HAYBUSTER®

Operating Instructions and Parts Reference

H-800™

PTO Driven Tub Grinder

Product Information

DURATECH INDUSTRIES

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DuraTech Industries International Inc.
PO Box 1940, Jamestown, ND 58402-1940
Tel: (701) 252-4601 • Fax: (701) 252-0502
www.duratechindustries.net • www.haybuster.com

HAYBUSTER®

A Tradition of Innovation Since 1966

HAYBUSTER®

H-800™

PTO Driven Tub Grinder

Operating Instructions and Parts Reference

DuraTech Industries International Inc. (DuraTech Industries) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the H-800 Tub Grinder as of the date of publication. DuraTech Industries reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your unit.

This manual, as well as materials provided by component suppliers to DuraTech Industries are all considered to be part of the information package. Every operator is required to read and understand these manuals, and they should be located within easy access for periodic review.

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Foreword

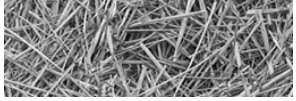
All personnel must read and understand the following sections before operating the H-800 Tub Grinder.

- Foreword and Section 1, important safety information.
- Section 2, “Machine operation,” which explains normal operation of the machine.
- Section 2.1, “Pre-Operation Inspection”.

Appropriate use of unit

The H-800 Tub Grinder is designed to grind material into more palatable or manageable rations for your operation. It has multiple uses:

1. Grind most types of hay
   - Big round bales
   - Loose hay
   - Square bales
2. Grind most types of grain
   - Shell corn
   - High moisture corn
   - Most small grains

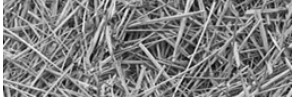


3. Grind most types of crop residue
   - Stover
   - Straw
4. Grind various sizes
   - Screens are available from 3/4” to 6”
   - Combine screen sizes to get desired cut

Operator protection

As with all machinery, care needs to be taken in order to insure the safety of the operator and those in the surrounding area.

WARNING: The **OPERATOR IS RESPONSIBLE** for the safety of the operator and those in the surrounding area. Operators and those observing the operation of the H-800 Tub Grinder are required to wear head, eye, and ear protection, No loose clothing is allowed.



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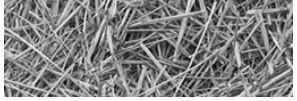

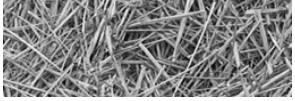

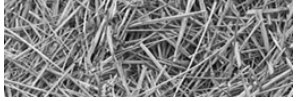

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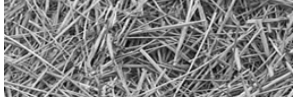
PTO Driven Tub Grinder

Part 1:
Operating Instructions



Introduction

The H-800 Tub Grinder is designed to grind material into more palatable or manageable rations for your operation. It has multiple uses:

1. Grind most types of hay
   - Round bales
   - Loose hay
   - Square bales

2. Grind most types of grain
   - Shell corn
   - High moisture corn
   - Most small grains

3. Grind most types of crop residue
   - Stover
   - Straw

4. Grind various sizes
   - Screens are available from 3/4” to 6”

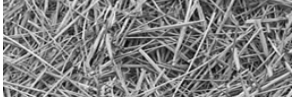
To avoid possible damage to the machine and risk of injury to the operator, consult with a DuraTech Industries International, Inc. (DuraTech Industries) representative before attempting to shred materials other than livestock forage.

Purpose

The purpose of this owner’s manual is to explain maintenance requirements and routine adjustments for the most efficient operation of your H-800 Tub Grinder. There is also a trouble shooting section that may help in case of problems in the field. Any information not covered in this manual may be obtained from your dealer.

Special Note: When reference is made as to front, rear, left hand, or right hand of this machine, the reference is always made from standing at the rear end of the machine and looking toward the hitch. Always use serial number and model number when referring to parts or problems. Please obtain your serial number and write it below for your future reference.

MODEL: H-800 SERIAL NO. _____



How to use this manual

Manual organization

This manual is organized into the following parts:

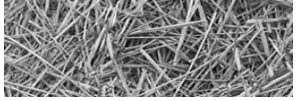
- **Part 1:** Operating Instructions
  - **Section 1:** Safety decals, safety instructions and information
  - **Section 2:** Describes the purposes of each part.
  - **Section 3:** Describes safe procedures.
  - **Section 4:** Tells how to use the H-800 Tub Grinder.
  - **Section 5:** Describes how to maintain the H-800 Tub Grinder.
- **Part 2:** Part's reference contains diagrams of each assembly, with the part number of each part. A key on the same or facing page contains a description of the part and the quantity used.

Dealer responsibilities

- Perform a daily pre-operation inspection as described in Section 2, "Operation."
- Upon delivery of the unit to the customer, it is your responsibility to conduct a training session on the safe operation of the unit for the primary operator(s). You must also conduct a "walk-around" inspection of all safety instructional decals on the machine itself. Decals are illustrated in **Part 2: Parts Reference.**
- Complete and return the Warranty Registration postcard. DuraTech Industries must receive this form before activating the warranty. Appendix A provides details of the warranty.

Operator responsibilities

- Note the important safety information in the Foreword and in Section 1, "Safety."
- Thoroughly review sections 1 and 2, which explain normal operation of the machine, and section 3, which explains maintenance requirements. These sections will function as your textbook during the dealer-conducted training course that is required before you can use the unit.
- Manuals for certain allied supplier's components are provided separately. You should also be familiar with their contents.
- Keep copies of all manuals in a readily accessible location for future reference.



Section 1: Safety

The safety of the operator is of great importance to DuraTech Industries. We have provided decals, shield and other safety features to aid you in using your machine safely. In addition, we ask you to be a careful operator who will properly use and service your Haybuster equipment.

WARNING: FAILURE TO COMPLY WITH SAFETY INSTRUCTIONS THAT FOLLOW WITHIN THIS MANUAL COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH. BEFORE ATTEMPTING TO OPERATE THIS MACHINE, CAREFULLY READ ALL INSTRUCTIONS CONTAINED WITHIN THIS MANUAL. ALSO READ THE INSTRUCTION MANUAL PROVIDED WITH YOUR TRACTOR.

THIS MACHINE IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THOSE EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING LITERATURE OR OTHER DURATECH WRITTEN MATERIAL PERTAINING TO THE H-800 TUB GRINDER.

1.1 Safety-alert symbols

Decals are illustrated in **Part 2: Parts Reference.**

The safety decals located on your machine contain important and useful information that will help you operate your equipment safely.

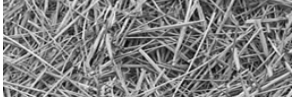
To assure that all decals remain in place and in good condition, follow the instructions below:

- Keep decals clean. Use soap and water - not mineral spirits, adhesive cleaners and other similar cleaners that will damage the decal.
- Replace all damaged or missing decals. When attaching decals, surface temperature of the machine must be at least 40° F (5° C). The surface must be also be clean and dry.
- When replacing a machine component to which a decal is attached, be sure to also replace the decal.
- Replacement decals can be purchased from your Haybuster dealer.

DuraTech uses industry accepted **ANSI** standards in labeling its products for safety and operational characteristics.

Safety-Alert Symbol

Read and recognize safety information. Be alert to the potential for personal injury when you see this safety-alert symbol.



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

DANGER:
Signal word - White Lettering/Red Background
Safety Alert Symbol - White Triangle/Red Exclamation Point

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

WARNING:
Signal word - Black Lettering/Orange Background
Safety Alert Symbol - Black Triangle/Orange Exclamation Point

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

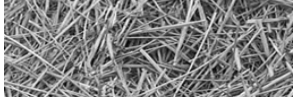
CAUTION:
Signal word - Black Lettering/Yellow Background
Safety Alert Symbol - Black Triangle/Yellow Exclamation Point

This manual uses the symbols to the right to denote important safety instructions and information.

The **DANGER**, **WARNING** and **CAUTION** symbols are used to denote conditions as stated in the text above. Furthermore, the text dealing with these situations is surrounded by a box with a white background, will begin with **DANGER**, **WARNING**, or **CAUTION**.

The **INFORMATION** symbol is used to denote important information or notes in regards to maintenance and use of the machine. The text for this information is surrounded by a box with a light grey background, and will begin with either **IMPORTANT** or **NOTE.**

	**1. Yellow warning triangle/black graphical symbol, indicates what the hazard is.** **Hazard Identification**
	**2. Red circle-with-slash/black graphical symbol indicates a prohibited action to avoid the hazard.** **Prohibited Action**
	**3. Blue mandatory action circles/white graphical symbol - indicates an action to take to avoid the hazard.** **Mandatory Action**



1.2 Operator - personal equipment

THE OPERATOR

Physical Condition

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Do not operate a **H-800** when you are fatigued. Be alert - If you get tired while operating your **H-800,** take a break. Fatigue may result in loss of control. Working with any farm equipment can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating

Proper Clothing

Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loosefitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become entangled with the machine.

Protect your head with a hard hat to reduce the risk of injury from flying debris.

Protect your hands with gloves when handling flail and sections. Heavyduty, nonslip gloves improve your grip and protect your hands.

Good footing is most important. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.

To reduce the risk of injury to your eyes never operate a **H-800** unless wearing goggles or properly fitted safety glasses with adequate top and side protection.

Tractor noise may damage your hearing. Always wear sound barriers (ear plugs or ear mufflers) to protect your hearing. Continual and regular users should have their hearing checked regularly.

1.3 Machine safety labels

The safety decals located on your machine contain important information that will help you operate your equipment. Become familiar with the decals and their locations.

DANGER: ROTATING PARTS WITHIN CAN KILL OR DISMEMBER. WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING, UNLOADING, OR INSPECTING MACHINE.

6500082

DANGER: ROTATING DRIVELINE, KEEP AWAY!

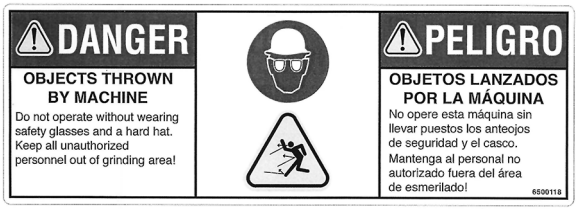
ENTANGLEMENT CAN CAUSE SERIOUS INJURIES OR DEATH.

DO NOT OPERATE WITHOUT

- ALL DRIVELINE GUARDS, TRACTOR AND EQUIPMENT SHIELDS IN PLACE
- DRIVELINES SECURELY ATTACHED AT BOTH ENDS
- DRIVELINE GUARDS THAT TURN FREELY ON DRIVELINE

6500085

DANGER: OBJECTS THROWN BY MACHINE
DO NOT OPERATE WITHOUT WEARING SAFETY GLASSES AND A HARD HAT.
KEEP UNAUTHORIZED PERSONNEL OUT OF THE GRINDING AREA

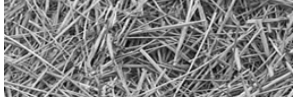


6500118

DANGER: ROTATING PART HAZARD, STAY OUT OF TUB WHEN ENGINE IS RUNNING.

1. KEEP OTHERS AWAY.
2. PLACE ALL CONTROLS IN NEUTRAL, STOP ENGINE, REMOVE KEY, AND WAIT FOR ALL MOVING PART TO STOP BEFORE SERVICING, ADJUSTING, REPAIRING, UNPLUGGING, OR ENTERING THE TUB FOR ANY REASON.
3. DISCONNECT DRIVELINE ON PTO MODELS.

6500212

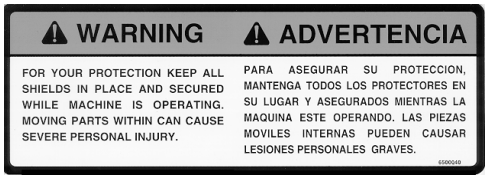


DANGER: THROWN OBJECT HAZARD
KEEP AWAY

- TO PREVENT SERIOUS INJURY OR DEATH FROM THROWN OBJECT:
- STAY AWAY FROM DISCHARGE AREA DURING OPERATION. KEEP OTHERS AWAY.
- DO NOT POINT DISCHARGE TOWARD PEOPLE, ANIMALS OR PROPERTY.

6500221

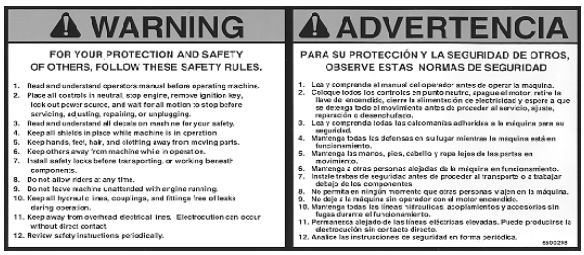
WARNING: FOR YOUR PROTECTION KEEP ALL SHIELDS IN PLACE AND SECURED WHILE MACHINE IS OPERATING MOVING PARTS WITHIN CAN CAUSE SEVERE PERSONAL INJURY.



6500040

WARNING: FOR YOUR PROTECTION AND PROTECTION OF OTHERS, **PRACTICE THE FOLLOWING SAFETY RULES.**

1. BEFORE OPERATING THIS MACHINE, READ THE OPERATOR'S MANUALS SUPPLIED WITH THIS MACHINE AND YOUR TRACTOR.
2. CHECK OPERATORS MANUALS TO BE SURE YOUR TRACTOR MEETS THE MINIMUM REQUIREMENTS FOR THIS MACHINE.
3. READ ALL DECALS PLACED ON THIS MACHINE FOR YOUR SAFETY AND CONVENIENCE.
4. NEVER ALLOW RIDERS ON THIS IMPLEMENT OR THE TRACTOR.
5. KEEP OTHERS AWAY FROM THIS MACHINE WHILE IN OPERATION.
6. KEEP ALL SHIELDS IN PLACE WHILE MACHINE IS OPERATING.
7. KEEP HANDS, FEET, LOOSE CLOTHING, ETC., AWAY FROM POWER DRIVEN PARTS.
8. ALWAYS SHUT OFF MACHINE AND ENGINE BEFORE SERVICING, UNCLOGGING, INSPECTING, OR WORKING NEAR THIS MACHINE FOR ANY REASON. ALWAYS PLACE TRANSMISSION IN PARK OR SET PARK BRAKE AND WAIT FOR ALL MOVEMENT TO STOP BEFORE APPROACHING THIS MACHINE.



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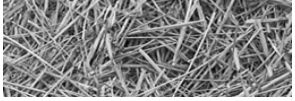


WARNING: NO RIDERS
SERIOUS INJURY COULD RESULT FROM RIDING ON THE MACHINE.

6500043

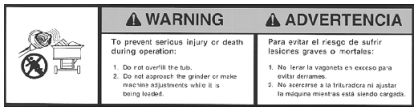
WARNING: HIGH-PRESSURE FLUID HAZARD, TO PREVENT SERIOUS INJURY OR DEATH:

- RELIEVE PRESSURE ON SYSTEM BEFORE REPAIRING OR ADJUSTING OR DISCONNECTING.
- WEAR PROPER HAND AND EYE PROTECTION WHEN SEARCHING FOR LEAKS. USE WOOD OR CARDBOARD INSTEAD OF HANDS.
- KEEP ALL COMPONENTS IN GOOD REPAIR.

6500220

WARNING: TO PREVENT SERIOUS INJURY OR DEATH DURING OPERATION:

1. DO NOT OVERFILL THE TUB.
2. DO NOT APPROACH THE GRINDER OR MAKE MACHINE ADJUSTMENTS WHILE IT IS BEING LOADED.

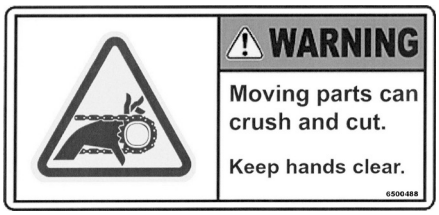


6500283

WARNING: PINCH POINT STAY BACK

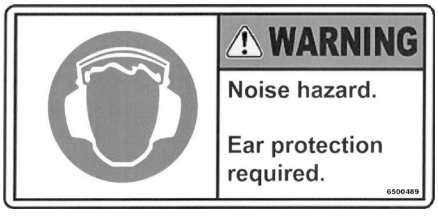
6500339

WARNING: Moving parts can crush and cut.
Keep hands clear.



6500488

WARNING: Noise hazzard.
Ear protection required.



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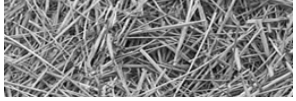


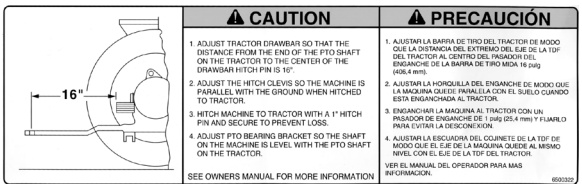
WARNING: NO STEP
DO NOT STEP, STAND, OR SIT ON THIS SURFACE.
MAY CAUSE INJURY AND/OR EQUIPMENT DAMAGE.

6500490

CAUTION: KEEP WHEEL BOLTS TIGHT.

6500042

CAUTION: ADJUST TRACTOR DRAWBAR SO THAT THE DISTANCE FROM THE END OF THE P.T.O. SHAFT ON THE TRACTOR TO THE CENTER OF THE DRAWBAR HITCH PIN IS 16".



6500322

1.4 Thrown objects and operator safety

An operational characteristic of all grinders is that objects may be thrown out of the hopper. Thrown objects may present a safety hazard to persons in the area. This section is to inform the operator of this characteristic, and what can be done to reduce the risk of injury to the operator and persons in the area. Keep all observers away from the machine.

Figure 1.1 shows an object being hit as the hammer is on the upswing. A general pattern for where thrown objects may land is shown in Figure 1.2.

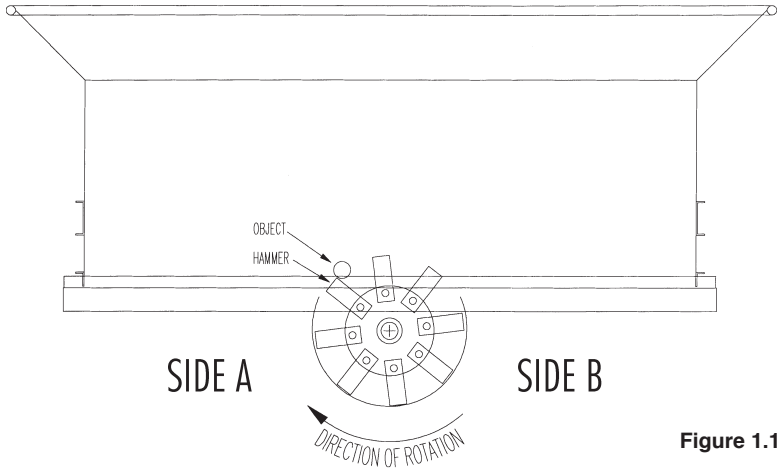


Figure 1.1

VIEWED FROM THE REAR OF THE H-800

NOTE: The difference in the size of the area for side A versus side B. Side B is larger.

Dimensioning the size of this area is not practical. The distance a thrown object may travel is dependent on several conditions, including, but not limited to, rotor speed and diameter, condition of the hammers, style of hammers, object mass, object shape, amount of material in the tub, and how the hammer strikes the object.

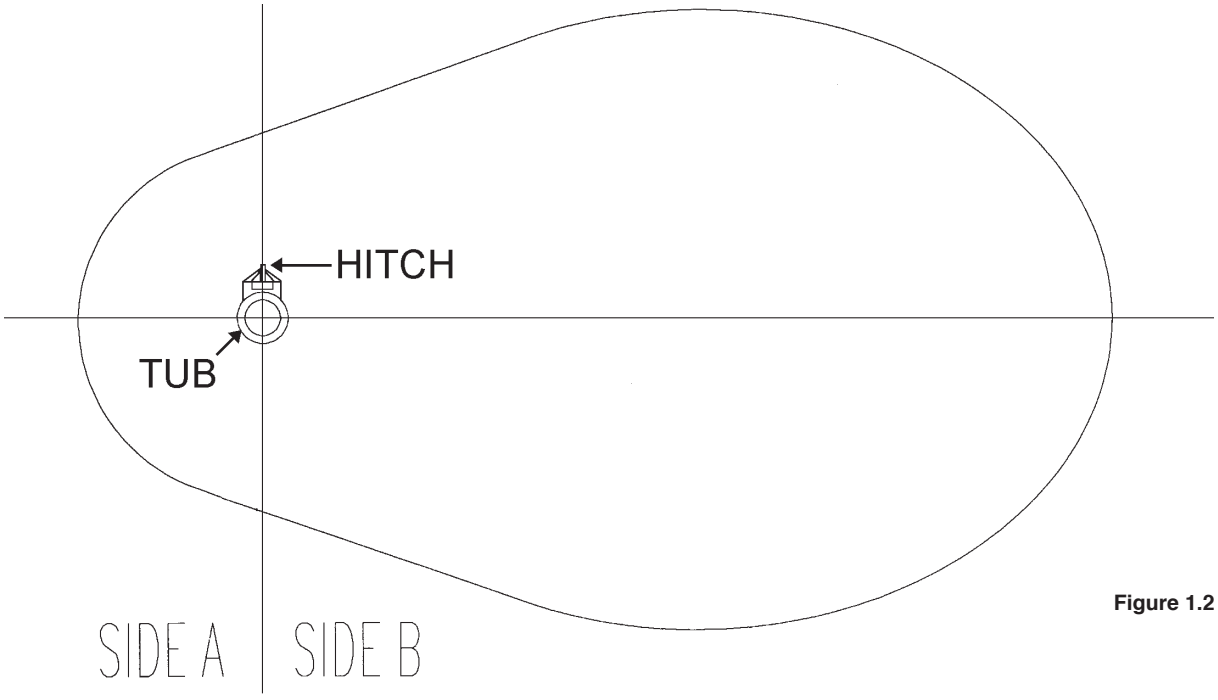
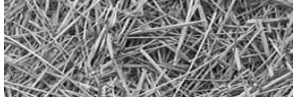


Figure 1.2



The amount of material in the tub can dampen or stop the object's potential flight. Keeping the tub full will reduce the risks. Filling the tub at least 1/2 full when starting will reduce the risk. Using a geyser plate can help reduce thrown objects. A risk may arise when the tub is being emptied, such as at the end of the grind. Running the engine at slower speeds when starting or finishing the grind will also help, especially slowing down when emptying the tub.

WARNING: To minimize the potential risk of injury or property damage, the operator must:

a) Place side B towards open areas, away from property and people.

b) Load the grinder from side A with a loader equipped with an enclosed cab.

c) Keep observers out of the area.

d) Wear a hard hat and safety glasses, at a minimum, and require that any other persons in the area are similarly equipped.

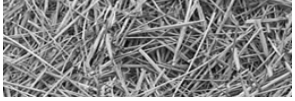
1.5 Shielding

This H-800 Tub Grinder is equipped with shielding at all major points of potential injury. All Shields should be kept in place during operation. Bodily injury may occur if the unit is operated without shields.

WARNING: Shields are installed for your protection and to keep material off machine parts. Do not operate this PTO Driven Tub Grinder without shields in place.

1.6 Personal protection equipment

Operators and authorized observers of the H-800 Tub Grinder are required to wear head, eye, and ear protection. No loose clothing is allowed.



1.7 Safety Review

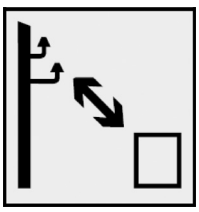
WARNING: Before attempting to operate your H-800 Tub Grinder, carefully read and follow instructions given below and contained elsewhere in this manual.

BEFORE OPERATING

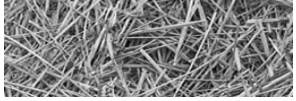
1. Read and follow all instructions contained in:
   - Operators Manual
   - Tractor Operators Manual
   - Decals placed on H-800 Tub Grinder.

NOTE: Your dealer has additional copies of these materials.

2. Allow only properly instructed, responsible individuals to operate your machine. Carefully supervise inexperienced operators.
3. Use a tractor that meets the requirements contained in this manual. **See Appendix C, Required for Operation, page 57.**
4. Make sure the H-800 Tub Grinder is in good operating condition and that all protective shields are in place and in proper working order. Replace damaged shields before operating.
5. Be sure all bystanders and other workers are clear before starting tractor and grinder.
6. Make no modifications to the H-800 Tub Grinder unless specifically recommended or requested by DuraTech.
7. Check periodically for broken or worn parts and make necessary repairs.
8. Be sure the unit is securely attached to tractor during grinder operation and road transport.



Keep sufficient distance away from electrical power lines.
WARNING: Electrocution is possible when running this machine during an electric storm or heavy fog.



DURING OPERATION

1. Enforce the following safety precautions to prevent serious personal injury.
   - Keep everyone clear of work area except operator seated at tractor controls.
   - **Never work on or near grinder unless engine is off, and all motion has stopped.**
   - Disengage PTO before starting engine.
2. Power take off shafts must be locked in place with protective PTO shields in place.
3. Keep hands, feet, and clothing away from power driven parts.
4. Keep shields in place and in good condition.
5. Watch out for and avoid any object that might interfere with the proper operation of the machine.
6. Loose clothing, necklaces, and similar items are more easily caught in moving parts. Avoid the use of these items and keep long hair confined.
7. Because it is possible that your H-800 may be used in dry areas or the presence of combustibles, special precautions should be taken to prevent fires and fire fighting equipment should be readily available.

NO SMOKING IN THIS AREA

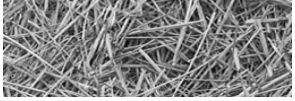
DANGER! NO OPEN FLAMES IN THIS AREA

8. Never allow riders on the machine at any time.

NORMAL SHUTDOWN PROCEDURE

WARNING: For your safety and the safety of others, you must use the following normal shutdown procedure before leaving the controls unattended for any reason, including servicing, cleaning, or inspecting. A variation of the following procedure may be used if so instructed within this manual or if an extreme emergency requires it.

1. Run H-800 Tub Grinder until auger and blower are empty, and grind as much of the material in the tub as possible.
2. Reduce engine speed to idle.
3. Disengage PTO
4. Disengage hydraulics.
5. Place transmission in park and set parking brake.
6. Shut off tractor engine and remove key.



7. Wait for all movement to stop.
8. Disconnect PTO driveline from tractor.

CAUTION: At full speed, energy is stored in the rotor. **Do not use the tractor PTO brake to stop the rotor. Reduce engine speed before disengaging the PTO**

1.8 Fire Prevention

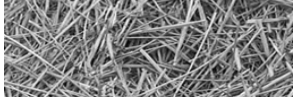
Grinding hay, and other products in a tub grinder produces a large amount of potentially combustible material. The risks of fire can be significantly reduced with proper operating and maintenance procedures. This does include frequent removal of dust, debris, and other combustible materials.

Most of the products that are ground are dry and the grinding process can produce fine, dusty material. The grinding process can produce heat and the spinning rotor will circulate air within the grinding chamber. For a fire to start, fuel, oxygen and heat in sufficient quantity, must be present. During normal operation and with a properly maintained tub grinder, the material being ground will move through the grinding chamber so quickly that it doesn't have a chance to heat up sufficiently to start a fire. Also, the rapid rate that a tub grinder can pile material will quickly smother small hot spots that might occur during normal grinding operations. Keeping the material moving through the machine and across the top of the rotor is important to keep frictional heating of the material to a minimum.

NEVER leave the vicinity of the unit with the engine running**.**

PROPER OPERATION OF THE TUB GRINDER:

- Do not grind materials any finer than necessary. Finely ground materials will produce more dust and increase the risk of fire. If finely ground materials are required, it is better to grind the materials coarse first with large opening screens installed in the grinder and then regrind them to the desired consistency by installing smaller opening screens in the grinder. Be especially cautious when grinding materials that can burn easily.
- When filling the tub grinder during start-up begin by filling the front of the tub and avoid placing materials on the spinning rotor. When material begins to fall over the rotor, engage the tub hydraulics and adjust the flow control valve to rotate the tub slowly while continuing to fill the tub. When the tub is 1/2 to 2/3 full, the flow control valve may be increased and grinding operations can resume normally. Do not allow the tub to stop for any significant amount of time with material over the rotor to minimize frictional heating.
- Do not smoke when working with combustible materials.



REMOVAL AND CLEANING INSTRUCTIONS:

- Check the rotor box for debris built up around the rotor. Remove material that may be packed tight near the bearings, on shaft or other rotating components because it will become hot due to friction.
- At shutdown, always clean and remove all dust, debris, or combustible material off the entire grinder. Use high-pressure air or water if necessary. Always move the grinder and all other equipment away from the ground material pile before leaving the job site in case of smoldering combustion in the ground material.

TUB GRINDER MAINTENANCE:

- Repair any fuel or hydraulic leaks as quickly as they are discovered. Clean up spills immediately. Fuel or oil soaked materials can contribute significantly to the rapid spreading of a fire once it has begun.
- Inspect all electrical wiring periodically. Any chafed or damaged wires should be repaired immediately. Keep all electrical connections tight to prevent arcs or sparks.
- Contact between the rotor and any stationary component of the grinding chamber such as contact between the hammers and the screens must be corrected immediately.

1.9 Fire Extinguishers:

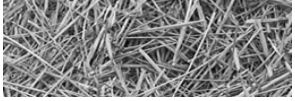
The fire extinguishers should be ABC dry chemical extinguishers that are appropriate for use with materials normally encountered on a tub grinder.

If a fire does start, CALL THE LOCAL FIRE DEPARTMENT IMMEDIATELY. Then, use the fire extinguisher if you feel confident that you can extinguish the fire. A 10# extinguisher will last about 15-20 seconds and a 20# extinguisher will last about 20-24 seconds, so they will not stop a large fire. The fire extinguishers should be at least 10#, but the preferred are 20# .

When using a fire extinguisher, use the P A S S method:

- Approach the fire with the wind at your back.
- **Pull the pin,**
- **Aim the spout,**
- **Squeeze the trigger, and**
- **Sweep along the base of the fire from about 6-8 feet away.**

Read the label on your extinguisher now, most extinguishers have descriptions of this method, and an estimated working time.



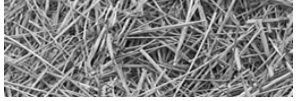
If an extinguisher is only partially used, the dry chemical will jam in the seals, allowing the extinguisher to loose its pressure charge in less than an hour, making it useless to you. It must be recharged before placing it back on the machine. Have the extinguisher recharged today; a fire will not wait for you to recharge your extinguisher tomorrow!

Fire extinguishers should be inspected and recharged by a professional at least annually to keep them at optimum performance! A "verification of service" collar that confirms the month and year of service should be attached to the neck of the container to confirm when the extinguisher was last serviced.

1.10 Towing

CAUTION: DO NOT TRANSPORT THE H-800 TUB GRINDER without first securing the blower in the transport position (see 2.7.1, page 30).

1. Be sure all loose parts are securely fastened down.
2. Make sure all bystanders are clear.
3. Hitch H-800 Tub Grinder to a tow vehicle with adequate load carrying and braking capacity. Be sure to attach safety chains between tow vehicle and H-800 Tub Grinder. Tongue weight is1,060 lbs. (480.81 kg)
4. Pull PTO apart and attach to transport bracket on the right hand side of the grinder.
5. Ensure that hitch jack is in the up position.
6. Check the turning clearance between H-800 Tub Grinder and the towing vehicle.
7. Check local ordinances regarding restrictions for H-800 Tub Grinder travel on your planned route.
8. Be aware of machine width at all times and do not exceed 20 miles per hour.
9. Check your state laws regarding the use of lights, slow moving vehicle signs, and other possible requirements.
10. Use good judgment and drive carefully, especially over rough and uneven roads.



1.11 Service and Maintenance

WARNING: Before performing any maintenance on the machine or getting into the tub, be sure rotor and all moving parts have come to a complete stop. Shut off engine and remove the key.

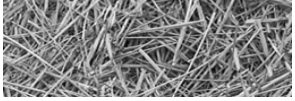
Before working on or near the Tub Grinder or any reason such as servicing, inspecting or unclogging the machine:

- Follow the normal shutdown procedure found on page 14 or 28 of this manual.
- If the unit is still attached to a towing vehicle, place the towing vehicle's transmission in park and set the parking/emergency brake.
- Relieve all pressure in the hydraulic system before disconnecting hydraulic lines or performing work on the system. Make sure all connections are tight and the hoses and lines are in good condition before applying pressure to the system.

WARNING: Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or a cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

WARNING: FAILURE TO COMPLY WITH SAFETY INSTRUCTIONS THAT FOLLOW WITHIN THIS MANUAL COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH. BEFORE ATTEMPTING TO OPERATE THIS MACHINE, CAREFULLY READ ALL INSTRUCTIONS CONTAINED WITHIN THIS MANUAL. ALSO READ THE INSTRUCTION MANUAL PROVIDED WITH YOUR TRACTOR.

THIS MACHINE IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THOSE EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING LITERATURE OR OTHER DURATECH WRITTEN MATERIAL PERTAINING TO THE H-800 TUB GRINDER.



Section 2: Operation and Adjustments

There is no substitute for a sound preventative maintenance program and a well-trained operator.

To insure long life and economical operation, learn how to operate the H-800 Tub Grinder and how to use the controls properly. Thoroughly instruct the operator in maintenance and operation of the H-800 Tub.

2.1 Pre-Operating Inspection

Prior to the starting the H-800 Tub Grinder, make a visual inspection of the machine. This can be done when lubricating the machine. Any items that are worn, broken, missing or needing adjustment must be serviced accordingly before operating the H-800 Tub Grinder.

WARNING: Before inspecting the machine, use the normal shutdown procedure found on pages 14 and 28.

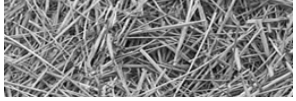
BEFORE OPERATING CHECKS

Before operating the H-800 Tub Grinder, follow these instructions:

- ❑ Read and understand the operator's manual.
- ❑ Learn how to operate the controls properly. Do Not let anyone operate without instruction.
- ❑ Know the machine's safety features and understand the safety precautions.
- ❑ Be sure the machine is hitched properly to the tractor.
- ❑ Be sure to lubricate all lubrication points. See lubrication chart, page 41.
- ❑ Check for loose bolts.
- ❑ Make sure machine is properly adjusted.
- ❑ Check hydraulic components for leaks or damage.

WARNING: Hydraulic fluid escaping under pressure can be almost invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

- ❑ Visually examine rotor to see if any parts have excessive wear. These parts include shaft, plates, rods, hammers and moveable plate.
- ❑ Check screens for wear and tightness.



- ❑ Check installation and condition of hammers.
- ❑ Visually examine rotor bearings and mounting bolts.
- ❑ Check all bearings for wear.
- ❑ Check chains and belts for proper tension and condition.
- ❑ Make sure all shields and guards are in place.
- ❑ Condition of decals.
- ❑ Lug nuts for tightness.
- ❑ Condition of tire rims.
- ❑ Check tires for proper air pressure.
- ❑ Always grind with the machine and tractor stationary on level ground.
- ❑ In cold weather, allow five minutes for the machine to warm up before grinding.
- ❑ Start the machine and check the tub direction, and flow control valve for proper operation.
- ❑ Watch for unusual or excessive vibration. If any occur, immediately shut off the power. Check to see what is wrong and correct it before starting the grinder again.
- ❑ If grinding grain, be sure proper grain attachment is in place.

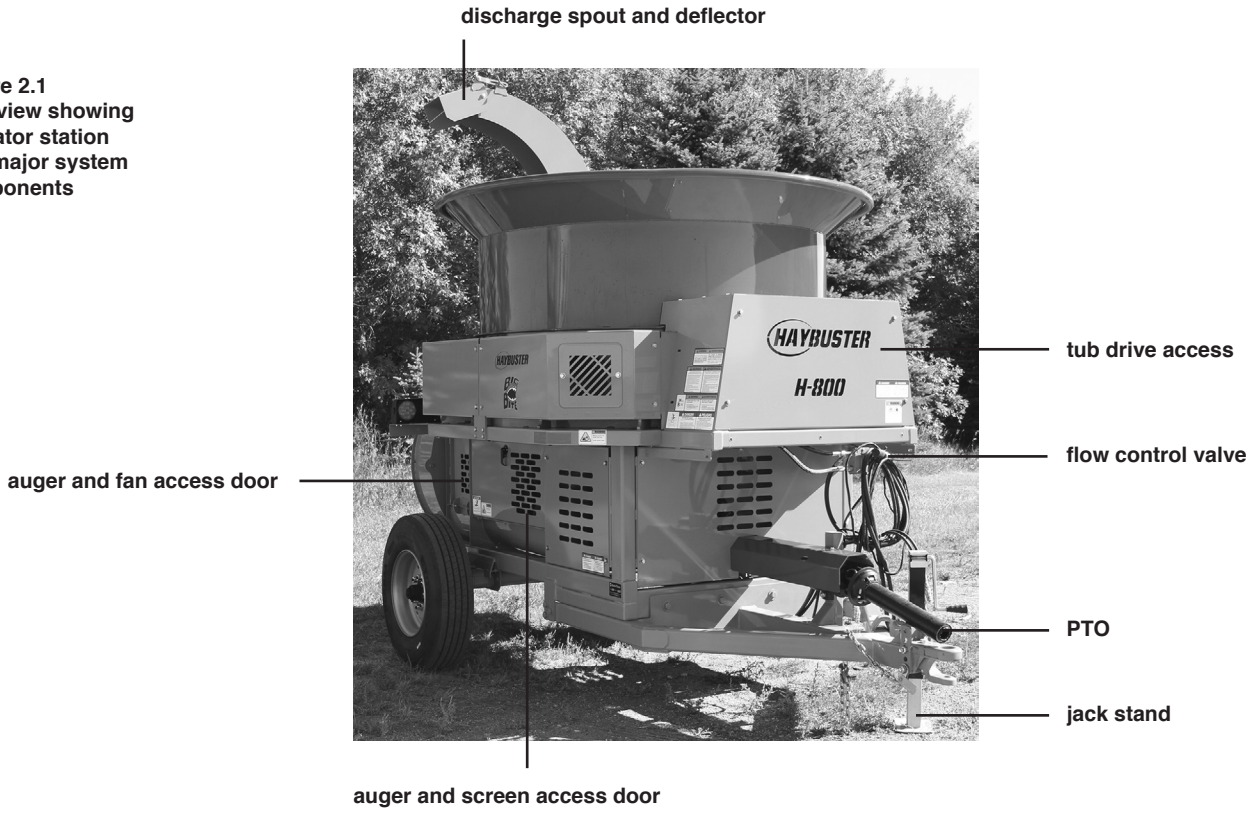
2.2 Introduction to the machine

2.2.1 Description of the H-800 Tub Grinder

The Tub Grinder is designed to grind most types of hay, grain, and crop residue such as stover and straw. The unit incorporates several basic features including the rotating tub, the rotor and hammer assemblies, the tub chain and drive assemblies, auger and blower fan assemblies and the axle and hitch assemblies.

Material is fed into the tub of the unit by appropriate means, such as a wheel loader. As the tub rotates, the material is exposed to the rotating hammers. The hammers then grind the material before the material is moved by the auger and discharged from the machine by the blower fan.

Figure 2.1
side view showing operator station and major system components



2.2.2 Overview of Operator's Controls

Operator controls include:

- **Flow Control Valve:** The flow control valve regulates the tubs rotational speed range.
- **Mill Grate Adjustment:** The mill grate adjustment raises and lowers the amount of material cut depending on the conditions and desired product.
- **Tractor Engine Speed:** The tractor engine speed should be set so 1000 PTO shaft is running at a 1000 RPM.
- **Tractor PTO Lever:** Engaging the tractor's PTO lever spins the rotor, and runs the auger.
- **One Tractor Control Valve:** Powers the tub hydraulic drive.
- **A Second Tractor Control Valve:** Contols spout angle and spout rotation.

2.2.3 Auger

Transfers material from the rotor chamber to the fan.

2.2.4 Rotor

The Rotor and screens are the heart of the tub grinder. The rotor on this H-800 Tub Grinder is equipped with 48 swinging hammers. Dull edges on the hammers and/or screens will result in a loss of capacity and increased horse power requirements.

IMPORTANT: Hammer and hammer rod life can be extended by keeping the rotor rotating at 2000 RPM. **Excessive tractor horsepower and/or overfeeding the rotor can cause the hammers to lay back resulting in excessive wear on both the hammers and hammer rods.**

CAUTION: Keep all foreign objects out of the tub and away from the rotor. Foreign objects may cause personal injury or damage to the H-800 Tub Grinder.

CAUTION: At full speed, energy is stored in the rotor. **Do not use the tractor PTO brake to stop the rotor. Reduce engine speed before disengaging the PTO.**

2.2.5 Screens

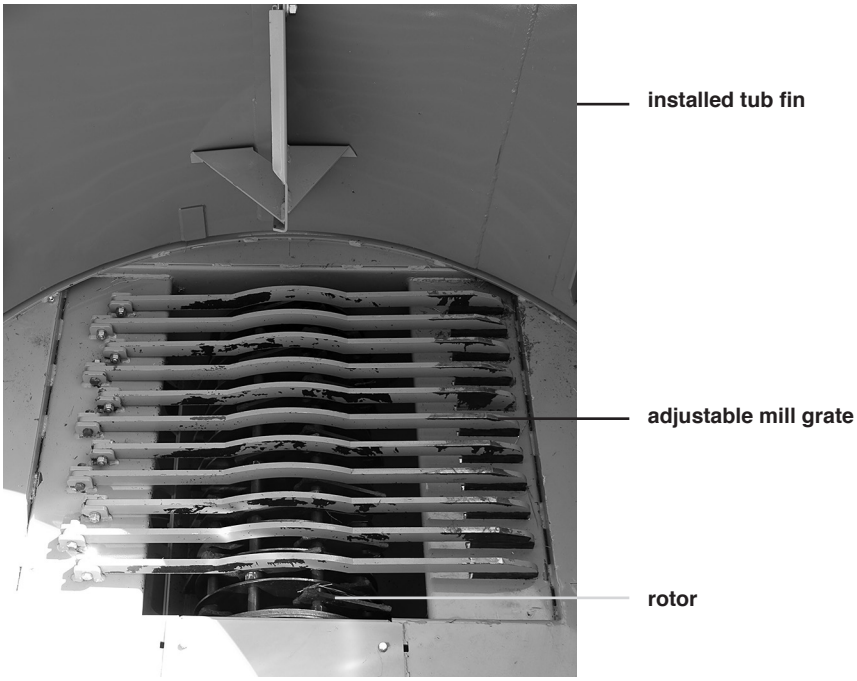
Screens are used to regulate product size. All H-800 Tub Grinders require one screen. As a rule, use the largest diameter screen capable of doing the job.

The size of the hole in the screen determines the coarseness of the grind. The larger the hole diameter, the coarser the grind. Hole sizes vary from ¾” to 6” round and 5-1/8” x 9” rectangle. In general, use the larger screen sizes for grinding hay.

2.2.6 Tub

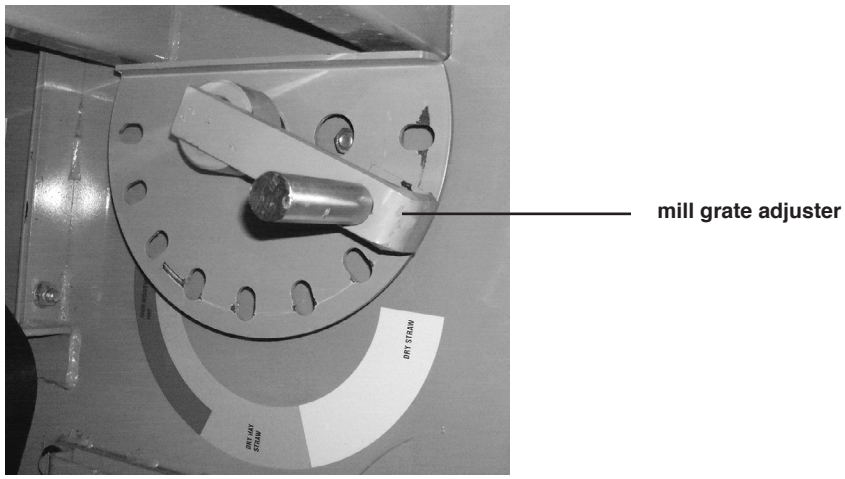
The purpose of the tub is to contain the material above the rotor, and to keep the rotor loaded

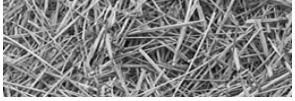
One tub fin is furnished with the H-800 Tub Grinder.



2.2.7 Adjustable Mill Grate

An adjustable mill grate is installed above the rotor to regulate the amount of material entering the rotor chamber. The adjustable mill grate can be positioned for wet or tough grasses or lower for dry hay.



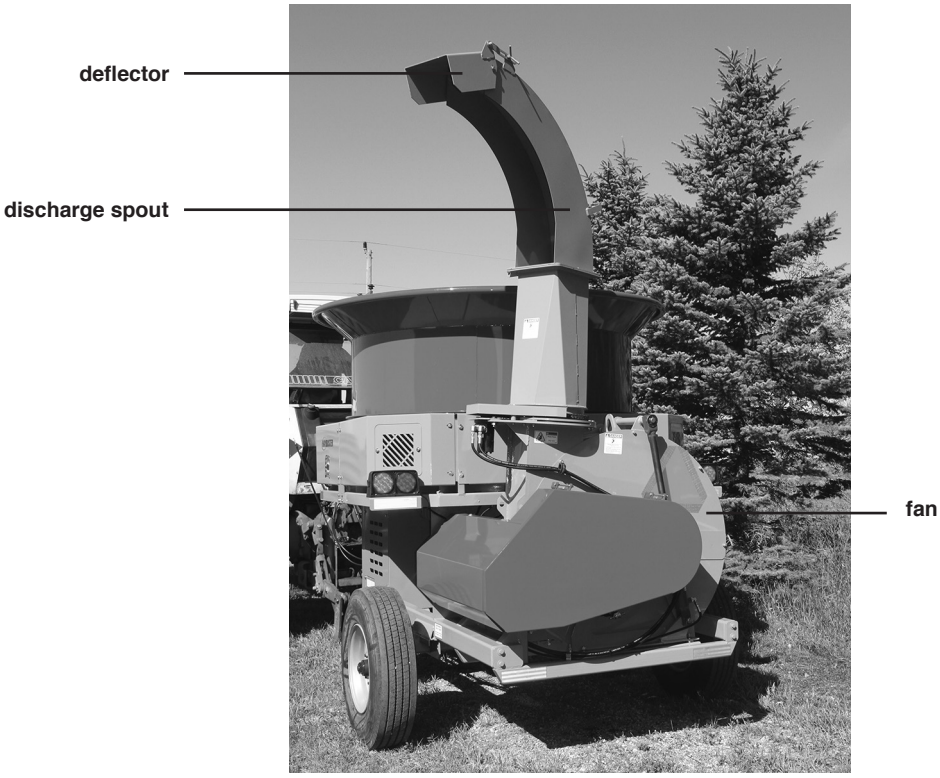


2.2.8 Fan

Material goes through the fan and is blown out the discharge spout.

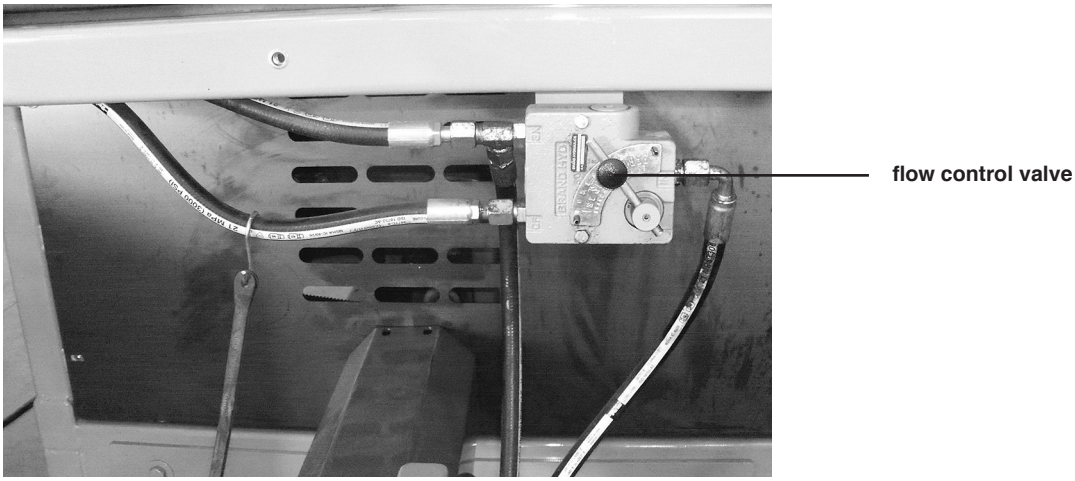
2.2.9 Discharge spout and deflector

The discharge spout and deflector assembly can be adjusted for different scattering effects. Raise the deflector for a wider spread. Lower the deflector for a narrower windrow. Rotate the discharge spout and fan housing for distribution near the machine or further out.



2.2.10 Flow control valve

The flow control valve regulates the tubs rotational speed range.



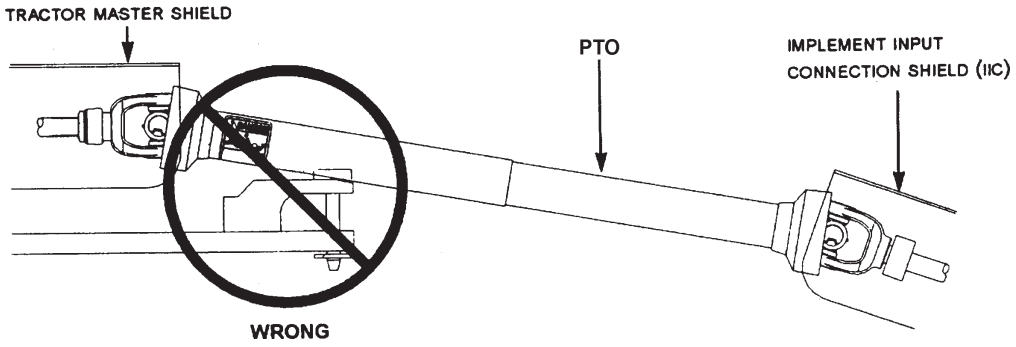
2.3 Machine Operation

2.3.1 Tractor Set Up

A tractor drawbar and 3-point arms can cause interference with the PTO driveline. This interference can cause serious damage to the PTO guarding and the PTO telescoping members.

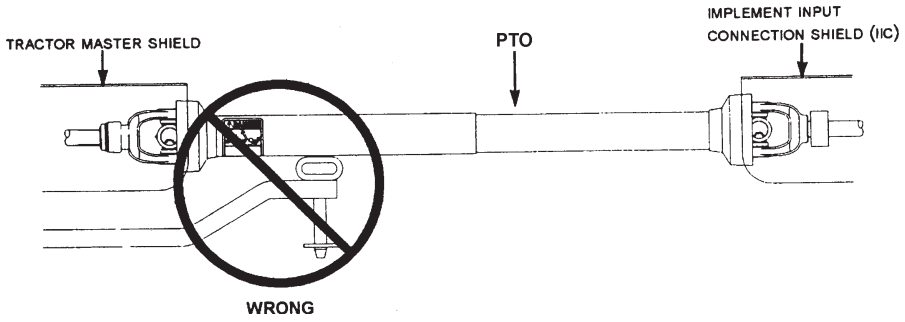
If this implement is attached to a tractor with a clevis hitch (hammer strap) style drawbar, the hammer-strap must be removed to prevent damage to the PTO guarding and the PTO telescoping members. See Figure 2.2.

Figure 2.2
incorrect clevis hitch (hammer strap) style drawbar set up

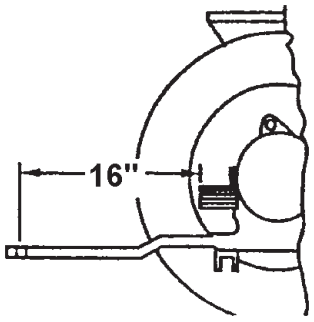


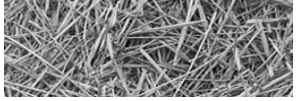
If this implement is attached to a tractor with an offset in the drawbar, be certain it is in the down position to prevent damage to the IID guarding and the IID telescoping members. See Figure 2.3.

Figure 2.3
incorrect offset style drawbar set up



If this implement is attached to a tractor with 3-point arms, the arms must be fully raised and locked in position to prevent damage to the PTO guarding and the telescoping members. Adjust the tractor drawbar so the distance from the end of the PTO shaft on the tractor to the center of the drawbar hitch pin hole is 16” (41 cm.) for a 1000 RPM shaft as shown at right.





2.3.2 How to hook up to tractor

To hitch the H-800 to a tractor, perform the following steps:

1. To reduce wear on the PTO shaft knuckle joints, tractor PTO shaft should be in line (parallel) with the H-800 Tub Grinder. If tractor is equipped with swinging drawbar, adjust so the tractor PTO and H-800 Tub Grinder drive shaft are in line.
2. Connect hydraulic lines to the tractor.
3. Connect electrical lines to tractor.

CAUTION: To insure a safe hook-up, the H-800 Tub Grinder and tractor should be connected with a 1" locking pin.

2.3.3 How to disconnect from tractor

To hitch the H-800 to a tractor, perform the following steps:

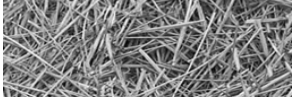
1. Park H-800 Tub Grinder and tractor on a level spot.
2. Lower jack to ground, place blocks under jack if ground is soft.
3. Disconnect electrical wires.
4. Disconnect hydraulic lines.
5. Disconnect PTO, place shaft in shaft holder.
6. Raise hitch of H-800 Tub Grinder to remove weight from tractor hitch by adjusting jack.
7. Remove hitch pin.
8. Drive tractor away slowly.

2.3.4 How to operate machine as a unit

INTRODUCTION

Tractor engines are designed to reach maximum power at PTO speed (1000 rpm), and most tractors are capable of engine speeds from 10 to 20 percent over PTO speed. A rotor speed of 2000 rpm is recommended. It will be necessary to operate tractor PTO at approximately 1100 rpm.

The flow control valve controls the feed rate to keep the tractor at its peak power point.



GRINDING

Place materials to be ground directly into the tub. The best method for filling the H-800 Tub Grinder is:

1. Engage rotor and increase engine speed to 1000 RPM on the P.T.O. shaft.
2. Fill the tub about half full of unground materials before starting tub rotation.
3. Start tub.
4. Place additional materials in the tub.

LOOSE HAY

The best capacity will be obtained if the tub is consistently kept no less than half full of loose hay. When loading the tub, place materials slightly to the rear rather than directly over the rotor. For best results feed the tub with small portions.

WET OR FROZEN HAY

This is the toughest material for any grinder to handle. When filling the tub with wet or frozen hay, deposit small quantities on a more frequent basis rather than filling the tub with one load.

LARGE ROUND BALES

Place large round bales in the tub on end.

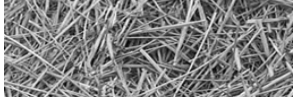
IMPORTANT: Never drop a large round bale into the tub from a high level. Ease the bale over the edge and down into the tub carefully. Dropping a large bale directly on top of the rotor will cause damage to the rotor.

CROP RESIDUE

When grinding crop residues, use the same methods as with loose hay. Extremely wet or frozen materials should be placed sparingly into the tub.

SMALL GRAINS

Grinding small grains requires special attachments. These attachments fit directly over the rotor. It is not recommended that small grains be ground without the use of one of the small grain attachments. (See Appendix B: H-800 Tub Grinder Specifications under the heading “Options”.)



IF LODGING OCCURS

Materials may lodge against the side of the tub and not feed down to the rotor. If this occurs, reverse the tub direction briefly and then start the tub in a forward direction again. This practice normally dislodges any materials.

WARNING: Never attempt to dislodge material inside the rotor when the machine is in operation by physically pushing down on materials. **WHEN THE MACHINE IS IN OPERATION, STAY OUT OF THE TUB.**

2.4 Shutdown procedures

2.4.1 Normal Shutdown Procedure

CAUTION: At full speed, energy is stored in the rotor. **Do not use the tractor PTO brake to stop the rotor.**

WARNING: The stored up energy in the rotor causes it to rotate long after disengaging the tractor PTO. Before performing any maintenance on the machine or getting into the tub, be sure rotor and all moving parts have come to a complete stop.

Before working on or near the H-800 Tub Grinder for any reason, including servicing, inspecting or unclogging machine:

1. Run H-800 Tub Grinder until discharge conveyor is empty, and grind as much of the material in the tub as possible.
2. Reduce engine speed to idle.
3. Disengage PTO
4. Disengage hydraulics.
5. Place transmission in park and set parking brake.
6. Shut off tractor engine and remove key.
7. Wait for all movement to stop.
8. Disconnect PTO driveline from tractor.

2.4.2 Emergency Shutdown Procedure

Disengage PTO and tractor hydraulics

2.5 Storage

2.5.1 Preparing for storage

To prepare the unit for storage, perform the following steps:

1. Check the wheel bearings for lubrication requirements and adjustments at the end of the season.
2. Check the pressure roller bearings for lubrication and adjustments at the end of the season.
3. Clean the machine thoroughly to prevent rust and to make inspections easier. Clean and repaint the tub floor to prevent rust and sticking problems at start up time.
4. Check for loose or worn chains, belts, sprockets, and pulleys.
5. Check the condition of bearings.

2.5.2 Removing from storage

To prepare the unit for use after storage, perform the following steps:

1. Perform a thorough pre-operation inspection.

2.6 Installing or changing a screen

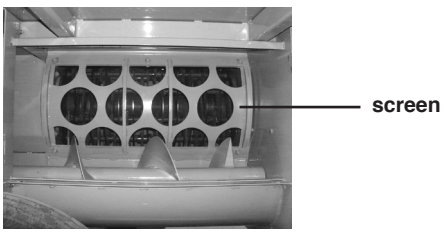
CAUTION: Follow normal shutdown procedures and make sure rotor and all moving parts come to a complete stop before installing or changing the screen.

Using a screen with smaller holes will produce a finer cut. Where a coarse cut is desired, use a screen with a larger hole.

Screens can be reversed when one edge becomes worn.

To change screens, perform the following steps:

1. Remove the auger/screen access door on the right side of the machine.
2. Remove six bolts, washers and nuts from the screen currently installed.
3. Slide screen out.
4. Insert new screen
5. Replace bolts, washers, nuts and access door.
6. Replace the auger/screen access door.



2.7 Road Transport

2.7.1 Set up to transport

Inspect the H-800 Tub Grinder for any loose parts, tools, or any materials. Remove them or fasten them securely to the H-800 Tub Grinder.

To set up the H-800 Tub grinder for transport, perform the following steps:

1. Rotate spout to the top.
2. Check for local restrictions on towing.

2.7.2 Change back to operate

To set up the H-800 Tub Grinder for operation, perform the following steps:

1. Connect H-800 Tub Grinder to the tractor.
2. Connect hydraulic hoses and electrical cable to the tractor.
3. Rotate spout to desired direction.

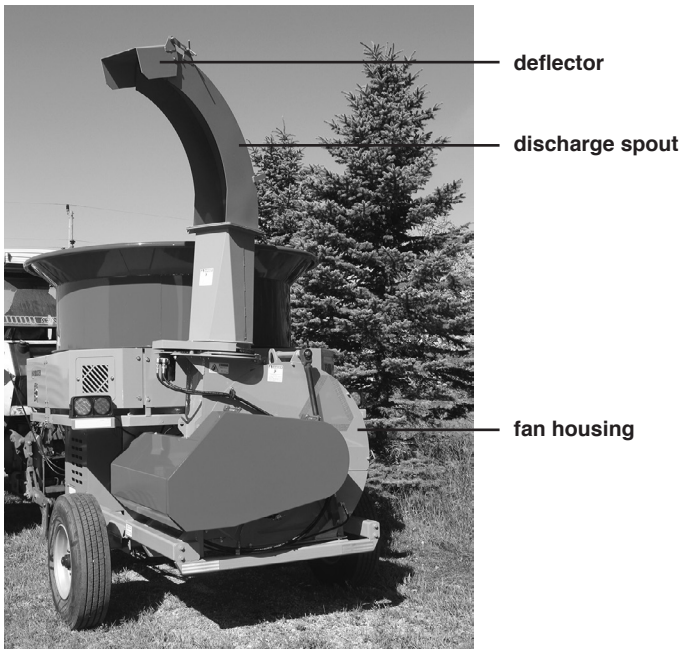
2.8 Changing the output distribution pattern

The spout and the deflector can be set to create a windrow or for spreading.

For bedding or mulching, remove the spout assembly. This allows the chopped material to discharge directly from the fan. The distance the material is thrown and the coverage may be varied by rotating the fan to obtain the desired results.

For Bunk Feeding, set the spout in its working position. Adjust the deflector on the end of the spout up or down to help regulate the force of the material leaving the spout. When bunk feeding, raise the spout above the bunk and use the deflector to direct the material downward. This will reduce the force, helping to prevent material from blowing out of the bunk. If material is still blowing out of the bunk, PTO speed may need to be decreased.

To create windrow set the spout and deflector as follows; with the spout latched in the working position, the deflector can be raised and the fan housing rotated to place the material in a row as desired.

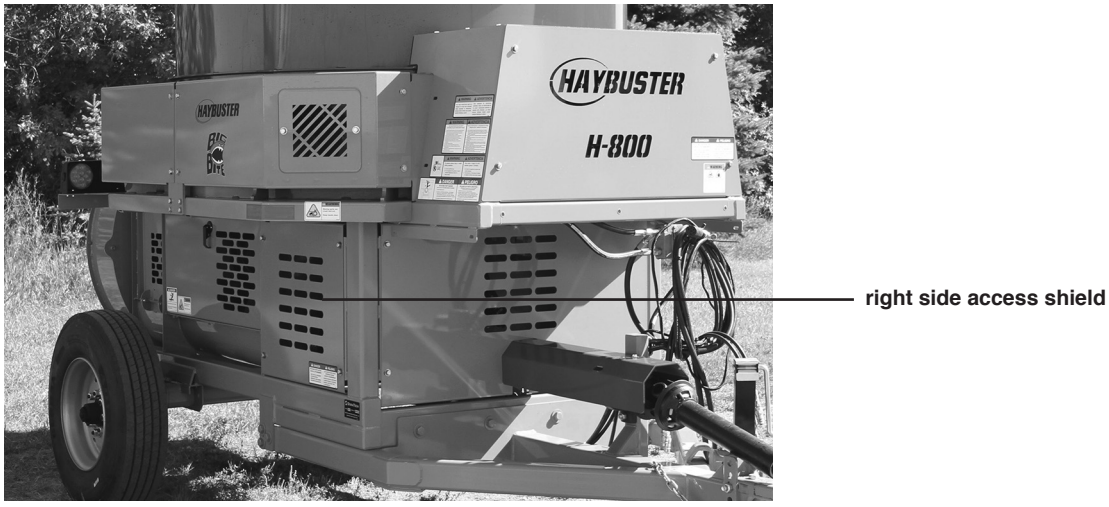


2.9 P.T.O. shield and belt drive system shields

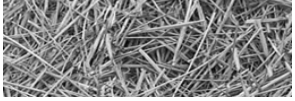
WARNING: Before removing the P.T.O and belt access shields, be sure and follow normal shutdown procedures. Be certain that the tractor is shut off and all rotating components of the machine have come to a complete stop before opening or removing shields. Loose clothing is discouraged and long hair should be restrained whenever working on the P.T.O shafts.

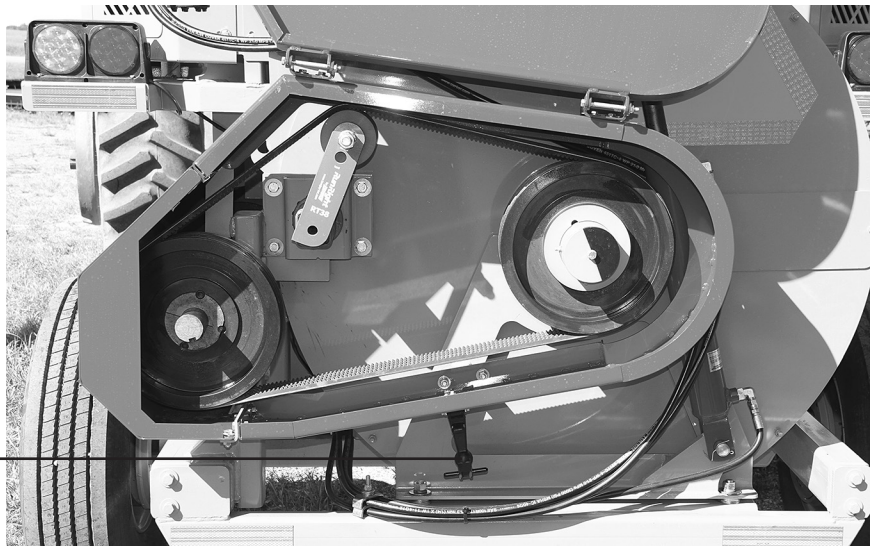
To access the front P.T.O. support bearing, remove the P.T.O. shield by removing four bolts and washers and lifting the shield off. Replace P.T.O. shield when finished.

By removing four bolts, washers and the right-side shield, you will be able to access the rear P.T.O. support bearing and the belt drive system.

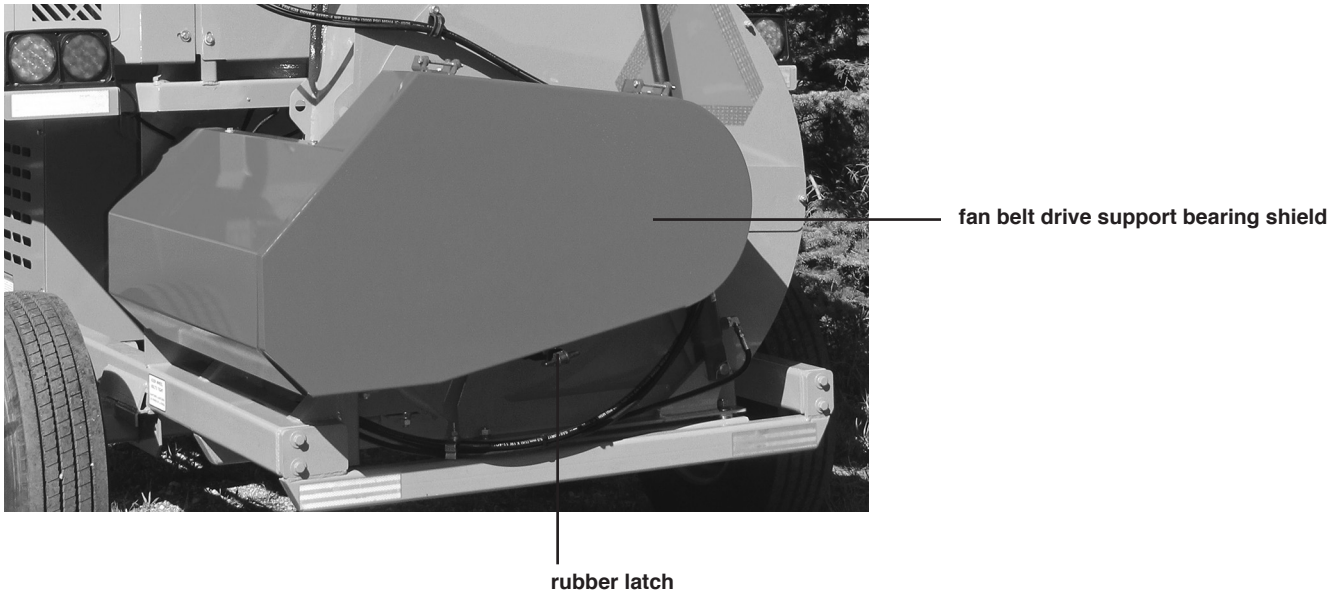


To access the fan belt drive system, unhook the rubber latch on the bottom of the shield and open shield as shown.





To access the fan belt drive support bearings and belts, open shield and remove six bolts, washers, nuts and remove shield. When finished with maintenance replace shield, bolts, washers and nuts. Close cover and re-hook the rubber latch.

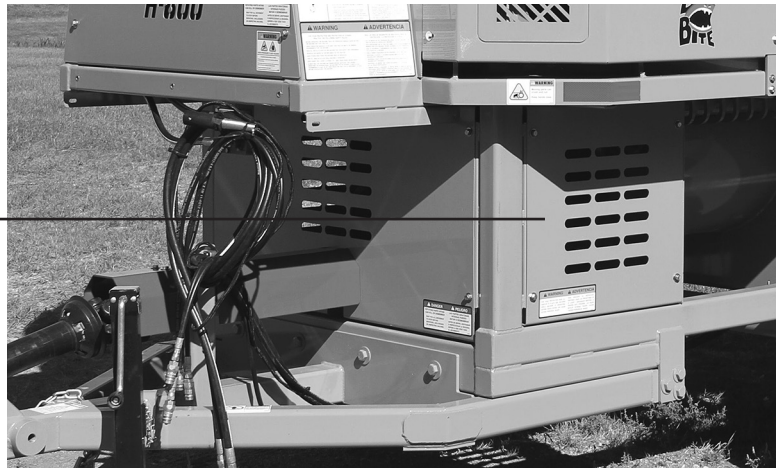


2.10 Mill grate adjustment

WARNING: Before removing the left side shield, be sure to follow the normal shut down procedure. Be certain that the tractor is shut off and all rotating components of the machine have come to a complete stop.

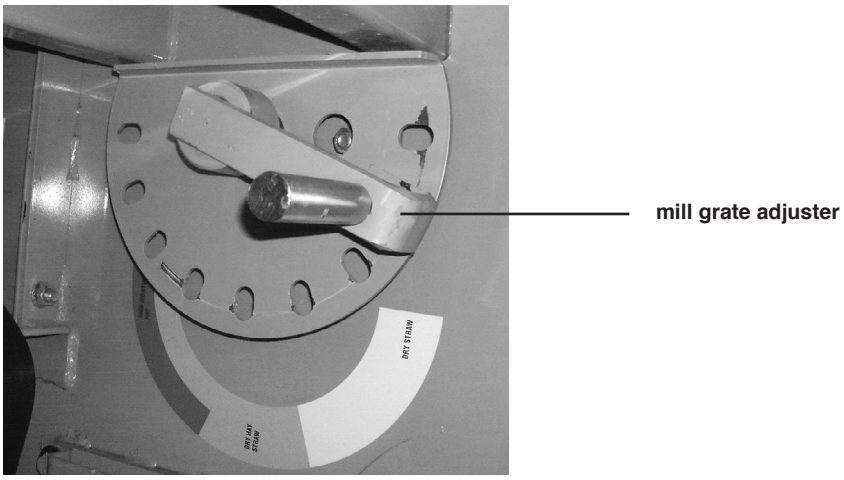
An adjustable mill grate is installed above the rotor to regulate the amount of material entering the rotor chamber. The adjustable mill grate can be positioned for wet or tough grasses or lower for dry hay.

To adjust the mill grate, remove four bolts and washers from the left side shield and remove the shield.



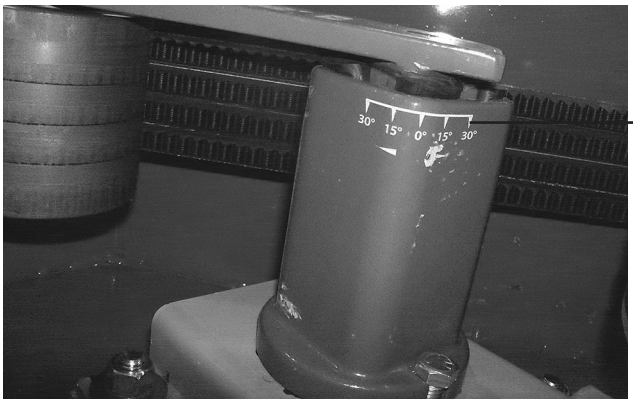
Rotating the mill grate adjustment handle clockwise will expose less of the hammer and produce a finer cut. Moving the handle counterclockwise will expose more of the hammer to produce a coarser cut.

To rotate the handle, squeeze the lever to release the lock and rotate the handle to the desired position and release the lever. Be sure that the lever is seated in one of the adjustment slots to ensure that the mill grate stays properly adjusted.

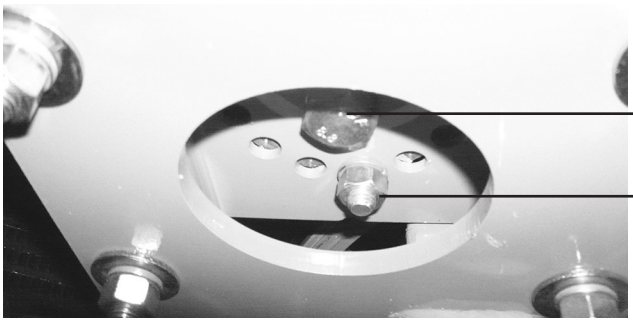


2.11 Adjusting Belt Tension

Using the pretension angle marking located in the corner of the outer housing as a reference; loosen the center mounting bolt. With the large wrench provided, hold the outer housing and remove the index bolt. Continue turning the outer housing until the proper amount of tension has been applied, 20 to 30 degrees.
DO NOT EXCEED 30 DEGREES OF PRE-TENSION!



Pretension angle markings



Mounting bolt

Index bolt

The tensioner mounting plates have a notch on one side, turning the mount 180 degrees will move the adjustment index holes a half step.

Tensioner mounting plate notch

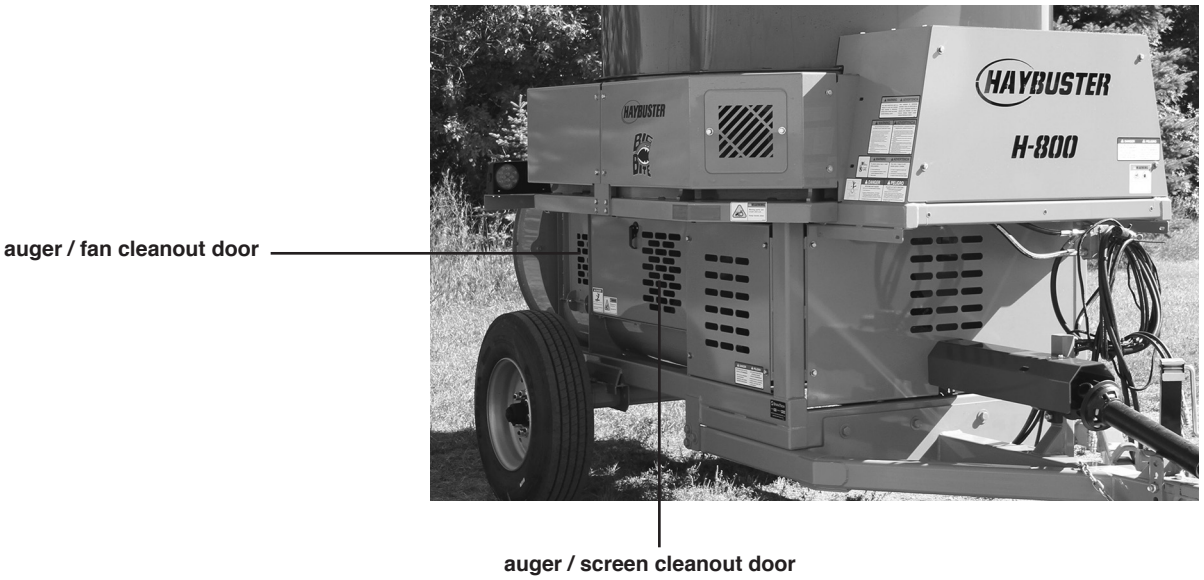
For a setting that is halfway between the holes on the mounting plate, rotate the mounting plate 180 degrees and re-tension the bolts.

When belts are at the proper tension, install index bolt and tighten. Tighten the center mounting bolt and re-check pre-tension angle on the outer housing.

2.12 Auger/Fan cleanout

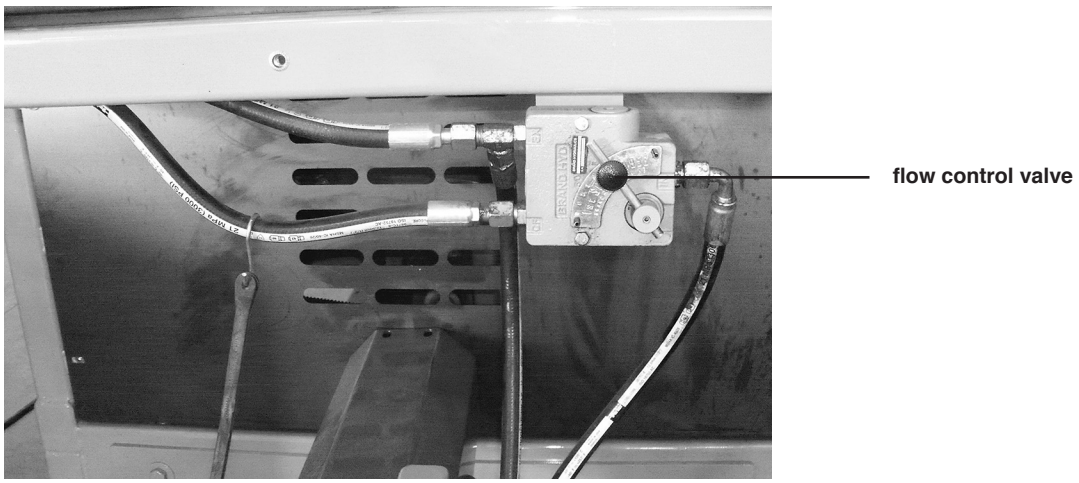
WARNING: Before removing or opening the auger doors, be sure to follow the normal shut down procedure. Be certain that the tractor is shut off and all rotating components of the machine have come to a complete stop.

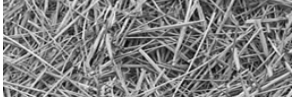
To open the rear auger/fan cleanout access door, release the rubber latch and pull the door open. To open the middle auger/screen access door, lift handle and turn until it unlatches and then remove door.



2.13 Adjusting the flow control valve

The flow control valve regulates the tubs rotational speed range. The higher the number on the valve the faster the tub rotates. The lower the number the slower the tub rotates.





2.14 Hydraulic cylinder and valve

All cylinders and valve hose connections should be tight and leak free. If the area near a hose connection becomes oily or dirty, repairs should be made to deal the leak. Hoses should be free of cracks or cuts to ensure safe operation. Cylinder seal kits are available from your dealer to repair a leaky cylinder. Pin connections should be free of excessive wear. If pins become worn they should be replaces. Also check yokes and mounts for cracks and wear.

WARNING: Hydraulic fluid escaping under pressure can be almost invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of wood or cardboard rather than your hands. If injured seek qualified medical attention immediately to prevent serious infection or reaction.

2.15 Tires and Rims

Tires should be inflated to 125 PSI (862 kPA) and should be free of cuts or cracks. There should also be adequate tread and no visible cords, wires or tread separation. Tires must also be of proper loading rating, speed rating and size.

Rims must be free of cracks and rust pitting. Lug nuts must also be tight, Inspect the area around the lug bolts. If rust develops this is a sign of loose lug bolts. Check wheel bearings and seals, replace grease as use requires. For lug nut torque requirements, see **Section 3.6**.

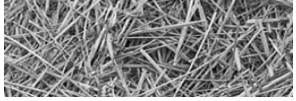
2.16 Jack

An adjustable jack is provided with the machine to support the hitch when machine is disconnected from the tractor. The jack must only be used on firm, level ground or similar base to prevent it from sinking.

When unhooking the machine, remove the jack pin and rotate the jack to the upright position and reinstall the pin. Crank the jack until the hitch is no longer supported by the drawbar of the tractor. The hitch pin can be removed.

WARNING: Never use the jack without reinstalling the jack pin.

When hooking up the machine, install a proper hitch pin and secure it with a hairpin clip or comparable device. Crank the jack until the foot of the jack is fully raised. Remove the jack and place in transport position.



HAYBUSTER®

A Tradition of Innovation Since 1966

Section 3: General Maintenance

SERVICE AND MAINTENANCE

CAUTION: If for any reason arc welding is to be done, always ground cylinder to frame of machine to prevent arcing in bearings.

1. Before working on or near the H-800 Tub Grinder for any reason, including servicing, inspecting or unclogging machine:

    a. Run H-800 Tub Grinder until the auger and blower are empty, and grind as much of the material in the tub as possible.

    b. Reduce engine speed to idle.

    c. Disengage PTO

    d. Disengage hydraulics.

    e. Place transmission in park and set parking brake.

    f. Shut off tractor engine and remove key.

    g. Wait for all movement to stop.

    h. Disconnect PTO driveline from tractor.

2. When replacing any part on your H-800 Tub Grinder, be sure to use only DuraTech Industries authorized parts.

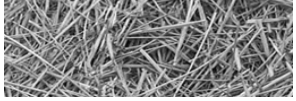
3. Relieve all pressure in the hydraulic system before disconnecting the lines or performing other work on the system. Make sure all connections are tight and the hoses and lines are in good condition before applying pressure to the system.

WARNING: Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspect leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

4. Visually examine to see if any internal parts show excessive wear. Repair or replace needed parts. These parts include rotor plates and holes in the plates that support the rods. Enlarged holes can cause rods to break.

    Also check rods, rod locking and retaining devices, hammers, screens, main shaft, hinges or anything else that could wear and perhaps fail if not properly maintained, and cause damage to the rotor and/or personnel safety. Check bearing alignment and mounting bolts to insure a firm foundation and reduced vibration.

    Keep all foreign objects out of the tub and away from the rotor. Foreign objects may result in personal injury or cause severe damage to hammers, screens, rods, and other parts that will cause rotor failure.



5. Check for loose or worn chains, belts, sprockets and pulleys.

6. Keep sprockets and pulleys aligned.

7. Inspect rotor and all rotating parts for wrapped twine or wire build up.

8. If machine is going to sit idle for an extended period of time, tub floor should be cleaned to prevent rust and sticking problems at start up time.

9. The proper tire pressure is 125 PSI. (862 kPa)

10. The wheel bearings should be checked for lubrication and adjustments yearly, preferably at the end of the season.

If a generous amount of grease is on the bearing and in the housing, and if the grease is soft, the grease will not need changing.

If the lubricant is caked and the bearing seems dry, wash the bearing to remove old grease. Repack the bearing.

3.1 Lubrication

CAUTION: Follow normal shutdown procedure before adjusting or lubricating.

LUBRICATION INSTRUCTIONS: The operator should make a check of all grease fittings in the unit before beginning to operate it to become familiar with their locations and the correct service schedule

Bearing Lubrication

Bearing lubrication in the presence of dust and water should contain as much grease as speed will permit, since a full bearing with a slight leakage is the best protection against entrance of foreign material. In the higher speed ranges, too much grease will cause overheating.

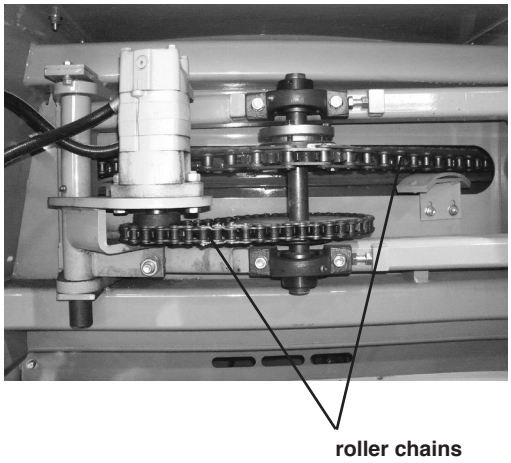
High operation, abnormal bearing temperature may indicate faulty lubrication. Normal temperatures may range from "cool to warm to the touch" up to a point. Unusually high temperatures "too hot to the touch for more than a few seconds" accompanied by excessive leakage of grease indicates too much grease. High temperatures with no grease showing at the seals, particularly if the bearing seems noisy, usually indicate too little grease. Normal temperatures and a slight showing of grease at the seals indicate proper lubrication.

Use only a high quality, multi-purpose grease when lubricating the unit. Make sure all fittings and the nozzle of the grease applicator are clean before applying the grease. If any grease fittings are missing, replace them immediately.

3.1.1 Lubrication Points

The following points will require a ten (10) hour service interval.

- Auger bearings- 2 places
- Fan housing- 2 places
- Fan Pivot- 1 place
- Fan driveline supports- 2 places
- P.T.O. universal joints- 2 places
- Driveline supports- 2 places
- Tub drive shaft bearings- 2 places
- Tub drive orbit motor bracket- 1 place
- Rotor Bearings- 2 places



The following points will require a fifty (50) hour service:

- Over running clutch

The roller chains requires graphite spray or oil daily in dusty conditions.

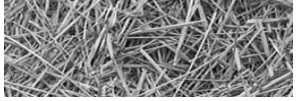


Figure 3.1
tub drive - orbit motor bracket and drive shaft bearing lubrication points

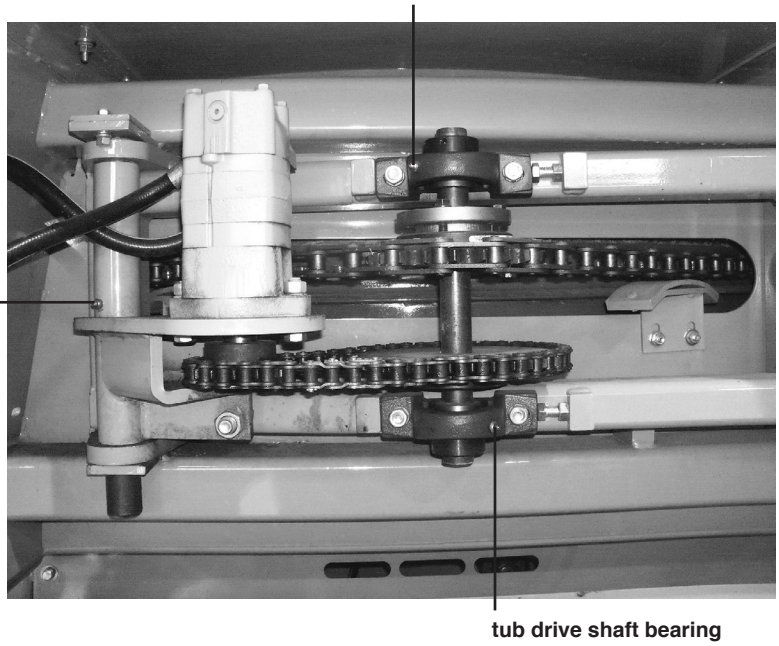


Figure 3.2
auger bearing and driveline support lubrication points

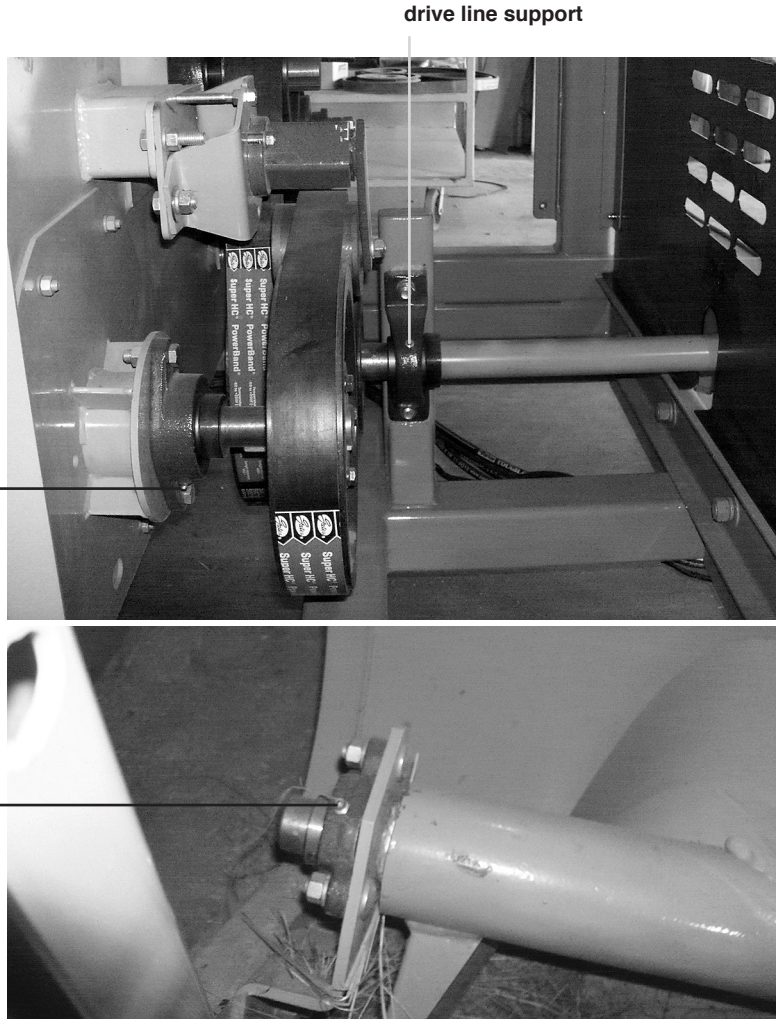


Figure 3.3
fan driveline supports lubrication points

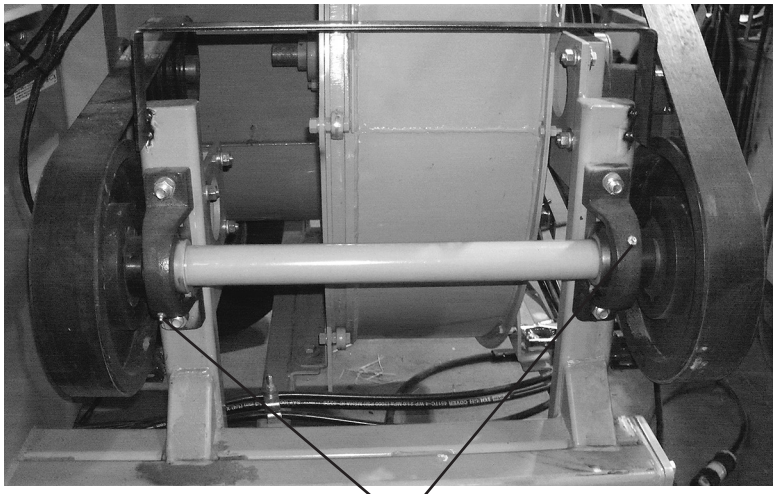
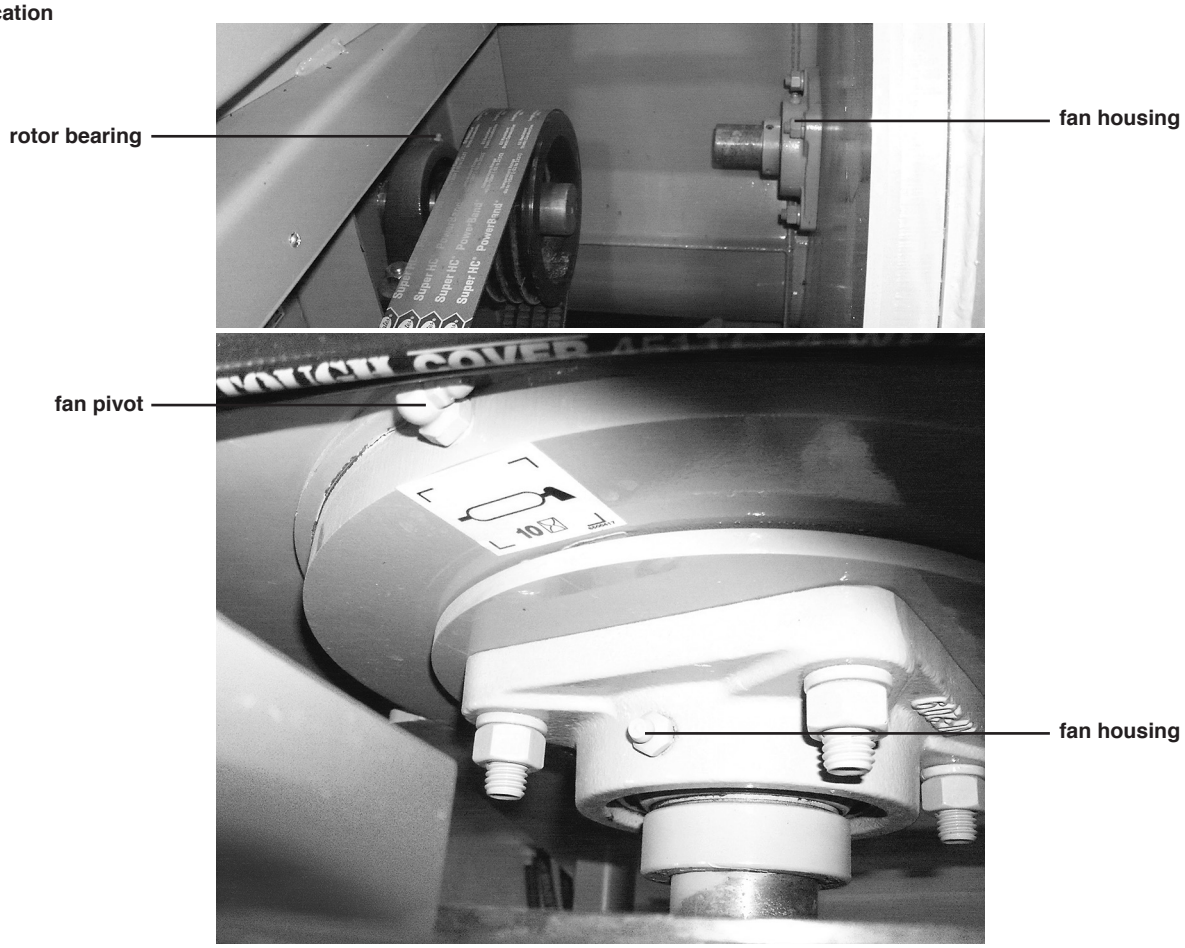


Figure 3.4
rotor bearing, fan housing and fan pivot lubrication points



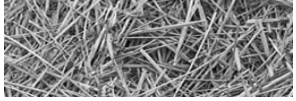


Figure 3.5
driveline support lubrication point

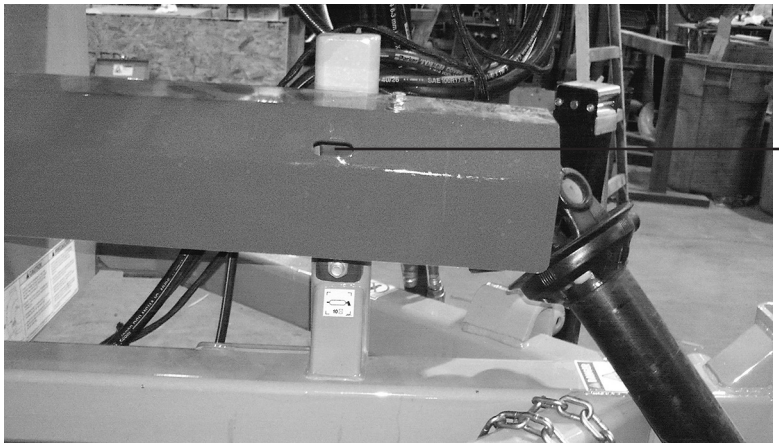


Figure 3.6
rotor bearing lubrication point

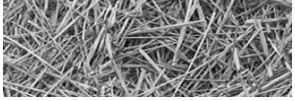


Figure 3.7
P.T.O. universal joint
lubrication points

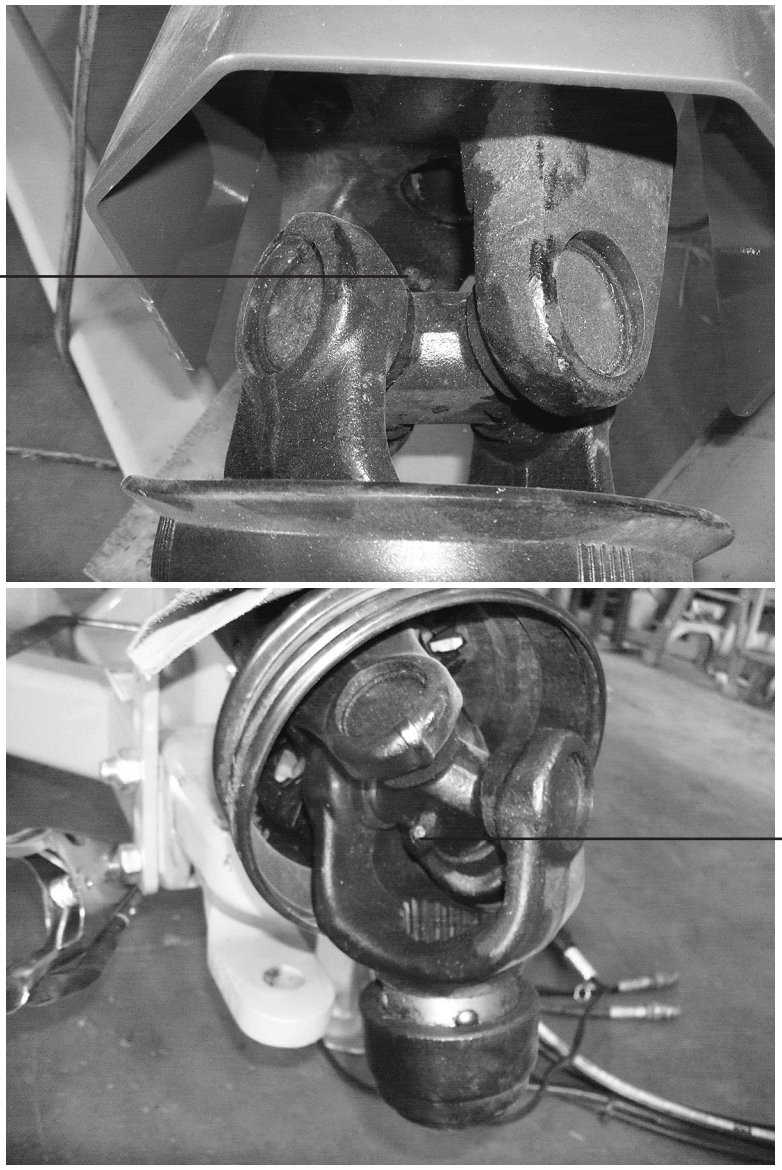
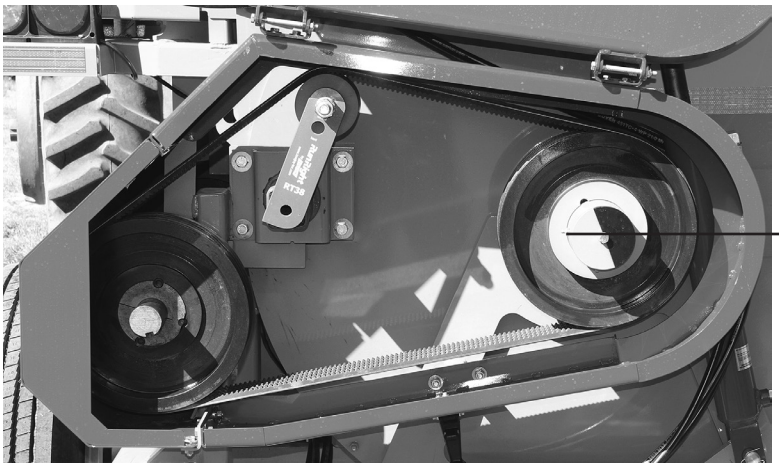
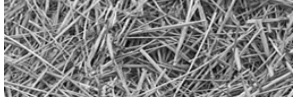


Figure 3.8
Over running clutch
lubrication point





3.1.2 Wheel bearing lubrications

Hub Removal

To remove the hub assembly for inspection, maintenance or service, follow the six (6) steps below:

⚠WARNING **Lift unit by the frame and never the axle or suspension. Do not go under unit unless it is properly supported by jack stands. Unsupported units can fall causing death or serious injury.**

1. Lift trailer and support it per manufacturer's requirements.
2. Remove the wheel.
3. Remove the grease cap by prying the edge out of the hub.
4. Pull the cotter pin from the castle nut and remove the outer spindle nut.
5. Remove the spindle washer.
6. Pull the hub off the spindle. Do not let the outer bearing cone fall free of the assembly. The inner bearing cone will be contained by the seal and will not fall out.

NOTE: A gear puller may be necessary to remove hub from spindle.

Bearing Inspection

Wash all grease and oil from the bearing cone using a suitable solvent. Dry the bearing with a clean, lint-free cloth and inspect each roller completely. If any pitting, spalling, or corrosion is present, then the bearing **MUST** be replaced. The bearing cup inside the hub **MUST** be inspected.
NOTE: Bearings **MUST** always be replaced in sets of one cone and one cup.

⚠CAUTION **Always wear eye protection when servicing the axle, brakes, hubs, springs and wheels. Failure to wear eye protection may result in serious injury.**

Follow the procedure below to replace the bearing cup:

1. Place hub on a flat surface with bearing cup on the bottom.
2. With brass drift punch, lightly tap around the small end of the cup to push it out.
3. Clean the hub bore. Replace the cup by tapping it back in with the brass drift punch. Cup should be seated against the retaining shoulder in the hub.

NOTE: Consult Bearing Replacement Chart for proper replacement bearings.

NOTE: Replacing the bearing cup is a very precise process. The cup **MUST** be perfectly seated when replaced. If the cup is not seated correctly, damage to the assembly may not be covered by the warranty. Consult Lippert Components, Inc. prior to replacing bearing and bearing cup. The trailer should be taken to a certified service center for this work to be done.

⚠CAUTION **Do not mix Lithium, calcium, sodium or barium complex greases. Chemical compatibility problems may occur. If you are changing from one chemical grease to another, be sure all old grease is removed prior to applying new grease. If the old grease is not removed completely, chemical compatibility may result in component failure or damage.**

Bearing Lubrication - Grease

Bearing grease should be replaced every 12,000 miles or 12 months, whichever comes first. Remove all old grease from wheel hub and bearings first. Bearings should be packed by machine if possible. Packing bearings by machine is preferable; however, packing by hand is a viable alternative.
Follow these procedures to repack bearings by hand:

1. Place grease into the palm of your hand (Fig. 1).
2. Press widest end of bearing into the outer edge of the grease pile, forcing grease into the inner area of the bearing between two adjacent rollers (Fig. 2).
3. Repeat this process while turning bearing from roller to roller until all rollers are coated.
4. Apply a light coat of grease into the bearing cup surface.
5. Reassemble bearing into cup.

Fig. 1

Fig. 2

Recommended Wheel Bearing Grease Specifications	
Thickener Type	Lithium Complex
Dropping Point	230°C (446°F) Minimum
Consistency	NLGI No. 2
Additives	EP, Corrosion, & Oxidation Inhibitors
Base Oil	Solvent Refined Petroleum Oil
Base Oil Viscosity	@40°C (104°F) 150cSt (695 SUS) Minimum
Viscosity Index	80 Minimum
Pour Point	-10°C (14°F) Minimum

Approved Sources	
Mobil Oil	Mobilgrease HP
Exxon/Standard	Ronex MP
Kendal Refining Co.	Kendall L-427
Ashland Oil Co.	Valvoline Val-plex EP Grease
Pennzoil Prod. Co.	Premium Wheel Bearing Grease 707L

Seal Inspection and Replacement

Always check the seal to make sure that it is not damaged, nicked, cracked or torn and is in good working order. If there is any question of condition, replace the seal.

Procedure to replace seal:

1. Pull seal from the hub with a seal puller. Never push the seal out with the bearing. The bearing may get damaged.
2. Apply a PERMATEX sealant to the outside of the new seal.

NOTE: Do not use PERMATEX on rubber encased seals.

3. Tap the new seal into place using a clean, hardwood block (Fig. 3).

NOTE: When installing a new oil seal, be sure side marked "AIR SIDE" is away from bearing cone.

Fig. 3

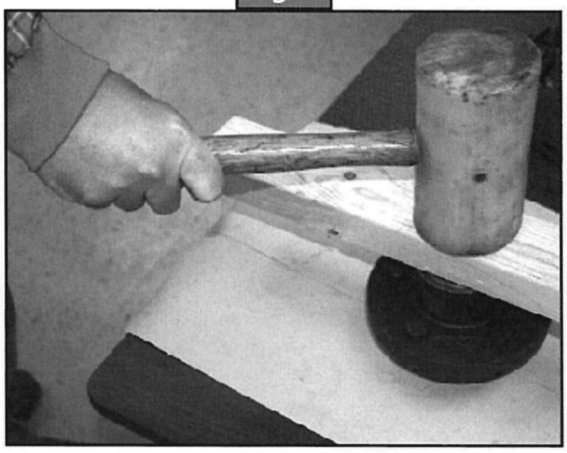
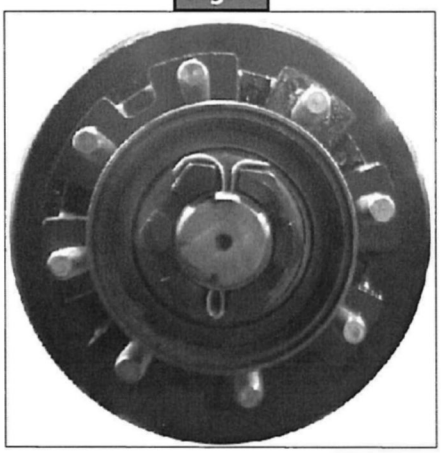


Fig. 4



Bearing Adjustment/Hub Replacement

To adjust bearings or replace removed hub, follow procedures below:

1. Place hub, bearing, washers and castle nut back on axle spindle in the reverse order from which they were removed. Castle nut should be torqued to 50 ft.-lb. Hub will rotate during this process.
2. Loosen castle nut to back off the torque.
3. Tighten castle nut finger tight until snug.
4. Insert cotter pin. If cotter pin does not line up with hole, back castle nut up slightly until pin can be inserted (Fig. 4).
5. Bend cotter pin over to lock nut in place. Nut should be free to move with only the cotter pin keeping it in place.
6. Tighten screw in cap to 25 ft-lbs.

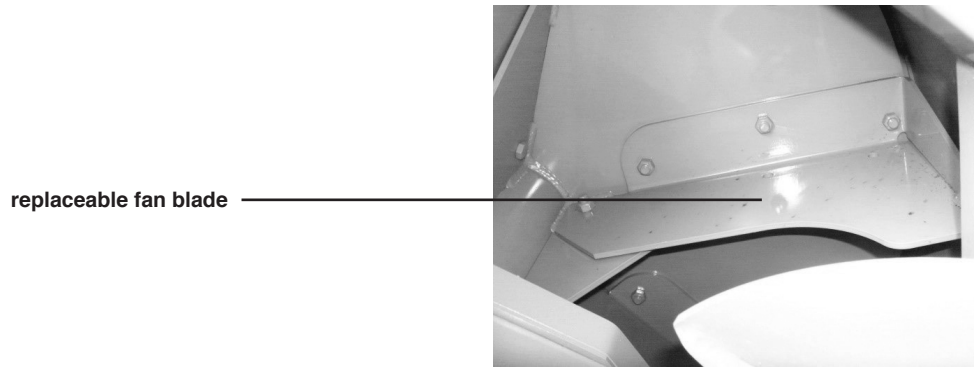
3.2 Replacing fan blades

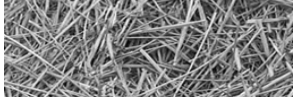
WARNING: The fan on the H-800 Tub Grinder has an overrunning clutch. When the PTO is disengaged, the fan will continue to rotate. Follow normal shut down procedure and **WAIT for all moving parts to STOP**!

The fan assembly on the H-800 Tub Grinder features a bolt-in replaceable fan blades and shaft.

To replace the fan blades, first remove the access cover located on the front of the fan. Remove the bolt, washer and nut to remove the access cover.

Then remove the bolt and top lock nut on the existing fan blades and remove the worn blade. Replace with new fan blade, bolts and top lock nuts. Fan blades should be replaced in pairs 180 degrees apart.





3.3 Hammermill maintenance

Visually examine the mill to see if any of the internal parts show excessive wear. These parts should include rotor discs and the holes in the discs that support the rods. Enlarged holes can cause rods to break or bend. Also check rods, rod locking or retaining devices, hammers, screens, screen tracks and hold downs, main shaft, platform locking devices, hinges or anything else that could wear and perhaps fail and causing damage to the hammermill and/or personnel safety if not properly maintained. The bearings should also be checked along with mounting bolts to insure a firm foundation and reduced vibration.

CAUTION: Keep all foreign objects out of the tub and away from the mill. Foreign objects may result in personal injury or damage to the machine.

The hammers have been designed and manufactured to provide the best compromise between hardness for good wearing qualities and strength for dependability and resistance to breakage.

WARNING: The hammers have been heat treated, and any alteration of the hammers by heating, grinding, resurfacing or any other process can change the mechanical properties of the hammer and make it unsuitable or dangerous to use.

Because of the high capacity of the machine, the hammers will wear and must be considered expendable. Each hammer has four cutting edges. For maximum life, it is suggested that hammers be rotated periodically to even out the wear over the entire rotor. If one end of a hammer is allowed to wear too long, one of the hammer's cutting edges will be lost.

Screens also have two cutting edges. When cutting edges become rounded, the screen can be turned end for end exposing the new cutting edges. The results of badly worn hammers and screens is loss of capacity, and added horse power requirements.

Hammer rods are case hardened to maximize wearability and toughness, although hammer rods must be considered expendable.

NOTE: Hammer and hammer rod life can be extended by keeping rotor rotating at 2000 RPM. Over powering or over feeding the rotor will cause the swinging hammers to lay back resulting in excessive wear on both the hammers and the rods.

3.4 Hammer maintenance and replacement

CAUTION: Follow normal shutdown procedure before entering tub to do any service work.

When installing or changing hammers, be sure to follow hammer pattern diagram carefully (page 53). Misplacement could cause excessive vibration.

We recommend the following:

A. Always replace hammers in pairs, 180 degrees apart. (illustrations A & B below).

B. Tips placed 180 degrees apart should be the same weight

To install new hammers or change the cutting edge on existing hammers:

1. Clear tub floor of all forage to allow easy access to rotor and rear rotor bearing cover.
2. Remove rear rotor bearing cover. Item A in figure 3.9.
3. Loosen two bolts at rear of rotor which holds the movable plate in place. Item B in figure 3.9.
4. Rotate movable plate counter clockwise to align holes allowing hammer rods to be removed through rear of rotor. Item C in figure 3.9.
5. Remove one row of hammers and replace, taking note as to where spacers are located. (page 53).

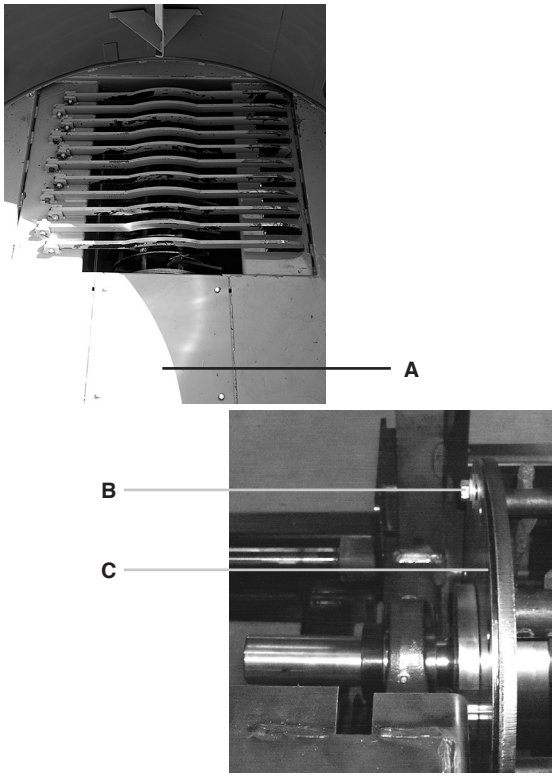


figure 3.9

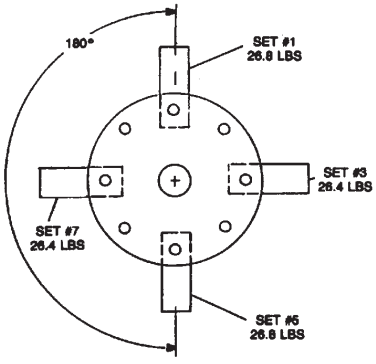


ILLUSTRATION A

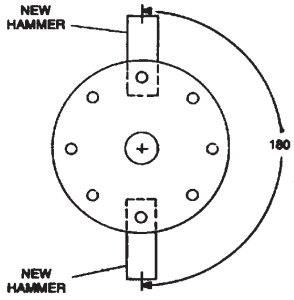


ILLUSTRATION B

6. After all hammers have been replaced or turned, reassemble movable plate and rear rotor bearing cover.
7. When starting the rotor after installing a new set of hammers or turning corners, watch for unusual or excessive vibration. If any occurs, immediately shut off the rotor. Check to see what is wrong and correct it before starting the rotor again.

3.5 Lug nut torque requirements

Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches assure the proper amount of torque is being applied to a fastener. Use no other method to torque fasteners.

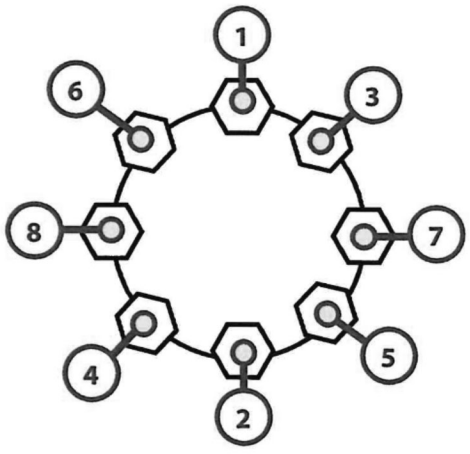
⚠WARNING **Proper and accurate torque MUST be maintained to prevent wheels from loosening, studs from cracking and/or breaking or other possible hazardous breakage resulting in death or serious injury.**

Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60°or 90°). The proper procedure for attaching your wheels is as follows:

1. Start all bolts or nuts by hand to prevent cross threading.
2. Tighten bolts or nuts in the following sequence (see Wheel Torque Requirement Chart below).
3. Tightening fasteners should be done in stages. Follow the recommended sequence (Fig. 8), tighten fasteners per wheel torque requirements chart below.
4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the 10 and 25 miles and again at 50 miles. A periodic check during regular service is recommended.

Wheel Torque Requirement Chart				
Wheel Size	Stud Size	Torque Sequence		
		1st Stage	2nd Stage	3rd Stage
14"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
15"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16.5" x 6.75"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs
16.5" x 6.75"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs
16" Dual and 17.5" Cone Nut	5/8"	50-60 ft-lbs	100-120 ft-lbs	190-210 ft-lbs
16" Dual and 17.5" Flange Nut	5/8"	50-60 ft-lbs	150-200 ft-lbs	275-325 ft-lbs
14.5" Demount	5/8"	Tighten sequentially to 85-95 ft-lbs		

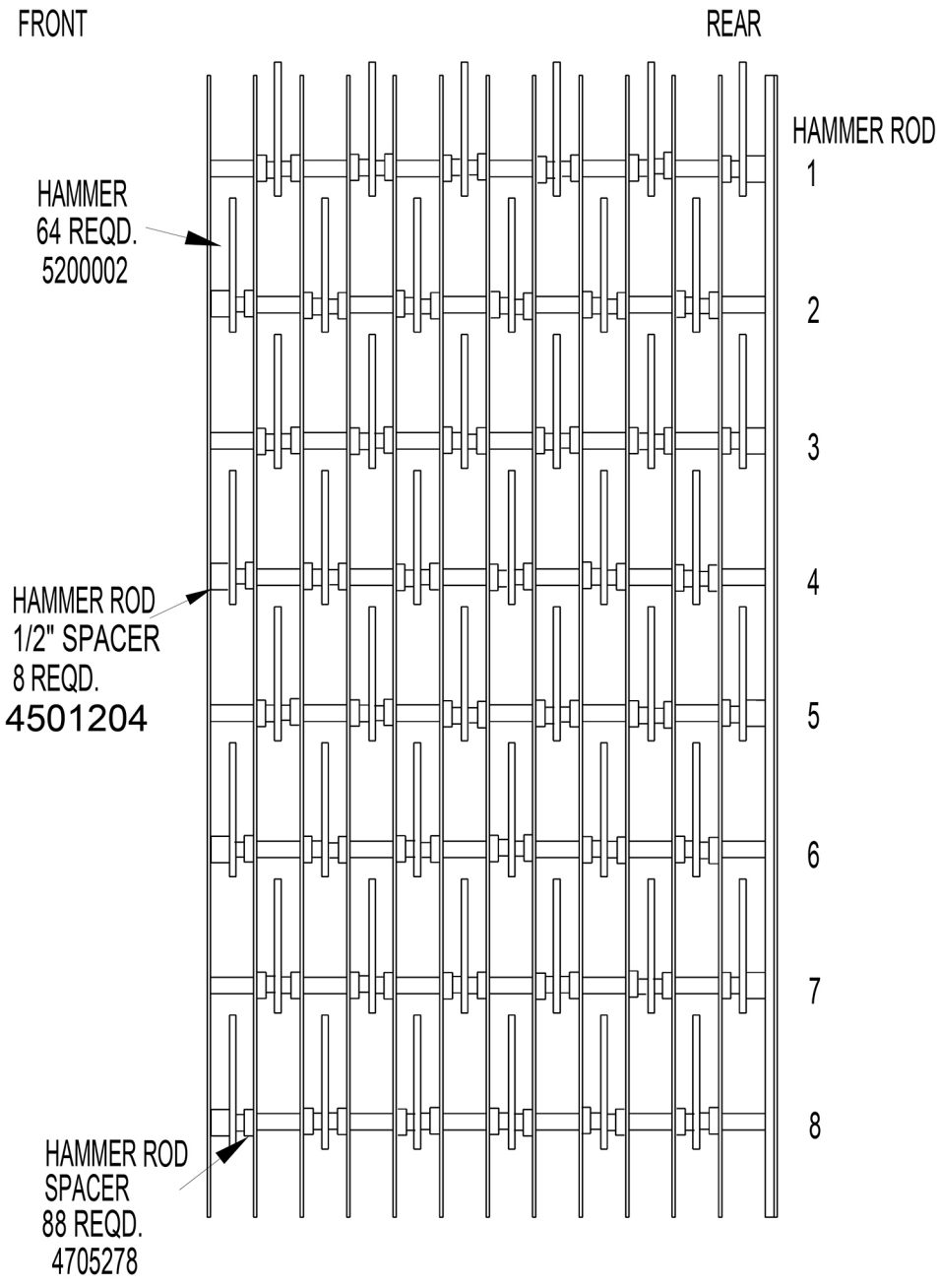
Fig. 8

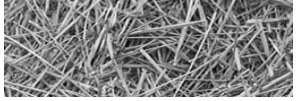


3.6 Belt Bushing Torque Settings

Location	ft/lbs.	m/kg
PTO shaft	83	11.5
Fan/Clutch	67	9.3
Rotor/Front	67	9.3
Rotor/Rear	30	4.1
Auger	30	4.1
Fan/Shaft	36	5.0

Figure 3.10
hammer spacing chart for the H-800

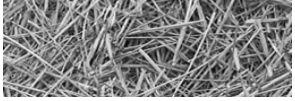




Section 4: Troubleshooting the H-800 Tub Grinder

4.1 General Troubleshooting

1. No grinding capacity	1. The screen is plugged. 2. The hammers or screens are badly worn. 3. Materials are too light or fluffy.	1. Clean out the holes in the screen. 2. Replace or turn worn parts. 3. Mix the lighter material with heavier material. 4. Use a larger screen.
2. The tub slows down or turns slowly	1. The hydraulic pressure is low or flow control is set too low.	1a. Look for internal leakage or wear in the orbit motor or pump. 1b. Check oil pressure.
3. The machine vibrates excessively	1. A hammer is broken. 2. The rotor bearing is defective. 3. The driveline is worn or misaligned. 4. Foreign material is wrapped in the rotor. 5. The hammer pattern is incorrect. 6. Fan blade broken	1. Replace the broken hammer. See product manual for more information about replacing hammers. 2. Replace the rotor bearing. 3. Replace worn part or the complete driveline. 4. Remove the foreign material. 5. See product manual for more information about hammer patterns. 6. Replace fan blades.
4. The tub stalls	1. The tub hydraulic system, pressure relief valve is set too low. 2. The tub is overloaded due to wet or tough grinding materials. 3. Too much material in the tub. 4. The tub is binding. 5. The hydraulic oil is too hot.	1. Check oil pressure. 2. Reduce amount of material in tub or shift the hydraulic tub drive to low range. 3. Reduce the amount of material in tub. 4. Remove material buildup between the tub and the platform framework. 5. Reduce the load on the hydraulic system, or stop and allow the hydraulic oil to cool.



Appendix A: Warranty

DuraTech Industries International Inc. (DuraTech Industries) warrants to its authorized dealer, who in turn warrants to the original purchaser for twelve (12) months from Retail Sale Date that this product will be free from defects in material and workmanship when used as intended and under normal maintenance and operating conditions.

This warranty shall become void if in the judgment of DuraTech Industries International, Inc. the machine has been subject to misuse, negligence, alterations, damaged by accident or lack of required normal maintenance, or if the product has been used for a purpose for which it was not designed.

All claims for warranty must be made through the dealer which originally sold the product and all warranty adjustments must be made through same.

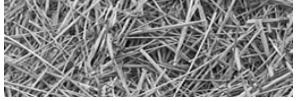
This warranty does not apply to tires or bearings or any other trade accessories not manufactured by DuraTech Industries International Inc. Buyer must rely solely on the existing warranty, if any, of these respective manufacturers.

DuraTech Industries International Inc., shall **not** be held liable for damages of any kind, direct, contingent, or consequential to property under this warranty. DuraTech Industries International Inc., cannot be held liable for any damages resulting from causes beyond its control. DuraTech Industries International Inc., shall **not** be held liable under this warranty for rental costs or any expense or loss for labor or supplies.

DuraTech Industries International Inc., reserves the right to make changes in material and/or designs of this product at any time without notice.

This warranty is void if DuraTech Industries International Inc. does not receive a valid warranty registration card at its office in Jamestown, North Dakota, USA, within 10 days from date of original purchase.

All other warranties made with respect to this product, either expressed or implied, are hereby disclaimed by DuraTech Industries International Inc.



Appendix B: H-800 Tub Grinder Specifications

Weight

Weight: .....6,700 lbs. (3,039 kg)
Tongue Weight: .....1,060 lbs. (480.81 kg)

Transportation Dimensions

Width: .....7'-4" (2.24 m)
Length: .....13'-2" (4.01 m)
Height: .....8'-1" (2.46 m)

Working Dimensions

Width: .....7'-4" (2.24 m)Chassis
Length: .....13'-2" (4.01 m)
Height: .....11'-1" (3.38 m)

Tub

Tub size at flare: ..... 8' (2.4384 m)
Tub size at base: ..... 6' (1.8288 m)
Max bale size: .....5' long x 5' diameter (1.52 m x 1.52 m)
Max bale weight: .....2,200 lbs. (997.9 kg)

Rotor

Hammermill size: ..... 33" (0.84 m) long x 26" (66.04 cm) diameter
Number of hammers: 48
Hammers: ..... 3/8" (0.95 cm) thick, two holes

Screens available:

¾" (1.905 cm), 1" (2.54 cm), 2" (5.08 cm), 3" (7.62 cm), 4" (10.16 cm), 5" (12.7 cm), 6" (15.24 cm) round and 5-5/8" x 9" rectangle (14.2875 x 22.86 cm)

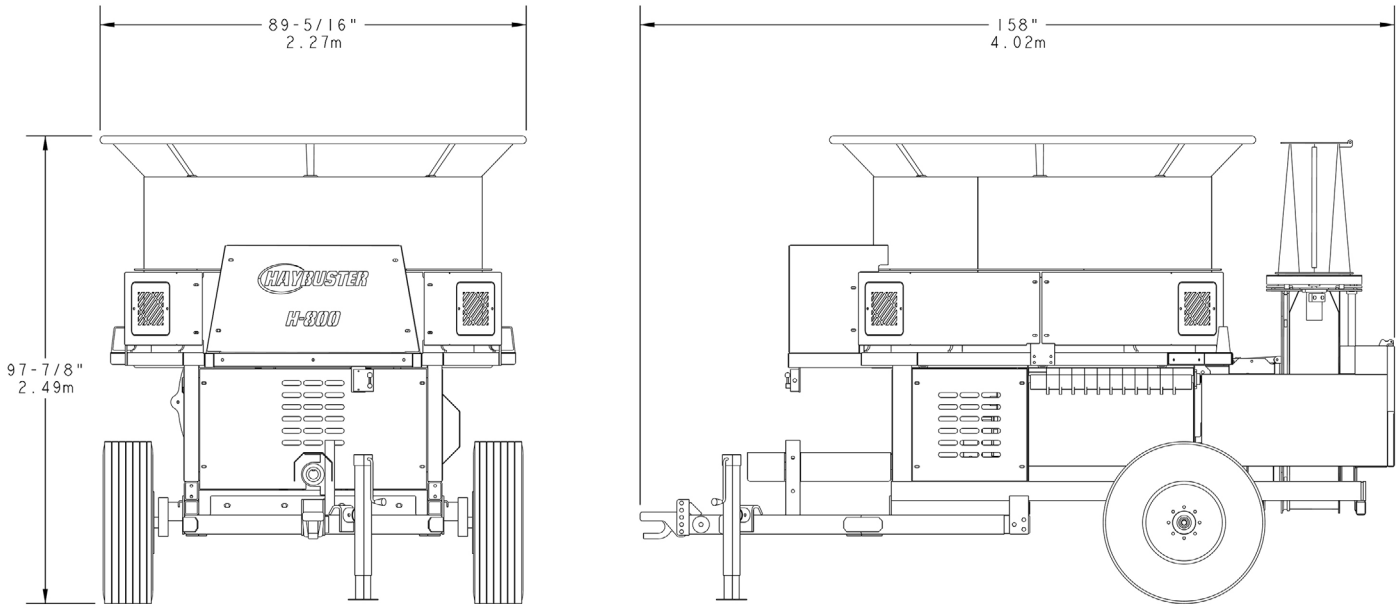
Miscellaneous

Mill grate: .....11 bars, individually removable and fully adjustable.
Tire size: .....10R 17.5-14 ply
Transfer auger drive system: .....Three groove belt
Blower fan drive system: .....Four groove belt

Options

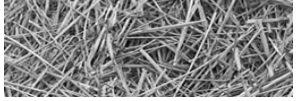
AVAILABLE OPTIONS FOR HAYBUSTER H-800 Tub Grinder:

- Various Screens Sizes
- Grain Grinding Hopper



Appendix C: Required for operation

Tractor PTO Horsepower 75-130
PTO Type..... 1000 RPM, 1-3/8" diameter PTO Shaft with 21 splines
Tractor Hydraulic Controls ..... Three outlet valves and quick coupler outlets
Min. Tractor Hydraulic Output.....8 gpm at 1500 PSI (30.3 lpm x 10,345 kpa)
Requires:.....12 volt DC with 7 pin power outlet for lights
See also section 2.3.1, Tractor set up



HAYBUSTER®

A Tradition of Innovation Since 1966

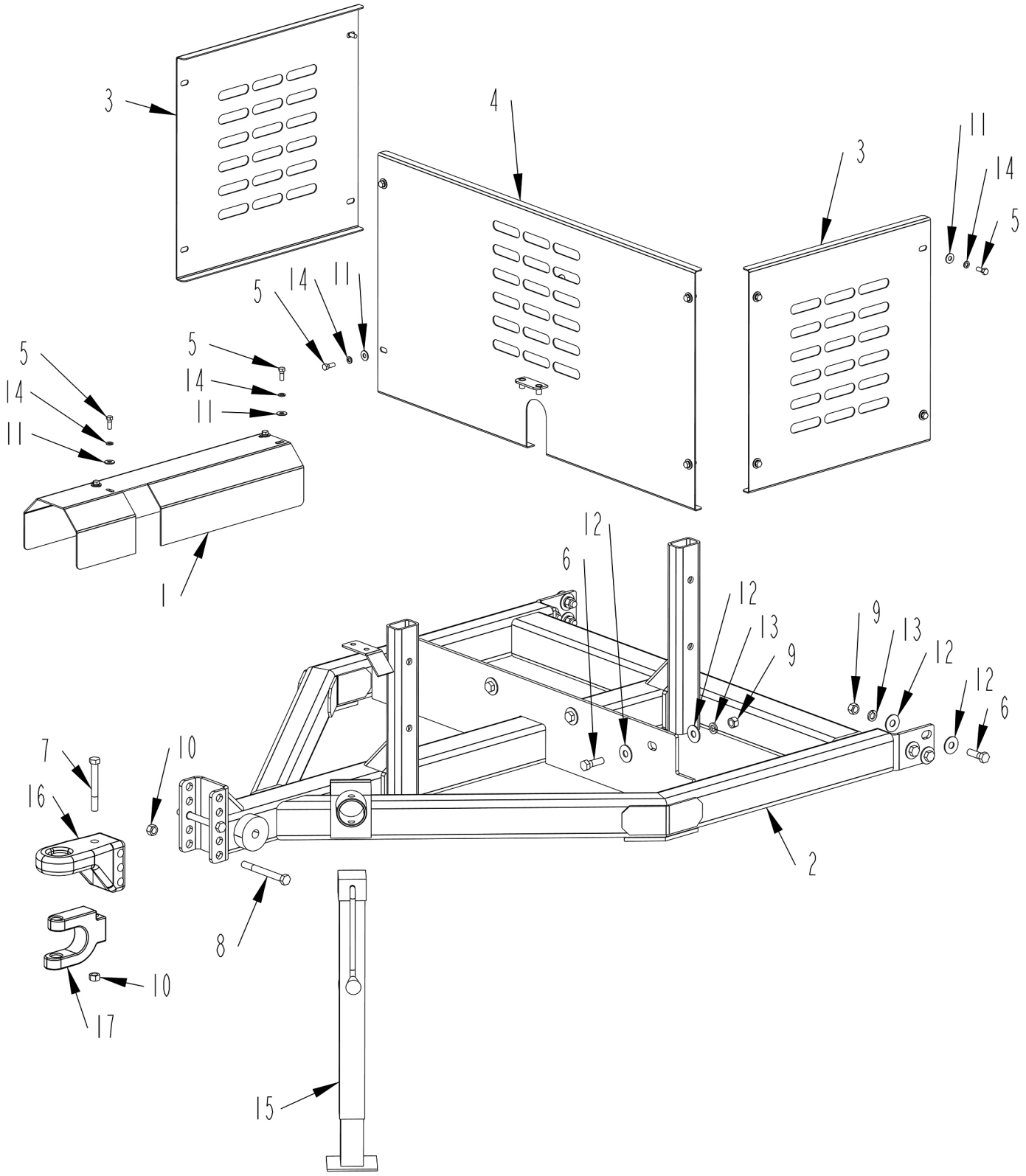
Genuine DuraTech Parts

HAYBUSTER®

H-800™

PTO Driven Tub Grinder

Part 2:
Parts Reference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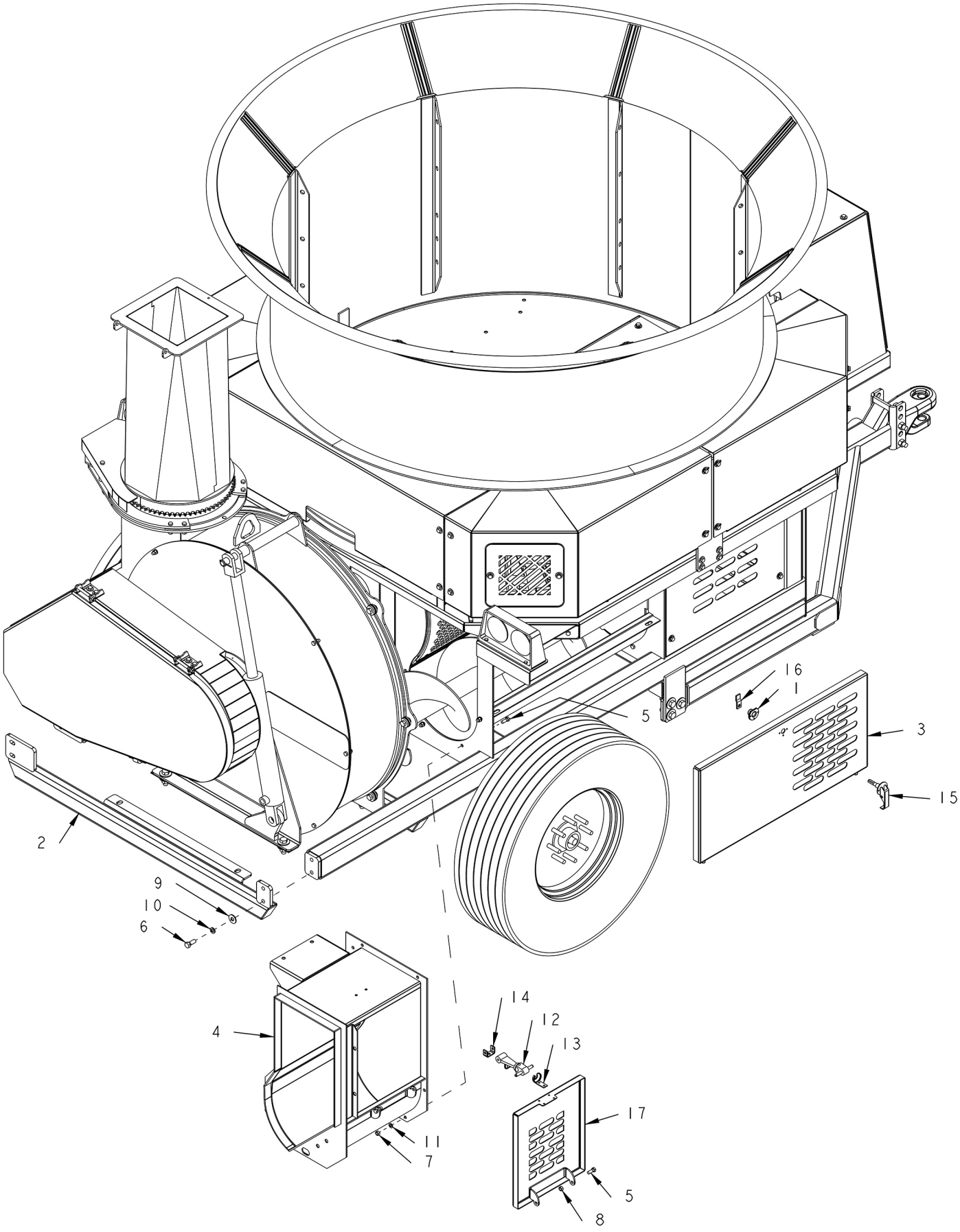
ITEM	PART	QTY.	PART DESCRIPTION
1	4705291	1	SHLD\SHFT\DRIVE\FRONT
2	4705336	1	HITCH\PTO\H800
3	4705728	2	SHLD\SIDE
4	4705729	1	SHLD\DRIVE\FRONT
5	4800003	16	BOLT\HEX\3/8X1
6	4800010	10	BOLT\HEX\5/8X2
7	4800032	1	BOLT\HEX\5/8X5
8	4800544	2	BOLT\HEX\5/8X6\NC
9	4900005	10	NUT\HEX\5/8\NC
10	4900012	3	NUT\TPLCK\5/8\NC
11	5000001	16	WASH\FLAT\3/8
12	5000002	20	WASH\FLAT\5/8
13	5000003	10	WASH\LOCK\5/8
14	5000019	16	WASH\LOCK\3/8
15	5800633	1	JACK\7000\SDWND\SQ\15”TRVL
16	7501047	1	HITCH\BASE\#3\PPI\1”PIN
17	7501048	1	HITCH\CLEVIS\PPI\1”PIN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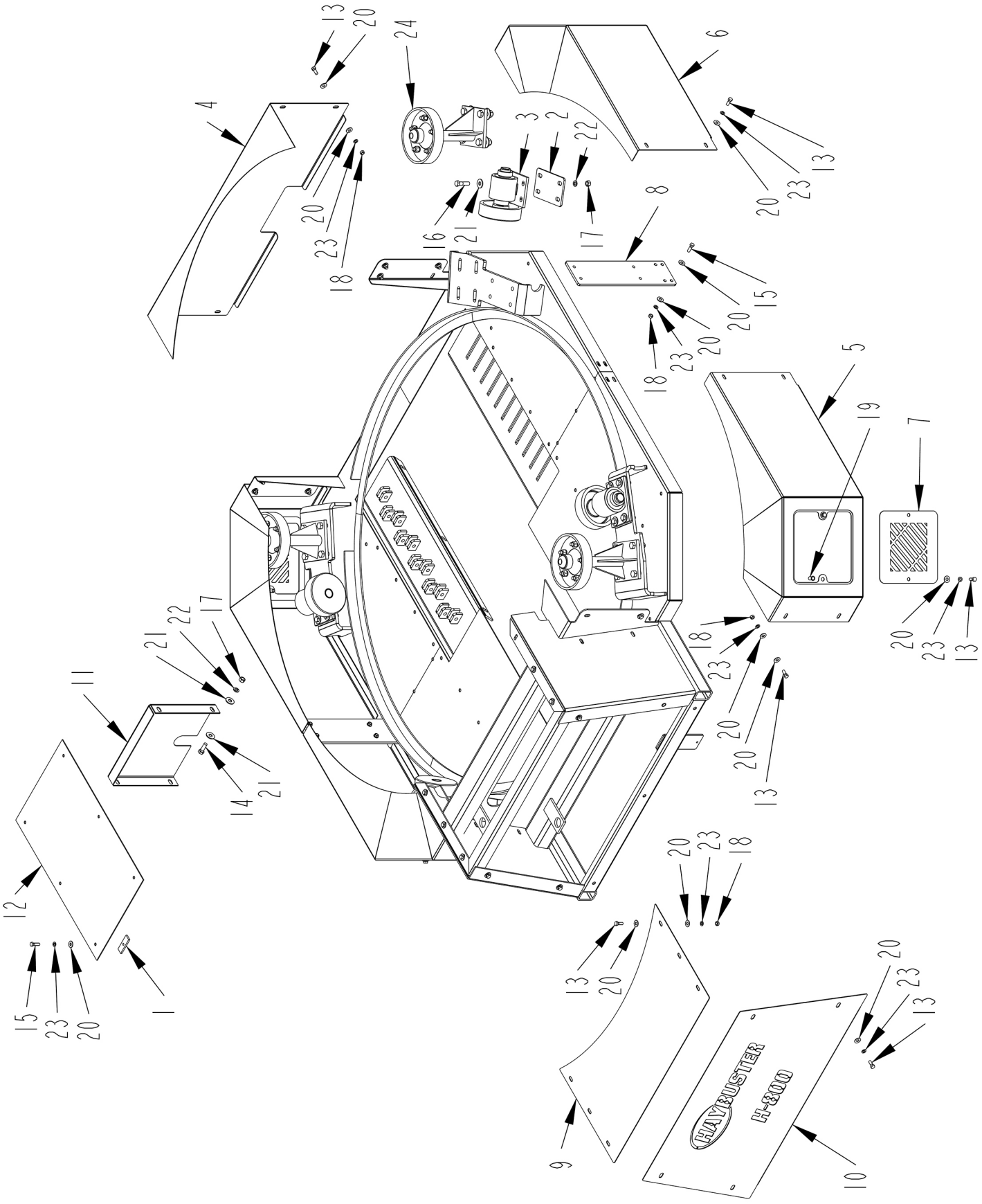
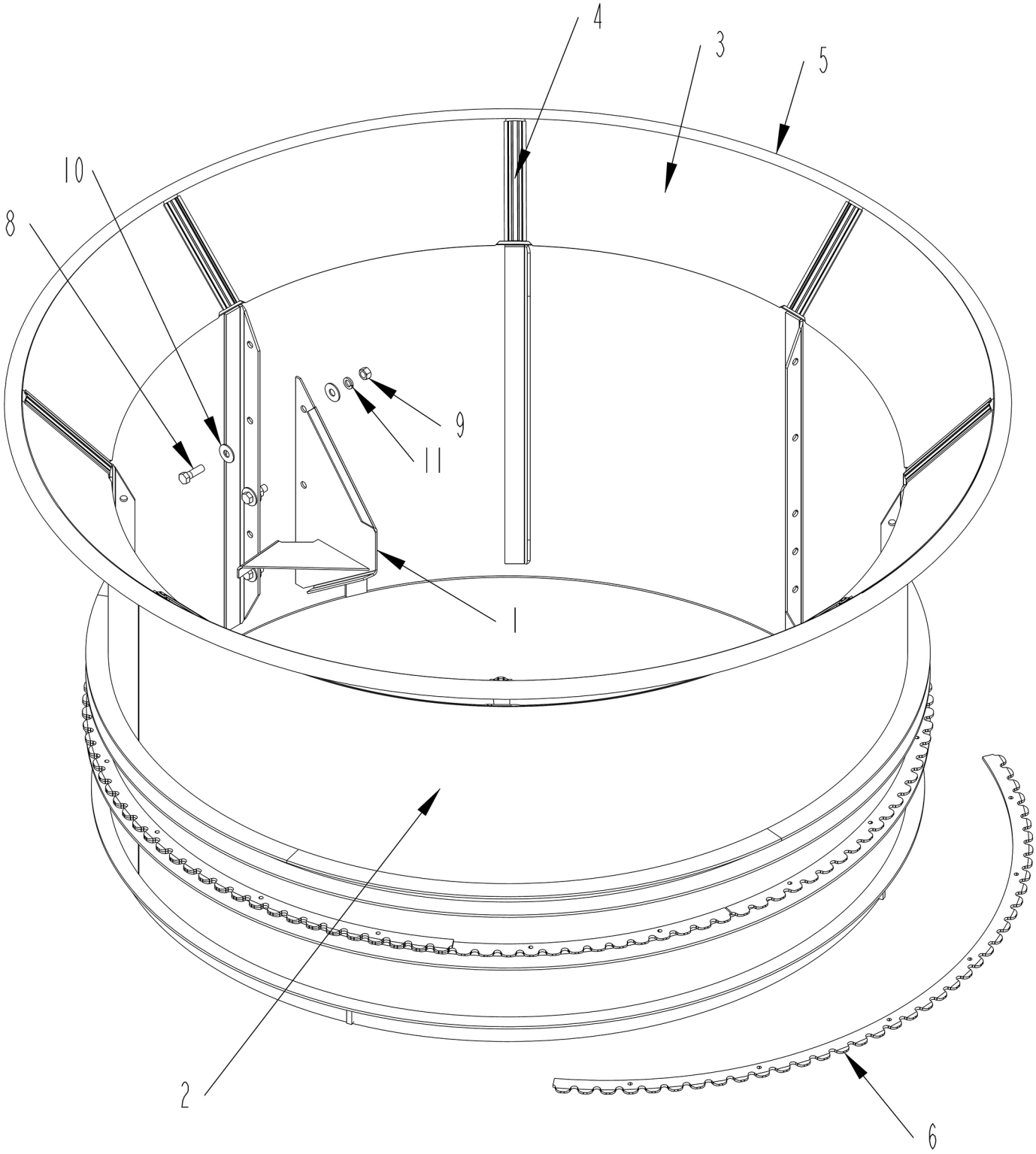
ITEM	PART	QTY.	PART DESCRIPTION
1	4704046	1	FLANGE\REINFORCE\LATCH
2	4705286	1	BRKT\FRM\REAR\FAN
3	4705290	1	DOOR\SIDE
4	4705320	1	AUGER\EXT
5	4800003	8	BOLT\HEX\3/8X1
6	4800018	4	BOLT\HEX\1/2X1-1/4
7	4900002	6	NUT\HEX\3/8\NC
8	4900023	2	NUT\TPLCK\3/8\NC
9	5000004	4	WASH\FLAT\1/2
10	5000006	4	WASH\LOCK\1/2
11	5000019	6	WASH\LOCK\3/8
12	7500166	2	LATCH\RBBR\6
13	7500190	2	LATCH\RBBR\CATCH\6
14	7500347	2	LATCH\RBBR\MNT\6
15	7500907	1	LATCH\COMP\HD\1.18-2.36
16	7500908	1	LATCH\COMP\HD\OFFSET;CAM
17	8101282	1	DOOR\AUGER EX


HAYBUSTER
H-800

ITEM	PART	QTY.	PART DESCRIPTION
1	4500094	6	LATCH\CVR\BRG\RTR\REAR
2	4501900	4	SHIM\RLLR\SPPRT\TUB\10GA
3		4	SEE TUB ROLLER
4	4702429	1	SHLD\CHAIN\TUB\REAR\HD8
5	4705280	2	SHLD\TUB\LF\RR
6	4705281	2	SHLD\TUB\LR\RF
7	4705282	4	DOOR\SHLD\TUB
8	4705283	2	SUP.\SHLD\SIDE\TUB
9	4705284	1	SHLD\DR\TUB\TOP
10	4705285	1	SHLD\DR\TUB\FR
11	4705288	1	FLLR\BOX\RTR
12	4705289	1	CVR\PLFRM
13	4800003	38	BOLT\HEX\3/8X1
14	4800082	4	BOLT\HEX\1/2X1-1/2
15	4800098	14	BOLT\HEX\3/8X1-1/4\NC
16	4800114	16	BOLT\HEX\1/2X2
17	4900001	20	NUT\HEX\1/2\NC
18	4900002	26	NUT\HEX\3/8\NC
19	4900083	12	NUT\INSERT\3/8\.LONG\0.15-0.312\(.418/CD)
20	5000001	78	WASH\FLAT\3/8
21	5000004	24	WASH\FLAT\1/2
22	5000006	40	WASH\LOCK\1/2
23	5000019	52	WASH\LOCK\3/8
24		4	SEE PRESSURE ROLLER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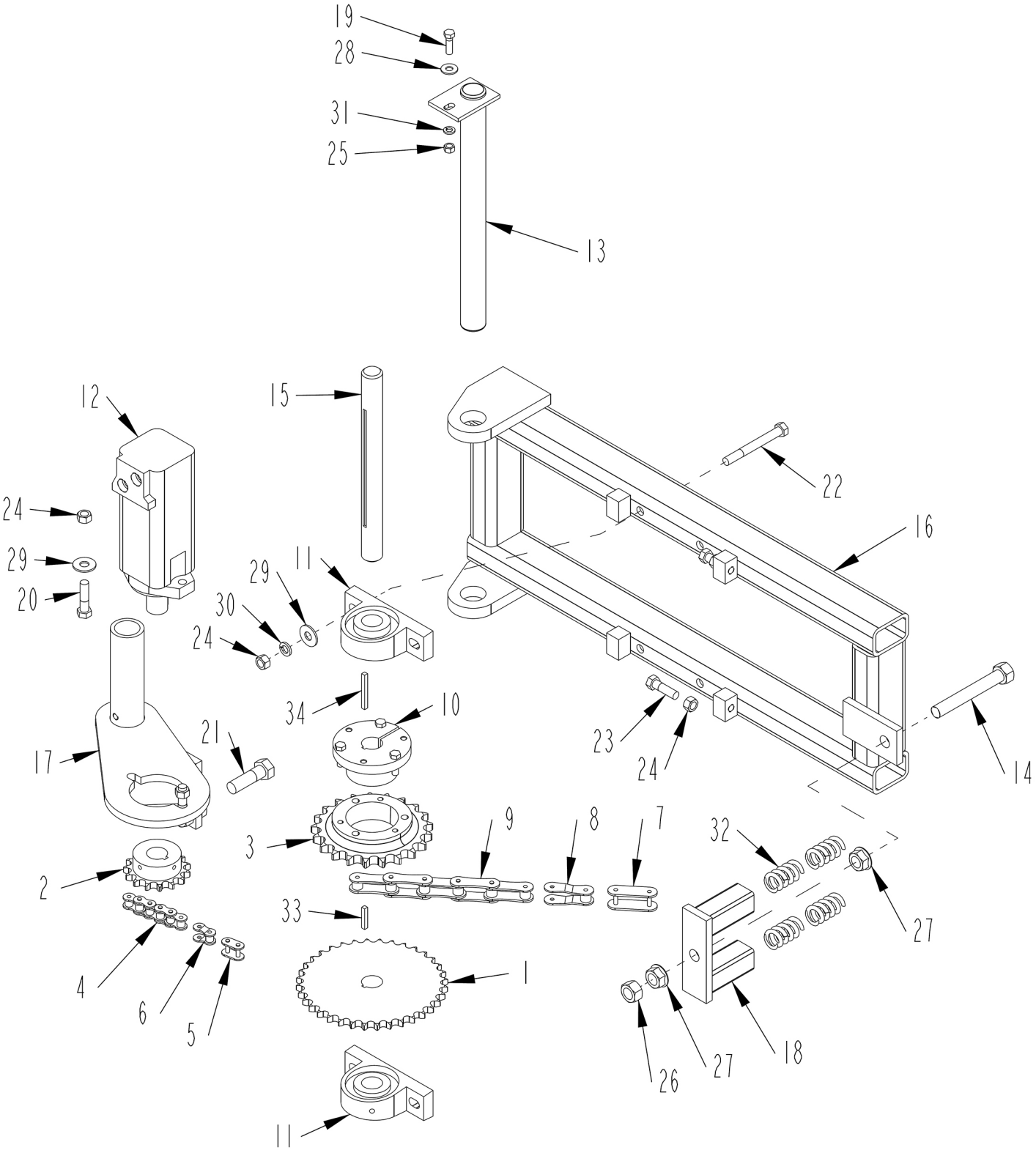
1	4502409	1	AGTTR\TUB\FIN\10
2	4705327	1	TUB\H800
3	4705328	8	PETAL\TUB\H800
4	4705329	8	GSST\PETAL\TUB\H800
5	4705330	1	RING\TUB\H800
6	4705339	6	TEETH\TUB\H800
7	4705709	1	ASSY\TUB\H800
8	4800010	3	BOLT\HEX\5/8X2
9	4900005	3	NUT\HEX\5/8\NC
10	5000002	6	WASH\FLAT\5/8
11	5000003	3	WASH\LOCK\5/8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ITEM	PART	QTY.	PART DESCRIPTION
1	1000009	1	SPKT\60\B\36\1-1/4\1/4KW
2	1000127	1	SPKT\60\B\15\1-1/4\5/16KW
3	1000268	1	SPKT\80\SF\21\H
4	1100013	1	CHAIN\60\45
5	1100062	1	CHAIN\60\CL
6	1100063	1	CHAIN\60\OL
7	1100070	1	CHAIN\2080\CL
8	1100071	1	CHAIN\2080\OL
9	1100154	1	CHAIN\2080\119
10	1400626	1	BUSH\1-1/4\SF
11	2000502	2	BRG\PB\1-1/4\2BOLT
12	3900005	1	MTR\HYD\14.9\2000\SAE;A
13	4702084	1	PIN\HINGE\FRM\DRIVE\TUB
14	4702349	1	BOLT\FRM\DR\TUB
15	4702407	1	SHFT\DR\TUB\1-1/4X13-1/2
16	4702408	1	FRM\WHL\BULL\DRV\TUB
17	4702425	1	BRKT\MOTOR\ORBIT\DRIVE\TUB
18	4702666	1	BRKT\TNSN\SPG\FRM\DR\TUB
19	4800098	1	BOLT\HEX\3/8X1-1/4\NC
20	4800114	2	BOLT\HEX\1/2X2
21	4800115	1	BOLT\HEX\3/4X2-1/2
22	4800141	4	BOLT\HEX\1/2X4-1/2
23	4800178	2	BOLT\HEX\1/2X1-3/4
24	4900001	8	NUT\HEX\1/2\NC
25	4900002	1	NUT\HEX\3/8\NC
26	4900004	2	NUT\HEX\3/4\NC
27	4900158	3	NUT\FLG\SERR\3/4\NC
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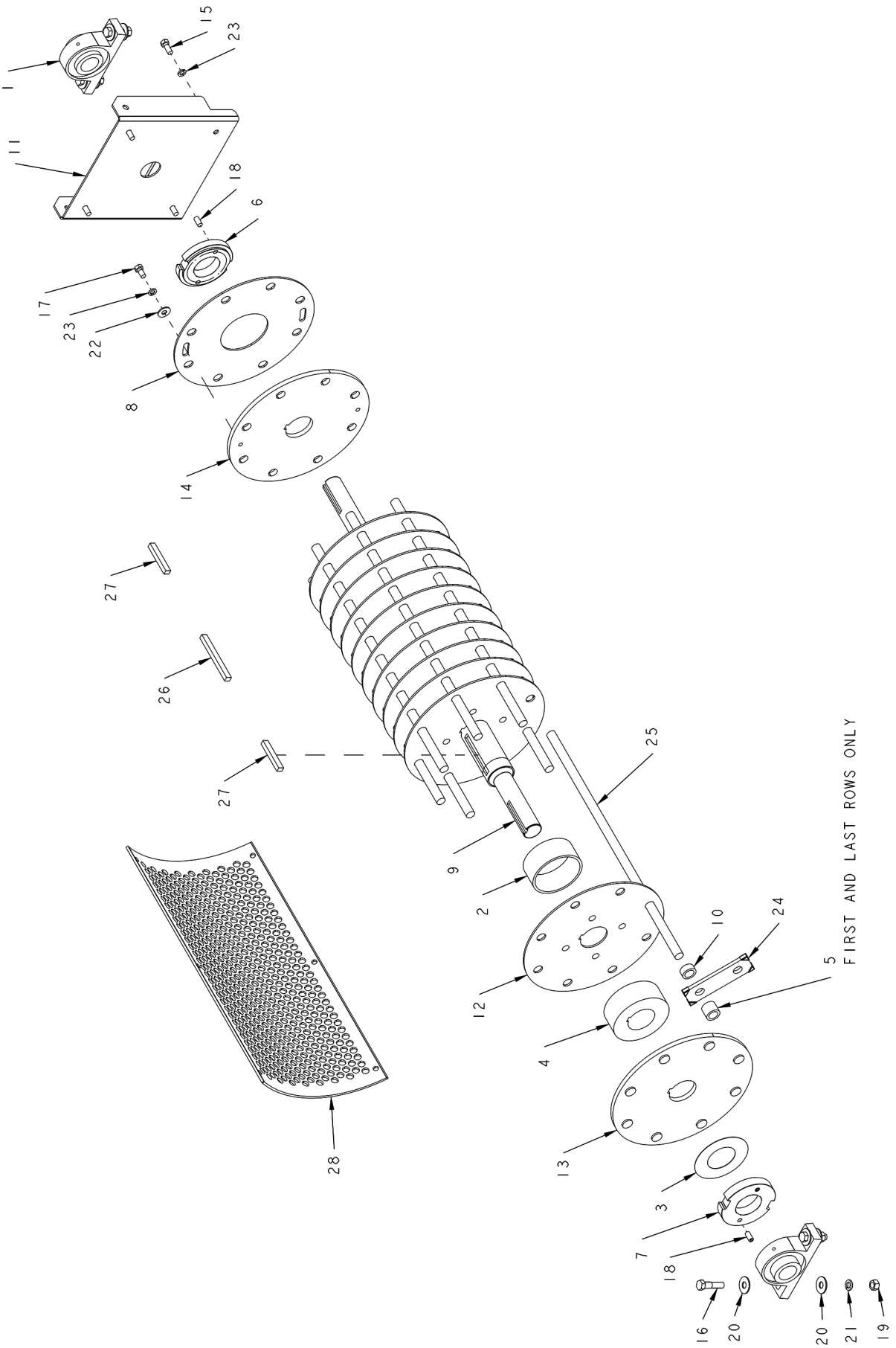
29	5000004	6	WASH\FLAT\1/2
30	5000006	4	WASH\LOCK\1/2
31	5000019	1	WASH\LOCK\3/8
32	6100005	4	SPRNG\.249OT\13/16ID\1-5/16OD
33	6200005	1	KEY\SQ\1/4X1-1/2
34	6200019	1	KEY\SQ\1/4X2-1/2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FIRST AND LAST ROWS ONLY
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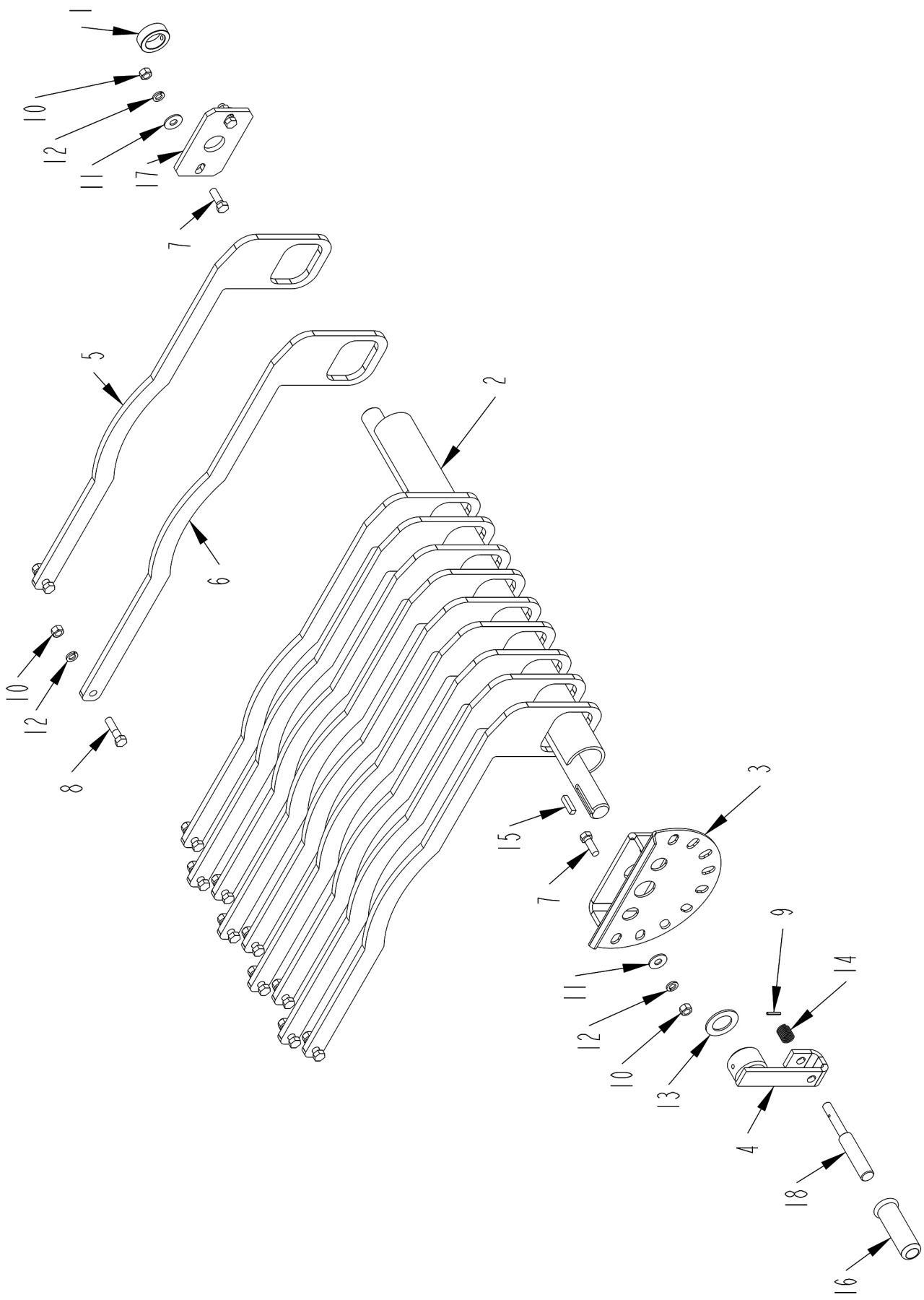
ITEM	PART	QTY.	PART DESCRIPTION
	4705347		RTR\32.5X15/16RD\H800
1	2000510	2	BRG\PB\2\2BOLT
2	4500134	10	SPACER\SHAFT\5.56 OD\RTR
3	4500253	1	WASH\THRUST\3-1/8IDX6SQ
4	4500425	2	SPCR\CAST\RTR\6-1/4 OD X 3 ID
5	4501204	8	SPCR\HMMR\1-1/2X1X1-1/4
6	4700266	1	NUT\ROTOR\3 W/SHOULDER
7	4700267	1	NUT\RTR\3\W/O;SHOULDER
8	4500019	1	PL\RTR\MOVEABLE5.32IDX3/16
9	4705277	1	SHAFT\ROTOR\3X50-11/16
10	4705278	88	SPCR\HMMR\1-1/2X1.028X11/16
11	4705287	1	BRKT\BRG\2”\REAR\RTR
12	4500020	11	PL\RTR\3IDX3/16
13	4500023	1	PL\RTR\END\SLUGS\3IDX1/2
14	4500021	1	PL\RTR\END\TAPPED\3 I.D.
15	4800018	4	BOLT\HEX\1/2X1-1/4
16	4800079	4	BOLT\HEX\5/8X2-1/2
17	4800085	2	BOLT\HEX\1/2X1
18	4800323	4	SCR\SET\AL1/2X1\NC
19	4900005	4	NUT\HEX\5/8\NC
20	5000002	8	WASH\FLAT\5/8
21	5000003	4	WASH\LOCK\5/8
22	5000004	2	WASH\FLAT\1/2
23	5000006	6	WASH\LOCK\1/2
24	5200002	48	3/8 AB SUPREME HAMMER
25	5300120	8	ROD\HMMR\15/16X32-11/32
26	6200035	1	KEY\RECT\1/2X5/8X6-1/4
27	6200043	2	KEY\RECT\1/2X5/8X4
28			SEE SCREEN LIST BELOW

SCREENS

5400163	3/4” ROUND SCREEN
5400162	1” ROUND SCREEN
5400157	2” ROUND SCREEN
5400158	3” ROUND SCREEN
5400159	4” ROUND SCREEN
5400160	5” ROUND SCREEN
5400161	6” ROUND SCREEN
5400164	5-5/8” X 9” RECTANGLE SCREEN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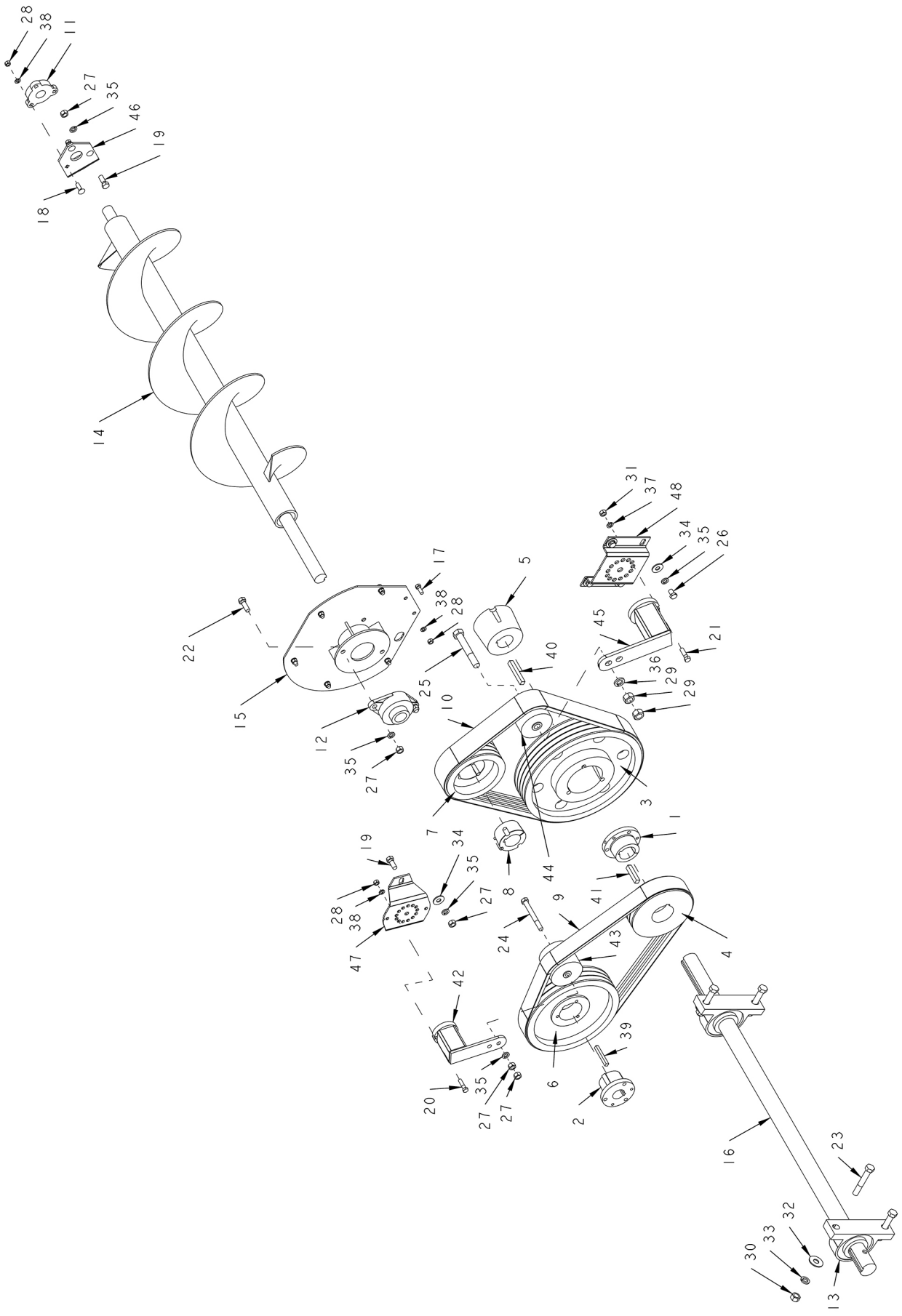
SLUG BAR ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	2000813	1	CLLR\SHFT\1-1/2\SET
2	4705343	1	SHAFT\SLUGBAR
3	4705344	1	BRKT\INDEX\SLUGBAR
4	4705345	1	BRKT\MNT\HANDLE\SLUGBAR
5	4705725	6	BAR\SLUG\1-1/2
6	4705726	5	BAR\SLUG\1-1/2
7	4800082	4	BOLT\HEX\1/2X1-1/2
8	4800114	11	BOLT\HEX\1/2X2
9	4800456	1	PIN\RLLD\3/16X1-1/8
10	4900001	15	NUT\HEX\1/2\NC
11	5000004	4	WASH\FLAT\1/2
12	5000006	15	WASH\LOCK\1/2
13	5000008	1	WASH\MACH\1-1/2IDX10GA\NR
14	6100031	1	SPRING\COMP\.072W\25/32OD
15	6200021	1	KEY\SQ\3/8X1-1/2\HARDEND
16	7500736	1	GRIP\HAND\1X4-1/2\FLG
17	8101039	1	BRKT\BRG\SLUGBAR
18	8101050	1	ROD\HANDLE\INDEX\SLUGBAR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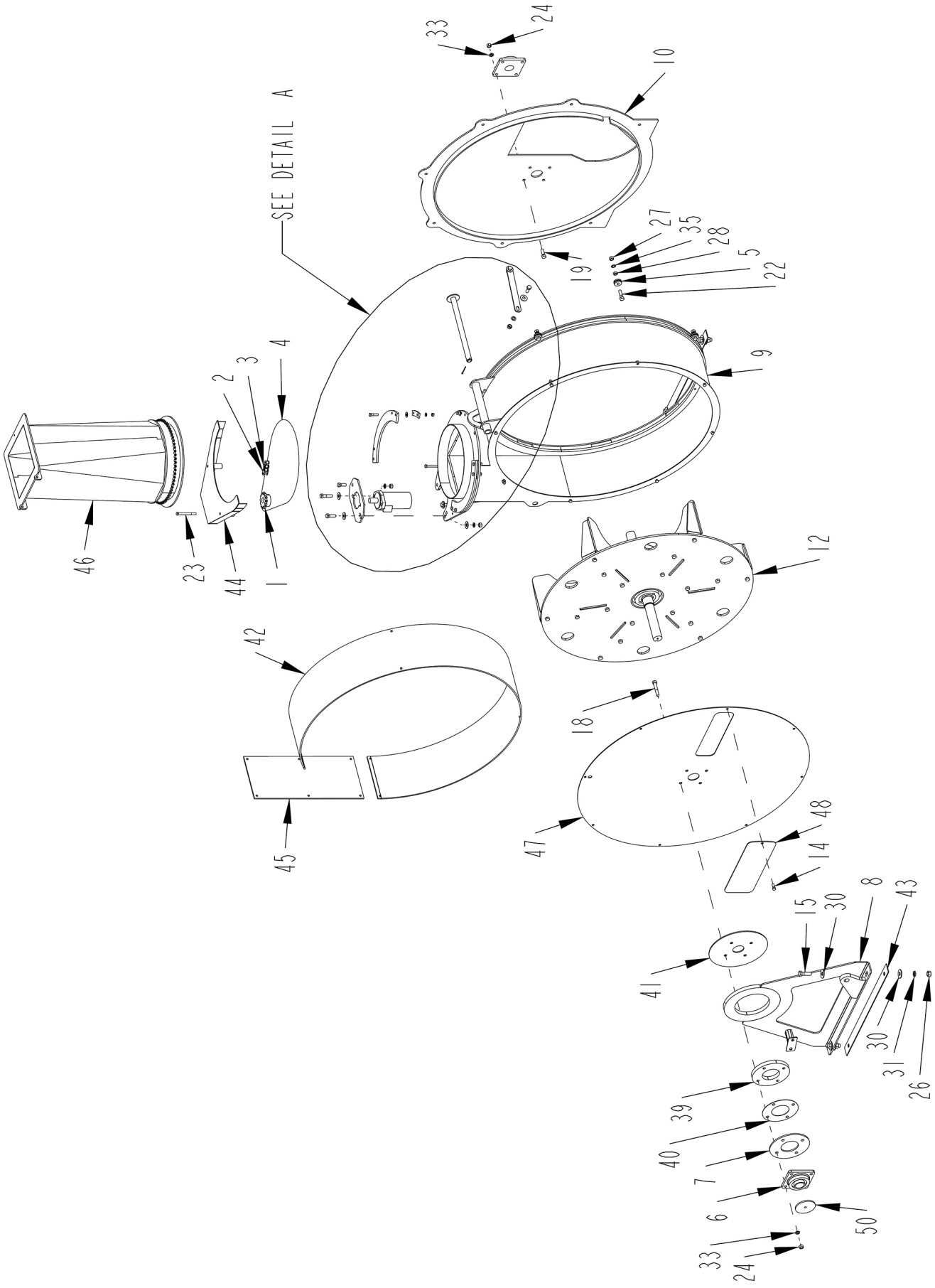
ITEM	PART	QTY.	PART DESCRIPTION
1	1400578	1	BUSH\QD\SF\2
2	1400582	1	BUSH\Q1\1-1/2
3	1400841	1	SHVE\5V-4\15.0\TB
4	1400842	1	SHVE\5V-3\7.4\SF
5	1400846	1	BUSH\B3\2
6	1400850	1	SHVE\5V-3\11.8\SF
7	1400854	1	SHVE\5V-4\7.50\TB
8	1400855	1	BUSH\A1\2
9	1600113	1	V-BELT\5VX\3\67.0
10	1600119	1	V-BELT\5VX\4\71
11	2000302	1	BRG\FLG\CAST\1-1/4\3BOLT
12	2000308	1	BRG\FLG\CAST\1-1/2\2BOLT
13	2000510	2	BRG\PB\2\2BOLT
14	4705279	1	AUGER
15	4705338	1	BRKT\BRG\PAN\AUGER
16	4705727	1	SHFT\DRIVE\FRONT\H800
17	4800003	6	BOLT\HEX\3/8X1
18	4800012	3	BOLT\CRG\3/8X1-1/4\NC
19	4800018	4	BOLT\HEX\1/2X1-1/4
20	4800034	1	BOLT\HEX\3/8X1-1/2
21	4800040	1	BOLT\HEX\7/16X1-1/2
22	4800082	2	BOLT\HEX\1/2X1-1/2
23	4800100	4	BOLT\HEX\5/8X4
24	4800141	1	BOLT\HEX\1/2X4-1/2
25	4800224	1	BOLT\HEX\3/4X5
26	4800931	4	BOLT\HEX\1/2X3/4\NC
27	4900001	8	NUT\HEX\1/2\NC
28	4900002	10	NUT\HEX\3/8\NC
29	4900004	2	NUT\HEX\3/4\NC
30	4900005	4	NUT\HEX\5/8\NC
31	4900025	1	NUT\HEX\7/16\NC
32	5000002	4	WASH\FLAT\5/8
33	5000003	4	WASH\LOCK\5/8
34	5000004	6	WASH\FLAT\1/2
35	5000006	11	WASH\LOCK\1/2
36	5000012	1	WASH\LOCK\3/4
37	5000015	1	WASH\LOCK\7/16
38	5000019	10	WASH\LOCK\3/8
39	6200026	1	KEY\SQ\3/8X3
40	6200062	1	KEY\SQ\1/2X3-1/2
41	6200071	1	KEY\SQ\1/2X2-1/2
42	7501601	1	TNSR\BELT\SE27
43	7501602	1	IDLER\BELT\STEEL\3.5”WIDE
44	7501616	1	IDLER\BELT\STEEL\3.5”WIDE
45	7501617	1	TNSR\BELT\SE38
46	8101991	1	MNT\BRG\AUGER
47	8102063	1	MNT\TNSR\BELT
48	8102116	1	MNT\TNSR\BELT


SEE DETAIL A
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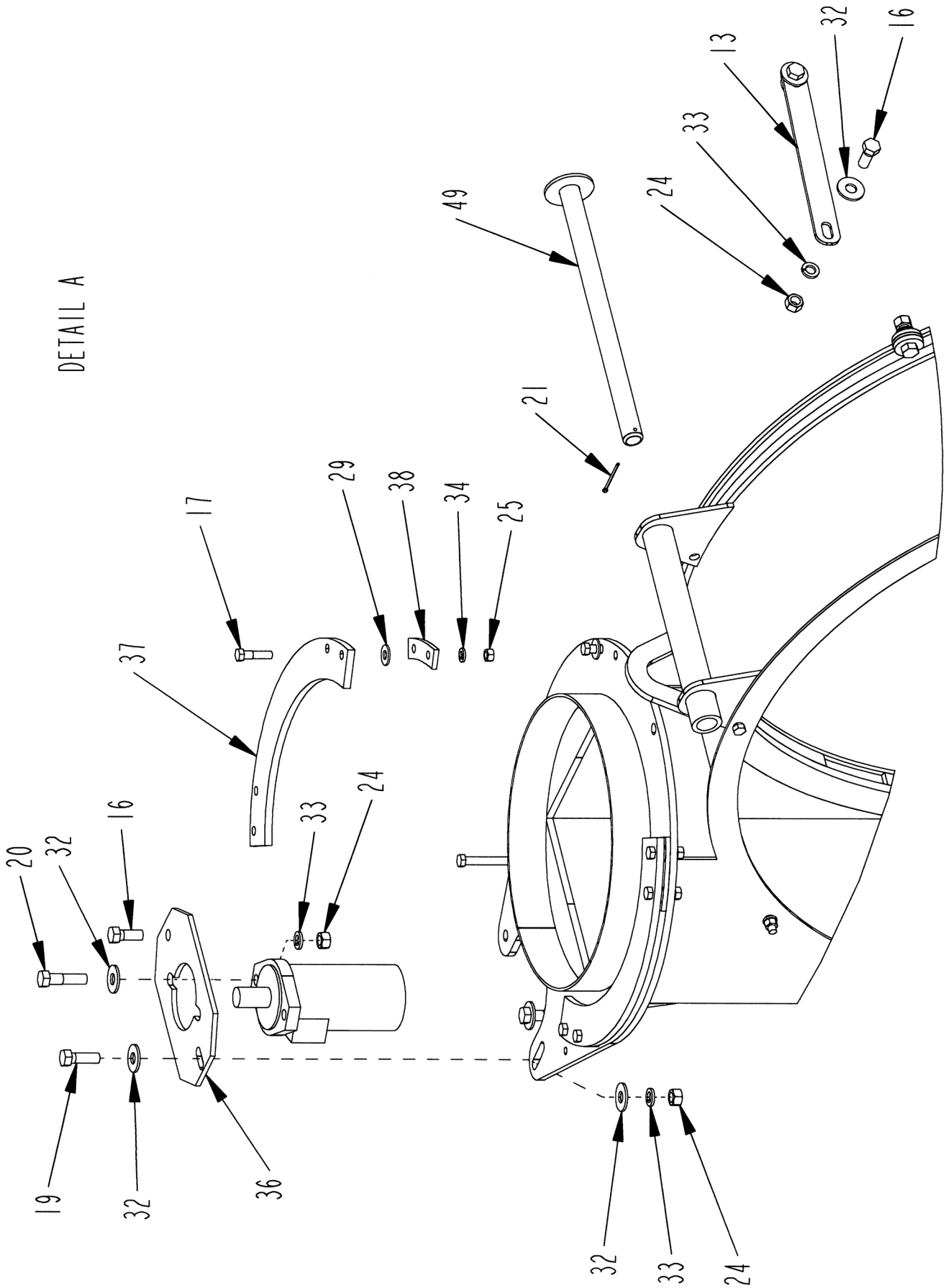
ITEM	PART	QTY.	PART DESCRIPTION
1	1000129	1	SPKT\60\B\12\1\1/4KW
2	1100062	1	CHAIN\60\CL
3	1100063	1	CHAIN\60\OL
4	1100270	1	CHAIN\60\77
5	2000080	7	BRG\CAM\1/2” I.D.X1-1/2” O.D
6	2000311	2	BRG\FLG\CAST\1-3/4\4BOLT
7	4500529	1	PL\MNT\FAN
8	4705295	1	MNT\FRONT\FAN\H800
9	4705323	1	HSG\FAN\TOP
10	4705325	1	HSG\FAN\FR
11	4705326	1	FAN\ASSY\H800
12	4705342	1	FAN\ASSY\REPLCB\FINS-SHAFT\H800
13	4705735	1	STRAP\BRACE\FAN
14	4800003	8	BOLT\HEX\3/8X1
15	4800010	4	BOLT\HEX\5/8X2
16	4800018	3	BOLT\HEX\1/2X1-1/4
17	4800034	8	BOLT\HEX\3/8X1-1/2
18	4800068	4	BOLT\HEX\1/2X3
19	4800082	5	BOLT\HEX\1/2X1-1/2
20	4800114	2	BOLT\HEX\1/2X2
21	4800172	1	PIN\COT\1/8X2
22	4800178	7	BOLT\HEX\1/2X1-3/4
23	4800516	2	BOLT\HEX\3/8X3-3/4/NC
24	4900001	14	NUT\HEX\1/2\NC
25	4900002	18	NUT\HEX\3/8\NC
26	4900005	4	NUT\HEX\5/8\NC
27	4900014	31	NUT\TPLCK\1/2\NC
28	4900046	7	NUT\JAM\1/2\NC
29	5000001	8	WASH\FLAT\3/8
30	5000002	8	WASH\FLAT\5/8
31	5000003	4	WASH\LOCK\5/8
32	5000004	6	WASH\FLAT\1/2
33	5000006	14	WASH\LOCK\1/2
34	5000019	18	WASH\LOCK\3/8
35	5000134	7	WASH\LOCK\TOOTH\INT\1/2
36	8100542	1	MNT\MTR\ORBIT\FAN
37	8101663	2	DBLR\MNT\SWVL\FAN
38	8101664	4	MNT\SWVL\FAN
39	8101665	1	MNT\PL\FAN\3/4”
40	8101666	1	MNT\PL\FAN
41	8101695	1	MNT\PL\FAN
42	8101720	1	SHT\LINER\FAN
43	8101735	2	SHIM\MNT\FAN\10GA
44	8101754	1	SHLD\CHN\RTT\FAN-TRANS
45	8101772	1	LNR\SPT\HSG\FAN
46	8101847	1	TRANS\FAN
47	8102001	1	SH\HSG\FAN
48	8102002	1	CVR\ACT\FAN
49	8102135	1	PIN\CYL\FAN
50	8102137	1	DISK\RETAINER\FAN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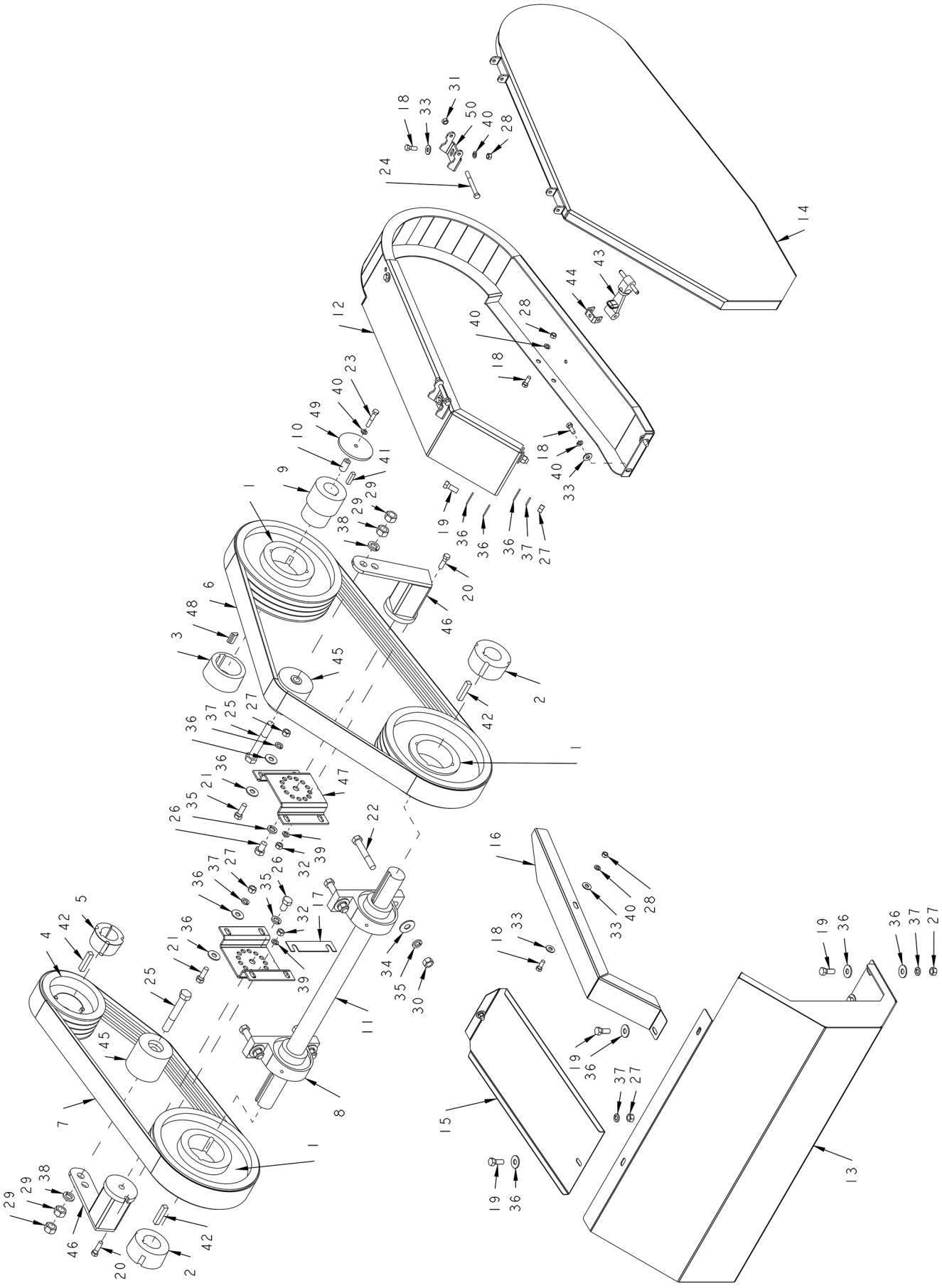
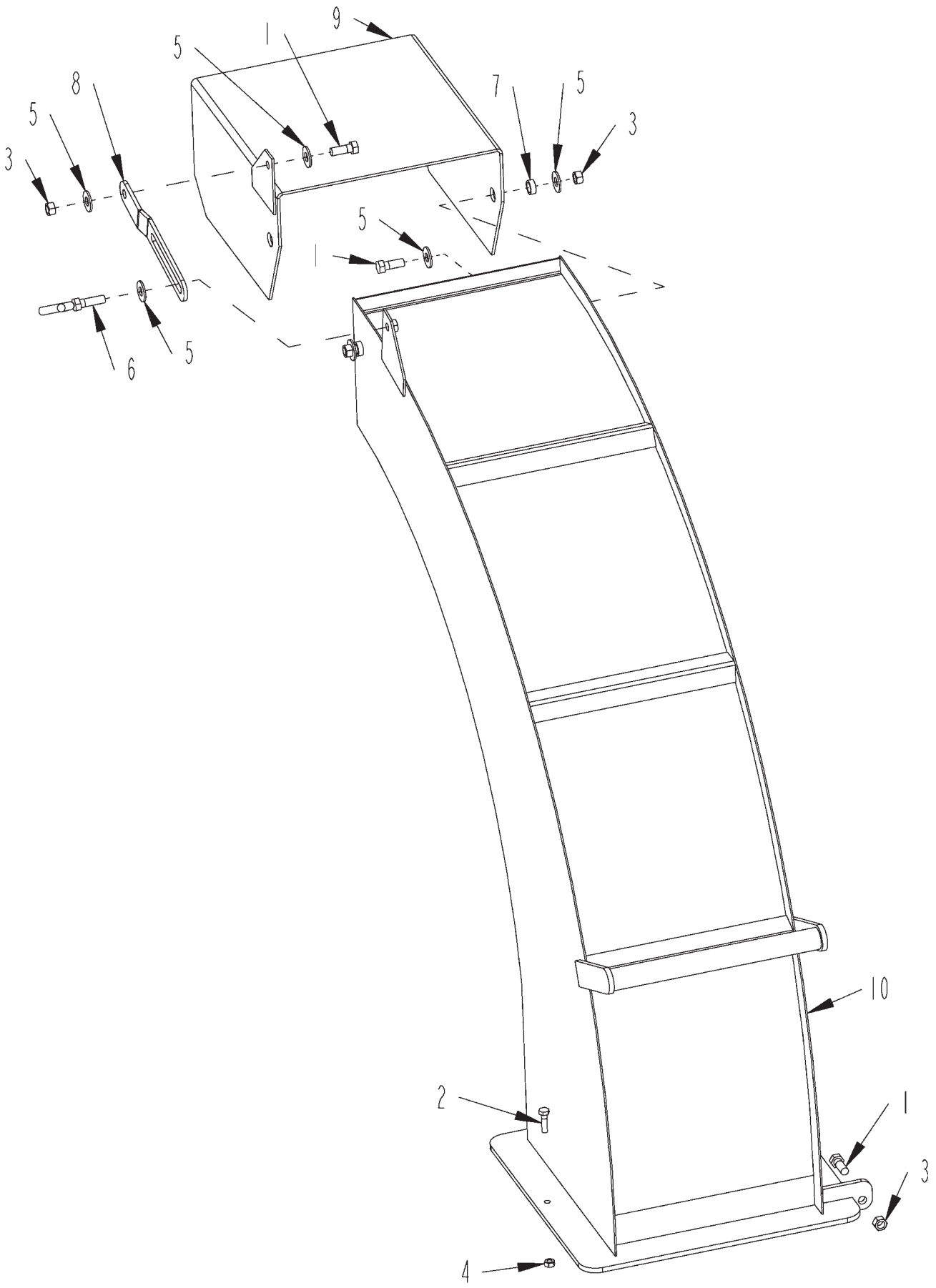
FAN ASSEMBLY - DETAIL A

ITEM	PART	QTY.	PART DESCRIPTION
1	1000129	1	SPKT\60\B\12\1\1/4KW
2	1100062	1	CHAIN\60\CL
3	1100063	1	CHAIN\60\OL
4	1100270	1	CHAIN\60\77
5	2000080	7	BRG\CAM\1/2" I.D.X1-1/2" O.D
6	2000311	2	BRG\FLG\CAST\1-3/4\4BOLT
7	4500529	1	PL\MNT\FAN
8	4705295	1	MNT\FRONT\FAN\H800
9	4705323	1	HSG\FAN\TOP
10	4705325	1	HSG\FAN\FR
11	4705326	1	FAN\ASSY\H800
12	4705342	1	FAN\ASSY\REPLCB\FINS-SHAFT\H800
13	4705735	1	STRAP\BRACE\FAN
14	4800003	8	BOLT\HEX\3/8X1
15	4800010	4	BOLT\HEX\5/8X2
16	4800018	3	BOLT\HEX\1/2X1-1/4
17	4800034	8	BOLT\HEX\3/8X1-1/2
18	4800068	4	BOLT\HEX\1/2X3
19	4800082	5	BOLT\HEX\1/2X1-1/2
20	4800114	2	BOLT\HEX\1/2X2
21	4800172	1	PIN\COT\1/8X2
22	4800178	7	BOLT\HEX\1/2X1-3/4
23	4800516	2	BOLT\HEX\3/8X3-3/4/NC
24	4900001	14	NUT\HEX\1/2\NC
25	4900002	18	NUT\HEX\3/8\NC
26	4900005	4	NUT\HEX\5/8\NC
27	4900014	31	NUT\TPLCK\1/2\NC
28	4900046	7	NUT\JAM\1/2\NC
29	5000001	8	WASH\FLAT\3/8
30	5000002	8	WASH\FLAT\5/8
31	5000003	4	WASH\LOCK\5/8
32	5000004	6	WASH\FLAT\1/2
33	5000006	14	WASH\LOCK\1/2
34	5000019	18	WASH\LOCK\3/8
35	5000134	7	WASH\LOCK\TOOTH\INT\1/2
36	8100542	1	MNT\MTR\ORBIT\FAN
37	8101663	2	DBLR\MNT\SWVL\FAN
38	8101664	4	MNT\SWVL\FAN
39	8101665	1	MNT\PL\FAN\3/4"
40	8101666	1	MNT\PL\FAN
41	8101695	1	MNT\PL\FAN
42	8101720	1	SHT\LINER\FAN
43	8101735	2	SHIM\MNT\FAN\10GA
44	8101754	1	SHLD\CHN\RTT\FAN-TRANS
45	8101772	1	LNR\SPT\HSG\FAN
46	8101847	1	TRANS\FAN
47	8102001	1	SH\HSG\FAN
48	8102002	1	CVR\ACT\FAN
49	8102135	1	PIN\CYL\FAN
50	8102137	1	DISK\RETAINER\FAN



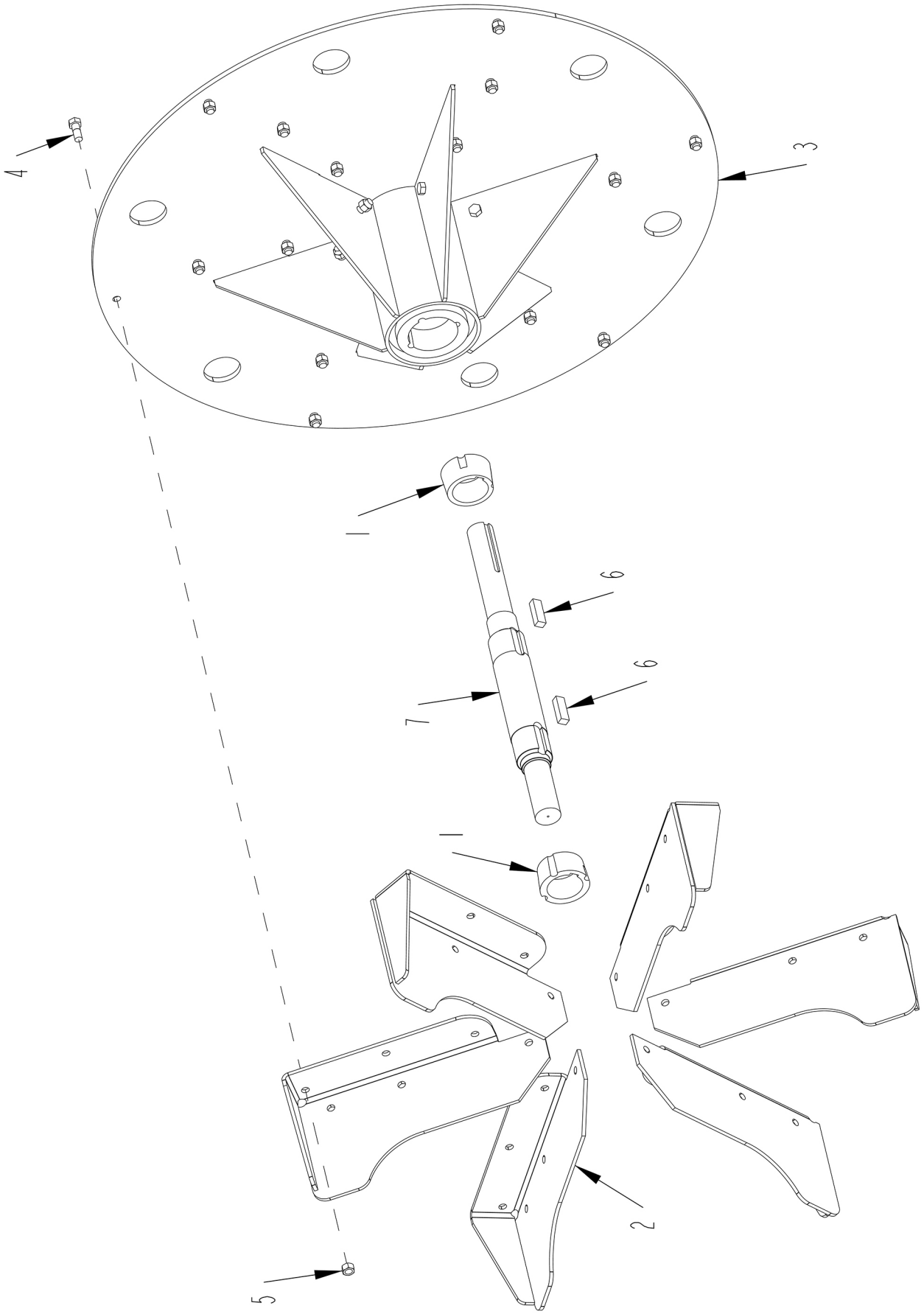
ITEM	PART	QTY.	PART DESCRIPTION
1	1400840	3	SHVE\5V-4\12.5\TB
2	1400844	2	BUSH\A2\2
3	1400845	1	BUSH\A2\3
4	1400854	1	SHVE\5V-4\7.50\TB
5	1400855	1	BUSH\A1\2
6	1600112	1	V-BELT\5VX\4\100.0
7	1600120	1	V-BELT\5VX\4\83
8	2000510	2	BRG\PB\2\2BOLT
9	3600837	1	CLUTCH\OVERRUNNING\CW
10	4705297	1	SPCR\DISK\FAN
11	4705716	1	SHFT\DRIVE\REAR\H800
12	4705730	1	SHLD\DRIVE\REAR
13	4705731	1	SHLD\REAR\LH
14	4705732	1	DOOR\SHLD\REAR
15	4705806	1	SHLD\DRV\REAR
16	4705807	1	SHLD\DRV\REAR
17	4705808		SHIM\MNT\IDLER\14GA
17A	4705809		SHIM\MNT\IDLER\10GA
18	4800003	10	BOLT\HEX\3/8X1
19	4800018	8	BOLT\HEX\1/2X1-1/4
20	4800040	2	BOLT\HEX\7/16X1-1/2
21	4800082	8	BOLT\HEX\1/2X1-1/2
22	4800100	4	BOLT\HEX\5/8X4
23	4800146	1	BOLT\HEX\3/8X2
24	4800197	2	BOLT\HEX\3/8X3-1/2
25	4800224	2	BOLT\HEX\3/4X5
26	4800962	2	BOLT\HEX\5/8X1\NC
27	4900001	16	NUT\HEX\1/2\NC
28	4900002	8	NUT\HEX\3/8\NC
29	4900004	4	NUT\HEX\3/4\NC
30	4900005	4	NUT\HEX\5/8\NC
31	4900023	2	NUT\TPLCK\3/8\NC
32	4900025	2	NUT\HEX\7/16\NC
33	5000001	9	WASH\FLAT\3/8
34	5000002	4	WASH\FLAT\5/8
35	5000003	6	WASH\LOCK\5/8
36	5000004	30	WASH\FLAT\1/2
37	5000006	16	WASH\LOCK\1/2
38	5000012	2	WASH\LOCK\3/4
39	5000015	2	WASH\LOCK\7/16
40	5000019	11	WASH\LOCK\3/8
41	6200021	1	KEY\SQ\3/8X1-1/2\HARDEND
42	6200071	3	KEY\SQ\1/2X2-1/2
43	7500166	1	LATCH\RBBR\6
44	7500347	1	LATCH\RBBR\MNT\6
45	7501616	2	IDLER\BELT\STEEL\3.5”WIDE
46	7501617	2	TNSR\BELT\SE38
47	8102116	2	MNT\TNSR\BELT
48	8102136	1	KEY\STEP\CLUTCH\FAN
49	8102137	1	DISK\RETAINER\FAN
50	8102157	2	HINGE\SHLD

COVERED SPOUT ASSEMBLY



COVERED SPOUT ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
	8101691		#3\CURVED\SPOUT\KIT
1	4800003	5	BOLT\HEX\3/8X1
2	4800277	1	BOLT\HEX\1/4X1
3	4900023	5	NUT\TPLCK\3/8\NC
4	4900084	1	NUT\TPLCK\1/4\NC
5	5000001	7	WASH\FLAT\3/8
6	8100247	1	BOLT\ADJ\SPOUT
7	8100257	2	BUSH\DFLCTR\SPOUT
8	8100299	1	STRAP\ADJ\SPOUT
9	8100500	1	DFLCTR\SPOUT\DISCH
10	8101298	1	SPOUT\NO3\2564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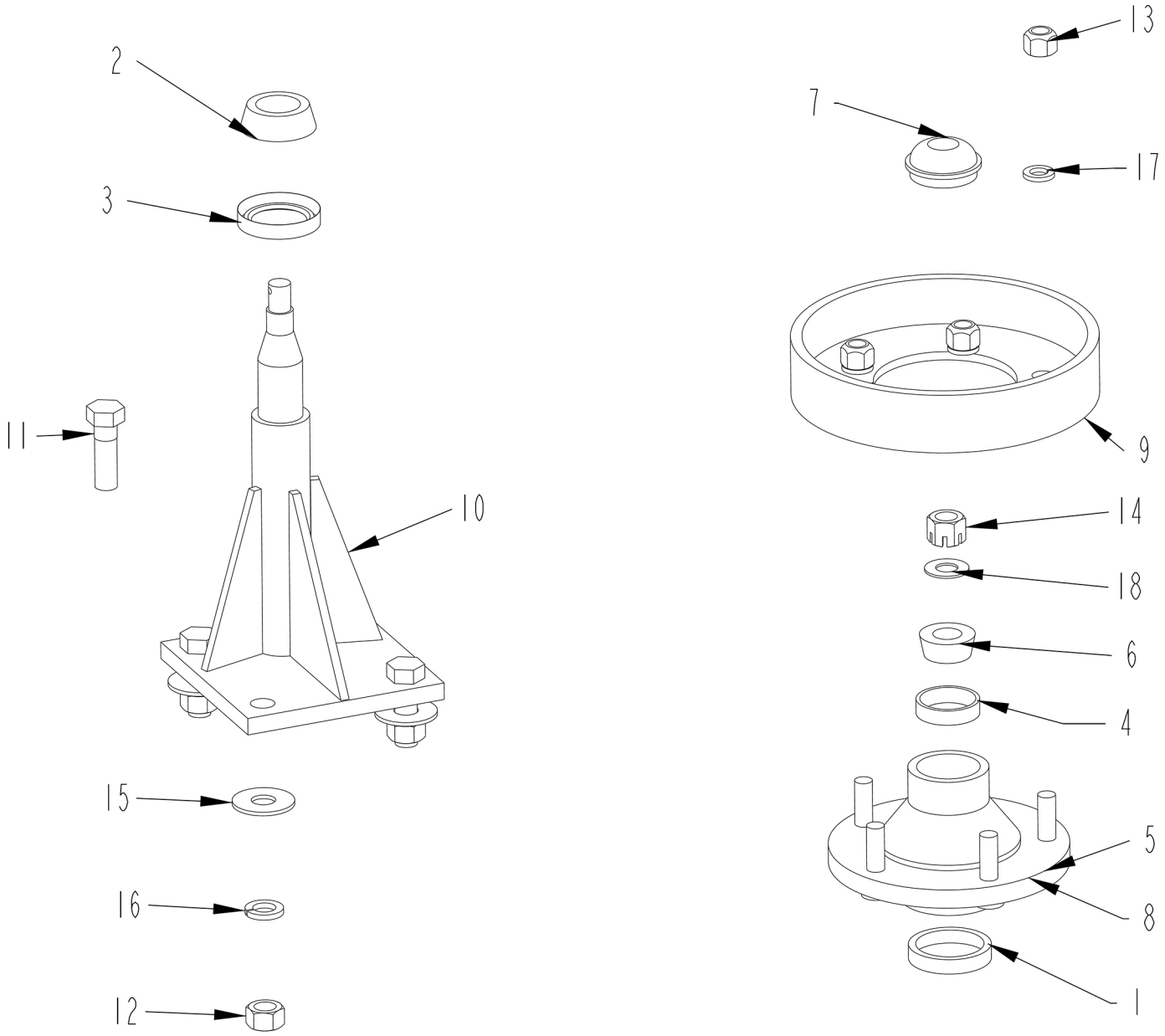
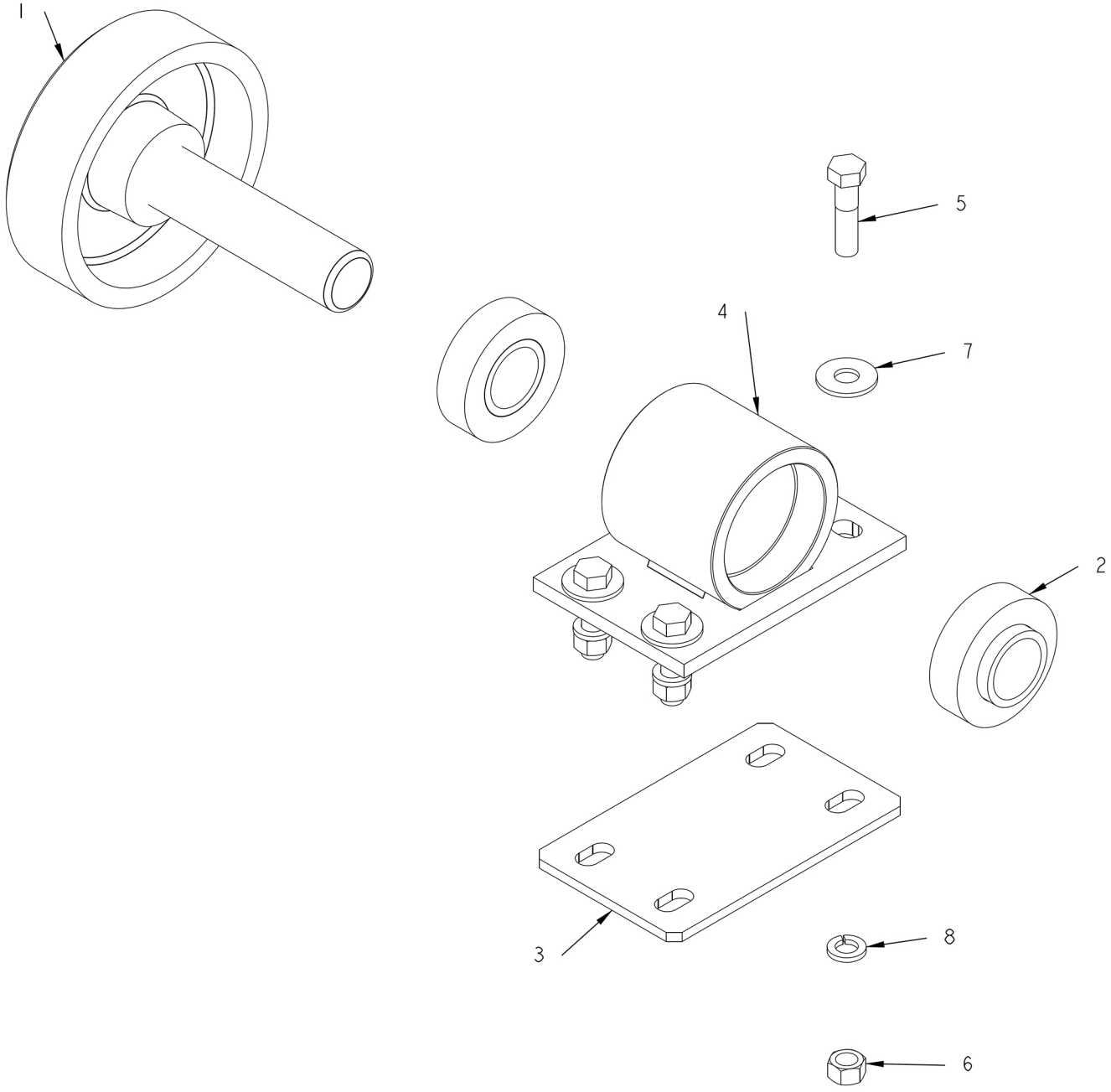
ITEM	PART	QTY.	PART DESCRIPTION
1	1400847	2	BUSH\2517\2-7/16
2	4705340	6	MNT\FIN\REPLACEABLE\H800
3	4705341	1	RTR\FAN\BOLT-ON\FIN\SHAFT
4	4800628	24	BOLT\HEX\1/2X1-1/4\GR8\NC
5	4900014	24	NUT\TPLCK\1/2\NC
6	6200098	2	KEY\REC\1/2X5/8X2
7	8102000	1	SHFT\RTR
	4705342		**FAN\ASSY\REPLCB\FINS\H800**

PRESSURE ROLLER ASSEMBLY

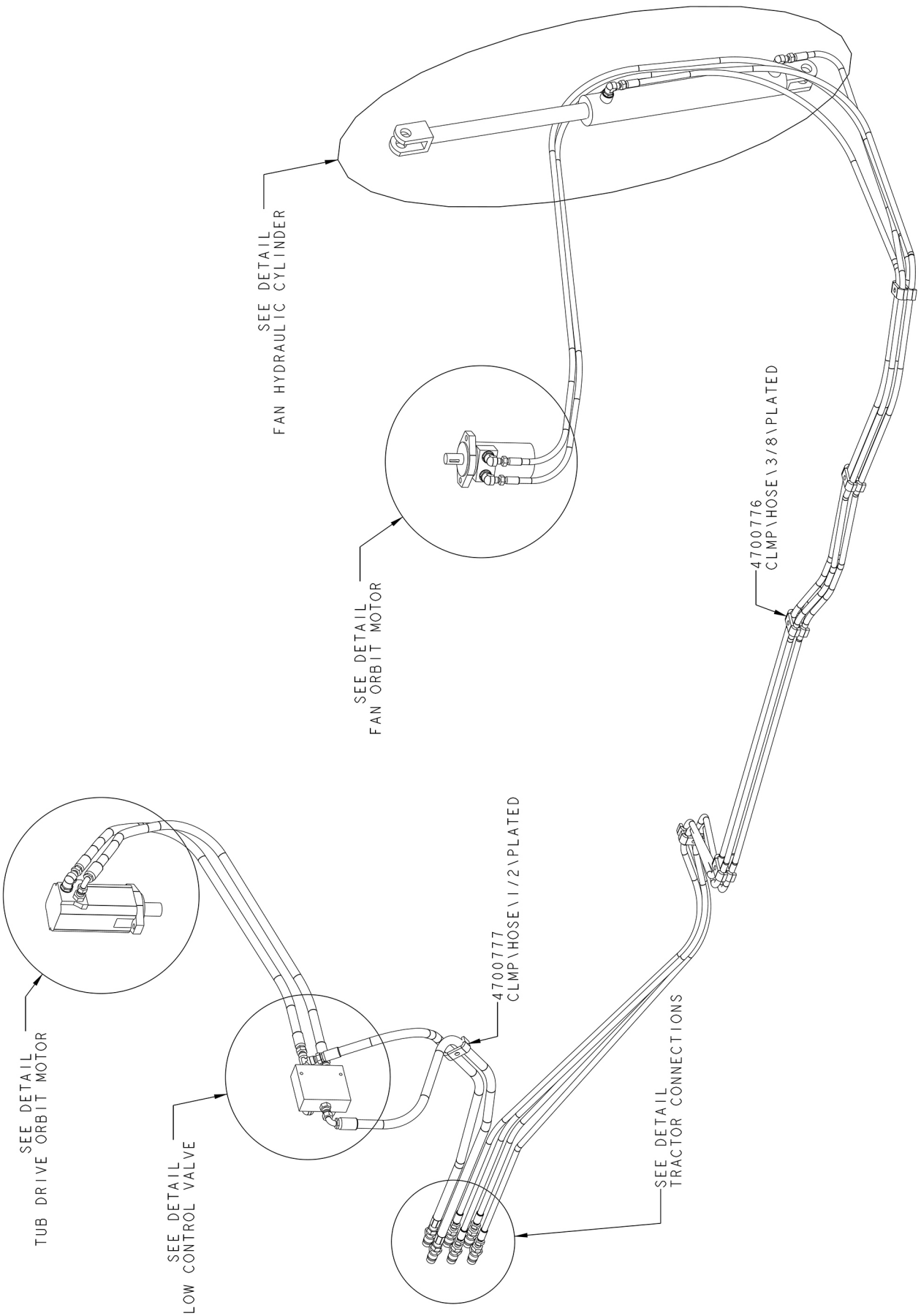


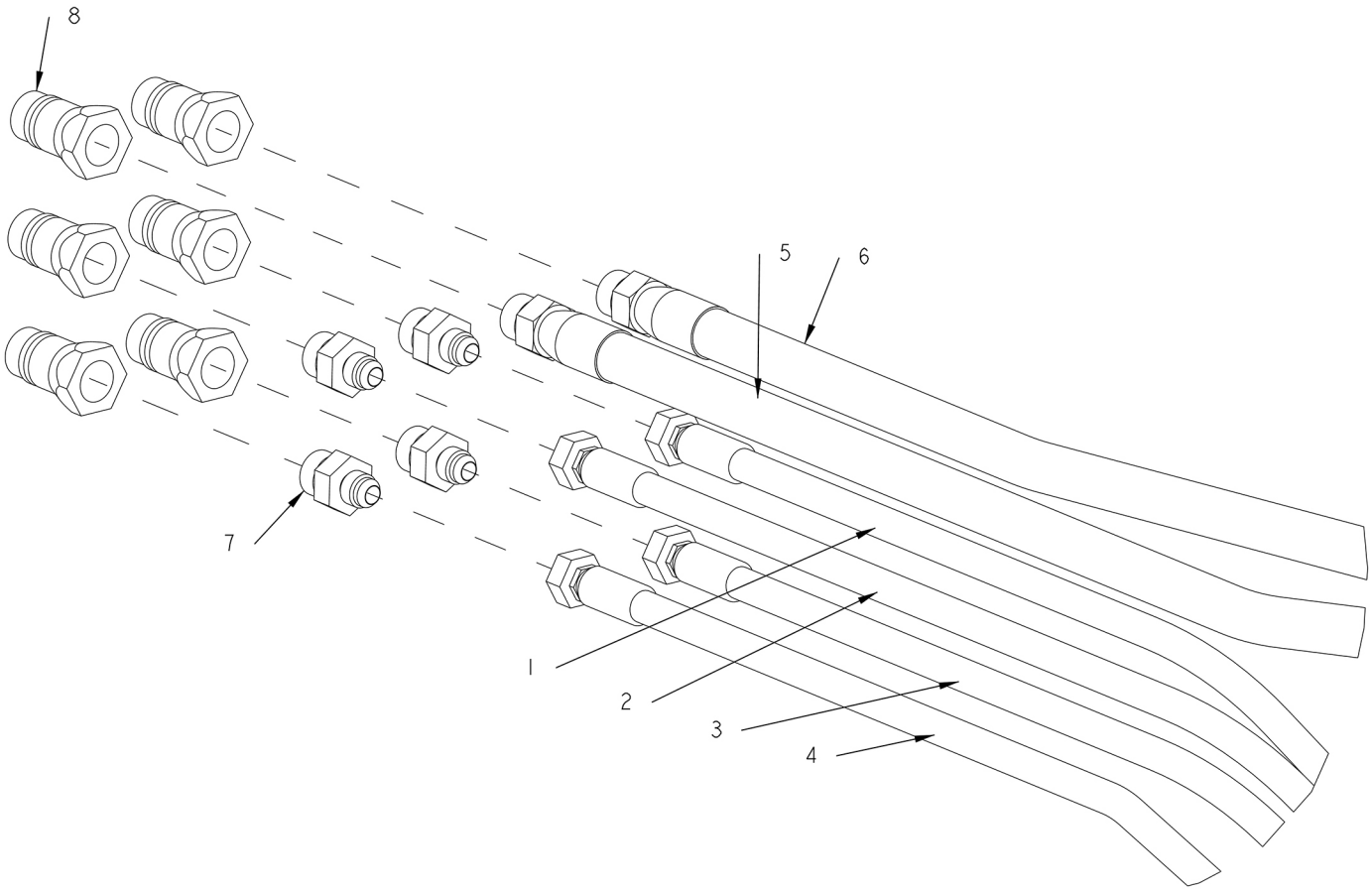
ITEM	PART	QTY.	PART DESCRIPTION
	4700886		PRESSURE ROLLER COMP. 11” includes items 1-10, 13,14,17,18, and cotter key
1	2900004	1	CUP\INNER\WHEEL HUB
2	2900018	1	CONE\OUTER\WHL;HUB(67048
3	2900055	1	SEAL\WHEEL HUB
4	2900056	1	CUP\OUTER\WHEEL HUB
5	2900057	1	HUB\5-BOLT\(985)\COMPLETE includes items 1-8,13
6	2900061	1	CONE\OUTER\WHEEL HUB
7	2900064	1	CAP\WHEEL HUB
8	2900138	1	HUB\WITH CONES\W/NUTS
9	4700115	1	DRUM\RLLR\PRESS
10	4700235	1	PRESSURE ROLLER STAND 11 SP
11	4800010	4	BOLT\HEX\5/8X2
12	4900005	4	NUT\HEX\5/8\NC
13	4900094	5	NUT\TAPER\WHEEL\1/2\NF
14	4900112	1	NUT\SLOT\5/8\NF
15	5000002	4	WASH\FLAT\5/8
16	5000003	4	WASH\LOCK\5/8
17	5000006	5	WASH\LOCK\1/2
18	5000094	1	WASH\SPINDLE\5/8
Not Shown			
	4800172	1	PIN\COTTER\1/8X2

TUB ROLLER ASSEMBLY



ITEM	PART	QTY.	PART DESCRIPTION
1	1200013	1	RLLR\TUB\1-1/2\W/O FLANGE
2	2000584	2	BRG\CYL\1-1/2\DLOK
3	4501900		SHIM\RLLR\SUP\TUB\10GA
3A	4501131		SHIM\RLLR\SUP\TUB\1/4
4	4702007	1	BRG\PB\RLLR\TUB\ASY
5	4800114	4	BOLT\HEX\1/2X2
6	4900001	4	NUT\HEX\1/2\NC
7	5000004	4	WASH\FLAT\1/2
8	5000006	4	WASH\LOCK\1/2

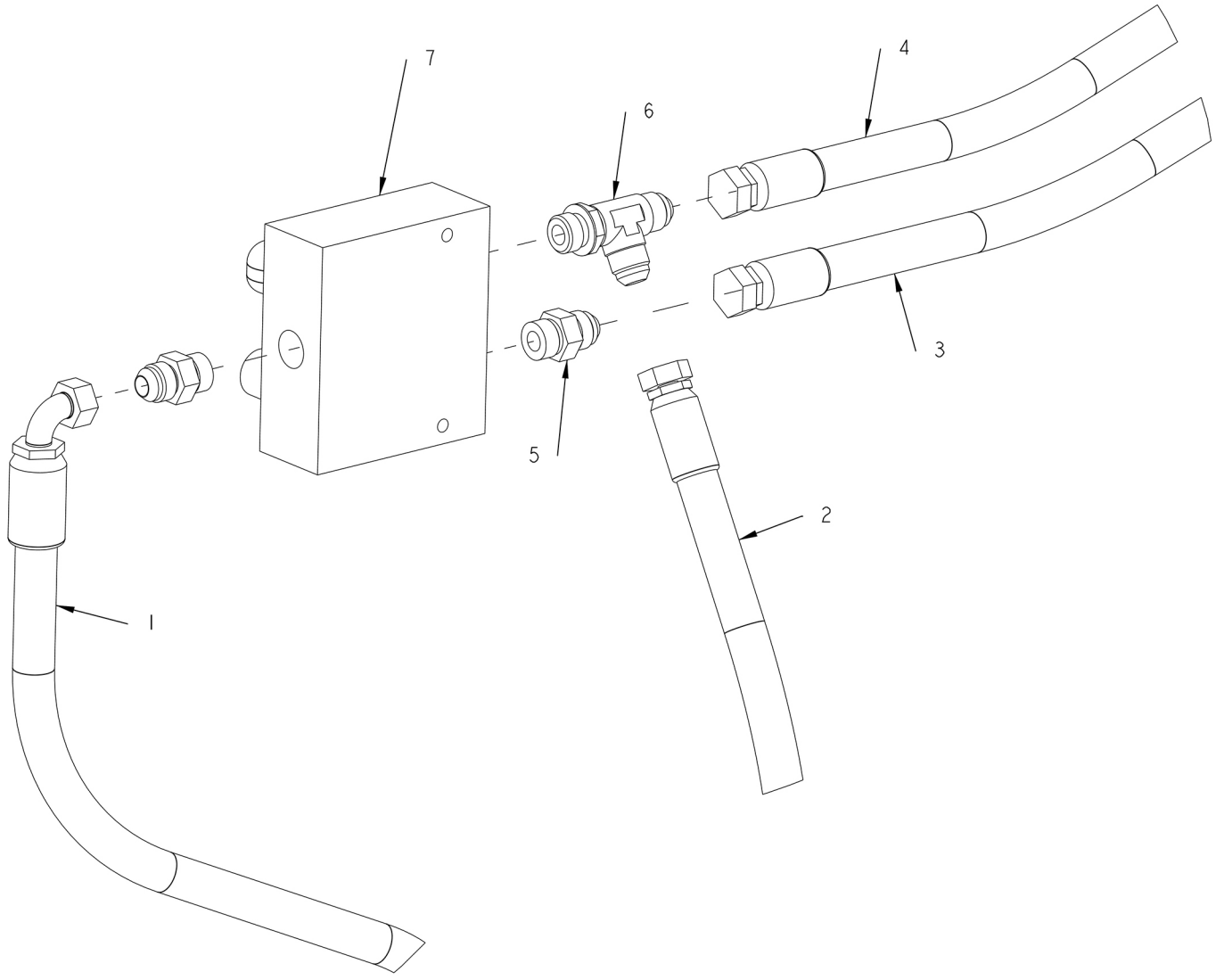

SEE DETAIL
FAN HYDRAULIC CYLINDER
SEE DETAIL
FAN ORBIT MOTOR
4700776
CLMP\HOSE\3/8\PLATED
SEE DETAIL
TUB DRIVE ORBIT MOTOR
SEE DETAIL
FLOW CONTROL VALVE
4700777
CLMP\HOSE\1/2\PLATED
SEE DETAIL
TRACTOR CONNECTIONS

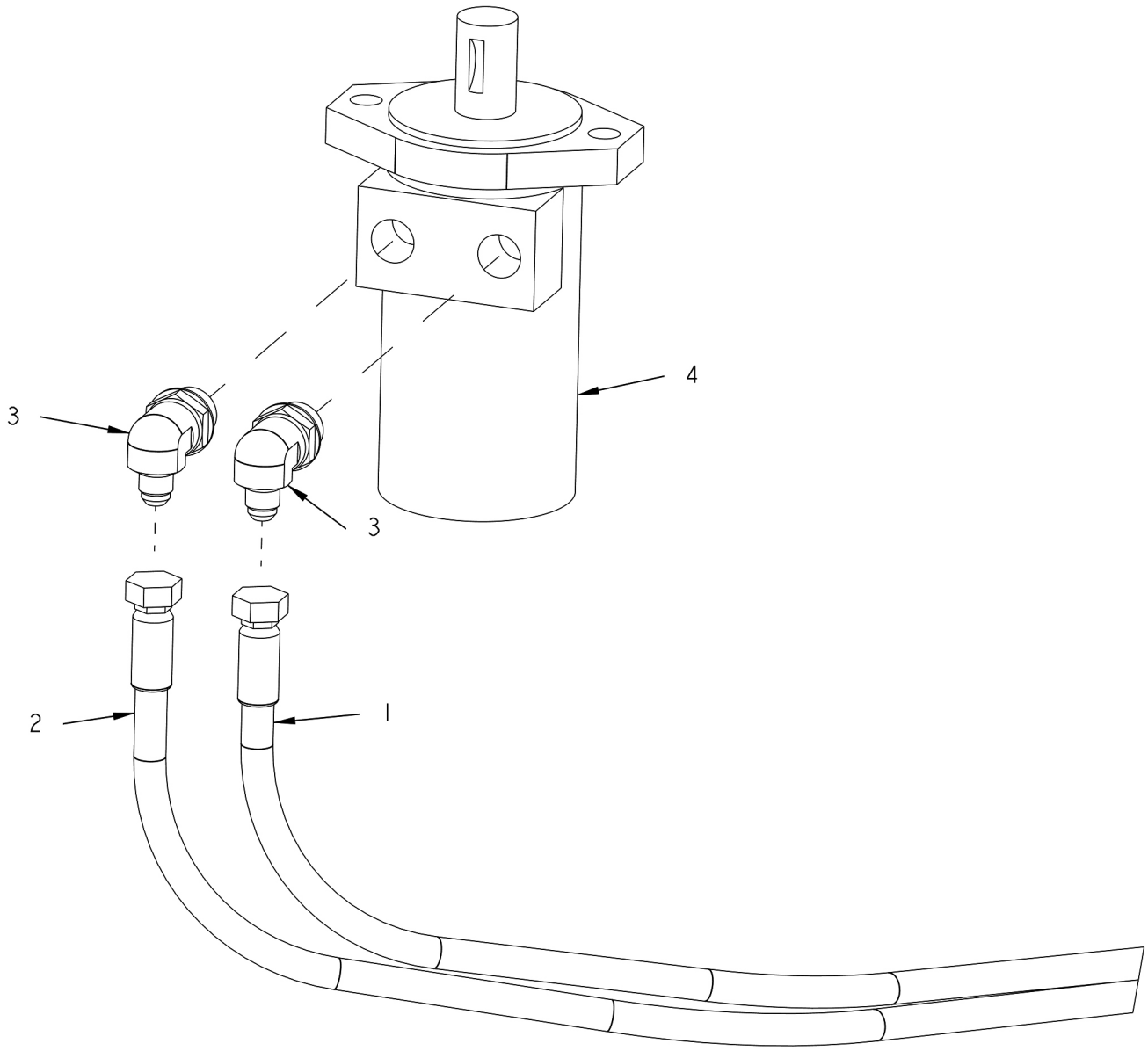


ITEM	PART NO.	QTY.	PART DESCRIPTION
1	3701682	1	HOSE\HYD\1/4X260\9/16FJC
2	3701683	1	HOSE\HYD\1/4X251\9/16FJC
3	3701684	1	HOSE\HYD\1/4X313\9/16FJC
4	3701684	1	HOSE\HYD\1/4X313\9/16FJC
5	3701685	1	HOSE\HYD\1/2X95\3/4MORX3/4FJICS/90
6	3701686	1	HOSE\HYD\1/2X95\3/4MORX3/4FJICS
7	3800530	4	FTG\3/4MORX9/16MJIC\ST
8	3800694	6	FTG\3/4FOR\QUICK;CPLR\MALE

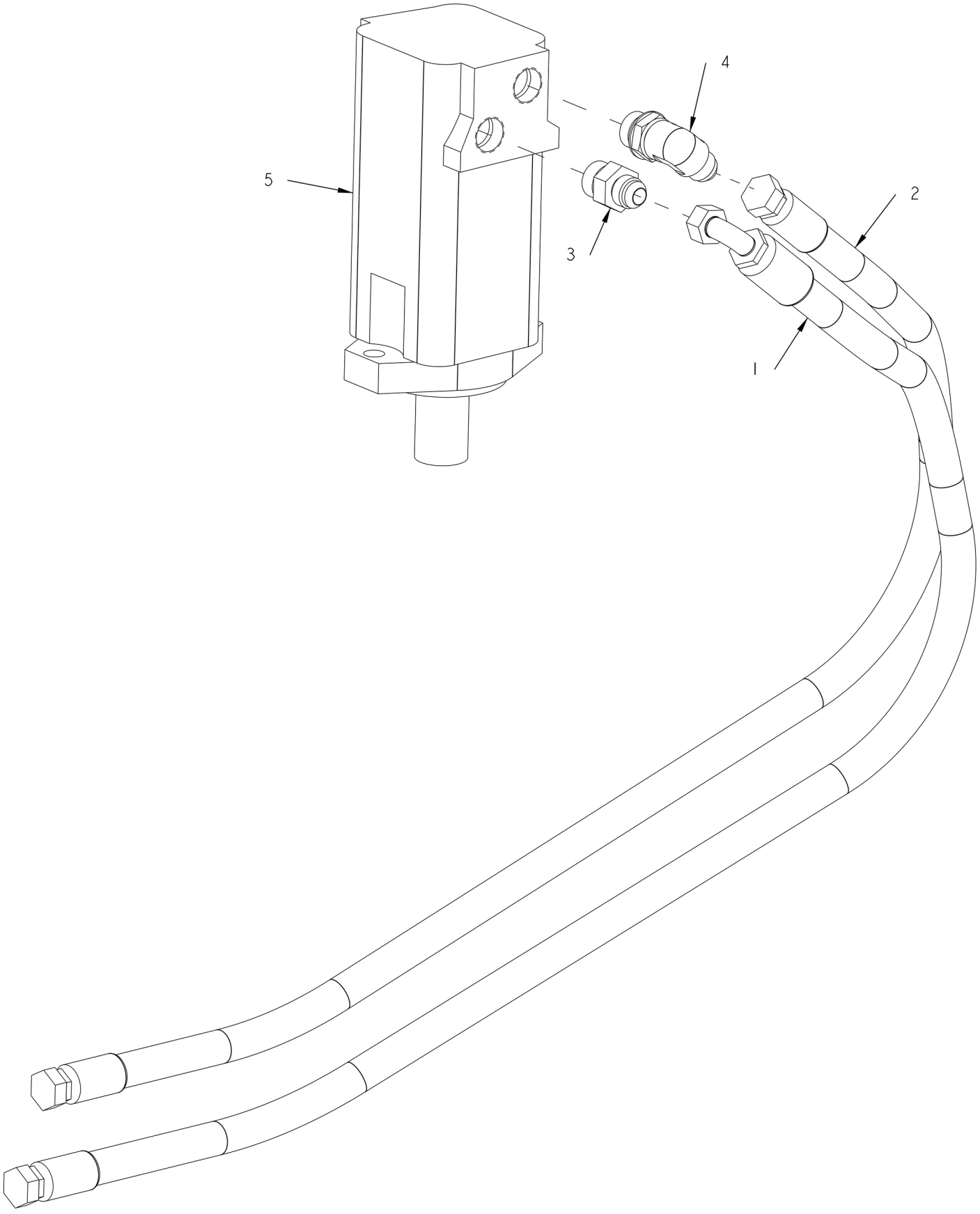
FLOW CONTROL VALVE

ITEM	PART	QTY.	PART DESCRIPTION
1	3701685	1	HOSE\HYD\1/2X95\3/4MORX3/4FJICS/90
2	3701686	1	HOSE\HYD\1/2X95\3/4MORX3/4FJICS
3	3701687	1	HOSE\HYD\1/2X55\3/4FJICX3/4FJIC\90
4	3701688	1	HOSE\HYD\1/2X 49\3/4FJICX3/4FJIC
5	3800477	2	FTG\3/4MORX3/4MJIC\ST
6	3800483	1	FTG\3/4MORX3/4MJICX3/4MJIC\RUN;TEE
7	4000331	1	VALVE\FLW-CNTRL\#8FOR

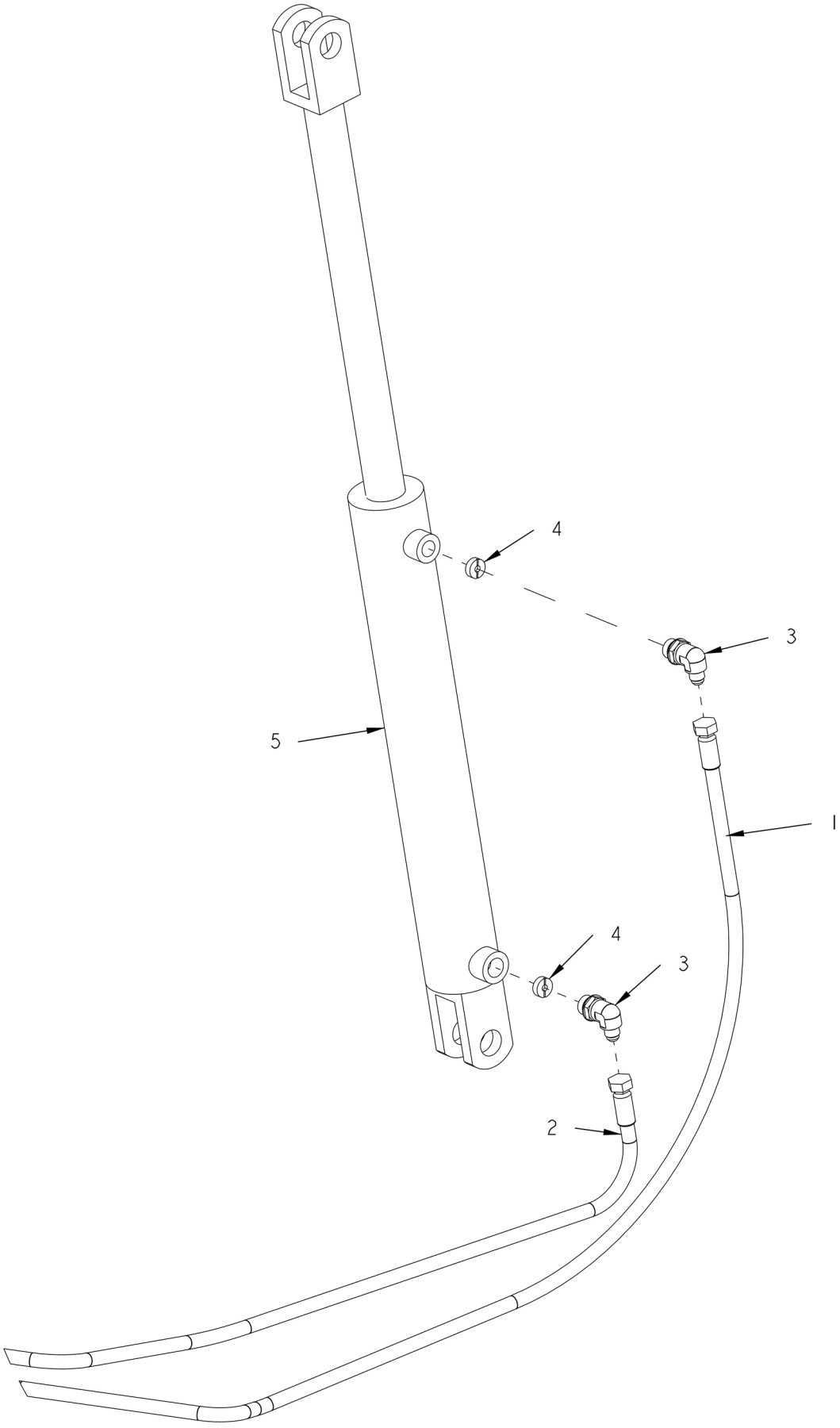




ITEM	PART	QTY.	PART DESCRIPTION
1	3701684	1	HOSE\HYD\1/4X313\9/16FJC
2	3701684	1	HOSE\HYD\1/4X313\9/16FJC
3	3800538	2	FTG\7/8MORX9/16MJIC\90
4	3900025	1	MOTOR\HYD\17.9\H


4
5
2
3
1

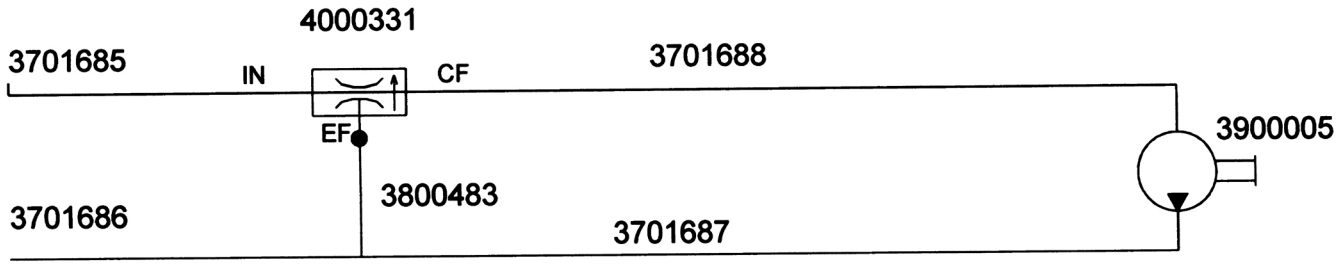
ITEM	PART	QTY.	PART DESCRIPTION
1	3701687	1	HOSE\HYD\1/2X55\3/4FJICX3/4FJIC\90
2	3701688	1	HOSE\HYD\1/2X 49\3/4FJICX3/4FJIC
3	3800328	1	FTG\7/8MORX3/4MJIC\ADPT
4	3800696	1	FTG\7/8MORX3/4MJIC\90
5	3900005	1	MTR\HYD\14.9\2000\SAE;A


4
3
5
1
4
3
2

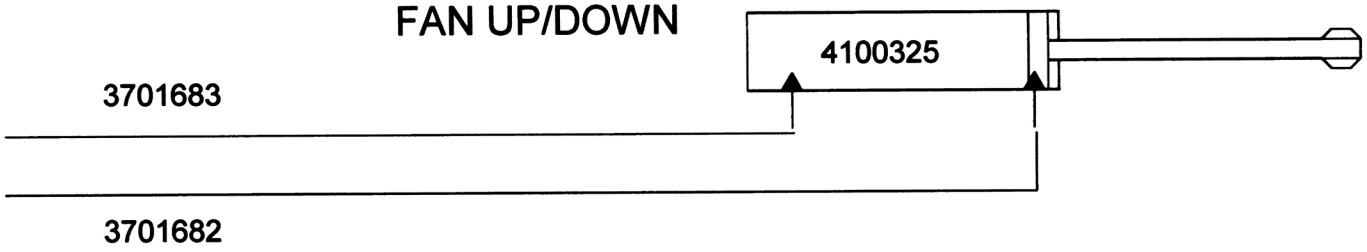
ITEM	PART	QTY.	PART DESCRIPTION
1	3701682	1	HOSE\HYD\1/4X260\9/16FJC
2	3701683	1	HOSE\HYD\1/4X251\9/16FJC
3	3800453	2	FTG\3/4MORX9/16MJIC\90
4	3800683	2	FTG\3/4MOR\ORFICE\0.0490”
5	4100224	1	CYL\HYD\2-1/2X16\1-1/2ROD\3/4OR
	4100235		SEAL KIT FOR 4100224

H800 HYDRAULICS

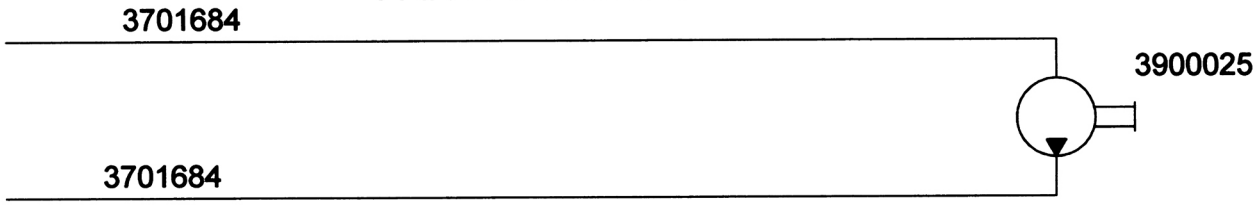
TUB ROTATION

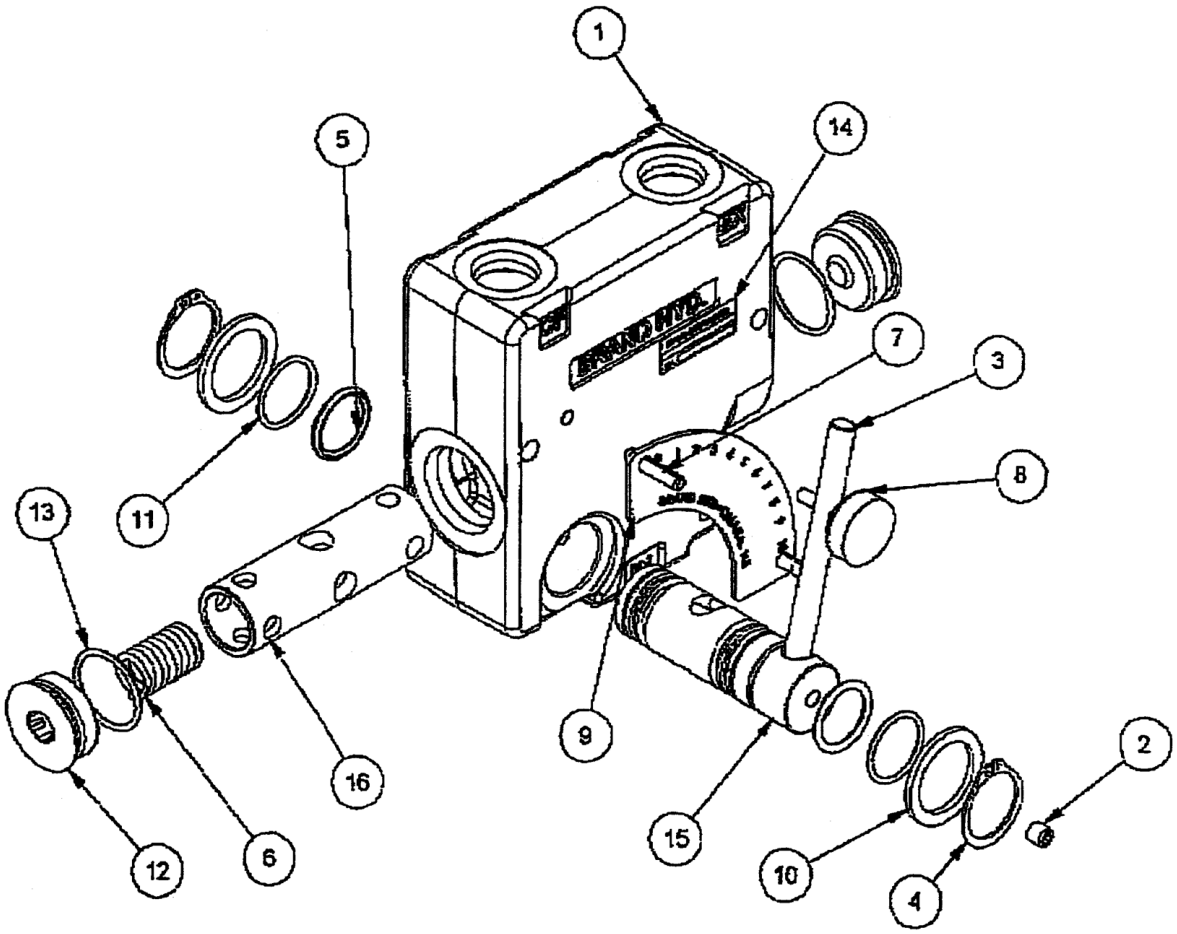


FAN UP/DOWN



FAN LEFT/RIGHT





ITEM	PART NO.	DESCRIPTION
	4000331	VALVE\FLW-CRTL\#8FOR
3 & 8	4000334	HDL\ASSY\V\HYD
5,10,11, & 13	4000335	SEAL\KIT\V\HYD (INCLUDES 2 EACH OF 5,10,11, & 13)
4	4000336	SNAP RING\V\HYD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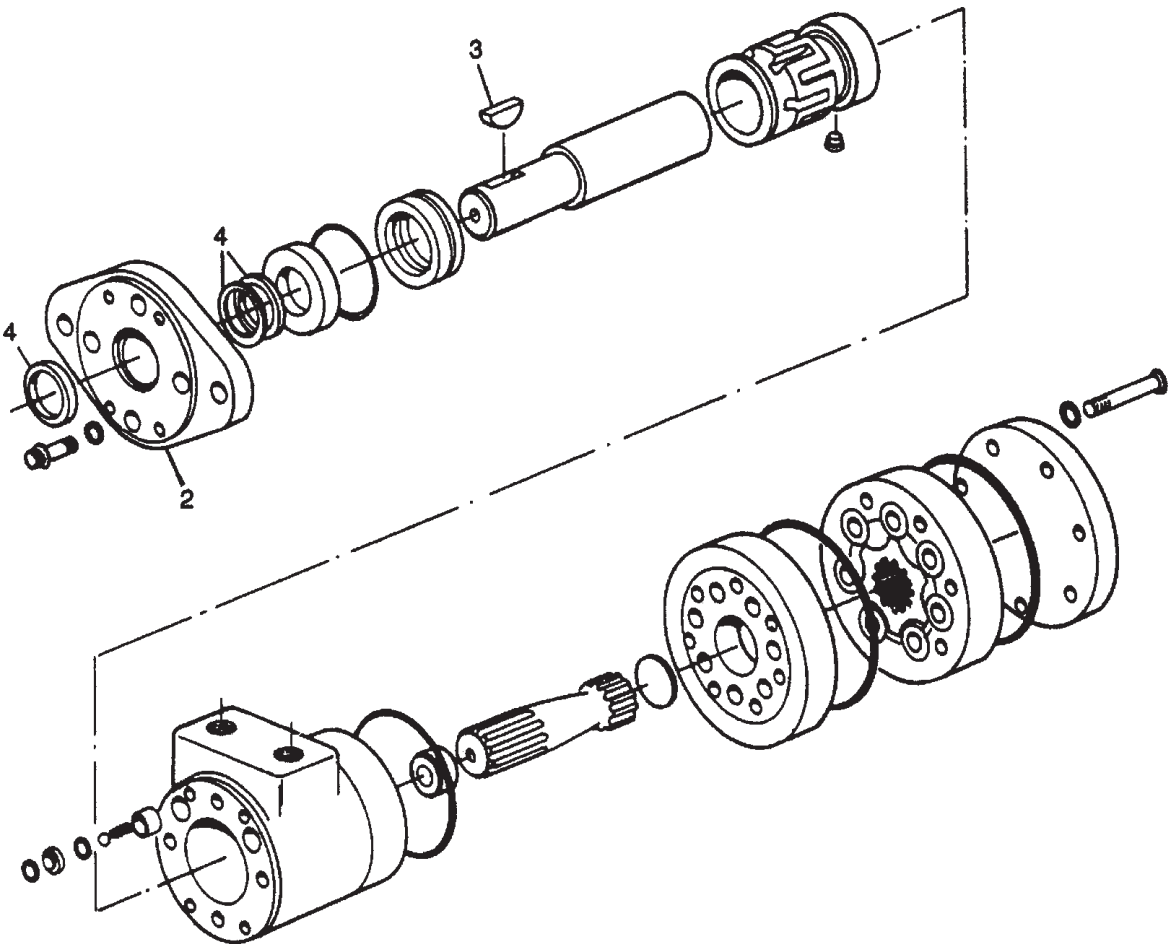
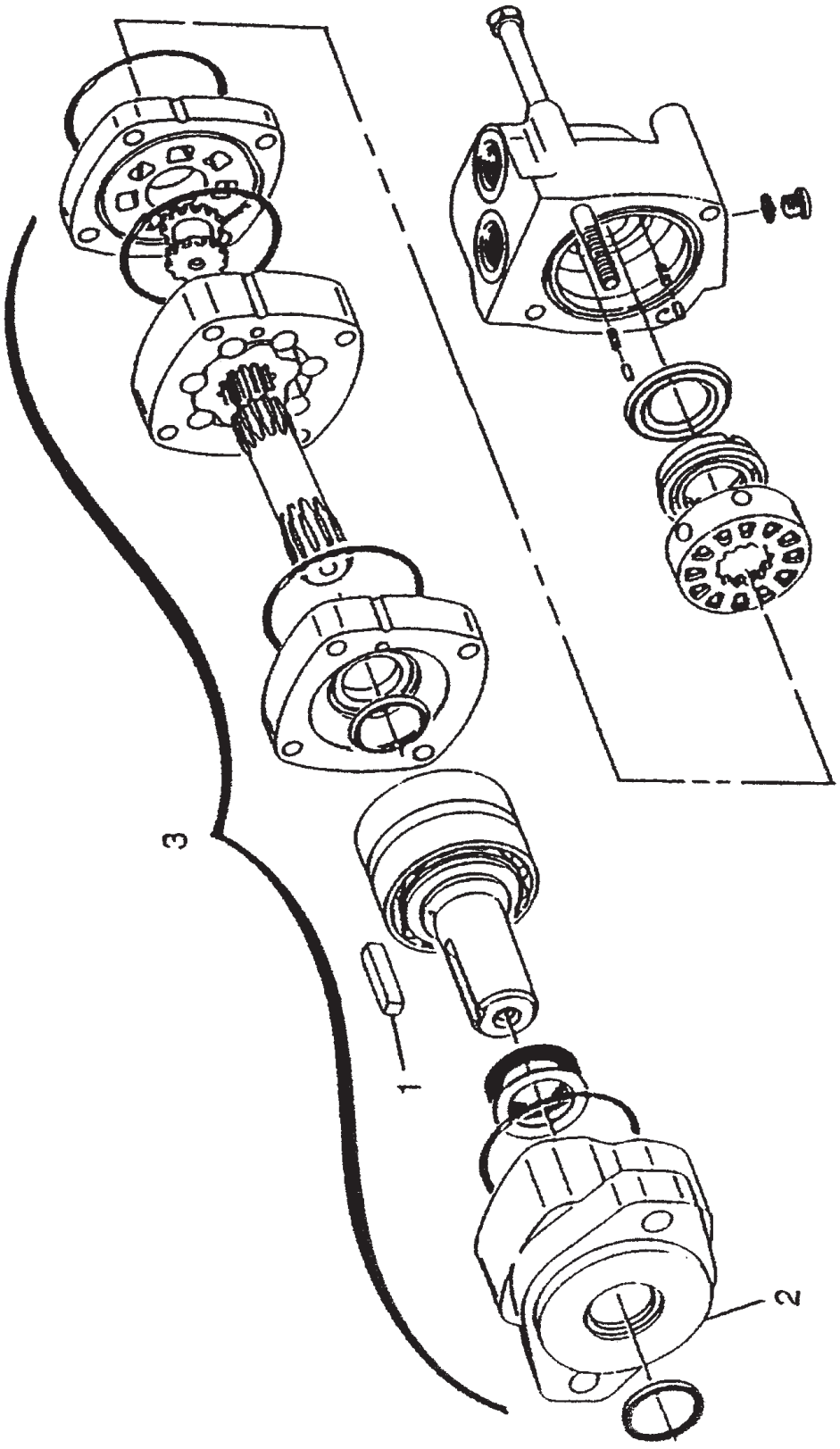
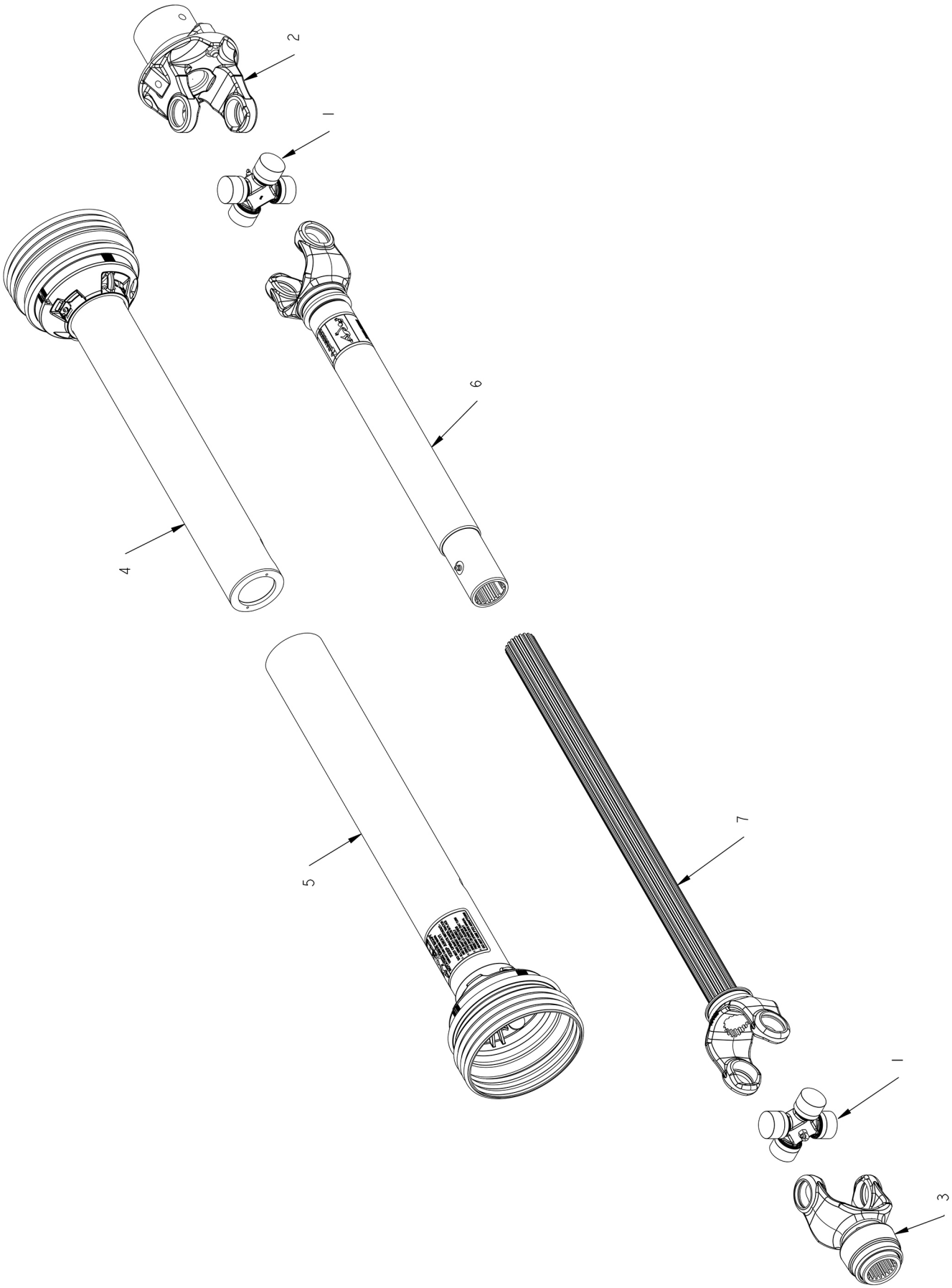
ITEM	PART NO.	QTY.	DESCRIPTION
1	3900025		Mtr\Hyd\17.9\H\A;MNT\7/8for o-ring thread
2	3900002	1	Mounting Flange
3	6200011	1	Key, Woodruff
4	7501038	1	Seal Kit

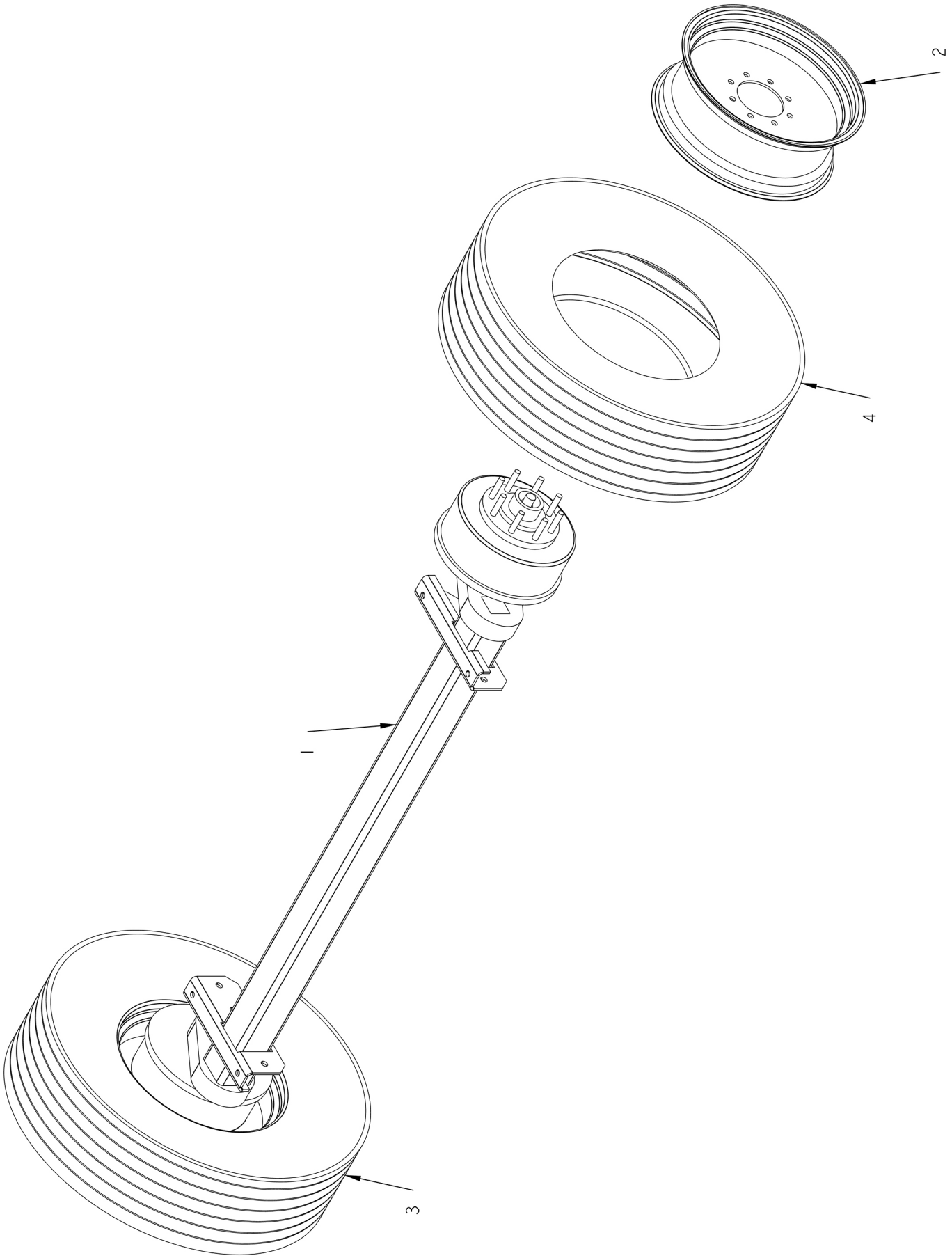



3
1
2

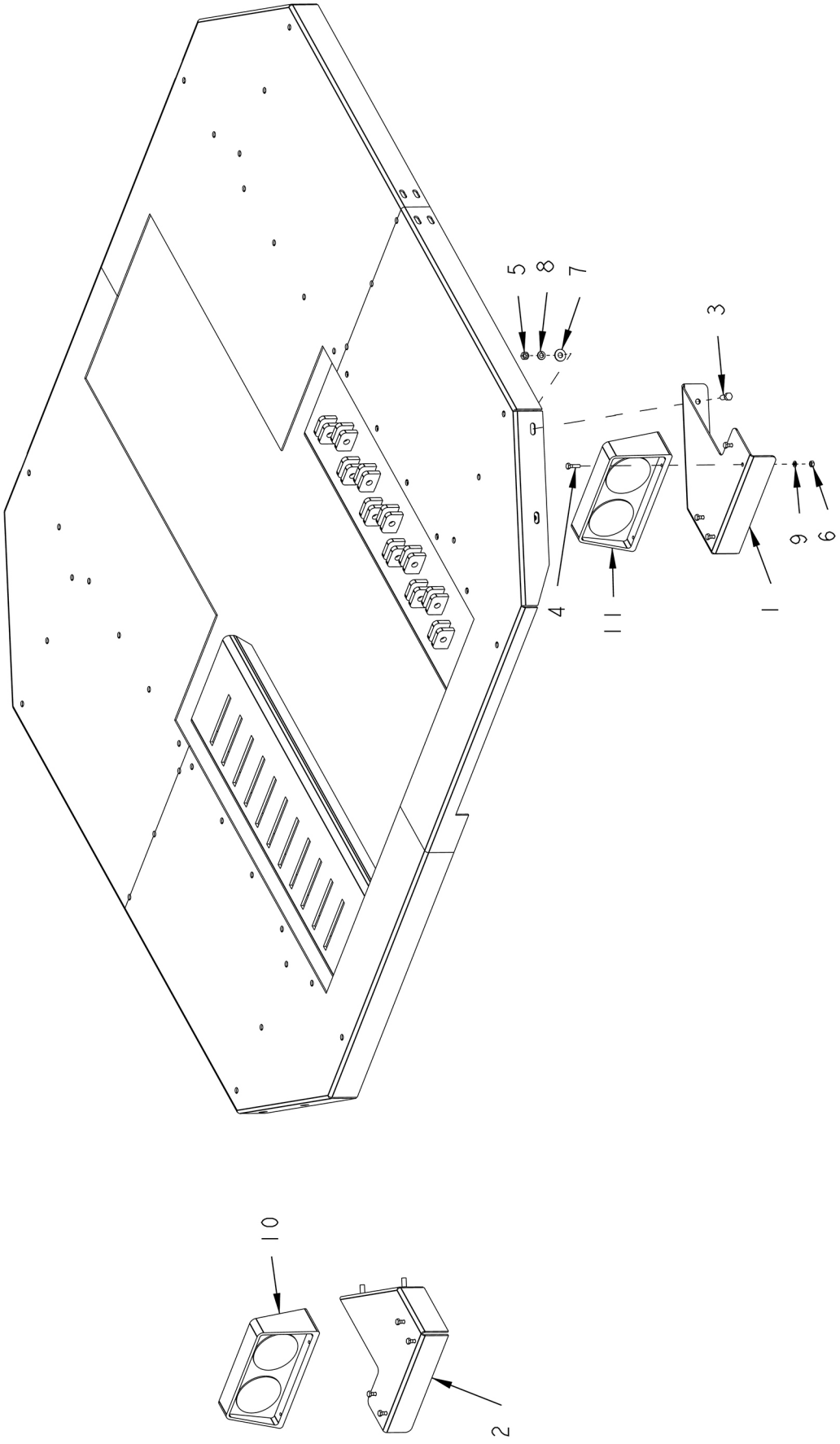
ITEM	PART	QTY.	PART DESCRIPTION
3	**3900005**	**1**	**MTR\HYD\14.9\200\SAE;A**
1	6200004	1	5/16” X 1-1/2” KEY
2	3900011	1	MOUNTING FLANGE
4	7501005	1	SEAL KIT


2
1
6
4
5
7
1
3

ITEM	PART	QTY.	PART DESCRIPTION
	3600885		**PTO\55E\BALLSHEAR\1-3/8-21**
1	3600820	2	CROSS & BEARING KIT\55E
2	3600877	1	YOKE\SHEAR\2-ID\55E
	4800982	2	3/8X2 GRADE 2 SHEAR BOLT
3	3600535		YOKE\55\QD\CLR\1-3/8\21SP


2
4
1
3

ITEM	PART	QTY.	PART DESCRIPTION
1	2500978	1	AXLE\TOR\8KLB
2	2600867	2	WHL\8-BOLT\17.5X6.75\8x6.5
3	2600878	2	WHL\ASSY\215/75R17.5 W/8-BOLT WHL 17.5X6.75 (INCLUDES 2600867 WHEEL AND 2600879 TIRE)
4	2600879	2	TIRE\10R17.5\16PLY


5
8
7
3
4
11
1
9
6
10
2

ITEM	PART	QTY.	PART DESCRIPTION
1	4705733	1	BRKT\LIGHT\RH
2	4705734	1	BRKT\LIGHT\LH
3	4800003	4	BOLT\HEX\3/8X1
4	4800277	8	BOLT\HEX\1/4X1
5	4900002	4	NUT\HEX\3/8\NC
6	4900009	8	NUT\HEX\1/4\NC
7	5000001	4	WASH\FLAT\3/8
8	5000019	4	WASH\LOCK\3/8
9	5000024	8	WASH\LOCK\1/4
10	5701058	1	TAILLIGHT\RED\LED\ASSY\4PIN
11	5701059	1	TAILLIGHT\RED\LED\ASSY\4PIN

NOT SHOWN

5700924		HARN\TAIL;LIGHTS\SHREDDR\4PIN
5701079		KIT\LIGHT\LED\2-LIGHT\4-PIN (INCLUDES 5701058, 5701059, AND 5700924)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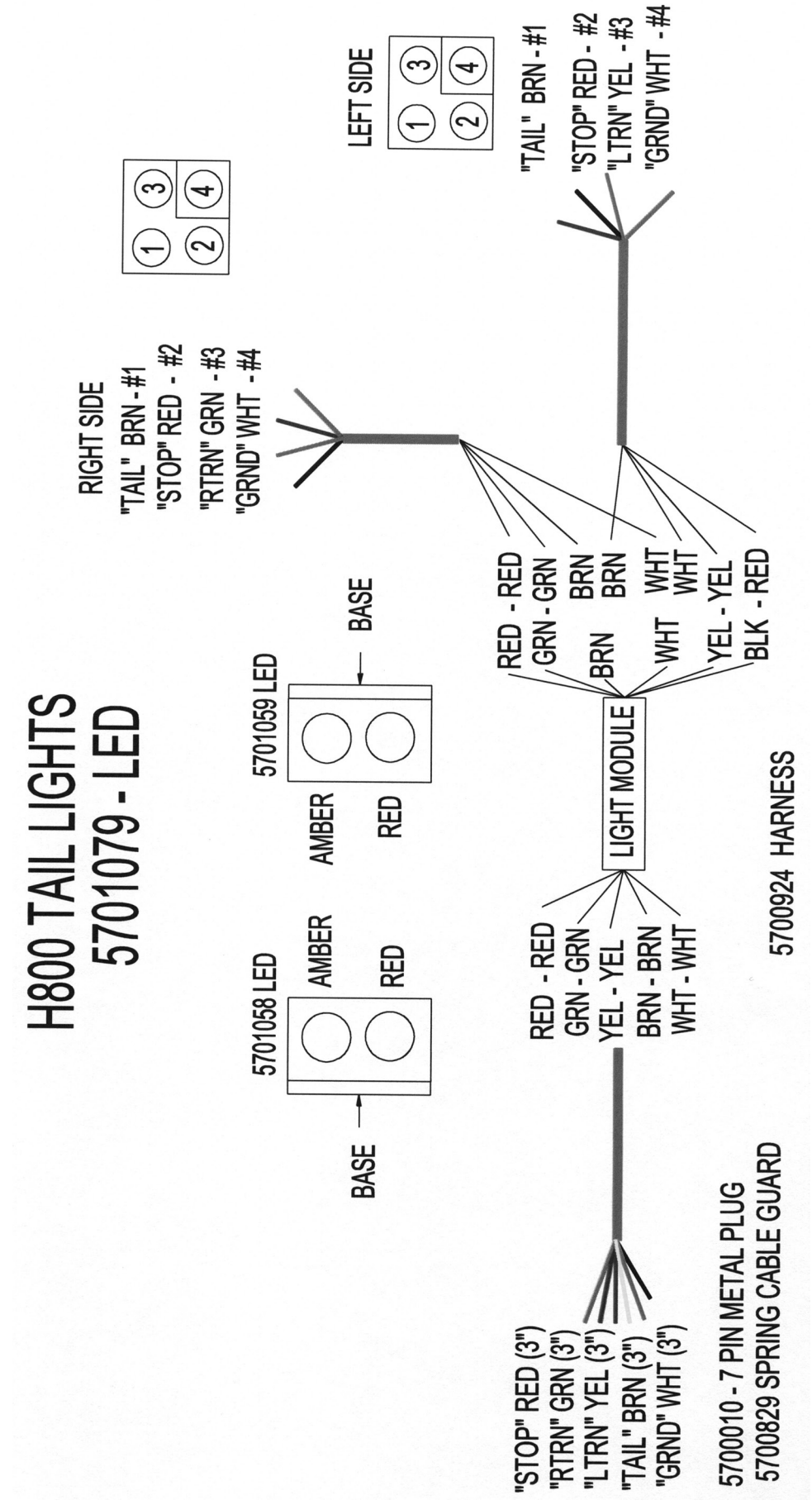
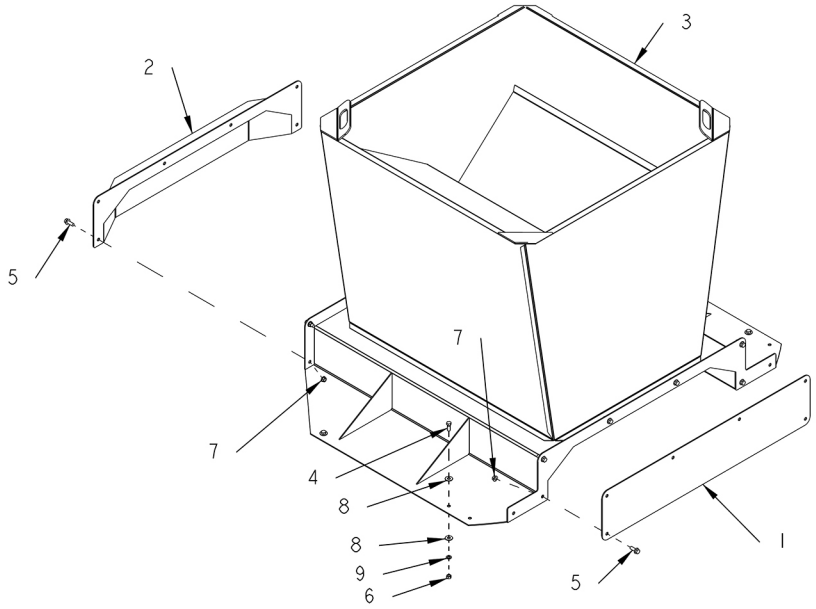
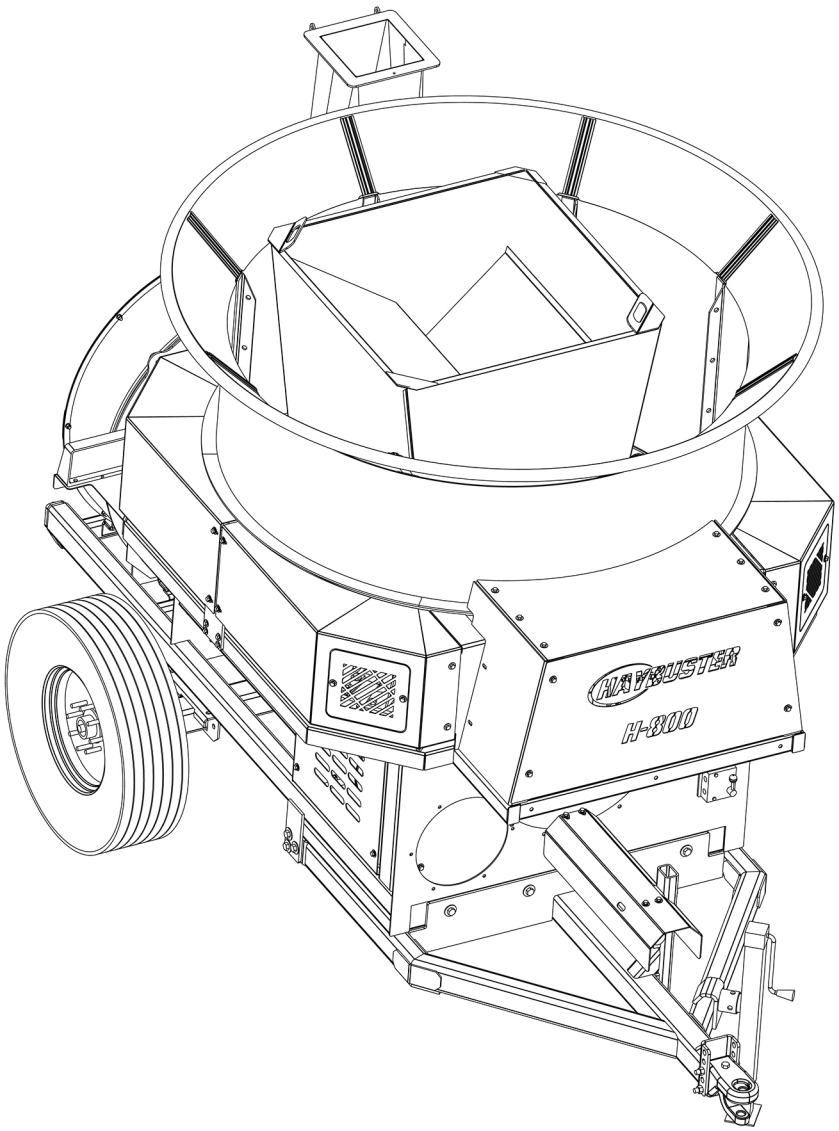

H800 TAIL LIGHTS
5701079 - LED
RIGHT SIDE
"TAIL" BRN - #1
"STOP" RED - #2
"RTRN" GRN - #3
"GRND" WHT - #4
LEFT SIDE
"TAIL" BRN - #1
"STOP" RED - #2
"LTRN" YEL - #3
"GRND" WHT - #4
5701059 LED
BASE
AMBER
RED
5701058 LED
AMBER
RED
BASE
RED - RED
GRN - GRN
BRN
BRN
WHT
WHT
YEL - YEL
BLK - RED
LIGHT MODULE
RED - RED
GRN - GRN
YEL - YEL
BRN - BRN
WHT - WHT
5700924 HARNESS
"STOP" RED (3")
"RTRN" GRN (3")
"LTRN" YEL (3")
"TAIL" BRN (3")
"GRND" WHT (3")
5700010 - 7 PIN METAL PLUG
5700829 SPRING CABLE GUARD

GRAIN HOPPER ASSEMBLY (OPTIONAL)





ITEM	PART	QTY.	PART DESCRIPTION
1	4501341	1	CVR\END\HPPR\GRAIN
2	4705296	1	CVR\RTR\HPPR\GRAIN
3	4705299	1	HPPR\GRAIN\H800
4	4800003	4	BOLT\HEX\3/8X1
5	4800913	12	BOLT\FLG\SERR\3/8X1\NC
6	4900002	4	NUT\HEX\3/8\NC
7	4900076	12	NUT\FLG\SERR\3/8\NC
8	5000001	8	WASH\FLAT\3/8
9	5000019	4	WASH\LOCK\3/8

Grain Hopper Option Installation:

1. Orient tub so that front interior tub angle is centered with cylinder box.

2. Bolt front(Item 1) and rear(Item 2) covers to grain hopper with hardware. Check to see that hopper baffle orientation is correct.

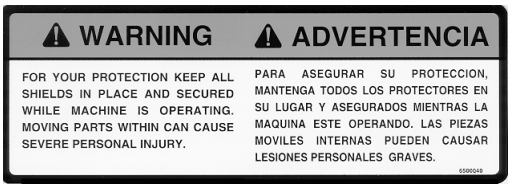
3 Place angled end of hopper tight against the tub.

4. Check to see the hopper is centered side to side over rotor.

5. Drill four 7/16” holes through tub floor using hopper as guide.

6. Secure hopper to the floor with provided 3/8” hardware.

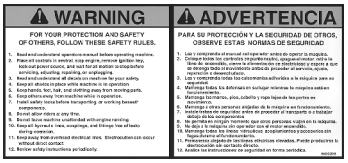
IMPORTANT! DO NOT ROTATE TUB WITH HOPPER INSTALLED



6500040

6500082

6500220



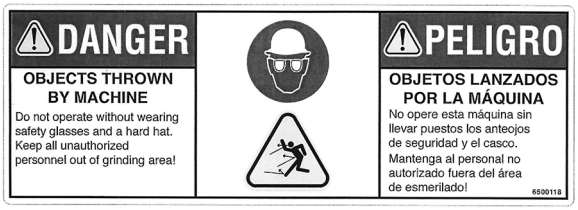
6500041

6500085

6500237

6500042

6500221

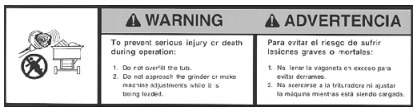


6500118

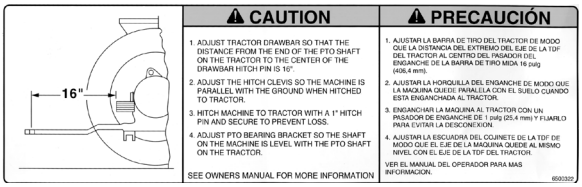
6500043

6500212

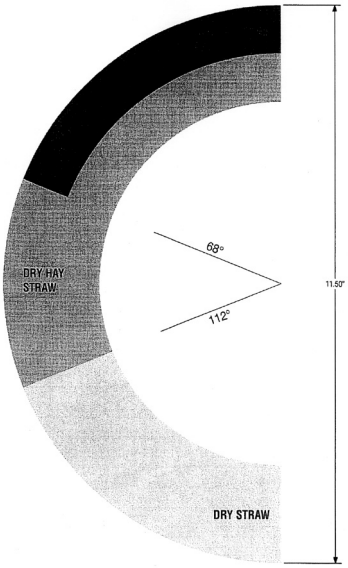
6500056



6500283



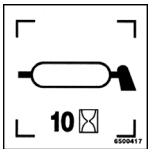
6500322



6500356

HAYBUSTER

6500304



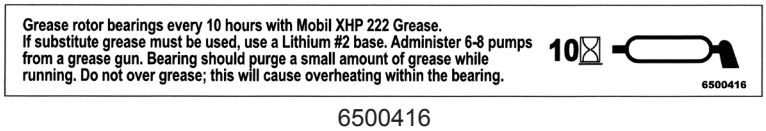
6500417

6500366

6500434

6500435

6500339

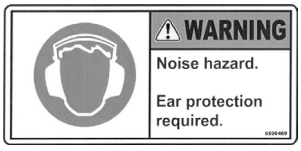


6500416

BIG BITE

6500363

6500488

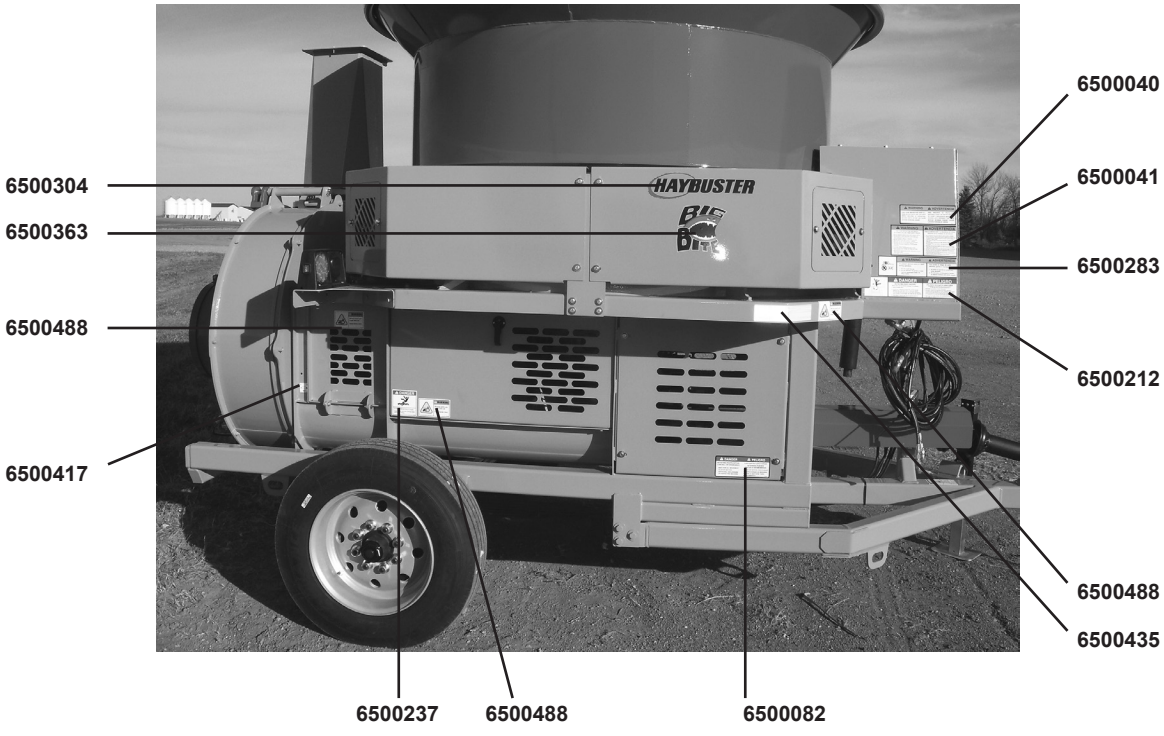


6500489

6500490

ITEM	PART	QTY.	PART DESCRIPTION
1	6500040	3	DECAL\WARN\SHIELD\PROT
2	6500041	2	DECAL\WARN\PROTECTION
3	6500042	2	DECAL\WARN\KEEP;WHL;BLTS
4	6500043	1	DECAL\WARN\NO;RIDERS
5	6500056	1	DECAL\INFO\ROTATION\STR
6	6500082	3	DECAL\WARN\ROTATN;PART;>
7	6500085	1	DECAL\DNGR\ROTATNG;DR-LNE
9	6500118	1	DECAL\DNGR\OBJCTS;THROWN
10	6500212	2	DECAL\WARN\ROTATING;PRT;>
11	6500220	1	DECAL\WARN\HI;PRESS;FLUID
12	6500237	1	DECAL\DNGR\AUGER;INT
13	6500221	2	DECAL\WARN\THROWN;OBJCTS
14	6500283	1	DECAL\WARN\OVERLOAD;TUB
15	6500304	2	DECAL\LOGO\HYBSTR\1-3/4\W/SUNBURST
16	6500322	1	DECAL\CAUT\ADJ_DRAWBAR\16”
17	6500339	1	DECAL\WARN\PINCH;POINT
18	6500356	1	DECAL\INDEX\SLUGBAR
19	6500363	2	DECAL\LOGO\BIGBITE\UNVRSL
20	6500366	1	DECAL\SMV
21	6500416	2	DECAL\BRG\RTR\GREASE\10HRS
22	6500417	8	DECAL\GREASE\10 HRS
23	6500434	4	DECAL\2X9\RED\REFCT
24	6500435	2	DECAL\2X9\AMBER\REFCT
25	6500488	4	DECAL\WARN\PARTS\MOVING
26	6500489	1	DECAL\WARN\PPE\HEARING
27	6500490	2	DECAL\WARN\NO STEP
	6500558		**DECAL\KIT\H800**
	7500077		PAINT\YELLOW\SPRAY\12OZ
	7500092		PAINT\YELLOW\QUART
	7500091		PAINT\YELLOW\GALLON
	7500078		PAINT\RED\SPRAY\11OZ>
	7500105		PAINT\RED\QUART
	7500104		PAINT\RED\GALLON


6500339
6500221
6500434
6500490
6500434
6500366
6500042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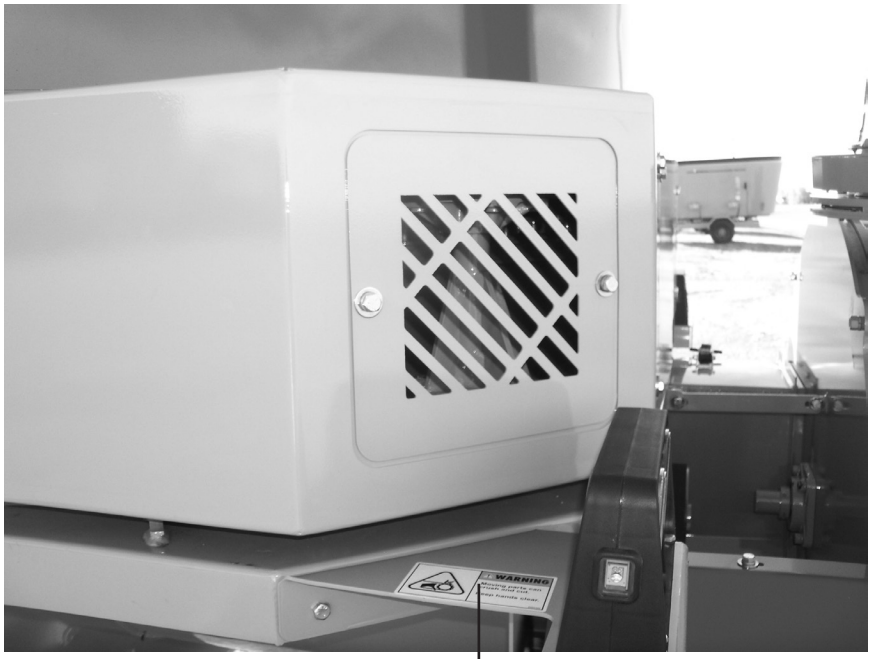
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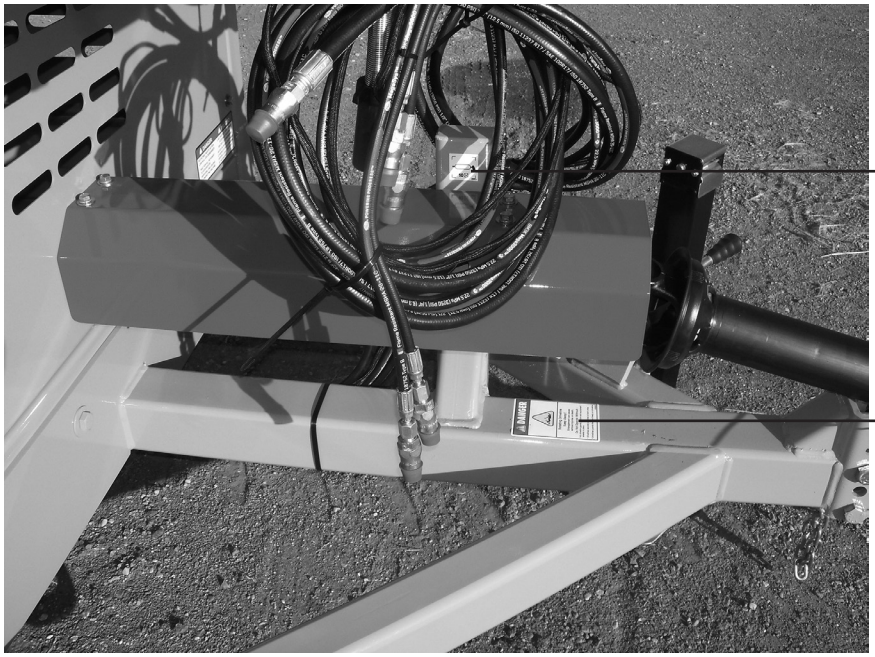
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6500085


6500220
6500082
6500435
6500488
6500490
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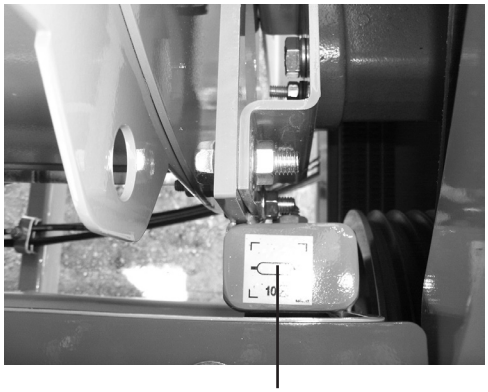

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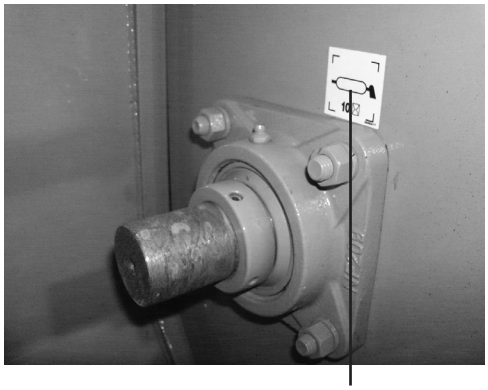

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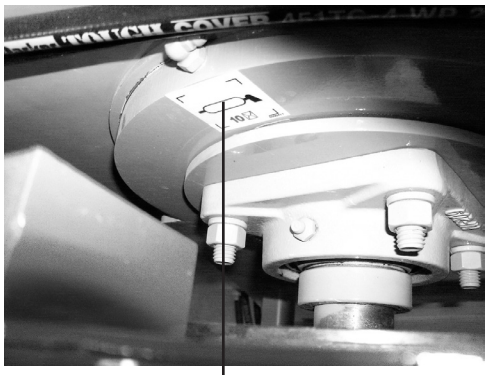

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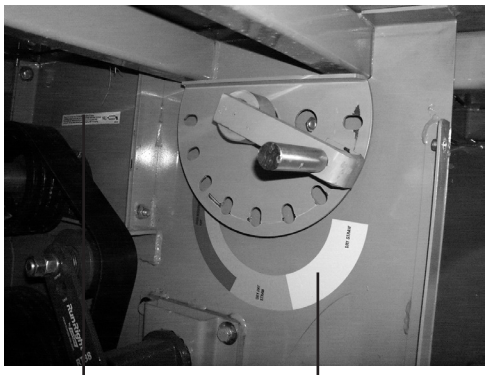

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