



BENGAL BRUTE ASSEMBLIES

JD6110-30M/R T4F

Current as of 03/31/2021

PARTS LISTING WITH MOUNTING AND OPERATING INSTRUCTIONS

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

06011037

TO THE OWNER / OPERATOR / DEALER

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BEFORE YOU START!! U 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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



DANGER

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

| | | | |
|-----------|---|--|---|
| <p>1.</p> | <p>2. NO RIDERS. NO CHILDREN OPERATORS.</p> | <p>3. USE SAFETY SHOES, HARD HAT, SAFETY GLASSES, SEAT BELTS, ROPS & OPS</p> | <p>4. BLOCK UP SECURELY BEFORE WORKING UNDER.</p> |
|-----------|---|--|---|

- 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
- 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.
- 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.
- 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
- 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.
- 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 rollover may cause serious injury or death.

| | | | |
|--------------------------------------|--|--|--|
| <p>5. TRANSPORT SAFELY, LOCK UP.</p> | <p>6. USE SMV, LIGHTS, & REFLECTORS.</p> | <p>7. DO NOT OPERATE WITH CUTTER OR WING RAISED.</p> | <p>8. DO NOT MOUNT OR DISMOUNT WHILE MOVING.</p> |
|--------------------------------------|--|--|--|

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.



Instructions for Boom Mower connection JD 6000M Series



Complete Boom mower.
Shown disconnected.



Take out 4 bolts in stow plate
and slide to far right, this is
the working position for stow.



Lift boom Swivel with over head
hoist and align with pin.



Attach 1/4" lines so that controls can be used
to help lift and line up boom arm fitting.

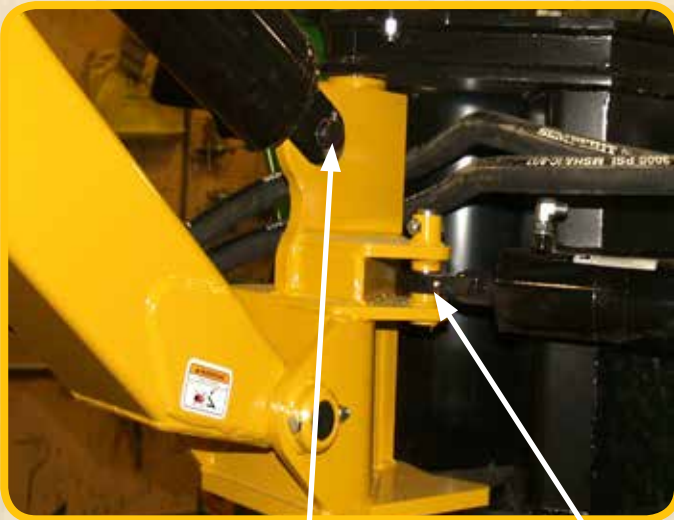


Connect end of primary boom arm to
swivel with horizontal pin.
Total time for assembly is 1 1/2 hours.



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Connect boom arm cylinder to top tab on swivel. Connect swing cylinder with vertical pin located on right side of swivel.



Attach hose clamp to side of swivel.



Run 1" lines on bottom 2 spaces of clamp and run 1/4" lines on top space. Measurement is 38" for 1" lines, clamp to clamp. Match 1/4".



Connect 1" hoses. Wrap hoses in teflon wrap. Wrap is located in the cab of tractor.



Connection complete - front side view.



Connection complete - back side view. **Approx. 4 hrs shop time to complete assembly.**

FORWARD

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

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

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

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

- Classify the problem
 - Hydraulic, electrical or mechanical - Read the trouble shooting section
 - Tractor or Truck chassis - Contact vehicle dealer

- If unable to correct the problem yourself, contact your local Tiger Dealer after gathering:
 - Machine model _____
 - Serial number _____
 - Dealer name _____
 - Detailed information about the problem including results of troubleshooting

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

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

MANUFACTURED BY:

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TABLE OF CONTENTS

| | |
|----------------------------------|---|
| SAFETY SECTION_____ | 1 |
| ASSEMBLY / MOUNTING SECTION_____ | 2 |
| OPERATION SECTION_____ | 3 |
| MAINTENANCE SECTION_____ | 4 |
| PARTS SECTION_____ | 5 |
| COMMON PARTS SECTION_____ | 6 |
| WARRANTY INFORMATION_____ | 7 |



1012

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.



SAFETY SECTION

Safety Section 1-1

SAFETY

GENERAL SAFETY INSTRUCTIONS AND PRACTICES

A 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 Implement. 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 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 faced when operating this equipment.

Practice all usual and customary safe working precautions and above all--- remember safety is up to YOU. Only YOU 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 and convenient operation or repair.*

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 this Manual and in the Safety Messages on the implement. Always follow the instruction in this manual and use good common sense to avoid hazards.



NOTE: *If you want a translation of this safety section in one of the following Languages, please contact: Translations at 1502 E. Walnut Street Seguin, TX 78155; Fax: (830) 372-9529; Safety Section Translations are available in Spanish, Portuguese, French, German, Russian. PN GS01*

SAFETY

SAFETY

Operator Safety

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Read and understand Operator's Manual | Always wear Safety Glasses | Wear Hard Hat Safety Shoes | Never use Drugs or Alcohol when operating equipment | Wear Safety Vest when operating on or near roads |

WARNING

TO AVOID SERIOUS INJURY OR DEATH DO THE FOLLOWING:

- **READ, UNDERSTAND** and **FOLLOW** Operator's Manual instructions, Warnings and Safety Messages.
- **WEAR SAFETY GLASSES**, safety shoes, hard hat, hearing protection and gloves when operating or repairing equipment
- **WEAR** appropriate breathing respirator when operating in dusty conditions to avoid respiratory diseases.
- **DO NOT WEAR** loose clothing or jewelry to avoid rotating parts entanglement injury.
- **DO NOT USE DRUGS** or **ALCOHOL** before or while operating equipment.
- **DO NOT ALLOW** anyone to operate equipment under the influence of drug or alcohol.
- **CONSULT** medical professional for medication impairment side effects.
- **STAY CLEAR** of hot surfaces such as Mufflers, hydraulic pumps, valves and tanks.
- **STAY ALERT**, prolonged operation can cause fatigue, **STOP** and **REST**.

GENERAL OPERATING SAFETY

VISIBILITY CONDITIONS WHEN MOWING:

- **OPERATE IN DAYLIGHT** or with lights that gives at least 100 yards clear visibility.
- **BE ABLE TO SEE** and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects.
- Avoid backing up while mowing, vision may be limited, severe damage or injury can occur.
- **DO NOT** run tractor in enclosed building without adequate exhaust ventilation.

GROUND SPEED WHEN MOWING:

- **NORMAL SPEED** range is between 1 to 2 mph(1-3 kph).
- **ADJUST MOWING SPEED** for terrain conditions and grass type, density and cut height.
- **REDUCE MOWING SPEED** when near steep slopes, ditches, drop-offs, overhead obstructions, power lines and to avoid debris and foreign objects.

TRACTOR and MOWER

- **DO NOT** operate the tractor or mower unless the equipment is maintained and operating properly.
- **DISCONTINUE OPERATION** if tractor or mower electrical and hydraulic controls do no function properly.
- **DISCONTINUE OPERATION** of the tractor if the braking or steering systems do not function properly.
- **DO NOT** operate the tractor or mower if there are any hydraulic leaks.

INSECT INFESTATION

- **DO NOT** operate in areas where bees or insects may attack unless you **WEAR PROTECTIVE CLOTHING** or use enclosed tractor cab.

PTO SPEED:

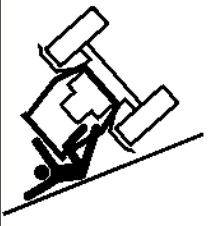
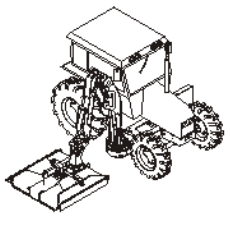

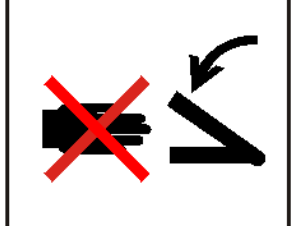

- **DO NOT EXCEED IMPLEMENT RATED PTO SPEED**
- **AVOID** exceeding rated PTO speeds that may result in broken drivelines or blade failures.

SAFETY SIGNS:

- **REPLACE** missing, damaged or unreadable safety signs immediately. *PN OSBM-01*

SAFETY

CRUSHING HAZARDS

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Crushing injury from roll over | Use Cab Tractor With Boom Mowers | Always wear seatbelt | Pinch Point Hazard Keep Hands and body parts clear of pinch points | Crushing injury from boom or mower head falling |



TO AVOID SERIOUS INJURY OR DEATH FROM FALLING OFF TRACTOR, EQUIPMENT RUN OVER, ROLLOVER AND CRUSHING BY FALLING WING OR IMPLEMENT:

- USE ROPS and SEAT BELT equipped tractors for mowing operations.
- KEEP ROPS lock in up position.
- ALWAYS BUCKLE UP seat belt when operating tractor and equipment.
- ONLY OPERATE tractor and equipment while seated in tractor seat.

WHEN RAISING BOOM MOWER:

- Raise or lower ONLY WHILE SEATED in tractor seat with seat belt buckled.
- KEEP BYSTANDERS CLEAR of area TO AVOID crushing.
- KEEP sufficient clearance around implement and wings TO AVOID contacting buildings or overhead power lines.

LIFTED Equipment can fall from mechanical or hydraulic failure or inadvertent Control Lever movement.



TO AVOID EQUIPMENT FALLING while working near or under lifted boom, components and Mower Head:

- SECURELY SUPPORT or block up raised equipment, wings and components.
- BLOCK UP and securely support equipment before putting hands, feet or body under raised equipment or lifted components.
- KEEP BYSTANDERS CLEAR of raised boom or mower head until securely blocked up.

WHEN PARKING Implement and Tractor:

- LOWER Mower Head to the ground or BLOCK lifted parts before leaving equipment.
- NEVER leave implement unattended in a raised position.

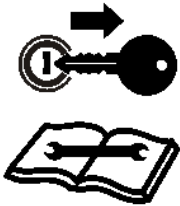





TO AVOID CHILDREN FALLING OFF OR BEING CRUSHED BY EQUIPMENT:

- NEVER ALLOW children to play on or around Tractor or Implement.
- DO NOT operate without operator CAB or OVERHEAD protection. Falling limbs and debris can cause injuries. *PN CHBM-01*

SAFETY

CONNECTING OR DISCONNECTING IMPLEMENT SAFETY

| | | | |
|---|---|---|---|
|  |  |  |  |
| <p>Stop Tractor Remove Key Read Manual</p> | <p>Crushing Hazard Do Not get under boom when connecting mower head to boom</p> | <p>Stability Hazard Ensure 20% of tractor weight is on front wheels</p> | <p>Stability Hazard Ensure 1500lbs down force on left tire with boom extended</p> |



TO AVOID SERIOUS INJURY OR DEATH FROM BEING CRUSHED BY TRACTOR OR IMPLEMENT:

WHEN connecting mower head to the boom:

- **KEEP BYSTANDERS AWAY** from tractor and mower.
- Ensure there is enough room to lift and swing the boom with out hitting objects

BEFORE connecting and disconnecting the mower head or boom:

- **STOP TRACTOR ENGINE**, place transmission into park, engage parking brake and remove key.

WHEN connecting and disconnecting the mower head or boom:

- **DO NOT** crawl or walk under raised mower head or boom. (*Refer to Instructions in Operation Section*)

WHEN CONNECTING IMPLEMENT DRIVELINE:(If equipped)

TO AVOID implement driveline coming loose during operation:

- **LUBRICATE** yoke spring locking collar to ensure it freely slides on PTO shaft.
- **SECURELY** seat yoke locking balls in PTO shaft groove.
- **PUSH** and **PULL DRIVELINE** on both the tractor and implement **PTO SHAFTS** to ensure it is **SECURELY ATTACHED**.

TO AVOID broken driveline during operations:

- **CHECK** driveline for proper length between PTO shaft and implement gearbox shaft. (*Refer to Instructions in Operation Section*)
- Drivelines too short can pull apart or disengage.
- Drivelines too long can bottom out.
- Bottoming driveline telescoping assembly will stop sliding and become solid.
- Driveline bottoming can push through support bearings and break off PTO shaft.

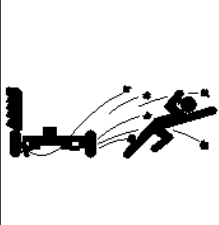

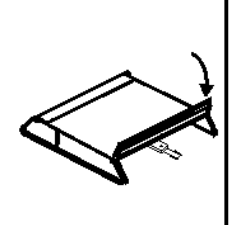

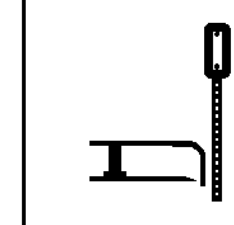
CONTACT DEALER if implement driveline does not match Tractor PTO shaft:

- **DO NOT USE PTO ADAPTER.**
Using a PTO adapter can cause:
 - Excessive vibration, thrown objects, blade and implement failures by doubling operating speed.
 - Increased working length exposing unshielded driveline areas and entanglement hazards. *PN CDBM-01*

SAFETY

SAFETY

THROWN OBJECTS HAZARDS

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Mower Thrown Objects Hazard | Raised Mower Thrown Objects | Keep mower door closed when traffic comes within 300 feet | Inspect Area remove foreign objects | Do not let blades contact solid objects |



ROTARY MOWERS CAN THROW OBJECTS 300 FEET OR MORE UNDER ADVERSE CONDITIONS.

TO AVOID SERIOUS INJURY OR DEATH TO OPERATOR OR BYSTANDERS FROM THROWN OBJECTS:

- KEEP bystanders 300 feet away

STOP MOWING IF PASSERSBY ARE WITHIN 300 FEET UNLESS:

- **ALL THROWN OBJECT SHIELDING** including, Front and Rear Deflectors, Chains Guards, Steel Guards, Bands, Side Skirts and Skid Shoes in place and in good condition when mowing.
- Mower is close and parallel to ground without exposing blades.
- **MOWING AREA** has been inspected and foreign materials and debris have been removed.
- **DO NOT** shred or mow loose or previously cut material if **BYSTANDERS** are within 300 feet.
- **PASSERSBY** are inside enclosed vehicle.

INSPECT AREA FOR POTENTIAL THROWN OBJECTS BEFORE MOWING:

- **REMOVE** debris, rocks, wire, cable, metal objects and other foreign material from area.
Wire, cable, rope, chains and metal objects can be thrown or swing outside deck with great velocity:
 1. **MARK** objects that cannot removed.
 2. **AVOID** these objects when mowing.

HIGH GRASS and WEED AREA INSPECTION:

- **INSPECT** for and **REMOVE** any hidden large debris.
- **MOW** at Intermediate height
- **INSPECT** and remove remaining debris
- **MOW** at final height.

MOWER THROWN OBJECT SHIELDING:

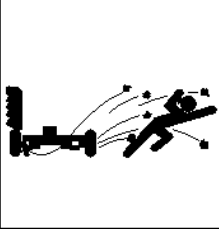
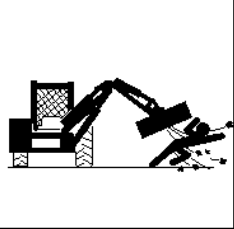
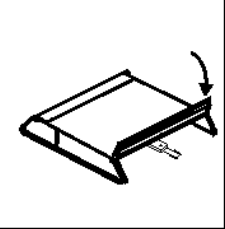

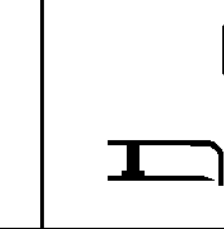
- **KEEP** all thrown object shielding including, Front and Rear Deflectors, Chains Guards, Steel Guards, Bands, Side Skirts and Skid Shoes in place and in good condition when mowing.
- **DO NOT OPERATE** with any thrown object shielding missing, damaged or removed.

RIGHT OF WAY (Highway) MOWING

- Stop mowing if any bystander comes within 300 feet of the mower.
- No shielding is 100% effective in preventing thrown objects. To Reduce Possibility of Injury:
 1. **MAINTAIN MOWER SHIELDING**, side skirts, skid shoes, and blades in good operational condition,
 2. **RAISE CUTTING HEIGHT** to **6 INCHES** minimum,
 3. **INSPECT AREA** thoroughly before mowing to **REMOVE** potential **THROWN OBJECT HAZARDS**,
 4. **NEVER ALLOW BLADES** to **CONTACT SOLID OBJECTS** like wire, rocks, post, curbs, guardrails, or ground while mowing. *PN TOBM-01*

SAFETY

THROWN OBJECTS HAZARDS (Continued)

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Mower Thrown Objects Hazard | Raised Mower Thrown Objects | Keep mower door closed when traffic comes within 300 feet | Inspect Area remove foreign objects | Do not let blades contact solid objects |

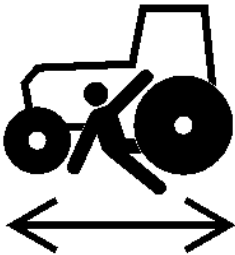
MOWER OPERATION:

- **DO NOT** exceed mower's rated Cutting Capacity or cut non-vegetative material.
- **USE ENCLOSED TRACTOR CABS** when two or more mowers are operating in mowing area.
- Do Not mow in areas where bees or insects may attack unless you **WEAR PROTECTIVE CLOTHING** or use enclosed tractor cab.
- **ADJUST** mower head close and parallel to ground without exposing blades.
- **ADJUST** cutting **HEIGHT** to **AVOID BLADE CONTACT** with solid objects like wire, rocks, posts, curbs, guard rails and fixed obstructions.
- **CLOSE** Mower door and stop operating if bystanders come within 300 feet of the mower.
- Keep mower door closed when cutting close to the ground.
- Open door only to cut large brush or tree limbs. Close door immediately after cutting limb.
- **DO NOT** push mower head down onto material to cut it, use the front tips of the mower blades to cut into the material.
- **DO NOT** operate mower when mower is in transport position.
- **STOP MOWING** immediately if blades strike heavy objects, fixed structures, metal guard rails and concrete structures:
 1. **BLADES CAN FAIL** from impact and objects can be thrown with great velocity.
 2. **INSPECT** and **REPLACE** any damaged blades.
 3. **CHECK** blade carrier and **REPLACE** if damaged.
- **DO NOT** mow in standing water **TO AVOID** possible **BLADE FAILURE**.
- **AVOID MOWING** in reverse:
 1. **STOP PTO** and back up mower.
 2. **LOWER** mower, engage **PTO** and mow forward.
- **DISENGAGE** mower head and wait until **BLADES** stop rotating before raising mower to transport position.
- **DO NOT ENGAGE PTO** with mower in transport position.
- **STOP** mowing when **EXCESSIVE VIBRATION** occurs:
 1. **STOP PTO** and tractor **ENGINE**.
 2. **INSPECT** mower for vibration source.
 3. **REPLACE** any damage parts and bent or damaged **BLADES**. *PN TOBM-02*

SAFETY

SAFETY

RUN OVER HAZARDS

| | | |
|---|---|---|
|  |  |  |
| Operator run over hazard | Rider fall off run over hazard | Bystander run over hazard |



TO AVOID SERIOUS INJURY OR DEATH FROM FALLING OFF TRACTOR OR EQUIPMENT RUN OVER:

- **USE ROPS** and **SEAT BELT** equipped tractors for mowing operations.
- **KEEP ROPS** locked in **UP** position.
- **ONLY** start tractor while seated in tractor seat.
- **ALWAYS BUCKLE UP** seat belt when operating tractor and equipment.
- **ONLY OPERATE** tractor and equipment while seated in tractor seat.
- **NEVER ALLOW RIDERS** on tractor or implement.
- When not mowing stow Boom and Mower head in transport location before moving.



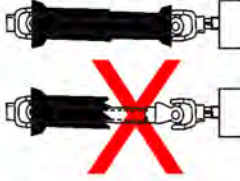
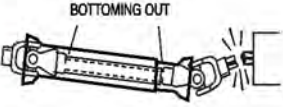
WHEN MOUNTING AND DISMOUNTING TRACTOR:

- **ONLY** mount or dismount when tractor and moving parts are stopped.
- **STOP ENGINE AND PTO**, engage parking brake, lower implement, allow all moving parts to stop and remove key before dismounting from tractor. *PN ROBM-01*

SAFETY

SAFETY

PTO ENTANGLEMENT HAZARDS

| | | | |
|---|--|--|---|
|  |  <p>PTO (Barra Gitoria)</p> |  |  |
| <p>Entanglement hazard Do Not approach or touch a rotating PTO driveshaft</p> | <p>Make sure PTO shaft is securely attached Do Not Use PTO Adapter</p> | <p>DO NOT Operate if PTO shields are damaged or missing</p> | <p>Make sure PTO shafts are proper length</p> |



KEEP AWAY FROM ROTATING DRIVELINES AND ELEMENTS TO AVOID SERIOUS INJURY OR DEATH:

STAY AWAY and **KEEP** hands, feet and body **AWAY** from rotating blades, drivelines and parts until all moving elements have stopped.

- **STOP, LOOK** and **LISTEN** before approaching the mower to make sure all rotating motion has stopped.
- **ROTATING COMPONENTS CONTINUE** to **ROTATE** after the PTO is shut off.

PTO SHIELDING:

TO AVOID SERIOUS INJURY OR DEATH FROM ENTANGLEMENT WHEN OPERATING IMPLEMENT:

- **KEEP PTO** shields, integral driveline shields and input shields installed
- **DO NOT OPERATE** mower without shields and guards in place or missing
- **REPAIR OR REPLACE** if damage, broken or missing
- **ALWAYS REPLACE GUARDS** that have been removed for service or maintenance.
- Do Not use PTO or PTO guard as a step.

TO AVOID broken driveline during operations:

- **CHECK** driveline for proper length between PTO shaft and implement gearbox shaft. *(Refer to Instructions in Operation Section)*
- Drivelines too short can pull apart or disengage.
- Drivelines too long can bottom out.
Bottoming driveline telescoping assembly will stop sliding and become solid.
- Driveline bottoming can push through support bearings and break off PTO shaft
- **AVOID** sharp turns or lift mower to heights to cause driveline "knocking".
- Lubricate driveshaft-telescoping components weekly.






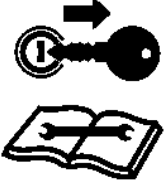
CONTACT DEALER if implement driveline does not match Tractor PTO shaft:

- **DO NOT USE PTO ADAPTER.**

Using a PTO adapter can cause excessive vibration, thrown objects, blade and implement failures by doubling operating speed. Increased working length exposing unshielded driveline areas. *PN PE01*

SAFETY

MOWER BLADE CONTACT HAZARDS

| | | | | | |
|---|---|---|--|---|---|
|  |  |  |  |  |  |
| Do not put fingers underneath mower | Do not put hands underneath Flail Mower | Do not put foot underneath mower | Do not put foot underneath Flail Mower | Shearing Hazard from Sickle blades | Stop Tractor Remove Key Read Manual |



KEEP AWAY FROM ROTATING BLADES TO AVOID SERIOUS INJURY OR DEATH FROM BLADE CONTACT:

- **STAY AWAY** and **KEEP HANDS, FEET** and **BODY AWAY** from rotating blades, drivelines and parts until all moving elements have stopped.
- **DO NOT** put hands or feet under mower decks
- **STOP** rotating **BLADES** disengage mower switch and PTO and wait for blade to stop rotating before raising mower head.
- **DO NOT** approach Sickle Bar head until Tractor Engine has been shut off.
- **STOP LOOK** and **LISTEN** before approaching the mower to make sure all rotating motion has stopped. *PN MBBM-01*

SAFETY

HIGH PRESSURE OIL LEAK HAZARD

| | | | |
|---|---|--|---|
|  |  |  |  |
| <p>High pressure oil penetrating skin</p> | <p>High pressure oil eroding skin</p> | <p>Using cardboard to check for oil leaks</p> | <p>Tank contents under pressure. Allow oil to cool before slowly removing cap</p> |



TO AVOID SERIOUS INJURY OR DEATH FROM HIGH PRESSURE HYDRAULIC OIL LEAKS PENERATING SKIN:

- **DO NOT OPERATE** equipment with oil or fuel leaks.
- **KEEP** all hydraulic hoses, lines and connections in **GOOD CONDITION** and **TIGHT** before applying system pressure.
- **RELIEVE HYDRAULIC PRESSURE** before disconnecting lines or working on the system.
- **REMOVE** and replace hose if you suspect it leaks. Have dealer test it for leaks.

HIGH PRESSURE FLUID LEAKS CAN BE INVISIBLE.

WHEN CHECKING FOR HYDRAULIC LEAKS AND WORKING AROUND HYDRAULIC SYSTEMS:

- **ALWAYS WEAR** safety glasses and impenetrable gloves.
- **USE** paper or cardboard to search for leaks.
- **DO NOT USE** hands or body parts to search for leak.
- **KEEP** hands and body **AWAY** from pin holes and nozzles ejecting hydraulic fluid.
- Hydraulic fluid may cause gangrene if not surgically removed immediately by a doctor familiar with this form of injury.

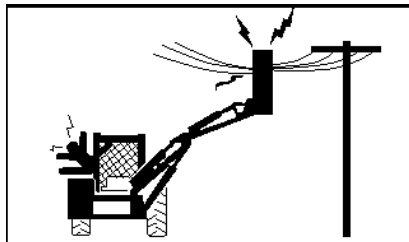
Use caution when removing Hydraulic Tank cap.

- Tank contents maybe under pressure
- Allow oil to cool before removing cap.
- Relieve oil pressure before removing cap slowly.
- Stay away from hot oil that may spray from tank.

PN HPBM-01

SAFETY

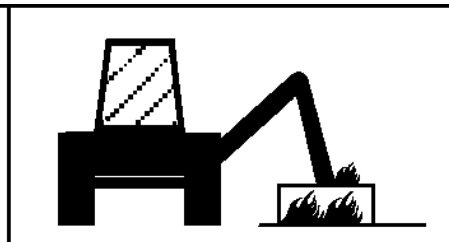
ELECTRICAL & FIRE HAZARDS



Mower head or Boom contacting overhead electrical lines



Strike and explosion Hazard
Blades Contacting Utility or Gas Lines



Fire Hazard Do Not operate near fires. Keep debris away from hydraulic pumps and valves



TO AVOID SERIOUS INJURY OR DEATH FROM ELECTRICAL CONTACT WHEN WORKING AROUND ELECTRICAL POWER LINES, GAS LINES AND UTILITY LINES:

- **INSPECT** mowing area for overhead or underground electrical power lines, obstructions, gas lines, cables and Utility, Municipal, or other type structure.
- **KEEP** all raised wings at a 10 feet or greater distance from all power lines and overhead obstructions.
- **DO NOT** allow mower to contact with any Utility, Municipal, or type of structures and obstructions.
- **CALL 811** and 1-800-258-0808 for identify buried utility lines.

FIRE PREVENTION GUIDELINES while Operating, Servicing, and Repairing Mower and Tractor to reduce equipment and grass fire Risk:

- **EQUIP** Tractor with a **FIRE EXTINGUISHER**
- **DO NOT OPERATE** mower on a tractor equipped with under frame exhaust
- **DO NOT SMOKE** or have open flame near Mower or Tractor
- **DO NOT DRIVE** into burning debris or freshly burnt area
- **AVOID FIRE IGNITION** by not allowing mower blade to contact solid objects like metal or rock.
- **DO NOT** operate if oil is leaking. Repair oil leak and remove all accumulated oil before operating.
- **CLEAR** any grass clippings or debris buildup around mower hydraulic pumps, valves or tanks.
- **SHUT OFF ENGINE** while refueling. *PN EFBM-01*

SAFETY

TRANSPORTING HAZARDS

| | | |
|---|---|---|
|  |  |  |
| Use SMV signs and Flashing Lights | Loss of Control Stopping Hazard | Loss of Control Speeding Hazard |

WARNING

TO AVOID SERIOUS INJURY AND DEATH WHEN TOWING OR TRANSPORTING EQUIPMENT:

- **KEEP** transport speed **BELOW** 20 mph to maintain control of equipment.
- **REDUCE SPEED** on inclines, on turns and in poor towing conditions.
- **DO NOT TOW** with trucks or other vehicles.
- **USE** only properly sized and equipped tractor for towing equipment.
- **FOLLOW** all local traffic regulations.

TRACTOR REQUIREMENTS FOR TOWING OR TRANSPORTING IMPLEMENTS:

- **ONLY TRANSPORT** with tractor with **ROPS** in the raised position.
- **USE** properly sized and equipped tractor that exceeds implement weight by at least 20%.
- **KEEP** 20% of tractor weight on front wheels to maintain safe steering.

BEFORE TRANSPORTING OR TOWING IMPLEMENT:

TRACTOR INSPECTION:

- **CHECK** steering and braking for proper operation and in good condition.
- **CHECK SMV** sign, reflectors and warning lights for proper operation and visibility behind unit.
- **CHECK** that your driving vision is not impaired by tractor, cab, or implement while seated in tractor seat.
- **ADJUST** your operating position, mirrors, and implement transport for clear vision for traveling and traffic conditions.

PREPARE IMPLEMENT FOR TRANSPORTING OR TOWING:

- Store Boom and Mower in transport positions and engage transport locks if equipped.

DETERMINE STOPPING CHARACTERISTICS OF TRACTOR AND IMPLEMENT FOR TRANSPORTING OR TOWING:

BRAKING TESTS:

- Stopping distance with implement attached may increase
- Observe **STOPPING** distances increases with increased speeds.
- **DETERMINE** the maximum safe transport speed that does not exceed 20 mph.
- Reduce travel speed in wet or icy roads, stopping distances increase.

DETERMINE MAXIMUM TURNING SPEED BEFORE OPERATING ON ROADS OR UNEVEN GROUND:

- **TEST** equipment in slowly increasing speed in turns to determine it can be operated at higher speeds.
- **USE REDUCED** turning speeds in sharp turns to avoid equipment turning over.

WHEN TOWING OR TRANSPORTING EQUIPMENT:






- Always **WEAR SEAT BELT** when operating or transporting mower.
- **USE** low speeds to avoid overturn with raised wings.
- **USE** low speeds and gradual steering on curves, hills, rough or uneven surfaces and on wet roads.
- **TURN ON** tractor **FLASHING WARNING LIGHTS**.
- **ALLOW** clearance for implement swing while turning.

KEEP raised boom mower 10 feet or greater distance from all power lines and overhead obstructions. PN THBM-01

SAFETY

SAFETY

HAZARDS WITH MAINTENANCE OF IMPLEMENT

| | | | | |
|--|---|---|--|---|
|  |  |  |  |  |
| Periodically inspect all moving parts, lubricate drivelines, and tighten all fasteners | Lower mower head to ground or block up before servicing | Stop engine remove key before conducting maintenance | Set mower head securely on the ground before servicing blades | Thrown Objects Hazard Ensure blades rotate clockwise viewed from above mower head |

WARNING

AVOID SERIOUS INJURY OR DEATH FROM COMPONENT FAILURE BY KEEPING IMPLEMENT IN GOOD OPERATING CONDITION IN PERFORMING PROPER SERVICE, REPAIRS AND MAINTENANCE.

BEFORE PERFORMING SERVICE, REPAIRS AND MAINTENANCE ON THE IMPLEMENT:

- **STOP ENGINE AND PTO**, engage parking brake, lower implement, allow all moving parts to stop and remove key before dismounting from tractor.
- **PLACE** implement on ground or securely block up raised equipment. Use large blocks on soft or wet soil.
- **PUSH** and **PULL** Remote Hydraulic Cylinder lever to relieve hydraulic pressure.
- **DISCONNECT Pump solenoid valve or PTO driveline connection before servicing mower head.**
- **WEAR SAFETY GLASSES, PROTECTIVE GLOVES** and follow **SAFETY PROCEDURES** when performing service, repairs and maintenance on the implement:
- Always **WEAR** protective **GLOVES** when handling blades, knives, cutting edges or worn component with sharp edges.
- Always **WEAR GLOVES** and **SAFETY GLASSES** when servicing hot components
- **AVOID CONTACT** with hot hydraulic oil tanks, pumps, motors, valves and hose connection surfaces.
- **SECURELY** support or **BLOCK UP** raised implement, framework and lifted components before working underneath equipment.
- **FOLLOW INSTRUCTIONS** in maintenance section when replacing hydraulic cylinders to prevent component falling.
- **STOP** any implement movements and **SHUT-OFF TRACTOR** engine before doing any work procedures.
- **USE** ladder or raised stands to reach high equipment areas inaccessible from ground.
- **ENSURE** good footing by standing on solid flat surfaces when getting on implement to perform work.
- **FOLLOW** manufacturer's instructions in handling oils, solvents, cleansers, and other chemical agents.
- **DO NOT** change any factory-set hydraulic calibrations to avoid component or equipment failures.
- **DO NOT** modify or alter implement, functions or components.
- **DO NOT WELD** or repair rotating mower components. These may cause vibrations and component failures being thrown from mower.

PERFORM SERVICE, REPAIRS, LUBRICATION AND MAINTENANCE OUTLINED IN IMPLEMENT MAINTENANCE SECTION:

- **INSPECT** for loose fasteners, worn or broken parts, leaky or loose fittings, missing or broken cotter keys and washers on pins, and all moving parts for wear.
- **REPLACE** any worn or broken parts with authorized service parts.
- Inspect mower blade spindle to ensure bearing preload. If loose repair before operating.
- **LUBRICATE** unit as specified by lubrication schedule
- **NEVER** lubricate, adjust or remove material while it is running or in motion.
- **TORQUE** all bolts and nuts as specified.

BLADE INSPECTION:

- Inspect blade carrier and blades daily.
- Check blade and blade carrier **BOLT TORQUE** daily. Loose bolts can cause blade or blade bolt failures.
- **REPLACE**, bent, damage, cracked and broken blades immediately with new blades.
- **AVOID** blade failures and thrown broken blades. **DO NOT** straighten, weld, or weld hard-facing blades.

SAFETY SHIELDS, GUARDS AND SAFETY DEVICES INSPECTION:

- **KEEP** all Deflectors, Chain Guards, Steel Guards, Gearbox Shields, and PTO integral shields, Bands, Side Skirts and Skid Shoes in place and in good condition.
- **REPLACE** any missing, broken or worn safety shields, guards and safety devices.
- Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.
- Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. **PN HMBM-01**

SAFETY

PARTS INFORMATION

PARTS INFORMATION

Tiger mowers use balanced and matched system components for blade carriers, blades, cuttershafts, knives, knife hangers, rollers, drivetrain 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. (SPTM-1)

SEE YOUR TIGER DEALER

Operator's & Parts Manuals



www.algqr.com/tpm

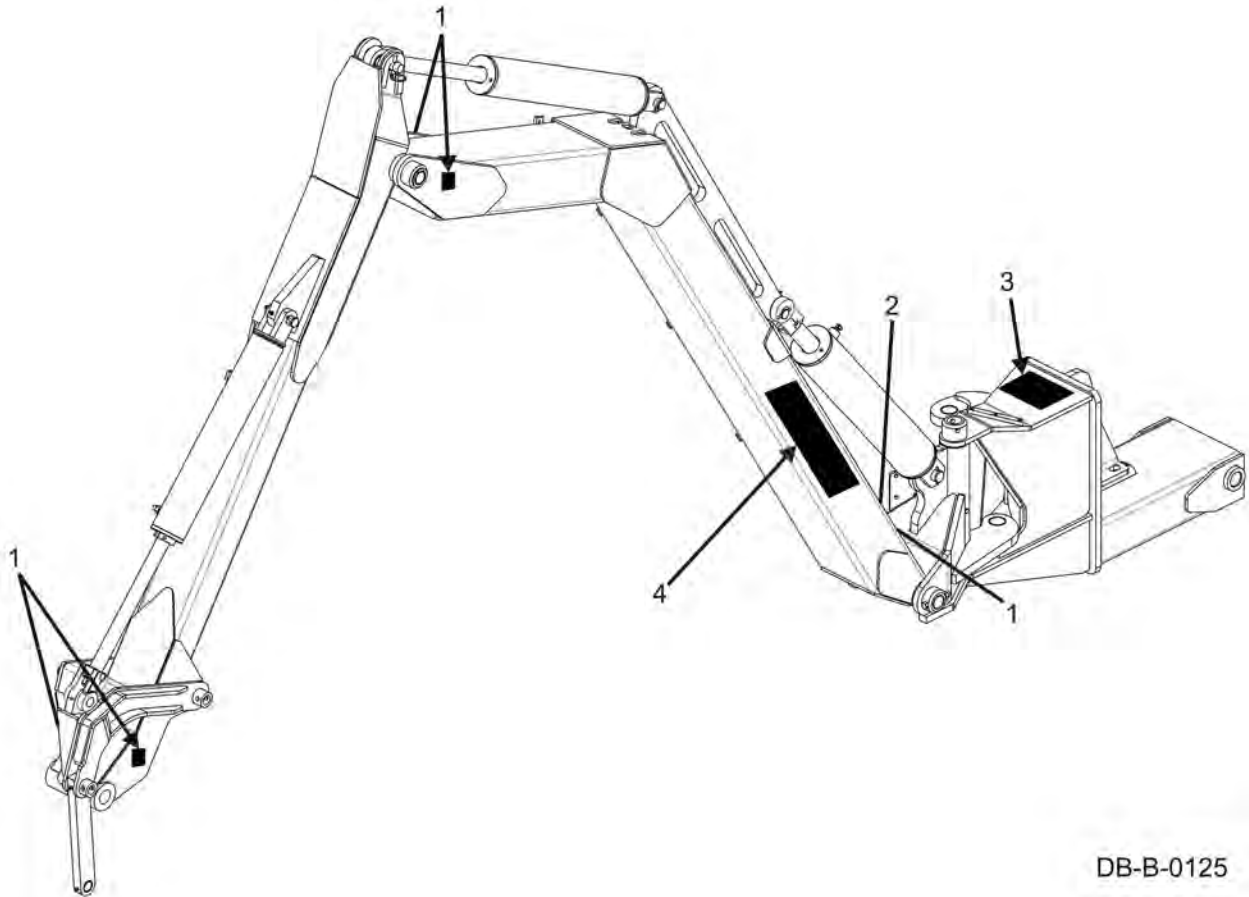
SAFETY

SAFETY

Decal Location

NOTE: Tiger supplies safety decals on this product to promote safe operation. Damage to the decals may occur while in shipping, use, or reconditioning. Tiger cares about the safety of its customers, operators, and bystanders, and will replace the safety decals on this product in the field, free of charge (Some shipping and handling charges may apply). Contact your Tiger dealer to order replacement decals.

Boom Arm

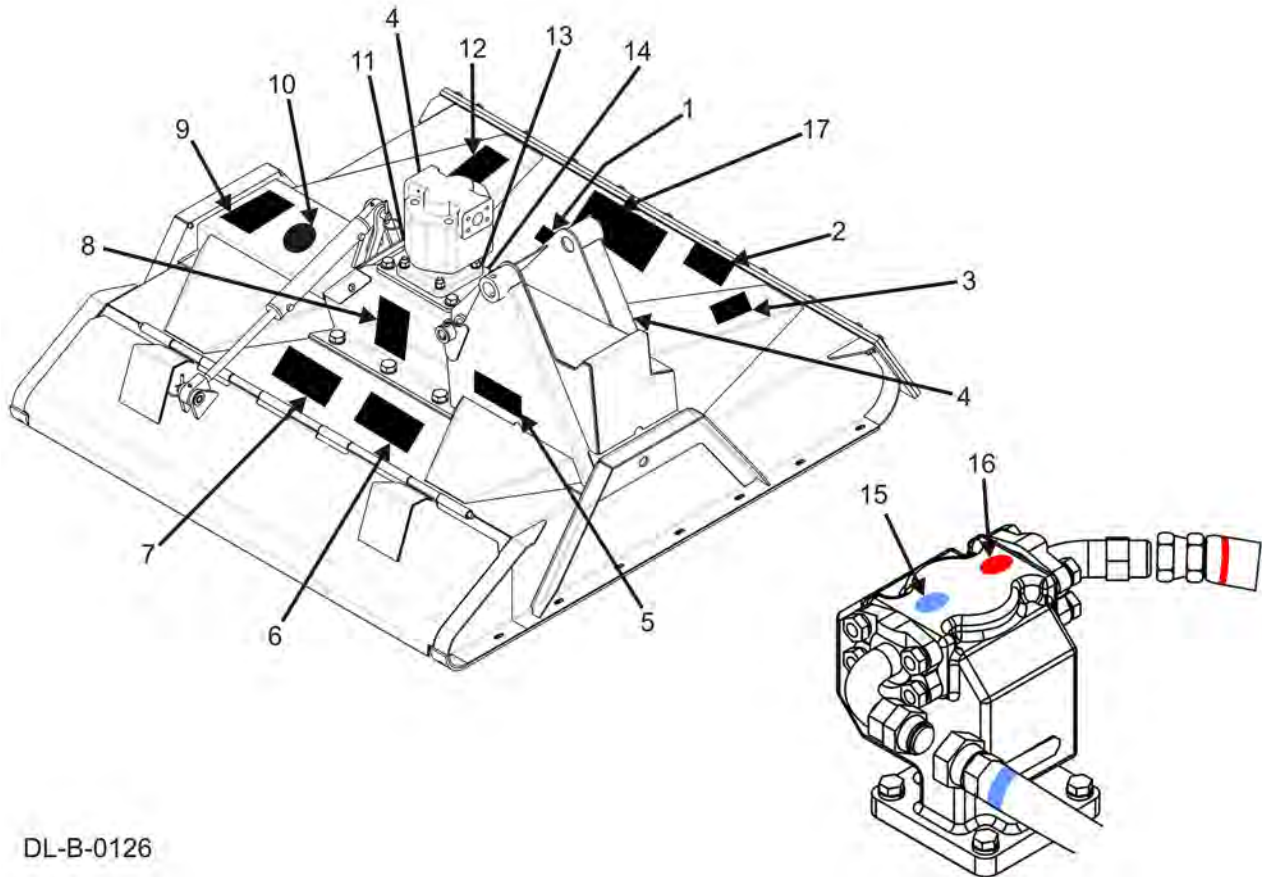


DB-B-0125

| ITEM | PART NO. | QTY. | TYPE | DESCRIPTION |
|------|----------|------|---------|----------------------|
| 1. | 02962764 | 5 | WARNING | Pinch Points |
| 2. | 02965262 | 1 | WARNING | Hydraulic Oil Hazard |
| 3. | 02962765 | 1 | DANGER | Crushing Hazard |
| 4. | | 1 | LOGO | Name |

SAFETY

50" & 60" Rotary



DL-B-0126

| ITEM | PART NO. | QTY. | TYPE | DESCRIPTION |
|------|----------|------|--------------|-------------------------------|
| 1. | 6T3237 | 1 | WARNING | Replace Blades |
| 2. | 24028 | 1 | WARNING | Thrown Object Hazard |
| 3. | D637 | 1 | WARNING | Disconnect Hydraulic Solenoid |
| 4. | 42399 | 2 | REFLECT | Red Reflector |
| 5. | 4240006 | 1 | REFLECT | Amber Reflector |
| 6. | D668 | 1 | INSTRUCT | Lubrication Chart |
| 7. | 33224 | 1 | DANGER | Blades, Thrown Object |
| 8. | D619 | 1 | WARNING | Blade Rotation |
| 9. | | 1 | LOGO | Made in the USA |
| 10. | | 1 | LOGO | Tiger Genuine Parts |
| 11. | 22839 | 1 | INSTRUCT | Use Hand Grease Gun |
| 12. | 32709 | 1 | WARNING | Use Genuine Tiger Parts |
| 13. | 6T3221 | 1 | INSTRUCT | Lubrication Instructions |
| 14. | nfs | 1 | SERIAL PLATE | Serial Number Plate |
| 15. | 06550058 | 1 | INSTRUCT | Blue Dot |
| 16. | 06550057 | 1 | INSTRUCT | Red Dot |
| 17. | | 1 | LOGO | Name |

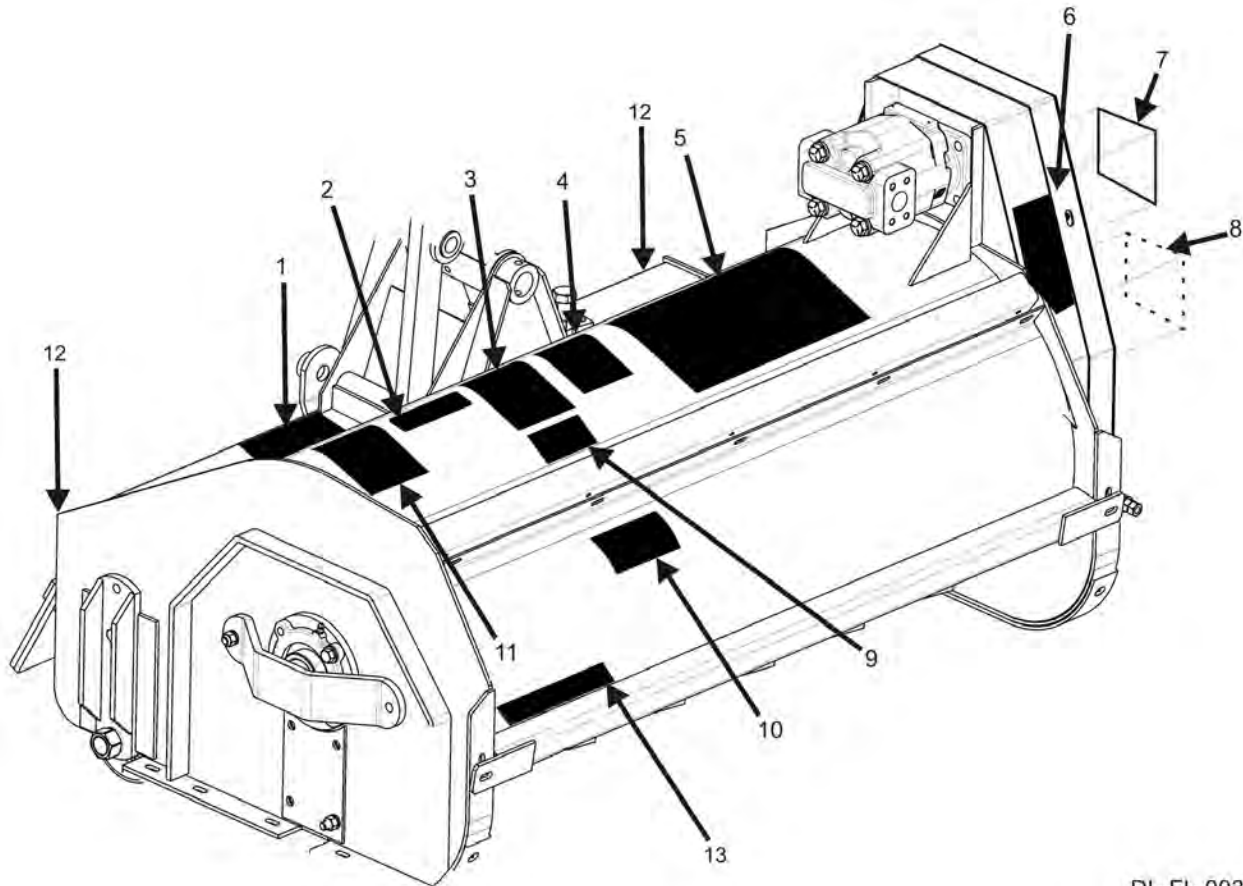
SAFETY

BOOM

Safety Section 1-17

SAFETY

50" & 63" Flail



DL-FL-0031

| ITEM | PART NO. | QTY. | TYPE | DESCRIPTION |
|------|----------|------|--------------|----------------------------------|
| 1. | 24028 | 1 | DANGER | Thrown Object Hazard, Deflectors |
| 2. | 32709 | 1 | WARNING | Use Genuine Tiger Parts |
| 3. | 33224 | 1 | DANGER | Blades, Thrown Object |
| 4. | D637 | 1 | WARNING | Disconnect Hydraulic Solenoid |
| 5. | | 1 | LOGO | Tiger Logo |
| 6. | 00758194 | 1 | WARNING | Pinch Point Hazard |
| 7. | | 1 | LOGO | 50" Logo |
| | | 1 | LOGO | 63" Logo |
| 8. | D646 | 1 | DANGER | Guard Missing, Do Not Operate |
| 9. | D655 | 1 | INSTRUCT | Lube Chart |
| 10. | TB1011 | 1 | DANGER | Thrown Object Hazard, Shield |
| 11. | 6T3236 | 1 | LOGO | Made in the USA |
| 12. | 42399 | 2 | REFLECT | Red Reflector |
| 13. | 4240006 | 1 | REFLECT | Amber Reflector |
| 14. | nfs | 1 | SERIAL PLATE | Serial Number Plate |

SAFETY

SAFETY



WARNING

TO AVOID SERIOUS INJURY OR DEATH FROM HIGH PRESSURE HYDRAULIC OIL LEAKS PENETRATING SKIN:

- DO NOT OPERATE equipment with oil or fuel leaks.
- KEEP all hydraulic hoses, lines and connections in good condition and tight before applying system pressure.
- Relieve hydraulic pressure before disconnecting lines or working on the system.
- REMOVE and replace hose if you suspect it leaks. Have dealer test it for leaks.

HIGH PRESSURE FLUID LEAKS CAN BE INVISIBLE. WHEN CHECKING FOR HYDRAULIC LEAKS AND WORKING AROUND HYDRAULIC SYSTEMS:

- DO NOT use hands to check for leaks.
- ALWAYS WEAR safety glasses and impenetrable gloves.
- USE paper or cardboard to search for leaks.
- KEEP hands and body AWAY from pin holes and nozzles ejecting hydraulic fluid.
- Hydraulic fluid may cause gangrene if not surgically removed immediately by a doctor familiar with this form of injury.

02965262

DANGER

CRUSHING AND PINCH POINTS

MOVING MACHINERY PARTS CAN PINCH OR CRUSH OR FALL-WHICH MAY CAUSE INJURY OR DEATH.

02962765

SAFETY

SAFETY

SAFETY

⚠ DANGER

THROWN OBJECT HAZARD

TO AVOID SERIOUS INJURY OR DEATH:
DO NOT OPERATE if Thrown Object Shielding is damaged or missing.

- Maintain Rubber Deflectors in good condition.
- Inspect Rubber Deflectors frequently.

MAINTAIN Thrown Object Shielding

HERE



24028



Rubber Deflector



Chain Guards

⚠ WARNING

TO AVOID SERIOUS INJURY OR DEATH FROM INADVERTENT MOWER HEAD START UP:

- Disconnect the hydraulic solenoid BEFORE servicing the tractor or mower.

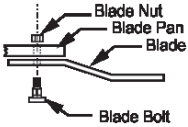


D637

⚠ WARNING

TO AVOID SERIOUS INJURY OR DEATH FROM BLADE ATTACHMENT FAILURE:

- Torque 1-1/8" blade bolt to 800 ft lbs.
- ALWAYS replace blades in pairs.
- ALWAYS replace blades with new bolts and nuts.



Blade Nut
Blade Pan
Blade
Blade Bolt


6T3237

⚠ WARNING

TO AVOID SERIOUS INJURY AND DEATH FROM THROWN OBJECTS:

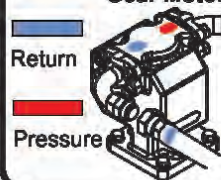
- MAKE CERTAIN blades rotate the correct direction.

BLADE ROTATION



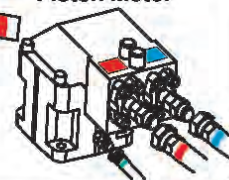
D619

Gear Motor



Return
Pressure

Piston Motor



SAFETY

SAFETY

| | | |
|---|--|--|
| ⚠ DANGER | | |
|  |  |  |
| THROWN OBJECTS HAZARD | | |
| <p>Mower can throw objects up to 300 feet. TO AVOID SERIOUS INJURY OR DEATH to operator or bystanders:</p> <ul style="list-style-type: none">● CLOSE MOWER DOOR and STOP operating if bystanders or traffic come within 300 feet.● KEEP door fully closed when cutting grass and weeds.● OPEN door ONLY to cut large brush. Close door immediately after.● DO NOT operate with door removed.● KEEP door in place and in good condition during operation.● Deflectors are SUBJECT TO WEAR. Replace if worn or damaged.● ALWAYS transport with door closed. 33224 | | |
| ENTANGLEMENT HAZARD | | |
|  | <ul style="list-style-type: none">● STAY AWAY and KEEP hands, feet and body AWAY from rotating blades, drivelines and parts that continue to move after power shut-off. WAIT until all moving elements have stopped.● STOP, LOOK and LISTEN for rotating motion before approaching implement. | |

SAFETY

⚠ WARNING

Non-genuine parts can fail catastrophically. TO AVOID SERIOUS INJURY OR DEATH:

- ONLY use genuine TIGER replacement parts.
- Non-genuine parts can fail creating hazardous conditions for operator and bystanders.

Contact local dealer or TIGER about repair parts at:

3301 N. LOUISE AVE.,
SIOUX FALLS, SD 57107 www.algqr.com/tpm
Customer Service: 800-843-6849.
Email: feedback@tiger-mowers.com 32709 1



IMPORTANT

| | |
|---|---|
| BE AWARE BE ALERT BE ALIVE | BE TRAINED Before Operating this Mower |
|---|---|

To prevent serious injury to yourself and/or bystanders, be trained in Safe Mowing Practices. Alamo Group Companies as well as AEM and FEMA provide training material that is critical for your Safety and the Safety of others when operating this equipment. www.algqr.com/tbv

Make these Safety Procedures an important part of every workday. Read and understand the Operator's Manual. Do not let untrained individuals operate this equipment. Contact your Dealer, AEM (www.aem.org), FEMA (314-878-2304, www.FarmEquip.org), or Alamo Group (www.Alamo-Group.com) for information on training material or courses that provide training in Safer Operating Practices for Mowers. 32709 2 32709



SAFETY

| | |
|---|--|
| ⚠ WARNING | |
| PINCH POINT HAZARD |  |
| TO AVOID SERIOUS INJURY: <ul style="list-style-type: none">• DO NOT OPERATE with Belt Shield removed. 00758194 | |

| |
|--|
| ⚠ DANGER |
|  D646 |
| GUARD MISSING DO NOT OPERATE |

| | |
|--|--|
| ⚠ DANGER | |
| THROWN OBJECTS HAZARD | |
| Mower can throw objects up to 300 feet. TO AVOID SERIOUS INJURY OR DEATH to operator or bystanders: <ul style="list-style-type: none">• DO NOT operate with Shield removed.• KEEP Shield in place and in good condition during operation. Tb1011 |  |

SAFETY

SAFETY

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 Training Requirements

Title 29, Code of Federal Regulations Part 1928.57(a)(6). www.osha.gov

Operator instructions. At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee who operates an agricultural tractor and implements in the safe operating practices and servicing of equipment with which they are or will be involved, and of any other practices dictated by the work environment.

Keep all guards in place when the machine is in operation;

Permit no riders on equipment

Stop engine, disconnect the power source, and wait for all machine movement to stop before servicing, adjusting, cleaning or unclogging the equipment, except where the machine must be running to be properly serviced or maintained, in which case the employer shall instruct employees as to all steps and procedures which are necessary to safely service or maintain the equipment.

Make sure everyone is clear of machinery before starting the engine, engaging power, or operating the machine.

Employer Responsibilities:

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

1. Train the employee in the proper and safe operation of the Tractor and Implement.
2. Require that the employee read and fully understand the Tractor and Implement Operator's manual.
3. Permit only qualified and properly trained employees to operate the Tractor and Implement.
4. Maintain the Tractor and Implement in a safe operational condition and maintain all shields and guards on the equipment.
5. Ensure the Tractor is equipped with a functional ROPS and seat belt and require that the employee operator securely fasten the safety belt and operate with the ROPS in the raised position at all times.
6. Forbid the employee operator to carry additional riders on the Tractor or Implement.
7. Provide the required tools to maintain the Tractor and Implement in a good safe working condition and provide the necessary support devices to secure the equipment safely while performing repairs and service.
8. Require that the employee operator stop operation if bystanders or passersby come within 300 feet.

Child Labor Under 16 Years of Age

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

ASSEMBLY SECTION

ASSEMBLY

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

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



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

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

TRACTOR PREPARATION

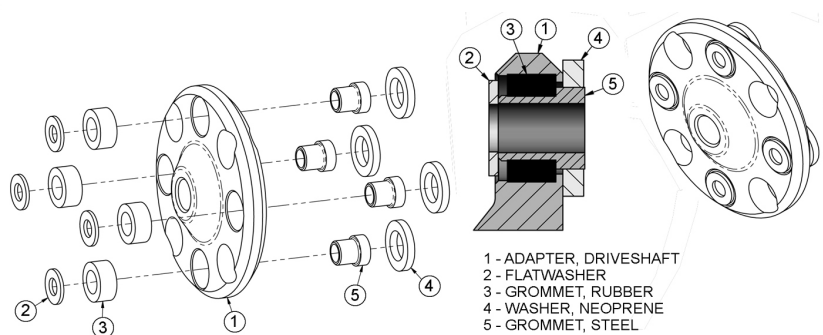
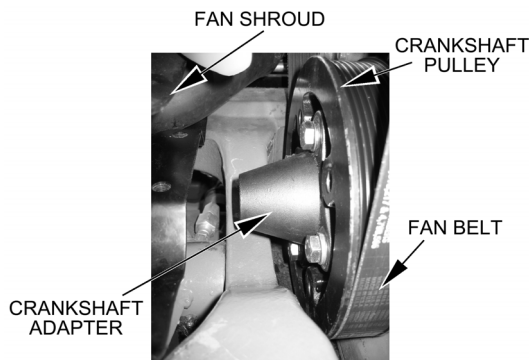
- A. Remove right and left hand steps.
- B. Disconnect battery cables from both batteries.
- C. Remove engine side panels, or raise hood to access front pulley.
- D. Remove plugs from tractor casting where mainframe and pump mount will be attached.
- E. Remove any front weights and weight supports.
-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

(ASM-JD-0001)

CRANKSHAFT ADAPTER

If necessary, remove the four capscrews from the crankshaft pulley. Then install the crankshaft adapter to the pulley with capscrews and lockwashers as shown in the Parts Section.

(ASM-JD-0051)



ASSEMBLY

FRONT CRANKSHAFT PULLEY

Tiger has found that the front crankshaft pulley used by John Deere will not allow for the installation of a front drive system. You will need to order a different pulley, washer and bolt from John Deere to allow for a front drive to be installed on your tractor.

Inspect the front pulley on your tractor to verify you have the correct pulley needed to mount the spacer plate. If your pulley has the (4) four holes needed to mount the spacer, your pulley is the correct one needed. If your pulley does not have the (4) four holes in the pulley, you will need to order the correct pulley, washer and bolt from John Deere.

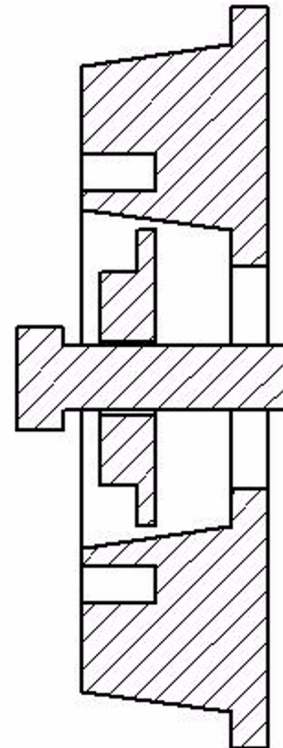
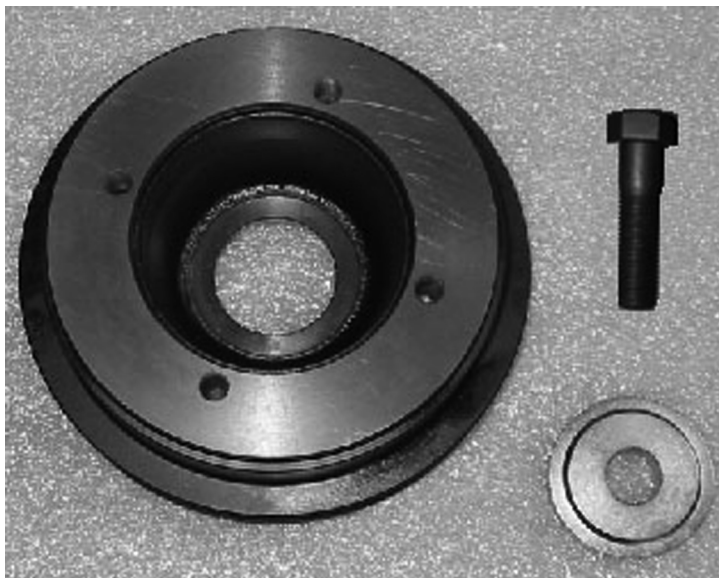
PARTS REQUIRED TO PURCHASE FROM JOHN DEERE:

Pulley from JD - R516320

Washer from JD - R517237

Bolt from JD - R516648

Torque on the pulley bolt with Loctite is 369 lb-ft.



Solution:

1. Clean nose of crankshaft using TY16285 clean and cure primer.
2. Apply a light 2-3mm bead of TY15969 retaining compound around the leading edge of the crankshaft nose.
3. Dip damper mounting capscrew in clean SAE30 engine oil (Always use a new capscrew).
4. Position damper/pulley on the crankshaft and thread capscrew up tight (do not rely on the capscrew to pull the pulley straight onto the taper).
5. Tighten capscrew to specification 500Nm (369lb-ft) (the engine will most likely have to be pinned).
6. Measure run-out on the pulley, spec is 0.003" or less.

(ASM-JD-0080)

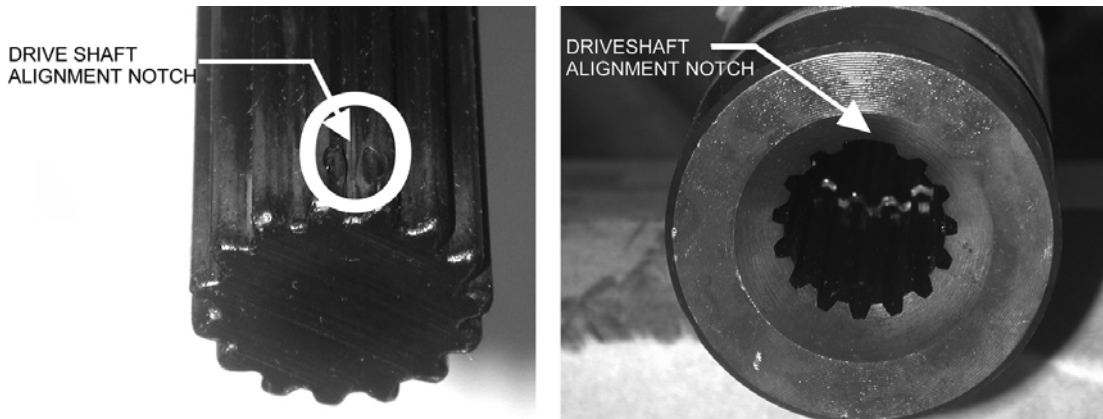


ASSEMBLY

DRIVESHAFT AND FRONT PUMP MOUNTING

Install spacer plate on tractor engine using bolts and lockwashers as shown in Parts Section. Grease sleeve section of the driveshaft and install from the side of the engine compartment. Once you have the sleeve section in place, bolt to spacer plate using bolts and lockwashers as shown in Parts Section. Install shaft end of driveshaft through opening and into driveshaft sleeve. Shaft and sleeve yokes should be aligned, if shaft does not insert easily in sleeve, turn shaft 180°, and then install. Align the notches on the shaft and yoke tube as shown in picture below. **Shaft end must be installed in correct orientation, failure to do so may result in damage to tractor and/or driveshaft.** After installation of shaft end, install pump mount. Next, install pump. After pump is secured, install driveshaft in to pump shaft. The end of driveshaft should be no more than 1/2" away from contact with pump housing. Tighten crimping bolt on driveshaft. Lube driveshaft and check all hoses, flanges, the pump, pump mount, driveshaft and mounting plate to ensure all fasteners are tightened before operation.

CAUTION: DO NOT START THE TRACTOR UNTIL ALL HOSES ARE ATTACHED, TANK IS FILLED WITH PROPER OIL AND BALL VALVES ARE OPEN! STARTING AT THIS TIME WILL CAUSE SERIOUS DAMAGE TO THE PUMP. (ASM-JD-0007)



ADJUSTING REAR WHEELS

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



ASSEMBLY

POLYCARBONATE SAFETY WINDOW

NOTE: Installing a boom mower requires that all of the right side windows be replaced or protected with a polycarbonate window. This should be done before mounting the mainframe.

1. Disconnect gas shock at door. Remove the right side cab door/window glass from tractor cab by removing hinge pins. Also, remove rear right side window.
2. Remove the existing hardware and discard factory glass door and window.
3. Place small bead of adhesive seal in the bottom of the trim lock bubble seal.
4. Install trim lock bubble seal on polycarbonate starting at the center bottom horizontal portion.
5. Install existing hardware removed from glass door and window on the polycarbonate.
6. Install the polycarbonate assembly in the cab with existing and supplied hardware.

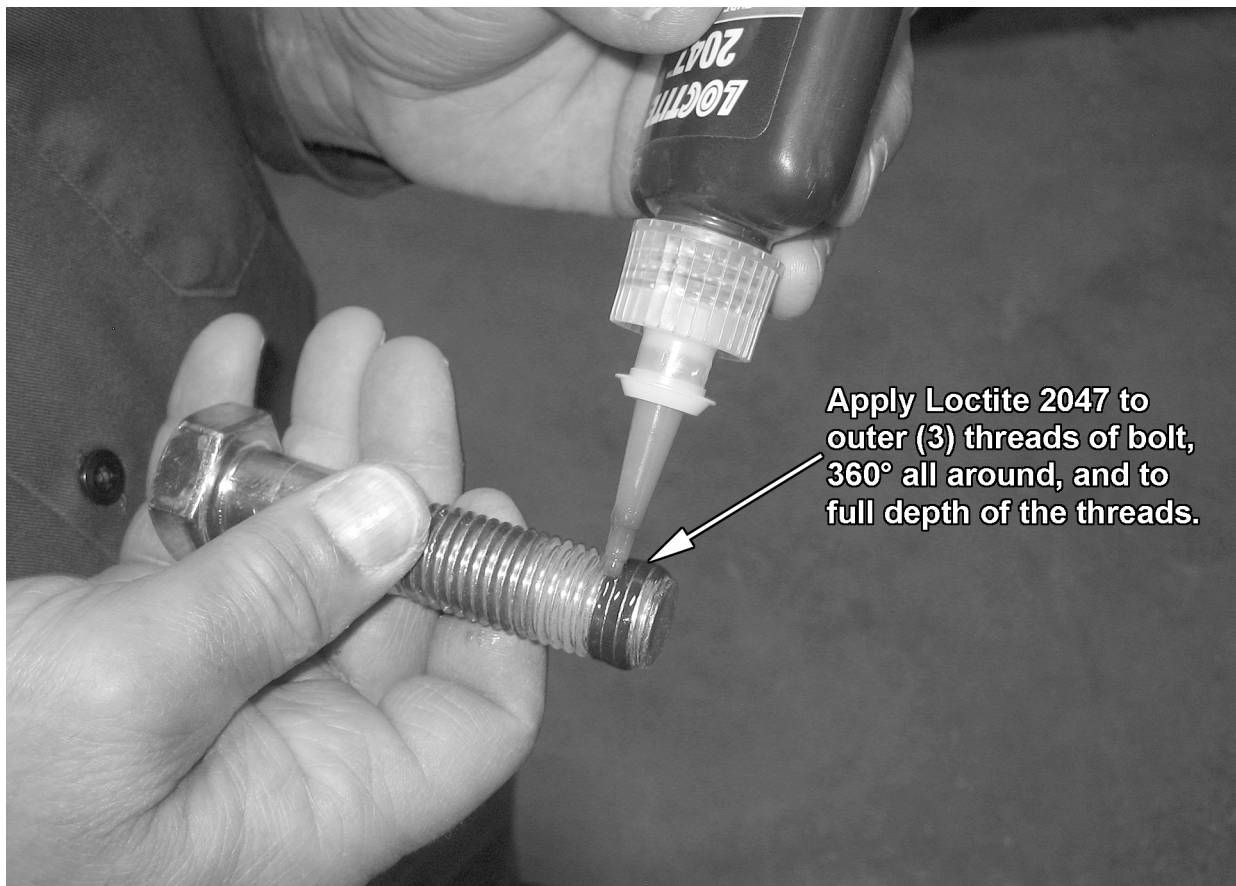
(ASM-JD-0052 JD6xxxM T4F)



ASSEMBLY

APPLICATION OF LOCTITE 2047 MOWER MAINFRAME MOUNTING BOLTS

All mower mainframe mounting bolts shall be secured utilizing Loctite 2047 and torqued per the Torque Chart in the maintenance section. Shake bottle for 60 seconds before use. To prevent clogging of nozzle, do not allow tip to touch metal surfaces during application. If tip of nozzle becomes clogged, cut off tip as required. If female threads are contaminated or rusty, clean threads by using a thread chaser prior to installation of bolts. Apply thread locker to threads of bolts as shown below. The allowable fixture time is (1) hour maximum. Therefore bolts must be torqued within this time limit. The cure time is 72 hours at room temperature, therefore machine is not to be used in actual application, except for function testing, until the Loctite is allowed to cure.



Apply Loctite 2047 to outer (3) threads of bolt, 360° all around, and to full depth of the threads.

(ASM-C-LOCTITE MNT BOLTS)



ASSEMBLY

TIGER TUBE GUIDE INSTALLATION

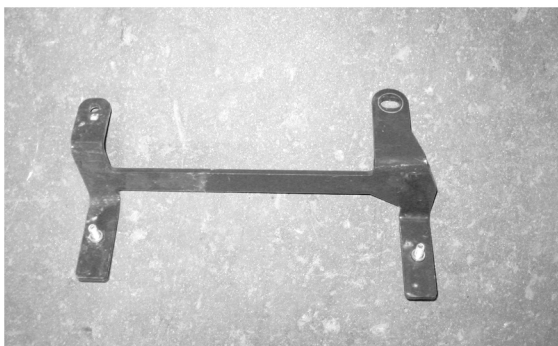
Before the Tiger mainframe can be installed on JD6145-55M/R tractors, some steps are necessary. First, portions of the heat shield need to be temporarily removed from the tractor's exhaust, as shown in the photos below. This will allow the replacement of the John Deere part securing the preformed tubes running along the right side of the tractor. The John Deere part shown should be replaced with the provided Tiger part. This is part #06411947 for 6145-55M/R tractors and part #06412417 for 6110-30M/R tractors. This will allow adjustment of the tube clamps. This is necessary for the mainframe to be installed without damaging the tubes. Remove the John Deere part and replace it with the Tiger part using two provided bolts #06530005. After replacing the John Deere tube guide with the Tiger part, replace the exhaust heat shield.

(ASM-JD tube bracket)

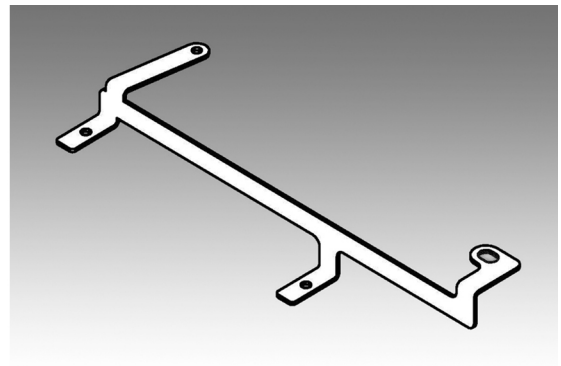


**PARTS TEMPORARILY
REMOVED FROM
TRACTOR EXHAUST**

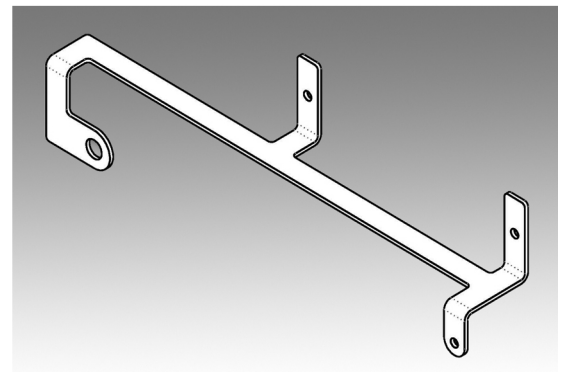
When removing heat shield parts from the tractor exhaust, save all hardware to re-install the heat shield after the John Deere tube bracket has been replaced



John Deere bracket to be replaced



**Tiger replacement bracket 06411947
for JD6145-55M/R tractors**



**Tiger replacement bracket 06412417
for JD6110-30M/R tractors**



ASSEMBLY

MAINFRAME INSTALLATION

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

SWITCHBOX WIRING

Power for the switchbox is accessed through the port located on the right rear of the cab. A John Deere plug is used, part number RE67651. DO NOT connect the plug to the cab port until the wiring is completed. The wires in the plug are colored RED, BLACK and ORANGE. **IMPORTANT: The hot wire will be the RED wire or the ORANGE wire.** ALWAYS test these wires to determine which is which. The hot wire needs to be capped. Attach connector 34538 to end of hot wire and tape wire back on itself. The BLACK and other non-hot wire become hot when tractor key is turned to "on." Connect the BLACK wire of the plug to the BLACK wire from the switchbox. Then connect the other non-hot wire of the plug to the hot wire from the switchbox. .

The two GREEN wires must be connected to the neutral safety wire by cutting the neutral safety wire and connecting one GREEN wire to one end and the second GREEN wire to the other. Refer to the switchbox schematic and wiring diagram for additional information.

The Neutral Safety wire is a brown wire located under steering column. Cut a slot in the right side of column to access, WATCH OUT for existing wires.

After connecting the power to the switchbox, route the white wire along the cables or wires to the solenoid valve. (ASM-JD-0245)



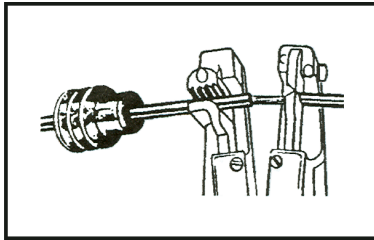
ASSEMBLY

WEATHER-PACK / METRI-PACK ASSEMBLY

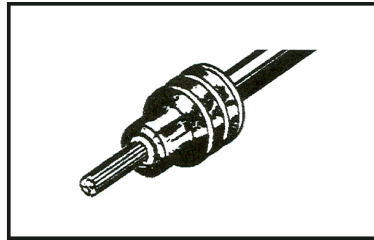
These instructions apply to both Weather-Pack and Metri-Pack connectors.

NOTE: Use the specific tool for the type of connector you are assembling.

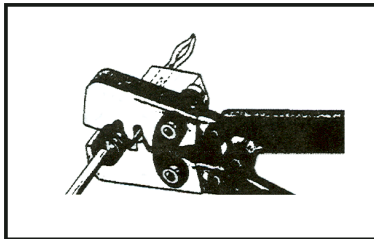
(ASM-C-0009)



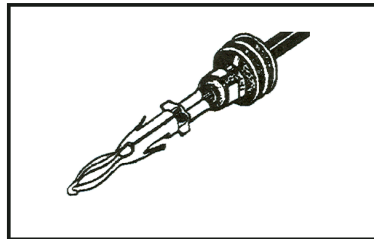
1. Apply seal to cable, before stripping insulation.



2. Align seal with cable insulation.



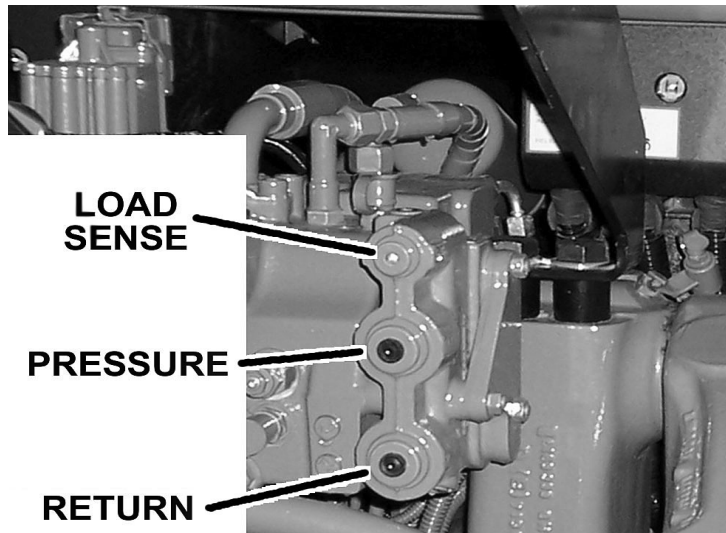
3. Put terminal in crimping tool, then position wire and seal in place.



4. Crimp and visually inspect for a good crimp before installing in connector body.

HYDRAULIC PORTS

These ports are located at the rear of the tractor, under the lift valve, where the valve mounting bracket attaches to the tractor. The load sense port is on top, then the pressure and finally the return port, as shown in the image below. Refer to the Parts Section for additional information. (ASM-JD60-7030-0004)



ASSEMBLY

PRESSURE LINE INSTALLATION

The hydraulic pressure line will be plumbed into the rear of the tractor remote valve. Locate the pressure port on the rear remotes and remove the plug (refer to the Hydraulic Ports illustration and the Parts Section pages for position of the pressure port). After the plug is removed install 27mm adapter. Next, connect a 1/2" hose from the tractor remote valve to the Tiger valve. (ASM-27mmPRESSURE-0001)

RETURN LINE INSTALLATION

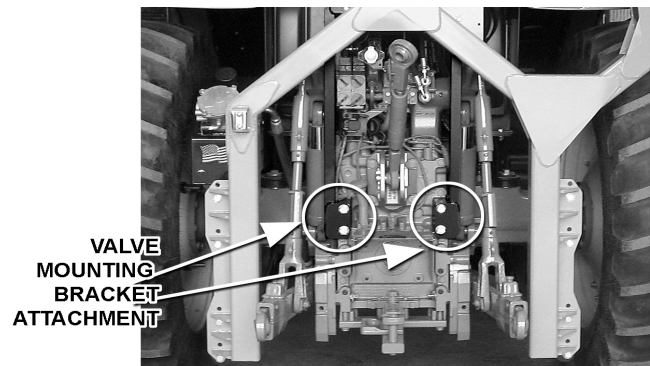
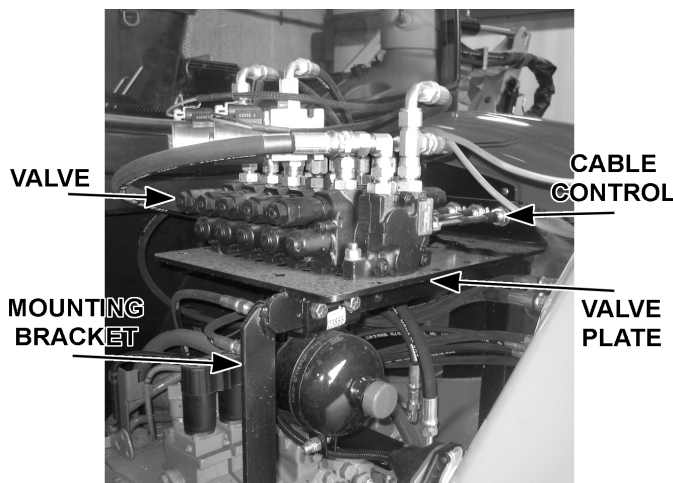
The return line will be plumbed next to the pressure line on the tractor remote valve. Locate the return port and remove the plug (refer to the Hydraulic Ports illustration and the Parts Section for the position of the return port). After the plug is removed install 27mm adapter or elbow. Next, connect a 1/2" hose from the tractor remote valve to the Tiger valve. (ASM-27mmRETURN-0001)

LOAD SENSE LINE INSTALLATION

The load sense line will be plumbed into the bottom of the tractor remote valve (refer to the Hydraulic Ports illustration and the Parts Section pages for the position of the load sense port). Locate the plug on the tractor rear remotes for the load sense, and remove the plug. Install a 14mm adapter or elbow and run a 1/4" hose from the remotes to the Tiger valve. Refer to the Parts Section pages for an exploded diagram of the tractor remote valve hookup. (ASM-14mmLOAD SENSE-0001)

VALVE MOUNTING

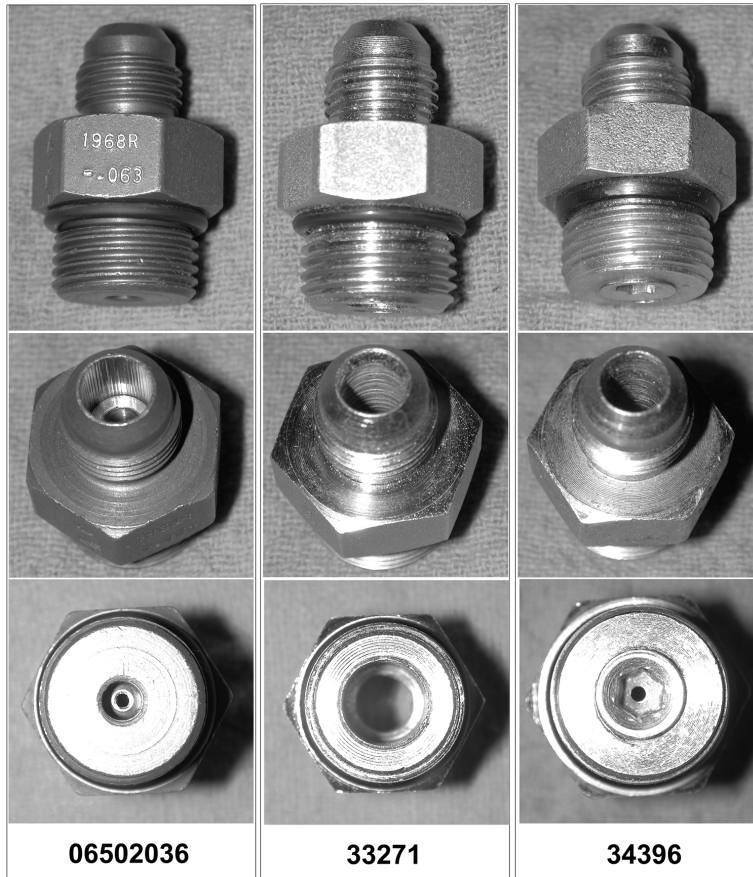
The mounting bracket for JD 6xxxR series tractors features two long legs which need to be attached as shown in the photo below. Secure the bracket to the tractor with hardware shown in the Parts Section of the manual. Align the holes for the cables on the Husco control valves and center the Danfoss valve on the valve plate. Then align the holes on the valve with the plate holes and secure the lift valve on top of the mounting plate. Route the hydraulic lines from the lift valve to the hydraulic cylinders as noted on the lift valve page of the Parts Section. Install the control cables to the valve and the mounting plate on the Husco valves. On the Danfoss valves, attach the electrical control cables. (ASM-JD7X30-0001 JD6140R)



ASSEMBLY

NOTE ON HUSCO CONTROL VALVES

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

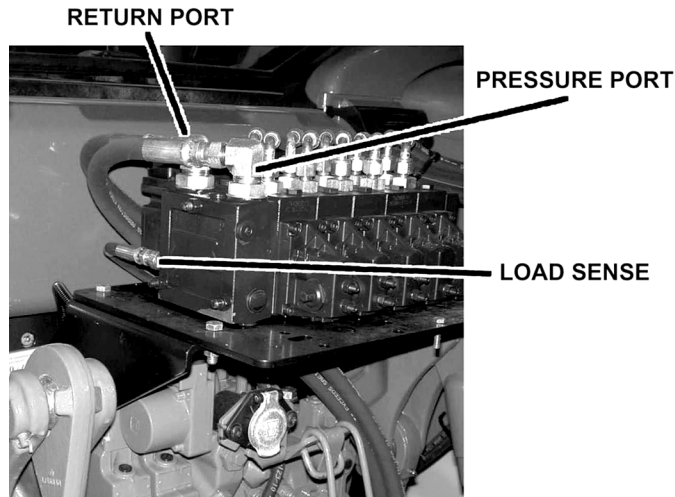


ASSEMBLY

ELECTRONIC LIFT VALVE PORTS

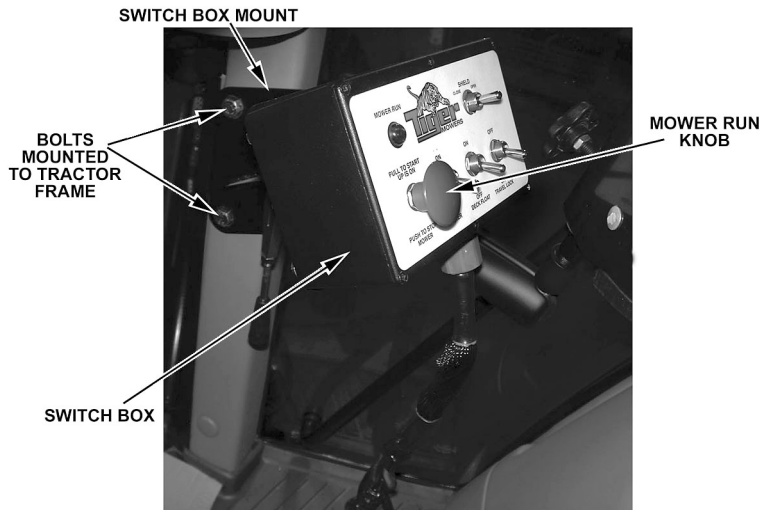
(ASM-C-0089)

DANFOSS VALVE



JOYSTICK SWITCHBOX MOUNTING

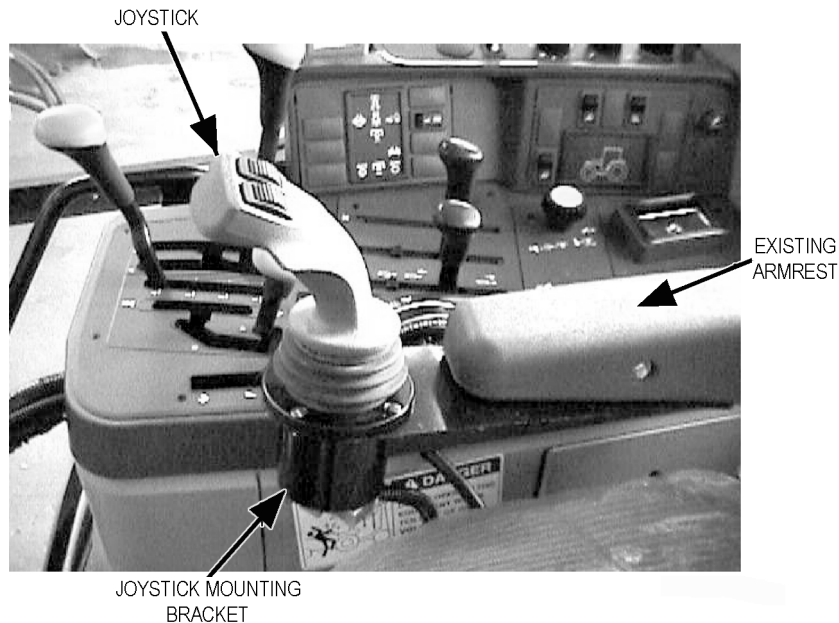
Locate the two holes in the right front corner of the cab frame. These will be the mounting holes for the two mounting bolts of the switchbox bracket. See picture below. Mount the bracket using the hardware supplied, as noted in the Parts Section. (ASM-JD-0081)



ASSEMBLY

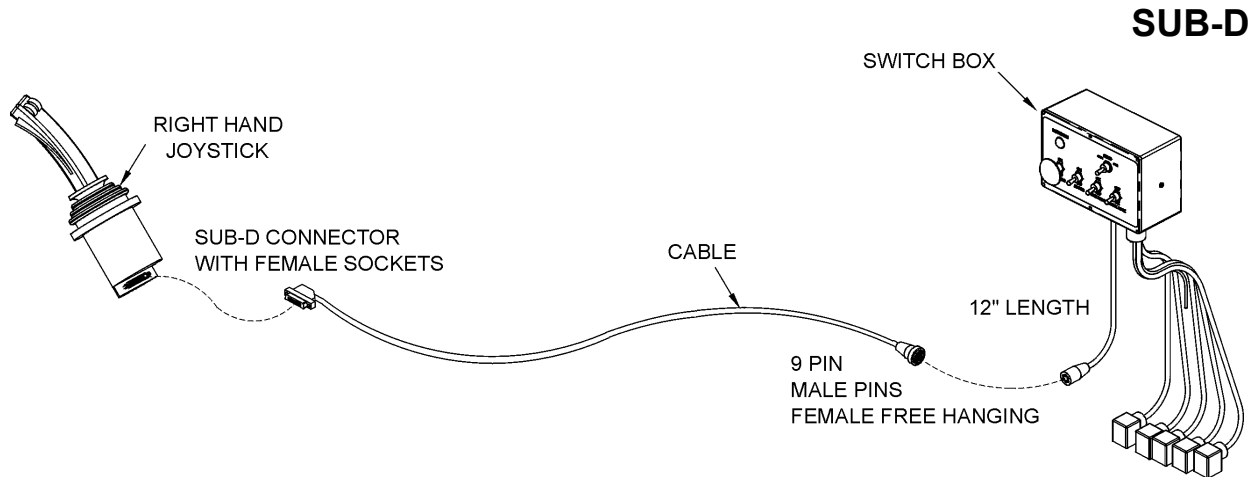
JOYSTICK CONTROL MOUNTING

Mounting the joystick control requires that the right armrest be modified and an additional bracket attached to accommodate the joystick. The armrest must be removed by sliding off the plastic cover and removing the capscrew from the lower right side of the seat. This will leave the armrest loose so it can be removed. Once the armrest is removed, place the joystick holder under the armrest, so the indentation on the outside of the armrest is lined up with the hole in the armrest bracket which the capscrew will need to pass through. Once they are lined up, mark the armrest where the hole passes through the armrest bracket. A 1/2" hole must be drilled through the armrest so that the bracket can be secured. After the initial 1/2" hole is drilled, on the inside of the armrest the hole must be cut to a larger diameter up to the metal plate in the armrest, so that a spacer and hex nut can be fastened to the capscrew which will secure the bracket. Install the armrest bracket on the armrest with the hardware shown in the Parts Section. Once the bracket is installed, re-attach the armrest to the seat using the existing hardware previously removed. Then install the joystick in the bracket with the machine screws shown in the Parts Section. Route the lift valve wires from the switchbox through the cab and out the back window. Cover with conduit and secure with ties or clamps as necessary. (ASM-JD-0082)



ASSEMBLY

BOOM JOYSTICK CONTROL CALIBRATION



This Electronic control valve is now equipped with higher-resolution actuators on Main Boom, Secondary Boom, Deck Roll, and Swivel functions. These actuators have active fault monitoring. The Deck Shield section does not have active fault monitoring. The joystick is unchanged and provides a ratio-metric voltage signal. The neutral signal voltage is half or 50% of tractor supply voltage. A 25% signal voltage will shift the valve spool to full A-Port, and 75% signal voltage will shift the spool to full B-Port in the Main, Secondary, and Swivel valve sections. On the Deck Roll function a 34% signal voltage will shift the valve spool to full A-Port and a 68% signal voltage will shift the spool to full B-port. If an actuator with active fault monitoring receives a signal from the joystick that is less than 15% or greater than 85% of supply voltage the actuator will “fault out” and shut down. Also, if there is an internal failure in the actuator or if the spool position is greater than that specified by the signal voltage from the joystick, the actuator will “fault out” and shut down. An “active fault” condition causes the actuator to drive the spool to neutral, shut down, and activate a red LED on the top of the actuator. The active fault can be canceled by simply cycling the Master Switch OFF and then ON, which resets the fault monitoring, and causes the LED on top of the actuator to be green again.



The joystick control is equipped with signal adaption potentiometers.

These provide the capability to individually adjust the oil flow to each boom function. It is important that the boom functions do not travel too fast. Excessive boom speed can reduce the stability of the unit and decrease operator control.

Note: Use a Phillips screwdriver and be sure to adjust the screws carefully! DO NOT turn the potentiometers beyond their stopping point, potentiometers are very delicate! Turning the “A” or “B” port potentiometers clockwise increases the oil flow to increase the boom function speed, and turning them counterclockwise decreases the oil flow to decrease the boom function speed. See the graphic on the next few pages for help in adjusting.



ASSEMBLY

BOOM JOYSTICK CONTROL CALIBRATION (CONTINUED)

Run tractor at normal operating RPM to adjust the settings as follows.

Set the dead band compensation potentiometer first.

Set the dead band compensation potentiometer at 50%, or halfway between full clockwise and full counterclockwise.

Setting Signal Adaptation Potentiometers:

Disconnect the Deutsch connectors from the actuators of the valve. Use a Volt/Ohm meter to measure signal voltage and adjust the signal adaptation potentiometers as needed. Pin #4 is tractor supply voltage. Pin #1 is signal voltage from the joystick, and pin #3 is ground. First, measure supply voltage between pins 4 and 3. Then measure signal voltage between pins 1 and 3 while indexing the joystick function fully in both the "A" and "B" port direction. Divide the signal voltage by the supply voltage to get signal voltage as a % of supply voltage. This percentage should not be less than 25% or greater than 75% for the Main Boom, Secondary Boom, or Swivel function. This percentage should not be less than 30% or greater than 62% for the Deck Roll function. Note these initial settings for the Deck Roll function should prevent the spool from shifting into float. *After making this first adjustment to deck roll if the spool still goes into float, adjust the "B" port screw additionally counterclockwise.*

Reconnect Deutsch connectors on control cables to actuators on Electronic valve. Run tractor until hydraulic system is at operating temperature. Now refine the adjustments of the signal adaptation potentiometers for both "A" and "B" ports for all proportional functions to achieve the following function times. Note: turning potentiometer clockwise increases the flow or the function speed, and turning them counterclockwise decreases the flow or the function speed. Note, if during this procedure the trim potentiometer is set to full counterclockwise but the function is still too fast, use the mechanical stops at the manual actuator end of the valve section to further limit flow. Turn limit screw in or clockwise to limit flow. The upper limit screw limits flow to B-port, and the lower limit screw limits flow to A-port. However DO NOT adjust the limit screw on B-port of deck roll function. Limiting B-port will prevent float function.



ASSEMBLY

BOOM JOYSTICK CONTROL CALIBRATION (CONTINUED)

MAIN BOOM: “A” Port, Boom Up: 8-10 Seconds

(Note: Extend secondary boom completely; roll deck to be level with ground, and lower main boom until deck is on ground. Now index main boom “up” function and determine the time required for main boom to rise completely.)

“B” Port, Boom Down: 6-8 Seconds

(Note: Extend secondary boom completely, roll deck to be level with ground, and raise the main boom to “full up”. Then index the main boom “down” function to determine the amount of time required for the deck to contact the ground. CAUTION: Stop the boom just as the deck contacts the ground.)

SECONDARY

BOOM: “A” Port, Boom Out: 8-10 Seconds

(Position main boom full up, roll deck out until deck cylinder is fully retracted, and bring secondary boom in completely. Then index the secondary boom “out” function and determine the time required for boom to extend out completely.)

“B” Port, Boom In: 8-10 Seconds

(Position the main boom full up, roll deck out until deck cylinder is fully retracted, and extend secondary boom completely. Then index the secondary boom “in” function and determine the time required for boom to come in.)

DECK ROLL: “A” Port, Deck Out: 7-9 Seconds

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck in until deck cylinder is completely extended. Then index the deck roll “out” function and determine the time required for the deck to roll out.)

“B” Port, Deck In: Target 7-9 Seconds (but DO NOT use Limit Screw)

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck out until deck cylinder is completely retracted. Then index the deck roll “in” function and determine the time required for the deck to roll in.)

BOOM

SWIVEL: “A” Port, Boom Aft: 14-16 Seconds for 3PS, 3OS, SS

(Extend booms completely; rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom full forward. Then index the boom swivel “aft” function and determine the time required for the boom to swivel full aft. Use caution when doing this, stop boom before main boom contacts tire.)

“B” Port, Boom Forward: 14-16 Seconds for 3PS, 3OS, SS

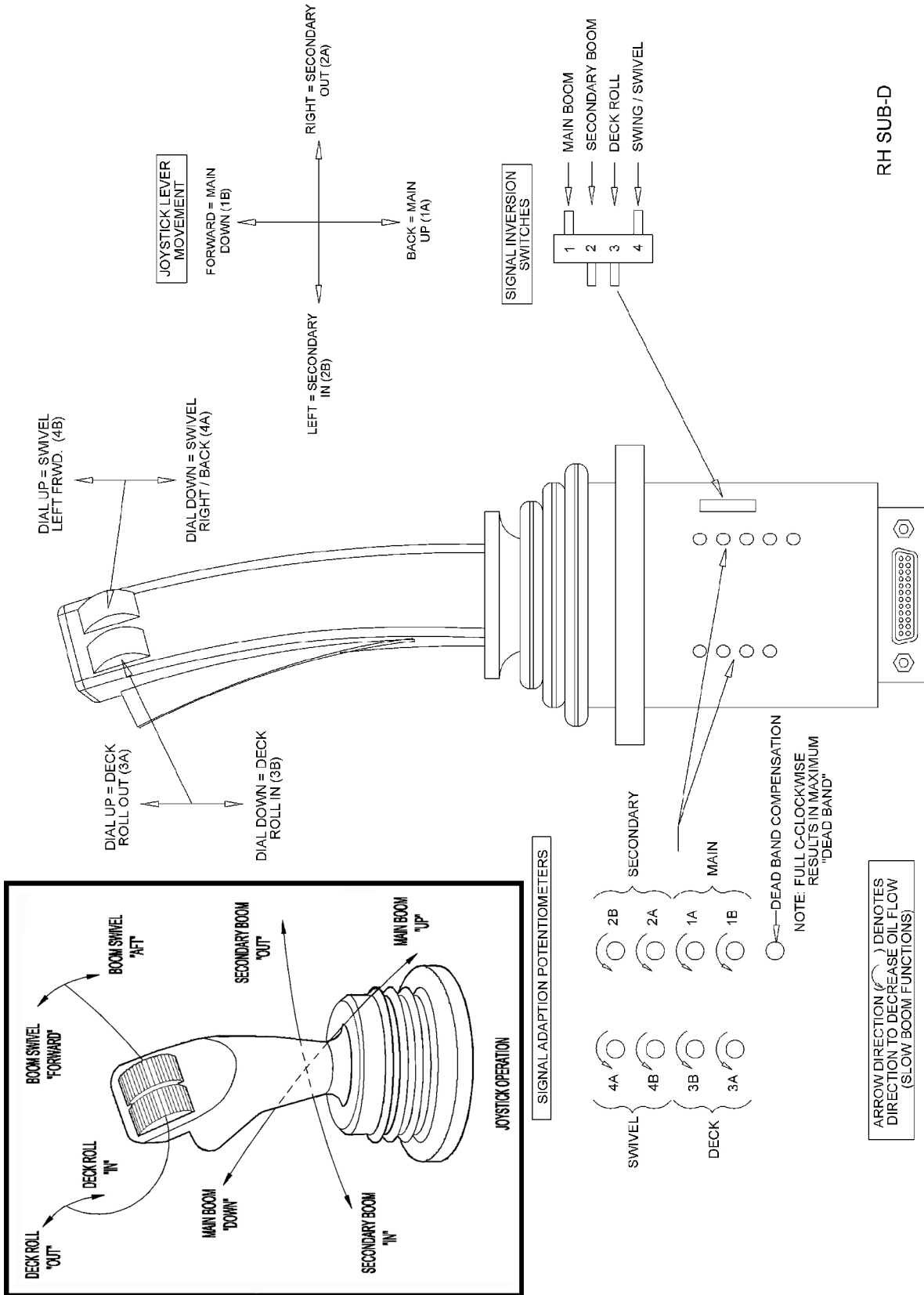
(Extend booms completely, rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom aft until near tire. Then index the boom swivel “forward” function and determine the time required for the boom to swivel full forward.)

(ASM-C-0082)



ASSEMBLY

BOOM JOYSTICK DIAGRAM (ASM-C-0082A)



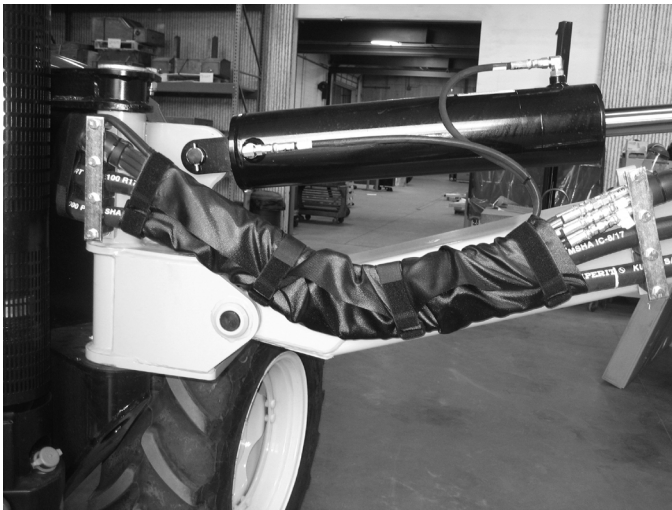
RH SUB-D



ASSEMBLY

REAR STOW BENGAL HOSE ROUTING

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



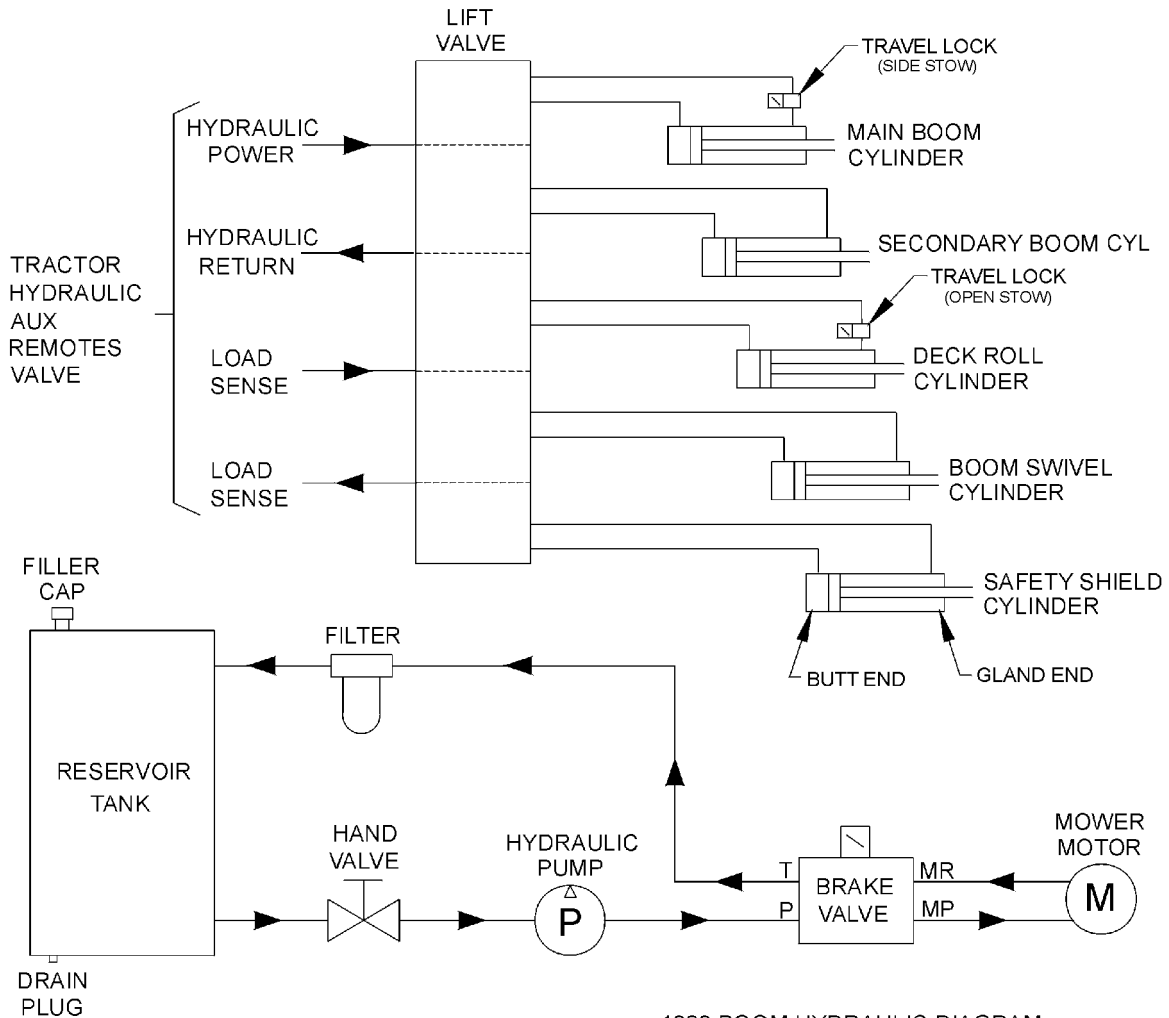
Route the hoses through the space between the swivel and the mainframe. Connect the hoses to the brake valve. Assemble the swivel clamp and place the return hose for the motor in the middle and the pressure line on the bottom. Place the 1/4" hoses in the top clamp and wrap the hoses with a split hose before tightening the clamp. If not all of the 1/4" hoses fit, route two of the hoses above the clamp and secure them to the other hoses with a zip tie. Make sure there is enough slack for all hoses to pivot at the joint where the main boom arm bends in the swivel, and tighten the hoses in the clamp. Wrap the hoses on either side of the clamp with the hose wrap. This will protect the hoses from abrasion and heat. (ASM-T4 HOSE ROUTING-0001)



ASSEMBLY

(ASM-C-0023)

BOOM HYDRAULIC DIAGRAM



WHEEL WELL HYDRAULIC TANK INSTALLATION

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

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

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

WHEEL SPACERS

When mounting a boom mower, a spacer kit is needed for both rear wheels (part # 06200637). After removing the wheels attach the spacer to the wheel portion of the axle with the hardware provided. When you are ready to re-attach the wheel, the wheel goes on first then the reinforcement ring and finally the hardware provided. (ASM-JD-0099)



ASSEMBLY

FILLING HYDRAULIC RESERVOIR

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

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

(ASM-C-0004hydro resrv)

INSTALLING O-RING FITTINGS

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

INSTALLING NATIONAL PIPE FITTINGS

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

PREFORMED TUBE INSTALLATION

Lay booms on floor so that the side with the clamp plates is up. Locate all tube clamps and install them loosely onto the clamp plates.

Arrange the tubes and hoses as outlined in the Common Parts Section. Install the tubes closest to the boom arm first, being careful not to pinch the tubes. Place the other tubes outside of the first tubes. Snug all clamp bolts, but do not tighten. Check all tubes for correct alignment and that none are pinched or bent. The clamp bolts can now be tightened. *(ASM-C-0085)*

GENERAL HOSE INSTALLATION

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

HOSE COVERING

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

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

ACCUMULATOR INSTALLATION

Install the accumulator bracket on the right mainframe mast or lift valve mount, if applicable, with the capscrews, lockwashers and spacers, if applicable, as shown in the Parts Section. Install the accumulator in the bracket and secure with the hardware shown. Install fittings and hoses to the cylinder and control valve as shown in the Parts Section. **Use teflon tape on all pipe fittings (except O-rings).** *(ASM-C-0012)*



ASSEMBLY

SOLENOID BRAKE VALVE

Install a solenoid valve on the mounting bracket with the supplied hardware as shown in the Parts Section in this manual. While installing the fittings to the brake valve, the electrical coil on the spool may have to be removed to make room. When reinstalling the coil, it is important to use no more than 5 ft. lbs. (or 60in. lbs.) torque. **WARNING: OVER TORQUE TO THE COIL WILL RESULT IN HYDRAULIC FAILURE OF SPOOL.** (ASM-C-0025)

TEMPERATURE GAUGE MOUNTING (OPTIONAL)

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

WHEEL WEIGHT MOUNTING

For all tractors using a boom mower, a wheel weight will be required for the rear left side wheel. It will be necessary to mount the weight in the wheel using the long capscrews, lockwashers, flatwashers, spacers (if applicable), and hex nuts per the diagram in the Parts Section.

Installation is most easily done with a fork lift, inserting a fork in the center slot of the wheel weight. The head of the capscrews is to be toward the OUTSIDE of the weight, with flatwashers on both the inside and outside of the assembly.

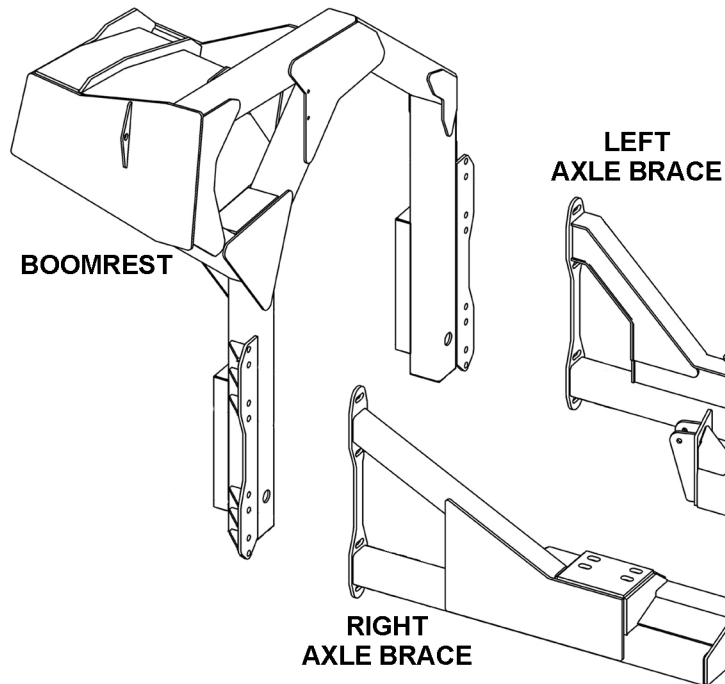
The left rear tire may also be filled with a mixture of water and calcium chloride at about five pounds per gallon. Tire air pressure should be maintained according to the Maintenance Section. (ASM-C-0055)



ASSEMBLY

RS AXLE BRACE MOUNTING

The rear stow axle braces are to be mounted under the rear axle of the tractor. The other end of the axle brace mounts on the outside of the lower rear corners of the mainframe. After attaching the boomrest, it should fit tightly and level under the tractor. Attach the axle brace(s) to the mainframe with hardware shown in the Parts Section and tighten. Attach the axle braces to the rear axle using the mounting hardware shown in the Parts Section, but **DO NOT** tighten.



RS BOOMREST MOUNTING

Carefully raise the rear stow boomrest and align the holes with those of the axle brace. Now install all attaching hardware, as shown in the Parts Section, loosely, to allow for the alignment with the left and right axle brace. Tighten/torque all hardware on the brace and the boomrest.

(ASM-JDBOOM-0001 6E BRUTE)

DECK ATTACHMENT

The pivot assembly is used to attach the head to the secondary boom. Install the deck pivot cylinder using the pins and hardware, which is illustrated in the Common Section.

Connect the fittings and hoses from the pivot cylinder to the small preformed tubes on the boom arm. Connect the fittings and hoses from the motor to the large preformed tubes on the boom arm. Connect all remaining hoses from the control valve to the cylinders and / or preformed tubes on the boom arm. Refer to Common Section for diagrams. *(ASM-C-0018)*



ASSEMBLY

MAIN BOOM INSTALLATION

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

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

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

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

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

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



ASSEMBLY

FINAL PREPARATION FOR OPERATION

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

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



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

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

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

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

MOWER TESTING

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

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



OPERATION SECTION

UJ ^!aa } ÁU^&a } ÁE

OPERATION

TIGER BOOM MOWER OPERATING INSTRUCTIONS

OPERATION

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READ AND UNDERSTAND THE ENTIRE OPERATING INSTRUCTIONS AND SAFETY SECTION OF THIS MANUAL AND THE TRACTOR MANUAL BEFORE ATTEMPTING TO USE THE TRACTOR AND IMPLEMENT. Q^A^]^• A^ i^A^]^ o^e^ }^ a^i^•ae^ a^A^e^ }^ A^ A^@A^ }^ d^ &e^ }^ E^e^]^ }^ ae^c^A^]^ i^A^ A^ae^•A^e^ c^e^ i^a^ a^A^A^ a^e^ i^A^ i^A^e^
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SAFETY INSTRUCTIONS



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LEA EL INSTRUCTIVO!



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OPERATION

1. OPERATOR REQUIREMENTS

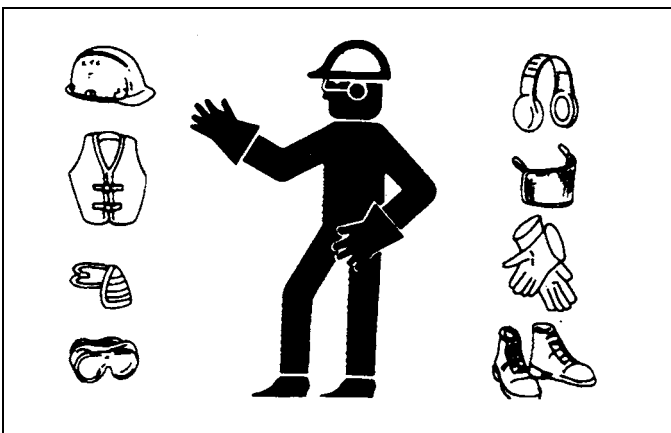
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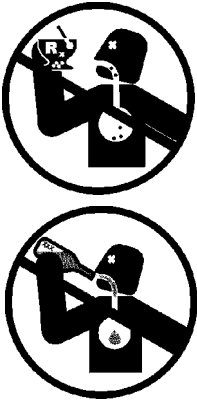
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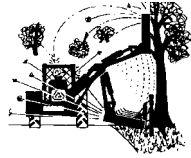


OPERATION

OPERATION



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2.3 Tractor Lighting and SMV Emblem

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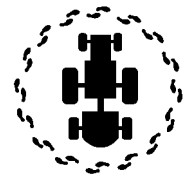
OPERATION

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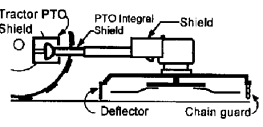
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6.1 Tractor Pre-Operation Inspection/Service

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OPERATION

OPERATION

6.2 Boom Unit Pre-Operation Inspection and Service

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OPERATION

OPERATION

OPERATION

- Q. 1. The operator must wear safety glasses and a hard hat when operating the machine. The operator must also wear a seat belt when operating the machine.
- Q. 2. The operator must ensure that the machine is properly maintained and that all safety features are in good working order.
- Q. 3. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.
- Q. 4. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.
- Q. 5. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.
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- Q. 8. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.
- Q. 9. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.
- Q. 10. The operator must ensure that the machine is properly calibrated and that all safety features are in good working order.



Q. 1. The operator must wear safety glasses and a hard hat when operating the machine. The operator must also wear a seat belt when operating the machine.



Q. 1. The operator must ensure that the machine is properly maintained and that all safety features are in good working order.

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OPERATION

Tractor PRE-OPERATION Inspection



Mower ID# _____ Make _____

Date: _____ Shift _____



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

OPERATION

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

Operator's Signature: _____

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

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OPERATION

Boom PRE-OPERATION Inspection



Mower ID# _____ Make _____
 Date: _____ Shift _____



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

Table 1:

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

Operator's Signature: _____

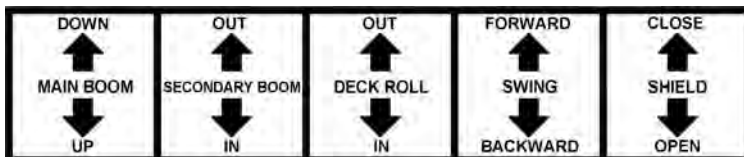
DO NOT OPERATE an UNSAFE TRACTOR or MOWER

OPERATION

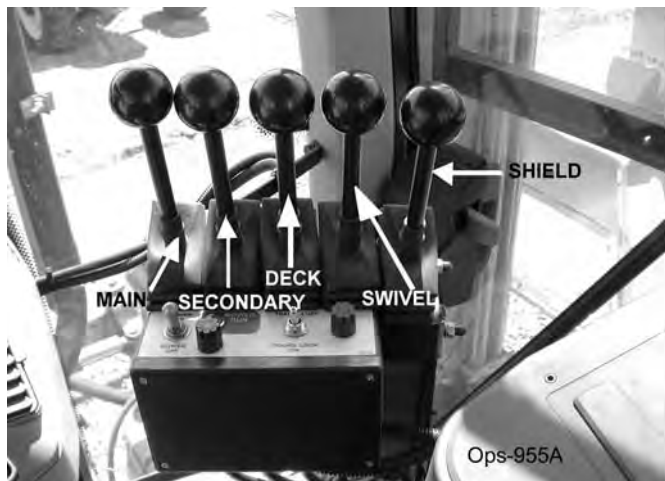
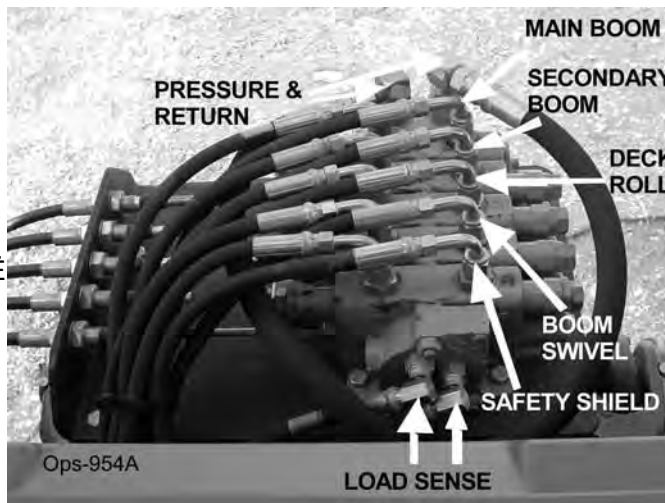
OPERATION

Cable Controlled Mowers

OPERATION



OPERATION



OPERATION

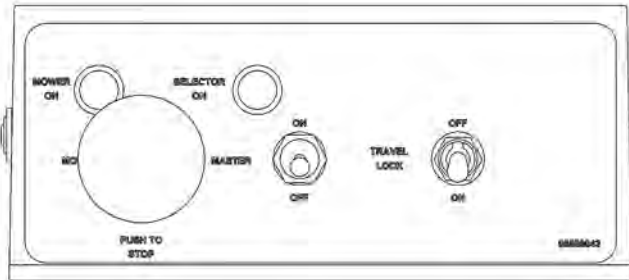
OPERATION

OPERATION

OPERATION

6.4 Switchbox

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OPERATION

DANGER

SAFETY SHIELD & DEFLECTOR OPERATION

| | |
|---|--|
| <p style="text-align: center; font-weight: bold;">SAFETY SHIELD</p> <p style="text-align: center; font-weight: bold;">DEFLECTOR</p> | <ul style="list-style-type: none"> • Failure to close Safety Shield and Deflector may allow objects to be thrown outward with great force which can cause property damage, bodily injury, or death. <ol style="list-style-type: none"> 1. Keep Safety Shield and Deflector fully closed when cutting grass and weeds to reduce possibility of objects being thrown outward by the Blades if persons are in the area. 2. Before Cutting brush, trimming limbs, or other such operations, raise the Deflector and Safety Shield fully to allow the blades to contact the material if area is clear of passerby. Operator must stop cutting and close shield if passerby enters the thrown objects area or blade contact area. 3. Repair or replace Safety Shield and Deflectors as needed. 4. Always transport with Safety Shield and Deflector closed. |
|---|--|

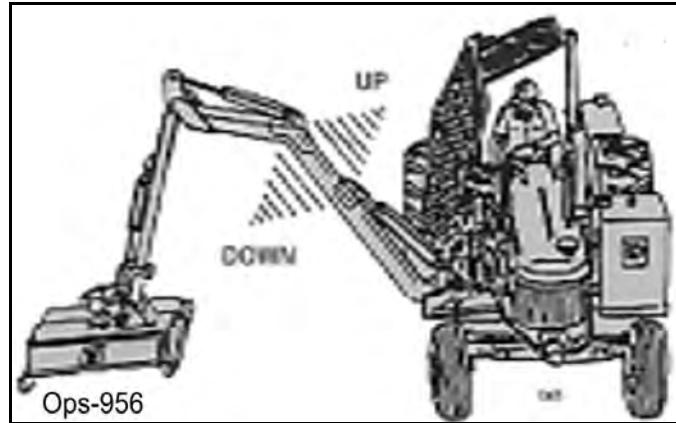
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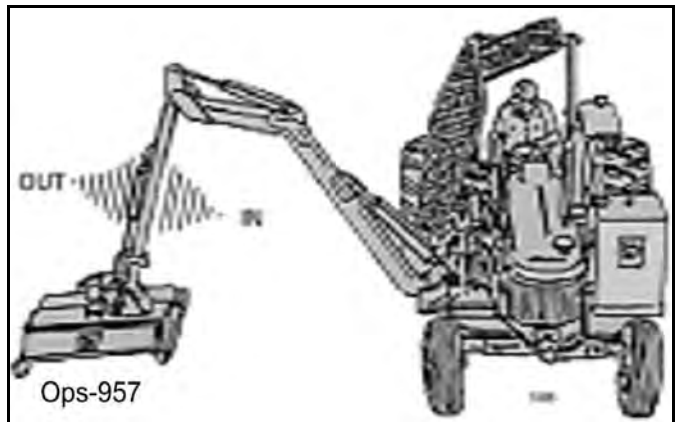
OPERATION

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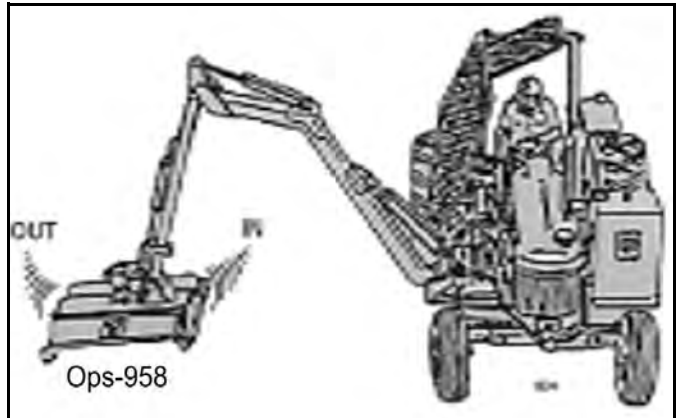
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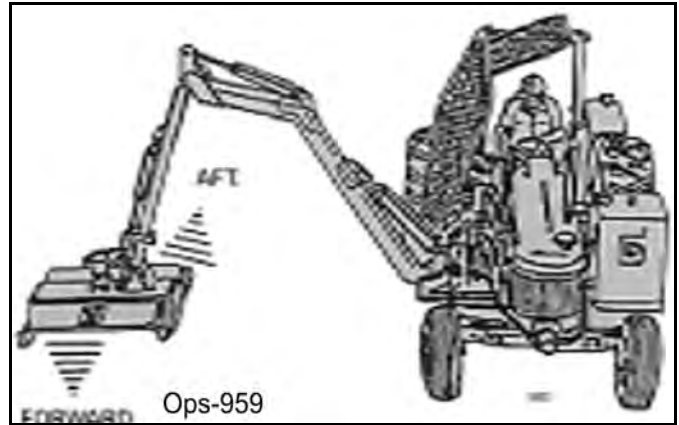
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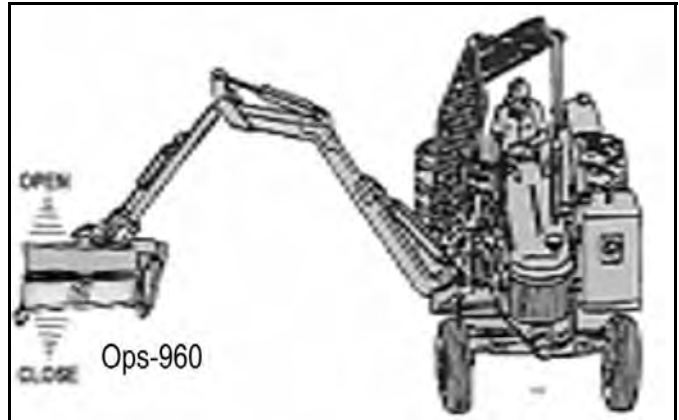
OPERATION

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OPERATION

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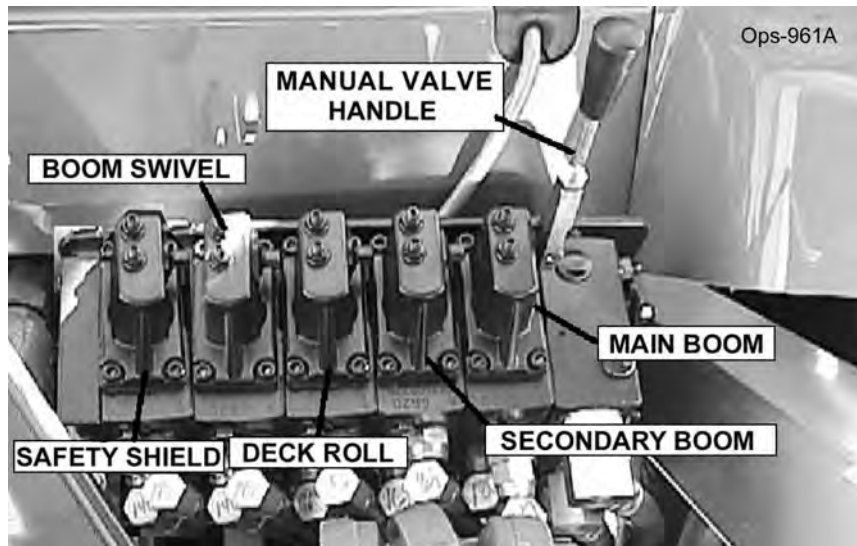
7. Joystick Controlled Mowers

WARNING DO NOT touch the controls while the machine is in operation. The controls are sensitive and can be damaged by touching them. Always use the correct technique when operating the controls.

When operating the joystick controlled mowers, the operator must be seated and the machine must be in the correct position. The operator must also be wearing the seat belt and the safety harness. The operator must also be wearing the safety glasses and the hearing protection.

CAUTION Do not touch the controls while the machine is in operation. The controls are sensitive and can be damaged by touching them. Always use the correct technique when operating the controls.

CAUTION DO NOT touch the controls while the machine is in operation. The controls are sensitive and can be damaged by touching them. Always use the correct technique when operating the controls.

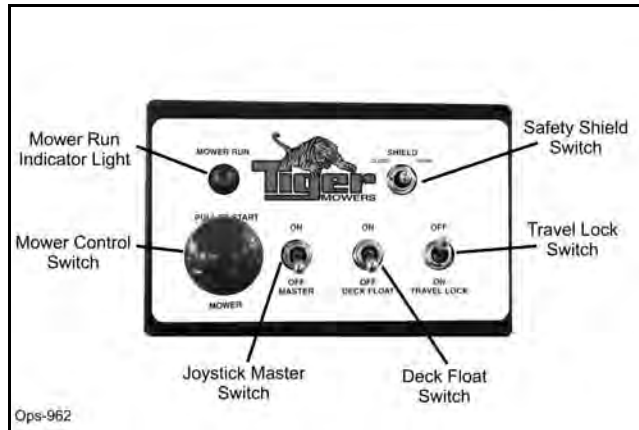


OPERATION

OPERATION

7.1 Switch Box and Joystick Control

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! DANGER

SAFETY SHIELD OPERATION

• Failure to close Safety Shield may allow objects to be thrown outward with great force which can cause property damage, bodily injury, or death.

1. Keep Safety Shield fully closed when cutting grass and weeds to reduce possibility of objects being thrown outward by the Blades and to prevent contact with the Blades if persons are in the area.
2. Before cutting brush, trimming limbs, or other such operations, raise Safety Shield fully to allow the blades to contact the material if area is clear of passersby. Operator must stop cutting and close shield if passerby enters the thrown objects area or blade contact area.
3. Repair or replace Safety Shield as needed.
4. Always transport with Safety Shield closed. Ops-963

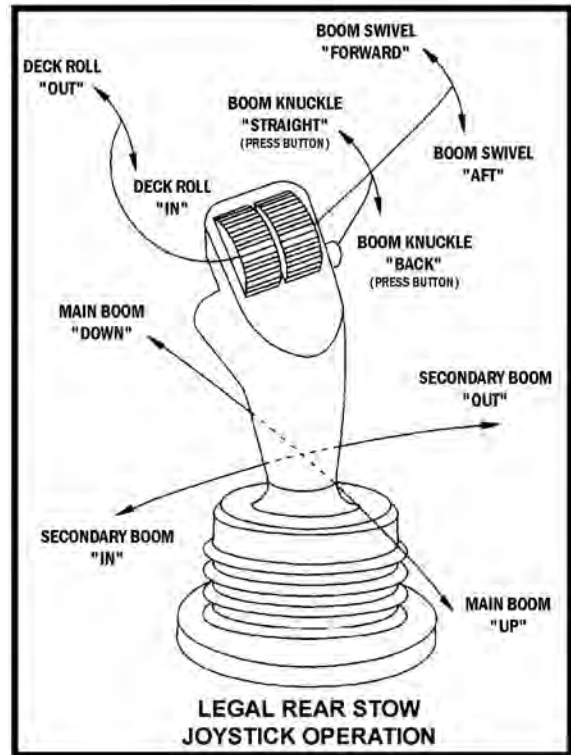
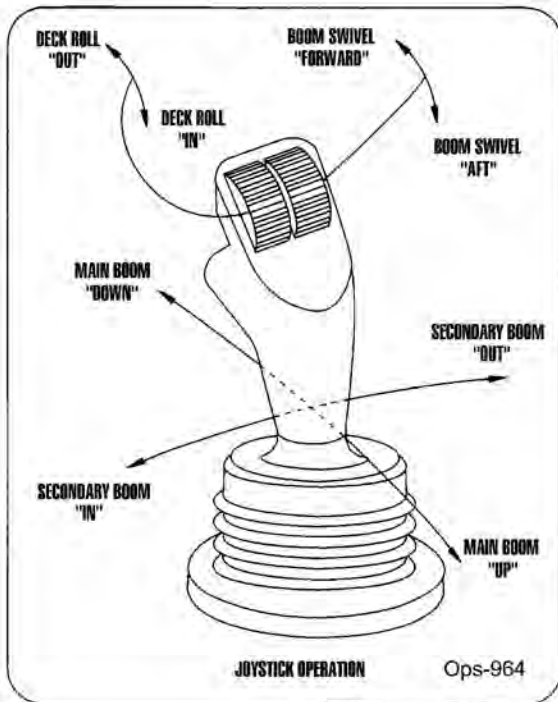
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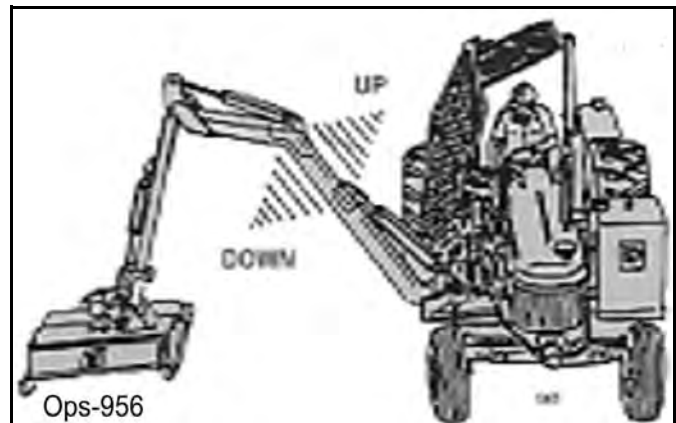
OPERATION

OPERATION

Joystick Control



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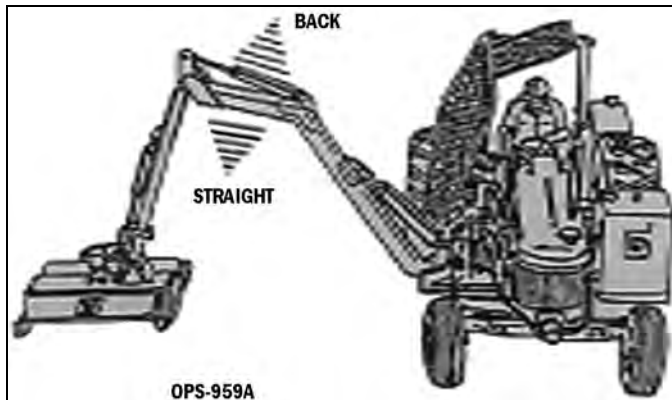
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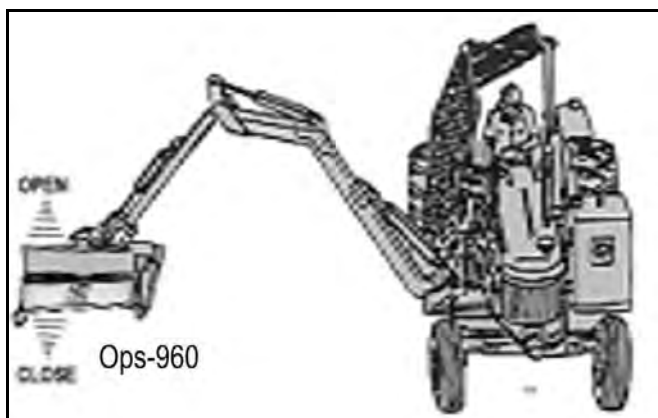
OPERATION

OPERATION

ÜÖPVARJYÜVÖSÄÜÜŠŠÖ ÜÄY PŠÖÁÜÜÖ ÜÜÖÖ
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8. DRIVING THE TRACTOR AND IMPLEMENT

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OPERATION

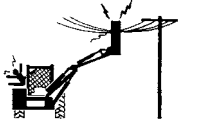
WARNING

Ինչպես օգտագործել այս սարքը, կարևոր է հասկանալ և համապատասխանաբար կիրառել օգտագործման արձագանքները և օգտագործման անվտանգության կանոնները:



DANGER

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:



OPERATION

9. OPERATING THE BOOM UNIT AND ATTACHED HEAD

THE OPERATOR MUST COMPLETELY UNDERSTAND HOW TO OPERATE THE TRACTOR AND MOWER AND ALL CONTROLS BEFORE ATTEMPTING TO MOW. Ինչպես օգտագործել սարքը, կարևոր է հասկանալ և համապատասխանաբար կիրառել օգտագործման արձագանքները և օգտագործման անվտանգության կանոնները:

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

Սկզբից ստուգե՛ք, որ սարքը ճիշտ է կապված և օգտագործման համար պատրաստ է: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

WARNING

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

WARNING

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից: Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

Օգտագործելու ժամանակ միշտ պահպանե՛ք անվտանգ և համապատասխանաբար կիրառելի հեռավորություններ անհատներից և կենդանիներից:

OPERATION

WARNING

Ότι οι άνω και κάτω άκρες των αλυσίδων και των τροχών της μηχανής είναι πολύ ζεστές. Μην αγγίζετε αυτές τις περιοχές χωρίς να χρησιμοποιείτε προστατευτικό εξοπλισμό. Η επαφή με αυτές τις περιοχές μπορεί να προκαλέσει εγκαύματα ή να οδηγήσει σε άλλους τραυματισμούς.

WARNING

Πριν χρησιμοποιήσετε τη μηχανή, διαβάστε προσεκτικά το εγχειρίδιο. Η μη συμμόρφωση με τις οδηγίες μπορεί να οδηγήσει σε σοβαρούς τραυματισμούς ή θάνατο. Τα παιδιά και οι ηλικιωμένοι πρέπει να χρησιμοποιούν τη μηχανή μόνο με την επίβλεψη ενός ειδικού. Η χρήση της μηχανής σε ακατάλληλο έδαφος μπορεί να προκαλέσει απώλεια ισορροπίας ή να οδηγήσει σε άλλους τραυματισμούς.

9.1 Foreign Debris Hazards/Overhead Obstructions

Οι άνω και κάτω άκρες των αλυσίδων και των τροχών της μηχανής είναι πολύ ζεστές. Μην αγγίζετε αυτές τις περιοχές χωρίς να χρησιμοποιείτε προστατευτικό εξοπλισμό. Η επαφή με αυτές τις περιοχές μπορεί να προκαλέσει εγκαύματα ή να οδηγήσει σε άλλους τραυματισμούς. Επίσης, μην χρησιμοποιείτε τη μηχανή σε ακατάλληλο έδαφος, καθώς αυτό μπορεί να προκαλέσει απώλεια ισορροπίας ή να οδηγήσει σε άλλους τραυματισμούς. Τα παιδιά και οι ηλικιωμένοι πρέπει να χρησιμοποιούν τη μηχανή μόνο με την επίβλεψη ενός ειδικού.

Πριν από την εκκίνηση της μηχανής, εξετάστε προσεκτικά την περιοχή για την παρουσία αντικείμενων που μπορεί να προκαλέσουν ζημιές ή τραυματισμούς. Μην χρησιμοποιείτε τη μηχανή σε ακατάλληλο έδαφος, καθώς αυτό μπορεί να προκαλέσει απώλεια ισορροπίας ή να οδηγήσει σε άλλους τραυματισμούς. Τα παιδιά και οι ηλικιωμένοι πρέπει να χρησιμοποιούν τη μηχανή μόνο με την επίβλεψη ενός ειδικού.

WARNING

Όταν χρησιμοποιείτε τη μηχανή, μην αφήνετε τα χέρια να ακουμπάνε σε άλλα αντικείμενα, καθώς αυτό μπορεί να προκαλέσει τραυματισμούς. Επίσης, μην χρησιμοποιείτε τη μηχανή σε ακατάλληλο έδαφος, καθώς αυτό μπορεί να προκαλέσει απώλεια ισορροπίας ή να οδηγήσει σε άλλους τραυματισμούς. Τα παιδιά και οι ηλικιωμένοι πρέπει να χρησιμοποιούν τη μηχανή μόνο με την επίβλεψη ενός ειδικού.



WARNING

Πριν από την εκκίνηση της μηχανής, εξετάστε προσεκτικά την περιοχή για την παρουσία αντικείμενων που μπορεί να προκαλέσουν ζημιές ή τραυματισμούς. Μην χρησιμοποιείτε τη μηχανή σε ακατάλληλο έδαφος, καθώς αυτό μπορεί να προκαλέσει απώλεια ισορροπίας ή να οδηγήσει σε άλλους τραυματισμούς. Τα παιδιά και οι ηλικιωμένοι πρέπει να χρησιμοποιούν τη μηχανή μόνο με την επίβλεψη ενός ειδικού.

Ότι { U} αντίστοιχ { Α} Η

OPERATION

9.8 Shutting Down the Attached Head- For Standard Equipment

1. Turn the engine off.
 2. Turn the PTO off.
 3. Turn the transmission park.
 4. Turn the parking brake on.
 5. Turn the tractor off.



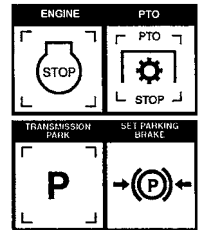
6. Turn the tractor off.
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 8. Turn the tractor off.
 9. Turn the tractor off.
 10. Turn the tractor off.



OPERATION



1. Turn the engine off.
 2. Turn the PTO off.
 3. Turn the transmission park.
 4. Turn the parking brake on.
 5. Turn the tractor off.



OPERATION

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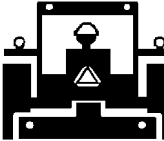
OPERATION



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OPERATION

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MAINTENANCE SECTION

Maintenance Section 4-1

MAINTENANCE

General Instructions

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

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

Maintenance Precautions

- Be sure end of grease gun and zerks are clean before using. Debris injected into bearings, etc. with grease will cause immediate damage.
- DO NOT use a power grease gun to lubricate bearings. These require very small and exact amounts of lubrication. Refer to the detailed maintenance section for specific lubrication instructions. DO NOT over-grease bearings.
- Lexan windows should be washed with mild soap or detergent and lukewarm water, using a soft clean sponge or soft cloth. DO NOT use abrasive or alkaline cleaners or metal scrapers on lexan windows!
- Be alert to maintenance indicators such as the in-tank filter pressure gauge, hydraulic reservoir sight gauge, etc. Take the required action to correct any problems immediately.
- Release of energy from pressurized systems may cause inadvertent actuation of cylinders, or sudden release of compressed springs. Before disconnecting any hoses, relieve pressure by shutting tractor off, setting cutter on ground and actuating lift valve handles.



DO NOT use hands to check for suspected leaks in hydraulic hoses! Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and cause serious injury. If fluid is injected into skin, it must be surgically removed within a few hours or gangrene may result. Use a small piece of wood or cardboard, not hands, to search for pin hose leaks. Be sure all connections are tight and hoses and lines are not damaged before applying pressure.

Break in Period

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

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



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



MAINTENANCE



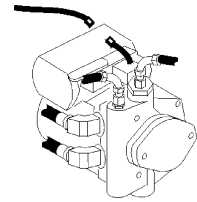
Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. (SG-8)



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



Always disconnect the wire leads from the mower pump solenoid before performing service on the Tractor or Mower. Use caution when working on the Tractor or Mower. Tractor engine must be stopped before working on Mower or Tractor. The Mower Blades could inadvertently be turned on without warning and cause immediate dismemberment, injury or death. (SBM-12a)

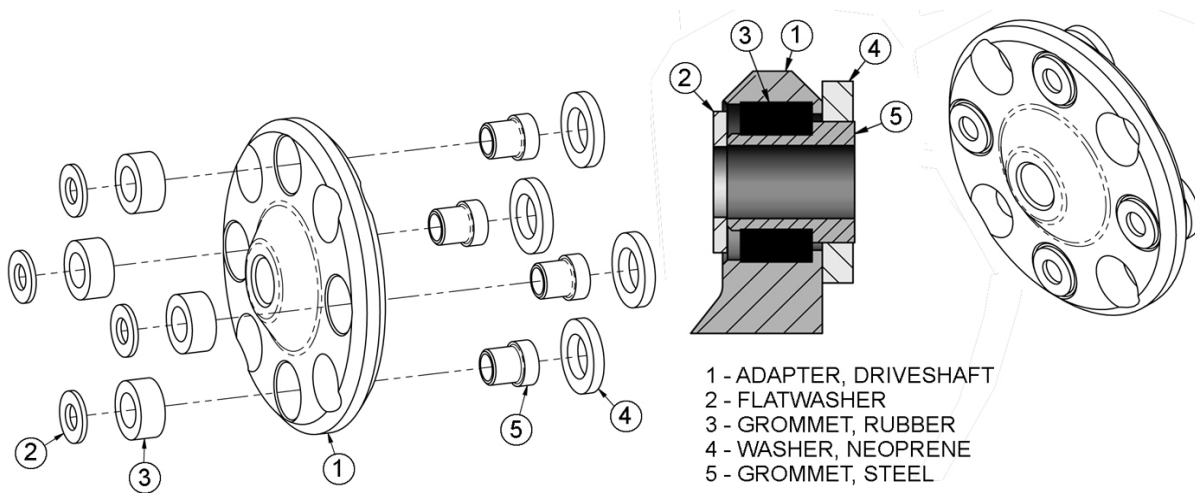


MAINTENANCE

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

If replacement of components of the crankshaft adapter assembly is required, follow the assembly procedures shown below. Seat rubber grommet completely into counterbore, then seat steel grommet completely into rubber grommet while rubber grommet is supported.

(ASM-JD-0051 CRANKSHAFT ADAPTER MAINTENANCE)



MAINTENANCE

MAINTENANCE

Regular Maintenance

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

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

Daily or Every 8 Hours

| ITEM | SERVICE | COMMENTS |
|---|-----------------------|--|
| Drive Shaft Yoke, U-Joint & Stub Shaft | Grease | Grease as instructed in detailed maintenance section |
| Pump Drive Shaft Coupler | Check and Lube | Insure driveshaft end play |
| Crankshaft Adapter | Check rubber grommets | Replace grommets if damaged or missing |
| Pivot Points | Lubricate | Inject grease until it appears at end |
| Hydraulic Fittings | Check for leaks | Tighten when needed. Do Not use hands to check for leaks, see maint. precautions |
| Knives | Check | Inspect for missing or damaged knives, change as needed. |
| Spindle mouting bolts (spindle to deck) | Check | Torque to 315 ft. lbs. lubricated Torque to 357 ft. lbs. dry |
| Knife mounting bolts (knife to disk or blade bar) | Check | Pre-lubricate threads with anti-seize torque to 800 ft. lbs. |
| Disk/Blade Bar mounting bolts (disk/blade bar to spindle) | Check | Torque to 180 ft. lbs. lubricated Torque to 204 ft. lbs. dry |
| Belts | Check/Adjust | Check if broken, tighten as required |
| Main Frame and Deck | Check | Retorque bolts to torque specifications in this section |
| Hydraulic Fluid Level | Check | Add if required per fluid recommendations |
| Rear Flail Drive(if applicable) Bear Flange and Shaft Coupler | Lubricate | Grease as instructed in detailed maintenance section |
| Cutter Shaft and Boom | Lubricate | Grease as instructed in Maintenance Section 4-4 |

MAINTENANCE

MAINTENANCE

Ground Roller detailed maintenance section

WEEKLY OR EVERY 40 HOURS

| ITEM | SERVICE | COMMENTS |
|----------------|-----------|--------------------------|
| Rotary Spindle | Lubricate | Every 40 hours or weekly |

WEEKLY OR EVERY 50 HOURS

| ITEM | SERVICE | COMMENTS |
|---|---------|--|
| In Tank Hyd. Fluid Filter (10 micron filter) | Change | Change after first 50 hours only, then every 500 hours or yearly |
| In-Line High Pressure Filter (10 micron filter) | Change | Change after first 50 hours only, then every 500 hours or yearly |

MONTHLY OR EVERY 150 HOURS

| ITEM | SERVICE | COMMENTS |
|---|------------------------------|--------------------------------------|
| Hydraulic Fluid Level | Check | Add as needed |
| Hyd. Tank Breather | Clean/Check/Replace | Clean or replace element as required |
| Rear Tire Type 480/80R38 18.4-34 18.4-38 | Max P.S.I. 29 26 26 | |

YEARLY OR EVERY 500 HOURS

| ITEM | SERVICE | COMMENTS |
|---|--------------------------------|---|
| Spindle Grease Hyd. Tank Fluid In Tank Hyd. Fluid Filter (10 micron filter) | Change Change Change | |
| In-Line HP Filter (10 micron filter) | Change or | Change when indicated by restriction indicator. |
| Hyd. Tank Breather | Change | |

Boom Maintenance Section 4-5

MAINTENANCE

TROUBLESHOOTING

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

MAINTENANCE

Clean parts or replace if scratched.

TROUBLESHOOTING (CONTINUED)

| SYMPTOMS | CAUSE | REMEDY |
|--|---|---|
| Motor runs but will not cut. | 1. Belts | 1. Inspect belts and pulleys. Replace belts and repair as needed. |
| | 2. Tensioner | 2. Adjust tensioner nut flatwasher washer is flush with top of guide. |
| Mower turns slowly or not at all. | 1. Contaminants restricting spool movement in valve body. | 1. Remove large nut on side of large valve block. Remove spring, and use needle nose vise grip to pull spool from block. Check block and spool for contaminants and scratches. Clean parts or replace if scratched. |
| | 2. Suction lines obstructed | 2. Check for kinks or obstruction in suction hose. |
| | 3. Low oil level | 3. Check hyd. tank level and fill. |
| Pump will not work | 1. Excessive wear on internal parts | 1. Disassemble and repair. |
| Motor will not work | 1. Excessive wear on internal parts | 1. Disassemble and repair. |

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

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

MAINTENANCE

MAINTENANCE

| Torque for Standard Fasteners | | | | | | | | | | | | | |
|-------------------------------|------------------|-------------------|------------|-----------|-------------------|------------|------------|-------------------|------------|------------|-------------------|------------|------------|
| Nominal Dia. (in.) | threads per inch | Grade 2 | | | Grade 5 | | | Grade 8 | | | Grade 9 | | |
| | | Tightening Torque | | | Tightening Torque | | | Tightening Torque | | | Tightening Torque | | |
| | | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain |
| | | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.17 | K = 0.20 |
| Unified Coarse Thread 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 | 836 | 966 | 1095 | 1288 | 1132 | 1283 |
| 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 |
| Fine Thread Series | | | | | | | | | | | | | |
| 1/4 | 28 | 56 in-lbs | 68 in-lbs | 75 in-lbs | 87 in-lbs | 99 in-lbs | 116 in-lbs | 123 in-lbs | 139 in-lbs | 164 in-lbs | 144 in-lbs | 163 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 | 26 ft-lbs | 30 ft-lbs | 35 ft-lbs | 37 ft-lbs | 42 ft-lbs | 49 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 D = Nominal Diameter
 Torque values calculated from formula T=KDF, where K = 0.17 for zinc plated and dry conditions F = Clamp Load
 K = 0.20 for plain and dry conditions

| Torque-Tension Relationship for Metric Fasteners | | | | | | | | | | | | | |
|--|-------|-------------------|------------|-----------|-------------------|------------|-----------|-------------------|------------|-----------|-------------------|------------|-----------|
| Nominal Dia. (mm) | Pitch | Class 4.6 | | | Class 8.8 | | | Class 10.9 | | | Class 12.9 | | |
| | | Tightening Torque | | | Tightening Torque | | | Tightening Torque | | | Tightening Torque | | |
| | | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain | Lubed | Dry Plated | Dry plain |
| | | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.17 | K = 0.20 | K = 0.15 | K = 0.20 | |
| 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 | 1.5 | 101 | 115 | 135 | 270 | 306 | 360 | 374 | 424 | 498 | 437 | 583 | |
| 20 | 2.5 | 91 | 104 | 122 | 236 | 267 | 314 | 337 | 382 | 449 | 394 | 525 | |

Clamp load calculated as 75% of the proof load for specified bolts. K = 0.15 for "lubricated" conditions D = Nominal Diameter
 All torque values are listed in foot-pounds K = 0.17 for zinc plated, dry conditions F = Clamp Load
 Torque values calculated from formula T=KDF, where K = 0.20 for plain and dry conditions

MAINTENANCE

LUBRICATION RECOMMENDATIONS

MAINTENANCE

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

Boom

Maintenance Section 4-9

MAINTENANCE

POLYCARBONATE CARE AND MAINTENANCE

The propriety UV and Abrasion Resistant Surface coating on SHIELDS SUPERCOATED polycarbonate significantly improves performance. Periodic cleaning using proper procedures and compatible cleaners are recommended to prolong service life. Tiger Corp. polycarbonate is SUPERCOATED on both sides.

CLEANING THE SUPERCOAT HARD-COAT

1. Wash with a mild solution of soap or detergent and lukewarm water.
2. Using a soft cloth or sponge, gently wash the sheet to loosen dirt and grime and rinse well with clean water.
3. To prevent water spotting, thoroughly dry with chamois or cellulose sponge.
4. Avoid the use of abrasive cleaners, squeegees and/or other cleaning implements that may mar or gouge the coating.

CLEANING AGENTS WHICH HAVE BEEN FOUND TO BE COMPATIBLE UNDER LABORATORY CONDITIONS:

Aqueous Solutions of Soaps and Detergents

| | | | |
|--------------|----------------|---------------|-------------|
| Windex(1) | Top Job(2) | Joy(2) | Mr Clean(2) |
| Fantastik(3) | Formula 409(4) | Sumalight D12 | Brucodecid |

Organic Solvents

| | | | |
|------------------|------------|-----------------|---------------------|
| Butyl Cellosolve | Kerosene | Hexel, F.O. 554 | Naphtha(VM&P grade) |
| Neleco-Placer | Turco 5042 | | |

Alcohols

| | |
|----------|-----------|
| Methanol | Isopropyl |
|----------|-----------|

All residual organic solvents should be removed with a secondary rinse.

GRAFFITI REMOVAL

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

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

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

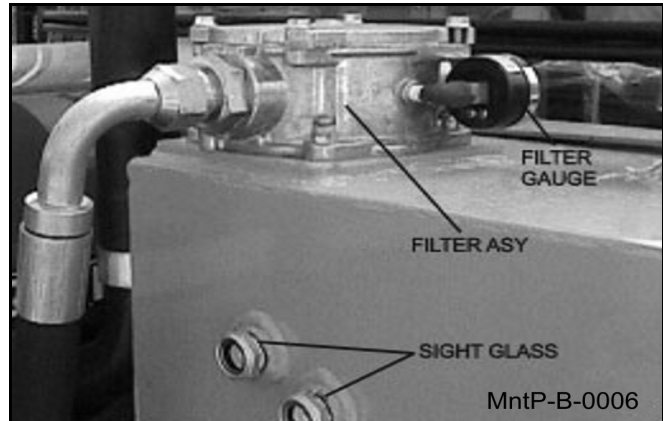
MAINTENANCE

MAINTENANCE

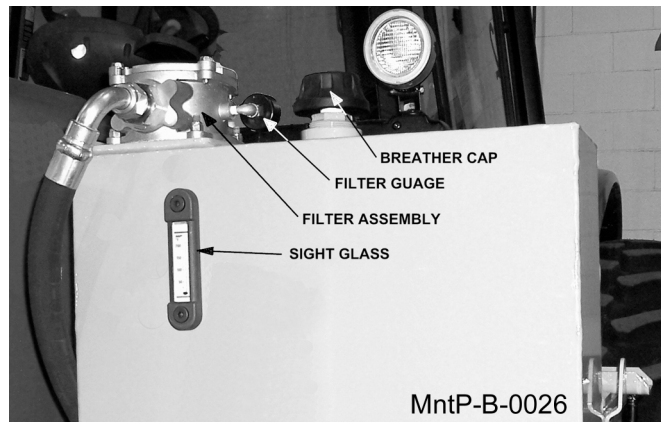
RECOMMENDED FILLING INSTRUCTIONS FOR HYDRAULIC RESERVOIRS

When filling or checking the oil level, the unit should be parked on a level surface., shut OFF, and allow sufficient time to cool to ambient temperature. Use caution when removing the pressurized breather. Do not place face over opening when removing breather.

If your reservoir has two sight glasses: The reservoir should be filled to the top of the lower sight glass on the side of the tank. Do not overfill. The reservoir has been overfilled when oil is visible in the upper sight glass. If tank has too much oil, the excess may be expelled through the pressurized breather.



If your reservoir has one sight glass/temperature gage: The reservoir should be filled to the center of the sight glass on the side of the tank. Do not over-fill. If the tank has too much oil, the excess may be expelled through the pressurized breather.



DETAILED MAINTENANCE

REPLACING IN-TANK HYDRAULIC FILTER:

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

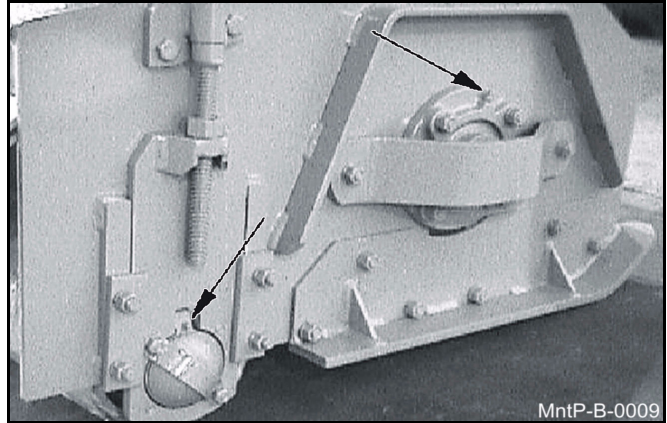


MAINTENANCE

MAINTENANCE

GREASING CUTTERSHAFT -- FLAIL MOWERS

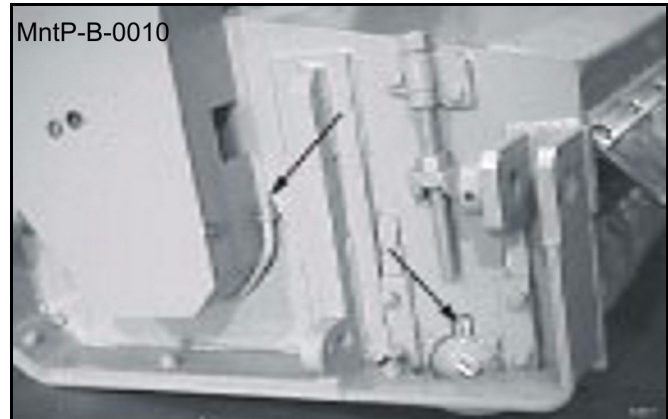
Locate grease zerks on each end of cuttershaft(s), these are located on the bearing cover. Normal conditions require one or two pumps in each bearing, using Lithium-Complex Extreme Pressure grease confirming to NLGI2-ISO 320 specifications. This is to be done with a standard grease gun daily or at **8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



MAINTENANCE

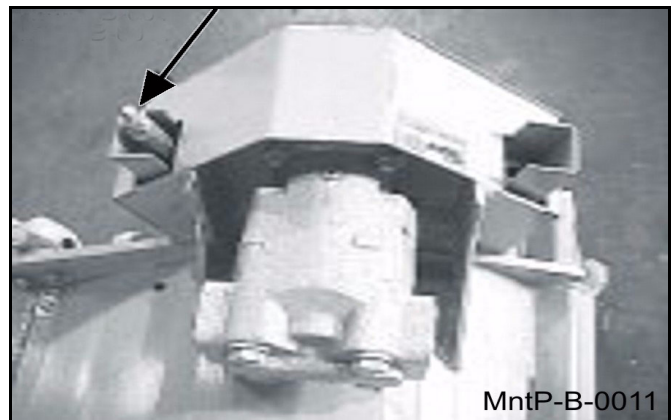
GREASING GROUND ROLLER SHAFT-- FLAIL

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



ADJUSTING/CHECKING BELT TENSION

To adjust belt tension or replace belts on flail cutter head, remove four bolts that secure the belt cover and remove cover. The hex nuts shown below can be adjusted to increase/decrease the belt tension as needed. (NOTE: Location of adjustment nuts may vary on flail cutter heads.) **Be sure to replace the belt cover BEFORE operating mower!**

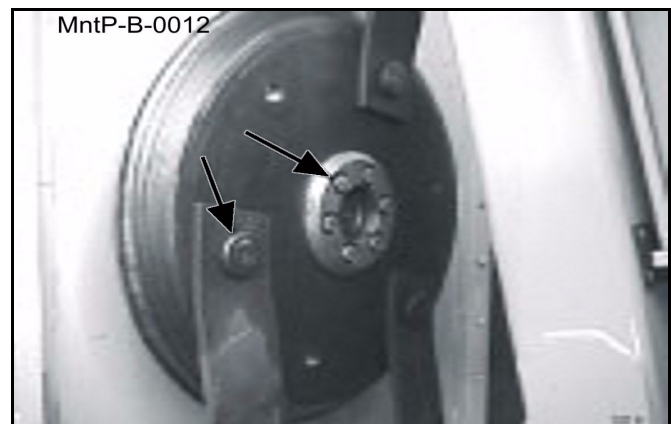


TIGHTENING KNIFE BOLTS AND DISK BOLTS:

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

Knife mounting bolts torque to 800 lubricated ft. lbs.

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

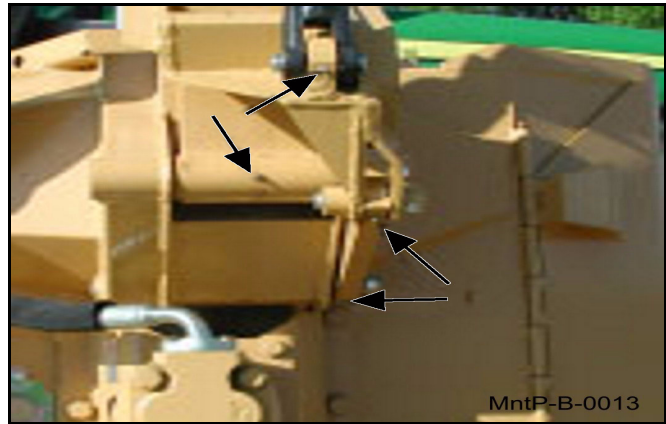


MAINTENANCE

MAINTENANCE

GREASING POINTS ON BOOM AND PIVOT

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



DECK STOP ADJUSTMENT

On boom flail, loosen locking nut. Turn adjustment bolt in, and run deck cylinder out to full extension. Adjust bolt out until the head just touches the boom, and tighten lock nut. **NOTE: Bolt should not hit boom before cylinder reaches full travel.**



GREASING SPINDLE

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

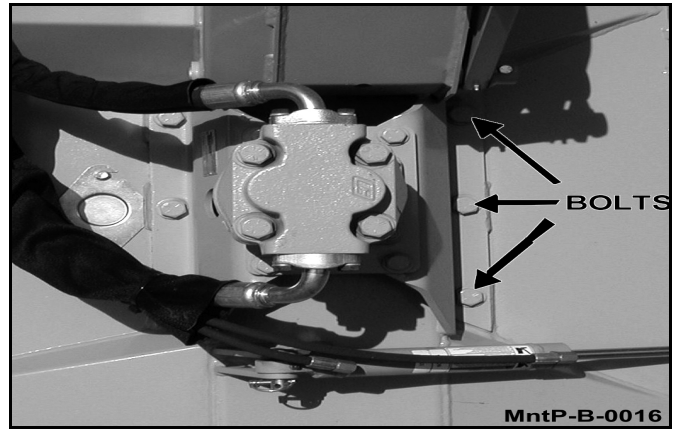


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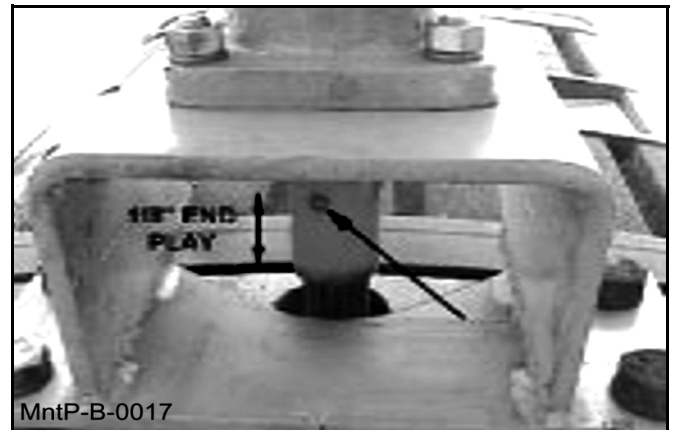
TIGHTENING SPINDLE BOLTS

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



GREASING PUMP DRIVE SHAFT COUPLER

With engine stopped, ensure driveshaft alignment by grasping coupler and sliding back and forth. Coupler should slide freely with approximately 1/8" of end play. If coupler does not slide freely, inspect for loose pump mount bolts, or damaged or loose crankshaft adapter. Inject Lithium-Complex Extreme Pressure grease conforming to NLG12-ISO 320 specifications into coupler until grease begins to protrude from ends. Grease daily or every 8 hours. Do not over grease.

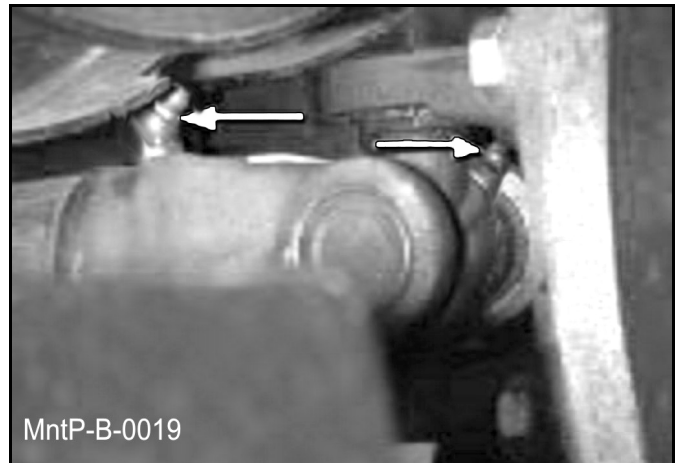
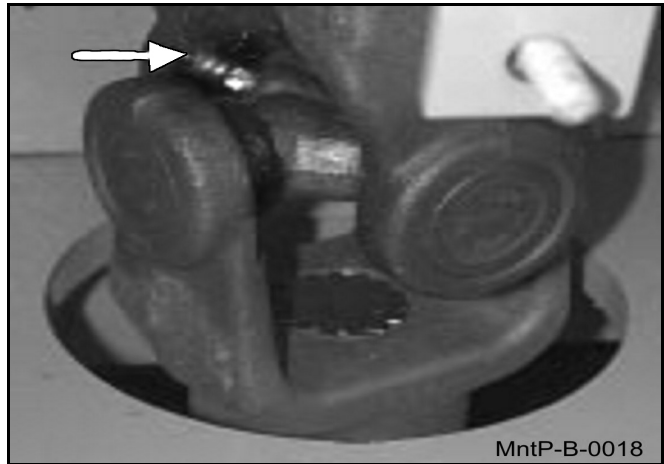


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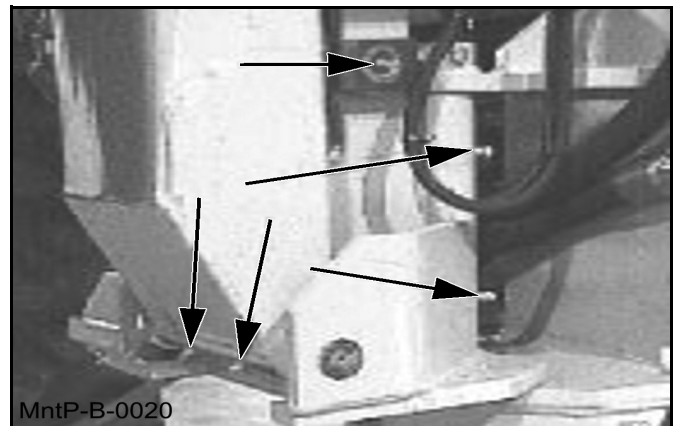
DRIVESHAFT YOKE, U-JOINT STUB SHAFT

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



GREASING THE BOOM SWIVEL

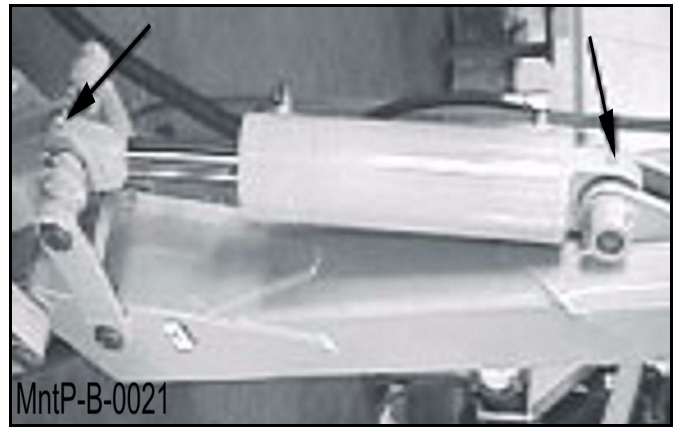
Locate the zerks on the main swivel boss (if applicable), main boom pivot boss (if applicable) and on both ends of the boom swivel cylinder. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specification until grease begins to protrude from ends.



MAINTENANCE

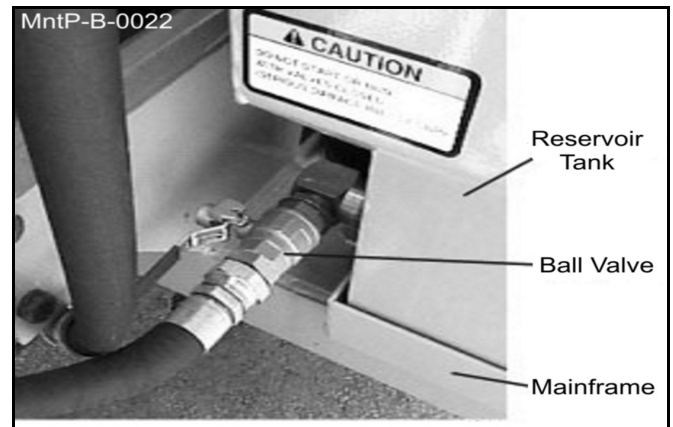
GREASING BOOM CYLINDER(S) PIVOT POINTS

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



BALL VALVES

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



MAINTENANCE

MAINTENANCE

Blades

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

CAUTION

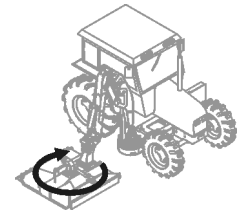
Blades should always be replaced in pairs. Blades of different weights can cause serious imbalance and damage to the machine and personnel. When replacing blades, take care to replace the blade bolts, nuts, and washers.


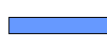

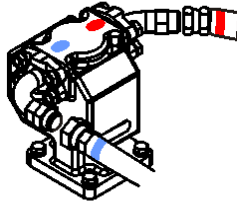
Important

Make sure the mower blades are turning clockwise when looking down from the top of the mower. Follow the color coding on the hydraulic hoses and fittings to make sure the motor and hydraulics hoses are assembled properly. Connect the red hose connection only to red fitting. Connect the blue hose connection only to the blue fitting. The blade rotation on the leading edge of the mower should discharge the cut material away from the tractor and operator.

WARNING

If the leading edge of the mower blades are rotating backwards they can discharge material toward the operator. If this occurs discontinue mowing immediately and reverse the direction of the motor rotation by correctly installing the motor pressure and return hoses. Contact your dealer or Alamo Industrial for specific information on the hose routing.



| WARNING | ADVERTENCIA |
|---|--|
| TO AVOID SERIOUS INJURY AND DEATH FROM THROWN OBJECTS: <ul style="list-style-type: none">• MAKE CERTAIN blades rotate the correct direction. | PARA EVITAR LESION SERIA O MUERTE POR OBJETOS LANZADOS: <ul style="list-style-type: none">• ASEGURE que las cuchillas giran en la dirección correcta. |
| BLADE ROTATION  ROTACIÓN DE CUCHILLAS | |
|  Return Retorno BLUE |  Pressure Presión RED |
|  | |

D619

MAINTENANCE

ROTARY KNIFE REPLACEMENT

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



WHEN CUTTING HEAVY BRUSH, KNIFE BOLTS SHOULD BE INSPECTED HOURLY AND RETORQUED TO 800 LUBRICATED FT. LBS.

REPLACEMENT OF ROTARY DISK/BLADE BAR



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

1. The bolts that attach the disk to the spindle must be grade 8. These 5/8 inch bolts are to be torqued to 204 dry or 184 ft. lbs lubricated with Loctite 271.
2. A thread locking agent may be applied to threads of all mounting bolts before they are installed.
3. **Disks must be inspected daily for hairline cracks between spindle mounting bolts or around the knife mounting bolts. These cracks indicate metal fatigue caused by severe abuse. If cracks are present the disk must be replaced.**
4. Inspect the disk mounting bolts daily when checking tightness of knife mounting bolts. If a disk mounting bolt is loose, it must be removed, threads cleaned, fresh thread locking agent applied, and tightened to proper torque value.
5. If a knife mounting bolt is loose, the self locking nut must be replaced as a safety precaution. Lubricate threads with anti-seize. Install bolts through knife and disk/blade bar from bottom side. Install self locking nuts and torque them to 800 ft. lbs.

MAINTENANCE

Flail Blades Inspection

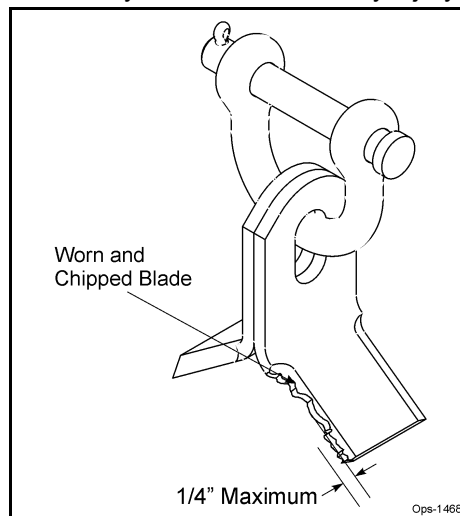


Inspect the Blades daily for abnormal wear. REPLACE ALL BLADES on the carrier IMMEDIATELY if any blades have:

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

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

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



Always replace blades in sets

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

MAINTENANCE

Blade Pins and D-Ring Inspection

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

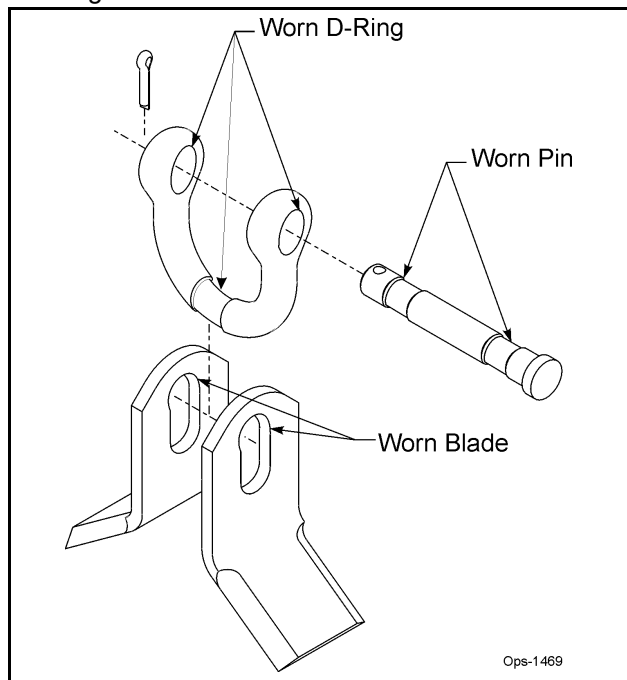


Inspect the Blade pins and D-Rings daily for abnormal wear. Make sure the cotter pins are in place and properly spread. REPLACE BLADE Pins and D-Rings IMMEDIATELY if they have:

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

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

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



Important

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

MAINTENANCE

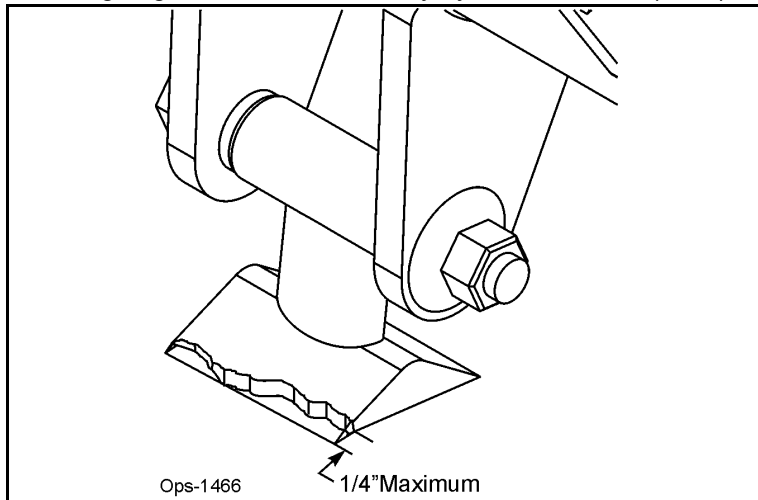
MAINTENANCE

Flail Axe Blades Inspection



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

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



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

Always replace blades in sets

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

Important

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



Never attempt to sharpen blades. OPS-U-0042

MAINTENANCE

Flail Axe Blade Bolt Inspection

Inspect Blade Bolts daily for wear or damage as follows:

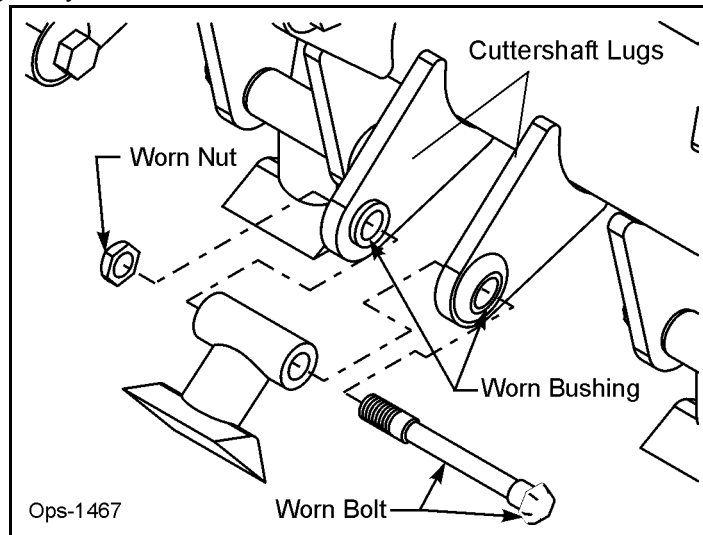


Inspect the Blade Bolt daily for abnormal wear. REPLACE ALL BLADE BOLTS on the carrier IMMEDIATELY if any bolts have:

- Visible cracks or
- If the blade bolt is worn or any recessed area is visible on the bolt, or
- If Blade Bolt has gouges or chipped areas. or
- If Bushing fits loose in the Rotor Shaft.

Failure to replace abnormally worn bolts or bushings may lead to catastrophic failure of the blades and ejection of the broken part, which may cause serious bodily injury or death.

Always replace Blade Bolts with new bolts and new bushings whenever replacing the Blades. To tighten bolts and nuts, first apply thread lock to nut. Make sure to tighten bolts and nuts just enough to allow the blades to swing freely and not bend the cuttershaft lugs. If cuttershaft lugs are bent together because of over tightening the blades will not swing freely. OPS-U-0043



MAINTENANCE

50" FLAIL KNIFE BLADE REPLACEMENT (Light Brush Grass)

1. If knives are damaged or badly worn, they will need to be replaced as a set. Replacing a single knife can cause severe vibration and possible damage to the mower. The knife should not be welded on for any reason.
2. Always replace the knife bolts when replacing the knives. DO NOT REUSE THE KNIFE BOLTS OR NUTS.
3. Assemble knives, bushings, bolts and nuts as shown in Parts Section of the manual.
4. Install the locking hex nut so that the flat face of the nut is towards the knife.
5. Apply Loctite 271 or equivalent to threads.
6. Torque nut to 50 ft. lbs. Knife must swing freely.



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

50" FLAIL KNIFE BLADE REPLACEMENT (Medium Brush Grass)

7. If knives are damaged or badly worn, they will need to be replaced as a set. Replacing a single knife can cause severe vibration and possible damage to the mower. The knife should not be welded on for any reason.
8. Always replace the knife bolts when replacing the knives. DO NOT REUSE THE KNIFE BOLTS OR NUTS.
9. Assemble knives, bushings, bolts and nuts as shown in Parts Section of the manual.
10. Install the locking hex nut so that the flat face of the nut is towards the knife.
11. Apply Loctite 271 or equivalent to threads.
12. Torque nut to 120 ft. lbs. Knife must swing freely.



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

50" FLAIL KNIFE BLADE REPLACEMENT (Heavy Duty Brush)

13. If knives are damaged or badly worn, they will need to be replaced as a set. Replacing a single knife can cause severe vibration and possible damage to the mower. The knife should not be welded on for any reason.
14. Always replace the knife bolts when replacing the knives. DO NOT REUSE THE KNIFE BOLTS OR NUTS.
15. Assemble knives, bushings, bolts and nuts as shown in Parts Section of the manual.
16. Install the locking hex nut so that the flat face of the nut is towards the knife.
17. Apply Loctite 271 or equivalent to threads.
18. Torque nut to 176 ft. lbs. Knife must swing freely.



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

MAINTENANCE

63" BOOM FLAIL KNIFE REPLACEMENT

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



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



Knives should not be welded on for any reason.

HEAVY DUTY SPINDLE ASSEMBLY INSTALLATION AND BEARING ADJUSTMENT

WARNING! A press **MUST** be used to install bearing cups, bearing cones, and seals. **DO NOT** use a hammer to install races, bearings, or seals. The parts of assembly may be damaged.

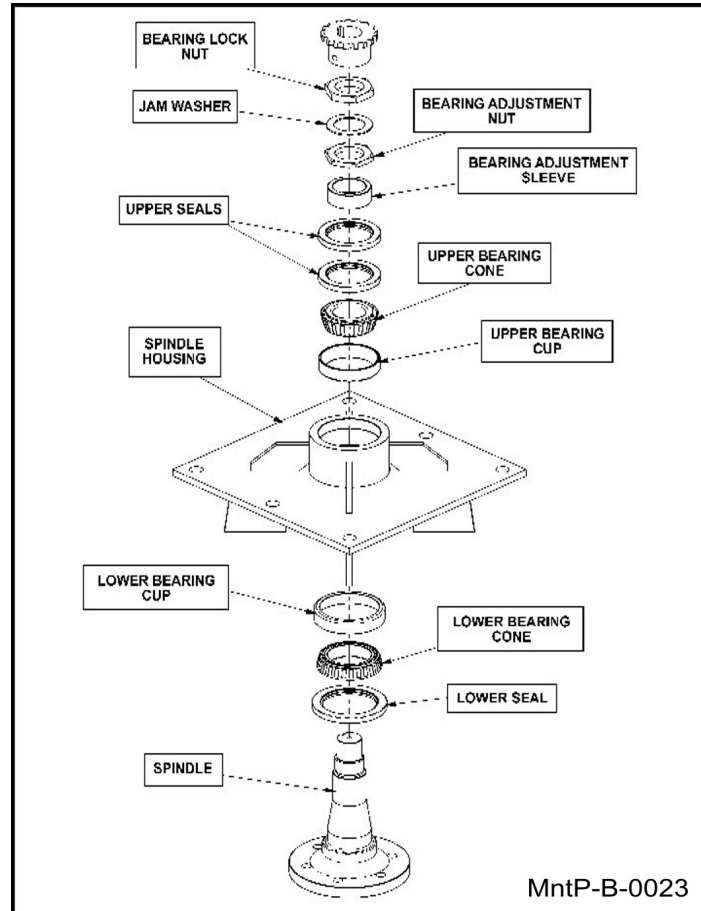
NOTE: The grease zerk and gussets are located on the top side of the spindle housing. Be sure the spindle is assembled correctly.

Be sure to wear eye protection and other protective equipment as needed when working on spindle assembly.

MAINTENANCE

THE SPINDLE ASSEMBLY

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



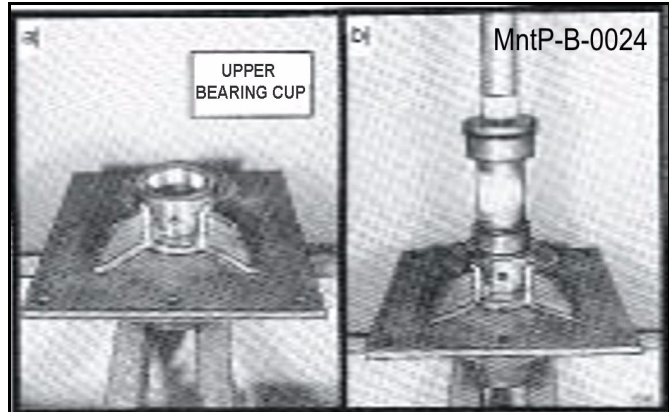
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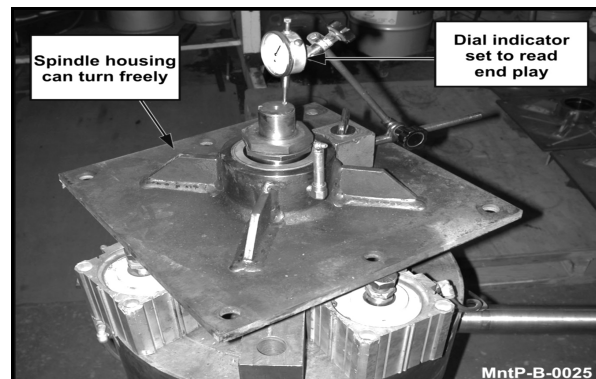
BEARING INSTALLATION

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



BEARING ADJUSTMENT

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



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

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

MAINTENANCE

Boom Cylinder Removal and Replacement Instructions

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

MAINTENANCE

MAINTENANCE

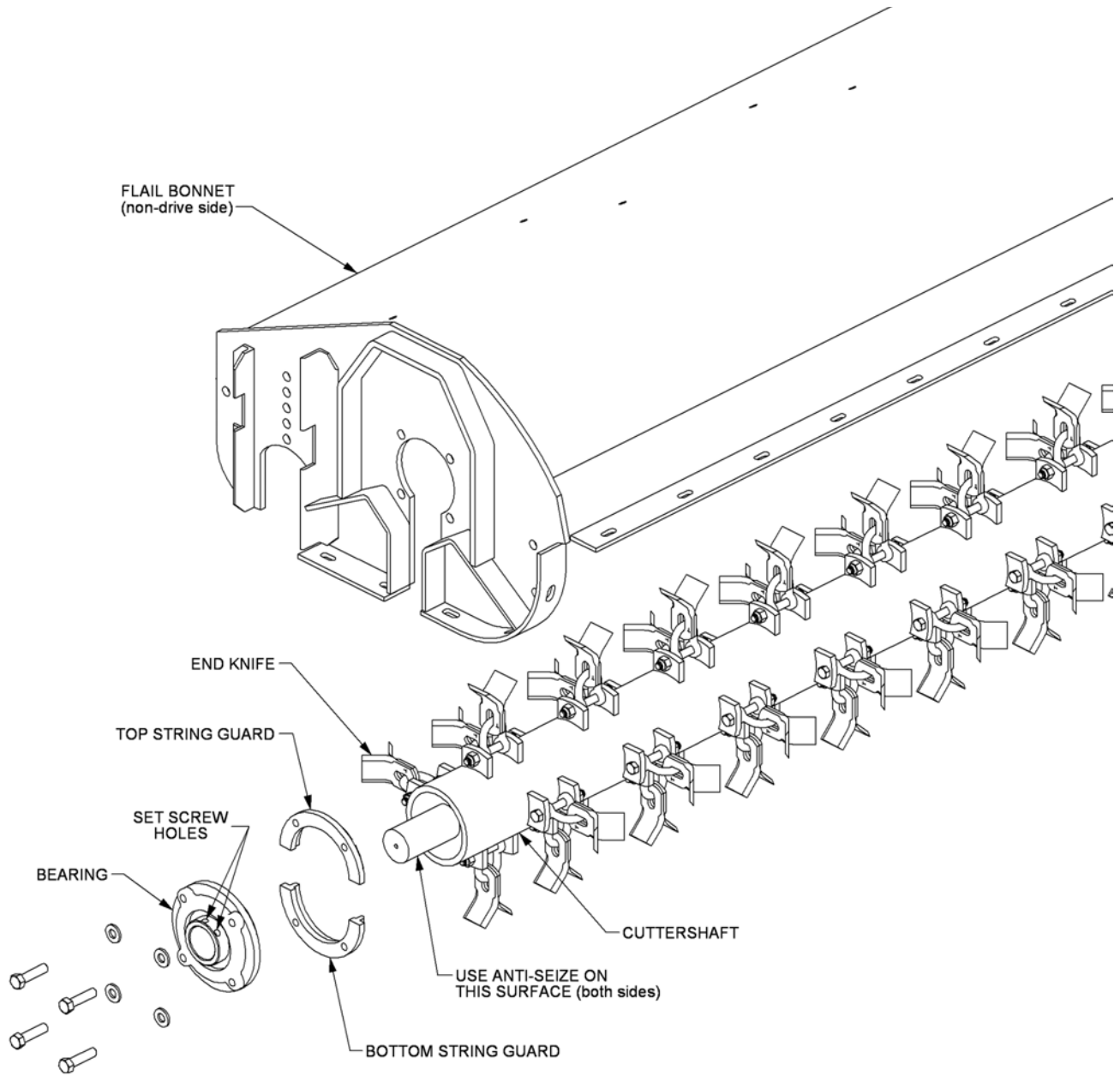
CUTTERSHAFT BEARING REPLACEMENT

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

See illustration on next page

MAINTENANCE

MAINTENANCE



Boom

Maintenance Section 4-30

MAINTENANCE

MAINTENANCE

GROUND ROLLER BEARING REPLACEMENT

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

See illustrations in the Common Parts Section.

MAINTENANCE

DAILY MAINTENANCE SCHEDULE

The following services should be performed daily or every 8 hours of service, following the detailed maintenance instructions in the operator's manual.

_____ Pump driveshaft: If required with drive shaft/coupler check for end play and lubricate at zerks.

_____ Crankshaft adapter: If equipped with rubber grommets check condition, replace if missing or damaged.

_____ Pivot points: Inject grease until it appears at ends.

_____ Hydraulic fittings: Check for leaks with paper or cardboard. Tighten fittings or replace hoses immediately.

_____ Knives: Inspect for missing or damaged knives, change (only complete sets) as needed.

_____ Belts: Check/tighten/replace belts as needed.

_____ Mainframe/deck: Unless otherwise specified retorque bolts according to torque specifications in this section.

_____ Hydraulic fluid level: Add, if required, per fluid recommendations.

_____ Rear flail drive, bearing flange and shaft couplers: Grease as instructed in the detailed maintenance section.

_____ Cuttershaft and ground roller: Grease as instructed in the detailed maintenance section.

Service performed by: _____ Date: ____/____/____ Hour

Meter: _____

Maintenance Section

**This page may be copied and used as part of the daily maintenance routine.

PARTS SECTION

PART NAME INDEX

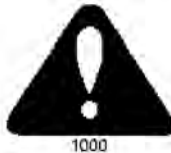
| | |
|---|----|
| PARTS ORDERING GUIDE..... | 3 |
| TRACTOR MOUNT KIT..... | 4 |
| TRACTOR MOUNT KIT - HYDRAULICS..... | 6 |
| BOOM MOUNT KIT..... | 8 |
| ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT..... | 10 |
| JOYSTICK AND SWITCHBOX MOUNT..... | 12 |
| CABLE (MANUAL) LIFT VALVE - 5 SPOOL..... | 14 |
| 5 SPOOL CABLE CONTROL MOUNT..... | 16 |
| POLYCARBONATE SAFETY WINDOW..... | 18 |
| BOOMREST - REAR STOW..... | 19 |
| FRONT AXLE STABILIZER OPTION..... | 20 |
| WHEEL SPACER..... | 22 |
| WHEEL WEIGHT..... | 23 |
| NOTES 1..... | 24 |

PARTS ORDERING GUIDE

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

1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
2. The Purchase Order must indicate the **Name and Address** of the person or organization ordering the parts, **who should be charged**, and if possible, the **serial number of the machine** for which the parts are being ordered.
3. The purchase order must clearly list the **quantity of each part**, the complete and correct **part number**, and the basic **name of the part**.
4. The manufacturer reserves the right to substitute parts where applicable.
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.

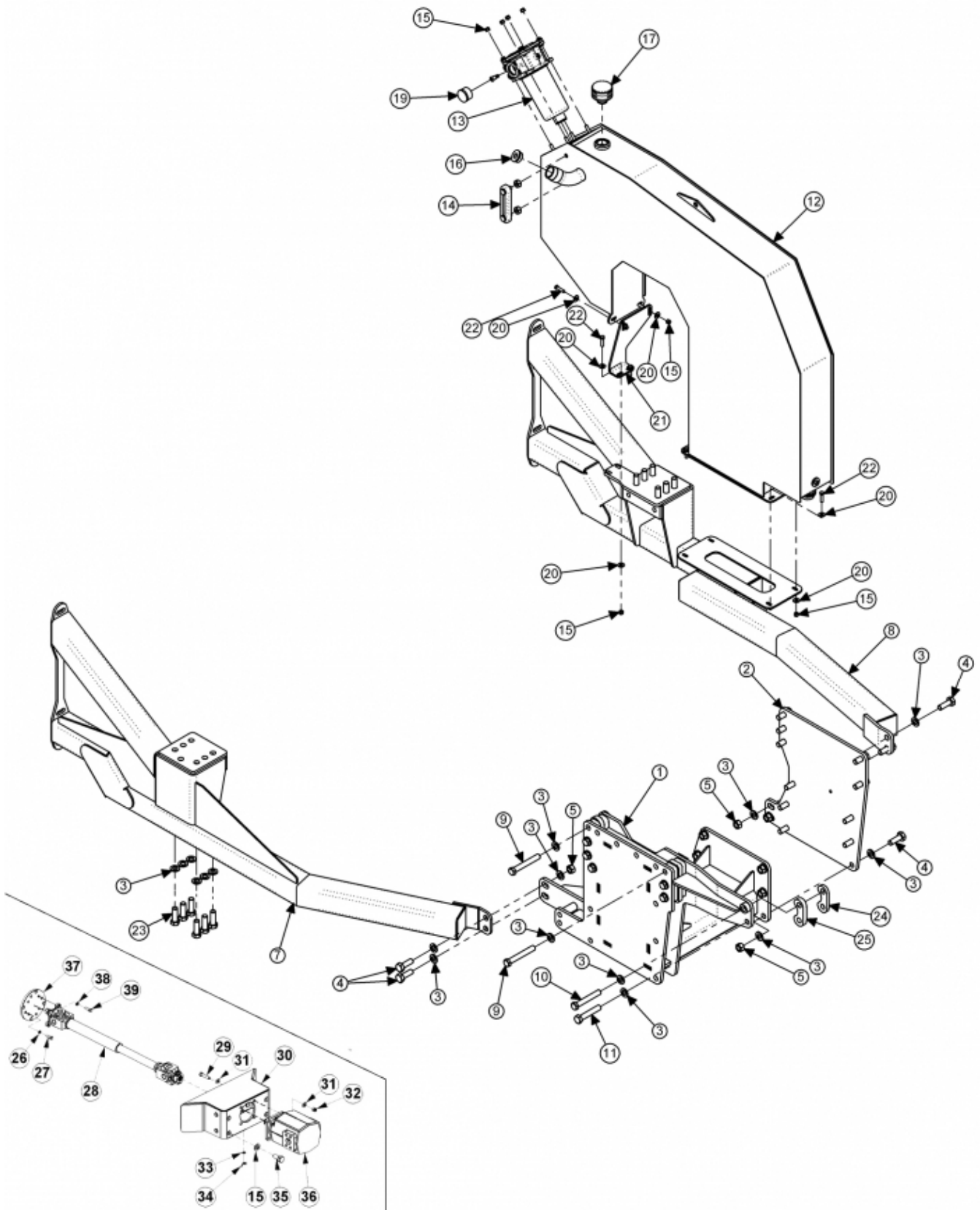


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

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



JD6110 M R T4F BENGAL BRUTE

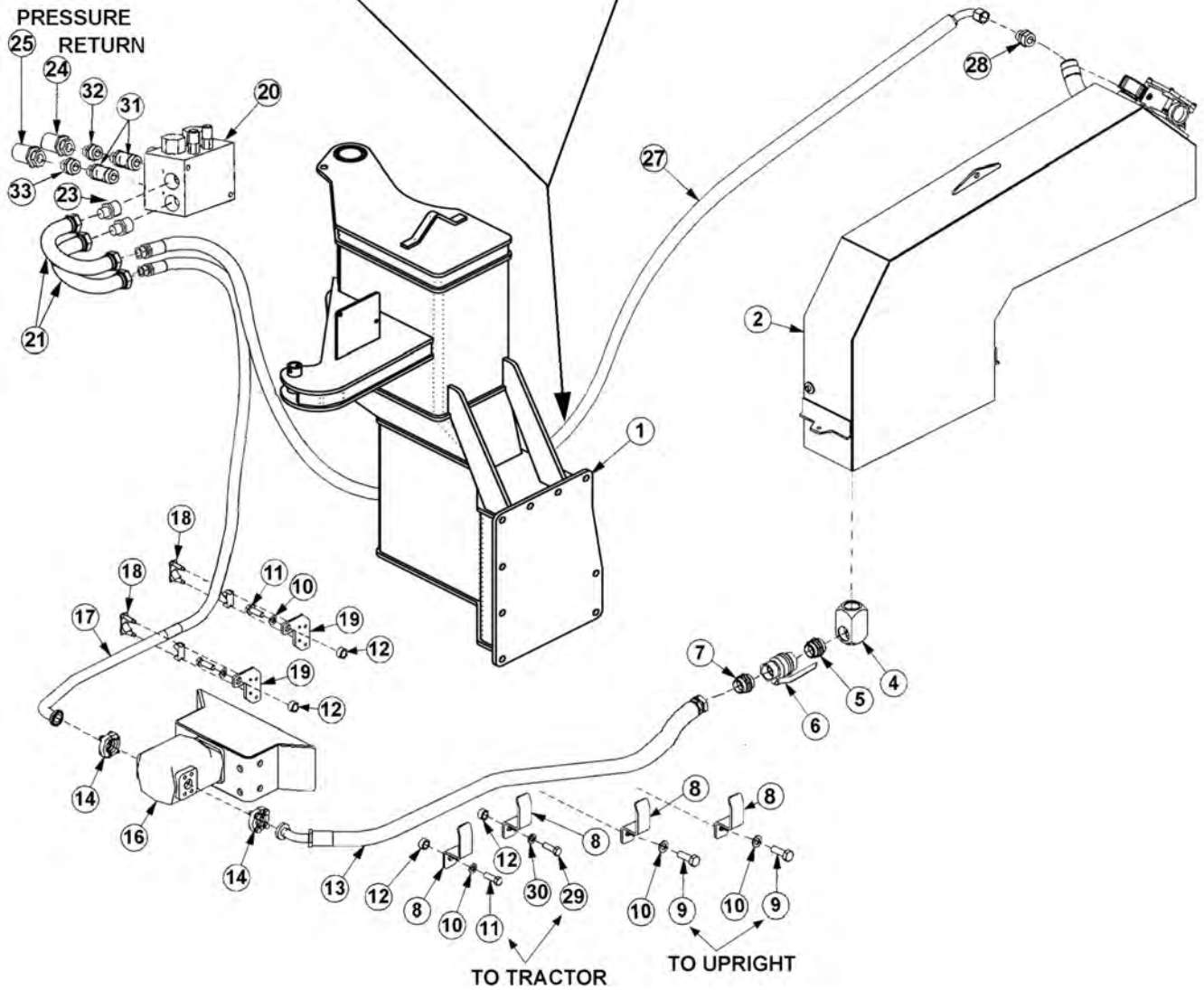
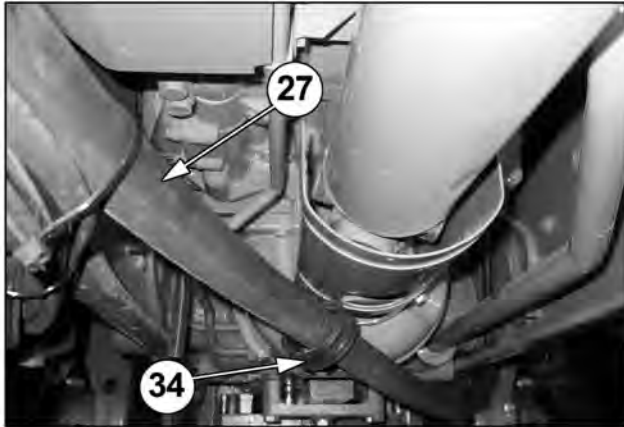
TRACTOR MOUNT KIT

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------------|-----------------|-------------|---------------------------------------|
| 1 | 06300383 | 1 | MAINFRAME MOUNT, JD6110M, T4F |
| 2 | 06402946 | 1 | RISER, LH, 06300383 |
| 3 | 33880 | 46 | FLATWASHER, 3/4" GR8, SAE |
| 4 | 06530237 | 10 | CAPSCREW, 3/4" X 2-1/4" NC GR8 |
| 5 | 06531008 | 10 | HEX NUT, 3/4" NC, GR8 |
| 6 | 31731 | 5 | CAPSCREW, 20MM X 50MM (2.5 PITCH) |
| 7 | 06300384 | 1 | AXLE BRACE, RH, JD6110M, T4F, RS |
| 8 | 06300386 | 1 | AXLE BRACE, LH, JD6100M, T4F, RS |
| 9 | 06530545 | 7 | CAPSCREW, 20MM X 140MM (2.5P), GR10.9 |
| 10 | 06530542 | 1 | CAPSCREW, 20MM X 130MM |
| 11 | 31240 | 1 | CAPSCREW, 20MM X 110MM (2.5P) |
| 12 | 06380084 | 1 | TANK, RES, JD6M, T4F |
| 13 | 06505044 | 1 | FILTER ASSY, IN-TANK, CPLT, SAE10, MP |
| 14 | 06505067 | 1 | SIGHT GAUGE |
| 15 | 21627 | 12 | NYLOCK NUT, 3/8" NC |
| 16 | 06505127 | 1 | PLUG, SAE #20 |
| 17 | 06505077 | 1 | CAP, BREATHER, 1 5/8MB |
| 18 | TF4888 | 1 | STREET ELBOW, 1/8" |
| 19 | 6T0649 | 1 | FILTER GAUGE |
| 20 | 22016 | 16 | FLATWASHER, 3/8" GR8 |
| 21 | 06412418 | 1 | SUPPORT, TANK, 06380084 |
| 22 | 21632 | 8 | CAPSCREW, 3/8" X 1-1/2" NC |
| 23 | 27281 | 12 | CAPSCREW, 20MM X 60MM (2.5P) |
| 24 | 06403829 | 1 | SPACER, FRONT |
| 25 | 06403836 | 1 | SPACER, FRONT 2 |
| 26 | 32691 | 4 | LOCKWASHER, 10MM |
| 27 | 23113 | 4 | CAPSCREW, 10MM X 30MM, 1.5P |
| 28 | 34999 | 1 | DRIVESHAFT, U-JOINT |
| 29 | 21733 | 4 | CAPSCREW, 1/2" X 2" NC |
| 30 | 34993 | 1 | PUMP MOUNT |
| 31 | 06533004 | 8 | FLATWASHER, 1/2" SAE |
| 32 | 21727 | 4 | NYLOCK NUT, 1/2" NC |
| 33 | 22014 | 1 | FLATWASHER, 1/4" |
| 34 | 32519 | 1 | WING NUT, 1/4" |
| 35 | 24860 | 4 | CAPSCREW, 20MM X 40MM 2.5P |
| 36 | 23152 | 1 | PUMP |
| 37 | 34998 | 1 | SPACER, DRIVESHAFT |
| 38 | 21989 | 4 | LOCKWASHER, 7/16" |
| 39 | 21680 | 4 | CAPSCREW, 7/16" X 1-1/4" NC |

JD6110 M R T4F BENGAL BRUTE

TRACTOR MOUNT KIT - HYDRAULICS

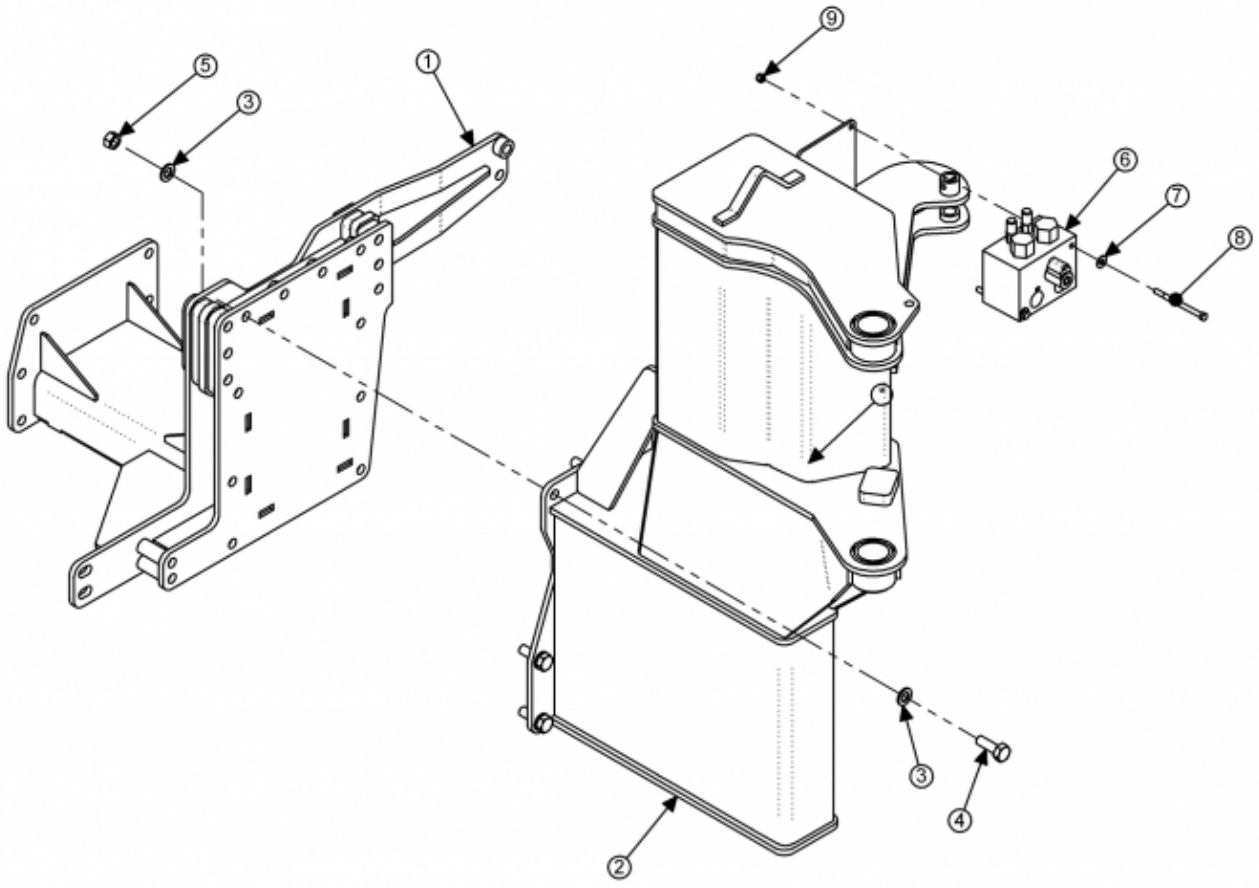


TRACTOR MOUNT KIT - HYDRAULICS

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 1 | ----- | - | MAIN FRAME *REFER TO TRACTOR MOUNT KIT PAGE |
| 2 | ----- | - | HYDRAULIC TANK *REFER TO TRACTOR MOUNT KIT PAGE |
| 4 | 06503084 | 1 | ELBOW,1-1/2"FOR X 1-1/2"FOR,MACH |
| 5 | 06503083 | 1 | ADAPTER,1-1/2"MOR X 1-1/2"MOR |
| 6 | 34309 | 1 | BALL VALVE,1-1/2"FOR |
| 7 | 34710 | 1 | ADAPTER,1-1/2"MOR X 1-1/2"MJ |
| 8 | 32382 | 3 | BRACKET,HOSE |
| 9 | 21834 | 2 | CAPSCREW, 3/4" X 2-1/2" NC |
| 10 | 33880 | 4 | FLATWASHER, 3/4", SAE |
| 11 | 30708 | 3 | CAPSCREW, 20MM X 90MM,2.5P |
| 12 | 24849 | 2 | SPACER |
| 13 | 06500692 | 1 | HOSE,1-1/2" X 110" |
| 14 | TF4852 | 2 | FLANGE KIT,#20 |
| 16 | ----- | 1 | PUMP *REFER TO TRACTOR MOUNT KIT PAGE |
| 17 | 06500549 | 1 | HOSE,1" X 87" |
| 18 | 34076 | 1 | CLAMP KIT,1" |
| 19 | 34626 | 1 | TUBE/CLAMP BRACKET |
| 20 | ---- | 1 | BRAKE VALVE *REFER TO TRACTOR MOUNT KIT |
| 21 | 06506012 | 2 | U-TUBE, PREFORMED |
| 23 | 33555 | 2 | ADAPTER, 1MB X1MJ |
| 24 | ---- | 1 | HOSE,HOSE (RETURN) *REFER TO BOOM ASSEMBLY |
| 25 | ----- | 1 | HOSE (PRESSURE) *REFER TO BOOM ASSEMBLY |
| 27 | 06500959 | 1 | HOSE, 1" X 190" |
| 28 | 34064 | 1 | ADAPTER, 1-1/4" MOR X 1" MJ |
| 29 | 06530819 | 1 | CAPSCREW, 12MM X 70MM |
| 30 | 22017 | 1 | FLATWASHER, 7/16" |
| 31 | 06503074 | 2 | UNION, 1" ORB X 1" ORB |
| 32 | 06503027 | 1 | QCK CPLR 1" FEMALE, FLAT |
| 33 | 06503028 | 1 | QCK CPLR, 1" MALE, FLAT |
| 34 | 06520536 | 1 | CLAMP, HOSE 2-1/2" INS |

BOOM MOUNT KIT

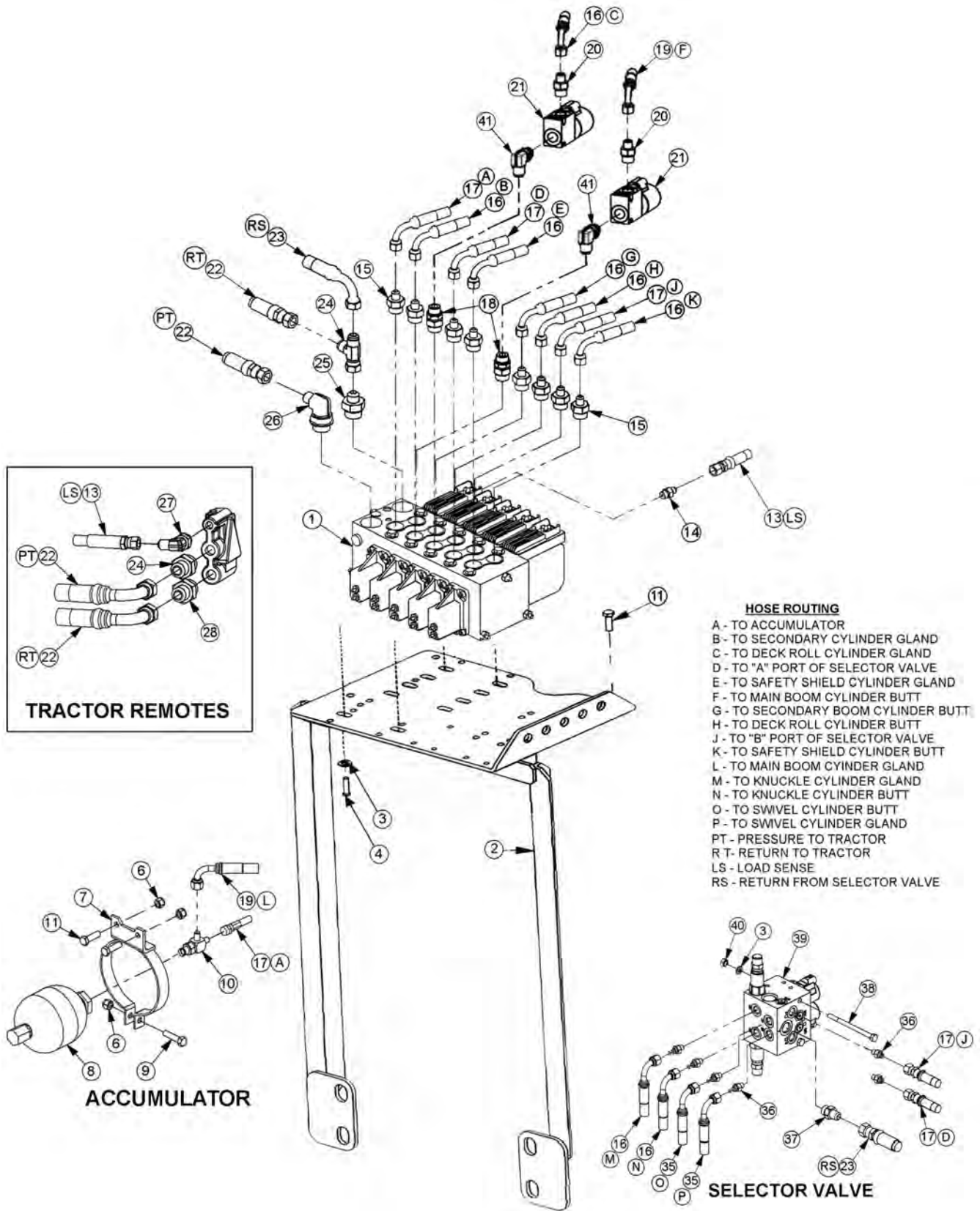


BOOM MOUNT KIT

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------|
| 1 | 06300383 | 1 | MAINFRAME MOUNT, JD6110M T4F |
| 2 | 06300381 | 1 | MAINFRAME, TB, JD6110M, T4F |
| 3 | 33880 | 18 | FLATWASHER, 3/4" GR8, SAE |
| 4 | 06530237 | 9 | CAPSCREW, 3/4" GR8, SAE |
| 5 | 06531008 | 9 | HEX NUT, 3/4" NC GR8 |
| 6 | 06510083 | 1 | VALVE, BRAKE, SOL, 3000PSI |
| 7 | 22016 | 2 | FLATWASHER, 3/8", GR8 |
| 8 | 21644 | 2 | CAPSCREW, 3/8" X 5" GR8 |
| 9 | 21627 | 2 | NYLOCK NUT, 3/8" NC |

ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT

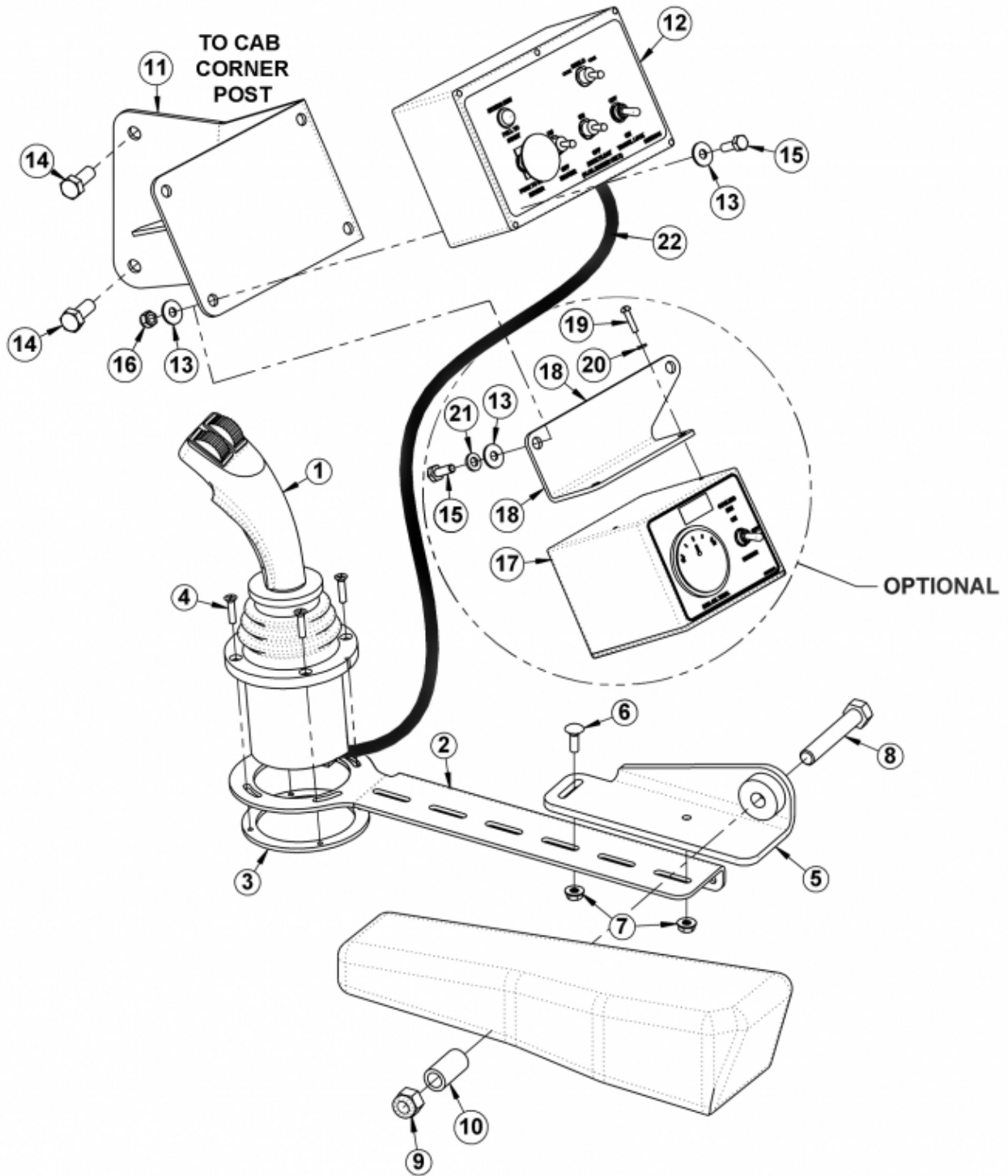


ELECTRONIC PROPORTIONAL LIFT VALVE MOUNT

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| 1 | 06502207 | 1 | ELECTRONIC LIFT VALVE |
| 2 | 06340063 | 1 | PLATE, VALVE, JD6110-30M/R T4F |
| 3 | 21987 | 6 | LOCKWASHER, 5/16" |
| 4 | 21579 | 4 | CAPSCREW, 5/16" X 3/4", NC |
| 6 | 21627 | 5 | NYLOCK NUT, 3/8" NC |
| 7 | 23888 | 1 | BRACKET, ACCUMULATOR |
| 8 | 24300 | 1 | ACCUMULATOR |
| 9 | 21632 | 1 | CAPSCREW, 3/8" X 1-1/2" NC |
| 10 | 06503029 | 1 | TEE, RUN |
| 11 | 21631 | 4 | CAPSCREW, 3/8" X 1-1/4", NC |
| 13 | 06500400 | 1 | HOSE, 1/4" X 30" |
| 14 | 33392 | 1 | ADAPTER |
| 15 | 32807 | 8 | ADAPTER |
| 16 | 06500854 | 8 | HOSE, 1/4" X 274" |
| 17 | 33744 | 3 | HOSE, 1/4" X 34" |
| 18 | 06503041 | 2 | ADAPTER, 5/8" ORB X 1/2" FJX |
| 19 | 06500855 | 2 | HOSE, 1/4" X 294" |
| 20 | 33271 | 2 | ADAPTER, 1/2" MOR X 3/8" MJ |
| 21 | 06510050 | 2 | TRAVEL LOCK |
| 22 | 34612 | 2 | HOSE, 1/2" X 34" |
| 23 | 06500564 | 1 | HOSE, 1/2" X 42" |
| 24 | 6T3992 | 1 | TEE, 1/2" MJ X 1/2" MJ X 1/2" FJX |
| 25 | 33591 | 1 | ADAPTER, 3/4" MOR X 1/2" MJ |
| 26 | 33294 | 1 | ELBOW |
| 27 | 06503013 | 1 | ELBOW, 14MM MOR X 5/16" MJ |
| 28 | 33463 | 2 | ADAPTER, 22MM MOR X 1/2" MJ |
| 35 | 06500697 | 2 | HOSE, 1/4" X 210" |
| 36 | 32901 | 6 | ADAPTER, 3/8" MOR X 3/8" MJ |
| 37 | 33528 | 1 | ADAPTER, 1/2" MOR X 1/2" MJ |
| 38 | 21593 | 2 | CAPSCREW, 5/16" X 4-1/2", NC |
| 39 | 06502055 | 1 | SELECTOR VALVE |
| 40 | 21575 | 2 | HEX NUT, 5/16", NC |
| 41 | 33382 | 2 | ELBOW, 1/2" MB X 1/2" MJ |

JOYSTICK AND SWITCHBOX MOUNT

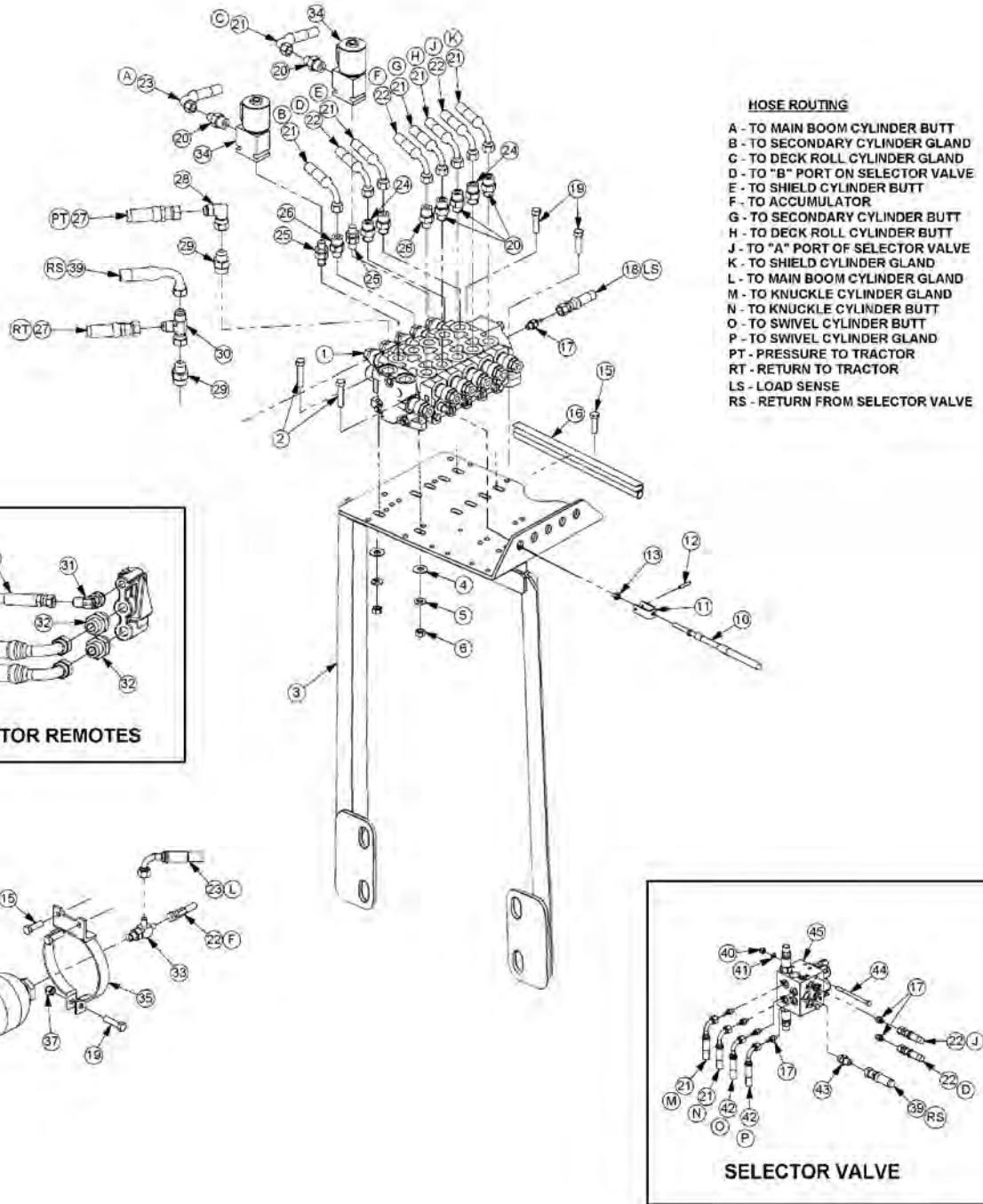


JOYSTICK AND SWITCHBOX MOUNT

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|-----------|------|----------------------------------|
| 1 | 06510046 | 1 | JOYSTICK, 4AXIS, RH, DF, W/SUBD |
| 2 | 06411652 | 1 | MOUNT, JOYSTICK ARM, JD6M |
| 3 | 06403098 | 1 | RING, JOYSTICK, 06340058 |
| 4 | 32829 | 4 | SCREW, MACHINE, 10-32X3/4, FLTHD |
| 5 | 06340007 | 1 | MOUNT, JOYSTICK BASE, JD6M |
| 6 | 06537060 | 1 | CARRIAGE BOLT, 1/4X3/4, NC |
| 7 | 94902A101 | 2 | HEX NUT, 1/4 NC, FLNG, GR8 |
| 8 | 21737 | 1 | CAPSCREW, 1/2 X 3, NC |
| 9 | 21727 | 1 | NYLOCK NUT, 1/2, NC |
| 10 | 33359 | 1 | TUBE |
| 11 | 33355 | 1 | MOUNT, BRACKET, SWITCH BOX |
| 12 | 06510196 | 1 | SWITCHBOX, DF |
| 13 | 22014 | 10 | FLATWASHER, 1/4, GR8 |
| 14 | 27513 | 2 | CAPSCREW, 10MM X 25MM (1.5PITCH) |
| 15 | 21539 | 6 | CAPSCREW, 1/4 X 3/4, NC |
| 16 | 21527 | 4 | HEX NUT, NYLOCK, 1/4 NC |
| 17 | 06510045 | 1 | CONTROLLER, COOLER FAN |
| 18 | 06411407 | 1 | MOUNT, SWITCHBOX CLR, DF |
| 19 | 32359 | 2 | SCREW, MACHINE, 8-32X3/4 |
| 20 | 32360 | 2 | LOCKWASHER, #8 |
| 21 | 21986 | 2 | LOCKWASHER, 1/4 |
| 22 | 33693 | 1 | CABLE |

CABLE (MANUAL) LIFT VALVE - 5 SPOOL



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------|
| 1 | 06502038 | 1 | VLV,5SPHSC,TRB,LS,RS |
| 2 | 21633 | 2 | CAPSCREW,3/8" X 1-3/4",NC |
| 3 | 06340063 | 1 | PLATE,VALVE,JD6110-30M/R T4F |
| 4 | 22016 | 4 | FLATWASHER,3/8" |

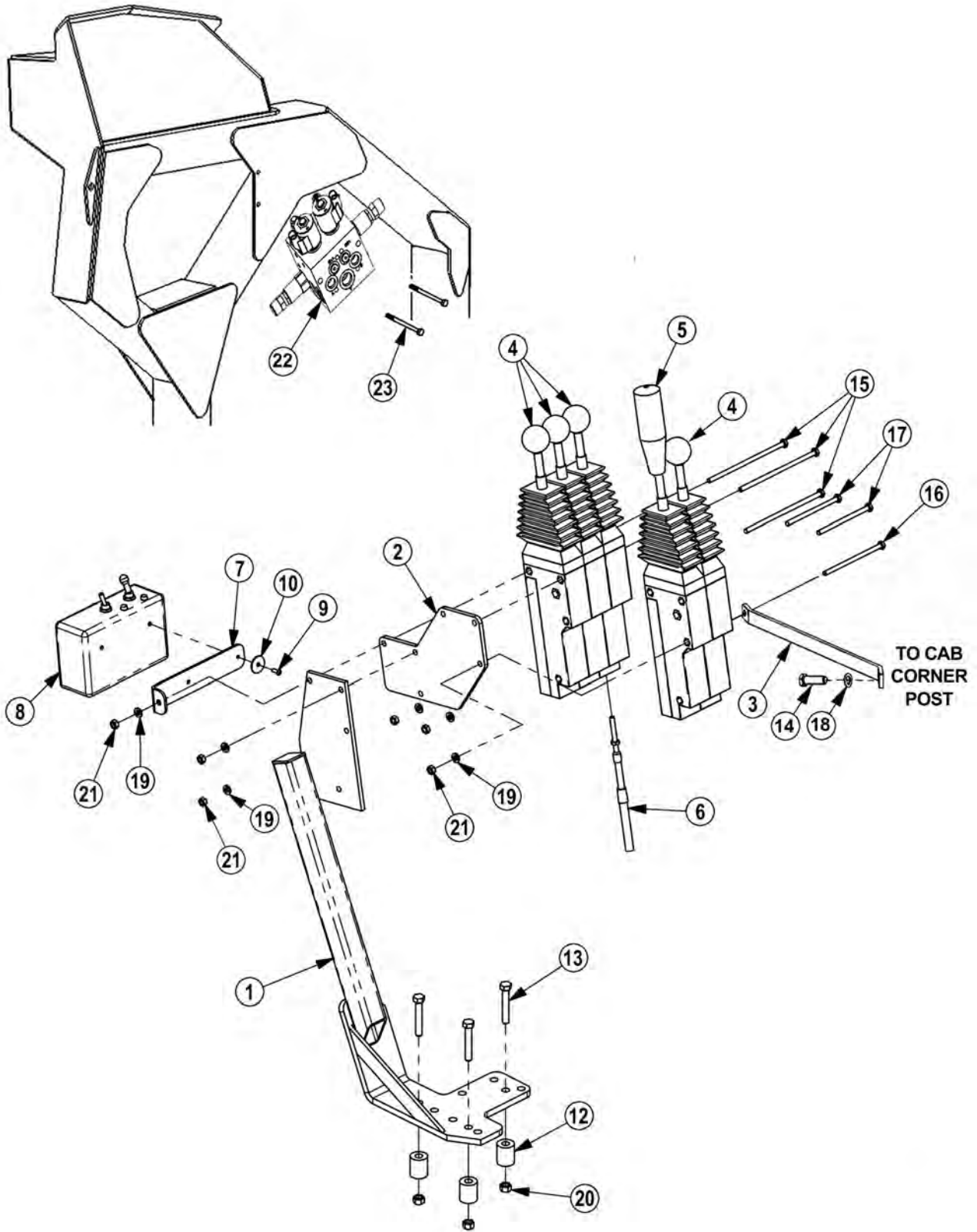
JD6110 M R T4F BENGAL BRUTE

CABLE (MANUAL) LIFT VALVE - 5 SPOOL

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| 5 | 21988 | 8 | LOCKWASHER,3/8" |
| 6 | 21625 | 8 | HEX NUT,3/8",NC |
| 10 | 06505100 | 5 | CBL,CNTRL,108" |
| 11 | 6T4411 | 5 | CLEVIS,CBL CTRL,3/16" |
| 12 | 6T3017 | 5 | ROLLPIN,3/16" X 1" |
| 13 | 21500 | 5 | HEX NUT,1/4",NF |
| 15 | 21631 | 4 | CAPSCREW,3/8" X 1-1/4",NC |
| 16 | 28053 | 1 | TRM LK,9/16 X 1/8FN PBL*100-1/8 |
| 17 | 32901 | 7 | ADAPTER,3/8"MOR X 3/8"MJ |
| 18 | 06500400 | 1 | HOSE,1/4" X 34" |
| 19 | 21632 | 3 | CAPSCREW,3/8" X 1-1/2",NC |
| 20 | 33271 | 6 | ADAPTER,1/2"MOR X 3/8"MJ |
| 21 | 06500854 | 8 | HOSE,1/4" X 274" |
| 22 | 33744 | 3 | HOSE,1/4" X 34" |
| 23 | 06500855 | 2 | HOSE,1/4" X 294" |
| 24 | 06503206 | 2 | RSTRCTR, .0645 |
| 25 | 06503019 | 2 | ADAPTER,1/2"MB X 1/2"FJX |
| 26 | 06502036 | 2 | VLV,CHECK,W/.06" ORF |
| 27 | 06500171 | 2 | HOSE,1/2" X 36" |
| 28 | 06503022 | 1 | ELBOW,1/2"FJX X 1/2"MJ90 |
| 29 | 06503011 | 2 | ADAPTER,5/8"MOR X 1/2"MJ |
| 30 | 6T3992 | 1 | RUN TEE,1/2"MJ X 1/2"FJX X 1/2"MJ |
| 31 | 06503013 | 1 | ELBOW,14MM MOR X 5/16"MJ |
| 32 | 33463 | 2 | ADAPTER,22MM MOR X 1/2"MJ |
| 33 | 06503029 | 1 | TEE,RUN |
| 34 | 06510050 | 2 | TRV LCK,METRIPACK COIL |
| 35 | 23888 | 1 | BRKT,ACCUMULATOR |
| 36 | 24300 | 1 | ACCUMULATOR |
| 37 | 21627 | 5 | NYLOCK NUT,3/8",NC |
| 39 | 06500564 | 1 | HOSE,1/2" X 42" |
| 40 | 21575 | 2 | HEX NUT,5/16",NC |
| 41 | 21987 | 2 | LOCKWASHER,5/16" |
| 42 | 06500697 | 2 | HOSE,1/4" X 210" |
| 43 | 33528 | 1 | ADAPTER,1/2"MOR X 1/2"MJ |
| 44 | 21593 | 2 | CAPSCREW,5/16" X 4-1/2",NC |
| 45 | 06502055 | 1 | VALVE,SELECTOR,RS |

5 SPOOL CABLE CONTROL MOUNT

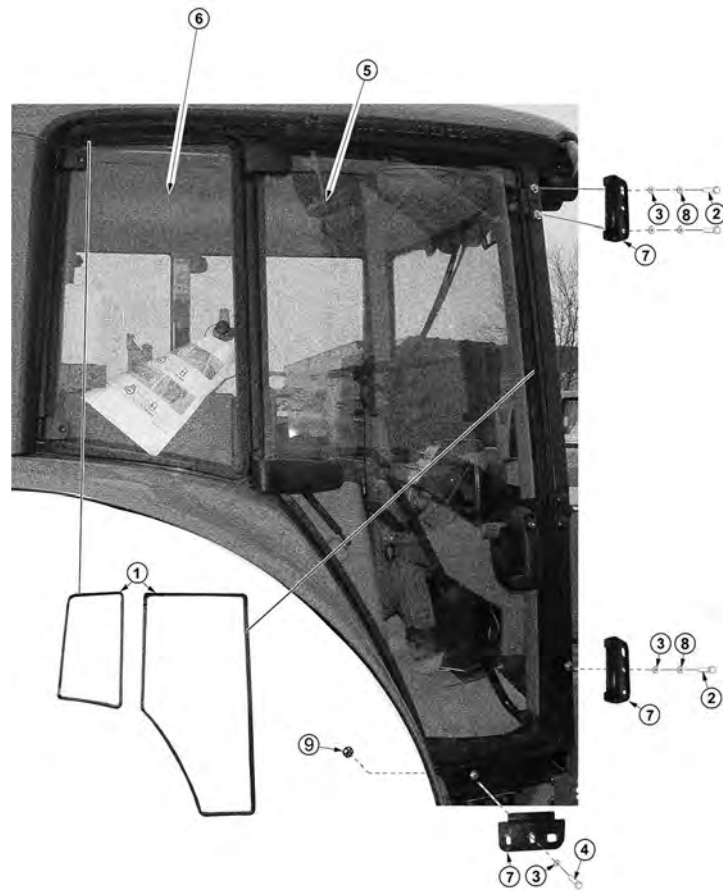


5 SPOOL CABLE CONTROL MOUNT

Continued...

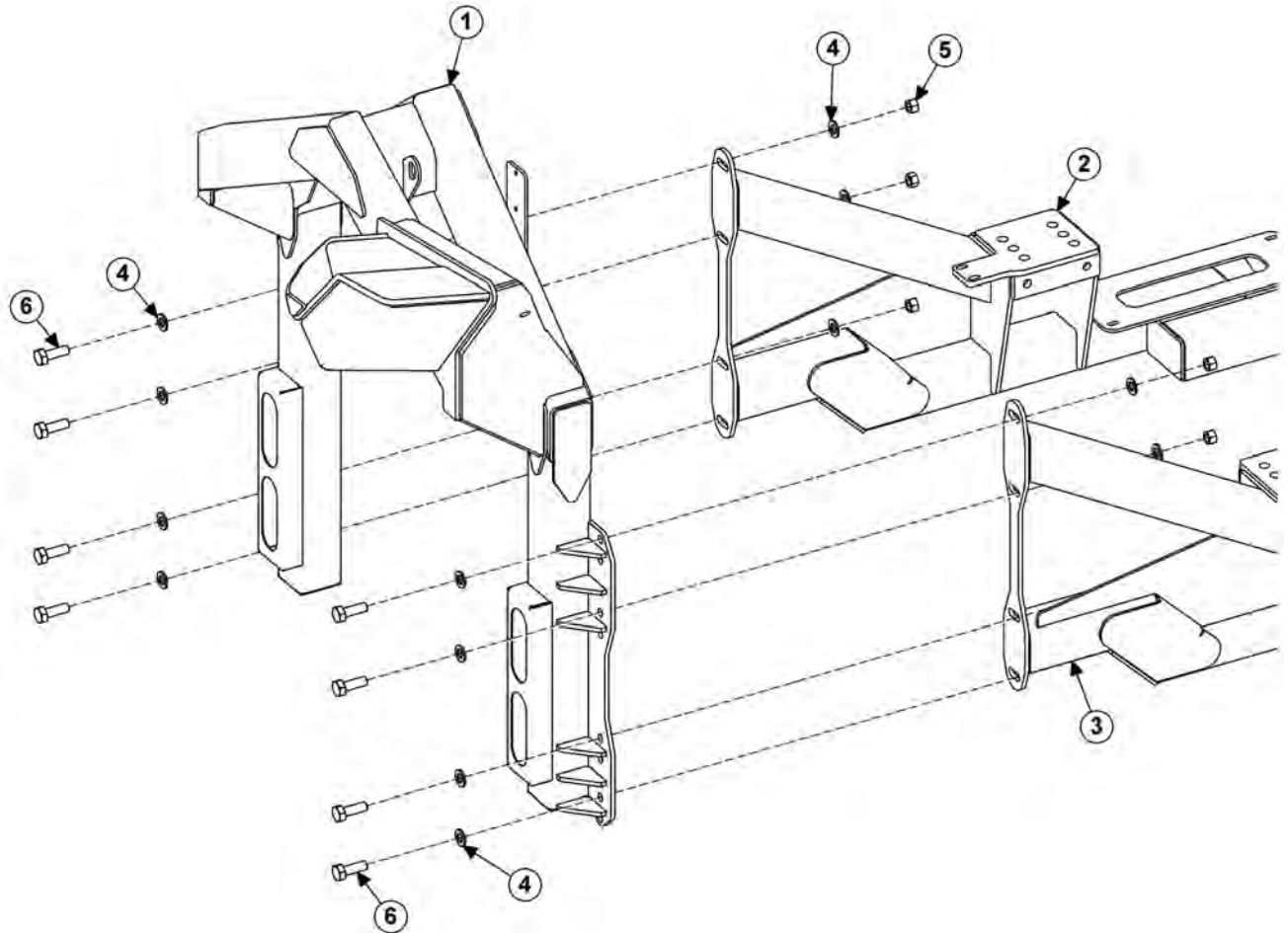
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------------|
| 1 | 23865B | 1 | CABLE CONTROL MOUNTING BRACKET |
| 2 | 06400179 | 1 | MOUNT,ADAPTER,CONTROL BOX |
| 3 | 30750A | 1 | BRACKET, JD6000 |
| 4 | 6T1251 | 4 | CABLE CONTROL BOX |
| 5 | 06505023 | 1 | CABLE CONTROL BOX W/ BUTTON |
| 6 | 06505100 | 5 | CONTROL CABLE,108" |
| 7 | 34496 | 1 | BRACKET,SWITCH BOX,UNIV |
| 8 | 06510049 | 1 | SWITCH BOX,LRS |
| 9 | 6T3951 | 2 | SCREW,MACHINE |
| 10 | 34508 | 2 | WASHER,FENDER,#10 |
| 12 | 27082B | 3 | SPACER |
| 13 | 21635 | 3 | CAPSCREW,3/8" X 2-1/4",NC |
| 14 | 33534 | 1 | CAPSCREW,10MM X 20MM,1.5P |
| 15 | 21545 | 3 | CAPSCREW,1/4" X 6",NC |
| 16 | 21543 | 1 | CAPSCREW,1/4" X 4-1/2",NC |
| 17 | 21542 | 2 | CAPSCREW,1/4" X 4",NC |
| 18 | 32691 | 1 | LOCKWASHER,10MM |
| 19 | 21986 | 6 | LOCKWASHER,1/4" |
| 20 | 21627 | 3 | NYLOCK NUT,3/8",NC |
| 21 | 21525 | 6 | HEX NUT,1/4",NC |
| 22 | 06502055 | 1 | VALVE SELECTOR |
| 23 | 21593 | 2 | CAPSCREW,5/16" X 4-1/2",NC |
| 24 | 21987 | 2 | LOCKWASHER,5/16" |
| 25 | 21575 | 2 | HEX NUT,5/16",NC |

POLYCARBONATE SAFETY WINDOW



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------------|
| 1 | 31965 | 22 | TRIM SEAL,3/8" CLIP X 3/4"OD (FEET) |
| 2 | 27508 | 3 | CAPSCREW,8MM X 20MM,1.25P |
| 3 | 22015 | 4 | FLATWASHER,5/16" |
| 4 | 21581 | 1 | CAPSCREW,5/16" X 1-1/4",NC |
| 5 | 06490005 | 1 | POLYCARB,FRMD,DOOR,RH |
| 6 | 06490027 | 1 | POLYCARB,FRMD,REAR,RH |
| 7 | 06520040 | 3 | BRKT,JD,POLY,RETAIN |
| 8 | 6T2619 | 3 | LOCKWASHER,8MM |
| 9 | 21577 | 1 | NYLOCK NUT,5/16",NC |

BOOMREST - REAR STOW



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|----------------------------------|
| 1 | 06310185 | 1 | BOOMREST, RS, JD6110 T4F |
| 2 | 06300386 | 1 | AXLE BRACE, LH, JD6110M, T4F, RS |
| 3 | 06300384 | 1 | AXLE BRACE, RH, JD6110M, T4F, RS |
| 4 | 33764 | 16 | FLATWASHER, 5/8 GR8 SAE |
| 5 | 21777 | 8 | NYLOCK NUT, 5/8 |
| 6 | 21783 | 8 | CAPSCREW, 5/8 x 2 NC |

FRONT AXLE STABILIZER OPTION

HOSE ROUTING KEY

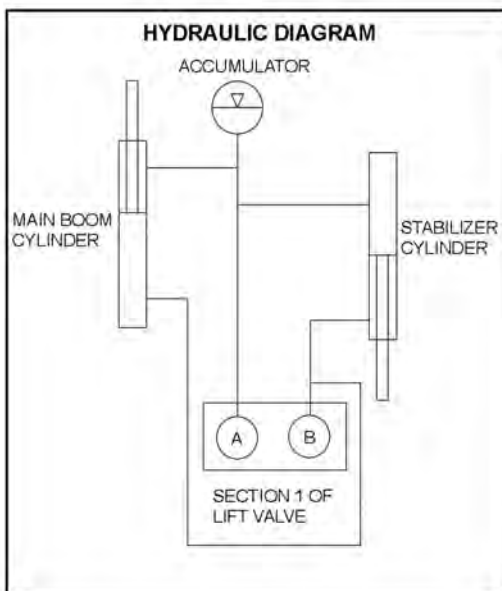
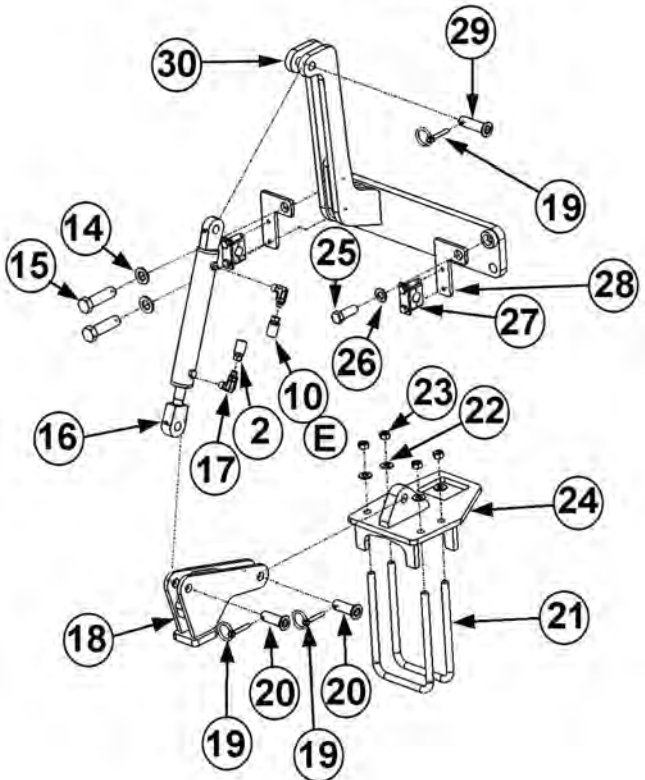
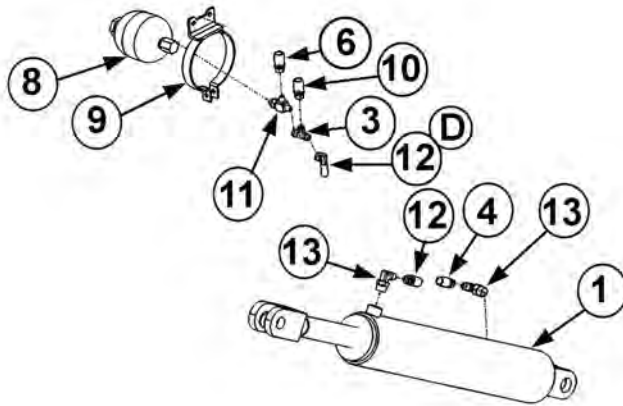
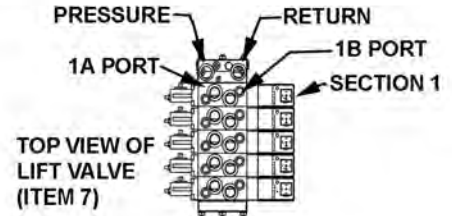
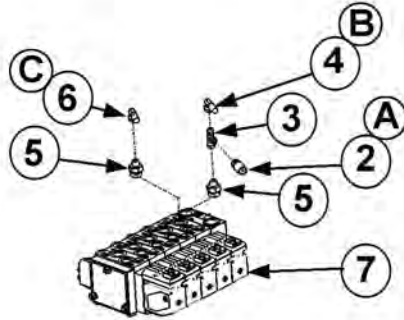
A- FROM 1B PORT ON LIFT VALVE
TO STABILIZER CYLINDER GLAND

B- FROM 1B PORT ON LIFT VALVE
TO MAIN BOOM CYLINDER BUTT

C- FROM 1A PORT ON LIFT VALVE
TO ACCUMULATOR

D- FROM ACCUMULATOR
TO MAIN BOOM CYLINDER GLAND

E- FROM STABILIZER CYLINDER BUTT
TO ACCUMULATOR



LOCATE HOLE IN ITEM 24 AROUND AXLE STOP
ON RIGHT FRONT AXLE.

USE ITEMS 21, 22, & 23 TO CLAMP ITEM 24 TO AXLE.

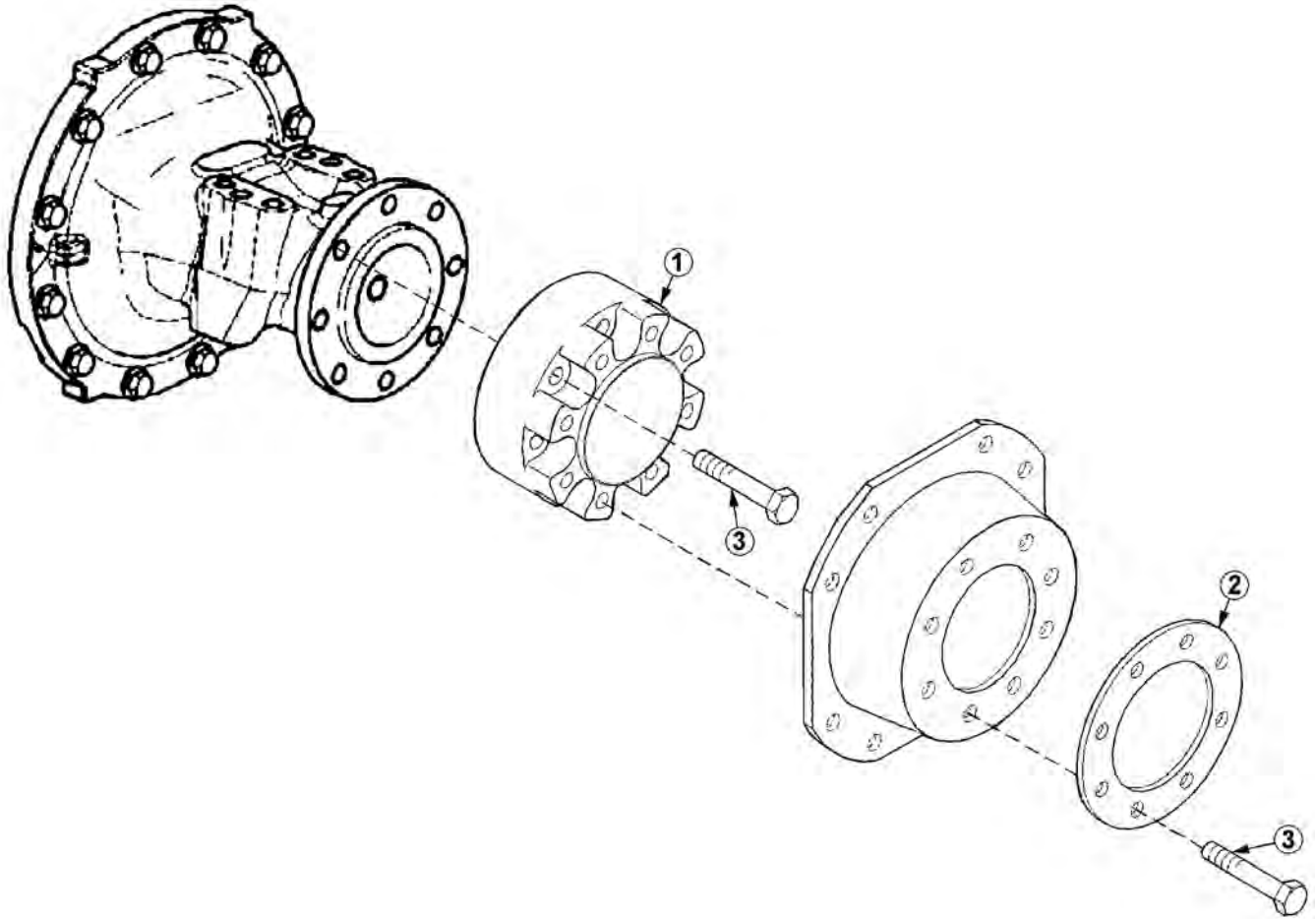
AFTER INSTALLATION, ARTICULATE FRONT AXLE
FROM STOP TO STOP AND EXTEND AND RETRACT
CYLINDER FULLY TO ENSURE A PROPER FIT.

FRONT AXLE STABILIZER OPTION

Continued...

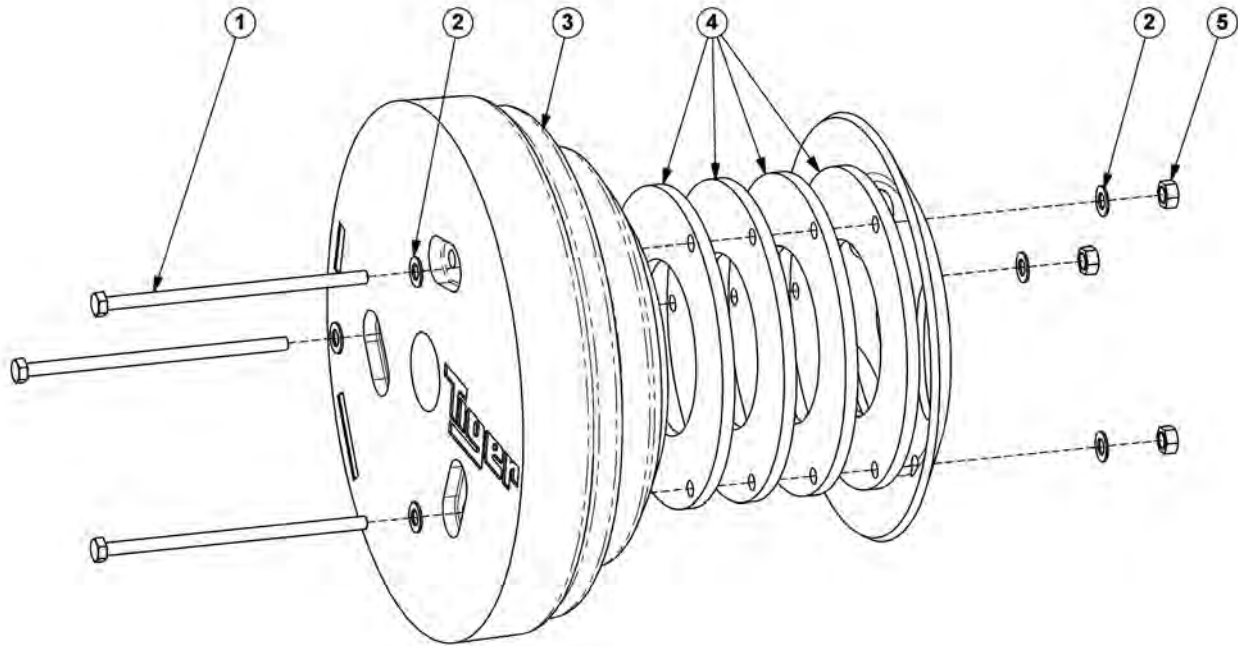
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | ----- | - | BOOM CYLINDER *REFER TO COMMON SECTION |
| 2 | 06500149 | 1 | HOSE,1/4" X 220" |
| 3 | 06503048 | 2 | RUN TEE,3/8" MJ X 3/8" FJX X 3/8" MJ |
| 4 | ----- | - | HOSE *REFER TO LIFT VALVE PAGE |
| 5 | ----- | - | ADAPTER *REFER TO LIFT VALVE PAGE |
| 6 | ----- | - | HOSE *REFER TO LIFT VALVE PAGE |
| 7 | ----- | - | LIFT VALVE *REFER TO LIFT VALVE PAGE |
| 8 | ----- | - | ACCUMULATOR *REFER TO LIFT VALVE PAGE |
| 9 | ----- | - | ACCUMULATOR BRKT *REFER TO LIFT VALVE PAGE |
| 10 | 06500149 | 1 | HOSE,1/4" X 220" |
| 11 | ----- | - | RUN TEE *REFER TO LIFT VALVE PAGE |
| 12 | ----- | - | HOSE *REFER TO LIFT VALVE PAGE |
| 13 | ----- | - | ELBOW *REFER TO LIFT VALVE PAGE |
| 14 | 33880 | 2 | FLATWASHER,3/4",SAE |
| 15 | 32703 | 2 | CAPSCREW,20MM X 100MM,2.5P |
| 16 | 33785 | 1 | CYLINDER,1-1/2" X 8" |
| 17 | 06503055 | 2 | ELBOW,1/4" MOR X 3/8" MJ |
| 18 | 06310132 | 1 | LINK,PIVOT,STABILIZER |
| 19 | RD1032 | 3 | LYNCH PIN |
| 20 | 33984 | 2 | PIN,3/4" X 2-7/16" |
| 21 | 06420140 | 2 | U-BOLT |
| 22 | 06533004 | 4 | FLATWASHER,1/2",SAE |
| 23 | 21700 | 4 | HEX NUT,1/2",UNC |
| 24 | 06310176 | 1 | MOUNT,AXLE |
| 25 | ----- | - | CAPSCREW *REFER TO LIFT VALVE PAGE |
| 26 | ----- | - | FLATWASHER *REFER TO LIFT VALVE PAGE |
| 27 | ----- | - | CLAMP KIT *REFER TO LIFT VALVE PAGE |
| 28 | ----- | - | BRACKET *REFER TO LIFT VALVE PAGE |
| 29 | 34799 | 1 | PIN,3/4" X 2-15/16" |
| 30 | 06310177 | 1 | STABILIZER,AXLE,CYL MNT |

WHEEL SPACER



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------|
| 1 | AL156779 | 1 | SPCR, WHL, JD, 1.732 |
| 2 | 06400919 | 1 | RING, SPACER, WHEEL, JD |
| 3 | 6T2548 | 16 | CAPSCREW, 20MM X 60MM |

WHEEL WEIGHT



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------------|
| 1 | 06530213 | 3 | CAPSCREW,7/8" X 16",NC,GR8, 3"THRD |
| 2 | 06533000 | 6 | FLATWASHER,7/8",GR8 |
| 3 | 32517 | 1 | WHEEL WEIGHT,1700# |
| 4 | 06400410 | 4 | SPACER |
| 5 | 06531000 | 3 | HEX NUT,7/8",NC,GR8 |

NOTES

COMMON LEGAL REAR STOW T4

PARTS SECTION

PART NAME INDEX

| | |
|--|----|
| PARTS ORDERING GUIDE..... | 4 |
| BENGAL BRUTE HOSE ROUTING..... | 5 |
| BENGAL BRUTE BOOM ASSY T4..... | 6 |
| BENGAL BRUTE BOOM HOSES..... | 8 |
| BOOMREST..... | 10 |
| LEGAL REAR STOW RTRY PIVOT ASSY..... | 12 |
| LEGAL REAR STOW FLAIL PIVOT ASSY..... | 14 |
| 60IN ROTARY MOWER ASSEMBLY..... | 16 |
| 50IN ROTARY MOWER ASSEMBLY..... | 18 |
| 50IN ROTARY KNIVES AND DISH..... | 20 |
| 50IN ROTARY BLADE BAR AND KNIVES..... | 21 |
| 60IN ROTARY KNIVES AND DISH..... | 22 |
| 60IN ROTARY BLADE BAR AND KNIVES..... | 23 |
| 50IN FLAIL DRIVE ASSEMBLY..... | 24 |
| 50IN FLAIL MOWER ASSEMBLY..... | 26 |
| 50IN FLAIL MOWER ASSY, PASS-THROUGH KNIVES..... | 28 |
| 63IN FLAIL DRIVE ASSEMBLY..... | 30 |
| 63IN FLAIL MOWER ASSEMBLY..... | 32 |
| 3 IN X 13-7/8 IN WELDED CYLINDER BREAKDOWN..... | 34 |
| 3IN X 18IN WELDED CYLINDER BREAKDOWN..... | 35 |
| 3-1/2IN X 20IN WELDED CYLINDER BREAKDOWN..... | 36 |
| 4IN X 20IN WELDED CYLINDER BREAKDOWN..... | 37 |
| ROTARY MOWER SPINDLE ASSEMBLY..... | 38 |
| PUMP AND GRILL GUARD OPTIONS..... | 40 |
| RESERVOIR TANK FILTER ASSEMBLY..... | 41 |
| 5 SPOOL ELECTRONIC VALVE - BENGAL BRUTE..... | 42 |
| FRONT HYDRAULIC PUMP..... | 44 |
| 50IN AND 60IN ROTARY MOTOR BREAKDOWN..... | 46 |
| FLAIL MOTOR BREAKDOWN..... | 48 |
| MANUAL LIFT VALVE SWITCH BOX..... | 50 |
| MANUAL LIFT VALVE SCHEMATIC..... | 51 |
| ELECTRONIC LIFT VALVE SWITCH BOX..... | 52 |
| ELECTRONIC LIFT VALVE SCHEMATIC - REAR STOW..... | 53 |
| ELECTRONIC LIFT VALVE WIRING DIAGRAM..... | 54 |
| BOOM TRAVEL LOCK..... | 55 |
| SELECTOR VALVE SCHEMATIC..... | 56 |
| BRAKE VALVE ASSEMBLY..... | 57 |
| BRAKE VALVE HYDRAULIC SCHEMATIC..... | 58 |
| HYDRAULIC TROUBLESHOOTING GUIDE..... | 59 |
| ELECTRICAL TROUBLESHOOTING GUIDE..... | 60 |

COMMON LEGAL REAR STOW T4

PART NAME INDEX

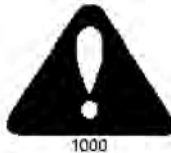
| | |
|----------------------------------|----|
| TROUBLESHOOTING..... | 61 |
| TROUBLESHOOTING - CONTINUED..... | 62 |
| NOTES..... | 63 |

PARTS ORDERING GUIDE

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

1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
2. The Purchase Order must indicate the **Name and Address** of the person or organization ordering the parts, **who should be charged**, and if possible, the **serial number of the machine** for which the parts are being ordered.
3. The purchase order must clearly list the **quantity of each part**, the complete and correct **part number**, and the basic **name of the part**.
4. The manufacturer reserves the right to substitute parts where applicable.
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.

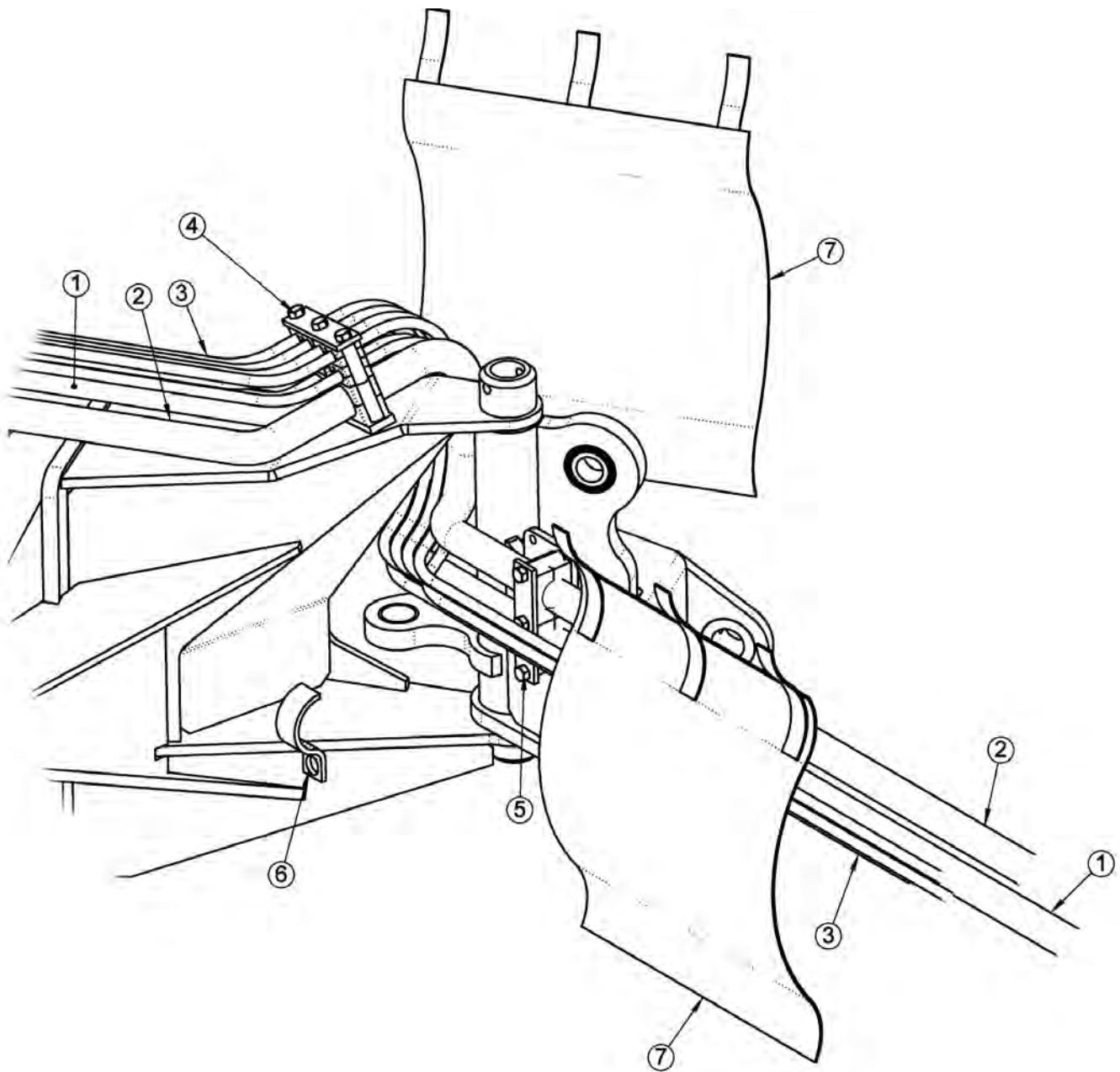


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

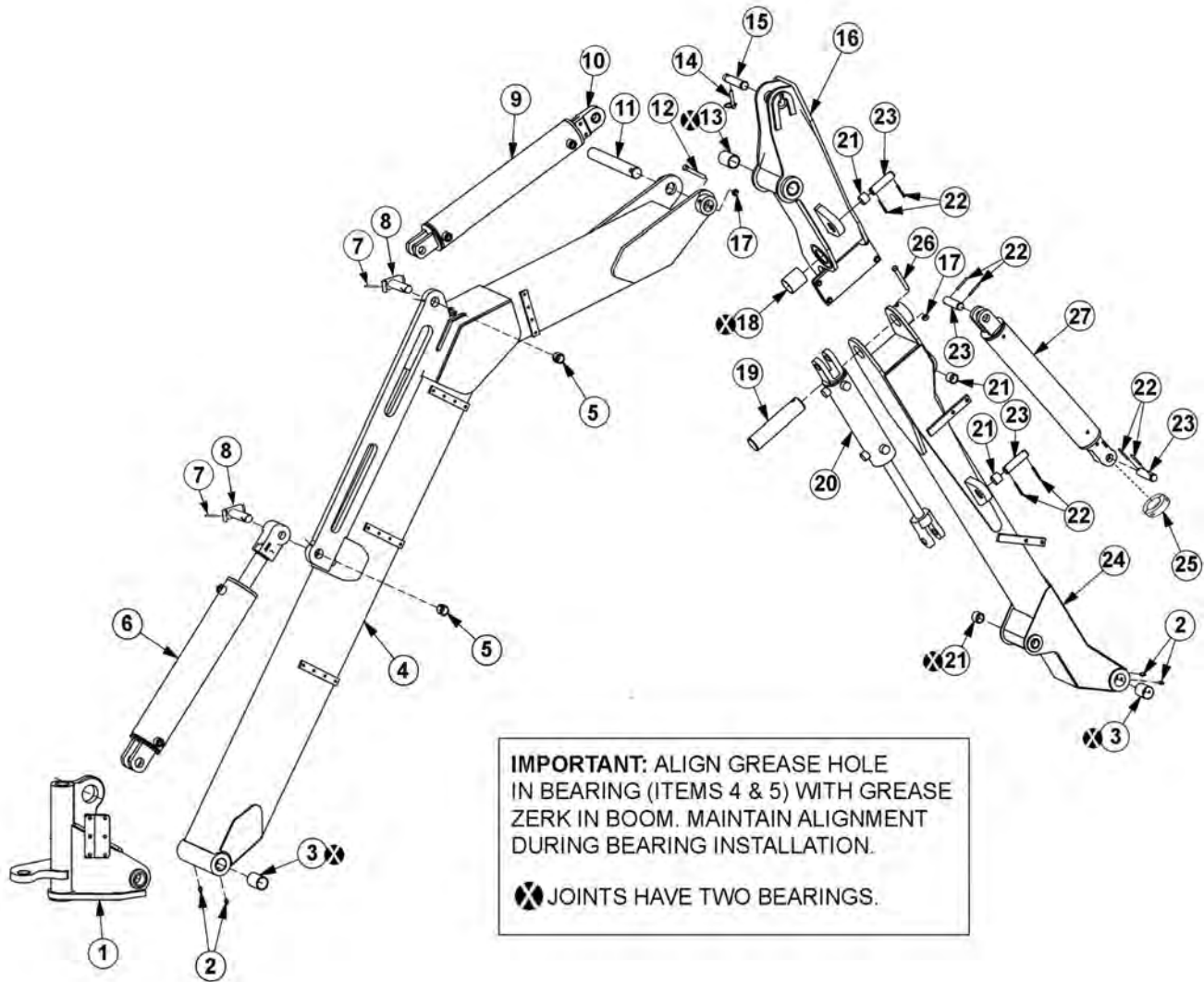
BENGAL BRUTE HOSE ROUTING



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---------------------------------|
| 1 | ----- | 1 | 1" HOSE TO MAIN BOOM LOWER TUBE |
| 2 | ----- | 1 | 1" HOSE TO MAIN BOOM UPPER TUBE |
| 3 | ----- | 6 | 1/4" HOSE TO MAIN BOOM |
| 4 | 06505085 | 1 | CLAMP KIT |
| 5 | 35131 | 1 | CLAMP KIT |
| 6 | TB3012 | 1 | CLAMP |
| 7 | 06505021 | 2 | HOSE COVER |

COMMON LEGAL REAR STOW T4

BENGAL BRUTE BOOM ASSY T4



BENGAL BRUTE BOOM ASSY T4

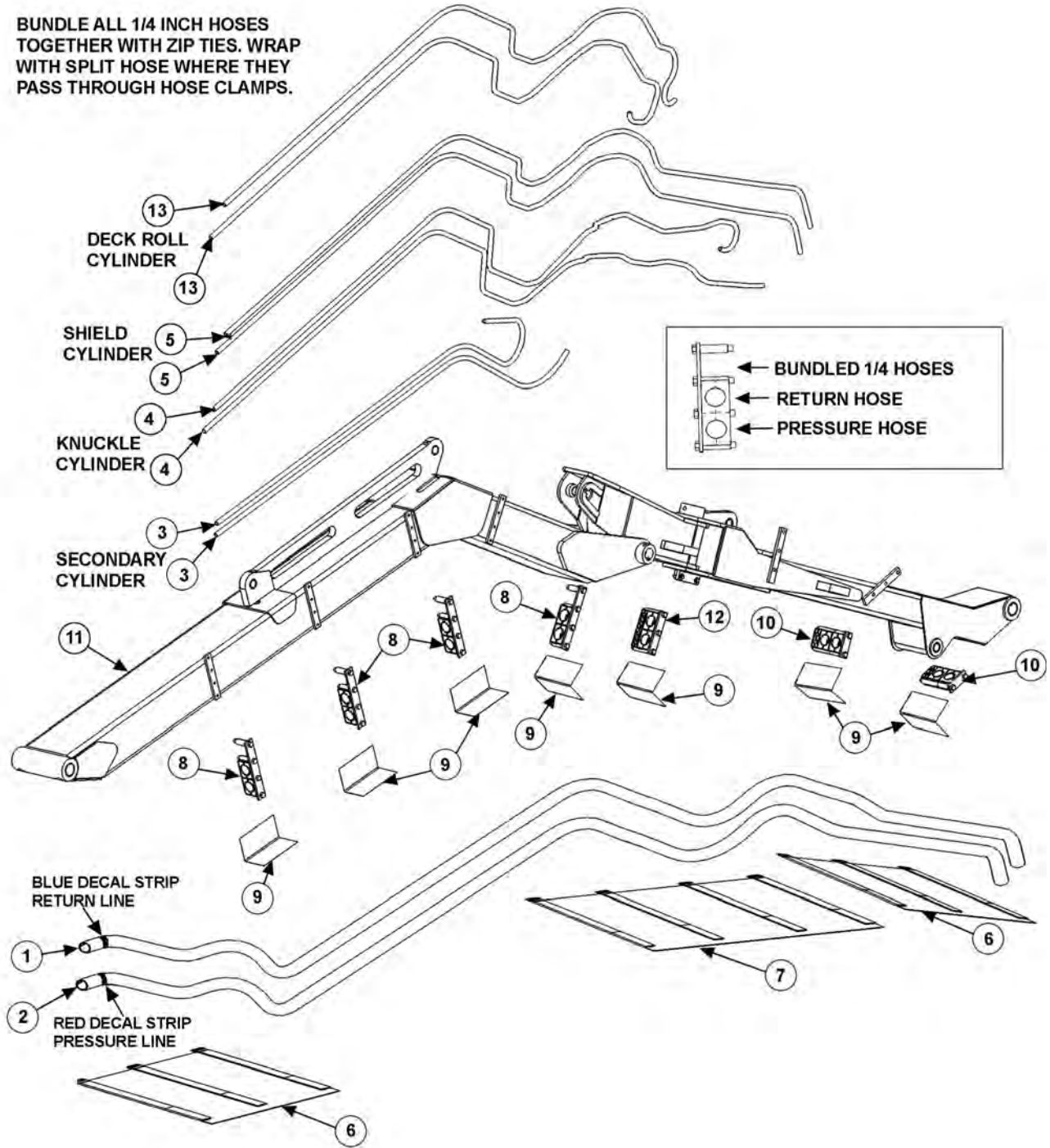
Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 1 | 06700016 | - | SWIVEL ASSY *REFER TO TRACTOR MOUNT KIT |
| 2 | 6T3711 | 4 | GREASE ZERK, 1/8" NPT |
| 3 | 32321 | 4 | BUSHING, 1-1/2ID X 2 |
| 4 | 06700189 | 1 | MAIN BOOM ARM ASSY |
| 5 | TB1044 | 2 | BUSHING, 1-1/4"ID |
| 6 | 06501020 | 1 | CYLINDER, 5 X 20 |
| 7 | 6T3014 | 2 | ROLLPIN, 1/4 X 2 |
| 8 | TB1045B | 2 | PIN, 1-1/4 X 3-3/8 |
| 9 | 06501022 | 1 | CYLINDER, 4 X 20 |
| 10 | 30172 | 1 | CLEVIS W/SPHERICAL BEARING |
| 11 | 06420015 | 1 | PIN, 1-1/2 X 11-3/4 |
| 12 | 21688 | 2 | CAPSCREW, 7/16 X 3-1/4, NC |
| 13 | 06520411 | 2 | BUSHING, 1-1/2ID X 2-1/2 |
| 14 | TF1143 | 1 | LYNCH PIN, 7/16 X 2 |
| 15 | TB1036 | 1 | PIN, 1 X 4-11/16 |
| 16 | 06700036 | 1 | KNUCKLE BOOM ARM ASSY |
| 17 | 21677 | 3 | NYLOCK NUT, 7/16 NC |
| 18 | 06520077 | 2 | BUSHING, 2ID X 2-1/2 |
| 19 | 06420017 | 1 | PIN, 2 X 8-9/16 |
| 20 | 06501021 | 1 | CYLINDER, 3 X 10 |
| 21 | 06520076 | 4 | BUSHING, 2ID X 1 |
| 22 | TB1023 | 10 | ROLLPIN, 7/32 |
| 23 | 06420014 | 4 | PIN, 1 X 3-5/8 |
| 24 | 06700187 | 1 | SECONDARY BOOM ARM ASSY |
| 25 | 35312 | 1 | SET COLLAR, 1.38ID (FOR ROTARY MOWERS) |
| --- | 35312 | 2 | SET COLLAR, 1.38ID (FOR FLAIL MOWERS) |
| 26 | 21689 | 1 | CAPSCREW, 7/16 X 3-1/2 |
| 27 | 06501023 | 1 | CYLINDER, 3 X 18 |

COMMON LEGAL REAR STOW T4

BENGAL BRUTE BOOM HOSES

BUNDLE ALL 1/4 INCH HOSES TOGETHER WITH ZIP TIES. WRAP WITH SPLIT HOSE WHERE THEY PASS THROUGH HOSE CLAMPS.

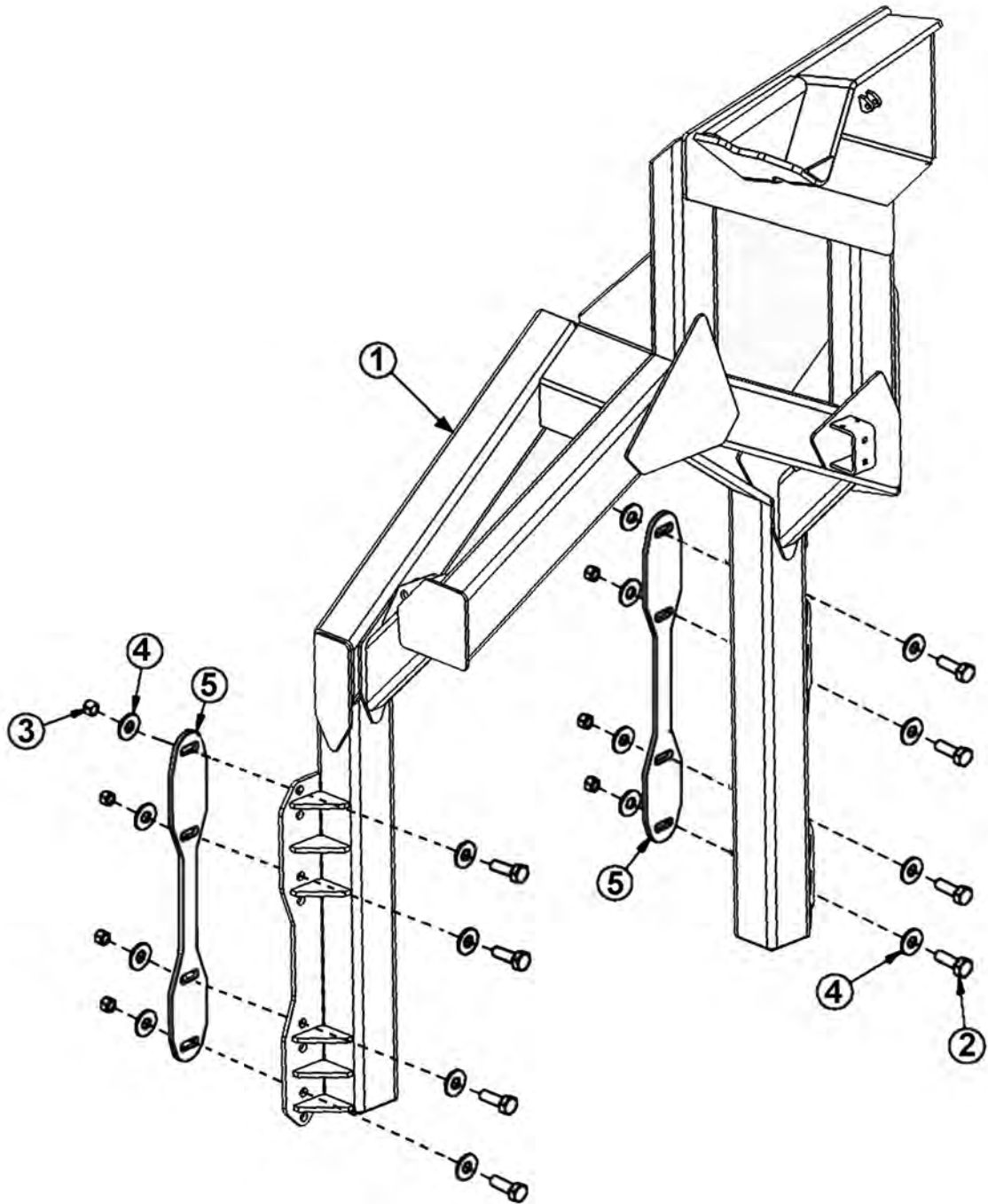


BENGAL BRUTE BOOM HOSES

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| 1 | 06500686 | 1 | HOSE, #16X218" (RETURN) |
| 2 | 06500685 | 1 | HOSE, #16X226" (PRESSURE) |
| 3 | 06500694 | 2 | HOSE, #4X83" |
| 4 | 06500709 | 4 | HOSE, #4X142" |
| 5 | 06500690 | 2 | HOSE #4X155" |
| 6 | 06505021 | 2 | HOSE WRAP |
| 7 | 06505022 | 1 | HOSE WRAP |
| 8 | 06505024 | 3 | CLAMP KIT |
| 9 | 6T3200 | 5 | SPLIT HOSE |
| 10 | 06505019 | 5 | CLAMP KIT |
| 11 | --- | - | LRS BOOM ASSY *REFER TO BOOM ASSY |
| 12 | 06505116 | 1 | CLAMP KIT |
| 13 | 06500015 | 2 | HOSE, #4 X 146" |

BOOMREST



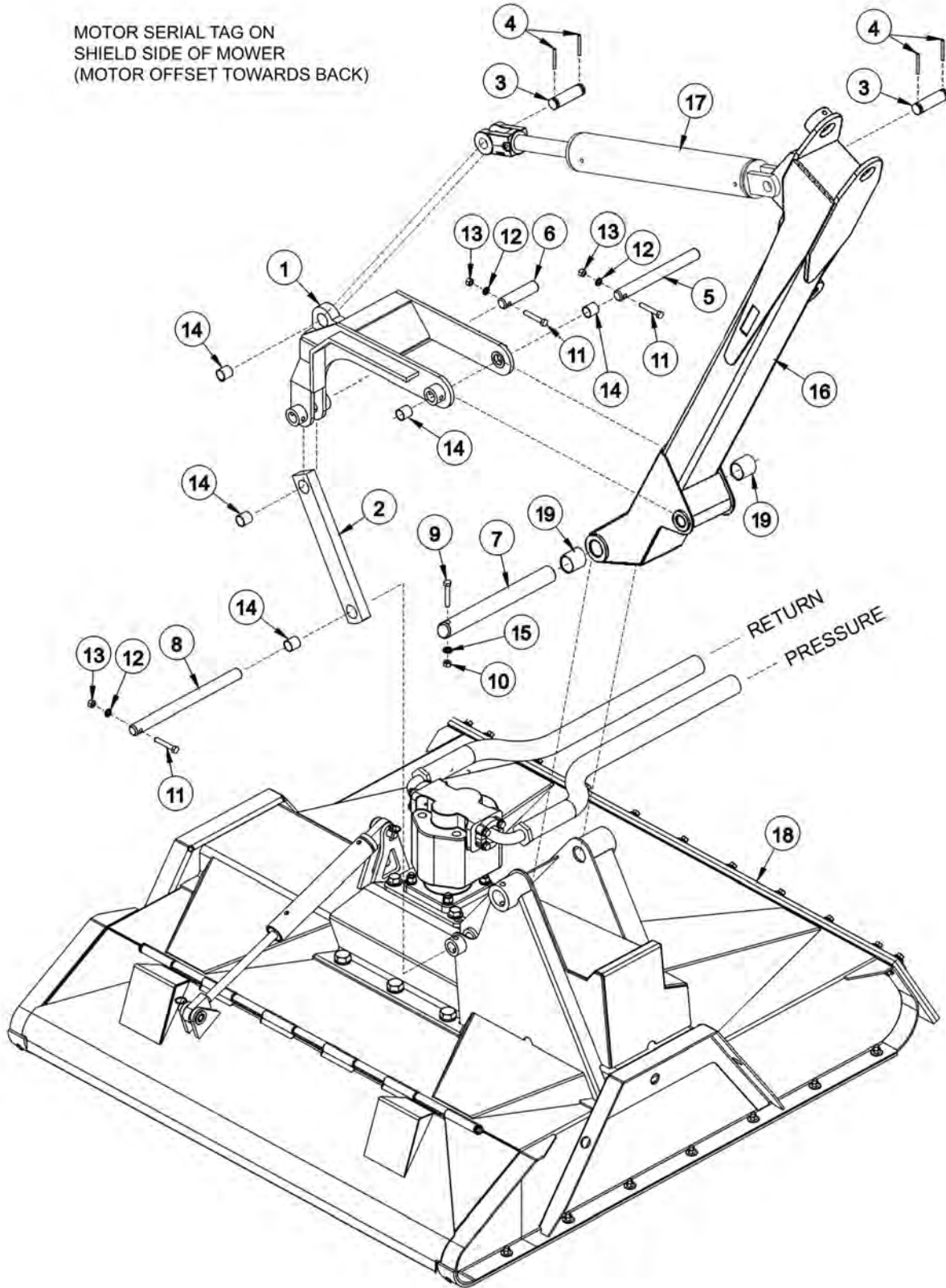
BOOMREST

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06310125 | 1 | BOOMREST, LRS, CT |
| 2 | 21782 | 8 | CAPSCREW, 5/8" X 1-3/4" NC |
| 3 | 21777 | 8 | NYLOCK NUT, 5/8" NC, GR8 |
| 4 | 33764 | 16 | FLATWASHER, 5/8", GR8 SAE |
| 5 | --- | - | AXLE BRACE *REFER TO TRACTOR MOUNT KIT |

LEGAL REAR STOW RTRY PIVOT ASSY

MOTOR SERIAL TAG ON
SHIELD SIDE OF MOWER
(MOTOR OFFSET TOWARDS BACK)



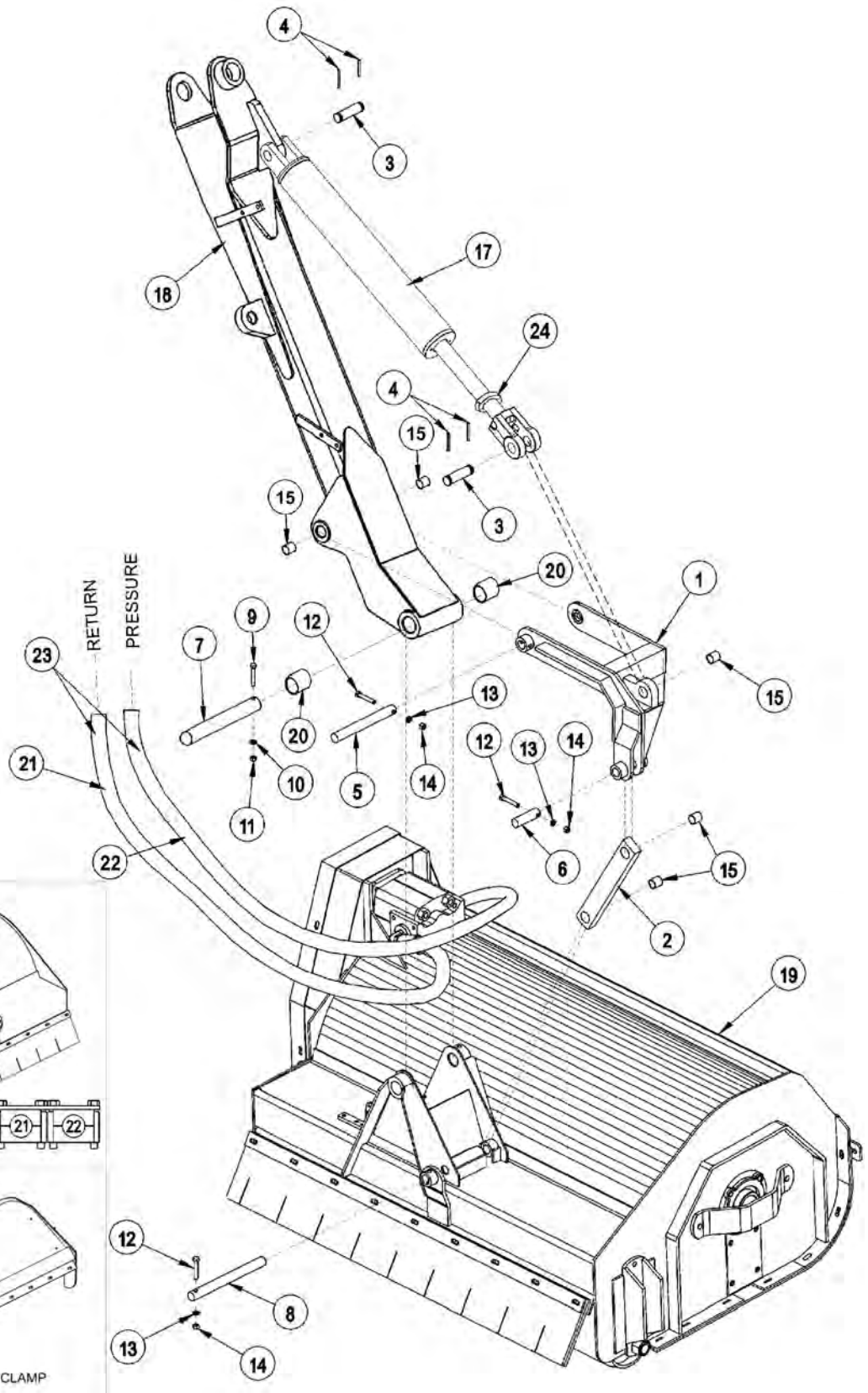
LEGAL REAR STOW RTRY PIVOT ASSY

Continued...

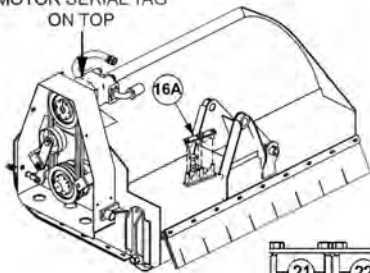
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 1 | 06700016 | 1 | PIVOT ASSEMBLY |
| 2 | 06700015 | 1 | PIVOT ARM ASSEMBLY |
| 3 | 06420014 | 2 | PIN, CLEVIS |
| 4 | TB1023 | 4 | ROLL PIN |
| 5 | 06420019 | 1 | PIN |
| 6 | 06420020 | 1 | PIN |
| 7 | 06420016 | 1 | PIN |
| 8 | 06420021 | 1 | PIN |
| 9 | 21688 | 1 | CAPSCREW 7/16" X 2-3/4", NC |
| 10 | 21675 | 1 | HEX NUT, 7/16", NC |
| 11 | 21635 | 3 | CAPSCREW 3/8" X 2 1/4" |
| 12 | 21988 | 3 | LOCKWASHER 3/8" |
| 13 | 21625 | 3 | HEX NUT 3/8" |
| 14 | 06520076 | 5 | BEARING, 1ID X 1 |
| 15 | 21989 | 1 | LOCKWASHER 7/16" |
| 16 | ----- | - | SECONDARY BOOM *REFER TO BOOM ARM ASSY |
| 17 | ----- | - | CYLINDER *REFER TO BOOM ARM ASSY |
| 18 | ----- | - | ROTARY MOWER HEAD *REFER TO ROTARY DECK |
| 19 | 06520411 | 2 | BEARING, 1.50ID X 2.50 |

COMMON LEGAL REAR STOW T4

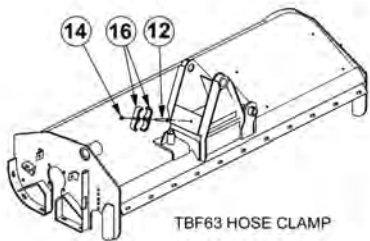
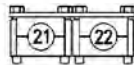
LEGAL REAR STOW FLAIL PIVOT ASSY



MOTOR SERIAL TAG
ON TOP



TBF50 HOSE CLAMP



TBF63 HOSE CLAMP

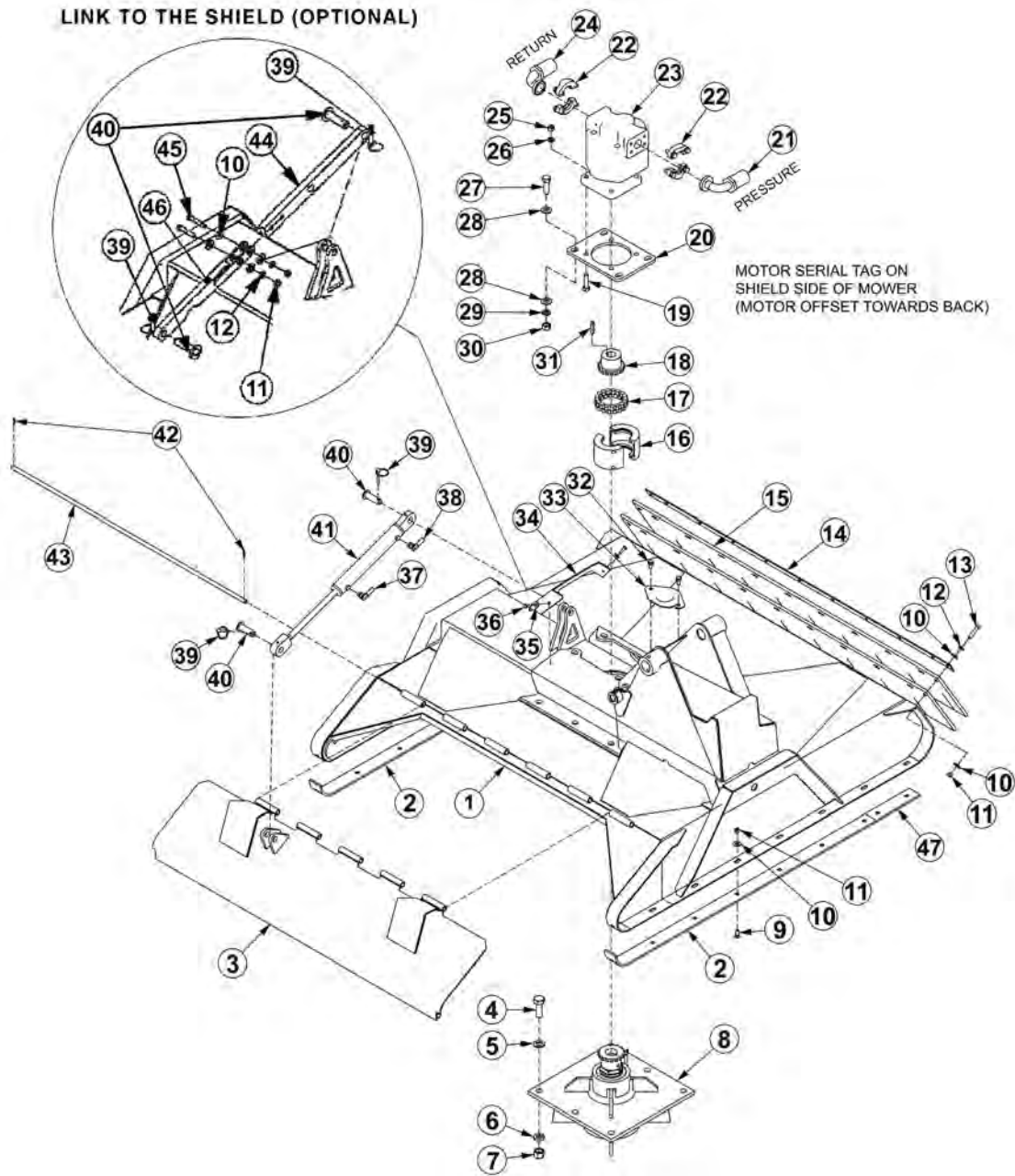
LEGAL REAR STOW FLAIL PIVOT ASSY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06700029 | 1 | PIVOT ASSEMBLY |
| 2 | 06700201 | 1 | PIVOT ARM ASSEMBLY |
| 3 | 06420014 | 2 | PIN CLEVIS |
| 4 | TB1023 | 4 | ROLL PIN |
| 5 | 06420019 | 1 | PIN |
| 6 | 06420020 | 1 | PIN |
| 7 | 06420018 | 1 | PIN |
| 8 | 06420021 | 1 | PIN |
| 9 | 21688 | 1 | CAPSCREW 7/16" X 3 1/4" |
| 10 | 21989 | 1 | LOCKWASHER 7/16" |
| 11 | 21675 | 1 | HEX NUT 7/16" |
| 12 | 21635 | 2 | CAPSCREW 3/8" X 2 1/4" |
| 13 | 21988 | 2 | LOCKWASHER 3/8" |
| 14 | 21625 | 2 | HEX NUT 3/8" |
| 15 | 06520076 | 5 | BEARING, 1ID X 1 |
| 16 | TB3031 | 1 | DOUBLE HOSE CLAMP (USED ON THE 63" FLAIL) |
| 16A | 31723 | 1 | CLAMP KIT, TBF 50 (USED ON THE 50" FLAIL) |
| 17 | ----- | - | CYLINDER - REFER TO BOOM ARM ASY |
| 18 | ----- | - | SECONDARY BOOM - REFER TO BOOM ARM ASY |
| 19 | ----- | - | FLAIL MOWER HEAD - REFER TO FLAIL CUTTER ASY |
| 20 | 06520075 | 2 | BEARING, 1.50ID X 2.50 |
| 21 | 06500158 | 1 | HOSE, 1" X 145" (USED ON THE 50" FLAIL) |
| 22 | 06500159 | 1 | HOSE, 1" X 158" (USED ON THE 50" FLAIL) |
| 23 | 06500159 | 2 | HOSE, 1" X 158"(USED ON THE 63" FLAIL) |
| 24 | 35312 | 2 | SPLIT COLLAR (USED ON FLAILS ONLY) |

COMMON LEGAL REAR STOW T4

60IN ROTARY MOWER ASSEMBLY



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------------|
| 1 | 06320159 | 1 | DECK,WLDMNT,60" RTRY |
| 2 | 33777 | 2 | SKID SHOE,RTRY |
| 3 | 06320162 | 1 | SHIELD,60"RTRY |
| 4 | 33879 | 6 | CAPSCREW, 3/4 X 2 1/4,NF GR 8 |
| 5 | 33880 | 6 | FLATWASHER,3/4",GR 8,SAE |
| 6 | 21993 | 6 | LOCKWASHER,3/4",GR 8 |
| 7 | 6T2413 | 6 | HEX NUT,3/4,NF,GR 8 |
| 8 | 6T1024H5 | 1 | SPINDLE ASSY,CPLT,HD,5/8 HOLES |

COMMON LEGAL REAR STOW T4

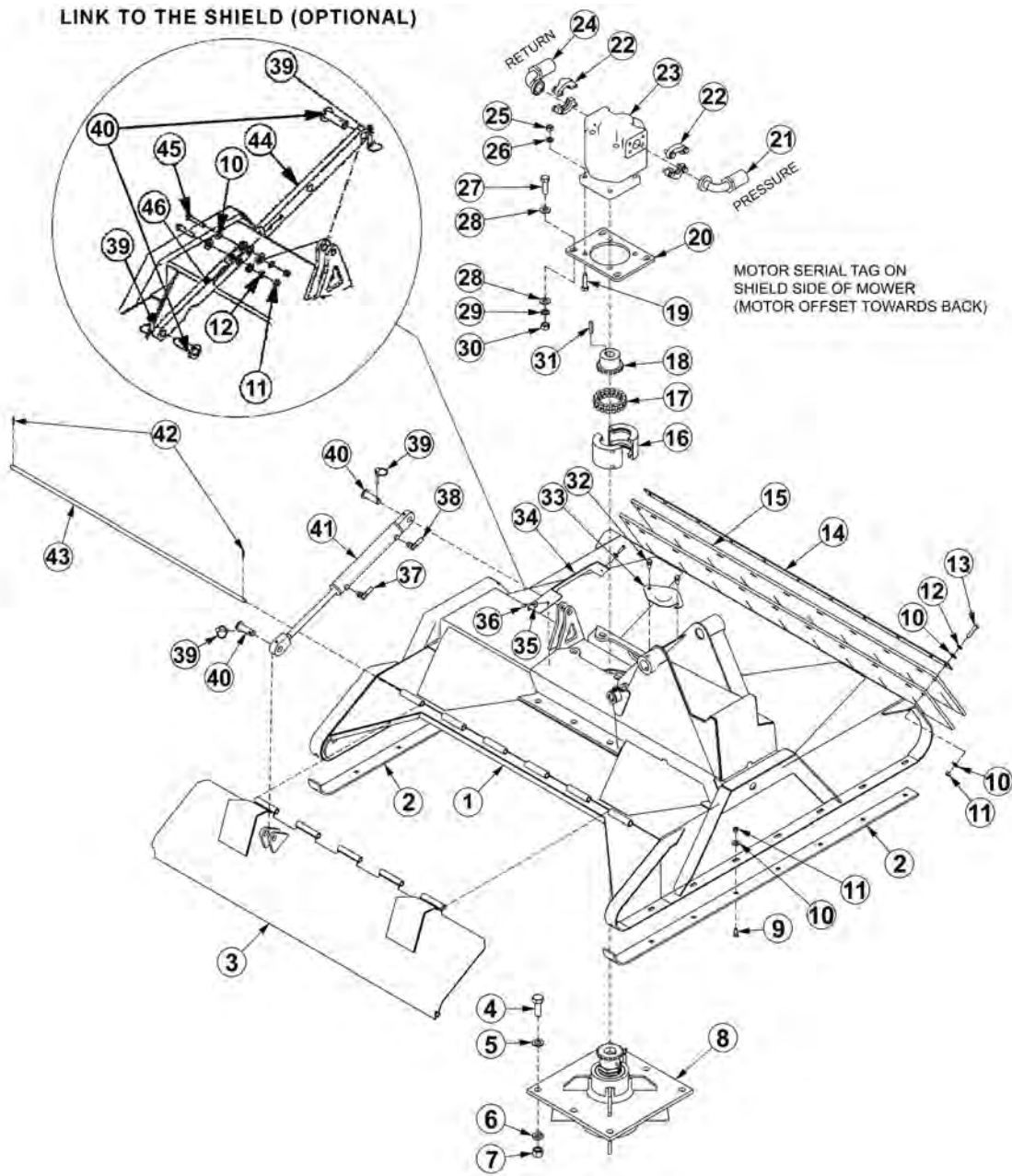
60IN ROTARY MOWER ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------------|-----------------|-------------|-------------------------------|
| 9 | 6T2270 | 16 | PLOW BOLT,3/8" X 1" NC |
| 10 | 22016 | 33 | FLATWASHER,3/8" |
| 11 | 21625 | 20 | HEX NUT,3/8",NC |
| 12 | 21988 | 11 | LOCKWASHER, 3/8" |
| 13 | 21633 | 11 | CAPSCREW, 3/8 X 1 3/4,NC |
| 14 | 6T0823 | 1 | FLAP RETAINER,60" RTRY |
| 15 | 06520238 | 2 | FLAP,60" RTRY |
| 16 | 6T1033 | 1 | COUPLER COVER |
| 17 | 6T1029 | 1 | COUPLER CHAIN |
| 18 | 21223 | 1 | SPROCKET |
| 19 | 21733 | 4 | CAPSCREW, 1/2 X 2,NC |
| 20 | 33776 | 1 | MOTOR MOUNT,PLATE,RTRY |
| 21 | 24490 | 1 | HOSE - PRESSURE |
| --- | 06500155 | 1 | HOSE-PRESSURE (LRS ONLY) |
| 22 | TF4852 | 2 | FLANGE KIT - #20 |
| 23 | 6504011 | 1 | MOTOR |
| 24 | 24489 | 1 | HOSE - RETURN |
| --- | 06500154 | 1 | HOSE-RETURN (LRS ONLY) |
| 25 | 21725 | 4 | HEX NUT, 1/2" NC |
| 26 | 06533004 | 4 | FLATWASHER, 1/2" |
| 27 | 6T2290 | 4 | CAPSCREW,5/8X2,NF GR 8 |
| 28 | 33764 | 8 | FLATWASHER,5/8",GR 8,SAE |
| 29 | 21992 | 4 | LOCKWASHER, 5/8 |
| 30 | 6T2408 | 4 | HEX NUT, 5/8, NF |
| 31 | TF1124 | 1 | SQUARE KEY |
| 32 | 33881 | 2 | CAPSCREW,FLG, 3/8 X 3/4,NC |
| 33 | 33779 | 1 | PLATE,COVER,KNF HOLE |
| 34 | 06410439 | 1 | COVER |
| 35 | 22014 | 2 | FLATWASHER,1/4 |
| 36 | 21530 | 2 | CAPSCREW,1/4 X 1,NC |
| 37 | 34187 | 1 | HOSE 1/4" X 75" |
| 38 | 34186 | 1 | HOSE 1/4" X 66" |
| 39 | RD1032 | 2 | LYNCH PIN |
| 40 | 33984 | 2 | PIN,SHIELD |
| 41 | 33785 | 1 | 1-1/2" X 8", CYLINDER, WELDED |
| 42 | 6T3017 | 2 | ROLLPIN |
| 43 | 06420139 | 1 | HINGE PIN,60" RTRY |
| 44 | 33772 | 1 | LINK, SHIELD,RTRY |
| 45 | 21634 | 2 | CAPSCREW, 3/8" X 2, NC |
| 46 | 33773 | 1 | LINK 2, SHIELD,RTRY |
| 47 | 06401245 | 2 | SKID SHOE,TRB60 |

COMMON LEGAL REAR STOW T4

50IN ROTARY MOWER ASSEMBLY



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------------|
| 1 | 33780 | 1 | DECK,WLDMNT,50" RTRY |
| 2 | 33777 | 2 | SKID SHOE,50" RTRY |
| 3 | 33754 | 1 | SHIELD,50"RTRY |
| 4 | 33879 | 6 | CAPSCREW, 3/4 X 2 1/4,NF GR 8 |
| 5 | 33880 | 6 | FLATWASHER,3/4",GR 8,SAE |
| 6 | 21993 | 6 | LOCKWASHER,3/4",GR 8 |
| 7 | 6T2413 | 6 | HEX NUT,3/4,NF,GR 8 |
| 8 | 6T1024H5 | 1 | SPINDLE ASSY,CPLT,HD,5/8 HOLES |

COMMON LEGAL REAR STOW T4

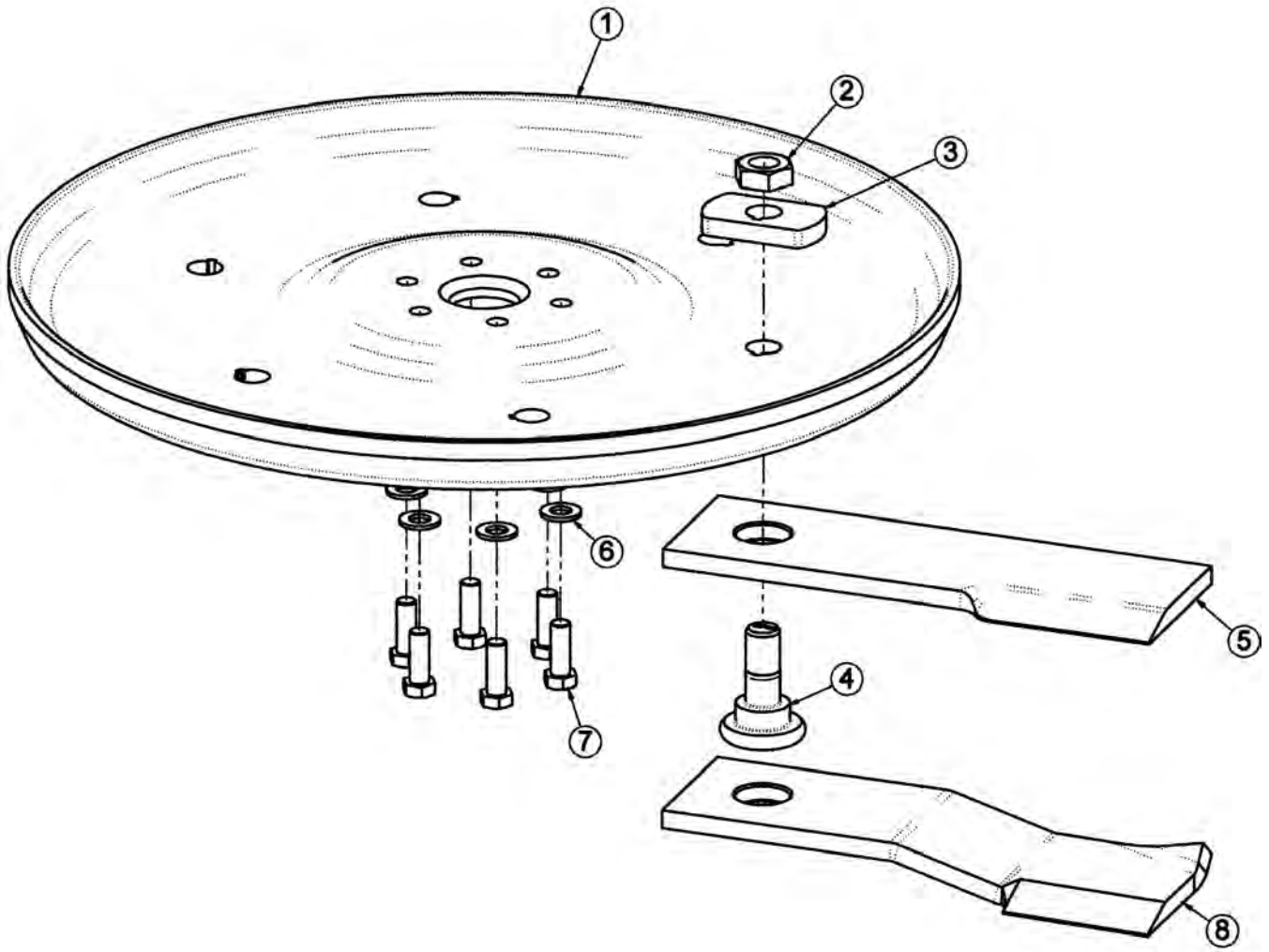
50IN ROTARY MOWER ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------|
| 9 | 6T2270 | 16 | PLOW BOLT,3/8" X 1" NC |
| 10 | 22016 | 33 | FLATWASHER,3/8" |
| 11 | 21625 | 20 | HEX NUT,3/8",NC |
| 12 | 21988 | 11 | LOCKWASHER, 3/8" |
| 13 | 21633 | 11 | CAPSCREW, 3/8 X 1 3/4,NC |
| 14 | 33774 | 1 | FLAP RETAINER,50" RTRY |
| 15 | 33775 | 2 | FLAP,50" RTRY |
| 16 | 6T1033 | 1 | COUPLER COVER |
| 17 | 6T1029 | 1 | COUPLER CHAIN |
| 18 | 21223 | 1 | SPROCKET |
| 19 | 21733 | 4 | CAPSCREW, 1/2 X 2,NC |
| 20 | 33776 | 1 | MOTOR MOUNT,PLATE,50" RTRY |
| 21 | 24490 | 1 | HOSE - PRESSURE |
| --- | 06500155 | 1 | HOSE- PRESSURE (LRS ONLY) |
| 22 | TF4852 | 2 | FLANGE KIT - #20 |
| 23 | 06504012 | 1 | MOTOR |
| 24 | 24489 | 1 | HOSE - RETURN |
| --- | 06500154 | 1 | HOSE-RETURN (LRS ONLY) |
| 25 | 21725 | 4 | HEX NUT, 1/2" NC |
| 26 | 06533004 | 4 | FLATWASHER, 1/2" |
| 27 | 6T2290 | 4 | CAPSCREW,5/8X2,NF GR 8 |
| 28 | 33764 | 8 | FLATWASHER,5/8",GR 8,SAE |
| 29 | 21992 | 4 | LOCKWASHER, 5/8 |
| 30 | 6T2408 | 4 | HEX NUT, 5/8, NF |
| 31 | TF1124 | 1 | SQUARE KEY |
| 32 | 33881 | 2 | CAPSCREW,FLG, 3/8 X 3/4,NC |
| 33 | 33779 | 1 | PLATE,COVER,KNF HOLE |
| 34 | 06410439 | 1 | COVER |
| 35 | 22014 | 2 | FLATWASHER,1/4 |
| 36 | 21530 | 2 | CAPSCREW,1/4 X 1,NC |
| 37 | 34187 | 1 | HOSE 1/4" X 75" |
| 38 | 34186 | 1 | HOSE 1/4" X 66" |
| 39 | RD1032 | 2 | LYNCH PIN |
| 40 | 33984 | 2 | PIN,SHIELD,50" |
| 41 | 33785 | 1 | 1-1/2" X 8", CYLINDER, WELDED |
| 42 | 6T3017 | 2 | ROLLPIN |
| 43 | 33778 | 1 | HINGE PIN,50" RTRY |
| 44 | 33772 | 1 | LINK, SHIELD 50" RTRY |
| 45 | 21634 | 2 | CAPSCREW, 3/8" X 2, NC |
| 46 | 33773 | 1 | LINK 2, SHIELD 50" RTRY |

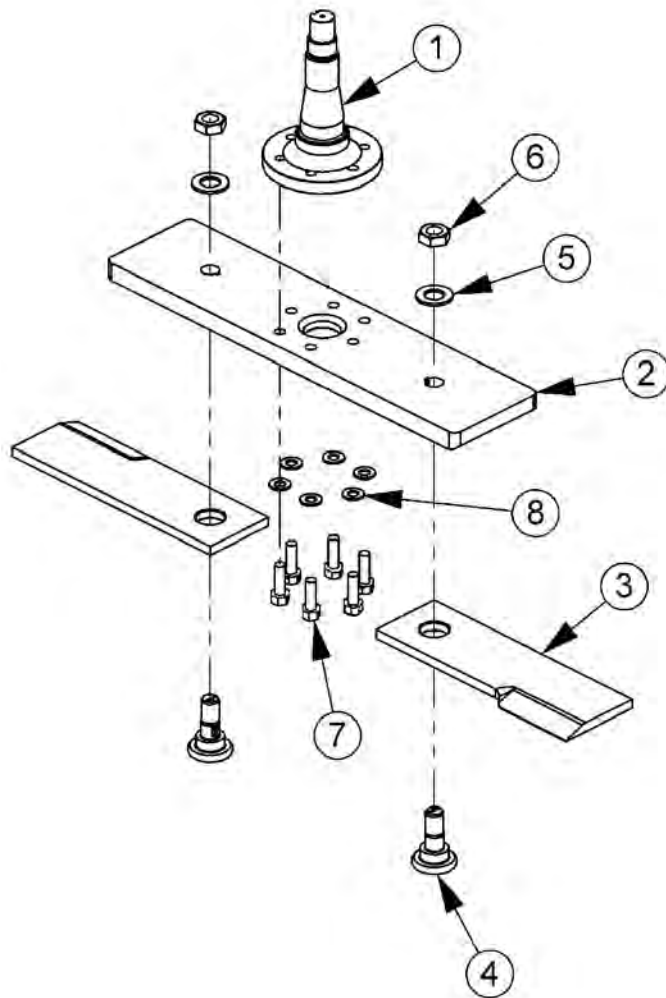
COMMON LEGAL REAR STOW T4

50IN ROTARY KNIVES AND DISH



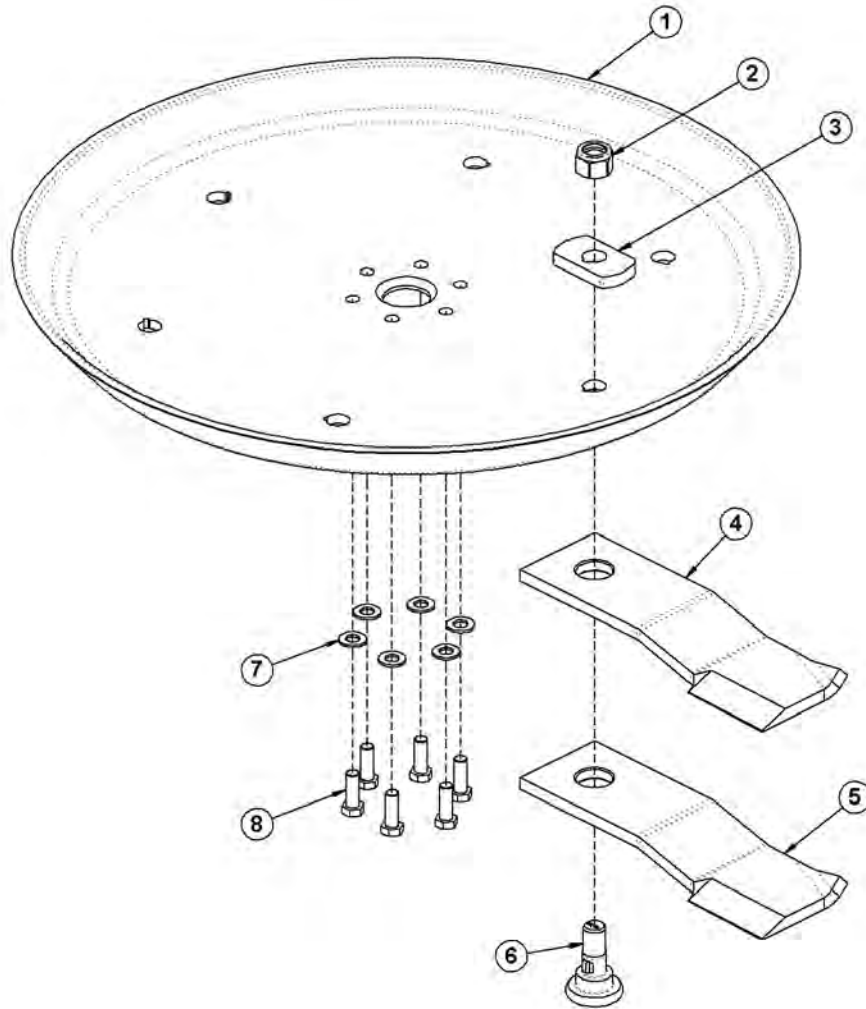
| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|--|
| ----- | 06700089 | - | KIT,TRB50,DISK,W/BOLT KIT (INCLUDES ITEMS 1,3 & 7) |
| 1 | 06770003 | 1 | BLADE MOUNTING DISK |
| 2 | 6T1023R | 2 | NYLOCK HEX NUT 1 1/8" |
| 3 | 34878 | 2 | SPACER |
| 4 | 06538000 | 2 | KNIFE MOUNTING BOLT |
| 5 | 06521001 | 2 | STANDARD KNIFE |
| 6 | 33764 | 6 | FLATWASHER |
| 7 | 6T2259 | 6 | CAPSCREW |
| ----- | 06770012 | - | BOLT KIT (INCLUDES ITEMS 6, 7 & LOCTITE) |
| 8 | 06521002 | 2 | GRASS KNIFE (OPTIONAL) |
| ----- | 6T1825 | - | LOCTITE - USED ON ALL DISK MOUNTING BOLTS |

50IN ROTARY BLADE BAR AND KNIVES



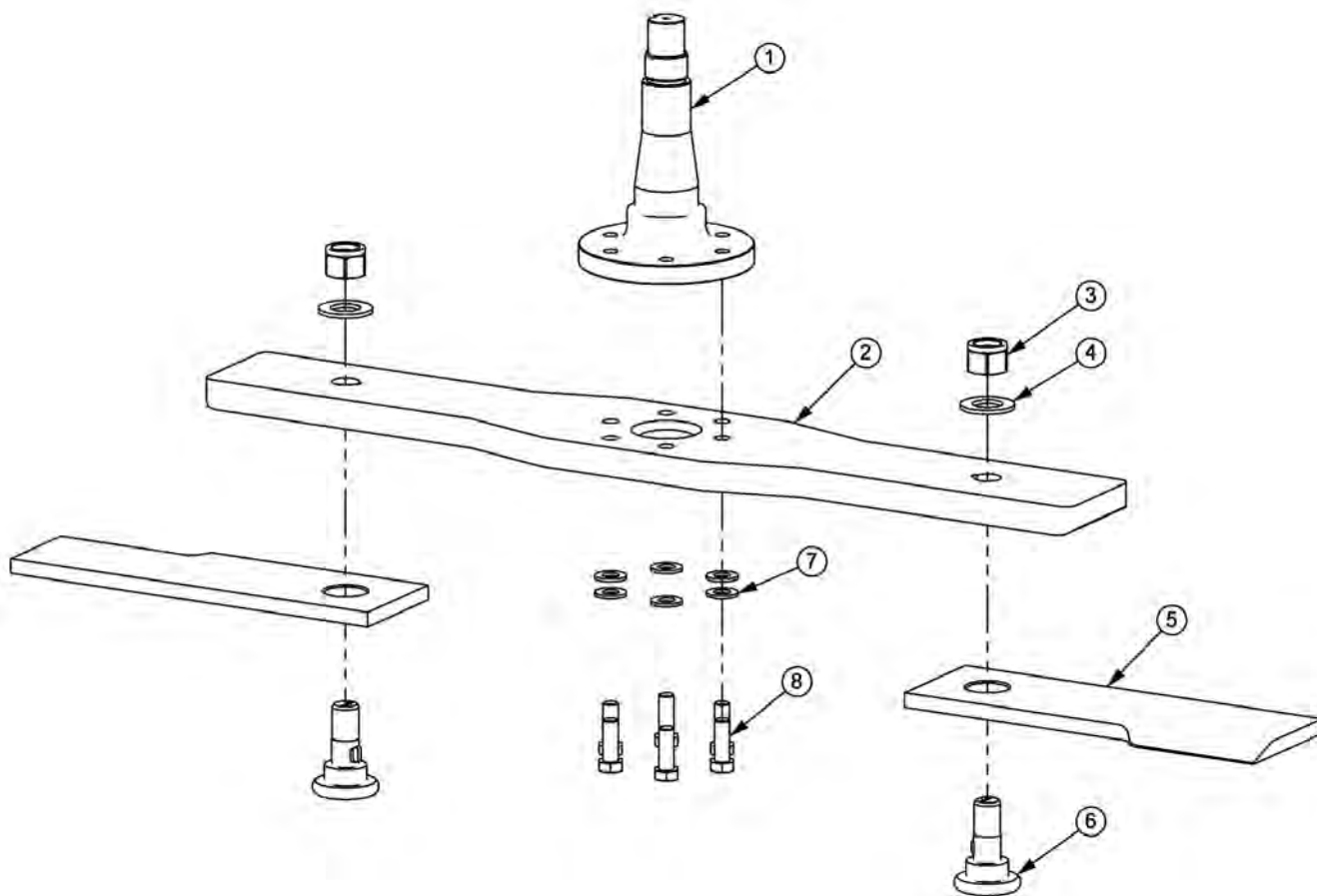
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------|
| 1 | PT1018H5 | 1 | SPINDLE,5/8HOLES,HD,WO/TABS |
| 2 | 06400388 | 1 | BAR,BLADE,TRB |
| 3 | 06521001 | 2 | KNIFE,TRB50,5/8 |
| 4 | 06538000 | 2 | KNIFE MTG BOLT,5/8 SHOULDER |
| 5 | 06533002 | 2 | FLATWASHER,1 1/8,GR 8 |
| 6 | 6T1023R | 2 | KNIFE MTG NUT,1 1/8,NF,GR8 |
| 7 | 6T2259 | 6 | CAPSCREW,5/8X1-3/4,NF,GR8 |
| 8 | 33764 | 6 | FLATWASHER,5/8,GR 8,SAE |

60IN ROTARY KNIVES AND DISH



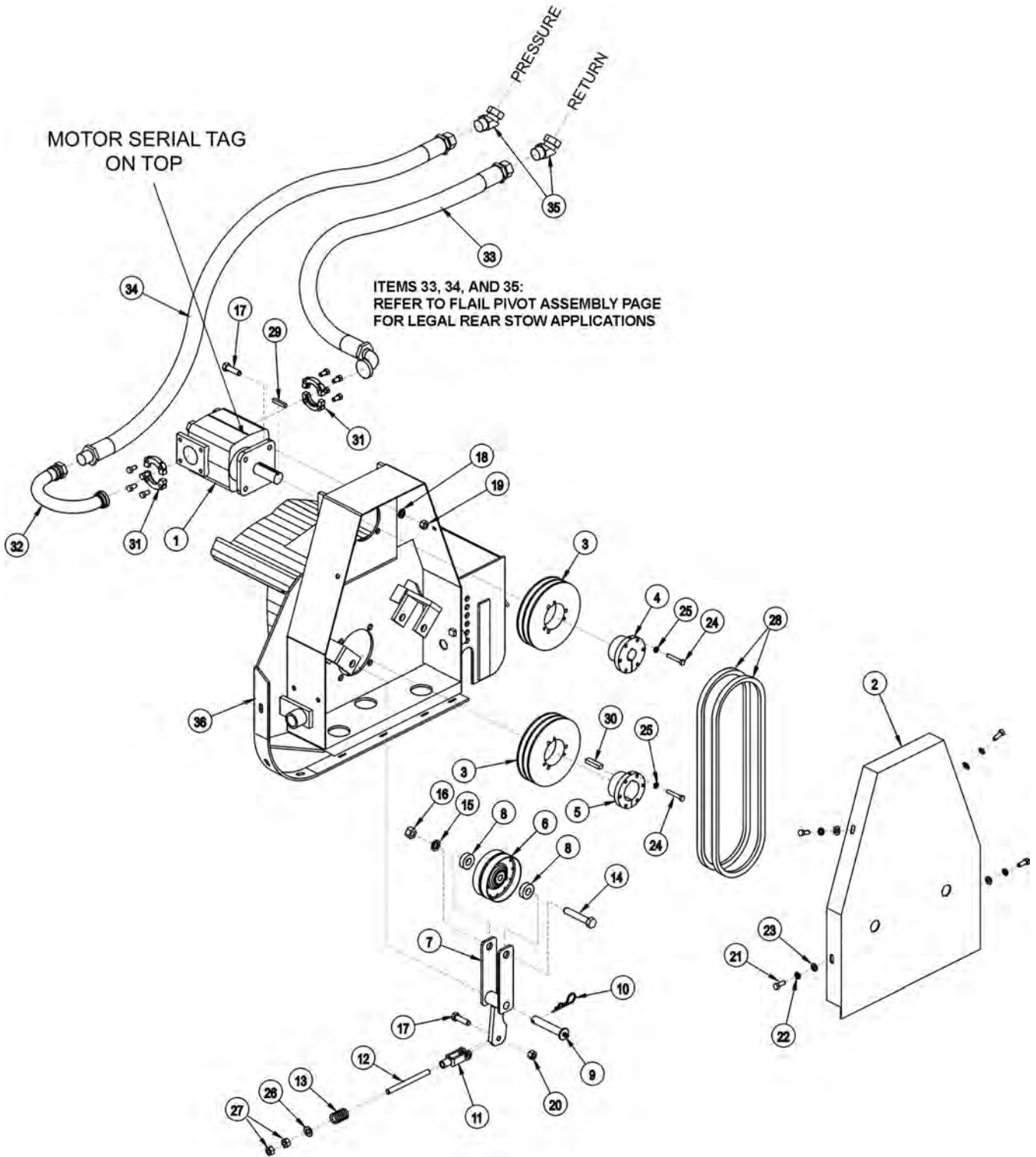
| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------------|
| 1 | 34876 | 1 | BLADE MOUNTING DISH,60" |
| 2 | 6T1023R | 2 | NYLOCK NUT,1-1/8",NF |
| 3 | 34878 | 2 | SPACER |
| 4 | 34684 | 2 | STANDARD GRASS KNIFE |
| 5 | 34685 | 2 | HIGH SUCTION GRASS KNIFE (OPTIONAL) |
| 6 | 34497 | 2 | KNIFE MOUNTING BOLT |
| 7 | 25270 | 6 | FLATWASHER,5/8",GR8,USS |
| 8 | 6T2259 | 6 | CAPSCREW,5/8" X 1-3/4",NF,GR8 |
| --- | 6T1825 | 1 | LOCKTITE (USED ON ITEM 8) |
| --- | 27167 | - | BOLT KIT (INCLUDES ITEMS 7 & 8) |
| --- | 33893 | - | KNIFE KIT (INCLUDES ITEMS 2, 4 & 6) |

60IN ROTARY BLADE BAR AND KNIVES



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

50IN FLAIL DRIVE ASSEMBLY



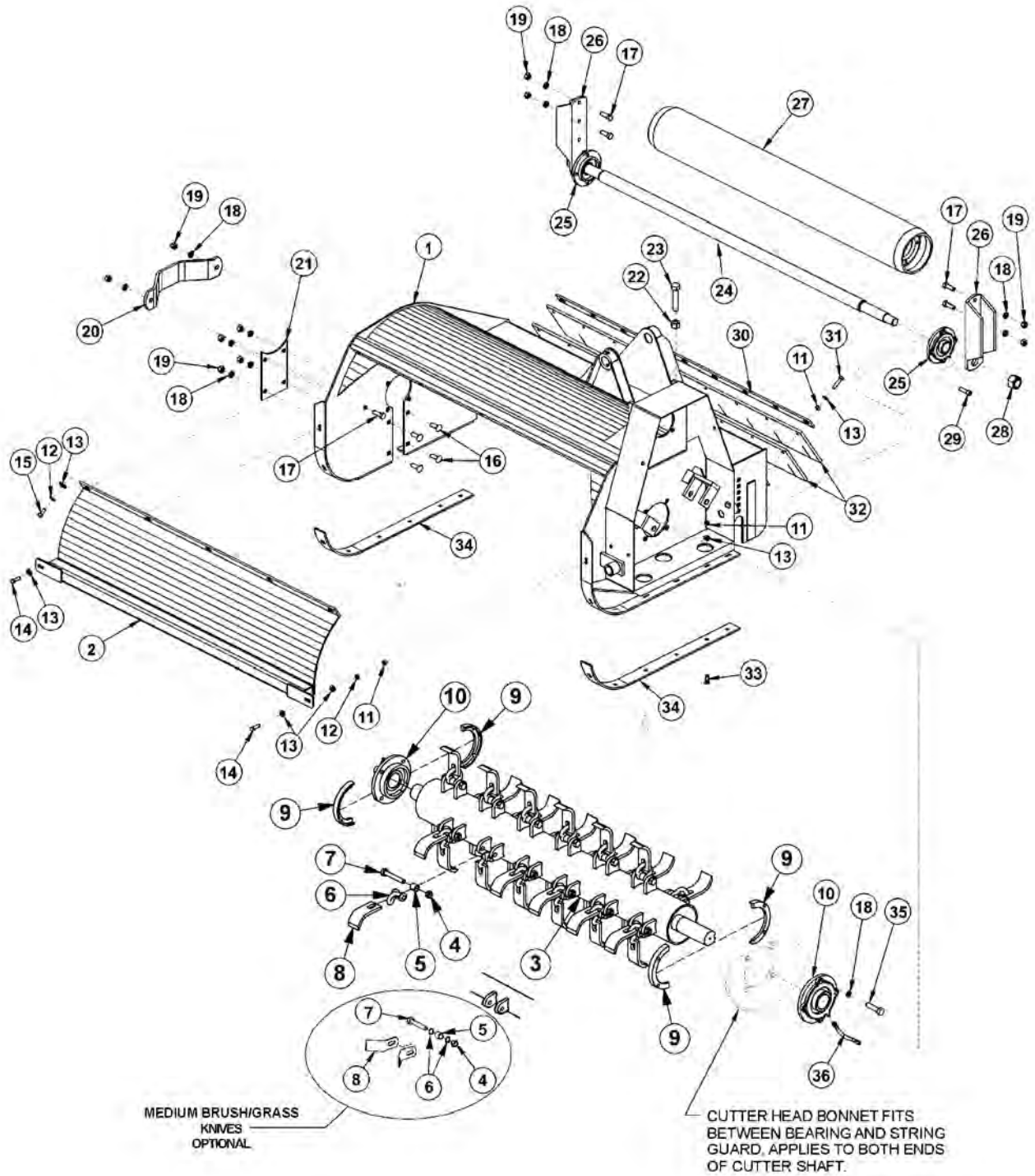
50IN FLAIL DRIVE ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 06504132 | 1 | MOTOR (M350-1 3/4" GEAR) |
| 2 | TF3006 | 1 | BELT GUARD |
| 3 | TF3043 | 2 | SHEAVE |
| 4 | TF3013 | 1 | BUSHING |
| 5 | TF3011 | 1 | BUSHING |
| 6 | TF3034 | 1 | IDLER PULLEY |
| 7 | TF3205 | 1 | IDLER ARM |
| 8 | TF3206 | 2 | IDLER PULLEY SPACER |
| 9 | TF3605 | 1 | IDLER ARM PIN WITH ZERK |
| 10 | 6T3004 | 1 | R - CLIP |
| 11 | PT3611A | 1 | CLEVIS |
| 12 | 32481 | 1 | THREADED ROD |
| 13 | TF3620 | 1 | COMPRESSION SPRING |
| 14 | 21789 | 1 | CAPSCREW 5/8" X 3 1/2" |
| 15 | 21992 | 1 | LOCKWASHER 5/8" |
| 16 | 21775 | 1 | HEX NUT 5/8" |
| 17 | 21732 | 5 | CAPSCREW 1/2" X 1 3/4" |
| 18 | 21990 | 4 | LOCKWASHER 1/2" |
| 19 | 21725 | 4 | HEX NUT 1/2" |
| 20 | 6T2418 | 1 | LOCK NUT 1/2" |
| 21 | 21630 | 4 | CAPSCREW 3/8" X 1" |
| 22 | 21988 | 4 | LOCKWASHER 3/8" |
| 23 | 22016 | 4 | FLATWASHER 3/8" |
| 24 | 21584 | 6 | CAPSCREW 5/16" X 2" |
| 25 | 21987 | 6 | LOCKWASHER 5/16" |
| 26 | 27938 | 1 | FLATWASHER 1/2" |
| 27 | 21700 | 2 | HEX NUT 1/2" NF |
| 28 | TF3021 | 2 | BELT |
| 29 | TF1125 | 1 | SQUARE KEY |
| 30 | TF1025 | 1 | SQUARE KEY MOTOR |
| 31 | TF4852 | 2 | FLANGE KIT |
| 32 | 34227 | 1 | PREFORMED TUBE |
| 33 | 31218 | 1 | HOSE - RETURN |
| 34 | 34331 | 1 | HOSE - PRESSURE |
| 35 | 24724 | 2 | SWIVEL FITTING |
| 36 | ----- | - | CUTTER HEAD *REFER TO CUTTER HEAD ASSY |

COMMON LEGAL REAR STOW T4

50IN FLAIL MOWER ASSEMBLY



| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| --- | 34787 | 1 | FLAIL,BOOM,50,BRUSH,CPLT ASSY (LIGHT BRUSH/GRASS) |
| | 06742133 | 1 | FLAIL,BOOM,50,MD GRASS,CPLT ASSY (MEDIUM BRUSH/GRASS) |
| 1 | TF3003F | 1 | CUTTER HEAD BONNET |
| 2 | TF3004 | 1 | FRONT SHIELD |

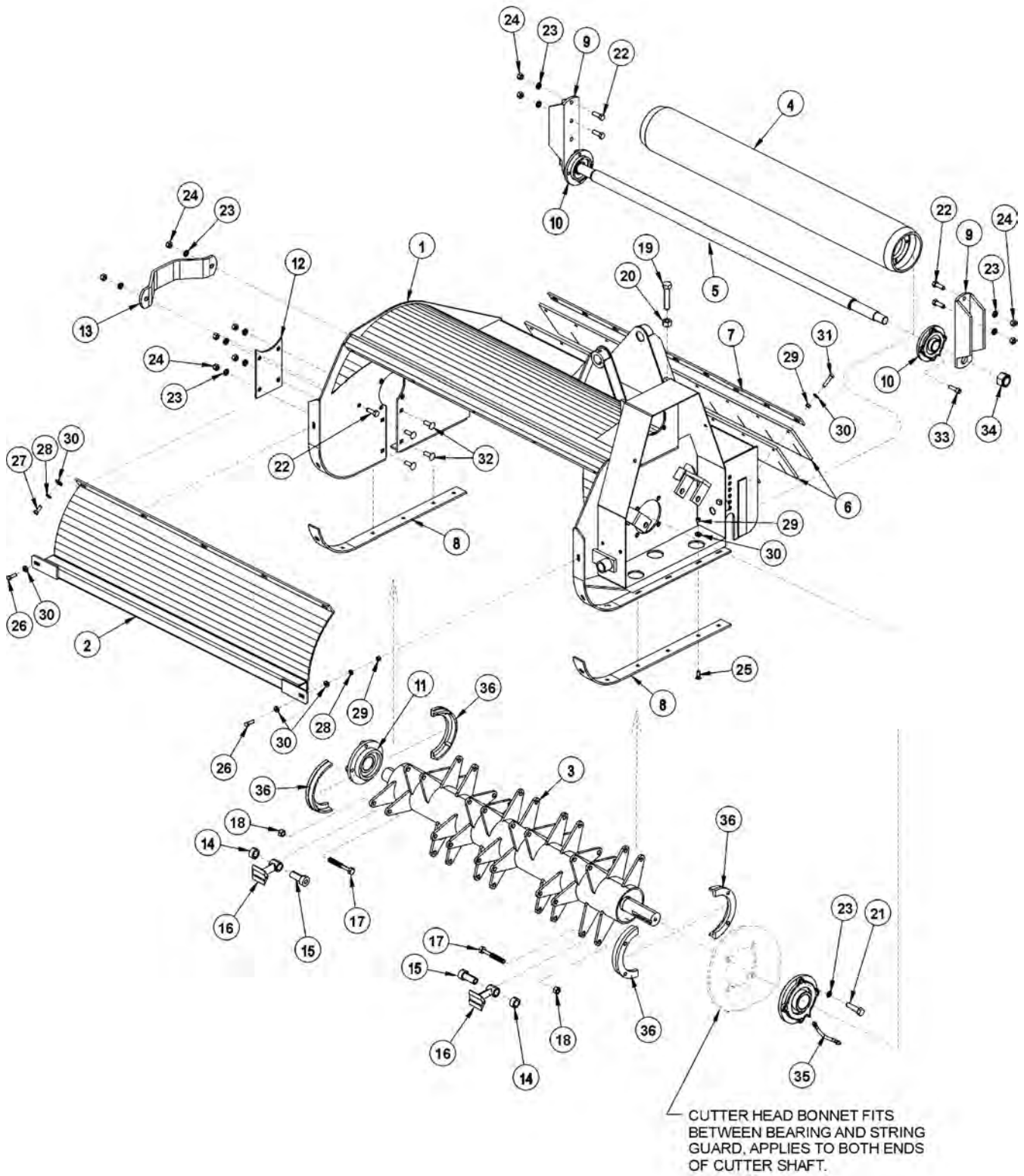
50IN FLAIL MOWER ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|------------|------|---------------------------------------|
| 3 | 34783 | 1 | TBF50 (LIGHT BRUSH/GRASS KNIFE ASSY) |
| ---- | 06700115 | 1 | TBF50 (MEDIUM BRUSH/GRASS KNIFE ASSY) |
| 4 | 6T2419 | 24 | HEX NUT,9/16",NC,STOVER |
| 5 | 41725.01HT | 24 | BUSHING,1"OD X 5/8"ID |
| 6 | 34782 | 24 | CLEVIS (LIGHT BRUSH/GRASS KNIVES) |
| ---- | 06430122 | 48 | SPACER (MEDIUM BRUSH/GRASS KNIVES) |
| 7 | 34786 | 24 | CAPSCREW,9/16" X 3-1/2",NC |
| 8 | 34780 | 24 | KNIFE (LIGHT BRUSH/GRASS CUTTING) |
| ---- | 06521007 | 48 | KNIFE (MEDIUM BRUSH/GRASS CUTTING) |
| 9 | 31204 | 2 | STRING GUARD SET (2 PIECES PER SET) |
| 10 | TF1018 | 2 | FLANGE BEARING,2-3/16" |
| 11 | 21625 | 23 | HEX NUT,3/8",NC |
| 12 | 21988 | 7 | LOCKWASHER,3/8" |
| 13 | 22016 | 30 | FLATWASHER,3/8" |
| 14 | 21631 | 2 | CAPSCREW,3/8" X 1-1/4",NC |
| 15 | 21630 | 5 | CAPSCREW,3/8" X 1",NC |
| 16 | 6T7031D | 4 | PLOW BOLT,1/2" X 1-1/2",NC |
| 17 | 21731 | 6 | CAPSCREW,1/2" X 1-1/2",NC |
| 18 | 21990 | 18 | LOCKWASHER,1/2" |
| 19 | 21725 | 10 | HEX NUT,1/2",NC |
| 20 | TF1040 | 1 | CUTTER SHAFT GUARD |
| 21 | TF3007A | 1 | COVER PLATE |
| 22 | 21825 | 1 | HEX NUT,5/8",NC |
| 23 | 21838 | 1 | CAPSCREW,3/4" X 3-1/2",NC |
| 24 | TF3406 | 1 | GROUND ROLLER TIE ROD |
| 25 | TF1022 | 2 | FLANGE BEARING,1-3/8" |
| 26 | TF3407 | 2 | GROUND ROLLER ADJUSTMENT BRACKET |
| 27 | TF3405 | 1 | GROUND ROLLER |
| 28 | 6T1023R | 2 | NYLOCK NUT,1-1/8",NF |
| 29 | 6T2330 | 8 | CAPSCREW,7/16" X 1-1/2",SOCKET HEAD |
| 30 | TB1008 | 1 | FLAP RETAINING BAR |
| 31 | 21633 | 9 | CAPSCREW,3/8" X 1-3/4",NC |
| 32 | TB1006A | 2 | DEFLECTOR FLAP |
| 33 | 6T2270 | 12 | PLOWBOLT,3/8" X 1",NC |
| 34 | TF3001 | 2 | SKID SHOE |
| 35 | 06530218 | 8 | CAPSCREW,1/2" X 1-3/4",NC |
| 36 | TF1032 | 1 | FLANGE BEARING GREASE HOSE |

COMMON LEGAL REAR STOW T4

50IN FLAIL MOWER ASSY, PASS-THROUGH KNIVES



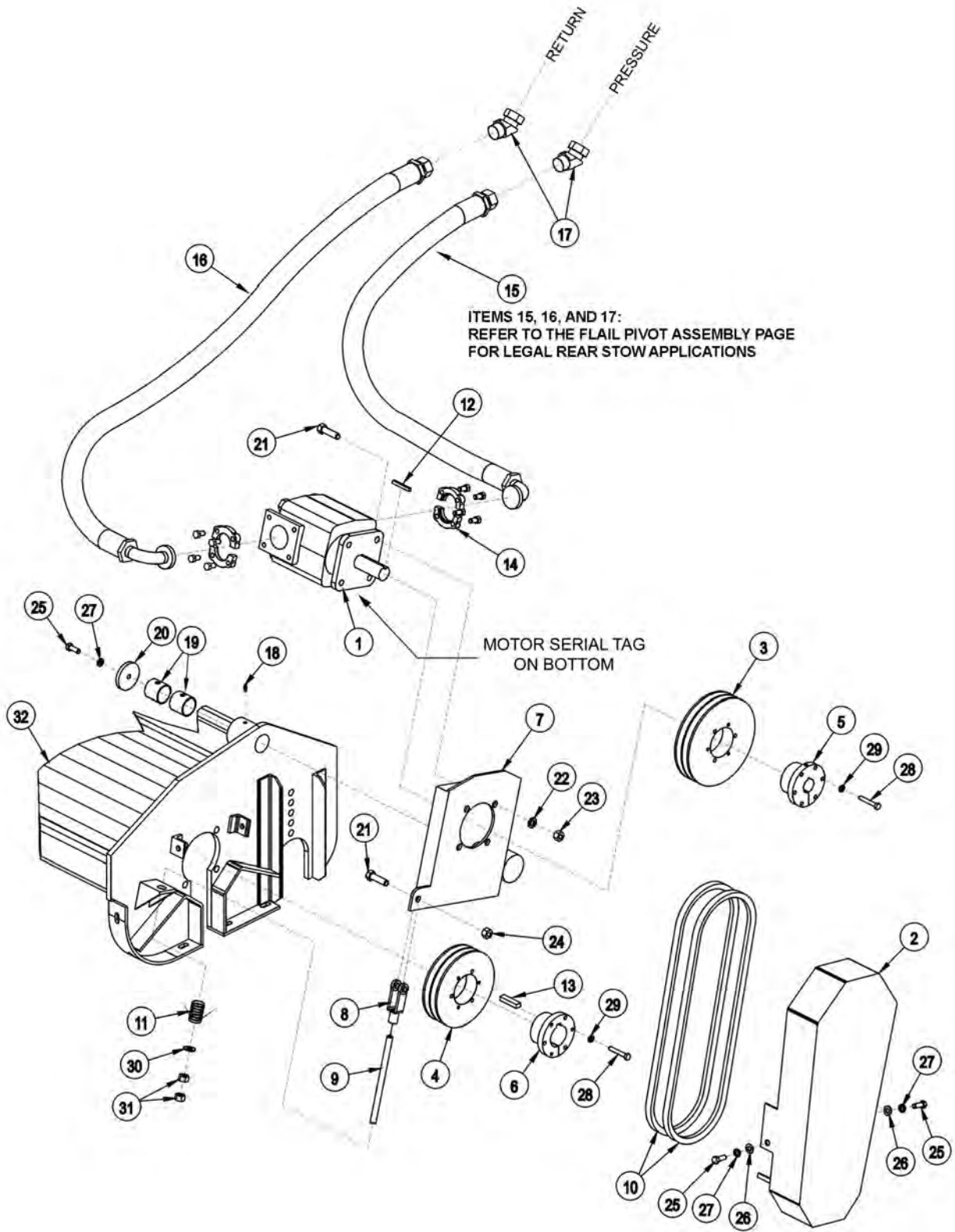
50IN FLAIL MOWER ASSY, PASS-THROUGH KNIVES

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-------------------------------------|
| --- | 34172 | 1 | FLAIL,BOOM,50,CPLT ASSY |
| 1 | TF3003F | 1 | CUTTER HEAD BONNET |
| 2 | TF3004 | 1 | FRONT SHIELD |
| 3 | 33717 | 1 | TBF50,CUTTERSHAFT,PASS THRU KNIVES |
| 4 | TF3405 | 1 | GROUND ROLLER |
| 5 | TF3406 | 1 | GROUND ROLLER TIE ROD |
| 6 | TB1006A | 2 | DEFLECTOR FLAP |
| 7 | TB1008 | 1 | FLAP RETAINING BAR |
| 8 | TF3001 | 2 | SKID SHOE |
| 9 | TF3407 | 2 | GROUND ROLLER ADJUSTMENT BRACKET |
| 10 | TF1022 | 2 | FLANGE BEARING,1-3/8" |
| 11 | TF1018 | 2 | FLANGE BEARING,2-3/16" |
| 12 | TF3007A | 1 | COVER PLATE |
| 13 | TF1040 | 1 | CUTTER SHAFT GUARD |
| 14 | 33858 | 24 | SPACER,COLLAR |
| 15 | 33857 | 24 | SHOULDER,BUSHING |
| 16 | 46399.01 | 24 | KNIFE,FLAIL,FORGED |
| 17 | 33854 | 24 | CAPSCREW,5/8" X 4-1/2",NC |
| 18 | 32674 | 24 | HEX NUT,5/8",NC |
| 19 | 21838 | 1 | CAPSCREW,3/4" X 3-1/2",NC |
| 20 | 21825 | 1 | HEX NUT,5/8",NC |
| 21 | 21732 | 8 | CAPSCREW,1/2" X 1-3/4",NC |
| 22 | 21731 | 6 | CAPSCREW,1/2" X 1-1/2",NC |
| 23 | 21990 | 18 | LOCKWASHER,1/2" |
| 24 | 21725 | 10 | HEX NUT,1/2",NC |
| 25 | 6T2270 | 12 | PLOWBOLT,3/8" X 1",NC |
| 26 | 21631 | 2 | CAPSCREW,3/8" X 1-1/4",NC |
| 27 | 21630 | 5 | CAPSCREW,3/8" X 1",NC |
| 28 | 21988 | 7 | LOCKWASHER,3/8" |
| 29 | 21625 | 23 | HEX NUT,3/8",NC |
| 30 | 22016 | 30 | FLATWASHER,3/8" |
| 31 | 21633 | 9 | CAPSCREW,3/8" X 1-3/4",NC |
| 32 | 6T7031D | 4 | PLOW BOLT,1/2" X 1-1/2",NC |
| 33 | 6T2330 | 8 | CAPSCREW,7/16" X 1-1/2",NC,SCKT HD |
| 34 | 6T1023R | 2 | NYLOCK NUT,1-1/8",NF |
| 35 | TF1032 | 1 | FLANGE BEARING GREASE HOSE |
| 36 | 31204 | 2 | STRING GUARD SET (2 PIECES PER SET) |

COMMON LEGAL REAR STOW T4

63IN FLAIL DRIVE ASSEMBLY



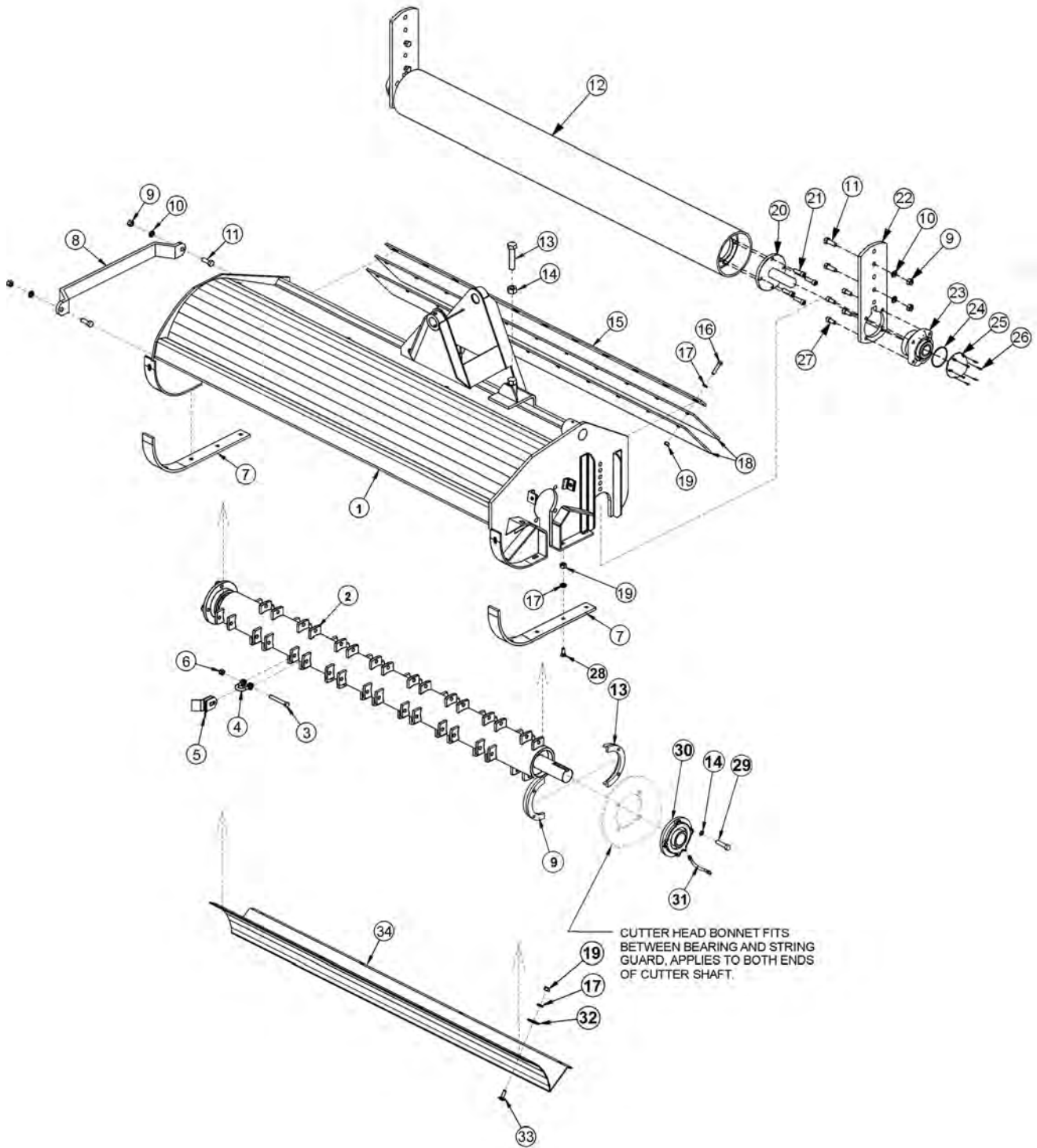
63IN FLAIL DRIVE ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|----------------------------------|
| 1 | 06504132 | 1 | MOTOR (M350-1 3/4 GEAR) |
| 2 | 32569 | 1 | BELT GUARD |
| 3 | TF3044 | 1 | UPPER SHEAVE |
| 4 | TF3040 | 1 | LOWER SHEAVE |
| 5 | TF3013 | 1 | BUSHING |
| 6 | 28723 | 1 | BUSHING |
| 7 | 28679B | 1 | MOTOR CHANNEL |
| 8 | PT3611A | 1 | CLEVIS |
| 9 | 40496 | 1 | THREADED ROD |
| 10 | 28702 | 2 | BELT |
| 11 | TF3620A | 1 | TENSIONER SPRING |
| 12 | 28572 | 1 | SQUARE KEY |
| 13 | 26142A | 1 | SQUARE KEY |
| 14 | TF4852 | 2 | FLANGE KIT |
| 15 | 30308 | 1 | HOSE,1 X 69 - PRESSURE |
| 16 | 30309 | 1 | HOSE,1 X 78 - RETURN |
| 17 | 24724 | 2 | SWIVEL FITTING |
| 18 | TF1033 | 1 | GREASE ZERK |
| 19 | 27580 | 2 | BUSHING |
| 20 | 28682 | 1 | MOTOR CHANNEL WASHER |
| 21 | 21732 | 5 | CAPSCREW 1/2" X 1 3/4" |
| 22 | 21990 | 4 | LOCKWASHER 1/2" |
| 23 | 21725 | 4 | HEX NUT 1/2" |
| 24 | 6T2418 | 1 | STOVER NUT 1/2" |
| 25 | 21630 | 3 | CAPSCREW 3/8" X 1" |
| 26 | 22016 | 2 | FLATWASHER 3/8" |
| 27 | 21988 | 3 | LOCKWASHER 3/8" |
| 28 | 21584 | 6 | CAPSCREW 5/16" X 2" |
| 29 | 21987 | 6 | LOCKWASHER 5/16" |
| 30 | 27938 | 1 | FLATWASHER 1/2" |
| 31 | 21700 | 2 | HEX NUT 1/2" NF |
| 32 | ----- | - | CUTTER HEAD *REFER TO MOWER ASSY |

COMMON LEGAL REAR STOW T4

63IN FLAIL MOWER ASSEMBLY



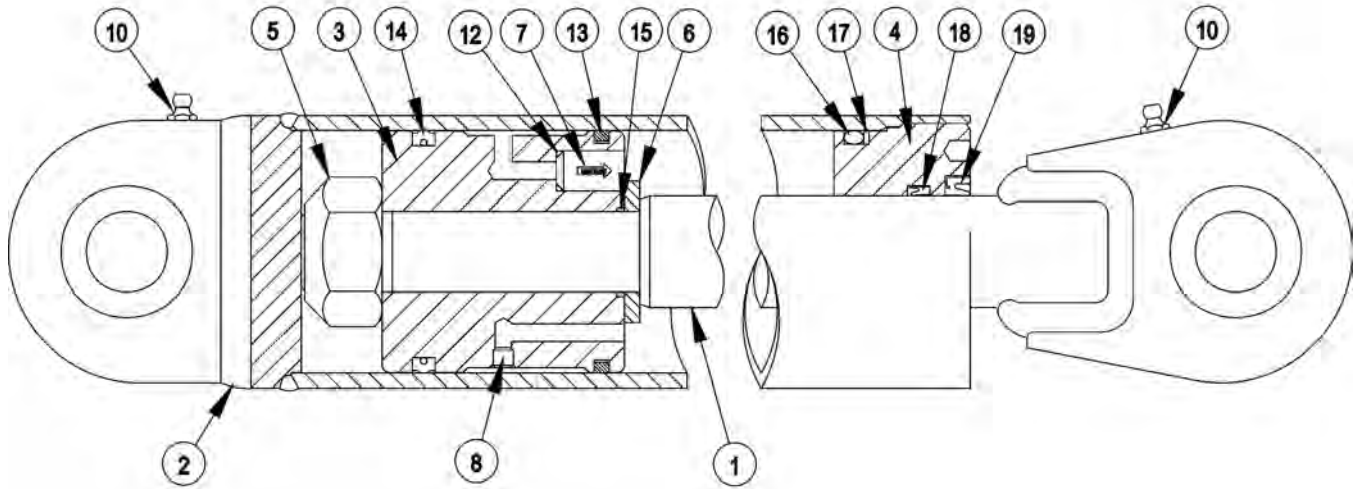
63IN FLAIL MOWER ASSEMBLY

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|---|
| ----- | 06200271 | - | FLAIL,BOOM,63,GRASS,CPLT ASSY |
| 1 | 28659H | 1 | CUTTER HEAD BONNET |
| 2 | 28743 | - | CUTTER SHAFT / KNIFE ASSY STANDARD GRASS |
| ----- | 28642C | 1 | CUTTER SHAFT,63,STD |
| 3 | 34011 | 36 | FLAIL KNIFE MOUNTING BOLT |
| 4 | TF1020 | 36 | FLAIL KNIFE MOUNTING CLEVIS |
| 5 | 33713 | 72 | FLAIL KNIFE - STANDARD |
| 6 | 21677 | 36 | NYLOCK NUT |
| 7 | 28086A | 2 | SKID SHOE |
| 8 | 27975A | 1 | CUTTER SHAFT GUARD |
| 9 | 21725 | 14 | HEX NUT 1/2" |
| 10 | 21990 | 14 | LOCKWASHER 1/2" |
| 11 | 21731 | 6 | CAPSCREW 1/2" X 1 1/2" |
| 12 | 06320240 | 1 | GROUND ROLLER |
| 13 | 33863 | 2 | STRING GUARD,STD |
| 14 | 06533006 | 8 | FLATWASHER,1/2",SAE,L9 |
| 15 | 28700 | 1 | FLAP RETAINING BAR |
| 16 | 21633 | 11 | CAPSCREW 3/8" X 1 3/4" |
| 17 | 21988 | 28 | LOCKWASHER 3/8" |
| 18 | 28701 | 2 | DEFLECTOR FLAP |
| 19 | 21625 | 28 | HEX NUT 3/8" |
| 20 | TF1045B | 2 | GROUND ROLLER STUB SHAFT |
| 21 | 6T2330 | 8 | CAPSCREW 7/16" X 1 1/2" SOCKET HEAD |
| 22 | 28735 | 2 | ADJUSTABLE ROLLER BRACKET |
| 23 | 06520028 | 2 | BEARING,FLANGE,1-3/8,GRNDRLLR |
| 24 | 06520029 | 2 | O-RING |
| 25 | 06520027 | 2 | CAP,BEARING,GROUNDROLLER |
| 26 | 06530001 | 12 | CAPSCREW,SKT HD,8-32 X 1/2,SS |
| 27 | 6T2331 | 8 | CAPSCREW 7/16" X 1" SOCKET HEAD |
| 28 | 6T2270 | 10 | PLOW BOLT 3/8" X 1 1/4" |
| 29 | 06530217 | 8 | CAPSCREW 1/2" X 2",L9 |
| 30 | 28683 | 2 | FLANGE BEARING |
| 31 | TF1032 | 1 | FLANGE BEARING GREASE HOSE |
| 32 | 6T2615 | 7 | FENDER WASHER 3/8" |
| 33 | 6T2283 | 7 | CARRIAGE BOLT 3/8" X 1" |
| 34 | 28665A | 1 | BAFFLE (INSIDE UPPER REAR OF CUTTER HEAD) |

COMMON LEGAL REAR STOW T4

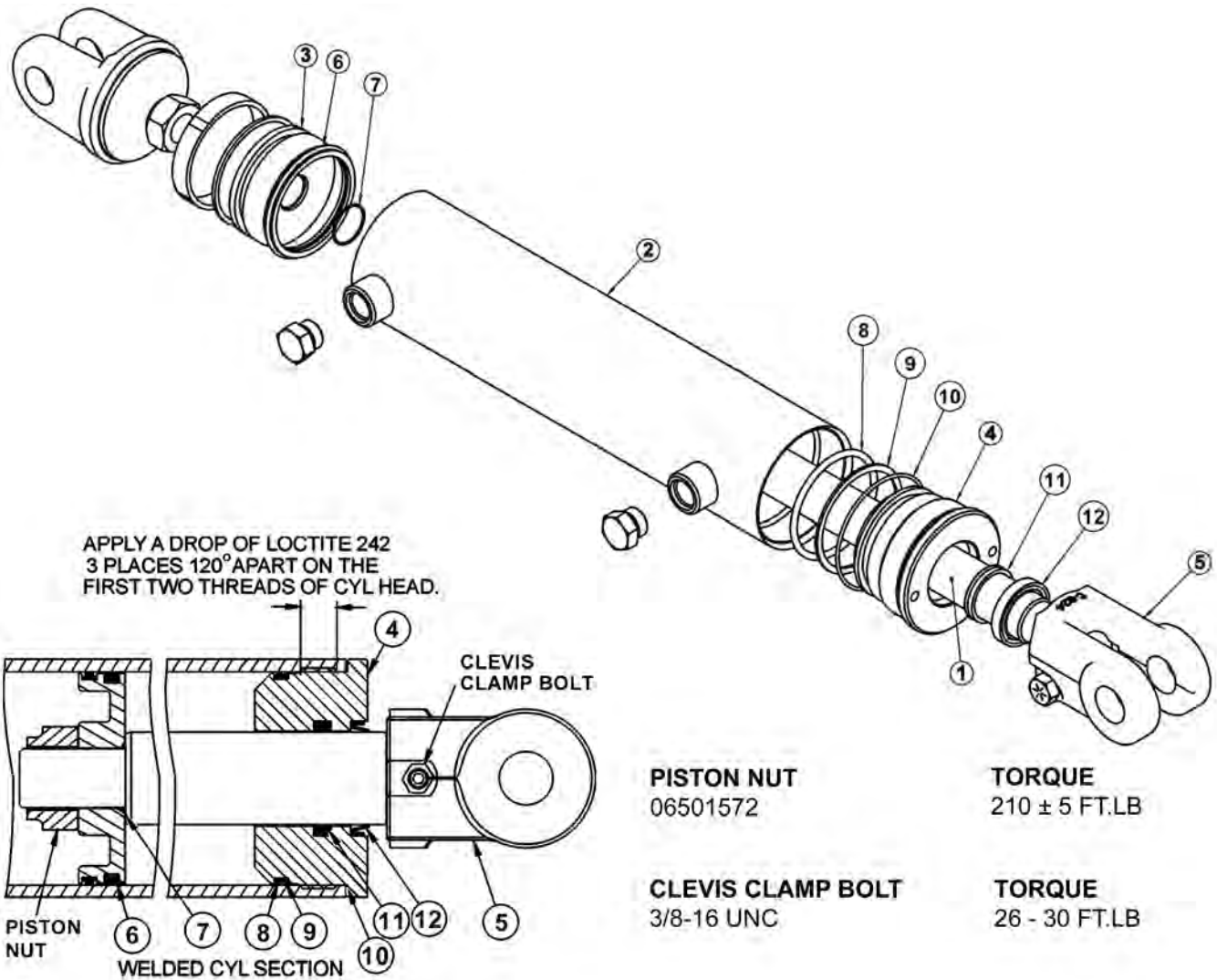
3 IN X 13-7/8 IN WELDED CYLINDER BREAKDOWN



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

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| --- | 06501029 | - | CYLINDER,WELDED,3" X 13.87" |
| 1 | 06501630 | 1 | PISTON ROD ASSY |
| 2 | 06501631 | 1 | BUTT & TUBE ASSY |
| 3 | 06501632 | 1 | PISTON |
| 4 | 34574 | 1 | GLAND |
| 5 | 34575 | 1 | LOCK NUT,1"-14 UNS (TORQUE TO 315 FT.LB.) |
| 6 | 34576 | 1 | SPACER |
| 7 | 34577 | 1 | CHECK VALVE,KEPNER |
| 8 | 06501633 | 1 | ORIFICE |
| 9 | 33761 | 1 | SEAL KIT,PACKING (ITEMS 12 THRU 19) |
| 10 | ----- | 2 | GREASE ZERK |
| 12 | ----- | 1 | O - RING |
| 13 | ----- | 1 | CAST IRON PISTON RING |
| 14 | ----- | 1 | CROWN SEAL |
| 15 | ----- | 1 | O - RING |
| 16 | ----- | 1 | O - RING |
| 17 | ----- | 1 | BACK - UP WASHER |
| 18 | ----- | 1 | U - CUP |
| 19 | ----- | 1 | WIPER |
| 20 | 34334 | - | SPHERICAL BEARING (NOT SHOWN) |

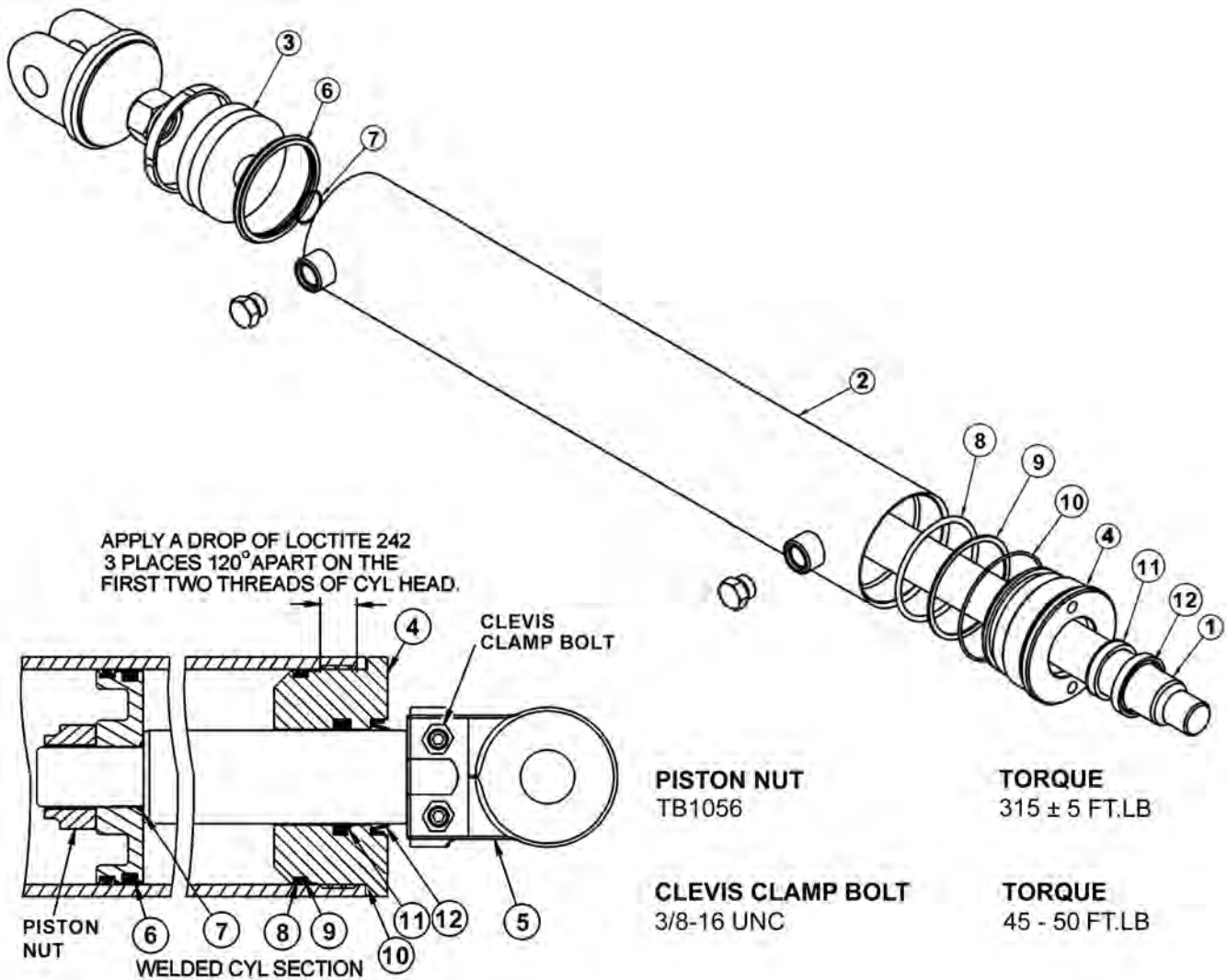
3IN X 18IN WELDED CYLINDER BREAKDOWN



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

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|--------------------------------------|
| ----- | 06501023 | - | HYDRAULIC CYLINDER COMPLETE |
| 1 | 06501561 | 1 | ROD |
| 2 | 06501562 | 1 | TUBE WELDMENT |
| 3 | 06501552 | 1 | PISTON |
| 4 | 06501563 | 1 | CYLINDER HEAD |
| 5 | 06501554 | 1 | CLEVIS |
| ----- | 06501564 | - | SEAL REPAIR KIT (ITEMS 6 THROUGH 12) |

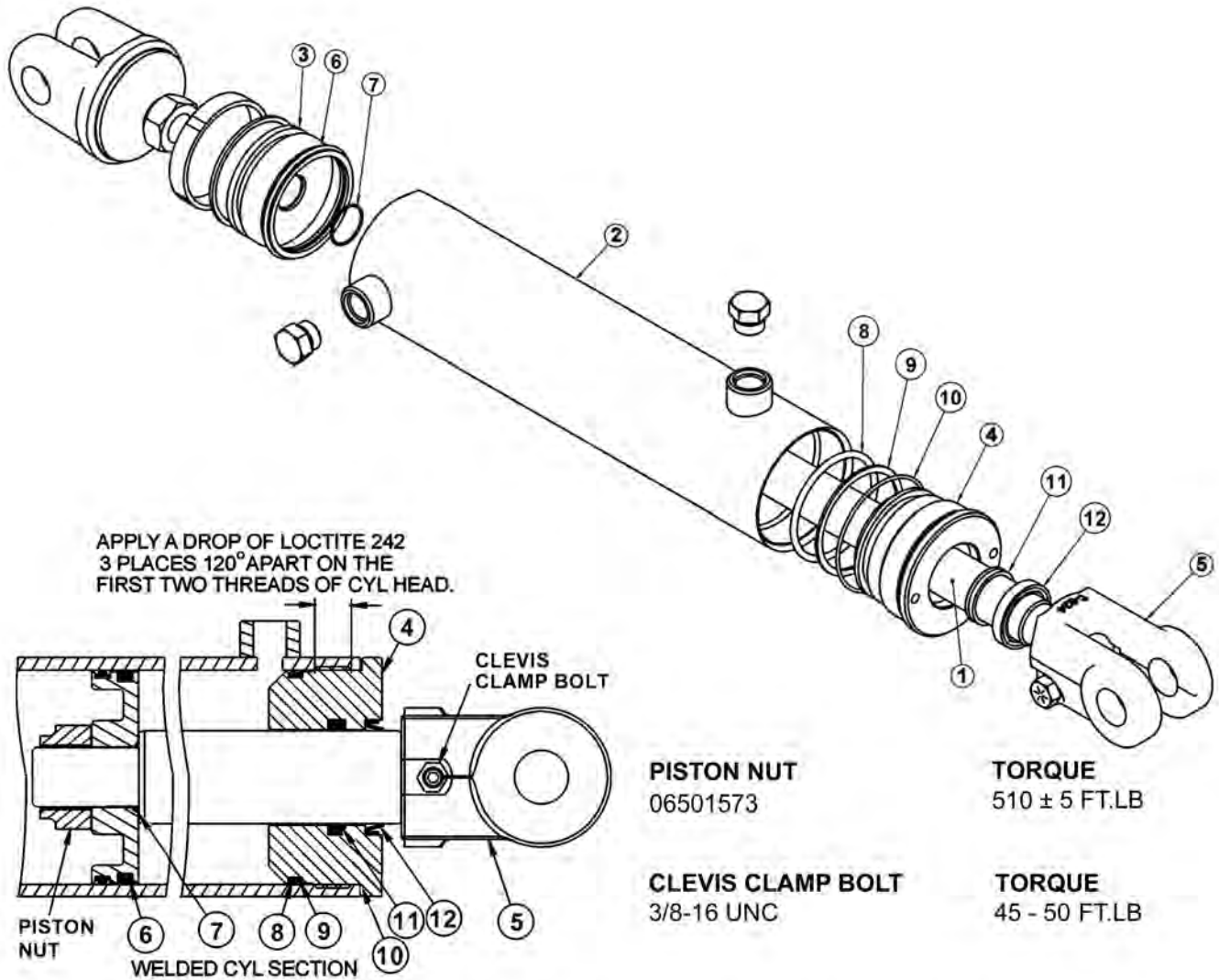
3-1/2IN X 20IN WELDED CYLINDER BREAKDOWN



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

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|--------------------------------------|
| ----- | 06501024 | - | HYDRAULIC CYLINDER COMPLETE |
| 1 | 06501565 | 1 | ROD |
| 2 | 06501566 | 1 | TUBE WELDMENT |
| 3 | 06501567 | 1 | PISTON |
| 4 | 06501568 | 1 | CYLINDER HEAD |
| 5 | TB3033 | - | CLEVIS |
| ----- | 06501569 | - | SEAL REPAIR KIT (ITEMS 6 THROUGH 12) |

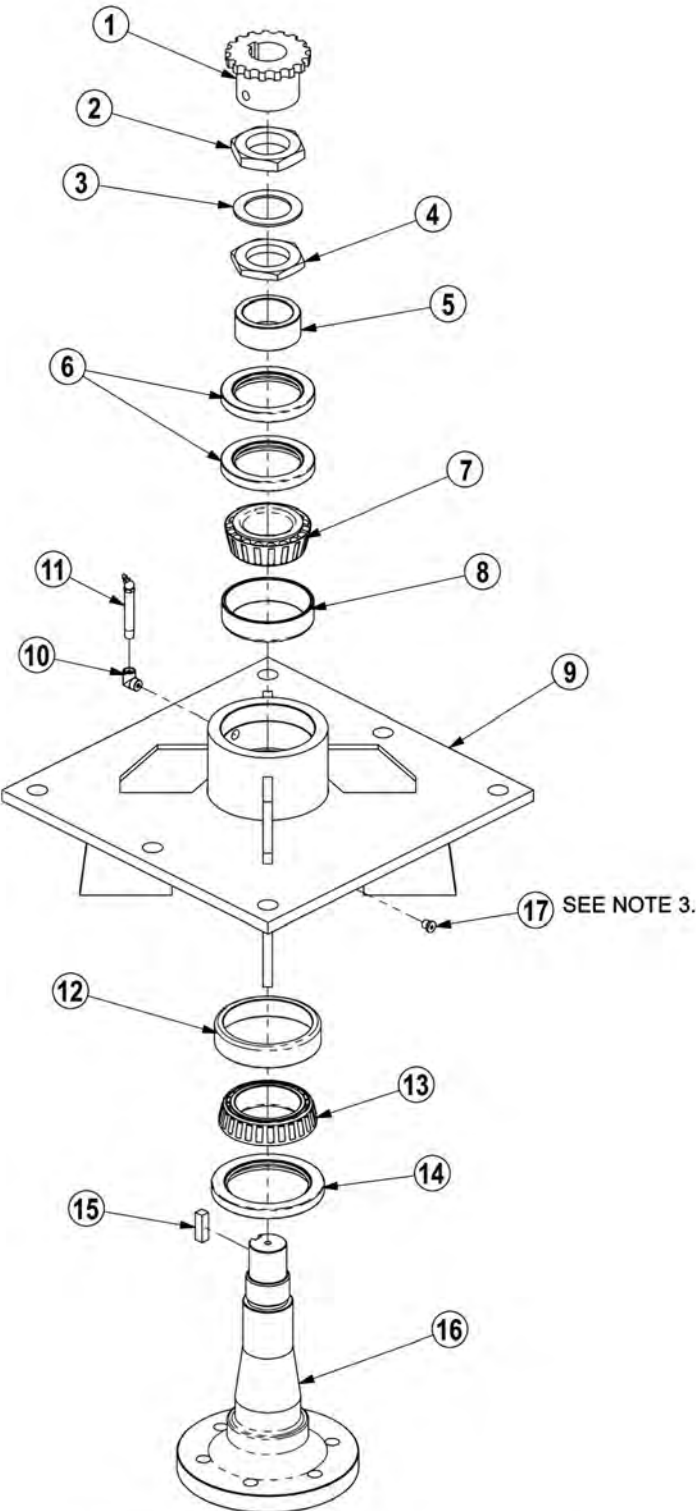
4IN X 20IN WELDED CYLINDER BREAKDOWN



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

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|--------------------------------------|
| ----- | 06501022 | - | HYDRAULIC CYLINDER COMPLETE |
| 1 | 06501556 | 1 | ROD |
| 2 | 06501557 | 1 | TUBE WELDMENT |
| 3 | 06501558 | 1 | PISTON |
| 4 | 06501559 | 1 | CYLINDER HEAD |
| 5 | 6T0172 | 1 | CLEVIS |
| 5A | 30172 | - | CLEVIS (FOR EXTENDED BOOM) |
| ----- | 06501560 | - | SEAL REPAIR KIT (ITEMS 6 THROUGH 12) |

ROTARY MOWER SPINDLE ASSEMBLY



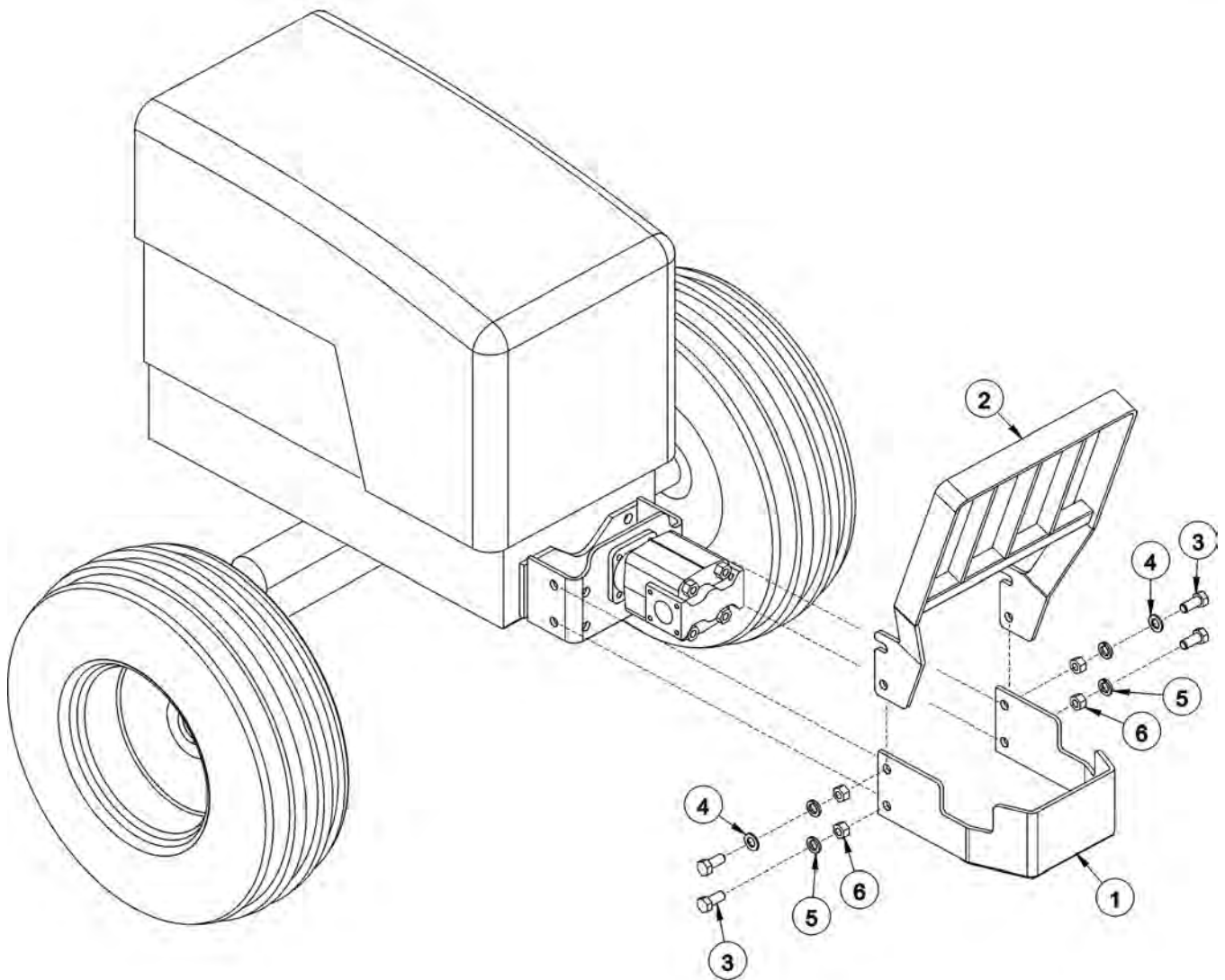
- NOTES:
1. FREEPLAY: .001" - .003"
2. GREASE: FILL WITH MOBILITH SHC 220.
3. APPLY LOCTITE "271" TO O-RING PLUG THRDS.

ROTARY MOWER SPINDLE ASSEMBLY

Continued...

| 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) |

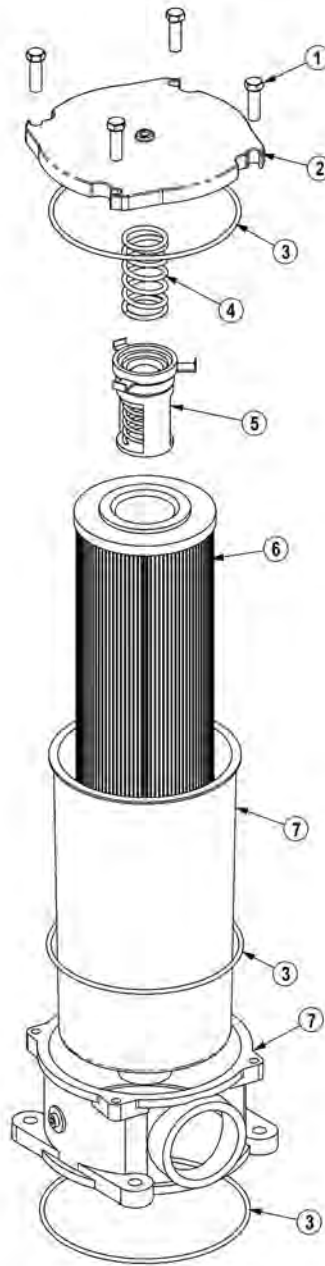
PUMP AND GRILL GUARD OPTIONS



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

COMMON LEGAL REAR STOW T4

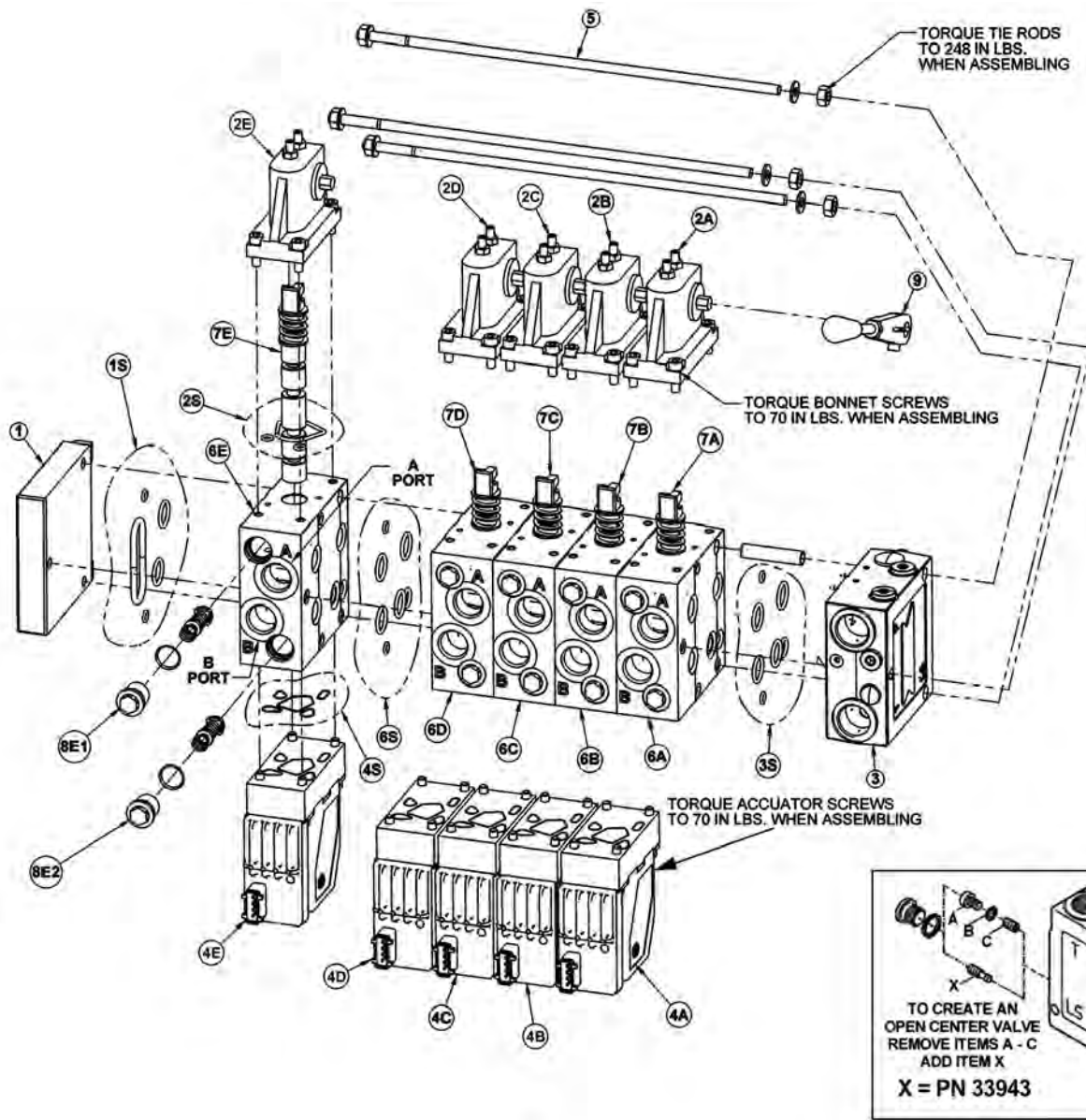
RESERVOIR TANK FILTER ASSEMBLY



| 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 |

COMMON LEGAL REAR STOW T4

5 SPOOL ELECTRONIC VALVE - BENGAL BRUTE



| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|-----------------------|
| ---- | 06700224 | 1 | VALVE, 5SP |
| ----- | 06502097 | 1 | VALVE, SUB-ASSEMBLY |
| 1 | 06502074 | 1 | END PLATE |
| 1S | 06505013 | 1 | END PLATE SEAL KIT |
| 2 | ----- | 5 | BONNET |
| 2S | 06505042 | 1 | BONNET SEAL KIT |
| 2A | 42197 | 1 | MAIN BOOM BONNET |
| 2B | 42197 | 1 | SECONDARY BOOM BONNET |
| 2C | 42197 | 1 | DECK ROLL BONNET |
| 2D | 42197 | 1 | BOOM SWIVEL BONNET |

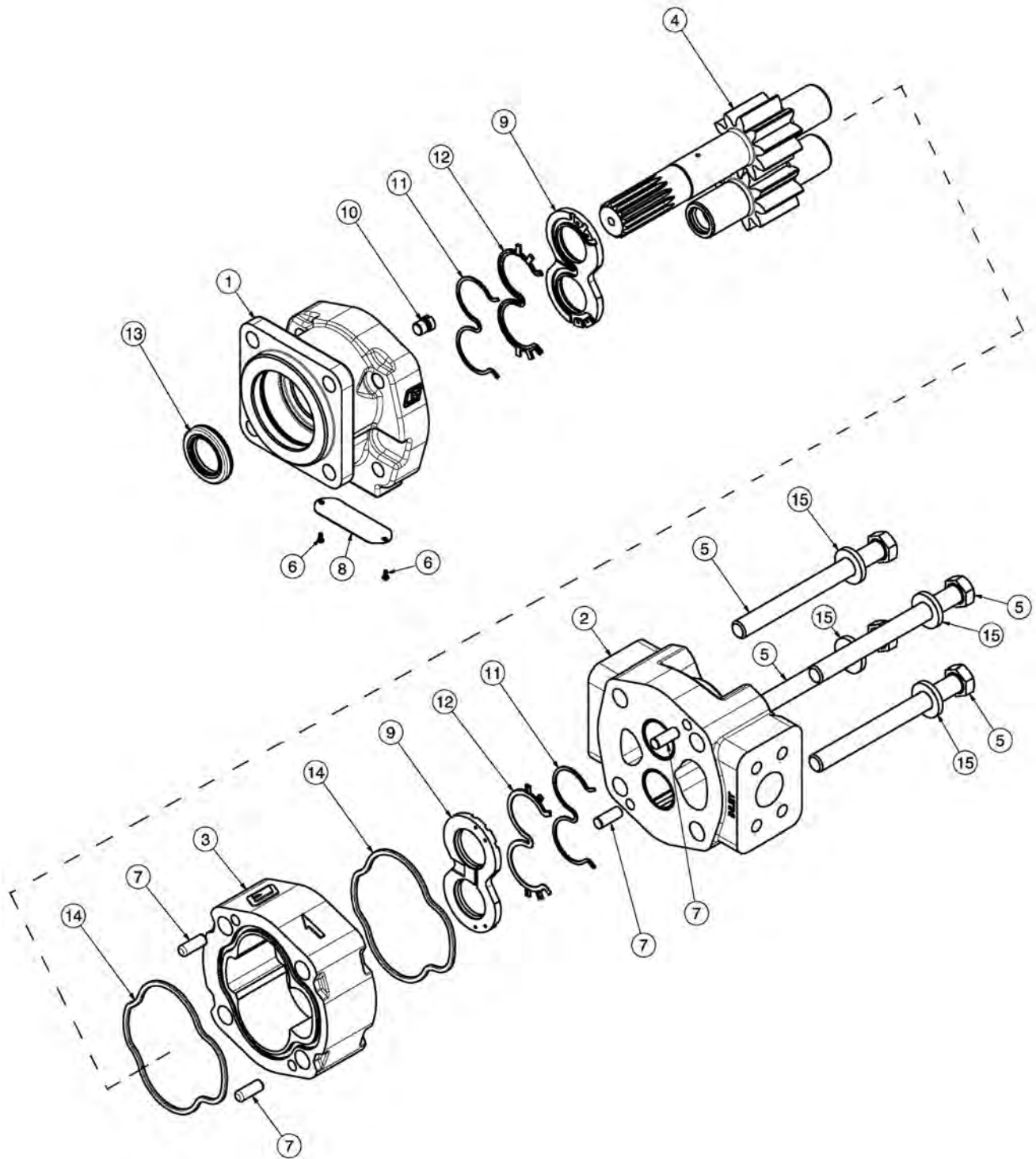
5 SPOOL ELECTRONIC VALVE - BENGAL BRUTE

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|------------------------------------|
| 3 | 34308 | 1 | INLET SECTION |
| 3S | 06505013 | 1 | INLET SECTION SEAL KIT |
| 4 | ----- | 5 | ELECTRONIC ACCUATOR |
| 4A | 06502101 | 1 | MAIN BOOM ELECTRONIC ACCUATOR |
| 4B | 06502101 | 1 | SECONDARY BOOM ELECTRONIC ACCUATOR |
| 4C | 06502100 | 1 | DECK ROLL ELECTRONIC ACCUATOR |
| 4D | 06502101 | 1 | BOOM SWIVEL ELECTRONIC ACCUATOR |
| 4E | 06502099 | 1 | DECK SHIELD ELECTRONIC ACCUATOR |
| 5 | 42202 | 1 | TIE-BOLT KIT |
| 6 | ----- | 5 | SECTION |
| 6S | 06505013 | 1 | SECTION SEAL KIT |
| 6A | 42698 | 1 | MAIN BOOM SECTION |
| 6B | 42698 | 1 | SEC BOOM SECTION |
| 6C | 06502076 | 1 | DECK ROLL SECTION |
| 6D | 42698 | 1 | BOOM SWIVEL SECTION |
| 6E | 06502077 | 1 | SHIELD SECTION |
| 7 | ----- | 5 | SPOOL |
| 7A | 42697 | 1 | MAIN BOOM SPOOL |
| 7B | 42697 | 1 | SEC BOOM SPOOL |
| 7C | 4242106 | 1 | DECK ROLL SPOOL |
| 7D | 06502073 | 1 | BOOM SWIVEL SPOOL |
| 7E | 42201 | 1 | DECK SHIELD SPOOL |
| 8 | ----- | 10 | ANTI CAV/SHOCK RELIEF |
| 8A1 | 06502084 | 1 | MAIN BOOM A PORT RELIEF |
| 8A2 | 06502081 | 1 | MAIN BOOM B PORT RELIEF |
| 8B1 | 42296 | 1 | SEC BOOM A PORT RELIEF |
| 8B2 | 06502082 | 1 | SEC BOOM B PORT RELIEF |
| 8C1 | 42295 | 1 | DECK ROLL A PORT RELIEF |
| 8C2 | 06502082 | 1 | DECK ROLL B PORT RELIEF |
| 8D1 | 06502070 | 1 | BOOM SWIVEL A PORT RELIEF |
| 8D2 | 06502083 | 1 | BOOM SWIVEL B PORT RELIEF |
| 8E1 | 06502081 | 1 | DECK SHIELD A PORT RELIEF |
| 8E2 | 06502081 | 1 | DECK SHIELD B PORT RELIEF |
| 9 | 33459 | 1 | HANDLE |

COMMON LEGAL REAR STOW T4

FRONT HYDRAULIC PUMP

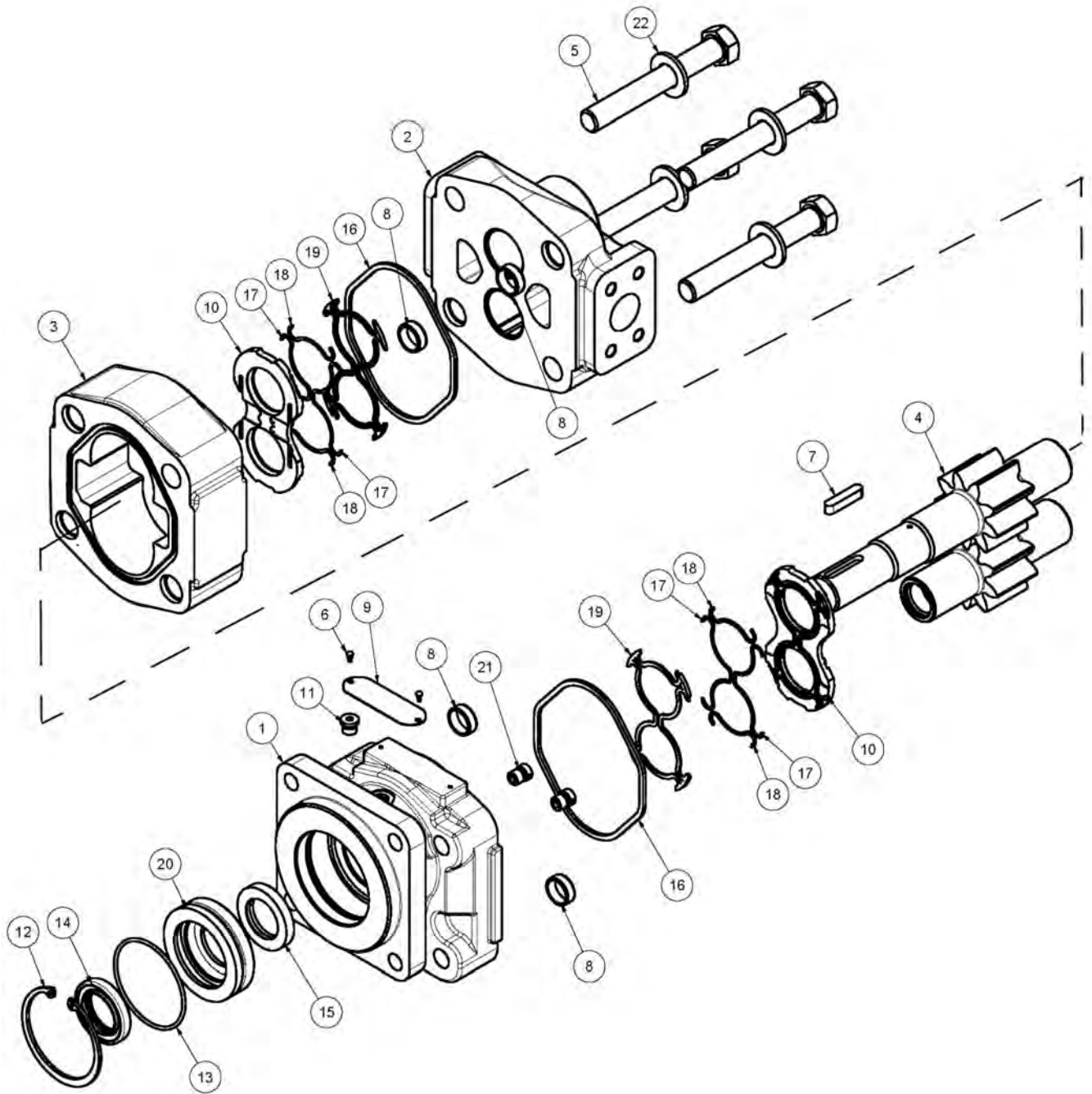


FRONT HYDRAULIC PUMP

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) |

50IN AND 60IN ROTARY MOTOR BREAKDOWN



COMMON LEGAL REAR STOW T4

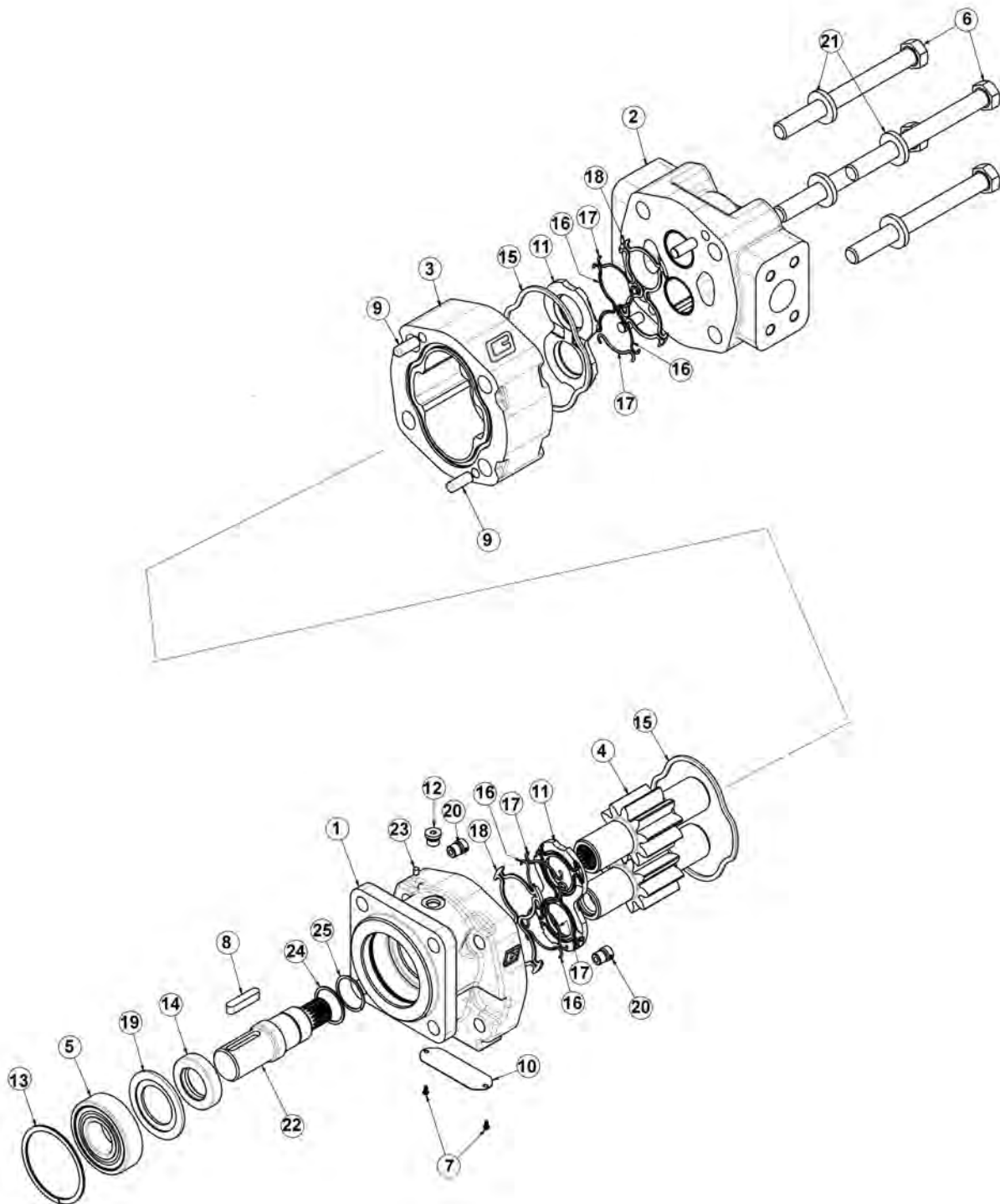
50IN AND 60IN ROTARY MOTOR BREAKDOWN

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|-------|----------|------|----------------------|
| | 06504011 | - | MOTOR ASSEMBLY,TRB60 |
| | 06504012 | - | MOTOR ASSEMBLY,TRB50 |
| 1 | 22790 | 1 | HOUSING, SEC |
| 2 | 06504088 | 1 | HOUSING, PEC |
| 3 | 06504062 | 1 | HOUSING, GEAR,TRB60 |
| ----- | 06504089 | - | HOUSING, GEAR,TRB50 |
| 4 | 06504090 | 1 | SET, GEAR SHAFT |
| 5 | 06504104 | 4 | CAP SCREW,TRB60 |
| ----- | 06504091 | - | CAP SCREW,TRB50 |
| 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 |

COMMON LEGAL REAR STOW T4

FLAIL MOTOR BREAKDOWN



COMMON LEGAL REAR STOW T4

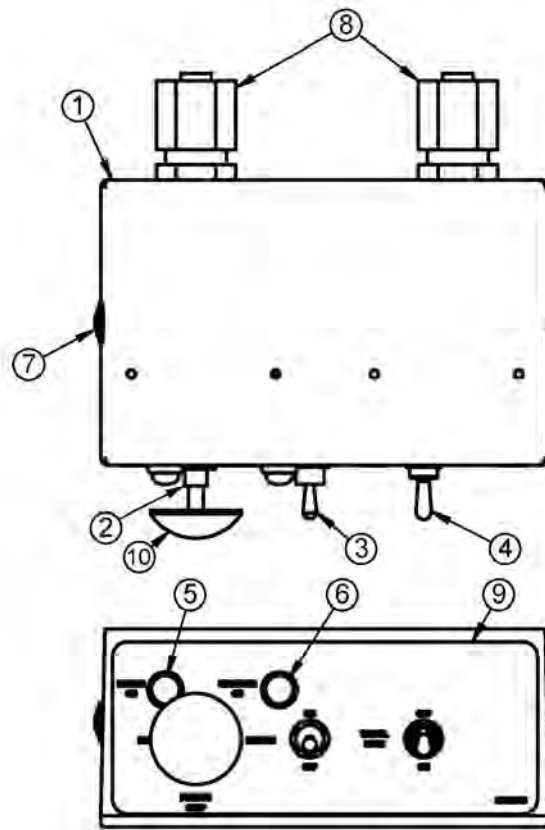
FLAIL MOTOR BREAKDOWN

Continued...

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|-----------------------------------|
| * | 06504132 | - | MOTOR ASSEMBLY 350 - TBF50, TBF63 |
| 1 | 06504141 | 1 | SHAFT END COVER |
| 2 | 06504040 | 1 | PORT END COVER |
| 3 | 06504041 | 1 | GEAR HOUSING |
| 4 | 06504117 | 1 | MATCHED GEAR SET |
| 5 | TF4402 | 1 | BALL BEARING |
| 6 | 06504043 | 4 | CAP SCREW |
| 7 | 06504044 | 2 | SET SCREW |
| 8 | 06504028 | 1 | KEY |
| 9 | 06504045 | 4 | DOWEL PIN |
| 10 | * | 1 | NAMEPLATE |
| 11 | 763759 | 1 | THRUSTPLATE |
| 12 | 2961940 | 1 | PLUG, ODT (0.25) |
| 13 | TF4401 | 1 | SNAP RING |
| 14 | 06504142 | 1 | LIP SEAL |
| 15 | TF4410 | 2 | GASKET SEAL |
| 16 | 06504046 | 4 | SIDE SEAL |
| 17 | 06504047 | 4 | END SEAL |
| 18 | TF4407 | 2 | BACK-UP SEAL |
| 19 | 06504122 | 1 | SEAL RETAINER |
| 20 | 6T5809 | 2 | CHECK ASSEMBLY |
| 21 | 2961917 | 4 | WASHER |
| 22 | 06504140 | 1 | SHAFT |
| 23 | 06504139 | 1 | BREATHER |
| 24 | 06504121 | 1 | SPACER, BRG |
| 25 | 06504119 | 1 | SNAP RING |
| * | 06504022 | - | SEAL KIT |

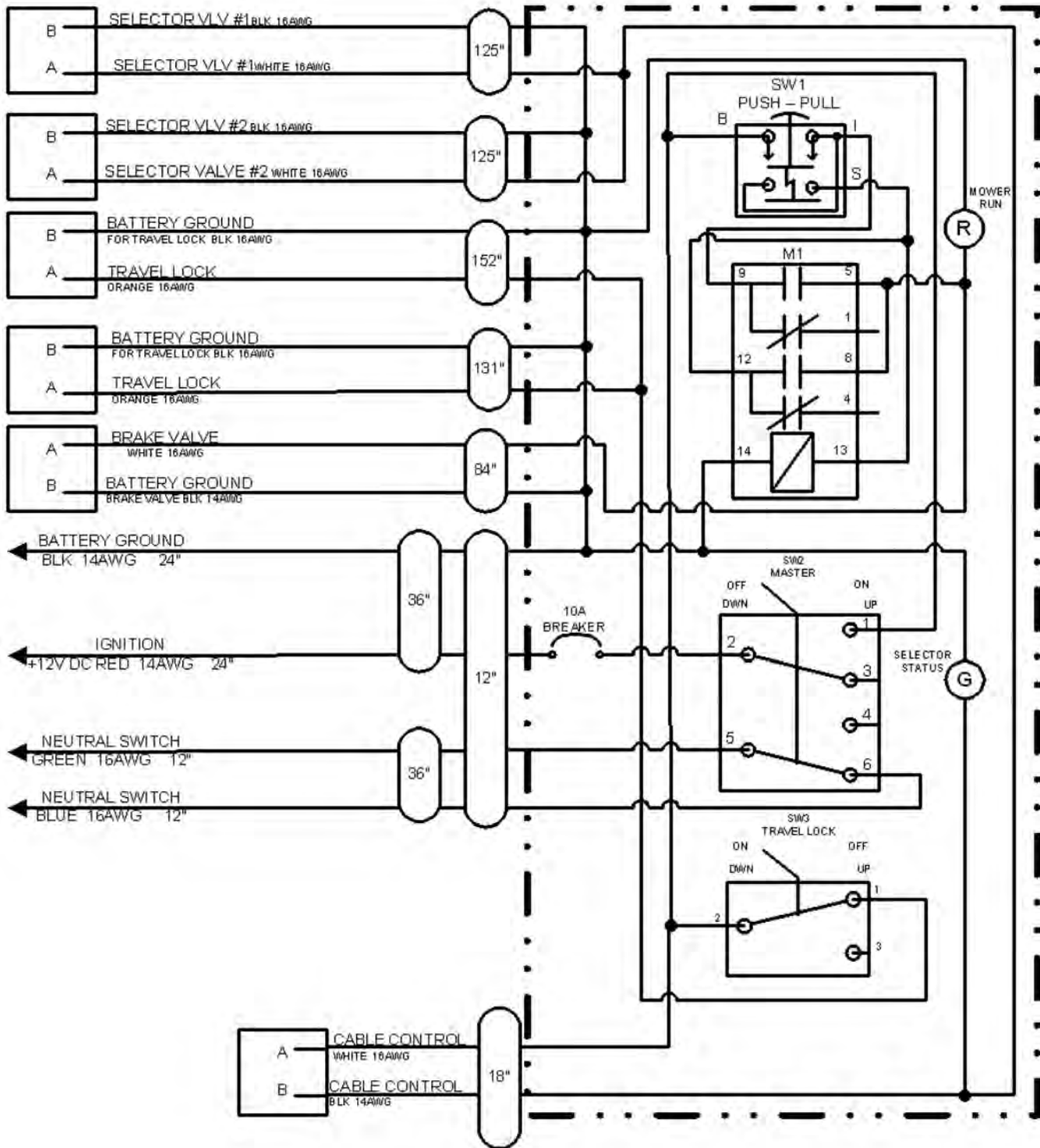
COMMON LEGAL REAR STOW T4

MANUAL LIFT VALVE SWITCH BOX

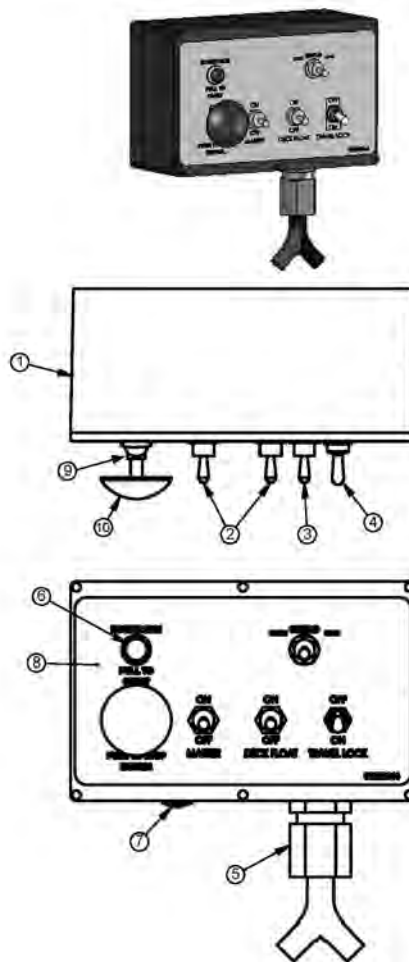


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|----------------------------------|
| 1 | 06510049 | 1 | SWITCH BOX ASSEMBLY |
| --- | 06514010 | 1 | SWITCH BOX |
| 2 | 35226 | 2 | SWITCH,MOWER,COLEHERSEE |
| 3 | 33811 | 1 | SWITCH,MASTER/DECK FLOAT |
| 4 | 34532 | 1 | SWITCH,TRVL LCK |
| 5 | 6T3923 | 1 | INDICATOR LIGHT,ON,RED |
| 6 | 06510193 | 1 | INDICTATOR LIGHT,ON,GREEN |
| 7 | 06514006 | 1 | BREAKER,15A,SWBX |
| 8 | 34540 | 2 | STRAIN RELIEF |
| 9 | 06550043 | 1 | DECAL,SWTCHBX |
| 10 | 02964063 | 1 | KNOB,RED |
| 11 | 35227 | 1 | RELAY,DP,DT,12V,LY2F (NOT SHOWN) |

MANUAL LIFT VALVE SCHEMATIC

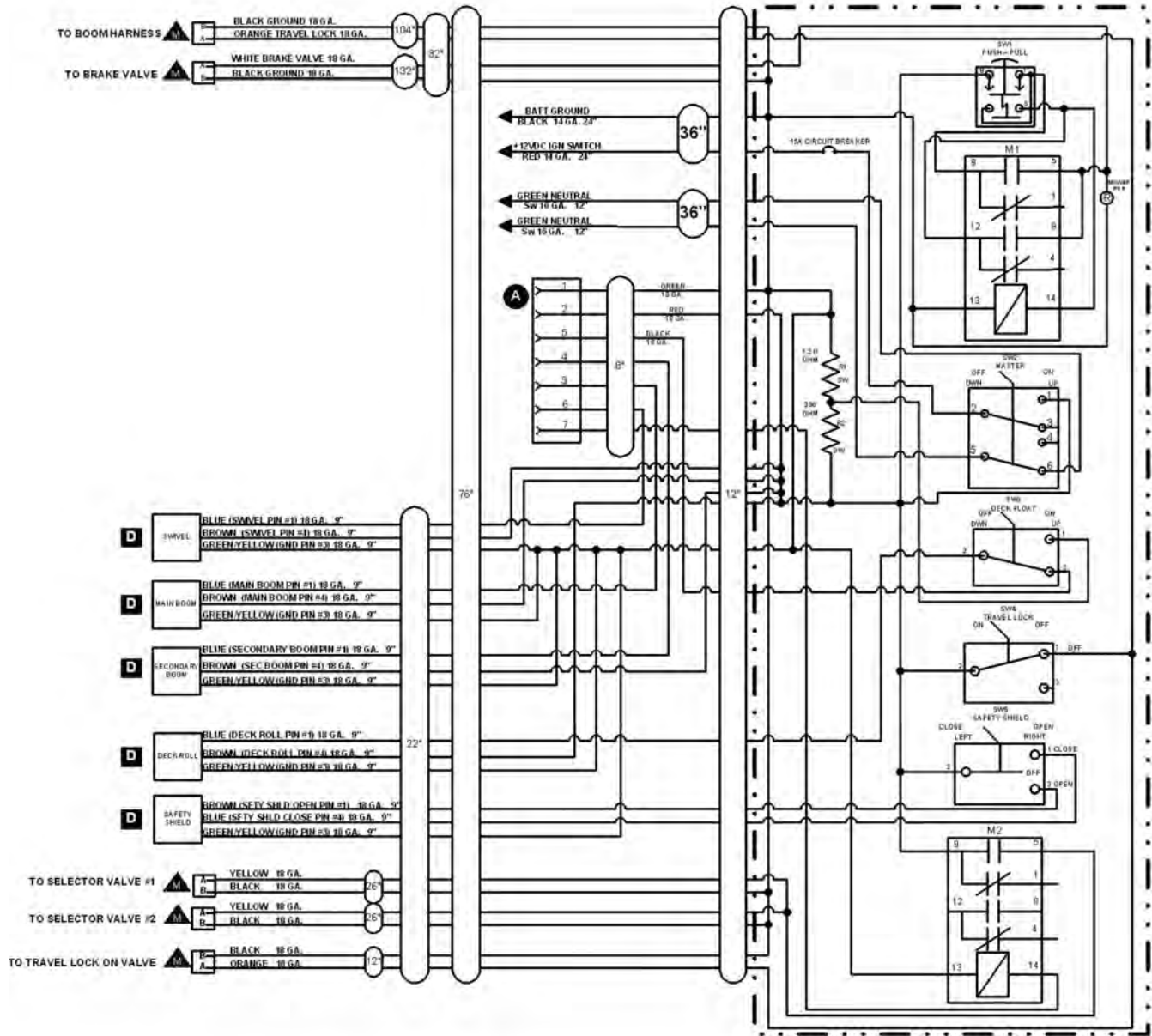


ELECTRONIC LIFT VALVE SWITCH BOX

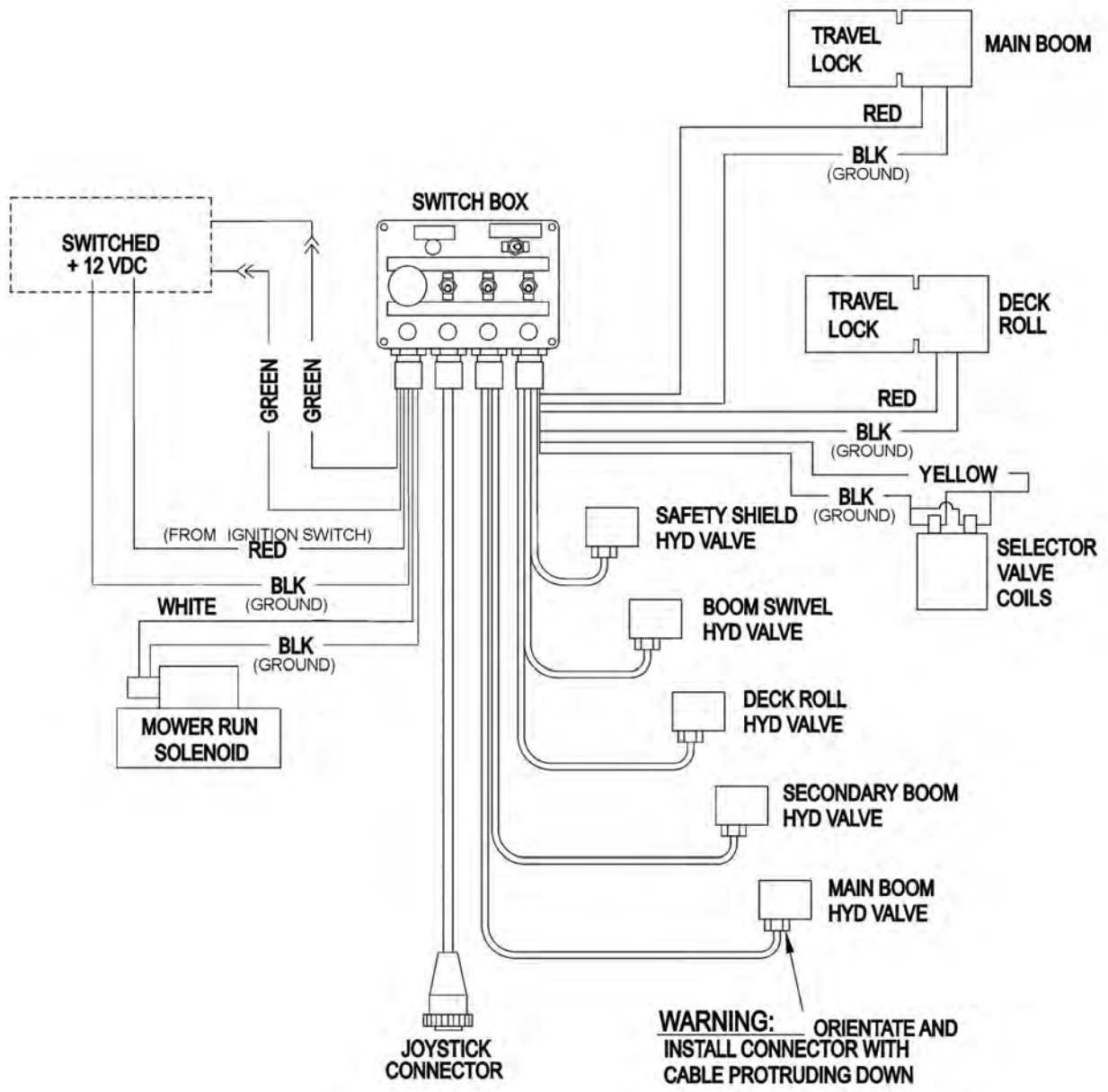


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--------------------------------|
| 1 | 06510195 | 1 | SWITCH BOX,ASSY |
| --- | 06514008 | 1 | SWITCH BOX |
| 2 | 33811 | 2 | SWITCH,MASTER/DECK FLOAT |
| 3 | 33813 | 1 | SWITCH,SFTY SHIELD |
| 4 | 34532 | 1 | SWITCH,TRVL LCK |
| 5 | 34540 | 1 | STRAIN RELIEF,3/4",BLACK,NYLON |
| 6 | 6T3923 | 1 | INDICTATOR LIGHT,ON,RED |
| 7 | 06514006 | 1 | BREAKER,15A,SWBX |
| 8 | 06550044 | 1 | DECAL,SWBX,06510047 |
| 9 | 35226 | 1 | SWITCH,MOWER,COLEHERSEE |
| 10 | 02964063 | 1 | KNOB,RED |
| 11 | 35227 | 1 | RELAY,DP,DT,12V,LY2F,35226 |

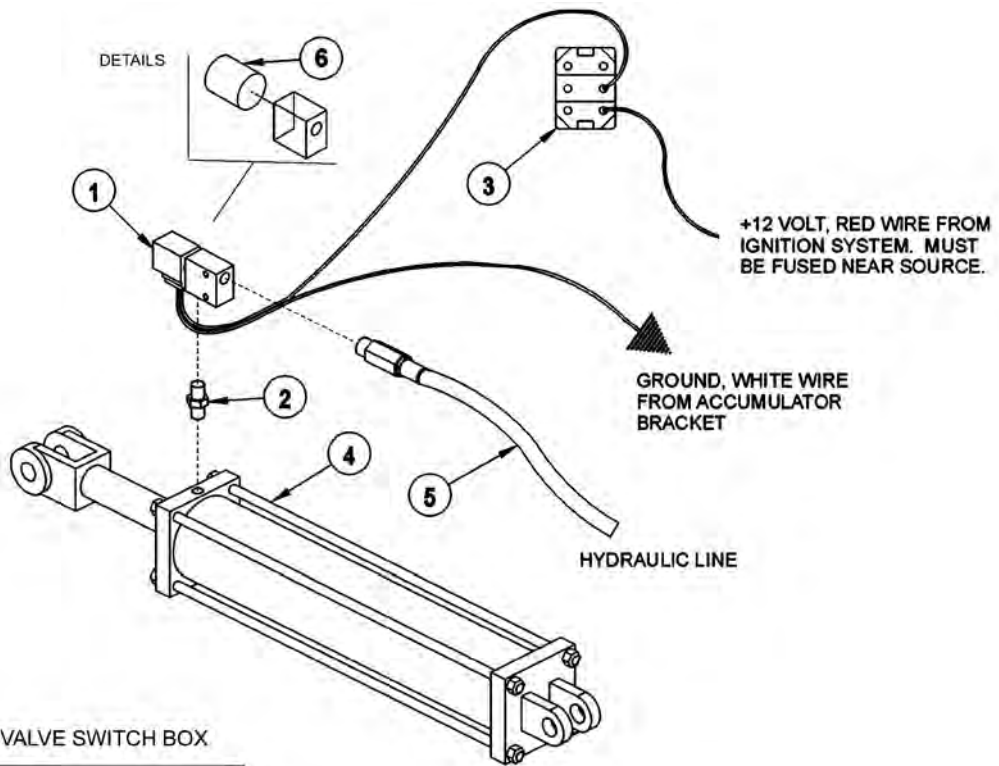
ELECTRONIC LIFT VALVE SCHEMATIC - REAR STOW



ELECTRONIC LIFT VALVE WIRING DIAGRAM



BOOM TRAVEL LOCK



ELECTRONIC LIFT VALVE SWITCH BOX

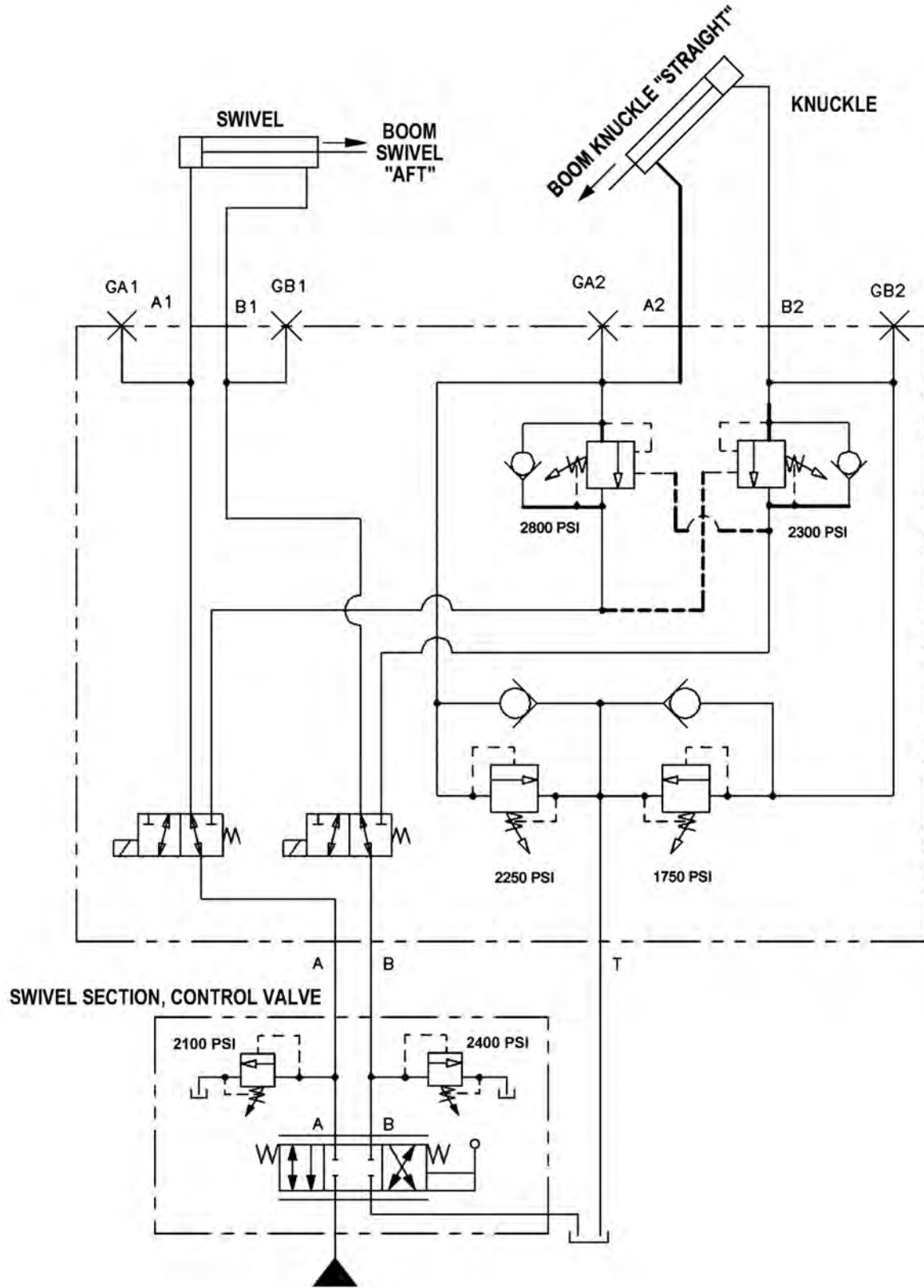


MANUAL LIFT VALVE SWITCH BOX

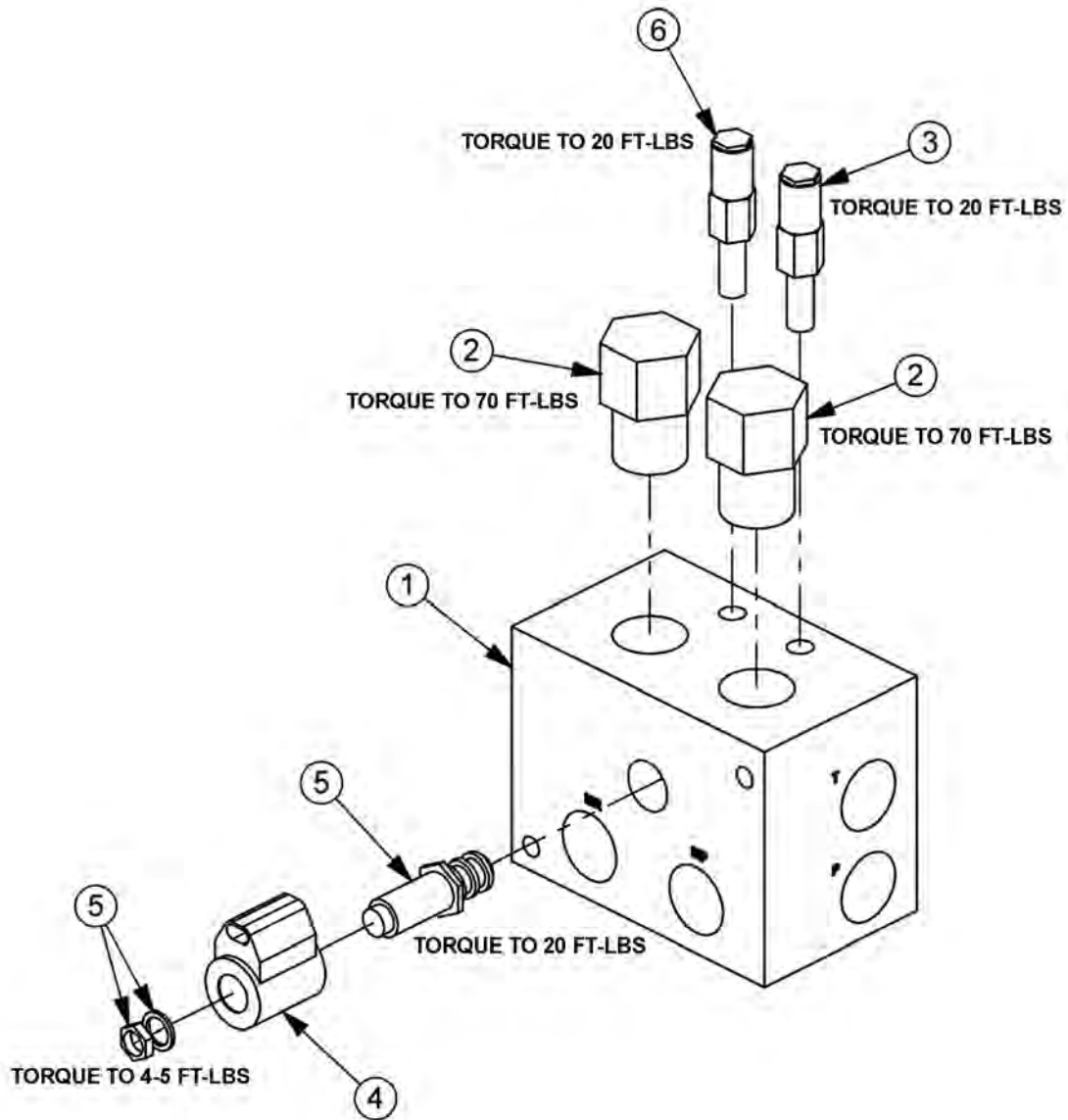


| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|---|
| 1 | 06510050 | 1 | HYDRAULIC TRAVEL LOCK VALVE |
| 2 | 31329 | 1 | ADAPTER - STANDARD BOOM |
| 3 | 34532 | 1 | SWITCH, TRAVEL LOCK |
| 4 | ----- | - | MAIN BOOM CYLINDER *REFER TO BOOM ASSY |
| 5 | ----- | - | HOSE / FITTINGS *REFER TO BOOM HYD ASSY |
| 6 | 06510092 | 1 | COIL, TRAVEL LOCK |

SELECTOR VALVE SCHEMATIC

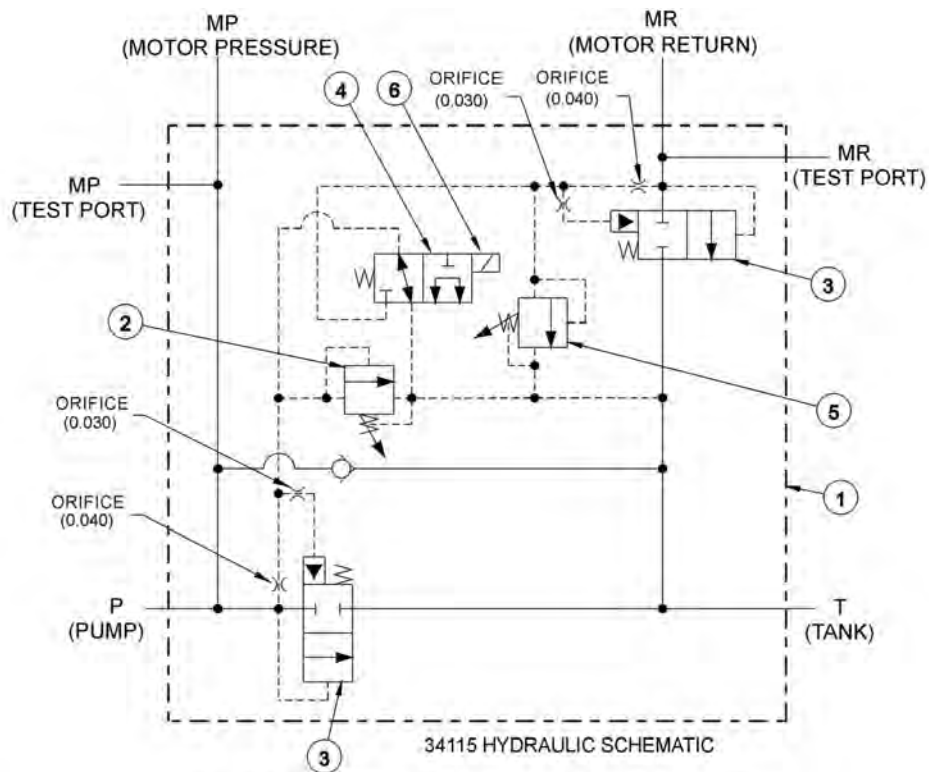


BRAKE VALVE ASSEMBLY



| 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 |

BRAKE VALVE HYDRAULIC SCHEMATIC



BRAKE VALVE TROUBLESHOOTING

FAILURE MODE:

- MOWER WILL NOT START - system pressure is low (engine not lugging).
- 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.
- MOWER BLADE WILL NOT STOP - blade will not stop in proper time.

CHECK STEPS

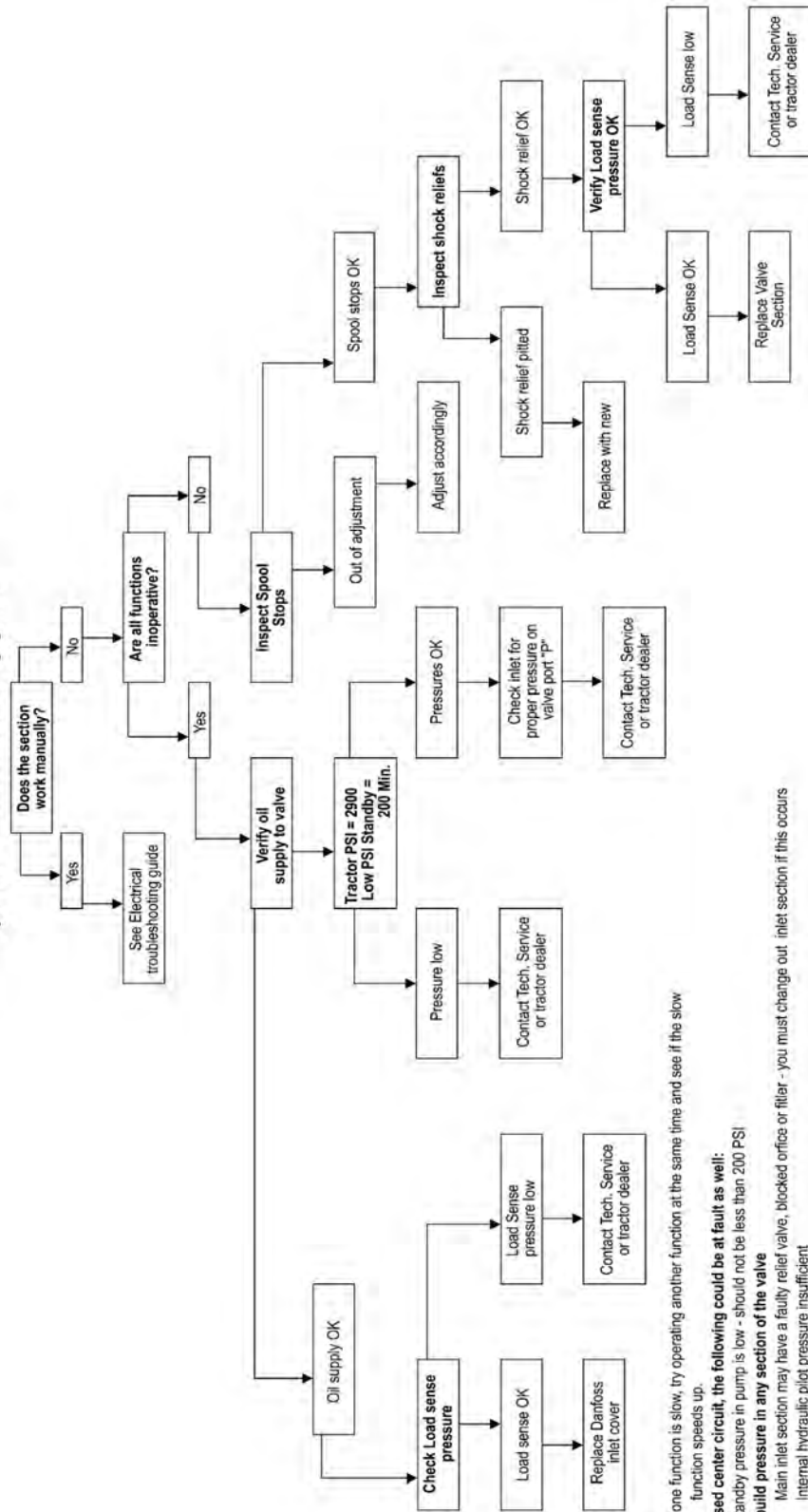
- 1 thru 6
- 7
- 3 thru 5
- 7 thru 9

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.

HYDRAULIC TROUBLESHOOTING GUIDE

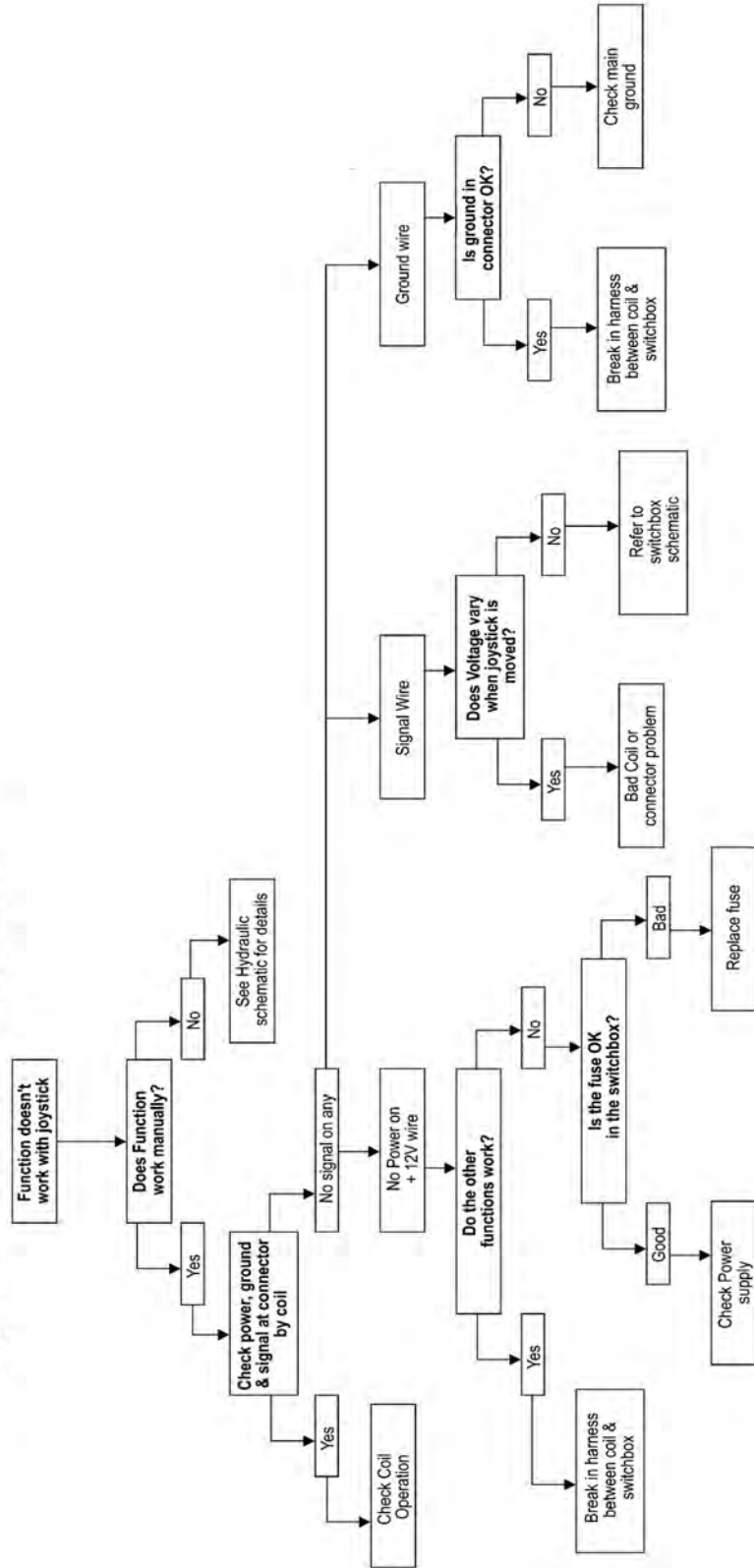
Hydraulic Troubleshooting guide



Notes: If one function is slow, try operating another function at the same time and see if the slow function speeds up.
On a closed center circuit, the following could be at fault as well:
 Tractor standby pressure in pump is low - should not be less than 200 PSI
Cannot build pressure in any section of the valve
 Main inlet section may have a faulty relief valve, blocked orifice or filter - you must change out inlet section if this occurs
 Internal hydraulic pilot pressure insufficient

ELECTRICAL TROUBLESHOOTING GUIDE

Joystick Electrical Troubleshooting guide



JOYSTICK TROUBLESHOOTING

Boom operation not responding to joystick movement.

Isolate hydraulic vs. electronic symptom.

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

Electronic inspection.

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

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

Pin #1 – Signal Voltage, Pin #4 – Power Voltage, Pin #3 – Ground

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

Pin #1 – Signal Voltage, Pin #4 – Power Voltage, Pin #3 – Ground

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

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

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

Possible electronic problems.

Open circuit (broken wire, bad connection or loose connection in switchbox).

Shorted to positive, ground, or other.

Incorrect voltage signal from joystick.

Continued on next sheet

TROUBLESHOOTING - CONTINUED

Hydraulic inspection.

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

With the spools in Neutral

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

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

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

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

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

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

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

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

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

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

Operate more than one spool.

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

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

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

Possible hydraulic problems.

Cylinder leak.

LS signal leaking to tank before reaching pump LS port.

Hydraulic system or pump not supplying flow to valve.

WARRANTY SECTION

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!**



1012

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



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