

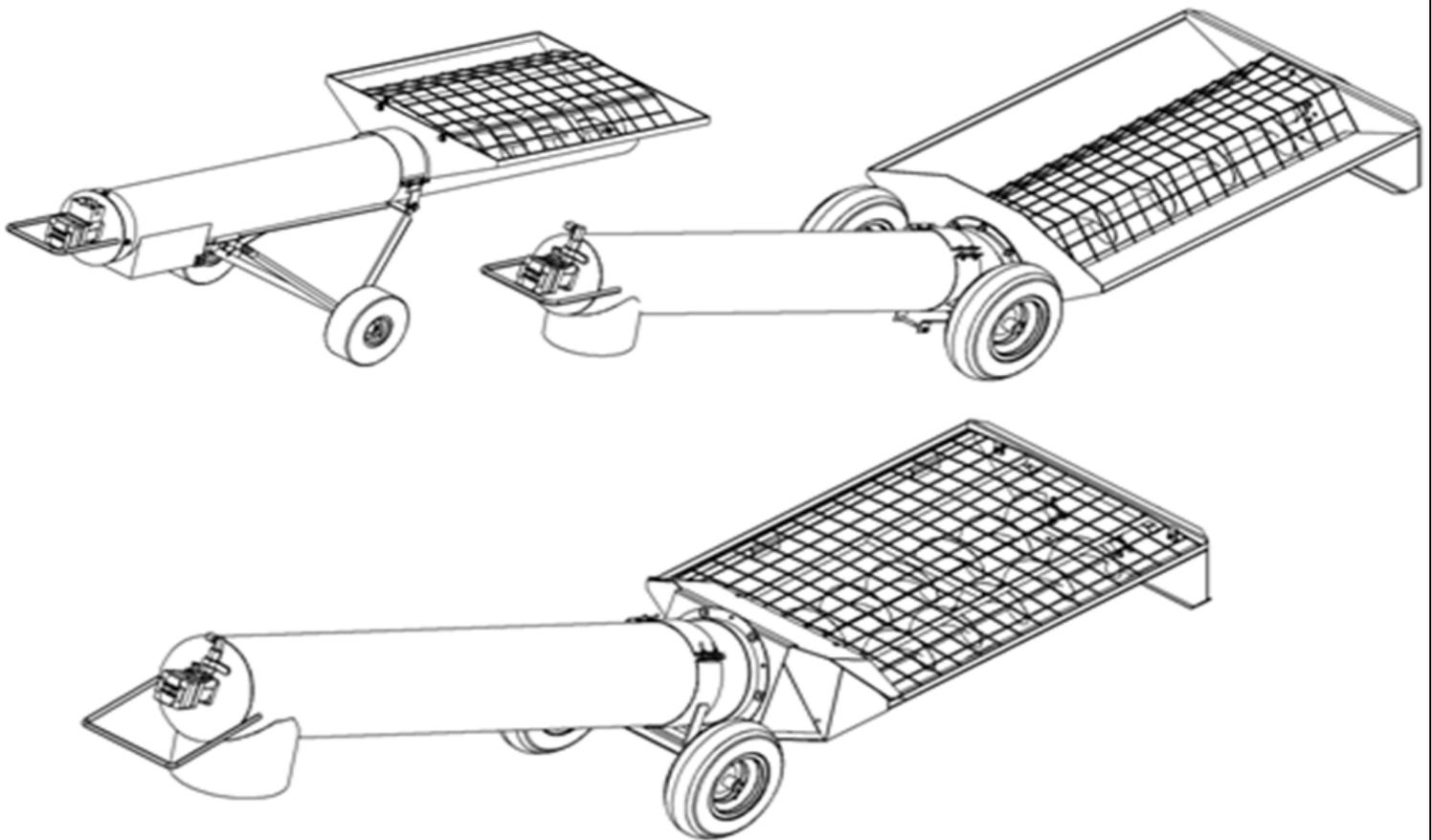


# Wheatheart

## TRANSFER AUGER

8", 10", & 13"

### ASSEMBLY & OPERATION MANUAL



Read this manual before using product. Failure to follow instructions and safety precautions can result in serious injury, death, or property damage. Keep manual for future reference.

Part Number: IM2 R1

Revised: 3/2/10



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# 1. Introduction

Congratulations on your choice of a Wheatheart Transfer Auger to complement your operation. This equipment has been designed and manufactured to meet the needs of the discriminating buyer for the efficient movement of grain, pulse crops, fertilizer, or any other granular material.

Safe, efficient, and trouble-free operation of your Transfer Auger requires that you, and anyone else who will be involved with operating the unit, read and understand all safety instructions and procedures contained within this manual. This manual covers all Transfer Augers made by Wheatheart Manufacturing; use the Table of Contents as a guide when searching for specific information. A sign-off form is provided on the inside front cover for your convenience.

Many features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and how to adjust it to provide maximum efficiency. By following the operating instructions in conjunction with a good maintenance program, your auger will provide many years of trouble-free service.

Keep this manual handy for frequent reference, to review with new personnel, and for ordering replacement parts. Call your Wheatheart distributor or dealer if you need assistance, information, or additional copies of the manual. Knowing the serial number and date of purchase will save time in getting your questions answered. Please write down this information in the space provided below.

**Operator Orientation:** The directions left, right, front and rear, as mentioned throughout the manual, are as seen from the spout and facing toward the hopper.

**Manufactured by**  
***Wheatheart Mfg. Ltd.***  
**Saskatoon, Sask. Canada**

SERIAL NO.

Made in Canada


Serial Number: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

Dealer Name: \_\_\_\_\_





## 2. Safety First



The Safety Alert symbol to the left identifies important safety messages on the product and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety messages. Why is SAFETY important to you?

Three big reasons:

- Accidents disable and kill.
- Accidents cost.
- Accidents can be avoided.

### SIGNAL WORDS

Note the use of the signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.

The Safety Alert symbol means ATTENTION, BE ALERT!, YOUR SAFETY IS INVOLVED.

#### DANGER



Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

#### WARNING



Indicates a hazardous situation that, if not avoided, could result in serious injury or death.

#### CAUTION



Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

#### NOTICE

Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

## 2.1. GENERAL SAFETY

**Important:** *The general safety section includes instructions that apply to all safety practices. Any instructions specific to a certain safety practice (e.g., assembly safety), can be found in the appropriate section. Always read the complete instructional sections and not just these safety summaries before doing anything with the equipment.*

**YOU** are responsible for the **SAFE** use and maintenance of your equipment. **YOU** must ensure that you and anyone else who is going to work around the equipment understands all procedures and related **SAFETY** information contained in this manual.

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program.

- It is the equipment owner and the operator's responsibility to read and understand **ALL** safety instructions, safety decals, and manuals and follow them before assembling, operating, or maintaining the equipment. All accidents can be avoided.
- Equipment owners must give instructions and review the information initially and annually with all personnel before allowing them to operate this product. Untrained users/operators expose themselves and bystanders to possible serious injury or death.
- Use this equipment for its intended purposes only.
- 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. Any modification to the equipment voids the warranty.
- Do not allow children, spectators, or bystanders within the work area.
- Have a first-aid kit available for use should the need arise, and know how to use it.
- Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
- Wear appropriate protective gear. This list includes, but is not limited to:
  - a hard hat
  - gloves
  - protective shoes with slip-resistant soles
  - protective goggles
  - hearing protection
- For Powered Equipment: before servicing, adjusting, or repairing powered equipment, unplug, place all controls in neutral or off position, stop the engine or motor, remove ignition key or lock out power source, and wait for all moving parts to stop.



- 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 at hand
  - Think SAFETY! Work SAFELY!



## 2.2. ASSEMBLY SAFETY

---

- Read the instructions and familiarize yourself with the subassemblies and hardware making up the equipment.
- The components are large, heavy, and can be hard to handle. Be sure to use the proper tools, stands, jacks, and hoists for the job.
- Have 2 people handle the heavy bulky components.
- Place safety stands or large blocks under the machine or components before going beneath the component for assembly.
- Stay away from overhead power lines and obstructions when lifting the machine during assembly. Electrocutation can occur without direct contact. Contact with obstructions can damage components or cause them to fail.
- Tighten all fasteners to their specified torque before using the machine.

## 2.3. OPERATION SAFETY

---

- Have another person nearby who can shut down the equipment in case of accident.
- Do not operate with any of the safety guards removed.
- Keep body, hair, and clothing away from moving parts. Stay away from intake during operation.

## 2.4. PLACEMENT SAFETY

---

- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Always travel at a safe speed. Use caution when turning corners or meeting traffic.
- Keep away from overhead and buried power lines / gas lines. Arcing and possible electrocutation can occur without direct contact.
- Consult local utility companies before operating machine near overhead or buried power lines / gas lines.
- Use extreme care and minimum ground speed when operating or transporting on hillsides, over rough ground, or near ditches or fences.
- Review the work safety area diagram before starting work.

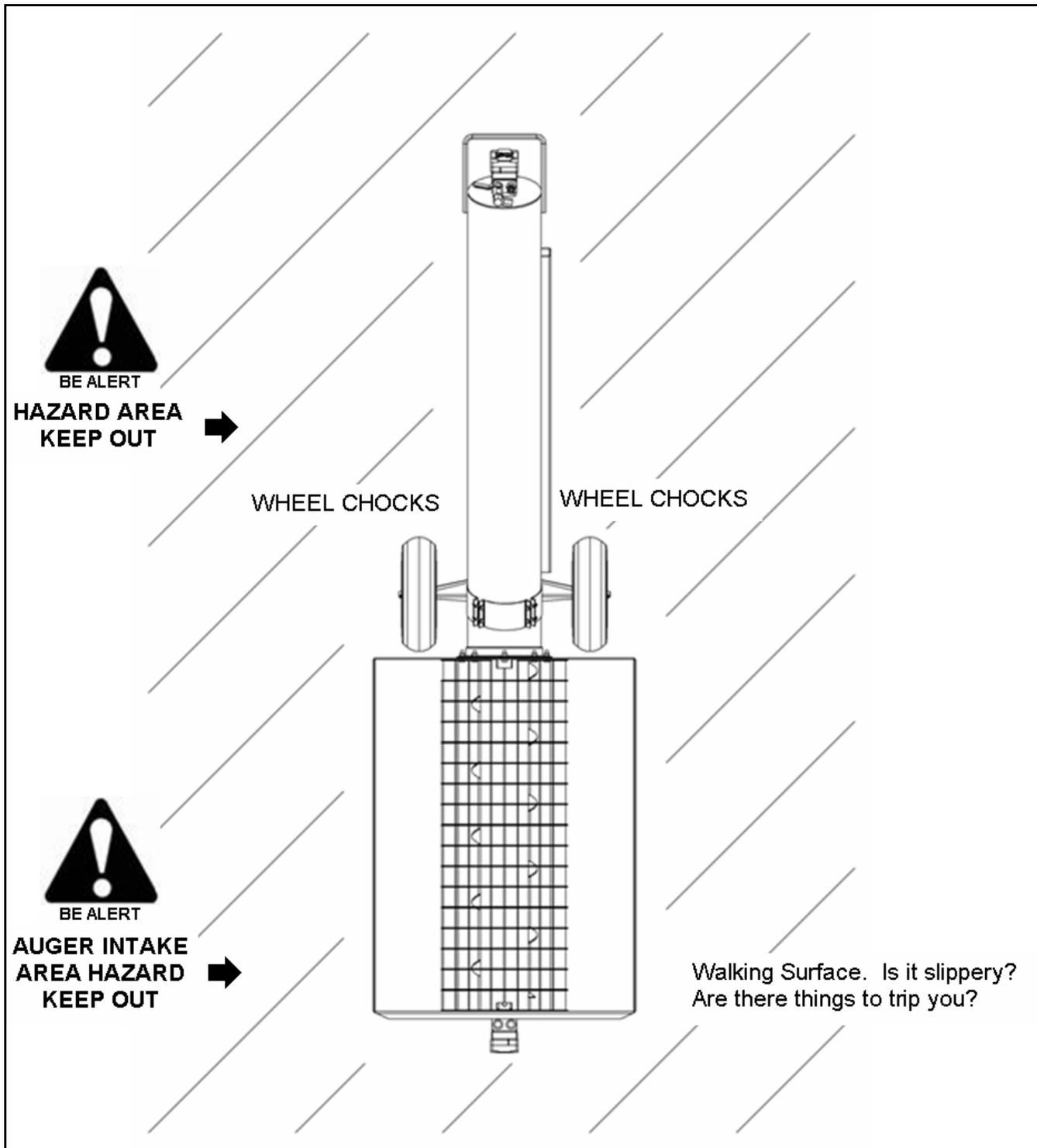


Figure 2.1 Work Area - Authorized Personnel Only

## 2.5. MAINTENANCE SAFETY

- Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.
- Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.

- Place stands or blocks under the frame before working beneath the machine.
- After maintenance is complete, replace and secure all safety guards and safety devices, and if applicable, service doors and cleanout covers.
- Remove all tools and unused parts from machine before operation.
- Remove buildup of grease, oil, and debris.
- Inspect all parts. Ensure parts are in good condition and installed properly.

*Use only genuine Wheatheart replacement parts or equivalent. Replacement parts must meet ASAE standards or serious injury may result. Use of unauthorized parts will void the warranty. If in doubt, contact Wheatheart or your Wheatheart dealer.*

## 2.6. STORAGE SAFETY

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- Store in an area away from human activity.
- Do not permit children to play on or around the stored machine.

## 2.7. HYDRAULIC SAFETY

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- Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.
- Keep all components in the hydraulic system tightly secured and in good condition and clean.
- Replace any worn, cut, abraded, flattened, or crimped hoses.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or concrete. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.
- Before moving a hydraulic cylinder, ensure that the attached component is safely secured.

<b>WARNING</b>	
	<p>Hydraulic fluid can cause serious injury if it penetrates the skin. If it does, see a doctor immediately.</p> <ul style="list-style-type: none"><li>• Relieve pressure before disconnecting hydraulic line.</li><li>• Wear proper hand and eye protection and use wood or cardboard, not hands, when searching for leaks.</li></ul>

## 2.8. ENGINE SAFETY

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- Be sure to stop engine and remove key or lock out power before inspecting or servicing engine
- Refer to engine operation manual for further details.

## 2.9. TIRE SAFETY

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- When replacing worn tires, ensure that they meet the original tire specifications. Never undersize the replacement tire.
- Let a qualified tire repair shop perform all required tire replacements.
- Ensure that the tires are inflated to the manufacturers's recommended pressure.

## 2.10. SAFETY DECAL LOCATIONS

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- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See decal location figures below.
- Replaced parts must display the same decal(s) as the original part.
- Safety decals are available from your distributor, dealer, or factory.

### 2.10.1. DECAL INSTALLATION

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1. Decal area must be clean and dry, with a temperature above 10°C (50°F).
2. Decide on the exact position before you remove the backing paper.
3. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
4. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
5. Small air pockets can be pierced with a pin and smoothed out using the sign backing paper.

### 2.10.2. DECAL LOCATIONS

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Replicas of the safety decals that are attached to the equipment are shown below. Good safety requires that you familiarize yourself with the various safety decals and the areas or particular functions that the decals apply to as well as the safety precautions that must be taken to avoid serious, injury, death, or damage.



Part # 9700031



Part # 9700002



Part # 9700003

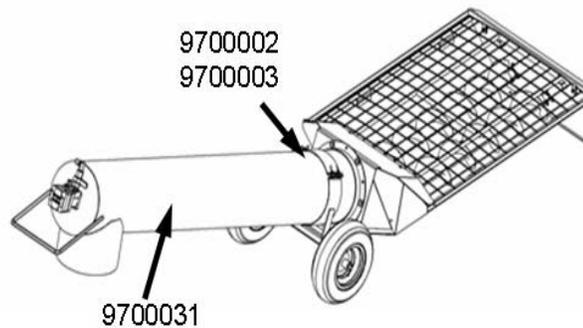
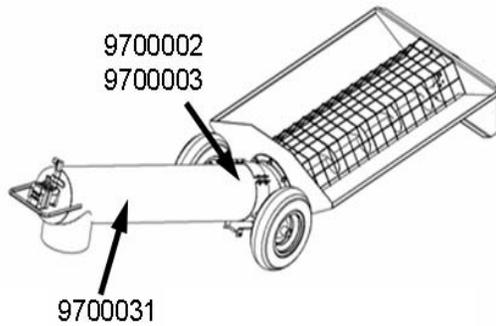
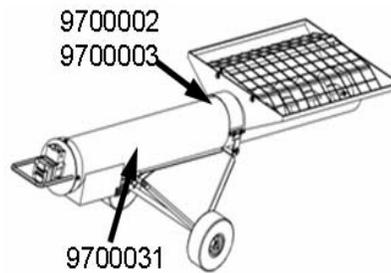


Figure 2.2 Safety Decals

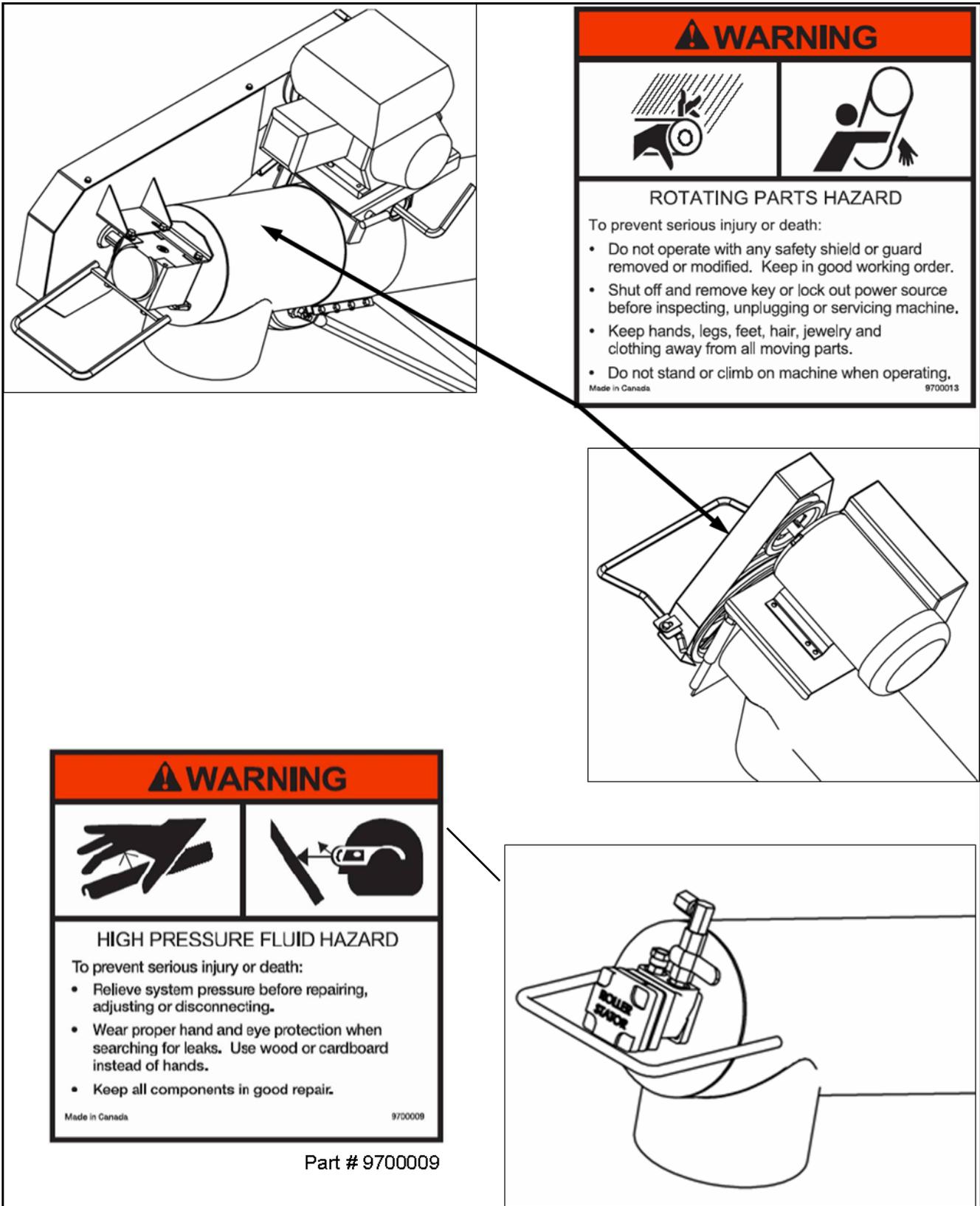


Figure 2.3 Safety Decals

# 3. Assembly

**Warning:** Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

➔ Augers are available in various combinations. In most cases, the following instructions will apply to all augers. Where the information varies, additional instructions will be included, indicated by an arrow.

## 3.1. GAS DRIVE TRANSFER ASSEMBLY

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Refer to Figure 3.1, 3.2, 3.3, and 3.4 for assembly of Transfer Augers with gas drives.

1. Secure spout (1) on stands to aid in assembly.
2. Attach motor mount top and bottom clamps (2) to tube (1) 15" from the spout (see Figure 3.1) using eight 5/16" x 1-1/4" bolts (3) and locknuts (4). Use a level to ensure mount is parallel to the ground before tightening.
3. Position plate (5) on motor mount (2) using pin (6), 3/4" flat washer (7), and hairpin (8) to secure in place.
4. Insert tightener pin (9) in mount and secure with 1/2" flat washer (10) and hairpin (11).
5. Remove spout (1) from stands.
6. Couple upper and lower flighting together with a u-joint (15) and secure each side with a 3/8" x 2-1/4" bolt (16) and locknut (17) (Figure 3.2 and 3.3).

**Note:** *U-joint is pre-assembled on upper tube flighting.*

7. Attach upper tube (1) to hopper bottom (19) with seven 7/16" x 1-1/4" bolts (20), flat washers (21), and nuts (22).

**Note:** *Use flat washers on both sides of hopper/tube.*

8. Attach upper (23) and lower (24) support tubes to axle (25) by sliding over axle shaft.
9. Mount each tire and rim (44) on axle and secure with cotter pin (46) and flat washer (45).
10. Attach upper support tubes (23) to motor mount bottom clamp (2) with two 1/2" x 2" bolts (26) and locknuts (27).
11. Install wheel frame clamp top and bottom (12) to lower end of tube (see Figure 3.1) with four 5/16" x 1-1/2" bolts (13) and locknuts (14). Do not tighten.
12. Attach lower support tubes (24) to wheel frame clamp (12) with two 1/2" x 1-1/2" bolts (28) and locknuts (29).
13. Adjust the position of the lower wheel frame clamp so that the back of the hopper is elevated ~1/2" from the ground (see Figure 3.1). Tighten bolts and nuts.

14. Install the gearbox (30) on the auger shaft and secure with a 3/8" x 2" (31) bolt and locknut (32).
15. Mount transport handle (36) to the bottom of the gearbox (30) with 3/8" x 3/4" bolts (37) and lock washers (38).
16. Connect bottom bracket (33) to gearbox (30) with 3/8" x 3/4" bolts (34) and lock washers (35).
17. Place two washers (50) on gearbox (30) and mount top bracket (33) and guard back plate (51) on gearbox (30) with three 3/8" x 3/4" bolts (34,48) and 3/8" lock washers (49).
18. Insert 1/4" x 1-1/2" key (39) on exposed gearbox shaft (30), and mount pulley (40) on gearbox shaft.
19. Insert 1/4" x 1-1/2" key (39) on motor shaft (41) and mount 3.5" pulley (42) on shaft.
20. Rotate tightener pin (9) as far as it will freely turn so that the handle points in the direction of the hopper.
21. Place the gas engine (41) on the motor mount (5), and using a level or straight edge, align the ends of the gearbox (30) and motor (41) shafts.
22. Adjust the motor position so that the center of the shafts are approximately 23"-25" apart. Refer to Figure 3.4.
23. Use c-clamps or vice grips to temporarily secure the motor to the mount.
24. Install the B-70 belts (43) provided. The belts should deflect 1/2" to 3/4" when pushed on with a 5 lb force. If they do not deflect properly, remove the clamps and belts, adjust the position of the motor, and re-align. Repeat this step until the belt tension is adequate. Remove the c-clamps or vice grips when finished.
25. Mark hole locations on the motor mount and remove the motor. Drill holes through to match the size of the mounting bolts, and install motor using bolts and locknuts.

**Note:** *The holes could be die ground to form slots in case of belt slippage after initial break-in. This will save time later if any adjustment is required.*

26. Attach guard front cover (47) and end cover (52) to backplate (51) with six self-tapping screws (53).

27. Affix decals as shown in "Safety Decal Locations" on page 12.

**Note:** *The final rpm for the auger should be between 500-600. Example: for 3200 rpm, using a 3.5" motor pulley, 1:1.5 gearbox, 12.7" gearbox pulley, final rpm = 588.*

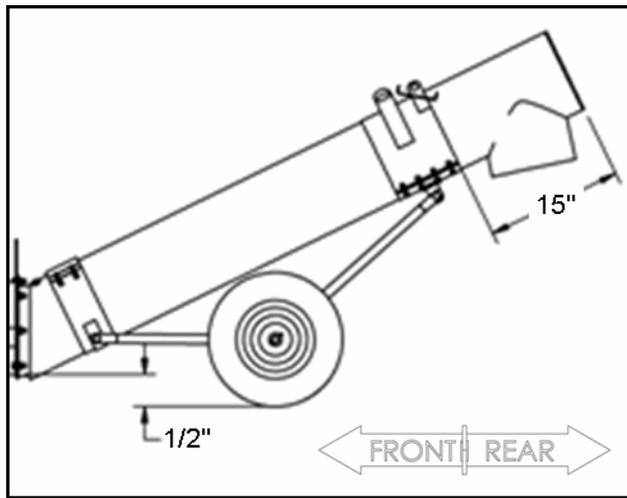


Figure 3.1 Side View of Assembly

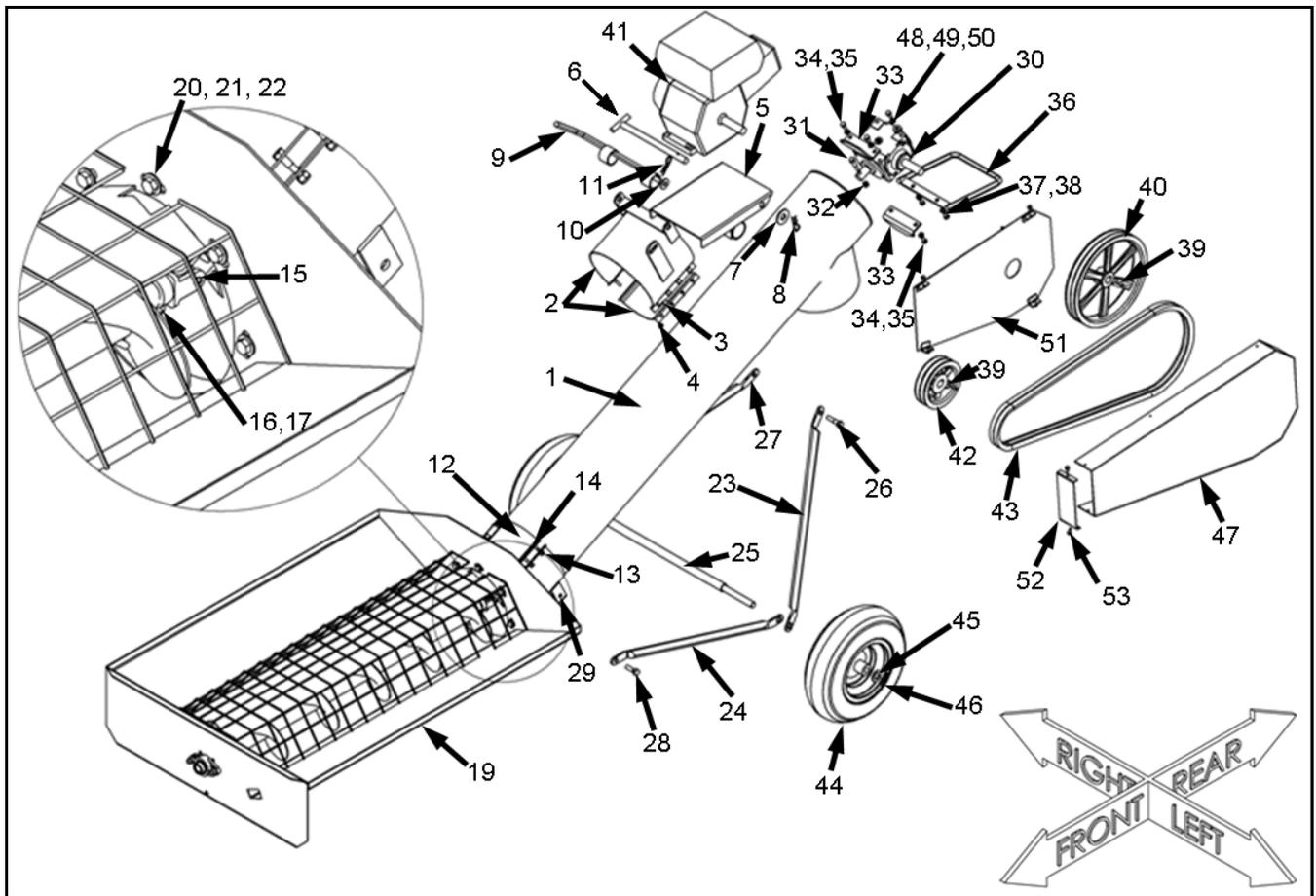


Figure 3.2

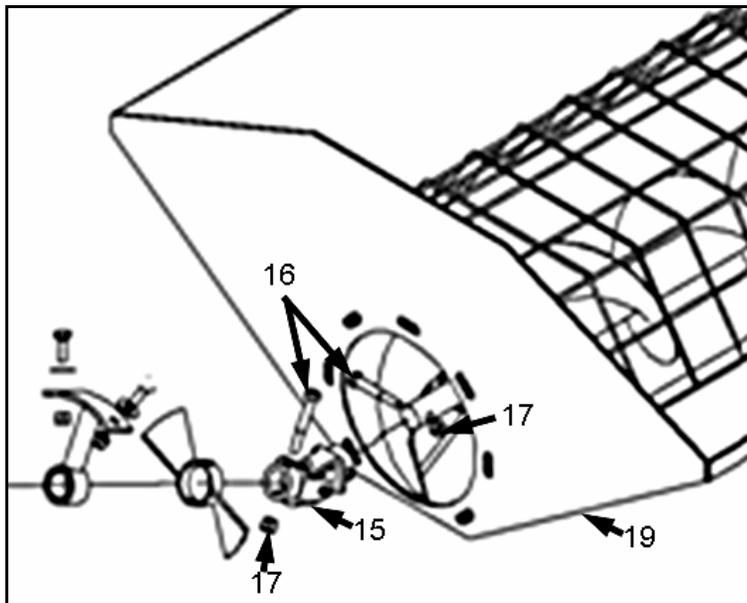


Figure 3.3

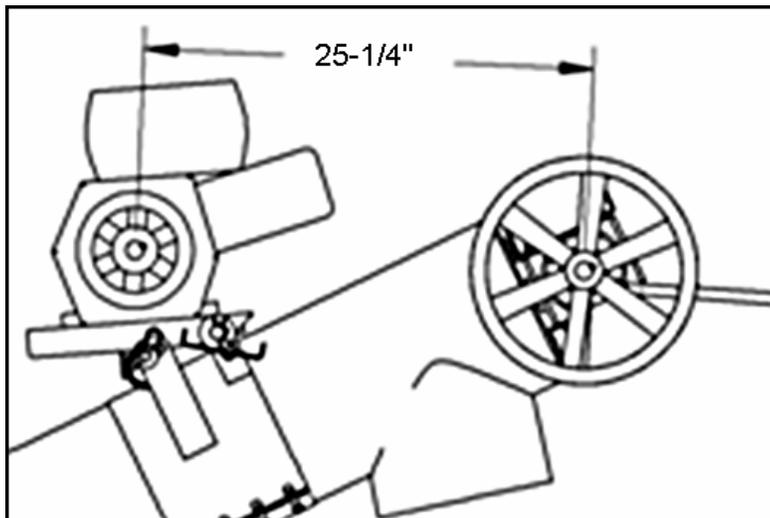


Figure 3.4

## 3.2. HYDRAULIC DRIVE TRANSFER ASSEMBLY

Refer to Figure 3.5 – 3.8 for assembly of Transfer Augers with hydraulic drive kits.

1. Insert a 3/8" x 2" bolt (2) through the hydraulic motor shaft (1) and secure to upper auger shaft with a 3/8" locknut (3).
2. Mount hydraulic motor (1) to upper auger tube using four 3/8" x 3/4" bolts (4).

**Note:** *Install bolts through tube end plate from inside.*



### **8" MODEL:**

1. Remove the plate protecting the top of the hydraulic motor and place #112 o-rings into the recessions in the top of the hydraulic motor.

2. Install a control valve (9) onto the hydraulic motor using the 5/16" Allen head bolts (10). Install hydraulic fittings into the control valve (see Figure 3.6).

➔ **8", 10", AND 13" MODELS:**

1. Attach axle (12) to tube (11) with four 5/16" x 1-1/2" bolts (16) and locknuts (17) (see Figure 3.5 A). Locate the axle band so that the hopper is 1/2" off the ground.
2. Install frame stiffeners (21) on axle (12) and secure with bolt (22) and locknut (23).
3. Place wheels (18) on axle (12) and anchor each with a 3/4" washer (19) and cotter pin (20).
4. Refer to Figure 3.5 B for the poly transfer frame assembly.

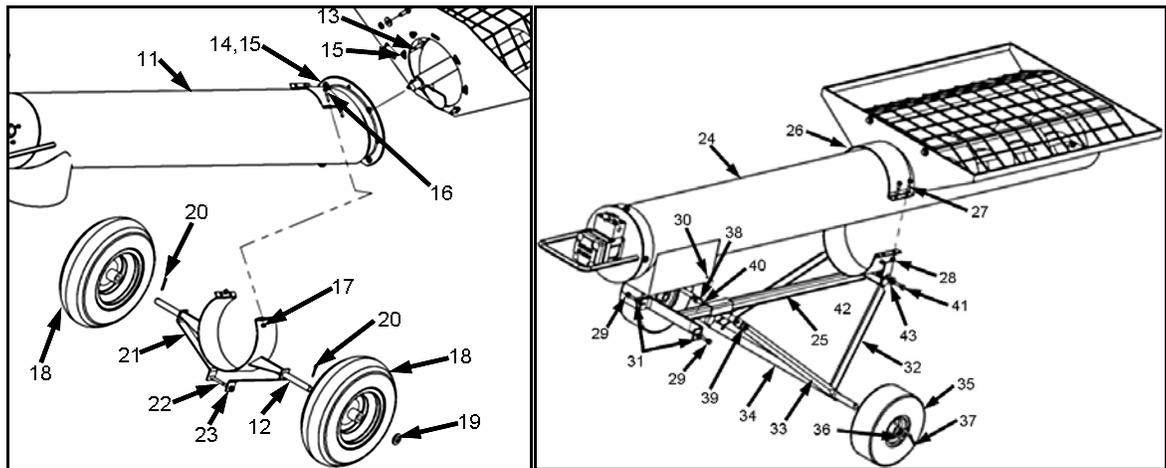


Figure 3.5 A

B

➔ **POLY MODEL**

1. Remove the plate protecting the top of the hydraulic motor and place #112 o-rings into the recessions in the top of the hydraulic motor.
2. Install a control valve (9) onto the hydraulic motor using the 5/16" Allen head bolts (10). Install hydraulic fittings into the control valve (see Figure 3.6). Connect upper end of tube support (25) to tube (24) with two 3/8" x 1-1/4" bolts (29), 3/8" flat washers (31), and 3/8" locknuts (30). Refer to Figure 3.6.
3. Connect lower end of tube support (25) to tube (24) with tube clamp (26), bolts (27), and locknuts (28).

4. Attach upper (33) and lower (32) support tubes to axle (34) by sliding over axle shaft.
5. Mount tire and rim (35) on axle (34) and secure with cotter pin (37) and 3/4" flat washer (36).
6. Install upper support tubes (33) to tube support (25) with a 1/2" x 6" bolt (38), 1/2" flat washer (40), and 1/2" locknut (39).
7. Install lower support tube (32) to tube support (25) with two 3/8" x 1-1/4" bolts (41), 3/8" flat washers (43), and 3/8" locknuts (42).

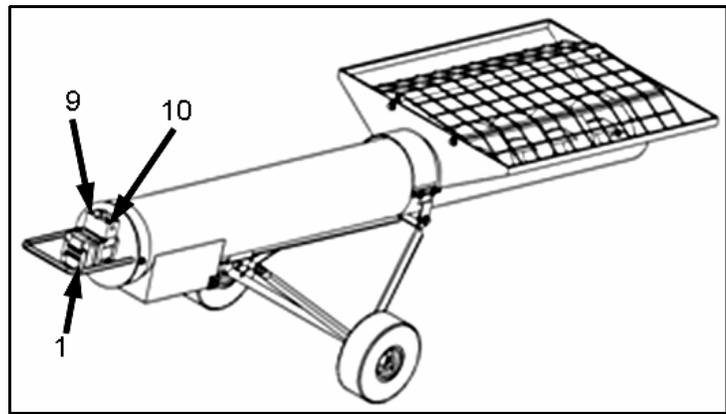


Figure 3.6

➔ **HYDRAULIC DOUBLE DRIVES (10")**

1. Connect the long hydraulic hoses (1 and 2) to the hopper hydraulic motor (11). Run these hoses (1 and 2) through the hopper guard (D). Refer to Figure 3.8.
2. **Open center hydraulics only:** Place the ball valve (4) on the handle (9) of the transfer auger. Connect hose (1) to part (5B) of the valve. Place the swivel fittings (12,14) into the ports of the tube hydraulic motor (8). Connect hose (2) to the swivel fitting (12) of the hydraulic motor (see Figure 3.8). Join the short hydraulic hose (3) into the swivel fitting (14) of the hydraulic motor. Place the other end of the short hose (3) into the port (5A) of the valve. Next, secure the hoses (1 and 2) to the tube. (See Figure 3.8.)

3. **For 10" and 13" closed center hydraulics only:** Install 1/2" nipple (6), 1/2" ball valve (7), and 1/2" elbow (8) on pressure side, and 1/2" swivel (5) on return side (see Figure 3.7).

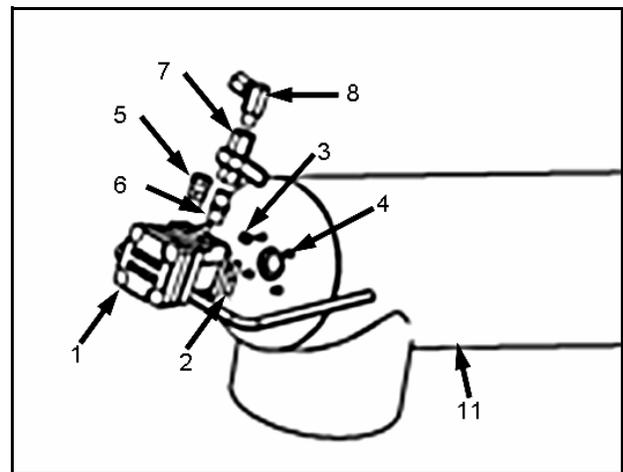


Figure 3.7

4. **Closed center hydraulics only:** Attach hydraulic line (13) to elbow. Connect hose (2) to the swivel fitting (7) on the hydraulic motor (8). Secure hoses (1 and 2) to the tube. (See Figure 3.8.)

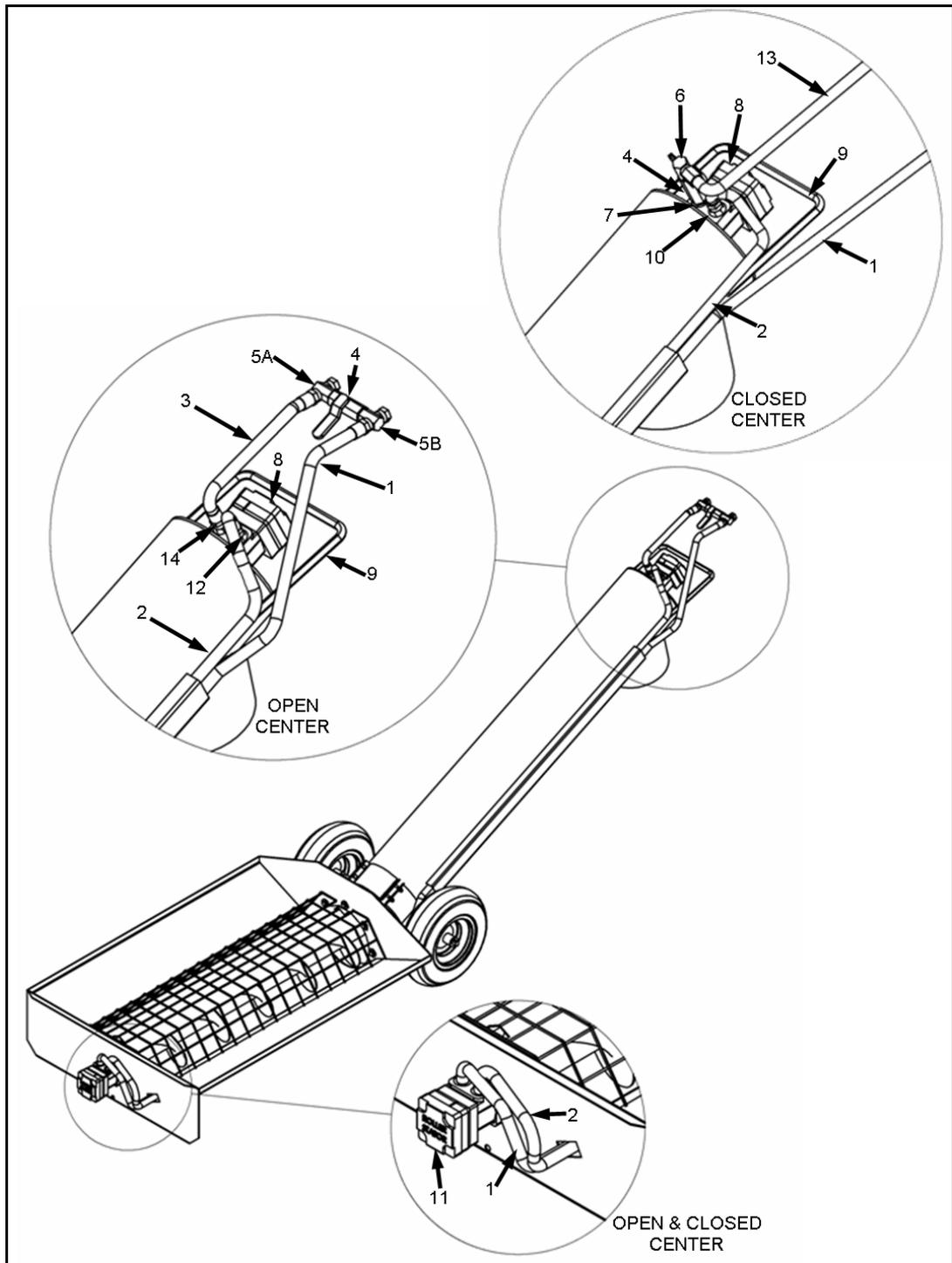


Figure 3.8

### 3.3. ELECTRIC DRIVE TRANSFER ASSEMBLY

Refer to Figure 3.9 and 3.10 for assembly of Transfer Augers with electric drive kits.

1. Install wheel frame clamp top and bottom (5) to tube (1) but don't tighten, (see Figure 3.9) and secure with four 5/16" x 1-1/2" bolts (6) and locknuts (7).
2. Attach u-joint to hopper auger.

3. Attach upper tube (1) to hopper bottom (2) with seven 7/16" x 1-1/4" bolts (8), flat washers (9), and nuts (10). When installing bolts, also attach frame brackets (11) to hopper as shown in Figure 3.9.

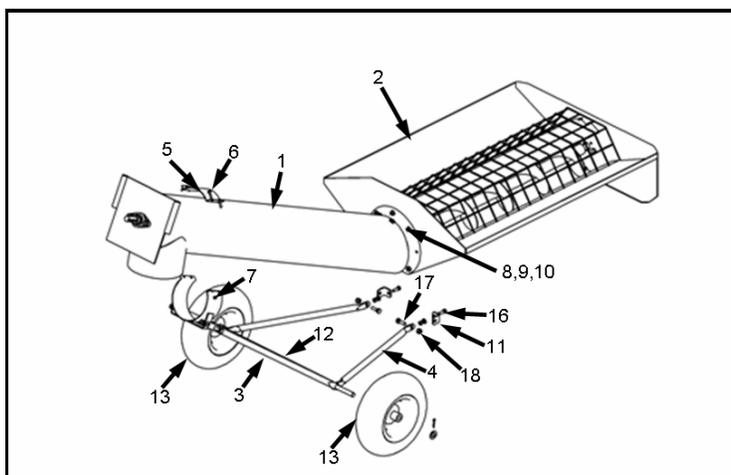
**Note:** Use flat washers on both sides of hopper/tube.

4. Attach upper (3) and lower (4) support tubes to axle (12) by sliding over axle shaft.
5. Mount each tire and rim (13) on axle and secure with cotter pin (15) and flat washer (14).
6. Install upper support tubes (3) to wheel frame clamp (13) with two 1/2" x 1-1/2" bolts (6) and 1/2" locknuts (7).
7. Install lower support tubes (4) to lower frame brackets (11) with two 1/2" x 1-1/2" bolts (16) and 1/2" locknuts (17). Adjust tube clamp until hopper is off ground ~1/2" and tighten.
8. Install 1/4" x 1-1/2" key (19) on electric motor shaft (20) and mount drive pulley (21) on shaft.

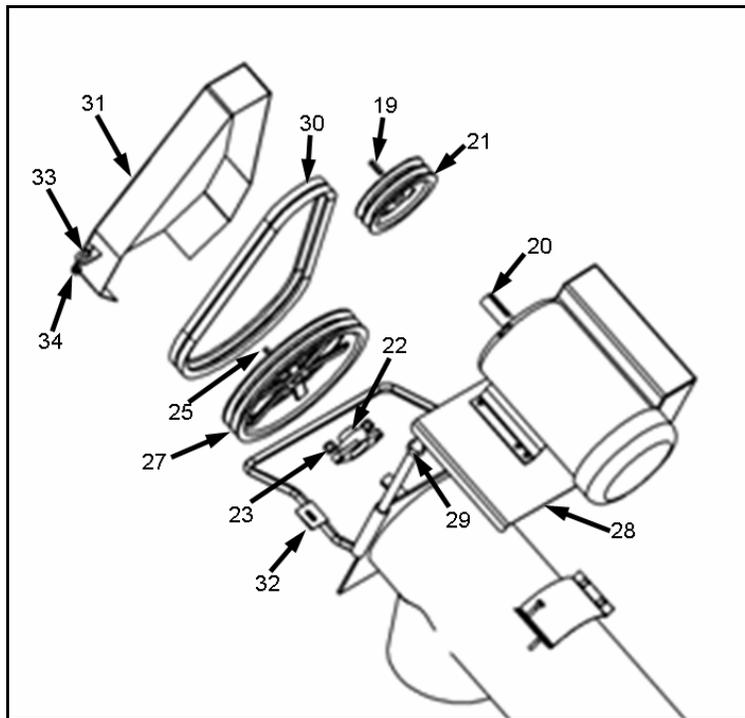
**Note:** Drive pulley should be 3.75" - 4.25"; see Figure 3.10.

9. Install 1/4" x 1-1/2" key (25) on fighting shaft (26) and mount pulley (27) on shaft.
10. Insert motor mount plate (28) with hex nuts (29) into head plate (24).
11. Place the electric motor (20) on the mount (28), and using a level or straight edge, align the ends of the fighting shaft (26) and motor shaft (20).
12. Use c-clamps or vice grips to temporarily secure the motor to the mount.
13. Mark hole locations on the motor mount and remove the motor and clamps / vice grips. Drill holes through to match the size of the mounting bolts, and install motor using bolts and locknuts.
14. Install the belts (30) provided. The belts should deflect 1/2" to 3/4" when pushed on with a 5 lb force. If they do not deflect properly, tighten or loosen the hex nuts (29) on the mount plate until the belt tension is adequate.
15. Secure pulley guard (31) to transfer handle tabs (32) with two bolts (33) and 3/8" locknuts (34).

**Important:** Final rpm for the auger should be between 500-600. Example: for 1750 rpm, using a 3.75" motor pulley, 12.7" auger pulley, final rpm = 517.



**Figure 3.9**



**Figure 3.10**



# 4. Transport & Placement

**Warning:** Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

## 4.1. TRANSPORT

---

1. When moving the Transfer Auger from location to location, place the unit on a transport vehicle and tie down securely. **DO NOT** tow behind a vehicle.

### NOTICE

**DO NOT** tow transfer auger behind a vehicle. Tires are not rated for road use.

## 4.2. PLACEMENT

---

When placing the auger, follow these guidelines:

- Ensure there is enough clearance from other equipment to move the machine into its working position.
- Move the machine under the truck or storage facility.
- Place the auger on a firm, level surface.
- Chock the wheels before augering any products.

**Note:** *The machine is almost evenly balanced. Pushing down a little on the discharge end will raise the intake end off the ground and allow easy maneuvering.*

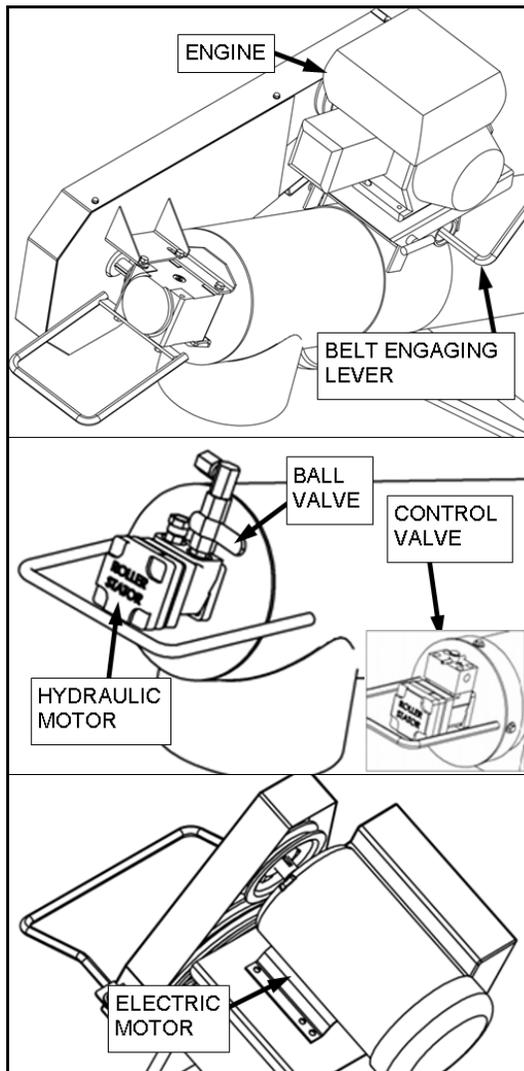


# 5. Operation

**Warning:** Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

## 5.1. OPERATOR CONTROLS

The transfer auger controls are located as shown in Figure 5.1. Please refer to engine manual for engine controls.



**Figure 5.1**

➔ Augers are available in various combinations. In most cases, the following instructions will apply to all augers. Where the information varies, additional instructions will be included, indicated by an arrow.

## 5.2. DRIVES & LOCKOUTS

---

Correct operation of this unit requires pre-inspection of the drive system, operator knowledge on how to shut down the system, and a general monitoring of the system during operation.

### **GAS ENGINE**

#### DRIVE SYSTEM

Before starting the engine, ensure that:

- The gas tank is properly closed.
- The belt release is disengaged.
- The area surrounding auge is properly ventilated.
- Pulley guards are in place and secure.

#### LOCKOUT

- Shut down and lock out power source.
- remove the spark plug wire or the spark plug.

### **ELECTRIC MOTOR**

#### DRIVE SYSTEM

Before starting the motor, ensure that:

- The motor is properly grounded.
- All electrical connections/wiring should be performed by a licensed electrician.
- Pulley guards are in place and secure.

#### LOCKOUT

- The electric motor should be equipped with a main power disconnect switch capable of being locked in the off position only. The switch should be in the locked position during shutdown or wherever maintenance is performed on the auger.
- If no disconnect switch, disconnect power source.
- If reset is required, disconnect all power before resetting motor.

### **HYDRAULIC MOTOR**

#### DRIVE SYSTEM

Before starting the motor, ensure that:

- Hoses are not leaking and are free of cracks.
- Hose connections are free of dirt and debris.

#### LOCKOUT

- Shut down power source and disconnect hydraulic hoses from power source.

<b>WARNING</b>	
	<p>Hydraulic fluid can cause serious injury if it penetrates the skin. If it does, see a doctor immediately.</p> <ul style="list-style-type: none"><li>• Relieve pressure before disconnecting hydraulic lin.</li><li>• Wear proper hand and eye protection and use wood or cardboard, not hands, when searching for leaks.</li></ul>

## 5.3. OPERATING PROCEDURES

---

### 5.3.1. BREAK-IN PERIOD

---

Your auger does not require an elaborate break-in. However, following a few simple tips during the first 1000 bu of operation can add to the reliability and life of your machine.

If any unusual noises or vibrations are encountered, determine the source, shut the auger off, lock out the power source, and adjust. If unsure of the problem, or the procedure to fix it, contact your local Wheateheart dealer.

#### PRE OPERATION CHECKLIST:

- Read the power source operation manual.
- Inspect motor mounting bolts for tightness.
- Check oil level in the gear box by removing the filler plug. Make sure the gear box is half full (center cross shaft) and free of foreign objects.
- Inspect all belts for alignment, tightness, and abnormal wear. Adjust or replace as required.
- Inspect components for damage and abnormal wear. Replace as required.
- Check that safety decals are installed and legible. Apply new decals if required.
- Check upper chain drive tension and alignment, apply or adjust grease.

Please refer to "Maintenance Intervals" on page 34 for recommended service intervals after the break-in period.

### 5.3.2. OPERATION

---

The following items should be checked before operating the machine **each time**:

- Visually inspect the machine.
- Ensure that all guards are in place, and secure.

- Check that drive belts are not frayed or damaged, and that they are properly adjusted and aligned.
- Ensure auger wheels are chocked.
- See that the discharge spout and intake area are free of obstructions.
- Ensure that operators are aware of safety precautions.

### NORMAL START-UP

1. Start the power source.
- ➔ 2. **GAS/HYDRAULIC DRIVES:** Increase the augering speed to achieve the desired speed.

*The flighting rpm on augers equipped with electric motors is not adjustable.*

3. If everything is operating normally, start running grain through the auger.
- Note:** In cold weather conditions, the gas mount can be easily removed by removing the pivot pin and hairpin and placed indoors to warm up. Once warmed, motor and mount can be re-installed and started.

#### NOTICE

Engine must be idling before you engage the belts.  
Engaging belts at high engine speed will result in premature belt wear.

#### NOTICE

Foreign objects can damage the auger.  
Remove any obstructions from the intake and discharge areas before operating the unit.

#### DANGER



To prevent death or serious injury:  
Keep away from rotating auger flighting.  
Do not remove or modify auger flighting, guards, doors, or covers. Keep in good working order. Have replaced if damaged.  
Do not operate auger without all guards, doors and covers in place.  
Never touch the auger flighting. Use a stick or the tool to remove an obstruction or clean out.  
Shut off and lock power to adjust, service, or clean.

### 5.3.3. RESTARTING WITH A FULL TUBE

---

The tube may be filled with material if the machine is shut down inadvertently or for an emergency. It is recommended that you restart with the following procedure:

1. With the power source locked out, remove as much of the grain as possible from the tube and intake.
- ➔ 2. **GAS/HYDRAULIC DRIVE:** Dis-engage belt and engage the power source and run it at half speed. Re-engage belt. Then increase the engine speed to achieve the desired augering speed.
- ➔ 3. **ELECTRIC DRIVE:** Start the electric motor and run to clear the full tube.

### 5.3.4. SHUTDOWN

---

#### NORMAL SHUTDOWN

1. Near the end of the load, reduce the feed of grain.
- ➔ 2. **GAS/HYDRAULIC DRIVE:** Decrease the auger speed.
3. Run the auger until the tube is empty.
4. Stop motor when auger is clear of grain.
5. Lock out power source.

#### NOTICE

Prolonged operation of an empty auger will cause unnecessary wear.

#### EMERGENCY SHUTDOWN

Although it is recommended that the machine be emptied before stopping, in an emergency situation:

1. Stop or shut down the power source immediately.
2. Stop the flow of material (if applicable).
3. Lock out power, and correct the emergency before resuming work.

#### WARNING



Lock out all power before attempting repairs or removing obstructions.

### 5.3.5. CLEANOUT

---

1. Run the unit to clean out the majority of the grain.
2. Shut down and lock out the power source.
3. Clean grain from the auger and hopper, and dump it into a container.

**Note:** *Transfer can be tipped sideways to assist in fully cleaning unit on electric and hydraulic models only.*

# 6. Maintenance

**Warning:** Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

This unit has been designed and manufactured to meet the highest standards while requiring minimal maintenance. Following a careful service and maintenance program will provide many years of trouble-free service.

To reduce the risk of injury or death to people using this equipment, follow basic safety precautions.

## **When performing adjustments, service, or repairs:**

- Always take safety into consideration and note Section 2.5.
- Use extra caution when cleaning and servicing augers because flighting edges can become sharp.
- Follow proper procedures when mounting a tire on a rim, see Section 2.9.

## **6.0.1. FLUIDS & LUBRICANTS**

---

### **ENGINE OIL**

Refer to the engine operation manual for recommended oil usage.

### **GEAR OIL**

Use SAE approved 90W or equivalent gear oil.

### **GREASE**

Use SAE multi-purpose, high-temperature grease with extreme pressure (EP) performance, or SAE multi-purpose lithium-based grease.

### **STORAGE & HANDLING**

Always follow manufacturer's guidelines for safe and effective storage and handling of lubricants.

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contaminants.

## 6.1. MAINTENANCE INTERVALS

Details of service are listed in Section 6.2.

**Table 6.1**

	Time Period			
	Daily (8000 BU)	Periodically (40,000 BU)	Annually (Before Storage)	Annually (After Storage)
Visually inspect the unit.	√			
Check engine oil level.	√			
Check air filter.		√		
Service belts.		√		
Grease machine.		√		
Check gearbox oil level (gas models).		√		
Clean machine.			√	
Service engine (gas & electric models).				√
Change gearbox oil.				√

## 6.2. MAINTENANCE PROCEDURES

### 6.2.1. VISUAL INSPECTION

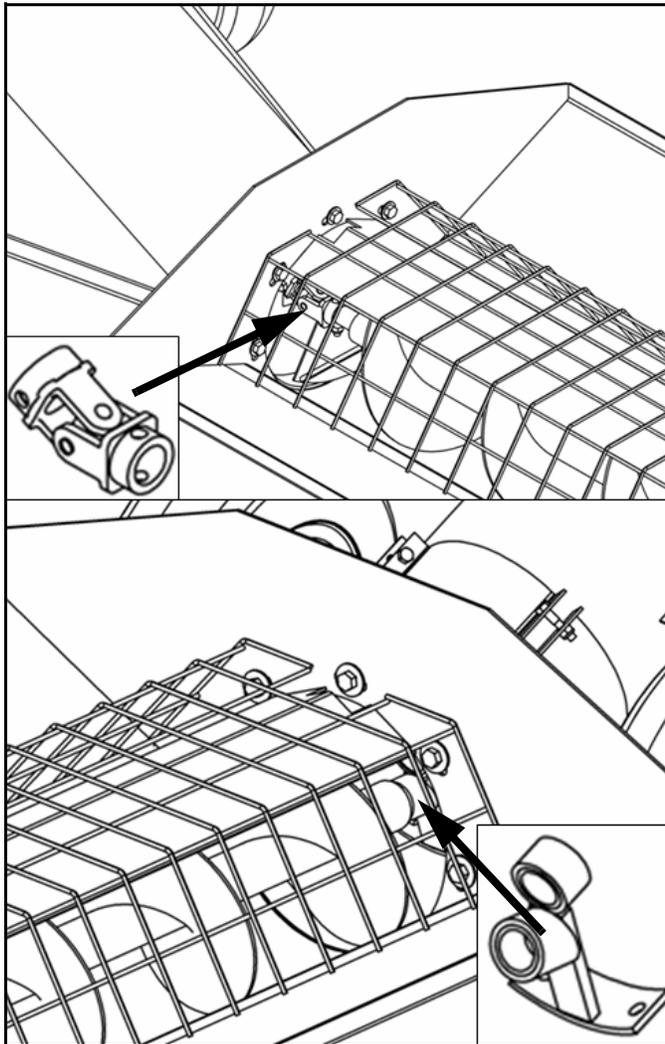
Before beginning the visual inspection, chock auger wheels and ensure that all operators are aware of safety precautions.

When inspecting:

- Ensure all guards are in place, and in good working order.
- Examine the auger for damage or unusual wear.
- Inspect the machine for evidence of oil leaks.
- Examine hydraulic hoses and fittings for leaks and cracks.
- Be sure all safety decals are in place and are legible.
- **ELECTRIC DRIVE:** Check that drive belts are not frayed or damaged. Ensure they are properly adjusted and aligned.
- Check that the discharge spout and intake area are free of obstructions.
- Ensure that intake housing fasteners are properly secured.
- Examine all flighting for damage or unusual wear.

- Examine tires for gashes, uneven wear, or loss of air pressure.
- Inspect auger shaft bushing for unusual wear or discoloration.

Orientation of bushing will vary depending on model.



**Figure 6.1**

## 6.2.2. GREASE MACHINE

---

**Important:** *Original equipment bearings used by Wheatheart are sealed units and will not accept grease.*

1. Lock out all power.
2. Grease points on the machine are shown by arrows in Figure 6.2.
3. Use the grease recommended in Section 6.0.1.
4. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
5. If a fitting will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.
6. Replace and repair broken fittings immediately.

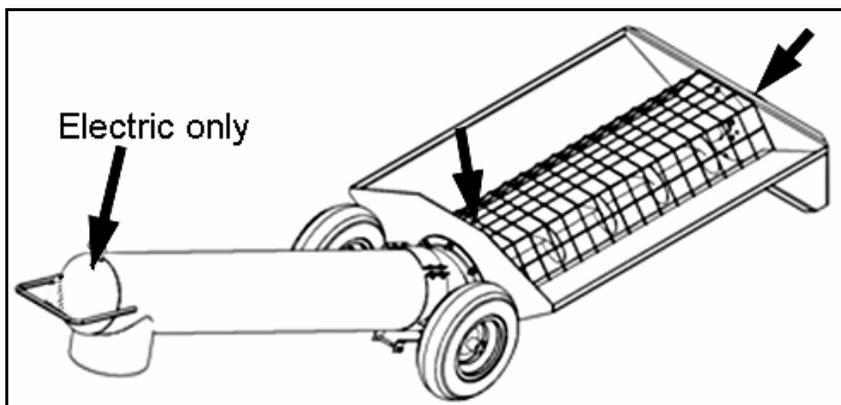


Figure 6.2

## 6.2.3. CLEAN MACHINE

---

1. Lock out all power.
2. Clean out excess grain from auger tube and intake.
3. Make sure nothing is obstructing the auger intake so water can run out.
4. Wash the tube with a water hose or pressure washer until all dirt, mud, debris, or residue is washed from the auger.
5. Provide sufficient time for the water to drain from the auger.

## 6.2.4. INSPECT HYDRAULIC HOSE & COUPLER

---

Using a piece of cardboard or wood, run it along the length of the hose and around all fittings. Replace the hose or tighten/replace the fitting if a leak is found.

<b>WARNING</b>	
	<p>Hydraulic fluid can cause serious injury if it penetrates the skin. If it does, see a doctor immediately.</p> <ul style="list-style-type: none"><li>• Relieve pressure before disconnecting hydraulic line.</li><li>• Wear proper hand and eye protection and use wood or cardboard, not hands, when searching for leaks.</li></ul>

## 6.2.5. SERVICE ENGINE

---

See engine operation manual for service requirements.

## 6.2.6. CHECK GEARBOX OIL LEVELS (GAS DRIVES)

---

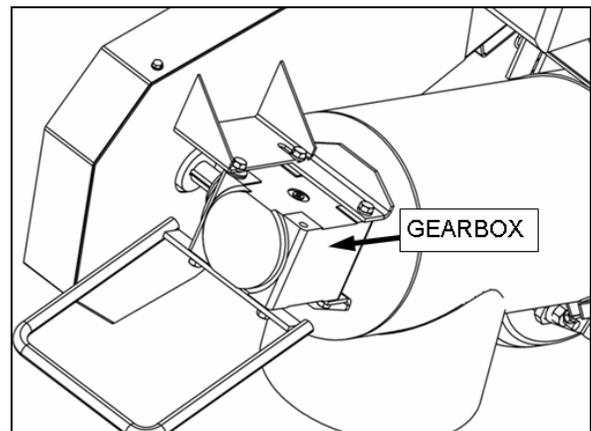
1. Lock out all power.
2. Remove oil filler plug.
3. Make sure the gearbox is half full (center of cross shaft) and free of foreign objects. Gearbox should be level when checking oil level.

## 6.2.7. CHANGING GEARBOX OIL (GAS DRIVES)

---

See Figure 6.3.

1. Remove guards and gearbox from auger.
2. Place a pan under the drain plug.
3. Use a wrench and remove the drain plug.
4. Loosen the filler plug so air can enter the gearbox and the oil will drain freely.
5. Allow the oil to drain completely.
6. Replace the drain plug.
7. Add oil until the gearbox is half full (center of cross shaft) and replace filler plug. Gearbox should be level when checking or refilling. **DO NOT OVERFILL.**
8. Reinstall gearbox and guards.



**Figure 6.3**

## 6.2.8. REPLACING BELTS (GAS & ELECTRIC DRIVES)

1. Lock out all power.
2. Remove guard to allow access to belts.
3. Disengage motor mount handle (gas only) and remove belts.
4. The new auger belts can now be put in place.
5. Follow procedure below for tightening belts.
6. Re-attach guards.

## 6.2.9. TIGHTENING BELTS (GAS & ELECTRIC DRIVES)

### ELECTRIC DRIVES:

- If the drive belts are slipping, the belt should be tightened by turning the adjustment nuts clockwise (see Figure 6.4) until the belt is tight enough so that it does not slip.
- If the drive belts have been over-tightened, the belts will wear quickly and extra stress will be placed on the pulleys. In this case, the belt tension should be lessened by turning the adjustment nuts counter-clockwise (see Figure 6.4).

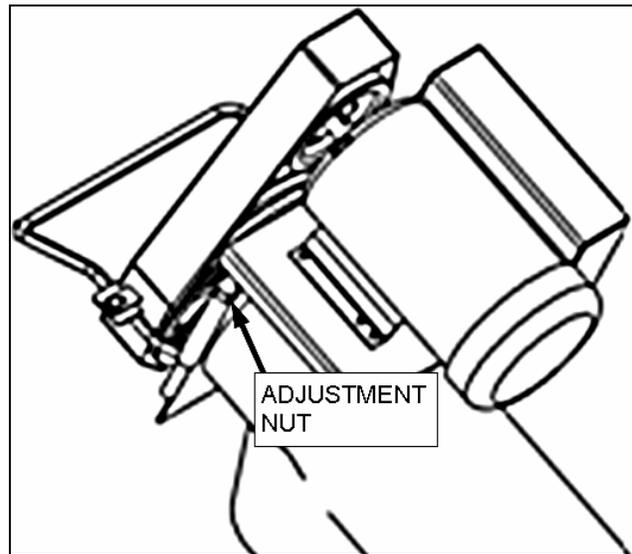


Figure 6.4

### GAS DRIVES:

- If the drive belts are slipping, the belts should be tightened. To tighten the belts, loosen the over-center handle, motor mount clamp, and wheel frame clamp. Slide each clamp toward the hopper approximately 1/2" and tighten nuts (see Figure 6.5). Test belt to ensure it no longer slips, repeat if necessary.
- If the drive belts are too tight, the belts should be loosened. To loosen the

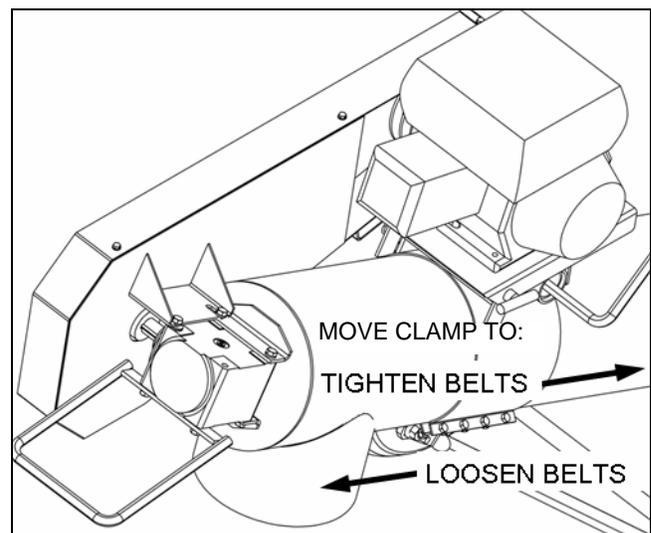


Figure 6.5

belts, loosen the over-center handle, motor mount clamp, and wheel frame clamp. Slide each clamp toward the spout approximately 1/2" and tighten nuts (see Figure 6.5). Test belt to ensure it no longer slips, repeat if necessary.

**Note:** *Refer to "Assembly" on page 15 for further details if required.*



# 7. Storage

**Warning:** Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

To ensure a long, trouble-free life, the following procedure should be followed when preparing the unit for storage after the season's use:

- Lock out all power.
- Store the machine on a level surface, free of debris, and in an area away from human activity. Store in a dry place, or use a tightly secured tarp to protect the equipment from the weather.
- Remove all residual material and clean the machine thoroughly.
- Inspect the unit at stress points for cracks.
- Repair or replace any worn or damaged components to prevent any unnecessary downtime at the start of the next season.
- Touch up paint nicks and scratches to prevent rusting.
- Check hydraulic fittings, hoses, lines, couplers, and valves. Tighten any loose fittings. Replace any hose that is badly cut, nicked, abraded, or is separating from the crimped end of the fitting. Secure the hoses to the machine.
- Inspect and tighten all fasteners; replace fasteners if required.
- Inspect the engine for any abnormal leaks, check the air filter and clean or replace as necessary. Drain the gas from the carburetor and gas tank. Check to see if there is sufficient oil in the crankcase.
- Support intake on blocks to eliminate prolonged contact with the ground.
- Lubricate all grease fittings.
- Cover motor/engine to protect from weather.
- Chock wheels.
- Check tire pressure.



# 8. Troubleshooting

The following table lists the causes and solutions to some potential problems you may encounter in operating your machine.

**Table 8.1**

PROBLEM	CAUSED BY	SOLUTION
The auger does not turn.	• auger is plugged or obstructed	• identify and remove obstruction
	• drive belt is slipping	• adjust the tension of the belt
	• a bearing is seized	• identify the bearing and replace
	• a chain is broken	• identify the chain and repair or replace
	• gearbox is seized	• fix or replace the gearbox
	• gearbox coupler bolt is broken or missing	• replace the bolt
The horizontal auger will not turn.	• center coupler bolt is broken or missing	• replace the bolt
Auger is noisy.	• obstruction in the auger	• identify and remove obstruction
	• auger shaft bolts are loose or damaged	• tighten or replace bolts
	• auger shaft is bent	• repair or replace auger
	• flighting is damaged	
	• worn bearing	• repair or replace bearing
	• low gear oil level (Gas/Electric Models)	• inspect the gearbox, replace if damaged or add oil if not damaged
Low material augering rate.	• engine speed is too slow	• increase rpm of the engine
	• inadequate material flow from truck or hopper	• increase flow of material
	• flow into the auger intake is restricted	• clear grating of obstructions
	• material too wet or heavy	• unloading rates are for dry grain
	• flighting is worn	• repair or replace as required
	• belt slipping	• identify the belt; adjust or replace as required



# 9. Appendix

## 9.1. BOLT TORQUE VALUES

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torque specified in the chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as your guide. Replace hardware with the same strength bolt.

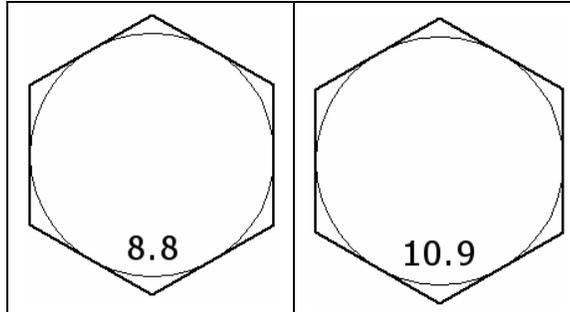
**Table 9.1**

BOLT DIAMETER	SAE 2		SAE 5		SAE 8	
	(Nm)	(Lb-ft)	(Nm)	(Lb-ft)	(Nm)	(Lb-ft)
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	+850	630	1320	970

**Table 9.2**

BOLT DIAMETER	8.8		10.9	
	(Nm)	(Lb-ft)	(Nm)	(Lb-ft)
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7

**Table 9.2**



BOLT DIAMETER	8.8		10.9	
	(Nm)	(Lb-ft)	(Nm)	(Lb-ft)
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710

Torque figures indicated above are valid for non-greased or non-oiled threads and head unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

## 9.2. SPECIFICATIONS

**Important:** *Wheatheart Manufacturing reserves the right to change specifications without notice.*

**Table 9.3**

	9" POLY	8" HYD	8" ELEC	8" GAS
Tube Size	9" (229mm)	8" (203mm)	8"(203mm)	8"(203mm)
<b>CAPACITIES</b>				
Unloading Rate	Up to 5000 Bu/hr (176m <sup>3</sup> /hr)	Up to 3000 Bu/hr (106m <sup>3</sup> /hr)	Up to 3000 Bu/hr (106m <sup>3</sup> /hr)	Up to 3000 Bu/hr (106m <sup>3</sup> /hr)
<b>DIMENSIONS</b>				
Hopper Size	27" X 36"	3' X 4'		
Hopper Clearance	20"	12"		
Overall Length	8'4"	10'		
Discharge Clearance	20"	24"		
<b>TIRES</b>				
Type	8"			
Inflation Pressure	20 - 24 psi (137-165kPa)			
<b>WEIGHT</b>				
Total Weight	140lb	235lb	265lb	300lb
<b>POWER REQUIREMENTS</b>				
Gas Engine				5.5 HP (max)
Electric Motor			3 HP (max)	
Hydraulic Motor	4.6,1/2NPTF	4.6,1/2NPTF		
<b>PART SPECIFICATIONS</b>				
Motor Pulley Size			3-3/4 - 4-1/4"	3.5"
Driven Pulley Size			12.7"	12.7"
Gearbox Oil Capacity				1/2 Imp GAL. (2.3L)
Belt Size			B69	B69

**Table 9.4**

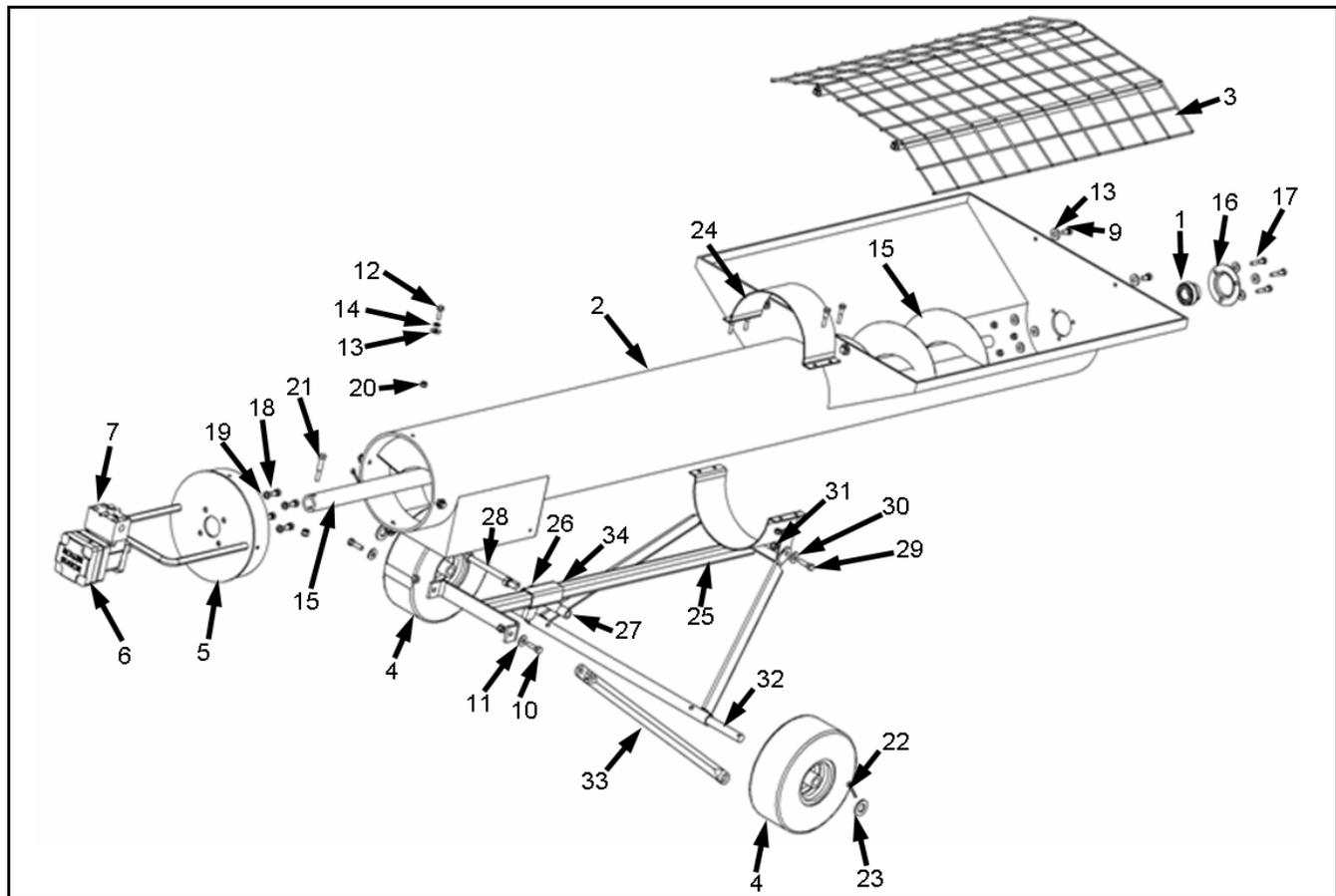
	10" ELEC	10" GAS	10" DD	13" HYD
Tube Size	10" (254mm)	10" (254mm)	10" (254mm)	13" (330mm)
<b>CAPACITIES</b>				
Unloading Rate	Up to 6000 Bu/hr (106m <sup>3</sup> /hr)	Up to 6000 Bu/hr (106m <sup>3</sup> /hr)	Up to 6000 Bu/hr (106m <sup>3</sup> /hr)	Up to 9000 Bu/hr (317m <sup>3</sup> /hr)
<b>DIMENSIONS</b>				
Hopper Size	3' X 4'			
Hopper Clearance	12"			

**Table 9.4**

Overall Length	10'			
Discharge Clearance	24"			30"
TIRES				
Type	8"			
Inflation Pressure	20 - 24 psi (137-165kPa)			
WEIGHT				
Total Weight	305lb	320lb	285lb	490lb
POWER REQUIREMENTS				
Gas Engine		9 HP (MAX)		
Electric Motor	5 HP (MAX)			
Hydraulic Motor			4.6,1/2NPTF	4.6,1/2NPTF
PART SPECIFICATIONS				
Motor Pulley Size	3-3/4 - 4-1/4" DBL	3-5" DBL		
Drive Pulley Size	12.7" DBL	12.7" DBL		
Gearbox Oil Capacity		1/2 Imp GAL. (2.3L)		
Belt Size	B69	B69		



### 9.3. PARTS

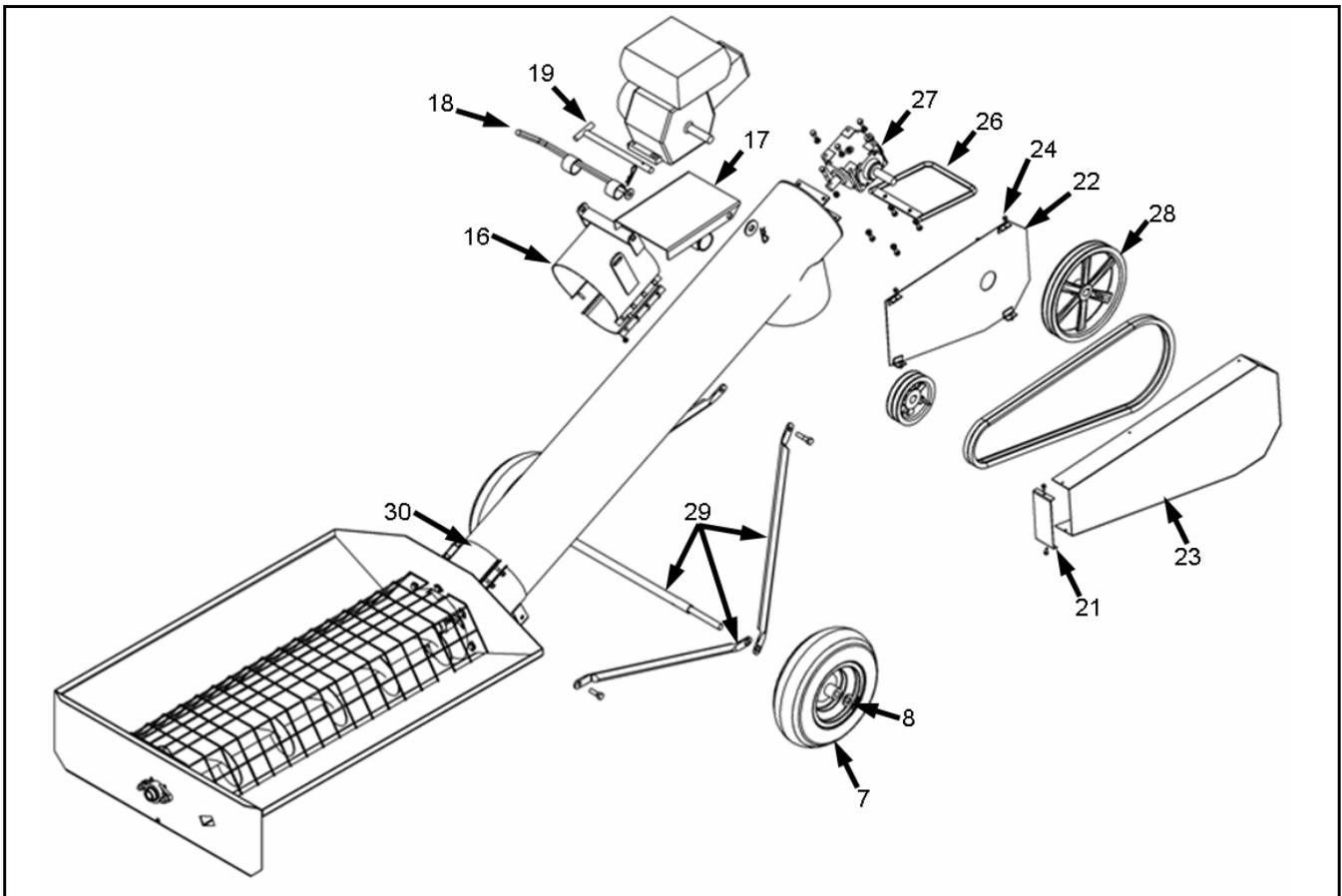


**Table 9.5**

REF	PART NO.	QTY	DESCRIPTION
1	300014	1	1" BEARING WITH CAMLOCK, 8" / 10"
2	311001	1	POLY AUGER SHELL
3	311007	1	SCREEN
4	2603010	2	TIRES 4.10 x 3.50
5	311024	1	HANDLE/ END CAP ASSEMBLY
6	9901001MANRP	1	MOTOR, HYD., 4.6 MANIFOLD
7	1100000	1	SPEED CONTROL VALVE, COMPLETE
8	9900554	9	NUT HEX 5/16 UNC PLT
9	311027	4	THUMB SCREW
10	9900531	2	BOLT HEX 3/8 X 1-1/4
11	601008	2	WASHER FLAT 3/8 PLT
12	9900699	4	BOLT HEX 3/8 X 1
13	9900529	14	WASHER FLAT 5/16 PLT
14	9900523	4	WASHER LOCK 5/16" PLT
15	311017	1	CORE W/ FLIGHTING
16	311030	1	205 BEARING FLANGE

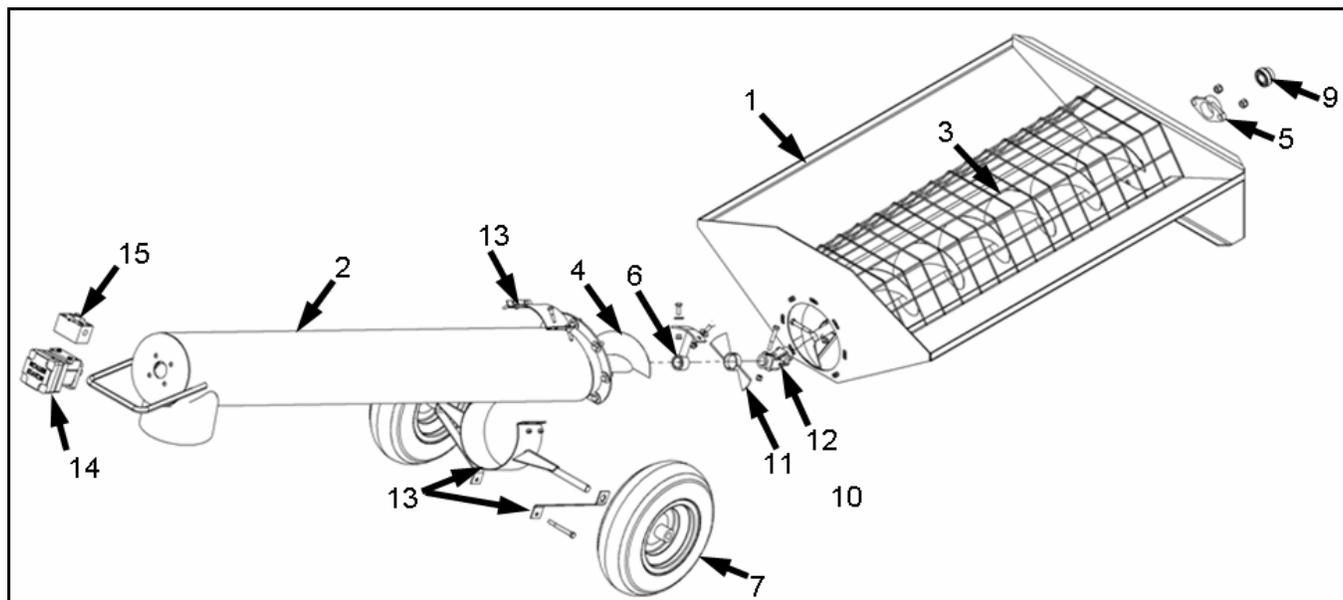
**Table 9.5**

REF	PART NO.	QTY	DESCRIPTION
17	9900586	7	BOLT HEX 5/16 X 1-1/2
18	9900530	4	BOLT HEX 3/8 X 3/4
19	601008	6	WASHER FLAT 3/8 PLT
20	9900660	5	NUT HEX 3/8 UNC GR.5 PLT
21	9900512	1	BOLT HEX 3/8 X 2-1/2
22	4500070	2	HAIRPIN 3/16 X 3-1/4
23	9900713	4	WASHER FLAT SAE 3/4 PLT
24	0311005-2	1	TUBE SUPPORT CLAMP
25	311009	1	TUBE SUPPORT ASSEMBLY
26	9900565	1	WASHER FLAT 1/2 PLT
27	9900538	1	NUT NYLOCK 1/2 UNC GR5 PLT
28	9900687	1	BOLT HEX 1/2 X 6
29	9900531	2	BOLT HEX 3/8 X 1-1/4
30	601008	4	WASHER FLAT 3/8 PLT
31	9900660	2	NUT HEX 3/8 UNC GR.5 PLT
32	311016	1	AXLE FRAME
33	311003	2	FRAME MEMBER W/ OUTSIDE PIVOT
34	2300163-2	1	BOLT HOLDER, PIPE



**Table 9.6**

REF.	PART NO.	QTY.	DESCRIPTION
			UNIVERSAL
1	0301602	1	8" T.A. HOPPER SECTION
1	0308006	1	10" T.A. HOPPER SECTION
2	0301604	1	8" UPPER AUGER TUBE
3	0300684	1	LOWER FLIGHTING WITH SHAFT, 8"
3	0300685	1	LOWER FLIGHTING WITH SHAFT, 10", GAS
4	0300024	1	UPPER FLIGHTING, 8" HYD., GAS
4	0300026	1	UPPER FLIGHTING, 10", GAS
4	0300025	1	UPPER FLIGHTING, 8" ELECTRIC
4	0300046	1	UPPER FLIGHTING, 10" ELECTRIC
5	0300013	1	205 CAST FLANGE WITH CAMLOCK
6	0300679	1	8" HANGER & BUSHING
6	0300682	1	10" HANGER & BUSHING, 10" TRANSFER AUGER
6	9900268	1	REPLACEMENT BUSHING, 1-1/16" (NOT SHOWN)
7	9900316	2	WHEEL AND TIRE, 4.8 - 8"
8	0300613	2	5/32" COTTER PIN
9	0300014	1	1" BEARING WITH CAMLOCK, 8" / 10"
10	0301616	1	U-JOINT WITH IMPELLER, 8"
10	0301617	1	U-JOINT WITH IMPELLER, 10"
11	0300022	1	IMPELLER ONLY 8"
11	0300022A	1	IMPELLER ONLY 10"
12	9900249X	1	U-JOINT DRILLED BOTH SIDES
12	9900182	1	8" HYDRAULIC T.A. BOLT PACKAGE (NOT SHOWN)
12	9900184	1	GAS / ELECTRIC T.A. BOLT PACKAGE (NOT SHOWN)



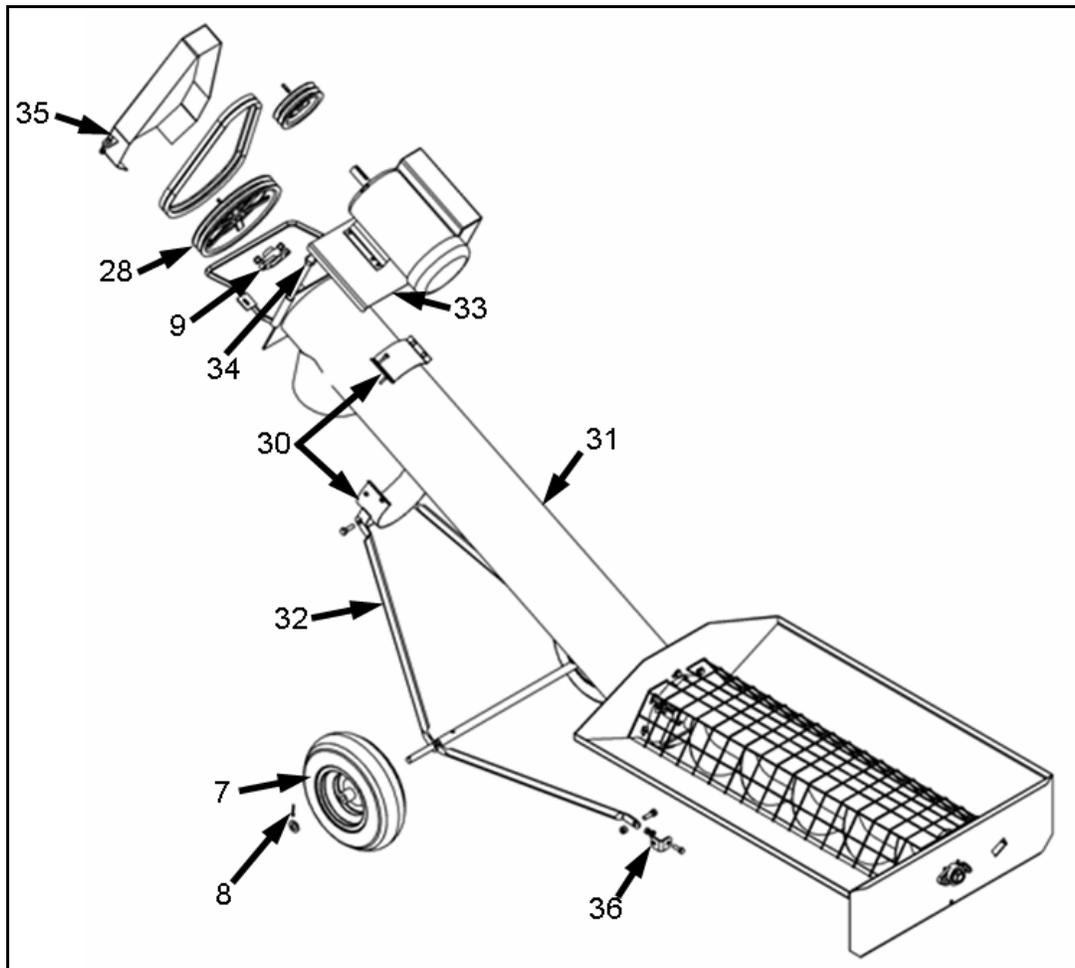
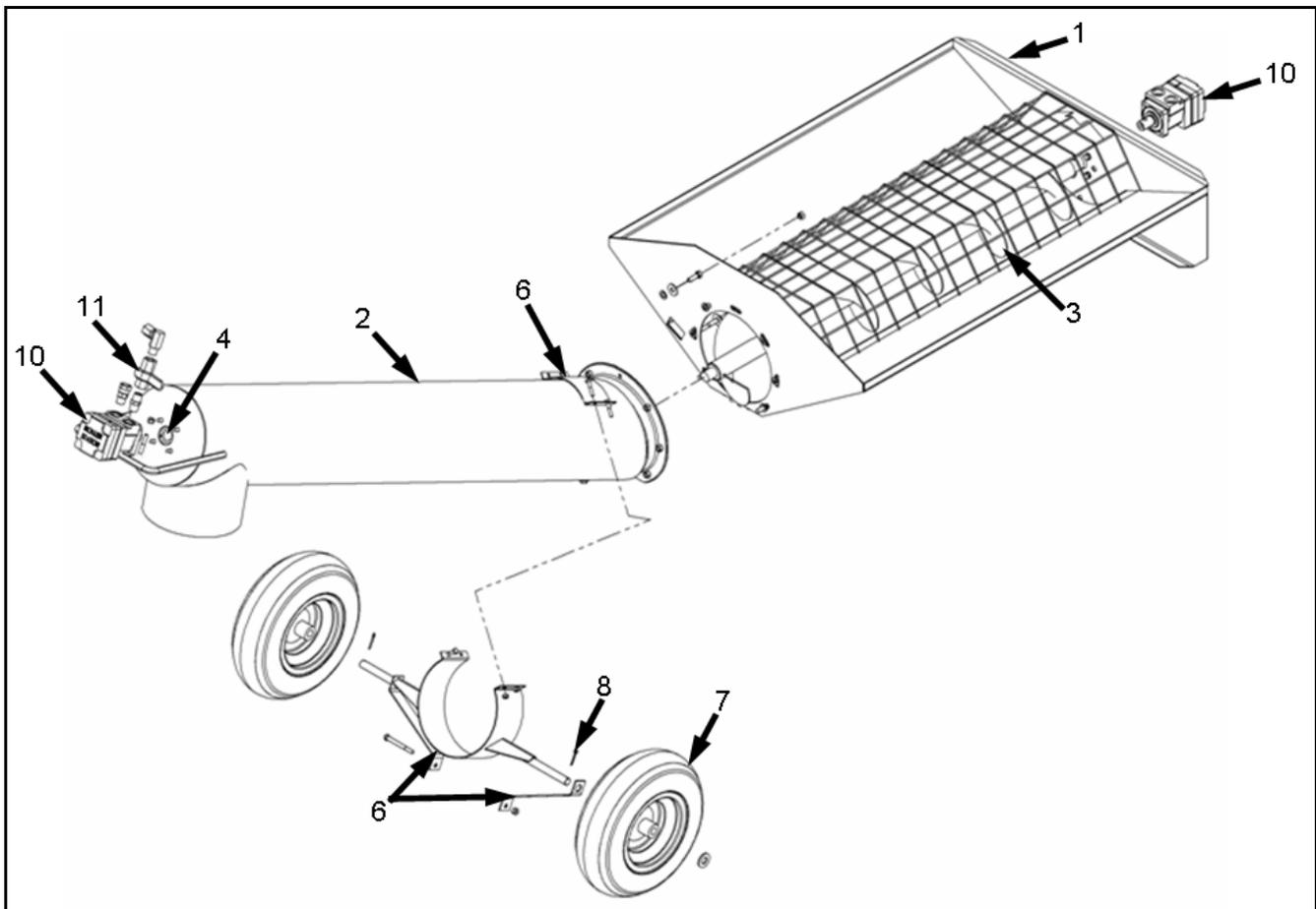


Table 9.7

REF	PART NO	QTY	DESCRIPTION
			<b>HYDRAULIC – 8"</b>
13	0300615A	1	WHEEL BAND ASSY 8" W/ STIFF/CAP
14	9901001MANRP	1	MOTOR HYD., MANIFOLD, 4.6
15	1100000	1	SPEED CONTROL VALVE, COMPLETE
			<b>GAS</b>
16	0300015	1	MOTOR BAND CLAMP, 8" (2 PIECES)
16	0300029	1	MOTOR MOUNT CLAMP, 10" (2 PIECES)
17	0300016	1	MOTOR MOUNT PLATE, 8"
17	0300030	1	MOTOR MOUNTING PLATE, 10"
18	0300017	1	TIGHTENER PIN, 8"
18	0300031	1	TIGHTENER PIN, 10"
19	0300018	1	T-PIN, 8"
19	0300032	1	T-PIN, 10"
20	0300700	1	GUARD, ASSY, GAS TRANSFER AUGER (REPLACES 0300667)
21	0300694	1	GUARD, END COVER, GAS TRANSFER AUGER
22	0300698	1	GUARD, BACK WELD'T, GAS TRANSFER AUGER
23	0300699	1	GUARD, FRONT WELD'T, GAS TRANSFER AUGER

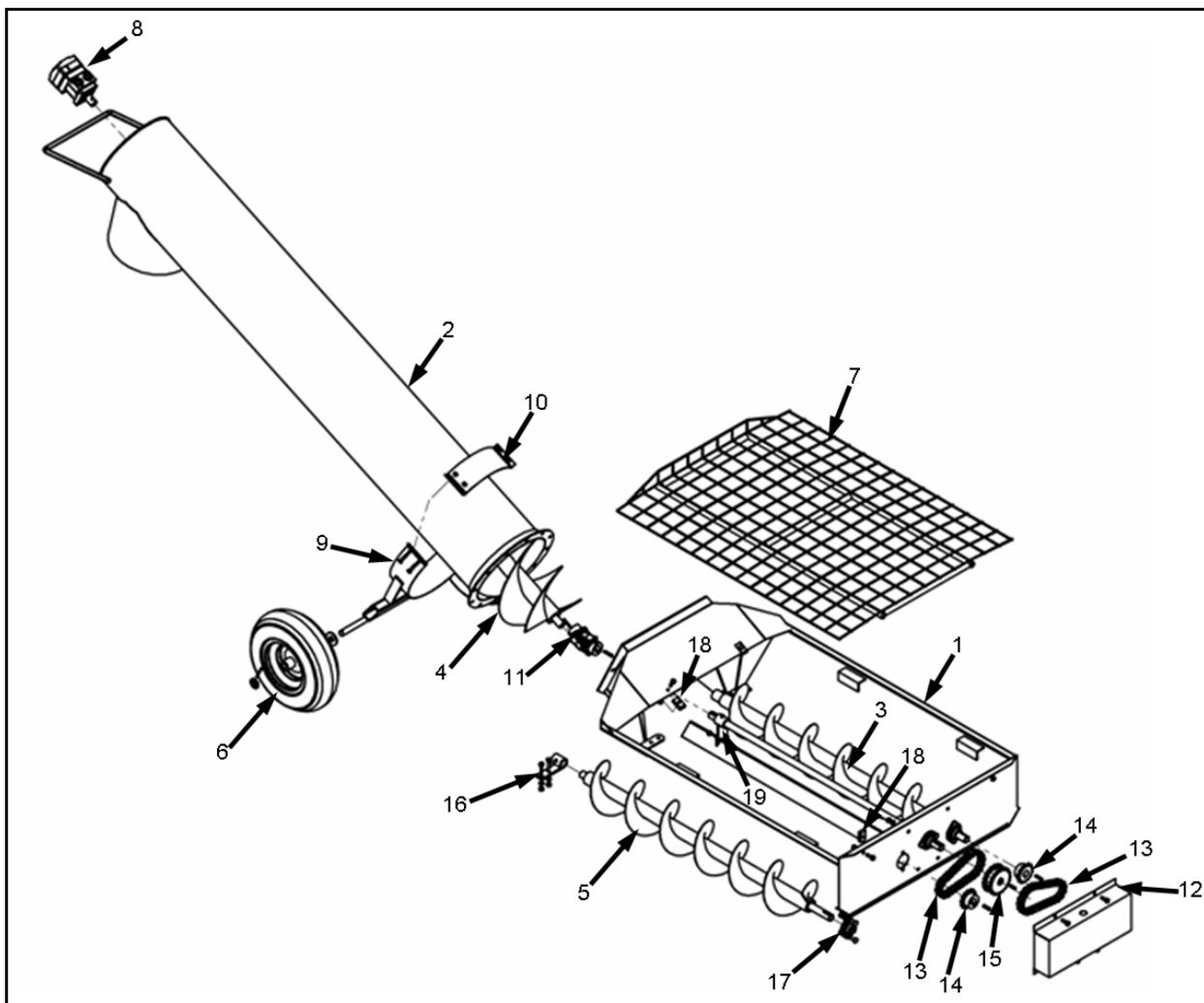
**Table 9.7**

REF	PART NO	QTY	DESCRIPTION
24	9900132	6	SCREW SHEET METAL, 1/4" x 5/8"
25	0300650		8" AUGER TUBE W/ GEAR BOX BRACKET
25	0300651	1	10" AUGER TUBE W/ GEAR BOX BRACKET
26	0300653-5	1	TRANSPORT HANDLE, GAS
27	0300655	1	GEARBOX, 1:1.5 RATIO (1994)
28	W19613	1	GEARBOX PULLEY, 13" DOUBLE, 8 & 10"
29	0300670		WHEEL FRAME ASSEMBLY (5 PIECES)
30	0300671		WHEEL FRAME CLAMP, 8" (2 PIECES)
30	0300672		WHEEL FRAME CLAMP, 10" (2 PIECES)
			<b>ELECTRIC</b>
31	0300001	1	8" AUGER TUBE (ELECTRIC)
31	0300002	1	10" AUGER TUBE (ELECTRIC)
32	0300005	1	WHEEL FRAME ASSEMBLY, 5 PIECE, ELECTRIC
33	0300006	1	MOTOR MOUNTING PLATE (ELECTRIC) 8"
33	0306002	1	MOTOR MOUNTING PLATE (ELECTRIC) 10"
34	9900695	2	NUT NYLOCK 3/4" UNC PLT
35	0300010	1	BELT GUARD (ELECTRIC)
36	0300033	1	BRACKET, WHEEL FRAME



**Table 9.8**

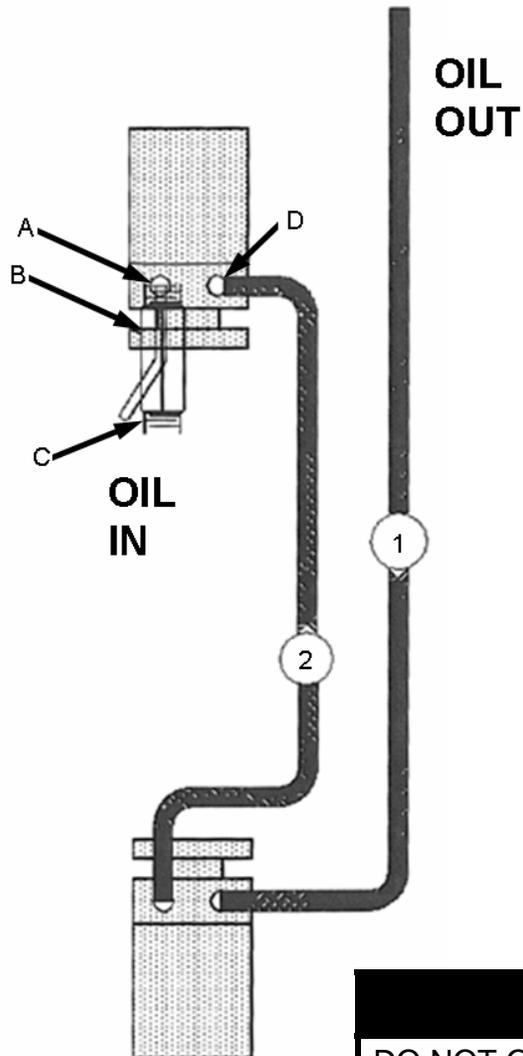
REF	PART NO.	QTY	DESCRIPTION
1	0308006	1	10" T.A. HOPPER SECTION
2	0308009	1	10" UPPER ANGLE TUBE W/ CHANNEL
3	0308001	1	HOPPER FLIGHTING W/ 1" SHAFT, 10"
4	0308002	1	TUBE FLIGHTING, 10"
5	9900268	2	1-1/16" ID BRASS BUSHING
6	0300616A	1	WHEEL BAND ASSY 10" W/ STIFF/CAP
7	9900316	2	WHEEL AND TIRE, 4.8 - 8"
8	0300613	2	5/32" COTTER PIN
9	0308012	1	HANGER W/ BUSHINGS
10	9901001PRP	2	MOTOR, HYD., 4.6
11	1600005	1	VALVE, BALL 1/2 F/FNPT
	9900183	1	BOLT PACKAGE
	0308010	1	HOSE KIT (2 - 138"-1/2" HOSES)



**Table 9.9**

REF	PART NO.	QTY.	DESCRIPTION
			HYDRAULIC:
1	0307019	1	13" T.A. HOPPER, DOUBLE WIDE, W/ TRANSITION
2	0307020	1	13" UPPER AUGER TUBE
3	0307002	1	HOPPER FLIGHTING, LEFT HAND, LOWER (O/S)
4	0307007	1	UPPER FLIGHTING
5	0307003	1	HOPPER FLIGHTING, RIGHT HAND, LOWER (N/S USES 2)
6	0307021	2	WHEEL AND TIRE, 5.3 – 8", 4 BOLT
7	0307024	1	WELDED SCREEN
8	9901002PRP	3	MOTOR, HYD., 6.3
9	0307039	1	AXLE, 13" T.A.,
10	0307013-2	1	TUBE BAND (13" CAP ONLY)
11	0309069	1	U-JOINT, 1" X 1" H10, KEYED
12	12176	1	LP CHAIN GUARD
13	n/a	2	CHAIN #50 X 21"
14	19131	2	50B14 X 1 SPROCKET
15	17349	1	DS50A20 X 1 SPROCKET
16	14074	2	SUPPORT ASSEMBLY W/ BUSHING
16A	19149	2	P245 - 14 POROUS BRONZE BUSHING
17	0300611	3	BRG W/ FLANGETTES, #52, 1" BORE, 2 BOLT
18	0307024-4	4	SCREEN HINGE TAB 13" T.A.
19	n/a	1	FLIGHT SUPPORT W/ BUSHING
19A	19149	1	P245 - 14 POROUS BRONZE BUSHING
	0307023	2	HUB W/ BEARINGS (4 BOLT), EACH
	0307025	1	HOSE KIT (174", 162", 10" – ½" HOSES

## 10" DOUBLE DRIVE TRANSFER AUGER CLOSED CENTER HYDRAULICS



### NOTICE

**DO NOT OVERTIGHTEN!**

Over-tightening hoses can crack motor body, cause the fittings to leak and will void the motor warranty.

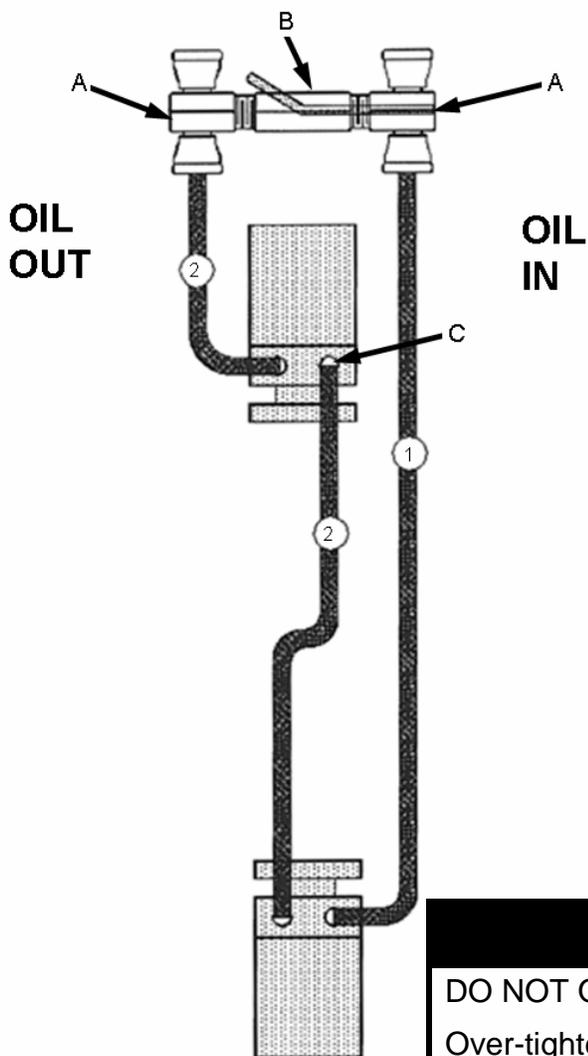
**Table 9.10**

FITTING	DESCRIPTION
A	1/2" NPTM - 1/2" NPTF NIPPLE
B	1/2" NPTF GLOBE VALVE
C	1/2" NPTM TO 90° 1/2" NPTF SW
D	1/2" NPTM TO 1/2" NPTF SW

**Table 9.11**

HOSE	HOSE SIZE	LOCATION	LENGTH	FITTING 1	FITTING 2
1	1/2"	VALVE	136"	1/2" NPT	1/2" NPT
2	1/2"	Orbit Motor	146"	1/2" NPT	1/2" NPT

### 10" DOUBLE DRIVE TRANSFER AUGER OPEN CENTER HYDRAULICS



**Note:** *Fitting and short hose are not standard and must be purchased extra for plumbing open centered hydraulics.*

#### NOTICE

**DO NOT OVERTIGHTEN!**  
 Over-tightening hoses can crack motor body, cause the fittings to leak, and will void the motor warranty.

**Table 9.12**

FITTING	DESCRIPTION
A	1/2" NPTM - 1/2" NPTF TEE
B	1/2" NPTF GLOBE VALVE
C	1/2" NPTM TO 1/2" NPTSF

**Table 9.13**

HOSE	HOSE SIZE	LOCATION	LENGTH	FITTING 1	FITTING 2
1	1/2"	VALVE	136"	1/2" NPT	1/2" NPT
2	1/2"	VALVE	136"	1/2" NPT	1/2" NPT
3	1/2"	ORBIT MOTOR	7"	1/2" NPT	1/2" NPT



# WARRANTY REGISTRATION

Wheatheart congratulates you on your new equipment purchase.

The warranty registration form must be filled out within thirty (30) days from delivery date and sent to:

**Wheatheart Manufacturing**  
**3455 Idylwyld Dr. N., Saskatoon, Saskatchewan S7L 6B5**

<b>CUSTOMER COPY</b>	
(Retain this card for warranty and record purposes.)	
PRODUCT:	DEALER'S NAME:
SERIAL #:	ADDRESS:
DELIVERY DATE:	
OWNER'S NAME:	PHONE #:
ADDRESS:	SIGNATURE:
	INVOICE #:
PHONE #:	(Please refer to invoice # when filing claim)

<b>DEALER COPY</b>	
(Retain this card for warranty and record purposes.)	
PRODUCT:	DEALER'S NAME:
SERIAL #:	ADDRESS:
DELIVERY DATE:	
OWNER'S NAME:	PHONE #:
ADDRESS:	SIGNATURE:
	INVOICE #:
PHONE #:	(Please refer to invoice # when filing claim)

<b>WARRANTY REGISTRATION</b>	
(Must be filled out and returned to Wheatheart within 30 days of delivery.)	
OWNER'S NAME:	DEALER'S NAME:
ADDRESS:	ADDRESS:
PHONE #:	PHONE #:
SIGNATURE:	SIGNATURE:
(I acknowledge the product to be whole and in proper working order.)	(I acknowledge the product to be whole and in proper working order. The owner has been given an operation manual and has been informed on proper operation and maintenance.)
PRODUCT:                      SERIAL #:	DELIVERY DATE:
INVOICE #:	GAS MOTOR SERIAL #:



# LIMITED WARRANTY

Wheatheart warrants to the buyer that the new machinery is free from defects in material and workmanship.

This warranty is only effective for any new machinery that has not been altered, changed, repaired, or treated since its delivery to the buyer, other than by Wheatheart or its authorized dealers or employees, and does not apply to accessories, attachments, tools, or parts sold or operated with the new machinery if they have not been manufactured by Wheatheart.

Wheatheart shall only be liable for defects in the material or workmanship attributed to faulty material or bad workmanship that can be proved by the buyer, and specifically excludes liability for repairs arising as a result of normal wear and tear of the new machinery or in any other manner whatsoever, and without limiting the generality of the foregoing, excludes application or installation of parts not completed in accordance with Wheatheart operation manual, specifications, or printed instructions.

A Warranty Registration Form and Inspection Report must be completed at the time of delivery and returned to Wheatheart Manufacturing within thirty (30) days.

## Warranty Period

Private Farm Use	One (1) year from date of purchase.
Commercial, Custom, or Rental Use	Ninety (90) days from date of purchase.
Replacement Parts	Ninety (90) days from date of replacement

Defective parts are subject to inspection by a Wheatheart representative prior to approval of a warranty claim. All returned parts must be sent to the factory, freight pre-paid, in order to qualify for warranty replacement. Repaired or replaced parts will be returned freight collect.

If these conditions are fulfilled, Wheatheart shall at its own cost and its own option either repair or replace any defective parts provided that the buyer shall be responsible for all expenses incurred as a result of repairs, labor, parts, transportation, or any other work, unless Wheatheart has authorized such expenses in advance. Normal wear and service items such as belts, hoses, flashing, etc. are excluded from warranty.

The warranty shall not extend to any repairs, changes, alterations, or replacements made to the new equipment other than by Wheatheart or its authorized dealers or employees.

This warranty extends only to the original owner of the new equipment.

This warranty is limited to the terms stated herein and is in lieu of any other warranties whether expressed or implied, and without limiting the generality of the foregoing, excluded all warranties, expressed or implied, or conditions whether statutory or otherwise as to quality and fitness for any purpose of the new equipment, Wheatheart disclaims all liability for incidental or consequential damages.

This machine is subject to design changes and Wheatheart shall not be required to retro-fit or exchange items on previously sold units except at its own option.

**WARRANTY VOID IF NOT REGISTERED**



Wheatheart is a Division of Ag Growth Industries LP

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