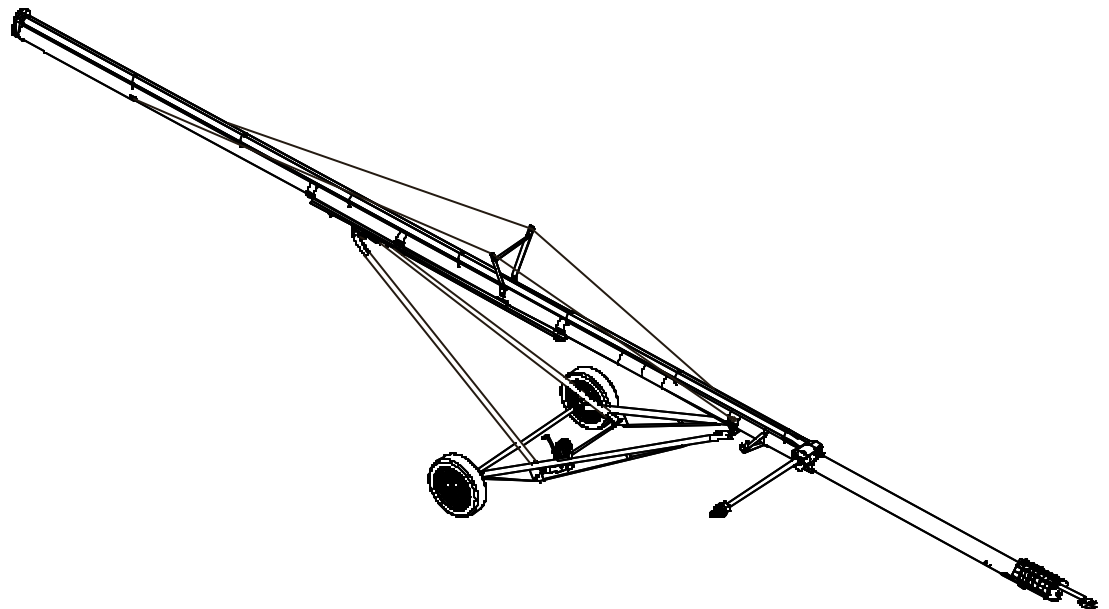


PNEG-1052
06-16-03

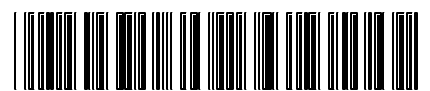
8" Top-End Drive Transport Auger

8" Top-End Drive Transport Auger

Assembly & Operation Manual



PNEG-1052
06-16-03

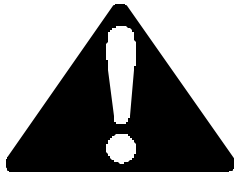


PNEG-1052

SAFETY GUIDELINES

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below.

Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



NOTE indicates information about the equipment that you should pay special attention to.

SAFETY GUIDELINES

1. General Safety Guidelines

- A. **DO NOT** make any alterations to the equipment. Such alterations may produce a very dangerous situation, where **SERIOUS INJURY** or **DEATH** may occur.
- B. This equipment shall be installed in accordance with any regulations or installation codes that are required by law. Authorities having jurisdiction should be consulted before installations are made.
- C. Untrained operators subject themselves and others to **SERIOUS INJURY** or **DEATH**. **NEVER** allow untrained personnel to operate this equipment.
- D. Keep children and other unqualified personnel out of the working area at **ALL** times. Refer to the **Start-up** section of this manual for diagrams of the working area.
- E. **NEVER** start equipment until **ALL** persons are clear of the work area.
- F. Be sure **ALL** operators are adequately rested and prepared to perform **ALL** functions of operating this equipment.
- G. Keep hair, loose clothing, and shoestrings away from rotating and moving parts. **NEVER** wear loose fitting clothing when working around augers.
- H. **NEVER** allow any person intoxicated or under the influence of alcohol or drugs to operate the equipment.
- I. **NEVER** allow anyone inside a bin, truck, or wagon which is being unloaded by an auger or conveyor. Flowing grain can trap and suffocate in seconds.
- J. Make sure someone is nearby who is aware of the proper shutdown sequence in the event of an accident or emergency.
- K. **NEVER** work alone.
- L. **ALWAYS** think before acting. **NEVER** act impulsively around the equipment.
- M. Make sure **ALL** equipment is locked in position before operating.
- N. Keep hands and feet away from the auger intake and other moving parts.
- O. **NEVER** attempt to assist machinery operation or to remove trash from equipment while in operation.
- P. **NEVER** drive, stand, or walk under the equipment.
- Q. Use caution not to hit the auger when positioning the load.
- R. Use ample overhead lighting after sunset to light the work area.
- S. **ALWAYS** lockout **ALL** power to the equipment when finished unloading.
- T. Keep area around intake free of obstacles such as electrical cords, blocks, etc. that might trip workers.

2. Personal Protective Equipment

- A. The proper personal protective equipment should be worn at **ALL** times by anyone in the work area.



2-B

- B. **ALWAYS** wear safety glasses when in the work area.



2-C

- C. The operator should **NEVER** wear jewelry.



2-D, E

- D. Loose clothing should not be worn. Any clothing that becomes loosened should be tucked in tightly.

- E. Loose or dangling shoe strings should be tucked in.



2-F

- F. Long hair should be tied up and/or back.

3. Emergency Shutdown Sequence

- A. In an emergency, shutdown the power source.

4. Pinch Points



A Pinch Point is any place on the equipment which can injure the operator.

- A. Components of this equipment have sharp edges which can scrape and/or cut an operator.
- B. A moving auger can sever an operator's limbs or even kill him/her.

5. Shields and Guards

- A. **ALWAYS** keep **ALL** shields and guards in place during operation.

We will replace any missing shields or guards free of charge!

See (page vi) for more information on our Safety First program.

Safety **1st**

6. Operator Qualifications

- A. The User/Operator must be competent and experienced to operate auger equipment. Anyone who works with or around augers must have good common sense in order to be qualified. These persons must also know and meet all other qualifications, such as:
 - 1. Any person who has not read and/or does not understand all operation and safety procedures is not qualified to operate any auger systems.
 - 2. Certain regulations apply to personnel operating power machinery. Personnel under the age of 18 years may not operate power machinery, including augers. It is your responsibility, as owner and/or supervisor, to know what these regulations are in your area or situation.
 - 3. Unqualified or incompetent persons are to remain out of the work area.
 - 4. O.S.H.A. (Occupational Safety & Health Administration) regulations state:
"At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved." (Federal Occupational Safety & Health Standards for Agriculture. Subpart D, Section 19287.57 (a) (6).

6. Operator Qualifications *(cont.)*

- B. As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operating and safety procedures for this auger. We included this sign-off sheet for your convenience and personal record keeping. All unqualified persons are to stay out of the work area at all times. It is strongly recommended that another qualified person who knows the shutdown procedure is in the area in the event of an emergency. A person who has not read this manual and understands all operating and safety instructions is not qualified to operate the machine.

DATE	EMPLOYER'S SIGNATURE	EMPLOYEE'S SIGNATURE
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	2	
	3	
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	35	

Safety 1st

Our equipment is built to provide many years of dependable service to our customers through durable craftsmanship.

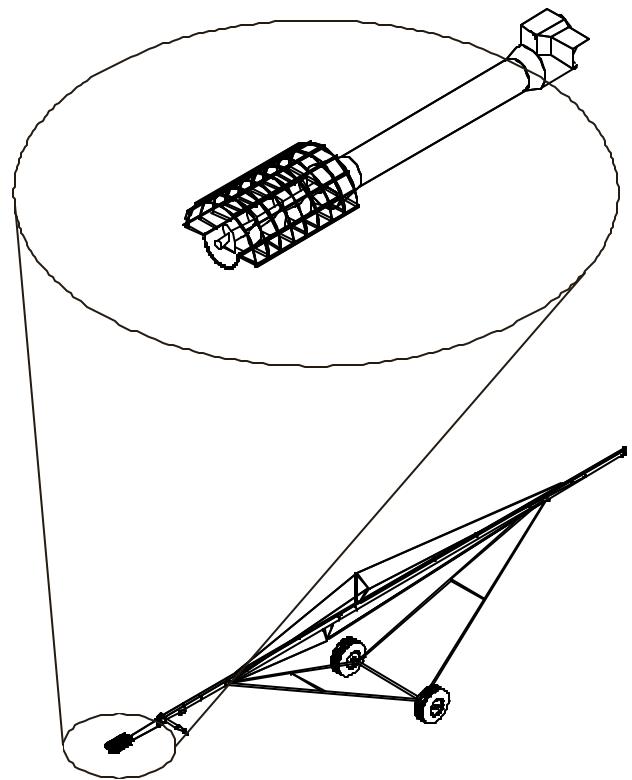
One of the most important aspects of our engineering is **SAFETY 1st** design throughout all product lines. At our company - safety is NO ACCIDENT!

That is why we have implemented a **SAFETY 1st** program. Should you ever need guards, shields, safety decals or owner/operator manuals, simply contact us or your local dealer, and we will supply you with them **FREE OF CHARGE!**

While it is our main goal for our company to be the world leader in auger manufacturing, it is always our first priority to keep our customers safe.

If you need any of the above listed safety items or have any safety questions, please contact the manufacturer or your local dealer.

We replace missing guards and shields
FREE OF CHARGE!



Personnel operating or working around this equipment should read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment. Any misuse of the equipment may void the warranty.

Safety Guidelines i

SAFETY 1st vi

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NOTES

Safety Decals

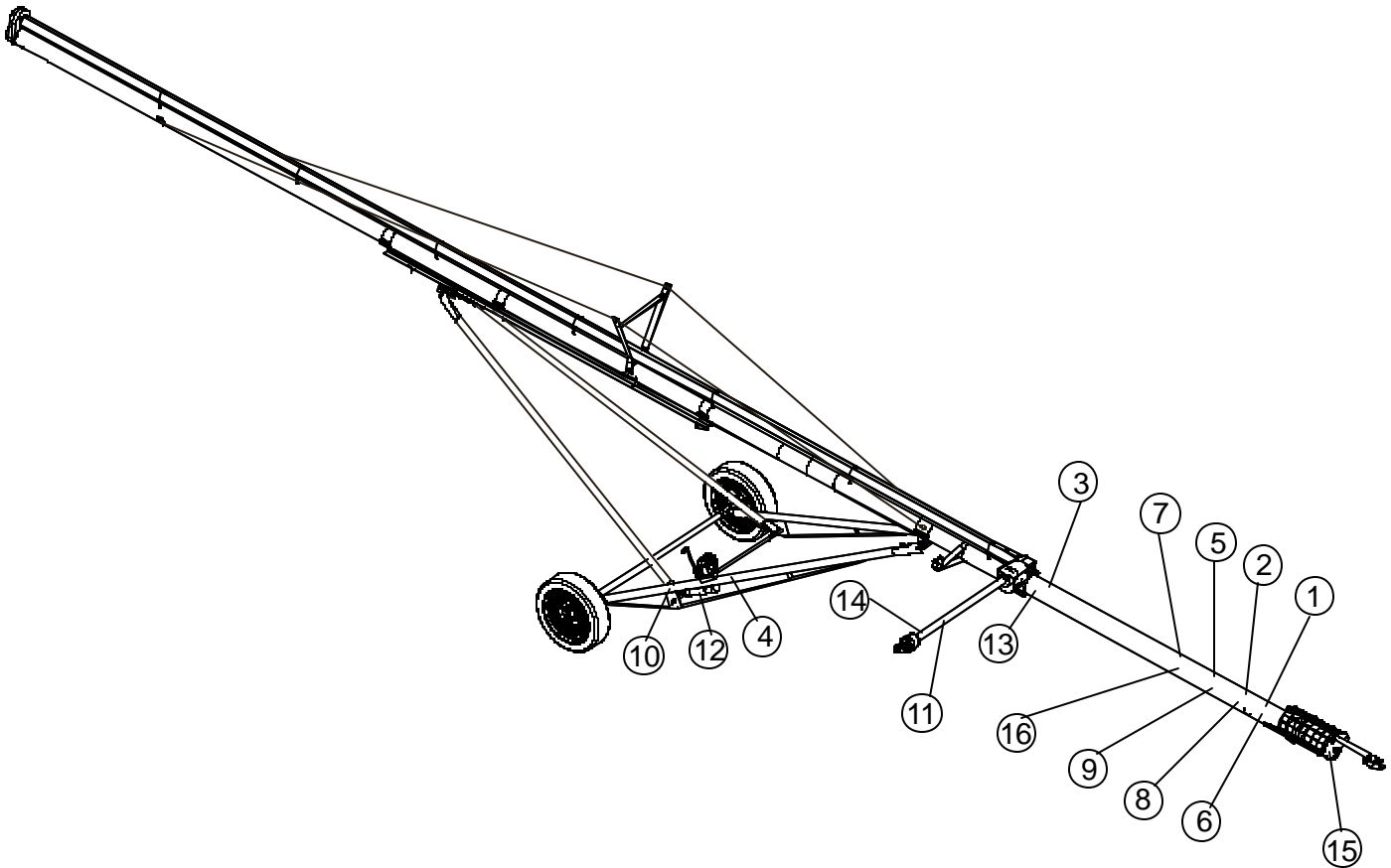
The Safety Decals listed below are included with the auger. Page 2 shows the locations of the decals on the auger.

Inspect all decals and replace any that are illegible, worn, or missing. Contact your dealer or the factory to order replacement decals.

See pages 2 thru 4 for illustrations of decals corresponding to reference numbers.

Safety Decals				
Ref. #	Part #	Qty.	Description	Size
1	DC-1446	1	Notice—General Statements 1-12	8-1/2" x 4-1/8"
2	DC-1412	1	Danger—Electrocution	8" x 3-1/2"
3	DC-1419	1	Warning—Hydraulic Fluid Under Pressure	8" x 3-3/8"
4	DC-1421	1	Warning—Winch Handle	7" x 3"
5	DC-1409	1	Danger—Falling Auger	4-1/2" x 6-3/4"
6	DC-1416	5	Danger—Rotating Auger	4-1/4" x 5-1/2"
7	DC-1410	1	Danger—Never Disassemble the Auger	7-3/8" x 3"
8	DC-1449	1	Warning--Hitch	7" x 3"
9	DC-1445	1	Notice—Transporting Auger	6" x 3-1/2"
10	DC-1447	2	Warning—Pinch Points	7" x 3"
11	DC-1375	1	Danger—Rotating Driveline	4-3/8" x 5-3/4"
12	DC-1425	1	Manual Inside	7" x 1-1/4"
13	DC-1414	1	Notice—PTO Driveline Guidelines	7" x 5-1/4"
14	DC-1413	1	Grease Here	2" x 1"
15	DC-1411	1	Danger—Shear Point	4-1/2" x 2"
16	DC-1418	1	Safety 1st	5" x 3-1/2"

Safety Decals



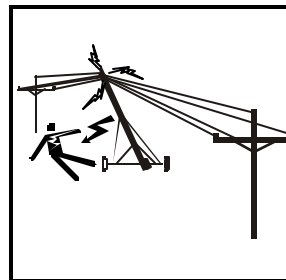
①

NOTICE

1. READ AND UNDERSTAND THE INSTALLATION & OPERATION MANUAL AND ALL SAFETY INSTRUCTIONS BEFORE OPERATING EQUIPMENT.
2. DO NOT OPERATE WHILE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.
3. DO NOT OPERATE UNLESS ALL SAFETY EQUIPMENT, SWITCHES, GUARDS AND SHIELDS ARE SECURELY IN PLACE AND OPERATIONAL.
4. BE SURE EVERYONE IS CLEAR OF THE EQUIPMENT BEFORE ATTEMPTING TO OPERATE OR MOVING THE MACHINE.
5. ALLOW ONLY TRAINED PERSONNEL IN THE OPERATING AREA.
6. KEEP HANDS, FEET, HAIR AND CLOTHING AWAY FROM MOVING PARTS.
7. DISCONNECT AND LOCKOUT POWER BEFORE ADJUSTING OR SERVICING.
8. ELECTRICAL WIRING OR SERVICE WORK MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN. IT MUST MEET ALL STATE AND LOCAL ELECTRICAL CODES.
9. EMPTY AUGER AND LOWER TO TRANSPORT POSITION BEFORE TRANSPORTING.
10. MAKE CERTAIN ALL ELECTRIC MOTORS ARE GROUNDED.
11. NEVER MOVE MACHINE MANUALLY. ALWAYS USE A TOWING VEHICLE.
12. KEEP CHILDREN AWAY FROM WORK AREA AT ALL TIMES.

DC-1446

②



⚠ DANGER

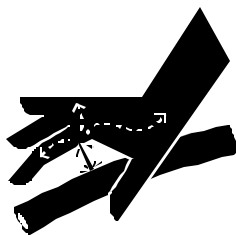
ELECTROCUTION!! STAY CLEAR OF POWER LINES!

- THIS EQUIPMENT IS NOT INSULATED FROM ELECTRIC SHOCK.
- KEEP EQUIPMENT AWAY FROM POWER LINES.
- ELECTROCUTION CAN OCCUR WITH OR WITHOUT DIRECT CONTACT.

FAILURE TO HEED WILL RESULT
IN SERIOUS INJURY OR DEATH!

DC-1412

③



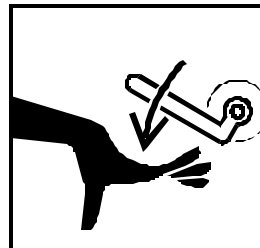
⚠ WARNING

HYDRAULIC FLUID LEAKING UNDER PRESSURE CAN PENETRATE SKIN. IF THIS HAPPENS, SEEK MEDICAL ATTENTION IMMEDIATELY. ALWAYS RELEASE PRESSURE FROM HYDRAULIC LINES BEFORE DISCONNECTING. ALWAYS INSPECT THE HYDRAULIC LINES BEFORE AND AFTER USING THIS EQUIPMENT AND PERFORM ANY NECESSARY MAINTENANCE ON THE HYDRAULIC SYSTEM BEFORE OPERATING.

FAILURE TO HEED
WILL RESULT IN SERIOUS INJURY OR DEATH!

DC-1419

④



⚠ WARNING

WINCH HANDLE CAN MOVE WITHOUT WARNING CAUSING SEVERE INJURY.

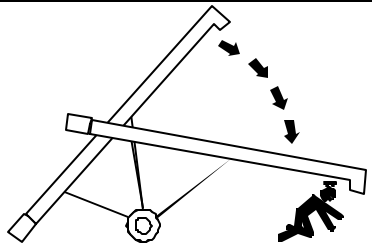
- NEVER RELEASE THE WINCH HANDLE UNTIL THE LOCK IS SECURELY IN PLACE.
- NEVER RELEASE WINCH LOCK BEFORE MANUALLY SECURING WINCH HANDLE WHEN LOWERING HOPPER.
- NEVER LEAVE HOPPER ON THE GROUND WHEN RAISING OR LOWERING THE AUGER. DOING SO COULD DAMAGE THE HOPPER WHEELS.

DC-1421

Safety Decals

⑤

! DANGER



FALLING AUGER CAN CRUSH OR KILL!

ALWAYS SECURE INTAKE END SO THAT THE AUGER CANNOT FALL.

EMPTY THE AUGER BEFORE ATTEMPTING TO TRANSPORT IT.

NEVER PUSH THE UNDERCARRIAGE. ALWAYS USE PROPER TRANSPORTING METHODS.

USE CAUTION WHEN LIFTING THE INTAKE END. NEVER LIFT HIGHER THAN THE VEHICLE TOW BAR. DO NOT RELEASE UNTIL AUGER IS SECURELY ATTACHED TO THE TOW BAR OR ON THE GROUND.

LOWER THE AUGER FOR TRANSPORTING IMMEDIATELY AFTER MOVING IT AWAY FROM THE GRAIN STORAGE BIN.

FAILURE TO HEED WILL RESULT IN SERIOUS INJURY OR DEATH!

DC-1409

⑥

! DANGER



ROTATING AUGER!

- DISCONNECT AND LOCKOUT POWER BEFORE SERVICING, ADJUSTING OR CLEANING.
- KEEP HANDS, FEET, HAIR AND LOOSE CLOTHING AWAY FROM ROTATING AUGER AND MOVING PARTS AT ALL TIMES.
- NEVER REMOVE OR MODIFY GUARDS OR SHIELDS.

FAILURE TO HEED WILL RESULT IN SERIOUS INJURY OR DEATH!

DC-1416

⑦

! DANGER



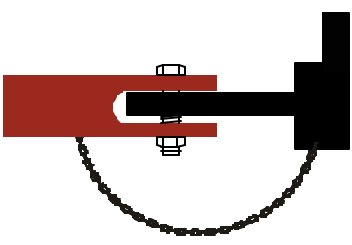
NEVER DISASSEMBLE THE AUGER WITHOUT SUPPORTING IT WITH AN OVERHEAD HOIST. LOOSE COMPONENTS MAY CAUSE THE AUGER TO COLLAPSE, IF NOT SUPPORTED.

FAILURE TO HEED WILL RESULT IN SERIOUS INJURY OR DEATH.

DC-1410

⑧

! WARNING



HITCH MAY COME LOOSE IF NOT SECURELY FASTENED. HITCH BOLT SHOULD NOT BE LESS THAN 3/4 INCH IN DIAMETER. DAMAGE TO PROPERTY MAY OCCUR.

DC-1449

Safety Decals

⑨

NOTICE

USE CAUTION WHEN TRANSPORTING AUGER!
WIDTH EXCEEDS 8 6".

TAKE PROPER PRECAUTIONS WHEN
TRAVELING ON PUBLIC ROADS.

USE CAUTION WHEN NEAR OTHER VEHICLES,
PEDESTRIANS, ANIMALS AND OBJECTS
ON THE ROAD.

DC-1445

⑩

⚠ WARNING

KEEP HANDS, FEET, HAIR AND LOOSE
CLOTHING AWAY FROM MOVING PARTS
AND PINCH POINTS WHEN RAISING
AND LOWERING THE AUGER.

FAILURE TO HEED WILL RESULT
IN SERIOUS INJURY OR DEATH!

DC-1447

⑪

⚠ DANGER



**ROTATING DRIVELINE CAN CAUSE
SEVERE INJURY OR DEATH!**

- KEEP AWAY FROM ROTATING DRIVELINE.
- KEEP LOOSE CLOTHING AWAY FROM
ROTATING DRIVELINE.
- KEEP ALL GUARDS IN PLACE.
- BE SURE DRIVELINE IS SECURELY CONNECTED
TO THE AUGER AND TRACTOR.
- THE DRIVELINE GUARDS MUST BE FREE TO
TURN ON THE DRIVELINE.

FAILURE TO HEED WILL RESULT IN
SERIOUS INJURY OR DEATH!

DC-1375

⑫

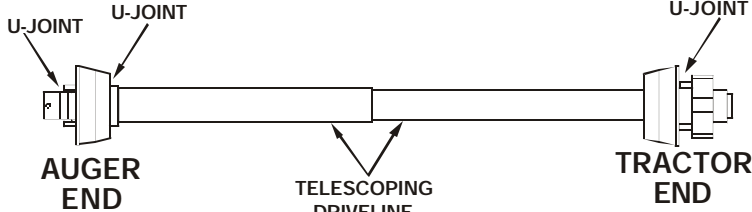
MANUAL INSIDE MANUAL INSIDE MANUAL INSIDE MANUAL INSIDE

DC-1425

⑬

NOTICE

- PLACE AUGER IN OPERATING POSITION BEFORE ATTACHING PTO
DRIVELINE TO AGRICULTURAL TRACTOR ONLY.
- NEVER MOVE THE AUGER FROM OPERATING POSITION BEFORE
DETACHING THE PTO DRIVELINE FROM THE TRACTOR PTO.
- MOVING the AUGER WITH THE PTO DRIVELINE ATTACHED TO THE
TRACTOR WILL CAUSE DAMAGE TO THE PTO DRIVELINE.
- THIS IS CONSIDERED A MISUSE OF THE EQUIPMENT. ANY MISUSE
OF THE EQUIPMENT MAY VOID THE WARRANTY.



U-JOINT U-JOINT U-JOINT

AUGER END TELESCOPING DRIVELINE TRACTOR END

DC-1414

⑭

**GREASE
HERE**



DC-1413

⑮

⚠ DANGER

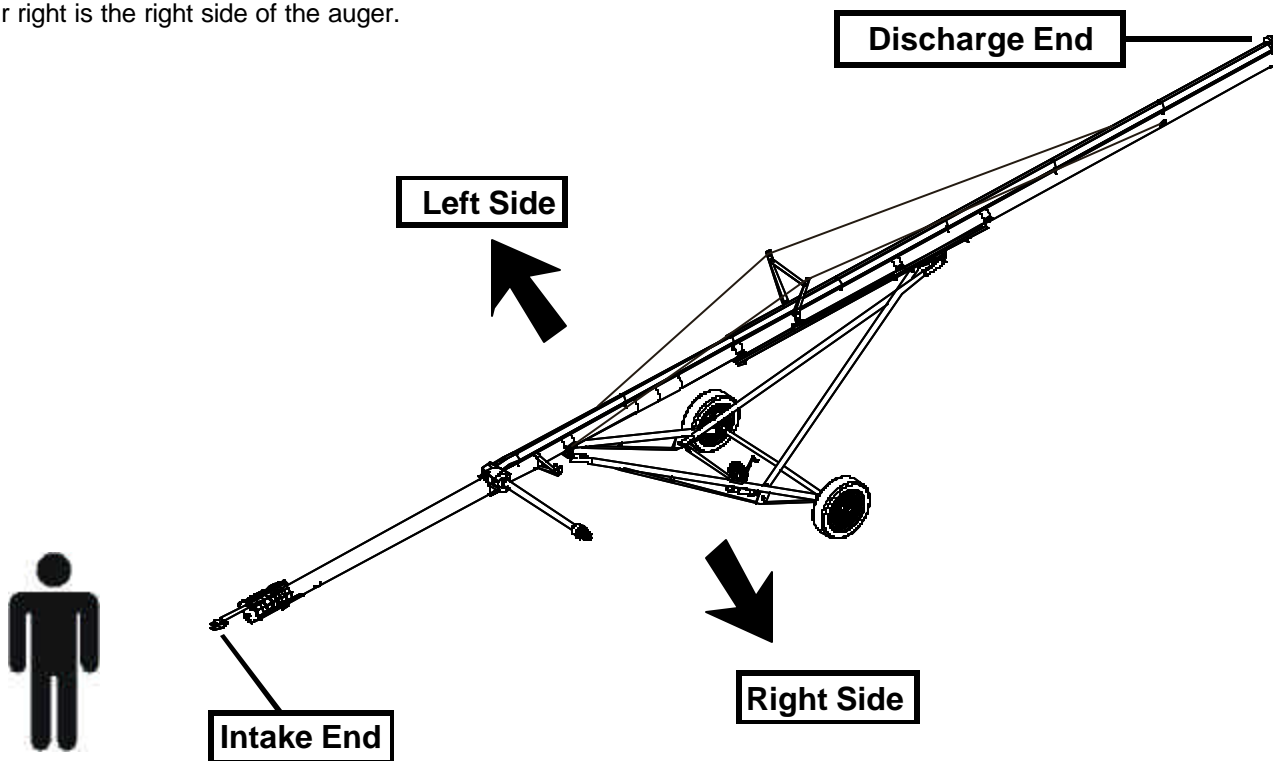
SHEAR POINT

KEEP FINGERS, HANDS, HAIR AND
LOOSE CLOTHING AWAY FROM
MOVING PARTS.

FAILURE TO HEED
WILL RESULT IN
SERIOUS INJURY OR DEATH!

DC-1411

For the purpose of this manual, if standing at the intake end of the auger, your left is the left side of the auger; your right is the right side of the auger.



1. General Information.

- A. The company reserves the right to improve its product whenever possible and practical to do so. We reserve the right to change, improve and modify products at any time without obligation to make changes, improvements and modifications on equipment sold previously.
- B. The Top-End Drive Transport Augers have been designed and manufactured to give years of dependable service. The care and maintenance of this machine will affect the satisfaction and service obtained. By observing the instructions and suggestions we have recommended, the owner should receive competent service for many years. If additional information or assistance should be required, please contact the manufacturer.
- C. When receiving merchandise, it is important to check both the quantity of parts and their descriptions with the packing list enclosed within each package. All claims for freight damage or shortage must be made by the consignee within ten (10) days from the date of the occurrence of freight damage. The consignee should accept the shipment after noting the damage or loss.

2. Capacity.

- A. The capacities of augers or screw conveyers varies greatly under varying conditions. The following factors play a role in the performance of the auger:
 - Speed
 - Angle of operation
 - Moisture content
 - Amounts of foreign matter
 - Methods of feeding
 - Different materials
- B. An auger operating at a 45° incline might experience 20% less capacity than an auger operating horizontally. Twenty-five percent (25%) moisture could cut capacity by as much as 40% under some conditions.

3. Tractor Requirements

A. The Top-End Drive Transport Auger was designed for use with a tractor meeting the following requirements:

- 540 RPM Power Take Off (PTO)
- Adjustable Drawbar
- One (1) hydraulic control circuit for lifting the main auger. Minimum pressure of 1800 to 2000 PSI.

4. PTO Driveline.

A. The PTO driveline furnished with the auger is equipped with a "Spring-Lok" coupler at the tractor end. The coupler is spring loaded and will fit the standard 1-3/8" x 6" spline PTO output shaft from the tractor.

B. The PTO driveline is equipped with a shear bolt at the tractor connection. The shear bolt protects the auger from damage if the auger becomes plugged or subjected to high loads.

C. Do not exceed the maximum recommended operating length of the PTO driveline.

5. Main Auger Drive Information.

▲ DANGER

Stop the engine and lockout the power source whenever the equipment must be serviced or adjusted.

Do not use a PTO driveline without a rotating shield in good working order that can be turned freely on the shaft.

Be sure to securely attach the PTO driveline to the auger and the tractor.

Do not exceed the recommended distance from the end of the tractor PTO to the hitch pin.

NEVER start the tractor unless power to PTO is OFF.

Stay out of designated hazard areas of an operating PTO. Observe restricted work areas.

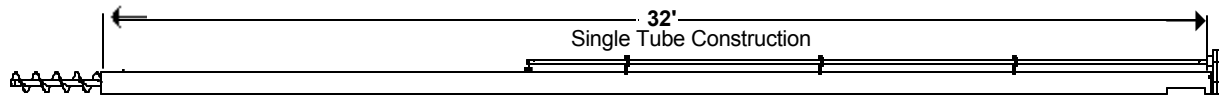
Do not operate unless ALL safety shields and devices are in place.

Be certain to close ALL the clean-out doors and inspection doors in the main auger hopper before operating the auger.

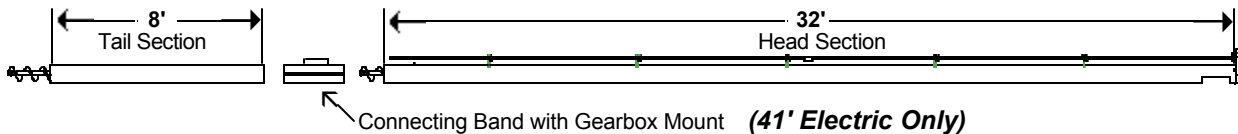
1. Layout Auger Housing for both Hydraulic and Manual Lift Augers

- Layout the auger housing on an open area of level ground that is accessible to a chain hoist or other lifting devices. The area needs to be large enough to accommodate the auger being laid out at full length.
- Assembling the undercarriage will be easier if you place the tubes on stands or saw horses. Make sure the stands or saw horses are strong enough to support the weight of the auger tubes. We recommend 36" tall stands or saw horses. Assembly tables will be helpful as well.
- Separate and sort all hardware by size and place on the assembly table.
- Lay the sections of the tube assembly in the approximate positions shown in the diagram below.

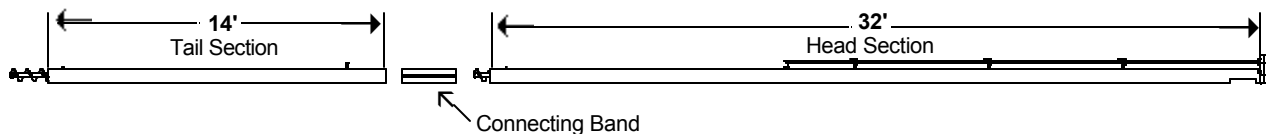
33' MODEL



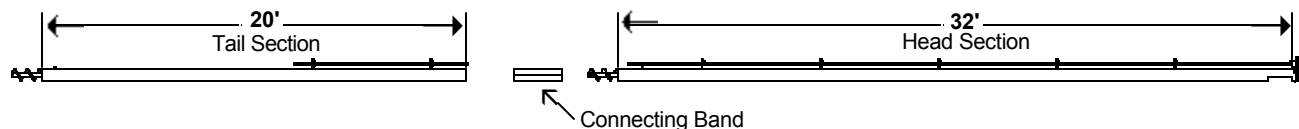
41' MODEL



47' MODEL

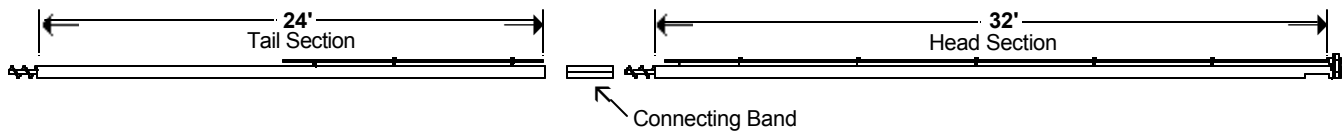


53' MODEL

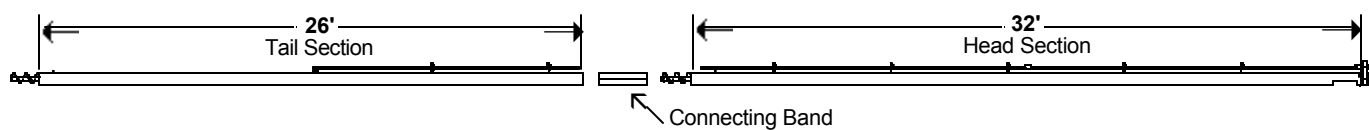


1. Layout Auger Housing for both **Hydraulic and Manual Lift Augers** (cont.)

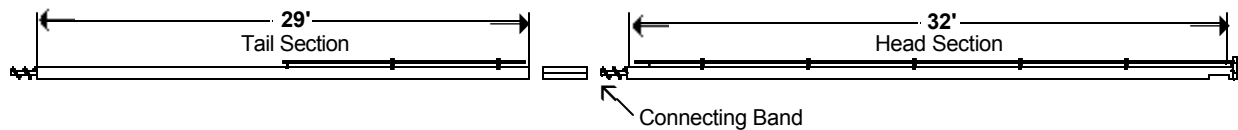
57' MODEL



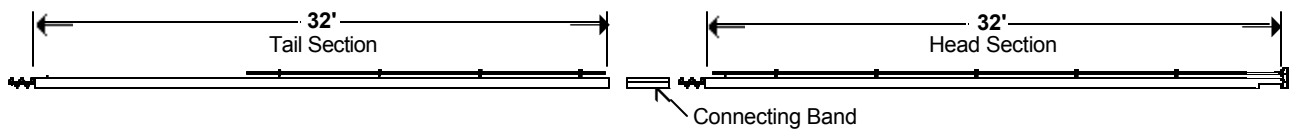
59' MODEL



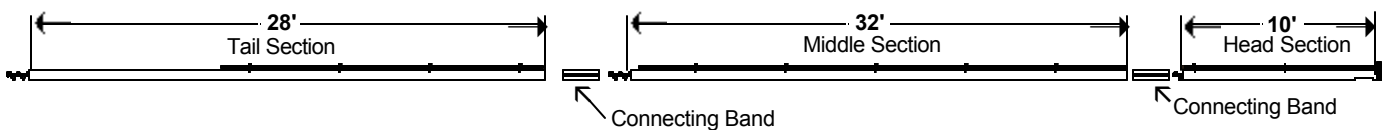
62' MODEL



65' MODEL



71' MODEL



2. Flight and Housing Section Assembly (33' Not Applicable)

- A. Remove the shipping bracket from the drive shaft. See figure 2-A for location of the shipping bracket.
- B. Slide the connecting bands onto the end of the auger housing tubes of the sections to be assembled.

NOTE

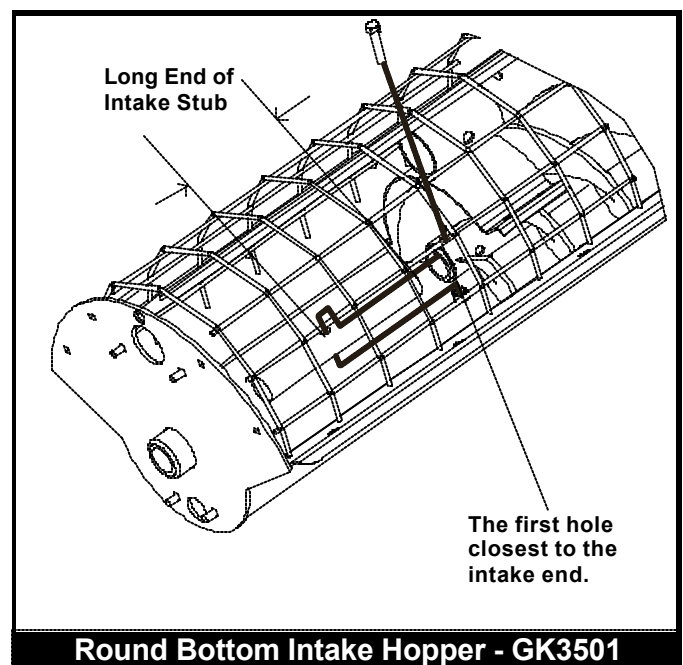
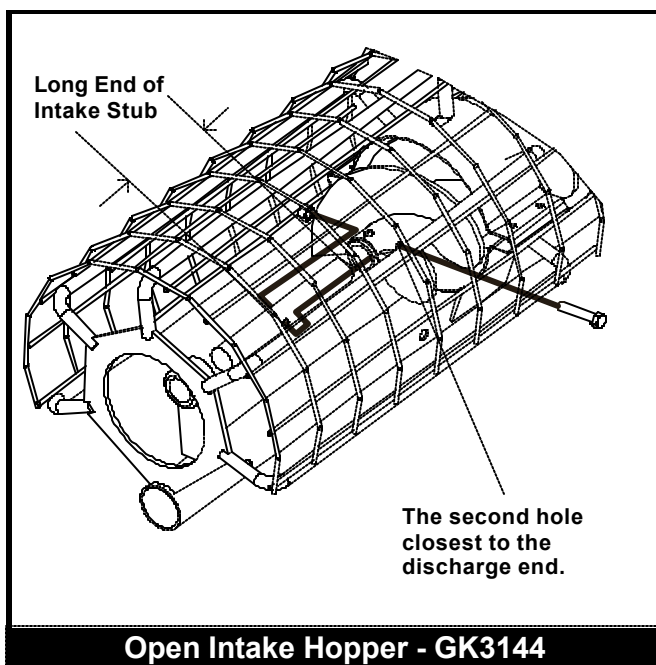
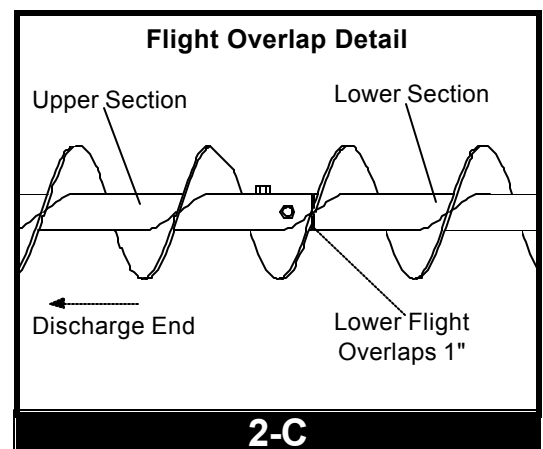
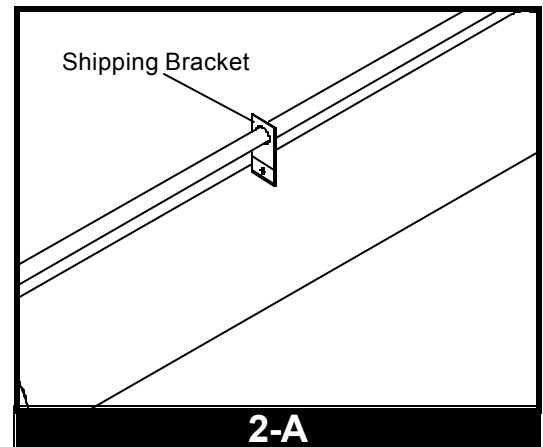
For the next step, use the bolts and stover nuts included with flight.

- C. Bolt the sections of the upper auger flighting to the next flight section, using two (2) $7/16"$ x 3" bolts (Grade 8) and stover nuts. The lower section of the flighting will overlap the upper section of the flighting approximately one inch on the side facing the discharge end. For easier assembly, coat the connecting stubs with anti-seize, lubricant, or grease.

- D. Insert the stub shaft into the intake end of the flighting. Secure using one (1) $7/16"$ x 2 $1/2"$ bolt and locknut.

NOTE

The end of the intake stub with the longest distance between the hole and the end should be inserted into the flighting. Use the first hole, closest to the intake end for the Round Bottom Intake Guard (GK3501). Use the second hole, closest to the discharge end, for the Open Intake Guard (GK3144). (See illustrations below.)



2. Flight and Housing Section Assembly (cont.)

(33' Not Applicable)

E. As you slide the head section and bottom section of auger housings together, connect the head and bottom sections of the drive shaft together. (See Fig. 2-E)

F. Insert one (1) 1/4" x 1-1/2" key onto the keyway located on the head drive shaft.

NOTE

Coat the drive shaft ends with anti-seize before installing the coupler.

G. Place a 1" to 1" coupler onto the head drive shaft with key in place.

H. Place one (1) 1/4" x 1-1/2" key into the keyway of the bottom drive shaft.

I. Insert the bottom drive shaft with key in place into the 1" to 1" coupler.

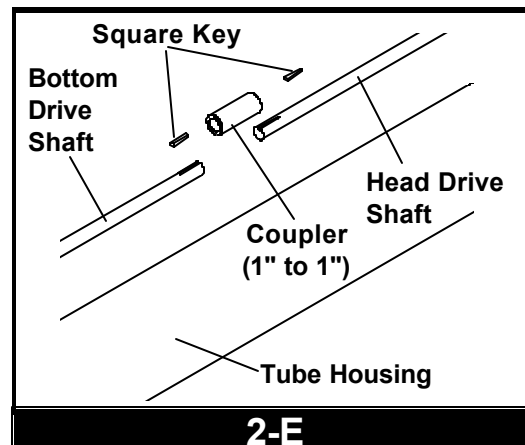
NOTE

The drive shaft(s) may need to be repositioned to allow the coupler to fit.

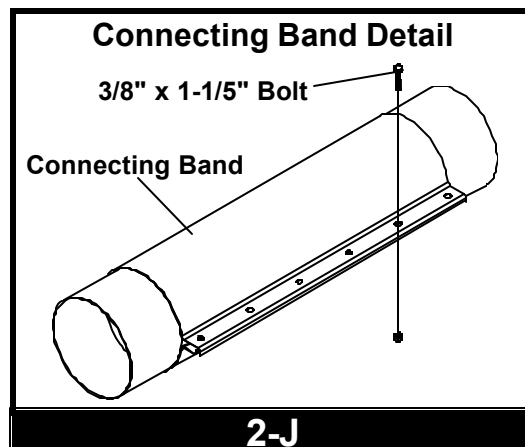
J. After the sections are connected, position the connecting bands equally over the connected tubes. Secure the connecting band with six (6) 3/8" x 1-1/2" (grade 5) hex bolts and nuts. (See Fig 2-J)

NOTE

For a 41' electric drive, it is a good practice to loosely place the gearbox onto the gearbox mount to properly position the connecting band.



2-E



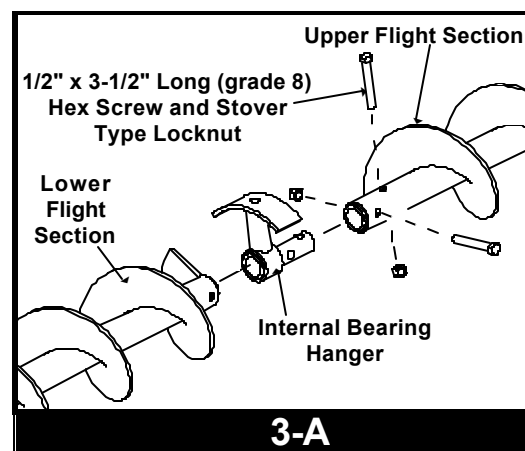
2-J

3. Flight and Housing Assembly for Augers with Optional Internal Flight Bearings

A. The internal bearing connecting band should be placed onto the lower end of the head (and Lower Middle for 71') auger section. Do NOT tighten bolts yet.

B. The internal bearing hanger should be placed over the end of the flight connecting stub on the upper auger section. Next, slide the flight section out of the lower or middle auger housing section. Connect the lower and head flight sections together. (For 71' augers connect the tail section to the middle and the middle section to the head flight.) Fasten together using two (2) 1/2" x 3-1/2" long (grade 8) hex head capscrews and stover type locknuts. (See Fig. 3-A.)

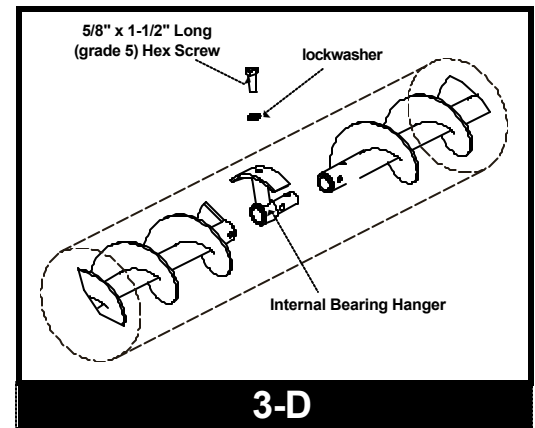
C. Slide the auger housing sections together so the tube ends are butted against each other to make a tight seam. Position the connecting band so it covers both housing sections equally. This should put the seam of the auger housings in the middle of the connecting band. Tighten the connecting band down by using six (6) 3/8" x 1-1/2" long (grade 5) hex head capscrews and nylon locknuts. (See Fig. 2-J)



3-A

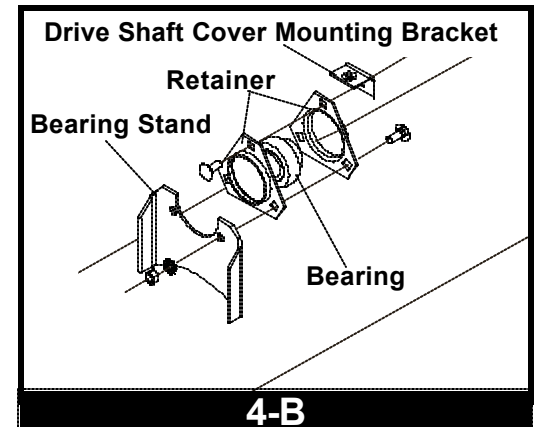
D. Attach the internal bearing hangers to the auger housing.

1. Detach the bands that are over the bearing access area.
2. Grab the internal bearing hanger stem through the bearing access area and rotate the bearing until it lines up with the 3/4" hole on the top of the auger housing. (See Fig. 3-D)
3. Line up the holes in the bearing hanger and auger housing, and fasten them together using a 5/8" x 1-1/2" long (grade 5) hex head capscrew and lockwasher. Before tightening, be sure the bearing is centered between the ends of the auger flighting by looking through the bearing hanger access hole.



4. Drive Shaft Extension Assembly

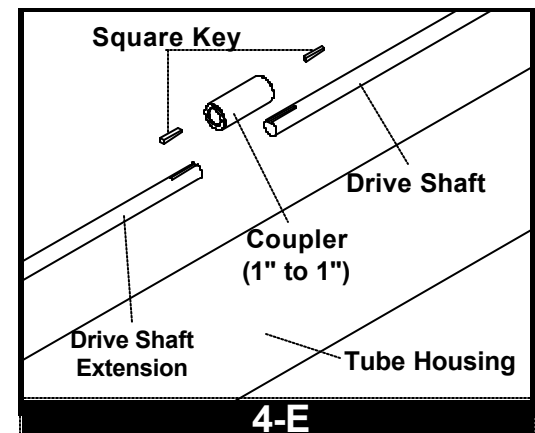
- A. Bolt the bearings onto the bolt-on bearing stand, which will be either welded on or banded-on depending on the auger size.
- B. Attach each bearing with two (2) retainers and one (1) drive shaft cover mounting bracket. (See Fig. 4-B)
- C. Slide the drive shaft extension through the bearing located on the bearing stand.
- D. Insert one (1) 1/4" x 1-1/2" key into the keyway located on the drive shaft.



NOTE

Coat the drive shaft ends with anti-seize before installing the coupler.

- E. Place a 1" to 1" coupler onto the existing drive shaft. (See Fig. 4-E)
- F. Place one (1) 1/4" x 1-1/2" key into the other drive shaft extension keyway.
- G. Insert the drive shaft extension into the 1" to 1" coupler.

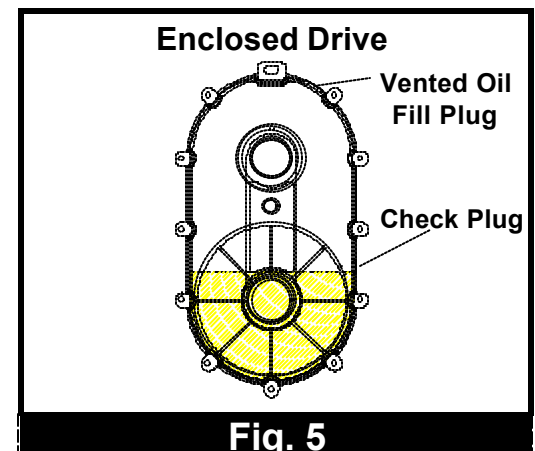


5. Enclosed Drive Preparation. (See Fig. 5)

- A. Unscrew the vented oil plug on top of the enclosed drive & check plug on the side.
- B. Fill with Oil even with the check plug. Replace the oil plugs.

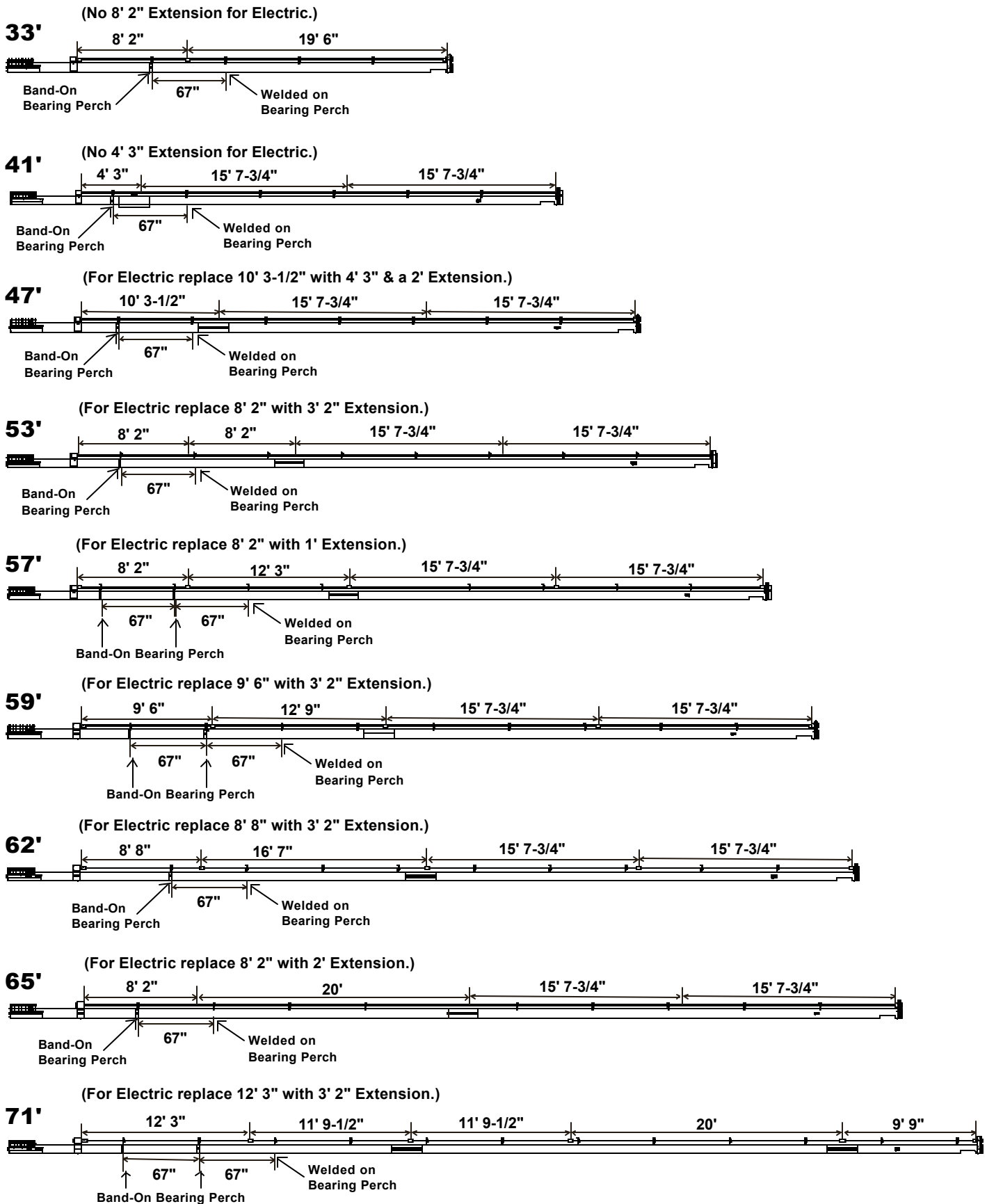
CAUTION

The oil level for the 8" enclosed drive should be even with the oil overflow check plug located on the side of the enclosed drive. DO NOT overfill, too much oil can cause pressure build up and may damage the seals.



6. Driveline Layout for Hydraulic and Manual Lift Augers (PTO Layout Shown)

A. The following diagrams show the locations of the drive shafts and drive extensions.



7. Assemble the Gearbox for PTO Driven Top Drives

CAUTION

ADD OIL!!

The gearbox is shipped dry! Fill with lubricant before use.

Install the gearbox to the mounting bracket with the vented plug on the top side of the gearbox so air pressure may be released.

Fill the gearbox to the check plug opening, (1/2 Full) with the recommended lubricant. For temperatures between 40° F and 120° F use non-foaming SAE 85W90. Below 40° F use SAE 80.

Replace the plugs.

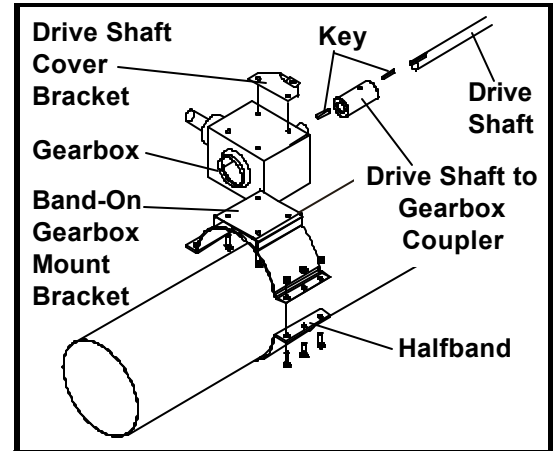


Fig. 7

CAUTION

Do NOT overfill the gearbox! Too much oil will cause pressure build up, which may damage the seals.

A. Attach the gearbox mounting bracket halfband loosely. Secure it with six (6) 3/8" x 1-1/2" bolts and locknuts.

NOTE

The gearbox mounting bracket is located below the drive shaft. The exact position is determined by the gearbox connection. Tighten the gearbox mount completely after the gearbox is attached to the drive shaft.

B. Attach the gearbox to the gearbox mounting bracket halfband using four (4) 3/8" x 3/4" bolts, flatwashers, and locknuts. (See Fig. 7)

C. Insert one (1) 1/4" x 1-1/2" key into the keyway located on the drive shaft and slide a 1-1/4" to 1" coupler onto the drive shaft.

NOTE

61'-71' models use 1" to 1-1/4" couplers.

D. Place one (1) 1/4" x 1-1/2" key into the keyway on the drive shaft on gearbox and insert shaft with key into the 1-1/4" to 1" coupler.

E. Attach the Drive Shaft Cover Bracket to the Gearbox using two (2) 3/8" x 3/4" bolts with lockwashers.

F. Tighten the halfbands.

G. Remove the vented fill plug from the top of the gearbox and the check plug from the side.

NOTE

P.T.O. Drives can be operated from the right or left hand side of the auger. All illustrations show gearbox in left hand drive position. To change the drive for a right hand drive, turn the gearbox over and bolt the other side to the gearbox mount. The vent plug in the gearbox must be switched out with the standard plug on the bottom. The vented plug should always stay on the top side of the gearbox when mounted. Install the PTO driveline support on the other side of the auger housing.

9. Track and Truss Layout for Manual Lift Augers

⚠ WARNING

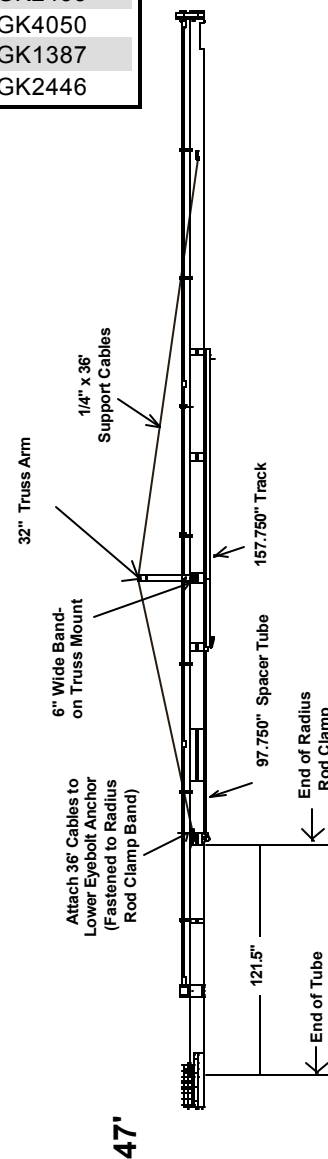
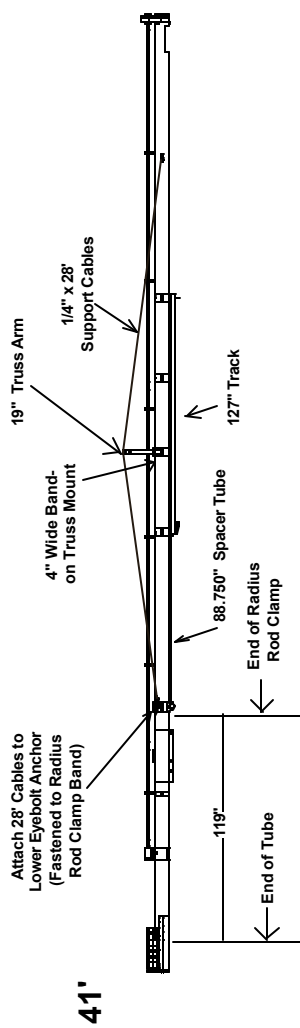
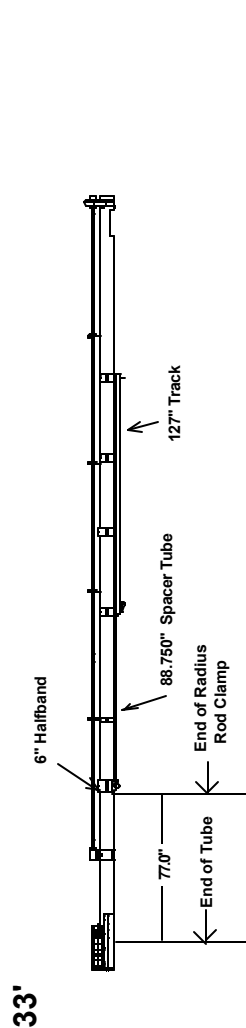
The location of components that band to the auger tube is critical for proper operation of the undercarriage system. If the auger components you have do not match the lengths specified in these instructions or you cannot position the components where instructions specify due to interference with other items mounted on the auger tube, contact your dealer or the factory immediately. DO NOT modify or substitute other components in an effort to complete the assembly of the auger. Failure to properly assemble auger can result in serious injury or death.

Radius Rod Chart

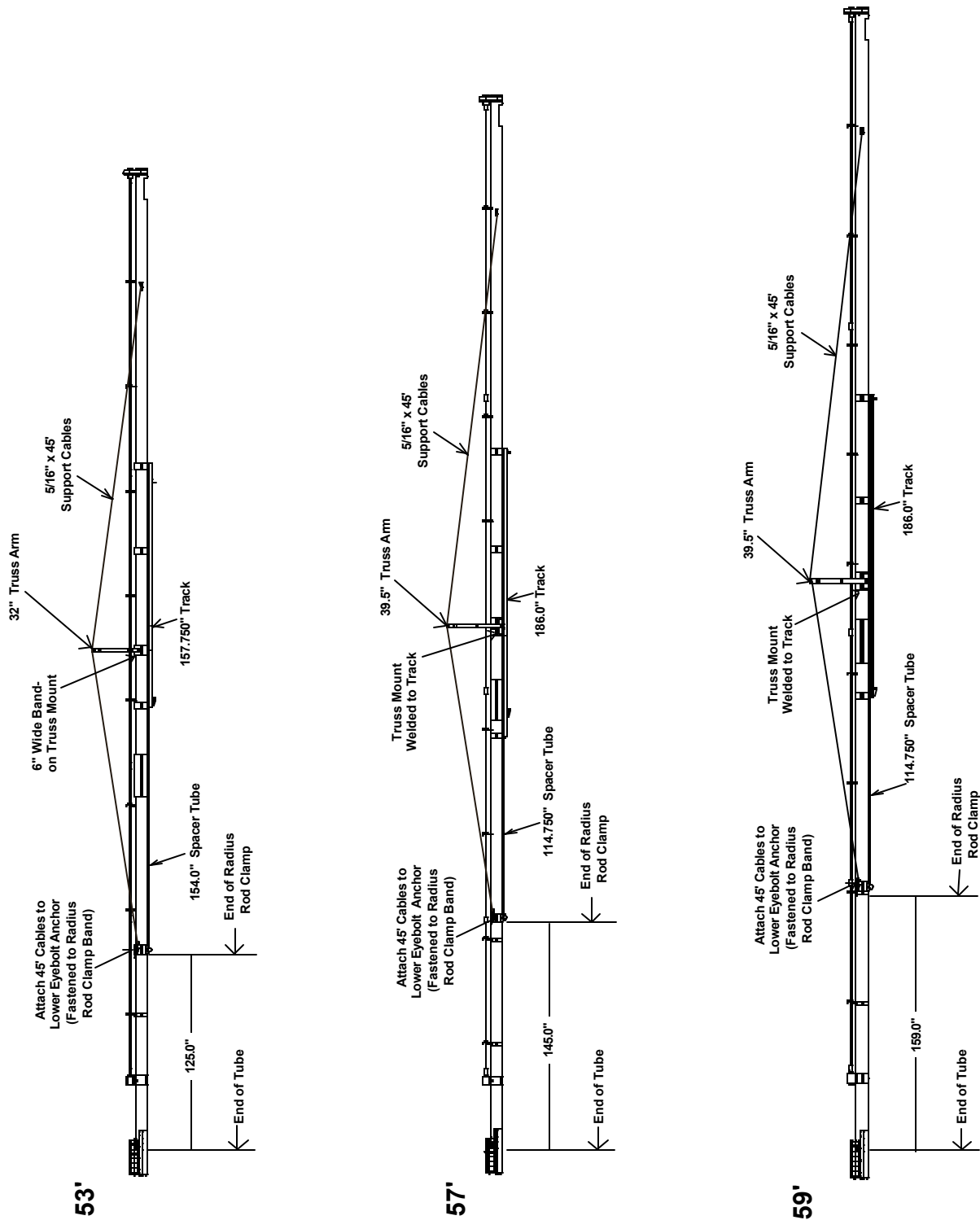
	Size	End of Radius Rod to End of Tube
Manual Lift	33'	77"
	41'	119"
	47'	121.5"
	53'	125"
	57'	145"
	59'	159"
	62'	129.75"
	65'	181.75"
	71'	193"

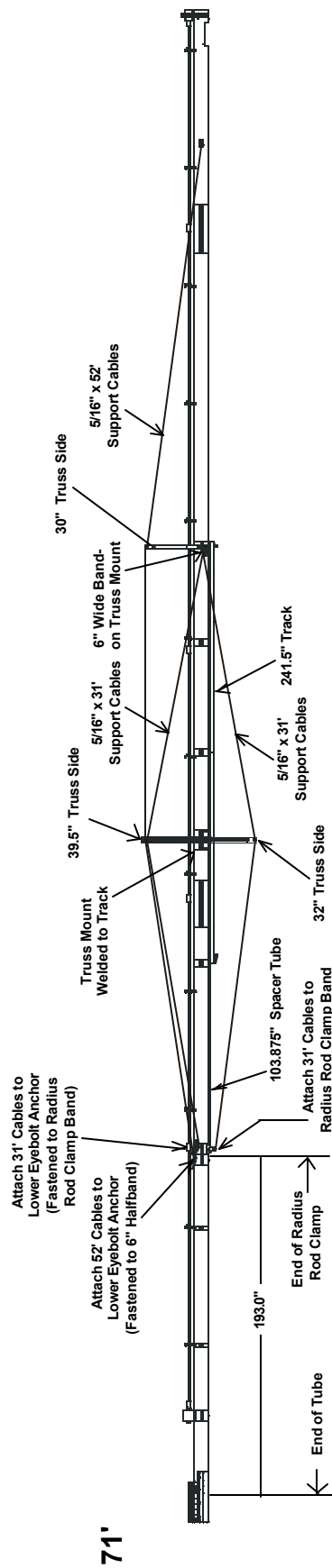
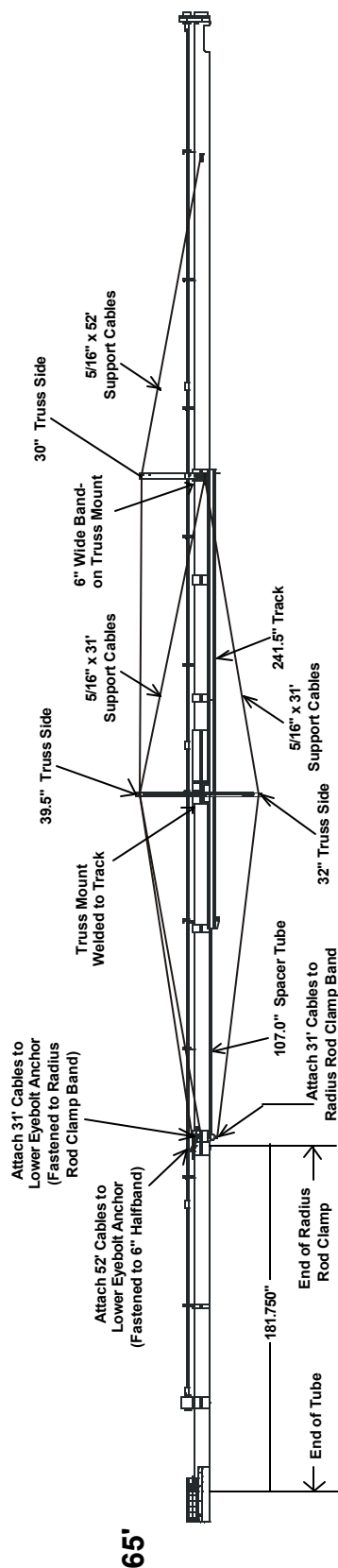
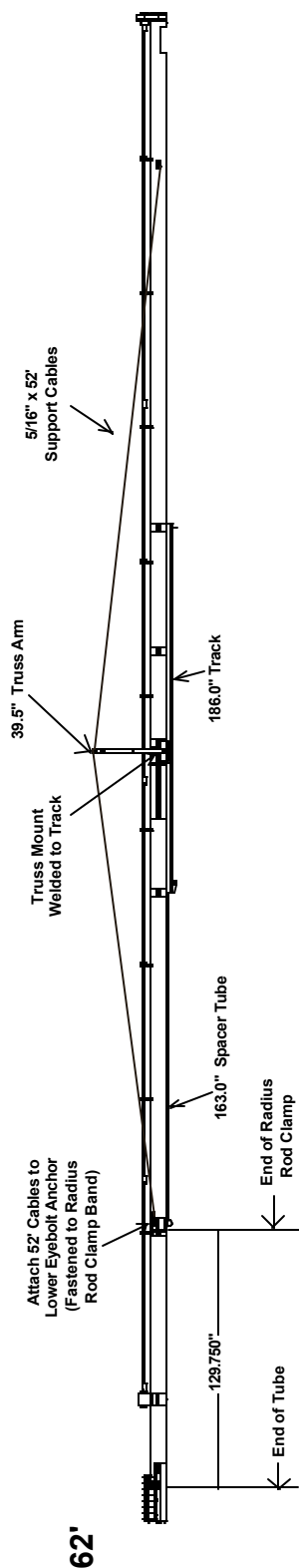
Spacer Tube Lengths

Auger Size	Spacer Tube Size	Part Number
8" x 33'	88.75"	GK3341
8" x 41'	88.75"	GK3341
8" x 47'	97.75"	GK3559
8" x 53'	154"	GK3909
8" x 57'	114.75"	GK2435
8" x 59'	114.75"	GK2435
8" x 62'	163"	GK4050
8" x 65'	107"	GK1387
8" x 71'	103.875"	GK2446



9. Track and Truss Layout for **Manual Lift Augers** (cont.)



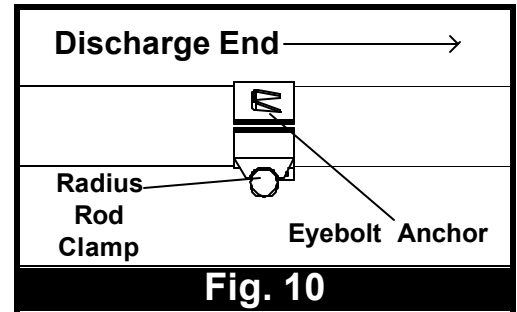


10. Assemble the Radius Rod Clamp

NOTE

Make sure the Radius Rod Clamp is directly under the Drive Shaft.

- A. For proper placement of the radius rod clamp band(s), measure from the intake end of the tube to the corresponding measurement(s) found on page 14-16 for your size model. Fasten the radius rod clamp band to the auger using a heavy duty halfband and six (6) 3/8" x 1-1/2" long hex head capscrews and nylon locknuts. The radius rod clamp will have eyebolt anchors welded to it. The eyebolt anchor ends **MUST** point toward the discharge end of the auger. (See Fig. 10)



11. Installing the Spacer Tube (Refer to pages 14-16)

- A. Insert the spacer tube into the collar on the radius rod clamp band. Secure the lower spacer tube end to the radius rod clamp using a 5/16" x 1-3/4" hex head capscrew and nylon locknut.

12. Installing the Track

- A. Position the track under the tube housing close to the position indicated in the drawings on page 14-16 for your size auger. Loosely attach track to tube by bolting the halfbands to the track using four (4) 5/16" x 1-1/2" (grade 5) hex head capscrews and nylon locknuts per each halfband. **(Each size auger has a different number of heavy duty halfbands. Be sure to use the appropriate gauge of halfband to assemble the track to the tube.)** Make sure the track can slide freely along the tube for final positioning.
- B. Slide the track towards the spacer tube until the spacer tube is seated into the receiver on the track. Fasten the spacer tube to the track using a 5/16" x 1-3/4" bolt and nylon locknut.
- C. **Make sure the spacer tube and track are aligned down the center along the bottom side of the tube housing.** Go back and fully tighten the 5/16" x 1-1/2" bolts on the halfbands.

13. Install the Intake Assembly Two Types - (Round Bottom and Open Bottom Intake Hoppers)

NOTE

If using GK3144, insert the intake guard halfbands prior to installation.

NOTE

The top halfband, for mounting the intake guard assembly, should be positioned to the discharge side (above) of the 3/8" key that is welded to the auger housing.

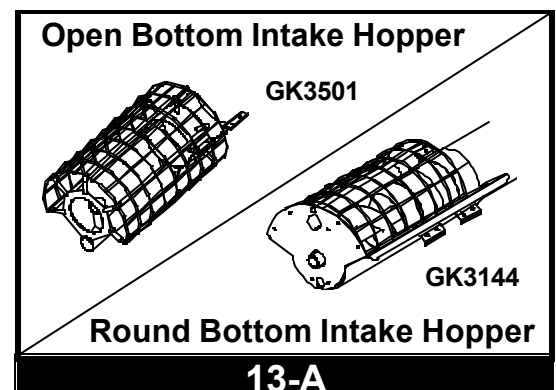
NOTE

Position the front side of the halfband closest to the intake end of the auger flush with the end of the auger housing.

- A. Attach the intake guard at the intake end of the auger housing.
- B. While sliding the intake guard on the auger housing, guide the intake stub shaft through the bearing.
- C. Secure the intake guard to the auger housing using a top halfband. Use (4) 5/16" x 1-3/4" bolts, flatwashers, and nuts.

NOTE

Do Not slide the intake guard on so far that the auger flight is in contact with the bearing. Leave 3/8" - 1/2" clearance.

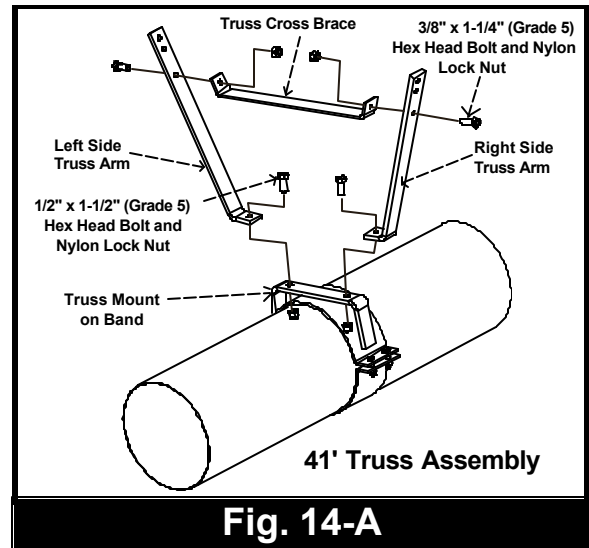


14. Truss Assembly for Manual Lift Undercarriage

(If you have a 33' Top Drive skip this section and go to Section 16 on page 22.)

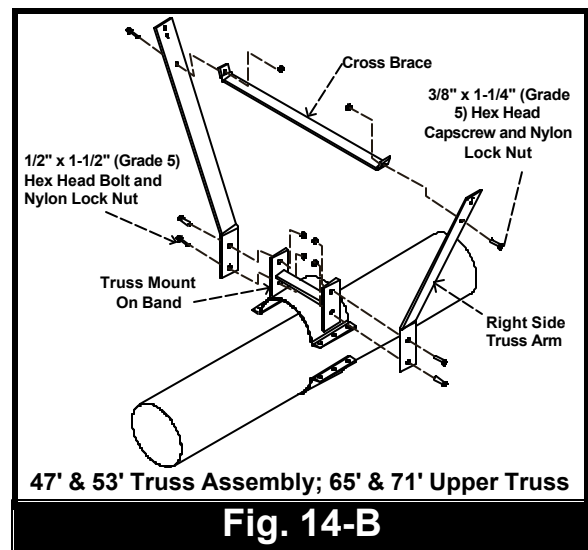
A. 41' Truss Assembly (See Fig. 14-A)

1. Attach the right side truss arm to the right side of the truss mounting band using a 1/2" x 1-1/2" (grade 5) hex head bolt and nylon locknut. TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME.
2. Attach the left side truss arm to the left side of the truss mounting band using a 1/2" x 1-1/2" (grade 5) hex head bolt and nylon locknut. TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME.
3. Fasten the truss crossbrace in between the right and left side truss arms using two (2) 3/8 x 1-1/4" (grade 5) hex head bolts and nylon lock nuts.
4. Go back and tighten all bolts and nuts on the truss mount.



B. 47' & 53' Truss and 65' & 71' Upper Truss Assembly (See Fig. 14-B)

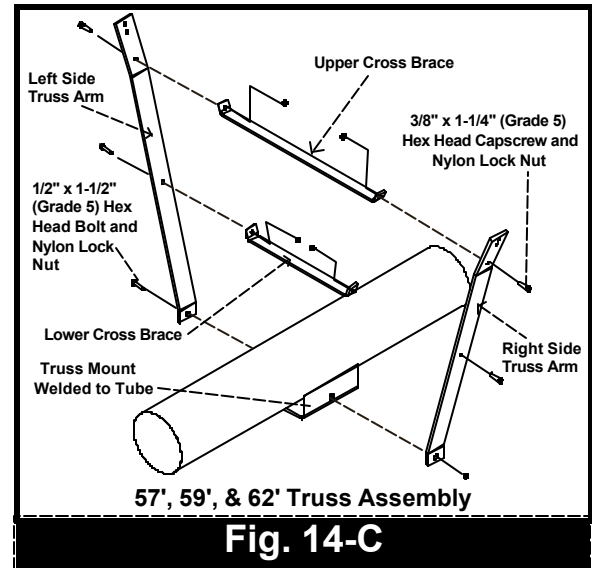
1. Attach right and left side truss arms to the left and right side of the truss mounting band using four (4) 1/2" x 1-1/2" (grade 5) hex head bolts and nylon locknuts. TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME.
2. Fasten the truss crossbrace to the left and right side truss arms using two (2) 3/8 x 1-1/4" (grade 5) hex head bolts and nylon locknuts.
3. Go back and tighten all bolts and nuts on the truss mount.



14. Truss Assembly for Manual Lift Undercarriage (cont.)

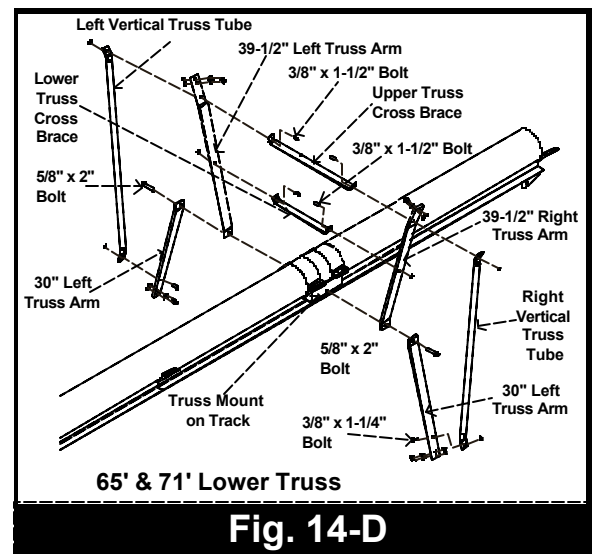
C. 57', 59', & 62' Truss Assembly (See Fig. 14-C)

1. Attach right and left truss arms to the right and left sides of the track using two (2) 5/8" x 1-1/2" hex head bolts (grade 5) with nylon locknut. **TIGHTEN ONLY FINGER TIGHT AT THIS TIME.**
2. Fasten lower and upper truss cross braces in between the right and left side truss arms using four (4) 3/8" x 1-1/4" (grade 5) hex head bolts and nylon locknuts.
3. Go back and tighten all bolts and nuts on the truss mount.



D. 65' & 72' Lower Truss Assembly (See Fig. 14-D)

1. Attach the bottom 39-1/2" and top 30" truss side arms to the truss mount on the track using one 5/8" x 2" (grade 5) hex head bolt capscrew and nylon locknut per side. **TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME. (Make sure the 39-1/2" Arms are installed between the truss mount and the 30" Arms.)**
2. Fasten the lower truss crossbrace to the inside of the two 39-1/2" truss arms using two (2) 3/8" x 1-1/2" hex head bolt and nylon locknuts.
3. Attach the upper truss crossbrace to the inside of the two 39-1/2" truss arms and attach the vertical truss tubes to the outside of the 39-1/2" truss arms using the same two (2) 3/8" x 1-1/2" hex head bolt and nylon locknuts.
4. Attach the other end of the vertical truss tubes to the bottom of the 30" long truss arms using two (2) 3/8" x 1-1/4" hex head bolt and nylon locknuts.
5. Go back and tighten all bolts and nuts on the truss.



15. Truss Cable Assembly

NOTE

33' augers have no cables.
41'- 62' have one set of truss cables.
65' & 71' has two sets of upper cables and one set of lower cables.

NOTE

Secure the U-Bolts against the loose end of the cable, as shown in figure 15-A.

A. Truss Cable Assembly for 41', 47', 53', 57', 59', and 62' Winch Augers

1. Start with the right side of the upper truss cable anchor (located near discharge end) that is welded to the 6" halfband. Guide the end of one cable through the cable anchor and attach the loose end of the cable to itself using two (2) cable clamps. (See Fig. 15-A)
2. Run the cables to the top right side of the truss arm and fasten the cable to the truss using a 3/8" cable clamp. DO NOT fully tighten the cable clamps. The cable must be able to slide freely through the clamps when taking up the slack. (See Fig. 15-B.)
3. Run the cable down to the right lower eyebolt anchor located on the lower radius rod clamp. Slide cable through the eyebolt and fasten loose end of cable using two cable clamps for each cable. (See Fig. 15-C.)
4. Repeat steps 1-3 with the left side support cable and use the left side anchors.
5. Screw eyebolts into left and right side eyebolt anchors to tighten cables and remove slack until snug. TIGHTEN BOTH CABLES SO THEY HAVE THE SAME AMOUNT OF TENSION. DO NOT OVERTIGHTEN.

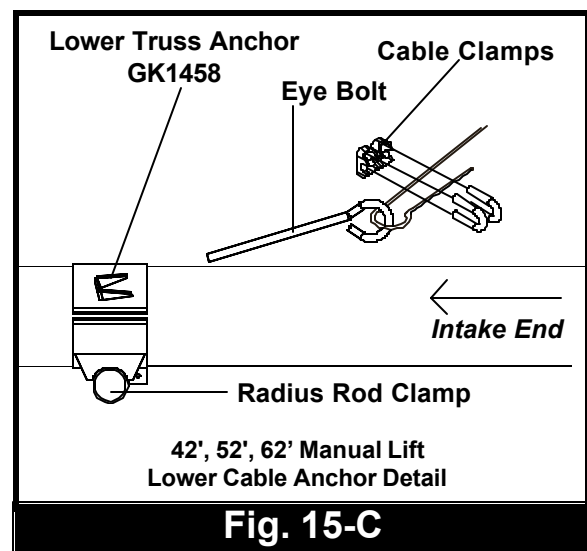
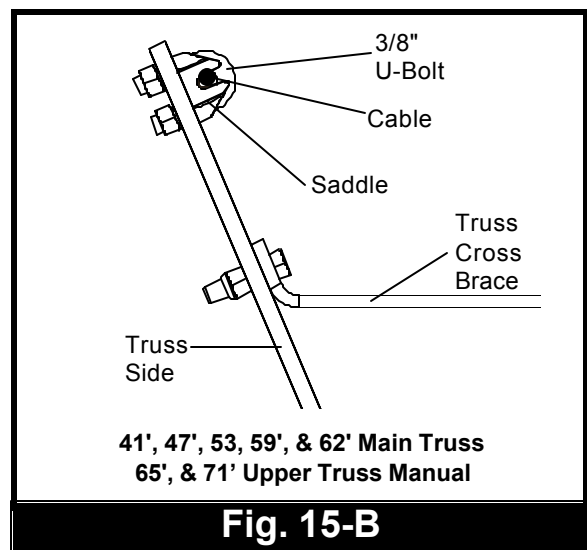
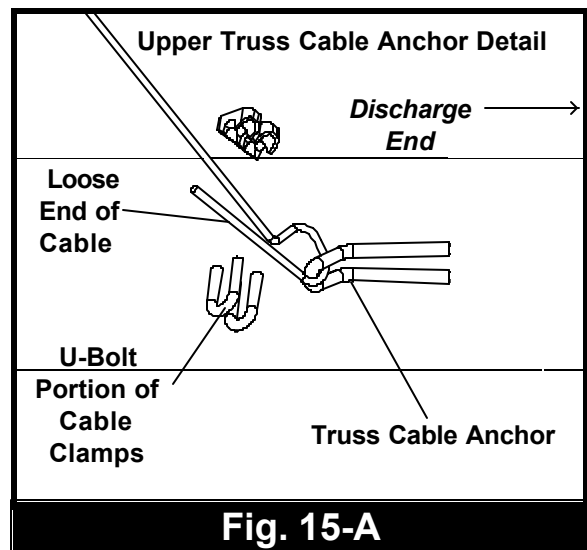
NOTE

The auger tube should have a slight upward bow when cables are tight.

6. Double check to be sure all sections are straight. Minor adjustments can be made after auger is assembled.
7. Go back and tighten 3/8" cable clamps on the truss arms.

NOTE

Support the end of the auger tube while tightening truss cables.



B. Truss Cable Assembly for 65' & 71' Winch Augers

Bottom Cable

1. Start at the two cable anchors located under the 32" truss arm, which are welded to the end of the track. Use one 31' cable per side and loop the cables through the anchors and tightly fasten the loose end of the cable to itself using two (2) 3/8" cable clamps per side. (See fig. 15-A.)
2. Run 31' cables to the right and left sides of 30" Truss arm located on the bottom side of the auger. Fasten cables to bottom 30" truss arms using (2) 3/8" cable clamps. DO NOT TIGHTEN. Cable must be allowed to slide freely until adjusted. (See Fig 15-D)
3. Run 31' cables up towards the Radius Rod Clamp. Loop ends of cables through eyebolts and fasten using (4) 5/16" cable clamps, two clamps for each cable. Screw eyebolts into the eyebolt anchors that are located on the bottom of the Radius Rod Clamp. (See Fig. 15-E.)

Top Cables

4. Starting at the right side upper truss cable anchor located near the discharge end. Guide one end of the 52' support cable through the cable anchor and fasten the loose end of cable to itself using two (2) 5/16" cable clamps. (See Fig. 15-A.)
5. Run the cable to the top right side of the 32" truss arm and fasten the cable to the truss using a 3/8" cable clamp. DO NOT fully tighten the cable clamp. The cable must be able to slide freely through the clamp when taking up the slack.
6. Run the 52' cable down the auger to the top right side of the 39-1/2" truss arm. Then start the remaining 31' cable.
7. Loop the end of the 31' cable through the right side truss cable anchor located under the 32" truss arm. Fasten cable with (2) 3/8" cable clamps.
8. Gather up both the 52' and 31' cables and run both cables through the 3/8" U-Bolt on the 39-1/2" truss arm and fasten. DO NOT fully tighten the cable clamps. The cables must be able to slide freely through the clamp when taking up the slack. (See Fig. 15-F.)
9. Run the 52' cable down the auger towards the bottom 6" half band. Loop end of cable through an eyebolt and fasten using (2) 3/8" cable clamps. Screw eyebolt into the eyebolt anchor that is welded on the right side of the 6" half band. (See Fig. 15-E.)
10. Run the 31' cable down the auger to the lower truss anchor which is attached to the radius rod clamp band. Loop end of cables through eyebolt and fasten using (2) 3/8" cable clamps. Screw eyebolt into the eyebolt anchor that is located on the bottom right side of the Radius Rod Clamp. (See Fig. 15-E.)
11. Repeat steps 4-10 for the left side support cables using the left side cable anchors.
12. USING THE EYEBOLT SCREWS, TIGHTEN ALL CABLES SO THEY HAVE THE SAME AMOUNT OF TENSION. DO NOT OVERTIGHTEN.
13. Go back and tighten up all cable clamps and U-Bolts.

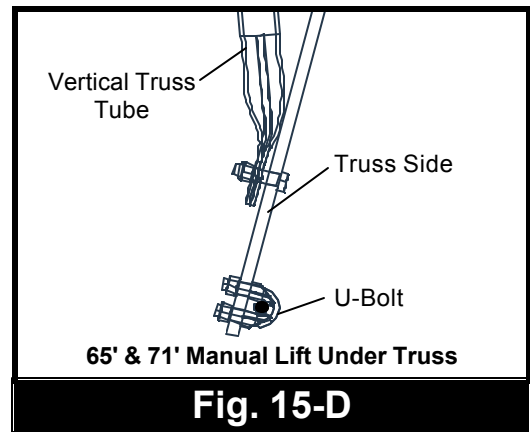


Fig. 15-D

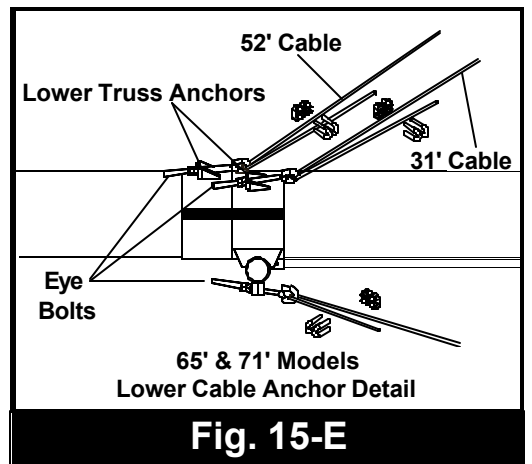


Fig. 15-E

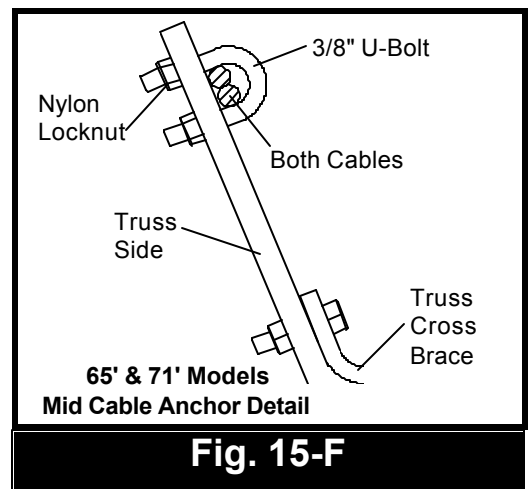


Fig. 15-F

16. Drive Shaft Cover Assembly (Electric and PTO Driven)

There is a special two piece section of the drive shaft cover that installs between the gearbox and the first bearing stand. It telescopes together to vary in length. This telescoping cover consists of a standard piece that telescopes into a special piece of cover with a retaining bottom edge.

A. Installing a two-piece drive shaft cover.

1. Center the slots in the covers over the hole in the mounting bracket.
2. Place the 1/4" x 1" O.D. flatwasher over the slot in the cover and drive the self-tapping slotted hex head screw through the hole in the mounting bracket.
3. Tighten the metal screw down to the flat washer and cover. **DO NOT** over tighten and strip out the hole in the mounting bracket.

CAUTION

The two(2) piece telescoping cover should overlap at least 6" for proper installation.

B. To install a one-piece drive shaft cover

1. Center the slots in the covers over the hole in the mounting bracket.
2. Place the 1/4" x 1" O.D. flat washer over the slot in the cover, and drive the self tapping slotted hex head screw through the hole in the mounting bracket.
3. Tighten the metal screw down to the flatwasher and metal cover.

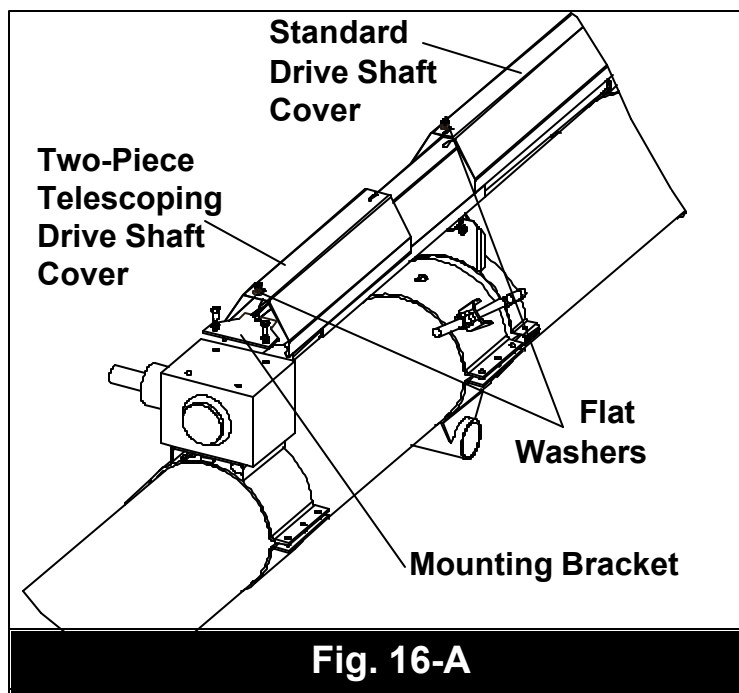
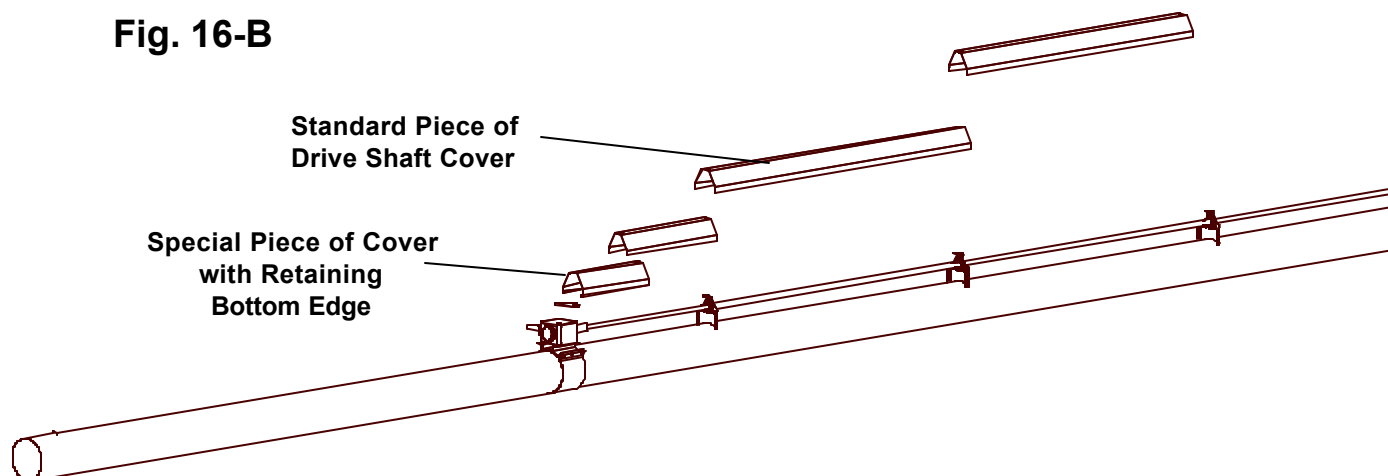


Fig. 16-B



16. Drive Shaft Cover Assembly (Electric and PTO Driven)

- Attach the drive shaft covers to the auger housing. Mount the covers to the drive shaft mounting brackets located along the auger housing.
- Secure the covers with 1" O.D. flatwashers and slotted hex head screws.

NOTE

Refer to the drawings below to reference the drive shaft covers for the Electric and PTO driven top drives. Begin at the intake end and work your way toward the output end overlapping the covers at each bearing stand. **ELECTRIC DRIVE IS SHOWN.**

33' Model

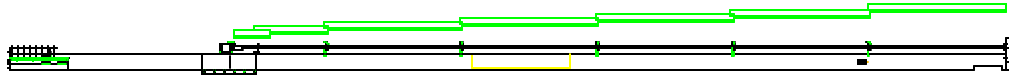
Telescoping Piece



Electric: 1@1'6", 1@2'0", 3@5' 8-1/4"
PTO: 1@1'6", 1@5'0", 4@5' 8-1/4"

41' Model

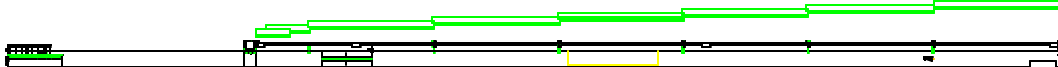
Telescoping Piece



Electric: 1@1'6", 1@3'0", 5@5' 8-1/4"
PTO: 1@1'6", 1@2'0", 6@5' 8-1/4"

47' Model

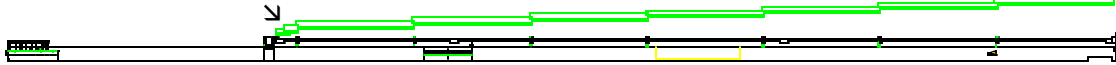
Telescoping Piece



Electric: 1@1'6", 1@5'0", 6@5' 8-1/4"
PTO: 1@1'6", 1@2'0", 7@5' 8-1/4"

53' Model

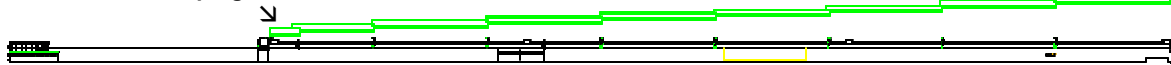
Telescoping Piece



Electric: 1@3', 7@5' 8-1/4", 1@1' 6"
PTO: 1@1'6", 1@2'0", 8@5' 8-1/4"

57' Model

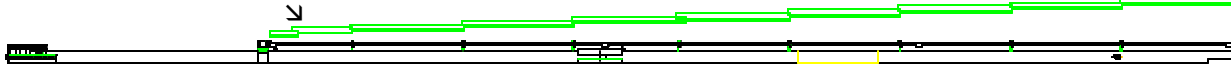
Telescoping Piece



Electric: 1@1'6", 1@5'0", 7@5' 8-1/4"
PTO: 1@1'6", 1@1'0", 8@5' 8-1/4"

59' Model

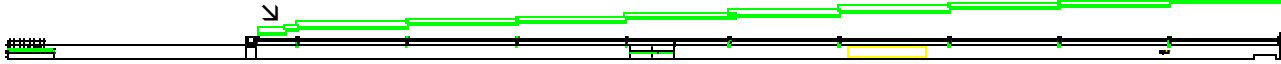
Telescoping Piece



Electric: 1@1'6", 1@2'0", 8@5' 8-1/4"
PTO: 1@1'6", 1@3'0", 9@5' 8-1/4"

62' Model

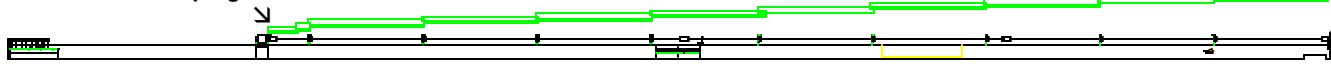
Telescoping Piece



Electric: 1@1'0", 1@8", 9@5' 8-1/4"
PTO: 1@0'8", 1@0'8", 10@5' 8-1/4"

65' Model

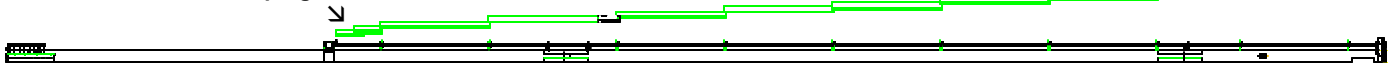
Telescoping Piece



Electric: 1@1'6", 1@0'8", 9@5' 8-1/4"
PTO: 1@5', 1@1'6", 10@5' 8-1/4"

71' Model

Telescoping Piece



Electric: 1@1'6", 1@4'0", 9@5' 8-1/4", 1@0'8", 1@1'6"
PTO: 1@1'6", 1@2', 11@5' 8-1/4", 1@0'8", 1@1'6"

NOTE

DO NOT operate the auger without all drive shaft covers in place.

17. Clevis Assembly.

A. Discharge End Trolley Cable Pulley and Long Clevis (See Fig. 17-A & 17-B)

1. Place the pulley(s), washers, and spacer bushing to the long clevis as shown below and fasten them together using a 1/2" x 3" (grade 5) hex head capscrew making sure the capscrew is installed so the head is on the top side of the clevis when the clevis is assembled onto the auger. Insert the cotter pin into the small hole in the clevis and fasten to the clevis by bending the legs of the cotter pin apart.
2. Attach the long clevis to the track by fastening the trolley sides onto the track. (See Fig. 17-B)

NOTE

Use the locknuts and tighten so that the bushings will not turn against the clevis.
Torque to 80 ft/lbs.

Fig. 17-A - 33' & 41' Augers

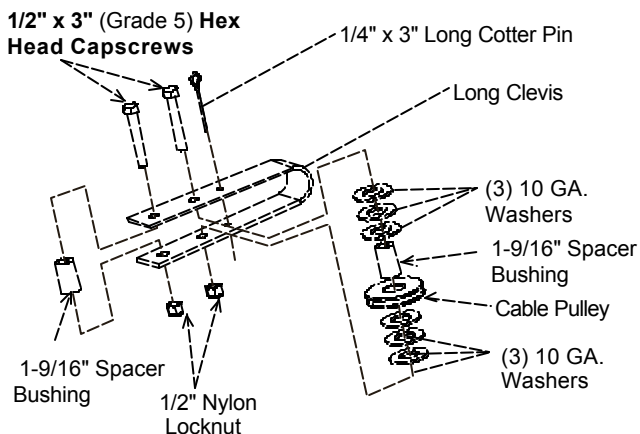
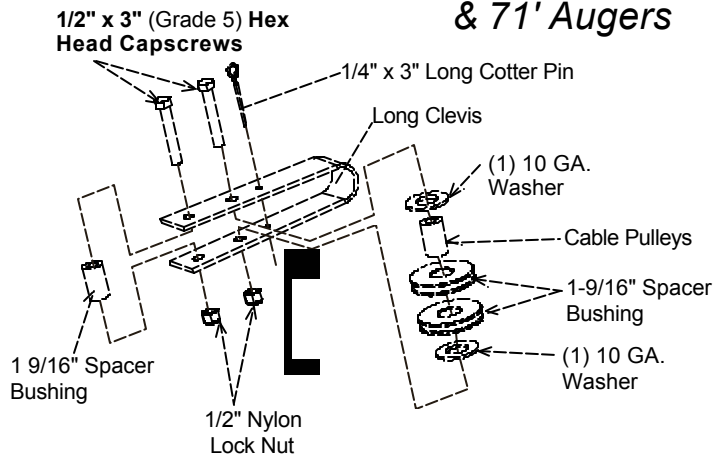


Fig. 17-B - 47', 53', 57', 59', 62', 65' & 71' Augers



B. Track Intake End Cable Pulley and Short Clevis (See Fig 17-C & 17-D)

1. Place the pulley(s), washers, and spacer bushing to the short clevis as shown below. Fasten them together using 1/2" x 3" (grade 5) hex head capscrews making sure the capscrews are installed so the heads are on the top side of the clevis when the clevis is assembled onto the auger. Insert the cotter pin into the small hole in the clevis and fasten to the clevis by bending the legs of the cotter pin apart.
2. Attach the short clevis to the track by fastening the 5/8" x 4" bolt through the track and clevis.

Fig. 17-C - 33' & 41' Augers

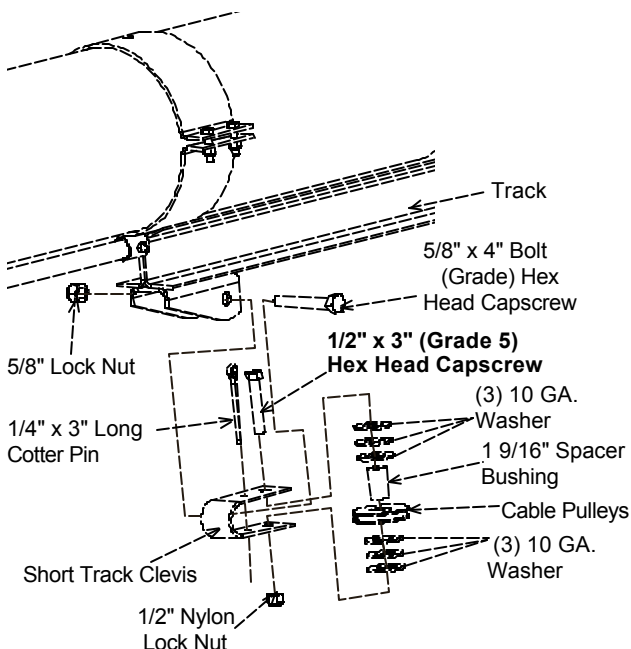
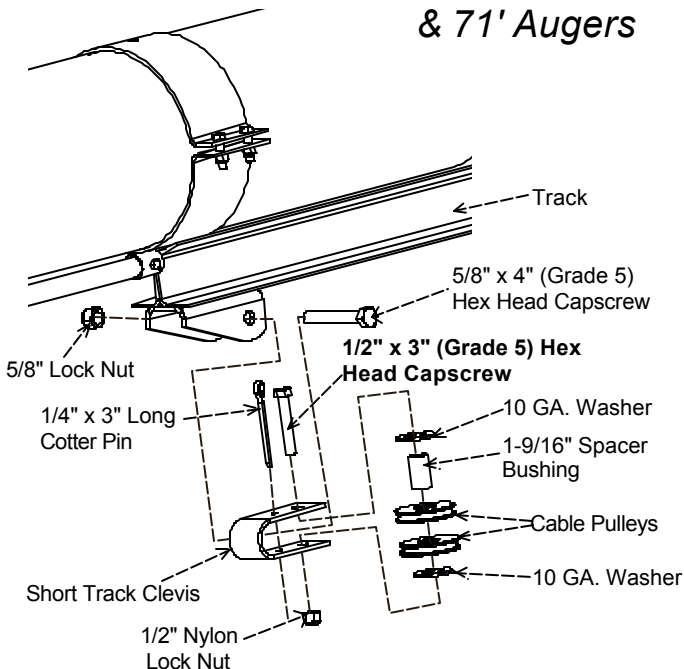


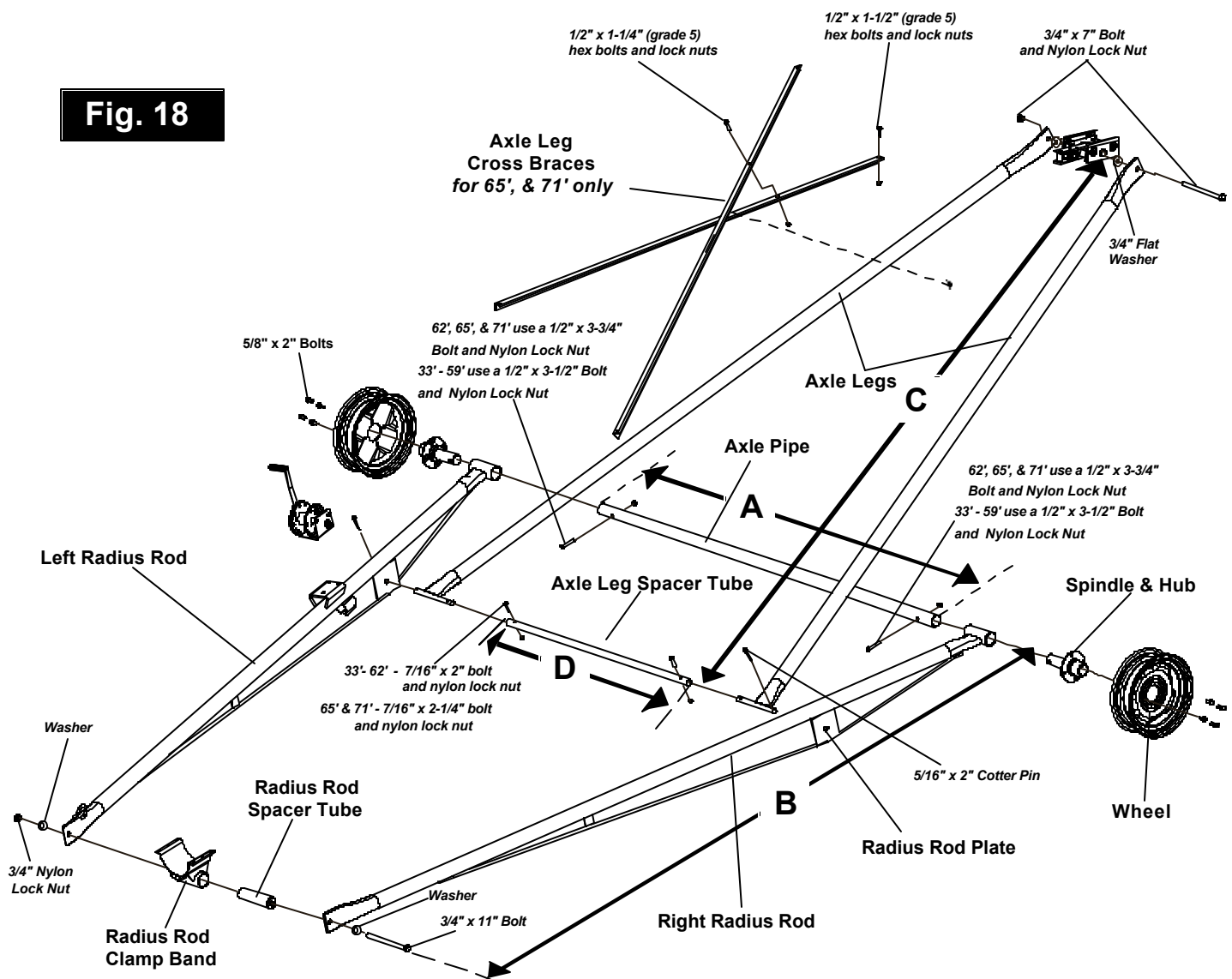
Fig. 17-D - 47', 53', 57', 59', 62', 65' & 71' Augers



18. Manual Lift Undercarriage Assembly.

- Place the left and right radius rods close to positions shown in Fig. 18 below. The flattened ends of the radius rods must be facing towards the intake end of the auger. The left radius rod with the winch mount **MUST** be on the left side, which is your left hand side when standing at the intake end of the auger looking up at the discharge end. Place undercarriage frame between the radius rods.
- Bolt the axle leg spacer tube to the bottom of the axle legs using a 7/16" x 2" (grade 5) hex head capscrew for 33' - 62' Augers and a 7/16" x 2-1/4" (grade 5) hex head capscrew on 65' & 71' models. Connect the short shafts on the axle legs into the square on the radius rods. Insert one 5/16" x 2" cotter pin in the end of each short shaft and bend back the legs of the pin to fasten.
- On 65' & 71' augers **ONLY**, connect axle leg crossbraces between the axle legs. Secure angles to ears on axle legs with four 1/2" x 1-1/4" long (grade 5) hex head capscrews and nylon locknuts. **DO NOT** fully tighten hardware until the trolley is assembled to the axle legs. Fasten the crossbraces through the middle with a 1/2" x 1" (grade 5) hex head capscrew and nylon locknut. **DO NOT** tighten hardware until later.

Fig. 18



Manual Lift Models	33'	41'	47'	53'	57'	59'	62'	65'	71'
"A" - Axle Spacer Tube Length	94.50"	94.50"	94.50"	93.00"	93.00"	93.00"	120.00"	120.00"	120.00"
"B" - Radius Rod Length	116.00"	116.00"	146.00"	179.75"	179.75"	179.75"	209.25"	209.25"	209.25"
"C" - Axle Leg Length	126.50"	126.50"	152.00"	178.00"	178.00"	178.00"	193.00"	193.00"	193.00"
"D" - Axle Pipe Length	53.00"	53.00"	51.00"	49.75"	49.75"	49.75"	72.50"	72.50"	72.50"

19. Manual Lift Undercarriage Assembly (cont.)

- D. Guide the axle pipe through the pipes on the ends of the short pipes at the end of the radius rods.
- E. Connect the spindle and hub to the Axle Pipe as shown on page 25 and fasten together using two (2) hex head cap-screws and nylon locknut. See bolt chart for spindle bolt sizes.
- F. Fasten tire and rim to hub with four (4) lug nuts on each side.
- G. When the transport height is correct as described above, the lifting device may be released.

Spindle Bolt Chart	
Auger Size	Bolt Size
33'- 52'	1/2"x 3-1/2" Long
62' - 71'	1/2" x 3-3/4" Long

20. Manual Track & Tube Housing to Undercarriage

- A. Place strap or chain around the auger tube housing about 1/3 of the way down from the discharge end. Use a lifting device and lift the auger tube about approximately 6' from the ground. Roll the undercarriage into position under the tubing.
- B. Assemble trolley, spacer, and long clevis to track.
(See Fig. 20-B)

NOTE

During installation, it may be helpful to hold the trolley in position using a c-clamp.

- C. Raise axle legs and bolt the trolley spacer with long clevis and pulley assembly together using a 3/4" x 7" long (grade 5) hex head capscrew, flat washers, and nylon locknut. Make sure washers are placed between spacer bushing and axle legs.
(See Fig. 20-B)
- D. Insert the radius rod spacer tube into the radius rod clamp band. Then, insert a 3/4" x 11" long (grade 5) hex head bolt through a flat washer, the right radius rod, and through the spacer tube to the left side. Then through the left radius rod, another flat washer and a nylon locknut.
(See Fig. 20-D)
- E. Double check that all undercarriage bolts and fasteners are tight and assembled correctly. On 71' augers go back and tighten all the 1/2" hex head capscrews that fasten the angle crossbraces to axle legs.

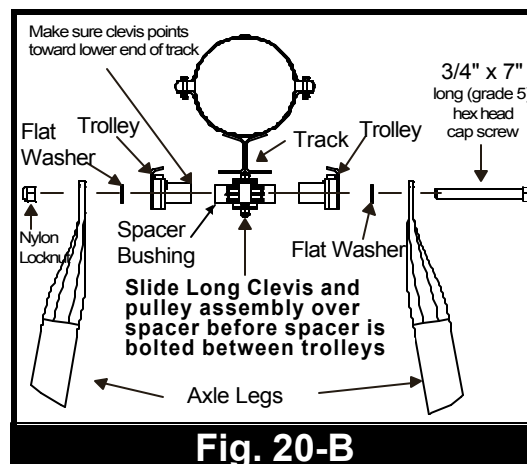


Fig. 20-B

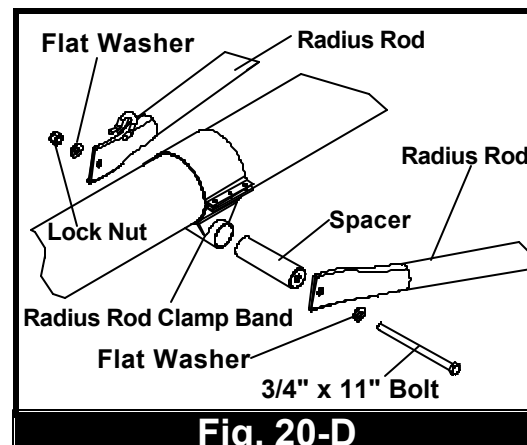


Fig. 20-D

WARNING

The trolley must be assembled to the track so it cannot slip off or be removed from the track.

⚠ DANGER

Before lowering the auger, make sure the intake is on the ground, and the trolley is touching the down stop. Check the transport height of the auger by measuring the distance from the top of the auger's discharge end to the ground. Check your measurement with the chart on page 47. If your measurement doesn't fit into the range on the chart for your size auger go back double check the following:

1. **Location of radius rod clamp and track.** (See page 14-16.)
2. **The length of the undercarriage components.** (See page 25.)
3. **The length of auger tubes.** (See pages 7-8.)
4. **Is the discharge end of the auger tube sagging because the truss cables require tightening?** (See page 20-21.)

If you have double checked all of the above items and your measured discharged height is **NOT** in the range specified in the transport height chart on page 47, call your dealer or the factory immediately. **DO NOT CONTINUE TO ASSEMBLE THE AUGER** and do not release the hoist with the auger in this condition. Failure to do so could result in damage to the auger and/or serious injury to personnel.

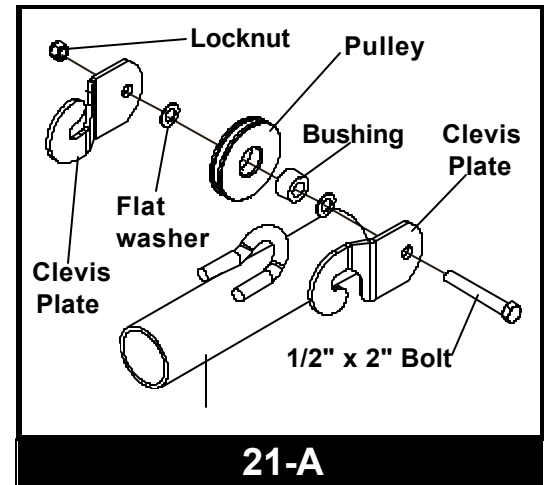
21. Winch and Cable Assembly (Manual lift only)

A. Bottom Clevis Assembly

1. Hook clevis plates to the anchor on the left radius rod.
(See Fig. 21-A)
2. Assemble the two (2) washers, pulley, and bushing in between the clevis plates and fasten together using 1/2" x 2" hex head capscrew and nylon locknut.
3. Double check and make sure the clevis plates are secure and can't slip off.

CAUTION

Use locknut and tighten so bushing will not turn against clevis plates.

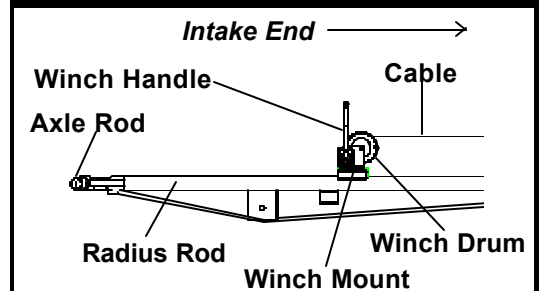


21-A

B. Winch

1. To assemble the winch see instructions provided with the winch.
2. Bolt the winch assembly to the mount located on the left radius rod so the winch drum is towards the intake end of the auger. Use three (3) 3/8" x 1" long (grade5) hex head bolts, flatwashers, and nylon locknuts to attach the winch to the mount.
(See Fig. 21-B.)
3. Tighten it with a wrench.

Cable wraps over the drum on the 1000# & 1500# winch; Cable wraps under the drum for the 2500# winch.



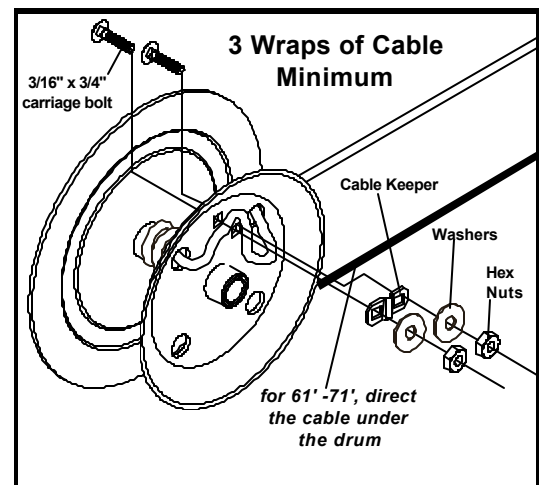
21-B

C. Cable

1. Connect the 1/4" lift cable to the winch drum so the cable will wrap **OVER** the winch drum on 33' - 59' size augers and **UNDER** the winch drum on the 65' & 72' size augers when turning the handle in a clockwise direction. (See Fig. 21-C.)
2. From inside of drum, insert the cable through one round hole in the drum side, until it extends 1" past the two square holes.
3. Clamp the cable to the outside of the drum with the cable keeper, using two (2) 3/16" x 3/4" carriage bolts, lock washers, and nuts. Be sure that the carriage bolt heads are on the inside of the drum.

WARNING

The cable keeper alone will not hold the weight of the auger. There should be enough cable so that when the auger is all the way down, there are at least 3 turns of cable on the winch drum. Never let the cable all the way out. Always keep a minimum of three (3) turns of cable on the winch drum. Cable should never be fully extended. If there are not (3) turns of cable around the winch drum when the auger is fully lowered, then the cable must be replaced with a longer cable.



21-C

Cable must wrap over drum when turning handle in a clockwise direction.

22. Winch and Cable Assembly for Manual Lift Augers (cont.)

D. Cable Assembly for 33' and 41' Models (See fig. 22-D)

1. Starting from the winch, extend the loose end of the cable to the pulley that is attached to the clevis anchor on the radius rod. Insert the cable from the lower side of the pulley & wrap around.
2. Extend the cable to the upper clevis mounted to trolley. Insert the cable from the left side, and go around the pulley.
3. Extend the cable from the upper clevis to the bottom clevis located on the bottom of the track located on the bottom of the track.
4. Insert the cable from the right side of the pulley and go around.
5. Extend the cable to the spacer bushing located in the upper clevis on the trolley.
6. Insert cable from the left and wrap the cable around the bushing and secure with two (2) u-bolts and saddles.

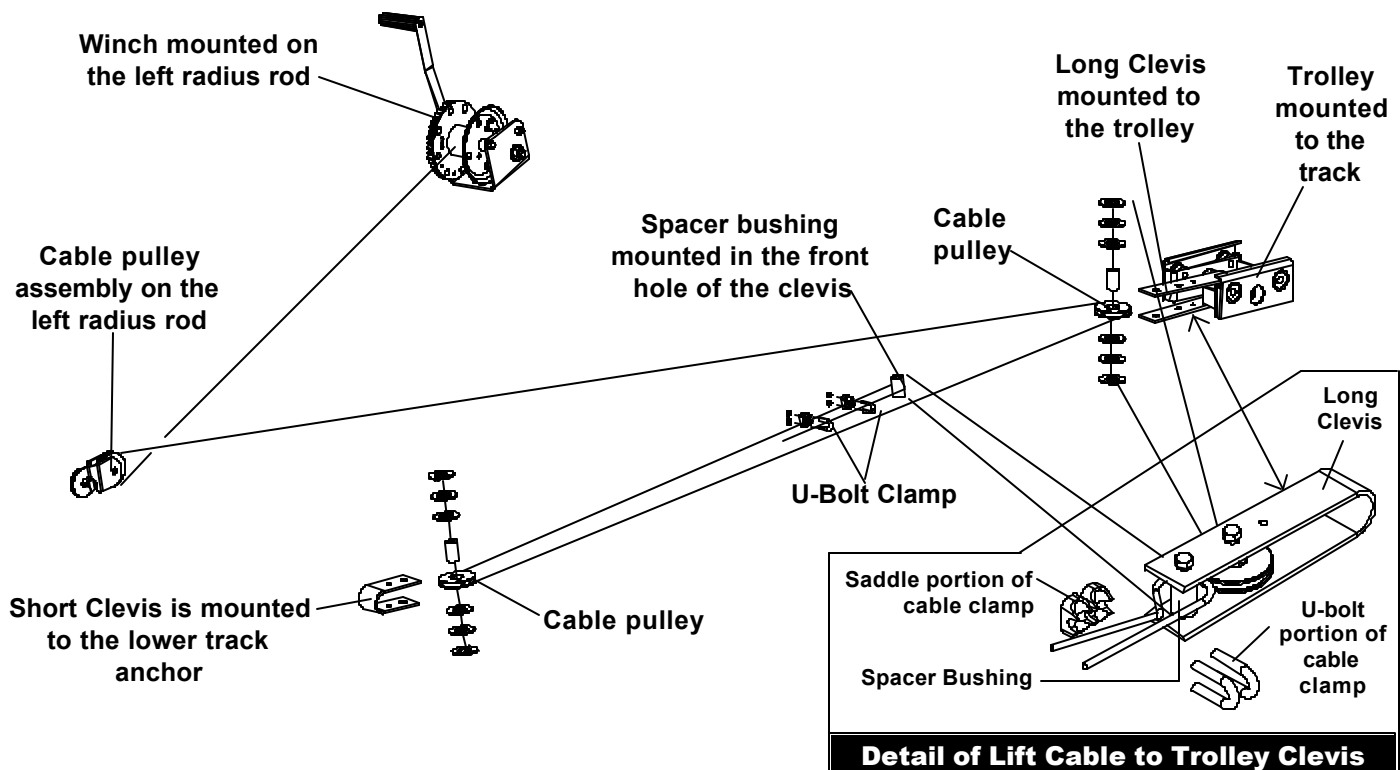
CAUTION

Secure the lift cable to the trolley with two (2) cable clamps, with the clamp U-Bolt against the loose end of the cable.

WARNING

Make sure the cable is located on all cable pulleys BEFORE raising the auger using the winch. Do NOT disassemble pulley(s) from clevis(s) during rigging.

Fig. 22-D - Rigging for 33' and 41' Models



22. Winch and Cable Assembly for Manual Lift Augers (cont.)

E. Cable Assembly for 47' - 71' Models (See Fig 22-E)

1. Starting from the winch, extend the loose end of the cable to the pulley that is attached to the clevis anchor on the radius rod. Insert the cable from the lower side of the pulley & wrap around.
2. Extend the cable to the upper clevis mounted to trolley. Insert the cable from the left side, around the top pulley.
3. Extend the cable down to the lower clevis located on the bottom of the track.
4. Insert the cable from the right side, around the top pulley. Then extend cable back up to upper clevis, and from the left side again wrap the cable around the bottom pulley.
5. Extend cable back down to lower clevis and insert cable from the right side, around the bottom pulley.
6. Extend the cable to the spacer bushing located in the upper clevis on the trolley. (See rigging Below)
7. Insert cable from the left and wrap the cable around the bushing. Secure with two (2) u-bolts and saddles.

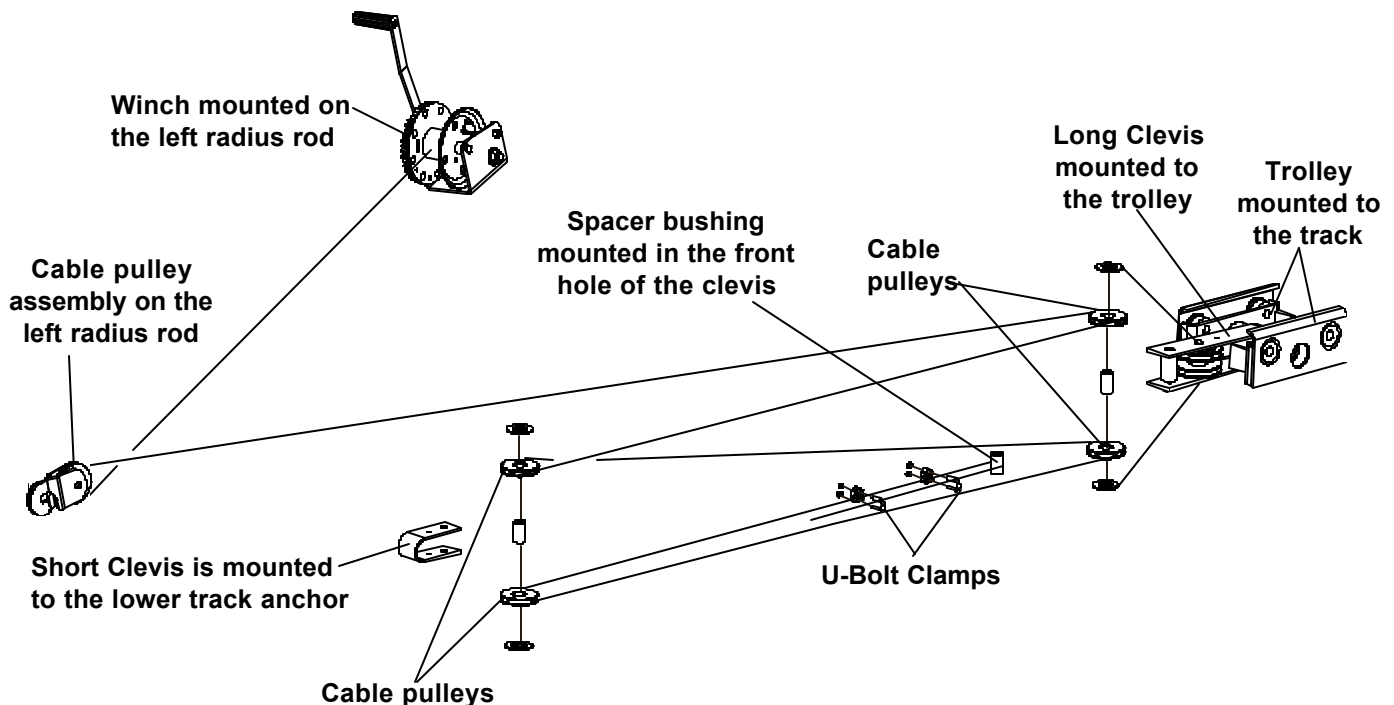


Secure the lift cable to the trolley with two (2) cable clamps, with the clamp U-Bolt against the loose end of the cable.



Make sure the cable is located on all cable pulleys BEFORE raising the auger using the winch. Do NOT disassemble pulley(s) from clevis(s) during rigging.

Fig. 22-E - Rigging for 47', 53', 57', 59', 62', 65', and 71' Models



NOTE

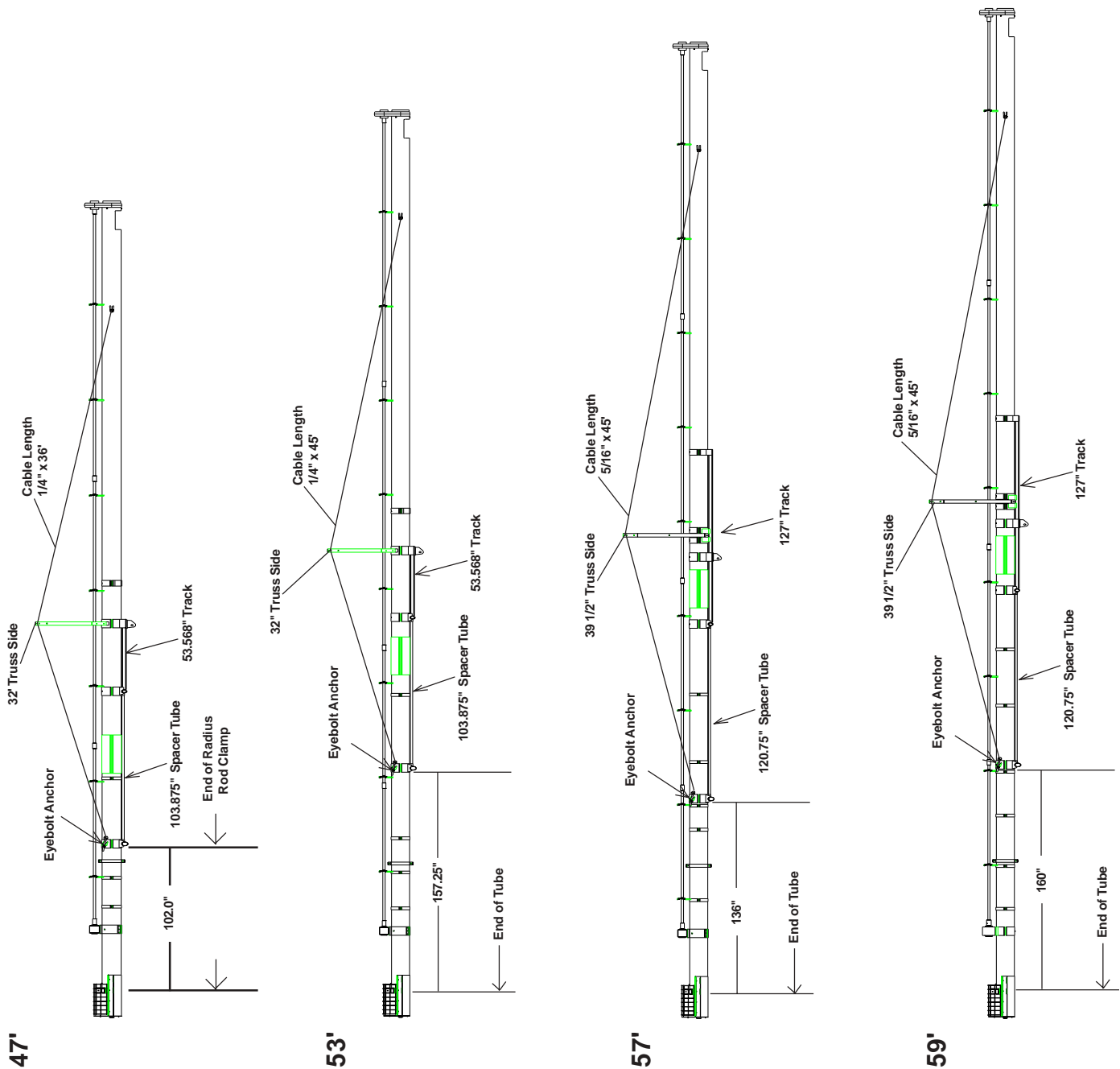
Make sure that the cable is inserted over the top of the pulley and not the bottom.

Skip Hydraulic Section and Go to Page 42 & 43 for PTO and Electric Drive Installation Instructions.

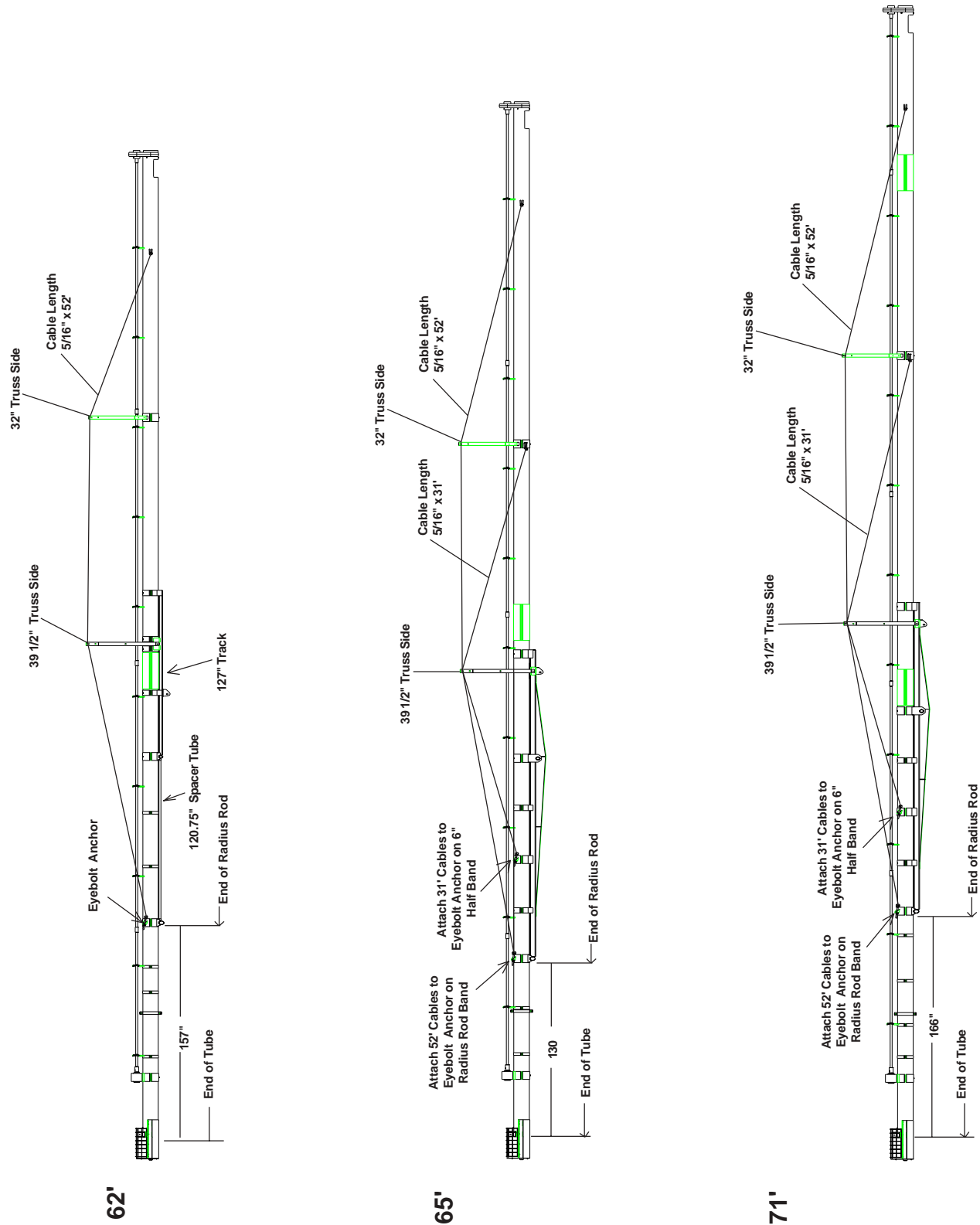
23. Track and Truss Layout for Hydraulic Lift Models

Radius Rod Chart		
	Size	End of Radius Rod to End of Tube
Hydraulic Lift	47'	102"
	53'	157.25"
	57'	136"
	59'	160"
	62'	157"
	65'	130"
	71'	166"

Spacer Tube Lengths		
Auger Size	Spacer Tube Size	Part Number
8" x 47'	103.875"	GK2446
8" x 53'	103.875"	GK2446
8" x 57'	120.75"	GK2505
8" x 59'	120.75"	GK2505
8" x 62'	120.75"	GK2505
8" x 65'	Does Not Apply	None
8" x 71'	Does Not Apply	None



23. Track and Truss Layout for Hydraulic Lift Models

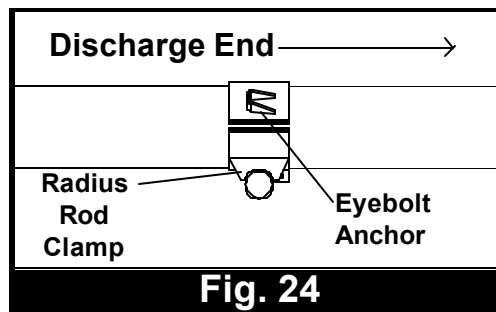


24. Radius Rod Clamp Assembly for Hydraulic Lift Augers

NOTE

Make sure the Radius Rod Clamp is directly under the Drive Shaft.

- A. For proper placement of the radius rod clamp band(s), measure from the intake end of the tube to the corresponding measurement(s) on pages 30 & 31 for your size model. Fasten the radius rod clamp band to the auger using a heavy duty halfband and six (6) 3/8" x 1-1/2" long hex head capscrews and nylon locknuts. The radius rod clamp will have eyebolt anchors welded to it. The eyebolt anchor ends **MUST** point toward the discharge end of the auger. (See Fig. 24)



25. Installing the Spacer Tube (Refer to pages 30-31)

- A. Insert the spacer tube into the collar on the radius rod clamp band. Secure the lower spacer tube end to the radius rod clamp using a 5/16" x 1-3/4" hex head capscrew and nylon locknut. **(65' and 71' Hydraulic Models do not have spacer tubes.)**

26. Installing the Track

- A. Position the track under the tube housing close to the position indicated in the drawings on page 30-31 for your size auger. Loosely attach track to tube by bolting the halfbands to the track using four (4) 5/16" x 1-1/2" (grade 5) hex head capscrews and nylon locknuts per each halfband. **(Each size auger has a different number of heavy duty halfbands. Be sure to use the appropriate halfband to assemble the track to the tube.)** Make sure the track can slide freely along the tube for final positioning.
- B. Slide the track towards the spacer tube until the spacer tube is seated into the receiver on the track. Fasten the spacer tube to the track using a 5/16" x 1-3/4" bolt and nylon locknut.
- C. **Make sure the spacer tube and track are aligned down the center along the bottom side of the tube housing.** Go back and tighten the 5/16" x 1-1/2" bolts on the halfbands.

27. Install the Intake Assembly Two Types - (Round Bottom and Open Bottom Intake Hoppers)

NOTE

If using GK3144, insert the intake guard halfbands prior to installation.

NOTE

The top halfband, for mounting the intake guard assembly, should be positioned to the discharge side (above) of the 3/8" key that is welded to the auger housing.

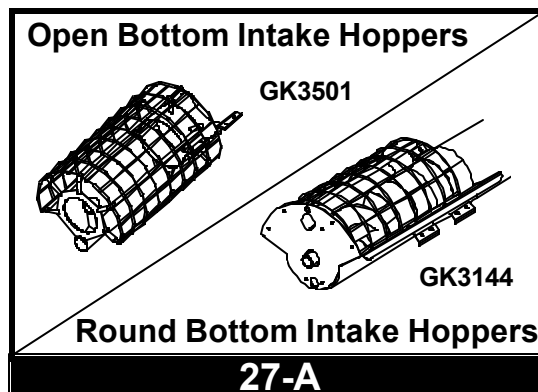
NOTE

Position the front side of the halfband closest to the intake end of the auger flush with the end of the auger housing.

- A. Attach the intake guard at the intake end of the auger housing.
- B. While sliding the intake guard on the auger housing, guide the intake stub shaft through the bearing.
- C. Secure the intake guard to the auger housing using a top halfband. Use (4) 5/16" x 1-3/4" bolts, flatwashers, and nuts.

NOTE

Do Not slide the intake guard on so far that the auger flight is in contact with the bearing. Leave 3/8"-1/2" clearance.



28. Truss Assembly for Hydraulic Lift Undercarriage

A. 47' & 53' Main Truss and 62', 65', & 71' Upper Truss Assembly (See Fig. 28-A)

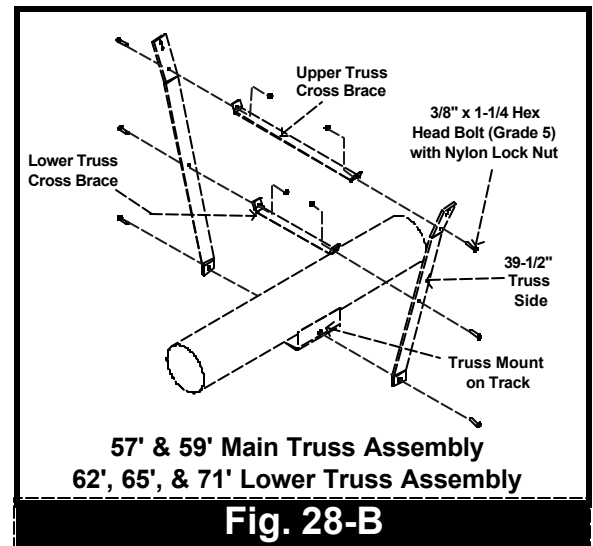
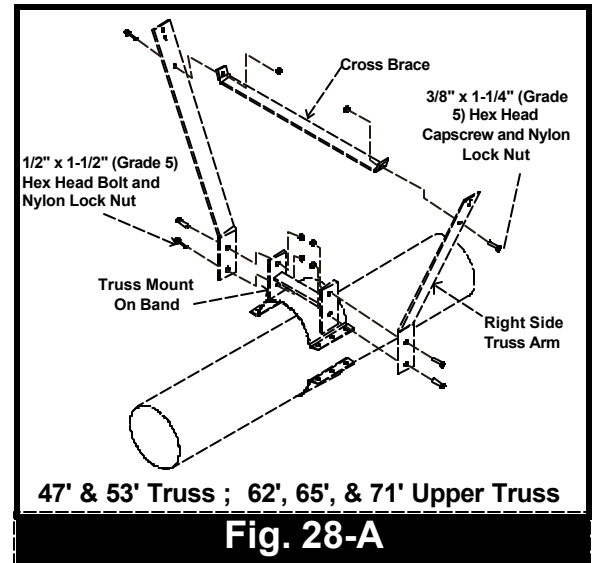
1. Attach right and left side truss arms to the left and right side of the truss mounting band using four (4) 1/2" x 1-1/2" (grade 5) hex head capscrews and nylon locknuts. **TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME.**
2. Fasten the truss crossbrace to the left and right side truss arms using two (2) 3/8" x 1-1/4" (grade 5) hex head capscrews and nylon locknuts.
3. Go back and tighten all bolts and nuts on the truss mount.

C. 57' & 59' Main Truss and 62', 65', & 71' Lower Truss Assembly (See Fig. 28-B)

1. Attach right and left truss arms to the right and left sides of the track using two (2) 5/8" x 1-1/2" hex head bolts (grade 5) with nylon locknut. **TIGHTEN ONLY FINGER TIGHT AT THIS TIME.**
2. Fasten lower and upper truss cross braces in between the right and left side truss arms using four (4) 3/8" x 1-1/4" (grade 5) hex head bolts and nylon locknuts.
3. Go back and tighten all bolts and nuts on the truss

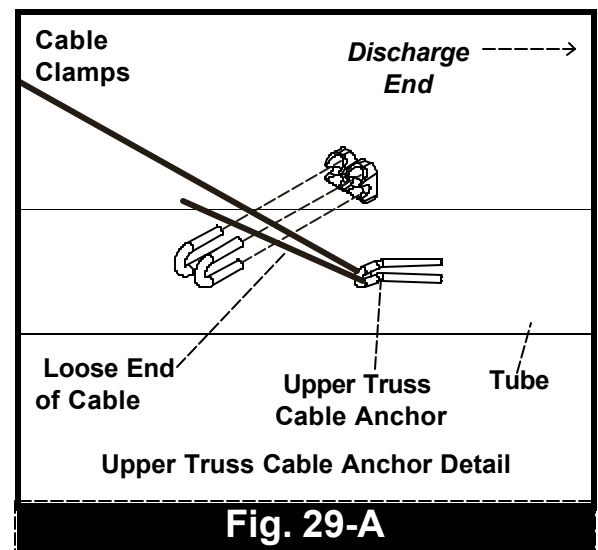
NOTE

Secure the U-Bolts against the loose end of the cable, as shown in figure 28-A.



29. Cable Assembly for 47', 53', 57', 59', and 62' Augers with Hydraulic Lift Undercarriage

- A. Start with the right side of the upper truss cable anchor (located near discharge end) that is welded to the tube. Guide the end of one cable through the cable anchor and attach the loose end of the cable to itself using two (2) sets of cable clamps. (See Fig. 29-A)
- B. Run the cables to the top right side of the truss arm and fasten the cable to the truss using a 3/8" cable clamp. **DO NOT** fully tighten the cable clamps. The cable must be able to slide freely through the clamps when taking up the slack. (See Fig. 29-B on page 34)



29. Cable Assembly for 47', 53', 57', 59', and 62' Augers with Hydraulic Lift Undercarriage (Cont.)

- C. Run the cable down to the right lower eyebolt anchor located on the radius rod clamp. Slide cable through the eyebolt and fasten loose end of cable using two cable clamps for each cable. (See Fig. 29-C.)
- D. Repeat steps 1-3 with the left side support cable and using the left side anchors.
- E. Screw eyebolts into left and right side eyebolt anchors to tighten cables and remove slack until snug. **TIGHTEN BOTH CABLES SO THEY HAVE THE SAME AMOUNT OF TENSION. DO NOT OVERTIGHTEN.**
- F. Double check to be sure all sections are straight. Minor adjustments can be made after auger is assembled.
- G. Go back and tighten cable clamps on the truss arms.

NOTE

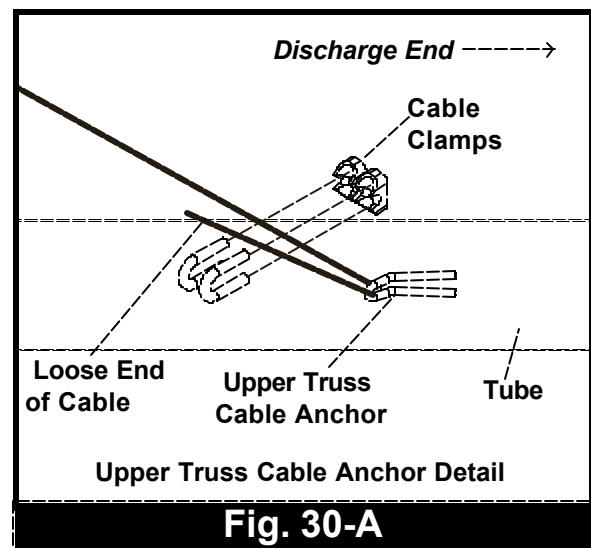
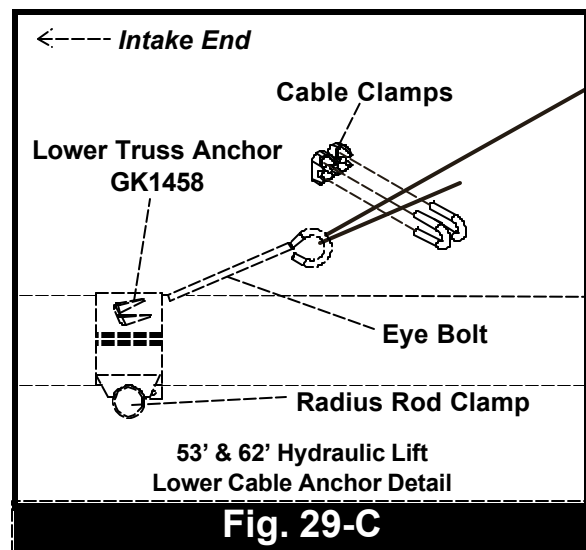
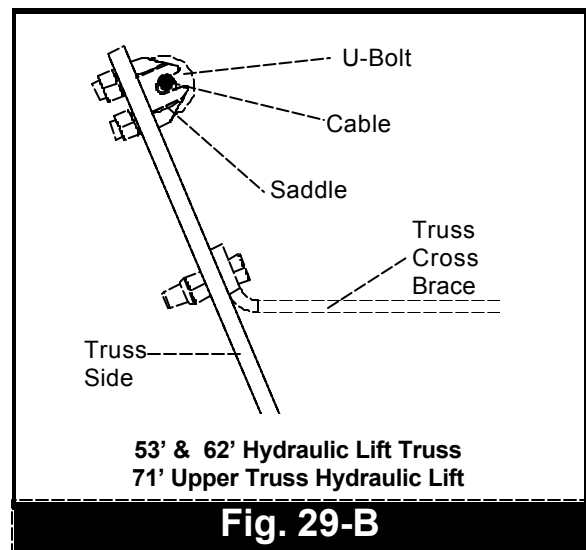
Support the end of the auger tube while tightening truss cables.

NOTE

The auger tube should have a slight upward bow when cables are tight.

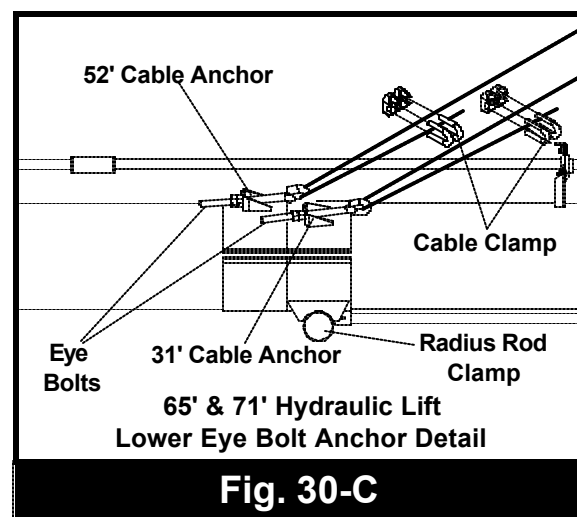
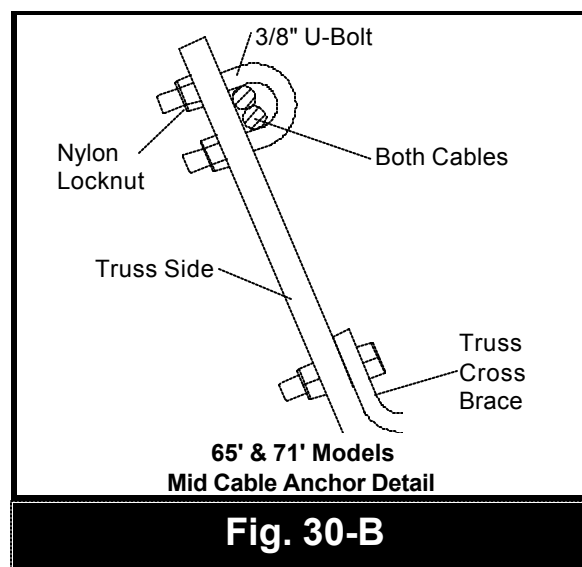
30. Cable Assembly for 65' & 71' Augers with Hydraulic Lift Undercarriage

- A. Starting with the right side upper truss cable anchor that is welded to the tube located near the discharge end, guide one end of the 52' support cable through the cable anchor and fasten the loose end of the cable to itself using two (2) 5/16" cable clamps. (See Fig. 30-A)
- B. Run the cable to the top right side of the 32" truss arm and fasten the cable to the truss using a 3/8" cable clamp. **DO NOT** fully tighten the cable clamps. The cable must be able to slide freely through the clamps when taking up the slack.
- C. Run the 52' cable down the auger to the top right side of the 39-1/2" truss arm. Then start the 31' cable.
- D. Loop the end of the 31' cable through the right side truss cable anchor located under the 32" truss arm. Fasten cable with (2) 5/16" cable clamps.



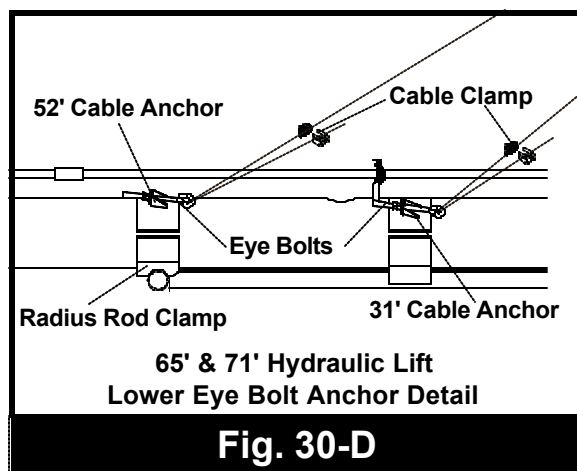
30. Cable Assembly for 65' & 71' Augers with Hydraulic Lift Undercarriage (Cont.)

- E. Gather up both the 52' and 31' cables and run both cables through the 3/8" U-Bolt and fasten. DO NOT fully tighten the cable clamps. The cables must be able to slide freely through the clamp when taking up the slack. (See Fig. 30-B)
- F. Run the 52' cable down the auger towards the bottom 6" half band. Loop end of cable through an eyebolt and fasten using (2) 5/16" cable clamps. Screw eyebolt into the eyebolt anchor that is welded on the right side of the 6" half band. (See Fig. 30-C & 30-D)
- G. Run the 31' cable down the auger to the Radius Rod Clamp. Loop end of cables through eyebolt and fasten using (2) 5/16" cable clamps. Screw eyebolt into the eyebolt anchor that is located on the bottom right side of the Radius Rod Clamp. (See Fig. 30-C & 30-D)
- H. Repeat steps 4-10 for the left side support cable using the left side cable anchors.
- I. USING THE EYEBOLT SCREWS, TIGHTEN ALL CABLES SO THEY HAVE THE SAME AMOUNT OF TENSION. DO NOT OVERTIGHTEN.
- J. Go back and tighten up all cable clamps and U-Bolts.



NOTE

The auger tube should have a slight upward bow when cables are tight.



31. Drive Shaft Cover Assembly for Hydraulic Lift Augers (Electric and PTO Driven)

There is a special two piece section of the drive shaft cover that installs between the gearbox and the first bearing stand. It telescopes together to vary in length. This telescoping cover consists of a standard piece that telescopes into a special piece of cover with a retaining bottom edge.

A. Installing a two-piece drive shaft cover. (See Fig. 31-A)

1. Center the slots in the covers over the hole in the mounting bracket.
2. Place the 1/4" x 1" O.D. flatwasher over the slot in the cover and drive the self-tapping slotted hex head screw through the hole in the mounting bracket.
3. Tighten the metal screw down to the flat washer and cover. **DO NOT** over tighten and strip out the hole in the mounting bracket.

CAUTION The two(2) piece telescoping cover should overlap at least 6" for proper installation.

B. To install a one-piece drive shaft cover (See Fig. 31-A)

1. Center the slots in the covers over the hole in the mounting bracket.
2. Place the 1/4" x 1" O.D. flat washer over the slot in the cover, and drive the self tapping slotted hex head screw through the hole in the mounting bracket.
3. Tighten the metal screw down to the flatwasher and metal cover.

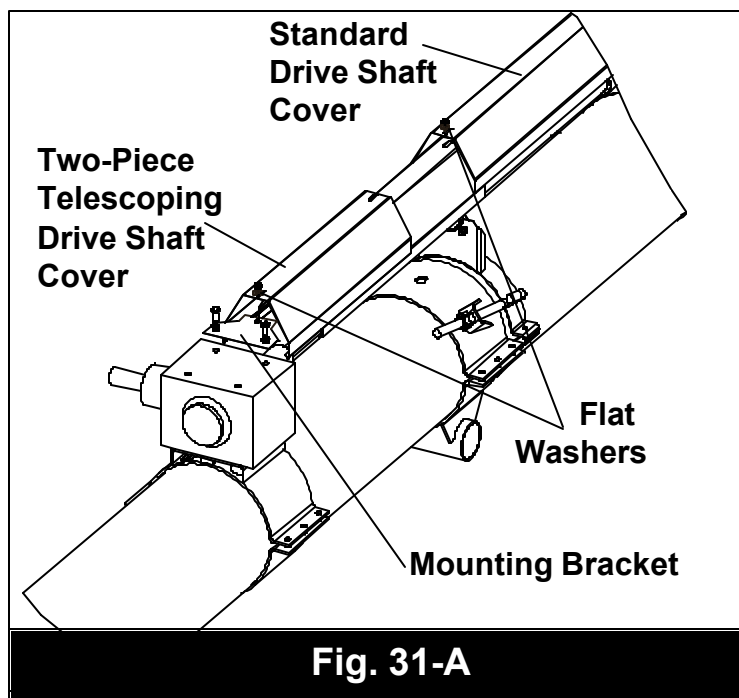
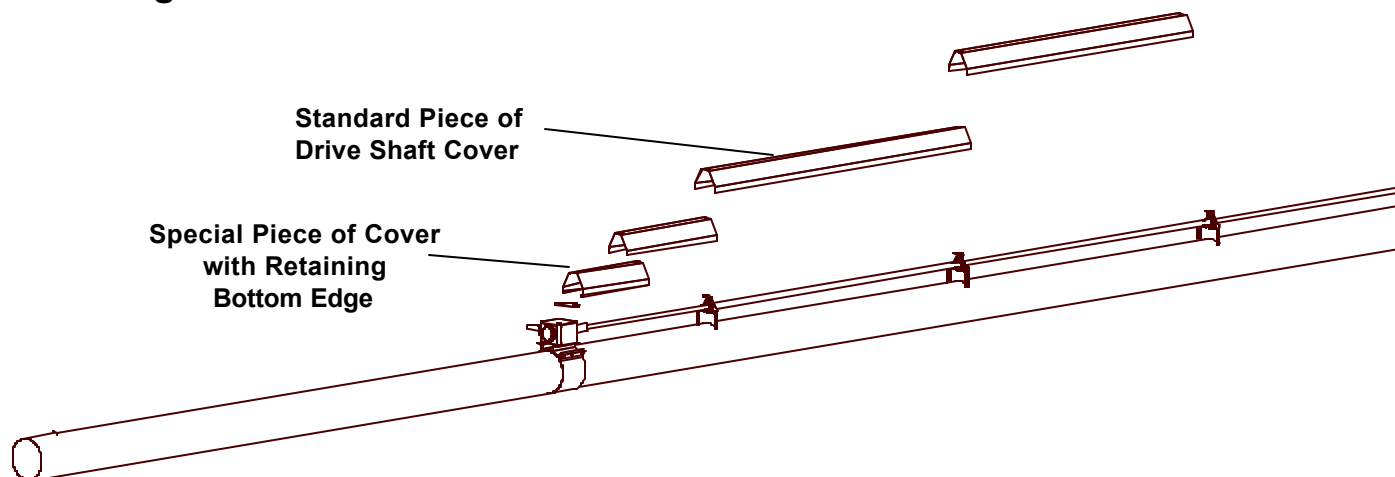


Fig. 31-B



31. Drive Shaft Cover Assembly (Cont.) (Electric and PTO)

- A. Attach the drive shaft covers to the auger housing. Mount the covers to the drive shaft mounting brackets located along the auger housing.
- B. Secure the covers with 1" O.D. flatwashers and slotted hex head screws.

NOTE

Refer to the drawings below to reference the drive shaft covers for the Electric and PTO driven top drives. Begin at the intake end and work your way toward the output end overlapping the covers at each bearing stand. *ELECTRIC DRIVE IS SHOWN*

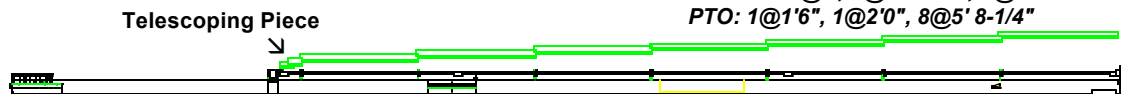
47' Model

Electric: 1@1'6", 1@5'0", 6@5' 8-1/4"
PTO: 1@1'6", 1@2'0", 7@5' 8-1/4"



53' Model

Electric: 1@3', 7@5' 8-1/4", 1@1' 6"
PTO: 1@1'6", 1@2'0", 8@5' 8-1/4"



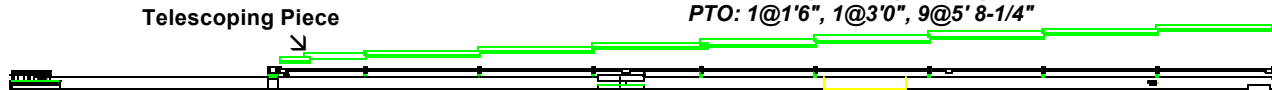
57' Model

Electric: 1@1'6", 1@5'0", 7@5' 8-1/4"
PTO: 1@1'6", 1@1'0", 9@5' 8-1/4"



59' Model

Electric: 1@1'6", 1@2'0", 8@5' 8-1/4"
PTO: 1@1'6", 1@3'0", 9@5' 8-1/4"



62' Model

Electric: 1@1'0", 1@8", 9@5' 8-1/4"
PTO: 1@5'0", 1@1'6", 10@5' 8-1/4"



65' Model

Electric: 1@1'6", 1@0'8", 9@5' 8-1/4"
PTO: 1@1'6", 1@3'0", 10@5' 8-1/4"



71' Model

Electric: 1@1'6", 1@4'0", 9@5' 8-1/4", 1@0'8", 1@1'6"
PTO: 1@1'6", 1@2'0", 11@5' 8-1/4", 1@0'8", 1@1'6"



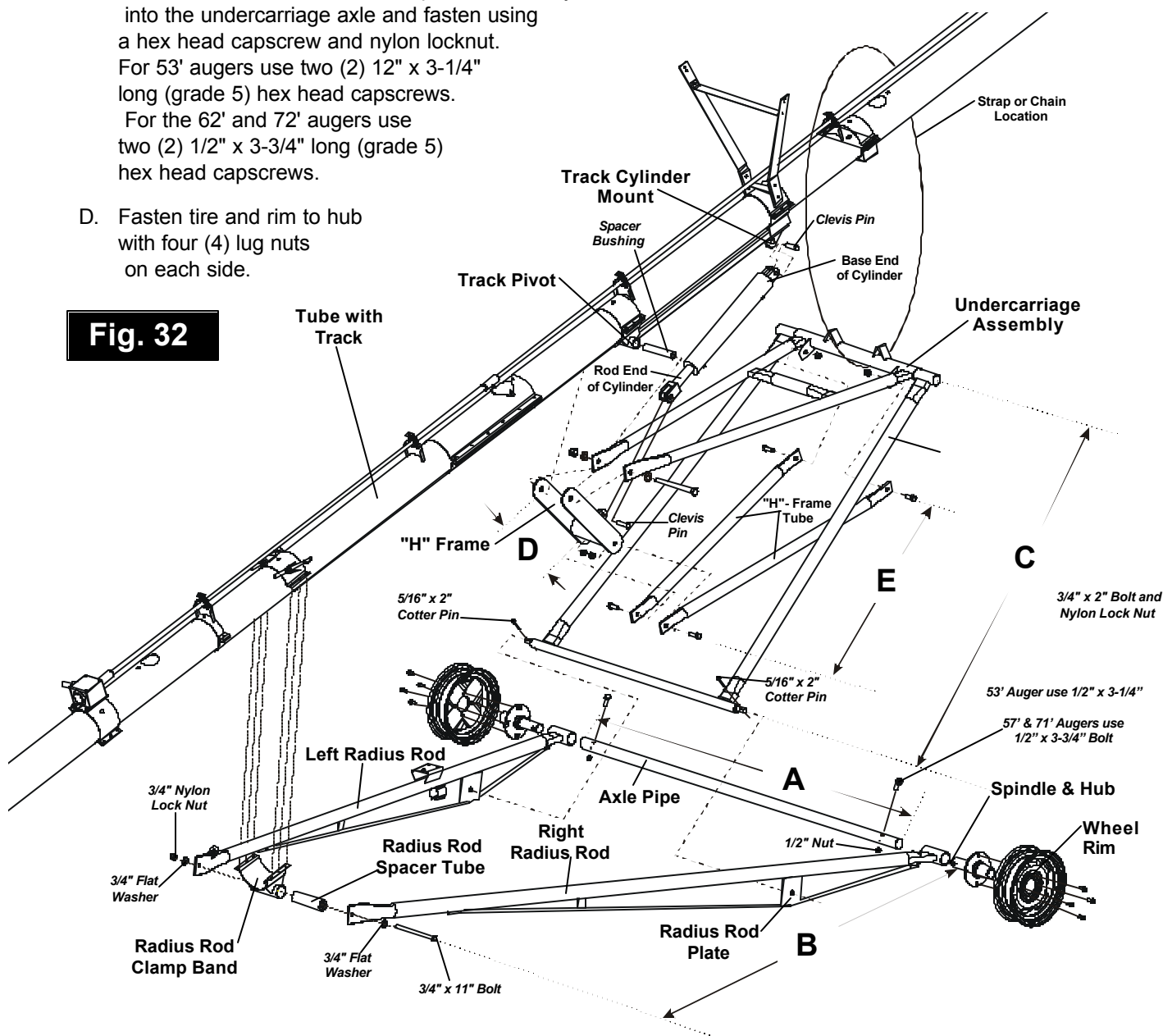
DANGER

DO NOT operate the auger without all drive shaft covers in place.

32. Hydraulic Undercarriage Assembly

- Place the left and right radius rod clamps close to positions shown in Fig. 32 below. The flattened ends of the radius rods must be facing towards the intake end of the auger. The left radius rod clamp with the winch mount **MUST** be on the left side, which is your left hand side when facing the discharge end. Place undercarriage frame between the radius rods.
- Insert the pivot shaft into the square plates on the radius rods. Secure using one 5/16" x 2" cotter pin for each pivot shaft.
- Guide the axle shaft through the short pipes at the end of the radius rods. Slide the hub and spindle assembly into the undercarriage axle and fasten using a hex head capscrew and nylon locknut.
For 53' augers use two (2) 12" x 3-1/4" long (grade 5) hex head capscrews.
For the 62' and 72' augers use two (2) 1-1/2" x 3-3/4" long (grade 5) hex head capscrews.
- Fasten tire and rim to hub with four (4) lug nuts on each side.

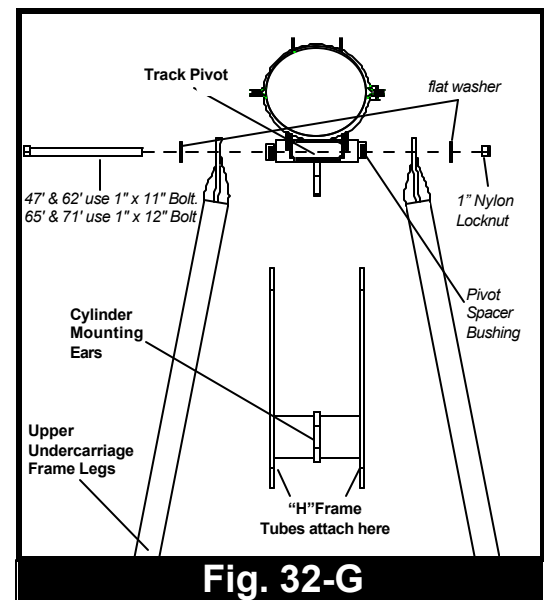
Fig. 32



Hydraulic Lift Models	47'	53'	57'	59'	62'	65'	71'
"A" - Axle Spacer Tube Length	94.50"	94.50"	93.00"	93.00"	93.00"	120.00"	120.00"
"B" - Radius Rod Length	146.00"	146.00"	176.75"	176.75"	176.75"	209.25"	209.25"
"C" - Undercarriage Frame	88.50"	88.50"	102.75"	102.75"	102.75"	115.00"	115.00"
"D" - H-Frame (Center to Center of Holes)	19.25"	19.25"	19.25"	19.25"	19.25"	26.625"	26.625"
"E" - H-Frame Tubes (Overall Length)	64.50"	64.50"	82.50"	82.50"	97.00"	97.00"	97.00"
"F" - Size of Hydraulic Cylinder	4" Bore X 24" Stroke	4" Bore X 24" Stroke	4" Bore X 24" Stroke	4" Bore X 24" Stroke	4" Bore X 24" Stroke	4" Bore X 36" Stroke	4" Bore X 36" Stroke

32. Hydraulic Undercarriage Assembly (Cont.)

- E. Place strap or chain around the auger tube housing about 1/3 of the way down from the discharge end. Use a lifting device and lift the auger tube about approximately 6' from the ground. Roll the undercarriage into position under the tubing. (See Fig 32 on pg 38)
- F. Insert the pivot spacer tube into the track pivot tube welded to the bottom of the track at the discharge end.
- G. Raise the upper undercarriage frame legs fasten the H-Frame and upper legs through the track pivot tube using a 1" x 11" (grade 5) hex head cap screw and nylon locknut on 47' & 62' augers or a 1" x 12" (grade 5) hex head capscrew and nylon locknut on 65' & 71' augers. (See Fig. 32-G)
- H. Fasten the "H" frame tubes to the lower end of the "H" frame with 3/4" x 2" long (grade 5) hex head capscrew and nylon locknut.



NOTE

Turn H-frame so cylinder mounting ear points toward the auger discharge end.

- I. Fasten the other end of the "H" Frame tubes to the ears on the undercarriage crosstube with two (2) 3/4" x 2" long (grade 5) hex head capscrews and nylon locknuts.
- J. Wrap a chain or heavy duty strap around the auger tube and undercarriage frame. The chain or strap must be tight to keep the undercarriage from opening when the tube is raised to attach the radius rods to the radius rod clamp.
- K. Insert the radius rod spacer tube into the radius rod clamp band. Then, insert a 3/4" x 11" long (grade 5) hex head capscrew through a flat washer, the right radius rod, and through the spacer tube to the left side. Then through the left radius rod, another flat washer and a nylon locknut.
- L. Double check that all undercarriage bolts and fasteners are tight and assembled correctly.

⚠ DANGER

Before releasing the lift. Make sure the intake is on the ground, and the trolley is touching the down stop. Check the transport height of the auger by measuring the distance from the top of the auger's discharge end to the ground. Double check your measurement with the chart on page 47. If they don't fit into the range on the chart for your size auger go back double check the following!

1. **Location of radius rod clamp and track.** (See pages 30-31.)
2. **The length of the undercarriage components.** (See page 38.)
3. **The length of auger tubes.** (See pages 7-8.)
4. **Is the discharge end of the auger tube sagging because the truss cables require tightening?** (See page 33-35.)

If you have double checked all of the above items and your measured discharged height is **NOT** in the range specified in the transport height chart on page 47, call your dealer or the factory immediately.

DO NOT CONTINUE TO ASSEMBLE THE AUGER and do not release the hoist with the auger in this condition.

- M. When the transport height is correct as described above, the lifting device may be released.
- N. Attach the hydraulic cylinder to the cylinder mounting ears on the "H" frame using mounting pin and keeper clip that is furnished with the cylinder. (See Fig. 32-G)

⚠ WARNING

The base of the cylinder must be attached to the mount on the track. The rod end of the cylinder will be attached to the cylinder mounting ears on the "H" frame. The cylinder ports must be facing the left side of the auger when viewing the auger from the intake end.

The cylinder furnished with your auger has a restrictor in the port at the base. This restrictor limits the speed the auger is raised or lowered. Only use the cylinder provided with the auger. **DO NOT** use a cylinder that does not have the proper restrictor.

33. Hydraulic Hose Assembly

1. Thread the 90° street elbow into the upper cylinder port at the base end of cylinder.
2. Attach the swivel end of the hydraulic hose to the street elbow and tighten. (See Fig. 33-A.)
3. Starting at the cylinder end of the hose, fasten the hydraulic hose to the auger tube using the hose mounting clamps located on the half bands located along the auger tube. (See Illustrations on page 41 for the number of clamp for your size auger.)
4. Thread the female end of the shut-off valve onto the end of the hydraulic hose.

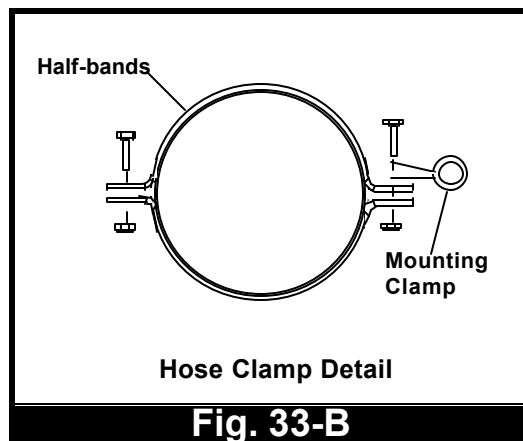
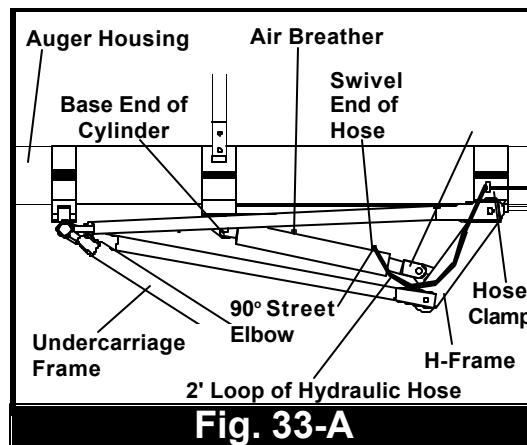
CAUTION

Leave a loop of hose approximately 2' in length to allow enough hose to be extended when the auger is fully raised.

5. Check all of the fittings and connections to see if they are tight.

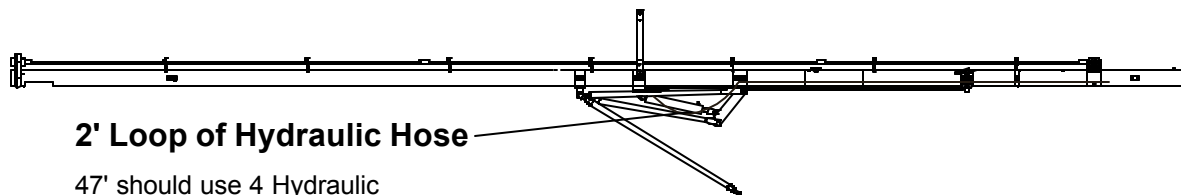
WARNING

Do NOT disconnect or connect the hydraulic components when there is ANY pressure within the system. These systems are very pressurized. If any hydraulic oil is released, even an invisible leak, it can penetrate body tissues and cause critical injury. Always use a piece of cardboard or wood when searching for leaks. NEVER use hands or other body parts. Make absolutely certain that all connections are tightened during reassembly. If injured by the releasing of pressurized hydraulic oil, seek medical attention IMMEDIATELY! Severe infection or reaction is possible if medical attention is not

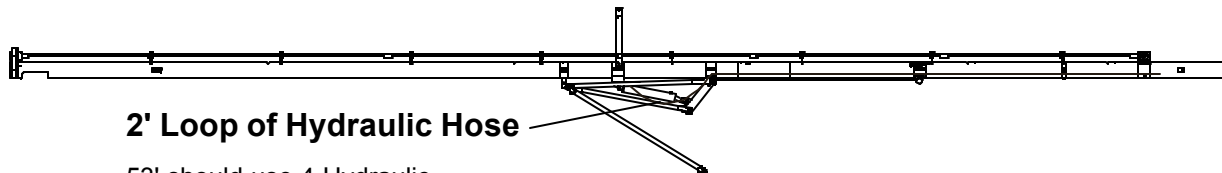


34. Hydraulic Hose Clamp Locations

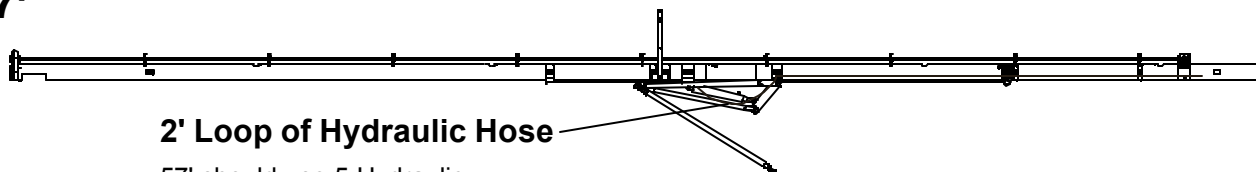
Space clamps evenly along the auger tube, making sure it is tight against the tube. Leave a two foot loop of hose where it attaches to the hydraulic cylinder so it has enough length to expand when the undercarriage is raised.

47'

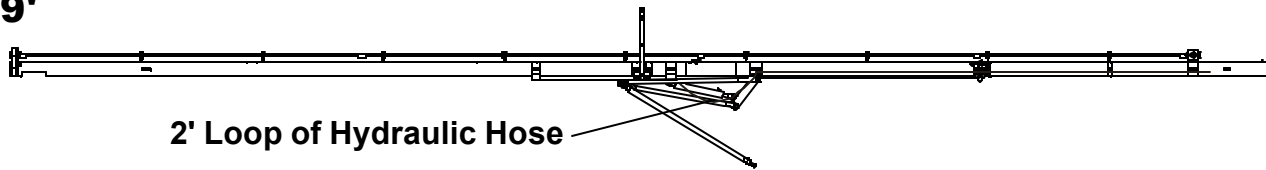
47' should use 4 Hydraulic Hose Mounting Clamps.

53'

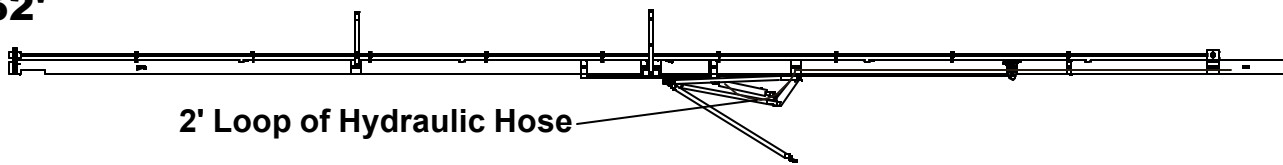
53' should use 4 Hydraulic Hose Mounting Clamps.

57'

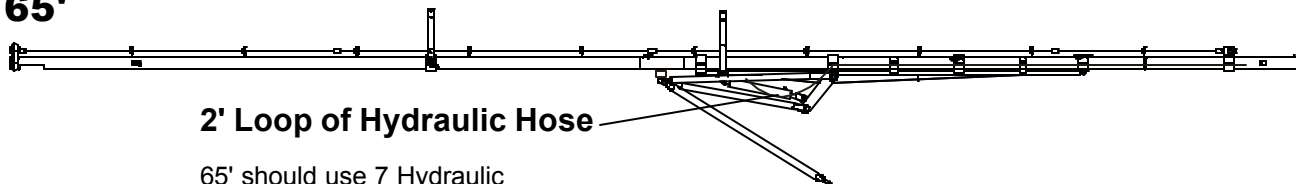
57' should use 5 Hydraulic Hose Mounting Clamps.

59'

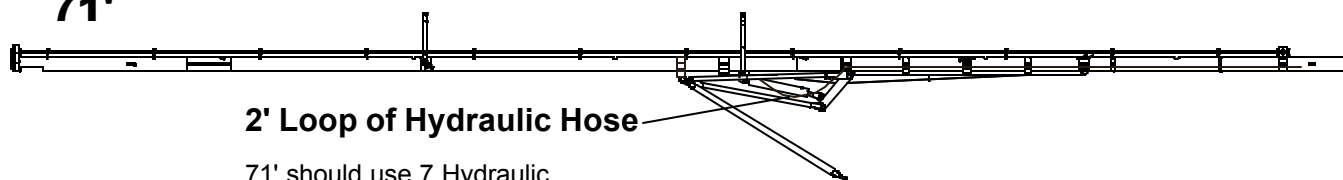
59' should use 5 Hydraulic Hose Mounting Clamps.

62'

62' should use 5 Hydraulic Hose Mounting Clamps.

65'

65' should use 7 Hydraulic Hose Mounting Clamps.

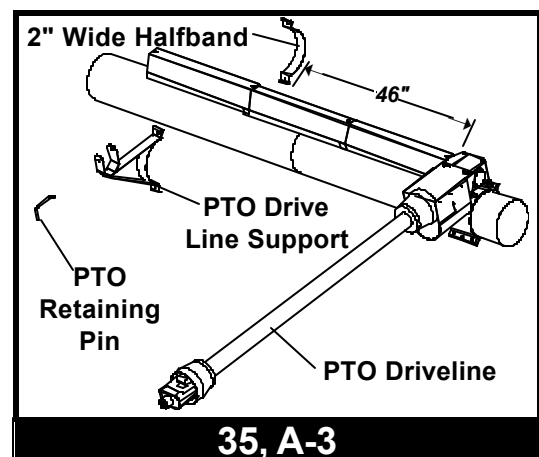
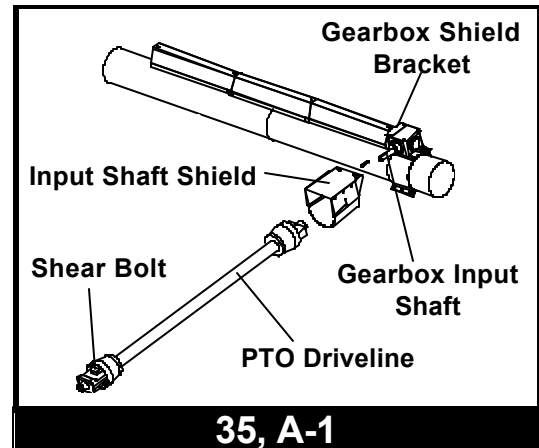
71'

71' should use 7 Hydraulic Hose Mounting Clamps.

35. Drive Kit Assembly for both Hydraulic & Manual Lift Augers

A. PTO Drive

1. Place the PTO shield onto the top of the gearbox.
2. Secure the PTO shield using two (2) 3/8" x 3/4" bolts, lockwashers and flatwashers.
3. Place the PTO driveline support 46" up the auger housing from the center of the gearbox and attach it to the auger using a halfband and two (2) 5/16" x 1-1/2" long (grade 5) hex head bolts and nuts. Position the PTO driveline support to the auger so that the PTO driveline is parallel with the drive shaft cover.
4. Install the retaining pin by slipping the short bent end of pin through the hole in the PTO driveline support and through the slot of the other side. Allow the long end of the pin to rotate downward. This will secure the pin in place. Set the PTO driveline into the support to be sure that the support is installed properly.
5. Attach PTO driveline to gearbox, using 1/4" x 1 1/2" long drive key.
6. Tighten set screw.



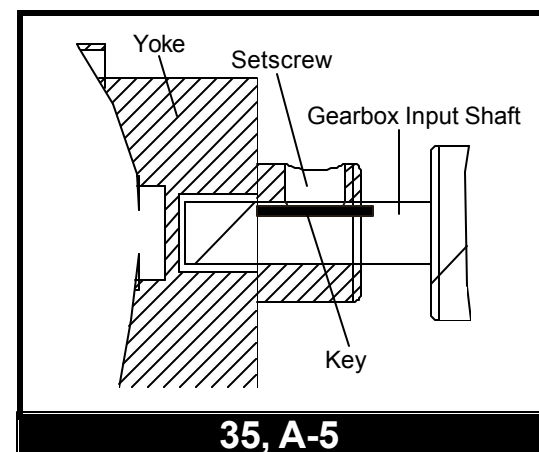
NOTE

P.T.O. Drives can be driven from either the right or left hand side of the auger. All illustrations show gearbox in left hand drive position.

To change the drive for a right hand drive, turn the gearbox over and bolt the other side to the gearbox mount. The vent plug in the gearbox must be put on the top side of the box. The PTO driveline support is installed on the other side of the auger housing.

NOTE

The PTO driveline is equipped with a shear bolt at the tractor connection. The shear bolt protects the auger from damage if the auger becomes plugged or subjected to high loads. It is important to use the correct replacement bolts of the proper size and strength to insure that the shear device will protect the auger and operator.

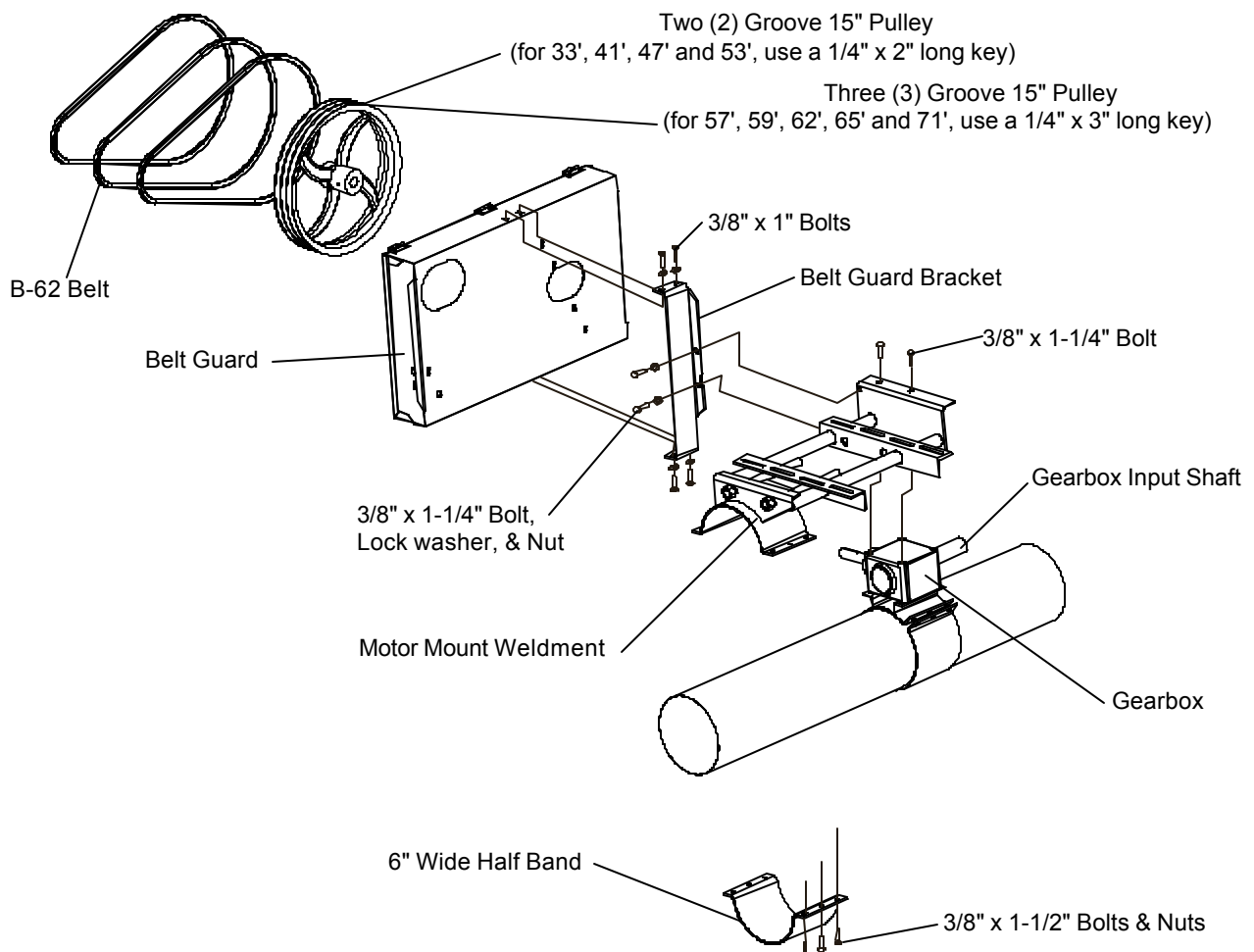


36. Drive Kit Assembly for both Hydraulic & Manual Lift Augers (cont.)

B. Electric Drive (See Fig 36-B)

1. Assemble the motor mount to the auger housing by attaching the halfbands. Secure the halfbands with six (6) 3/8" x 1-1/2" bolts and nuts.
2. Secure the bracket located on the end of the motor mount weldment to the gearbox with two (2) 3/8" x 1" bolts, flat washers and locknuts.
3. Attach the belt guard bracket to the belt guard with four (4) 3/8" x 1-1/4" bolts, lockwashers, flatwashers, and nuts.
4. Secure the belt guard bracket to the motor mount with two (2) 3/8" x 1" bolts, lockwashers, and nuts.
5. Attach the pulley to the gearbox input shaft. Secure the pulley with 1/4" x 2" key for 33', 41', 47', & 53' models and use a 1/4" x 3" key for 57', 59', 62', 65', & 71' models. Tighten the set screws with a hex head wrench.
6. Install a motor to the motor mount. **The motor, motor pulley, and the hardware used to attach it to the motor mount are not supplied.**
7. Install the motor pulley to the motor pulley shaft.
8. Install the belts.

FIG. 36-B
Top Mounted Electric Motor Drive Assembly

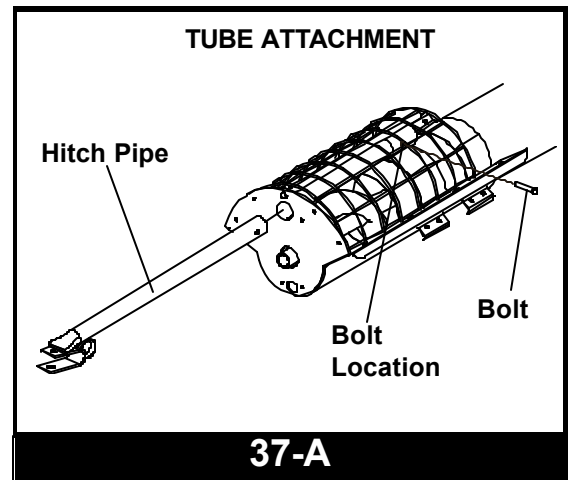


37. Install the Hitch.

- A. Attach the hitch to the tube attachment anchor with one (1) 7/16" x 2 1/2" long (grade 5), hex head bolt, lockwasher and nut. (See Fig. 37-A)

38. Operator's Manual Container.

- A. Check that an operator's manual is in the plastic container.
- B. Snap the container into the holder located on the left radius rod arm.



1. Designate Work Area.

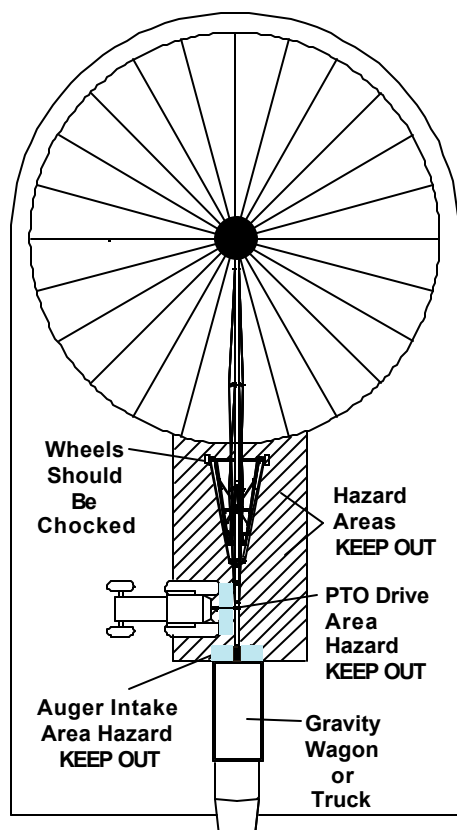
- A. Before starting the auger, establish the designated work areas. The diagram below shows where boundaries should be established.
- B. Mark off the designated work areas using colored nylon or plastic rope as portable barriers.

⚠ DANGER

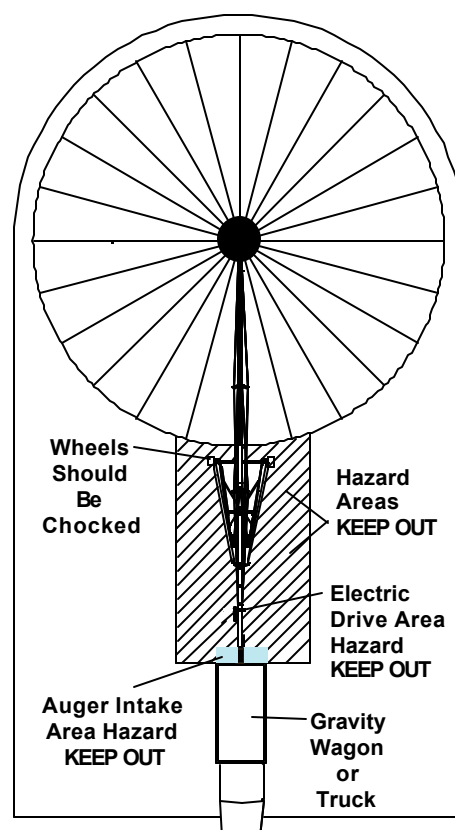
RULES FOR A SAFE WORK AREA

Under no circumstances should persons not involved in the operation of the auger be allowed to trespass into the designated work area. It is the duty of ALL operators to ensure that children and/or other persons stay out of the work areas. Should anyone not involved in the operation trespass into the work area or into a hazard area, the operator should immediately shutdown the auger.

It is the responsibility of ALL operators to ensure that the work area has secure footing, and is clean and free of debris and tools that might cause accidental tripping or falling. The operator is also responsible for keeping the work area clean and orderly during operation of the auger.



PTO DRIVE



ELECTRIC DRIVE

2. Inspect the Auger.

- A. After your new auger is delivered and assembly is complete, and before each use, you must inspect the auger.
- B. Be sure that ALL guards listed in the assembly instructions are in place, secured, and functional.
- C. Be sure that the shields on the PTO rotate easily.
- D. Check ALL safety decals. Replace any that are worn, missing, or illegible. A list of decals found on the auger is included in the front of this manual. You may obtain decals from your dealer or from the manufacturer.
- E. Check winch and cable to ensure they are secure and operational.

2. Inspect the Auger (cont.)

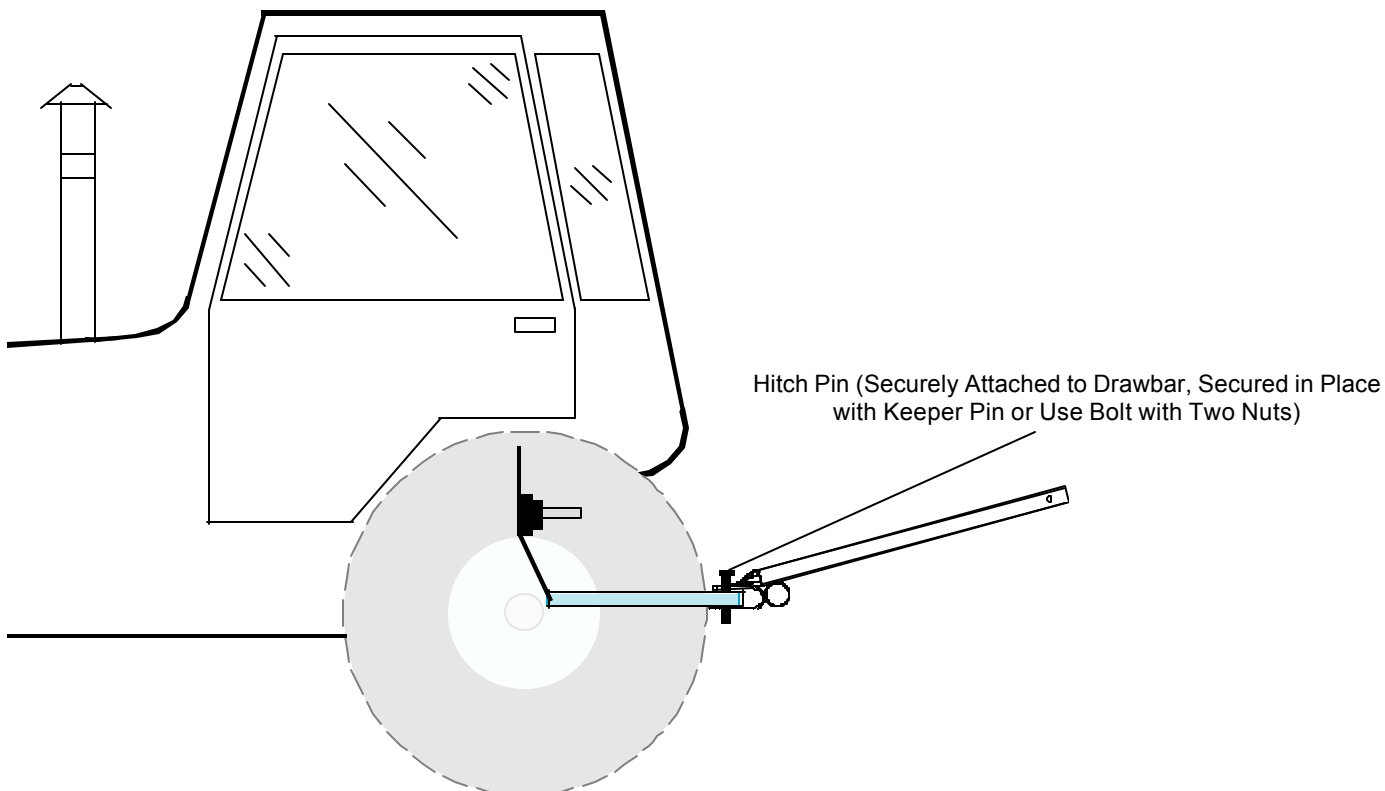
- F. Ensure that ALL fasteners are tight.
- G. Check the hydraulic hose and fittings to ensure they are tight and are not leaking hydraulic oil.
- H. Check the oil level in ALL gearboxes. The **Maintenance** section of this manual gives oil level recommendations.
- I. Ensure that the inspection covers are in place.

3. Hitch Auger to Tractor.

▲CAUTION Empty the machine before moving it to prevent upending.

▲WARNING NEVER stand between the tractor and the auger when hitching unless ALL controls are in neutral and the brakes are locked.

- A. Lift the auger intake to the height of the tractor drawbar. NEVER raise the intake end higher than necessary to attach to a towing vehicle because weight transfers rapidly to the head end when the intake is raised.
 - B. Attach the hitch clevis to the tractor drawbar using either the hitch pin and keeper, or a bolt with two (2) nuts.
- Refer to the figure below.
- C. **DO NOT** attach the PTO driveline to the tractor at this time. It will be attached after placement of the auger.



NOTE

A safety chain (auxiliary attachment system) is required on public roads to retain the connection between towing and towed machines in case the primary attachment system separates.

4. Transport the Auger.

- A. Before moving your portable auger, carefully consider the route you will follow to the designated work area. A route plan should be considered beforehand to avoid dangerous obstacles and loss of time.
- B. If you have marked off the designated work area using colored nylon or plastic rope as portable barriers, be sure to allow room for the tractor and auger to pass through.
- C. Move the auger with a tractor to and from the work area. If you need to move the auger over greater distances, use a pick-up truck or other suitable vehicle.
- D. Follow these recommendations when transporting the auger:
 1. Always transport the auger in the full-down position. This will prevent lowering of the hopper during transport.
 2. Make sure the hitch is secured to the tractor.

	Auger Size	Transport Height	Auger Size	Transport Height
Manual Lift	33'	9' 0"	47'	N/A
	41'	10'	53'	13' 4"
	47'	12'	57'	N/A
	53'	13'-1"	59'	N/A
	57'	12' 6"	62'	13' 2"
	59'	13' 2.5"	65'	12' 5"
	62'	13' 4"	71'	N/A
	65'	12' 10"		
	71'	13' 5 "		
		Hydraulic Lift		

NOTE

Overall transport height is with auger fully lowered and the intake on the ground. When the auger is attached to a towing vehicle, these heights will be approximately 12" less.

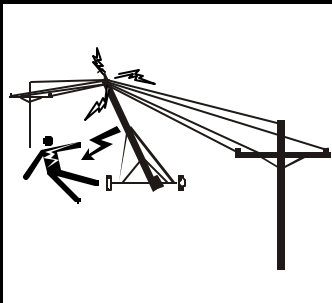
WARNING

Be careful making turns and AVOID SHARP TURNS.

⚠ DANGER

Watch for overhead obstructions and electrical wires. Failure to do so may result in electrocution. Before you begin transport, lower the auger well below the level of power lines. Maintain at least ten (10) feet of clearance. The chart above gives the recommended height of each portable auger in the lowered transport position. Refer to the chart to determine at what height you should transport your auger.

NEVER allow persons to stand under or ride on the auger during transport. Do not transport the auger at speeds in excess of 20 M.P.H. Comply with state and local regulations governing towing vehicles and maximum width. Observe safe driving and operation practices.



⚠ DANGER

ELECTROCUTION!!

STAY CLEAR OF POWER LINES!

- THIS EQUIPMENT IS NOT INSULATED FROM ELECTRIC SHOCK.
- KEEP EQUIPMENT AWAY FROM POWER LINES.
- ELECTROCUTION CAN OCCUR WITH OR WITHOUT DIRECT CONTACT.

FAILURE TO HEED WILL RESULT
IN SERIOUS INJURY OR DEATH!

DC-1412

5. Placing the Auger in Work Area.

A. Placing the Auger—Use a towing vehicle to move the auger into its working position within the designated work area. Placing the auger consists of three (3) steps:

1. Locating the auger next to the bin.
2. Raising the auger.
3. Backing the auger into position.

1. Locate Auger

- A. Locate the discharge end of the auger as close as possible to the bin or other structure.
- B. When moving the auger toward the working position, leave adequate room so the Top-End Drive Transport Auger can be deployed. Also allow room for a convenient path for the loaded vehicle to reach the Top-End Drive Transport Auger.
- C. Raise into position.

DANGER

Make sure everyone is clear of the work area when moving the auger. To prevent the auger from tipping over while backing, avoid rolling over any obstructions. Also avoid moving the auger at right angles to a slope. If the auger is to rest on a slope, approach the bin uphill.

Be certain that the entire area above the auger and in the line of travel is clear of overhead obstructions and electrical wires. Failure to do so may result in electrocution. Maintain at least ten (10) feet of clearance.

- C. Position the auger so the tractor and auger will be in a straight line during grain conveying operation.
 1. Place the auger on a level surface. The wheels must be allowed to roll freely while the auger is being raised. Be sure there are no obstructions in the area.
 2. Attach the PTO driveline to the tractor by completing these steps:
 - a. Slide the driveline end onto the tractor PTO output shaft.
 - b. Compress the spring keeper on the PTO driveline and continue to slide it onto the tractor PTO output shaft until the keeper sets in the groove on the tractor PTO output shaft.
 - c. The spring keeper returns to its original position and the PTO driveline locks onto the tractor PTO output shaft.

WARNING

Make sure the tractor is exactly in line with the auger while the PTO is operating.

2. Raise Auger

- A. Raise the auger only high enough to allow minimum clearance above the bin.

5. Placing the Auger in Work Area (cont.)

3. Back Into Position

- A. Slowly back the auger with the tractor so that the discharge end of the auger is positioned over the bin or grain storage structure. **DO NOT** back the auger by hand.
- B. Lower the auger until the discharge spout or auger discharge is directly over the bin hole opening.

CAUTION

If you discharge grain into a grain spreader, maintain at least twelve (12) inches of space between the auger discharge and the spreader. The discharge end will lower as the auger fills with grain during operation.

- C. Place the tractor in "Park," set the brake, and chock the wheels by placing a board or cement block in front and behind the wheels.
- D. We recommend securing the auger to the ground to prevent possible wind damage. Remember to untie the auger before attempting to move it.
- E. **DO NOT** increase the height of the auger by placing the wheels on blocks, lumber, or by other means.

1. Operation Recommendations.

- A. One person must be in a position to monitor the operation of the auger at ALL times. That person should visually inspect the auger before and during operation and be alert to any unusual vibrations, noises, and the loosening of any fasteners.
- B. For smoother start-ups, keep the auger from operating totally filled. This will also help ensure efficient operation.
- C. To avoid excessive wear, do not operate the auger empty for any length of time.
- D. You must “break-in” the auger when it is new and at the beginning of each season. Refer to Step 2, below for instructions.
- E. Only use an Agricultural Tractor with 540 RPM Power Take-Off (PTO).
- F. To avoid damage and excessive wear of the augers:
 - Do not operate the auger at speeds in excess of 540 RPM.
 - Do not operate the auger at speeds below 450 RPM.

WARNING

Be certain to close ALL the clean-out doors and inspection doors in the main auger hopper before operating the auger.

The operator should not add power before viewing the entire work area and checking that ALL personnel are clear of the designated work areas.

The operator should be alert to any unusual vibrations or noises that might indicate a need for service or repair during the initial startup and break-in period.

The operator should regulate the grain flow into the main auger by controlling the amount of grain fed into the hopper. Avoid plugging the main auger by overfeeding the hopper.

Be certain that ALL safety shields and devices remain in place during operation.

Ensure that hands, feet, and clothing are kept away from moving parts.

Stop the engine and lockout the power source whenever the equipment must be serviced or adjusted.

2. Startup and Break-In.

- A. Any auger that is new or has set idle for a season needs to go through a “break-in” period.
- B. Before you start the tractor, be sure the PTO driveline is securely attached to the auger and the tractor. Make sure the Top-End Drive Transport Auger is in a working position.
- C. Be sure that power to the PTO is **OFF**.

CAUTION

Be certain that the shaft shield rotates freely on the shaft before engaging the PTO driveline.

- D. Turn on the tractor.
- E. Engage the PTO (by turning the switch to **ON**, engaging the lever, or whatever means necessary) at a slow RPM to minimize shock loads.
- F. Do not allow the auger flighting to “load up” at low speed. If this occurs, high torque must be used to turn the auger flighting, and this can damage the auger.

2. Startup and Break-In (cont.)

- G. Run the auger at partial capacity until several hundred bushels of grain have been augered and the flighting assembly and tube are polished.
- H. When the screw and tube are polished and smooth, slowly work up to the recommended speed and run the auger at full speed.
- I. Run the auger at partial capacity when using an electric drive motor.

CAUTION

Do not stop or start the auger under load because the auger has a tendency to “freeze up,” especially if the flight and tube have not become well polished.

NOTE

You will minimize shock loads by engaging the PTO at a slow RPM, then increasing the RPM to the recommended speed.

1. Normal Shutdown.

- A. Make sure that the auger is empty before shutting down the unit.
- B. Slow down the RPM.
- C. Turn off the tractor or electric motor.
- D. Before the operator leaves the work area, the power source should be locked out, as described on below.

CAUTION

Precaution should be made to prevent anyone from operating the auger when the operator is absent from the work area. The operator must stop the auger and turn off the power source any time he/she must leave the work area, or service or adjust the auger.

2. Intermittent Operation Shutdown.

CAUTION

Do not stop and restart the auger when it is fully loaded. This may damage the auger.

- A. During intermittent operations such as batch drying, give careful consideration to the size of auger to use. Using a larger diameter auger and reducing its load level is far better than subjecting a smaller diameter auger to high loads. An auger that is kept from absolute filling will startup easier and convey more efficiently.

3. Emergency Shutdown.

- A. If you have to immediately shutdown the auger under load, **be sure to disconnect and lockout the power source.**
- B. Remove as much grain from the hopper and auger that you can before restarting.
- C. **Never** attempt to restart the auger when it is full.

CAUTION

Starting the auger under load may result in damage to the auger. Such damage is considered abuse of the equipment.

- D. When as much grain as possible has been cleared from the hopper and the auger, reconnect the power source and clear the remaining grain gradually.

4. Lockout.

- A. To lockout the auger, stop the auger and turn off the power supply.
- B. Remove the ignition key or coil wire from the power source. If this is not possible, remove the PTO driveline from the work area.
- C. The operator should lockout the Top-End Drive Auger in the following situations:
 - Anytime the operator leaves the work area, such as after shutdown.
 - Anytime the operator services or adjusts the auger.

5. Relocate the Auger.

- A. After you are finished conveying the grain, you should move the auger away from the bin and lower it. The auger can then be moved to a different bin for more conveying or cleaned and stored.
- B. Relocating the auger consists of three (3) steps:
 - 1. Disconnect the PTO driveline and place it in storage position.
 - 2. Move the auger from bin or storage area.
 - 3. Lower the auger.
 - 4. Move the auger to next bin or storage area.

6. Move Auger from Bin.

- A. Empty the auger and clean up the work area.
- B. Untie any anchors and remove all supports.
- C. Remove the wheel chocks.
- D. Raise the auger so that the discharge spout is clear of the bin opening.
- E. Slowly move the auger away from the bin.

CAUTION

When moving the auger, do not make turns while the PTO driveline is attached to the tractor. Maneuvering with the PTO driveline attached will result in damage to the driveline that is not covered by the warranty.

7. Lower the Auger.

- A. Lower the auger immediately after moving the auger away from the bin or storage structure.

▲ CAUTION

You should lower the auger even if you are relocating it a short distance away, such as to another bin in the immediate area.

8. Move Auger to Next Bin or Storage Area.

- A. Carefully move the auger to the next bin or storage area.
- B. It is recommended that the auger be stored in the full down position.
- C. Thoroughly inspect the auger.

9. Unhitch the Auger.

NOTE

If you must disconnect the tractor from the auger in the raised position, secure the auger to the ground to prevent wind damage.

- A. Chock the auger wheels to prevent the auger from rolling.
- B. Remove the safety chain and hitch pin.
- C. Disconnect the tractor from the auger.

▲WARNING

NEVER raise the intake end of the auger higher than is necessary to attach to a towing vehicle. When the intake end is raised, weight rapidly transfers to the intake end.

Never stand between the tractor and the auger when hitching unless all controls are in neutral and the brakes are locked.

10. Store PTO Driveline.

- A. Place the PTO driveline in storage position when it is not attached to the tractor.

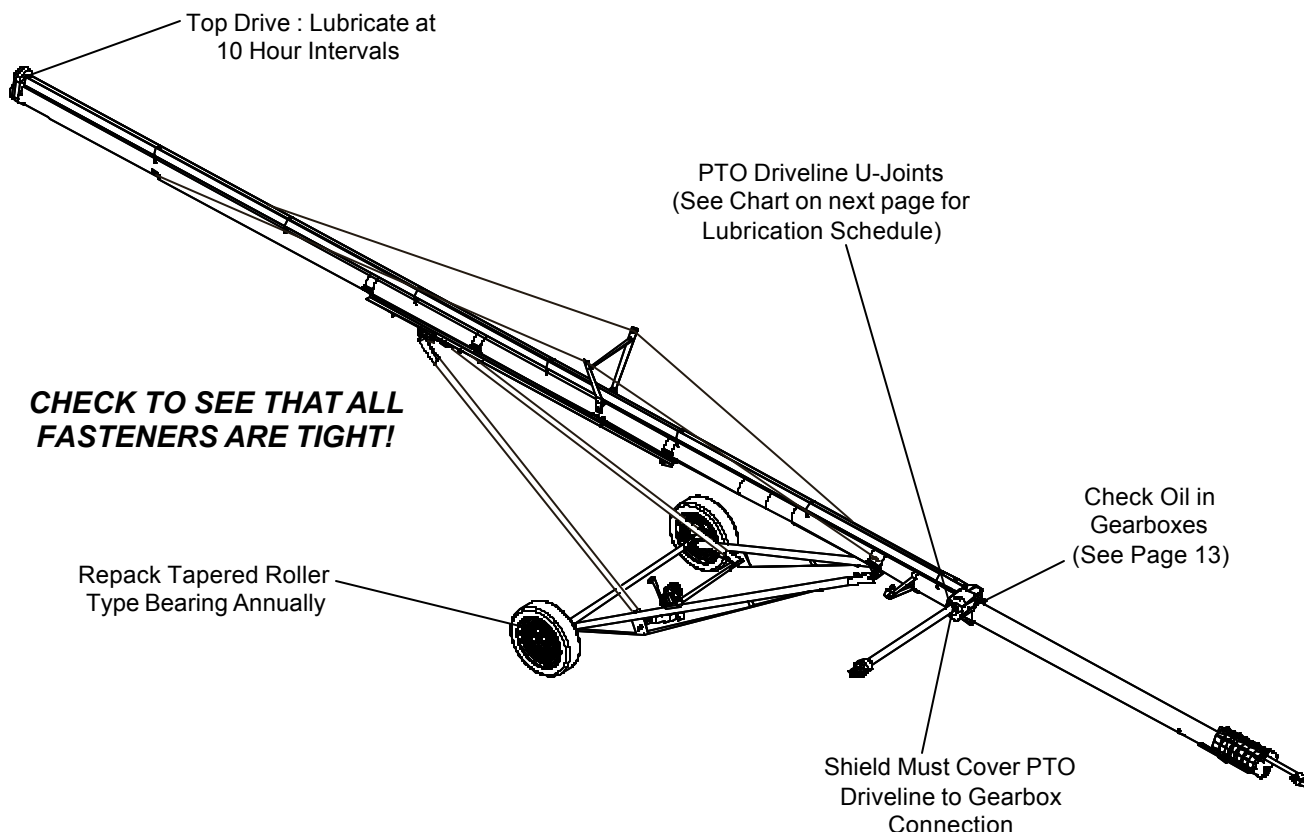
1. Lubrication Guidelines.

A. Check and service the auger frequently to ensure economical and efficient operation of your auger. Maintaining regular and correct lubrication is key to proper maintenance. Infrequent or incorrect lubrication can result in reduced efficiency, excessive wear, and needless downtime.

B. Refer to the drawing below to identify the parts that need lubrication and the lubrication frequency.



NEVER perform maintenance on the auger unless all safety shields and devices are in place. Replace any shields that are damaged or missing. Do not clean, adjust, or lubricate any part of a machine that is in operation.



2. Winch Lubrication.

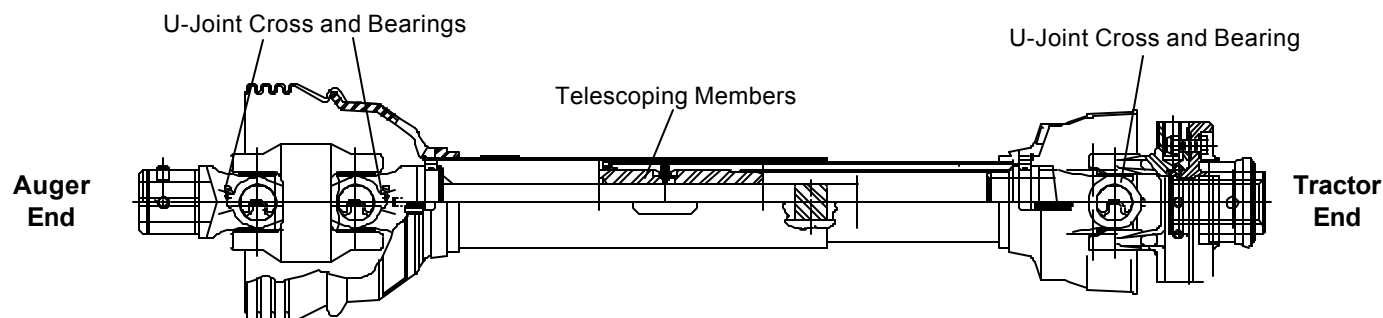
A. Winches require the following maintenance:

1. All gears must be covered by a film of grease at all times.
2. The nut holding the handle assembly must be tight.
3. The two (2) bushings found at the end of the drum shaft, the ratchet pawl, and the bushing at the ends of the pinion shaft should be wet with oil.
4. The teeth of the ratchet lock should be sharp, and not worn, so that they can hold the load.

3. PTO Driveline U-Joint Lubrication.

A. You must lubricate five (5) fittings on the PTO driveline. The drawing on the following page identifies the location of the fittings.

3. PTO Driveline U-Joint Lubrication (cont.)


NOTE

To lubricate the U-joint on the auger end, loosen the four (4) bolts holding the PTO driveline shield to the gearbox, then rotate the shield up.

B. To lubricate the auger end of the PTO driveline, you need to rotate the shaft shield upwards. Refer to the drawing on the previous page for the location of the shield.

C. Apply the first lubrication after the initial start-up and after 16–24 hours of operation, then follow this schedule:

Constant Angle Lube Recommendations		
Interval	Location	Amount
4 hrs.	U-Joint Cross & Bearings	1 Pump
8 hrs.	Telescoping Members	4-8 Pumps

D. Use a good quality lithium soap base E.P. grease meeting the N.L.G.I. # 2 specifications and containing no more than 1% molybdenum disulfide to lubricate all fittings. (Example: Shell super duty or equivalent)

E. You may substitute an E.P grease meeting the N.L.G.I. # 2 specifications and containing 3% molybdenum disulfide in the telescoping, and CV ball and socket members ONLY. (Example: Mobil Oil Company, "Mobil Grease CMP"; Shell Oil Company, "Retinax AM"; Texaco, "Molytex EP # 0 and # 2")

F. Be sure to return the shaft shield. Refer to the drawing on the previous page for the location of the shield.

4. PTO Driveline Replacement Parts.

A. To ensure optimal performance from your auger, any parts for replacement should be replaced with parts of the same type and size. Do not modify or alter any of the auger components, such as using a part that exceeds the maximum recommended operating length of PTO driveline.

NOTE

PTO driveline replacement parts do not come lubricated. Lubricate them at the time of assembly.

B. When lubricating PTO driveline replacement parts, refer to the chart above to determine the amount of lubrication and the recommended intervals.

5. PTO Driveline Shear Bolt.

A. The PTO driveline shear bolt is located at the tractor connection. The shear bolt protects the auger from damage if the auger is subjected to high loads or becomes plugged.

B. Use a replacement bolt of the proper size and strength to ensure that the shear device will protect the auger and operator. Refer to the chart below for the correct size and strength.

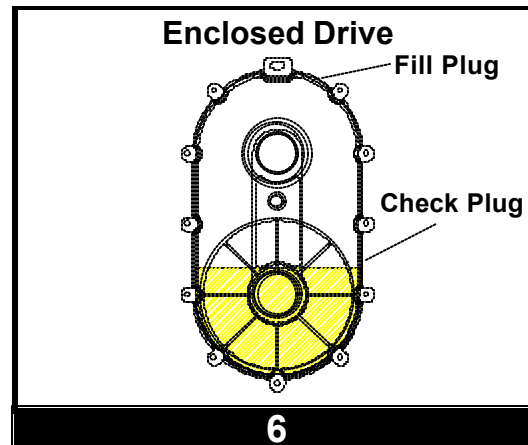
PTO Driveline Shear Bolt			
Auger Size	Shear Bolt Size	Shear Bolt Grade	Replacement Shear Bolt Part No.
8" dia.	3/8" - 16 x 1" long	Grade 2	GK1584

C. Extra shear bolts are supplied with the auger. They are stored in the operator's manual container located on the left radius rod.

6. Enclosed Drive Lubrication.

The enclosed drive is located at the discharge end of the auger housing and is shipped without oil. Oil is to be added to the unit during field assembly of the auger. Oil will dissipate under normal operating conditions, therefore the oil level should be checked regularly. Add 90 EP (non-foaming) oil until the oil level reaches the check point.

For lubrication in normal operating temperature between 40°F to 120°F, we recommend the use of non-foaming, multipurpose gear oil SAE 90 weight. For temperatures below 40°F, use SAE 80 weight oil. Use a grade of oil commercially available for automotive differentials. Extra pressure additives may be of value in severe applications.



NOTE

DO NOT add more oil than recommended. Additional oil may damage the seals or be forced out through the vented plug.

7. Belt Adjustment.

A. For drives that are powered by belts, the belt tension will need periodic adjustments.

8. Bearings.

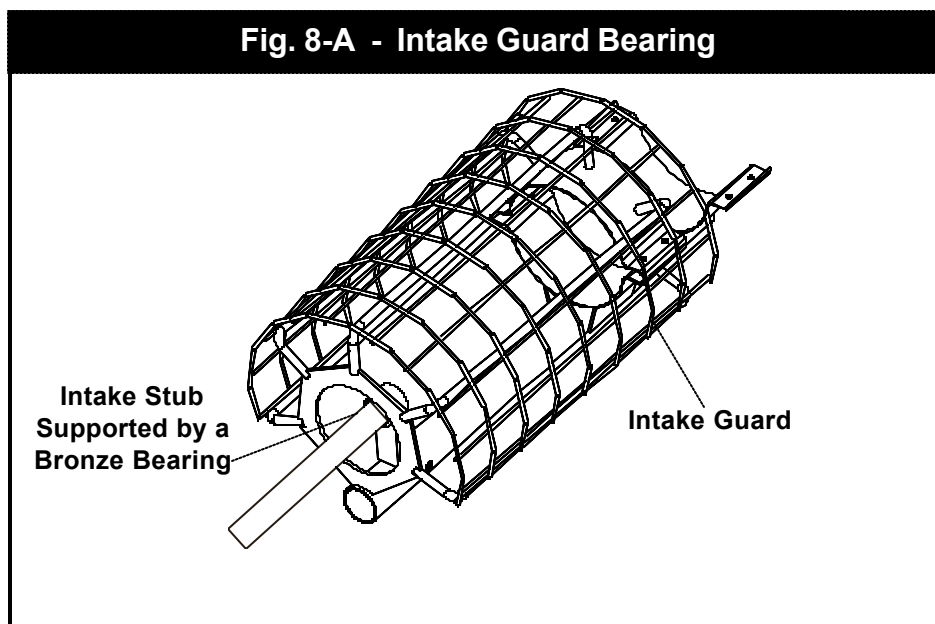
All drive shafts are supported by self-aligning, sealed ball bearings, which have been packed at the factory and require no further lubrication. There is no adjustment to be made to the bearings, but check that the retainers are firmly fastened to the bearing stand. Also check that the setscrews in the lock collars are tight against the drive shaft.

▲WARNING

The complete drive shaft must be shielded with drive shaft covers during operation.

A. Intake guard bronze bearing (See Fig. 8-A)

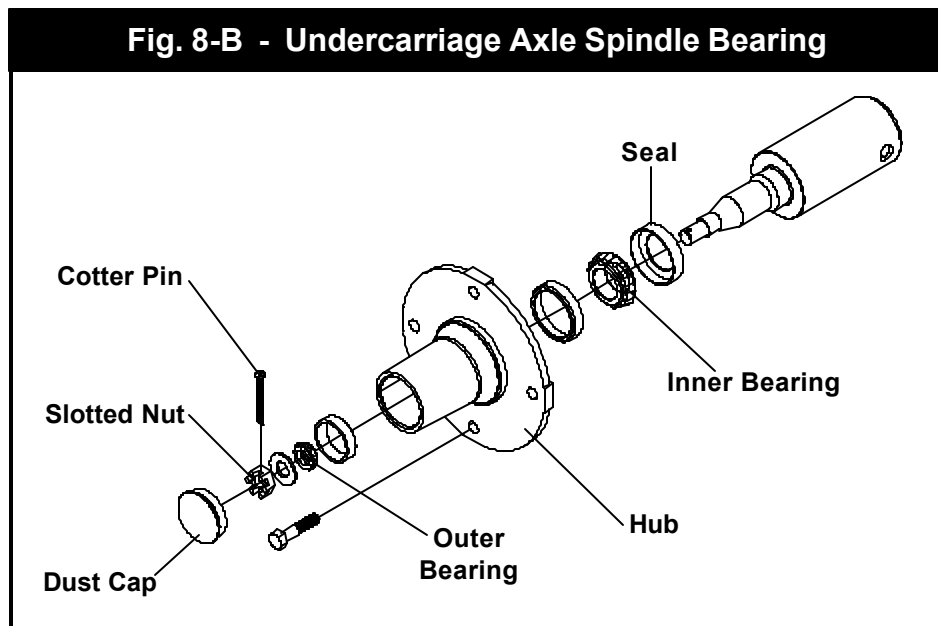
1. Every auger has a bronze bearing with a graphite bearing at the intake end. This bearing requires no lubrication. If the wire guard is damaged, contact dealer and replace.



8. Bearings (Cont.)

B. Undercarriage axle spindle bearing (See Fig. 8-B)

1. Tapered roller type bearings are standard for 8" augers and should be repacked with grease and adjusted annually or as needed, determined by the augers usage.
2. Care must be used in dismantling the tapered roller bearings. First remove the dust cap by prying around its edges. Remove the cotter pin, slotted nut and flatwasher. Carefully remove the hub and bearings from the spindle. Inspect all parts for wear or damage and replace them with new ones if necessary.
3. When reassembling the hub, repack both bearing cones with grease and fill hub cavity 1/3 full. Place the inner bearing assemblies into the hub, and then press the grease seal into the hub and carefully reinstall the hub on the spindle. When placing the hub on the spindle, be careful not to damage the lip of the grease seal. Install the outer bearing assembly into the hub, and replace the flat washer and slotted nut. Tighten the slotted nut to seal the bearings until the hub binds as you rotate the hub. Back off the slotted nut to the next slot and pin with a new cotter pin. Use a 5/32" cotter pin 1-1/4" long. Replace the dust cap.



PROBLEM	POSSIBLE CAUSE	SOLUTION
1. The auger is vibrating.	A. Damage can occur to the auger flighting, causing noise. Damage usually is caused from foreign material being run through the auger.	A1. It may be necessary to remove the flighting for inspection.
2. Capacity is too low.	A. There may not be enough grain reaching the auger.	A1. Make sure the intake has not bridged over, restricting flow. The flighting at the intake should be covered with grain for maximum capacity.
	B. The auger is moving too slowly.	B1. Check the auger speed. Low capacity will result from speeds slower than recommended.
3. The auger plugs.	A. The auger may be "jamming" because too much grain is reaching the auger.	A1. Decrease the amount of grain the auger is gathering.
	B. The grain may be wet.	B1. If wet grain or other hard-to-move material is being augered, reduce the amount of grain being fed into the swing-out hopper.
	C. The auger may be jammed with foreign material.	C1. Remove any foreign material in the auger.
	D. The discharge end may be plugged.	D1. Unplug any plugs at the discharge end of the auger.

PROBLEM	POSSIBLE CAUSE	SOLUTION
4. Driveline shear bolt shears frequently.	A. Grain may be flowing too quickly into the ground hopper.	A1. Reduce the flow rate of grain into the ground hopper.
	B. The discharge of grain from the main auger may be restricted.	B1. Inspect auger intake and discharge areas for damage.
5. Auger Lowering by itself (Hydraulic lift under-carriage augers ONLY)	A. Hydraulic fittings, hose, and connections could be leaking.	A1. Check that the hydraulic shut-off valve is close.
6. Auger WILL NOT raise or lower (Hydraulic lift under carriage augers ONLY)	A. The hydraulic coupler may not be properly attached to the tractor and the tractor reservoir is full of oil.	A1. Check that the hydraulic shut-off valve is open.

Pre-Assembled or Purchased Components

Items listed below can be ordered as complete assemblies. Individual components can be selected by referring to their parts breakdowns listed on pages 75-80.

Pre-Assembled or Purchased Components		
Ref #	8" Part #	Description
N/S	GK2504	Enclosed Drive Assembly for 8" (1 to 1 ratio)
N/S	GK1193	Spindle & Hub Assembly 4-Bolt
N/S	GK3337	1500# Winch, Brake Type, for 8" x 33', 41', 47', 53', 57' and 59'
N/S	GK2490	2500# Winch, Brake Type, for 8" x 62', 65' and 71'
N/S	GK1514	Implement Input Driveline (I.I.D.) for 8" x 33', 41', 47', 53', and 57'
N/S	GK1515	Implement Input Driveline (I.I.D.) for 8" x 59', 62', 65', and 71'
N/S	GK2493	Gearbox for 8" x 33', 41', 47', 53', and 57' Direct PTO and Top Mounted Electric Drive
N/S	GK2494	Gearbox for 8" x 59', 62', 65' and 71' Direct PTO and Top Mounted Electric Drive

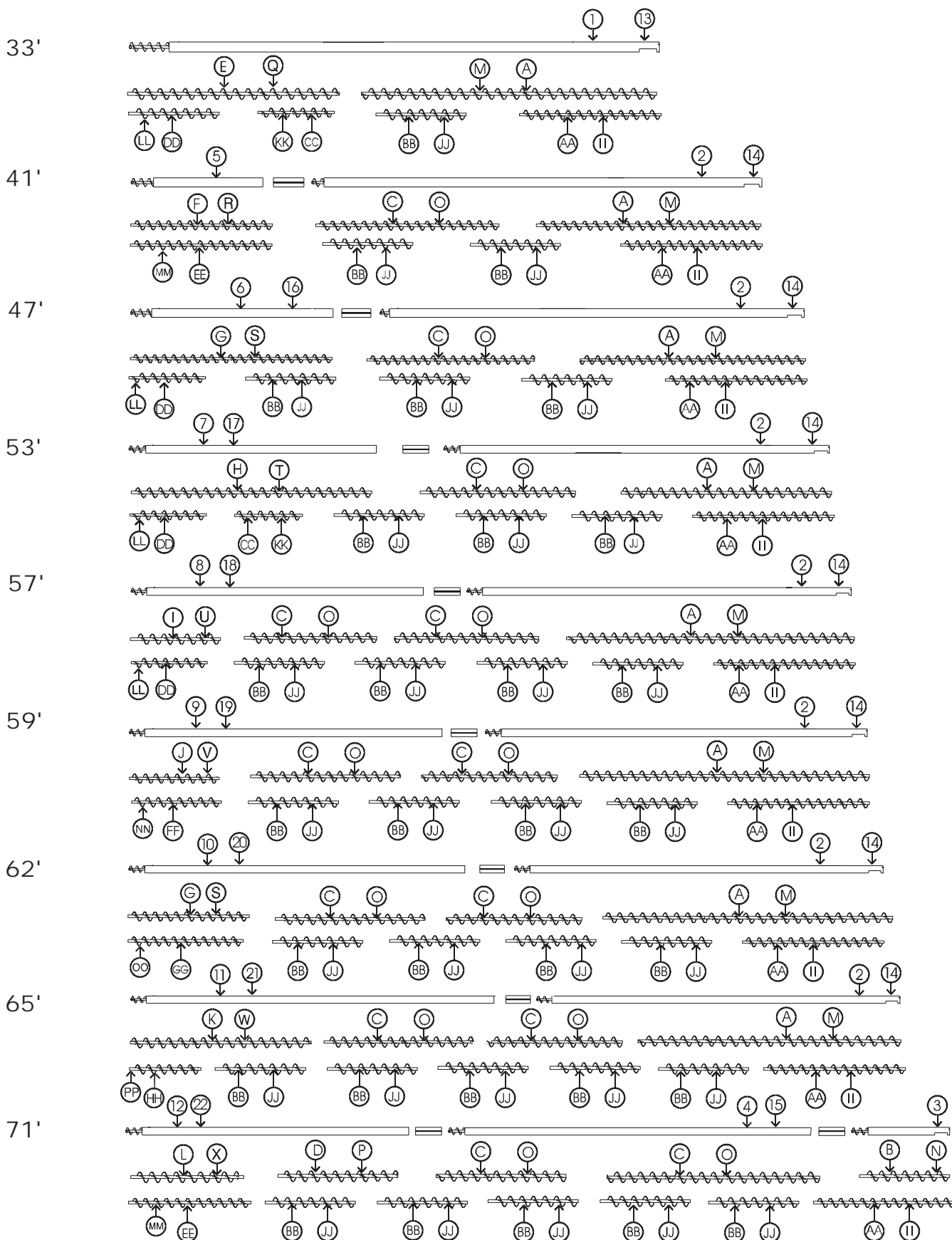
Flighting and Housing Components

AUGER HOUSING COMPONENTS		
Ref No.	Part No.	Description
N/S	GK1015	Connecting Band for 47', 53', 57', 59', 62', 65', and 71'
	GK3459	for 41' (with gearbox mount and decals)
N/S	GK3144	Intake Guard, Standard
	GK3501	Intake Guard, Open Bottom (optional)
N/S	GK3128	Halfband for Intake Guard
	GK2616	8" x 4" 7 Ga. Halfband
	GK5096	8" x 4" 12 Ga. Halfband - Painted
	GK5118	8" x 6" 7 Ga. Halfband - Painted
N/S	GK1401	Hitch Pipe
N/S	GK3340	Tail Stub 1-1/4" x 6-3/4" Long

INTERNAL BEARING COMPONENTS		
Ref No.	Part No.	Description
N/S	GK4052	Connecting Band with Slot
N/S	GK1263	Internal Bearing Bracket w\ Bronze Bushing
N/S	GK1192	Replacement Bronze Bushing
N/S	GK3669	Inspection Hole Cover
N/S	GK1763	Flight Connecting Stub, 1.25" x 11.5"
N/S	S-8316	Flight Connecting Bolt, 7/16" x 3" (Grade 8)
N/S	S-8317	Flight Connecting Nut, 7/16"

STANDARD FLIGHT CONNECTING COMPONENTS		
Ref No.	Part No.	Description
N/S	S-8316	Connecting Bolt 7/16" x 3" (grade 8) HHCS
N/S	S-8317	7/16" Stover Nut

Flighting and Housing Components



Flighting and Housing Components

STANDARD AUGER HOUSING (See page 62)		
Ref. No.	Part No.	Description
1	GK2510	Auger Housing for 8" x 33' (32'-0" long)
2	GK2081	Auger Housing - Upper Section for 8" x 41'-65' (32'-0" long)
3	GK3378	for 8" x 71' (10'-0" long)
4	GK3379	Auger Housing - Middle Section for 8" x 71' (32'-0" long)
5	GK3367	Auger Housing - Lower Section for 8" x 41' (8'-0" long)
6	GK2066	for 8" x 47' (14'-0" long)
7	GK1912	for 8" x 53' (20'-0" long)
8	GK2061	for 8" x 57' (24'-0" long)
9	GK1915	for 8" x 59' (26'-0" long)
10	GK2128	for 8" x 62' (29'-0" long)
11	GK3391	for 8" x 65' (32'-0" long)
12	GK3380	for 8" x 71' (28'-0" long)

INTERNAL BEARING AUGER HOUSING (See page 62)		
Ref. No.	Part No.	Description
13	GK4011	Auger Housing for 8" x 33' (32'-0" long)
14	GK4012	Auger Housing - Upper Section for 8" x 41'-65' (32'-0" long)
3	GK3378	for 8" x 71' (10'-0" long)
15	GK4014	Auger Housing - Middle Section for 8" x 71' (32'-0" long)
5	GK3367	Auger Housing - Lower Section for 8" x 41' (8'-0" long)
16	GK4016	for 8" x 47' (14'-0" long)
17	GK4017	for 8" x 53' (20'-0" long)
18	GK4018	for 8" x 57' (24'-0" long)
19	GK4019	for 8" x 59' (26'-0" long)
20	GK4020	for 8" x 62' (29'-0" long)
21	GK4021	for 8" x 65' (32'-0" long)
22	GK4022	for 8" x 71' (28'-0" long)

NOTE

The auger housing length is one foot shorter than the stated auger length i.e. a 57' long auger has 56' of housing. The head is 32' and the lower is 24'. Be careful to order the correct length replacement housing for your auger.

Flying and Housing Components

STANDARD - MEDIUM DUTY FLIGHT SECTIONS (See page 62)

Ref No.	Part No.	Description
A	GK3127	Upper Flight Section for 33', 41', 47', 53', 57', 59', 62' and 65' (18' 3/16")
B	GK3479	
C	GK1384	Middle Flight Section for 41', 47', 53', *57', *59', *62', *65', and *71' (15') for 71' (18') *NOTE: 57'-71' WILL USE TWO (2) GK1384
D	GK3480	
E	GK1297	Lower Flight Section for 33' (15' 2-3/16") for 41' (8' 1-13/16") for 47' & 62' (14' 1-11/16") for 53' (20' 2") for 57' (9' 1-3/4") for 59' (11' 1-9/16") for 65' (17' 1-11/16") for 71' (13' 2-7/16")
F	GK3131	
G	GK3132	
H	GK3133	
I	GK3134	
J	GK3193	
K	GK3236	
L	GK3250	

STANDARD - HEAVY DUTY FLIGHT SECTIONS (See page 62)

Ref #	Part No.	Description
M	GK3603	Upper Flight Section for 8" x 33', 41', 47', 53', 57', 59', 62' and 65' (18' 3/16") for 8" x 71' (10' 3/16")
N	GK3604	
O	GK3113	Middle Flight Section for 8" x 41', 47', 53', *57', *59', *62', *65' and *71' (15') for 8" x 71' (18') *NOTE: 57'-71' WILL USE TWO (2) GK3605
P	GK3621	
Q	GK3112	Lower Flight Section for 33' (15' 2-3/16") for 41' (8' 1-13/16") for 47' & 62' (14' 1-11/16") for 53' (20' 2") for 57' (9' 1-3/4") for 59' (11' 1-9/16") for 65' (17' 1-11/16") for 71' (13' 2-7/16")
R	GK3607	
S	GK3608	
T	GK3609	
U	GK3610	
V	GK3611	
W	GK3612	
X	GK3613	

Flighting and Housing Components

INTERNAL BEARING - MEDIUM DUTY FLIGHT SECTIONS (See page 62)		
Ref #	Part No.	Description
AA	GK3735	Upper Flight Section for 33'-71' (10' 10-1/2")
BB	GK3736	Middle Flight Section for 33' - 71'* (9' 9-3/4") *NOTE: 41' Uses Two (2) GK3735 *NOTE: 47'-53' Use Three (3) GK3735 *NOTE: 57'-62' Use Four (4) GK3735 *NOTE: 65'-71' Use Five (5) GK3735
CC	GK3737	for 33' & 53' (5' 9-3/4")
DD	GK3739	Lower Flight Section for 33', 47', 53' and 57' (6' 2")
EE	GK3741	for 41' and 71' (10' 2")
FF	GK3740	for 59' (8' 2")
GG	GK3742	for 62' (11' 2")
HH	GK3738	for 65' (4' 2")

INTERNAL BEARING - HEAVY DUTY FLIGHT SECTIONS (See page 62)		
Ref #	Part No.	Description
II	GK3743	Upper Flight Section for 33' - 71' (10' 10-1/2")
JJ	GK3744	Middle Flight Section for 33' - 71'* (9' 9-3/4") *NOTE: 41' Uses Two (2) GK3744 *NOTE: 47'-53' Use Three (3) GK3744 *NOTE: 57'-62' Use Four (4) GK3744 *NOTE: 65'-71' Use Five (5) GK3744
KK	GK3745	for 33' & 53' (5' 9-3/4")
LL	GK3747	Lower Flight Section for 33', 47', 53' and 57' (6' 2")
MM	GK3749	for 41' and 71' (10' 2")
NN	GK3748	for 59' (8' 2")
OO	GK3750	for 62' (11' 2")
PP	GK3746	for 65' (4' 2")

Drive Shaft Components

See Fig. 1 below for reference.

DRIVE SHAFT COMPONENTS		
Ref No.	Part No.	Description
N/S		Drive Shaft - Upper Section
	GK2526	for 8" x 33' (19' - 6" long)
	GK2602	for 8" x 41'-65' (15' 7-3/4" long)
	GK3202	for 8" x 71' (9' - 9" long)
N/S		Drive Shaft - Middle Section
	GK3203	for 8" x 71' (20' 0" long)
	GK2527	for 8" x 71' (11' 9-1/2" long)
14		Drive Shaft - Lower Section
	GK2069	for 8" x 47' (4' - 3" long) Electric Drive Only
	GK2432	for 8" x 53', (8' - 2" long)
	GK1914	for 8" x 57' (12' - 3" long)
	GK1789	for 8" x 59' (12' - 9" long)
	GK2532	for 8" x 62' (16' - 7" long)
	GK3203	for 8" x 65' and 71' (20' - 0" long)
	GK2527	for 8" x 71' (11' 9-1/2" long)
15		Drive Shaft Extension for PTO Drive
	GK2432	for 8' x 33', 53', 57', 65' (8' - 2" long)
	GK2069	for 8" x 41' (4' - 3" long)
	GK1917	for 8" x 47' (10' 3-1/2" long)
	GK1392	for 8" x 62' (8' - 8" long)
	GK2070	for 8" x 59' (9' - 6" long)
	GK1914	for 8" x 71' (12' - 3" long)
16	GK1596	Bearing with Triangle Flange & Set Screw
17	GK2556	Drive Shaft Bearing (1" Bore)
18	GK2557	Bearing Flangette
19	GK2603	Drive Shaft Cover Mounting Bracket
20	GK1500	Drive Shaft Coupler with Snap Ring (1" to 1")
21	GK1566	Square Drive Key 1/4" x 1-1/2" Long
N/S	GK1609	Gearbox to Driveline Coupler for 59', 62', 65' and 71'
22		Drive Shaft Covers
	GK2240	(5' 8-1/4" long)
	GK2355	(5' - 0" long)
	GK2143	(4' - 0" long)
	GK2144	(3' - 0" long)
	GK2521	(2' - 0" long)
	GK2235	(1' - 0" long)
	GK2522	(0' - 8" long)
N/S		Telescoping Drive Shaft Cover
	GK2523	(1' - 6" long)
	GK2524	(0' - 8" long)

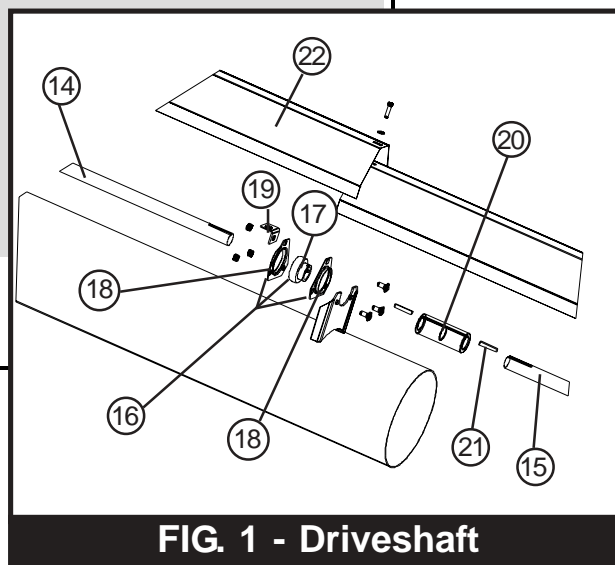
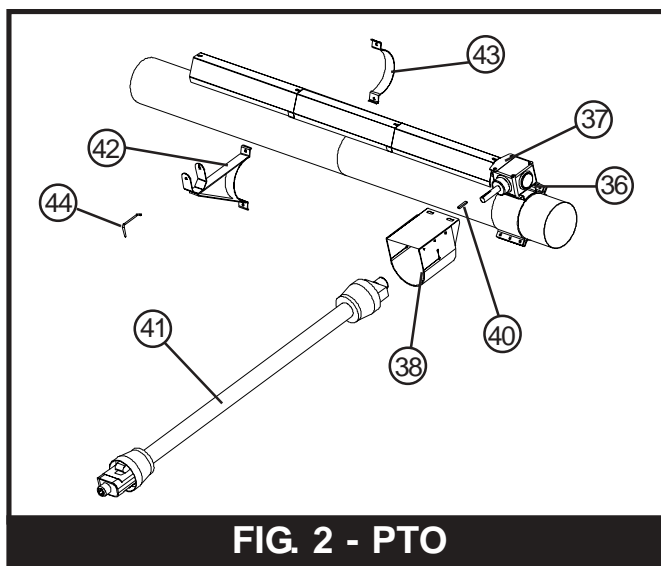


FIG. 1 - Driveshaft

Direct PTO Drive Components

See Fig. 2 below for reference.

DIRECT PTO DRIVE COMPONENTS		
Ref No.	Part No.	Description
36	GK1502 GK2225	Gearbox Mount (Band-On) for 8" x 33', 41', 47', 53' and 57' for 8" x 59', 62', 65' and 71'
37	GK1501 GK2224	Gearbox Shield Mounting Bracket for 8" x 33', 41', 47', 53', and 57' for 8" x 59', 62', 65' and 71'
38	GK1570	PTO U-Joint Shield Assembly
N/S	GK1500 GK1609	Drive Shaft to Gearbox Coupler for 8" x 33' - 71' (1" to 1") for 8" x 59' - 71' and 57' - 71' Hyd. (1" to 1-1/4")
40	GK1566	Sq. Key 1/4" x 1-1/2" long
42	GK3343	PTO Carrier Bracket
N/S	GK3273	Band-On Bearing Stand
43	GK1055	Half Band 2" Wide for I.I.D. Transport Support and Band-On Bearing Stand
41	GK1514 GK1515	PTO for 8" x 33', 41', 47', 53', & 57' PTO for 8" x 59', 62', 65', & 71'
N/S	GK2657	Shear Bolt Kit - 47', 57', 59', 62', 71'
19	GK2603	Drive Shaft Cover Bracket (See fig. 1 on pg 66)
16	GK1596	Bearing with Triangle Flange & Set Screw (Fig. 1 pg 66)
44	GK3246	PTO Retaining Pin



Truss Components

TRUSS COMPONENTS		
Ref No.	Part No.	Description
N/S	GK1183	Upper Band-On Truss Anchor for 65' and 71'
24		Band-On Truss Mount
	GK1397	for 41' Main Truss
	GK1068	for 47' and 53' Main Truss; 65' and 71' Upper Truss
25		Truss Side Straps
	GK1552	for 41' Main Truss (19" long)
	GK1555	for 47' and 53' Main Truss; 65' and 71' Upper Truss (32" long)
	GK2536	for 57', 59', 62', 65' and 71' Main Truss (39-1/2" long)
	GK1393	Under Truss for 65' and 71' (30" long)
26		Truss Crossbrace (Lower)
	GK1016	for 57', 59', 62', 65' and 71'
27		Truss Crossbrace
	GK1568	for 41' Main Truss (19" Long)
	GK1554	for 47'- 71' Main Truss
28		Truss Cable
	GK1575	for 41' (1/4" x 28' long)
	GK3332	for 47' (1/4 x 36' long)
	GK2641	for 53', 57' and 59' (5/16" x 45' long) for 47' & 53' Hydraulic
	GK2167	for 65' and 71' (5/16" x 31' long)
	GK1582	for 62', 65' and 71' (5/16" x 52' long) for 57' - 71' Hydraulic
29	GK3107	Eyebolt 5/8"-11 x 13 Grade 2 Zinc
30	GK2759	Cable Clamp 3/8"
	GK2760	Cable Clamp 5/16"
31	GK2759	Cable Clamp 3/8" for 41'- 62' Main and 65' and 71' Upper
	S-8245	U-Bolt for 65' and 71' Main
32	GK1030	Lower Band-On Truss Anchor (41' - 71') (with Radius Rod Clamp)
33	GK1393	Undertruss Side Strap 30" Long for 65' and 71'
34	GK1398	Lower Band-On Truss Anchor for 65' and 71'
35	GK1395	Truss Vertical Tube 56-5/8" Long for 65' and 71'

Main Auger Components

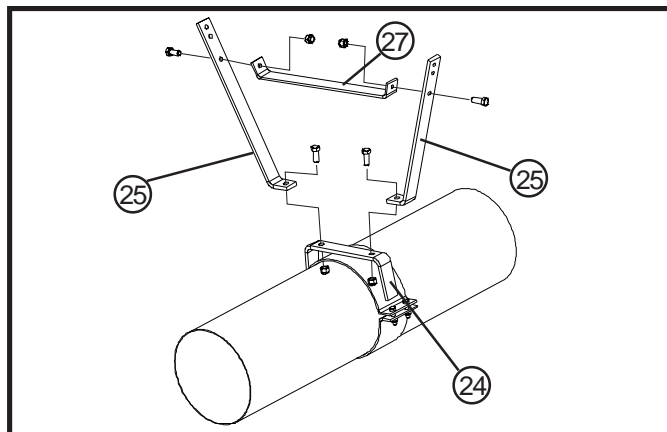


FIG. 3
41' Manual Model Main Truss

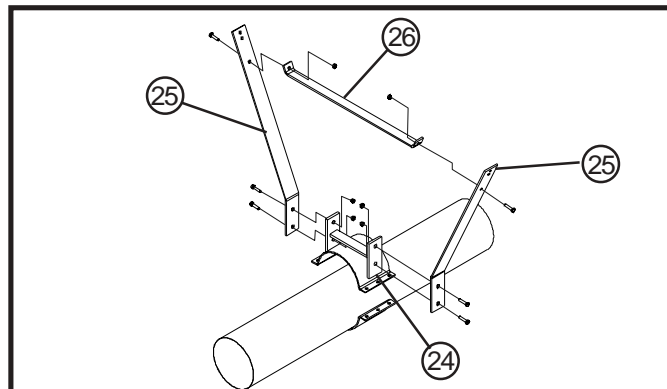


FIG. 4
47' & 53' Manual & Hydraylic Main Truss
62', 65', 71' Hydraulic Model Upper Truss
65' & 71' Manual Model Upper Truss

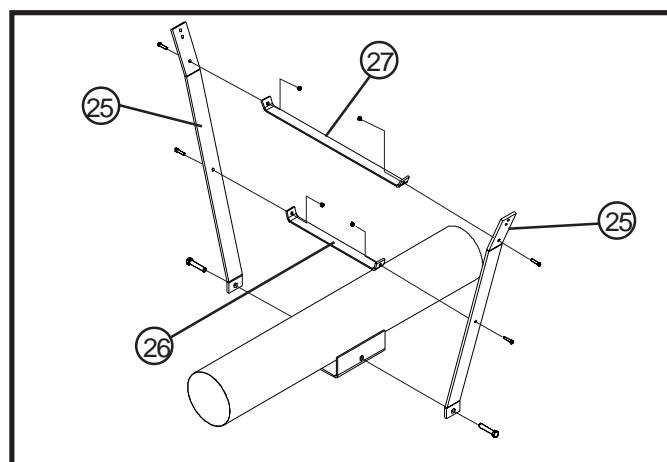


FIG. 5
57' - 71' Hydraulic Model Main Truss
57', 59', & 62' Manual Model Main Truss

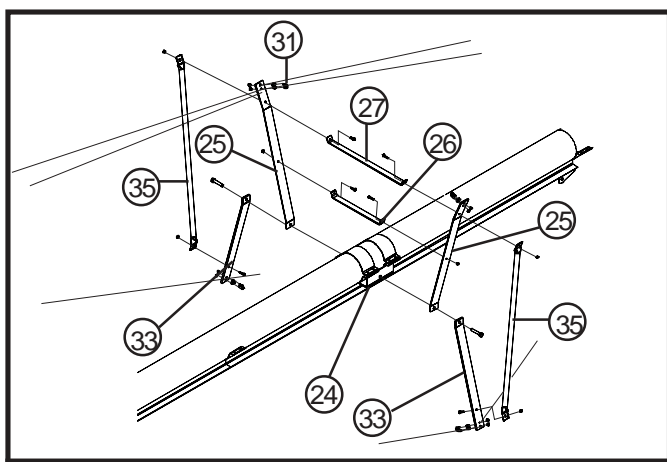


FIG. 6
61'-71' Manual Lower Truss

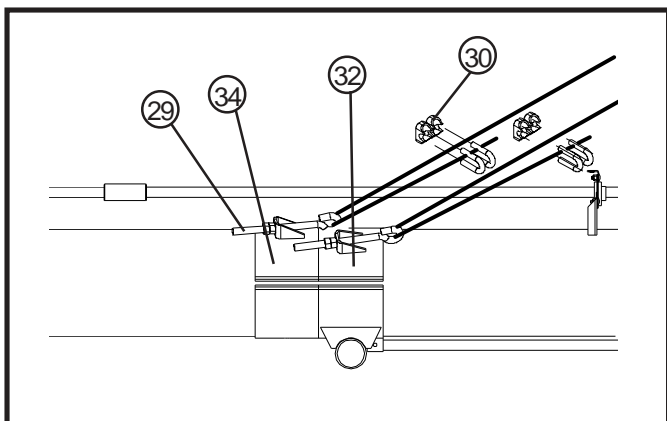
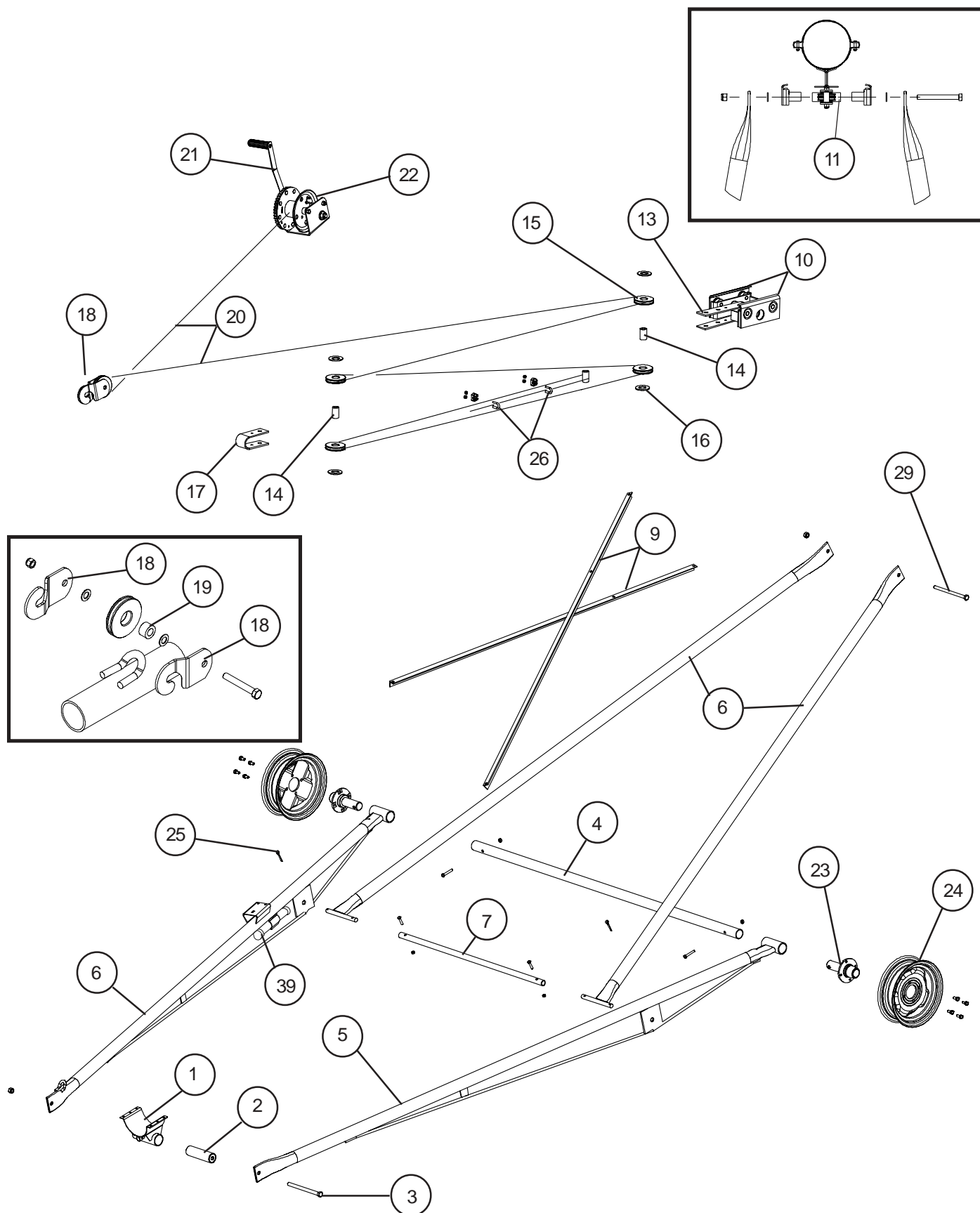


FIG. 7

Manual Lift Undercarriage Components

Ref No.	Part No.	Description
1	GK1316 GK3515	Radius Rod Clamp Band (33'-62' Models) Radius Rod Clamp Band (65'-71' models w/ Truss Anchor Bracket)
2	GK1549	Spacer Tube for Radius Rod Pivot (8-1/4" long)
3	S-8259	3/4" x 11" HHCS Zinc Grade 5 Bolt
4		Axle Pipe
	GK1546	for 33', 41', 47' (94-1/2" long)
	GK2056	for 53', 57' and 59' (93" long)
	GK2627	for 62', 65' and 71' (120" long)
5		Right Radius Rod
	GK1421	for 33' and 41' (9' - 8" long)
	GK2550	for 47' (12' - 2" long)
	GK2058	for 53', 57' and 59' (14' 8-3/4" long)
	GK3101	for 62', 65' and 71' (17' 10-1/2" long)
6		Left Radius Rod (with winch mount)
	GK1416	for 33' and 41' (9' - 8" long)
	GK2551	for 47" (12' - 2" long)
	GK2059	for 53', 57' and 59' (14' 8-3/4" long)
	GK3358	for 62', 65' and 71' (17' 5-1/4" long)
7		Axle Leg Tube Crosspipe
	GK1418	for 33' and 41' (53" long)
	GK1031	for 47' (51" long)
	GK2057	for 53', 57' and 59' (49-3/4" long)
	GK3366	for 62', 65' and 71' (72-1/2" long)
8		Axle Leg
	GK1419	for 33' and 41' (10' 6-1/2" long)
	GK2554	for 47' (12' - 8" long)
	GK2060	for 53', 57' and 59' (15' - 3" long)
	GK3196	for 62', 65' and 71' (16' - 6-1/2" long)
9	GK1394	Axle Leg Crossbraces for 62', 65', & 71' Models
10	GK1175	Trolley (with Steel Side Rollers)
11	GK1179	Trolley Spacer Bushing (4-3/4" long)
12	S-8352	Bolt 3/4" x 7" Long HHCS (grade 5)
13	GK1150	Trolley Long Pulley Clevis (for 33', 41', 47', 53', 57', 59', 62', 65' and 71')
14	GK1453	Track and Trolley Pulley Clevis Bushing (for 33'-71')
15	GK1543	1/4" Cable Pulley (3.0" O.D.)
16	S-7623	1 x 2 SAE Zinc Flat Washer
17	GK1391	Track Short Pulley Clevis (for 33', 41', 47', 53', 57', 59', 62', 65' and 71')
18	GK1545	Pulley Clevis Plate for Radius Rod Mount
19	GK1544	Cable Pulley Bushing (5/8" long)
20		Lift Cable
	GK1589	for 33' and 41' (1/4" x 44' long)
	GK3331	for 47' (1/4" x 75' long)
	GK3320	for 53', 57' and 59' (1/4" x 91' long)
	GK3322	for 62', 65' and 71' (1/4" x 118' long)
21	GK1567	Winch Handle #1000-2500 Frict.
26	S-8257	Cable Clamp 1/4"

Manual Lift Undercarriage Components



Manual Lift Undercarriage Components

Ref No.	Part No.	Description
22	GK3337	K-1500 Winch (33', 41', 47', 53', 57', 59', Models)
	GK2490	K-2250 Winch (62', 65' and 71' Model)
23	GK1193	Spindle and Hub Assembly (33', 41', 47', 53', 57', 59', 62', 65' and 71' Models)
24	GK1176	Wheel Rim (4-bolt)
25	S-8349	5/16" X 2" Cotter Pin
27	GK5118	Halfband: Intake Guard 8" x 4" Black Steel
28	GK1502	Halfband: with Gearbox Mount
N/S	GK5118	Halfband: 8" x 4" 12 Ga. Painted
N/S	GK5096	Halfband: 8" x 6" 7 Ga. Painted
N/S	GK2616	Halfband: 8" x 4" 7 Ga. Painted
N/S	GK1015	Connecting Band: 8" x 27" (No Hardware)
33	GK24931	Gearbox for 33' - 57'
	GK24941	Gearbox for 59' - 71'
34	GK1501	Gearbox Shield Bracket - for 33' - 57'
	GK2224	Gearbox Shield Bracket - for 62' - 71'
35	GK3144	8" Round Bottom Intake Guard
	GK3501	8" Open Bottom Intake Guard
N/S	GK2504	Enclosed Drive
N/S	GK3340	Intake Shaft (1.25" x 6.75")
37	GK1401	Hitch Pipe
38	GK1530	Intake Hopper Cleanout Cover
39	GK1523	Manual Container
42	GK1566	1/4" x 1/4" x 1-1/2" Long Square Key

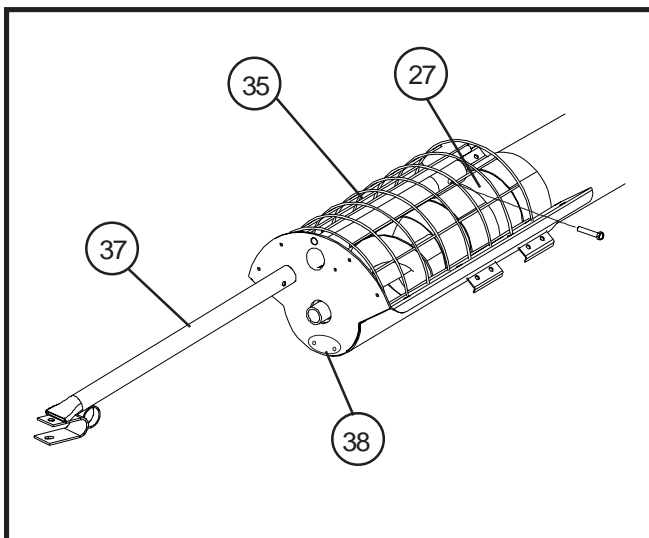


Fig. A

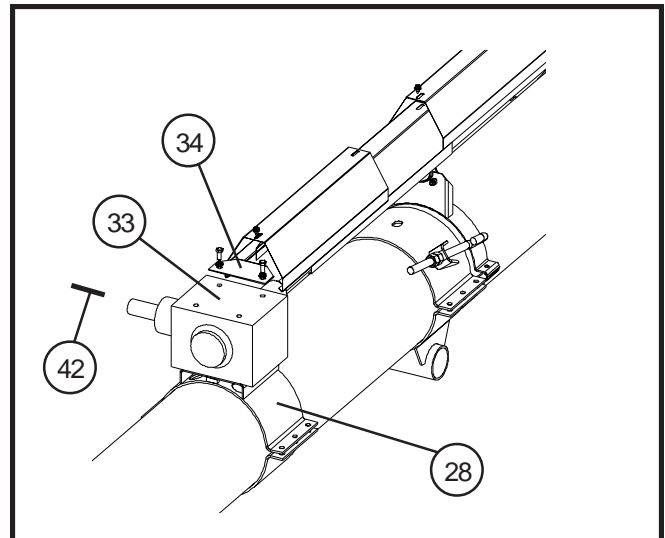
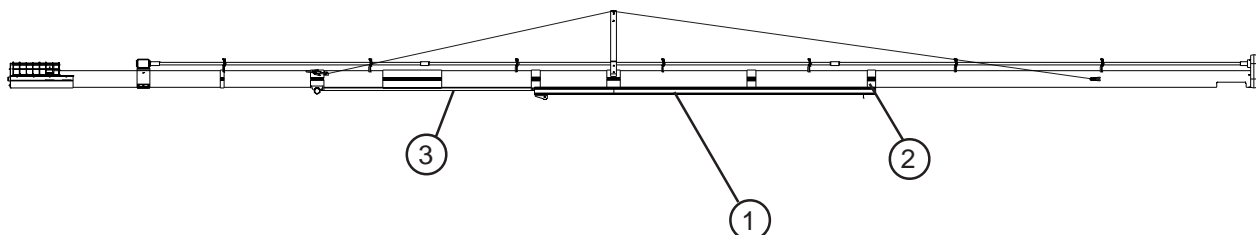


Fig. B

Manual Lift Track Components

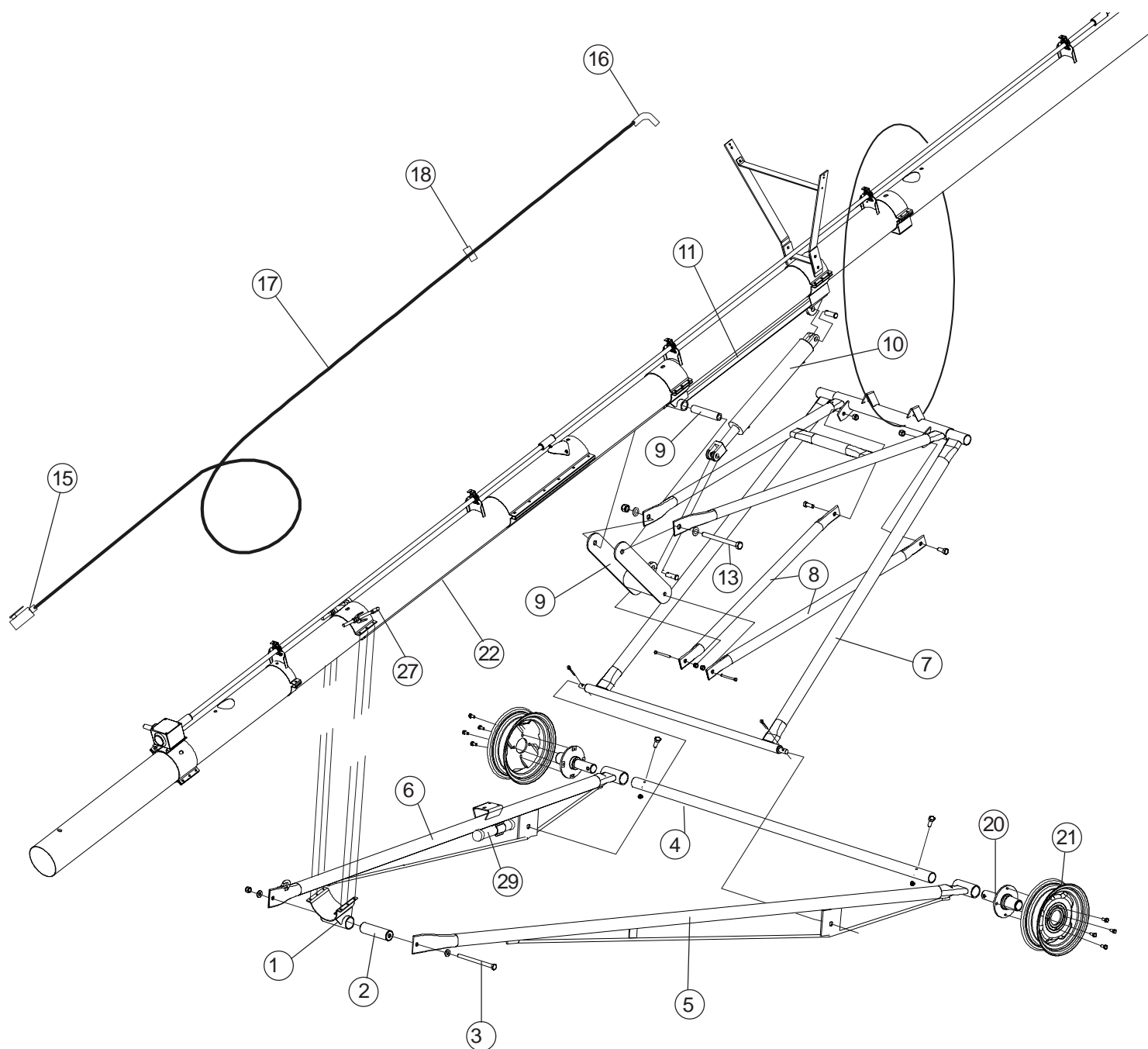


Manual Track Components		
QTY	Part #	Description
1		Track Weldments
	GK1399	for 33' & 41'
	GK4303	for 47'
	GK1396	for 53'
	GK2133	for 57'
	GK4049	for 62'
2	GK1456	for 65' & 71'
	GK5096	Halfband: 8" x 6" 7 Ga. Painted
	GK2616	Halfband: 8" x 4" 7 Ga. Painted
3		Spacer Tubes
	GK3341	for 33' - 41' (88.75")
	GK3559	for 47' (97.75")
	GK3909	for 53' (154")
	GK2435	for 57' & 59' (114.75")
	GK4050	for 62' (163")
	GK1387	for 65' (107")
	GK2446	for 71' (103.875")

Hydraulic Lift Undercarriage Components

Ref No.	Part No.	Description
1	GK1316	Radius Rod Clamp (47'- 62' Models)
2	GK1549	Radius Rod Spacer Tube (8-1/4" long)
3	S-8259	3/4"-10 x 11" Grade 5 Zinc HHCS Bolt
4		Axle Pipe
	GK1546	for 47' and 53' (94-1/2" long)
	GK2056	for 57', 59' and 62' (93" long)
	GK2627	for 65' and 71' (120" long)
5		Right Radius Rod
	GK2550	for 47' and 53' (12' - 2" long)
	GK2058	for 57', 59' and 62' (14' 8-3/4" long)
	GK3101	for 65' & 71' (17' 10-1/2" long)
6		Left Radius Rod (with winch mount)
	GK2551	for 47' and 53' (12' - 2" long)
	GK2059	for 57', 59' and 62' (14' 8-3/4" long)
	GK3358	for 65' & 71' (17' 10-1/2" long)
7		Undercarriage Assembly
	GK2614	for 47' and 53'
	GK3356	for 57', 59' and 62'
	GK3357	for 65' and 71'
8		Undercarriage H-Frame Tube
	GK2528	for 47' & 53' (64" long)
	GK2529	for 57' 59' and 62' (82" long)
	GK3082	for 65' and 71' (96 1/2" long)
9		H-Frame
	GK1450	for 47', 53', 57', 59' and 62'
	GK3359	for 65' and 71'
10		Hydraulic Cylinder
	GK1527	for 47', 53', 57', 59' and 62' ; 4" bore x 24" stroke
	GK1528	for 65' and 71' ; 4" bore x 36" stroke
11		Track Weldment
	GK3243	for 47' and 53'
	GK3355	for 57', & 59'
	GK4363	for 62'
	GK3517	for 65' and 71' (w/ Radius Rod Clamp)
12		H-Frame Spacer Pivot Tube
	GK2267	for 47', 53', 57', 59' and 62' (8 1/4" long)
	GK3523	for 65' and 71' (9 1/4" long)
13		Bolt for H-Frame Tube
	S-8419	for 47', 53', 57', 59' and 62' (1" x 11" long)
	S-8417	for 65' and 71' (1" x 12")
14		Rest Plate
	GK3429	for 47' and 53'
	GK5354	for 65' (Connecting Band with Rest Plate)
	GK4299	for 71'
15	GK1533	Hydraulic Shutoff Valve (Ball Valve)
16	GK1336	90° Elbow
17	GK3521	Hydraulic Hose (3/8" x 39')
18	GK1315	Hose Mounting Clamp
19	GK1055	2" x 8" Halfband 12 Ga. Galvanized

Hydraulic Lift Undercarriage Components



Hydraulic Lift Undercarriage Components

Ref No.	Part No.	Description
20	GK1193	Spindle and Hub Assembly (47', 53', 57', 59', 62', 65' and 71' Models)
21	GK1176	Wheel Rim (4-bolt)
22		Spacer Tubes
	GK2446	Spacer Tube for 47' and 53' Models (8' 7-7/8")
	GK2505	Spacer Tube for 57', 59' and 62' Models (10' 3/4")
N/S		Halfbands
	GK1055	8" x 2" 12 Ga. Galvanized Halfband
	GK3128	8" x 4" 12 Ga. Black Steel Halfband (Intake Guard)
	GK3429	8" x 4" 12 Ga. Black Steel Halfband w/ Hydraulic U/C Rest (52')
	GK4299	8" x 4" 12 Ga. Black Steel Halfband w/ Hydraulic U/C Rest (72')
	GK5118	8" X 4" - 12 Gauge Painted Halfband
	GK1326	8" x 6" - 7 Gauge Black Steel
	GK1502	8" x 6" Halfband w/ Gearbox Mount - 7 Gauge Black Steel
	GK5096	8" X 6" - 7 Gauge Painted
	GK1015	8" x 27" Connecting Band with Hydraulic Rest
	GK5354	8" x 27" Connecting Band - No Hardware
N/S	GK1531	Cylinder Mounting Pin (1" x 3-5/8")
N/S	GK3194	Hair Pin Clip for Cylinder Pin (3/16" x 1")
29	GK1523	Manual Container
23	GK2224	Gearbox Shield Mounting Bracket
24	GK1401	Hitch Pipe
25	GK3340	Intake Shaft
26	GK3144	8" Round Bottom Intake Guard
	GK3501	8" Open Bottom Intake Guard
27	GK3107	Eye Bolt - 5/8"-II x 18" Grade 2 Zinc
28		Gearbox
	GK2493	GK2493 33' - 57'
	GK2494	GK2494 59' - 71'

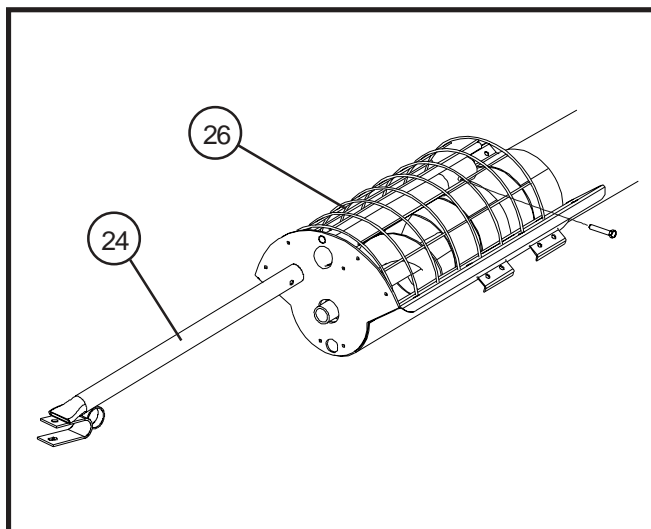


Fig. A

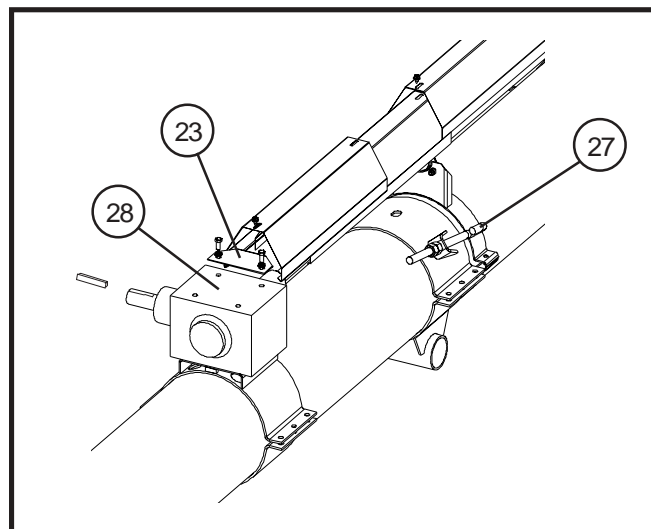
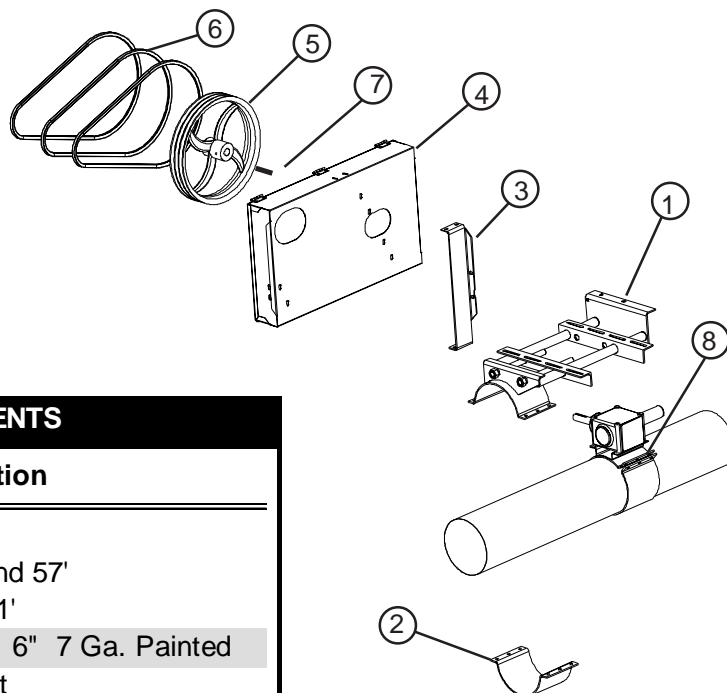


Fig. B

Top Mounted Electric Drive Components



ELECTRIC DRIVE COMPONENTS		
Ref No.	Part No.	Description
1	GK2530	Motor Mount Frame for 8" x 33', 41', 47', 53' and 57'
	GK2447	for 8" x 59', 62', 65' and 71'
2	GK5096	Halfband for Motor Mount 6" 7 Ga. Painted
3	GK2542	Belt Guard Mount Bracket
4	GK3445	Belt Guard
5	GK2544	Aluminum sheave 2B 15" - 1" Bore for 8" x 33', 41', 47', and 53'
	GK2545	3B 15" - 1" Bore for 8" x 57'
	GK2234	3B 15" 1-1/4" Bore for 8" x 59', 62', 65' and 71'
6	GK2546	Belt B-62
7	S-8276	Square Key 1/4" x 3"
8	GK3459	8" X 27" - Conn. Band w/ Gearbox Mount - 41'
N/S	GK1500	Drive Shaft Coupler (1" - 1") for 47' - 71'

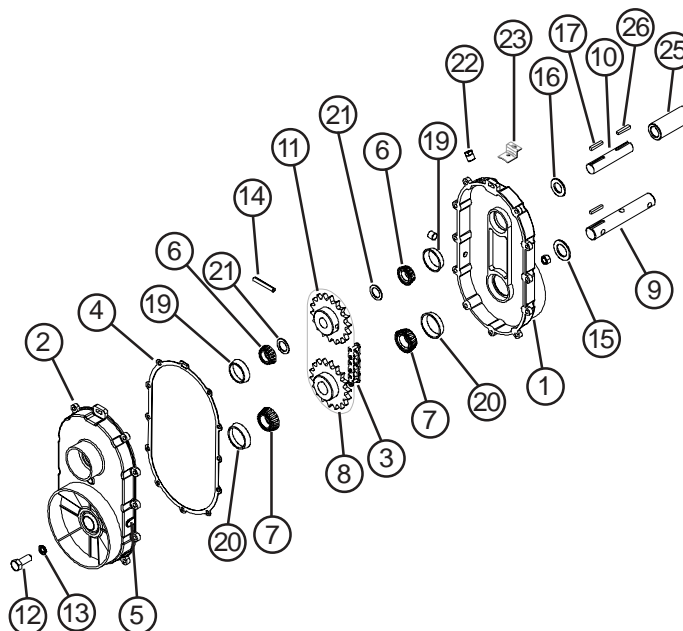
Miscellaneous Components

MISCELLANEOUS COMPONENTS		
Ref No.	Part No.	Description
N/S	GK1564	Corn screen cover 8"
N/S	GK1565	Corn screen cover band 8"
N/S	GK1523	Manual container with caps
N/S	GK3089	Cap for manual container

Enclosed Head Drive Assemblies

GK2504

Ref No.	Part No.	Description
1	GK3238	Aluminum casting
2	GK3239	Aluminum casting - cover
3	GK3240	# 60 roller chain - 38 pitch
4	GK3241	Gasket
5	GK2376	1/4" Plug
6	GK3242	1" Bearing; cone
7	GK2367	1-1/4" Bearing; cone
8	GK3244	1-1/4 Bore sprocket - 19 tooth
9	GK3252	Stub shaft 1-1/4"
10	GK3253	Stub shaft 1"
11	GK3245	1" Bore sprocket - 19 tooth
12	S-2741	5/16" x 1-1/2" HHCS
13	S-1147	5/16" Lockwasher
14	GK1629	3/8" x 2-1/2" roll pin
15	GK2374	Screw shaft seal 1-1/4"
16	GK3251	Drive shaft seal 1"
17	GK1032	Key
19	GK3247	1" Bearing cup
20	GK2383	1-1/4" Bearing cup
21	GK3248	1" Bearing spacer
22	GK2385	3/8" Pipe plug - vented
23	GK2543	Drive shaft mounting clip
N/S	S-8325	Self tapping screw
25	GK1500	4" Long coupler
26	GK1566	Key 1/4" x 1-1/2"
N/S	DC-1512	Decal - notice oil level

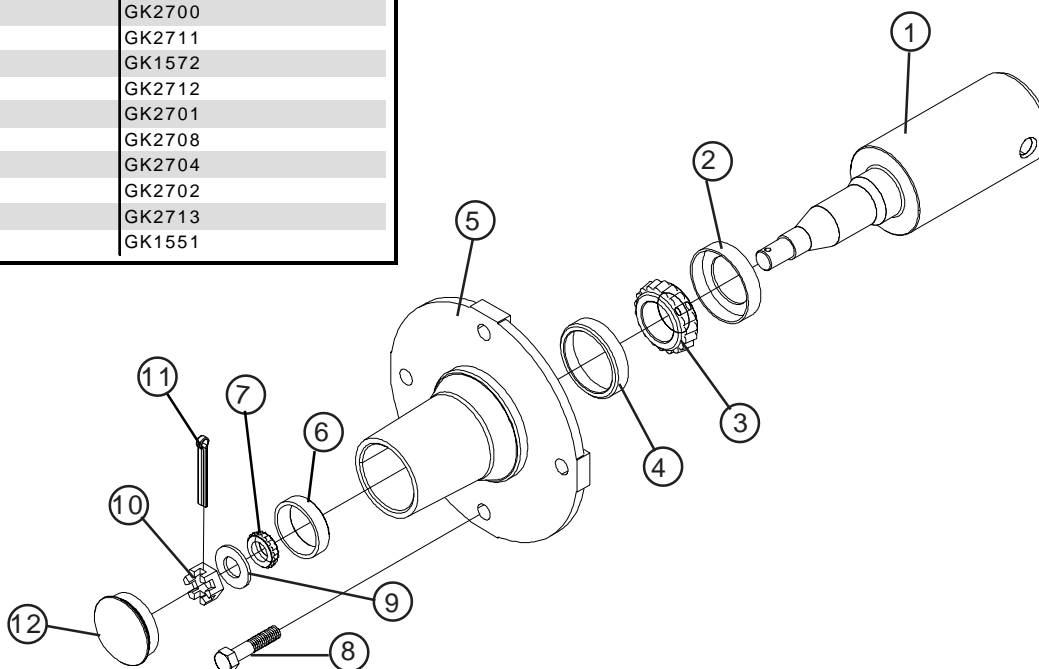


NOTE

* Indicates items that are not part of the assembly number. These items are sold separately.

Spindle and Hub Assemblies

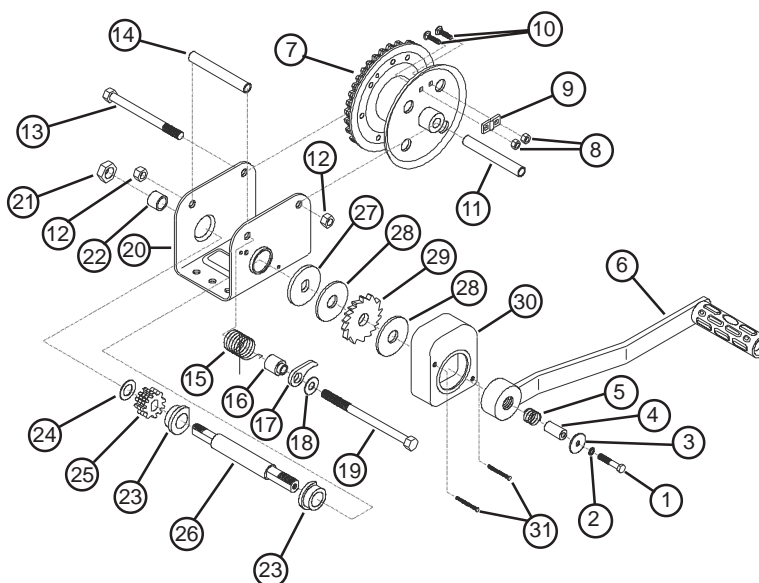
Ref No.	Description	4-bolt(2-1/16" x 14")for 10" x 31' - 71'
	Spindle and hub assembly	GK1193
1	Spindle	GK1511
2	Grease Seal	GK2703
3	Inner cone	GK2700
4	Inner cup	GK2711
5	Hub	GK1572
6	Outer cup	GK2712
7	Outer cone	GK2701
8	Lug bolt	GK2708
9	Washer	GK2704
10	Slotted hex nut	GK2702
11	Cotter pin	GK2713
12	Hub cup	GK1551



Winch - Brake Type 1000#

GK1562

Item Number	Description	Qty. Req.	Part Number
1	1/4" - 20 x 1-1/2" Hex Screw	1	GK6225
2	1/4" Lockwasher	1	GK6226
3	1/4" Wide Flatwasher	1	GK6227
4	Handle Retainer Spacer	1	GK6228
5	Spring	1	GK6229
6	Handle	1	GK1567
7	Real Assembly	1	GK6231**
8	#10-24 Hex Nut	2	GK6232
9	Cable Keeper	1	GK1382
10	#10-24 x 5/8" Carriage Bolt	2	GK6234
11	Front Frame Spacer	1	GK6235**
12	3/8 Lockwasher	2	GK6236*
13	3/8" x 1/2" Reel Bolt	1	GK6237*
14	Back Frame Spacer	1	GK6238**
15	Pawl Spring	1	GK6239**
16	Pawl Spacer	1	GK6240**
17	Pawl	1	GK6241**
18	3/8" Flat Washer	1	GK6242*
19	3/8" x 5-1/2" Pawl Bolt	1	GK6243*
20	Frame	1	GK6244**
21	9/16" - 16 Locknut	1	GK6245*
22	Bearing	1	GK6246**
23	3/4" I.D. Bushing	2	GK6247**
24	9/16" Flat Washer	1	GK6248*
25	Pinion Gear	3	GK6249**
26	Pinion Shaft	1	GK6250**
27	Brake Backup Plate	1	GK6251**
28	Brake Pad	2	GK6252**
29	Ratchet	1	GK6253**
30	Cover	1	GK6254**
31	#10-32 x 1-1/2" Cover Screw	2	GK6255*

**NOTE**

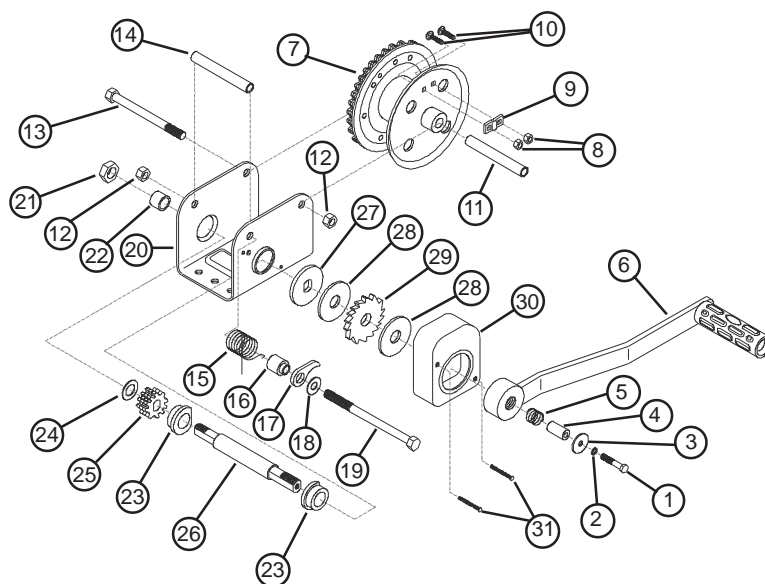
* Indicates standard hardware items - purchase locally.

** These items are not available as separate parts because of the precision assembly required. If these parts require placement, a new winch must be purchased.

Winch - Brake Type 1500#

GK3337

Item Number	Description	Qty. Req.	Part Number
1	1/4" - 20 x 1-1/2" Hex Screw	1	GK6225
2	1/4" Lockwasher	1	GK6226
3	1/4" Wide Flatwasher	1	GK6227
4	Handle Retainer Spacer	1	GK6228
5	Spring	1	GK6229
6	Handle	1	GK1567
7	Real Assembly	1	GK6259**
8	#10-24 Hex Nut	2	GK6232
9	Cable Keeper	1	GK1382
10	#10-24 x 5/8" Carriage Bolt	2	GK6234
11	Front Frame Spacer	1	GK6260**
12	3/8" Lockwasher	2	GK6141*
13	3/8" x 5" Reel Bolt	1	GK6261*
14	Back Frame Spacer	1	GK6262**
15	Pawl Spring	1	GK6239**
16	Pawl Spacer	1	GK6240**
17	Pawl	1	GK6241**
18	Washer	1	GK6248*
19	3/8" x 6" Pawl Bolt	1	GK6263*
20	Frame	1	GK6264**
21	9/16" - 18 Locknut	1	GK6245*
22	Bearing	1	GK6246**
23	Bushing	2	GK6247**
24	Washer	1	GK6248**
25	Pinion Gear	3	GK6249**
26	Pinion Shaft	1	GK6250**
27	Brake Backup Plate	1	GK6251**
28	Brake Pad	2	GK6252**
29	Ratchet	1	GK6253**
30	Cover	1	GK6254**
31	#10-32 x 1-1/2" Cover Screw	2	GK6255*


NOTE

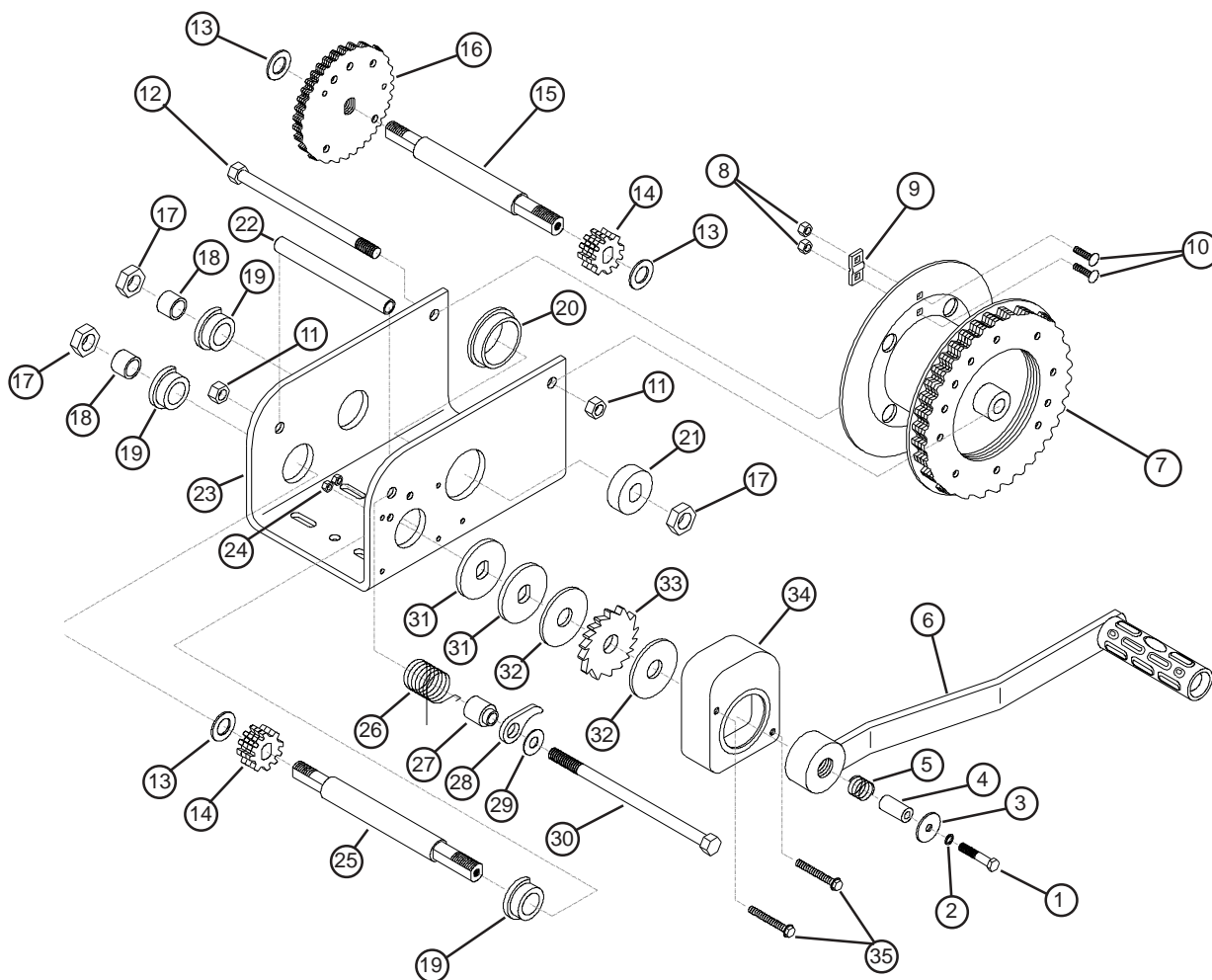
* Indicates standard hardware items - purchase locally.

** These items are not available as separate parts because of the precision assembly required. If these parts require placement, a new winch must be purchased.

Winch - Brake Type 2500#

GK2490

Item Number	Description	Qty. Req.	Part Number	Item Number	Description	Qty. Req.	Part Number
1	1/4" - 20 x 1-1/2" Hex Screw	1	GK6225	18	3/4" O.D. Bearing	2	GK6271**
2	1/4" Lockwasher	1	GK6226	19	3/4" I.D. Bushing	3	GK6272**
3	1/4" Wide Flatwasher	1	GK6227	20	1-1/2" I.D. Bushing	1	GK6273**
4	Handle Retainer Spacer	1	GK6228	21	1-1/2" O.D. Bushing	1	GK6274**
5	Spring	1	GK6229	22	Frame Spacer	1	GK6275**
6	Handle	1	GK1567	23	Frame	1	GK6276**
7	Real Assembly	1	GK6266**	24	#10-32 Locknut	2	GK6277*
8	#10-24 Hex Nut	2	GK6232	25	Back Pinion Shaft	1	GK6278**
9	Cable Keeper	1	GK1382	26	Pawl Spring	1	GK6239**
10	#10-24 x 5/8" Carriage Bolt	2	GK6234	27	Pawl Spacer	1	GK6240**
11	3/8" Locknut	2	GK6236*	28	Pawl	1	GK6241**
12	Reel Bolt	1	GK6267*	29	Washer	1	GK6242*
13	9/16" Flat Washer	3	GK6268*	30	Pawl Bolt	1	GK6279*
14	Pinion Gear	8	GK6249**	31	Brake Backup Plate	2	GK6251*
15	Front Shaft	1	GK6269**	32	Brake Pad	2	GK6252*
16	Pick-Off Gear Assembly	1	GK6270**	33	Ratchet	1	GK6253**
17	9/16"-18 Locknut	3	GK6245*	34	Cover	1	GK6254**
				35	#10-32 x 1-3/4" Cover Screw	1	GK6280*

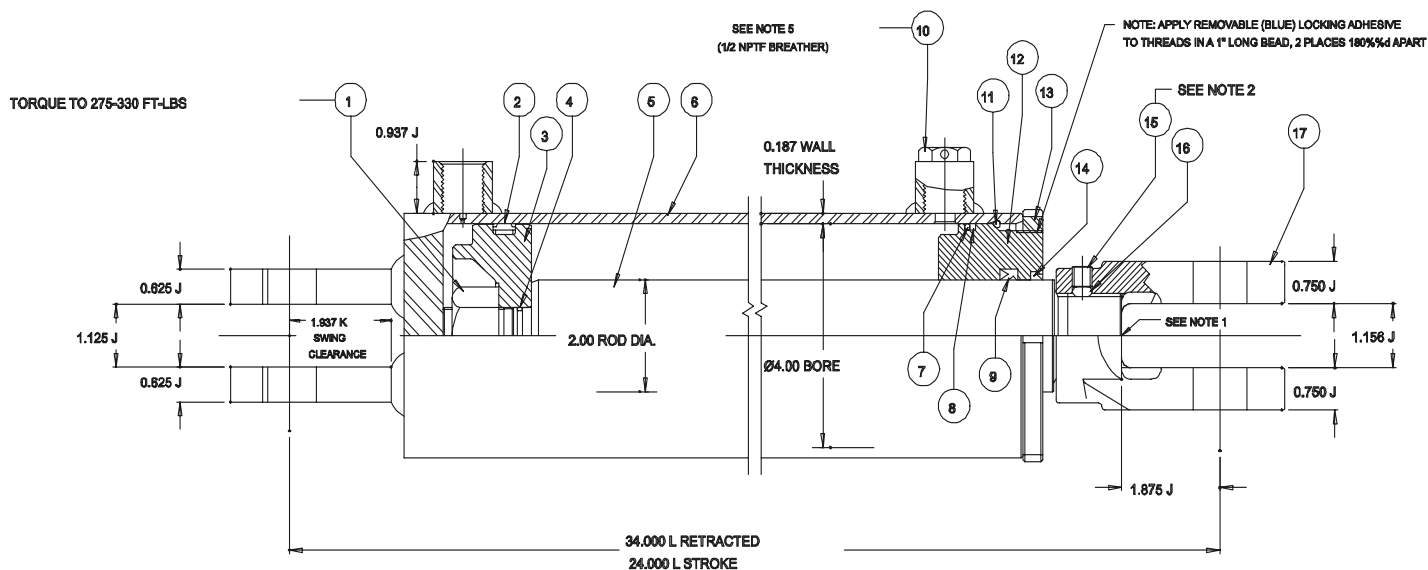
**NOTE**

* Indicates standard hardware items - purchase locally.

** These items are not available as separate parts because of the precision assembly required. If these parts require placement, a new winch must be purchased.

Hydraulic Cylinder

GK1527 & GK1528



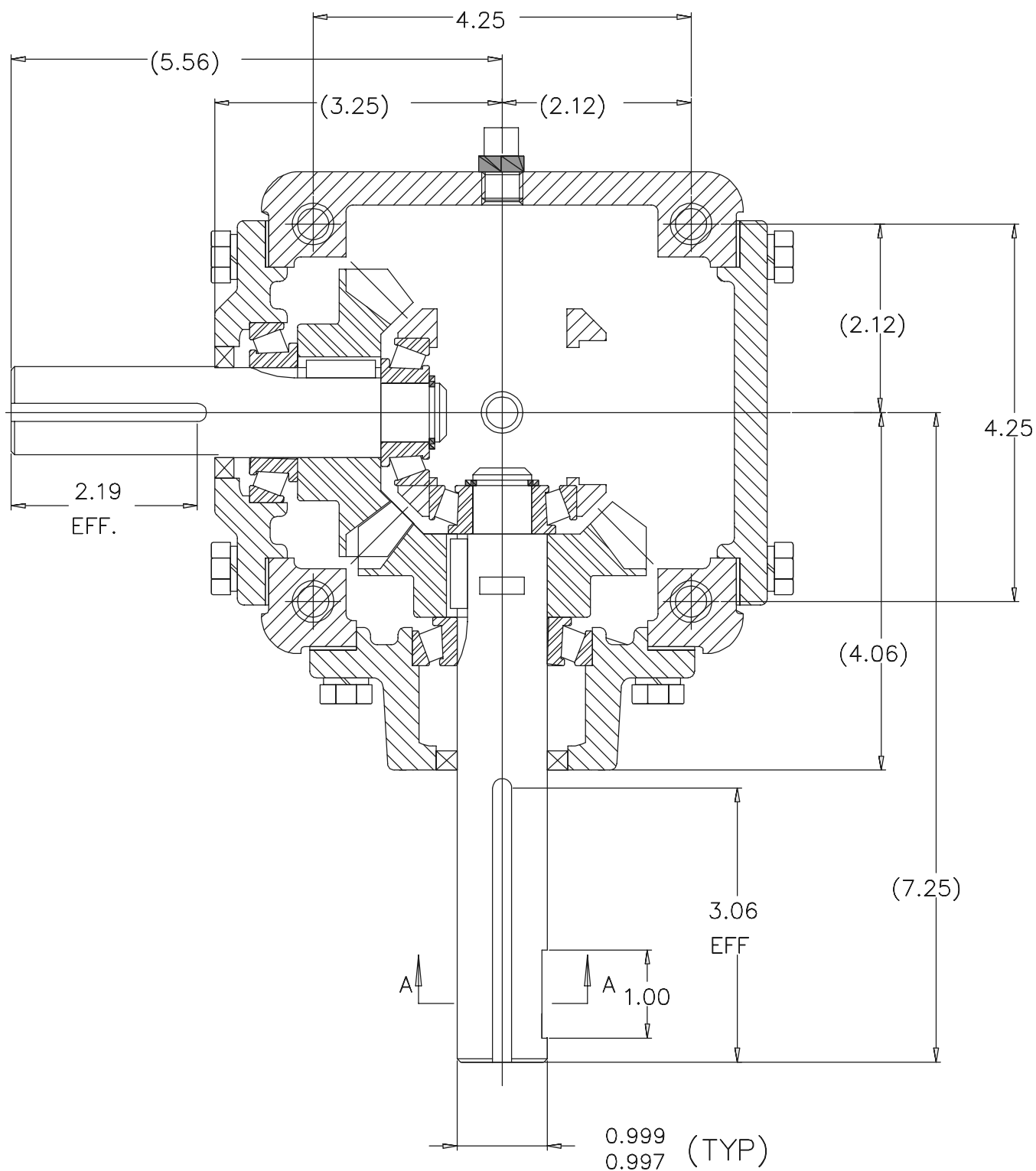
Ref #	Complete No. GK1527 4" Bore x 24" Stroke Used on 8" x 47' - 62'	Complete No. GK1528 4" Bore x 36" Stroke Used on 8" x 65' and 71'	Description
1	GK6213	GK6213	Nut Lock
2	GK6356	GK6356	O-Ring Seal
3	GK6211	GK6211	Piston Rod 4" O.D.
4	GK6357	GK6357	Small O-Ring
5	GK6208	GK6222	Piston Rod 2" DX
6	GK6207	GK6221	Cylinder 4" I.D.
7	GK6355	GK6355	Large O-Ring
8	GK6358	GK6358	Backup Washer
9	GK6360	GK6360	Backup Washer
10	GK6216	GK6216	Breather Plug 1/2" NPT
11	GK6214	GK6214	Cylinder: Ret Ring Rod Int 4"
12	GK6210	GK6210	Cylinder Guide 4" I.D. x 2"
13	GK6219	GK6219	Spanner Nut 3/4" x 4-1/2" O.D.
14	GK6359	GK6359	Piston Rod Washer
15	GK6220	GK6220	Set Screw 3/8"-16 x 3/4"
16	GK6212	GK6212	Plug: Nylon
17	GK6209	GK6209	Clevis Rod 1-1/2"-12UNF
N/S	GK1531	GK1531	Clevis Pin & Clip
N/S	GK6217	GK6217	Plug Steel Pipe, 1/2" HS
N/S	GK6218	GK6218	Cylinder
N/S	GK3323	GK3323	Seal Kit 4" Bore

NOTE

* Only available as part of a seal kit.

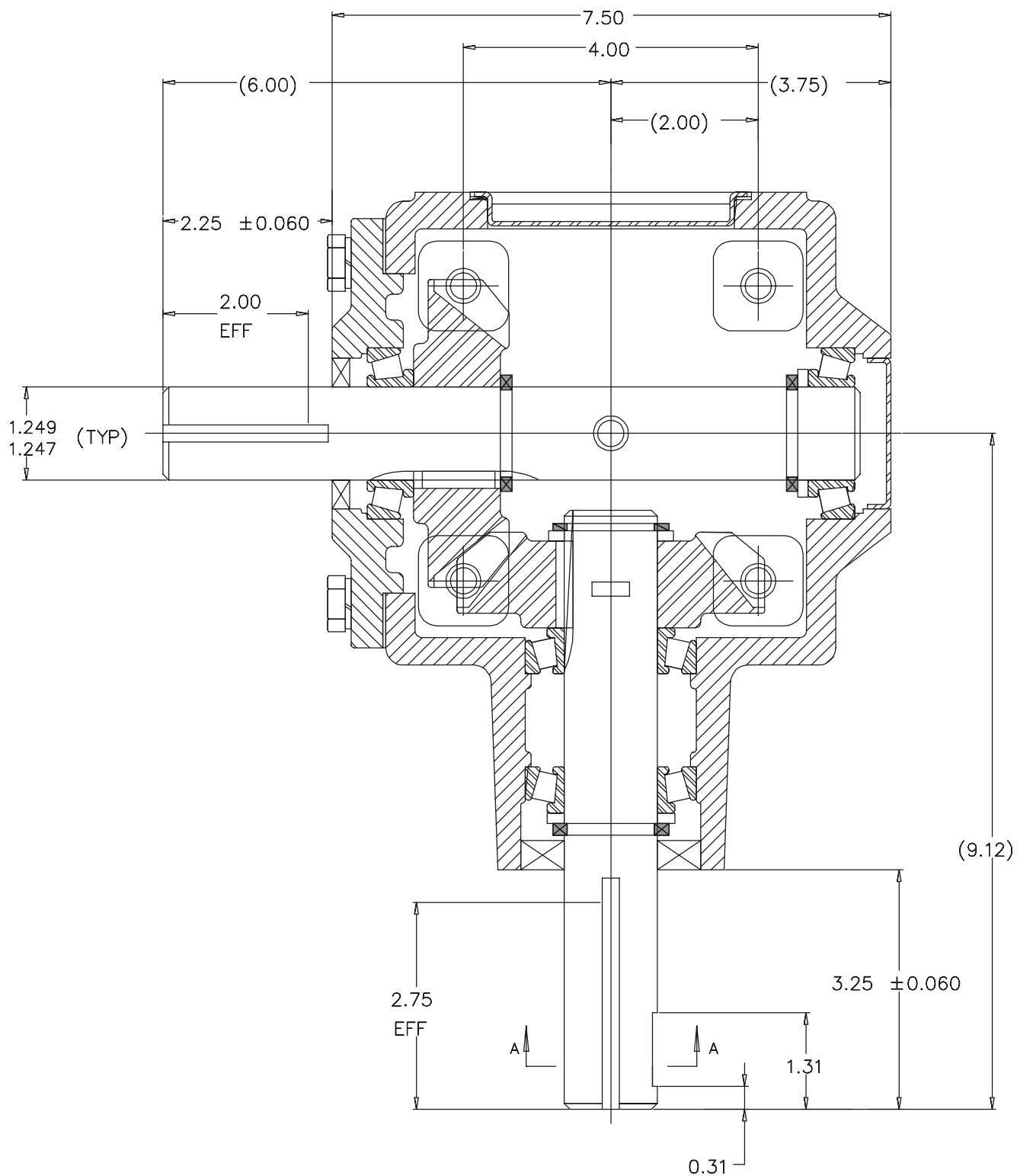
Gearbox

GK24931



Gearbox

GK24941



THE COMPANY WARRANTS ALL PRODUCTS MANUFACTURED TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USAGE AND CONDITIONS FOR A PERIOD OF TWELVE (12) MONTHS AFTER RETAIL SALE TO THE ORIGINAL END USER OF SUCH PRODUCTS. OUR ONLY OBLIGATION IS, AND PURCHASER'S SOLE REMEDY SHALL BE TO REPAIR OR REPLACE, AT THE COMPANY'S OPTION AND EXPENSE, PRODUCTS THAT, IN THE MANUFACTURERS SOLE JUDGEMENT, CONTAIN A MATERIAL DEFECT DUE TO MATERIALS OR WORKMANSHIP. ALL DELIVERY AND SHIPMENT CHARGES TO AND FROM THE FACTORY WILL BE PURCHASER'S RESPONSIBILITY. EXPENSES INCURRED BY OR ON BEHALF OF THE PURCHASER WITHOUT PRIOR WRITTEN AUTHORIZATION FROM AN AUTHORIZED EMPLOYEE OF THE COMPANY SHALL BE THE SOLE RESPONSIBILITY OF THE PURCHASER.

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THE FOREGOING WARRANTY SHALL NOT COVER PRODUCTS OR PARTS WHICH HAVE BEEN DAMAGED BY NEGLIGENT USE, MISUSE, ALTERATION, OR ACCIDENT. ANY NEGLIGENT USE, MISUSE, ALTERATION, OR DAMAGE DUE TO ACCIDENT, AS DETERMINED BY A COMPANY REPRESENTATIVE, MAY VOID THE WARRANTY. THIS WARRANTY COVERS ONLY PRODUCTS MANUFACTURED BY THE COMPANY. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. WE RESERVES THE RIGHT TO MAKE DESIGN OR SPECIFICATION CHANGES AT ANY TIME, BEARING NO RESPONSIBILITY TO MAKE SIMILAR DESIGN OR SPECIFICATION CHANGES ON PREVIOUSLY SOLD MERCHANDISE.

PRIOR TO INSTALLATION, PURCHASER HAS THE RESPONSIBILITY TO RESEARCH AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES WHICH MAY APPLY TO THE LOCATION AND INSTALLATION.

This Equipment shall be installed in accordance with the current installation codes and applicable regulations which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installation occurs.



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