# bühler

# farm king



13" x 36' Conventional Auger

Operator's and Parts Manual FK361



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# WARRANTY POLICY

Buhler Manufacturing products are warranted for a period of twelve (12) months (90 days for commercial application) from original date of purchase, by original purchaser, to be free from defects in material and workmanship under correct, normal agricultural use and proper applications.

Buhler Manufacturing's obligations under this warranty shall be limited to the repair or exchange, at Buhler Manufacturing's option, of any Buhler Manufacturing product or part which proves to be defective as provided. Buhler Manufacturing reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection.

The above warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from Buhler Manufacturing's factory, nor to goods altered or repaired by anyone other than an authorized Buhler Manufacturing representative.

Buhler Manufacturing makes no Express Warranties other than those, which are specifically described. Any description of goods, including any references and specifications in catalogues, circulars and other written material published, is for the sole purpose of identifying goods and shall conform to such descriptions. Any sample or model is for illustrative purposes only and does not create an Express Warranty that the goods conform to sample or model shown.

The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Manufacturing will in no event be liable for any incidental or consequential damages whatsoever. Nor for any sum in excess of the price received for the goods for which liability is claimed.

#### **WARRANTY CLAIMS:**

Warranty requests must be prepared on Buhler Manufacturing Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

#### **WARRANTY LABOR:**

Any labor subject to warranty **must** be authorized by Buhler Manufacturing. The labor rate for replacing defective parts, where applicable, will be credited at 100% of the dealer's posted shop rate. Defective parts will receive an extra 10% discount to assist with freight or other incidental costs.

#### **GOVERNMENT LEGISLATION:**

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

#### **IMPORTANT FACTS:**

Buckets and Bucket Tines Carry No Warranty Bent Spears Carry No Warranty Snowblower Fan Shafts Carry No Warranty Mower Blades Carry No Warranty Portable Auger Parts Have Two (2) Year Warranty Loader Parts Have Two (2) Year Warranty

**IMPORTANT NOTE:** This warranty does not apply to rentals



#### INTRODUCTION

The Buhler Farm King conventional augers deliver numerous well-proven design features for more convenience, efficiency and safety. A longer bottom end below the gearbox allows the auger further into the bin.

These augers are well balanced for easy handling. A belt tightener and improved hinged belt-guards provide you with added convenience and an extra measure of safety. Beefy, wide-stance undercarriages and lift-systems with automotive-type hubs and bearings are all Buhler Farm King standards. Strength and stability come with square tube construction. Buhler Farm King gives you all the drive options:

- Direct PTO
- Belt Drive PTO
- Gas Engine Drive
- Electric Motor Drive (belt and direct)

All belt drive engine models have self-leveling motor mounts. Reliable safety clutch winches are used. The double flighting intake has a brass bushing on all conventional auger intake guards. A new, narrow safety-guard and removable clevis-hitch allows for easier penetration into smaller openings. A storage bracket holds the clevis hitch when not needed. Sealed lubrication in the top-drive assembly makes it resistant to heat, dust, debris and moisture. It also reduces maintenance requirements and adds to the longevity of the chain and sprockets.

Keep this manual handy for frequent reference. All new operators or owners must review the manual before using the equipment and at least annually thereafter. Contact your Buhler Dealer if you need assistance, information, or additional copies of the manual. Visit our website at www.buhler.com for a complete list of dealers in your area.

The directions left, right, front and rear, as mentioned throughout this manual, are as seen facing in the direction of travel of the implement.



#### SAFETY INSTRUCTIONS

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. Be certain that everyone operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

The alert symbol is used throughout this manual. It indicates attention is required and identifies hazards. Follow the recommended precautions.



The safety alert symbol means...

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



#### CAUTION

The caution symbol indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



#### WARNING

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



#### DANGER

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



#### **GENERAL SAFETY INSTRUCTIONS**

Have a first-aid kit available for use and know how to use it.

Have a fire extinguisher available, stored in a highly visible location, and know how to use it.

Wear appropriate protective gear. This list may include but is not limited to:

- Hard hat
- Protective shoes with slip resistant soles
- Protective glasses or goggles
- Heavy gloves
- Wet weather gear
- Hearing protection
- Respirator or filter mask

Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing, or unplugging the equipment.

Do not attempt any unauthorized modifications to your Buhler product as this could affect function or safety, and could affect the life of the equipment.

Inspect and clean the working area before operating.

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

Ensure bystanders are clear of the area before operating.

#### **START-UP SAFETY**

Do not let inexperienced operators or children run this equipment.

Place all tractor and machine controls in neutral before starting.

Operate only with ROPS and seatbelt equipped tractors.

Do not operate inside a building unless there is adequate ventilation.

Ensure all shields are in place and in good condition before operating.

Stay clear of PTO shaft and machine when engaging PTO.

The auger must be on a level surface and wheels free to move when raising or lowering. Everyone should be kept clear during these operations.

Make certain electric motors are grounded.

#### **OPERATION SAFETY**

Do not permit riders.

Do not wear loose fitting clothing during operation.

Empty the auger before moving to prevent upending.

Do not allow anyone other than the operator close to the Auger when in operation.

Never stand under the auger while raising or lowering.

When filling tall bins, tanks, or granaries, it is advisable to anchor the auger to the bin or building to prevent it from being tipped over by the wind or a sudden movement. The upper end of the auger should rest on some support when in operation.

Never operate a Conventional Auger with the intake end off the ground.

Never operate over 540 rpm PTO speed.

Never raise the intake end of the auger above waist high, as the balance shifts forward, and the auger will tip over.

Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.



#### TRANSPORT SAFETY

Review Transport Safety instructions in tractor manual before moving.

Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.

Do not tow equipment that does not have brakes at speeds over 32km/h (20 mile/h). Do not tow equipment that does not have brakes that, when fully loaded, has a mass (weight) over 1.5 t (3300 lb) and more than 1.5 times the mass (weight) of the towing unit.

Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.

Never have the equipment in operation during transport.

Always transport the Conventional Auger in the down position, carrying the weight of the auger on the winch cable and not on the track stops.

Take extreme caution in maneuvering on or around tight corners so as not to catch the end of the auger on trees, buildings, power lines, etc.

The equipment should never be towed without the safety chain securely attached to the auger and the towing vehicle.

When moving the auger on the road, always use a red flag, or if absolutely necessary to move at night, accessory lights for adequate warning to operators of other vehicles. Always travel at a safe speed.

Inflate transport tires to recommended pressure.

#### SERVICE AND MAINTENANCE SAFETY

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

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

Follow good shop practices including

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

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

Replace and secure all shields removed during servicing before operating.

Use heavy leather gloves to handle sharp objects.

Check hydraulics regularly for leaks. Use cardboard to look for leaks, and use hand and eye protection.

Relieve pressure on hydraulic system before repairing or adjusting.

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.



#### STORAGE SAFETY

Store the unit in an area away from human activity.

Do not permit children to play on or around the stored machine.

Support the frame on stands and blocks to provide a secure base.

When storing an auger, park it on level ground so that the bottom end will never be over its center of gravity.

Block the wheels of the auger so that the auger will not move.

When storing the auger, the intake end should be tied or weighted to prevent tipping.

#### **SAFETY SIGNS**

The following illustration shows the approximate location and detail of safety signs. Keep all safety signs clean and legible and replace any that are damaged or missing. When original parts are replaced, any safety signs affixed to those parts should be replaced as well. Replacement safety signs are available from your local dealer.

#### **INSTALLATION OF SAFETY SIGNS**

To install safety signs, ensure the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper and align over the specified area. Carefully press in place. Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.

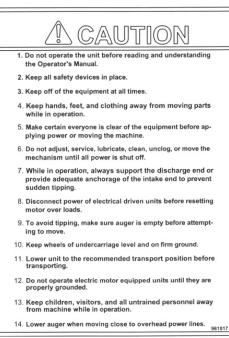


#### **SAFETY SIGNS**



Replace safety signs immediately should they become damaged, torn or illegible. Obtain replacements from our authorized dealer using the part numbers shown.







#### **ASSEMBLY INSTRUCTIONS**

- 1. Page 20: Assemble the bottom section (#1) to the top section (#2) making sure the flighting is aligned and locked with a hex bolt and lock nut. (½" x 2 ¾" grade 8). Use hex bolts, lock washers and hex nuts to fasten the auger rings together. (7/16" x 1 ¼" hex bolt). Align the two sections before tightening the bolts. Be sure to tighten bolts evenly first one side and then the other. Bolt the intake guard (#12) to the bottom of the auger using 3/8" x 2" full thread hex bolts, lock washers and hex nuts.
- 2. The gearbox is shipped without oil. Before you mount the gearbox on the auger, remove the lid and fill the gearbox about 1/3 full with SAE80-90 oil (oil should just be touching the bottom of the gears, do not overfill).
  - Use gasket glue when replacing the cover to reduce the chance of leaks. The gearbox may be used on either the left or the right side. Check to see that the breather plug on the gearbox lid will be on the top and the drain plug will be at the bottom when the gearbox is bolted to the auger. Connect the gearbox to the splined coupler on the drive line and bolt on the gearbox using ½" x 1" hex bolts and lock washers. Bolt the gearbox plate (#7) to the top of the gearbox with the ring on the drive side. The extension shield holder (#8) bolts on top of the plate with the welded bolt turned towards the top of the auger. Use the same hardware as for the gearbox.
- 3. Page 20: Mount the driveline shields (#10) starting at the top of the auger before you lift the auger. The final extension shield (#9) will be mounted after the auger is assembled. Bolt the extension shield to the shield holder (#8) using a 5/16" flat washer, lock washer and hex nut.
- 4. Page 23: Mount the two undercarriage arms (#1) and (#2) to the pivot pin under the welded gearbox mount using 2" washers (#19) and 5/16" x 2 ¼" cotter pins (#20). Bolt the undercarriage arms to the axle (#14) using hex bolts, lock washers and hex nuts. (1/2" x 3 ¼" hex bolt). Slide the track roller assembly (#54) onto the track with the large roller turned to the bottom of the auger. Bolt the lift arm extension (#13) to the track roller using 5/8" x 6" hex bolts and lock nuts. Bolt the lift arm extension to the top of the two lift arms (#12). Use 5/8" x 4 ½" bolts, lock washers and hex nuts. Bolt the track stops (#16) (Pages 13-15) to the top and 10 ¾" from the bottom of the track using 3/8" x 1 ¼" hex bolts, lock washers and hex nuts. The cable anchor (#17) (Pages 13-15) bolts to the very bottom of the track using the same hardware. The bottom of the lift arms bolt to the inside of the welded axle brackets using bolts and lock nuts (5/8" x 2). The right (#3) and left (#4) cross tubes bolt to the undercarriage using ½" x 3" hex bolts, lock washers and hex nuts and to the axle using ½" x 1 ½" hex bolts, lock washers and hex nuts. The R.H. brace is the one with the winch bracket. Make sure it is turned as shown in drawing.

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#### ASSEMBLY INSTRUCTIONS – cont'd.

- 5. Page 23: Bolt the mounting plate (#16) to the undercarriage arms using 3/8" x 2 3/4" bolts, lock washers and hex nuts. Fit the slots in the winch bracket onto the right hand cross tube and slide against the welded stop. The slots in the winch bracket at 90° to the cross tube are turned up. Bolt in place using two connector plates and 3/8" x 1" hex bolts, lock washers and hex nuts. Bolt the winch (#15) to the winch bracket on the R.H. cross tube (#3) using 3/8" x 1" hex bolts, lock washers and hex nuts. Flat washers are supplied for bolts which go through slotted holes.
- 6. Page 23: Bolt the swivel pulley holder (#7) to the loops at the top and inside of the undercarriage using 5/16" x 2" hex bolts, lock washers and hex nuts. The pulley holder is offset on the shaft and should be assembled to the same side as the drive.
- 7. Page 34: Thread the cable (#1) as shown in the drawing. From the winch the cable goes around the cable pulley on the idler plate. From there you go around the swivel and around the groove in the bottom roller of the track roller assembly. The end of the cable is clamped to the cable anchor at the bottom of the track assembly. Clamp to the winch spool using the clamps supplied with the winch.
- 8. Page 23: A clevis holder (#11) bolts to the top end of one undercarriage arm using a 3/8" x 3" hex bolt, lock washer and hex nut. This holder is used as a place to leave the intake swivel clevis when it is removed prior to inserting the auger in a bin.
- 9. Page 23: Mount the wheels (#48) and tires on the axle using  $\frac{1}{2}$ " wheel bolts.

#### PTO BELT DRIVE AUGERS: Page 26

- 10.a) Install the hanger (#15) between the welded brackets near the bottom of the undercarriage using the 1" shaft (#17) and two ½" x 1 ½" cotter pins. Turn as shown in drawing.
  - b) Bolt the PTO mount assembly (#20) to the hanger using ½" x 1 ¼" hex bolts, lock washers and hex huts.
  - c) Bolt the guard plate (#3) to the back of the sheave guard (#1) using ½" x ½" bolts, lock washers and hex nuts. Slide onto the welded ring on the PTO mount (#20). The guard is held on by a ring (#40) with two 5/16" x ¾" set screws and hex nuts. Hinge on guard must be up.
  - d) Attach the 12" sheave (#38) to the arbor shaft (#21) using a ½" x 3 3/8" key and set screws.
  - e) A 13 ¾" pivot arm (#54) bolts to the inside of the guard with a 3/8" x 1" hex bolt and lock nut and to the undercarriage with a 3/8" x 2 ¾" hex bolt and lock nut. Turn as shown in drawing.
  - f) Bolt a guard plate (#3) to the 6" guard (#4). Attach to the welded ring on the gearbox plate. The guard is held on by a ring (#40) mounted as in Step C. Hinge on guard must be up.
  - g) Bolt the 9" long guard pivot arm (#58) to the back of the guard using 5/16" x  $\frac{3}{4}$ " hex bolts, lock washers and hex nuts. A 10" pivot arm (#5) bolts to the end of the 9" arm and to the undercarriage. Turn arm as shown in drawing.



#### ASSEMBLY INSTRUCTIONS – cont'd.

- h) Mount the 6" sheave (#37) on the gearbox. Fasten with a 3/8" key and set screws.
- i) Align the sheaves with the tube and mount belts (#53).
- j) Bolt the belt tightener (#16) under the gearbox with the bevel to the intake end using 3/8" x 3" bolts and lock nuts. The outer tightener tube (#11) bolts to the brackets using ½" x 3" bolts and lock nuts. The inner tightener tube (#14) slides into the outer and bolts to the bottom of the hanger (#15) using a ½" x 3" bolt and lock. Tension belts and hold in place using the set screw in the outer tube.
- k) Bolt a guard plate (#2) on the outside of the 6" guard (#4) to cover the opening using ¼" x ½" hex bolts, lock washers and hex nuts. Bolt the guard mount (#55) to the outside of the 12" guard with the same size of hardware. Slide the flexible PTO guard (#56) and the guard clamp (#57) on to the PTO shaft (#6). Attach the PTO shaft using ¼" key, set screws and clamp bolt. Securely tighten set screws and clamp bolt. After mounting the PTO, clamp on the flexible PTO guard using a 5/16" x 1 ¼" hex bolt, lock washer and hex nut.
- I) Bolt the PTO cradle (#63) & (#64) onto the lift arm for transport position. A pin in the cradle keeps the PTO shaft from falling out during transport.
- m) When the belts and sheaves are aligned, bolt the bottom edges of both guards together using ½" x ½" hex bolts, lock washers and hex nuts.

#### **ENGINE BELT DRIVE AUGERS:** Page 29:

- 11.a) Install the hanger (#15) between the welded brackets near the bottom of the undercarriage using the 1" shaft (#17) and two ¼" x 1 ½" cotter pins. Turn as shown in drawing.
  - b) The motor mount (#19) should be installed so the handle is toward the axle. Use  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " hex bolts, lock washers and hex nuts.
  - c) The motor mount spacer (#24) and the guard mount (#23) fit under the motor base and are bolted on together with the gas motor. The ring on the guard mount is used to clamp on the guard for the motor sheave.
  - d) Bolt the guard plate (#3) to the back of the 12" guard (#1) using  $\frac{1}{4}$ " x  $\frac{1}{2}$ " bolts, lock washers and hex nuts. Slide onto the welded ring on the gearbox plate. The guard is held on by a ring (#40) with two 5/16" x  $\frac{3}{4}$ " set screws and hex nuts. Hinge on guard must be up.
  - e) Mount the 12" sheave (#38) on the gearbox using a key (3/8" x 3 3/8") and set screws.
  - f) A 10  $\frac{3}{4}$ " pivot arm (#5) bolts to the inside of the guard with a 3/8" x 1" hex bolt and lock nut and to the undercarriage with a 3/8" x 2  $\frac{3}{4}$ " hex bolt and lock nut. Turn as shown in drawing.
  - g) Bolt the clamp plate (#6) to the back of the engine sheave guard. Turn as shown in drawing. Clamp the guard to the welded ring on the guard mount (#23) using 5/16" x 1 1/4" hex bolts, lock washers and hex nuts. Hinge on guard must be up.



#### ASSEMBLY INSTRUCTIONS – cont'd.

- h) Mount the engine sheave (#37) on the gas engine. This sheave must be supplied by the customer.
- i) Align the sheaves with the tube and mount the belts (#18).
- j) The next step in assembly is to bolt the idler guard arm (#42) to the idler mounting plate using 5/16" x 2" hex bolts, lock washers and hex nuts. Bolt the idler guard (#43) to this arm using 5/16" x 1" hex bolts, lock washers and hex nuts. The idler sheave assembly bolt fits through the slots in the arm and guard. A flat washer on the idler bolt is placed on each side of the slot.
- k) Bolt the belt tightener brackets (#16) under the gearbox with the bevel to the intake end using 3/8" x 3" bolts, lock washers and hex nuts. The outer level rod (#11) bolts to the brackets using ½" x 3" bolts and lock nuts. The inner tightener tube (#14) slides into the outer and bolts to the bottom of the hanger (#15) using ½" x 3" bolt and lock nut. Tension belts and hold in place using the set screw in the outer rod.
- I) Bolt a guard plate (#2) on the outside of both sheave guards using ½" x ½" hex bolts, lock washers and hex nuts.
- m) The quick release on the motor mount (#19) is used when starting the engine and to stop the auger without shutting off the engine.
- n) When belts, sheaves and idler are aligned, bolt the bottom edges of all guards together using ½" x ½" hex bolts, lock washers and hex nuts.

#### 12. **DIRECT DRIVE AUGERS**: Page 32

- a) Bolt the PTO holder (#9) to the welded bracket on the tube using 3/8" x 1" hex bolts lock washers and hex nuts. A pin (#7) holds the PTO in place during transport.
- b) Mount the PTO guard holder (#14) to the welded ring on the gearbox plate using a 4" I.D. clamp (#15) with 5/16" x 1 1/4" hex bolts, lock washers and hex nuts.
- c) Slide the flexible PTO guard (#2) and the guard clamp (#3) onto the PTO shaft. Attach the PTO shaft using a key, (3/8" x 2") set screws and clamp bolt. Securely tighten the set screws and clamp bolt. After mounting the PTO, clamp on the flexible PTO guard using a 5/16" x 1 1/4" hex bolt, lock washer and hex nut.

# ALERT:

- 13. Re-check and tighten all bolts. Of particular importance are.
  - 1) Cable clamps!!!
  - 2) Bolts on track roller assembly.
  - 3) Bolts on lift arm joining axle and extension tube.
  - 4) Bolts joining undercarriage, cross tubes and axle.
  - 5) Gearbox mounting bolts.
  - 6) Pulley set screws.
  - 7) All bolts on shields.
  - 8) Wheel bolts.
  - 9) Set screws and clamp bolts holding on PTO shaft.



#### ASSEMBLY INSTRUCTIONS -cont'd.

- 14. **NOTE:** 1) Gearbox is shipped without oil. Add oil as described in Section 2.
  - 2) Do not exceed 600 RPM flighting speed when operating auger.
  - 3) An external chain tightener is supplied with all augers.

# ALERT:

- 1) High position: it is dangerous to move auger in raised position in vicinity of electrical lines.
- 2) Keep all shields and guards in place.
- 3) Turn off power when servicing or unplugging auger.
- 4) Check that intake guard bolts are tight and that the swivel clevis pin has the hitch pin in place before transporting the auger.



#### CLAMP-ON MOTOR MOUNT INSTRUCTIONS

1. The procedure is the same for belt drive or direct drive. Bolt the motor mount stand (#1) and two clamps (#2) to the tube using 3/8" x 2" hex bolts, lock washers and hex nuts. Tighten these bolts when exact position is determined with the pulleys and belts mounted.

**NOTE:** The motor mount cannot be mounted below the gearbox on belt drive augers.

- 2. Bolt the motor mount assembly (#6) to the stand using ½" x 1 ¼" hex bolts, lock washers and hex nuts. Mount the electric motor (#30) (supplied by customer) to the motor mount. A triple B-groove sheave is required. Do not tighten bolts until both sheaves are aligned. The electric motor is a 1725-rpm with at least 20hp. Sheave sizes are: direct drive 3 ½"; belt drive 6". Pulleys are mounted after the guard is in place. Electric motor sheave is supplied by customer.
- 3. Mount the belt guard assembly (#7) (hinge up). The bottom end of the guard clamps to the ring on the gearbox plate weldment (#4) using a 4" clamp (#8) and 5/16" x 1 ¼" hex bolts, lock washers and hex nuts. A guard-mounting bracket (#9) holds the top end. Use 5/16" x 1" and ½" x 1 ½" hex bolts with lock washers and hex nuts. There are two sets of holes in the guard and two holes in the motor mount stand. Use appropriate holes and slot in mounting bracket to adjust guard height to match height of the motor shaft.
- 4. Mount the 12" triple sheave on the gearbox using key and set screws supplied. Mount the motor sheave and align the two sheaves with the auger tube. Tighten sheave set screws and motor mount bolts after sheaves are aligned. Mount the belts on the sheaves. Adjust stand position to fit belt length and tighten stand bolts. The motor mount handle acts as a belt tightener. Adjust sheave position as required so they are approximately in the middle of the guard.



#### **OPERATING INSTRUCTIONS**

All augers may be elevated up to 45°: however, for best operating efficiency, 35° should not be exceeded. At angles over 35° the capacity and life of the auger decreases.

Never operate an empty auger for over one minute, as the flighting and housing will experience excessive wear.

To position the auger, always tow or move the auger in the down position to a point as close as possible to the bin or barn.

**CAUTION:** Always keep the wheels level. Raise the auger to the desired height and back the auger into position. Rest the head on some support. As an auger is emptied the head becomes heavy, the tail becomes light, and the auger could tip.

**CAUTION:** Never place blocks under the wheels to increase the elevation of the auger.

Be sure the wheels are free to move and no one is standing close to the auger when raising or lowering. Never attempt to raise or lower the auger while it is in operation.

The auger is equipped with a safety brake winch. The auger may be raised or lowered by simply turning the winch handle in the proper direction until the desired discharge height is obtained.

Never have less than three wraps of cable on the drum of the winch.

**NOTE:** Arrow on winch shows proper direction of rotation. Improper rotation may cause winch brake failure.

**CAUTION:** All wiring should be done by a competent electrical contractor to assure the electric motor is receiving the correct voltage and the cable will carry the correct load.

The life of a motor is greatly reduced if it is run at too high or too low voltage. Also, a motor cannot develop full power if the cable is too small. The electrical supply to each motor should include an enclosed safety switch or circuit breaker of the correct size to protect the motor from being overloaded. The switch should be under a padlock to prevent the motor from being turned on by accident while working on or moving the auger. This will also prevent unauthorized persons or children from operating the motor. A magnetic starter should be used to shut off the motor in case of low voltage, loss of power, or overloading the motor.

The electric motor must then be started manually.

Power take-off drives are designed for tractors with 540 RPM power take off and should not be run by tractors with 1000 RPM power take-off.



#### **OPERATING INSTRUCTIONS – cont'd.**

**CAUTION:** Always check to see that both ends of the PTO shaft are securely attached before using any PTO drive auger. This should always be done with the tractor shut off.

To assure a long life from a PTO tumbler shaft, operate the shaft at the least angle possible and always keep the tractor axle parallel to the side of the auger housing.

**CAUTION:** Always maintain at least a 6" lap on the tumble shields. Be sure they turn freely and make certain everyone stands clear of the tractor, tumbler shaft, and auger before engaging power take-off. Be sure ends are securely connected to the auger and tractor.

Before engaging power take-off, start tractor and idle engine. Engage power take-off slowly and bring PTO RPM up to recommended speed of 500 RPM.

Before stopping auger (except in an emergency) let all grain empty out of the auger, idle engine then disengage power take-off. Shut off tractor.

**NOTE:** When operating an auger for the first time when new or at the beginning of a season, run only partially full until flighting becomes polished. It is always a good idea to check the flighting for freedom of movement by turning pulley or tumbler shaft by hand before connecting to a power source. Other items to check are the head (spout) and intake cage for bird nests or other obstructions before starting the auger.

**IMPORTANT:** Always lower auger before transporting and allow the weight of the auger to rest on the winch cable and not on the transport stops.

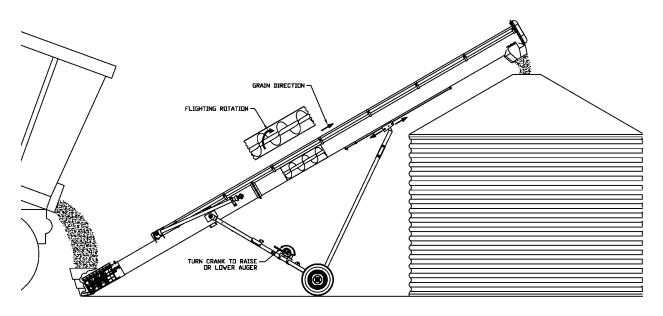


**CAUTION:** When towing the auger, never exceed 32 kilometers per hour.

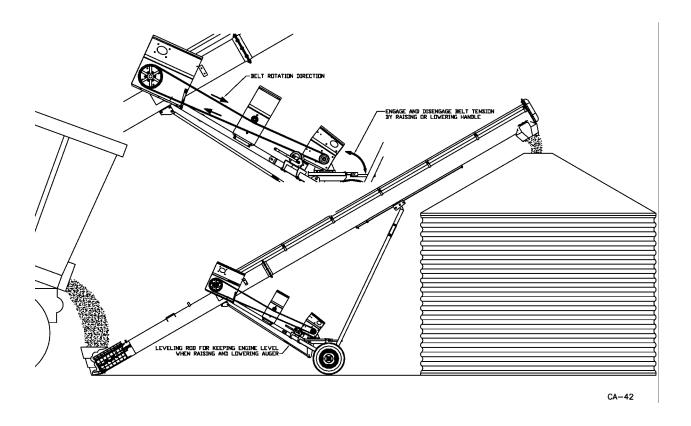
Always use a flag, or at night, a signal light when towing an auger on a road. Check your local regulations for further safety devices in this regard.



# **THEORY OF OPERATIONS**

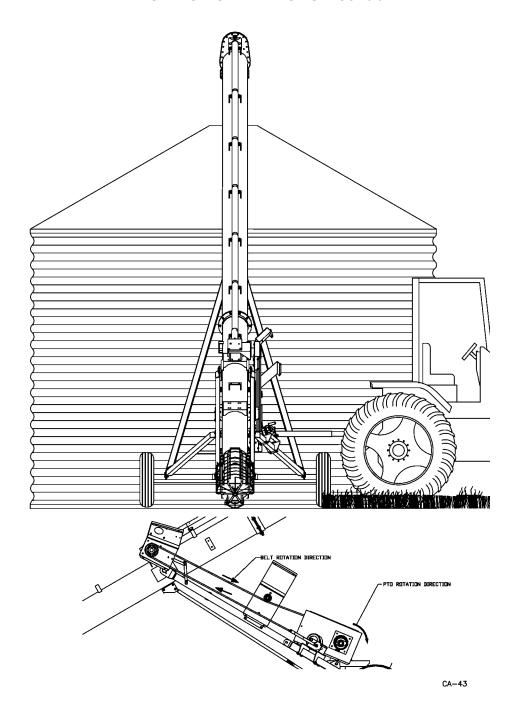


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# THEORY OF OPERATIONS - cont'd.





#### MAINTENANCE AND LUBRICATION

Check condition of winch cable occasionally and replace if it shows wear. The wear will occur on the first few wraps around the drum of the winch.

The main thing to check on the cable is for broken strands or rust, which penetrates the cable core. This is particularly important if the auger is more than a few years old.

Lubricate the PTO tumbler shaft universal joints every five hours. Grease the PTO shear yoke before using PTO for the first time.

Oil the moving parts of the winch two times per year.

Check the oil level of the gearbox one time per year and maintain the level at ½ full. Use SAE90.

The plastic chain guard at the top of the auger must be removed to inspect or replace the chain and sprockets. When replacing the plastic guard, clean off the residue from the old silicone and apply a fresh bead using a caulking gun. There must be about 2 pounds of grease in the guard. The bolts should be tightened in a criss-cross sequence to ensure proper seating of the guard. The bolts are a ½" grade 5 which should be torqued to about 9 foot pounds using a torque wrench.

After every 40 hours of use, add approximately 10 squirts of grease to chain cover at the top of the auger.

**NOTE:** When replacing bearings or tightening a loose bearing collar, always tighten collar in the direction of shaft rotation using a center punch or a similar tool.

If the auger is towed extensively, the wheel bearings should be repacked at least semiannually. Keep tire pressure at 37 psi maximum.



#### **STORAGE**

The auger should be stored in a dry place if possible. If stored outside, lower auger to its lowest position and tie the tail end down so that no one can accidentally overturn it.

Clean auger thoroughly as dirt draws moisture and causes metal to rust. If the auger has been used to move fertilizer, clean thoroughly and apply oil or grease on entire flighting and inside the housing to stop and prevent further corrosion.

Remove belts and store in a cool dry place if auger is to be left outdoors.

At this time check all moving parts for wear and order replacement parts from your nearest dealer.

When taking the auger out of storage, clean it thoroughly and check for obstructions at the inlet and outlet ends. Check the oil in the gearbox.

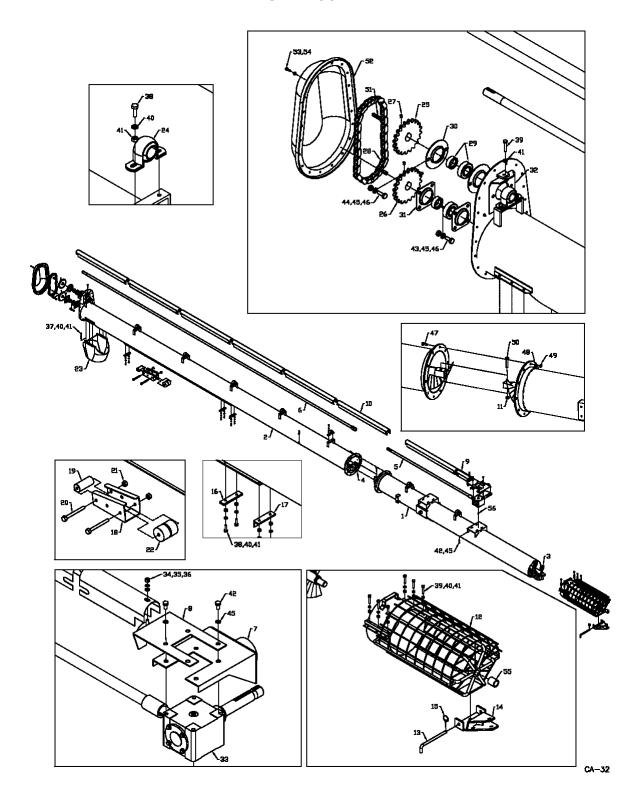
Check all bolts and set screws.

Regularly check the tightness of all cable clamps to avoid slipping. Inspect wire rope regularly for evidence of wear or corrosion. Such inspections should take place at progressively shorter intervals over the useful life of the rope, as wear tends to accelerate with use and/or age. Where wear is rapid, the outside of a wire rope will show flattened surfaces in a short time. A piece of cloth or rag, rubbed along the wire rope will help to reveal broken wires. The effects of corrosion are not easy to detect because the exterior wires may appear to be only slightly rusty, and the damaging effects of corrosion may be confined to the hidden inner wires where it cannot be seen. To prevent damage by corrosion, the rope should be kept well lubricated. Periodic cleaning of wire rope by using a stiff brush and kerosene or with compressed air or live steam and relubricating will help to lengthen rope life and reduce abrasion and wear on sheaves and drums.

| Bolt Torque   |     |       |     |       |      |       |
|---------------|-----|-------|-----|-------|------|-------|
|               |     |       |     |       |      |       |
| Bolt Diameter | SA  | E2    | SA  | E5    | SAE8 |       |
| "A"           | N.m | lb-ft | N.m | lb-ft | N.m  | 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  | 70    | 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   |



# **TUBE ASSEMBLY**





### WHEN ORDERING PARTS

Always give your dealer the Model, Color and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.

#### **TUBE ASSEMBLY**

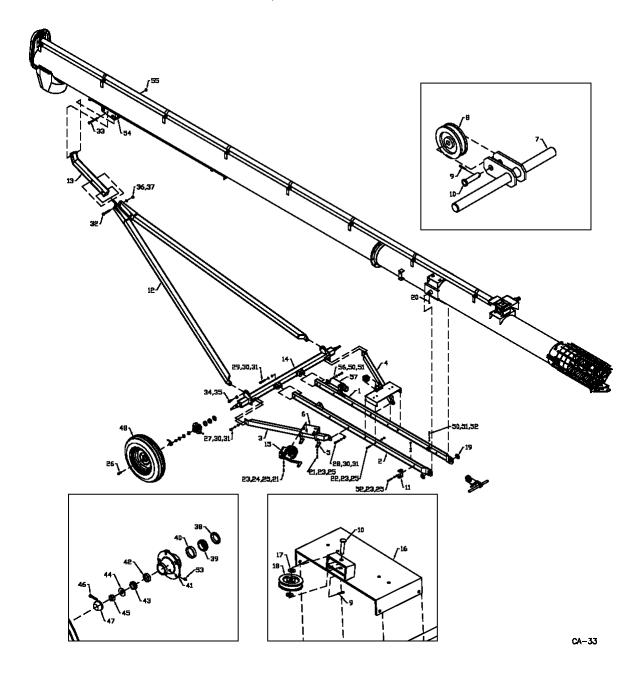
| Item # | Part # | Description  |
|--------|--------|--|
| 1      | 905460 | Extension Auger Weldment 13" x 12.5' Lg                        |
| 2      | 905463 | Basic Auger Weldment 13" x 22' Lg                              |
| 3      | 905482 | Extension Auger Flighting Weldment                             |
| 4      | 905485 | Basic Auger Flighting Weldment                                 |
| 5      | 905472 | Direct Drive Extension Drive Line Weldment 78 3/4" Lg          |
|        | 905468 | Belt Drive Extension Drive Line Weldment 30 3/4" Lg            |
| 6      | 905474 | Drive Line Tube Weldment 262 1/2" Lg                           |
| 7      | 906093 | Gearbox Plate Weldment   |
| 8      | 961346 | Extension Shield Holder Weldment                               |
| 9      | 906078 | Drive Line Shield 12 1/4" Lg                                   |
|        |        | (7 Req'd per Direct Drive / 6 Req'd per Belt Drive)            |
| 10     | 906077 | Drive Line Shield 49 1/2" Lg                                   |
| 11     | 812364 | 1/2" Lock Nut (pl)   |
| 12     | 905996 | Intake Guard Weldment  |
| 13     | 906100 | Clevis Pin 5/8" x 11 1/4"                                      |
| 14     | 905527 | Clevis Hitch Weldment  |
| 15     | 966729 | 3/16" Linch Pin  |
| 16     | 905489 | Track Stop 1 1/4" x 5 1/2"                                     |
| 17     | 961350 | Cable Anchor 1 1/2" x 5 1/8"                                   |
| 18     | 961354 | Track Roller Frame 7 Ga  |
| 19     | 902365 | Roller 2" O.D. x 4 1/2" Lg                                     |
| 20     | 812087 | 5/8" x 6" Hex Bolt (pl)  |
| 21     | 812482 | 5/8" Lock Nut (pl)   |
| 22     | 902364 | Track Roller 3.35" O.D. x 4 1/2" Lg                            |
| 23     | F9716  | Discharge Spout 13"  |
| 24     | 906588 | Bearing & Flange Set 1 1/2" - Wooden                           |
|        | 906587 | Bearing Only 1 1/2" - Wooden                                   |
| 25     | 906086 | Sprocket 80B 20T w/ 1 1/2" Bore (Direct Drive)                 |
|        | 960719 | Sprocket 80B 15T w/ 1 1/2" Bore (Belt Drive)                   |
| 26     | 906086 | Sprocket 80B 20T w/ 1 1/2" Bore (Direct Drive)                 |
|        | 906084 | Sprocket 80B 28T w/ 1 1/2" Bore (Belt Drive)                   |
| 27     | 988999 | Socket Setscrew 3/8" x 3/8"                                    |
| 28     | 906473 | Chain #80 41 Link Include Connector Plus Offset (Direct Drive) |
| _      | 906557 | Chain #80 44 Link Include Connector (Belt Drive)               |
| 29     | 968627 | 1 1/2" Bearing w/ Collar                                       |



| 30 | 906092  | Flange Bearing (80mm-4R x 2Hole) Pair   |
|----|---------|---|
| 31 | 967260  | Flange Bearing (80mm - 4 Hole) Pair     |
| 32 | 906083  | Chain Tightener Bracket Weldment        |
| 33 | 907207  | Gear Box Assy                           |
|    | 907413  | Optional Reverse Gear Box Assy          |
| 34 | 81570   | 5/16" Flat Washer (pl)                  |
| 35 | 81569   | 5/16" Lock Washer (pl)                  |
| 36 | 81568   | 5/16" Lock Washer (pl)                  |
| 37 | 86170   | 3/8" x 1" Hex Bolt (pl)                 |
| 38 | 86171   | 3/8" x 1 1/4" Hex Bolt (pl)             |
| 39 | 811795  | 3/8" x 2" Full Thread Hex Bolt (pl)     |
| 40 | 81593   | 3/8" Lock Washer (pl)                   |
| 41 | 81592   | 3/8" Hex Nut (pl)                       |
| 42 | 81619   | 1/2" x 1" Hex Bolt (pl)                 |
| 43 | 812768  | 1/2" x 1 1/4" Hex Bolt (pl)             |
| 44 | 812217  | 1/2" x 1 1/2" Carriage Bolt (pl)        |
| 45 | 81637   | 1/2" Lock Washer (pl)                   |
| 46 | 81636   | 1/2" Hex Nut (pl)                       |
| 47 | 81598   | 7/16" x 1 1/4" Hex Bolt (pl)            |
| 48 | 81615   | 7/16" Lock Washer (pl)                  |
| 49 | 81614   | 7/16" Hex Nut (pl)                      |
| 50 | 9812368 | 1/2" x 2 3/4" (Gr8) Hex Bolt (pl)       |
| 51 | 968807  | Key 3/8" Sq. x 2" Lg                    |
| 52 | 906581  | Plastic End Cover                       |
| 53 | 967473  | 1/4" x 3/4" Flange Hex Bolt (pl)        |
| 54 | 967474  | 1/4" Flange Hex Nut (pl)                |
| 55 | 905995  | Brass Bushing 2" OD x 1 1/2" ID x 2" Lg |
| 56 | 81638   | 1/2" Flat Washer (pl)                   |



# UNDERCARRIAGE, AXLE & LIFT ARM ASSEMBLY





# UNDERCARRIAGE, AXLE & LIFT ARM ASSEMBLY

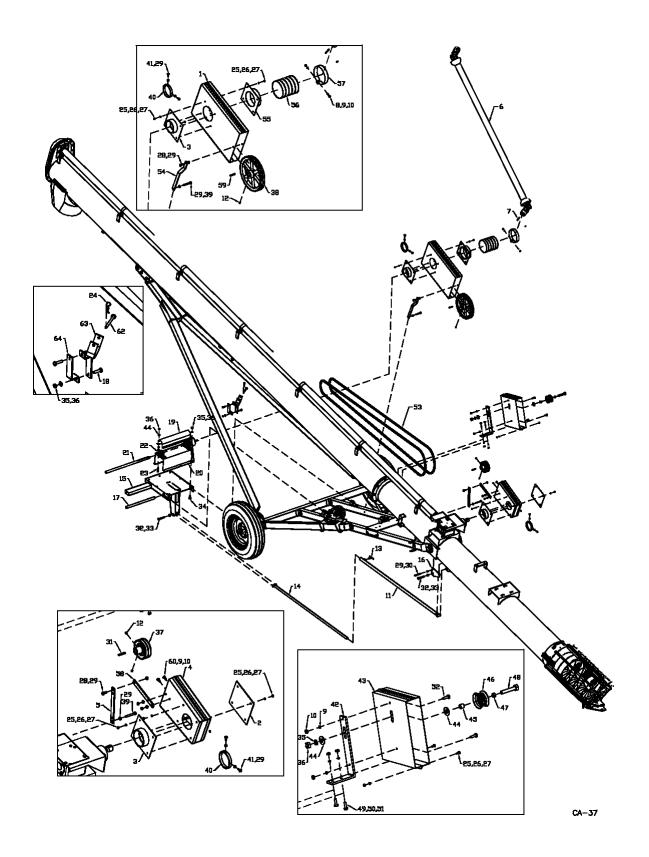
| Item #               | Part #          | Description  |
|----------------------|-----------------|--|
| 1                    | 909548          | Undercarriage Arm 2" x 3" x 108" - L                   |
| 2                    | 905582          | Undercarriage Arm 2" x 3" x 108" - R                   |
| 3                    | 905584          | Cross Tube Weldment 2" x 3" x 44" - R                  |
| 4                    | 905585          | Cross Tube Weldment 2" x 3" x 44" - L                  |
| 5                    | 903402          | Connector Plate 1 1/4" x 4 3/8"                        |
| 6                    | 903401          | Winch Bracket 8 1/4" x 19"                             |
| 7                    | 905587          | Swivel Pulley Holder Weldment                          |
| 8                    | 961846          | 4" Cast Cable Pulley                                   |
| 9                    | 9812430         | 1/8" x 1" Cotter Pin (pl)                              |
| 10                   | 961010          | 1/2" x 2 1/8" Clevis Pin                               |
| 11                   | 903392          | Clevis Holder 1 1/4" x 9 1/8"                          |
| 12                   | 905639          | Lift Arm Weldment 3" x 3" x 116"                       |
| 13                   | 961330          | Lift Arm Extension Weldment                            |
| 14                   | 905576          | Axle Weldment 3" x 3" x 72"                            |
| 15                   | 961945          | K2550 Winch  |
| 16                   | 905493          | Idler Mounting Plate Weldment                          |
| 17                   | 84048           | 1/2" SAE Flat Washer BS (pl)                           |
| 18                   | 961846          | 4" Cable Pulley 1/2" Bore                              |
| 19                   | 967153          | 2" x 10 Ga Rim Washer (pl)                             |
| 20                   | 967913          | 5/16" x 2 1/4" Cotter Pin                              |
| 21                   | 86170           | 3/8" x 1" Hex Bolt (pl)                                |
| 22                   | 967488          | 3/8" x 2 3/4" Hex Bolt (pl)                            |
| 23                   | 81593           | 3/8" Lockwasher (pl)                                   |
| 24                   | 84000           | 3/8" Flat Washer (pl)                                  |
| 25                   | 81592           | 3/8" Hex Nut (pl)                                      |
| 26                   | 968404          | 1/2" Wheel Bolt (pl)                                   |
| 27                   | 84277           | 1/2" x 1 1/2" Hex Bolt (pl)                            |
| 28                   | 81627           | 1/2" x 3" Hex Bolt (pl)                                |
| 29                   | 81628           | 1/2" x 3 1/4" Hex Bolt (pl)                            |
| 30                   | 81637           | 1/2" Lock Washer (pl)                                  |
| 31                   | 81636           | 1/2" Hex Nut (pl)                                      |
| 32<br>33             | 81672<br>812087 | 5/8" x 4 1/2" Hex Bolt (pl)                            |
| 33<br>34             | 81684           | 5/8" x 6" Hex Bolt (pl)<br>3/4" x 2 1/4" Hex Bolt (pl) |
| 3 <del>4</del><br>35 | 812365          | 3/4" Lock Nut (pl)                                     |
| 36                   | 81676           | 5/8" Hex Nut (pl)                                      |
| 36<br>37             | 81677           | 5/8" Lock Washer (pl)                                  |
| 38                   | 968430          | Oil Seal (SE14X)                                       |
| 39                   | 967208          | Inner Cone (LM67048)                                   |
| 40                   | 968412          | Inner Cup (LM67010)                                    |
| 70                   | 500+1Z          | minor oup (Livioro10)                                  |



| 41 | 968403  | 5-Bolt Hub w/ Bearing Cups |
|----|---------|----------------------------|
|    | 968431  | H516 Hub Assembly          |
| 42 | 968405  | Outer Cup (LM11910)        |
| 43 | 968406  | Outer Cone (LM11949)       |
| 44 | 9812416 | 3/4" S.A.E. Washer         |
| 45 | 81834   | 3/4" Slotted Hex Nut (br)  |
| 46 | 9812486 | 1/8" x 1 1/2" Cotter Pin   |
| 47 | 968409  | Dust Cap (DC12)            |
| 48 | F0110   | 15" x 5" x 5-Bolt Wheel    |
| 49 | 810640  | 5/16" x 2" Hex Bolt (pl)   |
| 50 | 81569   | 5/16" Lock Washer (pl)     |
| 51 | 81568   | 5/16" Hex Nut (pl)         |
| 52 | 81583   | 3/8" x 3" Hex Bolt (pl)    |
| 53 | 967900  | 1/4" Grease Fitting        |
| 54 | 904942  | Track Roller Assembly      |
| 55 | 812482  | 5/8" Lock Nut (pl)         |
| 56 | 909277  | Manual Holder              |
| 57 | 810582  | 5/16" x 3" Hex Bolt (pl)   |



# PTO BELT DRIVE ASSEMBLY





# **PTO BELT DRIVE**

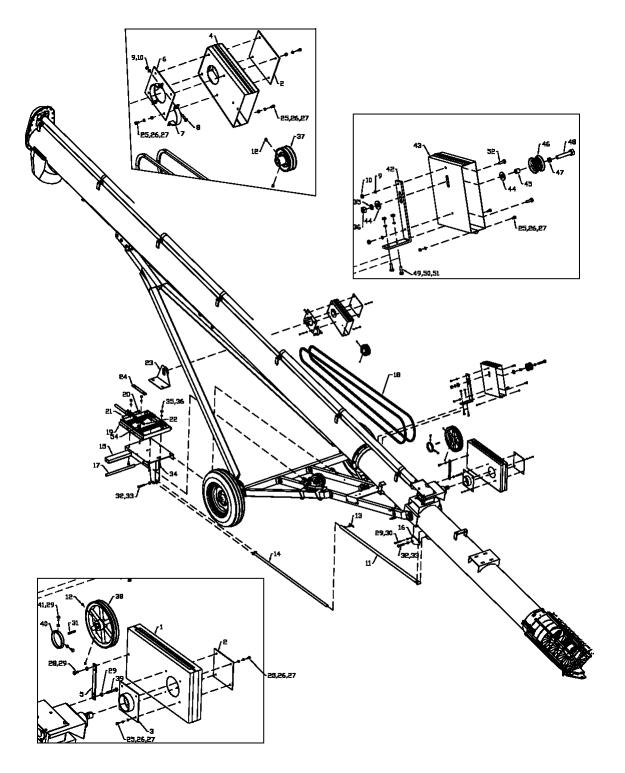
| Item #   | Part #          | Description  |
|----------|-----------------|--|
| 1        | 961370          | 12" Guard Weldment                                       |
| 2        | 961358          | Guard Mount Plate 8" x 8"                                |
| 3        | 961357          | Guard Plate Weldment                                     |
| 4        | 961356          | 6" Sheave Guard Weldment                                 |
| 5        | 906079          | Guard Pivot Arm 1" x 10"                                 |
| 6        | F0466           | Pto Shaft  |
| 7        | 968811          | 1/4" x 1/4" x 2" Key                                     |
| 8        | 81552           | 5/16" x 1 1/4" Hex Bolt (pl)                             |
| 9        | 81568           | 5/16" Hex Nut (pl)                                       |
| 10       | 81569           | 5/16" Lock Washer (pl)                                   |
| 11       | 908702          | 1 5/16" x 55" Outer Tube Weldment                        |
| 12       | 81213           | 3/8" x 1" Square Head Set Screw                          |
| 13       | 961647          | 1/2" Tightener Screw                                     |
| 14       | 961694          | Inner Tube Weldment 1" x 57"                             |
| 15       | 905593          | Hanger Weldment  |
| 16       | 961372          | Belt Tightener Brkt 4" x 6"                              |
| 17       | 905594          | Hanger Swivel Shaft 1" x 16 1/4"                         |
| 18       | 811792          | 3/8" x 1 1/2" Hex Bolt (pl)                              |
| 19       | 961367          | 20 Ga x 12 3/4" Arbor Shaft Shield                       |
| 20       | 961363          | Pto Mount Weldment                                       |
| 21       | 961365          | Pto Arbor Shaft 1 1/4" dia x 25" Lg                      |
| 22       | 973223          | 1 1/4" Pillow Bearing w/ Collar                          |
| 23       | 811791          | 1/2" x 2" Hex Bolt (pl)                                  |
| 24       | 12780           | #7 Hair Pin Clip   |
| 25       | 81523           | 1/4" x 1/2" Hex Bolt (pl)                                |
| 26       | 81545           | 1/4" Lock Washer (pl)                                    |
| 27       | 81544           | 1/4" Lock Nut (pl)                                       |
| 28       | 86170           | 3/8" x 1" Hex Bolt (pl)                                  |
| 29<br>20 | 812363          | 3/8" Lock Nut (pl)                                       |
| 30<br>31 | 81583<br>967044 | 3/8" x 3" Hex Bolt (pl)<br>3/8" x 3/8" x 3 3/8" Key (pl) |
| 32       | 81627           | 1/2" x 3" Hex Bolt (pl)                                  |
| 33       | 812364          | 1/2" Lock Nut (pl)                                       |
| 34       | 81620           | 1/2" x 1 1/4" Hex Bolt (pl)                              |
| 35       | 81637           | 1/2" Lock Washer (pl)                                    |
| 36       | 81636           | 1/2" Hex Nut (pl)  |
| 37       | 961074          | 6" Triple Sheave (1 1/2" Bore)                           |
| 38       | 961004          | 12" Triple Sheave (1 1/4" Bore)                          |
| 39       | 967488          | 3/8" x 2 3/4" Hex Bolt (pl)                              |
| 40       | 961383          | Guard Holder Ring 4 1/2" OD x 5/8" Lg                    |



| 41 | 9812377 | 5/16" x 3/4" Sq. Head Set Screw (pl)     |
|----|---------|--|
| 42 | 903588  | Idler Guard Arm 2" x 18 1/4"             |
| 43 | 961696  | Idler Guard Weldment                     |
| 44 | 81638   | 1/2" Flat Washer (pl)                    |
| 45 | 961699  | Spacer .840" O.D. x .622" I.D. x 1/2" Lg |
| 46 | 961001  | Idler Sheave Single Flange               |
| 47 | 962000  | Spacer .840" O.D. x .622" I.D. x 3/8" Lg |
| 48 | 967911  | 1/2" x 5" Hex Bolt Gr.8 (pl)             |
| 49 | 86171   | 3/8" x 1 1/4" Hex Bolt (pl)              |
| 50 | 81593   | 3/8" Lock Washer (pl)                    |
| 51 | 81592   | 3/8" Hex Nut (pl)                        |
| 52 | 812026  | 5/16" x 1" Hex Bolt (pl)                 |
| 53 | 907059  | Belt B221                                |
| 54 | 961371  | Guard Pivot Arm 1" x 13 3/4"             |
| 55 | 961368  | Guard Weldment 10 Ga x 8" x 8"           |
| 56 | 961201  | Flexible Guard 6" OD x 6 1/2" Lg         |
| 57 | 961200  | Guard Clamp 16 Ga x 1 1/4" x 21 1/2" Lg  |
| 58 | 961359  | Guard Pivot Arm 9" Lg                    |
| 59 | 961384  | 1/4" x 1/4" x 3 3/8" Key                 |
| 60 | 81549   | 5/16" x 3/4" Hex Bolt                    |
| 62 | 961539  | Pto Holder Pin 3/8" dia x 4 1/2" Lg      |
| 63 | 961380  | Pto Holder Weldment                      |
| 64 | 961382  | Pto Holder Bracket                       |
| 65 | 811792  | 3/8" x 1 1/2" Hex Bolt (pl)              |



# **ENGINE DRIVE ASSEMBLY**



CA-35



# **ENGINE BELT DRIVE**

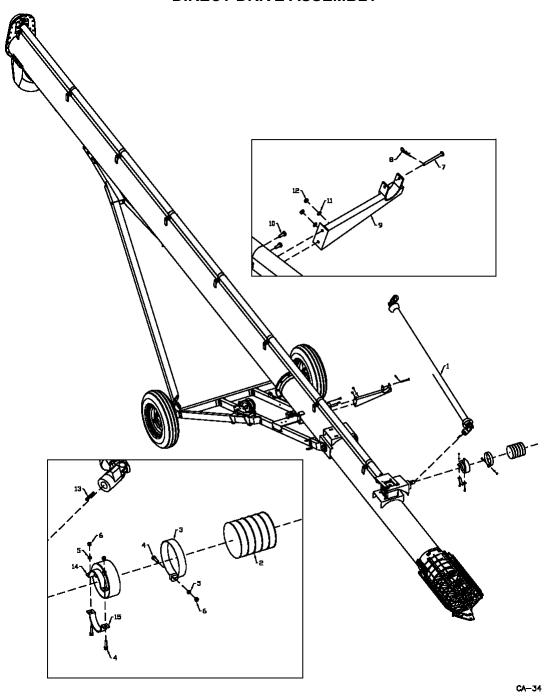
| Item # | Part # | Description                                  |
|--------|--------|--|
| 1      | 961370 | 12" Guard Weldment                           |
| 2      | 961358 | Guard Mount Plate 8" x 8"                    |
| 3      | 961357 | Guard Plate Weldment                         |
| 4      | 961356 | 6" Sheave Guard Weldment                     |
| 5      | 906079 | Guard Pivot Arm 1" x 10"                     |
| 6      | 962066 | Clamp Weldment 8" x 8" x 10 Ga               |
| 7      | 961896 | Clamp 10Ga x 1" x 8" Lg                      |
| 8      | 81552  | 5/16" x 1 1/4" Hex Bolt (pl)                 |
| 9      | 81568  | 5/16" Hex Nut (pl)                           |
| 10     | 81569  | 5/16" Lock Washer (pl)                       |
| 11     | 908702 | 1 5/16" x 55" Outer Tube Weldment            |
| 12     | 81213  | 3/8" x 1" Square Head Set Screw (pl)         |
| 13     | 961647 | 1/2" Tightener Screw                         |
| 14     | 961694 | Inner Tube Weldment 1" x 57"                 |
| 15     | 905593 | Hanger Weldment                              |
| 16     | 961372 | Belt Tightener Bracket 4" x 6"               |
| 17     | 905594 | Hanger Swivel Shaft 1" x 16 1/4"             |
| 18     | 907059 | Belt B221                                    |
| 19     | 908010 | Motor Mount Weldment                         |
| 20     | 981601 | 7/16" x 2" Hex Bolt (pl)                     |
| 21     | 86273  | 7/16" Lock Nut (pl)                          |
| 22     | 961973 | 12" Adjustment Rod                           |
| 23     | 961166 | Guard Mount Weldment 10" x 13"               |
| 24     | 961167 | Motor Mount Guard Spacer 1 1/4" x 10" x 10Ga |
| 25     | 81523  | 1/4" x 1/2" Hex Bolt (pl)                    |
| 26     | 81545  | 1/4" Lock Washer (pl)                        |
| 27     | 81544  | 1/4" Lock Nut (pl)                           |
| 28     | 86170  | 3/8" x 1" Hex Bolt (pl)                      |
| 29     | 812363 | 3/8" Lock Nut (pl)                           |
| 30     | 81583  | 3/8" x 3" Hex Bolt (pl)                      |
| 31     | 967044 | 3/8" x 3/8" x 3 3/8" Key                     |
| 32     | 81627  | 1/2" x 3" Hex Bolt (pl)                      |
| 33     | 812364 | 1/2" Lock Nut (pl)                           |
| 34     | 81620  | 1/2" x 1 1/4" Hex Bolt (pl)                  |
| 35     | 81637  | 1/2" Lock Washer (pl)                        |
| 36     | 81636  | 1/2" Hex Nut (pl)                            |
| 37     |        | 3 1/2" Triple Sheave (By Customer)           |
| 38     | 961187 | 12" Triple Sheave (1 1/2" Bore)              |
| 39     | 967488 | 3/8" x 2 3/4" Hex Bolt (pl)                  |
| 40     | 961383 | Guard Holder Ring 4 1/2" OD x 5/8" Lg        |



| 41 | 9812377 | 5/16" x 3/4" Sq. Head Set Screw (pl)     |
|----|---------|--|
| 42 | 903588  | Idler Guard Arm 2" x 18 1/4"             |
| 43 | 961696  | Idler Guard Weldment                     |
| 44 | 81638   | 1/2" Flat Washer (pl)                    |
| 45 | 961699  | Spacer .840" O.D. x .622" I.D. x 1/2" Lg |
| 46 | 961001  | Idler Sheave Single Flange               |
| 47 | 962000  | Spacer .840" O.D. x .622" I.D. x 3/8" Lg |
| 48 | 967911  | 1/2" x 5" Hex Bolt Gr.8 (pl)             |
| 49 | 86171   | 3/8" x 1 1/4" Hex Bolt (pl)              |
| 50 | 81593   | 3/8" Lock Washer (pl)                    |
| 51 | 81592   | 3/8" Hex Nut (pl)                        |
| 52 | 812026  | 5/16" x 1" Hex Bolt (pl)                 |
| 53 | 907059  | Belt B221                                |
| 54 | 811852  | 3/4" Sq. Nut (pl)                        |
|    |         |  |



# **DIRECT DRIVE ASSEMBLY**



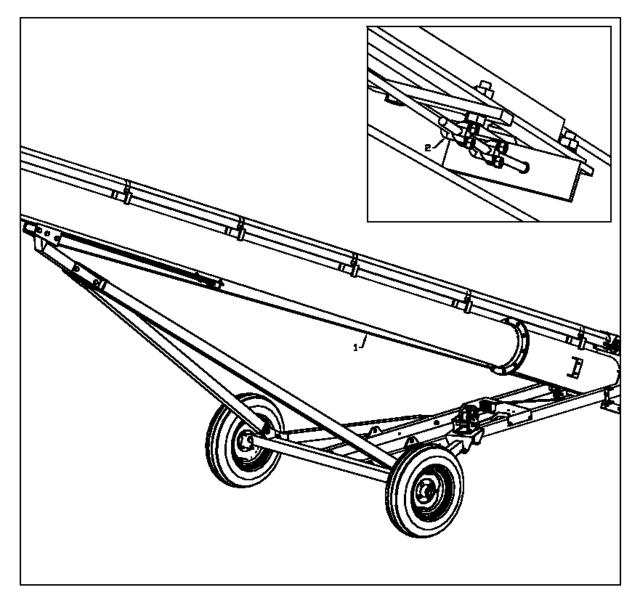


### **DIRECT DRIVE ASSEMBLY**

| ITEM | PART#  | DESCRIPTION                       |
|------|--------|-----------------------------------|
| 1    | F0466  | 13" PTO Shaft                     |
| 2    | 961201 | 6" Plastic Tube 6 1/2" Long       |
| 3    | 961200 | 6 1/4" x 1 1/4" Guard Clamp       |
| 4    | 81552  | 5/16" x 1 1/4" Hex Bolt (pl)      |
| 5    | 81569  | 5/16" Lock Washer (pl)            |
| 6    | 81568  | 5/16" Hex Nut (pl)                |
| 7    | 961539 | 3/8" x 4 1/2" Pin                 |
| 8    | 12780  | #7 Hair Pin Clip                  |
| 9    | 961790 | PTO Hanger                        |
| 10   | 86170  | 3/8" x 1" Hex Bolt (pl)           |
| 11   | 81593  | 3/8" Lock Washer (pl)             |
| 12   | 81592  | 3/8" Hex Nut (pl)                 |
| 13   | 968807 | 3/8" x 3/8" x 2" Key              |
| 14   | 961202 | PTO Guard Holder (W/4" I.D. Clamp |
| 15   | 961896 | Clamp (4" I.D.)                   |



# **CABLE ASSEMBLY**



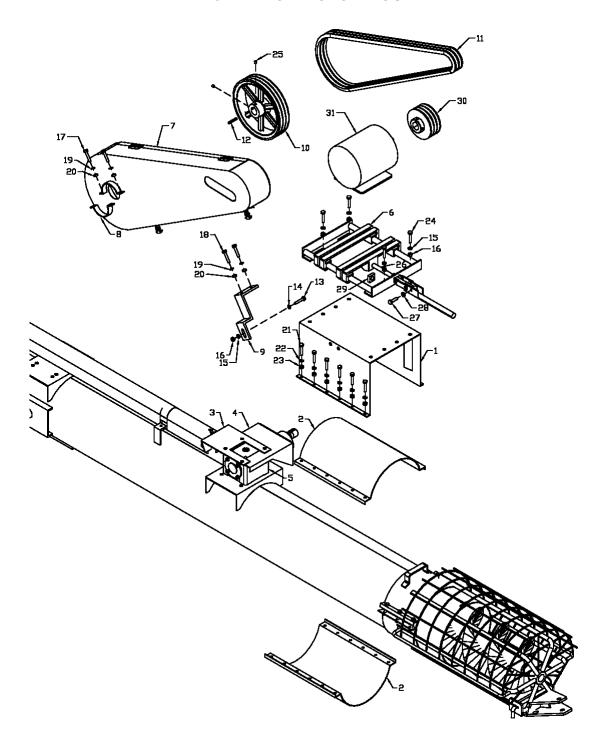
CA-36

### **CABLE ASSEMBLY**

| Item # | Part # | Description          |
|--------|--------|----------------------|
| 1      | 906925 | Cable 5/16" x 32'-6" |
| 2      | 961763 | 5/16" Cable Clamp    |



### **CLAMP-ON MOTOR MOUNT**



CA-39



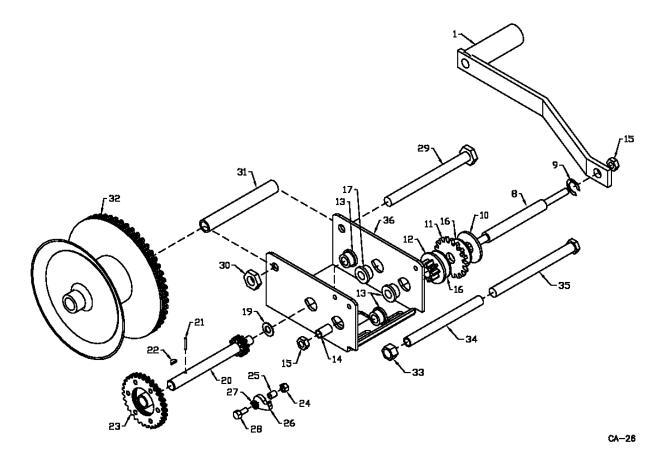
### **CLAMP-ON MOTOR MOUNT PARTS LIST**

| ITEM   | PART#                                 | DESCRIPTION                         |  |  |
|--|---------------------------------------|-------------------------------------|--|--|
| 1  | 907353                                | Motor Mount Stand                   |  |  |
| 2  | 907351                                | Motor Mount Clamp                   |  |  |
| 3  | 961346                                | Extension Shield Holder Weldment    |  |  |
| 4  | 906093                                | Gearbox Plate Weldment              |  |  |
| 5  | 907207                                | Gearbox Assembly                    |  |  |
|  | 907413                                | Optional Reverse Gearbox Assembly   |  |  |
| 6  | 907360                                | Clamp-On Motor Mount Weldment       |  |  |
|  | 907361                                | Clamp-On Motor Mount Assembly       |  |  |
| 7  | F0033                                 | Belt Guard Assembly                 |  |  |
| 8  | 961896                                | 4" Clamp                            |  |  |
| 9  | 907362                                | Guard Mounting Bracket              |  |  |
| 10   | 961187                                | 12" Triple Sheave 1 1/2" bore       |  |  |
| 11   | 973417                                | B-83 V-Belt                         |  |  |
| 12   | 967044                                | 3/8" Sq. x 3 3/8" Key - 10"         |  |  |
| 13   | 84277                                 | 1/2" x 1 1/2" Hex Bolt (pl)         |  |  |
| 14   | 84048                                 | 1/2" SAE Flat Washer (pl)           |  |  |
| 15   | 81637                                 | 1/2" Lock Washer (pl)               |  |  |
| 16   | 81636                                 | 1/2" Hex Nut (pl)                   |  |  |
| 17   | 81552                                 | 5/16" x 1 1/4" Hex Bolt (pl)        |  |  |
| 18   | 812026                                | 5/16" x 1" Hex Bolt (pl)            |  |  |
| 19   | 81569                                 | 5/16" Lock Washer (pl)              |  |  |
| 20   | 81568                                 | 5/16" Nut (pl)                      |  |  |
| 21   | 9812483                               | 3/8" x 2" Hex Bolt (pl)             |  |  |
| 22   | 81593                                 | 3/8" Lock Washer (pl)               |  |  |
| 23   | 81592                                 | 3/8" Hex Nut (pl)                   |  |  |
| 24   | 81620                                 | 1/2" x 1 1/4" Hex Bolt (pl)         |  |  |
| 25   | 81213                                 | 3/8" x 1" Square Head Set Screw     |  |  |
| 26   | 961973                                | 12" Adjustment Rod                  |  |  |
| 27   | 981601                                | 7/16" x 2" Hex Bolt                 |  |  |
| 28   | 86273                                 | 7/16" Lock Nut                      |  |  |
| 29   | 811852                                | 3/4" Square Nut (pl)                |  |  |
| *30  |                                       | Motor Pulley (Supplied by customer) |  |  |
| *31  | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |                                     |  |  |
| *SEE INSTRUCTIONS FOR CORRECT SHEAVE AND MOTOR SIZES |                                       |                                     |  |  |



## No. K2550 WINCH

# 961945



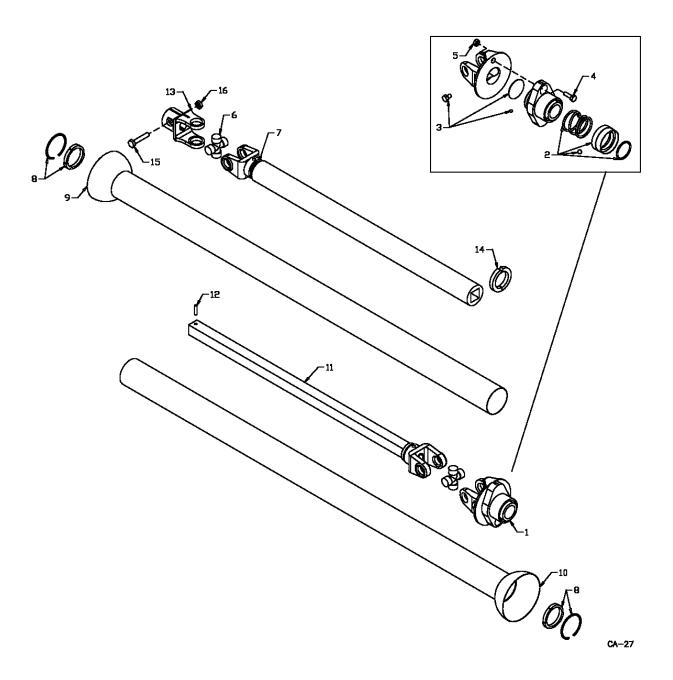


### **NO. K2550 WINCH PARTS LIST - 961945**

| ITEM             | DESCRIPTION        | PART#    |
|------------------|--------------------|----------|
| 1                | Handle             | 2461S01  |
| CABLE KEEPER KIT |                    | 5621S01  |
| 4                | Bolt               |          |
| 5                | Cable Clamp        |          |
| 6                | Lockwasher         |          |
| 7                | Nut                |          |
| INPUT SHAFT KIT  |                    | 1565S01  |
| 8                | Input Shaft        | 100001   |
| 9                | Retaining Ring     |          |
| 10               | Brake Disc         |          |
| 11               | Ratchet Gear       |          |
| 12               | Pinion Gear        |          |
| 13               | Bushing            |          |
| 14               | Spacer             |          |
| 15               | Nut                |          |
| 16               | Friction Disc      | 1578\$00 |
| INTERMEDIATE     | SHAFT KIT          | 1569S01  |
| 17               | Bushing            |          |
| 19               | Washer             |          |
| 20               | Intermediate Shaft |          |
| 21               | Roll Pin           |          |
| 22               | Woodruff Key       |          |
| 23               | Gear               |          |
| RATCHET KIT      |                    | 6730S00  |
| 24               | Nut                |          |
| 25               | Spacer             |          |
| 26               | Ratchet Pawl       |          |
| 27               | Spring             |          |
| 28               | Shoulder Bolt      |          |
| 29               | Drum Bolt          | *        |
| 30               | Lock Nut           | *        |
| 30<br>31         | Drum Spacer        | *        |
| 32               | Drum Assembly      | *        |
| 33               | Lock Nut           | *        |
| 34               | Frame Spacer       | *        |
| 35               | Bolt               | *        |
| 36               | Frame              | *        |
|                  | <del></del>        |          |
| BUSHING KIT      |                    | 906537   |
| 13               | Bushing            |          |
| 17               | Bushing            |          |



# **AUGER PTO**





### **DIRECT DRIVE PTO ASSEMBLY**

| Item # | Part # | Description                                   |
|--------|--------|---|
|        | F0466  | Shaft Complete                                |
|        | 908960 | Tractor Half of PTO (shear)                   |
|        | 908958 | Implement Half of PTO                         |
| 1      | 936324 | Shear Assembly                                |
| 2      | 936168 | Spring-Lok Repair Kit                         |
|        |        | (Collar, Spring, Ret. Ring, 2 3/8" Balls)     |
| 3      | 936248 | Shear Assembly Repair Kit                     |
|        |        | (3/8" x 1/2" Bolt, (Grade 5) - one required   |
| 4      | 86170  | 3/8" x 1" Shear Bolt (Grade 5) - one required |
| 5      | 812363 | 3/8" Lock Nut                                 |
| 6      | 936093 | Repair Kit                                    |
| 7      | 936325 | Yoke & Tube                                   |
| 8      | 936320 | Nylon Bearing Repair Kit                      |
| 9      | 908956 | Inner Guard                                   |
| 10     | 907397 | Outer Guard                                   |
| 11     | 936329 | Yoke & Shaft                                  |
| 12     | 936315 | 1/4" x 1" Roll Pin                            |
| 13     | 936376 | Clamp Yoke                                    |
| 14     | 936316 | Shield Bearing                                |
| 15     | 81628  | 1/2" x 3 1/4" Hex Bolt                        |
| 16     | 812364 | 1/2" Lock Nut                                 |

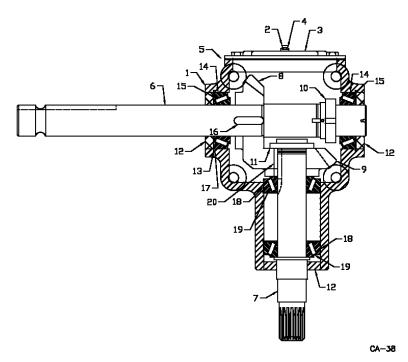


# PTO BELT DRIVE PTO ASSEMBLY

| Item # | Part # | Description                               |
|--------|--------|---|
|        | F0467  | Shaft Complete                            |
|        | 908960 | Tractor Half of PTO (Shear)               |
|        | 908959 | Implement Half of PTO                     |
| 1      | 936324 | Shear Assembly                            |
| 2      | 936168 | Spring-Lok Repair Kit                     |
|        |        | (Collar, Spring, Ret. Ring, 2 3/8" Balls) |
| 3      | 936248 | Shear Assembly Repair Kit                 |
|        |        | (3/8" x 1/2" Bolt, Blank, 24 1/4" Balls)  |
| 4      | 86170  | Shear Bolt - 3/8" x 1" (Gr.5)             |
| 5      | 812363 | 3/8" Lock Nut                             |
| 6      | 936093 | Repair Kit                                |
| 7      | 936325 | Yoke & Tube                               |
| 8      | 936320 | Nylon Bearing Repair Kit                  |
| 10     | 908956 | Inner Guard                               |
| 11     | 908397 | Outer Guard                               |
| 12     | 936329 | Yoke & Shaft                              |
| 13     | 936315 | Roll Pin (1/4" x 1")                      |
| 14     | 936262 | Clamp Yoke                                |
| 15     | 936316 | Shield Bearing                            |
| 16     | 81628  | 1/2" x 3 1/4" Hex Bolt                    |
| 17     | 812364 | 1/2" Lock Nut                             |
|        |        |   |



### **AUGER GEARBOX**



907207 - 13" CONVENTIONAL AUGER GEARBOX PARTS LIST

| Item #   | Part #   | Description   |  |
|--|--|---|--|
| 1 2 3 4 5 6 7 8 9  | 907207<br>BU50310<br>BU500089-3<br>BU50457<br>BU500167-1<br>BU50458<br>24970<br>BU50502<br>BU50329<br>BU50331                  | Gearbox Complete Gearbox Casting Only Pipe Plug Gearbox Cover Relief Valve Gearbox Gasket Cross Shaft Pinion Shaft Bevel Gear 1 1/2" B Bevel Gear 1 3/8" B                                      |  |
| 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20 | BU50428<br>BU50424<br>BU50442-1<br>BU50415<br>BU575902<br>BU575901<br>BU50429<br>BU50210X<br>BU575907<br>BU575906<br>BU50417-1 | Adjusting Nut Adjusting Nut Oil Seal (3 Used) Retainer Ring (4 Used) Bearing Cup (2 Used) Bearing Cone (2 Used) Key Shim Set Bearing Cup (2 Used) Bearing Cup (2 Used) Bearing Cup (2 Used) Key |  |



#### SHIPPING KIT AND BUNDLE NUMBERS

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

| QUANT  | ITY BUNDLE       | DESCRIPTION                        |
|--------|------------------|------------------------------------|
| C1336E | 13" x 36' CONVEN | TIONAL AUGER ENGINE DRIVE          |
| 1      | F0098            | Lift Arms                          |
| 1<br>1 | F0673<br>F0118   | Extension Auger<br>Basic Auger     |
| 1      | F0602            | •                                  |
| 1      | F0337            | Undercarriage & Axle               |
| C1336D | 13" x 36' CONVEN | TIONAL AUGER DIRECT DRIVE          |
| 1      | F0098            | Lift Arms                          |
| 1      | F0672            | Extension Auger                    |
| 1      | F0117            | Basic Auger                        |
| 1      | F0674            | Crate of Parts                     |
| 1      | F0337            | Undercarriage & Axle               |
| C1336P | 13" x 36' CONVEN | TIONAL AUGER BELT DIRECT DRIVE PTO |
| 1      | F0098            | Lift Arms                          |
| 1      | F0673            | Extension Auger                    |
| 1      | F0118            | Basic Auger                        |
| 1      | F0337            | Undercarriage & Axle               |
| 1      | F0677            | Crate of Parts                     |

#### **OPTIONAL BUNDLE NUMBERS**

The following is a list of options available for the Kits listed above.

| F3005 | 13" Poly Spout              |
|-------|-----------------------------|
| F211  | Big Daddy Flex Hopper       |
| F001  | Safety Light Kit            |
| F0013 | Reflective Safety Decal Kit |
| Y0029 | Light Kit                   |

# **NOTES**

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Skovde, Sweden 011-46-500-452651

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