

Farm King

OPERATOR AND PARTS MANUAL

Grain Cleaner

Model 482

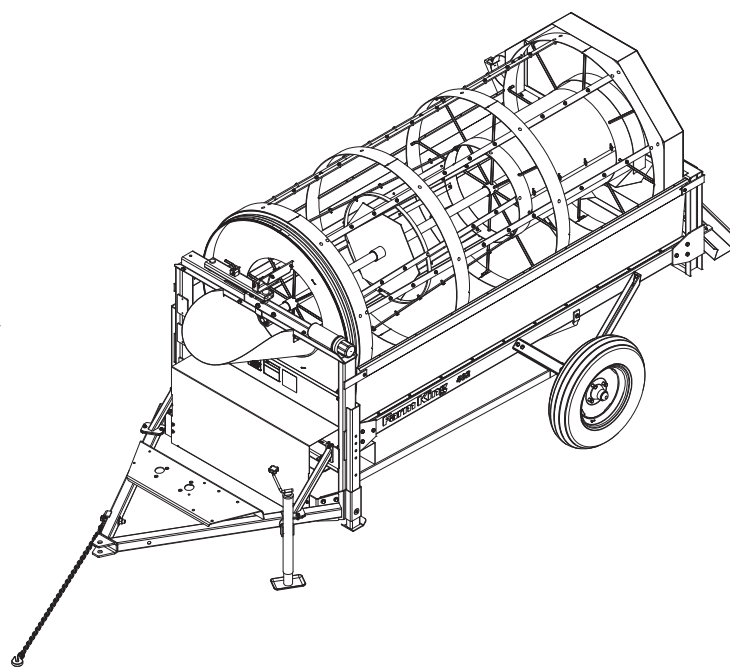


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Manufacturer’s Statement: For technical reasons, Buhler Industries Inc. reserves the right to modify machinery design and specifications provided herein without any preliminary notice. Information provided herein is of descriptive nature. Performance quality may depend on soil fertility, applied agricultural techniques, weather conditions, and other factors.

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Warranty Registration Form

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer Name:	
Customer Address:	
City:	Prov / State:
Postal / Zip Code:	Phone:

Dealer Name:	
Dealer Address:	
City:	Prov / State:
Postal / Zip Code:	Phone:

Equipment Model:	Serial Number:	Delivery Date:
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I have thoroughly instructed the buyer on the above described equipment which review included the Operator and Parts Manual content, equipment care, adjustments, safe operation and applicable warranty policy.

Dealer Inspection Report

- Bearings Turn Freely
- Belt Tension Checked
- All Fasteners Are Tight
- Lubricate Machine
- Hydraulic Hoses And Fittings Tight

Safety

- Safety Chain On Hitch
- All Decals Installed
- Guards And Shields Installed And Secure
- Review Operating And Safety Instructions

Date:	Dealer Rep. Signature:
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The above equipment and Operator And Parts Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date:	Customer / Owner Signature:
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Remove this Warranty Registration Form from the Operator And Parts Manual. Make two copies of the form. Send original Warranty Registration Form to Farm King. Give one copy to the customer and the dealer will keep one copy.

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Introduction

This Operator And Parts Manual was written to give the owner / operator instructions on the safe operation, maintenance and part identification of the Farm King equipment. **READ AND UNDERSTAND THIS OPERATOR AND PARTS MANUAL BEFORE OPERATING YOUR FARM KING EQUIPMENT.** If you have any questions, see your Farm King dealer. This manual may illustrate options and accessories not installed on your Farm King equipment.

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Owner's Information

Thank you for your decision to purchase a Farm King 482 Grain Cleaner. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator and Parts Manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and / or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this Operator and Parts Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Farm King is continually working to improve its products. Farm King reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, Farm King, makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. Farm King assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter.

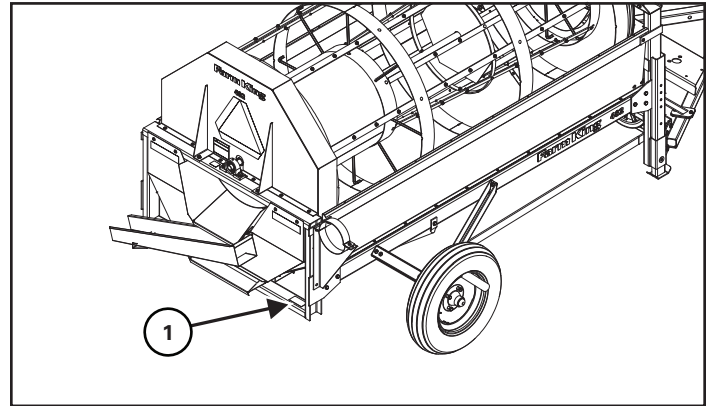
Contact your Farm King Dealer if you need assistance, information, or additional copies of the manual. Visit our website at www.farm-king.com for a complete list of dealers in your area.

The directions front, rear, right, and left are viewed as the operator sitting in the tractor with the equipment hitched to the tractor.

Serial Number Location

Please enter the model and serial number in the space provided for easy reference.

Figure 1



Model Number: _____

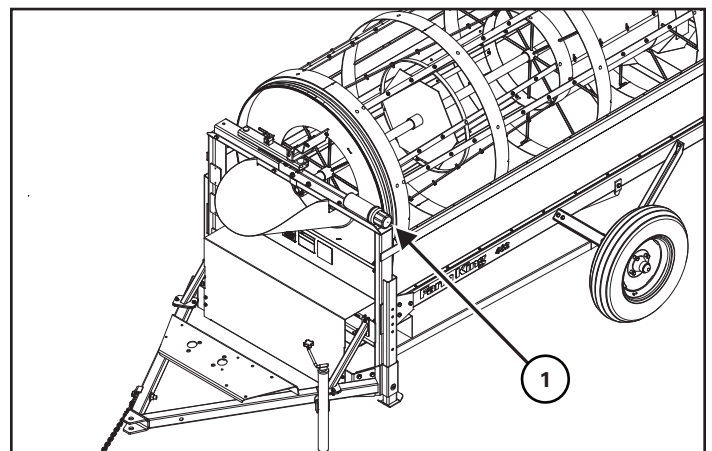
Serial Number: _____

The serial number plate (Item 1) is located on the rear frame [Figure 1].

Always use your serial number when requesting information or when ordering parts.

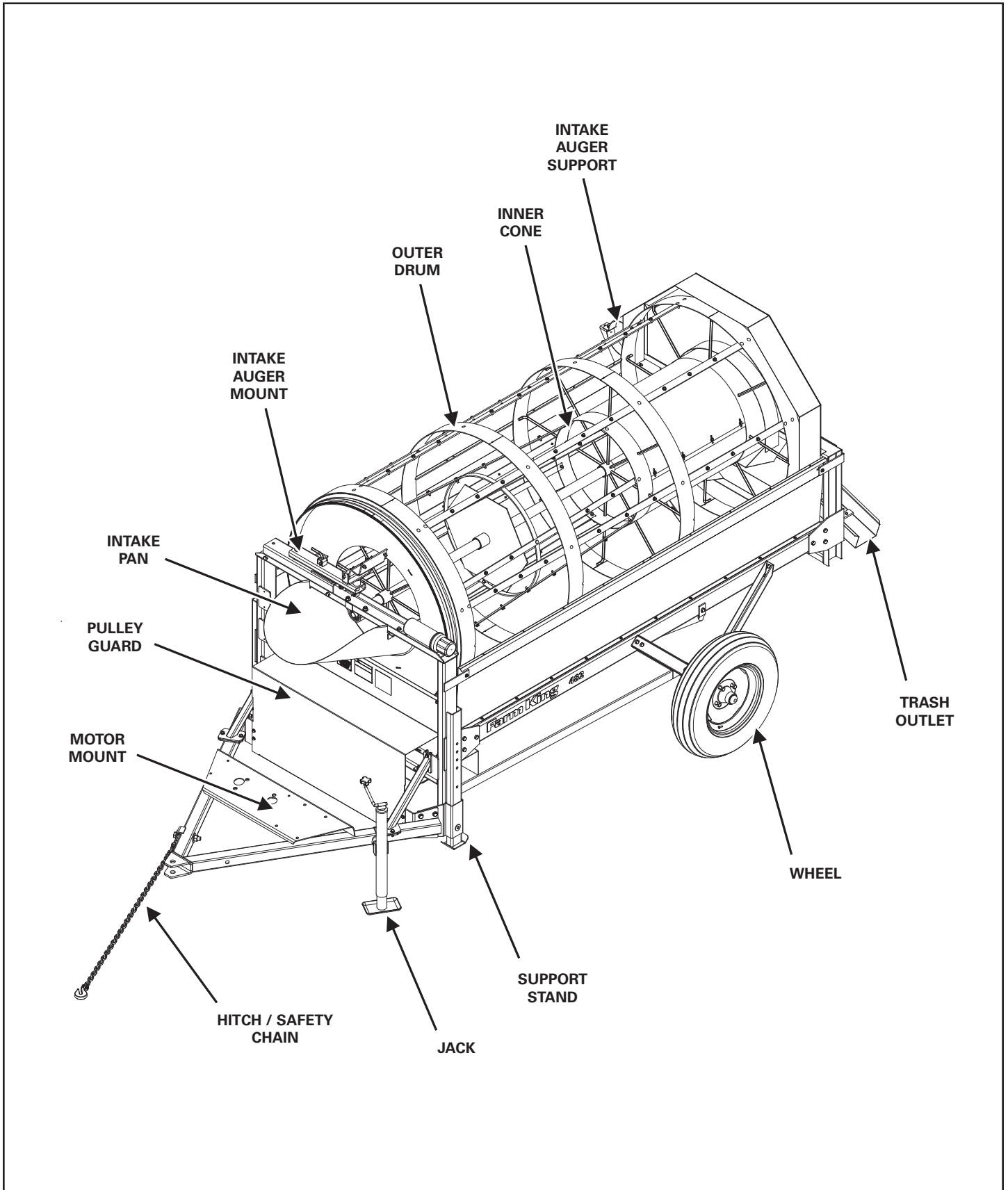
Manual Storage

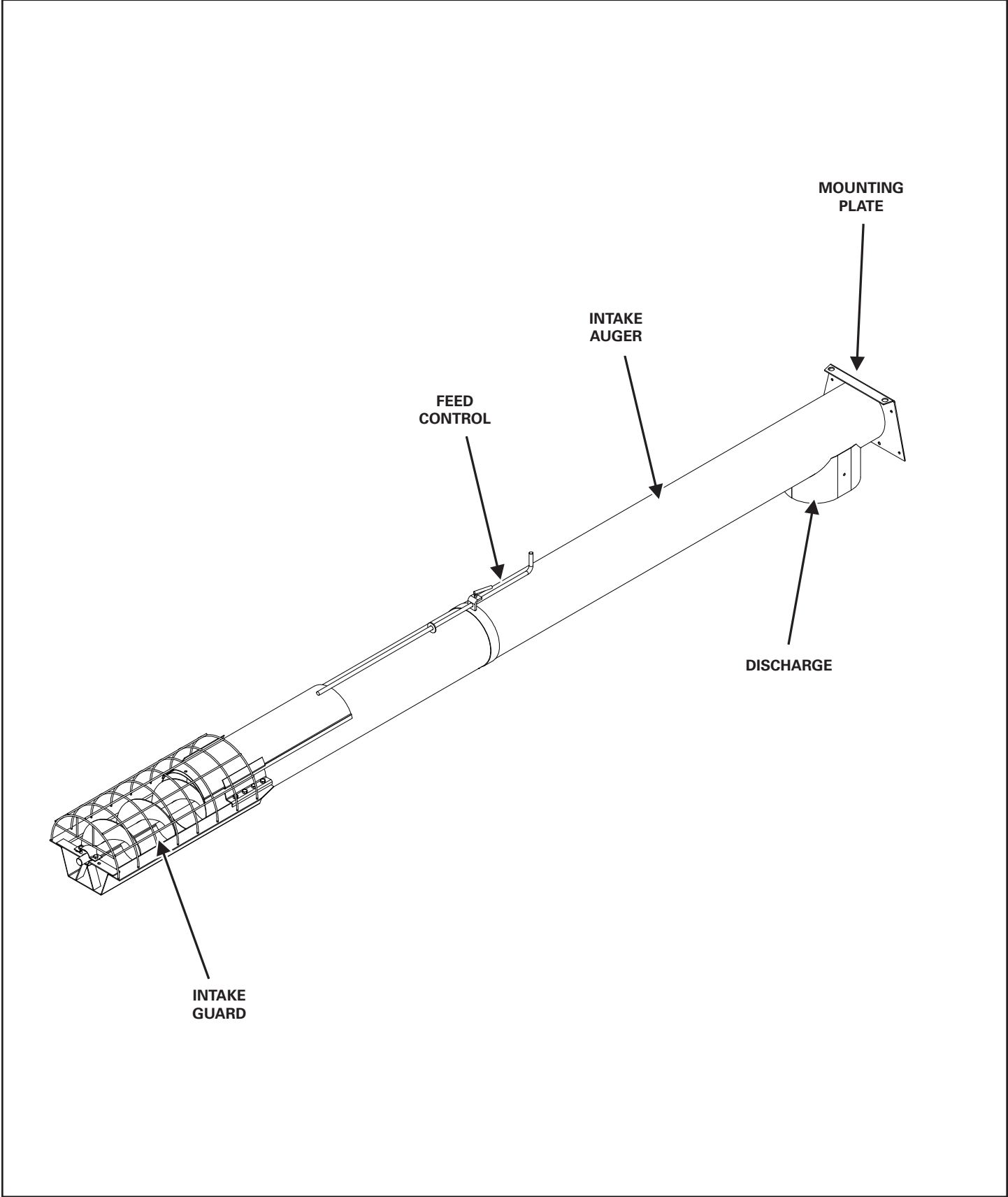
Figure 2



The operator and parts manual and other documents can be stored in the canister (Item 1) [Figure 2].

Equipment Identification





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Safety


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Safety Instructions

Safe Operation is The Operator’s Responsibility

	Safety Alert Symbol
<p>This symbol with a warning statement means: “Warning, be alert! Your safety is involved!” Carefully read the message that follows.</p>	


CAUTION

The signal word CAUTION on the machine and in the manuals 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.


DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.


WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.


IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

Safe Operation Needs A Qualified Operator


WARNING

Operators must have instructions before operating the machine. Untrained operators can cause injury or death.

For an operator to be qualified, he or she must not use drugs or alcohol which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.

Understand the written instructions, rules and regulations:

- The written instructions from Farm King include the Warranty Registration, Dealer Inspection Report, Operator And Parts Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer’s work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation:

- Operator training must consist of a demonstration and verbal instruction. This training is given by the machine owner prior to operation.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine safely under all conditions of the work area. Always fasten seat belt before operating.

Know the Work Conditions:

- Clear working area of all bystanders, especially small children and all obstacles that might be hooked or snagged, causing injury or damage.
- Know the location of any overhead or underground power lines. Call local utilities and have all underground power lines marked prior to operation.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service.

Use Safety Rules

- Read and follow instructions in this manual and the tractor's Operators Manual before operating.
- Under no circumstances should young children be allowed to work with this equipment.
- This equipment is dangerous to children and persons unfamiliar with its operation.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the equipment is securely fastened to the tractor / towing vehicle.
- Make sure all the machine controls are in the NEUTRAL position before starting the machine.
- Operate the equipment only from the operator's position.
- Operate the equipment according to the Operator And Parts Manual.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders, especially small children.
- DO NOT permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved tractors / transport vehicles.
- DO NOT modify the equipment in any way. Unauthorized modification may impair the function and / or safety and could affect the life of the equipment.
- Stop tractor engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing, unplugging or filling.
- DO NOT make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- Keep hands, feet, hair and clothing away from all moving parts.

Machine Requirements And Capabilities

- Fasten seat belt securely. If equipped with a folding Roll-Over Protective Structure (ROPS), only fasten seat belt when ROPS is up and locked. DO NOT wear seat belt if ROPS is down.
- Stop the machine and engage the parking brake. Install blocks in front of and behind the rear tires of the machine. Install blocks underneath and support the equipment securely before working under raised equipment.
- Keep bystanders clear of moving parts and the work area. Keep children away.
- Use increased caution on slopes and near banks and ditches to prevent overturn.
- Make certain that the Slow Moving Vehicle (SMV) emblem is installed so that it is visible and legible. When transporting the equipment, use the flashing warning lights (if equipped) and follow all local regulations.
- Operate this equipment with a machine equipped with an approved Roll-Over Protective Structure (ROPS). Always wear seat belt when the ROPS is up. Serious injury or death could result from falling off the machine.
- Before leaving the operator's position:
 1. Always park on a flat level surface.
 2. Place all controls in neutral.
 3. Engage the parking brake.
 4. Stop engine.
 5. Wait for all moving parts to stop.
- Carry passengers only in designated seating areas. Never allow riders on the machine or equipment. Falling off can result in serious injury or death.
- Start the equipment only when properly seated in the operator's seat. Starting a machine in gear can result in serious injury or death.
- Operate the machine and equipment from the operator's position only.
- The parking brake must be engaged before leaving the operator's seat. Roll-away can occur because the transmission may not prevent machine movement.

Transport Safety

- Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use.
- Local laws should be checked for all highway lighting and marking requirements.
- Always yield to oncoming traffic in all situations and move to the side of the road so any following traffic may pass.
- Always enter curves or drive up or down hills at a low speed and at a gradual steering angle.
- Never allow riders on either tractor or equipment.
- Keep tractor / towing vehicle in a lower gear at all times when traveling down steep grades.
- Maintain proper brake settings at all times (if equipped).

Fire Prevention



Maintenance

- The machine and some equipment have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.
- Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard. The operator's area, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.
- All fuels, most lubricants and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Operation

- The Farm King machine must be in good operating condition before use.
- Check all of the items listed on the service schedule under the 8 hour column before operation. (See Maintenance section)
- Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.

Starting

- Do not use ether or starting fluids on any engine that has glow plugs. These starting aids can cause explosion and injure you or bystanders.
- Use the procedure in the tractor's operator's manual for connecting the battery and for jump starting.

Electrical



- Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.
- Battery gas can explode and cause serious injury. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

Hydraulic System

- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

Fueling



- Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a machine near open flames or sparks. Fill the fuel tank outdoors.

Fire Extinguishers



- Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

Equipment And Safety Signs

Follow the instructions on all the signs (decals) that are on the equipment. Replace any damaged signs (decals) and be sure they are in the correct locations. Equipment signs are available from your Farm King equipment dealer.

Figure 3

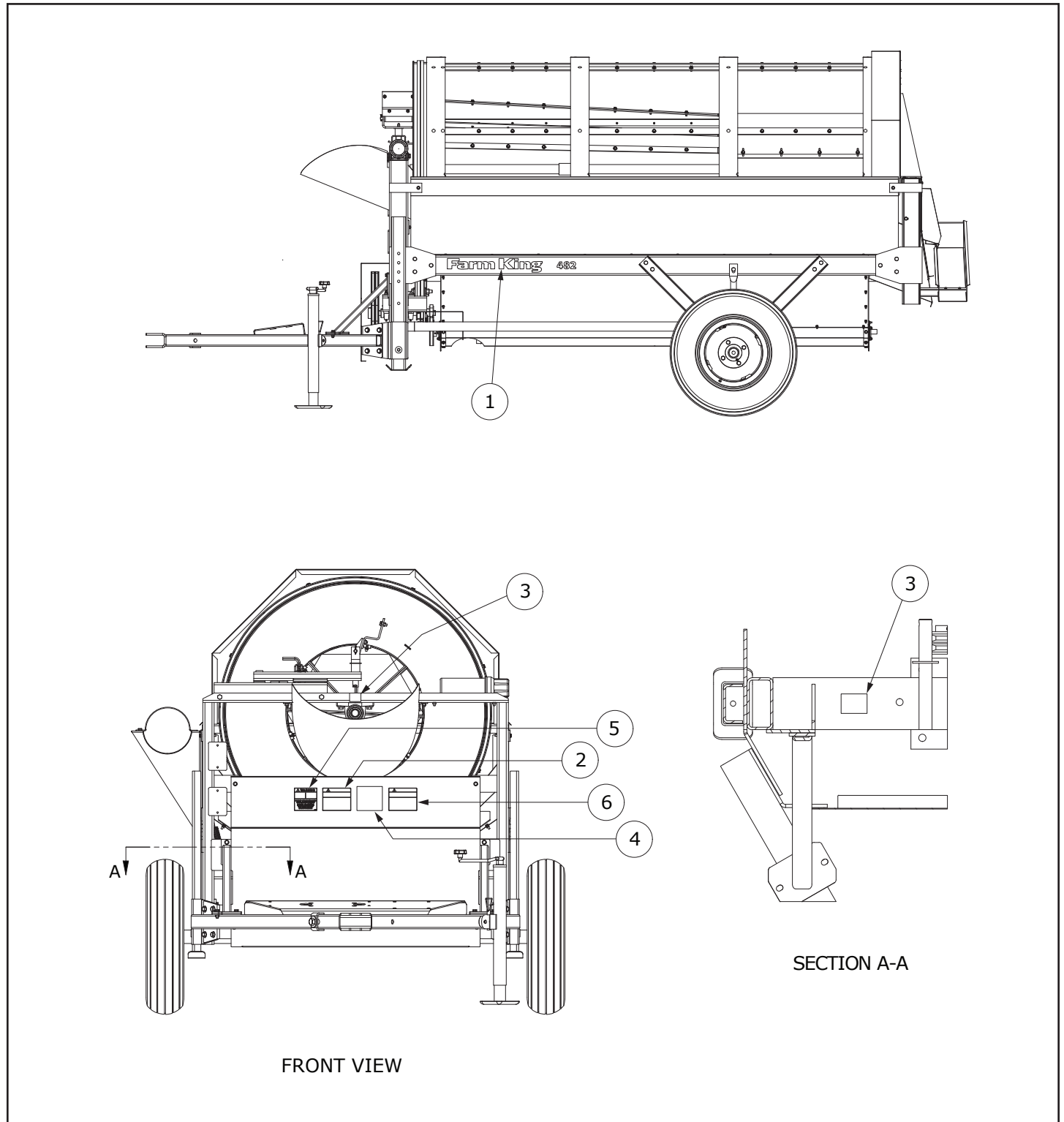
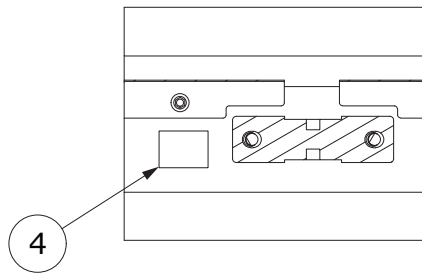
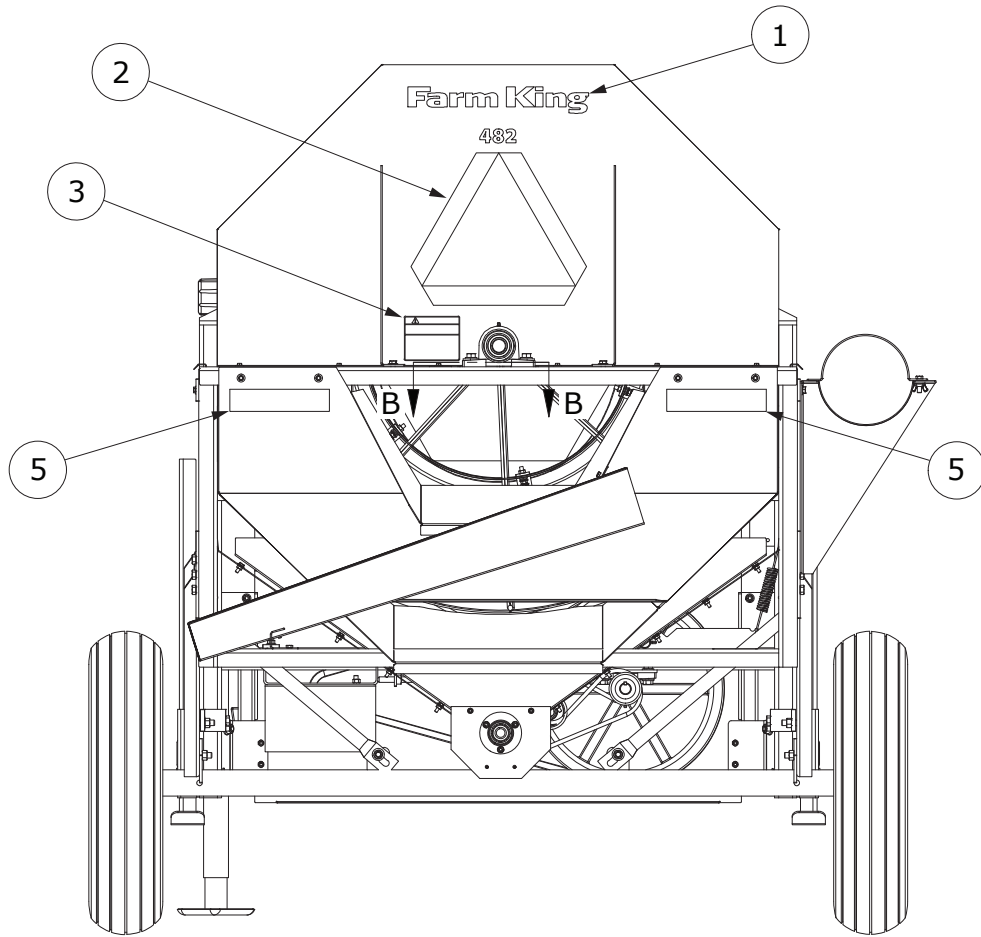


Figure 4



SECTION B-B

Equipment And Safety Signs [Figure 3]

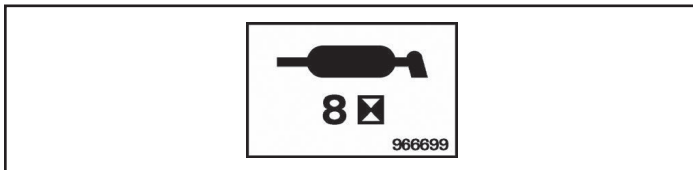
819910 - 482 SIDE (Item 1)



918272 - DANGER ROTATING DRIVELINE (Item 2)



966699 - GREASE (Item 3)



967382 - CAUTION (Item 4)



SZ06023 - WARNING, SHIELD (Item 5)



918280 - WARNING, HIGH PRESSURE (Item 6)



Equipment And Safety Signs [Figure 4]

819853 - 482 REAR (Item 1)



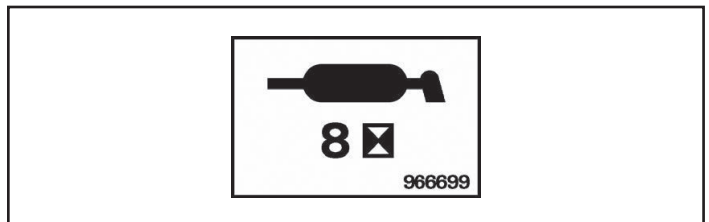
86547711 - SMV EMBLEM CAUTION (Item 2)



918272 - DANGER ROTATING DRIVELINE (Item 3)



966699 - GREASE (Item 4)



967053 - DECAL REFLECTIVE 2 X 9 RED (Item 5)



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Preparing For Assembly



IMPORTANT

Equipment may be shipped without some components installed due to transport restrictions.

- Using the packing list, locate and count the individual components and verify that you have received the correct number of each component.
- Check all the components for damage. If any components are damaged or missing, contact your Farm King dealer.



WARNING



AVOID INJURY OR DEATH

Before moving the tractor, look in all directions and make sure no bystanders, especially small children are in the work area. Do not allow anyone between the tractor and the equipment when backing up to the equipment for connecting.

Move the tractor, equipment and components to an area large enough for assembly.



WARNING

AVOID INJURY OR DEATH

Before you leave the operator's position:

- Always park on a flat level surface.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Stop the engine and remove the key.
- Wait for all moving parts to stop.

Park the tractor / equipment on a flat level surface.

Place all controls in neutral, engage the park brake, stop the engine and wait for all moving parts to stop. Leave the operator's position.



WARNING

AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.



IMPORTANT

The directions front, rear, right, and left are viewed as the operator sitting in the tractor with the equipment hitched to the tractor.

Frame And Wheels

Position the front and rear frame weldments (Item 1, 2) with the right and left frame sides (Item 3, 4). Attach using 1/2" x 1-1/4" hex bolts and 1/2" lock nuts. Frame ends and sides must be squared before tightening bolts **[Figure 5]**.

Position wheels (Item 5) on the axle / hub assembly (Item 6). Attach using 1/2" x 1-1/4" wheel bolts. Torque wheel bolts to 80 ft.-lbs. **[Figure 5]**.

Lift the frame using an adequate hoist. Position axle and wheel assembly under the frame.

Position the axle braces (Item 7, 8) between the frame sides and axle. Attach axle braces using 1/2" x 1-1/4" hex bolts and 1/2" lock nuts **[Figure 5]**.

Position the center axle braces (Item 9) between the frame sides and axle. Attach axle braces using 1/2" x 1-1/4" hex bolts, 1/2" flat washers, and 1/2" lock nuts **[Figure 5]**.

Position the frame braces (Item 10) between the front axle braces (Item 7) and front frame weldment (Item 1). Attach frame braces using 1/2" x 1-1/2" hex bolts, 1/2" flat washers, and 1/2" lock nuts **[Figure 5]**.

Attach hitch weldment (Item 11) to the frame using 1/2" x 1-1/4" hex bolts, 1/2" flat washers, and 1/2" lock nuts **[Figure 5]**.

Attach the left and right hitch braces (Item 12, 13) between the hitch weldment and front frame using 3/8" x 1-1/4" hex bolts, 3/8" flat washers, and 3/8" lock nuts **[Figure 5]**.

Slide the support stands (Item 14) into the front frame weldment mounts. Secure using stand pin and clip **[Figure 5]**.

Attach the manual holder (Item 15) to the top of the front frame weldment using 5/16" x 1" hex bolts and 5/16" lock nuts **[Figure 5]**.

Connect the jack stand (Item 16) to the hitch weldment **[Figure 5]**.

Attach the trash chute mount (Item 17) to the rear frame weldment using 5/16" x 3/4" hex bolt and 5/16" lock nut **[Figure 5]**.

Attach one pillow bearing (Item 18) to the top of the rear frame weldment using 1/2" x 1-3/4" hex bolts, 1/2" flat washers, and 1/2" lock nuts **[Figure 5]**.

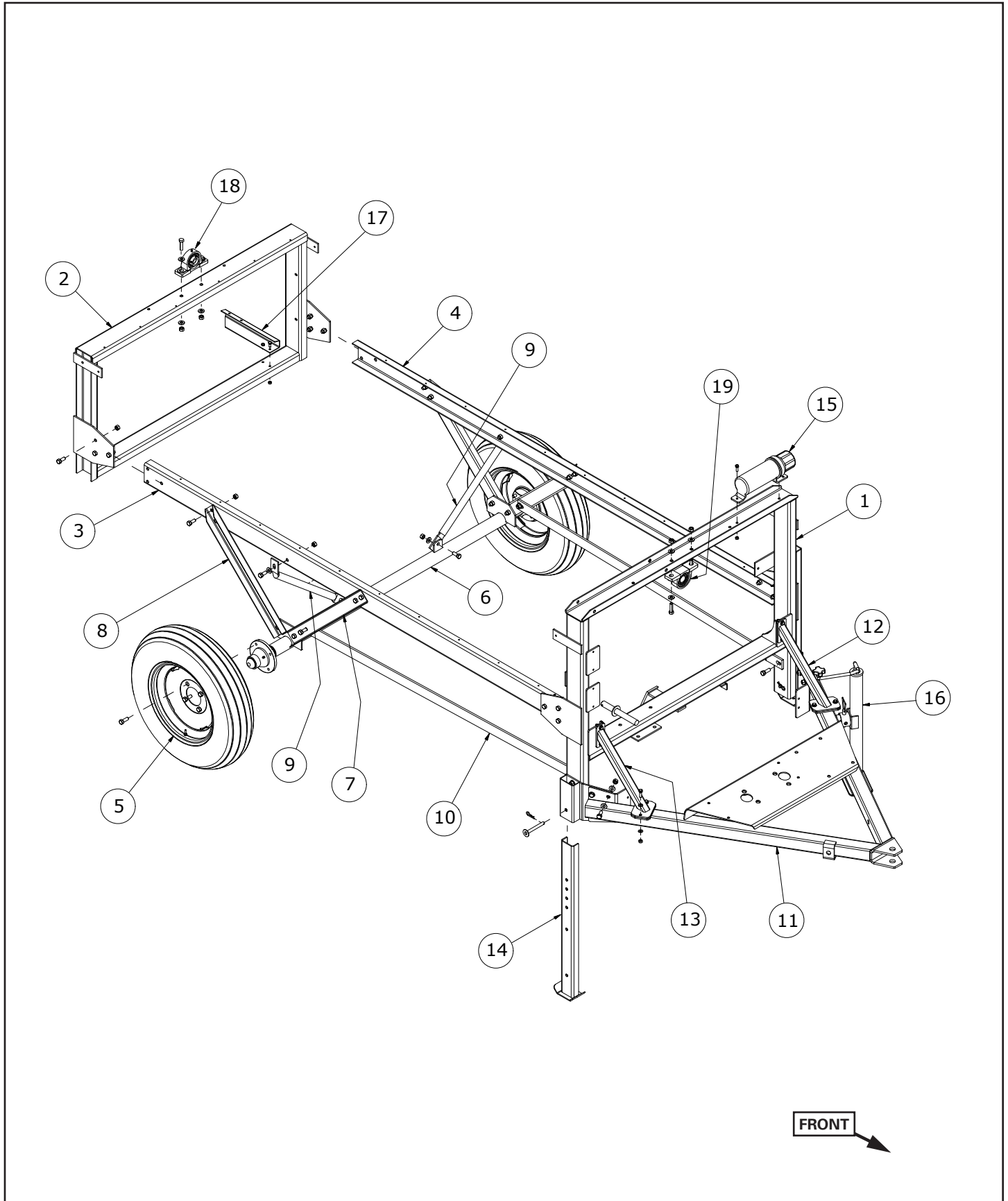
Attach one pillow bearing (Item 19) to the underside of the front frame weldment using 1/2" x 1-3/4" hex bolts, 1/2" flat washers, and 1/2" lock nuts **[Figure 5]**.



IMPORTANT

All bolts connecting the frame must be firmly tightened to proper torque. Any loose bolts could result in the frame separating while towing the cleaner.

Figure 5



Pulleys

Slide two pillow bearings (Item 2) onto the reducer shaft (Item 1). Attach the two pillow bearings to the bottom of the reducer mount (Item 3) using 1/2" x 1-3/4" hex bolts, 1/2" flat washers, and 1/2" lock nuts [Figure 6].

Slide one 3" double pulley (Item 4) onto the rear end of the reducer shaft. Attach with key and two Ø5/16" x 1/4" socket set screw [Figure 6].

Slide one idler plate (Item 6), one shaft bushing (Item 7), and one idler plate (Item 8) onto the idler shaft (Item 9). Attach using 1/4" x 2" cotter pin [Figure 6].

Position two idler pulleys (Item 10) and three 5/8" flat washers (Item 11) between the ends of the idler plates (Item 6, 8). Place the washers between the pulleys. Attach washers and pulleys to idler plates using one 5/8" x 4" hex bolt and 5/8" lock nut [Figure 6].

Connect two tightener springs (Item 12) to the bottom notches of the idler plates (Item 6, 8). Hook springs to holes located on the right frame side [Figure 6].

Electric Motor Mount



IMPORTANT

Electric motor not included. Contact your dealer for proper engine installation.

The motor mount assembly (Item 13, 14, 15, 16) and 12" double pulley (Item 5) are only used with electric motor.

Position the motor mount (Item 13) on the front frame with two motor mount clamps (Item 14). Attach motor mount and clamps using 3/8" x 1-1/4" hex bolts, 3/8" flat washers, and 3/8" lock nuts [Figure 6].

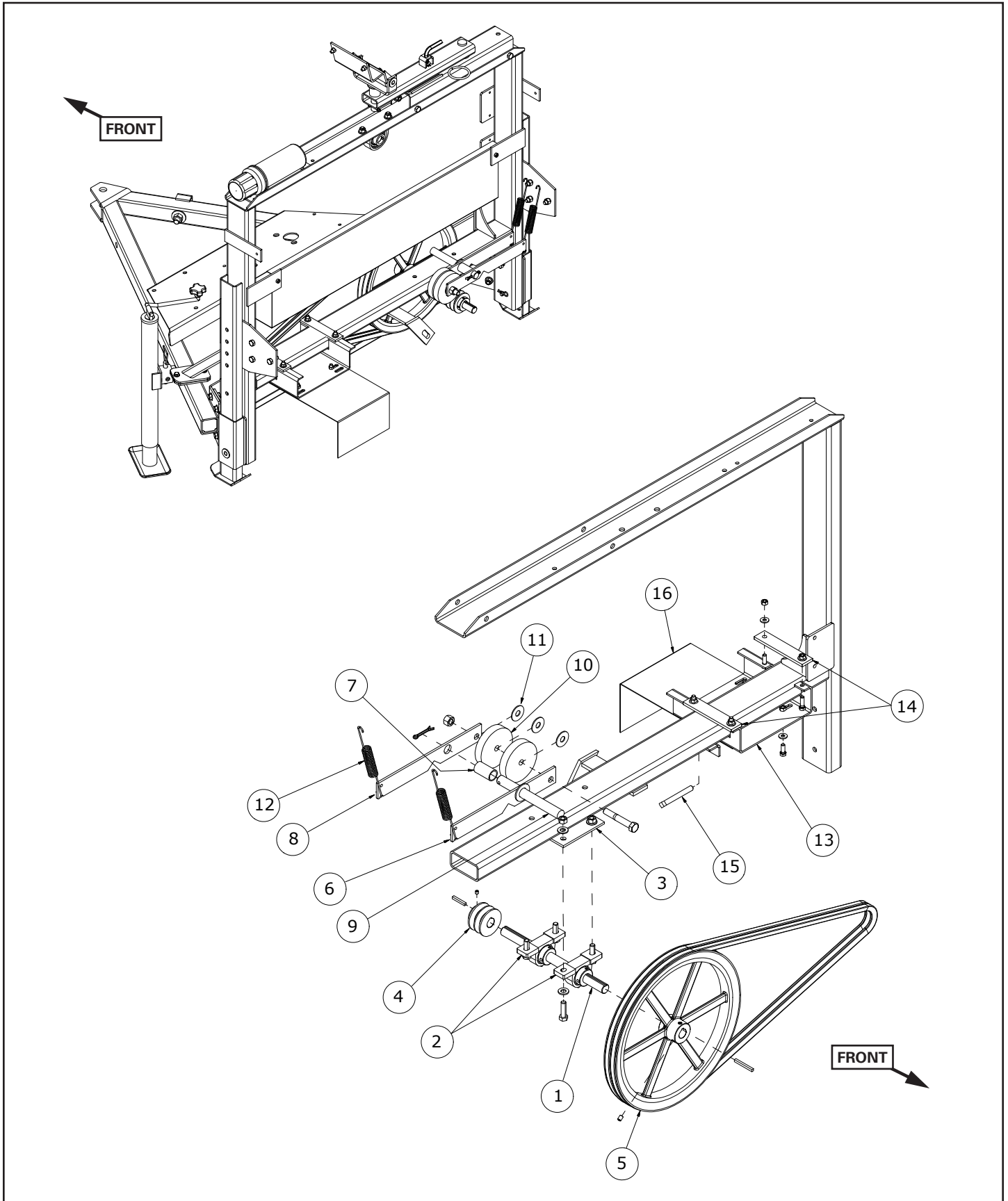
Install the 1/2" x 4" belt tightener screw (Item 15) through the welded bracket and weld nut until the screw contacts the side of the motor mount plate [Figure 6].

Attach the motor guard (Item 16) to the motor mount (Item 13) using 3/8" x 1" hex bolts, 3/8" flat washers, and 3/8" lock nuts [Figure 6].

The 3 HP electric motor is installed to the motor guard (motor installation not shown).

Slide one 12" double pulley (Item 5) onto the front end of the reducer shaft. Attach pulley using one 1/4" x 2-1/2" key and two Ø3/8" x 1/2" socket set screws [Figure 6].

Figure 6



Front Guards

Attach the intake pan (Item 1) to the underside of the front frame weldment using 3/8" x 1" hex bolts, 3/8" flat washers, and 3/8" lock nuts **[Figure 7]**.

Position the front pulley guard (Item 2) over the pulley assembly. Attach pulley guard to the front frame mounts using 5/16" x 3/4" hex bolts, 5/16" flat washers, and 5/16" lock nuts **[Figure 7]**.

Attach the safety chain (Item 3) to the hitch using a 3/4" x 5" hex bolt, 3/4" flat washers, and a 3/4" lock nut **[Figure 7]**.

Rear Guards

Position the discharge pan weldment (Item 4) within the rear frame. Attach the top of the weldment to the frame using 1/4" x 3/4" self tapping screws (Item 5) and 5/16" flat washers. Attach the sides of the weldment to the frame using 5/16" x 3/4" hex bolts (Item 6), 5/16" flat washers, and 5/16" lock nuts **[Figure 7]**.

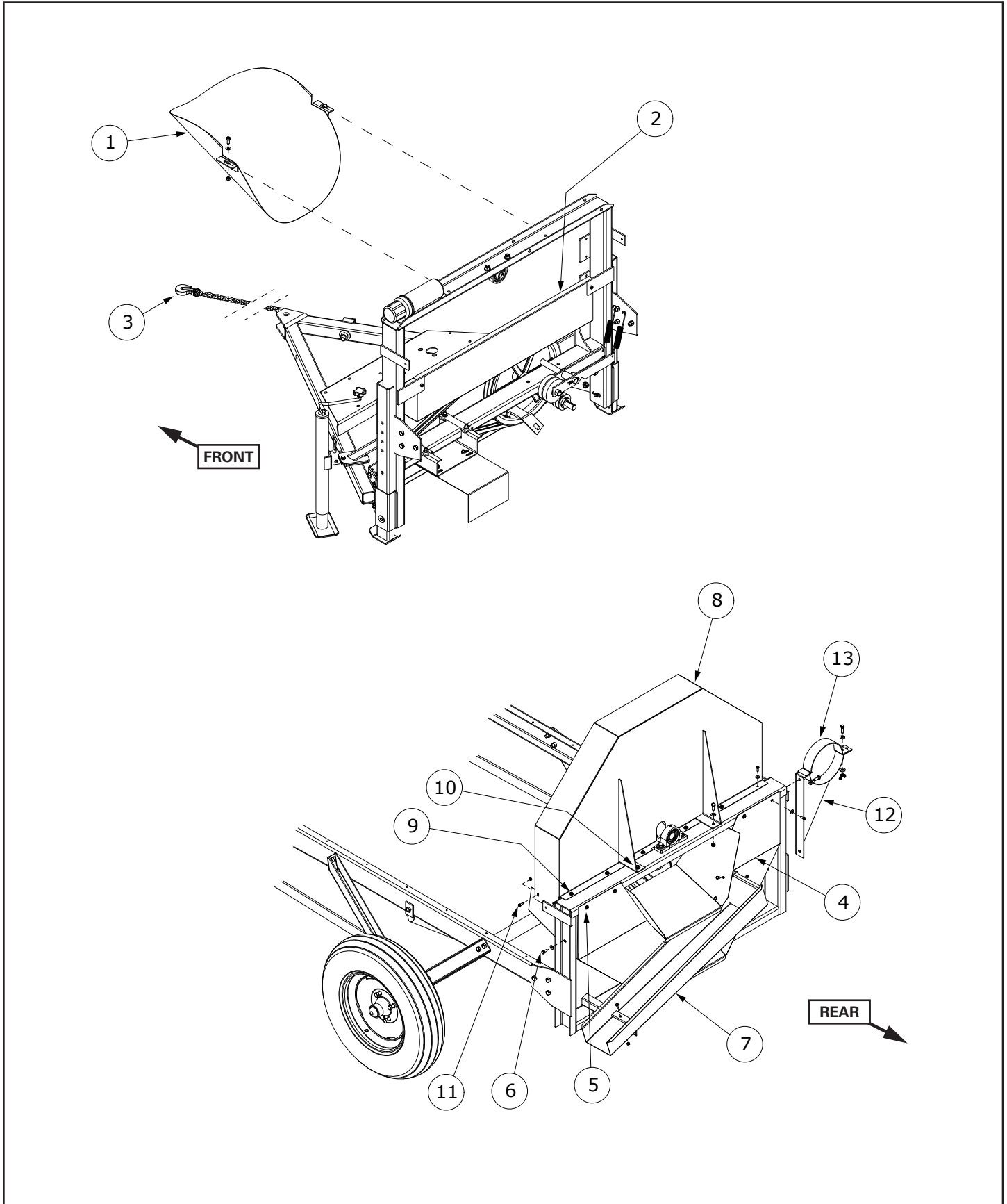
Position the discharge chute (Item 7) on the discharge pan weldment (Item 4). Attach the top end of chute to weldment using 1/4" x 3/4" hex bolts and 1/4" lock nuts. Attach the bottom end of the chute to the rear frame using 1/4" x 3/4" hex bolts and 1/4" lock nuts **[Figure 7]**.

Position the rear drum shield weldment (Item 8) on top of the rear frame. Attach the weldment to the rear frame using 1/4" x 3/4" self tapping screws (Item 9) and 5/16" flat washers. Attach the brackets using 3/8" x 1" hex bolts (Item 10), 3/8" flat washers, and 3/8" lock nuts.

Attach the sides of the weldments using 1/4" x 3/4" hex bolts (Item 11) and 1/4" lock nuts **[Figure 7]**.

Attach the intake auger support (Item 12) to the right side of the rear frame. Attach using 3/8" x 1" hex bolts, 3/8" flat washers, and 3/8" lock nuts. Attach one half clamp (Item 13) using 3/8" x 1-1/4" hex bolt, washer, and wing nut **[Figure 7]**.

Figure 7



Trash Pan

Attach the two trash pan end brackets (Item 1, 2) and trash pan side (Item 3, 4) to the trough (Item 5) using 1/4" x 3/4" hex bolts, 5/16" flat washers, and 1/4" lock nuts **[Figure 8]**.

The stub shaft of the trough flighting must face front.

Slide the trash pan assembly underneath the frame. Rest trash pan on frame edges.

Position left and right trash pan side panels (Item 6, 7) on the frame edges. Align holes along bottom of side panels with trash pan holes. Attach side panels and trash pan to frame using 1/4" x 3/4" self-tapping screws **[Figure 8]**.

Attach top corners of side panels to frame mounts using 1/4" x 3/4" hex bolts, 5/16" flat washers, and 1/4" lock nuts.

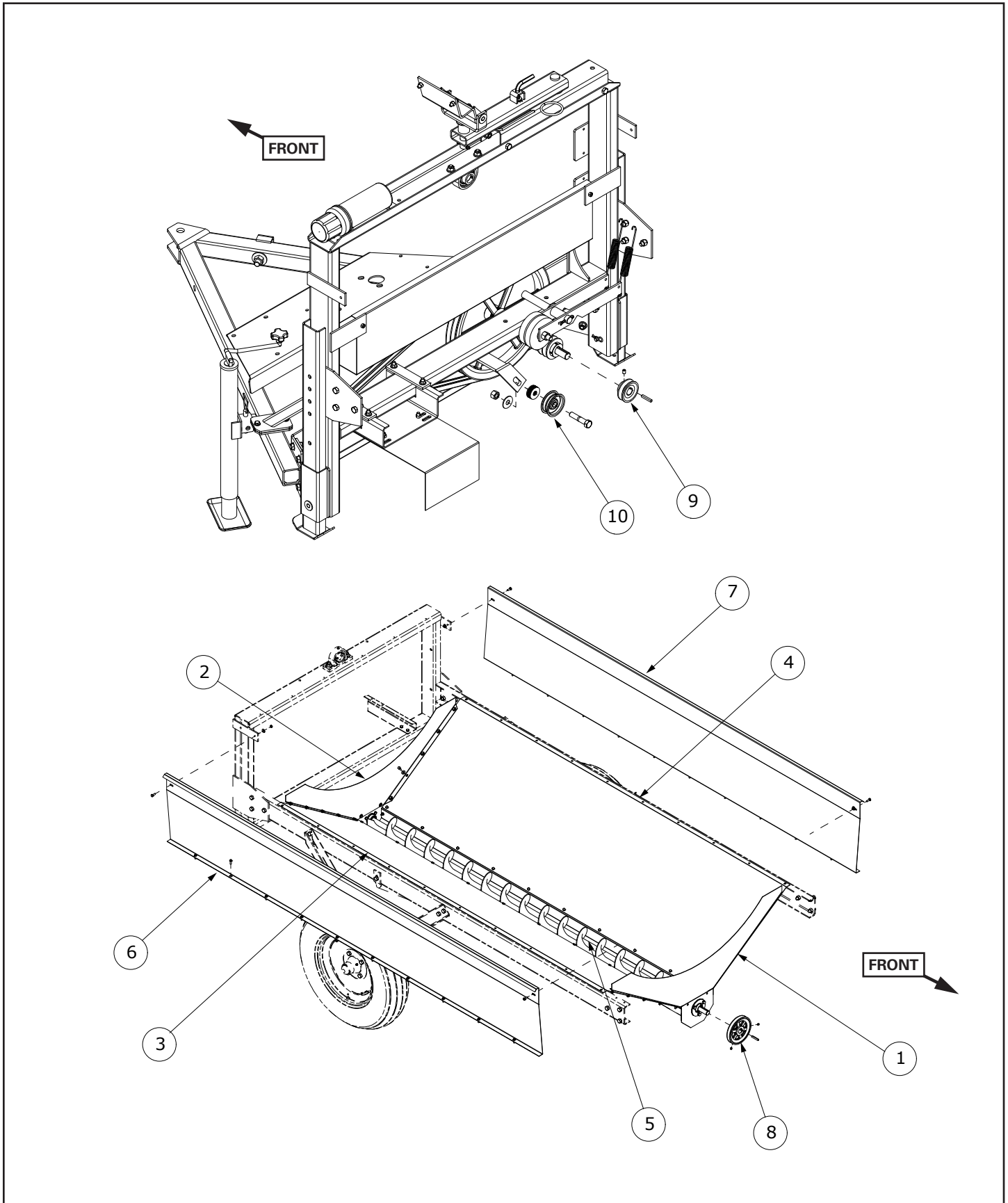
Slide one 6" single pulley (Item 8) onto the trough flighting stub shaft. Attach pulley using one key and two $\text{\O}5/16"$ x 1/4" socket set screws **[Figure 8]**.

Slide one 3" single pulley (Item 9) onto the end of the reducer shaft. Attach pulley using one key and two $\text{\O}3/8"$ x 1/2" socket set screws **[Figure 8]**.

Attach one 3" idler pulley (Item 10) to the slotted bracket welded to the front frame using one 5/8" x 3" hex bolt, 5/8" flat washers, and 5/8" lock nut **[Figure 8]**.

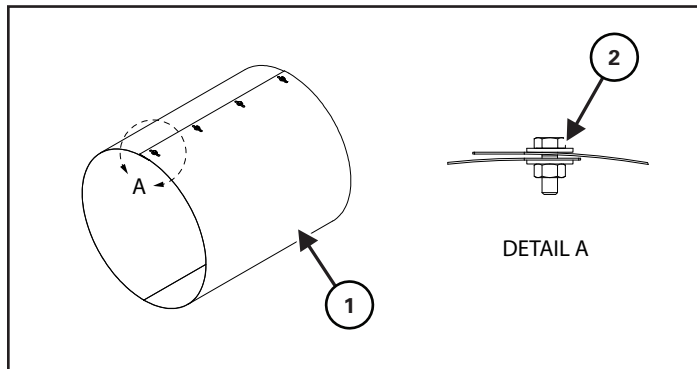
NOTE: Use 5/8" flat washers as required on both sides of idler pulley to align with belt assembly.

Figure 8



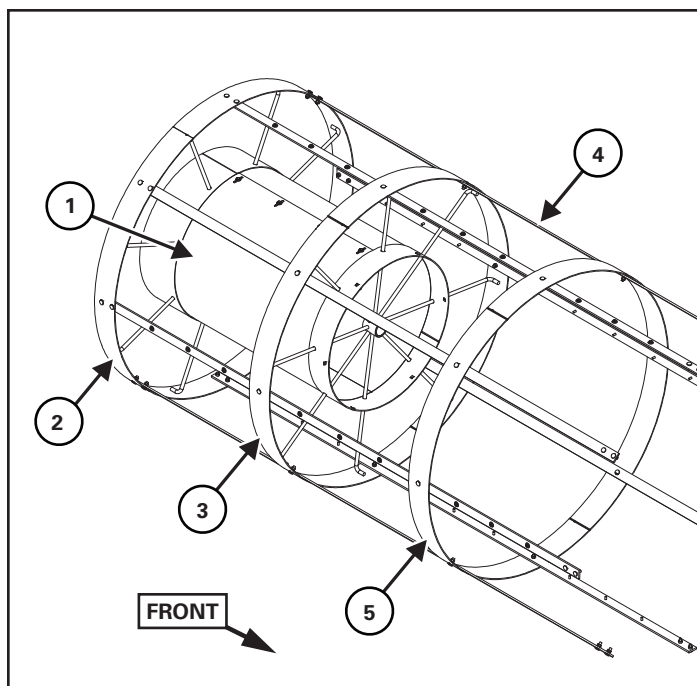
Drum

Figure 9



Assemble the cone extension tube by rolling the material (Item 1) and attaching the slots using four 1/4" x 3/4" hex bolts (Item 2), eight 1/4" flat washers (both sides), and four 1/4" lock nuts [Figure 9].

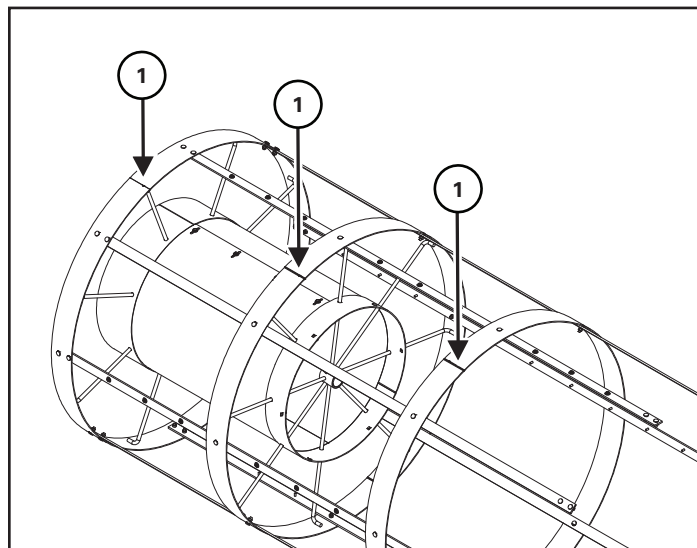
Figure 10



Position the cone extension tube (Item 1) within the rear drum ring (Item 2) and the rear center drum ring (Item 3) [Figure 10].

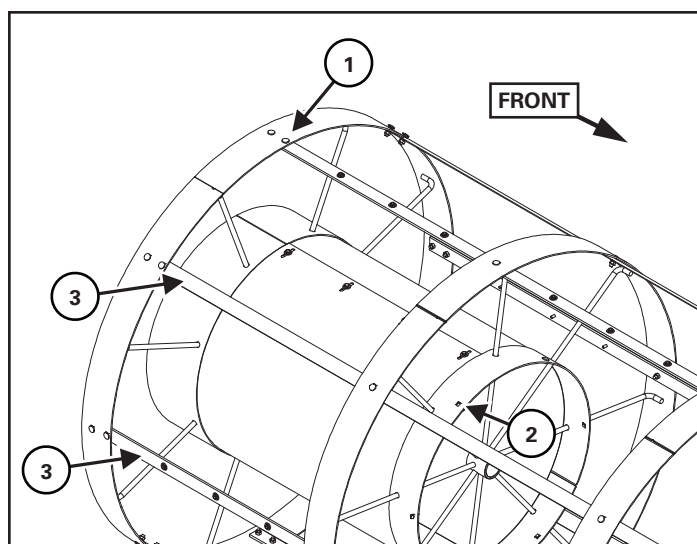
Position the 96" screen supports (Item 4) around the drum rings. Position the forward drum ring (Item 5) [Figure 10].

Figure 11



Make sure the notches (Item 1) of the drum rings are aligned [Figure 11].

Figure 12

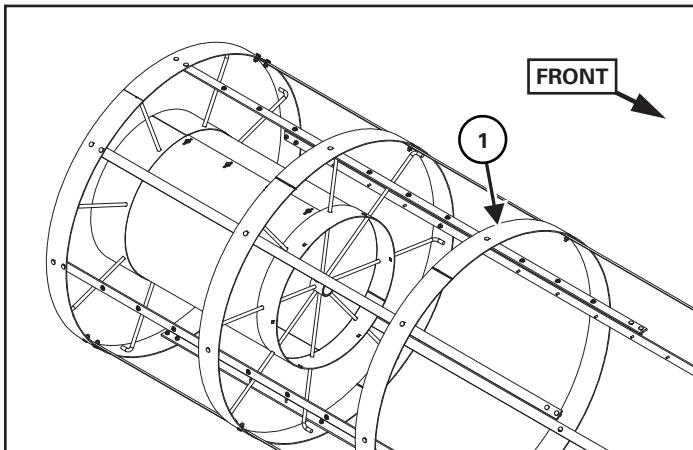


Position the outer holes (Item 1) of the rear drum ring facing forward. Position the inner holes (Item 2) of the rear center drum ring facing forward [Figure 12].

Screen supports (Item 3) must be placed within the drum rings [Figure 12].

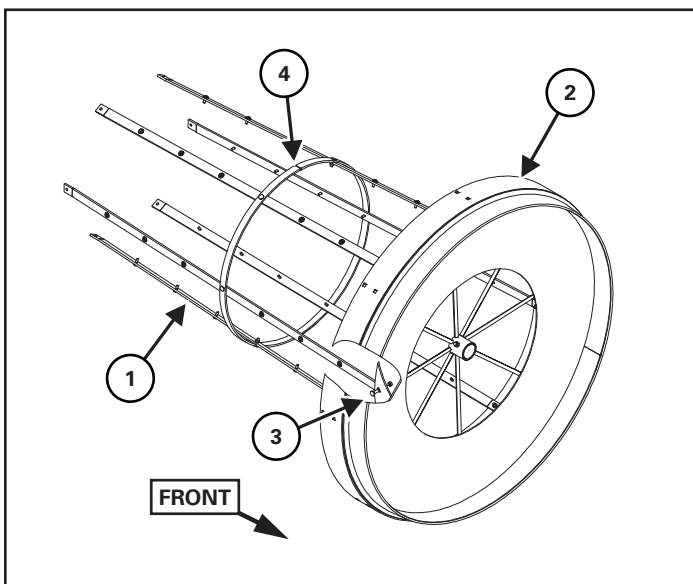
Attach the screen supports (Item 3) to the drum rings using 5/16" x 1" carriage bolts and 5/16" lock nuts [Figure 12].

Figure 13



Attach the forward drum ring (Item 1) to the screen supports using 5/16" x 1" carriage bolts and 5/16" lock nuts [Figure 13].

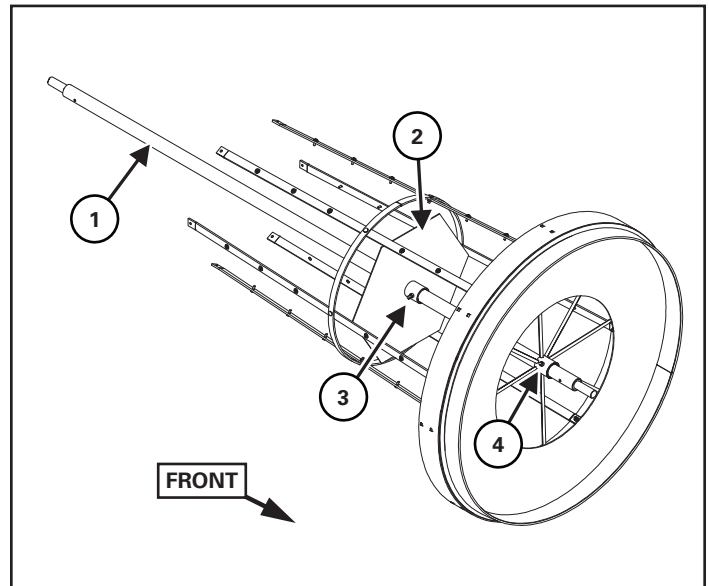
Figure 14



Position the 62-3/4" screen supports (Item 1) within the front drum ring (Item 2). Attach using 5/16" x 1" carriage bolts (Item 3) and 5/16" lock nuts [Figure 14].

Attach the support ring (Item 4) to the fifth hole of each screen support using 5/16" x 1" carriage bolts and 5/16" lock nuts. Position the screen supports inside the support ring [Figure 14].

Figure 15



Slide the drum shaft (Item 1) through the front drum ring [Figure 15].

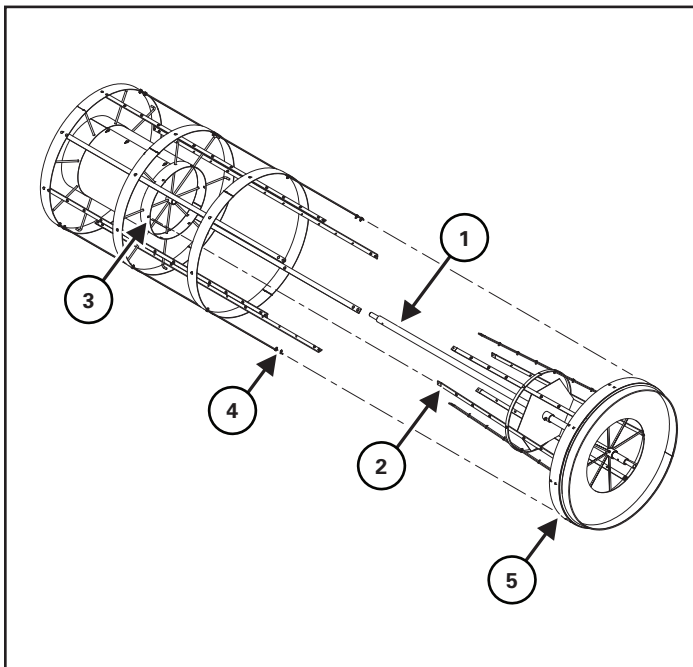
Slide the flow control weldment (Item 2) onto the drum shaft. Position the weldment slightly before the support ring [Figure 15].

Attach one 3/8" x 3/4" square head set screw (Item 3) to the flow control weldment [Figure 15].

Attach one 3/8" x 3/4" square head set screw (Item 4) to the front drum ring [Figure 15].

Do not tighten set screws at this time.

Figure 16

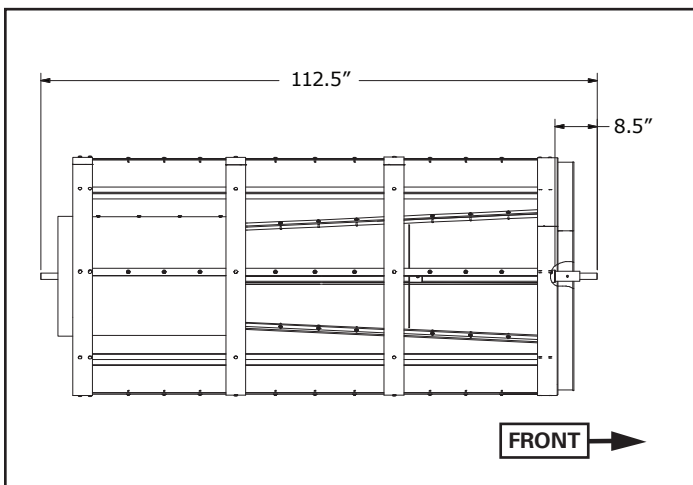


Align the inner drum and outer drum. Slide the drum shaft (Item 1) through the outer drum [Figure 16].

Attach the inner drum screen supports (Item 2) to the outer drum cone extension (Item 3) using 5/16" x 1" carriage bolts and 5/16" lock nuts [Figure 16].

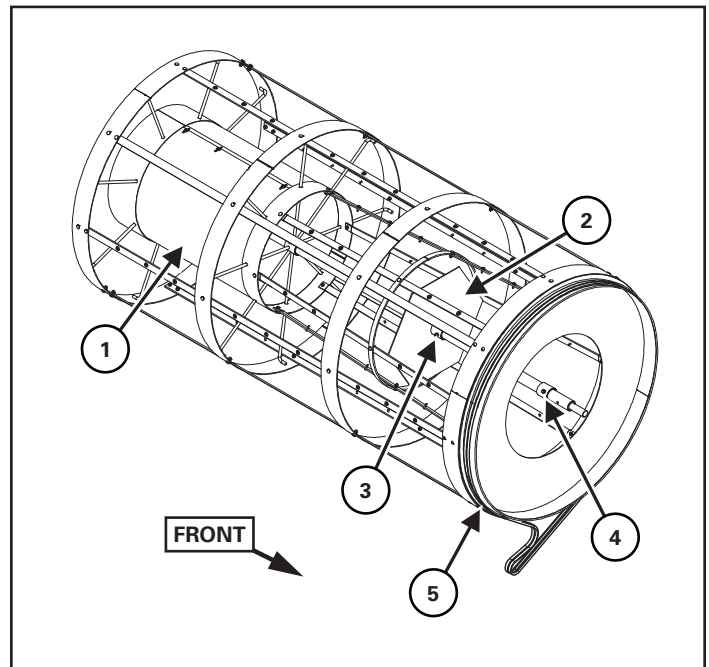
Attach the outer drum screen supports (Item 4) to the front drum ring (Item 5) using 5/16" x 1" carriage bolts and 5/16" lock nuts [Figure 16].

Figure 17



Position the drum shaft to extend 8-1/2" past the front drum ring [Figure 17].

Figure 18



Expand and tighten the cone extension (Item 1) against the drum rings [Figure 18].

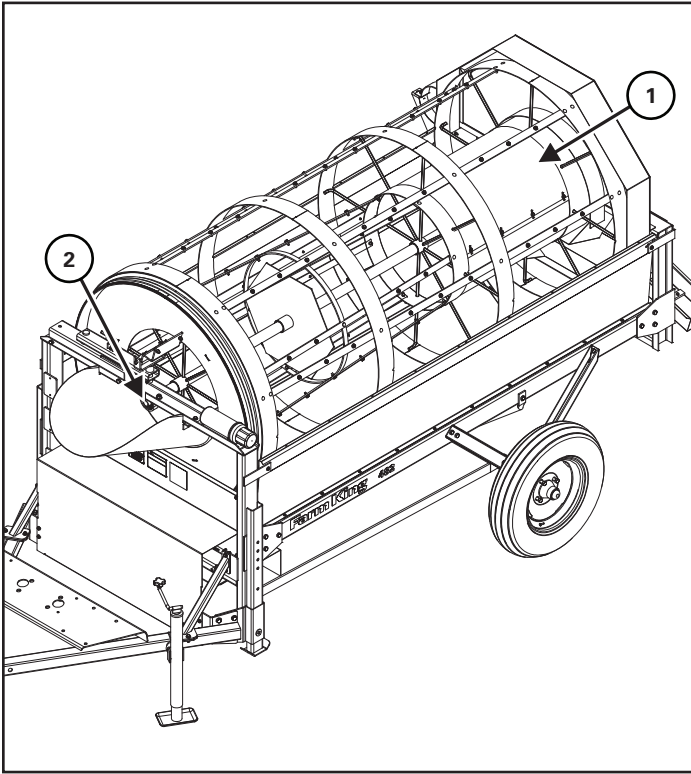
Position the flow control weldment (Item 2) ahead of the support ring [Figure 18].

Tighten the 3/8" x 3/4" square head set screw (Item 3) on the flow control weldment [Figure 18].

Tighten the 3/8" x 3/4" square head set screws (Item 4) on each of the three drum rings to secure the drum shaft [Figure 18].

Route two B-164 V-belts (Item 5) around the front drum ring [Figure 18].

Figure 19



Position the drum assembly within the grain cleaner frame. The cone extension (Item 1) should face rearward [Figure 19].

Secure the ends of the drum shaft within the two pillow bearings (Item 2) on the front and rear frame [Figure 19].

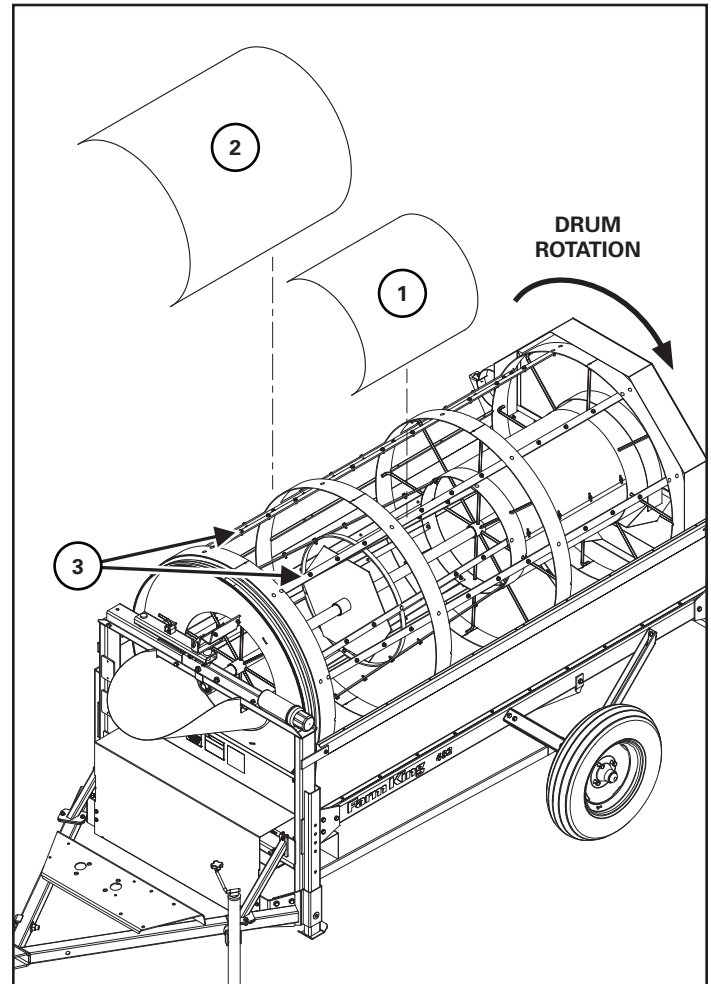
WARNING

DO NOT work under suspended parts.

Always use lifting devices, chains or straps of adequate size and strength when unloading and assembling components.

Screens

Figure 20



Attach the inner and outer drum screen sections (Item 1, 2) to the screen supports using 1/4" x 3/4" self-tap screws (Item 3) and flat washers [Figure 20].

Strap the ends of the screen sections to the drum rings using the appropriate straps.

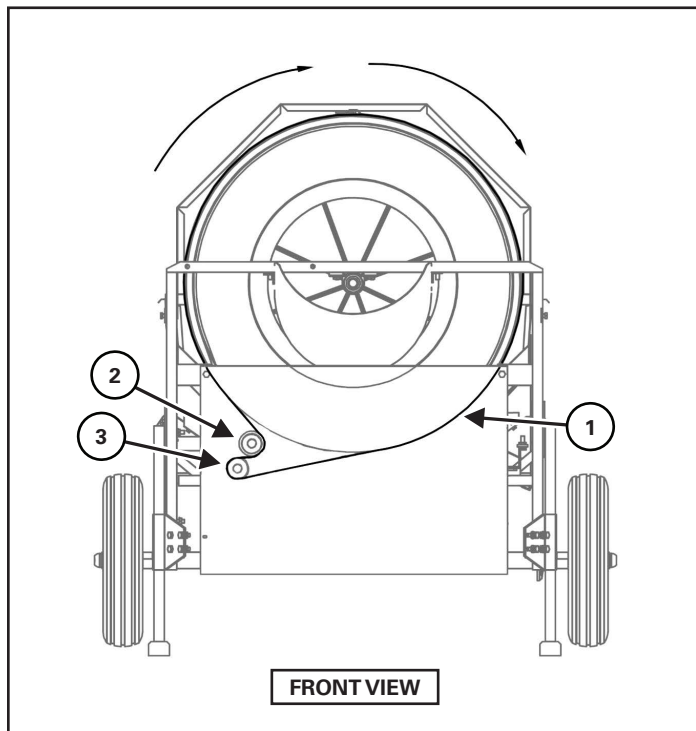
Tighten the straps with 1/4" x 2-1/2" bolts and 1/4" nuts.

IMPORTANT

All the strap bolts holding the screens should be turned so the end of the bolt trails the direction of drum rotation.

Belt Routing

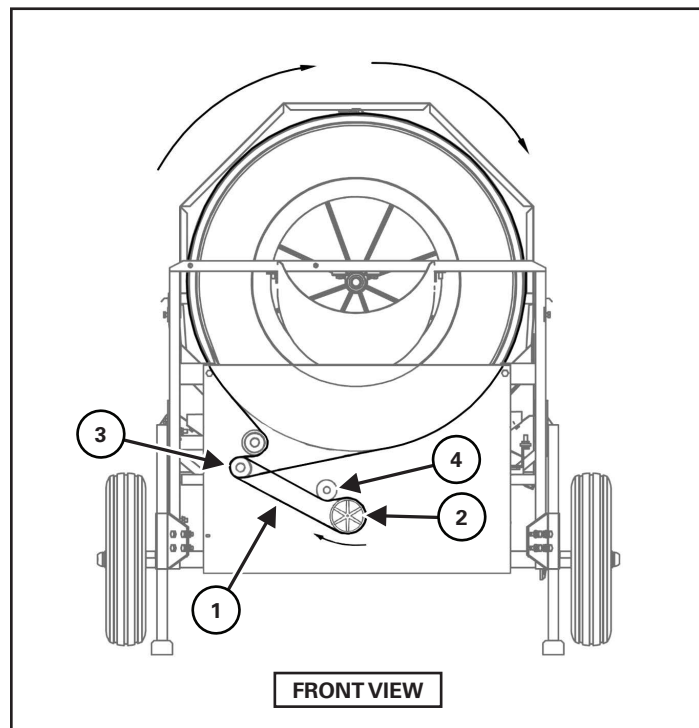
Figure 21



Route two B-164 V-belts (Item 1) around the outer drum assembly, the two idler pulleys (Item 2), and 3" double pulley (Item 3) [Figure 21].

Tighten belt by connecting the belt tightener springs on the idler arms to the frame.

Figure 22

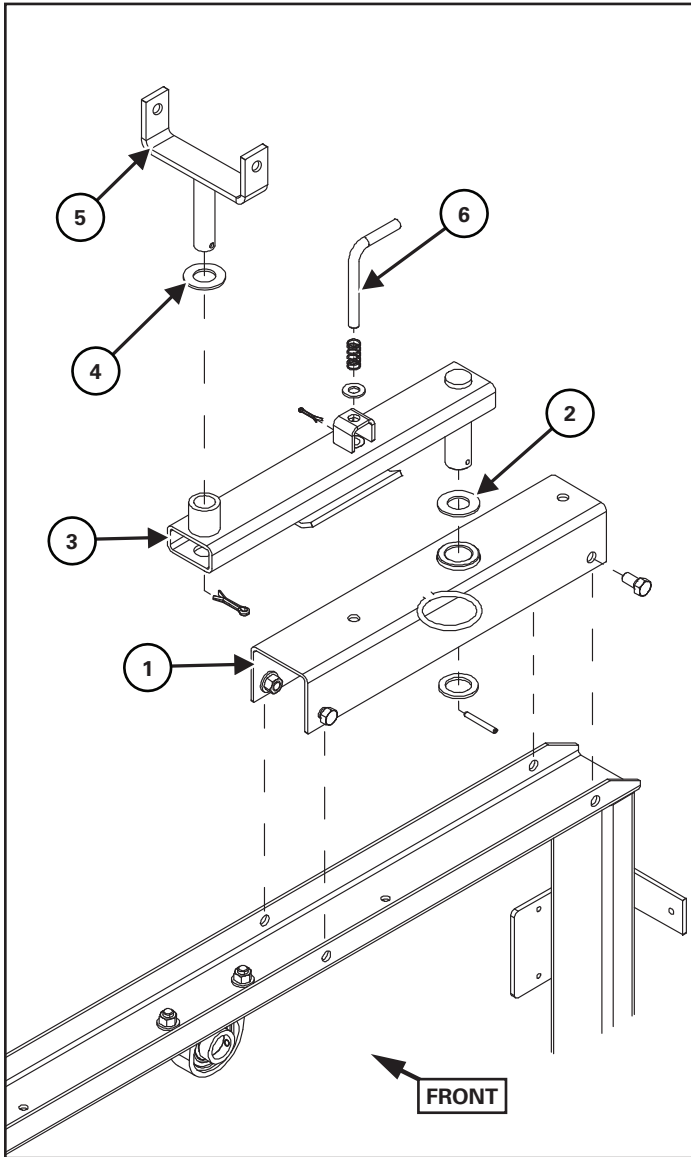


Route one 5L400 belt (Item 1) around the 6" single pulley (Item 2) on the trash pan flighting stub shaft and the 3" single pulley (Item 3) on the reducer shaft [Figure 22].

The belt must pass under the idler pulley (Item 4). Adjust tension by moving the idler pulley on the slotted bracket and tightening hardware [Figure 22].

Intake Auger Swivel Arm

Figure 23



Install one 1" ID flat washer (Item 2) to the pin on the swivel arm (Item 3). Insert the pin of the swivel arm into the hole on the swivel mount. Secure the swivel arm using one 1-1/4" ID flat washer and spring pin [Figure 23].

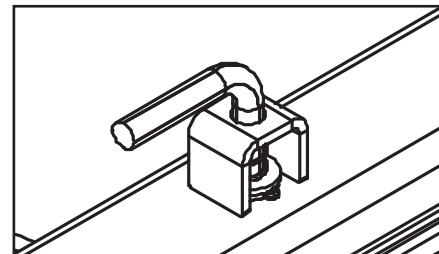
Position the swivel mount (Item 1) on top of the front frame. Attach using four 1/2" x 1" hex bolts, four 1/2" flat washers, and four 1/2" lock nuts [Figure 23].

Install one 1" ID flat washer (Item 4) to the pivot (Item 5). Insert the pivot into the swivel arm. Secure the pivot using one cotter pin [Figure 23].

Install one locking pin (Item 6), spring, and 1/2" flat washer to the swivel arm. Secure the washer and spring using one cotter pin [Figure 23].

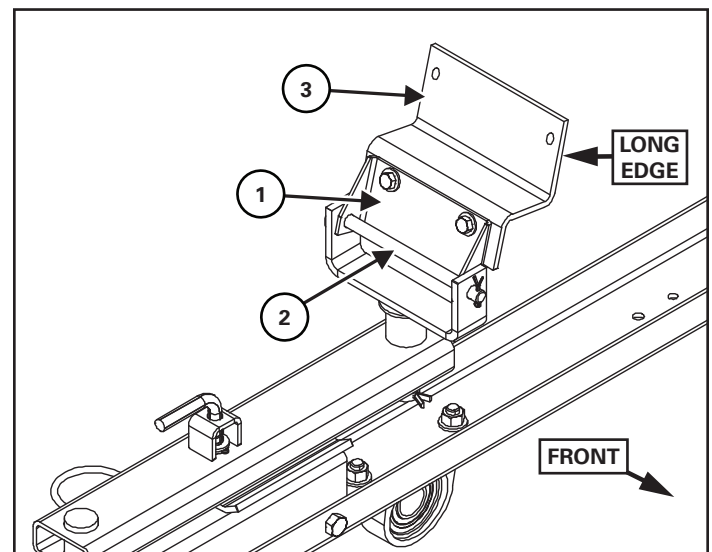


IMPORTANT



Install the locking pin properly. The spring is secured within the bracket using the washer and cotter pin.

Figure 24

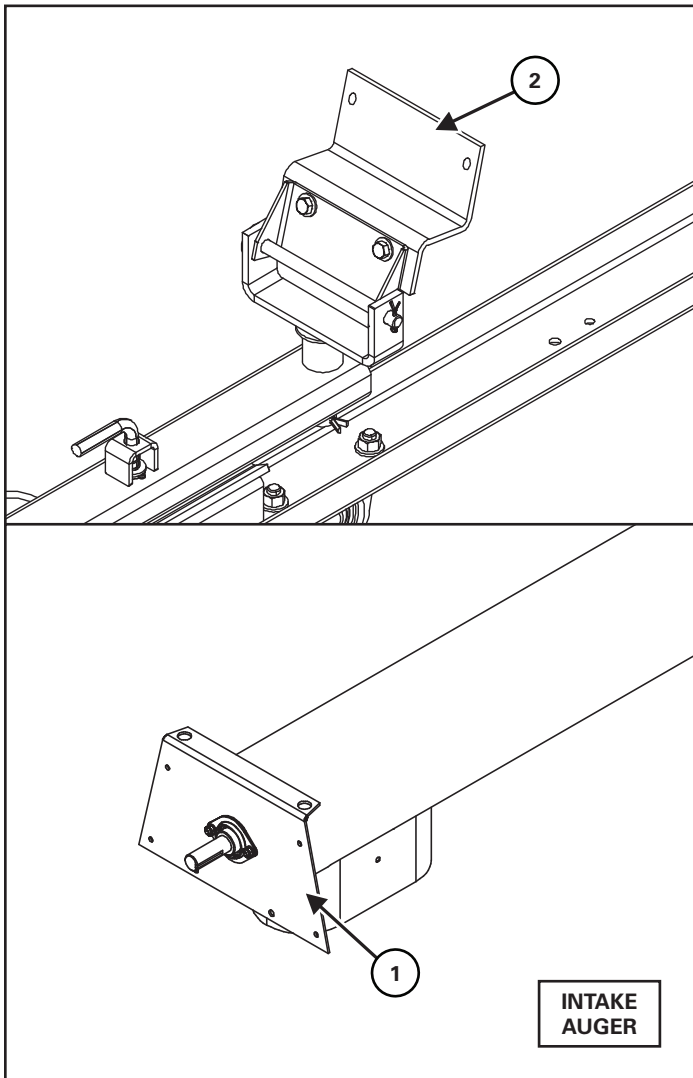


Install the connector plate (Item 1) to the pivot using one 7-1/2" pin (Item 2) and cotter pin [Figure 24].

Position the offset plate (Item 3) with the connector plate. The long edge of the offset plate must face upwards. Attach the plate using two 3/8" x 1" hex bolts, two 3/8" flat washers, and two 3/8" lock nuts [Figure 24].

Intake Auger (Optional)

Figure 25



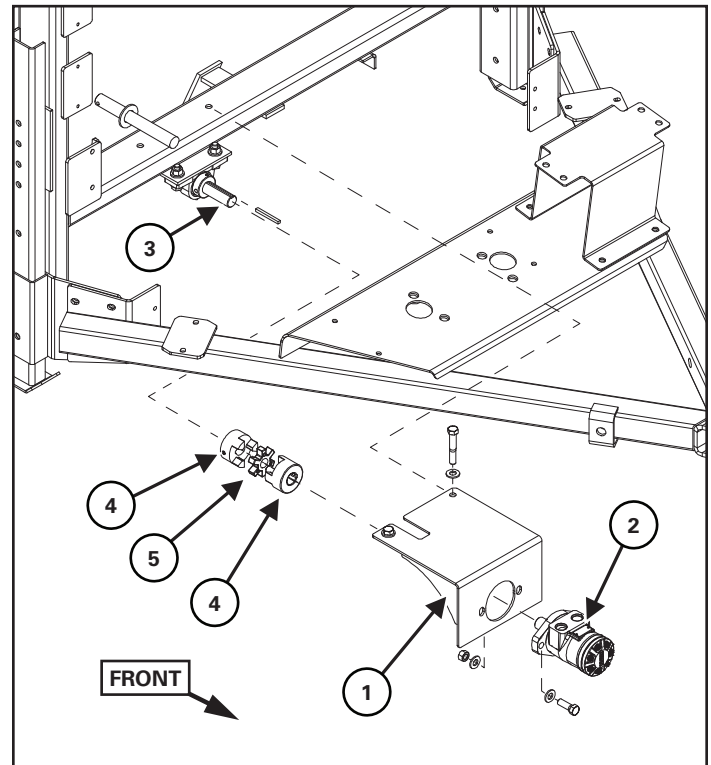
Position the intake auger mount plate (Item 1) with the offset plate (Item 2). Attach using 3/8" x 1" hex bolts, 3/8" flat washers, and 3/8" lock nuts [Figure 25].

NOTE: Motor pulley and belts not included.

Gas Engine And Hydraulics (Optional)

Components

Figure 26



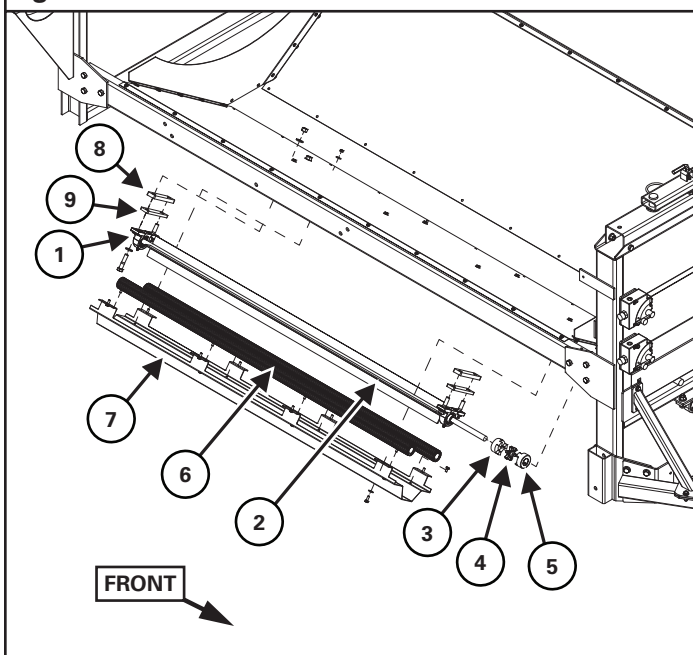
Position the motor mount (Item 1) over top the reducer shaft (Item 3) facing forward. Attach using two 1/2" x 3" hex bolts, four 1/2" flat washers, and two 1/2" lock nuts [Figure 26].

Attach the 3.6 CID hydraulic motor (Item 2) to the motor mount using two 1/2" x 1-1/2" hex bolts, four 1/2" flat washers (both sides), and two 1/2" lock nuts [Figure 26].

Install one 1/4" x 2-1/2" square key to the reducer shaft (Item 3) [Figure 26].

Connect the hydraulic motor shaft and reducer shaft (Item 3) using two 1" ID couplers (Item 4) and one rubber connector (Item 5) [Figure 26].

Figure 27



Position two 3/4" pillow bearings (Item 1) on both ends of the cooling fan shaft (Item 2). Align one 1/2" spacer (Item 8) and one 3/8" spacer (Item 9) under the base of each pillow bearing [Figure 27].

Position the bearings and cooling fan on the underside of the trash pan. Connect the cooling fan shaft with the reducer shaft using one 3/4" ID coupler (Item 3), one rubber connector (Item 4), and one 1" ID coupler (Item 5) [Figure 27].

Attach the two bearings to the underside of the trash pan using four 1/2" x 2-1/4" hex bolts, eight 1/2" flat washers (both sides), and four 1/2" lock nuts.

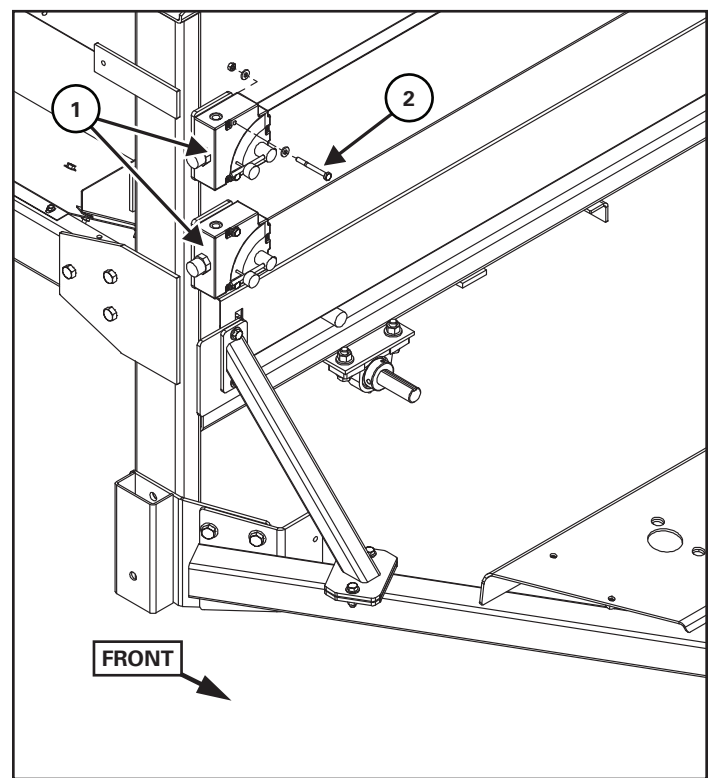
NOTE: Use the pre-punch holes in the trash pan to attach the pillow bearings.

Attach the two oil coolers (Item 6) to the underside of the fan cover (Item 7) using eight 1/4" x 1/2" hex bolts, eight 1/4" flat washers (both sides), and eight 1/4" lock nuts [Figure 27].

Attach the cover assembly over the cooling fan and to the underside of the trash pan using eight 1/4" x 3/4" hex bolts, sixteen 1/4" flat washers, and eight 1/4" lock nuts.

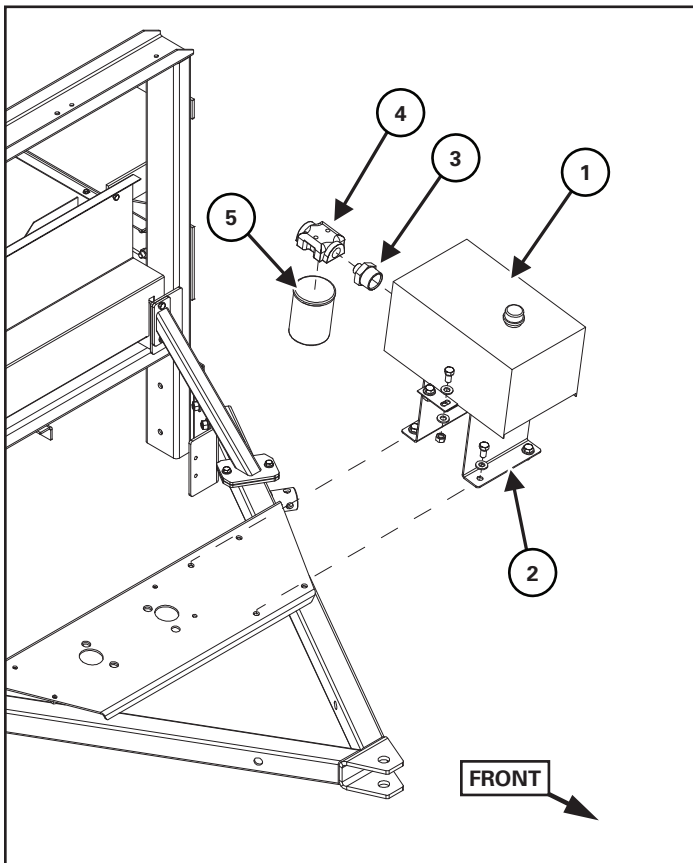
NOTE: Use the pre-punch holes in the trash pan to attach the cover.

Figure 28



Position two flow control valves (Item 1) to the front frame. Attach using two 1/4" x 2-1/2" hex bolts (Item 2), four 1/4" flat washers (both sides), and two 1/4" lock nuts [Figure 28].

Figure 29



Position the oil tank (Item 1) on top of the tank mount (Item 2). Attach the oil tank using 1/2" x 1" hex bolts, 1/2" flat washers, and 1/2" lock nuts [Figure 29].

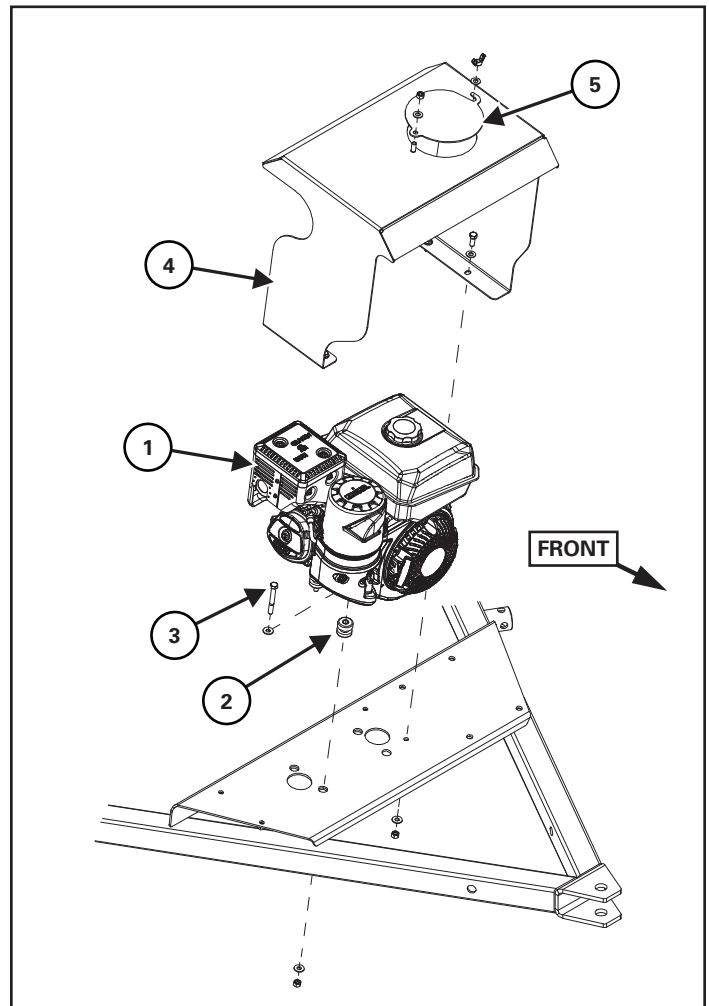
Position the tank and mount on the hitch. Attach using 1/2" x 1" hex bolts, 1/2" flat washers, and 1/2" lock nuts. The port on the side of the tank must face rearward.

Connect one -24MNPT x -12MNPT straight adapter (Item 3) to the oil tank [Figure 29].

Connect one filter head (Item 4) to the straight adapter [Figure 29].

Connect one 10 micron oil filter (Item 5) to the filter head [Figure 29].

Figure 30



Position the engine (Item 1) on the hitch frame mount. Place four rubber isolators (Item 2) between the engine and frame over the four bolt holes [Figure 30].

The engine driveline must face rearward.

Attach the engine using four 3/8" x 3" hex bolts (Item 3), eight 3/8" flat washers (both sides), and four 3/8" lock nuts [Figure 30].

Position the cover (Item 4) over the engine. Attach using four 3/8" X 1" hex bolts, eight 3/8" flat washers (both sides), four 3/8" lock nuts [Figure 30].

Position the hatch (Item 5) on the engine cover. Attach the hole side using one 3/8" lock nut and 3/8" flat washer. Attach the hook side using one 3/8" wing nut and 3/8" flat washer [Figure 30].

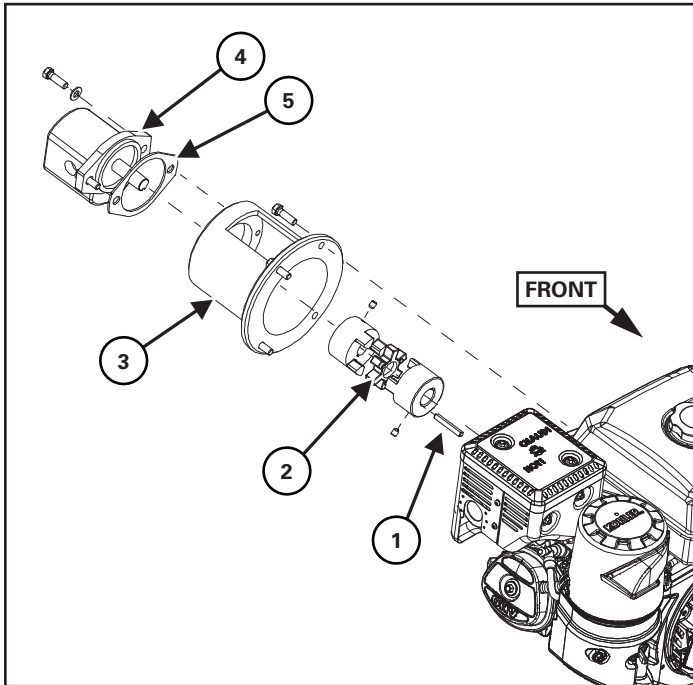


IMPORTANT

The following procedure may not depict your specific engine.

Contact your dealer for proper engine installation.

Figure 31



Install one 1/4" x 2" square key (Item 1) to the engine driveline. Install two coupling halves (Item 2) to the engine driveline [Figure 31].

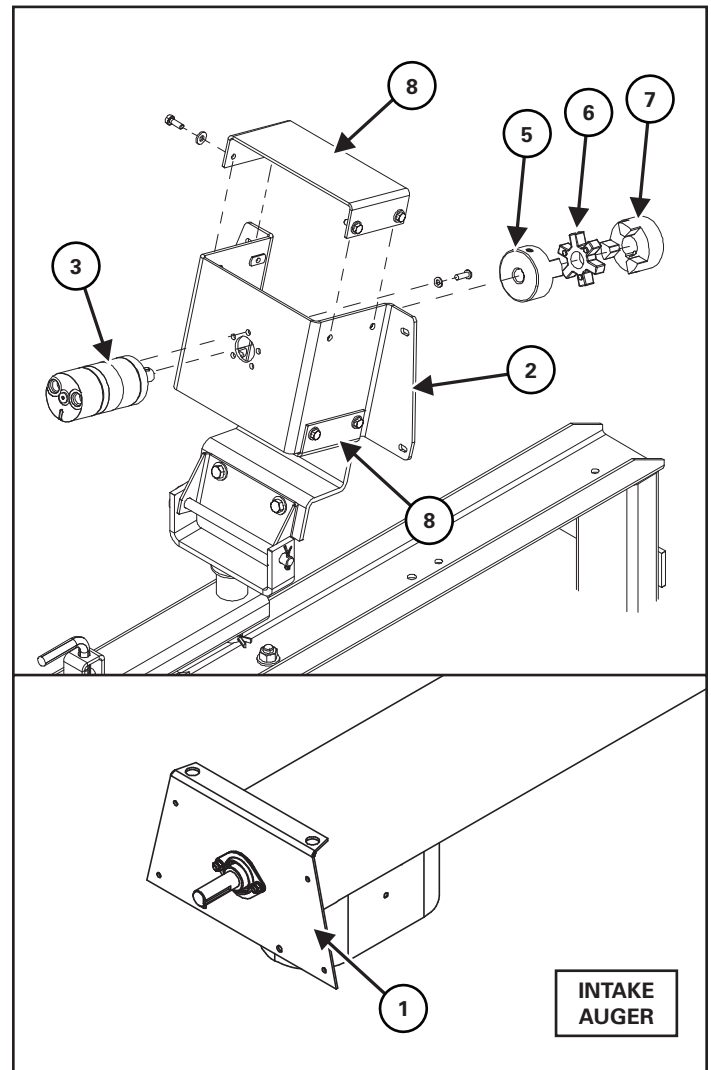
Position the hydraulic pump mount (Item 3) over the driveline. Attach the mount to the engine using six 3/8" x 1-1/4" hex bolts [Figure 31].

Position the hydraulic pump (Item 4) and pump plate (Item 5) on the mount [Figure 31].

NOTE: Ensure the hydraulic pump is installed right-side up. The wording on the back of the pump should be oriented correctly and legible.

Connect the pump driveline to the couplings. Attach the pump to the mount using two 3/8" x 1-1/4" hex bolts and two 3/8" flat washers [Figure 31].

Figure 32



Position the intake auger mount plate (Item 1) with the motor mount plate (Item 2). Attach using four 1/4" x 1" hex bolts and four 1/4" lock nuts [Figure 32].

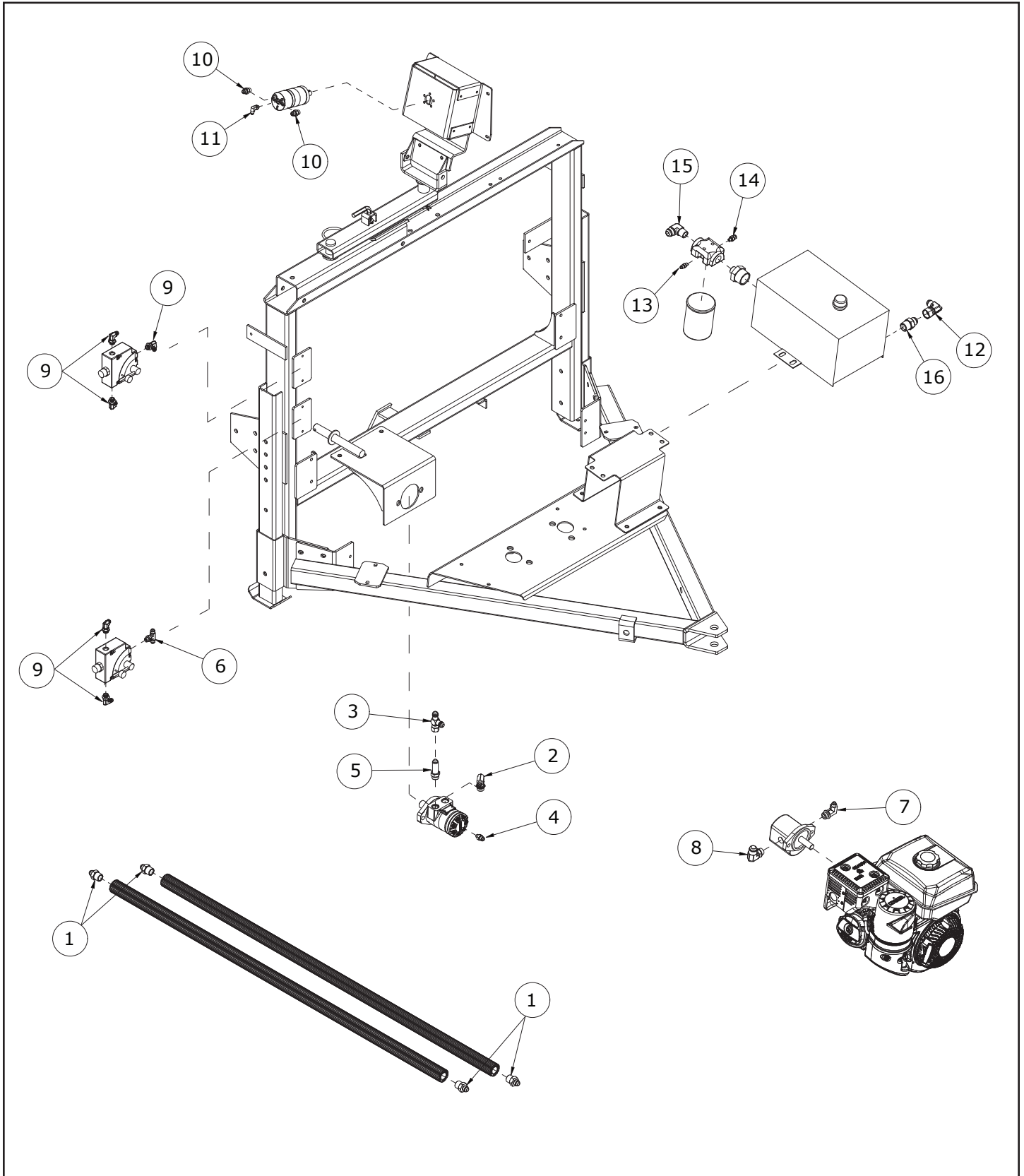
Position the 1.93 CID hydraulic motor (Item 3) on the mount plate (Item 2). Attach to the plate using five 1/4" x 3/4" BHCS screws and five 1/4" lock washers [Figure 32].

Connect the hydraulic motor shaft and intake auger driveline (Item 4) using one 5/8" ID coupler (Item 5), one rubber connector (Item 6), and one 1" ID coupler (Item 7) [Figure 32].

Install the top and bottom covers (Item 8) to the mount plate. Attach using eight 1/4" x 3/4" hex bolts and eight 1/4" flat washers [Figure 32].

Fittings

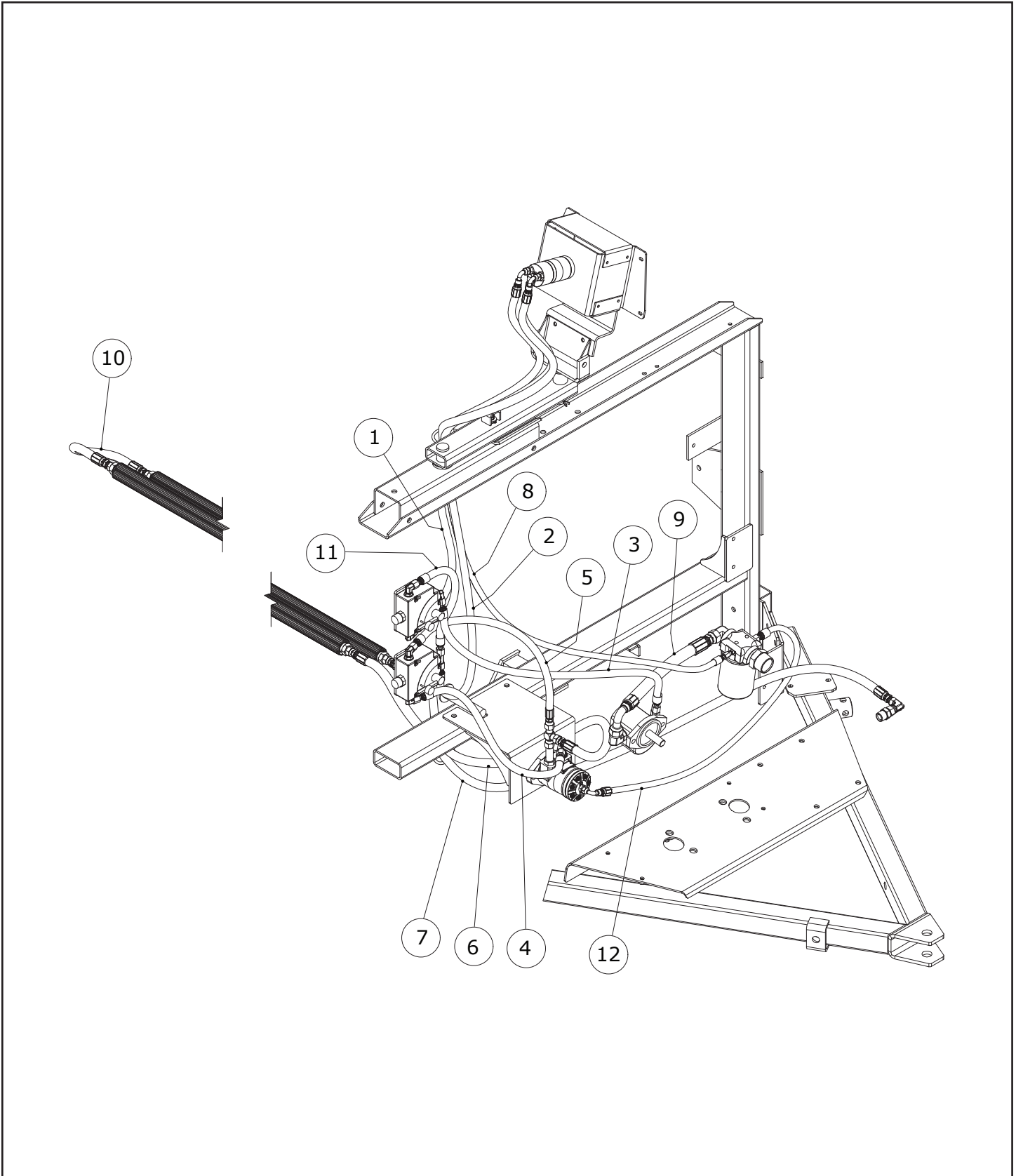
Figure 33



ITEM [Figure 33]	PART NUMBER	DESCRIPTION	QTY.
1	820362	ADAPTOR - 3/4 MJIC X 3/4 MNPT	4
2	812457	ELBOW-10 MORB X -6 MJIC, 90 DEG	1
3	812786	TEE 3/4 MJIC X RUN 3/4 SWFJIC	1
4	812838	ADAPTOR STR 7/16MORB X9/16MJIC	1
5	813094	ADAPTOR STR 7/8MORB X 3/4MJIC L	1
6	820363	TEE - BRANCH 9/16 MJIC X 9/16 MORB	1
7	812457	ELBOW-10 MORB X -6 MJIC, 90 DEG	1
8	865574	ELBOW 90 7/8MORB X 1.0625MJIC	1
9	811918	ELBOW 90 9/16 SWMORB X 9/16 MJIC	5
10	812086	ADAPTOR STR 9/16 MORB X 9/16 MJIC	2
11	820361	ELBOW - 7/16 MJIC X 3/8 MORB	1
12	821030	ELBOW 90 DEG -08MJIC X -10SWFJIC	1
13	820373	ADAPTOR - 7/16 MJIC X 1/8 MNPT	1
14	820729	ADAPTOR - 9/16 MJIC X 1/8 MNPT	1
15	886798	ELBOW 90 3/4 MNPT X 1 1/16 MJIC	1
16	886727	ADAPTOR STR 3/4MNPT X 7/8MJIC	1

Hoses

Figure 34



ITEM [Figure 34]	PART NUMBER	DESCRIPTION	QTY.
1	820319	HOSE - 3/8" X 60" 9/16SWFJIC X 9/16SWFJIC90	1
2	820320	HOSE - 3/8" X 72" 9/16SWFJIC X 9/16SWFJIC90	1
3	820321	HOSE - 3/8" X 36" 9/16SWFJIC X 9/16SWFJIC	1
4	820322	HOSE - 3/8" X 22" 9/16SWFJIC X 9/16SWFJIC	1
5	820323	HOSE - 3/8" X 23" 3/4SWFJIC X 9/16SWFJIC	1
6	820324	HOSE - 1/2" X 54" 3/4SWFJIC X 3/4SWFJIC	1
7	820325	HOSE - 1/2" X 72" 3/4SWFJIC X 3/4SWFJIC	1
8	820326	HOSE - 1/4" X 90" 7/16SWFJIC X 7/16SWFJIC	1
9	820366	HOSE - 3/4" X 12.5" 1-1/16SWFJIC X 1-1/16SWFJIC90	1
10	820724	HOSE - 1/2" X 19" 3/4SWFJIC X 3/4SWFJIC	1
11	820725	HOSE - 3/8" X 15" 9/16SWFJIC X 9/16SWFJIC	1
12	820726	HOSE - 3/8" X 40" 9/16SWFJIC X 9/16SWFJIC90	1

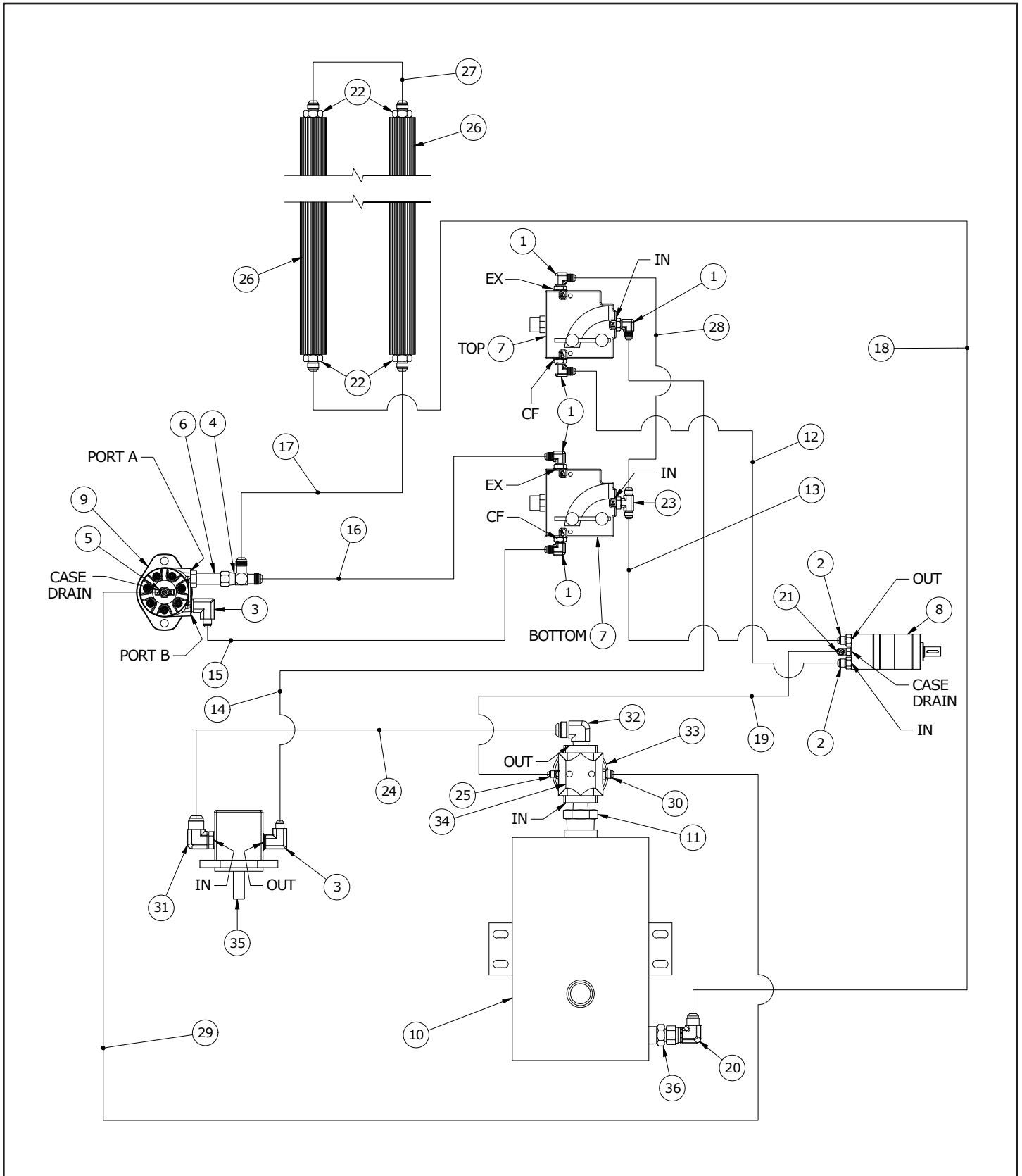
IMPORTANT

Route hoses (Item 6, 7) through the hose ring beneath the frame and to the oil cooler [Figure 34].

Make sure hoses do not rub against the rotating assembly.

Schematic

Figure 35



ITEM [Figure 35]	PART NUMBER	DESCRIPTION	QTY.
1	811918	ELBOW 90 9/16 SWMORB X 9/16 MJIC	5
2	812086	ADAPTOR STR 9/16 MORB X 9/16 MJIC	2
3	812457	ELBOW-10 MORB X -6 MJIC, 90 DEG	2
4	812786	TEE 3/4 MJIC X RUN 3/4 SWFJIC	1
5	812838	ADAPTOR STR 7/16MORB X9/16MJIC	1
6	813094	ADAPTOR STR 7/8MORB X 3/4MJIC L	1
7	820080	VALVE - FLOW CONTROL	2
8	820181	MOTOR - HYDRAULIC 1.93 CID	1
9	820182	MOTOR - HYDRAULIC 3.6 CID	1
10	820304	TANK - HYD 4.8 GAL	1
11	820305	ADAPTOR STR -24MNPT X -12MNPT	1
12	820319	HOSE - 3/8" X 60" 9/16SWFJIC X 9/16SWFJIC90	1
13	820320	HOSE - 3/8" X 72" 9/16SWFJIC X 9/16SWFJIC90	1
14	820321	HOSE - 3/8" X 36" 9/16SWFJIC X 9/16SWFJIC	1
15	820322	HOSE - 3/8" X 22" 9/16SWFJIC X 9/16SWFJIC	1
16	820323	HOSE - 3/8" X 23" 3/4SWFJIC X 9/16SWFJIC	1
17	820324	HOSE - 1/2" X 54" 3/4SWFJIC X 3/4SWFJIC	1
18	820325	HOSE - 1/2" X 72" 3/4SWFJIC X 3/4SWFJIC	1
19	820326	HOSE - 1/4" X 90" 7/16SWFJIC X 7/16SWFJIC	1
20	821030	ELBOW 90 DEG -08MJIC X -10SWFJIC	1
21	820361	ELBOW - 7/16 MJIC X 3/8 MORB	1
22	820362	ADAPTOR - 3/4 MJIC X 3/4 MNPT	4
23	820363	TEE - BRANCH 9/16 MJIC X 9/16 MORB	1
24	820366	HOSE - 3/4" X 12.5" 1-1/16SWFJIC X 1-1/16SWFJIC90	1
25	820373	ADAPTOR - 7/16 MJIC X 1/8 MNPT	1
26	820428	OIL COOLER	2
27	820724	HOSE - 1/2" X 19" 3/4SWFJIC X 3/4SWFJIC	1
28	820725	HOSE - 3/8" X 15" 9/16SWFJIC X 9/16SWFJIC	1
29	820726	HOSE - 3/8" X 40" 9/16SWFJIC X 9/16SWFJIC90	1
30	820729	ADAPTOR - 9/16 MJIC X 1/8 MNPT	1
31	865574	ELBOW 90 7/8MORB X 1.0625MJIC	1
32	886798	ELBOW 90 3/4 MNPT X 1 1/16 MJIC	1
33	910202	10 MICRON OIL FILTER	1
34	910212	FILTER HEAD	1
35	914263	PUMP-HYDRAULIC ENGINE CASAPPA	1
36	886727	ADAPTOR STR 3/4MNPT X 7/8MJIC	1

Farm King



Operation

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Farm King



Pre - Operation Checklist

Before operating the equipment for the first time and each time thereafter, check the following items:

1. Lubricate the equipment per the schedule outline in the Maintenance Section.
2. Check the equipment for damaged, loose or missing parts. Repair as needed before operation.
3. Use only a tractor of adequate power and weight to pull the machine.
4. Check the drums. Remove any twine, wire or other material that has become entangled.
5. Check belt tension.
6. Check that all bearings turn freely. Replace any that are rough or seized.
7. Make sure that all guards and shields are in place, secured and functioning as designed.
8. Check condition of all hydraulic components for leaks. Repair as required. Do not operate with hydraulic leaks.

WARNING



HIGH PRESSURE FLUID HAZARD

Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

WARNING

AVOID INJURY OR DEATH

Before you leave the operator's position:

- Always park on a flat level surface.
- Place all controls in **NEUTRAL**.
- Engage the park brake.
- Stop the engine and remove the key.
- Wait for all moving parts to stop.

WARNING



AVOID INJURY OR DEATH

Before moving the tractor, look in all directions and make sure no bystanders, especially small children are in the work area.

Do not allow anyone between the tractor and the equipment when backing up to the equipment for connecting.

Gas Engine Hydraulic Hoses (Optional)

The grain cleaner is equipped with the following hydraulic functions if equipped with a gas engine:

1. Hydraulic motor drum rotator
2. Hydraulic motor intake auger
3. Hydraulic motor oil cooler



WARNING



HIGH PRESSURE FLUID HAZARD

To prevent serious injury or death from high pressure fluid:

- Relieve pressure on system before repairing or adjusting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.



IMPORTANT

Contain and dispose of any oil leakage in an environmentally safe manner.

Thoroughly clean the couplers before making connections. Dirt can quickly damage the system.

Make sure the couplers are fully engaged. If the couplers do not fully engage, check to see that the couplers are the same size and type.

When disconnecting the hydraulic hoses:

- Release pressure
- Ensure couplers are cooled down before disconnecting



WARNING

AVOID BURNS

Hydraulic fluid, tubes, fittings and couplers can get hot when running equipment. Be careful when connecting and disconnecting couplers.

Operation

The Farm King 482 Grain Cleaner handles up to 1900 bushels per hour and uses two stage screening. Trash material is discharged onto the ground and cleaned grain is discharged from the chute.

The Farm King 482 Grain Cleaner is equipped with a trash pan. The trash pan collects and separates the trash using an auger.



CAUTION

Read operator and parts manual before operating the implement.

Do not permit riders.

Keep all guards and shields in place.

Keep hands, feet, clothing and hair away from moving parts.

Stop engine, set brake, remove key and wait for all moving parts to stop before servicing, adjusting, repairing and unplugging.

Remove bystanders, especially children, before starting or while operating.

Block up before working beneath unit.

Review safety instructions annually.



WARNING

ROTATING DRIVELINE HAZARD

Keep shields and all guards in place.

Keep away from moving parts.

Keep bystanders away.

Connect the equipment to the tractor and place the support stands into the travel position.

Move equipment to the work area.

Adjust the height of the front legs to maximize capacity.

Position and adjust bins or intake auger (if applicable).

Choose the appropriate screen for the work required.



CAUTION

Rest cleaner on the two adjustable front legs during operation. Do not rest cleaner on jack during operation.

Adjust the cleaner height to achieve maximum capacity without grain loss through the trash chute.



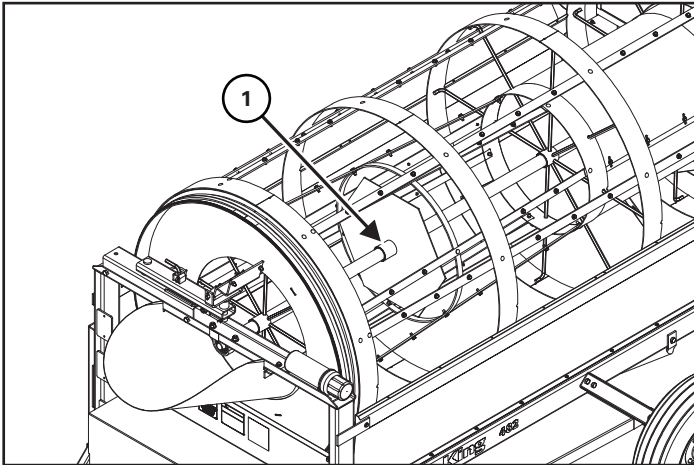
IMPORTANT

3 HP 1725 RPM electric motor is recommended to drive the cleaner.

The electric motor with weatherproof switch must be supplied by the customer.

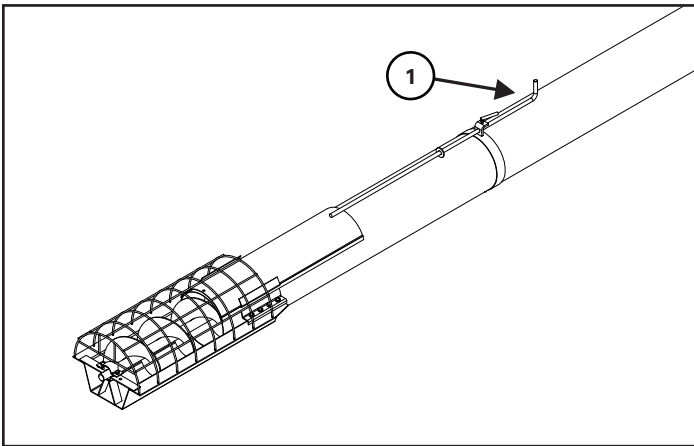
Consult electric motor manual for proper operation.

Figure 36



Adjust the cone flow control (Item 1) so trash can get through while minimizing grain loss [Figure 36].

Figure 37



Capacity will vary with grain type and moisture content.

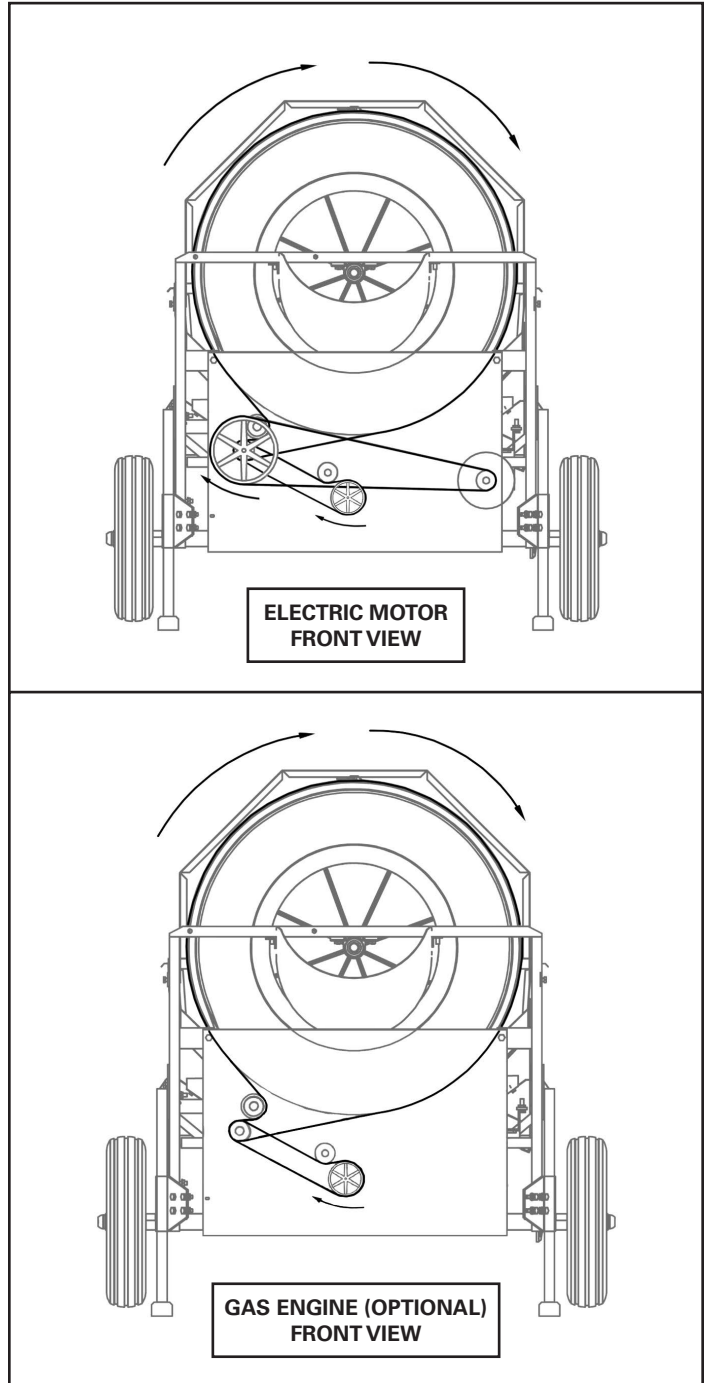
Adjust the intake auger flow control (Item 1) to match material input with equipment capacity [Figure 37].

CAUTION

Run the equipment until empty before stopping.

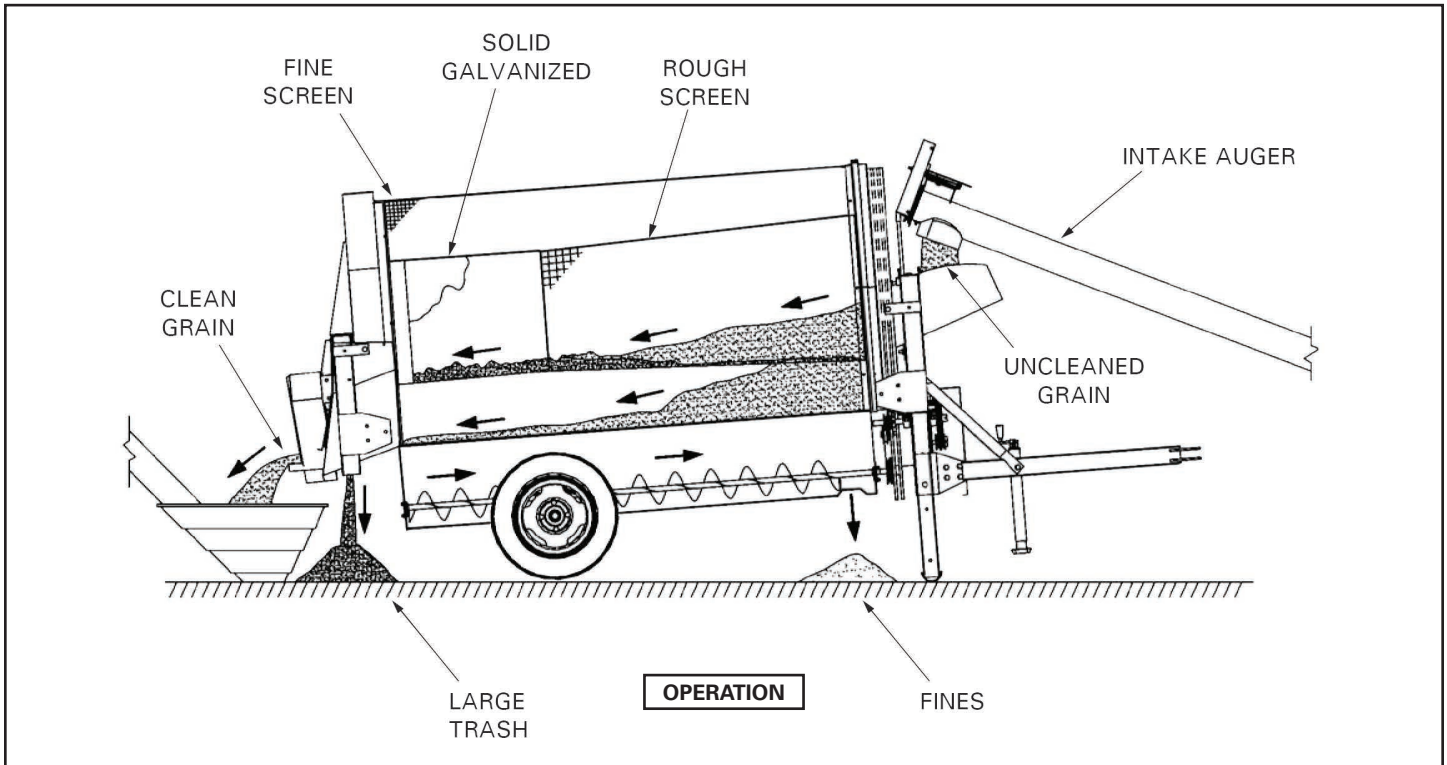
Do not leave grain in the drum or start the equipment while loaded.

Figure 38



Belt rotation as viewed from the front of the equipment [Figure 38].

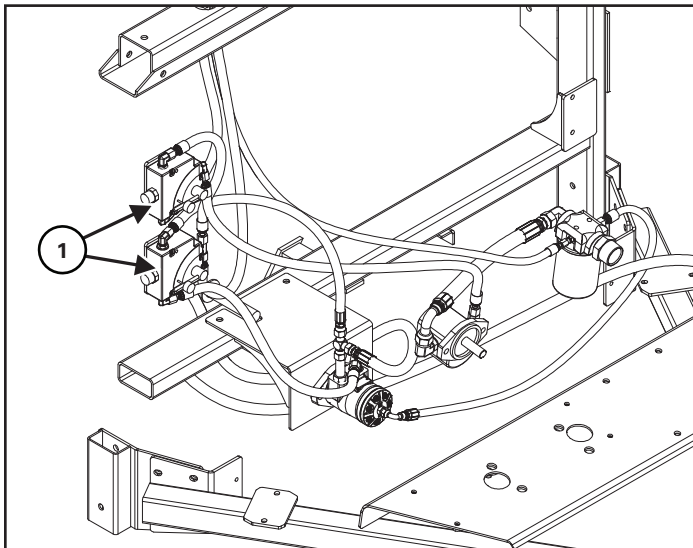
Figure 39



Grain cleaning process as viewed from the side of the equipment [Figure 39].

Gas Engine With Hydraulic Flow Controls (Option)

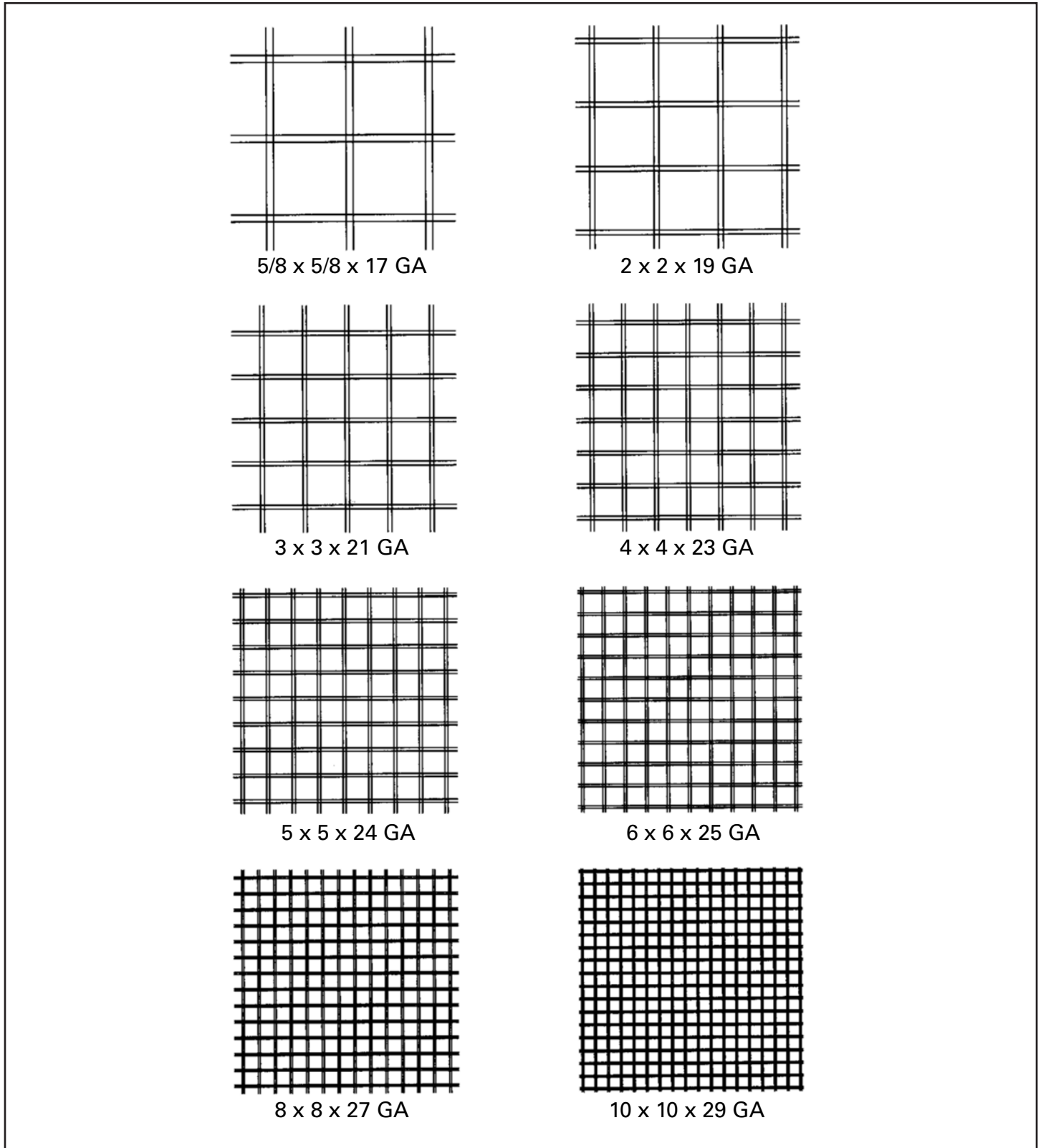
Figure 40



Hydraulic flow controls (Item 1) can be used to independently adjust the speed of the intake auger and cleaner drum [Figure 40].

Screen Sizes

Figure 41



Illustrations are approximate in size [Figure 41].

MATERIAL	INNER CONE	OUTER DRUM
Corn	Small - 2 x 2 x 19 Ga.	Standard - 4 x 4 x 23 Ga.
	Standard - 5/8 x 5/8 x 17 Ga.	
Wheat	Standard - 4 x 4 x 23 Ga.	Standard - 8 x 8 x 27 Ga.
	Large - 3 x 3 x 21 Ga.	Large - 6 x 6 x 25 Ga.
Sunflower	Standard - 2 x 2 x 19 Ga.	Small - 8 x 8 x 27 Ga.
	Large - 5/8 x 5/8 x 17 Ga.	Standard - 6 x 6 x 25 Ga.
		Large - 5 x 5 x 24 Ga.
Soybean	Small - 3 x 3 x 21 Ga.	Small - 6 x 6 x 25 Ga.
	Standard - 2 x 2 x 19 Ga.	Standard - 5 x 5 x 24 Ga.
Milo	Standard - 4 x 4 x 23 Ga.	Standard - 8 x 8 x 27 Ga.
	Large - 3 x 3 x 21 Ga.	Large - 6 x 6 x 25 Ga.
Flax	Small - 5 x 5 x 24 Ga.	Standard - 10 x 10 x 29 Ga.
	Standard - 4 x 4 x 23 Ga.	
Optional	10 x 10 x 28 Ga.	-

*Recommendation based on kernel size.

Transporting

Always comply with federal, state, local and provincial laws regarding the transport of farm equipment on public roadways.



AVOID INJURY OR DEATH

- Keep shields and all guards in place
- Keep bystanders away.
- Do not allow riders.
- Always use hazard flashers on the tractor when transporting unless prohibited by law.
- Always follow local regulations when transporting on public roadways. Check with your local authorities.



Never exceed 20 mph (32 kph).



Use of an unapproved hitch or tractor / tow vehicle can result in loss of control, leading to serious injury or death.

Tractor / tow vehicle and hitch must have the rated capacity to tow equipment.

Tires provided are for low speed towing only. Fill tires to a maximum of 32 psi (221 kPa).

Verify that the tractor / tow vehicle is approved for transporting the equipment and that the equipment is securely attached to the tractor / tow vehicle.

Verify safety chain is installed and properly connected before transporting equipment.

Verify that the SMV (Slow Moving Vehicle) emblem, all lights and reflectors are clean and visible.

The ratio of the tractor / tow vehicle weight to the loaded equipment weight plays an important role in defining acceptable travel speed.

TRAVEL SPEED - Acceptable travel speed.

WEIGHT RATIO - Weight of fully equipped or loaded implement(s) relative to weight of tractor / tow vehicle.

Travel Speed	Weight Ratio
20 mph (32 kph)	Less than 1 to 1
10 mph (16 kph)	Less than 2 to 1
DO NOT TOW	More than 2 to 1

Maintenance

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Farm King



Service Schedule



WARNING

Instructions are necessary before operating or servicing equipment. Read and understand the Operator And Parts Manual and safety signs (decals) on equipment. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures. The service schedule is a guide for correct maintenance of the equipment.

#	DESCRIPTION	SERVICE PROCEDURES					
		CHECK	CLEAN	LUBE	CHANGE	COVER	DRAIN
Daily Maintenance (or every 8 hours of use)							
1	Drum Screens	✓	✓				
2	Pulleys & Belt Tension	✓					
3	Guards & Shields	✓					
4	Tire Pressure	✓					
5	Hydraulic Oil Reservoir	✓					
Weekly (or every 40 hours of use)							
6	Driveline Pillow Bearings	✓		✓			
7	Reducer Shaft Pillow Bearings	✓		✓			
8	Fan Cooler Pillow Bearings	✓		✓			
Monthly (or every 200 hours of use)							
9	Hydraulic Oil Filter	✓			✓		
Annually (or every 500 hours of use)							
10	Entire Machine	✓	✓				

Lubrication

Always use a good quality multi-purpose / lithium base grease when lubricating the equipment.



IMPORTANT

Do not over-grease bearings. Greasing too often can damage seals and lead to premature bearing failure.

- Always use a hand-held grease gun.
- Clean fitting before greasing, to avoid injecting dirt and grit.
- Replace and repair broken fittings immediately.
- If fittings will not take grease, remove and clean thoroughly. Replace fitting if necessary.



IMPORTANT

Fluid such as engine oil, hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.



WARNING

AVOID INJURY OR DEATH

Stop engine, set brake, remove ignition key, and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.

Support the equipment with blocks or safety stands before working beneath it.

Follow good shop practices:

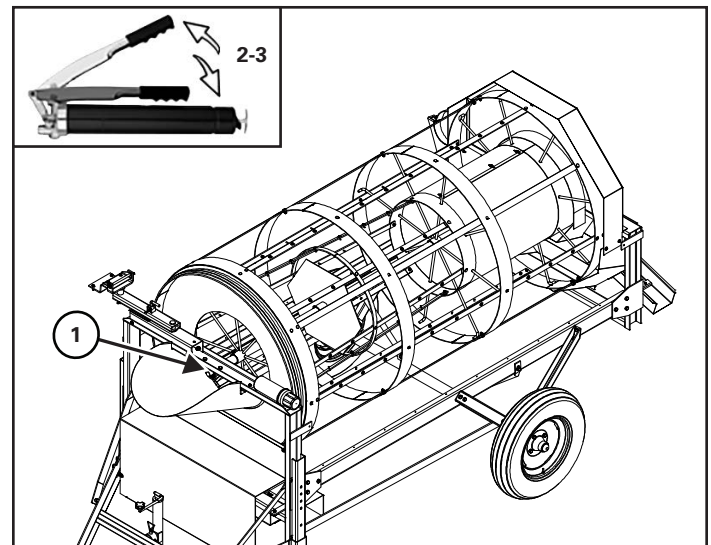
- Keep service area clean and dry
- Be sure electrical outlets and tools are properly grounded
- Use adequate light for the job

Use only tools, jacks, and hoists of sufficient capacity for the job.

Replace and secure all shields removed during servicing before operating.

Use heavy leather gloves to handle sharp objects.

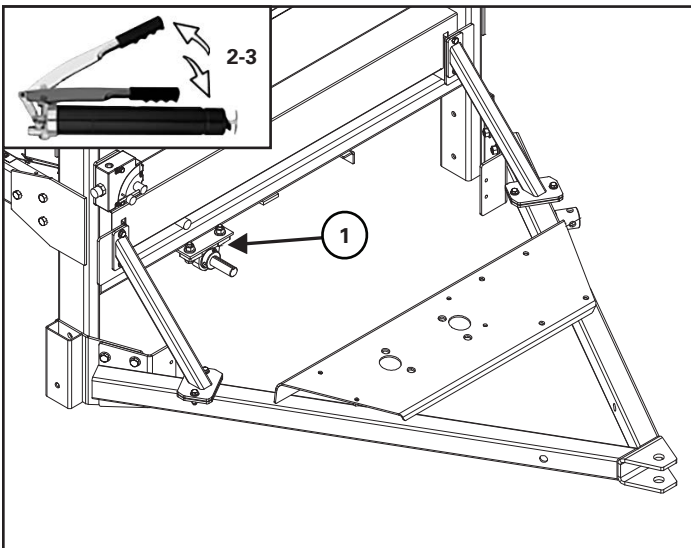
Figure 42



Apply two to three pumps of grease to the two drum shaft pillow bearings (Item 1) [Figure 42].

Grease every **40 hours** of use.

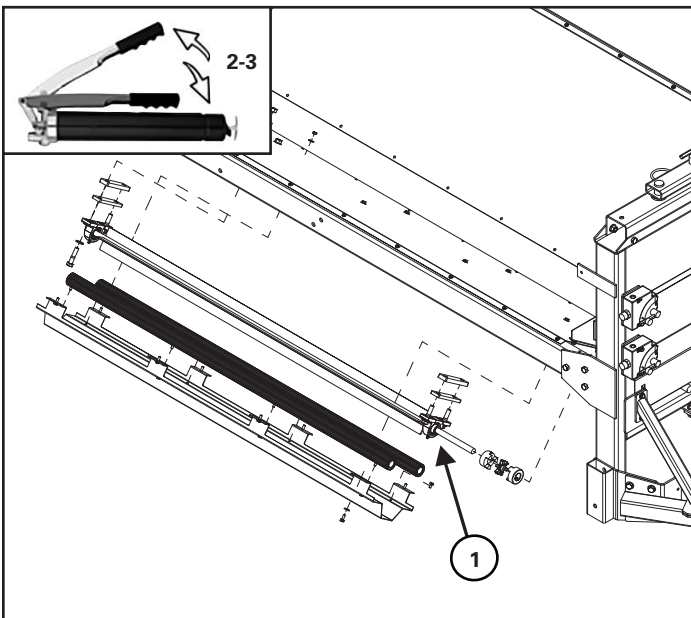
Figure 43



Apply two to three pumps of grease to the two reducer shaft pillow bearings (Item 1) [Figure 43].

Grease every **40 hours** of use.

Figure 44

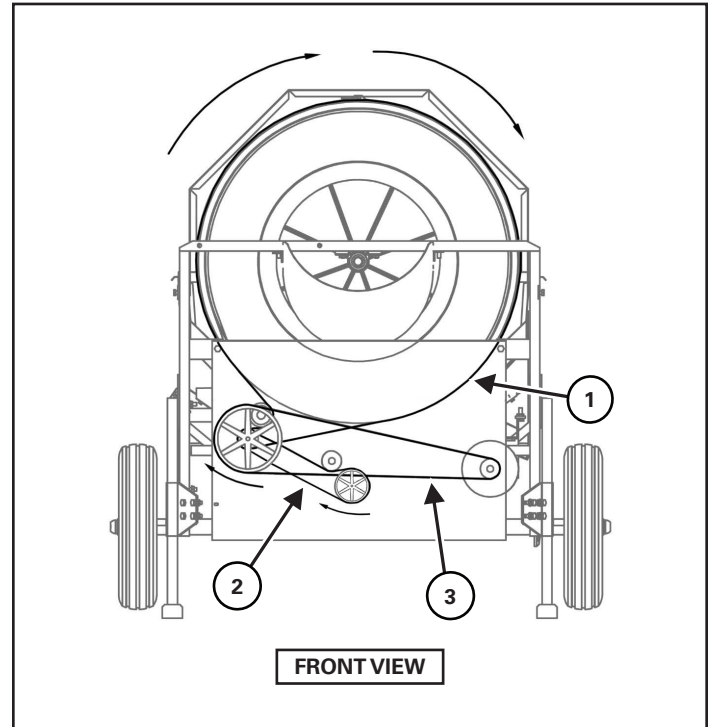


Apply two to three pumps of grease to the two cooler fan pillow bearings (Item 1) [Figure 44].

Grease every **40 hours** of use.

Belt Tension

Figure 45



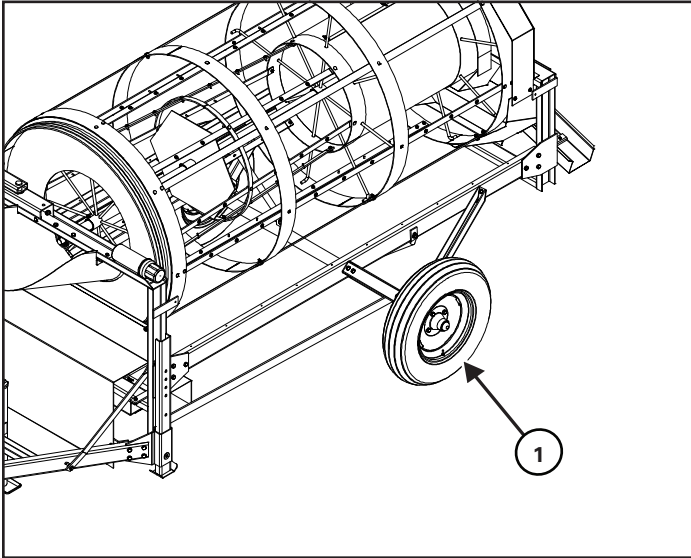
Check tension of belts:

- B-164 V-belts (Item 1) around the outer drum assembly, the 3" pulley, and idler pulley. Tighten belts using tightener springs connected to idler arm [Figure 45].
- 5L400 belts (Item 2) around trash pan 6" pulley, trash pan idler pulley, and 3" pulley [Figure 45].
- B-87 V-belts (Item 3) around the 12" pulley and electric motor. Tighten belts using belt tightener rod connected to motor mount [Figure 45].

Check every **8 hours** of use.

Tire Pressure

Figure 46

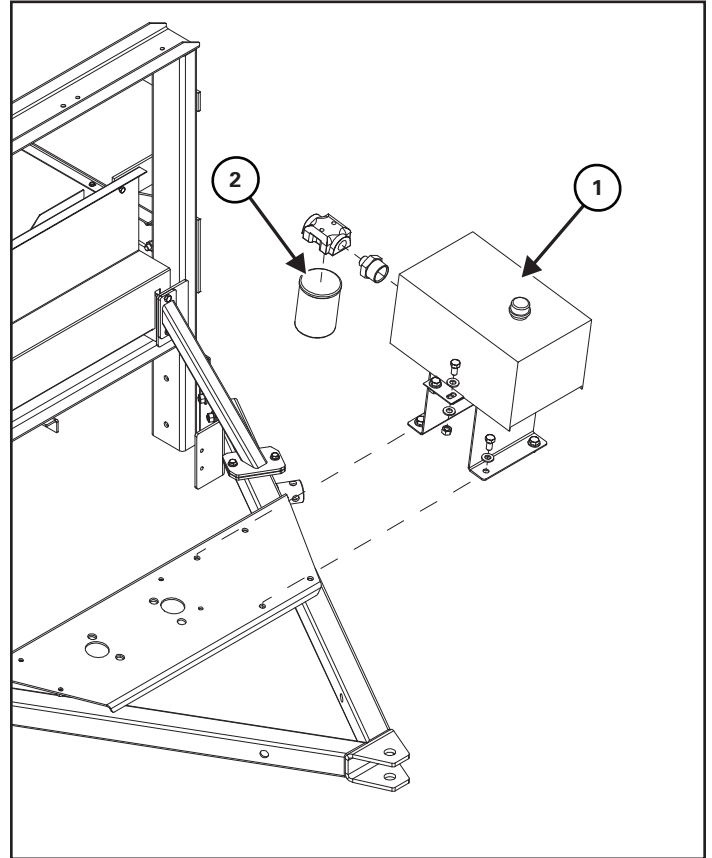


Fill tires (Item 1) to a maximum of 32 psi (221 kPa) [Figure 46].

Check every **8 hours** of use.

Hydraulics

Figure 47



Periodically check level of hydraulic oil in reservoir (Item 1). Oil should be within 1" (25 mm) of the top of reservoir [Figure 47].

Change oil every **200 hours** of use.

Periodically check oil filter (Item 2) [Figure 47].

Change oil filter every **200 hours** of use.

Decal Installation



IMPORTANT

When replacing safety signs (decals), the temperature must be above 10° C (50° F).

- Remove all portions of the damaged safety sign (decal).
- Thoroughly clean the area with adhesive remover and glass cleaner. Remove all adhesive residue.
- Allow the area to dry completely before installing the new safety sign (decal).
- Position the safety sign (decal) in the correct location.
- Remove a small portion of the backing paper on the safety sign (decal).
- Press on the safety sign (decal) where the backing paper has been removed.
- Slowly remove the remaining backing paper, pressing on the safety sign (decal) as the backing paper is removed.
- Using the backing paper, pressing firmly, move the backing paper over the entire safety sign (decal) area.

NOTE: Small air pockets can be pierced with a pin and smoothed out using the piece of the backing paper.

Storage And Return To Service

Storage

Sometimes it may be necessary to store the equipment for an extended period of time. Below is a list of items to perform before storage.



IMPORTANT

DO NOT permit children to play on or around the stored machine.

- Thoroughly clean the equipment.
- Lubricate the equipment.
- Inspect the hitch and all welds on the equipment for wear and damage.
- Check for loose hardware, missing guards, or damaged parts.
- Check for damaged or missing safety signs (decals). Replace if necessary.
- Replace worn or damaged parts.
- Touch up all paint nicks and scratches to prevent rusting.
- Place the equipment in a dry protected shelter.

NOTE: If a dry protected shelter is not available, cover with a waterproof tarp and tie down securely.

- Place the equipment flat on the ground.
- Support the jack / frame with planks if required.

Return To Service

After the equipment has been in storage, it is necessary to follow a list of items to return the equipment to service.

- Be sure all shields and guards are in place.
- Lubricate the equipment.
- Operate equipment, verify all functions operate correctly. Repair as needed.

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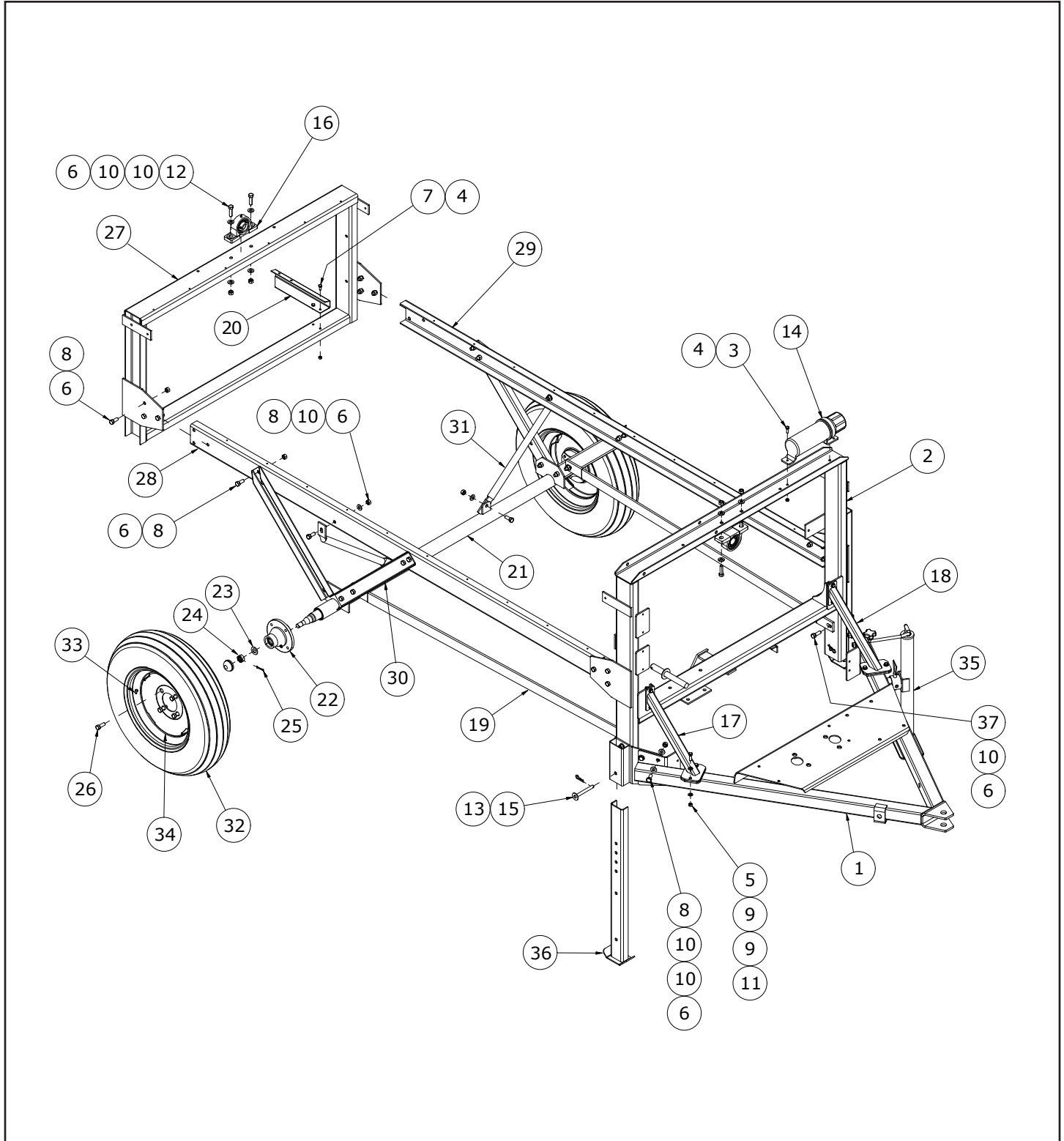
Parts Identification

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General Parts Information

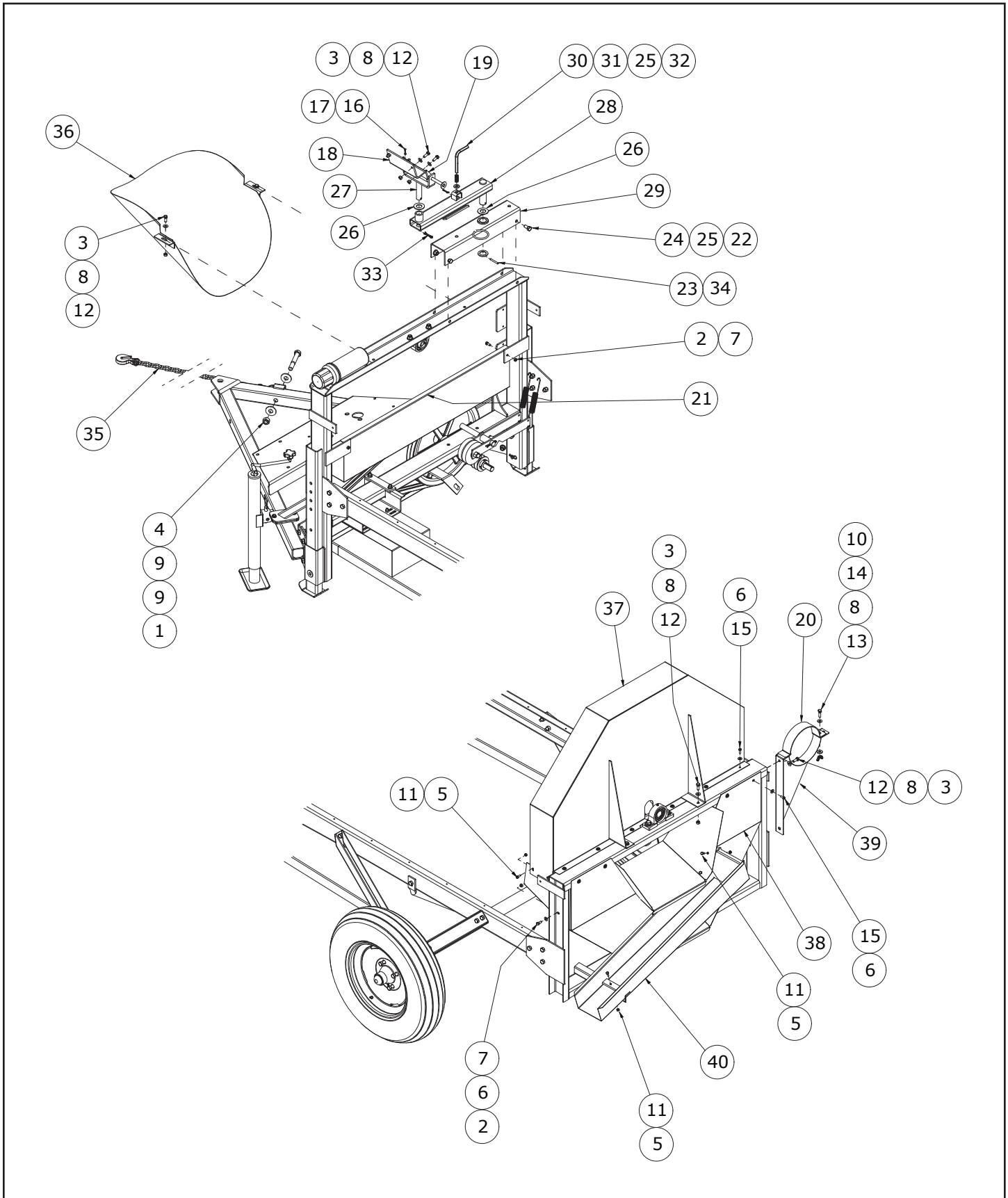
The parts identification section list descriptions, part numbers and quantities for all North America Base Model 482 Grain Cleaners. Contact your Farm King dealer for additional parts information.

Frame



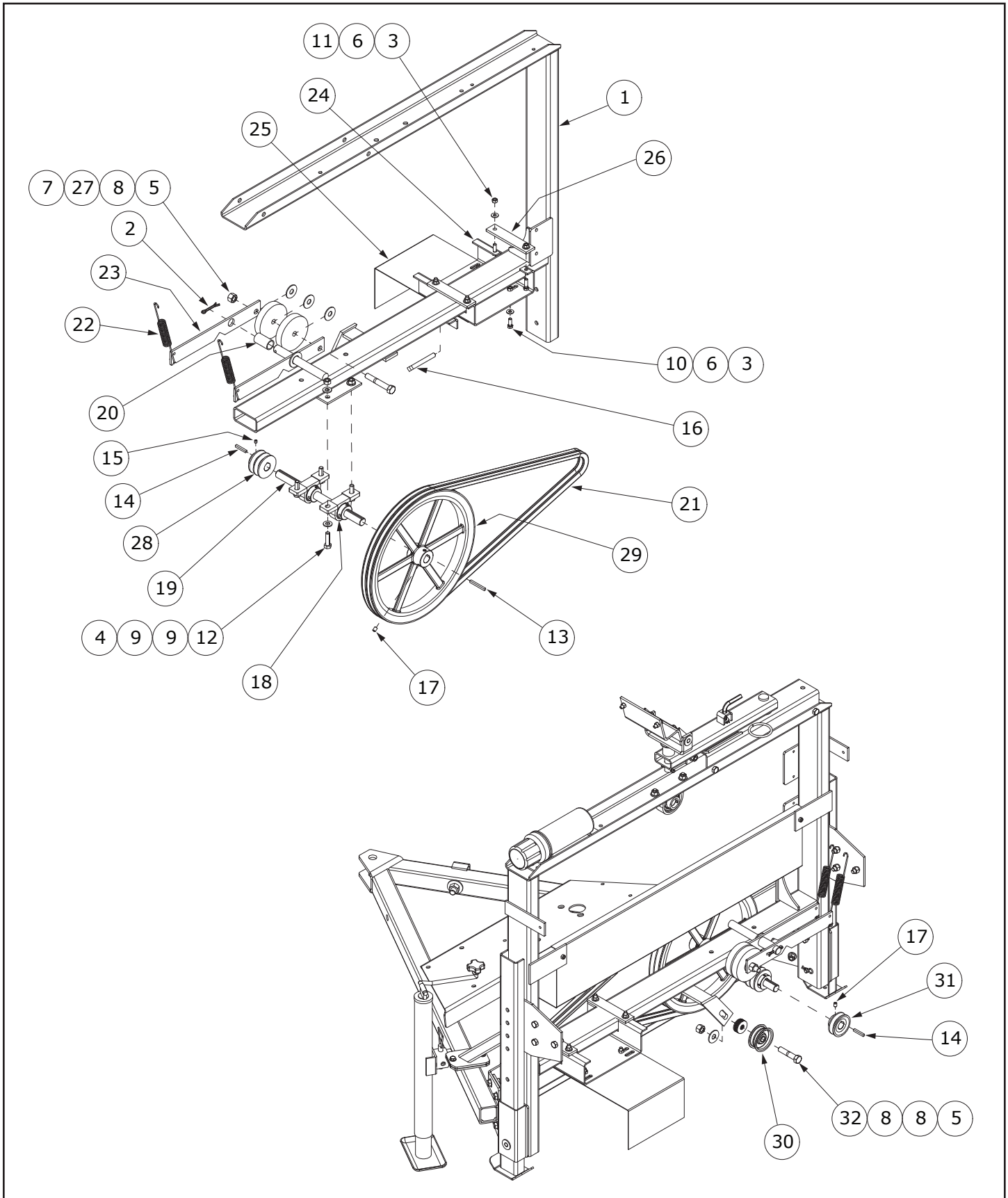
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	819928	WELDMENT - GC HITCH	1
2	819935	WELDMENT - FRONT FRAME	1
3	812026	5/16" X 1" HEX BOLT (PL)	2
4	812362	5/16" LOCK NUT (PL)	4
5	812363	3/8" LOCK NUT (PL)	8
6	812364	1/2" LOCK NUT (PL)	44
7	81549	5/16" X 3/4" HEX BOLT (PL)	2
8	81620	1/2" X 1 1/4" HEX BOLT PL	36
9	84039	WASHER - 3/8" SAE FLAT (PL)	16
10	84048	1/2" SAE FLAT WASHER (PL)	32
11	86171	3/8" X 1 1/4" HEX BOLT (PL)	8
12	87553	1/2" X 1.75" HEX BOLT UNC GR5 (PL)	4
13	961012	#16 HAIR PIN CLIP	2
14	909277	MANUAL HOLDER 3 1/2" X 12"	1
15	973214	WELDMENT - FRONT LEG PIN	2
16	973223	1 1/4" PILLOW BRG W/ COLLAR	2
17	820070	WELDMENT - HITCH BRACE RH	1
18	820072	WELDMENT - HITCH BRACE LH	1
19	820150	PLATE - FRAME BRACE	2
20	SZ000490	BRKT - TRASH DSCHG CHUTE MOUNTING	1
21	973206	AXLE WELDT	1
22	900145	4-BOLT HUB ASSY	2
23	9812416	3/4" FLAT WASHER (BR)	2
24	81834	3/4" SLOTTED HEX NUT	2
25	9812486	1/8" X 1 1/2" COTTER PIN (BR)	2
26	968404	WHEEL BOLT 1/2" X 1 1/4" (PL)	8
27	973202	WELDMENT - REAR FRAME	1
28	973203	FRAME SIDE - RIGHT HAND	1
29	973204	FRAME SIDE - LEFT HAND	1
30	973208	AXLE BRACE 10GA X 5" X 26"	4
31	973209	AXLE BRACE 11GA X 01.250" X 25"	2
32	959203	TIRE 6.70 X 15 X 4 PLY	2
33	959210	TIRE VALVE - TR415	2
34	F7110	WHEEL-15" X 4.5" X 4 BOLT	2
35	F3260	JACK SB & GC	1
36	SZ000472	WELDMENT - FRONT LEG	2
37	84277	1/2" X 1 1/2" HEX BOLT (PL)	4

Covers



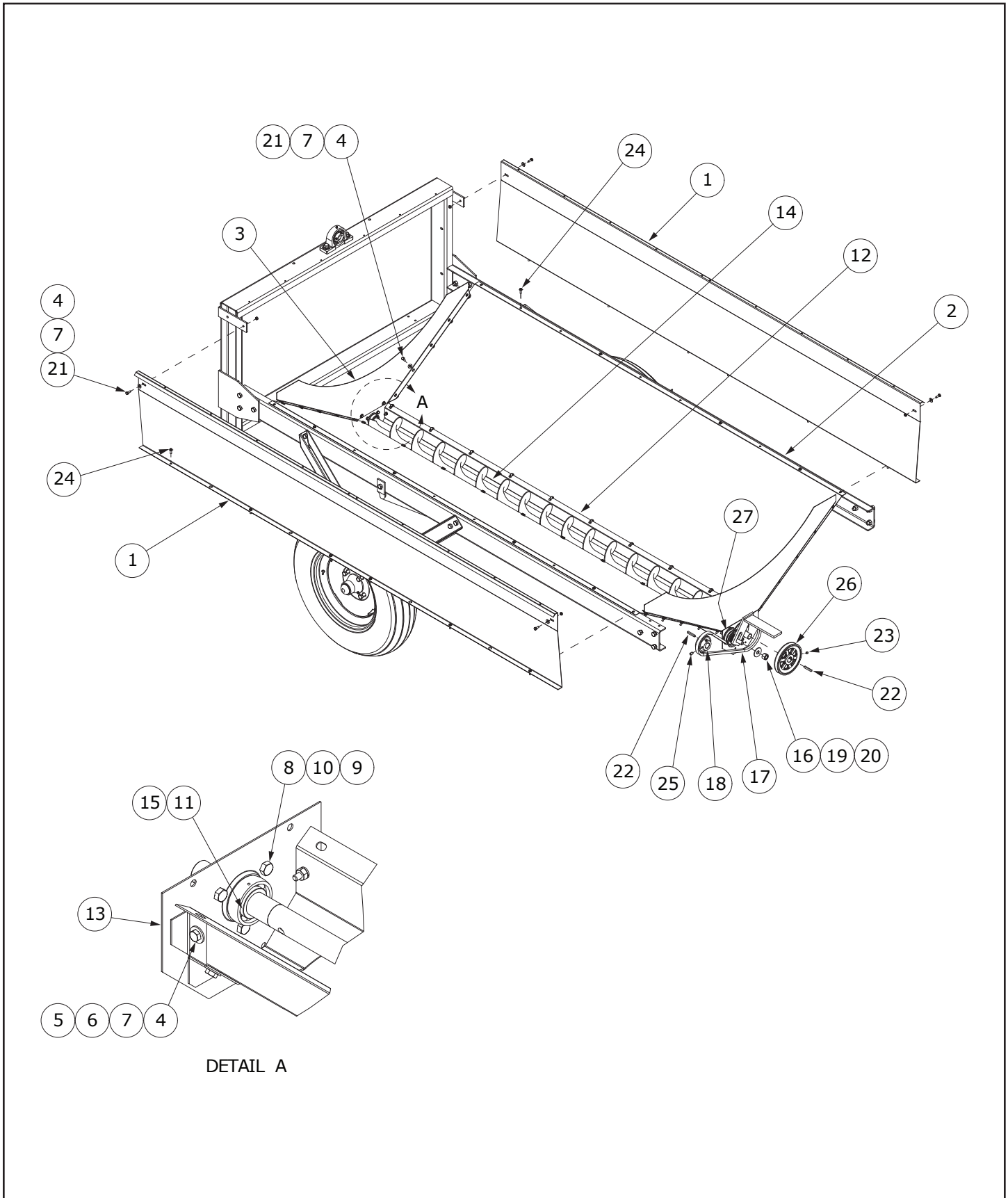
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	811751	3/4" X 5" HEX BOLT (PL)	1
2	812362	5/16" LOCK NUT (PL)	8
3	812363	3/8" LOCK NUT (PL)	9
4	812365	3/4" LOCK NUT (PL)	1
5	81525	1/4" X 3/4" HEX BOLT (PL)	8
6	81546	5/16" FLAT WASHER (PL)	12
7	81549	5/16" X 3/4" HEX BOLT (PL)	8
8	81570	WASHER - 3/8" STD FLAT (PL)	10
9	81702	3/4" BS FLAT WASHER (PL)	2
10	84217	3/8" WING NUT (PL)	1
11	84498	1/4" LOCK NUT (PL)	8
12	86170	3/8" X 1" HEX BOLT GR.5 (PL)	9
13	86171	3/8" X 1 1/4" HEX BOLT (PL)	1
14	964001	1" X 7/16" X 10GA FLAT WASHER (PL)	1
15	9812392	SCREW SELFTAP 0.25UNC X 0.75(F)	10
16	9812430	1/8" X 1" COTTER PIN (PL)	1
17	902996	INTAKE AUGER SWIVEL PIN	1
18	973291	PLATE - INTAKE AUGER OFFSET CONNECTOR	1
19	973629	PLATE - INTAKE AUGER CONNECTOR	1
20	SZ000601	HALF CLAMP	1
21	820728	PLATE - FRONT PULLEY GUARD	1
22	812364	1/2" LOCK NUT (PL)	4
23	81276	SPRING PIN 0.250 DIA X 2.00 PL	1
24	81619	1/2" X 1" HEX BOLT (PL)	4
25	84048	1/2" SAE FLAT WASHER (PL)	5
26	84522	1" ID SAE FLAT WASHER (PL)	2
27	900316	WELDMENT - INTAKE AUGER SWIVEL PIVOT	1
28	973277	WELDMENT - INTAKE AUGER SWIVEL ARM	1
29	973278	WELDMENT - INTAKE AUGER SWIVEL MOUNT	1
30	973279	BAR - INTAKE AUGER SWIVEL ARM PIN	1
31	973280	SPRING - 0.062" T X 0.310" P X 1.380" L	1
32	9812430	1/8" X 1" COTTER PIN (PL)	1
33	9812434	1/4" X 1 1/2" COTTER PIN (PL)	1
34	SZ0231250	WSHR FLT 1-1/4 1-7/8 10GA	1
35	910287	HOOK & SAFETY CHAIN ASSEMBLY	1
36	973247	WELDMENT - INTAKE PAN	1
37	SZ000491	WELDMENT - REAR DRUM SHIELD	1
38	SZ000492	WELDMENT - DISCHARGE PAN	1
39	821310	WELDMENT - AUGER SUPPORT	1
40	SZ000606	WELDMENT - TRASH DISCHARGE CHUTE	1

Pulleys



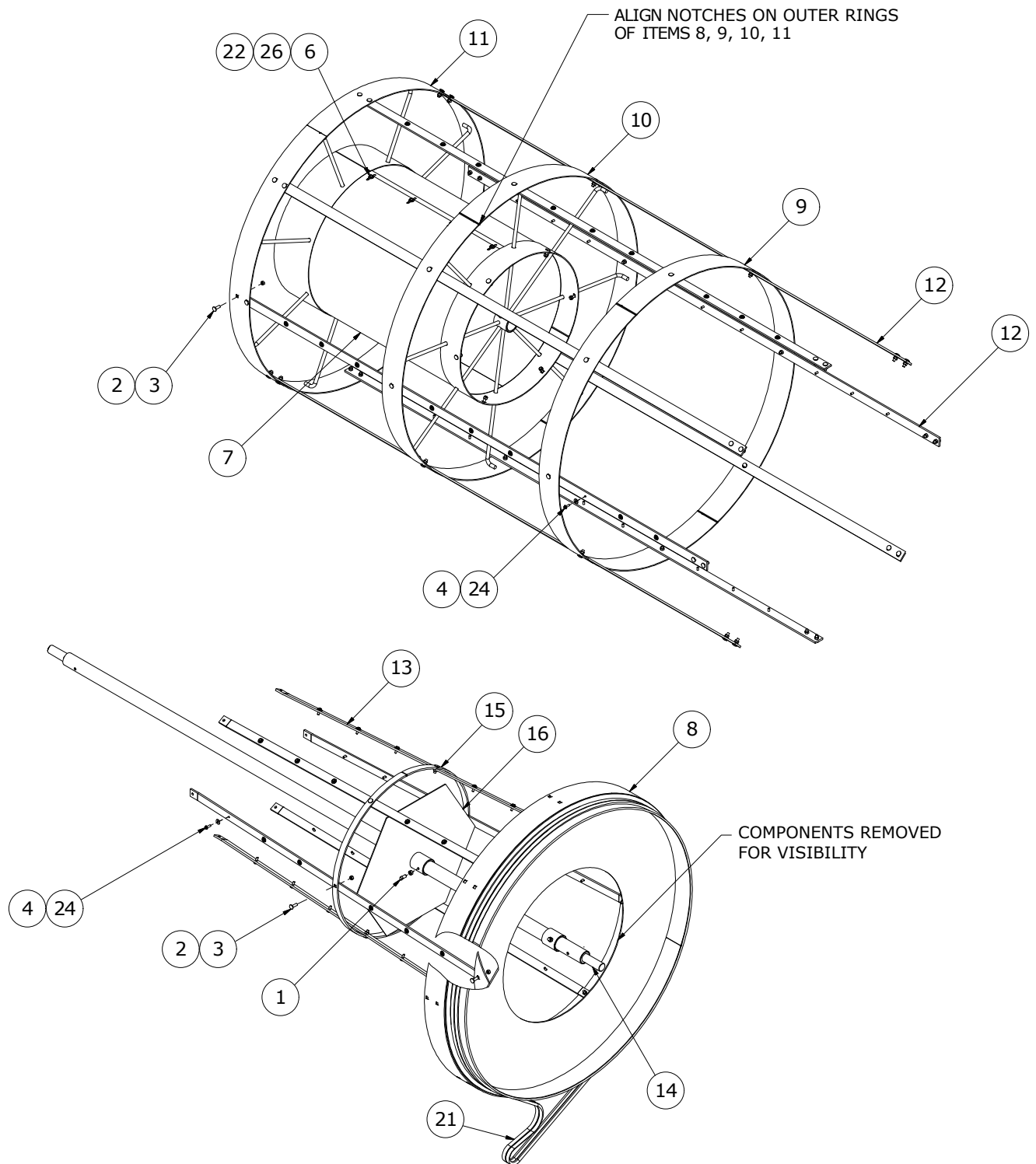
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	819935	WELDMENT - FRONT FRAME	1
2	81210	1/4" X 2" COTTER PIN (PL)	1
3	812363	3/8" LOCK NUT (PL)	8
4	812364	1/2" LOCK NUT (PL)	4
5	812482	5/8" LOCK NUT (PL)	2
6	81570	WASHER - 3/8" STD FLAT (PL)	8
7	81671	5/8" X 4" HEX BOLT (PL)	1
8	81678	5/8" FLAT WASHER STD (PL)	11
9	84048	1/2" SAE FLAT WASHER (PL)	8
10	86170	3/8" X 1" HEX BOLT GR.5 (PL)	4
11	86171	3/8" X 1 1/4" HEX BOLT (PL)	4
12	87553	1/2" X 1.75" HEX BOLT UNC GR5 (PL)	4
13	900286	KEY PULLEY, 0.25" SQ X 2.50" GC	1
14	901550	KEY-0.25 SQ X 1.75	2
15	967141	5/16" X 1/4" SOCKET SET SCREW (BR)	2
16	9812380	1/2" X 4" SQ. HD. SET SCREW (PL)	1
17	985639	03/8" X 1/2" SOCKET SET SCREW (BR)	4
18	961792	HOUSING W/BEARING PILLOW (P205)	2
19	973240	REDUCER SHFT 01" X 14 1/2"	1
20	973245	REDUCER SHFT BUSH 1.250"OD X 1.032"ID	1
21	973248	B-87 BELT	2
22	973618	BELT TIGHTENER SPRING	2
23	SZ001250	PLATE - IDLER ARM	2
24	820042	PLATE - MOTOR MOUNT	1
25	973242	MM GUARD 16GA X 10" X 22"	1
26	973243	PLATE - MOTOR MOUNT CLAMP	2
27	973645	IDLER PULLEY	2
28	F888	3" DOUBLE PULLEY	1
29	973287	SHEAVE-18" DOUBLE B, 1.0" BORE	1
30	968892	PULLEY BELT TGHNR	1
31	973616	3" SINGLE SHEAVE	1
32	84289	5/8" X 3" HEX BOLT GR.5 (PL)	1

Trash Pan



ITEM	PART NUMBER	DESCRIPTION	QTY.
1	973253	TRASH PAN SIDE PANEL	2
2	973254	TRASH PAN SIDE	2
3	973255	TRASH PAN END	2
4	81525	1/4" X 3/4" HEX BOLT (PL)	58
5	81544	1/4" HEX NUT (PL)	10
6	81545	1/4" LOCK WASHER (PL)	10
7	81546	5/16" FLAT WASHER (PL)	58
8	81549	5/16" X 3/4" HEX BOLT (PL)	6
9	81568	5/16" HEX NUT PL	6
10	81569	5/16" LOCK WASHER PL	6
11	961627	1" BEARING W/COLLAR	2
12	973256	TRASH PAN TROUGH	1
13	973257	WELDMENT - TRASH PAN TROUGH END	2
14	973258	TRASH PAN AUGER FLIGHTING	1
15	973511	01" 3 HOLE BEARING FLANGE	4
16	812482	5/8" LOCK NUT (PL)	1
17	968913	BELT 5L400	1
18	973616	3" SINGLE SHEAVE	1
19	81678	5/8" FLAT WASHER STD (PL)	8
20	84289	5/8" X 3" HEX BOLT GR.5 (PL)	1
21	84498	1/4" LOCK NUT (PL)	48
22	901550	KEY-0.25 SQ X 1.75	2
23	967141	5/16" X 1/4" SOCKET SET SCREW (BR)	2
24	9812392	SCREW SELFTAP 0.25UNC X 0.75(F)	20
25	985639	03/8" X 1/2" SOCKET SET SCREW (BR)	2
26	909013	SINGLE SHEAVE 6"	1
27	968892	PULLEY BELT TGHNR	1

Drum And Screen Assembly



ITEMS 4 & 24 ARE USED TO FASTEN SCREENS TO SUPPORTS.
 ITEMS 5, 17, 18, 19, 20, 23, 25 ARE NOT SHOWN (CONE & DRUM STRAPS).

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	812037	03/8" X 3/4" SQHDCUP SETSCREW (PL)	4
2	812362	5/16" LOCK NUT (PL)	66
3	812626	BOLT CARR 0.313NC X 1.00GR5PL	66
4	81546	5/16" FLAT WASHER (PL)	108
5*	84498	1/4" LOCK NUT (PL)	8
6	84498	1/4" LOCK NUT (PL)	4
7	930503	CONE EXTENSION TUBE	1
8	820001	WELDMENT - FRONT DRUM RING	1
9	820002	WELDMENT - CENTER DRUM RING	1
10	820000	WELDMENT - REAR CENTER DRUM RING	1
11	819999	WELDMENT - REAR DRUM RING	1
12	973220	PLATE - OUTER DRUM SCREEN SUPPORT	8
13	973221	PLATE - CONE SCREEN SUPPORT	6
14	973222	DRUM SHFT WELDT	1
15	973224	PLATE - CONE SCREEN SUPPORT	1
16	973225	CONE FLOW CTRL WELDT	1
17*	973226	WELDMENT - DRUM STRAP	4
18*	973227	WELDMENT - CONE STRAP	1
19*	973228	WELDMENT - CONE STRAP	1
20*	973229	WELDMENT - CONE STRAP	1
21	973270	B-164 V-BELT	2
22	81484	WASHER - FLAT STD 0.250 HS PL	8
23*	973289	SPRING, SCREEN (GRAIN CLEANER)	2
24	SZ000421	PLAIN INDENTED HEX WASHER HEAD TAPPING SCREW - TYPET	108
25*	9812398	BOLT STOVE 0.25 UNC X 2.50 RDHD	8
26	81525	1/4" X 3/4" HEX BOLT (PL)	4

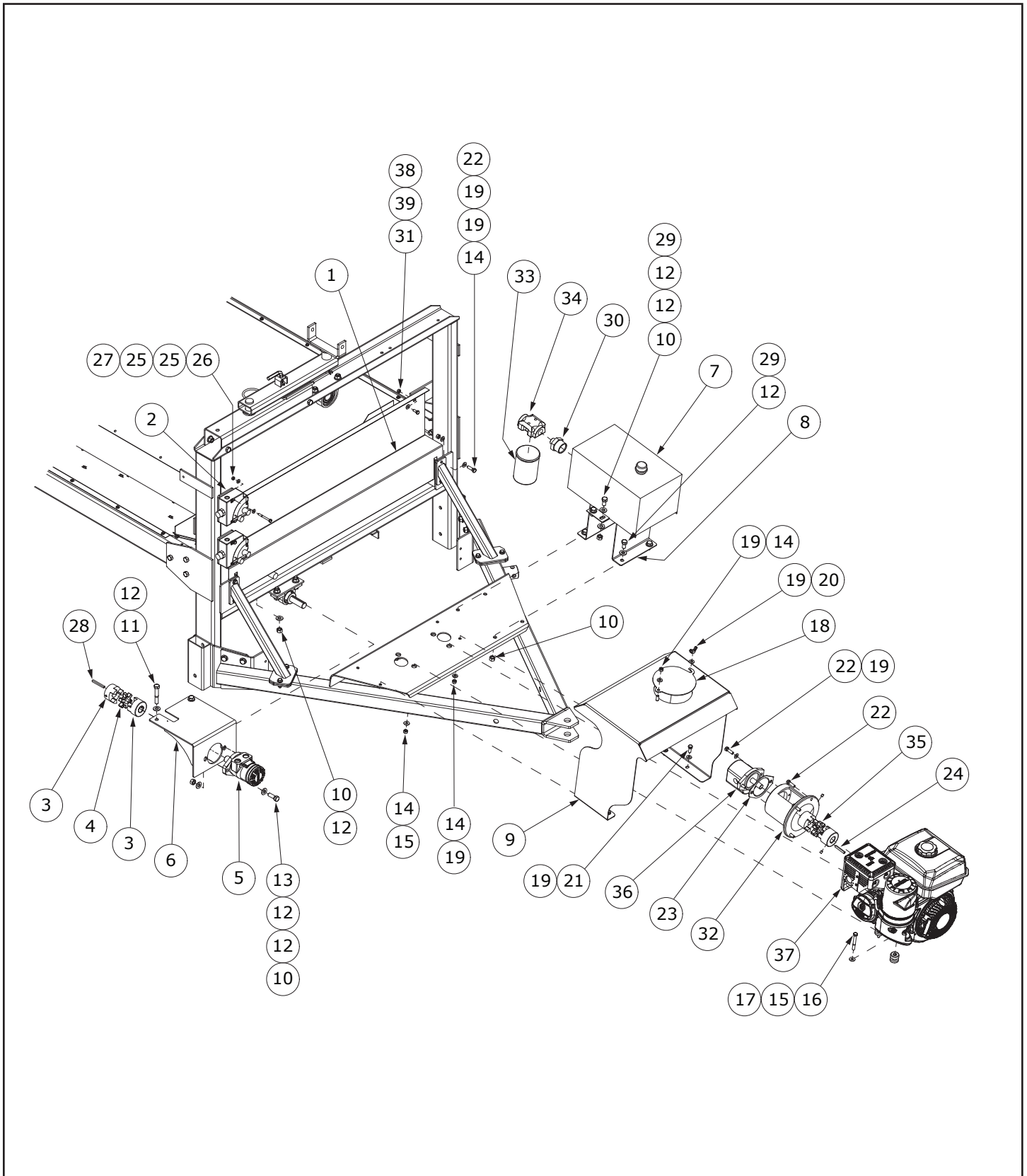
*	903522	5 X 5 CONE SCREEN	3
*	973238	4 X 4 CONE SCREEN	3
*	973237	3 X 3 CONE SCREEN	3
*	924032	2 X 2 CONE SCREEN	3
*	973236	5/8 X 5/8 CONE SCREEN	3

*	911904	10 X 10 DRUM SCREEN	3
*	911902	8 X 8 DRUM SCREEN	3
*	911901	6 X 6 DRUM SCREEN	3
*	911903	5 X 5 DRUM SCREEN	3
*	911900	4 X 4 DRUM SCREEN	3

* NOT SHOWN

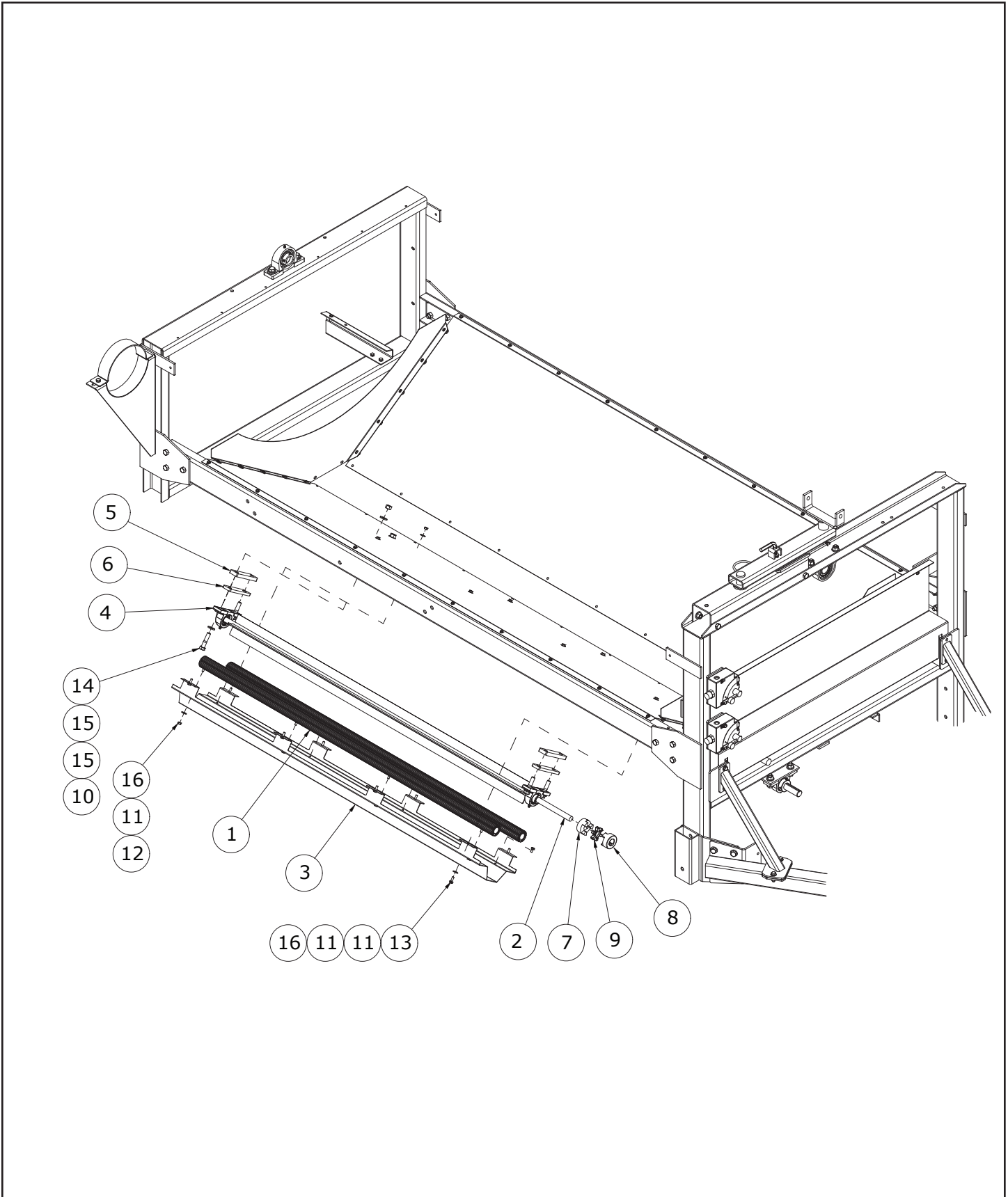
Gas Engine And Hydraulic Components (Optional)

Hydraulic Motors



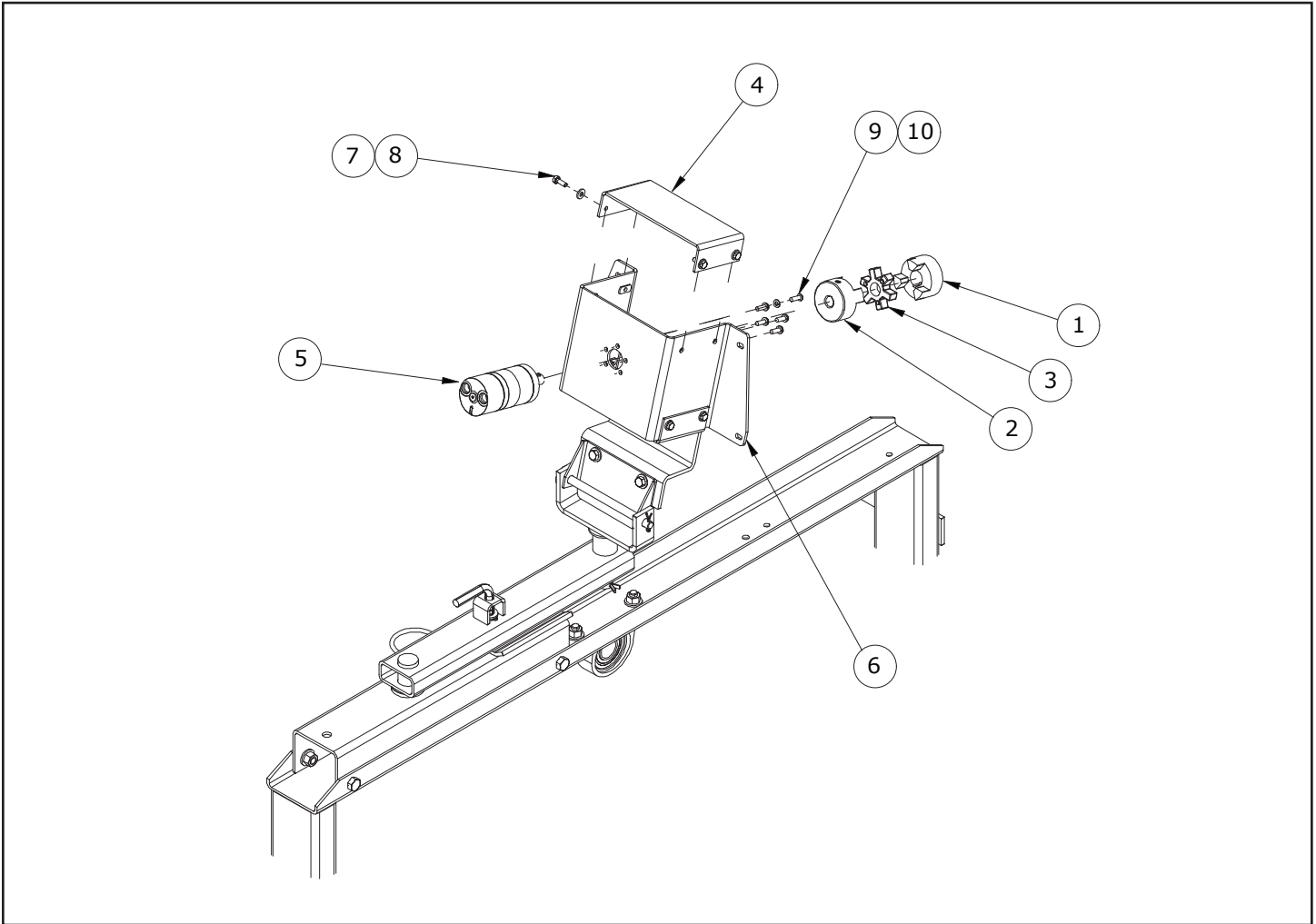
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	820029	PLATE - FRONT GUARD	1
2	820080	VALVE - FLOW CONTROL	2
3	820169	COUPLING - 1" ID 2 35/64" OD	2
4	820171	SPIDER - HYTREL RUBBER 2 35/64" OD	1
5	820182	MOTOR - HYDRAULIC 3.6 CID	1
6	820220	WELDMENT - MOTOR MOUNT	1
7	820304	TANK - HYD 4.8 GAL	1
8	820345	PLATE - TANK MOUNT	1
9	820730	WELDMENT - ENGINE SHIELD	1
10	812364	1/2" LOCK NUT (PL)	12
11	81627	1/2" X 3" HEX BOLT (PL)	2
12	84048	1/2" SAE FLAT WASHER (PL)	20
13	84277	1/2" X 1 1/2" HEX BOLT (PL)	2
14	812363	3/8" LOCK NUT (PL)	13
15	81570	WASHER - 3/8" STD FLAT (PL)	8
16	81583	3/8" X 3" HEX BOLT (PL)	4
17	820149	MOUNT - ENGINE ISOLATOR (DUROMETER 65A)	4
18	820732	PLATE - ENGINE SHIELD HATCH	1
19	84039	WASHER - 3/8" SAE FLAT (PL)	20
20	84217	3/8" WING NUT (PL)	1
21	86170	3/8" X 1" HEX BOLT GR.5 (PL)	4
22	86171	3/8" X 1 1/4" HEX BOLT (PL)	6
23	924776	PLATE - PUMP	1
24	968811	1/4" SQ X 2" KEY	1
25	812624	1/4" FLAT WASHER PL	8
26	84498	1/4" LOCK NUT (PL)	2
27	967193	1/4" X 2 1/2" HEX BOLT (PL)	2
28	900286	KEY PULLEY, 0.25" SQ X 2.50" GC	1
29	81619	1/2" X 1" HEX BOLT (PL)	8
30	820305	ADAPTOR STR -24MNPT X -12MNPT	1
31	812362	5/16" LOCK NUT (PL)	2
32	820985	MOUNT - PUMP HYDRAULIC	1
33	910202	10 MICRON OIL FILTER	1
34	910212	FILTER HEAD	1
35	914251	COUPLING-JAW	1
36	914263	PUMP-HYDRAULIC ENGINE CASAPPA	1
37	F1753	ENGINE-KOHLER CH395	1
38	81549	5/16" X 3/4" HEX BOLT (PL)	2
39	81546	5/16" FLAT WASHER (PL)	2

Oil Cooler



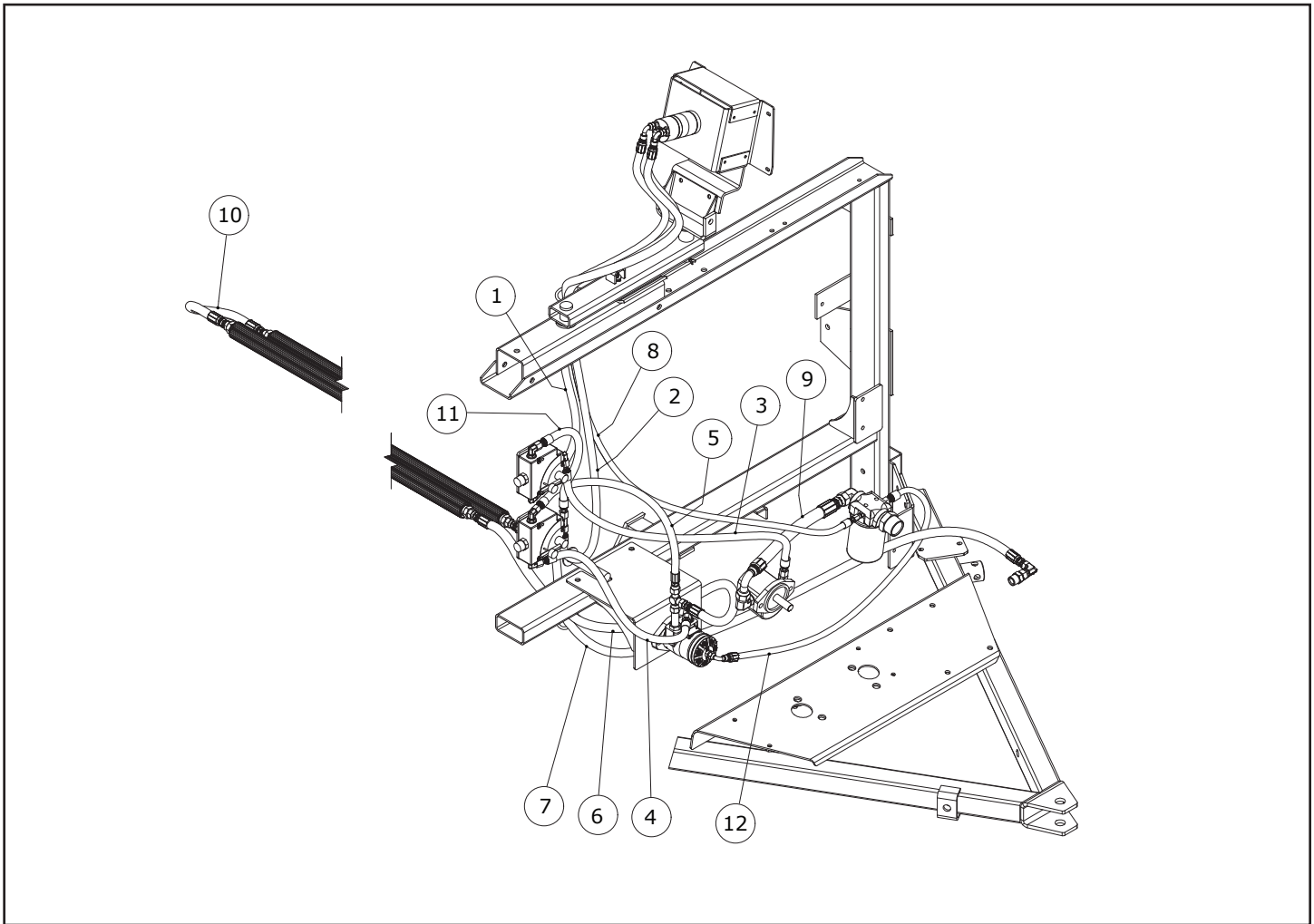
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	820428	OIL COOLER	2
2	820464	WELDMENT - COOLING FAN	1
3	820469	PLATE - FAN COVER	1
4	820512	3/4" PILLOW BRG W/COLLAR	2
5	820513	PLATE - BEARING SPACER (1)	2
6	820514	PLATE - BEARING SPACER (2)	2
7	820557	COUPLING - 3/4" ID X 2 7/64" OD	1
8	820558	COUPLING - 1" ID X 2 7/64" OD	1
9	820559	SPIDER - POLYURETHANE 2 7/64" OD	1
10	812364	1/2" LOCK NUT (PL)	4
11	81484	WASHER - FLAT STD 0.250 HS PL	24
12	81523	1/4" X 1/2" HEX BOLT (PL)	8
13	81525	1/4" X 3/4" HEX BOLT (PL)	8
14	81624	1/2" X 2 1/4" HEX BOLT (PL)	4
15	84048	1/2" SAE FLAT WASHER (PL)	8
16	84498	1/4" LOCK NUT (PL)	16

Auger Hydraulic Motor



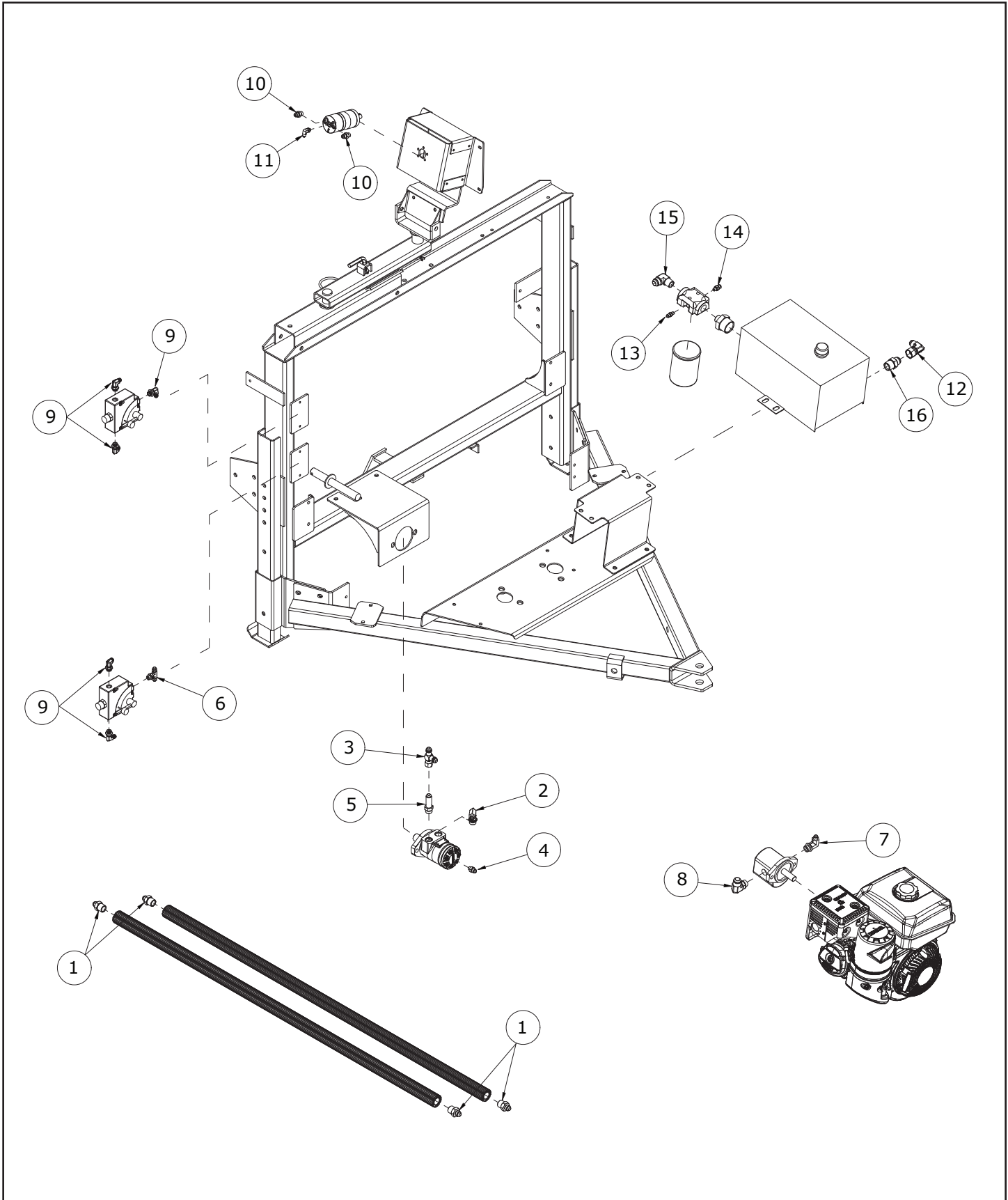
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	820169	COUPLING - 1" ID 2 35/64" OD	1
2	820170	COUPLING - 5/8" ID 2 35/64" OD	1
3	820171	SPIDER - HYTREL RUBBER 2 35/64" OD	1
4	820173	PLATE - COVER	2
5	820181	MOTOR - HYDRAULIC 1.93 CID	1
6	820223	WELDMENT - AUGER MOTOR MOUNT	1
7	812624	1/4" FLAT WASHER PL	8
8	81525	1/4" X 3/4" HEX BOLT (PL)	8
9	81545	1/4" LOCK WASHER (PL)	5
10	820372	BOLT - 1/4-28 X .75 BHCS	5

Hydraulic Hoses



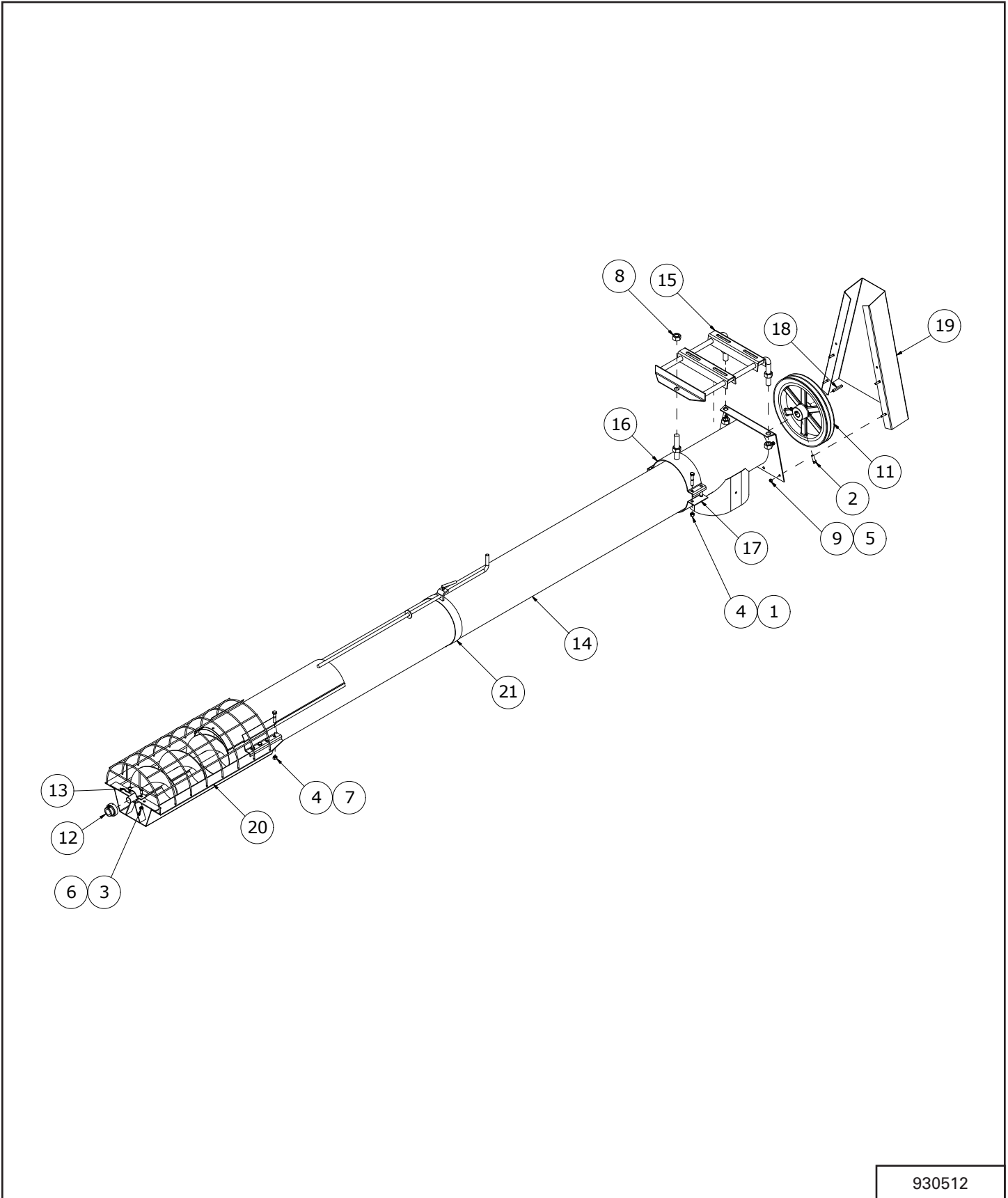
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	820319	HOSE - 3/8" X 60" 9/16SWFJIC X 9/16SWFJIC90	1
2	820320	HOSE - 3/8" X 72" 9/16SWFJIC X 9/16SWFJIC90	1
3	820321	HOSE - 3/8" X 36" 9/16SWFJIC X 9/16SWFJIC	1
4	820322	HOSE - 3/8" X 22" 9/16SWFJIC X 9/16SWFJIC	1
5	820323	HOSE - 3/8" X 23" 3/4SWFJIC X 9/16SWFJIC	1
6	820324	HOSE - 1/2" X 54" 3/4SWFJIC X 3/4SWFJIC	1
7	820325	HOSE - 1/2" X 72" 3/4SWFJIC X 3/4SWFJIC	1
8	820326	HOSE - 1/4" X 90" 7/16SWFJIC X 7/16SWFJIC	1
9	820366	HOSE - 3/4" X 12.5" 1-1/16SWFJIC X 1-1/16SWFJIC90	1
10	820724	HOSE - 1/2" X 19" 3/4SWFJIC X 3/4SWFJIC	1
11	820725	HOSE - 3/8" X 15" 9/16SWFJIC X 9/16SWFJIC	1
12	820726	HOSE - 3/8" X 40" 9/16SWFJIC X 9/16SWFJIC90	1

Hydraulic Fittings



ITEM	PART NUMBER	DESCRIPTION	QTY.
1	820362	ADAPTOR - 3/4 MJIC X 3/4 MNPT	4
2	812457	ELBOW-10 MORB X -6 MJIC, 90 DEG	1
3	812786	TEE 3/4 MJIC X RUN 3/4 SWFJIC	1
4	812838	ADAPTOR STR 7/16MORB X9/16MJIC	1
5	813094	ADAPTOR STR 7/8MORB X 3/4MJIC L	1
6	820363	TEE - BRANCH 9/16 MJIC X 9/16 MORB	1
7	812457	ELBOW-10 MORB X -6 MJIC, 90 DEG	1
8	865574	ELBOW 90 7/8MORB X 1.0625MJIC	1
9	811918	ELBOW 90 9/16 SWMORB X 9/16 MJIC	5
10	812086	ADAPTOR STR 9/16 MORB X 9/16 MJIC	2
11	820361	ELBOW - 7/16 MJIC X 3/8 MORB	1
12	821030	ELBOW 90 DEG -08MJIC X -10SWFJIC	1
13	820373	ADAPTOR - 7/16 MJIC X 1/8 MNPT	1
14	820729	ADAPTOR - 9/16 MJIC X 1/8 MNPT	1
15	886798	ELBOW 90 3/4 MNPT X 1 1/16 MJIC	1
16	886727	ADAPTOR STR 3/4MNPT X 7/8MJIC	1

Intake Auger (Optional)



930512

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	811795	3/8" X 2" HEX BOLT (PL)	4
2	81213	SETSCREW SQHDCUP 0.375NC X 1 PL	2
3	812362	5/16" LOCK NUT (PL)	2
4	812363	3/8" LOCK NUT (PL)	12
5	81527	1/4" X 1" HEX BOLT (PL)	4
6	81549	5/16" X 3/4" HEX BOLT (PL)	2
7	81578	3/8" X 1 3/4" HEX BOLT (PL)	8
8	81700	3/4" HEX NUT (PL)	6
9	84498	1/4" LOCK NUT (PL)	4
10	907458	UTILITY AUGER MANUAL	1
11	961567	12" DBL SHEAVE	1
12	961627	1" BEARING W/COLLAR	1
13	961913	INTAKE GUARD BEARING CAP	1
14	F1419	AUGTUBE ASSY	1
15	963707	MOTOR MOUNT WELDMENT	1
16	963808	MM CLP WELDT - TOP	1
17	963809	MOTOR MOUNT CLAMP - BOTTOM 12GA	1
18	968811	1/4" SQ X 2" KEY	1
19	F1307	BELT GUARD PLATE	1
20	F1405	INT GUARD ASSY BNDL	1
21	F1413	FEED CONTROL ASSY	1

Farm King



Specifications And Shipping Kit Numbers

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Farm King



Specifications

Model	GC482
Height	78.6" (1996.4 mm)
Width	76.1" (1932.9 mm)
Length	176.7" (4488.2 mm)
Electric Motor	3 HP (Recommended)

NOTE: Dimensions are approximate measurements.

Shipping Kit And Bundle Numbers

The following is a list of Kit Numbers for this product and the Bundle Numbers, Descriptions, and Quantities for each Kit.

Qty.	Bundle	Description
GC482 GRAIN CLEANER W/ HITCH, TIRES, TILT ADJ., SHROUD AND FINES AUGER		
1	Y482	482 GRAIN CLEANER
OPTIONAL EQUIPMENT		
1	Y811S	8" X 11' UTILITY AUGER W/FLOW CONTROL AND BOLT-ON SPOUT
1	F211	BIG DADDY HOPPER
1	F210	STANDARD FLEX HOPPER
1	F482E	ASSEMBLY - GAS DRIVE OPTION
SCREEN KITS		
1	F4519	10 x 10 DRUM SCREEN (3)
1	F4518	8 x 8 DRUM SCREEN (3)
1	F4517	6 x 6 DRUM SCREEN (3)
1	F4516	5 x 5 DRUM SCREEN (3)
1	F4515	4 x 4 DRUM SCREEN (3)
1	F4319	5 x 5 CONE SCREEN (3)
1	F4514	4 x 4 CONE SCREEN (3)
1	F4513	3 x 3 CONE SCREEN (3)
1	F4511	2 x 2 CONE SCREEN (3)
1	F4512	5/8 x 5/8 CONE SCREEN (3)

Hardware Torque Values

Metric Chart

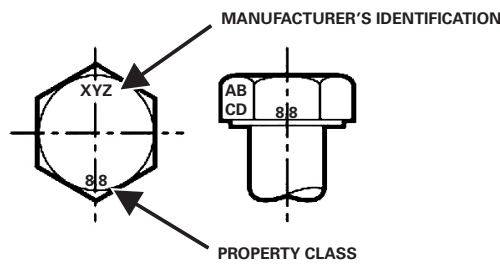
NOTE: Do not use the values listed in the charts if a different torque value or tightening procedure is specified in this manual for a specific application. Torque values listed are for general use only.

Use the following charts to determine the correct torque when checking, adjusting or replacing hardware. **Torque values are listed in newton-meters (inch* or foot pounds) for normal assembly applications.**

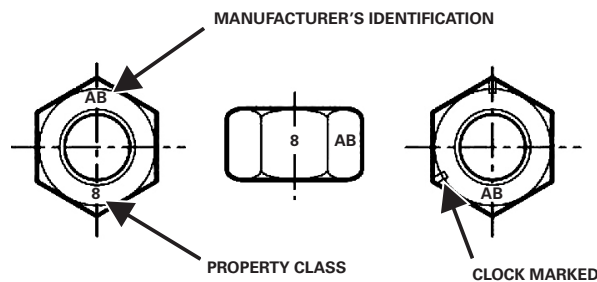
NOMINAL SIZE	CLASS 5.8		CLASS 8.8		CLASS 10.9		LOCK NUTS
	Unplated	Plated W / ZnCr	Unplated	Plated W / ZnCr	Unplated	Plated W / ZnCr	CL.8 W/ CL. 8.8 Bolt
M4	1.7 (15*)	2.2 (19*)	2.6 (23*)	3.4 (30*)	3.7 (33*)	4.8 (42*)	1.8 (16*)
M6	5.8 (51*)	7.6 (67*)	8.9 (79*)	12 (102*)	13 (115*)	17 (150*)	6.3 (56*)
M8	14 (124*)	18 (159*)	22 (195*)	28 (248*)	31 (274*)	40 (354*)	15 (133*)
M10	28 (21)	36 (27)	43 (32)	56 (41)	61 (45)	79 (58)	30 (22)
M12	49 (36)	63 (46)	75 (55)	97 (72)	107 (79)	138 (102)	53 (39)
M16	121 (89)	158 (117)	186 (137)	240 (177)	266 (196)	344 (254)	131 (97)
M20	237 (175)	307 (226)	375 (277)	485 (358)	519 (383)	671 (495)	265 (195)
M24	411 (303)	531 (392)	648 (478)	839 (619)	897 (662)	1160 (855)	458 (338)

NOTE: Torque values shown with * are inch pounds.

Identification of Hex Cap Screws and Carriage Bolts - Classes 5 and Up



Identification of Hex Nuts and Lock Nuts - Classes 5 and Up



Imperial Chart

NOTE: Do not use the values listed in the charts if a different torque value or tightening procedure is specified in this manual for a specific application. Torque values listed are for general use only.

Use the following charts to determine the correct torque when checking, adjusting or replacing hardware. Torque values are listed in newton-meters (inch* or foot pounds) for normal assembly applications.

NOMINAL SIZE	SAE GRADE 5		SAE GRADE 8		LOCK NUTS			
	Unplated or Plated Silver	Plated W / ZnCr Gold"	Unplated or Plated Silver	Plated W / ZnCr Gold"	Unplated or Plated Silver	Plated W / ZnCr Gold"	Grade W / Gr. 5 Bolt	Grade W / Gr. 8 Bolt
1/4	6.2 (55*)	8.1 (72*)	9.7 (86*)	12.6 (112*)	13.6 (121*)	17.7 (157*)	6.9 (61*)	9.8 (86*)
5/16	13 (115*)	17 (149*)	20 (178*)	26 (229*)	28 (250*)	37 (324*)	14 (125*)	20 (176*)
3/8	23 (17)	30 (22)	35 (26)	46 (34)	50 (37)	65 (48)	26 (19)	35 (26)
7/16	37 (27)	47 (35)	57 (42)	73 (54)	80 (59)	104 (77)	41 (30)	57 (42)
1/2	57 (42)	73 (54)	87 (64)	113 (83)	123 (91)	159 (117)	61 (45)	88 (64)
9/16	81 (60)	104 (77)	125 (92)	163 (120)	176 (130)	229 (169)	88 (65)	125 (92)
5/8	112 (83)	145 (107)	174 (128)	224 (165)	244 (180)	316 (233)	122 (90)	172 (127)
3/4	198 (146)	256 (189)	306 (226)	397 (293)	432 (319)	560 (413)	217 (160)	306 (226)
7/8	193 (142)	248 (183)	495 (365)	641 (473)	698 (515)	904 (667)	350 (258)	494 (364)
1	289 (213)	373 (275)	742 (547)	960 (708)	1048 (773)	1356 (1000)	523 (386)	739 (545)

NOTE: Torque values shown with * are inch pounds.

Identification of Hex Cap Screws and Carriage Bolts



GRADE 2 SAE BOLT



GRADE 5 SAE BOLTS



GRADE 8 SAE BOLTS



GRADE 2 SAE NUTS

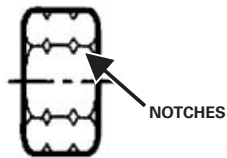


GRADE 5 SAE NUTS



GRADE 8 SAE NUTS

Identification of Hex Nuts and Lock Nuts



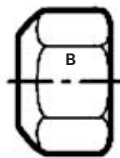
NOTCHES

GRADE IDENTIFICATION

GRADE A: NO NOTCHES

GRADE B: ONE CIRCUMFERENTIAL NOTCH

GRADE C: TWO CIRCUMFERENTIAL NOTCHES



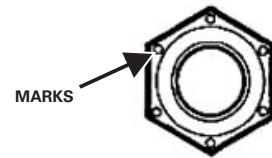
B

GRADE IDENTIFICATION

GRADE A: NO MARK

GRADE B: LETTER B

GRADE C: LETTER C



MARKS

GRADE IDENTIFICATION

GRADE A: NO MARKS

GRADE B: THREE MARKS

GRADE C: SIX MARKS

MARKS NEED NOT BE LOCATED AT CORNERS

Farm King



Warranty

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Farm King



Farm King Base Limited Warranty

Farm King provides this warranty only to original retail purchasers of its products. Farm King warrants to such purchasers that all Farm King manufactured parts and components used and serviced as provided for in the Operator's Manual shall be free from defects in materials and workmanship for a period following delivery to the original retail purchaser of one (1) year. This limited warranty applies only to those parts and components manufactured by Farm King. Parts and components manufactured by others are subject to their manufacturer's warranties, if any.

Farm King will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Farm King within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Parts must be returned through the selling representative and the buyer must prepay transportation charges.

Farm King will not be responsible for repairs or replacements that are necessitated, in whole or part, by the use of parts not manufactured by or obtained from Farm King. Under no circumstances are component parts warranted against normal wear and tear. There is no warranty on product pump seals, product pump bearings, rubber product hoses, pressure gauges, or other components that require replacement as part of normal maintenance.

Repair Parts Limited Warranty

Farm King warrants genuine Farm King replacement parts purchased after the expiration of the Farm King Limited Warranty, and used and serviced as provided for in the Operator's Manual, to be free from defects in materials or workmanship for a period of thirty (30) days from the invoice date for the parts. Farm King will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Farm King within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Such parts must be shipped to the Farm King factory at the purchaser's expense.

What Is Not Covered

Under no circumstances does this limited warranty cover any components or parts that have been subject to the following: negligence; alteration or modification not approved by Farm King; misuse; improper storage; lack of reasonable and proper maintenance, service, or repair; normal wear; damage from failure to follow operating instructions; accident; and/or repairs that have been made with parts other than those manufactured, supplied, and or authorized by Farm King.

Authorized Dealer And Labor Costs

Repairs eligible for labor under this limited warranty must be made by Farm King or an authorized Farm King dealer. Farm King retains the exclusive discretion to determine whether it will pay labor costs for warranty repairs or replacements, and the amount of such costs that it will pay and the time in which the repairs will be made. If Farm King determines that it will pay labor costs for warranty work, it will do so by issuing a credit to the dealer's or distributor's account. Farm King will not approve or pay invoices sent for repairs that Farm King has not previously approved. Warranty service does not extend the original term of this limited warranty.

Warranty Requirements

To be covered by warranty, each new product must be registered with Farm King within thirty (30) days of delivery to original retail purchaser. If the customer decides to purchase replacement components before the warranty disposition of such components is determined, Farm King will bill the customer for such components and then credit the replacement invoice for those components later determined to be covered by this limited warranty. Any such replacement components that are determined not be covered by this limited warranty will be subject to the terms of the invoice and shall be paid for by the purchaser.

EXCLUSIVE EFFECT OF WARRANTY AND LIMITATION OF LIABILITY

TO THE EXTENT PERMITTED BY LAW, FARM KING DISCLAIMS ANY WARRANTIES, REPRESENTATIONS, OR PROMISES, EXPRESS OR IMPLIED, AS TO THE QUALITY, PERFORMANCE, OR FREEDOM FROM DEFECT OF THE COMPONENTS AND PARTS COVERED BY THIS WARRANTY AND NOT SPECIFICALLY PROVIDED FOR HEREIN.

TO THE EXTENT PERMITTED BY LAW, FARM KING DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ON ITS PRODUCTS COVERED HEREIN, AND DISCLAIMS ANY RELIANCE BY THE PURCHASER ON FARM KING'S SKILL OR JUDGMENT TO SELECT OR FURNISH GOODS FOR ANY PARTICULAR PURPOSE. THE PURCHASER'S ONLY AND EXCLUSIVE REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON FARM KING'S PRODUCTS ARE THOSE SET FORTH HEREIN. IN NO EVENT SHALL FARM KING BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BY WAY OF EXAMPLE ONLY AND NOT LIMITATION, LOSS OF CROPS, LOSS OF PROFITS OR REVENUE, OTHER COMMERCIAL LOSSES, INCONVENIENCE, OR COST OF REPLACEMENT OF RENTAL EQUIPMENT). IN NO EVENT SHALL FARM KING'S CONTRACT OR WARRANTY LIABILITY EXCEED THE PURCHASE PRICE OF THE PRODUCT. (Note that some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusion may not apply to you.) This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Farm King neither assumes nor authorizes any person or entity, including its selling representatives, to assume any other obligations or liability in connections with the sale of covered equipment, or to make any other warranties, representations, or promises, express or implied, as to the quality, performance, or freedom from defect of the components and parts covered herein. No one is authorized to alter, modify, or enlarge this limited warranty, or its exclusions, limitations and reservations.

Corrections of defects and improper workmanship in the manner, and for the applicable time periods, provided for herein shall constitute fulfillment of all responsibilities of Farm King to the purchaser, and Farm King shall not be liable in negligence, contract, or on any other basis with respect to the subject equipment.

This limited warranty is subject to any existing conditions of supply which may directly affect Farm King's ability to obtain materials or manufacturer replacement parts.

Buhler Industries Inc. reserves the right to make improvements in design or changes in specifications to its products at anytime, without incurring any obligation to owners of units previously sold.

www.farm-king.com

Farm King

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