

# shuttlekart

## Operator's Manual

EFFECTIVE DATE:  
JULY, 1996



**Degelman**

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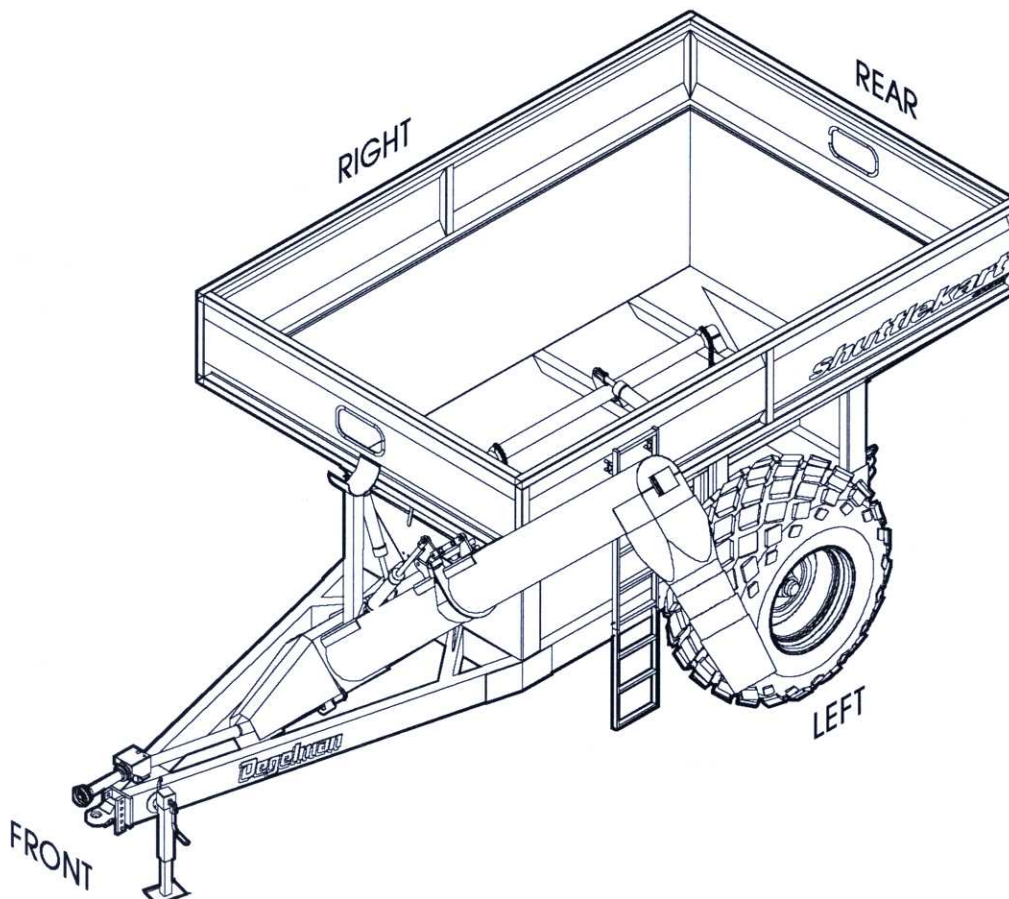
Congratulations on your choice of a Degelman Shuttlekart to complement your farming operation. It has been designed and manufactured to meet the needs of a discerning agricultural market for effective short distance grain transport, enhancing harvest and seeding operations.

Use this manual as your first source of information about this machine. If you follow the instructions provided in this manual, your machine should operate for many years to come.

Safe, efficient and trouble free operation of your Degelman Shuttlekart requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Maintenance and Troubleshooting information contained within this Operator's Manual.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Degelman dealer if you need assistance, information or additional copies of this manual.

**OPERATOR ORIENTATION** - The directions left, right, front and rear, as mentioned throughout the manual as seen from the forward direction of travel. SEE BELOW.



**FIGURE 1**

## 2.1 SAFETY ALERT SYMBOL



The Safety Alert symbol identifies important safety messages on the machine 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 message.

### 2.1.1 SIGNAL WORDS

**DANGER:** An immediate and specific hazard which will result in severe personal injury or death if the proper precautions are not taken.

**WARNING:** A specific hazard or unsafe practice which could result in severe personal injury or death if proper precautions are not taken.

**CAUTION:** Unsafe practices which could result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

### 2.1.2 BEFORE OPERATING THIS MACHINE



1. Read and understand the operator's manual.

2. Use hitch pin with a mechanical locking device.

3. Clear area of bystanders, especially children before operating.

4. Stop tractor engine, set park brake and remove ignition key before servicing or repairing.



5. Relieve pressure before working on hydraulic system. Use a piece of wood or cardboard when searching for leaks.

6. Review safety instructions annually.



**7. NEVER ALLOW RIDERS.**

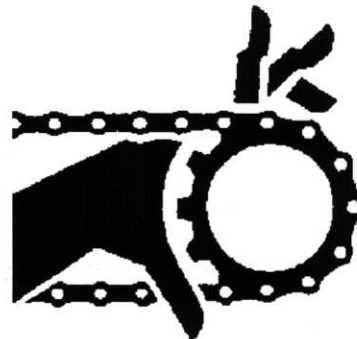
## 2.2 SPECIFIC DANGER AREAS

### 2.2.1 DANGER - DROWNING



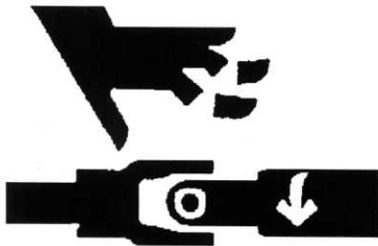
Extreme danger of drowning exists while loading or unloading your shuttlekart.

### 2.2.2 DANGER - ROTATING CHAIN



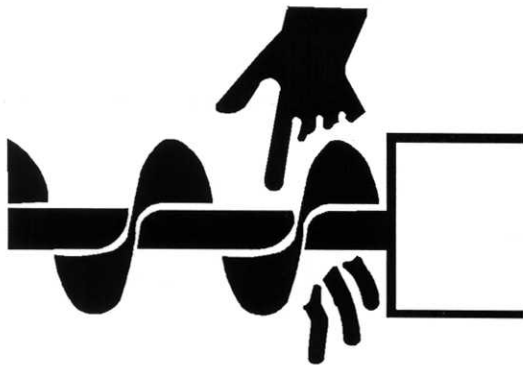
Extreme danger of amputation exists around rotating chains and sprockets. Keep fingers, hair, loose clothing etc. clear of moving chains.

2.2.3 DANGER - ROTATING PART



Extreme danger of death or amputation exists around rotating PTO components. Keep fingers, hair, loose clothing etc. clear of moving parts.

2.2.2 WARNING - MOVING AUGER



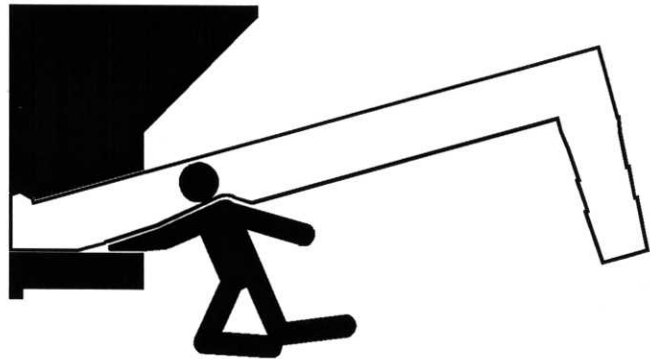
Danger exists around moving auger flighting. Although augers are protected, exercise caution around moving auger components.

2.2.3 WARNING - FOLD LADDER



Danger of falling exists from unfolded ladder. Never allow children to play on the ladder. Always fold ladder when not using it.

2.2.4 WARNING - CRUSHING DANGER



Danger of crushing limbs exists when pivot auger is moving to lowered position. Keep limbs clear of area between auger and cart frame.

2.2.5 WARNING - NO RIDERS

Under no circumstances should this machine



ever have riders. Keep all bystanders, especially children, clear of this machine during use.

**2.2.5 CAUTION - PIVOTING AUGER**



Danger exists while pivot auger is moving. Clear area of all bystanders while setting pivoting auger. Exercise caution wherever you see this graphic.

**2.2.6 CAUTION- PINCHING DANGER**



Danger exists of pinching in the following areas: Folding Auger, Flow Control Gate. Clear area of all bystanders while unfolding auger and setting flow control gate.

**2.3 SIGN-OFF FORM**

Degelman follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining this machine must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all your equipment. We feel that an untrained operator is unqualified to operate this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the safe operation of the equipment.

**Sign-Off Form**

Date	Employee's Signature	Employer's Signature

## 3.0 Operation

### 3.1 TO THE NEW OPERATOR OR OWNER

The Degelman Shuttlekart is designed to transport grain into and out of locations where a grain truck or semi may have difficulty. Unloading may then be achieved into a truck trailer or grain hopper.

It is the responsibility of the owner or operator to read this manual carefully to learn how to operate the machine safely, and how to set it to provide maximum efficiency. Safety is everyone's business. By following safe operating practices, a safe environment is provided for the operator and bystanders.

The manual will take you step-by-step through your working day. By following the operating instructions in conjunction with a good maintenance program your machine will provide many years of trouble-free service.

### 3.2 PRINCIPLES OF OPERATION

The Shuttlekart 800 can transport up to 800 bushels of grain into and out of fields. The tire centres may be adjusted from 120" to 144" to accommodate row crops. The unloading auger and drive system are pivoted with a 3" x 16" hydraulic cylinder - giving heights from 3' to 13'.

Augers are driven with either PTO or Hydraulic motor systems.

1. Grain Tank
2. Viewing Window
3. Auger Pivot Cylinder
4. Auger Fold Cylinder
5. Adjustable Axle
6. Auger Transition Box
7. Pivoting Auger
8. Auger Spout
9. Flow Control Cylinder
10. Flow Control Gate
11. Horizontal Auger

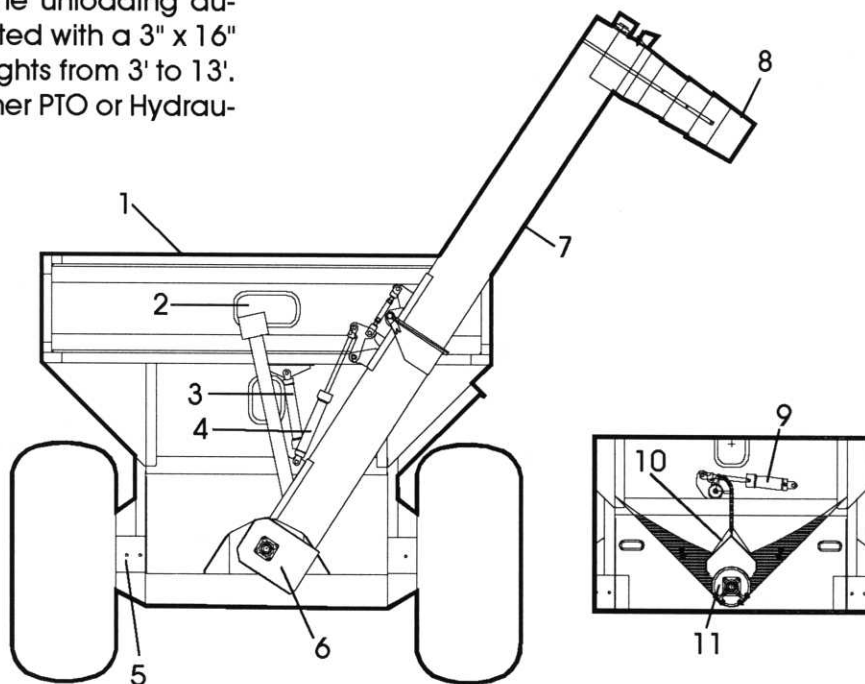


FIGURE 2

## OPERATING SAFETY

1. Read and understand the Operator's Manual before starting.
2. Lower to ground, stop engine, place all controls in neutral, set park brake and remove ignition key before servicing, adjusting or repairing.
3. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
4. Do not allow riders.
5. Clear the area of bystanders, especially small children.
6. Stay well back from machine when operating. Keep others away.

### 3.3 BREAK-IN

Although there are no operational restrictions on the Shuttlekart when it is new, there are some mechanical checks that must be done to ensure the long term integrity of the unit. When using the machine for the first time, follow this procedure:

#### A. BEFORE USING:

1. Read Operator's Manual.
2. Lubricate all grease fittings.
3. Check all bolt tightness.

#### B. AFTER OPERATING FOR 2 HOURS:

1. Check all hardware.
2. Check all hardware tightness.
3. Check all hydraulic system connections.  
Tighten if any are leaking.

### 3.4 PRE-OPERATION CHECKLIST

It is important for both personal safety and maintaining the good mechanical condition of the machine that this pre-operational checklist be followed.

Before operating the machine and each time thereafter, the following areas should be checked off:

1. Lubricate the machine per the schedule outlined in the "Maintenance Section".
2. Use only a tractor with adequate power to pull the Shuttlekart under ordinary operating conditions.

800 bushel model: 175 HP. Min.

3. Ensure the machine is properly attached to the tractor using a drawbar pin with provisions for a mechanical retainer. Make sure that a retainer such as a Klik pin is installed.

**NOTE:** It is important to pin the drawbar in the central location only.

4. Check the oil level in the tractor hydraulic reservoir. Top up as required.
5. Inspect all hydraulic lines, hoses, fittings and couplers for tightness. Tighten if there are leaks. Use a clean cloth to wipe any accumulated dirt from the couplers before connecting to the tractor's hydraulic system.



### 3.5 HOOK-UP / UNHOOKING

The Shuttlekart should always be parked on a level, dry area that is free of debris and foreign objects. Follow this procedure to hook-up:

1. Clear the area of bystanders and remove foreign objects from the machine and working area.
2. Make sure there is enough room to back the tractor up to the trailer hitch.
3. Start the tractor and slowly back it up to the hitch point.
4. Stop the tractor engine, place all controls in neutral, set park brake and remove ignition key before dismounting.
5. Use the trailer jack to raise or lower the hitch to align with the drawbar.
6. Install a drawbar pin with provisions for a mechanical retainer such as a Klik pin. Install the retainer.
7. Install a safety chain between the tractor and the hitch.
8. Connect the hydraulics. To connect, proceed as follows:
  - Use a clean cloth or paper towel to clean the couplers on the ends of the hoses. Also clean the area around the couplers on the tractor. Remove the plastic plugs from the couplers and insert the male ends.
  - Be sure to match the pressure and return line to one valve bank.
9. Raise the hitch jack and rotate it 90° to place in its stowed position.
10. When unhooking from the tractor, reverse the above procedure.

### 3.6 HITCH CLEVIS ADJUSTMENT

Refer to Figure 3. To adjust the hitch clevis location, hook-up the tractor to the trailer hitch, following the procedure in section 3.5 Hook-up/Unhooking. Stand back and check to see if the trailer hitch is parallel to the ground.

Remove the clevis mounting bolts and move the clevis up or down as required. Install the clevis mounting bolts and locknuts. Lower the trailer hitch.

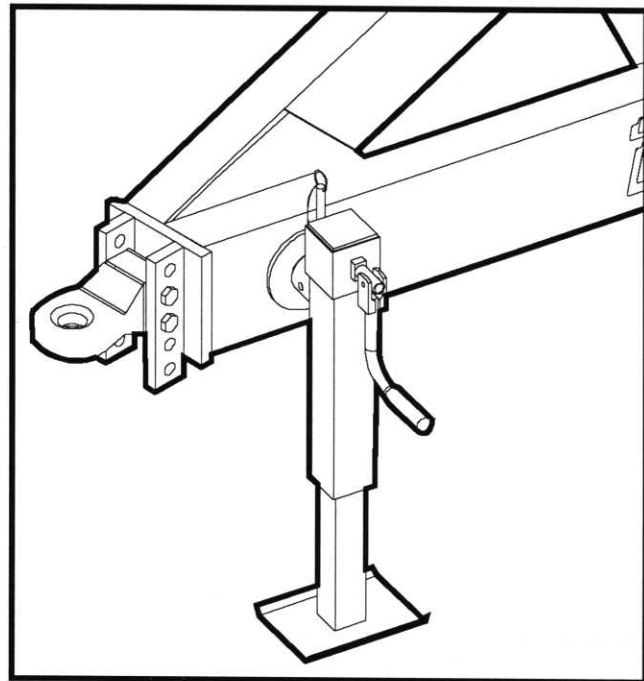


FIGURE 3

### 3.7 LOADING

The Shuttlekart 800 is designed to hold and transport 800 bushels of grain safely. Before loading, however, take the following precautions:

1. Clear immediate area of all bystanders.

**DO NOT UNDER ANY CIRCUMSTANCES  
CLIMB INTO THE TANK WHILE LOADING!**

2. Be sure all cleanouts are closed.
3. Be sure flow control gate is completely closed.

### 3.8 UNLOADING

#### 3.8.1 UNFOLDING PIVOT AUGER

The pivot auger is unfolded simply by extending the auger fold cylinder. In time, however, the turn buckle jack at the auger joint will have to be adjusted (see adjustments).

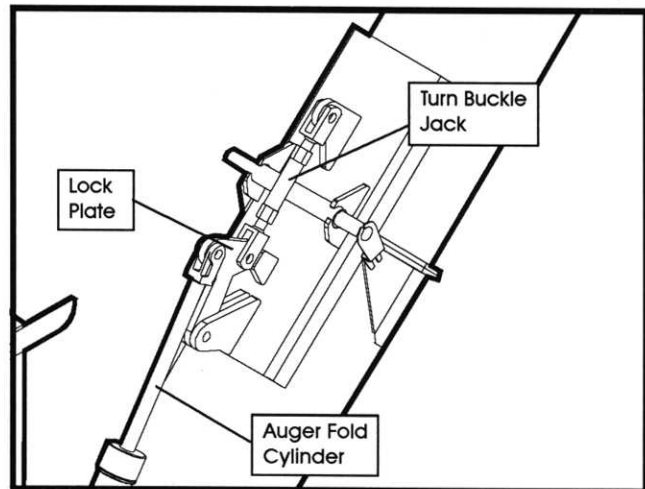
**Refer to Figure 4.** The correct setting for the turnbuckle jack is determined as follows:

1. Extend auger fold cylinder.
2. As auger moves into unfolded position, listen for the sound of the lock plate clicking into place. There should be a distinctly audible "click" of steel on steel as unfolding finishes.
3. If the lock plate does not click or the click is barely audible, you will need to adjust the turnbuckle jack.

**See Adjustments - Page 14.**

# DANGER

Flowing grain traps and suffocates victim in seconds!  
You can die in seconds in flowing grain!



**FIGURE 4**

### 3.8.2 SETTING UNLOAD HEIGHT

Refer to *Figure 5*. Unloading height is set by extending or retracting the auger pivot cylinder. Unloading range is from 3'-0" to 13'-0".



**NOTE:** Exercise extreme caution while setting, loading or unloading the Shuttlekart. The following dangerous situations exist: Drowning, rotating driveline, rotating auger and crushing or pinching due to moving pivot auger.

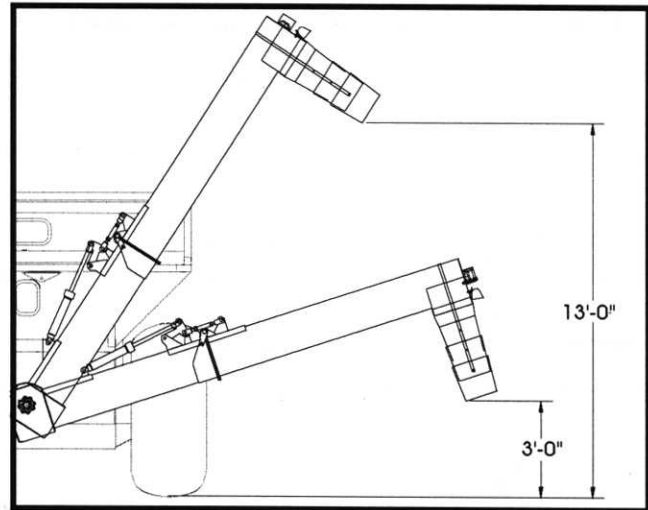


FIGURE 5

### 3.8.3 UNLOADING

#### The Flow Control Gate

Refer to *Figure 6*. The flow control gate effectively regulates the amount of grain moving into the horizontal auger. It is adjusted by extending or retracting the 3" x 8" hydraulic cylinder shown.

The degree to which the gate is open can be seen on the OPEN/CLOSED gauge (*Figure 7*) at the front of the Shuttlekart or through the auger window at the rear.

Use the following procedure for unloading.

1. Position Shuttlekart and truck/auger as desired.
2. Start augers running BEFORE opening flow control gate. Commence unloading.
3. If unloading slows or stalls it may be due to overloading the augers. Lower flow control as required.
4. If augers are loaded before running and cannot start, it may be necessary to close off the flow control gate and allow some grain to pass through cleanouts until the augers can start running.

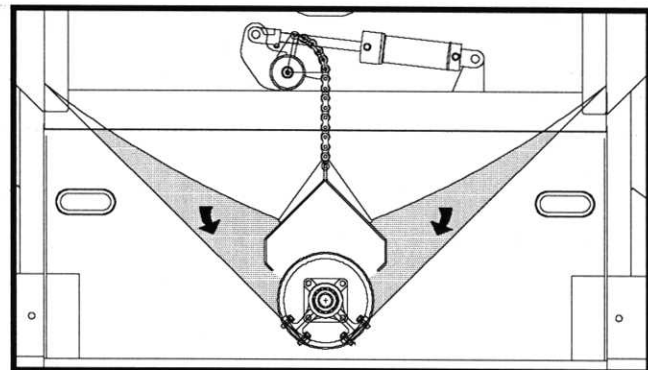


FIGURE 6

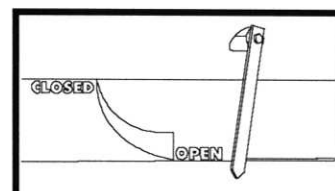


FIGURE 7

### 3.9 TRANSPORT

**NOTE:** Shuttlekart is created primarily for transporting grain from the field to either a truck or bin. It is not recommended that it be used to haul grain extensive distances.

Use the following guidelines while transporting the Shuttlekart.

1. **MAXIMUM RECOMMENDED TRANSPORT SPEED:** 30 km/h or 19 mph. (Road Conditions. Field speeds may be lower.)
2. **Refer to Figure 8.** Fully raise and fold pivot auger into transport position.
3. Be sure hazard lights are flashing and SMV decal is visible.
4. Use a safety chain.
5. Fold retractable ladder.
6. Be sure cleanouts are closed.



7. For lengthy transport, be sure adjustable axles are set to the narrowest setting. (See Adjustments)

**NOTE:** UNDER NO CIRCUMSTANCES SHOULD THERE EVER BE RIDERS WHILE THE SHUTTLEKART IS IN TRANSPORT.

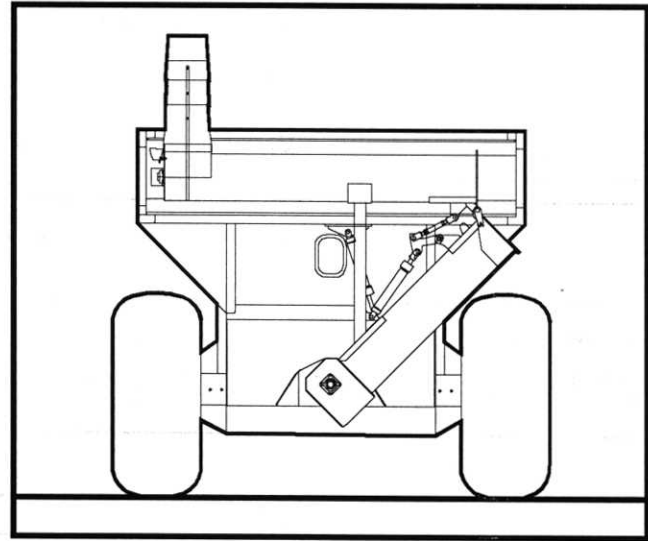


FIGURE 8.

#### TRANSPORT SAFETY

1. Use only a drawbar pin with a mechanical retainer, and a safety chain.
2. Clean the SMV sign, lights and reflectors before starting.
3. Always use hazard flashing lights on tractor.
4. Travel at a safe speed. Use care when making corners or meeting traffic.

### 3.10 CLEANOUT

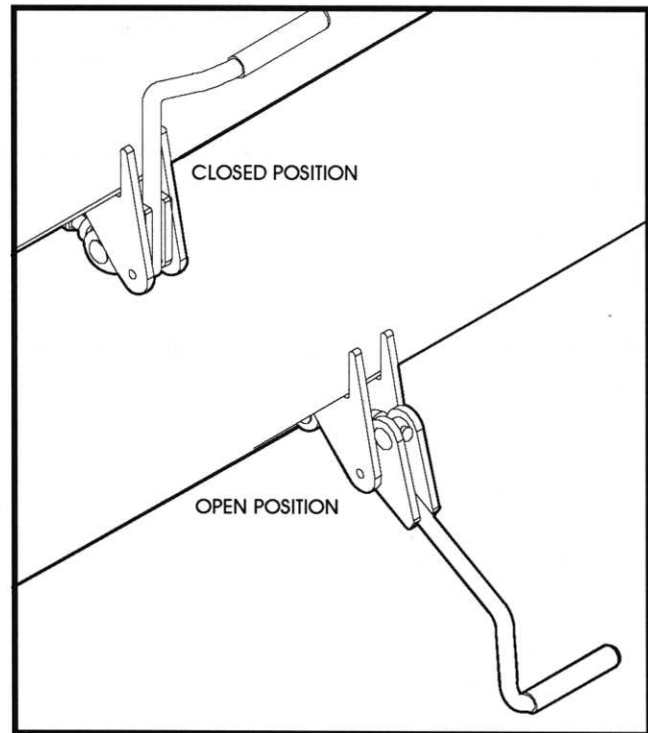
Cleanout is achieved in two ways. There are two cleanout doors that run the full length of the horizontal auger, and there is a cleanout door at the bottom of the auger transition box.

1. **Refer to Figure 9.** The bottom cleanout doors are controlled by a pair of over-centre lever handles. Open and closed positions are as shown. The door should close quite firmly, but not so firm that one person cannot close it.

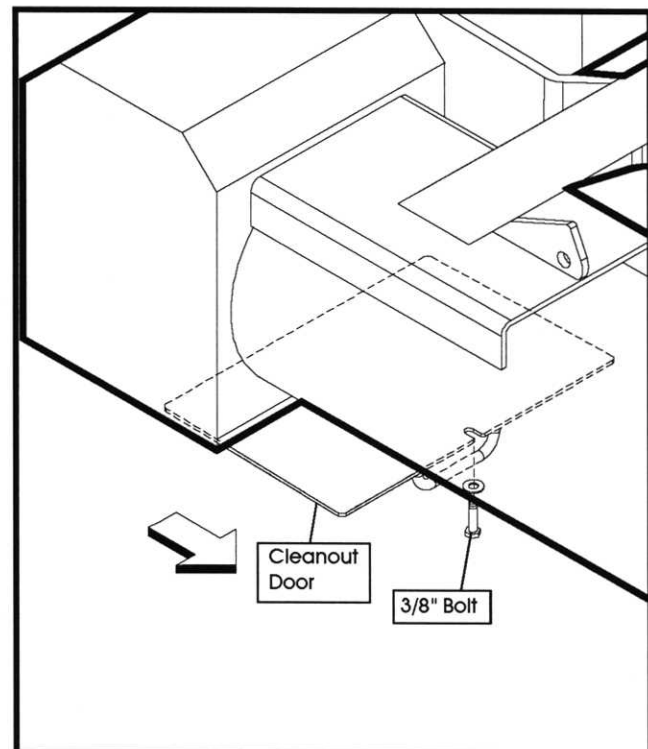
**NOTE:** If grain is escaping through these cleanout doors, it may be necessary to re-adjust the mechanism to assure proper closing. (See *Adjustments - Page 15*).

2. **Refer to Figure 10.** The transition box cleanout consists of a plate that slides in and out of the auger transition box. It is locked into place by the 3/8" x 1-1/4" bolt shown.

**NOTE:** Be sure to replace 3/8" bolt firmly after cleanout has been completed.



**FIGURE 9**



**FIGURE 10**

### 3.11 STORAGE

Since the unit can be used in extremely adverse conditions during the season, the machine should be carefully prepared for storage to ensure that all dirt, mud, debris and moisture has been removed.

Follow this procedure when preparing to store:

1. Wash the entire machine thoroughly using a water hose or pressure washer to remove all dirt, mud, debris or residue.
2. Inspect all parts to see if anything has become entangled in them. Remove the entangled material.
3. Lubricate all grease fittings to remove any moisture in the bearings.
4. Inspect all hydraulic hoses, fittings, lines and couplers. Tighten any loose fittings. Replace any hose that is badly cut, nicked or abraded or is separating from the crimped end of the fitting.
5. Touch up all paint nicks and scratches to prevent rusting.
6. Oil the exposed rams on the hydraulic cylinder to prevent rusting.
7. Open cleanouts to allow any moisture to escape and prevent freezing over winter.
8. Select an area that is dry, level and free of debris.
9. Follow the procedure given in section 4.5 when unhooking.

### STORAGE SAFETY

1. Store in an area away from human activity.
2. Do not allow children to play on or around the stored unit.
3. Be sure retractible ladder is up.

## 4.0 Adjustments

### 4.1 ADJUSTABLE AXLES

The Shuttlekart's axles can be adjusted to increase or decrease the distance between wheel centres.

Adjustable axle configurations are as follows:

1. 120" (for 30" row crops)
2. 128" (for 32" row crops)
3. 136" (for 34" row crops)
4. 144" centres (for 36" row crops).

To Adjust axles, use the following procedure.

1. **Refer to Figure 11.** Jack up both sides of the cart, block up frame and remove tires.
2. Remove the 3/4" x 8" bolt holding the axle in its current setting.
3. Move axle to desired setting and bolt in place.

**NOTE:** The axle & hub/spindle can be rotated 180° to achieve a 4" height variance to suit different tire profiles.

### 4.2 ADJUSTING TURNBUCKLE JACK

As time goes on, it will be necessary to tighten the joint on the folding auger. This procedure should be done once annually.

1. **Refer to Figure 12.** Loosen Jam Nut from body assembly.
2. To adjust length of turnbuckle jack, turn the body assembly in small increments until desired length is reached.

**NOTE:** It may only be necessary to lengthen the jack a small amount. A quarter turn at a time will likely be sufficient.

## WARNING

Be sure to block up frame before adjusting axles.

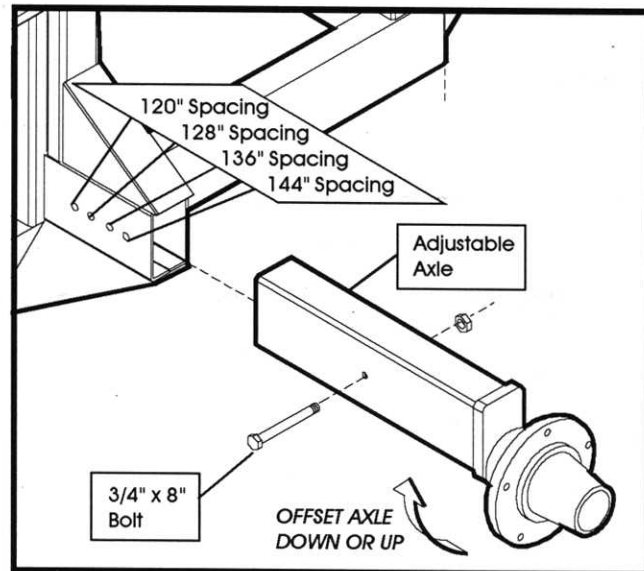


FIGURE 11

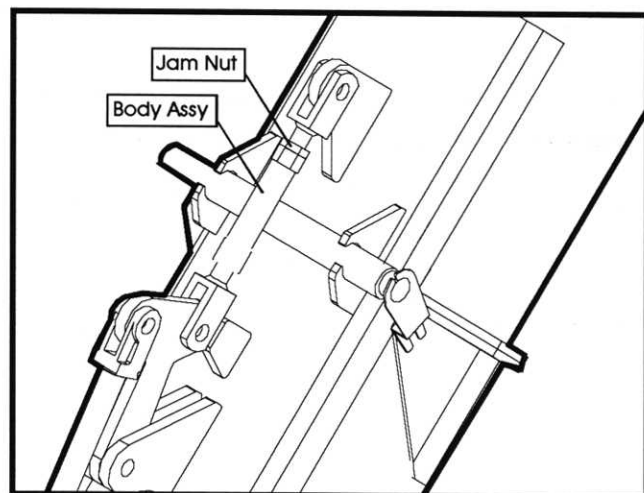


FIGURE 12

### 4.3 ADJUSTING CLEANOUT DOORS

As time goes on, it may be necessary to tighten the cleanout doors. This procedure should be done once annually.

1. Refer to Figure 13. Open cleanout mechanism.
2. Loosen 5/8" Spacer Nut.
3. To tighten door, turn threaded rod assembly towards the LH 5/8" Pin. Be sure 5/8" Spacer Nut is tightened when finished.
4. To loosen door, turn threaded rod assembly towards the RH 5/8" Pin. Be sure 5/8" Spacer Nut is tightened when finished.

**NOTE:** It may only be necessary to adjust the cleanout door a small amount. A quarter to half turn of the threaded rod assembly at a time will likely be sufficient.

### 4.4 DRIVE CHAIN TENSION ADJUSTMENT

When drive chains become loose it will be necessary to re-adjust the Shuttlekart's chain tightener assembly. This type of adjustment is typically unnecessary because the idler assembly is self adjusting to a large range.

1. Refer to Figure 14. Remove chains from drive system by removing connector link.
2. Loosen 16mm x 60mm bolt securing chain tightener and rotate it as required to loosen or tighten drive chains. (Use a pipe wrench on the tightener body to turn.)

### 4.5 PTO DRIVE CLUTCH ADJUSTMENT

Some adjustment of clutch springs is acceptable if excessive drive line slippage occurs. However, it is recommended that a minimum 2" measurement on each spring is maintained to prevent gearbox damage.

1. Refer to Figure 15. Adjustment is achieved by tightening nuts as shown. Each nut should be tightened the same amount - about 1/4 turn at a time.

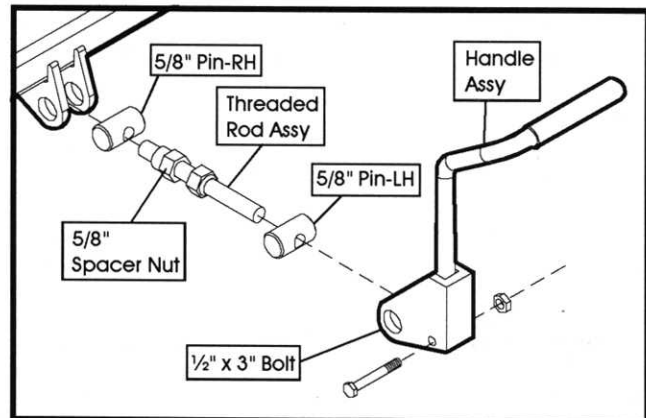


FIGURE 13

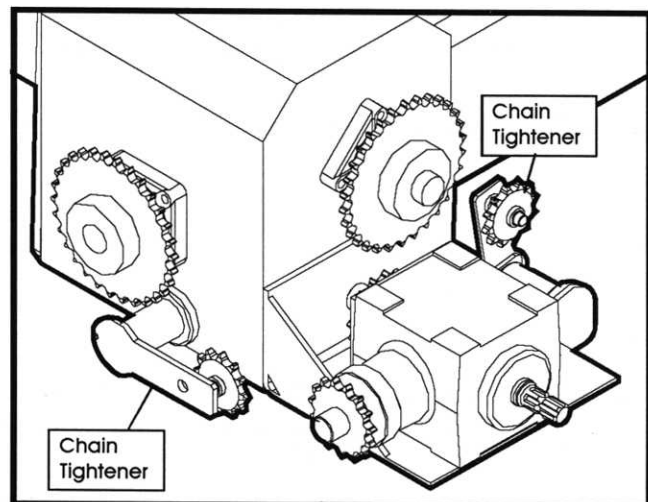


FIGURE 14

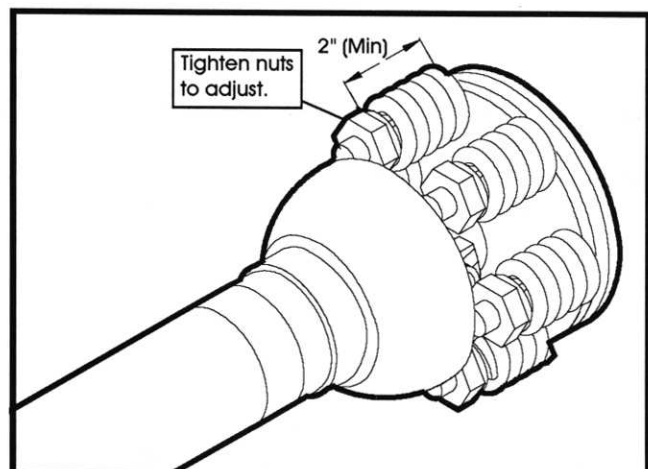


FIGURE 15



## 5.0 Service & Maintenance

### 5.1 SERVICE

#### 5.1.1 LUBRICANTS

1. Grease: Use an SAE multipurpose grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium base grease.
2. Storing 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.

#### 5.1.2 GREASING

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

1. Use only a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt.
3. Replace and repair broken fittings immediately.
4. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.
5. Inject grease until you see grease being expelled from the bearing or bushing areas.

### MAINTENANCE SAFETY

1. Read Operator's Manual before servicing, or maintaining machine.
2. Stop tractor engine, set park brake and remove ignition key before servicing, adjusting, repairing or maintaining.
3. Be careful when working around or maintaining a high pressure hydraulic system. Wear the proper hand and eye protection when searching for a pin hole leak in a hose or fitting.
4. Place safety stands or large blocks under the frame before removing the tires or working beneath the machine.

### 5.1.3 SERVICE INTERVALS

The following areas should be greased at the intervals shown.

1. GREASE WEEKLY. Flange Bearing at rear of horizontal auger.

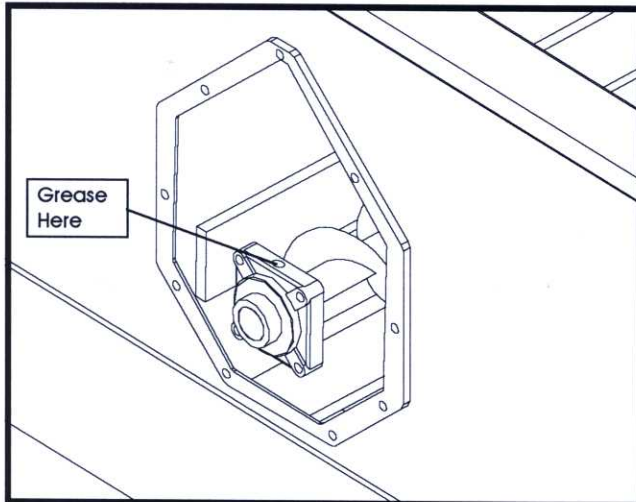


FIGURE 16

3. GREASE SEASONALLY. Folding Auger hinge.

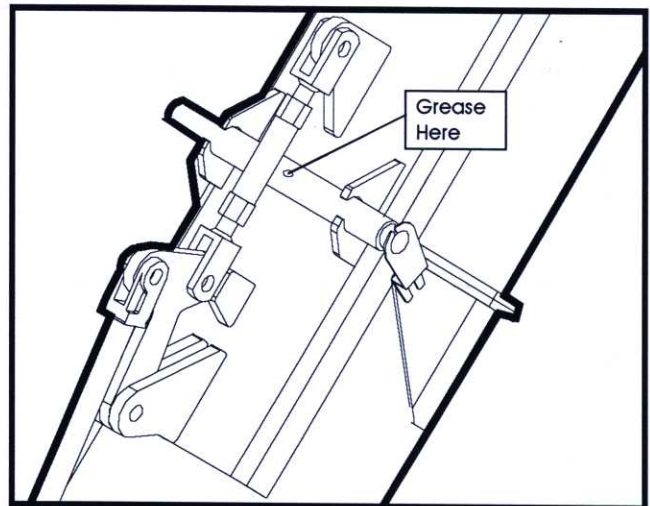


FIGURE 18

2. GREASE WEEKLY. Flange Bearing at rear of pivoting auger (at transition box).

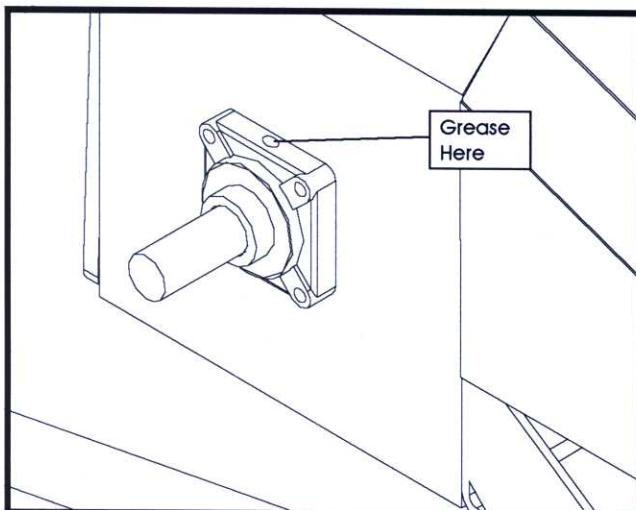


FIGURE 17

4. GREASE SEASONALLY. 1" x 4-1/2" Hex Bolt (at Lock Plate).

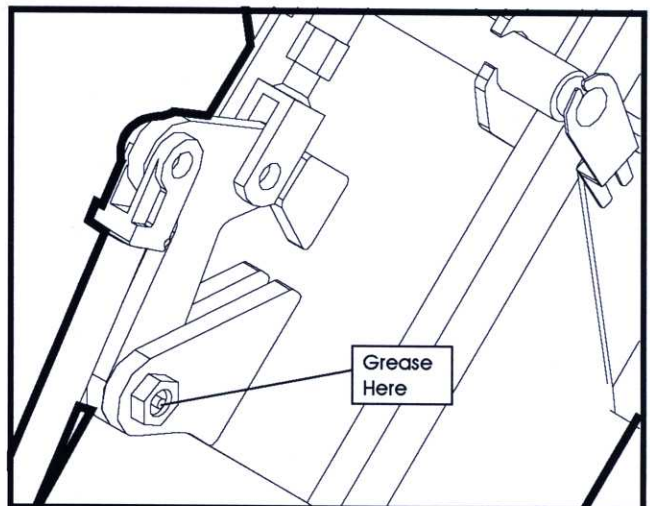


FIGURE 19

**5.2 HYDRAULIC CYLINDER REPAIR**

Complete seal kits and cylinder components are available when repair work becomes necessary due to excessive oil leakage or damage to various parts.

**NOTE:** Complete rebuilt cylinder may be available. Contact your dealer for further information.

**DISASSEMBLY: REFER TO FIGURES 20 & 21.**

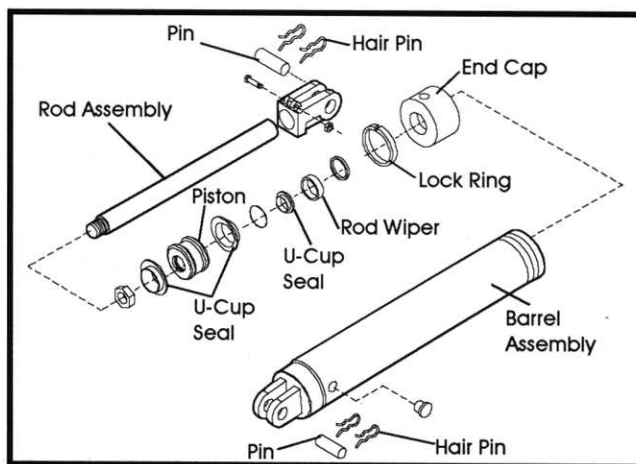
1. Loosen lock ring and turn off end cap.
2. Carefully remove piston, rod and cap combination.
3. Disassemble piston from rod by removing lock nut.

**NOTE:** DO NOT clamp rod by chromed surface.

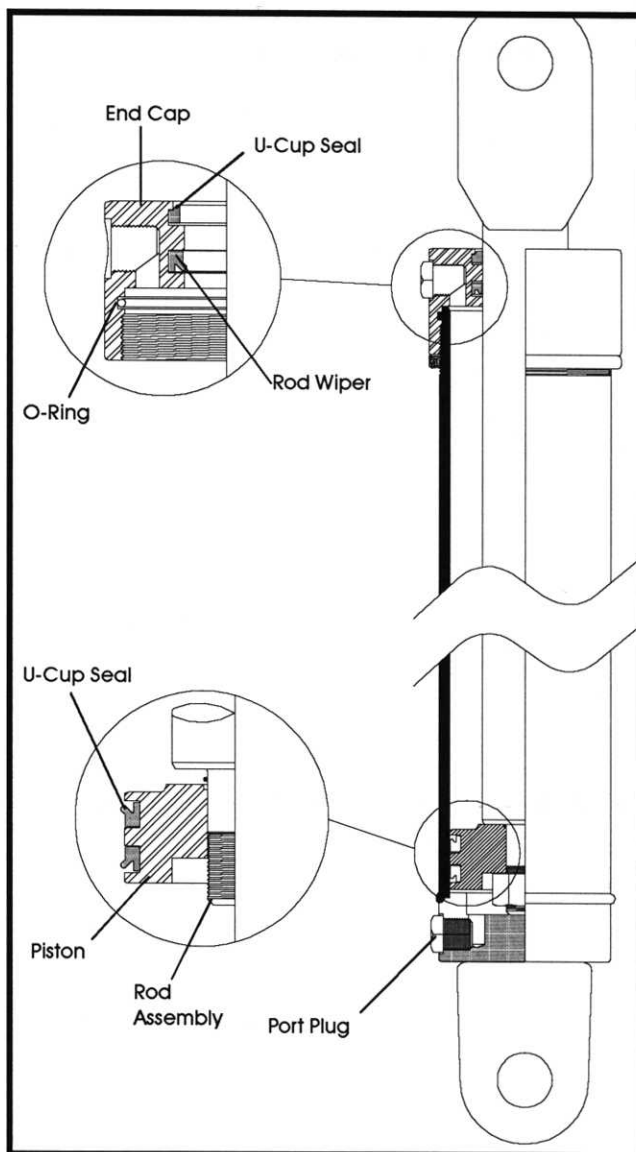
4. Slide off end cap.
5. Remove seals and inspect all parts for damage.
6. Install new seals and replace damaged parts with new components.

**ASSEMBLY: REFER TO FIGURES 19 & 20.**

1. Reinstall rod through end cap.
2. Secure piston to rod with lock nut. Torque to 225 ft. lbs.
3. With cylinder body held gently in a vise, insert piston and rod combination using a slight rocking motion.
4. Thread lock ring fully onto barrel.
5. Turn end cap fully against lock ring then back off end cap to align ports.
6. Tighten lock ring against end cap using a drift punch and hammer.



**FIGURE 20**



**FIGURE 21**

### 5.3 WHEEL HUB REPAIR

DISASSEMBLY: REFER TO FIGURE 22.

1. Carefully pry off dust cap.
2. Remove cotter pin from nut.
3. Remove nut and washer.
4. Pull off spindle.
5. Dislodge the inner cone bearing and dust seal.
6. Inspect cups that are press fitted into hub for pits or corrosion and remove if necessary.
7. Inspect and replace defective parts with new ones.

ASSEMBLY: REFER TO FIGURE 22.

1. If cups need replacing, be careful to install them gently and evenly into hub until they are fully seated.
2. Apply a thick wall of grease inside hub. Pack grease into cones.
3. Install dust seal as illustrated, and inner cone.
4. Position hub onto spindle and fill surrounding cavity with grease.
5. Assemble outer cone, washer and nut.
6. Tighten nut while rotating hub until there is a slight drag.
7. Turn nut back approximately 1/4 turn to align cotter pin hole with notches on nut.

Note: Hub should rotate freely. If not, repeat step 6.

8. Install cotter pin and bend legs sideways over nut.
9. Fill dust cap half full of grease and gently tap into position.

### 5.4 WHEEL BOLT TORQUE

1. The Recommended bolt torque for this implement is 270 ft.lbs.
2. When attaching the wheel, tighten to this specifications. Check again after approximately 500 revolutions and re-tighten as required.
3. Check wheel bolts twice annually to ensure proper bolt torque.

## WARNING

Be sure to block up frame section before removing tires.

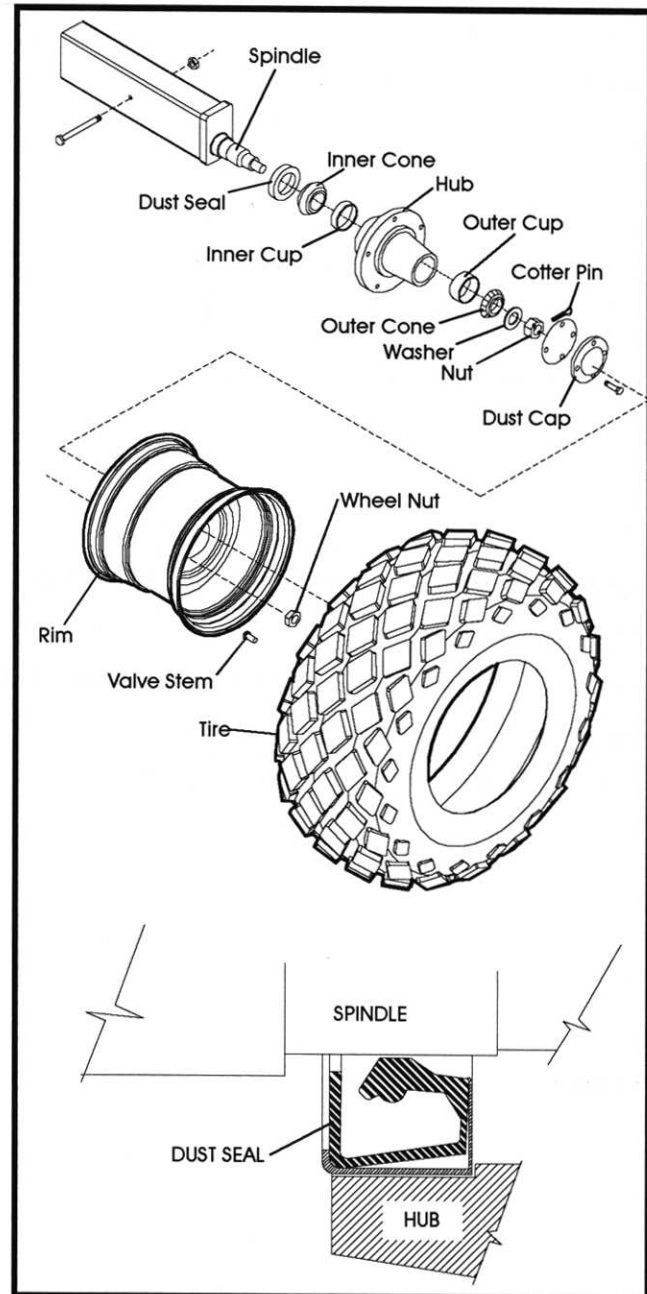


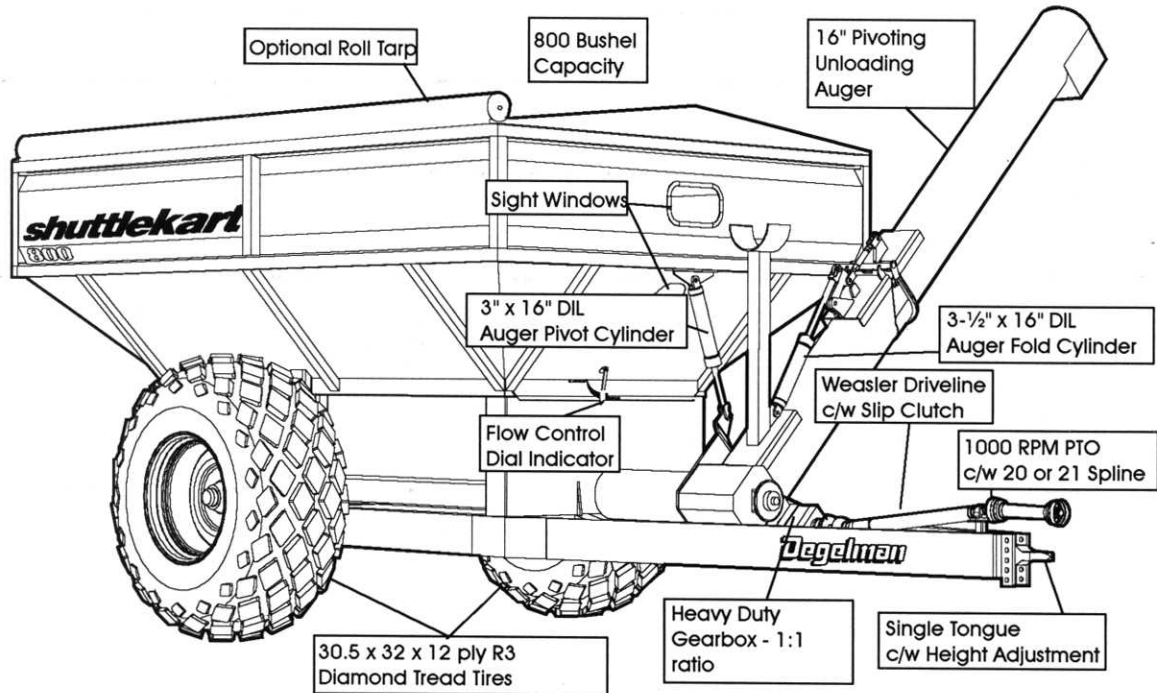
FIGURE 22

## 6.0 Troubleshooting

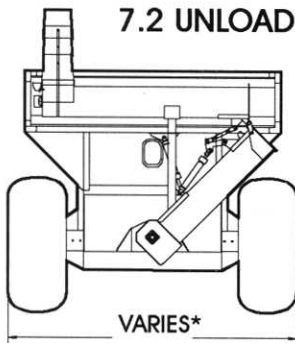
In the following section, we have listed some of the problems, causes and solutions that you may encounter. If you encounter a problem that is difficult to solve, even after having read through this troubleshooting section, please call your local dealer or distributor. Before you call, have this manual and the serial number from your unit ready.

PROBLEM	CAUSE	SOLUTION
Hydraulics creep down during operation.	Tractor hydraulic leak.	To verify, raise auger half way up, disconnect at tractor. Observe if auger creeps down. If not, repair tractor hydraulics.
	Damaged hose or fittings	Search for leaks with a piece of paper (not by hand). Repair as necessary.
	Hydraulic cylinder leak	Replace seals or damaged components.
Oil accumulation on cylinder shaft	Oil bypassing seals	Seal manufacturer advises that small amounts of oil getting past seals is desirable. If problem becomes excessive, replace seals.
Unload too slow Unload stalls	Augers may be overloaded	When unloading, start augers before opening flow control gate. If grain is already in augers, it may be necessary to allow some of it to escape through the cleanout.
Grain escaping through cleanout.	Cleanout latch assembly too loose.	Tighten latch assembly annually. <i>See Adjustments.</i>
	Neoprene seal may be worn or missing.	Replace as required.
Grain escaping through joint in pivot auger.	Neoprene seal may be worn or missing.	Replace as required.
	Pivot auger locking assembly too loose.	Tighten locking assembly annually. <i>See Adjustments.</i>

**7.1 BASE UNIT GENERAL SPECIFICATIONS & FEATURES**



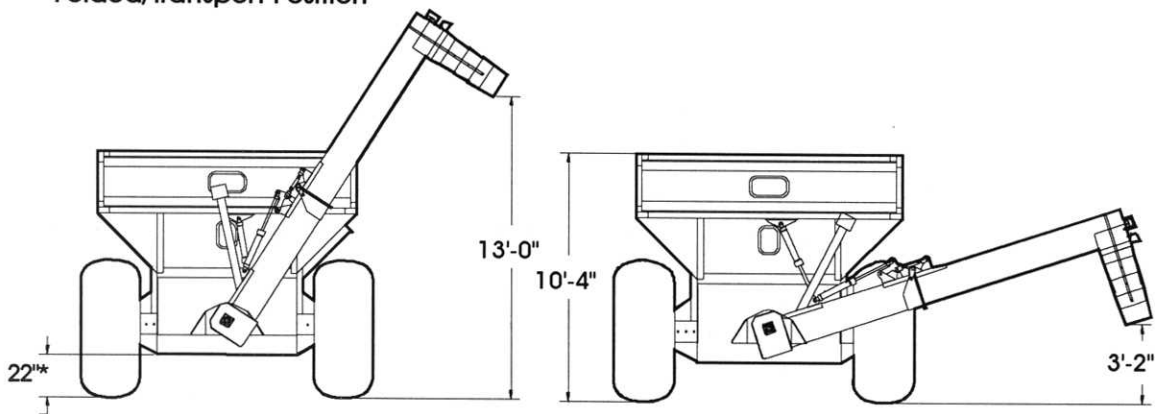
**7.2 UNLOADING AUGER CONFIGURATIONS & GENERAL DIMENSIONS**



Folded/Transport Position

\*Transport width varies with axle setting and tire type. As a general guideline, here are the transport widths for each axle setting.

120" Centers	-150" Overall Width
128" Centers	-158" Overall Width
136" Centers	-166" Overall Width
144" Centers	-174" Overall Width



Fully Raised Position

Fully Lowered Position

\*Ground Clearance will depend on tire type and inflation.

### 7.3 OTHER FEATURES AND SPECIFICATIONS

- 800 Bushel Capacity
- Pivot Auger Design
- Self-Supporting Box Design
- 4- $\frac{1}{2}$ " Adjustable axles - 120" (for 30" row crops), 128" (for 32" row crops), 136" (for 34" row crops) and 144" centers (for 36" row crops).
- Cleanout gate along full length of drag auger.
- Cleanout on transition box.
- #80 long life auger drive chain.
- Fully Shielded.
- Floating Bearing at end of unloading auger.
- Inside steps & catwalk.
- Integral frame/axle design.
- 4" x 10" x .250W frame material.
- Heavy Duty Jack.
- Self-adjusting chain tightener.
- Auger Unloading Light.
- 200 bushels/minute unloading time (approx).
- Shut-off Flow Control Gate.
- Full Pitch 5/16" Flighting.
- Heavy Duty Gearbox & Driveline.
- Large Sight Glass.
- 30.5 x 32 Lug or Diamond Tires.
- High Frame Clearance.
- Integral Lighting Package.

## Degelman Shuttlekart Grain Cart

Degelman Industries Ltd. warrants its products to the original owner for a period of one (1) year from date of purchase. All matters related with the warranty of our products must be handled through the authorized selling dealer. Warranty does not cover normal wear of the machine components or damages caused by lack of maintenance or misuses, and is subject to the following provisions:

### •REPLACEMENT PARTS:

Will be warranted for a period of ninety (90) days.

### •WARRANTY ON MACHINES USED FOR CUSTOM WORK, RENTALS OR INDUSTRIAL USE:

Will be warranted as stated above, with the exception that it shall be for a period of ninety (90) days only.

### •TIRES:

Will be adjusted for warranty by the tire manufacturer.

### •LABOUR:

Any labour subject to warranty must be authorized by a Degelman representative before work is started. Warranty labour allowance and rates will be handled according to established service warranty policy.

### •GOVERNMENT LEGISLATION:

Warranty terms and conditions are subject to Provincial or State Legislation.

### •MODIFICATIONS:

Warranty will be void if any component is altered or modified, unless written authorization is granted by Degelman Industries Ltd.

### •WARRANTY ON ATTACHED EQUIPMENT:

No responsibility will be assumed for whatever damages may occur to equipment attached to this Degelman product.

Always give your dealer the serial number of your Degelman Shuttlekart when ordering parts or requesting service or other information.

The serial number is located on the machine as shown in the diagram below. In the space provided record the model number, the serial number and the date of purchase to assist your dealer in providing you with prompt and efficient service.

MODEL NUMBER: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_



<b>A</b>		<b>S</b>	
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Adjusting Turnbuckle Jack .....	14	SERVICE .....	16
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