

# SIDE ROTARY ASSEMBLIES

NEW HOLLAND TS6.110 CAB / WOC



# 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

## 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!



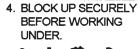
FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE SERIOUS BODILY INJURY OR EVEN DEATH TO OPERATOR AND OTHERS IN THE AREA.









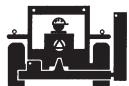




- Study and understand Operator's Manuals, Safety Decals, and Instructional Decals for tractor and implement to prevent misuse, abuse, and accidents. Practice before operating in a confined area or near passersby.
   Learn how to stop engine suddenly in an emergency. Be alert for passersby and especially children
- 2. Allow no children on or near folding mower or tractor. Allow no riders on tractor or implement. Falling off may cause serious injury or death from being run over by tractor or mower or contact with rotating blades.
- 3. Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seat belt securely fastened to prevent injury and possible death from falling off or tractor overturn.
  Personal Protective Equipment such as Hard Hat, Safety Glasses, Safety Shoes, & Ear Plugs are recommended.
- 4. Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent crushing injury or death from sudden dropping or inadvertent operation of controls. Make certain area is clear before lowering or folding
- 5. Before transporting, put Lift Lever in detent or full-lift position. Install Transport Safety Devices securely on folding mowers. Put Booms securely in Transport Rest.
- Folding and Boom Mowers have raised center of gravity. Slow down when turning and on hillsides.
- 6. Make certain that SMV sign, warning lights, and reflectors are clearly visible. Follow local traffic codes.
- 7. Never operate with Cutting Head or Folding Section raised if passersby, bystanders, or traffic are in the area to reduce possibility of injury or death from objects thrown by Blades under Guards or mower structure.
- 8. Before dismounting, secure implement in transport position or lower to ground.
  Put tractor in park or set brake, disengage PTO, stop engine, remove key, and wait until noise of rotation has ceased to prevent crushing by entanglement in rotating parts which could cause injury or death.
  Never mount or dismount a moving vehicle. Crushing from runover may cause serious injury or death.



6. USE SMV. LIGHTS. & REFLECTORS.



7. DO NOT OPERATE WITH CUTTER OR WING RAISED.



8. DO NOT MOUNT OR **DISMOUNT WHILE** MOVING

Warranty Information: Read and understand the complete Warranty Statement found in this manual. Fill out the Warranty Registration form in full and return it within 90 days. Make certain the Serial Number of the machine is recorded on the Warranty Card, and form that you retain.

## **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

| • | <ul><li>If unable to correct the problem yourself, contact your local Tiger Dealer after</li></ul> |
|---|--|
|   | gathering:   |
|   | Machine model  |

| • Machine model                   |  |
|-----------------------------------|--|
| <ul><li>Serial number _</li></ul> |  |
| <ul><li>Dealer name</li></ul>     |  |

• 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: |
|--------------------------|-----------------|
| <b>Tiger Corporation</b> |                 |
| 3301 N. Louise Ave.      |                 |
| Sioux Falls, SD 57107    | 1               |
| 1-800-843-6849           | 1               |
| 1-605-336-7900           |                 |
| www.tiger-mowers.com     |                 |

## **TABLE OF CONTENTS**

| SAFETY SECTION              |   |  |
|-----------------------------|---|--|
| ASSEMBLY / MOUNTING SECTION | 2 |  |
| OPERATION SECTION           | 3 |  |
| MAINTENANCE SECTION         | 4 |  |
| PARTS SECTION               | 5 |  |
| COMMON PARTS SECTION        | 6 |  |
| WARRANTY INFORMATION        | 7 |  |

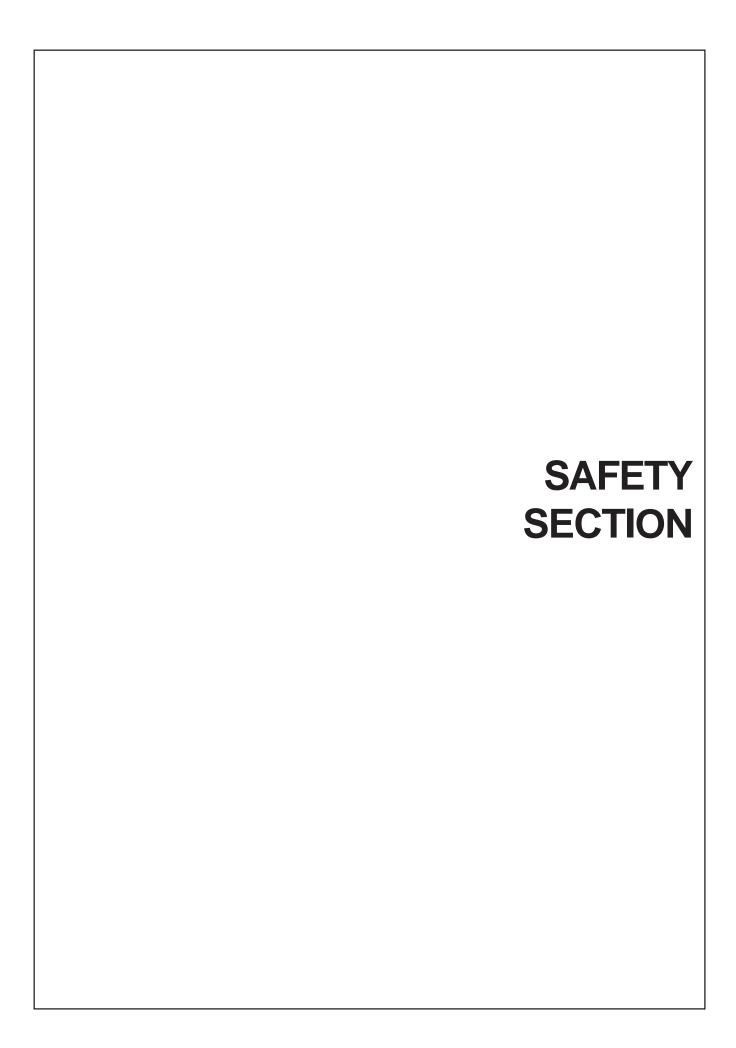


## This symbol means: CAUTION – YOUR SAFETY IS AT RISK!

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.



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



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



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

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

READ, UNDERSTAND, and FOLLOW 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 medida de seguridad. (SG-3)



## i LEA EL INSTRUCTIVO!

#### **DANGER!**



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 too 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. If the decals are missing, damaged, or unreadable, obtain and install replacement decals immediately.  $({\rm SG-5})$ 

#### **WARNING!**



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)



#### **WARNING!**



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!**

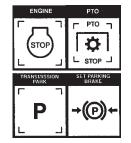


Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. (SG-8)

#### DANGER!



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.



Side Rtry Safety Section 1-3

#### **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)





Never allow children to operate or ride on the Tractor or Implement.

(SG-11



**WARNING!** 



Do not mount the Tractor while the tractor is moving. Mount the Tractor only when the Tractor and all moving parts are completely stopped.



DANGER!



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)



**DANGER!** 



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.  $_{\rm (SG-14)}$ 



DANGER!



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)







#### **CAUTION!**



PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PER-MANENT 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-17)



#### WARNING!

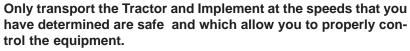


Transport only at safe speeds. Serious accidents and injuries can result from operating this equipment at unsafe speeds. Understand the Tractor and Implement and how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.



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

- 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. 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 andwatch out for the other guy. (SG-19)



#### WARNING!



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)





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 cotter pins and washers. Serious injury may occur from not maintaining this machine in good working order.  $_{\rm (SG-21)}$ 



#### **WARNING!**



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



#### DANGER!



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

(SG-23)

#### DANGER!



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



#### **DANGER!**



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)

#### DANGER!



**DO NOT** allow any person under a folded wing unless wing is securely locked up or supported. **DO NOT** approach the Implement unless the Tractor is turned off and all motion has ceased. Never work under the frame work, or any lifted component unless the implement is securely supported or blocked up. A sudden or inadvertent fall by any of these components could cause serious injury or even death. (STI-3)



Side Rtry Safety Section 1-6

#### **CAUTION!**



On a fully-assembled unit, do not remove the Wing Retaining Strap until hoses are attached to the tractor and the Wing Cylinders are filled with oil. Lower the Wings slowly and carefully. Keep bystanders away during operations. (STI-5)

#### **DANGER!**



**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)

#### WARNING!



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)

#### **DANGER!**



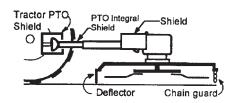
There are obvious and hidden potential hazards in the operation of this Mower. REMEMBER! This machine is often operated in heavy brush and in heavy weeds. The Blades of this Mower can throw objects if shields are not properly installed and maintained. Serious injury or even death may occur unless care 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.  $_{\rm (SGM-3)}$ 



#### 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)

#### **WARNING!**



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.  $_{(\mathrm{SGM-5})}$ 



#### WARNING!



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)

#### **WARNING!**



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)

#### WARNING!



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)



#### **DANGER!**



Replace bent or broken blade with new blades. NEVER ATTEMPTTO STRAIGHTEN OR WELD ON BLADES SINCE THIS WILL LIKELY CRACK OR OTHERWISE DAMAGE THE BLADE WITH SUBSEQUENT 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. (SGM-11)

#### DANGER!



Rotary 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:

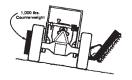
- -Front and Rear Deflectors are installed and in good, working condition;
- -Mower Head is running close to and parallel to the ground without exposed Blades;
- -Passersby are outside the existing thrown-object zone;
- -All areas have been thoroughly inspected and all foreign material such as rocks, 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 removed, and mowed again at desired final height. (SBM-1)

#### WARNING!



Each Rear Wheel must have a minimum of 1,000 pounds contact with the surface to prevent lateral instability and possible tip-over which could result in serious bodily injury or even death. Widen the wheel tread and add weights if needed. Refer to the mounting instructions or call Customer Service if you need assistance with Couterweight Procedure. (SFL-3)



#### WARNING!



Do not operate Mower if excessive vibration exists. Shut down PTO and the Tractor engine. Inspect the Mower to determine the source of the vibration. If Mower blades are missing or damaged replace them immediately. Do not operate the mower until the blades have been replaced and the Mower operates smoothly. Operating the Mower with excessive vibration can result in component failure and 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 Mower to be operated with blades missing. (SFL-4)

#### WARNING!



Do not let the Blades turn when the Mower Deck is raised for any reason, including clearance or for turning. Raising the Mower deck exposes the Cutting Blades which creates a potentially serious hazard and could cause serious injury or even death from objects thrown from the Blades. (SRM-7)



#### 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.

#### WARNING!



Never leave the Tractor and Implement unattended while the Implement is in the lifted position. Accidental operation of lifting lever or a hydraulic failure may cause sudden drop of unit with injury or death by crushing. To properly park the implement when disconnecting it from the tractor, lower the stand and put the retaining pin securely in place, or put a secure support under the A-Frame. Lower the implement carefully to the ground. Do not put hands or feet under lifted components. (S3PT-1)

#### **WARNING!**



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)

#### DANGER!



Always disconnect the wire leads from the mower valve 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-12)



#### WARNING!



Use extreme care when lowering or unfolding the implement's wings. Make sure no bystanders are close by or underneath the wings. Allow ample clearance around the implement when folding or unfolding the wings. Use extreme caution around buildings or overhead power lines.

(S3PT-

5)

#### WARNING!



Relieve hydraulic pressure prior to doing any maintenance or repair work on the Implement. Place the Implement on the ground or securely blocked up, disengage the PTO, and turn off the tractor engine. Push and pull the Remote Cylinder lever in and out several times prior to starting any maintenance or repair work. (S3PT-9)



#### DANGER!



This Implement is wider than the Tractor. Be careful when operating or transporting this equipment to prevent the Implement from running into or striking sign posts, guard rails, concrete abutments or other solid objects. Such an impact could cause the Implement and Tractor to pivot violently resulting in loss of steering control, serious injury, or even death. Never allow the Implement to contact obstacles. (S3PT-12)

#### DANGER!



The flail cutter shaft is designed for standard rotation (same rotation as the tractor wheel during forward travel). **Never operate the cutter shaft in the reverse rotation.** Operating this mower in reverse rotation may cause objects to be thrown out the front of the mower head.



Side Rtry Safety Section 1-10

#### WARNING!



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!

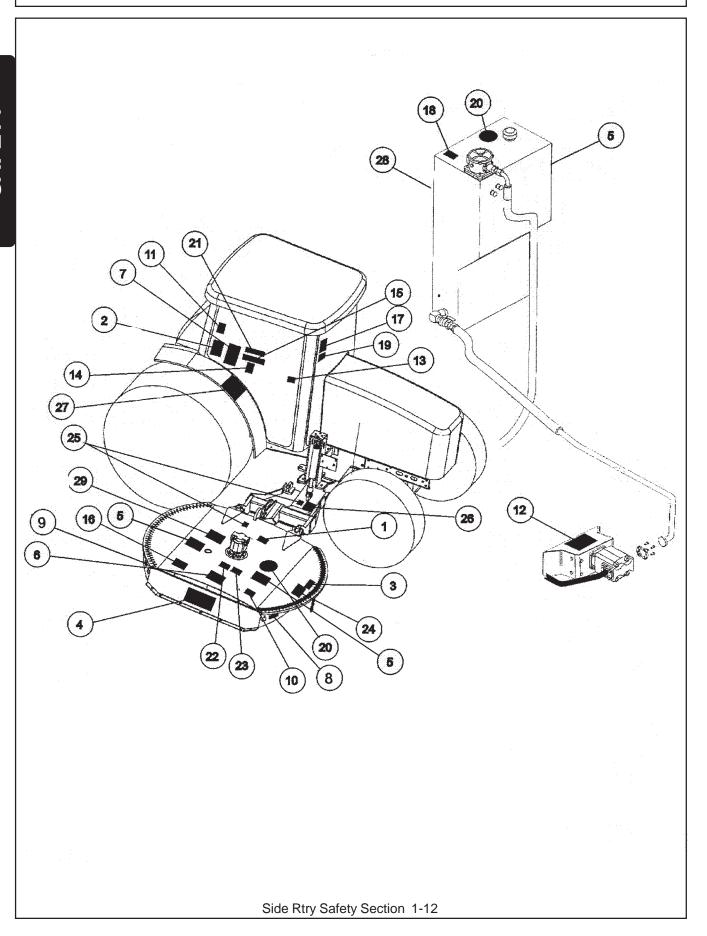


Battery post, terminals and related accessories contain lean and lead compounds, chemicals known to the state of California to cause cancer and birth or other reproductive harm. **Wash hands after handling!** 

Tiger mowers use balanced and matched system components for blade carriers, blades, cutter-shafts, 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)



| ITEM | PART NO. | QTY. |          | DESCRIPTION                                  |
|------|----------|------|----------|--|
| 1    | 22839    | 1    | INSTRUCT | Don Not Lubricate With Automatic Grease Gun  |
| 2    | 22840    | 1    | WARNING  | Foreign Objects Contacted                    |
| 3    | 24028    | 1    | WARNING  | Inspect Rear Flap                            |
| 4    | 31522    | 1    | LOGO     | TIGER MOWERS                                 |
| 5    | 31523    | 3    | LOGO     | TIGER MOWERS                                 |
| 6    | 42350    | 1    | DANGER   | Cuttershaft Direction                        |
| 7    | 33743    | 1    | INSTRUCT | Mowing Safet Tips                            |
| 8    | 42399    | 1    | REFLECT  | Red Reflector                                |
| 9    | 42400    | 1    | REFLECT  | Amber Reflector                              |
| 10   | 6T3217   | 1    | DANGER   | Keep Hands and Feet Clear                    |
| 11   | 6T3219   | 1    | WARNING  | Read Operators and Maintenance Manuals       |
| 12   | 6T3220   | 1    | INTRUCT  | Lubricate Pump, Driveshaft Daily             |
| 13   | 6T3221   | 1    | CAUTION  | Lubricate Spindle When Mower and Tractor Off |
| 14   | 6T3222   | 1    | INSTRUCT | Engine will not start when mower is engaged  |
| 15   | 1059     | 1    | INSTRUCT | Mower Positions                              |
| 16   | 6T3224   | 1    | DANGER   | Stay Clear, Discharge Opening                |
| 17   | 6T3230   | 1    | WARNING  | Don't Operate with Bystanders in Area        |
| 18   | 6T3233   | 1    | CAUTION  | DONOT Start or Run with Valves closed        |
| 19   | 6T3234   | 1    | CAUTION  | Check Crankshaft Adapter Daily               |
| 20   | 6T3236   | 1    | LOGO     | Made In USA                                  |
| 21   | 6T3243   | 1    | WARNING  | Replace Bolts and Locknut if damaged         |
| 22   | 6T3249A  | 1    | INSTRUCT | Grease Inst. Cuttershaft Bearing             |
| 23   | 6T3261   | 1    | INSTRUCT | Grease Inst. Ground Roller Bearing           |
| 24   | TB1011   | 1    | WARNING  | Do Not Work Mower with Safety Shiel Removed  |
| 25   | 02962764 | 1    | WARNING  | Pinch Point                                  |
| 26   | 02965262 | 1    | WARNING  | Hydraulic Hose Repair                        |
| 27   | 02967827 | 1    | DANGER   | Multi Warn Messages                          |
| 28   | 34852    | 1    | INSTRUCT | Hydraulic Specifications                     |
| 29   | 00756059 | 1    | WARNING  | Check Hydraulic Hose with Cardboard          |

DO NOT LUBRICATE WITH AUTOMATIC GREASE GUN. GREASE WITH HAND GREASE GUN ONLY.

P/N22839

PART NO. LOCATION

22839 MOWER DECK



22840 INSIDE OF CAB

## **A** WARNING

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

24028

24028 MOWER DECK



10"X5.5" 31522 MOWER DECK

18.25"X10" 31523 HYDRAULIC TANK



MOWING SAFETY TIPS Read & understand the Operator's Manual.

Keep all shields and guards in place. Make sure equipment is in proper working order.

Remove all foreign debris.

minimum of 300 feet away.

objects or foreign material. Never approach rotating elements.

before leaving seat.

Wear Your Seat Belt.

PART NO. **LOCATION** 

42350 **MOWER DECK** 

■ Never attempt to get off or on a moving truck. Never allow riders on truck or equipment. Only start the truck from the seat with the key. Always inspect the area before mowing. Always keep bystanders and coworkers a Never allow the mower blades to contact solid Disengage mower head. Shut down Aux.

33743 **INSIDE OF CAB** 

5

Engine place transmission in park, set parking brake, shut off truck engine, and remove key. Wait till all rotating motion has stopped

> 42399 MOWER DECK

> 42400 MOWER DECK





PART NO. LOCATION

6T3217 MOWER DECK



6T3219 INSIDE OF CAB

6T3220 FRONT PUMP MOUNT

## **A** CAUTION

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.

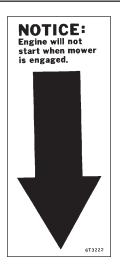
NOTE: SEE OPERATORS MANUAL FOR SUBSTITUTE LUBRICANT AND MORE DETAILED INSTRUCTIONS.

6T3221

29-6T3221

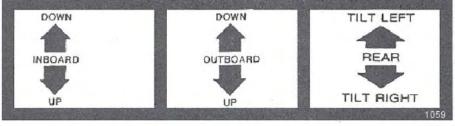
Side Rtry Safety Section 1-16

6T3221 INSIDE OF CAB



PART NO. LOCATION

6T3233 INSIDE OF CAB



6T3234 INSIDE OF CAB

1059



6T3236 MOWER DECK

## **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.

6T3243 INSIDE OF CAB

Side Rtry Safety Section 1-17

PART NO. LOCATION

6T3233 HYDRAULIC TANK

## **A** CAUTION

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

6T-3233

## **A** CAUTION

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 HYDRAULIC TANK

> 6T3243 INSIDE OF CAB

PART NO. LOCATION

## **GREASING INSTRUCTIONS**

**GROUND SHAFT BEARING**GREASE EVERY 8 HRS. OR DAILY

NOTE: If unusual environmental conditions exist; extreme temperatures, moisture, or contaminants more frequent lubrication is required.

6T3249A

6T3249A MOWER DECK

## **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.

6T3261

6T3261 MOWER DECK



DO NOT OPERATE MOWER
WITH SAFETY SHIELD REMOVED.

TB1011 MOWER DECK



02962764 MOWER DECK DRAFT BEAM

PART NO. LOCATION

02965262 DRAFT BEAM



FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE SERIOUS BODILY INJURY OR EVEN DEATH TO OPERATOR AND OTHERS IN THE AREA.









- Study and understand Operator's Manuals, Safety Decals, and Instructional Decals for tractor and implement to prevent misuse abuse, and accidents. Practice before operating in a confined area or near passersby.
   Learn how to stop engine suddenly in an emergency. Be alert for passersby and especially children.
- 2. Allow no children on or near folding mower or tractor. Allow no riders on tractor or implement. Falling off may cause serious of ury or death from being run over by tractor or mower or contact with rotating blades.
- Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seat belt securely fastened to prevent injury and possible death from falling off or tractor overturn.
   Personal Protective Equipment such as Hard Hat, Safety Glasses, Safety Shoes, & Ear Plugs are recommended.
- 4 Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent crushing injury or death from sudden dropping or inadvertent operation of controls. Make certain area is clear before lowering or folding.
- 5 Before transporting, put Lift Lever in detent or full-lift position. Install Transport Safety Devices securely on folding mowers. Put Booms securely in Transport Rest.
   Folding and Boom Mowers have raised center of gravity. Slow down when turning and on hillsides.
- 6 Make certain that SMV sign, warning lights, and reflectors are clearly visible. Follow local traffic codes.
- Never operate with Cutting Head or Folding Section raised if passersby, bystanders, or traffic are in the area to reduce possibility of injury or death from objects thrown by Blades under Guards or mower structure.
- Before dismounting, secure implement in transport position or lower to ground.
   Put tractor in park or set brake, disengage PTO, stop engine, remove key, and wait until noise of rotation has ceased to prevent crushing by entanglement in rotating parts which could cause injury or death.
   Never mount or dismount a moving vehicle. Crushing from runover may cause serious injury or death.







7. DO NOT OPERATE WITH



02967827 **CAB FENDER** 

Side Rtry Safety Section 1-20

0

## **SAFETY**

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/<br>Low Temp<br>JD-20C<br>ISO 46 Anti-Wear<br>ISO 100 Anti-Wear | Mobil DTE® 15M  Mobilfluid® 424  Mobil DTE® 25  Mobil DTE® 18M |
| Flail Rear Gearbox  | Reservoir   | PAO Synthetic Extreme<br>Pressure Gear Lube                                      | Mobilube SHC® 75W-90,<br>Mobil 1 Synthetic Gear Lubricant      |
| Cutter Shaft and Ground Roller Shaft (Flail)  | Grease Gun  | Lithium Complex,<br>NLGI 2 ISO 320   | Mobilgrease® CM-S  |
| Drive Shaft Coupler (Rotary and Flail)<br>Drive Shaft Yoke, U - Joint and Stub Shaft  | Grease Gun  | Lithium Complex,<br>NLGI 2 ISO 320   | Mobilgrease® CM-S  |
| Boom Swivel, Boom Cylinder Pivots<br>(Rotary and Flail Boom Type)   | Grease Gun  | Lithium Complex,<br>NLGI 2 ISO 320   | Mobilgrease® CM-S  |
| Deck Boom Pivot & Deck Stop Adjustment<br>(Rotary and Flail)  | Grease Gun  | Lithium Complex,<br>NLGI 2 ISO 320   | Mobilgrease® CM-S  |
| Deck Spindle (Rotary)   | Grease Gun  | Tiger Spindle<br>Lubricant   | Tiger Part #25351  |

For Mobil product information, availability, or technical information, call 1-800-662-4525.

Tiger PN 34852

34852 HYDRAULIC TANK



USE PAPER OR CARDBOARD TO CHECK FOR LEAKS. **NEVER USE YOUR HAND**. IF OIL PENETRATES SKIN, GANGRENE OR OTHER SERIOUS INJURY COULD OCCUR.

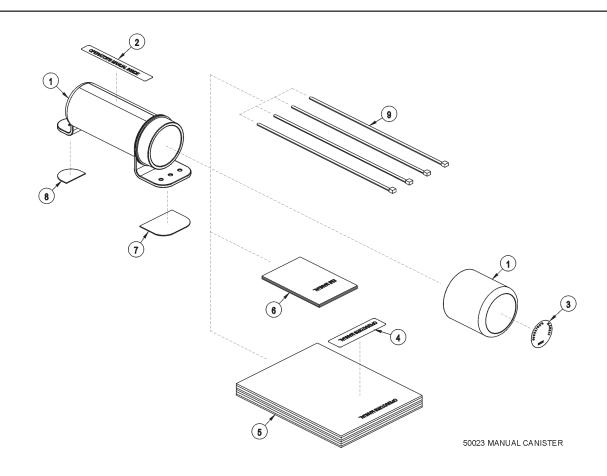
GET IMMEDIATE MEDICAL ATTENTION.

See Operator's Manual.

00756059



00756059 MOWER DECK



| ITE | M PARTNO. | QTY.  | DESCRIPTION                   |
|-----|-----------|-------|-------------------------------|
|     | 50023     | AVAIL | MANUAL CANISTER COMPLETE      |
| 1   | 00776031  | 1     | Round Manual Canister         |
|     | 33997     | 1     | Decal, Sheet, Manual Canister |
| 2   |           | *     | Decal                         |
| 3   |           | *     | Decal                         |
| 4   |           | *     | Decal                         |
| 5   | *         | AVAIL | Specification Product Manual  |
| 6   | 33753     | 1     | EMI 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 DRILL-ING 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."

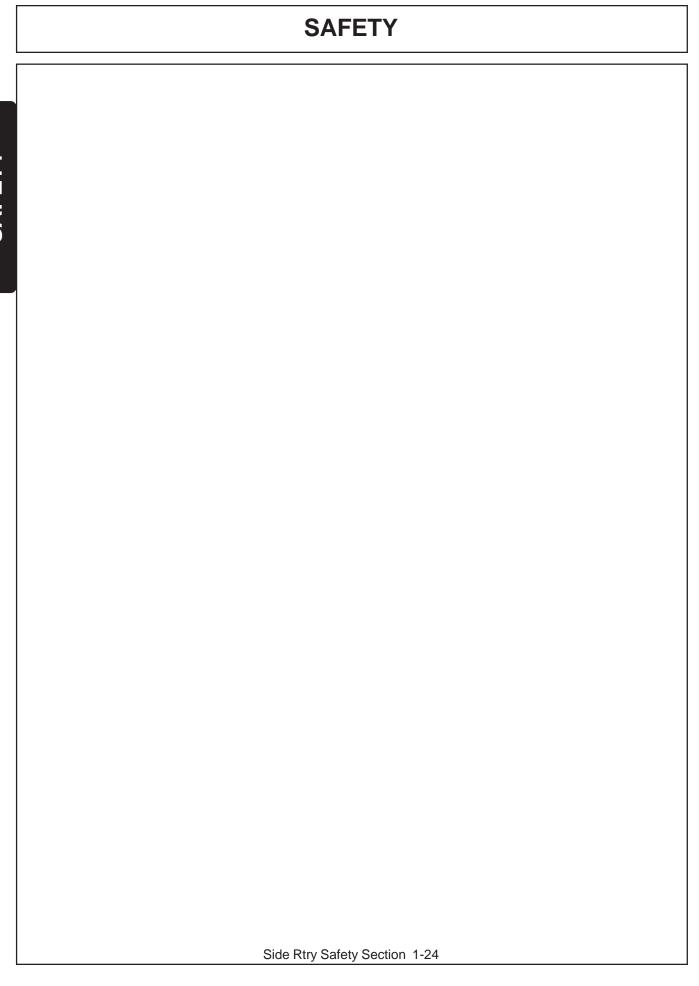
#### **Employer Responsibilities:**

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

- 1. Train the employee in the proper and safe operation of the Truck and Implement.
- 2. Require that the employee read and fully understand the Truck and Implement Operator's manual.
- 3. Permit only qualified and properly trained employees to operate the Truck and Implement.
- 4. Maintain the Truck and Implement in a safe operational condition and maintain all shields and guards on the equipment.
- 5. Ensure the Truck is equipped with functional seat belts and require that the employee operator securely fasten the safety belts at all times.
- 6. Forbid the employee operator to carry additional riders on the Truck.
- 7. Provide the required tools to maintain the Truck 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.)





## 6 YZcfY UthYa dt]b[ 'tc'a ci bhmci f' H][ Yf'a ck Yfz]h]g']a dcfhUbh tc'fYUX'UbX'i bXYfgtUbX' U`'cZ t\ Y' GUZYtmA YggU[ Yg']b't\ Y'GUZYtm 'GYW]cb'cZt\ ]g'a Ubi U"

Ô@&\Á&[{]|^<\Á\@]{^}oÁæ\*dæ\*æ}•oÁœ\Á;æ&\ā;\*Áæ\*oÁ;Á;æ\^Á;\^Áœ\^Á;\^Áæ\^Á;[Á\ •@;|cæ\*^•ÈÁTæ:^ÁX;|cæ#,Ás@:Á;æ&;[Á;[å^|Æ#.Ás@:Áæ]];[];ææ\*Á;}^Á;;\Á@:Á;[, ^;Á^&\æ;^åÂ

**≜**WARNING

Off, æê•Á•^ÁæÁ√[[¦Áæ&\ÊÓQ)ãơÁ;¦Á[¦\ÁãoÁ;ÁãoÁæ)åÁæã^^Á@æç^Á,æd•È

 $\ddot{A} = \ddot{A} + \ddot{A} +$ 

## HF57HCF DF9D5F5HCB

- OÈ Ü^{ [c^Áã @Áæ} åÁ^~Áœè åÁc^]•È
- ÓÈ Öã &[}}^&oÁaæeo^\^Á&æà|^•Á\[{Áa[c@Áaæeo^\andabe} èÈ
- ÔÈ Ü^{ [ç^Án} \* 3, ^ Án 38, ^
- $\ddot{O} \dot{E} \qquad \ddot{U}^{\hat{A}} = \dot{A}^{\hat{A}} = \dot{$
- ÒÈ Ü^{ [ç^Ása}^Á;[} oÁ, ^āt @ Ása) åÁ, ^āt @Á\*]][¦o È
- ﴿ الْعَصْمَ ^ الْمَوْهِ الْمَا عَجْمَ الْمَا عَجْمَ الْمَا عَجْمَ اللَّهِ الْمَا عَلَى اللَّهِ الْمَا عَلَى اللَّهِ اللَّهُ اللَّا اللَّهُ اللَّ

## 7F5B?G<5: H'585DH9F

## 58>I GH+B; F95F K < 99 @G

## : FCBH'DI AD'ACI BHB;

 $Q \cdot cad|As@Aj^* \{ ]Aj^* [ * \} caj^* As | ass. ^oAj^* As@Aj^* assat[ } Aj^* assat[ + Aj^* assat[ +$ 

751 H-CB. "8 C BCH'GH5 FH'H-9 'HF57 HCF 1 BH-@5 @@ < CG9 G5 F9 5 HH57 < 98 Z H5 B? '-G': =@@98 'K +H- 'DFCD9F'C=@5 B8 65 @@J5 @9 G5 F9 'CD9 B' ''GH5 FH-B; ' 5 H'H-4-G'H-A9 'K =@@751 G9 'G9F-C1 G'85 A5; 9 'HC'H-9 'DI AD" (ASM-NH-0024)

## DC @M7 5 F 6 CB5 H9 G5: 9 HM K =B8 CK

ÞUVÒKÁÁQ • cæ|lāj \* Ásaás [[{ Á; [¸ ^¦Á^˘ ã^^ Ás@æóÁæ|Á; -Ás@Áã @óÁ ãs^Á; āj å[¸ •Ás^Á^] |æ&^åẾA; lÁ ];[c^&c^åÁj ãc@ÁæÁ;[} &ædà[}ææ^Ájājå[¸ÈÁV@áÁ; @) |åÁs^Ás[}^Ás^[, ^Ás^[, `} cāj \* Ás@Á; æāj +æ{ ^È

FÉÁÍÖã 8[}}^&oÁæÁæÁ@&\ÁææÁa[[¦ÉÁÚV{[ç^Ás@Áã @ÁæáÁa[[¦Ð ð åa], Á|æ•Á¦[{ÁsæàÁ à^Á^{[çā\*Á@]\*^Áa]•ÉÁOE;[ÉÁ^{[ç^Á^æÁã @ÁæáÁã @ÁæáÁā @ÁæáÁā].È

 $\begin{array}{l} \text{CE} \dot{A} \ddot{U} \wedge \{ \ [ \ \varsigma \wedge \dot{A} \otimes \dot{A} \otimes$ 

HÉÁÚ | 288^Á { 28| Áà^28å Á Á88å @ • ãç^Á^28Á A 6@ Áà [ 00] { Á Á6@ Ádã Á [ 8] Áà à à | ^Á^28È

ΙΕΑΑΟ Φ. coch Act at A[&\ As `àà|^Án ~aφA; }Α΄ [|^ & cochà[} ασε^Án coch ca; \* ÁσσεΑσΘ. A&^} σ^\ As [ας { Ασθ. ta [} cocμΑ; [\cap A] [\c

ÍÐÁQ,•oæ|Án¢ãro3,\*Á©æt叿t^Án^{[ç^åÁ+|{{Ær|æe•Áa[[¦Áæn)åÁ,ājå[¸Án}}Ás⊙0-Án[|^&ætà[}ææ^È

Î EÁQ • cæ|Ác@ Á,[|^ &æàà[}ææ^Áæ••^{ à|^ Ás, Ác@ Á&æàÁ, ãc@Á ¢ã cã, \* Áæ}åÁ`]]|ā\åÁœæå, æ¢^Áæ•Á Q;}Á ā, Ác@ ÁÚæ÷o ÁÙ^&cā;}È

ÏΕĂΚΟ≣•^{à|^Á&[¦}^¦Áa¦æ&\^αÁgÁo@Á&[}d[|Árœa}åÁg•ãå^Áo@Á&æàÈ

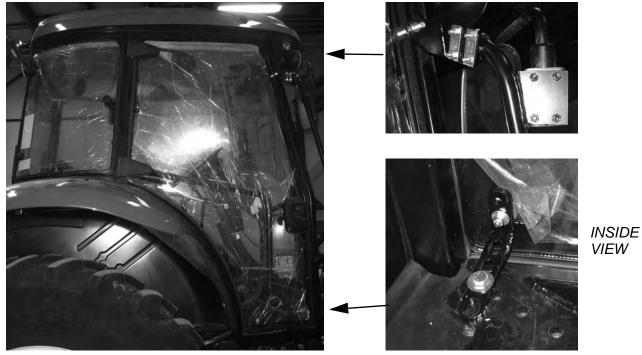
ÌĐÁŠ[8æe^Áæ)åÁå¦ā|ÁæÁcFÐ+ÁQ|^ÁœQ[\*\*@Á;[|^8æàà[}æe^ÉÁ,ão@ÁæÁaãaÁo@æeÆaÁcb`mÁ.•^åÁ;¦Á;[|^8æbË à[}æe^ÉÁ;Á;æe&@ÁœÁ&[¦}^¦Áà¦æ&\^dÈ

JEÁNOE•^{ à |^Án@ Án; æ&\ ^oÁn; åÁnt @^} Ánt @^} Án@ Á@ Ánt A^&`; ^Án@ Án; |^&æ; } ææ^È

F€EÁOE•^{ à |^Áo@Á&|æ{ ]Á§Áo@Á] ]^¦Á;[}oÁ&[;}^¦Áà^Áo@Á;ã;[¦È

FFEÁOCabi • OÁS@ Á&Jæ{ ] Ág Áæ&@nç^ÁæÁ^&` \^Á@ |åÈ

FŒĂÁÜ^]|æ&^Ás@Á^æÁ&[¦}^¦Á¸ã¸å[¸Á¸ão@Ás@Áæá叿b^Á^{[ç^åÁ;[{Ás@Á¸ã¸å[¸È (ASM-NH-0101)



## A5=B: F5A9=BGH5@@5H-CB

 $Y \ \tilde{a}t \ \tilde{a}t \ \tilde{b}t \ \tilde{c}t \$ 

## $GK \pm 17 < 6 CL K = F = B;$

BCH9"CB@M: CF'9@97HFCB=7'J5@J9."Ž%&JC@HG'9@97HF=75@DCK9F'AIGH'69'H5?9B': FCA'5'GCIF79'@C75H=CB'K<9F9'=H'=G'@J9'CB@MK<9B'H<9' =; B=H=CB'GK=H7<'=G'=B'H<9'ÍCBÎ'DCG=H=CB"'H<=G'K=F9'AIGH'69': IG98'5H'H<9'GCIF79'@C75H=CB"

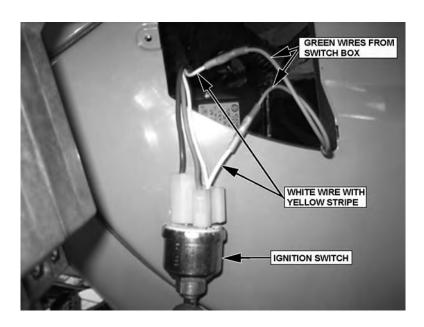
Ü[ˇơ Ás@ ÁÜ^ åĀF€\* æÁse) å ÁÓ|æ&\ ÁF€\* æÁ; ã^•Á¦[{ Ás@ Á; ãs&@a[¢Á; Ás@ Ásĕ ¢ā|lãsel^Á;|ǐ\*È

Ü[ ˇ ơ Á xố Đ Á; Đặc Á Đạ ở Á bà | æ& Á; đo • Á f Á xố Á Đã đ l æ | æ Á; Đặc Á; Đạc ^ Á; Đạc ^ È

Ü[`c^Ás@ÁÜ^åÁFI\*æÁ¸ã^ÊÁ^^^åÁQ≀dÊÁ;[{Ás@Ásĕ¢ā|lãseb^Á;|`\*Áq;Ás@Ás∄}æÁ;[•dá;Ás@Ás[}dā;`Ë [`•Ás`c`Á;[^}[:aåÁsÁse]]|a8æà|^È

V@Á, ān&@ā[¢ÁanÁnÁnÁ.\*\* | ^åÁn ÁnÁa\* @Áā @Áā ãnÁnÁnÆæà|^Á&; }d[|Áa|æ&\^óÁæÁa@,}}Áa; Án@Á ÚædoÁÙ^&ān}È

**Á**ASM-NH-0121)

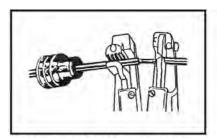


## 

 $V@ \bullet ^{A} \oplus d^{*} \otimes d^{*} \} \bullet A \oplus ] | ^{A} \oplus d^{*} | (c) \oplus A \oplus d$ 

### BCH9. I gY'll Y'gdYWJZJWlrcc`'Zcf'll Y'lmdY'cZWcbbYWlrcf'nrci 'UfY'UggYa V']b["

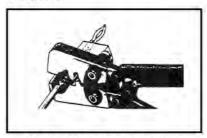
(ASM-C-0009)



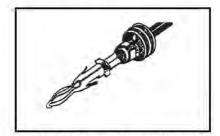
Apply seal to cable, before stripping insulation.



2. Align seal with cable insulation.



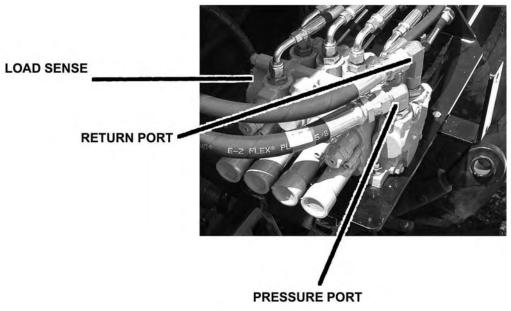
3. Put terminal in crimping tool, then



4. Crimp and visually inspect for a good

## A5BI 5@@ HJ5@9 DCFHG

Á



(ASM-C-0057)



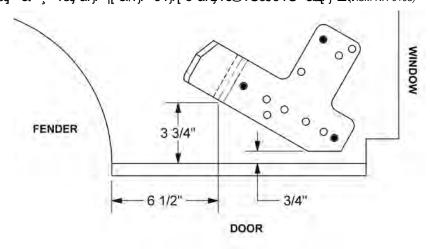
# A5BI 5@GK +H7 < 6 CL ACI BH+B;

ÁÁV@Á; ãt&@ā[¢Á\$ ÁţÁ\$^Á^&`¦^åÁţÁ\$@Áã @Áã\$^Á; Á\$@Á; æ) `æþÆ{} d[þÁ\$¦æ&\^dŽÁÜ^~^¦ÁţÁs@·Á\æ&\^dŽÁÜ^~~¦ÁţÁ\$@ ÁÚæd• ÁÚ^&æd; ÁަÁæ••^{ à|^Áæ}åÁ&[{][}^}•^Å^å^åŘÁqSM-NH-0139)Á



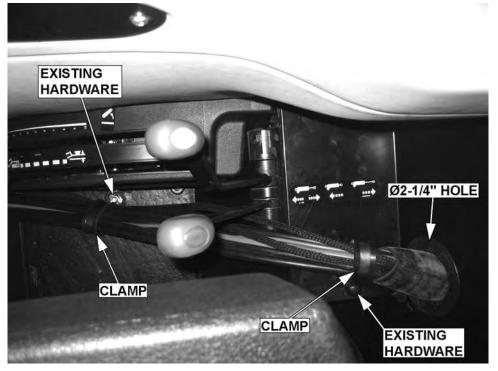
# 756 @ 7 CBHF C @ CMGH-7 ? GH5 B8

\(\text{W} \bar{a} \times \hat{A} \cong \hat{A} \times \righta \hat{A} \cong \hat{A} \times \hat{A} \cong \hat{A} \times \hat{



# @ HJ5@9756@9#K F9 FCI HB;

 $\hat{O} \circ \hat{A} = \hat{A} \circ \hat{A} \circ$ 



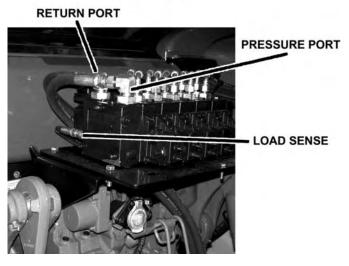
# ∤BCH9 CB < I G7 C 7 CBHF C @J5 @J9 Gł



# 9 @ 7 HFCB=7 '@ H'J5 @ 9 'DCFHG

(ASM-C-0089)Á

# **DANFOSS VALVE**



# >CMGH=7? GK =H7<6CL ACI BH=B;

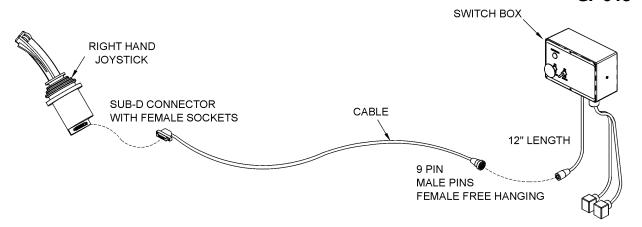


# @ HJ5@9'ACI BHB;

**REAR OF** 

# LIFT VALVE MOUNTING PLATE

# G=8 9 FCH5 FMT>CMGH=7 ? 7 CBHFC @7 5 @6 F5H=CB



V@ ÁÒ|^&d[] &&ÁQ] d[|Áçæţç^ÁæA, [, Á~~]] ^åÁ¸ ão@Á@ã @!Ë^•[| dī] Áæ&c æ[!•Á;) ÁQà[æc Ó^æc Þæ; åÁu\* à Áu\* à [æláA, jó] æc Ó^æc Þæ; åÁu\* à Áu\* à [æláA, jó] eæc Ó^æc Þæ; åÁu\* à Áu\* à Áu\* à Áu\* à Áu\* à Áu\* à Áu\* è Ææ; 寿; æc þá; eæc ^Áæ; æc þá; eæc ^Áæ; eæc fi e Áææ; 寿&cã; ^Áæë eæc þá; eæc ^Áæ; eæc fi e Æææ; 寿&cã; ^Áæë eæc fi e Ææ; 寿¢ eæc fi e Æææ; 寿¢ eæc fi e Æææ; 寿¢ eæc fi e Æææ; 寿¢ eæc æc fi eæc ^Áæ; æc fi eæc f

**A** CAUTION

 $V@Ai(n^{-1} cab(As(n^{-1}) d[|As(n^{-1})^{-1} ah, ac(n^{-1}) ah,$ 

Ü`}Ádæ&d[¦ÁææÁ,[¦{æþÁ,]^¦ææã,\*ÁÜÚTÁq[Áæå,bŏ•óÁc@A^^ccā,\*•Áæ•Áq[||[¸•È

### GYhili Y'XYUX'VUbX'Wca dYbgUrjcb'dchYblijca Yhlf 'Zfgh'

Ù^oÁno@Ás^æáÁnàæ)åÁ&[{]^}•ææā[}Á][ơ}ơā[{^ơ¦Áææ/Í€ÃÊÁ;¦Á@æ∳¸æÁnà^ç^^}Áˇ||Á&|[&\¸ãr^Áæ)å ~`||Á&|ˇ}ơ¦Ë&|[&\¸ãr^È

# G=89 FCH5 FM > CMGH=7? 7 CBHFC@75 @6F5 H=CB ft cвны 98 L

### GYH]b[ 'G][ bU '5 XUdHUh]cb DchYbh]ca YhYfg.

\(\text{O}\) \(\text{\alpha}\) \(\text{\alpha}\

### **B6C5F8.** %QEÁÚ[¦dÊÁQ}à[æåÁN]K IÊÍÁÛ^&[}å•

(Note: Lower Draft Beam completely. Now index Inboard control "up" function and determine the time required to raise the Draft Beam completely.)

## %ÁÁÚ[¦dÁÁQà[æ¦åÁÖ[]}K IÉÍÁÚ^&[}å•

(Note: Raise Draft Beam completely. Now index Inboard control "down" function and determine the time required to lower the Draft Beam completely.)

# CIH6C5F8KÁÁÁ % QEÁÚ[ dÁÐ čà[ædåÁÖ[ ] K JËFFÂÛ^&[ }å•

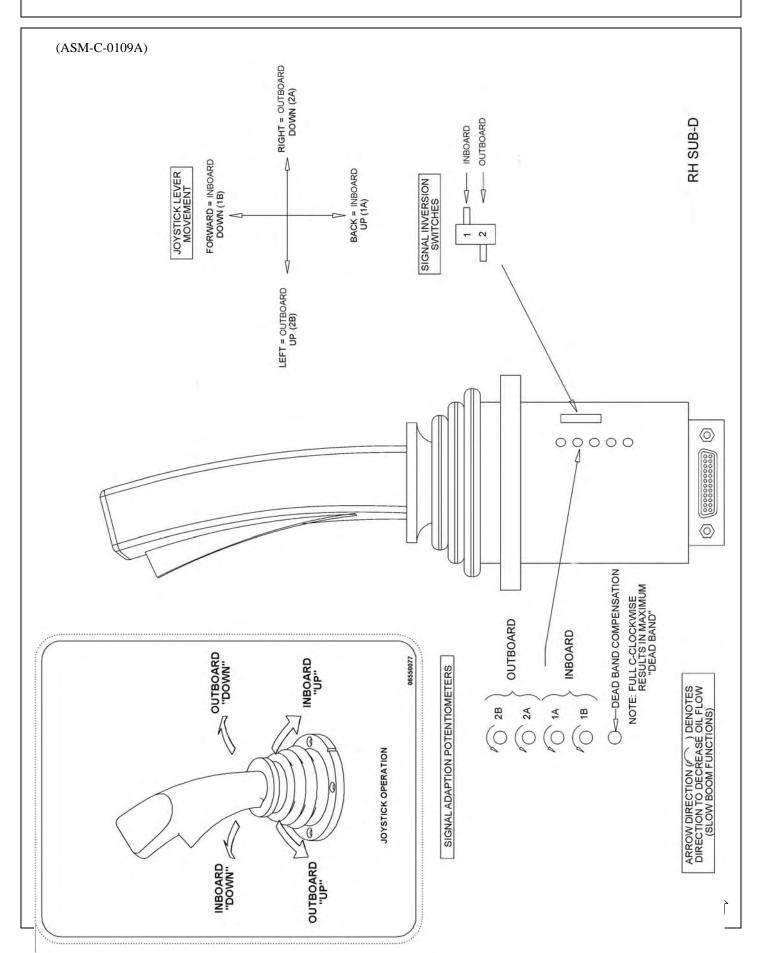
(Position mower head full up. Then index the outboard control "down" function and determine the time required for mower head to go down completely.)

### %ÔHÁÚ[¦ŒÂÚˇcà[ætåÁM]K JËFFÁÛ^&[}å•

(Position the mower head full down. Then index the outboard control "up" function and determine the time required for mower head to come up completely.)

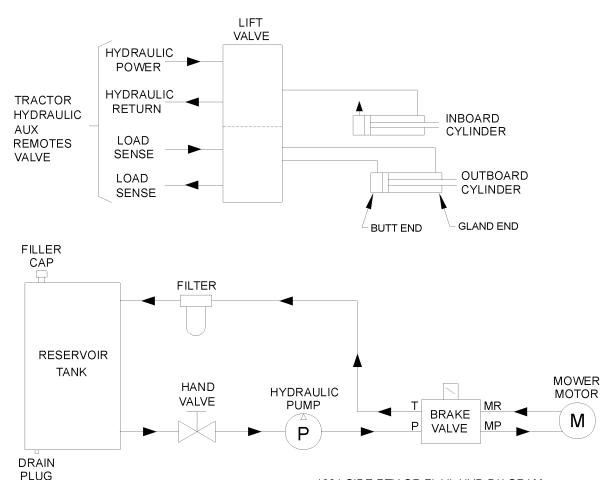
(ASM-C-0109)





# 5L@9'6F579'ACI BHB;

# G=89 ACK 9F < M8F5 | @7 8=5; F5A



(ASM-C-0090)

1321 SIDE RTY OR FLAIL HYD DIAGRAM

# G=89 < MB F 51 @F H5 B? =BGH5 @@5 H=CB

 $Q \bullet cad|Aad|Aaca| * \bullet Aad åAc à^ \bullet Aad (Aaca) Aad (Aaca) Aad (Aaca) Aaca) Aad (Aaca) Aaca) Aaca (Aaca) (Aaca) Aaca (Aaca) (Aaca$ 

# : =@@B; < M8 F5 I @7 F9 G9 FJC = F

BCH9. `GHUfh]b[`cf`fibb]b[`mcif`H][Yf`ackYf`VYZcfY`Z]``]b[`fYgYfjc]f`k]```WUigY gYf]cig`XUaU[Y`hc`\mXfUi`]Wdiad"

(ASM-C-0004hydro resrv)

# BGH5 @@B; C!FB; : +HB; G

 $Q \bullet cat|3 * \acute{A} d = @\acute{E}A \acute{A} = \&\acute{A} = \acute\acute{A} = \&\acute{A} = \acute\acute{A} = \&\acute{A} = \acute\acute{A} =$ 

# BGH5 @@B; B5H-CB5 @D=D9 : HH+B; G

 $Y @ \} ^c ^! \acute{A} \bullet cadd ? \acute{$ 

# ; 9B9F5@<CG9~BGH5@@5H=CB

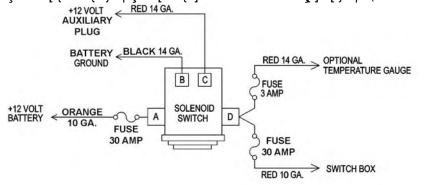
 $\ddot{\mathbf{A}} = \ddot{\mathbf{A}} + \ddot{\mathbf$ 

# GC @BC = 8 6 F 5 ? 9 J 5 @ 9

# H9AD9F5HIF9; 51; 9'ACIBHB; quúvou þašo

# 7 CBH-BI CI G'81 HM'GC @ BC-8 'GK +17 <

T[ˇ] ơÁs@Á[ |^} [ãāÁ¸ã&®Áá¦Ā́Q |^•ÁṭÁ, ææ&®ÁÁ, ^&^••æʿÉÁ¸ÁæÁᦈÁæ) åÁ¸ ^||Á¸![ơ·&ơ·åÁæd·æÁÁ
Ù^& '^Áæ Á Q; }Á¸Ás@Á¸æð Á ^&dí}Á¸ãs@Á; |Çãã^åÁHĐ +Á¢Æ;+Á&æ)•&¼¸•ÉÁ[ &\¸æ @!•ÉÆæ) åÁ@¢Á¸°eÈ
Ü[ˇơÁ¸ã^•ÁṭÁæ, åÁ+[{Ás@ÁÔ[}cājˇ[ˇ•ÁÖˇċÁÙ[|^}[ãáÁ)¸ã&®ÆæÁ\*Q;}Áá^|[¸È
ŒĐÁU ÜŒÞÕÒÆ;€ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;ÁEFGXÁàææ°, '^Áוãa|^Áβ¸\È
ÒĐÁÜÒÖÆ;ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;ÁEFGXÁàææ°, '^Á;•ãa|^Áβ¸\È
ÔĐÁÖŠŒÔSÆ;ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;ÁEFGXÁàææ°, '^Á;[•cÈ
ÖĐÁÜÒÖÆ;ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;ÁEGXÁàææ°, '^Á;[•cÈ
ÖĐÁÜÒÖÆ;ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;Á°,ã&ææ°, '^Á;[•cÈ
ÖĐÁÜÒÖÆ;ÁÕŒÁ¸ã^Á+[{Áơ\{⏿ÁÇŒÁ;Á°,ã&ææ°, '^Á;[•cÈ



# 7CC@F"ACI BHB; '!'G=89'H5B?





# 7CA6C @ H8F5: H695A BGH5 @ 5H-CB

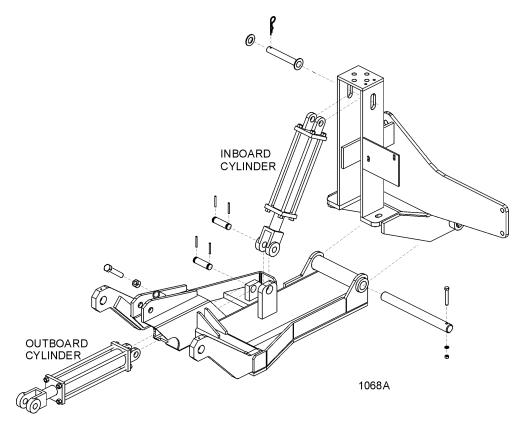
Q • cæþlÁ +ÁUËā; \* Áà¦^æ@%¦Áā; q Áà` cœÁ; [¦cÁ; Áā; à[æååÆĉ; |ā;å^¦ÈÁÁQ • cæþlÁãcā; \* • Áā; Ác@Á[åÁr}åÁr}åÁr Ás@Á 8^|a\_a^|Áa88||a\_a \* Áf Ác@ Áaae\*|as Áa Ác@ Á8|{ { [} • Á^8ca}} EXXV@ • ^ Áaca \* • Á @ \* |a Áa^Á | • áaa } ^ A d Áæ&^Ác@ Áà coÁ\} å Á -Ác@ Á& lā å^¦È

Þ^¢ơÁc';}Ác@Á&I^cãnÁ;}diÁc@Á[åÁ;Ác@Á[åÁ;Ác@Á&c`lā]å^¦Á;}dāÁñóÁnÁcāt@Ácetaaā]•oÁc@Án@C`lå^¦ÁcetåÁl&A.Á

ā d Á | æ&^Á ão@Á & ā \* Áa [ | oÁ } Á&|^çã ÈÁÁ

V@ Ásjà[ætå Áscî|ājå^¦Ásæa)Áj[, Ásì^Ásj•œd|^å Ásjq Ás@ Á;æājÁ¦æ; ^Á;æ óÁ,ão@Ás@ ÁjājÊÁyæçæ @ ¦•Á

å^¦ÈÁÁOTcæ&@ÁQ•^•ÁæÁ]^&ããà\åÁg Ás@ÁÚædeÁÚ2de ÁÚ^&da[} ÈÁÁÚ|ãå^Ás@Á&`|ājå^¦Ág diÁs@Ás¦æóÁs^æ(Á¦[{Á c@ Á \* o ãà ^ Á -Áo@ Áå; zeoÁà ^ æ Áæ) å Áærææ @kx [ā å ^ ; Áf Áo@ Áå; zeoÁà ^ æ Á ão@kk/ cã Á ā Áæ) å Á[ ||] ā • È



# 8F5: H695A ACI BHB;

Úˇ||Ás@Áspà[ædåÁs^|ðpå^¦Ápðarqf}Á[åÁsu[;}ÁqfÁs@Ár¢d^{^Ár¢cV}å^åAjh[•ãðap}ÈÁÁÚ|ðå^Ás@ÁslæðÁ à^æ Á}å^¦Ás@Á&î jā å^¦Ésæà åÁsætå}Á&l^cã Á@l^Á ãs@Ás¦ææÁs^æ Á@l/Á,^æt^• ÓÆt Ás@Ásæ&d; ¡ÈÁMQ• æælÁ ]ā,Áse)åÁ;^&`¦^Á,ão@Á[||]|ā,•È

W•a] \*Áajà[æååÁ&î|ajå^¦ÁæéÁæÁjãç[œÁj[ajæÁá]ãã^Á妿óÁà^æ€Á}}å^¦Ádæ&d;¦ÁæðàåÁaj•œæþÁ妿óÁà^æ€Á ] ā ĒÁÁOCĪĒ } ÁQ |^Áā, Áå; æðás^æ; Á,ā,Á,ãcQÁQ |^•Áā,Á,æā,+æ; ^Áa[••Áæ; åÆ;•œ;|Á&æ;•&!^. ĒÁ(&) . æ @¦Áse) åÁ@¢Á, dŽÁASM-SIDE MNTS-0001)

# @A + I GK + 17 < A CI BH+B;

### **ASSEMBLING LIMIT SWITCH**

T[ˇ] ơౕà læ& ^ơ⁄̄FÉĐ +ớá [¸ } Á [ { Áq ] Á å\* ^Á; } Á @ Á

∄ • ãà ^Á; Á ® Á ^æ Áæ { Á; Á ® Áå læ ó à ^æ É QŒ É Œ E É QŒ É É QŒ É É Œ É À

ã ®Á; • ãà ^Á&[ l } ^ l Áæ Á @ ¸ } Á ã ®Á ®Á Å È +Á Æ [ l } ^ l • Á
æť æð; • ơ⁄æ { ĚÁY ^ |å Á; |æ ° Á; [ Á; [ l ^ Á ®æ )Á È +Á É Ð +Á; Á Ē Ð +Á; Æ Ð +Á; Æ Ē Ð +Á; Æ Ð +Á; Æ Ð Æ Æ Ð +Á; Æ Æ Ð +Á; Æ Æ Ð +Á; Æ

 $\begin{array}{c} \hat{\text{Ot}} \bullet \land \{ \text{ a} | \land \text{A} \text{ a} \text{ a} \hat{\text{A}} \bullet \} \text{ a} \hat{\text{a}} \hat{\text{A}} \bullet \} \text{ a} \hat{\text{A}} \bullet$ 

### **ADJUSTING LIMIT SWITCH**

V[Áscaðiŏ•oÁs,ãn&@Ás[ÁsceÁ[∥[,•K

FÉAY ão @ÁSæ (ÁS) Á, |æ& ^Ásæ) å Á, ā) Ás [|oÁS) • cæ ||^å ÉÁ ææ ^Á; [, ^¦ q; Ás^•ā^å Á @ q; ~Ásæ) \* |^È

### WIRING LIMIT SWITCH

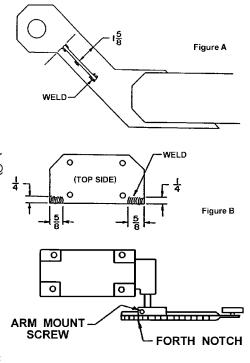
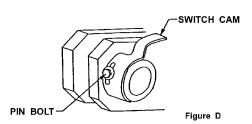
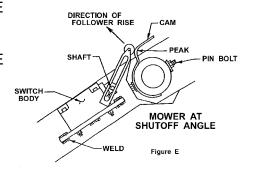


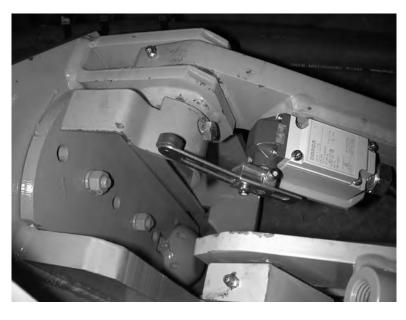
Figure C





# @A +H GK +17 <

(ASM-C-0029)



# HF5J9@@C7? ACI BHB;

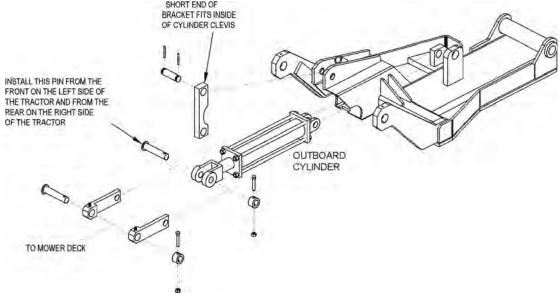
&a] • &l $^{\prime}$ ,  $\stackrel{?}{\text{EA}}$ [ &l $^{\prime}$ ] as @ | Ása) å Á@ ¢Á, ° ČÈ

Üæā ^ Ás@ Æs. DajæjÁg Ásæ Ás | • æág | • æág | • æág | • æág | • Æg | • Æ



# ACK9F'ACI BHB;

Ô@ &\ Ás@æcÁæd|Á\*¦^æ=^Á.^\\•Á@æç^Áa^^} Áā,• cæd|^å Áā, Ás@ Á妿cóÁa^æ(•Án áō;[cóÁæd{ÉA^-cóÁā}\æ\*^Áæd{ÉÁ ¦ã\*@Áā}\æ\*^Áæd{ÉÆæd}å Á&û`|ā;å^¦Áî;[``}cā;\*Án æd•È



# @# H7CBHFC@: 998 @B9G

 $P[\bullet^{A}/^{*}*c@A, 3|A;ca^{A}/^{*}*c^{A}/^{*}] = A^{A}/^{*}*c^{A}/^{*} + A^{A$ 

Q) • cæ||ÁæÁQ] • ^ Á¦[{ Ás@ Ás[cc[{ Áş¦Áş}}^¦Áşæ¢ç^Áş[¦Ás@à Ág-æş)åÁsæàÁş¦ÁsæàÁ} ã • ÉÁş}Ácæ)åÁş¦ŞË &æàÁ}ã • DÁşÁs@Á^ • dæc¦Áş}Ás@Áşà[æàåÁsê;]ā,å^¦Á;[æ)åÈ

# 897? #ACHCF: 998 @B9

Q • cæ|lÁs@ÁT-HÁQ • ^ • Á+[{Ás@Á;[q[+Áq[Ás@Á=[|^}[aãaÁşæ4ç^ÈÁÜ^-^+A[Áq[Ás@Á]æ+o•Á=^8cā]}Á[+Á å^cæā/^åÁg--[-{ ææā]}Áæà[\*oÁQ • ^ • Áæ}åÁãcā]\* • Á[+Ás@áÁæ]]|ā8ææā]}È

Q•cæ|Á| |ãÁQ•^•Áæ| `} åÁ@ ålæ |ã&ÁQ•^•Á, @\^Ás@^Á&[} cæ&óÁ @æb] Á\å\*^•ÉÁ, lÁæ) ^Á, c@\Á ^å\*^•Ás@æÁ, æÂÁ`àÁQ•^•È

 $\acute{O}^{\dot{A}}^* | ^{\dot{A}}_{\dot{C}} \otimes ^{\dot{A}}_{\dot{C}} | ^{\dot{A}}_{\dot{C}} \otimes ^{\dot{$ 

Üánann Árcið Árcið Árcið Arcin Árcið Árcið Arcin á Árcið Árcin Árc

# GHCD'6C@H'58>I GHA9BH

Ò¢ơ\}åÁs@Á¸i àa[æłåÁsî|ā¸å^¦ÁæḍÁs@Á¸æÁ¸i œÁs@Áa[]Áæåbŏ•oÁs@Áa[]Áæåbŏ•a(^)oÁs[|oÁs[]&ææ^åÁ¸}Ás@d[]Á¸Ás@Ás¦ææÓà^æ{DÁ¸ŏÁ}aÁsÁsÁsÁs]Áææå¸•oÁs@Ás[}}^œÆÁKŠ[&\Ás@Ás[|oÁs[]òÁs[]}Á¸ão@Ás@Á +Á@¢}¸čÈ

ÞUVÒKÁY @} Ác@ Ái ` cà[æå Ásc |āj å^!Ásc Ái ||^Án¢c^} å^å Ésc@ Ás[}} ^oÁ; IÁs^&\Á @` |åÁnãc@!Ás^Á]
æt æt ; •oÁc@ Án æt ] Á; IÁsÁtæç^|ÁI & •Ásd ^ÁsJ • œd|^å ÉscÁ @` |åÁs^Á] Áæt æt ; •oÁc@ Ástæç^|ÁI & ÈÁMQÁ; æð Ás^
}^&^••æð Át Á •^Ánãc@!Án¢c^!} ædÁ; IÁS c^!} ædÁ|\* \*•Ás} & œd|^å Ásc Ai ] åæt æt ; •Ók@ Ásc | āj å^!Át Ár oÁc@ ÁsC |!^&An d [\^ÈÁMQÁc@
&` cc^!Á@æðÁs Áæt æt •Ok@Á æt ] Áæt åÁc@Ásc | āj å^!Á@æ•Á æt \^Á\{ æt ] āj \* ÉA^!āI ` •Ásæt æt ^Á; ālÁs &&`!È
Ú![&^^åÁt Ád ædÁ; Ád ædÁ; A] ædÁ; A] ædæt } Át | Át] ^!ææt } Ás • d` &æt } •Ás &@ Á, ¢oÁ; æt ^ÈAsM-SIDE MNTS-0003)

# : **B**5 @DF9D5F5H**C**B : CF CD9F5H**C**B

Øðj æļ PÉAæļ Ás [ ••^• EÁ] ðj • Áæj å Á] ãş [ cÁ] [ ðj o• Á¸ ðļ Á} ^^å Áq Áà^Á\* | ^æ• ^å Áæ Áðj • d\* &c^å Áðj Ác@ Át æðj c^} æj &c^A æj &c^A æj \* á Áæj \* á Ææj \* á Áæj \* á Ææj \* á Ææ

### **AWARNING**

ÓÒ 20 UÜÒ Á cæd cāj \* Áj | Áj | ^| ææāj \* Ás@ Ád ææð (| Á| Čí | Ćó Á æð Áæð å Áð | å ^| • cæð å Ás@ Á ÁDæ^ C Áæð å ÁU | ^| &æãj | A ^ &æãj | • Áj - Ás@ã Áj æð | æð æð Æ| { | | | ^ c^| È

69 GIF9 H<9 65 @@J5 @J9 G 5 F9 CD9 B° ``` Ùæd oÁd æ&d ¦Áæd å Áæd|[¸Áā, •d {^} o Át Án ææd áã ^È W•ā, \*ÁæÁ, ã & A, Á, Á, æð, ^¦Á; ¦Áæd åå [æd åÁæ Á, [c å Áā, Áo@ Án æA c Áæd, å Át æð, c }æd, c }æd, & Án ^&æð, }•É&@ & Áæd åæd \*•Áæd å Á& }} ^&æð, c }æd & Án } •Át ¦Á@ 妿 |æÁn æð, e È

6 YZcfYcdYfUjb['h Yack YfÉko@k& co\kó@æåkæjåkæjåkæjåkæj\[{ ká@`|åkå\^ki|[, |^k, [ç^åkó@[\*\*@`co@k`|lkæj\*^k; [qi} EkkYæ&ok[kæok[kæ] kæ] kæ] kæ] kææk •^kjæ «^kjæ «^kjæk»•kd^••kd^••k; co@kó@•^•EkkV@k; kæ] EkkYæ&ok[kæ] kæ] kæ] kææk •^kjæ «^kjæ «

# ACK9F'H9GH+B;

 $\label{eq:label_label} $$ \end{cases} $$ \frac{1}{4} \end{cases} = \frac{1}{4} \end{cases} $$ \frac{1$ 

=ZUbmidUfhgʻcZh\]gʻ5 ggYa V`miGYWiJcbžcfʻUbmich\Yfʻ gYWiJcbʻcZh\]gʻa Ubi UʻUfY bchWyUf`mi bXYfghccX'mci a i ghWcbhUWinci fʻXYU`Yfʻcfʻh\YʻUXXfYggʻcbʻh\YʻZfcbhcZh\]gʻa Ubi UʻZcfʻUgg]ghUbWY°(ASM-C-0010)



# H=; 9F'G=89'FCH5FM'ACK9F CD9F5H=B; '=BGHFI7H=CBG

 $V@i(A^{8}ai) A_{i} A_{$ 

<u>ÜÒŒÊÁMÞÖÒÜÙVŒÞÖÊÁæ</u>) å ÁZUŠŠUY Áo@Á[||[¸ā]\*ÁÛæ^cÂT^••æ\*^•ÈÁÁÛ^¦ā[\*•Áā]b'¦^Á;¦ å^æ@Á;æÂÁ;&&`¦Á;}|^••Áæ&^Áæ;Áæà^}Áq;Áq;H[¸Áo@Á;æ}ā]\*•Áæ)åÁq;•d`&a[}•Á\*cææ°åÁq;Áo@ Ùæ^cÂT^••æ\*^•ÈÁÁCE;æ\*•Á\*•^Á\*[[åÁ&[{{[}Á^}}•^Á¢;Éæç;ãáÁæeæåå•ÈÁçö⊞;;ii



A PELIGRO



ÙØÖÒÁÜU VŒÜŸ

U] ^ lædā } ÁÙ ^ & dā } ÁHËG

### %"GH5 B8 5 F8 9 E1 =DA 9 BH 5 B8 GD97 = =75H=CBG

### G=89 FCH5 FM

Ô coa} \*Áv ãàco@ Î €√Áxa) åÁi G√ÁQB&c æ√ÁÔ c

 $\ddot{Q} = \ddot{Q} - \dot{Q} -$ 

Ô cơ\ ÁP ^ æ á ÁOE& FÌ € ¾ ( ) ÁÔ æ à | ^ ÁSã á Áæ ) å ÁF Í J » Á; } ÁÔ [ { à [ ÁÖ | æ á ÁÓ ^ æ (

S}  $\tilde{a}_{\gamma}^{\bullet}$  V, [ $\hat{A}_{\gamma}^{*}$  | $\hat{A}_{\gamma}^{*}$   $\hat{A}_{\gamma}^{*$ 

U] ca[} ædÁc@^^ÊÁ[`¦Á[¦Á;ā¢Á] ãç^•Áæçæájæà|^

ÇTæî Áşæbî Áså^] ^} åðj \* Áj} Ádæ&d[¦Á; [å^|D

ŠãeÁÔ[}d[| Vˈlæ&d[ˈÁP^åˈlæĕ |ã&Á[ˈÁÚ] dã[}æ4Ôæà|^Á&[}d[|Áæ)åÁçæ‡ç^•

EÁTæ Áçæ Áçæ Áå^] ^} å ã, \* Á; A Ác æ Sc[ ¦ Á; [ å ^ | È

# A DANGER

 $\begin{array}{l} V@AT[\ ^1ABA^{\bullet}^{\bullet}]^{a}A[\ 1ABA^{\bullet}\cos^{2}A[\ 1ABA^{\bullet}\cos^{2}A[\ 1ABA^{\bullet}]^{\bullet}Baaeq^{2}]^{\bullet}Aeq^{\bullet}aABAAeA^{\bullet}AeeA^{\bullet}aABAAeA^{\bullet}]^{\bullet}AeaA^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}AeaA^{\bullet}]^{\bullet}$ 

ÙÖÖÖÁÜUVŒÜŸ

### &"CD9F5HCFF9EI =F9A9BHG

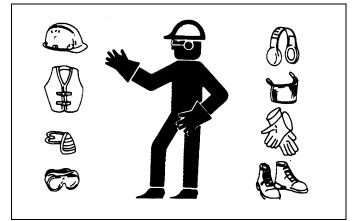
\(\text{\arangle}\) \(\frac{1}{\pi}\) \(\frac{1}

QÁn@Á,]^¦æq[¦Ásæa}}[oÁ^æåÁn@Á;æ) ĭæpiÁu¦Án@{•^|ç^•Á;¦Áng[^•Á,[oÁs[{]|^c^|^Á;å^!•œa)åÁn@Á,]^¦ææā[}Á;Án@ ^``ā]{^}oÁngiÁngiÁngiÁngiÁn•Ín]}}•ãna ājācíÁ;ÁngiÁn`]^¦çãn[¦Án[Án^æåÁna)åÁn¢]|æaā,Án@Á;æ) ĭæpiÉnæo^cÁ;¦æskæ3k0•Énae)å []^¦ææā]\*Án[•d`8cā[}•Án[Án@Án]^¦ææ[¦È

Ùæ^Á;]^¦æā;}Á;Á^``ā]{ ^}ơÁ^``ā]^•Ác@œÁc@A;]^¦æē[¦Á,^ækÁsē]]¦[ç^åÁÚ/¦•[}æþÁÚ¦[ơ&cã;^ÁÒ``ā]{ ^}ơÁÇÚÚÒC -{¦Ác@Áq;àÁs[}åãā;}•Á,@}Áœœæ&@a,\*ÉÄ;]^¦ææā;\*ÉÁn^¦çã&ā;\*ÉÆse;åÁn]æāā;\*Ác@Ár``ā]{ ^}dÉÁÚÚÒÁarÁs^•â\*}^åÁq ]¦[çãå^Á;]^¦æē[¦Áj¦[ơ&cã;}Áæò;åÁs;&|`å^•Ác@Á[||[¸ā;\*Áræ^ĉÁ,^ækK

### D9FGCB5@DFCH97H=J9'9EI =DA9BH'fDD9L

- ″ OE, æê•Á√^æÁÚæ^cÂŐ|æ•^•
- ″ PælåÆPænc
- "Ùc^^|Á/[^ÁÛæ^c ÁØ[[c,^æ]
- ″ Õ∥ç^•
- "P\"a\"a\"a\"a\"\"\" (c\\\ca\"a\"a\")\"
- $\ddot{U}^{\bullet}] \tilde{a} = \{ \dot{A} [\dot{A} \mathcal{D}_{a}^{\bullet} e^{A} \dot{A} T = \dot{A}_{c} \dot{A}_{c} \dot{A}^{\bullet}]^{A} \} \dot{a} \cdot \dot{A} [ \}$   $[]^{\bullet} = \tilde{a} = \tilde{a} \times \dot{A}_{c} \} \dot{a} = \tilde{a} = \tilde{a} \times \dot{A}_{c}$



### A DANGER



ÙŒÒÁÜUVŒÜŸ

U]^{aea[} AÛ^&a[} AHÊ

### ' "HF57HCF F9EI =F9A9BHG

### HfUWcf FYei ]fYa Ybhg UbX 7 UdUV] ]h]Yg

- OEÙ OEÓ Ò Ásēj ] ! [ ç^å ÁÜ [ ||ËÜ ç^¦ ÁÚ ! [ e^&cāç^ÁÚ c' &c' !^ÁQÜ U Ú Ù DÁ; ! ÁÜ U Ú Ù Á&æà Ásēj å Á ^ææÁs ^ |cÈ

- ″ Ú[ ^¦Á⁄æ\^ÁJ~<del>[]]]]]]]]]]]</del> I €ÁÜÚT

### ' "%FCDG"UbX"GYUh6 Y`h

 $V@ \acute{A}t = & c_{\dot{A}} ( \dot{A}_{\dot{A}} ) - \dot{A}$ 







### <u>' "&`HfUWfcf`GUZYlmi8 Yj.]WYg</u>

Qátæj•][|cāj\*Áţ|Áj]^|ææāj\*Ás@Átæ&c[|ÁæjåÁs[]|^{ ^},cájAsæÁsæáj\*à|æðájæájæájæájææðij-kájaæðij-

Tænāj cænāj ÁndļÁ, æn) ˇæn\$cč¦^¦Án´ˇaj]^åAnæn^cÁn @ma\å•Ánænà åhtˇænå•ÈÁNOT; æn•Án]|æn\$n\Án @ma\å•Ánænà åhtˇænå•Án@nænÁ, ^¦^ ¦^{[ç^åÁj[¦Ánæn&n••Áj[Án]}}^&odÉn^¦çann^Én Án]ænāÁn@nÁsænáj¦Án;Ánj]|^{ ^}odÉMOPS-U-0004\_A

### <u>" "HfUWrcf" < cfqYdck Yf</u>

ÙÖÖÖÁÜUVŒÜŸ

 $U] ^{\text{laga}} \hat{A}U^{\text{log}} \hat{A}U^{\text{log}} \hat{A}H\tilde{E}$ 

### <u>' '( ': fcbh9bX'K Y][ \ h</u>

CEÁ, aj aj `{ Áp. -ÁG€Ã Áp cadÁbæ&d; ¦Á, ^at @cÁ; `• oÁs^Á; æad cæad, ^å Á;}Ác@ Áb æ&d; ¦Á;[}óÁs}å ÅæcÆd|Ácā; ^• ÈÁÓZ[}oÁs)å

¸ ^at @cÁs ÁslānaBædÁp Áp æad, Áp c^^¦aj \* Ás[}d[|Ácd, áp åÁp Áp åÁp Áp æad, áp c^^¦aj \* Ás[}d[|Ácd, áp åÁp Áp æad, áp æad, áp c^^¦aj \* Ás[}d[|Ácd, áp æad, áp

### ("; 9HHB; CB5B8C:: H<9HF57HCF

Ó^{; \^Á'^^ca} \* Á;} qī Ás@ Ádæ&qī; Ēks@ Á;] ^; æqī; Á; `• cÁ^`æå Áse} å Ás[{]|^c^|^ Á;} å^;• cæ} å Ás@ Áqī]|^{ ^} cÁsæ} å Ádæ&qī;
[]^|æqī; Á; æð; æð• ĒÁsAse)^Á; æðof; Ásēo@; Á; æð; æðásē Á;[ cÁsqī {]|^c^|^ Á;} å^;• qī [ å ĒÁsqī}• \* |cÁse) Ásē c@; lã ^å Ás^æp^; Á; ;
æÁsqī {]|^c^Asp]|æð; ææðī;} ĒÁOPS-U-0007

**AWARNING** 

Ö[Å,[ơʎ,[ˇ]ơʎ,ˈʎåãa{[ˇ]ơʎ@Á/læ&d[ˈlÅ; @ǎ/k@Ádæ&d[ˈlÆ; ʎ; [çā,\* ÞĀT[ˇ]cc@Á/læ&d[ˈlÁ;]ſ´Á, @}Ác@Á/læ&d[ˈlÁ;]ſ´Á, @}Ác@Á/læ&d[ˈlÁæ; åÁæd|Á, [çā,\* Á,ædo Áæk^Á&[{]|^ơ/|ˆ•d[]]^åÈÁ;ŏ#co



### ('%6cUfX]b['h\Y'HfUWfcf

\\\\^\A\dag{\con\_\text{con

$$\begin{split} & \text{P}^{\text{ch}} \left[ \int_{\mathbb{R}^{3}} \dot{A} & \text{P}^{\text{ch}} \right] + \hat{A} \left[ \hat{A} \cdot \hat{A}$$





A DANGER



**▲**WARNING

 $O[A,[\sigma([``)\sigma([ABa['])^*]^*] \circ A[ABa[']^*] \circ A[ABa[']^*]$ 



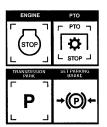
ÙÖÖÖÁÜUVŒÜŸ

 $U] ^{a}$  aga  $A\hat{U}^{a}$   $A\hat{U}^{b}$   $A\hat{U}^{c}$ 

### <u>("&"8]gacibh]b["h\Y"HfUWfcf</u>

Ó^{; \^\anticolor \angle \angl

### A DANGER



### ) "GH5 FH+B: 'H<9'HF57 HCF

 $V@A_i]^{+} = \frac{1}{4} \cdot \bullet OA_{0000} A_{000} A$ 

### 9 ggYbhjU 'HfUWcf 7 cblfc`g.

- ″ Š[&æe^Ás@•Áa\*@Á&[}d[|Ái.ãa&@ÉÁ
- ″Š[&æe^Ás@^Ár}\*āj^Ár@`dÁ;~Á&[}d[|ÈÁ
- ‴Š[&æe^Ás@^Ás¦æt^Á,^忆•Ása)åÁs@∙Ás√;c&@ÉÁÁ
- ‴Š[&æe^Áo@^ÁÚVUÁ&[}d[|ÉÁ
- ″ Š[&æe^Ás@•ÁнЁ;[ã,oÁ@ã&@Ás[}d;[|Á/\ç^¦È
- ‴Š[&æe^Ás@~Á@ 妿ĕ|&&Á^{[c^Á&[}d[|Á^ç^¦∙È

### 6 YZcfY'ghUfh]b[ 'h\ Y'hfUWrcf'Ybgi fY'h\ Y'Zc``ck ]b[ . . .

- ‴Ô[}å`&oÁsel|Á,¦^Ë;cætoÁ,]^¦æeā[}Á§,•]^&cā[}Áse}åÁ;^¦çæt^Ásæ&&[¦åā]\*Ás[Ás@^Ásæ&d;¦Ás]^¦æe[¦q•Á;æè}`æeÈÁ
- Tæ\^Á\`\^Áæ\Á``æå. Æ\ @\å. Ê\æ\å. Â\ c@\Á\æ.^c Á\c\ç&.\. Á\æ\^\Á\&\`\^\Â\Á\ æ&\È
- ″ V@^Ájad\āj\*Áns¦ad:^Áns/Ái}ÈÁ
- ~ V@^ÁnHÏ;[ā]oÁ@ã&@ÁS[}d[|ÁΛ°ç^\ÁāAÁŞÁG@^Á[¸^\^åÁ][•ãαã[}È
- ‴ V@^Á@妿ĕ|&&Á^{[c^Á&[}d[|Án^ç^¦•Áæd^Áa,Ác@Á,^čdædÁ,[•ãaā,}È
- ″V@^Ádæ&d[¦Ádæ)•{ã••ã[}Á/^ç^¦•Áæ+^Á5[Á]æ-k\Á[¦Á,^`dæ—ÈÀ

Ü^-^¦ÁqíÁc@ Ádæ&d;¦Án;}^¦qnÁ;æ);ĕæjÁg¦Ádæ&d;¦Árœælœ3;\*Áj¦[&^å;¦^•ÈÁU}|^ÁrœæloÁc@ Ádæ&d;¦Á;@4j^Ár^ææ^åÁæ)å à^|d^åÁgÁc@ Ádæ&d;¦Án]^¦æeg¦qnÁr^æeĎÁp^ç^¦Ásî]æ••Ác@ Ást}ãoã;}Á;ão&@Ás^Ár@;¦oÁsã&čão3;\*Ác@ Ádœelo∜lÁ[|^}[ãòÈ

 $C = e^{\frac{\hbar}{4}} e^{\frac{\hbar}{4}}$ 

ÙŒÒÁÜUVŒÜŸ

U]^{aea[} AÛ^&a[} AHE

A DANGER

A DANGER



### \*"7CBB97H=B; 'H<9'ACK9F'HC'H<9'HF57HCF

### \* '%7 cbbYW1b[ 'Ack Yf'< mXfUi `]Wa

 Otcczek.@hc@.hr.Ähr[•^•Ai[{ hc@.hó!æh.Akæhç^há!hc@.

 @ å!æĕ | ãbÁ! [ d | hí] hc@.hú[ cæh.Ar^æh.Eqû.^-A|Á[

 : ][ i fY'Cdg!%k) &LEÁÛ^&; |^hc@.hú] •^ç^•hí] }

 ^æ&.@f@.•^hí ñc@hí] hæð.•hí] há[ c@h) å.•EÓPS-R-0104



**AWARNING** 

ÙÖÖÖÁÜUVŒÜŸ

U]^\aea[} AÛ^&ca[} AHÊ

### **AWARNING**

Ö[Á[ơḥ]^!ææ^ÁcœáÀò``ā]{ ^} ơḥ ácœÁœáÀi áḥ;!Á·^|Áræàā;\*ÈÁUā; æ; åÁ·^|Áæb^Ár¢] |[•ãr^Áæ; åÁœáāḥ;!^•^} &rÁs[`|åÁ;!^•^} oÁæÁœæææåÈÁÖ[} [ ơÁcæ & Á; [ • ár^Áæ; åÁæ; åÁæ; åÁæ; åÁæ; • ír ár ár ár æ; !/Árāà•Ás[`|áA; |^•\*] róæáAæ; æř ^ ákææ•Ásæ, ár ár æ; \*/^} rÁs[`|áA; /^} róæærÁcæ Ár] āÁæ; åÁææ• róæáæ; eř ^ ásæ; eř ^ ásæ; eř / árā; áræ; eř / árā; áræ; eř / árā; áræ; eř / árā; áræ; eř / árā; e

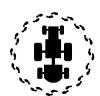


### +"DF9!CD9F5H-CB'-BGD97H-CB'5B8'G9FJ-79

 $\begin{array}{l} & \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \cos \left( -\frac{1}{4} \right) -\frac{1}{4} \cos \left( -$ 

### **AWARNING**

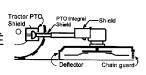
U^|ā| åā8æ||^A\$|•]^&cAæ|A{|[çā|\*A|;æd•A{|A|; Aæ|Aæ|åAA^]|æ&^A; @}}
}^&c••æd^Á; āc@Áæ\*c@|ā^åÁr^|cæc^Á;æd•ĒÁŠ[[\Á{|Á|[•^Áæ•c^}]^|•ÉÁ[|}
[|Áæ|[\^}A;æd•ĒÁæ)åAf^æd^Á;|Á|[•^Áācā]\*•ĒÁTæd^Á\*|^Áæ|Ajā]•Áææç^
æææææ@]\*Áædå;æd^ĒÁÜ^|ā|\*•Á\$|Ď|^A(æð;As&\*|Á|[{A;[cÁ;æð;cæð]ā]\*Ác@æ
{æ&@]\*Á\$|A[[åÁ;[|\å]\*Á;lĚÁ;cōæ;cæð]





A DANGER

OŒ||AUæ^¢`AU@^\|å•EO`æå•Aæ}åAUæ^¢`Aå^çæ%^•A\$|&|`åā;\*A@`¢A;[c |a; ãvåÁq;DHËA@AÖ^+|^&q;¦•EÔ@æ3jÁÕ`æåå•ÊÛ¢^||ÁÕ`æåå•EÔ^æà[¢ Ù@^|å•ÊÚVUÁq;¢^\*¦æ4Á@?|å•Êæ}åÄÜ^dæ&ææå|^ÁÖ[[¦ÁÛ@?\å•Á@]\*|å



ÙÖÖÖÁÜUVŒÜŸ

U]^{acaaaa} AÛ^&caaa} AHËJ

### +'%HfUWfcf'DfY!CdYfUhlcb'=bqdYWflcb#GYfi]WY

- ″ Vãi^Á&[}åããã[}ÐæãiÁn¦^∙∙`¦^
- ″ Y @^|Á \* Á [ | Á
- ″ Ùc^^¦ā, \* Áã, \æ\*^
- ″ÚVUÁn@An∥åÁ
- " ÙT XÁ  $\hat{a}$  } Ás Ás Ás As As  $\hat{a}$  å Áç  $\hat{a}$   $\hat{a}$   $\hat{b}$
- $^{\prime\prime}$  V¦æ&d[¦q Áðā @ Áæ4^Á&4^æ) Áæ4 åÁ $^{\prime}$ } &dã[}æ4
- ″ V¦æ&q[¦ÁÛ^ægÁs^|oÁsiÁsjÁ\*[[åÁ&[}åããa[}Á
- "  $V_1$  as  $A_1$  \( \hat{A}\_1 \hat{U} \hat{U} \hat{U} \hat{A}\_2 \hat{A}\_3 \hat{A}\_1 \hat{A}\_1 \hat{A}\_3 \
- ŰUÚÙÁ≨rÁŞIÁo@ Álæ≨r^åÁ,[•ãcá[}
- ″Þ[Ád¦æ&d[¦ÁjājÁj^æd∖•Á
- ″ Üæåãæng[¦Á√^^Án, Ánå^à¦ã•Á
- "  $\dot{O}$  \*  $\ddot{a}$   $\dot{A}$   $\dot{A$
- "Ú[ ^ | Áa | æa ^ Á| ãa Á/ ç^ | Á
- "Ú[¸^\Á\c^^\ā,\*Á\`ãāÁ\^ç^\Á
- ″ Ø ^|Á&[}åãαā[}Ásα)åΑ(^ç^|Á
- ‴Ù`~-a&a^}oÁ;à¦a&aeaa[}Áseex5ed|Á;à^Á;[ā]o•
- " OFAÁARON! ÁSI } å ãTAI } ÁHÓPS-Ü-0030



- ″Ü^{[ç^Áæ)^Á\*¦æ••Á[¦Á[c@`¦Áå^à¦æiÁ, @3&@Á(æiÁà^Á¸¦æi]]^å æ[ĭ}åÁc@.Án]ājå|^È
- (Q•) ^80Ác@Á8[}åããã]}Á[-Áå^&\Á•\ãåÁq ^0 ^•Á&@æ3]•ÉÁ-|æ3]•Áæ)å
  @æå æ4^È₩₩₩OPS-R-205



ÙŒÒÁÜU VŒÜŸ

U]^¦æaā[}ÁÛ^&aā[}ÁHËF€

### **AWARNING**

U^|ā| å ā8æ||^A\$| • ] ^ &cAæ|A([çā] \* A] æ o A[|A] ~æ Aæ) å A^] |æ&^A] @^}
}^&^••æ^Â; āc@æ c@|ā^åA;^|çā&^A; æ o ĒÁŠ[[\Á(¦A[[•^Áæ•c^}^-)^-)•ĒÁ[¦]
|\Áa|[\^} A; æ o ĒÁæ) å A;^æ ^ A; |A[[•^Áācā] \* • ĒÁT æ ^ A; |^Áæ|A; ā • Áœ¢^
ææææ@; \* Áœæå, æ ^ ĒÁÜ/|ā| \* • Ā\$| Ď|^A; æ A; && |Á|[{ A;[c´; ææ] ææē] ā; \* Áœæ
{ æ&@; ^ Æ\$| A;[|åA;[|\ā] \* A;|ÈÁ\$;oĕæ•cæē]







**NOTE:** The mower Operator's Manual and affixed Decals contain important instructions on the safe and proper use of the mower. Maintain these important safety features on the mower in good condition to ensure the information is available to the operator at all times.

### ØUCET OACEUUOT OSY

- ″ Q.•]^&oÁ&[}åããã[}Á;Á;[`}dā;\*Á;æ{^Á;^|å{^}d£
- " Q•]^&c4&[}åããã[}Á;-Á;æ{ ^ÁQē•^{ à|^È
- Ö) ` ¦ ^ Áæ þá [ | o Áæ þ å Á & ¦ ^, Áæ þ Á ð Á ∫ Í [ ãã ] } Áæ þ å æ þ Á ; [] ^ | Áæ þ å æ þ Á ; [] ^ | Áæ þ á ë
- `` \^Áæ|Á, ā, Áæ\^Áā, Á] |æ&\^Áæ) åÁæ• c\}^åÁ, ão@
   •&\^, •È



ÙŒÒÁÜU VŒÜŸ

U]^\aeai} AÛ^&ai} ÁHËF

### PYOUOEVSOOASO OAD UUOOVOU Þ

- ″Ò}•`¦^Áãcãj\*ÁãeÁj¦[]^¦|^Á&[}}^&c^å
- "Q•]^86/8{} åããã} Å -Áà \*• @ \*• ÞÁHOPS-R-0100\_A



### **AWARNING**

Ö[Á,[ớ\]^\æe^Áœæ ÁÒ``ā]{ ^} ó\ āœ́\@ å\æ |æð\á,ā¼\\Á`^|Á\æa ā \* ĒÁŪā æ) åÁ`^|Á\æh^Á\¢]|[•āç^Áæ) åÁœ āÁ,\^^} &\Á&[`|åÁ,\^^•\} oÁæÁœ æå ĒÁŪ[ } [ oÁæ@ &\Á; |Á\æh^Á\¢]|[•āç^Áæ) åÁœ āÁ,\^^\} &\Á&[`|åÁ,\^^•\} oÁæÁœ æå ĒÁÖ[ } [ oÁæ@ &\Á; |Á\æh • Á, āœ́A; [`|Áœ) åÁÁP æ æð; |Aæ, ákæ • ^Áæ • Æ, āæ • Á; [ { à\aæ • Áş Áœ Áð, ^Á&[`|åA,^\} odæ Áœ Á\æ &\Á; ] Áæ å 寿 • ^Áæ • ^Áæ æ; ~Áæ æ \* ^Áæ æ; ~Áæ æ; ~Ææ æ; ~Áæ æ; ~Áæ æ; ~Ææ æ;



ÙŒÒÁÜU VŒÜŸ

### PŸÖÜŒWŚŒÄÜWT ÚÐUSÄÜÓÚÓÜXUŒÜ

- ‴ Q.•]^&oÁ;ç^¦æ|Á&[}åããā[}Á;~Á@妿ĕ|ã&Aj`{]È
- ″ Q.•]^&oÁ, {]Ás¦ãç^Á;@eedÈ



ÁOPS-R-215

### **AWARNING**

Offich } cat } káu aláozat | káu aláozat | káu aláozat káu káu | [ Ás@ ÁÚ! ^ • • \* | ^ ÁÜ ^ | að -ÁÔaat È

Ü^{ [ ç^Ásæ] Á|[ , |^Á[Á^|ā^ç^Á; |^••\* |^Ás^-[ |^Án^{ [ çā] \* Ásæ] Ás[ { ] |^c^|^ÈÜæê Ás|^æbÁ[ ] |^c^|^ÈÄ@æÁ; ãc@Á@ oÁ; ākæ] oÁ; ākæ] a Ásæ] | Ac@æÁ; ákæ] \Ác@æÁ; ákæ] a Ásæ] a

### **AWARNING**

ÙØÖÁÜU VŒÜŸ

U]^\aea[\}Á\J^&aa[\}Á\HËH

### ÜU VŒÜŸÁP ÒŒÖÁŒ ÙÚÒÔVŒÞ

Q•] ^&Aá|æå^•Áæ) åÁa|æå^Áa[ | ΦÁṭ | Á[ [ •^} ^••
æ) åÁ¢&^••ãç^Á¸ ^æ\ÄÜ[ ææ^Áṭ Á] €»Áṭ Á; æè^Áṭ ¦
&@&\ā; \*Á^æa³\ÄÜA] |æ&^Áåæ; æ\*^åÊø [ ¦} Ê
æ) åÁ{ã•ā; \*Áà|æå^•Áæ Á&[{ ] |^c^Á•^σÁṭ
{ æā; æā; Æā; Áà|æå, &^È

]¦[]^¦Án]^&ãa&æaãi}•È



Q•] ^& A\$( } åãã } Á; -Áå ^&\ Á\ ãã Á; Q! ^• Áæ; å Áœ; æ AÈOPS-R-216

**AWARNING** 



A DANGER

Ö[A][oA]`oA@e)å•A[¦A^^oA]å^¦A[[¸^¦A&^&)•EO|æå^AÖ[}cæ&cA&e)A^•`|c ājÁa^{a]i`•Áa]b`¦^Á[¦Á^ç^}Áa^æc@EO@eêQæêA;æ;æêÁ}cājÁæe)A[[cā[}Á@e•Áa[]]^å æ)åÁc@A&a^&)•Áæ4^Áa^&;'^|Âa[&\^åA]EAA;æææ

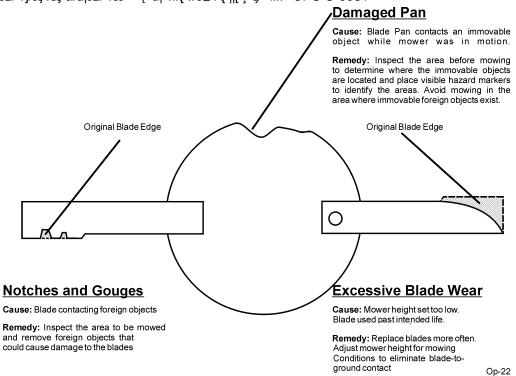


ÙŒÒÁÜU VŒÜŸ

U]^\aea[}ÂÛ^&ca[}ÂHËTI

### +"&7 i Hilb[ '7 ca dcbYbh=bqdYWicb

Q•]^&oÁa|æå^Ájæ}åÁa}åÁa|æå^Áæ•^{{ à|^ÁA; | Ás@•Á; ||[ ¸ã;\* kÁ OPS-U-0031



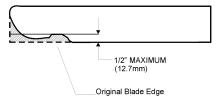
A DANGER

Q.•] ^&ACO AO | aaai ^ • Aaaaaaaa A.[ | Aaaaa ] [ | { aay. | ^aab EU OUSO EO OAO U.V.P.AO SO EO OUA; } Aco aaaa A. | aaaa | aa. | aa OTTÒÖODE/ÒŠŸÁSÁÁða@\ÁÁa|æå^Á@æK

- $\dot{O}^{8}[ \{ \dot{A}_{a}^{a} \} \dot{A}_{a}^{i} ] \{ \dot{A}_{a}^{a} \}_{a}^{i} \} \dot{A}_{a}^{i} ] \{ \dot{A}_{a}^{a} \}_{a}^{i} ]$
- OE; ^Á&; æ&\•Áæ; ^Áçã; ãa | ^ÉÁ; ¦Á

- Õ[ \*\* ^• Á; | Ás@a] ] ^a Áse ^ æ Ás Ás@ Ás cca] \* Á å \* ^ Áse ^ Áse \* ^ | Ás@æ) ÁFEGENÇFCEË { { DÁS; | Á V@ Á; æz ^ | ãæ Á; } Ás@ Á; ^æå a] \* Ár å \* ^ Á@æ Ás ^ } ¸ [ | } Áse; æê Ás ^ Á; [ | ^ Ás@æ) ÁFEGGFCEË { { De

à|[\^}Ájædó, ão@Ád^{^}å[ˇ•Á[¦&^Á, @&@Á, æêÁ&æĕ•^Á^¦ā[ˇ•Áa[åāfÁajbˈ¦^Ájkáa^ææ@ÉOPS-U-0032



NOTE: Replace Blades in pairs after no more than 1/2" (12.7mm) wear O p - 2  $^{\circ}$ 

ÙØÒÁÜUVŒÜŸ

U]^¦æaa[}ÂÛ^&aa[}Â<del>HË</del>É

### +" '6 'UXY'6 c 'h = bqdYWflcb

Q.•]^80ÁÓ|æå^ÁÓ[|0ÁP^æåÁåæáf^Á[¦Á¸^ækÁæ Á[||[¸^åK

### **Excessive Blade Bolt Wear**

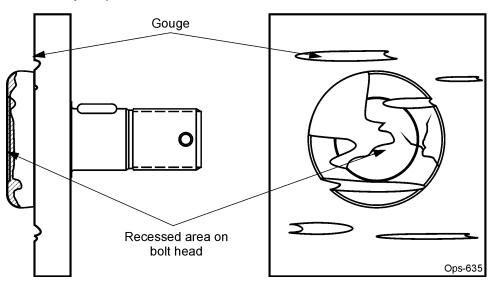
**Cause:** Blade Bolt contacts a foreign or solid object while Blade is in motion.

**Remedy:** Inspect the area before mowing to determine where the foreign objects are located and place visible hazard markers to identify the areas where immovable foreign objects exist, and avoid hitting the objects.

### **Notches and Gouges**

Cause: Blade Bolt contacting foreign objects.

Remedy: Inspect area to be mowed and remove foreign objects that could cause damage to the blade bolt.



A DANGER

Q.•]^&A\$@ÁO|æå^ÁO| |oÁP^æå•Á&æã|`Á[;Áæà}[;{ æÁ, ^æ;ÄÜÒÚŠŒÔÒÁOUVPÁOŠŒÖÒÁOUŠVÙÁ;}
c@ÁO|æå^•ÁQTTÒÖQŒK/ÒŠŸÁ\$Á\*ão@;{Ás|æå^Ás[]o•Á@æK

- ″ Xã-ãa |^Á&¦æ&\•Á;¦Á

5 k Umg f Yd `UWY 6 `UXY 6 c `hg k ]h 'b Yk 'Vc `hg k \ Yb Yj Yf f Yd `UWJb[ 'h Y 6 `UXYg "ÁOPS-U-0037

ÙØÒÁÜUVŒÜŸ

U]^\aea[} \(\hat{A}\hat{U}^\&a[\) \(\hat{A}\hat{\frac{H}{H}} = \hat{\frac{H}{H}} = \ha

# CD9F5H€B

| Mower ID#   | Mower ID# Make              |                               |  |
|---|-----------------------------|-------------------------------|--|
| Date:   |                             |                               |  |
| 6 YZcfY'WcbXi W¶b['h\Y']bgdYW¶cbža U_ \Ug'ghcddYX'UbX'h\Y'hfUWrcf']g']b'dUf_'' h\Y'a ck Yf']g'fYgh]b['cb'h\Y'[fci bX'c dfYggi fY'\ Ug'VYYb'fY']Yj YX" | k]N 'N Y'dUf_]b[ 'VfU_Y     | 'Yb[ <b>U</b> [ YX"AU_Y'gi fY |  |
| Item  | Condition at Start of Shift | Specific Comment 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 M                | OWER                          |  |

 $V@\tilde{a} AQ\bullet] ^8c\tilde{a} AQ[ : \{ A[a\hat{a} A\hat{a}^A+^A]^A\hat{a}^*] | 38ae^AA[:A^cdae^A8[] a^A\bullet E$ 

Ù**Ö**ÖÁÜU VŒÜŸ U]^¦æaa[} }ÁÛ^&ca[} }Á<del>hE</del>Ë

| Side Rotary Mower PRE-OPERATION Inspection |   |                                |                               |
|--|---|--------------------------------|-------------------------------|
|  | Mower ID#   | Make                           |                               |
| Tiger                                      | Date:   | Shift                          |                               |
| AWARNING \Ugʻ<br>h\Yʻa                     | fY'WcbXiW¶b['h\Y']bgdYW¶cbža<br>ghcddYX'UbX'h\Y'hfUWrcf']g']b'dl<br>ackYf']g'fYgh]b['cb'h\Y'[fcib<br>gifY\Ug'VYYb'fY`]YjYX" | Jf_'k]N\'\\Y'dUf_]b[           | 'VfU_Y'Yb[ U[ YX"AU_Y'gi fY   |
|  | Table 1   | l:                             |                               |
|  | Item  | Condition at<br>Start of Shift | Specific Comments if not O.K. |
| The Operator's Man                         | ual is in the tractor   |                                |                               |
| All safety decals are                      | in place and legible  |                                |                               |
| The hydraulic cylind                       | ders pins are tight   |                                |                               |
| There are no leaking                       | or damaged hoses  |                                |                               |
| The mower deck is                          | clear of cut grass and debris   |                                |                               |
| Chain guards/deflec                        | tors are in place & in good   |                                |                               |
| Blade carrier retaini                      | ng nut is tight   |                                |                               |
| Blades are not chipp                       | ed, cracked or bent   |                                |                               |
| Blade bolts are tight                      |   |                                |                               |
| Wheel lug nuts are t                       | •   |                                |                               |
| Transport locks are                        | in good condition   |                                |                               |
| Operator's Signature:                      |   |                                |                               |
|  |   |                                |                               |
|  |   |                                |                               |
|  |   |                                |                               |
|  |   |                                |                               |
|  |   |                                |                               |
|  |   |                                |                               |

# DO NOT OPERATE an UNSAFE TRACTOR or MOWER

ÙÖÖÒÁÜUVŒÜŸ

U]^¦æqā[}ÁÛ^&cā[}ÁHËFÌ

#### DRIVING THE TRACTOR AND IMPLEMENT

æ) å Ánalæ) ^• Ánæ) ^ Ána Án [ [ å Ána ] } å ãna ] Ána) å Án ] ^ læe ^ Án l [ ] ^ l | È

A DANGER

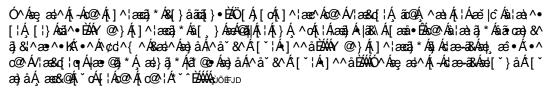


Ó^-{¦^Ád;æ}•][¦œ]\*Ás@ÁV¦æ&d[¦Áse)åÁQ]|^{^}dÉå^c^¦{ā}^Ás@Á;¦[]^¦Ád;æ)•][¦cÁ•]^^å•Á[¦ ^[`Áse)åÁs@Á^``ā]{^}dÉÁTæ}^Ár`¦^Á[`Áseàãå^Ás^Ás@Á;||[¸ā;\*Á`|^•K

V^• ofs@ Átæ&d; lÁæÁæÁ; [, Á]^^åÁæjåÁş &l^æ• ^Ás@ Á]^^åÁ; ] | ÉÁOE] | Âæ ÁÓ!æà^• Á; [ [ c@° d; Áå^c° | { 3,^Ás@ Á d] ] ] 3; Á&@æbæ&c° | ã cæð• Á; Ás@ Á/læ&d; lÁæjåÁQ ] | ^{ ^} dÉÁOE Á [ ´Áş &l^æ• ^ c@ Á; ] ^å ÁQ ] | ^{ ^} dÉÁOE Á [ ´Áş &l^æ• ^ cæ) Á; Ás@ Á/læ&d; lÁæjå ÁQ ] | ^{ ^} dÉÓO c° | { 3, ^Ás@ Á; æ¢ã; ´ { dæj•] [ | cÁ; Aó@ Á/; cÁ; Áóæ Á; æ¢ã; ` { dæj•] [ | cÁ; Aóæ Á; Cæf; ] @ÁQ+EÁ; ] @ÁQ+EÁ] @ÓQ+EÁ] @ÓQ+EÁ]

 $\begin{array}{l} V^{\bullet} \circ \acute{A} \otimes \acute{A}^{-} \stackrel{?}{4} \{ \ ^{} \circ \acute{A} \otimes \acute{A} \stackrel{?}{A} \widehat{A} \stackrel{?}{4} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \widehat{A} \stackrel{?}{4} \stackrel{?}{$ 

U}|^Ádcæ}•][¦oÁc@^Á/¦æ&d[¦Áæ}åÁQ]|^{^}oÁææÁc@Án]^^å•Á;@&&@Áæ∯[;Á[\*Áq[Á,¦[]^¦|^Á&[}d[| c@Á~``ā]{^}cÈ





ÙØÖÁÜU VŒÜŸ

#### +"( 'Ghufhilb[ 'h\ Y'HfuWhcf



#### +") '6 fU Y'UbX'8 ]ZZYfYbhJU' @cW 'GYHJb[

 CII, æê•Ásār^}\*æ\*^Ás@Átæ&d; lÁsār^l^} cædÁ[ & Á @}

 c°!}ā,\*ÉAY @} Ár)\*æ\*^åÁc@Ásãr~l^} cædÁ[ & Á å]

 j'^ç^} oÁ; lÁā; ãoÁs@Átæ&d; lÁ; [{ Áč; }ā,\* ÈÖ`;ā,\*

 j[ (æÁsč ccā,\*Ás[) åãoā])•ÉÄ[ & Á; | óár^Á.•^åÈÁ

 j'[çããr^•Á; [Ás^}~ãoÁsē)åÁr@; låÁ; [oÁs^Á.•^åÈÁ

OPS-U- 0013



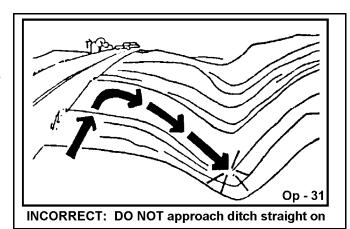
ÙÖÖÖÁÜUVŒÜŸ

#### +"\* '8 f]j ]b[ 'h\ Y'HfUWcf'UbX'=a d'Ya Ybh

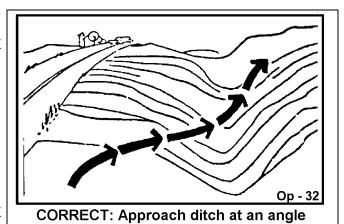
\(\text{Ucadofi\_\(\frac{A}\) \(\frac{A}\) \(

\[Áæqc[aå/fiç^\c'\}•Êfå\aç^Áo@ Ádæ&d[\Ájāc@&æd^Áæ)å/ÁæpÁæA\*æ^Án]^^å•Êfv•]^&āæd|^Áj@}Ái]^\æaā;\*Áiç^\Á[`\*@ \*\[``}åÊf&\[••ā\*Áāā&@•Á;\Án|[]^•Êfæ)åÁc`\}ā;\*Ás[\}^\•ÊfÁ\\æ&d[\Á]@^\Ád^aæā/A]æ&ā;\*Ái@[`\åj&\Ás,As;&\^æ•^å .@}Á;[\\ā;\*ÁjAs&]ā^•Á;\Á[`\*@#\[``}åÁgÁk[Á^å`&^Áœ]]ā;\*ÈÁ

#### <u>+"+"</u>



ÙÖÖÖÁÜUVŒÜŸ



## <u>."CD9F5H+B;"H<9"HF57HCF"5B8"=AD@9A9BH</u>

#### **AWARNING**



ÙÖÖÖÁÜUVŒÜŸ

#### **AWARNING**

T ab ^ Açada à A[ à b 8 c En \* & @ App A a ^ En & ab | CEN[] ^ En | A & @ ab | A & & @ ab | A & & @ ab | A & & & & A &

#### <u>'%: cfY|[b'8 YVf]q'< UnUfXq</u>

Ó^{ | ^Á; [ ] ā \* ÉÉB • ] ^ & cÁc@ Áæ + æÁţ Á; æ + ^Á\* | ^ c@ | ^Áæ + Á; [ Á; | ^ â } Á; à b & o Ác@æ Ác@ Á; [ ] ^ | ÁÉa | æ å \* • & [ | ^Á\*) cæ) \* | ^ å Á; ãc@æÁÑÛ ^ { [ ç ^ Áæ | - [ | ^ â } Á; à b & o Áæ + Át [ Ás | ^ á\*) a í æ ÉÁGÁ; à b & o Áæ + Át [ Ás | Á ác@ Á át | - [ ç ^ ÉÉ; æ + Ác@ { Ás| ^ æ | ^ Áæ | â Ás ^ Á\* | ^ Át | Á; | ^ ç ^ } c c@ Á; [ ] ^ ! ÁÉa | æ å ^ • Á¦ [ { ÁS[ } cæ& cā] \* Ác@ { È



FYa cj Y': cfY][ b'A UhYf]U



FUJgY'Ack Yf'cj Yf'gc']X'cV'YWg

#### , "&'6 mgHUbXYfg#DUggYfgVmiDfYWUi Hicbg

ÙŒÒÁÜU VŒÜŸ

U] ^ | ææaa[ } ÁÛ^&æa[ } ÁHËGH



Ü[cæl^ÁT[,^¦•Áæd^Á&æd]ææù|^Á'}å^¦Áæååç^¦•^Á&{]}åããã[}•Á;-Ác@[, ā]\* [àb^&o•Á[¦Á'¦^ææÁsãrœe)&^•ÁQHE€Á^^OÁ;¦Á;[¦^DÁæ)åÁ&æĕ•ā]\*Ár^¦ā[ĭ•Áājb'¦^ [¦Ás^æc@ÉÁQ[||[,Áræ^¢ĉÁ;^••æ\*^-Á&æd^~||^È



GHCD'ACK +B; '= 'D5 GG9 F G6 M'5 F9 'K + K +B" \$\$: YYhi B @ GG.

EZI[} ơÁcc) å ÁÜ^æ ÁÖ^-/^&[;• ÉŹÔ @ccc] ÁÕ`æ å • ÉÃ; ¦ ÁÓæ) å • Ácc ^ÁB; • ccc// å Ácc) å Ácc Åcc Åcc / å ÉÃ; [;\æà/^ &[} å ãcc[} L

ËT[¸^¦Án^&cā[}•Án;¦Án∕ā]\*•Ándò^Án`}}ā]\*Á&|[•^Án[Ándò}åÁ]ædæd|^|Án[ÁncoòÁn;|`}åÁ¸ãnoQ`oÁn¢][•^å Ó|æå^•L

ËÚæ•^¦•à^Áæ}^Áį~œãa^Ás@ Ár¢ãrđj\*Ás@[¸}Ë;àb^&oÁ[}^LÁ

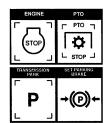
NOTE: Where there are grass and weeds high enough to hide debris that could be struck by the blades, the area should be: inspected and large debris removed, mowed at an intermediate height, inspected, closely with any remaining debris being removed, and mowed again at desired final height. (This will also reduce power required to mow, reduce wear and tear on the Mower drivetrain, spread cut material better, reduce streaking, and make the final cut more uniform). AUTERD

**AWARNING** 

Ö[Å;[ơ\^ơ\cœ^ÁO|æå^•Åc'|}Å;@\}Ác@^ÁT[¸^!ÁÖ^&\ÆāAæā^åA[;lÁæ}^ !^æ@[}ÊÁB&|`åā;\*Á&|^ææ;æ\&^Á;!Á;!Á;!Ác'|}ā;\*ÈÁÜæāā;\*Ác@^ÁT[¸^!ÁB^&\ ^¢][•^•Ác@ÁÔ`cæā;\*ÁO|æå^•Á;@&@&&\^æ&•ÁæÁ;[ơ\}cæā#]^Ár^!ā[`•Á@e ælå æ)åÁ&[`|åÁ&æ\*•^Ár^!ā[`•ÁB;b`!^Á;!Árç^}ÁB^\*ææ@Á![{Á;àb\&o\*Ác@[¸}Á+[{ c@ÁÓ|æå^•ÈÁpiūT⊞ID



A DANGER



ÙØÖÁÜU VŒÜŸ

#### , " '; fci bX'GdYYX

Õ¦[`}åÁn]^^åÁæAæ&@nç^åÁaîÁtæ)•{ã••ā[}Ár^æAn^|^&cā]}Aæ}åÁp[cÁaîAæAn}\*Af]^\åæā]\*Áp]^^åÈÁn/@ []^|æe[|Ápæ&An^Á^`ăa^åÁp[Ár¢]^|āpa}ofa@Án^ç^|æþÁr^æAæAæ)\*^Ás[{àāpæaāp}•Áp[Áan^c^|{āpAk@Aan}\*ofanæAæ}å |æp|\*^Áp@a&@Ap||çãan•Áo@Áp[•ofannæApAn|-|||{æp}&nÁp[{Áo@Áp[, ^|Áæp}åÁp[•ofanæ&ap}ofabæ&q|Áp]n|ææāp}æÁp]\*ÁboæAæ •^ç^|ácÁp-Á&cæap\*Ás[}åãaāp}•Ásp&|n^æn^Efa@Ar|[`}åÁn]^^åÁn@p"|åÁanAan^æn^åÁanÁn^|n&cap\*ÁæAp[, ^|Ár^æbÁp[ {æapæapAcæapAc@Ap||]^||n^|Áp]^^åEÁOPS-R-210

#### **AWARNING**

 $T [ Asec Acc@A]^^å Acc@ec A [ `Asca) A ec^| A[]^! acc^Acc] å As[] d [ |Acc@Acl acs C[!Asc] å A[] _ ^! EV @ S[!!^&cA[] _ ^å Acc]^^å Acc]^^å Acc]^^å Acc]^* acc Ecc acc Acc]^* Acc]^* Acc Acc]^* Acc Acc]^* Acc Acc]^* Acc]^* Acc Acc]^* Acc]^$ 

#### A DANGER

## - "CdYfUndb[ 'h Y'7cblfc`'JU'j Yg'!'G]XY'Aci bh

ÚUÙQYQJÞÁÔUÞVÜUŠÁXCŒŠXÒÁEÁV@ÁXæţç^ÁārÁ[&ææ°åÁq[Áx@Áã @Á;Áx@Áí]^¦ææ[¦ÁææÁæÁs[}ç^}ā?}óÁ@ã @Á;}Áæ }[}Ë&æàÁ;}ãŒÁV@ÁXæţç^ÁārÁ[&ææ°åÁà^@\$,åÁæ%Á°æÅ,åÁg åå[¸Áā,ÁæÁsæàÁ;æ&q;¦ŒÁV@ÁXæţç^Á;]^¦ææñ,Áār |[&ææ°åÁ;}Áx@Á^}å^¦Á[¦Á;[}Ë&æàÁ;}ãrÁæ;åA;}Áæ,ÁA;}áæ,Á;ãæ,Áæ,Á;ãæ,Á;}áæ,É



Ops-124

ACK9F'J5@J9'CD9F5H=CB

ÙØÖÁÜU VŒÜŸ

U] ^ | ææa[ } ÁÙ ^ &ca[ } ÁHËGÍ

#### ACK9F'@+H

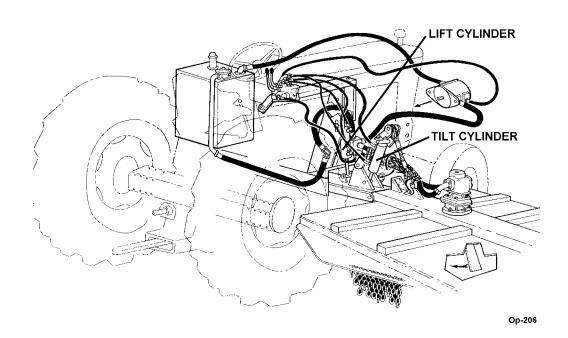
V@Á@a)å|^Á,^æ^• oÁ@Á&^} c^¦Á, Á@Ádæ&q¦¦ÉÉæ&c`æe^• Áo@ÁŠãæÁÔ^|ā,å^¦ÁQQà[æbåDÈ

 $\begin{array}{l} \dot{U} = \dot{A} = \dot$ 

Ú`•@\$;\*Ás@ Áşæqç^Á@e;)å|^Át;¦¸ætåÊæç æ`Át[{Ás@ Át]^¦æt;¦Ê&æ\*•^•Ás@ ÁŠãoÁÔ^|ājå^¦Át;Át[¸^¦Ás@ ÁÒ¢⊄^}•āt}ÁtE{È Ú`||ā;\*Ás@ Á@e;)å|^Áæt||Ás@ Á¸æ`Áaæ&\Á`}œTÁ;ætÁ[&\•Á;|æ&^•Ác@ Á;[¸^¦ÁjãoÁ`}&cāt}Ás;Át[ædÊæt||¸ā;\*Ás@ Á`}ãoÁt;Áã\*^ æ)åÁæt|Á;ão@Ás@ Áx^¦¦æājÈ

#### ACK9F'H±@H

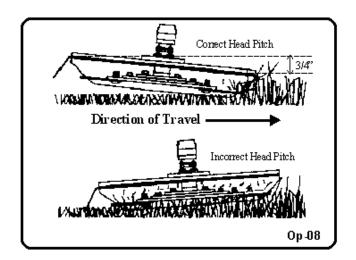
V@Á@a) å |^Á~; ¦c@•oÁg Ás@Ás^}c^;Án, Ás@Ás æsség; Ébeæscĕær•Ás@Á/āpÓÔ^ |ājå^;ÁnçU`cà[æååDÈ Ú`||āj\*Ás@Áşæqç^Á@a) å |^Ássæss Ébég æsåás@Án]^;æg; ¦Ébsæĕ•^•Ás@Á/āpÓÔ^ |ājå^;Án;Ánæā^Ás@ÁT[¸^;Ár?æåÈ QÁs@Á@a) å |^ÁnsÁ^|^æ•^åÉbs@Áşæqç^Á¸ā|Ásĕq[{ææãsæq|^Á^c;}ÁnjÁsse>°!Ása)åÁs@Á@æåá¸ā|Ása^Ánj&s^Ánjæs^È Ú`•@aj\*Ás@Áşæqç^Á@a)å |^Án;;æååÉbæçæáÁ;[{Ás@Án]^;æg;¦Ébsæĕ•^•Ás@Á/āpÁÔ^|ājå^;Áng,^¦Ás@ÁT[¸^;Án?æåÈ



#### <958 D+17 <

ÙÖÖÖÁÜUVŒÜŸ

U] ^ læaa[} ÁÛ^&ca[} ÁHËGÎ



#### A95GI F9A9BHC: <958 D+17<

- FÈ ÔWÁTUY Ò ÜÁU Ø ÁÐÐ ÖÁÐЊŮY Á Ó ŠOÐ Ò ÙÁ VUÁ Ú VU ÚÁ ÜU V OÐ Ó
- $\overrightarrow{CE}$  T[ $\overrightarrow{c}$ ^ $\overrightarrow{A}$ [ $\overrightarrow{c}$ ^ $\overrightarrow{A}$ ]  $\overrightarrow{c}$  $\overrightarrow{A}$ [ $\overrightarrow{A}$  $\overrightarrow{c}$  $\overrightarrow{A}$ ]  $\overrightarrow{C}$  $\overrightarrow{A}$ [ $\overrightarrow{C}$  $\overrightarrow{A}$ ]  $\overrightarrow{C}$ [ $\overrightarrow{C}$  $\overrightarrow{A}$ ]  $\overrightarrow{C}$ [ $\overrightarrow{C}$  $\overrightarrow{C}$  $\overrightarrow{C}$ ]  $\overrightarrow{C}$ [ $\overrightarrow{C}$  $\overrightarrow{C}$  $\overrightarrow{C}$ ]  $\overrightarrow{C}$ [ $\overrightarrow{C}$  $\overrightarrow{C$
- HÈ Š[¸^¦Á;[¸^¦Á@æåÁ;Á¸ã@ã,Á^ç^¦æÁ§&@•Á;ÁœÆ;[ˇ}åÁà ´ơÁå;Á;[ oÁ^•ơÁ@æåÁ;}Á;;[ ˇ}åÈ
- IÈ Ùd[]Á\}\*ā^È
- ÍÈ Ú[•ãā]}Áà|æå^•Át]¸æååÁ+[}ơÁæ)åÁ\a±ÈT^æ\*¦^Ác@Áåãæ;æ)&^Á+[{Ác@Áà[cd;{Á;Āś@Áà |æå^Ád]•Át]•Át]&@^ \*¦[`}åʸãc@Áæ)Áà|æå^•Áæ)\*ā¸\*ÁÇæÁ^•dŒÁW•^Áç,[Á¸^[]|^Át[Á;^æ•`¦^ÈP[¦{æþÁå¦ãcÁ;Ác@Á&`|ā¸å^¦•Á¸ã| &æ\*•^Áā;æ&&`¦æz^Á;^æ\*¹/{^};°ÁāÁœ)Á+[}ơÁ; æ\*j^å;AáAæÁ;[cÁ;^æ•`¦^åÁæÁœ)Áæ,Áa;^ÉÖUÁÞUVÁŒŠŠUY ŒĐUVPÒÜÁÚÒÜÙUÞÁVUÁUÚÒÜŒVÒÁ/PÒÁÔUÞVÜUŠÙÁY PŒŠÒÁT ÒŒÙWÜÒTÒÞVÙÁŒÜÒÁÓÒΦ;ÕÁ/ŒSÒÞÈ
- ÎÈ Ó^}ơÁs pæả^• ÉÁsæ• ÉÁ æ•• ÉÁ ;Á([•^Ás[[•^Ás[]ø-Á;ā]Á; æ•^Á; ^æ•ˇ¦^{ ^}ø-Á;•^|^••È

#### 5 @ BA9BH

P^æåÁæþå}{ ^}oÁæÁå^æj^åÁæ Ás@Á^|ææåj}•@jÁjÁs@Á&^}c^|jåj^ÁjÁs@Á;[¸^|Á[Ás@Á&^}c^|jåj^ÁjÁs@Álæ&d[|ÈÁ/@ å^•å^åÁæþå}{ ^}oÁæÁs@æÁs@æÁs@Á&^}c^|jåj^ÁjÁs@Álæ&d[|ÁæþåÁ;[¸^|Áæb^ÁjææAæþ^|ÁfÁsæ&@Ásæ&Dé]È

 $CFET_{A}^{A} = A^{A}_{A}^{A} + A^{A}_{A}^{A}$ 

ÙØÖÁÜU VŒÜŸ

U]^{aea[} AÛ^&aa[} AHËGË

#### - "%6 UqTWTHfci V`Yq\ cchtb[ '; i TXY'Zcf': ]fqh'GhUfHi d"

 $a \pm \hat{A} = \hat{A$ 

&BÁÔ^|ā¸å^!•Á¸ā|Á¸[ơÁæã^ÁÆQ]•^•Á¦[{ Ásc |ā¸å^¦Ás¸8[!!^8d^Ás[}}^8c^åÁq Áşæţç^Ásæa¸) ÉÁ¸\*{ ]Á¸[ơÁ\*]]|ā¸\*Á¸āÈ åĚÔ^|ā¸å^¦Áæã^•Á|[¸|^ÆÉQ]•^•Á¦[{ Ásc |ā¸å^¦Ás¸8[!!^8d^Ás[}}^8c°åÁq Áşæţç^Ásæ¸) ÉÁ¸[!\Á¸[¦ơÁ^|ã>•Á;]Áşæţç^ àæ¸) Á^ơÁq [Á[¸ÁŒÁ^]|æ&^Áæ•Á^\* ã^åÈ

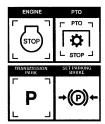
A DANGER



**AWARNING** 

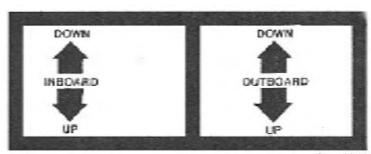
 $CF_{a} \stackrel{?}{=} \bullet A_{b} \stackrel{?}{=} A_{b} \stackrel{?}{$ 

A DANGER



ÙØÖÁÜU VŒÜŸ

#### - "&7 cblfc`'@cWUricb'UbX': i bWricbq



Ops-1246

 $V@\dot{A}^* \Leftrightarrow \dot{A} [\ \ ^! \dot{A}@^{\dot{a}} @\dot{A}_{\dot{a}} \dot{A}_{\dot{a}}] \Leftrightarrow \dot{A}_{\dot{a}} \dot{A}_{\dot{a}}$ 

 $V@ \acute{A} \tilde{a}_{A}^{A}([, ^!\acute{A}] \rightarrow DU ØØ \acute{A}_{a} \tilde{a}_{A}^{A}(Base^{\dot{A}}_{A}^{A}) \acute{A}_{A}^{A}(A) \rightarrow DU ØØ \acute{A}_{a}^{A}(A) \rightarrow$ 

V@ā Á; æ&@a,^Á; æ Áa^Áa~ã@æ; Áa ão@æ; Áæ ¢āãæ; Á; āÁa^{]^¦æč¦^Á; æ\*^Éæ; Áæ{] Á; æ\*^Á; ¼, āÁ; ¼, āÁ; ¼, āA, ¼, åæ\*^Èæ; [āÁa^{]^, aæ\*, A, å; Åaæ\*, A, å

ÙØÖÁÜU VŒÜŸ

#### - " 'CdYfUfib[ 'h Y'Ack Yf

 $\begin{array}{l} | | \hat{A}_{1} |^{4} | ^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^{4} |^$ 

\\@\dag{ [ \^\\dag{\approx} \^\approx \approx \approx

Occ[aåÁ, [, ā \* Ás Ác@Á^ç^¦•^Áåā^&cā} } Á, @}Á, [••āà|^ÈÁQÀācĕædā] • Á, @¦^Ác@Á, [, ^¦Á, ˇ•ơ\à^Áàæ&\^åÁ[
æ&&^••Áæ^æ•ÁqÁà^Á&ˇdÉA, æ\^Áaˇ¦^Áa@¦^Áæd^Á,[Á,^¦•[]•Á;¦Á,c@¦Á;¦^â\*}Áå^à¦ā⁄Áà^@]åÁc@Á; [, ^¦Áà^-;¦^
{ [,ā]\*Áş Á^ç^¦•^ÈÁY @}Á; [,ā]\*Áş Á^ç^¦•^ÊÁ]^\æ&^Ác@Ádæ&q¦Áæ;åÁ; [,^¦ÁææÁæÁ^åˇ&^åŘ;[ˇ}åÁ]^^åÁq
^}•ˇ¦^Ádæ&q¦Áæ;åÁ; [,^¦Á&]}d[JÆæÁ;ææā;oæā,^åÈÁOPS-R-211

**A**WARNING

 $O[A,[oA,[oA,[aBA]] \land ABA \land A$ 

#### **AWARNING**

⚠ WARNING | Ø[||[¸Ás@•^Át`äå^|ā¸^•Át[Á^å`&^Ás@Átã\Á¸Á\*`čā]{ ^}oÁse)åÁt¦æs•Ádā^• ¸@p^Á;]^¦ææā;\*É4^¦çã&ā;\*Ése)åÁ^]æáā;\*Ác@ÁT[¸^¦Áse)åÁ/¦æ&4[¦K



ËÒ ˇājÁs@Á/¦æ&q°¦Á, ão@ÁæÁã^Ár¢cāj\*ˇãr@¦ÁsjÁse}Ásæ&∧•ãa|^Á[&ææāj}È

ËÖ[Á¬[ơÁ,]^¦æe^Ás@•ÁT[、^¦Án;}ÁæeÁ/¦æ&d;¦Á,ão@Áæe;Á';å^¦√æe; ^Á\¢@eĕ•dÈ

EÖ[ÁP[ơÁ{[\^Á;\Á@æç^Áæ;Aí]^}Á|æ{^Á;^ædÁx@^ÁT[¸^\Áæ;åÁ\¦æ&d;\È

ËÖ[Á¤-[cÁs¦āç^Ásjq[Ásì`¦}āj\*Ás^à¦ãrÁ;¦Á-¦^∙@(^Ás`¦}cÁsd^æ-È

ËÒ}•ˇ¦^Áq|āļÁsŲˇœ&@•Áseb^Áp¦[]^¦ſÁsœåbŏ•c^åá{jÁ¦^ç^}cA°\$æ\$e•āç^Áq|ā]æ\*^Áse}åÁj|æe^Á@ææā;\*È

ËÞ^ç^¦Ásd|[¸Á&|ā] ā,\*•Á;¦Áså^à¦ãrÁq[Á&[||^&c4,^ashÁs¦ãç^|ā,^eÊn|ā]Á&|`c&@•Êsæ)åÁs^ashā[¢^•È Ú^¦ā[åã&æ||^Án@c4s[¸}Ás@Áv¦æ&q¦Ásæ)åÁT[¸^¦Ásæ)åÁsQ^æ)Á&|ā]ā,\*•Ásæ)åÁ&[||^&c^åÁs^à¦ãrÁs[{ c@Á;[¸^¦Ás^&\ÈÁpòō⊤#co

ÙŒÒÁÜU VŒÜŸ

U]^¦æaa[}ÂÛ^&aa[}Â<del>HÊH</del>€

#### **A**WARNING

Y @} Á[cæēā]\* Ájædo Ásē\ÁsjÁ; [cāi] ÉÁ\-\ái] \* Ásj b`|^ Á; æ Á; &&`|ÁsiÁ&æ cāi] ÁsiÁ; [cÁ·•\åiA; |Ásiæ] \* ^| ãiÁ; [cÁ\^&[\*] ã ^å ÈÉÞ^ç^| Áæ||[¸Ásì•cæ] å^|• Á; āc@; Á \$\$:ZYYh; [-Ác@ Á; æ&@; ^Á; @} Ás; []^|æēāi] ÈÉÒ¢d^{ ^Á&æd^Á; @} `|åÁsi^Ácæd^} Á; @} Á; ]^|æēā; \* Á; ^æbÁ; [•^Á; àb'&o ÁÉÁ\* &@Áæ\* \*|æē^|ĒÁ[ &&•Áæ) åÁsi^à|ãiÈV@•^Á&[ } åãóā] • Á @ \*|åÁsi^Áæe; āán^àÈ

U} &^Á;}Á[ &ææã;}ÉÁ[, ^¦Ás@Á; [, ^¦Ás^&\Á|ð @¢|Áæà;[ç^Ás@Á; ææ^¦ãæþÁ; Ás^Á&`ŒÁ; [Ác@Á; [, ^¦Ás[^•Á; [oÁææç^Á; eæchá; Ás^Á&`ŒÁ; [, ^¦Ás^A; Ás@ÁÜÚT Á; Ás@^Ádæác¦Á] Á; ÁFG€€Áæ) åÁr} \* æt ^Ác@Áïãa^Á; [, ^¦ÈÆGÁæÁ^æÁ; [, ^¦Æiàa^ð; \* æt ª, \* Ás@ÁÜÚT Á; Ár°C; }Áf ÆFG€€Ás^; ¦^Ás} \* æt ð; \* æt å\* åc@Á/æÁ; [, ^¦È

 $Y @ \} \text{ As } \text{ $c$} \text{ $c$} \text{ $a$} \text{ $h$} \text{ $a$} \text{ $h$} \text{ $c$} \text{ $a$} \text{ $h$} \text{ $a$} \text{ $a$$ 

#### **A** CAUTION

## **AWARNING**

QÁàˆ• œa) å^¦• Áæi] ¦[æ&@ý,ãc@g,Áh∈€Á^^cý,@g^Áí,[¸^¦ÁærÁj,Áj]^¦ææāj}Êáč¦}Áí,[¸^¦Ár¸ãæ&@ %ЫØØ+Áāj{^åãæe^|^ÂÁŒe^¦Ár@ cå[¸}ÊÁ,^ç^¦Áræç^Ás@ Ádæ&d;¦Á;¦Áæd|[¸Áሕœa)å^¦•Ád;Áæðj]¦[æ&@ ¸ãc@g,Á\$\$\***ZZYYh**Á,-Ás@Á}ãcÁ}cāÁædÁ,[cāj}Ád;]•Á&[{]|^c^|È

ÙŒÒÁÜU VŒÜŸ

U] ^ | acaaaa } Á D ^ & caaaa } Á H 🗒 F

Y @} Án} &[`} ch¦ā \* ÁæÁç^\^Án^ç^\^Ás[} å ãaā[} Á, @B&@&æě•^•Án@ Ád æ&d; lÁq Án cæþlÉðáða^} \* æt ^Á; [¸ ^¦ÉÁn cæb óÁd æ&d; lÊ læða^Án@Á; [¸ ^¦Ál;[{ Án@Ás` dÉÚ)@ óÁd æ&d; lÁ; ~Áæ) å Ás,•]^&oÁn@Á; [¸ ^¦ÉÁn|æå^•Áæ) å Ásiða \Á; lÁåæ; æt ^Án^-{ l^ ^} æt ā] \* Á; [¸ ^¦Áæt æð) È

5 ZħYf 'h\ Y'Z̞fghiXUmicZcdYfUh̞cbžƯ``Vc`hg˙g\ ci`X`VY'W\ YW\_YX`UbX'h̞[\ hYbYX`gYW fY`m'\ @ Á @ ` |å Áa^Áa[}^ ]^¦ā̞ å ä&æḥ̞l^Áṭ Ár̞)• `¦^Ár@ Áa[|ơ Áa[Ár̞ CÁa^&[{ ^Á̞[•^Ásɡ å Ásæě•^Áaæṭæ\*^Áṭ Ár@ Ád æ&æṭ!ʎṛlʎṭ[¸^¦Ēð̣ lÁa̞ ɒˈ¦^Áṭ Ár@ []^¦æc[¦È

Y @} Á[ `Á^cÁ[Ác@Á) åÁ; ÁæÁ; æ• ÊÁ|ª @|^Áæã^^Ác@ { [, ^!ÁÇCË +DÁà^-{!^Ác"}} ā, \* ĒÁÞ^ç^!Áæã^^Ác@ { [, ^!ÁY} cā^|^Á, @]^Ác@Áà|æå^•Áæ4^Ác'!} ā, \* ĒÁÞ^ç^!Áæã^^Ác@ { [, ^!ÁY} cā^|^Á, @]^Ác@Áa @!Ác@a, ÁFG-Á![{ Á\*![ ` } å |^ç^|ÊÃã^^} \*æ\*^Ác@Á[ [, ^!Áæ] åÁ, æãó^[!Áæ|Á; [, ^!Áæ] åÁ, æãó^[!Áæ|Á; [, ^! | [cæcā] } Á[ Á&[ { ^Á[Áæð^&[ { ] |^c^Ac[ ] Áà^-{!^c} ] | [cæcā] } Á[ Áæ] \*Á[ Áæð^Ac@Á[ [, ^!EÁÞ ÒXÒÜÁæð ^Ác@ { [, ^!Á, @]^Ác@Áa]æå^•Ác@ Á; [, ^!EÁÞ ÒXÒÜÁæð ^Ác@ { [, ^!Á, @]^Ac@Áa]æå^•Ác@ A£ |} ā, \*È

OPS-R-212



#### **AWARNING**



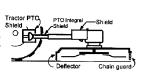
 $\ddot{O}[\dot{A}[\dot{A}][\dot{A}][\ddot{A}][\dot{A}[\dot{A}][$ 

ÙÖÖÖÁÜUVŒÜŸ

U]^¦æafa[}Áû\^&afa[}ÁHËHG

A DANGER

OŒ||AUæ^ĉ AU@^\|å•EPO`æå•Aæ}åAUæ^ĉ Aå^çæ%·Aæ}&|`åā;\*AÇā`c^}[c |ā;ãc^åÁq[DÆA@AÖ^+|^&q[¦•ÆÔ@æ\$;ÁÕ`æ\啯Ûc^|ÁÕ`æ\啯Ô^æ\à[¢ Ù@^|啯ÚVUÁq;c^\*¦æ\Á@^|啯æ}åAÜ^dæ&ææ\|^ÁÖ[[¦ÁÙ@@^|å•Á@^|å



**AWARNING** 

T ap ^ Aç æd añ ǎ fi à bh & or En \* & @ & æp · A ā ^ E& æà | ^ EN [ ] ^ EN [ ] ^ EN [ ] \* A\$ @ æà \* [ { ^ A^ } cap \* | ^ å A\$ A x @ [ ] ^ | ææ \* A\* æ or A\* æ or A\* æ A\* æ \* | ^ å A\* æ e A\* æ A\* æ \* | ^ å A\* æ \* A\* æ \* | ^ å A\* æ \* A\* æ \* | ^ å A\* æ \* A\* æ \* | ^ å A\* æ \* A\* æ \* | ^ å A\* æ \* Æ \* æ \* & æ \*

A DANGER

ÙÖÖÖÁÜUVŒÜŸ

U]^\aea[\}\A\\\^&a[\}\A\\\\

#### - "( 'G\ i H1]b[ '8 ck b'h\ Y'=a d`Ya Ybh

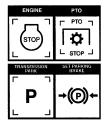
\[ \( \hat{A} \empty \cdot \hat{A} \) \( \ha





#### A DANGER

OOQUUOA/\acqā \* As@ Aslas&c[ | A\^am Esta; aê • A\^cAs@ Aj as\ ā \* Aslas\^sa; afp | A\cccc@ Aslas\cq | Aslas\^sa; Aslas\



#### %"8=G7CBB97H=B; H<9'ACK9F': FCA'H<9'HF57HCF

 $\label{eq:control_problem} $$ W^{A} \phi d^{A} (A^{A}) = A^{A} \phi d^{A} (A^{A})$ 

A DANGER

Þ^ç^¦Á+cæ) åÁ[¦Áæ)[[, Áæ)[[c@¦Á]^¦•[] Áq[Á+cæ) åÁà^ç, ^^}ÁæÁ']} ā,\*Ádæ&q[¦Áæ) åÁc@Á([, ^¦ , @}Áåã&{[}}^&cā) \*ÁœÁ[]|^{ ^}cÁ¦[{Ás@Ádæ&q[¦È

ÙŒÒÁÜU VŒÜŸ

U] ^ læaa[ } ÁÙ ^ & ca[ } ÁHËH

A DANGER

#### **%%"ACK9F"GHCF5**; 9

Úl[]^¦|^Á;|^]æða]\*Áæ)åÁnd[¦a]\*Áœ)Á;[¸^¦ÁææÁc@ Án}åÁ;Ác@ Án^æe[}ÁærÁsklãna8ædÁtÁ;æájææájā]\*ÁærÁædj]^æbæ)&^ æ)åÁtÁæ/jÁr}•`¦^Á^æð•ÁtÁå^]^}åæái|^Án^¦ça8x^ÈÁv@ Át||[¸ā]\*Áæb^Án`\*\*^•c∿åÁnd[læt^Át;8x°å`¦^•K

- Š`àlā&ææ^ÁæþlÁ; [¸^lÁtl^æ•^Áj, [ājc•Áæ)åÁællÁ;āj |^ç^|•Áæ•Áå^ææå^åÁājÁæ0Á;æājc\*)æj&^Á^&æāj}}

ÁOPS-R-214



A DANGER



## <u>%&"HF5BGDCFH+B</u>; H<9 HF57HCF 5B8 = AD @ A 9 BH

ÙØÖÁÜU VŒÜŸ

 $U] ^{\text{laga}} \hat{A}U^{\text{log}} \hat{A}U^{\text{log}} \hat{A}H \hat{B}H$ 

#### **≜**WARNING



#### %%"%HfUbadcfhb[ 'Ack Yf

#### HF5BGDCFH=B: IB89F'H<9'IB+HBG'CKB'DCK9F

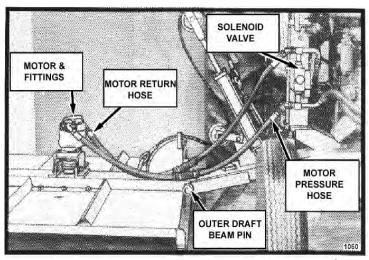
Y @ }Ádæ)•][¦cā)\*Áa^ç^^}ÁqàÁañe^•Áq¦Áà^ç^^}Áxöa^ç^^}Áxöao,\*Á,æ••^•Éao@ Á[||[¸ã,\*Á,¦[&^å`¦^Áq@,`|åÁa^Á[||[¸^åK

- $F \grave{E} \grave{U} @ o \hat{A}_{i} \hat{A}_{i} @ \hat{A}_{i} [, ^{l} \acute{A}_{i} \acute{A}_{i} @ \acute{A}_{i} @$
- QÈ Üæãn ^Ás@ Ás¦æóÁs^æ(Ág Áãn•Á@ã @ •oÁ,[•ãaā[}È
- HÈ Üæãn^Ás@Áãå^Á; [ `\Á`} cāÁs@Áå^&\Á; []•Áæťæðj•oÁs@Á妿æÁà^æ; È
- $$\label{eq:linear_linear} \begin{split} \text{LÈ $U$} \ddot{\text{u}} \ddot{\text{u}} \wedge \dot{\text{h}} \ddot{\text{u}} &= \dot{\text{h}} \dot{$$

#### HF5BGDCFH=B; IB=H'6M': @5H698'HF5=@9F

T[•oÁtæ&d[¦•Á,ão@ÁæÁ;ãā^Á([`}&°åÁ,[,^¦Á@°æåÁææææ&@°åÁ,ā∥Áà^Á;ç^¦Á/\*æþÁtæ)•][¦cā,\*Á,ãào@ÁÇF€G+Á,ãà^DÈÁZ(¦c@àÁ^æ•[}ÊÁ,}^Á,-Ás@°Á(|[,ā,\*Á,![&^å`¦^•Á; \*•óÁa^Á(|[,^åK

- FÈ  $\frac{V(a)}{a} \cdot \frac{1}{a}$   $\frac{1}{a}$   $\frac{1}{a}$



U]•ËGĜ

ÙÖÖÁÜUVŒÜŸ

 $U] ^{laga} A \hat{U} ^{s} \hat{a}_{i}$ 

#### %&"&"HfUbgdcfhjb['cb'DiV']WFcUXkUmg

 $\hat{O}_{C} (A_{AB} = A_{A} =$ 

**≜**WARNING



ÙØÖÁÜU VŒÜŸ

U]^¦æeā[}ÁÛ^&cā[}Á<del>HĒH</del>Î



$$\begin{split} T & \triangleq \land \mathring{A}^* \mid \land \mathring{A} \otimes \text{exp} \mathring{A} = | \mathring{A} \mid \text{exp} \otimes \mathring{A} \mid \mathring{A} \mid \text{exp} \mathring{A} \mid \mathring{A} \mid \mathring{A} \mid \text{exp} \mathring{A} \mid \mathring{A$$



 $Y @^{} A[] ^{|} acc\bar{a}] * A[] A] ^{} \dot{a} | \bar{a} \bar{b} A| [ acc^{} acc$ 



A DANGER



ÙØÖÁÜU VŒÜŸ

 $U] ^{laga} A U ^{8} a a b ^{laga} A H \dot{a} b$ 

#### **AWARNING**





#### %&" '<Ui `]b[ 'h\ Y'HfUWcf'UbX'=a d`Ya Ybh



ÙØÒÁÜUVŒÜŸ

U] ^ | aeca[ } ÁÛ^&ca[ } ÁHËU





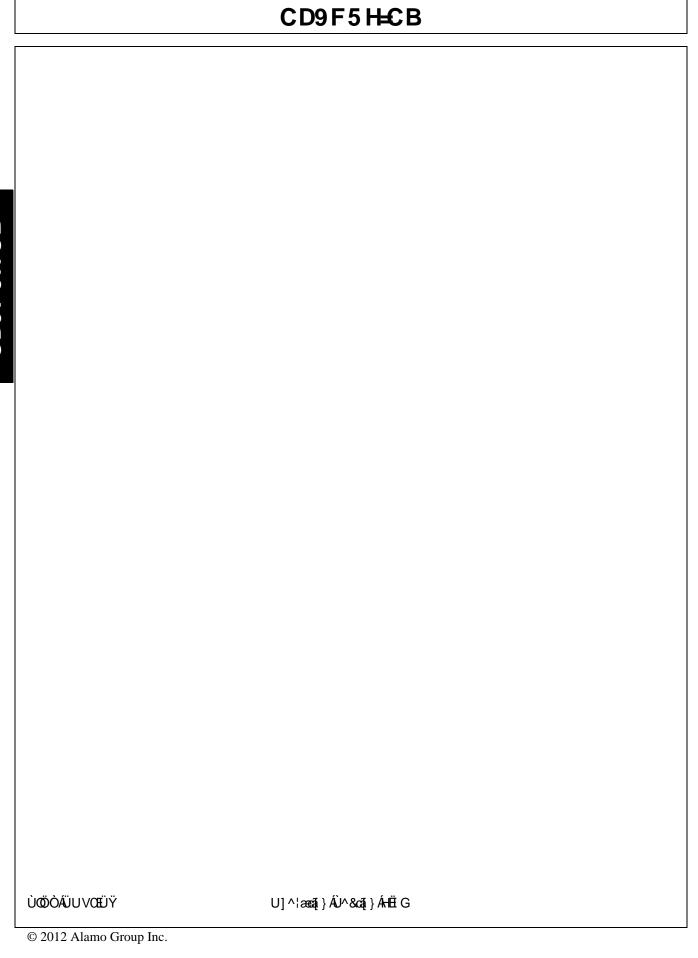
## % "HFCI 6 @ G < CCH=B; ; I =89

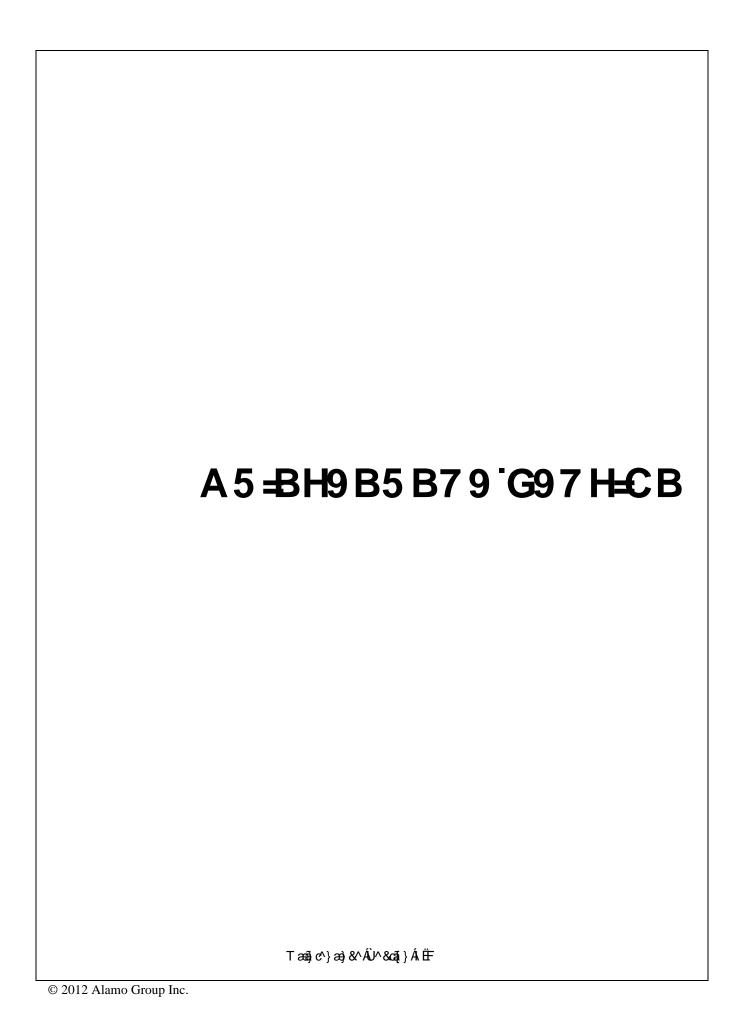
**NOTE:** Refer to repair parts section on valve bank settings on individual relief cartridges.

< MBF51 @7 `A CHCF`BCH`K CF?=B; ÁËZÔ@&\Ájā^•Á[¦Áā,\•Á[¦Áā,Á;@^Á±;^Ájā,&@åĚÁQÁ;@Á; [d̞¦Áā;Ása]\*\*å;\*
å[]}+Á}å^¦ÁjæåÉÁ^&@&\Á@Á^]å\*-Á;æ;¢^Á^(æ;\*å;\*Á;Æ;æ;¢^È

#### GHFI 7HI F5 @A9A69FG

ÙÖÖÖÁÜUVŒÜŸ





#### ; 9B9F5 @=BGHFI 7H=CBG

Y@}Á[`Á¸`¦&@œ•^ÁæÁ/ã^¦ÁT[¸^¦Á[`Áæ]•[Áæ&``ã^Áæ)[o@¦Áçæ|`æà|^Áæ••^dÉA/ã^¦oţÁ]ædoÁ;¦\*æ)ãææã]}ÉAU`¦ ¦æða áÁæ}åÁ~æða}oÁ•^¦çæðAÁ@æ•Á\* ææðo¢^åÁ@æÁ\*•o[{{^¦Árææãoæ&å}}Á[¦Á;æ)^Á^æð•ÉA/ã^¦Á;ædoÁ^^]Á]Ájã@ o@Áå^{æ)å•Á[¦Á~æða}}&°ÉAæ^cÁæ}å\*)æ°ÉAæ}åÁ\}å`¦æ)&AÁ¢]^8&°åÁ;ÁæÁ@Á/ã^¦ÁT[¸^¦È

#### A√5 -BH9B5B79 DF9751 H-CBG

- ″် Ó^Án`¦^Án}åAjÁnÁt¦^æ•^Át`}Áse)åÁ^¦∖•Áse}^Á&|^æ)Ása^ajÁsa^-[¦^Á.•āj\*ÈÄÖ^à¦ãrÁsjb^&c^åÁsjqÁs^æðj\*•ÊÁnc&ÈÁ,ão@Át¦^æ•^ ,āl|Á&æ\*•^Ásj{ ^åäæerÁsaæjæ\*^È
- ÖUÁÞUVÁ •^ÁæÁj[¸^lÁt¦^æ•^Átˇ}Át[Áj`à¦a8ææ^Áà^æáj\*•ÉÁV@•^ÁAˇˇã!^Áç^¦^Át{ædjÁægàáÁr¢æ&ScÁæt{[ˇ}œ∙Á;~ |ĭàla8ææāj}ÉÄÜ^-~!Át[Ás@-Áå^cæáphåÁ;æájc^}æájc^}æ)&vÁr^&cāt]}Át[lÁr]^&ãá&Ajˇàla8ææāt]Áaj•dˇ&cāt]}•ÉÉÖUÁÞUVÁ;ç^¦Ë \*¦^æ•^Áà^æáj\*•È

- \[
  \text{\text{\pi} \frac{\pi}{\pi} \frac{

## **AWARNING**

#### 6F95? B D9F C8

QuÁxœååããā) ÁqíÁq∥[¸ā,\*Áx@Áa¦^æàÁajÁaj•d`&cāq)•Áq¦Áq[`¦Ánjædcã&`|æbÁdæ&d;¦Éxs@ÁajÉcæò,\Á@妿ĕ|ã&Áqo°¦Án@;`|å
à^Á^]|æ&^åÁææ°¦Ác@Áaj•oÁi€Á@;`¦•Áq;Án^¦çã&^ÈÁv@;'^ææ°¦Ác@Áajæ°¦Ár@;`|åÁà^Án^]|æ&^åÁn°ç^¦^Á퀀Á@;`¦•É4q;`
^^æd|^ÉÁ;@&&@ç^¦Áxq;{^•Áaj•cÈ

Ü^Ë[; | ``^Á; @^|Á|`\*•Áœe^¦Áā•oÁāç^ÁQ `|•Á[-Á[]^|æā[}Áæ; åÁ]^|ā[å&æ4|^Ác@|^æe^|ÈĚÙ^^Á[; ``^Á-]^&ãã&æa[]}•
|ãre^åÁājÁc@Ádæ&c[|qÁr^|çã&^Á[æ4]|;Á[; [iÁ]ædã& |æÁ[; á^|ÈÁK\YY```i[g'aigh'UkUmg'VY'fY!hcfeiYXk\YbYjYf'Uk\YY`]g'fYacjYX'UbX'fY]bghU`YX"

#### A DANGER

Þ^ç^!Ÿ[!\Å`}å^!Åc@ÂQ]|^{ ^}dÃc@Â; æ{ ^¸[!\ÆÄ[!Áæ)^Åã-&å &[{][}^}oÁ;|^••Ác@ÁQ]|^{ ^}oÆnÁ^&`!^|Á\*]][!&åÁ;!Áä|[&\^åÁ] q´Á]!^ç^}oÁ`åå^}Á[!Áā;æåç^!&}oÁæd]ā;\*Á¸@Bk@Á&[`|åÁ&æě•^Á^!ā[`• ā,b`!^Á;!Á^¢^}Æå^ææðÁ;dō#□D



ÙØÖÁÜU VŒÜŸ

**AWARNING** 

 $\ddot{O}[\dot{A}\rangle[\dot{A}\rangle[\dot{A}\rangle[\dot{A}\rangle] + (\dot{A}) + (\dot{A$ 

**AWARNING** 

Ü^|a^c,^Â@ å|aĕ|a&Á|^^••`|^Á|:á|:Áṭ Áá[ā]\*Ás9^Â; æā] c^} æā, c^} æā, c^| æā, c



ÙÖÖÖÁÜUVŒÜŸ

## F9; I @ F'A5=BH9B5B79

V@Áşiơ¦ç憕ÁœÁ; @®@Á^\*ˇ|æÁ^¦çæð; \*Ár@Įˇ|åÁà^Áå[}^Áæ+^Áàæ•^åÁ;}ÁQĮˇ|•Á;-Á;]^¦ææā;}ÈÁW•^ÁœAdæ&d;¦•ÁQĮˇ| {^ơ¦ÁqiÁà^ơ¦{ā;^ở;@}Á^\*`|æÁ^¦çæð;\*ÁsiÁ^ˇˇāl^åÈ

## 8 U]`mcf'9 j Yfm, '<ci fg

| ±H9 A `   | G9FJ <i>⊒</i> 9           | 7CAA9BHG   |
|---|---------------------------|--|
| Ö¦ãç^ÁÛ@eeÁŸ[\^ÉÃVËR[ã]c<br>BÁÛcàÁÛ@eec         | Õ¦^æ^                     | Õ¦^æ•^Ásæ•Ásj•d`&c^åÆsj<br>å^cæa\$ ^åÁTæa\$jc^}æ)&^ÁÛ^&ca[}                                |
| Úˇ{]ÁÖ¦ãç^ÁÛ@eec                                | Ô@&\Ása) åÆŠ`à^           | Q • ˇ ¦ ^ Áng ¦ ãç ^ Án @eeoÁn} å Án   æê  |
| Ô¦æ}\•@æð(Œaæ);c^¦Á                             | Ô@&\Á`àà^\Á' [{{ ^•       | Ü^] æ&^Át¦[{{^o•ÁsāÁsa€æ*^å<br>[¦Á(ã•∄*  |
| Úã;[ ơÁÚ[ ¾ ơ                                   | Š`à¦a&æe^                 | Qub%soÁt¦^æ•^Át}cāļ/ānÁad}]^æ÷•ÁæenÁt}å  |
| P^妿ĕ a® <i>ÁØācā</i> j*•                        | Ô@&\Á(¦Á^æ)•              | Vã @^}Á, @}Á,^^å^åÈ<br>Ö[ÁÞ[cÁ•^Á @æ)å•Á([Á&@ &\Á-[¦Á ^æà•È<br>Ù^^ÁTæā]c^}æ)&^ÁÚ¦^&æ`dā[}• |
| S}ãç^•Á   | Ô@&\                      | ÓÁ •]^&oÁ[¦Á;ã•ā;*Á;¦Ásæ;æ≛^åÁ<br>\}ãç^•Éx@æ;*^Á;¦Á;@æ;]^}Áæ•Á;^^å^å                       |
| Ù] āj å ^Á([ˇ} cāj*Áa[ o•<br>Ģ] āj å ^Áa(Áa^&\D | Ô@&\                      | HDHÁ¢ÁGÁ¶¦~~^Á¶ÁHF-ŒÈà•È   |
| S}ã^Á([ˇ}α∄*Áa[ o•<br>Ç}ã^Á(Áaã\D               | Ô@&\                      | Ú¦^Ë;`à¦ã&æe^Áo@^æå•ÉAo@}Á<br>q'¦``^ÁqÁn€€ÁdÉAjà•È   |
| Öã\Á([ˇ}cā)*Áà[ o•<br>Çàã\Á([Á:]ā)å ^Ł          | Ô@&\                      | ÍÐÌ+ÁÝÁT-ËHÐ+Áà[ cÁq;¦~`^Áq;Á<br>G€IÁå¦^Áq;ÁFÌIÁ;āإ^åÁaÐÁÀèÐÀà•È                           |
| Ó^ @  | Ô@&\£ <b>0</b> Eabŏ•c     | Ô@ &\ Á5AÁ; [\^}ÊÁ;à*@^}Á;æ•Á^~~ã^å  |
| TænājÁn⊘læ(, ^Ánanjå*Ö^&\                       | Ô@&\Á                     | Ü^d[¦~~^Áa[ o•Áq Áq ¦~~^<br>•]^&ãã&æāa}}•Áa,Áx@a•Án^&cāa[}                                 |
| P^妿   <b>38ÁØ</b>  *ãåÆŠ^ç^                     | Ô@&\                      | OEååÁ5AÁ^~~ al^åÁj.^¦<br>⊣~äãÁ^&[{{^}}åææa]}•  |
| ÙÓÓÒÁÜU VŒÜŸ                                    | Tænaje^}ænj&^Ánù^&cnaj}Án | Ë  |

## A5=BH9B5B79

| K99?@MCF'9J9FM(\$' <cifg< th=""></cifg<>                 |                                  |   |  |  |  |  |
|--|----------------------------------|---|--|--|--|--|
| ±19 A  | G9FJ <i>⊒</i> 79                 | 7CAA9BHG  |  |  |  |  |
| Ü[cæe^ÂÛ] ājå ^  | Š`à¦a®æe^                        | Òç^¦^Án,€ÁQQ*¦•Án,¦Á, ^^\ ^   |  |  |  |  |
|  | K99?@MCF'9J9FN                   | ſ)\$ <sup>:</sup> <ci fg<="" td=""></ci>                            |  |  |  |  |
| ±19 A  | G9FJ <i>⊒</i> 79                 | 7CAA9BHG  |  |  |  |  |
| OjÁvæ)∖Ár?妿ĕ æ3kÁv0 °æã<br>Øajev¦Ánfv\$s`a]Wicb:Zj`hYnfŁ | Ô@a)*^                           | Ô@aa)*^Áace^\Áã•oÁ,€Á@;`!•Á;} `<br>o@}Ánç^\^Á,€€Á@;`¦•Á;¦Á^æd ^     |  |  |  |  |
| QEŠaj^ÁPaf@ÁÚ¦^••ˇ¦^<br>Øaje^¦Ánt/Sp`a]Wicb`Zj`hYfŁ      | Ô@;                              | Ô@aa)*^Áaaeo*¦Áai•oÁi€Á@(*¦•Á;} <br>c@?}Án;ç^¦^Ái€€Á@(*¦•Á;¦Á^aa) ^ |  |  |  |  |
|  | ACBH< @MCF 9J9FN                 | √1%)\$ <sup>·</sup> <cifg< td=""></cifg<>                           |  |  |  |  |
| ±19 A  | G9FJ <b></b> ₹9                  | 7CAA9BHG  |  |  |  |  |
| P^妿ĭ a&ÁØ ĭäåÁŠ^ç^ Á                                     | Ô@&\                             | ŒaåÁæeÁ,^^å^å   |  |  |  |  |
| P^妿ĕ &&Á√æ}∖ÁÓ¦^æe@^¦                                    | Ô ^æ} ĐÔ@~&\ĐÜ^]  æ&^            | Ô ^æ}nÁ;¦Á^] æ&^Á<br>Ò ^{^}oÁænÁ^~~ã^å                              |  |  |  |  |
| FYUf`H]fY`HmdY<br>‱‱ià ⊕i €ÜHì                           | <b>AU</b> ' <b>D'G'</b> ¥È<br>GJ |   |  |  |  |  |
| /////////////////////////////////////                    | G<br>G                           |   |  |  |  |  |

ÙŒÒÁÜUVŒÜŸ

Tængi e^}ængi &^ÁÛ^&cna[}Ái É

## A5=BH9B5B79

| M95F@MCF'9J9FM')\$\$' <cifg< th=""></cifg<>            |                            |  |  |  |  |  |  |
|--|----------------------------|--|--|--|--|--|--|
| ±19 A  | G9FJ <i>⊒</i> 79           | 7CAA9BHG   |  |  |  |  |  |
| Ù] āj å ^ÁÕ¦^æ^  | Ô@a}*^                     |  |  |  |  |  |  |
| T[q[kÁq[ÁÛ]ā]å ^ÁÛ] ā]^Á                               | Ô@a}*^                     |  |  |  |  |  |  |
| P^妿ĭ a&Á√æ)\Áx0 ĭãå                                    | Ô@;                        |  |  |  |  |  |  |
| Q\Ávæ)\ÁR^妿ĕ &&ÁØ `ãaÁØ\$je^¦<br>ffv\$s`a]Wicb`Z]hhYfŁ | Ô@;                        |  |  |  |  |  |  |
| QËŠĄ^ÁPÚÁĐĄ¢^¦<br>ff/\$Fa]WicbʻZjhYfŁ                  | Ô@;*^ <i>}</i> *^ <i>}</i> | Ô@aa)*^Á, @}Á5jåä8&æe^å<br>à^Á∧•dä8&aāj}Á5jåä8&æe[¦È |  |  |  |  |  |
| P^妿i a&Á/æ}∖ÁÓ¦^æa@∿¦                                  | Ô@;)*^                     |  |  |  |  |  |  |

ÙŒÒÁÜUVŒÜŸ

Tængi e^}ængi &^ÁÛ^&cna[}ÁiÉ

| GMA DHC A G                | 751 G9   | F9A98M   |
|----------------------------|--|--|
| Xãn lacaj }                | š[ [ •^ÁÓ[  •  | Ô@^&\Áse Ási[ o^Áse}åÁsã@^}Ás[<br> ^&[{ { ^}å^åÁs[ ~~^Ás]^&ãa&ææā[}•ÁsiÁs@s<br>•^&æā[}   |
|                            | Ô`cc^¦Áaœ•^{à ^  | æÉÁÔ@^&\Áj¦Ásaæ;æ≛^åÁs æå^•Éásã&Ê<br>`}àæÞæ)&^åÁj¦Ásčœ^¦Ár@e∞dÉÁ   |
|                            |  | àÈÁÜ^] æ&^ÆáÁ,^^å^åÈ   |
|                            |  | & EÁÔ@ &\Á-[¦Á, ã^É\[]^ÉA^c& EÁ\}cæ)* ^åÁa<br>c@ Á&`cc^¦Áæe•^{à ^  |
| T[¸^¦Á̞ā̞ļʎ̞[ớ́μãε         | P^妿ĕ a&Án2 ĭaä,Án3[¸<br>Š^æà•Án3,Án3}^<br>Øæĕ c°Án^ a%-Ánşæ4ço^          | Ô@ &\ Áse) åÁ^-ā ÁP^ åÁØ `ãå<br>Vã @^}Á;¦Á^] æ&^Áācā)*•Áse) åÁ@,•^•<br>Ô@ &\Á;¦^••`¦^ÁspÁāj^ÈŠSāj^Á<br>]¦^••`¦^ÁājÁÔ[}d[ ÁXæqç^Á•@ ` åÁà^Áse<br> ^æ•cÁGÍ€€ÁÚÈÙÈÈ |
|                            | Sā,\^å./[  | Ô ^æ}Á;¦Á^] æ&^Á;ã^•   |
|                            | Øæĕ cîÁ&î ājå∧¦  | Q.•]^&dÊA^]æaālÁ[lÁ^] æ&^Á& [ā]å^¦   |
| UāļÁv^{]^¦æc`¦^Álãr^•      | Š[¸ÁįāÁ^^ç^ Ásaà[ç^ÁG⊖⊖€>%Ø<br>Sā;\^å-Ba [&\^åÁQ∮•^•<br>Y[¦}Á,`{]-B?[d;¦ | Ó¦āj*ÁjāÁgÁjÁ;[]^¦Áj^ç^ È<br>Q,•]^&oÁĐÜ^]æaãÁĐÜ^] æa&^<br>Öãræaà ^Áæ)åÁÜ^]æaã  |
| T[,^{Á, á∥Á,[cÁ-cæ-cÁ,¦Á*} | Ó [ ¸ } Áˇ•^   | Ô@^&\Á~`•^Ási^ç^^}Á([, ^¦Án, ãn&@Á<br>æ)åÁaf}ãnā[}ÁnÁ^] æ&^  |
|                            | Óæ  Áçæqç^•Á& [•^å<br>Š[,Á,ā/Á^ç^ <br>Šāj^Á/^æ                           | Tæà^Án`¦^Án;æqhç^•Ánsd^Án;]^}<br>Ô@^&\Án?^åÉneæ}\ÁneyàÁÁnj<br>Ô@^&\ÁneylÁnānan;*•ÁneyàÁÁnj^•Ê<br>¦^Énant @^}Án;!Án] æa&n   |
|                            | Ò ^&d[} &&^[ ^}[ & Aée   c   | ######################################   |
| ÙŒÒÁÜUVŒÜŸ                 | Tæāje^}æ)&^ÁÛ^&aāj}ÁiEï  |  |

| HFCI 6 @9 G< CCH                  | LB; ˈf/7 CBHLBI98Ł   |   |
|-----------------------------------|--|---|
|                                   |  | à ÈÁÜ^{ [ç^Áo@^Á[ˇ¦Áà[ o•Á@ åā]*Áo@^Án{ æ <br>à [&\Áq[Áo@^Á(æā]Áà [&\ÈÁŠãoÁæ)åÁ\^{ [ç^<br>•{æ  Áà [&\Áà^ā]*Á&æ4^~ĭ Á,[oÁq[Áåæ4[æ*^ÁUË<br>¦ā]*•Đāpc^¦È   |
|                                   |  | &ÈÉÔ ^æ),Áajk^¦Áan),åÁ,^Ë3,•œe()È   |
|                                   |  | <pre>å EÁÜ^{ [ç^Ápæl*^Áj`ơÁ;}Ánaãn^Á;Ápæl*^Áçælç^ à [&amp;\EÁÜ^{ [ç^Á•]¦āj*ÉAæ)åÁ`•^Á}^^å ^ }[•^Áçãn^Á*¦ājÁq[Á]`  Á•][[ Á-√;{Áa][&amp;\É &amp;@ &amp;\Áà [&amp;\Áæ)åÁ•][[ Á-√;Á&amp;[}œæ(ājæ)• æ)åÁ•&amp;¦ææ&amp;@•ÉAÔ ^æ)Á]æŀoÁ[¦Á\^] æ&amp;^Áã •&amp;√ææ&amp;@åÉÁ</pre> |
| T[d[¦Áĭ}•Áàĭc                     | Ó^ œ   | Q•]^&oÁà^ o•Áæ}åÁ,`  ^^•ÈÁÜ^] æ&^   |
| , ą̃lÁ,[o∕s&`c<br>                | <b>\</b> ^}• <b>ā</b> }^¦                                    | à^ o•Ásc)åÁ^]æālÁsc•Á,^^å^åÈ<br>OZābŏ•oÁc^}•ā[}^¦Á,ŏóÁ;æaÁ,æe@¦<br>¸æ•@¦ÁsēÁ;ŏ•@Á,ão@Át[]Á;Á*ŏãā^È  |
| T[,^\áč\}•Á\ [, ^<br>[\Á,[oÁxæÁxd | Ô[}cæ{ ājæ)o•Á^∙da&cāj*<br>•][[lÁ;[ç^{ ^}o^{5}<br>çæ‡ç^Áa[å^ | Ü^{ [ç^Ápæł*^Á, ŏÁ,}Ánãa^Á,Áæł*^<br>çæqç^Áa [&\ÈÁÜ^{ [ç^Á]¦ā]*ÉAayåÁ•^<br>}^^å ^Á,[•^Áçã^Át¦ā]ÁqÁ,`  Á][[ <br>~[{ Áà [&\ÈÁÔ@&\Áà [&\Áæ}åÁ•][[ Á-{¦<br>&[}œ{ā]æ)•ÁayåÁ&¦æ&@•È  |
|                                   |  | Ô ^æ}Á,æŀ¢Á;¦Á^] æ&^ÆÁ&;æ&@åÈ   |
|                                   | Ù`&cā[}Á[ā]^•Á[à•d`&c^å                                      | Ô@~&\Á(¦Á,ā)\•Á(¦Á(à•d`&ca[})Á5)<br>•`&ca[}Áq0,•^È  |
|                                   | Š(, Á; ā)Á/^ç^   | Ô@~&\ÁP^åBÁsea}\Áp^ç^ Ásea}åÁā  È   |
| Ú { ] Á allÁ [ Á [ ¦\             | Ò¢&^••ãç^Á¸^æÁį}<br>ã̞ơ¦}æÁ¸æơ•                              | Öãræ••^{à ^Ása}åÁ^]æãiÈ   |
| T[q: Á, ā  Á,[oÁ,[: \             | Ò¢&^••ãç^Á¸^æÁ¸}<br>∄਼c^¦}æÁjæo•                             | Öãræe•^{à ^Ása);åÁ^]æãni  |
|                                   | ∖ ^{Á&æ}}}[oÁà^Á[ĭ}åÁşÁs@àÁ·^&cā[}É                          | me for all suspected hydraulic problems.<br>Ž&æ Ác@Á/^&@ &&æÁÙ^¦ç&^Á^]¦^•^} ææãç^ÁæÁc@  |
| Ù <b>ፙ</b> ÒÆÜUVŒÜŸ               | Tænjiơ}ænj&^Áù/&anji}Á                                       | ÁÄ  |

#### HCFEI 9 GD97 = ₹5H±CBG

| Nominal |      |           | $\rangle$   | Grade 2   | 0         | >          | Grade 5           | (D)        |            | Grade 8           |            |            | Grade 9    |
|---------|------|-----------|-------------|-----------|-----------|------------|-------------------|------------|------------|-------------------|------------|------------|------------|
| Dia.    | per  | Tig       | htening Ton |           |           |            | Tightening Torque |            |            | Tightening Torque |            |            |            |
|         | inch |           | Dry Plated  |           |           | Dry Plated |                   |            | Dry Plated |                   | Lubed      | Dry Plated |            |
| (in.)   |      | K = 0.15  | K = 0.17    |           |           | K = 0.17   |                   | K = 0.15   |            |                   | K = 0.15   | K = 0.17   | K = 0.20   |
|         |      |           |             |           | Uni       | fied Coa   | rse Threa         | d Series   |            |                   |            |            |            |
| 1/4     | 20   | 49 in-lbs | 59 in-lbs   | 66 in-lbs | 76 in-lbs | 86 in-lbs  | 101 in-lbs        | 107 in-lbs | 122 in-lbs | 143 in-lbs        | 126 in-lbs | 143 in-lbs | 168 in-lbs |
| 5/16    | 18   | 101       | 122         | 135       | 157       | 178        | 209               | 221        | 251        | 295               | 259        | 294        | 346        |
| 3/8     | 16   | 15 ft-lbs | 18 ft-lbs   | 20 ft-lbs | 23 ft-lbs | 26 ft-lbs  | 31 ft-lbs         | 33 ft-lbs  | 37 ft-lbs  | 44 ft-lbs         | 38 ft-lbs  | 43 ft-lbs  | 51 ft-lbs  |
| 7/16    | 14   | 24        | 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        | 125        |
| 9/16    | 12   | 53        | 63          | 70        | 82        | 92         | 109               | 115        | 130        | 154               | 135        | 153        | 180        |
| 5/8     | 11   | 73        | 87          | 97        | 113       | 128        | 150               | 159        | 180        | 212               | 186        | 211        | 248        |
| 3/4     | 10   | 129       | 155         | 172       | 200       | 227        | 267               | 282        | 320        | 376               | 331        | 375        | 441        |
| 7/8     | 9    | 125       | 150         | 167       | 322       | 365        | 429               | 455        | 515        | 606               | 533        | 604        | 710        |
| 1       | 8    | 187       | 225         | 250       | 483       | 547        | 644               | 681        | 772        | 909               | 799        | 905        | 1065       |
| 1 1/8   | 7    | 266       | 319         | 354       | 596       | 675        | 794               | 966        | 1095       | 1288              | 1132       | 1283       | 1510       |
| 1 1/4   | 7    | 375       | 450         | 500       | 840       | 952        | 1121              | 1363       | 1545       | 1817              | 1597       | 1810       | 2130       |
| 1 1/2   | 6    | 652       | 783         | 869       | 1462      | 1657       | 1950              | 2371       | 2688       | 3162              | 2779       | 3150       | 3706       |
|         |      | !         |             | !-        |           |            | nread Se          |            |            |                   |            |            |            |
| 1/4     | 28   | 56 in-lbs |             |           |           |            |                   |            | 139 in-lbs |                   |            |            | 192 in-lbs |
| 5/16    | 24   | 112       | 135         | 150       | 174       | 197        | 231               | 245        | 278        | 327               | 287        | 325        | 383        |
| 3/8     | 24   | 17 ft-lbs | 20 ft-lbs   | 23 ft-lbs |           | 30 ft-lbs  | 35 ft-lbs         | 37 ft-lbs  | 42 ft-lbs  |                   | 43 ft-lbs  | 49 ft-lbs  | 58 ft-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        | 71          | 78        | 91        | 103        | 121               | 128        | 146        | 171               | 151        | 171        | 201        |
| 5/8     | 18   | 82        | 99          | 110       | 127       | 144        | 170               | 180        | 204        | 240               | 211        | 239        | 281        |
| 3/4     | 16   | 144       | 173         | 192       | 223       | 253        | 297               | 315        | 357        | 420               | 369        | 418        | 492        |
| 7/8     | 14   | 138       | 165         | 184       | 355       | 403        | 474               | 502        | 568        | 669               | 588        | 666        | 784        |
| 1       | 14   | 210       | 252         | 280       | 542       | 614        | 722               | 765        | 867        | 1020              | 896        | 1016       | 1195       |
| 1 1/8   | 12   | 298       | 357         | 397       | 668       | 757        | 890               | 1083       | 1227       | 1444              | 1269       | 1439       | 1693       |
| 1 1/4   | 12   | 415       | 498         | 553       | 930       | 1055       | 1241              | 1509       | 1710       | 2012              | 1768       | 2004       | 2358       |
| 1 1/2   | 12   | 734       | 880         | 978       | 1645      | 1865       | 2194              | 2668       | 3024       | 3557              | 3127       | 3544       | 4169       |

Torque values for 1/4 and 5/16-in series are in inch-pounds. All other torque values are in foot-pounds. K = 0.15 for "lubricated" conditions Torque values calculated from formula T=KDF, where

$$\label{eq:K} \begin{split} \text{K} &= 0.17 \text{ for zinc plated and dry conditions} \\ \text{K} &= 0.20 \text{ for plain and dry conditions} \end{split}$$

D = Nominal Diameter F = Clamp Load

|   |       | <                             | Class 4.6<br>4.6 | >        |          | Class 8.8    | >  |                               | Class 10.9  |          | F                 | 12.9        |  |
|---|-------|-------------------------------|------------------|----------|----------|--------------|--|-------------------------------|-------------|----------|-------------------|-------------|--|
|   |       |                               |                  |          |          |              |  |                               |             |          |                   |             |  |
| Nominal   | Pitch |                               | ntening To       |          |          | htening Tor  |  |                               | htening To  |          | Tightening Torque |             |  |
|   |       |                               | Dry Plated       |          |          | Dry Plated   |  |                               | Dry Plated  |          |                   | Dry plair   |  |
| Dia.  |       | to a speciment of contract of |                  | K = 0.20 | K = 0.15 | K = 0.17     | the state of the s | Instrument und affection (see | K = 0.17    | K = 0.20 |                   | K = 0.20    |  |
| (mm)  |       | (ft-lbs)                      | (ft-lbs)         | (ft-lbs) | (ft-lbs) | (ft-lbs)     | (ft-lbs)   | (ft-lbs)                      | (ft-lbs)    | (ft-lbs) | (ft-lbs)          | (ft-lbs)    |  |
| 3   | 0.5   | 0.28                          | 0.32             | 0.38     | 0.73     | 0.82         | 0.97   | 1.0                           | 1.2         | 1.4      | 1.2               | 1.6         |  |
| 3.5   | 0.6   | 0.44                          | 0.50             | 0.59     | 1.1      | 1.3          | 1.5  | 1.6                           | 1.9         | 2.2      | 1.9               | 2.5         |  |
| 4   | 0.7   | 0.66                          | 0.74             | 0.87     | 1.7      | 1.9          | 2.3  | 2.4                           | 2.7         | 3.2      | 2.8               | 3.8         |  |
| 5   | 0.8   | 1.3                           | 1.5              | 1.8      | 3.4      | 3.9          | 4.5  | 4.9                           | 5.5         | 6.5      | 5.7               | 7.6         |  |
| 6   | 1     | 2.3                           | 2.6              | 3.0      | 5.8      | 6.6          | 7.7  | 8.3                           | 9.4         | 11       | 9.7               | 13          |  |
| 6   | 1.25  | 2.1                           | 2.3              | 2.7      | 5.3      | 6.0          | 7.0  | 7.6                           | 8.6         | 10       | 8.8               | 12          |  |
| 7   | 1     | 3.8                           | 4.3              | 5.0      | 9.7      | 11           | 13   | 14                            | 16          | 19       | 16                | 22          |  |
| 8   | 1     | 5.9                           | 6.6              | 7.8      | 15       | 17           | 20   | 22                            | 24          | 29       | 25                | 34          |  |
| 8   | 1.25  | 5.5                           | 6.2              | 7.3      | 14       | 16           | 19   | 20                            | 23          | 27       | 24                | 31          |  |
| 10  | 1.25  | 11                            | 13               | 15       | 29       | 33           | 39   | 42                            | 48          | 56       | 49                | 66          |  |
| 10  | 1.5   | 11                            | 12               | 14       | 28       | 32           | 37   | 40                            | 45          | 53       | 47                | 62          |  |
| 12  | 1.25  | 21                            | 23               | 28       | 53       | 60           | 71   | 76                            | 86          | 101      | 89                | 119         |  |
| 12  | 1.5   | 20                            | 22               | 26       | 51       | 58           | 68   | 73                            | 82          | 97       | 85                | 113         |  |
| 12  | 1.75  | 19                            | 21               | 25       | 49       | 55           | 65   | 70                            | 79          | 93       | 81                | 108         |  |
| 14  | 1.25  | 26                            | 29               | 34       | 66       | 75           | 89   | 95                            | 108         | 127      | 111               | 148         |  |
| 14  | 1.5   | 28                            | 32               | 37       | 72       | 82           | 96   | 103                           | 117         | 138      | 121               | 161         |  |
| 14  | 2     | 30                            | 34               | 40       | 78       | 88           | 104  | 111                           | 126         | 148      | 130               | 173         |  |
| 16  | 1.5   | 50                            | 57               | 67       | 129      | 146          | 171  | 184                           | 208         | 245      | 215               | 287         |  |
| 16  | 2     | 47                            | 53               | 62       | 121      | 137          | 161  | 173                           | 196         | 230      | 202               | 269         |  |
| 18  | 1.5   | 73                            | 82               | 97       | 187      | 212          | 249  | 268                           | 303         | 357      | 313               | 417         |  |
| 18  | 2.5   | 65                            | 73               | 86       | 167      | 189          | 222  | 239                           | 270         | 318      | 279               | 372         |  |
| 20  | 2.5   | 91                            | 104              | 122      | 236      | 267          | 314  | 337                           | 382         | 449      | 394               | 525         |  |
|   |       |                               |                  |          |          | cified bolts |  |                               |             |          |                   | nal Diamete |  |
|   |       |                               | ed in foot-      |          |          |              |  |                               | ated, dry o |          | F = Clamp         |             |  |
| Torque values calculated from formula T=KDF, where K = 0.20 for plain and dry condition |       |                               |                  |          |          |              | 2101114  |                               |             |          |                   |             |  |

ÙŒÒÁÜUVŒÜŸ

Tængi e^) ængi &^ÁÙ^&cngi } Ái Ë

# A5=BH9B5B79

| @ 6F-₹5H-CB <sup>-</sup> F97CAA9B85H-CBG                                     |  |  |   |  |  |  |  |  |  |
|--|--|--|---|--|--|--|--|--|--|
| 89G7F±DH±CB  | 5 DD@7 5 H€B   | ; 9B9F5@GD97 <b>=</b> -75H-CB  | F97CAA9B898<br>AC6=@@ 6F-₹5BH   |  |  |  |  |  |  |
| . V¦æ&d[¦ÁR^妿ĕ a&e   | Ü^∙^¦ç[ ã  | RÖËG€Ô<br>TØÁTFFHÍÉÄTFFIF<br>ØÞPTGÔFHIÖÁÇØÞPGÆFD   | T[àậ—jĭaãúÁniGi   |  |  |  |  |  |  |
| T[,^\AR^^a\ae\ae\ae\<br>O[ &A^{{}}]^\ae\ae\ae\ae\ae\ae\ae\ae\ae\ae\ae\ae\ae\ | • Æ×∞ÁÙæ÷ďÄV <br>¦^• Æ√≈∞ÁÙæ÷ďÄV <br>¦^•Æ√Í×∞ÁÙæ÷ďÄV | OÙUÁIÎÁOUŞ ŒÜY^æHÜŠ[¸ÁA^{]<br>RÖLÜSEÔ<br>TØÁT FFHÍLÉAT FFIF<br>ØÞPÁT GÔFHIÖÁQØÞPGEFD<br>OÙUÁÎÁOUŞ ŒÜY^æH<br>OÙUÁF€EÁOU; ŒÜY^æH | T [àāļÁÖVÒÁFÍ T<br>T [àāļ⊣ĭãáÁlGI<br>T [àāļÁÖVÒÁGÍ<br>T [àāļÁÖVÒÁFÌ T |  |  |  |  |  |  |
| // / / / / / / / / / / / / / / / / / /                                       | Õ¦^æ^  | ÚCEUÁÙ^} c@ c&ÁÒ¢d^{ ^<br>Ú¦^••`¦^ÁÕ^æhÁŠ`à^   | T[àāļÁÙPÔÁÌÍYËJ€<br>T[àãļÁFÙ^}o@oã&ÁÕ^æs                              |  |  |  |  |  |  |
| Ô` cc^¦ÁÙ @eeÁBÁÕ¦[`}å<br>Ü[  ^¦ÁÙ @eeÁÇZ æä‡D                               | Õ¦^æ^ÄÕ~}  | Šão@ã{ ËÔ[{] ^ơ^<br>Ò¢d^{^ÁÛ;^••`¦^<br>ÞŠÕŒÄÄÛUÁHG€  | T[àā[*¦^æ•^ÁÔTĒÙ  |  |  |  |  |  |  |
| Ö¦ãç^ÁÙ@eeófÔ[ˇ] ^¦<br>ÇØ æ¶ó€e)åÄÜ[œeh^D                                    | Õ¦^æ^ÄÕ~}  | Šão@ã{ ËÔ[{] ^¢<br>Ò¢d^{^ÁÚ!^••`¦^<br>ÞŠÕOÁGÆÖÖÙUÁHG€  | T[àā[*¦^æ•^ÁÔTĒÙ  |  |  |  |  |  |  |
| Ö¦ãç^ÁÙ@eeoŰ[∖^Ê<br>WËQiājoÁBÁÛc`àÁÙ@eec                                     | Õ¦^æ^ÄÕ~}  | Šãc@ã{ ËÔ[{] ^¢<br>Ò¢d^{^ÁÚ¦^••`¦^<br>ÞŠÕŒÁGÆÖÖÙUÁHG€  | T[àā[*¦^æ•^ÁÔTĒÙ  |  |  |  |  |  |  |
| Ö^&\ÁÛ] āj å ^ÁÇÜ[ æ&^ D   | Õ¦^æ^ÄÕ~}  | Va*^¦ÁÚæloÁÚ]ā,å ^ÁŠ`à¦a3&e)c<br>ÚæloÁ⊃`{à^¦Á€ÎÍI <del>€€€€</del>  | T[àajaão@ÁÙPÔÁGG€   |  |  |  |  |  |  |
|  |  |  |   |  |  |  |  |  |  |
|  |  |  |   |  |  |  |  |  |  |
| ÙፙÒÁÜUVŒÜŸ   | Tæ   | c^}æ)&^Áû^&cā[}ÁiË=€   |   |  |  |  |  |  |  |

#### DC @M75F6CB5H9 75F9 / A5 = BH9B5B79

V@Áj;[];ancæ;^ÁWXÁæ;aåAOæ;æā;}ÁÜ^•ãrcæ;c4\*;-æ&xÁ&[ææ;\*Á[}ÁÙPQÒŠÖÙÁÙWÚÒÜÔUOE/ÒÖÁj;[|^&æ;à[}ææ^ •ã;}ãa&æ;d^Áā;];[ç^•Á;^;4;{æ;&xÈÚ^;ā;aå&Á&|^æ;ā;\*Á;\*[]^;Áj;[&xå;\^•Áæ;åÁ&[{]ææã;|^Á&|^æ;^ ;^&[{ {^}å^åÁ;Á;;[[];\*Á^\;c4&\Áã^ÈZÁ\*^;ÁŐ[;]ÈÁ;[]^&æ;à[}ææ^Áæ ÁÙWÚÒÜÔUOE/ÒÖÁ;}Ás[c@Á;ãA·•È

#### 7@95BB; 'H<9'GI D9F7C5H'<5F8!7C5H

- FÈ Yæn @Á, ão @ÁnaÁ, āḥåÁn[| ˇ oā[}Án, Án[æ]Án, ˈÁno oʰkh² oÁna) åÁn `\^,æd{Á, ææ^¦È
- $\begin{array}{ll} \text{HÈ V}[A_1^{\dagger}, ^{\circ}] \circ A_2^{\bullet} & \text{dec} A_1^{\bullet}] [\cos A_1^{\bullet} + \widehat{\text{Dec}} A_2^{\bullet}] [\text{ } * A_2^{\bullet}] (\text{ } * A_2^{\bullet}) (\text{ } * A_2^{\bullet}) A_2^{\bullet}] (\text{ } * A_2^{\bullet}) (\text{ } A_2^{\bullet}) (\text{ } A_2^{\bullet}) (\text{ } * A_2^{\bullet}) (\text{ } * A_2^{\bullet}) (\text{ } A_2$
- IÈ Ofē[ aā Ás@ Á ^ Á Ásà læ ãç ^ Ásul^ æ) ^ l ÉÁ ˇ ` ^ ^ \* ^ Ásè å む l Á c@ l Ásul^ æ) ā \* Áā ] | ^ { ^ } o• Ás@æ Á æ Á は æ Á l Á l [ ˇ \* ^ Á c@ Ásul æ ā \* È

# 7 @ 5 B±B; '5; 9 BHG'K < ₹ < '<5 J 9 '6 9 9 B': CIB8 'HC' 6 9 '7 CAD5 H±6 @ 'IB8 9 F' @ 5 6 C F 5 HC FM 7 CB8 ± H±C BG.

″ OE `^[`•ÂÛ[|`œ[]}•Á;-ÂÛ[æ]•Áæ)åÁÖ^c^¦\*^}o•

Y ả ả  $^{\circ}$  Vị ] Árī à Rĩ  $^{\circ}$  T ¦ Đố  $^{\circ}$   $^{\circ}$  Øà ær cã Øî ;  $^{\circ}$  ( $^{\circ}$  ¿ á  $^{\circ}$  & Å  $^{\circ}$  §  $^{\circ}$   $^{\circ}$  \$\text{V} \text{1} & Å \text{8} & Å \text{0} \text{1} & Å \text{0} & Å \text{0} \text{1} & Å \text{0} & Å \text{0} \text

″ U¦\*æ}æ\$ÂÛ[|ç^}œ

 $O c | \hat{AO} \rangle | [\bullet [ | c \rangle S \wedge S \wedge ] [\bullet \wedge] \wedge P \wedge \phi \wedge | \hat{BAOE} \rangle \hat{BA} | 1$   $P \wedge \phi \wedge | \hat{BAOE} \rangle \hat{BA} | 1$   $P \wedge \phi \wedge | \hat{BAOE} \rangle \hat{BA} | 1$   $P \wedge \phi \wedge | \hat{BAOE} \rangle \hat{BAOE} | 1$ 

Þ^|^&[ ËÚ|æ&^¦ V~¦&[ ÁÍ €] G

T^c@<del>2</del>)[| Q[];[]^|

## ; F5:: **#** F9ACJ5 @

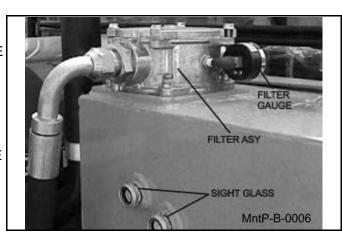
\text{\frac{\pi}{\pi}} \frac{\pi}{\pi} \frac{\

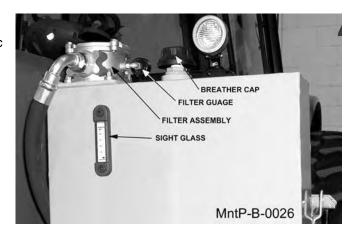
ÙÖÖÖÁÜUVŒÜŸ

#### A5=BH9B5B79

# F97CAA9B898: =@@B; '=BGHFI7H=CBG': CF'<M8F5I @7' F9G9FJC=FG

 $Y @ \} \acute{A} | \vec{a} * \acute{A} | \dot{A} \& @ \& \vec{a} * \acute{A} @ \acute{A} \vec{a} \acute{A} ? c^| \vec{E} \& @ \acute{A} \ \vec{a} \acute{A} @ ^| \vec{a} \\ \grave{A} | \vec{a} \land \mathring{A} | \vec{a} \land \mathring{A} | \hat{A} \not A | \hat{A} | \hat{A} \not A | \hat{A} | \hat{A}$ 





## F9D@57=B; '=B!H5B?' < M8F5I @7': =@H9F

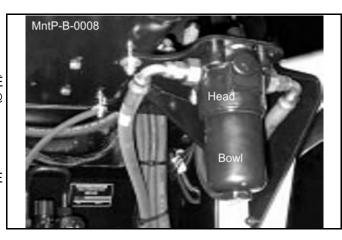
Š[[•^}}Ác@Á[ˇ¦Áa[|ơÁ[≯Ác@Á[]ÁS[ç^¦Á[-Ác@Áā]ơ¦ @`•ā]\*ÈÁ´¦}Á&[ç^¦Ás[ˇ}ơ¦Ë&|[&\¸ã\*^Á};ŒÁ&[ç^¦Áa -\^ÈÜ^{ [ç^Áæ]åÁ^]|æ&^Áā]ơ¦ÈÜ^]|æ&^Á[]Á&[ç^¦ æ)åÁ&[ç^¦Áa[|ơÁgÁ]][•ãcÁ[¦å^¦ÁæA.



ÙØÖÁÜU VŒÜŸ

Tæd c^} æ) &^ ÁÛ^&cd} } Á ËFG

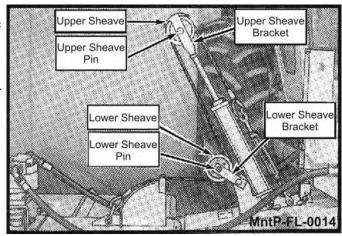
# F9D@57=B; '<=, < 'DF9GGI F9' < M8F5I @7': =@H9F'9@9A9BH



ÙÖÖÖÁÜUVŒÜŸ

# ; F95G=B; 'H<9'I DD9F'5B8' @CK9F'G<95J9G

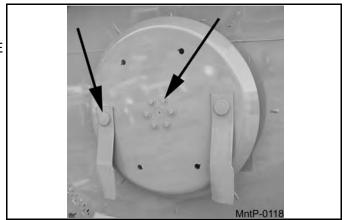
$$\begin{split} &\tilde{S}[8\text{de}^{\prime}\hat{A}\text{c}@\mathring{A}^{\prime}|^{2}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{de}^{\prime}\hat{A}^{\prime}|^{4}\text{$$



# H=, <H9B=B; '6 @589'6 C @HG'5 B8'8=G?'6 C @HG

 $\begin{array}{l} \text{OEe} \cdot | \text{A} \cdot \text{C}_{\text{c}} \cdot | \cdot \text{A} \cdot \text{A} \cdot \text{A}_{\text{c}} \cdot | \cdot \text{A}_{\text{c}} \cdot \text{A}_$ 

 $\ddot{O}\tilde{a} \setminus \dot{A}T[\ \ \ \ \ \ \dot{A}) = \dot{A}(\ \dot{A}) = \dot{A}(\ \ \dot{A}) = \dot{A}(\ \dot{A}) = \dot{A}(\ \ \dot{A}) = \dot{A}(\ \ \dot{A}) = \dot{A}(\ \ \dot{A}) = \dot{A}($ 

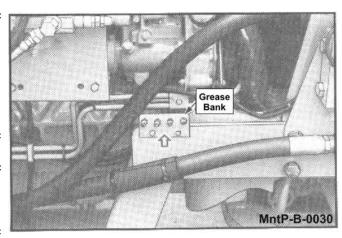


ÙØÖÁÜU VŒÜŸ

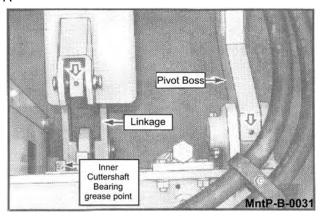
# A5=BH9B5B79

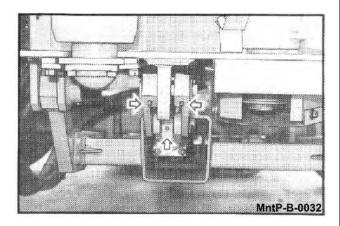
#### ; F95G-B; '-BB9F'5B8'CI H9F'8F5: H'695A'D-JCH'DC-BHG

\$[ &\alpha \alpha \alph

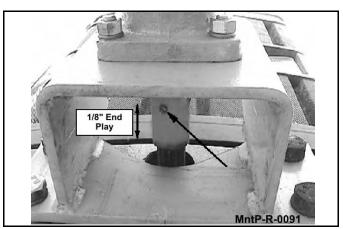


Á





# ; F95G=B; 'DI AD'8F=J9'G<5: H7CI D@F



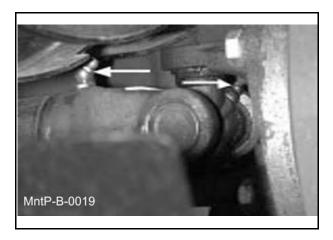
ÙÖÖÖÁÜUVŒÜŸ

Tæāje^}æj&^ÁÙ^&cāj}ÁjËFÍ

#### 8F=J9'G<5: H'MC?9z| !>C=BH'/ 'GH| 6'G<5: H

Y ão@Á^} \* ∄ ^Á• q[]] ^å ÊÁ∄ lý &cÁŠãc@ã { Ε̈́Ô[{]|^¢Á^¢d^{ ^Á]¦^•• `¦^Á\*¦^æ• ^Á&[}-[; { ∄ \* Áq ÁÞŠÕ ΦΕΕΌ)U ÁHΘ€ •] ^&ãã&æã∄} • Æij q[Á; ãç^¦• æþÁij ∄ σ Ææ) å Áp |∄ Á[\^Á; α¾Á; |^æ• ^Ææ]] ^æ• ÆæÆ⁄æÆ. Æn æþÆÖ¦^æ• ^Ææ; Ájæ; Áj¦Æ;ç^¦^Â @ `¦• È



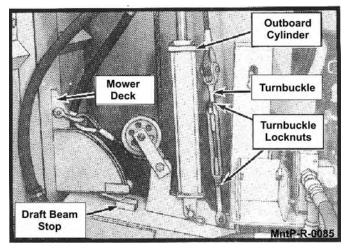


# 58>I GH+B; 'H<9'756 @9' @+ H

Ò¢¢^}åÁc@Á[``cà[æååÁ&^|ā]å^\Á`}cāļÁc@Á[[¸^\Áå^&\ {``&@•ÁæÁ(]Á[}Á)&A@Áå;æóÅa^æ(ÁæÁ@¸}È

**NOTE:** Make sure the cable turnbuckle is loose enough to allow the cylinder to reach full extension before the head reaches the stop.

Þ[ ÁQ | åÁc@ Á@ æåÁæt æð • cÁc@ Ác [ ] Áæ) åÁð @^ kó@ c'} à` &\ |^A`} ; cðAc@ Á&æà|^Áæ Áð @ÈŠ[ , ^!Áæ) åÁæ Ac @ `|å @` Ac @Æ Æå Ac @ `|å @` |å @



ÙÖÖÖÁÜUVŒÜŸ

Tæā, c^}æ) &^ÁÛ^&cā; }Á ËFÎ

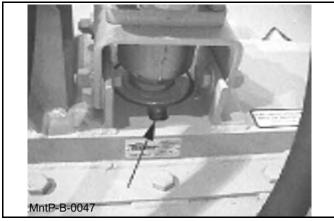
# A5=BH9B5B79

#### 65@@J5@J9G

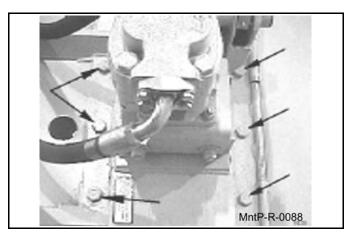


# ; F95G-B; 'GD-B8 @9

Š[8æe°Á\*¦^æ•^Á-āmcāj\*Á;}Áāj•āā^Á[Æå^&\Á@; •āj\*È
Q)b^8cÁ Vā'^¦ÁÙ]ājå|^ÁŠ`à¦ā8æajdÃ]æbcÁ}`{à^!
€ÎÍI€€€€ÁājqÁ]ājå|^Á@@;•āj\*ÈÁOāļļÁ,āc@Á|`à¦ā8æajc
`}dāÁ|`à¦ā8æajcÁ,^^]•Á[`cÁ[Æá[]Á•]ājå|^Á•^æÈ
Š`à¦ā8ææ°Á]ājå|^Á,^^\|^Á;LÁ°ç^¦^Á,€Á@;'|•Á;Æá•^È



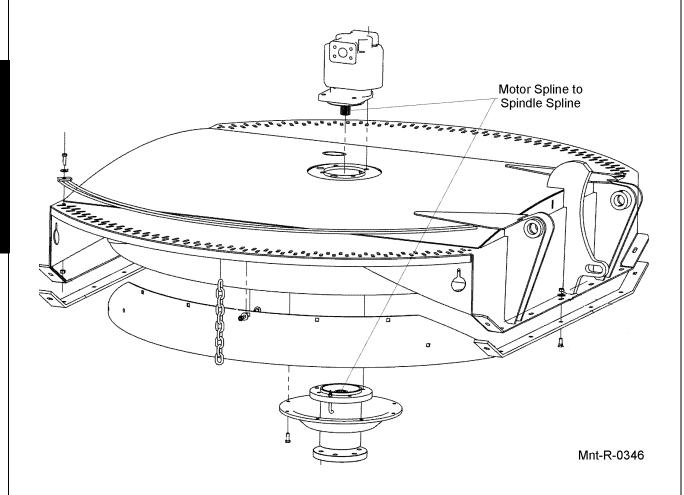
# H=; < H9 B=B; 'GD=B8 @9'6 C @+IG



ÙØÖÁÜU VŒÜŸ

Tæā, c^}æ) &^ÁÛ^&cā; }Á, ËFÏ

# ; F95G=B; 'A CHCF'GD@B9'HC'GD=B8 @9'GD@B9



ÙØÖÒÁÜUVŒÜŸ

Tæng e^}æng &^ÁÛ^&cng }Á ËFÌ

# 6 UXYq

Ô@ &\ Ác@ ÁÓ|æå^•Á[¦Á&;æ&\•Áæ) åÁ¸^æ;Áæ) åÁÓ|æå^ÁÓ[|o•Á[¦Áæ] @}^••Ēåæa]îĒÓ|æå^•Á;@;`|åÁæ^Á^]|æ&^åÁ¸@}
c@^Áæ;^Á[;}Ár¢&^••āç^|Ēåx^} dĒå^-[;{ ^åĒá;!Á;`oÁ; Æåææ; &^È

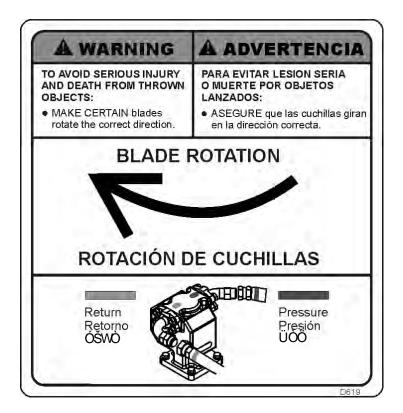
#### A CAUTION

#### **Important**

#### **AWARNING**







ÙÖÖÖÁÜUVŒÜŸ

T and  $C^{*}$  a

# A5 = BH9B5B79

#### FCH5 FM?B= 9 F9D@579A9BH

- FÈ Ó^Á\*;\^Á[ \*Á@æç^Áæó&[{ ] |^c^Á; ææ&@]\*Á^^oÁ; -Á,^. Á} ãç^•Á;;\Á^] |æ&^{ ^} cÈ
- QÈ Ü^{ [ç^Á}ãç^•Ása}åÁş•]^&cÁQ |^•Áş¦Áåsa¢ æ\*^ÀÆQE•[Á;æs&@Áş¦Ásæ&,•ÁşÁx@Ásã\Ása¢]~}åás@ÁQ |^•È
- HÈ Š`à^Áo@^æå•Á,ão@Áæ) œãë^ã^ɼ[[q[¦ÁpãAjk¦Ár¦^æ•^ÈÁQQ•œæ|Áa[|o•Áo@[`\*@Á}ã^Áæ) åÁaãa\Á¦[{Áa[cq[{Áaãa^ÁpÁ åã\ÈÁQ,•œa|Á,^¸Á,^|-Ë[,&\ā,\*Á,ઁo-Ása)åÁ[;¦˘ˇ^Ás@^{Á[Â,€€ÁdĚA)à•È
- IÈ V@Á}ãç^•Á@, ¾Á, ¾\*Á, ^|^Áξ Ásaà•[¦àÁ, @,&,•Á, [{Áξ ]æ&οÁ, @}Ádã ¾\*Á,àb/&•Æ

Y PÒÞÁÔWVV ΦÕÁPÒOSKŸÁÓÜWÙ PĒŚSÞQØÒÁÓU ŠVÙÁÙPU WŠÖÁÓÒÁÞUÙÚÒÔVÒÖÁPU WÜ ŠŸÁŒÐÖ **ÀWARNING** ÜÒVUÜÛWÒÖÁVUÆF€Ĩ €ÆÖÜŸÁJÜ €€ÁJŒŠÒÖÆØNÈŠÓÙÈ

#### F9D@579A9BHC: FCH5FM8=G?

Øæaāĭ¦^ÁqīÁŢ∥[¸Áo@^Á-[∥[¸ā¸\*Á¸æ-}ã¸\*•Áæ)åÁ⏕d`&oā[}•Á(æêÁ¦^•`|oÁā¸Á•^¦ā[`•Áā¸b`|^Á;| **A** CAUTION åæ{æ\*^Áq[Ás@^Án``ā]{^}o4[lÁ];[]^¦cÎÂ

V@Áa[|o•Ác@ancÁancca&@Ác@Á)ã^Á;[ˇ}cā;\*Áaã\Á[Áo@Á;]ā;å|^Á;ˇ•cÁa^Á;¦æå^Â;ÈÁV@◆^Á;ĐÁā;&@Áa[|o•Áad^Á;Áa^ d | ``^å Áse&&| | å ā \* Á f Ás@ Á&@ ed o Æ Ás@ Á ^& Cā | È

OZÁx@^æåA[8\ā}\*Ásë^}o^{á\$~Ásē}][à\*åÁt[Áx@^æå•Át,Áse|A[[``}cā}\*Ás[[o•Ás^-{:\^Ás@^^Ase\^Ás]•cæ|\^åEÅ

8]g\_gʻa i ghʻVY`]bgdYWhYX`XU]`miZcf`\ Ujf`]bY`WIUW\_gʻVYhk YYbʻgd]bX`Yʻa ci bh]b[ `Vc`hgʻcf`Ufci bX`h\ Y`\_b]ZY a ci bh]b[ 'Vc`hg"H\ YgY`WUW\_g']bX]WUhY'a YhU`ZUh][ i Y`WUi gYX`VmigYj YfY`UVi gY"-ZWIUW\_g'UfY'dfYgYbh''h\ Y X]g\_'a i ghVY'fYd`UWYX"

Q,•]^&oAs@^kaā\At[`}ca}\*As[|orAsæaaf^A;@}As@&&a]\*As[|orAsæaaf^A;@}As@&&a]\*As[|orEaAsæafAs@Atafi]orEaAsæafaAswafaAs |[[•^ÊsarÁ, ˇ•ơÁa^Á^{ [ç^åÊás@^æå•Á&|^æ}^åÊÁ+^•@Ás@^æåÁ[&\ā]\*Áæ\*^}oÁæ}]|ā^åÊæ;åÁæã@^}^åÁaã@^}^åÁq[Á;|[]^¦Áq[¦˘`^ çæ|`^È

QÁSTÁ } ã^Á([ \* } cā) \* Á\$[ | cÁ\$ Á[[ • ^ ÉÁS@ Á ^ | -Á[ & 3, \* Á, \* cÁ; \* • cÁ\$ ^ Á^] | æ& ^ å Áse Áse Áse Áse Áse Cá, | ^ & & cá, } ÈÉŠ à | æ&æ ^ Ás@ ^ æå • ão@Áca) cã É^ã^ÃÃÁÉ; \^æ-^Á; \Ã; [d; \Á; ā|ÈÁU|æ& A\$; [lo-Ác@] \* @Á} ã^Áca) å Áca ã \Á; [{ Ác} [cq; { Ác ãc Á; ~Ác ã \ÈQ• cæ|A; ^|~ |[&\āj\*Á,`o•Ása)åÁ[¦``^Ás@\{Á[Â,€€ÁdŽÁà•È

- FÈ K.5.FB=B; .ÁnN.YX]g\_ 'UcbY'k Y][\g'cjYf'%\$\$``Vg"ÁÓ^Á\*`¦^Á®pÁ,^â@ó%sæ)Ás^Á\*`]][¦c^åÁs^f¦^Áseec^{]qā,\* [d, A^] |æ&^ÊA/@^A.•^A, A\$æAjãeA, ^&@æ) ã { Å, ã|A^æ•^A^] |æ&^{ ^} dÈ
- QÈ Ü^{ [ç^Ás@ Á ã¢Ásã \Á; [ˇ] q3 \* Ás[|o•Ása) å Ás@ Ásã \Á;[{ Ás@ Á ]ā, å|^È
- HÈ Q,•cæ|Á,^, Áåãa \Áæ)åÁæ)åÁæ)å ¸ ãc@Á([ˇ]cā)\*Áà[|cÁ@|/^•È
- IÈ CE]]|^ÁsaÁc@^æå.Á[&\ā]\*Áse\*^}oÁg Áse#\}oÁg Áse#|Á; Æó@Á; [`}cā]\*Ás[|o•Áse}å.Ás]•cæ|Ác@ Ás[|o•Ás@[`\*@Ác@ Ásiã\È NOTE: Disk bolts must be Grade 8.
- ÍÈ Vat@c^}Áns[|o•Áns[ː}Ánce)åÁns¦``^ÁnsAnçae;`^•Án[c^aÈ
- ÎÈ Ù^^Á}ã^Á^]|æ&^{^}o^\$;•d`&qã[}•Á[¦Á^]|æ&ã]\*Ás@^Á}ãç^•Á;}q[Ás@^Á,^¸Ásã`KÈ

ÙŒÒÁÜU VŒÜŸ

Tæajc^}æ)&^ÁÛ^&aaj}ÅÉG€

# <95 J M 78 I HM 7GD = B8 @9 '5 GG9 A 6 @M = BGH5 @@5 H=CB '5 B8 '6 95 F=B; '58 > I GHA 9 B H

 OŒÍ; | ^ • • ÁT WÙ VÁS ^ Á • ^ å Ág Ág • œæl Ás ^ æð ā \* ÁS ] • ĒÉS ^ æð ā \* ÁS ] • ĒÉS ^ æð ā \* ÁS ] > • ĒÉB à å Ár ^ æð ĒÖU ÁP U VÁ • ^ Áæ

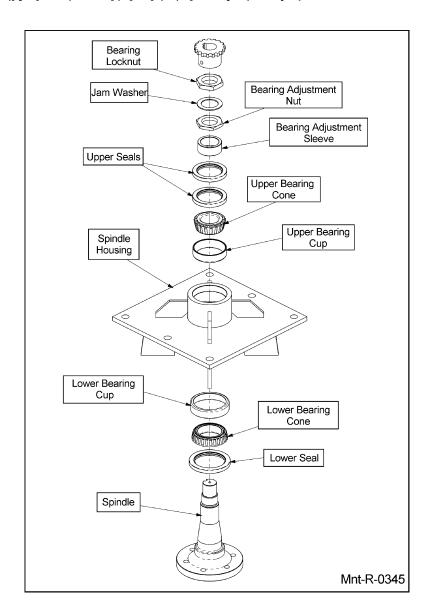
 ▲ WARNING
 @æ { ^ | Ág Ág • œæl ÁæS ^ ĒÉS ^ æð ā \* • ĒÉ | Ár ^ æð ĒÉ V @ Ág æð • Ág • Æð • ^ { æð 6 År ^ æð 6 År ^

**NOTE:** The grease zerk and gussets are located on the top side of the spindle housing. Be sure the spindle is assembled correctly.

6 Y'gifY'hc'k YUf'YmY'dfchYW¶cb'UbX'ch\Yf'dfchYW¶jY'Yei]daYbh'Ug'bYYXYX'k\Yb'k cf\_]b['cb'gd]bX`Y UggYaV'm'

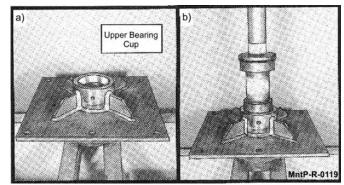
#### H<9 GD=B8 @9 5 GG9 A 6 @M

 $\dot{U}^{\Lambda}$ Ás@ Ásaæt læ (Ás $^{\Pi}$ [ Á[ lÁss $^{\Lambda}$ ] cãa8æsa[ } Áj Á] āj å  $^{\Lambda}$ A æto ÉÁ @ $^{\Lambda}$ A  $^{\Lambda}$ lç8&āj \* È



#### 695F=B; '=BGH5 @@5H=CB

- FÈ Ú¦^••Áˇ]]^¦Áà^æðð \*Á&ˇ]Áðð (ð Áœ)Á•]ð å|^ @ˇ•ð \*Á
- CÈ V'; Ào@ Án] ā, å |^ÁqQ \* •ā, \* Án; ç^; Ánd) å Án; |^• Án; Ánd@ |[ ^ !Án ^ æð ā, \* Án; ] È
- HÈ Ú|æ&^Ác@Á|[¸^¦Áà^æða\*Á&[}^Áða¸Ác@Áà^æða\* &`]ÈÁÞ^¢cÁ]¦^••Ác@Á•^æþÁða¸QÁc@Á•]ðaå|^ QQ`•ða\*ÈÁV@Áða}^¦Á|ða,Ác@Á•^æþÁ{`•cÁà^ ÖUYÞÉÁq¸æå•Ác@Áà^æða\*ÉÁ•[Áj`à¦æðæ)cÓa •^æ\åÁa•æå^Ác@ÁQ`•ã\*È
- IÈ Q•cællÁc@Á•] 尋 å|^Á•j Ác@Á·Q ˇ• 專 \* ÈÉŠā @d^Á; ¦^•• c@Á^} åÁ[-Ác@Á•] 尋 å|^Á·q Á•^ææÁc@Á·] 尋 å|^ æ æ a • cÁc@Á•?æ á \* Ás} ^!Áæ&^È



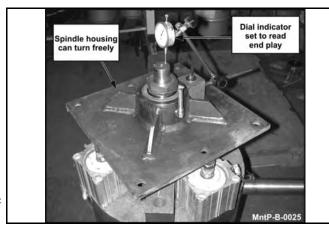
- ÍÈ V"¦ Ás@ Án]āja¦^Á@, \*•āj\*Án;ç^¦Án;]Án;[•ãnā]}DÁna)a ÁnāļÁ,ãn@Ávāt^¦ÁD]āja¦^Ánš`à¦a3bæ)oÁn;æboÁ, \*{à^¦Án≘ÎÍI∈∈∈∈∈DÁn; c@ Án;[jÁnà\*^Án,-Án@ Án]]^¦Ánà^æbāj\*Án;]È
- ÎÈÙˇ]][¦ơÁc@Áà[cɑ[{Áṇ-Ác@Á•]ājå|^Áæ)åÁj¦^••Ác@Á\*]]^¦Áà^ædā\*Á&[}^Áæ)åÁà^ædā\*Áæåbੱ•d(^}ơÁ·|^^ç^Á;}d c@Á;]ājå|^È

NOTE: The spindle housing must turn freely when seating the bearing cone and sleeve.

- ÏÈÚ¦^••Ás@Áς[Á]]^¦Ár^æ;Ásβq[Ás@Ár]ājå|^Á@;•āj\*ÈV@Ásβ}^¦ÁβjÁ;Ás@Ár^æ;Át°\*;ÁsôAhÚÉ£æ;æÂ;[{Ás@ à^æ;āj\*ÊA[Ár¢&^••Á;à¦ā&æ;ó&æ;Á\*•&æ;^È

#### 695F=B; '58>I GHA9BH

- QÈ Ú[•āāā]}ÁæÁ(æť}^ca8/Aææ^ÁåāæhÁā;åå8ææ[¦Á[}Ác@-[čc\Áåãæé,^cc\Áí]Æáæé,^cc\Áí]Æáæé,^cc\Áí]Æáæé,^cc\Áí]Æáæé,Acc\Áí]Æáæé,Acc\Áí]Æáæé,Acc@ÁæÁ;åå8ææ[¦Áæææ,•cóAc@ÁæÁ;å寿Á;åå8ææ[¦ÁææÁ;ååå8ææ[¦Á;ā]Á,[],{^æe^¦AææA;}AáæA;ååå8ææ[¦Á;ā]Á,[],{^æe^}\Áæ&&`¦ææ^|^ÁsAcæA;å\*Á;åáÅ|æêÈ
- HÈ Vã @^}Ás@Ás^æðā;\*ÁsæåĎ•d(^}oÁ;\*oÁ;}dĀÁ@;\^Ásæ €ÌÈFGÆ\$&@Á[[ç^{^}oÁ;@}Ás@Á]ā;å|^ÁQ;\*•ā;\* ã;Á;!ã°åÁ],æåÁse;æåÁ;[{Ás@Áçã^Ásæ;•È
- IÈY@}Áx@¦^Ása;Á∈BÈEFCÁS;&@Á¦^^Á;|æêÁs^ç,^^}Ás@ •]引å|^Ása;åÁ@; \*•引\*ÉŠs;•œa;|Áx@;Ás^æò引\*Á;|&\Á;\*c Ç@®K\Á;\*dBĚP[|åÁx@;Ásaåb\*•c3;\*Á;\*ó4·^&;¦^|´Ása;å c3\*@^}Áx@;Á[&\Á;\*óÁ;Á;H∈€ÁdĚÁà•ÈĂ;-Ás;¦\*\*^È



ÍÈ Œơ\Á;@Á[&\Á,`óÁs Ác∄ @^}^åÆð;@\^Á,`•oÁs^ÁEÈEEFÁS,&@Á[ÁEÈEHÁS,&@Á,-Á-\^^Á,|æÁ, @}Ác∄ @\^Á;\^ð,\*Á]Á;}
c@Á]ð,å|^Á@;`•ð,\*ÈÁ

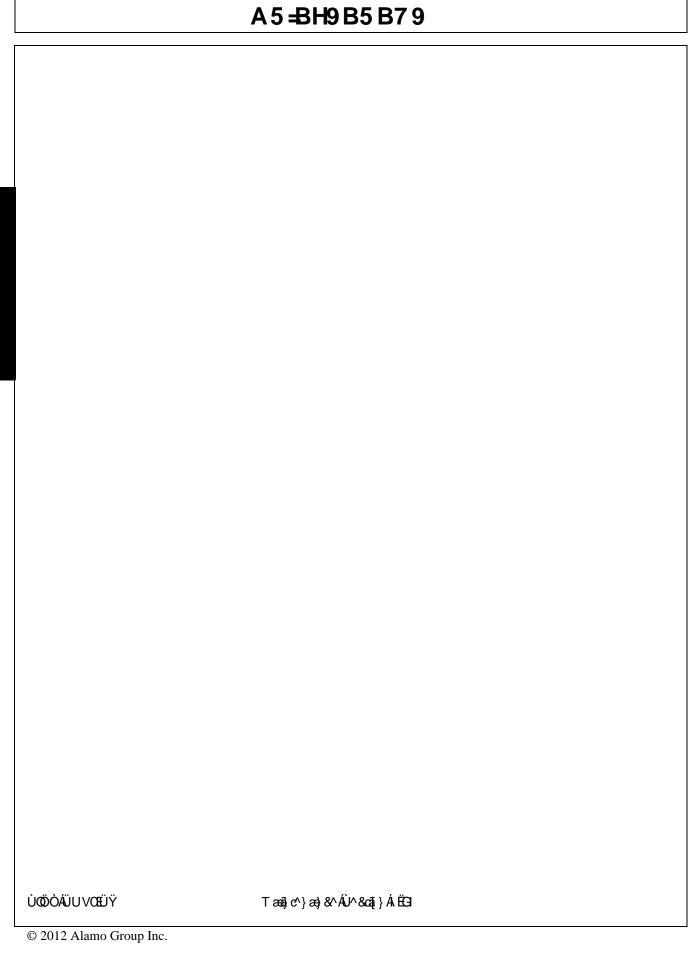
 $Q\hat{A}_{0}\otimes \hat{A}_{1}^{A} \mid \hat{A}_{2}\otimes \hat{A}_{3}\otimes \hat{A}_{4}^{A} \mid \hat{A}_{3}\otimes \hat{A}_{4}^{A} \mid \hat{A}_{4}\otimes \hat{A}_{5}^{A} \mid \hat{A}_{5}\otimes \hat{A}_{5}^{A} \mid \hat{A}_{5}$ 

QÁc@Ár}åÁj∣æÁnē ÁÞUVÁ&[¦¦^&dÉA[[•^}Ác@Á[&\Á; ŏÁnæ)åÁc;¦}Ác@Ánæåbŏ•d;^}oÁnĕ ÁA^čãAnèàÁnèàåÁ^ÉEæt@r}Ác@ [[&\Á; dÉÜ^]^ænÁa•oÁ;ædó[-Áco]Á EÁ

ÙÖÖÖÁÜUVŒÜŸ

# 85=@MA5=BH9B5B79G7<981 @9 V@Á{||[¸ā,\*Á•^¦çã&^•Á•@;`|åÁà^Á]^¦-{¦{^åÁåæaā;^Á;¦Á^ç^¦^ÁìÁ@;`¦•Á[-Á•^¦çã&^ÊÁ-{||[¸ā,\*Ác@•Áå^æaā;^å; { aaā, c^} aa) &^ Áa5, • d` & caī, } • Áa5, Ác@ Áa, ] ^ ¦ aae[ ¦ • Áa, aa) ~ aaþÈ ``````` Ú`{ ]ÁÖ¦āç^ÁÛ;@eedÁÔ@ &\Á;¦Á^}åÁ;|æêÁā;Áå¦āç^•@eeóÆA6;`]|^¦Áæ}åÁ;`à¦ā&æe^ÁææÁ^¦\•È Ôlaa)\•@eeoÁsaåaa]c^\kKQÁ^``ā]]^åÁ,ão@Á`àà^\Át\[{{ ^orÁs@8.\Ás[}åãāā]}ÊÁ^]|a&A^\$á4,ã•ā,ã•ā,\*Á;IÁ åæ{æ\*^åÈ ´´´´ Úão;[oÁn;[ã]o•kÁQp b∿&oÁ\*¦^æ•^Á;}cāļÁãoÁæd;]^æd•ÁæeóÁ;}å•È $P^a = BAA - BAA$ ã[ { ^åãæe^\|^ ˈ´´S}ãç^∙KáQ•]^&oÁ;¦Á;ãr∙ā;\*Á;Áåæ;æ;a\*^åÁ}ãç∧•É‱@ea;\*^ÁQ}|^Ó&;{]|^ó&;4\0;DÁœ;Á;^^a^å^åÈ Ó^|@ KÁÔ@^&\ ÐV# @^} ÐÜ^] |æ&^Áa^|@ Áæ Á,^^å^åÈ TænājÁ⊘læ(^EÖÒ^&\KÁN}|^••Á[c@\;ãr^Á+]^&ãað\åÁ\^d[¦``^Áa[|o•Áa&&&[¦åã]\*Ád[Ád[¦``^Á+]^&ãað&æænā[}•Áā] c@ãÁr^&cãi}È Ü^æÁØ|æãÁÖ|ãç^ÊÁÓ^æða} \*ÁØ|æ} \*ÁØ|æ} \*^Áæ} åÁÙ@æóÁÔ[`]|^¦•ÁÇãÁæ}]|&ææ}|^DMÁÕ¦^æ•^Áæ•Áð;•d`&c^åÁð;Ác@ å^æai/åÁ(æai/c^}æ)&^Á(^&cai/}È ´´Ô`œ^¦ÁÙ@eeóÁa);åÁÕ¦[`}åÁÜ[∥^¦kÁŐ¦^æe•^Áae•Áāj•d`&c^åÆjÁa@Áå^ææāf^åÁTæafjc^}æ);&?ÁÙ^&caf[}È Ù^¦çã&^Á;^¦-{ ^åÆa^K´´´´´ //////////////////Öææ^K///Ð///Ð///ÁP[\*¦ T^&\K''''' AUJbhYbUbWY GYWhjcb

ÙØÖÒÁÜU VŒÜŸ



# **NH TS6.110 SIDE ROTARY PARTS SECTION**

# PART NAME INDEX

| RCTVU'QTFGTIPI 'I WE COMMONOMINION COMMONINA COMMO                 | ) 5 |
|--|-----|
| VTCEVQT"O~QWP~V"M& 000000000000000000000000000000000000  | 6 ( |
| VTCEVQT"O~QWP~V"MKV")"J~[~FTCWNE~L000000000000000000000000000000000000   | 8 ( |
| EQO DQ'F TCHV'DGCO 'CUU (  | ):  |
| $4"URQQN"ECDNG"EQP\ VTQN"UVCPF\\ (000000000000000000000000000000000000$  | 32  |
| $ECDNG'^*OCPWCN+'NKHV''XCNXG''/'4'URQQN'EQODQ00000000000000000000000000000000000$  | 34  |
| $IQ[\ UV \rlap/EM' CPF' UY\ KV EJ\ 'DQZ' O\ QWP\ V000000000000000000000000000000000000$  | 36  |
| $ GNGEVTQP \not\!\!E'RTQRQTV\not\!\!QPCN''N\not\!\!E'V''XCNXG'OQWPV \\  WARRING FOR STANDARD FOR S$ | 38  |
| $72 \rlap/$W$ 'U\hbox{\rlap/$F$ G'EQO DQ''VO 'TQVCT[ ''O QY GIOWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW$   | 3:  |
| VO~72"TGCT"EJ~CP~U"QRVQP00000000000000000000000000000000000  | 42  |
| VO 72'TQVCT[ 'F KJ 'CPF'MP K/GL000000000000000000000000000000000000  | 43  |
| VO~72"TQVCT[~"O~QVQT"DTGCMF~QY~P00000000000000000000000000000000000  | 44  |
| $CZNG'DTCEG'CUUGODN[\ 000000000000000000000000000000000000$  | 46  |
| EQODQ'FTCHV'DGCO'VTCXGN'NQEM000000000000000000000000000000000000   | 48  |
| $RQN[\ ECTDQPCVG'UCHGV[\ 'Y\ IP\ F\ QY 00000000000000000000000000000000000$  | 4:  |
| $4 \text{"URQQN"GNGEVTQP } \text{\em in NkIV"} X CNXG000000000000000000000000000000000000$   | 52  |
| $ \   UY K/EJ ''DQZ''/'GNGEVTQP iE'NKHV''XCNXG00000000000000000000000000000000000$   | 54  |
| $ \   UY K/EJ "DQZ"UEJ GO CVKE"/"GNGEVTQP KE"NKHV"XCNXG00000000000000000000000000000000000$  | 56  |
|  |     |

#### 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.

- 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 pur chase 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.
- 5. 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.

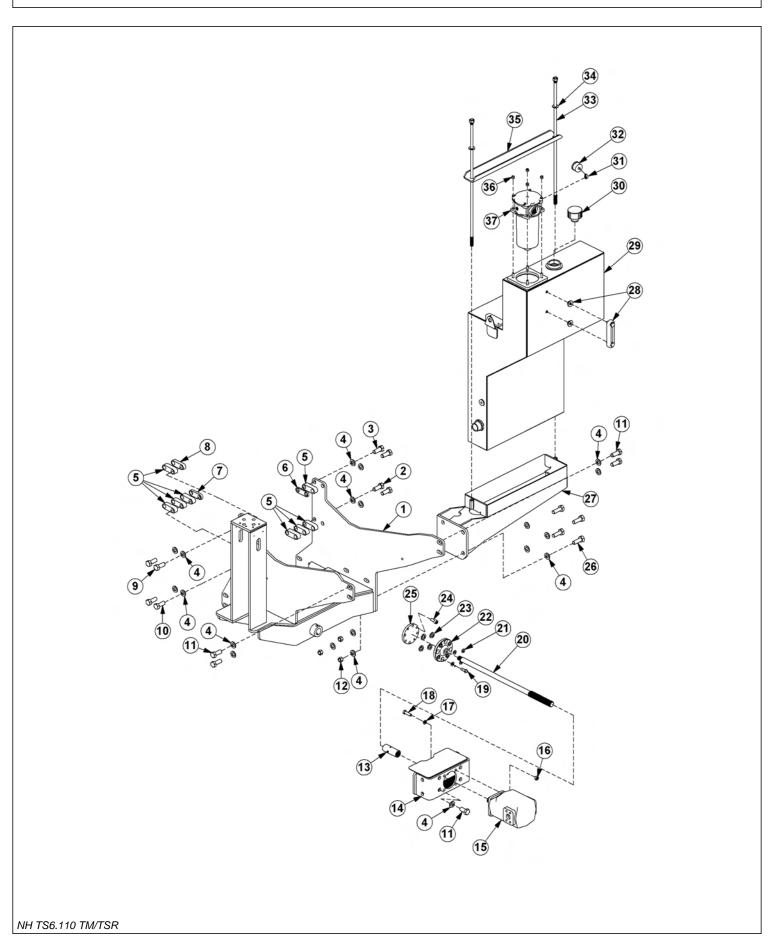


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

#### TRACTOR MOUNT KIT

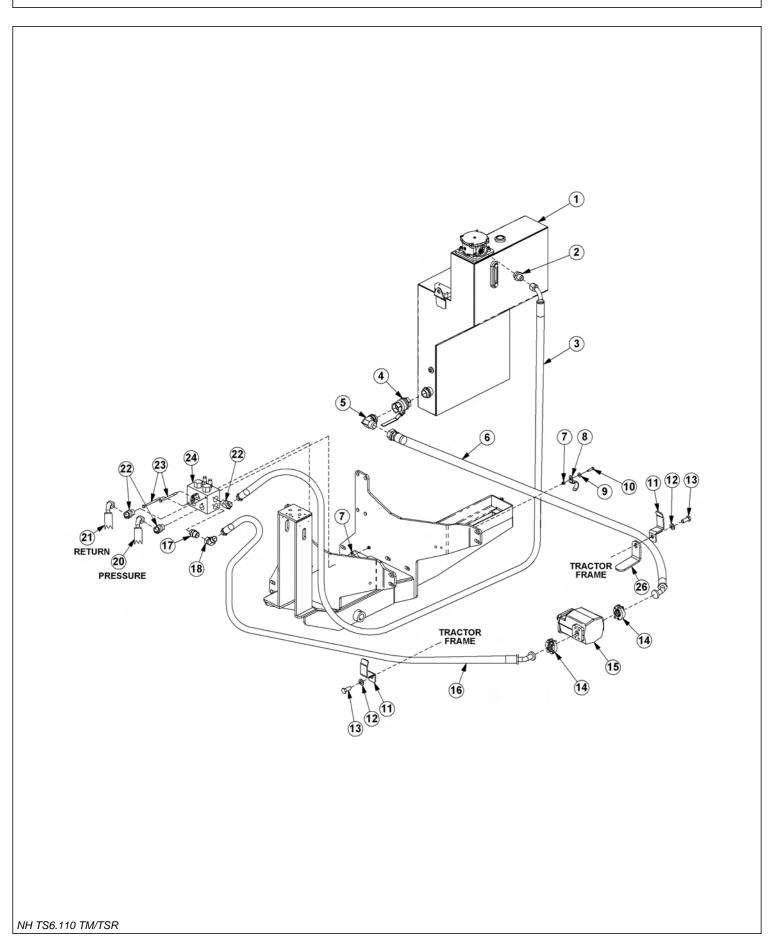


#### TRACTOR MOUNT KIT

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                       |
|------|----------|------|-----------------------------------|
| 1    | 06300222 | 1    | MAIN FRAME                        |
| 2    | 06530537 | 2    | CAPSCREW,20MM X 122MM,2.5P        |
| 3    | 32285    | 2    | CAPSCREW,20MM X 75MM,2.5P         |
| 4    | 33880    | 24   | FLATWASHER,3/4",SAE               |
| 5    | 06401627 | 8    | SPACER,1"                         |
| 6    | 06401630 | 1    | SPACER,5/16"                      |
| 7    | 06401629 | 1    | SPACER,1/2"                       |
| 8    | 06401628 | 1    | SPACER,3/4"                       |
| 9    | 30708    | 2    | CAPSCREW,20MM X 90MM,2.5P         |
| 10   | 06530542 | 2    | CAPSCREW,20MM X 130MM,2.5P        |
| 11   | 21831    | 4    | CAPSCREW,3/4" X 1-3/4",NC         |
| 12   | 21825    | 4    | HEX NUT,3/4",NC                   |
| 13   | 6T0375B  | 1    | COUPLER                           |
| 14   | 06380042 | 1    | MOUNT,PUMP                        |
| 15   | 23152    | 1    | PUMP                              |
| 16   | 21727    | 4    | NYLOCK NUT,1/2",NC                |
| 17   | 06533004 | 4    | FLATWASHER,1/2",SAE               |
| 18   | 21732    | 4    | CAPSCREW,1/2" X 1-3/4",NC         |
| 19   | 06535000 | 4    | CAPSCREW,7/16" X 1-1/4",NC,CUTOFF |
| 20   | 06420153 | 1    | DRIVESHAFT                        |
| 21   | 24937    | 4    | FLATWASHER,7/16",SAE              |
| 22   | 6T0389   | 1    | KIT,ADAPTER,DRIVESHAFT            |
| 23   | 31674    | 1    | CRANSHAFT,ADAPTER,W/O WASHER      |
|      | 06537004 | 4    | WASHER, NEOPRENE                  |
| 24   |          | -    | CAPSCREW *EXISTING HARDWARE       |
| 25   | 06420144 | 1    | SPACER, DRIVESHAFT                |
| 26   | 21833    | 4    | CAPSCREW,3/4" X 2-1/4",NC         |
| 27   | 06300060 | 1    | MOUNT,TANK,SIDE                   |
| 28   | 06505067 | 1    | SIGHT GAGE                        |
|      | 06503175 | 1    | KIT,SEAL,SIGHT GAGE               |
| 29   | 06700090 | 1    | HYDRAULIC TANK,ASSY               |
| 30   | 06380012 | 1    | HYDRAULIC TANK                    |
|      | 06505077 | 1    | CAP,BREATHER,O-RING               |
| 31   | TF4888   | 1    | ELBOW,STREET,1/8" X 90°           |
| 32   | 6T0649   | 1    | FILTER GAGE                       |
| 33   | 06380014 | 2    | TIE BOLT,SIDE TANK                |
| 34   | 33764    | 2    | FLATWASHER,5/8",SAE               |
| 35   | 06410352 | 1    | CHANNEL,MOUNT,SIDE TANK           |
| 36   | 21627    | 4    | NYLOCK NUT,3/8",NC                |
| 37   | 06505044 | 1    | FILTER ASSY,IN-TANK               |
|      |          |      |                                   |

#### **TRACTOR MOUNT KIT - HYDRAULICS**

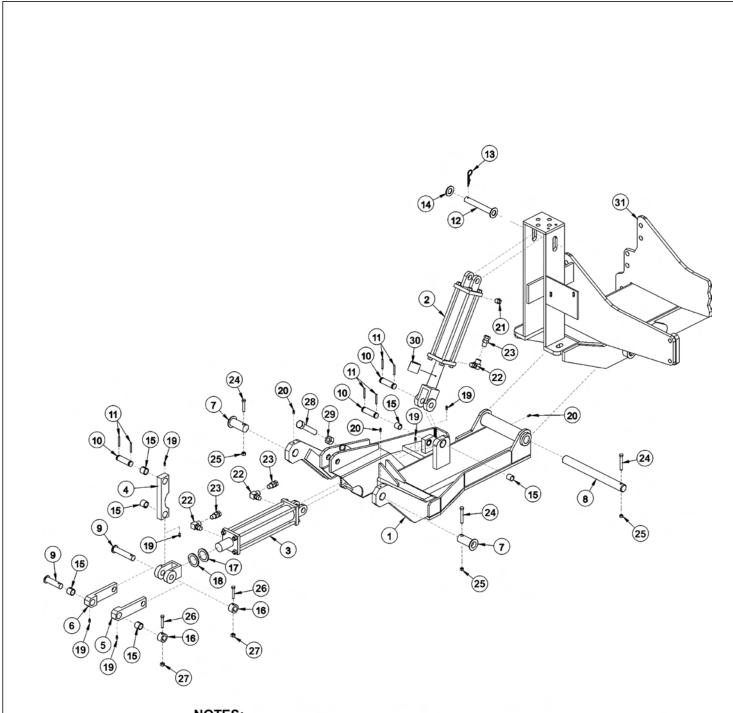


# TRACTOR MOUNT KIT - HYDRAULICS

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                                     |
|------|----------|------|---|
| 1    |          | -    | HYDRAULIC TANK *REFER TO TRACTOR MOUNT KIT PAGE |
| 2    | 34064    | 1    | ADAPTER,1-1/4"MOR X 1"MJ                        |
| 3    | 06500328 | 1    | HOSE,1" X 96"                                   |
| 4    | 34309    | 1    | BALL VALVE,1-1/2"FOR                            |
| 5    | 34655    | 1    | ELBOW,1-1/2"MOR X 1-1/2"MJ                      |
| 6    | 06500309 | 1    | HOSE,1-1/2" X 70"                               |
| 7    | 21627    | 4    | NYLOCK NUT,3/8",NC                              |
| 8    | 06411136 | 1    | CLAMP,HOSE,2"                                   |
| 9    | 22016    | 1    | FLATWASHER,3/8"                                 |
| 10   | 21632    | 1    | CAPSCREW,3/8" X 1-1/2",NC                       |
| 11   | 32382    | 2    | BRACKET,HOSE                                    |
| 12   | 33880    | 2    | FLATWASHER,3/4",SAE                             |
| 13   | 21831    | 2    | CAPSCREW,3/4" X 1-3/4"                          |
| 14   | TF4852   | 2    | KIT,FLANGE,#20                                  |
| 15   |          | -    | PUMP *REFER TO TRACTOR MOUNT KIT PAGE           |
| 16   | 06500597 | 1    | HOSE,1" X 68"                                   |
| 17   | 33555    | 1    | ADAPTER,1"MOR X 1"MJ                            |
| 18   | 24724    | 1    | ELBOW,1"FJ X 1"MJ,45°                           |
| 20   | 30309    | 1    | HOSE,1" X 78" (PRESSURE) (TM50)                 |
|      | 06500285 | 1    | HOSE,1" X 85" (PRESSURE) (TM60)                 |
| 21   | 34416    | 1    | HOSE,1" X 75" (RETURN) (TM50)                   |
|      | 34293    | 1    | HOSE,1" X 80" (RETURN) (TM60)                   |
| 22   | 33554    | 3    | ELBOW,1"MOR X 1"MJ,45°                          |
| 23   | 21644    | 2    | CAPSCREW,3/8" X 5",NC                           |
| 24   | 06510083 | 1    | BRAKE VALVE                                     |
| 25   |          | 1    | MAIN FRAME *REFER TO TRACTOR MOUNT KIT PAGE     |
| 26   | 06411721 | 1    | STOP,OSCILLATION (4WD TRACTORS)                 |
|      |          |      |   |

#### **COMBO DRAFT BEAM ASSY**



#### NOTES:

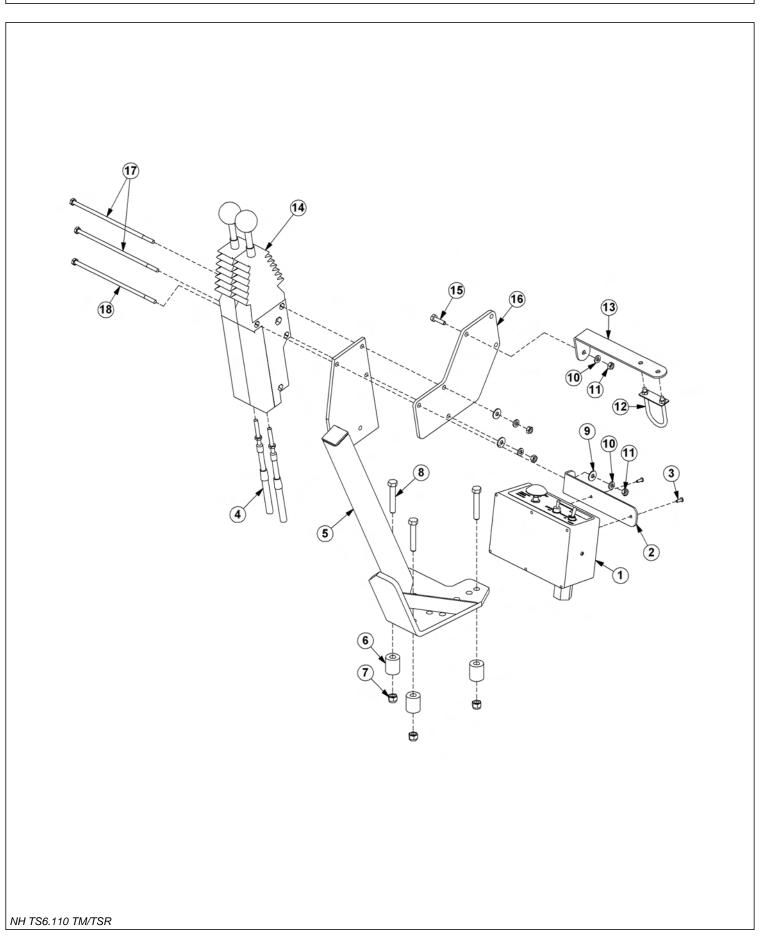
- 1. ITEM 30 IS USED ON THE GLAND END OF ITEM 2 (AS NEEDED)
- 2. ORIENTATION OF ITEMS 4,5 & 6 ARE CRITICAL

#### **COMBO DRAFT BEAM ASSY**

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                             |
|------|----------|------|---|
| 1    | 06350021 | 1    | COMBO DRAFT BEAM                        |
| 2    | 6T0151R  | 1    | HYD. CYLINDER 3" X 10"                  |
| 3    | 25343    | 1    | HYD. CYLINDER 3" X 12"                  |
| 4    | TF4500A  | 1    | PIVOT ARM                               |
| 5    | TF4507B  | 1    | RIGHT LINKAGE ARM                       |
| 6    | TF4506B  | 1    | LEFT LINKAGE ARM                        |
| 7    | TF4514A  | 2    | PIN, HEAD PIVOT                         |
| 8    | 6T3001   | 1    | PIN, BEAM PIVOT                         |
| 9    | TF4519   | 2    | PIN, LINKAGE                            |
| 10   | TB1033   | 3    | PIN, CLEVIS                             |
| 11   | 06537021 | 6    | ROLLPIN                                 |
| 12   | 6T3005   | 1    | PIN,1" W/ CAP                           |
| 13   | 6T3004   | 1    | R-CLIP HAIRPIN                          |
| 14   | 22023    | 1    | FLATWASHER 1"                           |
| 15   | TB3010   | 8    | BUSHING 1"                              |
| 16   | 22847A   | 2    | BOSS, LINKAGE PIN                       |
| 17   | 22076    | 1    | SPACER, HYD. CYLINDER 1/4"              |
| 18   | 22077    | 1    | SPACER, HYD. CYLINDER 5/16"             |
| 19   | 6T3207   | 6    | GREASE ZERK 1/4"                        |
| 20   | 6T3211   | 3    | GREASE ZERK 1/8"                        |
| 21   | 6T4258   | 1    | BREATHER 1/2"                           |
| 22   | 32810    | 3    | ELBOW FITTING 1/2"                      |
| 24   | 21688    | 3    | CAPSCREW 7/16" X 3-1/4"                 |
| 25   | 21677    | 3    | NYLOCK NUT 7/16"                        |
| 26   | 21635    | 2    | CAPSCREW 3/8" X 2-1/4"                  |
| 27   | 21627    | 2    | NYLOCK NUT 3/8"                         |
| 28   | 21831    | 1    | CAPSCREW 3/4" X 1-3/4"                  |
| 29   | 21825    | 1    | HEX NUT 3/4"                            |
| 30   | 06700095 | 1    | CYLINDER SPACER W/SET SCREW             |
| 31   |          | -    | MAIN FRAME *REFER TO TRACTOR MOUNT PAGE |

# **2 SPOOL CABLE CONTROL STAND**

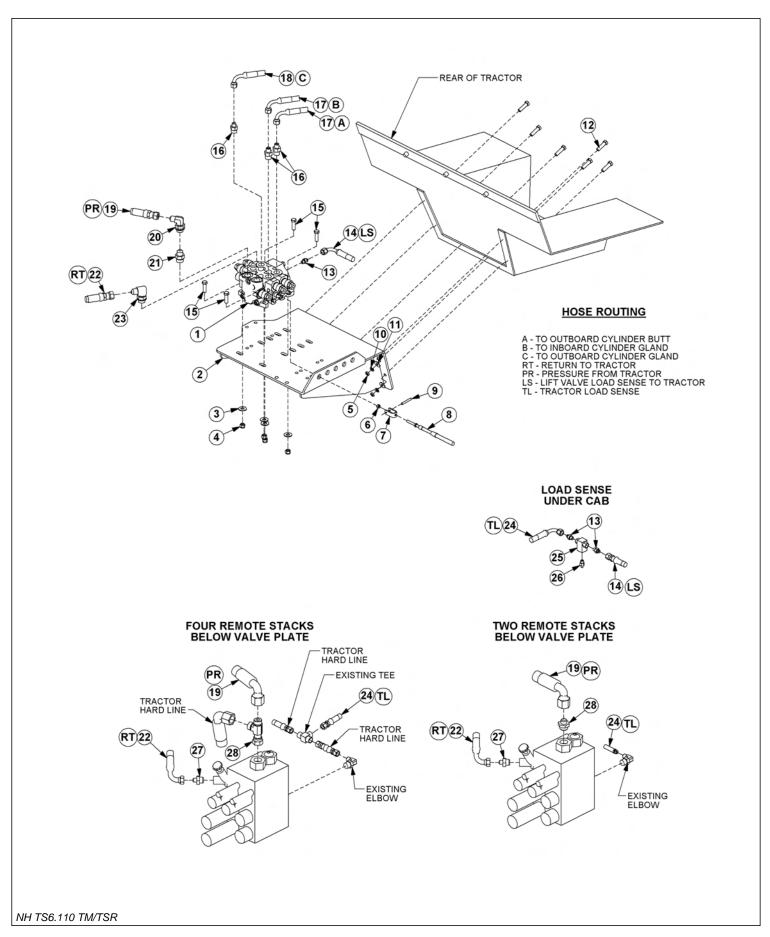


#### **2 SPOOL CABLE CONTROL STAND**

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION               |
|------|----------|------|---------------------------|
| 1    | 06510102 | 1    | SWITCH BOX,TM             |
| 2    | 34496    | 1    | BRACKET,SWITCH BOX,UNIV   |
| 3    | 6T3951   | 2    | SCREW,MACH,8-32 X 1/2"    |
| 4    | 06505100 | 2    | CBL CNTRL,108"            |
| 5    | 23865B   | 1    | STAND,CBL CNTRL           |
| 6    | 27082B   | 3    | SPACER                    |
| 7    | 21627    | 3    | NYLOCK NUT,3/8",NC        |
| 8    | 21636    | 3    | CAPSCREW,3/8" X 2-1/2",NC |
| 9    | 22014    | 3    | FLATWASHER,1/4"           |
| 10   | 21986    | 4    | LOCKWASHER,1/4"           |
| 11   | 21525    | 4    | HEX NUT,1/4",NC           |
| 12   | 06537039 | 1    | U-BOLT,ASSY               |
| 13   | 06411376 | 1    | BRACKET,CBL CNTRL         |
| 14   | 6T1251   | 2    | CBL CNTRL BOX,180 DEG     |
| 15   | 21530    | 1    | CAPSCREW,1/4" X 1",NC     |
| 16   | 06400179 | 1    | MNT,ADAPTER,CBL CNTRL     |
| 17   | 21542    | 2    | CAPSCREW,1/4" X 4",NC     |
| 18   | 21543    | 1    | CAPSCREW,1/4" X 4-1/2",NC |

#### **CABLE (MANUAL) LIFT VALVE - 2 SPOOL COMBO**

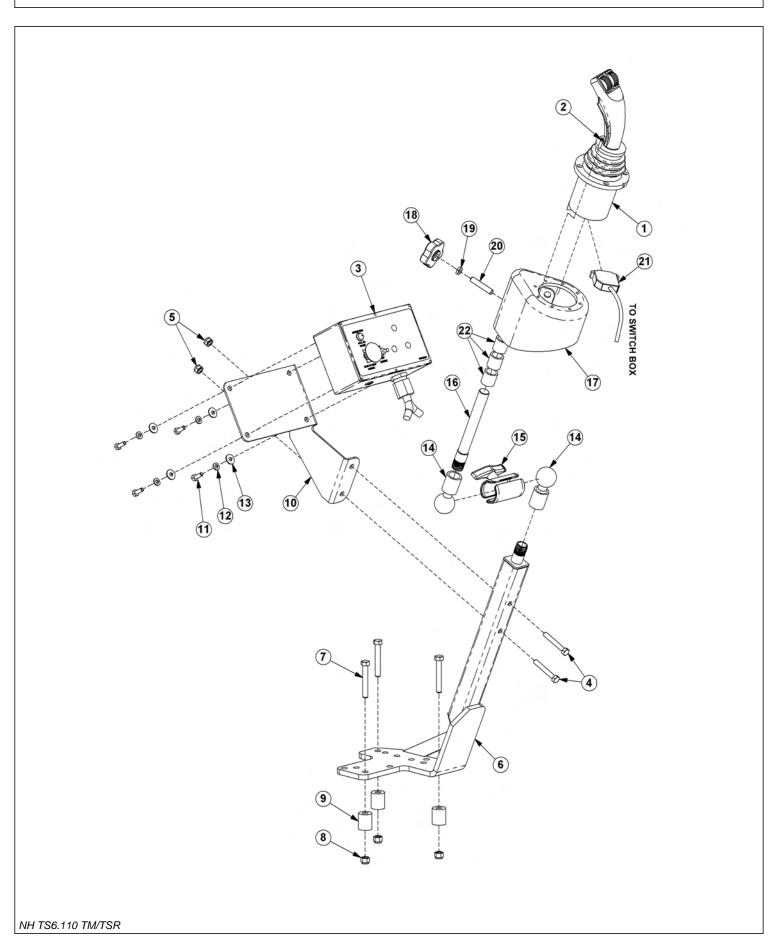


# CABLE (MANUAL) LIFT VALVE - 2 SPOOL COMBO

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION   |
|------|----------|------|---|
| 1    | 06502041 | 1    | VALVE,2 SPOOL,LS                                      |
| 2    | 06340039 | 1    | MOUNT,VALVE   |
| 3    | 22016    | 4    | FLATWASHER,3/8"                                       |
| 4    | 21627    | 4    | NYLOCK NUT,3/8",NC                                    |
| 5    | 22151    | 6    | HEX NUT,8MM,1.25P                                     |
| 6    | 21500    | 2    | HEX NUT,1/4",NF                                       |
| 7    | 6T4411   | 2    | CLEVIS,CBL CNTRL                                      |
| 8    | 6T3017   | 2    | ROLL PIN,CBL CNTRL                                    |
| 9    | 06505100 | 2    | CBL CNTRL,108"  |
| 10   | 6T2619   | 6    | LOCKWASHER,8MM  |
| 11   | 22015    | 6    | FLATWASHER,5/16"                                      |
| 12   | 6T2492   | 6    | CAPSCREW,8MM X 35MM,1.25P                             |
| 13   | 32901    | 3    | ADAPTER,3/8"MOR X 3/8"MJ                              |
| 14   | 06500450 | 1    | HOSE,1/4" X 42" (LOAD SENSE)                          |
| 15   | 21632    | 2    | CAPSCREW,3/8" X 1-1/2",NC                             |
| 16   | 33271    | 3    | ADAPTER,1/2"MOR X 3/8"MJ                              |
| 17   | 34631    | 2    | HOSE,1/4" X 126"                                      |
| 18   | 34632    | 1    | HOSE,1/4" X 115"                                      |
| 19   | 06500339 | 1    | HOSE,1/2" X 35" (PRESSURE) (TWO REMOTE STACKS)        |
|      | 34355    | 1    | HOSE,1/2" X 34" (PRESSURE) (FOUR REMOTE STACKS)       |
| 20   | 06503022 | 1    | ELBOW,1/2"MJ X 1/2"FJX                                |
| 21   | 06503011 | 1    | ADAPTER,5/8"MOR X 1/2"MJ                              |
| 22   | 33410    | 1    | HOSE,1/2" X 48" (RETURN)                              |
| 23   | 33383    | 1    | ELBOW,5/8"MOR X 1/2"MJ                                |
| 24   | 21633    | 2    | CAPSCREW,3/8" X 1-3/4",NC                             |
| 25   | 06500594 | 1    | HOSE,1/4" X 28" (TWO REMOTE STACKS)                   |
|      | 06500648 | 1    | HOSE,1/4" X 30" (FOUR REMOTE STACKS)                  |
| 26   | 3338806  | 1    | TEE,SHUTTLE,3/8"FOR                                   |
| 27   | 06503166 | 1    | ADAPTER,3/8"MOR X 1/4"FJX                             |
| 28   | 06503059 | 1    | ADAPTER,5/8"MJ X 3/4"BSPP                             |
| 29   | 06503167 | 1    | ADAPTER,BANJO (TWO REMOTE STACKS)                     |
|      | 32872    | 1    | TEE,RUN,5/8"FF X 5/8"MF X 5/8"MF (FOUR REMOTE STACKS) |

#### **JOYSTICK AND SWITCH BOX MOUNT**

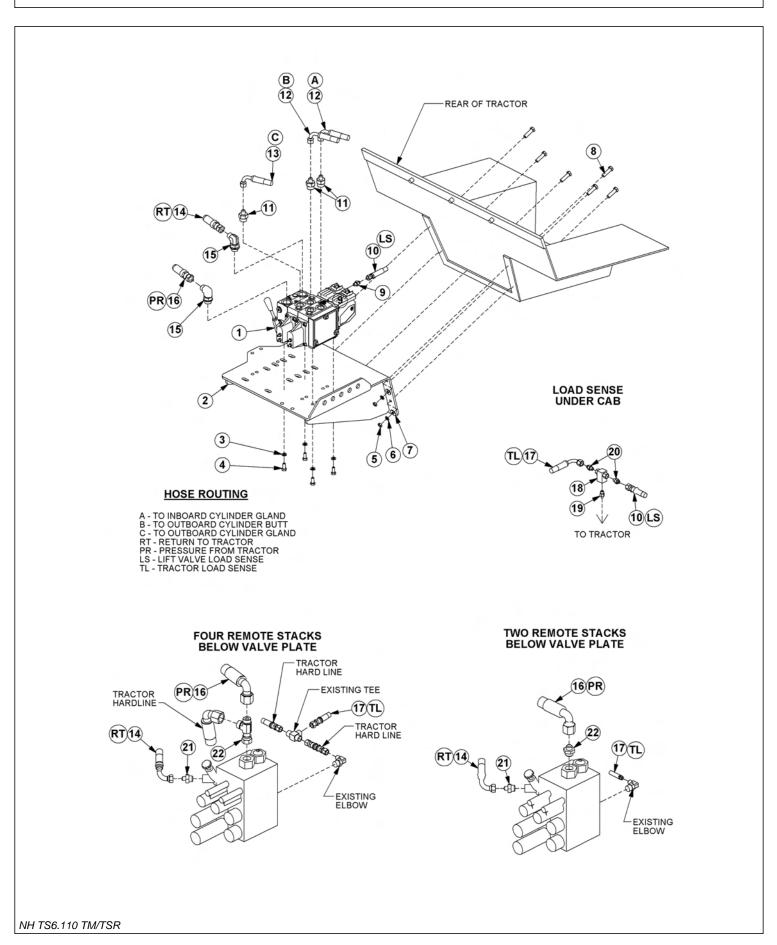


# **JOYSTICK AND SWITCH BOX MOUNT**

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                       |
|------|----------|------|-----------------------------------|
| 1    | 06510273 | 1    | JOYSTICK                          |
| 2    | 32829    | 4    | SCREW,MACHINE,10-32 X 3/4",FLATHD |
| 3    | 06510272 | 1    | SWITCH BOX,TM                     |
| 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              |
| 22   | 35256    | 3    | BUSHING,NYLON                     |

#### **ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT**

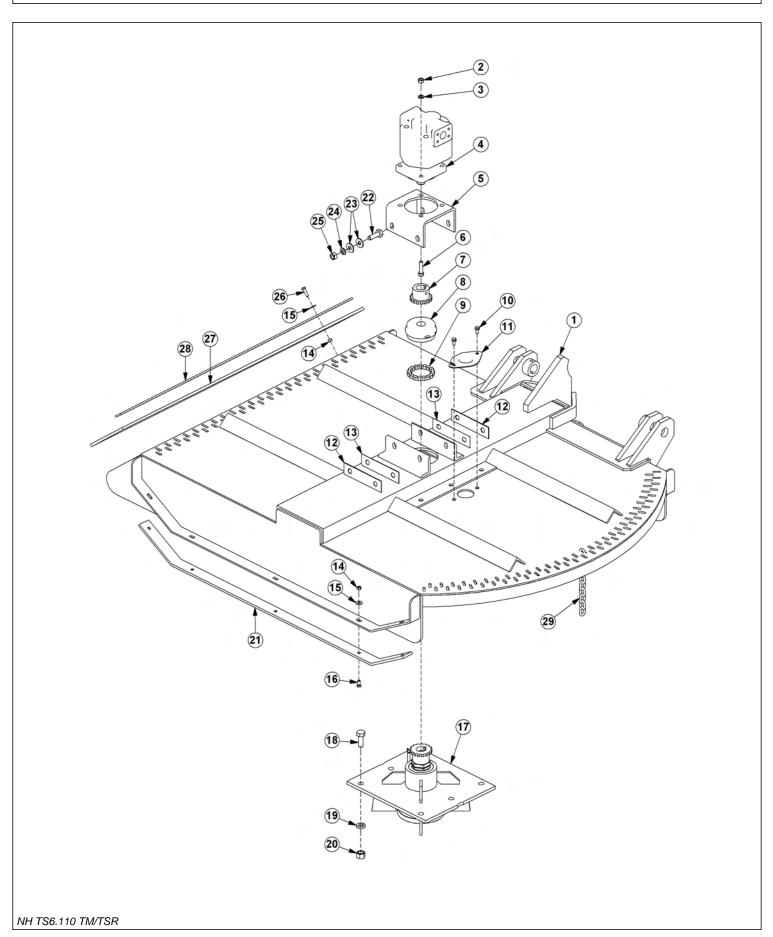


# **ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT**

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                                     |  |
|------|----------|------|---|--|
| 1    | 06502130 | 1    | VALVE,2SP,DF,TM,COMBO                           |  |
| 2    | 34622    | 1    | VALVE MOUNTING PLATE                            |  |
| 3    | 21987    | 4    | LOCKWASHER,5/16"                                |  |
| 4    | 21579    | 4    | CAPSCREW,5/16" X 3/4",NC                        |  |
| 5    | 22151    | 6    | HEX NUT,8MM,1.25P                               |  |
| 6    | 6T2619   | 6    | LOCKWASHER,8MM                                  |  |
| 7    | 22015    | 6    | FLATWASHER,5/16"                                |  |
| 8    | 6T2492   | 6    | CAPSCREW,8MM X 35MM,1.25P                       |  |
| 9    | 33419    | 1    | ADAPTER,5/16"MOR X 1/4"MJ                       |  |
| 10   | 06500450 | 1    | HOSE,1/4" X 42" (LOAD SENSE)                    |  |
| 11   | 32807    | 3    | ADAPTER,5/8"MOR X 3/8"MJ                        |  |
| 12   | 34631    | 2    | HOSE,1/4" X 126"                                |  |
| 13   | 34632    | 1    | HOSE,1/4" X 115"                                |  |
| 14   | 33410    | 1    | HOSE,1/2" X 48" (RETURN)                        |  |
| 15   | 33294    | 2    | ELBOW,3/4"MOR X 1/2"MJ                          |  |
| 16   | 06500339 | 1    | HOSE,1/2" X 35" (PRESSURE) (TWO REMOTE STACKS)  |  |
|      | 34355    | 1    | HOSE,1/2" X 34" (PRESSURE) (FOUR REMOTE STACKS) |  |
| 17   | 06500594 | 1    | HOSE,1/4" X 28" (TWO REMOTE STACKS)             |  |
|      | 06500648 | 1    | HOSE,1/4" X 30" (FOUR REMOTE STACKS)            |  |
| 18   | 3338806  | 1    | TEE,SHUTTLE,3/8"FOR                             |  |
| 19   | 06053166 | 1    | ADAPTER,3/8"MOR X 1/2"FJX                       |  |
| 20   | 32901    | 2    | ADAPTER,3/8"MOR X 3/8"MJ                        |  |
| 21   | 06503059 | 1    | ADAPTER,5/8"MJ X 3/4"BSPP                       |  |
| 22   | 06503167 | 1    | ADAPTER,BANJO (TWO REMOTE STACKS)               |  |
|      | 32872    | 1    | TEE,RUN (FOUR REMOTE STACKS)                    |  |
|      |          |      |   |  |

#### **50IN SIDE COMBO TM ROTARY MOWER**

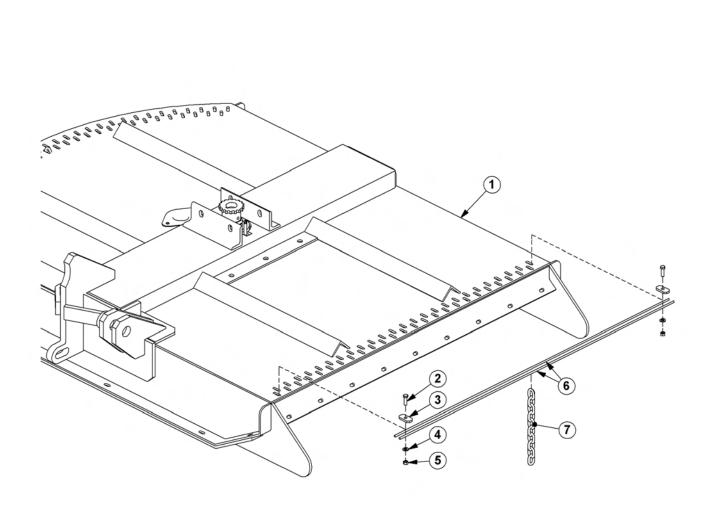


#### **50IN SIDE COMBO TM ROTARY MOWER**

#### Continued...

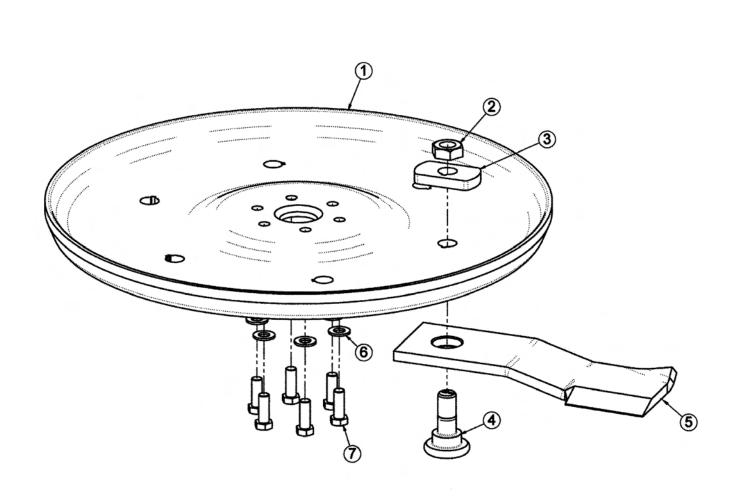
| ITEM | PART NO. | QTY. | DESCRIPTION                          |
|------|----------|------|--------------------------------------|
| 1    | 06320196 | 1    | RTRY,50" DECK, COMBO                 |
| 2    | 21725    | 4    | HEX NUT,1/2",NC                      |
| 3    | 21990    | 4    | LOCKWASHER,1/2"                      |
| 4    | 06504012 | 1    | MOTOR,(M365-1-3/4" GEAR)             |
| 5    | 6T1001   | 1    | BRKT,MOTOR MTG                       |
| 6    | 21733    | 4    | CAPSCREW,1/2" X 2",NC                |
| 7    | 21223    | 1    | SPROCKET,1-1/4" BORE                 |
| 8    | 6T1033   | 1    | COVER,COUPLING                       |
| 9    | 6T1029   | 1    | CHAIN, COUPLING                      |
| 10   | 33881    | 2    | CAPSCREW,FLG,3/8" X 3/4"             |
| 11   | 33779    | 1    | PLATE,COVER,KNF HOLE                 |
| 12   | 6T0822   | 2    | SHIM,MOTOR MOUNT, 14GA. (AS NEEDED)  |
| 13   | 6T0822A  | 2    | SHIM,MOTOR MOUNT, 18 GA. (AS NEEDED) |
| 14   | 21625    | 19   | HEX NUT,3/8",NC                      |
| 15   | 22016    | 19   | FLATWASHER,3/8"                      |
| 16   | 6T2270   | 10   | PLOW BOLT,3/8" X 1",NC               |
| 17   | 6T1024H5 | 1    | SPINDLE ASSY,CPLT,HD,5/8" HOLES      |
| 18   | 6T2277   | 6    | CAPSCREW,3/4" X 2",NF                |
| 19   | 21993    | 6    | LOCKWASHER,3/4"                      |
| 20   | 6T2413   | 6    | HEX NUT,3/4",NF                      |
| 21   | 06411155 | 2    | SKID SHOE,TM50                       |
| 22   | 6T2259   | 4    | CAPSCREW,5/8" X 1-3/4",NF            |
| 23   | 25270    | 8    | FLATWASHER,5/8"                      |
| 24   | 21992    | 4    | LOCKWASHER,5/8"                      |
| 25   | 6T2408   | 4    | HEX NUT,5/8",NF                      |
| 26   | 21631    | 9    | CAPSCREW,3/8" X 1-1/4",NC            |
| 27   | 06520513 | 1    | FLAP,DEFLECTOR,TM50                  |
| 28   | TB1008   | 1    | BAR,FLAP,TM50                        |
| 29   | 22992    | 61   | CHAIN,5/16",10 LINKS                 |
| 30   | 28407    | 10   | CABLE,5/16" (NOT SHOWN)              |
| 31   | 28408    | 2    | U-BOLT,CABLE,5/16" (NOT SHOWN)       |
|      |          |      |                                      |

#### **TM50 REAR CHAINS OPTION**



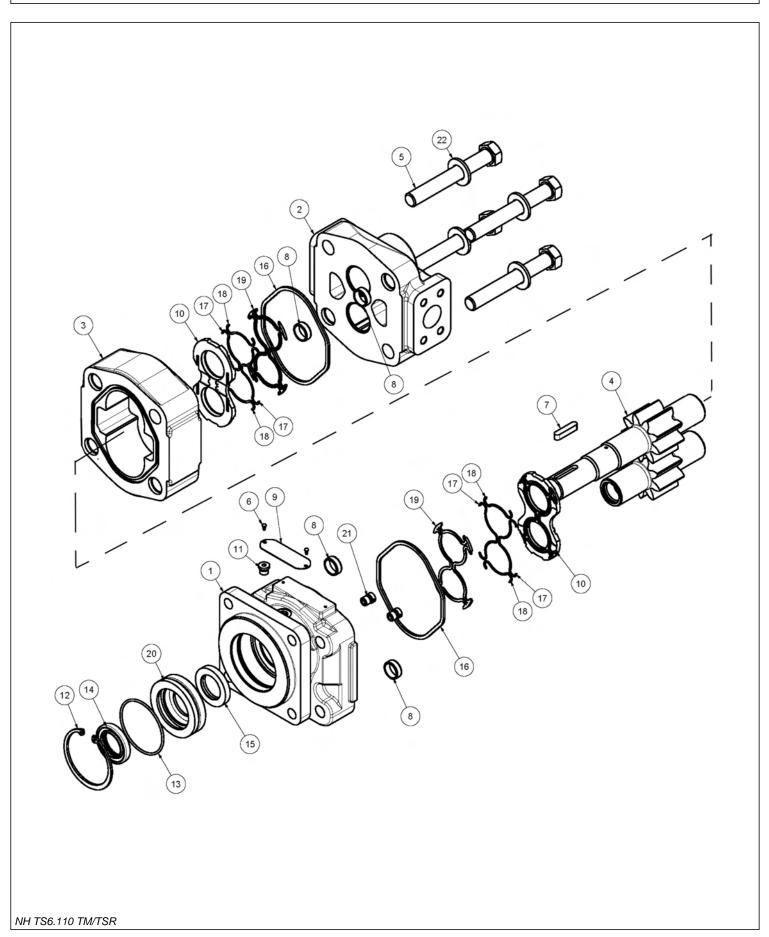
| ITEM | PART NO. | QTY. | DESCRIPTION                       |
|------|----------|------|-----------------------------------|
| 1    |          | -    | TM50,CMB *REFER TO MOWER ASSEMBLY |
| 2    | 21631    | 2    | CAPSCREW,3/8" X 1-1/4",NC         |
| 3    | 34972    | 2    | PLATE,CAP,CHAIN                   |
| 4    | 21625    | 2    | HEX NUT,3/8",NC                   |
| 5    | 21988    | 2    | LOCKWASHER,3/8"                   |
| 6    | 28407    | 9    | CABLE,5/16",BULK                  |
| 7    | 22992    | 52   | CHAIN,10 LINK                     |
|      |          |      |                                   |
|      |          |      |                                   |

#### TM50 ROTARY DISH AND KNIVES



|   | ITEM | PART NO. | QTY. | DESCRIPTION  |  |
|---|------|----------|------|--|--|
|   |      | 06700089 | 1    | KIT,TRB50,DISK,W/BOLT KIT (INCLUDES ITEMS 1,3 $\&7)$ |  |
|   | 1    | 06770003 | 1    | BLADE MOUNTING DISK                                  |  |
|   | 2    | 6T1023R  | 2    | NYLOCK NUT,1-1/8"                                    |  |
|   | 3    | 34878    | 2    | SPACER   |  |
|   | 4    | 06538000 | 2    | KNIFE MOUNTING BOLT                                  |  |
|   | 5    | 06521002 | 2    | SUCTION KNIFE  |  |
|   | 6    | 33764    | 6    | FLATWASHER   |  |
|   | 7    | 6T2259   | 6    | CAPSCREW   |  |
|   |      | 06770012 | 1    | BOLT KIT (INCLUDES ITEMS 6, 7 & LOCTITE)             |  |
|   |      | 6T1825   | 1    | LOCTITE - USED ON ALL DISK MOUNTING BOLTS            |  |
| ı |      |          |      |  |  |

# TM50 ROTARY MOTOR BREAKDOWN

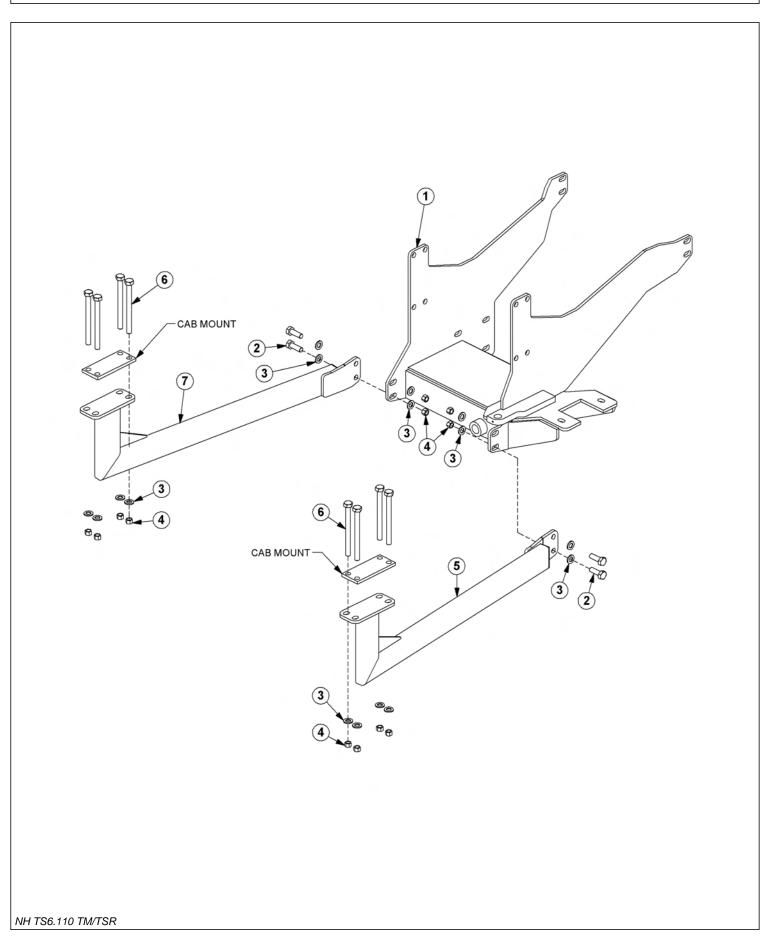


# TM50 ROTARY MOTOR BREAKDOWN

#### Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION         |
|------|----------|------|---------------------|
|      | 06504012 | 1    | MOTOR ASSEMBLY,TM50 |
| 1    | 22790    | 1    | END,COVER           |
| 2    | 06504088 | 1    | HOUSING,PEC         |
| 3    | 06504089 | 1    | HOUSING,GEAR        |
| 4    | 06504090 | 1    | SET,GEAR SHAFT      |
| 5    | 06504091 | 1    | CAP SCREW           |
| 6    | 06504078 | 2    | SCREW,DRIVE         |
| 7    | 06504092 | 1    | KEY                 |
| 8    | 06504093 | 4    | PIN,DOWEL           |
| 9    | 06504094 | 1    | NAME PLATE          |
| 10   | 06504095 | 2    | THRPL               |
| 11   | 02961940 | 1    | PLUG,ODT            |
| 12   | 02962200 | 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 ASSY          |
| 22   | 06504102 | 4    | WASHER              |
|      | 06504103 | 1    | SEAL KIT            |

# **AXLE BRACE ASSEMBLY**



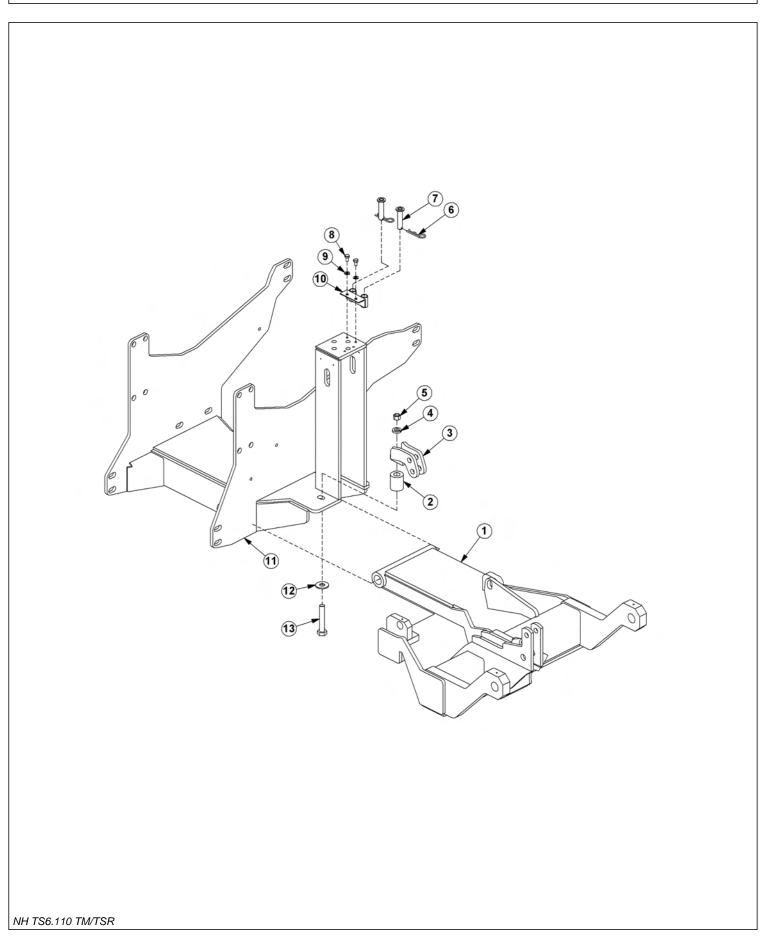
# **AXLE BRACE ASSEMBLY**

## Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                                 |
|------|----------|------|---|
| 1    |          | -    | MAIN FRAME *REFER TO TRACTOR MOUNT KIT PAGE |
| 2    | 21833    | 4    | CAPSCREW,3/4" X 2-1/4",NC                   |
| 3    | 33880    | 16   | FLATWASHER,3/4"                             |
| 4    | 21825    | 12   | HEX NUT,3/4",NC                             |
| 5    | 06300208 | 1    | AXLE BRACE,RH                               |
| 6    | 21846    | 8    | CAPSCREW,3/4" X 9",NC                       |
| 7    | 06300209 | 1    | AXLE BRACE,LH                               |

NH TS6.110 TM/TSR

# **COMBO DRAFT BEAM TRAVEL LOCK**



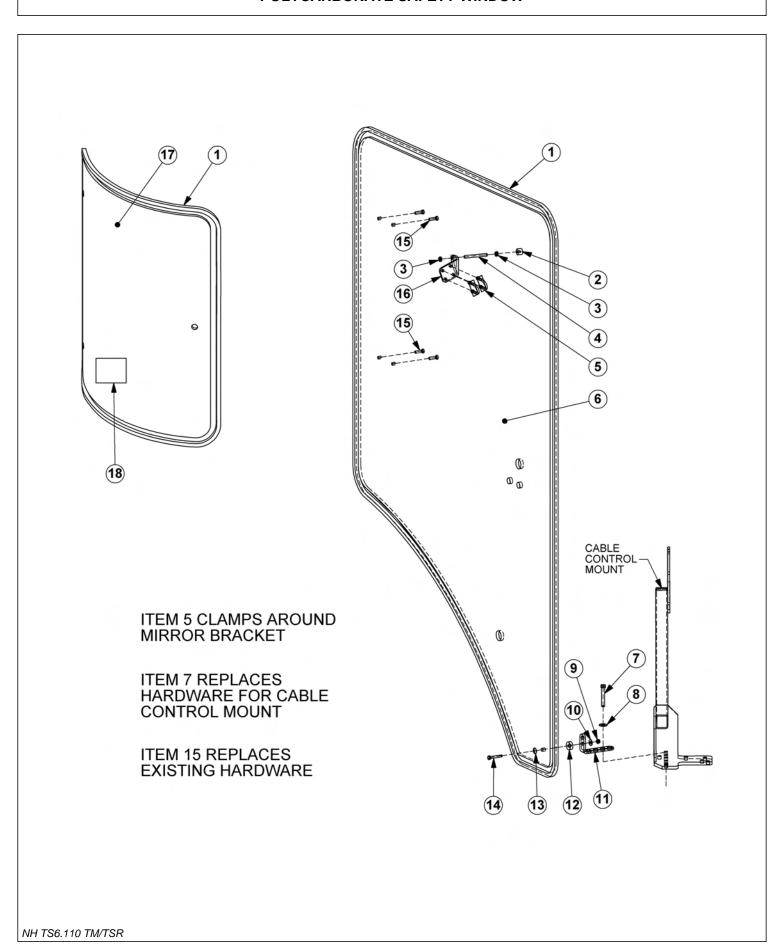
# **COMBO DRAFT BEAM TRAVEL LOCK**

## Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                            |
|------|----------|------|--|
| 1    | 06350021 | 1    | DRAFT BEAM                             |
| 2    | 06430146 | 1    | SPACER,TRAVEL LOCK                     |
| 3    | 6T0106   | 1    | TRAVEL LOCK BRACKET                    |
| 4    | 21993    | 1    | LOCK WASHER,3/4"                       |
| 5    | 21825    | 1    | HEX NUT,3/4"                           |
| 6    | 6T3020   | 1    | R - CLIP,5/32"                         |
| 7    | 6T0107   | 2    | TRAVEL LOCK PINS,3/4" X 3-1/4"         |
| 8    | 21629    | 2    | CAPSCREW,3/8" X 3/4",NC                |
| 9    | 21988    | 2    | LOCK WASHER,3/8"                       |
| 10   | 33856    | 1    | BRKT,PIN HOLDER                        |
| 11   |          | 1    | MAIN FRAME *REFER TO TRACTOR MOUNT KIT |
| 12   | 22021    | 1    | FLAT WASHER,3/4"                       |
| 13   | 21841    | 1    | CAPSCREW,3/4" X 4-1/2",NC              |

NH TS6.110 TM/TSR

### **POLYCARBONATE SAFETY WINDOW**



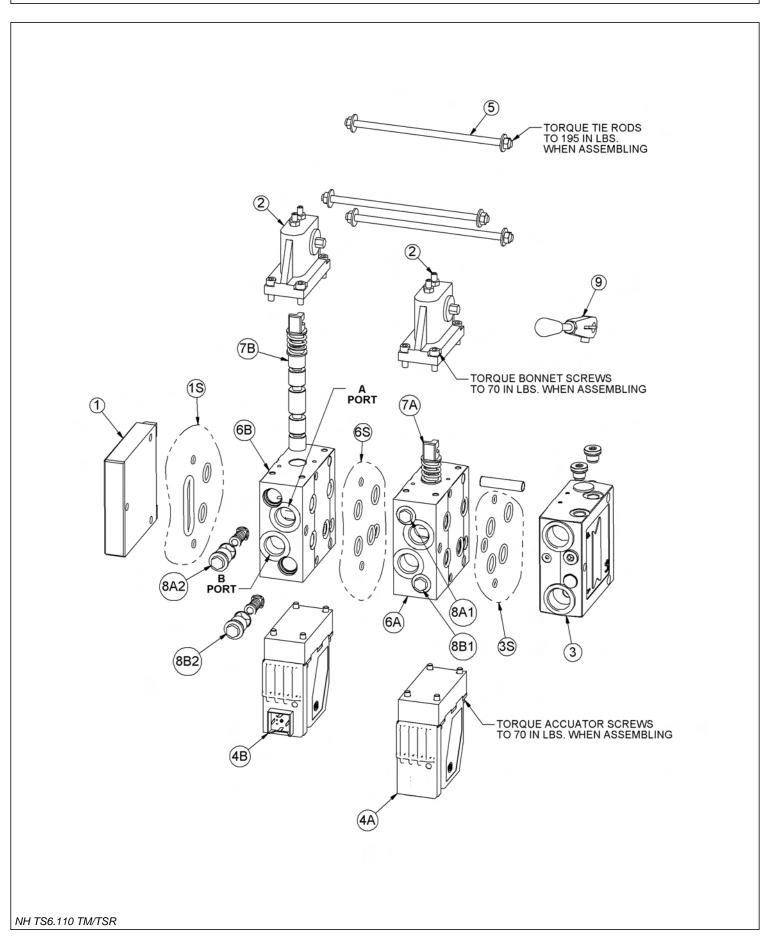
# **POLYCARBONATE SAFETY WINDOW**

## Continued...

| 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    | 32550    | 2    | U-BOLT,ASSY               |
| 6    | 06490039 | 1    | POLYCARBONATE,DOOR        |
| 7    | 21636    | 1    | CAPSCREW,3/8" X 2-1/2",NC |
| 8    | 22016    | 1    | FLATWASHER,3/8"           |
| 9    | 21527    | 1    | NYLOCK NUT,1/4",NC        |
| 10   | 22014    | 1    | FLATWASHER,1/4"           |
| 11   | 06410672 | 1    | BRACKET,BOTTOM            |
| 12   | 06537000 | 1    | WASHER, NEOPRENE          |
| 13   | 06537001 | 1    | WASHER,RUBBER             |
| 14   | 21533    | 1    | CAPSCREW,1/4" X 1-3/4",NC |
| 15   | 28583    | 4    | CAPSCREW,8MM X 25MM,1.25P |
| 16   | 06411375 | 1    | BRACKET,TOP               |
| 17   | 06490040 | 1    | POLYCARBONATE,REAR        |
| 18   | 22645    | 1    | DECAL                     |

NH TS6.110 TM/TSR

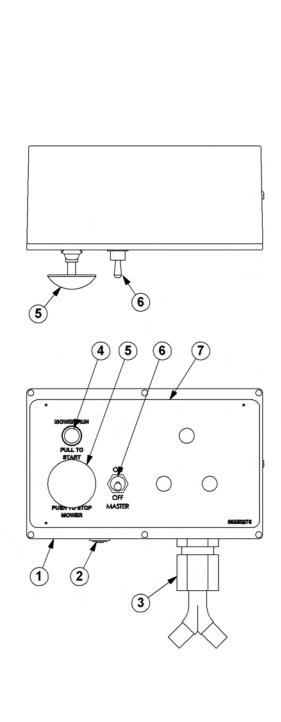
### **2 SPOOL ELECTRONIC LIFT VALVE**



# **2 SPOOL ELECTRONIC LIFT VALVE**

| ITEM | PART NO. | QTY. | DESCRIPTION                         |
|------|----------|------|-------------------------------------|
|      | 06502130 | 1    | VLV,2SP,32PVG,TM                    |
| 1    | 06502074 | 1    | END PLATE                           |
| 1S   | 06505013 | 1    | END PLATE SEAL KIT                  |
| 2    | 42197    | 2    | BONNET                              |
| 2S   | 06505042 | 1    | BONNET SEAL KIT                     |
| 3    | 34308    | 1    | INLET SECTION                       |
| 3S   | 06505013 | 1    | INLET SECTION SEAL KIT              |
| 4    |          | 2    | ELECTRONIC ACCUATOR                 |
| 4A   | 06502101 | 1    | DRAFT BEAM LIFT ELECTRONIC ACCUATOR |
| 4B   | 06502101 | 1    | DECK ROLL ELECTRONIC ACCUATOR       |
| 5    | 06502134 | 1    | TIE-BOLT KIT                        |
| 6    |          | 2    | SECTION                             |
| 6S   | 06505013 | 1    | SECTION SEAL KIT                    |
| 6A   | 42698    | 1    | DRAFT BEAM LIFT SECTION             |
| 6B   | 42698    | 1    | DECK ROLL SECTION                   |
| 7    |          | 2    | SPOOL                               |
| 7A   | 06502135 | 1    | DRAFT BEAM LIFT                     |
| 7B   | 06502073 | 1    | DECK ROLL                           |
| 8    |          | 4    | ANTI CAV/SHOCK RELIEF               |
| 8A1  | 42296    | 1    | DRAFT BEAM LIFT A PORT RELIEF       |
| 8B1  | 06502136 | 1    | DRAFT BEAM LIFT B PORT RELIEF       |
| 8A2  | 06502081 | 1    | DECK ROLL A PORT RELIEF             |
| 8B2  | 42296    | 1    | DECK ROLL B PORT RELIEF             |
| 9    | 33459    | 1    | HANDLE                              |
|      |          |      |                                     |

# **SWITCH BOX - ELECTRONIC LIFT VALVE**



NH TS6.110 TM/TSR

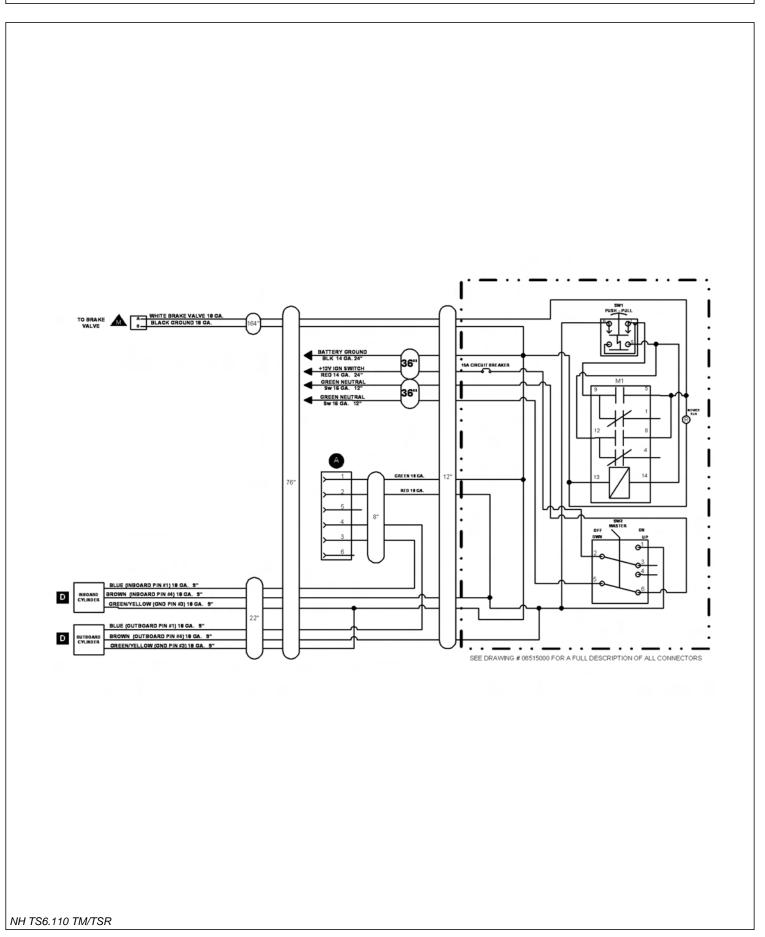
# **SWITCH BOX - ELECTRONIC LIFT VALVE**

## Continued...

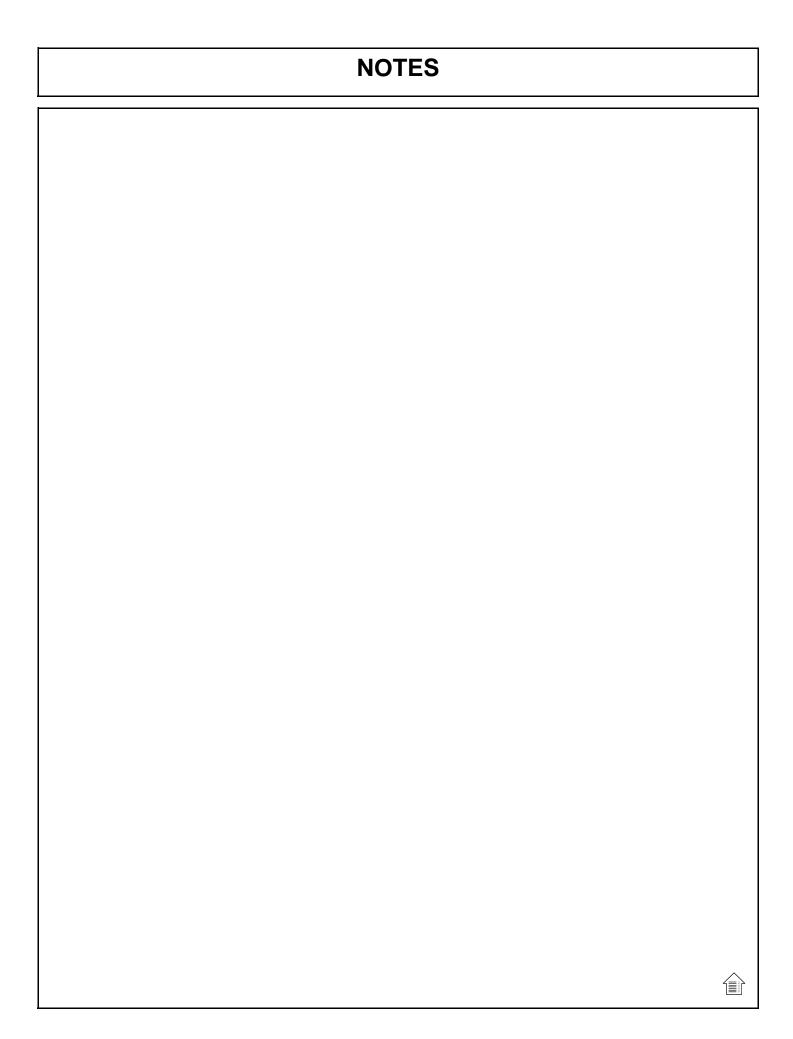
| ITEM | PART NO. | QTY. | DESCRIPTION                   |
|------|----------|------|-------------------------------|
|      | 06510272 | 1    | SWITCH BOX,ASSY               |
| 1    | 06514008 | 1    | SWBX,ALUM,BLK,06510047        |
| 2    | 06514006 | 1    | BREAKER,15A,SWBX              |
| 3    | 34540    | 1    | STRAIN RELIEF,3/4,BLACK,NYLON |
| 4    | 6T3923   | 1    | INDICTATOR LIGHT, ON, RED     |
| 5    | 35226    | 1    | SWITCH,MOWER,COLEHERSEE       |
| 6    | 33811    | 1    | SWITCH,MASTER/DECK FLOAT      |
| 7    | 06550076 | 1    | DECAL,SWTCHBX                 |
| 8    | 35227    | 1    | RELAY,DP,DT,12V,LY2F,35226    |

NH TS6.110 TM/TSR

### SWITCH BOX SCHEMATIC - ELECTRONIC LIFT VALVE



# **COMMON SIDE ROTARY PARTS SECTION**



# PART NAME INDEX

| PARTS ORDERING GUIDE                           | 5  |
|--|----|
| CABLE DRAFT BEAM ASSEMBLY                      | 6  |
| COMBO DRAFT BEAM ASSEMBLY                      | 8  |
| 60IN SIDE CABLE TM ROTARY MOWER                | 10 |
| 72IN SIDE CABLE TM ROTARY MOWER                | 12 |
| 60IN SIDE COMBO TM ROTARY MOWER                | 14 |
| 72IN SIDE COMBO TM ROTARY MOWER                | 16 |
| 60IN SIDE TM CHAIN GUARDS                      | 18 |
| 72IN SIDE TM CHAIN GUARDS                      | 20 |
| 60IN SIDE TSR ROTARY MOWER                     | 22 |
| 60IN SIDE TSR REAR GUARDS                      | 24 |
| SIDE ROTARY CASTER WHEEL ASSEMBLY              | 26 |
| CASTER WHEEL ASSEMBLY                          | 28 |
| ROTARY DISK AND KNIVES                         | 29 |
| TM MOWER SPINDLE ASSEMBLY                      | 30 |
| TSR MOWER SPINDLE ASSEMBLY                     | 32 |
| ROTARY MOTOR BREAKDOWN                         | 34 |
| 60IN TSR ROTARY MOTOR BREAKDOWN                | 36 |
| FRONT HYDRAULIC PUMP BREAKDOWN                 | 38 |
| PUMP AND GRILL GUARD OPTIONS                   | 40 |
| RESERVOIR TANK FILTER ASSEMBLY                 | 41 |
| COOLER ASSEMBLY                                | 42 |
| 3IN X 10IN HYDRAULIC CYLINDER BREAKDOWN        | 43 |
| 3IN X 12IN HYDRAULIC CYLINDER BREAKDOWN        | 44 |
| 3IN X 18IN HYDRAULIC CYLINDER BREAKDOWN        | 45 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 30801    | 46 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 31320    | 48 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 31321    | 50 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 31752    | 52 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 06502040 | 54 |
| CABLE (MANUAL) LIFT VALVE BREAKDOWN - 06502041 | 56 |
| BRAKE VALVE ASSEMBLY                           | 58 |
| BRAKE VALVE HYDRAULIC SCHEMATIC                | 59 |
| CABLE DRAFT BEAM TRAVEL LOCK                   | 60 |
| COMBO DRAFT BEAM TRAVEL LOCK                   | 61 |
| SWITCH BOX                                     | 62 |
| SWITCH BOX SCHEMATIC                           | 63 |
| NOTES 1  | 64 |
| FIRE SUPPRESSION SYSTEM                        | 65 |
| FIRE SUPPRESSION 3-POINT MOUNT                 | 66 |
|  |    |
|  |    |

# PART NAME INDEX

| FIRE SUPPRESSION FRONT MOUNT                 | 68 |
|--|----|
| FIRE SUPPRESSION SYSTEM ELECTRICAL SCHEMATIC | 70 |
| WETCUT                                       | 71 |
| WETCUT 50 GALLON TANK - 3PNT MOUNT           | 72 |
| WETCUT 100 OR 150 GALLON TANK - 3PNT MOUNT   | 73 |
| WETCUT 3PNT PLUMBING - 50IN MOWERS           | 74 |
| WETCUT 3PNT PLUMBING - LARGE MOWERS          | 76 |
| WETCUT FRONT PLUMBING - 50IN MOWERS          | 78 |
| WETCUT FRONT PLUMBING - LARGE MOWERS         | 80 |
| WETCUT 50IN SPRAYER HEAD ASSEMBLY            | 82 |
| WETCUT 60IN SPRAYER HEAD ASSEMBLY            | 84 |
| WETCUT CABLES                                | 86 |
|  |    |

#### 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 pur chase 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.
- 5. 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.



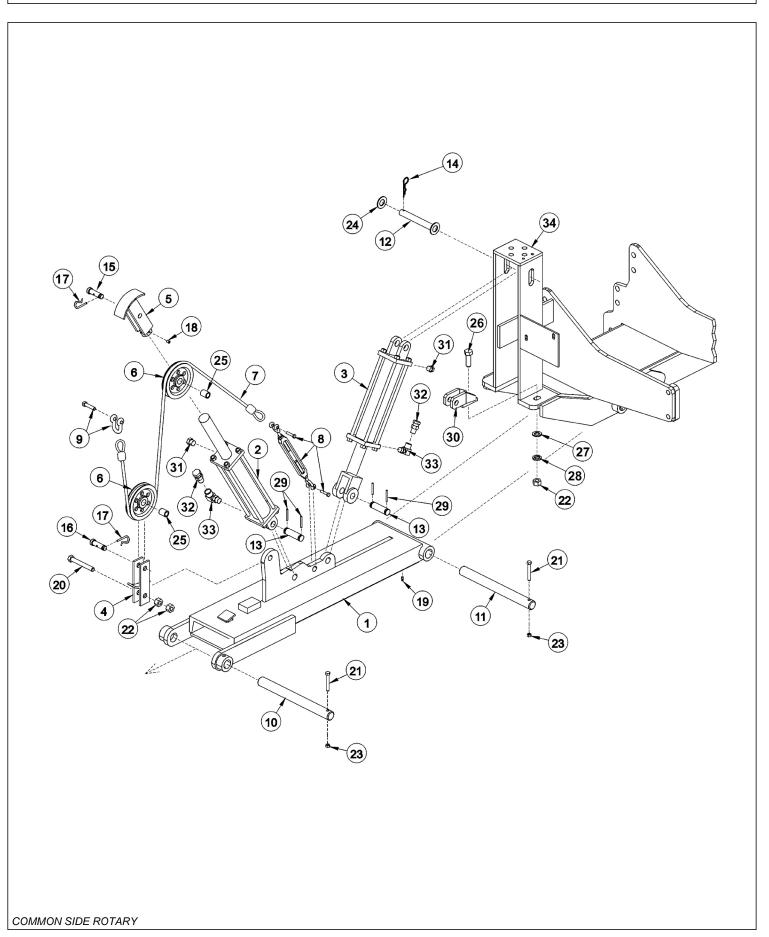
For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

COMMON SIDE ROTARY

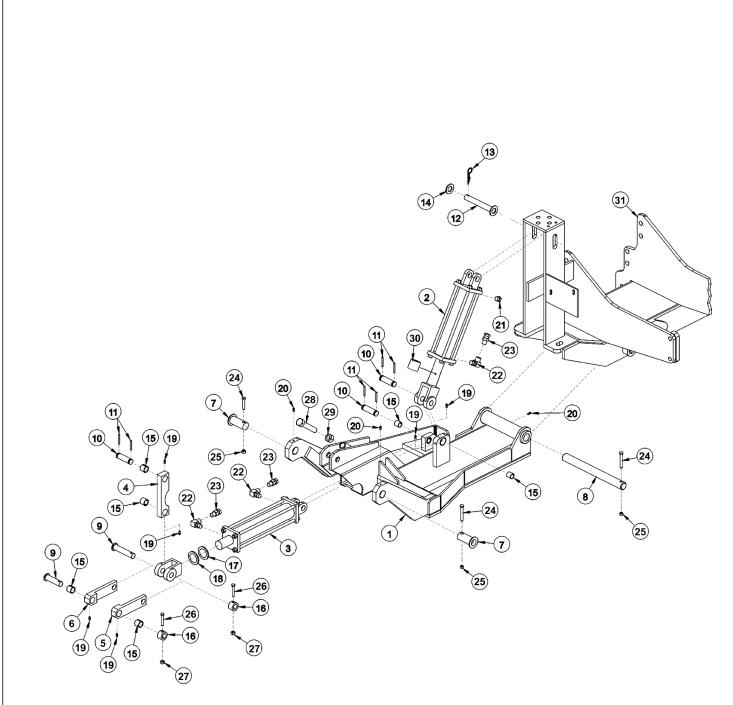
# **CABLE DRAFT BEAM ASSEMBLY**



# **CABLE DRAFT BEAM ASSEMBLY**

|   | ITEM | PART NO. | QTY. | DESCRIPTION                                |
|---|------|----------|------|--|
|   | 1    | 6T0105   | -    | DRAFT BEAM (STD WITH TRAVEL LOCK)          |
| l |      | 27241    | -    | DRAFT BEAM (EXTENDED 6")                   |
| l | 2    | 6T0150   | 1    | CYLINDER 3" X 18"                          |
| l | 3    | 6T0151R  | 1    | HYD. CYLINDER 3" X 10"                     |
| l | 4    | 6T0100   | 1    | LOWER SHEAVE BRACKET                       |
| l | 5    | 6T0101   | 1    | UPPER SHEAVE BRACKET                       |
| l | 6    | 33768    | 2    | SHEAVE                                     |
| l | 7    | 6T0110   | 1    | LIFT CABLE (STD 1/2" X 87 1/2")            |
| l |      | 6T0110E  | -    | LIFT CABLE (EXTENDED 6")                   |
| l | 8    | 6T0115   | 1    | TURN BUCKLE                                |
| l | 9    | 6T0112   | 1    | SHACKLE WITH PIN                           |
| l | 10   | 6T2999   | 1    | OUTER DRAFT BEAM PIN 1 1/2" X 14 1/2"      |
| l | 11   | 6T3001   | 1    | INNER DRAFT BEAM PIN 1 1/2" X 15 3/4"      |
| l | 12   | 6T3005   | 1    | CYLINDER PIN 1" X 6 5/8"                   |
| l | 13   | TB1033   | 2    | CLEVIS PIN 1" X 4"                         |
| l | 14   | 6T3004   | 1    | R - CLIP 3/16"                             |
| l | 15   | 6T3010   | 1    | UPPER SHEAVE PIN WITH ZERK 3/4" X 3"       |
| l | 16   | 6T3009   | 1    | LOWER SHEAVE PIN WITH ZERK 3/4" X 2 1/2"   |
| l | 17   | 6T3020   | 2    | R - CLIP 5/32"                             |
| l | 18   | 6T2272   | 1    | SET SCREW 3/8" X 1/2"                      |
| l | 19   | 6T3211   | 1    | GREASE ZERK 1/8" STRAIGHT                  |
| l | 20   | 21837    | 1    | CAPSCREW 3/4" X 3 1/4"                     |
| l | 21   | 21688    | 2    | CAPSCREW 7/16" X 3 1/4"                    |
| l | 22   | 21825    | 2    | HEX NUT 3/4"                               |
| l | 23   | 21677    | 2    | NYLOCK NUT 7/16"                           |
| l | 24   | 22023    | 1    | FLAT WASHER 1"                             |
| l | 25   | 6T0104N  | 2    | SHEAVE PIN BUSHING 1" OD X 3/4" ID         |
| l | 26   | 21833    | 1    | CAPSCREW 3/4" X 2 1/4"                     |
| l | 27   | 22021    | 1    | FLAT WASHER 3/4"                           |
| l | 28   | 21993    | 1    | LOCK WASHER 3/4"                           |
| l | 29   | 06537021 | 4    | ROLL PIN                                   |
| l | 30   | 6T0106   | 1    | TRAVEL LOCK BRACKET                        |
|   | 31   | 6T4258   | 2    | BREATHER 1/2"                              |
|   | 32   | 34396    | 2    | RESTRICTOR                                 |
|   | 33   | 34244    | 2    | ELBOW FITTING 1/2"                         |
|   | 34   |          | -    | MAIN FRAME *REFER TO TRACTOR PARTS SECTION |

### **COMBO DRAFT BEAM ASSEMBLY**

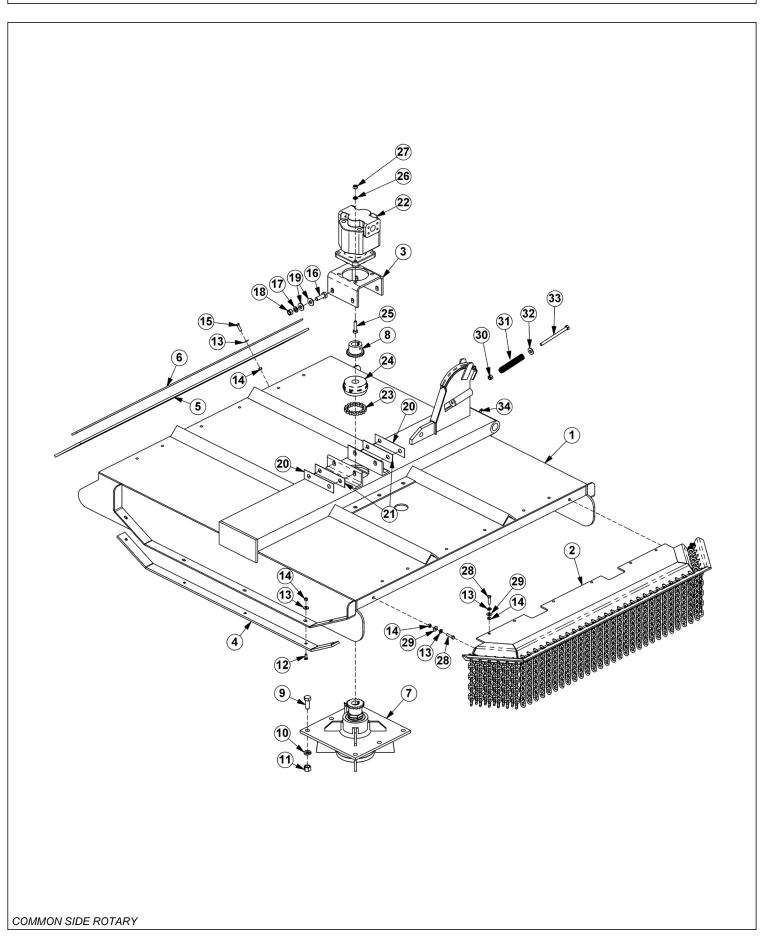


## **NOTES:**

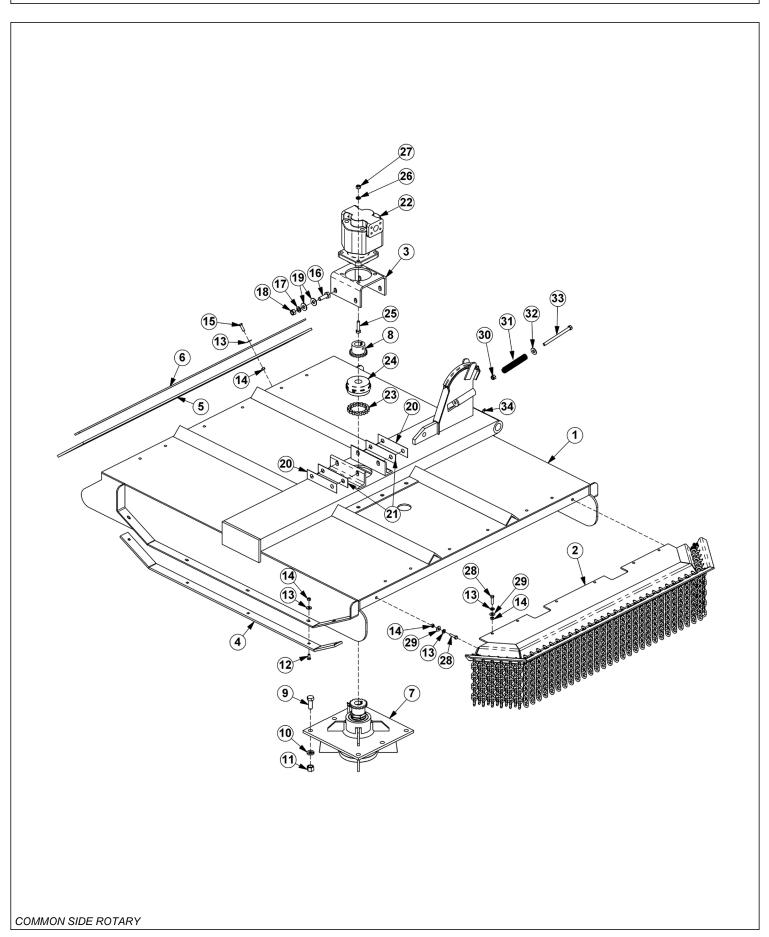
- 1. ITEM 30 IS USED ON THE GLAND END OF ITEM 2 (AS NEEDED)
- 2. ORIENTATION OF ITEMS 4,5 & 6 ARE CRITICAL

## **COMBO DRAFT BEAM ASSEMBLY**

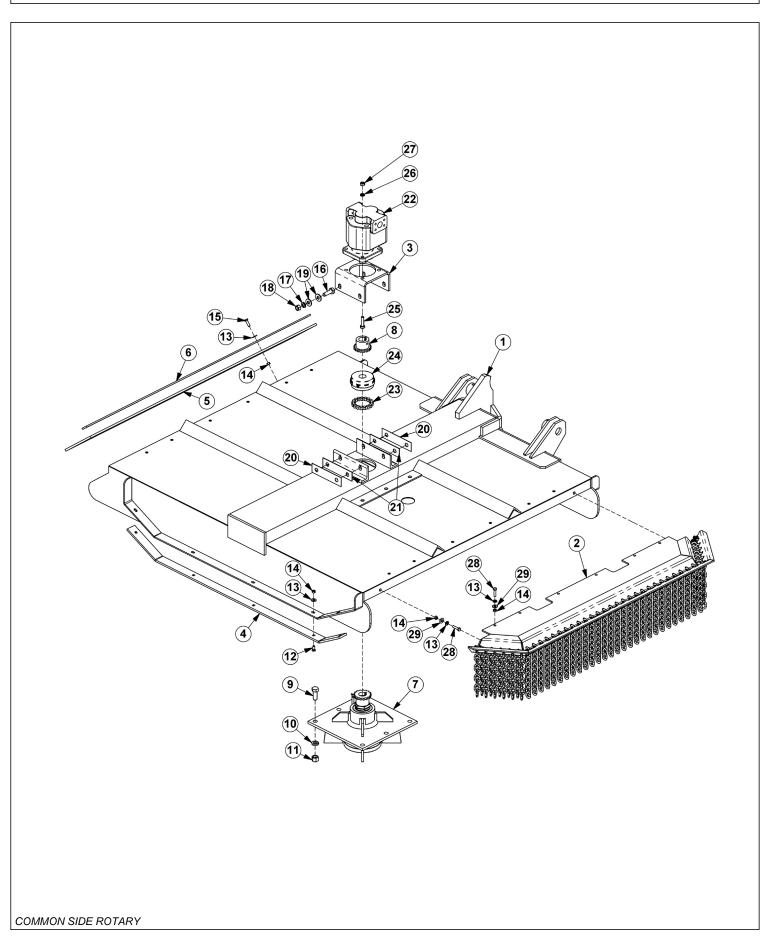
| ITEM | PART NO. | QTY. | DESCRIPTION                             |
|------|----------|------|---|
| 1    | 06350001 | 1    | COMBO DRAFT BEAM - STD DTY ROTARY       |
|      | 31063    | -    | COMBO DRAFT BEAM - HVY DTY ROTARY       |
| 2    | 6T0151R  | 1    | HYD. CYLINDER 3" X 10"                  |
| 3    | 32215    | 1    | HYD. CYLINDER 3" X 12" - STD DTY        |
|      | 25343    | -    | HYD. CYLINDER 3" X 12" - HVY DTY        |
| 4    | TF4500A  | 1    | PIVOT ARM                               |
| 5    | TF4507B  | 1    | RIGHT LINKAGE ARM                       |
| 6    | TF4506B  | 1    | LEFT LINKAGE ARM                        |
| 7    | 30126B   | 2    | PIN, HEAD PIVOT - STD DTY               |
|      | TF4514A  | -    | PIN, HEAD PIVOT - HVY DTY               |
| 8    | 6T3001   | 1    | PIN, BEAM PIVOT                         |
| 9    | TF4519   | 2    | PIN, LINKAGE                            |
| 10   | TB1033   | 3    | PIN, CLEVIS                             |
| 11   | 06537021 | 6    | ROLLPIN                                 |
| 12   | 6T3005   | 1    | PIN,1" W/ CAP                           |
| 13   | 6T3004   | 1    | R-CLIP HAIRPIN                          |
| 14   | 6T2614   | 1    | FLATWASHER 1"                           |
| 15   | TB3010   | 8    | BUSHING 1"                              |
| 16   | 22847    | 2    | BOSS, LINKAGE PIN                       |
| 17   | 22076    | 1    | SPACER, HYD. CYLINDER 1/4"              |
| 18   | 22077    | 1    | SPACER, HYD. CYLINDER 5/16"             |
| 19   | 6T3207   | 6    | GREASE ZERK 1/4"                        |
| 20   | 6T3211   | 3    | GREASE ZERK 1/8"                        |
| 21   | 6T4258   | 1    | BREATHER 1/2"                           |
| 22   | 34244    | 3    | ELBOW FITTING 1/2"                      |
| 23   | 34396    | 3    | SWIVEL RESTRICTOR                       |
| 24   | 21688    | 3    | CAPSCREW 7/16" X 3 1/4"                 |
| 25   | 21677    | 3    | NYLOCK NUT 7/16"                        |
| 26   | 21635    | 2    | CAPSCREW 3/8" X 2 1/4"                  |
| 27   | 21625    | 2    | HEX NUT 3/8"                            |
| 28   | 21831    | 1    | CAPSCREW 3/4" X 1 3/4"                  |
| 29   | 21825    | 1    | HEX NUT 3/4"                            |
| 30   | 06700095 | 1    | CYLINDER SPACER W/SET SCREW             |
| 31   |          | -    | MAIN FRAME *REFER TO TRACTOR MOUNT PAGE |



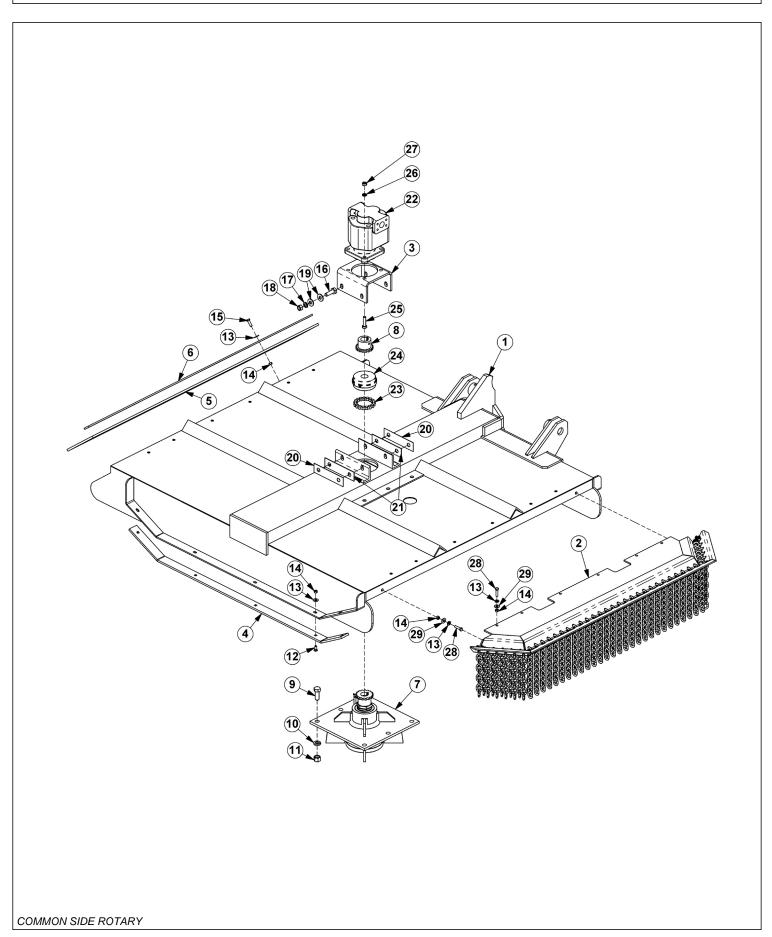
| ITEM | PART NO. | QTY. | DESCRIPTION                           |
|------|----------|------|---------------------------------------|
| 1    | 32099    | 1    | RTRY, 60" DECK, CABLE                 |
| 2    | 31773    | 1    | GAURD,CHAIN,FRONT,SR60                |
| 3    | 6T1001   | 1    | BRKT, MOTOR MTG, 60"SIDE RTRY         |
| 4    | 6T0820H  | 2    | SKID SHOE, TM60                       |
| 5    | 22592    | 1    | FLAP, DEFLECTOR, TM60                 |
| 6    | 6T0823   | 1    | BAR, FLAP, TM60                       |
| 7    | 6T1024H5 | 1    | SPINDLE ASSY,CPLT,HD,5/8" HOLES       |
| 8    | 21223    | 1    | SPROCKET, 1-1/4" BORE                 |
| 9    | 6T2277   | 6    | CAPSCREW,3/4" X 2",NF                 |
| 10   | 21993    | 6    | LOCKWASHER,3/4",GR 8                  |
| 11   | 6T2413   | 6    | HEX NUT,3/4",NF,GR 8                  |
| 12   | 6T2270   | 10   | PLOW BOLT,3/8" X 1",NC                |
| 13   | 22016    | 29   | FLATWASHER,3/8"                       |
| 14   | 21625    | 29   | HEX NUT,3/8",NC                       |
| 15   | 21631    | 11   | CAPSCREW, 3/8" X 1-1/4",NC            |
| 16   | 21783    | 4    | CAPSCREW, 5/8" X 2",NC                |
| 17   | 21992    | 4    | LOCKWASHER, 5/8"                      |
| 18   | 21775    | 4    | HEX NUT, 5/8"                         |
| 19   | 25270    | 8    | FLATWASHER,5/8",GR 8                  |
| 20   | 6T0822   | 2    | SHIM, MOTOR MOUNT, 14GA. (AS NEEDED)  |
| 21   | 6T0822A  | 2    | SHIM, MOTOR MOUNT, 18 GA. (AS NEEDED) |
| 22   | 06504011 | 1    | MOTOR,(M365-2 1/4" GEAR)              |
| 23   | 6T1029   | 1    | CHAIN, COUPLING                       |
| 24   | 6T1033   | 1    | COVER, COUPLING                       |
| 25   | 21733    | 4    | CAPSCREW, 1/2" X 2",NC                |
| 26   | 21990    | 4    | LOCKWASHER,1/2"                       |
| 27   | 21725    | 4    | HEX NUT, 1/2",NC                      |
| 28   | 21632    | 8    | CAPSCREW,3/8" X 1-1/2",NC             |
| 29   | 21988    | 8    | LOCKWASHER,3/8"                       |
| 30   | 21727    | 1    | NYLOCK NUT,1/2",NC                    |
| 31   | 27005    | 1    | SPRING,PUSHOFF,SIDE RTRY              |
| 32   | 22018    | 1    | FLATWASHER,1/2",WIDE                  |
| 33   | 21745    | 1    | CAPSCREW,1/2" X 7",NC                 |
| 34   | 6T3211   | 1    | GREASE ZERK                           |
|      |          |      |                                       |



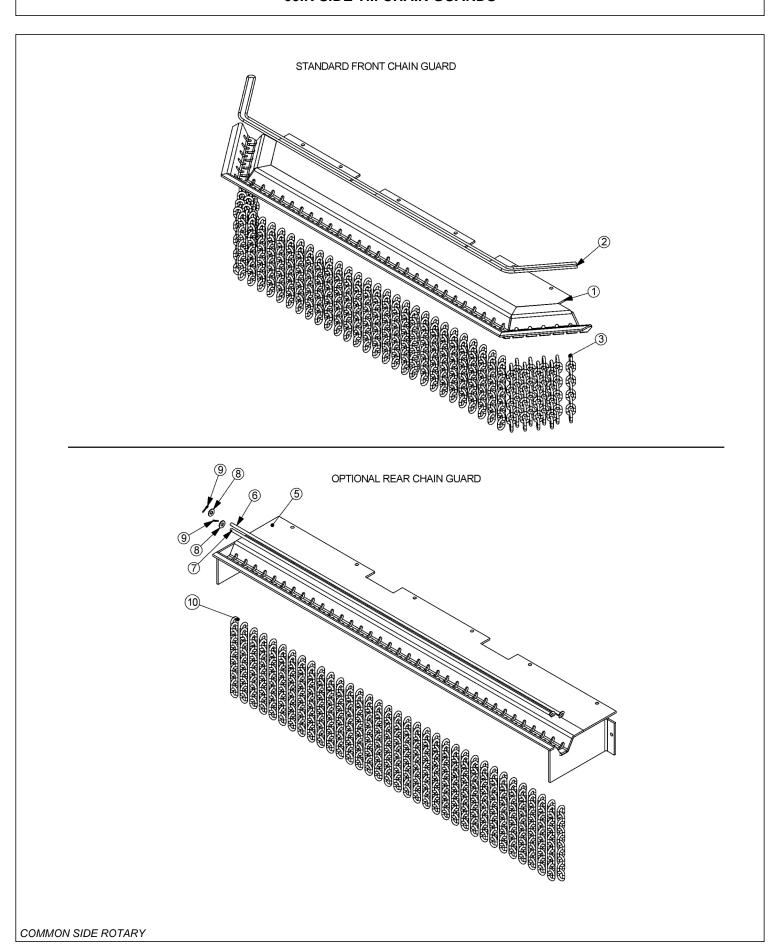
| ITEM | PART NO. | QTY. | DESCRIPTION                           |
|------|----------|------|---------------------------------------|
| 1    | 21225B   | 1    | RTRY,72" DECK, CABLE                  |
| 2    | 31931    | 1    | GUARD,CHAIN,FRONT,SR72                |
| 3    | 6T1001   | 1    | BRKT, MOTOR MTG, 60"SIDE RTRY         |
| 4    | 21248    | 2    | SKID SHOE, TM72                       |
| 5    | 21295B   | 1    | FLAP, DEFLECTOR, TM72                 |
| 6    | 21242A   | 1    | BAR, FLAP, TM72                       |
| 7    | 6T1024H5 | 1    | SPINDLE ASSY,CPLT,HD,5/8" HOLES       |
| 8    | 21223    | 1    | SPROCKET, 1-1/4" BORE                 |
| 9    | 6T2277   | 6    | CAPSCREW,3/4" X 2",NF                 |
| 10   | 21993    | 6    | LOCKWASHER,3/4",GR 8                  |
| 11   | 6T2413   | 6    | HEX NUT,3/4",NF,GR 8                  |
| 12   | 6T2270   | 10   | PLOW BOLT,3/8" X 1",NC                |
| 13   | 22016    | 29   | FLATWASHER,3/8"                       |
| 14   | 21625    | 29   | HEX NUT,3/8",NC                       |
| 15   | 21631    | 11   | CAPSCREW, 3/8" X 1-1/4",NC            |
| 16   | 21783    | 4    | CAPSCREW, 5/8" X 2",NC                |
| 17   | 21992    | 4    | LOCKWASHER, 5/8"                      |
| 18   | 21775    | 4    | HEX NUT, 5/8"                         |
| 19   | 25270    | 8    | FLATWASHER,5/8",GR 8                  |
| 20   | 6T0822   | 2    | SHIM, MOTOR MOUNT, 14GA. (AS NEEDED)  |
| 21   | 6T0822A  | 2    | SHIM, MOTOR MOUNT, 18 GA. (AS NEEDED) |
| 22   | 06504011 | 1    | MOTOR,(M365-2 1/4" GEAR)              |
| 23   | 6T1029   | 1    | CHAIN, COUPLING                       |
| 24   | 6T1033   | 1    | COVER, COUPLING                       |
| 25   | 21733    | 4    | CAPSCREW, 1/2" X 2",NC                |
| 26   | 21990    | 4    | LOCKWASHER,1/2"                       |
| 27   | 21725    | 4    | HEX NUT, 1/2",NC                      |
| 28   | 21632    | 8    | CAPSCREW,3/8" X 1-1/2",NC             |
| 29   | 21988    | 8    | LOCKWASHER,3/8"                       |
| 30   | 21727    | 1    | NYLOCK NUT,1/2",NC                    |
| 31   | 27005    | 1    | SPRING,PUSHOFF,SIDE RTRY              |
| 32   | 22018    | 1    | FLATWASHER,1/2",WIDE                  |
| 33   | 21745    | 1    | CAPSCREW,1/2" X 7",NC                 |
| 34   | 6T3211   | 1    | GREASE ZERK                           |
|      |          |      |                                       |



| ITEM | PART NO. | QTY. | DESCRIPTION                           |
|------|----------|------|---------------------------------------|
| 1    | 30087D   | 1    | RTRY, 60" DECK, COMBO - STD DUTY      |
|      | 32617    | 1    | RTRY, 60" DECK, COMBO - HEAVY DUTY    |
| 2    | 31773    | 1    | GUARD,CHAIN,FRONT,SR60                |
| 3    | 6T1001   | 1    | BRKT, MOTOR MTG, 60"SIDE RTRY         |
| 4    | 6T0820H  | 2    | SKID SHOE, TM60                       |
| 5    | 22592    | 1    | FLAP, DEFLECTOR, TM60                 |
| 6    | 6T0823   | 1    | BAR, FLAP, TM60                       |
| 7    | 6T1024H5 | 1    | SPINDLE ASSY,CPLT,HD,5/8" HOLES       |
| 8    | 21223    | 1    | SPROCKET, 1-1/4" BORE                 |
| 9    | 6T2277   | 6    | CAPSCREW,3/4" X 2",NF                 |
| 10   | 21993    | 6    | LOCKWASHER,3/4",GR 8                  |
| 11   | 6T2413   | 6    | HEX NUT,3/4",NF,GR 8                  |
| 12   | 6T2270   | 10   | PLOW BOLT,3/8" X 1",NC                |
| 13   | 22016    | 29   | FLATWASHER,3/8"                       |
| 14   | 21625    | 29   | HEX NUT,3/8",NC                       |
| 15   | 21631    | 11   | CAPSCREW, 3/8" X 1-1/4",NC            |
| 16   | 21783    | 4    | CAPSCREW, 5/8" X 2",NC                |
| 17   | 21992    | 4    | LOCKWASHER, 5/8"                      |
| 18   | 21775    | 4    | HEX NUT, 5/8"                         |
| 19   | 25270    | 8    | FLATWASHER,5/8",GR 8                  |
| 20   | 6T0822   | 2    | SHIM, MOTOR MOUNT, 14GA. (AS NEEDED)  |
| 21   | 6T0822A  | 2    | SHIM, MOTOR MOUNT, 18 GA. (AS NEEDED) |
| 22   | 06504011 | 1    | MOTOR,(M365-2 1/4" GEAR)              |
| 23   | 6T1029   | 1    | CHAIN, COUPLING                       |
| 24   | 6T1033   | 1    | COVER, COUPLING                       |
| 25   | 21733    | 4    | CAPSCREW, 1/2" X 2",NC                |
| 26   | 21990    | 4    | LOCKWASHER,1/2"                       |
| 27   | 21725    | 4    | HEX NUT, 1/2",NC                      |
| 28   | 21632    | 8    | CAPSCREW,3/8" X 1-1/2",NC             |
| 29   | 21988    | 8    | LOCKWASHER,3/8"                       |
|      |          |      |                                       |



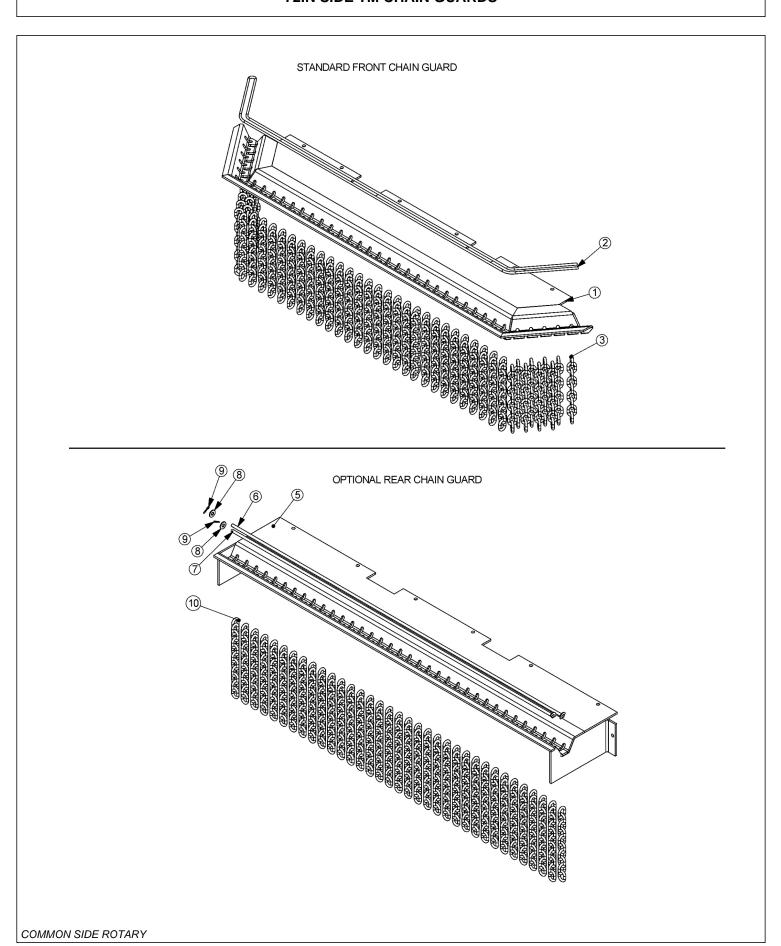
| ITEM | PART NO. | QTY. | DESCRIPTION                           |
|------|----------|------|---------------------------------------|
| 1    | 34260    | 1    | RTRY, 72" DECK, COMBO - STD DUTY      |
|      | 31408A   | 1    | RTRY, 72" DECK, COMBO - HEAVY DUTY    |
| 2    | 31931    | 1    | GUARD,CHAIN,FRONT,SR72                |
| 3    | 6T1001   | 1    | BRKT, MOTOR MTG, 60"SIDE RTRY         |
| 4    | 21248    | 2    | SKID SHOE, TM72                       |
| 5    | 21295B   | 1    | FLAP, DEFLECTOR, TM72                 |
| 6    | 21242A   | 1    | BAR, FLAP, TM72                       |
| 7    | 6T1024H5 | 1    | SPINDLE ASSY,CPLT,HD,5/8" HOLES       |
| 8    | 21223    | 1    | SPROCKET, 1-1/4" BORE                 |
| 9    | 6T2277   | 6    | CAPSCREW,3/4" X 2",NF                 |
| 10   | 21993    | 6    | LOCKWASHER,3/4",GR 8                  |
| 11   | 6T2413   | 6    | HEX NUT,3/4",NF,GR 8                  |
| 12   | 6T2270   | 10   | PLOW BOLT,3/8" X 1",NC                |
| 13   | 22016    | 29   | FLATWASHER,3/8"                       |
| 14   | 21625    | 29   | HEX NUT,3/8",NC                       |
| 15   | 21631    | 11   | CAPSCREW, 3/8" X 1-1/4",NC            |
| 16   | 21783    | 4    | CAPSCREW, 5/8" X 2",NC                |
| 17   | 21992    | 4    | LOCKWASHER, 5/8"                      |
| 18   | 21775    | 4    | HEX NUT, 5/8"                         |
| 19   | 25270    | 8    | FLATWASHER,5/8",GR 8                  |
| 20   | 6T0822   | 2    | SHIM, MOTOR MOUNT, 14GA. (AS NEEDED)  |
| 21   | 6T0822A  | 2    | SHIM, MOTOR MOUNT, 18 GA. (AS NEEDED) |
| 22   | 06504011 | 1    | MOTOR,(M365-2 1/4" GEAR)              |
| 23   | 6T1029   | 1    | CHAIN, COUPLING                       |
| 24   | 6T1033   | 1    | COVER, COUPLING                       |
| 25   | 21733    | 4    | CAPSCREW, 1/2" X 2",NC                |
| 26   | 21990    | 4    | LOCKWASHER,1/2"                       |
| 27   | 21725    | 4    | HEX NUT, 1/2",NC                      |
| 28   | 21632    | 8    | CAPSCREW,3/8" X 1-1/2",NC             |
| 29   | 21988    | 8    | LOCKWASHER,3/8"                       |
|      |          |      |                                       |



## Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                    |
|------|----------|------|--------------------------------|
|      | 31773    | -    | GUARD,CHAIN,TM60,FRONT,ASSY    |
| 1    | 31762    | 1    | GUARD,CHAIN,TM60,FRONT         |
| 2    | 28407    | 12   | CABLE,5/16",BULK (QTY IN FEET) |
| 3    | 22993    | 77   | CHAIN,5/16",GR30,9 LINK        |
| 4    | 28408    | 4    | U-BOLT,CABLE,5/16" (NOT SHOWN) |
|      | 31774    | -    | GUARD,CHAIN,TM60,REAR,ASSY     |
| 5    | 31763    | 1    | GUARD,CHAIN,TM60,REAR          |
| 6    | 31879    | 1    | ROD,SHORT,TM60                 |
| 7    | 31878    | 1    | ROD,LONG,TM60                  |
| 8    | 22016    | 2    | FLATWASHER,3/8",GR8            |
| 9    | 6T3028   | 2    | COTTER PIN,1/8" X 1"           |
| 10   | 22992    | 69   | CHAIN,5/16",GR30,10 LINK       |

COMMON SIDE ROTARY

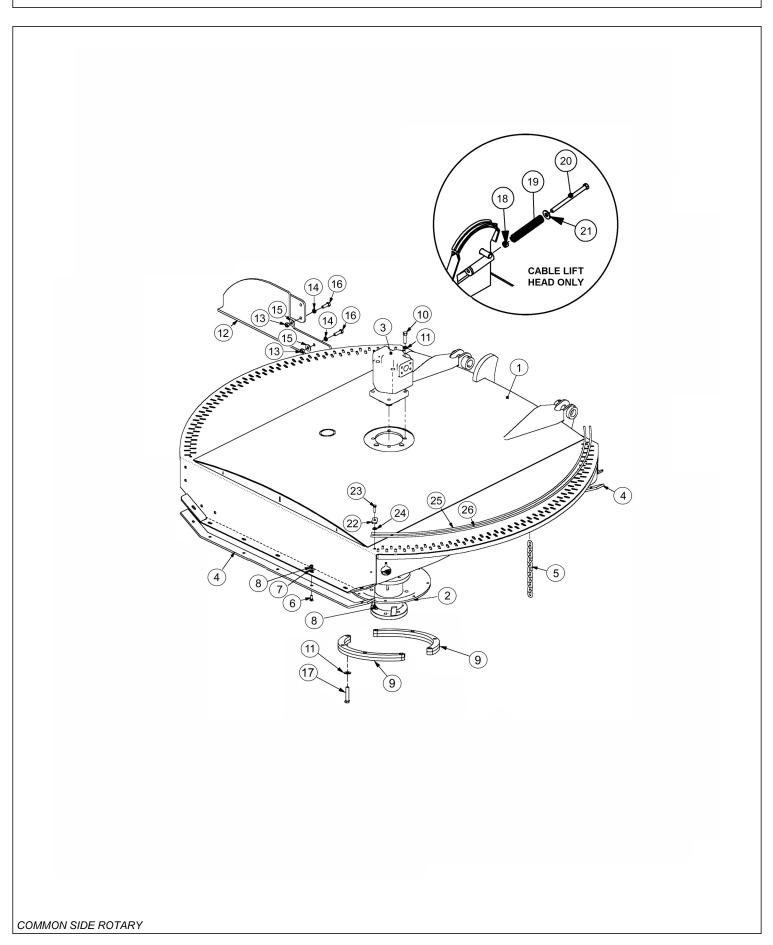


## Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION                    |
|------|----------|------|--------------------------------|
|      | 31931    | -    | GUARD,CHAIN,TM72,FRONT,ASSY    |
| 1    | 31863    | 1    | GUARD,CHAIN,TM72,FRONT         |
| 2    | 28407    | 14   | CABLE,5/16",BULK (QTY IN FEET) |
| 3    | 22993    | 91   | CHAIN,5/16",GR30,9 LINK        |
| 4    | 28408    | 4    | U-BOLT,CABLE,5/16" (NOT SHOWN) |
|      | 31932    | -    | GUARD,CHAIN,TM60,REAR,ASSY     |
| 5    | 31864    | 1    | GUARD,CHAIN,TM60,REAR          |
| 6    | 31934    | 1    | ROD,LONG,TM72                  |
| 7    | 31933    | 1    | ROD,SHORT,TM72                 |
| 8    | 22016    | 2    | FLATWASHER,3/8",GR8            |
| 9    | 6T3028   | 2    | COTTER PIN,1/8" X 1"           |
| 10   | 22992    | 83   | CHAIN,5/16",GR30,10 LINK       |

COMMON SIDE ROTARY

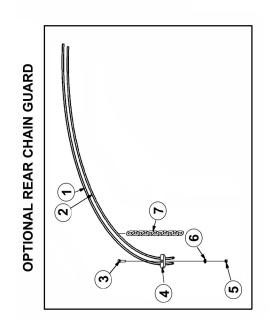
# **60IN SIDE TSR ROTARY MOWER**

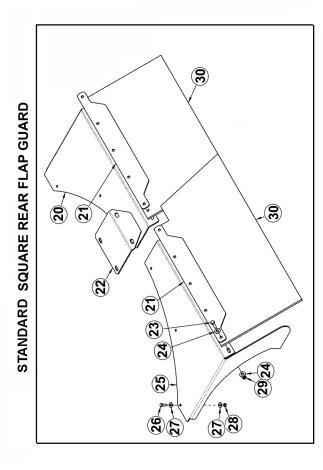


## **60IN SIDE TSR ROTARY MOWER**

| ITE | M PART NO. | QTY. | DESCRIPTION                           |
|-----|------------|------|---------------------------------------|
| 1   | 34975      | 1    | HEAVY DUTY GRASSKAT COMBO             |
|     | 06320005   | 1    | STD DUTY GRASSKAT COMBO               |
|     | - 06320008 | 1    | HEAVY DUTY GRASSKAT CABLE             |
| 2   | 34980      | 1    | SPINDLE ASSY,TM 60"                   |
| 3   | 06504016   | 1    | CURRENT MOTOR,(M365-1 1/4" 14-SPLINE) |
| 4   | 06410254   | 2    | SKID,OUTBOARD,TM60                    |
| 5   | 22992      | 156  | CHAIN,10 LINK                         |
| 6   | 6T2270     | 14   | PLOW BOLT,3/8" X 1" NC                |
| 7   | 22016      | 26   | FLATWASHER,3/8"                       |
| 8   | 21625      | 30   | HEX NUT,3/8",NC                       |
| 9   | 06320011   | 2    | SPACER,TSF,SPINDLE                    |
| 10  | 6T1025     | 4    | CAPSCREW, 1/2 X 2,GR 8,NC             |
| 11  | 06533004   | 12   | FLATWASHER,1/2,SAE,GR 8               |
| 12  | 06370029   | 1    | TIRE GUARD, LEFT                      |
| 13  | 21725      | 8    | HEX NUT, 1/2",NC                      |
| 14  | 21990      | 8    | LOCKWASHER, 1/2"                      |
| 15  | 22018      | 8    | FLATWASHER, 1/2", WIDE                |
| 16  | 21731      | 4    | CAPSCREW, 1/2" X 1-1/2" NC            |
| 17  | 06530221   | 8    | CAPSCREW,1/2 X 2-1/4,NF,GR8           |
| 18  | 21745      | 1    | NYLOCK NUT, 1/2                       |
| 19  | 21727      | 1    | SPRING, PUSHOFF, SIDE RTRY            |
| 20  | 27005      | 1    | CAPSCREW, 1/2 X 7,NC                  |
| 21  | 22018      | 1    | FLATWASHER,1/2",WIDE                  |
| 22  | 34972      | 4    | PLATE,CAP,CHAIN                       |
| 23  | 21631      | 16   | CAPSCREW, 3/8 X 1-1/4,NC              |
| 24  | 21988      | 16   | LOCKWASHER, 3/8"                      |
| 25  | 34974      | 2    | ROD,CHAIN,INNER,TM60                  |
| 26  | 34973      | 2    | ROD,CHAIN,OUTER,TM60                  |
|     |            |      |                                       |

## **60IN SIDE TSR REAR GUARDS**

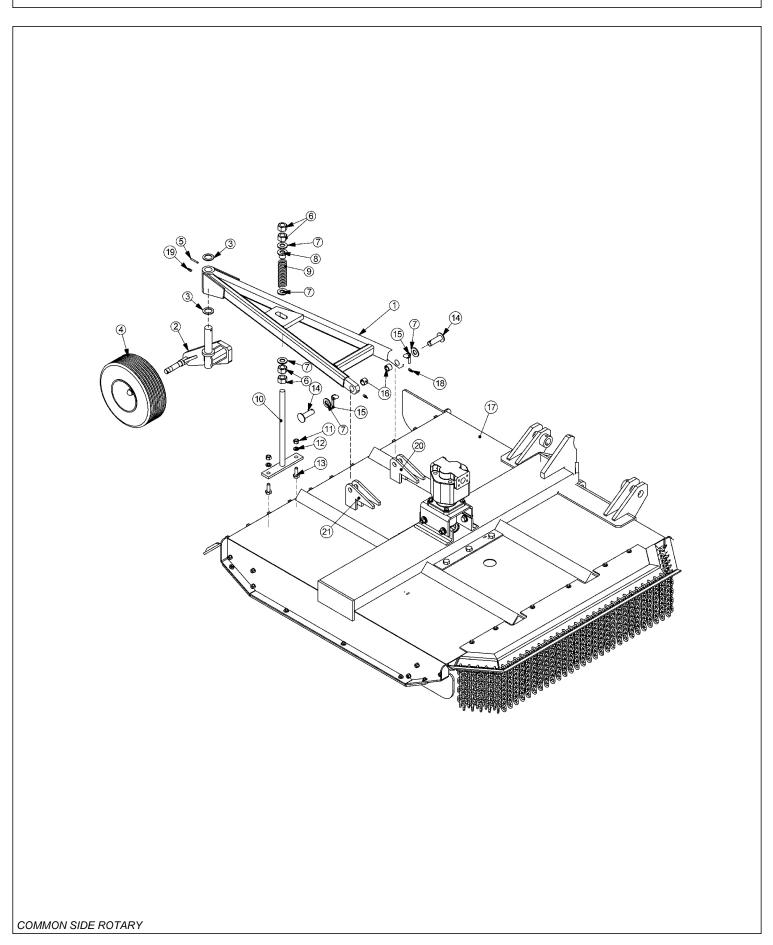




## **60IN SIDE TSR REAR GUARDS**

| ITEM | PART NO. | QTY. | DESCRIPTION               |
|------|----------|------|---------------------------|
| 1    | 34973    | 2    | ROD,CHAIN,OUTER,TM60      |
| 2    | 34974    | 2    | ROD,CHAIN,INNER,TM60      |
| 3    | 21631    | 16   | CAPSCREW, 3/8 X 1-1/4,NC  |
| 4    | 34972    | 4    | PLATE,CAP,CHAIN           |
| 5    | 21625    | 30   | HEX NUT,3/8",NC           |
| 6    | 21988    | 16   | LOCKWASHER, 3/8"          |
| 7    | 22992    | 156  | CHAIN,10 LINK             |
| 20   | 06410947 | 1    | MNT,FLAP,RH,EXT,TSR       |
| 21   | 06401184 | 2    | STRAP,FLAP,EXT,TSR        |
| 22   | 06410948 | 1    | COVER,FLAP,EXT,TSR        |
| 23   | 21632    | 10   | CAPSCREW,3/8" X 1-1/2" NC |
| 24   | 22016    | 20   | FLATWASHER,3/8",GR8       |
| 25   | 06410946 | 1    | MNT,FLAP,LH,EXT,TSR       |
| 26   | 21580    | 6    | CAPSCREW,5/16 X 1 NC      |
| 27   | 22015    | 12   | FLATWASHER,5/16           |
| 28   | 21577    | 6    | NYLOCK NUT, 5/16,NC       |
| 29   | 21625    | 10   | HEX NUT,3/8",NC           |
| 30   | 06520331 | 2    | FLAP,EXT,TSR              |

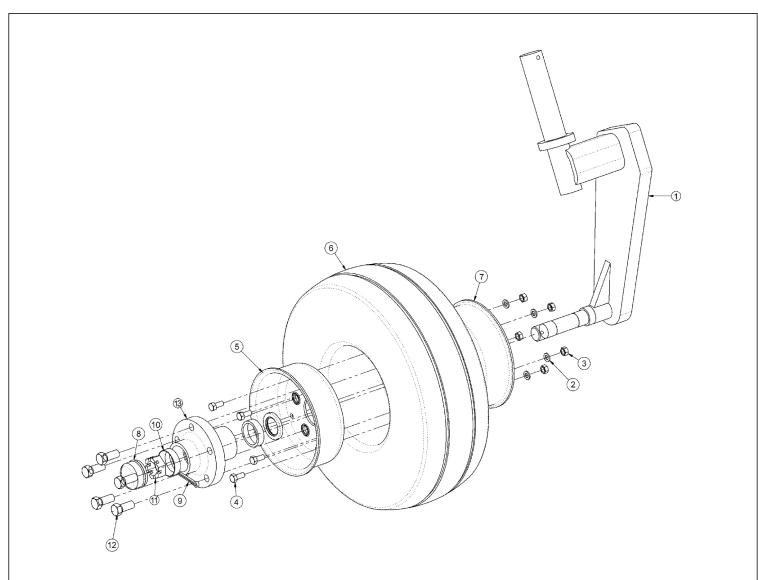
# SIDE ROTARY CASTER WHEEL ASSEMBLY



## SIDE ROTARY CASTER WHEEL ASSEMBLY

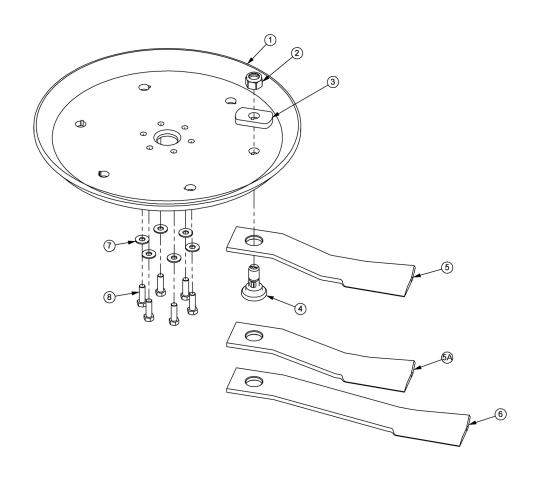
| ITEM | PART NO. | QTY. | DESCRIPTION                   |
|------|----------|------|-------------------------------|
| 1    | 25214C   | 1    | FRAME,CASTER,WHL (TM60)       |
|      | 28297A   | -    | FRAME, CASTER WHL (TM72)      |
| 2    | 22057    | 1    | SPINDLE,CASTER AXLE,ASSY      |
| 3    | 6T2617   | 2    | BUSHING,MACH,1-1/2IDX 2-1/4OD |
| 4    | 28548    | 1    | CASTER WHEEL,SOLID TIRE       |
|      | 22065    | 1    | HUB,ASSY,CASTER               |
|      | 22066    | 1    | HUB,CASTER                    |
|      | 22070    | 1    | DUST CAP                      |
|      | 22071    | 5    | HUB STUD                      |
|      | 22073    | 1    | HEX NUT,1",NF (SLOTTED)       |
|      | 22533    | 1    | COTTER PIN,3/16" X 2"         |
|      | 6T0830   | 2    | BEARING,CONE,CASTER WHEEL     |
|      | 6T0838   | 1    | SEAL                          |
|      | 23329    | 1    | WHEEL,CPLT,SOLID TIRE         |
|      | 21416    | 1    | TIRE,SOLID                    |
|      | 22697    | 1    | RIM,OUTER                     |
|      | 22696    | 1    | RIM,CASTER                    |
| 5    | 6T3014   | 1    | ROLL PIN,1/4" X 2"            |
| 6    | 21925    | 4    | HEX NUT,1",NC                 |
| 7    | 22023    | 5    | FLATWASHER,1"                 |
| 8    | 22753    | 1    | TUBE,PROTECTOR                |
| 9    | 22058    | 1    | SPRING,REAR RTRY              |
| 10   | 22059B   | 1    | ADJ ROD,TRR                   |
| 11   | 21775    | 2    | HEX NUT,5/8"                  |
| 12   | 21992    | 2    | LOCKWASHER,5/8"               |
| 13   | 21782    | 2    | CAPSCREW,5/8" X 1-3/4",NC     |
| 14   | 22060    | 2    | CASTER FRAME PIN              |
| 15   | TF1143   | 2    | PIN,LYNCH,7/16" X 2"          |
| 16   | TB3010   | 2    | BUSHING,1"                    |
| 17   |          | 1    | RTRY,CPLT,TM                  |
| 18   | 6T3207   | 2    | GREASE ZERK,1/4" X STR        |
| 19   | 6T3211   | 1    | GREASE ZERK,1/8" X STR        |
| 20   | 21441    | 2    | CASTER FRAME ANCHOR (TM60)    |
|      | 42527    | 2    | CASTER FRAME ANCHOR (TM72)    |
| 21   | 21442    | 2    | CASTER FRAME ANCHOR (TM60)    |
|      | 42527    | 2    | CASTER FRAME ANCHOR (TM72)    |
|      |          |      |                               |

## **CASTER WHEEL ASSEMBLY**



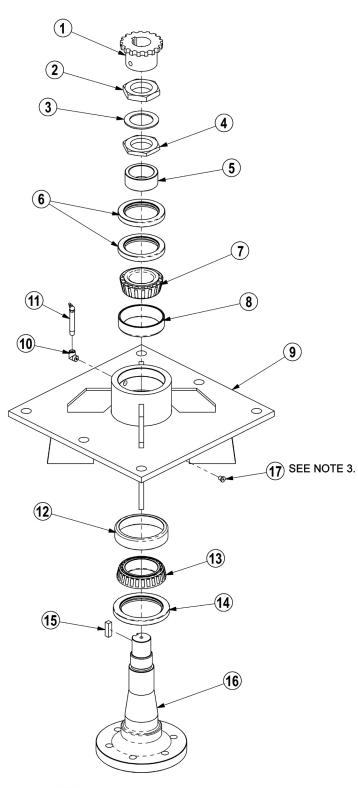
| ITEM | PART NO. | QTY. | DESCRIPTION                     |
|------|----------|------|---------------------------------|
| 1    | 22057    | 1    | SPINDLE,CASTER AXLE,ASSY        |
| 2    | 21987    | 5    | LOCKWASHER,5/16"                |
| 3    | 21575    | 5    | HEX NUT,5/16"                   |
| 4    | 28548    | 5    | CAPSCREW,5/16" X 3/4",NC        |
| 5    | 22697    | 1    | RIM,OUTER,CASTER ASSY           |
| 6    | 21416    | 1    | TIRE,SOLID                      |
| 7    | 22696    | 1    | RIM,CASTER WHEEL                |
| 8    | 22070    | 1    | DUST CAP                        |
| 9    | 22533    | 1    | COTTER PIN,3/16" X 2"           |
| 10   | 6T0836   | 2    | CUP,CASTER WHEEL                |
| 11   | 22073    | 1    | HEX NUT,1",NF (SLOTTED JAM NUT) |
| 12   | 22071    | 5    | HUB STUD                        |
| 13   | 22066    | 1    | HUB,CASTER WHEEL                |
|      |          |      |                                 |

## **ROTARY DISK AND KNIVES**



|   | ITEM | PART NO. | QTY. | DESCRIPTION                                      |
|---|------|----------|------|--|
|   | 1    | 34876    | 1    | BLADE MOUNTING DISK                              |
|   | 2    | 6T1023R  | 2    | NYLOCK NUT,1-1/8"                                |
|   | 3    | 34878    | 2    | SPACER   |
|   | 4    | 34497    | 2    | KNIFE MOUNTING BOLT                              |
|   | 5    | 34685    | 2    | KNIFE,60" HIGH SUCTION - STANDARD                |
|   | 5A   | 34684    | 2    | KNIFE,60" - OPTIONAL                             |
|   | 6    | 34682    | 2    | KNIFE 72" (MOUNT ON 72" MOWER ONLY)              |
|   | 7    | 25270    | 6    | FLATWASHER,5/8",USS,GR8                          |
|   | 8    | 6T2259   | 6    | CAPSCREW,5/8" X 1-3/4",NF                        |
|   |      | 6T1825   | -    | LOCTITE - USED ON ALL DISK MOUNTING BOLTS        |
|   |      | 27167    | -    | BOLT KIT (INCLUDE ITEMS 7 & 8)                   |
|   |      | 06700002 | -    | KIT,60/72,DISK,KNF MTG (INCLUDE ITEM 1, 3,7 & 8) |
| ı |      |          |      |  |

#### TM MOWER SPINDLE ASSEMBLY



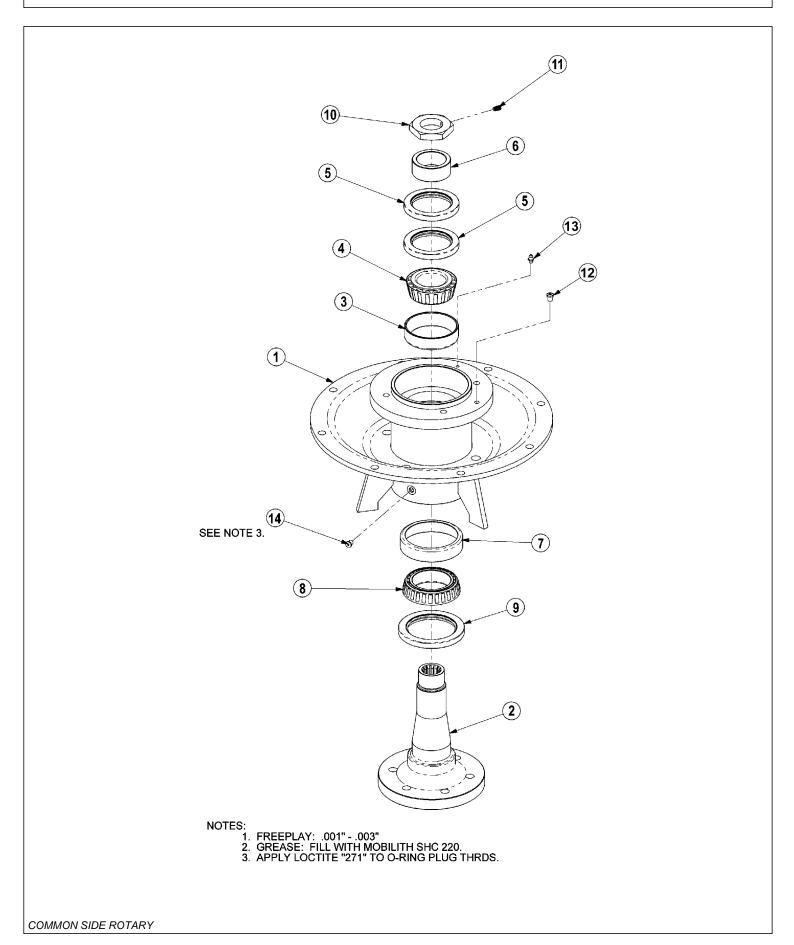
#### NOTES:

- 3. 1. FREEPLAY: .001" .003" 2. GREASE: FILL WITH MOBILITH SHC 220. 3. APPLY LOCTITE "271" TO O-RING PLUG THRDS.

## TM 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) |  |

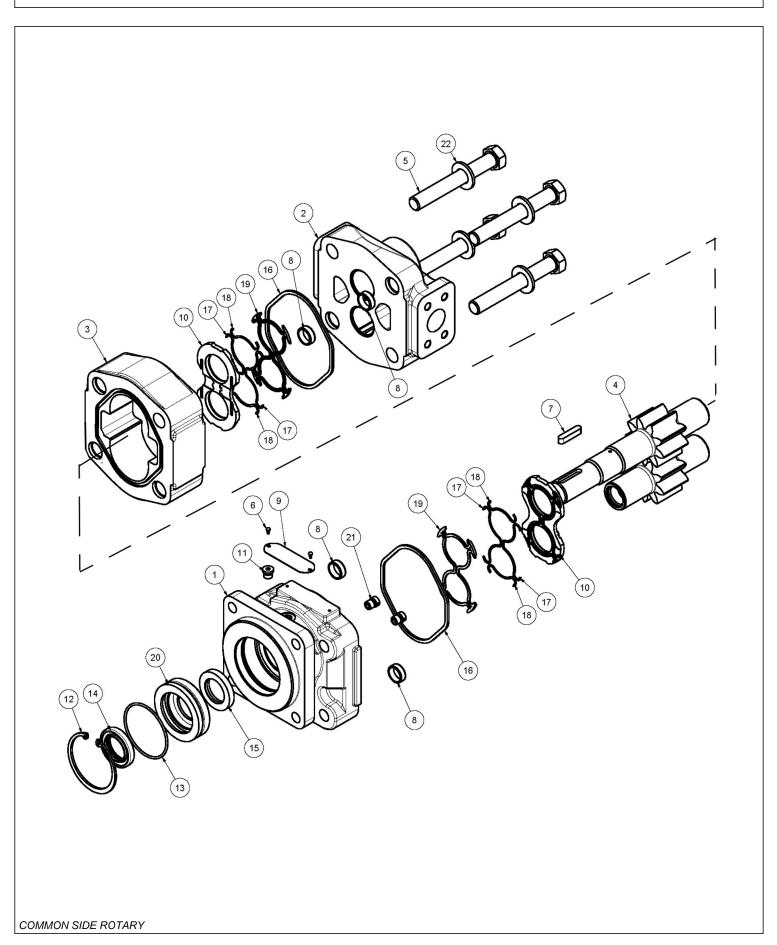
### TSR MOWER SPINDLE ASSEMBLY



## TSR MOWER SPINDLE ASSEMBLY

| ITEM | PART NO. | QTY. | DESCRIPTION               |
|------|----------|------|---------------------------|
|      | 34980    | -    | SPINDLE ASSEMBLY COMPLETE |
| 1    | 34978    | 1    | SPINDLE MOUNT             |
| 2    | 34979    | 1    | SPINDLE,TM60              |
| 3    | 6T1013   | 1    | BEARING CUP               |
| 4    | 6T1012   | 1    | BEARING CONE              |
| 5    | 6T1011   | 1    | UPPER SEAL - SET OF 2     |
| 6    | 6T1014   | 1    | BEARING ADJUSTMENT SLEEVE |
| 7    | 6T1013H  | 1    | BEARING,CUP,HD            |
| 8    | 6T1012H  | 1    | BEARING CONE,HD           |
| 9    | 6T1011H  | 1    | SEAL,LOWER,HD             |
| 10   | 34985    | 1    | NUT W/SETSCREW            |
| 11   | 6T2275   | 1    | SETSCREW,5/16" X 1/2",NC  |
| 12   | 34988    | 1    | RELIEF,1PSI,1/8" NPT      |
| 13   | 6T3207   | 1    | ZERK,1/4" X STR           |
| 14   | 06503064 | 1    | O-RING PLUG, 1/8"         |

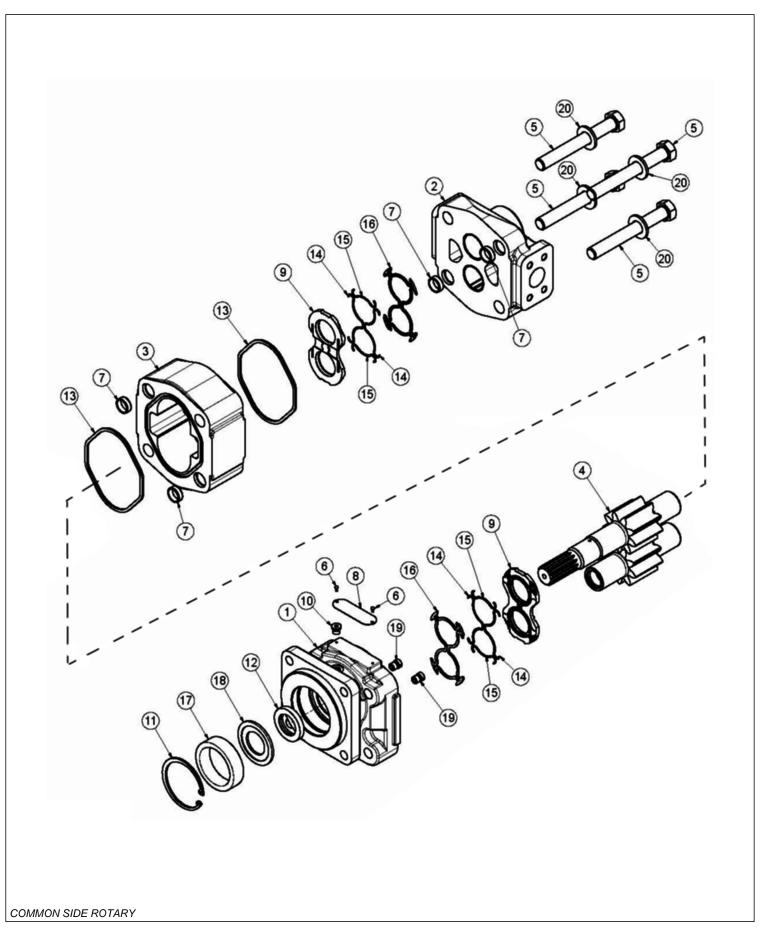
## **ROTARY MOTOR BREAKDOWN**



## **ROTARY MOTOR BREAKDOWN**

| ITEM | PART NO. | QTY. | DESCRIPTION     |
|------|----------|------|-----------------|
|      | 06504011 | -    | MOTOR ASSEMBLY  |
| 1    | 22790    | 1    | END,COVER       |
| 2    | 06504088 | 1    | HOUSING, PEC    |
| 3    | 06504111 | 1    | HOUSING, GEAR   |
| 4    | 06504026 | 1    | SET, GEAR SHAFT |
| 5    | 06504104 | 4    | CAPSCREW        |
| 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 | -    | SEAL KIT        |

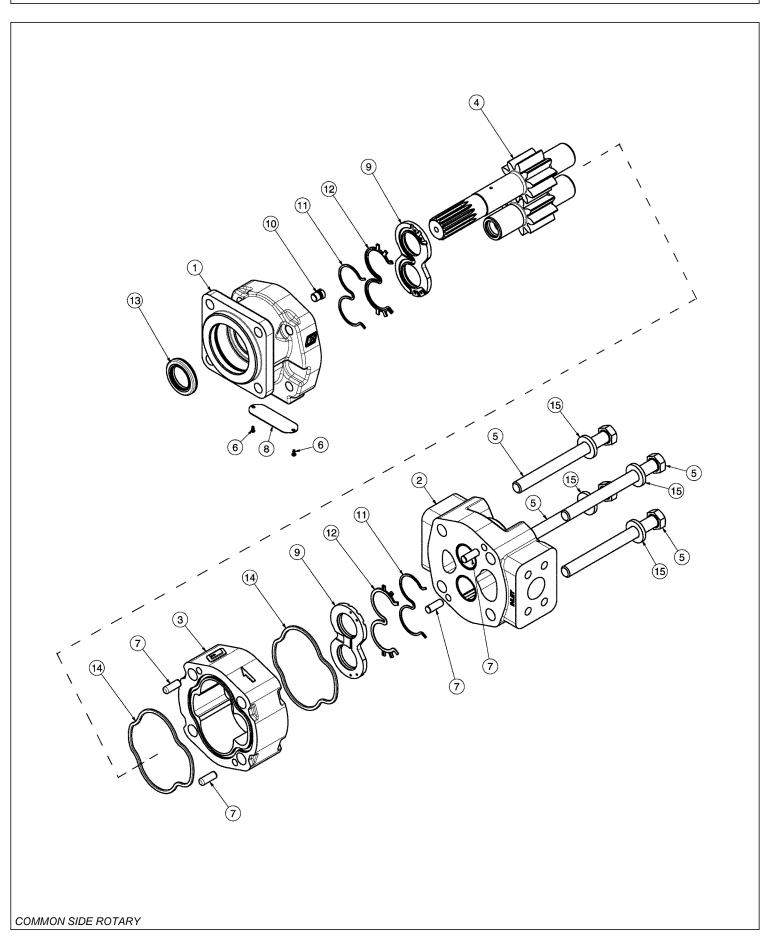
## **60IN TSR ROTARY MOTOR BREAKDOWN**



## **60IN TSR ROTARY MOTOR BREAKDOWN**

| ITEM | PART NO. | QTY. | DESCRIPTION                    |
|------|----------|------|--------------------------------|
|      | 06504016 | -    | MOTOR(M365-1 1/4SPLINE),SEALED |
| 1    | 22790    | 1    | COVER,END                      |
| 2    | 06504088 | 1    | HOUSING,PEC                    |
| 3    | 06504111 | 1    | HOUSING,GEAR                   |
| 4    | 06504110 | 1    | SET,GEAR SHAFT                 |
| 5    | 06504104 | 4    | CAP SCREW                      |
| 6    | 06504078 | 2    | SCREW,DRIVE                    |
| 7    | 06504093 | 4    | PIN,DOWEL                      |
| 8    | 06504094 | 1    | NAME PLATE                     |
| 9    | 06504095 | 2    | THRPL                          |
| 10   | 02961940 | 1    | PLUG,ODT (0.25)                |
| 11   | 6T5200   | 1    | RING,SNAP                      |
| 12   | 06504097 | 1    | SEAL,LIP                       |
| 13   | 22797    | 2    | SEAL,SQ-R                      |
| 14   | 06504098 | 4    | SEAL,SIDE CHAN                 |
| 15   | 06504099 | 4    | SEAL,END CHAN                  |
| 16   | 06504100 | 2    | SEAL,BK-UP                     |
| 17   | 06504112 | 1    | SPACER                         |
| 18   | 06504113 | 1    | RTNR,SEAL                      |
| 19   | 6T5809   | 2    | CHECK ASS'Y                    |
| 20   | 06504102 | 4    | WASHER                         |
|      | 06504022 | 1    | SEAL KIT                       |

## FRONT HYDRAULIC PUMP BREAKDOWN

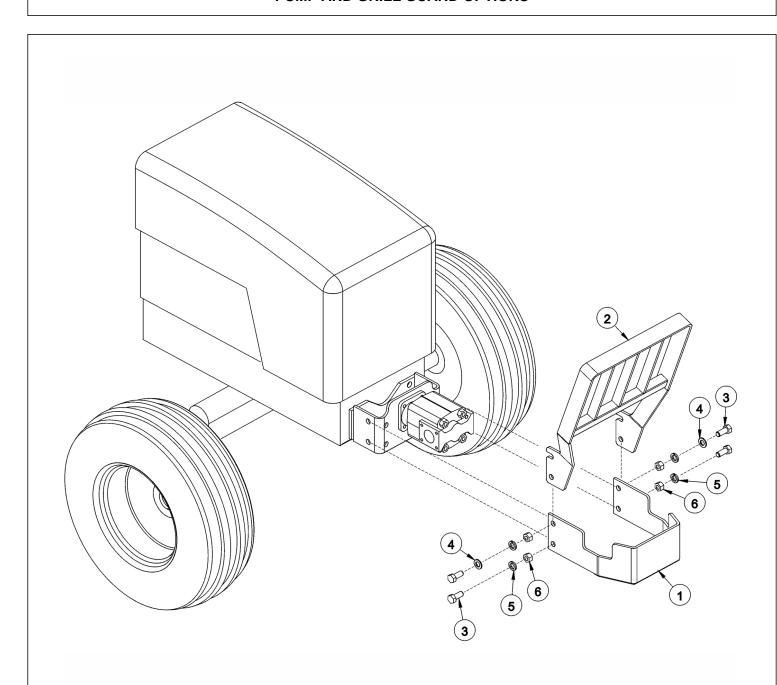


## FRONT HYDRAULIC PUMP BREAKDOWN

### Continued...

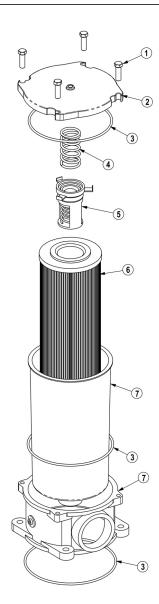
| ITEM | PART NO. | QTY. | DESCRIPTION                           |  |
|------|----------|------|---------------------------------------|--|
|      | 23152    | 1    | PUMP ASSEMBLY,1-3/4",COMPLETE         |  |
| 1    | 22766    | 1    | SHAFT END COVER                       |  |
| 2    | 22779    | 1    | 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) |  |

## **PUMP AND GRILL GUARD OPTIONS**



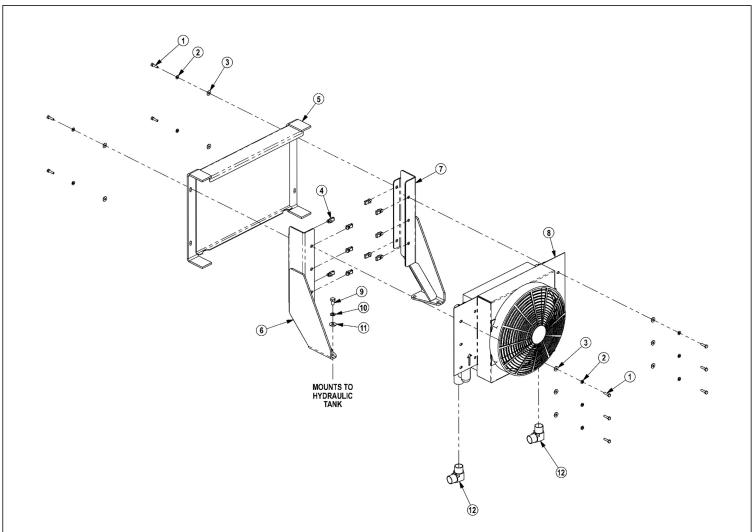
| IIEM | PART NO. | QTY. | DESCRIPTION               |
|------|----------|------|---------------------------|
| 1    | 32430    | 1    | UNIVERSAL PUMP GUARD      |
| 2    | 32737    | 1    | UNIVERSAL GRILL GUARD     |
| 3    | 21833    | 4    | CAPSCREW,3/4" X 2-1/4",NC |
| 4    | 22021    | 2    |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

## RESERVOIR TANK FILTER ASSEMBLY



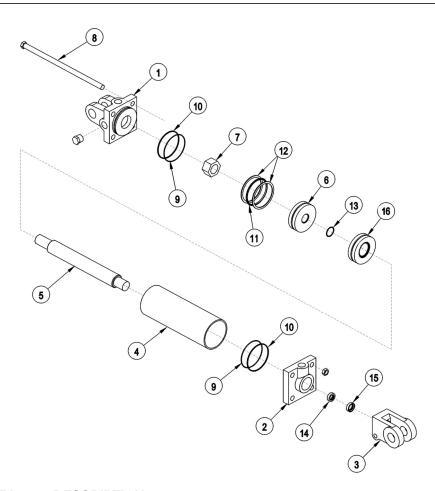
| ITEM | PART NO. | QTY. | DESCRIPTION                     |
|------|----------|------|---------------------------------|
|      | 06505044 | -    | FILTER ASSY SAE 10 MICRON       |
| 1    | 28583    | 4    | CAPSCREW,8MM X 25MM(1.25 PITCH) |
| 2    | 06505045 | 1    | COVER                           |
| 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                        |

## **COOLER ASSEMBLY**



| 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 |

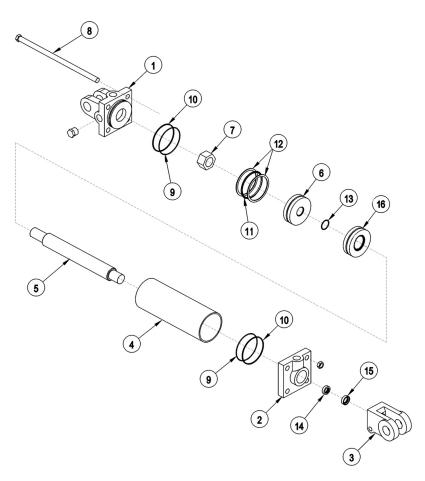
## **3IN X 10IN HYDRAULIC CYLINDER BREAKDOWN**



|   | ITEM | PART NO. | QTY. | DESCRIPTION            |
|---|------|----------|------|------------------------|
|   |      | 6T0151R  | -    | HYD. CYLINDER 3" X 10" |
|   | 1    | 6T0167   | 1    | CYLINDER BUTT          |
|   | 2    | 6T0170   | 1    | CYLINDER GLAND         |
|   | 3    | 6T0178   | 1    | CLEVIS END             |
|   | 4    | 6T0164   | 1    | CYLINDER TUBE          |
|   | 5    | 6T0161   | 1    | PISTON ROD             |
|   | 6    | 6T0173   | 1    | PISTON                 |
|   | 7    | 6T0179   | 1    | LOCKNUT                |
|   | 8    | 6T0176   | 4    | TIE ROD ASY            |
|   |      | 6T0187   | -    | SEAL KIT               |
|   | 9    |          | 2    | O - RING               |
|   | 10   |          | 2    | BACK - UP WASHER       |
|   | 11   |          | 1    | O - RING               |
|   | 12   |          | 2    | BACK - UP WASHER       |
|   | 13   |          | 1    | O - RING               |
|   | 14   |          | 1    | U - CUP                |
|   | 15   |          | 1    | WIPER                  |
| 1 |      |          |      |                        |

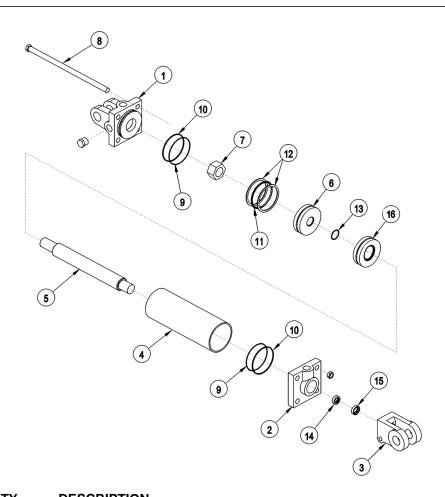
©2014 Alamo Group Inc.

## **3IN X 12IN HYDRAULIC CYLINDER BREAKDOWN**

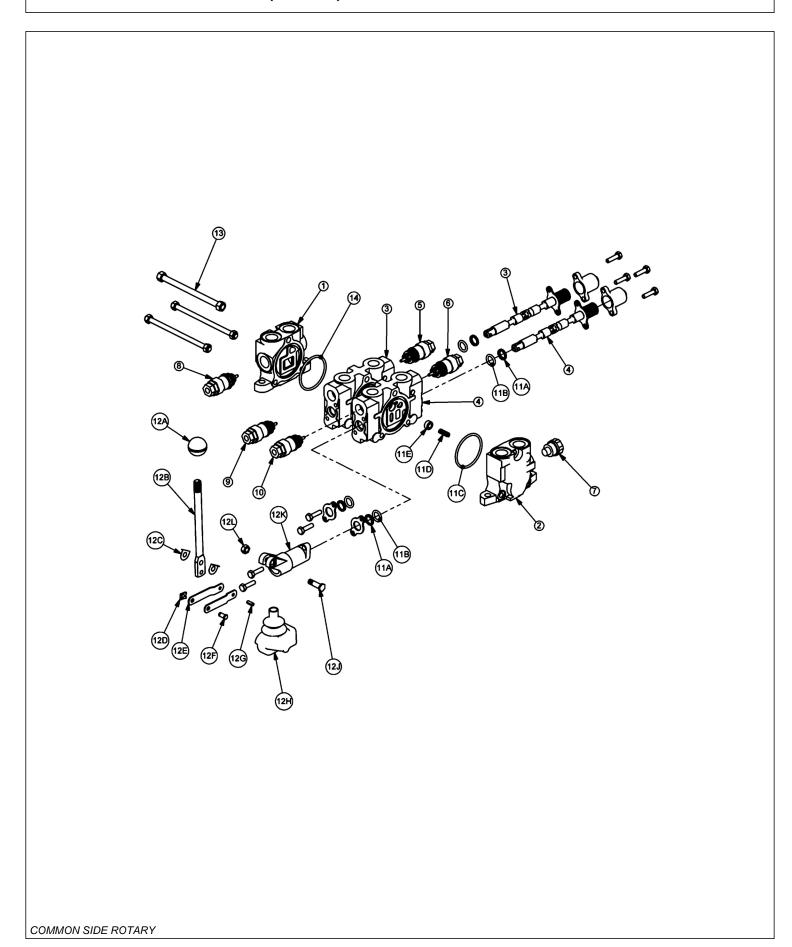


| ITEM | PART NO. | QTY. | DESCRIPTION                       |
|------|----------|------|-----------------------------------|
|      | 32215    | -    | HYD. CYLINDER 3" X 12" (STD DUTY) |
|      | 25343    | -    | HYD. CYLINDER 3" X 12" (HVY DUTY) |
| 1    | 6T0167   | 1    | CYLINDER BUTT                     |
| 2    | 6T0170   | 1    | CYLINDER GLAND                    |
| 3    | 6T0178   | 1    | CLEVIS END                        |
| 4    | 6T0204   | 1    | CYLINDER TUBE                     |
| 5    | 6T0203   | 1    | PISTON ROD                        |
| 6    | 6T0173   | 1    | PISTON                            |
| 7    | 6T0179   | 1    | LOCKNUT                           |
| 8    | 6T0205   | 4    | TIE ROD ASY                       |
|      | 6T0187   | -    | SEAL KIT                          |
| 9    |          | 2    | O - RING                          |
| 10   |          | 2    | BACK - UP WASHER                  |
| 11   |          | 1    | O - RING                          |
| 12   |          | 2    | BACK - UP WASHER                  |
| 13   |          | 1    | O - RING                          |
| 14   |          | 1    | U - CUP                           |
| 15   |          | 1    | WIPER                             |
|      |          |      |                                   |

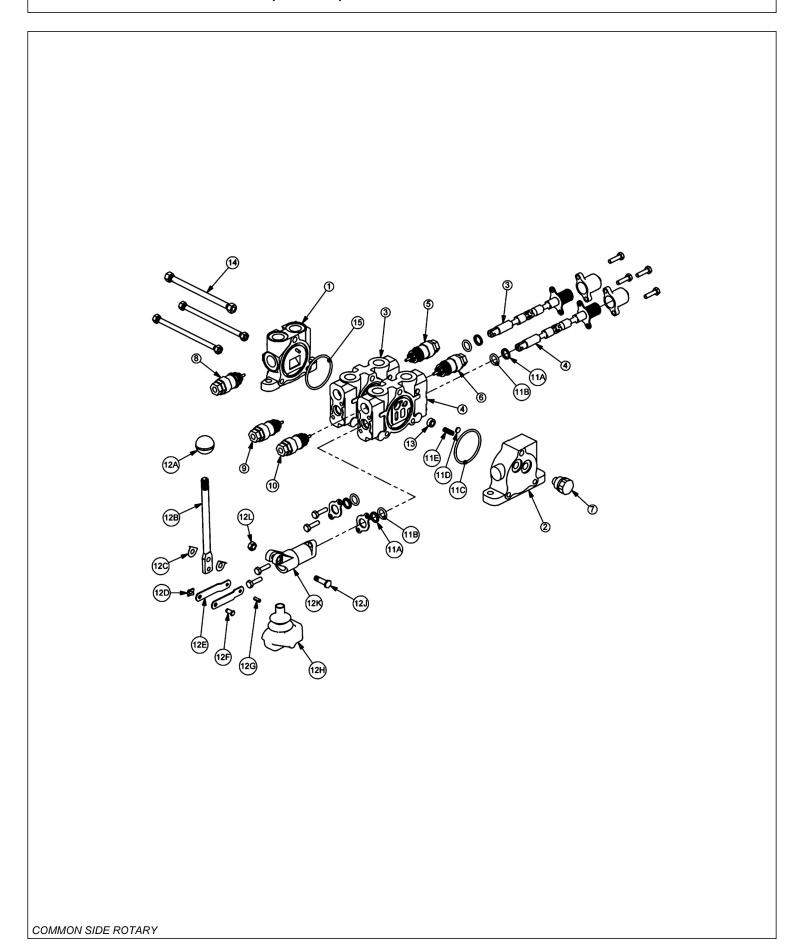
## **3IN X 18IN HYDRAULIC CYLINDER BREAKDOWN**



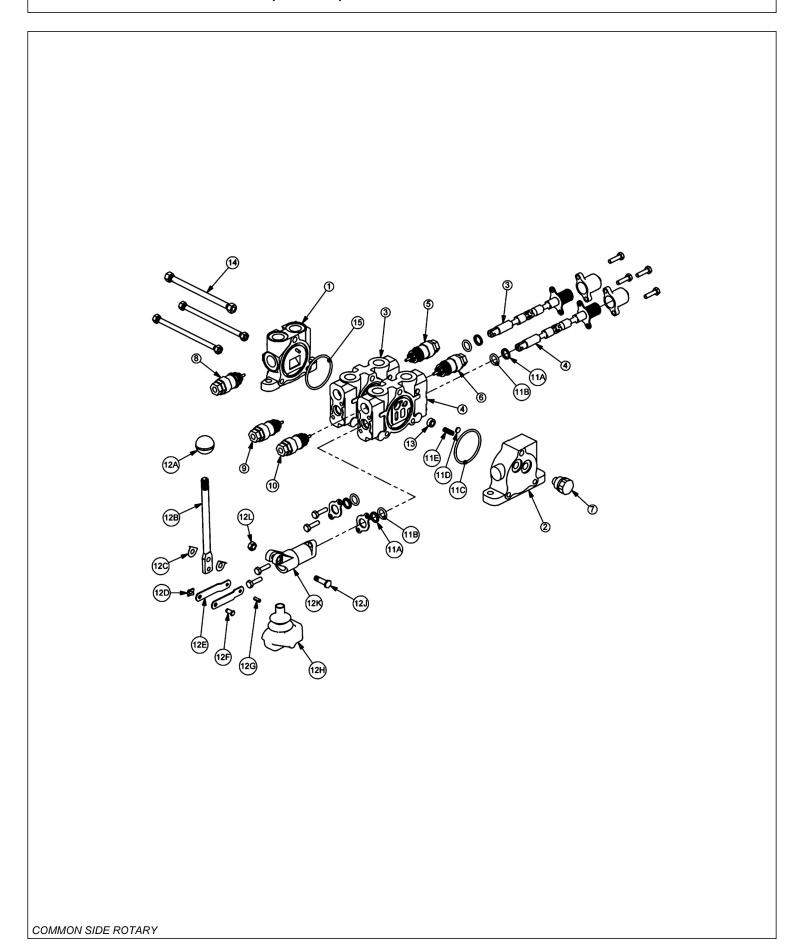
| ITEM | PART NO. | QTY. | DESCRIPTION       |
|------|----------|------|-------------------|
|      | 6T0150   | -    | CYLINDER 3" X 18" |
| 1    | 6T0167   | 1    | CYLINDER BUTT     |
| 2    | 6T0170   | 1    | CYLINDER GLAND    |
| 3    | 6T0178   | 1    | CLEVIS END        |
| 4    | 6T0165   | 1    | CYLINDER TUBE     |
| 5    | 6T0162   | 1    | PISTON ROD        |
| 6    | 6T0173   | 1    | PISTON            |
| 7    | 6T0179   | 1    | LOCKNUT           |
| 8    | 6T0177   | 4    | TIE ROD ASY       |
|      | 6T0187   | -    | SEAL KIT          |
| 9    |          | 2    | O - RING          |
| 10   |          | 2    | BACK - UP WASHER  |
| 11   |          | 1    | O - RING          |
| 12   |          | 2    | BACK - UP WASHER  |
| 13   |          | 1    | O - RING          |
| 14   |          | 1    | U - CUP           |
| 15   |          | 1    | WIPER             |
| 16   | 6T0206   | 1    | SPACER            |
|      |          |      |                   |



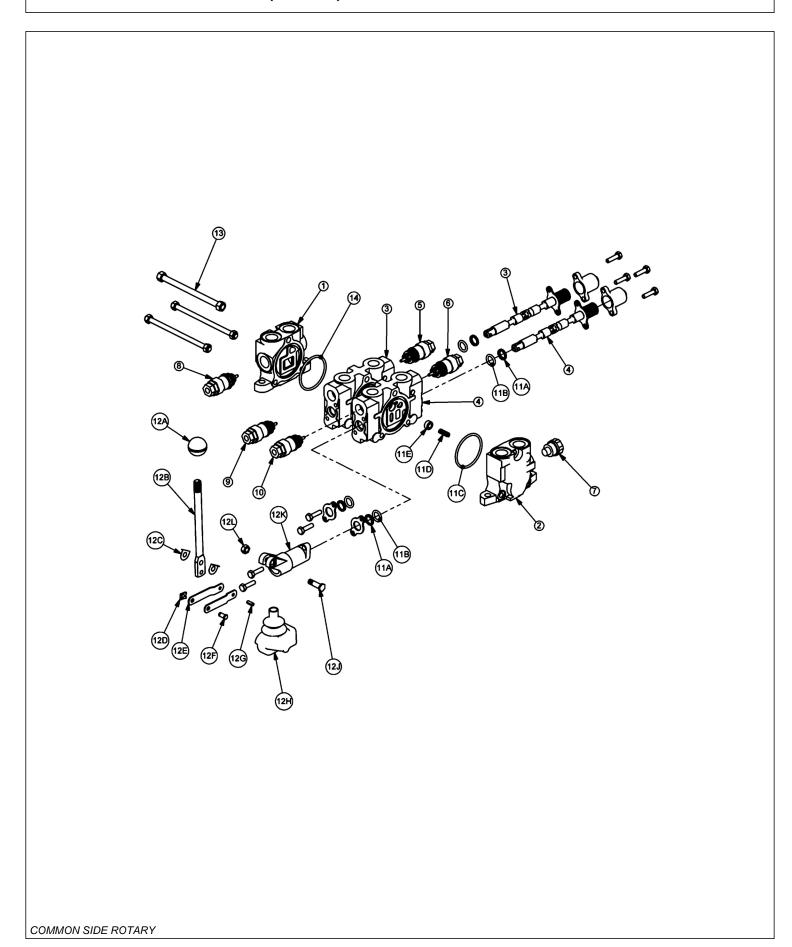
| 17584 | DADT NO  | OTV | DECODIDATION  |
|-------|----------|-----|---|
|       | PART NO. |     | DESCRIPTION   |
| 1     | TB1017S  | 1   | INLET END COVER   |
| 2     | TB1702   | 1   | END COVER, POWER BEYOND   |
| 3     | TB1017P  | 1   | VALVE SECTION (SINGLE ACTING, SPRING DETENT)                      |
| 4     | 06502091 | 1   | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) (NO AUX VALVE PORTS) |
| 5     | N/A      | -   | N/A   |
| 6     | N/A      | -   | N/A   |
| 7     | TB1017M  | 1   | SHUT-OFF PLUG   |
| 8     | TB1017E  | 1   | RELIEF VALVE, 2250 PSI  |
| 9     | TB1017M  | 1   | SHUT-OFF PLUG   |
| 10    | N/A      | -   | N/A   |
| 11    | TB1017A  | 2   | VALVE SEAL KIT (FOR ONE SECTION)                                  |
| 11A   |          | 2   | WIPER   |
| 11B   |          | 2   | O-RING SMALL  |
| 11C   |          | 1   | O-RING LARGE  |
| 11D   |          | 1   | SPRING  |
| 11E   |          | 1   | PUCKET  |
| 12    | TB1017L  | 2   | LEVER KIT (FOR ONE SECTION)                                       |
| 12A   |          | 1   | LEVER KNOB  |
| 12B   |          | 1   | LEVER   |
| 12C   |          | 2   | LEVER WASHER  |
| 12D   |          | 1   | LEVER CLIP  |
| 12E   |          | 2   | LINKAGE   |
| 12F   |          | 1   | LEVER PIN   |
| 12G   |          | 1   | ROLL PIN  |
| 12H   |          | 1   | LEVER BOOT  |
| 12J   |          | 1   | LEVER BOLT  |
| 12K   |          | 1   | LEVER DUST COVER  |
| 12L   |          | 1   | LEVER NUT   |
| 13    | TB1017X  | 1   | TIE ROD KIT   |
| 14    | 24214    | 1   | O-RING, LARGE   |
|       |          |     |   |



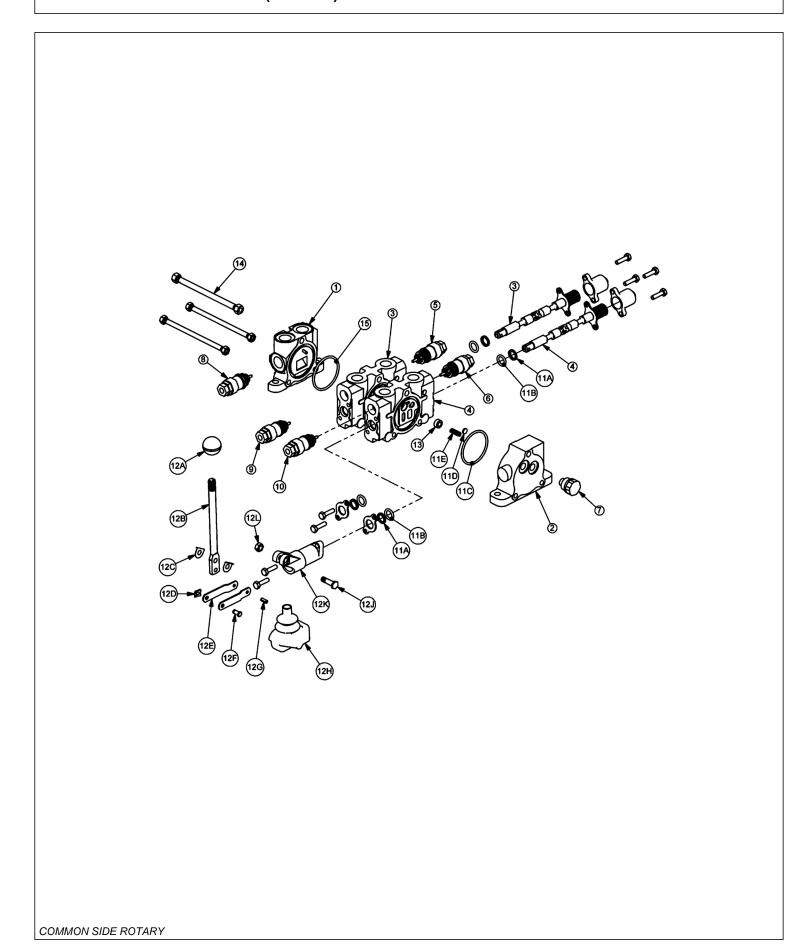
| l |      |          |      |  |
|---|------|----------|------|--|
|   | ITEM | PART NO. | QTY. | DESCRIPTION                                  |
|   | 1    | 31595    | 1    | INLET END COVER                              |
|   | 2    | 31594    | 1    | END COVER, LOAD SENSE                        |
|   | 3    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 4    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 5    | 06503067 | 1    | RELIEF PLUG                                  |
|   | 6    | 06503067 | 1    | RELIEF PLUG                                  |
|   | 7    | N/A      | -    | N/A  |
|   | 8    | 6T4209   | 1    | RELIEF PLUG                                  |
|   | 9    | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 10   | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 11   | 31593    | 2    | VALVE SEAL KIT (FOR ONE SECTION)             |
|   | 11A  |          | 2    | WIPER  |
|   | 11B  |          | 2    | O-RING SMALL                                 |
|   | 11C  |          | 1    | O-RING LARGE                                 |
|   | 11D  |          | 1    | SHUTTLE DISC                                 |
|   | 11E  |          | 1    | SPRING                                       |
|   | 12   | TB1017L  | 2    | LEVER KIT (FOR ONE SECTION)                  |
|   | 12A  |          | 1    | LEVER KNOB                                   |
|   | 12B  |          | 1    | LEVER  |
|   | 12C  |          | 2    | LEVER WASHER                                 |
|   | 12D  |          | 1    | LEVER CLIP                                   |
|   | 12E  |          | 2    | LINKAGE                                      |
|   | 12F  |          | 1    | LEVER PIN                                    |
|   | 12G  |          | 1    | ROLL PIN                                     |
|   | 12H  |          | 1    | LEVER BOOT                                   |
|   | 12J  |          | 1    | LEVER BOLT                                   |
|   | 12K  |          | 1    | LEVER DUST COVER                             |
|   | 12L  |          | 1    | LEVER NUT                                    |
|   | 13   | 31603    | 2    | COMPENSATOR                                  |
|   | 14   | TB1017X  | 1    | TIE ROD KIT                                  |
|   | 15   | 24214    | 1    | O-RING, LARGE                                |
| l |      |          |      |  |



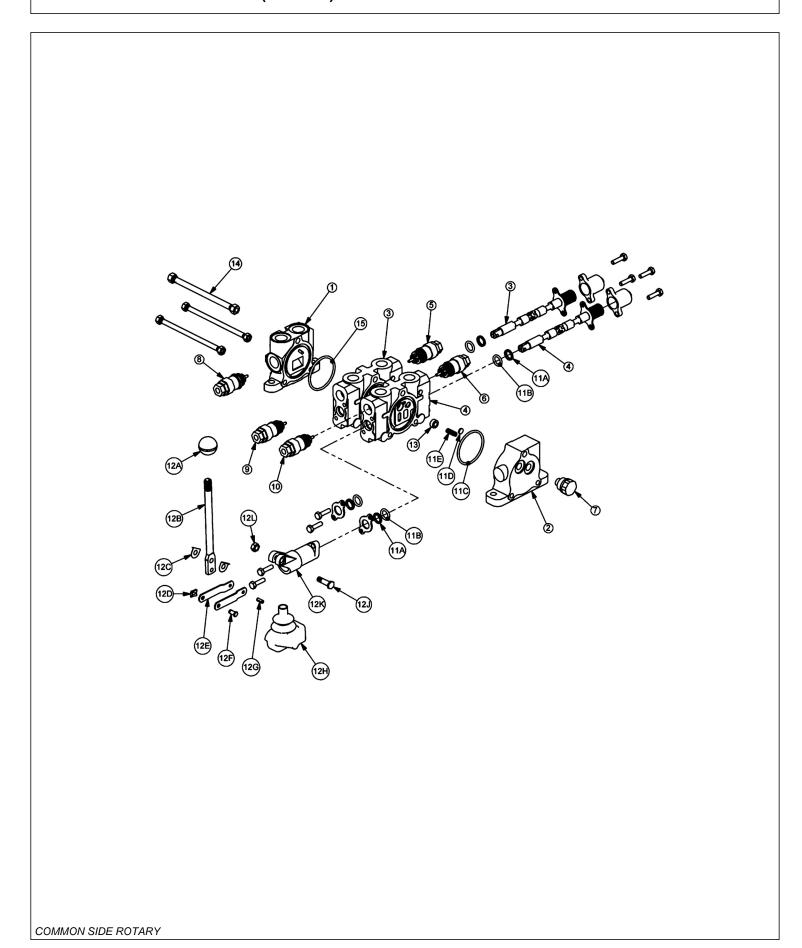
| l |      |          |      |  |
|---|------|----------|------|--|
|   | ITEM | PART NO. | QTY. | DESCRIPTION                                  |
|   | 1    | 31595    | 1    | INLET END COVER                              |
|   | 2    | 31594    | 1    | END COVER, LOAD SENSE                        |
|   | 3    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 4    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 5    | 06503067 | 1    | RELIEF PLUG                                  |
|   | 6    | 31861    | 1    | RELIEF VALVE, 360 PSI                        |
|   | 7    | N/A      | -    | N/A  |
|   | 8    | 6T4209   | 1    | RELIEF PLUG                                  |
|   | 9    | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 10   | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 11   | 31593    | 2    | VALVE SEAL KIT (FOR ONE SECTION)             |
|   | 11A  |          | 2    | WIPER  |
|   | 11B  |          | 2    | O-RING SMALL                                 |
|   | 11C  |          | 1    | O-RING LARGE                                 |
|   | 11D  |          | 1    | SHUTTLE DISC                                 |
|   | 11E  |          | 1    | SPRING                                       |
|   | 12   | TB1017L  | 2    | LEVER KIT (FOR ONE SECTION)                  |
|   | 12A  |          | 1    | LEVER KNOB                                   |
|   | 12B  |          | 1    | LEVER  |
|   | 12C  |          | 2    | LEVER WASHER                                 |
|   | 12D  |          | 1    | LEVER CLIP                                   |
|   | 12E  |          | 2    | LINKAGE                                      |
|   | 12F  |          | 1    | LEVER PIN                                    |
|   | 12G  |          | 1    | ROLL PIN                                     |
|   | 12H  |          | 1    | LEVER BOOT                                   |
|   | 12J  |          | 1    | LEVER BOLT                                   |
|   | 12K  |          | 1    | LEVER DUST COVER                             |
|   | 12L  |          | 1    | LEVER NUT                                    |
|   | 13   | 31603    | 2    | COMPENSATOR                                  |
|   | 14   | TB1017X  | 1    | TIE ROD KIT                                  |
|   | 15   | 24214    | 1    | O-RING, LARGE                                |
|   |      |          |      |  |



| ITEM | PART NO. | QTY. | DESCRIPTION                                  |
|------|----------|------|--|
| 1    | TB1017S  | 1    | INLET END COVER                              |
| 2    | TB1702   | 1    | END COVER, POWER BEYOND                      |
| 3    | TB1017P  | 1    | VALVE SECTION (SINGLE ACTING, SPRING DETENT) |
| 4    | TB1017P  | 1    | VALVE SECTION (SINGLE ACTING, SPRING DETENT) |
| 5    | N/A      | -    | N/A  |
| 6    | N/A      | -    | N/A  |
| 7    | TB1017M  | 1    | SHUT-OFF PLUG                                |
| 8    | TB1017E  | 1    | RELIEF VALVE, 2250 PSI                       |
| 9    | TB1017M  | 1    | SHUT-OFF PLUG                                |
| 10   | TB1017M  | 1    | SHUT-OFF PLUG                                |
| 11   | TB1017A  | 2    | VALVE SEAL KIT (FOR ONE SECTION)             |
| 11A  |          | 2    | WIPER  |
| 11B  |          | 2    | O-RING SMALL                                 |
| 11C  |          | 1    | O-RING LARGE                                 |
| 11D  |          | 1    | SPRING                                       |
| 11E  |          | 1    | PUCKET                                       |
| 12   | TB1017L  | 2    | LEVER KIT (FOR ONE SECTION)                  |
| 12A  |          | 1    | LEVER KNOB                                   |
| 12B  |          | 1    | LEVER  |
| 12C  |          | 2    | LEVER WASHER                                 |
| 12D  |          | 1    | LEVER CLIP                                   |
| 12E  |          | 2    | LINKAGE                                      |
| 12F  |          | 1    | LEVER PIN                                    |
| 12G  |          | 1    | ROLL PIN                                     |
| 12H  |          | 1    | LEVER BOOT                                   |
| 12J  |          | 1    | LEVER BOLT                                   |
| 12K  |          | 1    | LEVER DUST COVER                             |
| 12L  |          | 1    | LEVER NUT                                    |
| 13   | TB1017X  | 1    | TIE ROD KIT                                  |
| 14   | 24214    | 1    | O-RING, LARGE                                |

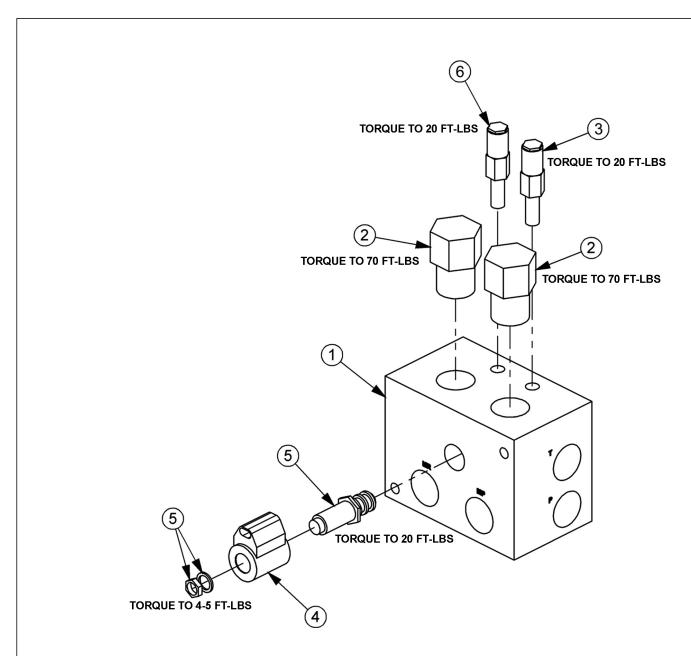


| ITEM | PART NO. | QTY. | DESCRIPTION  |
|------|----------|------|--|
| 1    | 31595    | 1    | INLET END COVER  |
| 2    | 31594    | 1    | END COVER, LOAD SENSE  |
| 3    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING)                       |
| 4    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) (REMOVE SHUTTLE DISC) |
| 5    | 06503067 | 1    | RELIEF PLUG  |
| 6    | 06503067 | 1    | RELIEF PLUG  |
| 7    | 06503068 | 1    | RELIEF PLUG  |
| 8    | N/A      | -    | N/A  |
| 9    | 31862    | 1    | RELIEF VALVE, 2175 PSI   |
| 10   | 31862    | 1    | RELIEF VALVE, 2175 PSI   |
| 11   | 31593    | 2    | VALVE SEAL KIT (FOR ONE SECTION)                                   |
| 11A  |          | 2    | WIPER  |
| 11B  |          | 2    | O-RING SMALL   |
| 11C  |          | 1    | O-RING LARGE   |
| 11D  |          | 1    | SHUTTLE DISC   |
| 11E  |          | 1    | SPRING   |
| 12   | TB1017L  | 2    | LEVER KIT (FOR ONE SECTION)  |
| 12A  |          | 1    | LEVER KNOB   |
| 12B  |          | 1    | LEVER  |
| 12C  |          | 2    | LEVER WASHER   |
| 12D  |          | 1    | LEVER CLIP   |
| 12E  |          | 2    | LINKAGE  |
| 12F  |          | 1    | LEVER PIN  |
| 12G  |          | 1    | ROLL PIN   |
| 12H  |          | 1    | LEVER BOOT   |
| 12J  |          | 1    | LEVER BOLT   |
| 12K  |          | 1    | LEVER DUST COVER   |
| 12L  |          | 1    | LEVER NUT  |
| 13   | 31603    | 2    | COMPENSATOR  |
| 14   | TB1017X  | 1    | TIE ROD KIT  |
| 15   | 24214    | 1    | O-RING, LARGE  |
| 1    |          |      |  |



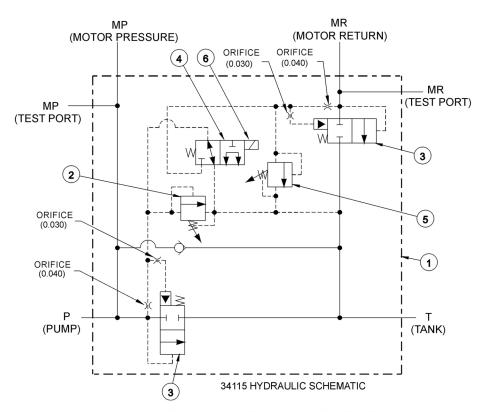
| ı |      |          |      |  |
|---|------|----------|------|--|
|   | ITEM | PART NO. | QTY. | DESCRIPTION                                  |
|   | 1    | 31595    | 1    | INLET END COVER                              |
|   | 2    | 31594    | 1    | END COVER, LOAD SENSE                        |
|   | 3    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 4    | 31597    | 1    | VALVE SECTION (DOUBLE ACTING, CENTER SPRING) |
|   | 5    | 06503067 | 1    | RELIEF PLUG                                  |
|   | 6    | 31861    | 1    | RELIEF VALVE, 360 PSI                        |
|   | 7    | 06503068 | 1    | RELIEF PLUG                                  |
|   | 8    | 6T4209   | 1    | RELIEF PLUG                                  |
|   | 9    | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 10   | 31862    | 1    | RELIEF VALVE, 2175 PSI                       |
|   | 11   | 31593    | 2    | VALVE SEAL KIT (FOR ONE SECTION)             |
|   | 11A  |          | 2    | WIPER  |
|   | 11B  |          | 2    | O-RING SMALL                                 |
|   | 11C  |          | 1    | O-RING LARGE                                 |
|   | 11D  |          | 1    | SHUTTLE DISC                                 |
|   | 11E  |          | 1    | SPRING                                       |
|   | 12   | TB1017L  | 2    | LEVER KIT (FOR ONE SECTION)                  |
|   | 12A  |          | 1    | LEVER KNOB                                   |
|   | 12B  |          | 1    | LEVER  |
|   | 12C  |          | 2    | LEVER WASHER                                 |
|   | 12D  |          | 1    | LEVER CLIP                                   |
|   | 12E  |          | 2    | LINKAGE                                      |
|   | 12F  |          | 1    | LEVER PIN                                    |
|   | 12G  |          | 1    | ROLL PIN                                     |
|   | 12H  |          | 1    | LEVER BOOT                                   |
|   | 12J  |          | 1    | LEVER BOLT                                   |
|   | 12K  |          | 1    | LEVER DUST COVER                             |
|   | 12L  |          | 1    | LEVER NUT                                    |
|   | 13   | 31603    | 2    | COMPENSATOR                                  |
|   | 14   | TB1017X  | 1    | TIE ROD KIT                                  |
|   | 15   | 24214    | 1    | O-RING, LARGE                                |
|   |      |          |      |  |

### **BRAKE VALVE ASSEMBLY**



| ITEM               | PART NO. | QTY. | DESCRIPTION                                      |  |  |
|--------------------|----------|------|--|--|--|
|                    | 06510083 | 1    | BRAKE VALVE, ASSY                                |  |  |
| 1                  | 34092    | 1    | BRAKE VALVE, BLANK                               |  |  |
| 2                  | 34094    | 2    | LOGIC ELEMENT                                    |  |  |
| 3                  | 34095    | 1    | RELIEF VALVE, 3000 PSI                           |  |  |
| 4                  | 06510095 | 1    | METRI PAK COIL                                   |  |  |
| 5                  | 34093    | 1    | CARTRIDGE, 2 POSITION, 3 WAY (WITH NUT & WASHER) |  |  |
| 6                  | 34091    | 1    | RELIEF VALVE, 2600 PSI                           |  |  |
|                    | 34096    | 2    | RELIEF SEAL KIT                                  |  |  |
|                    | 34097    | 1    | SOLENOID SEAL KIT                                |  |  |
|                    | 34098    | 2    | ELEMENT SEAL KIT                                 |  |  |
|                    |          |      |  |  |  |
|                    |          |      |  |  |  |
| COMMON SIDE ROTARY |          |      |  |  |  |

#### BRAKE VALVE HYDRAULIC SCHEMATIC



### **BRAKE VALVE TROUBLESHOOTING**

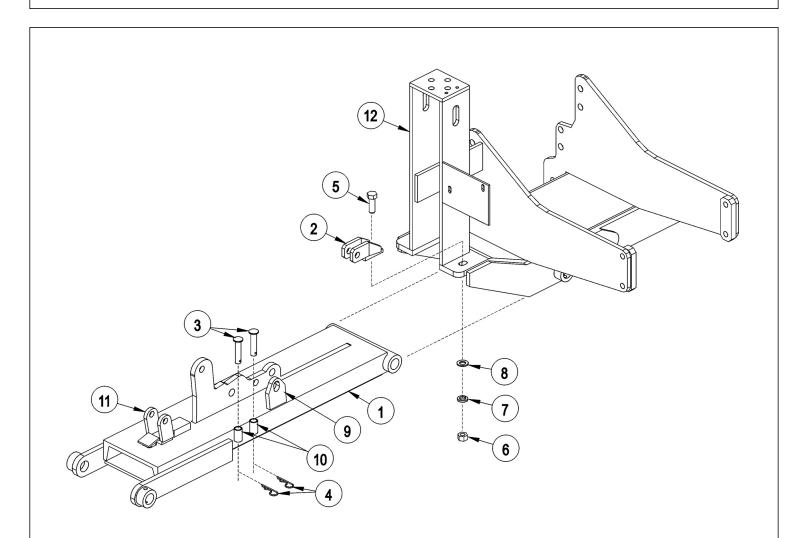
| FAILURE MODE: CI | HECK STEPS |
|------------------|------------|
|------------------|------------|

- MOWER WILL NOT START system pressure is low
   (engine not lugging).
   1 thru 6
- MOWER WILL NOT START system pressure is high
   (engine lugging). "MR" port will be high pressure.
- MOWER WILL NOT ROTATE AT FULL SPEED limited power. 3 thru 5
- MOWER BLADE WILL NOT STOP blade will not stop in proper time. 7 thru 9

#### **CORRECTIVE STEPS:**

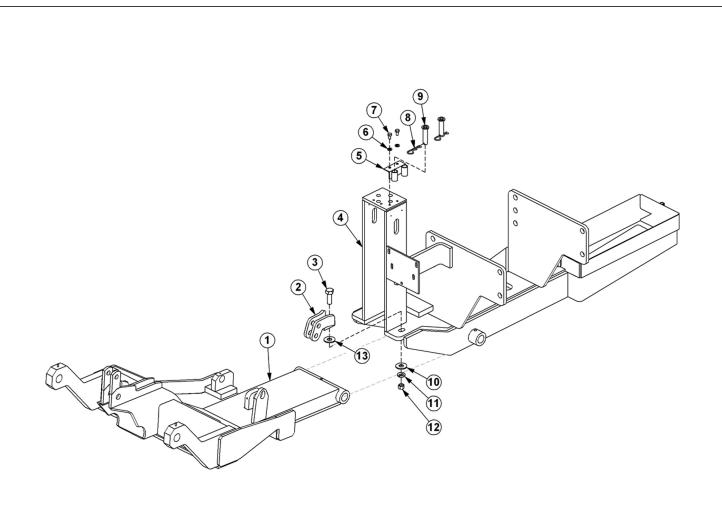
- 1. Check for voltage at solenoid (item 6), voltage must be between 10.2 volts and 13.8 volts.
- 2. Remove, inspect solenoid and cartridge (items 4, 6) for wear or contamination.
- 3. Remove, inspect logic elements near "P" port (item 3) for wear or contamination.
- 4. Remove, inspect 3000 psi relief valve (item 2) for wear or contamination.
- 5. Remove and inspect orifices near "P" port for contamination.
- 6. Remove "P" port hose and fitting, visually inspect for contamination, check ball for movement.
- 7. Remove and inspect orifices near "MR" port for contamination.
- 8. Remove, inspect 2600 psi relief valve (item 5) for wear of contamination.
- 9. Remove, inspect logic element near "MR" port (item 3) for wear or contamination.

## **CABLE DRAFT BEAM TRAVEL LOCK**



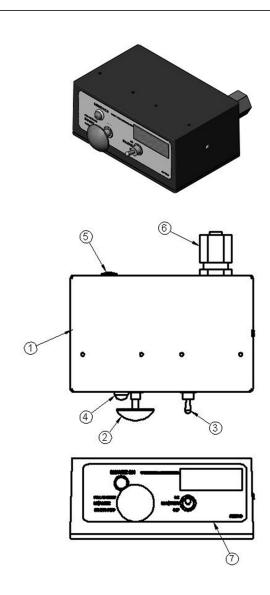
| ITEM | PART NO. | QTY. | DESCRIPTION                        |
|------|----------|------|------------------------------------|
| 1    |          | -    | CABLE DRAFT BEAM                   |
| 2    | 6T0106   | 1    | TRAVEL LOCK BRACKET                |
| 3    | 6T0107   | 2    | TRAVEL LOCK PINS 3/4" X 3 1/4"     |
| 4    | 6T3020   | 2    | R - CLIP 5/32"                     |
| 5    | 21833    | 1    | CAPSCREW 3/4" X 2 1/4"             |
| 6    | 21825    | 1    | HEX NUT 3/4"                       |
| 7    | 21993    | 1    | LOCK WASHER 3/4"                   |
| 8    | 22021    | 1    | FLAT WASHER 3/4"                   |
| 9    | 22600    | 1    | TRAVEL LOCK EAR                    |
| 10   | 22604    | 2    | PIN HOLDER                         |
| 11   | 22601C   | 1    | TRAVEL LOCK ASY                    |
| 12   |          | -    | MAIN FRAME *REFER TO PARTS SECTION |
|      |          |      |                                    |

## **COMBO DRAFT BEAM TRAVEL LOCK**



| ITEM | PART NO. | QTY. | DESCRIPTION                        |
|------|----------|------|------------------------------------|
| 1    |          | -    | COMBO DRAFT BEAM                   |
| 2    | 6T0106   | 1    | TRAVEL LOCK BRACKET                |
| 3    | 21835    | 1    | CAPSCREW,3/4" X 2-3/4",NC          |
| 4    |          | -    | MAIN FRAME *REFER TO PARTS SECTION |
| 5    | 33856    | 1    | BRKT,PIN HOLDER                    |
| 6    | 21988    | 2    | LOCKWASHER,3/8"                    |
| 7    | 21629    | 2    | CAPSCREW,3/8" X 3/4",NC            |
| 8    | 6T3020   | 2    | R-CLIP,5/32"                       |
| 9    | 6T0107   | 2    | TRAVEL LOCK PINS,3/4" X 3-1/4"     |
| 10   | 22021    | 1    | FLATWASHER,3/4"                    |
| 11   | 21993    | 1    | LOCKWASHER,3/4"                    |
| 12   | 21825    | 1    | HEX NUT,3/4",NC                    |
| 13   | 06430147 | 1    | SPACER                             |
|      |          |      |                                    |

## **SWITCH BOX**

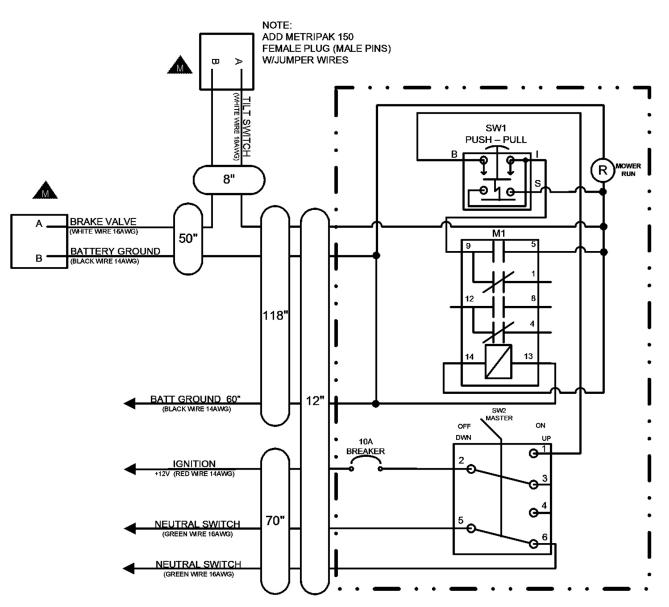


| ITEM PART NO. QTY. DESCRIPTION      |       |
|-------------------------------------|-------|
| 1 06514013 1 SWBX,ALUM,BLK,06510102 |       |
| 2 35226 1 SWITCH,MOWER,COLEHER      | SEE   |
| 3 33811 1 SWITCH,MASTER/DECK FLO    | DAT   |
| 4 6T3923 1 INDICTATOR LIGHT,ON,RE   | D     |
| 5 06514014 1 BREAKER,10A,SWBX       |       |
| 6 34540 1 STRAIN RELIEF,3/4,BLACK,  | NYLON |
| 7 06550018 1 DECAL,SWTCHBX,TM/TSF,0 | CG    |
| 8 35227 1 RELAY,DP,DT,12V,LY2F,352  | 26    |

#### **SWITCH BOX SCHEMATIC**

# 06510102 SCHEMATIC

COMMON GROUND SWITCH BOX SIDE MOWER

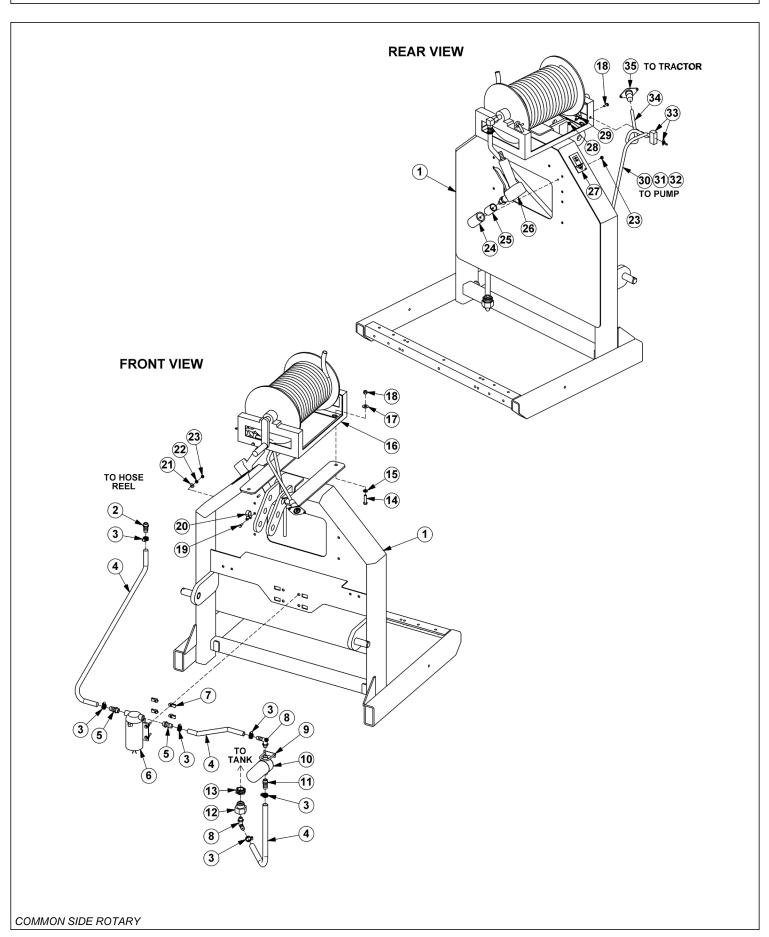


SEE DRAWING # 06515000 FOR A FULL DESCRIPTION OF ALL CONNECTORS

| NOTES 1            |
|--------------------|
|                    |
| NOTES              |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
|                    |
| COMMON SIDE ROTARY |

| FIRE SUPPRESSION SYSTEM         |  |  |  |
|---------------------------------|--|--|--|
| FIRE SUPPRESSION SYSTEM SECTION |  |  |  |
| COMMON SIDE ROTARY              |  |  |  |

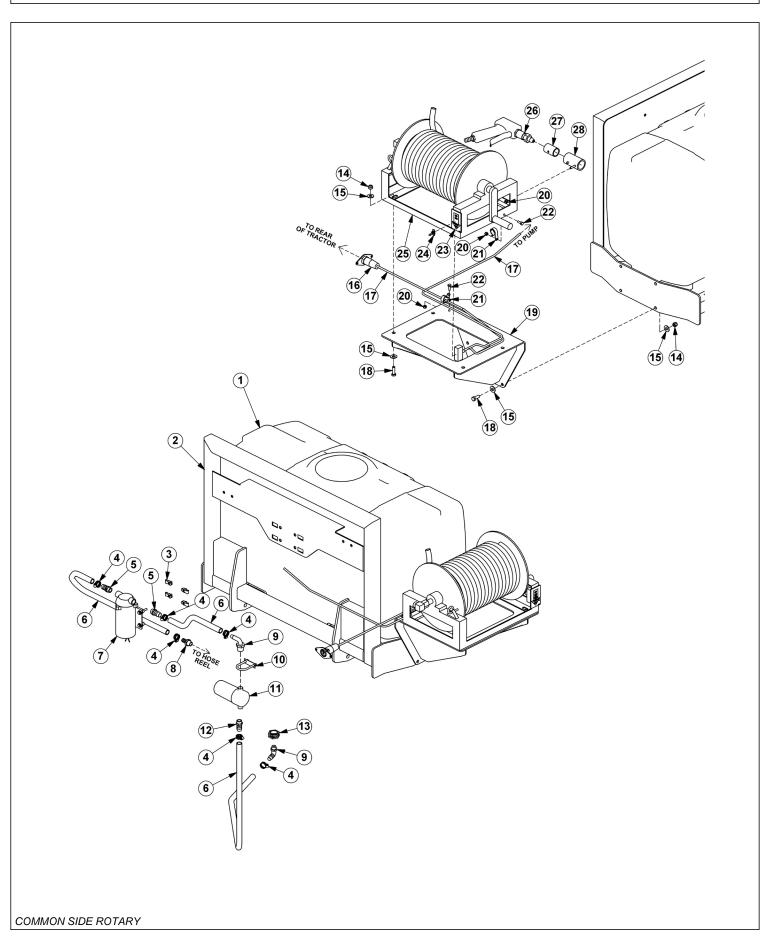
#### **FIRE SUPPRESSION 3-POINT MOUNT**



## **FIRE SUPPRESSION 3-POINT MOUNT**

| 1 |      |          |      |   |
|---|------|----------|------|---|
|   | 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                               |
| 1 |      |          |      |   |

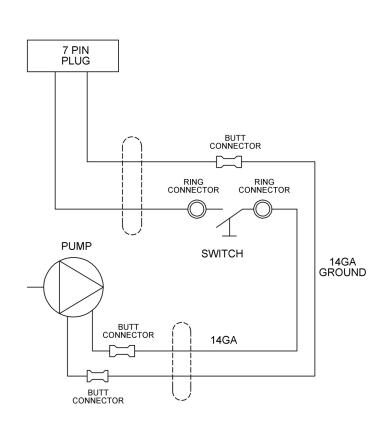
## FIRE SUPPRESSION FRONT MOUNT



## FIRE SUPPRESSION FRONT MOUNT

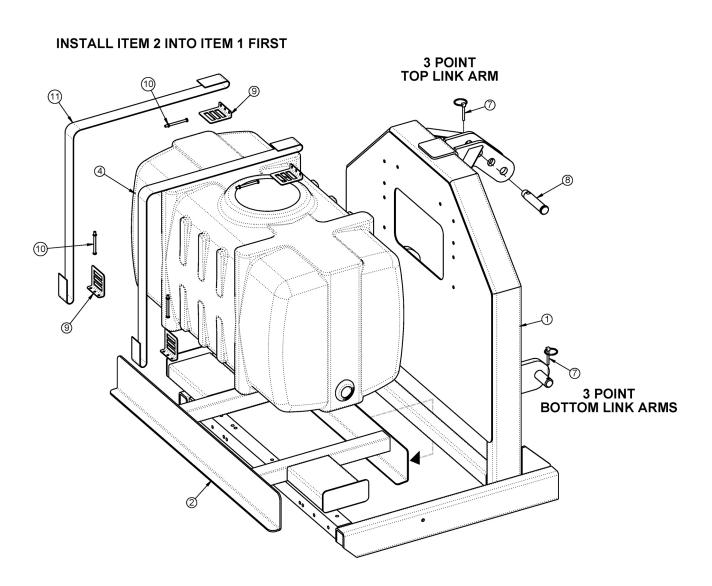
| ITEM | PART NO. | QTY. | DESCRIPTION                 |
|------|----------|------|-----------------------------|
| 1    | 06520342 | 1    | TANK,50 GALLON              |
| 2    | 06370204 | 1    | MNT,TANK,FRNT,50 GALLON     |
| 3    | 35176    | 4    | U-NUT,1/4,3/4 TO CENTER     |
| 4    | 35091 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





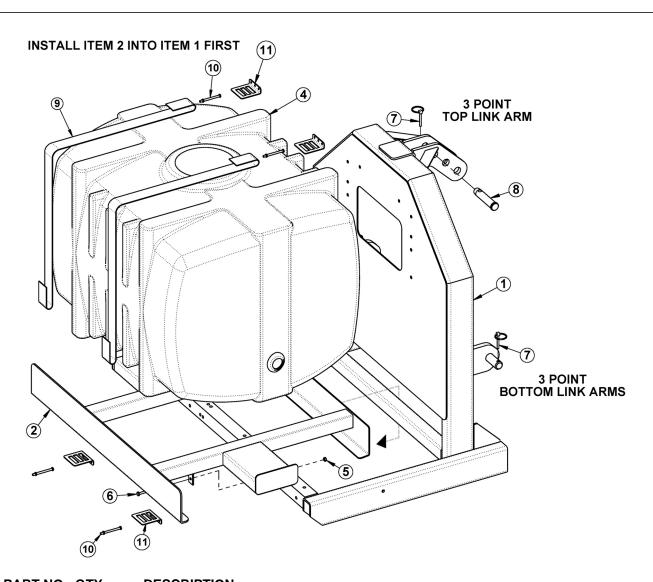
|                    | WETCUT |         |
|--------------------|--------|---------|
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        | WETCUT  |
|                    |        | SECTION |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
|                    |        |         |
| COMMON SIDE ROTARY |        |         |

#### **WETCUT 50 GALLON TANK - 3PNT MOUNT**



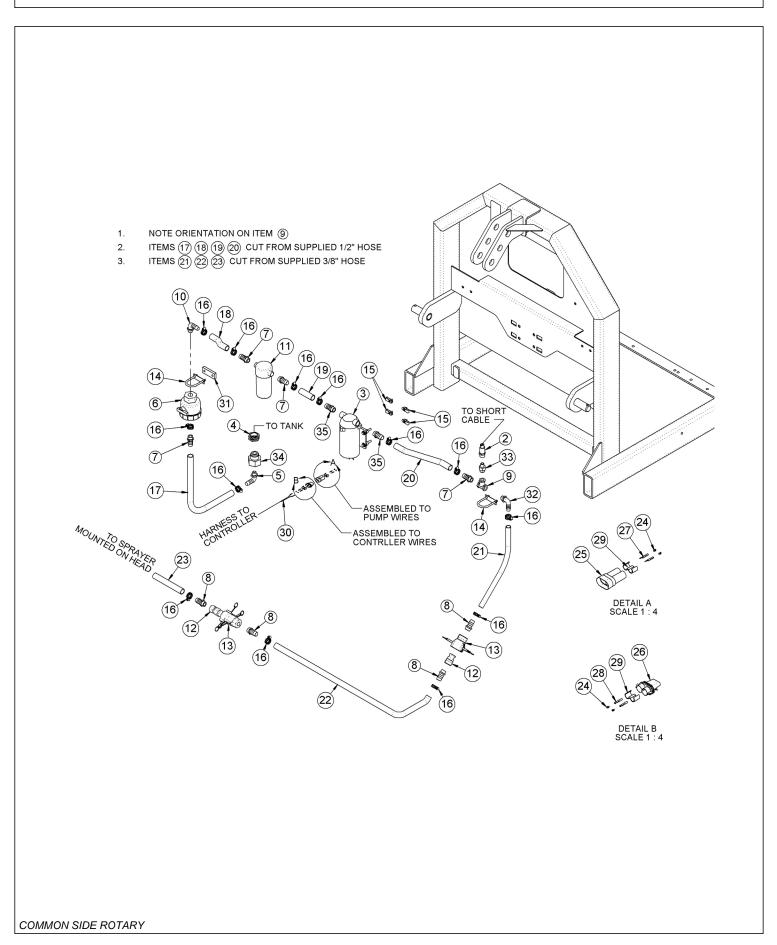
| ITEM | PART NO. | QTY. | DESCRIPTION                  |
|------|----------|------|------------------------------|
| 1    | 06370128 | 1    | MNT,3PNT,UNI                 |
| 2    | 06370136 | 1    | MNT,TANK,50GAL,WETCUT        |
| 4    | 06520342 | 1    | TANK,50GA.,WETCUT            |
| 7    | RD1032   | 3    | PIN,LYNCH 1/4" X 2"          |
| 8    | TB1036   | 1    | PIN,SEC BOOM SWIV 1X4-11/16" |
| 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 1X4-11/16" |
| 9    | 06520345 | 2    | STRAP,TANK,WETCUT            |
| 10   | 06520344 | 4    | BOLT,STRAP,TANK,WETCUT       |
| 11   | 06520343 | 4    | ANCHOR,STRAP,WETCUT          |
|      |          |      |                              |

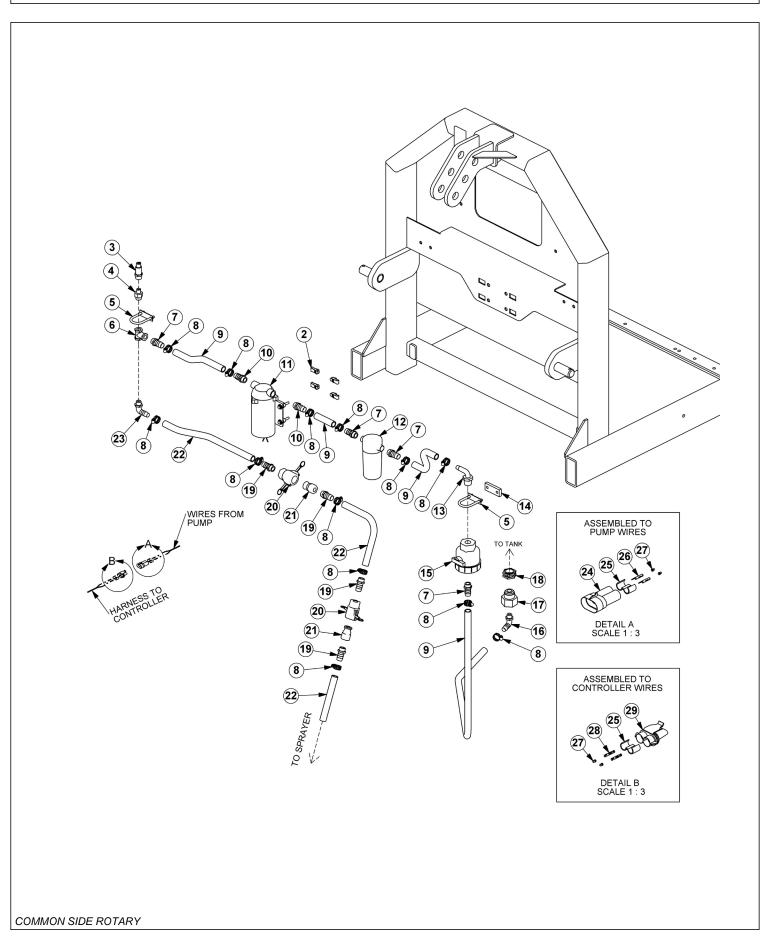
#### **WETCUT 3PNT PLUMBING - 50IN MOWERS**



## WETCUT 3PNT PLUMBING - 50IN MOWERS

| 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                      |
|         |          |      |   |

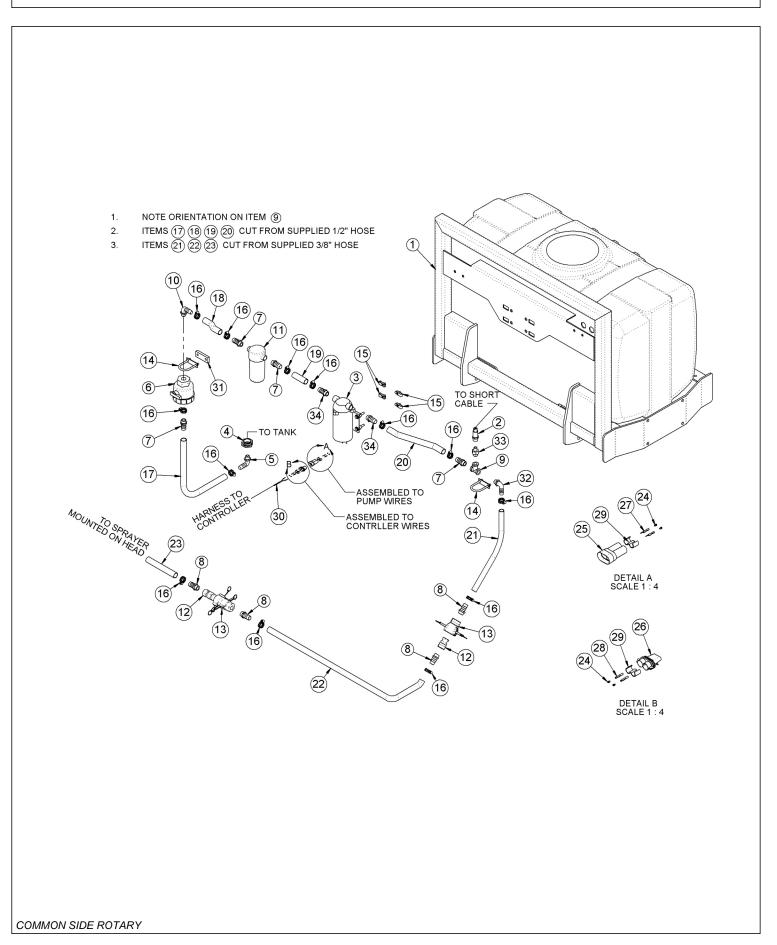
#### **WETCUT 3PNT PLUMBING - LARGE MOWERS**



## **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                    |
|      |          |      |   |

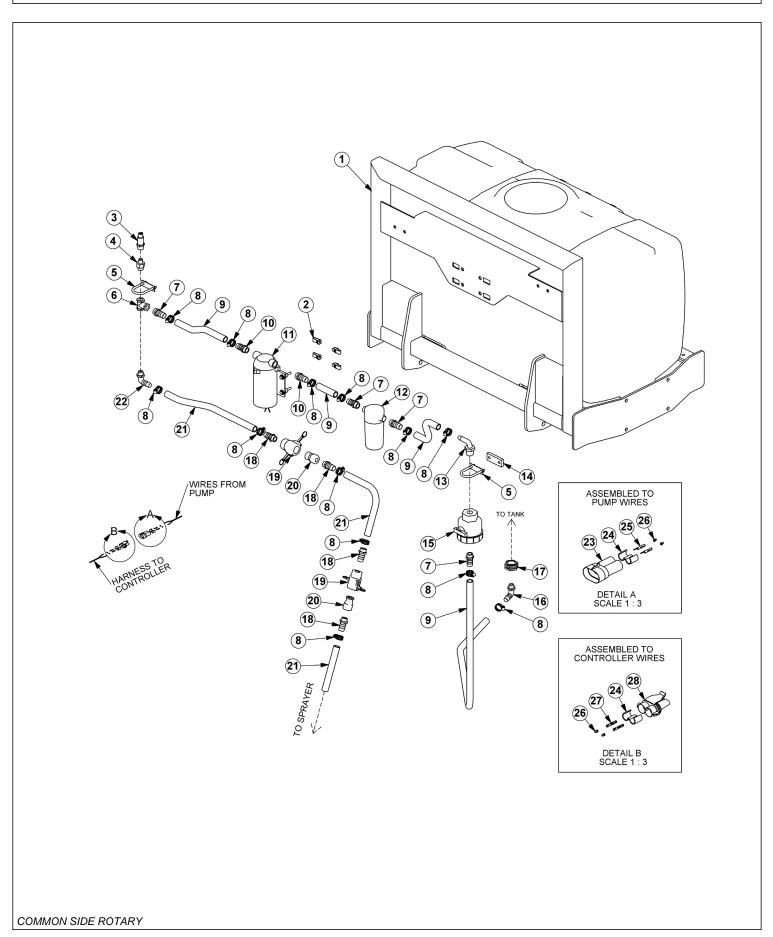
#### **WETCUT FRONT PLUMBING - 50IN MOWERS**



## **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         |
|         |          |      |                                   |

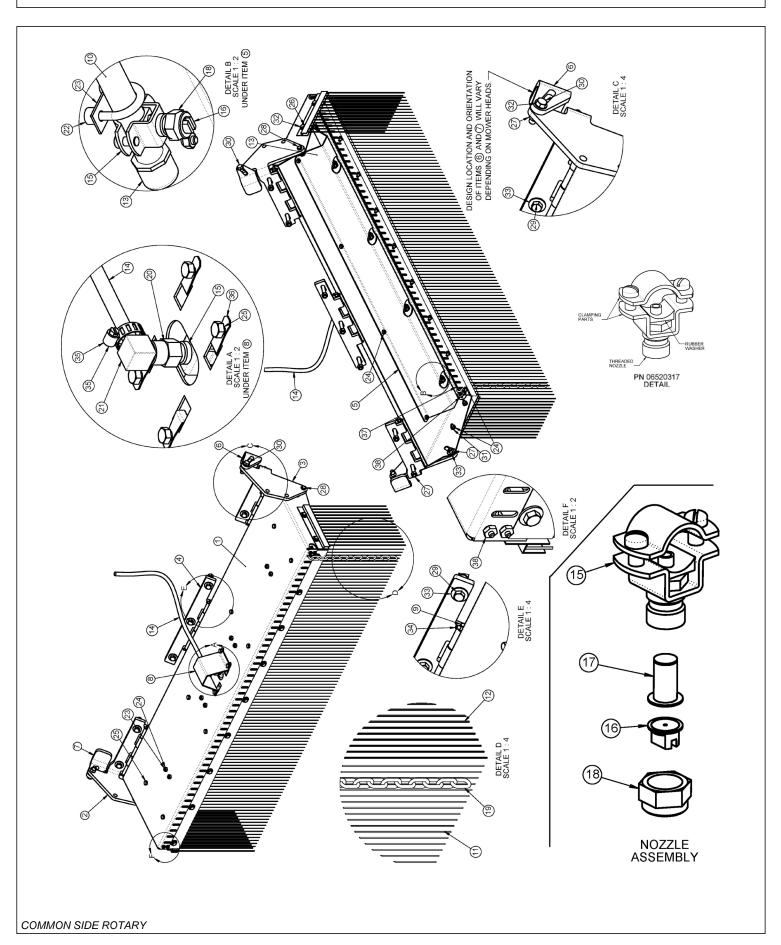
#### **WETCUT FRONT PLUMBING - LARGE MOWERS**



## **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**

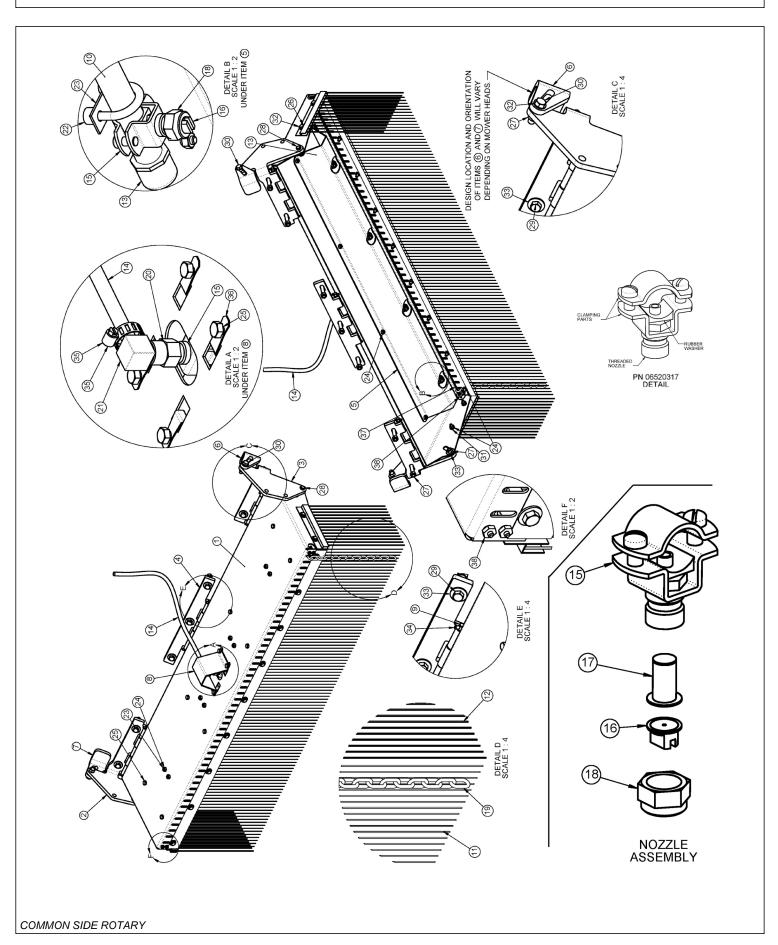


#### **WETCUT 50IN SPRAYER HEAD ASSEMBLY**

#### Continued...

| 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**

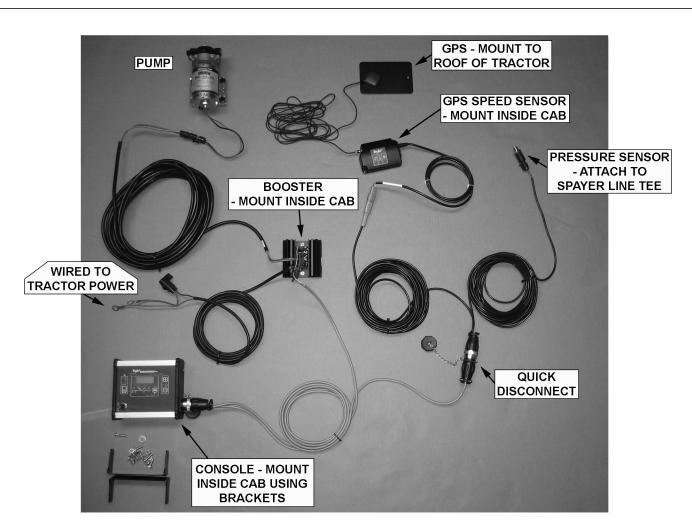


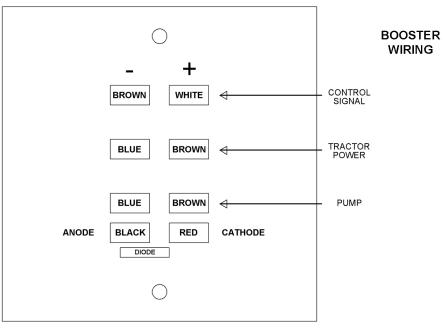
#### **WETCUT 60IN SPRAYER HEAD ASSEMBLY**

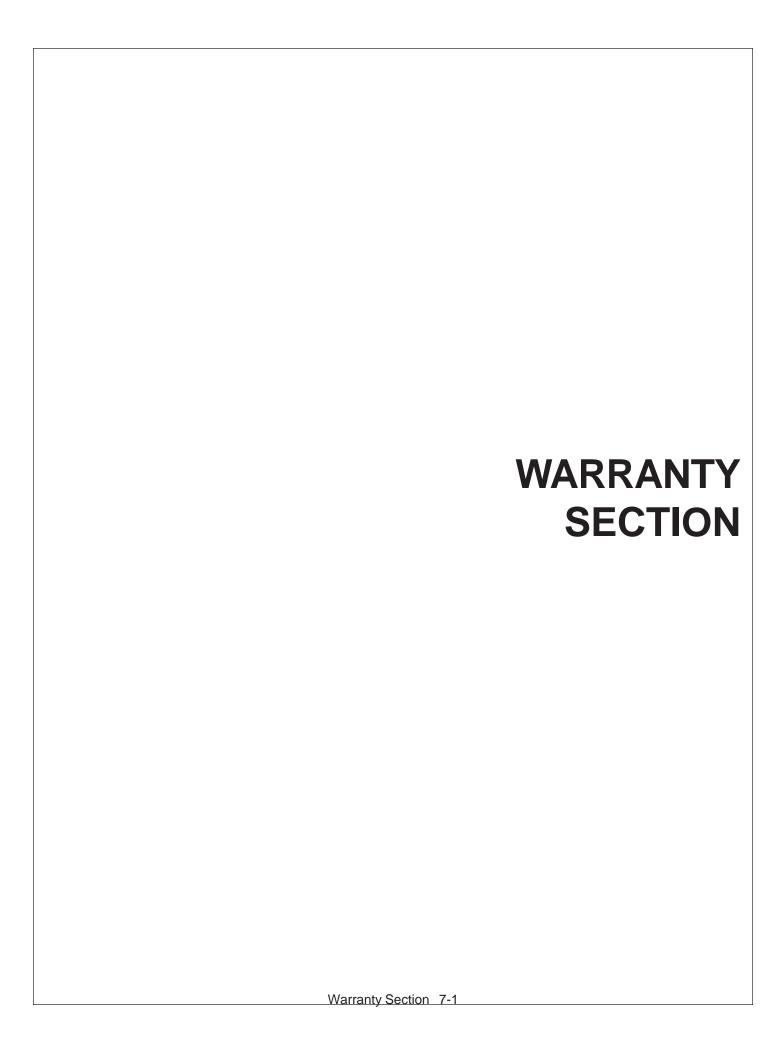
#### Continued...

| 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 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

