

TWIN FLAIL ASSEMBLIES

JD5085-5115E T4F

Current as of 4/7/16



PARTS LISTING WITH MOUNTING AND OPERATING INSTRUCTIONS

Tiger Corporation

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

TO THE OWNER / OPERATOR / DEALER

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

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

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



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









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









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 loc	al Tiger Dealer afte
gathering:			
 Machine model 			

Serial numberDealer name

• Detailed information about the problem including results of troubleshooting

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

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

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

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

Tiger is a registered trademark.





GENERAL SAFETY INSTRUCTIONS AND PRACTICES

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



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

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

A DANGER

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

AWARNING

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

A CAUTION

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 environment.

NOTE: Identifies points of particular interest for more efficient and convenient operation or repair.

READ, UNDERSTAND, and FOLLOW the following Safety Messages. Serious injury or death may occur unless care is taken to follow the warnings and instructions stated in this Manual and in the Safety Messages on the implement. Always follow the instruction in this manual and use good common sense to avoid hazards.



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

OPERATOR SAFETY



Read and understand Operator's Manual



Always wear Safety Glasses



Wear Hard Hat Safety Shoes



Never use Drugs or Alcohol when operating equipment



Wear Safety Vest when operating on or near roads

AWARNING

TO AVOID SERIOUS INJURY OR DEATH DO THE FOLLOWING:

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

GENERAL OPERATING SAFETY

VISIBILITY CONDITIONS WHEN MOWING:

- OPERATE IN DAYLIGHT or with lights that gives at least 100 yards clear visibility.
- **BE ABLE TO SEE** and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects.

GROUND SPEED WHEN MOWING:

- NORMAL SPEED range is between 2 to 5mph.
- ADJUST MOWING SPEED for terrain conditions and grass type, density and cut height.
- **REDUCE MOWING SPEED** when near steep slopes, ditches, drop-offs, overhead obstructions, power lines and to avoid debris and foreign objects.

INSECT INFESTATION

• Do Not operate in areas where bees or insects may attack unless you **WEAR PROTECTIVE CLOTHING** or use enclosed tractor cab.

PTO SPEED:

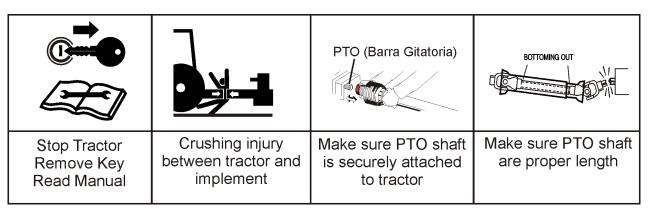
- DO NOT EXCEED IMPLEMENT RATED PTO SPEED
- AVOID exceeding rated PTO speeds that may result in broken drivelines or blade failures.

SAFETY SIGNS:

REPLACE missing, damaged or unreadable safety signs immediately. PN 0s01

SIDE FLAIL

CONNECTION OR DISCONNECTING IMPLEMENT SAFETY





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

WHEN BACKING tractor to implement hitch:

DO NOT ALLOW BYSTANDERS between tractor and implement

BEFORE connecting and disconnecting implement hitch:

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

WHEN connecting and disconnecting implement hitch:

DO NOT crawl or walk under raised mower

WHEN CONNECTING IMPLEMENT DRIVELINE:

TO AVOID implement driveline coming loose during operation:

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

TO AVOID broken driveline during operations:

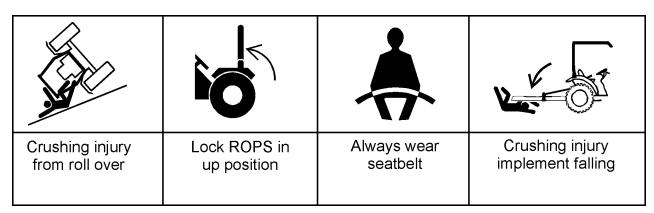
- CHECK driveline for proper length between PTO shaft and implement gearbox shaft.
- Drivelines too short can pull apart or disengage.
- · Drivelines too long can bottom out.
- Bottoming driveline telescoping assembly will stop sliding and become solid.
- Driveline bottoming can push through support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

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

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

DO NOT connect the Mower to a tractor with the PTO directly connected to the Tractor transmission. PN CDFM-01

CRUSHING HAZARDS





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

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

WHEN RAISING OR LOWERING IMPLEMENT:

- Raise or lower **ONLY WHILE SEATED** in tractor seat with seat belt buckled.
- · Raise or lower ONLY when implement tongue is securely attached to tractor drawbar TO AVOID implement tip over.
- KEEP BYSTANDERS CLEAR of area TO AVOID crushing.

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



TO AVOID EQUIPMENT FALLING while working near or under lifted wings, components and implements raised by 3-Pointed tractor hitch:

- SECURELY SUPPORT or block up raised equipment and components.
- BLOCK UP and securely support equipment before putting hands, feet or body under raised equipment or lifted components

WHEN PARKING Implement and Tractor:

- LOWER implement, LOCK or BLOCK lifted parts before leaving equipment.
- NEVER leave implement unattended in a raised position.

▲WARNING

TO AVOID CHILDREN FALLING OFF OR BEING CRUSHED BY EQUIPMENT:

• **NEVER ALLOW** children to play on or around Tractor or Implement.

WHEN UNHITCHING IMPLEMENT:

LOWER implement, LOCK or BLOCK lifted parts before leaving equipment. PN CHFM-01

THROWN OBJECT HAZARDS



Mower Thrown Objects Hazard



Raised Mower Thrown Objects



Inspect Area remove foreign objects



Do not let blades contact solid objects



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

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

KEEP bystanders 300 feet away

STOP MOWING IF PASSERSBY ARE WITHIN 300 FEET UNLESS:

- All THROWN OBJECT SHIELDING including, Front and Rear Deflectors, Steel Guards, Bands, Side Skirts and Skid Shoes in place and in good condition when mowing.
- Mower sections or wing are adjusted to be close and parallel to ground without exposing blades.
- MOWING AREA has been inspected and foreign materials and debris have been removed.
- · PASSERSBY are inside enclosed vehicle.

INSPECT AREA FOR POTENTIAL THROWN OBJECTS BEFORE MOWING:

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

HIGH GRASS and **WEED AREA INSPECTION**:

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

MOWER THROWN OBJECT SHIELDING:

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

RIGHT OF WAY (Highway) MOWING

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

SIDE FLAIL

THROWN OBJECTS HAZARDS (CONTINUED)



Mower Thrown Objects Hazard



Raised Mower Thrown Objects



Inspect Area remove foreign objects



Do not let blades contact solid objects

MOWER OPERATION:

- DO NOT exceed mower's rated Cutting Capacity or cut non-vegetative material.
- USE ENCLOSED TRACTOR CABS when two or more mowers are operating in mowing area.
- ADJUST mower sections or wing close and parallel to ground without exposing blades
- ADJUST cutting HEIGHT to AVOID BLADE CONTACT with solid objects like wire, rocks, posts, curbs, guard rails and fixed obstructions.
- **DO NOT** operate mower when mower is raised or in transport position
- STOP MOWING immediately if blades strike heavy objects, fixed structures, metal guard rails and concrete structures:
 - 1. BLADES CAN FAIL from impact and objects can be thrown with great velocity.
 - 2. INSPECT and REPLACE any damaged blades.
 - 3. CHECK blade carrier balance and REPLACE if damaged.
- DO NOT mow in standing water TO AVOID possible BLADE FAILURE.
- AVOID MOWING in reverse:
 - 1. STOP PTO and back up mower.
 - 2. **LOWER** mower, engage **PTO** and mow forward.
- STOP PTO and BLADES when raising the mower to transport position.
- DO NOT ENGAGE PTO with mower in transport position.
- STOP mowing when EXCESSIVE VIBRATION occurs:
 - 1. STOP PTO and tractor ENGINE.
 - 2. **INSPECT** mower for vibration source
 - 3. REPLACE any damage parts and bent or damaged BLADES. PN TOFM-02

RUN OVER HAZARDS





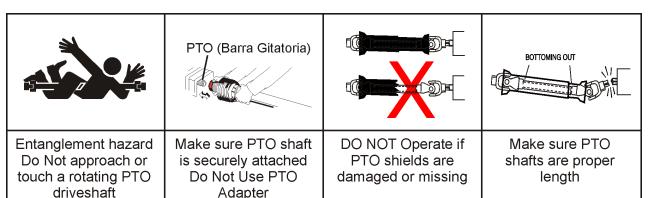
TO AVOID SERIOUS INJURY OR DEATH FROM FALLING OFF TRACTOR OR EQUIPMENT RUN OVER:

- USE ROPS and SEAT BELT equipped tractors for mowing operations.
- KEEP ROPS locked in UP position.
- ONLY start tractor while seated in tractor seat.
- ALWAYS BUCKLE UP seat belt when operating tractor and equipment.
- ONLY OPERATE tractor and equipment while seated in tractor seat.
- NEVER ALLOW RIDERS on tractor or implement.

WHEN MOUNTING AND DISMOUNTING TRACTOR:

- ONLY mount or dismount when tractor and moving parts are stopped.
- STOP ENGINE AND PTO, engage parking brake, lower implement, allow all moving parts to stop and remove key before dismounting from tractor. PN RO01

PTO ENTANGLEMENT HAZARDS





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

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

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

PTO SHIELDING:

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

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

TO AVOID broken driveline during operations:

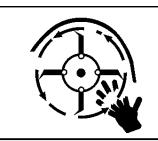
- CHECK driveline for proper length between PTO shaft and implement gearbox shaft. (Refer to Instructions in Operation Section)
- Drivelines too short can pull apart or disengage.
- Drivelines too long can bottom out.
 - Bottoming driveline telescoping assembly will stop sliding and become solid.
- Driveline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

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

DO NOT USE PTO ADAPTER.

Using a PTO adapter can cause excessive vibration, thrown objects, blade and implement failures by doubling operating speed. Increased working length exposing unshielded driveline areas. PN PEO1

MOWER BLADE CONTACT HAZARDS



Do not put fingers underneath mower



Do not put foot underneath mower



Stop Tractor Remove Key Read Manual

A DANGER

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

- STAY AWAY and KEEP HANDS, FEET and BODY AWAY from rotating blades, drivelines and parts until all moving elements have stopped.
- DO NOT put hands or feet under mower decks
- STOP rotating BLADES disengage PTO and wait for blade to stop rotating before raising mower deck or wings
- STOP LOOK and LISTEN before approaching the mower to make sure all rotating motion has stopped. PN MBFM-01

HIGH PRESSURE OILLEAK HAZARDS



High pressure oil penetrating skin



High pressure oil eroding skin



Using cardboard to check for oil leaks



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

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

HIGH PRESSURE FLUID LEAKS CAN BE INVISIBLE.

WHEN CHECKING FOR HYDRAULIC LEAKS AND WORKING AROUND HYDRAULIC SYSTEMS:

- ALWAYS WEAR safety glasses and impenetrable gloves.
- USE paper or cardboard to search for leaks.
- **DO NOT USE** hands or body parts to search for leak.
- KEEP hands and body AWAY from pin holes and nozzles ejecting hydraulic fluid.
- Hydraulic fluid may cause gangrene if not surgically removed immediately by a doctor familiar with this form of injury.
 PN HP01

SIDE FLAIL

ELECTRICAL & FIRE HAZARDS



Strike and explosion Hazard Blades Contacting Utility or Gas Lines



Do not operate near fires. Keep mower deck clear of debris

A DANGER

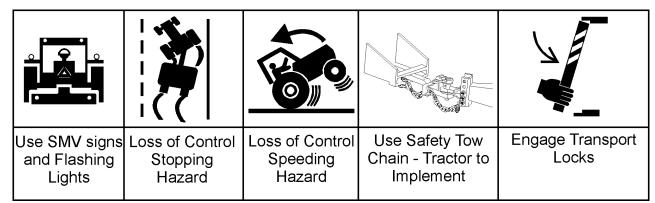
TO AVOID SERIOUS INJURY OR DEATH FROM ELECTRICAL CONTACT WHEN WORKING AROUND ELECTRICAL POWER LINES, GAS LINES AND UTILITY LINES:

- **INSPECT** mowing area for overhead or underground electrical power lines, obstructions, gas lines, cables and Utility, Municipal, or other type structure.
- DO NOT allow mower to contact with any Utility, Municipal, or type of structures and obstructions.
- CALL 811 and 1-800-258-0808 for identify buried utility lines.

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

- EQUIP Tractor with a FIRE EXTINGUISHER
- **DO NOT OPERATE** mower on a tractor equipped with under frame exhaust
- **DO NOT SMOKE** or have open flame near Mower or Tractor
- DO NOT DRIVE into burning debris or freshly burnt area
- AVOID FIRE IGNITION by not allowing mower blade to contact solid objects like metal or rock.
- ADJUST SLIP CLUTCHES to avoid excessive slippage and clutch plate heating.
- CLEAR any grass clippings or debris buildup around mower drivelines, slip clutches, and gearboxes.
- SHUT OFF ENGINE while refueling. PN EF02

TRANSPORTING HAZARDS



AWARNING

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

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

TRACTOR REQUIREMENTS FOR TOWING OR TRANSPORTING IMPLEMENTS:

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

BEFORE TRANSPORTING OR TOWING IMPLEMENT:

TRACTOR INSPECTION:

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

PREPARE IMPLEMENT FOR TRANSPORTING OR TOWING:

- DISENGAGE PTO
- RAISE MOWER
- REMOVE any cut material collected on mower deck.

TOWED MOWERS - ENGAGE TRANSPORT LOCKS AND SAFETY CHAINS:

- INSTALL center axle cylinder transport stops or pins
- ATTACH implement SAFETY CHAIN to tractor

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

BRAKING TESTS:

- APPLY brakes at increasing speeds
- Observe STOPPING distances increases with increased speeds.
- DETERMINE the maximum safe transport speed that does not exceed 20 mph

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

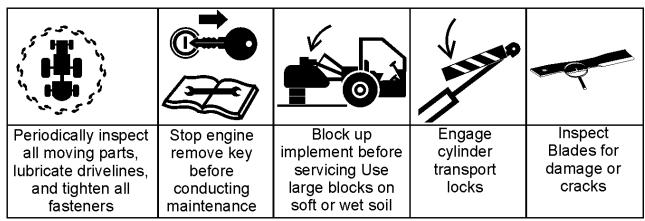
- TEST equipment in slowly increasing speed in turns to determine it can be operated at higher speeds.
- USE REDUCED turning speeds in sharp turns to avoid equipment turning over.

WHEN TOWING OR TRANSPORTING EQUIPMENT:

- Always WEAR SEAT BELT when operating or transporting mower.
- USE low speeds to avoid overturn with raised wings.
- . USE low speeds and gradual steering on curves, hills, rough or uneven surfaces and on wet roads
- TURN ON tractor FLASHING WARNING LIGHTS.
- ALLOW clearance for implement swing while turning. PN TH02

SIDE FLAIL

HAZARDS WITH MAINTENANCE OF IMPLEMENT



≜WARNING

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

BEFORE PERFORMING SERVICE, REPAIRS AND MAINTENANCE ON THE IMPLEMENT:

- STOP ENGINE AND PTO, engage parking brake, lower implement, allow all moving parts to stop and remove key before
 dismounting from tractor.
- · PLACE implement on ground or securely block up raised equipment. Use large blocks on soft or wet soil.
- PUSH and PULL Remote Hydraulic Cylinder lever to relieve hydraulic pressure.
- DISCONNECT IMPLEMENT driveline from tractor PTO SHAFT.

WEAR SAFETY GLASSES, PROTECTIVE GLOVES and follow SAFETY PROCEDURES when performing service, repairs and maintenance on the implement:

- Always WEAR protective GLOVES when handling blades, knives, cutting edges or worn component with sharp edges.
- Always WEAR GLOVES and SAFETY GLASSES when servicing hot components
- AVOID CONTACT with hot hydraulic oil tanks, pumps, motors, valves and hose connection surfaces.
- SECURELY support or BLOCK UP raised implement, framework and lifted components before working underneath
 equipment.
- STOP any implement movements and SHUT-OFF TRACTOR engine before doing any work procedures.
- USE ladder or raised stands to reach high equipment areas inaccessible from ground.
- ENSURE good footing by standing on solid flat surfaces when getting on implement to perform work.
- FOLLOW manufacturer's instructions in handling oils, solvents, cleansers, and other chemical agents.
- DO NOT change any factory-set hydraulic calibrations to avoid component or equipment failures.
- DO NOT modify or alter implement, functions or components.
- DO NOT WELD or repair rotating mower components. These may cause vibrations and component failures being thrown from mower.

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

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

BLADE INSPECTION:

- REPLACE bent, damage, cracked or broken blades immediately with new blades.
- AVOID blade failures and thrown broken blades. DO NOT straighten, weld, or weld hard-facing blades.

SAFETY SHIELDS, GUARDS AND SAFETY DEVICES INSPECTION:

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

PARTS INFORMATION

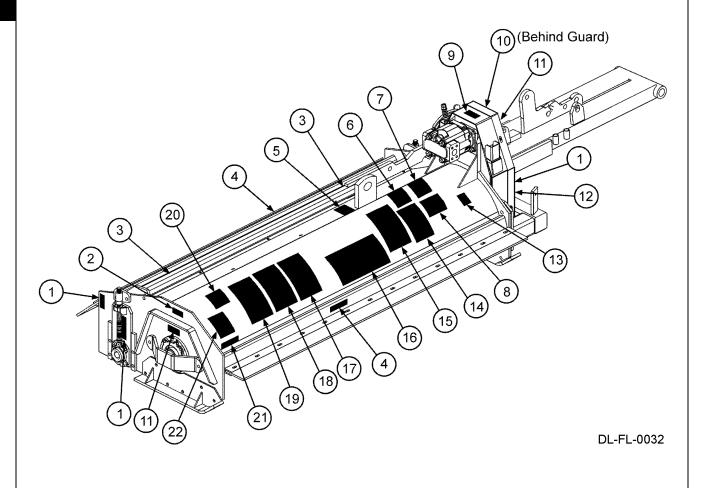
PARTS INFORMATION

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

SEE YOUR TIGER DEALER

Decal Location

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

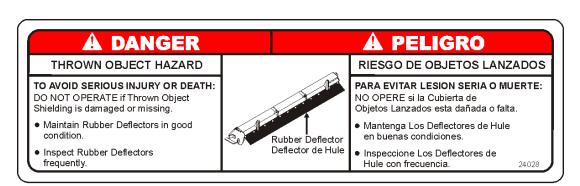


SIDE FLAIL

	ITEM	PART NO.	QTY.	TYPE	DESCRIPTION
	1.	6T3261	2	INSTRUCT	Greasing Instructions
	2.	22839	1	INSTRUCT	Do Not Lubricate with Automatic Grease Gun
	3.	42399	2	REFLECTOR	Red Reflector
	4.	24028	2	DANGER	Thrown Object Hazard
	5.	D703	1	DANGER	Crushing Hazard
	6.	02962765	1	DANGER	Crushing Hazard & Pinch Points
	7.	02965262	1	WARNING	Oil Leak Hazard
	8.	D698	1	DANGER	Crushing Hazard - Injury or Death
	9.	00758194	1	WARNING	Pinch Point Hazard
	10.	D646	1	DANGER	Guard Missing, Do Not Operate
	11.	6T3249A	2	INSTRUCT	Greasing Instructions-Cutter Shaft Bearing
	12.	21405	2	INSTRUCT	Standard/Smooth Cut Measurements
	13.	6T3221	1	IMPORTANT	Lubricate Spindle every 40 hours
	14.	32709	1	WARNING	Use Genuine Tiger Parts
	15.	D699	1	WARNING	Multi-Hazard
	16.	31522	1	LOGO	Tiger Logo (10" x 5.5")
	17.	D696	1	DANGER	Multi-Hazard
	18.	D687	1	DANGER	Entanglement / Run Over Hazard
	19.	D686	1	DANGER	Thrown Object / Crushing Hazard
	20.	D706	1	INSTRUCT	Lubrication Chart - Rear Flail
	21.	42400	1	REFLECTOR	Amber Reflector
	22.	6T3236	1	LOGO	Made in the USA
- 1					

Decal Description







SIDE FLAIL

AWARNING AADVERTENCIA

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

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

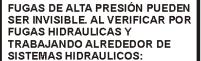
HIGH PRESSURE FLUID LEAKS CAN BE INVISIBLE. WHEN CHECKING FOR HYDRAULIC LEAKS AND WORKING AROUND HYDRAULIC SYSTEMS:

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





- NO OPERE el equipo con fugus de aceite o combustible.
- MANTENGA todas las mangueras hydráulicas, líneas y conexiones en buenas condiciones y apretadas antes de aplicar presión al sistema.
- Releve la presión hidráulica antes de desconectar las líneas o trabajar en le sistema.
- QUITE y reemplace la manguera si sospecha que hay fuga.



- NO use las manos para verificar si hay agujeros.
- SIEMPRE USE lentes de seguridad y guantes impenetrables.
- USE papel o un cartón para buscar agujeros.
- NO USE las manos o partes del cuerpo para buscar agujeros.
- MANTEGA manos y cuerpo LEJOS de agujeros de alfiler y boquillas que expulsan el liquido hidráulicos.





12965262

A DANGER

A PELIGRO

Crushing Hazard - Injury or Death

TO AVOID SERIOUS INJURY OR DEATH:

- STAND CLEAR when removing transport latch, lowering or raising wings.
- CLEAR AREA of bystanders before lowering implement wings.
- IMPLEMENT CAN FALL from hydraulic failure or accidental operation of controls.
- BLOCK UP and securely support equipment before putting hands, feet or body under raised equipment or lifted components.
- SECURELY ENGAGE transport latch before transportation or working under wing.
- FILL CYLINDERS with oil before attempting to lower implement wings.
- DO NOT OPERATE in transport position or with wings off ground.





Riesgo de Aplastamiento Lesion o Muerte

PARA EVITAR LESION SERIA O MUERTE:

- MANTENGASE LEJOS al quitar el cierre de transporte, bajando y devantando las alas.
- DESOCUPE EL AREA de personas presentes antes de bajar las alas del implemento.
- EL IMPLEMENTO PUEDE CAER del fracaso hidráulico o por operación accidental de controles.
- BLOQUEE y soporte con seguridad antes de poner manos, pies o cuerpo debajo del equipo de componentes levantados.
- CON SEGURIDAD ACTIVE el cierre de transporte antes de la transportacion o trabajar debajo de las alas.
- LLENE LOS CILINDROS con aceite antes de intentar de bajar las alas del implemento.
- NO OPERE en posicion de transporte o con las alas devantadas del la tierra.

SIDE FLAIL





SIDE FLAIL

A WARNING

A ADVERTENCIA

TO AVOID SERIOUS INJURY AND **DEATH DURING TRANSPORTATION:**

- ALWAYS BUCKLE UP seat belt
- PLACE wing securely in Transport latch and turn off master switch.
- CHECK SMV sign, reflectors and warning lights for visibility behind unit.
- TURN ON tractor flashing warning liahts.

TO AVOID LOSS OF TRANSPORTATION CONTROL:

- DO NOT travel at speeds over 20 mph.
- · REDUCE SPEED on inclines, in turns and in poor weather conditions.





- seguridad.
- COLOQUE el brazo serguramente en transporte y apague el interruptor principal.
- VERIFIQUE QUE EL SMV, reflectors, y luces intermitentes de advertencia pueden ser vistos claramente por detras de la unidad.
- PRIENDA las luces intermitentes de advertencia.



- NO remolque en velocidades arriba de 20 mph.
- REDUZCA LA VELOCIDAD en inclinas. en vueltas y en pobres condiciones de remolque. D699_1



WARNING

A ADVERTENCIA

TO AVOID SERIOUS INJURY AND **DEATH DURING OPERATION:**

- DO NOT lift implement while on steep
- · KEEP AWAY from soft ditch banks and holes
- ALWAYS MAINTAIN 20% of tractor weight on front wheels.
- DO NOT start or accelerate suddenly.
- KEEP mower AT LEAST 10 FEET AWAY from electric lines and pipe lines





PARA EVITAR LESION SERIA Y **MUERTE DURANTE LA OPERACION:**

- NO levante el implemento al estar en pendientes pronunciados..
- MANTENGASE ALEJADO DE agujeros y zanjas blandas..
- MANTENGA SIEMPRE el 20% de peso del tractor en las ruedas delanteras.
- NO comience ni acelere repentinamente.
- MANTENGA la unidad, por lo menos 10 pies de distancia de las líneas electricas y líneas de tubo.

WARNING

ADVERTENCIA

TO AVOID EQUIPMENT AND GRASS FIRES:

· CLEAR AWAY grass or debris from hydraulic lines, circuits and decks.

TO AVOID FIRE IGNITION:

- DO NOT ALLOW BLADES TO CONTACT rocks, metal or solid objects.
- DO NOT ALLOW OIL TO SPRAY on hot equipment or components.

D699 3



D699

PARA EVITAR INCIENDOS DE **EQUIPO Y CÉSPED:**

 QUITE el césped y escombros de las líneas hidraulicas, circuito, y las cubiertas

PARA EVITAR INCIENDOS POR IGNICIÓN:

- NO PERMITA QUE LAS CUCHILLAS CONTACTEN piedras, metal o objectos solidos.
- NO PERMITA QUE EL ACEITE CAIGA en el equipo o componentes calientes.

SIDE FLAIL

A DANGER A PELIGRO

KEEP AWAY THROWN OBJECTS HAZARD

CONSÉRVESE LEJOS OBJETOS LANZADOS

Mower can throw objects up to 300 feet. TO AVOID SERIOUS INJURY OR DEATH to operator or bystanders:

- STOP mowing if bystanders or traffic come within 300 feet.
- DO NOT OPERATE with thrown object shielding removed.
- KEEP thrown object shielding in place and in good condition during operation.
- INSPECT area for potential mower thrown object hazards before mowing.
- Remove and AVOID objects such as wire, cable, metal objects and all other foreign material.
- DO NOT ALLOW blades to contact solid objects like wire, rocks, posts, curbs or guard rails.
- DO NOT OPERATE in transport position or with wings off ground.







Cortacésped puede lanzar objectos hasta 300 pies. PARA EVITAR LESION SERIA O MUERTE a operadores y personas presentes:

- Pare de segar si personas o traffico se acercan entre 300 pies del area de segar.
- NO OPERE sin la cubierta para objetos lanzados.
- MANTENGA la cubierta para objeto lanzado en su lugar y en buenas condiciones.
- INSPECCIONE el área por si hay riesgos potenciales de objetos lanzados antes de segar.
- REMUEVA y EVITE objetos come alambre, cable, objetos de metal y todo otro material extranjero.
- NO DEJE que las cuchillas contacten los objectos sólidos como alambre, rocas, postes, borde de banqueta, o barandillas.
- NO OPERE en posicion de transporte o con las alas levantadas.



A DANGER

A PELIGRO

Crushing Hazard Injury or Death

Riesgo de Aplastamiento Lesion o Muerte

TO AVOID SERIOUS INJURY OR DEATH:

- USE tractor equipped with <u>R</u>ollover <u>P</u>rotective <u>S</u>tructure ("ROPS") including roll bar and seat belt. Keep roll bar in raised position.
- KEEP ALERT and AVOID hitting stumps, holes, ruts, and uneven terrain.
- ALWAYS BUCKLE UP seat belt.
- STAND CLEAR when removing transport latch, lowering or raising wings.
- CLEAR AREA of bystanders before lowering implement wings.
- IMPLEMENT CAN FALL from hydraulic failure or accidental operation of controls.
- BLOCK UP and securely support equipment before putting hands, feet or body under raised equipment or lifted components.









PARA EVITAR LESION SERIA O MUERTE:

- USE un tractor equipado con Estructura Protectora Contra Vuelcos ("ROPS") incluyendo barra antivuelco y cinturon de seguridad. Mantenga la barra antivuelco en la posicion elevada.
- MANTENGASE ALERTO y EVITE golpes en troncos, agujeros, pozos o terreno en desnivel.
- SIEMPRE ABROCHE el cinturón de seguridad.
- PERMANEZCA ALEJADO al quitar el seguro de transporte, y al bajar o subir las alas.
- DESOCUPE el ÁREA de personas presentes antes de bajar las alas del implemento.
- EL IMPLEMENTO SE PUEDE CAER por el mal funcionamiento hidraulico o operacion accidental de los controles.
- BLOQUEE y soporte con seguridad el equipo antes de poner manos, pies o cuerpo debajo del equipo o componentes levantados.

SIDE FLAIL

A DANGER

APELIGRO

KEEP AWAY Entanglement Hazard

MANTENGASE ALEJADO Riesgo de Enredamiento

TO AVOID SERIOUS INJURY OR DEATH:

- DO NOT operate without guards in place and in good condition
- STAY AWAY and KEEP hands feet and body AWAY from rotating blades, drivelines and parts that continue to move after power shut-off. WAIT until all moving elements have stopped.
- STOP, LOOK and LISTEN for rotating motion before approaching implement.
- STOP ENGINE and PTO, engage parking brake, lower implement, allow all moving parts to stop and remove key before dismounting from tractor.



PARA EVITAR LESION SERIA O MUERTE:

- NO opere sin la cubierta protectora en su lugar y en buen estado
- MANTENGASE ALEJADO y MANTENGA manos, pies y cuerpo LEJOS de las cuchillas girando, líneas de conducción, y partes que siguen moviendose depués de que el poder es apagado. ESPERE hasta que todos los elementos móviles se han parado.
- DETENGASE, OBSERVE y ESCUCHE por el movimiento de rotación antes de acercarse al implemento.
- PARE EL MOTOR y el Toma De Fuerza (Barra Gitatoria) active el freno de mano, baje el implemento, y permita que todas las partes móviles se paren y quite la llave antes de desmontar del tractor.

D687 1





A DANGER A PELIGRO Run Over Hazard Riesgo de Atropello

TO AVOID SERIOUS INJURY OR DEATH:

Injury or Death

- ALWAYS USE Roll Over Protective Structure ("ROPS") including ROLL BAR and SEAT BELT equipped tractors for mowing operations.
- ONLY START Tractor while seated in the operator's seat.
- DO NOT MOUNT or DISMOUNT Tractor in motion
- NEVER ALLOW riders on tractor or implement.
- NEVER ALLOW children to operate or ride on tractor or implement.
- KEEP BYSTANDERS CLEAR of area before moving tractor or implement.
- STOP ENGINE AND PTO, engage parking brake, lower implement, allow all moving parts to stop and remove key before dismounting from tractor.







PARA EVITAR LESION SERIA O MUERTE:

- SIEMPRE USE tractors equipados con una Estructura Protectora Contra Vuelcos ("ROPS") incluyendo BARRA ANTIVUELCOS y CINTURON DE SEGURIDAD al segar.
- SOLO ENCIENDA el tractor mientras que esta sentado en el asiento del operador.
- NO MONTE o DESMONTE el tractor en movimiento.
- NUNCA PERMITA pasajeros en el tractor o implemento.
- NUNCA PERMITA que niños operen o se monten en el tractor o implemento.
- MANTENGA LAS
 PERSONAS PRESENTES
 LEJOS de la area antes de
 mover el tractor o implemento
- PARE EL MOTOR Y Toma De Fuerza (Barro Gitatoria), aplique el freno de mano, baje el implemento, y deje que todas las partes movil paren completamente, y quite la llave antes de desmontar el tractor. D887

SIDE FLAIL

A DANGER

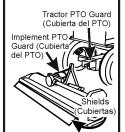
A PELIGRO

TO AVOID SERIOUS INJURY OR DEATH FROM ENTANGLEMENT AND THROWN OBJECTS:

- DO NOT OPERATE mower without shields and guards in place and in good condition.
- DO NOT OPERATE with thrown object shielding or guards missing.
- Thrown objects shielding, PTO and gearbox guarding are SUBJECT TO WEAR.
- REPAIR OR REPLACE shielding if damaged, broken or missing. See Operator's Manual for all Shields and Guards.
- ALWAYS REPLACE GUARDS that have been removed for service or maintenance.
- DO NOT STEP ON drivelines or guards. D696_1







PARA EVITAR LESION SERIA O MUERTE POR ENREDAMIENTO Y OBJETOS LANZADOS:

- NO OPERE la unidad sin cubiertas maya protectoras en su lugar y en buenas condiciones
- NO OPERE sin las cubiertas de objetos lanzados o si faltan las maya protectoras.
- Cubierta de Objetos Lanzados, Toma De Fuerza (Barra Gitatoria) y guardias de caja de engranaje son SUJETO AL DESGASTE.
- REPARE O REEMPLACE cubiertas si son dañadas, quebradas, o si faltan.
- SIEMPRE REEMPLACE CUBIERTAS que han sido quitadas para servicio o mantenimiento.
- NO PISE EN las líneas de conducción o cubiertas.

A DANGER

A PELIGRO

TO AVOID SERIOUS INJURY OR DEATH:

- READ AND UNDERSTAND the provided Operator's Manuals, safety signs and information decals for tractor and implement before operating equipment.
- CONTACT DEALER immediately if you do not have manuals.
- CONTACT DEALER to explain any instructions not fully understood.
- KNOW HOW to stop tractor and equipment quickly for an emergency.
- ALWAYS WEAR safety glasses.
- WEAR hard hat, safety shoes and gloves for protection when operating equipment.





PARA EVITAR LESION SERIA O MUERTE:

- LEA Y ENTIENDA el Manual de Operador proporcionado, signos de seguridad y calcomanias informativas para el tractor y implemento antes de operar el equipo.
- CONTACTE AL DISTRIBUIDOR imediatamente si no tiene los manuales.
- CONTACTE AL DISTRIBUIDOR para que le explique cualquier instrucciónes que no entiende completamente.
- ENTIENDA COMO parar el tractor y equipo rapidamente en caso de una emergencia.
- SIEMPRE USE lentes de seguridad.
- USE un casco, zaptos de seguridad y guantes para su protection cuando esta operando el equipo.

D696_2

SIDE FLAIL

A WARNING

A ADVERTENCIA

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

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

Contact local dealer or TIGER about repair parts at:

3301 N. LOUISE AVE., SIOUX FALLS, SD 57107 Customer Service: 800-843-6849.

Email: feedback@tiger-mowers.com

Partes que no son auténticas pueden fallar catastróficamente.

PARA EVITAR LESION SERIA O MUERTE:

- Use SOLAMENTE las partes de reemplazo autenticas de TIGER.
- Partes que no son autenticas pueden fallar y causar conidiciones peligrosas para el operador y personas presentes.

Contacte a su distribuidor local o TIGER sobre partes de reparo a:

3301 N. LOUISE AVE., SIOUX FALLS, SD 57107

Servicio al Cliente: 800-843-6849.

Correo Electronico: feedback@tiger-mowers.com

IMPORTANT

32709_1

IMPORTANTE

BE AWARE BE ALERT BE ALIVE

BE TRAINED Before Operating this Mower

ESTE ALERTO **ESTE VIVO**

ESTE CONSCIENTE SEA ENTRENADO Antes de Funsionar Cortacésped

To prevent serious injury to yourself and/or bystanders, be trained in Safe Mowing Practices.

Alamo Group Companies, Alamo Industrial, Bush Hog, M&W, Rhino, Schulte, Tiger and Terrain King as well as AEM and FEMA provide training material that is critical for your Safety and the Safety of others when operating this equipment. Make these Safety Procedures an important part of every workday.

Read and understand the Operator's Manual.

Do not let untrained individuals operate this equipment.

Contact your Dealer, AEM (www.aem.org), FEMA (314-878-2304, www.FarmEquipment.org), or Alamo Group (www.Alamo-Group.com) for information on training material or courses that provide training in Safer Operating Practices for Mowers.

Para prevenir lesiónes graves a usted y/o personas presentes, sea entrendado en la Practica de Segar Seguro.

Companias de Alamo Group, Alamo Industrial, Bush Hog, M&W, Rhino, Schulte, Tiger y Terrain King asi como AEM y FEMA proporcionan material para entrenar que es esencial para su seguridad y la seguridad de otros al operar este equipo. Haga estos procedimientos de seguridad una parte importante de su dia de trabajo.

Lea y entienda el Manual de Operadores.

No permita que personas sin entrenamiento funcionen este equipo.

Contacte a su distribuidor, AEM (www.aem.org), FEMA (314-878-2304, www.FarmEquipment.org), o Alamo Group (www.Alamo-Group.com) para la informacion sobre el material de entrenamiento o cursos que ofrecen el entenamiento de Prácticas de Operación para Cortadoras. 32709

32709 2

SIDE FLAIL

Federal Laws and Regulations

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

Employer-Employee Operator Regulations

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

This Act Seeks:

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

DUTIES

Sec. 5 (a) Each employer-

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

OSHA Training Requirements

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

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

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

Permit no riders on equipment

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

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

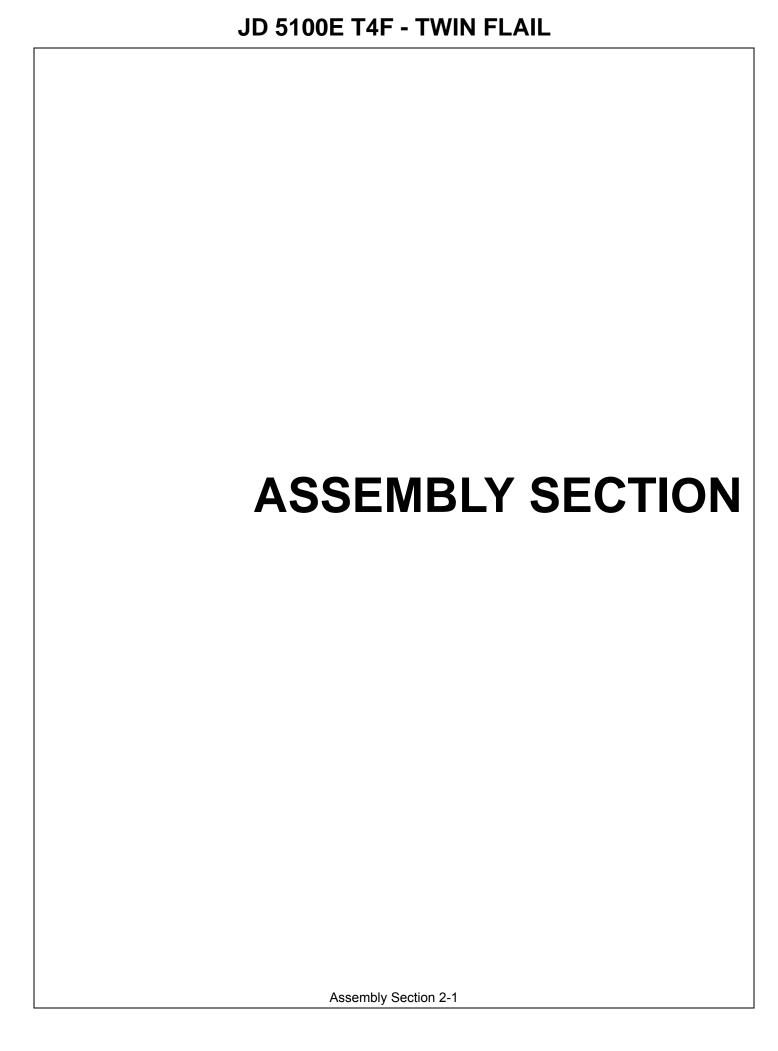
Employer Responsibilities:

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

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

Child Labor Under 16 Years of Age

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



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

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

▲WARNING

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

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

TRACTOR PREPARATION

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

(ASM-JD-0001)

CRANKSHAFT ADAPTER

For JD5065M and 5075M tractors, remove the four capscrews from the crankshaft pulley. Then install the crankshaft adapter and spacer to the pulley with the capscrews and lockwashers as shown in the Parts Section.

For JD5085M - JD5115M tractors, install the John Deere kit LVB24989 and follow the instructions. (ASM-JD-0226)



DRIVESHAFT AND FRONT PUMP MOUNTING

Install driveshaft into the crankshaft adapter.

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

Install pump and align so that splined coupling can be moved (FREE PLAY) back and forth by hand. Rotate coupler and check free play every 1/4 turn. Tighten pump mounting bolts in succession, rechecking for spline coupling free play. Remove the pump mounting bracket bolts one at a time and apply a thread locking agent. Tighten these bolts in succession, again checking for free play in the driveshaft. After all bolts are torqued, the end play on the driveshaft 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 shaft to achieve the proper end play. If there is more than 1/4" of end play, return the shaft with specifications for a longer shaft.

CAUTION: DO NOT START THE TRACTOR UNTIL ALL HOSES ARE ATTACHED, TANK IS FILLED WITH PROPER OIL AND BALL VALVES ARE OPEN! STARTING AT THIS TIME WILL CAUSE SERIOUS DAMAGE TO THE PUMP. (ASM-C-0091)

ADJUSTING REAR WHEELS

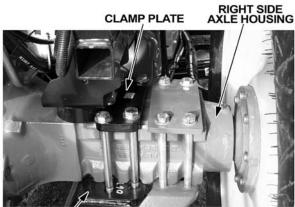
Raise rear of tractor onto jack-stands. **Follow the instructions in the tractor owner's manual for adjusting tires and rims**. The back wheels MUST be adjusted to the widest setting. NOTE: This may require switching the wheels to opposite sides of tractor. Also take note of any width restrictions when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

AXLE BRACE MOUNTING

Position the right axle brace under the tractor right hand side. Raise the brace up to the matching mounting holes in the mainframe and rear axle housing. Pictures below show right side brace installation. Install the clamp plate with capscrews, washers and nuts as shown in the mainframe Parts Section. Apply Loctite to the threads and torque to the values noted in the torque chart located in the Maintenance Section of this manual. (ASM-JD-0072 5100E T4F).



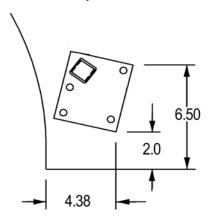


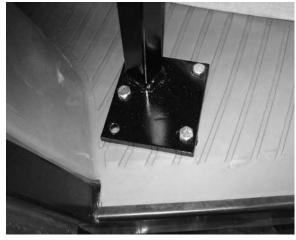


RIGHT HAND AXLE BRACE

CABLE CONTROL LEVER STAND

Place the cable control bracket on the floor so that the bracket is 2" from the side edge of the door, and 4-3/8" in front of the rear edge of the door. See images below. Be sure that the location of the stand will allow the operation of all control levers in the tractor and that the door will not strike the stand when shut. Before drilling, double check location of the stand for proper placement of holes. Make sure that all cables and wires are clear of the area before drilling holes to mount the stand. Drill 3 holes to match control bracket as shown below and secure with capscrews and nylock nuts noted in the Parts Section.



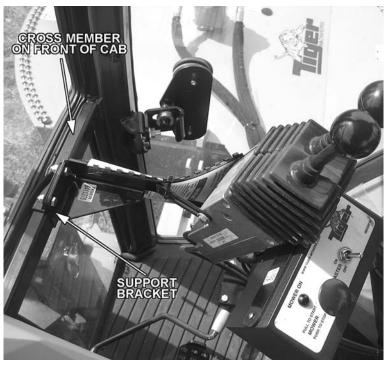


. (ASM-JD-0087rev2).

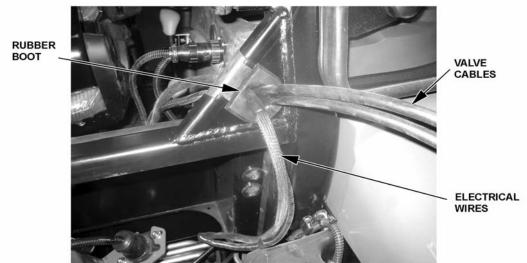
CABLE CONTROL INSTALLATION

The switchbox is attached to the cable controls, which are attached to the control stand and to the cross member on the front of the cab, to the right of the steering console. Cables are routed to the right of the driver's seat and through the rubber boot in the corner of the rear window frame. See the illustration in the Parts Section for hardware used and more information. ...





The rubber boot under the rear window can be cut in a crosshair pattern and, if necessary, the bottom cut through to allow it to slip over the cables and back into position. These cables will be routed to the lift valve mounted on the valve mounting plate, and should not have any sharp bends or kinks in them. Secure cables with zip ties and apply RTV sealer in and around individual cables, inside and outside of the cab, for a water tight seal. Do not allow excess cable to hang unsecured on the outside of the cab. (ASM-JD-0087 Side).





MAINFRAME INSTALLATION

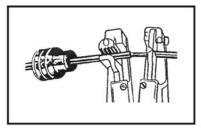
With an overhead hoist and / or jack-stands, raise one side of the frame up to the correctly matching mounting holes. Install capscrews and other hardware to secure the sides of the mainframe to the tractor casting, as shown on the tractor mount kit page in the Parts Section. DO NOT tighten at this time.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

WEATHER-PACK / METRI-PACK ASSEMBLY

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

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

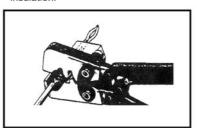
(ASM-C-0009)



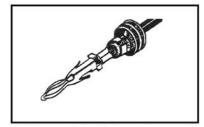
1. Apply seal to cable, before stripping insulation.



2. Align seal with cable insulation.



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



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

SWITCHBOX WIRING

Power for the switchbox is accessed through the port located on the right rear of the cab. A John Deere plug is used, part number RE67651. DO NOT connect the plug to the cab port until the wiring is completed. The wires in the plug are colored RED, BLACK and ORANGE. The RED wire will always be hot, so it needs to be capped. Attach connector 34538 to end of RED wire and tape wire back on itself. The BLACK and ORANGE wires are hot when tractor key is turned to "on." Connect the BLACK wire of the plug to the BLACK wire from the switchbox. Then connect the ORANGE wire of the plug to the RED wire from the switchbox. IMPORTANT: In some cases the red and orange wires may be switched. ALWAYS test the wires to be certain which wire is which.

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

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

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

VALVE MOUNTING BRACKET

Attach the rear valve mounting bracket to the fender of the tractor by removing the two rear bolts on the left fender and the two rear bolts on the right fender. Use the hardware noted in the Parts Section to attach the valve mounting bracket to the tractor.

Next, attach the valve mounting plate to the mounting bracket. Align the holes on the plate to the holes on the bracket. Use the hardware shown in the Parts Section to attach the plate to the valve mounting bracket. Finally, place the valve on the valve mounting plate as shown in the Parts Section. Align the holes on the valve assembly to the holes on the plate. Use the hardware provided to secure the valve to the plate. Refer to the Parts Section for the placement of the valve and the hardware used. Please handle the lift valve with care. It is extremely heavy and contains small parts. (ASM-JD-0088 JD5E T4F)



NOTE ON HUSCO CONTROL VALVES

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



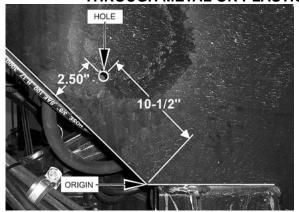
HOSE AND WIRE ROUTING

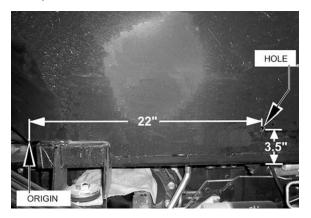
Attach two clamps to the right rear wheel well for proper hose/wire routing. Drill one hole for each clamp. Use the lower rear corner of the wheel well as an origin for measuring. The holes should be 10mm or 3/8" reamed to accept 3/8" hardware.

Measure along the back edge of the wheel well 10-1/2" from the origin. Use a square to measure 2-1/2" up, from the last mark. Refer to the image below to see the first hole.

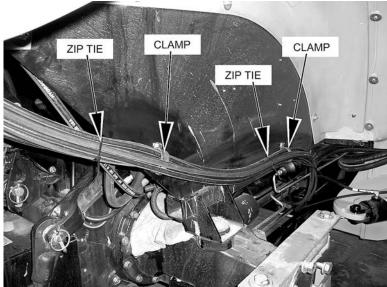
The second hole should run parallel to the bottom edge of the wheel well. Mark the hole 22" from the origin and 3-1/2" from the bottom edge. Use the images below for reference.

NOTE: DO NOT CUT INTO TUBES / HOSES / WIRES WHEN DRILLING THROUGH METAL OR PLASTIC!. (ASM-JD-0068)





Place as many hoses in the clamp as will fit without compromising pressure. Then secure the (2) HOSE CLAMP (06520013) to the holes drilled with (1 EACH) CAPSCREW,3/8 X 1 NC (21630) and (1 EACH) NYLOCK NUT,3/8 NC (21627). The hoses that don't fit into the clamp are to be secured to the others with zip ties. For protection of hoses in contact with metal edges, wrap hoses with split hose sections and fasten with hose clamps or zip ties as needed.



FILLING HYDRAULIC RESERVOIR

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

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

(ASM-C-0004hydro resrv)

WHEEL WELL HYDRAULIC TANK INSTALLATION

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

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

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

INSTALLING O-RING FITTINGS

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

INSTALLING NATIONAL PIPE FITTINGS

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

GENERAL HOSE INSTALLATION

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

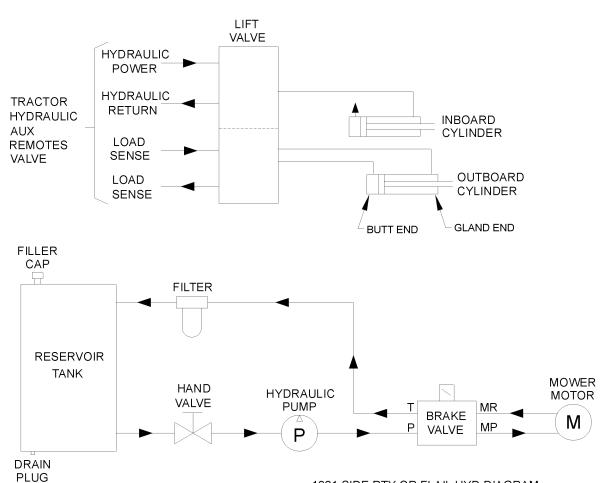
HOSE COVERING

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

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



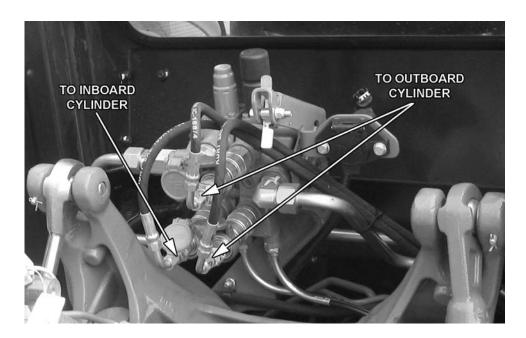
SIDE MOWER HYDRAULIC DIAGRAM



(ASM-C-0090)

NO VALVE OPTION

In some instances, if ports at the rear of the tractor are available for exclusive use, a lift valve may not be installed. Hoses (1/4") are to be attached from ports to cylinders as shown below, using the adapters (part # 33271) and quick couplers (part # 32900) provided. Hoses used are as follows: Outboard Cylinder: #34631 (two hoses). Inboard Cylinder: #34632.



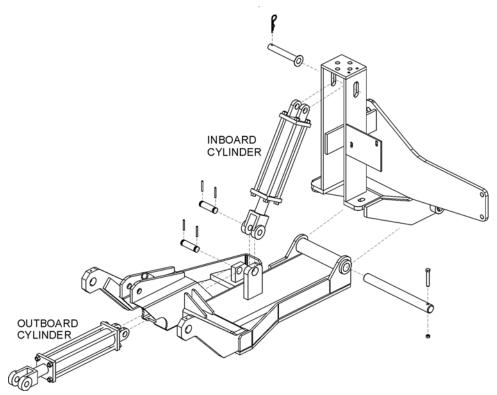
DRAFT BEAM INSTALLATION

Install ½" O-ring breather into butt port of inboard cylinder. Install fittings in the rod end of the cylinder according to the diagram in the Common Parts section. These fittings should be positioned to face the butt end of the cylinder.

Next turn the clevis onto the rod of the cylinder until it is tight against the shoulder and lock into place with locking bolt on clevis.

The inboard cylinder can now be installed into the main frame mast with the pin, flatwasher and R-clip as shown below.

Install all fittings in the outboard cylinder and adjust to point towards the butt end of the cylinder. Attach the hoses as specified in the Parts Section. Slide the cylinder into the draft beam from the outside of the draft beam and attach cylinder to the draft beam with clevis pin and rollpins. (ASM-C-0076)



DRAFT BEAM MOUNTING

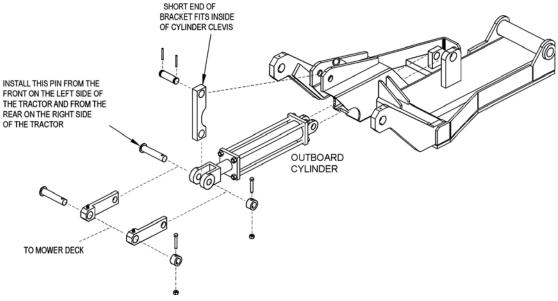
Pull the inboard cylinder piston rod down to the extreme extended position. Slide the draft beam under the cylinder

Using the inboard cylinder as a pivot point, slide the draft beam under the tractor and install draft beam pin. Align hole in draft beam pin with holes in mainframe boss and install capscrew and nylock nut. (ASM-C-0078)

MOWER MOUNTING

Check that all grease zerks have been installed in the draft beams pivot arm, left linkage arm, right linkage arm, and cylinder mounting ears.

Using a clevis pin and roll pins, connect the pivot arm to clevis on draft beam. NOTE: Make sure the longer distance between the cutout and the end of the pivot arm is closest to the draft beam pivot ears on the center tube as shown in the diagram below. Also make sure the cutout on the pivot arm faces into tube of draft beam. (ASM-C-0077)



Slide other end of pivot arm with short distance between the cutout and the end of the pivot arm, into the cylinder clevis. Next, line up the holes of the left and right lift linkage arms outside of the cylinder clevis holes. Connect with linkage pin, shims (as required), boss, capscrew, lockwasher and hex nut as shown.

To connect the bonnet to the draft beam, slide the extension arms of the draft beam between the mounting ears on the inner end of the bonnet. Line up the holes and secure with swivel pin, capscrew, lockwasher, and hex nut (both sides). See Parts Section illustration.

Next, slide the left and right linkage arms up to the slotted ear on the side of the deck. Secure with linkage pin, shims, boss, capscrew, lockwasher and hex nut. See illustration in Parts Section.

LIFT CONTROL FEEDLINES

Hose lengths will vary between tractor applications such as cab and non-cab units. See the Parts Section that pertains to your tractor for hose applications.

Install a hose from the bottom or inner valve port (behind cab for cab units, on stand for non-cab units) to the restrictor on the inboard cylinder gland.

Install a hose from the upper or outer valve port to the restrictor on the outboard cylinder butt. See Parts Section for part numbers and hose routing illustrations. (ASM-C-0093)



SOLENOID BRAKE VALVE

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

STOP BOLT ADJUSTMENT

Extend the outboard cylinder all the way out. Adjust the stop adjustment bolt (located on the top of the draft beam) out until it is up against the bonnet. Lock the bolt down with the $\frac{3}{4}$ " hex nut.

NOTE: When the outboard cylinder is fully extended, the bonnet or deck should either be up against the stop, or if travel locks are installed, it should be up against the travel lock. It may be necessary to use either external or internal slugs on the cylinder to get the correct stroke. If the cutter head is against the stop and the cylinder has stroke remaining, serious damage will occur. (ASM-SIDE MNTS-0003)

DECK / MOTOR FEEDLINE

Install the 1" hoses from the motor to the solenoid valve. Refer to the Parts Section for detailed information about hoses and fittings for this application.

Install split hoses around hydraulic hoses where they contact sharp edges, or any other edges that may rub hoses.

Be sure that all grease zerks are installed in the draft beam pin bosses. Grease all areas of the draft beam according to the instructions in the Maintenance Section. Re-check all fittings for tightness.

Fill hydraulic tank with fluid as recommended in the Maintenance Section. **BE SURE TO OPEN THE BALL VALVES.** Start the tractor and operate the inboard cylinder through the entire stroke and the outboard cylinder through the bottom ¾ stroke repeatedly to clear the lines of air. **DO NOT** run outboard cylinder out to full stroke until stop bolt has been adjusted!

Check for oil leaks at all fittings and connections using a piece of paper or cardboard. If a leak is found, you must shut down the tractor and set the cutter head 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. **DO NOT USE HANDS TO CHECK FOR FLUID LEAKS!**

Raise the three point hitch and check the tractor internal hydraulics, fill to proper level if needed. (ASM-C-0079)



FINAL PREPARATION FOR OPERATION

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

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



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

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

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

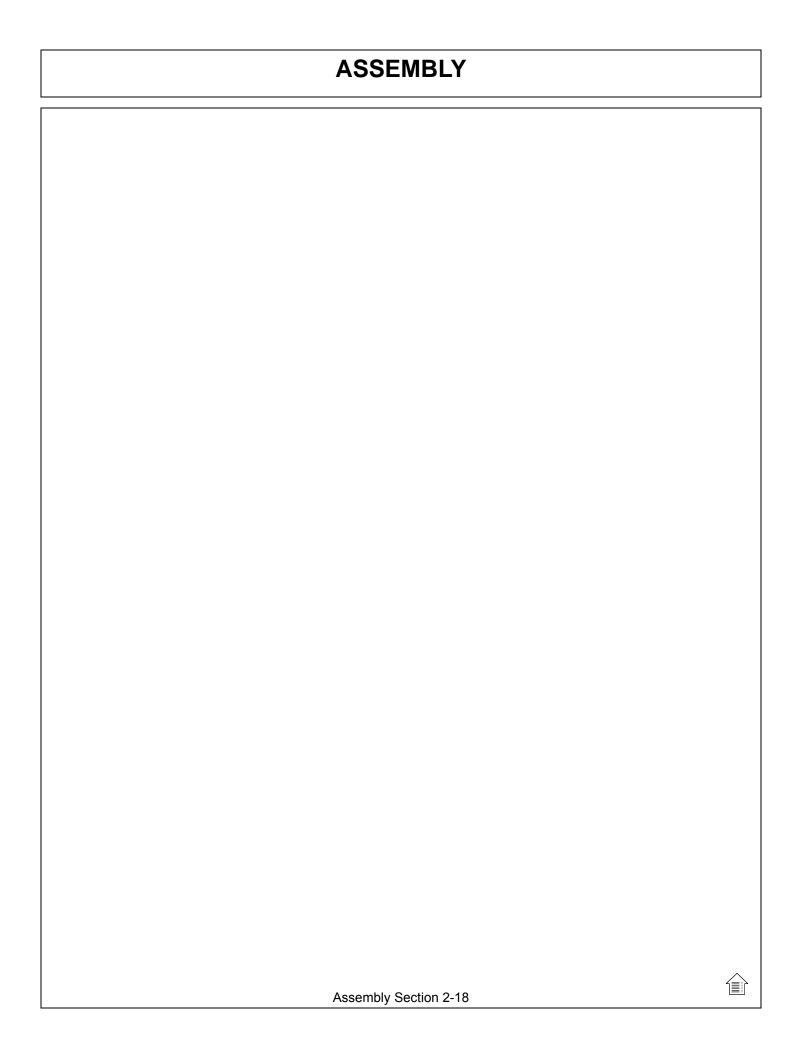
Before operating the mower, the cutter head and boom should be slowly moved throughout the full range of motion. Watch for any condition that would cause pinching or excess stress on the hoses. The steering and front axle travel should also be carefully moved through their full range of motion. If any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

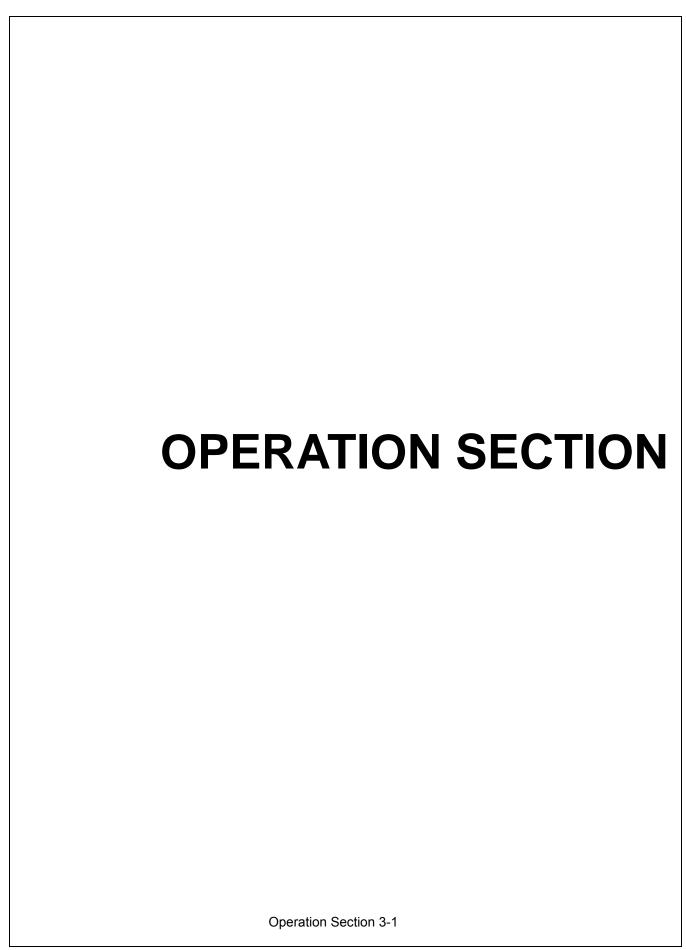
MOWER TESTING

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

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







TIGER SIDE AND REAR FLAIL MOWER OPERATING INSTRUCTIONS

Tiger Side and Rear flail mowers are manufactured with quality material by skilled workers. These mowers are designed for cutting grass and small weeds. The mower is equipped with protective deflectors to prevent objects being thrown from the mower by the blades, however, no shielding is 100% effective. All shields, guards, and deflectors equipped on the mower must be maintained in good operational condition.

It is the operator's responsibility to be knowledgeable of all potential operating hazards and to take every reasonable precaution to ensure oneself, others, animals, and property are not injured or damaged by the mower, tractor, or a thrown object. Do not operate the mower if passersby, pets, livestock, or property are within 100 yards of the unit.

This section of the Operator's Manual is designed to familiarize, instruct, and educate safe and proper mower use to the operator. Pictures contained in this section are intended to be used as a visual aid to assist in explaining the operation of a Side and Rear flail mower and are not specific to any model. Some pictures may show shields removed for picture clarity. NEVER operate implement without all shields in place and in good operational condition. The operator must be familiar with the mower and tractor and all as sociated safety practices before operating the mower and tractor. Proper operation of the mower, as detailed in this manual, will help ensure years of safe and satisfactory use of the mower.

IMPORTANT: To avoid mower damage, retorque all bolts after the first 10 hours of operation. Refer to the Torque Chart at the end of the Maintenance Section to en sure bolts are properly tightened.

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

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)





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



Side and Rear Flail

1. OPERATOR REQUIREMENTS

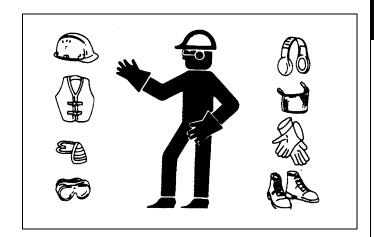
Safe operation of the unit is the responsibility of a qualified operator. A qualified operator has read and understands the implement and tractor Operator's Manuals and is experienced in implement and tractor operation and all associated safety practices. In addition to the safety messages contained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

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

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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



A DANGER

NEVER use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator 's alertness and coordination and therefore affect the operator's ability to operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to o perate the E quipment 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)



Side and Rear Flail

2. TRACTOR REQUIREMENTS

The tractor used to operate the mower must have the power, capacity and required equipment to safely operate the mower at a ground speed between 2 and 5 MPH. Operating the mower with a tractor that does not meet the following requirements may cause tractor or mower damage and could be a potential danger to the operator and passersby.

Tractor Requirements and Capabilities

- ASAE approved Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt.
- Tractor Safety DevicesSlow Moving Vehicle (SMV) emblem, lighting, PTO master shield
- Tractor Horsepower-Minimum........ 65 HP Min Recommended
- Power Take Off......540 RPM

2.1 ROPS and Seat Belt

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



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)





2.2 Tractor Safety Devices

If transporting or operating the tractor and implement near a public roadway, the tractor must be equipped with proper warning lighting and a Slow Moving Vehicle (SMV) emblem which are clearly visible from the rear of the unit. Lights and a SMV emblem must be equipped directly on implements if the visibility of the tractor warning signals are obscured.

Maintain all manufacturer equipped safety shields and guards. Always replace shields and guards that were removed for access to connect, service, or repair the tractor or implement. Never operate the tractor PTO with the PTO master shield missing or in the raised position. *OPS-U- 0004*

2.3 Tractor Horsepower

The horsepower required to operate the mower depends on many factors including the vegetation to be cut, terrain condition, operator experience, and condition of the mower and tractor. For most mowing conditions, the Side and Rear mowers require a tractor with at least 65HP. Operating the mower with a tractor that does not have adequate power may damage the tractor engine.

Side and Rear Flail

2.4 Front End Weight

Maintain a minimum of 20% total tractor weight on the tractor front end at all times. Front end weight is critical to maintain steering ability and to prevent the front end from rearing up. Consult your authorized tractor dealer for front weights and carriers.

2.5 Power Take Off (PTO)

Only operate the mower on a tractor equipped to operate at 540 rpm PTO speed. Tractors operating at 540 rpm will have a 1-3/8" diameter 6-spli ne PTO shaft stub. Refer to the tractor operator's manual for operating the PTO at the proper speed.

If operating an older model tractor where the tractor's transmission and PTO utilize one master clutch, an over-running clutch must be used between the PTO output shaft and the driveline of the mower. Consult an authorized tractor dealer to purchase and install an over-running clutch if needed.



DO NOT use a PT O adapter to attach a non-matching Implement driveline to a Tractor PTO. Use of an adapter can double the operating speed of the Implement resulting in excessive vibration, thrown objects, and blade and implement failure. Adapter use will also change the working length of the driveline exposing unshielded driveline areas. Serious bodily injury and/or equipment failure can result from using a PTO adapter. Consult an authorized dealer for assistance if the Implement driveline does not match the Tractor PTO. (S3PT-14)



Never operate the Tractor and Mower if the Implement input driveline is directly connected to the Tractor transmission. Tractor braking distances can be substantially increased by the momentum of the rotating Mower blades driving the Tractor transmission even though the Tractor clutch has been disengaged. Install an over running clutch between the Tractor PTO and the Mower driveline to prevent this potentially dangerous situation. (S3PT-16)

3. GETTING ON AND OFF THE TRACTOR

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



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



Side and Rear Flail

3.1 Boarding the Tractor

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

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

A DANGER

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



A DANGER

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



AWARNING

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



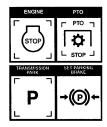
3.2 Dismounting the Tractor

Before dismounting, park the tractor and implement on a reasonably level surface, apply the parking brake, idle the engine down, disengage the PTO, and lower the implement to the ground. Shut down the tractor engine according to the operator's manual, remove the key, and wait for all motion to completely stop. Never leave the seat until the tractor, its engine and all moving parts have come to a complete stop.

Use hand rails and steps when exiting the tractor. Be careful of your step and use extra caution when mud, ice, snow or other matter has accumulated on the steps or hand rails. Use all handrails and steps for support and never rush or jump off the tractor. *OPS-U- 0009*



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



Side and Rear Flail

4. STARTING THE TRACTOR

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

Essential Tractor Controls:

- Locate the light control switch.
- Locate the engine shut off control.
- Locate the brake pedals and the clutch.
- · Locate the PTO control.
- Locate the 3-point hitch control lever.
- Locate the hydraulic remote control levers.

Before starting the tractor ensure the following:

- Conduct all pre-start operation inspection and service according to the tractor operator's manual.
- Make sure all guards, shields, and other safety devices are securely in place.
- The parking brake is on.
- The PTO control lever is disengaged.
- The 3-point hitch control lever is in the lowered position.
- The hydraulic remote control levers are in the neutral position.
- The tractor transmission levers are in park or neutral.

Refer to the tractor owner's manual for tractor starting procedures. Only start the tractor while seated and belted in the tractor operator's seat. Never bypass the ignition switch by short circuiting the starter solenoid.

After the tractor engine is running, avoid accidental contact with the tractor transmission to prevent sudden



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



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



5. CONNECTING THE MOWER TO THE TRACTOR

Use extreme caution when connecting the mower to the tractor. The mower should be securely resting at ground level or setting on blocks. Keep hands and feet from under the mower deck and clear of pinch points between the tractor hitch arms and mower pins. *OPS-R-0001*

Side and Rear Flail



Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15)

5.1 Connecting the Rear Flail to the Tractor

- 1. Make sure the tractor is equipped with the correct PTO shaft. Change shafts if needed.
- 2. Shorten or remove the tractor drawbar to avoid interference when raising and lowering the mower.
- 3. Board the tractor and start the engine. Position the tractor to the mow er with the 3-point lift arms positioned between the respective set of mower A-frame lift lugs. **Note:** Set the 3-point lift control to "Position Control" so that the lift arms maintain a constant height when attaching the mower. See the tractor Operator's Manual for correct settings when attaching 3-point equipment.
- 4. Turn off the tractor engine and dismount.
- One lift arm at a time, a lign arm end hole between the set of A-frame lift lugs. Insert hitch pin through the lug and arm holes and insert retaining pin into hitch pin.
- 6. Walk around to o posite side and repeat procedure for remaining lift arm and hitch pin.
- 7. Extend or retract 3-point top link to align its end hole with the holes of the mo wer's top link. Insert the top link hitch pin and insert retaining pin into hitch pin.

Adjust any lower link check chains, guide blocks, or sway blocks to prevent the mower from swaying side to side and possible contact with tractor rear tires.





NOTE: Offset Adaptor Hitches are available to position the mower to the left or right. Mowers with Offset Adaptor hitches connect to the 3-Point hitch the same way as the mower A-frame.

Side and Rear Flail

5.2 Connecting the Side Flails to the Tractor

- 1. Install the Draft Beam onto the Main Frame.
- 2. Raise the Draft Beam to line up with the the 'ears' on the Side Flail and install Pins and hardware.
- 3. Connect the Linkage and Cylinder to the Side Flail for a Combo Lift set-up or route and connect the cable to the Side Flail if it's a Cable Lift set-up.
- 4. Route and connect the hydraulic lines to the cylinders and from the Brake Valve to the Side Flail motor.



AWARNING

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



AWARNING

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



DO NOT allow any person under a sid e mower unless mower is securely locked up or supported. **DO NOT** approach the Implement unless the Tractor is turned off and all motion has ceased. Never work under the frame work, or any lifted component unless the implement is securely supported or blocked up. A sudden or inadvertent fall by any of these components could cause serious injury or even death. (STI-03_A)



Side and Rear Flail

6. SETTING THE MOWER

Properly setting the cutting height is essential for efficient and safe operation. A properly set mower will make a more uniform cut, distribute clippings more evenly, require minimal tractor work, and follow the contour of uneven terrain. *NOTE:* Avoid very low cutting heights, striking the ground with the blades gives the most damaging shock loads and will cause damage to the mower and drive. Blades contacting the ground may cause objects to be thrown out from under the mower deck. Always avoid operating the mower at a height which causes the blades to contact the ground. OPS-U- 0010

A DANGER

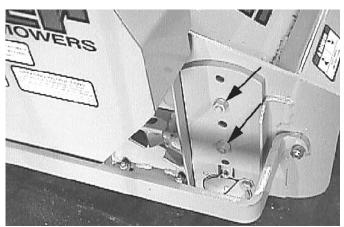
Never work under the Implement, the fr amework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SG-14)

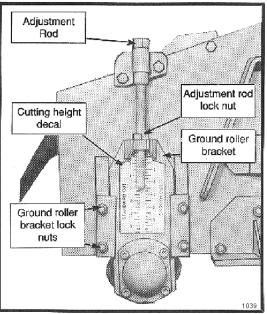


Standard Duty

6.1 Roller Height Adjustment

- The mower's cutting height is set by positioning the roller assembly for each mower section. Each section must be set at the same height to ensure an even cut across the entire width of the mower.
- 2. Place the tractor and mower on a le vel surface and completely lower the mower to the ground.
- Shut down the tractor, place the transmission in park, and set the parking brake before dismounting.
- 4. One section at a tim e, place lifting device (scissors jack or hydraulic jack) under center of cutter housing.
- Remove hex nuts, washers and carriage bolts from brackets at each end of roller. Make certain that roller bracket is free to move once the fasteners are removed. A stuck roller could drop unexpectedly and cause injury.
- For Standard Duty flails, use lifting device to reposition cutter housing to desired cutting height. Align bracket holes with cutter housing, then reinstall hardware.
- 7. For Heavy Duty flails, loosen the Adjustment rod lock nut and adjust height by turning the Adjustment Rod. Retighten the Adjustment rod lock nut and then reinstall hardware.
- 8. Lower cutter housing to the ground and remove lifting device.





Side and Rear Flail

Operation Section 3-10

Heavy Duty

Set cutting height according to procedures above for remaining two cutter sections. Make sure that all three rollers are set at the same height to ensure an even cut across the entire width of the mower.

6.2 Leveling Rear Flail Deck

To facilitate a safe and efficient mowing operation, the mower should be operated parallel to the ground at all times. Never operate if front or rear of mower is tilted upward. Objects may be discharged at high speeds causing possible injury or even death.

Adjust Top Link to level mower roller adjustment. Side Skid Shoes s hould always be p arallel to ground throughout the full adjustment range. Adjust cutting height of machine by raising or lowering rear roller as specified in Operation Section.





Do not let the Blades turn when the Mower Deck is raised for any reason, including clearance or for turning. Raising the Mower deck exposes the Cutting Blades which creates a potentially serious hazard and could cause serious injury or even death from objects thrown from the Blades. (SRM-07)



7. DRIVELINE ATTACHMENT

The driveline yoke and tractor PTO shaft must be dirt free and greased for attachment.

To connect the mower driveline to the tractor PTO output shaft, pull the driveline yoke collar back and align the grooves and splines of the yoke with those of the PTO shaft. Push the driveline yoke onto the PTO shaft, release the locking collar, and position the yoke until the locking collar balls are seated onto the PTO shaft. Push and pull the driveline back and forth several times to ensure a secure attachment.

After the driveline is securely attached, place the tractor PTO master shield back in the operating position. *OPS-R-0003*



Side and Rear Flail

AWARNING

When attaching the Implement input driveline to the Tractor PTO, it is important that the connecting yoke spring activated locking collar slides freely and the locking balls are seated securely in the groove on the Tractor PTO shaft. Push and pull the driveline back and forth several times to ensure it is securely attached. A driveline not attached correctly to the Tractor PTO shaft could come loose and result in personal injury and damage to the Implement. (S3PT-17)

7.1 Driveline Length Check

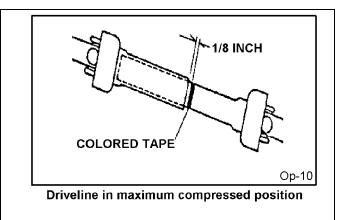
AWARNING

Before operating the Implement, check to make sure the Implement input driveline will not bottom out or become disengaged. Bottoming out occurs when the inner shaft penetrates the outer housing until the assembly becomes solid-it can shorten no more. Bottoming out can cause serious damage to the Tractor PTO by pushing the PTO into the Tractor and through the support bearings or downward onto the PTO shaft, breaking it off. A broken driveline can cause personal injury. (S3PT-18)

When fitting the mower to the tractor, the telescoping driveline must be inspected to ensure that at its most compressed position, the pr ofiles do not "bottom out", and when at its farthest extended position, there is sufficient engagement between the profiles to operate safely. At its shortest length, there must be at least a 1" clearance between each profile end and opposite profile universal joint. At its farthest operating extension, a minimum profile engagement of 12" must be maintained.

"Bottoming Out" Check Procedure

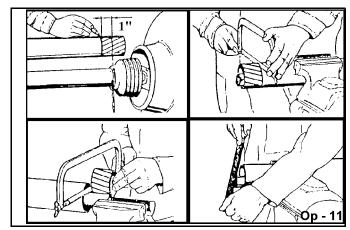
- Disconnect driveline from the tractor and slide the profiles together until fully compressed.
- Place a mark on the inner shield 1/8" from the end of the outer shield and reattach the driveline to the PTO Shaft.
- With the PTO NOT TURNING, slowly drive the tractor with mower attached through the sharpest turn possible and watch shaft movement. With the PTO NOT TURNING, slowly drive the tractor with the mower attached through the most severe terrain conditions expected and watch shaft movement.
- If the distance between the mark and the outer shield becomes less than 2" at any point there is a potential problem bottoming out the driveline and the driveline should be shortened. OPS-F-0001



Side and Rear Flail

Shorten the driveline profiles as follows:

- · Remove the driveline from the tractor.
- Position the mower to the point with the shortest distance between the tractor PTO shaft and cutter gearbox. Shut down the tractor and securely block the mower in this position.
- Pull driveline apart and reattach yoke to PTO shaft.
- Hold driveline sections parallel to one another and measure back 1" from yoke of each shaft and place mark on opposite section. Cut this length off with a saw.
- Round off all sharp edges and debur.
- · Thoroughly grease then reinstall the driveline.
- Recheck for proper operation.



Engagement Check Procedure

- With the driveline attached, position the mower to the point where the telescoping driveline is at its maximum extension. Completely shut down the tractor and secure in position.
- Mark the inner driveline shield 1/8" from the end of the outer shield.
- Disconnect the driveline from the tractor and separate the two driveline halves.
- Measure the distance from the mark to the end of the inner profile. This length is the amount the driveline profiles were engaged.
- If the engaged length is less than 12" the shaft is considered too short and should be replaced with a longer shaft. Consult an authorized dealer to purchase the required driveline length.

NOTE: If the driveline cannot be shortened and still maintain the required profile engagement, the operator must be made aware of terrain conditions and avoid situations which pose a potential problem to avoid damaging the driveline.

OPS-F-0002

8. PRE-OPERATION INSPECTION AND SERVICE

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



Always disconnect the main PTO Driveline from the Tractor before performing service on the Implement. Never work on the Implement with the tractor PTO driveline connected and running. Rotating Parts, Blades or Drivelines could turn without warning and cause immediate entanglement, injury or death. (S3PT-11)

Side and Rear Flail

A DANGER

DO NOT allow any person under a folded wing unless wing is securely locked up or supported. **DO NOT** approach the Implement unless the Tractor is turned off and all motion has ceased. Never work under the frame work, or any lifted component unless the implement is securely supported or blocked up. A sudden or inadvertent fall by any of these components could cause serious injury or even death. (STI-03)



AWARNING

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





8.1 Tractor Pre-Operation Inspection/Service

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

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

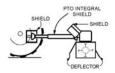


Side and Rear Flail

8.2 Mower Pre-Operation Inspection/Service

Before each mower use, a complete inspection and service is required to ensure the mower is in a good and safe working condition. Damaged and/or broken parts should be repaired and/or replaced immediately. To ensure the mower is ready for operation, conduct the following. *OPS-R-0007*

All Safety Shields, Guards and Safety devices including (but not limited to) - the Deflectors, 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



A DANGER

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

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

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



- Check that the main driveline securely attached to the tractor and the locking collar is seated in the groove of the PTO Shaft.
- Inspect that the 3-point hitch pins are the proper size, correctly installed and secured to the tractor lift arms with retaining pins inserted.
- Ensure side mower hydraulics are secure at both ends. OPS-F-0015_A



Side and Rear Flail

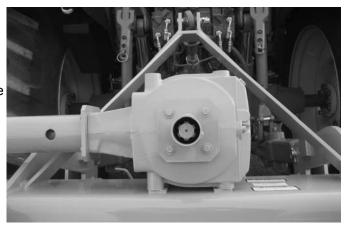
- Ensure rubber deflectors are in position and not damaged. Replace worn, broken, and missing sections immediately.
- Ensure the rollers are in good condition and rotate freely.
- Ensure the driveline integral shield is in good condition and rotate freely.
- Inspect that all bolts and screws are in position and are properly torqued. OPS-F- 0004



- Inspect the condition of the side mowers and rear mower drive belts.
- Ensure the slip clutch (rear mower section only) is properly adjusted and the friction plates are not frozen together. Reference the Maintenance Section for proper slip clutch maintenance.
- Ensure the slip clutch shield and drive belts shields are in place and in good repair.
- Ensure the tractor PTO master shield is in place, lowered and in good condition. OPS-F- 0005 A



- Inspect oil level in gearbox and replenish if needed. A low oil level is a warning sign that the gearbox may be cracked or its seal is damaged and needs to be replaced.
- Check the oil level in tank and replenish if needed. NOTE: Do not fill the tank with oil above the level of the sight gauge. Over filling the tank with oil after initial filling may result in oil being discharged through the breather cap on the top of the hydraulic tank.
- Perform scheduled lubrication as specified in the Maintenance Section. OPS-F- 0006_A



Side and Rear Flail

- Inspect cutter knives and knife pins for looseness and excessive wear. Make sure the mower is securely blocked up before crawling beneath. Replace damaged, worn, and missing knives as complete sets to maintain cuttershaft balance.
- Remove any grass or other debris which may be wrapped around the cuttershafts.
- Inspect the condition of deck skid shoes and hardware. OPS-F- 0007



Side and Rear Flail

Flail Mower PRE-OPERATION Inspection

Mower ID#	Make
Date:	Shift

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

Table 1:

Item	Condition at Start of Shift	Specific Comments if not O.K.
The Operator's Manual is in the canister		
All safety decals are in place and legible		
The Mounting frame bolts are in place and tight		
The connection bolts & pins are tight		
There are no cracks in mower		
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 shields are in place and in good condition		
The Skid shoes are in good condition & tight		
The Hyd. motor mounting bolts are tight		

Operator's Signature:

DO NOT OPERATE an UNSAFE TRACTOR or BOOM

Side and Rear Flail

Tractor PRE-OPERATION Inspection

	Mower ID#	Make
اعاقات	Date:	Shift

AWARNING

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

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

Operator's Signature:_____

DO NOT OPERATE an UNSAFE TRACTOR or MOWER

This Inspection Form may be freely duplicated for extra copies.

Side and Rear Flail

9. DRIVING THE TRACTOR AND IMPLEMENT

Safe tractor transport requires the operator possess a thorough knowledge of the model being operated and precautions to take while driving with an attached implement. Ensure the tractor has the capacity to handle the weight of the implement and the tractor operating controls are set for safe transport. To ensure safety while driving the tractor with an attached implement, review the following. *OPS-U- 0012*

A DANGER

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

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



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

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

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

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

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



Side and Rear Flail

9.1 Starting the Tractor

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

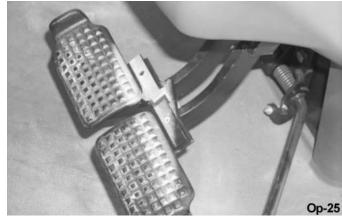


9.2 Brake and Differential Lock Setting

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

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

OPS-U- 0013



Raising the Mower

Side and Rear Flail

Using the tractor 3-point hitch control lever, raise the mower off the ground about 6", or just high enough to clear any ground obstacles. When raising the mower, make sure all connection points are securely attached and at least 1" clearance is maintained between the driveline and the deck. If necessary, place an upper lift strip on the 3-point hitch control lever to limit the height the mower can be raised to avoid driveline damage.



9.3 Driving the Tractor and Implements

Start off driving at a slow speed and gradually increase your speed while maintaining complete control of the tractor and units. Moving slowly at first will also prevent the tractor from rearing up and loss of steering control. The tractor should never be operated at speeds that cannot be safely handled or which will prevent the operator from stopping quickly during an emergency. If the power steering or engine ceases operating, stop the tractor immediately as the tractor will be difficult to control.

Drive the tractor with the 3-point lift arms in the raised position and lock the control lever in the transport detent position to prevent damage to the mower driveline when turning.

Perform turns with the tractor and units at slow speeds to d etermine how the tractor with an attached mower handles a turn. Determine the safe speed to maintain proper control of the tractor when making turns.

To avoid overturns, drive the tractor with care and at safe speeds, especially when operating over rough ground, crossing ditches or slopes, and turning corners. Tractor wheel tread spacing should be increased when working on inclines or rough ground to reduce the possibility of tipping.

Use extreme caution when operating on steep inclines.

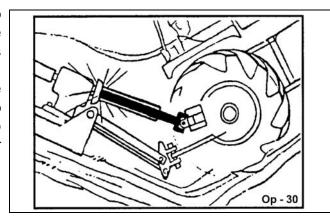




Side and Rear Flail

9.4 Crossing Ditches and Steep Inclines

When crossing ditches with steep banks or going up sharp inclines, it is possible that the main driveline inner profile will penetrate into the outer housing to its maximum depth until the assembly becomes solid (driveline is at its extreme shortest length). This type of abusive operation can cause serious damage to the tractor and mower drive by pushing the PTO into the tractor and through the support bearings or downward onto the PTO shaft, breaking it off.

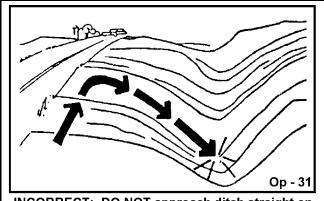


AWARNING

Damage resulting from over-collapse of the driveline's inner profile and its outer housing may allow the driveline to come loose from the Tractor which could cause bodily injury to the operator or bystanders and/or extensive damage to the Tractor or Implement. *OPS-R-0020*

When confronted with an incline or ditch, do not approach from an angle which is p erpendicular or straight on as damaged to over collapse of the driveline may occur.

When crossing such terrain, the implement should be fully lowered for a lower center of gravity and added stability. *OPS-R-0021*

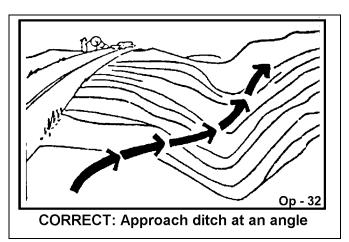


INCORRECT: DO NOT approach ditch straight on

Side and Rear Flail

Inclines and ditches should be approached along a line which is at an angle as shown. This type of path will reduce the pos sibility of over-collapse of the driveline and resulting damage. If the gradient is so steep that such an ap proach increases the possibility of a tractor roll-over, select an alternate crossing path.

When operating the tractor and mower across slopes and inclines, through ditches, and other uneven terrain conditions, it is important to maintain sufficient deck to ground clearance. Blade contact with the ground may cause soil, rocks and other debris to be thrown out from under the mower resulting in possible injury and/or property damage. Ground contact also produces a severe shock load on the mower drive and to the mower blades resulting in possible damage and premature wear. *OPS-R-0022*



10. OPERATING THE TRACTOR AND IMPLEMENT

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

Before starting any operation, the operator must become familiar with the area to be worked in and any obstacles and hazards contained within to ensure safety to the operator, bystanders, and equipment. Special attention should be paid to foreign debris, rough terrain, steep slopes, and passersby and animals in the area. *OPS-U- 0015*

AWARNING

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



Side and Rear Flail

AWARNING

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

10.1 Foreign Debris Hazards

Before mowing, inspect the area to make sure there are no foreign objects that the mower blades could hit or become entangled with. Re move all foreign objects and debris. If objects are too big to remove, mark them clearly and be sure to prevent the mower blades from contacting them.

If you hit a solid object or foreign debris, stop the mower and tractor at on ce. Immediately idle the engine speed and disengage the PTO. Wait for all mower rotating motion to stop, then raise the mower and move the tractor and implement off the object. Inspect the area and remove, or mark the location of the debris. Inspect the condition of the mower and make any needed repairs immediately. Make sure the blades are not da maged and the carrier is balanced before resuming operation.

Always wear your seat be It securely fastened and only operate the tractor and mower with the ROPS in the raised position. If the tractor or mower hits a tree stump, rock, or bump, a sudd en movement could throw you off of the seat and under the tractor and/or mower. The seat belt is your best protection from falling off the tractor and the ROPS provides protection from being crushed during a tractor roll-over. *OPS-F-0010*





10.2 Bystanders/Passersby Precautions

If a bystander comes within 300 feet of the tractor while the mower is being operated, stop the tractor at once, idle the engine and disengage the PTO. Do not engage the PTO again until all bystanders are well past the 300 foot distance. *OPS-R-0024*

Side and Rear Flail

Flail Mowers are capable under adverse conditions of thro wing objects for great distances (300 feet or more) and causing serious injury or death. Follow safety messages carefully.



STOP MOWING IF PASSERSBY ARE WITHIN 300 FEET UNLESS:

- -Front and Rear Deflectors, Chain Guards, or Bands are installed and in good, workable condition;
- -Mower sections are running close to and parallel to the ground without exposed Blades;
- -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. (This will also reduce power required to mow, reduce wear and tear on the Mower drivetrain, spread cut material better, eliminate

10.3 Engaging the Power Take Off (PTO)

Before engaging the PTO, make certain that the area is clear of bystanders and passersby. The implement must be completely lowered and the deck positioned at a safe operating height. NEVER engage the PTO with the implement in the raised position.

Set the tractor engine speed at approximately 1,000 RPM before engaging the PTO. Shift the PTO control to the on position, and slowly increase the engine speed until the PTO is operating at the rated speed. If you hear unusual noises or see or feel abnormal vibrations, disengage the PTO immediately. Inspect the implement to determine the cause of the noise or vibration and repair the abnormality. *OPS-U- 0027*



Do not let the Blades turn when the Mower Deck is raised for any reason, including clearance or for turning. Raising the Mower deck exposes the Cutting Blades which creates a potentially serious hazard and could cause serious injury or even death from objects thrown from the Blades. (SRM-07)



AWARNING

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



Side and Rear Flail

10.4 PTO RPM and Ground Speed

Ground speed for mowing will depend upon the height, type , and dens ity of vegetation to be cut. Recommended speed for efficient mower performance is between 2 and 5 mph(3-8 kph). Operate the mower at its full rated PTO speed to maintain blade speed for a clean cut. Refer to the tractor operator's manual or the tractor instrument panel for the engine speed and gear to provide the required PTO and desired ground speed. Make sure that the mower is operating at its full rated speed before entering the vegetation to be cut. If it becomes necessary to temporarily regulate engine speed, increase or decrease the throttle gradually.

Ground speed is achieved by transmission gear selection and not by the engine operating speed. The operator may be required to experiment with several gear range combinations to determine the best gear and range which provides the most ideal performance from the mower and most efficient tractor operation. As the severity of cutting conditions increase, the ground speed should be decreased by selecting a lower gear to maintain the proper operating PTO speed. *OPS-R-0025*

AWARNING

Do not exceed the rated PTO speed for the Implement. Excessive PTO speeds can cause Implement driveline or blade failures resulting in serious injury or death. (SG-26)



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

10.5 Operating the Mower

Only operate the mower from the tractor operator's seat with the seatbelt securely fastened. The tractor must be equipped with a ROPS in the raised position or a ROPS cab.

The mower is designed to cut vegetation up to 2" in diameter. Sharp blades will produce a cleaner cut and require less power. Travel at a speed that allows the mower sufficient time to cut through the vegetation and maintain the PTO operating speed to prevent overloading the mower and tractor. Choose a driving pattern that provides the maximum pass length and minimizes turning.

Under certain conditions, tractor tires may roll some grasses down preventing them from being cut at the same height as the surrounding area. When this occurs, reduce the tractor ground speed while maintaining the operating speed of the mower. A slower ground speed will permit grasses to at least partially rebound and be cut. Taking a partial cut and/or reversing the direction of travel may also help produce a cleaner cut.

Avoid mowing in the reverse direction when possible. In situations where the mower must be backed to access areas to be cut, make sure there are no persons or other foreign debris behind the mower before mowing in reverse. When mowing in reverse, operate the tractor and mower at a reduced ground speed to ensure tractor and mower control is maintained. *OPS-R-0026*

Side and Rear Flail



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

AWARNING

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

AWARNING

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

AWARNING

Follow these guidelines to reduce the risk of equipment and grass fires while operating, servicing, and repairing the Mower and Tractor:



- -Equip the Tractor with a fire extinguisher in an accesible location.
- -Do Not operate the Mower on a Tractor with an underframe exhaust.
- -Do Not smoke or have an open flame near the Mower and Tractor.
- -Do Not drive into burning debris or freshly burnt areas.
- -Ensure slip clutches are properly adjusted to prevent excessive slippage and plate heating.
- -Never allow clippings or debris to collect near drivelines, slip clutches, and gearboxes. Periodically shut down the Tractor and Mower and clean clippings and collected debris from the mower deck. (SGM-12)

Side and Rear Flail

10.6 Shutting Down the Implement

To shut down the implement, first bring the tractor to a complete stop. Then slow down the implement by reducing the engine speed before disengaging the PTO. Wait for all motion to stop before proceeding to drive or shut down the tractor.



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



11. DISCONNECTING THE MOWER FROM THE TRACTOR

Before disconnecting the mower, the PTO must be disengaged and all motion at a comp lete stop. Move the mower to a level storage location and lower both side mowers to the ground. If the mower will be stored with the sections in the raised position, be sure that the travel locks are engaged. If the mower is not resting securely on the ground, block the mower up securely before attempting to disconnect it from the tractor. Use extreme care to keep feet and hands from under the mower and clear of any pinch points. *OPS-F-0012_A*



Side and Rear Flail



Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15)

A DANGER

Never stand or allow another person to stand between a running Tractor and the Mower when disconnecting the Implement from the Tractor 3-point hitch. Always shut the Tractor off completely and set the parking brake before attempting to disconnect the Mower pins from the Tractor hitch.

After disconnecting the 3 lift points, remove the mower driveline from the tractor PTO shaft. Lay the driveline down carefully to avoid damaging the driveline or its shield. Do not let the driveline fall into mud or dirt, which can contaminate the bearing and shorten the life of th e driveline. *OPS-F-0013*



A DANGER

Never work under the Implement, the fr amework, 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)



Side and Rear Flail

12. MOWER STORAGE

It is recommended that the mower be stored with the center section and both side mowers fully lowered to ground level. If the mower is stored with the side mowers in the raised position, select a level area and engage travel locks and travel lock pins to prevent the side mowers from falling BEFORE disconnecting the rear mower.

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

- Thoroughly clean all debris off the mower to prevent damage from rotting grass and standing water.
- Lubricate all mower grease points and fill gearbox oil levels as detailed in the Maintenance Section.
- Tighten all bolts and pins to the recommended torque.
- Check the mower for worn and damaged parts. Perform repairs and make replacements immediately so that the mower will be ready for use at the start of the next season.
- Store the mower in a clean, dry place with the mower housing resting securely on blocks or at ground level.
- Keep the driveline yoke from sitting in water, dirt and other contaminants.
- Use spray touch-up enamel where necessary to prevent rust and maintain the appearance of the mower.



It is critical that driveline clutches slip when an obstacle or heavy load is encountered to avoid mower and/or tractor damage. If the mower sits outside for an extended period of time or is exposed to rain and/or humid air, the clutch lining plates must be inspected to ensure they are not frozen together from rust or corrosion. If the mower has been exposed to such conditions, at the start of each mowing season, and any time it is



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)

Side and Rear Flail

13. TRANSPORTING THE TRACTOR AND IMPLEMENT

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

A DANGER

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



Before transporting the tractor and mower, idle the tractor engine, disengage the PTO and wait for all mo wer moving parts to come to a complete stop. Raise the mower sections and ensure transport locks engage and install the travel lock pins. *OPS-F- 0021*





Side and Rear Flail

Before transporting the tractor on a public roadway or boarding a trailer for transport, the tractor brake pedals should be locked together. Lo cking the pedals ensures that both wheels brake simultaneously while stopping, especially when making an emergency stop.

Use extreme caution and avoid hard applications of the tractor brakes when carrying equipment at road speeds. Never haul the implement at speeds greater than 20 MPH (32 kph). *OPS-U- 0018_A*



If the tractor's hydraulic pump is not independent of the tractor PTO, or if the tractor PTO has to be run to have hydraulic power, disconnect the mower driveline from the tractor PTO output shaft. Secure the driveline to the mower deck to prevent driveline damage or loss during transport.

13.1 Transporting on Public Roadways

Extreme caution should be used when transporting the tractor and implement on public roadways. The tractor must be equipped with all required safety warning features including a SMV emblem and flashing warning lights to a lert drivers of the tractor's presence. Remember that roadways are primarily designed for automotive drivers and most drivers will not be looking out for you, therefore, you must look out for them. Check your side view mirrors frequently and remember that vehicles will approach quickly because of the tractor's slower speed. Be extremely cautious when the piece of equipment that you are carrying is wider than the tractor tire width and/or extends beyond your lane of the road. *OPS-U-0019_A*

NOTE: Ensure that the mower sections are fully raised and that the transport locks are engaged for each section.



Only carry the Implement behind a properly sized and equipped Tractor which exceeds the weight of the Implement by at least 20%. DO NOT carry the Implement behind a truck or other type of vehicle. Never carry the Implement and another Implement connected in tandem. Never carry the Implement at speeds over 20 MPH. (STI-06_A)





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



Side and Rear Flail

AWARNING

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



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



Make sure that all tractor flashing warning lights, headlights, and brake/tail lights are functioning properly before proceeding onto public roads. While newer model tractors have plenty of lighting to provide warning signals and operating lighting, most older models are only equipped with operating lights. Consult an authorized tractor dealer for lighting kits and modifications available to upgrade the lighting on older tractor models. *OPS-U- 0021*

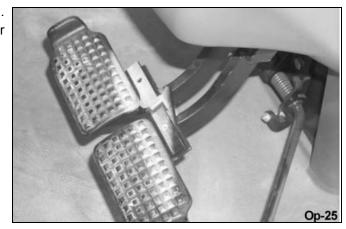


When operating on public roads, have consideration for other road users. Pull to the side of the road occasionally to allow all following traffic to pass. Do not exceed the legal speed limit set in your country for agricultural tractors. Always stay alert when transporting the tractor and implement on public roads. Use caution and reduce speed if other vehicles or pedestrians are in the area. *OPS-U-0022*



Side and Rear Flail

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



13.2 Hauling the Tractor and Implement

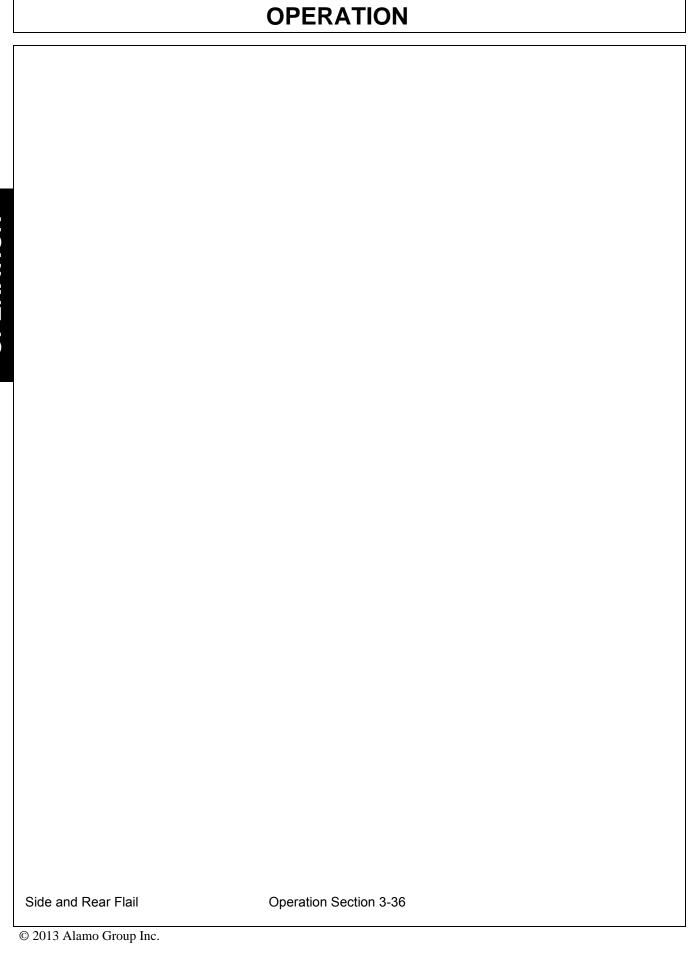
Before transporting a loaded tractor and implement, measure the height and width dimensions and gross weight of the complete loaded unit. Ensure that the load will be in compliance with the legal limits set for the areas that will be traveled through. *OPS-U- 0024*

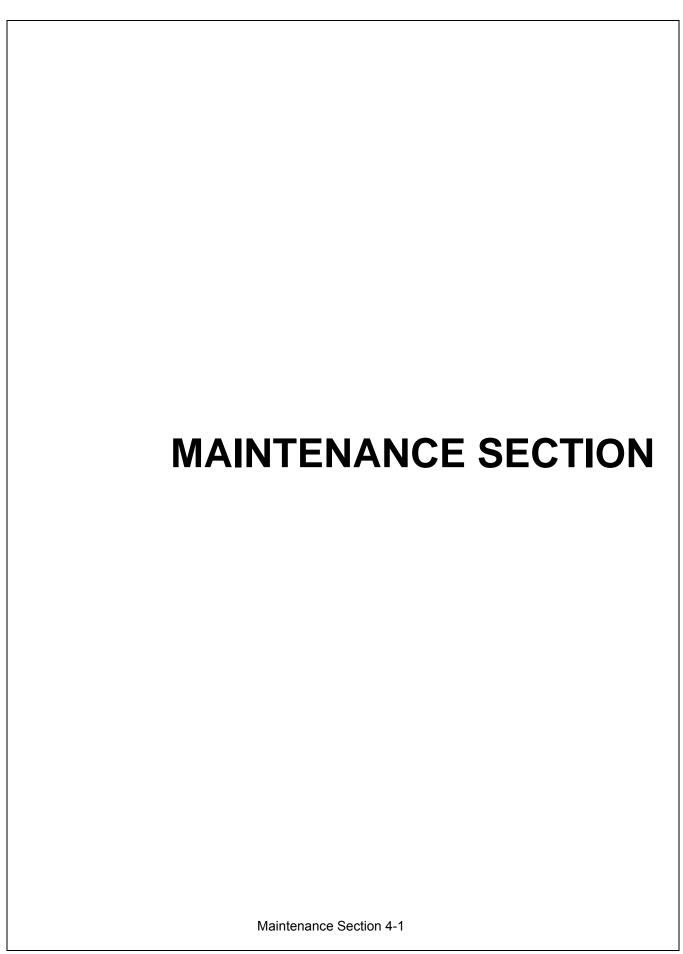


Use adequately sized and rated trailers and equipment to transport the tractor and implement. Consult an authorized dealer to determine the proper equipment required. Using adequately sized chains, heavy duty straps, cables and/or binders, securely tie down both the front and rear of the tractor utilizing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



Side and Rear Flail





General Instructions

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

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

Maintenance Precautions

- Be sure end of grease gun and fittings are clean before using. Debris injected into bearings, etc. with grease will cause immediate damage.
- DO NOT use a power grease gun to lubricate bearings. These require very small and exact amounts of lubrication. Refer to the detailed maintenance section for specific lubrication instructions. DO NOT overgrease bearings.
- 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.



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

Break in Period

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



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





Do not 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)

Side and Rear Flail

A 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 tractor's hour meter to determine when regular servicing is required.

Daily or Every 8 Hours

ITEM	SERVICE	COMMENTS
Drive Shaft Yoke, U-Joint & Stub Shaft	Grease	Grease as instructed in detailed maintenance section
Pump Drive Shaft Coupler	Check and Lube	Insure driveshaft end play
Crankshaft Adapter	Check rubber grommets	Replace grommets if damaged or missing
Pivot Points	Lubricate	Inject grease until it appears at ends
Hydraulic Fittings	Check for leaks	Tighten when needed. Do not use hands to check for leaks, see maintenance precautions
Knives	Check	Inspect for missing or damaged knives, change as needed.
Belts	Check/Adjust	Check if broken, tighten as required.
Main Frame and Deck	Check	Retorque bolts to torque specifications in this section

Side and Rear Flail Maintenance Section 4-3

ITEM	SERVICE	COMMENTS			
Hydraulic Fluid Level	Check	Add if required per			
		fluid recommendations			
ear Flail Drive (if applicable)	Lubricate	Grease as instructed in			
Bearing Flange and Shaft Coupler		detailed maintenance section			
Cutter Shaft	Lubricate	Grease as instructed in			
		detailed maintenance section			
Ground Roller Bearings	Lubricate	Grease as instructed in			
		detailed maintenance section			
	WEEKLY OR EVER	Y 50 HOURS			
TEM	SERVICE	COMMENTS			
n Tank Hyd. Fluid	Change	Change after first 50			
Filter	-	hours only, then every			
0 micron filter)		500 hours or yearly			
-Line High Pressure	Change	Change after first 50			
Filter		hours only, then every			
0 micron filter)		500 hours or yearly			
N	MONTHLY OR EVER	Y 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			

Side and Rear Flail Maintenance Section 4-4

YEARLY OR EVERY 500 HOURS

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

Side and Rear Flail

TROUBLESHOOTING								
SYMPTOMS	CAUSE	REMEDY						
Vibration	1. Loose Bolts	Check all bolts and tighten to						
		recommended torque specs.						
	Cutter assembly	2a. Check for damaged blades, disc						
	Unbalanced	or cuttershaft. Replace if needed.						
		2b. Check for wire, rope, etc.						
		entangled in the cutter assembly						
Mower will not lift	1. Hyd. Fluid Low	Check and refill hydraulic fluid						
	2. Leaks in line	2. Tighten or replace fittings and hoses						
	Faulty relief valve	3. Check pressure in line. Line						
		pressure should be at least 2500 PSI						
	4. Kinked or blocked	4. Clean or replace lines						
	5. Faulty cylinder	5. Inspect, repair or replace cylinder						
Mower will not start	1. Blown fuse	Check fuse between mower switch						
or run		and ignition/replace						
	Ball valves closed	Make sure valves are open						
	Low oil level	Check hydraulic tank and fill						
	4. Line leak	Check all fittings and lines,						
		re-tighten or replace						
	Electronic	5a. Without the tractor running, turn						
	solenoid faulty	the mower switch to on. A low						
		audible click is not 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.						
Side and Rear Flail	Maintenance Secti	on 4-6						

		5c.	Remove large nut on side of large valve block. Remove spring, and use needle nose vise grip to pull spool from block. Check block and spool for contaminants and scratches. Clean parts or replace if scratched.
Oil Temperature rises1. Belts	1. Low oil level	1.	Bring oil to proper level.
above 200 deg. F	 Kinked or blocked hose Worn pump/motor 	2. 3.	Inspect, repair, or replace hoses. Disable and repair.
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 flatwasher is flush with top of guide.
Mower turns slowly or not at all.	Contaminants restricting spool movement in valve body.	1.	Remove large nut on side of large valve block. Remove spring, and use needle nose vise grip to pull spool from block. Check block and spool for contaminants and scratches. Clean parts or replace if scratched.
	Suction lines obstructed	2.	·
	3. Low oil level	3.	Check Hyd. tank level and fill.
Pump will not work	Excessive wear on internal parts	1.	Disassemble and repair.
Motor will not work	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.

Side and Rear Flail

These are intended to be general specifications. See tractor operator's or service manual for exact specifications for your unit.

LUBRICATION RECOMMENDATIONS

Description	Application	General Specification	Recommended Mobil Lubricant
Tractor Hydraulics	Reservoir	JD-20C	Mobilfluid®
Mower Hydraulics	Reservoir		
Cold Temperatures 0° Start-Up	F	ISO 46 Anti-Wear/ Low Temp	Mobil DTE® 15M
Normal Temperatures 15° F Start-Up		ISO 46 Anti-Wear	Nuto® H46, Mobil DTE®25
Flail Rear Gearbox	Reservoir	PAO Synthetic Extreme Pressure Gear Lube	Mobil® 1 Synthetic Gear Lubricant LS 75W-90 Mobil® Delvac Synthetic 75W-90
Cutter Shaft & Ground Roller Shaft(Flail)	Grease Gun	Lithium-Complex NLGI 2 ISO 320	Mobil Delvac® Xtreme Grease, Mobilgrease CM-S
Drive Shaft Coupler (Flail and Rotary)	Grease Gun	Lithium-Complex NLGI2-ISO 320	Mobil Delvac® Xtreme Grease, Mobilgrease CM-S
Drive Shaft Yoke, U-joint & Stub Shaft	Grease Gun	Lithium-Complex Extreme Pressure NLGI2-ISO 320	Mobilgrease CM-S

Side and Rear Flail

TORQUE SPECIFICATIONS

				Т	orque	for St	andard	Faste	ners				
Nominal			\rangle	Grade 2		>	Grade 5		k)	Grade 8			Grade 9
Dia.	per	Tig	htening Tor	que	Tio	htening To	rque	Tig	htening Ton	que	Tig	htening Tor	que
	inch		Dry Plated		Lubed	Dry Plated	Dry plain	Lubed	Dry Plated		Lubed	Dry Plated	Dry plain
(in.)	1 1	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
					Uni	fied Coa	rse Threa	d Series			-	-	
1/4	20	49 in-lbs	59 in-lbs	66 in-lbs	76 in-lbs	86 in-lbs	101 in-lbs	107 in-lbs	122 in-lbs	143 in-lbs	126 in-lbs	143 in-lbs	168 in-lbs
5/16	18	101	122	135	157	178	209	221	251	295	259	294	346
3/8	16	15 ft-lbs	18 ft-lbs	20 ft-lbs	23 ft-lbs	26 ft-lbs	31 ft-lbs	33 ft-lbs	37 ft-lbs	44 ft-lbs	38 ft-lbs	43 ft-lbs	51 ft-lbs
7/16	14	24	29	32	37	42	49	52	59	70	61	70	82
1/2	13	37	44	49	57	64	75	80	90	106	94	106	125
9/16	12	53	63	70	82	92	109	115	130	154	135	153	180
5/8	11	73	87	97	113	128	150	159	180	212	186	211	248
3/4	10	129	155	172	200	227	267	282	320	376	331	375	441
7/8	9	125	150	167	322	365	429	455	515	606	533	604	710
1	8	187	225	250	483	547	644	681	772	909	799	905	1065
1 1/8	7	266	319	354	596	675	794	966	1095	1288	1132	1283	1510
1 1/4	7	375	450	500	840	952	1121	1363	1545	1817	1597	1810	2130
1 1/2	6	652	783	869	1462	1657	1950	2371	2688	3162	2779	3150	3706
						Fine Ti	nread Se	ries					
1/4	28	56 in-lbs	68 in-lbs	75 in-lbs	87 in-lbs				139 in-lbs	164 in-lbs	144 in-lbs	163 in-lbs	192 in-lbs
5/16	24	112	135	150	174	197	231	245	278	327	287	325	383
3/8	24	17 ft-lbs	20 ft-lbs	23 ft-lbs	26 ft-lbs	30 ft-lbs	35 ft-lbs	37 ft-lbs	42 ft-lbs	49 ft-lbs	43 ft-lbs	49 ft-lbs	58 ft-lbs
7/16	20	27	32	36	41	47	55	58	66	78	68	78	91
1/2	20	41	49	55	64	72	85	90	102	120	105	120	141
9/16	18	59	71	78	91	103	121	128	146	171	151	171	201
5/8	18	82	99	110	127	144	170	180	204	240	211	239	281
3/4	16	144	173	192	223	253	297	315	357	420	369	418	492
7/8	14	138	165	184	355	403	474	502	568	669	588	666	784
1	14	210	252	280	542	614	722	765	867	1020	896	1016	1195
1 1/8	12	298	357	397	668	757	890	1083	1227	1444	1269	1439	1693
1 1/4	12	415	498	553	930	1055	1241	1509	1710	2012	1768	2004	2358
1 1/2	12	734	880	978	1645	1865	2194	2668	3024	3557	3127	3544	4169

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

K = 0.17 for zinc plated and dry conditions
K = 0.20 for plain and dry conditions

D = Nominal Diameter F = Clamp Load

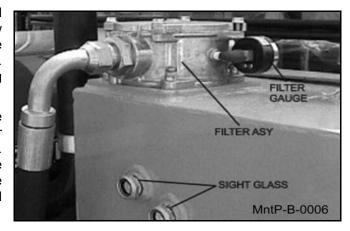
			Torqu	e-Tens	ion Re	elations	hip for	Metric	Faste	ners		
	Class 4.8 Class 8.8 8.8						>	Class 10.9			Class 12.9	
Nominal	Pitch	itch Tightening Torque Tight			htening Tor	aue	Tightening Torque			Tightening Torque		
		Lubed		Dry plain	Lubed	Dry Plated	Dry plain	Lubed Dry Plated Dry plain				
Dia.		K = 0.15		K = 0.20	K = 0.15	K = 0.17	K = 0.20	K = 0.15	K = 0.17	K = 0.20	K = 0.15	K = 0.20
(mm)		(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)	(ft-lbs)
3	0.5	0.28	0.32	0.38	0.73	0.82	0.97	1.0	1.2	1.4	1.2	1.6
3.5	0.6	0.44	0.50	0.59	1.1	1.3	1.5	1.6	1.9	2.2	1.9	2.5
4	0.7	0.66	0.74	0.87	1.7	1.9	2.3	2.4	2.7	3.2	2.8	3.8
5	0.8	1.3	1.5	1.8	3.4	3.9	4.5	4.9	5.5	6.5	5.7	7.6
6	1	2.3	2.6	3.0	5.8	6.6	7.7	8.3	9.4	11	9.7	13
6	1.25	2.1	2.3	2.7	5.3	6.0	7.0	7.6	8.6	10	8.8	12
7	1	3.8	4.3	5.0	9.7	11	13	14	16	19	16	22
8	1	5.9	6.6	7.8	15	17	20	22	24	29	25	34
8	1.25	5.5	6.2	7.3	14	16	19	20	23	27	24	31
10	1.25	11	13	15	29	33	39	42	48	56	49	66
10	1.5	11	12	14	28	32	37	40	45	53	47	62
12	1.25	21	23	28	53	60	71	76	86	101	89	119
12	1.5	20	22	26	51	58	68	73	82	97	85	113
12	1.75	19	21	25	49	55	65	70	79	93	81	108
14	1.25	26	29	34	66	75	89	95	108	127	111	148
14	1.5	28	32	37	72	82	96	103	117	138	121	161
14	2	30	34	40	78	88	104	111	126	148	130	173
16	1.5	50	57	67	129	146	171	184	208	245	215	287
16	2	47	53	62	121	137	161	173	196	230	202	269
18	1.5	73	82	97	187	212	249	268	303	357	313	417
18	2.5	65	73	86	167	189	222	239	270	318	279	372
20	1.5	101	115	135	270	306	360	374	424	498	437	583
20	2.5	91	104	122	236	267	314	337	382	449	394	525
Clamp lo	ad cal	culated as	75% of th	ne proof lo	ad for spe	cified bolts	K = 0.15 for "lubricated" conditions				D = Nomi	nal Diameter
All torqu	e valu	es are list	ed in foot-	pounds	100		K = 0.17 f	or zinc pl	ated, dry c	onditions	F = Clamp	Load
Torque values calculated from formula T=KDF, where							K = 0.20 for plain and dry conditions					

Side and Rear Flail

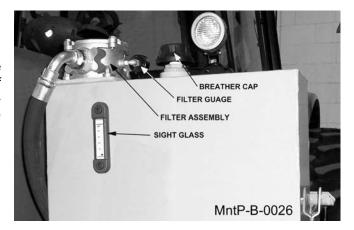
RECOMMENDED FILLING INSTRUCTIONS FOR HYDRAULIC RESERVIORS

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

If your reservoir has two sight glasses: The reservoir should be filled to the top of the lower sight glass on the side of the tank. Do not over-fill. The reservoir 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.



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



REPLACING IN-TANK HYDRAULIC FILTER:

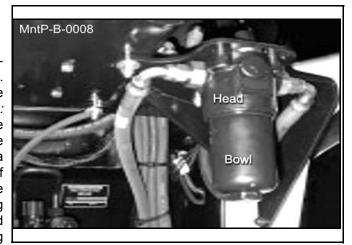
Loosen the four bolts on the top cover of the filter housing. Turn cover counter-clockwise until cover is free. Remove and replace filter. Replace top cover and cover bolts in opposite order as removed.



Side and Rear Flail

REPLACING HIGH PRESSURE HYDRAULIC FILTER ELEMENT:

Ensure that the system has been shut down and depressurized. Locate High Pressure Filter housing. Confirm that the element to be installed matches the element p/n on the filter model tag. (Example: V3.0510-06 (world line 100, HD049 model). Locate the bottom of the High Pressure Bowl. Using the appropriate spanner wrench or ratchet, turn in a counterclockwise rotation, (looking at the bottom of the bowl) to remove the bowl from the head. The first couple rotations will seem tight as the o-ring passes the sealing flats. Once the o-ring has cleared the sealing flats the bowl should spin freely. Taking care not to drop the bowl, finish removing the bowl from the head.



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

GREASING INNER AND OUTER DRAFT BEAM PIVOT POINTS

Locate the grease zerks on the inner and outer draft beam pivot bosses. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications into each zerk until grease protrudes from joints. Grease all pivots daily or every 8 hours of service.

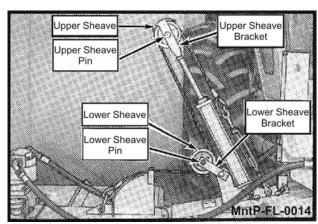
Side and Rear Flail

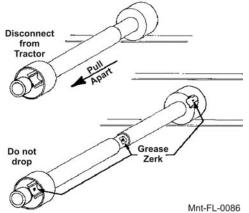
GREASING THE UPPER AND LOWER SHEAVES

Locate the grease zerks on the ends of the upper and lower sheave pins. Mnt-R-0018 Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications into each pin until it protrudes from the ends. These should also be greased daily or for every 8 hours of service.

GREASING PTO SHAFTS

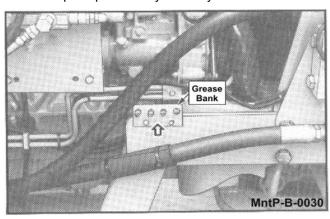
After bringing the tractor to a complete stop, shut off the engine and remove he PTO shaft from the tractor. Slide the shaft apart to expose the grease zerk. Grease the shaft with 5 pumps of grease and the U-joints until grease protrudes from caps per the scheduled interval in the maintenance section.

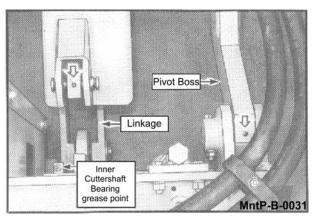




GREASING INNER AND OUTER DRAFT BEAM PIVOT POINTS

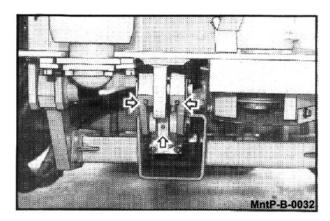
Locate the grease zerks on the inner and outer draft beam pivot bosses. Inject Lithium-Complex Extreme Pressure grease conforming to NLGI2-ISO 320 specifications into each zerk until grease protrudes from joints. Grease all pivot points daily or every 8 hours of service.





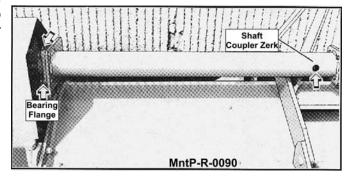
Side and Rear Flail

With the cutter head lowered, locate the grease zerks on the linkage and pivot bosses. Inject Lithium-Complex Extreme Pressure grease conforming to NLG12-ISO 320 specifications until it protrudes from the ends. With the cutter head in this position it is also possible to grease the draft beam cylinder anchors and pins. Now raise the cutter head to expose the remaining zerks on the deck tilt linkages and on the other end of the cylinder.



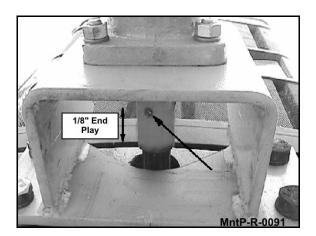
GREASING THE REAR DRIVE BEARING AND EXTENSION COUPLER SHAFT

Locate the grease zerks for the rear flail drive extension shaft. Make sure the zerks are clean before injecting grease. One pump of grease into flange zerk and shaft coupler once every day or for every 8 hours of service.



GREASING PUMP DRIVESHAFT COUPLER

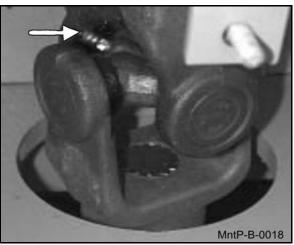
With engine stopped, ensure driveshaft alignment by grasping coupler and sliding back and forth. Coupler should slice freely with approximately 1/8" of end play. If coupler does not slide freely, inspect for loose pump mount bolts, or damaged or loose crank shaft adapter. Inject-Lithium Complex Extreme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

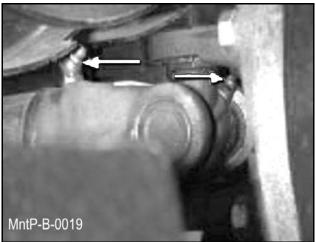


Side and Rear Flail

DRIVE SHAFT YOKE, U-JOINT STUB SHAFT

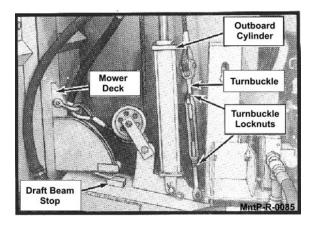
With engine stopped, inject Lithium-Complex extreme pressure grease conforming to NLGI2-ISO 320 specifications into universal joints and slip yoke until grease appears at the seal. Grease them daily or every 8 hours.





ADJUSTING THE CABLE LIFT

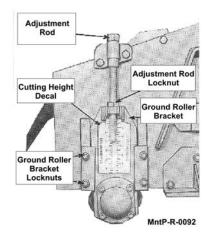
Extend the outboard cylinder until the mower deck touches its stop on the draft beam as shown. **NOTE:** Make sure the cable turnbuckle is loose enough to allow the cylinder to reach full extension before the head reaches the stop. Now hold the head against the stop and tighten the turnbuckle until the cable is tight. Lower and raise the head to check the adjustment. The head should touch its stop at the same time the cylinder reaches full extension. Tighten turnbuckle lock nuts securely after adjustment is complete.



Side and Rear Flail

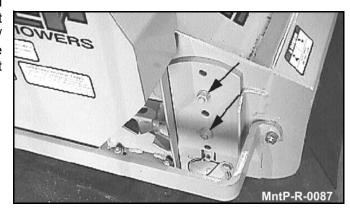
ADJUSTING THE CUTTING HEIGHT

Loosen the four ground roller bracket locknuts. Loosen the adjustment rod locknut and turn the adjustment rod to adjust the cutting height. The cutting height is indicated by the end of the adjustment rod on the cutting height decal. When cutting height has been achieved, tighten the ground roller bracket locknuts and the adjustment rod locknut securely. Be sure both sides of the flail are adjusted the same.



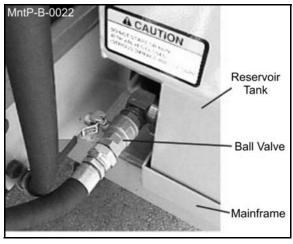
ADJUSTING STANDARD DUTY CUT HEIGHT

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



BALL VALVES

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



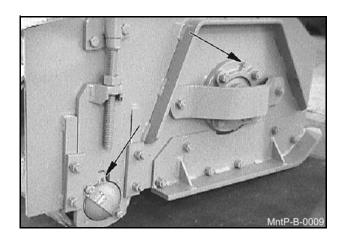


Side and Rear Flail

Maintenance Section 4-15

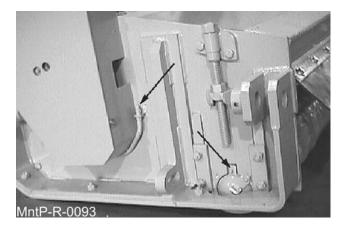
GREASING CUTTER SHAFT-FLAIL MOWERS

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



GREASING THE IDLER TENSION ARMS

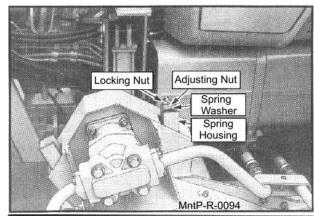
Locate the access holes and grease zerks in the belt shields of the side and rear flails. Normal conditions require one pump daily or every 8 hours of service with multi-purpose grease.

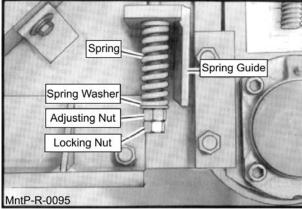
Side and Rear Flail

IDLER TENSION

Locate the idler tensioning rod for each flail. Loosen the locking nut. Turn the adjusting nut until the washer between the spring and nuts are flush with the spring housing or guide. Tighten locking nut securely. For standard cut on side flail adjust until the spring washer is flush with the top of the spring housing. **MntP-R-0094** Use the same method to adjust hydraulically driven rear flails.

For standard cut on the mechanically driven rear flail mower, adjust so that the spring washer is flush with the spring guide. **MntP-R-0095**



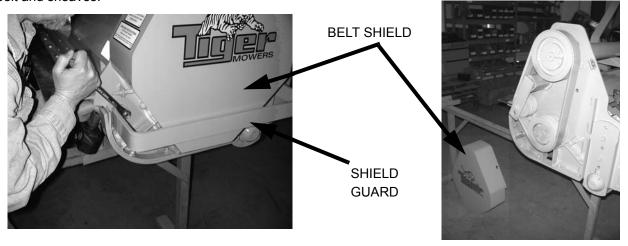


Side and Rear Flail

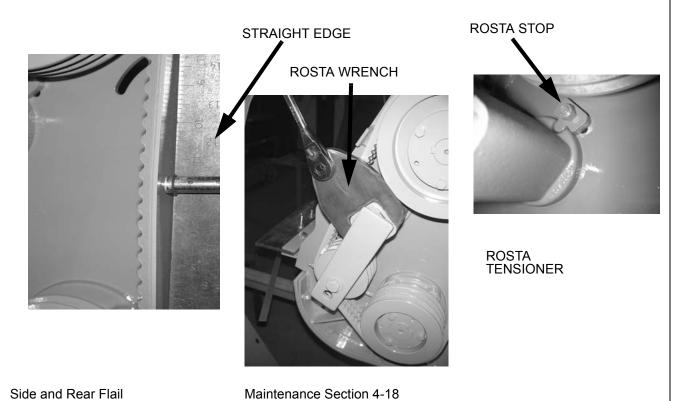
ROSTA TENSIONER

STANDARD DUTY REAR FLAILS

Remove the shield guard over the belt shield. Next, remove the belt shield that covers the tensioner, belt and sheaves.



Place a straight edge over both sheaves and measure the belt tension (See TENSIONER MEASUREMENT PROCEDURE). To adjust the Rosta Tensioner, first, loosen the Rosta Stop and Rosta Bolt that secures the Rosta to the flail. Next use the Wrench (P/N 06401023 available) to adjust the tension of the belt. After the tension has been set, secure the Rosta Stop and re-torque the Rosta Bolt to specs.

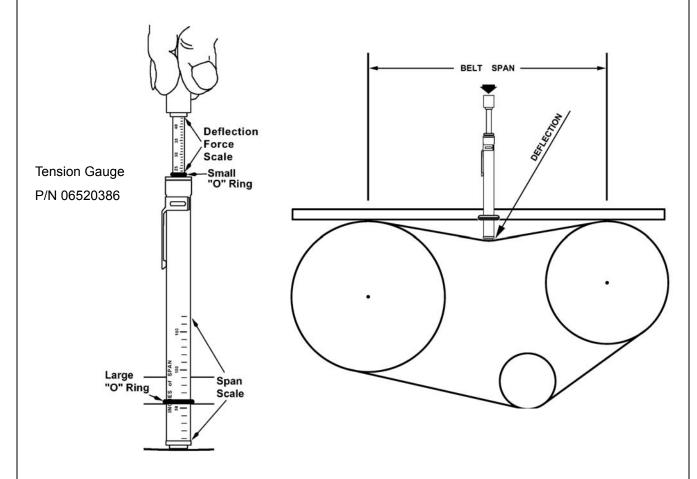


TENSIONER MEASUREMENT PROCEDURE

- Measure the Belt Span (SEE SKETCH).
- 2. Position the bottom of the Large "O" Ring on the Span Scale at the measured Belt Span.
- 3. Set the Small "O" Ring on the Deflection Force Scale to Zero.
- 4. Place the tension gauge squarely on the belt at the center of the belt span. Apply a force on the plunger perpendicular to the belt span until the bottom of the Large "O" Ring is even with the bottom of a straight edge laid across the sheaves.
- 5. Remove the tension gauge and read the force applied from the bottom of the Small "O" Ring on the Deflection Force Scale.
- 6. Compare the force denoted by the Small "O" Ring with the values shown. The force should be between the values given for either a New Belt or Used Belt.
- 7. Make sure to use the force values in pounds if the span is measured in inches. Use kilograms of force if the span is measured in centimeters.
- 8. NOTE: The ratio of the deflection to belt span is 1/64 in either units of measurements.

Deflection Force Values - Standard Duty

New Belt: 20 to 25 pounds Used Belt: 12 to 20 pounds

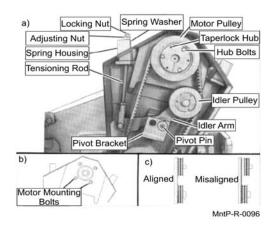


Side and Rear Flail

REVERSING MOWER ROTATION OF SIDE FLAIL MOWERS

To reverse the rotation of the side and hydraulically driven Heavy Duty rear flail, a different idler arm is needed only for side flail. Part No. TF4346 is used in standard rotation. Part No. TF4345 is used in reverse rotation.

Before attempting this procedure be sure all dirt is cleaned away from the motor and around all hose connections. This will prevent the oil from becoming contaminated. 1-Start by removing the belt shield from the flail mower. 2-Remove the locking and adjusting nut, spring washer and spring from the idler tensioning rod. 3-Disconnect the tensioning rod from the idler arm. 4-Remove the idler arm with the pulley attached.



5-Remove the idler pulley from the idler arm and reinstall in the short end of the new idler arm.

Reinstall the idler arm and pivot pin. The pivot pin is installed into the hole in the pivot bracket closest to the idler pulley. When assembling for **standard** cut rotation, the idler arm is installed with the idler pulley toward the front of the mower with the pivot pin in the front hole. When assembling for **reverse** rotation, with smooth cut knives, the idler arm is installed with the pulley toward the rear of the mower with the pivot pin in the rear hole.

Now disconnect the hoses and fittings from the motor and remove the taper-lock hub and pulley from the motor by removing the three hub bolts from the existing positions and inserting simultaneously into the threaded holes. Remove the four bolts holding the motor. Rotate the motor 180° so the hump is opposite the prior position. Reinstall the motor bolts and torque to 75 ft. lbs. Reconnect the hoses and fittings to the motor in the same configuration as before, i.e. the hose that was connected to the front port on the motor should now be connected to the port that is now facing the front.

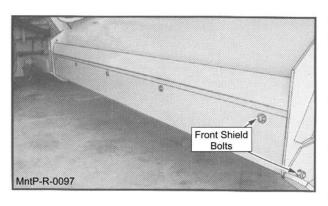
Reinstall the taper-lock hub and pulley on the motor by installing the hub bolts in the original holes and tightening until the hub just contacts the pulley. Then, position the pulley on the motor shaft approximately 3/16" beyond the idler pulley and tighten and torque the hub bolts to 18 ft. lbs. Be sure the pulleys are vertically aligned when tight (see diagram on previous page), loosen and readjust if needed.

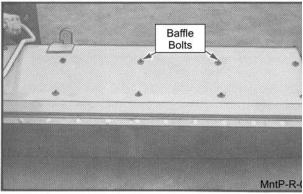
Reinstall the belts and idler tensioning rod. Tighten and lock the tensioning rod as shown previously in the Maintenance Section. Reinstall the belt shield.

With the motor rotation changed, now all of the knives on the cutter shaft must be changed as required. The cutter shaft rotates in the same direction as the tractor tires when going forward for standard cut knives. The shaft rotates opposite to standard rotation for smooth cut knives. Smooth cut knives should be installed so the cutting edge is forward.

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

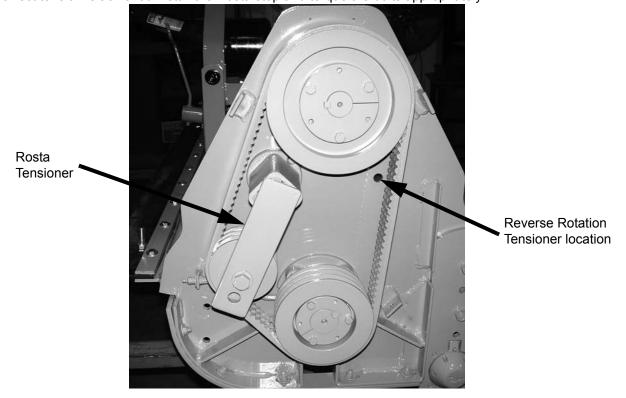
Side and Rear Flail





REVERSING MOWER ROTATION OF SD REAR FLAIL MOWERS

Remove the shield guard and belt shield. Next, remove the Rosta stop and loosen the Rosta Tensioner (**CAUTION**: the Rosta Tensioner is under belt pressure. Sudden release of this pressure may cause serious injury). Remove the Rosta Tensioner and relocate to the Reverse Rotation Tensioner location. Using the Rosta wrench, tension the belt, then tighten the Rosta bolt. Check the tension and adjust as needed. When the correct tension is achieved install the Rosta stop and torque the bolts appropriately.



Side and Rear Flail

REVERSING MOWER ROTATION REAR MECHANICAL DRIVEN FLAIL MOWERS

Remove the rear shaft guard and disconnect the chain coupling to the shaft. Disconnect the P.T.O. drive shaft from the right angle gear box. Remove the gear box from the flail frame and lay down flat so that gear oil does not leak not.

Switch the top breather vent plug with the drain plug on the bottom. Remove the input shaft guard. The input shaft must be pressed through or turned around so the rear extension is equal to what the original front dimension was. Turn the gear box 180° and install on the flail frame so the frame so the chain coupling sprockets are side by side and the breather vent plug is on the top of the case.

The sprocket must be aligned and spaced approximately 3/8" apart. When changing from standard cut to smooth cut rotation, a spacer plate may have to be installed between the gear box and the frame. When changing from smooth cut to standard cut rotation the spacer plate is to be omitted. Install the chain for the chain coupling. If there is any binding, or not free movement in the chain, the bearing next to the coupler may be shimmed as required to eliminate the chain binding.

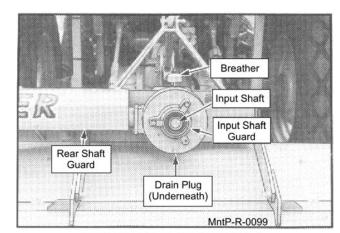
Change all the knives on the cutter shaft as required. The cutter shaft rotates in the same direction as the tractor tires when going forward for standard knives. The cutter shaft rotates opposite the tractor tires for smooth cut knives.

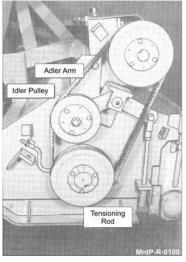
Remove the belt shield. Then remove the adjusting nuts, washer and spring from the idler tensioning

nuts, washer and spring from the idler tensioning rod. Remove the clevis rod and small bushing from the idler arm. Remove the idler arm with the pulley attached. Remove the idler pulley from the idler arm and install the pulley on the other end of the idler arm. Reinstall the idler arm in the pivot bracket. For standard cut rotation the pulley is toward the front, for reverse rotation with smooth knives, the idler pulley is toward the rear. Install the small bushing in the idler arm and connect the idler tensioning rod.

Tightening the adjusting nuts for the idler arm tensioner as shown previously in the Maintenance Section. Install the belt shield, the shaft guard and PTO shaft guards.

When operating the mower in reverse rotation with smooth cut knives, remove the baffle and install the front shield. When operating the mower in standard rotation with standard cut knives, remove the front shield and install the baffle.





Side and Rear Flail

Flail Blades Inspection

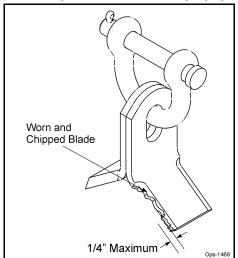


Inspect the Blades daily for abnormal wear. REPLACE ALL BLADES on the carrier IMMEDIATELY if any blades have:

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

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

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



Always replace blades in sets

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

Important

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



Never attempt to sharpen blades. ops-u-0044

Side and Rear Flail

Blade Pins and D-Ring Inspection

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

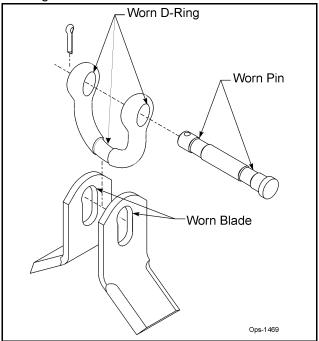
A DANGER

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

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

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

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



Important

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

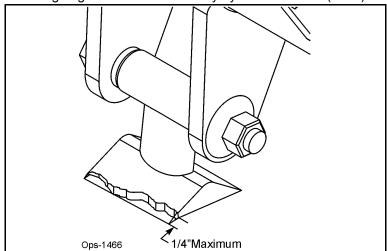
Side and Rear Flail

Flail Axe Blades Inspection

A DANGER

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

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



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

Always replace blades in sets

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

Important

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



Never attempt to sharpen blades. *ops-u-0042*

Side and Rear Flail

Flail Axe Blade Bolt Inspection

Inspect Blade Bolts daily for wear or damage as follows:

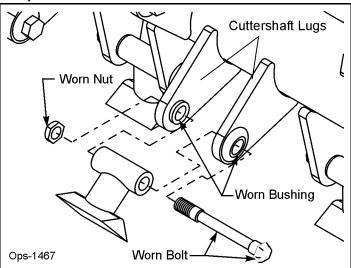
▲ DANGER

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

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

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

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



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 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 Parts Section of the manual.
- 4. Install the locking hex nut so that the flat face of the nut is towards the knife.
- 5. Apply Loctite 271 or equivalent to threads.
- 6. Torque nut to 50 ft. lbs. Knife must swing freely.

Side and Rear Flail



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

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 Parts Section of manual.
- 3. Install locking hex nut so that the flat face of nut is towards the knife.
- 4. Apply loctite "271" or equivalent to threads.
- 5. Torque nut to 35 FT. LBS. Knife must swing freely.



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



Knives should not be welded on for any reason.

STANDARD OR HEAVY DUTY SIDE OR REAR 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 Parts Section of manual.
- 3. Install locking hex nut so that the flat face of nut is towards the knife.
- 4. Apply loctite "271" or equivalent to threads.
- 5. Torque nut to 35 FT. LBS. Knife must swing freely.



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



Knives should not be welded on for any reason.

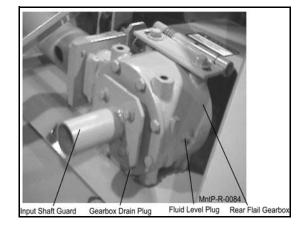
Side and Rear Flail

RECOMMENDED FILLING INSTRUCTIONS FOR REAR FLAIL GEARBOX

When filling or checking the fluid level, the unit should be parked on a level surface with rear flail down on surface, shut OFF, and cold, (at ambient temperature).

Remove the fluid level plug located on the side of the gear box. The gear box should be filled to the bottom of the fluid level hole. If necessary, use 75-90 wt. PAO Synthetic Extreme Pressure Gear Lube to raise level to bottom of the hole.

Do not overfill. excessive gear oil will run back out of the hole. Reinstall fluid level plug into gearbox. If gearbox has been overfilled, the excess may be expelled through the pressurized breather.



Side and Rear Flail

MAINTENANCE

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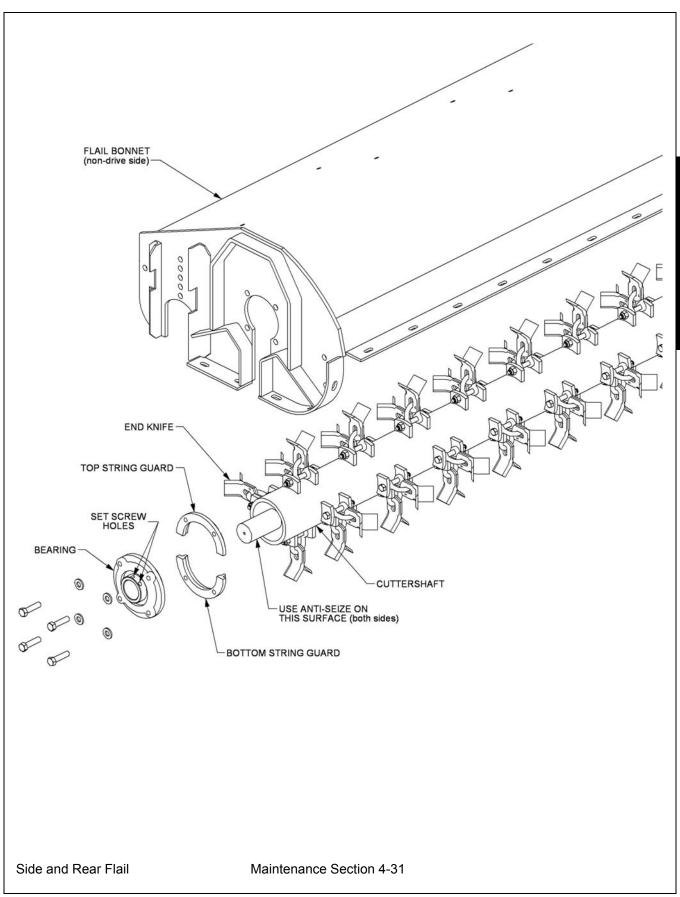
Side and Rear Flail

CUTTERSHAFT BEARING REPLACEMENT

- 1. Remove existing cuttershaft, bearings and string guards.
- 2. Make sure that the end knives on each end of the cuttershaft are oriented as shown.
- 3. Apply anti-seize on cuttershaft as shown on next page.
- 4. Install non-drive side bearing first.
- 5. Install the top of the string guard on the non-drive side first. Use Loctite-271 or equivalent and torque (95 ft-lb or 104ft-lb if you use an extension).
- 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 CAREFUL 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.

See illustration on next page

Side and Rear Flail



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DAILY MAINTENANCE SCHEDULE	
The following services should be performed daily or every 8 hours of service, following the detaile maintenance instructions in the operator's manual.	d
Pump Drive Shaft: Check for end play in driveshaft / coupler 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 hose immediately.	S
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 i this section.	n
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.	е
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.	
Side and Rear Flail Maintenance Section 4-32	

JD 51009 H(: - HK =B:: @5 =@ **PARTS SECTION**

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PARTS ORDERING GUIDE

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

- 1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.
- 3. The pur chase order must clearly list the **quantity of each part**, the complete and correct **part number**, and the basic **name of the part**.
 - 4. The manufacturer reserves the right to substitute parts where applicable.
- 5. Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a purchase order.
 - 6. The manufacturer reserves the right to change prices without prior notice.

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

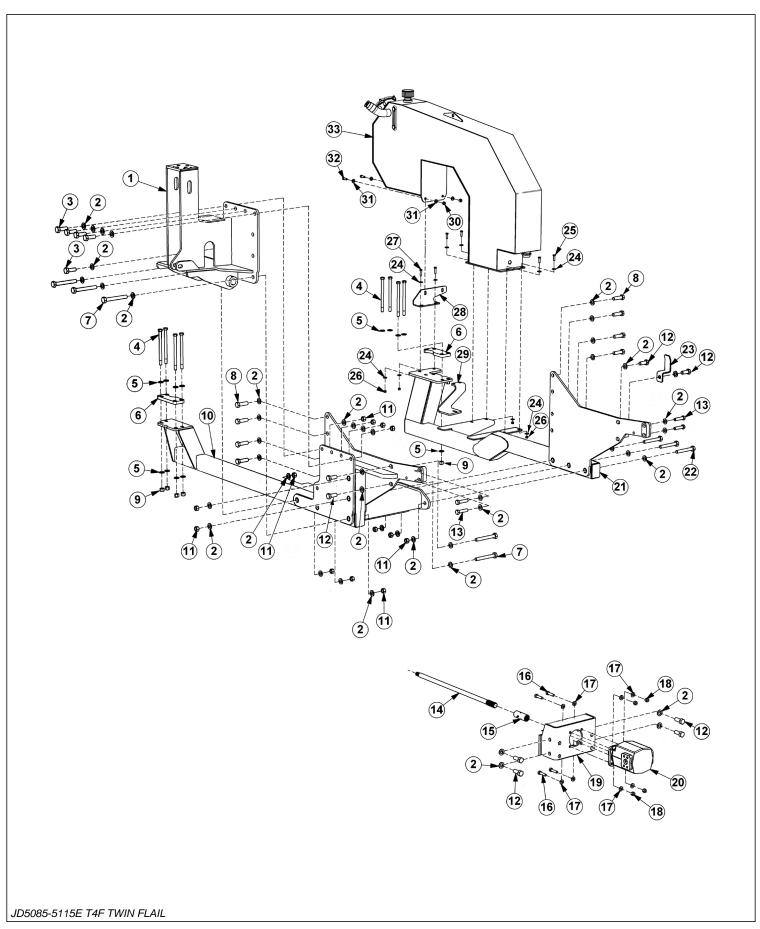


For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

TRACTOR MOUNT KIT

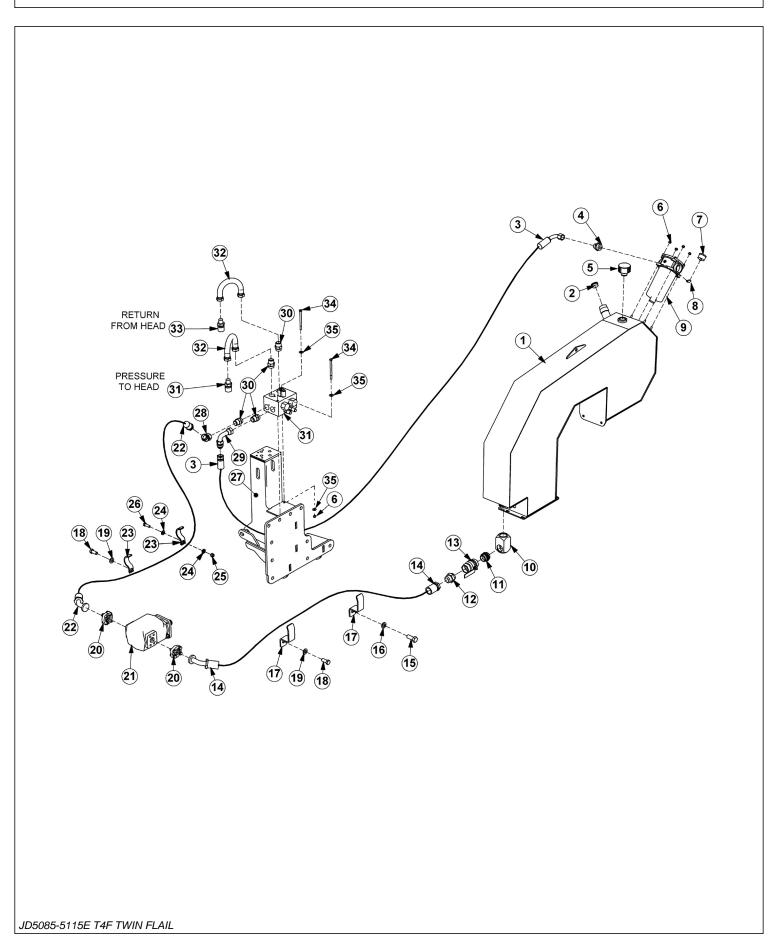


TRACTOR MOUNT KIT

Continued...

	ITEM	PART NO.	QTY.	DESCRIPTION
	1	06300361	1	MAIN FRAME
	2	33880	36	FLATWASHER,3/4",GR 8
	3	21833	5	CAPSCREW,3/4" X 2-1/4", NC
	4	21797	8	CAPSCREW,5/8" X 9",NC
	5	33764	24	FLATWASHER,5/8",GR 8
	6	06401246	2	TOP AXLE PLATE
	7	21843	5	CAPSCREW,3/4" X 6', NC
	8	25341	8	CAPSCREW,20MM X 70MM,2.5P
	9	21775	12	HEX NUT,5/8`, NC
	10	06300360	1	AXLE BRACE,RH
	11	21825	13	HEX NUT,3/4", NC
	12	31731	8	CAPSCREW,20MMX50MM,2.5P
	13	31732	4	CAPSCREW,16MMX70MM,2.0P
	14	06420158	1	DRIVESHAFT
	15	6T0375B	1	COUPLER
	16	21733	4	CAPSCREW,1/2" X 2", NC
	17	06533004	8	FLATWASHER,1/2",GR8
	18	21727	4	NYLOCK NUT,1/2", NC
	19	32642	1	PUMP MOUNT
	20	23152	1	PUMP
	21	06300363	1	AXLE BRACE,LH
	22	6T2309	3	CAPSCREW,3/4" X 5-1/2", NC
	23	32382	1	HOSE BRACKET
	24	22016	12	FLATWASHER,3/8",GR8
	25	21631	4	CAPSCREW,3/8" X 1-1/4", NC
	26	21627	6	NYLOCK NUT,3/8", NC
	27	21632	2	CAPSCREW,3/8" X 1-1/2", NC
	28	06412355	1	HYRAULIC TANK SUPPORT BRACKET
	29	06412356	1	FUEL TANK SUPPORT BRACKET *USE EXISTING JD FASTENERS*
	30	21677	2	NYLOCK NUT,7/16", NC
	31	22017	4	FLATWASHER,7/16"
	32	21680	2	CAPSCREW,7/16" X 1-1/4NC GR5
	33	06700213	1	TANK,RES,WHEEL WELL ASSY
1				

TRACTOR MOUNT KIT - HYDRAULICS

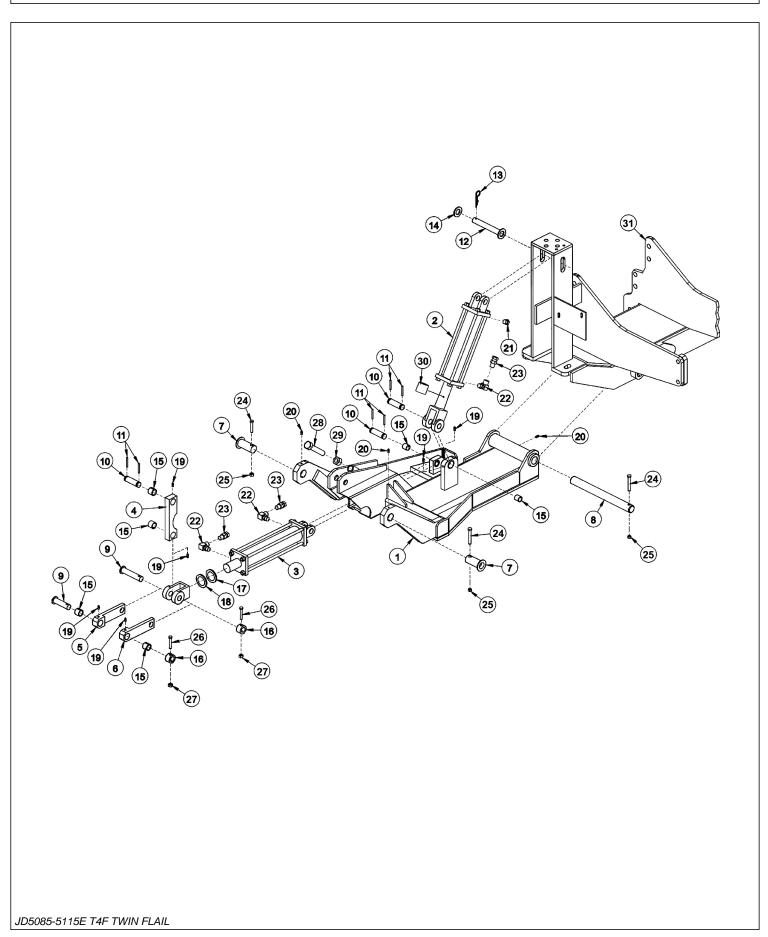


TRACTOR MOUNT KIT - HYDRAULICS

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1		-	TANK,RES,ASSY* REFER TO TRACTOR MOUNT KIT*
2	06505127	1	PLUG,SAE #20
3	06500346	1	HOSE,1" X 132" (RETURN)
4	34064	1	ADAPTER,1 1/4"MOR X 1MJ"
5	06505077	1	CAP,BREATHER,O-RING
6	21627	6	NYLOCK NUT,3/8", NC
7	6T0649	1	FILTER GAUGE
8	TF4888	1	STREET ELBOW,1/8" X 90°
9	06505044	1	FLITER ASSY,IN-TANK CPLT
10	06503084	1	ELBOW,1 1/2"FB X 1 1/2"FB
11	06503083	1	ADAPTER,1 1/2"ORB X 1 1/2"ORB
12	34710	1	ADAPTER,1 1/2"ORB X 1 1/2"MJ
13	34309	1	BALL VALVE,1 1/2" FOR
14	06500818	1	HOSE,1 1/2" X 102"
15	31731	1	CAPSCREW,20MMX50MM,(2.5),10.9
16	33880	1	FLATWASHER,3/4,GR 8,SAE
17	32382	2	BRACKET,HOSE
18	22421	2	CAPSCREW,16MMX40MM,2.0,10.9
19	33764	2	FLATWASHER,5/8,GR 8,SAE
20	TF4852	2	KIT,FLANGE,#20
21	23152	1	PUMP
22	06500744	1	HOSE,1" X 71" (PRESSURE)
23	TB3012	2	CLAMP,CROSSOVER
24	21727	1	NYLOCK NUT,1/2", NC
25	06533004	2	FLATWASHER,1/2",GR 8
26	21731	1	CAPSCREW,1/2" X 1 1/2", NC
27	06300361	1	MAINFRAME
28	24724	1	SWIVEL,1"MJ X 1"FJX 45°
29	06503200	1	ELBOW,1"MJ X 1"FJX,BT90°
30	33555	4	ADAPTER,1MBX1MJ
31	06500821	1	HOSE,1" X 82" (MOTOR PRESSURE)
32	06506012	2	PREFORMED,4" X 1"FJX X 1"FJX 180°
33	06500822	1	HOSE,1" X 90" (MOTOR RETURN)
34	21644	2	CAPSCREW,3/8" X 5", NC
35	22016	4	FLATWASHER,3/8",GR8

DRAFT BEAM ASSEMBLY

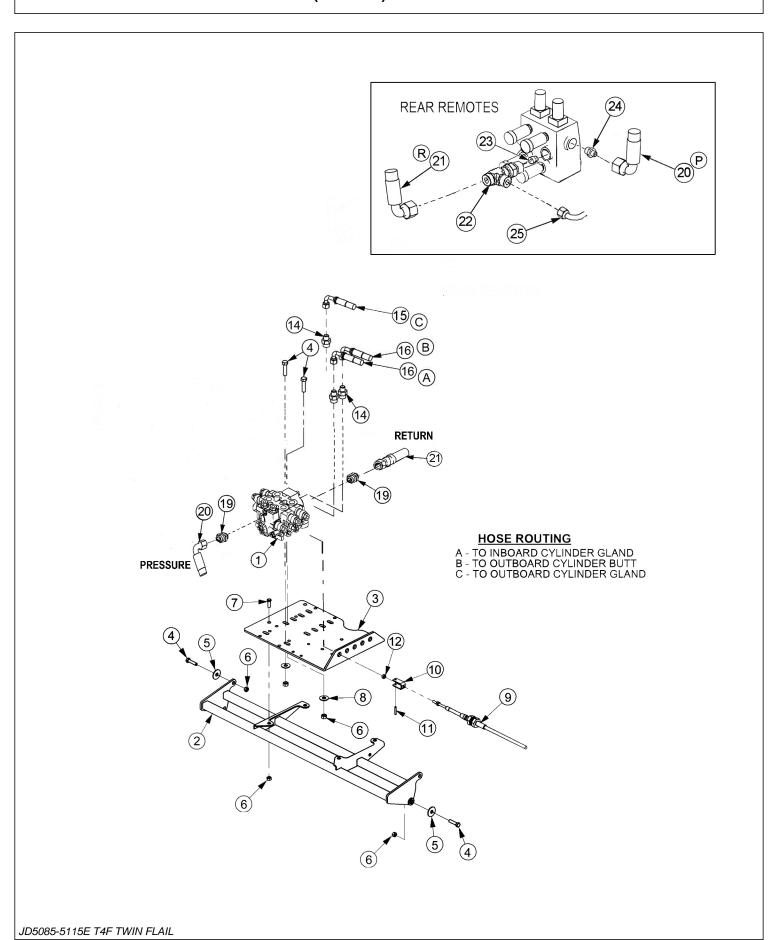


DRAFT BEAM ASSEMBLY

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	06350004	1	DRAFT BEAM
2	6T0151R	1	HYD. CYLINDER 3" X 10"
3	32215	1	HYD. CYLINDER 3" X 12" - STD DTY
4	TF4500A	1	PIVOT ARM
5	TF4507B	1	RIGHT LINKAGE ARM
6	TF4506B	1	LEFT LINKAGE ARM
7	30126B	2	PIN, HEAD PIVOT
8	6T3001	1	PIN, BEAM PIVOT
9	TF4519	2	PIN, LINKAGE
10	TB1033	3	PIN, CLEVIS
11	06537021	6	ROLLPIN
12	6T3005	1	PIN,1" W/ CAP
13	6T3004	1	R-CLIP HAIRPIN
14	22023	1	FLATWASHER 1"
15	TB3010	8	BUSHING 1"
16	22847A	2	BOSS, LINKAGE PIN
17	22076	1	SPACER, HYD. CYLINDER 1/4"
18	22077	1	SPACER, HYD. CYLINDER 5/16"
19	6T3207	6	GREASE ZERK 1/4"
20	6T3211	3	GREASE ZERK 1/8"
21	6T4258	1	BREATHER 1/2"
22	34244	3	ELBOW FITTING 1/2"
23	34396	3	SWIVEL RESTRICTOR
24	21688	3	CAPSCREW 7/16" X 3 1/4"
25	21677	3	NYLOCK NUT 7/16"
26	21635	2	CAPSCREW 3/8" X 2 1/4"
27	21627	2	NYLOCK NUT 3/8"
28	21831	1	CAPSCREW 3/4" X 1 3/4"
29	21825	1	HEX NUT 3/4"
30	06700095	1	CYLINDER SPACER W/SET SCREW
31		-	MAINFRAME *REFER TO TRACTOR MOUNT PAGE

2 SPOOL (MANUAL) LIFT VALVE MOUNT

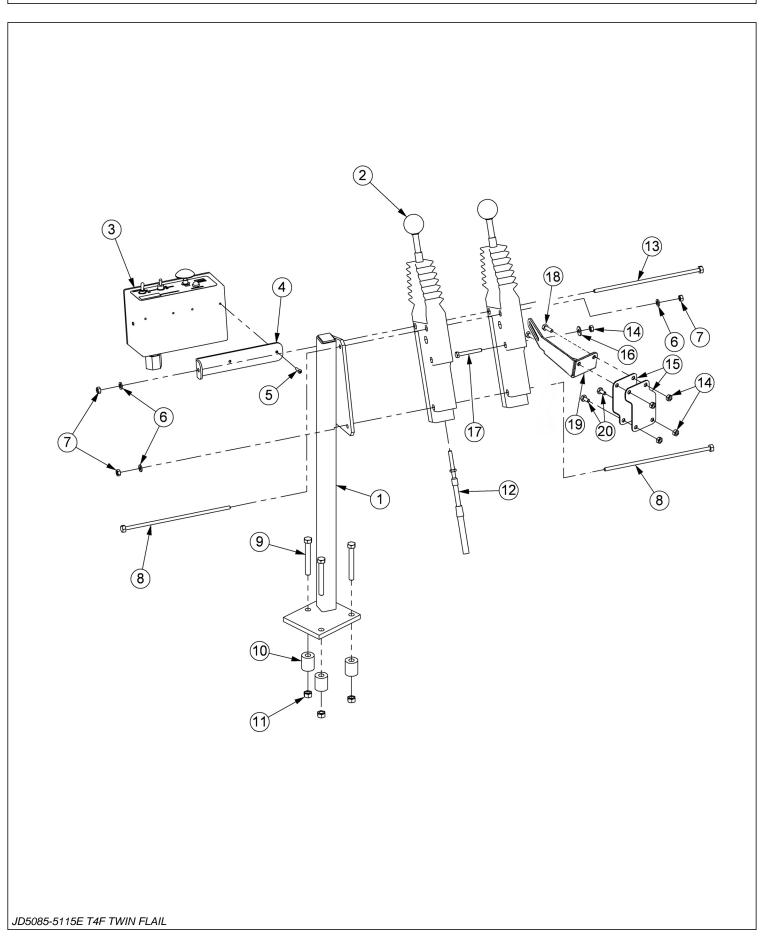


2 SPOOL (MANUAL) LIFT VALVE MOUNT

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	06502185	1	VALVE,2SP,HSC,OC
2	06340033	1	VALVE MNT
3	34622	1	PLATE, VALVE, REAR MNT
4	21632	9	CAPSCREW,3/8" X 1-1/2",NC
5	6T2615	4	WASHER,FENDER,3/8"
6	21627	13	NYLOCK NUT,3/8",NC
7	21630	4	CAPSCREW,3/8" X 1",NC
8	22016	4	FLATWASHER,3/8"
9	06505100	2	CBL,CNTRL,108"
10	6T4411	2	CLEVIS,CBL CTRL,3/16"
11	6T3017	2	ROLLPIN,3/16" X 1"
12	21500	4	HEX NUT,1/4",NF
14	33271	3	ADAPTER,1/2"MOR X 3/8"MJ
15	34631	1	HOSE,1/4" X 126"
16	33492	2	HOSE,1/4" X 138"
19	06503188	2	ADAPTER, 5/8" MB X 3/4" MJ
20	06500824	1	HOSE,3/4" X 28"
21	06500825	3	HOSE, 3/4" X 40"
22	06503193	1	TEE,RUN, 27MM X 3/4" MF X 3/4" MF
23	06503194	1	PLUG
24	06502167	1	PB ADAPTER
25		-	TRACTOR PREFORMED TUBE

2 SPOOL CABLE CONTROL STAND

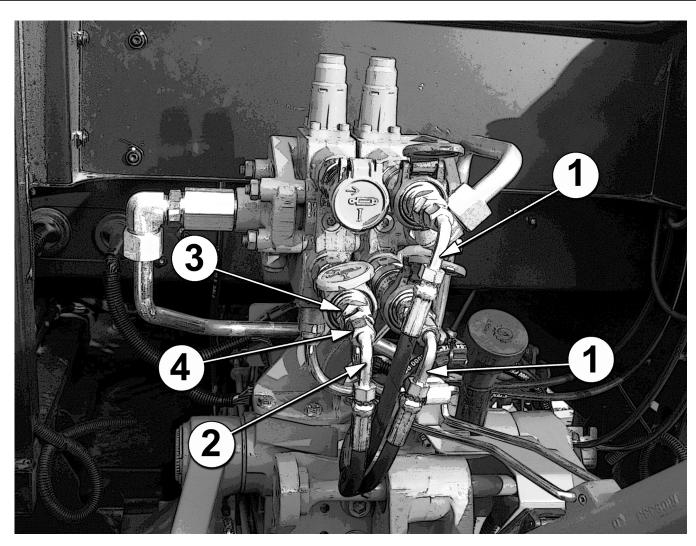


2 SPOOL CABLE CONTROL STAND

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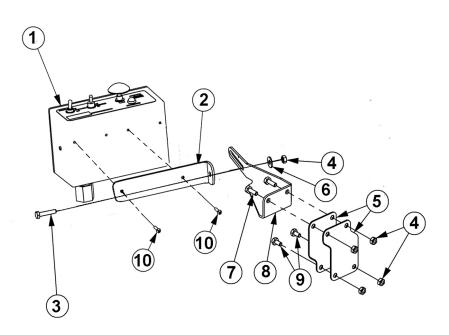
ITEM	PART NO.	QTY.	DESCRIPTION
1	31923	1	BRKT,CTRL,CBL
2	6T1251	2	CBL CTRL BOX,180 DEG
3	06510102	1	SWITCHBOX,SIDE
4	34496	1	BRKT,SWITCHBOX
5	6T3951	2	SCREW,MACHINE,8-32 X 1/2"
6	21986	3	LOCKWASHER,1/4"
7	21525	3	HEX NUT,1/4",NC
8	21542	2	CAPSCREW,1/4" X 4",NC
9	21635	3	CAPSCREW,3/8" X 2-1/4",NC
10	27082B	3	SPACER
11	21627	3	NYLOCK NUT,3/8",NC
12	06505100	2	CBL,CNTRL,108"
13	21544	1	CAPSCREW,1/4" X 5",NC
14	21527	5	NYLOCK NUT,1/4",NC
15	06411086	2	BRKT,MNT
16	22014	1	FLATWASHER,1/4"
17	21534	1	CAPSCREW,1/4" X 2",NC
18	21529	2	CAPSCREW,1/4" X 3/4",NC
19	06411378	1	BRKT, SWBX, RH
20	21528	2	CAPSCREW,1/4" X 1/2",NC

ZERO SPOOL TRACTOR PORT MOUNT



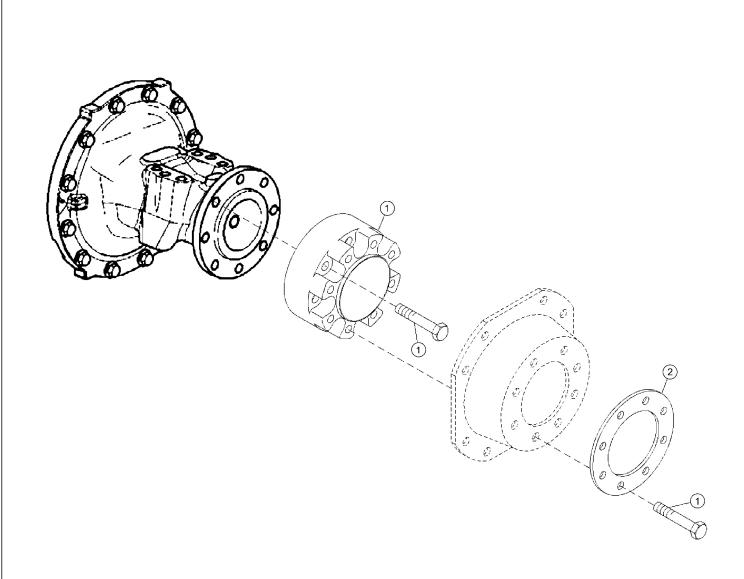
ITEM	PART NO.	QTY.	DESCRIPTION
1	34631	2	HOSE, 1/4" X 126"
2	34632	1	HOSE, 1/4" X 115"
3	32900	3	QCK CPLR, M #8 X #8FB
4	33271	3	ADAPTER, 1/2" MOR X 3/8" MJ

ZERO SPOOL SWITCHBOX



ITEM	PART NO.	QTY.	DESCRIPTION
1	06510102	1	SWITCHBOX
2	34496	1	BRKT, SWITCHBOX
3	21528	1	CAPSCREW, 1/4" X 1/2" NC
4	21527	5	NYLOCK NUT, 1/4" NC
5	06411086	2	BRKT, MNT
6	22014	1	FLATWASHER, 1/4"
7	21529	2	CAPSCREW, 1/4" X 3/4" NC
8	06411087	1	BRKT, STABILIZER
9	21528	2	CAPSCREW, 1/4" X 1/2" NC
10	32359	2	SCREW, MACHINE, 8-32 X 3/4"

WHEEL SPACER



ITEM	PART NO.	QTY.	DESCRIPTION
1	06770025	1	KIT,SPCR,WHL,JD
2	06400919	1	RING,SPACER,WHEEL,JD

G=89: @5=@G8 **COMMON PARTS**

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WETCUT CABLES	64

COMMON SIDE FLAIL - SD

PARTS ORDERING GUIDE

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

- 1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.
- 3. The pur chase order must clearly list the **quantity of each part**, the complete and correct **part number**, and the basic **name of the part**.
 - 4. The manufacturer reserves the right to substitute parts where applicable.
- 5. Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a purchase order.
 - 6. The manufacturer reserves the right to change prices without prior notice.

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



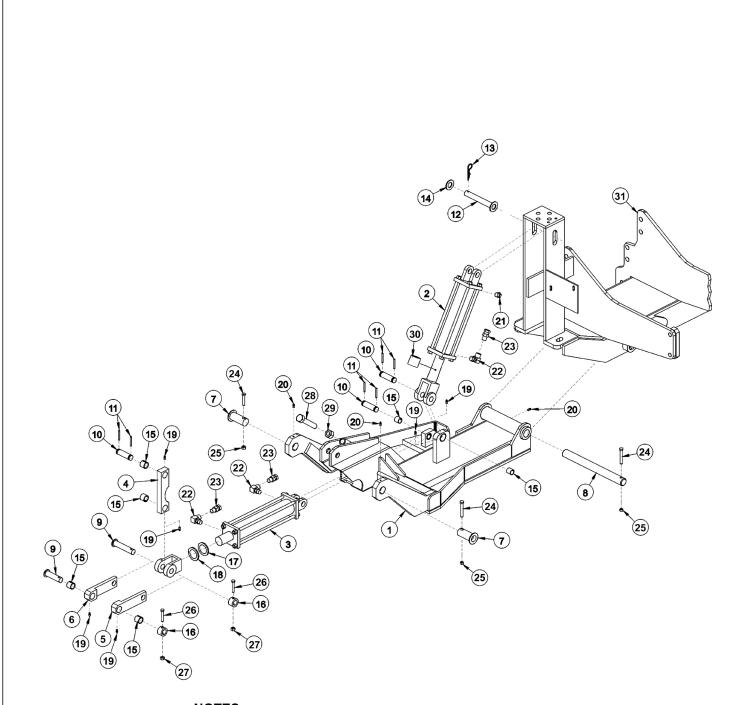
For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

COMMON SIDE FLAIL - SD

COMBO DRAFT BEAM



NOTES:

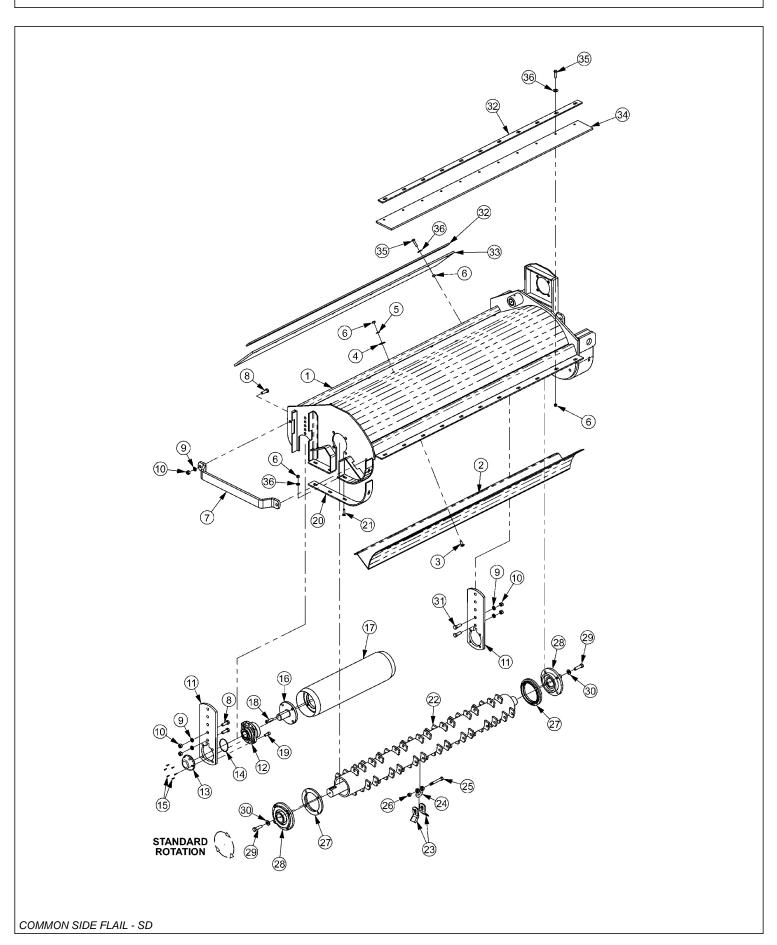
- 1. ITEM 30 IS USED ON THE GLAND END OF ITEM 2 (AS NEEDED)
- 2. ORIENTATION OF ITEMS 4,5 & 6 ARE CRITICAL

COMBO DRAFT BEAM

Continued...

	D.4.D.T.11.5	0.77/	DECODIDETION
IIEM	PART NO.	QTY.	DESCRIPTION
1	32143	1	COMBO DRAFT BEAM -STD DTY FLAIL
2	6T0151R	1	HYD. CYLINDER 3" X 10"
3	32215	1	HYD. CYLINDER 3" X 12" - STD DTY
4	TF4500A	1	PIVOT ARM
5	TF4507B	1	RIGHT LINKAGE ARM
6	TF4506B	1	LEFT LINKAGE ARM
7	30126B	2	PIN, HEAD PIVOT
8	6T3001	1	PIN, BEAM PIVOT
9	TF4519	2	PIN, LINKAGE
10	TB1033	3	PIN, CLEVIS
11	06537021	6	ROLLPIN
12	6T3005	1	PIN,1" W/ CAP
13	6T3004	1	R-CLIP HAIRPIN
14	22023	1	FLATWASHER 1"
15	TB3010	8	BUSHING 1"
16	22847A	2	BOSS, LINKAGE PIN
17	22076	1	SPACER, HYD. CYLINDER 1/4" (AS NEEDED)
18	22077	1	SPACER, HYD. CYLINDER 5/16" (AS NEEDED)
19	6T3207	6	GREASE ZERK 1/4"
20	6T3211	3	GREASE ZERK 1/8"
21	6T4258	1	BREATHER 1/2"
22	34244	3	ELBOW FITTING 1/2"
23	34396	3	SWIVEL RESTRICTOR
24	21688	3	CAPSCREW 7/16" X 3 1/4"
25	21677	3	NYLOCK NUT 7/16"
26	21635	2	CAPSCREW 3/8" X 2 1/4"
27	21627	2	NYLOCK NUT 3/8"
28	21831	1	CAPSCREW 3/4" X 1 3/4"
29	21825	1	HEX NUT 3/4"
30	06700095	1	CYLINDER SPACER W/SET SCREW
31		-	MAIN FRAME *REFER TO TRACTOR MOUNT PAGE

63IN SIDE FLAIL - STANDARD ROTATION



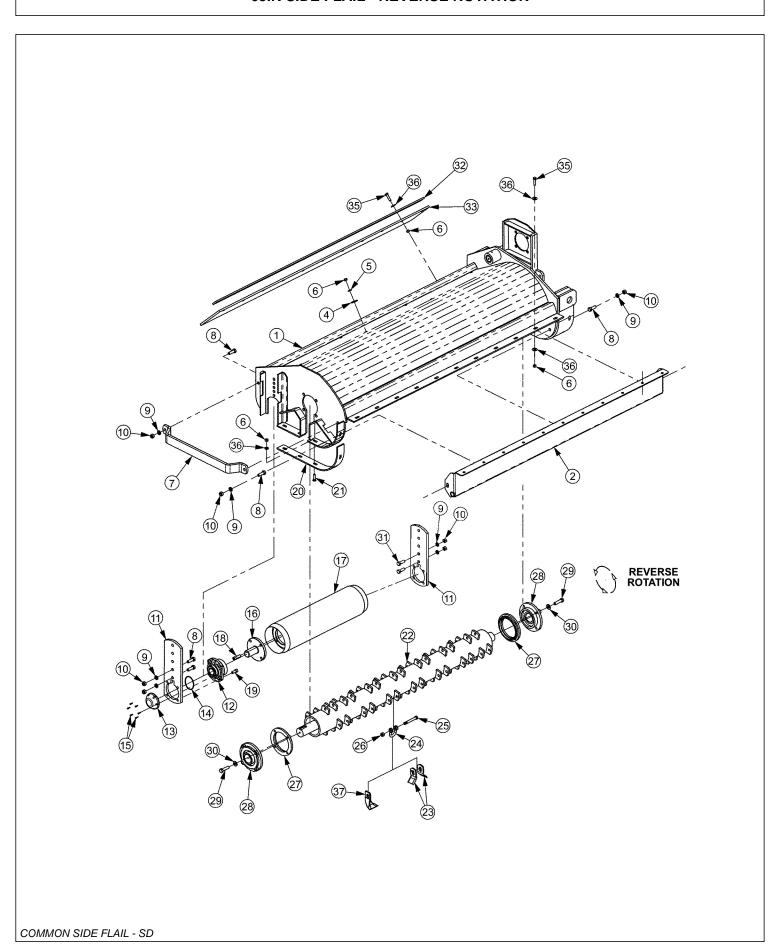
63IN SIDE FLAIL - STANDARD ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	28647E	1	BONNET,63",STD,COMBO
2	28665A	1	BAFFLE,63",STD ROT
3	6T2283	8	CARRIAGE BOLT,3/8" X 1",NC
4	6T2615	8	WASHER,FENDER 3/8"
5	21988	8	LOCKWASHER,3/8"
6	21625	40	HEX NUT,3/8",NC
7	27975A	1	GUARD,CUTTERSHAFT
8	21731	4	CAPSCREW,1/2" X 1-1/2",NC
9	21990	6	LOCKWASHER,1/2"
10	21725	6	HEX NUT,1/2",NC
11	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
12	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLR
13	06520027	2	CAP,BEARING,GRNDRLR
14	06520029	2	O-RING,2-3/4" X 3/32",AS568A-148
15	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
16	TF1045B	2	STUB SHAFT, GROUND ROLLER
17	28650A	1	GROUND ROLLER,63"
18	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
19	6T2331	8	CAPSCREW,SKT HD,7/16" X 1",NC
20	28086A	2	SKID SHOE,STD DUTY REAR FLAIL
21	30013	10	PLOW BOLT,3/8" X 1-1/4",NC,GR5
	28743	-	CUTTERSHAFT ASSY,STANDARD
22	28642C	1	CUTTERSHAFT,63"
23	33713	64	KNIFE,FLAIL,SHORT,FORGES GORCE
24	TF1020	32	KNIFE MTG CLEVIS,FLAIL
25	34011	32	CAPSCREW,7/16" X 3-7/16",NC,GR8
26	21677	32	NYLOCK NUT,7/16",NC
27	33863	2	STRING GUARD,STD
28	28683	2	BEARING,FLANGE,1-15/16",STD,TSF
29	06530217	8	CAPSCREW,1/2" X 2",NC,L9
30	06533006	8	FLATWASHER,1/2",SAE,L9
31	21732	2	CAPSCREW,1/2" X 1-3/4",NC
32	28700	2	BAR,FLAP,TSF/TBF,63"
33	28701	1	FLAP,DEFLECTOR,TSF,63"
34	06520241	1	FLAP,63",FRONT
35	21632	22	CAPSCREW,3/8" X 1-1/2",NC
36	22016	32	FLATWASHER,3/8"

COMMON SIDE FLAIL - SD

63IN SIDE FLAIL - REVERSE ROTATION



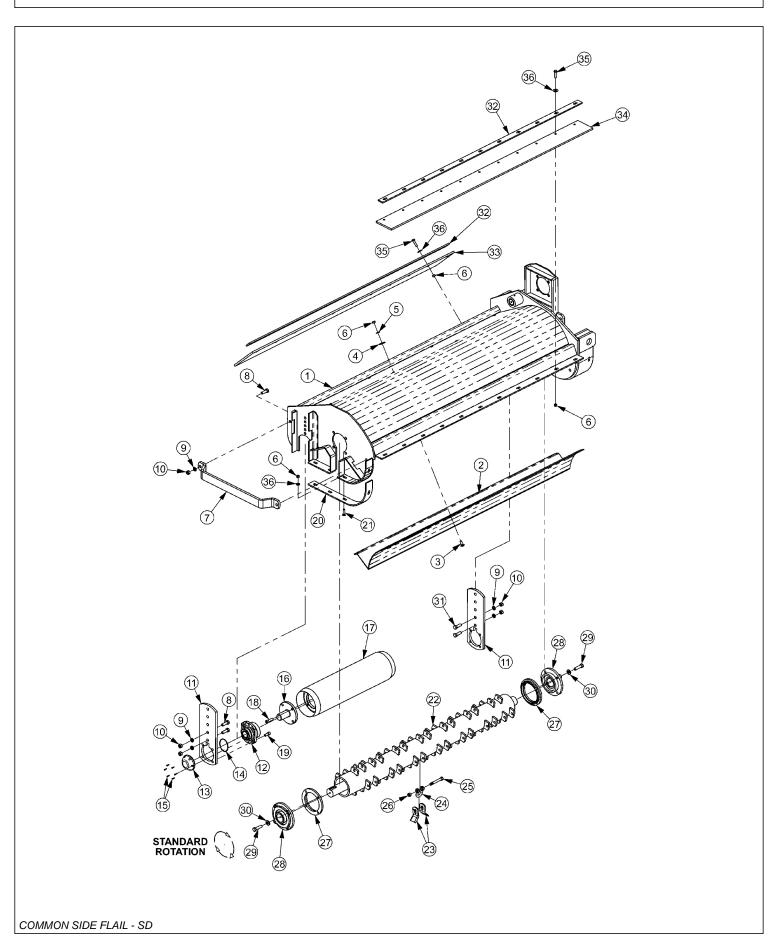
63IN SIDE FLAIL - REVERSE ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	28647E	1	BONNET,63",STD,COMBO
2	28969A	1	TRASH GUARD,63",REV ROT
3	6T2283	8	CARRIAGE BOLT,3/8" X 1",NC
4	6T2615	8	WASHER,FENDER,3/8"
5	21988	8	LOCKWASHER,3/8"
6	21625	40	HEX NUT,3/8",NC
7	27975A	1	GUARD,CUTTERSHAFT
8	21731	6	CAPSCREW,1/2" X 1-1/2",NC
9	21990	8	LOCKWASHER,1/2"
10	21725	8	HEX NUT,1/2",NC
11	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
12	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLR
13	06520027	2	CAP,BEARING,GRNDRLR
14	06520029	2	O-RING,2-3/4" X 3/32",AS568A-148
15	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
16	TF1045B	2	STUB SHAFT, GROUND ROLLER
17	28650A	1	GROUND ROLLER,63"
18	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
19	6T2331	8	CAPSCREW,SKT HD,7/16" X 1",NC
20	28086A	2	SKID SHOE,STD DUTY REAR FLAIL
21	30013	10	PLOW BOLT,3/8" X 1-1/4",NC,GR5
	28743	-	CUTTERSHAFT ASSY,STANDARD CUT
	28744	-	CUTTERSHAFT ASSY,SMOOTH CUT
22	28642C	1	CUTTERSHAFT,63"
23	33713	64	FLAIL KNIVES (STANDARD CUT)
24	TF1020	32	KNIFE MTG CLEVIS,FLAIL
25	34011	32	CAPSCREW,7/16" X 3-7/16",NC,GR8
26	21677	32	NYLOCK NUT,7/16",NC
27	33863	2	STRING GUARD,STD
28	28683	2	BEARING,FLANGE,1-15/16",STD,TSF
29	06530217	8	CAPSCREW,1/2" X 2",NC,L9
30	06533006	8	FLATWASHER,1/2",SAE,L9
31	21732	2	CAPSCREW,1/2" X 1-3/4",NC
32	28700	2	BAR,FLAP,TSF/TBF,63"
33	28701	1	FLAP,DEFLECTOR,TSF,63"
35	21632	22	CAPSCREW,3/8" X 1-1/2",NC
36	22016	43	FLATWASHER,3/8"
37	28184A	32	FLAIL KNIVES (SMOOTH CUT)

COMMON SIDE FLAIL - SD

75IN SIDE FLAIL - STANDARD ROTATION



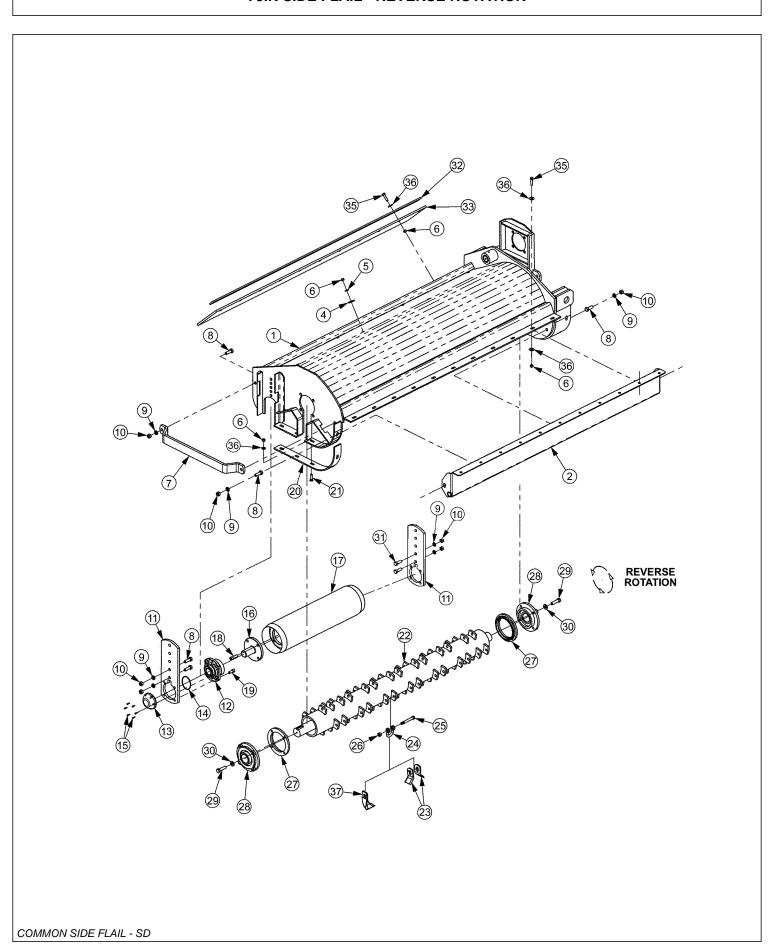
75IN SIDE FLAIL - STANDARD ROTATION

Continued...

	ITEM	PART NO.	OTY	DESCRIPTION
	1	28736D	1	BONNET,75",STD,T3F,RT
	2	28737	1	BAFFLE,75",STD ROT-STD
	3	6T2283	10	CARRIAGE BOLT,3/8" X 1",NC
	4	6T2615	10	WASHER, FENDER, 3/8"
	5	21988	10	LOCKWASHER,3/8"
	6	21625	46	HEX NUT,3/8",NC
	7	27975A	1	GUARD,CUTTERSHAFT
	8	21731	4	CAPSCREW,1/2" X 1-1/2",NC
	9	21990	6	LOCKWASHER,1/2"
	10	21725	6	HEX NUT,1/2",NC
	11	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
	12	06520028	2	BEARING,FLANGE,1-3/8,GRNDRLR
	13	06520027	2	CAP,BEARING,GRNDRLR
	14	06520029	2	O-RING,2-3/4 X 3/32",AS568A-148
	15	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
	16	TF1045B	2	STUB SHAFT,GROUND ROLLER
	17	28738	1	GROUND ROLLER,75"
	18	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
	19	6T2331	8	CAPSCREW,SKT HD,7/16" X 1",NC
	20	28086A	2	SKID SHOE,STD DUTY REAR FLAIL
	21	30013	10	PLOW BOLT,3/8" X 1-1/4",NC,GR5
		28747	-	CUTTERSHAFT ASSY,STANDARD
	22	28643B	1	CUTTERSHAFT,75"
	23	33713	80	KNIFE,FLAIL,SHORT,FORGES GORCE
	24	TF1020	40	KNIFE MTG CLEVIS,FLAIL
	25	34011	40	CAPSCREW,7/16" X 3-7/16",NC,GR8
	26	21677	40	NYLOCK NUT,7/16",NC
		06200639	-	STRING GUARD KIT,SD (ITEMS 27,29,30)
	27	33863	2	STRING GUARD,STD
	28	28683	2	BEARING,FLANGE,1-15/16",STD,TSF
	29	06530217	8	CAPSCREW,1/2" X 2",NC,L9
	30	06533006	8	FLATWASHER,1/2",SAE,L9
	31	21732	2	CAPSCREW,1/2" X 1-3/4",NC
	32	TF1029	2	BAR,FLAP,TSF/TBF,75"
	33	TF1016	1	FLAP,DEFLECTOR,TSF,75"
	34	06520242	1	FLAP,75",FRONT
	35	21632	26	CAPSCREW,3/8" X 1-1/2",NC
	36	22016	36	FLATWASHER,3/8"
ı				

COMMON SIDE FLAIL - SD

75IN SIDE FLAIL - REVERSE ROTATION

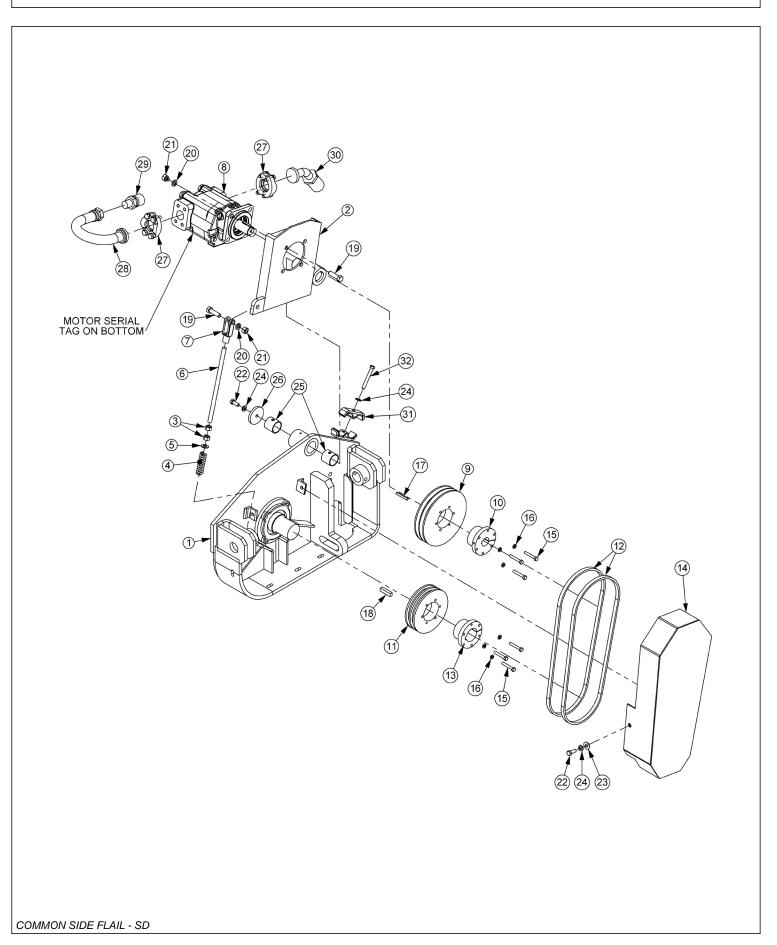


75IN SIDE FLAIL - REVERSE ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	28736D	1	BONNET,75,STD,T3F,RT
2	28968A	1	TRASH GUARD,75"
3	6T2283	10	CARRIAGE BOLT,3/8" X 1",NC
4	6T2615	10	WASHER,FENDER,3/8"
5	21988	10	LOCKWASHER,3/8"
6	21625	36	HEX NUT,3/8",NC
7	27975A	1	GUARD,CUTTERSHAFT
8	21731	6	CAPSCREW,1/2" X 1-1/2",NC
9	21990	8	LOCKWASHER,1/2"
10	21725	8	HEX NUT,1/2",NC
11	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
12	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLR
13	06520027	2	CAP,BEARING,GRNDRLR
14	06520029	2	O-RING,2-3/4" X 3/32",AS568A-148
15	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
16	TF1045B	2	STUB SHAFT,GROUND ROLLER
17	28738	1	GROUND ROLLER,75"
18	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
19	6T2331	8	CAPSCREW,SKT HD,7/16" X 1",NC
20	28086A	2	SKID SHOE,STD DUTY REAR FLAIL
21	30013	9	PLOW BOLT,3/8" X 1-1/4",NC,GR5
	28747	-	CUTTERSHAFT ASSY,STANDARD (22, 23, 24, 25 & 26)
	28748	-	CUTTERSHAFT ASSY,SMOOTH (22, 23, 24, 25 & 37)
22	28643B	1	CUTTERSHAFT,75"
23	33713	80	FLAIL KNIVES (STANDARD CUT)
24	TF1020	40	KNIFE MTG CLEVIS,FLAIL
25	34011	40	CAPSCREW,7/16" X 3-7/16",NC,GR8
26	21677	40	NYLOCK NUT,7/16",NC
	06200639	-	STRING GUARD KIT, SD (ITEMS 27,29,30)
27	33863	2	STRING GUARD,STD
28	28683	2	BEARING,FLANGE,1-15/16",STD,TSF
29	06530217	8	CAPSCREW,1/2" X 2",NC,L9
30	06533006	8	FLATWASHER,1/2",SAE,L9
31	21732	2	CAPSCREW,1/2" X 1-3/4",NC
32	TF1029	1	BAR,FLAP,TSF/TBF,75"
33	TF1016	1	FLAP,DEFLECTOR,TSF,75"
35	21632	22	CAPSCREW,3/8" X 1-1/2",NC
36	22016	49	FLATWASHER,3/8"
37	28184A	40	FLAIL KNIVES (SMOOTH CUT)

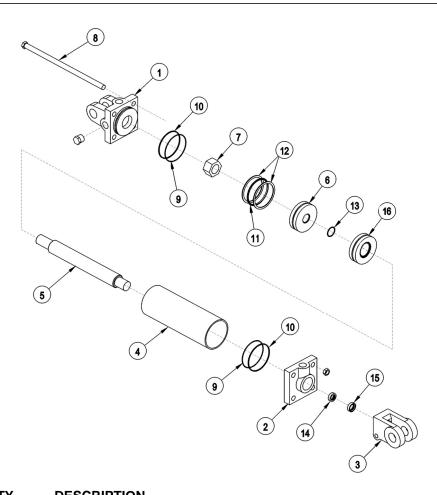
SIDE FLAIL DRIVE ASSEMBLY



SIDE FLAIL DRIVE ASSEMBLY

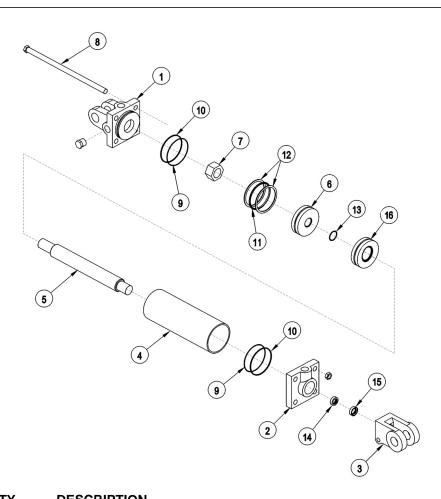
ITEM	PART NO.	QTY.	DESCRIPTION
1		-	BONNET *REFER TO HEAD PARTS
2	28679B	1	MOTOR CHANNEL
3	21700	2	HEX NUT, 1/2", NF
4	TF3620A	1	SPRING, TENSIONER
5	27938	1	BUSHING,MACH,10DX1/2IDX14GA.
6	40496	1	ROD,THREADED,1/2NFX8
7	PT3611A	1	CLEVIS,6"
8	06504013	1	MOTOR, M350-1 3/4 GEAR
9	TF3044	1	SHEAVE,8.0
10	TF3013	1	BUSHING,QD,SK 1-1/4,1/4 KEY
11	TF3040	1	SHEAVE,6.3
12	28702	2	V-BELT,(500)
13	28723	1	BUSHING,QD,SK 1-15/16
14	28703B	1	GUARD,BELT,TSF,STD
15	21584	6	CAPSCREW, 5/16 X 2,NC
16	21987	6	LOCKWASHER, 5/16"
17	06504028	1	KEY (KEY FROM MOTOR)
18	26142A	1	KEY,1/2 X 1/2 X 2
19	21732	5	CAPSCREW, 1/2 X 1 3/4,NC
20	21990	5	LOCKWASHER, 1/2"
21	21725	5	HEX NUT,1/2 NC
22	21630	3	CAPSCREW, 3/8 X 1,NC
23	22016	2	FLATWASHER,3/8"
24	21988	3	LOCKWASHER, 3/8"
25	27580	2	BEARING,DX,1-1/2",GRM
26	28682	1	RETAINING,WASHER 2-1/2 X 5/16
27	TF4852	2	KIT,FLANGE,#20
28	34227	1	PREFORMED TUBE
29		-	HOSE (RETURN FOR STANDARD ROTATION)
30		-	HOSE (PRESSURE FOR STANDARD ROTATION)
31	TB3031	1	CLAMP,HOSE
32	21638	1	CAPSCREW,3/8 X 3,NC

3IN X 10IN HYDRAULIC CYLINDER BREAKDOWN



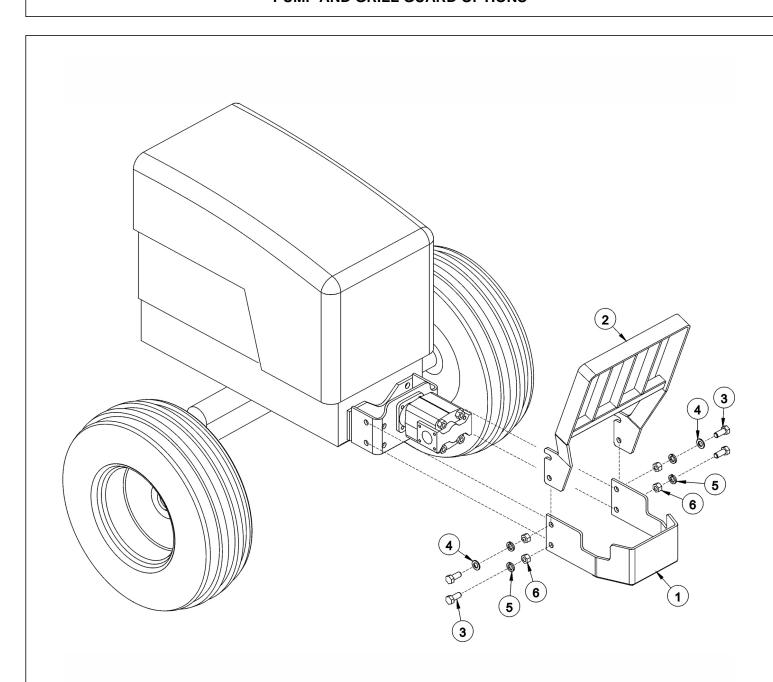
ITEM	PART NO.	QTY.	DESCRIPTION
	6T0151R	-	HYD. CYLINDER 3" X 10"
1	6T0167	1	CYLINDER BUTT
2	6T0170	1	CYLINDER GLAND
3	6T0178	1	CLEVIS END
4	6T0164	1	CYLINDER TUBE
5	6T0161	1	PISTON ROD
6	6T0173	1	PISTON
7	6T0179	1	LOCKNUT
8	6T0176	4	TIE ROD ASY
	6T0187	-	SEAL KIT
9		2	O - RING
10		2	BACK - UP WASHER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

3IN X 12IN HYDRAULIC CYLINDER BREAKDOWN



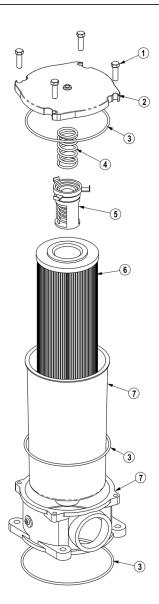
ITEM	PART NO.	QTY.	DESCRIPTION
	32215	-	HYD. CYLINDER 3" X 12"
1	6T0167	1	CYLINDER BUTT
2	6T0170	1	CYLINDER GLAND
3	6T0178	1	CLEVIS END
4	6T0204	1	CYLINDER TUBE
5	6T0203	1	PISTON ROD
6	6T0173	1	PISTON
7	6T0179	1	LOCKNUT
8	6T0205	4	TIE ROD ASY
	6T0187	-	SEAL KIT
9		2	O - RING
10		2	BACK - UP WASHER
11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

PUMP AND GRILL GUARD OPTIONS

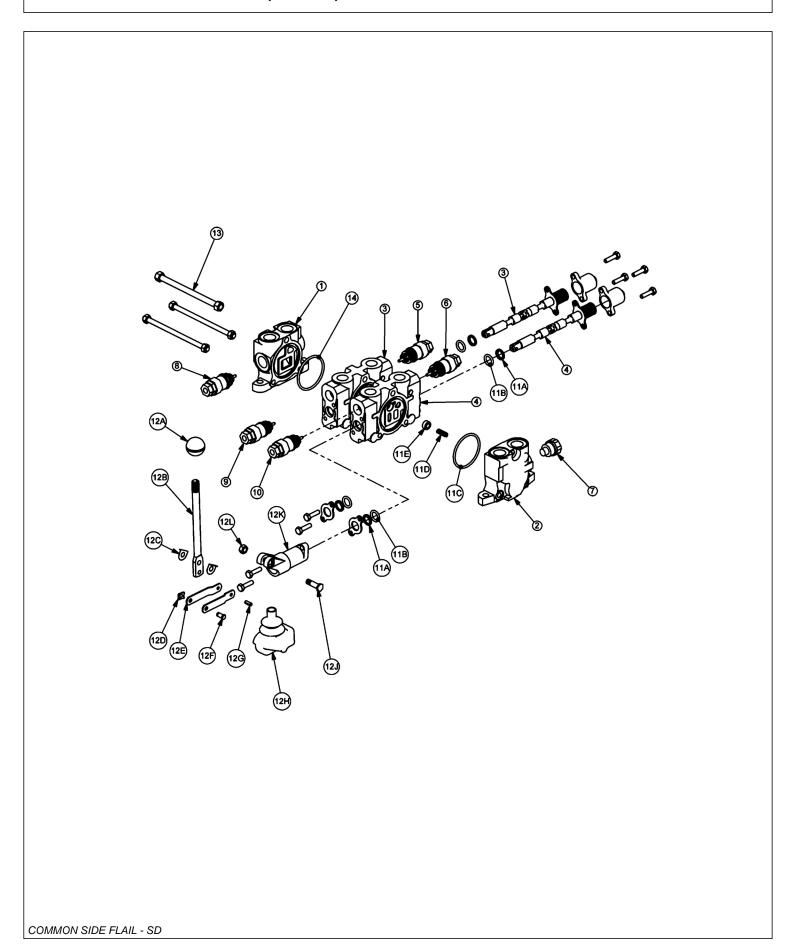


ITEM	PART NO.	QTY.	DESCRIPTION
1	32430	1	UNIVERSAL PUMP GUARD
2	32737	1	UNIVERSAL GRILL GUARD
3	21833	4	CAPSCREW,3/4" X 2-1/4",NC
4	22021	2	FLATWASHER,3/4"
5	21993	4	LOCKWASHER,3/4"
6	21825	4	HEX NUT,3/4",NC

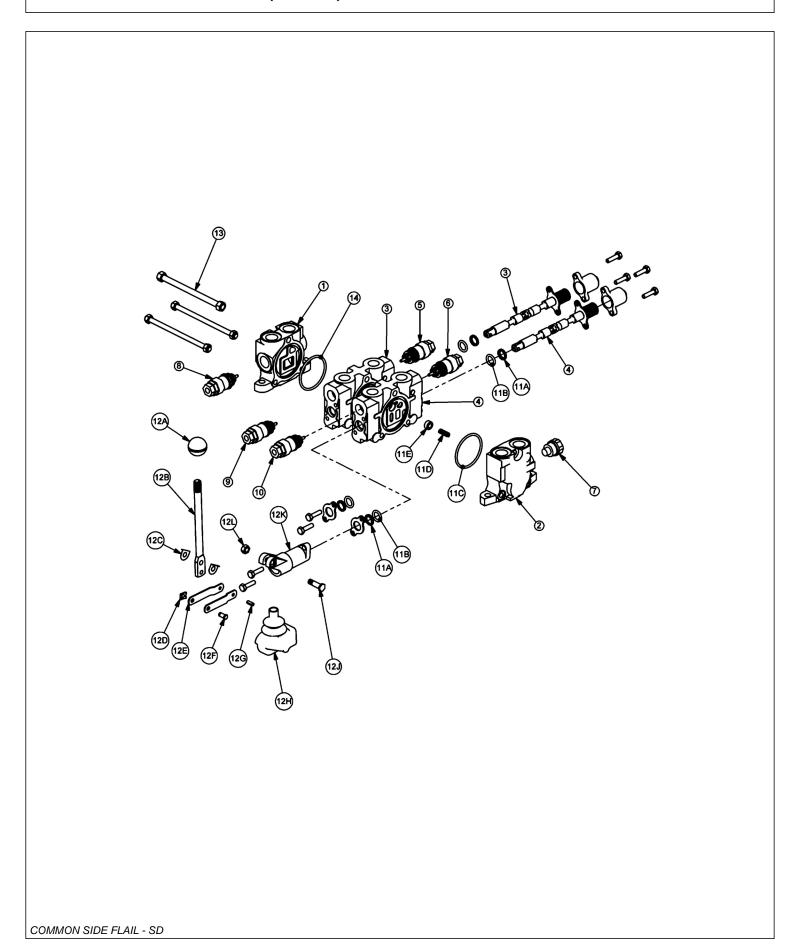
RESERVOIR TANK FILTER ASSEMBLY



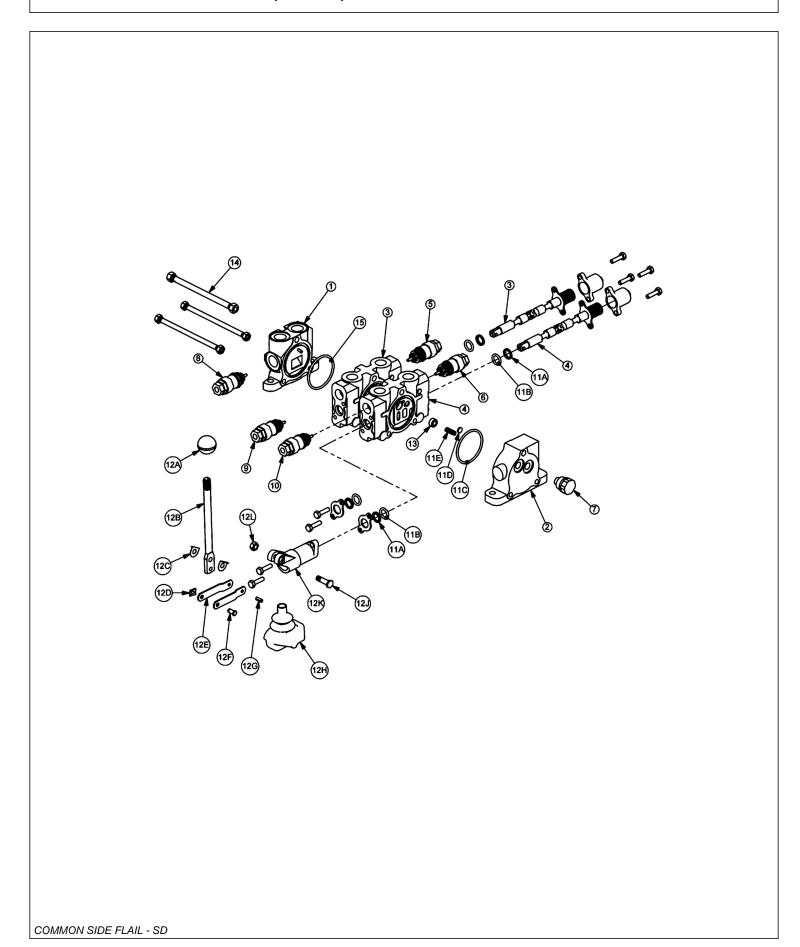
ITEM	PART NO.	QTY.	DESCRIPTION
	06505044	-	FILTER ASSY SAE 10 MICRON
1	28583	4	CAPSCREW,8MM X 25MM(1.25 PITCH)
2	06505045	1	COVER
3	06505046	1	SEAL KIT
4	06505047	1	SPRING
5	06505048	1	BYPASS
6	35259	1	FILTER,10 MIC,RETURN LINE
7	06505049	1	CAN/BODY



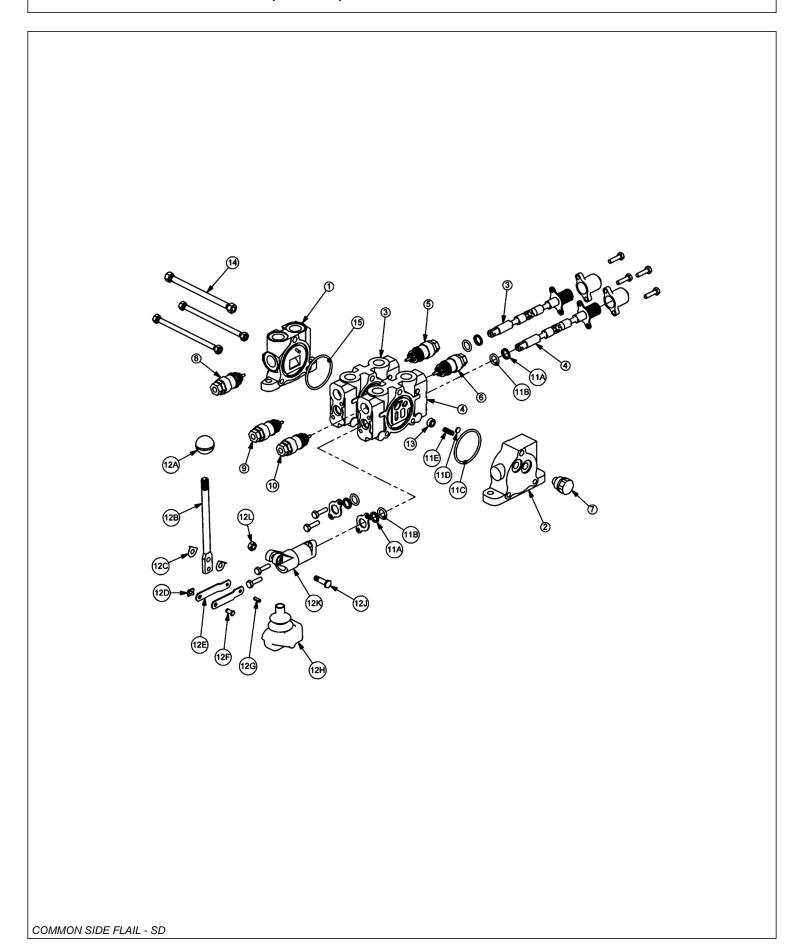
ITEM	PART NO.	QTY.	DESCRIPTION
1	TB1017S	1	INLET END COVER
2	TB1702	1	END COVER, POWER BEYOND
3	TF3009	1	VALVE SECTION (DOUBLE ACTING, DETENT - FLOAT)
4	TF3009	1	VALVE SECTION (DOUBLE ACTING, DETENT - FLOAT)
5	06503067	1	RELIEF PLUG
6	TF4212	1	RELIEF VALVE, 200 PSI
7	TB1017M	1	SHUT-OFF PLUG
8	TB1017E	1	RELIEF VALVE, 2250 PSI
9	TB1017M	1	SHUT-OFF PLUG
10	TB1017M	1	SHUT-OFF PLUG
11	TB1017A	2	VALVE SEAL KIT (FOR ONE SECTION)
11A		2	WIPER
11B		2	O-RING SMALL
11C		1	O-RING LARGE
11D		1	SPRING
11E		1	PUCKET
12	TB1017L	2	LEVER KIT (FOR ONE SECTION)
12A		1	LEVER KNOB
12B		1	LEVER
12C		2	LEVER WASHER
12D		1	LEVER CLIP
12E		2	LINKAGE
12F		1	LEVER PIN
12G		1	ROLL PIN
12H		1	LEVER BOOT
12J		1	LEVER BOLT
12K		1	LEVER DUST COVER
12L		1	LEVER NUT
13	TB1017X	1	TIE ROD KIT
14	24214	1	O-RING, LARGE



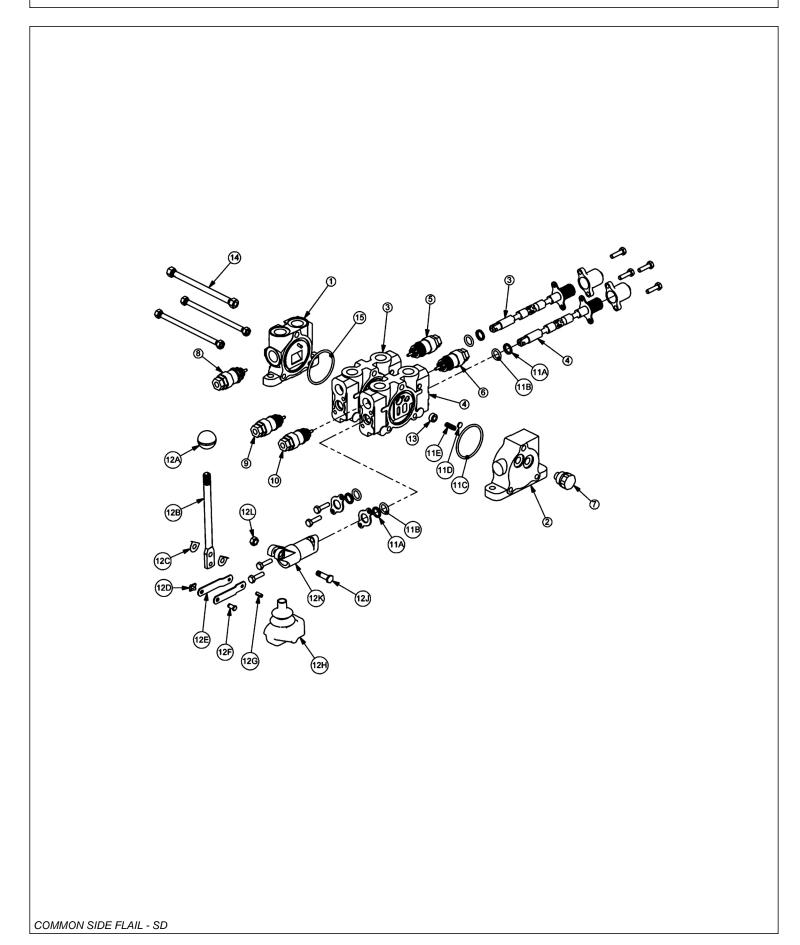
ITEM	PART NO.	QTY.	DESCRIPTION
1	TB1017S	1	INLET END COVER
2	TB1702	1	END COVER, POWER BEYOND
3	TB1017P	1	VALVE SECTION (SINGLE ACTING, SPRING DETENT)
4	TB1017P	1	VALVE SECTION (SINGLE ACTING, SPRING DETENT)
5	N/A	-	N/A
6	N/A	-	N/A
7	TB1017M	1	SHUT-OFF PLUG
8	TB1017E	1	RELIEF VALVE, 2250 PSI
9	TB1017M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



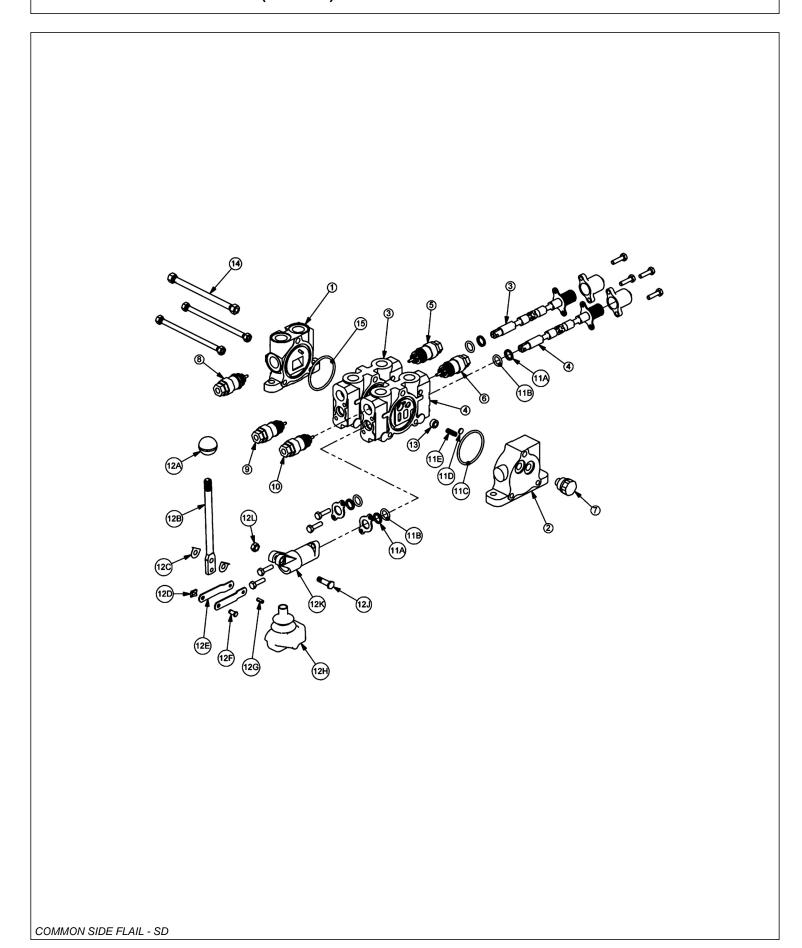
ITEM	PART NO.	QTY.	DESCRIPTION
1	31595	1	INLET END COVER
2	31594	1	END COVER, LOAD SENSE
3	31597	1	VALVE SECTION (DOUBLE ACTING, CENTER SPRING)
4	31597	1	VALVE SECTION (DOUBLE ACTING, CENTER SPRING)
5	06503067	1	RELIEF PLUG
6	06503067	1	RELIEF PLUG
7	N/A	-	N/A
8	6T4209	1	RELIEF PLUG
9	31862	1	RELIEF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



1 31595 1 INLET END COVER 2 31594 1 END COVER, LOAD SENSE 3 31600 1 VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT) 4 31600 1 VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT) 5 06503067 1 RELIEF PLUG 6 31861 1 RELIEF PLUG 7 N/A - N/A 8 674209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 1 O-RING SMALL 11C 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B	ITEM	PART NO.	QTY.	DESCRIPTION
3 31600 1 VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT) 4 31600 1 VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT) 5 06503067 1 RELIEF PLUG 6 31861 1 RELIEF PLUG 7 N/A - N/A 8 674209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER WASHER 12F	1	31595	1	INLET END COVER
4 31600 1 VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT) 5 06503067 1 RELIEF PLUG 6 31861 1 RELIEF VALVE, 360 PSI 7 N/A - N/A 8 6T4209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER WASHER 12D 1 LEVER PIN 12G 1	2	31594	1	END COVER, LOAD SENSE
5 06503067 1 RELIEF PLUG 6 31861 1 RELIEF VALVE, 360 PSI 7 N/A - N/A 8 6T4209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER WASHER 12D 1 LEVER PIN 12G 1 ROLL PIN	3	31600	1	VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT)
6 31861 1 RELIEF VALVE, 360 PSI 7 N/A - N/A 8 6T4209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12J 1 LEVER BOOT	4	31600	1	VALVE SECTION (DOUBLE ACTING, DETENT-FLOAT)
7 N/A - N/A 8 6T4209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT	5	06503067	1	RELIEF PLUG
8 6T4209 1 RELIEF PLUG 9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER KNOB 12B 1 LEVER WASHER 12D 1 LEVER CLIP 12E 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J	6	31861	1	RELIEF VALVE, 360 PSI
9 31862 1 RELIEF VALVE, 2175 PSI 10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 1 O-RING SMALL 11C 1 SPRING 11D 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER WASHER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOOT 12J 1 LEVER BOLT 12LEVER OUST COVER 12LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	7	N/A	-	N/A
10 31862 1 RELIEF VALVE, 2175 PSI 11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOOT 12J 1 LEVER BOLT 12L 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	8	6T4209	1	RELIEF PLUG
11 31593 2 VALVE SEAL KIT (FOR ONE SECTION) 11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 1 LEVER CLIP 12E 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOLT 12J	9	31862	1	RELIEF VALVE, 2175 PSI
11A 2 WIPER 11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 1 LEVER CLIP 12E 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	10	31862	1	RELIEF VALVE, 2175 PSI
11B 2 O-RING SMALL 11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	11	31593	2	VALVE SEAL KIT (FOR ONE SECTION)
11C 1 O-RING LARGE 11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	11A		2	WIPER
11D 1 SHUTTLE DISC 11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	11B		2	O-RING SMALL
11E 1 SPRING 12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 ROLL PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	11C		1	O-RING LARGE
12 TB1017L 2 LEVER KIT (FOR ONE SECTION) 12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	11D		1	SHUTTLE DISC
12A 1 LEVER KNOB 12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K	11E		1	SPRING
12B 1 LEVER 12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12	TB1017L	2	LEVER KIT (FOR ONE SECTION)
12C 2 LEVER WASHER 12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12A		1	LEVER KNOB
12D 1 LEVER CLIP 12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12B		1	LEVER
12E 2 LINKAGE 12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12C		2	LEVER WASHER
12F 1 LEVER PIN 12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12D		1	LEVER CLIP
12G 1 ROLL PIN 12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12E		2	LINKAGE
12H 1 LEVER BOOT 12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12F		1	LEVER PIN
12J 1 LEVER BOLT 12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12G		1	ROLL PIN
12K 1 LEVER DUST COVER 12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12H		1	LEVER BOOT
12L 1 LEVER NUT 13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12J		1	LEVER BOLT
13 31603 2 COMPENSATOR 14 TB1017X 1 TIE ROD KIT	12K		1	LEVER DUST COVER
14 TB1017X 1 TIE ROD KIT	12L		1	LEVER NUT
	13	31603	2	COMPENSATOR
15 24214 1 O-RING, LARGE	14	TB1017X	1	TIE ROD KIT
	15	24214	1	O-RING, LARGE

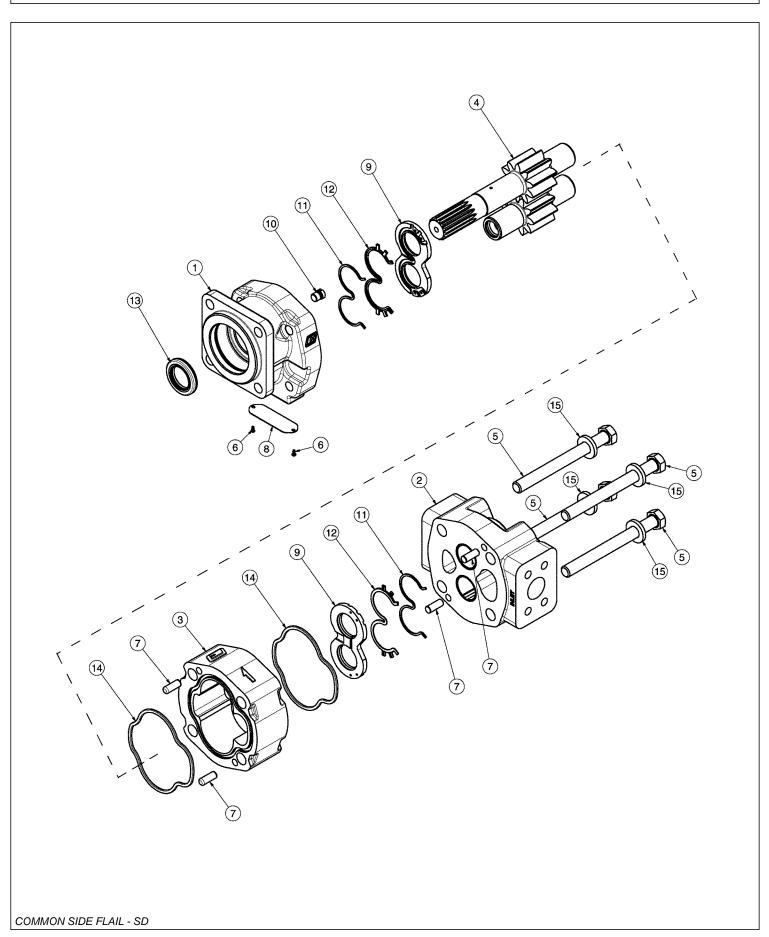


	ITEM	PART NO.	QTY.	DESCRIPTION
	1	31595	1	INLET END COVER
	2	31594	1	END COVER, LOAD SENSE
	3	31597	1	VALVE SECTION (DOUBLE ACTING, CENTER SPRING)
	4	31597	1	VALVE SECTION (DOUBLE ACTING, CENTER SPRING) (REMOVE SHUTTLE DISC)
	5	06503067	1	RELIEF PLUG
	6	06503067	1	RELIEF PLUG
	7	06503068	1	RELIEF PLUG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



	ITEM	PART NO.	QTY.	DESCRIPTION
	1	31595	1	INLET END COVER
	2	31594	1	END COVER, LOAD SENSE
	3	31600	1	VALVE SECTION (DOUBLE ACTING, DETENT FLOAT)
	4	31600	1	VALVE SECTION (DOUBLE ACTING, DETENT FLOAT) (REMOVE SHUTTLE DISC)
	5	06503067	1	RELIEF PLUG
	6	31861	1	RELIEF VALVE, 360 PSI
	7	06503068	1	RELIEF PLUG
	8	6T4209	1	RELIEF PLUG
	9	31862	1	RELIEF VALVE, 2175 PSI
	10	31862	1	RELIEF VALVE, 2175 PSI
	11	31593	2	VALVE SEAL KIT (FOR ONE SECTION)
	11A		2	WIPER
	11B		2	O-RING SMALL
	11C		1	O-RING LARGE
	11D		1	SHUTTLE DISC
	11E		1	SPRING
	12	TB1017L	2	LEVER KIT (FOR ONE SECTION)
	12A		1	LEVER KNOB
	12B		1	LEVER
	12C		2	LEVER WASHER
	12D		1	LEVER CLIP
	12E		2	LINKAGE
	12F		1	LEVER PIN
	12G		1	ROLL PIN
	12H		1	LEVER BOOT
	12J		1	LEVER BOLT
	12K		1	LEVER DUST COVER
	12L		1	LEVER NUT
	13	31603	2	COMPENSATOR
	14	TB1017X	1	TIE ROD KIT
	15	24214	1	O-RING, LARGE
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FRONT HYDRAULIC PUMP BREAKDOWN

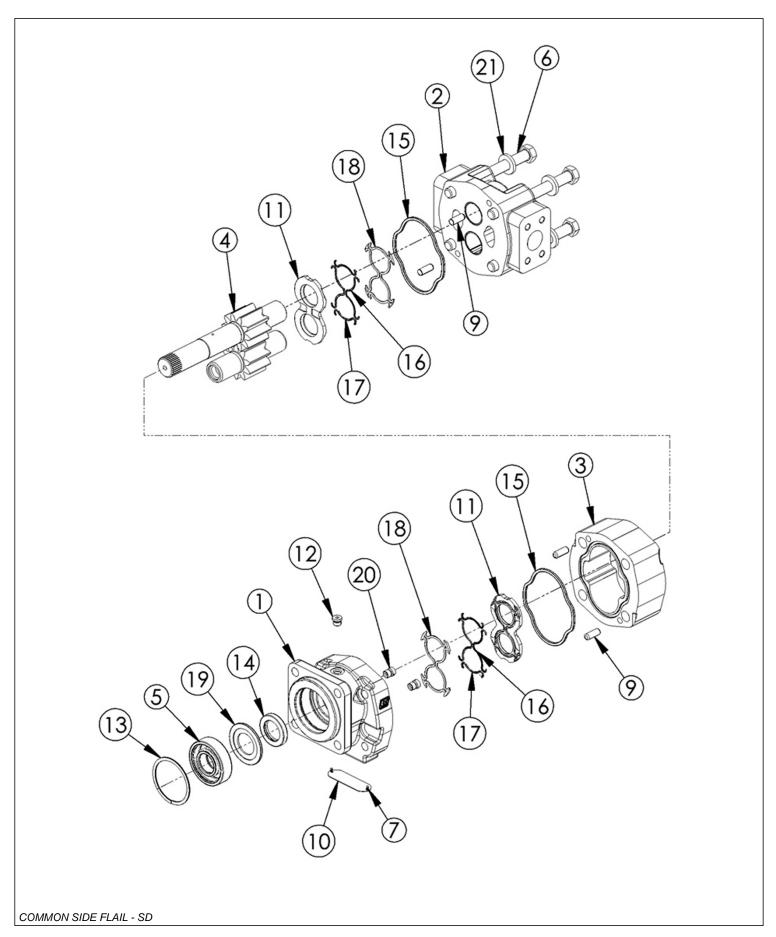


FRONT HYDRAULIC PUMP BREAKDOWN

Continued...

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

FLAIL MOTOR BREAKDOWN

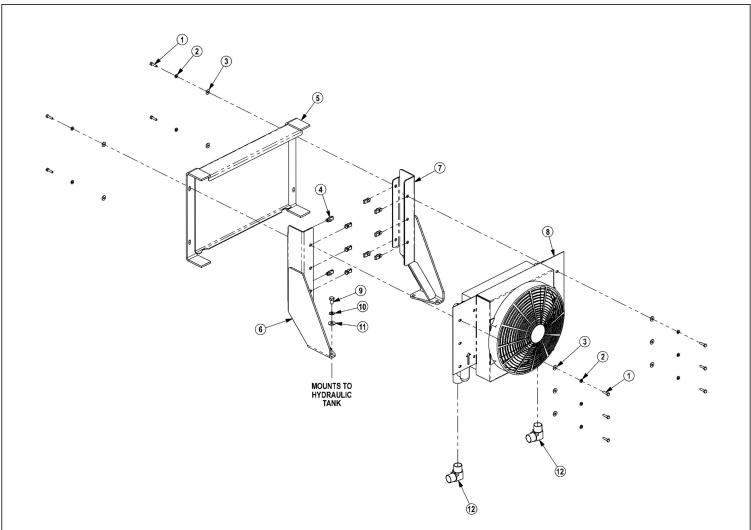


FLAIL MOTOR BREAKDOWN

Continued...

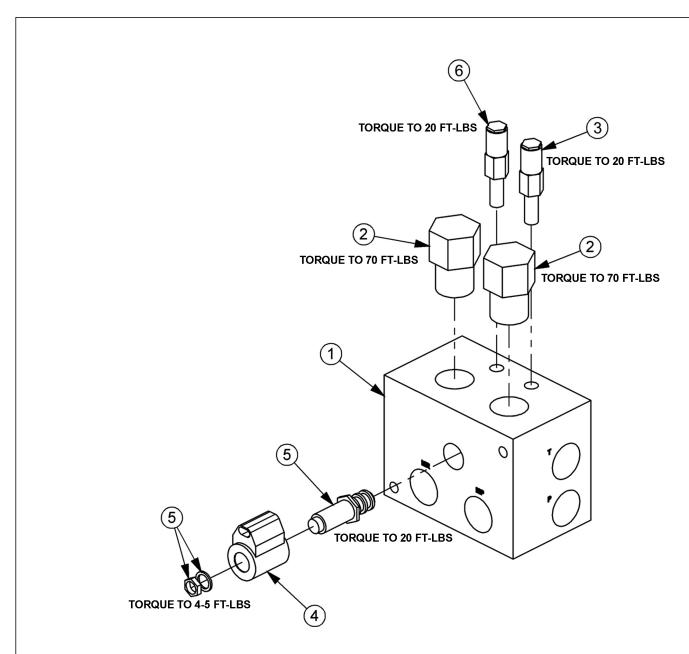
ITEM	PART NO.	QTY.	DESCRIPTION
	06504132	-	MOTOR ASSEMBLY 350 - TSF
1	06504039	1	SHAFT END COVER
2	06504040	1	PORT END COVER
3	06504041	1	GEAR HOUSING
4	06504042	1	MATCHED GEAR SET
5	TF4402	1	BALL BEARING
6	06504043	4	CAP SCREW
7	06504044	2	SET SCREW
8	06504028	1	KEY
9	06504045	4	DOWEL PIN
10		1	NAMEPLATE
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
20	6T5809	2	CHECK ASSEMBLY
21	02961917	4	WASHER
	06504023	-	SEAL KIT (INCLUDES 14, 15, 16, 17, AND 18)

COOLER ASSEMBLY



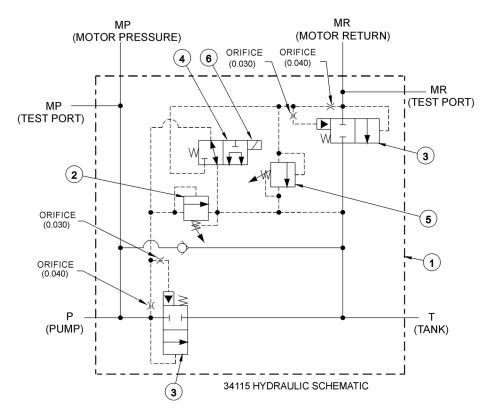
ITEM	PART NO.	QTY.	DESCRIPTION
1	21530	10	CAPSCREW,1/4 X1 NC
2	21986	10	LOCKWASHER,1/4
3	22014	10	FLATWASHER,1/4
4	35176	10	1/4 U-NUT
5	06370015	1	SCREEN,COOLER,FRNT
6	06380006	1	MNT,COOLER,BUMPER TANK,RH
7	06380007	1	MNT,COOLER,BUMPER TANK,LH
8	06510026	1	COOLER,FRONT MNT
	06510029	1	FAN ASSY, ONLY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

BRAKE VALVE ASSEMBLY



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

BRAKE VALVE HYDRAULIC SCHEMATIC



BRAKE VALVE TROUBLESHOOTING

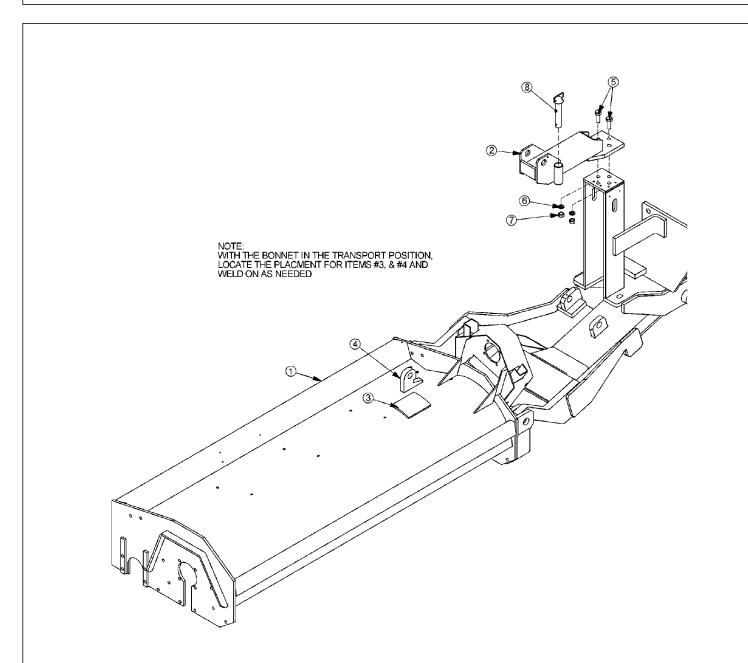
FAILURE MODE: CI	HECK STEPS
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- MOWER WILL NOT START system pressure is low
 (engine not lugging).
 1 thru 6
- MOWER WILL NOT START system pressure is high
 (engine lugging). "MR" port will be high pressure.
- MOWER WILL NOT ROTATE AT FULL SPEED limited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

CORRECTIVE STEPS:

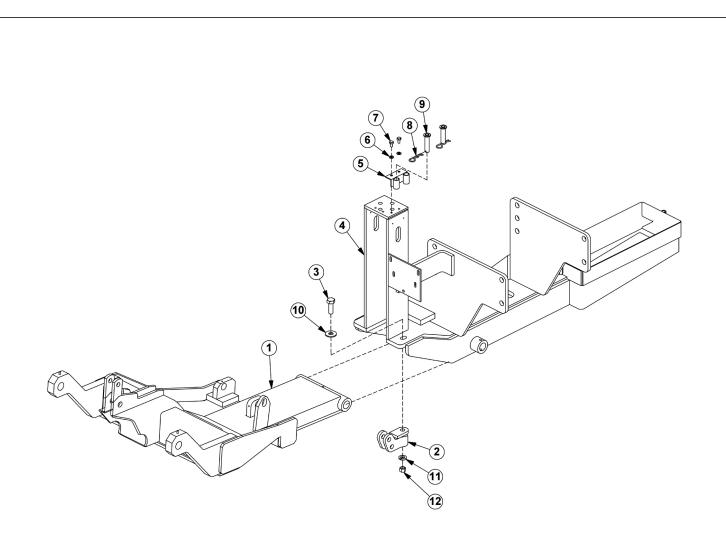
- 1. Check for voltage at solenoid (item 6), voltage must be between 10.2 volts and 13.8 volts.
- 2. Remove, inspect solenoid and cartridge (items 4, 6) for wear or contamination.
- 3. Remove, inspect logic elements near "P" port (item 3) for wear or contamination.
- 4. Remove, inspect 3000 psi relief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

SIDE FLAIL TRAVEL LOCK



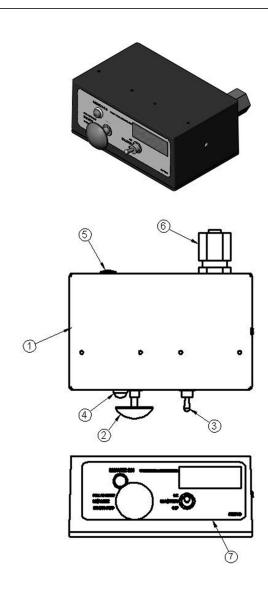
ITEM	PART NO.	QTY.	DESCRIPTION
1		-	BONNET *REFER TO FLAIL ASSEMBLY
2	30531A	1	BRACKET, TRAVEL LOCK
3	TF4248	1	PLATE, TRAVEL LOCK
4	23745	1	TRAVEL LOCK HOOK
5	21783	2	CAPSCREW,5/8"X2" NC
6	21992	2	LOCKWASHER, 5/8"
7	21775	2	HEX NUT, 5/8" NC
8	TF4250	1	PIN, TRAVEL LOCK

DRAFT BEAM TRAVEL LOCK



ITEM	PART NO.	QTY.	DESCRIPTION
1	32143	1	DRAFT BEAM
2	6T0106	1	TRAVEL LOCK BRACKET
3	21833	1	CAPSCREW 3/4" X 2 1/4"
4		-	MAIN FRAME *REFER TO PARTS SECTION
5	33856	1	BRKT,PIN HOLDER
6	21988	2	LOCK WASHER 3/8"
7	21629	2	CAPSCREW 3/8" X 3/4"
8	6T3020	2	R - CLIP 5/32"
9	6T0107	2	TRAVEL LOCK PINS 3/4" X 3 1/4"
10	22021	1	FLAT WASHER 3/4"
11	21993	1	LOCK WASHER 3/4"
12	21825	1	HEX NUT 3/4"

SWITCH BOX

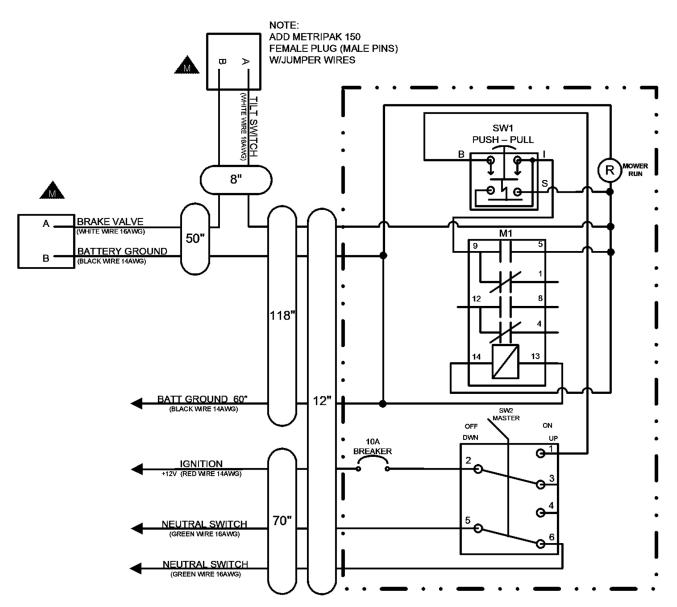


ITEM	PART NO.	QTY.	DESCRIPTION
1	06514013	1	SWBX,ALUM,BLK,06510102
2	35226	1	SWITCH,MOWER,COLEHERSEE
3	33811	1	SWITCH,MASTER/DECK FLOAT
4	6T3923	1	INDICTATOR LIGHT, ON, RED
5	06514014	1	BREAKER,10A,SWBX
6	34540	1	STRAIN RELIEF,3/4,BLACK,NYLON
7	06550018	1	DECAL,SWTCHBX,TM/TSF,CG
8	35227	1	RELAY,DP,DT,12V,LY2F,35226

SWITCH BOX SCHEMATIC

06510102 SCHEMATIC

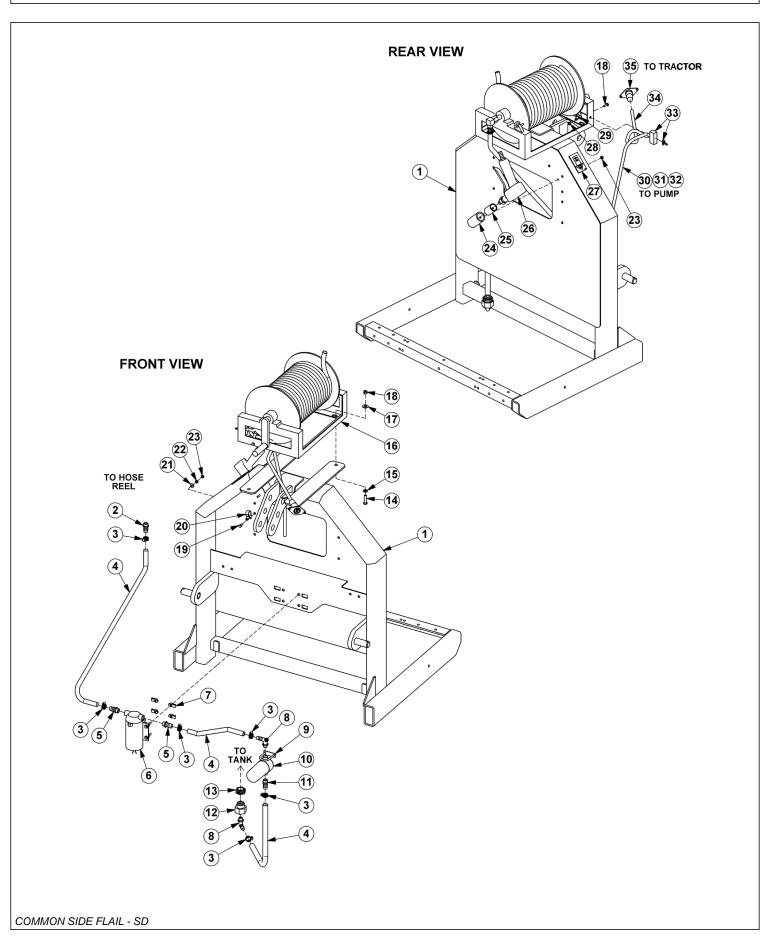
COMMON GROUND SWITCH BOX SIDE MOWER



SEE DRAWING # 06515000 FOR A FULL DESCRIPTION OF ALL CONNECTORS

FIRE SUPPRESSION SYSTEM				
FIRE SUPPRESSION SYSTEM SECTION				
COMMON SIDE FLAIL - SD				

FIRE SUPPRESSION 3-POINT MOUNT

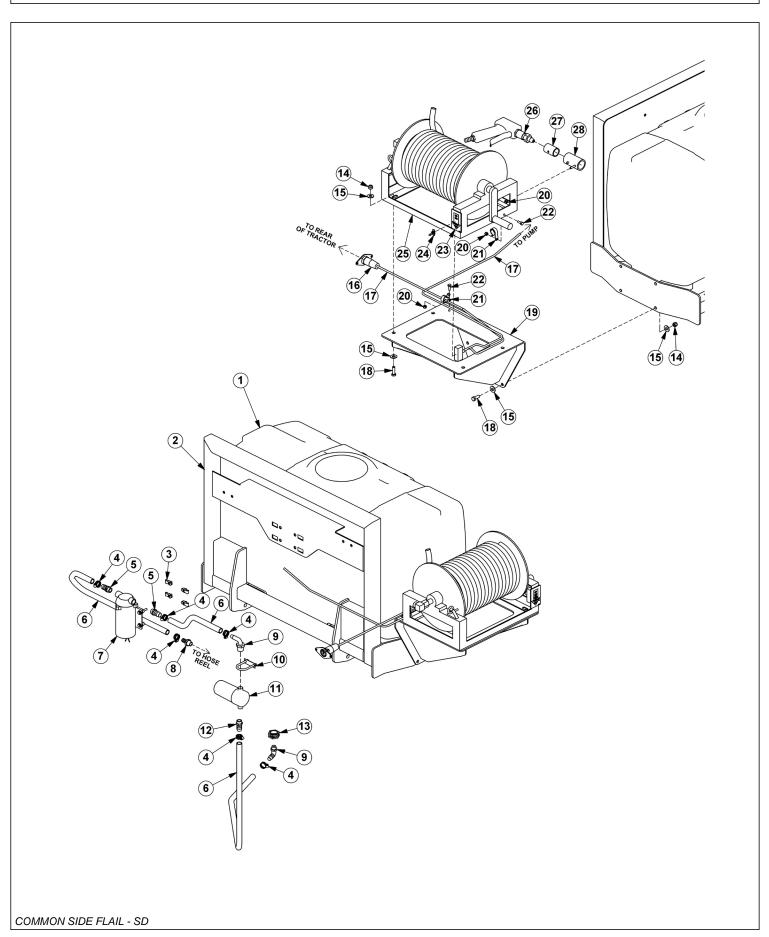


FIRE SUPPRESSION 3-POINT MOUNT

Continued...

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

FIRE SUPPRESSION FRONT MOUNT

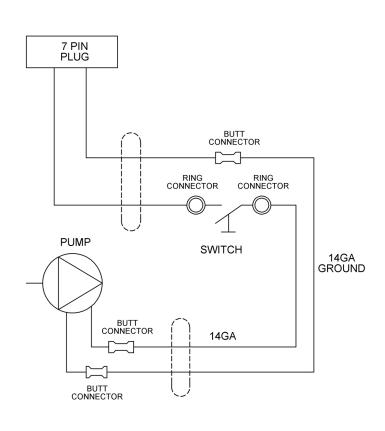


FIRE SUPPRESSION FRONT MOUNT

Continued...

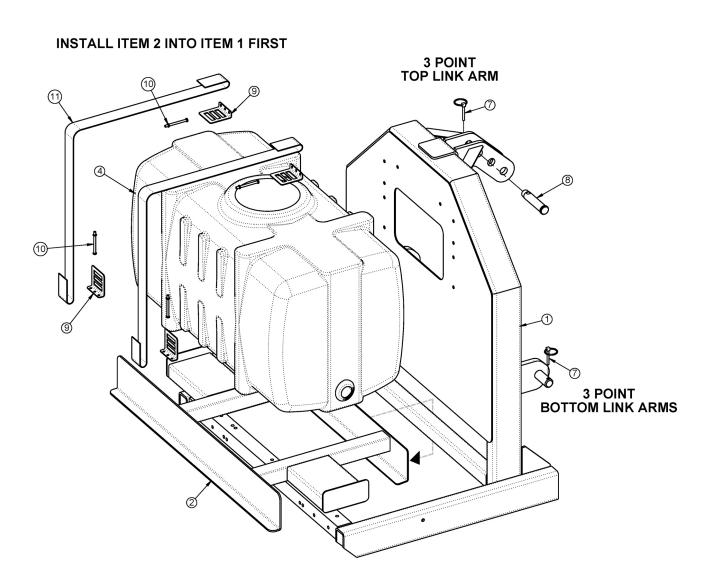
ITEM	PART NO.	QTY.	DESCRIPTION
1	06520342	1	TANK,50 GALLON
2	06370204	1	MNT,TANK,FRNT,50 GALLON
3	35176	4	U-NUT,1/4,3/4 TO CENTER
4	35091	6	CLAMP,HOSE,#6
5	06503168	2	SWIVEL,1/2 STR,POLY
6	06520469	8	HOSE,1/2,SPRAYER
7	06520359	1	PUMP,FIRE KIT
8	06503108	1	FITTING,1/2"BARB X 1/2"MP
9	06520367	2	ELBOW,1/2MPX1/2BARB,POLY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





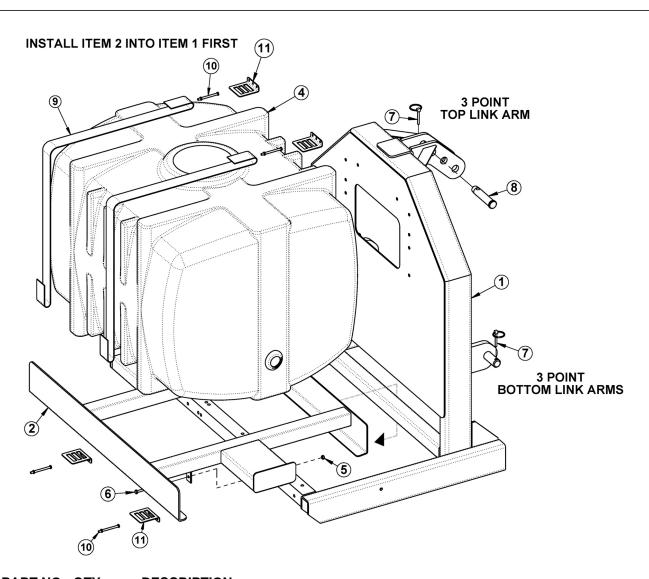
WETCUT	
	WETCUT
	SECTION
COMMON SIDE ELAIL - SD	

WETCUT 50 GALLON TANK - 3PNT MOUNT



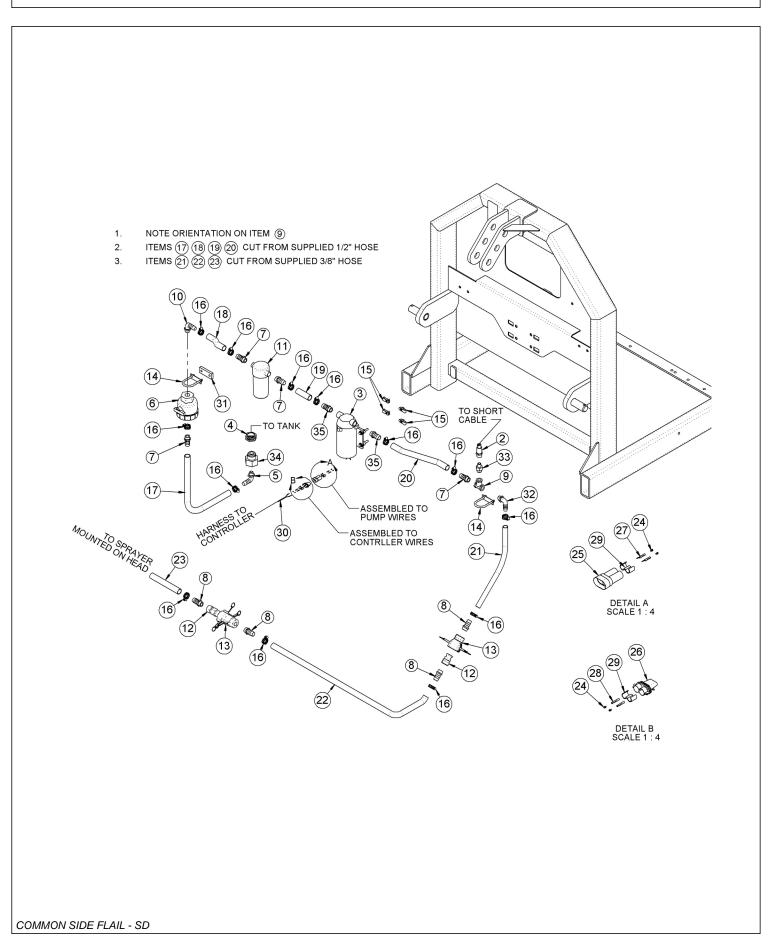
ITEM	PART NO.	QTY.	DESCRIPTION
1	06370128	1	MNT,3PNT,UNI
2	06370136	1	MNT,TANK,50GAL,WETCUT
4	06520342	1	TANK,50GA.,WETCUT
7	RD1032	3	PIN,LYNCH 1/4" X 2"
8	TB1036	1	PIN,SEC BOOM SWIV 1X4-11/16"
9	06520343	4	ANCHOR,STRAP,WETCUT
10	06520344	4	BOLT,STRAP,TANK,WETCUT
11	06520345	2	STRAP,TANK,WETCUT

WETCUT 100 OR 150 GALLON TANK - 3PNT MOUNT



ITEM	PART NO.	QTY.	DESCRIPTION
1	06370128	1	MNT,3PNT,UNI
2	06370138	1	MNT,TANK,100GAL,WETCUT
	06370139	-	MNT,TANK,150GAL,WETCUT
4	06520372	1	TANK,100GA.,WETCUT
	06520373	-	TANK,150GA.,WETCUT
5	21527	2	HEX NUT,NYLOCK,1/4" NC
6	21530	2	CAPSCREW,1/4" X 1" NC
7	RD1032	3	PIN,LYNCH 1/4" X 2"
8	TB1036	1	PIN,SEC BOOM SWIV 1X4-11/16"
9	06520345	2	STRAP,TANK,WETCUT
10	06520344	4	BOLT,STRAP,TANK,WETCUT
11	06520343	4	ANCHOR,STRAP,WETCUT

WETCUT 3PNT PLUMBING - 50IN MOWERS

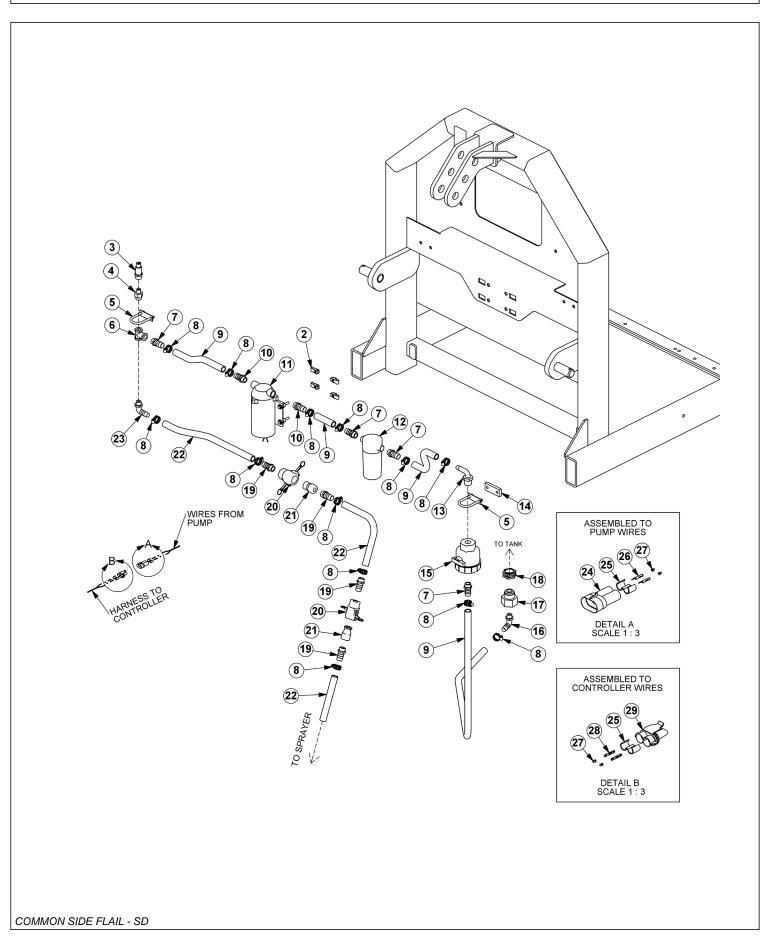


WETCUT 3PNT PLUMBING - 50IN MOWERS

Continued...

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

WETCUT 3PNT PLUMBING - LARGE MOWERS

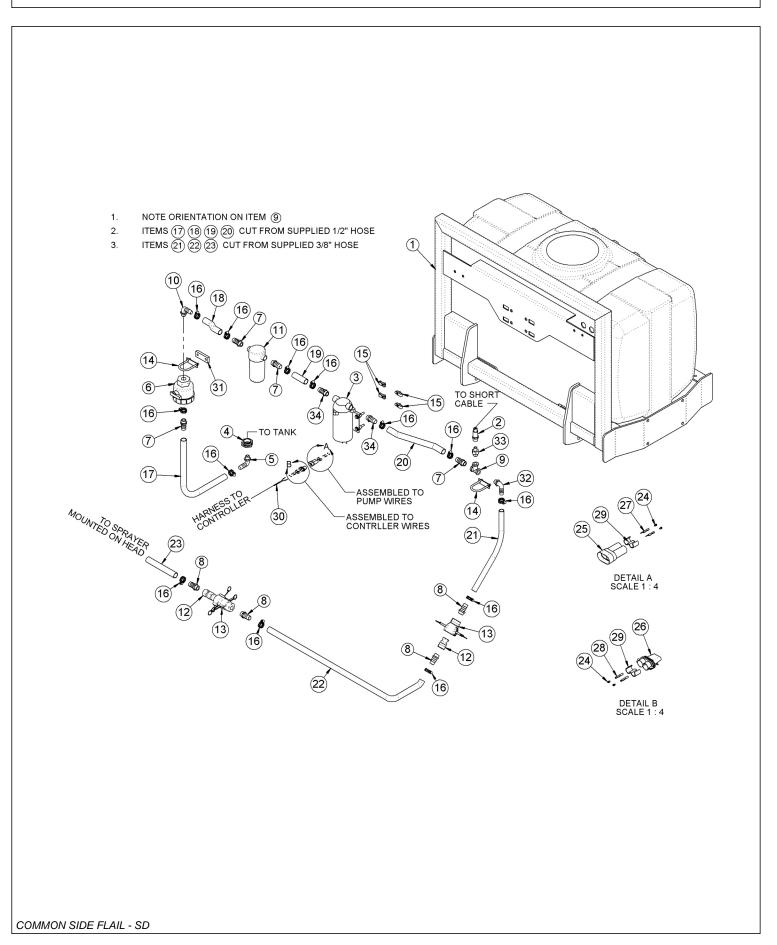


WETCUT 3PNT PLUMBING - LARGE MOWERS

Continued...

	ITEM	PART NO.	QTY.	DESCRIPTION
	1	06370128	1	MNT,3PNT,UNI
	2	35176	4	U-NUT,1/4,3/4 TO CENTER
	3	06520336	1	CNTRLR,SENSOR,06520333
	4	06520354	1	BUSHING,REDUCER,WETCUT
	5	27329	2	U-BOLT,1/4" X 1" X 2"
	6	06520353	1	FITTING,TEE,WETCUT
	7	06520349	4	FITTING,BARB,HOSE,WETCUT
	8	35091	13	CLAMP, HOSE #6
	9	06520469	5	1/2" HOSE (FEET)
	10	06503168	2	SWIVEL,1/2" STR
	11	06520359	1	PUMP,LARGE
	12	06520361	1	FILTER,FIRE KIT,RAILKUT
		06520351	1	STRAINER,40MESH
	13	06520367	1	ELBOW,1/2X1/2BARB,POLY
	14	06401133	1	SPACER,Ø.31X1.75X.38
	15	06520348	1	VLV,BALL,WETCUT
	16	06520347	1	FITTING,ELBOW,WETCUT
	17	06503169	1	BUSHING,1MPX1/2FP (100 & 150 GALLON TANKS ONLY)
	18	06520346	1	FITTING,BULKHEAD,WETCUT (50 GALLON TANKS ONLY)
	19	06520352	4	FITTING,NIPPLE,1/2X3/8,WETCUT
	20	06520401	2	QUIK CPLR,FEM,1/2,WETCUT
	21	06520400	2	QUIK CPLR,MALE,1/2,WETCUT
	22	06520316	-	3/8" HOSE (INCLUDED WITH SPRAYER)
	23	06503165	1	ELBOW,1/2X3/8BARB,POLY
	24	06510052	1	CONN.,BODY,MALE,METRIPACK 150
	25	06510056	2	TPA
	26	06510054	2	TERMINAL,MALE,16/18GA.METPAK
	27	06510051	4	SEAL,16-18GA,METPAK
	28	06510055	2	TERMINAL,FEM,16/18GA.METPAK
	29	06510053	1	CONN.,BODY,FEM,METRIPACK 150
1				

WETCUT FRONT PLUMBING - 50IN MOWERS

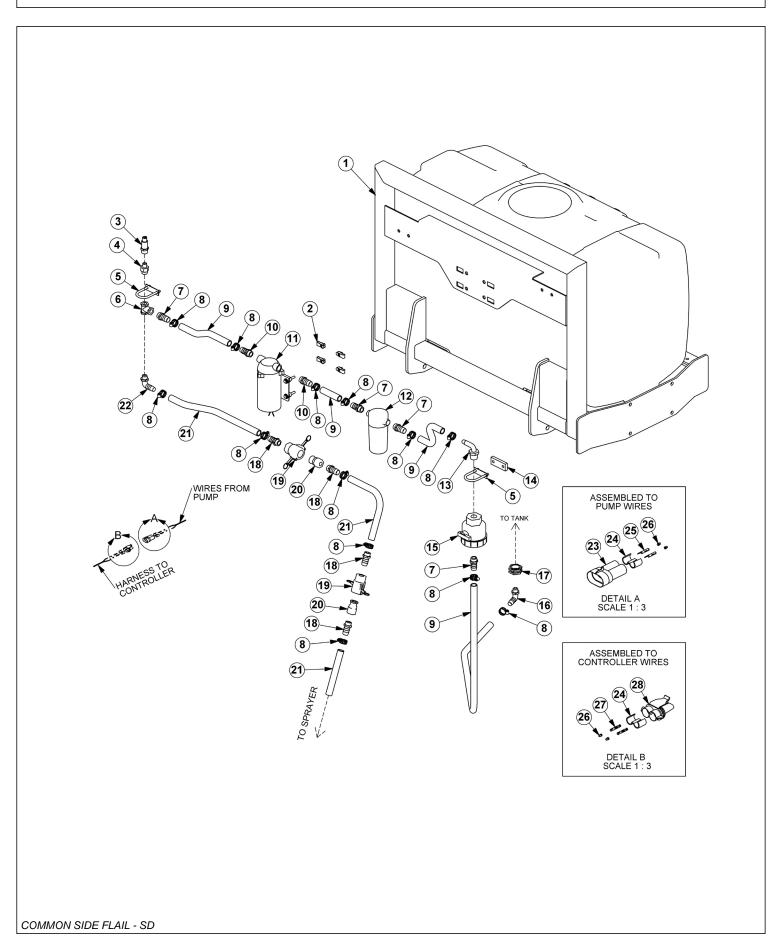


WETCUT FRONT PLUMBING - 50IN MOWERS

Continued...

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

WETCUT FRONT PLUMBING - LARGE MOWERS

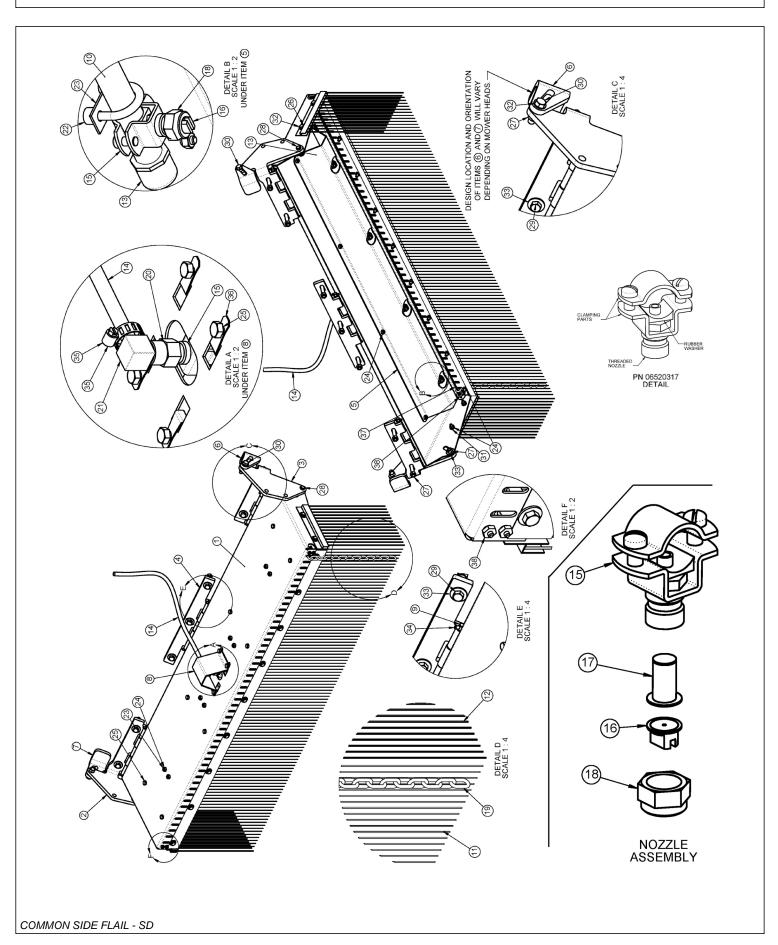


WETCUT FRONT PLUMBING - LARGE MOWERS

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	06370204	1	MNT,FRONT,UNIV
2	35176	4	U-NUT,1/4,3/4 TO CENTER
3	06520336	1	CNTRLR,SENSOR,06520333
4	06520354	1	BUSHING,REDUCER,WETCUT
5	27329	2	U-BOLT,1/4" X 1" X 2"
6	06520353	1	FITTING,TEE,WETCUT
7	06520349	4	FITTING,BARB,HOSE,WETCUT
8	35091	13	CLAMP, HOSE #6
9	06520469	5	1/2" HOSE (FEET)
10	06503168	2	SWIVEL,1/2" STR
11	06520359	1	PUMP,LARGE
12	06520361	1	FILTER,FIRE KIT,RAILKUT
	06520351	1	STRAINER,40MESH
13	06520367	1	ELBOW,1/2X1/2BARB,POLY
14	06401133	1	SPACER,Ø.31X1.75X.38
15	06520348	1	VLV,BALL,WETCUT
16	06520347	1	FITTING,ELBOW,WETCUT
17	06520346	1	FITTING,BULKHEAD,WETCUT
18	06520352	4	FITTING,NIPPLE,1/2X3/8,WETCUT
19	06520401	2	QUIK CPLR,FEM,1/2,WETCUT
20	06520400	2	QUIK CPLR,MALE,1/2,WETCUT
21	06520316	-	3/8" HOSE (INCLUDED WITH SPRAYER)
22	06503165	1	ELBOW,1/2X3/8BARB,POLY
23	06510052	1	CONN.,BODY,MALE,METRIPACK 150
24	06510056	2	TPA
25	06510054	2	TERMINAL,MALE,16/18GA.METPAK
26	06510051	4	SEAL,16-18GA,METPAK
27	06510055	2	TERMINAL,FEM,16/18GA.METPAK
28	06510053	1	CONN.,BODY,FEM,METRIPACK 150

WETCUT 50IN SPRAYER HEAD ASSEMBLY

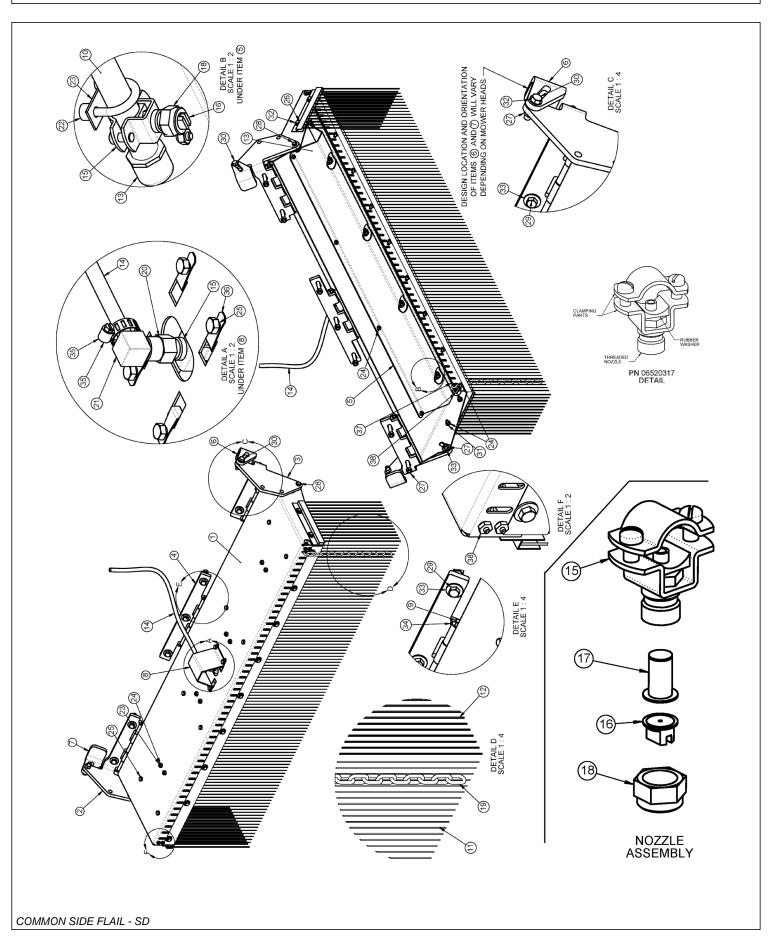


WETCUT 50IN SPRAYER HEAD ASSEMBLY

Continued...

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

WETCUT 60IN SPRAYER HEAD ASSEMBLY

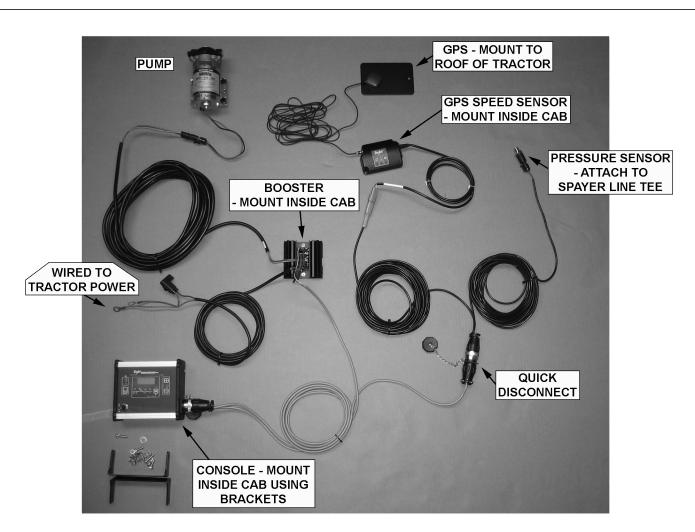


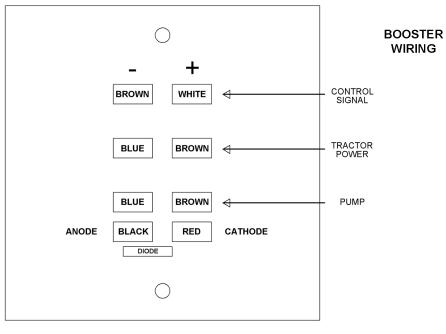
WETCUT 60IN SPRAYER HEAD ASSEMBLY

Continued...

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

WETCUT CABLES





COMMON REAR FLAIL - SUPER DUTY PARTS SECTION

PART NAME INDEX

PARTS ORDERING GUIDE	
NOTES	
75IN REAR FLAIL - STANDARD ROTATION	. 6
75IN REAR FLAIL - REVERSE ROTATION	. 8
90IN REAR FLAIL - STANDARD ROTATION	10
90IN REAR FLAIL - REVERSE ROTATION	12
96IN HYDRAULIC REAR FLAIL	14
96IN HYDRAULIC REAR FLAIL - DRIVE ASSEMBLY	16
96IN PTO REAR FLAIL	
REAR FLAIL DRIVE ASSEMBLY	
PTO DRIVE ASSEMBLY	22
REAR GEAR BOX ASSEMBLY	24
PTO SHAFT ASSEMBLY	26
PTO SHAFT ASSEMBLY WITH CLUTCH	
CLUTCH ASSEMBLY	
PTO STAND	29
NOTES 1	30

PARTS ORDERING GUIDE

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

- 1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.
- 3. The pur chase order must clearly list the **quantity of each part**, the complete and correct **part number**, and the basic **name of the part**.
 - 4. The manufacturer reserves the right to substitute parts where applicable.
- 5. Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a purchase order.
 - 6. The manufacturer reserves the right to change prices without prior notice.

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



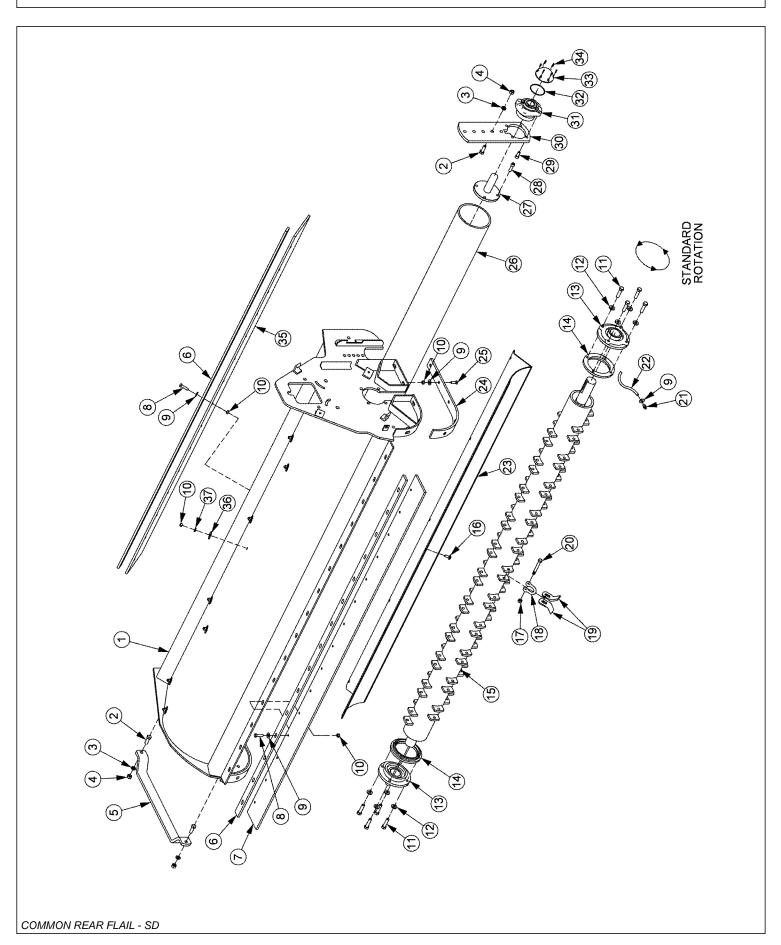
For maximum safety and to guarantee optimum product reliability, always use genuine **Tiger** replacement parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death.

Direct any questions regarding parts to:

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

NOTES
NOTES
NOTES
COMMON REAR FLAIL - SD

75IN REAR FLAIL - STANDARD ROTATION

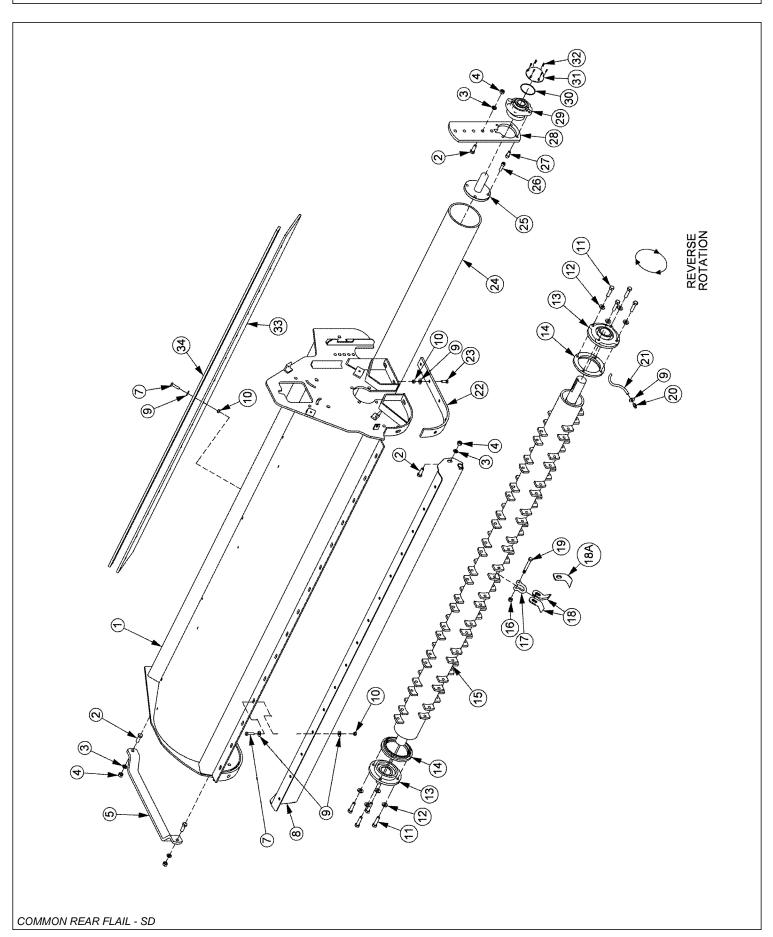


75IN REAR FLAIL - STANDARD ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
	06742090	-	75" REAR FLAIL ASSY,SD,STD ROT
1	06320134	1	BONNET,75",STD,ROSTA
2	21731	6	CAPSCREW,1/2" X 1-1/2",NC
3	21990	6	LOCKWASHER,1/2"
4	21725	6	HEX NUT,1/2",NC
5	27975A	1	GUARD,CUTTERSHAFT
6	TF1029	2	BAR,FLAP,TSF/TRF 75"
7	06520242	1	FLAP,75",FRONT
8	21632	20	CAPSCREW,3/8" X 1-1/2",NC
9	22016	37	FLATWASHER,3/8",GR8
10	21625	46	HEX NUT,3/8",NC
11	06530217	8	CAPSCREW,3/4" X 2-1/2",GR8,NC
12	06533006	8	FLATWASHER,1/2",SAE,L9
13	28683	2	BEARING,FLANGE,1-15/16",STD
14	33863	2	STRING GUARD,STD
15	28643B	1	CUTTERSHAFT,75"STD,W/EARS
16	6T2283	10	CARRIAGE BOLT,3/8" X 1",NC
17	21677	40	NYLOCK NUT,7/16",NC
18	TF1020	40	KNIFE MTG CLEVIS,FLAIL
19	33713	80	KNIFE,FLAIL,SHORT
20	34011	40	CAPSCREW,7/16" X 3-7/16",GR8,NC
21	TF1033	1	GREASE ZERK,1/8" FPT
22	TF1032	1	GRS HOSE,3/16" X 8"
23	28737	1	BAFFLE,75",STD ROT-STD
24	28086A	2	SKID SHOE,STD DUTY,REAR FLAIL
25	30013	10	PLOW BOLT,3/8" X 1-1/4",GR5,NC
26	28738	1	GROUND ROLLER,75"
27	TF1045B	2	STUB SHAFT, GROUND ROLLER
28	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
29	6T2331	4	CAPSCREW,SKT HD,7/16" X 1",NC
30	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
31	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLLR
32	06520029	2	O-RING,2-3/4" X 3/32"
33	06520027	2	CAP,BEARING,GRNDRLLR
34	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
35	TF1016	1	FLAP,DEFLECTOR,75"
36	6T2615	10	WASHER,FENDER,3/8"
37	21988	10	LOCKWASHER,3/8"

75IN REAR FLAIL - REVERSE ROTATION

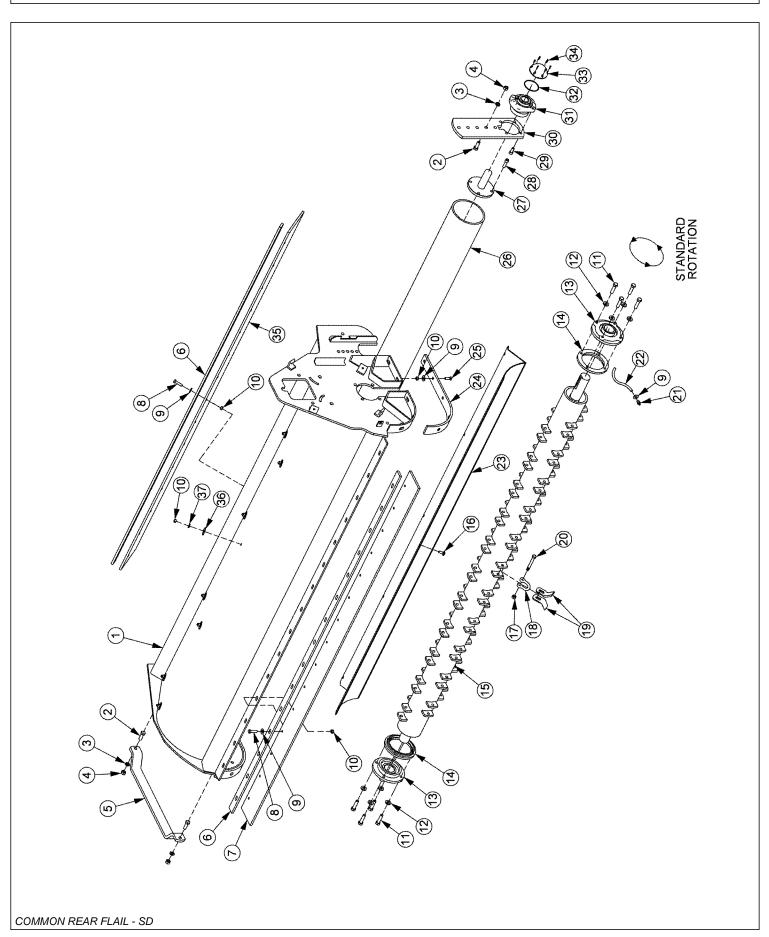


75IN REAR FLAIL - REVERSE ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
	06742091	-	75" REAR FLAIL,SD,RR,STANDARD CUT
	06742092	-	75" REAR FLAIL,SD,RR,SMOOTH CUT
1	06320134	1	BONNET,75",STD,ROSTA
2	21731	8	CAPSCREW,1/2" X 1-1/2",NC
3	21990	8	LOCKWASHER,1/2"
4	21725	8	HEX NUT,1/2",NC
5	27975A	1	GUARD,CUTTERSHAFT
7	21632	20	CAPSCREW,3/8" X 1-1/2",NC
8	28968A	1	TRASH GUARD,75"
9	22016	50	FLATWASHER,3/8",GR8
10	21625	40	HEX NUT,3/8",NC
11	06530217	8	CAPSCREW,3/4" X 2-1/2",GR8,NC
12	06533006	8	FLATWASHER,1/2",SAE,L9
13	28683	2	BEARING,FLANGE,1-15/16",STD
14	33863	2	STRING GUARD,STD
15	28643B	1	CUTTERSHAFT,75"STD,W/EARS
16	21677	40	NYLOCK NUT,7/16",NC
17	TF1020	40	KNIFE MTG CLEVIS,FLAIL
18	33713	80	KNIFE,FLAIL,SHORT
18A	28184A	40	KNIFE,FLAIL,SMOOTH CUT
19	34011	40	CAPSCREW,7/16" X 3-7/16",GR8,NC
20	TF1033	1	GREASE ZERK,1/8" FPT
21	TF1032	1	GRS HOSE,3/16" X 8"
22	28086A	2	SKID SHOE,STD DUTY,REAR FLAIL
23	30013	10	PLOW BOLT,3/8" X 1-1/4",GR5,NC
24	28738	1	GROUND ROLLER,75"
25	TF1045B	2	STUB SHAFT,GROUND ROLLER
26	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
27	6T2331	4	CAPSCREW,SKT HD,7/16" X 1",NC
28	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
29	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLLR
30	06520029	2	O-RING,2-3/4" X 3/32"
31	06520027	2	CAP,BEARING,GRNDRLLR
32	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
33	TF1016	1	FLAP,DEFLECTOR,75"
34	TF1029	1	BAR,FLAP,TSF/TRF,75"

90IN REAR FLAIL - STANDARD ROTATION

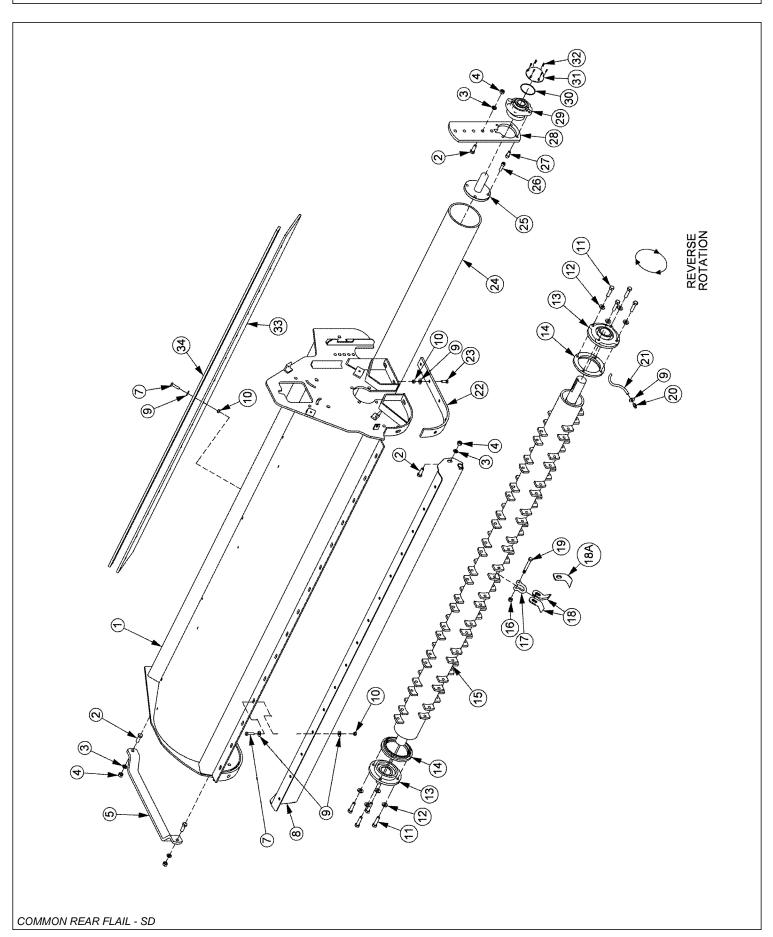


90IN REAR FLAIL - STANDARD ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
	06742080	-	90" REAR FLAIL,SD,STD ROT
1	06320115	1	BONNET,90",STD,ROSTA
2	21731	6	CAPSCREW,1/2" X 1-1/2",NC
3	21990	6	LOCKWASHER,1/2"
4	21725	6	HEX NUT,1/2",NC
5	27975A	1	GUARD,CUTTERSHAFT
6	TF1135	2	BAR,FLAP,TSF/TRF 90"
7	06520243	1	FLAP,90",FRONT
8	21632	20	CAPSCREW,3/8" X 1-1/2",NC
9	22016	41	FLATWASHER,3/8",GR8
10	21625	50	HEX NUT,3/8",NC
11	06530217	8	CAPSCREW,3/4" X 2-1/2",GR8,NC
12	06533006	8	FLATWASHER,1/2",SAE,L9
13	28683	2	BEARING,FLANGE,1-15/16",STD
14	33863	2	STRING GUARD,STD
15	27964C	1	CUTTERSHAFT,90"STD,W/EARS
16	6T2283	10	CARRIAGE BOLT,3/8" X 1",NC
17	21677	48	NYLOCK NUT,7/16",NC
18	TF1020	48	KNIFE MTG CLEVIS,FLAIL
19	33713	96	KNIFE,FLAIL,SHORT
20	34011	48	CAPSCREW,7/16" X 3-7/16",GR8,NC
21	TF1033	1	GREASE ZERK,1/8" FPT
22	TF1032	1	GRS HOSE,3/16" X 8"
23	27971	1	BAFFLE,90",STD ROT-STD
24	28086A	2	SKID SHOE,STD DUTY,REAR FLAIL
25	30013	10	PLOW BOLT,3/8" X 1-1/4",GR5,NC
26	27972A	1	GROUND ROLLER,90"
27	TF1045B	2	STUB SHAFT, GROUND ROLLER
28	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
29	6T2331	4	CAPSCREW,SKT HD,7/16" X 1",NC
30	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
31	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLLR
32	06520029	2	O-RING,2-3/4" X 3/32"
33	06520027	2	CAP,BEARING,GRNDRLLR
34	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
35	TF1116	1	FLAP,DEFLECTOR,90"
36	6T2615	10	WASHER,FENDER,3/8"
37	21988	10	LOCKWASHER,3/8"

90IN REAR FLAIL - REVERSE ROTATION

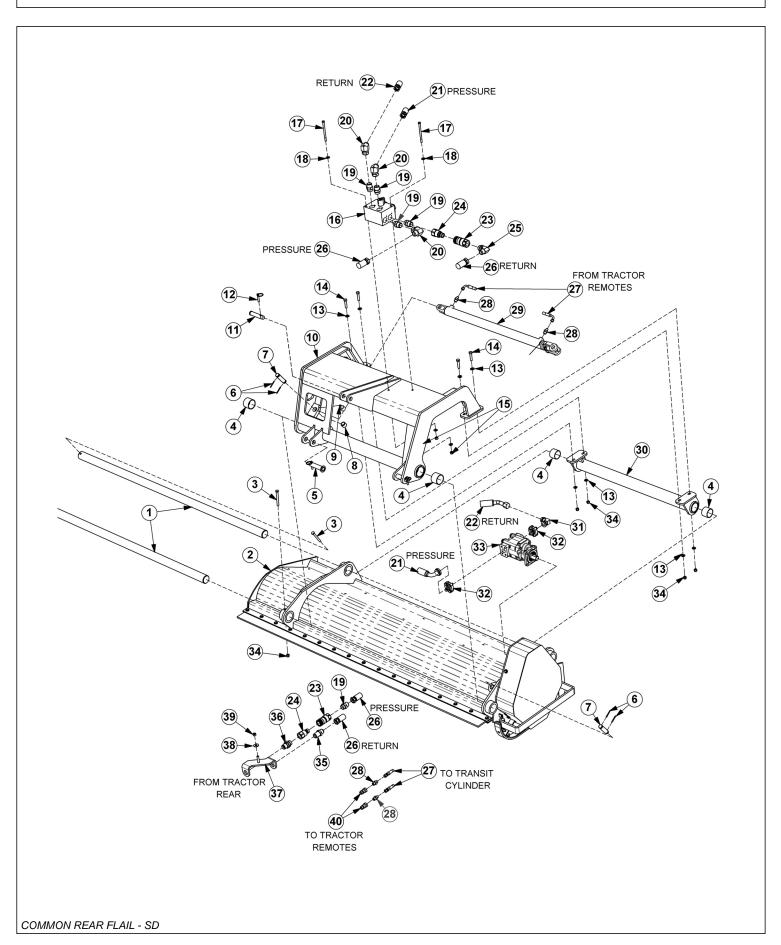


90IN REAR FLAIL - REVERSE ROTATION

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
	06742083	-	90" REAR FLAIL,SD,STANDARD CUT
	06742084	-	90" REAR FLAIL,SD,SMOOTH CUT
1	06320115	1	BONNET,90",STD,ROSTA
2	21731	8	CAPSCREW,1/2" X 1-1/2",NC
3	21990	8	LOCKWASHER,1/2"
4	21725	8	HEX NUT,1/2",NC
5	27975A	1	GUARD,CUTTERSHAFT
7	21632	20	CAPSCREW,3/8" X 1-1/2",NC
8	28967A	1	TRASH GUARD,90"
9	22016	56	FLATWASHER,3/8",GR8
10	21625	40	HEX NUT,3/8",NC
11	06530217	8	CAPSCREW,3/4" X 2-1/2",GR8,NC
12	06533006	8	FLATWASHER,1/2",SAE,L9
13	28683	2	BEARING,FLANGE,1-15/16",STD
14	33863	2	STRING GUARD,STD
15	27964C	1	CUTTERSHAFT,90"STD,W/EARS
16	21677	48	NYLOCK NUT,7/16",NC
17	TF1020	48	KNIFE MTG CLEVIS,FLAIL
18	33713	96	KNIFE,FLAIL,SHORT
18A	28184A	48	KNIFE,FLAIL,SMC,STD
19	34011	48	CAPSCREW,7/16" X 3-7/16",GR8,NC
20	TF1033	1	GREASE ZERK,1/8" FPT
21	TF1032	1	GRS HOSE,3/16" X 8"
22	28086A	2	SKID SHOE,STD DUTY,REAR FLAIL
23	30013	10	PLOW BOLT,3/8" X 1-1/4",GR5,NC
24	27972A	1	GROUND ROLLER,90"
25	TF1045B	2	STUB SHAFT, GROUND ROLLER
26	6T2330	8	CAPSCREW,SKT HD,7/16" X 1-1/2",NC
27	6T2331	4	CAPSCREW,SKT HD,7/16" X 1",NC
28	28735	2	GROUND ROLLER ADJ BRKT,STD DTY
29	06520028	2	BEARING,FLANGE,1-3/8",GRNDRLLR
30	06520029	2	O-RING,2-3/4" X 3/32"
31	06520027	2	CAP,BEARING,GRNDRLLR
32	06530001	12	CAPSCREW,SKT HD,8-32 X 1/2",SS
33	TF1116	1	FLAP,DEFLECTOR,90"
34	TF1035	1	BAR,FLAP,TSF/TRF,90"

96IN HYDRAULIC REAR FLAIL

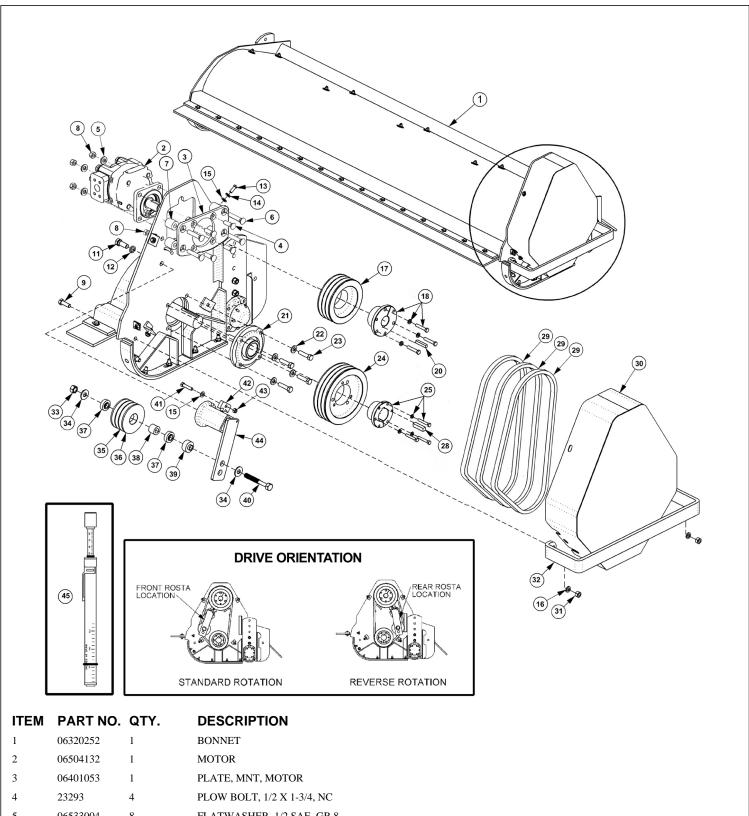


96IN HYDRAULIC REAR FLAIL

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	06420173	2	PIN,2.50 X 83.25,TRFS
2	06320252	1	BONNET, TRFS96, SD
3	21742	2	CAPSCREW,1/2" X 4 1/2", NC
4	06520522	4	BEARING,2.75 X 2.50 X 2.0,GSM
5	TF1120	2	PIN,1.13 X 4.27,CAP
6	06537021	4	ROLLPIN,5MM X 50MM
7	TB1033	2	PIN,1.00 X 3.00
8	TB3010	2	BUSHING,1"
9	6T3207	2	GREASE ZERK,1/4"
10	06770072	1	TRANSIT,FRONT,TRFS
11	TB1036	1	PIN,1.00 X 4.69,WØ.47,TAPER,SHLD
12	TF1143	3	PIN,LYNCH,.44 X 2.00
13	06533004	8	FLATWASHER,1/2",GR 8
14	21734	4	CAPSCREW,1/2" X 2 1/4",NC
15	21627	2	NYLOCK NUT,3/8", NC
16	06510083	1	BRAKE VALVE
17	6T2131	2	CAPSCREW,3/8" X 5-1/2", NC
18	22016	4	FLATWASHER,3/8",GR8
19	33555	4	ADAPTER,1"MB X 1"MJ
20	33259	3	ELBOW,1"MJ X 1"FJX 90°
21	24489	1	HOSE,1" X 64 1/2"
22	06500104	1	HOSE,1" X 64"
23	06503027	2	QCK CPLR,1", FEM,FLAT
24	06503028	2	QCK CPLR,1", MALE,FLAT
25	34117	1	ELBOW,1"MB X 1"MJ
26	06500642	2	HOSE,1" X 62"
27	33745	2	HOSE,1/4" X 100"
28	33271	4	ADAPTER,1/2" MOR X 3/8" MJ
29	06501031	1	CYLINDER
30	06770073	1	TRANSIT,REAR,TRFS
31	34943	1	ELBOW,20FLG90 X 1MJ
32	TF4852	2	FLANGE KIT
33	06504132	1	MOTOR
34	21727	6	NYLOCK NUT,1/2", NC
35	34183	1	ADAPTER,BULKHEAD,1"MJ X 1"MJ
36	33287	1	FITTING,BULKHEAD,1"MJ X 1"MOR
37	34181	1	UNION BLOCK,TRR,JD
38	22018	1	FLATWASHER,1/2"
39	21725	1	HEX NUT,1/2" NC
40	32900	2	QCK CPLR,M,1/2" X 1/2"FB
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96IN HYDRAULIC REAR FLAIL - DRIVE ASSEMBLY



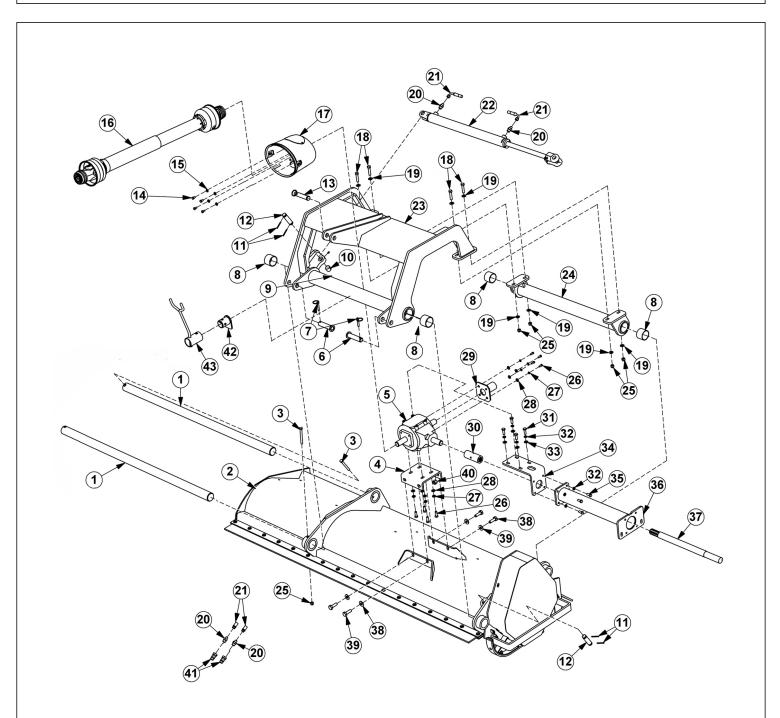
ITEM	PART NO.	QTY.	DESCRIPTION			
1	06320252	1	BONNET			
2	06504132	1	MOTOR			
3	06401053	1	PLATE, MNT, MOTOR			
4	23293	4	PLOW BOLT, 1/2 X 1-3/4, N			
5	06533004	8	FLATWASHER, 1/2 SAE, GR			
6	06537024	4	PLOW BOLT, 1/2 X 3, NC			
COMMON BEAD FLAW OR						
COMMON REAR FLAIL - SD						

96IN HYDRAULIC REAR FLAIL - DRIVE ASSEMBLY

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
7	06470007	4	BOSS, 1.25 X .56 X 1.347
8	21727	8	NYLOCK NUT, 1/2 NC
9	21731	4	CAPSCREW, 1/2 X 1-1/2 NC
10	22018	2	FLATWASHER, 1/2 WIDE
11	22421	1	CAPSCREW, 16MM X 40MM (2.0P)
12	31956	1	FLATWASHER, 16MM, HARDENED
13	21630	4	CAPSCREW, 3/8 X 1 NC
14	21988	4	LOCKWASHER, 3/8
15	22016	5	FLATWASHER, 3/8, GR8
16	21990	2	LOCKWASHER, 1/2
17	06520218	1	SHEAVE, 6.7, 3G5V, QD, SK
18	32696	1	BUSHING, SF 1-1/4 W/5/16 KEYWAY
20	TF1124	1	KEY, 5/16 SQ X 1-1/2RND
21	28683	2	BEARING, FLANGE, 1-15/16 STD
22	06533006	8	FLATWASHER, 1/2, SAE, L9
23	06530217	8	CAPSCREW, 1/2 X 2, NC,L9
24	06520236	1	SHEAVE, 7.5, 3G5V, SF
25	02967328	1	BUSHING, QD, HUB, SF 1-15/16
28	26142A	1	KEY, 1/2 SQ X 2
29	33756	3	V-BELT 54D
30	06320114	1	SHIELD, BELT, WLDMENT, STD
31	21725	1	HEX NUT, 1/2 NC
32	06410723	1	BAR, RUB
33	32838	1	HEX NUT, 5/8-11 UNC, GR8
34	33764	2	FLATWASHER, 5/8 GR8 SAE
35	06700092	1	ASSY, SHEAVE, IDLER, 3GRV
36	06420072	1	SHEAVE, IDLER, 3 GRV
37	31298	2	BRG, FAFNIR, 203KPR2
38	06430072	1	SPACER, 1.25 X 69 X 1.03
39	06420094	1	SPACER, 1.00 X 1.63OD X 64ID
40	33854	1	CAPSCREW, 5/8 X 4-1/2, NC, GR8
41	21632	1	CAPSCREW, 3/8 X 1-1/2 NC
42	06400717	1	STOP, ROSTA
43	21627	1	NYLOCK NUT, 3/8 NC
44	06520306	1	TENSIONER, ROSTA
45	06520386	1	GAGE, TENSION, PLUNGER

96IN PTO REAR FLAIL



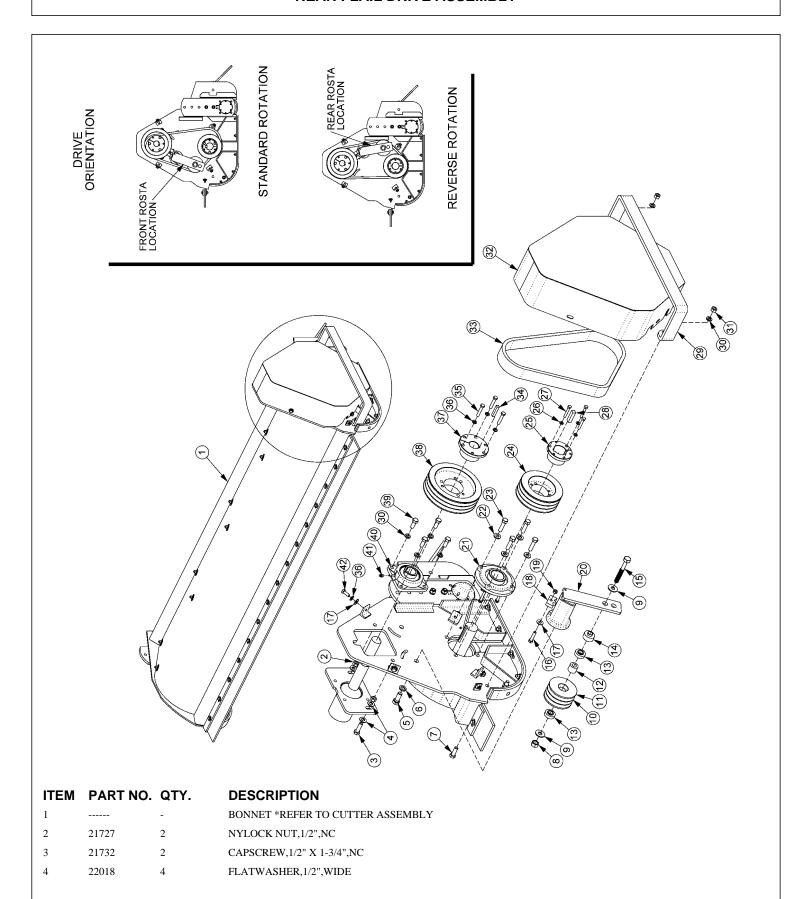
PART NO	OTY	DESCRIPTION				
06420170	2	PIN,2.5" X 68.88",TRFS				
	1	BONNET* REFER TO CUTTER ASSEMBLY				
21742	2	CAPSCREW,1/2" X 4 1/2", NC				
06412227	1	BRKT,TRFS96,SD,GRBX				
28950	1	GEAR BOX				
TF1120	2	PIN,1.13" X 4.27",CAP				
COMMON REAR FLAIL - SD						
	06420170 21742 06412227 28950 TF1120	1 21742 2 06412227 1 28950 1 TF1120 2				

96IN PTO REAR FLAIL

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
7	TF1143	3	PIN,LYNCH
8	06520522	4	BEARING,2.75" X 2.5" X 2.0",GSM
9	TB3010	2	BUSHING
10	6T3207	2	GREASE ZERK,1/4"
11	06537021	4	ROLLPIN,5MM X 50MM
12	TB1033	2	PIN,1.00" X 3.00"
13	TB1036	1	PIN,1.00X4.69,WØ.47",TAPER,SHLD
14	27507	4	CAPSCREW,8MM X 15MM(1.25 PITCH)
15	34948	4	FLATWASHER,8MM
16	06520414	1	PTO,DRV SHFT
17	06520181	1	GUARD,PTO,GRBX
18	21734	4	CAPSCREW,1/2" X 2 1/4",NC
19	06533004	8	FLATWASHER,1/2",GR 8
20	33271	4	ADAPTER,1/2" MOR X 3/8" MJ
21	33745	2	HOSE,1/4" X 100"
22	06501030	1	CYLINDER,2" X 24"
23	06770076	1	TRANSIT,FRONT,TRFS
24	06770077	1	TRANSIT,REAR,TRFS
25	21727	6	NYLOCK NUT,1/2" NC
26	27508	4	CAPSCREW,8MM X 20MM(1.25)
27	6T2619	4	LOCKWASHER,8MM
28	22015	4	FLATWASHER,5/16"
29	28447E	1	GUARD,OUTPUT SHAFT
30	28914	1	COUPLING,6 SPLINE W/ZERK
31	34890	4	CAPSCREW,12MM X 35MM(1.75 PITCH)
32	21989	8	LOCKWASHER,7/16"
33	22017	4	FLATWASHER,7/16"
34	33204	1	GUARD MNT PLATE
35	21679	4	CAPSCREW,7/16 X 1 NC
36	06320261	1	SAFETY TUBE
37	06420184	1	OUTPUT SHAFT
38	21783	4	CAPSCREW,5/8" X 2", NC
39	25270	4	FLATWASHER,5/8"
40	21777	4	NYLOCK NUT,5/8", NC
41	32900	2	QCK CPLR,M,1/2" X 1/2"FB
42	06370080	1	PTO SUPPORT BRKT
43	06370022	1	PTO SUPPORT

REAR FLAIL DRIVE ASSEMBLY

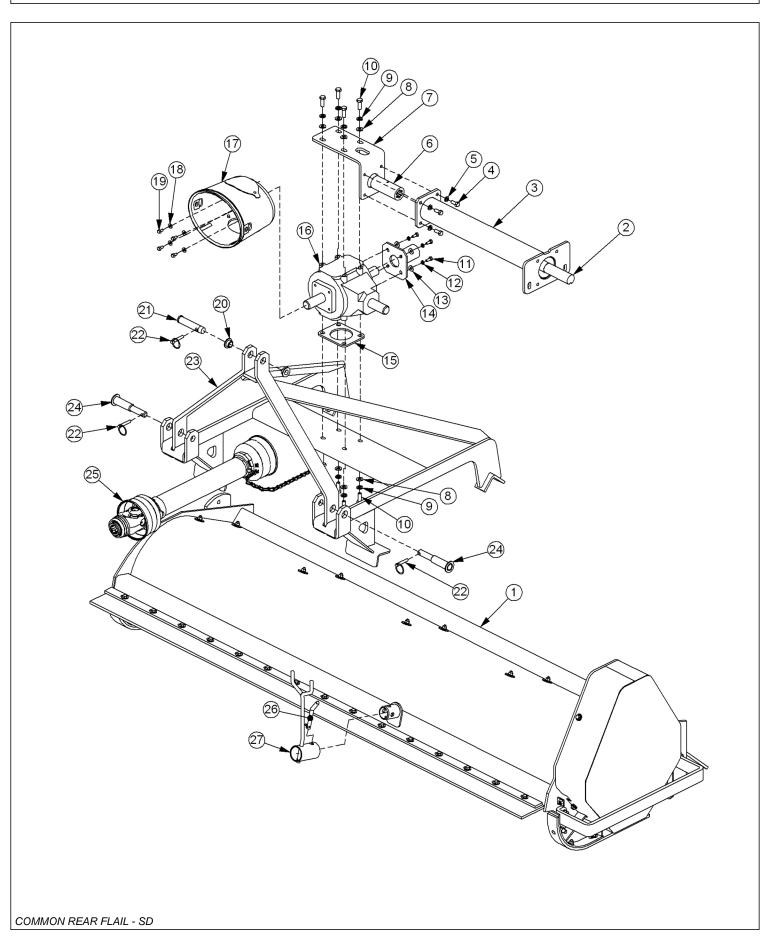


REAR FLAIL DRIVE ASSEMBLY

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
5	22421	-	CAPSCREW,16MM X 40MM(2.0P)
6	31956	-	FLATWASHER,16MM,HARDENED
7	21731	2	CAPSCREW,1/2" X 1-1/2",NC
8	32838	1	HEX NUT,5/8-11 UNC,GR8
9	25270	2	FLATWASHER,5/8",GR8,USS
10	06700092	-	ASSY,SHEAVE,IDLER,3 GRV
11	06420072	1	SHEAVE,IDLER,3 GRV
12	31298	2	BRG,FAFNIR,203KRR2
13	06430072	1	SPACER,1.25" X .69" X 1.03"
14	06420094	1	SPACER,1.00" X 1.63" X .64"
15	33854	1	CAPSCREW,5/8" X 4-1/2",GR8,NC
16	21632	1	CAPSCREW,3/8" X 1-1/2",NC
17	22016	5	FLATWASHER,3/8",GR8
18	06400717	1	STOP,ROSTA
19	21627	1	NYLOCK NUT,3/8",NC
20	06520306	1	TNSNR,ROSTA,SE38,W/MTG BOLT
21	28683	2	BEARING,FLANGE,1-15/16",STD
22	06533006	8	FLATWASHER,1/2",L9,SAE
23	06530217	8	CAPSCREW,1/2" X 2",L9,NC
24	06520218	1	SHEAVE,6.7",3G5V,QD,SK
25	28723	1	BUSHING,QD,SK 1-15/16"
26	21987	3	LOCKWASHER,5/16"
27	21584	3	CAPSCREW,5/16" X 2",NC
28	26142A	1	KEY,1/2"SQ X 2"
29	06410723	1	BAR,RUB
30	21990	6	LOCKWASHER,1/2"
31	21725	2	HEX NUT,1/2",NC
32	06320114	1	SHIELD,BELT,WLDMNT,STD
33	06520312	1	BELT,BANDED,3/5VX560
34	28224	1	KEY,3/8"SQ X 2"
35	21634	3	CAPSCREW,3/8" X 2",NC
36	21988	3	LOCKWASHER,3/8"
37	06520304	1	BUSHING,QD,SF 1-1/2",3/8" KEY
38	02967325	1	SHEAVE,8.5",3G5V
39	21730	4	CAPSCREW,1/2" X 1-1/4",NC
40	06520308	1	BRNG,FLNG,1-1/2",GRIP-TIGHT
41	6T3208	1	ZERK,1/8" X 45°
42	21630	4	CAPSCREW,3/8" X 1",NC
43	06520386	-	GAGE, TENSION, PLUNGER (NOT SHOWN)
44	06401023	-	WRENCH,ROSTA

PTO DRIVE ASSEMBLY

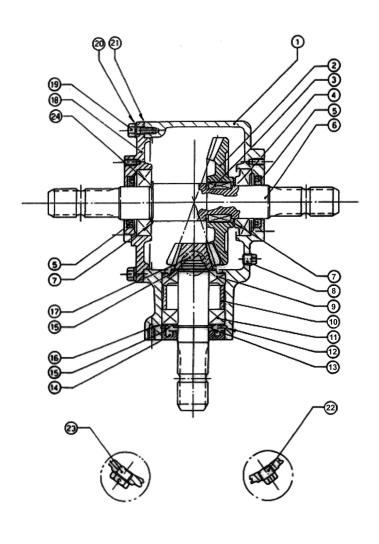


PTO DRIVE ASSEMBLY

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
1	06320134	1	BONNET,75,STD,ROSTA
	06320115	-	BONNET,90,STD,ROSTA
2	06420110	1	SHAFT,OUTPUT,TRF75
	06420109	-	SHAFT,OUTPUT,TRF75 (OFFSET)
	06420092	-	SHAFT,OUTPUT,TRF90
	06420109	-	SHAFT,OUTPUT,TRF90 (OFFSET)
3	06320133	1	TUBE,SAFETY,75,SD
	06320119	-	TUBE,SAFETY,75 (OFFSET)
	06320117	-	TUBE,SAFETY,90,SD
	06320119	-	TUBE,SAFETY,90 (OFFSET)
4	21679	4	CAPSCREW,7/16 X 1,NC
5	21989	4	LOCKWASHER,7/16
6	28914	1	COUPLING,6 SPLINE W/ZERK
7	33204	1	PLATE,MNT,GUARD
8	27724	8	LOCKWASHER,12MM
9	22017	4	FLATWASHER,7/16
10	34890	8	CAPSCREW,12MM X 35MM(1.75P)
11	27508	4	CAPSCREW,8MM X 20MM(1.25P)
12	6T2619	4	LOCKWASHER,8MM
13	22015	4	FLATWASHER,5/16
14	28447E	1	GUARD,TRF,OUTPUT SHAFT
15	06400018	1	SPACER,REAR FLAIL (IF NECESSARY)
16	28950	1	GEAR BOX,540 RPM
17	06520181	1	SHIELD,PTO
18	34948	4	FLATWASHER,3/8
19	27507	4	CAPSCREW,8MM X 15MM(1.25P)
20	28235A	2	BUSHING,3PT,CAT II TO CAT I
21	TB1036	1	PIN,SEC BOOM SWIV 1 X 4-11/16
22	TF1143	3	PIN,LYNCH,7/16 X 2
23	06370154	1	FRM,3PT,STD
24	28234B	2	PIN,3PT,TRF,STD
25	06520414	1	PTO,DRV SHFT,TRF
	06520415	-	PTO,DRV SHFT,TRF,W/ CLUTCH
26	06520048	1	PIN,.5 X 2.5,BENT,W/R-CLIP
27	06370022	1	SUPPORT,PTO
I			

REAR GEAR BOX ASSEMBLY

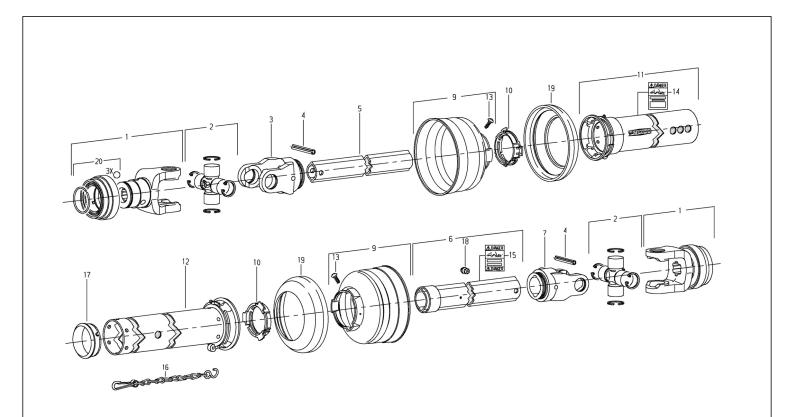


REAR GEAR BOX ASSEMBLY

Continued...

ITEM	PART NO.	QTY.	DESCRIPTION
	28950	-	GEAR BOX ASSEMBLY,SD
1	30133	1	CASING
2	30134	1	CROWNWHEEL Z30
3	30135	2	PARALLEL KEY
4	28604	1	BEARING 30208
6	30136	2	OIL SEAL 40 X 62 X 7
7	30137	1	SHAFT
8	28603	2	SHIM
9	30138	1	PLUG
10	30139	1	BEARING 30207
11	30140	1	SPACER
12	30141	1	BEARING 6207
13	30142	1	INTERNAL CIRCLIP 72
14	30143	1	EXTERNAL CIRCLIP 35
15	30144	2	OIL SEAL 35 X 72 X 10
16	30145	1	SHIM
17	30146	1	SHIM
18	30147	1	PINION Z10
19	30148	1	COVER
20	30149	6	HEX BOLT M8 X 22
21	30151	6	SEAL
22	30152	1	PLUG
23	30153	1	OIL FILLER PLUG
24	30154	1	BEARING 6208

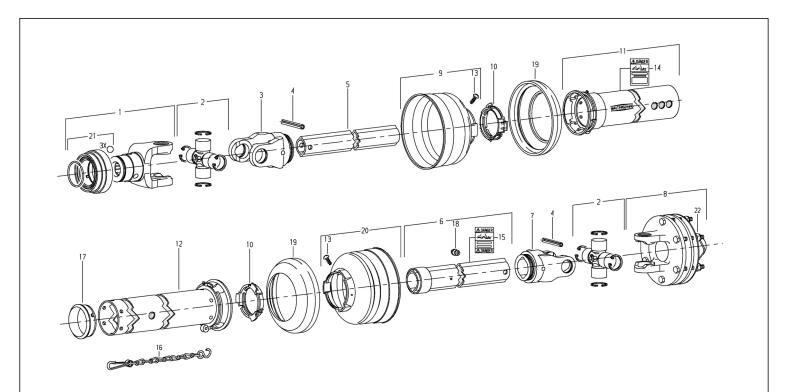
PTO SHAFT ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
	06520414	-	PTO,DRV SHFT,TRF
1	00775353	2	YOKE 1-3/8"-6 SPL.
2	00189700	2	CROSS & BEARING KIT
3	00775317	1	INBOARD YOKE 1B
4	00756934	2	SPRING PIN
5		1	INNER PROFILE 1B
6		1	PROFILE & SLEEVE
7	00775318	1	INBOARD YOKE 2A
9	06505010	2	GUARD CONE
10	8393	2	BEARING RING
11		1	GUARD TUBE,OUTER
12		1	GUARD TUBE,INNER
13	00759217	2	SCREW (ITEM 9)
14	00756005	1	DECAL,OUTER (ITEM 11)
15	00756004	1	DECAL,INNER (ITEM 6)
16	1416412	1	RESTRAINT CHAIN
17		1	SUPPORT BEARING
18		1	ZERK (ITEM 6)
19		2	REINFORCING COLLAR
20	00767954	1	KIT,COLLAR (ITEM 1)
	06520471	1	GUARD,PTO,KIT

COMMON REAR FLAIL - SD

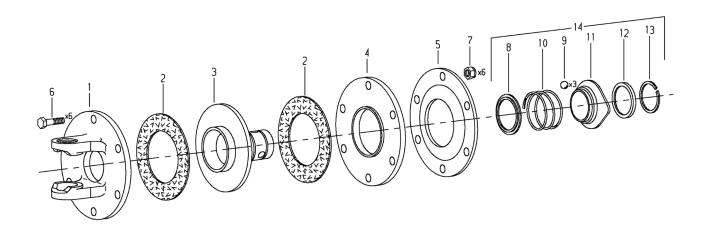
PTO SHAFT ASSEMBLY WITH CLUTCH



ITEM	PART NO.	QTY.	DESCRIPTION
	06520415	-	PTO,DRV SHFT,TRF,CLUTCH
1	00775353	1	YOKE 1-3/8"-6 SPL.
2	00189700	2	CROSS & BEARING KIT
3	00775317	1	INBOARD YOKE 1B
4	00756934	2	SPRING PIN
5		1	INNER PROFILE 1B
6		1	PROFILE & SLEEVE
7	00775318	1	INBOARD YOKE 2A
8	00775365	1	FRICTION CLUTCH
9	06505010	2	GUARD CONE
10	8393	2	BEARING RING
11		1	GUARD TUBE,OUTER
12		1	GUARD TUBE,INNER
13	00759217	2	SCREW (ITEM 9)
14	00756005	1	DECAL,OUTER (ITEM 11)
15	00756004	1	DECAL,INNER (ITEM 6)
16	1416412	1	RESTRAINT CHAIN
17		1	SUPPORT BEARING
18		1	ZERK (ITEM 6)
19		2	REINFORCING COLLAR
20		1	GUARD CONE
21	00767954	1	KIT,COLLAR (ITEM 1)
22	0921000470	1	KIT,FLANGE (ITEM 8)
	06520471	1	GUARD,PTO,KIT

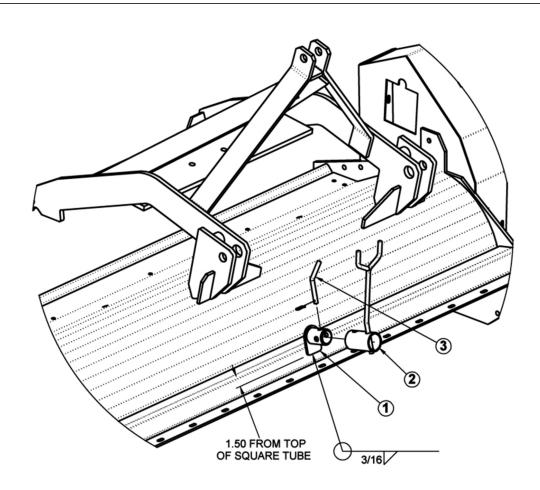
COMMON REAR FLAIL - SD

CLUTCH ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
	00775365	-	CLUTCH ASSY
1		1	FLANGE YOKE
2		2	FRICTION DISC
3		1	HUB
4		1	THRUST PLATE
5		1	BELLE VILLE SPRING
6		6	HEX BOLT
7		6	HEX LOCKNUT
8		1	BACK-UP RING
9		3	BALL
10		1	COMPRESSION SPRING
11		1	LOCK COLLAR
12		1	BACK-UP RING
13		1	SNAP RING
14	0921000470	-	KIT(ITEMS 8 THRU 13)

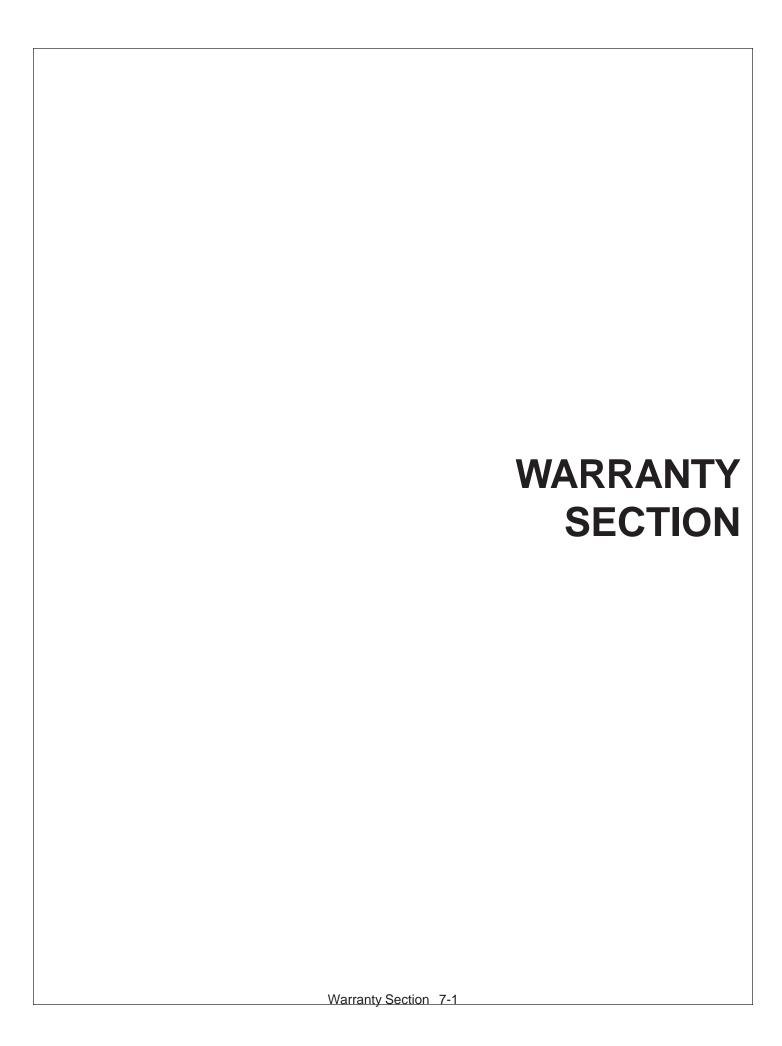
PTO STAND



- NOTES:
 1. LOCATE ITEM 1 ON TUBE
 AS SHOWN, CENTER ON
 GEAR BOX SHAFT.
- WELD ITEM 1 AS SHOWN AFTER LOCATING 2.
- AFTER WELDING, PIN ITEM 2 IN PLACE WITH ITEM 3. 3.

ITEM	PART NO.	QTY.	DESCRIPTION
1	06370080	1	BRACKET,SUPPORT
2	06370022	1	SUPPORT,PTO
3	06520048	1	PIN,BENT,W/ R-CLIP

NOTES 1
NOTES
COMMON REAR ELAIL - SD



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:

- 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

