BENGAL 210 ASSEMBLIES

CNH T5000

Current as of 11/19/2010

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

06024004

TO THE OWNER / OPERATOR / DEALER

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

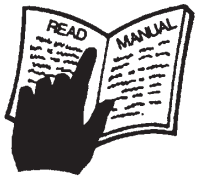
BEFORE YOU START!! Read the safety messages on the implement and shown in this manual. Observe the rules of safety and use common sense!

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

DANGER

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

1.



2. NO RIDERS. NO CHILDREN OPERATORS.

3. USE SAFETY SHOES, HARD HAT, SAFETY GLASSES, SEAT BELTS, ROPS & OPS

4. BLOCK UP SECURELY BEFORE WORKING UNDER.

1. Study and understand Operator's Manuals, Safety Decals, and Instructional Decals for tractor and implement to prevent misuse, abuse, and accidents. Practice before operating in a confined area or near passersby.
- Learn how to stop engine suddenly in an emergency. Be alert for passersby and especially children

2. Allow no children on or near folding mower or tractor. Allow no riders on tractor or implement. Falling off may cause serious injury or death from being run over by tractor or mower or contact with rotating blades.

3. Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seat belt securely fastened to prevent injury and possible death from falling off or tractor overturn.
- Personal Protective Equipment such as Hard Hat, Safety Glasses, Safety Shoes, & Ear Plugs are recommended.

4. Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent crushing injury or death from sudden dropping or inadvertent operation of controls. Make certain area is clear before lowering or folding

5. Before transporting, put Lift Lever in detent or full-lift position. Install Transport Safety Devices securely on folding mowers. Put Booms securely in Transport Rest.
- Folding and Boom Mowers have raised center of gravity. Slow down when turning and on hillsides.

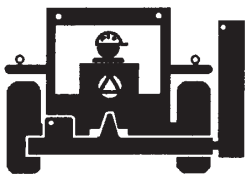
6. Make certain that SMV sign, warning lights, and reflectors are clearly visible. Follow local traffic codes.

7. Never operate with Cutting Head or Folding Section raised if passersby, bystanders, or traffic are in the area to reduce possibility of injury or death from objects thrown by Blades under Guards or mower structure.

8. Before dismounting, secure implement in transport position or lower to ground.
- Put tractor in park or set brake, disengage PTO, stop engine, remove key, and wait until noise of rotation has ceased to prevent crushing by entanglement in rotating parts which could cause injury or death.
- Never mount or dismount a moving vehicle. Crushing from runover may cause serious injury or death.

5. TRANSPORT SAFELY, LOCK UP.

6. USE SMV, LIGHTS, & REFLECTORS.



7. DO NOT OPERATE WITH CUTTER OR WING RAISED.

8. DO NOT MOUNT OR DISMOUNT WHILE MOVING.

02967827

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

FORWARD

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

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

Troubleshooting - Please, before you call, help us to help you!
Please look at the equipment to observe what is happening, then:

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

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

DISTRIBUTED BY:
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1-_____-_____-_____
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This symbol means:

CAUTION – YOUR SAFETY IS AT RISK!

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

SAFETY SECTION

SAFETY

General Safety Instructions and Practices

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


1000

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

Practice all usual and customary safe working precautions and above all -- remember safety is up to 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.

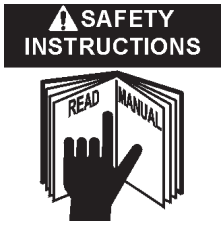
Indicates an imminently hazardous situation that, if not avoided, COULD result in DEATH OR SERIOUS INJURY.

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

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

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

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



SAFETY

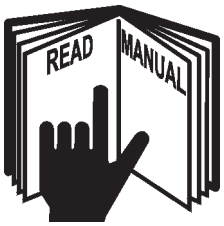
PELIGRO!

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

¡ LEA EL INSTRUCTIVO!

DANGER!

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

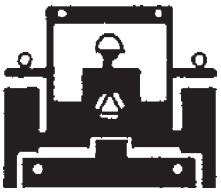


WARNING!

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

WARNING!

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



WARNING!

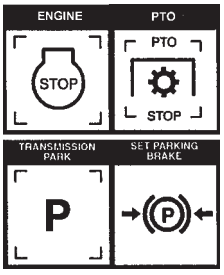
Operate this Equipment only with a Tractor equipped with an approved roll-over-protective system (ROPS). Always wear seat belts. Serious injury or even death could result from falling off the tractor--particularly during a turnover when the operator could be pinned under the ROPS. (SG-7)

WARNING!

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

DANGER!

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



SAFETY

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

DANGER! Never allow children to operate or ride on the Tractor or Implement. (SG-11)

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

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

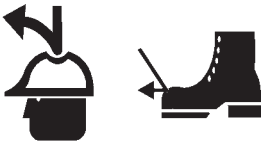
DANGER! Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SG-14)

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

SAFETY

WARNING!

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



CAUTION!

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

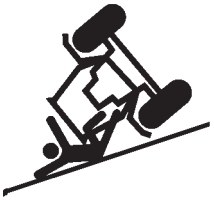
WARNING!

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

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

1. **Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum safe transport speed for you and this Equipment.**

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

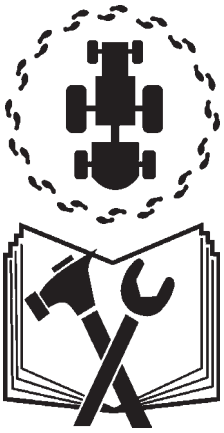


3. Only transport the Tractor and Implement at the speeds that you have determined are safe and which allow you to properly control the equipment.

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

SAFETY

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



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

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

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

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

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

DANGER!

NEVER use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator's alertness and coordination and therefore affect the operator's ability t o operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to operate the Equipment safely. **NEVER** knowingly allow anyone to operate this equipment when their alertness or coordination is impaired. Serious injury or death to the operator or others could result if the operator is under the influence of drugs or alcohol. (SG-27)

DANGER!

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

WARNING!

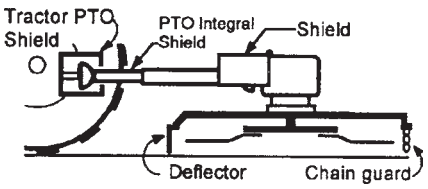
Mow only in conditions where you have clear visibility in daylight or with adequate artificial lighting. Never mow in darkness or foggy conditions where you cannot clearly see at least 100 yards in front and to the sides of the tractor and mower. Make sure that you can clearly see and identify passersby,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

DANGER!

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

DANGER!

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



SAFETY

DANGER!

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

WARNING!

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

WARNING!

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

WARNING!

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

WARNING!

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

WARNING!

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

DANGER!

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

WARNING!

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

DANGER!

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

- -Front and Rear Deflectors are installed and in good, working condition;
- -Mower Head is running close to and parallel to the ground without exposed Blades;
- -Passersby are outside the existing thrown-object zone;
- -All areas have been thoroughly inspected and all foreign material such as rocks, cans, glass, and general debris has been removed.

NOTE: Where there are grass and weeds high enough to hide debris that could be struck by the blades, the area should be: inspected and large debris removed, mowed at an intermediate height, inspected closely with any remaining debris being removed, and mowed again at desired final height. (SBM-1)

DANGER!

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

DANGER!

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

WARNING!

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

WARNING!

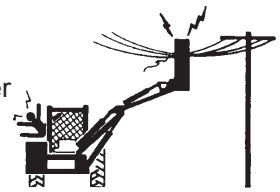
The rotating parts of this machine continue to rotate even after the Tractor has been turned off. The operator should remain in his seat for 60 seconds after the brake has been set, the PTO disengaged, the tractor turned off, and all evidence of rotation has ceased. (SBM-5)

"Wait a minute...Save a life!"

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

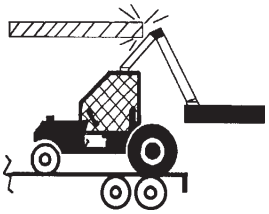
DANGER!

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



DANGER!

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



DANGER!

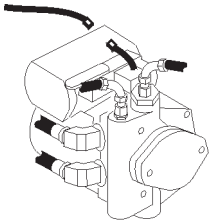
Never operate the Tractor and Mower Unit without an OPS (Operators Protective Structure) or Cab to prevent injury from objects thrown from ground or from overhead trimming. Stop mowing if workers or passersby are with in 100 yards. (SBM-9)

DANGER!

Each Rear Wheel must have a minimum of 1500 pound contact with the surface to prevent lateral instability and possible tip-over which could result in serious bodily injury or even death. Widen the wheel tread and add weights if needed. Refer to the mounting instructions or call Customer Service if you need assistance with Couterweight Procedure. (SBM-11)

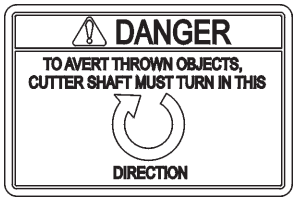
DANGER!

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)



DANGER!

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



WARNING!

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

WARNING!

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

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

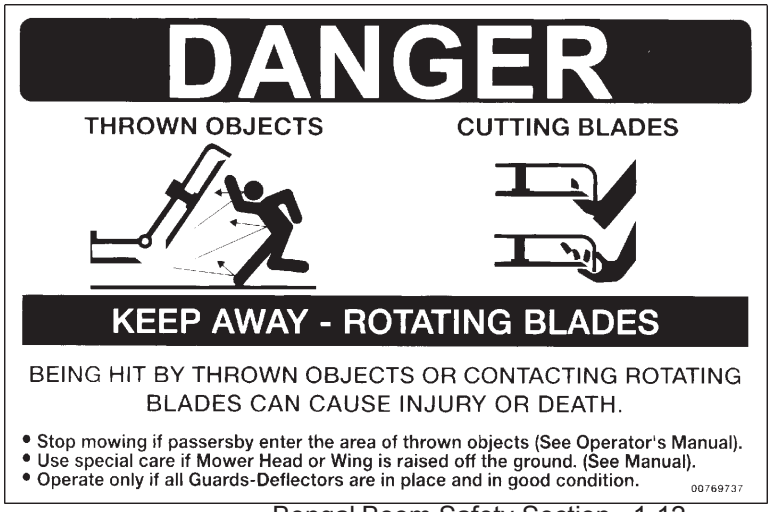
SEE YOUR Tiger DEALER

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

PART NO.
LOCATION

002369
HYDRAULIC TANK

00725746
INSIDE OF CAB



00769737
MOWER DECK

PART NO.
LOCATION

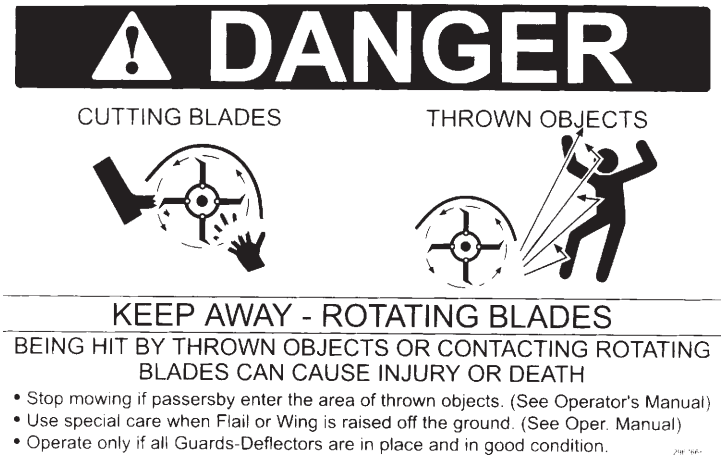
00758194
MOWER DECK

02962764
MAIN BOOM, SECONDARY BOOM, MAIN FRAME

02962765
MAIN FRAME

02965262
HYDRAULICTANK

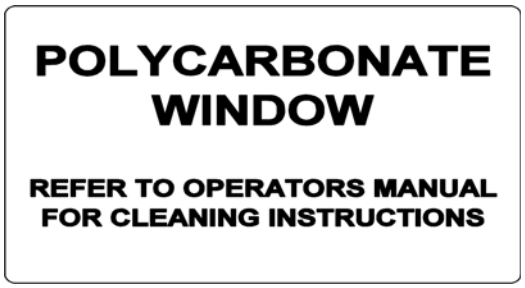
PART NO.
LOCATION



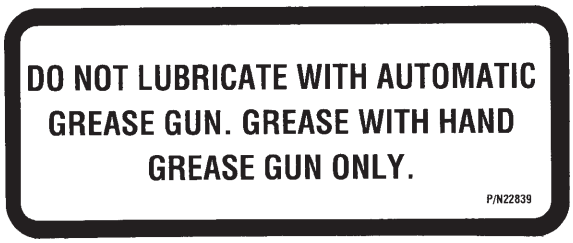
02967668
MOWER DECK

02971123
HYDRAULICTANK

03200285
OUTSIDE OF CAB



22645
INSIDE OF CAB



22839
MOWER DECK

PART NO.
LOCATION

22840
INSIDE OF CAB

24028
MOWER DECK

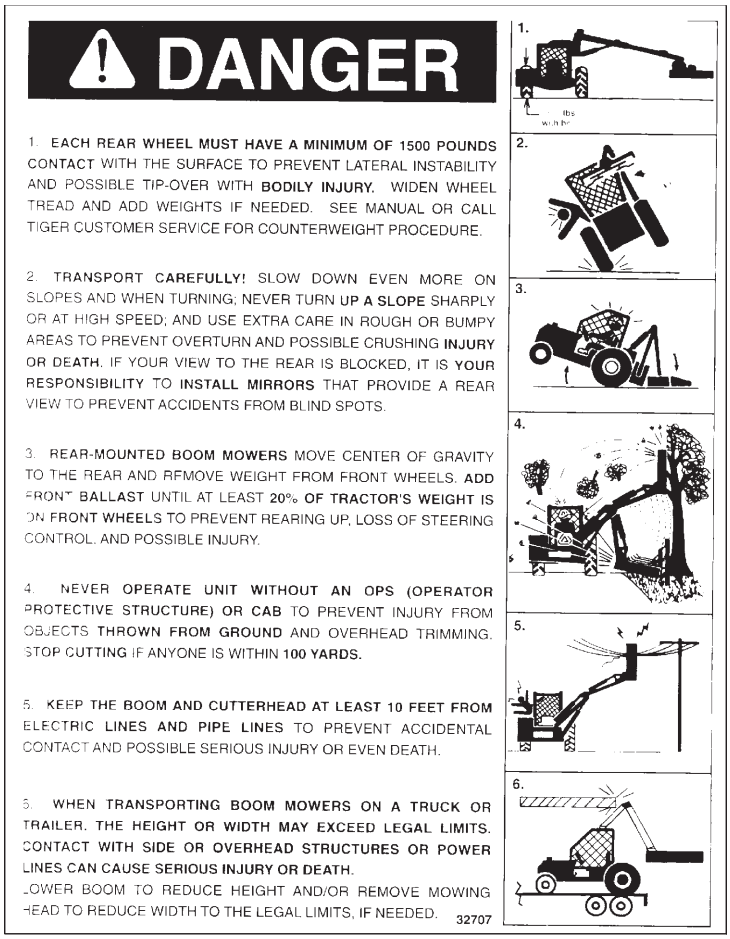
25387
INSIDE OF CAB

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

PART NO.
LOCATION

27001
INSIDE OF CAB

31935
INSIDE OF CAB



32707
HYDRAULICTANK

42350
MOWER DECK

PART NO.
LOCATION

ATTENTION

SERVICE HYDRAULIC SYSTEM WITH UNIVERSAL TRACTOR HYDRAULIC OIL.

32708

32708
HYDRAULICTANK

⚠ CAUTION

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

32709

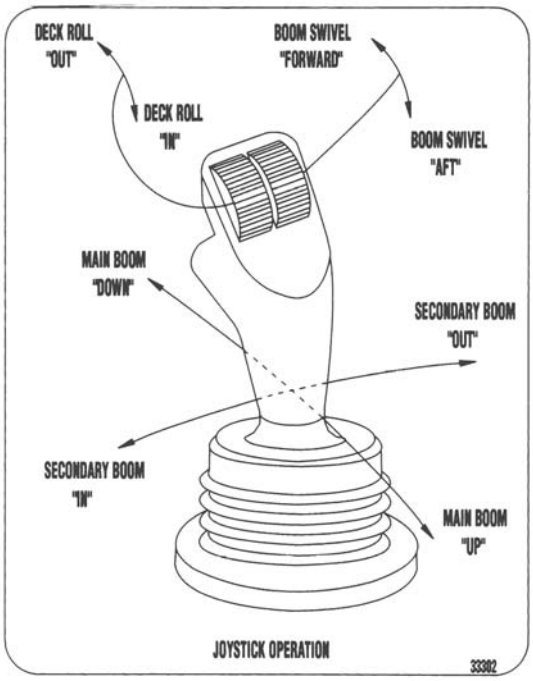
32709
INSIDE OF CAB

33224
MOWER DECK

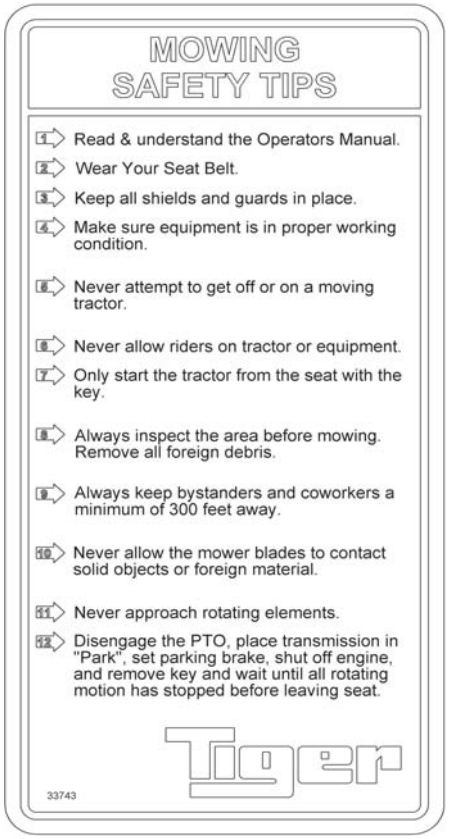
Tiger™

33438
MAIN BOOM

PART NO.
LOCATION



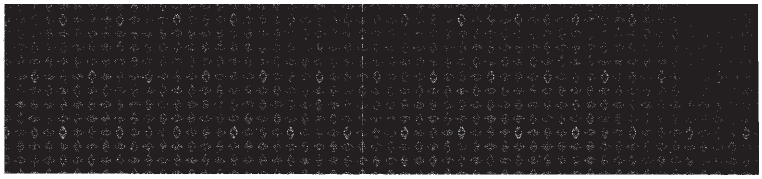
33302
INSIDE OF CAB



33743
INSIDE OF CAB

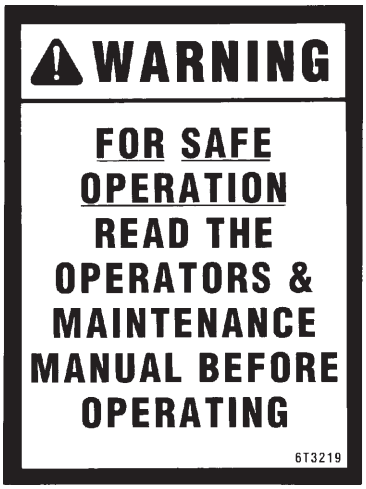
PART NO.
LOCATION

RED 42399
REFLECTIVE TAPE
MOWER DECK



AMBER 42400
REFLECTIVE TAPE
MOWER DECK

6T3217
MOWER DECK

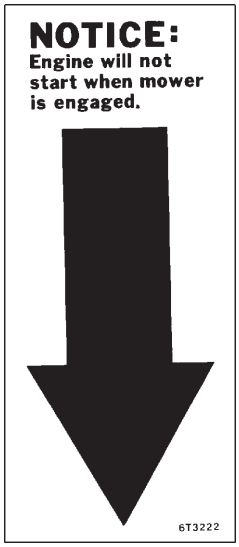


6T3219
INSIDE OF CAB

6T3220
FRONT PUMP MOUNT

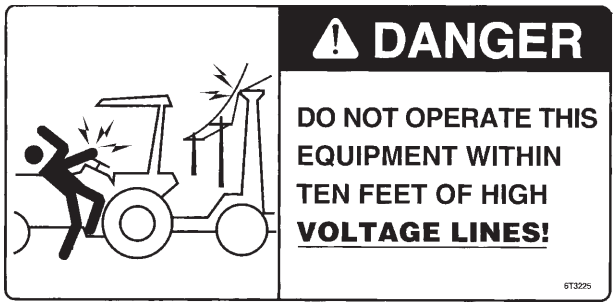
PART NO.
LOCATION

6T3221
INSIDE OF CAB



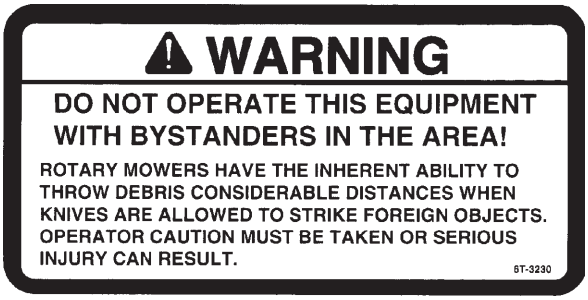
6T3222
INSIDE OF CAB

6T3224
MOWER DECK



6T3225
INSIDE OF CAB

PART NO.
LOCATION



6T3230
INSIDE OF CAB

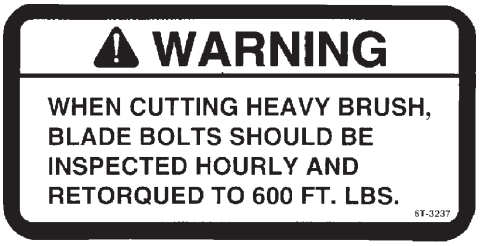
6T3231
INSIDE OF CAB

6T3233
HYDRAULICTANK

6T3234
INSIDE OF CAB

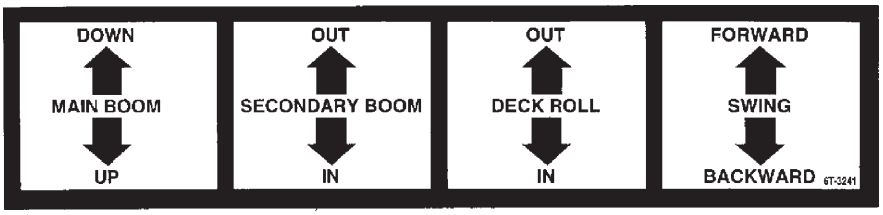
6T3236
MOWER DECK

PART NO.
LOCATION



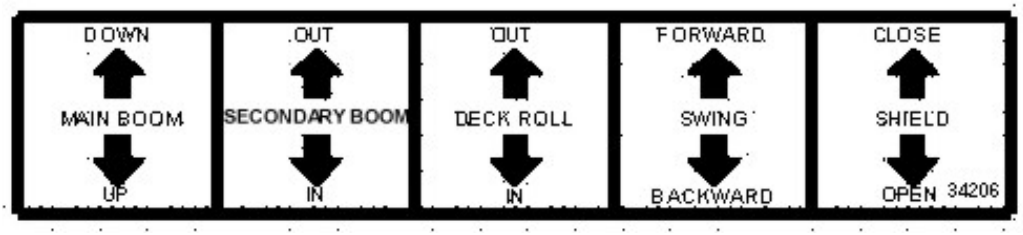
6T3237

6T3237
INSIDE OF CAB

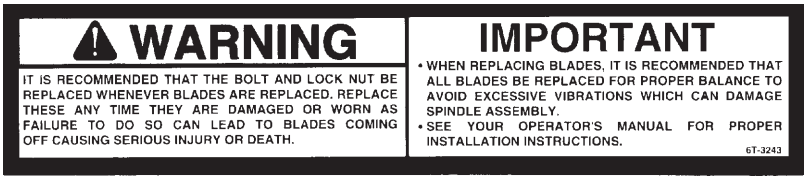


6T3241

6T3241
INSIDE OF CAB



34206
INSIDE OF CAB



6T3243
INSIDE OF CAB

6T3249A
MOWER DECK

6T3261
MOWER DECK

TB1011
MOWER DECK

Tiger MOWERS

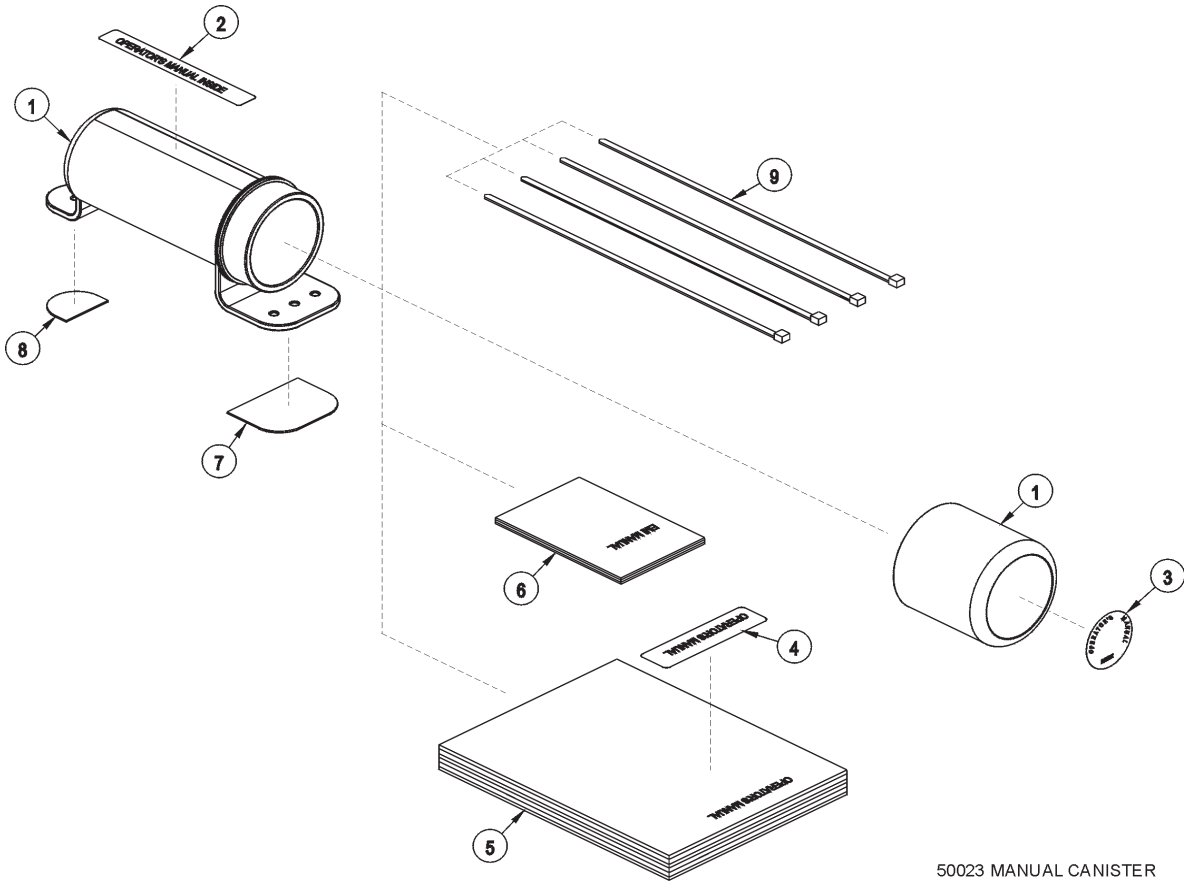
Tiger Corporation
800-843-6849
www.tiger-mowers.com

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

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

Tiger PN 34852

34852
HYDRAULIC TANK



50023 MANUAL CANISTER

ITEM	PART NO.	QTY.	DESCRIPTION
	50023	**AVAIL**	**MANUAL CANISTER COMPLETE**
1	00776031	1	ROUND MANUAL CANISTER
	33997	1	DECAL, SHEET, MANUAL CANISTER
2		*	DECAL
3		*	DECAL
4		*	DECAL
5	*	AVAIL	SPECIFIC PRODUCT MANUAL
6	33753	1	E M I SAFETY MANUAL
7	34296	1	FRONT ADHESIVE PAD
8	34297	1	REAR ADHESIVE PAD
9	6T1823	4	ZIP TIE 14” LONG

NOTE:

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

FEDERAL LAWS AND REGULATIONS

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

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

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

DUTIES

Sec. 5 (a) Each employer-
(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
(2) shall comply with occupational safety and health standards promulgated under this Act.
(b) Each employee shall comply with occupational safety and health standards and all rules, regulations and orders issued pursuant to this Act which are applicable to his own actions and conduct.

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

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

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

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

ASSEMBLY SECTION

ASSEMBLY

Before attempting to mount or service your Tiger mower, it is important to read and understand all of the information 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!

CAUTION!

Use a floor jack, hoist or fork lift to lift or raise heavy parts whenever possible whether mentioned or not.

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.

TRACTOR PREPARATION

A: Remove right hand steps and air intake tube.

B: Disconnect battery cables.

C: Remove engine side panels, or raise hood to access front pulley.

D: Remove plugs from tractor casting where main frame and pump mount will be attached.

E: Raise the tractor onto jack-stands and remove the right rear wheels.

ADJUSTING REAR WHEELS

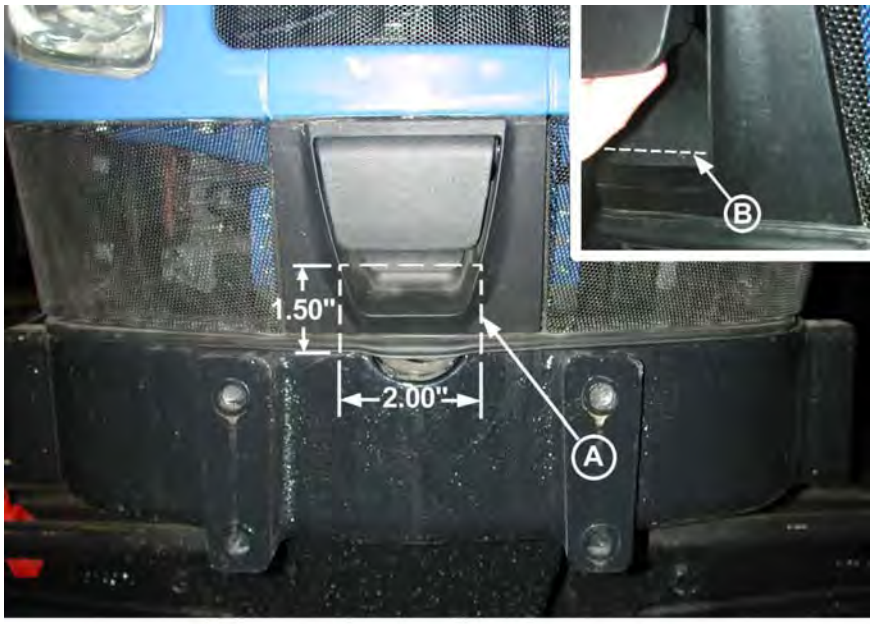
Raise rear of tractor onto jack-stands and adjust tires / rims all the way out. **Follow the instructions in the tractor owners manual for adjusting tires and rims**. NOTE: This may require switching the wheels to opposite sides of tractor. Do not reinstall wheels onto tractor until valve has been mounted (cab), and all hoses have been installed

CRANKSHAFT ADAPTER

If necessary remove the four cap-screws from the crankshaft pulley. Then install the crankshaft adapter and spacer to the pulley with cap-screws and lock-washers as shown in the parts section.

PUMP MOUNTING BRACKET

To allow for the pump mounting bracket on a CNH TL80-100A series tractor, a notch needs to be cut in the front hood latch housing. Refer to the image below for directions on cutting the notch. This does not apply to the CNH T5000 series tractor. NOTE: The battery needs to be relocated to connect the pump to the crankshaft.

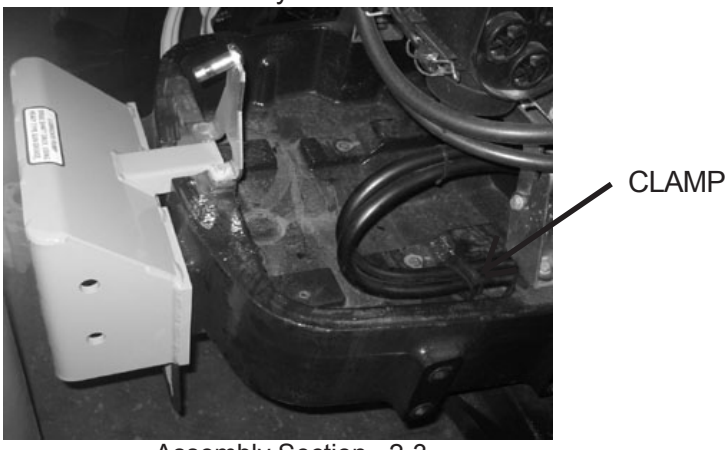


A. CUT HOOD LATCH HOUSING AS SHOWN, GROUND EDGES OF CUT SMOOTH. CUT SEAL GASKET TO MATCH.

B. CUT LOWER PORTION OF LATCH HANDLE TO MATCH CUT-OUT OF HOUSING, GRIND EDGE SMOOTH.

BATTERY RELOCATION

To allow for the Tiger driveshaft from the pump to the crankshaft, the battery needs to be removed. The battery cables then have to be secured away from the driveshaft. Remove the battery by removing the capscrews and the mounting bar at the base of the battery. Use a clamp and the existing bolt hole as shown below. The battery will replaced with a smaller battery.



VALVE MOUNTING BRACKET

Attach the valve mounting brackets to the back of the cab, first. Using the 18mm capscrews, locate the existing holes under the rear window, and attach the bracket to the cab. Locate the lower straps on the bracket. Mark the holes for the bracket support. Drill the holes and add the supplied hardware. Check the parts section for the correct hardware.

VALVE MOUNTING PLATE

Align the holes in the vavle mounting plate to the holes on the mounting bracket. Use the hardware shown in the parts section to attach the plate to the bracket.

VALVE MOUNTING

Attach the vavle to the valve mounting plate as shown in the parts section. Align the holes on the valve assembly to the holes on the plate. Please note the placement of the valve and the hardware shown in the parts section. **Exercise caution when installing the valve, as it is extremely heavy.**

CABLE CONTROL LEVER STAND

Follow the directions to mount the bracket to the cab floor on the following page. Then mount the control boxes to the stand as shown in the parts section.

Cut a 2 ¼" hole in the floor of the cab. This hole is to be located 4½" from the back fender, and 3 ½" from the edge of the door frame. Check under cab floor before cutting. Install trim lock around the metal edges of the hole, then route the cables through the hole. Next, wrap the cables with the 6" split hose at the point they pass through the hole, and secure with zip-ties.

NOTE: Read the Switch Box directions before routing the cables. Some wires use the same hole.

CABLE SWITCH BOX WIRING

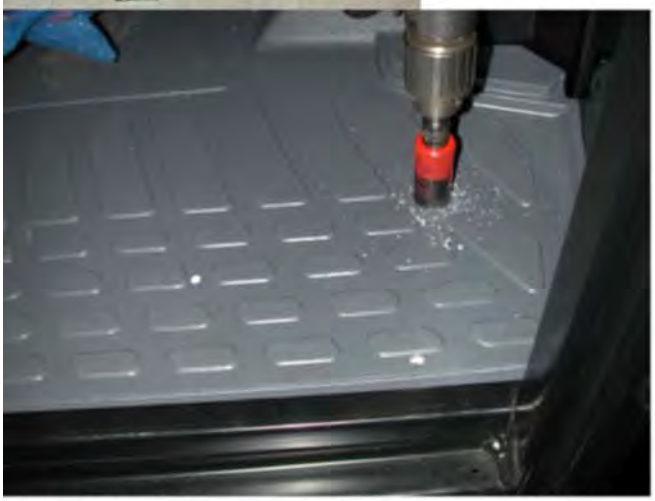
Refer to the parts section for wiring diagram to hook up the switch box. Cover the four wires from the switch box with plastic wire wrap provided. Route the wires from the switch box to the front console panel. Remove the console panel under the steering wheel to access wires. Locate the brown colored wire. **Using a test light or meter to verify** this wire is the neutral safety wire. Cut the brown wire and connect the green wires from the switch box as shown in the wiring diagram.

Run the white wire to the solenoid valve through the floor with the control cables. Then with the hoses to the solenoid valve. Cover the wires with wire wrap.

The red wire is to be hooked to the tractor ignition switch or an available slot in the fuse box. **NOTE: Be certain that the power taken for the switch box is "HOT" only when the tractor ignition is "ON". Also double check that the line is fused.**

The travel lock red wire from the switch box should also be covered with wire wrap and should run with the white wire through the grommet. This wire will be connected to the electronic travel lock located on the deck roll cylinder. The wires from the switch box are longer than needed and should carefully cut and spliced as required. Zip ties should be used to secure the wires to the tractor framework and boom hoses to eliminate vibation and rubbing.

LOCATE THIS HOLE FIRST. WITH A TAPE MEASURE & SQUARE, MEASURE 3/4" (A) FROM THE FRONT CORNER OF THE DOOR FRAME & 7" (B) FROM OUTSIDE EDGE OF DOOR FRAME



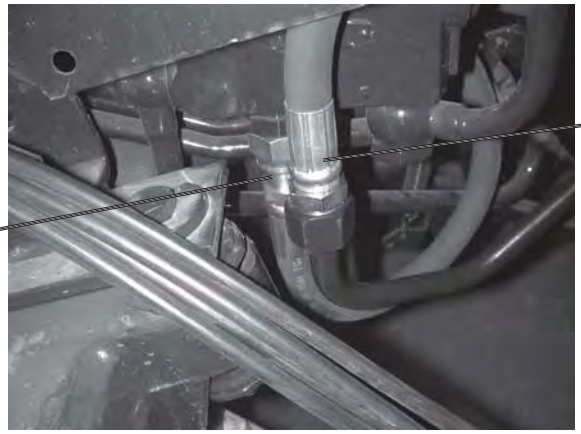
DRILL USING A 1-1/8" HOLE SAW THROUGH THE FLOORMAT.

LOCATE STAND USING HOLE. USING THE SQUARE, ROTATE STAND UNTIL REAR MOUNTING HOLE IS 4-5/8" FROM DOOR FRAME.

BEFORE FINAL INSTALLATION, BE SURE TO PLACE SPACERS IN HOLES.

PRESSURE LINE INSTALLATION - HUSCO

The hydraulic pressure line will be plumbed from the line supplying pressure to the tractor remotes. The location of the connection is by the right rear axle, see the image below. Disconnect the two lines. The pressure line comes in from the tractor. After lines are disconnected, connect the pressure hose to the female fitting and route the hose from the line to the high pressure filter, as shown in the parts section.

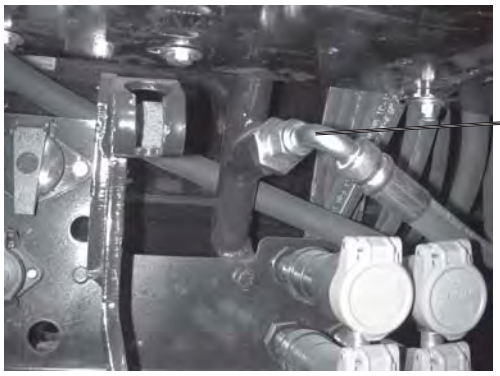


POWER BEYOND LINE - HUSCO

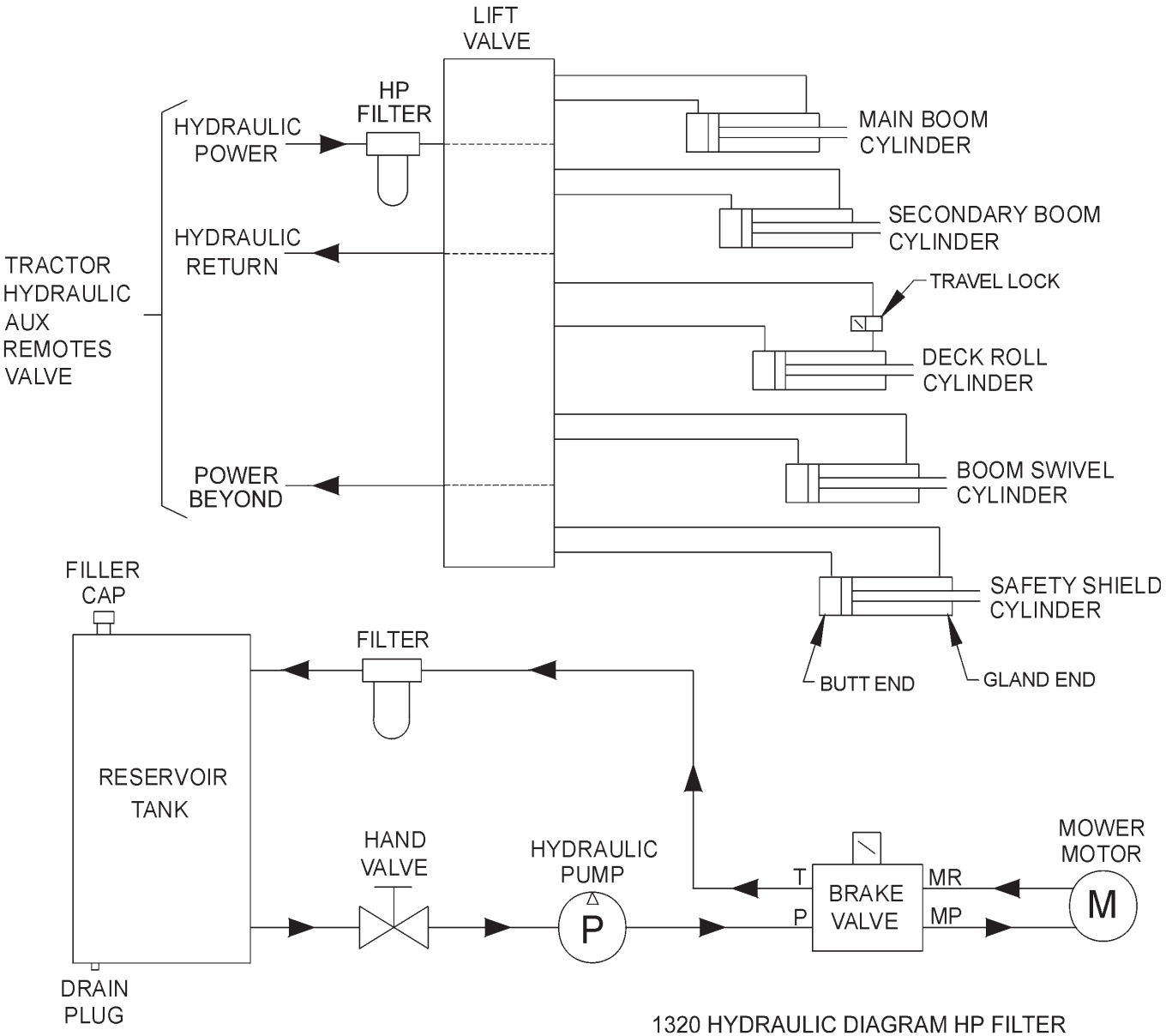
The power beyond line will use the male connection of the tractor remote line that was disconnected when plumbing the pressure line. Route the power beyond hose from the port on the Husco valve, as shown in the parts section, to the remaining line. Connect the hose to the male fitting, as shown above.

RETURN LINE INSTALLATION - HUSCO

The return line will be plumed into the tank port, just below the cap of the filler neck, located under the rear window. Locate the tank port and remove the plug. Connect the adapter and the hose to the port and route the hose to the return port on the Tiger lift valve, as shown in the parts section.



BOOM HYDRAULIC DIAGRAM



1320 HYDRAULIC DIAGRAM HP FILTER

HIGH PRESSURE FILTER - HUSCO

The high pressure filter is mounted to the right valve mounting bracket with two capscrews, as shown in the parts section. Attach the two adapters to the filter. The pressure line from the tractor is plumbed to the left side of the filter. The pressure hose that is attached to the right side of the filter is routed to the pressure port of the Tiger lift valve.

SWITCH BOX MOUNTING

Locate the right rear window indside of the cab as shown in the image below. While using the switch box mounting bracket as a template, find the two holes used to mount the bracket. Remove the 2 capscrews and mount the bracket to the console, as shown in the parts section. Use the hardware shown to mount the switch box to the mounting bracket.

SWITCH BOX WIRING

Refer to the parts section for wiring diagrams. Cover the four wires from the on / off terminal of the switch box with plastic wire wrap provided. Route the wires from the on / off terminal of the switch box through the hole that you have cut in the cab pillar cover, down to the floor. Run the wires under the lip at the edge of the floor to the front council. Remove the gauge panel under the steering wheel to access wires. Locate the black plug connector behind the dash panel. Locate the neutral safety wire. **Use a test light or meter to verify that this is the neutral safety wire.** Cut the wire and connect the green wires from the switch box as shown in the wiring diagram. The red power wire from the switch box on / off terminal may be connected to the unused, fused white plug located behind the dash. **NOTE: Be certain that the power taken for the switch box is "HOT" only when the tractor ignition is "ON". Also double check that the line is fused.**

The single red wire from the last terminal on the switch box should also be covered with wire wrap and run out the back window with the valve cables. This wire will be connected to the electronic travel lock.

FRONT PUMP MOUNTING

Install the pump mounting bracket on the front of the tractor with cap-screws and lock-washers as shown in the parts section illustration. DO NOT tighten fasteners at this time.

Slide the pump drive shaft into the crankshaft adapter. The end with the shorter splines should be inserted into the adapter (if applicable).

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

Align pump so that splined coupling can be moved back and forth by hand. Tighten pump mounting bolts in succession rechecking for spline coupling movement. Remove the pump mounting bracket bolts one at a time and apply a tread locking agent. Tighten these bolts in succession, again checking for free movement in the drive shaft. After all bolts are torqued, the end play on the drive shaft should be 1/16” to 1/8”, and coupler should move freely with hand pressure. If end play is less than 1/16”, grind the end of the shaf to achieve the proper end play. If there is more than 1/4" of end play, return the shaft with specifications for a longer shaft.

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.

GENERAL HOSE INSTALLATION

Refer to the parts section for detailed information about hoses and fittings for this application.

When mounting the suction hose between the pump and the tank, the stainless steel bands that are provided must be used. CAUTION: DO NOT use regular hose clamps for this purpose.

For protection of hoses in contact with metal edges, wrap hoses with spit hose sections and fasten with hose clamps or zip ties as needed.

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.

MAIN FRAME MOUNTING

It may be necessary to raise the front of the tractor slightly to allow the main frame to be slid under the tractor. With an overhead hoist or floor jack, slide the frame under the tractor from the right hand side. Raise the frame up to the correctly matching mounting holes. Install the capscrews and all other hardware as shown in the main frame parts section. Remove the capscrews one at a time and apply a Loc-Tite to the threads. Reinsert the capscrews and tighten / torque to the values noted in the torque chart located in the maintenance section of this manual.

BOOM MOUNTING KIT

After mounting the main frame use a hoist to raise the boom mounting bracket so the inner draft beam pin can be inserted. Secure the pin to the main frame with the capscrew and lock nut. Add the rest of the hardware to secure the boom mounting bracket to the main frame, as shown in the parts section.

Use a hoist to raise the swivel into place. Align the swivel with the boom mounting bracket and insert the swivel pin as shown in the parts section. After inserting the swivel pin secure the pin to the boom mounting bracket with the hardware shown.

Place any needed spacers on the rod of the swivel cylinder. Add the clevis to the rod of the swivel cylinder. Using the pins and hardware shown in the parts section, attach the butt end of the cylinder to the boom mounting bracket and the clevis to the swivel.

BOOM INSTALLATION

Install the boom swivel into the main frame as shown in the parts section using a hoist. Line up holes in swivel and main frame for large swivel pin and insert pin. Secure with hardware as shown.

Attach the inner end of the main boom to the boom swivel using pins and hardware as shown. Be sure that the bearings are properly installed as shown in the boom parts section.

Install main boom cylinder on the main boom with the fittings facing towards the rear of the tractor. Attach the butt end to the main boom cylinder to the swivel bracket anchor with cylinder pin and hardware shown in parts section. Attach the piston clevis to the main boom with the cylinder pin and hardware. Install all fittings into the cylinders and hoses as shown in the boom and lift valve parts sections.

WHEEL WEIGHT MOUNTING

For all machines using a boom mower, a wheel weight will be required for the left side wheel. It will be necessary to mount the 500 pound wheel weight in the wheel using the long cap-screws, lock-washers, flat-washers, and hex nuts per diagram in the parts section.

Installation is most easily done with a small fork lift, inserting a fork in the center slot of the wheel weight. The head of the cap-screws is to be toward the OUTSIDE of the weight, with flat-washers on both inside and outside of the assembly.

The left rear tire must also be filled with a mixture of water and calcium chloride at about five pound per gallon. Tire air pressure should be maintained at approximately 22 P.S.I.

HYDRAULIC TANK INSTALLATION

Attach the tank mount to the main frame with the hardware shown in the parts section.

Install all fittings and tubes into tank and tank filter as shown in parts section illustration. Install the temperature sensor (optional) or pipe plug into the side of the tank. Place the tank in the mounting bracket on the main fame as shown in the parts section. 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 breather cap will be installed after tank is filled.

AXLE BRACE MOUNTING

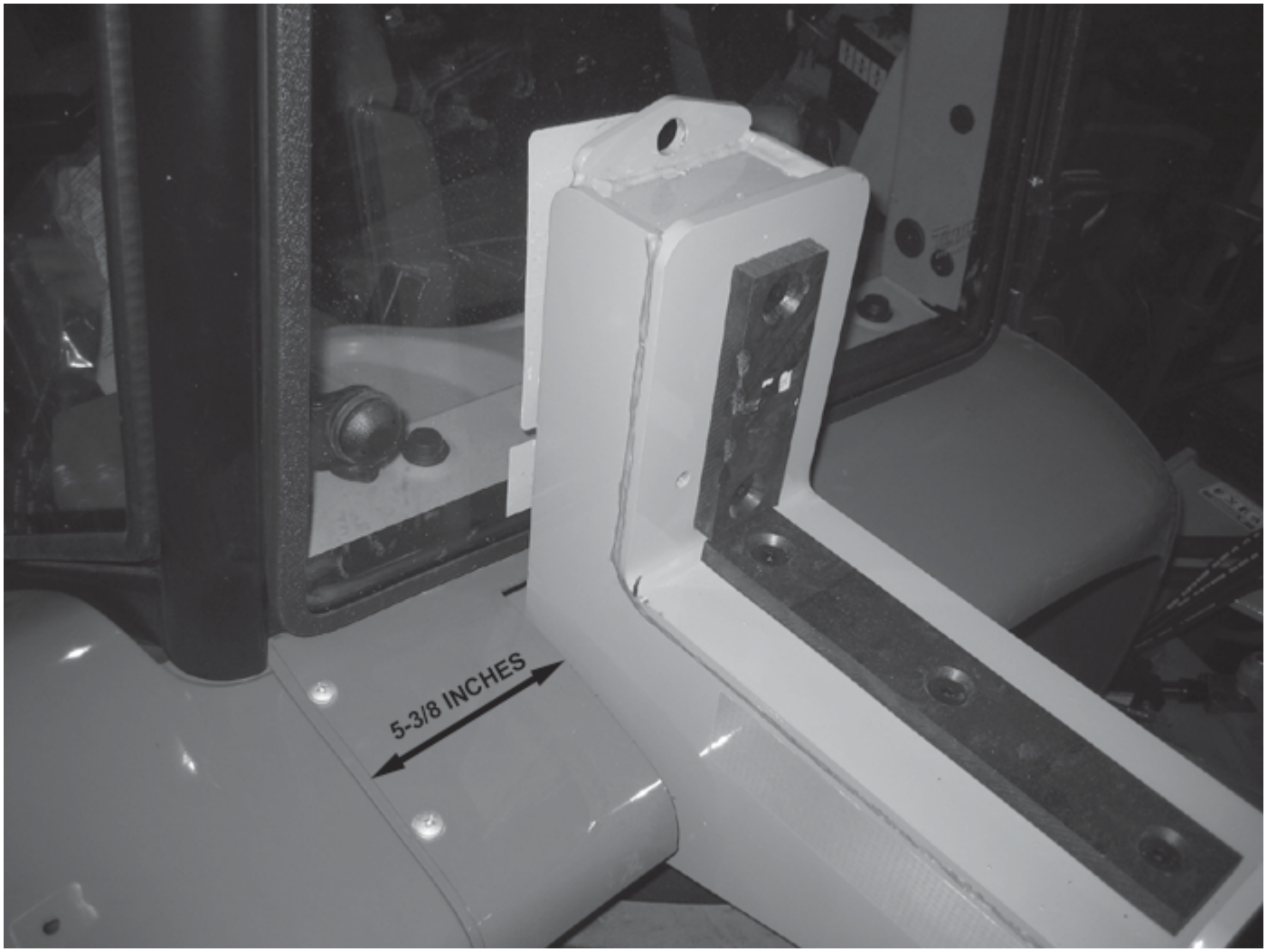
The axle brace is to be mounted under the rear axle of the tractor. The other end of the axle brace mounts on the outside of the lower rear corners of the main frame. After attaching the axle brace, it should fit tightly and level under the tractor. Attach the axle brace to the main frame with hardware shown in the parts section and tighten. Attach the axle brace to the rear axle using the mounting hardware shown in the parts section, but DO NOT tighten.

SC BOOM REST MOUNTING

Carefully raise the boom rest and align the boss' with the holes of the axle brace. Now install all attaching hardware as shown in the parts section loosely, to allow for alignment. Tighten / torque all hardware on the axle brace and the boom rest. Add the Clamp Bars as shown in the parts section. Finally, add the wear pads with the hardware provided.

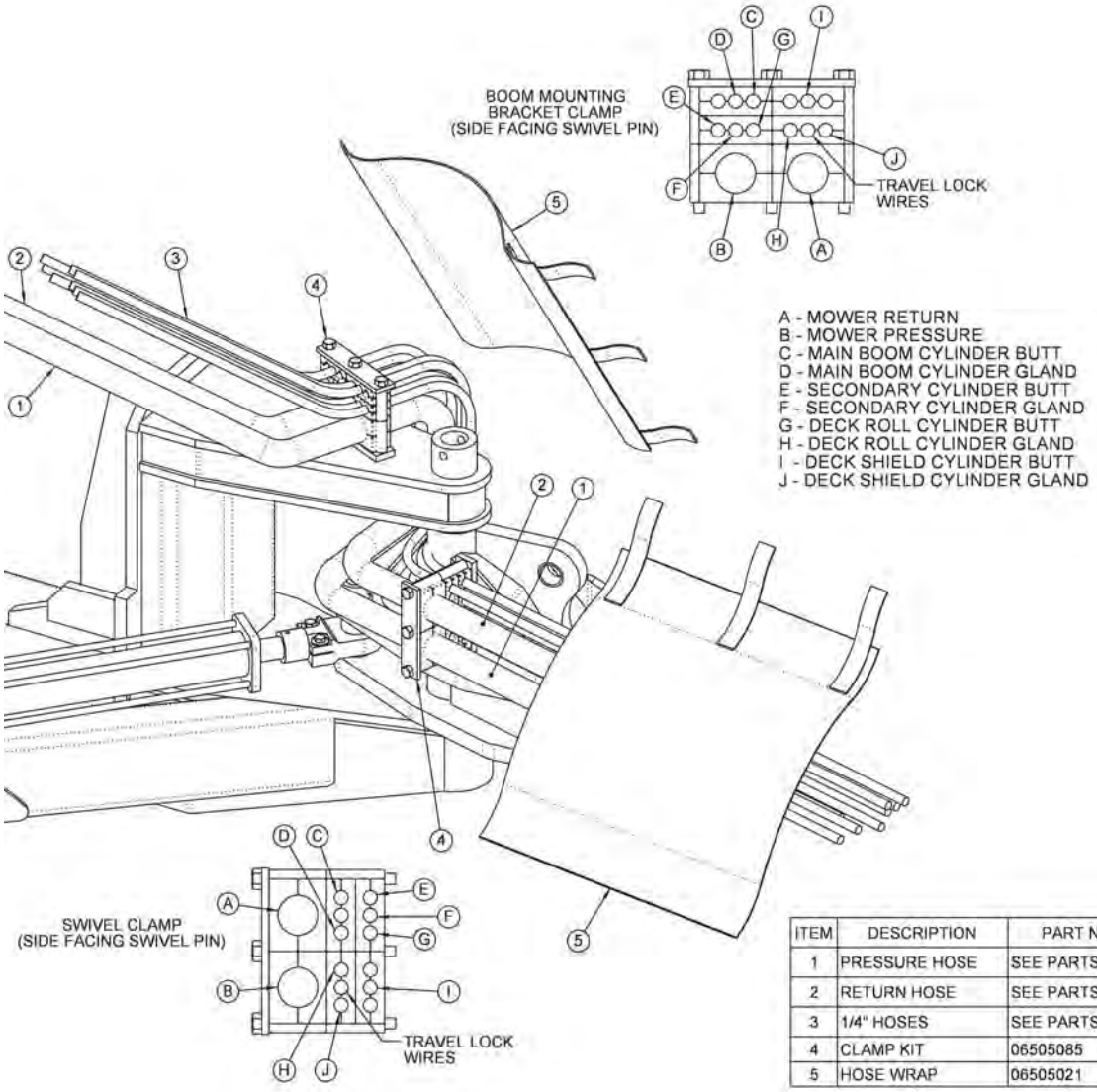
FENDER PREP FOR BOOMREST

The right rear fender must be cut to allow for the boomrest to pass through. The first cut should be made 5-3/8 inches from the rear of the flat fender piece perpendicular to the widow and up to 1/2 inch from the window. The rectangular cutout should be 6 inches wide. The removal of this material should allow 1/2 inch clearance for the boomrest all the way around. See picture below.



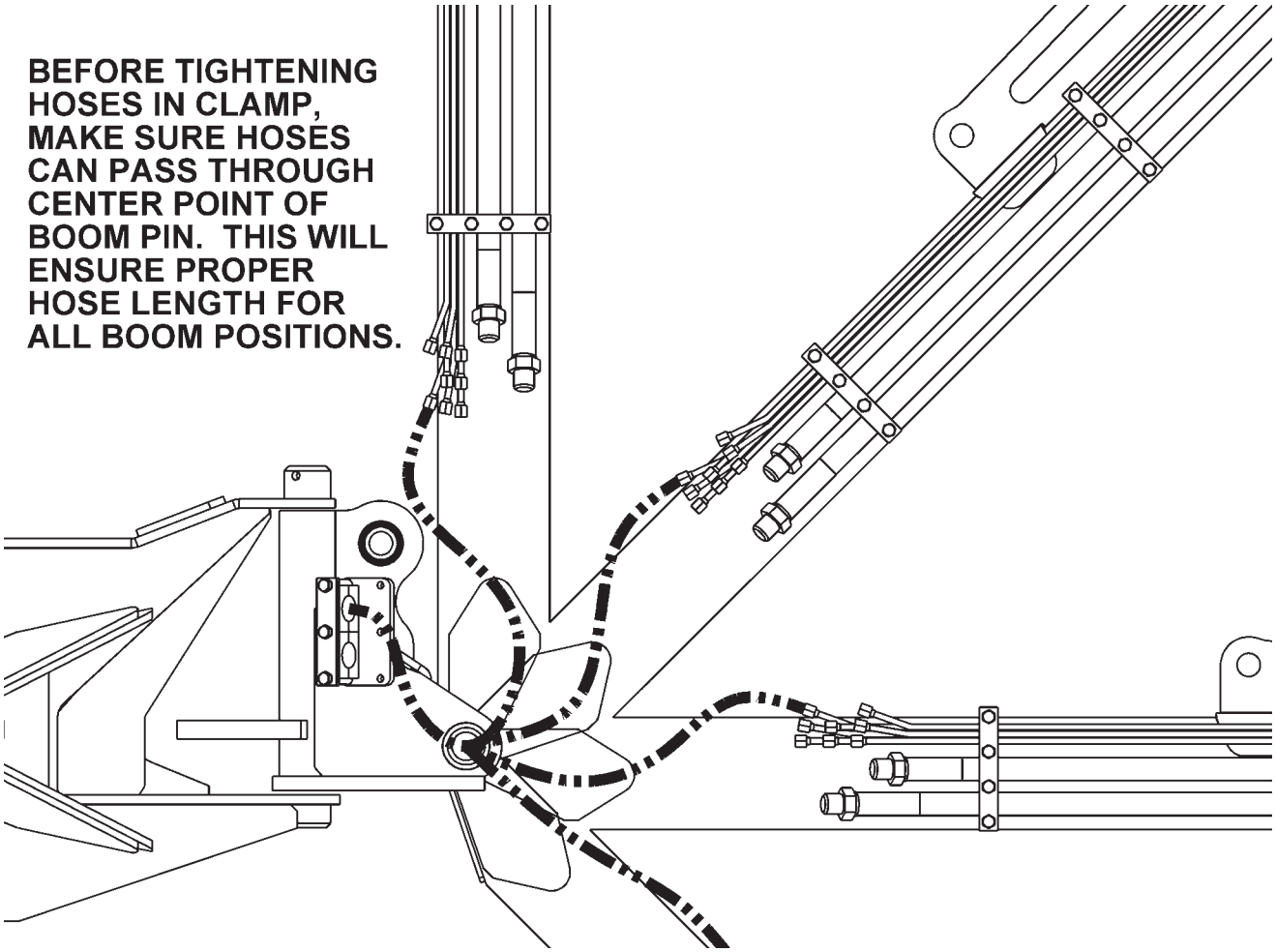
HOSE ROUTING

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 in order to prevent hydraulic failure Make sure the hoses do not pinch or stretch as boom moves. Measure TWICE, check TWICE then proceed with caution.



ITEM	DESCRIPTION	PART NUMBER
1	PRESSURE HOSE	SEE PARTS SECTION
2	RETURN HOSE	SEE PARTS SECTION
3	1/4" HOSES	SEE PARTS SECTION
4	CLAMP KIT	06505085
5	HOSE WRAP	06505021

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



Arrange the hoses in the clamp that attaches to the boom mounting bracket as shown above, with the 1” motor hoses closest to the bracket and the return hose closest to the boom arm. Pull the hoses snug from the swivel to the mounting bracket clamps, when main boom is still forward, and tighten the hoses in the clamp.

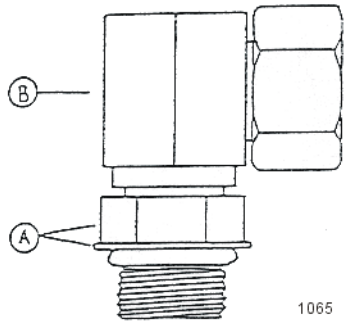
Make sure the 1” motor hoses do not kink as the boom arm is moved into the stowing position. If this happens the motor hoses will have to be shortened, because there is too much hose between clamps.

HOSE COVERING

Secure hoses together with zip ties wherever loose. Wrap the hoses between the main boom and secondary boom with the yellow hose cover, secure with black string 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 clear hose wrap. Cover the valve, valve fittings with the yellow hose cover and secure with black string provided.

INSTALLING O-RING FITTINGS

Installing straight, 45 degree and 90 degree O-ring fittings requires that the O-ring, washer and nut (A) be up against the swivel body (B). Insert the swivel and turn in until the swivel is pointed in the right 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.



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.

POLYCARBONATE SAFETY WINDOWS

NOTE: Installing a boom mower requires that all of the right side windows be replaced with polycarbonate. Secure the windows after all of the cab wiring and mounting is done; and before the boom arm is mounted. Locate all the hardware in the Parts Section on the Safety Screen page, for the correct hardware to used in the installation.

Remove the right rear window and the right door from the cab. Remove the hardware from both and save the hardware for use later . W rap the trim seal around the polycarbonate door and cut the trim to match the other end so the door will seal. Wrap the rear window with the rest of the seal, in the same way as the door . Apply the adhesive in the groove of the trim seal where the polycarbonate sits and apply the trim seal to the polycarbonate. Use the existing hardware to install the polycarbonate door and rear window.

Place the supplied support brackets into position. To place the fender bracket on the door, use the hardware shown in the p arts section to att ach the bracket to the polycarbonate. Use the bracket as a template to drill a hole in the fender of the tractor Then use the Tiger hardware to secure the bracket to the fender . For the bottom bracket drill two 3/8” holes through the door frame. Use the hardware shown in the parts book to secure the brackets into place.

FINAL PREPARATION FOR OPERATION

Place operators 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 section of this book. The decals are to remain in good condition as a reminder to the operator, and should be replaced if damaged.

Finally, 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.

WARNING!

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, 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 operators 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 operators 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 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!

OPERATION SECTION

OPERATION

Safety is of primary importance to the owner / operator and to the manufacturer. 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. Many of the messages will be repeated throughout the manual. The owner / operator / dealer should know these Safety Messages before assembly and be aware of the hazards of operating this mower during assembly, use, and maintenance.

The **Safety Alert Symbol** combined with a signal word, as seen below, is intended to warn the owner / operator of impending hazards and the degree of injury possible during operation.

Indicates an imminently hazardous situation that, if not avoided, WILLresult 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.

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

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

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

OPERATION

CAUTION!

Before any operation of tractor and mower, the user should read and understand the safety and operating instructions for both the tractor and the mower. The user should also be familiar with the location and functions of the units instruments and controls. Being familiar with the machine and it's controls will increase efficiency and reduce possibility of serious injury or damage to the unit. The operator should work slowly and carefully until he feels comfortable with the machine. Speed and skill will be attained much easier if the necessary time is spent to familiarize yourself with the machine and its operations.

Since tractor makes and models vary, we recommend reading and following the operators manual provided by the manufacturer pertaining to your particular unit.

WARNING!

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

STARTING TRACTOR AND MOWER

Check the operators manual received from the tractor manufacturer, for their recommendation and procedures pertaining to your particular make and model.

WARNING!

When rotating parts are in motion, serious injury may occur if caution is not used or danger is not recognized. Never allow bystanders within **300 feet** of the machine when mower is in operation.

1000

Be sure the ball valves on the mower hydraulic tank are **OPEN** before starting the tractor. Serious damage to the hydraulic system can occur if the valves are not open.

WARNING!

Check to make sure mower switch is in the "**OFF"** position. The unit is designed not to start if the switch is in the "on" position. If tractor starts with switch on, turn off tractor and contact your local Tiger dealership for assistance.

Start the tractor and allow the instruments to stabilize. Without starting the mower, practice positioning the boom and deck. Remember, speed and skill will be attained easier if the necessary time is spent familiarizing yourself with the machine and its operations. When you feel comfortable at controlling the position of the mower, return the mower to the travel position, and transport the mower to the desired mowing location.

If mowing for the first time with a Tiger Boom Mower, we recommend choosing a ditch or area relatively flat with a minimum of sign posts, guard rails, etc. As always, you should inspect the area for other objects that can cause potential hazards and removing them before mowing.

The Mower Control switch turns the mower “ON” and “OFF. This switch is to be in the “OFF” position to start the tractor. If the switch is “ON” and the tractor ignition switch is turned to “ON” the red “mower run” indicator light will come on. However, the tractor will not start with the Mower Control switch in the “ON” position. Upon starting tractor the “mower run” indicator light may flash briefly, and may flash briefly again when tractor is shut down.

WARNING!

If tractor starts with switch on, turn off tractor and contact your local Tiger dealership for assistance.

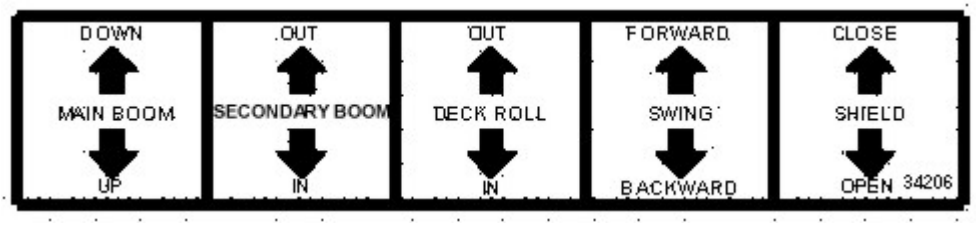
NOTE: The tractor ignition switch and the Master Switch must be “ON” ” to allow movement of the mower deck.

SWITCHBOX

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

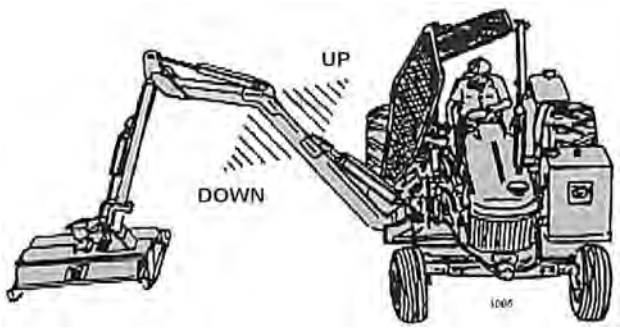
CABLE CONTROLLED MOWERS

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

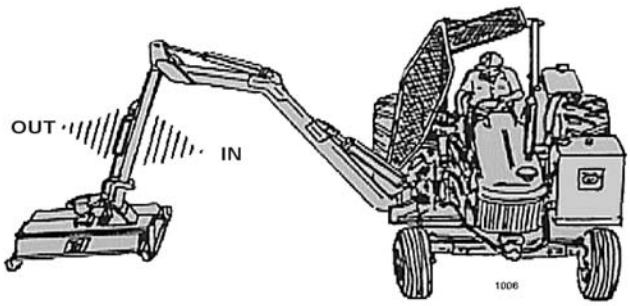


The main control valve on the Tiger Boom Mower has five sections with t apered spools, located near the right side of the steering wheel. The malfunction of a section of the valve does not necessitate the replacement of the entire “bank”, only the faulty section. Each section of the valve controls a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

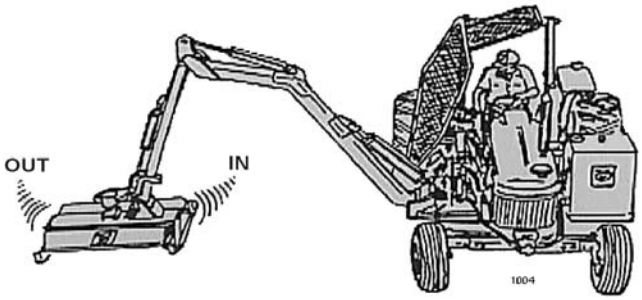
LEVER #1
MAIN BOOM



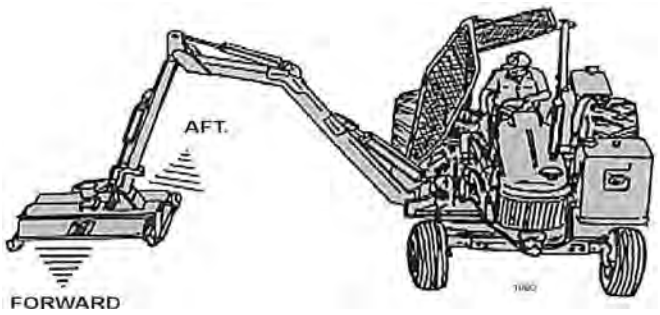
LEVER #2
SECONDARY BOOM



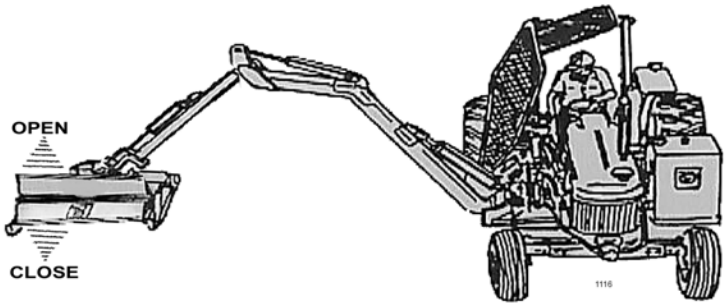
LEVER #3
DECK ROLL



LEVER #4
BOOM SWIVEL



LEVER # 5
BOOM SHIELD



DANFOSS JOYSTICK CONTROLLED MOWERS

WARNING!

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

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

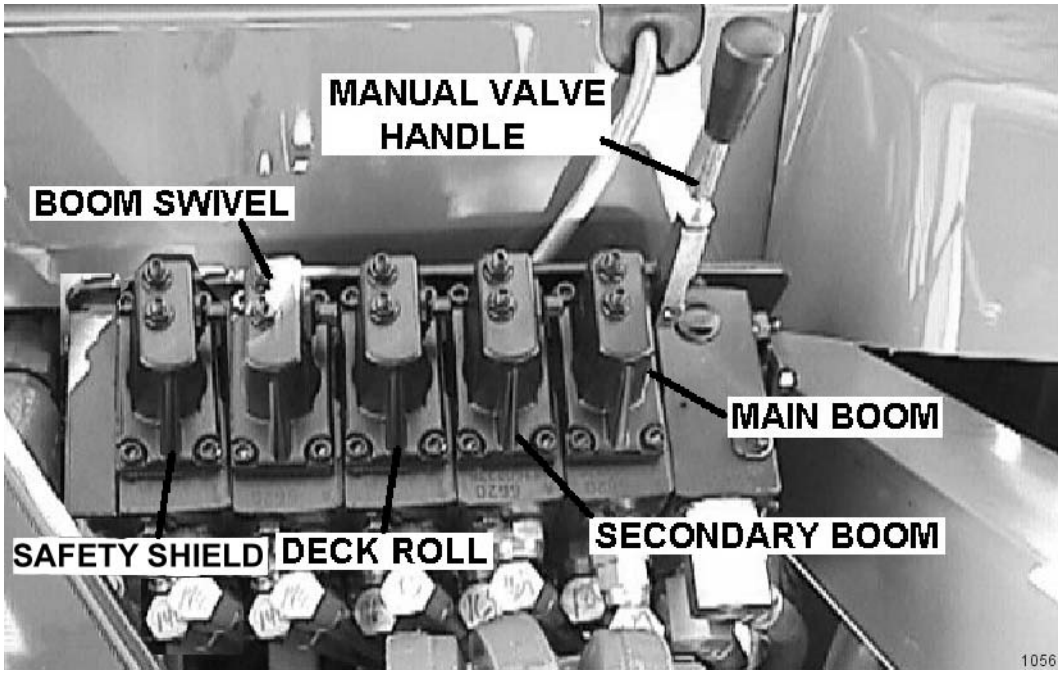
CAUTION!

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

CAUTION!

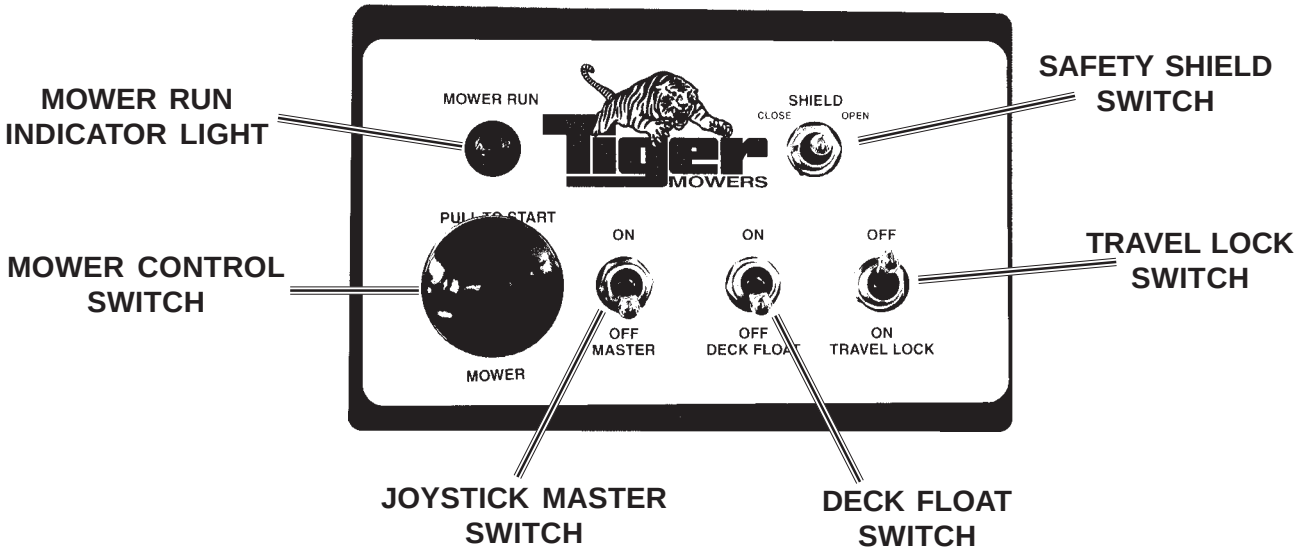
DO NOT attempt to operate the valve manually for mowing operations!

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



DANFOSS SWITCH BOX AND JOYSTICK CONTROL

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



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

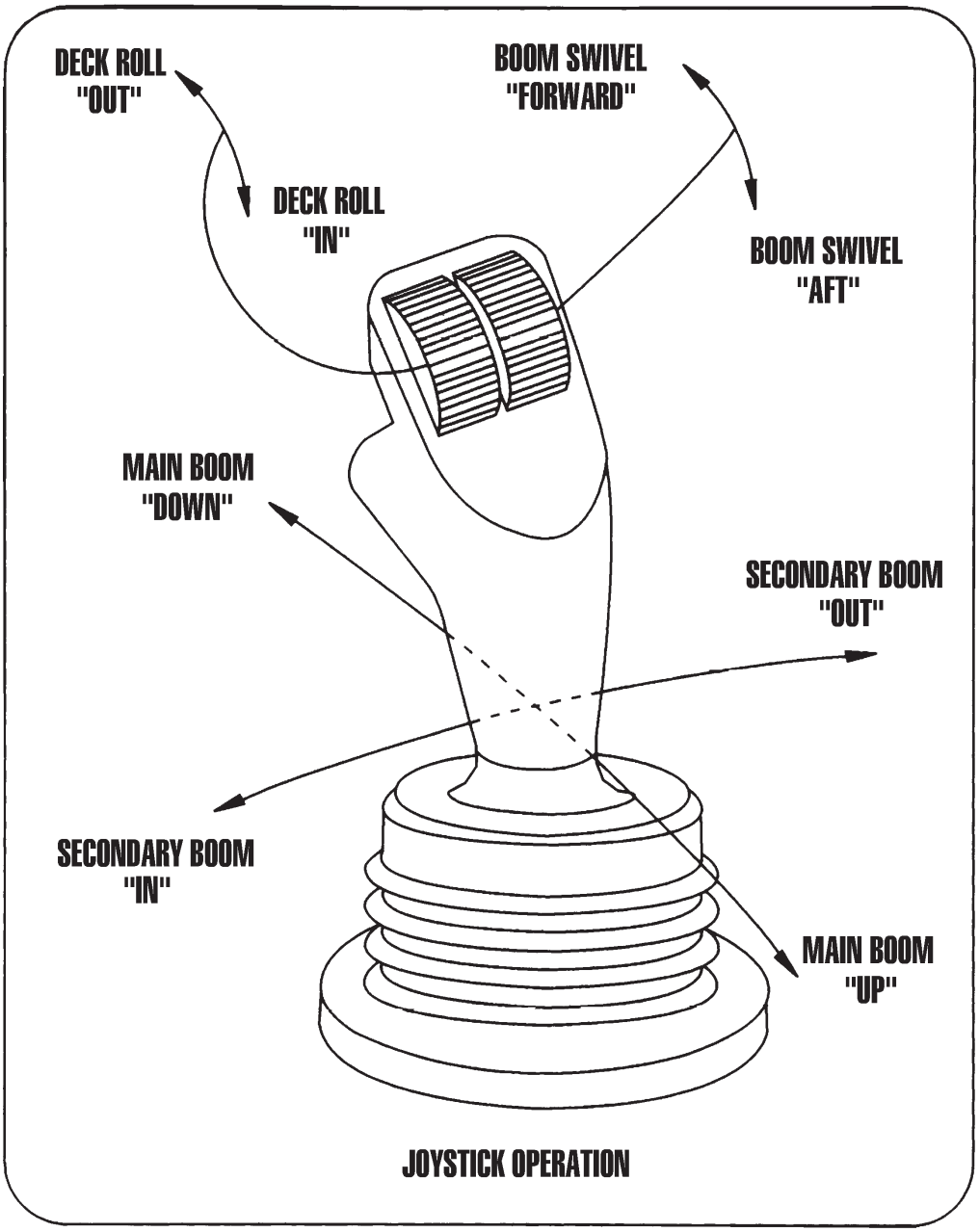
⚠ DANGER

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.

JOYSTICK CONTROL



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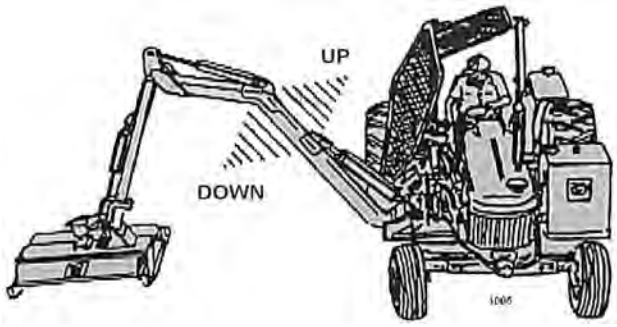
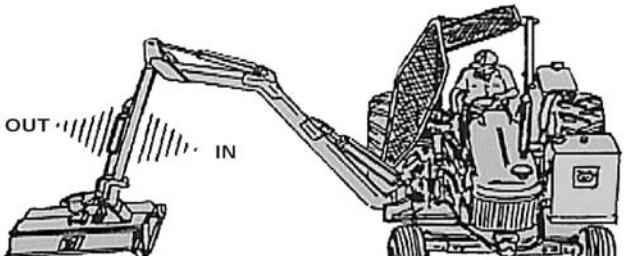
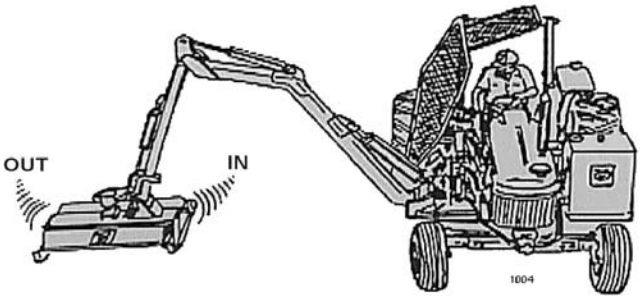
JOYSTICK FWD / BACK
MOVES MAIN BOOM



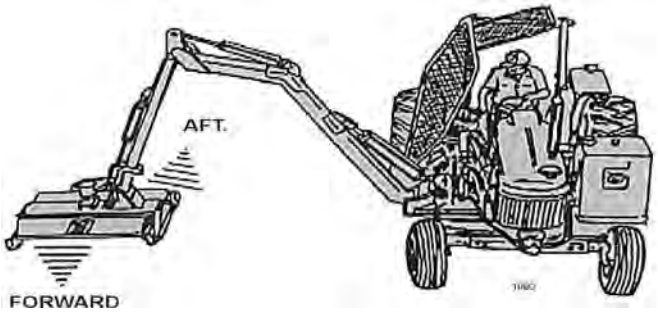
JOYSTICK LEFT / RIGHT
MOVES SECONDARY BOOM



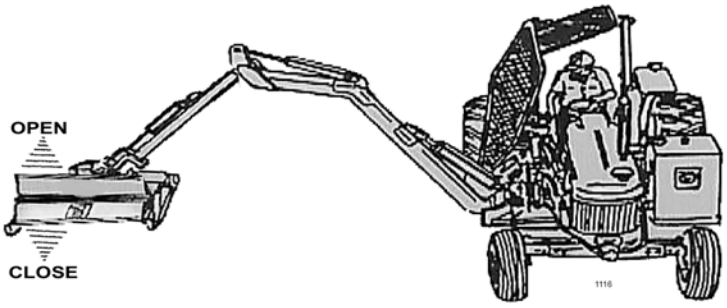
LEFT JOYSTICK ROLLER
MOVES DECK ROLL



RIGHT JOYSTICK ROLLER
MOVES BOOM SWIVEL



SHIELD SWITCH
(ON SWITCH BOX)
OPERATES SAFETY SHIELD



MOWER OPERATION

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

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

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

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

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

50” BOOM ROTARY

The 50” boom rotary mower was designed for cutting brush and foliage up to 6 inches in diameter or multiple branches that have a total cross section area equivalent to one 6 inch branch.

During mower operation, the hand throttle must be used to maintain engine speed at1900 – 2200 R.P.M. This prevents radical changes in mower spindle speeds, reducing the possibility of cutter assembly damage.

The horizontal positioning action of the boom is designed to position the cutting head and provide a limited pressure relief when excessive pressure is applied to the boom. Do not force the cutting head into heavy branches or stumps. Damage to the unit may result.

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

CAUTION!

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

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

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

CAUTION!

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

CAUTION!

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

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

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

WARNING!

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

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

Begin each pass at the top side of the trees and work down with each consecutive pass. Use a low speed to allow the cutting blades time to mulch as well as cut the foliage. When the initial pass has been made, disengage the mower, and return boom to a safe travel position. Return to starting point and make next pass, etc..

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

50” BOOM FLAIL

The 50” boom flail mower was designed for cutting brush and foliage up to 2 inches in diameter or multiple branches that have a total cross section area equivalent to one 2 inch branch. Cutting multiple limbs at the same time may overload the mower causing it to slow down or stall completely. Regardless of the size of material being cut, the cutter shaft speed must be maintained. To ensure that the cutter shaft is running at maximum speed, run the tractor at full throttle during mowing operations. If the cutter shaft slows to the point that the knives are folding back, move the mower head away from the foliage and allow the cutter shaft to regain full speed.

Operating the mower in a manner that allows the knives to continually fold back or allowing knife lugs to contact foliage will cause permanent damage to the cutter shaft drum, knives, and knife attachment parts.

The 50” boom flail cutter shaft is designed for standard rotation (same rotation as the tractor wheels during forward travel). **Never operate the cutter shaft in reverse rotation.** Operating this mower in reverse rotation may cause objects to be thrown out the front of the mower head.

The 50” boom flail equipped with free swinging brush knives is intended for brush cutting only. Cutting grass is not recommended.

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

63” BOOM FLAIL

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

Operating the mower in a manner that allows the knives to contact the drum will cause permanent damage to the cutter shaft drum, knives, and knife attachment parts.

The 63" boom flail cutter shaft is designed for standard rotation (same rotation as the tractor wheels during forward travel). **Never operate the cutter shaft in reverse rotation.** Operating this mower in reverse rotation may cause objects to be thrown out the front of the mower head.

TRANSPORTING MOWER

Transporting under the units own power:

When transporting between job sites or between cutting passes, the following procedure should be followed: Shut off the power to the cutting head and allow all motion to come to a complete stop. Raise the boom to it's highest position, being cautious of overhead obstructions such as highline wires. Rotate the deck until stop bolt touches secondary boom. Swing boom to a 90 ° angle from tractor. Retract secondary boom until inner skid shoe of the deck just touches the main boom. Check to be sure deck has ample clearance from front and rear tires. The unit is now in position for self transportation.

Transporting unit by flatbed trailer:

Park flatbed on level area. Drive tractor onto center of flatbed to avoid uneven distribution of weight and staying within local width restrictions. If boom is over local height restrictions, you will need to extend booms outward enough to clear front of tractor when boom is pivoted forward. Pivot mower deck to it's extreme outward position and deck cylinder is fully retracted. Lower boom until deck is slightly above trailer bed. Remove cylinder pin from outer end of the boom swivel cylinder.

CAUTION: If trailer is not perfectly level, the boom will tend to swing towards the lower side. Have other personnel ready to control its swinging motion when cylinder pin is removed.

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

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

INSPECTION SHEETS

BOOM MOWER PRE-OPERATION Inspection

Mower ID#_____ Make_____

Date:_____ Shift_____

WARNING!

Before conducting the inspection, make sure the Tractor engine is off, all rotation has stop and the tractor is in the Park with the parking brake engaged. The Mower head is resting on the ground (or is securely blocked up and supported) and all hydraulic pressure has been relieved.

Item	Condition at Start of Shift	Specific Comments if not O.K.
The Operator's Manual is in the Canister on the mower		
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 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 Mower shields are in place and in good condition		
The Skid shoes are in good condition & tight		
There are no cracks or holes in mower deck		
The Hydraulic motor mounting bolts are tight		
The mower head spindle housing is tight and lubricated		

Operators Signature:_____

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

TRACTOR PRE-OPERATION Inspection

Tractor ID#_____ Make_____

Date:_____ Shift_____

WARNING!

Before conducting the inspection, make sure the Tractor engine is off, all rotation has stop and the tractor is in the Park with the parking brake engaged. The Mower head is resting on the ground (or is securely blocked up and supported) and all hydraulic pressure has been relieved.

Item	Condition at Start of Shift	Specific Comments if not O.K.
The Flashing lights function properly		
The SMV Sign is clean and visible		
The Tires are in good condition with proper pressure		
The Wheel Lug bolts are tight		
The tractor Brakes are in good condition		
The Steering linkage is in good condition		
There are no visible Oil Leaks		
The Hydraulic controls function properly		
The ROPS or ROPS 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		

Operators Signature:_____

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

FRONT END LOADER PRE-OPERATION Inspection

Mower ID#_____ Make_____

Date:_____ Shift_____

WARNING!

Before conducting the inspection, make sure the Tractor engine is off, all rotation has stop and the tractor is in the Park with the parking brake engaged. The Loader is resting on the ground (or is securely blocked up and supported) and all hydraulic pressure has been relieved.

Item	Condition at Start of Shift	Specific Comments if not O.K.
The Operator's Manual is in the Canister on the mower		
All Safety Decals are in place and legible		
The Mounting frame bolts are in place and tight		
There are no cracks in Draftbeam or Yolk		
The Draftbeam/Yolk connection bolts & pins are tight		
There are no cracks or holes in mower deck		
The Hydraulic motor mounting bolts are tight		
The mower head spindle housing is tight and lubricated		
There mower deck is clear of cut grass and debris		
The Skid shoes are in good condition & tight		
Chain Guards/Deflectors are in place & in good condition		
Blade carrier retaining nut is tight		
Blades are not chipped, cracked or bent		
Blade bolts are tight		
Transport locks are in good condition		
There are no leaking or damaged hoses		
There is no evidence of Hydraulic leaks		
The Hydraulic Oil level is full		
The Hydraulic Cylinders pins are tight		
The Hydraulic Pump hose connections are tight		
The Hydraulic Valve hose connections are tight		
The Hydraulic Valve controls function properly		
Wheel lug nuts are tight		

Operators Signature:_____

DO NOT OPERATE an UNSAFE TRACTOR or FRONT END LOADER

TRACTOR PRE-OPERATION Inspection

Tractor ID#_____ Make_____

Date:_____ Shift_____

WARNING!

Before conducting the inspection, make sure the Tractor engine is off, all rotation has stop and the tractor is in the Park with the parking brake engaged. The Loader is resting on the ground (or is securely blocked up and supported) and all hydraulic pressure has been relieved.

Item	Condition at Start of Shift	Specific Comments if not O.K.
The Flashing lights function properly		
The SMV Sign is clean and visible		
The Tires are in good condition with proper pressure		
The Wheel Lug bolts are tight		
The Tractor Brakes are in good condition		
The Steering linkage is in good condition		
There are no visible Oil Leaks		
The Hydraulic controls function properly		
The ROPS or ROPS Cab is in good condition		
The Seatbelt is in place and in good condition		
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		

Operators Signature:_____

DO NOT OPERATE an UNSAFE TRACTOR or FRONT END LOADER

MAINTENANCE SECTION

MAINTENANCE

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 luke warm 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.

WARNING!

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 pressure is relieved whenever disconnecting lines. 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, which ever comes first.

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

DANGER!

Never work under the Implement, the 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)

WARNING!

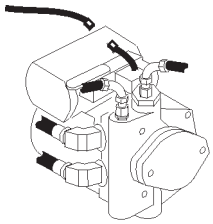
Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. (SG-8)

WARNING!

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

DANGER!

Always disconnect the wire leads from the mower 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)



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.

This symbol indicates a point that needs to be greased at an interval noted in the section below. 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 maint. section
Pump Drive Shaft Coupler	Check and Lube	Insure drive shaft end play
Crankshaft Adapter	Check rubber grommets	Replace grommets if damaged or missing
Pivot Points	Lubricate	Inject grease until it appears at ends
Hydraulic Fittings Do Not use hands to	Check for leaks	Tighten when needed. check for leaks, see maint. Precautions
Knives	Check	Inspect for missing or damaged knives, change as needed
Spindle mounting bolts (spindle to deck)	Check	Torque to 331 ft. lbs. lubricated Torque to 357 ft. lbs. dry
Knife mounting bolts (knife to disk or knife to blade bar)	Check lubricated	Re-torque to 800 ft. lbs.
Disk / blade bar mounting blolts (disk 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 perfluid recommendations
Rear Flail Drive (if applicable) Bearing Flange and Shaft Coupler	Lubricate	Grease as instructed in detailed maint. section
Cutter Shaft and Ground Roller	Lubricate	Grease as instructed in detailed maint. section.

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

Hydraulic Fluid Level	Check	Add as needed
Hyd. Tank Breather	Clean / Check / Replace	Clean or replace Element as required

Rear Tire Type	Max P.S.I.
480/80R38	29
18.4-34	26
18.4-38	26

YEARLY OR EVERY 500 HOURS

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

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 cutter shaft. Replace if needed.
		2b. Check for wire, rope, etc. entangled in cutter assembly
Mower will not lift	1. Hyd. Fluid low	1. Check and refill Hyd Fluid
	2. Leaks in line	2. Tighten or replace fittings and hoses
	3. Faulty relief valve	3. Check pressure in line. Line pressure in Control Valve should be at least 2500 P.S.I.
	4. Kinked or blocked	4. Clean or replace lines
	5. Faulty cylinder	5. Inspect, repair or replace cylinder

SYMPTOMS	CAUSE	REMEDY
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 contaminates and scratches. Clean parts or replace if scratched.
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 until flat washer is flush with top of guide.
Motor 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 contaminates and scratches. Clean parts or replace if scratched.
	2. Suction lines obstructed	2. Check for kinkes 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.

TORQUE SPECIFICATIONS

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	966	1095	1288	1132	1283	1510
1 1/4	7	375	450	500	840	952	1121	1363	1545	1817	1597	1810	2130
1 1/2	6	652	783	869	1462	1657	1950	2371	2688	3162	2779	3150	3706
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.
Torque values calculated from formula T=KDF, where

K = 0.15 for "lubricated" conditions
K = 0.17 for zinc plated and dry conditions
K = 0.20 for plain and dry conditions

D = Nominal Diameter
F = Clamp Load

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 plain
		K = 0.15 (ft-lbs)	K = 0.17 (ft-lbs)	K = 0.20 (ft-lbs)	K = 0.15 (ft-lbs)	K = 0.17 (ft-lbs)	K = 0.20 (ft-lbs)	K = 0.15 (ft-lbs)	K = 0.17 (ft-lbs)	K = 0.20 (ft-lbs)	K = 0.15 (ft-lbs)	K = 0.20 (ft-lbs)
3	0.5	0.28	0.32	0.38	0.73	0.82	0.97	1.0	1.2	1.4	1.2	1.6
3.5	0.6	0.44	0.50	0.59	1.1	1.3	1.5	1.6	1.9	2.2	1.9	2.5
4	0.7	0.66	0.74	0.87	1.7	1.9	2.3	2.4	2.7	3.2	2.8	3.8
5	0.8	1.3	1.5	1.8	3.4	3.9	4.5	4.9	5.5	6.5	5.7	7.6
6	1	2.3	2.6	3.0	5.8	6.6	7.7	8.3	9.4	11	9.7	13
6	1.25	2.1	2.3	2.7	5.3	6.0	7.0	7.6	8.6	10	8.8	12
7	1	3.8	4.3	5.0	9.7	11	13	14	16	19	16	22
8	1	5.9	6.6	7.8	15	17	20	22	24	29	25	34
8	1.25	5.5	6.2	7.3	14	16	19	20	23	27	24	31
10	1.25	11	13	15	29	33	39	42	48	56	49	66
10	1.5	11	12	14	28	32	37	40	45	53	47	62
12	1.25	21	23	28	53	60	71	76	86	101	89	119
12	1.5	20	22	26	51	58	68	73	82	97	85	113
12	1.75	19	21	25	49	55	65	70	79	93	81	108
14	1.25	26	29	34	66	75	89	95	108	127	111	148
14	1.5	28	32	37	72	82	96	103	117	138	121	161
14	2	30	34	40	78	88	104	111	126	148	130	173
16	1.5	50	57	67	129	146	171	184	208	245	215	287
16	2	47	53	62	121	137	161	173	196	230	202	269
18	1.5	73	82	97	187	212	249	268	303	357	313	417
18	2.5	65	73	86	167	189	222	239	270	318	279	372
20	2.5	91	104	122	236	267	314	337	382	449	394	525

Clamp load calculated as 75% of the proof load for specified bolts.
All torque values are listed in foot-pounds
Torque values calculated from formula T=KDF, where

K = 0.15 for "lubricated" conditions
K = 0.17 for zinc plated, dry conditions
K = 0.20 for plain and dry conditions

D = Nominal Diameter
F = Clamp Load

* These are intended to be general specifications. See tractor operators or service manual for exact specifications for your unit.

LUBRICATION RECOMMENDATIONS

Description	Application	General Specification	Recomended Mobil Lubricant
Tractor Hydraulics	Reservoir	JD-20C MF M1135,M1141 FNHM2C134D (FNH201)	Mobilfluid 424
Mower Hydraulics	Reservoir		
Cold Temperatures 0 F Start-Up		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 2 - 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 NLGI 2 - 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 2 - ISO 320	Mobilgrease CM-S
Deck Spindle (Rotary)	Grease Gun	Tiger Spindle Lubricant part number 06540000	Mobilith SHC 220

POLYCARBONATE CARE & MAINTENANCE

The proprietary 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 works well for lifting off old weathered paints.

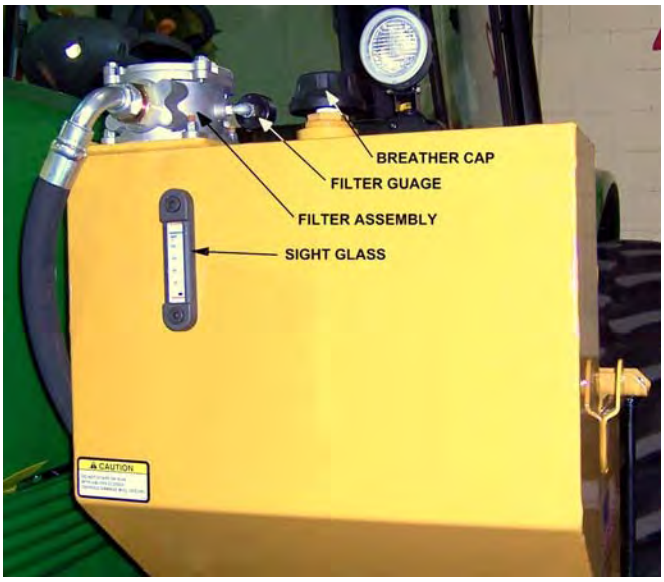
To remove labels, stickers, etc., the use of kerosene or VM&P naphtha are generally effective. When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the adhesive and promote removal.

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

RECOMMENDED FILLING INSTRUCTIONS FOR HYDRAULIC RESERVIORS

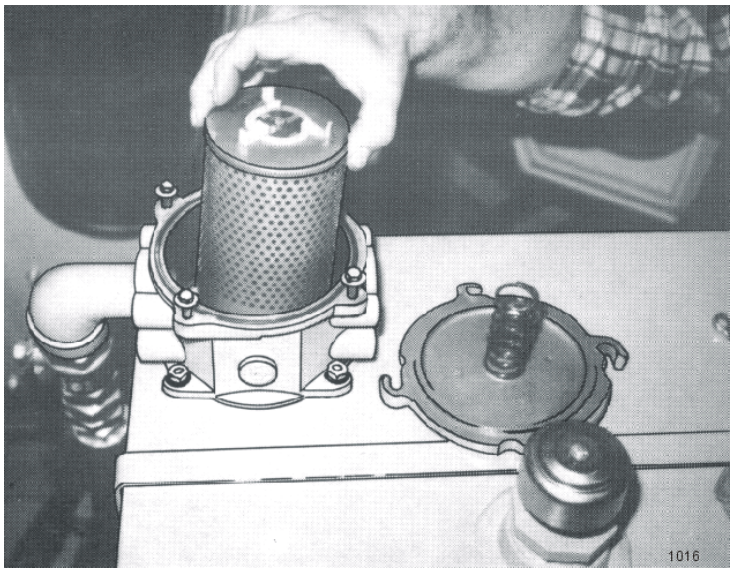
When filling or checking the oil level, the unit should be parked on a level surface, shut "**OFF**", and allowed sufficient time to cool to ambient temperature. Use caution when removing the pressurized breather. Do not place face over opening when removing the breather.

The reservior should be filled to the top of the lower sight glass on the side of the tank OR check the sight guage for the appropriate level. Do not over-fill. The reservior has been over-filled when oil is visible in the upper sight glass. If tank has too much oil, the excess may be expelled through the pressurized breather.



REPLACEING 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.

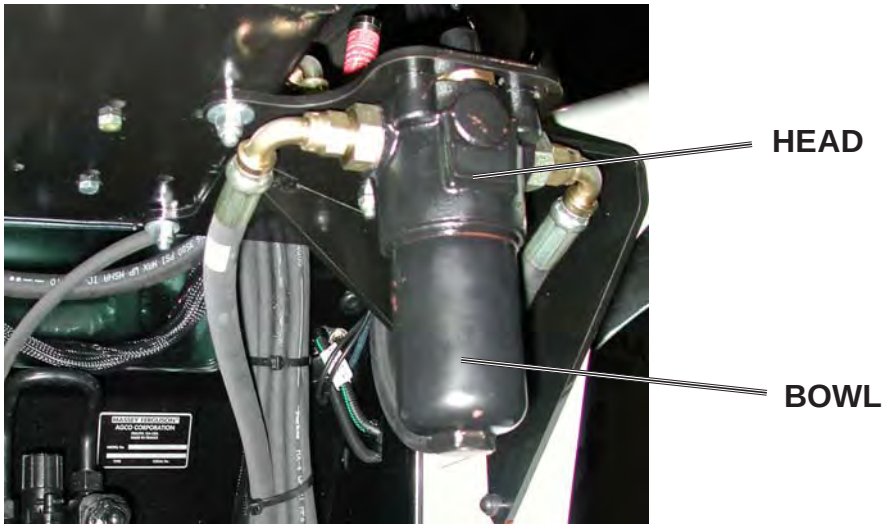


DETAILED MAINTENANCE

FOR TRACTORS EQUIPPED WITH A HIGH PRESSURE HYDRAULIC FILTER

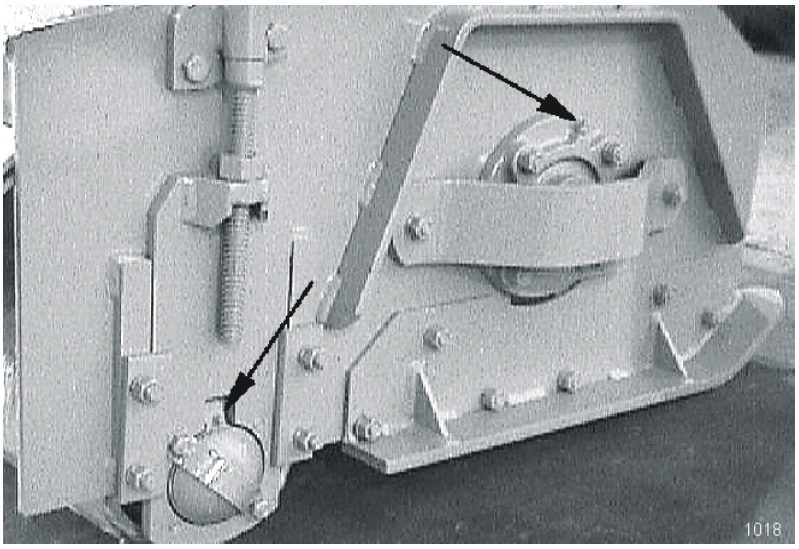
REPLACEING FILTER ELEMENT:

Assure system has been shut down and de-pressurized. Locate High Pressure Filter housing. Confirm that the element that is about to be installed matches the element p/n on the filter model tag. Example: V3.0510-06 (world line 100, HD049 model) Locate the bottom of the High Pressure Bowl, and use the appropriate spanner wrench –or- ratchet that matches the hex pattern. Using the spanner wrench -or- ratchet and turning in a counterclockwise rotation, (looking at the bottom of the bowl) remove the bowl from the head, The first couple rotations will seam tight as the o-ring passes the sealing flats, once the o-ring has cleared the sealing flats the bowl should spin freely. Taking care not to drop the bowl, finish removing the bowl from the head. WARNING: bowl will be full of oil! Pour the oil from the bowl into a container, this oil should be considered contaminated due to the flow direction through the element is outside ~ in. Clean the inside of the bowl if “dirt” is present. Remove the old element from the filter head by pulling with a rotation motion. Dispose of the used element properly. Remove the new element from the packaging. Using your finger, dab and lubricate the o-ring in the top of the new element. Install the new element into and on the mounting boss with in the head; assure that the element is fully seated on the boss. Clean and inspect the o-ring that is affixed in the bowl, lubricate with oil. Using a clockwise rotation, screw the bowl back into the head, assuring that the bowl has not been cross threaded into the head. Continue “tighten” the bowl into the head, using the spanner wrench –or- ratchet, the rotation of the bowl will become tighter once the o-ring engages the sealing flats. Once the bowl has been fully inserted into the head, and the o-ring has reached the sealing flats, the bowl can no longer be “tightened” and bottoms out. Once the bowl has bottomed out, “back-off” the bowl by 1/6 turn, this assures that the o-ring is seated properly with in the sealing flats. Element change out and re-assembly is now complete. Start the machine and inspect the filter area checking that there is no oil leaking from the filter assembly. This is first to be done at 50 hours of operation, then yearly(500 hours) or when indicated by restriction indicator



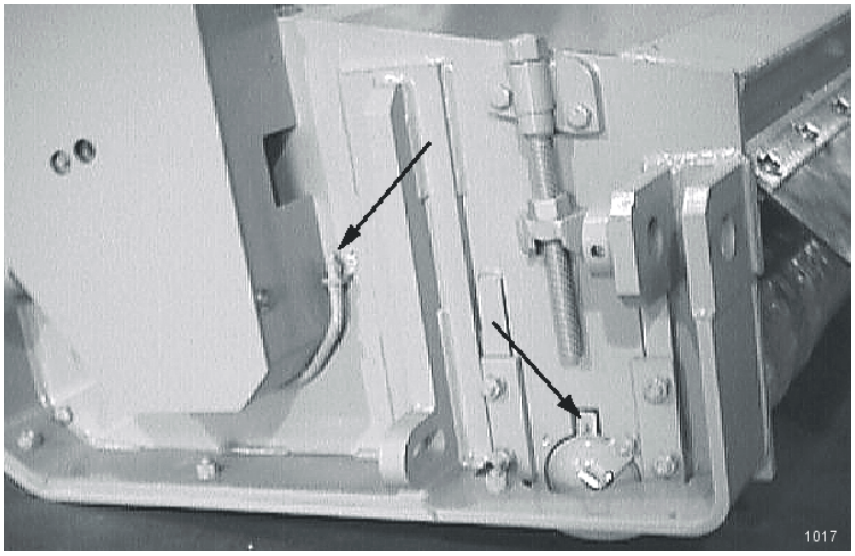
GREASING CUTTER SHAFT – FLAIL MOWERS

Locate grease zerks on each end of cutter shaft(s), these are located on the bearing cover. Normal conditions require one or two pump 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.**



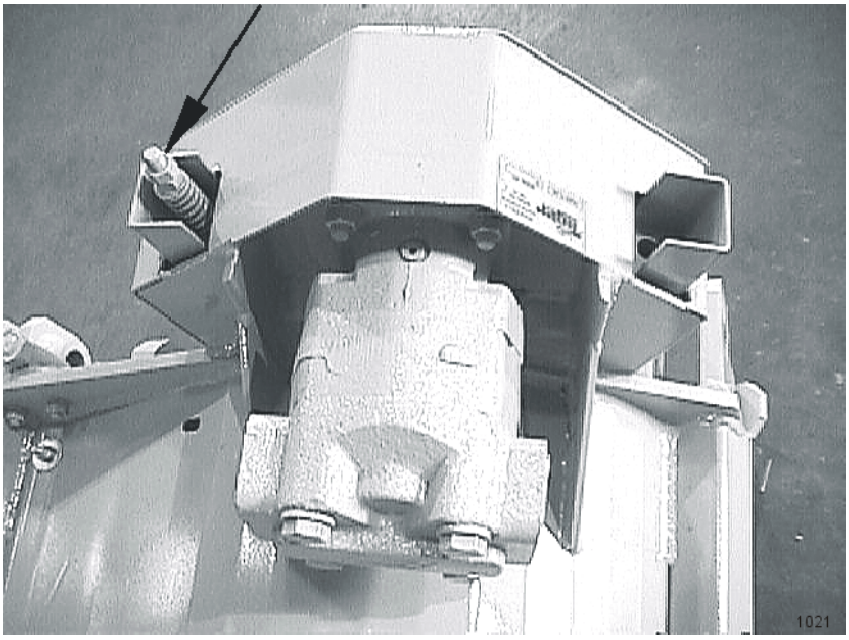
GREASING GROUND ROLLER SHAFT – FLAIL

Locate grease zerks on each end of roller tube at lower rear of head. Normal conditions require one or two pump 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

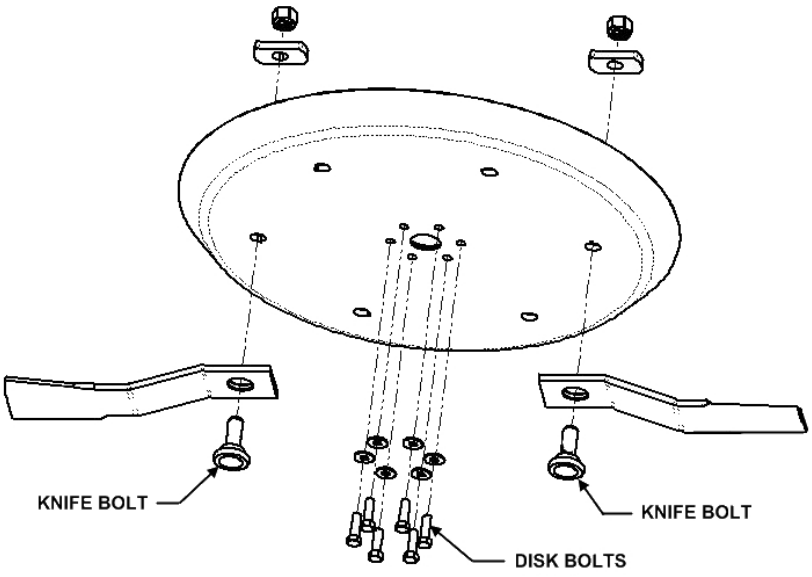
To adjust belt tension or replace belt s on flail cutter head, remove four bolt s that secure belt cover and remove cover. The hex nuts shown below can be adjusted to increase / decrease the belt tension as needed. (NOTE: Location of adjustment nuts may vary on flail cutter heads.) **Be sure to replace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



TIGHTENING KNIFE BOLTS AND DISK BOLTS:

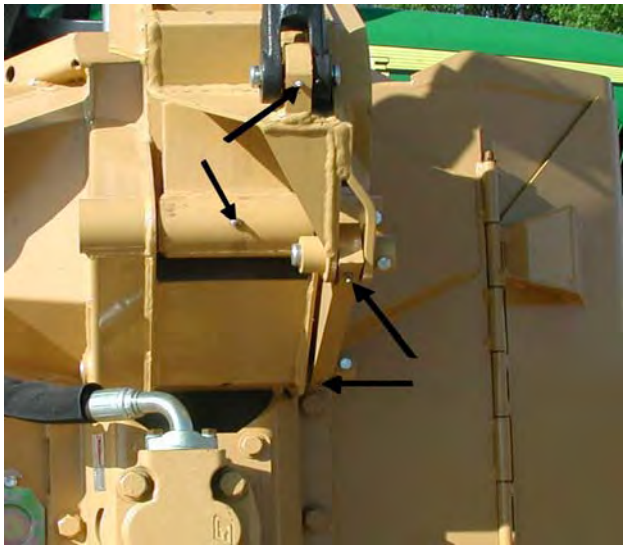
After every 8 hours of operation or daily, the Knife Bolts and Disk Bolts should be tightened as follows:

Knife mounting bolts (2ea) torque to 800 ft. lbs. lubricated
Disk mounting bolts (6ea) torque to 204 ft. lbs. dry or 180 ft. lbs. lubricated (loctite 271)



GREASING POINTS ON BOOM AND PIVOT

Locate grease zerks (8) on deck pivot assembly , (2) on deck end of secondary boom, (2) at main / secondary boom joint, and (2) 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

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.

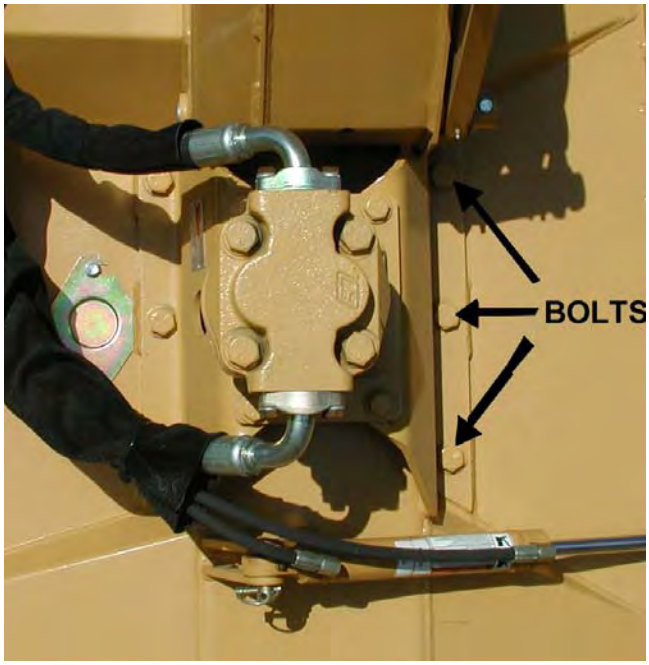
GREASING SPINDLE

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.

TIGHTENING SPINDLE BOLTS

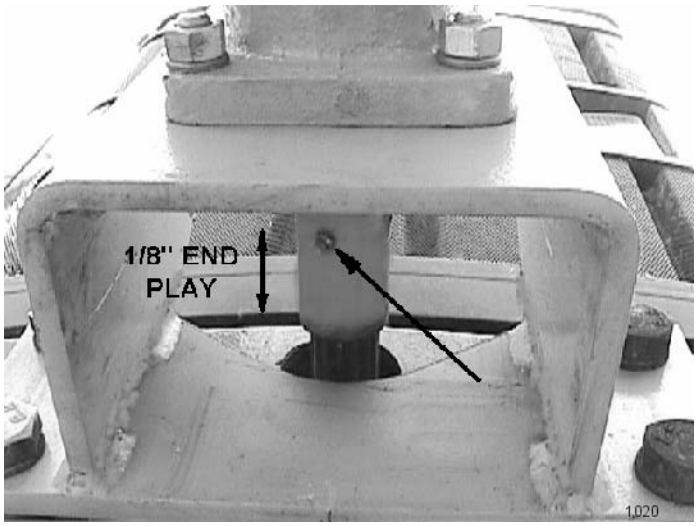
The spindle mounting bolts should be checked and retorqued daily or every 8 hours of service. Torque the (6) bolts shown below as follows:

Torque to 315 ft. lbs. lubricated (loctite 271)
Torque to 357 ft. lbs. dry



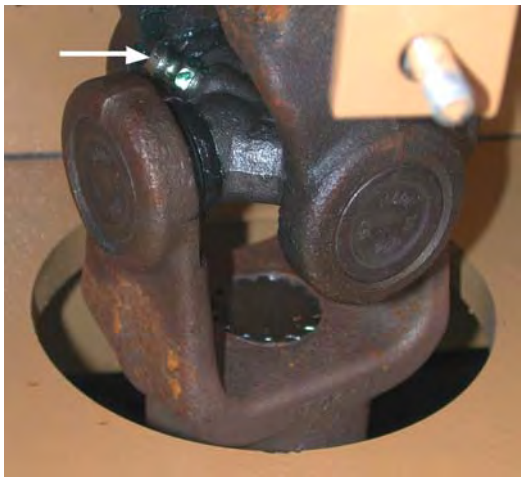
GREASING PUMP DRIVE SHAFT COUPLER

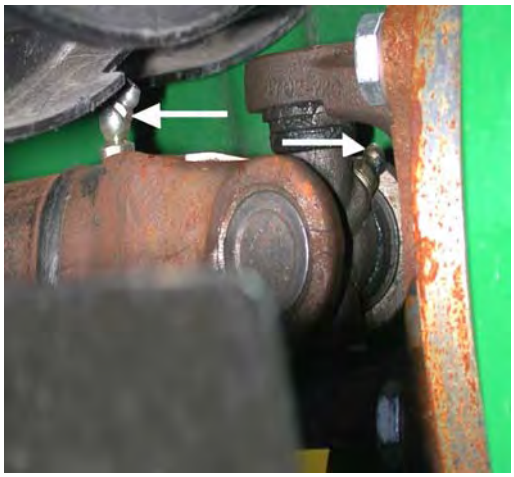
With engine stopped, ensure drive shaft alignment by grasping coupler and sliding back and forth. Coupler should slide freely with approximately 1/8” of end play. If coupler does not slide freely , inspect for loose pump mount bolt s, or damaged or loose crank shaf t adapter. Inject Lithium-Complex Extreme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



DRIVE SHAFT YOKE, U-JOINT & STUB SHAFT

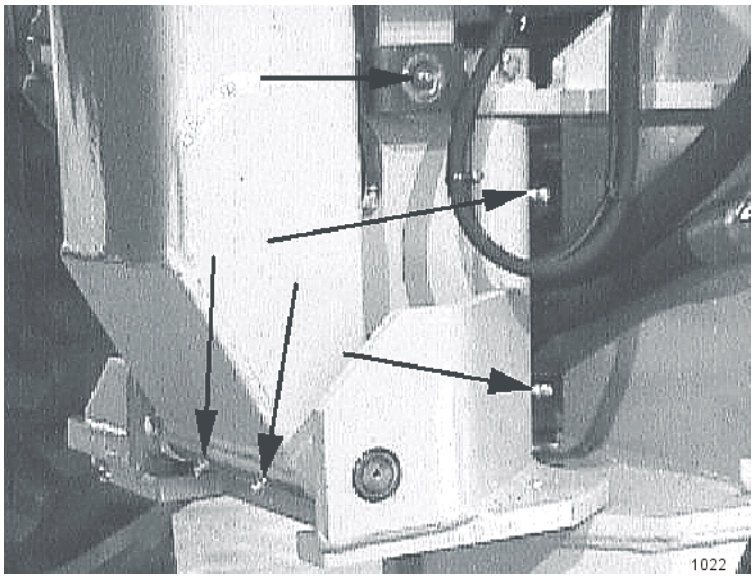
With engine stopped, inject Lithium-Complex extreme pressure grease conforming to NLGI2-ISO 320 specifications into universal joints and slip yoke untill grease appears at the seal. Grease them daily or every 8 hours .





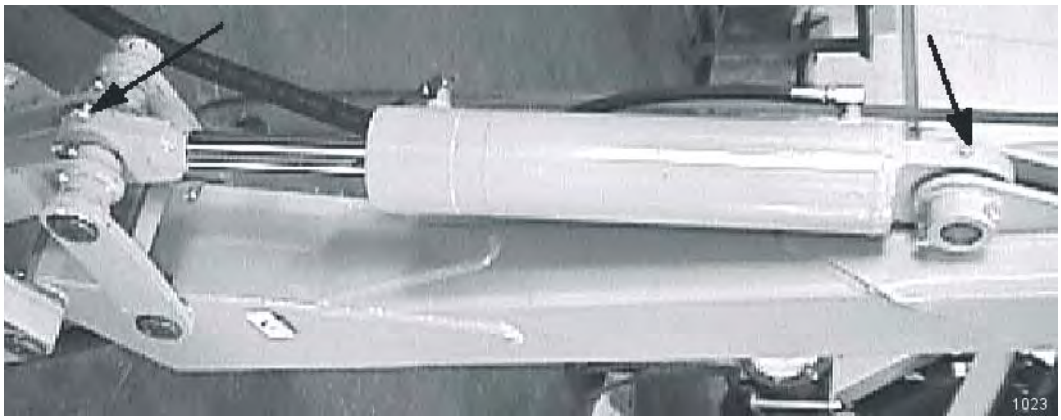
GREASING THE BOOM SWIVEL

Locate the zerks on the main swivel boss (2), main boom pivot boss (2) 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.



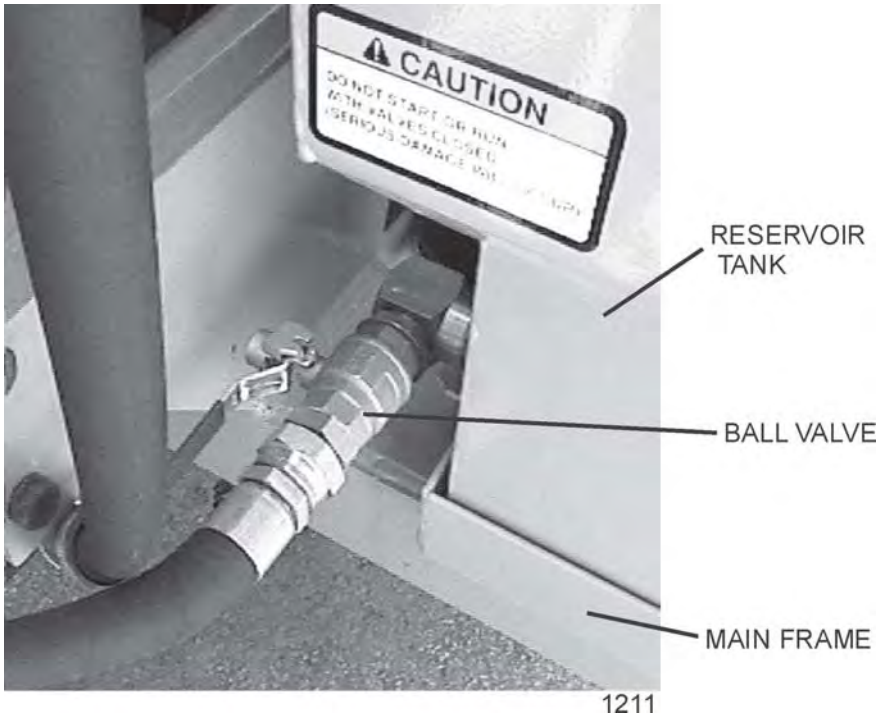
GREASING BOOM CYLINDER(S) PIVOT POINTS

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 P.T.O. !** Failure to do so will result in component failure!



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INSPECTION OF ROTARY KNIFE

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

1 – **DO NOT** weld on the knives or bolts. Damaged or worn knives must be replaced.

2 – Knives must be replaced in sets. **Knives with unequal wear may cause serious vibration and resulting structural damage to the mower.**

3 – The self-locking nuts for the knife mounting bolts must **NOT** be reused. If the self-locking nut is removed from the knife mounting bolt, the nut **must** be replaced with a new self-locking nut.

4 – Inspect the condition and tightness of the knife mounting bolts and disk mounting bolts daily.

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 around the holes..

3 – Lube threads with anti-seize. Install bolt through knife and disk from bottom side of disk. 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 FT. LBS. LUBRICATED

REPLACEMENT OF ROTARY DISK OR BAR

CAUTION!

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

1 – The bolts that attach the disk to the spindle must be grade 8.
These 5/8 inch bolts are to be torqued to 180 ft. lbs. lubricated (loctite 271) or 204 ft. lbs. dry

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 or blade bar from bottom side. Install self locking nuts and torque them to 800 ft. lbs.

50” FLAIL KNIFE BLADE 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. The knife should <u>not</u> 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 part 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.

WARNING!

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.

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 – Torque nut to 35 FT. LBS. Knife must swing freely.

WARNING!

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.

WARNING!

Knives should <u>not</u> be welded on for any reason.

HEAVY DUTY SPINDLE ASSEMBLY INSTALLATION AND BEARING ADJUSTMENT

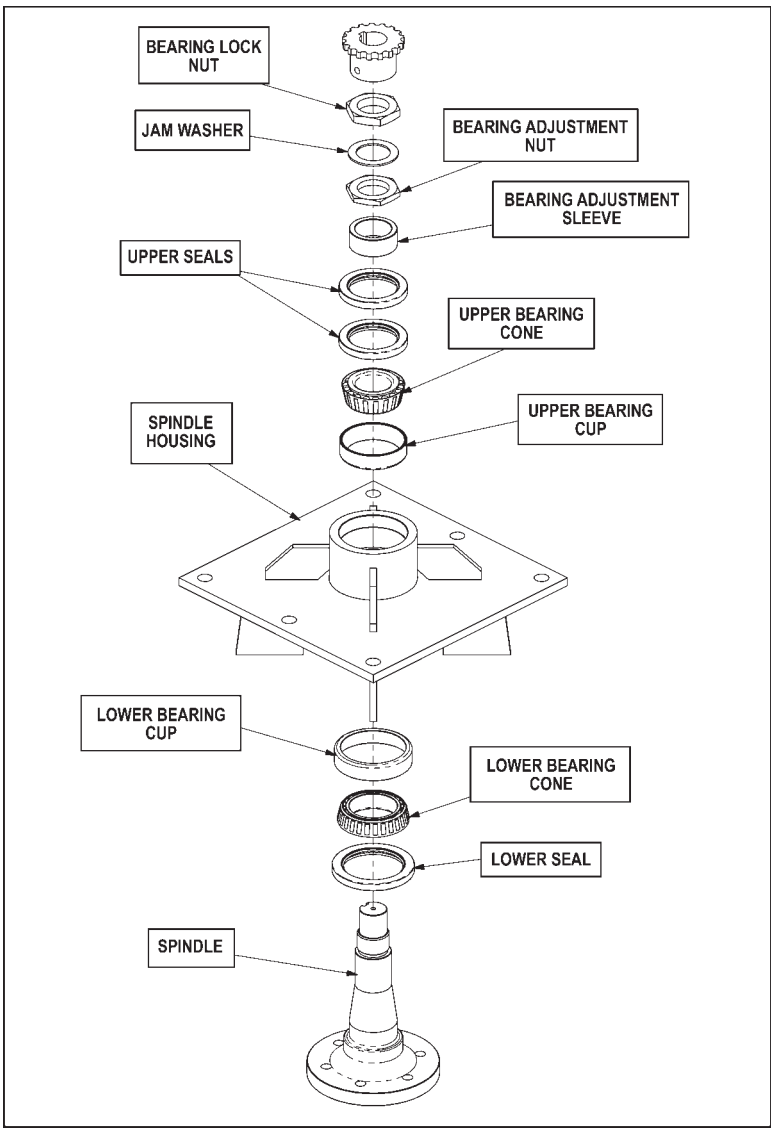
WARNING! A press MUST be used to install bearing cups, bearing cones, and seals. DO NOT use a hammer to install races, bearings, or seals. The parts of assembly may be damaged.

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.

THE SPINDLE ASSEMBLY

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



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.

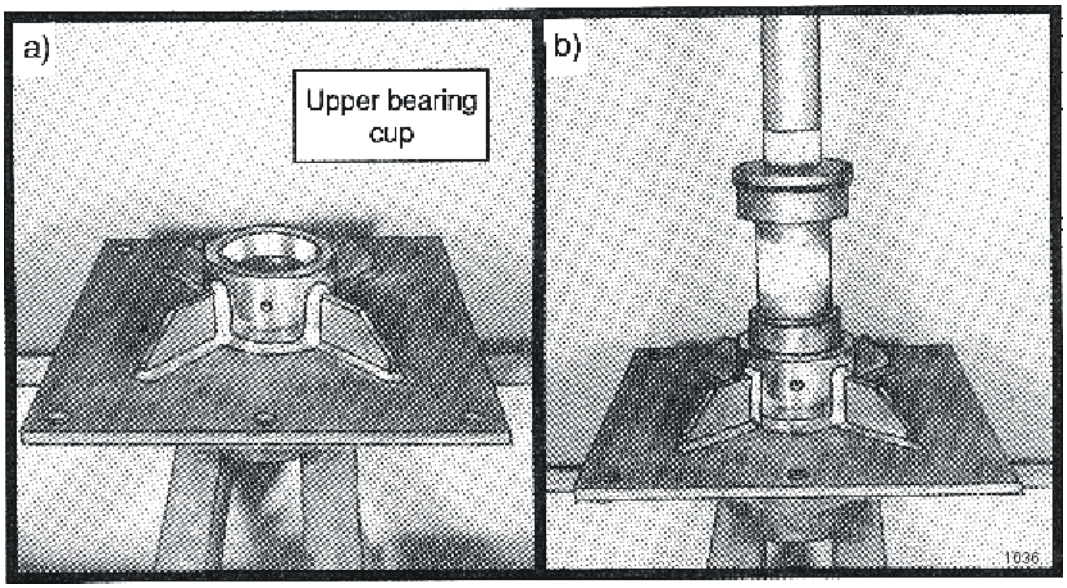
NOTE: The spindle housing must turn freely when seating the bearing cone and sleeve.

6 – 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.

7 – Install the bearing adjustment nut (thin nut) so there is 1/16” clearance between the nut and the sleeve. Install the jam washer, placing the tab into the key-way. Install the bearing lock nut (thick nut) and hand tighten against jam washer and adjustment nut. See the following section for bearing adjustment.

8 – 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.

9 – Install the plug into the drain hole.



BEARING ADJUSTMENT

1 – Clamp the bottom end of the spindle 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.

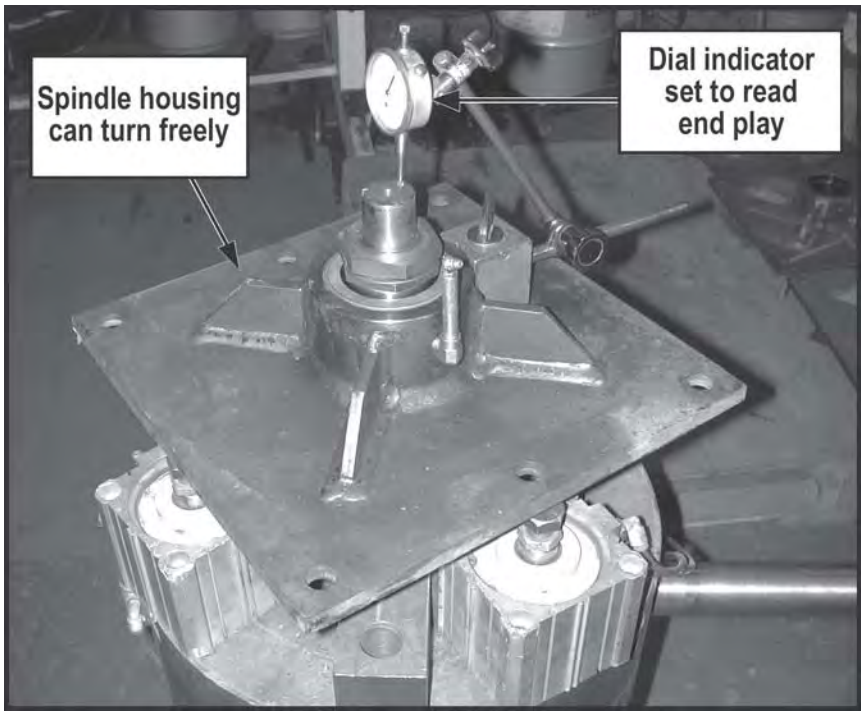
3 – Tighten the bearing adjustment nut until there is .012 inch movement when the spindle housing is pried upward away from the vise jaws.

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 in 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.

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



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 orientated as shown.

3 – Apply anti-seize on cuttershaft as shown on next page.

4 – Install non-drive side bearing first.

5 – Install the top of the string guard on the non-drive side first. Use loctite-271 or equvalent and torque (95 ft-lb or 104ft-lb if you use an extension).

6 – Install the bearing and top string guard on the drive side.

7 – 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.

8 – 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.

9 – Make sure the cuttershaft is centered. On the non-drive side, tighten one set-screw in the bearing onto the cuttershaft.

10 – Remove the other set-screw and drill a 5/16” hole into the cuttershaft 3/16” deep through the hole in the bearing. BE CAREFULL NOT TO DAMAGE THE THREADS IN THE BEARING HOLE.

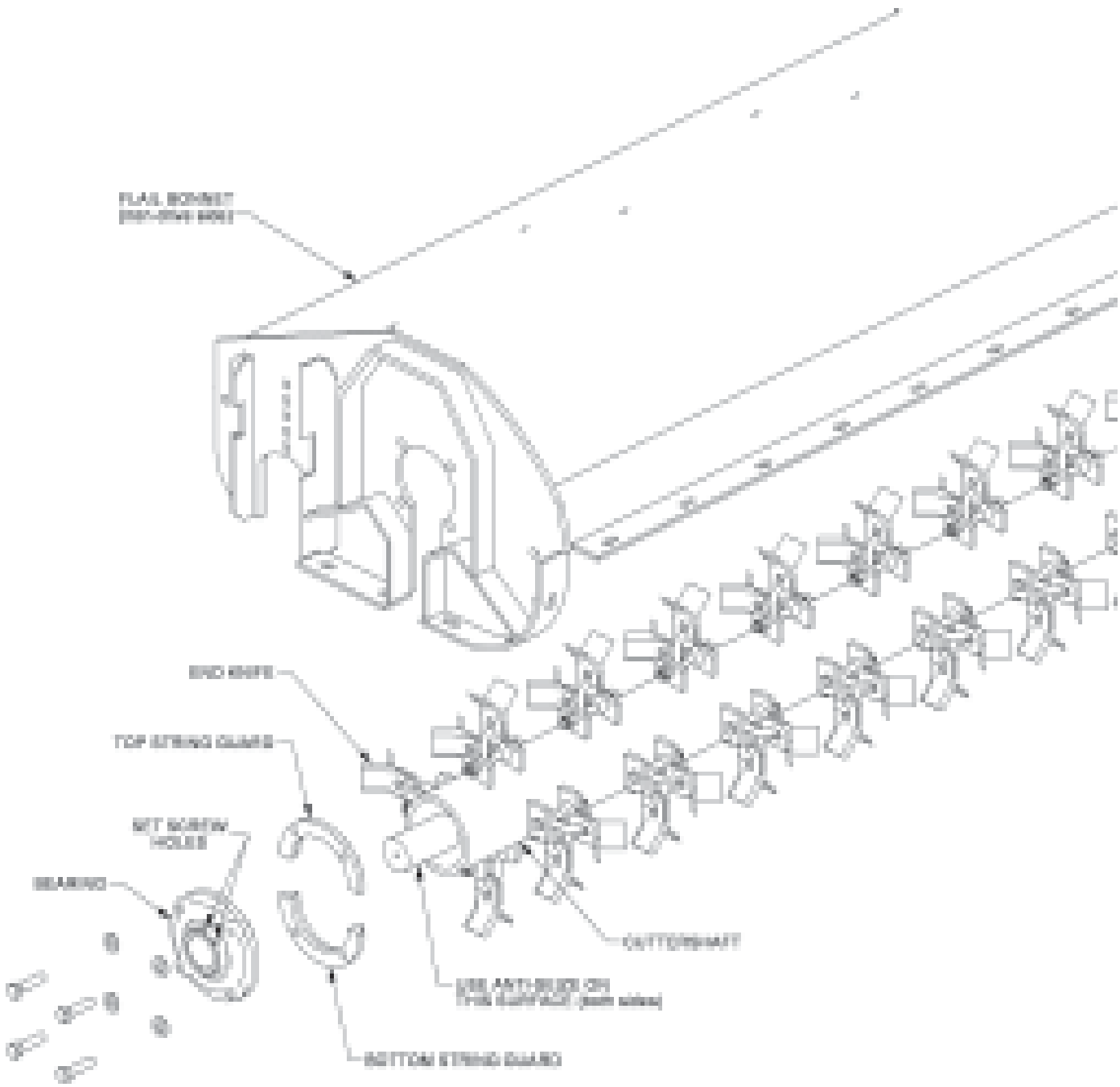
11 – Replace the set-screw in the bearing, use loctite-271 or equivalent, and tighten onto the cuttershaft through the new hole.

12 – Remove the other set-screw and repeat the drilling procedure (Step 10). Replace the set screw as stated in Step 11.

13 – Repeat steps 9 through 12 on the drive side.

14 – Grease both bearings properly.

CUTTERSHAFT BEARING REPLACEMENT



DAILY MAINTENANCE SCHEDULE

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

_____ Pump Drive Shaft: 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.

_____ Main Frame / 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: (if applicable) Grease as instructed in the detailed maintenance section.

_____ Cutter Shaft 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

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.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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

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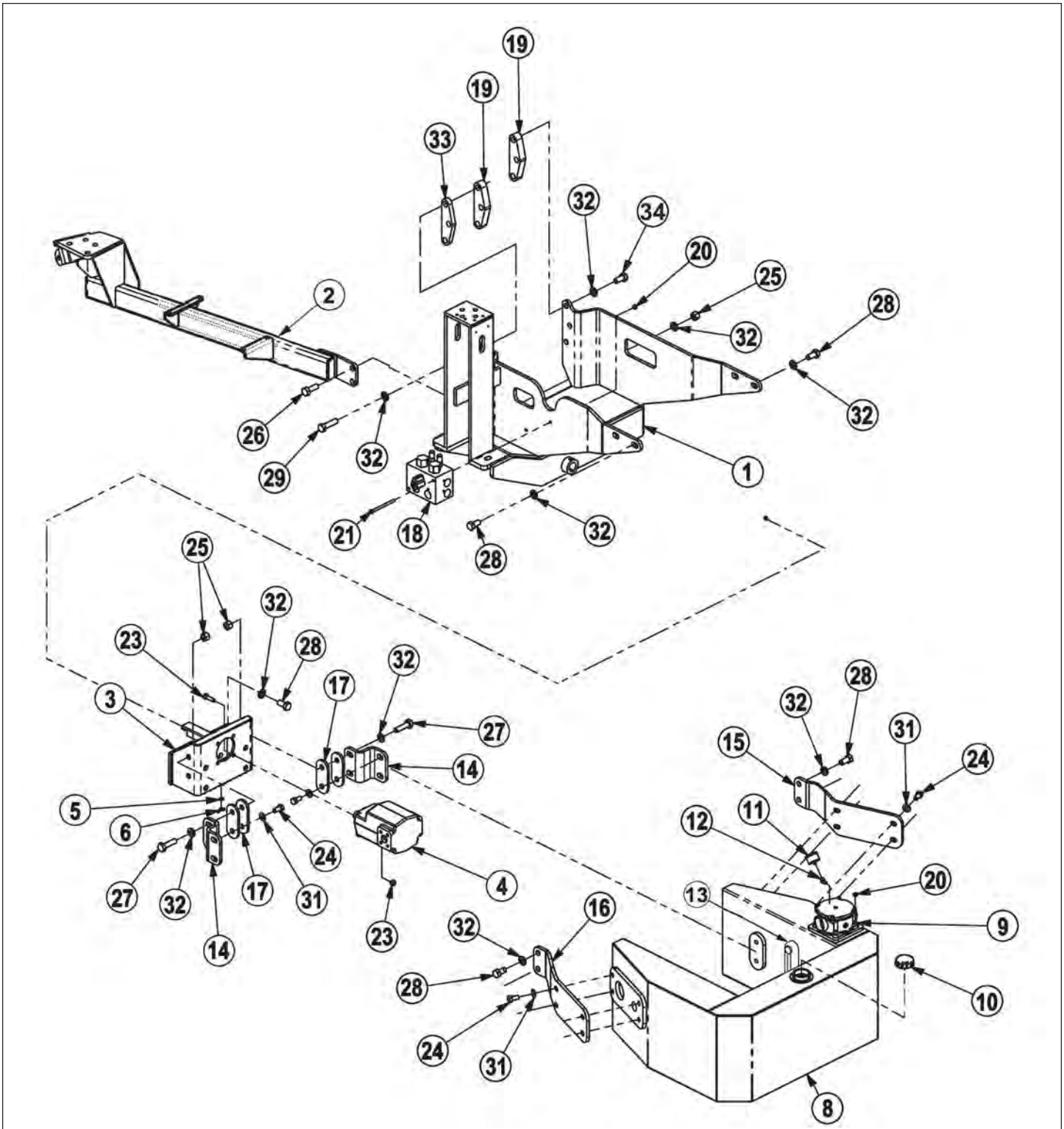
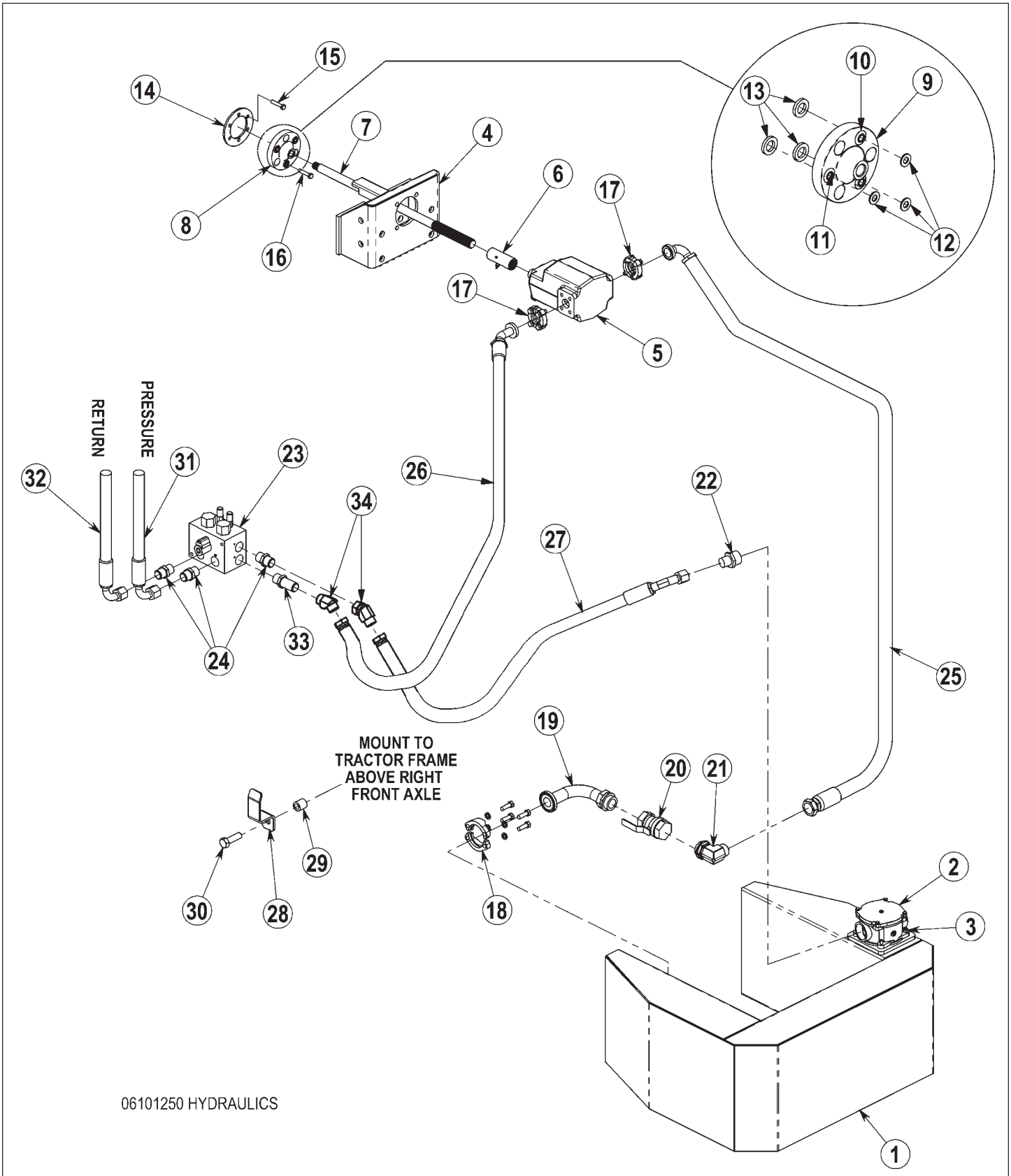
MAIN FRAME & BUMPER TANK



MAIN FRAME & BUMPER TANK

ITEM	PART NO.	QTY.	DESCRIPTION
1	06300025	1	MNFRM,TL80-90A, ALL
2	-	REF	AXLE BRACE
3	06370036	1	PUMP MNT,TL80-90A
4	23152	1	PUMP,P350-1 3/4 GEAR
5	22014	1	FLATWASHER,1/4
6	32519	1	NUT,WING,1/4-20 UNC
	34666	*	TANK,RES,BUMP,BLANK,CPLT,ASSY
8	33695	1	TANK,RES,BUMPER,BLANK
9	06505044	1	FILTER ASSY,IN-TANK
10	06505077	1	CAP,BREATHER,O-RING
11	6T0649	1	FILTER GAUGE
12	TF4887	1	STREET ELBOW,1/8 X 45
13	06505067	1	SIGHT GLASS,TANK
14	06410150	2	PLATE,SM,MNT,RES TANK,TS135A
15	06410314	1	MNT,TANK,HYDRO,RH,TL80A
16	06410315	1	MNT,TANK,HYDRO,LH,TL80A
17	06400165	4	SPACER,COOLER,FRONT
18	06510083	1	VALVE,BRAKE,SOL,3000PSI,METRI
19	06400342	2	SPACER,3/4", MNFRM,TL80A
20	21627	6	NYLOCK NUT,3/8 NC
21	21644	2	CAPSCREW,3/8 X 5 NC
22	21725	4	HEX NUT,1/2 NC
23	21732	4	CAPSCREW,1/2 X 1-3/4 NC
24	21780	12	CAPSCREW,5/8 X 1-1/4 NC
25	21825	6	HEX NUT,3/4 NC
26	21833	2	CAPSCREW,3/4 X 2-1/4 NC
27	21835	4	CAPSCREW,3/4 X 2-3/4 NC
28	24860	12	CAPSCREW,20mmx40mm(2.5P)GR10.9
29	32285	3	CAPSCREW,20mmx75mm(2.5)GR10.9
30	06530509	4	CAPSCREW,18MMx40MM(1.5P)GR10.9
31	33764	16	FLATWASHER,5/8,GR 8,SAE
32	33880	24	FLATWASHER,3/4,GR 8,SAE
33	06400419	1	SPACER,1/2", MNFRM,TL80A
34	24879	3	CAPSCREW,20mm X 65mm(2.5)GR10.9

MAIN FRAME - HYDRAULICS



MAIN FRAME - HYDRAULICS

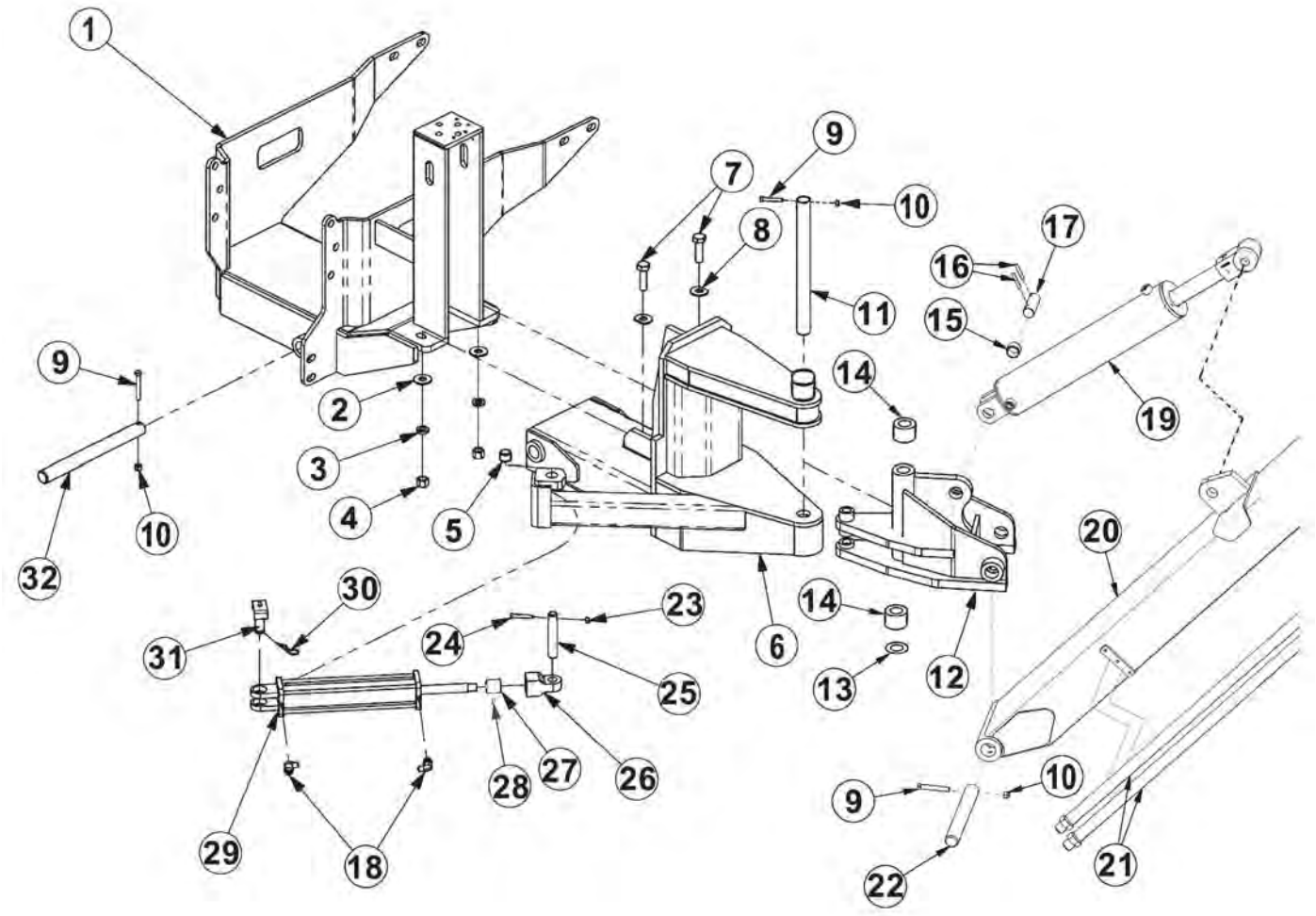
ITEM	PART NO.	QTY.	DESCRIPTION
1	34666	REF	TANK,RES,BUMPER,ASSY
2	06505044	REF	FILTER ASSY
3	21627	4	NYLOCK NUT,3/8 NC
4	06370036	1	PUMP MNT,TL80-90A
5	23152	1	PUMP,P350-1 3/4 GEAR
6	6T0375B	1	COUPLING,14 SPLINE,W/ZERK,4
		TL80-90A	
7	34624	1	DRV SHF,PMP,29,TSA
	02982761	1	BATTERY RELOCATION KIT
		T5000	
7	06420096	1	DRV SHFT,32.5,LH THRD,T5000
	02986418	1	BATTERY RELOCATION KIT
8	06770004	1	ADAPTER,CRANKSHAFT,TL80A,W/GRO
9	06420029	1	ADAPTER,CRANKSHAFT,TL80A
10	6T3218	3	GROMMET,RUBBER
11	06420030	3	GROMMET,10MMx.78
12	24937	3	FLATWASHER,7/16,SAE
13	06537004	3	WASHER,NEOPRENE,.75x1.25x.19
14	06420031	1	SPACER,CRANKSHAFT,TL80A
15	33534	3	CAPSCREW,10MMX20MM(1.5PITCH)
16	22254	3	CAPSCREW,10MMX50MM(1.5 PITCH)
17	TF4852	2	KIT,FLANGE,#20
18	TF4431	1	KIT,FLANGE,#32
19	34389	1	ELBOW,1 1/2ORBX32FLG90
20	34309	1	BALL VALVE,1 1/2 FOR
21	06503054	1	ELBOW,1 1/2 ORB x 1 1/4 MJ
22	34064	1	ADAPTER,1 1/4MOR X 1MJ
23	06510083	1	VALVE,BRAKE,SOL,3000PSI,METRI
24	33555	3	ADAPTER 1” MORB X 1” MJIC
25	06500214	1	HOSE,1 1/4x29(1 1/4FJXx20FLG90)
26	06500232	1	HOSE,1x63(1FJXx20FLG45)
27	06500233	1	HOSE,1x83(1FJXx1FJX45)
28	32382	1	BRACKET,HOSE
29	34229	1	SPACER
30	24879	1	CAPSCREW,20MMX65MM(2.5 PITCH)
31	06500328	1	HOSE,1x96(1FJX90x1FJX)
32	06500070	1	HOSE,1x93(1FJX90x1FJX)
33	32869	1	ADAPTER,1ORBx1MJ,LONG
34	24724	2	SWIVEL,1MJ X 1FJX 45

NOTES:

1. Loop the hose from the pump to the brake valve and the hose from the brake valve to the tank THROUGH THE HOSE BRACKET.

2. Band hoses together with zip ties wherever loose. Where hoses may contact the frame or other edges, wrap with split hose and secure with hose clamps or zip ties.

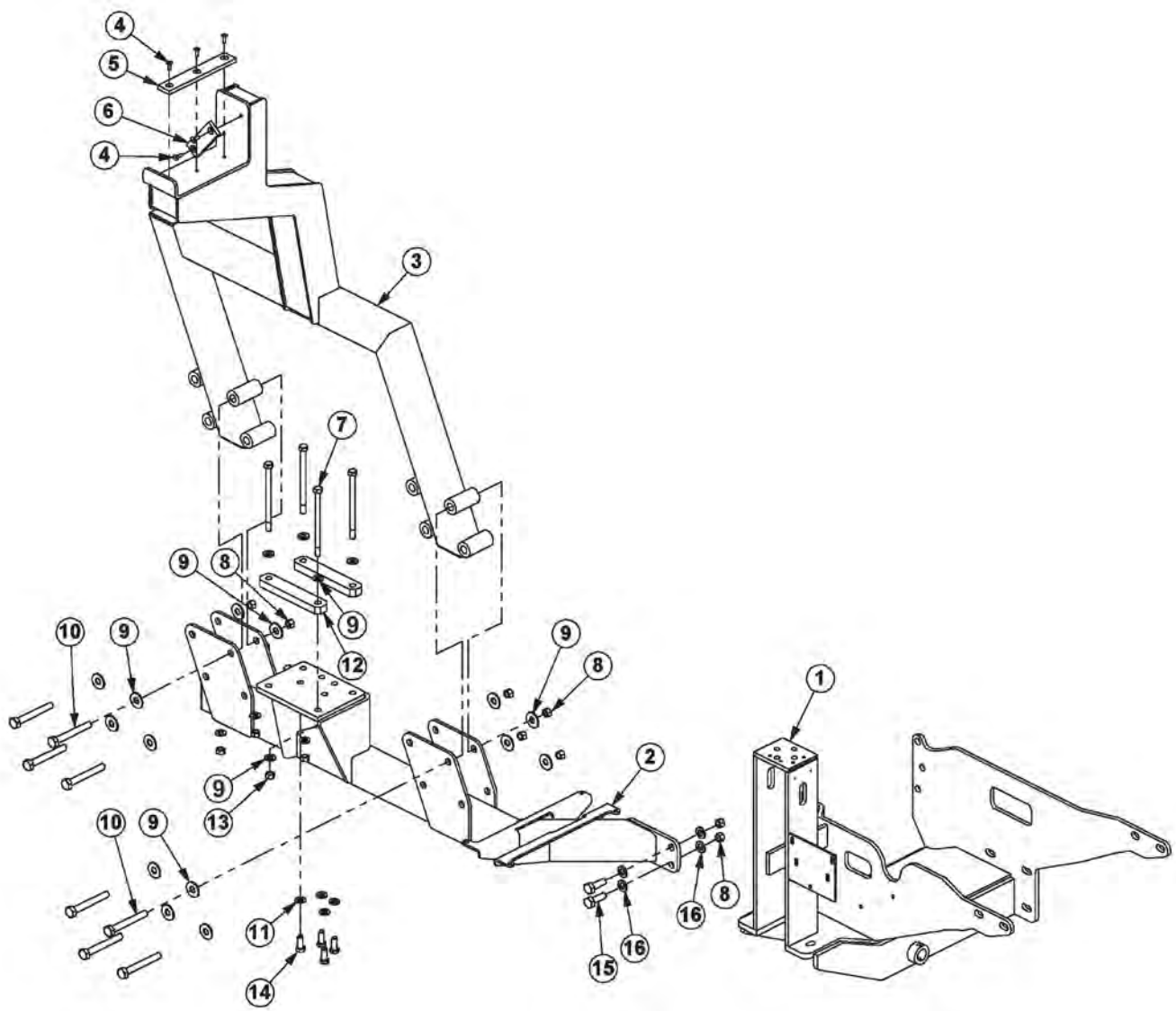
BOOM MOUNT KIT



BOOM MOUNT KIT

ITEM	PART NO.	QTY.	DESCRIPTION
1	*	REF	REFER TO MAIN FRAME PAGE
2	22021	2	FLATWASHER,3/4
3	21993	2	LOCKWASHER,3/4,GR8
4	21825	2	HEX NUT,3/4,NC
5	TB3010	1	BUSHING,1
6	06310030	1	BRKT,MTG,BOOM
7	21835	2	CAPSCREW,3/4 X 2-3/4,NC
8	6T2607	2	FLATWASHER,3/4,CUT
9	21688	3	CAPSCREW,7/16 X 3-1/4,NC
10	21677	3	NYLOCK NUT,7/16,NC
11	06420013	1	PIN,1.50x19.88,NIT
	06700056	**AVAIL**	**SWIVEL,BOOM,ASSY,CHEETAH**
12	06310029	1	SWIVEL,CHEETAH,GREASELESS
13	06520049	1	BEARING,SWING,COMP
14	06520411	2	BEARING,1.50ID X 2.50,COMP
15	06499004	1	BEARING,1.50 X 1.25 X 1.00,COMP
16	TB1023	2	ROLL PIN,7/32 x 2,SS
17	06420053	1	PIN,1.25 X 3.63,NIT
18	32810	2	ELBOW,1/2ORB X 3/8MJ90ADJ
19	*	REF	CYLINDER - REFER TO BOOM ASSY PAGE
20	*	REF	BOOM - REFER TO BOOM ASSY PAGE
21	*	REF	HOSE - REFER TO BOOM ASSY PAGE
22	33442	1	PIN,1-1/2 X 10-3/4
23	21627	1	NYLOCK NUT,3/8,NC
24	21635	1	CAPSCREW,3/8 X 2-1/4,NC
25	33464	1	PIN,1.00 X 5.63
26	TB3033	1	CLEVIS W/ SPHERICAL BEARING
27	06420114	1	SPACER
28	06537023	1	SETSCREW
29	34275	1	CYLINDER,3-1/2 X 11-1/2
30	6T3004	1	R-CLIP
31	TB1031	1	PIN,PVT ASSY,1.00 X 4.00
32	6T3001	1	PIN,1-1/2 X 15-3/4

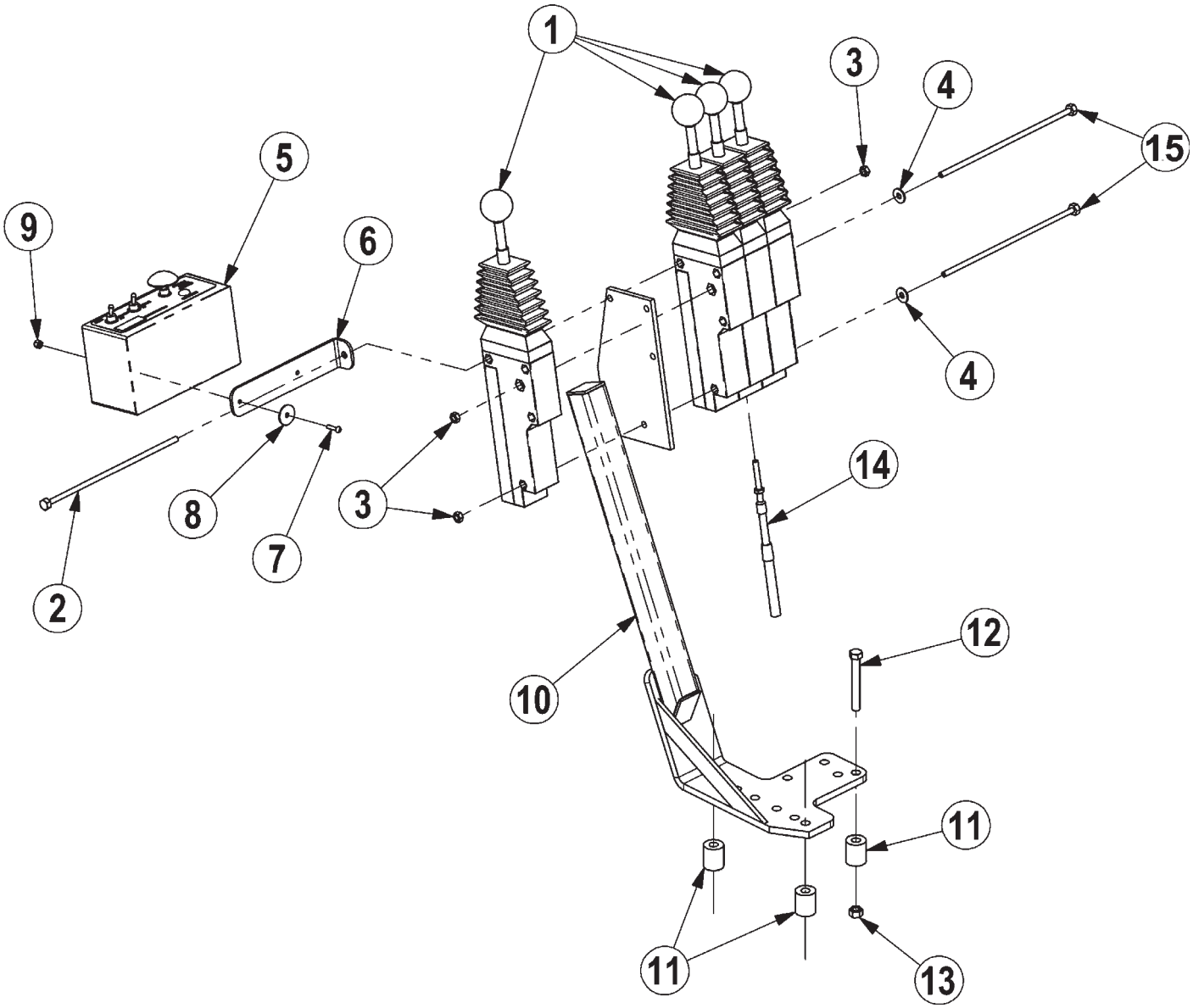
TRACTOR MOUNT KIT - SINGLE COLUMN BOOMREST



TRACTOR MOUNT KIT - SINGLE COLUMN BOOMREST

ITEM	PART NO.	QTY.	DESCRIPTION
1	*	REF	REFER TO MAIN FRAME PARTS
2	06300128	1	AXLE BRACE,RH,T5000,SC
3	06310097	1	BOOMREST,210
4	28734	5	CAPSCREW,FLT/SKT HD,3/8 x 1,NC
5	32686	1	WEARPAD,LONG
6	06520178	1	WEARPAD,SHORT
7	21847	4	CAPSCREW,3/4 x 10,NC
8	21825	10	HEX NUT,3/8,NC
9	22021	24	FLATWASHER,3/4
10	21843	8	CAPSCREW,3/4 x 6,NC
11	06533005	4	FLATWASHER,5/8,GR8,SAE
12	06401350	2	BAR,AXLE BRACE
13	21825	8	HEX NUT,3/4,NC
14	22421	4	CAPSCREW,16MM x 40MM,2.0P,10.9
15	21832	2	CAPSCREW,3/4 x 2,NC
16	33880	4	FLATWASHER,3/4,SAE

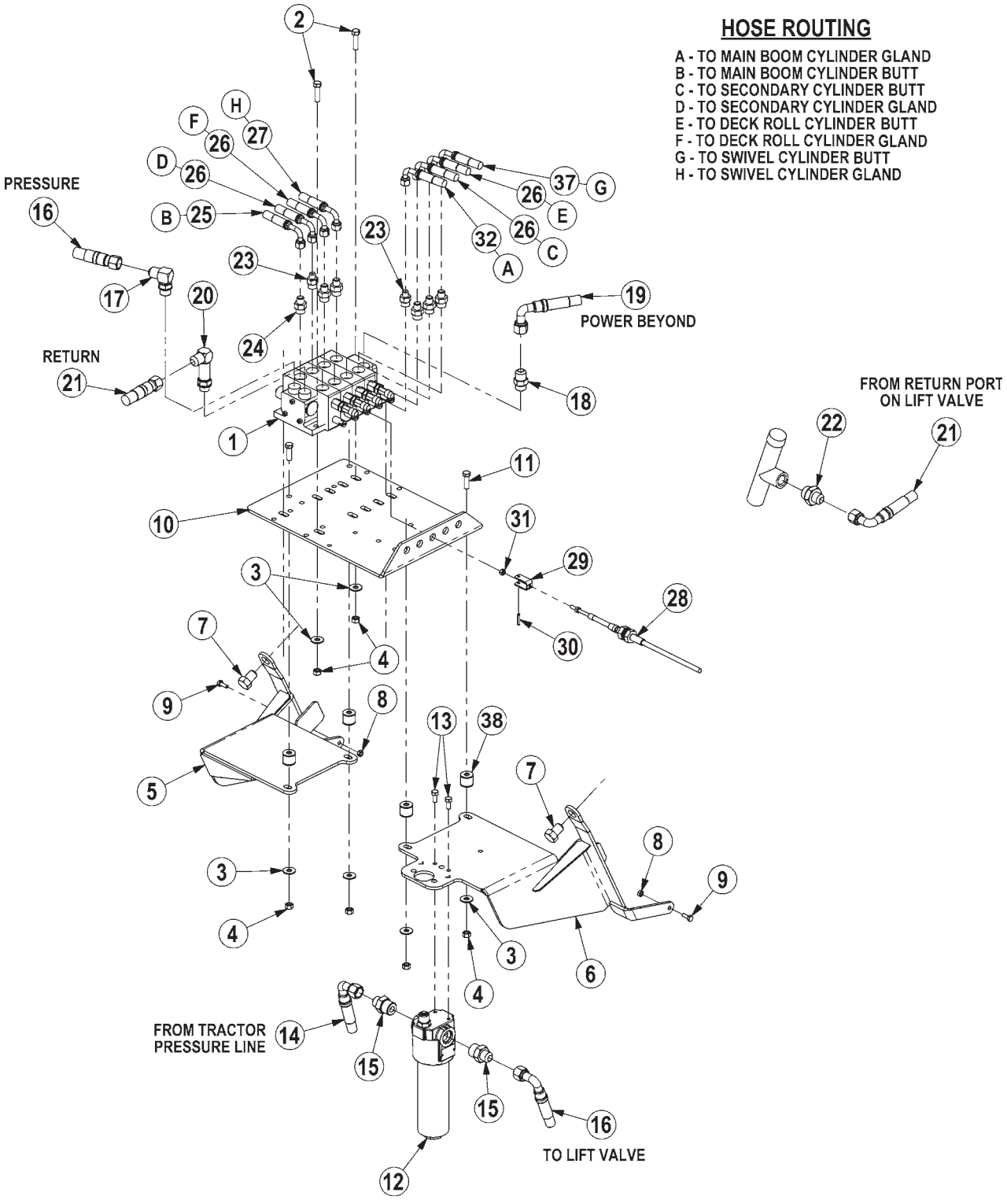
4 SPOOL CABLE CONTROLS



4 SPOOL CABLE CONTROLS

ITEM	PART NO.	QTY.	DESCRIPTION
1	6T1251	4	CBL CTRL BOX,180 DEG
2	21547	1	CAPSCREW,1/4 X 8 NC
3	21525	3	HEX NUT,1/4 NC
4	22014	2	FLATWASHER,1/4
5	06510100	1	SWITCHBOX,BOOM,GND
6	34496	1	BRKT,SWITCHBOX,UNI
7	32359	2	SCREW,MACHINE,8-32X3/4
8	34508	2	WASHER,FENDER,#10
9	6T3952	2	HEX NUT,8/32 NYLOCK
10	23865B	1	CBL CTRL MT BRK,9030-FD40-JD60
11	27082B	3	SPACER
12	21637	3	CAPSCREW,3/8 X 2-3/4 NC
13	21627	3	NYLOCK NUT,3/8 NC
14	34623	4	CBL,CNTRL,122
15	21545	2	CAPSCREW,1/4 X 7 NC

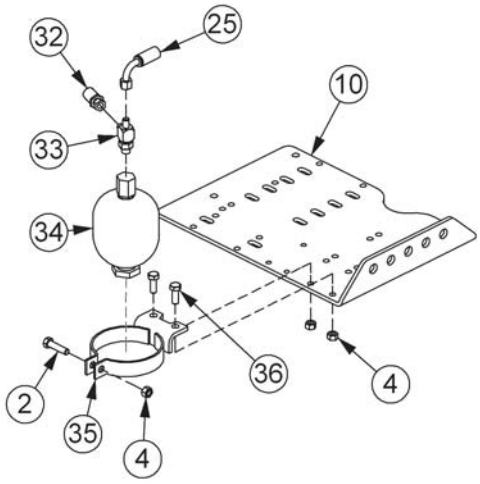
4 SPOOL HUSCO VALVE

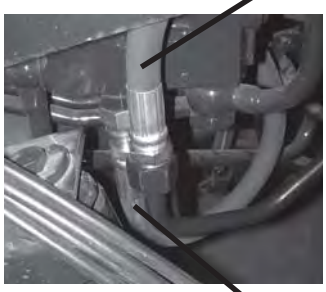


4 SPOOL HUSCO VALVE

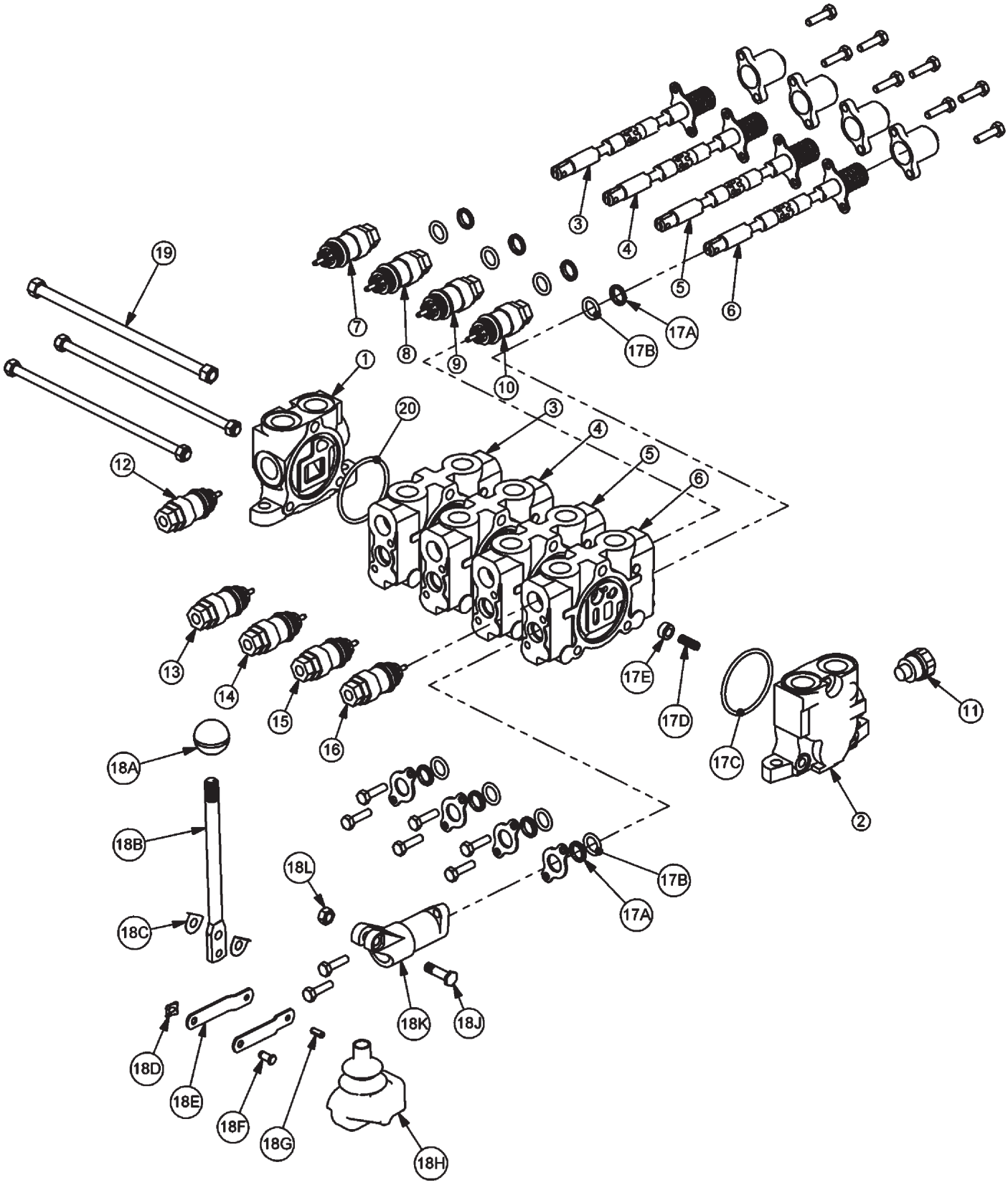
ITEM	PART NO.	QTY.	DESCRIPTION
1	06502121	1	VALVE,4SP,HSC,TBF,PB
2	21632	4	CAPSCREW,3/8 X 1-1/2 NC
3	22016	8	FLATWASHER,3/8
4	21627	8	NYLOCK NUT,3/8 NC
5	06340020	1	VALVE MNT,LH,TL80-100A
6	06340021	1	VALVE MNT,RH,TL80-100A
7	06530510	2	CAPSCREW,18MMx25MM(1.5P)GR8.8
8	21527	2	NYLOCK NUT,1/4 NC
9	21529	2	CAPSCREW,1/4 X 3/4 NC
10	34622	1	PLATE,VALVE,REAR MNT
11	21636	4	CAPSCREW,3/8 X 2-1/2 NC
12	06505029	1	FILTER,HP,3/4SAE,11MIC,VIS IND
13	21579	2	CAPSCREW,5/16 X 3/4 NC
14	06500229	1	HOSE,5/8x64(5/8FJX90x3/4MFS)
15	06503056	2	ADAPTER,3/4ORBx 5/8MJ
16	06500235	1	HOSE,5/8x49(5/8FJXx5/8FJX90)
17	06503033	1	ELBOW,5/8ORBx5/8MJ
18	06503036	1	ADAPTER,5/8ORBx5/8MJ
19	06500234	1	HOSE,5/8x65(5/8FJX90x3/4FFS)
20	33748	1	ELBOW,5/8 MORB LL x 5/8 MJ
21	06500236	1	HOSE,5/8x38(5/8FJXx5/8FJX90)
22	06503059	1	ADAPTER,3/4BSPPx5/8MJ
23	06502036	2	CHECK VALVE,W/.06 ORF,1/2MORx3/8
24	33271	6	ADAPTER,1/2 MOR X 3/8 MJ
25	06500228	2	HOSE,1/4x204(3/8FJXx3/8FJX90)
26	06500227	4	HOSE,1/4x180(5/16MJx3/8FJX90)
27	33600	1	HOSE,1/4X103(3/8FJX903/8FJX)
28	34623	4	CBL,CNTRL,122
29	6T4411	4	CLEVIS,CBL CTRL,3/16
30	6T3017	4	ROLLPIN,3/16 X 1
31	21500	4	HEX NUT,1/4 NF
32	06500337	1	HOSE,1/4x11(3/8FJXx3/8FJX90)
33	06503029	1	TEE,RUN,1/2ORBx3/8MJx3/8MJ
34	24300	1	ACCUMULATOR
35	23888	1	BRACKET,ACCUMULATOR
36	21630	2	CAPSCREW,3/8 X 1 NC
37	06500151	1	HOSE,1/4 x 112(3/8FJX x 3/8FJX90)
38	27082B	4	SPACER

ACCUMULATOR MOUNTING





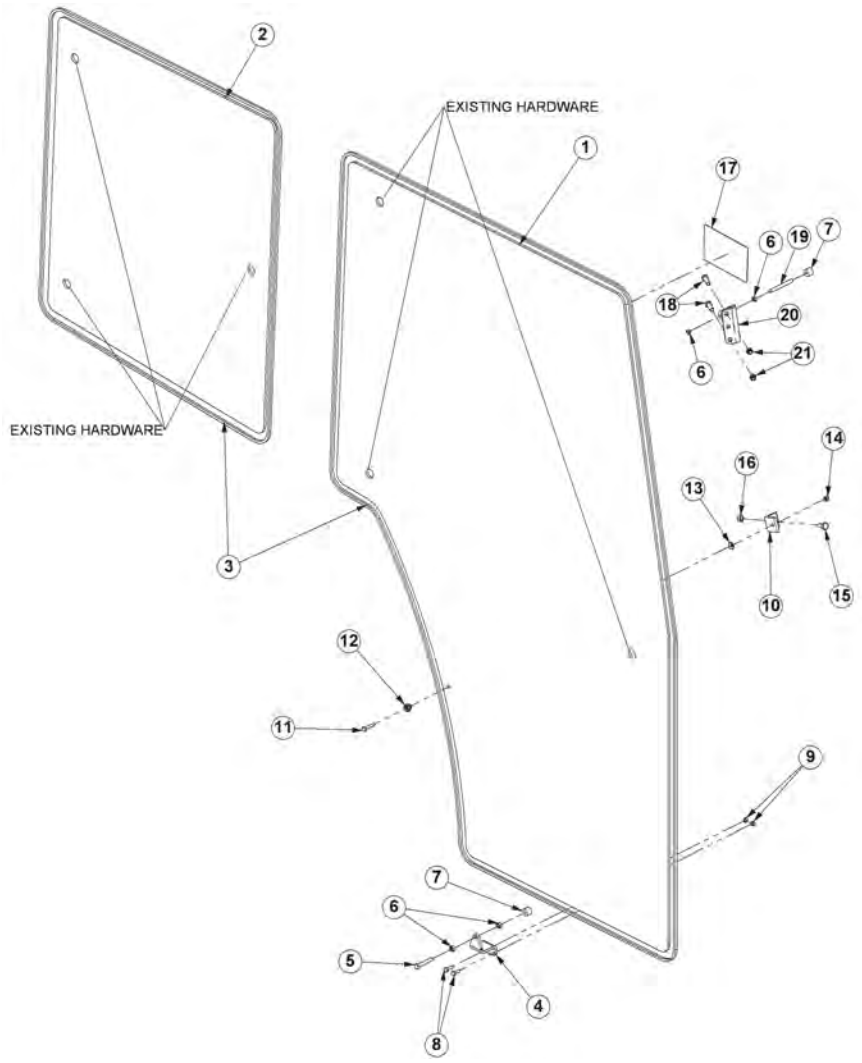
4 SP HUSCO - POWER BEYOND (06502121)



4 SP HUSCO - POWER BEYOND (06502121)

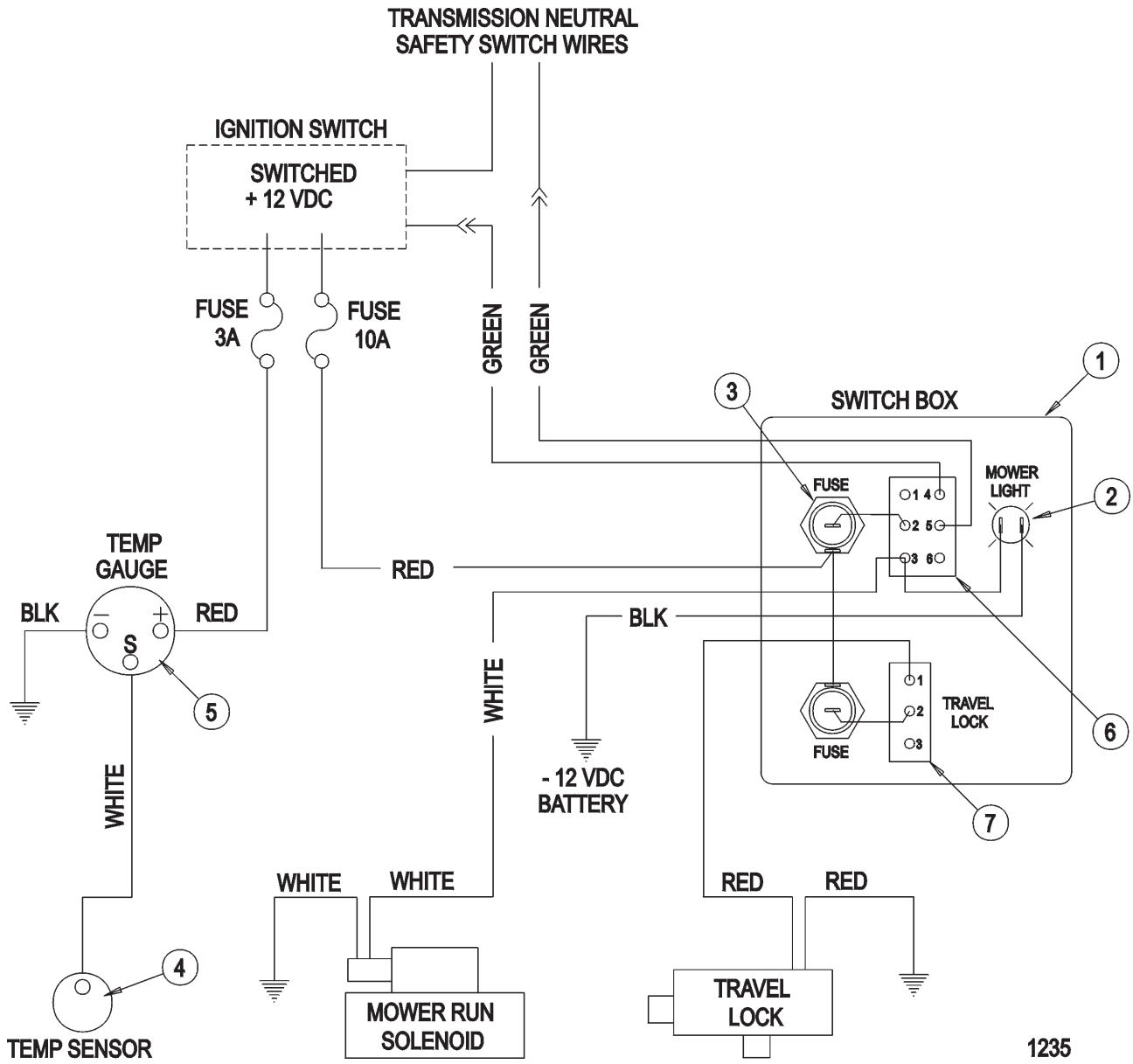
ITEM	PART NO.	QTY	DESCRIPTION
1	TB1017S	1	INLET END COVER
2	TB1702	1	END COVER, POWER BEYOND
3	TB1017P	1	VALVE SECTION (SINGLE ACTING, SPRING DETENT)
4	TB1017N	1	VALVE SECTION (DOUBLE ACTING, CENTER SPRING)
5	TF3009	1	VALVE SECTION (DOUBLE ACTING, DETENT - FLOAT)
6	TB1017Q	1	VALVE SECTION (DOUBLE ACTING, SPRING METERED)
7	N/A	-	N/A
8	06502003	1	RELIEF VALVE, 2500 PSI
9	06502085	1	RELIEF VALVE, 3000 PSI
10	TB1017H	1	RELIEF VALVE, 1750 PSI
11	TB1017M	1	SHUT-OFF PLUG
12	06502085	1	RELIEF VALVE, 3000 PSI
13	06502003	1	RELIEF VALVE, 2500 PSI
14	TB1017F	1	RELIEF VALVE, 1500 PSI
15	TB1017F	1	RELIEF VALVE, 1500 PSI
16	TB1017H	1	RELIEF VALVE, 1750 PSI
17	TB1017A	4	VALVE SEAL KIT (FOR ONE SECTION)
17A		2	WIPER
17B		2	O-RING SMALL
17C		1	O-RING LARGE
17D		1	SPRING
17E		1	PUCKET
18	TB1017L	4	LEVER KIT (FOR ONE SECTION)
18A		1	LEVER KNOB
18B		1	LEVER
18C		2	LEVER WASHER
18D		1	LEVER CLIP
18E		2	LINKAGE
18F		1	LEVER PIN
18G		1	ROLL PIN
18H		1	LEVER BOOT
18J		1	LEVER BOLT
18K		1	LEVER DUST COVER
18L		1	LEVER NUT
19	TB1017U	1	TIE ROD KIT
20	24214	1	O-RING, LARGE

SAFETY WINDOW - CNH T5000 or TL80-100A, CAB



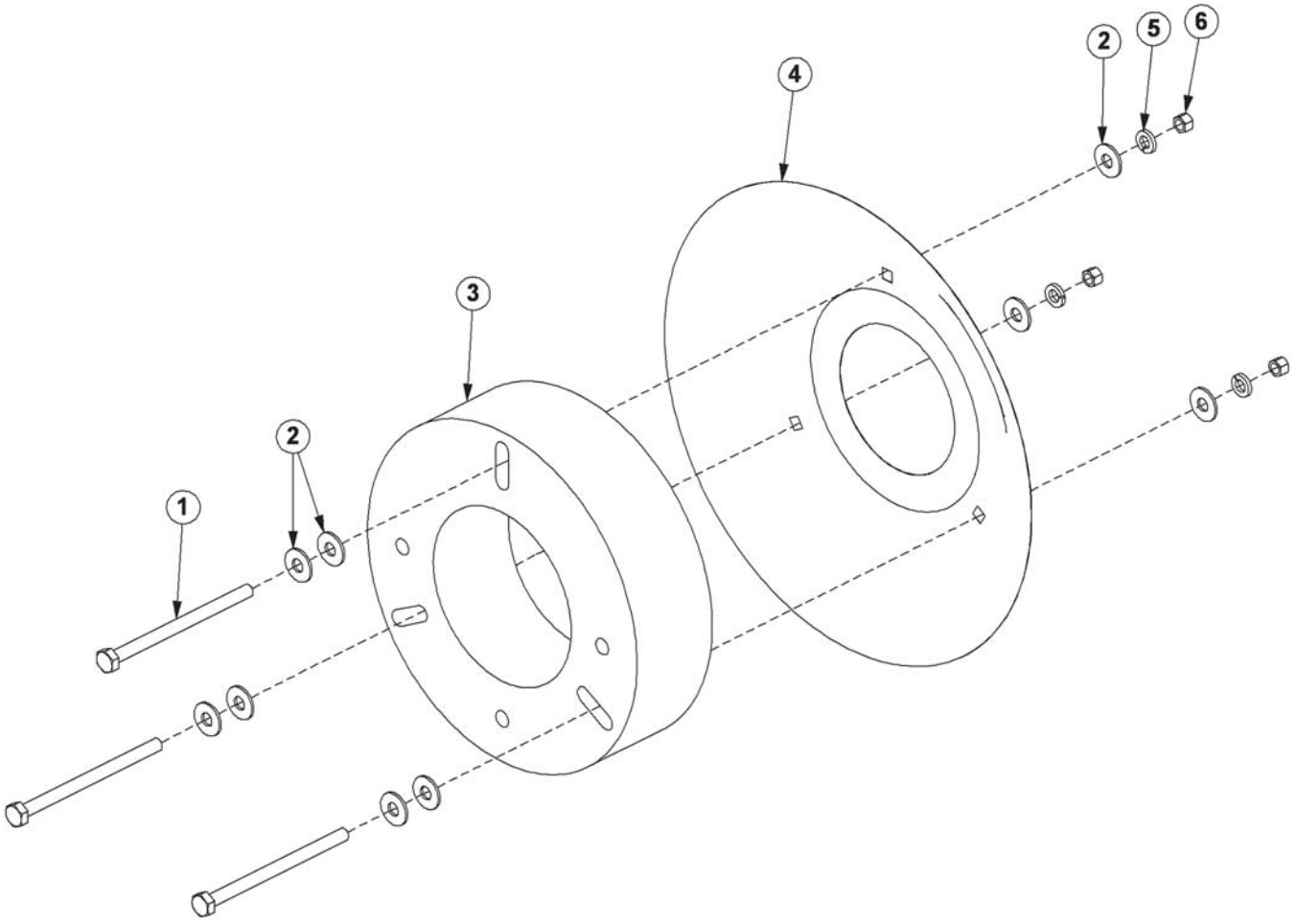
ITEM	PART NO.	QTY.	DESCRIPTION
1	06490017	1	POLYCARB,FRMD,TL90A,DOOR,RH
2	06490018	1	POLYCARB,FRMD,TL90A,REAR,RH
3	31965	24’	TRIM SEAL,3/8 CLIP X 3/4 OD
4	06410269	1	BRKT,SFTY SCRN,BOTTOM
5	21584	1	CAPSCREW,5/16 X 2 NC
6	21575	4	HEX NUT,5/16 NC
7	33477	2	VIBRATION ISOLATOR,5/16 NC
8	21529	2	CAPSCREW,1/4 X 3/4 NC
9	21525	2	HEX NUT,1/4 NC
10	34874	1	BRKT,SWITCH MTG,NONCAB
11	21531	1	CAPSCREW,1/4 X 3 1/4 NC
12	35234	1	GROMMET,RIBBED,1/2ODx1/4IDx1/2
13	06537001	1	WASHER,RUBBERIZED,.25,CONICAL
14	21527	1	NYLOCK NUT,1/4 NC
15	21629	1	CAPSCREW,3/8 X 3/4 NC
16	21625	1	HEX NUT,3/8 NC
17	22645	1	DECAL,POLYCARBONATE WINDOW INS
18	21632	2	CAPSCREW,3/8 X 1-1/2 NC
19	33478	1	THREADED ROD,5/16 X 3
20	06410396	1	BRKT,UPPER,TL
21	21627	2	NYLOCK NUT,3/8 NC

SOLENOID VALVE SWITCH AND WIRING



ITEM	PART NO.	QTY.	DESCRIPTION
1	*	REF	SWITCH BOX
2	6T3923	1	INDICATOR LIGHT
3	6T3924	1	FUSE HOLDER
4	6T3931	OPT.	TEMPERATURE SENSOR
5	6T3934	OPT.	TEMPERATURE GAUGE
6	PT3905A	1	TOGGLE SWITCH, MOWER RUN
7	34532	1	TOGGLE SWITCH, TRAVEL LOCK

WHEEL WEIGHT ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	21848	3	CAPSCREW,3/4 x 11,NC
2	33626	9	FLATWASHER,3/4,USS,GR8
3	30687	1	WHEEL WEIGHT,500LB
4	*	*	WHEEL DISH
5	21993	4	LOCKWASHER,3/4,GR8
6	21825	4	HEX NUT - 3/4

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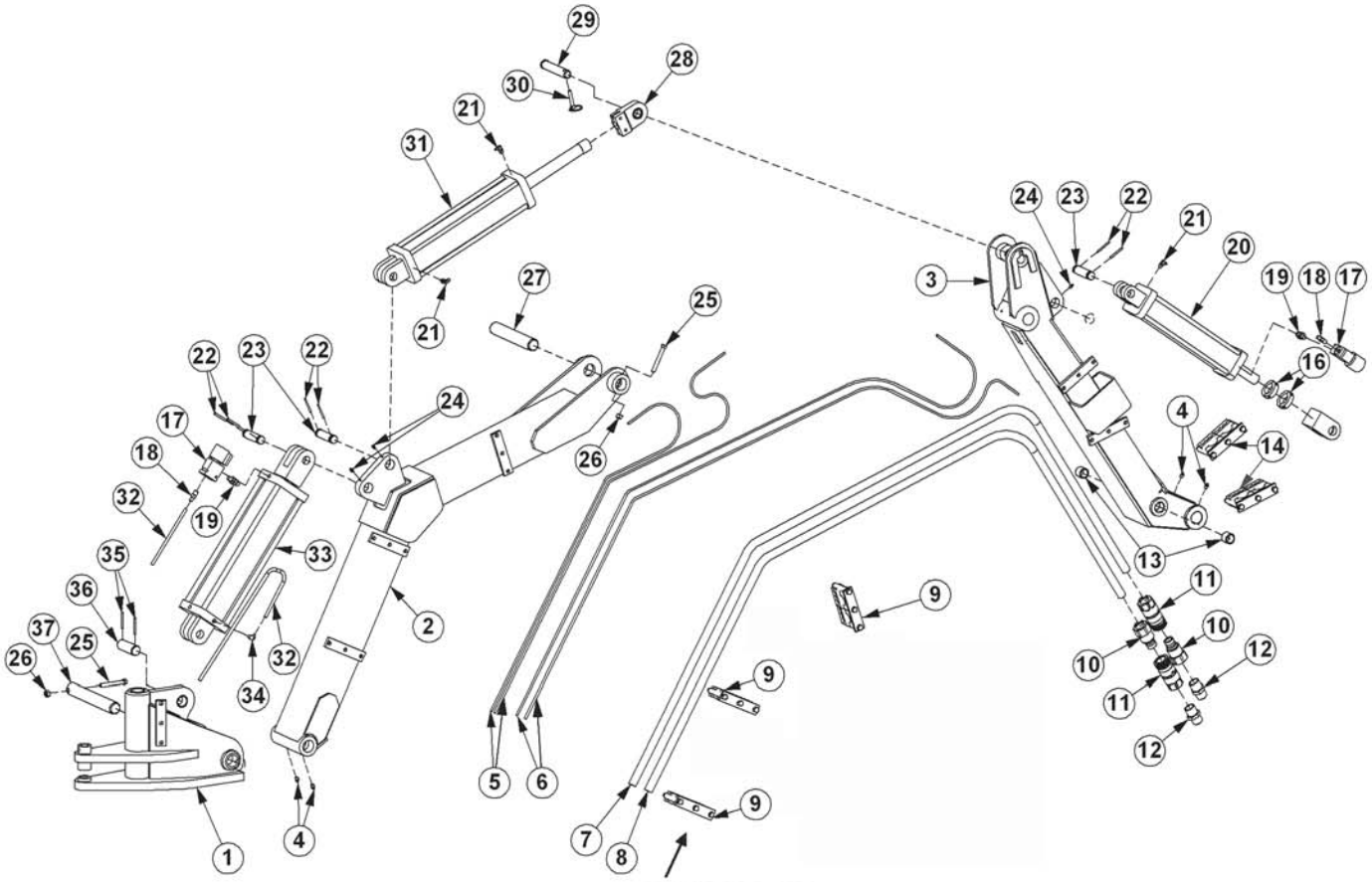
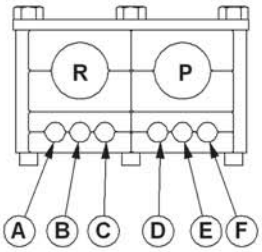
BENGAL 210 BOOM ASSEMBLY



NOTES:

1. RETURN AND PRESSURE HOSES ARE REVERSED FOR REVERSE ROTATION BOOM FLAILS
2. IMPORTANT: ALIGN GREASE HOLE IN BEARING (ITEM 15) WITH GREASE ZERK IN BOOM. MAINTAIN ALIGNMENT DURING BEARING INSTALLATION
3. GREASE (ITEM 4) HINGE PIN ZERKS ON BOOM AFTER ASSEMBLY, ONCE UNDER LOAD WITH BOOM ELEVATED AND AGAIN AT REST WITH BOOM SUPPORTED



VIEW A-A

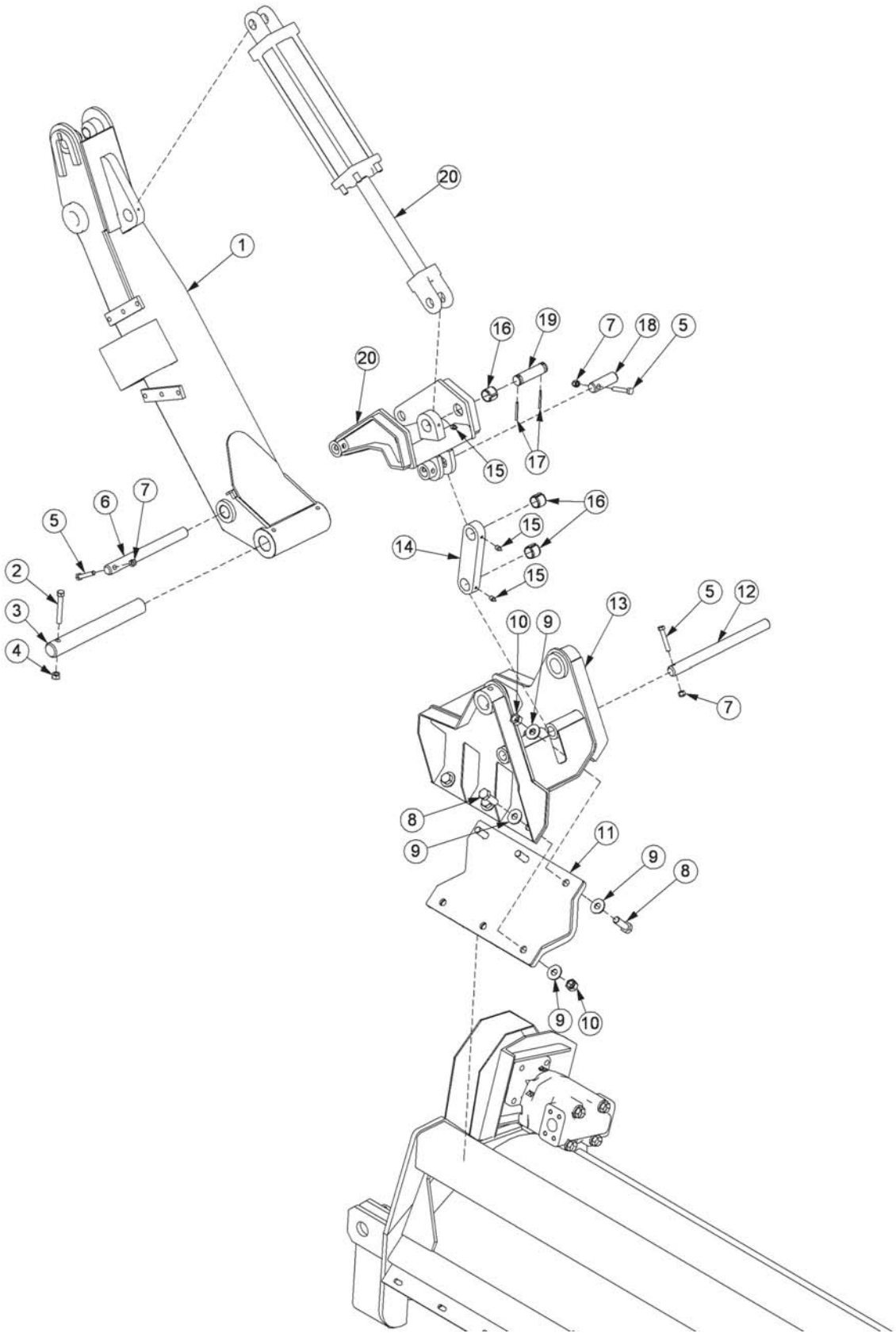
KEY

A - SECONDARY BUTT
B - NONE
C - SECONDARY GLAND
D - DECK ROLL GLAND
E - NONE
F - DECK ROLL BUTT
P - PRESSURE
R - RETURN

BENGAL 210 BOOM ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1	**06700056**	**1**	**SWIVEL,ASSEMBLY**
	06310029	**-**	**SWIVEL,WLDMNT**
2	06700169	1	BOOM,MAIN,ASSEMBLY
	06310093	-	BOOM,MAIN,WLDMNT
3	06700170	1	BOOM,SECONDARY,ASSEMBLY
	06310094	-	BOOM,SECONDARY,WLDMNT
4	6T3211	4	GREASE ZERK,1/8
5	06500517	2	HOSE,1/4 x 61
6	06500518	2	HOSE,1/4 x 89
7	06500520	1	HOSE,1 x 92, (RETURN)
8	06500519	1	HOSE,1 x 88, (PRESSURE)
9	06505116	3	KIT,HOSE CLAMP,MAIN
10	33273	2	QUICK COUPLER,MALE
11	33274	2	QUICK COUPLER,FEMALE
12	33555	2	ADAPTER, 1MOR x 1MJ
13	06520076	2	BUSHING,COMPOSITE
14	35131	2	KIT,HOSE CLAMP,SECONDARY
15	TB3010	3	BUSHING,STEEL
16	35312	2	SET COLLAR
17	06510232	2	TRAVEL LOCK,ELECTRIC
18	**33271**	2	ADAPTER,1/2MOR x 3/8MJ
19	31329	2	ADAPTER,1/2ORB x 1/2ORB ADJ
20	6T0149	1	CYLINDER,3 x 12
21	32810	3	ELBOW,1/2ORB x 3/8MJ
22	06537021	6	ROLL PIN,5MM,SS
23	TB1033	3	PIN,1 x 3-3/4
24	6T3207	3	GREASE ZERK,1/4
25	21688	2	CAPSCREW 7/16 x 3-1/4,NC
26	21677	2	NYLOCK NUT,7/16,NC
27	33443	1	PIN,1-1/2 x 9-1/2
28	TB3033	1	CLEVIS,SPHERICAL BEARING
29	33503	1	PIN,1 x 5-1/2,W/ SHOULDER
30	TF1143	1	LYNCH PIN
31	33703	1	CYLINDER,3-1/2 x 14
32	06500228	2	HOSE,1/4 x 204
33	33702	1	CYLINDER,4 x 14
34	33399	1	ELBOW,1/2MP x 3/8MJ
35	TB1023	2	ROLLPIN,7/32,SS
36	06420053	1	PIN,1-1/4 x 3-5/8
37	33442	1	PIN,1-1/2 x 10-3/4

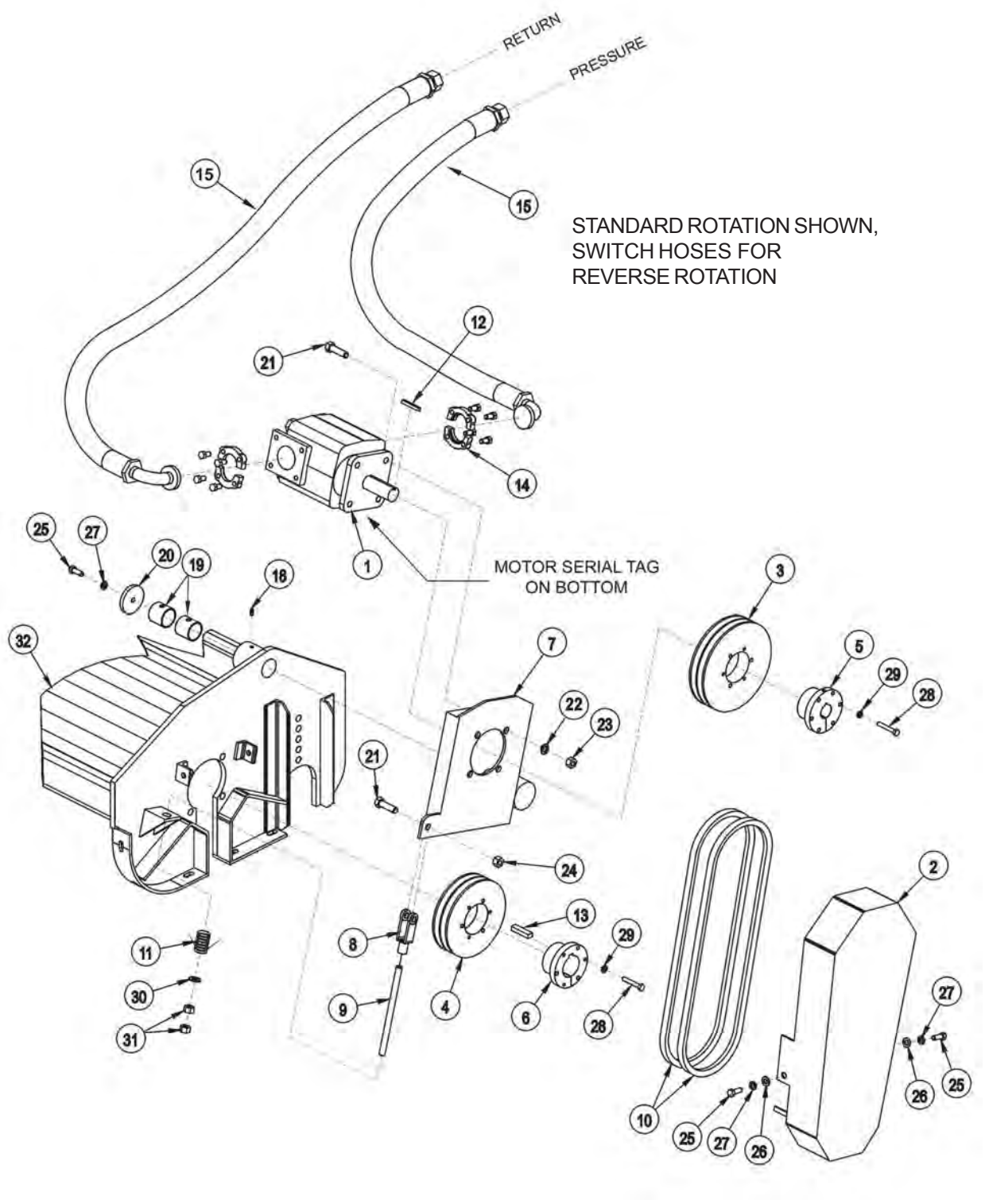
BOOM FLAIL PIVOT ASSEMBLY



BOOM FLAIL PIVOT ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1	*	REF	SECONDARY BOOOM - REFER TO BOOM ARM ASSY
2	21688	1	CAPSCREW,7/16 x 3-1/4,NC
3	32313	1	PIN,1-1/2 x 12-3/8
4	21677	1	NYLOCK NUT,7/16,NC
5	21635	3	CAPSCREW,3/8 x 2-1/4,NC
6	06520021	1	PIN,1 x 10-5/8
7	21627	3	NYLOCK NUT,3/8,NC
8	6T2290	6	CAPSCREW,5/8 x 2,NF,GR8
9	25270	11	FLATWASHER,5/8,GR8,USS
10	6T2408	5	HEX NUT,5/8,GR8,NF
11	06310098	1	BRKT,TREE,210
12	33986	1	PIN,1 x 13-1/8
13	06310096	1	TREE,210
*	33523	REF	LINK,PIVOT ASSY
14	33434	1	LINK,PIVOT
15	6T3207	3	GREASE ZERK,1/4
16	TB3010	3	BUSHING,1
17	06537021	2	ROLL PIN,5MM,SS
18	06420122	1	PIN,1 x 3-1/8
19	TB1033	1	PIN,1 x 3-3/4
20	06310095	1	PIVOT,DOGLEG,210
21	*	REF	CYLINDER - REFER TO BOOM ARM ASSY

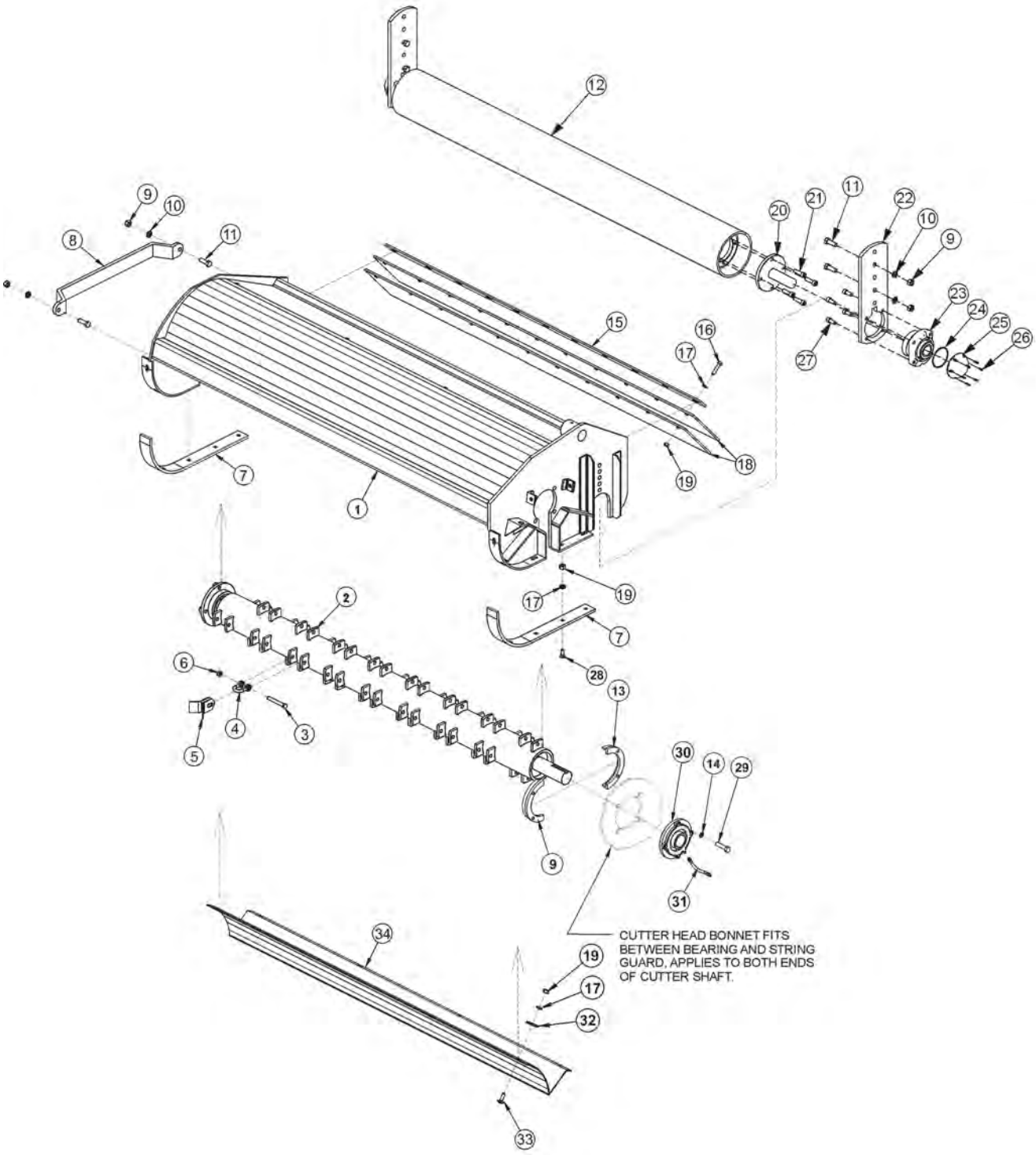
63” FLAIL DRIVE ASSEMBLY



63” FLAIL DRIVE ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1	**06504013**	**1**	**CURRENT MOTOR(M350-1 3/4 GEAR)**
2	32569	1	BELT GUARD,RH
3	TF3041	1	UPPER SHEAVE
4	TF3040	1	LOWER SHEAVE
5	TF3013	1	BUSHING
6	28723	1	BUSHING
7	32287	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	06500458	2	HOSE,1 X 95(FJX x 20FLG90)
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	*	REF.	CUTTER HEAD - REFER TO CUTTER HEAD ASY

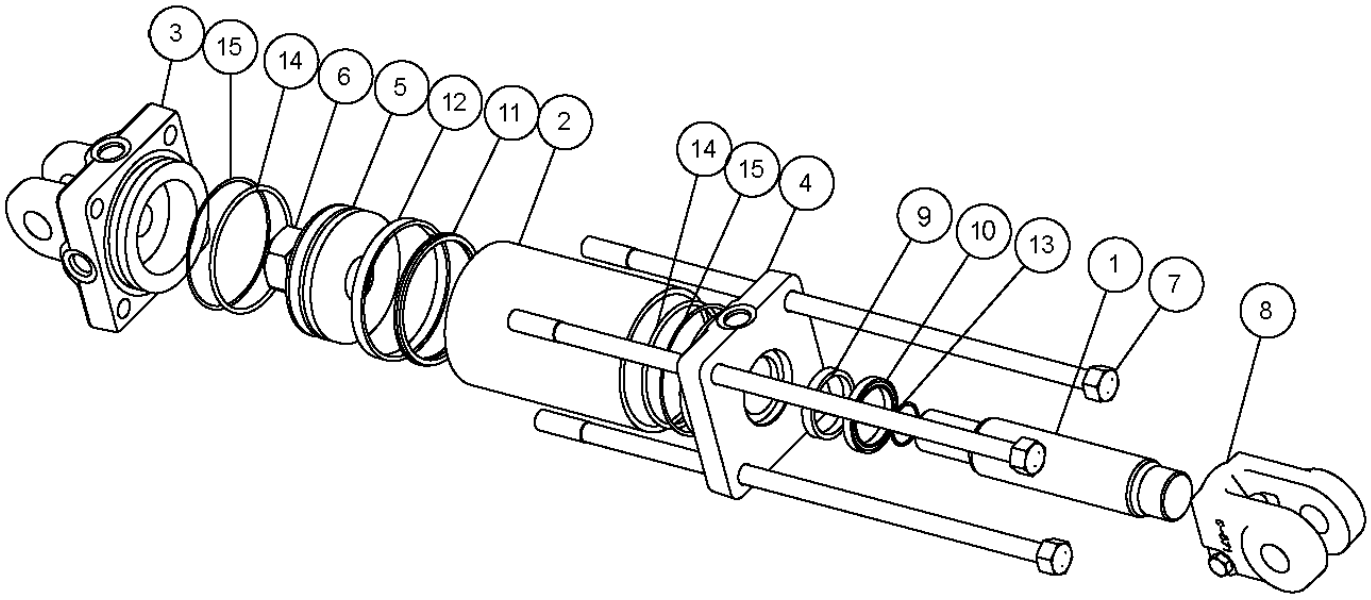
63” FLAIL ASSEMBLY



63” FLAIL ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1	06320182	1	CUTTER HEAD BONNET
2	28743	1	CUTTER SHAFT / KNIFE ASY STANDARD GRASS
2A	28744	1	CUTTER SHAFT / KNIFE ASY SMOOTH CUT
2B	28642C	*	CUTTERSHAFT WLDMNT,63”
3	TF1021B	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	CUTTERSHAFT GUARD
9	21725	6	HEX NUT,1/2”
10	21990	6	LOCKWASHER,1/2”
11	21731	6	CAPSCREW,1/2” x 1-1/2”
12	28650A	1	GROUNDROLLER,63”
13	33863	2	STRING GUARD,STD
14	06533006	8	FLATWASHER,1/2”,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	GROUNDROLLER STUB SHAFT
21	6T2330	8	CAPSCREW,7/16” x 1-1/2”,SKT HD
22	28735	2	ADJUSTABLE ROLLER BRACKET
23	06520028	2	BEARING,FLANGE,1-3/8”
24	06520029	2	O-RING
25	06520027	2	CAP,BEARING,GRNDRLLR
26	06530001	12	CAPSCREW ,SKT HD,8-32 x 1/2”,SS
27	6T2331	8	CAPSCREW,7/16” x 1”,SKT HD
28	6T2270	10	PLOW BOLT 3/8” x 1-1/4”
29	06530217	8	CAPSCREW,1/2” x 2”,L9
30	28683	2	BEARING,FLANGE
31	TF1032	1	HOSE,GREASE
32	6T2615	8	FENDER WASHER,3/8”
33	6T2283	8	CARRIAGE BOLT,3/8” x 1”
34	28665A	1	BAFFLE (INSIDE UPPER REAR OF CUTTER HEAD)

CYLINDER BREAKDOWNS



CYLINDER BREAKDOWNS

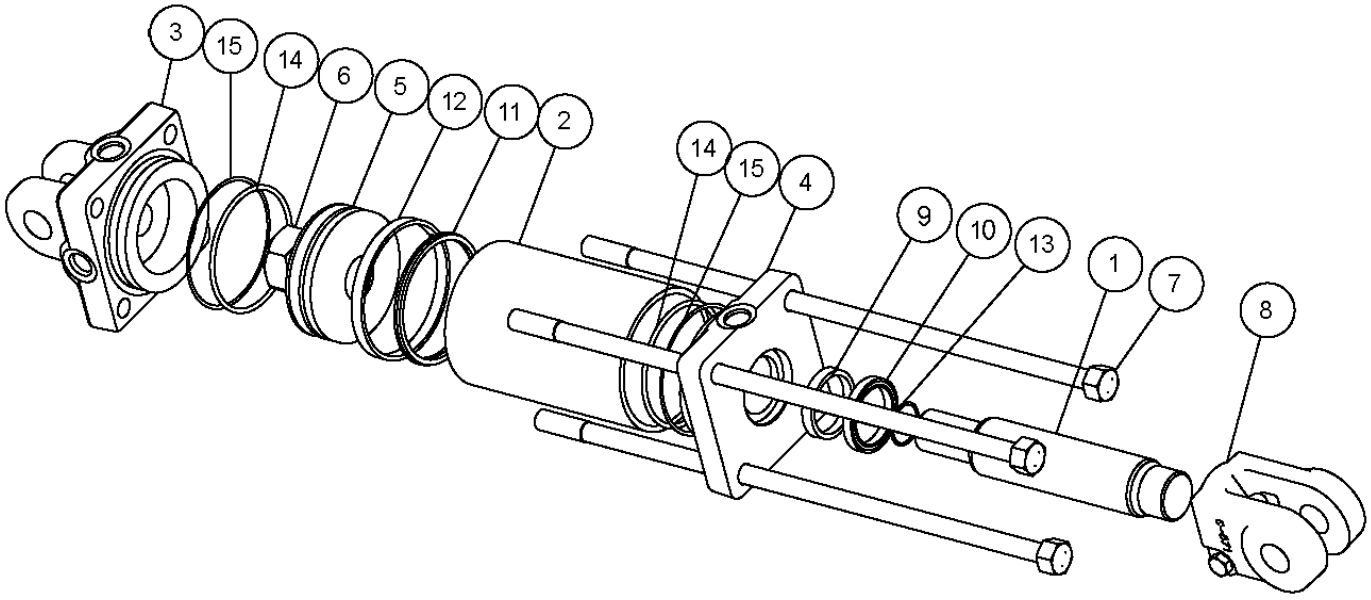
3 1/2" X 14" CYLINDER # 33703

ITEM	PART NO.	QTY.	DESCRIPTION
1	33822	1	PISTON ROD
2	33823	1	CYLINDER TUBE
3	33824	1	CYLINDER BUTT
4	33825	1	CYLINDER GLAND
5	33826	1	PISTON
6	33827	1	LOCK NUT
7	33829	4	TIE-ROD ASSY
8	6T0178	1	CLEVIS ASSY
	33832	**AVAIL**	**SEAL KIT**
9	*	1	U-CUP
10	*	1	WIPER
11	*	1	CROWN SEAL
12	*	N/A	N/A
13	*	1	O-RING
14	*	2	O-RING
15	*	1	BU-WASHER

4" X 14" CYLINDER # 33702

ITEM	PART NO.	QTY.	DESCRIPTION
1	33814	1	PISTON ROD
2	33816	1	CYLINDER TUBE
3	6T0169	1	CYLINDER BUTT
4	6T0171	1	CYLINDER GLAND
5	33817	1	PISTON
6	6T0175	1	LOCK NUT
7	33819	4	TIE-ROD ASSY
8	6T0172	1	CLEVIS ASSY
	33821	**AVAIL**	**SEAL KIT**
9	*	1	U-CUP
10	*	1	WIPER
11	*	1	CROWN SEAL
12	*	1	BEARING RING
13	*	1	O-RING
14	*	2	O-RING
15	*	1	BU-WASHER

CYLINDER BREAKDOWNS



CYLINDER BREAKDOWNS

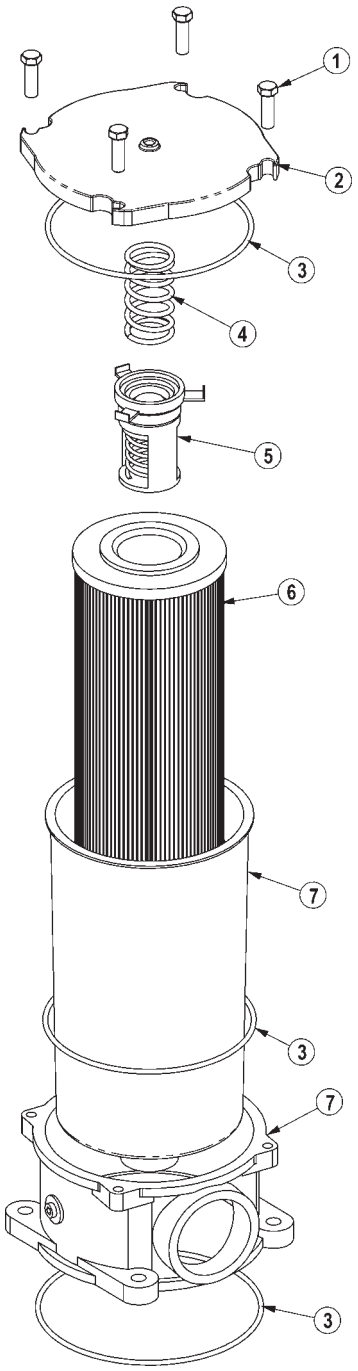
2 1/2" X 11 1/2" CYLINDER # 34275

ITEM	PART NO.	QTY.	DESCRIPTION
1	06501576	1	PISTON ROD
2	06501575	1	CYLINDER TUBE
3	06501574	1	CYLINDER BUTT
4	33836	1	CYLINDER GLAND
5	33837	1	PISTON
6	33838	1	LOCK NUT
7	06501577	4	TIE-ROD ASSY
8	N/A	N/A	CLEVIS ASSY
	06501578	**AVAIL**	**SEAL KIT**
9	*	1	U-CUP
10	*	1	WIPER
11	*	1	CROWN SEAL
12	*	N/A	N/A
13	*	1	O-RING
14	*	2	O-RING
15	*	1	BU-WASHER

3" X 12" CYLINDER # 6T0149

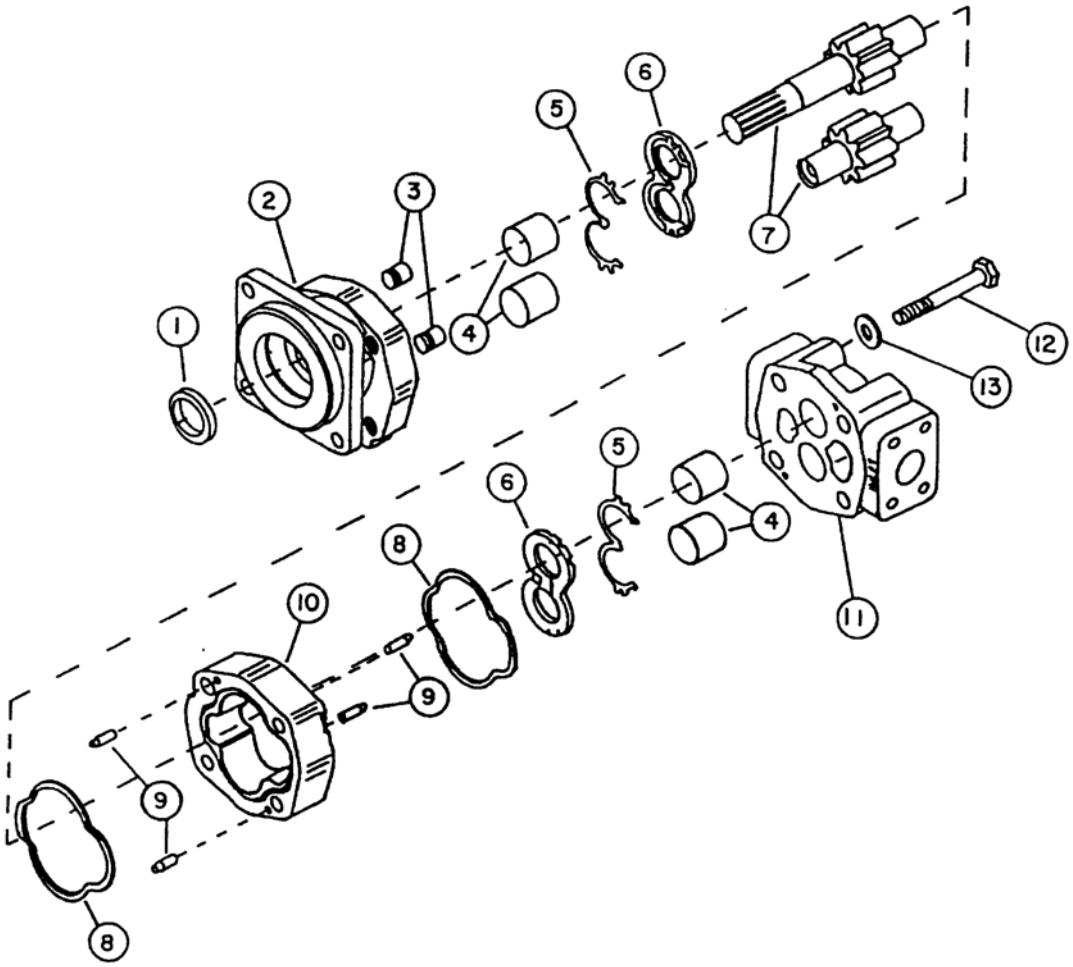
ITEM	PART NO.	QTY.	DESCRIPTION
1	6T0203	1	PISTON ROD
2	6T0204	1	CYLINDER TUBE
3	6T0167	1	CYLINDER BUTT
4	*	1	CYLINDER GLAND
5	6T0173	1	PISTON
6	6T0179	1	LOCK NUT
7	*	4	TIE-ROD ASSY
8	6T0178	1	CLEVIS ASSY
	06501579	**AVAIL**	**SEAL KIT**
9	*	1	U-CUP
10	*	1	WIPER
11	*	1	CROWN SEAL
12	*	N/A	N/A
13	*	1	O-RING
14	*	2	O-RING
15	*	1	BU-WASHER

RESERVOIR TANK FILTER ASSEMBLY



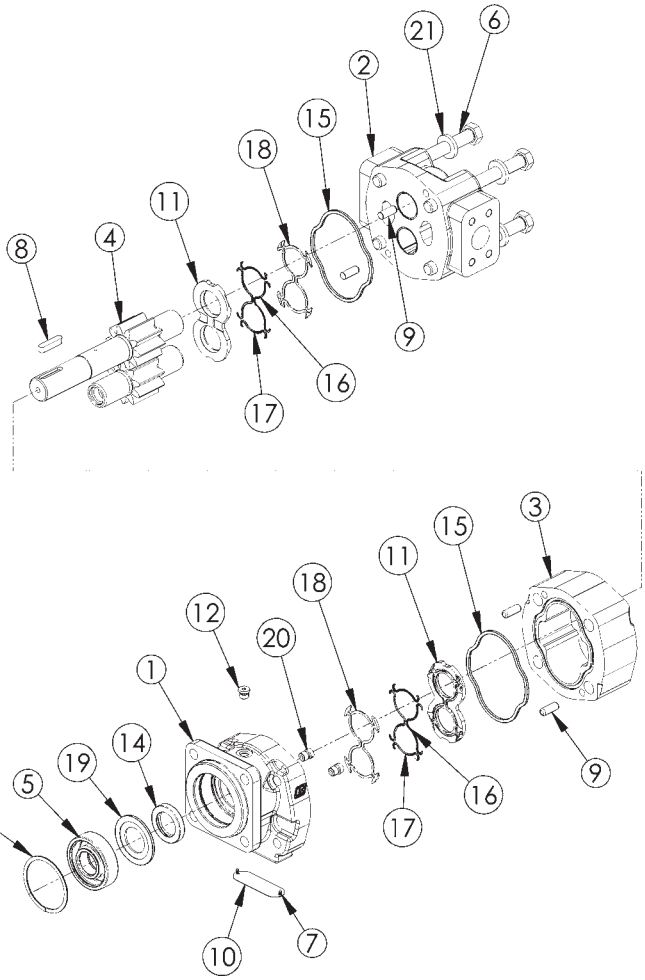
ITEM	PART NO.	QTY.	DESCRIPTION
	06505044	**AVAIL**	**FILTER ASSY SAE 10 MICRON**
1	28583	4	CAPSCREW,8MMX25MM(1.25 PITCH)
2	06505045	1	COVER
3	06505046	1	SEAL KIT
4	06505047	1	SPRING
5	06505048	1	BYPASS
6	35259	1	FILTER,10 MIC,RETURN LINE
7	06505049	1	CAN/BODY

HYDRAULIC PUMP



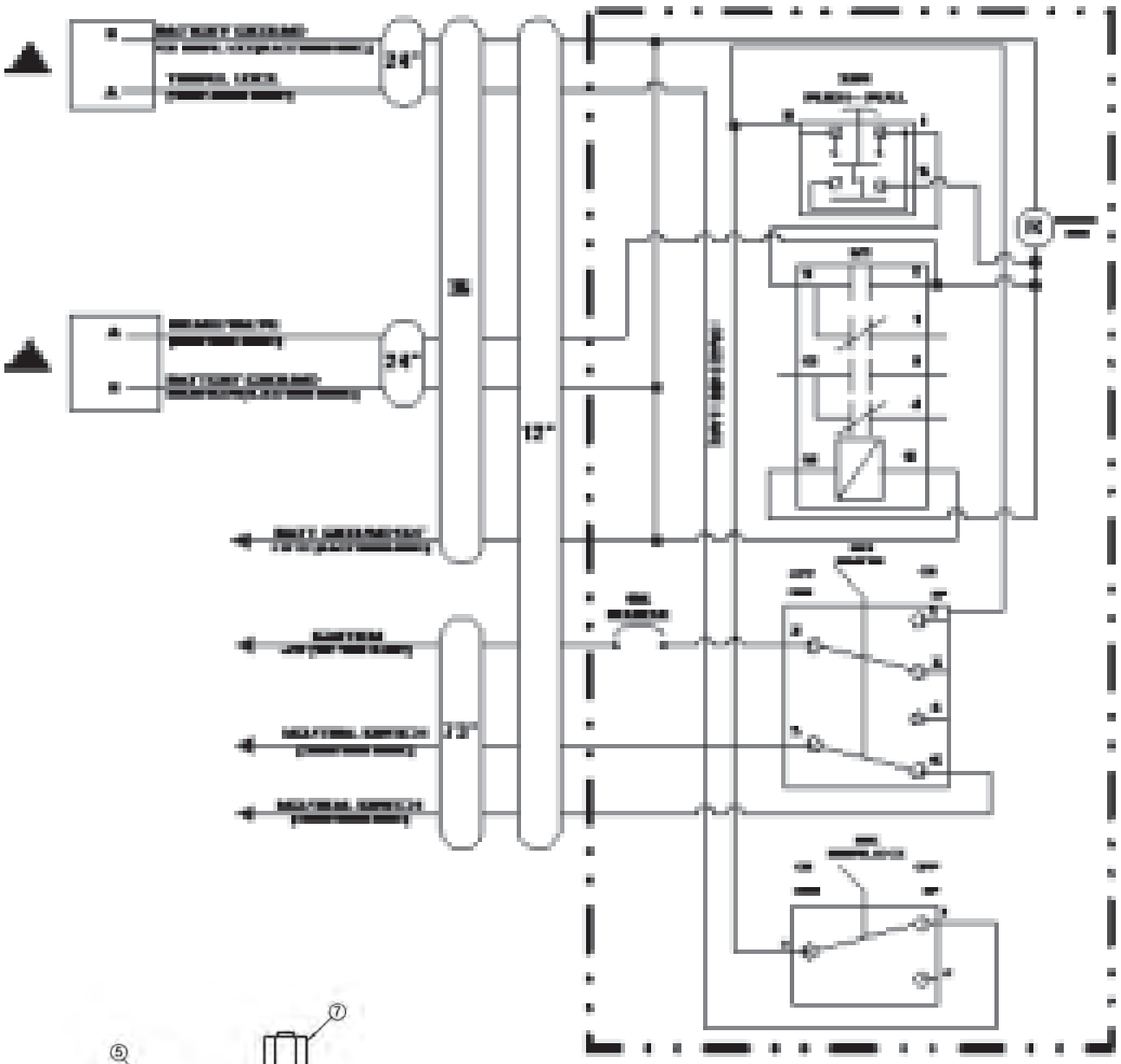
ITEM	PART NO.	QTY	DESCRIPTION
	23152	**AVAIL.**	**PUMP ASSEMBLY 1 3/4" COMPLETE**
1	22765	1	SEAL (INCLUDED IN SEAL KIT)
2	22766	1	SHAFT END COVER
3	22767	2	CHECK AND END COVER
4	22768	2	BUSHING
5	22769	2	CHANNEL SEAL (INCLUDED IN SEAL KIT)
6	22770	2	THRUST PLATE (INCLUDED IN SEALKIT)
7	22771	SET	DRIVE SHAFT AND GEAR SET 1 3/4"
8	22772	2	GASKET SEAL (INCLUDED IN SEAL KIT)
9	22773	4	DOWEL PINS
10	22774	1	GEAR HOUSING 1 3/4"
11	22779	1	PORT END COVER
12	23824	4	STUDS
13	22781	SET	WASHER
	6T5322	**AVAIL.**	**SEAL APPLICATOR TOOL**
	24150	**AVAIL.**	**SEAL KIT (INCLUDES 1, 5, 6 AND 8)**

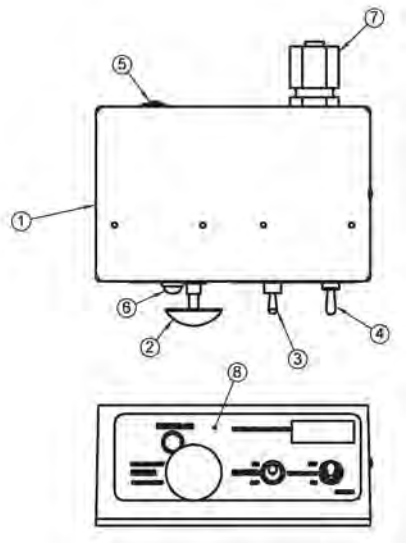
FLAIL MOTOR



ITEM	PART NO.	QTY.	DESCRIPTION
*	06504013	AVAIL	MOTOR ASSEMBLY 350 - TBF50, TBF63
1	06504039	1	SHAFT END COVER
2	06504040	1	PORT END COVER
3	06504041	1	GEAR HOUSING
4	06504042	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	2	THRUSTPLATE
12	02961940	1	HEX PLUG
13	TF4401	1	SNAP RING
14	06504049	1	LIP SEAL (INCLUDED IN SEAL KIT)
15	TF4410	2	GASKET SEAL (INCLUDED IN SEAL KIT)
16	06504046	4	SIDE SEAL (INCLUDED IN SEAL KIT)
17	06504047	4	END SEAL (INCLUDED IN SEAL KIT)
18	TF4407	2	BACK-UP SEAL (INCLUDED IN SEAL KIT)
19	06504048	1	SEAL RETAINER

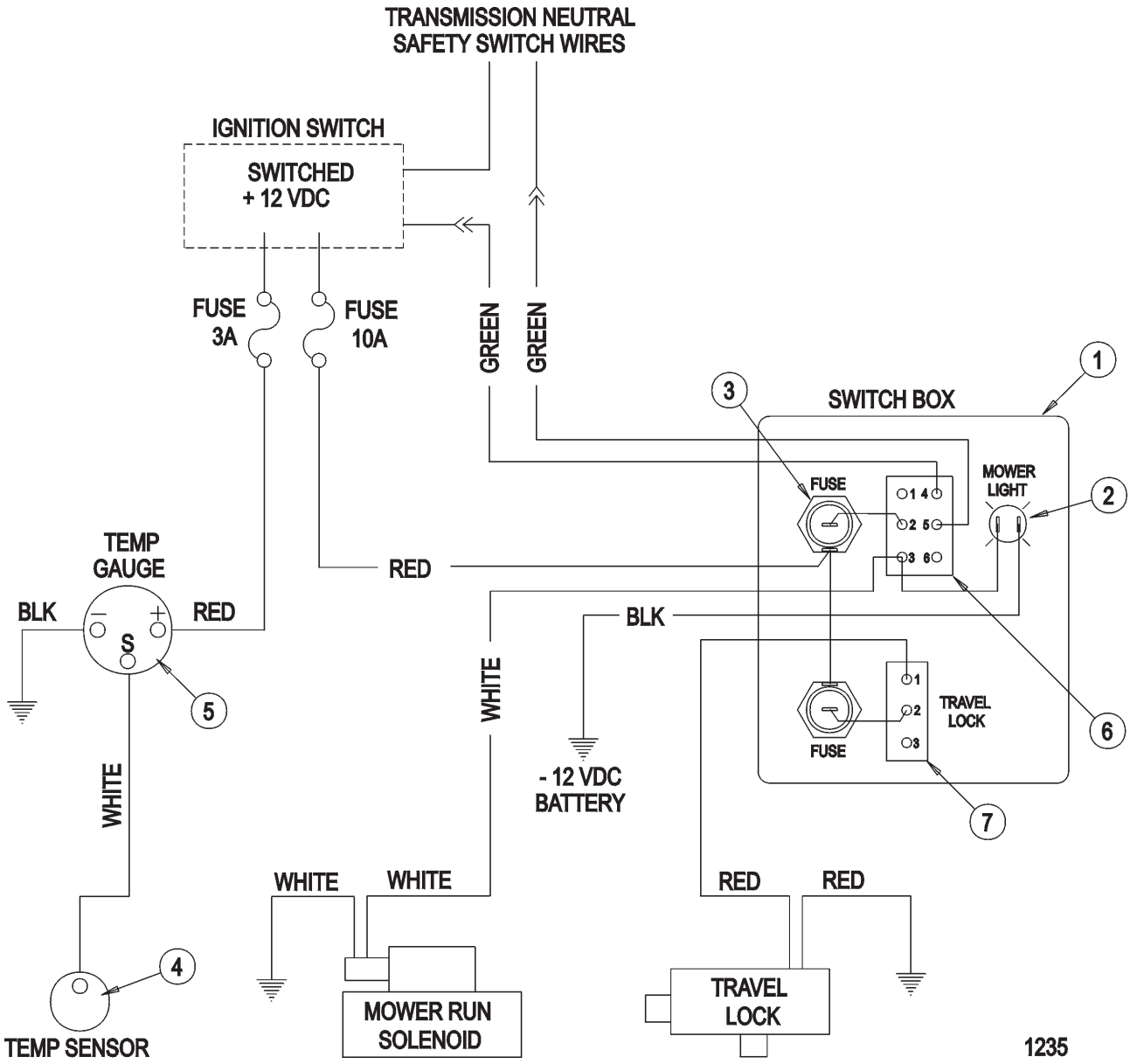
HUSCO CONTROLS SWITCHBOX





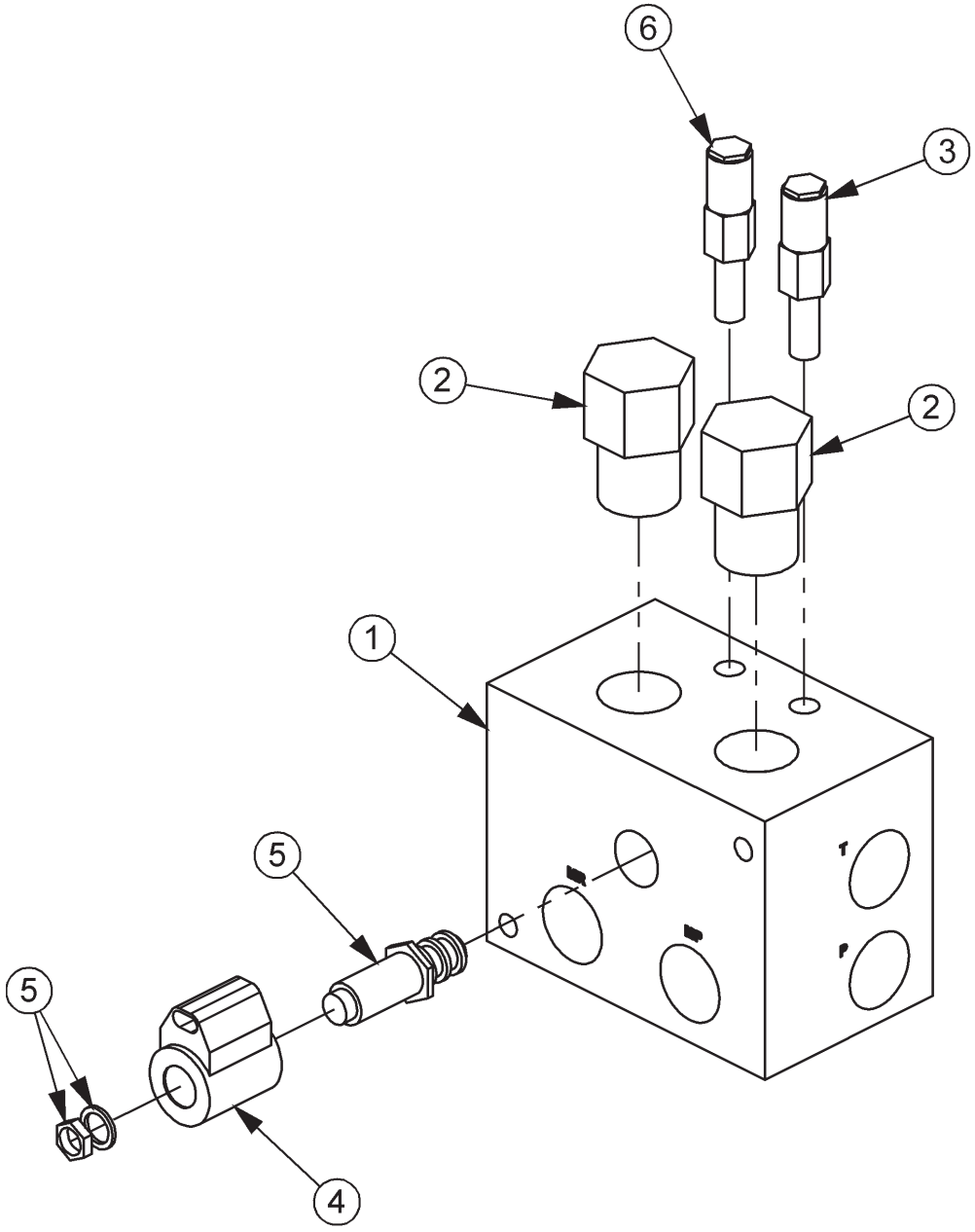
ITEM	P/N	QTY.	DESCRIPTION
1	06514012	1	SWBX,ALUM,BLK,06510100
2	35226	1	SWITCH,MOWER,COLEHERSEE
3	33811	1	SWITCH,MASTER/DECK FLOAT
4	34532	1	SWITCH,TRVL LCK
5	06514014	1	BREAKER,10A,SWBX
6	6T3923	1	INDICTATOR LIGHT,ON,RED
7	34540	1	STRAIN RELIEF,3/4,BLACK,NYLON
8	06550019	1	DECAL,SWTCHBX,BOOM,CG
9	35227	1	RELAY,DP,DT,12V,LY2F,35226

SOLENOID SWITCHBOX AND WIRING



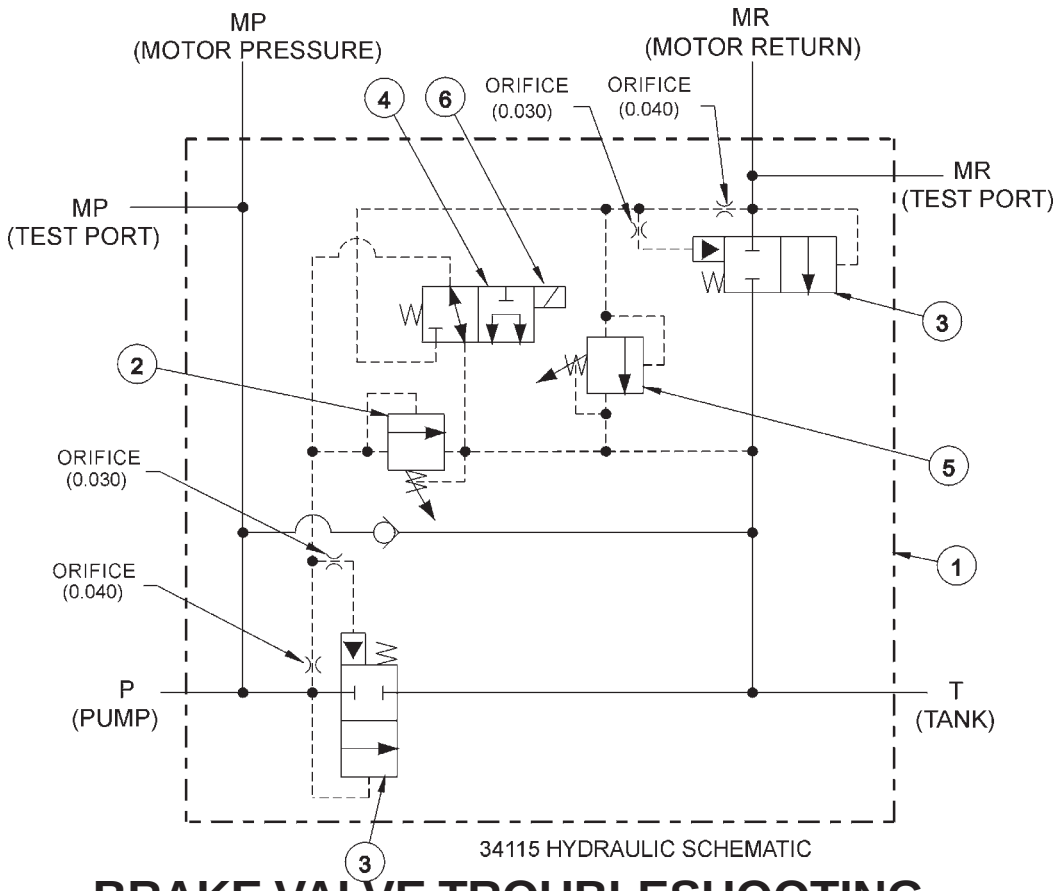
ITEM	PART NO.	QTY.	DESCRIPTION
1	*	REF	SWITCH BOX
2	6T3923	1	INDICATOR LIGHT
3	6T3924	1	FUSE HOLDER
4	6T3931	OPT.	TEMPERATURE SENSOR
5	6T3934	OPT.	TEMPERATURE GAUGE
6	PT3905A	1	TOGGLE SWITCH, MOWER RUN
7	34532	1	TOGGLE SWITCH, TRAVEL LOCK

BRAKE VALVE ASSEMBLY W/ METRI PAK



ITEM	PART NO.	QTY.	DESCRIPTION
1	34092	1	BRAKE VALVE, BLANK
2	34094	2	LOGIC ELEMENT
3	34095	1	RELIEF VALVE, 3500 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

BRAKE VALVE HYDRAULIC SCHEMATIC



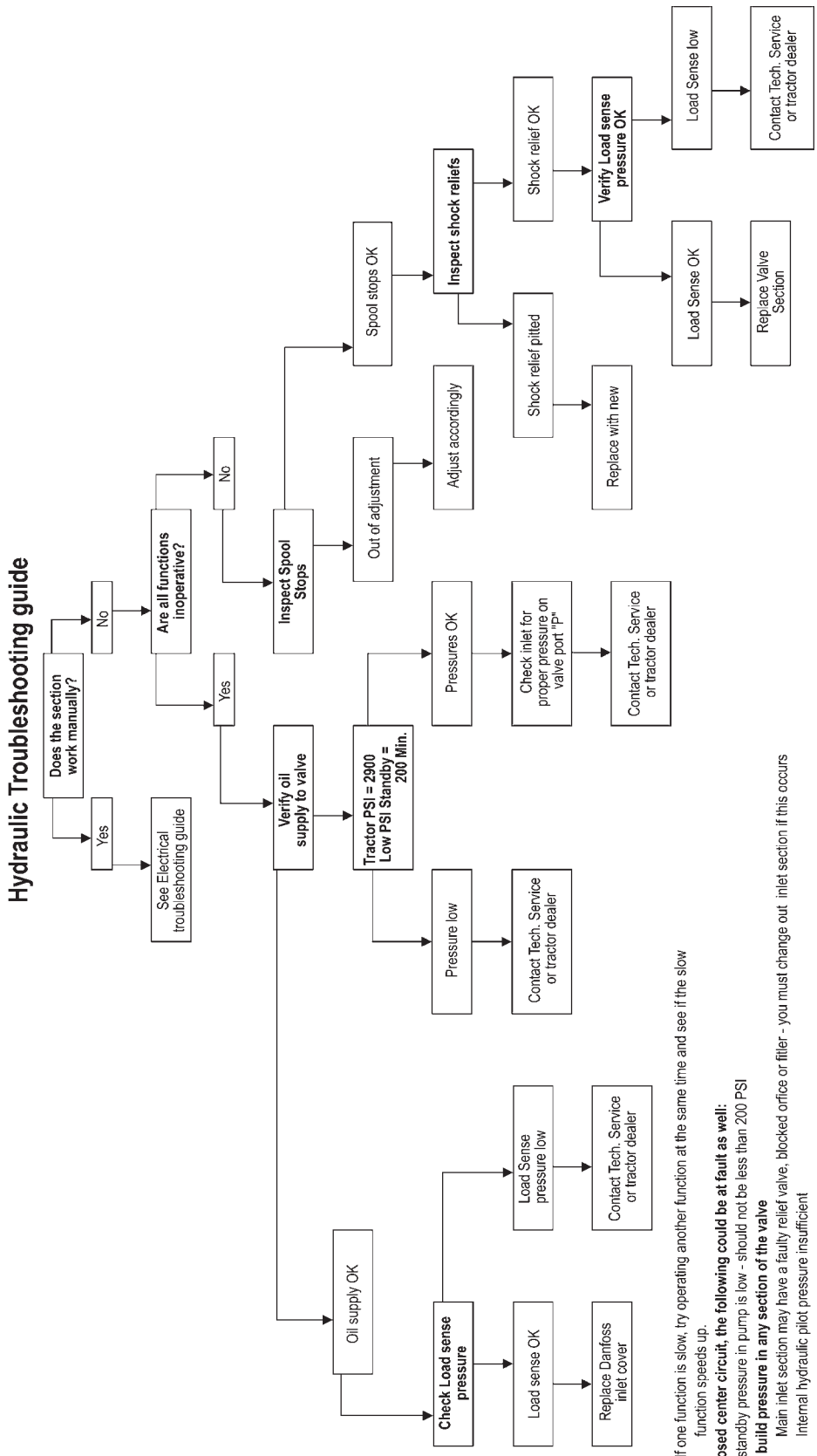
BRAKE VALVE TROUBLESHOOTING

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

CORRECTIVE STEPS:

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

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 orfice or filter - you must change out inlet section if this occurs
Internal hydraulic pilot pressure insufficient

HYDRAULIC - TROUBLESHOOTING GUIDE

Hydraulic inspection.

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

With the spools in Neutral

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

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

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

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

Operate more than one spool.

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

Possible hydraulic problems.

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

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NOTES

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!

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

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

TO THE OWNER / OPERATOR / DEALER

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

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

OWNER REQUIREMENTS:

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

OPERATOR REQUIREMENTS:

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

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