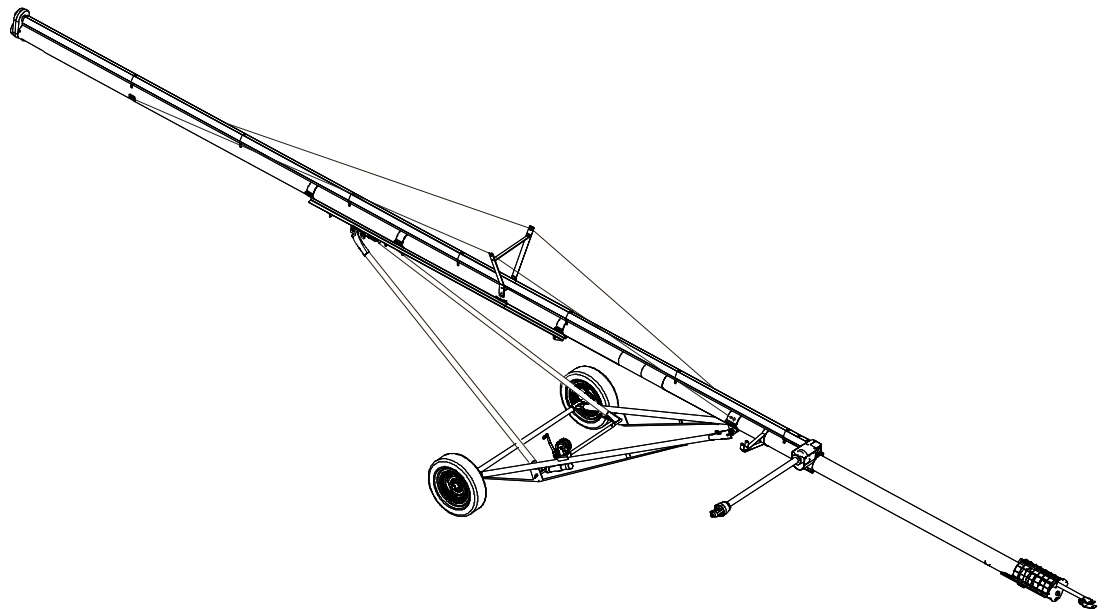


PNEG-1052
9-29-06

8" Top-End Drive Transport Auger

8" Top-End Drive Transport Auger

Assembly & Operation Manual



PNEG-1052
9-29-06



PNEG-1052

Table of Contents

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.

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Warranty Inside Back Cover

***SAFETY* 1st**

*Replace missing guards and shields
FREE OF CHARGE!*

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. Safety is NO ACCIDENT!

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

While it is a main goal 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 safety questions, please contact us at:

<p>The GSI Group PO Box 20 1004 E. Illinois Street Assumption, IL 62510 Ph: 217-226-4421</p>
--

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 it's 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 Instructions

Our principle concern is your safety and the safety of others associated with grain handling equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems which may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards and precautions exist, and to inform all personnel associated with the equipment or in the area. Safety precautions may be required from the personnel. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation, where **SERIOUS INJURY** or **DEATH** may occur.

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 installations are made.

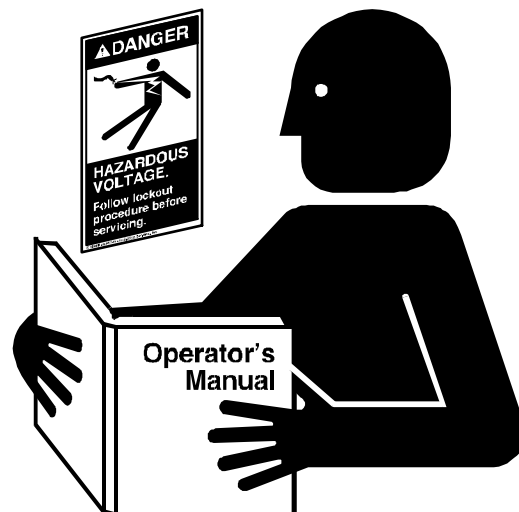
FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and safety signs on your machine. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction. Keep children and other unqualified personnel out of the working area at ALL times

Keep your machinery in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your dealer.



Read and Understand Manual.

STAY CLEAR OF ROTATING PARTS

Entanglement in rotating augers or drive shafts will cause serious injury or death.

Keep all shields and covers in place at all times.

Wear close fitting clothing. Stop and lock out power source before making adjustments, cleaning, or maintaining equipment.



Rotating Auger

OPERATE EQUIPMENT PROPERLY

- Untrained operators subject themselves and others to **SERIOUS INJURY** or **DEATH**. **NEVER** allow untrained personnel to operate this equipment.
- **NEVER** work alone.
- Keep children and other unqualified personnel out of the working area at **ALL** times. Refer to the **Startup** section of this manual for diagrams of the working area.
- Make sure **ALL** equipment is locked in position before operating.
- **NEVER** start equipment until **ALL** persons are clear of the work area.
- Always keep all shields and guards in place during operation.
- Keep hands and feet away from the auger intake and other moving parts.
- **NEVER** attempt to assist machinery operation or to remove trash from equipment while in operation.
- Be sure all operators are adequately rested and prepared to perform all functions of operating this equipment.
- **NEVER** allow any person intoxicated or under the influence of alcohol or drugs to operate the equipment.
- Make sure someone is nearby who is aware of the proper shutdown sequence in the event of an accident or emergency.
- In the event of an accident or emergency, shut down the power source.
- **ALWAYS** think before acting. **NEVER** act impulsively around the equipment.
- **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.
- Use ample overhead lighting after sunset to light the work area.
- Keep area around intake free of obstacles such as electrical cords, blocks, etc. that might trip workers.
- **NEVER** drive, stand or walk under the equipment.
- Use caution not to hit the auger when positioning the load.
- **ALWAYS** lockout **ALL** power to the equipment when finished loading or unloading a bin.



**Operate
Equipment
Safely**

KEEP HANDS AWAY FROM MOVING PARTS

DO NOT put hand or arm in hopper. Rotating auger can crush and dismember.

DO NOT put any kind of tool inside hopper to try and clear debris while the auger is running. Damage to the equipment will result.

ALWAYS turn off and lock out all power sources before servicing equipment.

Rotating Auger



INSTALL & OPERATE ELECTRICAL EQUIPMENT PROPERLY

To avoid serious injury or death, stay away from unit and make sure everyone is clear of all augers before starting or operating the unit.

All electrical connections should be made by a qualified electrician and must meet the standards set by the National Electric Code and all local and state codes.

Disconnect and lock out all power sources before installing wires/cables or servicing equipment.

Do not operate electric motor equipped units until motors are properly grounded.

Disconnect power on electrical driven units before resetting motor overloads.

Do not repetitively stop and start the drive in order to free a plugged condition. Jogging the drive in this type of condition can damage the equipment.



Electric Shock Hazard.

PRACTICE SAFE MAINTENANCE

Understand service procedures before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is in operation. Keep hands, feet, and clothing from rotating parts.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any build up grease, oil, or debris.

Maintain Equipment and Work Area.



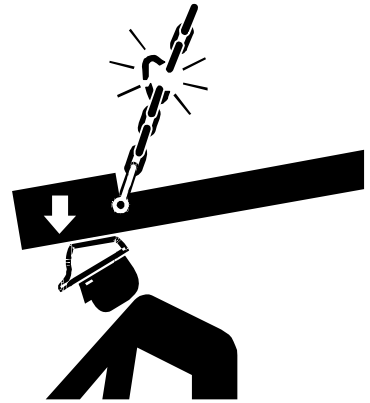
STAY CLEAR OF HOISTED EQUIPMENT

Always use proper lifting/hoisting equipment when assembling or disassembling equipment.

Do not walk or stand under hoisted equipment.

Always use sturdy and stable supports when needed for installation.

Crush Hazard.

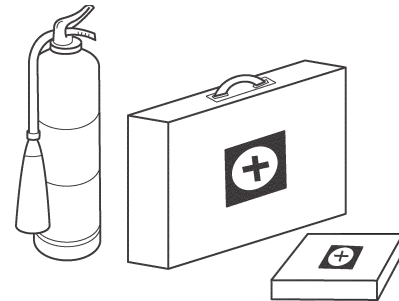


PREPARE FOR EMERGENCIES

Be prepared if fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



Keep Emergency Equipment Quickly Accessable.

WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Safety glasses should be worn at all times to protect eyes from debris.

Wear gloves to protect your hands from sharp edges on plastic or steel parts.

A respirator may be needed to prevent breathing potentially toxic fumes and dust.

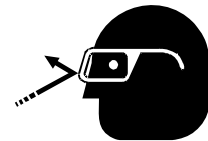
Wear hard hat and steel toe boots to help protect your head and toes from falling debris.

Remove all jewelry.

Tuck in any loose or dangling shoe strings.

Long hair should be tied up and back.

Eye Protection



Gloves



Steel Toe Boots



Respirator



Hard Hat



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 instructions 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 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. Sub part D, Section 19287.57 (a) (6).

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 people 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.

<i>Date</i>	<i>Employees Name (printed)</i>	<i>Employees Signature</i>
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NOTES

Safety Decals

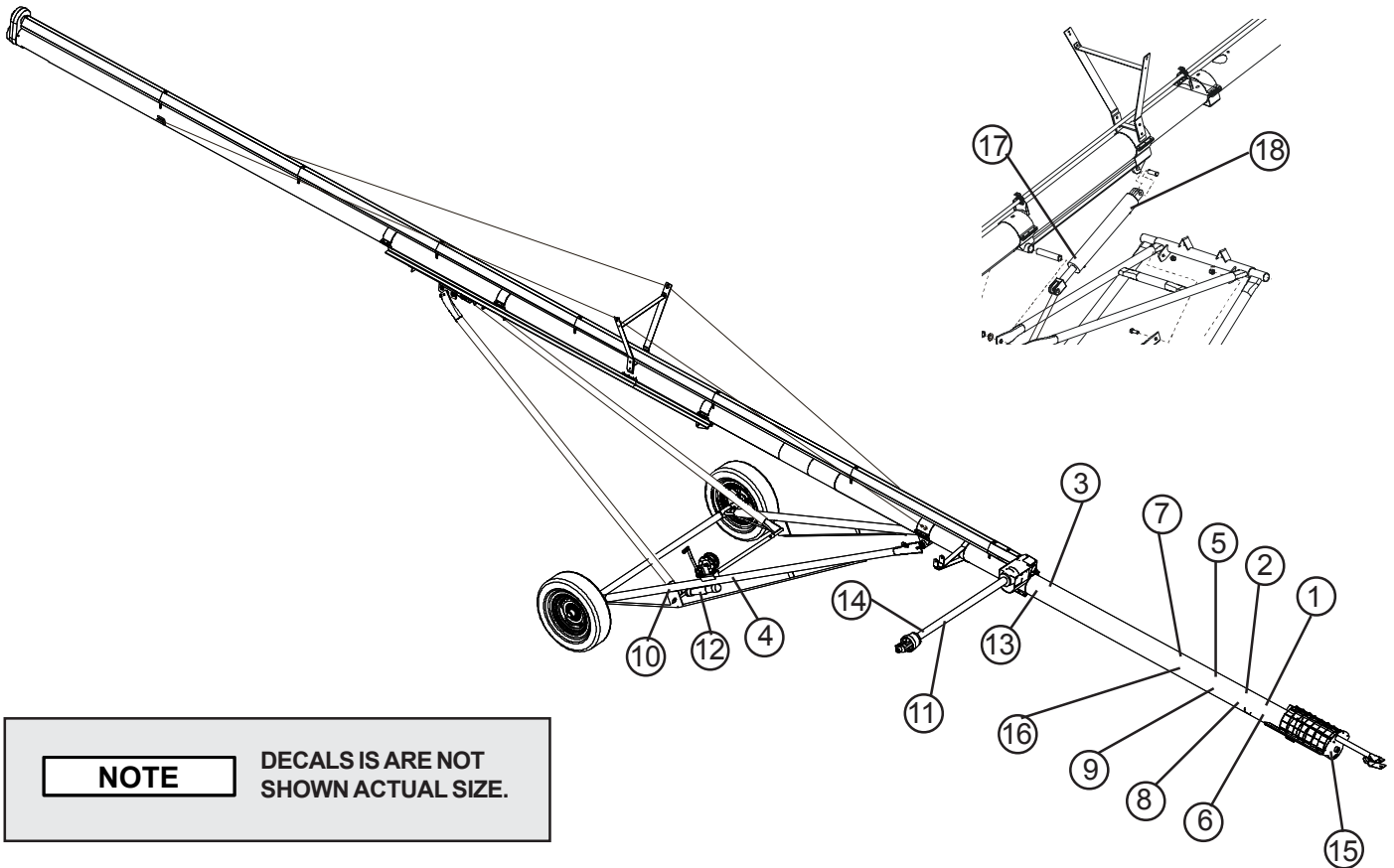
The Safety Decals listed below are included with the auger. Pages 13 through 15 shows the locations of the decals on the auger.

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

See pages 13 through 15 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"
17	DC-1408	2	Danger—Cylinder Guidelines (On Both Sides of Hydraulic Cylinder)	8" x 3-7/8"
18	DC-1873	1	Caution - Crush Hazard	4" x 1-3/4"

Safety Decals



NOTE

DECALS ARE NOT SHOWN ACTUAL SIZE.

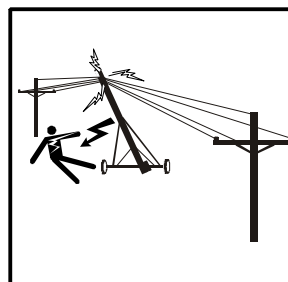
①

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



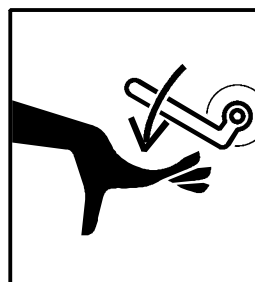
⚠ WARNING

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.

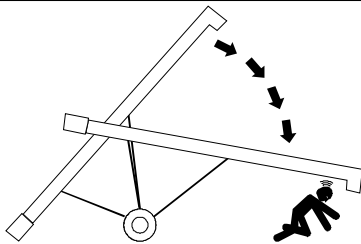
- NEVER RELEASE THE WINCH HANDLE UNTIL THE LOCK IS SECURELY IN PLACE.
- NEVER RELEASE WINCH LOCK BEFORE MANUALLY SECURING WINCH HANDLE WHEN LOWERING HOPPER.
- NEVER LEAVE HOPPER ON THE GROUND WHEN RAISING OR LOWERING THE AUGER. DOING SO COULD DAMAGE THE HOPPER WHEELS.

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.

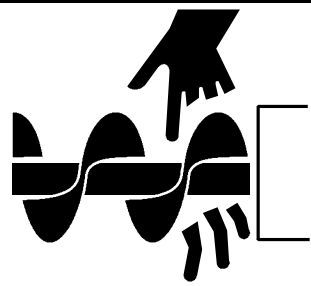
LOWER THE AUGER FOR TRANSPORTING IMMEDIATELY AFTER MOVING IT AWAY FROM THE GRAIN STORAGE BIN.

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



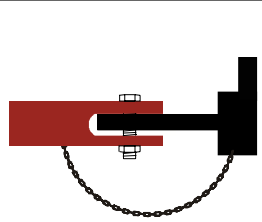
DANGER

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

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

Safety Decals

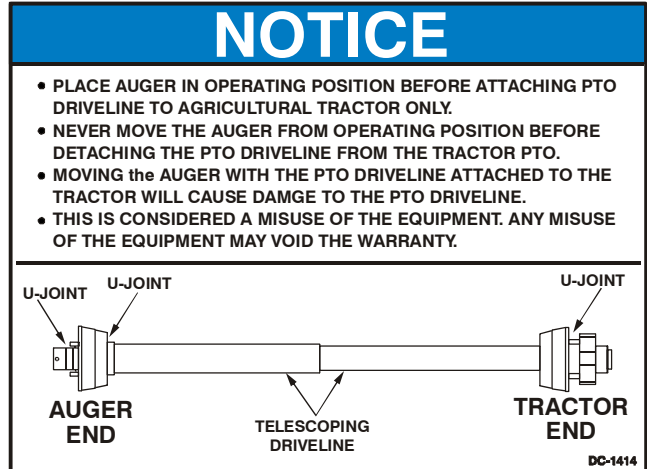
⑪



⑫



⑬



⑭



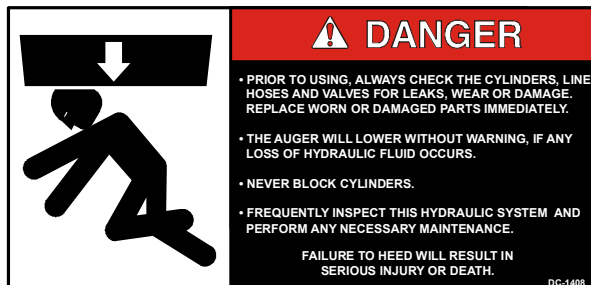
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⑮



⑰

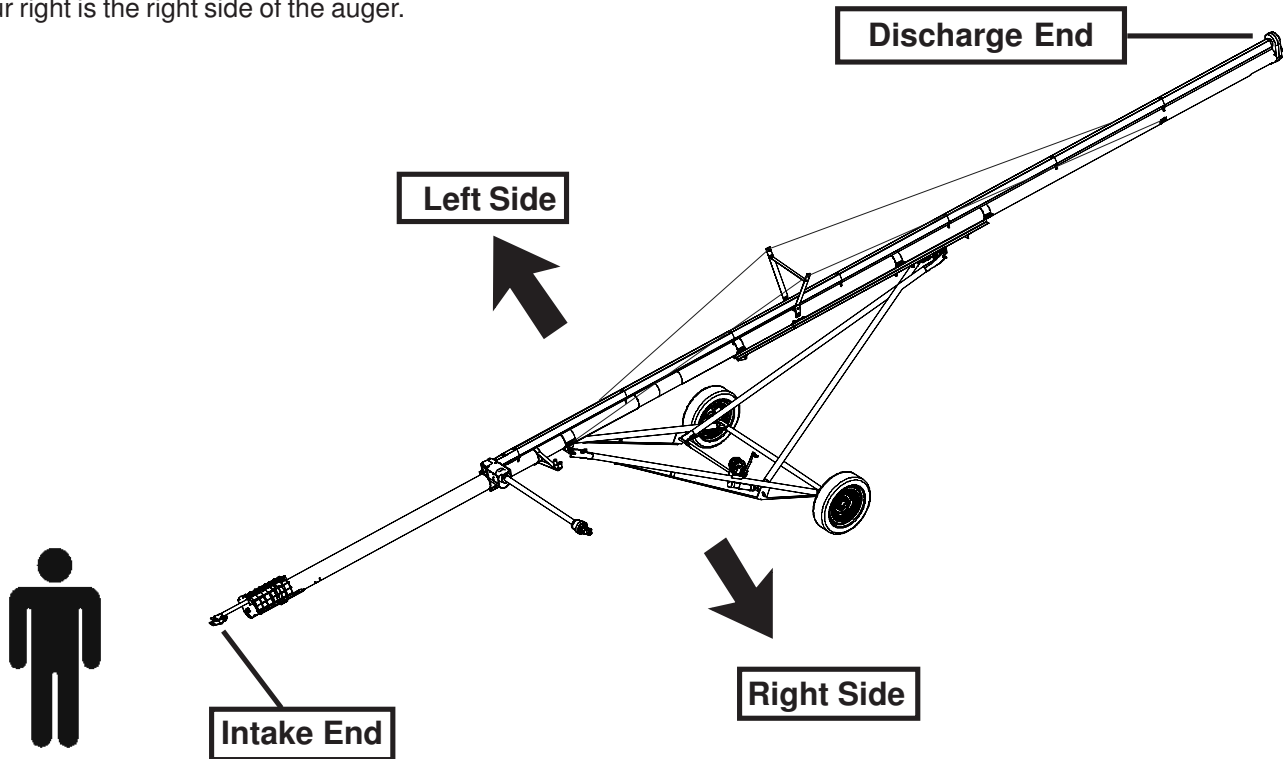


⑱



Introduction

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 if optional hydraulic lift is used. 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 or electric motor 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.

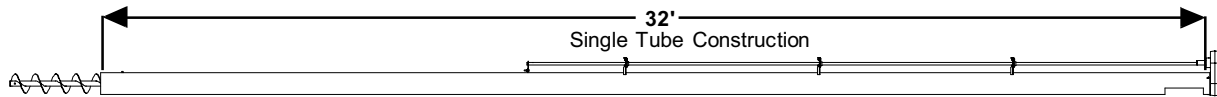
Do not operate unless ALL safety shields and devices are in place.

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

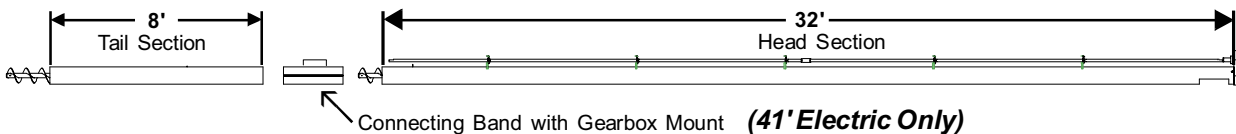
1. Layout Auger Housing for both Hydraulic and Manual Lift Augers

- 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.

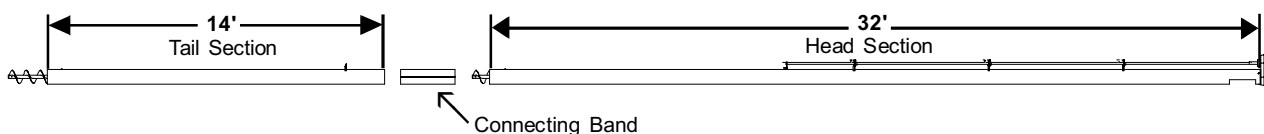
33' MODEL



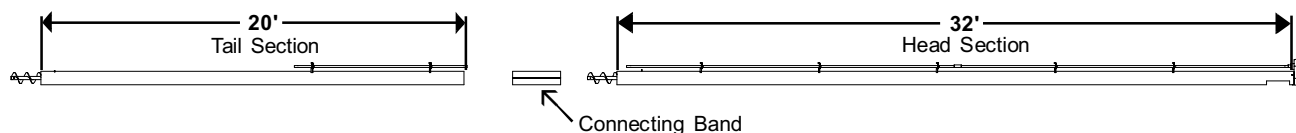
41' MODEL



47' MODEL

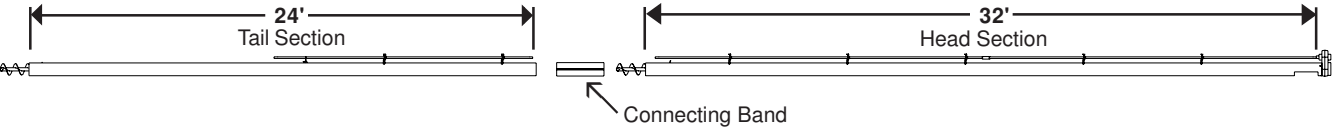


53' MODEL

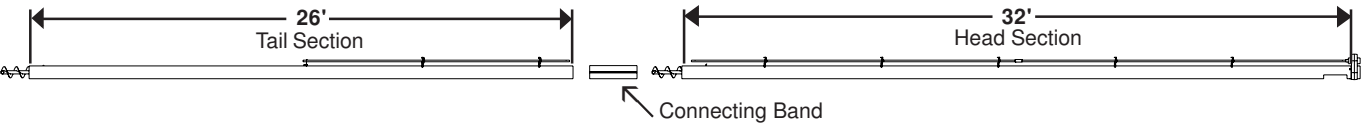


1. Layout Auger Housing for both **Hydraulic and Manual Lift Augers** (cont.)

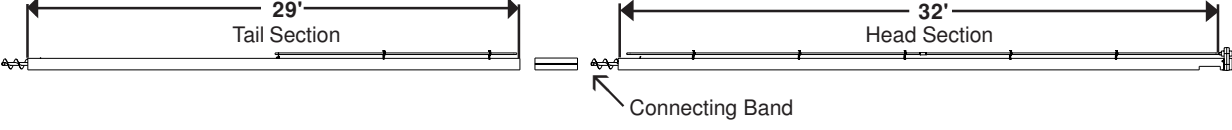
57' MODEL



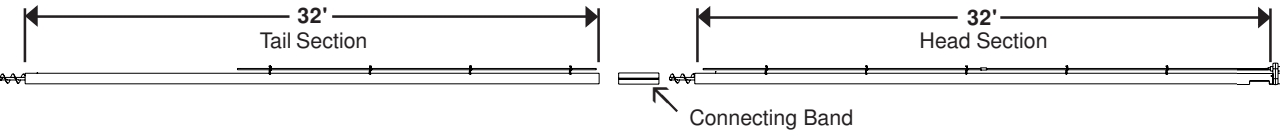
59' MODEL



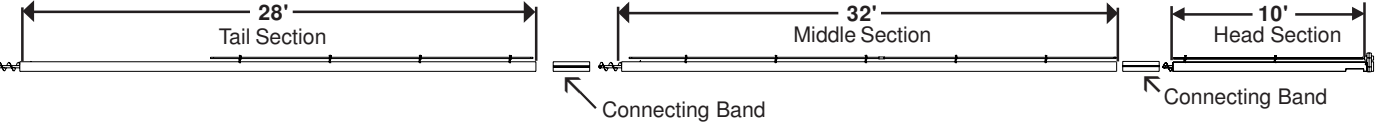
62' MODEL



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.

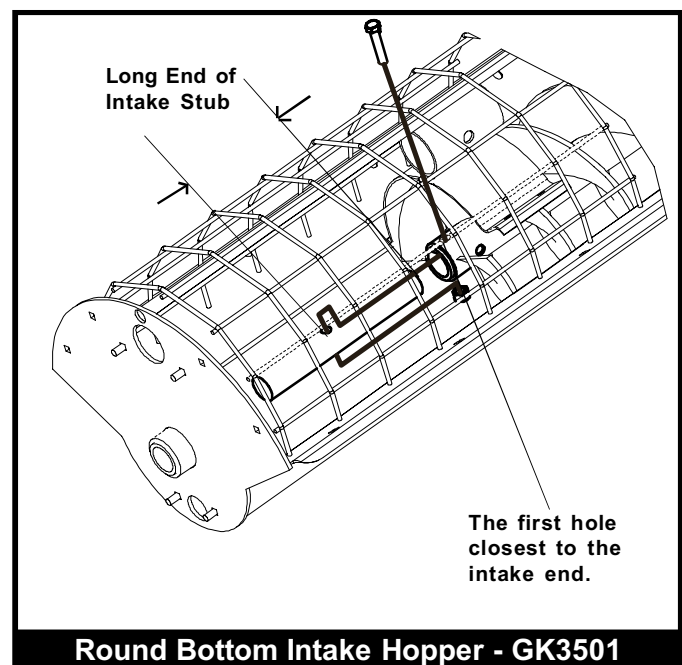
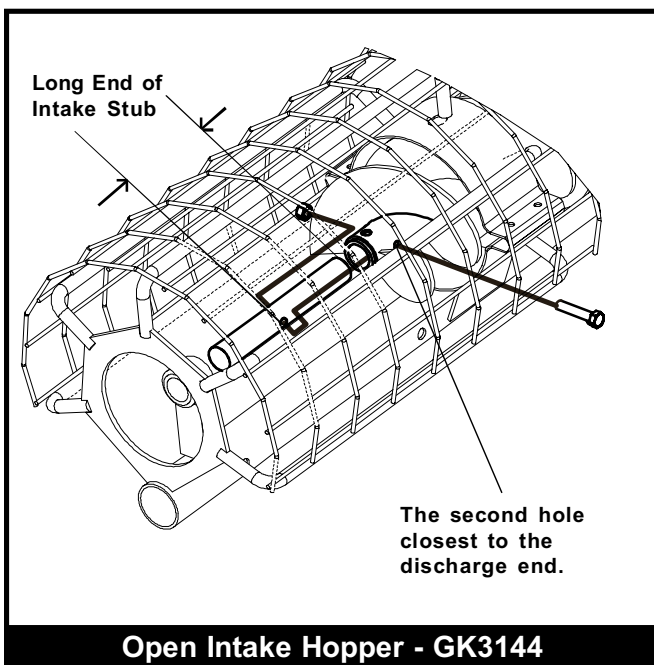
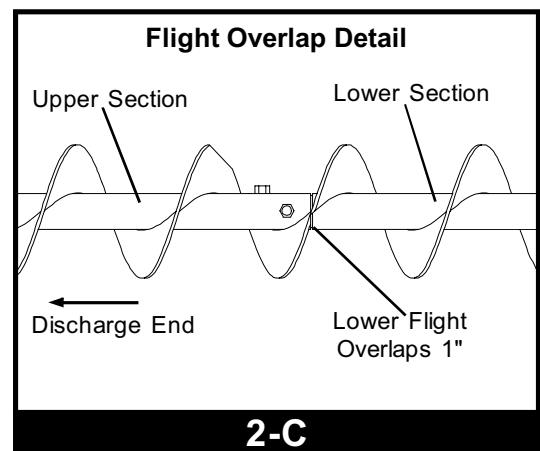
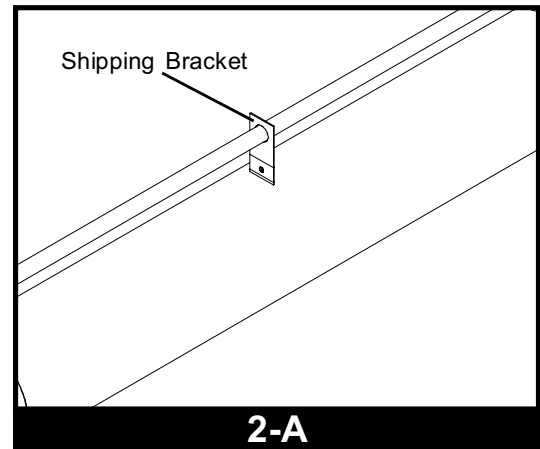
NOTE

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 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 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. Tighten the set screws in the coupler over the keys.

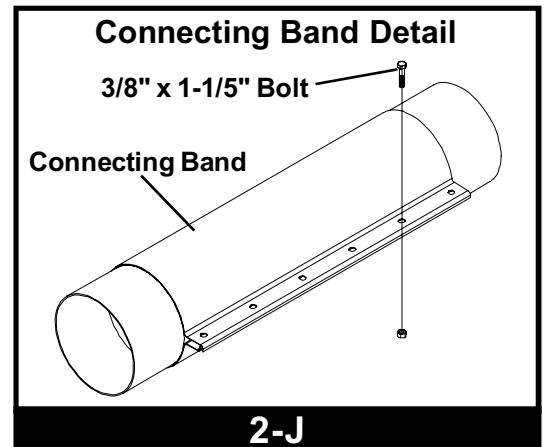
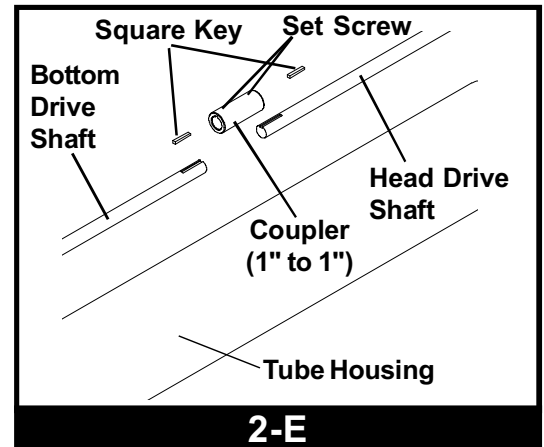
NOTE

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)

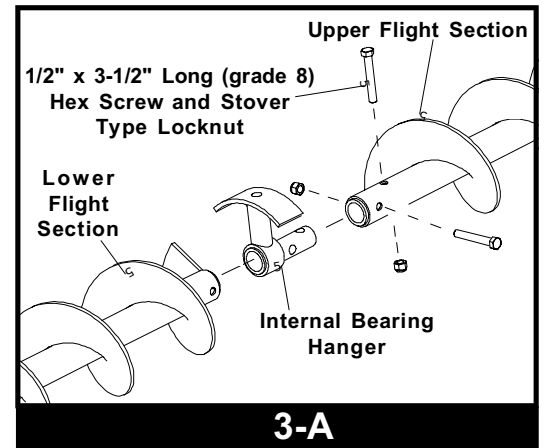
NOTE

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.



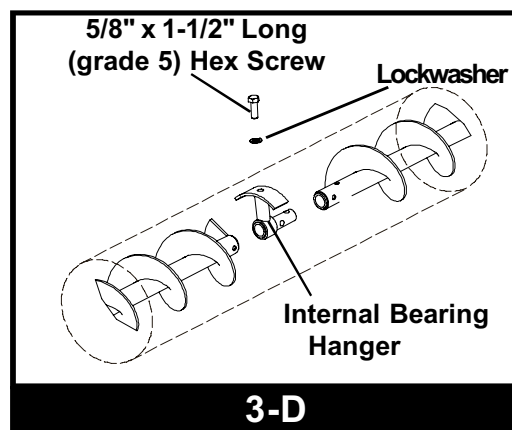
3. Flight and Housing Assembly for Augers with Optional Internal Flight Bearings

- 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)



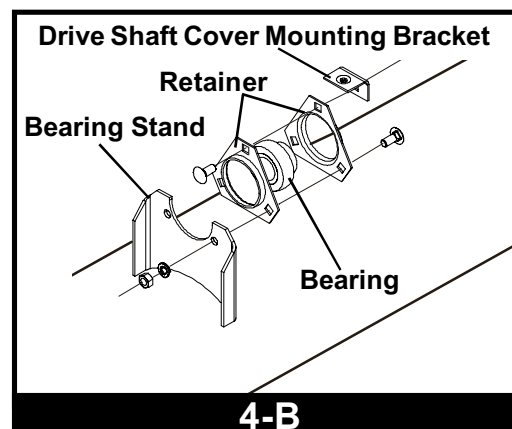
D. Attach the internal bearing hangers to the auger housing.

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

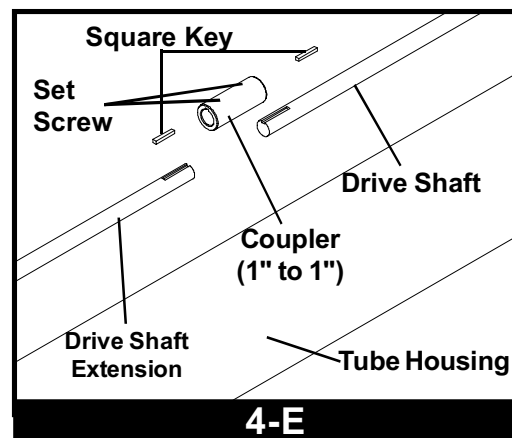
- A. Bolt the bearings onto the bolt-on bearing stand, which will be either welded on or banded-on depending on the auger size.
- B. Attach each bearing with two (2) retainers and one (1) drive shaft cover mounting bracket. (See Fig. 4-B)
- C. Slide the drive shaft extension through the bearing located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

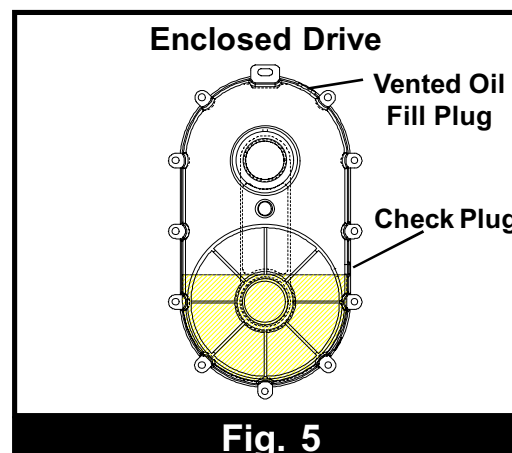


5. Enclosed Drive Preparation. (See Fig. 5)

- A. Unscrew the vented oil plug on top of the enclosed drive & check plug on the side.
- B. Fill with non-foaming multipurpose gear oil with the bottom of the check plug. Replace the oil plugs. Use SAE 85W90 weight oil for temperatures between 40° F and 120° F, SAE 80 for temperatures below 40° F or SAE 80W90 for all operating temperatures.

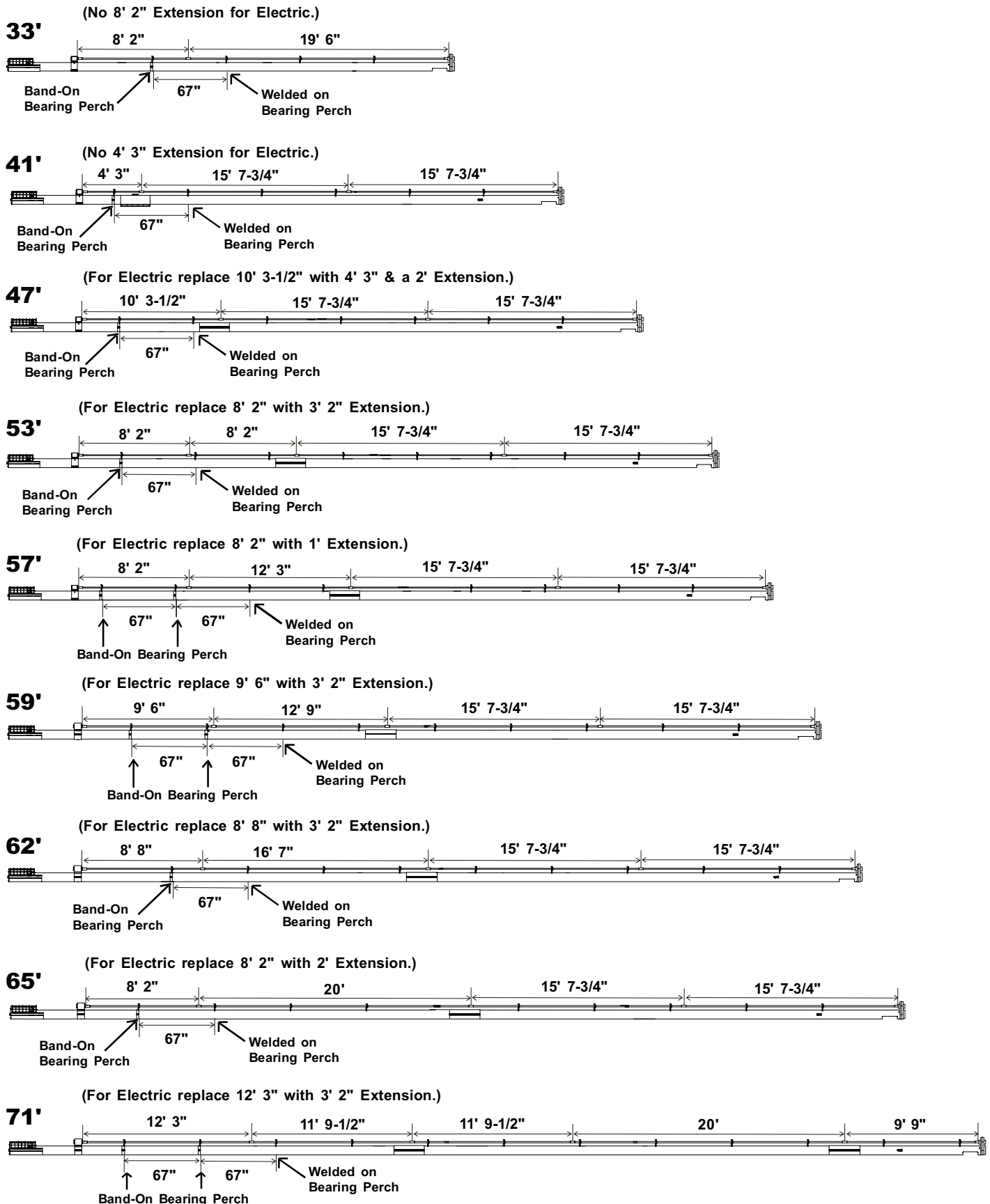
CAUTION

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

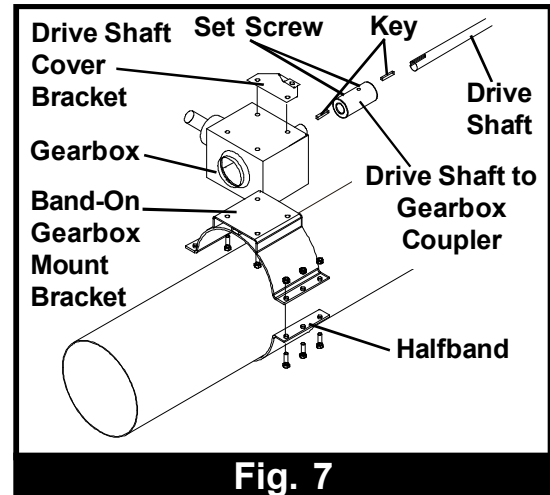
CAUTION

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 multipurpose gear oil SAE 85W90. SAE 80W90 may also be used for all operating temperatures. Below 40° F use SAE 80. Replace the plugs.



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.

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

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 mounting bracket halfband loosely. Secure it with six (6) 3/8" x 1-1/2" bolts and locknuts.
- C. Insert one (1) 1/4" x 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 2" key into the keyway on the drive shaft on gearbox and insert shaft with key into the 1-1/4" to 1" coupler. Tighten the set screws in the coupler over the keys.
- 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.
- H. Fill the gearbox to the check plug opening with the recommended oil per the instructions above.

CAUTION

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

8. Track and Truss Layout for Manual Lift Augers

⚠ WARNING

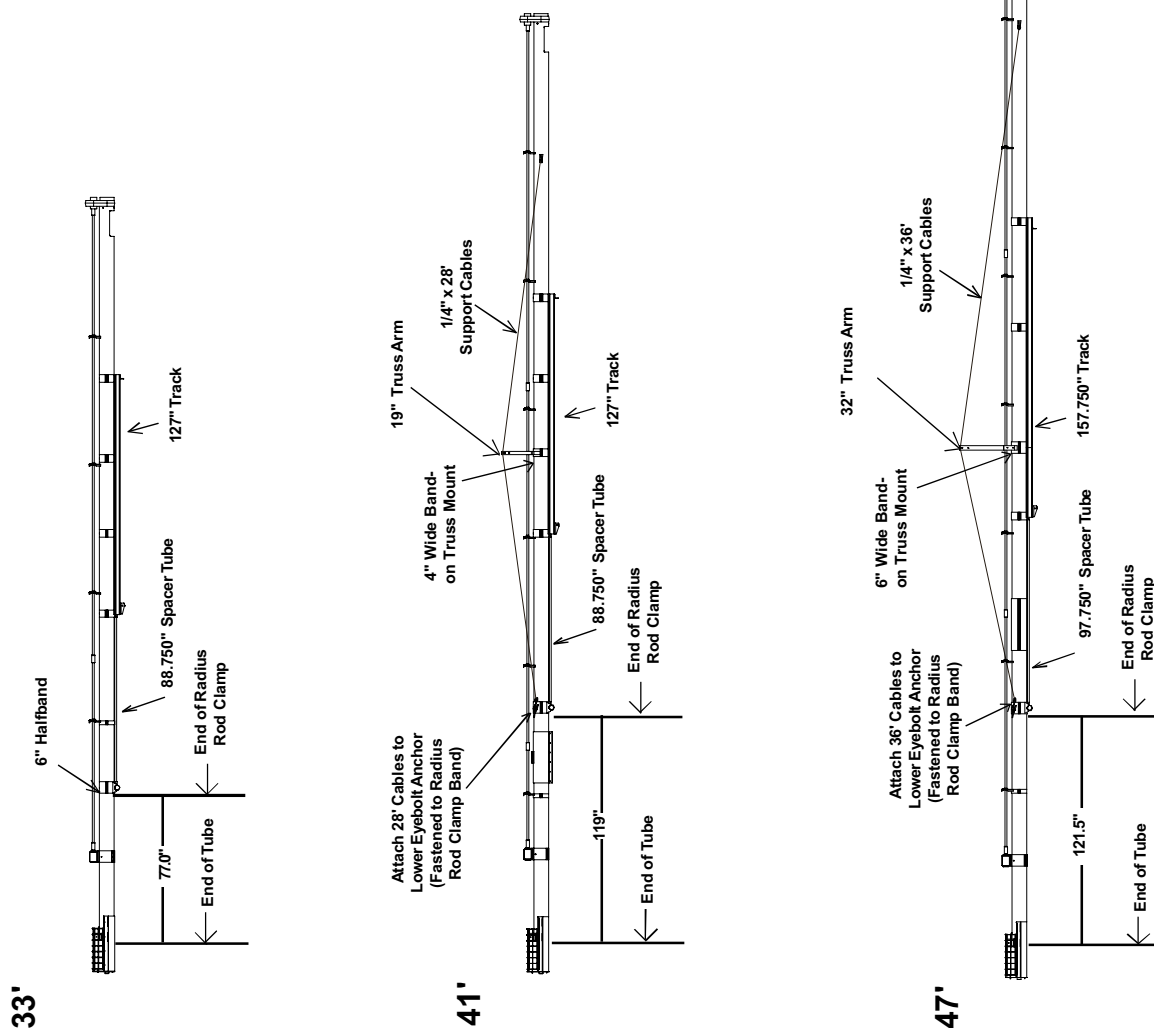
The location of components that band to the auger tube is critical for proper operation of the undercarriage system. If the auger components you have do not match the lengths specified in these instructions or you cannot position the components where instructions specify due to interference with other 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

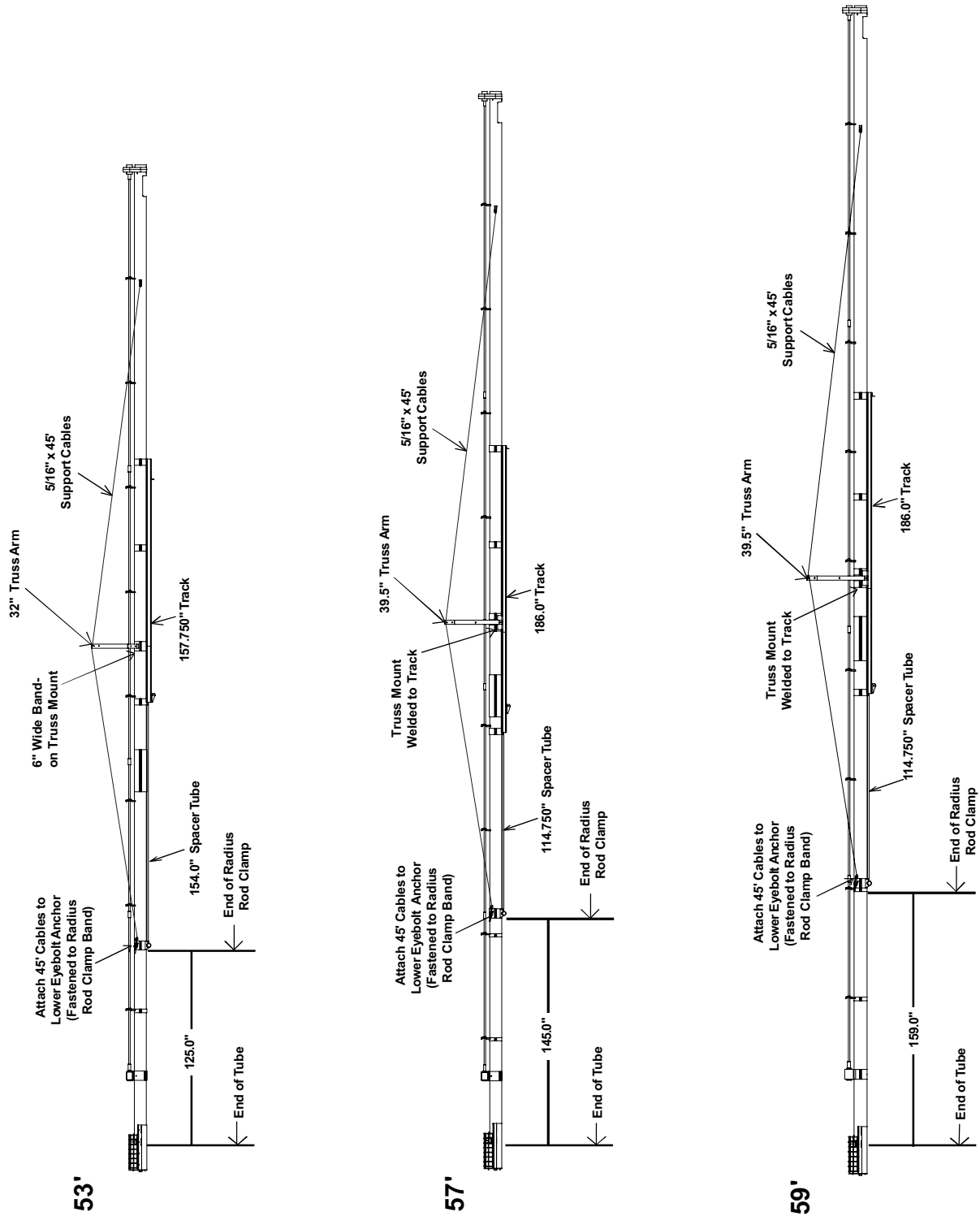
	Size	End of Radius Rod to End of Tube
Manual Lift	33'	77"
	41'	119"
	47'	121.5"
	53'	125"
	57'	145"
	59'	159"
	62'	129.75"
	65'	181.75"
	71'	193"

Spacer Tube Lengths

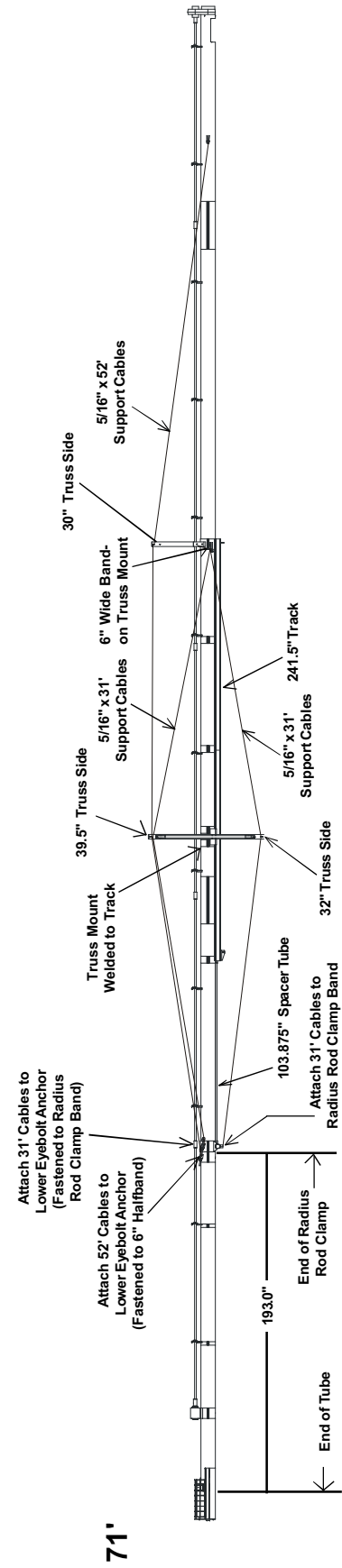
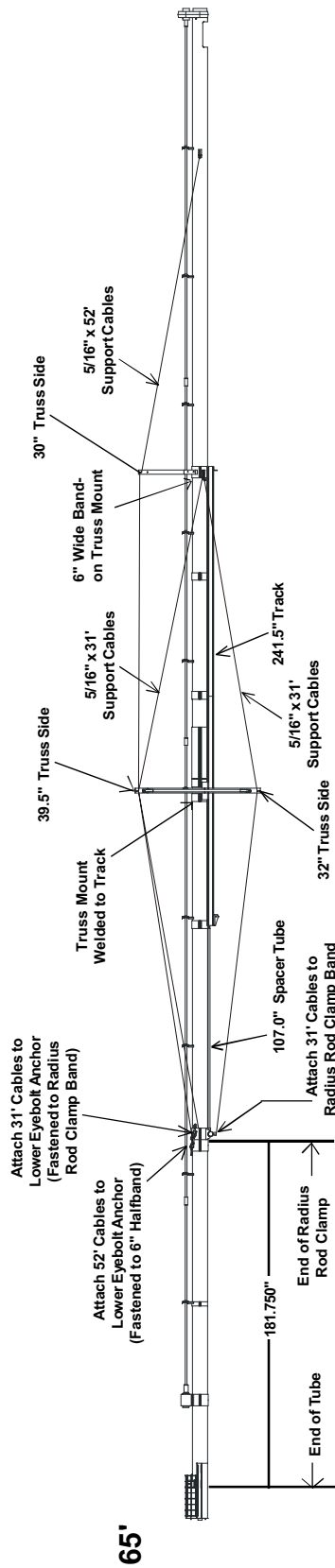
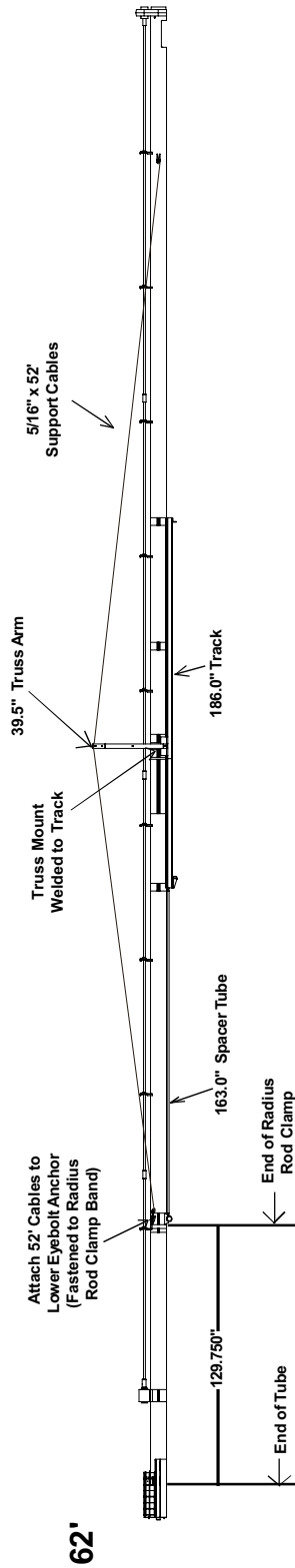
Auger Size	Spacer Tube Size	Part Number
8" x 33'	88.75"	GK3341
8" x 41'	88.75"	GK3341
8" x 47'	97.75"	GK3559
8" x 53'	154"	GK3909
8" x 57'	114.75"	GK2435
8" x 59'	114.75"	GK2435
8" x 62'	163"	GK4050
8" x 65'	107"	GK1387
8" x 71'	103.875"	GK2446



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



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

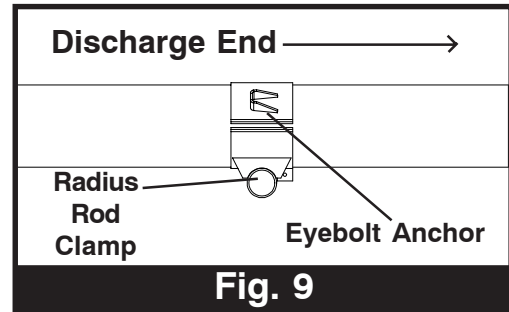


9. Assemble the Radius Rod Clamp

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 25-27 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. 9)



10. Installing the Spacer Tube (Refer to pages 25-27)

- 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.

11. Installing the Track

- A. Position the track under the tube housing close to the position indicated in the drawings on page 25-27 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.

12. 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.

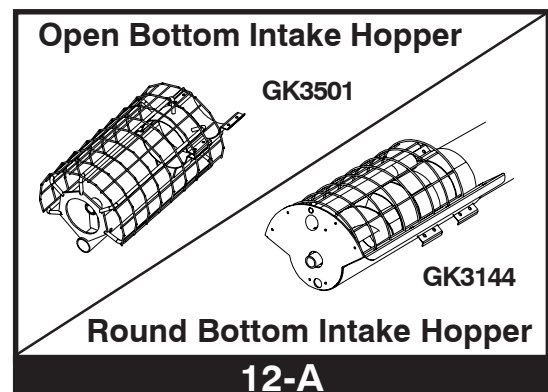
NOTE

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, flat washers, 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.



13. Truss Assembly for Manual Lift Undercarriage

(If you have a 33' Top Drive skip this section and go to Section 15 on page 33.)

A. 41' Truss Assembly (See Fig. 13-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.

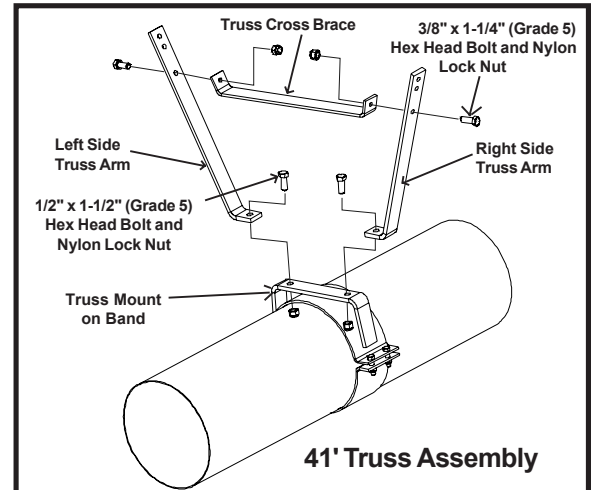


Fig. 13-A

B. 47' & 53' Truss and 65' & 71' Upper Truss Assembly (See Fig. 13-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.

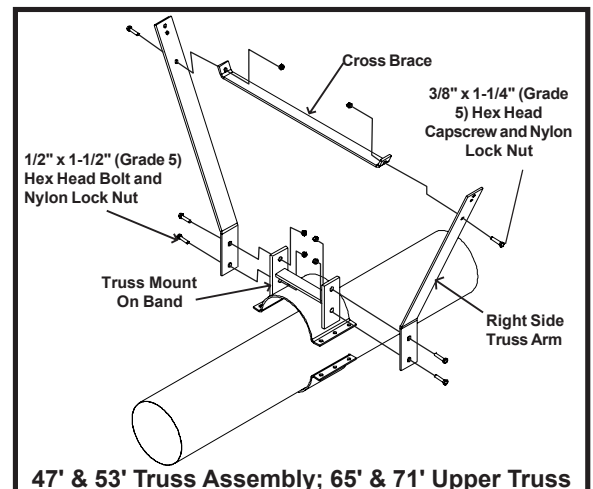
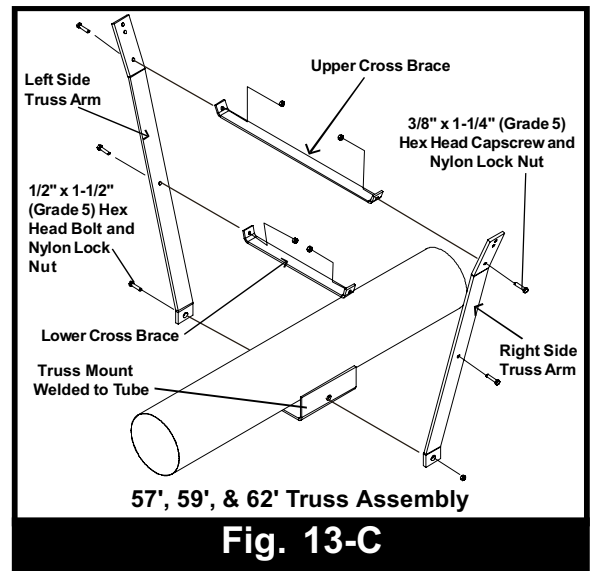


Fig. 13-B

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

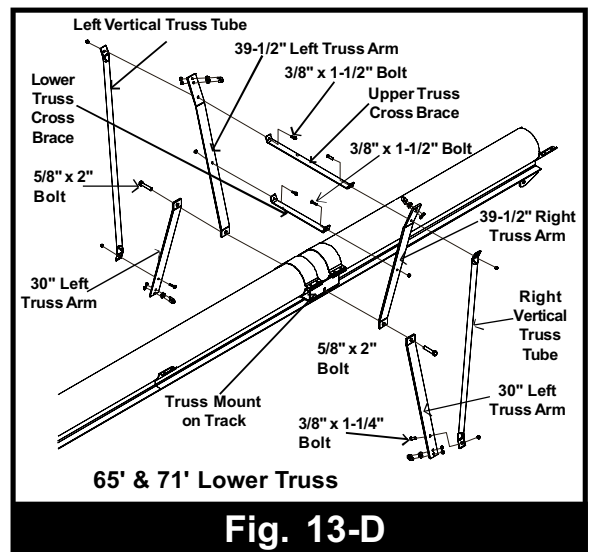
C. 57', 59', & 62' Truss Assembly (See Fig. 13-C)

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. 13-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.



14. 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 14-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. 14-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. 14-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. 14-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.**

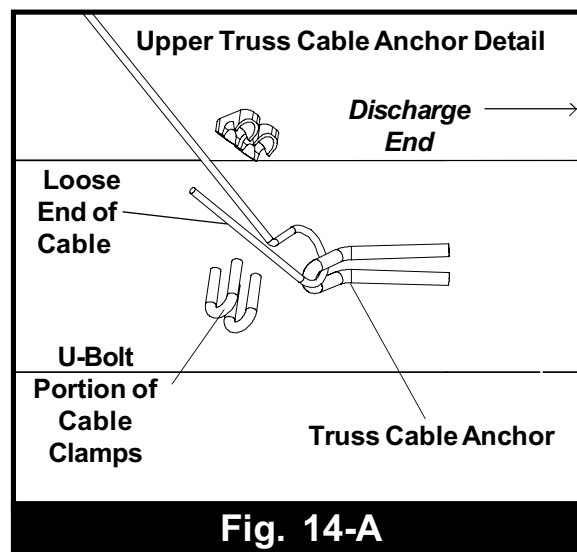
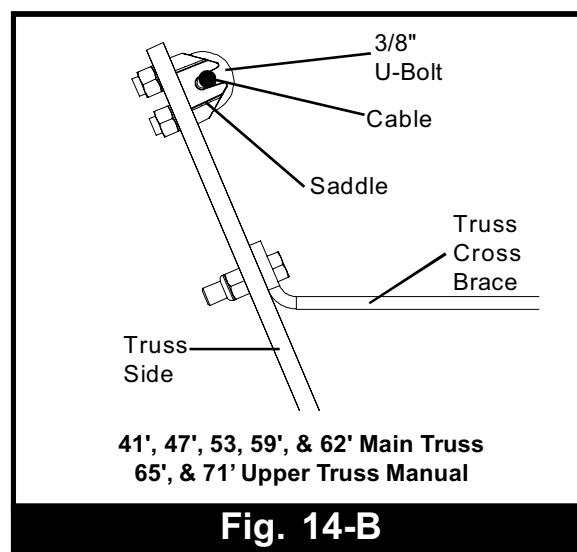
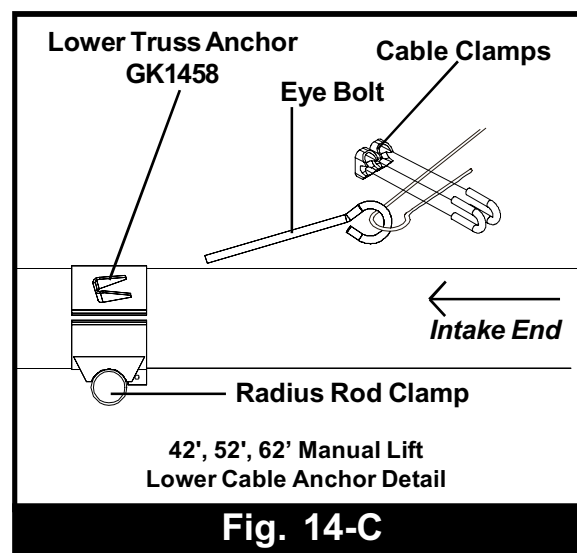
NOTE

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.

**Fig. 14-A****Fig. 14-B****Fig. 14-C**

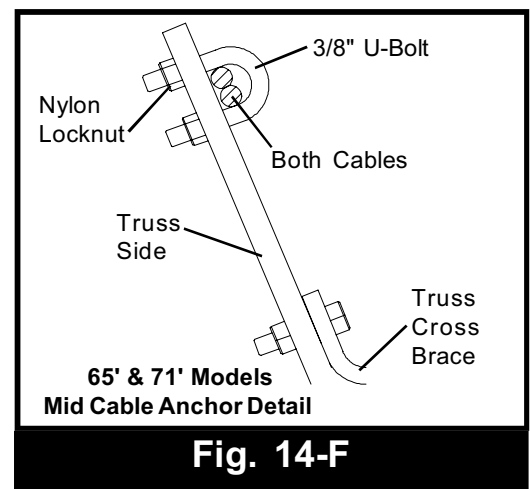
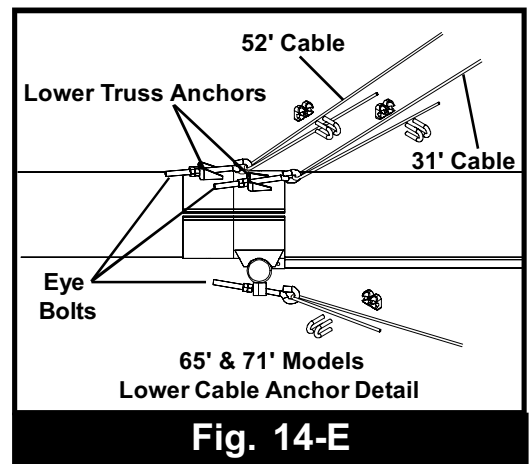
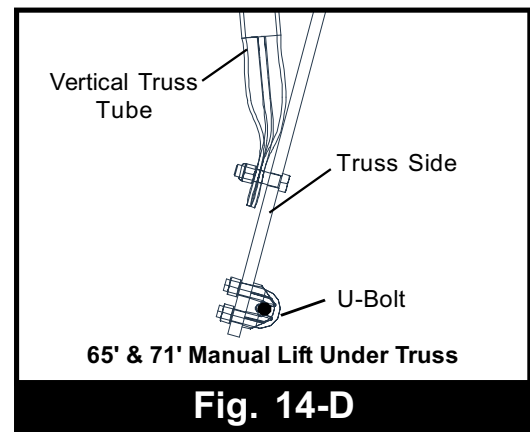
B. Truss Cable Assembly for 65' & 71' Winch Augers

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. 14-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 14-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. 14-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. 14-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. 14-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. 14-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. 14-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.



15. 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 consist 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.

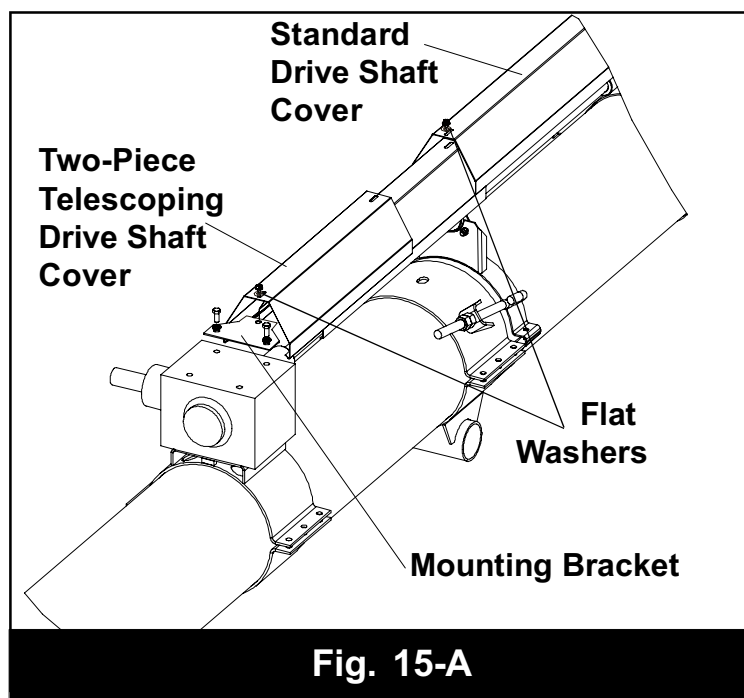
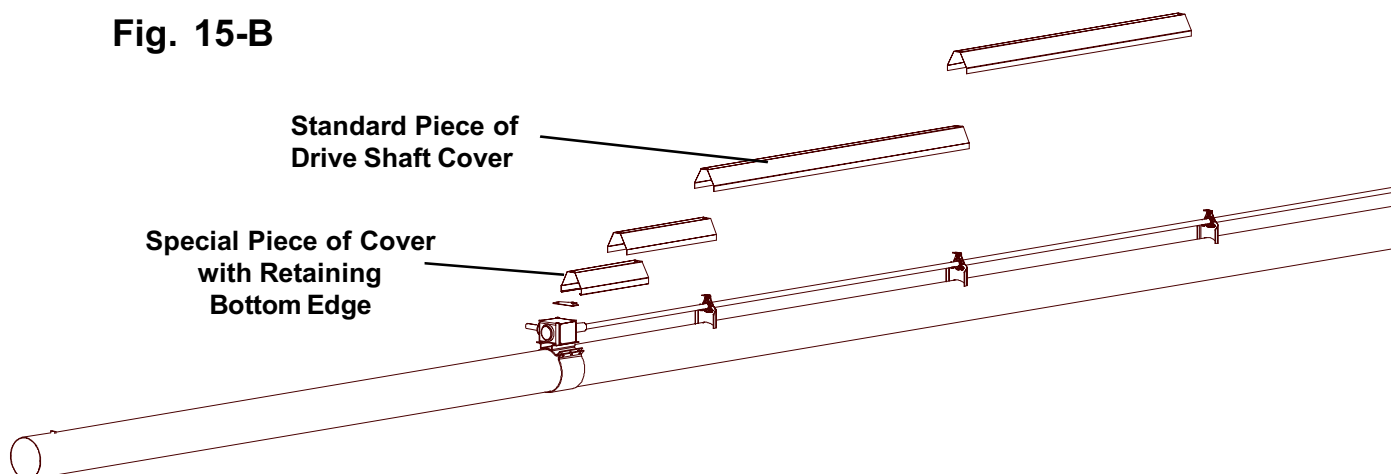


Fig. 15-B



15. 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. flat washers and slotted hex head screws.

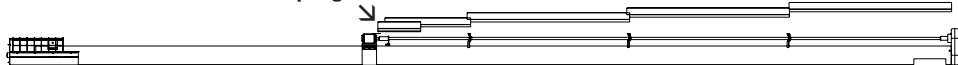
NOTE

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

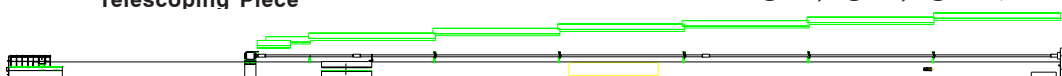
Electric: 1@1'6", 1@3'0", 5@5' 8-1/4"
PTO: 1@1'6", 1@2'0", 6@5' 8-1/4"



47' Model

Telescoping Piece

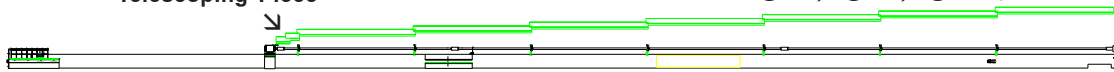
Electric: 1@1'6", 1@5'0", 6@5' 8-1/4"
PTO: 1@1'6", 1@2'0", 7@5' 8-1/4"



53' Model

Telescoping Piece

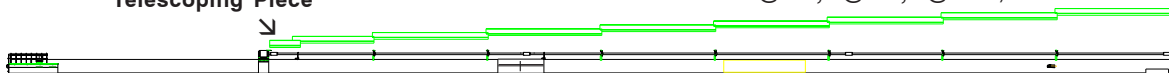
Electric: 1@3', 7@5' 8-1/4", 1@ 1' 6"
PTO: 1@1'6", 1@2'0", 8@5' 8-1/4"



57' Model

Telescoping Piece

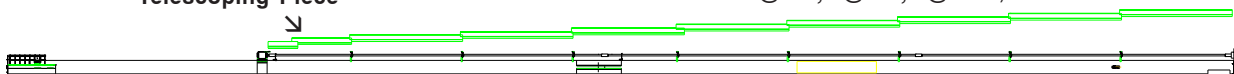
Electric: 1@1'6", 1@5'0", 7@5' 8-1/4"
PTO: 1@1'6", 1@1'0", 8@5' 8-1/4"



59' Model

Telescoping Piece

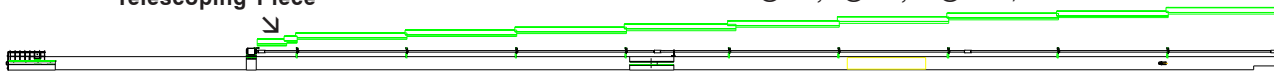
Electric: 1@1'6", 1@2'0", 8@5' 8-1/4"
PTO: 1@1'6", 1@3'0", 9@5' 8-1/4"



62' Model

Telescoping Piece

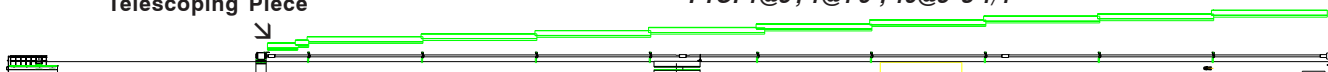
Electric: 1@1'0", 1@8", 9@5' 8-1/4"
PTO: 1@0'8", 1@0'8", 10@5' 8-1/4"



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"

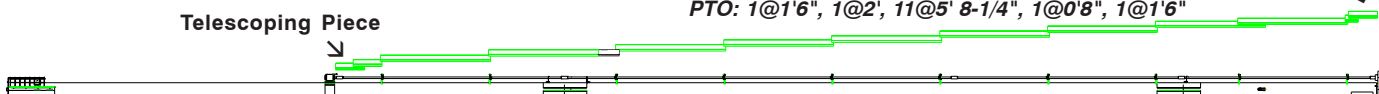


71' Model

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"

Telescoping Piece



NOTE

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

16. Clevis Assembly.

A. Discharge End Trolley Cable Pulley and Long Clevis (See Fig. 16-A & 16-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. 16-B)

NOTE

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

Fig. 16-A - 33' & 41' Augers

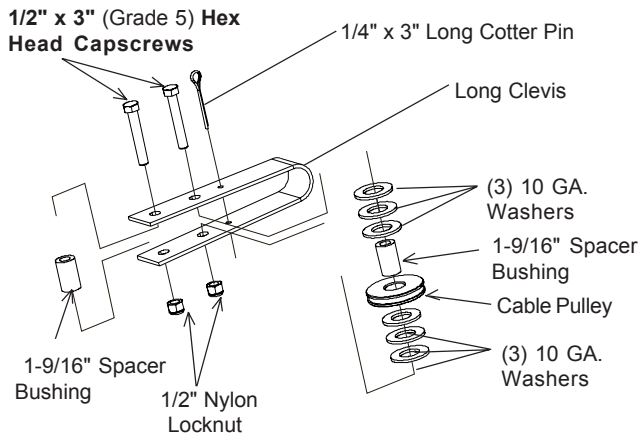
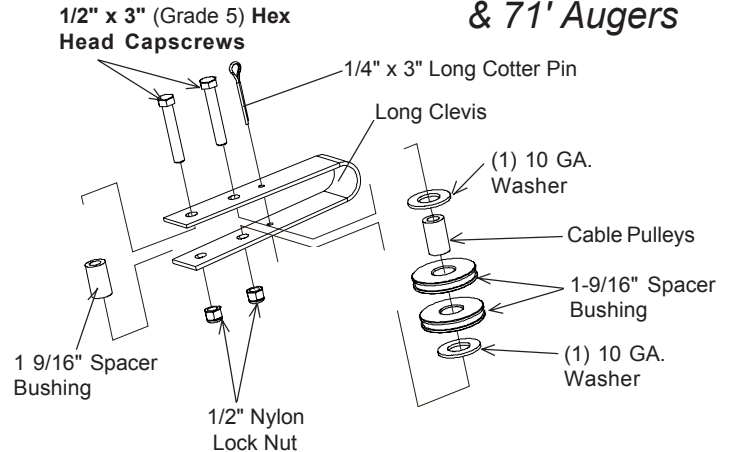


Fig. 16-B - 47', 53', 57', 59', 62', 65' & 71' Augers



B. Track Intake End Cable Pulley and Short Clevis (See Fig 16-C & 16-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. 16-C - 33' & 41' Augers

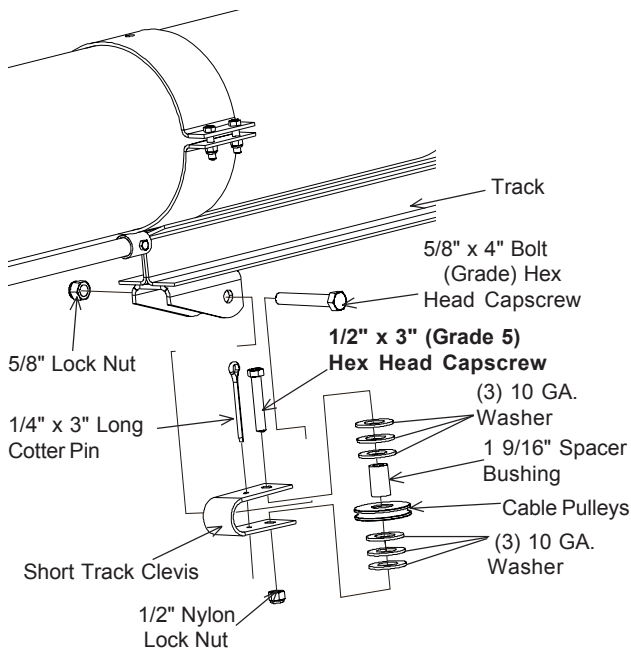


Fig. 16-D - 47', 53', 57', 59', 62', 65' & 71' Augers

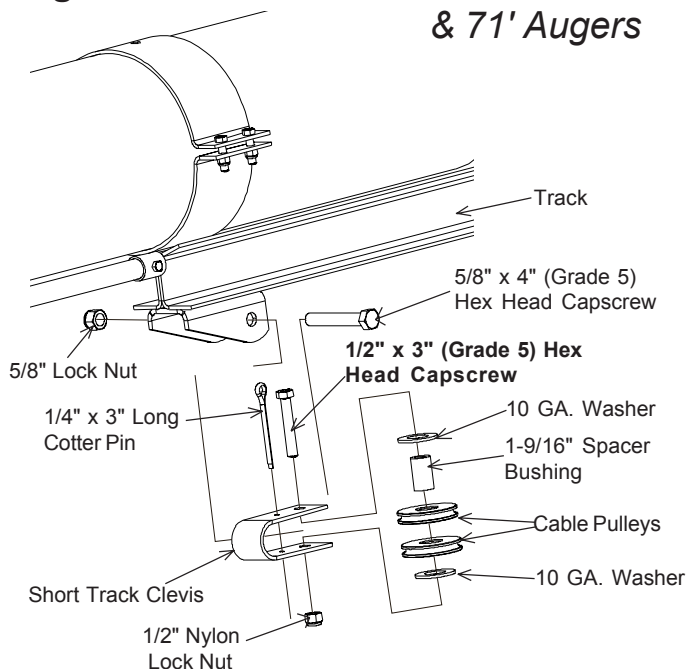
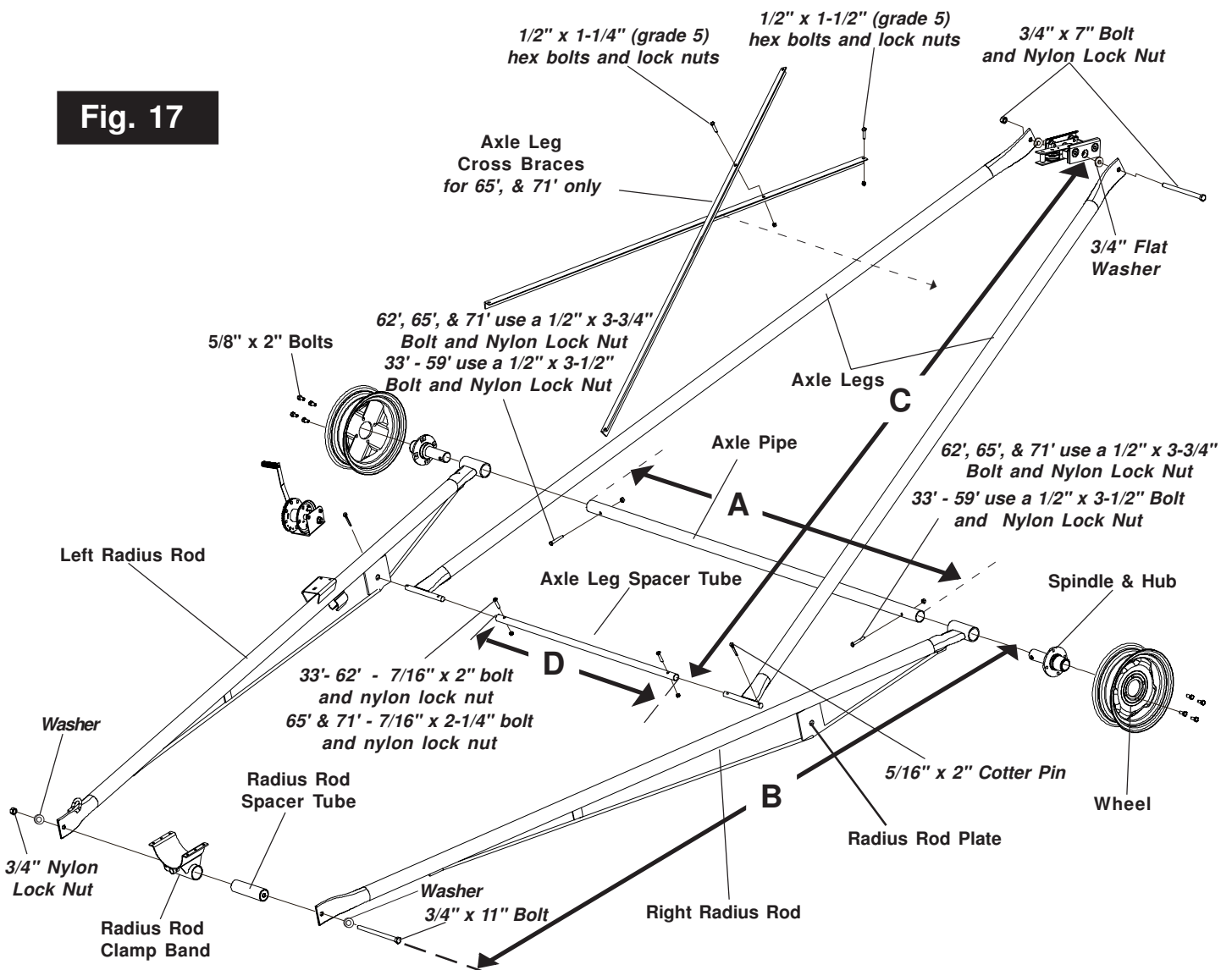


Fig. 17

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"

17. 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

18. 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. 18-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 cap screw, flat washers, and nylon locknut. Make sure washers are placed between spacer bushing and axle legs.
(See Fig. 18-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. 18-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 cap screws that fasten the angle crossbraces to axle legs.

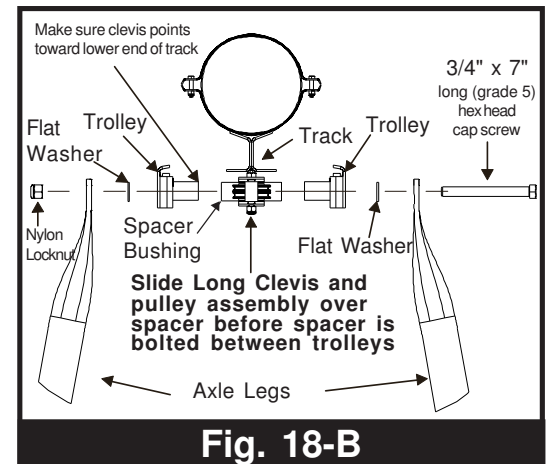


Fig. 18-B

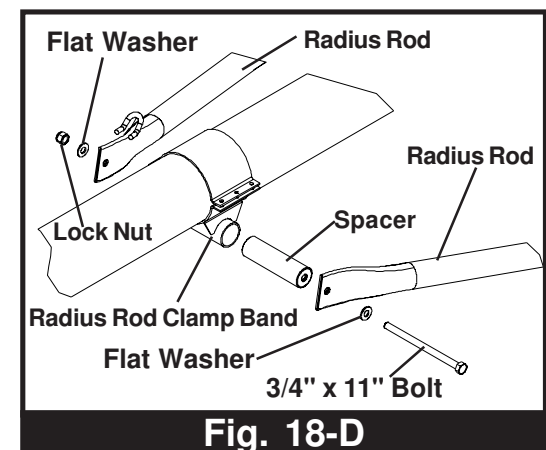


Fig. 18-D

⚠ 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 58. If your measurement doesn't fit into the range on the chart for your size auger go back double check the following:

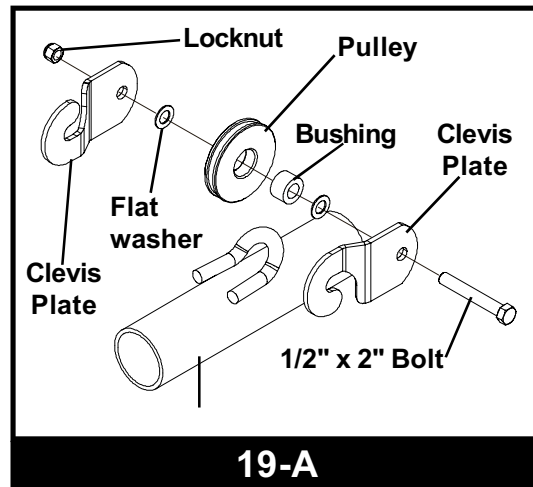
1. **Location of radius rod clamp and track.** (See page 25-27.)
2. **The length of the undercarriage components.** (See page 36.)
3. **The length of auger tubes.** (See pages 18-19.)
4. **Is the discharge end of the auger tube sagging because the truss cables require tightening?** (See page 31-32.)

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.

19. 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. 19-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.

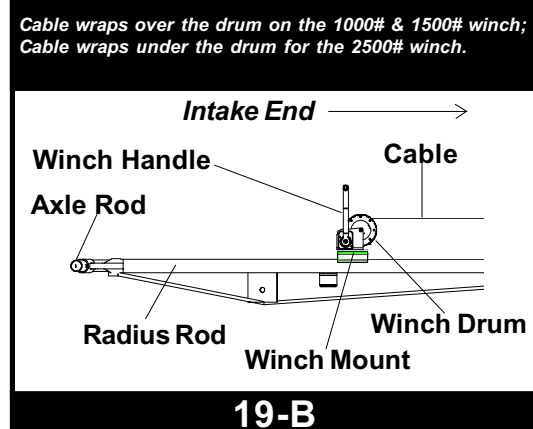


CAUTION

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

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. 19-B.)
3. Tighten it with a wrench.

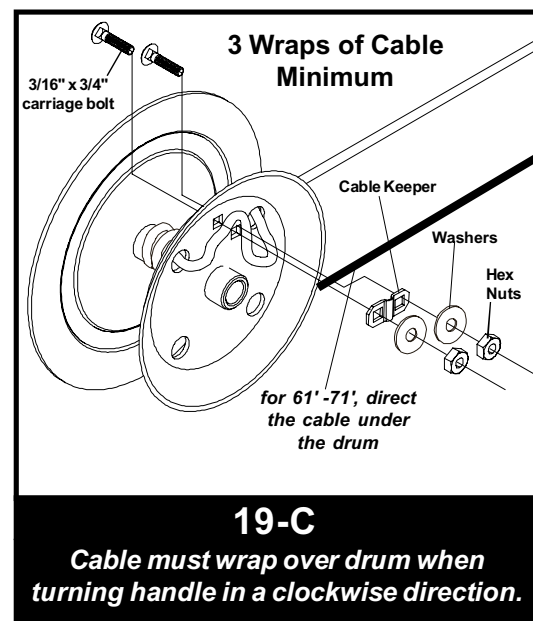


C. Cable

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. 19-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.



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

D. Cable Assembly for 33' and 41' Models (See fig. 19-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.

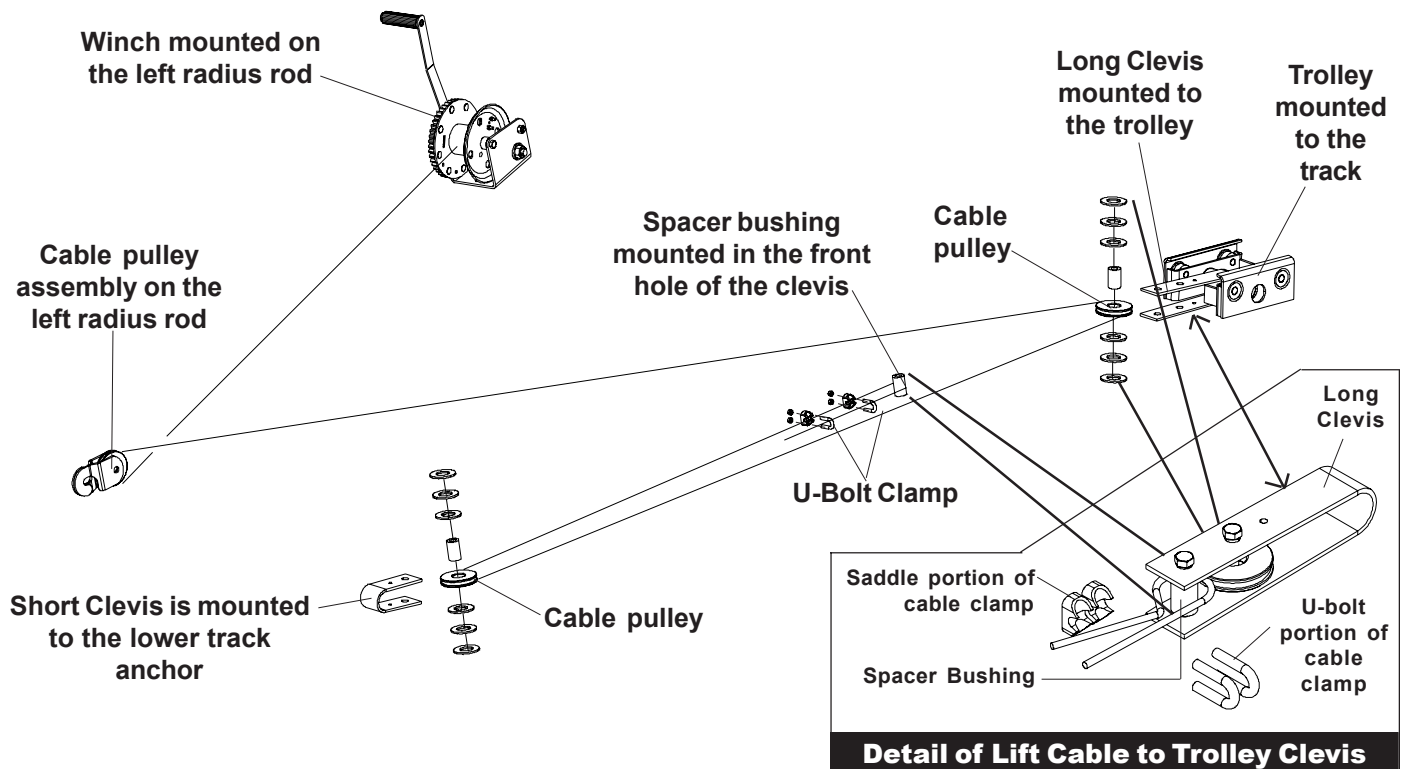


Secure the lift cable to the trolley with two (2) cable clamps, with the clamp U-Bolt against the loose end of the cable.



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. 19-D - Rigging for 33' and 41' Models



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

E. Cable Assembly for 47' - 71' Models (See Fig 19-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.

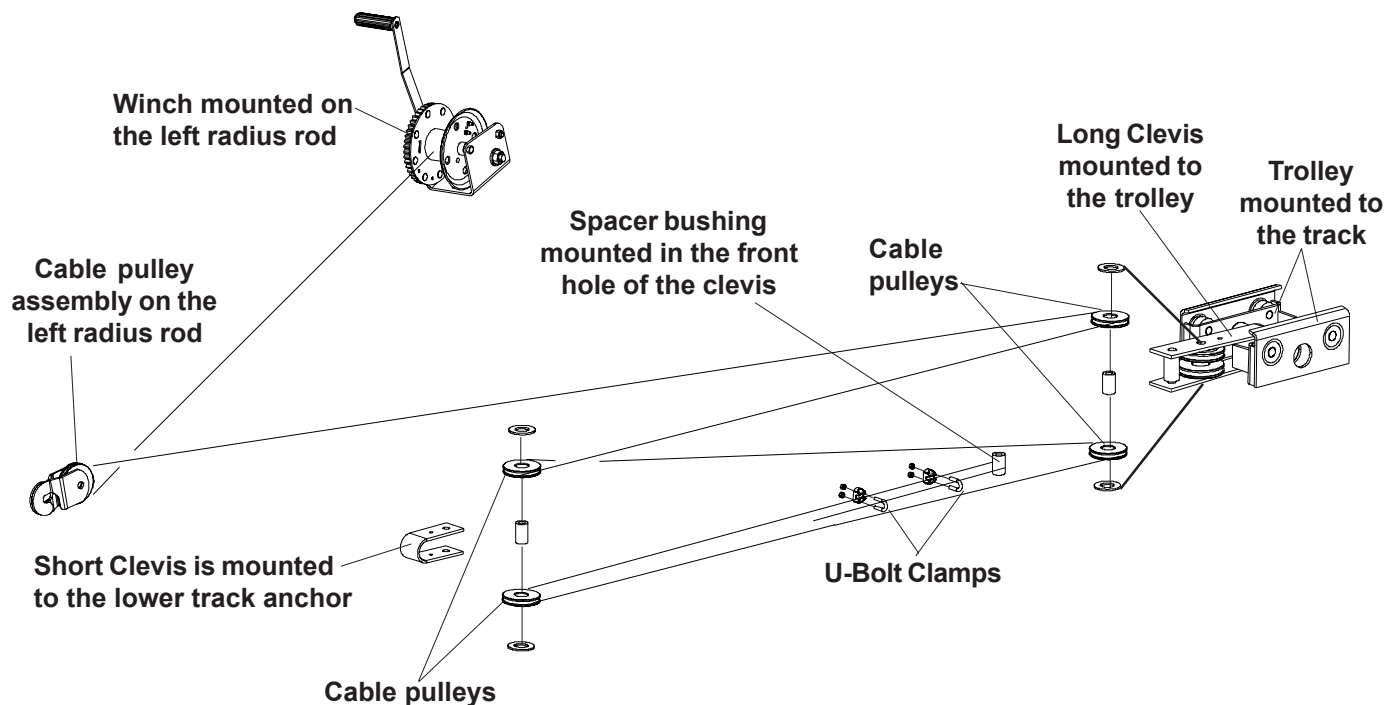
CAUTION

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



NOTE

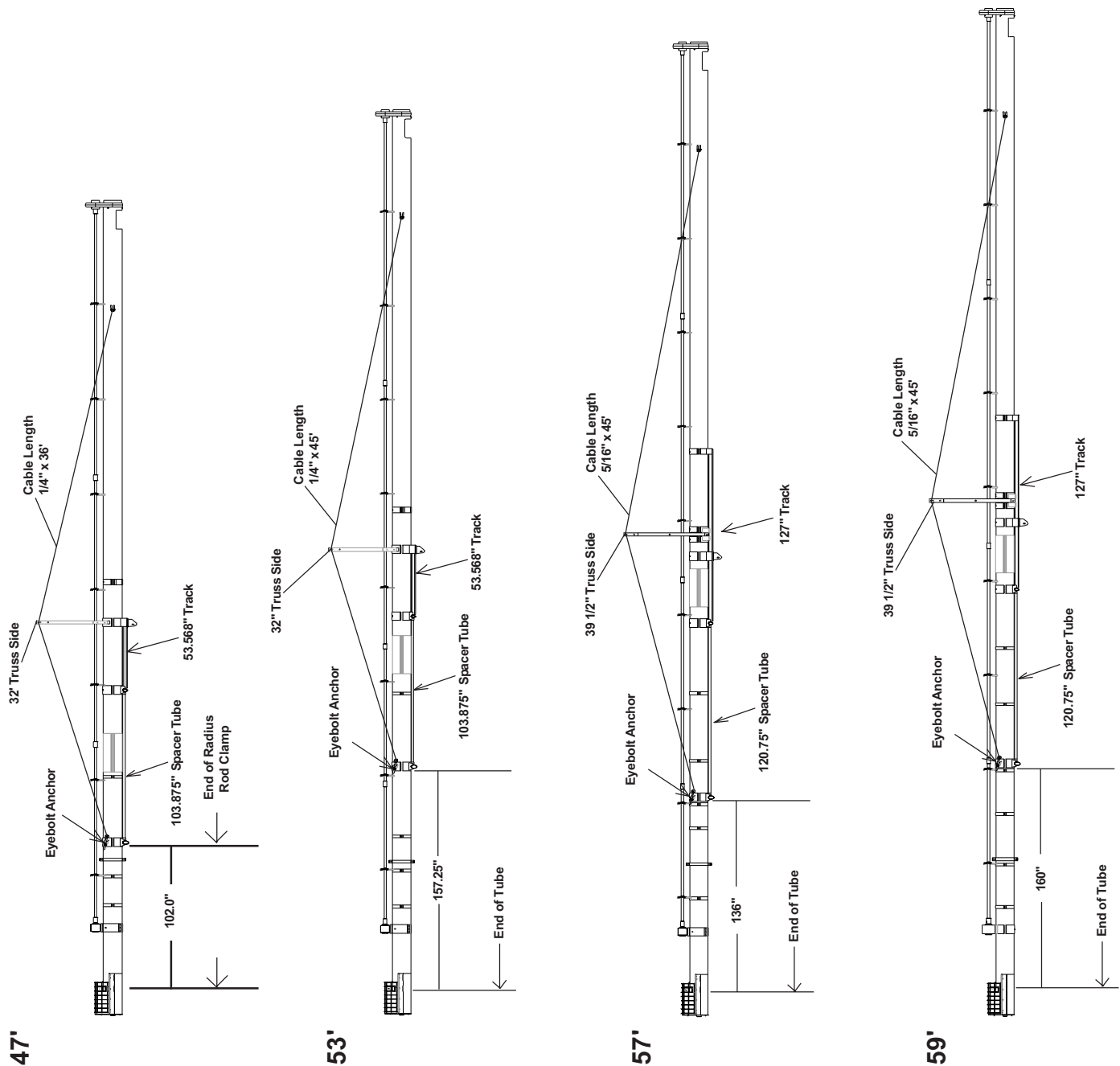
Make sure that the cable is inserted over the top of the pulley and not the bottom.

Skip Hydraulic Section and Go to Page 53 & 54 for PTO and Electric Drive Installation Instructions.

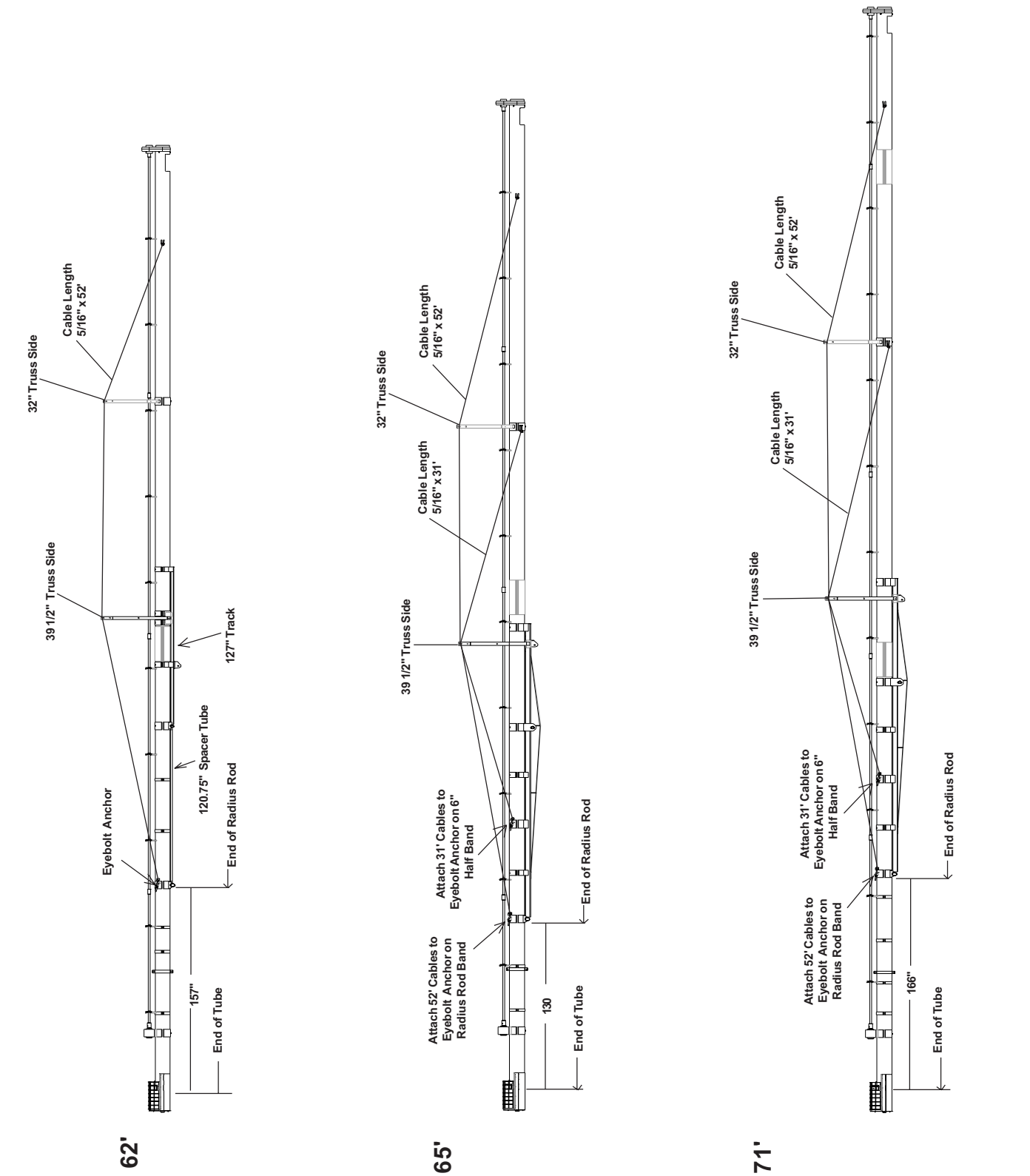
20. Track and Truss Layout for Hydraulic Lift Models

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



20. Track and Truss Layout for Hydraulic Lift Models

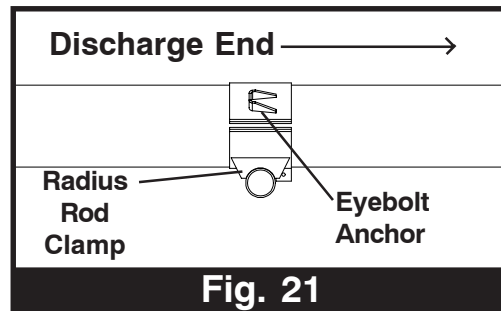


21. Radius Rod Clamp Assembly for Hydraulic Lift Augers

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 41 & 42 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. 21)



22. Installing the Spacer Tube (Refer to pages 41-42)

- 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.)**

23. Installing the Track

- A. Position the track under the tube housing close to the position indicated in the drawings on page 41-42 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.

24. 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.

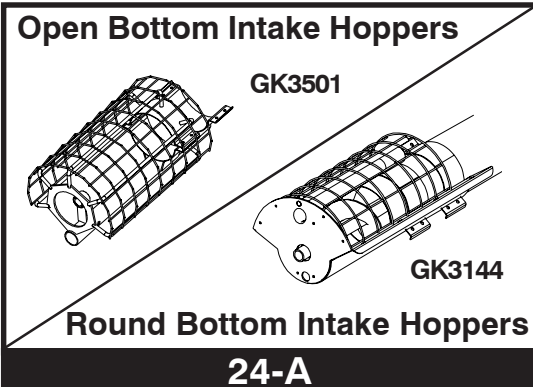
NOTE

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, flat washers, 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.



25. Truss Assembly for Hydraulic Lift Undercarriage

A. 47' & 53' Main Truss and 62', 65', & 71' Upper Truss Assembly (See Fig. 25-A)

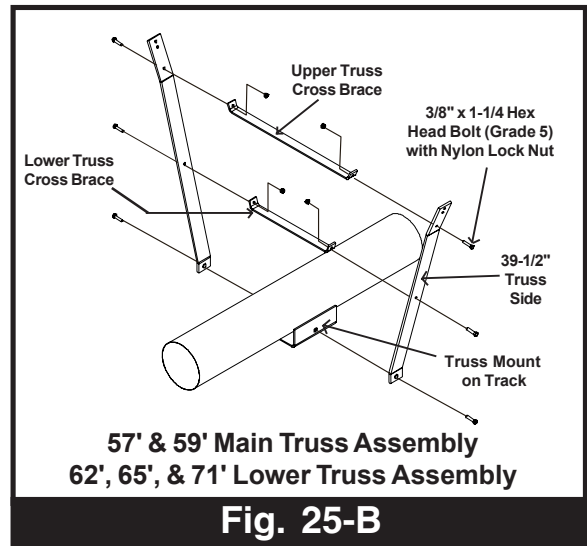
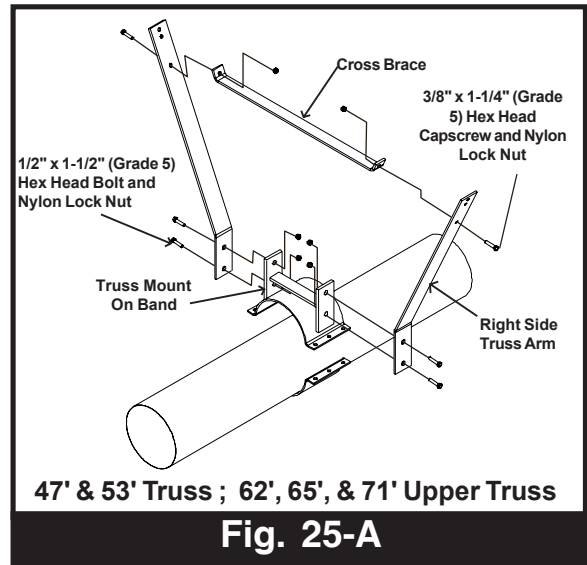
1. Attach right and left side truss arms to the left and right side of the truss mounting band using four (4) 1/2" x 1-1/2" (grade 5) hex head capscrews and nylon locknuts. **TIGHTEN BOLTS ONLY FINGER TIGHT AT THIS TIME.**
2. Fasten the truss crossbrace to the left and right side truss arms using two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

B. 57' & 59' Main Truss and 62', 65', & 71' Lower Truss Assembly (See Fig. 25-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

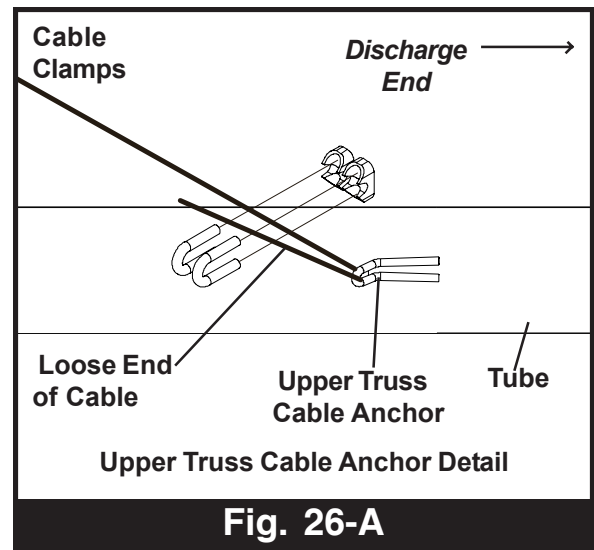
NOTE

Secure the U-Bolts against the loose end of the cable, as shown in figure 25-A.



26. 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. 26-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. 26-B on page 45)



26. 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. 26-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.

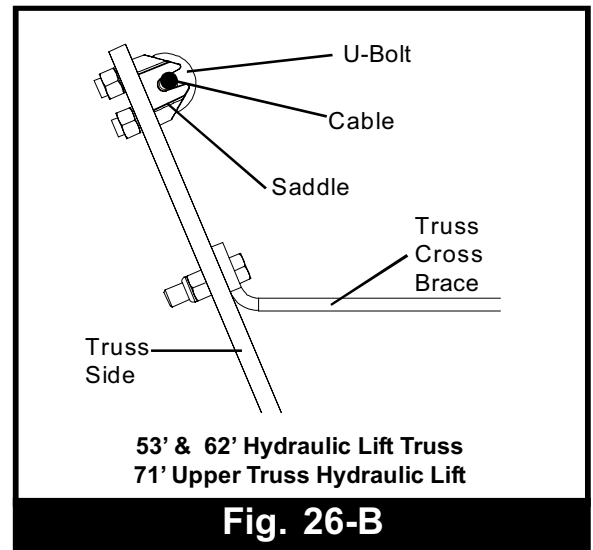


Fig. 26-B

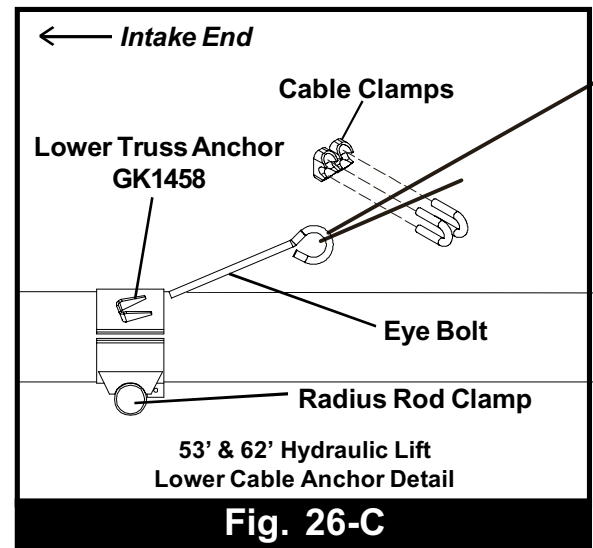


Fig. 26-C

27. 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. 27-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.

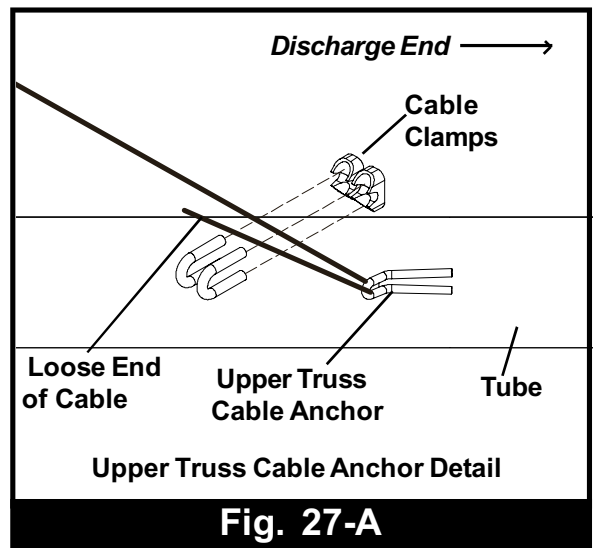


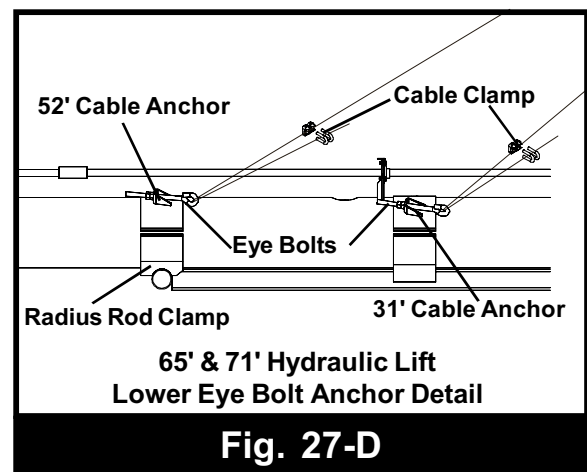
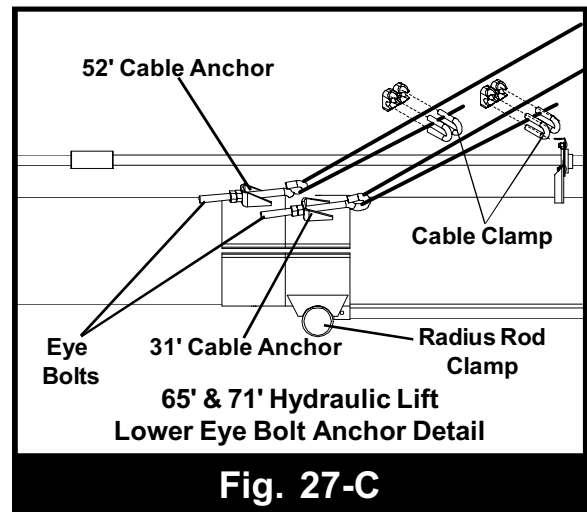
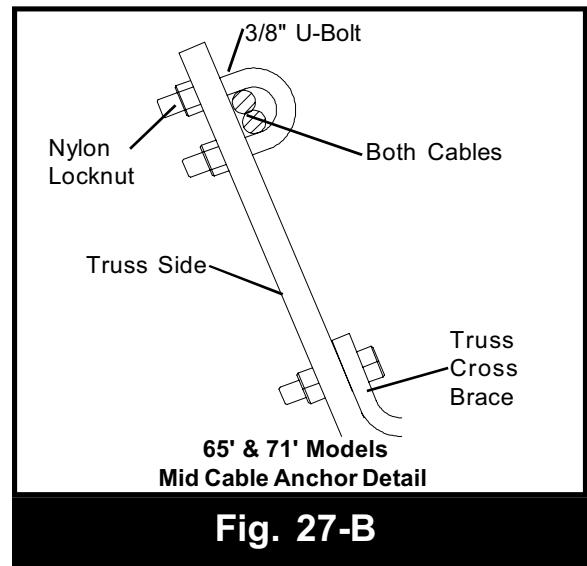
Fig. 27-A

27. 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. 27-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. 27-C & 27-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. 27-C & 27-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.



28. 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 consist 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. 28-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. 28-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.

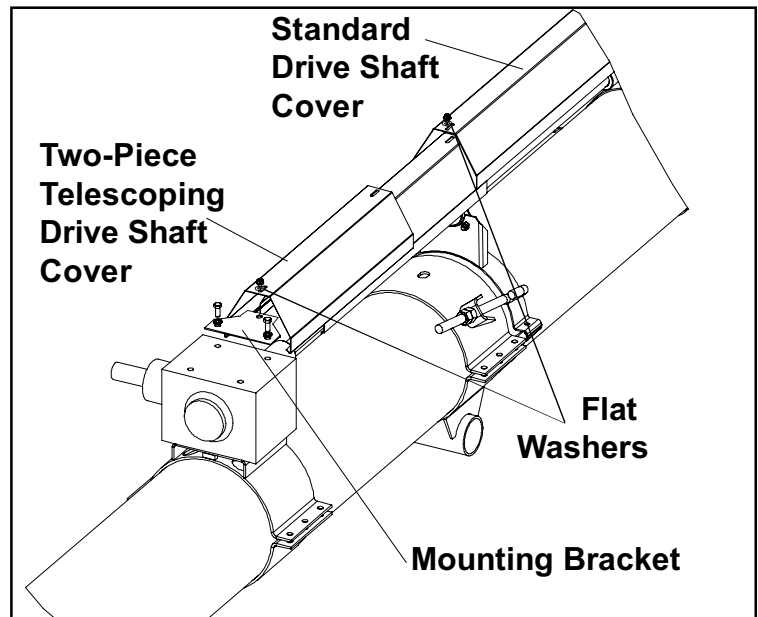
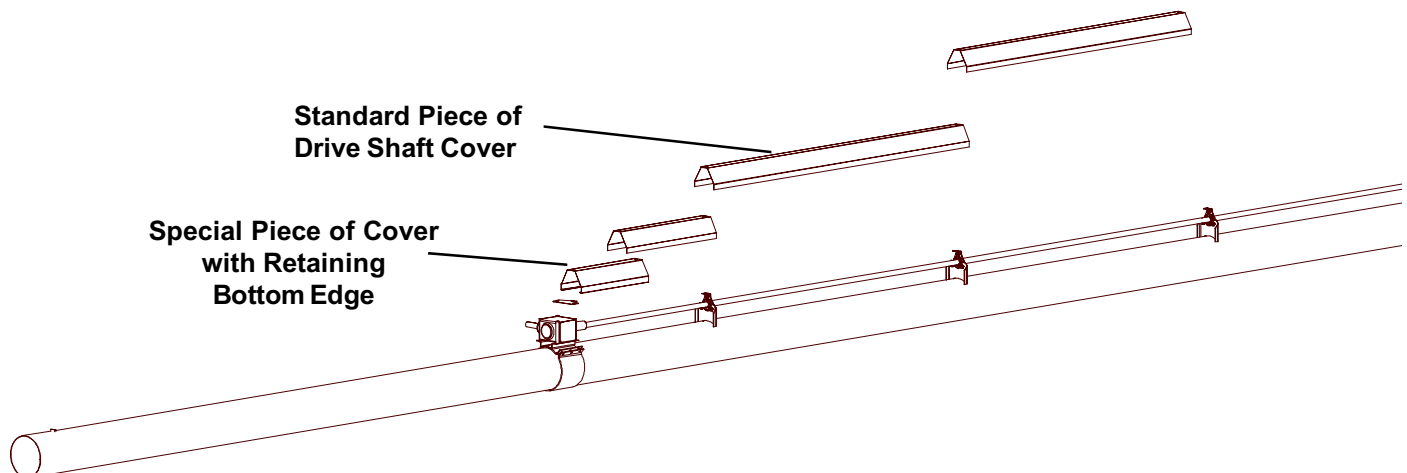


Fig. 28-A

Fig. 28-B



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

- 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. flat washers and slotted hex head screws.

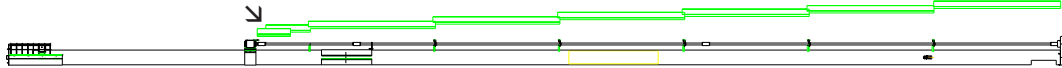
NOTE

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"

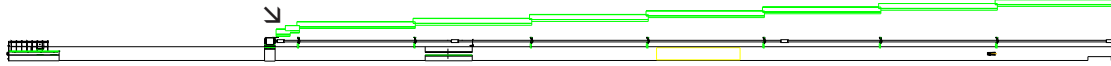
Telescoping Piece



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"

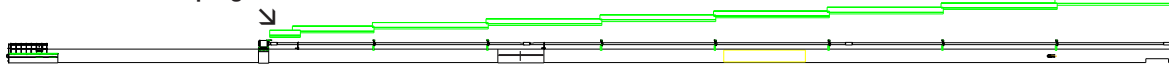
Telescoping Piece



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"

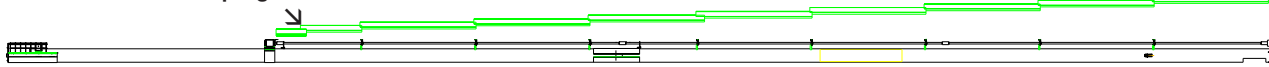
Telescoping Piece



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"

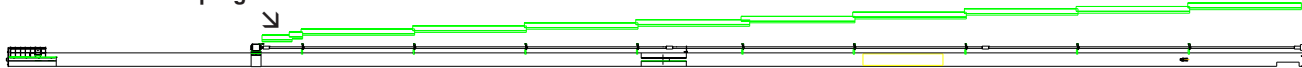
Telescoping Piece



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"

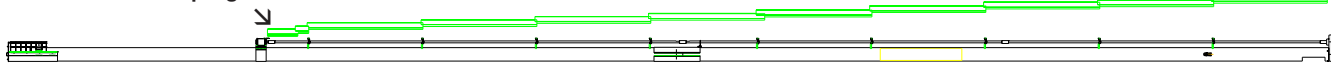
Telescoping Piece



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"

Telescoping Piece



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"

Telescoping Piece

Telescoping Piece



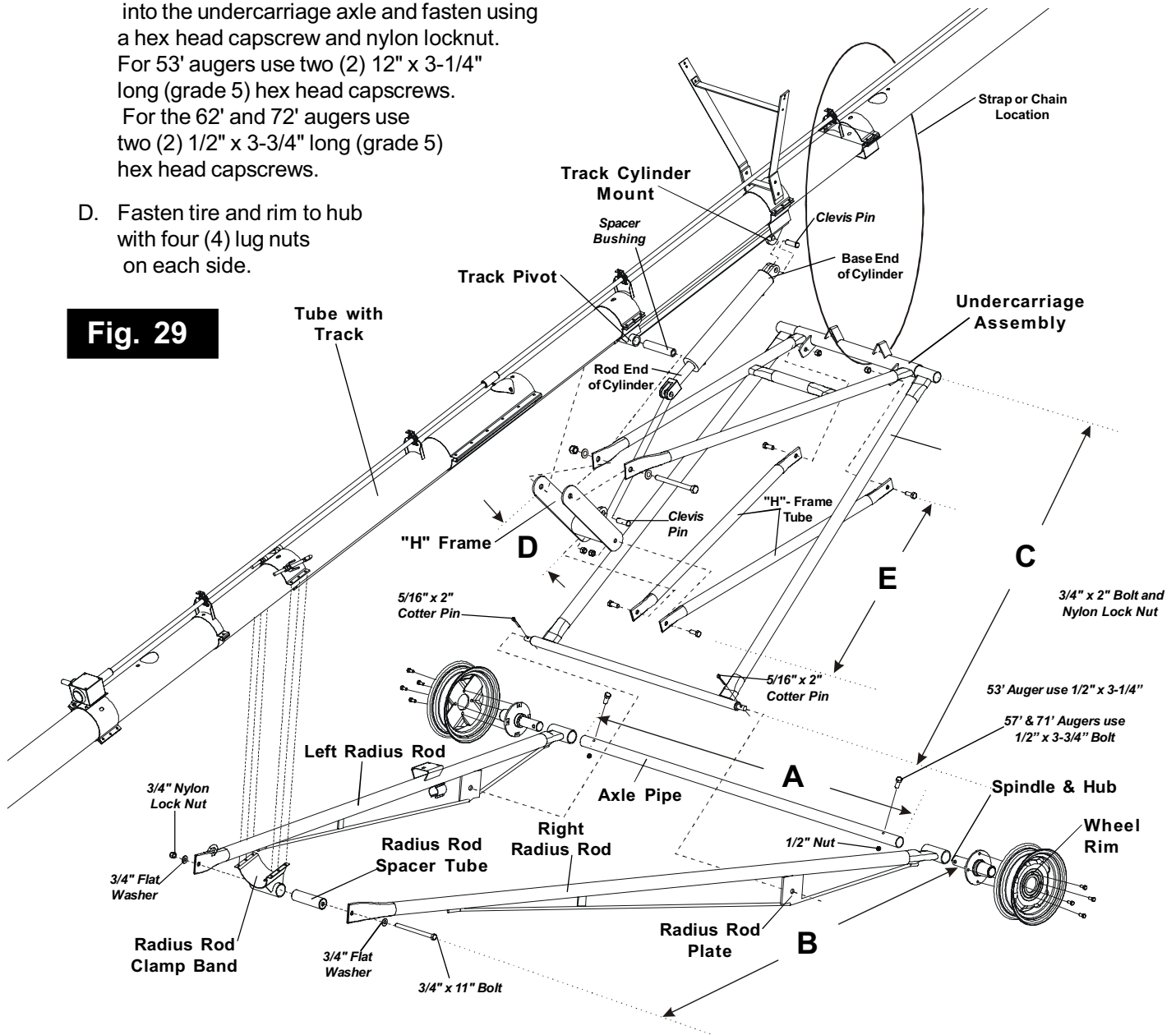
DANGER

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

29. Hydraulic Undercarriage Assembly

- Place the left and right radius rod clamps close to positions shown in Fig. 29 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) 1/2" 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. 29



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

29. 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 29 on pg 49)
- 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. 29-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.

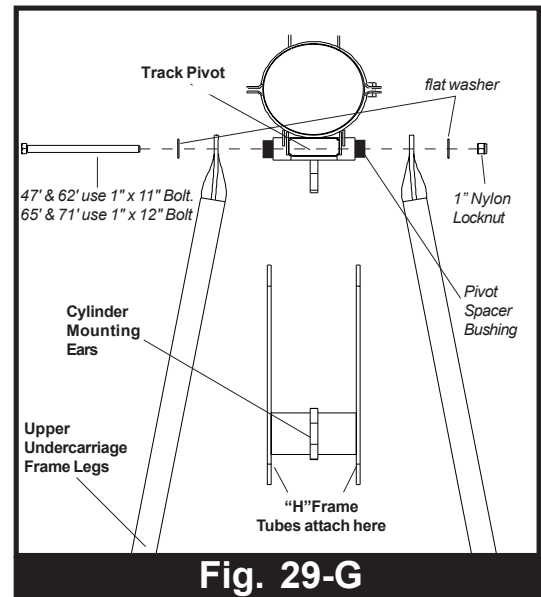


Fig. 29-G

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 58. 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 41-42.)**
2. **The length of the undercarriage components. (See page 49.)**
3. **The length of auger tubes. (See pages 18-19.)**
4. **Is the discharge end of the auger tube sagging because the truss cables require tightening? (See page 44-46 .)**

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 58, 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. 29-G)

CAUTION

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 hydraulic cylinder furnished with your auger uses a restrictor at the port at the base end of the cylinder. The style of restrictor depends on which length cylinder is used. The 4" bore x 24" stroke cylinder uses a restrictor built into the port at the base to control the speed that the auger is raised and lowered. The 4" bore x 36" stroke cylinder uses an in-line restrictor valve assembled to the port at the base to control the speed that the auger is lowered. Only use the cylinder provided with the auger. Do not use a cylinder that does not have the proper restrictor present. If using the 4" bore x 36" stroke cylinder, the in-line restrictor must be installed as instructed below. The restrictor must be installed with flow direction arrow pointing towards the cylinder port.

30. Hydraulic Hose Assembly

A. 4" bore x 24" Hydraulic Cylinder - 51', 57' & 62' Augers.

1. Thread the 90° street elbow into the upper cylinder port at the base end of the cylinder.
2. Attach the swivel end of the hydraulic hose to the street elbow and tighten. (See Fig. 30-A.)

B. 4" bore x 36" hydraulic cylinder - 65' and 71' augers

1. Thread the 90° elbow of the in-line restrictor valve and elbow assembly into the upper cylinder port at the base of the cylinder. Ensure that the restrictor valve flow direction arrow is pointing towards the cylinder port. (See fig. 30-A and 30-C)

CAUTION

Check and insure that the flow direction arrow on the in-line restrictor valve is pointing toward the cylinder port. Otherwise the cylinder will not function properly.

2. Attach the swivel end of the hydraulic hose to the in-line restrictor valve and tighten. (See Fig. 30-A)
- C. 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 52 for the number of clamps for your size auger.) (See Figures 30-A & 30-B)
- D. 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.

- E. 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 received immediately.

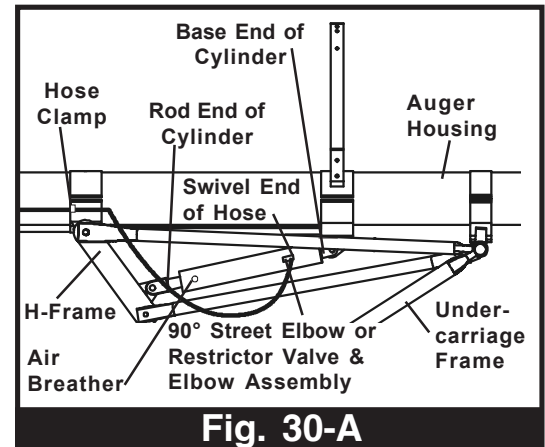


Fig. 30-A

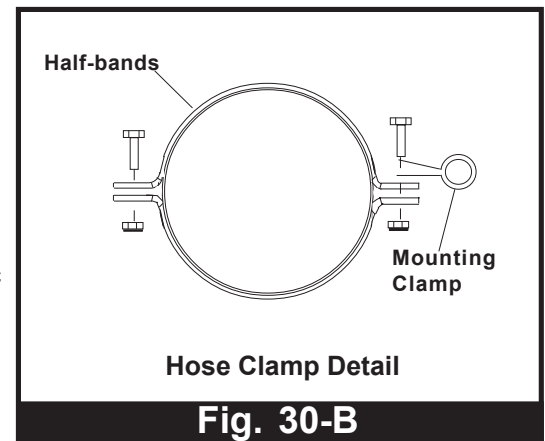


Fig. 30-B

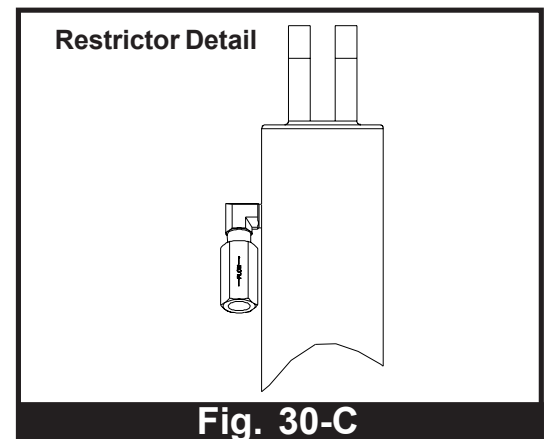
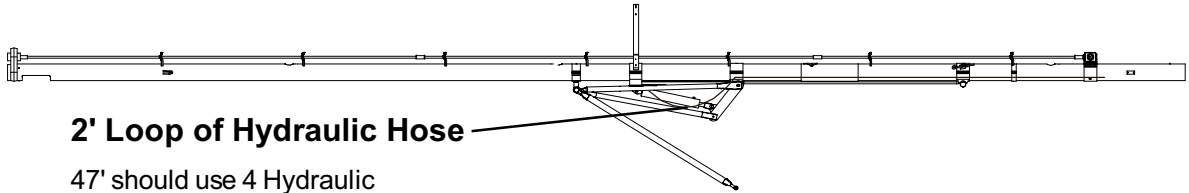


Fig. 30-C

31. Hydraulic Hose Clamp Locations

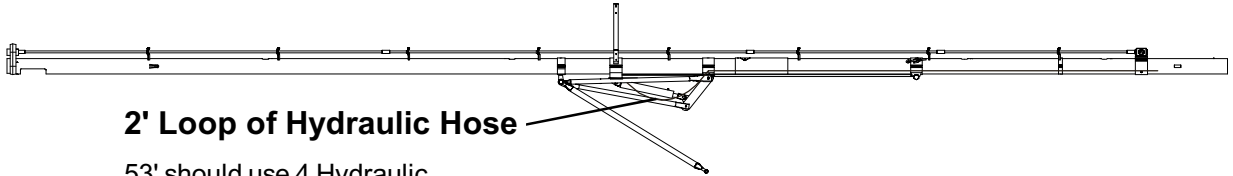
Space clamps evenly along the auger tube, making sure it is tight against the tube. Leave a two foot loop of hose where it attaches to the hydraulic cylinder so it has enough length to expand when the undercarriage is raised.

47'



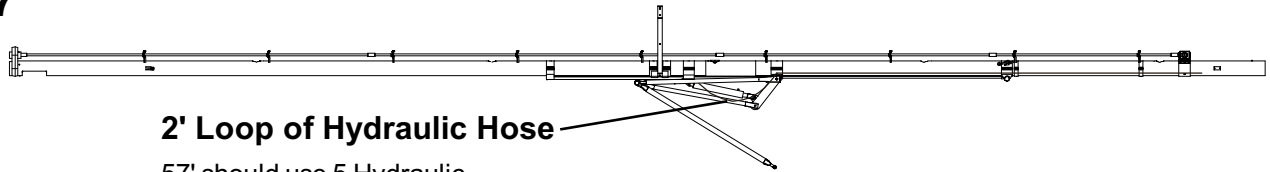
47' should use 4 Hydraulic Hose Mounting Clamps.

53'



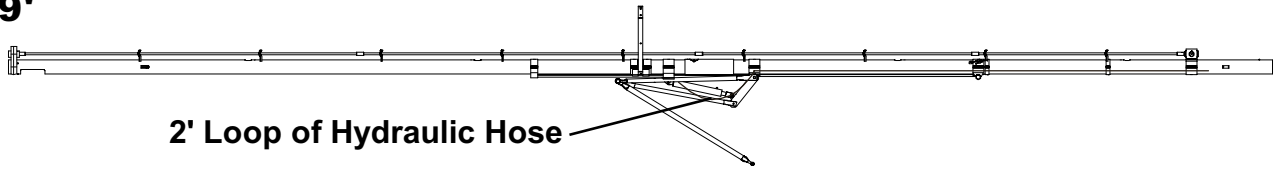
53' should use 4 Hydraulic Hose Mounting Clamps.

57'



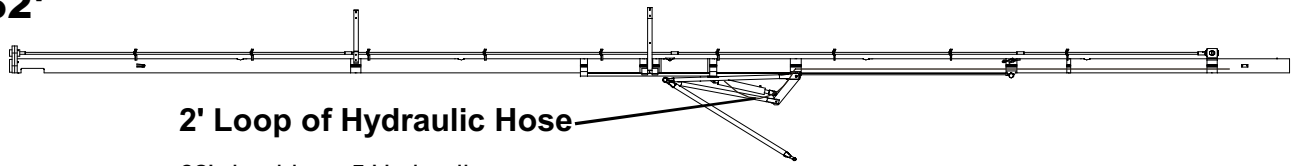
57' should use 5 Hydraulic Hose Mounting Clamps.

59'



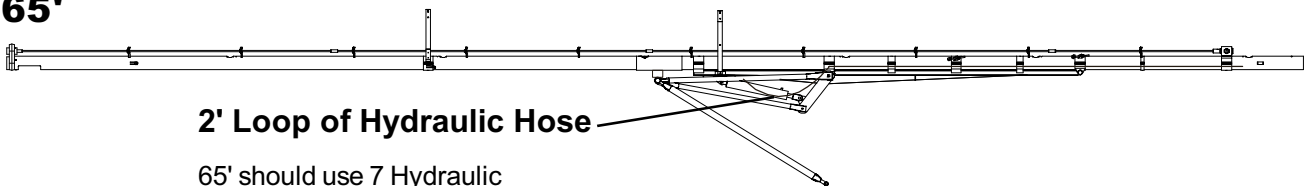
59' should use 5 Hydraulic Hose Mounting Clamps.

62'



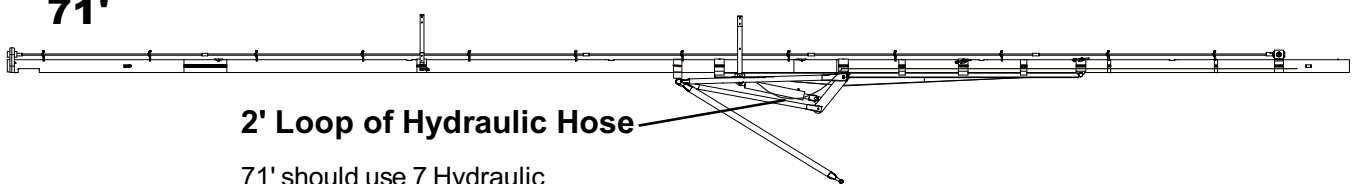
62' should use 5 Hydraulic Hose Mounting Clamps.

65'



65' should use 7 Hydraulic Hose Mounting Clamps.

71'

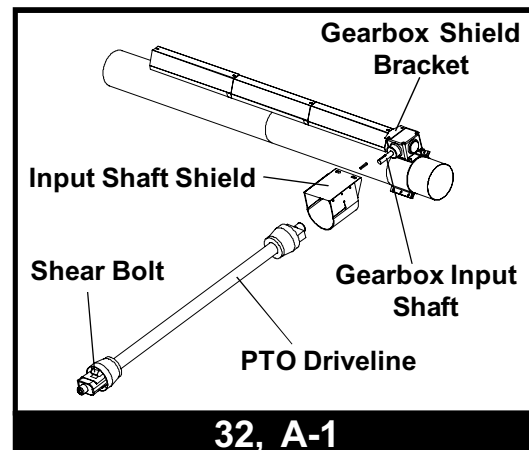


71' should use 7 Hydraulic Hose Mounting Clamps.

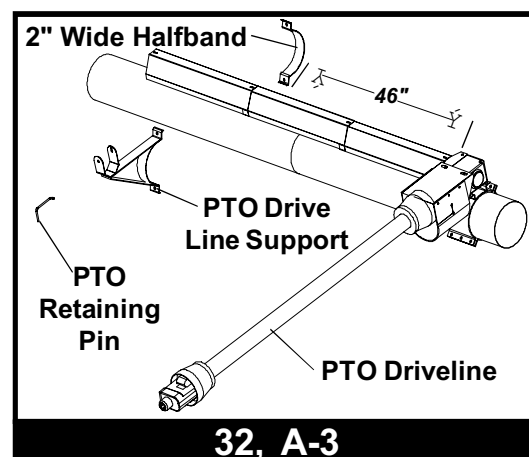
32. Drive Kit Assembly for both Hydraulic & Manual Lift Augers

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.



32, A-1



32, A-3

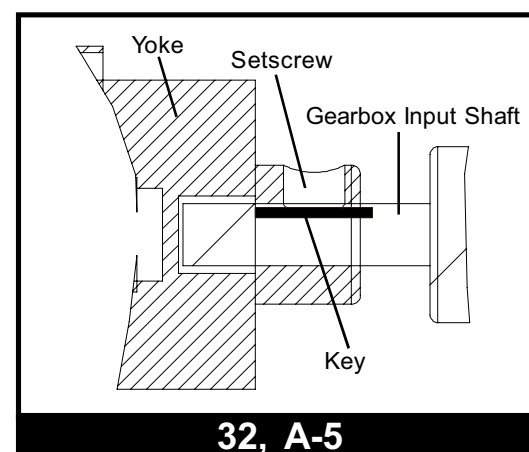
NOTE

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.



32, A-5

32. Drive Kit Assembly for Both Hydraulic and Manual Lift Augers (cont.)

B. Electric Drive (See Fig 32-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. Secure the belt guard bracket to the motor mount with two (2) 3/8" x 1-1/4" bolts, lockwashers, and nuts.
4. Attach the belt guard bracket to the belt guard with four (4) 3/8" x 1" bolt, lockwashers, flat washers, and nuts.
5. Attach the pulley to the gearbox input shaft. Secure the pulley with 1/4" x 2" key for 31', 41', & 51' models and use a 1/4" x 3" key for 57', 61', 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.*** Use an electric motor of the proper size that operates at 1750 RPM. (See table in Fig. 32-B.) Use a 4" O.D. motor pulley.



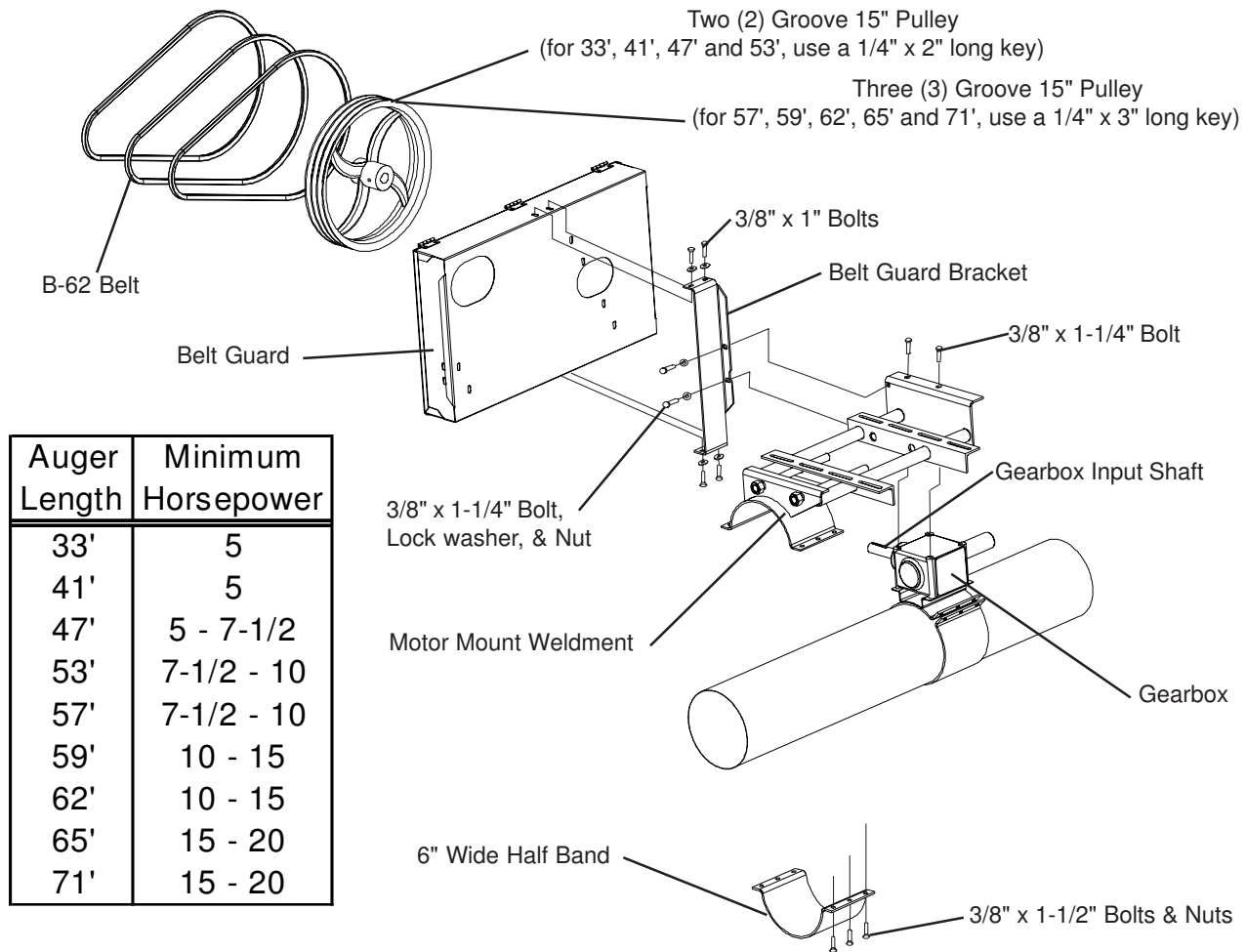
1750 RPM electric motors and controls shall be installed by a qualified electrician, and must meet the standards set by the National Electrical Code and all local and state codes. Reset and motor starting controls shall be located where the operator has unrestricted access to the controls.

7. A magnetic starter should be used for the operator's protection and for the protection of the motor. This is to protect the operator against accidental restart caused by power interruption, conductor fault, low voltage, circuit interruption or motor overload. Therefore, the motor must be restarted manually. If using a motor with built-in thermal overload protection, make sure this type of motor has a manual reset.



Disconnect and lockout power before resetting motor overloads. Make certain electric motors are grounded.

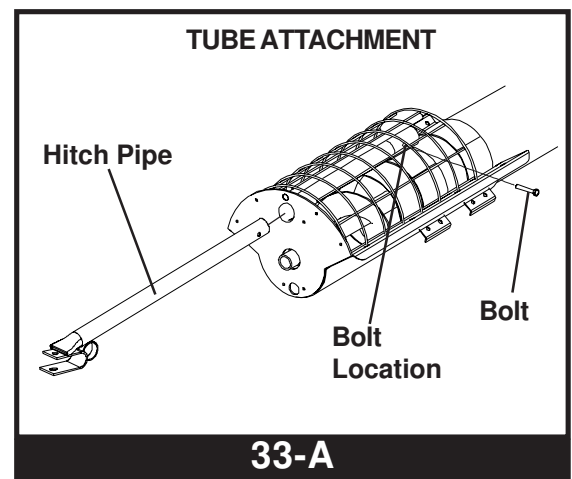
8. Install the motor pulley to the motor pulley shaft.
9. Install the belts.

FIG. 32-B**Top Mounted Electric Motor Drive Assembly****33. 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. 33-A)

34. 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.

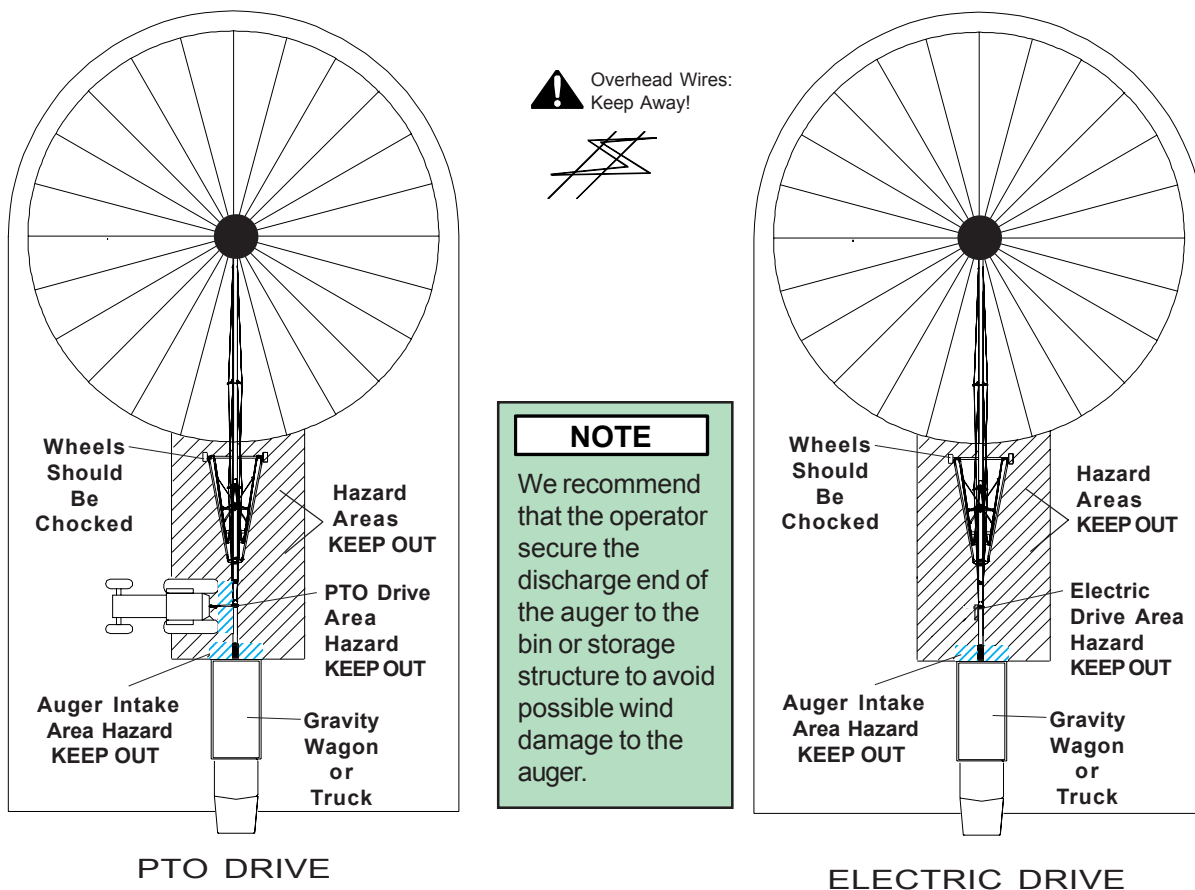
- Before starting the auger, establish the designated work areas. The diagram below shows where boundaries should be established.
- Mark off the designated work areas using colored nylon or plastic rope as portable barriers.

⚠ 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.



2. Inspect the Auger.

- After your new auger is delivered and assembly is complete, and before each use, you must inspect the auger.
- Be sure that ALL guards listed in the assembly instructions are in place, secured, and functional.
- Be sure that the shields on the PTO rotate easily.
- 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.
- Check winch and cable to ensure they are secure and operational.

2. Inspect the Auger (cont.)

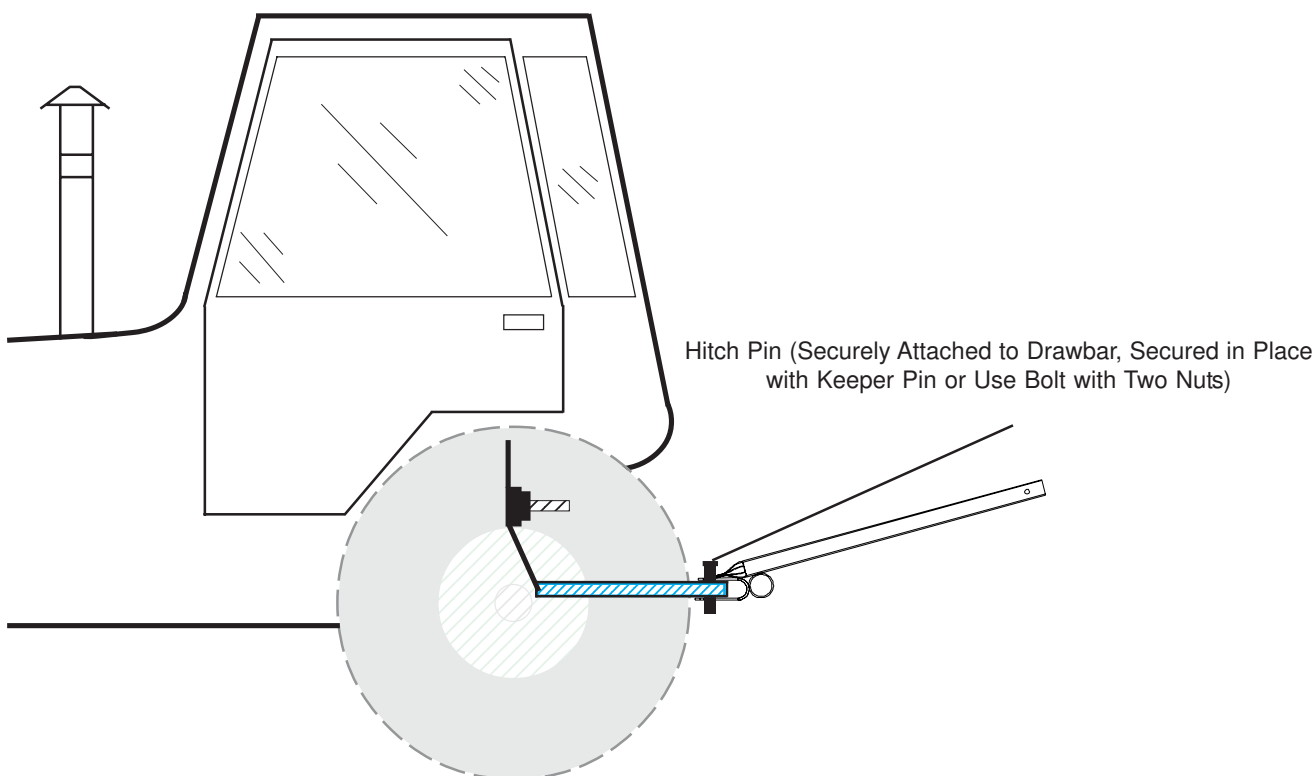
- F. Ensure that ALL fasteners are tight.
- G. Check the hydraulic hose and fittings to ensure they are tight and are not leaking hydraulic oil.
- H. Check the oil level in ALL gearboxes and enclosed drives. The **Maintenance** section of this manual gives oil level recommendations
- I. Ensure that the inspection covers are in place.
- J. Make sure all belts are tensioned properly.
- K. Make sure all electrical wiring is not damaged and that it meets proper wiring codes.
- L. Ensure that the electric motor is operating at proper speed.

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. The safety chain is not supplied with the augers.

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"	Hydraulic Lift	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 "			

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.

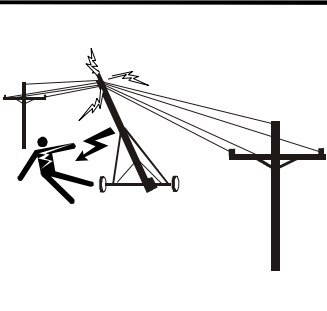
⚠ WARNING

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 marking 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

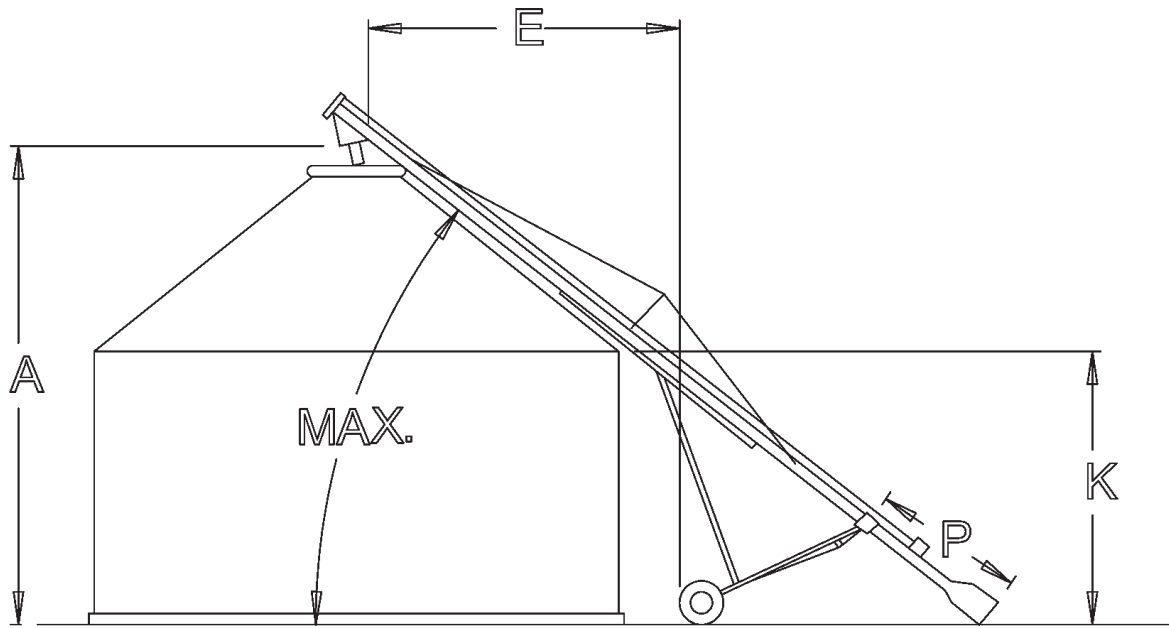
If you discharge grain into a grain spreader, maintain at least twelve (12) inches of space between the auger discharge and the spreader. The discharge end will lower as the auger fills with grain during operation.

- 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. **DO NOT** increase the height of the auger by placing the wheels on blocks, lumber, or by other means.

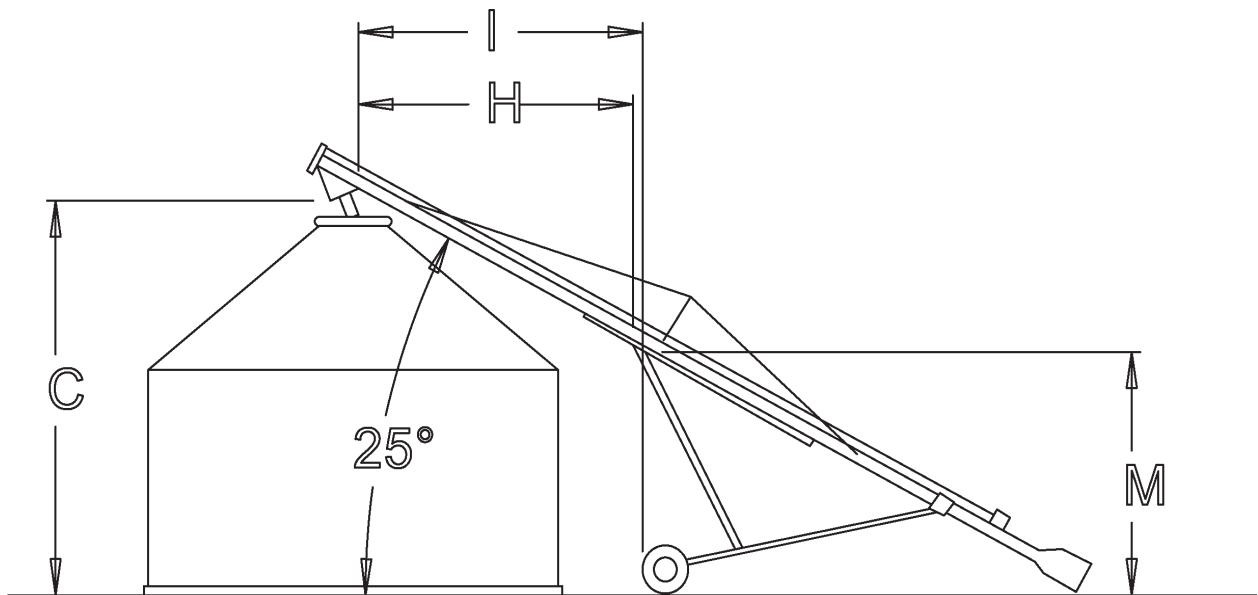
Auger Operating Heights and General Dimensions

	A	B	C	D	E	F	G	H
Auger Diameter and Length	Discharge Height at Maximum	Discharge Height at 35°	Discharge Height at 25°	Overall Height during *Transport	Closest Point to Bin at Maximum	Closest Point to Bin at 35° (ground level)	Closest Point to Bin at 35° (eave level)	Closest Point to Bin at 25° (eave level)
8" x 33'	23' 9"	18' 8"	13' 8"	9' 0"	8' 0"	9' 10"	9' 6"	8' 0"
8" x 41'	25' 3"	22' 10"	16' 11"	10' 0"	13' 3'	14' 10"	14' 10"	13' 0"
8" x 47'	32' 0"	26' 2"	19' 5"	12' 0"	13' 9"	16' 2"	16' 6"	17' 3"
8" x 53'	34' 0"	30' 2"	22' 0"	13' 1"	16' 9"	17' 3"	17' 6"	17' 3"
8" x 57'	38' 9"	32' 5"	25' 1"	12' 6"	17' 2"	19' 9"	20' 11"	20' 0"
8" x 59'	40' 10"	32' 11"	24' 3"	13' 3"	18' 3"	22' 2"	22' 6"	21' 0"
8" x 62'	40' 3"	34' 8"	25' 7"	13' 4"	21' 4"	22' 7"	23' 7"	22' 8"
8" x 65'	44' 0"	36' 10"	26' 11"	12' 10"	19' 9"	22' 7"	23' 6"	17' 9"
8" x 71'	49' 0"	40' 2"	29' 5"	13' 5"	21' 9"	24' 1"	24' 2"	18' 2"

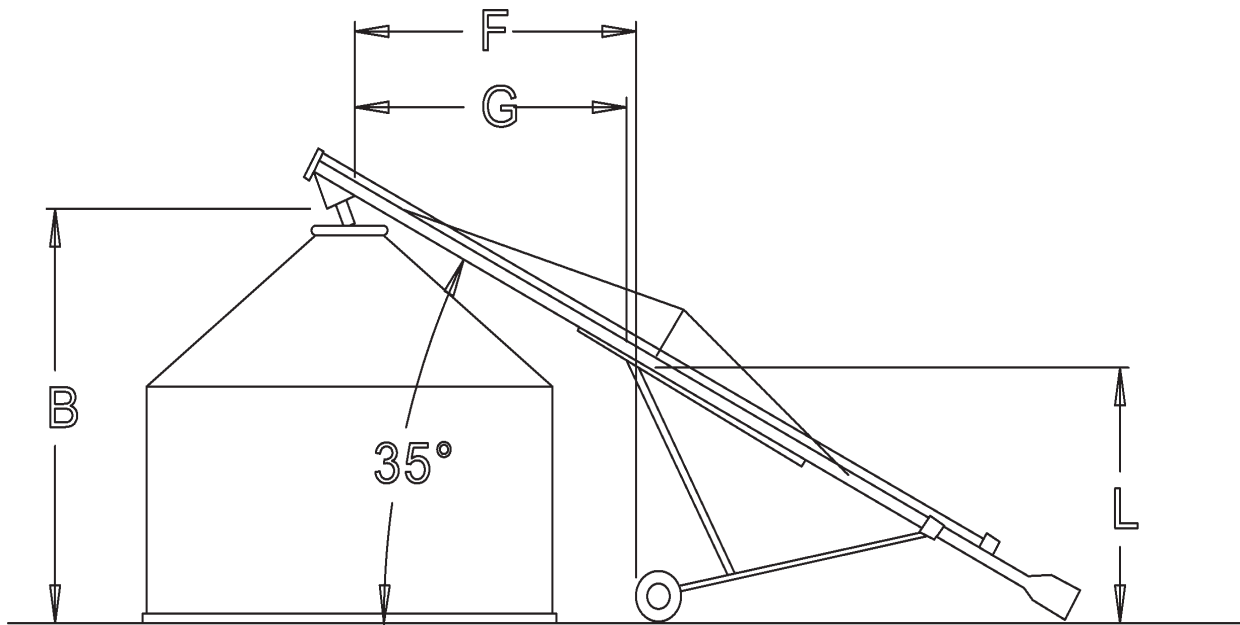
	I	J	K	L	M	N	O	P
Auger Diameter and Length	Closest Point to Bin at 25° (ground level)	Closest Point to Bin at Transport Position	Free Clearance above Wheels at Maximum	Free Clearance above Wheels at 35°	Free Clearance above Wheels at 25°	Length of Upper Under-carriage Arm	Length of Lower Under-carriage Arm	Distance From Intake to Under-carriage Mount
8" x 33'	11' 8"	14' 6"	15' 9"	13' 8"	9' 7"	10' 6"	9' 8"	6' 5"
8" x 41'	16' 2"	19' 5"	12' 10"	12' 5"	10' 5"	10' 6"	9' 8"	9' 11"
8" x 47'	18' 9"	21' 10"	18' 7"	14' 4"	11' 11"	12' 8"	12' 2"	10' 2"
8" x 53'	21' 4"	24' 7"	19' 1"	16' 9"	14' 0"	14' 10"	14' 9"	10' 5"
8" x 57'	24' 5"	25' 8"	21' 8"	18' 1"	14' 2"	14' 10"	14' 9"	12' 1"
8" x 59'	25' 0"	29' 4"	20' 9"	17' 1"	14' 4"	14' 10"	14' 9"	13' 3"
8" x 62'	25' 11"	20' 3"	22' 7"	17' 10"	15' 3"	16' 1"	17' 5"	10' 10"
8" x 65'	25' 0"	27' 0"	24' 10"	21' 7"	19' 2"	16' 1"	17' 5"	15' 2"
8" x 71'	27' 3"	29' 6"	28' 11"	24' 0"	21' 8"	16' 1"	17' 5"	16' 1"



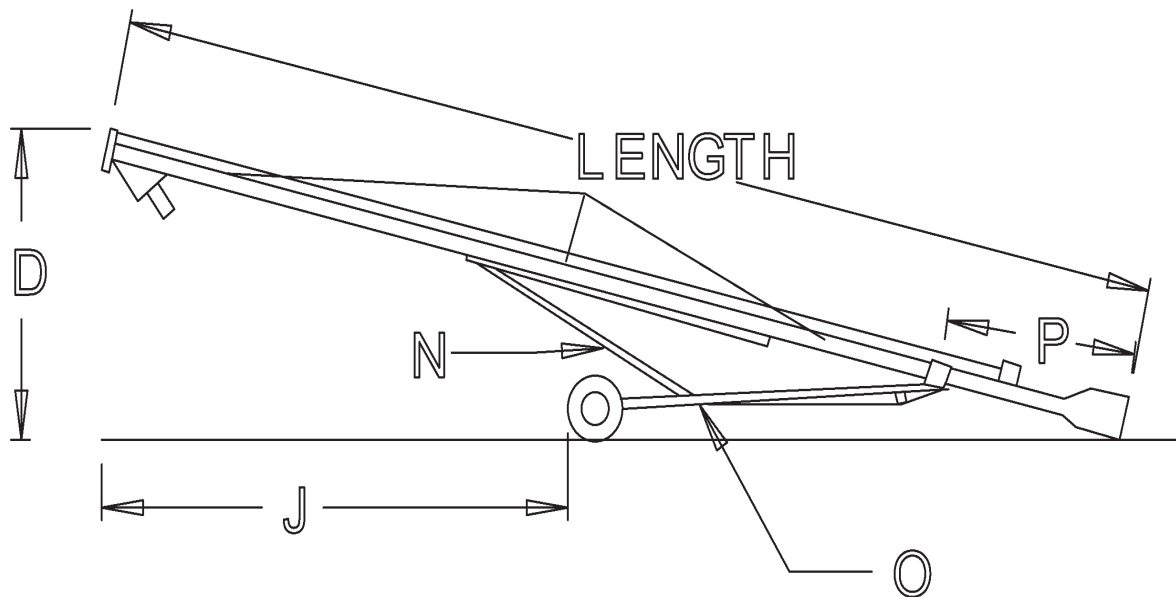
Auger Raised to Maximum Height



Auger Raised to 25°



Auger Raised to 35°



Auger Positioned for Transport

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). If electric motor drive is used, use a motor that operates at 1750 RPM and use a 4" O.D. motor pulley.
- 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 or electric motor and lockout the power source whenever the equipment must be serviced or adjusted. Disconnect and lock out power before resetting motor overloads. Make certain electric motors are properly grounded.

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 motor drive.

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. With an electric motor drive, disconnect the electric power supply.
- 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.

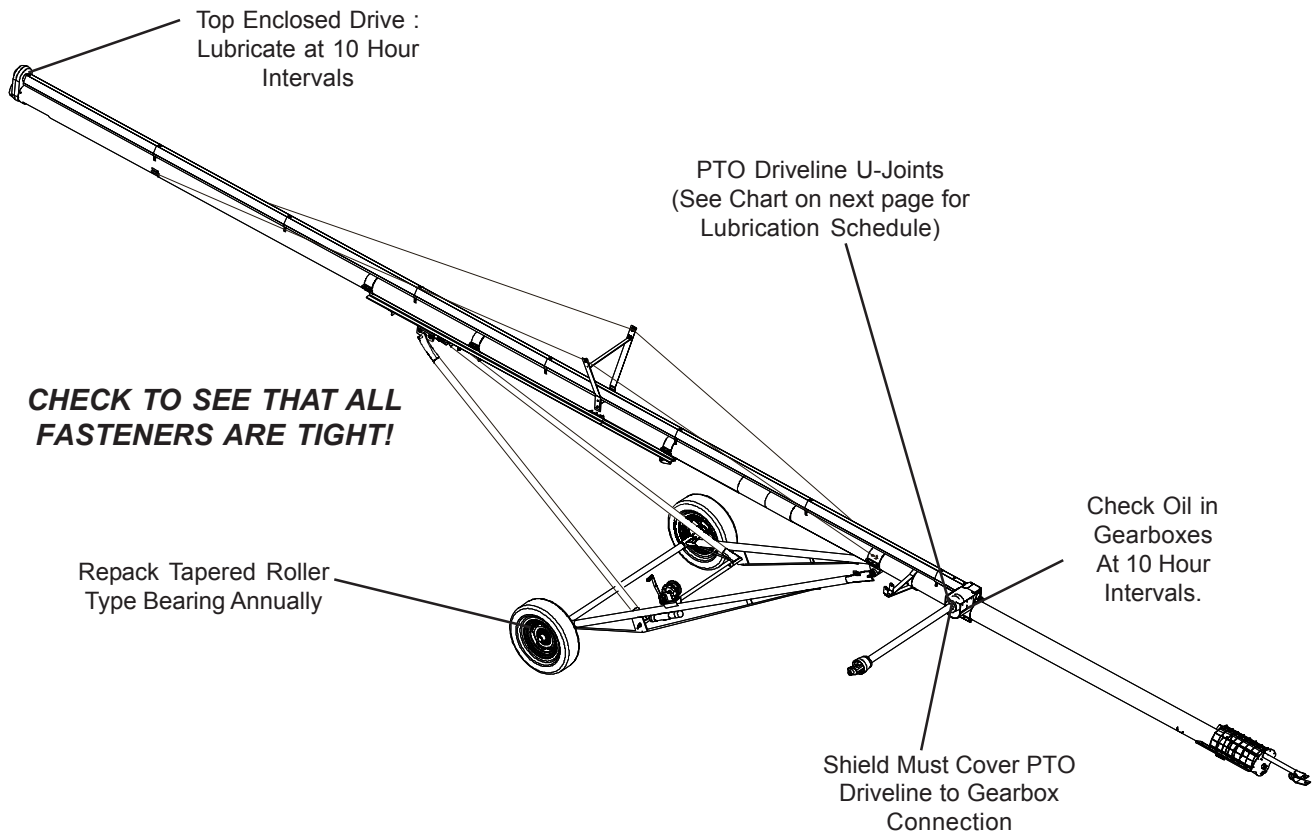
- A. Place the PTO driveline in storage position when it is not attached to the tractor.

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.

⚠ DANGER

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.

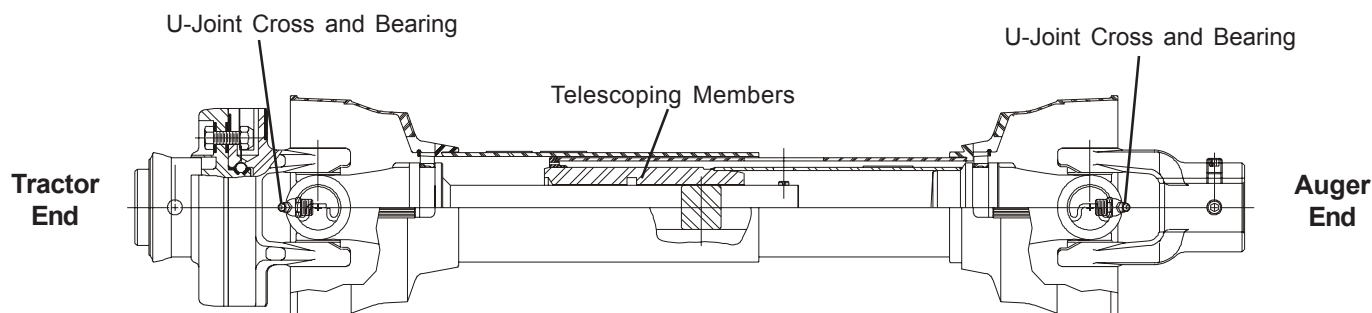
- A. Winches require the following maintenance:

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 three (3) 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.

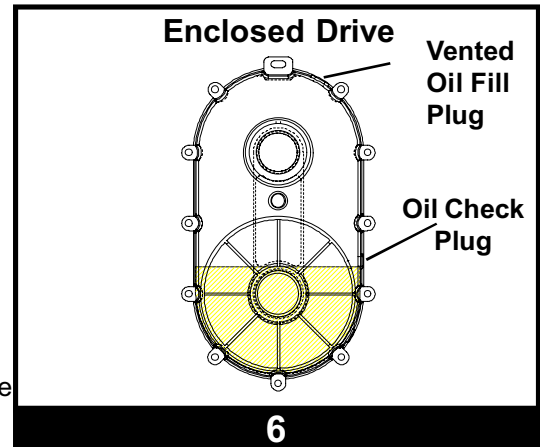
PTO Driveline Shear Bolt			
Auger Size	Shear Bolt Size	Shear Bolt Grade	Replacement Shear Bolt Kit Part No.
8" dia.	5/16" - 18 x 1" long	Grade 5	GK2657

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 oil until the oil level reaches the bottom of the oil check plug.

For lubrication in normal operating temperature between 40°F to 120°F, we recommend the use of non-foaming, multipurpose gear oil SAE 85W90 weight. For temperatures below 40°F, use SAE 80 weight oil. SAE 80W-90 weight oil may also be used for all operating temperatures. 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. Gearbox Lubrication

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

B. Fill the gearbox to the check plug opening with non-foaming SAE 85W90 for temperatures between 40° F & 120° F. Below 40° F use SAE80. SAE 80W90 may also be used for all temperatures.

8. Belt Adjustment.

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

9. 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.

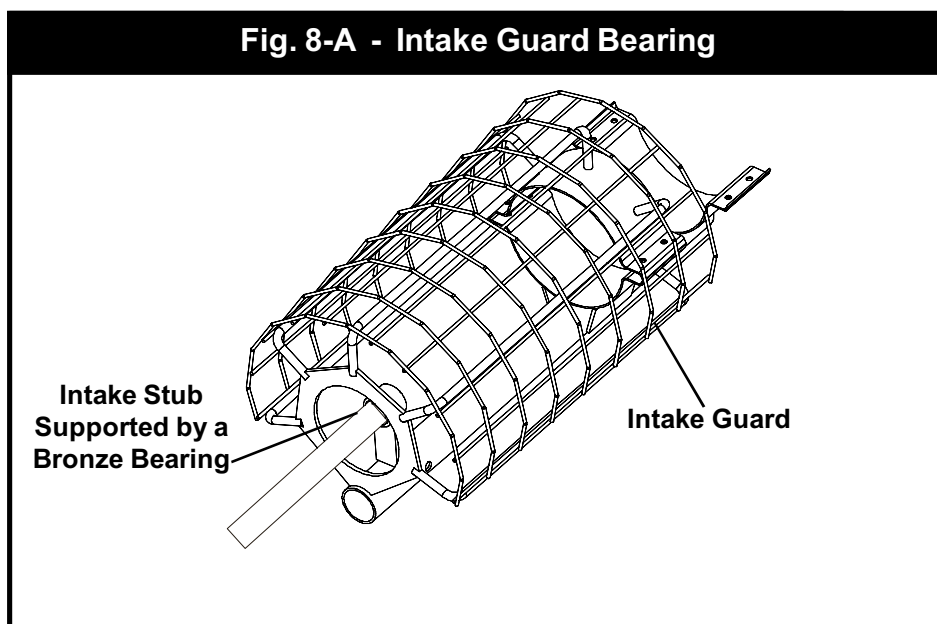
WARNING

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.

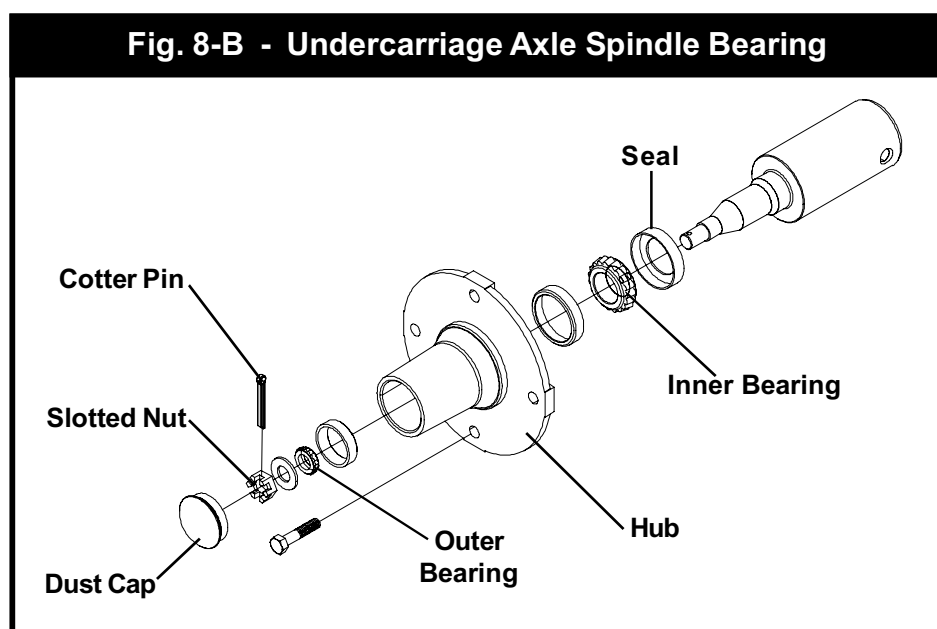
Fig. 8-A - Intake Guard Bearing



9. 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 86-91.

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

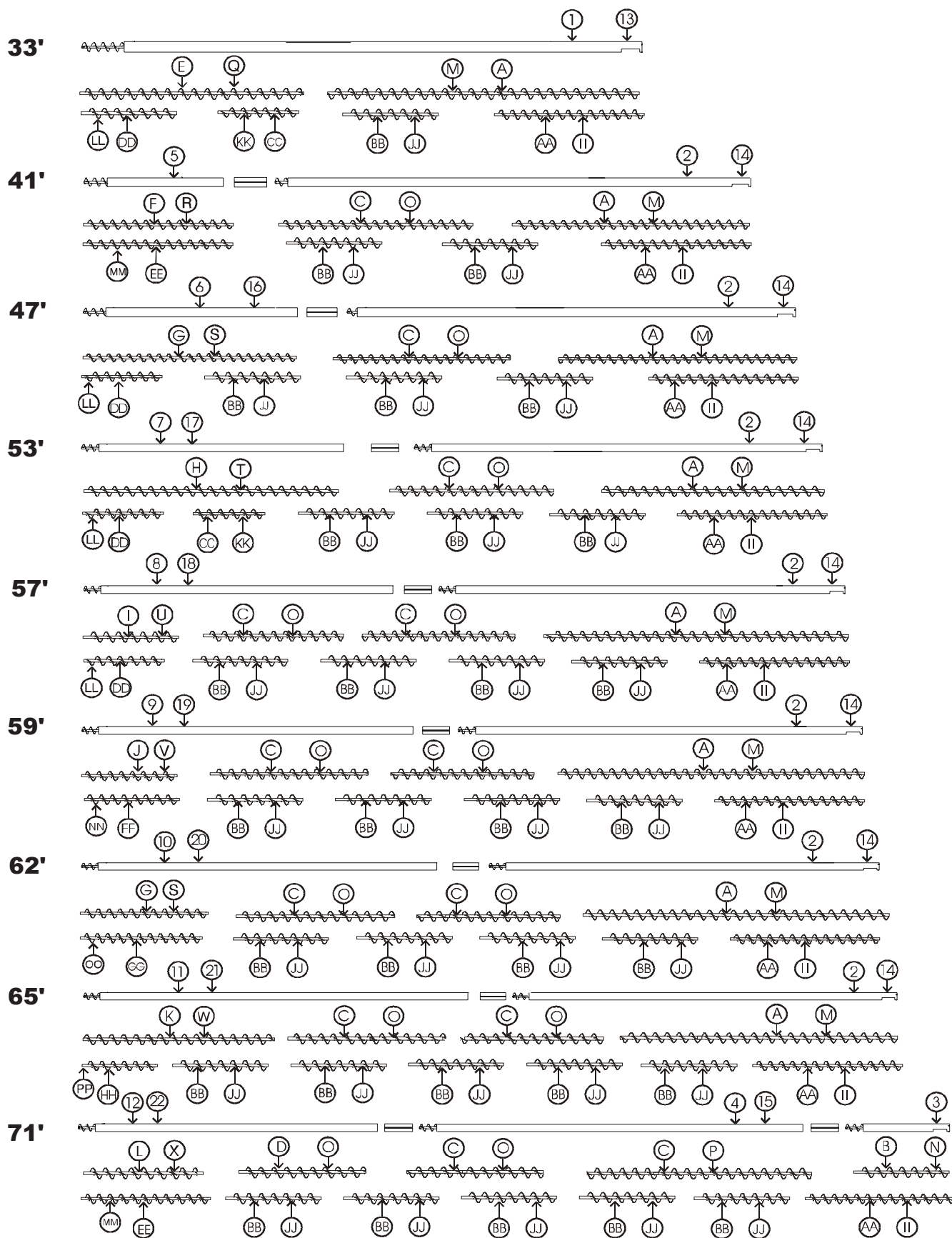
INTERNAL BEARING COMPONENTS

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	GK1736	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

Flying and Housing Components



Flighting and Housing Components

STANDARD AUGER HOUSING (See page 75)

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 75)

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.

Flighting and Housing Components

STANDARD - MEDIUM DUTY FLIGHT SECTIONS (See page 75)

Ref No.	Part No.	Description
A	GK3127	Upper Flight Section
B	GK3479	for 33', 41', 47', 53', 57', 59', 62' and 65' (18' 3/16") for 71' (10' 3/16")
C	GK1384	Middle Flight Section
D	GK3480	for 41', 47', 53', *57', *59', *62', *65', and *71' (15') for 71' (18') *NOTE: 57'-71' WILL USE TWO (2) GK1384
E	GK1297	Lower Flight Section
F	GK3131	for 33' (15' 2-3/16")
G	GK3132	for 41' (8' 1-13/16")
H	GK3133	for 47' & 62' (14' 1-11/16")
I	GK3134	for 53' (20' 2")
J	GK3193	for 57' (9' 1-3/4")
K	GK3193	for 59' (11' 1-9/16")
L	GK3236	for 65' (17' 1-11/16")
	GK3250	for 71' (13' 2-7/16")

STANDARD - HEAVY DUTY FLIGHT SECTIONS (See page 75)

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

Flighting and Housing Components

INTERNAL BEARING - MEDIUM DUTY FLIGHT SECTIONS (See page 75)

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") <i>*NOTE: 41' Uses Two (2) GK3735</i> <i>*NOTE: 47'-53' Use Three (3) GK3735</i> <i>*NOTE: 57'-62' Use Four (4) GK3735</i> <i>*NOTE: 65'-71' Use Five (5) GK3735</i>
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	GK3741	for 62' (11' 2")
HH	GK3738	for 65' (4' 2")

INTERNAL BEARING - HEAVY DUTY FLIGHT SECTIONS (See page 75)

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") <i>*NOTE: 41' Uses Two (2) GK3744</i> <i>*NOTE: 47'-53' Use Three (3) GK3744</i> <i>*NOTE: 57'-62' Use Four (4) GK3744</i> <i>*NOTE: 65'-71' Use Five (5) GK3744</i>
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 #	Description	Part #	Auger
1	Drive Shaft Shield 5' 8-1/4" 8" 1' 6"	GK2240	ALL
		GK2522	71'
		GK2523	71'
2	Drive Shaft (Upper & Mid Section) 19' 6" 15' 7-3/4" 9' 9" 11' 9-1/2"	GK2526	33'
		GK2602	41' - 65'
		GK3202	71'
		GK2527	71'
3	Drive Shaft (Lower Section) 8' 2" 12' 3" 12' 9" 16' 7" 20' 11' 9-1/2"	GK2432	53'
		GK1914	57'
		GK1789	59'
		GK2532	62'
		GK3203	65' & 71'
		GK2527	71'
4	Key SQ 1/4"X 1 1/2"	S-9169	ALL
5	1" to 1" Drive Shaft Coupler	GK1500	ALL
6	Nylock Nut 5/16"-18 ZN GR5	S-7382	ALL
7	Drive Shaft Cover Bracket	GK2603	ALL
8	Bearing with Triangle Flange & Set Screw	GK1596	ALL
8a	1" Bore Bearing	GK2557	ALL
8b	Flangette	GK2556	ALL
9	Carriage Bolt 5/16"-18x3/4" ZN GR2	S-6076	ALL
10	1/4" Flat Washer	S-8351	ALL
11	Screw 1/4" x 5/8"	S-8350	ALL

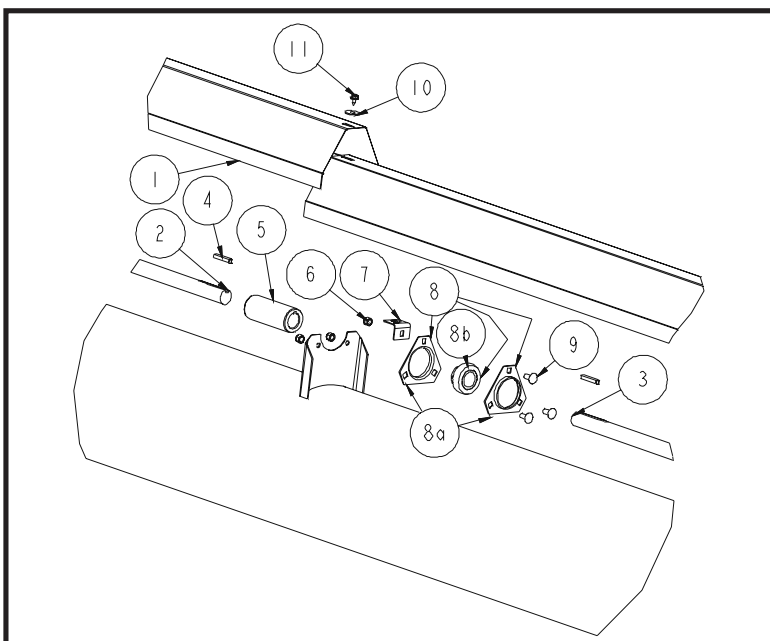


Fig. 1 - Driveshaft

Direct PTO Drive Components

See Fig. 2 below for reference.

DIRECT PTO DRIVE COMPONENTS			
Ref. #	Description	Part #	Auger
1	Drive Shaft Cover Long 5' 8-1/4"	GK2240	ALL
2	Drive Shaft Cover Short 5' 3' 2' 1'	GK2355 GK2144 GK2521 GK2235	33' & 62' 59' & 65' 41' - 53' & 71' 57'
3	Telescoping Drive Shaft Cover 1' 6"	GK2523	ALL
4	Drive Shaft Extension 4' 3" 8' 2" 8' 8" 9' 6" 10' 3-1/2" 12' 3"	GK2069 GK2432 GK1392 GK2070 GK1917 GK1914	41' 33', 53', 57', & 65' 62' 59' 47' 71'
5	1" to 1" Drive Shaft Coupler	GK1500	ALL
6	Key SQ 1/4"X 1 1/2"	S-9169	ALL
7	Drive Shaft Cover Bracket	GK2603	ALL
8	Bearing with Triangle Flange & Set Screw	GK1596	ALL
8a	1" Bore Bearing	GK2557	ALL
8b	Flangette	GK2556	ALL
9	Carriage Bolt 5/16"-18x3/4" ZN GR2	S-6076	ALL
10	Nylock Nut 5/16"-18 ZN GR5	S-7382	ALL
11	Drive Shaft to Gearbox Coupler 1" to 1" Drive Shaft Coupler 1-1/4" to 1" Drive Shaft Coupler	GK1500 GK1609	33' - 57' 59' - 71'
12	Gearbox Shield Bracket	GK1501 GK2224	33' - 57' 59' - 71'
13	Bolt HHCS 3/8"-16x3/4" GR5	S-7105	ALL
14	3/8" Lock Washer	S-1054	ALL
15	1/4" Flat Washer	S-8351	ALL
16	Screw 1/4" x 5/8"	S-8350	ALL
17	Gearbox 90 Deg 1:1 Ratio 1" Shaft 1-1/4" Shaft	GK24931 GK24941	33' - 57' 59' - 71'
18	3/8" Flat Washer	S-248	ALL
19	PTO Shield	GK1570	ALL
20	Band On Gearbox Mount	GK1502 GK2225	33' - 57' 59' - 71'
21	Bolt HHCS 3/8"-16x1-1/2" ZN GR5	S-7515	ALL
22	Half Band 8"x 6" 7GA. Painted	GK5096	ALL
23	Nylock Nut 3/8"-16 ZN GR5	S-7383	ALL
24	Half Band 8" X 2" 12GA. GALV	GK1055	ALL
25	8" Band-on Bearing Stand	GK3273	ALL
26	8" PTO Carrier Bracket	GK3343	ALL
27	Bolt HHCS 5/16" - 18 x 1-1/2" ZN GR5	S-2741	ALL
28	PTO Retaining Pin	GK3246	ALL
29	PTO Input Drive PTO Input Drive Line 60" 1" Shaft PTO Input Drive Line 60" 1-1/4" Shaft	GK1514 GK1515	33' - 57' 59' - 71'

Direct PTO Drive Components

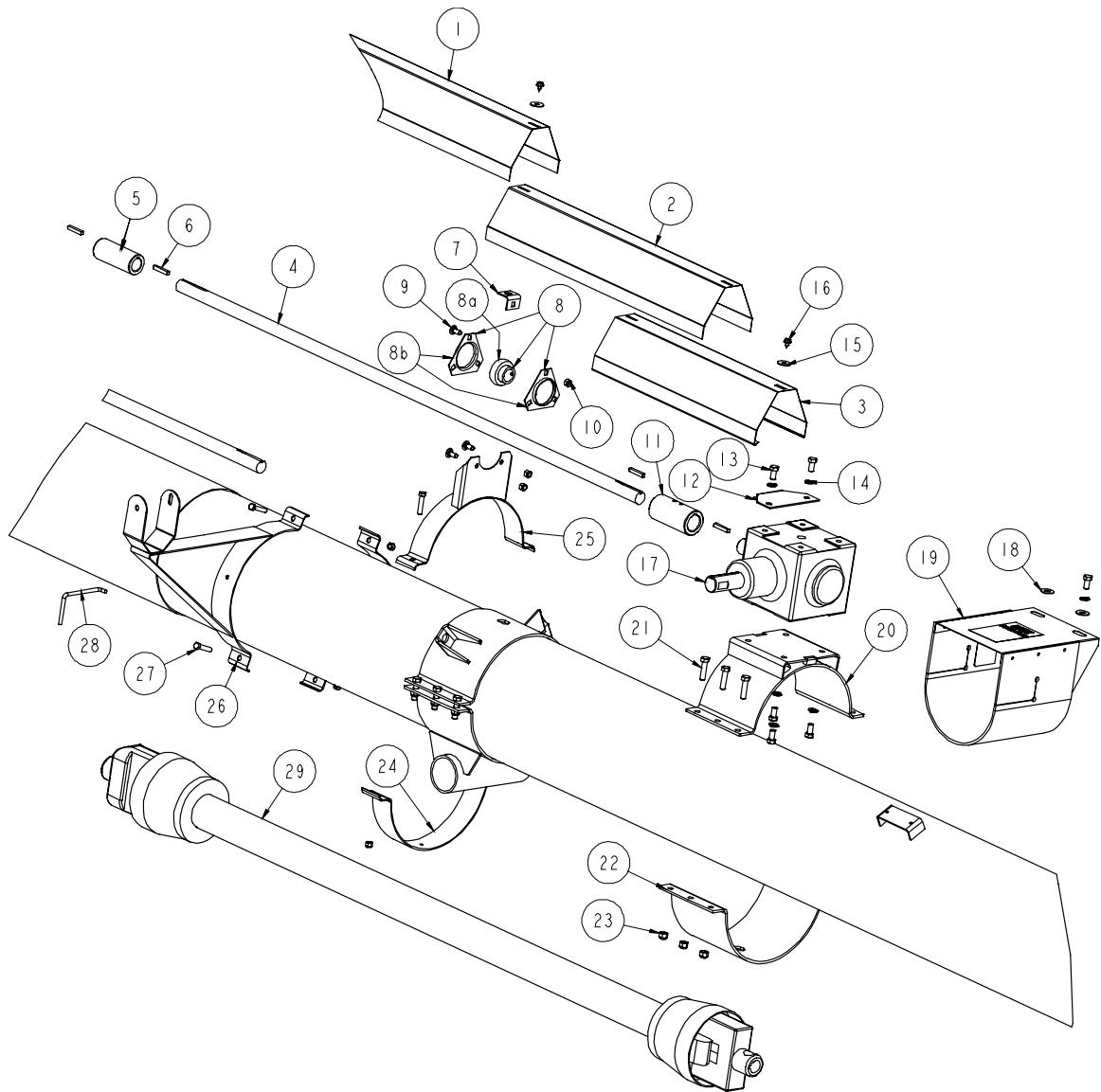


Fig. 2 - PTO

Truss Components

TRUSS COMPONENTS			
Ref. #	Description	Part #	Auger
24	Band-On Truss Mount	GK1397 GK1068	41' 47', 53', & 62'-71'
25	Truss Side Support (19" long) Upper (32" long) Lower (39-1/2" long) Under (30" long)	GK1552 GK1555 GK2536 GK1393	41' 47', 53', & 62'-71' 57' to 71' 65' & 71'
26	Lower Truss Crossbrace(17-5-16" long)	GK1016	57' to 71'
27	Upper Truss Crossbrace (18-1/4" long) 26-7/8" (long)	GK1568 GK1554	41' 47' to 71'
28	Truss Cable 1/4" x 28' long 1/4" x 36' long 5/16" x 45' long 5/16" x 31' long 5/16" x 52' long'	GK1575 GK3332 GK2641 GK2167 GK1582	41' 47' 53' to 59' 65' & 71' 62' to 71'
29	Eye Bolt 5/8" Dia.	GK3107	41' to 71'
30	3/8" Cable Clamp 5/16" Cable Clamp	GK2759 GK2760	41' to 71' 41' to 71'
31	3/8" Cable Clamp U-Bolt	GK2759 S-8245	41' to 62' 65' & 71'
32	Lower Band-On Truss anchor	GK1030	41' to 71'
33	Undertruss Side Stap (30" long)	GK1393	65' & 71'
34	Lower Band-On Truss Anchor	GK1398	65' & 71'
35	Turss Vertical Tube	GK1395	65' & 71'
N/S	Upper Band-On Truss Anchor	GK1183	65' & 71'

Main Auger Components

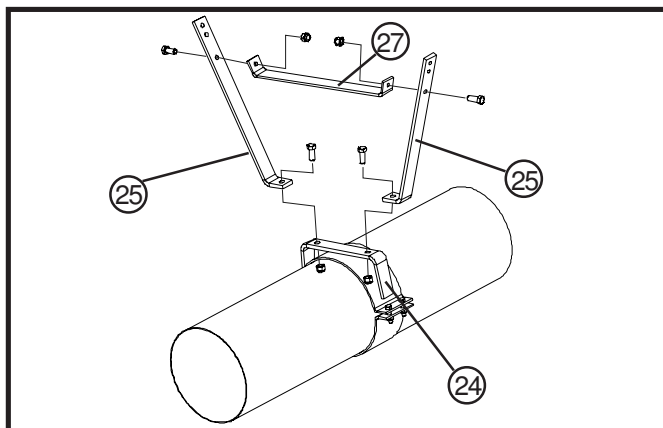


Fig. 3
41' Manual Model Main Truss

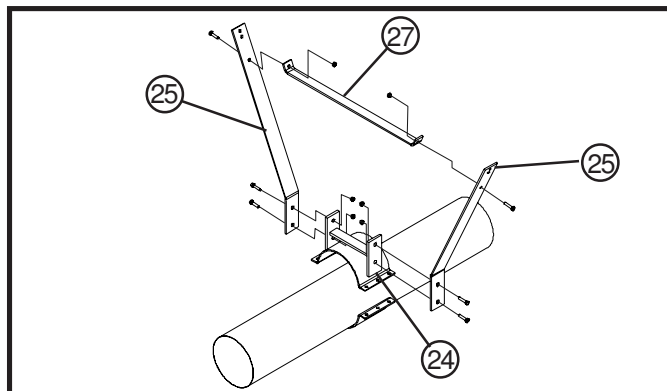


Fig. 4
47' & 53' Manual & Hydraylic Main Truss
62', 65', 71' Hydraylic Model Upper Truss
65' & 71' Manual Model Upper Truss

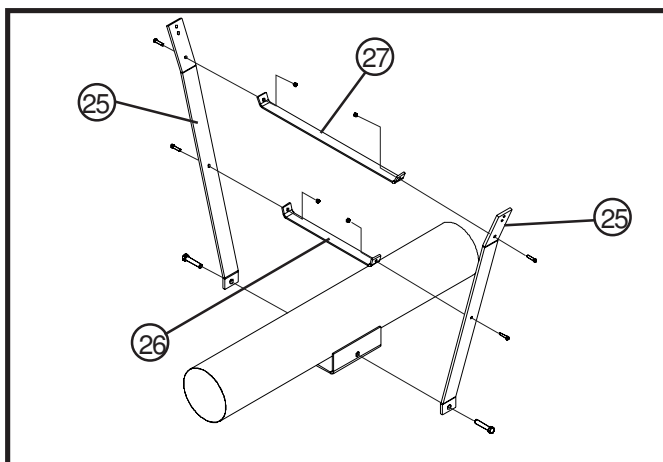


Fig. 5
57' - 71' Hydraylic Model Main Truss
57', 59', & 62' Manual Model Main Truss

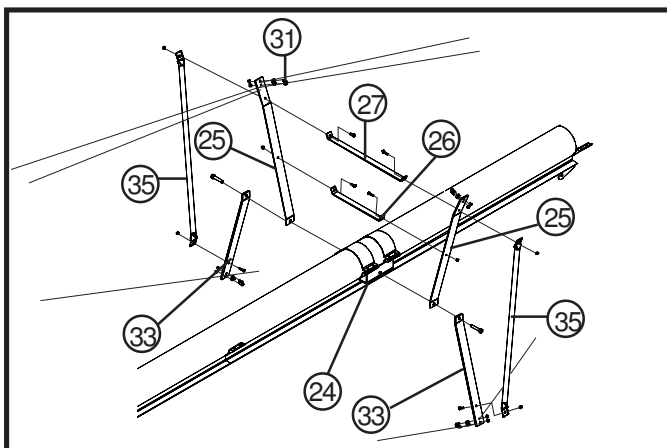


Fig. 6
61'-71' Manual Lower Truss

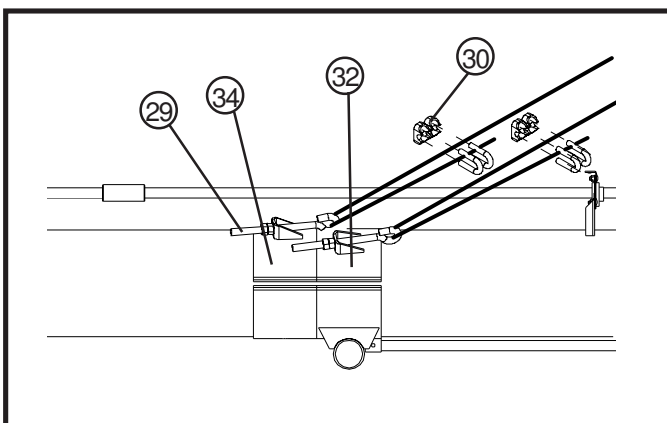
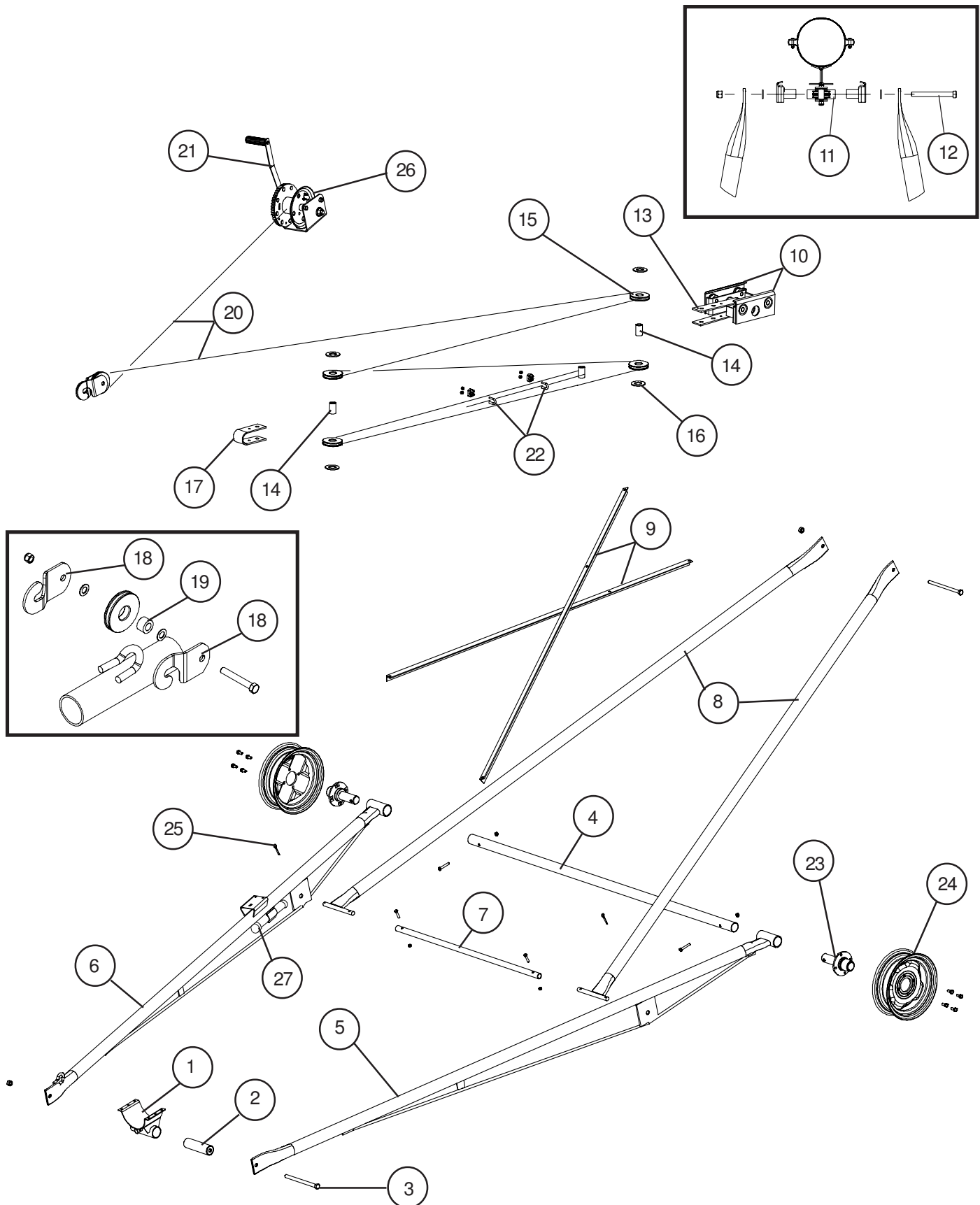


Fig. 7

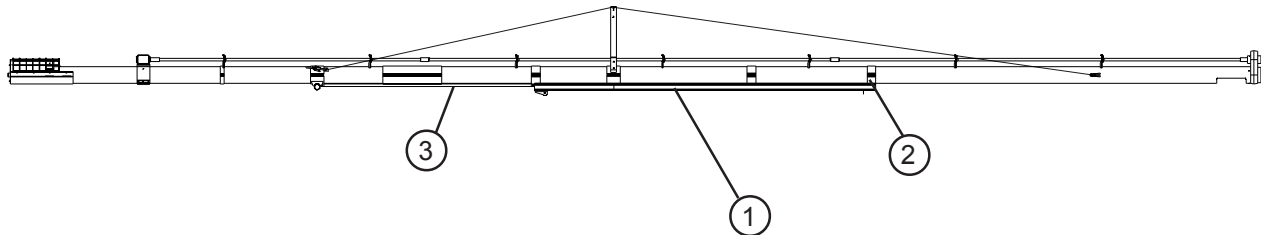
Manual Lift Undercarriage Components

Manual Lift Undercarriage Components			
Ref. #	Description	Part #	Auger
1	Radius Rod Clamp Band	GK1316	33' to 62'
		GK3515	65' & 71'
2	Spacer Tube for Radius Rod Pivot	GK1549	ALL
3	HHCS bolt 3/4" - 10 x 11" ZN Gr. 5	S-8259	ALL
Axle Pipe			
4	7' 10-1/2" long	GK1546	33' to 47'
	7' 9" long	GK2056	53' to 59'
	10' long	GK2627	62' to 71'
Right Radius Rod			
5	9' 8" long	GK1421	33' & 41'
	12' 2" long	GK2550	47'
	14' 8-3/4" long	GK2058	53' to 59'
	17' 10-1/2" long	GK3101	62' to 71'
Left Radius Rod			
6	9' 8" long	GK1416	33' & 41'
	12' 2" long	GK2551	47'
	14' 8-3/4" long	GK2059	53' to 59'
	17' 10-1/2" long	GK3358	62' to 71'
Axle Leg Tube Crosspipe			
7	4' 5" long	GK1418	33' & 41'
	4' 3" long	GK1031	47'
	4' 1-3/4" long	GK2057	53' to 59'
	6' 1/2" long	GK3366	62' to 71'
Axle Leg			
8	10' 6-1/2" long	GK1419	33' & 41'
	12' 8" long	GK2554	47'
	15' 3" long	GK2060	53' to 59'
	16' 6-1/2" long	GK3196	62' to 71'
9	Axle leg Cross Brace	GK1394	62' to 71'
10	Trolley	GK1175	ALL
11	Trolley Spacer Bushing	GK1179	ALL
12	HHCS bolt 3/4" - 10 x 7" ZN Gr. 5	S-8352	ALL
13	Trolley Long Pulley Clevis	GK1150	ALL
14	Track and Trolley Pulley Clevis Bushing	GK1453	ALL
15	1/4" Cable Pulley	GK1543	ALL
16	1" SAE ZN Flat Washer	S-7623	ALL
17	Track Short Pulley Clevis	GK1391	ALL
18	Pulley Clevis Plate	GK1545	ALL
19	Cable Pulley Bushing	GK1544	ALL
Lift Cable			
20	1/4" x 44' long	GK1589	33' & 41'
	1/4" x 75' long	GK3331	47'
	1/4" x 91' long	GK3320	53' to 59'
	1/4" x 118' long	GK3322	62' to 71'
21	Winch Handle	GK1567	ALL
22	1/4" Cable Clamp	S-8257	ALL
23	Spindle and Hub Assembly	GK1193	ALL
24	4-Bolt Wheel Rim	GK1176	ALL
25	5/16" x 2" Cotter Pin	S-8349	ALL
Winch			
26	# 1500	GK3337	33' to 59'
	# 2500	GK2490	62' to 71'
27	Manual Container	GK1523	ALL

Manual Lift Undercarriage Components



Manual Lift Track Components

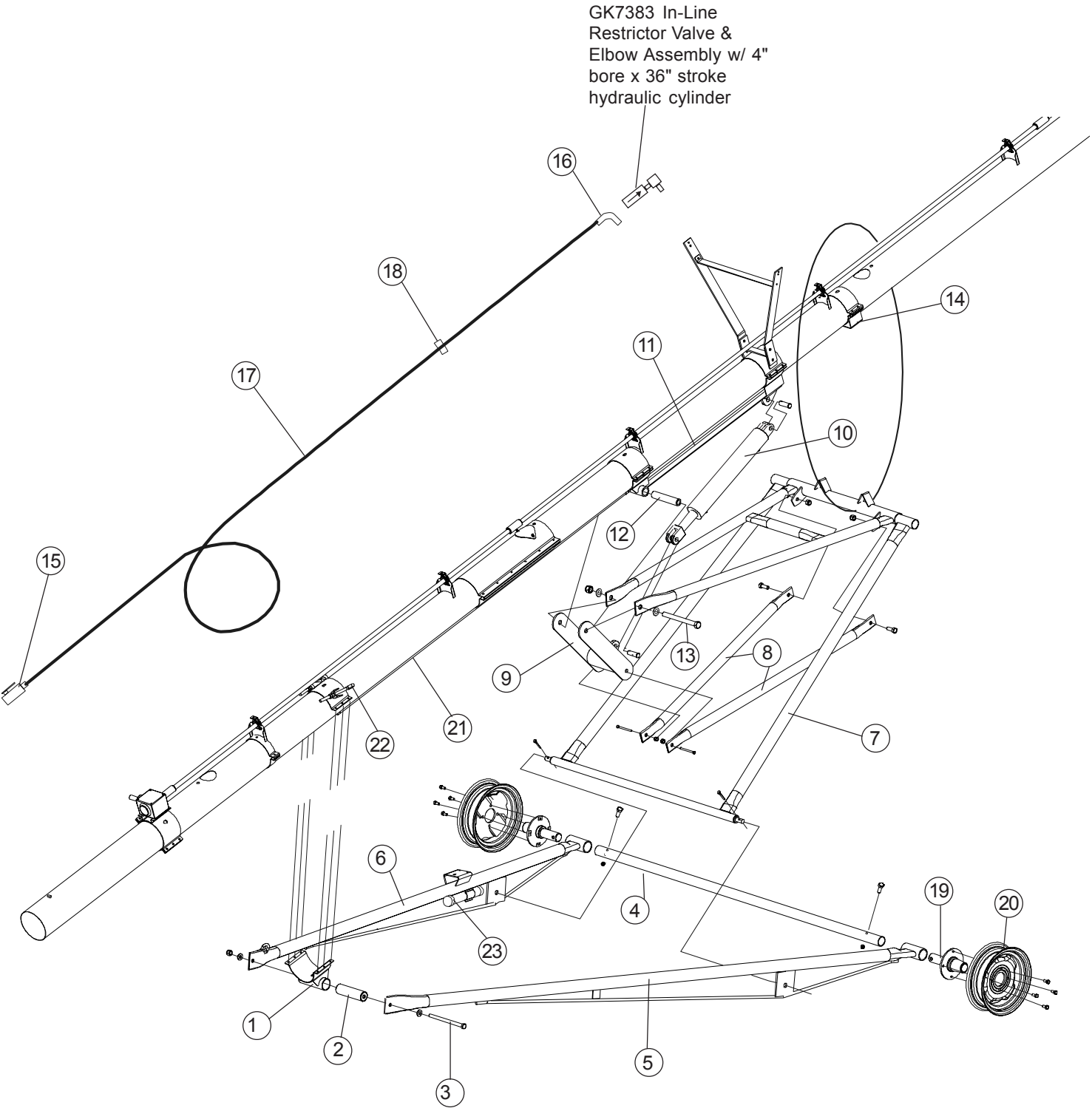


Manual Track Components		
Ref. #	Part #	Description
1		Track Weldments
	GK1399	for 33' & 41'
	GK4303	for 47'
	GK1396	for 53'
	GK2133	for 57'
	GK4049	for 62'
2	GK1456	for 65' & 71'
	GK5096	Halfband: 8" x 6" 7 Ga. Painted
	GK2616	Halfband: 8" x 4" 7 Ga. Painted
3		Spacer Tubes
	GK3341	for 33' - 41' (88.75")
	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

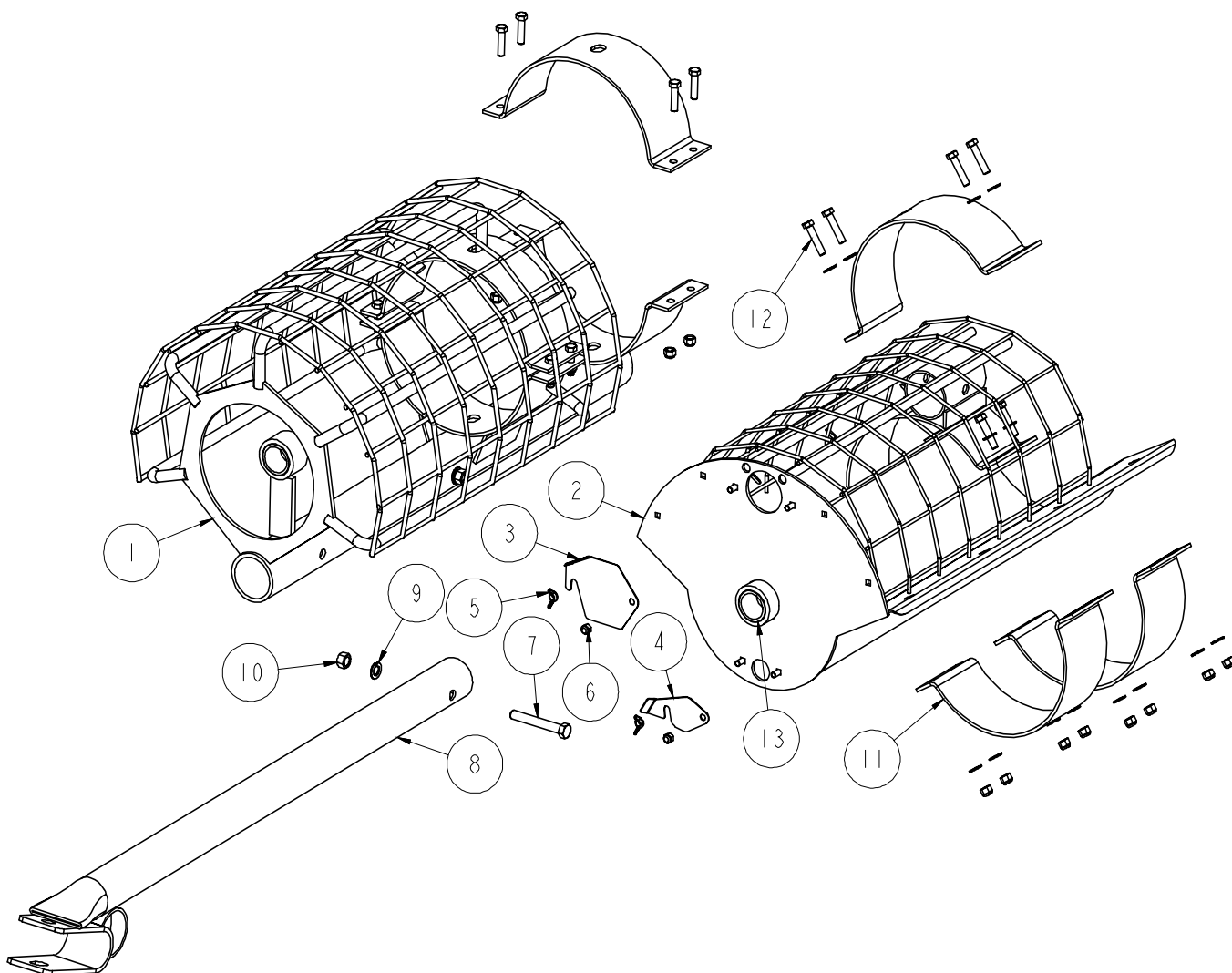
Hydraulic Lift Undercarriage Components			
Ref. #	Description	Part #	Auger
1	Radius Rod Clamp	GK1316	47' to 62'
2	Radius Rod Spacer Tube	GK1549	ALL
3	Bolt HHCS 3/4" - 10 x 11" ZN Gr. 5	S-8259	ALL
Axle Pipe			
4	7' 10-1/2" long	GK1546	33' to 47'
	7' 9" long	GK2056	53' to 59'
	10' long	GK2627	62' to 71'
Right Radius Rod			
5	12' 2" long	GK2550	47' & 53'
	14' 8-3/4" long	GK2058	57' to 62'
	17' 10-1/2" long	GK3101	65' & 71'
Left Radius Rod			
6	12' 2" long	GK2551	47' & 53'
	14' 8-3/4" long	GK2059	57' to 62'
	17' 10-1/2" long	GK3358	65' & 71'
7	Undercarriage Assembly	GK2614	47' & 53'
		GK3356	57' to 62'
		GK3357	65' & 71'
Undercarriage H-Frame Tube			
8	5' 4"	GK2528	47' & 53'
	6' 10"	GK2529	57' to 62'
	8' 1/2"	GK3082	65' & 71'
9	H-Frame	GK1450	47' to 62'
		GK3359	65' & 71'
Hydraulic Cylinder			
10	4" Bore 24" Stroke	GK1527	47' to 62'
	4" Bore 36" Stroke (Includes GK7383 Restrictor Valve & Elbow Assembly)	GK7381	65' & 71'
11	Track Weldment	GK3243	47' & 53'
		GK3355	57' & 59'
		GK4363	62'
		GK3517	65' & 71'
H-Frame Spacer Pivot Tube			
12	8-1/4" long	GK2267	47' to 62'
	9-1/4" long	GK3523	65' & 71'
Bolt for H-Frame Tube			
13	HHCS Bolt 1" -8 x 11" ZN Gr.5	S-8419	47' to 62'
	HHCS Bolt 1" -8 x 12" ZN Gr.5	S-8417	65' & 71'
14	Rest Plate	GK3529	47' & 53'
		GK5354	65'
		GK4299	71'
15	Hydraulic Shut-off Valve	GK1533	ALL
16	90 Deg Hydraulic Elbow	GK1336	47' to 62'
17	Hydraulic Hose; 3/8" x 39'	GK3521	ALL
18	Hose Mounting Clamo	GK1315	ALL
19	Spindle and Hub Assembly	GK1193	ALL
20	4-Bolt Wheel Rim	GK1176	ALL
Spacer Tube			
21	8' 7-7/8"	GK2446	47' & 53'
	10' 3/4"	GK2505	57' to 62'
22	Eye Bolt	GK3107	ALL
23	Manual Container	GK1523	ALL

Hydraulic Lift Undercarriage Components



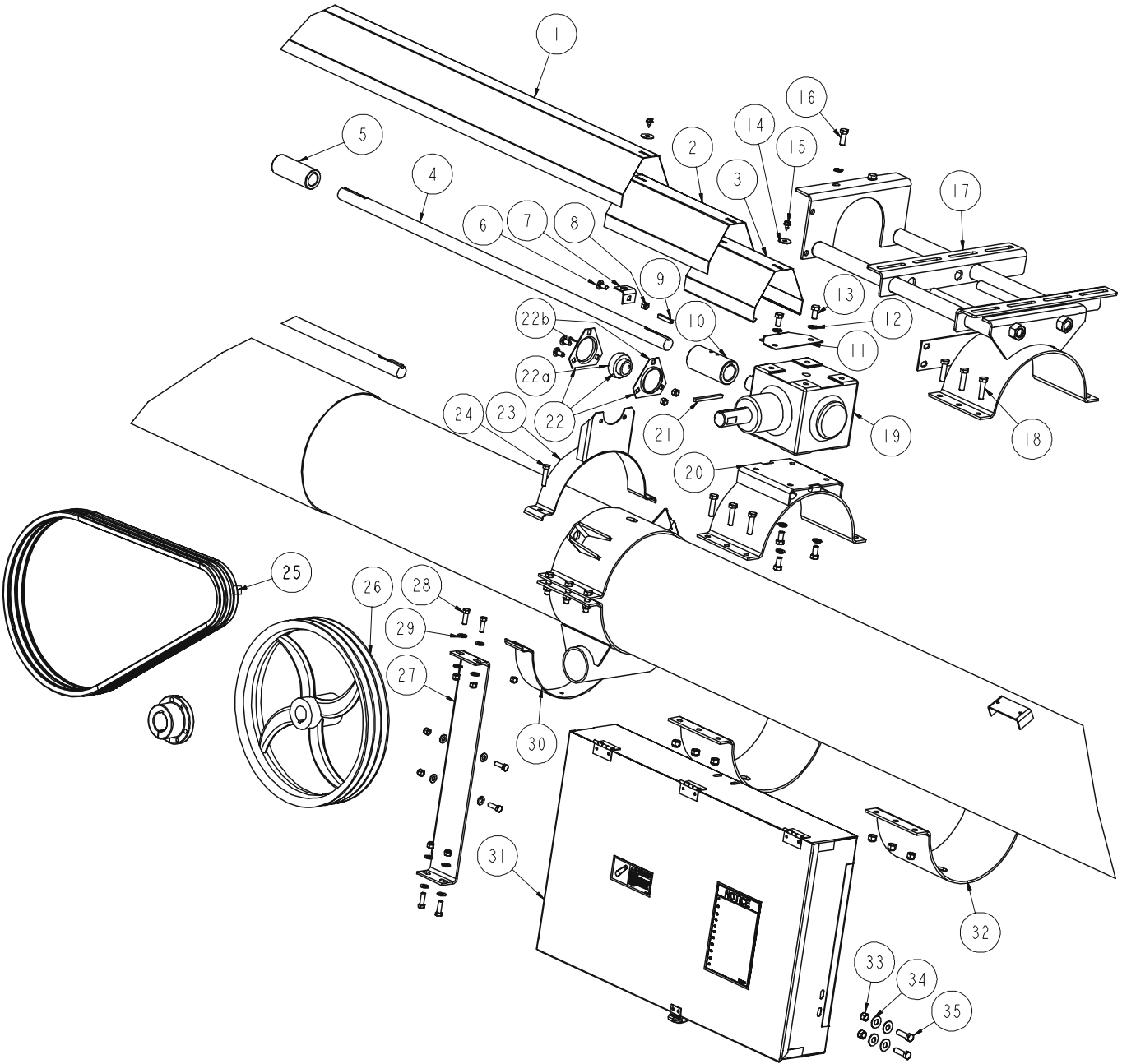
Intake Guard Components

INTAKE GUARD COMPONENTS		
Ref. #	Part #	Description
1	GK3502	INTAKE GUARD - OPEN
2	GK3144	INTAKE GUARD - ROUND BOTTOM
3	GK1530	HOPPER HITCH COVER
4	GK1475	HOPPER CLEANOUT COVER
5	S-4301	WING NUT 5/16"-18 ZN GR2
6	S-7382	NYLOCK NUT 5/16"-18 ZN GR5
7	S-8314	BOLT HHCS 1/2"-13x3-1/2" ZN GR8
8	GK1401	HITCH PIPE
9	S-236	1/2" LOCK WASHER
10	S-7510	HEX NUT 1/2"-13 ZN GR2
11	GK5118	HALF BAND 8"x4" 7GA. PAINTED
12	S-7149	BOLT HHTB 5/16"-18x1-3/4" ZN GR5
13	GK1192	BRONZE BUSHING 1.25" ID X 1.63" OD



Top Mounted Electric Drive Components

ELECTRIC DRIVE COMPONENTS			
Ref. #	Description	Part #	Auger
1	Drive Shaft Cover Long 5' 8-1/4"	GK2240	59' & 62'
2	Drive Shaft Cover Short 5'	GK2355	47' & 57'
	4'	GK2143	71'
	3'	GK2144	41' & 53'
	2'	GK2521	33' & 59'
	1'	GK2235	62'
	8"	GK2522	65'
3	Telescoping Drive Shaft Cover 8"	GK2524	62'
	1' 6"	GK2523	33' to 59', 65', & 71'
4	Drive Shaft Extension 3' 2"	GK4078	53', 59', 62', & 71'
	4' 3"	GK2069	47'
5	1" to 1" Drive Shaft Coupler	GK1500	ALL
6	Carriage Bolt 5/16"-18x3/4" ZN GR2	S-6076	ALL
7	Drive Shaft Cover Bracket	GK2603	ALL
8	Nylock Nut 5/16"-18 ZN GR5	S-7382	ALL
9	Key SQ 1/4"X 1 1/2"	S-9169	ALL
10	Drive Shaft to Gearbox Coupler 1" to 1" Drive Shaft Coupler	GK1500	33' - 57'
	1-1/4" to 1" Drive Shaft Coupler	GK1609	59' - 71'
11	Gearbox Shield Bracket	GK1501	33' - 57'
		GK2224	59' - 71'
12	3/8" Lock Washer	S-1054	ALL
13	Bolt HHCS 3/8"-16x3/4" GR5	S-7105	ALL
14	1/4" Flat Washer	S-8351	ALL
15	Screw 1/4" x 5/8"	S-8350	ALL
16	Bolt HHCS 3/8" - 16 x 1" GR5	S-7469	ALL
17	8" Motor Mount	GK2530	33' - 57'
		GK2447	59' - 71'
18	Bolt HHCS 3/8"-16x1-1/2" ZN GR5	S-7515	ALL
19	Gearbox 90 Deg 1:1 Ratio 1" Shaft	GK24931	33' - 57'
	1-1/4" Shaft	GK24941	59' - 71'
20	Band On Gearbox Mount	GK1502	33' - 57'
		GK2225	59' - 71'
21	Key SQ 1/4"X 3"	S-8276	ALL
22	Bearing with Triangle Flange & Set Screw	GK1596	ALL
22a	1" Bore Bearing	GK2557	ALL
22b	Flangette	GK2556	ALL
23	8" Band-on Bearing Stand	GK3273	ALL
24	Bolt HHCS 5/16"-18x1-1/2" ZN GR5	S-2741	ALL
25	B62 V-Belt	GK2546	ALL
26	Sheave Aluminum 2 Belt 15" x 1" Bore	GK2544	33' to 53'
	Aluminum 3 Belt 15" x 1" Bore	GK2545	57'
	Aluminum 3 Belt 15" x 1-1/4" Bore	GK2234	59' to 71'
27	Belt Guard Mounting Bracket	GK2542	ALL
28	Bolt HHCS 5/16"-18x1" ZN GR5	S-1196	ALL
29	5/16" Flat Washer	S-1937	ALL
30	Half Band 8" X 2" 12GA. GALV	GK1055	ALL
31	Belt Guard Assmely	GK3445	ALL
32	Half Band 8"x 6" 7GA. Painted	GK5096	ALL
33	Nylock Nut 3/8"-16 ZN GR5	S-7383	ALL
34	3/8" Flat Washer	S-248	ALL
35	Bolt HHCS 3/8"-16x1-1/4" ZN GR5	S-2071	ALL



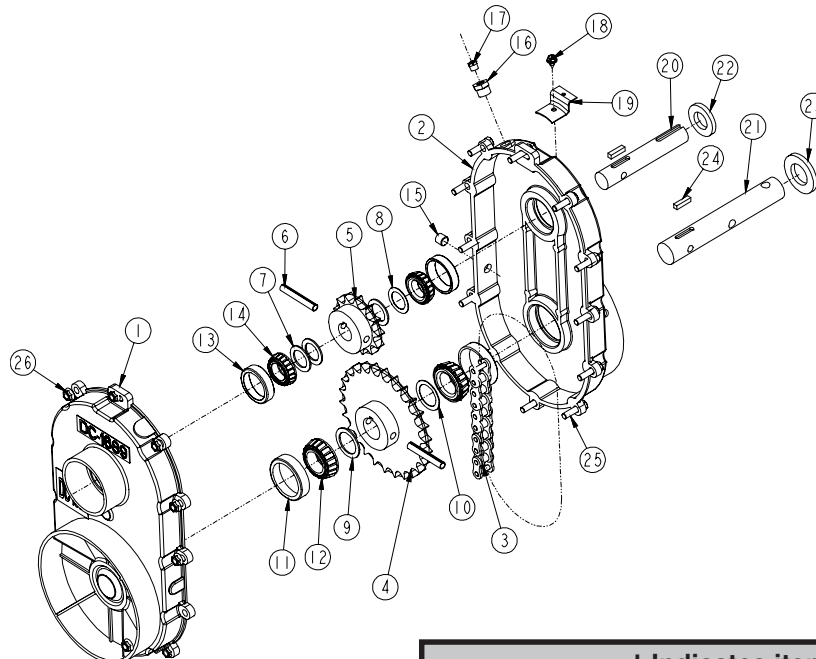
Miscellaneous Components

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

ENCLOSED HEAD DRIVE ASSEMBLIES GK2506 (2:1) & GK2504 (1:1)			
Ref. #	Description	Part #	Ratio
1	Aluminum Casting	GK3239	Both
2	Aluminum Casting	GK3238	Both
Roller Chain			
3	#60 Roller Chain 38 Pitch	GK3240	1:1
	#60 Roller Chain 39 Pitch	GK6330	2:1
Lower Sprocket			
4	#60 19T 1-1/4" Bore	GK6778	1:1
	#60 26T 1-1/4" Bore	GK5990	2:1
Upper Sprocket			
5	#60 19T 1" Bore	GK3245	1:1
	#60 13T 1" Bore	GK5217	2:1
6	3/8" x 2-1/2" Rolled Pin	S-7245	Both
7	1" ID .075" Thick Bushing	GK6328	Both
8	1" ID .031" Thick Bushing	GK6782	Both
9	1-1/4" ID .075" Thick Bushing	GK6336	Both
10	1-1/4" ID .031" Thick Bushing	GK6780	Both
11	1-1/4" Bearing Cup	GK2383	Both
12	1-1/4" Cone Bearing	GK2367	Both
13	1" Bearing Cup	GK3247	Both
14	1" Cone Bearing	GK3242	Both
15	1/4" NPT Plug	FLX-3788	Both
16	1/8" x 3/8" Pipe Bushing	GK5350	Both
17	1/8" - 27 NPT Vent Plug	GK2697	Both
18	1/4" x 5/8" Screw	S-8350	Both
19	Shield Mounting Bracket	GK2543	Both
20	Stub Shaft 1"	GK3253	Both
21	Stub Shaft 1-1/4"	GK3252	Both
22	1" Oil Seal	GK3251	Both
23	1-1/4" Oil Seal	GK2374	Both
24	1/4" x 1" Key	S-9168	Both
25	Bolt HHTB 5/16"-18x1-1/4" ZN GR5	S-4276	Both
26	Nut Flange Wiz 5/16"-18 ZN GR2	S-8675	Both
N/S	Gasket Replacement Kit - Blue RTV Silicone	GK7529	Both

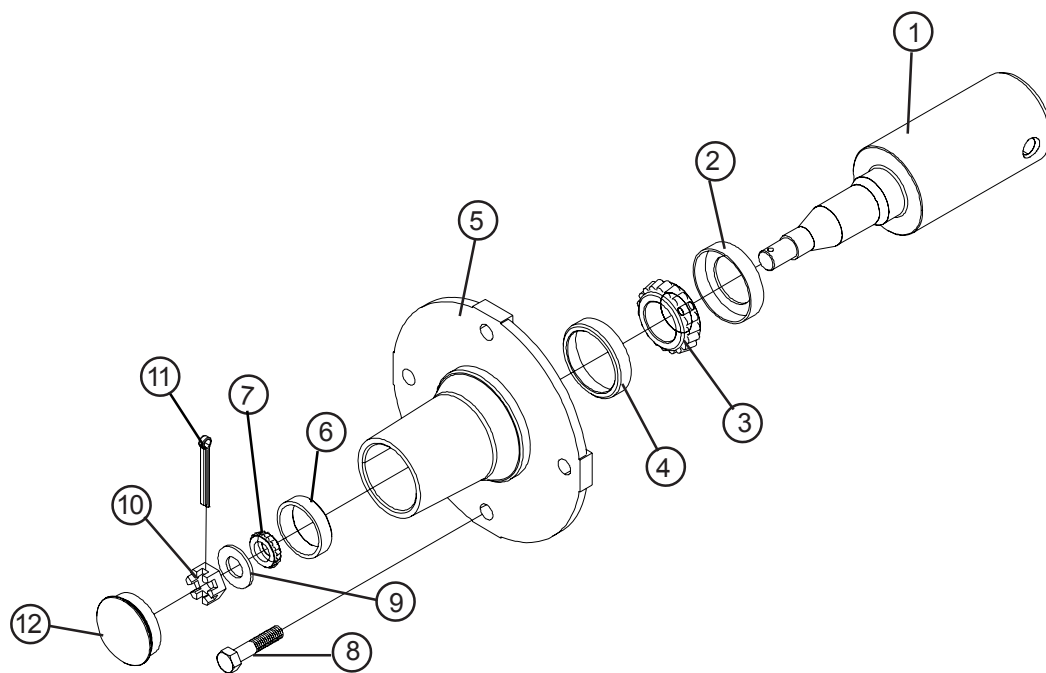


NOTE

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

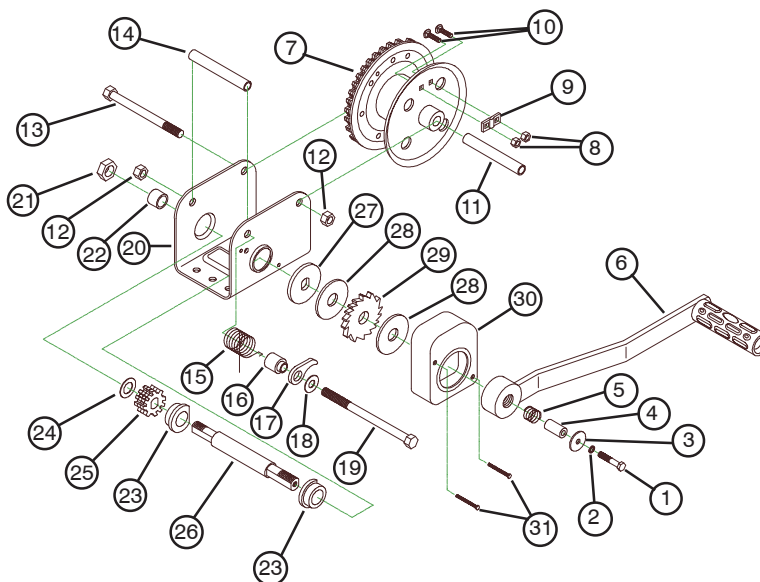
Spindle and Hub Assemblies

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#

Ref. #	Description	Part #	Qty. Req.
1	1/4" - 20 x 1-1/2" Hex Screw	GK6256	1
2	1/4" Lockwasher		
3	1/4" Flat Washer		
4	Handle Retainer Spacer		
5	Spring		
6	Handle Retainer Spacer	GK1567	1
7	Reel Assembly	GK6231**	1
8	#10-24 Hex Nut	S-7635	1
9	Cable Keeper		
10	#10-24 x 5/8" Carriage Bolt		
11	Front Frame Spacer	GK6235**	1
12	3/8" Lockwasher	GK6236*	2
13	3/8" x 1/2" Reel Bolt	GK6237*	1
14	Back Frame Spacer	GK6238**	1
15	Pawl Spring	GK6239**	1
16	Pawl Spacer	GK6240**	1
17	Pawl	GK6241**	1
18	3/8" Flat Washer	GK6242*	1
19	3/8" x 5-1/2" Pawl Bolt	GK6243*	1
20	Frame	GK6244**	1
21	9/16" - 16 Locknut	GK6245*	1
22	Bearing	GK6246**	1
23	3/4" ID Bushing	GK6247**	2
24	9/16" Flat Washer	GK6248*	1
25	Pinion Gear	GK6249**	3
26	Pinion Shaft	GK6250**	1
27	Brake Backup Plate	GK6251**	1
28	Brake Pad	GK6252**	2
29	Ratchet	GK6253**	1
30	Cover	GK6254**	1
31	#10-32 x 1-1/5" Cover Screw	GK6255*	2



NOTE

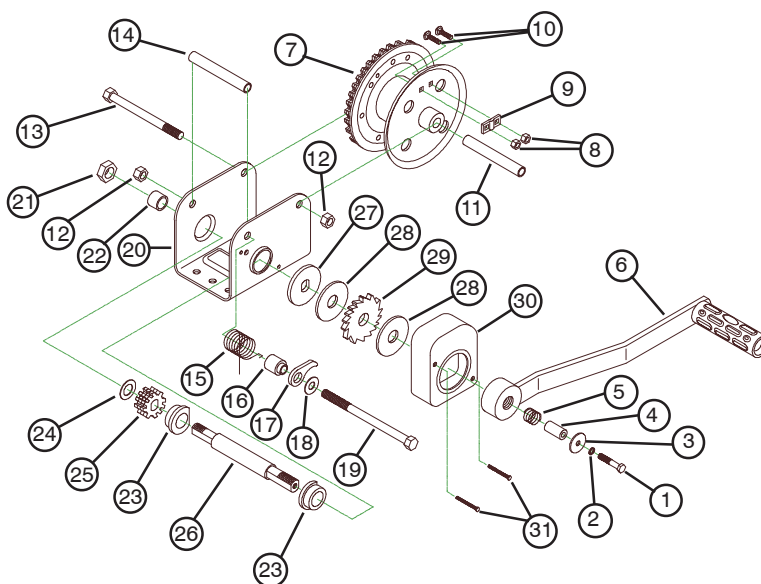
* Indicates standard hardware items - purchase locally.

**** 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

Ref. #	Description	Part #	Qty. Req.
1	1/4" - 20 x 1-1/2" Hex Screw	GK6256	1
2	1/4" Lockwasher		
3	1/4" Flat Washer		
4	Handle Retainer Spacer		
5	Spring		
6	Handle Retainer Spacer	GK1567	1
7	Reel Assembly	GK6259**	1
8	#10-24 Hex Nut	S-7635	1
9	Cable Keeper		
10	#10-24 x 5/8" Carriage Bolt		
11	Front Frame Spacer	GK6260**	1
12	3/8" Lockwasher	GK6241*	2
13	3/8" x 1/2" Reel Bolt	GK6261*	1
14	Back Frame Spacer	GK6262**	1
15	Pawl Spring	GK6239**	1
16	Pawl Spacer	GK6240**	1
17	Pawl	GK6241**	1
18	3/8" Flat Washer	GK6241*	1
19	3/8" x 5-1/2" Pawl Bolt	GK6263*	1
20	Frame	GK6264**	1
21	9/16" - 16 Locknut	GK6245*	1
22	Bearing	GK6246**	1
23	3/4" ID Bushing	GK6247**	2
24	9/16" Flat Washer	GK6248*	1
25	Pinion Gear	GK6249**	3
26	Pinion Shaft	GK6250**	1
27	Brake Backup Plate	GK6251**	1
28	Brake Pad	GK6252**	2
29	Ratchet	GK6253**	1
30	Cover	GK6254**	1
31	#10-32 x 1-1/5" Cover Screw	GK6255*	2

**NOTE**

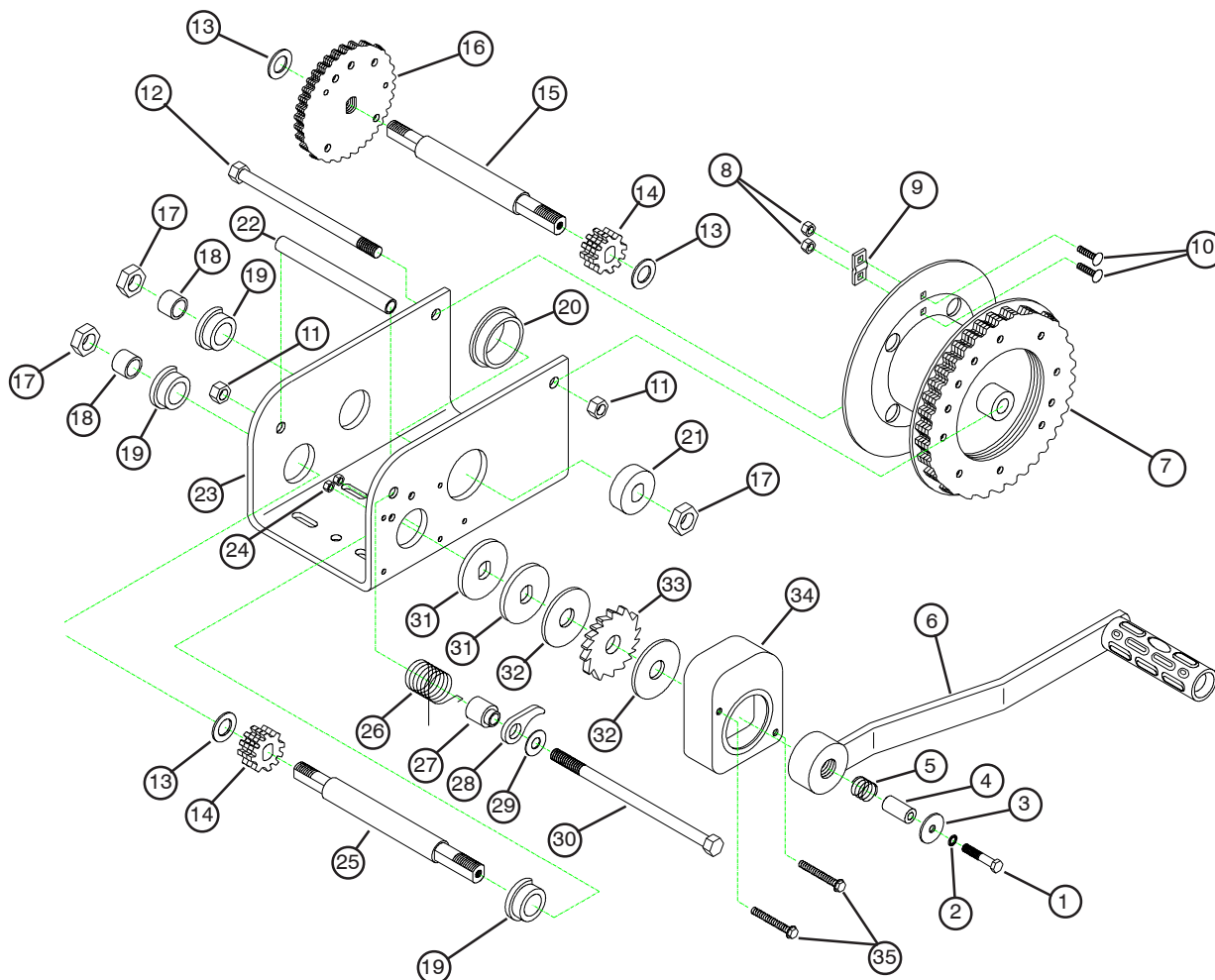
* Indicates standard hardware items - purchase locally.

** 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

Ref. #	Description	Part #	Qty. Req.	Ref. #	Description	Part #	Qty. Req.
1	1/4" - 20 x 1-1/2" Hex Screw	GK6256	1	18	3/4" OD Bearing	GK6271**	2
2	1/4" Lockwasher			19	3/4" ID Bushing	GK6272**	3
3	1/4" Flat Washer			20	1-1/2" ID Bushing	GK6273**	1
4	Handle Retainer Spacer			21	1-1/2" OD Bushing	GK6274**	1
5	Spring			22	Frame Spacer	GK6275**	1
6	Handle Retainer Spacer	GK1567	1	23	Frame	GK6276**	1
7	Reel Assembly	GK6266**	1	24	#10-32 Locknut	GK6277*	2
8	#10-24 Hex Nut	S-7635	1	25	Back Pinion Shaft	GK6278**	1
9	Cable Keeper			26	Pawl Spring	GK6239**	1
10	#10-24 x 5/8" Carriage Bolt			27	Pawl Spacer	GK6240**	1
11	3/8" Locknut	GK6236**	2	28	Pawl	GK6241**	1
12	Reel Bolt	GK6267*	1	29	Washer	GK6242*	1
13	9/16" Flat Washer	GK6268*	3	30	Pawl Bolt	GK6279*	1
14	Pinion Gear	GK6249**	8	31	Brake Backup Plate	GK6251*	2
15	Front Shaft	GK6269*	1	32	Brake Pad	GK6252*	2
16	Pick-Off Gear Assembly	GK6270*	1	33	Ratchet	GK6253**	1
17	9/16"-18 Locknut	GK6245*	3	34	Cover	GK6254**	1
				35	#10-24 x 1-3/4" Cover Screw	GK6280*	1

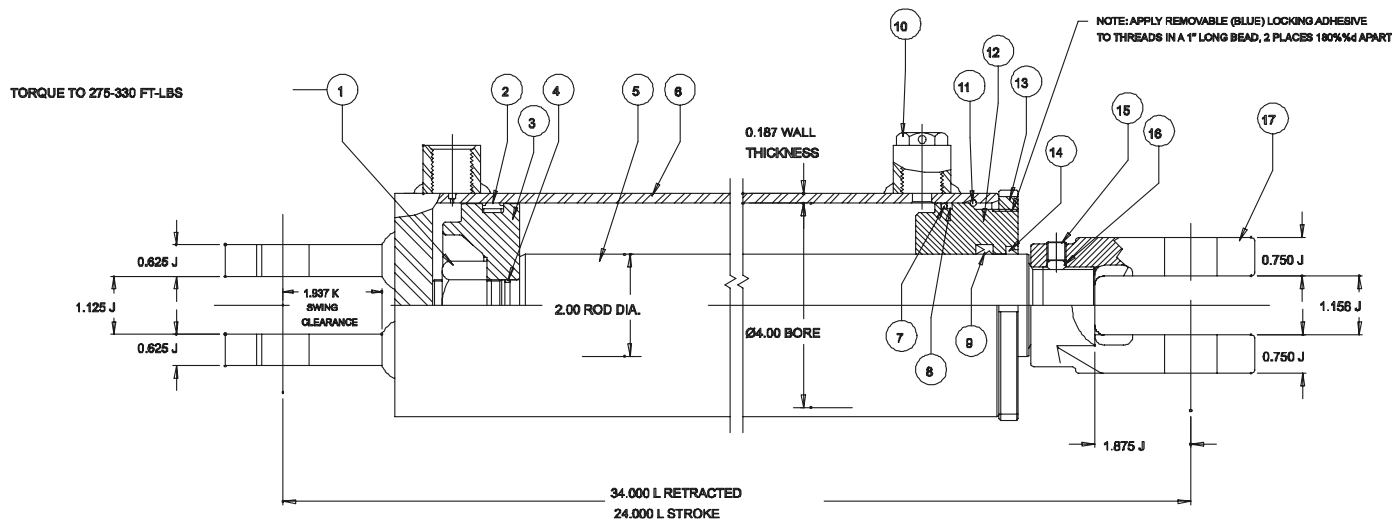
**NOTE**

* 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 GK1527 4" Bore x 24" Stroke Used on 51', 57', & 62'	Complete GK7381 4" Bore x 36" Stroke Used on 65' & 71'	Description
1	GK6213	GK6213	Nut Lock**
2	GK3323	GK3323	O-Ring Seal*
3	GK6211	GK6211	Piston Rod 4" OD**
4	GK3323	GK3323	Small O-Ring*
5	GK6208	GK6222	Piston Rod 2" DX**
6	GK6207	GK6221	Cylinder 4" ID**
7	GK3323	GK3323	Large O-Ring*
8	GK3323	GK3323	Backup Washer*
9	GK3323	GK3323	Backup Washer*
10	GK6216	GK6216	Breather Plug 1/2" NPT
11	GK6214	GK6214	Cylinder : Ret Ring Rod Inlet 4"***
12	GK6210	GK6210	Cylinder Guide 4" ID x 2"***
13	GK6219	GK6219	Spanner Nut 3/4" x 4-1/2" OD**
14	GK6359	GK6359	Piston Rod Washer*
15	GK6220	GK6220	Set Screw 3/8"-16x3/4"***
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
N/S	- -	GK7383	Restrictor Valve & Elbow Assembly

NOTE

* Only available as part of a seal kit.

** Not available seperately.

N/S - Not Shown.

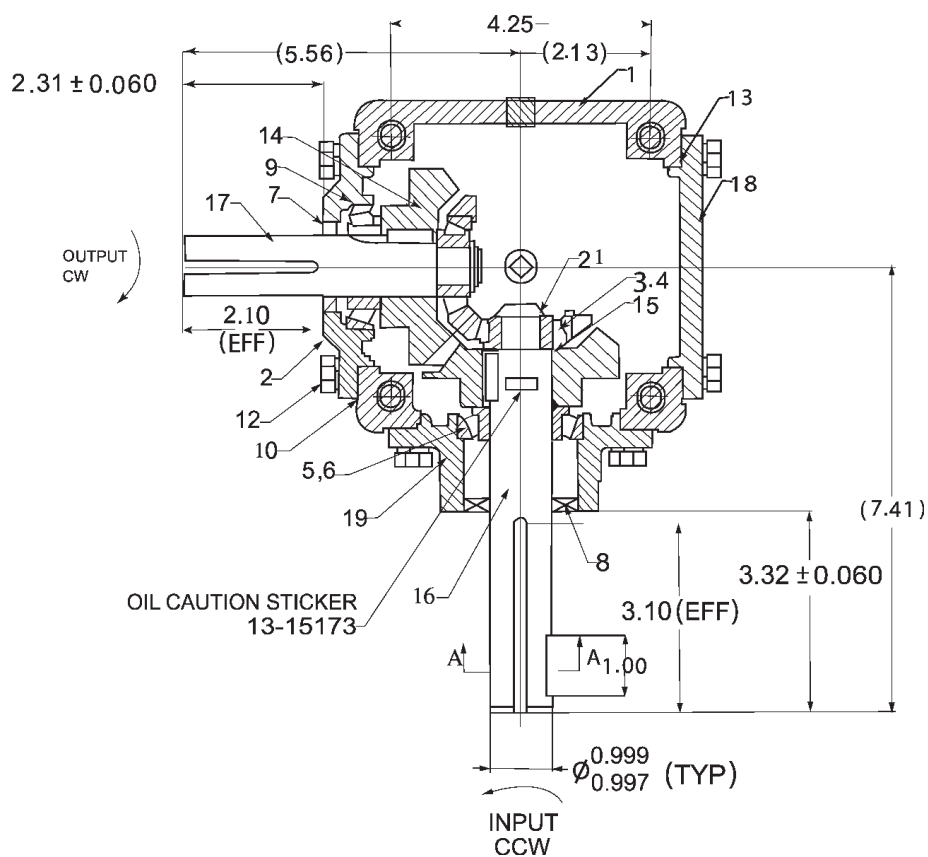
Gearbox

GK24931

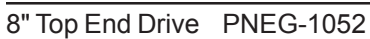
90 Degree Gearbox 1:1 Ratio 1" Shaft

GK24931

Ref. #	Description	Part #
1	90 Deg. Gear Case	GK6029
2	End Cap	GK6044
3	BEARING: CONE (LM11749)	GK6031
4	BEARING: CUP (LM11710)	GK6032
5	BEARING: CONE (L44643)	GK6033
6	BEARING: CUP (L44610)	GK6034
7	SEAL: NAT#470553	GK6035
8	SEAL: (25.4X50.8X8)	GK6050
9	KEY 1/4" x 1/4" x 3/4"	BLK-11004
10	SHIM: KIT; (.005, .0075, .020)	GK6037
11	1/4" - 18 NPT Plugg	GK5454
12	5/16" x 3/4" Capscrew	GK6038
13	O-Ring 71 x 1.8mm	
14	19 Tooth Bevel Gear	GK6040
15	Bearing Spacer	GK6041
16	Input shaft	GK6132
17	Output Shaft	GK6133
18	Gearbox Cover	GK6047
19	90 Deg. Quill	GK6045
20	1/4" - 18 NPT Plugg	GK5454
21	Gear Retainer	GK6134

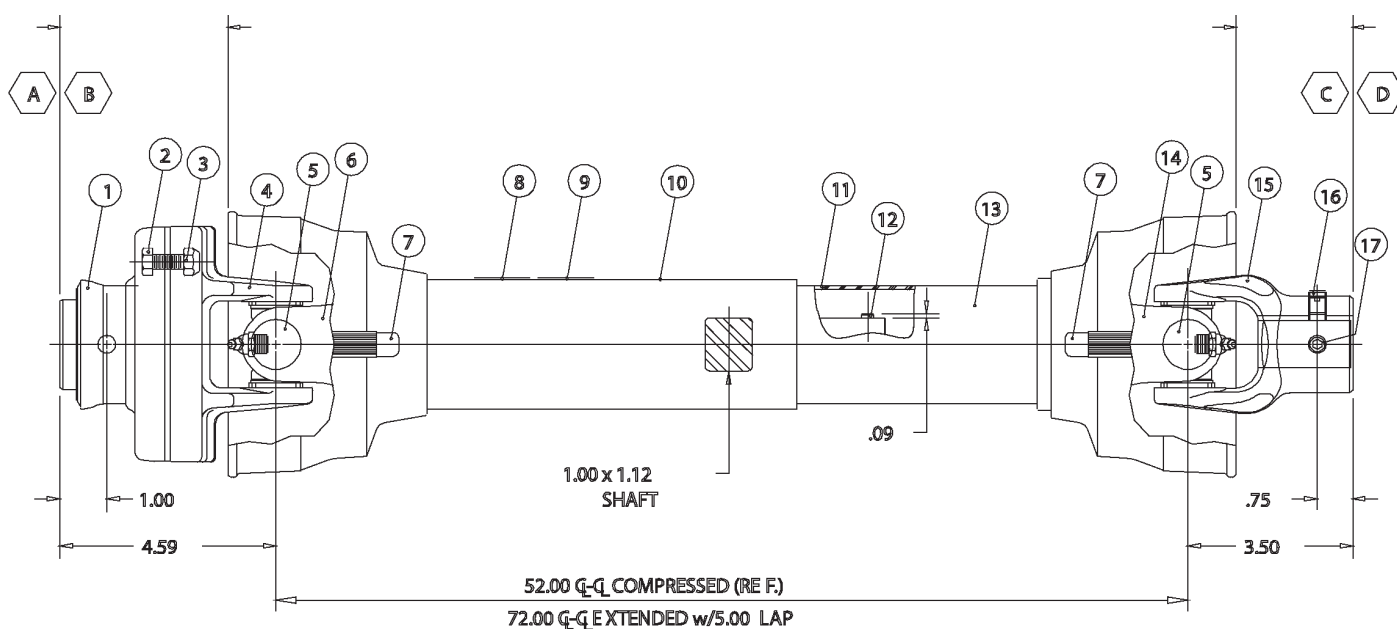


Ref. #	Description	Part #
1	90 Deg. Gear Case	GK6029
2	End Cap	GK6044
3	BEARING: CONE (LM11749)	GK6031
4	BEARING: CUP (LM11710)	GK6032
5	BEARING: CONE (L44643)	GK6033
6	BEARING: CUP (L44610)	GK6034
7	SEAL: NAT#470553	GK6035
8	SEAL: (25.4X50.8X8)	GK6050
9	KEY 1/4" x 1/4" x 3/4"	BLK-11004
10	SHIM: KIT; (.005, .0075, .020)	GK6037
11	1/4" - 18 NPT Plugg	GK5454
12	5/16" x 3/4" Capscrew	GK6038
13	O-Ring 71 x 1.8mm	
14	19 Tooth Bevel Gear	GK6040
15	Bearing Spacer	GK6041
16	Input shaft	GK6143
17	Output Shaft	GK6144
18	Gearbox Cover	GK6047
19	90 Deg. Quill	GK6045
20	1/4" - 18 NPT Plugg	GK5454
21	Gear Retainer	GK6134



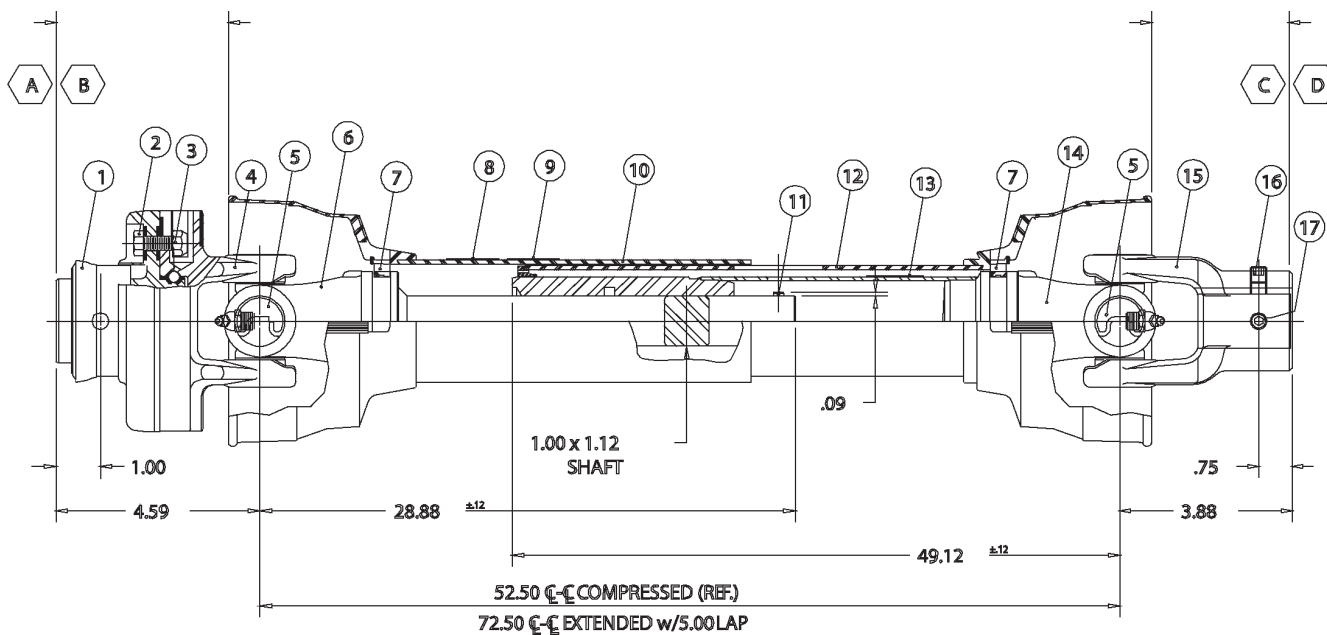
PTO GK1514

GK1514 - PTO Driveline		
Ref. #	Part #	Description
A	GK6026	Joint and Shaft Half Assembly with Guard
C	GK6025	Joint and Tube Half Assembly with Guard
1	GK2665	Spring-Lok Repair Kit
2	GK2657	Shear Bolt Kit (5/16" - 18x1" Gr.5)
3	GK6302	5/16-18 Nut
4	GK2675	Ball Shear Assembly
5	GK2654	12E Cross and Bearing Kit
6	GK6300	Yoke and Shaft
7	GK2664	Nylon Repair kit
8	GK2658	Safety Sign
9	GK6303	Safety Sign 540 RPM
10	GK2689	Outer Guard
11	S-6076	Roll Pin
12	GK2684	Inner Guard
13	GK2659	Safety Sign
14	GK6301	Yoke, Tube, & Slip Sleeve
15	GK2677	Yoke
16	GK2655	Set Screw, 3/8"-16x.38" Long Knurled Cup Point, Socket Head
17	GK3289	Set Screw, 3/8"-16x.50" Long Knurled Cup Point, Socket Head



PTO GK1515

GK1515 - PTO Driveline		
Ref. #	Part #	Description
A	GK6028	Joint and Shaft Half Assembly with Guard
C	GK6027	Joint and Tube Half Assembly with Guard
1	GK2665	Spring-Lok Repair Kit
2	GK2657	Shear Bolt Kit (5/16" - 18 x 1" Gr. 5)
3	GK6302	5/16-18 Nut
4	GK2676	Ball Shear Assembly
5	GK2653	14E Cross and Bearing Kit
6	GK6306	Yoke and Shaft
7	GK2662	Nylon Repair kit
8	GK2658	Safety Sign
9	GK6303	Safety Sign 540 RPM
10	GK2690	Outer Guard
11	S-6076	Roll Pin
12	GK2685	Inner Guard
13	GK2659	Safety Sign
14	GK6307	Yoke, Tube, & Slip Sleeve
15	GK2678	Yoke
16	GK2655	Set Screw, 3/8"-16x.38" Long Knurled Cup Point, Socket Head
17	GK3289	Set Screw, 3/8"-16x.50" Long Knurled Cup Point, Socket Head



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