Automatic

ATG3620

PORTABLE ROLLER MILL

Operator, Parts & Installation Manual

Introduction

Congratulations! You are now the owner/operator of America's finest roller mill. Please take a few minutes to be sure that you understand the maintenance and operation of this roller mill. Read this operator's manual carefully: you'll get better results and have fewer problems.

After your roller mill has been in operation for a few hours, check for loose bolts, setscrews, belts, etc. All are tight when the roller mill leaves the factory; however, after a break-in period, some items may require additional tightening. Like any other machine, your Automatic roller mill requires proper care and intelligence in operation. Misuse and neglect will only cause unnecessary expense and dissatisfaction.

This manual is written as a guide for owners and operators of the Automatic ATG3620 model roller mill. Read it carefully and follow the suggestions made. Keep this manual in a convenient place for quick, easy reference, and use it whenever questions arise.

Fill in the following information now for future reference and convenience. Always give this information to your dealer when ordering new parts. If at any time it becomes necessary for you to write directly to Automatic Equipment Manufacturing Company for additional information, give the model and serial number of your machine, and as much descriptive information as possible. It will enable us to more thoroughly and quickly expedite your order.

Model No. _____ Serial No. _____ Date of Purchase _____

Name and Address of Dealer _____

_____

Exchange & Resharpening Roll Service

If your rolls ever become dull or require resharpening, you can order an exchange set of rolls. For further details on our special roll replacement program, contact your nearest dealer or distributor. If you do not have a dealer or distributor in your area, contact the factory. Credit allowance on used rolls is subject to roll inspection upon return to factory via prepaid freight.

DEALER/OPERATOR PRE-USE INSPECTION CHECKLIST

Although everything is in working order when the roller mill leaves the factory, some components may get out of adjustment in transit. The following inspection must be made prior to operation. Check each item listed and make adjustments if necessary. Refer to the corresponding sections of the manual to determine the correct settings for individual items.

- Check all belts for proper tension and alignment.
- Check to make sure the set screws in all pulleys and bearings are tight.
- Check all grease line connections and lines for damage during shipment.
- Make a general check for bolts that may have vibrated loose during shipment.
- Check greased bearings for proper lubrication.
- Check to make sure all shields and guards are in place.
- After operating the roller mill for the first few times, go through this checklist again. Some bolts, setscrews and belts may require additional adjustment during this break-in period.

DO NOT OPERATE OR USE THIS EQUIPMENT UNTIL THE FOLLOWING OPERATING AND SAFETY INSTRUCTIONS HAVE BEEN READ AND UNDERSTOOD.

SAFETY

This symbol is used to bring attention to safety precautions and instructions. When you see this symbol, be alert and pay attention to all instructions. **YOUR PERSONAL SAFETY IS INVOLVED.**

The words **CAUTION, WARNING,** and **DANGER** following a ⚠ symbol indicate three degrees of hazard. **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in **death** or serious injury. **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in **death** or serious injury.

⚠ SAFETY PRECAUTIONS

FAILURE TO UNDERSTAND AND PRACTICE GOOD SAFETY PROCEDURES COULD RESULT IN PERSONAL INJURY OR DEATH.

All farm machinery is inherently dangerous to children and to persons unfamiliar with its general operation. Children should not be permitted in areas where machinery of this nature is operating.

Since mills contain numerous moving parts, some of which may not always be visible to the operator, they can be extremely dangerous. Steps should be taken to assure the safety of the operator, and any other people in the area. Automatic Equipment strongly recommends that no person be permitted to operate this mill without a thorough understanding of how the machine works and the precautions to be observed.

If the mill discharges into an auger, be sure the auger is covered and shields are provided between the mill discharge and the auger.

Because of the dry, highly flammable material associated with this machine, **FIRE FIGHTING EQUIPMENT SHOULD BE READILY AVAILABLE DURING THE OPERATION OF THIS MACHINE.**

The operator of this machine should be a responsible adult who is familiar with farm machinery, and trained in its operation. **REMEMBER!** Your best insurance against accidents is a careful and responsible operator. A careless operator is a liability to himself and those who work with him.

Before operating this equipment, be sure to read and understand this operator's manual. If there is any portion of the manual, or any phase of the hammer mill's operation you do not understand, be sure to contact your local Automatic dealer or Automatic Equipment, Pender, Nebraska. 402-385-3051.

⚠ SAFETY PRECAUTIONS - BEFORE OPERATION

1 Keep the mill in good repair. Good maintenance is your responsibility. A poorly maintained machine is an invitation for trouble. Always use proper tools when servicing your mill.

2 **DO NOT** start, operate, or attempt repair work on the mill until you carefully read and thoroughly understand this operator's manual.

3 Be sure all shields are in place and all bolts are tight throughout the mill.

4 Be sure the rolls and drive belts are properly adjusted and in good condition. (See Operation Section)

5 Be sure there are no tools or other foreign objects lying on or in the machine.

⚠ SAFETY PRECAUTIONS - DURING OPERATION

1 **DO NOT** wear loose-fitting clothing that may catch in moving parts.

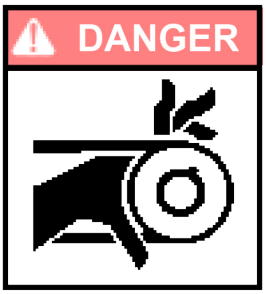
2 Children should not be permitted in areas where machinery of this nature is operating.

3 **DO NOT** operate this machine until you are sure everyone is clear of the area.

4 **NEVER** leave the mill running unattended.

5 Always keep hands, feet, and clothing away from moving parts.

6 ⚠ **DANGER** Keep hands and feet out of the hopper when machine is in operation. Never remove safety grates, or use your hands or feet to dislodge any obstruction from the mill. Never try to push or force feed grain or snow that may be bridged or laying in the hopper.



7 **NEVER** sit or stand on the mill while it is in operation.

8 **NEVER** adjust or service the unit while it is in operation.

9 **NEVER** open shields, mill access doors or clean out doors while the mill is in operation.

10 ⚠ **DANGER** Avoid contact between the discharge auger and overhead electrical lines. Failure to heed warning will result in serious personal injury or death.

11 Hydraulic fluid can cause serious burns. Hydraulic fluid escaping under pressure can have enough force to penetrate the skin and may also infect a minor cut or opening in the skin. If injured by escaping fluid, see a doctor at once. Make sure all connections are tight and that hoses are in good condition.

⚠ SAFETY PRECAUTIONS - SERVICE AND REPAIR

1 **SAFETY SHUTDOWN PROCEDURE:** Working on the mill when it is operating is expressly prohibited. Never clean, adjust, lubricate, or otherwise service this machine until the following steps have been taken.

A. Disengage the power source.

B. Lock all switches.

C. Wait until all mechanical motion has stopped on the mill.

Only when these precautions have been taken, should you proceed in the adjustment or servicing of the mill. Failure to follow the above procedure could lead to death or serious personal injury.

2 Keep the mill in good repair. Good maintenance is your responsibility. A poorly maintained machine is an invitation for trouble. Always use proper tools when servicing machine, making certain that they are removed from the unit when services or repairs have been completed.

3 All mills are equipped with shielding to protect the operator from injury. **For purposes of clarity only,** some illustrations in this manual may show the mill with the shields removed or missing. Although shields may be opened or removed for servicing and repair of the mill, they **MUST** always be closed or replaced before operation resumes.

Automatic Grain Roller Mills are manufactured from the best materials and workmanship available - each has been tested and properly adjusted at the factory before shipping. Simple adjustments and minimum maintenance have been emphasized. Reasonable care and operation will assure many years of trouble-free service.

BE SURE ROLLER MILL is mounted on a firm base. The machine should be level while operating so the grain will flow evenly across the rolls. This will eliminate unnecessary strain on roll bearings and shafts, as well as doing a better job of rolling.

IT IS IMPORTANT that all units are checked after the first few hours of service to assure that all setscrews, lock collars, and other hardware has remained secure. This operation should be performed periodically as part of the general maintenance on your roller mill.

ROLLER TENSION SPRINGS on floating rolls are set at the factory to maintain just the right amount of pressure. Never readjust compression spring tension. These springs prevent stoppage, allowing foreign objects such as nails, bolts, etc. to pass between the rolls. On all of our mills, magnets are available and recommended, as they separate pieces of steel and iron from the feed. Saving the life of just one animal will pay for several magnet installations.

HOPPER GATE CONTROL - Your roller mill will not start with grain between the rolls. Always start roller and bring rolls to full RPM before opening feed gate. Make sure feed gate in hopper is closed before putting grain in hopper. If grain is released to rolls before they are turning, grain will pile up and it will be necessary to clean out between rolls and run remaining kernels through by hand before starting.

YOUR ROLLER MILL IS DESIGNED TO ELIMINATE COMPLICATED ADJUSTMENTS. There are only two major points of adjustment for any small grain or shelled corn...hopper gate control and roller spacing.

1. HOPPER GATE - Open feed gate gradually until you reach maximum flow of grain that power will handle. If it becomes necessary to stop machine at any time before hopper is empty, be sure to close the feed door before shutting off power.

2. ROLLER SPACING - This depends upon the type of grain to be rolled. Different grain varies in size, shape, toughness and moisture content. This is also true of the same kind of grain from different localities. For this reason, it is impossible for us to tell you how to set the rolls. Do not over-roll hard or dry grains, as this will cause dusting. Remember, proper adjustment keeps dust at a minimum, even when rolling the driest grain.

   The closest roll setting is preset at the factory and as a rule, should not require additional adjustment. However for certain types or conditions of rolling, some “fine tuning” may be required. This is done by removing the cotter pin from the slotted hex nut (see page 5, item 23) and turning the nut counterclockwise one slot at a time. This will move the rolls slightly closer together.

   IMPORTANT: Move the nut only one slot at a time. Check to make sure the roll teeth do not come in contact with each other by turning the mill BY HAND after each adjustment.

IN ADJUSTING FEED ROLLS from fine to a medium or coarse grind, a turn of the handle on the quick-adjust on the side of the mill will set your rolls. To move roll inward, remove lock pin, turn quick-adjust handle counter-clockwise. To move roll outward, remove lock pin, turn quick-adjust handle clockwise. This will assure you of an even and proper setting, adjusting both sides of the roll at the same time. After adjustment has been made, always lock setting by placing lock pin on the right side of chain link welded to the end plate.

DON'T OVERCROWD THE ROLLS, just keep a ribbon of grain going between the rolls, and you'll do a better job of rolling. This is especially true of oats and barley. It is not necessary to completely flatten the kernel. The grain becomes easy to digest when the hard coat or hull is broken open, exposing the nutrients to the digestive juices.

⚠ CAUTION

NEVER OPERATE WITH PTO SPEED IN EXCESS OF 1000 RPM

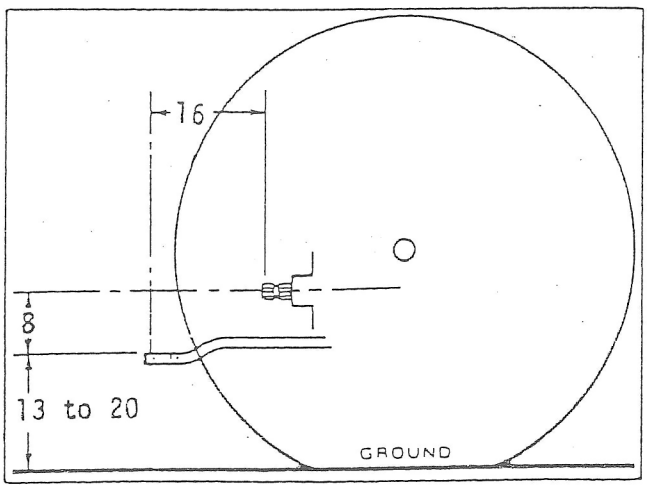
ON PTO UNITS - Grade 5 shear bolts should be used at all times in the shear plate of the PTO assembly.

ALWAYS EASE THE PTO in slowly with tractor idling, then increase RPM gradually to full throttle, 900 to 1000 RPM. Always maintain full tractor throttle and PTO speed while operating mill.

TRACTOR HITCH (See illustration below) - The hitch of the Roller Mill is designed to attach to any SAE-ASAE standardized tractor drawbar. Adjust the drawbar so that it is 13 to 20 inches above the ground. Extend or shorten the tractor drawbar so that the horizontal distance from the end of the tractor power take-off shaft to the center of the hitch pin hole is 16 inches for 1000 RPM. Lock the drawbar in its crossbar, parallel with the centerline of the tractor. Place locking pins on each side of the drawbar. If the tractor has an offset drawbar, the offset should be down for PTO work.

⚠ CAUTION

THE TRACTOR HITCH POINT MUST BE PROPERLY ADJUSTED. AN IMPROPERLY LOCATED HITCH POINT MAY CAUSE DAMAGE TO THE POWER TAKE-OFF WHICH MAY LEAD TO PERSONAL INJURY.



⚠ CAUTION

NEVER ATTEMPT TO LUBRICATE, ADJUST OR OTHERWISE SERVICE THIS MACHINE UNTIL THE PTO HAS BEEN DISENGAGED, THE TRACTOR ENGINE HAS BEEN TURNED OFF AND ALL MOTION HAS BEEN STOPPED. LISTEN AS WELL AS LOOK FOR MOTION BEFORE PROCEEDING.

BEARINGS - All pillow block and cast flange bearings are sealed and as a general rule REQUIRE NO LUBRICATION. However, the bearing manufacturer does furnish grease zerks and recommends the bearings be regreased before one-third (1/3) of the bearings' calculated life elapses. Usually just a pump or two of grease per bearing before start up each harvest or after the unit has not been used for a month or more will be sufficient.

IMPORTANT: DO NOT OVERGREASE. OVERGREASING CAN CAUSE DAMAGE TO THE BEARING SEAL.

WHEEL BEARINGS - Trailer wheel bearings should be cleaned and repacked with grease on a yearly basis.

PTO (See page 27) - Cross bearings should be greased daily. Telescoping sections of the PTO should be greased yearly.

HYDRAULIC SYSTEM

Tractors are manufactured with two types of hydraulic systems, Open Center and Closed Center. Before connecting the tractor to the hydraulic intake auger, check with your tractor dealer or in your tractor instruction manual to make sure your hydraulic system is compatible.

OPEN CENTER SYSTEM - The hydraulic flow control valve for controlling the 12 inch loading auger is assembled at the factory for an Open Center hydraulic system (See page 25).

CLOSED CENTER SYSTEM - If your tractor has a Closed Center hydraulic system, it will be necessary to change the plumbing to match that shown on page 25 for Closed Center system.

IMPORTANT: FAILURE TO MATCH HYDRAULIC SYSTEMS COULD DAMAGE YOUR TRACTOR!

⚠ WARNING

The motors on the mill have a speed limitation of 20 gpm. Going above that flow rating by bypassing the flow controller on the mill could damage or destroy the motor's geroler.

BELT TENSION

DRIVE BELT TENSION - Check V-belt tension as noted below:

New Belt - - - After 15 minutes of running
First 4 Hours of Service - - - Every Hour
After first 4 hours - - - Every 8 hours service

ROLL DRIVE BELTS are tensioned properly when they can be depressed 3/8 inch, in the middle of the longest span, using a force of 7 pounds.

AUGER BASE DRIVE BELTS are tensioned properly when they can be depressed 1/4 inch, in the middle of the longest span, using a force of 7 pounds.

CORN COB MIX

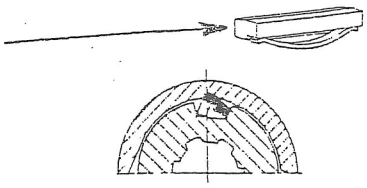
When processing corn cob mix, the agitator (See page 15) in the hopper should be removed to prevent bridging and increase material flow. If a magnetic grate is to be used, be sure to use the corn cob mix magnetic grate (See page 16, item 6). The standard magnetic grate will not with the corn cob mix.

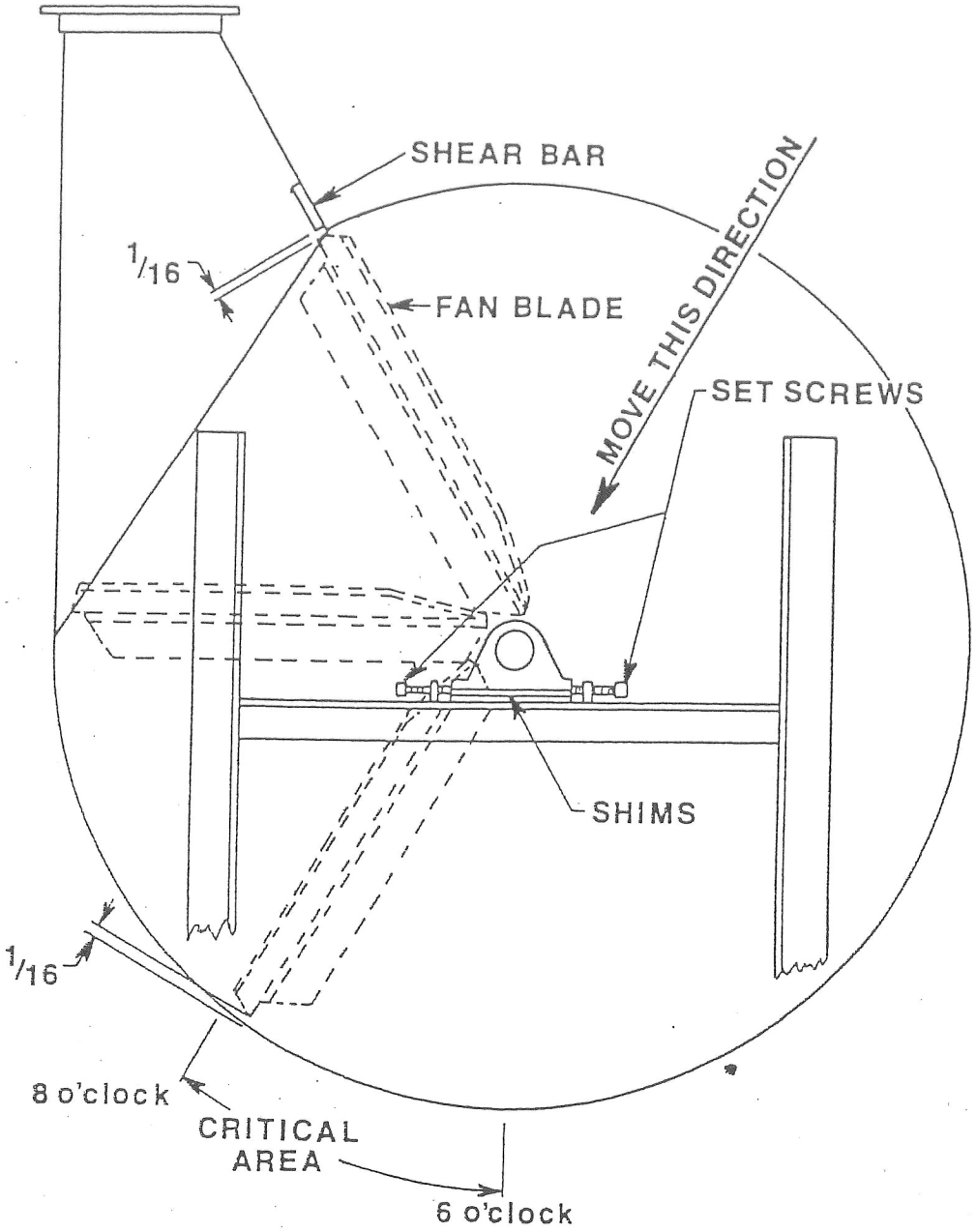
OVER-RUNNING COUPLER MAINTENANCE

The Over-Running Coupler is a mechanical unit and is subject to normal mechanical wear and requires regular servicing and lubrication.

LUBRICATION: Frequency of greasing will depend on the amount of over-running required. Greasing several times a day could be required if over-running is constant. Over greasing is not possible, so be sure it gets frequent lubrication. Your regular gun grease is okay.

SERVICING: Coupler should be dismounted and disassembled at regular intervals for cleaning and checking. Frequency of this will depend on operating conditions (more frequently under severe dust conditions or when over-running constantly). Disassemble by removing snap ring at splined end. When removing inner sleeve, use care to be sure drive keys and springs do not fall out as these could be misplaced or lost. Any burrs or scores on either inner sleeve or outer housing should be removed with file or grinder or polished with emery cloth. Re-assemble with parts in position shown on drawing below. Particularly observe caution on drawing. Be sure all parts are well greased and there is additional grease in housing when re-assembling.





FAN ADJUSTMENT is made by adding or removing shims under the fan shaft pillow block bearings. This adjustment moves the fan up and down. Adjustment is also made with the set screws at both sides of the fan. This adjustment moves the fan assembly from side to side. To adjust the assembly, loosen the mounting bolts on the pillow block bearings. Clean an area across the inside of the fan housing between the 6 o’clock and 8 o’clock position (see diagram). Place a nickel and dime side by side on the fan housing and rotate the fan blades slowly, by hand, over the coins. If the blade assembly is properly adjusted, with 1/16 clearance between the tip of fan and fan housing, the blades will move the nickel and leave the dime. Measure at both edges of the housing to make sure the assembly is aligned side to side. Tighten the bolts on the pillow block bearings.

FAN BALANCING is accomplished by double nutting fan blades on the light side of fan. Double nuts on fan blades must not be removed or added except to rebalance fan after replacing fan blades.

40” BLOWER ADJUSTMENTS

SHEAR BAR adjustment or replacement may be done through the access hole in the blower throat. To adjust, loosen the two bolts and adjust the shear bar so there is 1/16 clearance between it and fan blade tips (see diagram). Tighten bolts securely when adjustment has been completed.

NOTE: A good safety habit is to turn the fan by hand after making any adjustment. NEVER PLACE HANDS IN FAN HOUSING TO TURN FAN! Turn fan by rotating fan shaft.

⚠ CAUTION

CHECK SHEAR BAR ADJUSTMENT WHENEVER BAND AND BLOWER THROAT POSITION IS CHANGED. KEEP HANDS OUT OF BLOWER THROAT WHILE FAN IS ROTATING.

BLOWER THROAT repositioning may be accomplished by loosening the band tightener and turning blower throat and band to desired position. When re-tightening be sure that the band is snug and the blower sides are firmly seated in the band grooves. Never use a wrench or pipe to tighten. Hand tightening is sufficient.

⚠ CAUTION

NEVER ATTEMPT TO ADJUST THE BLOWER THROAT AND BAND WHEN MILL IS OPERATING WITH SILO PIPE ATTACHED.

SILO PIPE

When using silo pipe with this blower, follow these basic rules to help maintain capacity and prevent plugging:

1 - When elbows are needed, use as large a radius as possible.
2 - Install telescopic pipe and flexible elbows right side up; large end on top, small end on bottom.
3 - Don’t vary pipe diameters, as this can create unnecessary turbulence.
4 - Don’t use dented or bent pipe.

NOTE: Never let silo pipe rest entirely on blower.

REPLACEMENT PARTS

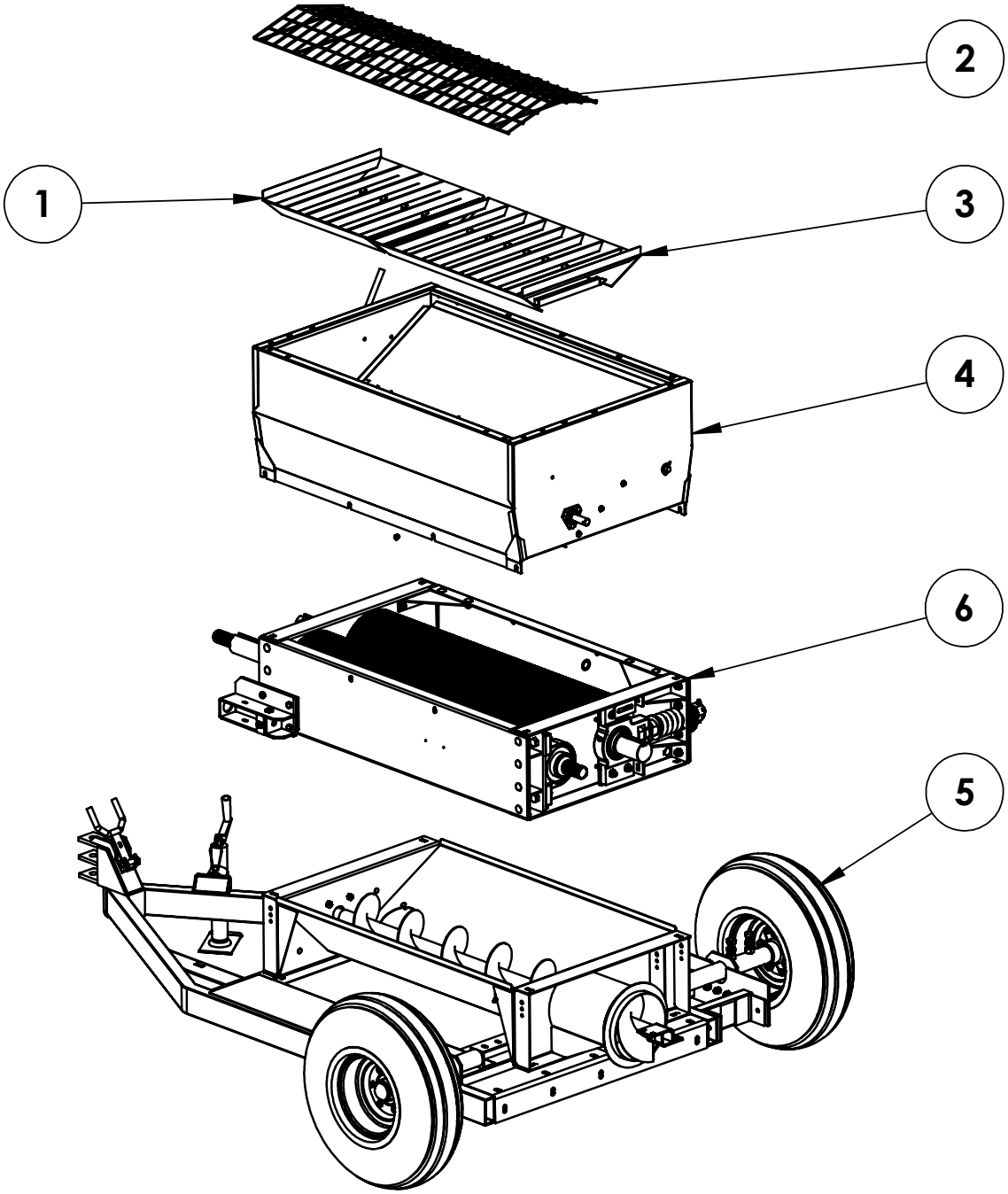
When ordering parts for your mill, please state your needs with the following information:

COMPLETE MODEL NO.	COMPLETE SERIAL NO.	PART NO.	DESCRIPTION
ATG-3620	000000	101-2467	Shim, 20 Ga

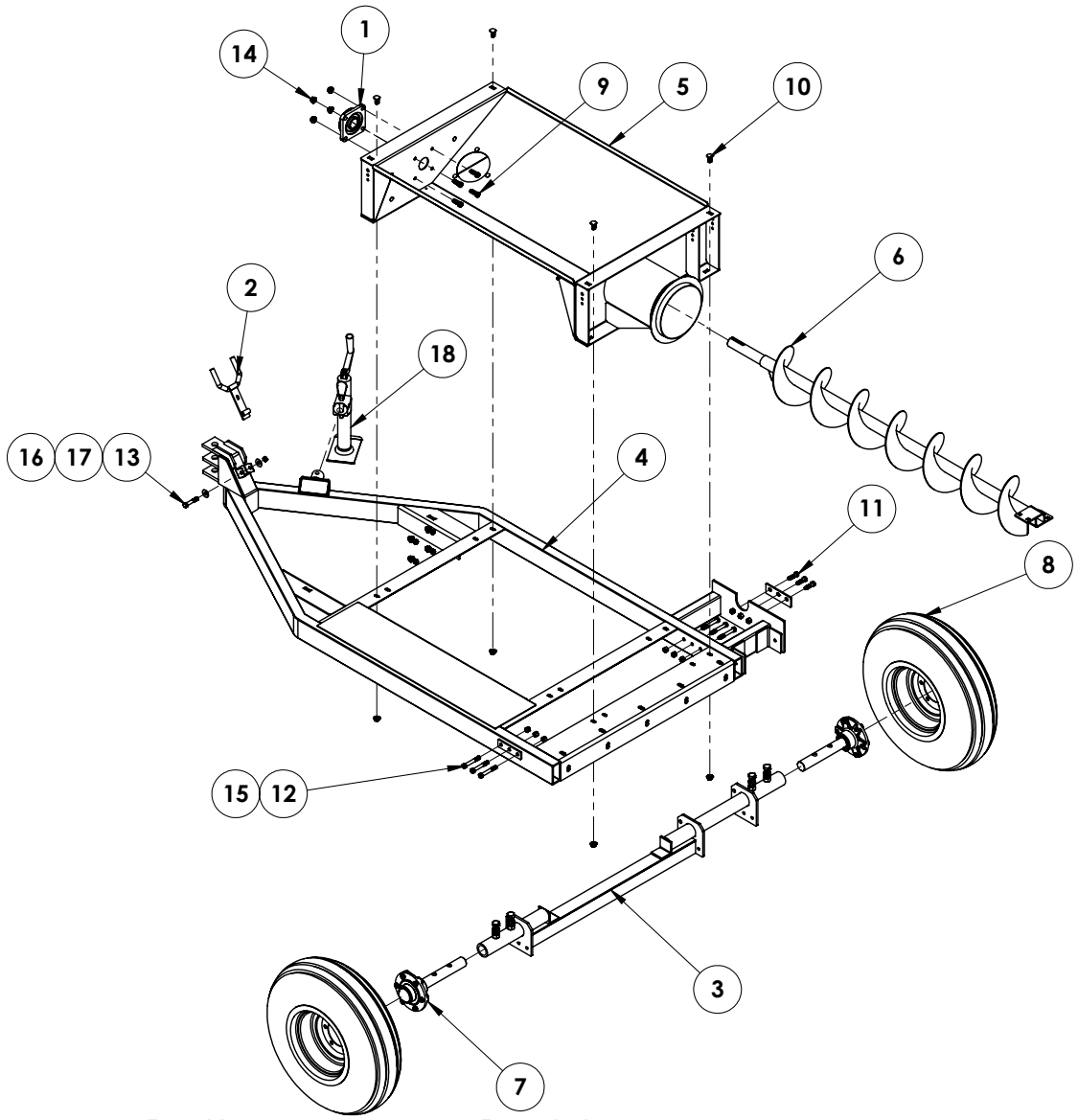
When you order in this way, you can be certain the correct part will be delivered in the shortest time possible.

IMPORTANT: Use only genuine factory replacement parts on your mill. Do not substitute homemade or non-typical parts. If a bolt is lost or in need of replacement, for your safety and the preservation of your mill, be sure to use a replacement bolt of the same grade (Usually Grade 5).

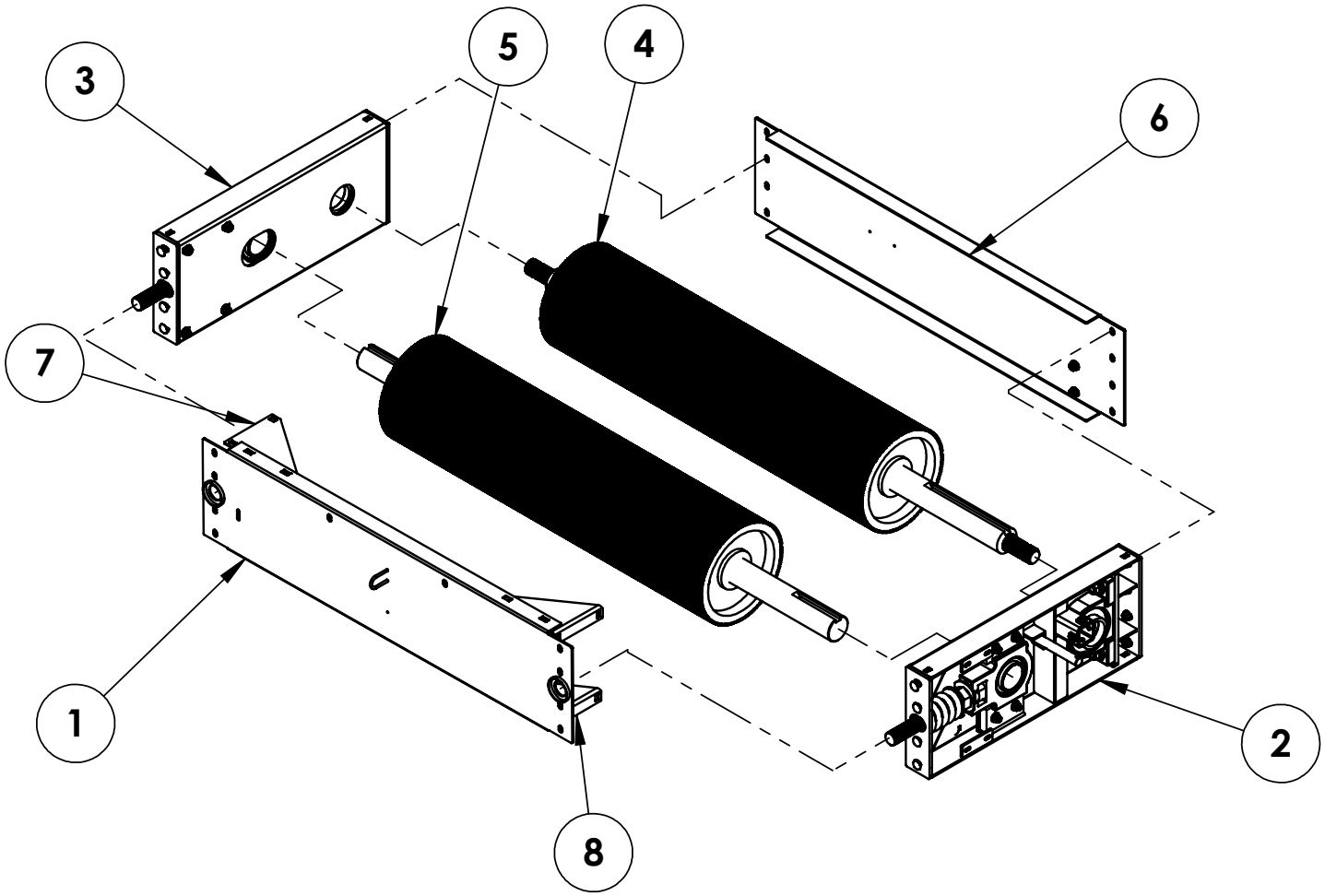
Repair parts may be ordered through your nearest Automatic dealer. If there is no dealer in your area, write or call Automatic Equipment Mfg. Co., Pender, Nebraska 68047, phone 402-385-3051.



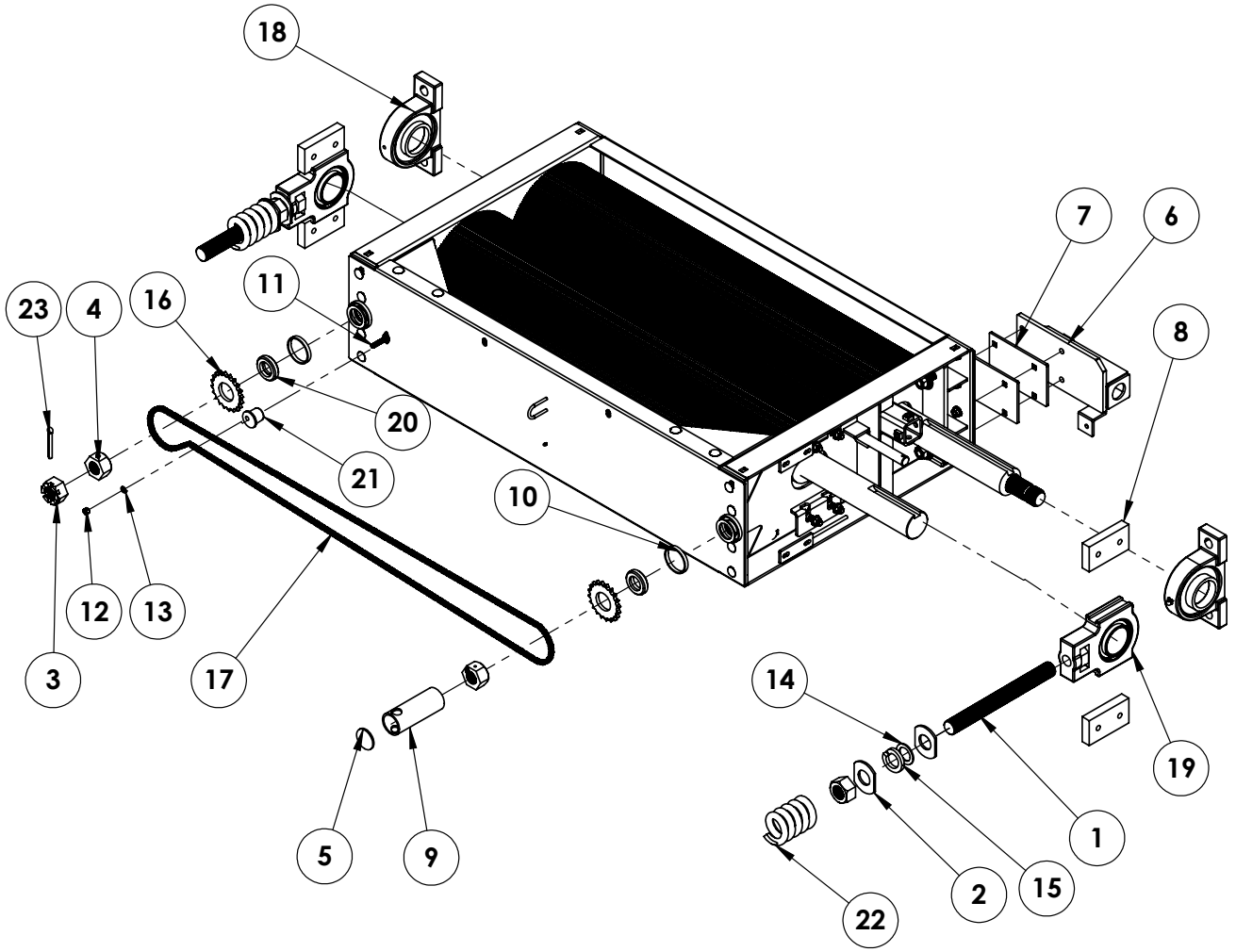
Item No.	Part No.	Description	Qty.
1	61-1597	3600 Mill Magnetic Grate	1
2	61-1842	1800 Hopper Safety Mesh	1
3	61-1962	3600 Mill Magnetic Grate, Rear	1
4	62-1213	3600 Mill Hopper Assembly	1
5	62-3440	Trailer Assembly	1
6	93-0407	3600 x 4, Trailer Basic	1
	93-0612	3600 x 4 x 6.5, Trailer Basic	1
	93-0408	3600 x 6.5, Trailer Basic	1
	93-0409	3600 x 8, Trailer Basic	1
	93-0410	3600 x 10, Trailer Basic	1



Item No.	Part No.	Description	Qty.
1	53-0007	1-3/4 Cast Baring, 4-Hole	1
2	61-3913	PTO Holder Yoke	1
3	61-4924	Trailer Mill Axle	1
4	61-5388	Trailer Frame	1
5	61-5394	Auger Base	1
6	61-5595	A B Screw	1
7	62-1524	6 on 6 Hub & Spindle Assembly	2
8	62-1806	11L15 8 Ply Tire & Wheel	2
9	201-0051	1/1”-13 x 1-1/2” Hex Head Bolt, Grade 5	8
10	201-0058	1/2”-13 x 1-1/4” Carriage Bolt, Grade 5, ZP	4
11	201-0068	1/2”-13 x 1-3/4” Hex Head Bolt, Grade 5, ZP	3
12	201-0369	1/2”-13 x 3-1/2” Hex Head Bolt, Grade 5	6
13	201-0473	1/2”-13 x 2-3/4” Hex Head Bolt, grade 5, ZP	1
14	202-0072	1/2”-13 Hex Flange Whiz Lock Nut, ZP	12
15	202-0094	1/2”-13 Hex Nylon Insert Lock Nut, ZP	9
16	202-0143	1/2”-13 Essna Jam Nut, ZP	1
17	203-0005	1/2” Flat Washer, ZP	2
18	229-0120	Trailer Jack	1

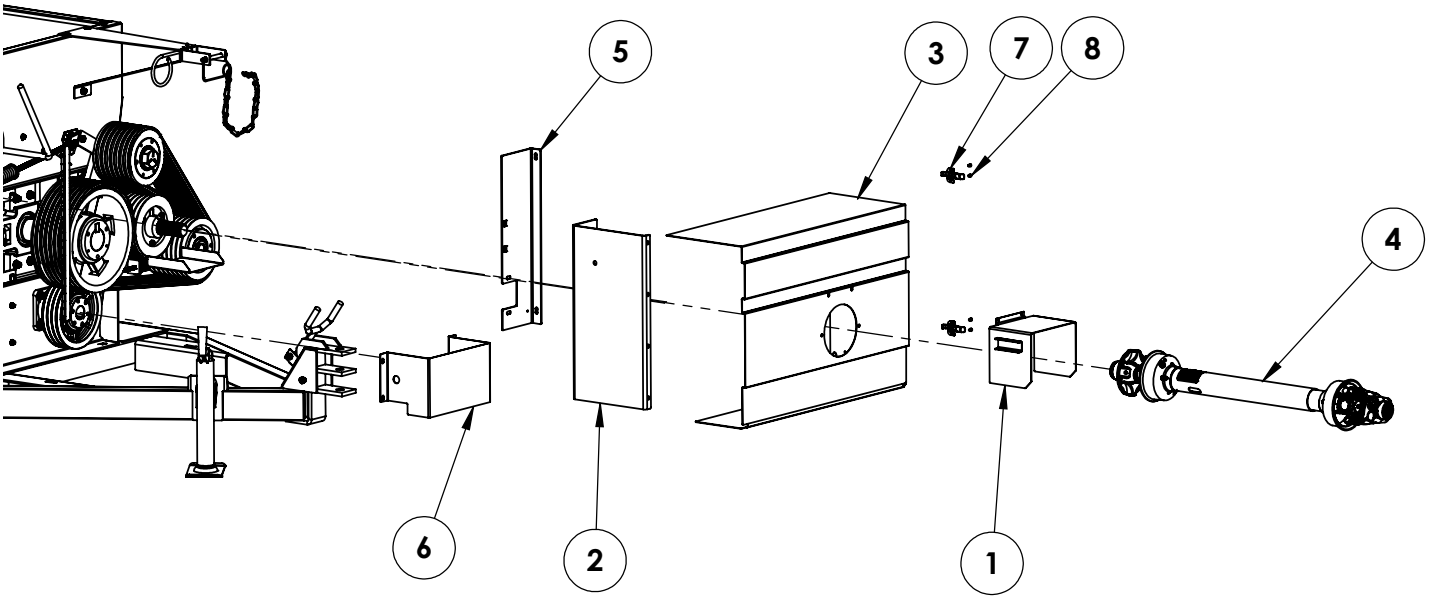


Item No.	Part No.	Description	Qty.
1	61-2460	3600 Mill 2-15/16” Plate, Right	1
2	62-1492	Channel Assembly, Front	1
3	62-1493	Channel Assembly, Rear	1
4	71-0534	3600 Mill 4-Cut Drive Roll	1
	71-0535	3600 Mill 6.5-Cut Drive Roll	1
	71-0536	3600 Mill 8-Cut Drive Roll	1
	71-0537	3600 Mill 10-Cut Drive Roll	1
5	71-0541	3600 Mill 4-Cut Idler Roll	1
	71-0542	3600 Mill 6.5-Cut Idler Roll	1
	71-0543	3600 Mill 8-Cut Idler Roll	1
	71-0544	3600 Mill 10-Cut Idler Roll	1
6	101-2766	3600 End Plate, Left	1
7	101-3396	Corner Gusset, Right	2
8	101-3398	Corner Gusset, Left	2

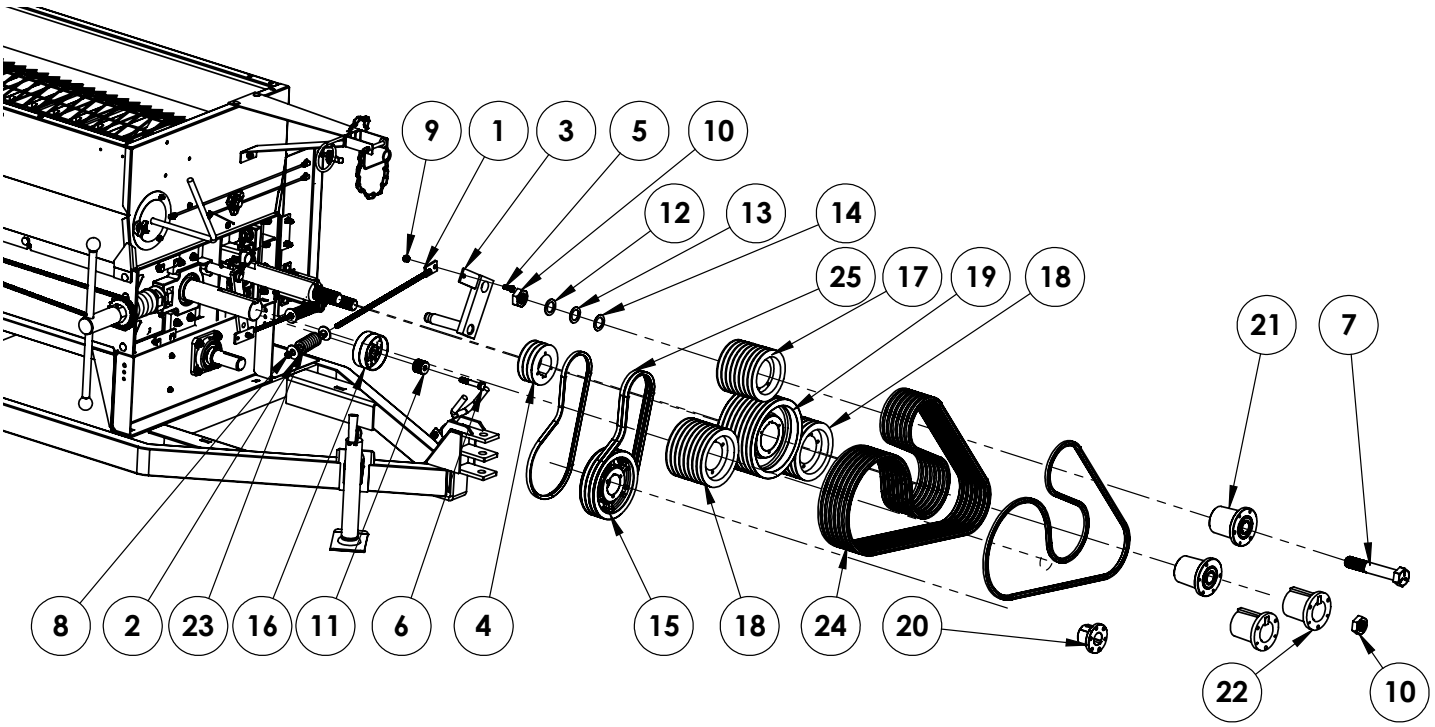


Item No.	Part No.	Description	Qty.
1	100-0666	2-15/16” Rod Take-Up	2
2	100-0667	1-1/2” Clipped Washer	4
3	100-0677	1-1/2”-8 Castle Nut, Grade B	1
4	100-0689	1-1/2”-8 Drill & Tap Nut, Grade B	2
5	101-2768	2-1/4 Diameter Slug, 7 GA	1
6	102-1683	Idler Support, Flat, Back	1
7	102-1685	Idler Support Flat Spacer	2
8	102-1750	2-15/16” Shaft Take-Up	4
9	106-0235	Q-Adjust Pipe	1
10	107-0841	Thrust Bearing Tube	4
11	201-0172	3/8”-16 x 2-1/4” Carriage Bolt, Grade 5, ZP	1
12	202-0003	3/8”-16 Hex Nut, ZP	1
13	203-0010	3/8” Lock Washer, ZP	1
14	203-0082	10Ga Bushing, 2-1/4” x 1-1/2”	2
15	203-0085	1-1/2” Lock Washer	2
16	204-0142	5020 Sprocket	2
17	206-0185	Adjustment Chain	1
18	209-0104	2-15/16” Pillow Block Bearing w/ Zerk	2
19	209-0105	2-15/16” Take-Up Bearing	2
20	209-0106	Thrust Bearing, 2-19/32” x 1-9/16”	2
21	210-0004	Chain Tightener	1
22	222-0048	Compression Spring, 3” x 4-7/8”	2
23	229-0063	Cotter Pin, 3/8” x 3”	1

FRONT SHIELD ASSEMBLY

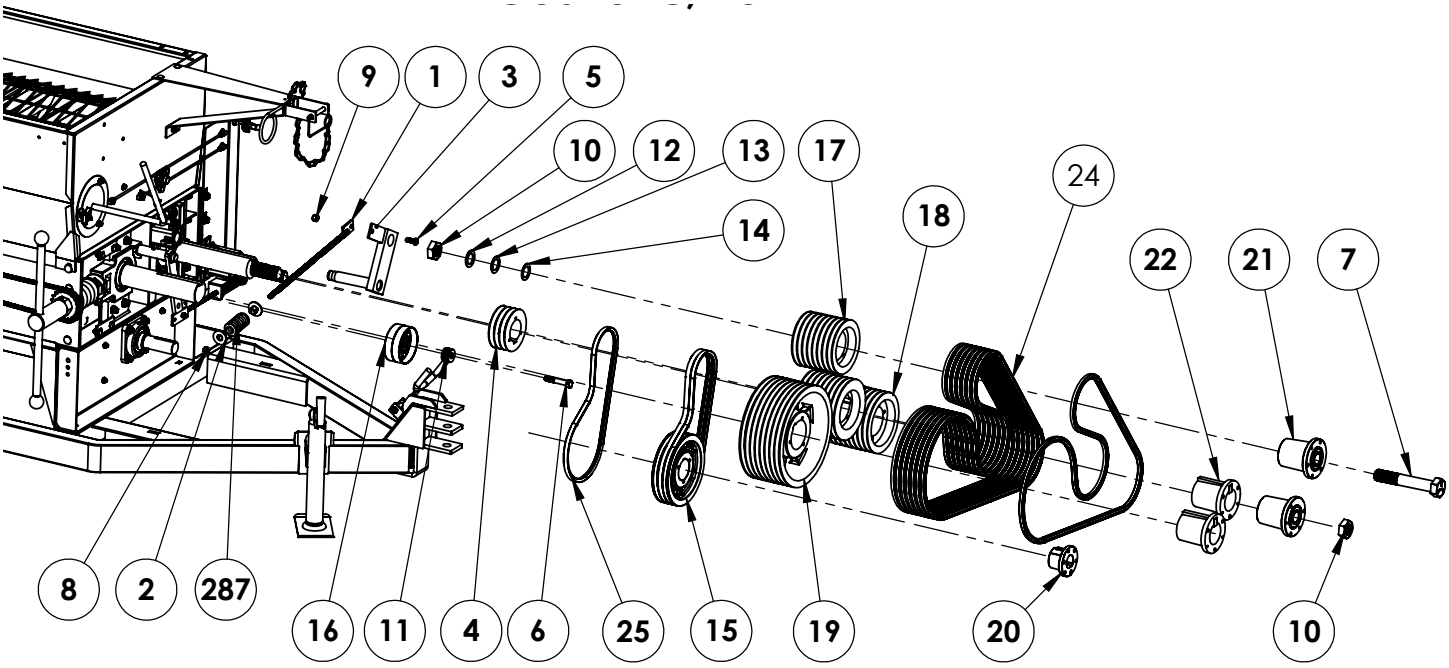


Item No.	Part No.	Description	Qty.
1	61-1543	Front Drive Chain Shield	1
2	61-2903	Right Trailer Support Shield	1
3	61-2904	Front Trailer Shield	1
4	83-1160	12” Mills PTO Kit Plastic Guard	1
5	101-3322	Left Support Shield	1
6	101-9270	3600 Mill Auger Base Drive Belt Shield	1
7	229-0132	Tension Latch	2
8	229-0655	3/16” D x .300 L Pop Rivet, AL/ST	4

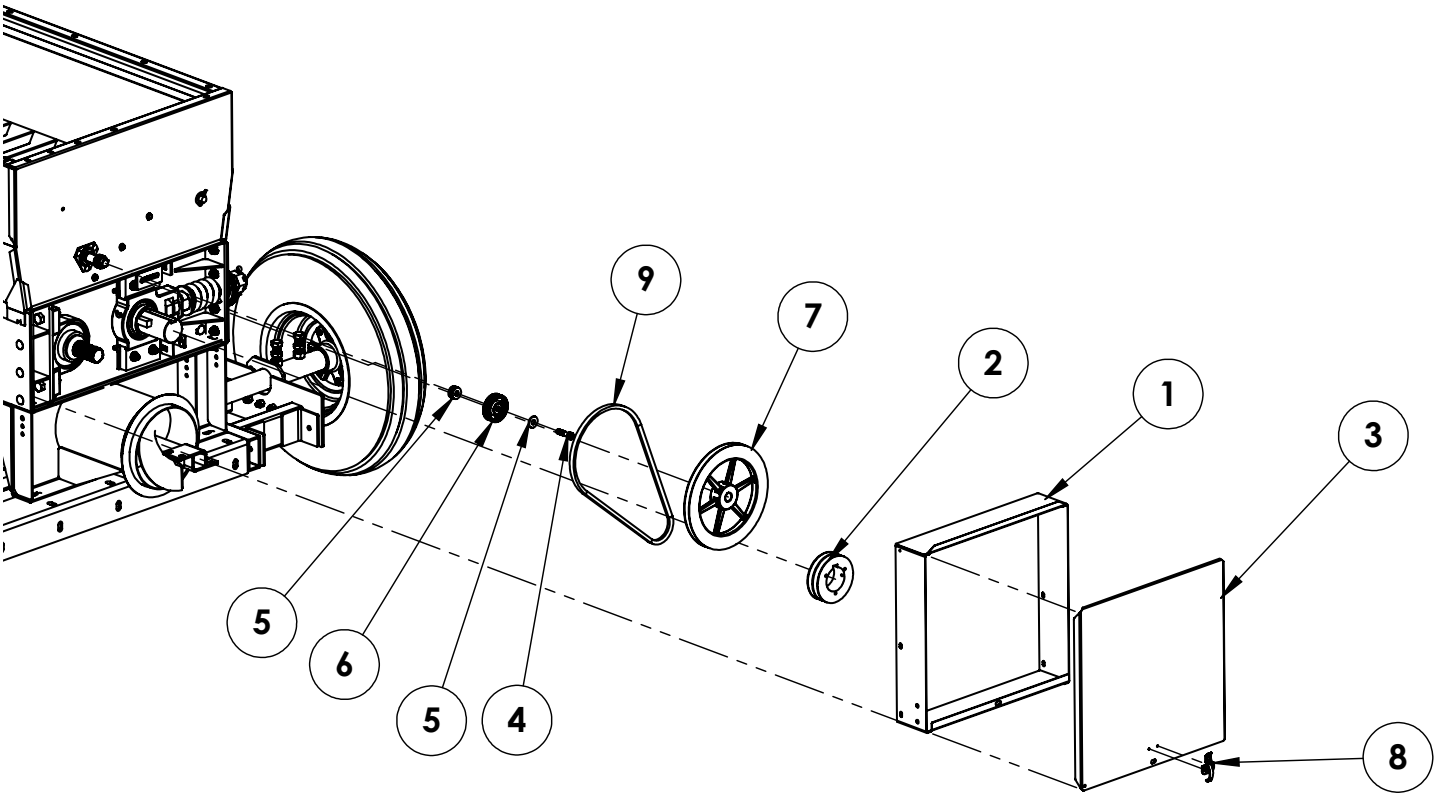


Item No.	Part No.	Description	Qty.
1	61-1863	Idler Take-up Road	1
2	61-1968	Spring Center	2
3	61-2275	Pivot Idler Arm	1
4	100-0693	3B54Q Bored Sheave, 2-15/16”	1
5	201-0011	1/2”-13 x 1-1/4” Hex Head Bolt, Grade 5, Zp	1
6	201-0125	5/8”-11 x 3-1/2” Hex Head Bolt, Grade 2, ZP	1
7	201-0364	1-1/2”-6 x 9” Hex Head Bolt, Grade 5	1
8	202-0005	1/2”-13 Hex Nut, ZP	1
9	202-0094	1/2”-13 Hex Nylon Insert Lock Nut, Zp	1
10	202-0104	1-1/2”-6 Hex Jam Nut	2
11	203-0006	5/8” Flat Washer, ZP	11
12	203-0082	10 GA x 2-1/4” x 1-1/2” Machine Bushing	1
13	203-0083	14 GA x 2-1/4” x 1-1/2” Machine Bushing	1
14	203-0084	18 GA x 2-1/4” x 1-1/2” Machine Bushing	1
15	205-0083	3TB94 Browning Sheave	1
16	205-0189	5 O.D. x 2-1/2” Wide Flat Idler	2
17	205-0216	8B70R Browning Sheave	1
18	205-0217	8B80R Browning Sheave	2
19	205-0219	8B110R Browning Sheave	1
20	205-0221	Q1-1 3/4” Browning Bushing	1
21	205-0223	IDR2-1 1/2” Special Idler Bushing	2
22	205-0232	R2-2 15/16” Bushing	2
23	222-0078	Compression Spring	1
24	251-0125	BB116 Belt	8
25	251-0136	B49 Belt	3

FRONT BELT ASSEMBLY (8 & 10 Cut)

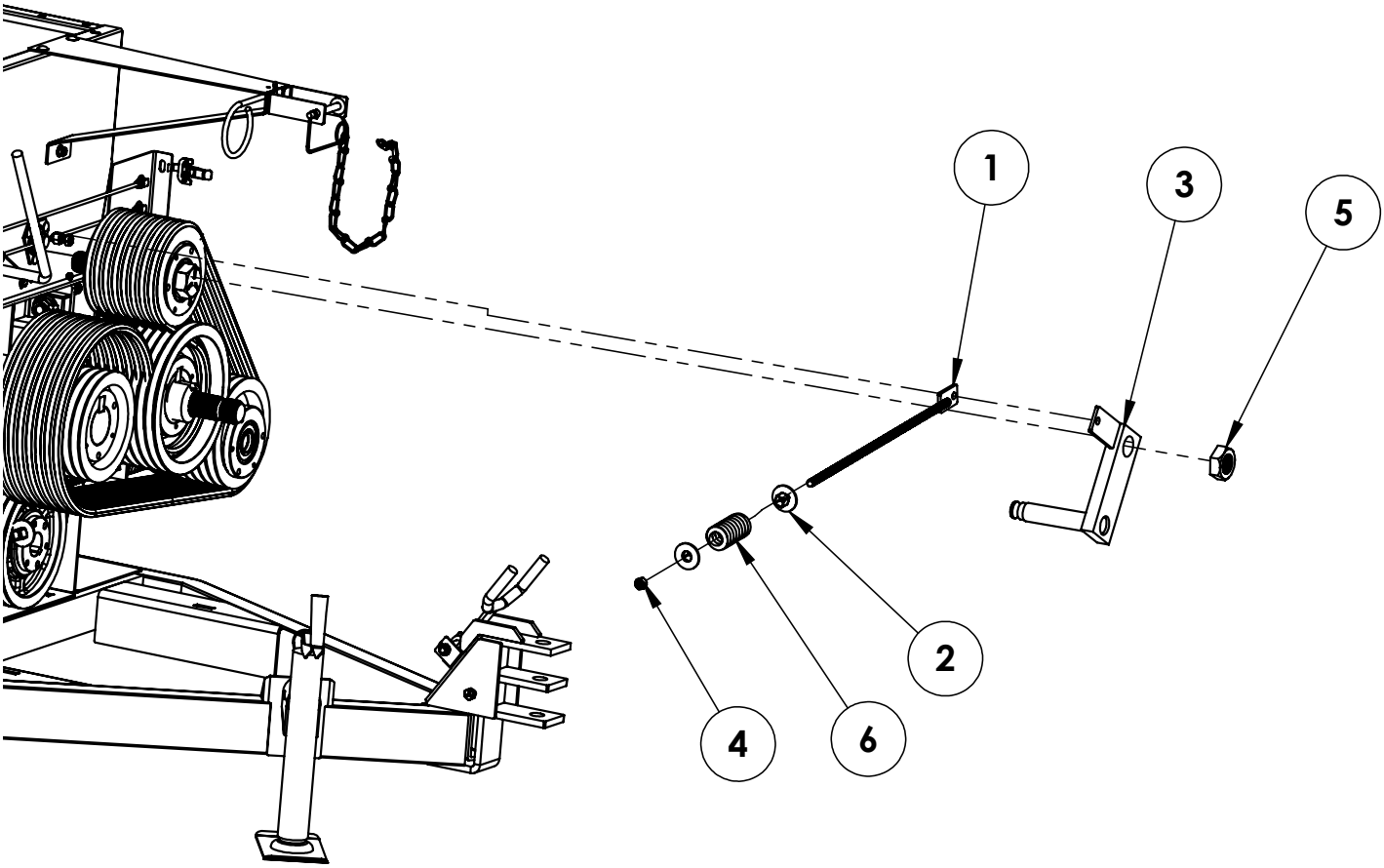


Item No.	Part No.	Description	Qty.
1	61-1863	Idler Take-up Road	1
2	61-1968	Spring Center	2
3	61-2275	Pivot Idler Arm	1
4	100-0693	3B54Q Bored Sheave, 2-15/16”	1
5	201-0011	1/2”-13 x 1-1/4” Hex Head Bolt, Grade 5, Zp	1
6	201-0125	5/8”-11 x 3-1/2” Hex Head Bolt, Grade 2, ZP	1
7	201-0364	1-1/2”-6 x 9” Hex Head Bolt, Grade 5	1
8	202-0005	1/2”-13 Hex Nut, ZP	1
9	202-0094	1/2”-13 Hex Nylon Insert Lock Nut, Zp	1
10	202-0104	1-1/2”-6 Hex Jam Nut	2
11	203-0006	5/8” Flat Washer, ZP	10
12	203-0082	10 GA x 2-1/4” x 1-1/2” Machine Bushing	1
13	203-0083	14 GA x 2-1/4” x 1-1/2” Machine Bushing	1
14	203-0084	18 GA x 2-1/4” x 1-1/2” Machine Bushing	1
15	205-0083	3TB94 Browning Sheave	1
16	205-0189	5 O.D. x 2-1/2” Wide Flat Idler	2
17	205-0216	8B70R Browning Sheave	1
18	205-0217	8B80R Browning Sheave	2
19	205-0220	8B136R Browning Sheave	1
20	205-0221	Q1-1 3/4” Browning Bushing	1
21	205-0223	IDR2-1 1/2” Special Idler Bushing	2
22	205-0232	R2-2 15/16” Bushing	2
23	222-0078	Compression Spring	1
24	251-0125	BB116 Belt	8
25	251-0136	B49 Belt	3

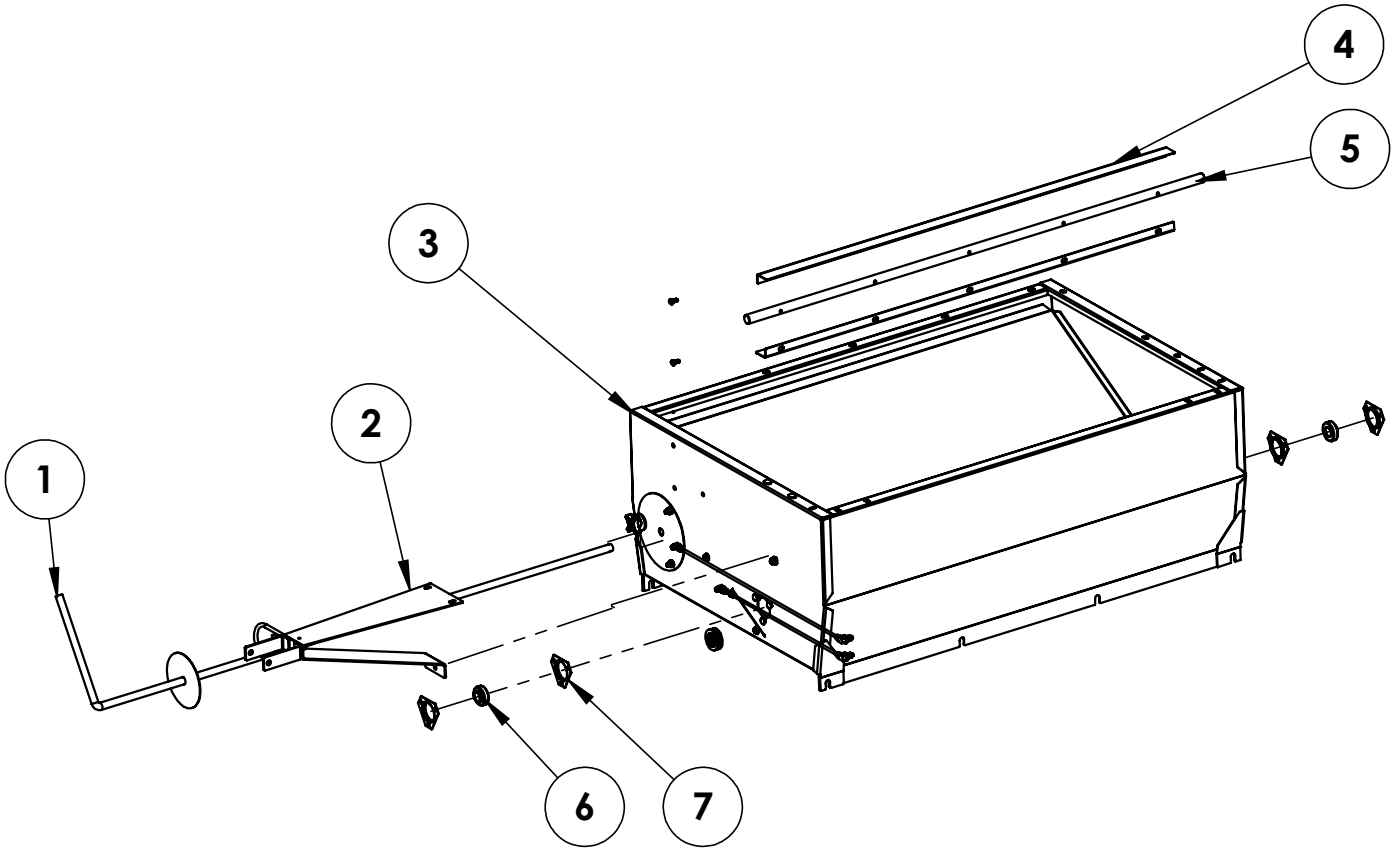


Item No.	Part No.	Description	Qty.
1	61-2913	Auger Discharge Rear Shield	1
2	100-0692	2B54Q Bored Sheave, 2-15/16”	1
3	101-4029	Rear Shield Cover Plate	1
4	201-0490	1/2”-13 x 3” Hex Bolt, Grade 5, ZP	1
5	203-0005	1/2” Flat Washer, ZP	8
6	205-0111	AG2352-A Flat Idler	2
7	205-0183	BK130 x 1 Bore Sheave	1
8	229-0132	Tension Latch	3
9	251-0117	B56 Belt	1

TIGHTENER ASSEMBLY

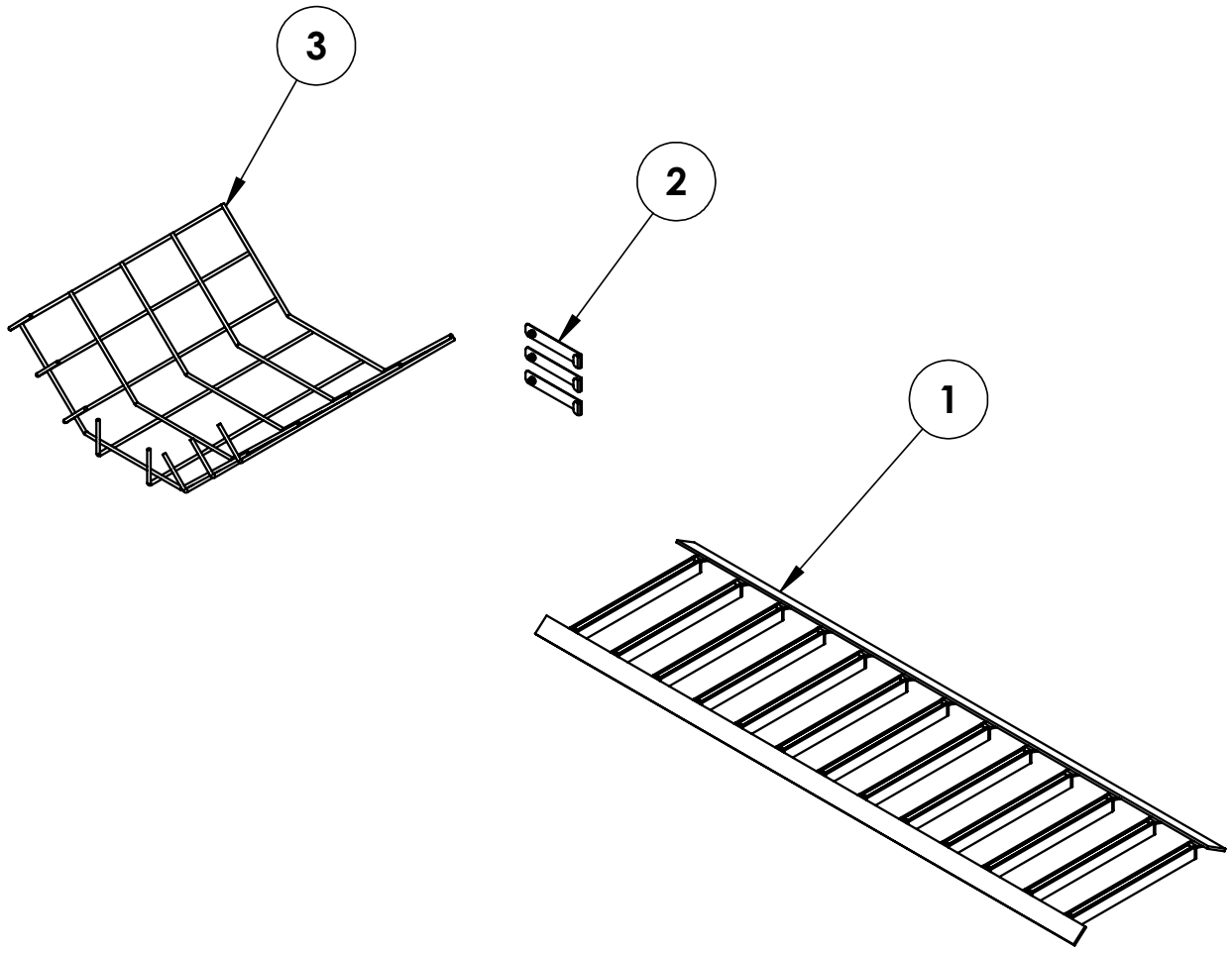


Item No.	Part No.	Description	Qty.
1	61-1863	Idler Roll Take-Up Rod	1
2	61-1968	Center Spring Bushing	2
3	61-2275	Idler Arm Pivot	1
4	202-0005	1/2”-13 Hex Nut, ZP	1
5	202-0104	1-1/2”-6 Hex Jam Nut, ZP	1
6	222-0078	Mill Spring Component	1

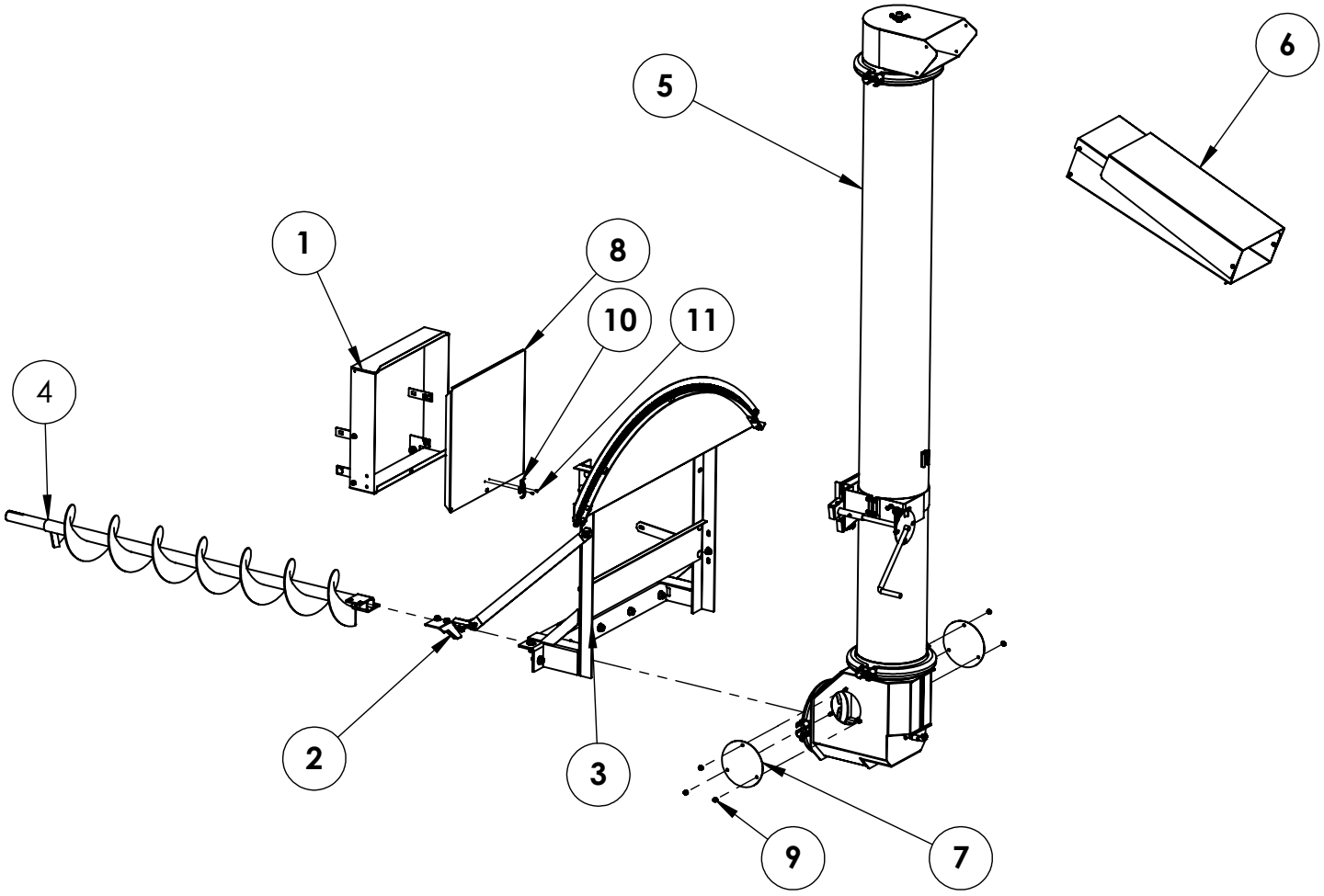


Item No.	Part No.	Description	Qty.
1	61-1844	Gate Rod	1
2	61-1880	PTO Support	1
3	61-1961	Hopper	1
4	101-2877	Agitator Paddle	2
5	207-0408	Agitator Shaft	1
6	209-0032	Bearing Insert	2
7	211-0023	Housing	4

CORN COB MIX GRATES KIT (OPTIONAL)

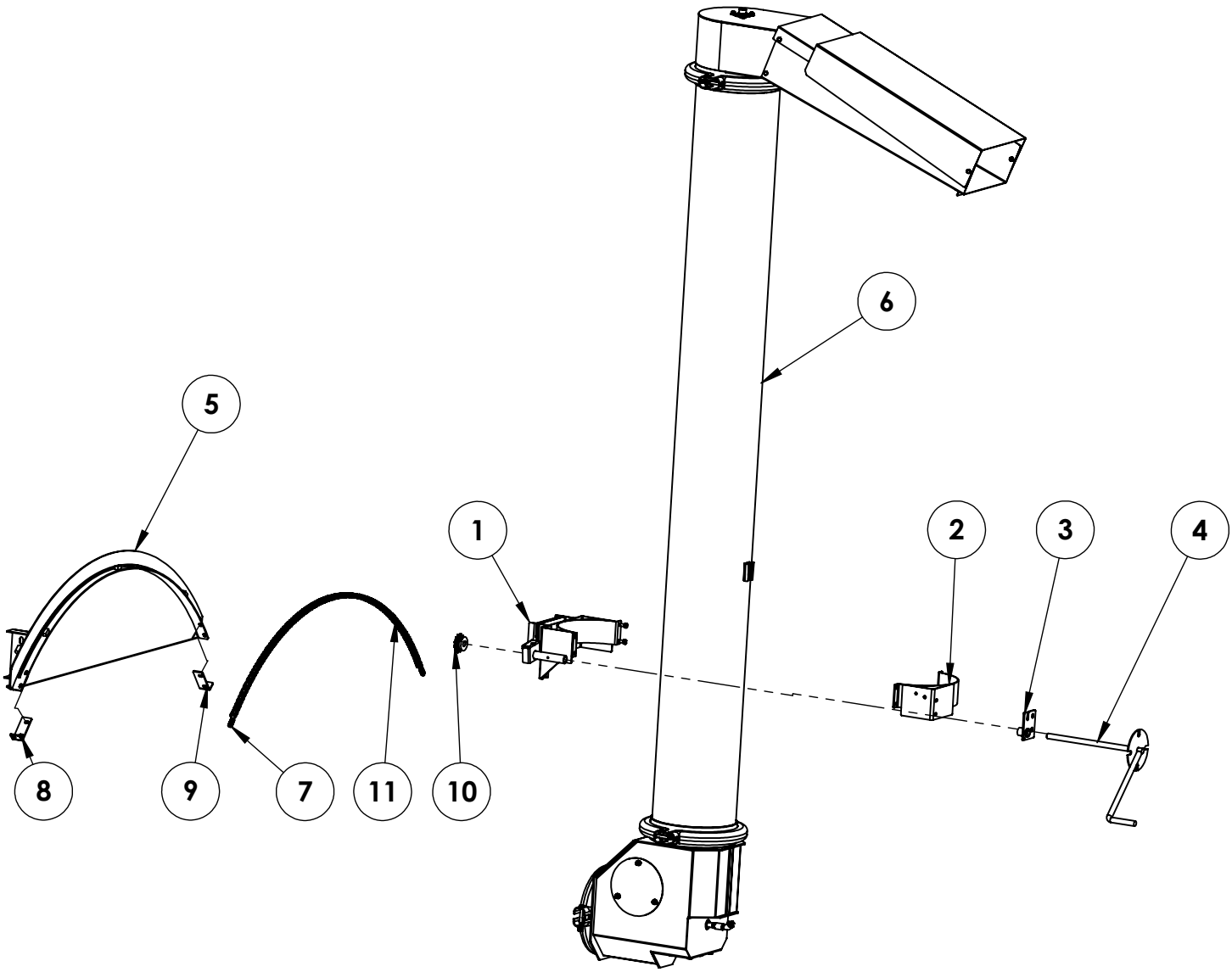


Item No.	Part No.	Description	Qty.
1	61-2164	Corn Cob Mix Magnetic Grate	1
2	63-0301	Grate Retainer	1
3	100-0679	12” Auger Formed Grate	1

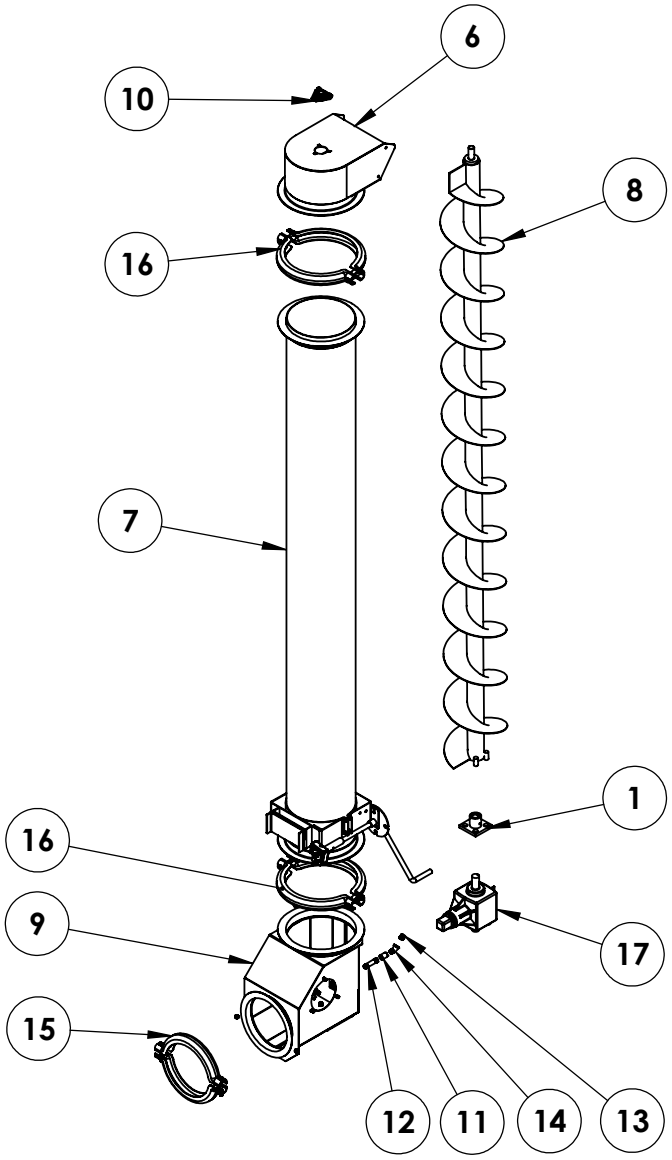


Item No.	Part No.	Description	Qty.
1	61-2913	Discharge Auger, Rear Shield	1
2	61-3692	12” Auger Flipper	2
3	61-5396	Support Rack	1
4	61-5595	Auger Discharge Screw	1
5	62-3448	Discharge Auger Assembly, 11ft	1
6	63-0288	12” Discharge Auger Spout Kit	1
7	101-2306	Clean Out Door Cover	2
8	101-4029	Cover Plate, Rear Shield	1
9	202-0070	5/16”-18 Hex Flange Whiz Lock Nut, ZP	6
10	229-0132	Tension Latch	1
11	229-0655	3/16” D x .300 L Pop Rivet, AL/ST	2

DISCHARGE SUPPORT ASSEMBLY

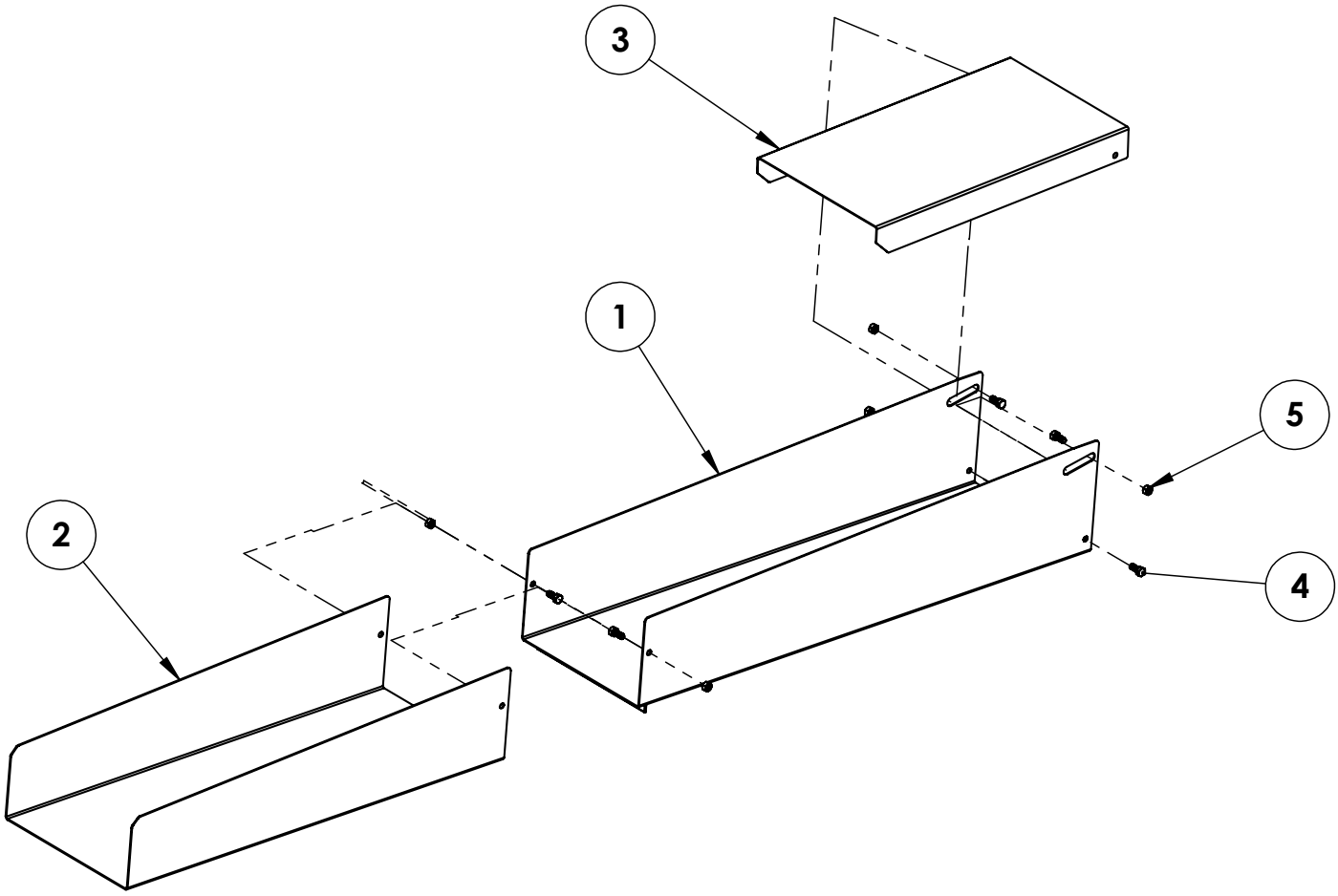


Item No.	Part No.	Description	Qty.
1	61-1892	Guide End Clamp	1
2	61-1893	Crank End Clamp	1
3	61-1894	Crank Support Bracket	1
4	61-1895	Discharge Auger Crank	1
5	61-5395	Discharge Auger Rack	1
6	62-3448	11 Ft., 12 In. Discharge Auger Assembly	1
7	100-0529	Chain Snugger	2
8	102-1430	Chain Rack Bracket, Left	1
9	102-1432	Chain Rack Bracket, Right	1
10	204-0151	5012 x 3/4 W/KW & SS Drive Sprocket	1
11	206-0169	Sprocket Drive Chain	1

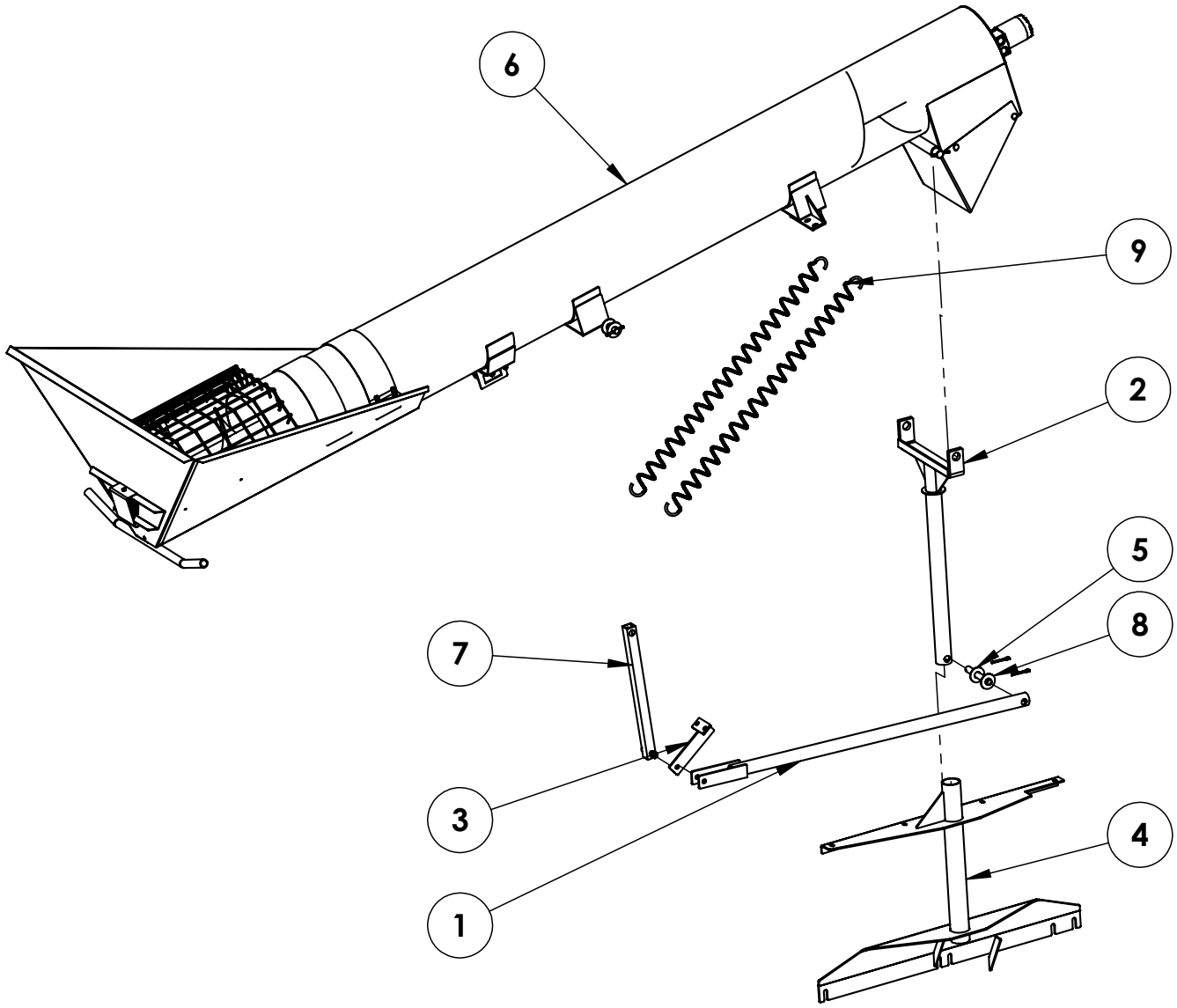


Item No.	Part No.	Description	Qty.
1	61-1890	Drive End Adapter	1
2	61-1892	Guide End Clamp	1
3	61-1893	Crank End Clamp	1
4	61-1894	Crank Support Bracket	1
5	61-1895	Discharge Auger Crank	1
6	61-1897	Discharge Head	1
7	61-1899	12” Discharge Tube	1
8	61-1901	11’ Discharge Auger Screw	1
9	61-1945	Discharge Elbow	1
10	211-0023	Housing	2
11	224-0315	3/8” Pipe Coupler	1
12	224-0316	3/8” x 3” Pipe Nipple	1
13	224-0385	3/8” Pipe Vent Plug	1
14	224-0570	3/8” x 45 Degree Street Elbow	1
15	225-0040	10” Band Clamp	1
16	225-0041	12” Band Clamp	2
17	228-0011	Discharge Auger Gear Box	1

DOWNSPOUT KIT

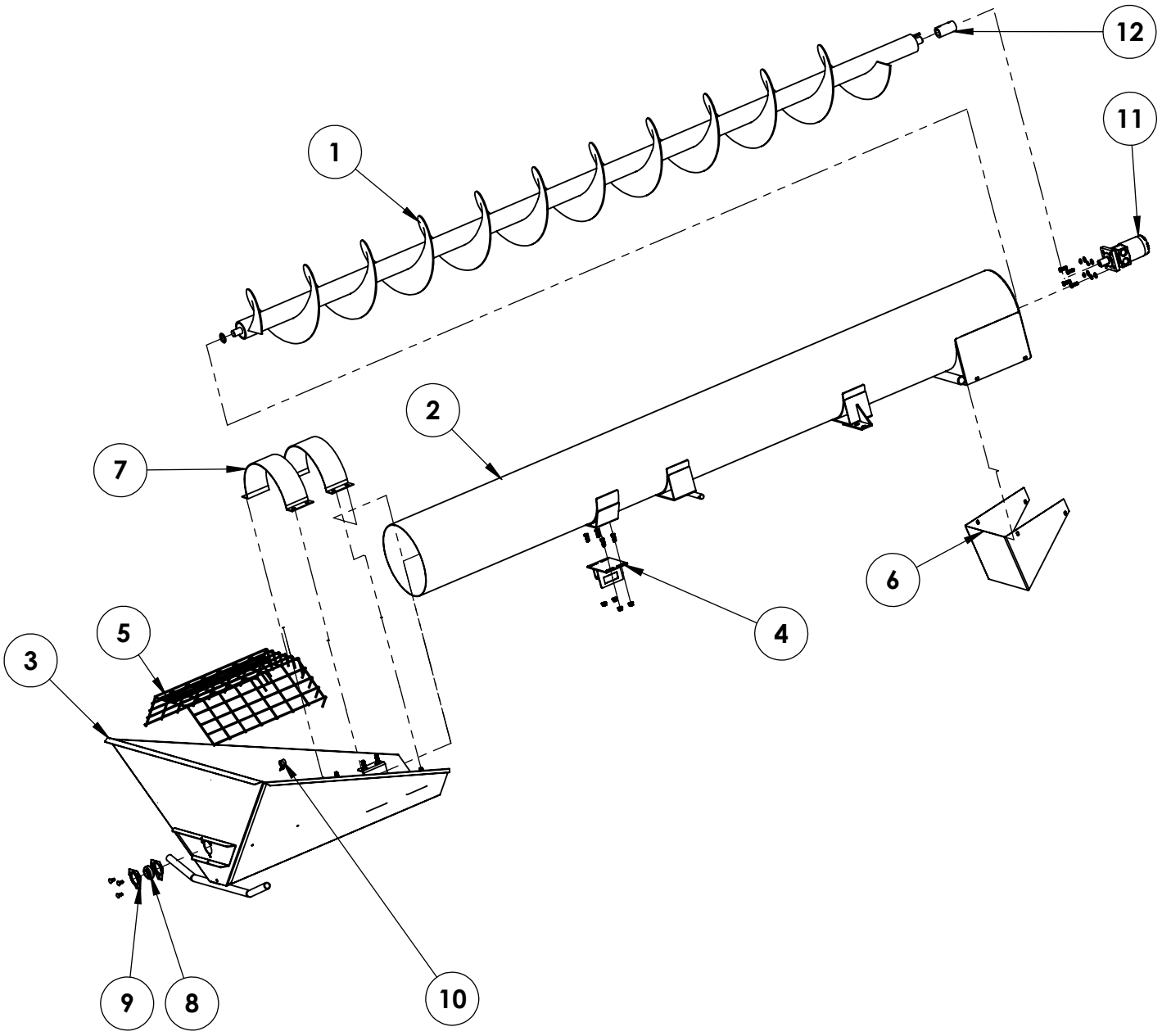


Item No.	Part No.	Description	Qty.
1	101-2802	Lower Spout	1
2	101-2803	Spout Extension	1
3	101-2804	Spout Splash Sheet	1
4	201-0003	5/16”-18 x 3/4” Hex Head Bolt, Grade 5, ZP	6
5	202-0015	5/16”-18 Hex Lock Nut, ZP	6

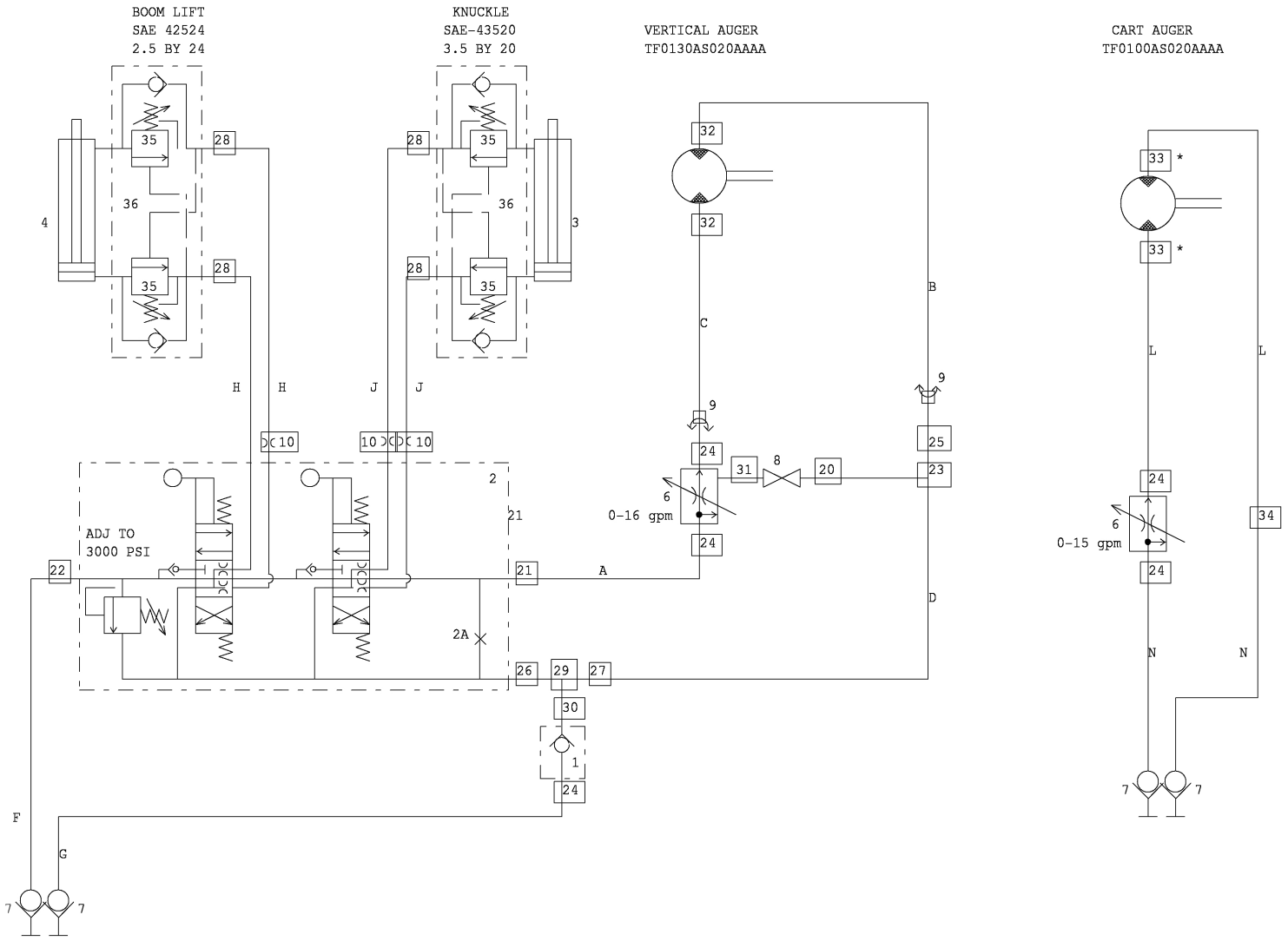


Item No.	Part No.	Description	Qty.
1	61-1667	Link Arm, Long	1
2	61-2096	Intake Yolk	1
3	61-2097	Lift Assist Spring Bracket	1
4	61-2098	Loading Auger Pivot	1
5	61-2100	Spring Assist Mount	1
6	72-0234	Auger Assembly	1
7	107-0736	Link Arm, Tube	1
8	203-0007	3/4” Flat Washer, ZP	3
9	222-0046	Extension Spring, 21-1/2”	2

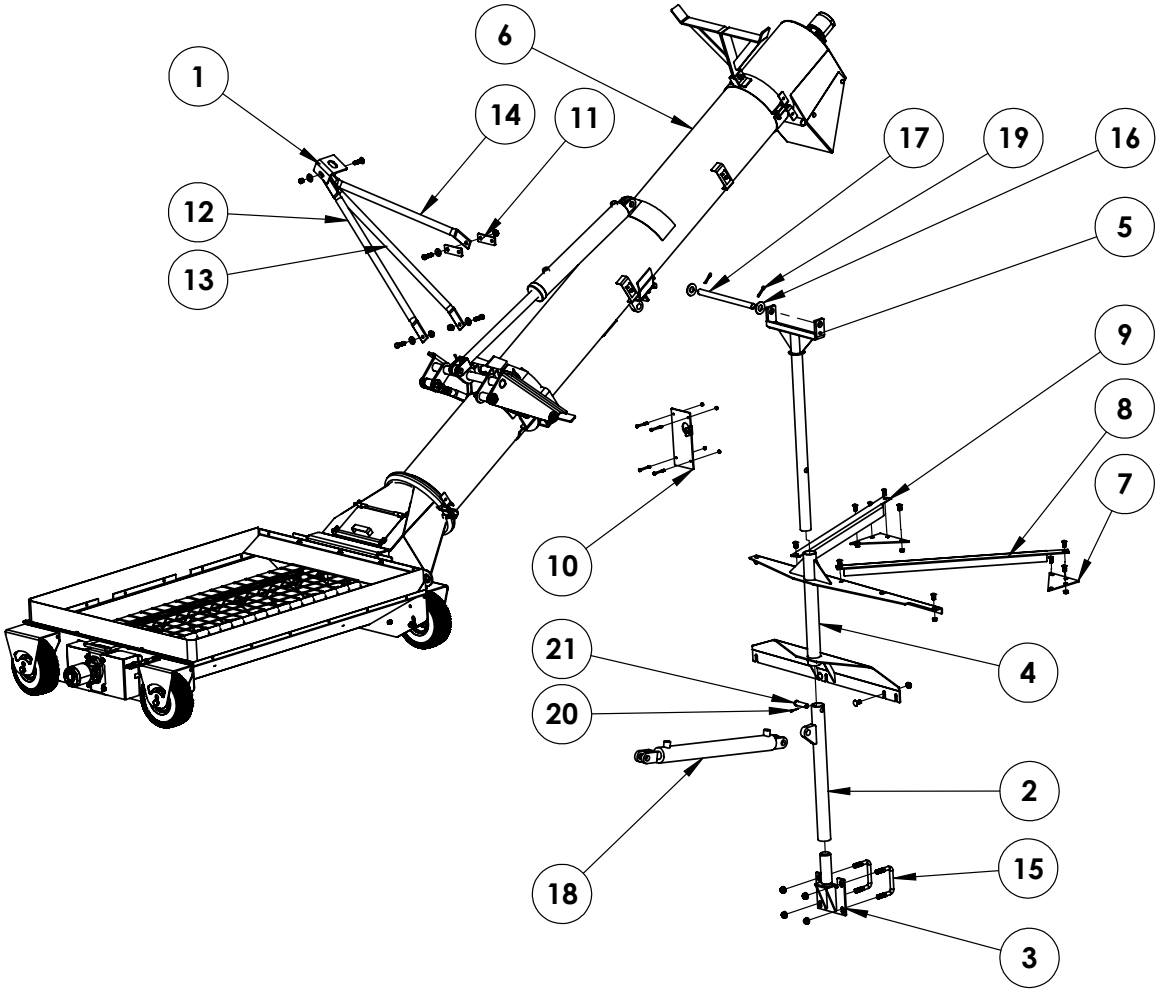
INTAKE AUGER ASSEMBLY (OPTIONAL)



Item No.	Part No.	Description	Qty.
1	61-1963	Loading Auger Screw	1
2	61-1965	Loading Auger Tube	1
3	61-1967	Loading Auger Hopper	1
4	61-2099	Adjustment Bracket, Cradle Pin	1
5	100-0552	Safety Mesh	1
6	101-2881	Deflector	1
7	101-2884	Clamping Strap	2
8	209-0032	Bearing Insert	1
9	211-0023	Housing	2
10	225-0008	1/2” EMT Snap Strap	4
11	227-0046	Hydraulic Motor	1
12	229-0032	1” Bore Shaft Coupler	1

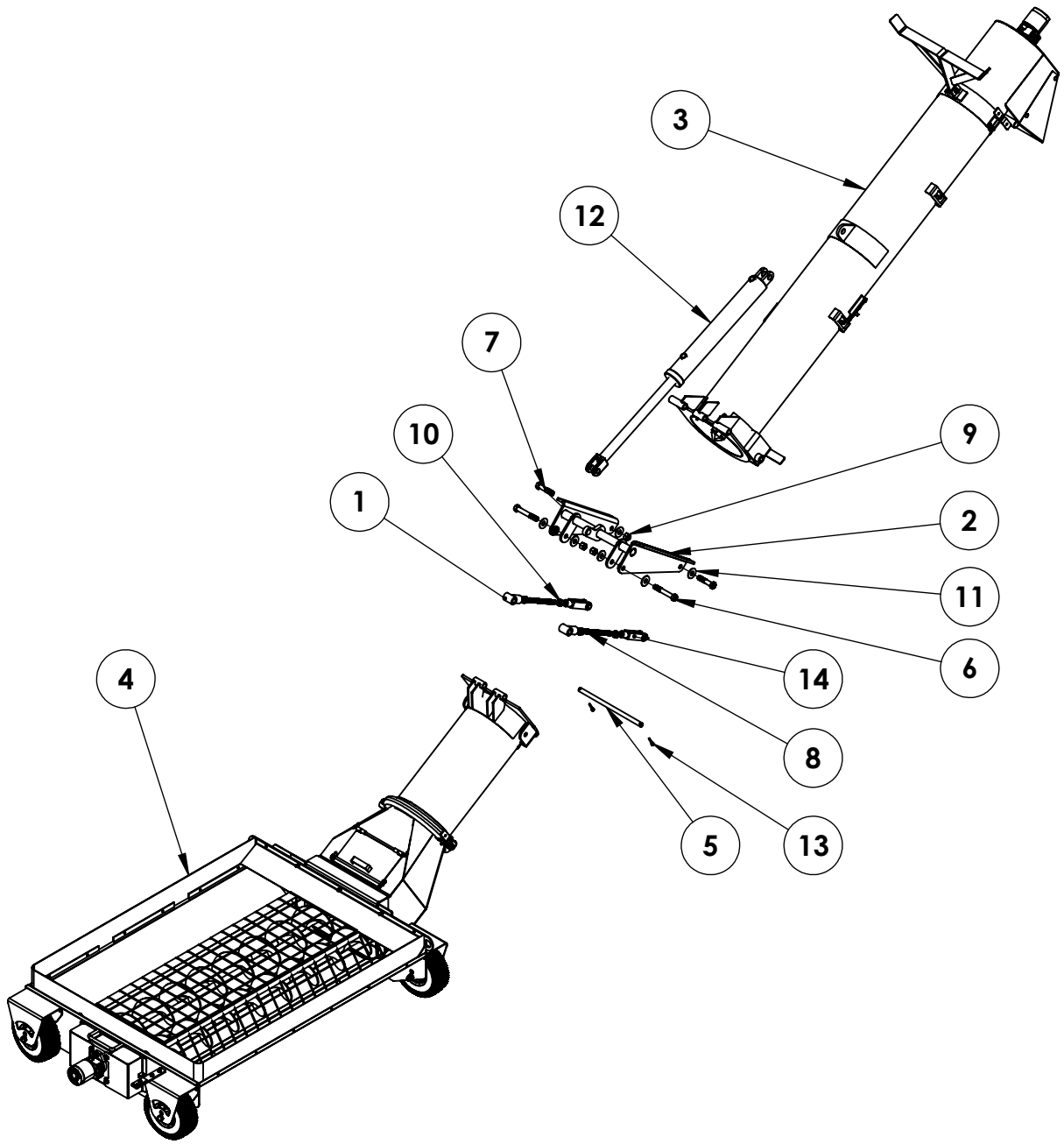

BOOM LIFT
SAE 42524
2.5 BY 24
KNUCKLE
SAE-43520
3.5 BY 20
VERTICAL AUGER
TF0130AS020AAAA
CART AUGER
TF0100AS020AAAA
ADJ TO
3000 PSI
0-16 gpm
0-15 gpm

Item No.	Part No.	Description	Qty.
A	253-0278	21” JIC Straight to 90° Swivel Hydraulic Hose	1
B	253-0279	55.5” JIC Straight to Straight Hydraulic Hose	1
C	253-0280	50” JIC Straight to Straight Hydraulic Hose	1
D	253-0281	22” JIC Straight to 90° Swivel Hydraulic Hose	1
F	253-0282	119.5” JIC Straight to Straight Hydraulic Hose	1
G	253-0283	121” JIC Straight to Straight Hydraulic Hose	1
H	253-0301	84” JIC Straight to 90° Swivel Hydraulic Hose	2
J	253-0286	118.5” JIC Straight to 90° Swivel Hydraulic Hose	2
L	253-0302	306” JIC Straight to Straight Hydraulic Hose	2
N	253-0282	119.5” JIC Straight to Straight Hydraulic Hose	2
7	229-1056	Quick Disconnect Standard Couplings w/ Poppet Valve	4
8	229-1071	1/2” NPT Block Body Ball Valve	1
9	229-1058	3/4-16 UNF-2A & 2B Swivel Fitting	2
10	224-0739	3/4”-16 Male JIC to 7/8”-14 Male O-Ring Adapter	3
20	224-0727	3/4”-16 Male JIC to 1/2”-14 Male Pipe Adapter	1
21	224-0728	3/4”-16 Male JIC to 1-1/16”-12 Male O-Ring Adapter	1
22	224-0729	3/4”-16 Male JIC to 1/16”-12 Male O-Ring, 90° Elbow	1
23	224-0730	3/4”-16 MJIC to 3/4”-16 FJIC Swivel to 3/4”-16 MJIC	1
24	224-0731	3/4”-16 Male JIC to 3/4”-14 Male Pipe Adapter	5
25	224-0732	3/4”-16 Male JIC to 3/4”-16 Female JIC Swivel Adpt.	1
26	224-0733	1-1/16”-12 Male JIC to 1-1/16”-12 male O-Ring Adpt.	1
27	224-0734	1-1/16”-12 Female JIC to 3/4”-16 Male JIC Adapter	1
28	224-0735	9/16”-18 Male JIC to 3/4”-16 Male O-Ring Adapter	4
29	224-0736	1-1/16”-12 MJIC to 1-1/16”-12 FJIC to 1-1/16” MJIC	1
30	224-0737	1-1/16”-12 FJIC Swivel to 3/4”-14 Male Pipe Adapter	1
31	224-0738	3/4”-14 Male Pipe to 1/2”-14 Male Pipe Adapter	1
33	224-0742	3/4”-16 MJIC to 7/8”-14 Male O-Ring 45° Elbow Adpt.	2
34	224-0743	3/4”-16 Male JIC to 3/4”-16 Male JIC 90°Elbow Adpt	1
N/A	225-0068	3/8” Hose Clamp (Not Shown)	2
N/A	225-0069	1/2” Hose Clamp (Not Shown)	6

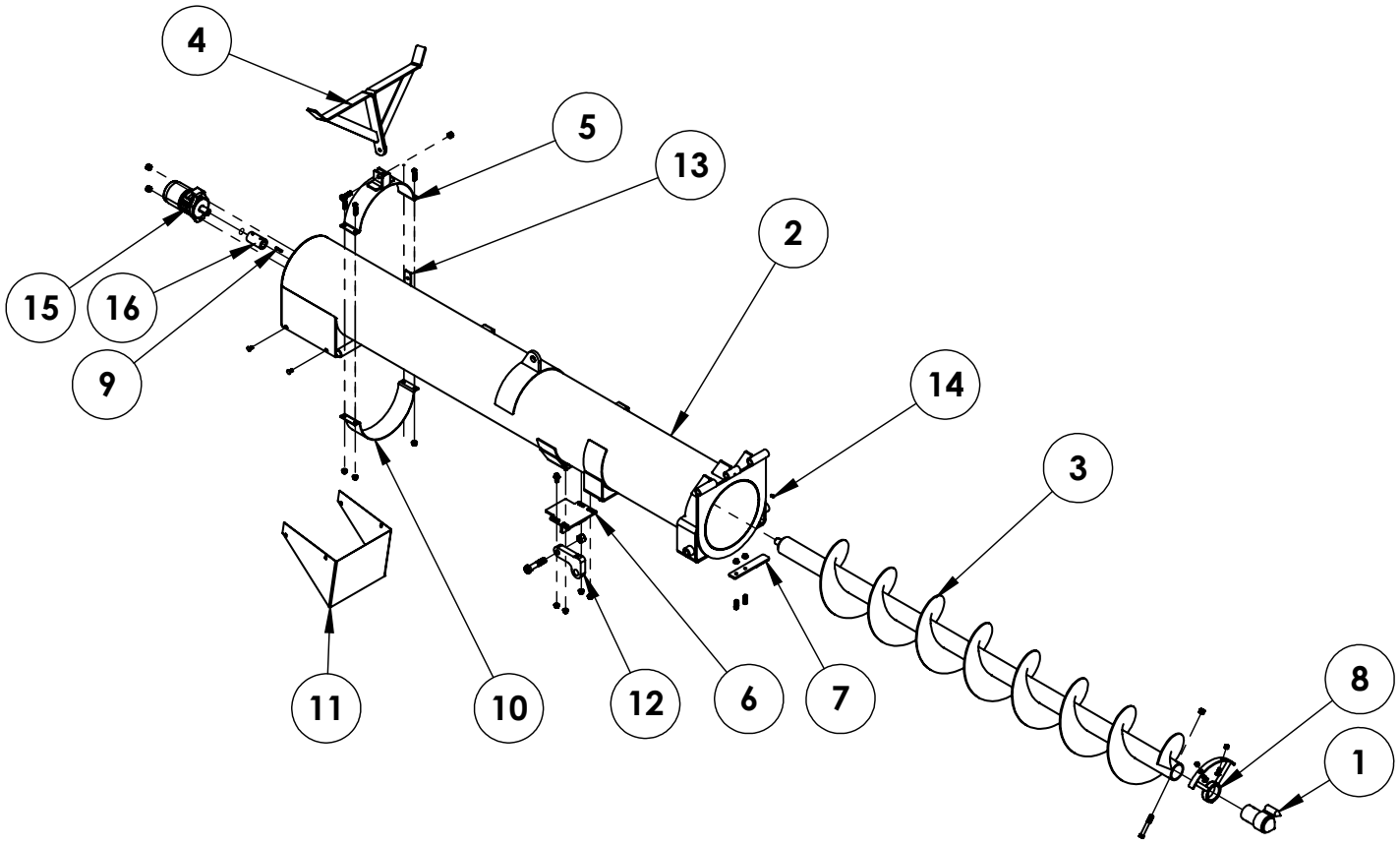


Item No.	Part No.	Description	Qty.
1	61-7765	Cradle Mount	1
2	61-7766	12” Auger Lift Mount	1
3	61-7775	Lower Intake Auger Pivot	1
4	61-7783	Auger Pivot	1
5	61-7784	12” Intake	1
6	62-4126	12” Auger Swing Under Intake	1
7	101-9346	Outer Hopper Plate	2
8	101-9347	Hopper Auger Support (Long)	1
9	101-9348	Hopper Auger Support (Short)	1
10	101-9459	Flow Control Exterior Mount Plate	1
11	102-1500	12” Loading Auger Support Bracket	2
12	106-0397	12” Outside Auger Support	1
13	106-0398	12” Middle Auger Support	1
14	106-0399	12” Short Auger Support	1
15	201-1002	5/8”-11 x 4-1/4” x 3-1/2” Square U-Bolt, Grade 5, ZP	2
16	203-0017	1” Flat Washer	2
17	207-0441	Auger Carrier	1
18	227-0130	2.5 Bore X 24” Stroke Cylinder	1
19	229-0057	1/4” x 2” Cotter Pin	2
20	229-0156	1/8” X 1 1/2” Cotter Pin	1
21	229-1061	3/4” X 2 1/2” Pin	1

SWING UNDER AUGER ASSEMBLY (INTAKE) (OPTIONAL)

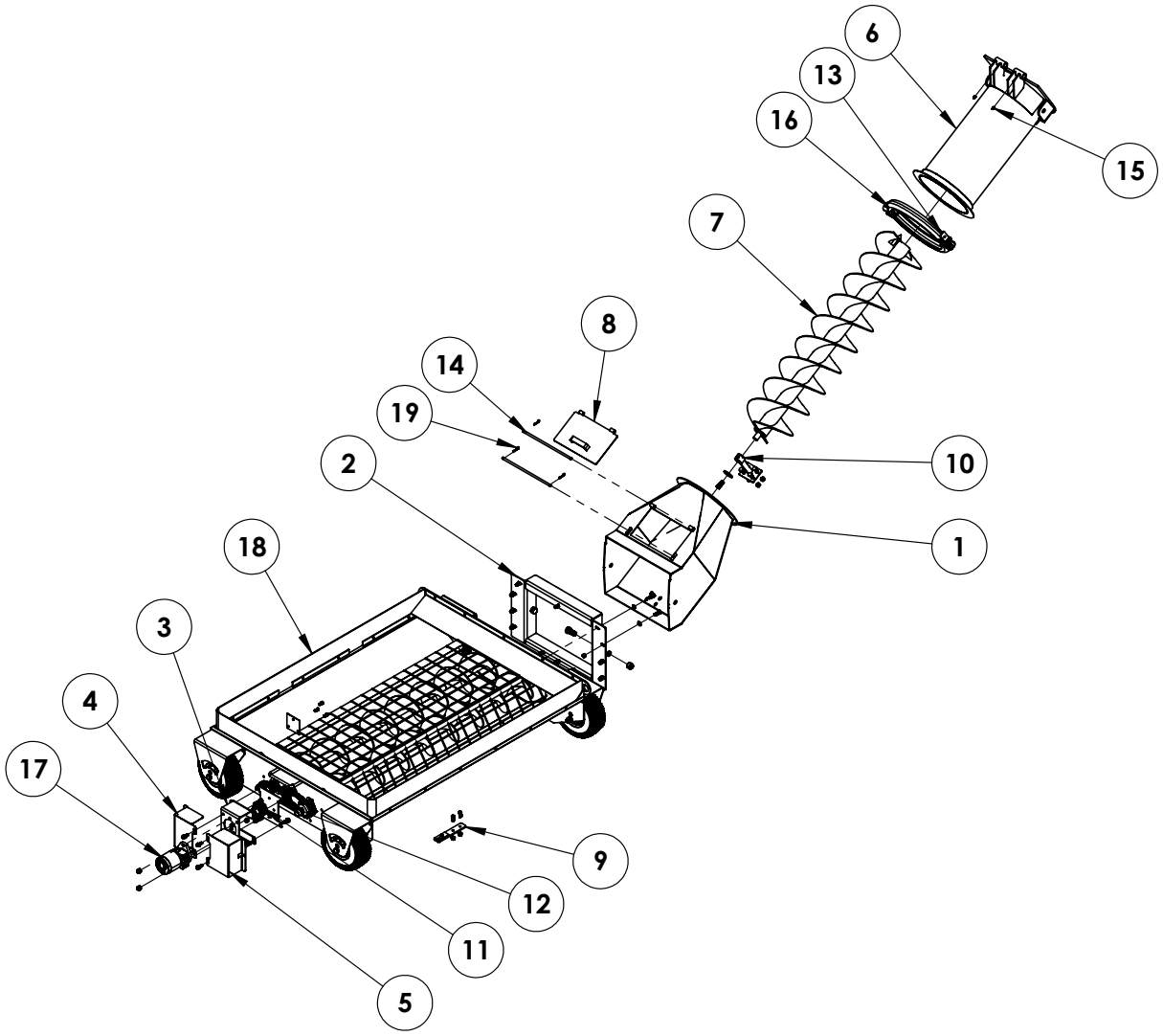


Item No.	Part No.	Description	Qty.
1	61-7668	Male Rod End	2
2	61-7745	Folding Cam	1
3	62-4120	12” Auger Upper Section	1
4	62-4122	12” Swing Under Intake Hopper	1
5	104-0999	Auger Pivot	1
6	201-0353	3/4-10 X 5” Hex Head Bolt	2
7	201-0847	3/4-10 x 3-1/2” Hex Head Bolt	2
8	201-1041	3/4-10 X 8” Rod	2
9	202-0107	Lock Nut	4
10	202-0155	3/4”-10 Hex Nut, Plain, Grade 5	4
11	203-0007	3/4” Flat Washer, ZP	8
12	227-0135	3-1/2” Bore x 20” Stroke Cylinder	1
13	229-0057	1/4” x 2” Cotter Pin	2
14	229-1014	Female Rod End	2

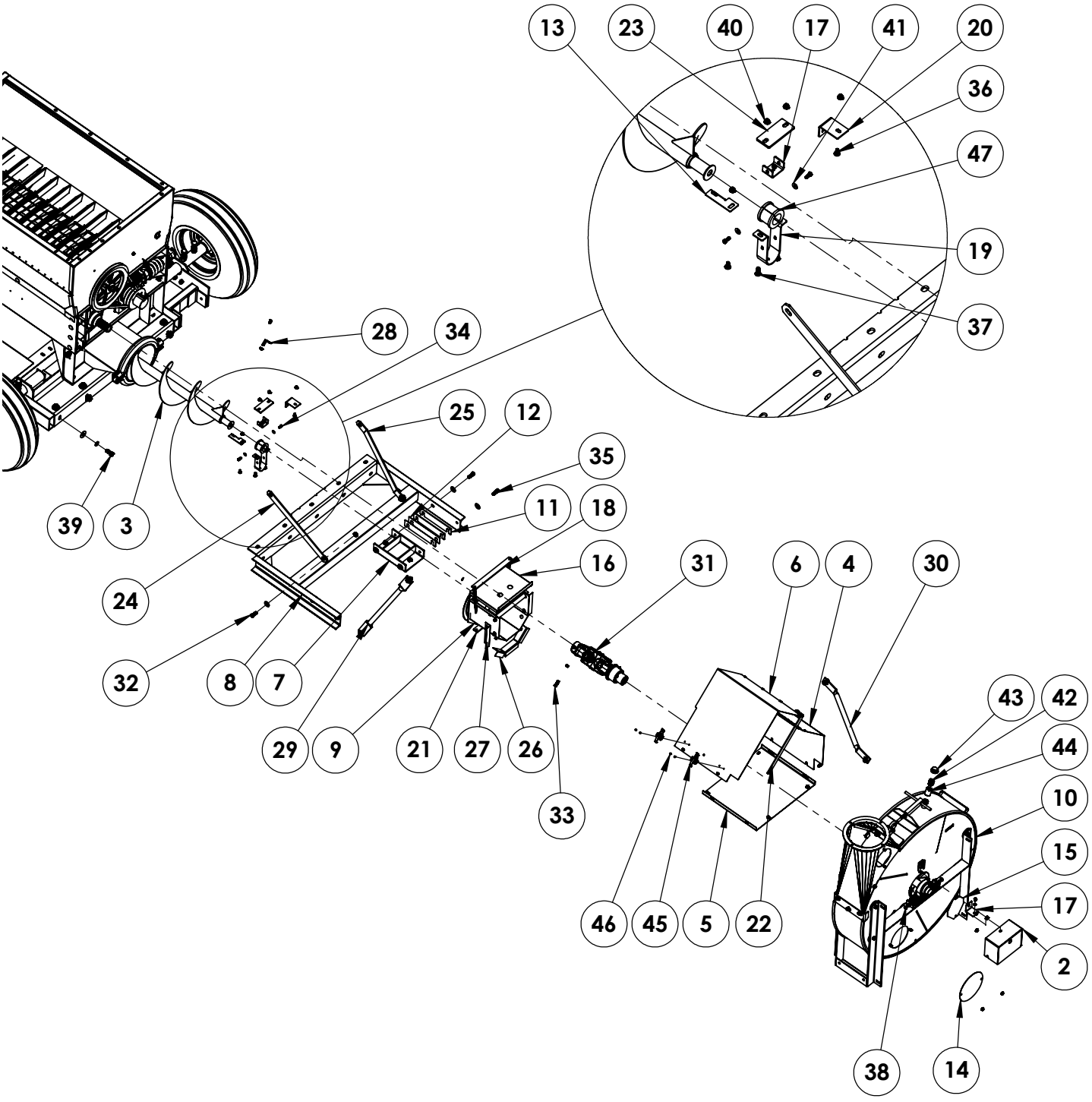


Item No.	Part No.	Description	Qty.
1	61-7647	Centering Stub	1
2	61-7740	Upper Loading Auger Tube	1
3	61-7744	Long Loading Auger Screw	1
4	61-7756	Swing Under Cradle	1
5	61-7762	Cradle Pivot Mount	1
6	61-7792	Swing Under Lift Mount	1
7	61-7848	Swing Under Hydraulic Wheel Mount	1
8	62-4132	12” Tube Hander Bearing	1
9	100-0292	1/4 X 1/4 X 1/4” Key	1
10	101-2798	Tube Clamp	1
11	101-2881	Loading Auger Deflector	1
12	101-9355	Auger Lift Plate	1
13	102-7263	Hydraulic Hose Clamp Bracket	2
14	224-0425	Zerk Fitting	1
15	227-0137	Hydraulic Motor, 2 Bolt, Parker	1
16	229-0032	Shaft Coupler	1

SWING UNDER AUGER ASSEMBLY (FOLDING ASSEMBLY) (OPTIONAL)



Item No.	Part No.	Description	Qty.
1	61-7805	12” Lower Auger Pivot	1
2	61-7806	Auger Pivot Mount	1
3	61-7809	Swing Under Motor Mount	1
4	61-7823	Gear Cover, LH	1
5	61-7824	Gear Cover, RH	1
6	61-7827	12” Short Loading Auger Tube	1
7	61-7828	12” Short Loading Auger Screw	1
8	61-7836	Swing Under Door	1
9	61-7848	Swing Under Hydraulic Wheel Mount	1
10	62-4127	Pedestal Bearing	1
11	100-1381	Triple #50 x 12 Tooth, 1” Bore, Keyed Sprocket	1
12	101-9431	Motor Mount Drill Template	1
13	101-9493	Hydraulic Clamp Bracket, 1/2” Mount Hole	1
14	207-1123	Transition Lid Hold Down Pin	2
15	224-0425	Zerk Fitting	2
16	225-0041	Clamp Band Set 12	1
17	227-0138	Hydraulic Motor, 2 Bolt, Parker	1
18	229-1027	Swing Under Intake Hopper	1
19	229-1064	Cotter 3/32, 1/4”-1/2” Hairpin, ZP	4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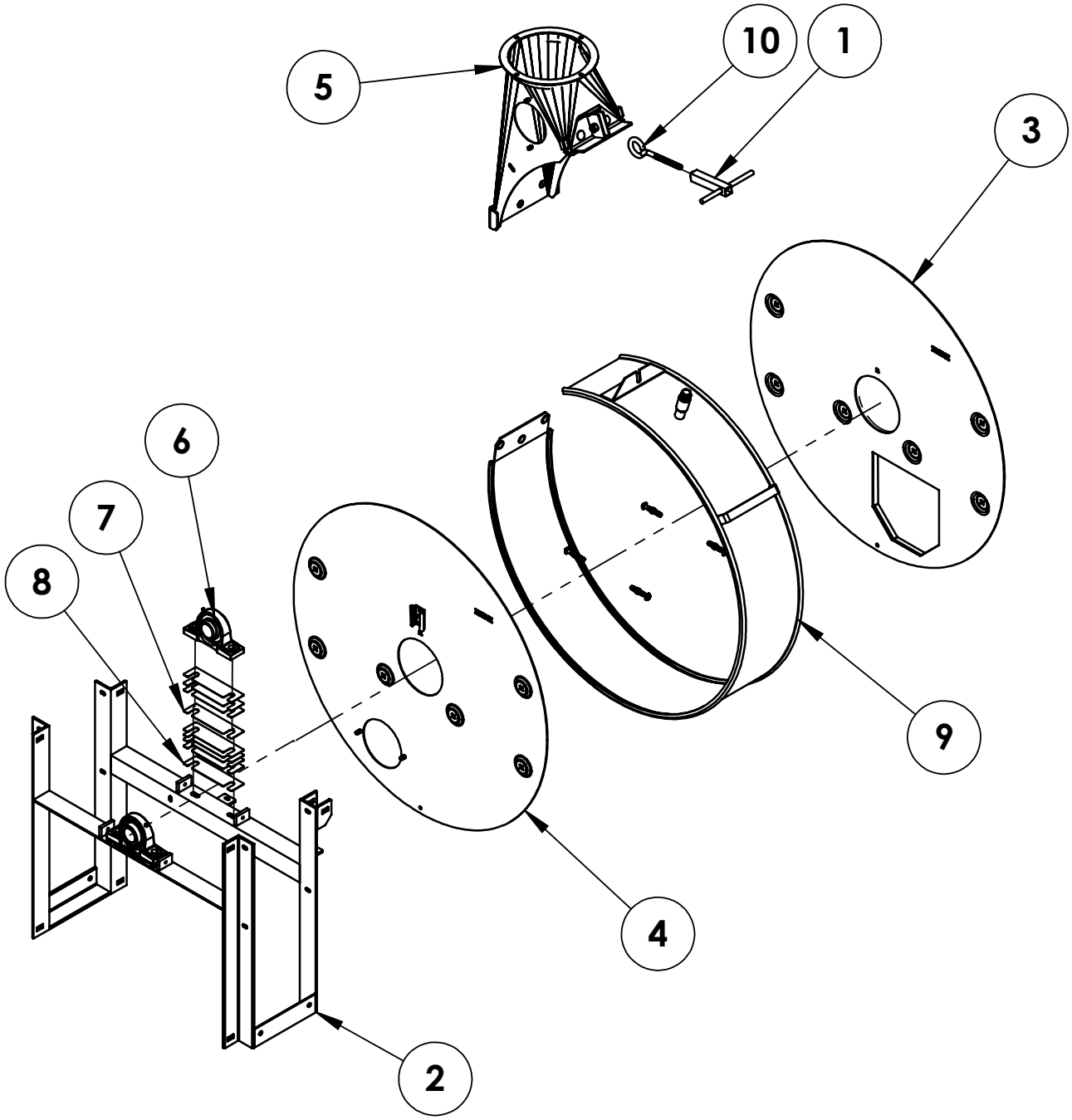
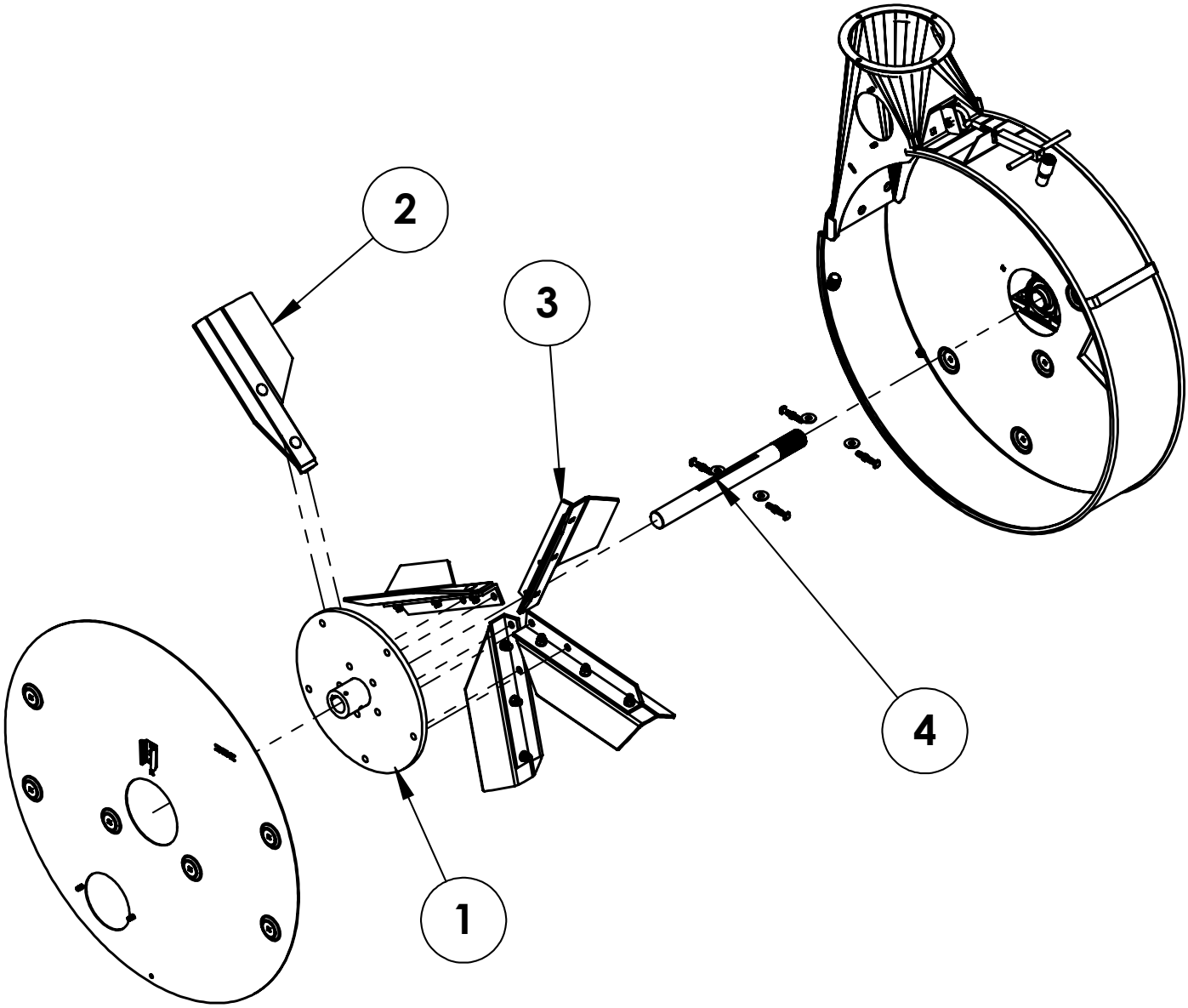
Item No.	Part No.	Description	Qty.
1	61-1554	Rear Blower Shield Bracket	1
2	61-1626	Rear Blower Shield	1
3	61-2067	AB Screw	1
4	61-2905	Rear U-Joint Shield	1
5	61-4034	Base U-Joint Shield	1
6	61-4084	Lid U-Joint Shield	1
7	61-5004	Spacer Extension	1
8	61-5599	Trailer Extension	1
9	61-5600	Trough Extension	1
10	62-1338	40” Blower Assembly	1
11	101-3092	10 GA Shim	1
12	101-3093	16 GA Shim	1
13	101-3145	Shield Bracket	1
14	101-5659	Front Cover	1
15	101-5650	Rear Cover	1
16	101-6138	Trough Extension Cover	1
17	102-1102	Hanger Bearing Cross Strap	1
18	102-1364	Cover Hold Down Flat	1
19	102-1538	1-3/8” Hanger Bearing Holder	1
20	102-1577	Shield Bracket	1
21	102-1578	Bottom Cover Hold Down Flat	1
22	102-1579	Support Shield	1
23	102-6076	Hanger Bearing Flat Spacer	1
24	102-6094	Blower Extension Flat Brace	1
25	102-6217	Trailer Extension Brace	1
26	105-0970	Bottom Trough Filler	1
27	105-0971	Side Trough Filler	2
28	105-0973	Shield Bracket	1
29	106-0258	Brace	1
30	106-0361	Offset Brace	1
31	200-1301	1-3/4”-20 Spline Double U-Joint	1
32	201-0011	1/2”-13 x 1-1/4” Hex Head Bolt, Grade 5 ZP	12
33	201-0018	3/8”-16 x 1-1/4” Square Head Cap Knurl, S.S.	2
34	201-0050	1/4”-20 x 3/4” Hex Head Bolt, Grade 5, ZP	2
35	201-0051	1/2”-13 x 1-1/2” x Cap, Grade 5, ZP	2
36	201-0119	5/16”-18 x 3/4” Carriage Bolt, Grade 5, ZP	12
37	201-0121	5/16”-18 x 1” Carriage Bolt, Grade 5, ZP	2
38	201-0279	3/8”-16 x 2-1/2” Square Head Cap Knurl, Set Screw	4
39	201-0350	5/8”-11 x 1-1/2” Hex Head Bolt, Grade 5, ZP	10
40	202-0070	5/16”-18 Hex Flange Whiz Lock Nut, ZP	10
41	203-0001	1/4” Flat Washer, ZP	11
42	224-0085	3/4” NPT Close Steel Nipple	1
43	224-0360	3/4” NPT SCH 40 Cap	1
44	224-0495	3/4”-14 NPT Coupler	1
45	229-0132	Tension Latch	2
46	229-0655	3/16” D x .300 L AL/ST Pop Rivet	4
47	290-0139	1-3/8” Plastic Bearing	1

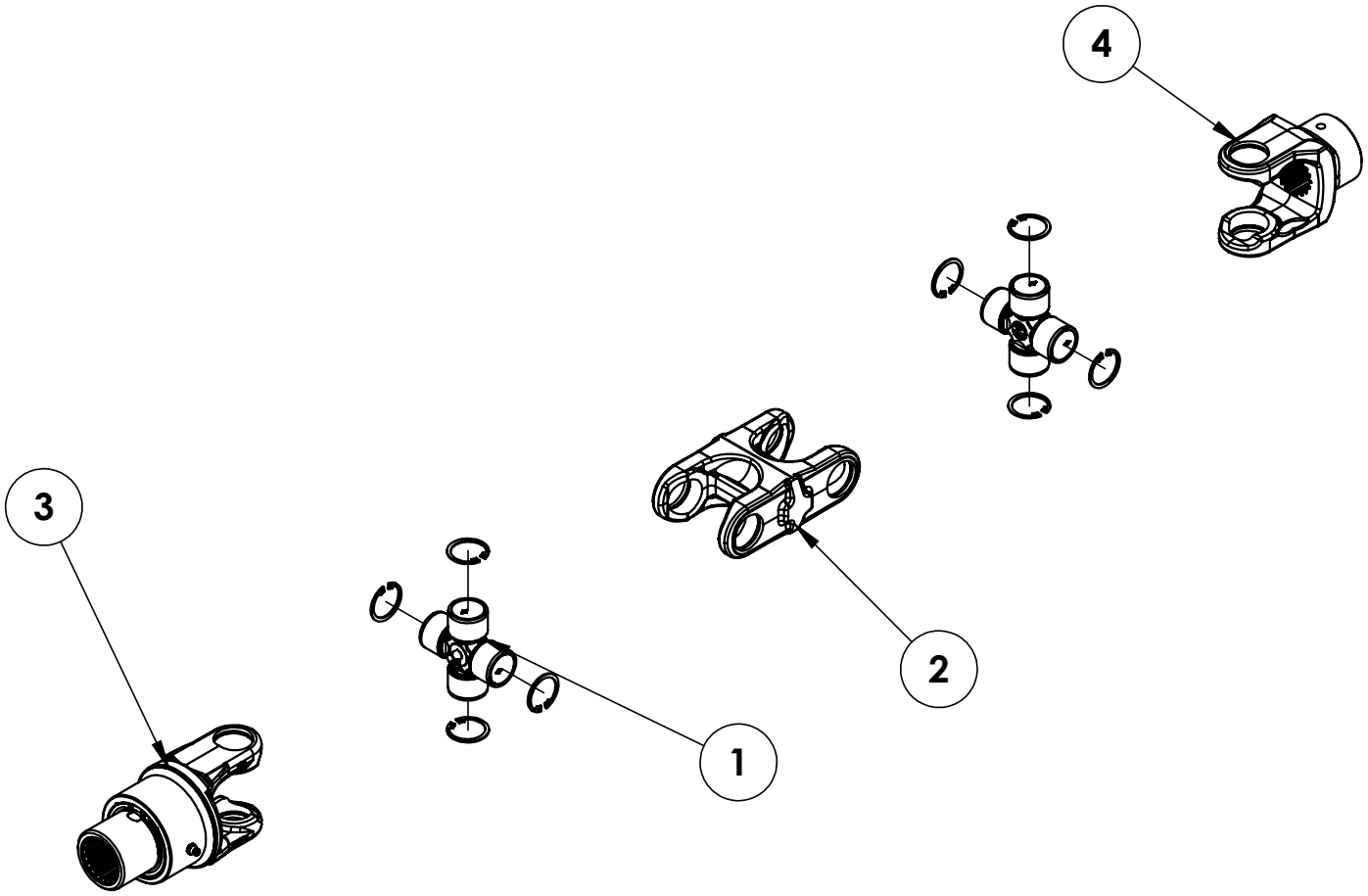


Item No.	Part No.	Description	Qty.
1	61-1630	Blower Band Tightener	1
2	61-2061	40” Blower, Frame	1
3	61-2065	40” Blower, Front	1
4	61-2935	40” Blower Side, Rear	1
5	61-4927	40” Blower Throat	1
6	62-0933	1-3/4” Pillow Block Bearing w/ Zerk	2
7	101-2467	20 GA, 54” Blower Shim	8
8	101-2468	16 GA, 54” Blower Shim	10
9	200-1053	40” Blower Band	1
10	201-0280	1/2’-13 x 7” Eye Bolt, ZP	1

BLOWER ASSEMBLY #2



Item No.	Part No.	Description	Qty.
1	100-1046	Fan Hub	1
2	101-5645	Fan Blade	5
3	105-1452	Fan Arm, Angle	5
4	207-0451	Splined Shaft	1



Item No.	Part No.	Description	Qty.
1	293-0293	U-Joint, 312209	2
2	293-0294	Double Yoke, 023476	1
3	293-0296	Clutch, 381833	1
4	293-0794	1-3/4”-20 Spline Yoke	1

This section is a condensed chart to help you remedy problems if unsatisfactory operation occurs. If you are unable to determine and correct the trouble, consult your authorized dealer.

⚠ CAUTION

NEVER ATTEMPT TO LUBRICATE, ADJUST, OR OTHERWISE SERVICE THIS MACHINE UNTIL THE POWER HAS BEEN DISENGAGED AND LOCKED OUT, AND ALL MOTION HAS BEEN STOPPED. LISTEN, AS WELL AS LOOK FOR MOTION BEFORE PROCEEDING.

TROUBLE	CAUSE	REMEDY
SHEARING BOLT IN PTO	1. Starting mill with grain between rolls.	Always run mill a short time to clean out mill. Close grain control gate above rolls before stopping mill.
	2. Low RPM.	Maintain 900 to 1000 RPM at all times. PTO will easily shear under load below this speed.
	3. Overload on mills.	Running damp, high moisture grain can cause “sticking to the rolls”, and cause an abnormal power requirement on new mills. There sometimes can be some sticking of dry grain to new rolls, particularly on oats and barley. This condition should not continue after 2000-3000 bushels of grain has been run.
	4. Opening grain control gate too fast and too far open.	Always open gate slowly and open only as far as necessary to keep rolls “hungry”. Don’t over feed rolls and cause an excess building up of grain in roll pocket between rolls.
	5. Misalignment of PTO.	PTO should not operate over 15^0 out of line for best possible service and operation. Misalignment will cause excess vibration.
INTAKE AUGER SPEED CONTROL INEFFECTIVE	1. Hydraulic hoses reversed at auger motor and/or tractor.	Switch hoses. (See page VI)
INTAKE AUGER RUNS BACKWARDS	1. Hydraulic hoses reversed at tractor.	Switch hoses.

TROUBLE	CAUSE	REMEDY
MILL IS HARD TO START	1. Grain between rolls.	When grain is between rolls, separate rolls to allow grain to fall through or turn rolls backwards and scoop out grain by hand. The best remedy is to make a practice of closing gate before stopping mill so no grain is left between rolls.
GRAIN TOO FINE OR DUSTING OF GRAIN	1. Over rolling.	Open control gate to allow more grain to feed into rollers or readjust spacing of rolls.
	2. Rolling mixed grain.	If mixed grains of different size are run together, to crack or crimp the small grain, the rolls “over roll” or pulverize larger kernels in mixed grain. As a general rule, all grains should be rolled separately and then mixed after rolling.
	3. Failure to reset rolls for different varieties of grain.	Always reset rolls every time a different grain is to be processed.
	4. Very dry grain, particularly when hard.	Open rolls wider than normal to eliminate over-rolling. On extreme cases, grain can be tempered by sprinkling a small amount water over grain to be rolled and let stand 8 to 12 hours. This is generally done in small holding bin or wagon. The amount of moisture used depends on dryness of grain.
PIPE PLUGGED (BLOWER MILLS)	1. Improperly adjusted fan tip or shear bar clearance.	Readjust per instruction.
	2. Fluctuating tractor speed.	Check tractor for constant operating speed.
	3. Tractor speed too low.	Increase tractor speed to adequate RPM.
	4. More horsepower required.	Larger horsepower tractor needed.
	5. Dented or bent pipes.	Replace.
BELT BREAKAGE OR SLIPPAGE	1. Overloading roller mill.	Decrease load on roller mill by reducing intake rate.
	2. Belts too loose or too tight.	Tighten as per recommendation. (Page VI)
	3. Using new belts and old belts together.	Always replace with a complete new matched set.

TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
EXCESSIVE ROLL WEAR	1. Overfeeding with excess grain continually sliding off top of rolls creates friction and excessive roll wear.	Keep rolls “hungry”. Adjust control gate to feed in only amount of grain rolls will take away. Usually overfeeding is not the cause for roll wear on deep-grooved rollers.
	2. Crushing abrasive materials other than grain.	Mills are designed to be used only on grain or similar textured materials.
	3. Foreign matter, such as metal, going between rolls.	We recommend a magnetic trap to remove steel or iron from the grain.
	4. Gravel in grain.	Sand and small gravel is difficult to remove from grain because of similar sizes as grain. Larger gravel and small rocks can be removed by screening with wire hardware cloth on frame mounted in hopper.
HEATING OF PTO	1. Extreme angle of operation.	Do not operate over 15^0 out of line.
	2. Failure to grease.	Manufacturer recommends greasing.
EXCESS VIBRATION	1. Overextended PTO.	Shorten distance between the mill and tractor. (See page IV)
	2. Extreme angle of PTO.	Do not operate over 15^0 out of line.
	3. Uneven flow of grain into mill.	Eliminate “surging of grain” into mill as much as possible.
	4. Excess RPM.	Recommend operation 900 to 1000 RPM.
WHOLE GRAIN COMING THRU MILL	1. Improper setting of rolls.	Rolls should be set closer together to crimp all grain being processed.
	2. Over feeding.	Grain control gate opened so wide rolls will not take all grain and builds up above rolls. This can cause some whole grain to go over top and not between rolls.
	3. Uneven size kernels.	This could be reason for a few small poorly developed whole kernels going through mill. It is better to not set mill to crack these if in doing so you would “over-roll” the majority of the kernels.

PORTABLE ROLLER MILL WARRANTY

The manufacturer warrants all AUTOMATIC roller mills to be free from defects in material and workmanship under the normal use and service for which the machine was intended.

ONE YEAR WARRANTY-At any time within one year from date of delivery to the original purchaser, the manufacturer will furnish replacement parts or repair material for any portion of the roller mill found to be defective. Such replacement part or repair material shall be furnished without cost to the owner or the user through an authorized dealer, or F.O.B. factory at manufacturer's option. Automatic liability under this warranty must be for part or parts but not for such labor charges involved for removing and replacing defective parts. The warranty repair period for equipment used for commercial or rental purposes is limited to thirty days. All rolls are guaranteed for life against breakage.

This warranty does not apply to any part of an Automatic Roller Mill which has been subject to misuse, neglect, alteration, accident, or damage caused by fire, flood, or other damage beyond the control of the manufacturer. IN NO EVENT SHALL THE OWNER BE ENTITLED TO RECOVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, LOSS OF CROPS, LOSS OF PROFITS OR REVENUE, OTHER COMMERCIAL LOSSES, INCONVENIENCE OR COST OF RENTAL OR REPLACEMENT EQUIPMENT. No responsibility is assumed for delays or failure caused by strikes, Government regulations, or other circumstances beyond the control of the manufacturer or authorized dealer or distributor. Further, tires and tubes are warranted directly by the respective manufacturer only and not by Automatic Equipment Mfg. Co.

Automatic Equipment Mfg. Co. assumes no liability for any damages that might be inflicted on the operator, spectator or general public who might be in the general area while this machine is in operation, or for any cause whatsoever.

Removal of original serial number voids this warranty in its entirety.

AUTOMATIC EQUIPMENT MANUFACTURING CO., PENDER, NE 68047

TO BE VALID, WARRANTY CARD MUST BE COMPLETED IN ITS ENTIRETY BY AN AUTHORIZED DISTRIBUTOR OR DEALER AND SENT TO AUTOMATIC EQUIPMENT MFG. CO., PENDER, NEBRASKA. FAILURE TO DO SO WILL VOID THIS WARRANTY.

Please visit us at www.automaticag.com for our complete line of agricultural equipment.

It is a continuing policy of Automatic Equipment Manufacturing Company to make improvements. The company reserves the right to make these improvements without incurring any obligation to add them to machines already in the field. Many years of research combined with experience gained through close contact with operators have been drawn upon in designing your mill.

Automatic

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