LH AXLE BRACE *SEE TRACTOR MOUNT PAGE* |
| 3 | | - | RH AXLE BRACE *SEE TRACTOR MOUNT PAGE* |
| 4 | 21727 | 4 | NYLOCK NUT, 1/2", NC |
| 5 | 06340054 | 1 | VLV MNT, RH, T5.115 |
| 6 | 06340053 | 1 | VLV MNT, LH, T5.115 |
| 7 | 21627 | 8 | NYLOCK NUT, 3/8", NC |
| 8 | 21625 | 4 | HEX NUT, 3/8", NC |
| 9 | 21988 | 4 | LOCKWASHER, 3/8" |
| 10 | 06340055 | 1 | VLV MNT, T5.115 |
| 11 | 22016 | 12 | FLATWASHER, 3/8", GR8 |
| 12 | 21631 | 12 | CAPSCREW, 3/8" X 1 1/4", NC, GR8 |
| 13 | 34622 | 1 | PLATE, VALVE, REAR MNT |

NH T5.115 RSS

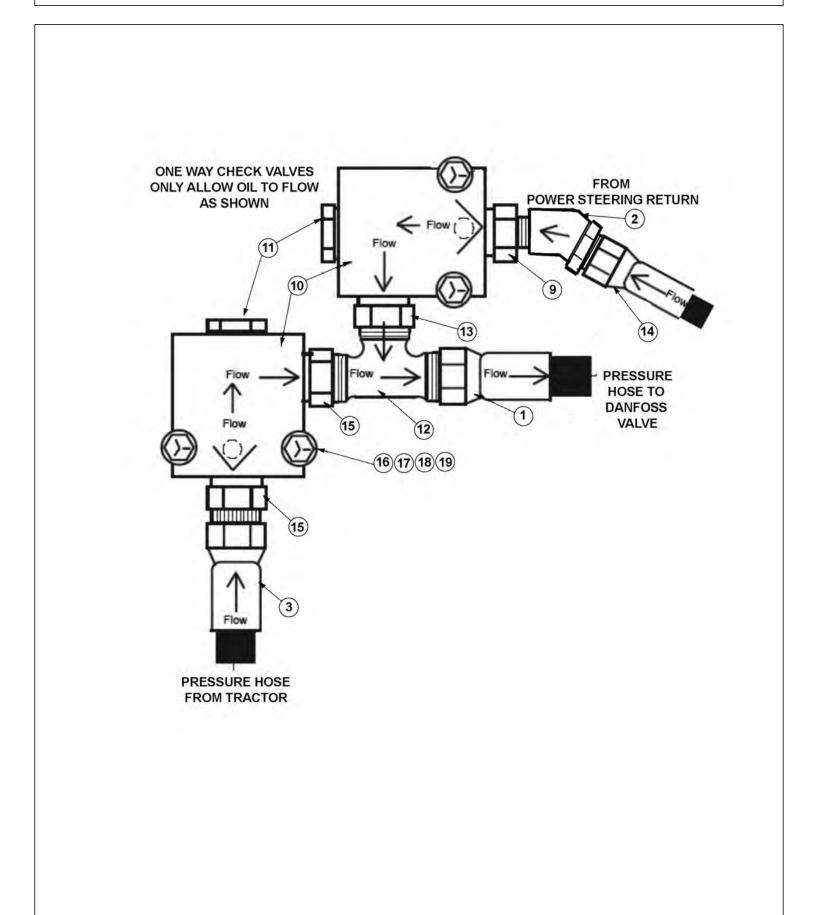
ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT



Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------------|
| 1 | 33463 | 1 | ADAPTER, 22MM ORB X 1/2 " MJ |
| 2 | 06500803 | 1 | HOSE, 1/2" X 14" |
| 3 | 06500339 | 1 | HOSE, 1/2" X 35" |
| 4 | 06503012 | 1 | ADAPTER, 27MM ORB X 3/4" MJ |
| 5 | 06503002 | 1 | ADAPTER, 12MM MB X 5/16" MJ |
| 6 | 06500400 | 1 | HOSE, 1/4° X 34" |
| 7 | 06500804 | 1 | HOSE, 3/8" X 62" |
| 8 | 06503172 | 1 | ELBOW, 3/8 "MJ X 3/8" FJX X 45° |
| 9 | 33271 | 1 | ADAPTER, 1/2" MOR X 3/8" MJ |
| 10 | 06503019 | 1 | ADAPTER, 1/2" MB X 1/2" FJX |
| 11 | 06500122 | 1 | HOSE, 3/8" X 30" |
| 12 | 6T3992 | 1 | RUN TEE, 1/2" MJ X 1/2" FJX X 1/2" MJ |
| 13 | 33528 | 2 | ADAPTER, 1/2" MB X 1/2" MJ |
| 14 | 21534 | 4 | CAPSCREW, 1/4" X 2", NC |
| 15 | 22014 | 8 | FLATWASHER, 1/4" |
| 16 | | - | *SEE HYDRAULIC CHECK VALVE PAGE* |
| 17 | 06410171 | 1 | PLATE,MNT,VLV,TSA |
| 18 | 21525 | 6 | HEX NUT, 1/4", NC |
| 19 | 21986 | 4 | LOCKWASHER, 1/4" |
| 20 | 27508 | 2 | CAPSCREW, 8MM X 20MM (1.25) |
| 21 | 6T2619 | 2 | LOCKWASHER, 8MM |
| 22 | 34948 | 2 | FLATWASHER, 8MM |
| 23 | 06402606 | 1 | ADAPTOR PLATE, MNT, VLV, T5.115 |
| 24 | 21585 | 2 | CAPSCREW, 5/16" X 2-1/4", NC |
| 25 | 21987 | 4 | LOCKWASHER, 5/16" |
| 26 | 21579 | 4 | CAPSCREW, 5/16" X 3/4", NC |
| 27 | | - | *SEE LIFT VLV MNT TO AXLE BRC PAGE* |
| 28 | | - | *SEE LIFT VLV MNT TO AXLE BRC PAGE* |
| 29 | 06502165 | 1 | VLV,5SP,DF,PVEA,WILDKAT,CNBS |
| 30 | 33392 | 1 | ADAPTER, 5/16" MB X 3/8" MJ |
| 31 | 32807 | 10 | ADAPTER, 5/8" MB X 3/8" MJ |
| 32 | 06500687 | 6 | HOSE, 1/4" X 268" |
| 33 | 06500697 | 2 | HOSE, 1/4" X 210" |
| 34 | 06500688 | 2 | HOSE, 1/4" X 288" |
| 35 | 33294 | 2 | ELBOW, 3/4" MB X 1/2" MJ |
| 36 | 27082B | 2 | SPACER |
| 37 | 21577 | 2 | NYLOCK NUT, 5/16" NC |

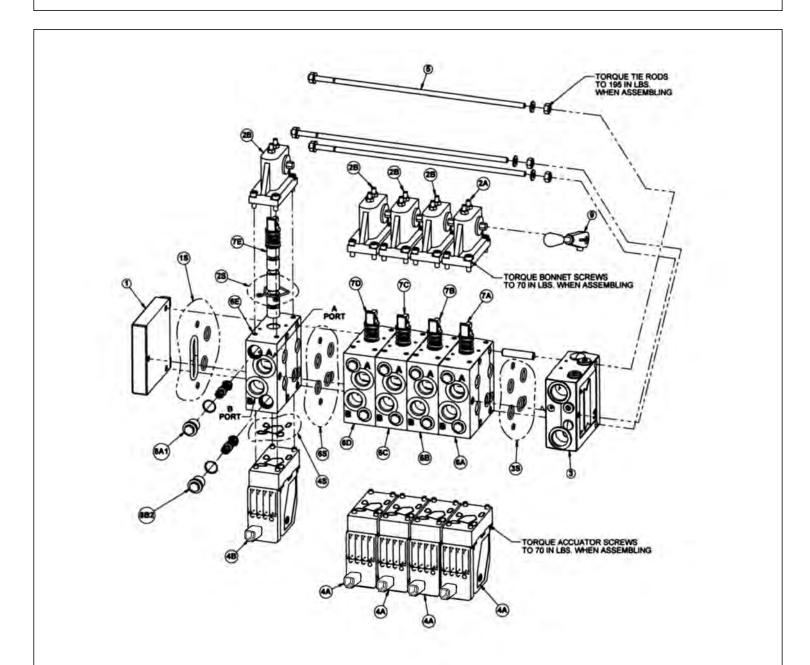
CHECK VALVES



NH T5.115 RSS

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------|
| 1 | 06500122 | 1 | HOSE, 1/2" X 30" |
| 2 | 06503172 | 1 | ELBOW, 3/8" MB X 3/8" MJ |
| 3 | 06500803 | 1 | HOSE, 1/2" X 14" |
| 9 | 33271 | 1 | ADAPTER |
| 10 | 06502005 | 2 | VALVE RELIEF BODY |
| 11 | 06502006 | 2 | CHECK VALVE CARTRIDGE |
| 12 | 6T3992 | 1 | ADAPTER, TEE |
| 13 | 06503019 | 1 | ADAPTER |
| 14 | 06500804 | 1 | HOSE, 3/8" X 62" |
| 15 | 33528 | 2 | ADAPTER |
| 16 | 21534 | 4 | BOLT |
| 17 | 21525 | 4 | NUT |
| 18 | 22014 | 4 | FLATWASHER |
| 19 | 21986 | 4 | LOCKWASHER |
| | | | |

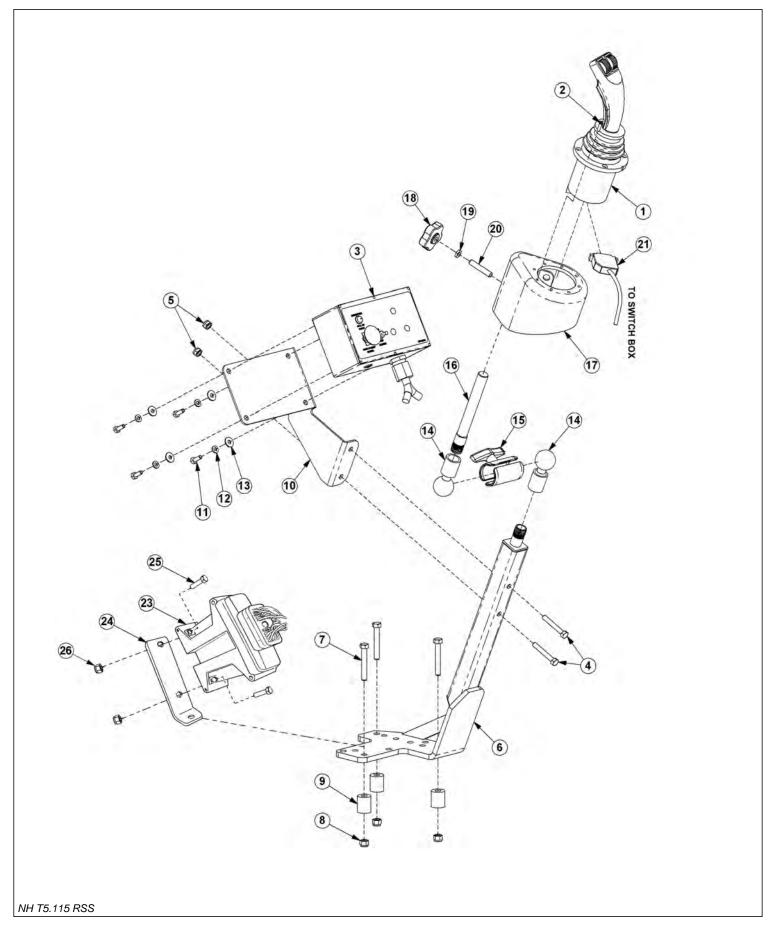
CANBUS LIFT VALVE BREAKDOWN



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------------|----------|------|-----------------------|
| 1 | 06502074 | 1 | END PLATE |
| 1 S | 06505013 | 1 | END PLATE SEAL KIT |
| 2 | * | 5 | BONNET |
| 2S | 06505042 | 1 | BONNET SEAL KIT |
| 2A | 33459 | 1 | MAIN BOOM BONNET |
| 2B | 42197 | 1 | SECONDARY BOOM BONNET |
| | 42197 | 1 | DECK ROLL BONNET |
| | 42197 | 1 | BOOM SWIVEL BONNET |
| | 42197 | 1 | DECK SHIELD BONNET |
| | | | |

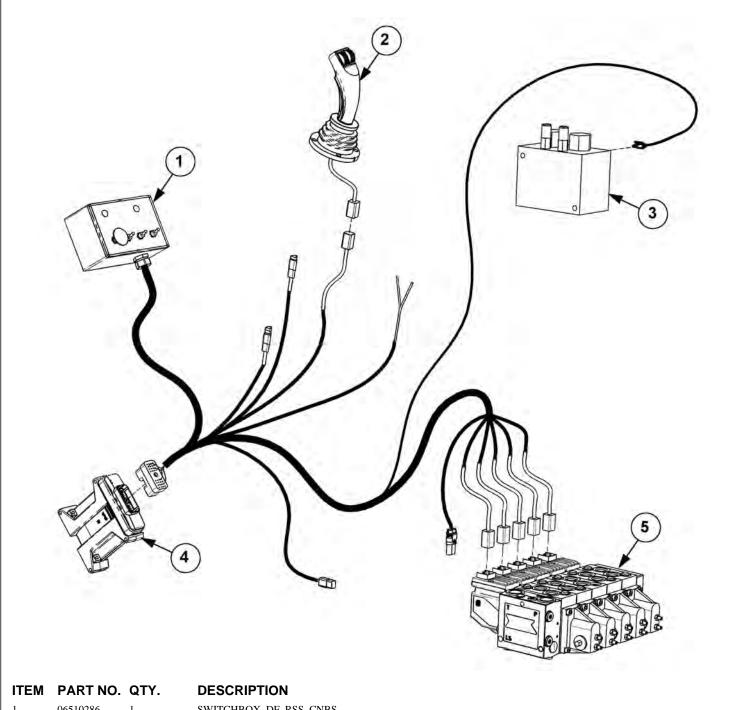
| | ITEM | PART NO. | QTY. | DESCRIPTION |
|----|------|----------|------|------------------------------------|
| | 3 | 06502075 | 1 | INLET SECTION |
| | 3S | 06505013 | 1 | INLET SECTION SEAL KIT |
| | 4 | * | 5 | ELECTRONIC ACCUATOR |
| | 4S | 34030 | 1 | ELECTRONIC ACCUATOR SEAL KIT |
| | 4A | 06502067 | 1 | MAIN BOOM ELECTRONIC ACCUATOR |
| | | 06502067 | 1 | SECONDARY BOOM ELECTRONIC ACCUATOR |
| | | 06502067 | 1 | DECK ROLL ELECTRONIC ACCUATOR |
| | | 06502067 | 1 | BOOM SWIVEL ELECTRONIC ACCUATOR |
| | 4B | 06502072 | 1 | DECK SHIELD ELECTRONIC ACCUATOR |
| | 5 | 42002 | 1 | TIE BOLT KIT |
| | 6 | * | 5 | SECTION |
| | 6S | 06505013 | 1 | SECTION SEAL KIT |
| | 6A | 42698 | 1 | MAIN BOOM SECTION |
| | 6B | 42698 | 1 | SECONDARY BOOM SECTION |
| | 6C | 42698 | 1 | DECK ROLL SECTION |
| | 6D | 42698 | 1 | BOOM SWIVEL SECTION |
| | 6E | 42698 | 1 | SHIELD SECTION |
| | 7 | * | 5 | SPOOL |
| | 7A | 42697 | 1 | MAIN BOOM SPOOL |
| | 7B | 42697 | 1 | SECONDARY BOOM SPOOL |
| | 7C | 4229806 | 1 | DECK ROOM BOOM SPOOL |
| | 7D | 06502073 | 1 | BOOM SWIVEL SPOOL |
| | 7E | 42201 | 1 | BECK SHIELD SPOOL |
| | 8 | * | 10 | ANTI CAV/SHOCK RELIEF |
| | 8A1 | 06502071 | 1 | MAIN BOOM A PORT RELIEF |
| | 8A2 | 06502069 | 1 | MAIN BOOM B PORT RELIEF |
| | 8B1 | 42650 | 1 | SECONDARY BOOM A PORT RELIEF |
| | 8B2 | 06502070 | 1 | SECONDARY BOOM B PORT RELIEF |
| | 8C1 | 42296 | 1 | DECK ROLL A PORT RELIEF |
| | 8C2 | 42295 | 1 | DECK ROLL B PORT RELIEF |
| | 8D1 | 42650 | 1 | BOOM SWIVEL A PORT RELIEF |
| | 8D2 | 42650 | 1 | BOOM SWIVEL B PORT RELIEF |
| | 8E1 | 06502072 | 1 | DECK SHIELD A PORT RELIEF |
| | 8E2 | 06502072 | 1 | DECK SHIELD B PORT RELIEF |
| | 9 | 33459 | 1 | HANDLE |
| L. | | | | |

JOYSTICK AND SWITCHBOX MOUNT



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|-----------|------|--------------------------------------|
| 1 | 06510285 | 1 | JOYSTICK |
| 2 | 32829 | 4 | SCREW, MACHINE, 10-32 X 3/4", FLATHD |
| 3 | 067324: 8 | 1 | SWITCH BOX |
| 4 | 21585 | 2 | CAPSCREW,5/16" X 2-1/4",NC |
| 5 | 21577 | 2 | NYLOCK NUT,5/16",NC |
| 6 | 06340011 | 1 | MNT,STND,JOYSTICK |
| 7 | 21639 | 3 | CAPSCREW,3/8" X 3-1/4",NC |
| 8 | 21627 | 3 | NYLOCK NUT,3/8",NC |
| 9 | 41794 | 3 | SPACER |
| 10 | 06340015 | 1 | SWITCH BOX MNT |
| 11 | 21529 | 4 | CAPSCREW,1/4" X 3/4",NC |
| 12 | 21986 | 4 | LOCKWASHER,1/4" |
| 13 | 22014 | 4 | FLATWASHER,1/4" |
| 14 | 06520041 | 2 | MOUNT,RAM,BALL,1-1/2" |
| 15 | 06520020 | 1 | MOUNT,RAM,ARM |
| 16 | 06340010 | 1 | ROD,1/2"NPT X 7" |
| 17 | 35033 | 1 | CAN, JOYSTICK, ASSY |
| 18 | 35204 | 1 | KNOB,3/8",NC,INSERT |
| 19 | 35206 | 1 | HEX NUT,JAMB,3/8",NC |
| 20 | 35205 | 1 | SETSCREW,3/8" X 2",NC,KNURLED |
| 21 | 33693 | 1 | CBL,EXT,4FT,JOYSTICK |
| 23 | 06510287 | 1 | CONTROLLER, SWBX CNBS |
| 24 | 06411524 | 1 | MNT, CNTRLLR, CNBS |
| 25 | 21534 | 2 | CAPSCREW, 1/4" X 2" NC |
| 26 | 21527 | 2 | NYLOCK NUT, 1/4" |
| | | | |

CANBUS JOYSTICK CONTROL



| 1 | 06510286 | 1 |
|---|----------|---|
| 2 | 06510285 | 1 |
| 3 | 06510083 | 1 |
| 4 | 06510287 | 1 |
| 5 | 06502165 | 1 |

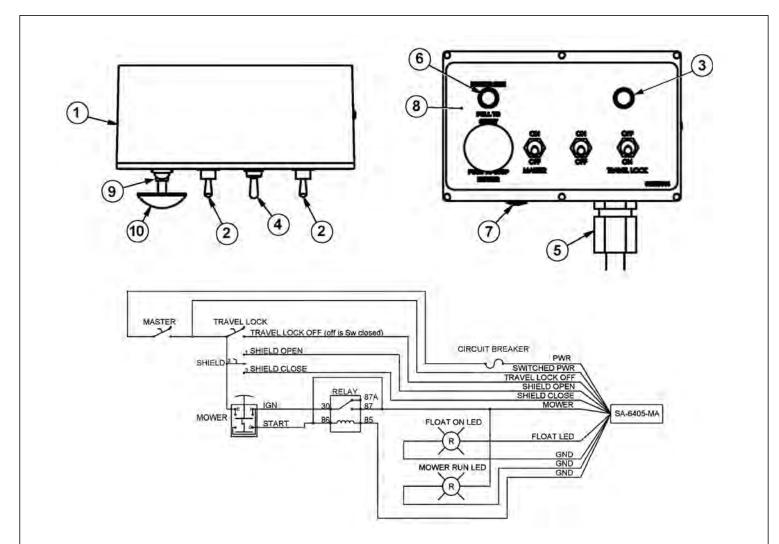
SWITCHBOX, DF, RSS, CNBS JOYSTICK, RH, DF, CNBS

1 VALVE, BRAKE, SOL, 3000PSI

1 CONTROLLER, SWBX, CNBS

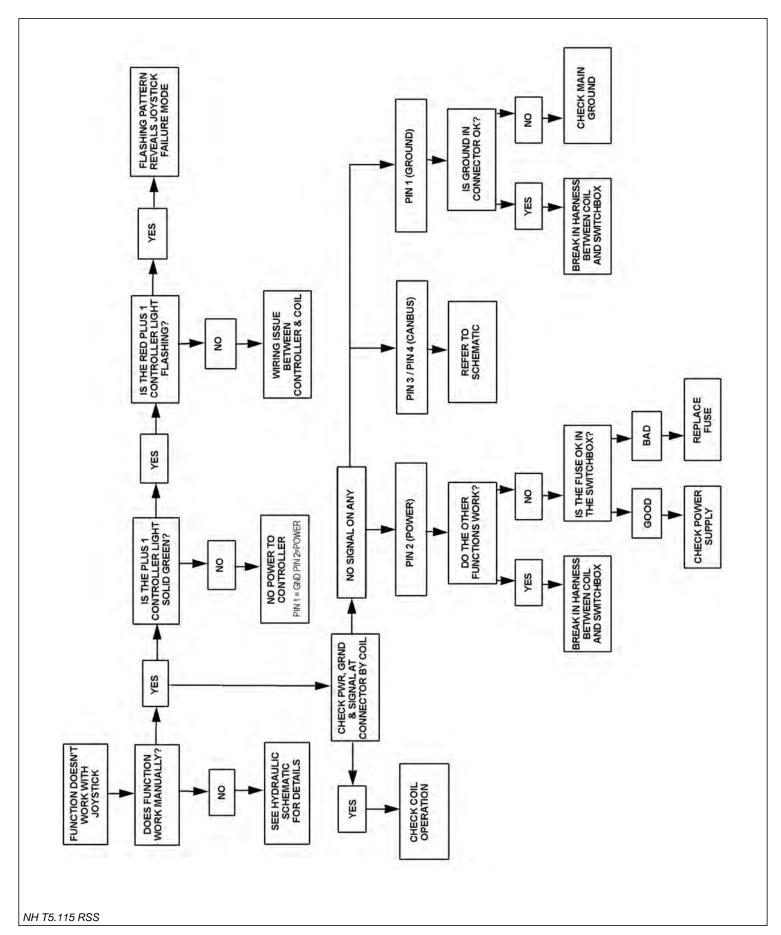
06502165 1 VALVE, 5SPL, DF, RSS, CNBS

CANBUS ELECTRONIC LIFT VALVE SWITCHBOX

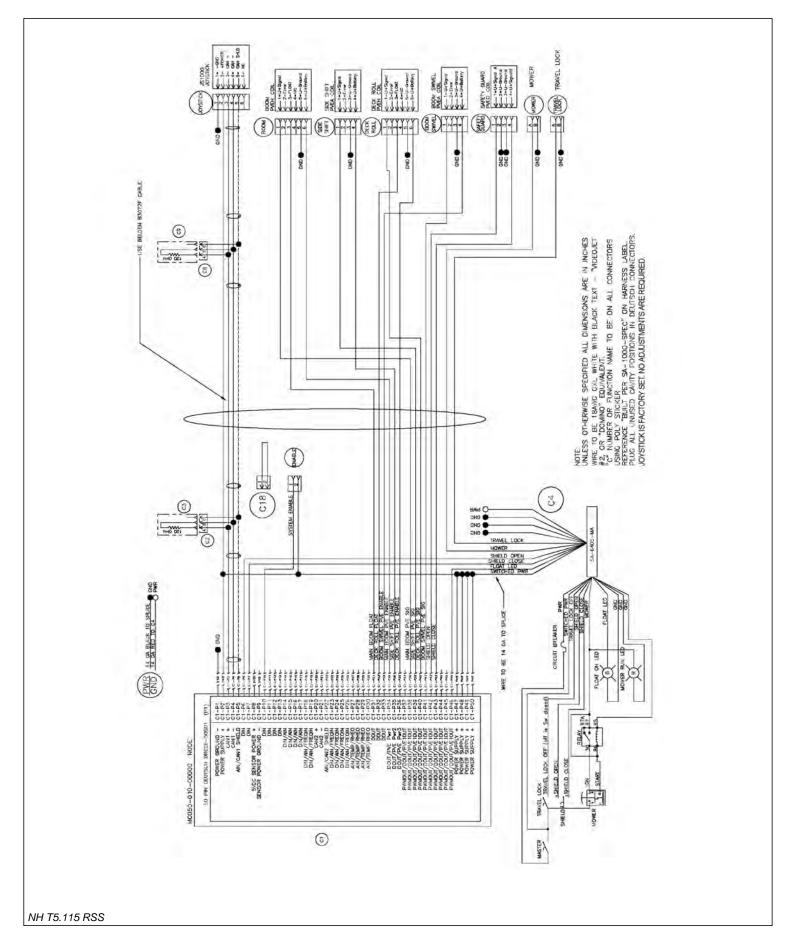


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------|
| 1 | 06502168 | 1 | SWITCHBOX ASSY |
| 2 | 06502171 | 2 | SWITCH, MASTER, TRAVEL LOCK |
| 3 | 06502172 | 1 | INDICATOR LIGHT, FLOAT, GREEN |
| 4 | 06502170 | 1 | SWITCH, SHIELD |
| 5 | 34540 | 1 | STRAIN RELIEF, 3/4" BLACK |
| 6 | 06502174 | 1 | INDICATOR LIGHT, ON, RED |
| 7 | 06502169 | 1 | CIRCUIT BREAKER, 15A |
| 8 | 06550044 | 1 | LABEL, SWBX |
| 9 | 35226 | 1 | SWITCH, MOWER, COLEHERSEE |
| 10 | 02964063 | 1 | KNOB, RED |

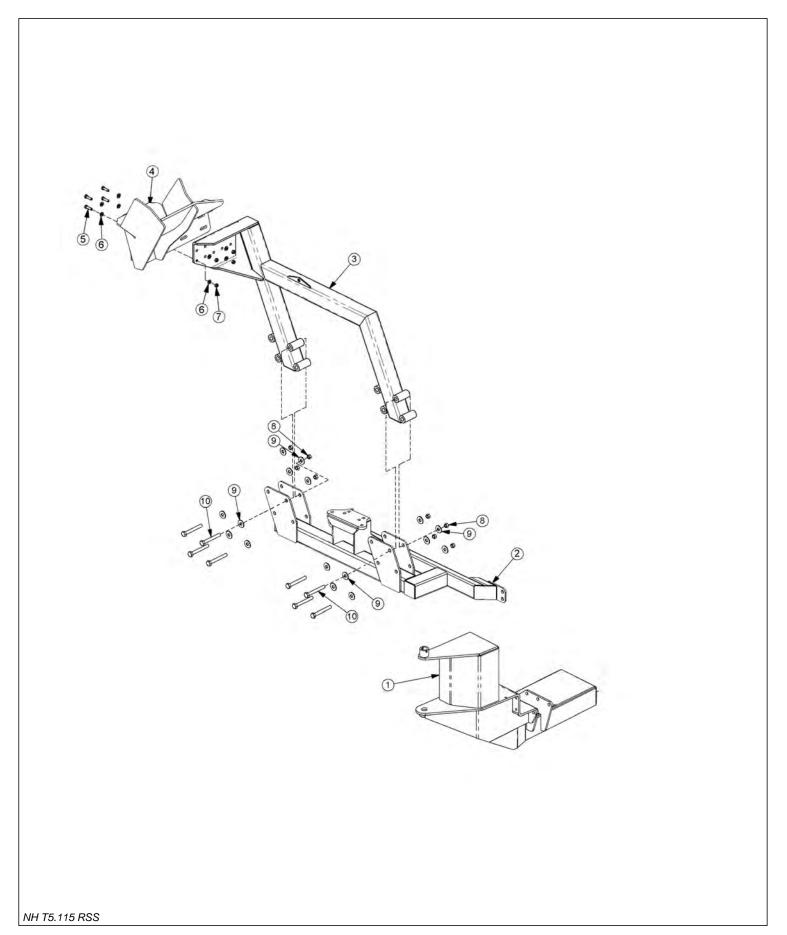
CANBUS JOYSTICK ELECTRICAL TROUBLESHOOTING



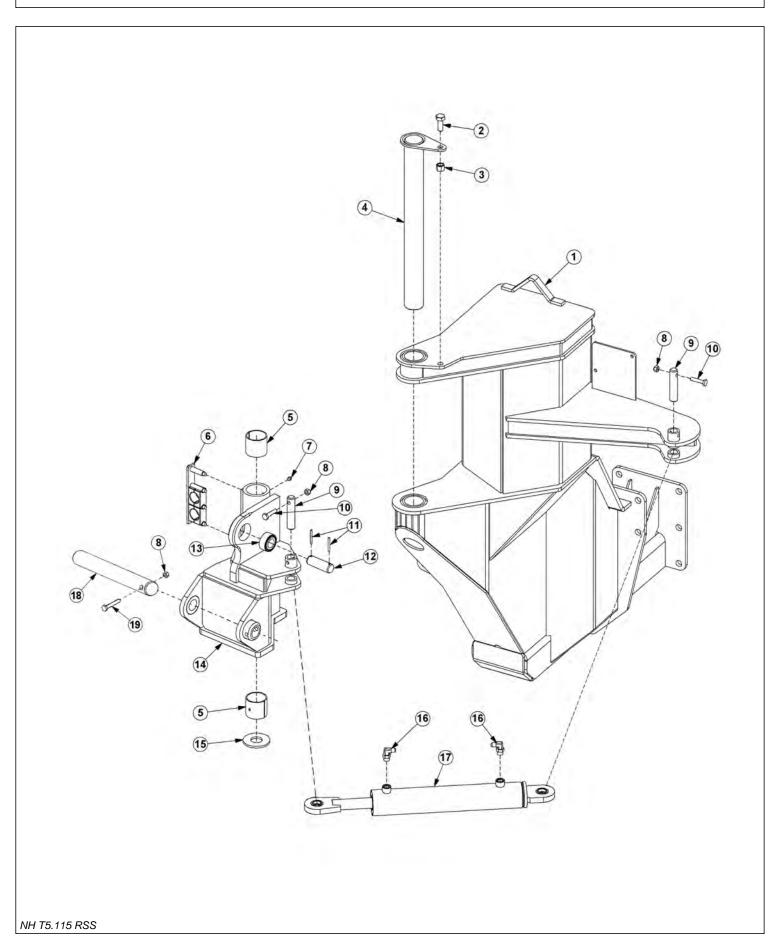
CANBUS ELECTRONIC SCHEMATIC



SINGLE COLUMN BOOMREST



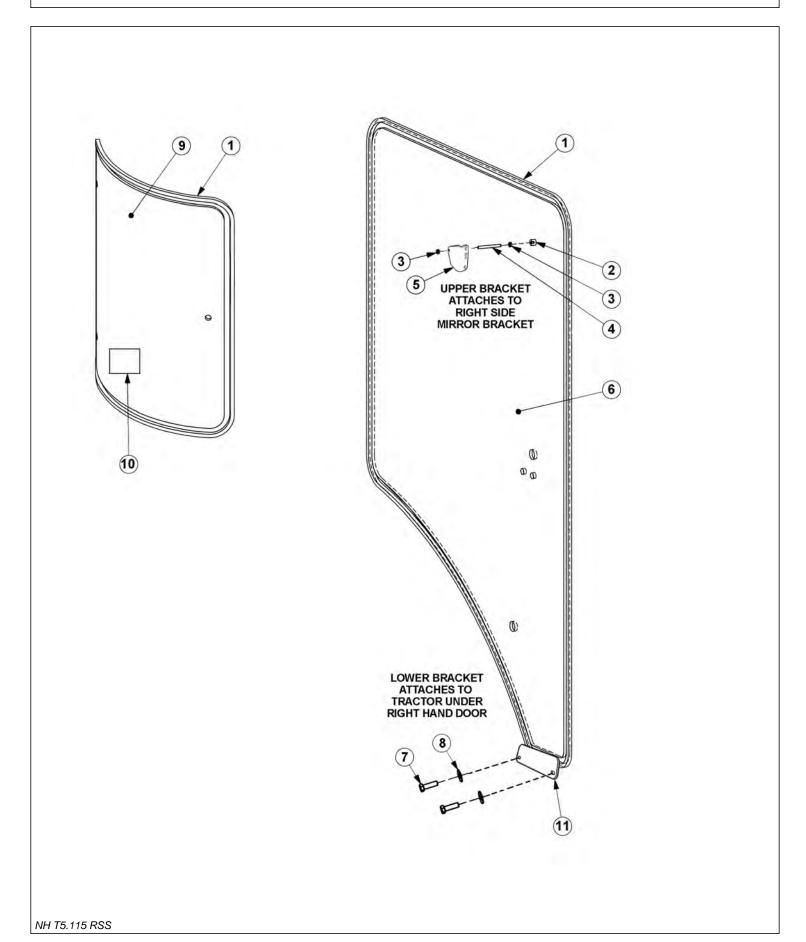
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | | - | MAINFRAME *REFER TO TRACTOR MOUNT KIT PAGE |
| 2 | | - | AXLE BRACE, RH, *REFER TO TRACTOR MOUNT KIT* |
| 3 | 06310074 | 1 | BOOMREST,SINGLE COLUMN |
| 4 | 06310116 | 1 | BOOMREST ADAPTER |
| 5 | 21725 | 4 | HEX NUT,1/2",NC |
| 6 | 06533004 | 8 | FLATWASHER,1/2" SAE, GR8 |
| 7 | 21733 | 4 | CAPSCREW,1/2" X 2",NC |
| 8 | 21825 | 8 | HEX NUT,3/4",NC |
| 9 | 22021 | 16 | FLATWASHER,3/4" |
| 10 | 21843 | 2 | CAPSCREW,3/4" X 6",NC |



BOOM MOUNT KIT

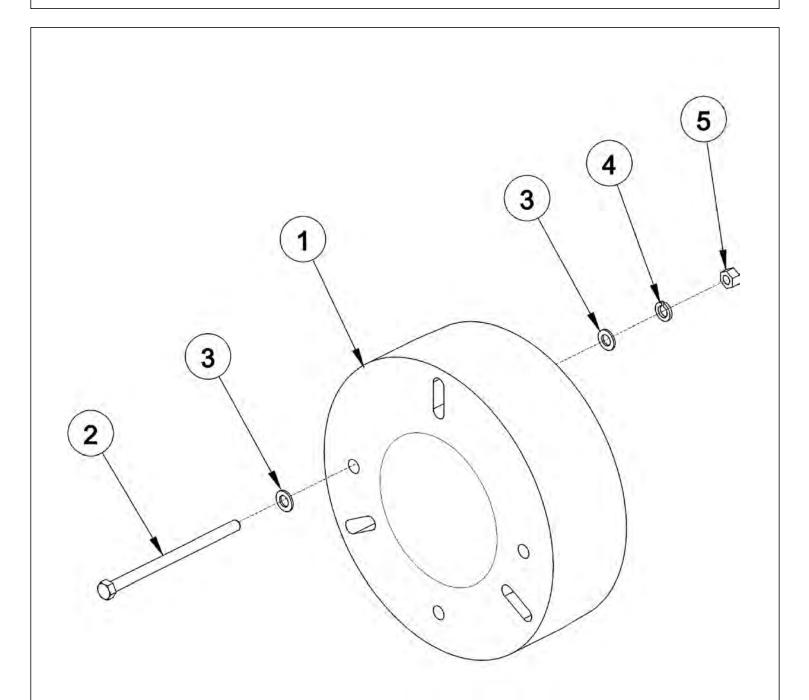
| 1 MAINFRAME *REFER TO TRACTOR MOUNT KIT 2 21782 1 CAPSCREW,5/8" X 1-3/4",NC 3 21777 1 NYLOCK NUT,5/8",NC 4 32381 1 PIN,CAPPED 5 32322 2 BUSHING 6 06505185 1 CLAMP KIT 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" 18 06420022 1 PIN, 1/5" X 12" | ITEM | PART NO. | QTY. | DESCRIPTION |
|--|------|----------|------|---------------------------------------|
| 3 21777 1 NYLOCK NUT,5/8",NC 4 32381 1 PIN,CAPPED 5 32322 2 BUSHING 6 06505185 1 CLAMP KIT 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 1 | | - | MAINFRAME *REFER TO TRACTOR MOUNT KIT |
| 4 32381 1 PIN,CAPPED 5 32322 2 BUSHING 6 06505185 1 CLAMP KIT 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 2 | 21782 | 1 | CAPSCREW,5/8" X 1-3/4",NC |
| 5 32322 2 BUSHING 6 06505185 1 CLAMP KIT 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 BEARING,WASHER 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 3 | 21777 | 1 | NYLOCK NUT,5/8",NC |
| 6 06505185 1 CLAMP KIT 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 4 | 32381 | 1 | PIN,CAPPED |
| 7 6T3211 2 GREASE ZERK,1/8"NPT 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 5 | 32322 | 2 | BUSHING |
| 8 21677 3 NYLOCK NUT,7/16",NC 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 6 | 06505185 | 1 | CLAMP KIT |
| 9 32380 2 PIN,1" 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 7 | 6T3211 | 2 | GREASE ZERK,1/8"NPT |
| 10 21683 2 CAPSCREW,7/16" X 2",NC 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 8 | 21677 | 3 | NYLOCK NUT,7/16",NC |
| 11 TB1023 2 ROLL PIN 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 9 | 32380 | 2 | PIN,1" |
| 12 06420100 1 PIN,1-1/4" 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 10 | 21683 | 2 | CAPSCREW,7/16" X 2",NC |
| 13 - SPHERICAL BEARING *NOT FOR SALE 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 11 | TB1023 | 2 | ROLL PIN |
| 14 06700185 1 SWIVEL ASSEMBLY 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 12 | 06420100 | 1 | PIN,1-1/4" |
| 06310150 1 SWIVEL WELDMENT 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 13 | | - | SPHERICAL BEARING *NOT FOR SALE |
| 15 06520250 1 BEARING,WASHER 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | 14 | 06700185 | 1 | SWIVEL ASSEMBLY |
| 16 32810 2 ADAPTER,ELBOW 17 06501029 1 CYLINDER,3" X 13.88" | | 06310150 | 1 | SWIVEL WELDMENT |
| 17 06501029 1 CYLINDER,3" X 13.88" | 15 | 06520250 | 1 | BEARING,WASHER |
| | 16 | 32810 | 2 | ADAPTER,ELBOW |
| 18 06420022 1 PIN. 1/5" X 12" | 17 | 06501029 | 1 | CYLINDER,3" X 13.88" |
| | 18 | 06420022 | 1 | PIN, 1/5" X 12" |
| 19 21688 1 CAPSCREW, 7/16" X 3-1/4" | 19 | 21688 | 1 | CAPSCREW, 7/16" X 3-1/4" |

POLYCARBONATE SAFETY SCREEN



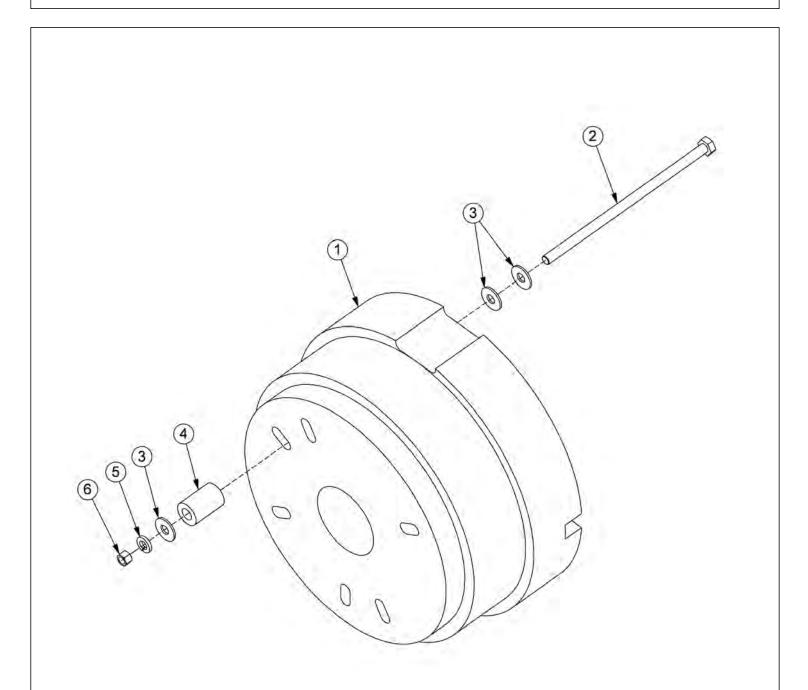
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------------|
| 1 | 31965 | 23 | TRIMLOCK (IN FEET) |
| 2 | 33477 | 1 | ISOLATOR |
| 3 | 21575 | 2 | HEX NUT,5/16",NC |
| 4 | 33478 | 1 | ROD, THREADED, 5/16" X 3" |
| 5 | 06410396 | 1 | BRACKET, TOP, SAFETY SCREEN |
| 6 | 06490051 | 1 | POLYCARBONATE, DOOR, RH |
| 7 | 23113 | 2 | CAPSCREW, 10MM X 30MM |
| 8 | 22016 | 2 | FLATWASHER,3/8" |
| 9 | 06490052 | 1 | POLYCARBONATE, REAR, T5 95-115 |
| 10 | 22645 | 1 | DECAL |
| 11 | 06402536 | 1 | BRACKET,LOWER, SFTY SCRN T4.85 |

WHEEL WEIGHT (500 LB)



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------|
| 1 | 30687 | 1 | 500# WHEEL WEIGHT |
| 2 | 21956 | 4 | CAPSCREW,3/4" X 13",NC |
| 3 | 22021 | 8 | FLATWASHER,3/4" |
| 4 | 21993 | 4 | LOCKWASHER,3/4" |
| 5 | 21825 | 4 | HEX NUT,3/4",NC |
| | | | |

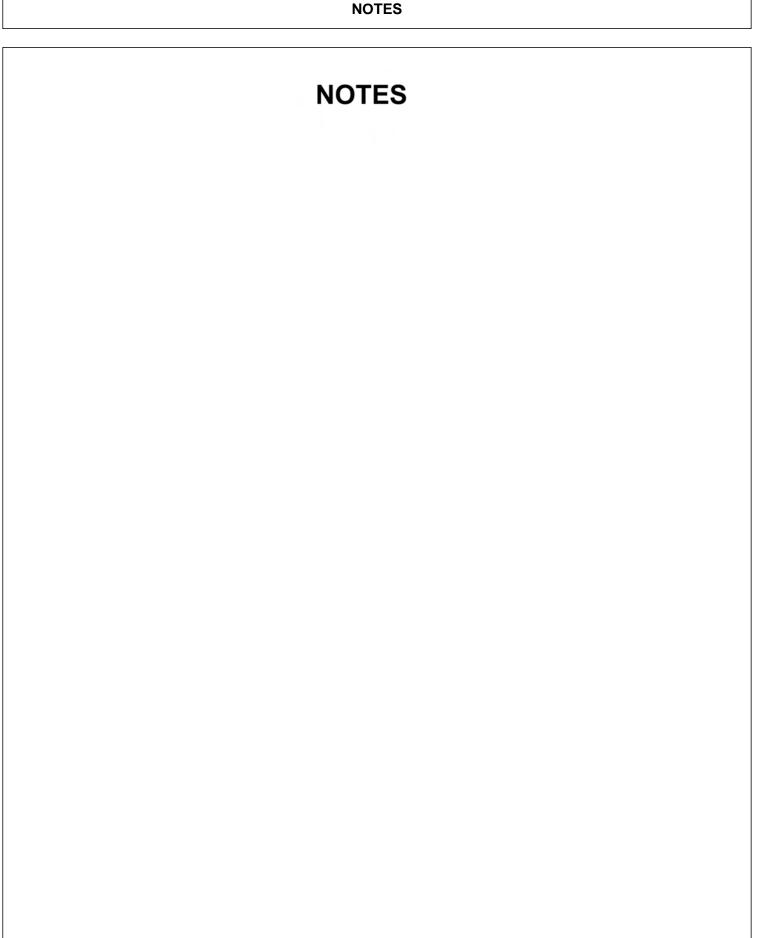
OPTIONAL WHEEL WEIGHT (1300 LB)



| ITEM | PART | NO. | QTY. |
|------|------|-----|------|
|------|------|-----|------|

DESCRIPTION

| SAL |
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COMMON REAR STOW SIDE

PARTS SECTION

Common Section 6-1

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PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delay and error in processing purchase orders for the equipment in this manual.

1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.

2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.

3. The purchase order must clearly list the quantity of each part, the complete and correct part number, and the basic name of the part.

4. The manufacturer reserves the right to substitute parts where applicable.

 Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a purchase order.

6. The manufacturer reserves the right to change prices without prior notice.

NOTE: When ordering replacement decals, refer to the part numbers and descriptions listed in the safety section in the front of this manual.

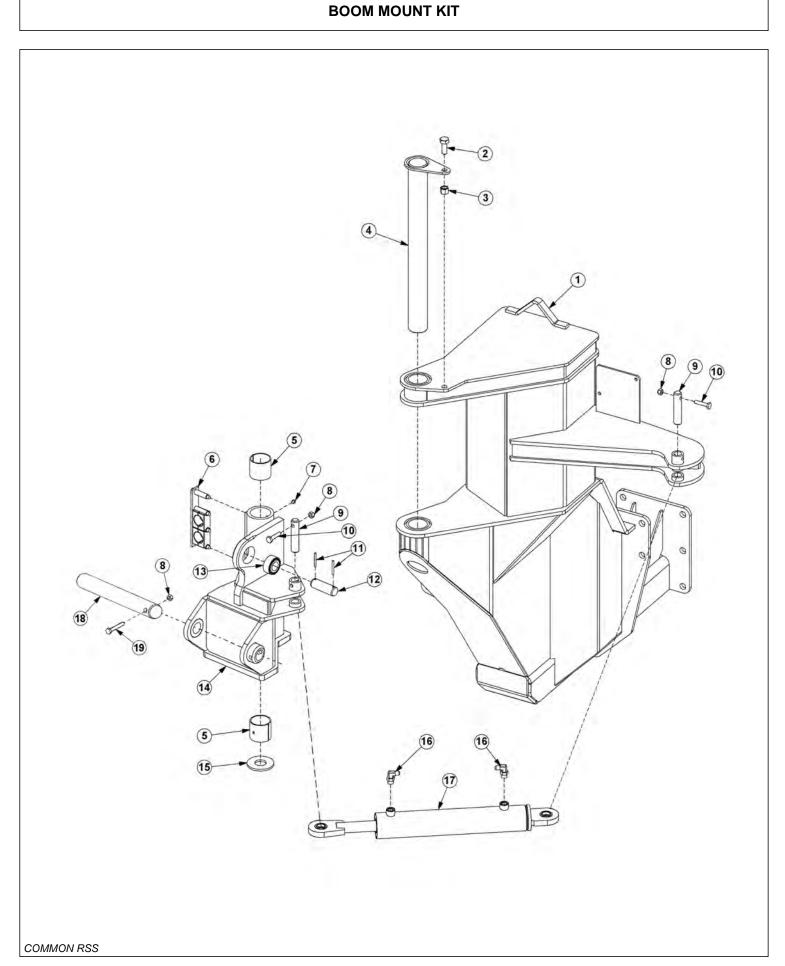


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

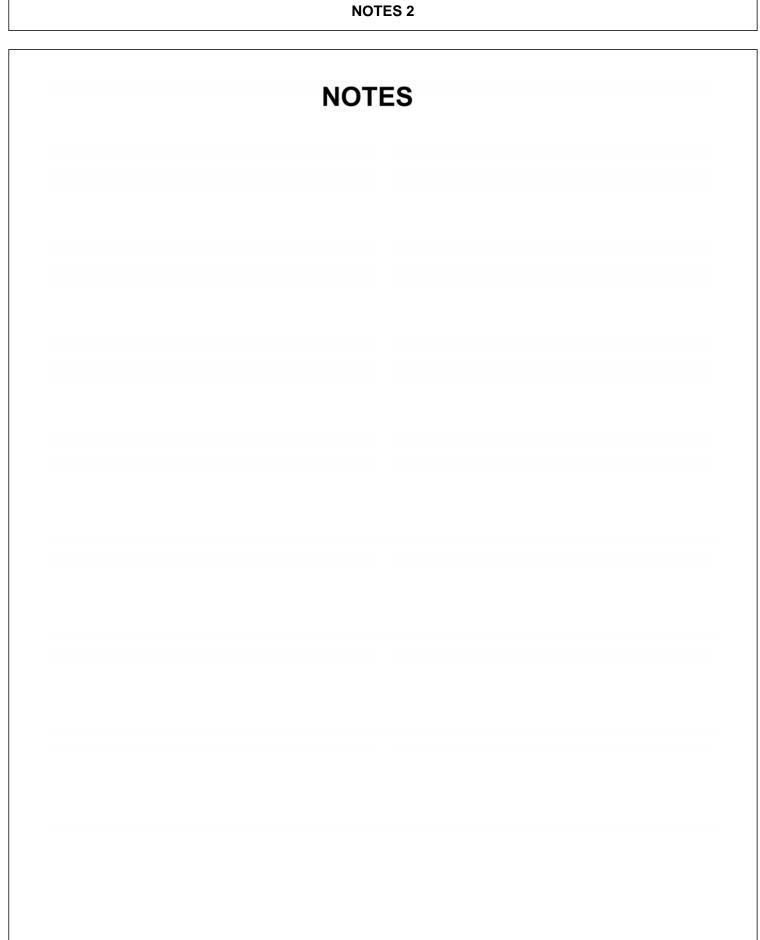
Direct any questions regarding parts to:

Tiger Corporation

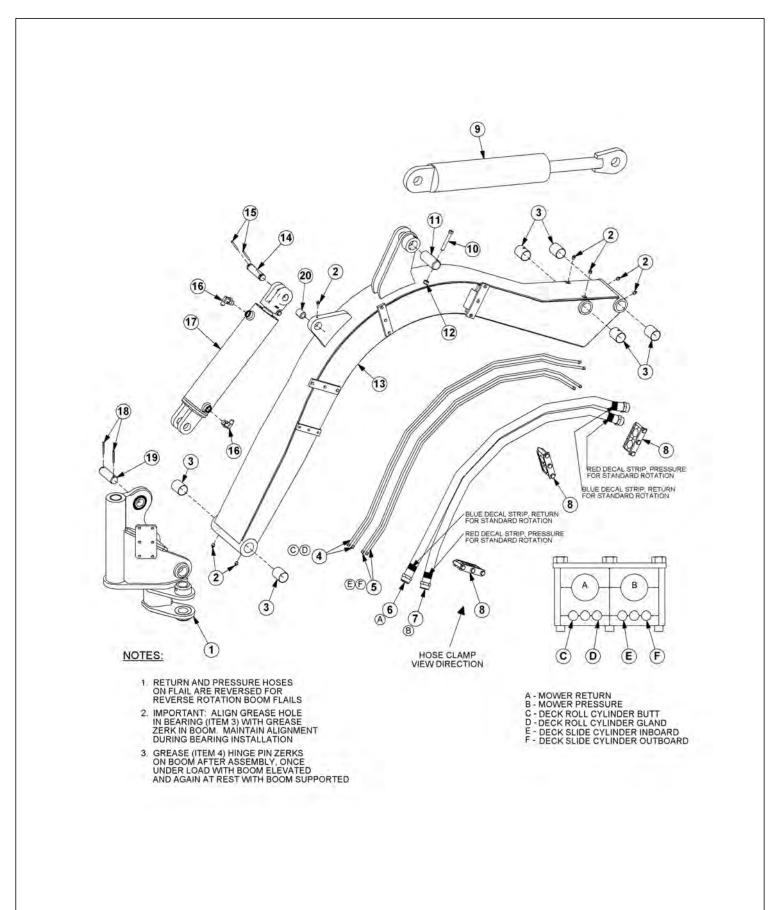
3301 N. Louise Ave. Sioux Falls, SD 57107 1-800-843-6849 1-605-336-7900



| ITEM | PART NO. | QTY. | DESCRIPTION | |
|------|----------|------|---------------------------------------|--|
| 1 | | - | MAINFRAME *REFER TO TRACTOR MOUNT KIT | |
| 2 | 21782 | 1 | CAPSCREW,5/8" X 1-3/4",NC | |
| 3 | 21777 | 1 | NYLOCK NUT,5/8",NC | |
| 4 | 32381 | 1 | PIN,CAPPED | |
| 5 | 32322 | 2 | BUSHING | |
| 6 | 06505185 | 1 | CLAMP KIT | |
| 7 | 6T3211 | 2 | GREASE ZERK,1/8"NPT | |
| 8 | 21677 | 3 | NYLOCK NUT,7/16",NC | |
| 9 | 32380 | 2 | PIN,1" | |
| 10 | 21683 | 2 | CAPSCREW,7/16" X 2",NC | |
| 11 | TB1023 | 2 | ROLL PIN | |
| 12 | 06420100 | 1 | PIN,1-1/4" | |
| 13 | | - | SPHERICAL BEARING *NOT FOR SALE | |
| 14 | 06700221 | 1 | SWIVEL ASSEMBLY | |
| 15 | 06520250 | 1 | BEARING, WASHER | |
| 16 | 32810 | 2 | ADAPTER, ELBOW | |
| 17 | 06501029 | 1 | CYLINDER,3" X 13.88" | |
| 18 | 06420022 | 1 | PIN, 1/5" X 12" | |
| 19 | 21688 | 1 | CAPSCREW, 7/16" X 3-1/4" | |

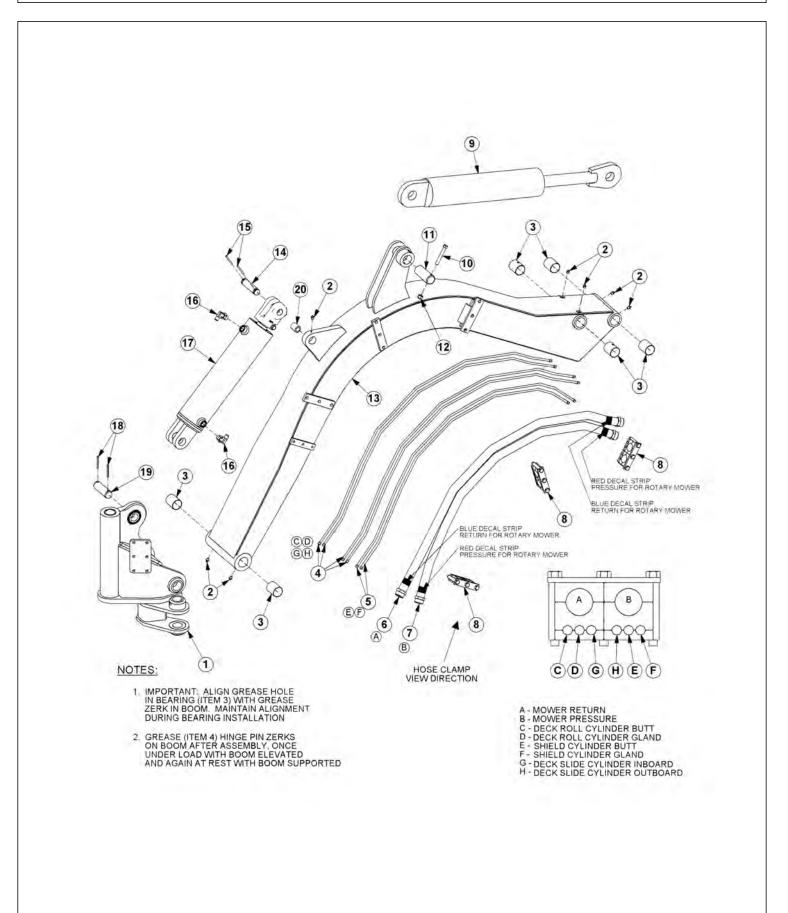


BOOM ASSEMBLY - FLAIL



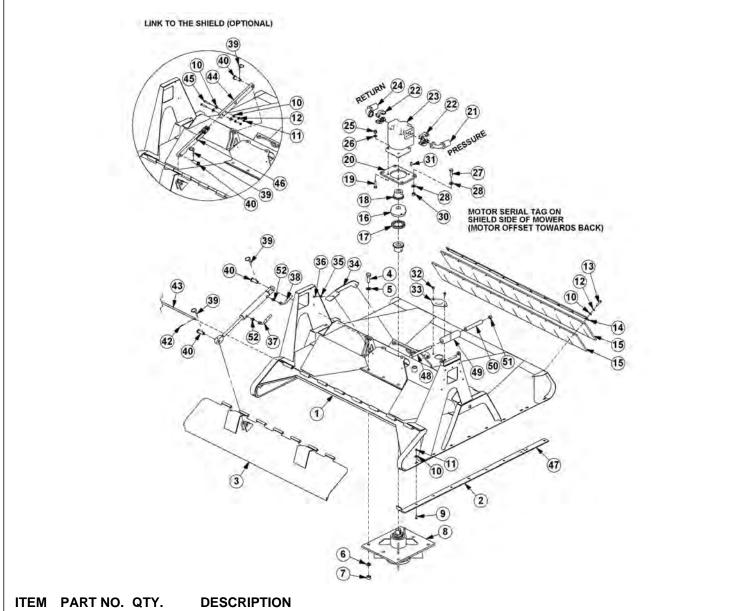
| н | | | | | |
|---|------|----------|------|---|--|
| | ITEM | PART NO. | QTY. | DESCRIPTION | |
| | 1 | | - | SWIVEL ASSY *REFER TO BOOM MOUNT KIT PAGE | |
| | 2 | 6T3211 | 7 | GREASE ZERK,1/8" | |
| | 3 | 32321 | 6 | BEARING | |
| | 4 | 06500723 | 2 | HOSE,1/4" X 52" | |
| | 5 | 06500724 | 2 | HOSE,1/4" X 70" | |
| | 6 | | 1 | HOSE *REFER TO TRACTOR SPECIFIC PARTS | |
| | 7 | | 1 | HOSE *REFER TO TRACTOR SPECIFIC PARTS | |
| | 8 | 06505116 | 3 | HOSE CLAMP | |
| | 9 | 32365 | 1 | CYLINDER,4" X 15",WELDED | |
| | 10 | 21687 | 1 | CAPSCREW,7/16" X 3",NC | |
| | 11 | 32375 | 1 | PIN,1-1/2"OD | |
| | 12 | 21677 | 1 | NYLOCK NUT,7/16" | |
| | 13 | 06700000 | 1 | BOOM ASSEMBLY, COMPLETE | |
| | | 35331 | 1 | BOOM WELDMENT | |
| | 14 | TB1033 | 1 | PIN,CLEVIS | |
| | 15 | 06537021 | 2 | ROLL PIN,5MM | |
| | 16 | 32810 | 2 | ELBOW | |
| | 17 | 06501028 | 1 | CYLINDER,4" X 14",WELDED | |
| | 18 | TB1023 | 2 | ROLL PIN,7/16" | |
| | 19 | 06420100 | 1 | PIN,1-1/4"OD | |
| | 20 | TB3010 | 1 | SPLIT BUSHING | |
| Т | | | | | |





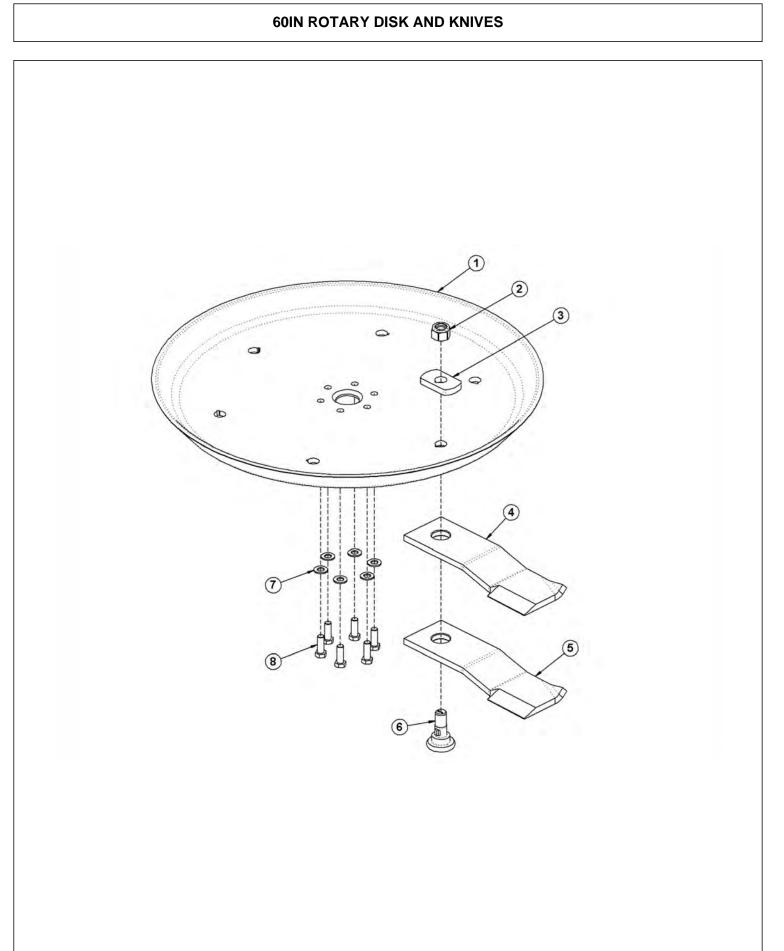
| | ITEM | PART NO. | ΟΤΥ | DESCRIPTION | |
|---|----------------|-----------|-------|---|--|
| | 1 E IVI | I ANT NO. | w.II. | SWIVEL ASSY *REFER TO BOOM MOUNT KIT PAGE | |
| | | | - | | |
| | 2 | 6T3211 | 7 | GREASE ZERK,1/8" | |
| | 3 | 32321 | 6 | BEARING | |
| | 4 | 06500723 | 4 | HOSE,1/4" X 52" | |
| | 5 | 06500724 | 2 | HOSE,1/4" X 70" | |
| | 6 | | 1 | HOSE *REFER TO TRACTOR SPECIFIC PARTS | |
| | 7 | | 1 | HOSE *REFER TO TRACTOR SPECIFIC PARTS | |
| | 8 | 06505116 | 3 | HOSE CLAMP | |
| | 9 | 32365 | 1 | CYLINDER,4" X 15",WELDED | |
| | 10 | 21687 | 1 | CAPSCREW,7/16" X 3",NC | |
| | 11 | 32375 | 1 | PIN,1-1/2"OD | |
| | 12 | 21677 | 1 | NYLOCK NUT,7/16" | |
| | 13 | 06700000 | 1 | BOOM ASSEMBLY, COMPLETE | |
| | | 35331 | 1 | BOOM WELDMENT | |
| | 14 | TB1033 | 1 | PIN,CLEVIS | |
| | 15 | 06537021 | 2 | ROLL PIN,5MM | |
| | 16 | 32810 | 2 | ELBOW | |
| | 17 | 06501028 | 1 | CYLINDER,4" X 14",WELDED | |
| | 18 | TB1023 | 2 | ROLL PIN,7/16" | |
| | 19 | 06420100 | 1 | PIN,1-1/4"OD | |
| | 20 | TB3010 | 1 | SPLIT BUSHING | |
| L | | | | | |

60IN ROTARY MOWER



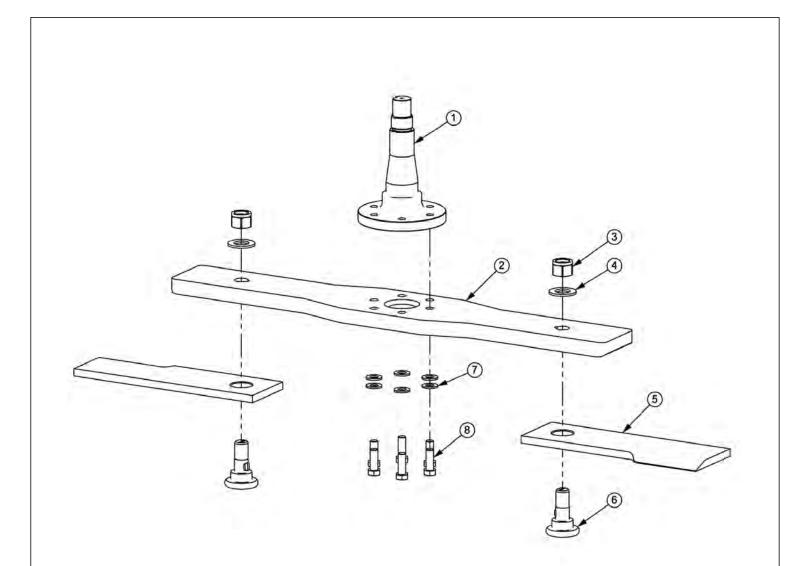
| 1 | 06320183 | 1 | DECK,WLDMNT,60" RTRY,RSS |
|----|----------|----|--------------------------------|
| 2 | 33777 | 2 | SKID SHOE,RTRY |
| 3 | 06320162 | 1 | SHIELD,60"RTRY |
| 4 | 33879 | 6 | CAPSCREW,3/4" X 2-1/4",NF,GR 8 |
| 5 | 33880 | 6 | FLATWASHER,3/4",GR 8,SAE |
| 6 | 21993 | 6 | LOCKWASHER,3/4",GR 8 |
| 7 | 6T2413 | 6 | HEX NUT,3/4",NF,GR 8 |
| 8 | 6T1024H5 | 1 | SPINDLE ASSY,CPLT,HD,5/8 HOLES |
| 9 | 6T2270 | 16 | PLOW BOLT,3/8" X 1",NC |
| 10 | 22016 | 33 | FLATWASHER,3/8" |
| 11 | 21625 | 20 | HEX NUT,3/8",NC |
| 12 | 21988 | 11 | LOCKWASHER,3/8" |
| | | | |

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------|
| 13 | 21633 | 11 | CAPSCREW,3/8" X 1-3/4",NC |
| 14 | 6T0823 | 1 | FLAP RETAINER,60" RTRY |
| 15 | 06520238 | 2 | FLAP,60" RTRY |
| 16 | 6T1033 | 1 | COUPLER COVER |
| 17 | 6T1029 | 1 | COUPLER CHAIN |
| 18 | 21223 | 1 | SPROCKET |
| 19 | 21733 | 4 | CAPSCREW,1/2" X 2",NC |
| 20 | 33776 | 1 | MOTOR MOUNT, PLATE, RTRY |
| 21 | 06500458 | 1 | HOSE,1" X 95" (PRESSURE) |
| 22 | TF4852 | 2 | FLANGE KIT,#20 |
| 23 | 06504011 | 1 | MOTOR |
| 24 | 06500613 | 1 | HOSE,1" X 87" (RETURN) |
| 25 | 21727 | 4 | NYLOCK NUT,1/2",NC |
| 26 | 06533004 | 4 | FLATWASHER,1/2" |
| 27 | 6T2290 | 4 | CAPSCREW,5/8" X 2",NF,GR 8 |
| 28 | 33764 | 8 | FLATWASHER,5/8",GR 8,SAE |
| 29 | 21992 | 4 | LOCKWASHER,5/8" |
| 30 | 6T2408 | 4 | HEX NUT,5/8",NF |
| 31 | TF1124 | 1 | SQUARE KEY |
| 32 | 33881 | 4 | CAPSCREW,FLG,3/8" X 3/4",NC |
| 33 | 33779 | 1 | PLATE,COVER,KNF HOLE |
| 34 | 06410439 | 2 | COVER |
| 35 | 22014 | 2 | FLATWASHER,1/4" |
| 36 | 21530 | 2 | CAPSCREW,1/4" X 1",NC |
| 37 | 06500141 | 1 | HOSE,1/4" X 92" |
| 38 | 06500443 | 1 | HOSE,1/4" X 83" |
| 39 | RD1032 | 2 | LYNCH PIN |
| 40 | 33984 | 2 | PIN,SHIELD |
| 41 | 33785 | 1 | CYLINDER,1-1/2" X 8" |
| 42 | 6T3017 | 2 | ROLLPIN |
| 43 | 06420139 | 1 | HINGE PIN,60" RTRY |
| 44 | 33772 | 1 | LINK,SHIELD,RTRY |
| 45 | 21634 | 2 | CAPSCREW,3/8" X 2",NC |
| 46 | 33773 | 1 | LINK 2,SHIELD,RTRY |
| 47 | 06401245 | 2 | SKID SHOE, TRB60 |
| 48 | 06530226 | 1 | CAPSCREW,3/4" X 8-1/2",NC |
| 49 | 35340 | 1 | ROLLER |
| 50 | 35339 | 1 | BUSHING |
| 51 | 21825 | 1 | HEX NUT,3/4",NC |
| 52 | 06503057 | 2 | ADAPTER,1/4"MOR X 3/8"MJ |
| | | | |

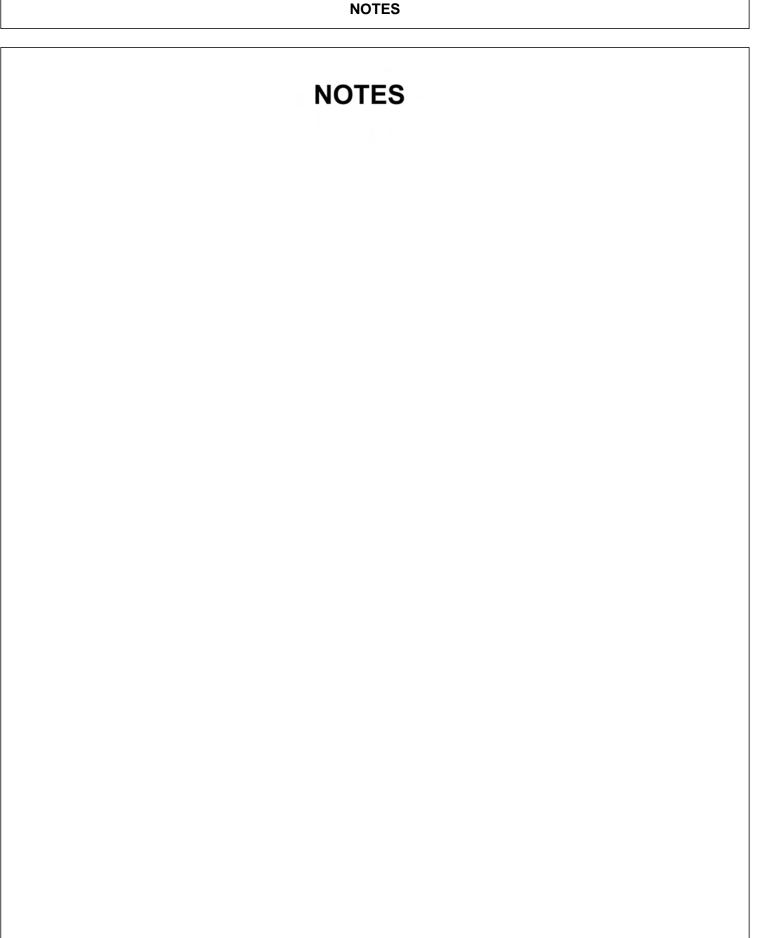


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| | 27167 | 1 | BOLT KIT (INCLUDES ITEMS 7, 8 & LOCTITE) |
| 1 | 34876 | 1 | BLADE MOUNTING DISK |
| 2 | 6T1023R | 2 | NYLOCK NUT,1-1/8",NF |
| 3 | 34878 | 2 | SPACER |
| 4 | 34684 | 2 | STANDARD GRASS KNIFE |
| 5 | 34685 | 2 | HIGH SUCTION GRASS KNIFE (OPTIONAL) |
| 6 | 34497 | 2 | KNIFE MOUNTING BOLT |
| 7 | 25270 | 6 | FLATWASHER,5/8",GR8,USS |
| 8 | 6T2259 | 6 | CAPSCREW,5/8" X 1-3/4",NF |
| | 6T1825 | 1 | LOCTITE (USED ON ITEM 8) |
| | 33893 | 1 | KNIFE KIT (ITEMS 2,4 & 6) |

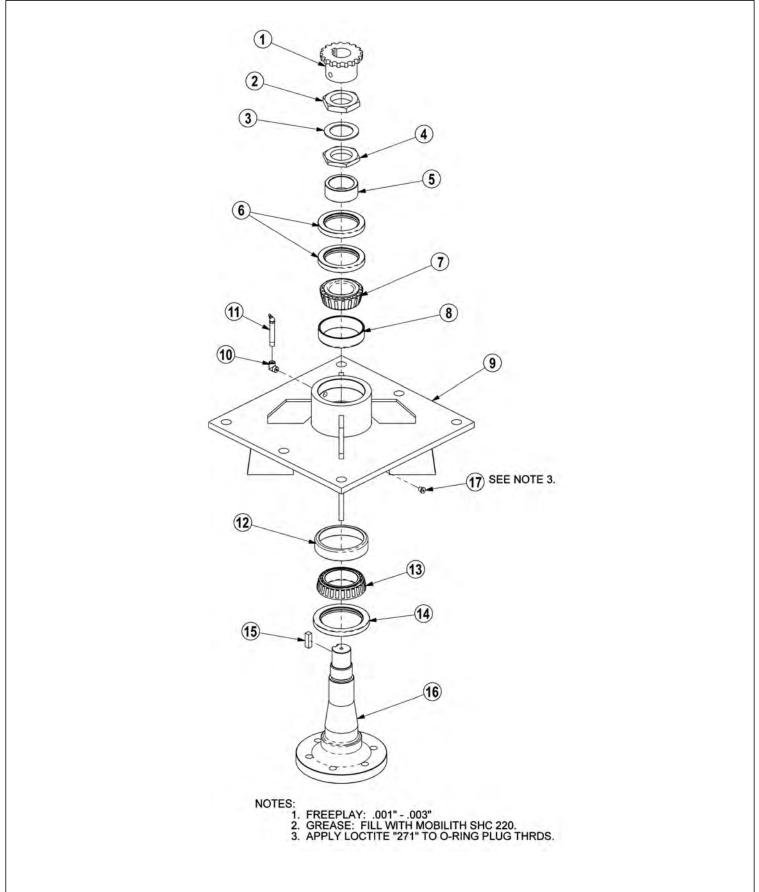
60IN BLADE BAR AND KNIVES



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------|
| 1 | PT1018H5 | 1 | SPINDLE |
| 2 | 06400690 | 1 | BAR,BLADE,RTRY60 |
| 3 | 6T1023R | 2 | KNIFE MTG NUT,1-1/8,NYLOCK,NF |
| 4 | 06533002 | 2 | FLATWASHER,1-1/8,GR8 |
| 5 | 06521001 | 2 | KNIFE,TRB50,5/8 |
| 6 | 06538000 | 2 | KNIFE MTG BOLT,5/8 SHOULDER |
| 7 | 33764 | 6 | FLATWASHER,5/8,GR 8,SAE |
| 8 | 6T2259 | 6 | CAPSCREW,5/8 X 1-3/4,NF,GR8 |
| | | | |

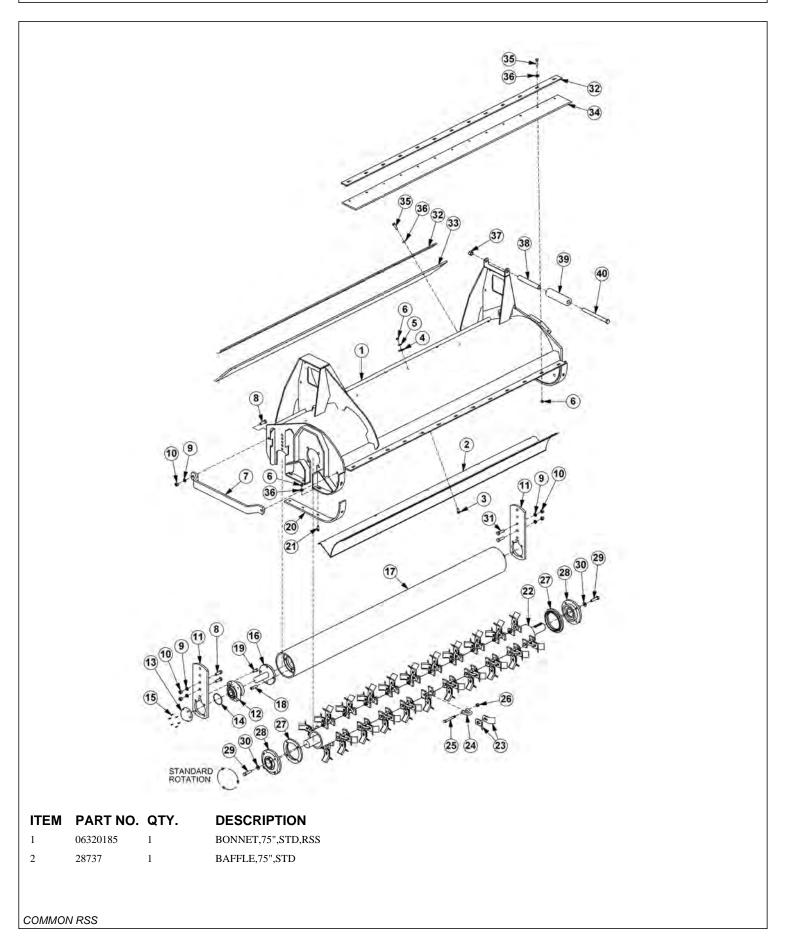


ROTARY MOWER SPINDLE ASSEMBLY



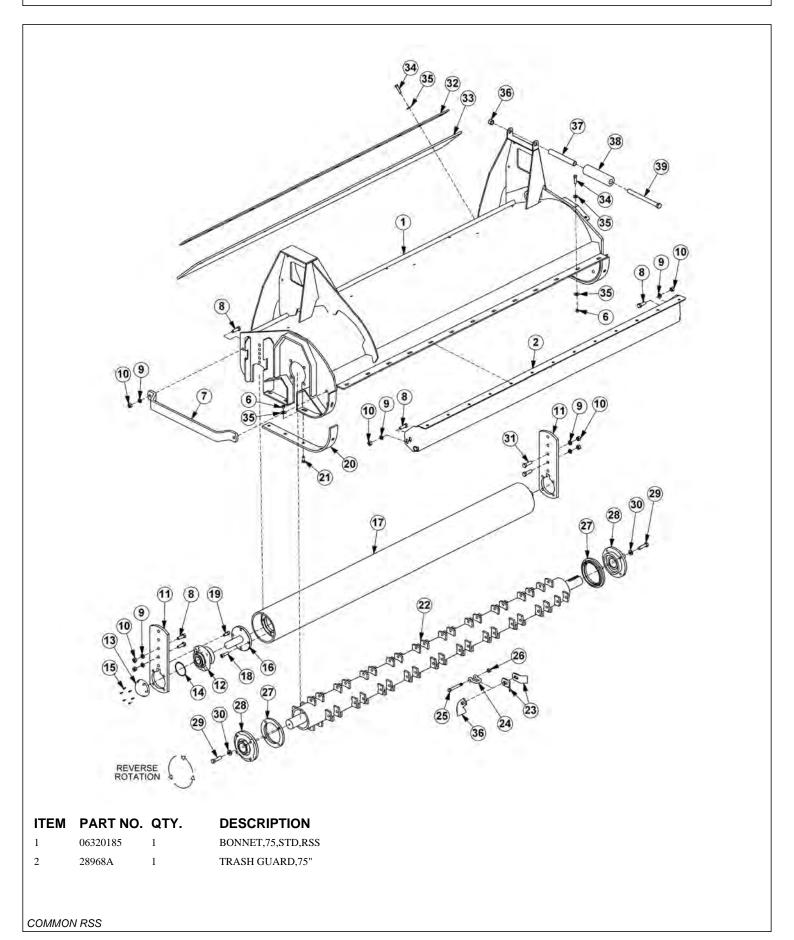
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|-----------|------|--|
| | 6T1024H5 | - | SPINDLE ASSEMBLY COMPLETE |
| 1 | 6T1031 | 1 | SPROCKET |
| 2 | 6T1016 | 1 | BEARING LOCK NUT - THICK |
| 3 | 22596 | 1 | JAM WASHER |
| 4 | 6T1015 | 1 | BEARING ADJUSTMENT NUT - THIN |
| 5 | 6T1014 | 1 | BEARING ADJUSTMENT SLEEVE |
| 6 | 6T1011 | 1 | UPPER SEAL - SET OF 2 |
| 7 | 6T1012 | 1 | BEARING CONE |
| 8 | 6T1013 | 1 | BEARING CUP |
| 9 | 6T1010H | 1 | SPINDLE HOUSING |
| 10 | 30570 | 1 | FITTING STREET ELBOW |
| 11 | 33990 | 1 | GREASE ZERK |
| 12 | 6T1013H | 1 | BEARING CUP |
| 13 | 6T1012H | 1 | BEARING CONE |
| 14 | 6T1011H | 1 | LOWER SEAL |
| 15 | 6T1019 | 1 | SPINDLE KEY |
| 16 | PT1018H-5 | 1 | SPINDLE |
| 17 | 06503064 | 1 | O-RING PLUG, 1/8" |
| | 31771 | - | SPINDLE REBUILD KIT (INCLUDES ITEMS 2 - 8 AND 12 - 15) |

75IN FLAIL - STANDARD ROTATION



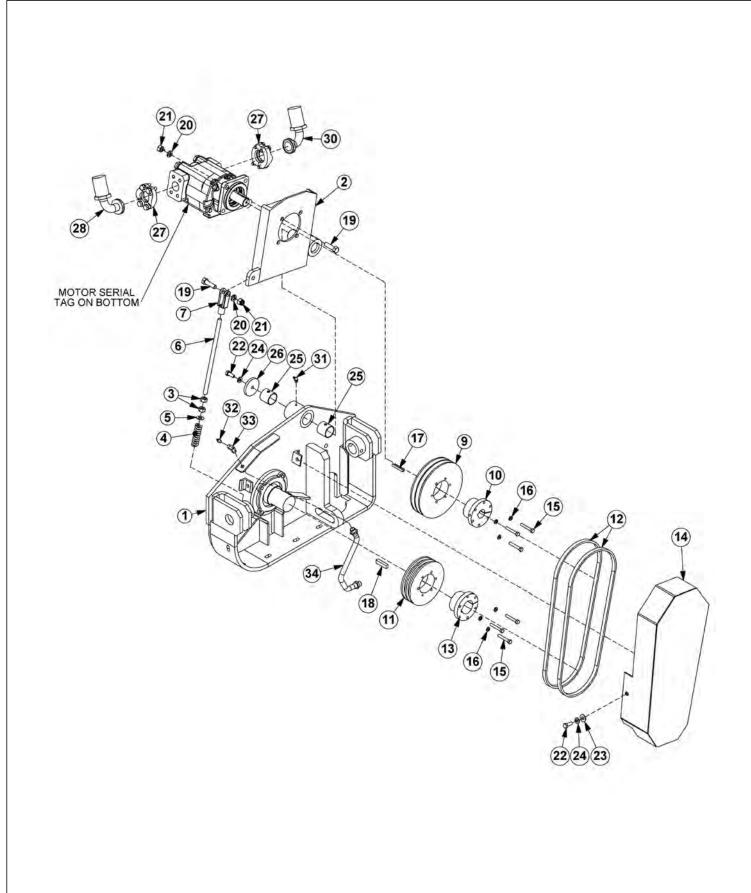
| 3 6T2283 10 CARRIAGE BOLT,3/8" X 1",NC 4 6T2615 10 WASHER,FENDER,3/8" 5 21988 10 LOCKWASHER,3/8" 6 21625 46 HEX NUT,3/8",NC 7 27975A 1 GUARD,CUTTERSHAFT 8 21731 4 CAPSCREW,1/2" X 1-1/2",NC 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 672330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28066A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 | ITEM | PART NO. | QTY. | DESCRIPTION |
|---|------|----------|------|--------------------------------------|
| 5 21988 10 LOCKWASHER,38" 6 21625 46 HEX NUT,3/8",NC 7 27975A 1 GUARD,CUTTERSHAFT 8 21731 4 CAPSCREW,1/2" X 1-1/2",NC 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER,75" 18 672330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B | 3 | 6T2283 | 10 | CARRIAGE BOLT,3/8" X 1",NC |
| 6 21625 46 HEX NUT,3/8",NC 7 27975A 1 GUARD,CUTTERSHAFT 8 21731 4 CAPSCREW,1/2" X 1-1/2",NC 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 2806A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,35" 23 33713 | 4 | 6T2615 | 10 | WASHER, FENDER, 3/8" |
| 7 27975A 1 GUARD,CUTTERSHAFT 8 21731 4 CAPSCREW,I/2" X 1-1/2",NC 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 2806A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT,ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,ASSY,STANDARD 24 | 5 | 21988 | 10 | LOCKWASHER,3/8" |
| 8 21731 4 CAPSCREW,1/2" X 1-1/2",NC 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 | 6 | 21625 | 46 | HEX NUT,3/8",NC |
| 9 21990 6 LOCKWASHER,1/2" 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT,57" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,716" X 3-716",NC,GR8 26 21677 | 7 | 27975A | 1 | GUARD,CUTTERSHAFT |
| 10 21725 6 HEX NUT,1/2",NC 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 < | 8 | 21731 | 4 | CAPSCREW,1/2" X 1-1/2",NC |
| 11 28735 2 GROUND ROLLER ADJ BRKT,STD DTY 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC | 9 | 21990 | 6 | LOCKWASHER,1/2" |
| 12 06520028 2 BEARING,FLANGE,1-3/8,GRNDRLR 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,716",NC | 10 | 21725 | 6 | HEX NUT,1/2",NC |
| 13 06520027 2 CAP,BEARING,GRNDRLR 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,716",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 <td>11</td> <td>28735</td> <td>2</td> <td>GROUND ROLLER ADJ BRKT,STD DTY</td> | 11 | 28735 | 2 | GROUND ROLLER ADJ BRKT,STD DTY |
| 14 06520029 2 O-RING,2-3/4 X 3/32",AS568A-148 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 <t< td=""><td>12</td><td>06520028</td><td>2</td><td>BEARING,FLANGE,1-3/8,GRNDRLR</td></t<> | 12 | 06520028 | 2 | BEARING,FLANGE,1-3/8,GRNDRLR |
| 15 06530001 12 CAPSCREW,SKT HD,8-32 X 1/2",SS 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 | 13 | 06520027 | 2 | CAP,BEARING,GRNDRLR |
| 16 TF1045B 2 STUB SHAFT,GROUND ROLLER 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 | 14 | 06520029 | 2 | O-RING,2-3/4 X 3/32",AS568A-148 |
| 17 28738 1 GROUND ROLLER,75" 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28643B 1 CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 BEARING,FLANGE,1-15/16",STD,TSF 29 0653017 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1 | 15 | 06530001 | 12 | CAPSCREW,SKT HD,8-32 X 1/2",SS |
| 18 6T2330 8 CAPSCREW,SKT HD,7/16" X 1-1/2",NC 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 | 16 | TF1045B | 2 | STUB SHAFT, GROUND ROLLER |
| 19 6T2331 8 CAPSCREW,SKT HD,7/16" X 1",NC 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,75",FRONT 35 21632 | 17 | 28738 | 1 | GROUND ROLLER,75" |
| 20 28086A 2 SKID SHOE,STD DUTY REAR FLAIL 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,0EFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 | 18 | 6T2330 | 8 | CAPSCREW,SKT HD,7/16" X 1-1/2",NC |
| 21 30013 10 PLOW BOLT,3/8" X 1-1/4",NC,GR5 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT ASSY,STANDARD 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE,MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,0EFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 | 19 | 6T2331 | 8 | CAPSCREW,SKT HD,7/16" X 1",NC |
| 28747 - CUTTERSHAFT ASSY,STANDARD 22 28643B 1 CUTTERSHAFT ASSY,STANDARD 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,0EFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 < | 20 | 28086A | 2 | SKID SHOE, STD DUTY REAR FLAIL |
| 22 28643B 1 CUTTERSHAFT,75" 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,0EFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 21 | 30013 | 10 | PLOW BOLT,3/8" X 1-1/4",NC,GR5 |
| 23 33713 80 KNIFE,FLAIL,SHORT 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | | 28747 | - | CUTTERSHAFT ASSY,STANDARD |
| 24 TF1020 40 KNIFE MTG CLEVIS,FLAIL 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 22 | 28643B | 1 | CUTTERSHAFT,75" |
| 25 34011 40 CAPSCREW,7/16" X 3-7/16",NC,GR8 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 23 | 33713 | 80 | KNIFE,FLAIL,SHORT |
| 26 21677 40 NYLOCK NUT,7/16",NC 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 24 | TF1020 | 40 | KNIFE MTG CLEVIS,FLAIL |
| 06200639 - STRING GUARD KIT,SD (ITEMS 27,29,30) 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 25 | 34011 | 40 | CAPSCREW,7/16" X 3-7/16",NC,GR8 |
| 27 33863 2 STRING GUARD,STD 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 26 | 21677 | 40 | NYLOCK NUT,7/16",NC |
| 28 28683 2 BEARING,FLANGE,1-15/16",STD,TSF 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | | 06200639 | - | STRING GUARD KIT,SD (ITEMS 27,29,30) |
| 29 06530217 8 CAPSCREW,1/2" X 2",NC,L9 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 27 | 33863 | 2 | STRING GUARD,STD |
| 30 06533006 8 FLATWASHER,1/2",SAE,L9 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 28 | 28683 | 2 | BEARING,FLANGE,1-15/16",STD,TSF |
| 31 21732 2 CAPSCREW,1/2" X 1-3/4",NC 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 29 | 06530217 | 8 | CAPSCREW,1/2" X 2",NC,L9 |
| 32 TF1029 2 BAR,FLAP,TSF/TBF,75" 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 30 | 06533006 | 8 | FLATWASHER,1/2",SAE,L9 |
| 33 TF1016 1 FLAP,DEFLECTOR,TSF,75" 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 31 | 21732 | 2 | CAPSCREW,1/2" X 1-3/4",NC |
| 34 06520242 1 FLAP,75",FRONT 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 32 | TF1029 | 2 | BAR,FLAP,TSF/TBF,75" |
| 35 21632 26 CAPSCREW,3/8" X 1-1/2",NC 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 33 | TF1016 | 1 | FLAP, DEFLECTOR, TSF, 75" |
| 36 22016 36 FLATWASHER,3/8" 37 21825 1 HEX NUT,3/4",NC | 34 | 06520242 | 1 | FLAP,75",FRONT |
| 37 21825 1 HEX NUT,3/4",NC | 35 | 21632 | 26 | CAPSCREW,3/8" X 1-1/2",NC |
| | 36 | 22016 | 36 | FLATWASHER,3/8" |
| 38 35339 1 BUSHING | 37 | 21825 | 1 | HEX NUT,3/4",NC |
| | 38 | 35339 | 1 | BUSHING |
| 39 35340 1 ROLLER | 39 | 35340 | 1 | ROLLER |
| 40 06530226 1 CAPSCREW,3/4" X 8-1/2",NC | 40 | 06530226 | 1 | CAPSCREW,3/4" X 8-1/2",NC |

75IN FLAIL - REVERSE ROTATION



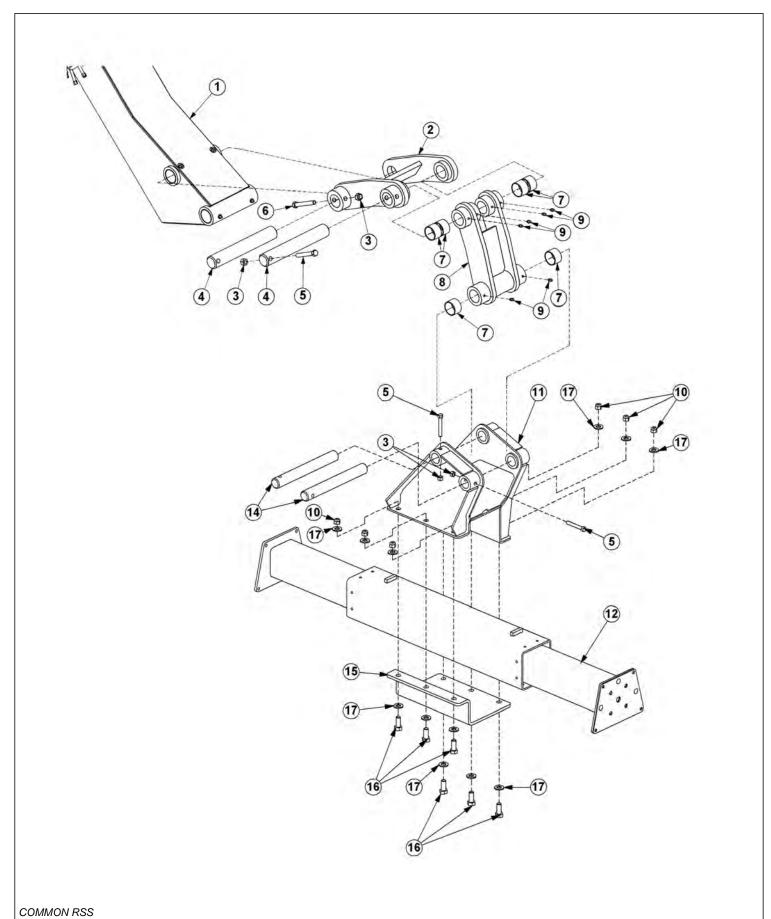
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 3 | 6T2283 | 10 | CARRIAGE BOLT,3/8" X 1",NC |
| 4 | 6T2615 | 10 | WASHER,FENDER,3/8" |
| 5 | 21988 | 10 | LOCKWASHER,3/8" |
| 6 | 21625 | 36 | HEX NUT,3/8",NC |
| 7 | 27975A | 1 | GUARD,CUTTERSHAFT |
| 8 | 21731 | 6 | CAPSCREW,1/2" X 1-1/2",NC |
| 9 | 21990 | 8 | LOCKWASHER,1/2" |
| 10 | 21725 | 8 | HEX NUT,1/2",NC |
| 11 | 28735 | 2 | GROUND ROLLER ADJ BRKT,STD DTY |
| 12 | 06520028 | 2 | BEARING,FLANGE,1-3/8",GRNDRLR |
| 13 | 06520027 | 2 | CAP,BEARING,GRNDRLR |
| 14 | 06520029 | 2 | O-RING,2-3/4" X 3/32",AS568A-148 |
| 15 | 06530001 | 12 | CAPSCREW,SKT HD,8-32 X 1/2",SS |
| 16 | TF1045B | 2 | STUB SHAFT, GROUND ROLLER |
| 17 | 28738 | 1 | GROUND ROLLER,75" |
| 18 | 6T2330 | 8 | CAPSCREW,SKT HD,7/16" X 1-1/2",NC |
| 19 | 6T2331 | 8 | CAPSCREW,SKT HD,7/16" X 1",NC |
| 20 | 28086A | 2 | SKID SHOE, STD DUTY REAR FLAIL |
| 21 | 30013 | 9 | PLOW BOLT,3/8" X 1-1/4",NC,GR5 |
| | 28747 | - | CUTTERSHAFT ASSY,STANDARD (22, 23, 24, 25 & 26) |
| | 28748 | - | CUTTERSHAFT ASSY, SMOOTH (22, 23, 24, 25 & 37) |
| 22 | 28643B | 1 | CUTTERSHAFT,75" |
| 23 | 33713 | 80 | FLAIL KNIVES (STANDARD CUT) |
| 24 | TF1020 | 40 | KNIFE MTG CLEVIS,FLAIL |
| 25 | 34011 | 40 | CAPSCREW,7/16" X 3-7/16",NC,GR8 |
| 26 | 21677 | 40 | NYLOCK NUT,7/16",NC |
| | 06200639 | - | STRING GUARD KIT, SD (ITEMS 27,29,30) |
| 27 | 33863 | 2 | STRING GUARD,STD |
| 28 | 28683 | 2 | BEARING,FLANGE,1-15/16",STD,TSF |
| 29 | 06530217 | 8 | CAPSCREW,1/2" X 2",NC,L9 |
| 30 | 06533006 | 8 | FLATWASHER,1/2",SAE,L9 |
| 31 | 21732 | 2 | CAPSCREW,1/2" X 1-3/4",NC |
| 32 | TF1029 | 1 | BAR,FLAP,TSF/TBF,75" |
| 33 | TF1016 | 1 | FLAP,DEFLECTOR,TSF,75" |
| 34 | 21632 | 22 | CAPSCREW,3/8" X 1-1/2",NC |
| 35 | 22016 | 49 | FLATWASHER,3/8" |
| 36 | 28184A | 40 | FLAIL KNIVES (SMOOTH CUT) |
| 37 | 35339 | 1 | BUSHING |
| 38 | 35340 | 1 | ROLLER |
| 39 | 06530226 | 1 | CAPSCREW,3/4" X 8-1/2",NC |

FLAIL DRIVE ASSEMBLY



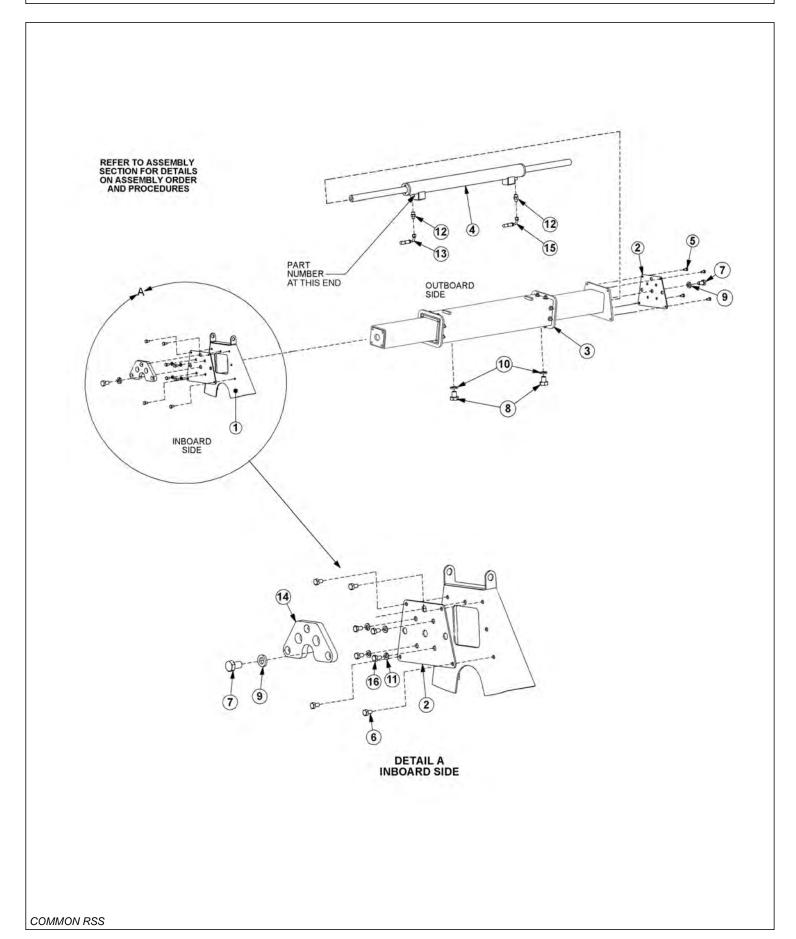
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | | - | BONNET *REFER TO HEAD PARTS |
| 2 | 32287 | 1 | MOTOR CHANNEL |
| 3 | 21700 | 2 | HEX NUT,1/2",NF |
| 4 | TF3620A | 1 | SPRING, TENSIONER |
| 5 | 27938 | 1 | BUSHING,MACH,1"OD X 1/2"ID X 14GA. |
| 6 | 40496 | 1 | ROD, THREADED, 1/2"NF X 8" |
| 7 | PT3611A | 1 | CLEVIS,6" |
| 8 | 06504013 | 1 | MOTOR |
| 9 | TF3044 | 1 | SHEAVE,8.0" |
| 10 | TF3013 | 1 | BUSHING,QD,SK 1-1/4",1/4" KEY |
| 11 | TF3040 | 1 | SHEAVE,6.3" |
| 12 | 28702 | 2 | V-BELT (500) |
| 13 | 28723 | 1 | BUSHING,QD,SK 1-15/16" |
| 14 | 32569 | 1 | GUARD,BELT |
| 15 | 21584 | 6 | CAPSCREW,5/16" X 2",NC |
| 16 | 21987 | 6 | LOCKWASHER,5/16" |
| 17 | 06504028 | 1 | KEY (KEY FROM MOTOR) |
| 18 | 26142A | 1 | KEY,1/2" X 1/2" X 2" |
| 19 | 21732 | 5 | CAPSCREW,1/2" X 1-3/4",NC |
| 20 | 21990 | 5 | LOCKWASHER,1/2" |
| 21 | 21725 | 5 | HEX NUT,1/2",NC |
| 22 | 21630 | 3 | CAPSCREW,3/8" X 1",NC |
| 23 | 22016 | 2 | FLATWASHER,3/8" |
| 24 | 21988 | 3 | LOCKWASHER,3/8" |
| 25 | 27580 | 2 | BEARING,DX,1-1/2",GRM |
| 26 | 28682 | 1 | RETAINING,WASHER,2-1/2" X 5/16" |
| 27 | TF4852 | 2 | KIT,FLANGE,#20 |
| 28 | 06500616 | 1 | HOSE,1" X 104" (RETURN FOR STANDARD ROTATION) |
| 30 | 06500617 | 1 | HOSE,1" X 106" (PRESSURE OF STANDARD ROTATION) |
| 31 | 6T3204 | 1 | GREASE ZERK,1/4" X 90° |
| 32 | 6T3211 | 1 | GREASE ZERK,1/8" |
| 33 | 22085 | 1 | ELBOW,1/8" X 90° |
| 34 | TF1032 | 1 | GREASE HOSE |

BOOM PIVOT ASSEMBLY



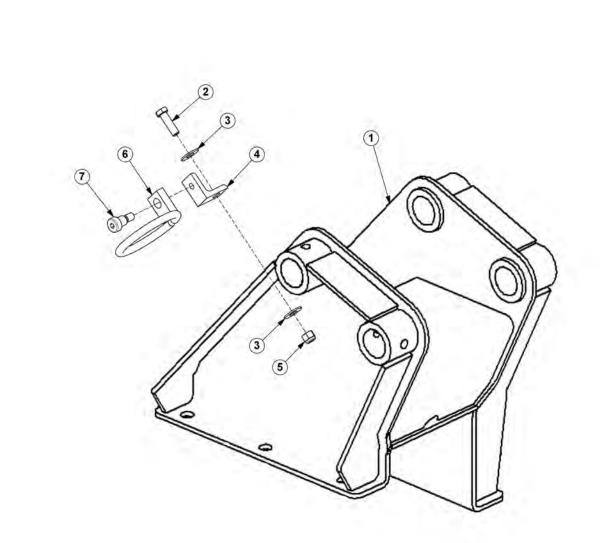
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------|
| 1 | | 1 | BOOM *REFER TO BOOM ASSEMBLY |
| 2 | 32316 | 1 | LINKAGE, BOOM TO CYLINDER |
| 3 | 21677 | 4 | NYLOCK NUT, 7/16",NC |
| 4 | 32319 | 2 | PIN,LINKAGE |
| 5 | 21687 | 3 | CAPSCREW, 7/16" X 3" NC |
| 6 | 21688 | 1 | CAPSCREW, 7/16" X 3-1/4" NC |
| 7 | 32318 | 6 | BEARING |
| 8 | 32745 | 1 | LINKAGE, CYLINDER TO TREE |
| 9 | 6T3207 | 6 | GREASE ZERK, 1/4" |
| 10 | 32838 | 6 | HEX NUT, 5/8" NC |
| 11 | 06310181 | 1 | TREE, WILDKAT |
| 12 | 06770096 | 1 | SLIDE ASSEMBLY |
| 14 | 32313 | 2 | PIN,TREE |
| 15 | 06412199 | 1 | CLAMP, TREE, WILDKAT |
| 16 | 06530208 | 6 | CAPSCREW,5/8" X 1-1/2",NC |
| 17 | 33764 | - | FLATWASHER, 5/8" SAE |

SLIDE ASSEMBLY



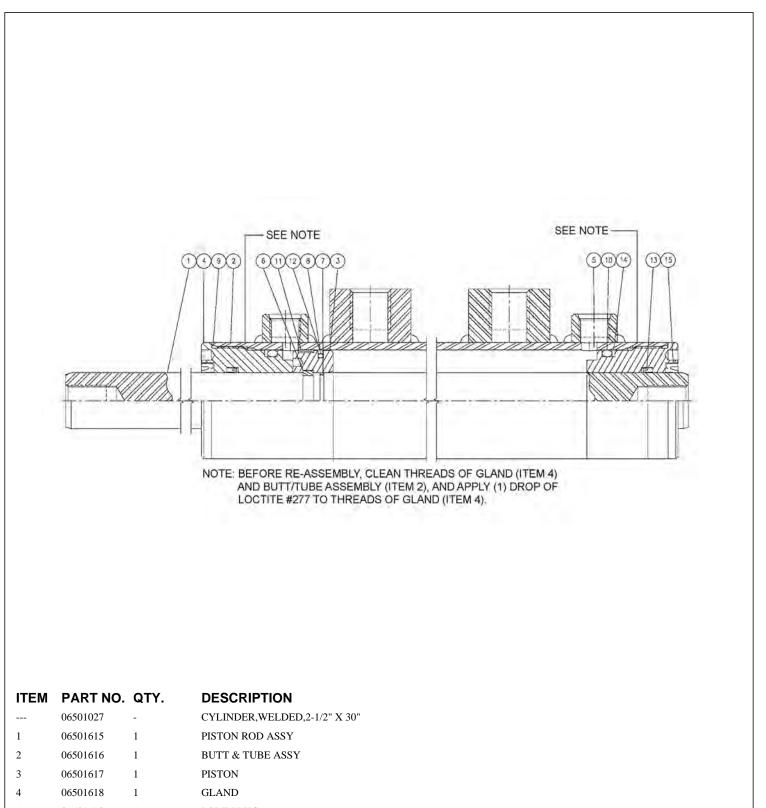
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------------|
| 1 | | - | MOWER *REFER TO MOWER ASSEMBLY PAGE |
| 2 | 35336 | 2 | CAP |
| 3 | 06770096 | 1 | SLIDE ASSEMBLY |
| 4 | 06501027 | 1 | CYLINDER, 2-1/2" X 30" |
| 5 | 21632 | 4 | CAPSCREW, 3/8" X 1-1/2" NC |
| 6 | 21630 | 4 | CAPSCREW, 3/8" X 1" NC |
| 7 | 21804 | 2 | CAPSCREW, 3/4" X 1-1/4" NF |
| 8 | 21929 | 2 | CAPSCREW, 1" X 1-1/4" NC |
| 9 | 21993 | 2 | LOCKWASHER,3/4" |
| 10 | 21995 | 2 | LOCKWASHER,1" |
| 11 | 21990 | 4 | LOCKWASHER,1/4" |
| 12 | 33271 | 2 | ADAPTER,1/2"MOR X 3/8"MJ |
| 13 | 35109 | 1 | HOSE,1/4" X 126" (ROTARY MOWERS) |
| | 06500449 | 1 | HOSE,1/4" X 53" (FLAIL MOWERS) |
| 14 | 06497006 | 1 | BUMPER,RSS |
| 15 | 06500480 | 1 | HOSE,1/4" X 107" (ROTARY MOWERS) |
| | 06500449 | 1 | HOSE,1/4" X 53" (FLAIL MOWERS) |
| 16 | 21729 | 4 | CAPSCREW,1/2" X 1" |

HOSE RING ASSEMBLY



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | | - | TREE *REFER TO BOOM PIVOT ASSY PAGE |
| 2 | 21631 | 1 | CAPSCREW,3/8" X 1-1/4",NC |
| 3 | 22016 | 2 | FLATWASHER,3/8" |
| 4 | 06460043 | 1 | ANGLE, MOUNT |
| 5 | 21627 | 1 | NYLOCK NUT,3/8",NC |
| 6 | 6310117 | 1 | RING,HOSE |
| 7 | 06530003 | 1 | CAPSCREW,SHOULDER,SKT HD |
| | 06505021 | 1 | COVER, HOSES (BOOM TO HOSE GUIDE) *NOT SHOWN |
| | 06505020 | 1 | COVER, HOSES (HOSE GUIDE TO DECK) *NOT SHOWN |
| | | | |

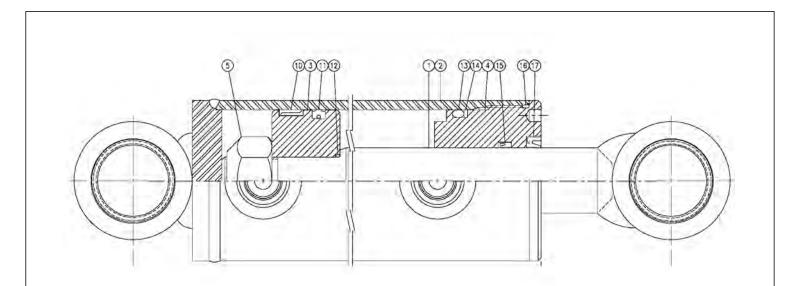
2-1/2IN X 30IN CYLINDER BREAKDOWN

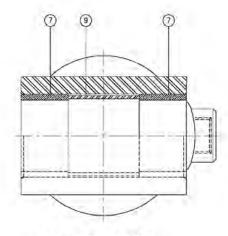


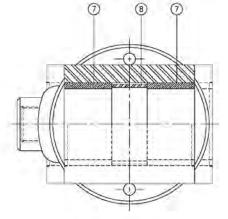
5 06501598 1 PORT PLUG

6-15 06501619 1 SEAL KIT

3IN X 15IN CYLINDER BREAKDOWN







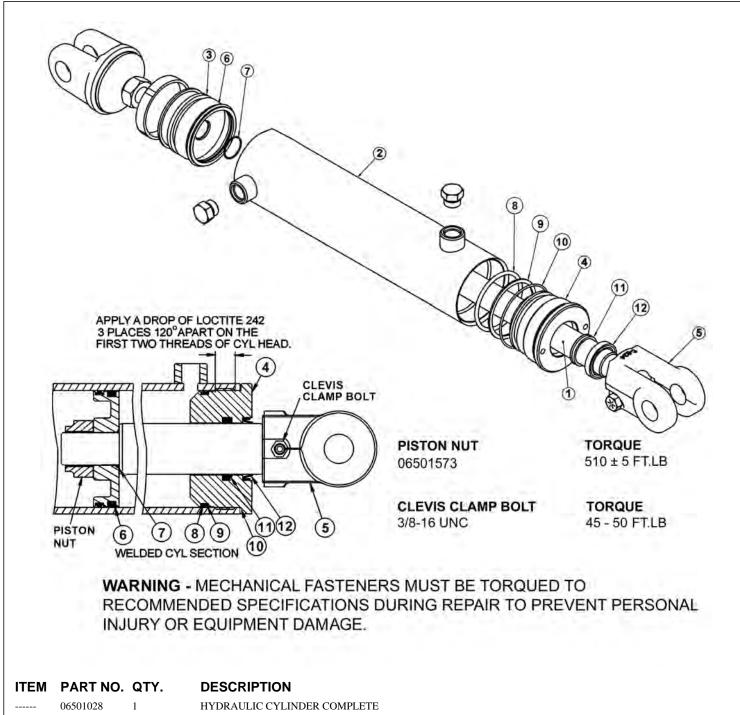
ROD END VIEW

BUTT END VIEW

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|---|
| | 06501026 | - | CYLINDER,WELDED,3" X 15" |
| 1 | 06501608 | 1 | PISTON ROD ASSY |
| 2 | 06501609 | 1 | BUTT & TUBE ASSY |
| 3 | 06501610 | 1 | PISTON |
| 4 | 06501563 | 1 | GLAND |
| 5 | 6T0179 | 1 | LOCK NUT,1-1/4"-12 UNF (TORQUE TO 315 FT.LB.) |
| 6 | 06501598 | 2 | PORT PLUG (NOT SHOWN) |
| 7 | 06501611 | 4 | BUSHING |
| 8 | 06501612 | 1 | SPACER,ROD END |
| 9 | 06501613 | 1 | SPACER,BUTT END |
| 10-17 | 06501614 | 1 | SEAL KIT |

COMMON RSS

4IN X 14IN CYLINDER BREAKDOWN



1 06501623 1 ROD

2 06501624 1 TUBE WELDMENT

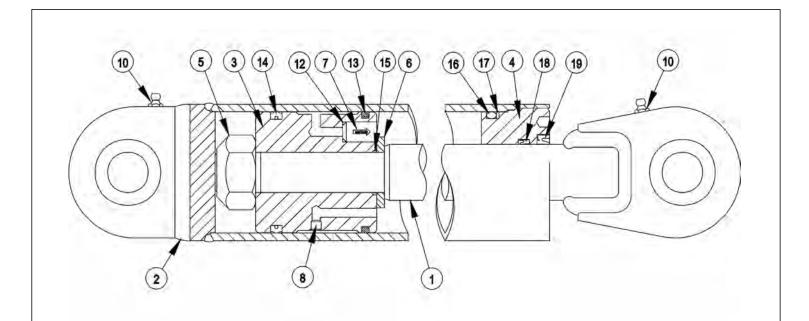
 3
 06501558
 1
 PISTON

 4
 06501607
 1
 CYLINDER HEAD

5 6T0172 1 CLEVIS

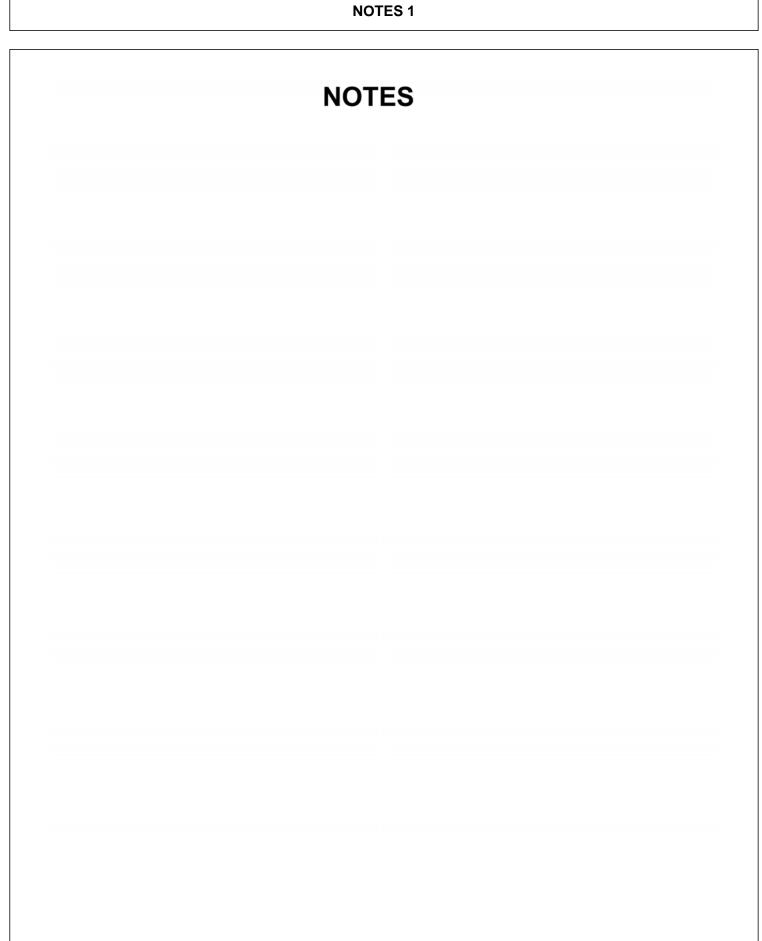
----- 06501560 1 SEAL REPAIR KIT (ITEMS 6 THROUGH 12)

4IN X 15IN CYLINDER BREAKDOWN

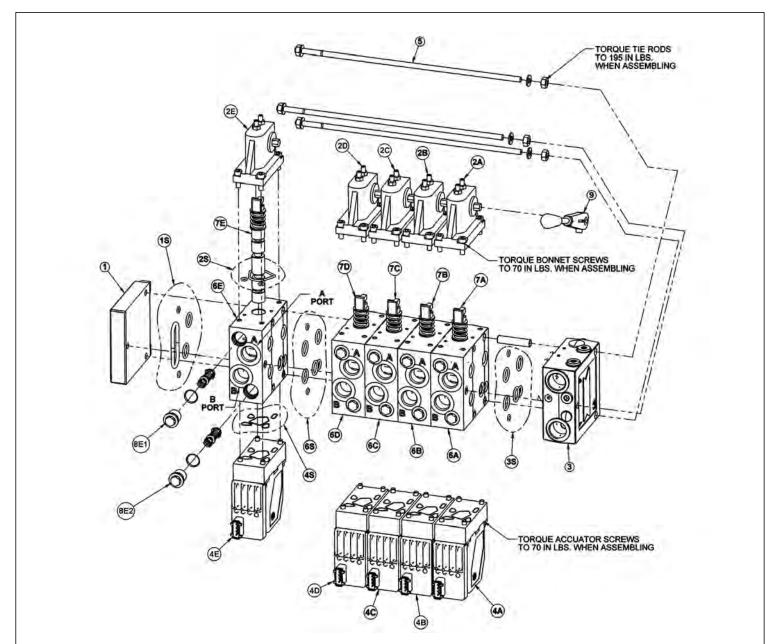


WARNING - MECHANICAL FASTENERS MUST BE TORQUED TO RECOMMENDED SPECIFICATIONS DURING REPAIR TO PREVENT PERSONAL INJURY OR EQUIPMENT DAMAGE.

| 32365 - CYLINDER,WELDED,4" X 15" 1 06501604 1 PISTON ROD ASSY 2 06501605 1 BUTT & TUBE ASSY 3 06501606 1 PISTON 4 06501607 1 GLAND 5 06501753 1 LOCK NUT,1-1/4"-12 UNF (TORQUE TO 510 FT.LB.) 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CROWN SEAL 14 1 O - RING 15 1 O - RING 16 1 O - RING |
|--|
| 2 06501605 1 BUTT & TUBE ASSY 3 06501606 1 PISTON 4 06501607 1 GLAND 5 06501753 1 LOCK NUT,1-1/4"-12 UNF (TORQUE TO 510 FT.LB.) 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 3 06501606 1 PISTON 4 06501607 1 GLAND 5 06501753 1 LOCK NUT,1-1/4"-12 UNF (TORQUE TO 510 FT.LB.) 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 4 06501607 1 GLAND 5 06501753 1 LOCK NUT,1-1/4"-12 UNF (TORQUE TO 510 FT.LB.) 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 5 06501753 1 LOCK NUT,1-1/4"-12 UNF (TORQUE TO 510 FT.LB.) 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 9 33757 1 SEAL KIT,PACKING (ITEMS 12 THRU 19) 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 10 2 GREASE ZERK 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 12 1 O - RING 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 13 1 CAST IRON PISTON RING 14 1 CROWN SEAL 15 1 O - RING |
| 14 1 CROWN SEAL 15 1 O - RING |
| 15 1 O - RING |
| |
| 16 1 O DING |
| |
| 17 1 BACK - UP WASHER |
| 18 1 U - CUP |
| 19 1 WIPER |
| 20 34335 2 SPHERICAL BEARING (NOT SHOWN) |



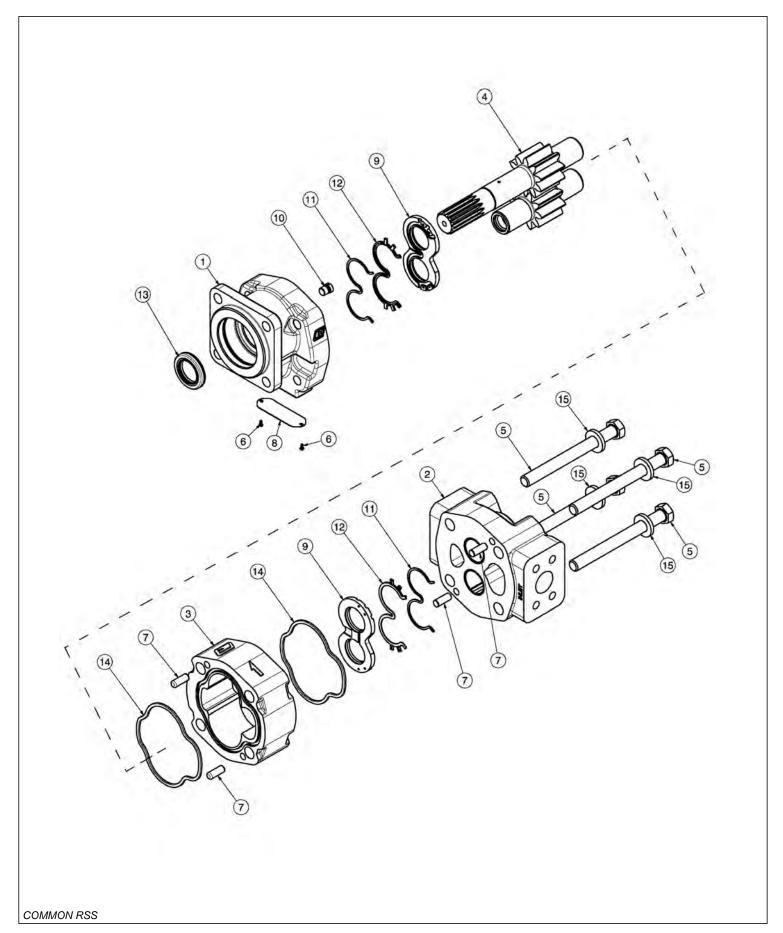
5 SPOOL ELECTRONIC VALVE



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------------|----------|------|-------------------------|
| | 06502096 | - | VLV,5SP,32PVG,SIDE STOW |
| 1 | 06502074 | 1 | END PLATE |
| 1 S | 06505013 | 1 | END PLATE SEAL KIT |
| 2 | | 5 | BONNET |
| 2S | 06505042 | 1 | BONNET SEAL KIT |
| 2A | 42197 | 1 | MAIN BOOM BONNET |
| 2B | 42197 | 1 | SECONDARY BOOM BONNET |
| 2C | 42197 | 1 | DECK ROLL BONNET |
| 2D | 42197 | 1 | BOOM SWIVEL BONNET |
| 2E | 42197 | 1 | DECK SHIELD BONNET |
| | | | |

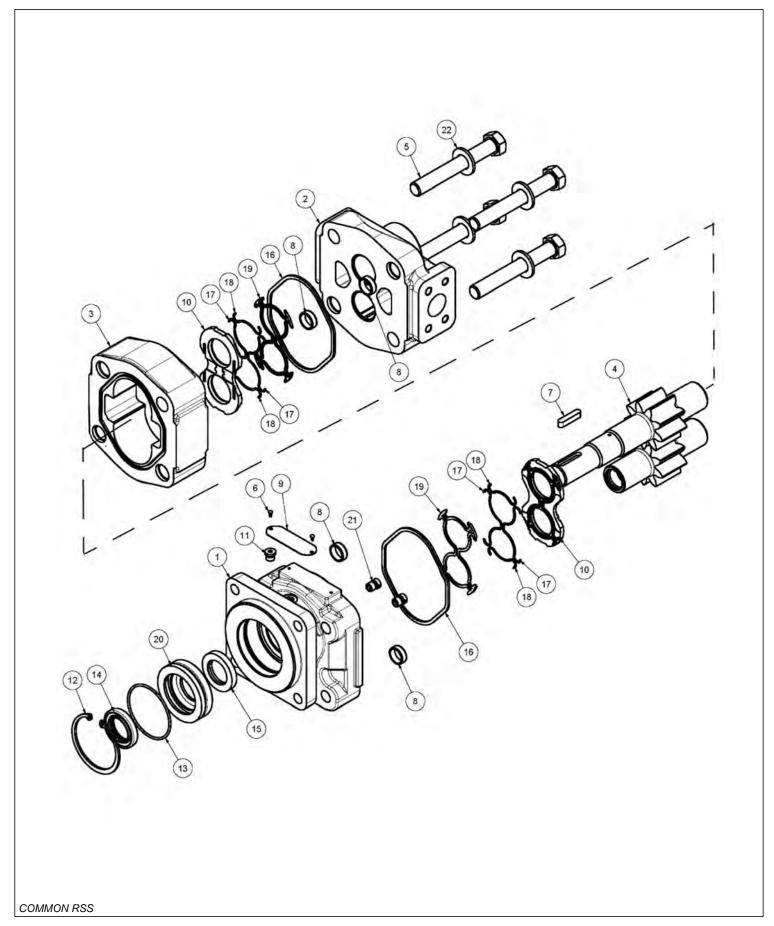
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------------|
| 3 | 34308 | 1 | INLET SECTION |
| 3S | 06505013 | 1 | INLET SECTION SEAL KIT |
| 4 | | 5 | ELECTRONIC ACCUATOR |
| 4A | 06502101 | 1 | MAIN BOOM ELECTRONIC ACCUATOR |
| 4B | 06502101 | 1 | SECONDARY BOOM ELECTRONIC ACCUATOR |
| 4C | 06502100 | 1 | DECK ROLL ELECTRONIC ACCUATOR |
| 4D | 06502101 | 1 | BOOM SWIVEL ELECTRONIC ACCUATOR |
| 4E | 06502099 | 1 | DECK SHIELD ELECTRONIC ACCUATOR |
| 5 | 42202 | 1 | TIE-BOLT KIT |
| 6 | | 5 | SECTION |
| 6S | 06505013 | 1 | SECTION SEAL KIT |
| 6A | 42698 | 1 | MAIN BOOM SECTION |
| 6B | 42698 | 1 | SEC BOOM SECTION |
| 6C | 06502076 | 1 | DECK ROLL SECTION |
| 6D | 42698 | 1 | BOOM SWIVEL SECTION |
| 6E | 06502077 | 1 | SHIELD SECTION |
| 7 | | 5 | SPOOL |
| 7A | 42697 | 1 | MAIN BOOM SPOOL |
| 7B | 42697 | 1 | SEC BOOM SPOOL |
| 7C | 4242106 | 1 | DECK ROLL SPOOL |
| 7D | 06502073 | 1 | BOOM SWIVEL SPOOL |
| 7E | 42201 | 1 | DECK SHIELD SPOOL |
| 8 | | 10 | ANTI CAV/SHOCK RELIEF |
| 8A1 | 42650 | 1 | MAIN BOOM A PORT RELIEF |
| 8A2 | 06502069 | 1 | MAIN BOOM B PORT RELIEF |
| 8B1 | 42650 | 1 | SEC BOOM A PORT RELIEF |
| 8B2 | 42295 | 1 | SEC BOOM B PORT RELIEF |
| 8C1 | 42296 | 1 | DECK ROLL A PORT RELIEF |
| 8C2 | 42295 | 1 | DECK ROLL B PORT RELIEF |
| 8D1 | 42295 | 1 | BOOM SWIVEL A PORT RELIEF |
| 8D2 | 42295 | 1 | BOOM SWIVEL B PORT RELIEF |
| 8E1 | 06502069 | 1 | DECK SHIELD A PORT RELIEF |
| 8E2 | 06502069 | 1 | DECK SHIELD B PORT RELIEF |
| 9 | 33459 | 1 | HANDLE |
| | | | |

FRONT PUMP BREAKDOWN



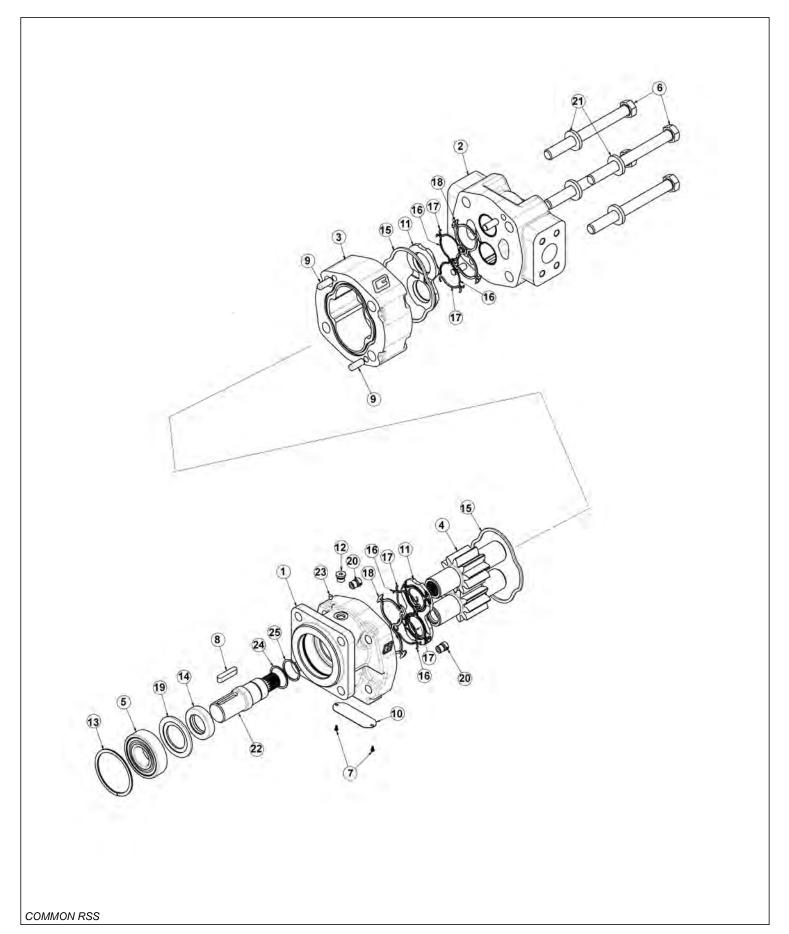
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------------|
| | 23152 | 1 | PUMP ASSEMBLY,1-3/4",COMPLETE |
| 1 | 22766 | 1 | SHAFT END COVER |
| 2 | 22779 | 1 | PORT END COVER |
| 3 | 22774 | 1 | GEAR HOUSING,1-3/4" |
| 4 | 22771 | 1 | GEAR SET |
| 5 | 23824 | 4 | CAPSCREW |
| 6 | 06504078 | 2 | SCREW, DRIVE |
| 7 | 22773 | 4 | DOWEL PINS |
| 8 | 06504077 | 1 | NAMEPLATE |
| 9 | 22770 | 2 | THRUST PLATE |
| 10 | 22767 | 1 | PLUG |
| 11 | 06504075 | 2 | SEAL,BK-UP |
| 12 | 06504074 | 2 | SEAL,CHAN |
| 13 | 22765 | 1 | SEAL,LIP |
| 14 | 06504076 | 2 | SEAL,SQ-R |
| 15 | 02961917 | 4 | WASHER |
| | 24150 | 1 | SEAL KIT (INCLUDES 11, 12, 13 AND 14) |

ROTARY MOTOR BREAKDOWN

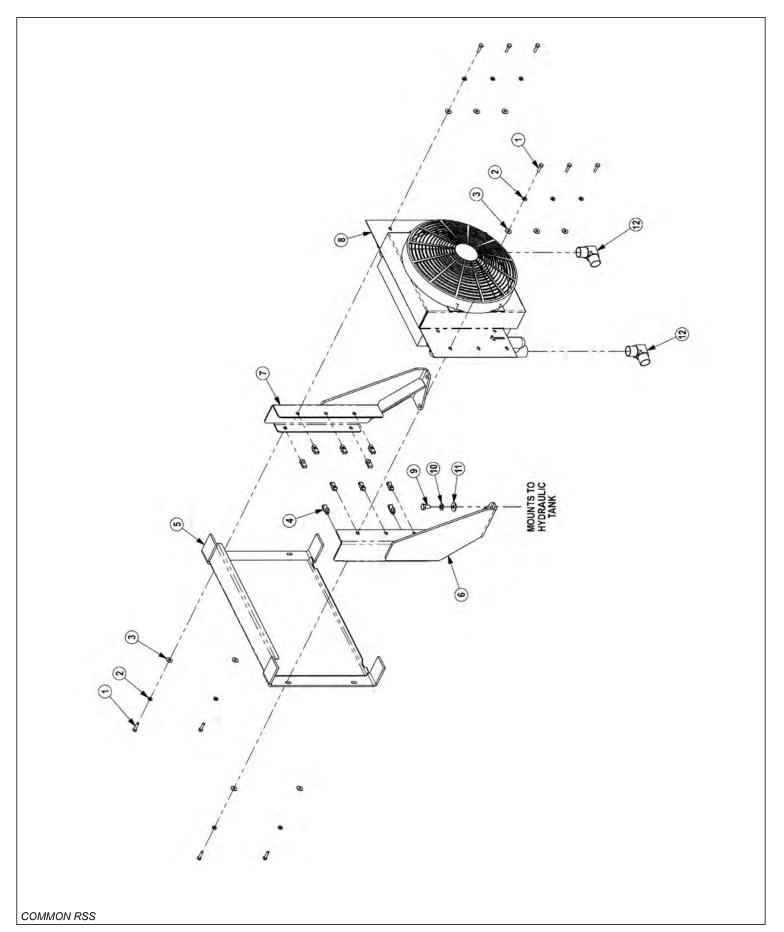


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------|
| | 06504011 | - | MOTOR ASSEMBLY, TRB60 |
| 1 | 22790 | 1 | END,COVER |
| 2 | 06504088 | 1 | HOUSING, PEC |
| 3 | 06504062 | 1 | HOUSING, GEAR, TRB60 |
| 4 | 06504090 | 1 | SET, GEAR SHAFT |
| 5 | 06504104 | 4 | CAP SCREW, TRB60 |
| 6 | 06504078 | 2 | SCREW, DRIVE |
| 7 | 06504092 | 1 | KEY |
| 8 | 06504093 | 4 | PIN, DOWEL |
| 9 | 06504094 | 1 | NAME PLATE |
| 10 | 06504095 | 2 | THRPL |
| 11 | 2961940 | 1 | PLUG, ODT |
| 12 | 2962200 | 1 | RING, SNAP |
| 13 | 06504096 | 1 | O RING |
| 14 | 6T5101 | 1 | SEAL, LIP |
| 15 | 06504097 | 1 | SEAL, LIP |
| 16 | 22797 | 2 | SEAL, SQ-R |
| 17 | 06504098 | 4 | SEAL, SIDE CHAN |
| 18 | 06504099 | 4 | SEAL, END CHAN |
| 19 | 06504100 | 2 | SEAL, BK-UP |
| 20 | 06504101 | 1 | RTNR, SEAL |
| 21 | 6T5809 | 2 | CHECK ASS'Y |
| 22 | 06504102 | 4 | WASHER |
| | 06504103 | 1 | SEAL KIT |
| | | | |

FLAIL MOTOR BREAKDOWN

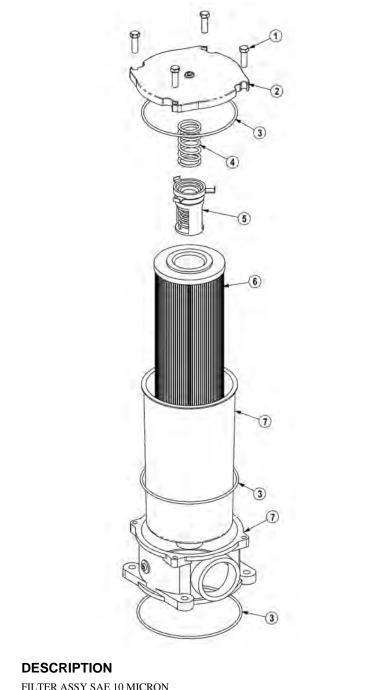


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| | 06504132 | 1 | MOTOR ASSEMBLY 350 - TBF50, TBF63 |
| 1 | 06504141 | 1 | SHAFT END COVER |
| 2 | 06504040 | 1 | PORT END COVER |
| 3 | 06504041 | 1 | GEAR HOUSING |
| 4 | 06504117 | 1 | MATCHED GEAR SET |
| 5 | TF4402 | 1 | BALL BEARING |
| 6 | 06504043 | 4 | CAP SCREW |
| 7 | 06504044 | 2 | SET SCREW |
| 8 | 06504028 | 1 | KEY |
| 9 | 06504045 | 4 | DOWEL PIN |
| 10 | | 1 | NAMEPLATE |
| 11 | 0763759 | 1 | THRUSTPLATE |
| 12 | 02961940 | 1 | PLUG, ODT (0.25) |
| 13 | TF4401 | 1 | SNAP RING |
| 14 | 06504142 | 1 | LIP SEAL |
| 15 | TF4410 | 2 | GASKET SEAL |
| 16 | 06504046 | 4 | SIDE SEAL |
| 17 | 06504047 | 4 | END SEAL |
| 18 | TF4407 | 2 | BACK-UP SEAL |
| 19 | 06504122 | 1 | SEAL RETAINER |
| 20 | 6T5809 | 2 | CHECK ASSEMBLY |
| 21 | 02961917 | 4 | WASHER |
| 22 | 06504140 | 1 | SHAFT |
| 23 | 06504139 | 1 | BREATHER |
| 24 | 06504121 | 1 | SPACER, BRG |
| 25 | 06504119 | 1 | SNAP RING |
| | 06504022 | 1 | SEAL KIT |



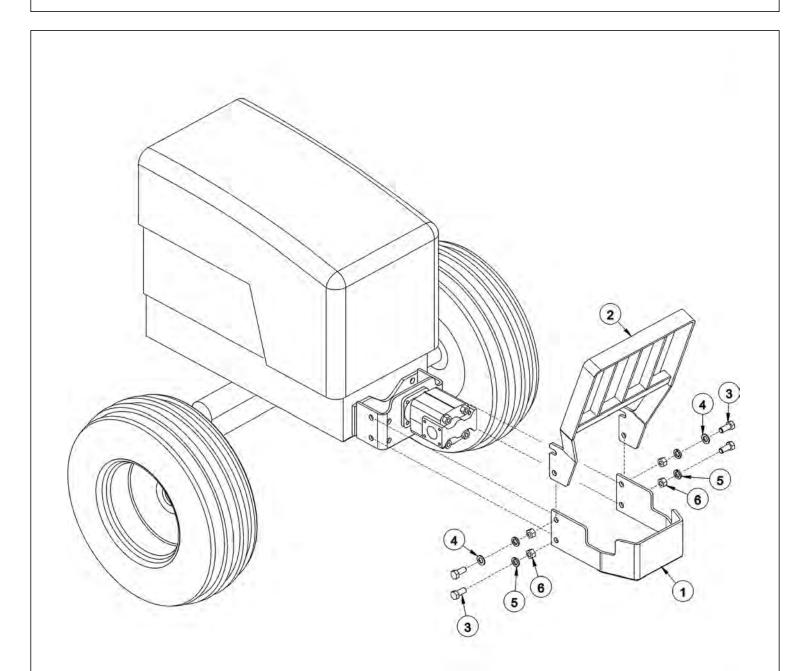
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------|
| 1 | 21530 | 10 | CAPSCREW,1/4 X1 NC |
| 2 | 21986 | 10 | LOCKWASHER,1/4 |
| 3 | 22014 | 10 | FLATWASHER,1/4 |
| 4 | 35176 | 10 | 1/4 U-NUT |
| 5 | 06370015 | 1 | SCREEN,COOLER,FRNT |
| 6 | 06380006 | 1 | MNT,COOLER,BUMPER TANK,RH |
| 7 | 06380007 | 1 | MNT,COOLER,BUMPER TANK,LH |
| 8 | 06510026 | 1 | COOLER, FRONT MNT |
| | 06510029 | 1 | FAN ASSY, ONLY |
| 9 | 21629 | 4 | CAPSCREW,3/8 X 3/4 NC |
| 10 | 21988 | 4 | LOCKWASHER,3/8 |
| 11 | 22016 | 4 | FLATWASHER,3/8 |
| 12 | 34117 | 2 | ELBOW,1MOR X 1MJ90,FORGED |

RESERVOIR TANK FILTER ASSEMBLY



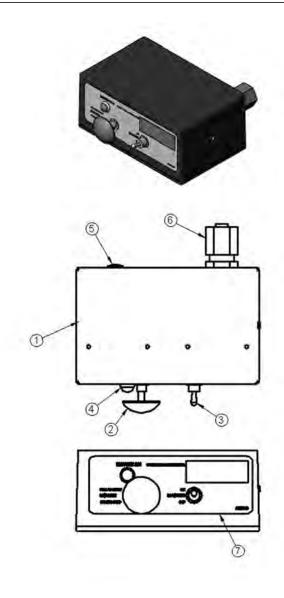
| | ITEM | PART NO. | QTY. | DESCRIPTION |
|---|------|----------|------|---------------------------------|
| | | 06505044 | - | FILTER ASSY SAE 10 MICRON |
| | 1 | 28583 | 4 | CAPSCREW,8MM X 25MM(1.25 PITCH) |
| | 2 | 06505045 | 1 | COVER |
| | 3 | 06505046 | 1 | SEAL KIT |
| | 4 | 06505047 | 1 | SPRING |
| | 5 | 06505048 | 1 | BYPASS |
| | 6 | 35259 | 1 | FILTER,10 MIC,RETURN LINE |
| | 7 | 06505049 | 1 | CAN/BODY |
| l | | | | |

PUMP AND GRILL GUARD OPTIONS



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------|
| 1 | 32430 | 1 | UNIVERSAL PUMP GUARD |
| 2 | 32737 | 1 | UNIVERSAL GRILL GUARD |
| 3 | 21833 | 4 | CAPSCREW,3/4" X 2-1/4",NC |
| 4 | 22021 | 2 | FLATWASHER,3/4" |
| 5 | 21993 | 4 | LOCKWASHER,3/4" |
| 6 | 21825 | 4 | HEX NUT,3/4",NC |

MANUAL LIFT VALVE SWITCH BOX

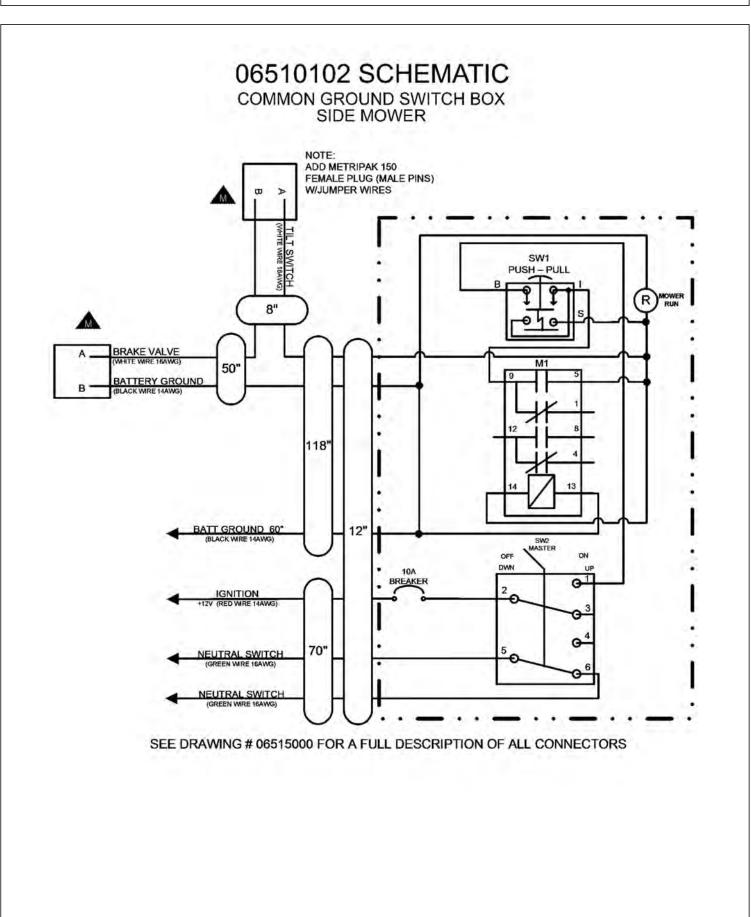


| ITEM | PART NO. | QTY. |
|------|----------|------|
| 1 | 06514013 | 1 |
| 2 | 35226 | 1 |

6T3923

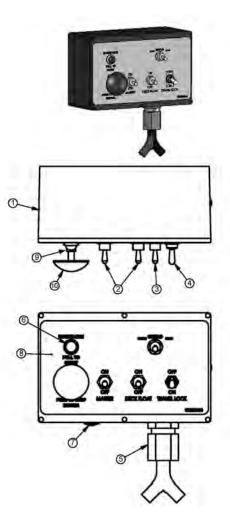
DESCRIPTION

| SWBX,ALUM,BLK,06510102 |
|---------------------------------|
| SWITCH, MOWER, COLEHERSEE |
| SWITCH, MASTER/DECK FLOAT |
| INDICTATOR LIGHT, ON, RED |
| BREAKER,10A,SWBX |
| STRAIN RELIEF,3/4,BLACK,NYLON |
| DECAL,SWTCHBX,TM/TSF,CG |
| RELAY, DP, DT, 12V, LY2F, 35226 |



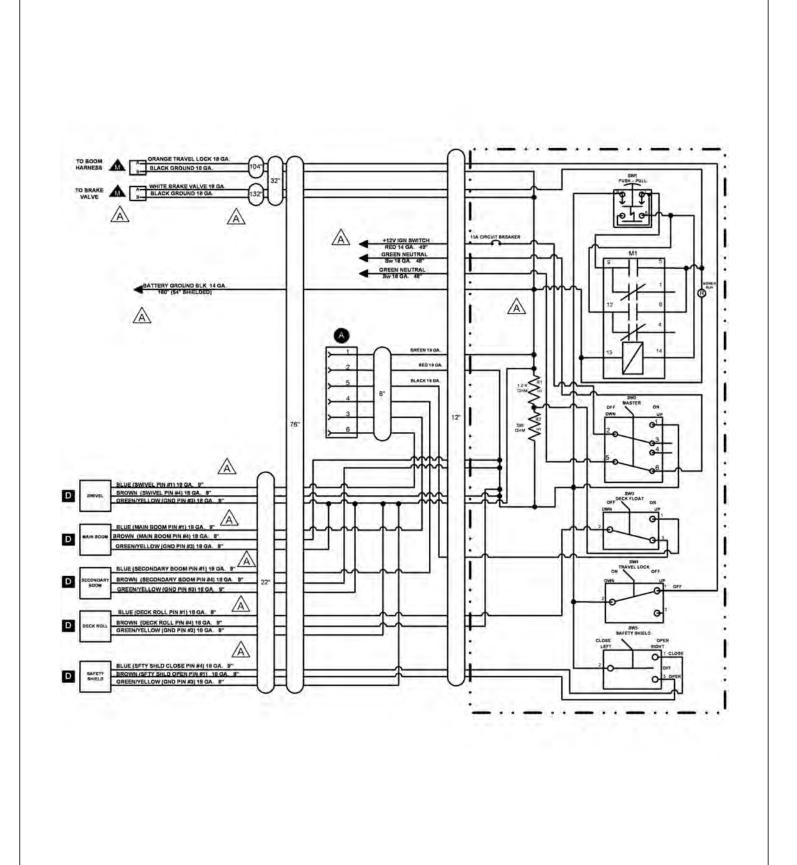
MANUAL LIFT VALVE SWITCH BOX SCHEMATIC

ELECTRONIC LIFT VALVE SWITCH BOX

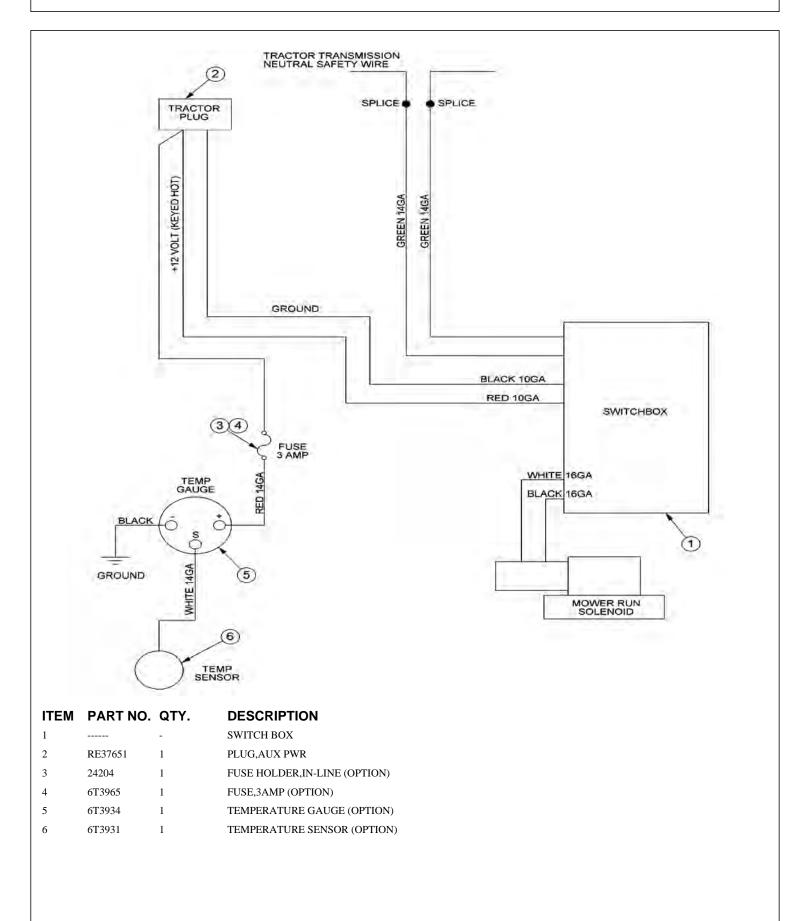


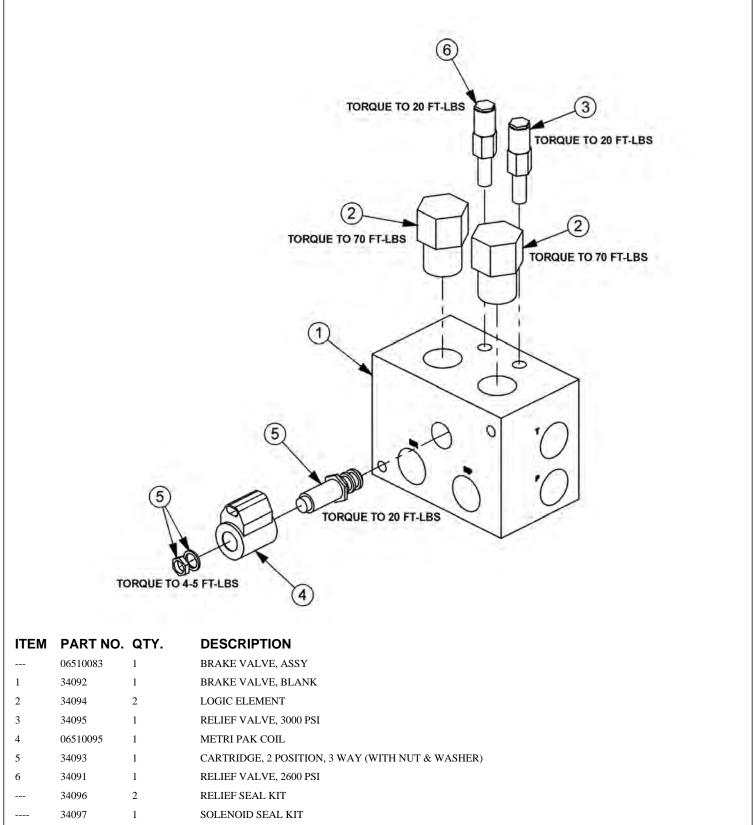
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------|
| 1 | 06510196 | 1 | SWBX,ASSY |
| 2 | 33811 | 2 | SWITCH, MASTER/DECK FLOAT |
| 3 | 33813 | 1 | SWITCH, SFTY SHIELD |
| 4 | 34532 | 1 | SWITCH,TRVL LCK |
| 5 | 34540 | 1 | STRAIN RELIEF,3/4",BLACK,NYLON |
| 6 | 6T3923 | 1 | INDICTATOR LIGHT, ON, RED |
| 7 | 06514006 | 1 | BREAKER,15A,SWBX |
| 8 | 06550044 | 1 | DECAL,SWBX,06510047 |
| 9 | 35226 | 1 | SWITCH, MOWER, COLEHERSEE |
| 10 | 35227 | 1 | RELAY, DP, DT, 12V, LY2F, 35226 |

ELECTRONIC LIFT VALVE SCHEMATIC

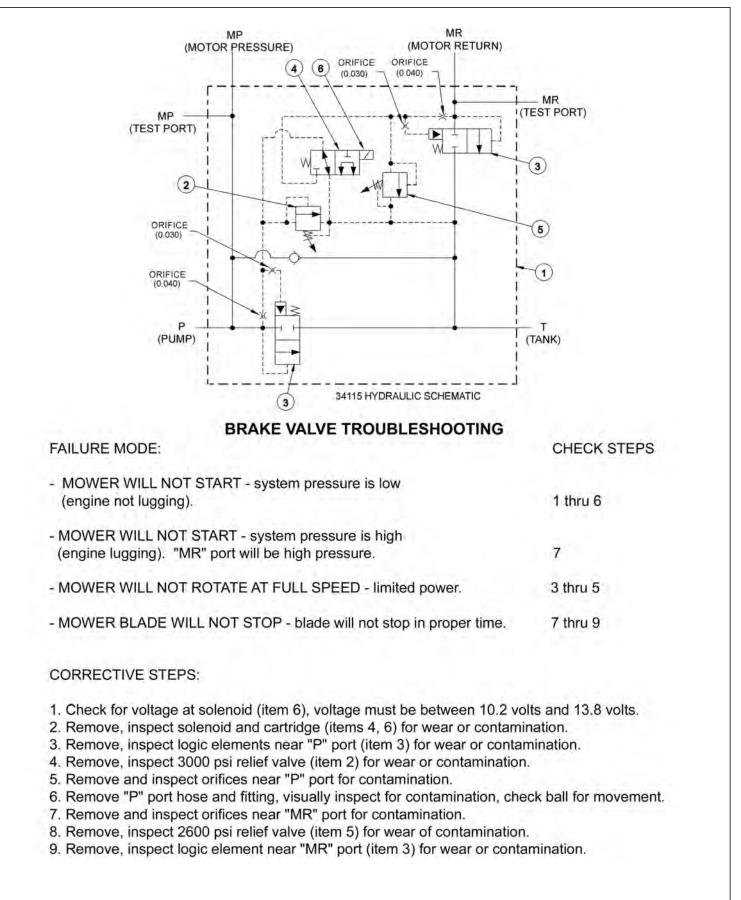


SOLENOID SWITCH BOX AND WIRING

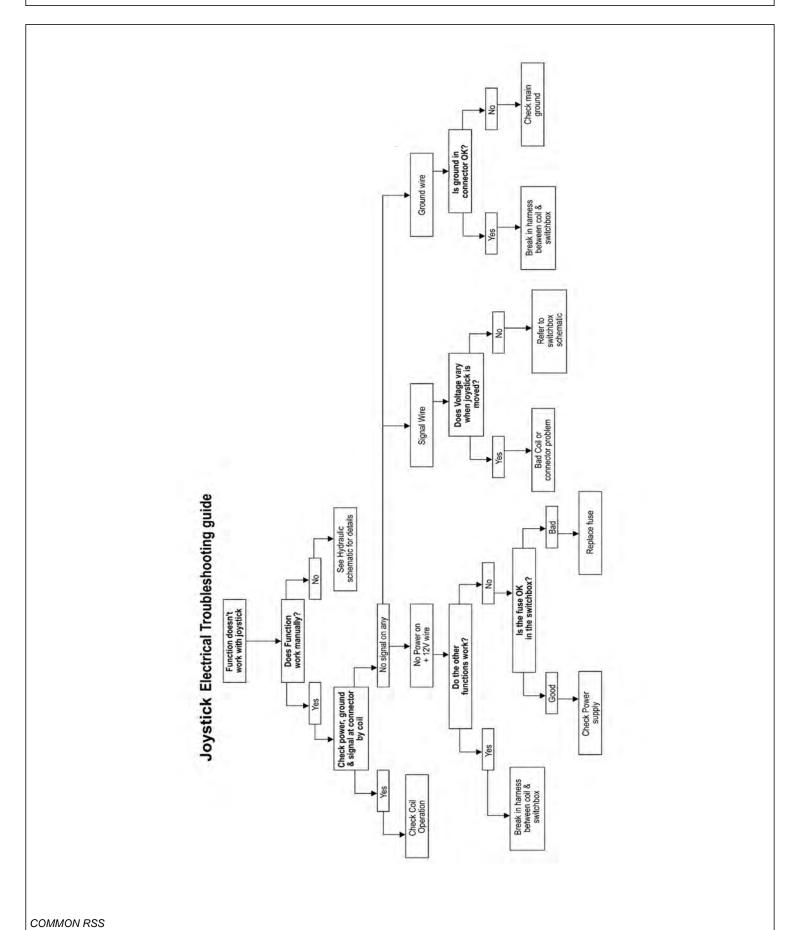


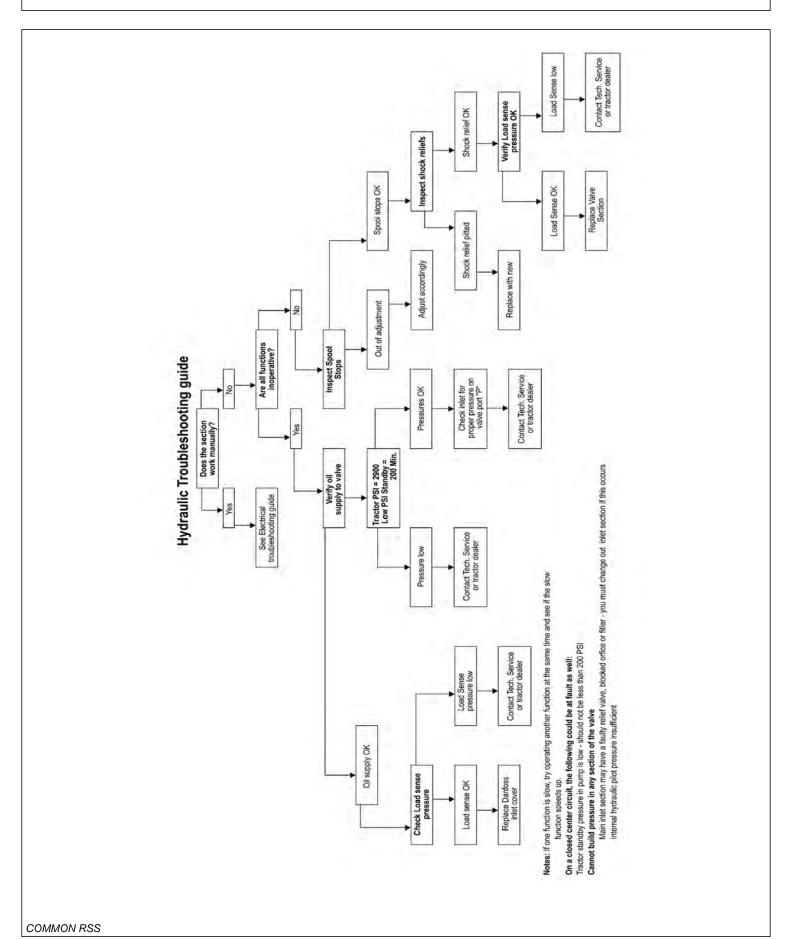


--- 34098 2 ELEMENT SEAL KIT



ELECTRICAL TROUBLESHOOTING GUIDE





HYDRAULIC TROUBLESHOOTING GUIDE

TROUBLESHOOTING

JOYSTICK TROUBLESHOOTING

Boom operation not responding to joystick movement.

Isolate hydraulic vs. electronic symptom.

Turn off electronic master switch (preventing electronic actuator on valve from attempting to hold spool in neutral position). With tractor engine running, operate the valve section with the manual handle. If function operates normally, continue with electronic inspection. If function does not operate normally, continue with hydraulic inspection.

Electronic inspection.

Connect a voltmeter to the cable connector of the valve section that is not operating. This will allow you to measure supply and signal voltage when the joystick is operated.

Main, Secondary, and Swivel Valves – signal voltage should be 50% of supply voltage with joystick in Neutral position, up to 75% of supply voltage in B direction, down to 25% of supply voltage in A direction. Signal voltage should change smoothly with lever movement. Pin #1 – Signal Voltage, Pin #4 – Power Voltage, Pin #3 – Ground

Deck Roll Valve or Float Valve – signal voltage should be 50% of supply voltage with joystick in Neutral position, up to 65% of supply voltage in B direction, down to 35% of supply voltage in A direction. Signal voltage should change smoothly with lever movement. Signal voltage should be approximately 75% of supply voltage when float switch is operated. Pin #1 – Signal Voltage, Pin #4 – Power Voltage, Pin #3 – Ground

Shield Valve or On/Off Valve – Voltage on pin #1 should be equal to supply voltage when switch is operated in A direction. Voltage on pin #4 should be equal to supply voltage when switch is operated in B direction.

Pin #1 - Signal Voltage (Shield Open), Pin #4 - Signal Voltage (Shield Close), Pin #3 - Ground

If none of the valve will operate with electrical signal, verify that there is oil pressure at the valve inlet. Electrical Valves must have pilot supply oil to move the spools.

Possible electronic problems.

Open circuit (broken wire, bad connection or loose connection in switchbox). Shorted to positive, ground, or other. Incorrect voltage signal from joystick.

Continued on next sheet

Hydraulic inspection.

Install 3 pressure gauges, on the valve inlet (use M port, or tee into hose supplying oil from the pump to the inlet), on the workport that is not operating, and on the LS port.

With the spools in Neutral

Gear pump – P should be approximately 200 psi, LS = 0, workport – pressure on cylinder or function.

LS pump – P should equal pump standby pressure, LS = 0, workport – pressure on cylinder or function.

Pressure Comp pump – P should equal pump standby pressure, LS = 0, workport – pressure on cylinder or function.

Gear pump – P should be approximately 200 psi higher than LS, LS should equal workport, workport – pressure on cylinder or function.

LS pump – P should be LS + standby, LS should equal workport, workport – pressure on cylinder or function.

Pressure Comp pump – P should equal pump standby pressure, LS should equal workport, workport – pressure on cylinder or function.

Operate one spool, measure pressures with function at end of travel or stop

Gear pump – P should equal valve relief setting or workport shock valve setting. LS should equal workport. Workport should equal relief setting or workport shock valve setting.

LS pump – P should equal valve relief setting, pump max pressure setting, or workport shock valve setting. LS should equal workport. Workport should equal relief setting, pump max pressure setting, or workport shock valve setting.

Pressure Comp pump – P should equal pump standby pressure, LS should equal workport. Workport should equal pump standby pressure or workport shock valve setting.

Operate more than one spool.

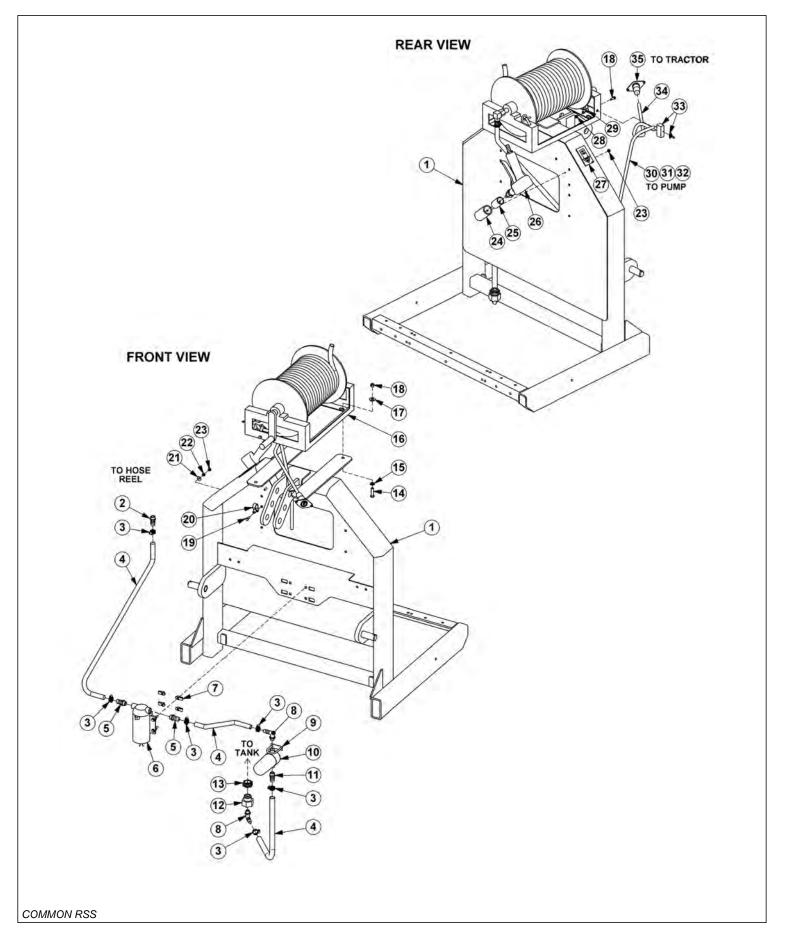
Gear pump – P should approximately 200 psi higher than LS. LS should equal highest workport pressure. Workport – pressure on cylinder or function. LS pump – P should be LS + standby pressure. LS should equal highest workport pressure. Workport – pressure on cylinder or function. Pressure Comp pump. P should equal pump standby pressure. LS should equal highest workport pressure. Workport – pressure on cylinder or function.

Possible hydraulic problems.

Cylinder leak.

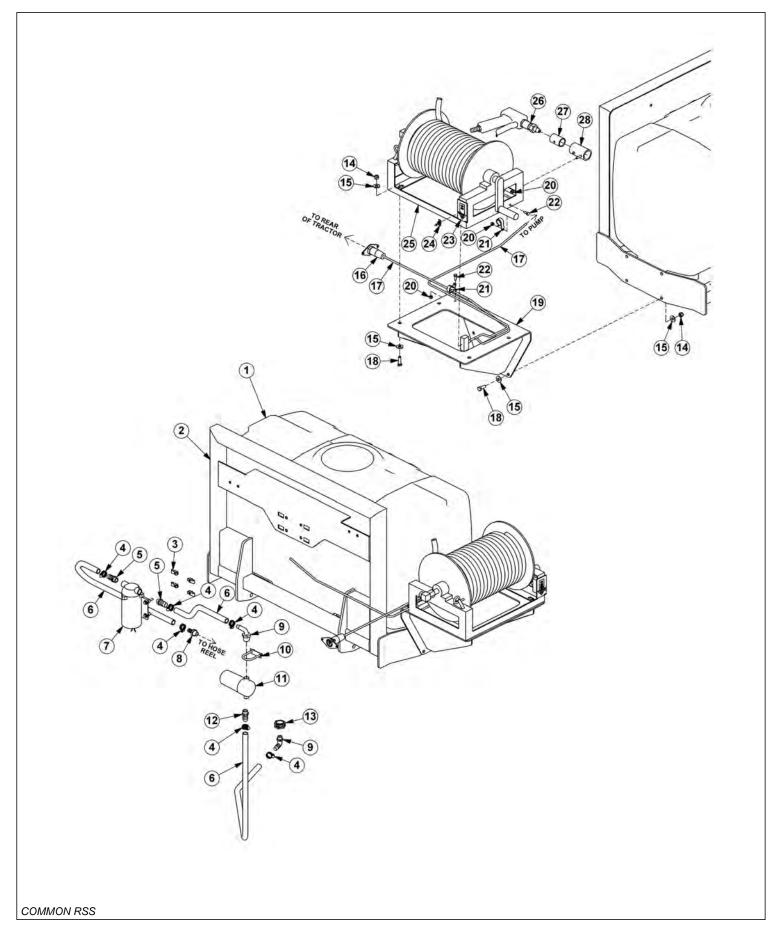
LS signal leaking to tank before reaching pump LS port. Hydraulic system or pump not supplying flow to valve.

FIRE SUPPRESSION SYSTEM SECTION



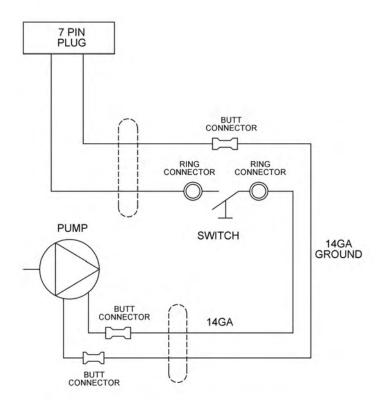
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06370137 | 1 | MOUNT,3PNT,FIRE SYS |
| 2 | 06503108 | 1 | FITTING,1/2"BARB X 1/2"MP |
| 3 | 35091 | 6 | CLAMP,HOSE,#6 |
| 4 | 06520469 | 5 | HOSE,1/2",BULK (FEET) |
| 5 | 06503168 | 2 | SWIVEL,1/2"STR,POLY |
| 6 | 06520359 | 1 | PUMP,LARGE |
| 7 | 35176 | 4 | U-NUT,1/4" |
| 8 | 06520367 | 2 | ELBOW,1/2"BARB X 1/2"MP,POLY |
| 9 | 27329 | 1 | U-BOLT,1/4" |
| 10 | 06520361 | 1 | FILTER |
| | 06520351 | 1 | ELEMENT, FILTER |
| 11 | 06520349 | 1 | FITTING,BARB,HOSE |
| 12 | 06503169 | 1 | REDUCER, BUSHING (100 & 150 GALLON TANKS ONLY) |
| 13 | 06520346 | 1 | FITTING,BULKHEAD (50 GALLON TANKS ONLY) |
| 14 | 21632 | 4 | CAPSCREW,3/8" X 1-1/2",NC |
| 15 | 21988 | 4 | LOCKWASHER,3/8" |
| 16 | 06520360 | 1 | HOSE REEL |
| 17 | 22016 | 4 | FLATWASHER,3/8" |
| 18 | 21627 | 4 | NYLOCK NUT,3/8",NC |
| 19 | 21529 | 2 | CAPSCREW,1/4" X 3/4",NC |
| 20 | 06510258 | 1 | CLAMP,3/4" |
| 21 | 22014 | 1 | FLATWASHER,1/4" |
| 22 | 21986 | 1 | LOCKWASHER,1/4" |
| 23 | 21525 | 2 | HEX NUT,1/4",NC |
| 24 | 06370121 | 1 | HOLSTER |
| 25 | 06430090 | 1 | SLEEVE |
| 26 | 06520366 | 1 | GUN,FIRE SYS |
| 27 | 6T3222 | 1 | DECAL |
| 28 | 21527 | 1 | NYLOCK NUT,1/4",NC |
| 29 | 06510257 | 1 | CLAMP,3/8" |
| 30 | 28055 | 5 | WIRE,BLACK,14GA (FEET) |
| 31 | 24200 | 5 | WIRE,RED,14GA (FEET) |
| 32 | 22802 | 5 | WIRE WRAP (FEET) |
| 33 | PT3905A | 1 | SWITCH |
| 34 | 06510256 | 4 | CABLE,14GA,4WIRE (FEET) |
| 35 | 06510255 | 1 | PLUG,7PIN,TRCTR |

FIRE SUPPRESSION FRONT MOUNT



| 1 06520342 1 TANK,50 GALLON 2 06370204 1 MNT,TANK,FRNT,50 GALLON 3 35176 4 U-NUT,1/4,3/4 TO CENTER 4 35091 6 CLAMP,HOSE,#6 5 06503168 2 SWIVEL,1/2 STR,POLY 6 06520469 8 HOSE,1/2,SPRAYER 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 11 06520361 1 FILTER,FIRE KIT,RAILKUT | ITEM | PART NO. | QTY. | DESCRIPTION |
|---|------|----------|------|-----------------------------|
| 3 35176 4 U-NUT,1/4,3/4 TO CENTER 4 35091 6 CLAMP,HOSE,#6 5 06503168 2 SWIVEL,1/2 STR,POLY 6 06520469 8 HOSE,1/2,SPRAYER 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 1 | 06520342 | 1 | TANK,50 GALLON |
| 4 35091 6 CLAMP,HOSE,#6 5 06503168 2 SWIVEL,1/2 STR,POLY 6 06520469 8 HOSE,1/2,SPRAYER 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 2 | 06370204 | 1 | MNT,TANK,FRNT,50 GALLON |
| 5 06503168 2 SWIVEL,1/2 STR,POLY 6 06520469 8 HOSE,1/2,SPRAYER 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 3 | 35176 | 4 | U-NUT,1/4,3/4 TO CENTER |
| 6 06520469 8 HOSE,1/2,SPRAYER 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 4 | 35091 | 6 | CLAMP,HOSE,#6 |
| 7 06520359 1 PUMP,FIRE KIT 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 5 | 06503168 | 2 | SWIVEL,1/2 STR,POLY |
| 8 06503108 1 FITTING,1/2"BARB X 1/2"MP 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 6 | 06520469 | 8 | HOSE,1/2,SPRAYER |
| 9 06520367 2 ELBOW,1/2MPX1/2BARB,POLY 10 27329 1 U-BOLT,1/4X2X1 | 7 | 06520359 | 1 | PUMP,FIRE KIT |
| 10 27329 1 U-BOLT,1/4X2X1 | 8 | 06503108 | 1 | FITTING,1/2"BARB X 1/2"MP |
| | 9 | 06520367 | 2 | ELBOW,1/2MPX1/2BARB,POLY |
| 11 06520361 1 FILTER,FIRE KIT,RAILKUT | 10 | 27329 | 1 | U-BOLT,1/4X2X1 |
| | 11 | 06520361 | 1 | FILTER, FIRE KIT, RAILKUT |
| 06520351 1 STRAINER,40 MESH | | 06520351 | 1 | STRAINER,40 MESH |
| 12 06520349 1 FITTING,BARB,HOSE,WETCUT | 12 | 06520349 | 1 | FITTING,BARB,HOSE,WETCUT |
| 13 06520346 1 FITTING,BULKHEAD | 13 | 06520346 | 1 | FITTING,BULKHEAD |
| 14 21627 8 NYLOCK NUT,3/8 NC | 14 | 21627 | 8 | NYLOCK NUT,3/8 NC |
| 15 22016 16 FLATWASHER,3/8,GR8 | 15 | 22016 | 16 | FLATWASHER,3/8,GR8 |
| 16 06510255 1 PLUG,7PIN,TRCTR | 16 | 06510255 | 1 | PLUG,7PIN,TRCTR |
| 17 06510256 22 WIRE,14GA,4WIRE (FEET) | 17 | 06510256 | 22 | WIRE,14GA,4WIRE (FEET) |
| 18 21631 8 CAPSCREW,3/8X1 1/4, NC,GR8 | 18 | 21631 | 8 | CAPSCREW,3/8X1 1/4, NC,GR8 |
| 19 06370207 1 MNT,FIRE SUPPRESSION | 19 | 06370207 | 1 | MNT, FIRE SUPPRESSION |
| 20 21527 3 NYLOCK NUT,1/4 NC | 20 | 21527 | 3 | NYLOCK NUT,1/4 NC |
| 21 06510257 2 CLAMP,3/8X1/4,INS | 21 | 06510257 | 2 | CLAMP,3/8X1/4,INS |
| 22 21529 2 CAPSCREW,1/4 X 3/4 NC | 22 | 21529 | 2 | CAPSCREW,1/4 X 3/4 NC |
| 236T32221DECAL,CONTROL,ON-OFF SWITCH | 23 | 6T3222 | 1 | DECAL,CONTROL,ON-OFF SWITCH |
| 24 PT3905A 1 SWITCH,MOWER | 24 | PT3905A | 1 | SWITCH, MOWER |
| 25 06520360 1 HOSE REEL,FIRE KIT,RAILKUT | 25 | 06520360 | 1 | HOSE REEL,FIRE KIT,RAILKUT |
| 26 06520366 1 GUN,FIRE KIT,RAILKUT | 26 | 06520366 | 1 | GUN,FIRE KIT,RAILKUT |
| 27 06430090 1 SLEEVE,GUN,FIRE SYS | 27 | 06430090 | 1 | SLEEVE,GUN,FIRE SYS |
| 28 06370121 1 HOLSTER,FIRESYS,RAILKUT | 28 | 06370121 | 1 | HOLSTER, FIRESYS, RAILKUT |

FIRE SUPPRESSION SYSTEM ELECTRICAL SCHEMATIC

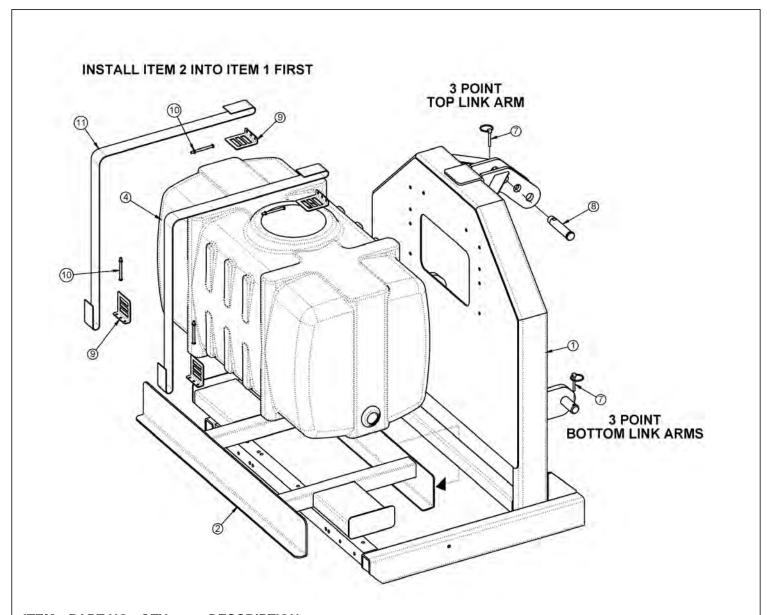


WETCUT

| | | WETCUT SECTION |
|------------|--|-------------------|
| COMMON RSS | | |

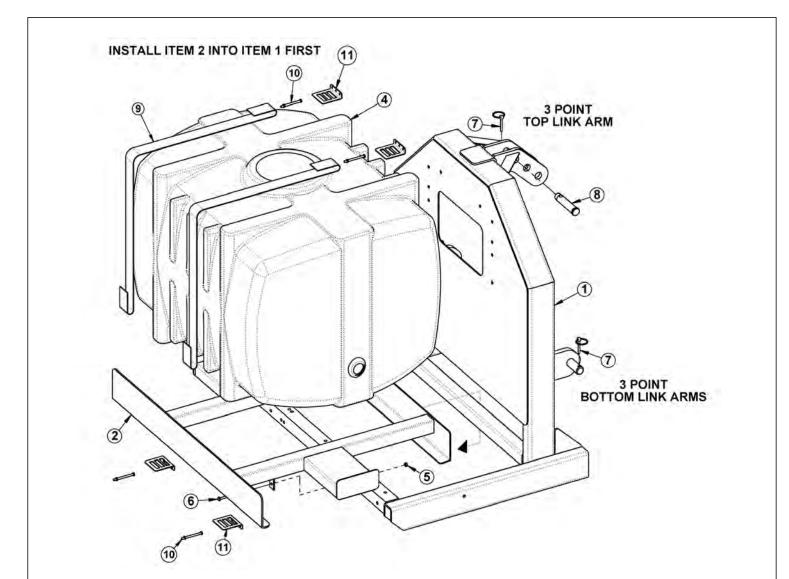
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WETCUT 50 GALLON TANK - 3PNT MOUNT

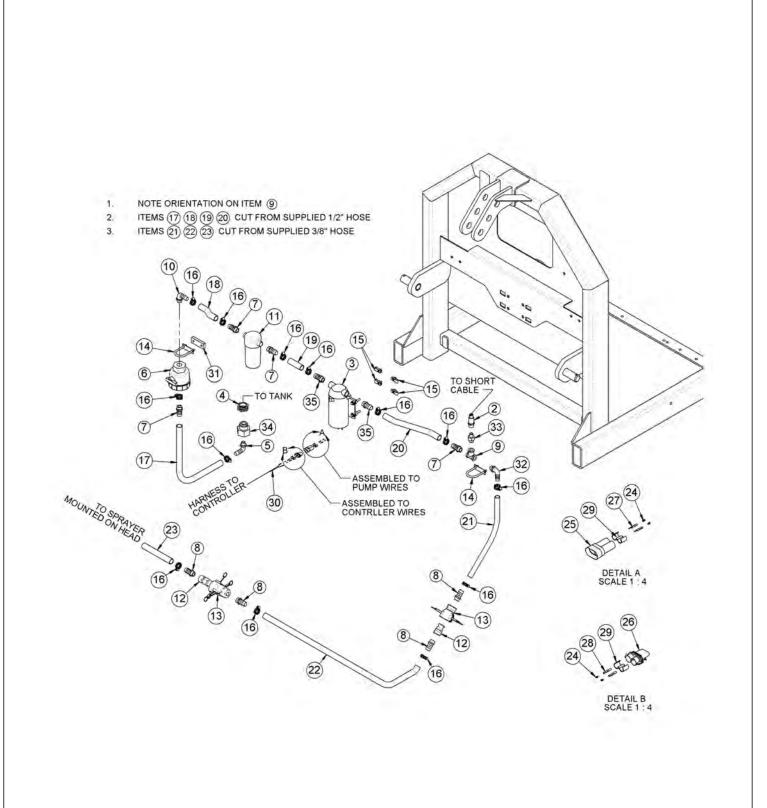


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------|
| 1 | 06370128 | 1 | MNT,3PNT,UNI |
| 2 | 06370136 | 1 | MNT,TANK,50GAL,WETCUT |
| 4 | 06520342 | 1 | TANK,50GA.,WETCUT |
| 7 | RD1032 | 3 | PIN,LYNCH,1/4" X 2" |
| 8 | TB1036 | 1 | PIN,SEC BOOM SWIV,1" X 4-11/16" |
| 9 | 06520343 | 4 | ANCHOR, STRAP, WETCUT |
| 10 | 06520344 | 4 | BOLT,STRAP,TANK,WETCUT |
| 11 | 06520345 | 2 | STRAP, TANK, WETCUT |
| | | | |

WETCUT 100 OR 150 GALLON TANK - 3PNT MOUNT

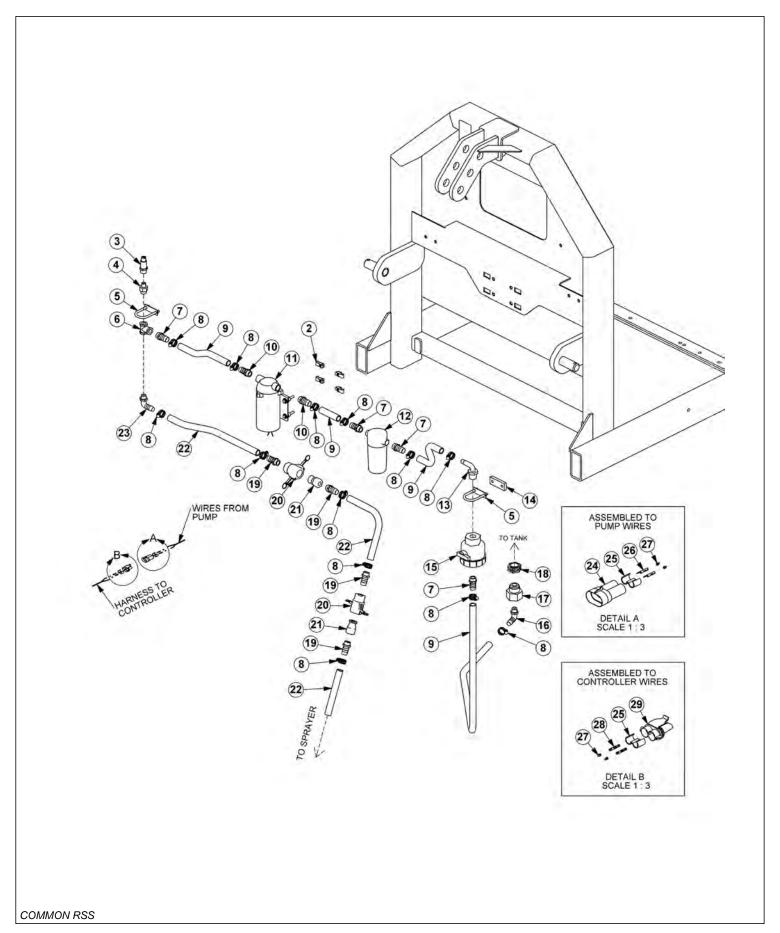


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------|
| 1 | 06370128 | 1 | MNT,3PNT,UNI |
| 2 | 06370138 | 1 | MNT,TANK,100GAL,WETCUT |
| | 06370139 | - | MNT,TANK,150GAL,WETCUT |
| 4 | 06520372 | 1 | TANK,100GA.,WETCUT |
| | 06520373 | - | TANK,150GA.,WETCUT |
| 5 | 21527 | 2 | HEX NUT,NYLOCK,1/4",NC |
| 6 | 21530 | 2 | CAPSCREW,1/4" X 1",NC |
| 7 | RD1032 | 3 | PIN,LYNCH 1/4" X 2" |
| 8 | TB1036 | 1 | PIN,SEC BOOM SWIV,1" X 4-11/16" |
| 9 | 06520345 | 2 | STRAP, TANK, WETCUT |
| 10 | 06520344 | 4 | BOLT,STRAP,TANK,WETCUT |
| 11 | 06520343 | 4 | ANCHOR,STRAP,WETCUT |
| | | | |



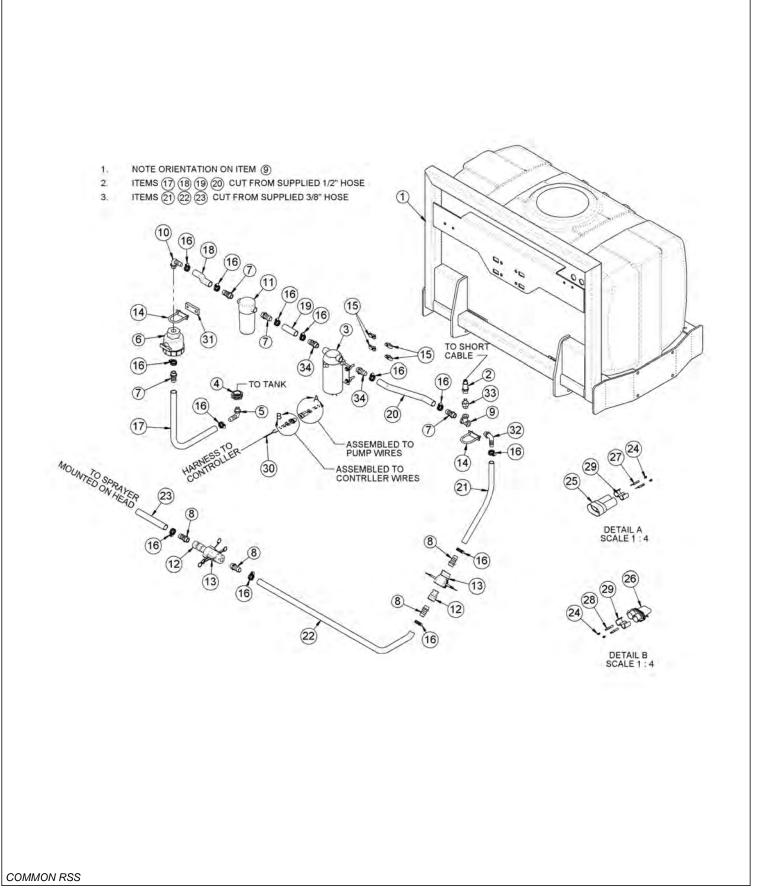
| ITEM | PART NO. | QTY. | DESCRIPTION |
|---------|----------|------|---|
| 1 | 06370128 | 1 | MNT,3PNT,UNI |
| 2 | 06520336 | 1 | CNTRLR,SENSOR,06520333 |
| 3 | 06520341 | 1 | PUMP,WETCUT |
| 4 | 06520346 | 1 | FITTING,BULKHEAD,WETCUT (50 GALLON TANKS ONLY) |
| 5 | 06520347 | 1 | FITTING,ELBOW,WETCUT |
| 6 | 06520348 | 1 | VLV,BALL,WETCUT |
| 7 | 06520349 | 4 | FITTING,BARB,HOSE,WETCUT |
| 8 | 06503173 | 4 | FITTING,1/2MP X 3/8"BARB |
| 9 | 06520353 | 1 | FITTING, TEE, WETCUT |
| 10 | 06520367 | 1 | ELBOW,1/2" X 1/2"BARB,POLY |
| 11 | 06520361 | 1 | FILTER,FIRE KIT,RAILKUT |
| 12 | 06520400 | 2 | QUIK CPLR,MALE,1/2",WETCUT |
| 13 | 06520401 | 2 | QUIK CPLR,FEM,1/2",WETCUT |
| 14 | 27329 | 2 | U-BOLT,1/4" X 1" X 2" |
| 15 | 35176 | 4 | U-NUT,1/4",3/4" TO CENTER |
| 16 | 35091 | 13 | CLAMP, HOSE #6 |
| 17 - 20 | 06520469 | 5 | 1/2" HOSE (FEET) |
| 21 - 23 | 06520316 | - | 3/8" HOSE (INCLUDED WITH SPRAYER) |
| 24 | 06510051 | 4 | SEAL,16-18GA,METPAK |
| 25 | 06510052 | 1 | CONN.,BODY,MALE,METRIPACK 150 |
| 26 | 06510053 | 1 | CONN.,BODY,FEM,METRIPACK 150 |
| 27 | 06510054 | 2 | TERMINAL, MALE, 16/18GA. METPAK |
| 28 | 06510055 | 2 | TERMINAL,FEM,16/18GA.METPAK |
| 29 | 06510056 | 2 | TPA |
| 30 | 06520337 | 1 | INCLUDED WITH CONTROLLER |
| 31 | 06401133 | 1 | SPACER,Ø.31" X 1.75" X .38" |
| 32 | 06503165 | 1 | ELBOW,1/2"MP X 3/8"BARB |
| 33 | 06520354 | 1 | BUSHING, REDUCER, WETCUT |
| 34 | 06503169 | 1 | BUSHING,1"MP X 1/2"FP (100 & 150 GALLON TANKS ONLY) |
| 35 | 06503176 | 2 | FITTING,BARB,3/8"MP X 1/2"BARB |

WETCUT 3PNT PLUMBING - LARGE MOWERS



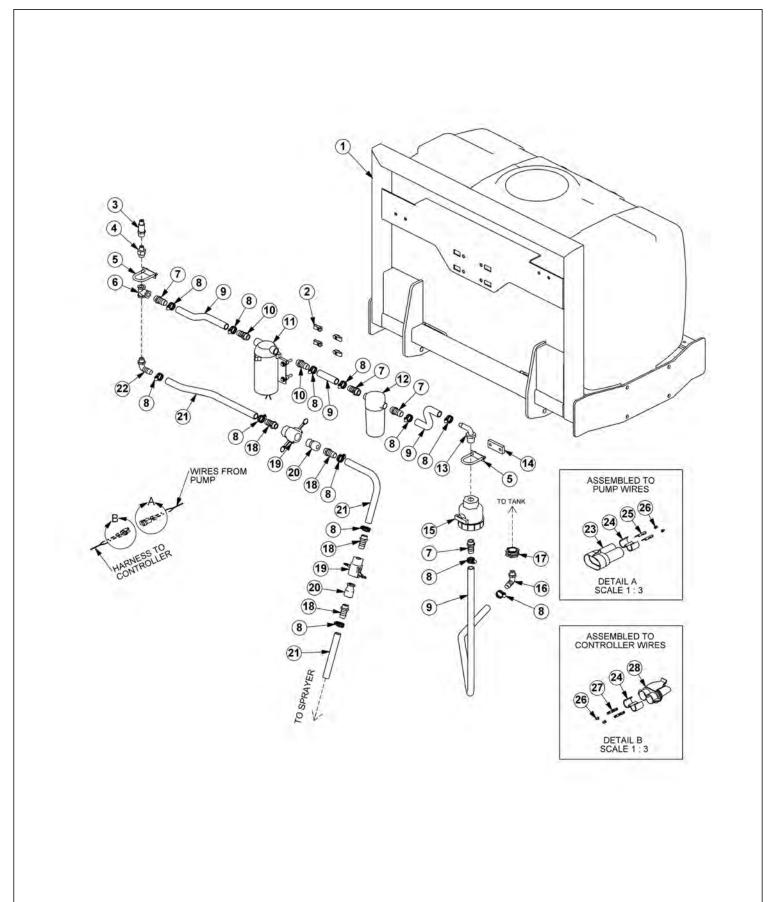
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 1 | 06370128 | 1 | MNT,3PNT,UNI |
| 2 | 35176 | 4 | U-NUT,1/4,3/4 TO CENTER |
| 3 | 06520336 | 1 | CNTRLR,SENSOR,06520333 |
| 4 | 06520354 | 1 | BUSHING,REDUCER,WETCUT |
| 5 | 27329 | 2 | U-BOLT,1/4" X 1" X 2" |
| 6 | 06520353 | 1 | FITTING,TEE,WETCUT |
| 7 | 06520349 | 4 | FITTING,BARB,HOSE,WETCUT |
| 8 | 35091 | 13 | CLAMP, HOSE #6 |
| 9 | 06520469 | 5 | 1/2" HOSE (FEET) |
| 10 | 06503168 | 2 | SWIVEL,1/2" STR |
| 11 | 06520359 | 1 | PUMP,LARGE |
| 12 | 06520361 | 1 | FILTER,FIRE KIT,RAILKUT |
| | 06520351 | 1 | STRAINER,40MESH |
| 13 | 06520367 | 1 | ELBOW,1/2X1/2BARB,POLY |
| 14 | 06401133 | 1 | SPACER,Ø.31X1.75X.38 |
| 15 | 06520348 | 1 | VLV,BALL,WETCUT |
| 16 | 06520347 | 1 | FITTING, ELBOW, WETCUT |
| 17 | 06503169 | 1 | BUSHING,1MPX1/2FP (100 & 150 GALLON TANKS ONLY) |
| 18 | 06520346 | 1 | FITTING,BULKHEAD,WETCUT (50 GALLON TANKS ONLY) |
| 19 | 06503173 | 4 | FITTING,BARB,1/2X3/8,WETCUT |
| 20 | 06520401 | 2 | QUIK CPLR,FEM,1/2,WETCUT |
| 21 | 06520400 | 2 | QUIK CPLR,MALE,1/2,WETCUT |
| 22 | 06520316 | - | 3/8" HOSE (INCLUDED WITH SPRAYER) |
| 23 | 06503165 | 1 | ELBOW,1/2X3/8BARB,POLY |
| 24 | 06510052 | 1 | CONN.,BODY,MALE,METRIPACK 150 |
| 25 | 06510056 | 2 | TPA |
| 26 | 06510054 | 2 | TERMINAL, MALE, 16/18GA. METPAK |
| 27 | 06510051 | 4 | SEAL,16-18GA,METPAK |
| 28 | 06510055 | 2 | TERMINAL, FEM, 16/18GA. METPAK |
| 29 | 06510053 | 1 | CONN.,BODY,FEM,METRIPACK 150 |

WETCUT FRONT PLUMBING - 50IN MOWERS



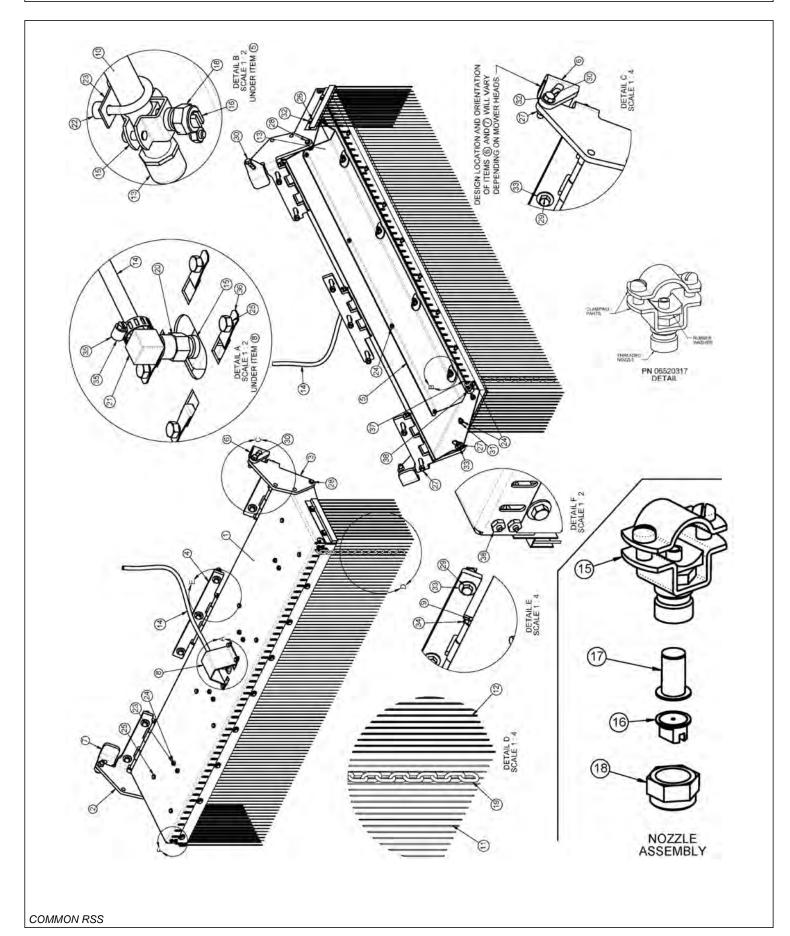
| ITEM | PART NO. | QTY. | DESCRIPTION |
|---------|----------|------|-----------------------------------|
| 1 | 06370204 | 1 | MNT,FRONT,UNI |
| 2 | 06520336 | 1 | CNTRLR,SENSOR,06520333 |
| 3 | 06520341 | 1 | PUMP,WETCUT |
| 4 | 06520346 | 1 | FITTING,BULKHEAD,WETCUT |
| 5 | 06520347 | 1 | FITTING,ELBOW,WETCUT |
| 6 | 06520348 | 1 | VLV,BALL,WETCUT |
| 7 | 06520349 | 4 | FITTING,BARB,HOSE,WETCUT |
| 8 | 06503173 | 4 | FITTING,1/2"MP X 3/8"BARB |
| 9 | 06520353 | 1 | FITTING, TEE, WETCUT |
| 10 | 06520367 | 1 | ELBOW,1/2"MP X 1/2"BARB,POLY |
| 11 | 06520361 | 1 | FILTER, FIRE KIT, RAILKUT |
| | 06520351 | 1 | STRAINER,40MESH |
| 12 | 06520400 | 2 | QUIK CPLR,MALE,1/2",WETCUT |
| 13 | 06520401 | 2 | QUIK CPLR,FEM,1/2",WETCUT |
| 14 | 27329 | 2 | U-BOLT,1/4" X 1" X 2" |
| 15 | 35176 | 4 | U-NUT,1/4",3/4" TO CENTER |
| 16 | 35091 | 13 | CLAMP,HOSE #6 |
| 17 - 20 | 06520469 | 5 | 1/2" HOSE (FEET) |
| 21 - 23 | 06520316 | - | 3/8" HOSE (INCLUDED WITH SPRAYER) |
| 24 | 06510051 | 4 | SEAL,16-18GA,METPAK |
| 25 | 06510052 | 1 | CONN.,BODY,MALE,METRIPACK 150 |
| 26 | 06510053 | 1 | CONN.,BODY,FEM,METRIPACK 150 |
| 27 | 06510054 | 2 | TERMINAL, MALE, 16/18GA. METPAK |
| 28 | 06510055 | 2 | TERMINAL, FEM, 16/18GA. METPAK |
| 29 | 06510056 | 2 | TPA |
| 30 | 06520337 | 1 | INCLUDED WITH CONTROLLER |
| 31 | 06401133 | 1 | SPACER,Ø.31" X 1.75" X .38" |
| 32 | 06503165 | 1 | ELBOW,1/2"MP X 3/8"BARB,POLY |
| 33 | 06520354 | 1 | BUSHING,REDUCER,WETCUT |
| 34 | 06503176 | 2 | FITTING,3/8"MP X 1/2"BARB |

WETCUT FRONT PLUMBING - LARGE MOWERS



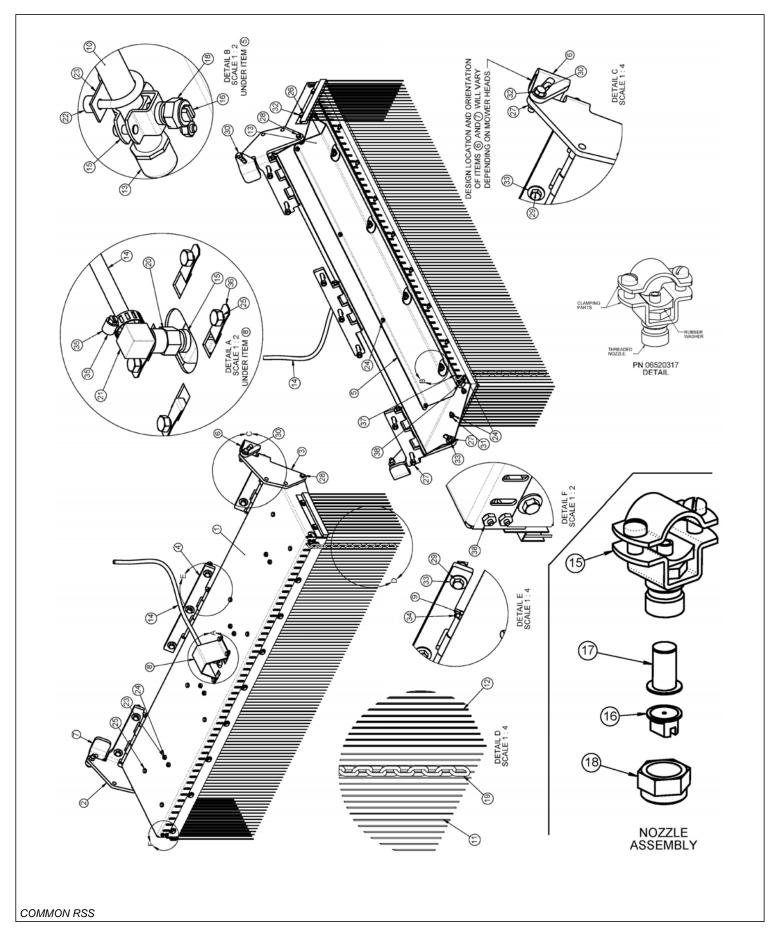
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| 1 | 06370204 | 1 | MNT,FRONT,UNIV |
| 2 | 35176 | 4 | U-NUT,1/4,3/4 TO CENTER |
| 3 | 06520336 | 1 | CNTRLR,SENSOR,06520333 |
| 4 | 06520354 | 1 | BUSHING, REDUCER, WETCUT |
| 5 | 27329 | 2 | U-BOLT,1/4" X 1" X 2" |
| 6 | 06520353 | 1 | FITTING, TEE, WETCUT |
| 7 | 06520349 | 4 | FITTING,BARB,HOSE,WETCUT |
| 8 | 35091 | 13 | CLAMP, HOSE #6 |
| 9 | 06520469 | 5 | 1/2" HOSE (FEET) |
| 10 | 06503168 | 2 | SWIVEL,1/2" STR |
| 11 | 06520359 | 1 | PUMP,LARGE |
| 12 | 06520361 | 1 | FILTER, FIRE KIT, RAILKUT |
| | 06520351 | 1 | STRAINER,40MESH |
| 13 | 06520367 | 1 | ELBOW,1/2X1/2BARB,POLY |
| 14 | 06401133 | 1 | SPACER,Ø.31X1.75X.38 |
| 15 | 06520348 | 1 | VLV,BALL,WETCUT |
| 16 | 06520347 | 1 | FITTING, ELBOW, WETCUT |
| 17 | 06520346 | 1 | FITTING,BULKHEAD,WETCUT |
| 18 | 06503173 | 4 | FITTING,BARB,1/2X3/8,WETCUT |
| 19 | 06520401 | 2 | QUIK CPLR,FEM,1/2,WETCUT |
| 20 | 06520400 | 2 | QUIK CPLR,MALE,1/2,WETCUT |
| 21 | 06520316 | - | 3/8" HOSE (INCLUDED WITH SPRAYER) |
| 22 | 06503165 | 1 | ELBOW,1/2X3/8BARB,POLY |
| 23 | 06510052 | 1 | CONN.,BODY,MALE,METRIPACK 150 |
| 24 | 06510056 | 2 | TPA |
| 25 | 06510054 | 2 | TERMINAL, MALE, 16/18GA. METPAK |
| 26 | 06510051 | 4 | SEAL,16-18GA,METPAK |
| 27 | 06510055 | 2 | TERMINAL, FEM, 16/18GA. METPAK |
| 28 | 06510053 | 1 | CONN.,BODY,FEM,METRIPACK 150 |

WETCUT 50IN SPRAYER HEAD ASSEMBLY



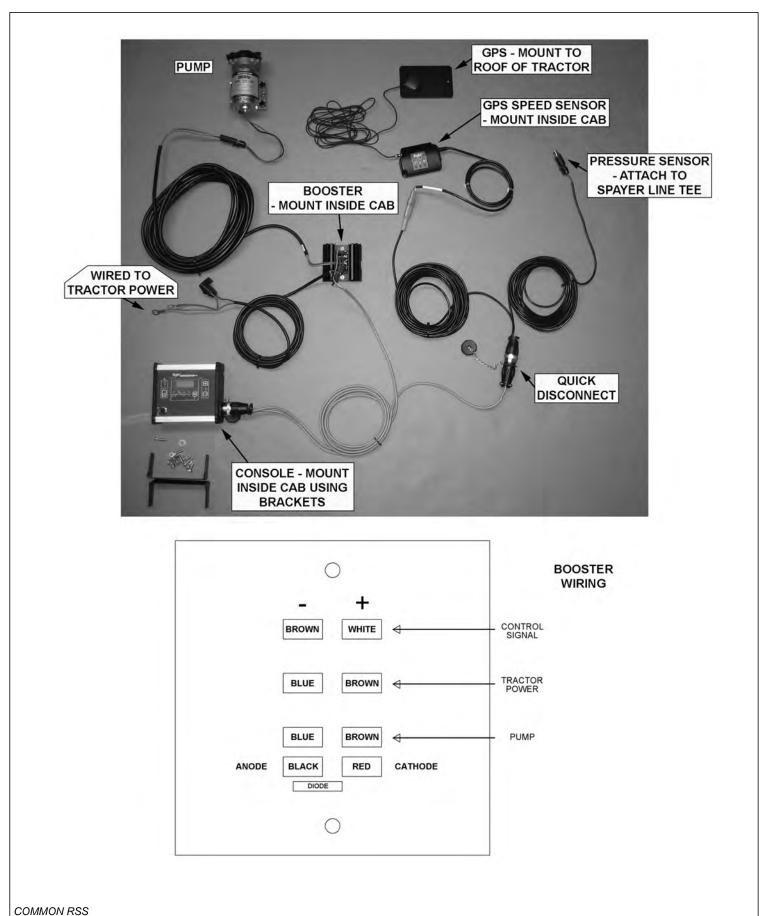
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06370105 | 1 | HOOD,SPRAYER |
| 2 | 06370106 | 1 | HINGE,LH,SPRAYER |
| 3 | 06370107 | 1 | HINGE,RH,SPRAYER |
| 4 | 06370108 | 1 | HINGE,CNTR,SPRAYER |
| 5 | 06410668 | 1 | GUARD,SPRAYER,WETCUT |
| 6 | 06410753 | 1 | MNT,RH,WET CUT (FLAIL) |
| | 06410942 | 1 | MNT,RH,WET CUT (ROTARY) |
| 7 | 06410754 | 1 | MNT,LH,WET CUT (FLAIL) |
| | 06410943 | 1 | MNT,LH,WET CUT (ROTARY) |
| 8 | 06410796 | 1 | GUARD,HOSE,WETCUT |
| 9 | 06420069 | 3 | PIN,HINGE,WET CUT |
| 10 | 06497003 | 1 | TUBE,LG,SPRAYER |
| 11 | 06499012 | 1 | SKIRT,ANTI SPRAY,50 |
| 12 | 06499013 | 2 | SKIRT,ANTI SPRAY,7 |
| 13 | 06520314 | 2 | TUBE,CAP,SPRAYER |
| 14 | 06520316 | 15 | HOSE, SPRAYER (FEET) |
| 15 | 06520317 | 5 | NOZZLE,SPRAYER |
| 16 | 06520319 | 4 | TIP,NOZZLE,SPRAYER |
| 17 | 06520320 | 4 | FILTER,NOZZLE,SPRAYER |
| 18 | 06520321 | 4 | NUT,NOZZLE,SPRAYER |
| 19 | 06520322 | 49 | CHAIN,.18" X 1.31" X 13LINKS |
| 20 | 06520381 | 1 | ADAPTER,1/4"NPT,WETCUT |
| 21 | 06520382 | 1 | ELBOW,BARB,3/8" X 1/4"NPT |
| 22 | 06520383 | 8 | SPACER,.50"O.D. X .252"I.D. X .38",NYLON |
| 23 | 32550 | 4 | U-BOLT,1/4" X 1" X 1" X 1-3/4" |
| 24 | 21527 | 29 | HEX NUT,NYLOCK,1/4",NC |
| 25 | 21528 | 12 | CAPSCREW,1/4" X 1/2",NC |
| 26 | 21529 | 13 | CAPSCREW,1/4" X 3/4",NC |
| 27 | 21625 | 11 | HEX NUT,3/8",NC |
| 28 | 21630 | 2 | CAPSCREW,3/8" X 1",NC |
| 29 | 21634 | 7 | CAPSCREW,3/8" X 2",NC |
| 30 | 21632 | 2 | CAPSCREW,3/8" X 1-1/2",NC |
| 31 | 21986 | 4 | LOCKWASHER,1/4" |
| 32 | 22014 | 15 | FLATWASHER,1/4" |
| 33 | 22016 | 9 | FLATWASHER,3/8",GR8 |
| 34 | 34698 | 6 | ROLL PIN, PLAIN, 3/16" X 7/8" |
| 35 | 35091 | 1 | CLAMP,HOSE #6 |
| 36 | 35176 | 4 | U-NUT,1/4",3/4" TO CENTER |
| 37 | 06520376 | 5 | CABLE,3/16" |
| 38 | 06537022 | 2 | U-BOLT,CABLE,3/16" |

WETCUT 60IN SPRAYER HEAD ASSEMBLY



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06370210 | 1 | HOOD,SPRAYER |
| 2 | 06370106 | 1 | HINGE,LH,SPRAYER |
| 3 | 06370107 | 1 | HINGE,RH,SPRAYER |
| 4 | 06370108 | 1 | HINGE,CNTR,SPRAYER |
| 5 | 06411234 | 1 | GUARD,SPRAYER,WETCUT |
| 6 | 06410753 | 1 | MNT,RH,WET CUT (FLAIL) |
| | 06410942 | 1 | MNT,RH,WET CUT (ROTARY) |
| 7 | 06410754 | 1 | MNT,LH,WET CUT (FLAIL) |
| | 06410943 | 1 | MNT,LH,WET CUT (ROTARY) |
| 8 | 06410796 | 1 | GUARD,HOSE,WETCUT |
| 9 | 06420069 | 3 | PIN,HINGE,WET CUT |
| 10 | 06497009 | 1 | TUBE,LG,SPRAYER |
| 11 | 06499018 | 1 | SKIRT,ANTI SPRAY,60 |
| 12 | 06499013 | 2 | SKIRT,ANTI SPRAY,7 |
| 13 | 06520314 | 2 | TUBE,CAP,SPRAYER |
| 14 | 06520316 | 15 | HOSE, SPRAYER (FEET) |
| 15 | 06520317 | 6 | NOZZLE,SPRAYER |
| 16 | 06520319 | 5 | TIP,NOZZLE,SPRAYER |
| 17 | 06520320 | 5 | FILTER,NOZZLE,SPRAYER |
| 18 | 06520321 | 5 | NUT,NOZZLE,SPRAYER |
| 19 | 06520322 | 61 | CHAIN,.18" X 1.31" X 13LINKS |
| 20 | 06520381 | 1 | ADAPTER,1/4"NPT,WETCUT |
| 21 | 06520382 | 1 | ELBOW,BARB,3/8" X 1/4"NPT |
| 22 | 06520383 | 10 | SPACER,.50"O.D. X .252"I.D. X .38",NYLON |
| 23 | 32550 | 5 | U-BOLT,1/4" X 1" X 1" X 1-3/4" |
| 24 | 21527 | 33 | HEX NUT,NYLOCK,1/4",NC |
| 25 | 21528 | 15 | CAPSCREW,1/4" X 1/2",NC |
| 26 | 21529 | 13 | CAPSCREW,1/4" X 3/4",NC |
| 27 | 21625 | 13 | HEX NUT,3/8",NC |
| 28 | 21630 | 2 | CAPSCREW,3/8" X 1",NC |
| 29 | 21634 | 7 | CAPSCREW,3/8" X 2",NC |
| 30 | 21632 | 4 | CAPSCREW,3/8" X 1-1/2",NC |
| 31 | 21986 | 4 | LOCKWASHER,1/4" |
| 32 | 22014 | 33 | FLATWASHER,1/4" |
| 33 | 22016 | 11 | FLATWASHER,3/8",GR8 |
| 34 | 34698 | 6 | ROLL PIN, PLAIN, 3/16" X 7/8" |
| 35 | 35091 | 1 | CLAMP,HOSE #6 |
| 36 | 35176 | 4 | U-NUT,1/4",3/4" TO CENTER |
| 37 | 06520376 | 6 | CABLE,3/16" (FEET) |
| 38 | 06537022 | 2 | U-BOLT,CABLE,3/16" |

WETCUT CABLES



WARRANTY SECTION

Warranty Section 7-1

•

WARRANTY INFORMATION

Tiger Corporation, 3301 N. Louise, Sioux Falls, South Dakota, warrants to the original Retail Customer, the new Tiger equipment is free of defects in material and workmanship. Any part of equipment that in Tiger's judgement, show evidence of such defects will be repaired or replaced without charge, provided that the failure of part(s) shall have occurred within twelve (12) months from the date of delivery of said equipment to the Retail Customer. Expendable components such as knives, oil, chain sprockets, skid shoes, knife mounting disks and the like are excluded but not limited to this warranty.

The Retail Customer must pay the transportation cost to and from the Tiger Dealer's service shop for warranty service. Warranty service will be performed by the Tiger Dealer from whom the equipment was purchased, during service shop regularly scheduled days and hours of operation.

All Tiger obligation under this warranty shall be terminated if the equipment is modified or altered in ways not approved in writing by Tiger, if repair parts other than genuine Tiger repair parts have been used, or if the equipment has been subject to misuse, neglect, accident, improper maintenance or improper operation.

Tiger Corporation reserves the right to make improvements in design or changes in specification at any time without incurring any obligation to owners of equipment previously sold.

No agent or person has authority to alter, add to or waive the above warranties which are agreed to be in the only warranties, representations or promises, expressed or implied, as to the quality or performance of the products covered and which do not include any implied warranty of merchantability or fitness. In no event will Tiger be liable for incidental or consequential damages or injuries, including, but not limited to, loss of profits, rental or substitute equipment or other commercial loss.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE EXPRESSED HEREIN.

It is the Purchasers obligation to sign the warranty registration form **AFTER** he / she has Read and Understands the Operation and Safety Instructions stated within this manual.

ONE LAST WORD

This manual cannot possibly cover all of the potentially hazardous situations you will encounter. By being familiar with the safety rules, operating and maintenance instructions in this manual you can help prevent accidents. The objective of this manual is to help make you a better operator. Remember, **SAFETY IS YOU!**



Your safety and the safety of those around you depends on **YOU**. Common sense should play a large role in the operation of this machine.

Since we at Tiger Corporation are constantly striving to improve out products, we reserve the right to change specifications or design at any time.

TO THE OWNER / OPERATOR / DEALER



To keep your implement running efficiently and safely, read your manual thoroughly and follow these directions and the Safety Messages in this manual and on the machine. The table of contents clearly identifies each section where you can easily find the information you need.

The Occupational Safety and Health Act (OSHA 1928.51 subpart C) makes the following minimum requirements for tractor operators.

OWNER REQUIREMENTS:

- 1. Provide a Roll-Over-Protective Structure that meets the requirements of this Standard; and
- 2. Provide Seatbelts that meet the requirements of this Standard and SAE J3C; and
- 3. Ensure that each employee uses such Seatbelt while the tractor is moving; and
- 4. Ensure that each employee tightens the Seatbelt sufficiently to confine the employee to the protected area provided by the ROPS.

OPERATOR REQUIREMENTS:

- 1. Securely fasten seatbelt it the tractor has a ROPS.
- 2. Where possible, avoid operating the tractor near steep ditches, embankments, and holes.
- 3. Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
- 4. Stay off slopes too steep for safe operation.
- 5. Watch where you are going especially at row ends, on roads, and around trees.
- 6. Do Not permit others to ride.
- 7. Operate the tractor smoothly no jerky turns, starts, or stops.
- 8. Hitch only to the draw-bar and hitch points recommended by the tractor manufacturer.
- 9. When the tractor is stopped, set brakes securely and use park lock, if available



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