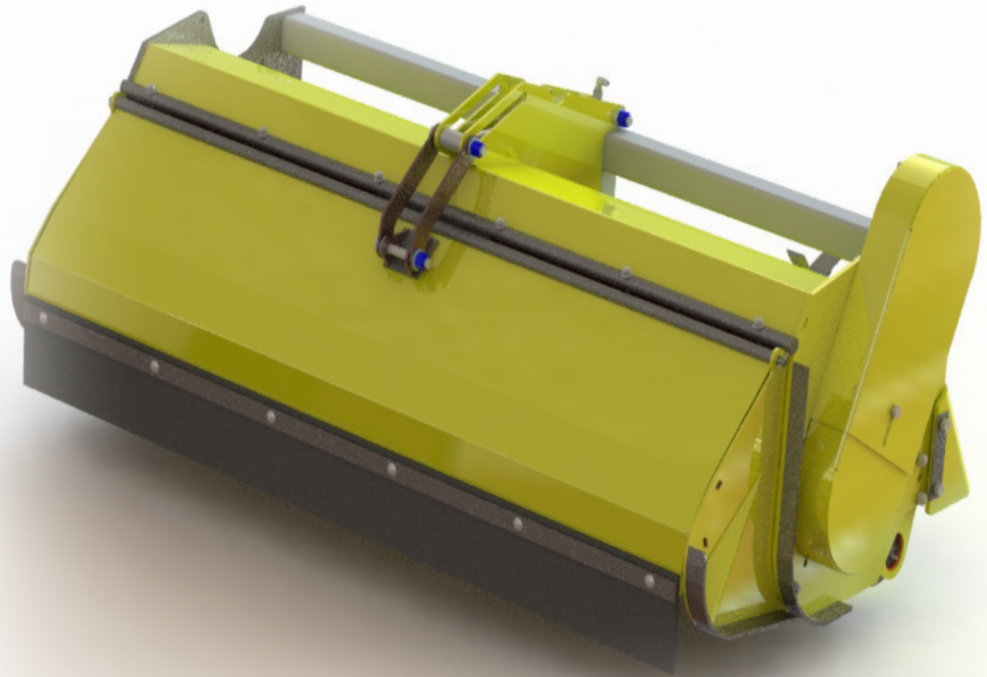




BUILT SHARPER®

An Alamo Group Company

60 Inch Grass Flail (2018 to Present)



Alamo Industrial®

1502 E. Walnut
Seguin, Texas 78155
830-379-1480
alamo-industrial.com

¡ATENCIÓN!

LEA EL INSTRUCTIVO

Si No Lee Ingles, Pida Ayuda a Alguien
Que Si Lo Lea Para Que le Traduzca las
Medidas de Seguridad.



An Operator's Manual was shipped with the equipment in the Manual Canister. This Operator's Manual is an integral part of the safe operation of this machine and must be maintained with the unit at all times. READ, UNDERSTAND, and FOLLOW the Safety and Operation Instructions contained in this manual before operating the equipment. If the Operator's Manual is not with the equipment, contact your dealer or Alamo Industrial (800-356-6286) to obtain a Free copy before operating the equipment.

Rev 01-20

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Part No. 02998150

Introduction

Health and Safety Statement

The health and safety of employees and guests of Alamo Industrial is of primary concern for Alamo Industrial. Alamo Industrial strives to comply with OSHA regulations and our own health, environmental and safety policies. Alamo Industrial is committed to the goal of providing an accident free work place by providing a safe and productive work environment. All employees and guests are required to comply with all Alamo Industrial safety rules in all of their activities. Employees and guests are required to wear Personal Protective Equipment, which includes safety glasses with side shields, hearing protection, safety shoes with metatarsal guards, while in the Alamo Industrial manufacturing facility.

Personnel safety requires each person to be aware of potential hazards associated with the work, paying attention, following instructions, not taking risks, and watching out for other workers. The help and support of each guest is essential to the success of our safety objectives. Each of us is responsible for our own safety and for the safety of fellow workers and guests. Together we can learn and work safely and enjoy our experiences at Alamo Industrial.

Contact Information

Contact Information

To help you assemble your new mower and mount it to your tractor, we provide you with drawings, instructions and general information. When needed, you can get information or clarification from Alamo Industrial Customer Service over the phone.

How to Contact Alamo Industrial To Place Orders

1. Visit www.alamo-industrial.com
2. Call or visit your local Alamo Industrial dealer (Dealer listing can be found on www.alamo-industrial.com)
3. Call Alamo Industrial Customer Support to speak with your assigned Account Manager*
4. Fax or e-mail your orders to your assigned Customer Support Account Manager*

*Orders placed over the phone, fax, or e-mail are subject to a 5% loss of contracted discount

For parts identification please visit <http://www.alamo-industrial.com/ProductManuals>

Customer Support Contact Information

Phone Toll Free 1-800-356-6286

Fax 1-800-322-5041

Operational Hours

8 AM to 5 PM CST.

Monday Through Friday

parts@alamo-industrial.com

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CONTENTS

Section 10: Safety	6
General Safety Instructions and Practices	7
Operator Safety	8
Hazards	11
Decal Location	20
Section 20 Parts	30
60 Inch Flail Head P/N 02998031	32
60 Inch Flail Head ,No Door - P/N 02998605	34
60 Inch Grass Flail Sub Assy With Door - P/N 02998103	36
60 inch Grass Flail, Piston, 3 Axis Hitch With Door P/N 02999741	38
60 inch Grass Flail, Piston, 3 Axis Hitch No Door P/N 02999742	40
60 Inch Grass Flail,Piston, Swvl Door P/N 02998068	42
60 Inch Flail, Cuttershaft - P/n 02999678	44
60 Inch Grass Flail, Pulley Assembly	46
60 Inch Grass Flail, Piston Assembly	48



SECTION 10

SAFETY

SAFETY

GENERAL SAFETY INSTRUCTIONS AND PRACTICES

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



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

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



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



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



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

Important

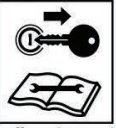
Identifies special instructions or procedures that, if not strictly observed, could result in damage to, or destruction of the machine, attachments or the environment.

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.



Pictographs are used throughout this manual to help bring your visual attention to safety issues.

SAFETY HAZARD	SAFETY AVOIDANCE	SAFETY PREVENTION
Pictograph surrounded by a triangle indicates a Safety Hazard that must be avoided. Example:  Equipment contacting overhead electrical lines	Pictograph by itself or inside a box indicates an avoidance procedure that should be followed to prevent injuries. Example:  Always shut off engine and remove key before working on equipment.	A circle with a slash through it indicates an action that is prohibited. Example:  No Smoking

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

SAFETY

Operator Safety

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

WARNING

TO AVOID SERIOUS INJURY OR DEATH DO THE FOLLOWING:

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

GENERAL OPERATING SAFETY

VISIBILITY CONDITIONS WHEN MOWING:

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

GROUND SPEED WHEN MOWING:

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

TRACTOR and MOWER

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

INSECT INFESTATION

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

PTO SPEED:

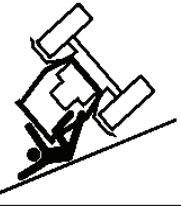
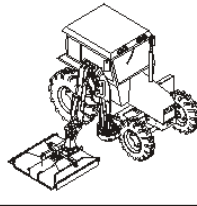
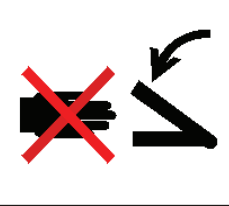
- **DO NOT EXCEED IMPLEMENT RATED PTO SPEED**
- **AVOID** exceeding rated PTO speeds that may result in broken drivelines or blade failures.

SAFETY SIGNS:

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

SAFETY

CRUSHING HAZARDS

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



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

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

WHEN RAISING BOOM MOWER:

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

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



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

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

WHEN PARKING Implement and Tractor:

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

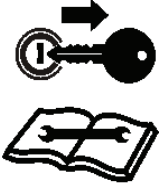


TO AVOID CHILDREN FALLING OFF OR BEING CRUSHED BY EQUIPMENT:

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

SAFETY

CONNECTING OR DISCONNECTING IMPLEMENT SAFETY

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



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

WHEN connecting mower head to the boom:

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

BEFORE connecting and disconnecting the mower head or boom:

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

WHEN connecting and disconnecting the mower head or boom:

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

WHEN CONNECTING IMPLEMENT DRIVELINE:(If equipped)

TO AVOID implement driveline coming loose during operation:

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

TO AVOID broken driveline during operations:

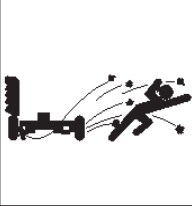
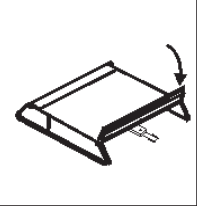
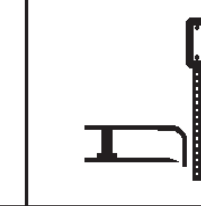
- **CHECK** driveline for proper length between PTO shaft and implement gearbox shaft. *(Refer to Instructions in Operation Section)*
- Drivelines too short can pull apart or disengage.
- Drivelines too long can bottom out.
- Bottoming driveline telescoping assembly will stop sliding and become solid.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

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

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

SAFETY

THROWN OBJECTS HAZARDS

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



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

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

- KEEP bystanders 300 feet away

STOP MOWING IF PASSERSBY ARE WITHIN 300 FEET UNLESS:

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

INSPECT AREA FOR POTENTIAL THROWN OBJECTS BEFORE MOWING:

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

HIGH GRASS and WEED AREA INSPECTION:

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

MOWER THROWN OBJECT SHIELDING:

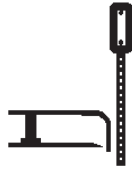
- **KEEP** all thrown object shielding including, Front and Rear Deflectors, Chains Guards, Steel Guards, Bands, Side Skirts and Skid Shoes in place and in good condition when mowing.
- **DO NOT OPERATE** with any thrown object shielding missing, damaged or removed.

RIGHT OF WAY (Highway) MOWING

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

SAFETY

THROWN OBJECTS HAZARDS (Continued)

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

MOWER OPERATION:

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

SAFETY

RUN OVER HAZARDS

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



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

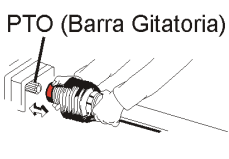
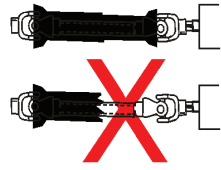
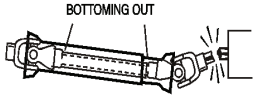
- **USE ROPS** and **SEAT BELT** equipped tractors for mowing operations.
- **KEEP ROPS** locked in **UP** position.
- **ONLY** start tractor while seated in tractor seat.
- **ALWAYS BUCKLE UP** seat belt when operating tractor and equipment.
- **ONLY OPERATE** tractor and equipment while seated in tractor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

WHEN MOUNTING AND DISMOUNTING TRACTOR:

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

SAFETY

PTO ENTANGLEMENT HAZARDS

			
Entanglement hazard Do Not approach or touch a rotating PTO driveshaft	Make sure PTO shaft is securely attached Do Not Use PTO Adapter	DO NOT Operate if PTO shields are damaged or missing	Make sure PTO shafts are proper length



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

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

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

PTO SHIELDING:

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

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

TO AVOID broken driveline during operations:

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

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

- **DO NOT USE PTO ADAPTER.**

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

SAFETY

MOWER BLADE CONTACT HAZARDS

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



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

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

SAFETY

HIGH PRESSURE OIL LEAK HAZARD

			
High pressure oil penetrating skin	High pressure oil eroding skin	Using cardboard to check for oil leaks	Tank contents under pressure. Allow oil to cool before slowly removing cap



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

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

HIGH PRESSURE FLUID LEAKS CAN BE INVISIBLE.

WHEN CHECKING FOR HYDRAULIC LEAKS AND WORKING AROUND HYDRAULIC SYSTEMS:

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

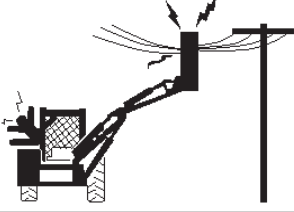
Use caution when removing Hydraulic Tank cap.

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

PN HPBM-01

SAFETY

ELECTRICAL & FIRE HAZARDS

		
Mower head or Boom contacting overhead electrical lines	Strike and explosion Hazard Blades Contacting Utility or Gas Lines	Fire Hazard Do Not operate near fires. Keep debris away from hydraulic pumps and valves



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

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

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

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

SAFETY

TRANSPORTING HAZARDS

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



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

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

TRACTOR REQUIREMENTS FOR TOWING OR TRANSPORTING IMPLEMENTS:

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

BEFORE TRANSPORTING OR TOWING IMPLEMENT:

TRACTOR INSPECTION:

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

PREPARE IMPLEMENT FOR TRANSPORTING OR TOWING:

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

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

BRAKING TESTS:

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

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

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

WHEN TOWING OR TRANSPORTING EQUIPMENT:

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

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

SAFETY

HAZARDS WITH MAINTENANCE OF IMPLEMENT

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

WARNING

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

BEFORE PERFORMING SERVICE, REPAIRS AND MAINTENANCE ON THE IMPLEMENT:

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

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

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

BLADE INSPECTION:

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

SAFETY SHIELDS, GUARDS AND SAFETY DEVICES INSPECTION:

- **KEEP** all Deflectors, Chain Guards, Steel Guards, Gearbox Shields, and PTO integral shields, Bands, Side Skirts and Skid Shoes in place and in good condition.
- **REPLACE** any missing, broken or worn safety shields, guards and safety devices.
- **PROPOSITION 65** - Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.
- Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. **PN HMBM-01**

SAFETY

PARTS INFORMATION

PARTS INFORMATION

Alamo Industrial 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 Alamo Industrial 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 Alamo Industrial mower parts for economy and safety. (SPAM-1)

SEE YOUR ALAMO DEALER

Operator's & Parts Manuals

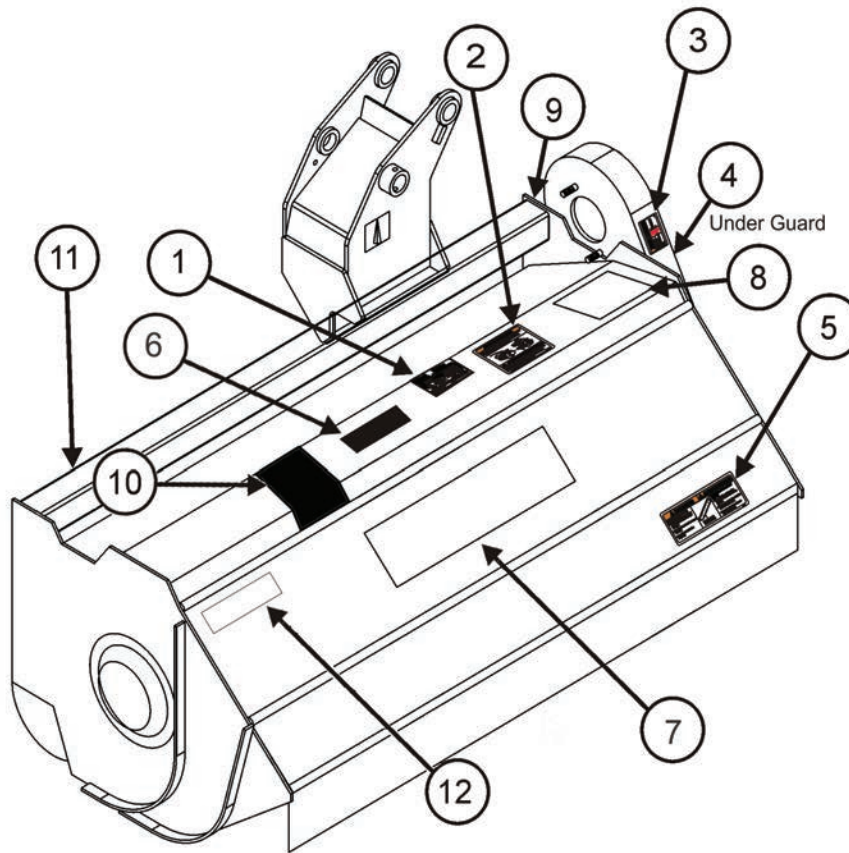


www.algqr.com/apm

Decal Location

NOTE: Alamo Industrial supplies safety decals on this product to promote safe operation. Damage to the decals may occur while in shipping, use, or reconditioning. Alamo Industrial 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 Alamo Industrial dealer to order replacement decals.

SAFETY



DL-FL-0022

ITEM	PART NO.	QTY.	TYPE	DESCRIPTION
1.	D564	1	WARNING	Use Genuine Parts
2.	D637	1	WARNING	Disconnect Hydraulic Solenoid
3.	D641	1	WARNING	Belt Shield
4.	D646	1	WARNING	Shields & Guards
5.	D626	1	DANGER	Thrown Object Hazard
6.	D661	1	INSTRUCT	Lubrication Chart
7.	00757139	1	LOGO	Alamo Industrial Logo
8.	000108	1	INSTRUCT	Flail Operation Instructions
9.	nfs	1	SERIAL PLATE	Flail Head Serial Plate
10.	D622	1	DANGER	Thrown Object Hazards
11.	1458392	1	REFLECT	Red Reflector
12.	1458393	1	REFLECT	Yellow Reflector

SAFETY

IMPORTANT

TO AVOID ELECTRICAL EQUIPMENT DAMAGE:

- DISCONNECT computer modules BEFORE welding on any part of unit.
- DISCONNECT tractor battery BEFORE welding on any part of unit.

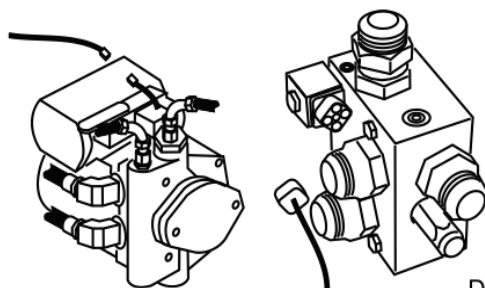
D627



⚠ WARNING

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

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



D637

IMPORTANT

Over speeding the engine will D624
overheat and rapidly decrease the life
of hydraulic components.

To prevent premature hydraulic component failure:

- DO NOT overspeed engine.
- Operate tractor at 540 PTO speed.

SAFETY

⚠ DANGER

THROWN OBJECT HAZARD

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

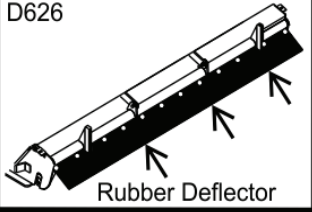
- Maintain Rubber Deflectors in good condition.
- Inspect Rubber Deflectors frequently.

MAINTAIN Thrown Object Shielding

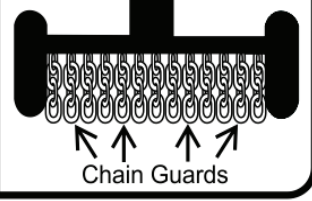
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D626



Rubber Deflector



Chain Guards

⚠ WARNING

TO AVOID SERIOUS INJURY AND DEATH FROM THROWN OBJECTS:

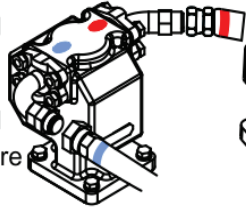
- MAKE CERTAIN blades rotate the correct direction.

BLADE ROTATION

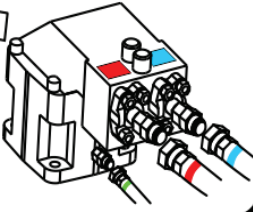


D619

Gear Motor



Piston Motor

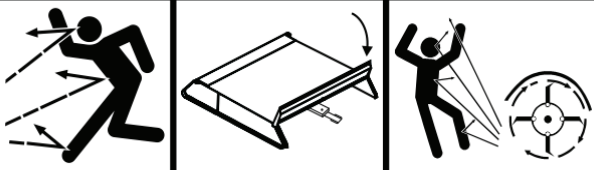


Return

Pressure

SAFETY

⚠ DANGER



THROWN OBJECTS HAZARD

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

- CLOSE MOWER DOOR and STOP operating if bystanders or traffic come within 300 feet.
- KEEP door fully closed when cutting grass and weeds.
- OPEN door ONLY to cut large brush. Close door immediately after.
- DO NOT operate with door removed.
- KEEP door in place and in good condition during operation.
- Deflectors are SUBJECT TO WEAR. Replace if worn or damaged.
- ALWAYS transport with door closed.

D622

ENTANGLEMENT HAZARD

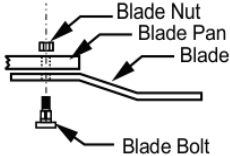


- STAY AWAY and KEEP hands, feet and body AWAY from rotating blades, drivelines and parts that continue to move after power shut-off. WAIT until all moving elements have stopped.
- STOP, LOOK and LISTEN for rotating motion before approaching implement.

⚠ WARNING

TO AVOID SERIOUS INJURY OR DEATH FROM BLADE ATTACHMENT FAILURE:

- Torque blade bolt to 600 ft lbs.
- ALWAYS replace blades in pairs.
- ALWAYS replace blades with new bolts and nuts.



D620

SAFETY

WARNING

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

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

Contact local dealer or ALAMO INDUSTRIAL about repair parts

at:

1502 E. Walnut, Seguin, TX 78155.

Customer Service: 800-882-5762.

Email: support@alamo-industrial.com



www.algqr.com/apm

IMPORTANT

**BE AWARE
BE ALERT
BE ALIVE**

BE TRAINED

Before Operating this Mower

To prevent serious injury to yourself and/or bystanders, be trained in Safe Mowing Practices. Alamo Group Companies as well as AEM and FEMA provide training material that is critical for your Safety and the Safety of others when operating this equipment. Make these Safety Procedures an important part of every

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



www.algqr.com/abv

D564

D564_B

IMPORTANT

- Lubricate spindle every 40 hours of use or weekly.
- With tractor and mower off, inject lubricant into spindle.
- See Operator's Manual for substitute lubricant and detailed instructions.

D621

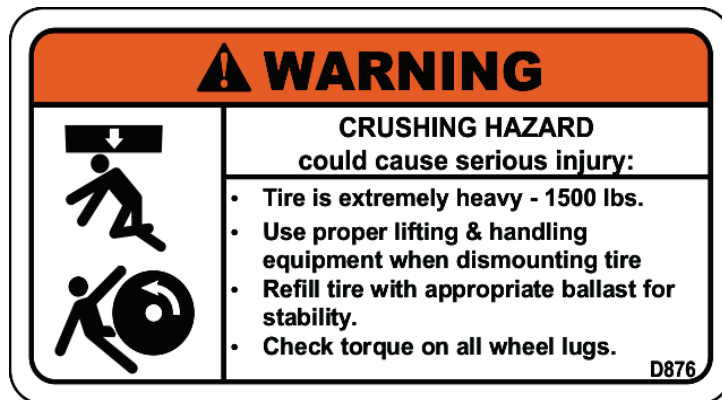
SAFETY



SAFETY



SAFETY



SAFETY

Federal Laws and Regulations

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

Employer-Employee Operator Regulations

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

This Act Seeks:

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

DUTIES

Sec. 5 (a) Each employer-

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

OSHA Training Requirements

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

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

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

Permit no riders on equipment

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

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

Employer Responsibilities:

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

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

Child Labor Under 16 Years of Age

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

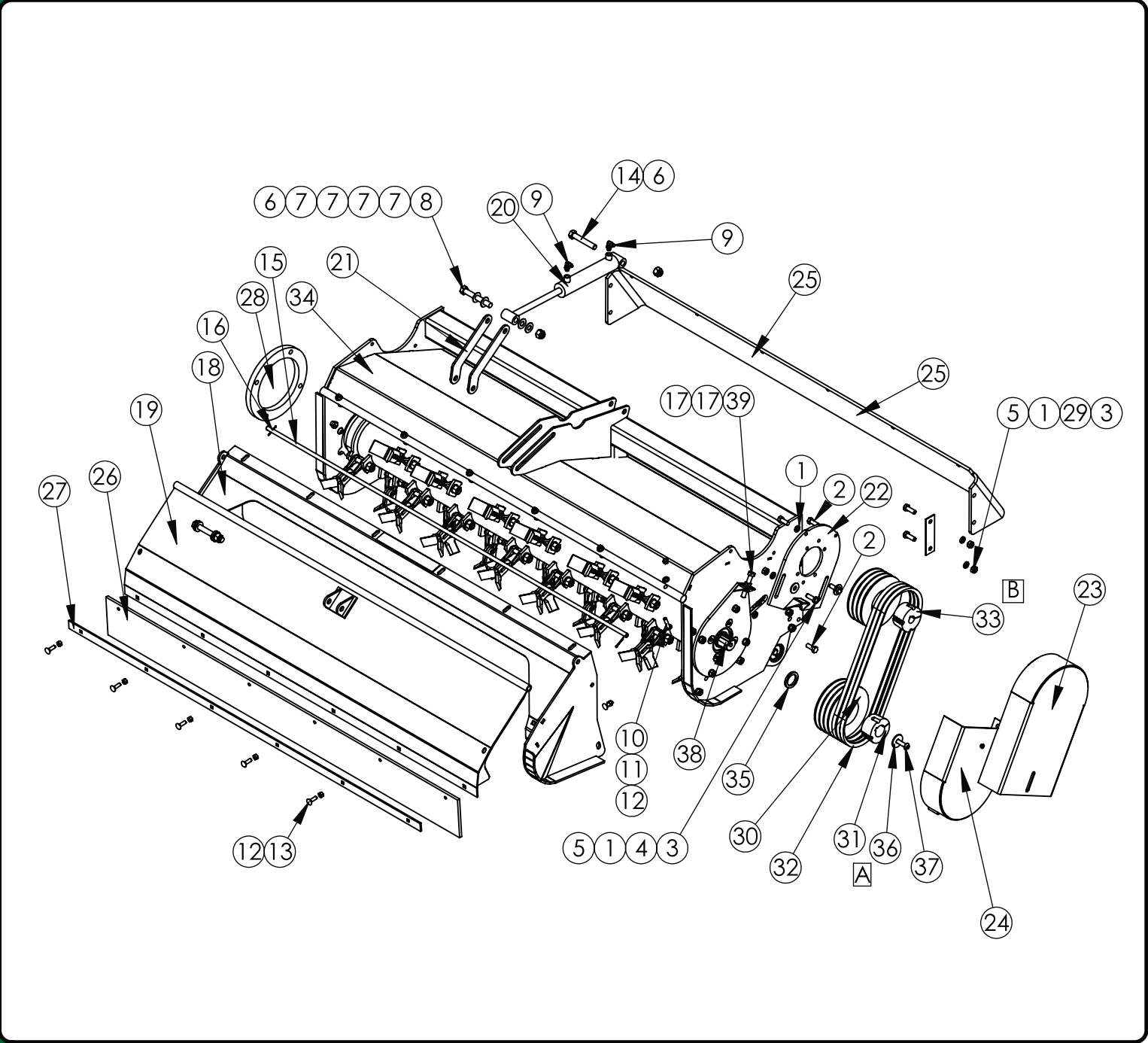
SECTION 20

PARTS

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60" FLAIL HEAD

60 Inch Grass Flail



Click on the model to rotate

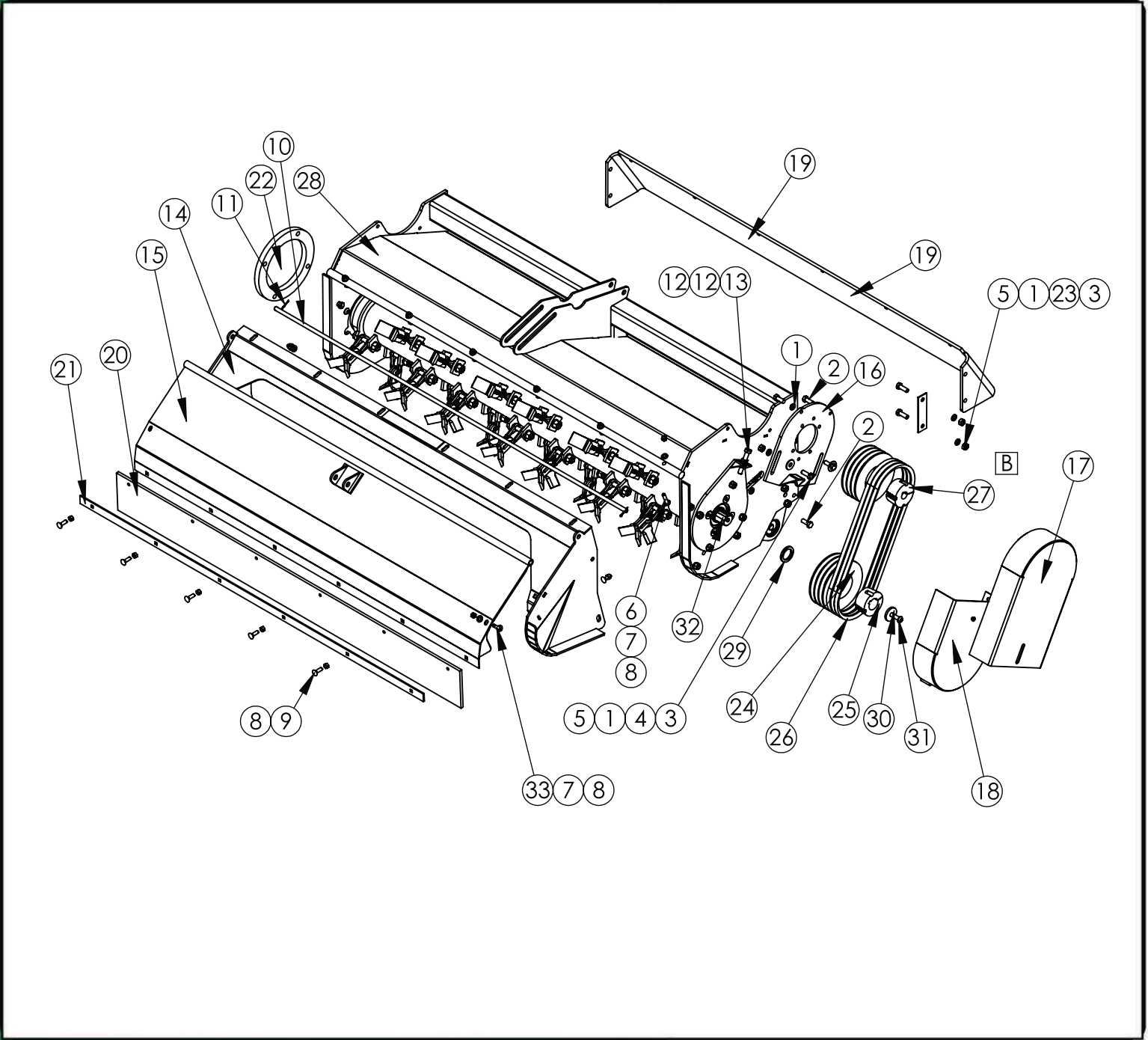
Notes:

60" FLAIL HEAD

ITEM NO.	PART NUMBER	DESCRIPTION	Default/QTY
1	00754566	LOCKWASHER, 12MM	14
2	00756026	HHCS 12mm X 30mm LG	3
3	02998060	HEXB 12mm X 35MM LG	10
4	00002700	FLATWASHER, 1/2 PL STD	2
5	00762413	NUT MET 12MM	11
6	02991279	TOP LOCKNUT, NYLON, 5/8	3
7	00001400	FLATWASHER 5/8 PL STD	8
8	02975147	HHCS 5/8"NC X 4-1/2" GR8	2
9	02960018	ADP, HYD, ELBOW, 4MB-4MJ90	2
10	02998061	CARB 3/8 x 1 3/4 GR 5 PL	6
11	00011100	FLATWASHER 3/8 STD	6
12	00015800	LOCKNUT TLM 3/8 NC PLC	18
13	000644	CARB 3/8 NC 1-1/4 PL5	12
14	7B101130	HHCS 5/8 NC 3-3/4 PL8	1
15	02997787	HINGE PIN	1
16	40010000	PIN, COTTER 1/8X1	2
17	02988071	FLANGE NUT, 1/2"-13 NC	2
18	02997795	WLDMT SKID	1
19	02997796	WLDMT, BOM DOOR	1
20	02981316	CYLINDER, DOOR	1
21	02997788	PLATE, HINGE LINK	2
22	02998009	WLDMT MOTOR MOUNT	1
23	02998013	WLDMT, TOP PULLEY COVER	1
24	02998014	WLDMT BOTTOM PULLY COVER	1
25	02997977	REAR FLAP, BOMFORD	1
26	02997978	FRONT FLAP BOMFORD	1
27	02998032	FLAP RETAINER BAR	2
28	02998015	WLDMT, CAP	1
29	02998030	PLATE GUARD REAR	2
30	03.795.02	PULLEY-VEE 180MM PCD X 3SPA	2
31	05.424.18	BUSH, TAPERLOCK 40MM (2517)	1
32	05.299.53	BELT 60 FLAIL	3
33	05.424.07	BUSHING, TAPERLOCK,1 BORE	1
34	02998103	SUB-ASY,GRASS FLAIL,DOOR,	1
35	02998115	THRUST WASHER	1
36	02998327	WASHER FENDER 1/2 x 1 3/	1
37	02998059	BUTTON HD,12MMx50MM(1.75)	1
38	05.960.16	KEY-S/REP 12MM X 8MM X 40MM	1
39	00753013	HHCS 1/2 NC 3 PL8	1

**60" FLAIL HEAD
NO DOOR**

60 Inch Grass Flail



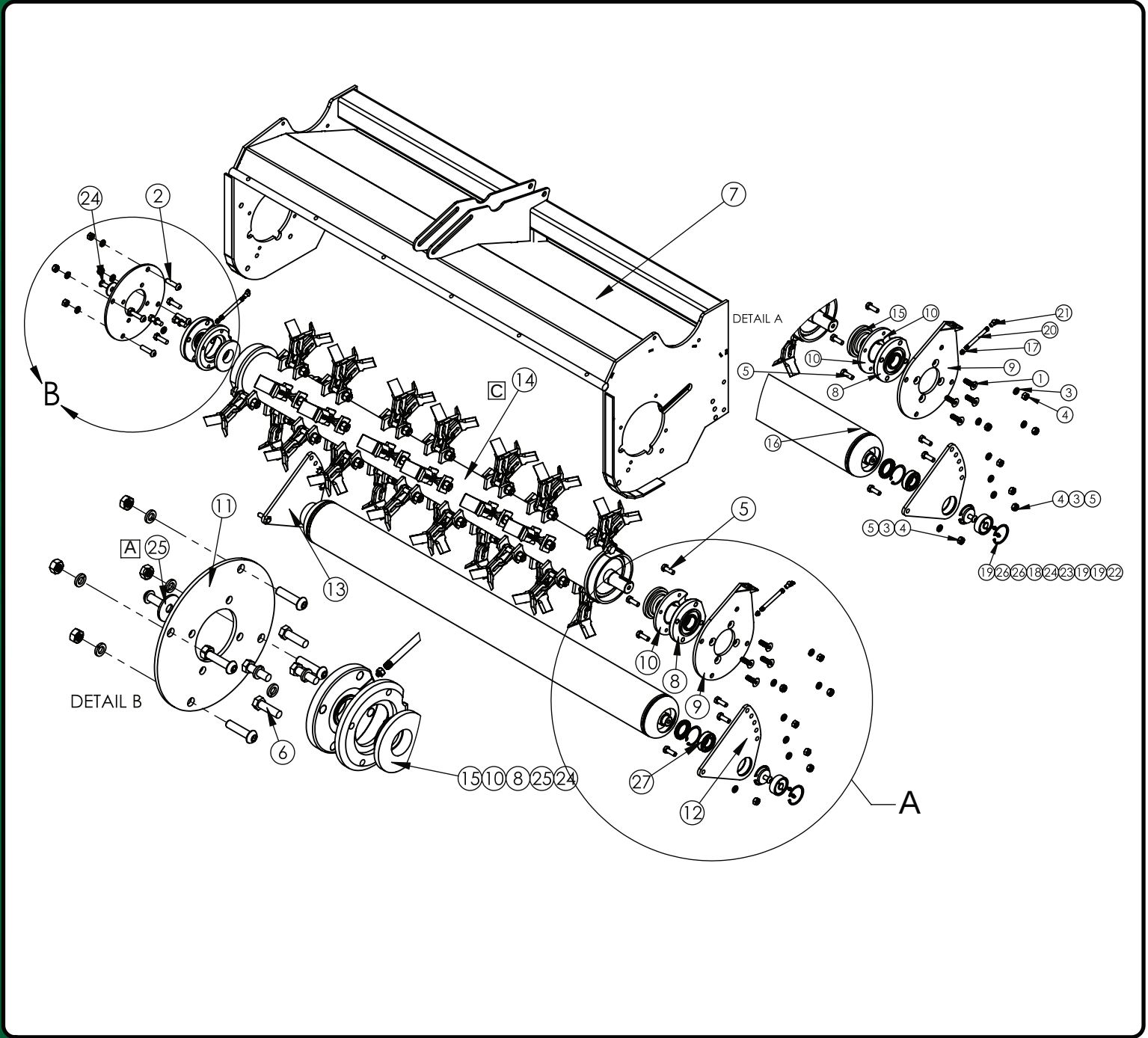
Notes: P/N 02998605

60" FLAIL HEAD NO DOOR

ITEM NO.	PART NUMBER	DESCRIPTION	Default/QTY
1	00754566	LOCKWASHER, 12MM	14
2	00756026	HHCS 12mm X 30mm LG	3
3	02998060	HEXB 12mm X 35MM LG	10
4	00002700	FLATWASHER, 1/2 PL STD	2
5	00762413	NUT MET 12MM	11
6	02998061	CARB 3/8 x 1 3/4 GR 5 PL	6
7	00011100	FLATWASHER 3/8 STD	8
8	00015800	LOCKNUT TLM 3/8 NC PLC	20
9	000644	CARB 3/8 NC 1-1/4 PL5	12
10	02997787	HINGE PIN	1
11	40010000	PIN, COTTER 1/8X1	2
12	02988071	FLANGE NUT, 1/2"-13 NC	2
13	00753013	HHCS 1/2 NC 3 PL8	1
14	02997795	WLDMT SKID	1
15	02997796	WLDMT, BOM DOOR	1
16	02998009	WLDMT MOTOR MOUNT	1
17	02998013	WLDMT, TOP PULLEY COVER	1
18	02998014	WLDMT BOTTOM PULLY COVER	1
19	02997977	REAR FLAP, BOMFORD	1
20	02997978	FRONT FLAP BOMFORD	1
21	02998032	FLAP RETAINER BAR	2
22	02998015	WLDMT, CAP	1
23	02998030	PLATE GUARD REAR	2
24	03.795.02	PULLEY-VEE 180MM PCD X 3SPA	2
25	05.424.18	BUSH, TAPERLOCK 40MM (2517)	1
26	05.299.53	BELT 60 FLAIL	3
27	05.424.07	BUSHING, TAPERLOCK,1 BORE	1
28	02998103	SUB-ASY,GRASS FLAIL,DOOR,60"	1
29	02998115	THRUST WASHER	1
30	02998114	2" HARD WASHER	1
31	02998059	BUTTON HD,12MMx50MM(1.75)	1
32	05.960.16	KEY-S/REP 12MM X 8MM X 40MM	1
33	02961677	CARB 3/8 NC 1-1/4 PL5	2

SUB-ASSY,GRASS FLAIL,DOOR 60'

60 Inch Grass Flail



Click on the model to rotate

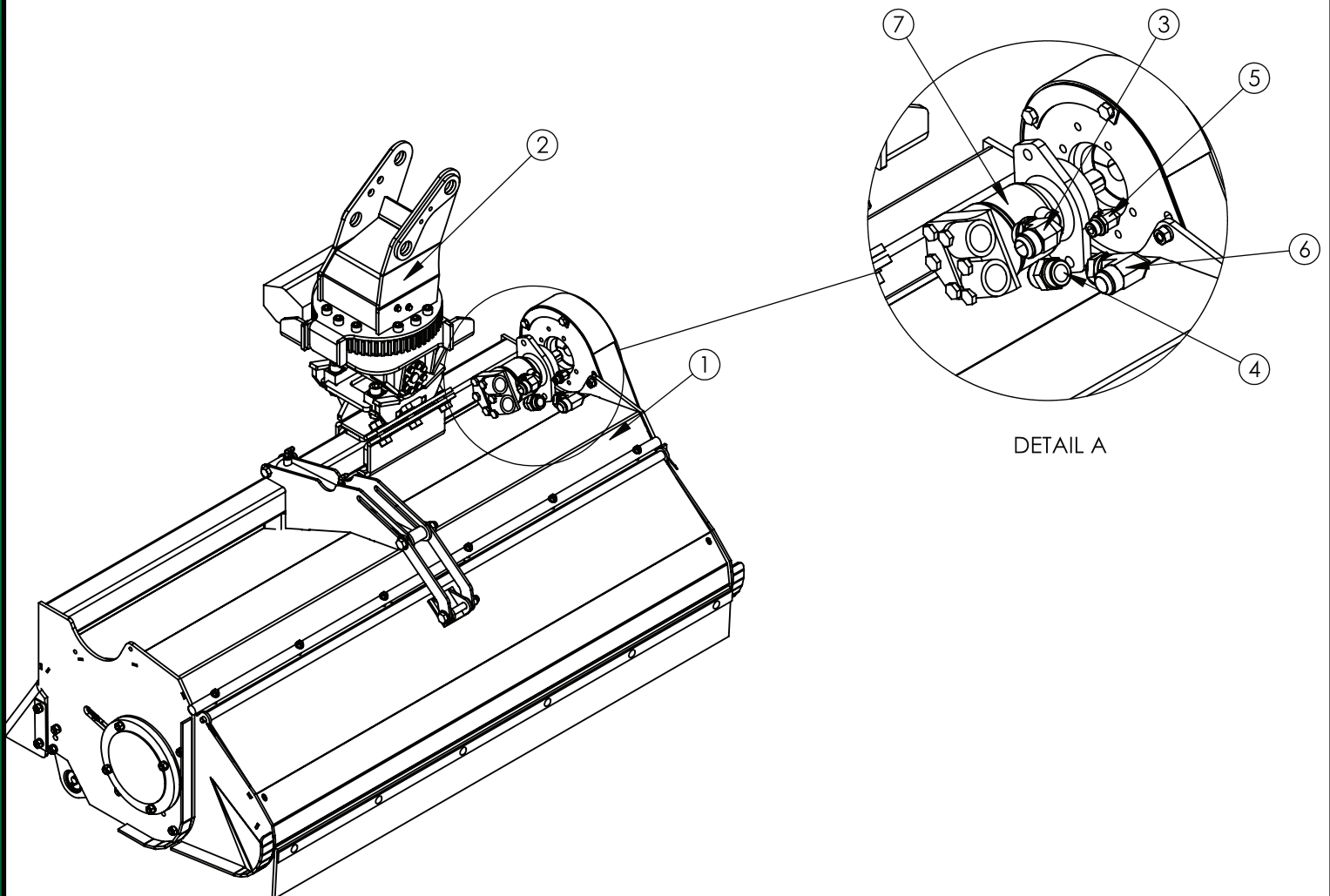
Notes: P/N 02998103

SUB ASSY, GRASSFLAIL, DOOR 60"

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	05.345.05	SOCKET CSK SCREW M12X1.75X40	4
2	02998059	BUTTON HD,12MMx50MM(1.75)	4
3	00754566	LOCKWASHER, 12MM	18
4	00762413	NUT MET 12MM	14
5	02998060	HEXB 12mm X 35MM LG	10
6	02980720	HHCS M12-P1.75 X 40 PL10.9	4
7	02998006	WELDMNT, FLAIL HSING	1
8	06.221.01	BEARING ASSY 40 - BORE	2
9	02998007	ADJ PLATE WLDMT	1
10	02998055	PLATE, BACKING	2
11	02997987	BOLT PLATE	1
12	02998008	WLDMT L ROLLER ADJUSTER	1
13	02998010	WLDMT R ROLLER ADJUSTER	1
14	02999678	ASY,SHAFT, 60 GRASSFLAIL	1
15	02997996	DRIVE WASHER	2
16	02998012	WLDMT 60 IN ROLLER	1
17	02998024	1/4-28 X 1/8 NPT ADPT	2
18	02998016	GREASE CAP	2
19	02998023	62MM SNAP RING	6
20	02998026	NIPPLE 1/8 NPT 4"	2
21	02998025	ZERK 1/8 F 45	2
22	02998027	SHAFT SEAL	2
23	02998114	2" HARD WASHER	2
24	02998116	BUTTON HD,12MMx50MM(1.75)	3
25	02998327	WASHER FENDER 1/2 x 1 3/4	1
26	00723562	GREASE FITTING, 1/4-28	4
27	02998022	BEARING 62x30	2

ASY, 60" GRSFLAIL, PISTON, 3AXIS, WITH DOOR

60 Inch Grass Flail



Notes: P/N 02999741

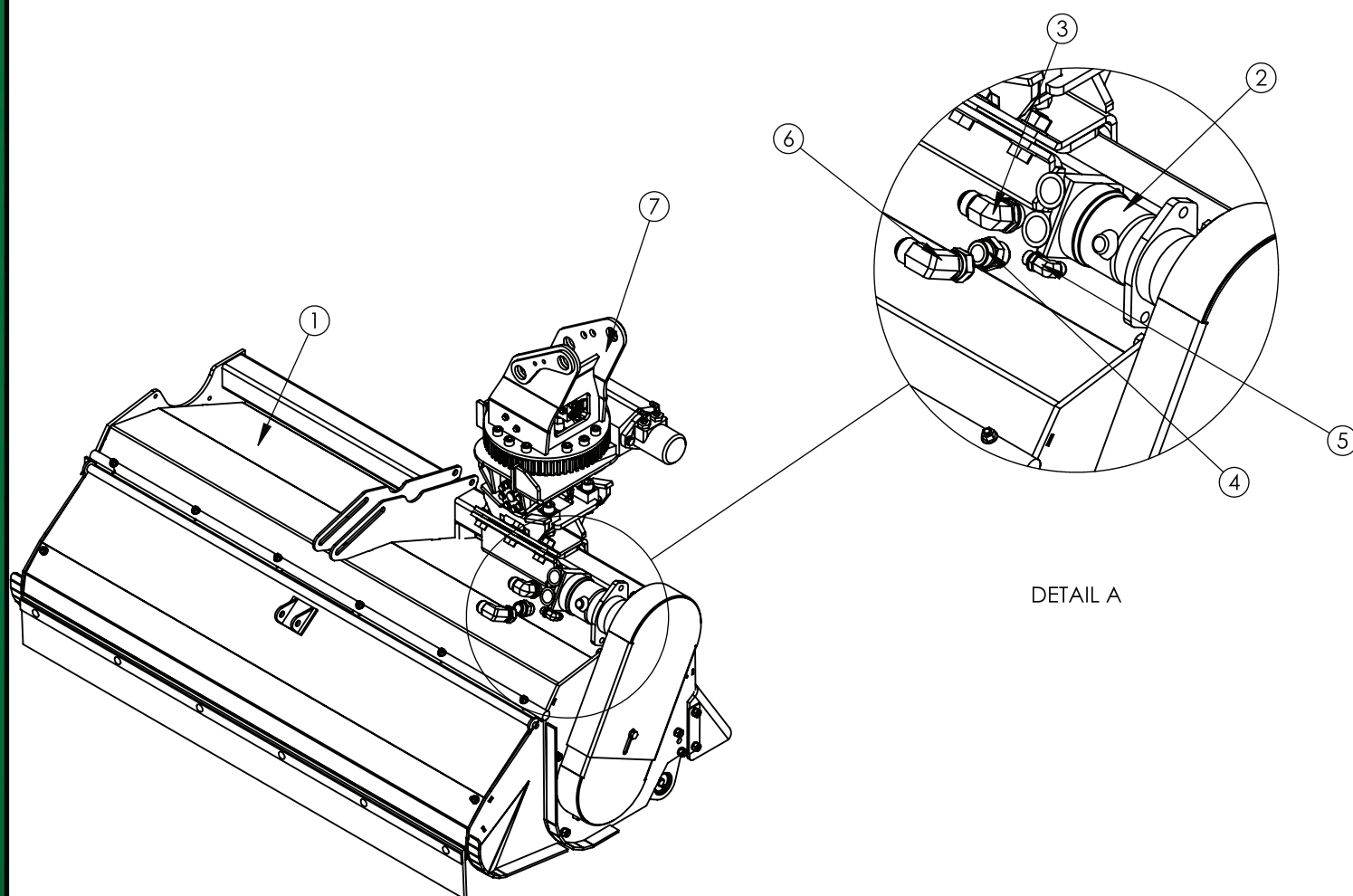
ASY, 60" GRASSFLAIL, PISTON, 3 AXIS WITH DOOR

P/N 02999742

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	02998605	60" FLAIL HEAD	1
2	8301295	PISTON MOTOR	1
3	02090900	ADP HYD ELBOW 16MB-16MJ90	1
4	02957622	ADP HYD STGHT 16MB-16MJ	1
5	02962213	ADP HYD ELBOW 8MB-8MJ 90°	1
6	02956851	ADP HYD ELBOW 16 MJ-16 JX 90	1
7	02998889	ASY, 3RD AXIS HITCH, 3"SQ.TUBE	1

**ASY, 60" GRASSFLAIL, PISTON,
3 AXIS HITCH, NO DOOR**

60 Inch Grass Flail



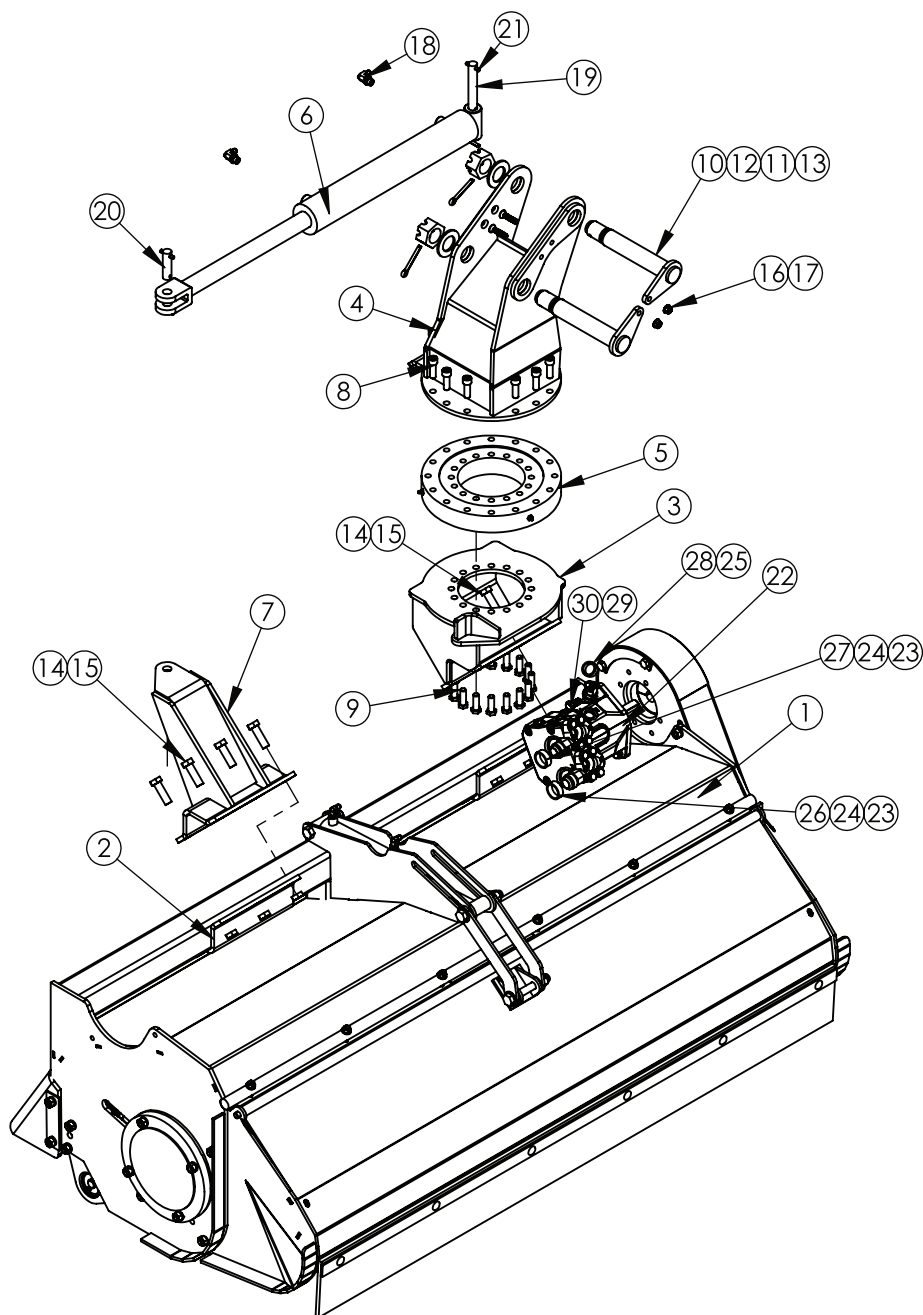
Notes: P/N 02999742

ASY, 60" GRASSFLAIL, PISTON, 3 AXIS HITCH, NO DOOR P/N 02999742

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	02998605	60" FLAIL HEAD	1
2	8301295	PISTON MOTOR	1
3	02090900	ADP HYD ELBOW 16MB-16MJ90	1
4	02957622	ADP HYD STGHT 16MB-16MJ	1
5	02962213	ADP HYD ELBOW 8MB-8MJ 90°	1
6	02956851	ADP HYD ELBOW 16 MJ-16 JX 90	1
7	02998889	ASY, 3RD AXIS HITCH, 3"SQ.TUBE	1

ASY, 60" GRSFL,PISTON, SWVL DOOR

60 Inch Grass Flail



Notes: P/N 02998068

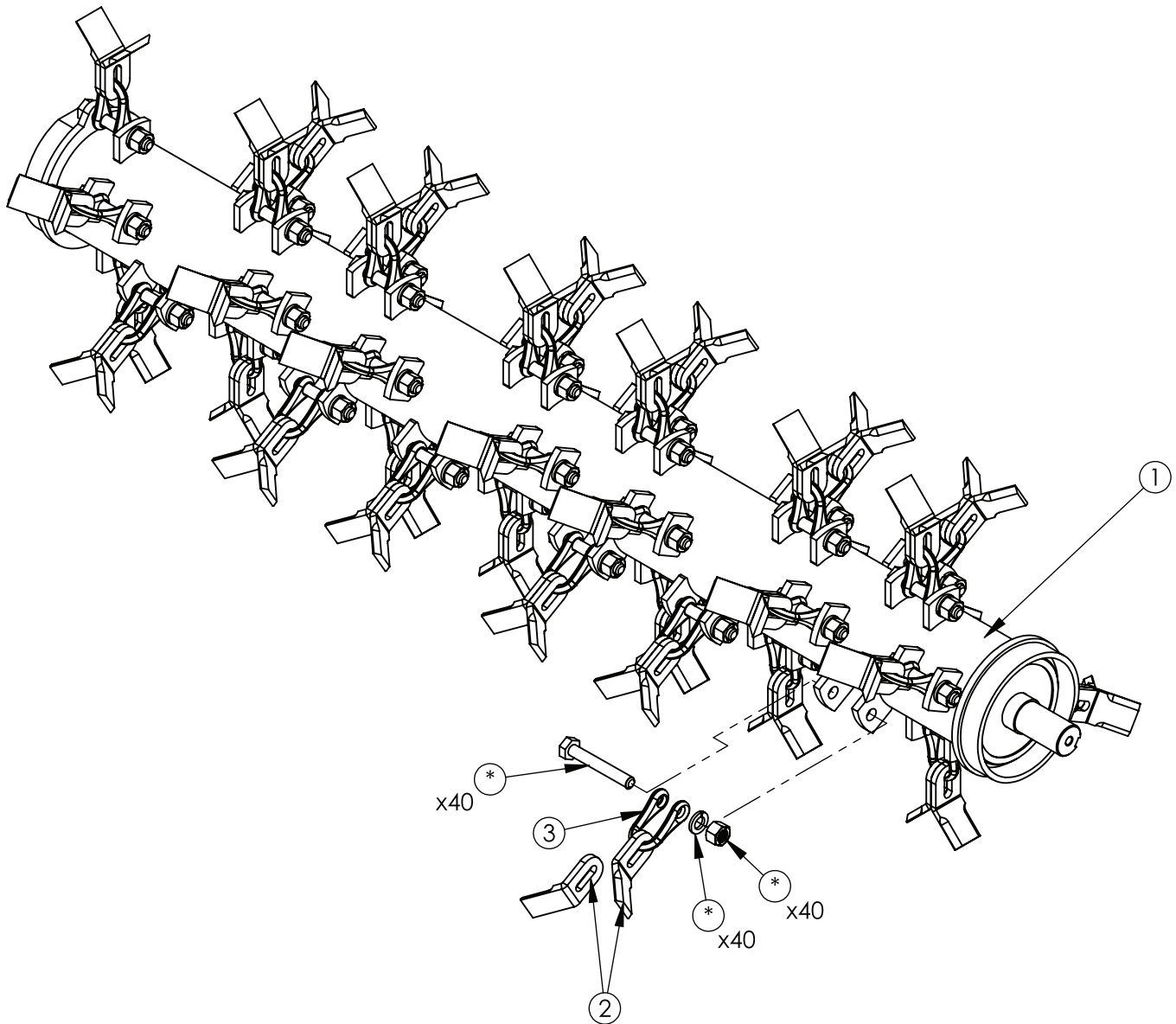
ASY, 60" GRSFL,PISTON, SWVL DOOR

P/N 02998068

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	02998031	ASY, BASE, GF60 W/ DOOR	1
2	02968245	PLATE, CLAMP	2
3	02985447	WLDMNT, HITCH SWIVEL	1
4	02985319	WELDMNT, HITCH POST	1
5	02981318	BEARING, 12OD x 5.8ID	1
6	02981315	CYLINDER, 2.5B X 1.5R X 14.38S	1
7	02985445	WLDMNT, CYL MOUNT	1
8	02981820	SHCS 1/2 NC X 1 1/2" LG PL8	12
9	02892000	HHCS 1/2NC 1-1/2 LG PL8	16
10	02981757	WELDMNT, PIN, HITCH POST	2
11	02971701	NUT, SLOTTED 1-3/8 12NF PLB	2
12	02971702	FLATWASHER, 1-3/8 TYPE B PL NARROW	2
13	165020	PIN, COTTER 5/16 X 2-1/2 PL	2
14	00695100	LOCKNUT TOPLOCK 5/8NC PLC	12
15	02845500	BOLT, HHCS 5/8" X 2" LG	12
16	02995908	NUT SPRLCK FLG 3/8-16 PL	2
17	02995907	FSCS 3/8-16 X 1-3/4 PL8	2
18	03200762	ADP, HYD 6MB-4MJ 90	2
19	02995472	PIN, 3/4" X 4" U.L.	1
20	02995471	PIN, 3/4" X 1-7/8" U.L.	1
21	002416	ROLL PIN 1/4 X 1-1/2 LG	4
22	32120413	MOTOR, 37CC PISTON CL	1
23	02994909	KIT, FLANGE, #12 CODE 62	2
24	32120623	HYD ADP 12FL62-16MJ 90	2
25	02972817	ADP HYD ELBOW 10MB - 8MJ 45 DEG	1
26	02968896	VINYL TAPE, BLUE, 1/2"	1
27	02968894	VINYL TAPE, RED, 1/2"	1
28	02991249	VINYL TAPE, GREEN, 1/2"	1
29	00759635	FLATWASHER, 1/2 HARDENED	2
30	02994389	HHCS M12 - 1.75 x 25MM	2

60 Inch Flail - Cuttershaft

60 Inch Grass Flail



Click on the model to rotate

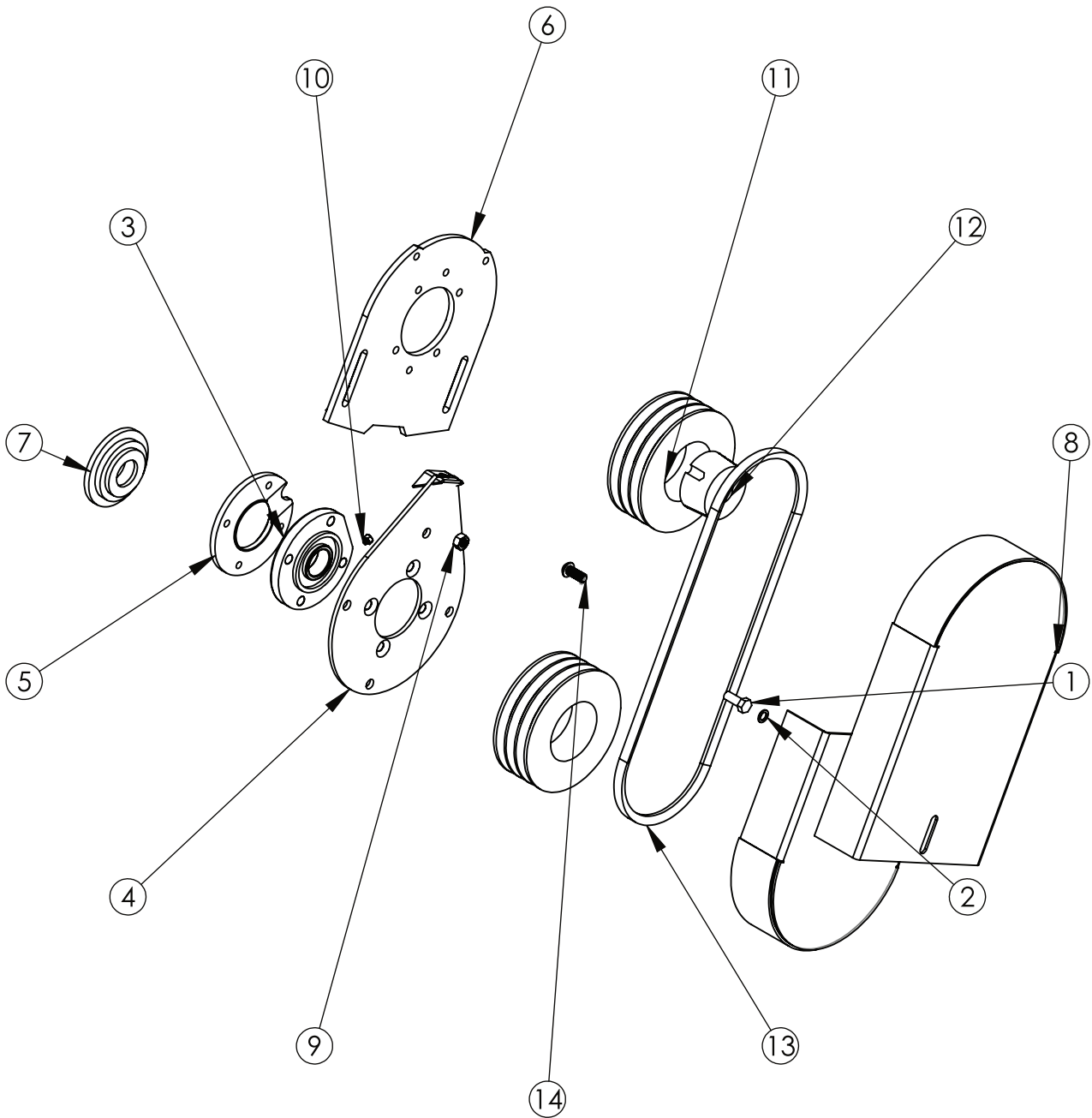
Notes: P/N 02999678

02999678 - 60 INCH FLAIL - CUTTERSHAFT

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	02998011	WLDMT 60 INCH FLAIL	1
2	09.528.01	FLAIL 39 X 8	80
3	09.517.01	SHACKLE - STANDARD	40

ASY, 60 INCH GRASS FLAIL - PULLEY ASSEMBLY

60 Inch Grass Flail



Click on the model to rotate

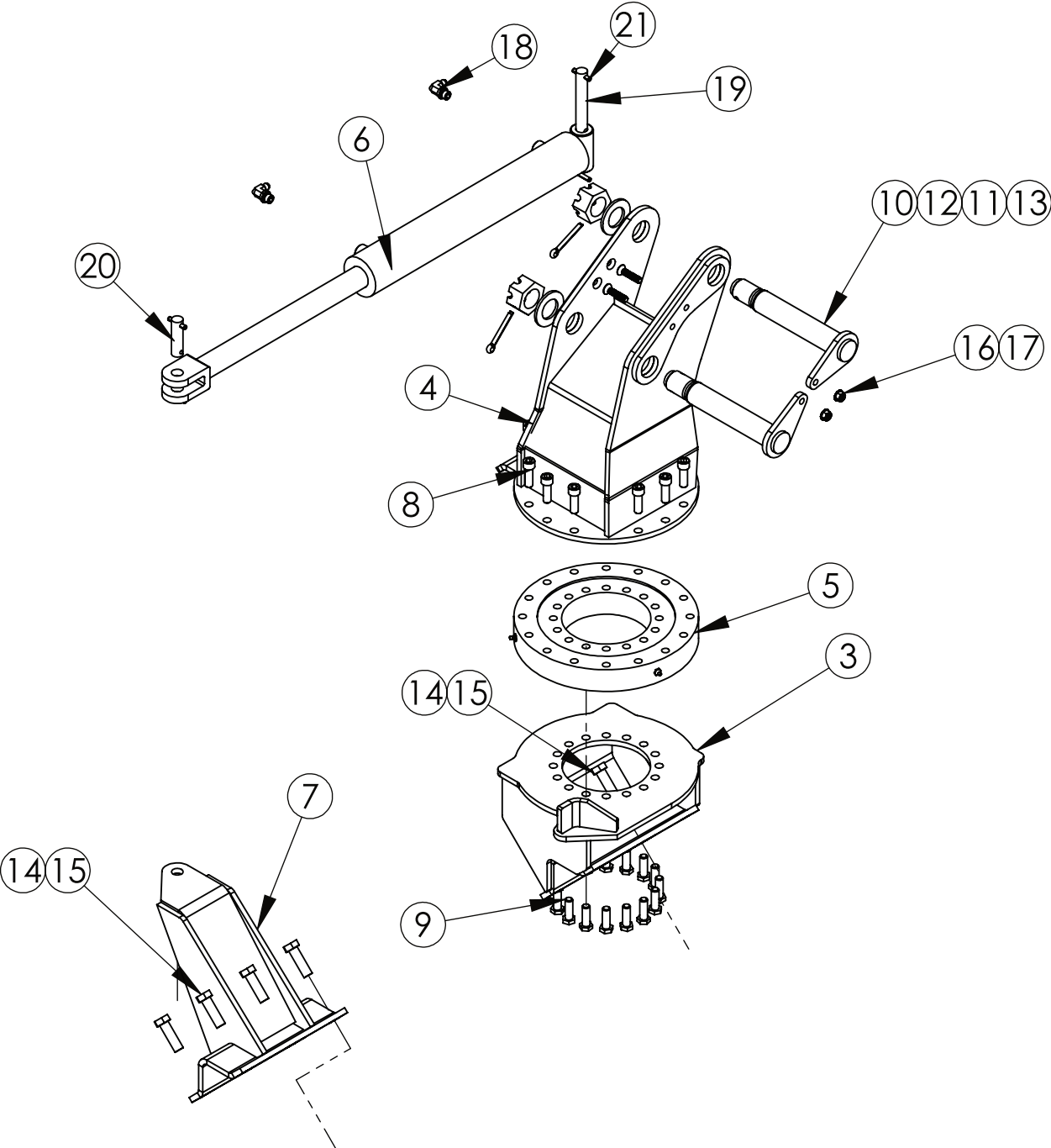
Notes:

ASY 60 INCH GRASS FLAIL - PULLEY ASSY

ITEM NO.	PART NUMBER	DESCRIPTION	exploded/QTY.
1	00756026	HHCS 12mm X 30mm LG	1
2	00754566	LOCKWASHER, 12MM	1
3	06.221.01	BEARING ASSY 40 - BORE	1
4	02998007	ADJ PLATE WLDMT	1
5	02998055	PLATE, BACKING	1
6	02998009	MOTOR MOUNT	1
7	02997996	DRIVE WASHER	1
8	02998013	TOP PULLEY COVER	1
9	02998014	T0P SHEAVE COVER	1
10	02998024	6MM X 1/*8 NPT ADPT	1
11	03.795.02		2
12	05.424.02 A		1
13	79.154.01		1
14	02980728	HHCS, M12-P1.75 x 30MM PL10.9	1

ASY, 60" GRASSFLAIL, PISTON

60 Inch Grass Flail



Click on the model to rotate

Notes:

ASY, 60" GRASSFLAIL, PISTON SWIVEL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	02968245	PLATE, CLAMP	2
2	02985447	WLDMNT, HITCH SWIVEL	1
3	02985319	WELDMNT, HITCH POST	1
4	02981318	BEARING, 12OD x 5.8ID	1
5	02981315	CYLINDER, 2.5B X 1.5R X 14.38S	1
6	02985445	WLDMNT, CYL MOUNT	1
7	02981820	SHCS 1/2 NC X 1 1/2" LG PL8	12
8	02892000	HHCS 1/2NC 1-1/2 LG PL8	16
9	02981757	WELDMNT, PIN, HITCH POST	2
10	02971701	NUT, SLOTTED 1-3/8 12NF PLB	2
11	02971702	FLATWASHER, 1-3/8 TYPE B PL NARROW	2
12	165020	PIN, COTTER 5/16 X 2-1/2 PL	2
13	00695100	LOCKNUT TOPLOCK 5/8NC PLC	12
14	02845500	BOLT, HHCS 5/8" X 2" LG	12
15	02995908	NUT SPRLCK FLG 3/8-16 PL	2
16	02995907	FSCS 3/8-16 X 1-3/4 PL8	2
17	03200762	ADP, HYD 6MB-4MJ 90	2
18	02995472	PIN, 3/4" X 4" U.L.	1
19	02995471	PIN, 3/4" X 1-7/8" U.L.	1
20	002416	ROLL PIN 1/4 X 1-1/2 LG	4



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