Owner's Manual

8" & 10" Transport Augers

Publication No. B012842 – Rev 10

Toll Free 1-866-427-2638
www.brandt.ca

Brandt

Pre-delivery Inspection Sheet

To the Dealer

In order to ensure that this Auger will provide your customer with many years of trouble free service, please ensure that the following Dealer Inspection has been performed.

DEALER INSPECTION REPORT

General

___ Wheel Bolts Tight - 80 ft.lbs.

___ Tire Pressure as per sidewall marking.

___ Winch lift cable clamps tight - torqued to 15 ft.lbs.

___ All Fasteners are tight.

___ Bearing lock collars are tight.

___ All shields are in place.

___ Gearbox filled to proper level.

___ Drive chain tensioned correctly.

___ Drive belts are aligned and properly tensioned.

___ All safety decals in place & legible.

___ Paint scratches touched up.

___ Grease PTO Shaft.

___ PTO shields in place & rotate freely.

___ All applicable service bulletins performed.

Run In

___ Auger has been elevated and lowered without any problems.

___ Auger has been run for several minutes and checked for unusual noise and vibration.

Date_____ Dealer's Signature: _____

8” & 10” Std & SC Augers

Table of Contents

8” & 10” Transport Augers

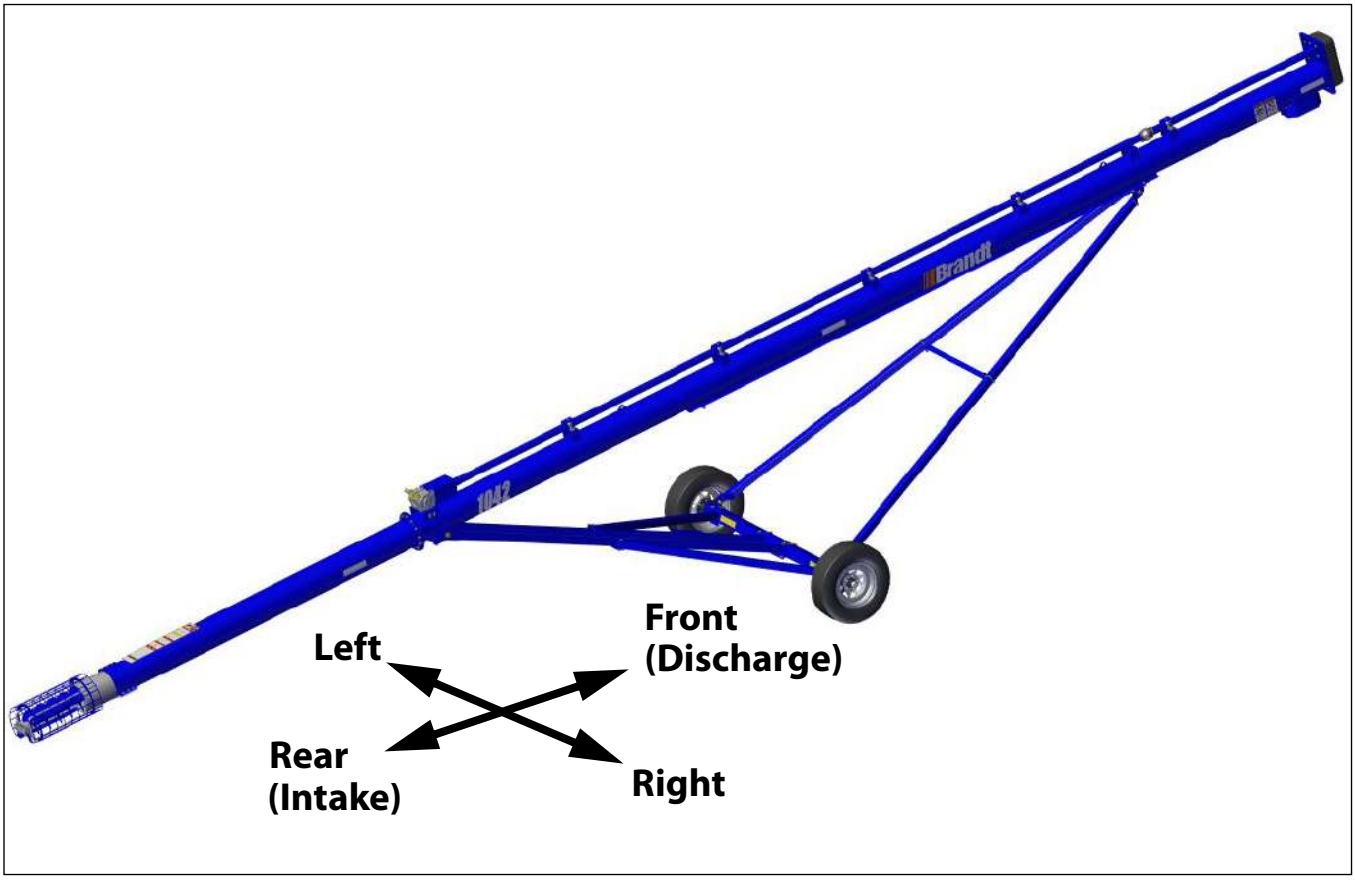
CHAPTER 1 Introduction

This manual is for use with Brandt 8" & 10" Transport Augers. Safe and efficient operation of your Auger requires that anyone who will inspect and work on this machine read and understand the information included in this manual. A person that is not trained and has not read this manual is not qualified to work on this machine. Read this manual before proceeding with any inspections or repairs on this machine.

Use the Table of Contents as a guide. Keep all manuals for future use. Contact Brandt Industries Ltd. if you need additional copies of this manual.

1.1 Operator Orientation

The directions left, right, front and rear, as mentioned throughout the manual, are as seen from the intake facing the discharge outlet.



1.2 Safety Awareness Sign Off Form

Brandt follows the general Safety Standards specified by the American Society of Agricultural and Biological Engineers (ASABE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the auger must read and clearly understand all safety, operating and maintenance information presented in this manual.

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

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

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

TABLE 1-1. Sign off Form

DATE	FULL NAME (PLEASE PRINT)	SIGNATURE	EMPLOYER NAME (PLEASE PRINT)	SIGNATURE

1.3 General Specifications

8" Standard and Super Charged Augers

Auger Size	832	837	842	847	852	862
Performance - Standard Augers						
Capacity[1]	3,200 bu/hr					
Horsepower Requirement (Gas[2]/PTO)	20	23	25	25	27	35
Horsepower Requirement (Electric)	10	10	15	15	15	20
Performance - Super Charged Augers						
Capacity[1]	3,700 bu/hr					
Horsepower Requirement (Gas[2]/PTO)	20	23	25	25	27	35
Horsepower Requirement (Electric)	10	15	15	20	20	25
Dimensions						
Lowered Height	9' 5"	9' 1"	9' 1"	10' 4"	10' 4"	11' 8"
Maximum Height	21' 6"	25'	28' 1"	32'	34' 4"	42' 2"
Reach Lowered	10' 10"	13' 3"	15' 7"	17' 4"	19' 10"	25'
Reach Raised	9'	10' 10"	12' 10"	13' 10"	16' 1"	18' 5"
Intake Reach	11'	12' 1"	12' 11"	15' 3"	16' 8"	18'
Tube Diameter	8"					
Intake Flighting	1/4"					
Main Flighting	10 ga					
Tube Thickness	14 ga					
Top Drive Chain	Double #60					
Flight Core Diameter	1 1/2"					
Pulley Size (Gas)	2B4.0					
Pulley Size (Electric)	2B5.6			3B5.6		

[1] Auger capacity is based on wheat at a 30° angle of incline with a moisture content of 14.5%. Capacities will vary depending on commodities.

[2] SAE J1940 Gross Engine Horsepower

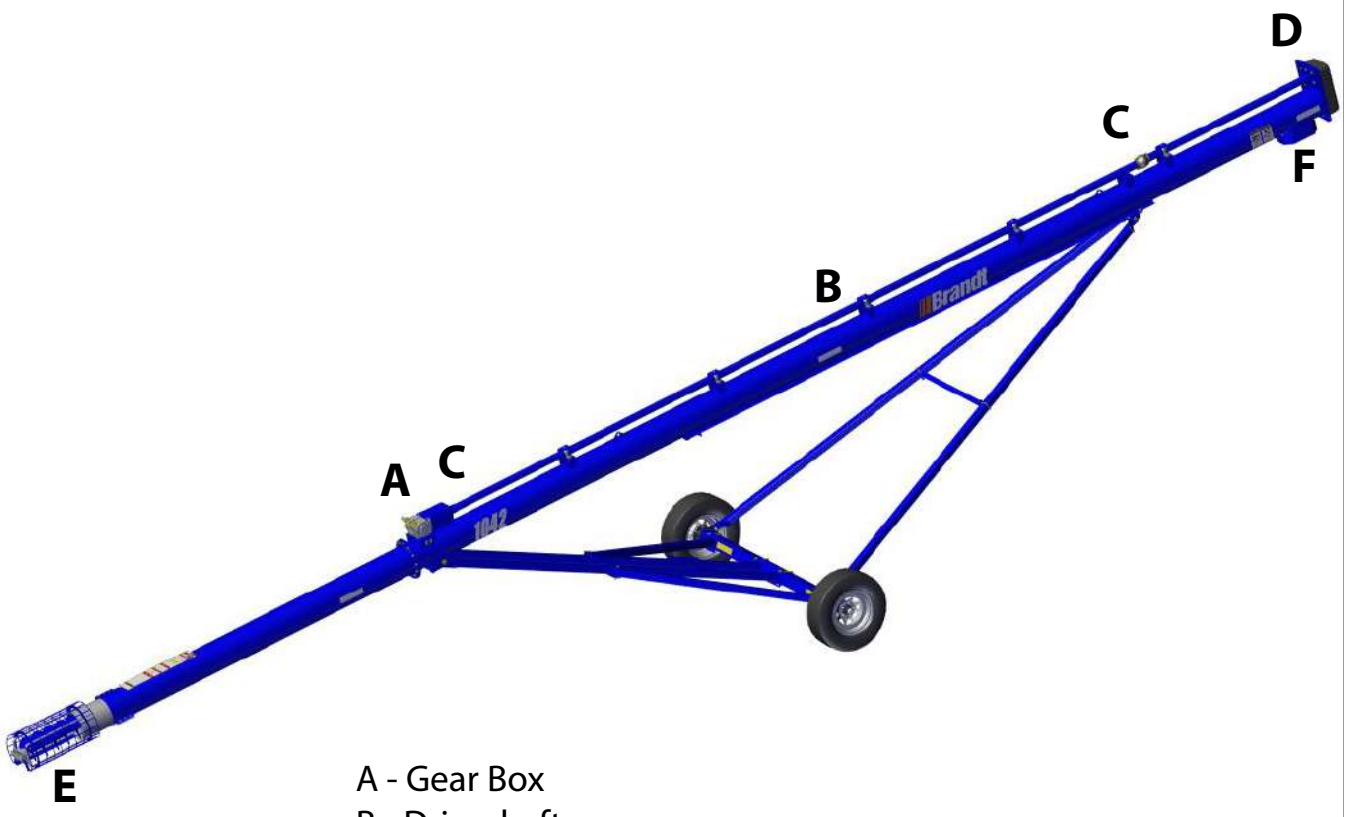
10” Standard and Super Charged Augers

Auger Size	1032	1037	1042	1052
Performance - Standard Augers				
Capacity[1]	5,000 bu/hr			
Horsepower Requirement (Gas[2]/PTO)	33	35	35	35
Horsepower Requirement (Electric)	20	20	25	30
Performance - Super Charged Augers				
Capacity[1]	6,200 bu/hr			
Horsepower Requirement (Gas[2]/PTO)	35	35	35	35
Horsepower Requirement (Electric)	25	25	25	30
Dimensions				
Lowered Height	9' 3"	9' 1"	10' 5"	10' 3"
Maximum Height	21' 5"	25' 1"	28' 2"	34' 6"
Reach Lowered	10' 8"	13' 7"	15' 3"	19' 8"
Reach Raised	9" 0"	10' 9"	12' 9"	16' 0"
Intake Reach	11' 0"	12' 1"	12' 11"	16' 10"
Tube Diameter	10"			
Intake Flighting	1/4"			
Main Flighting	7 ga			
Tube Thickness	14 ga			
Top Drive Chain	Double #60			
Flight Core Diameter	2"			
Pulley Size (Gas)	2B4.0			
Pulley Size (Electric)	3B5.6			

1 Auger capacity is based on wheat at a 30o angle of incline with a moisture content of 14.5%. Capacities will vary depending on commodities.

[2] SAE J1940 Gross Engine Horsepower

1.4 Description and Location of Major Components



A - Gear Box
B - Driveshaft
C - Flexible Coupling
D - Sprockets and Chain
E - Auger Intake
F - Auger Discharge

This product has been designed and built to give maximum performance, economy and ease of operation under a variety of operating conditions. To maintain the condition of this product and ensure trouble-free operation, it is important that routine maintenance procedures, as specified, are carried out at the recommended intervals.

Dimensions and weights are approximate only. To provide a better view, certain illustrations in this manual show safety shields removed. It is important that the machine never be operated without safety shields. Keep all shields in place. Actual product may not appear exactly as shown in the illustrations.

The information contained in this manual is subject to change. The manufacturer may at any time, for technical or other necessary reasons, modify any of the details or specifications of the product described in this manual. Please read the safety precautions carefully and follow the advice offered BEFORE operating the machine.

CHAPTER 2 Important Safety Information

It is your responsibility as an owner, operator or supervisor to know what specific requirements, precautions and work hazards exist. It is also your responsibility to make these known to all other personnel working with the equipment or in the area, so that they too may take any necessary safety precautions that may be required.

You are responsible for the safe operation and maintenance of this equipment. Make sure that all persons who operate, maintain or work near this equipment know the contents of this manual.

You are the key to safety. These safety precautions protect you and the people near you. Include these precautions in your safety program. Accidents can be prevented.

THINK SAFETY

WORK SAFELY

2.1 Safety Symbols / Signal Words

2.1.1 Recognizing Safety Information

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

2.1.2 Understanding Signal Words

A signal word – DANGER, WARNING or CAUTION – is used with the Safety Alert Symbol.

DANGER! Is reserved for a hazard that, if not avoided, will result in death or serious injury.

WARNING! Indicates a hazard that, if not avoided, could result in death or serious injury.

Caution. Shows a hazard that, if not avoided, could result in injury.

Notice. Indicates that your heightened awareness is required to avoid practices not related to personal injury.

These safety signs include a message that tells what the hazard is, and the steps to avoid the hazard.

2.1.3 Safety Messages / Decals

Different safety messages are displayed on this equipment. Locate, read, and understand the safety messages. The DANGER, WARNING, CAUTION or NOTICE symbol can be shown with a safety message.

These messages mean:


Crush Hazard


Cutting Hazard


Hearing Protection


Hard Hat


Pinch Hazard


Entanglement


Eye Protection


High Voltage

Heavy Object


Breathing Protection


Stop


Lock-out Location


Lock-out Required

Note: Some of these messages will not be used on this product. They are shown for example only.

NOTICE

Notice. Replace safety signs when they become damaged. Make sure to include safety signs on replacement parts. New safety signs are available from Brandt.

2.2 General Safety Precautions

- **THE MOST IMPORTANT SAFETY DEVICE ON THIS MACHINE IS A SAFE OPERATOR.** It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow them.
- Auger owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes them self and bystanders to possible serious injury or death.
- Read and understand the Operator's manual and all safety signs before operating, maintaining, adjusting, unplugging or transporting the Auger.
- Keep equipment, operator's stations, and the area around the equipment clean.
- Do not perform unauthorized modifications to this equipment.
- Make and follow an approved maintenance and inspection schedule.
- Do not remove, change, or disable machine guards.
- Keep railings, fences, and barriers in good condition and in place.
- Correct malfunctions and preform repairs immediately on discovery.
- Do not replace fasteners, or hardware, or mechanical connectors with a different or unknown grade or type. Torque fasteners and hardware to the correct value.
- Do not overload or exceed the machine capacity. Do not operate the machine at speeds or systems pressures that exceed the designed ratings.
- Use tools applicable to the work. Use power tools to loosen threaded fasteners only. Do not use SAE tools on SI (metric) fasteners.
- Use the correct lifting equipment for moving heavy parts. Follow recommended procedures for removal and installation of parts.
- Always have two people present when operating the machine.
- Keep the area clear of bystanders, especially children. Always ensure a clear path to the power source is available should the need arise to shut it down in case of an emergency.
- Have a first-aid kit available for use should the need arise and know how to use it.
- Provide a fire extinguisher for use in case of a fire. **Store in a highly visible place.**
- Do not allow riders on the machine.
- Place all controls in neutral, stop and lock out the power source and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging the machine.
- Know where overhead electrical lines are located and stay away from them. Electrocution can occur without direct contact.
- Know the location and read all decals on the machine. They contain important alerts and precautions which are to be followed at all times.

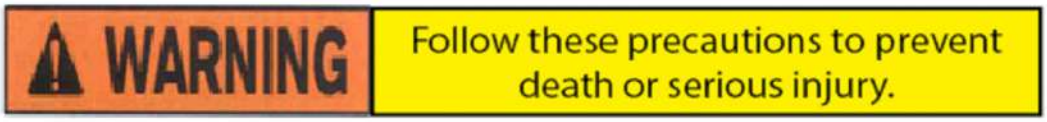
2.2.1 Personal Protection Equipment

- Wear close-fitting clothing and personal protection equipment that is required for the work. Do not allow clothing to interfere with vision, hearing, or free use of hands and feet.
- Wear approved hearing protection as required. Continuous exposure to high noise levels can cause loss of hearing.
- Wear hand protection suitable for the work. The appropriate gloves will reduce exposure to surface temperatures, chemical absorption through the skin, cuts and skin injury.
- Wear eye and face protection required for the work.
- Hard hats should be worn while working on this machine.
- Wear approved steel-toe footwear.
- **DO NOT** wear neckties, jewelry or loose-fitting clothing when operating or working on this equipment.
- Safety requires your full attention to the work. DO NOT wear a radio or music headphones.
- Dusts, moulds and other pollutants can cause health problems. Operators should wear the appropriate breathing apparatus when operating or working on this equipment.

2.2.2 Handling Chemicals Safely

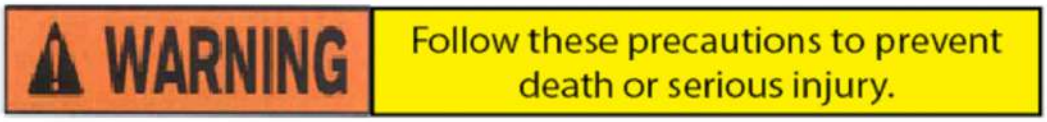
- Direct exposure to hazardous chemicals can cause serious injury. Hazardous chemicals used in Brandt products can include lubricants, coolants, paints, fuels, adhesives and other products.
- A Material Safety Data Sheet (MSDS) provides specific details on these chemical products; physical and health effects; safety precautions; and emergency response procedures.
- Check the MSDS before you start any job that involves a potentially hazardous chemical. You will understand the risk and how to do the work safely. Follow procedures and use approved equipment.

2.3 Operating Precautions



- Read and understand the operator's manual prior to operating the Auger.
- Read and understand the operator's manual for the brake winch prior to operating the Auger.
- Complete an inspection of the machine before operating. Check condition of belts, gearboxes, drivelines, etc. and repair or replace if necessary.
- Watch for overhead electrical lines when moving the auger.
- Ensure all guards are in place and in good repair before operating.
- Keep hands, feet, hair and clothing away from all moving or rotating parts.
- Clear the area of all bystanders, especially children, before starting.
- Keep away from the intake of the auger while the machine is running. Keep others away.
- When cleaning out the corners of a truck box, do not lean over the auger intake.
- Do not use your hands or feet when cleaning out the intake hopper.
- Do not use the auger downspout as a support.
- Stay clear of the auger discharge end.
- Make sure the intake end of the auger is anchored or the discharge end is supported before moving any product.
- Do not stand on the edge of the truck box when loading a truck.
- Use extreme caution when maneuvering at or near maximum height. While the auger is in transport position, it should be backed until it is close to the bin then raised to the height needed, then carefully moved back to the bin. Under no circumstances should the auger be moved while it is at maximum height.
- Dusts, molds and other pollutants can cause health problems. Therefore, operators should wear the appropriate breathing apparatus.
- Wear hearing protection while operating.
- Do not run the auger at high speeds when it is empty.

2.4 PTO Shaft Safety Precautions



- Ensure all guards are in place and in good repair before operating the auger. Replace any damaged or missing guards or shields.
- Keep children, bystanders and other workers away from the machine while it is operating or while the PTO is engaged.
- Do not wear loose hanging clothes, neckties or jewellery. Long hair is to be placed under a hat. These precautions will help prevent you from becoming entangled in any moving parts.
- Read and understand the tractor operation and maintenance manual regarding safe and proper operation of PTO driven equipment.
- Read and understand the information booklet included with the PTO shaft.
- Be sure the PTO driveline guard telescopes and rotates freely on the shaft before installing.
- Always check that the PTO shaft is firmly locked in place by pulling and pushing on it to check for movement.
- Never step over or crawl around the equipment while the PTO is engaged; entanglement can occur.
- If the PTO shaft guard is equipped with chains, they are intended to prevent the guard from rotating against non-moving parts. The chains are not designed to carry the weight of the PTO shaft in a transport situation.
- Engage the PTO slowly at idle speed to prevent unnecessary stress on the driveline. Slowly bring the tractor up to operating speed.
- Do not exceed 540 RPM PTO speed.
- Disengage the PTO driveline and place in the stored position when the machine is transported.
- Use only recommended shear bolts.
- Use only parts that are designed for this make and series of PTO shaft.

2.5 Hydraulic System Safety Precautions

⚠ WARNING Follow these precautions to prevent death or serious injury.

- Lock-out/Tag-out the hydraulic system before performing maintenance or repairs to the machine.
- Ensure that the equipment being repaired is not connected to other systems (electrical, pneumatic) on the machine. Lock-out/Tag-out other systems to prevent unintended start-up or operation.
- Do not attempt temporary repairs to hydraulic components using tape, clamps, cement, etc. The hydraulic system operates using extremely high pressure. These repairs will fail suddenly and create a hazard and unsafe condition.
- Ensure replacement parts meet the capacity and pressure rating of the original part.
- When changing more than one part, completely install one part at a time to prevent incorrect connections. Protect openings from contamination.
- Wear appropriate personal protection equipment when searching for a hydraulic leak. Use a piece of wood or cardboard as a backstop instead of your hands to isolate and identify a leak. **If you suspect you have been injured by a concentrated high pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin.**

THERE MAY BE NO VISIBLE SYMPTOMS IMMEDIATELY AFTER EXPOSURE.

2.6 Transport Safety

- Make sure you are in compliance with all local regulations regarding transport of Agricultural equipment on public roads and highways.
- Make sure the hitch on the towing vehicle is rated for the gross weight of the towed machine.
- Always lower the auger to its lowest position before transporting.
- Pin the Hitch into the transport position.
- Make sure the Slow Moving Vehicle emblem and all the lights and reflectors that are required by the local highway and transporting authorities are in place, clean and can be seen clearly by all overtaking on oncoming traffic.
- Attach securely to tow vehicle or tractor using a 3/4" dia. pin with a retainer and safety chain. Refer to Fig. • in Section 2.6.1 for safety chain attachment method.
- When transporting use a clevis-to-tongue connection. Never use a clevis-to-clevis or tongue-to-tongue connection as this can lead to hitching failure. See Fig. 2-1.

FIG. 2-1. Hitch Connection

- Do not exceed 80 km/h (50 mph) when towing an Auger.
- The auger is not equipped with brakes. Make sure the tow vehicle has sufficient braking capacity to handle the extra load. The auger may not exceed 1.5 times the towing vehicle weight.
- Check the tires for cracks and make sure they are inflated to the recommended pressure as per sidewall marking.
- Never allow riders on the auger.
- Use hazard flashers on tow vehicle except where prohibited by law.
- Stay clear of all overhead electrical lines. Electrocution can occur without direct contact.
- Be careful not to turn too sharply when transporting the auger. Damage to the auger and/or towing vehicle can occur.
- Be aware of posts, trees, buildings and other obstacles when turning.

2.6.1 Safety Chain Installation

- Ensure that the chain has a load rating equal to or greater than the Gross Vehicle Weight.
- Attach the safety chain from the auger to the towing vehicle. The chain should be noosed around the tube on the underside of the boot. Route the chain through the intermediate supports on the side of the auger hitch to the towing vehicle. Do not use the intermediate support as the primary method of attachment.
- Allow no more slack in the chain than necessary for articulation.
- Do not leave the safety chain attached to the auger while moving product. When not in use, store the safety chain in a clean dry place.
- The safety chain should be replaced and not be used if one or more of the links or end fittings are broken, stretched or otherwise damaged or deformed. The replacement chain must be rated and stamped for the appropriate towing operation.

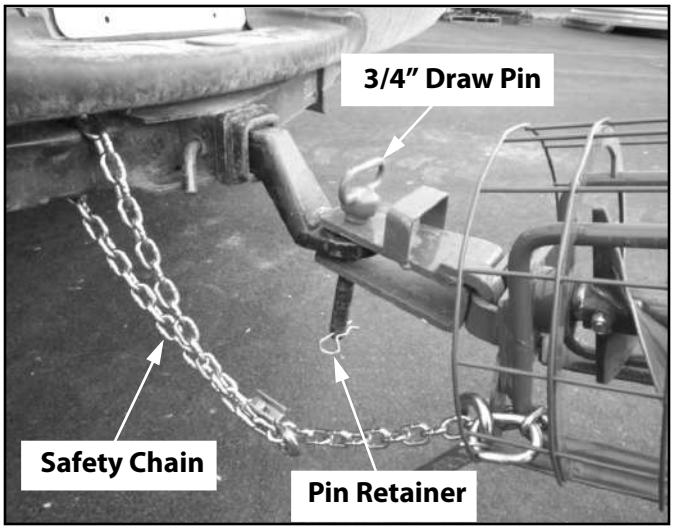


FIG. 2-1. Standard Hitch Attachment

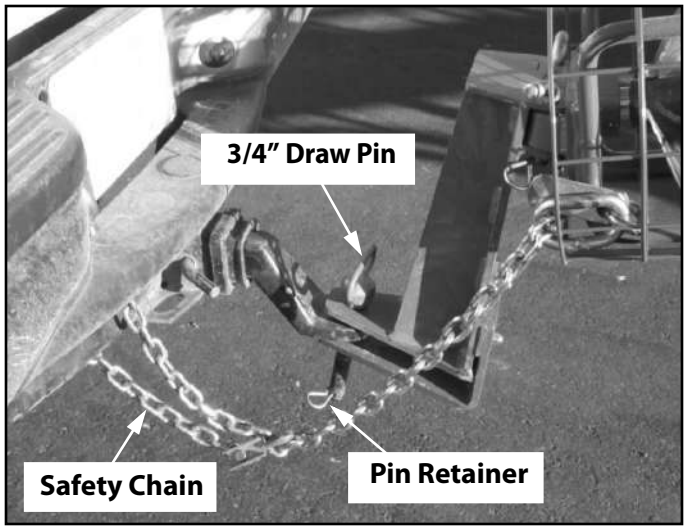
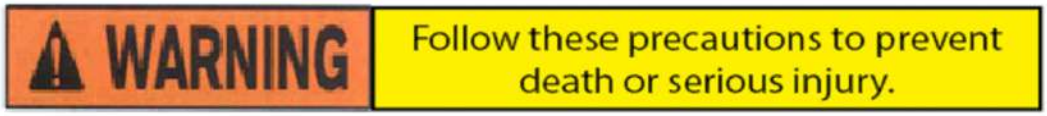


FIG. 2-2. EZMove Hitch Attachment

2.7 Welding/Heating Safety Precautions



- Do not weld or use a torch near pressurized hydraulic fluid lines. Hydraulic lines can burst and create a flammable spray, resulting in severe burns to yourself and bystanders.
- Toxic fumes may be created when paint is heated by welding or using a torch. Remove paint a minimum of 4 inches (100mm) from the area affected by heating.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before heating. Remove the solvent or paint stripper and flammable material from the area. Ventilate the area for 15 minutes before welding or heating.
- Lock-out/Tag-out electrical power to the machine.
- Ground welding machine as near to the weld area as possible.
- Do not use chlorinated solvent in the area where welding will take place.
- Perform all work in a well-ventilated area. Use a welder's respirator.
- Dispose of paint and solvents properly.

2.8 Maintenance Safety

- Always disengage power, shut down the engine, remove the ignition key, be sure all moving parts have stopped before attempting to maintain or service the unit.
- Support the machine with blocks or stands when changing tires or working beneath.
- Follow good shop practices:
  - keep service areas clean and dry.
  - be sure electrical tools are properly grounded.
  - use adequate light for the job at hand.
  - use personal protective equipment. (ie. gloves, safety glasses, etc.)
- Use only tools, jacks and hoists of sufficient capacity for the job.
- Relieve pressure from the hydraulic system before servicing.
- Before applying pressure to a hydraulic system, be sure all connections and fittings are tight and in good condition. Never check for leaks with your hands. Always use a piece of wood.
- Replace all shields after maintenance. Never operate without shields, guards or access doors in place.
- If your intake shield has been removed, misplaced or damaged, Brandt will replace it free of charge. Contact us directly by calling the toll free number on the cover of this manual.

2.9 Grain Bin Safety

- Never enter a grain bin unless at least two people are present. Have one person outside the bin who can shut down the machine if an emergency arises.
- Always ensure an escape route exists before entering the bin.
- Do not walk on top of the grain in a bin unless another person is present and the person on the grain is equipped with a safety line.

2.10 Safety Decals

- Read and understand all decals before operating. Take care to follow all precautions and warnings displayed on the decals.
- Keep safety decals and signs clean and legible at all times.
- If the safety decals on your auger have been removed or damaged, Brandt will replace them free of charge. Contact us directly by calling the toll free number on the cover of this manual.
- Replaced parts that originally displayed a safety sign must also display the original sign.

2.11 Safety Decal Locations

The following illustrations show the position and content of the various safety decals on the Brandt 8" & 10" Transport Augers. If safety decals ever become damaged, removed or illegible, new decals must be applied.


DANGER
READ THE OPERATOR'S MANUAL PRIOR TO OPERATION OR MAINTENANCE
FOR YOUR SAFETY, THIS AUGER HAS BEEN EQUIPPED WITH AN INTAKE GUARD
REMOVAL OF THE INTAKE GUARD IS AT THE OWNERS RISK, AND MAY RESULT IN SERIOUS INJURY OR DEATH
B029101

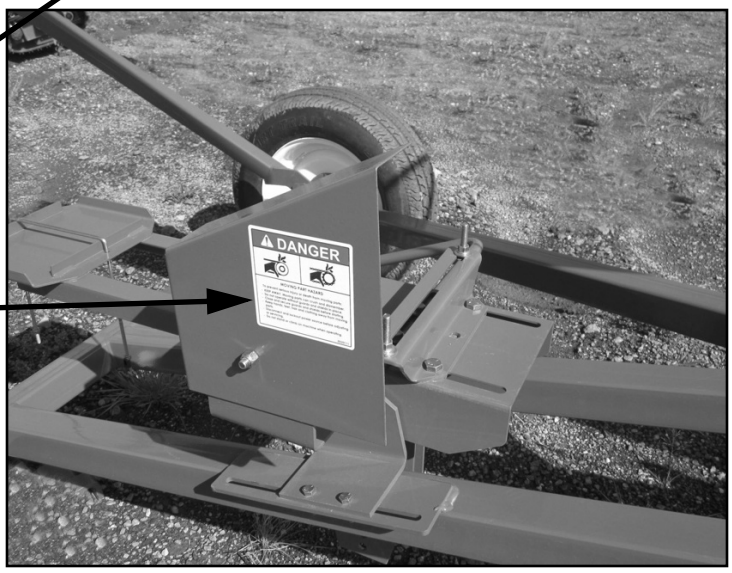

DANGER
DANGER
CAUTION
WINCH OPERATION
DANGER
UPENDING HAZARD
DANGER
CAUTION
WARNING

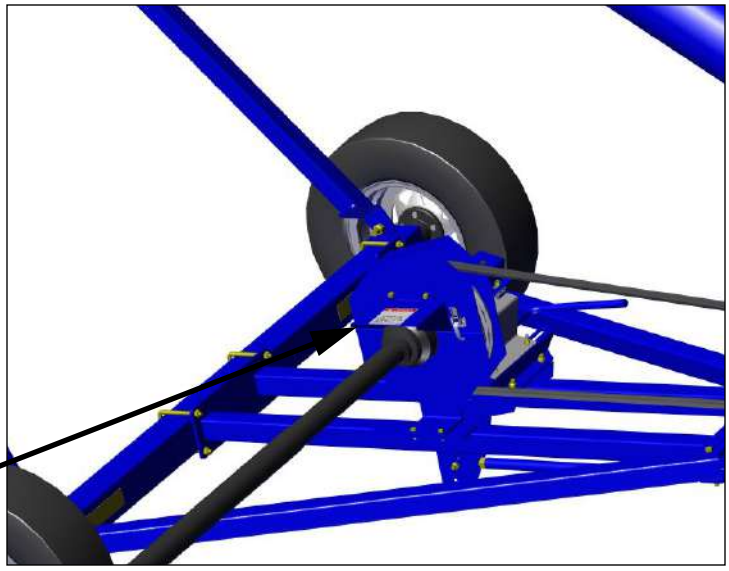

DANGER
To Prevent Serious Injury Or Death:
Keep hands, feet and clothing away from auger intake.
CAUTION
WINCH OPERATION
1. After lowering the auger always turn the winch handle clockwise at least two clicks to tighten the brake lock.
2. Maintain control of the winch handle at all times.
3. Maintain light cable tension when in the towing position.
4. Do not put lubrication of any kind on the brake disc.
5. Check cable before each use. Replace if frayed or damaged.
DANGER
UPENDING HAZARD
1 The
2 Always
3 If the
when attaching or releasing it
4 Do not push the undercarriage
5
FAILURE TO DO SO WILL CAUSE UPENDING WHICH WILL RESULT IN SERIOUS INJURY OR DEATH
DANGER
ELECTROCUTION HAZARD
To prevent serious injury or death from electrocution:
Stay away from overhead power lines when transporting or raising auger
The machine is not grounded
Electrocution can occur without direct contact
CAUTION
1. Read and understand the operator's manual before operating.
2. Keep all safety shields and devices in place.
3. Keep certain everyone is clear before operating or moving the machine.
4. Keep hands, feet and clothing away from all moving parts.
5. Shut off power to adjust, service or clean the auger.
6. Use all flotation and transport tires to prevent upending. (See Operator's Manual)
7. Disconnect power before moving motor overload. (Electric motor Only)
8. Empty auger before moving to prevent upending.
9. Lower auger to transport position before moving or transporting.
10. Make certain electric motors are grounded.
11. Use only genuine Brandt replacement parts. Inspect daily these pins and bolts.
12. Do not run this auger empty except at idling speed.


WARNING
BEFORE TRANSPORTING REFER TO LOCAL TRANSPORTATION REGULATIONS AND OPERATORS MANUAL
FAILURE TO FOLLOW SAFE TOWING PRACTICES COULD CAUSE MACHINE DAMAGE AND/OR SERIOUS INJURY OR DEATH
BRANDT DOES NOT ASSUME LIABILITY FOR ANY PRODUCTS TRANSPORTED IN VIOLATION OF LOCAL TRANSPORT REGULATIONS WITHOUT DUE CONCERN FOR SAFETY
B029971

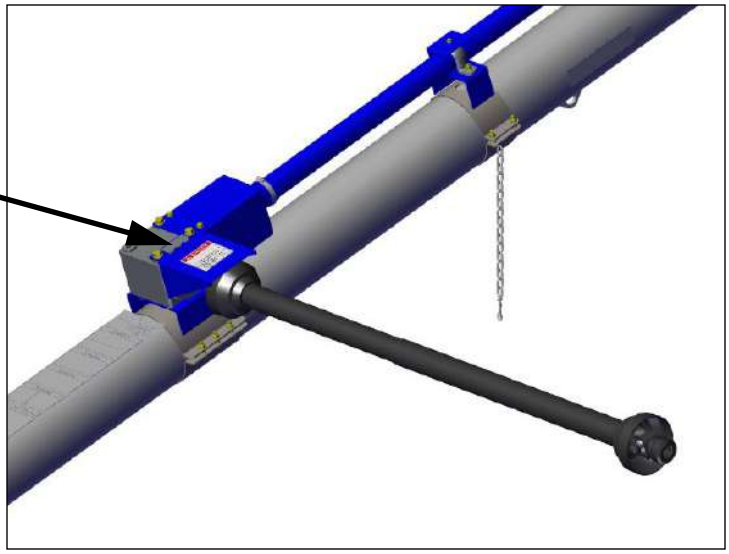

DANGER
MOVING PART HAZARD
To prevent serious injury or death from moving parts:
- KEEP AWAY, Moving parts can crush and dismember.
- Do not operate without guards and shields in place.
- Close and secure guards and shields before starting.
- Keep hands, feet, hair and clothing away from moving parts.
- Disconnect and lockout power source before adjusting and servicing.
- Do not stand or climb on machine when operating.
B029111

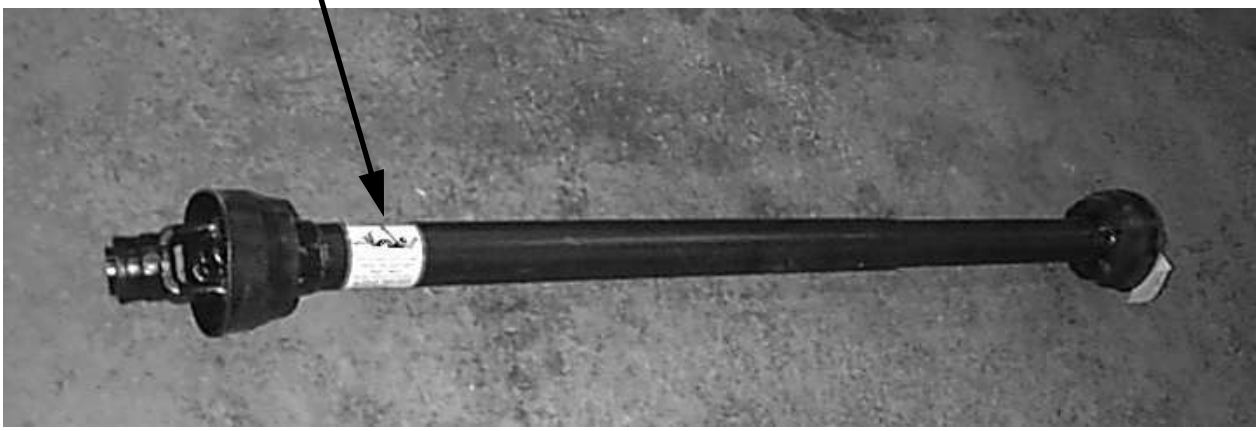

DANGER


DANGER




DANGER
ROTATING DRIVELINE HAZARD
To prevent serious injury or death from
rotating driveline:
Keep all guards in place when operating.
Operate only at 1000 RPM.
Keep hands, feet, hair and clothing away
from moving parts

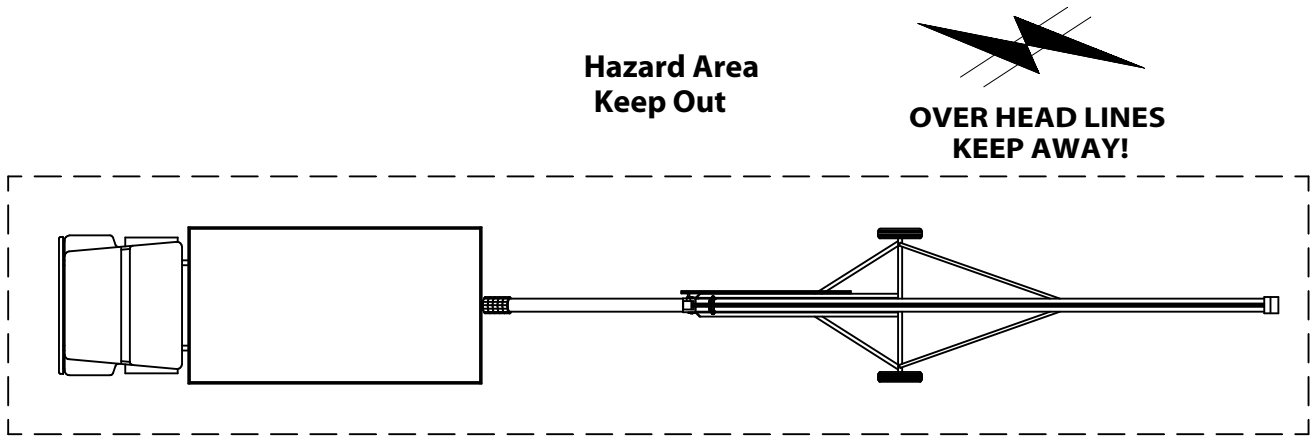




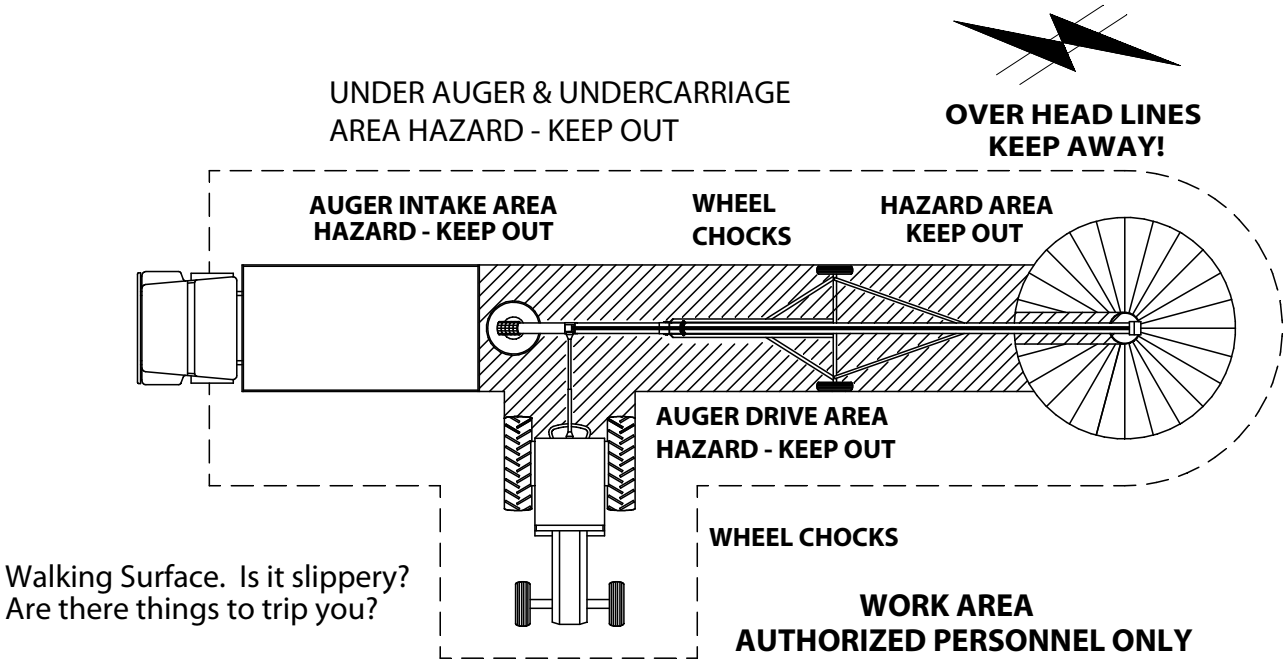
2.12 Work Area Safety

The work areas shown below and on the next page should be marked off with barriers.
It shall be the duty of the operator to see that children and/or other persons stay out of the work area! Trespassing into the work area by any one not directly involved in the actual operation, or trespassing into the hazard area by anyone, shall result in an immediate shut down by the operator.
Prior to start up and during operation, it shall be the responsibility of the operator to see that the work area has secure footing, is clean and free of all debris and tools which may cause accidental tripping and/or falling.

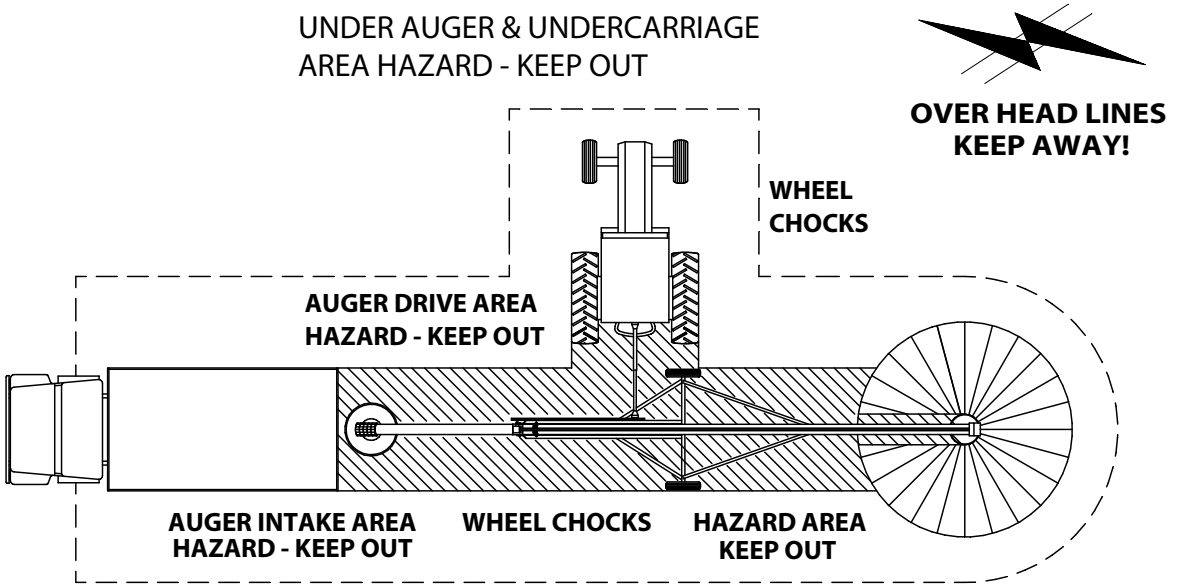
2.12.1 Transport Position



2.12.2 PTO DIRECT DRIVE



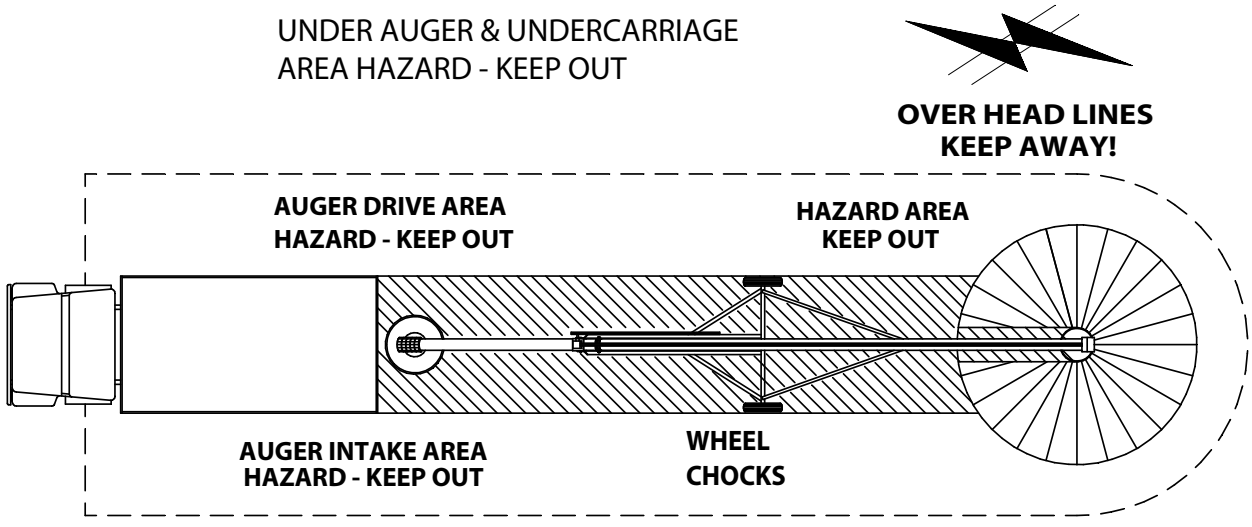
2.12.3 PTO Centre Drive



Walking Surface. Is it slippery?
Are there things to trip you?

WORK AREA
AUTHORIZED PERSONNEL ONLY

2.12.4 Engine or Motor Drive



Walking Surface. Is it slippery?
Are there things to trip you?

WORK AREA
AUTHORIZED PERSONNEL ONLY

CHAPTER 3 Assembly

Before beginning to assemble your new Brandt Transport Auger, you are advised to read the following instructions carefully. Familiarize yourself with all the sub-assemblies and parts making up the auger. Check that all parts are on hand and arranged for easy access.

3.1 Preparing the Assembly Site

IMPORTANT: *In order to setup the Auger, at least two people are required and the assembly must be carried out in a large open area with a flat floor surface. Do not attempt to assemble the auger alone or without a forklift or overhead crane.*

3.2 Auger Tube Assembly

Note: The 847, 852, 862 and 1052 augers are shipped with the tube assembly in two pieces. All others are shipped in one piece.

1. 847, 852 & 862 Augers (see Fig. 3-1)

Set the two tube assemblies end to end on a level surface. Join the drive shafts, flights and tubes with the following fasteners:

Drive Shaft Joint - The Drive Shaft Joining Sleeve, four 5/16" x 1/4" set screws and two 1/4" x 2" long keys. Use medium strength thread locking compound on the set screws.

Flight Joint - Two 3/8"x 2" bolts Gr.5 and lock nuts. Make sure the flighting on the lower flight is lapped OVER the flighting on the upper flight. After the nuts have been tightened, take a hammer and flatten the threads on the end of the bolts. This will make sure the nuts do not come off. Grind the outside of the flight joint to create a smooth outer edge.

Tube Joint - Twelve 3/8"x 1" bolts, lock washers and hex nuts. Make sure the tubes are lined up straight before tightening.

On the 862, also see Fig. 3-9.

Note: Join the drive shafts together first. Install the Drive Shaft Joining Sleeve onto the upper tube drive shaft as shown in Fig. 3-1. Slide the lower drive shaft into the other end of the sleeve. Next join the upper and lower flights, making sure the lower flight laps over the upper flight. Lastly, join the tubes together.

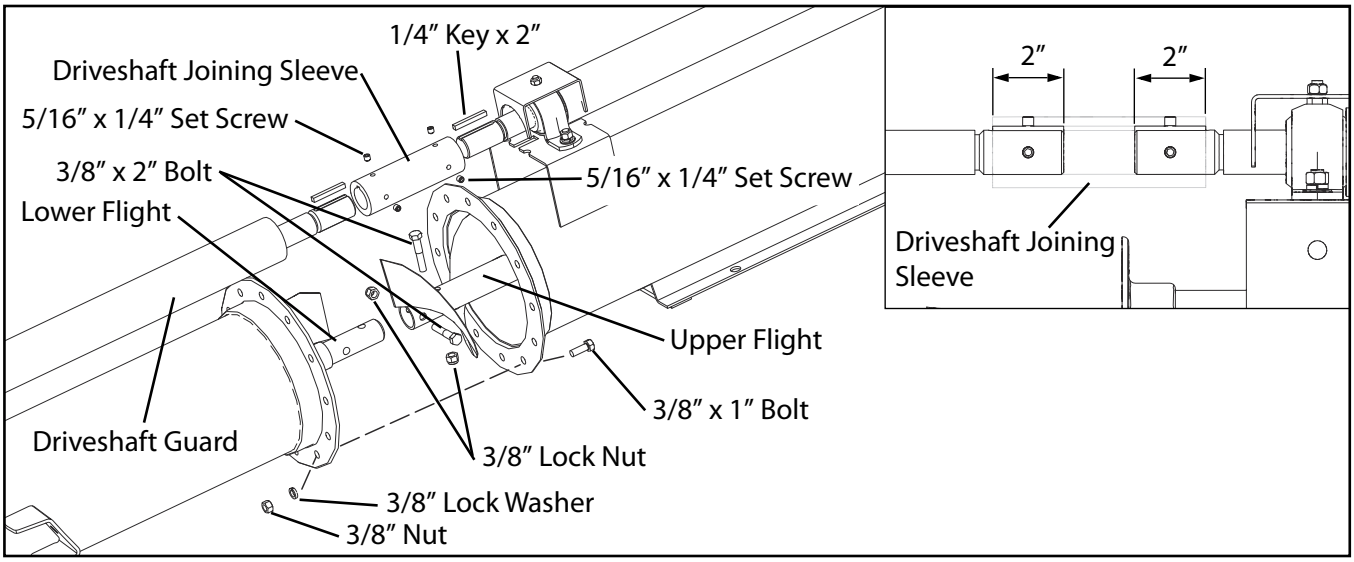


FIG. 3-1. 847, 852 & 862 Tube Joint

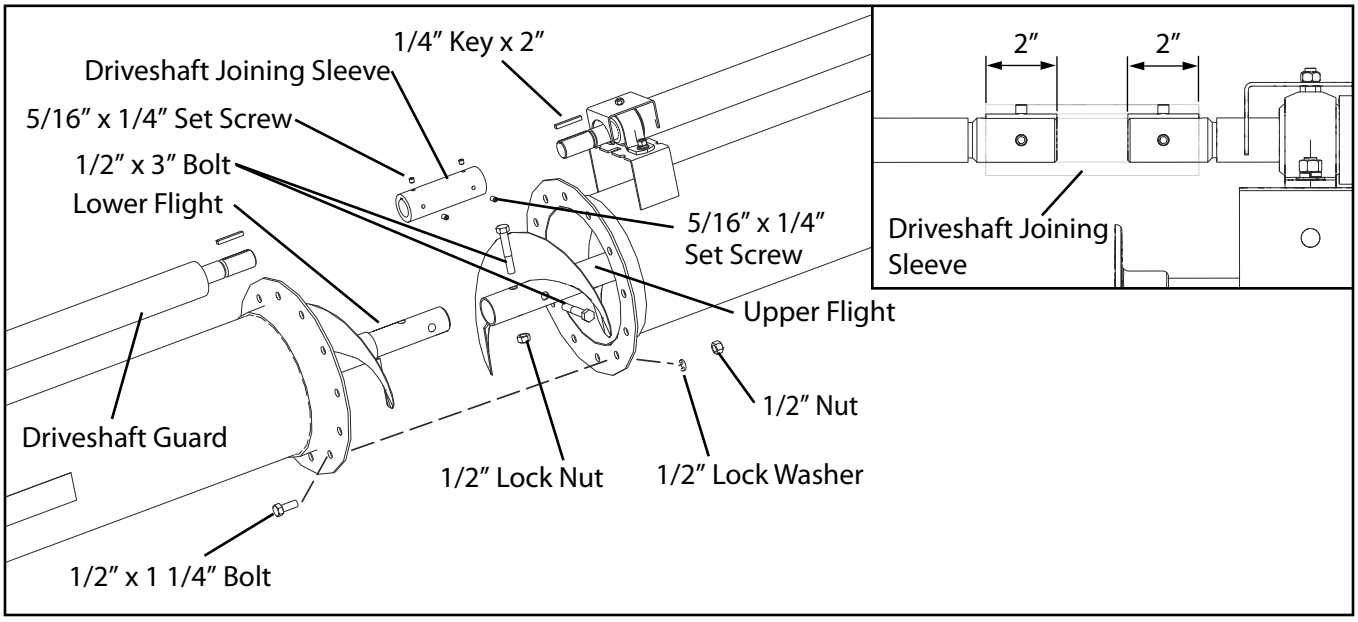


FIG. 3-2. 1052 Tube Joint

1052 Auger (see Fig. 3-2)

Set the two tube assemblies end to end on a level surface. Join the drive shafts, flights and tubes with the following fasteners:

Drive Shaft Joint - The Drive Shaft Joining Sleeve, four 5/16" x 1/4" set screws and two 1/4" x 2" long keys. Use medium strength thread locking compound on the set screws.

Flight Joint - Two 1/2"x 3" bolts Gr.5 and lock nuts. Make sure the flighting on the lower flight is lapped OVER the flighting on the upper flight. After the nuts have been tightened, take a hammer and flatten the threads on the end of the bolts. This will make sure the nuts do not come off. Grind the outside of the flight joint to create a smooth outer edge.

Tube Joint - Twelve 1/2"x 1 1/4" bolts, lock washers and hex nuts. Make sure the tubes are lined up straight before tightening.

Note: Join the drive shafts together first. Install the Drive Shaft Joining Sleeve onto the upper tube drive shaft as shown in Fig. 3-2. Slide the lower drive shaft into the other end of the sleeve. Next join the upper and lower flights, making sure the lower flight laps over the upper flight. Lastly, join the tubes together.

2. After the top and bottom tube assemblies have been joined, check the clearance between the end of the flight tube and the intake plate. See Fig. 3.3. A minimum clearance of 1/4" at this location is required.

a) If the clearance is between 1/4" and 5/16", adjustment of the flight assembly is not required.

b) If the clearance is less than 1/4" or more than 5/16", it will be necessary to adjust the gap. This is done by loosening the lock collar on the upper flight bearing at the head end of the auger.

- Remove the plastic head end guard.

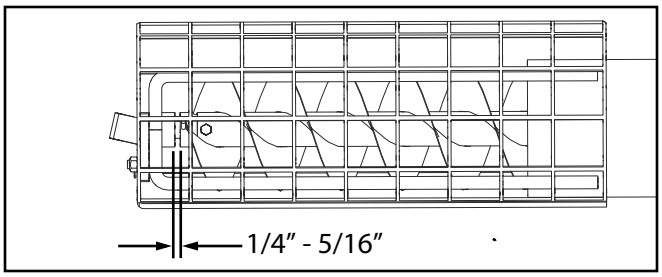


FIG. 3-3. Flight Core to Intake Spacing

- Loosen the lock collar on the upper flight bearing.

- Move the flight until the proper clearance at the intake end is achieved.

- Retighten the lock collar on the upper flight bearing.

- Do not reinstall the plastic head end guard yet.

Note: The auger tubes assembled at the factory already have had the flight clearance adjusted.

3.3 Gear Box and Head End Drive Assembly

The gear box and head end drive components should be installed on the auger tube now. The instructions for installing the gear box, head end sprockets and chain are included in the Auger Drive manual.

Notice. If a tube mounted electric motor drive kit will be mounted on the auger tube, install the kit after the gearbox and drive components are installed.

3.4 Tube Truss Assembly - 847, 852, 862 and 1052

Note: If you are assembling a 32', 37' or 42' auger, move ahead to Section 3.5.

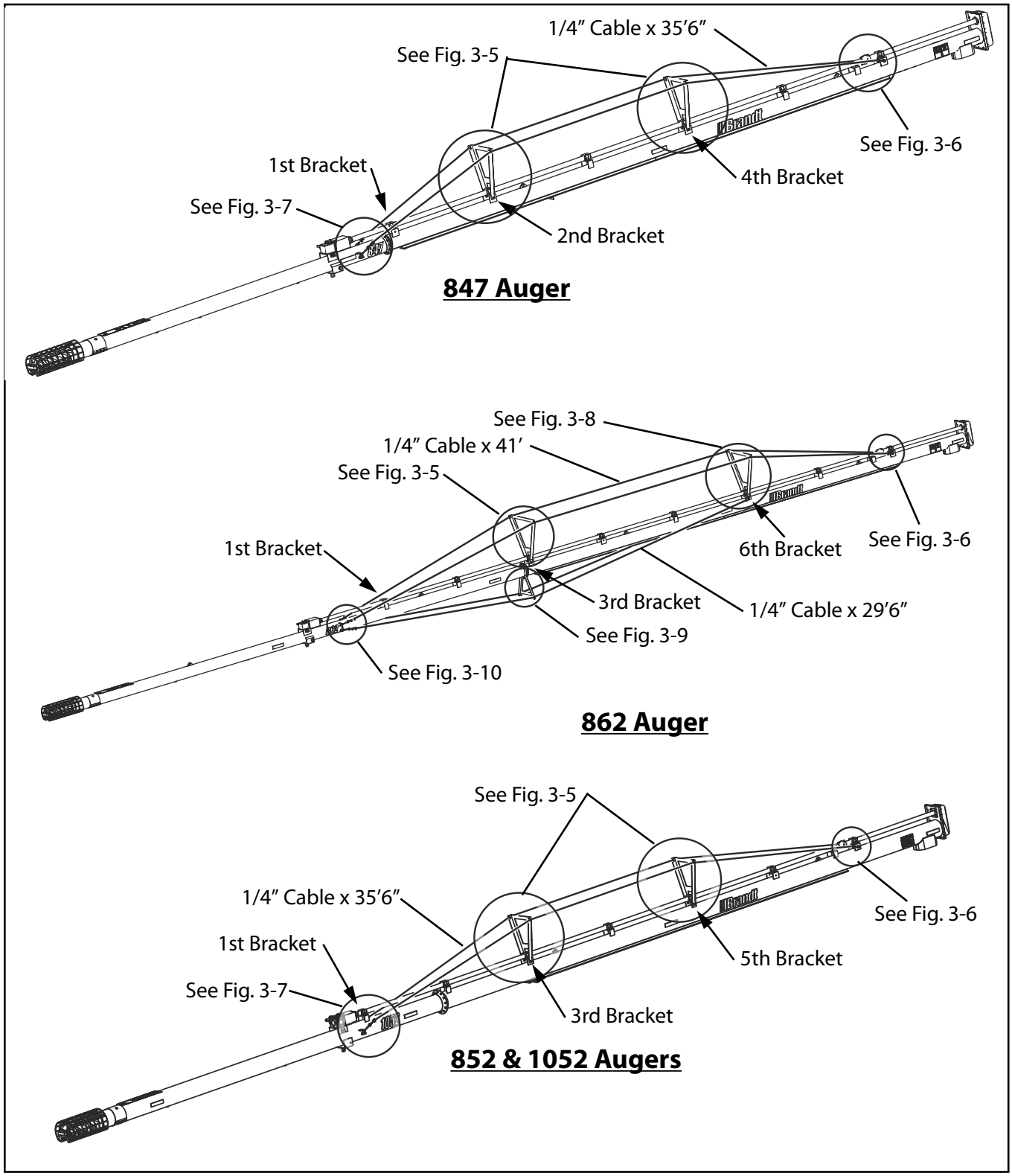


FIG. 3-4. Tube Truss - 847, 852 and 1052

3.4.1 Over the Tube Truss

3. Install the truss towers on the bearing mount brackets shown in Fig. 3-4. Use two 1/2"x 1 1/4" bolts and lock nuts for each tower. See Fig. 3-5.

On the 862, the Truss Tower closest to the discharge end is mounted using 1/2" x 2" full thread bolts, 5/8" long Spacers, 1/4" Cable Thimbles, 1/2" flat washers and lock nuts. See Fig. 3-8.

4. Assemble a 1/4" cable thimble onto one end of both truss cables. Use two 1/4" cable clamps to make the loop in the cable. Make sure the u-bolt of the clamp is on the short side of the cable. Leave approximately 3" between the clamps. Torque the nuts to 15 ft.lbs.

5. Attach this end to the bearing bracket shown in Fig. 3-6. Use a 1/2"x 1 3/4" bolt, a 5/8" long Spacer, a 1/2" flat washer and a lock nut.

6. Mount the truss cables to the truss towers using 1/4" cable clamps as shown in Fig. 3-5. Do not tighten at this time.

7. Attach the two 1/2"x 6 3/4" eye bolts to the truss mount brackets welded to the lower tube below the gearbox. Run the first nut up the threads as far as possible, followed by a 1/2" flat washer. Insert the threaded end into the bracket, followed by a 1/2" flat washer and just start the second nut. See Fig. 3-7.

8. Place a 1/4" cable thimble in the eye portion of each bolt. Loop the cable through the eye of the bolt and secure it with two 1/4" cable clamps. Do not tighten at this time. Make sure the u-bolt of the clamp is on the short side of the cable.

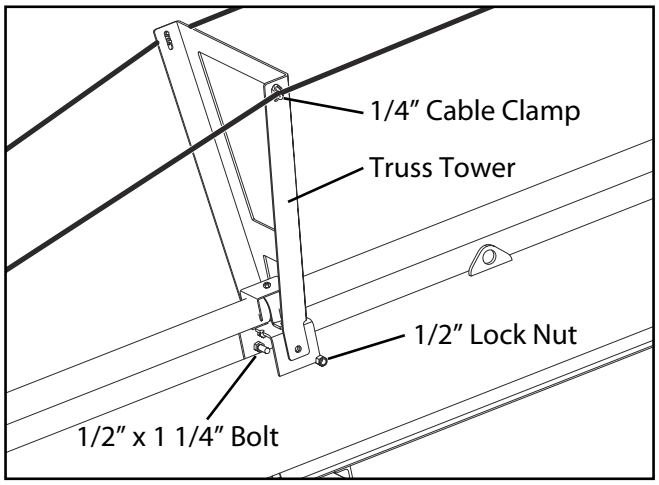


FIG. 3-5. Truss Tower Assembly

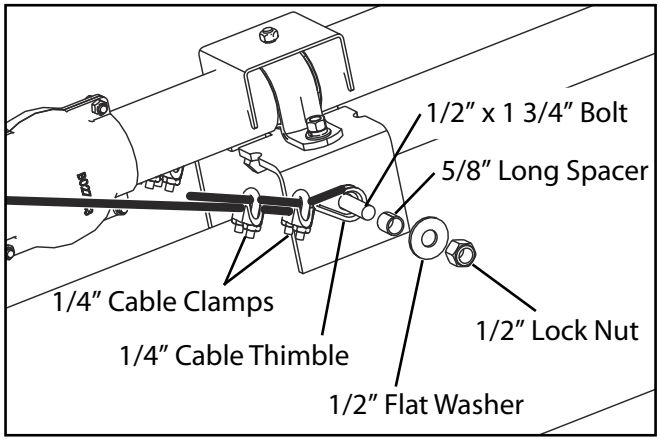


FIG. 3-6. Upper Cable Mounting

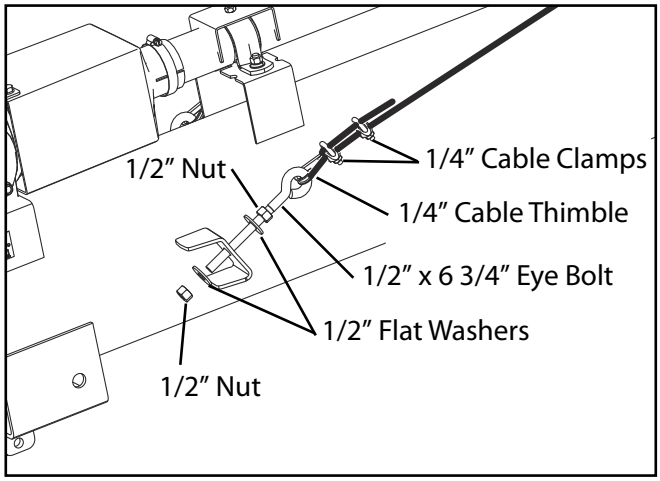


FIG. 3-7. Lower Cable Mounting

9. While wearing gloves, pull the cable as tight as possible and tighten the clamps closest to the eye bolts. Adjust the other clamp to be approximately 3" from the lower clamp and tighten. Torque the nuts to 15 ft.lbs

10. Tighten the lower nut on the eye bolts until the cables are tight. Keep a eye on the auger tube to make sure it stays straight. Lock the upper nut against the mount bracket.

11. The truss cables will stretch and will need readjusting after the auger is in the air.

12. Using electrical tape, secure the excess cable to the tight portion of cable. Do not cut off the excess. It may be required to aid you when retightening the cable.

13. Tighten the cable clamps on the truss towers.

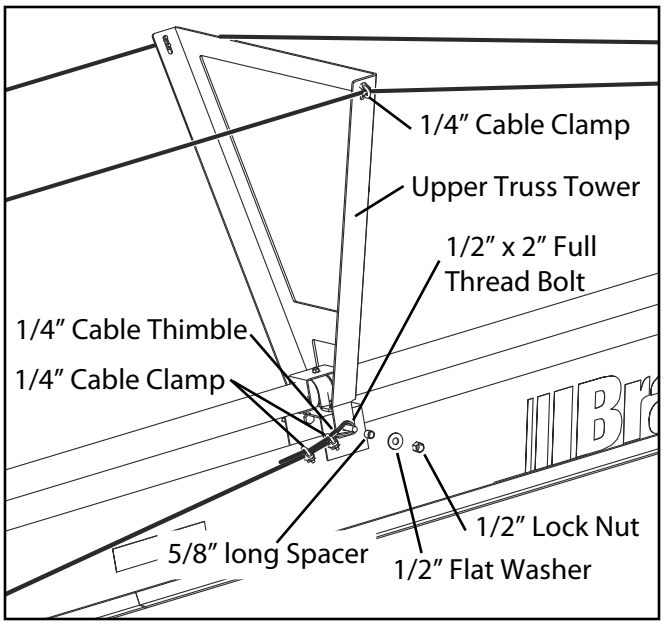


FIG. 3-8. Truss Tower & Truss Cable Mounting - 862

3.4.2 Under the Tube Truss - 862 Auger only

1. Install the Lower Truss Tower on the under side of the tube flange using three 3/8" x 1 1/4" bolts, lock washers and nuts. See Fig. 3-9.

2. Loop the short truss cables around the thimbles installed on the bolts holding the Upper Truss Tower closest to the discharge end. See Fig. 3-8. Use two 1/4" cable clamps to make the loop in the cable. Make sure the u-bolt of the clamp is on the short side of the cable. Leave approximately 3" between the clamps. Torque the nuts to 15 ft.lbs.

3. Mount the truss cables to the truss towers using 1/4" cable clamps as shown in Fig. 3-9. Do not tighten at this time.

4. Attach the two 1/2"x 6 3/4" eye bolts to the truss mount brackets welded to the lower tube below the gearbox. Run the first nut up the threads as far as possible, followed by a 1/2" flat washer. Insert the threaded end into the bracket, followed by a 1/2" flat

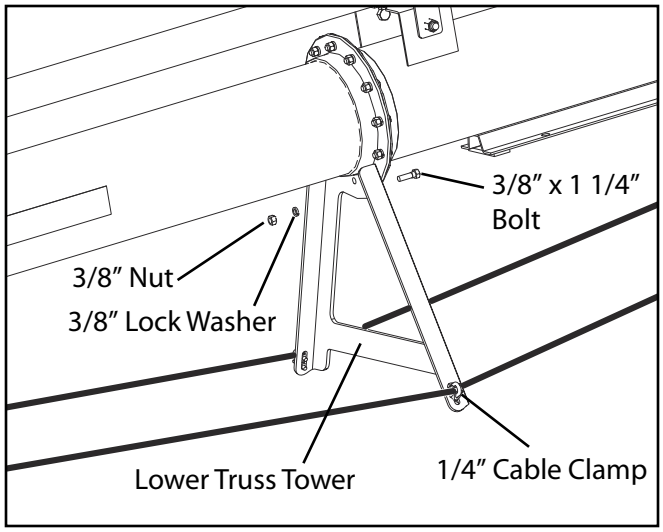


FIG. 3-9. Lower Truss Tower Mounting - 862

washer and just start the second nut. See Fig. 3-10.

5. Place a 1/4" cable thimble in the eye portion of each bolt. Loop the cable through the eye of the bolt and secure it with two 1/4" cable clamps. Do not tighten at this time. Make sure the u-bolt of the clamp is on the short side of the cable.

6. While wearing gloves, pull the cable as tight as possible and tighten the clamps closest to the eye bolts. Adjust the other clamp to be

approximately 3" from the lower clamp and tighten. Torque the nuts to 15 ft.lbs

7. Tighten the lower nut on the eye bolts until the cables are tight. Keep an eye on the auger tube to make sure it stays straight. Lock the upper nut against the mount bracket.

8. The truss cables will stretch and will need readjusting after the auger is in the air.

9. Using electrical tape, secure the excess cable to the tight portion of cable. Do not cut off the excess. It may be required to aid you when retightening the cable.

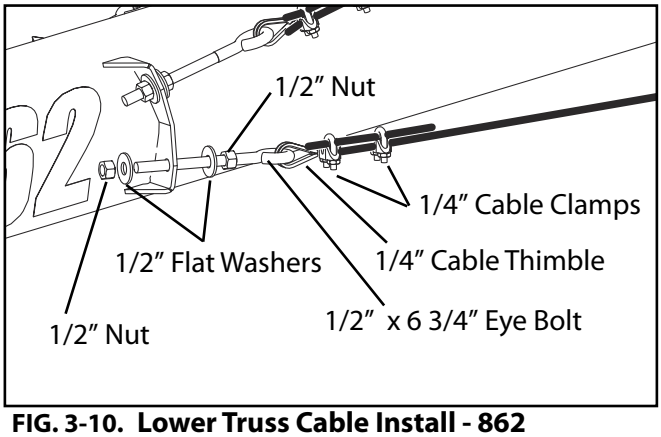


FIG. 3-10. Lower Truss Cable Install - 862

10. Tighten the cable clamps on the truss towers.

3.5 Undercarriage Assembly

1. Loosely attach the Axle Frame to the middle of the Axle as shown in Fig. 3-11, making sure the Axle Frame is attached to the face of the Axle that has the yellow reflectors on it. Make sure the motor base mounting plates welded to the arms are UP. Use two 1/2" x 4" U-Bolt and four lock nuts. Do not fully tighten the nuts yet.

Note: Some Axle Frames may have a truss welded to the underside of the arms.

2. Loosely attach the end of one Axle Frame Support Arm to the Axle using one 1/2" x 4" U-Bolt and two lock nuts. Do not tighten the nuts yet.

3. Attach the other end of the Support Arm to the Axle Frame using a 1/2" x 4" bolt and lock nut. Do not tighten the nut yet.

4. Repeat steps 2 and 3 on the other side.

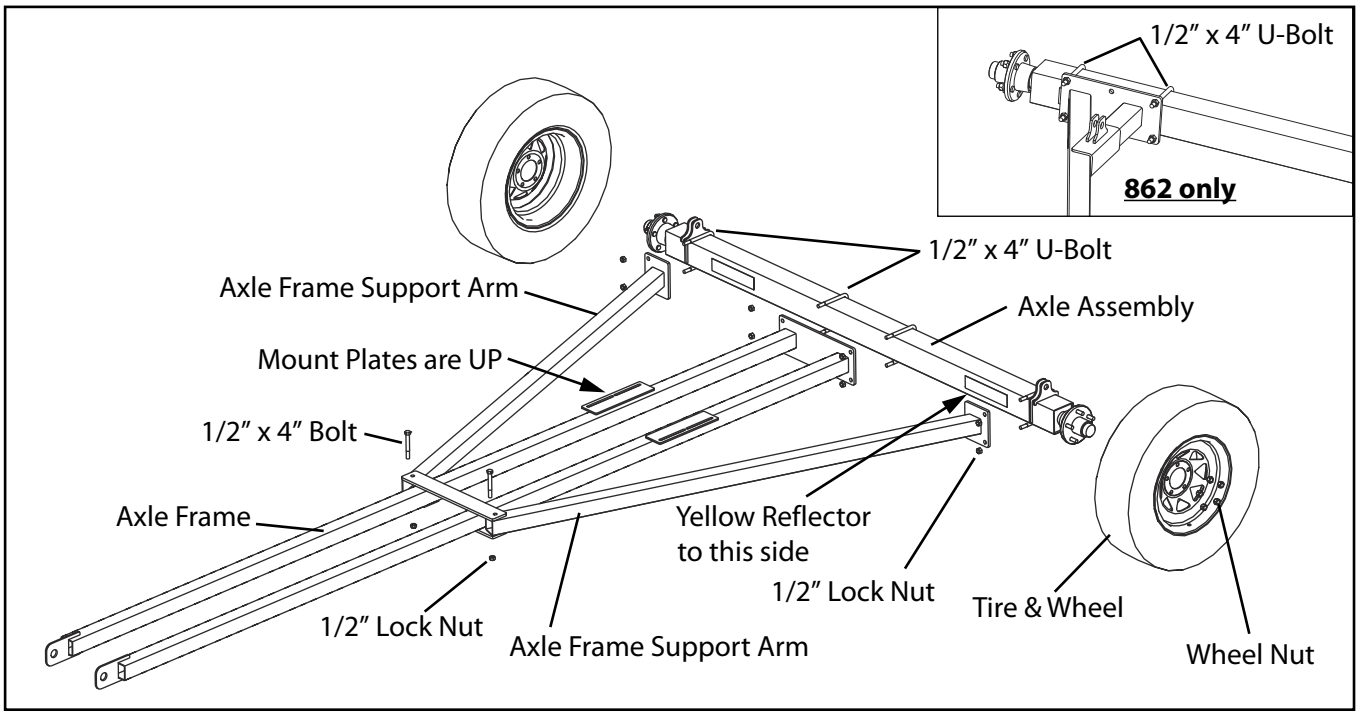


FIG. 3-11. Axle Frame Assembly

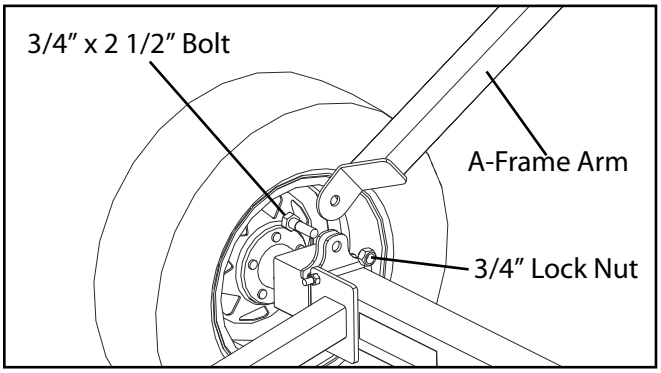


FIG. 3-12. A-Frame Arms to Axle Assembly

5. Making sure the Axle Frame is properly centred on the Axle, tighten all the nuts on the bolts and U-Bolts.

6. Install the tire and wheel assemblies on both axle hubs using five 1/2" wheel nuts on each. Torque the wheel nuts to 90 ft.lbs.

7. Attach the A-Frame Arms to the Axle using a 3/4" x 2" bolt and lock nut. Do not fully tighten the nuts, the arms must be able to rotate. See Fig. 3-12.

8. Assemble the Slide and Roller to the other end of the A-Frame Arms as shown in Fig. 3-13. Do not over-tighten the nut. The Slide must be able to rotate between the arms.

9. 847, 852, 862, 1037, 1042 & 1052 Augers
Position the Cross Brace between the A-Frame Arms and secure in place using two 3/8" x 2 1/2" U-Bolts and lock nuts. See Fig. 3-14.

10. Loop the Winch Cable around the Slide Roller, making sure it is in the groove in the roller. The ends of the cable will be attached later. Doing this now makes for easier assembly later.

11. Raise the intake end of the auger tube high enough to remove the stand from under it and then lower it to the ground.

12. Carefully move the undercarriage under the auger tube. Raise the A-Frame Arms and slip the Slide onto the upper end of the track. See Fig. 3-15.

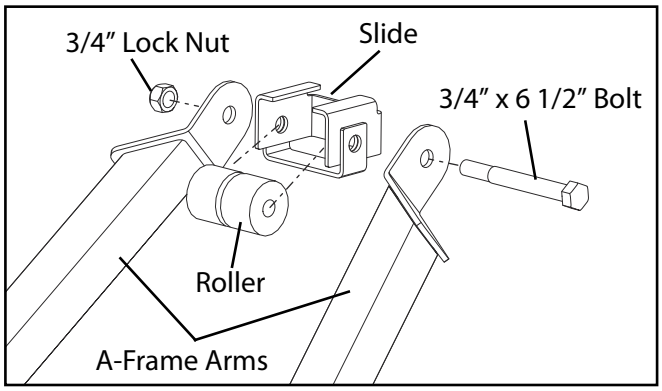


FIG. 3-13. Track Slide Assembly

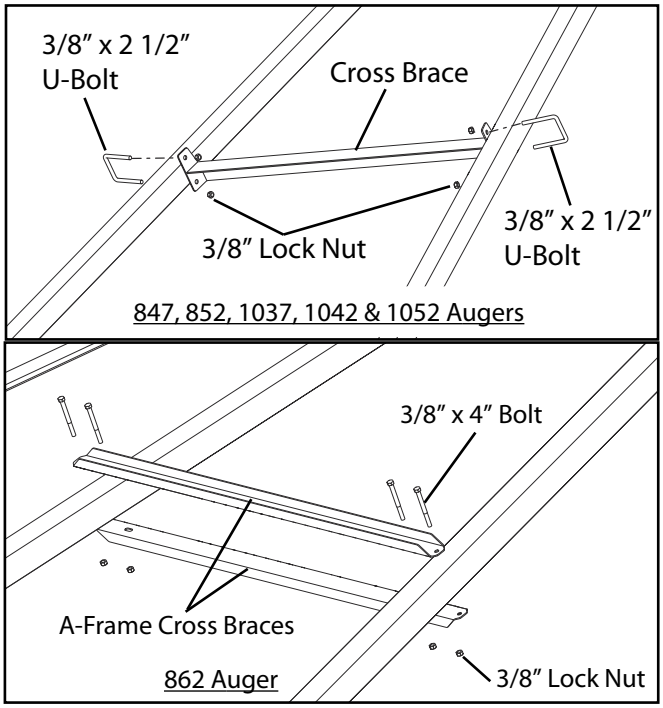


FIG. 3-14. A-Frame Cross Brace Installation

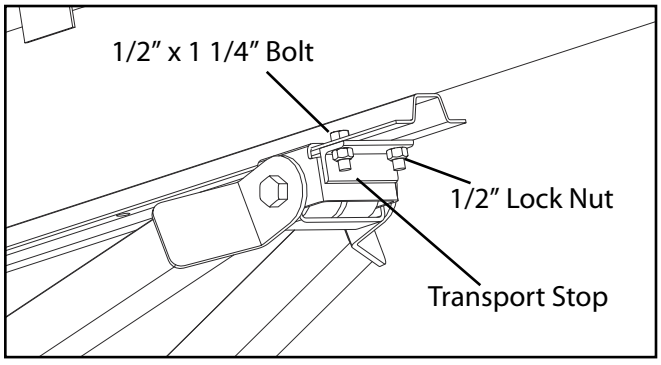


FIG. 3-15. Transport Stop Installation

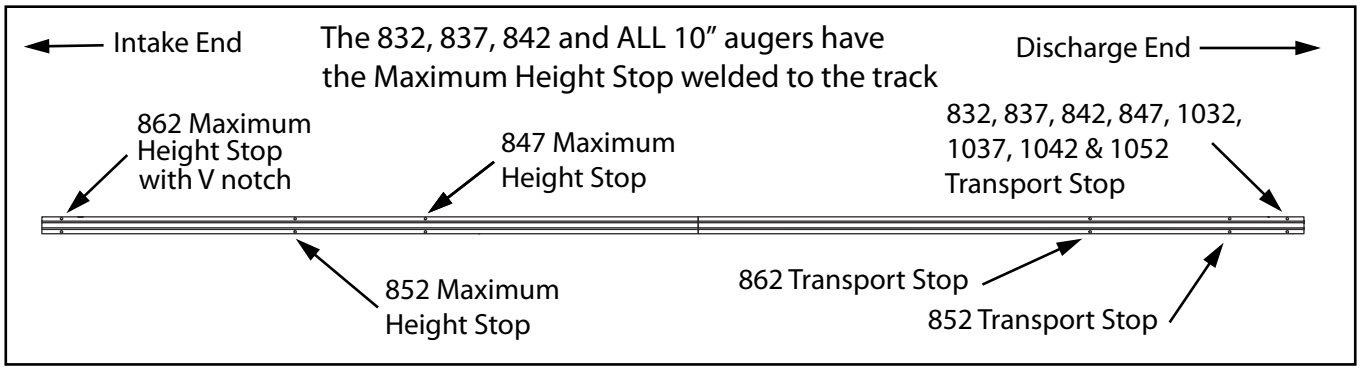


FIG. 3-16. Transport and Maximum Height Stop Mounting Locations

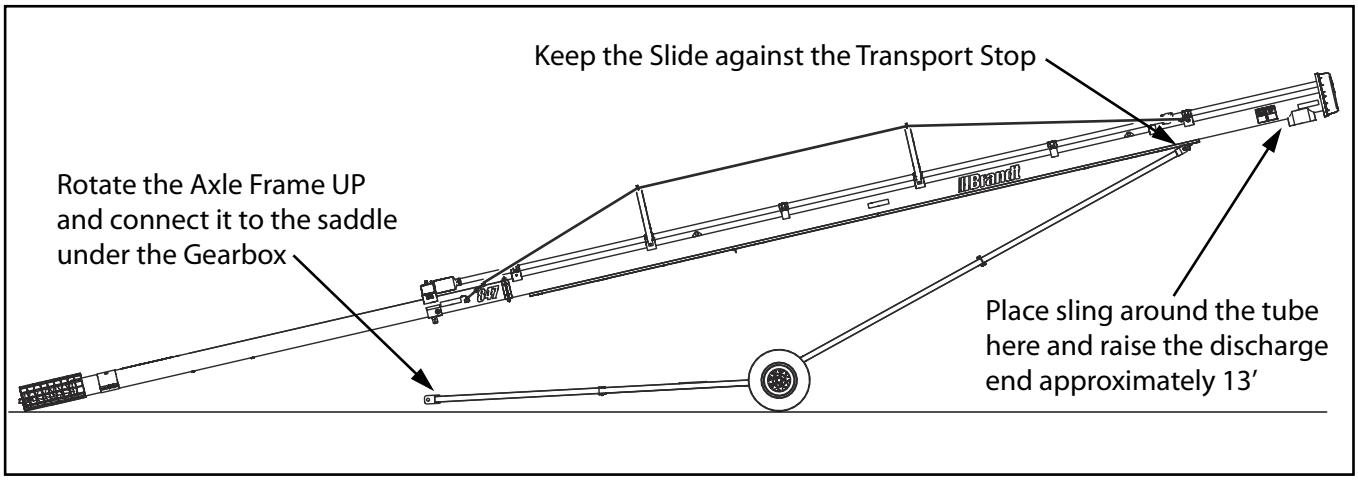


FIG. 3-17. Raising the Auger

13. Move the Slide down the track, past the transport stop mounting holes.

14. Attach the Transport Stop to the track using two 1/2" x 1 1/4" bolts and lock nuts, as shown in Fig. 3-15. Fig. 3-16 shows the mounting locations for the various size augers.

15. The 847, 852 and 862 use a bolt on Maximum Height Stop. It is attached the opposite way as the Transport Stop and uses the same fasteners. Refer to Fig. 3-16 for mounting locations.

Note: **Do not raise the discharge end of the auger yet.**

16. Move the undercarriage towards the discharge end of the auger until the slide comes up against the transport stop.

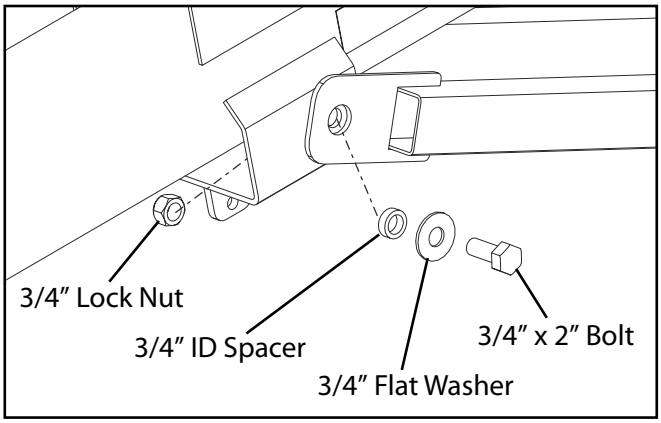


FIG. 3-18. Axle Frame to Tube Installation

17. Wrap a sling around the discharge end of the tube where shown in Fig. 3-17. Using a front end loader or a crane, raise the discharge end approximately 13' off the ground.

⚠ DANGER

DANGER! WATCH OUT FOR OVERHEAD POWER LINES.

18. Rotate the Axle Frame up and connect it to the tube using a 3/4" x 2" bolt, 3/4" flat washer, 3/4" ID Spacer and a 3/4" lock nut on both sides. See Fig. 3-18.

It may be necessary to adjust the height of the discharge end in order to get the holes to line up.

19. Slowly and carefully, lower the discharge end of the auger until the slide rests against the Transport Stop.

3.6 Finishing the Basic Auger Assembly

1. Attach the end of the winch cable, which goes over top the slide roller, to the flat welded to the lower end of the slide track. See Fig. 3-19. Slide a cable thimble over the flat. Loop the cable around the thimble with the short end on top. Install the cable clamps. Make sure the u-bolt of the clamp is on the short side of the cable. Leave approximately 3" between the clamps. Torque the nuts on the clamps to 15 ft.lbs.

2. Mount the plastic Manual Holder to the axle frame support using the components shown in Fig. 3-20.

3. <u>All Augers with the HP Intake</u>

Clean and dry both sides of the auger tube between the intake and the gearbox. Install the two "HP" decals directly after the number decal, as shown in Fig. 3-21.

Note: Augers with the Low Profile (LP) intake, install the LP decals in place of the HP decals.

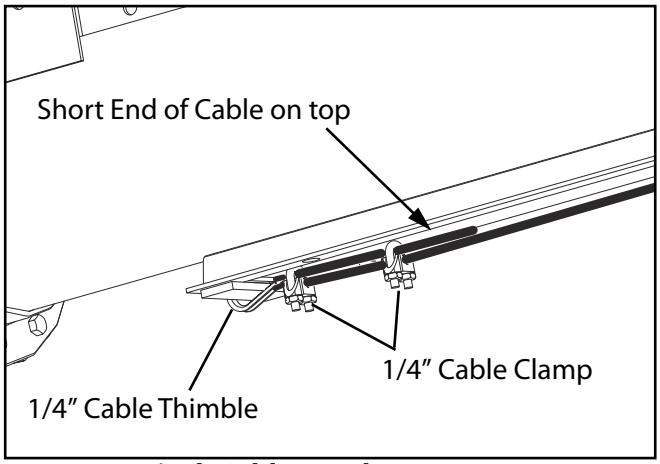


FIG. 3-19. Winch Cable to Tube

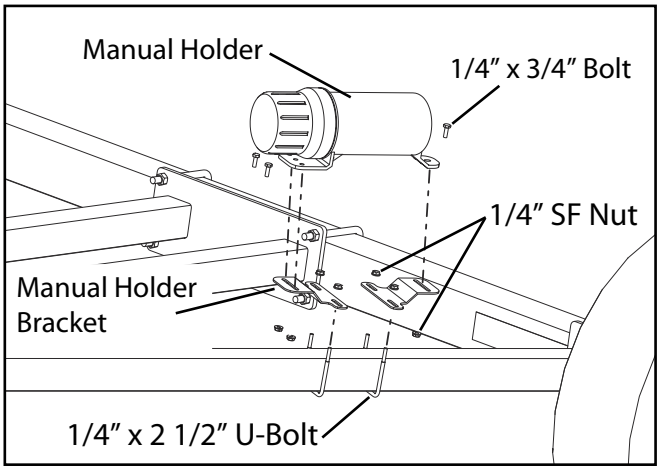


FIG. 3-20. Manual Holder Installation

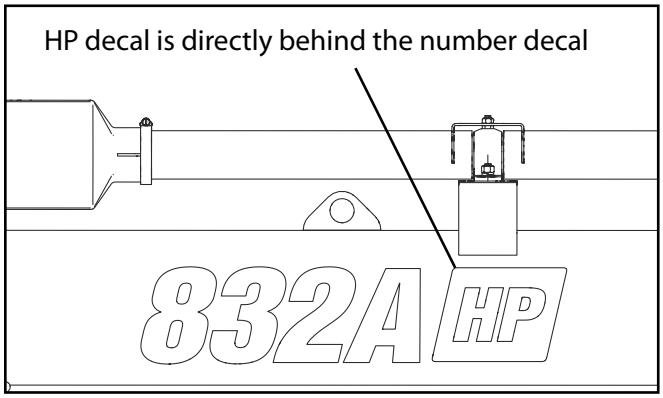


FIG. 3-21. HP Decal Installation

3.7 Manual Winch Assembly

1. Attach the Winch Mount Plate to the Axle Frame approximately 12" above the support arm mount strap using two 3/8" x 2 1/2" sq. U-Bolts and four lock nuts. See Fig. 3-22.

2. Mount the winch to the Mount Plate as shown in Fig. 3-22. The handle should be on the right side of the axle frame when standing at the intake end of the auger and looking towards the discharge end. Use three 3/8"x 1 1/4" bolts, six flat washers and three lock nuts.

3. 847, 852, 862 & 1052 Augers

   Attach the Pulley Block Mount to the Axle Frame using two 1/2" x 2 1/2" U-bolts and lock nuts as shown in Fig. 3-23. Position the mount so there is approximately 3" of clearance between the mount and the underside of the auger tube.

4. Attach the Cable Swivel Assembly to the Pulley Block Mount using a 3/4" x 2 1/2" bolt and lock nut. Do not fully tighten the nut, the cable swivel must be able to move.

5. 832, 837, 842, 1032 & 1037 Augers

   Route the loose end of the winch cable to the winch as shown in Fig. 3-24. Wrap the cable around the winch drum as shown in Fig.3-26. Attach the cable to the winch drum using the cable clamp supplied with the winch.

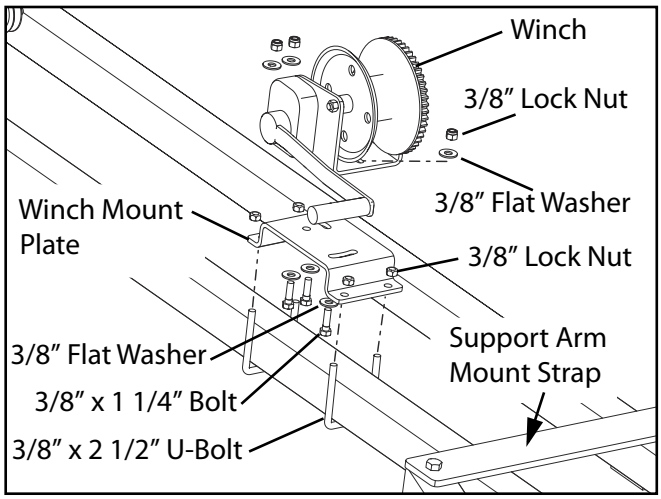


FIG. 3-22. Installing the Winch

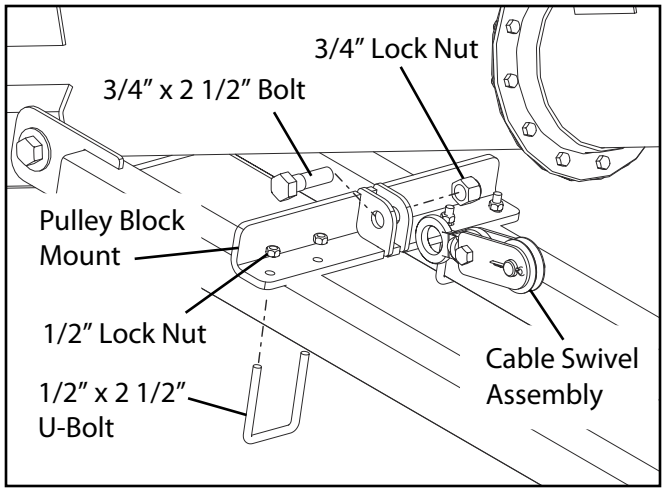


FIG. 3-23. Installing the Pulley Block Mount

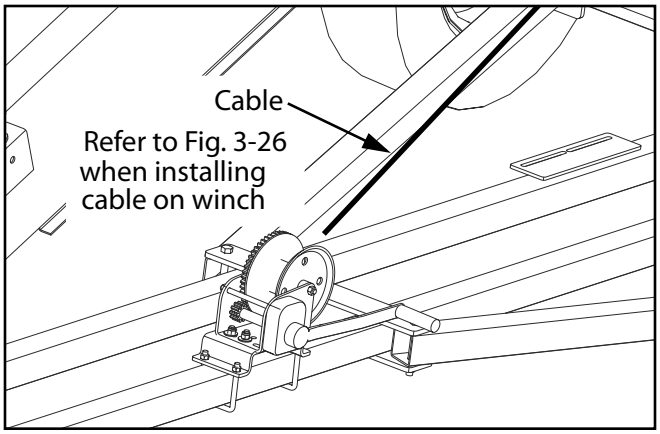


FIG. 3-24. Winch Cable Routing - All 32, 37 & 42

847, 852, 862 & 1052 Auger

Route the loose end of the cable around the pulley in the Cable Swivel Assembly and bring it back to the winch, as shown in Fig. 3-25. Wrap the cable around the winch drum as shown in Fig.3-26. Attach the cable to the winch drum using the cable clamp supplied with the winch.

Make sure there are at least 3 wraps of cable around the drum before the auger starts to lift.

Note: The winch should `click' when the auger is being raised. Always keep slight tension on the cable when the auger is in transport position.

⚠ CAUTION

Caution. Be sure to re-tighten the winch cable clamps after the auger has been raised 2 or 3 times.

Note: The position of the winch may have to be adjusted to ensure the cable winds evenly on the drum.

CAREFULLY READ AND UNDERSTAND THE INSTRUCTION SHEET PROVIDED FOR THE WINCH.

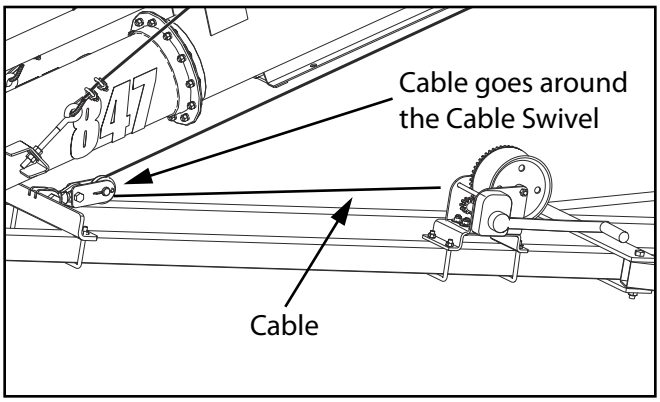


FIG. 3-25. Winch Cable Routing - All 47, 52 & 62

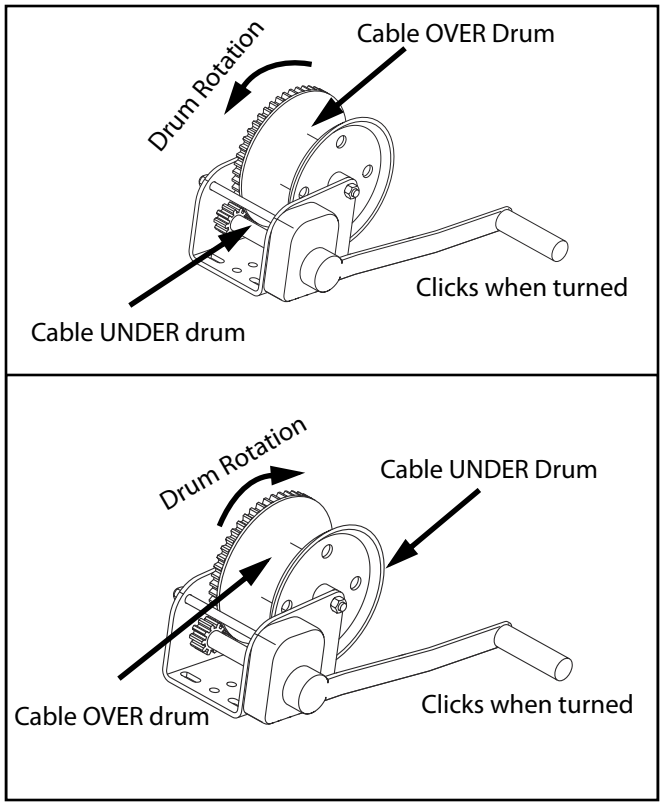


FIG. 3-26. Installing Cable on Winch

CHAPTER 4 Operation

4.1 Principles of Operation

The Brandt 8" & 10" Transport Augers are used for moving products to or from a storage site. The auger is powered by either a gas or diesel engine, a electric motor or a tractor PTO. The engine or electric motor is mounted to a self-leveling motor mount (A), attached to the auger undercarriage. An optional tube mounted electric motor base is also available. An optional tractor driven Centre Drive PTO kit can be installed on the Axle Frame to drive the auger. The direct drive augers have the PTO shaft attached directly the gear box. Power is transferred to the auger by a set of belts or in the case of a direct drive or a PTO Centre drive, by a PTO shaft. The belts or PTO shaft are attached to a right angle gear box (B), which powers a drive shaft (C) mounted to the top of the auger tube. The drive shaft is connected to the auger flighting by two sprockets and a chain (E).

A shear bolt is located in the flexible coupling (D) between the gearbox and the drive shaft. This shear bolt helps to protect the auger from damage if a foreign object enters the auger intake.

⚠ DANGER

The shear pin **WILL NOT** protect body parts from injury if moving parts of the auger are touched. All safety shields and guards must be kept in place.

The auger can be equipped with an optional reversing gear box which allows the operator to reverse the flighting direction without removing the drive belts.

⚠ CAUTION

The reversing gear box **MUST NOT** be shifted from forward to reverse or reverse to forward while the drive belts or PTO shaft are turning. The drive engine or motor must be shut off or the tractor PTO disengaged, before shifting the gear box.

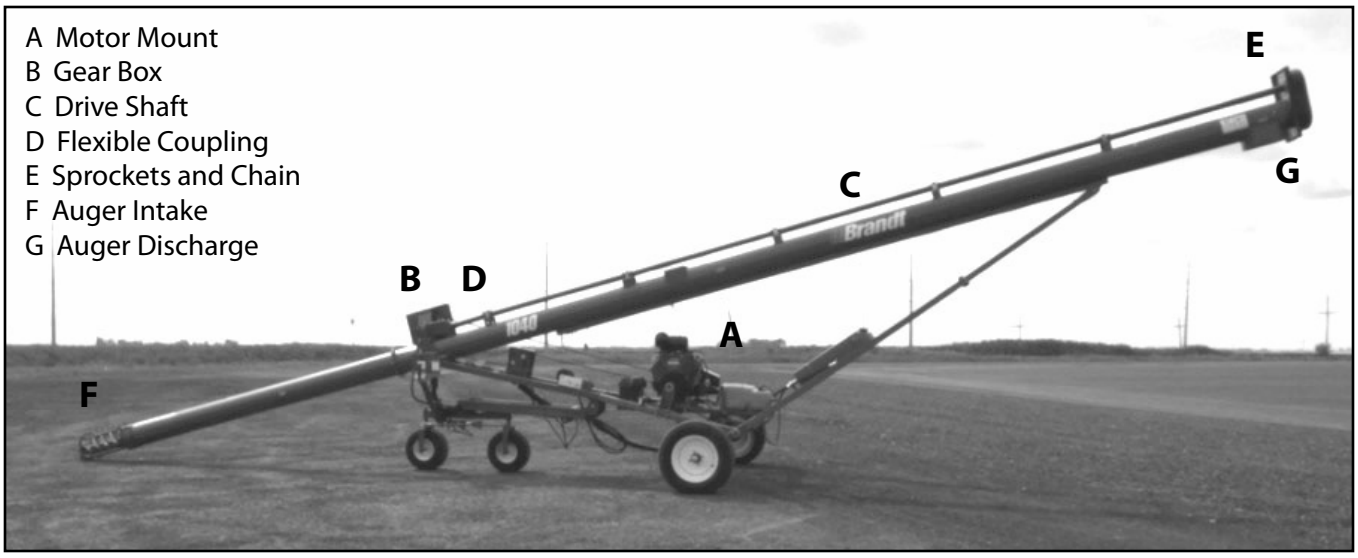


FIG. 4-1. Principles of Operation

4.2 Lock-Out Information

It is essential to inspect your auger drive before adding power and know how to shut it down in case of an emergency.

Whenever you must service or adjust the auger, make sure to stop the engine and lock out the power source!

4.2.1 Tractor PTO

- Never use a PTO shaft without a rotating shield in good working order. Also see that the power drive system safety shields are in place at the auger and the power source.
- Be certain that the PTO shaft is securely attached to the auger and the power source.
- Before starting the power source, make sure the power to the PTO is off.
- Stay out of the hazard area of the operating PTO shaft.

LOCK OUT

- Remove the ignition key or coil wire from the power source. If this is impossible, remove the PTO shaft from the work area.

4.2.2 Electric Motor

- Electric motors and controls must be installed by a qualified electrician and must meet the standards set by the National Electrical Code and all local and provincial/state codes.
- A magnetic starter should be used to protect the motor.
- There must be a manual reset button.
- You must disconnect the power **BEFORE** resetting the motor.
- The reset and the motor starting controls must be located so that the operator has full view of the entire operation.

LOCK OUT

- A main power disconnect switch capable of being locked only in the OFF position shall be provided. This shall be locked whenever work is being done to the auger.

4.2.3 Gasoline or Diesel Engine

- Never attempt to adjust or service an engine while it is in operation.
- Shut down and allow the engine to cool before filling with fuel.
- Keep all guards and shields in place.

LOCK OUT

- For engines with rope or crank start, remove the spark plug wire or spark plug.
- For engines with electric start, remove the ignition key, spark plug wire or spark plug.

4.3 Pre Operation Check List

4.3.1 Before running the new Auger

- Read and understand this operator's manual, especially Sections 1, 2 and 4.
- Read and understand the operator's manual for all 3rd party components included with this machine prior to operating the auger.
- Hand turn the gearbox pulley to ensure the auger flight turns freely.
- Tighten wheel bolts to specified torque.
- Check all fasteners and ensure they are tightened to specified torque levels.
- Check oil in auger drive gearbox. The gearbox should be approximately half full of oil. Use S.A.E. 80W90 gear oil.
- Check that all guards are in place, secure and functional.
- Check the winch and cable for security and operation. There should be at least three complete wraps of cable around the winch drum in the full down position. The cable anchor on the winch drum must be tight.
- If the auger is powered by a tractor PTO, make sure the PTO shaft is properly attached to the tractor and the safety lock is engaged. Check by pulling and pushing on the PTO shaft several times.

WARNING! Serious injury or death can occur if the PTO shaft is not securely attached to the tractor.

4.3.2 Pre-Operation Checklist

Before operating the Auger and each time thereafter, the following areas should be checked.

- Insure the auger flighting turns freely inside the tube.
- Insure the PTO drive line shield turns freely on the shaft.
- Service the machine as per the schedule in the maintenance section of this manual.
- Make sure all guards and shields are in place and in good repair.
- Check the tires for proper inflation and be sure the are in safe road condition.
- Check the gearbox for leaks.
- Check the auger drive belt tension.
- Check and clear the auger of any obstructions.
- Check the winch cable for fraying. If the cable is frayed at all, replace immediately.
- Check the winch brake. Fix if necessary.
- After the auger has been positioned, anchor the intake end or support the discharge end to prevent tipping.
- Check oil in auger drive gearbox. The oil level in the gearbox should be 2 1/2" down from the top. Top up with S.A.E. 80W90 gear oil if required.
- Remove the plastic head end cover and check the auger chain drive tension. Adjust if necessary.

4.4 Work Area Placement

Moving the Auger with a Towing Vehicle into or out of the Working Area. Refer to Section 2.6.

- Clear the entire area of all debris.
- When moving the auger, always use a vehicle. When removing from or attaching to a vehicle, test the intake end for downward weight. Lift it slowly and keep the intake end no higher than the tow vehicle's hitch. Be sure all product is emptied from the auger before lifting.

WARNING! Never move the auger manually. Do not push on the auger undercarriage.

- The auger must be on a level surface attached to a vehicle and the wheels must be free to move when raising or lowering.
- If the auger must be raised before placement, make sure the entire area above the auger and in the line of travel is clear of obstructions and electrical wires.

DANGER! Electrocution can occur without direct contract with power lines.

- Move the auger into working position with the tow vehicle - **NOT BY HAND**. Make sure everyone is clear of the work area, especially children.
- Once in place, the auger should be anchored at the intake end and/or supported at the discharge end. The wheels should be chocked on **BOTH** sides of the auger and power source.

DANGER! DO NOT attempt to increase the auger height by positioning the wheels on lumber, blocks or by any other means.

4.5 Operation & Break-In

During the regular operation of your auger, one person must be in position to monitor the operation.

It is also good practice to visually inspect the auger periodically during the actual operation. You should be alert for unusual vibrations, noises and loosening of fasteners.

⚠ WARNING

WARNING! Clear the area of all bystanders especially children.

- Keep all safety shields and devices in place.
- Make certain everyone is clear before operating or moving the machine, especially children.
- Keep hands, feet and clothing away from moving parts.
- If the auger is PTO driven, make sure Tractor PTO does not exceed 540 rpm.
- Regulate the amount of grain entering the auger to keep it from overloading.
- When using the auger to remove grain from a bin, adjust the position of the auger intake in the bin chute, to keep the auger from overloading.

⚠ CAUTION

Caution. Attempting to bury the complete auger intake in a bin, will cause the drive system to overload.

- If the intake guard becomes plugged with foreign material and does not allow product through, shut off the flow of material and allow the intake guard to clean out.

⚠ DANGER

DANGER! Never use a body part (hand or foot) to clean off the intake guard. Use a broom or shovel.

- Use caution when looking in the back of the truck box.

⚠ WARNING

WARNING! NEVER use the auger as a step when looking in the back of the box.

- Use caution when cleaning out the corners of the truck box.

⚠ WARNING

WARNING! Do not lean over the auger intake.

- When cleaning out the intake hopper, always use a shovel or broom.

⚠ DANGER

DANGER! NEVER use your hands or feet to clean out the intake hopper. Use a shovel.

- Do not judge the fullness of the bin by allowing the auger to plug at the top end and break the shear pin; severe damage to the flighting can result. This type of damage will not be covered under warranty.
- Always allow the auger to empty out before shutting off the power source.
- Shut off the power and lock out the power source before adjusting, servicing or cleaning.

4.5.1 Initial Break-in

Proper initial break-in of your new Brandt grain auger will greatly increase the efficiency and lifespan of the auger.

⚠ WARNING

WARNING! Never run a new auger empty until the break in procedure has been completed, and then only at low RPM.

⚠ CAUTION

Caution. During the initial start-up and break in period, the operator shall be aware of any unusual vibrations or noises. If any unusual vibrations or noises are noticed, shut down the auger, lock out the power source, and adjust according to the manual or contact your local dealer.

⚠ CAUTION

Caution. Use extreme caution when moving the auger into working position! Make sure everyone is clear of the work area, especially children.

1. Insert the auger into the grain so the intake is approximately half full or allow grain into the hopper so the intake is half covered.
2. Start the engine and set the throttle to half speed (electric drive models will run the auger at full speed).
3. Allow grain into the auger to keep the intake half full.
4. Maintain this grain level and engine speed for at least 20 minutes.

Note: Running the auger at this lowered capacity will allow the grain to polish the rust from the inside of the auger tube without putting excess strain on the drive components.

5. At the end of the 20 minute break-in period, stop the grain flow and continue to run the auger slowly until it is empty.
6. Shut down the auger and lock out the power source.
7. Do a complete inspection of the auger which includes but not restricted to:
   - Checking the auger drive belt tension. New belts stretch noticeably upon initial use. It is crucial that the belts are tightened as specified at this time. If the drive belts are not tightened, they will fail.
   - Checking the auger drive gearbox for leaking.
   - Checking for any loose fasteners and components.

Upon completion of the inspection and making any adjustments as required, your Brandt auger is now ready for normal operation. Normal operation does not include running the auger at high speeds without grain. Following this break-in procedure at the beginning of every grain moving season will enhance the auger lifespan and user experience.

4.5.2 Auger Shutdown

Normal Shutdown

- Make sure the hopper and auger are empty before stopping the unit.
- Before the operator leaves the work area, the power source must be locked out.

Emergency Shutdown

- Should it be necessary to shutdown the auger under load, disconnect and lock out the power source. Clear as much product from the hopper and auger as possible. Never attempt to start the auger when full.
- Starting the unit under load may result in damage to the auger. Such damage is considered abuse of the equipment and is not covered under warranty.

4.6 Auger Drive Shear Pin

The auger drive system and flight are protected by a shear pin located in the flex coupler connecting the gear box to the drive shaft.

All 8" Augers use a 5/16" x 2" HD Roll Pin.

All 10" Augers use a 3/8" x 2" HD Roll Pin.

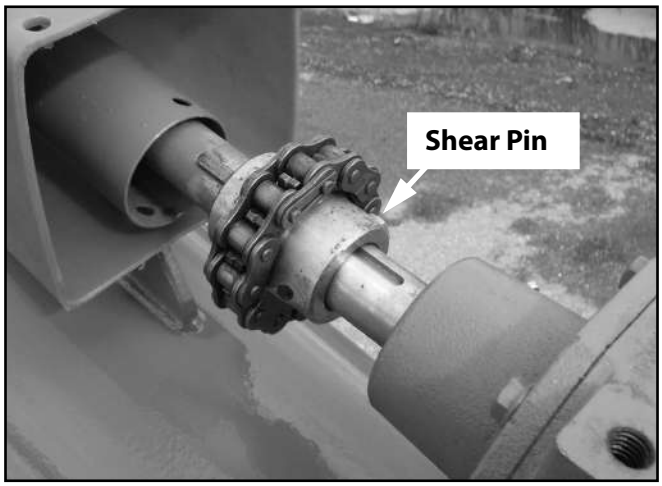


FIG. 4-2. Shear Bolt

4.7 Optional Reversing Gear Box

An optional Reversing Gear Box is available for the 8" & 10" augers. This gear box allows the auger flighting to be reversed, to allow for auger clean out, without removing the drive belts or PTO shaft.

The shift lever can be moved to three positions: forward, neutral and reverse. Fig. 4.4, 4.5 and 4.6 show the shift lever in the different positions.

Operating the Reversing Gear Box

1. Stop all power to the auger drive system.

   If the auger is driven by a gas or diesel engine, shut off the engine. If the engine is equipped with a optional electric clutch, turn the clutch switch to the off position. The engine can remain running.

   If the auger is driven with a electric motor, turn off the power to the motor.

   If the auger is driven by a tractor PTO, disengage the power to the PTO shaft.

⚠ CAUTION

Caution. The shift lever <u>MUST NOT</u> be moved while the belts or PTO shaft are turning. Failure to heed this warning will result in damage to the internal components of the gear box.

2. Move the shift lever to the desired position. If the lever does not move or it will not move into the opposite position, slightly turn the gear box shaft by hand while pushing or pulling on the shift lever. You will feel when the shift lever has moved into position. Detent holes are drilled into the top of the gear box to hold the shift lever in place.

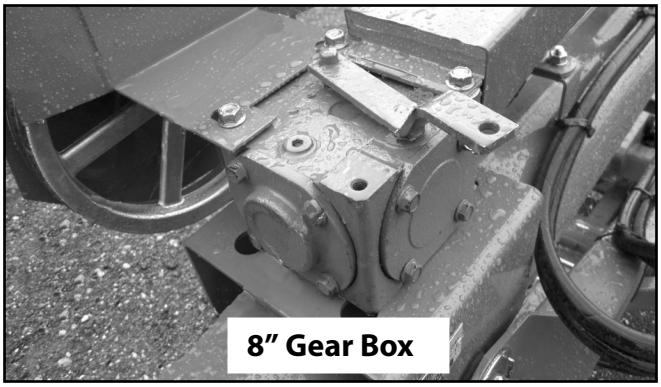


FIG. 4-3. Optional 8" Reversing Gear Box

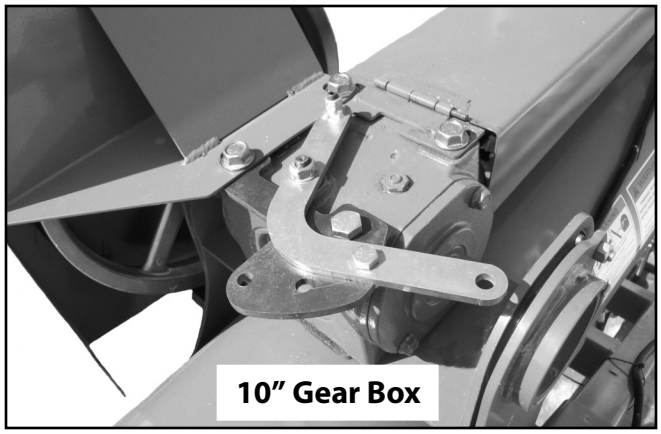


FIG. 4-4. Optional 10" Reversing Gearbox

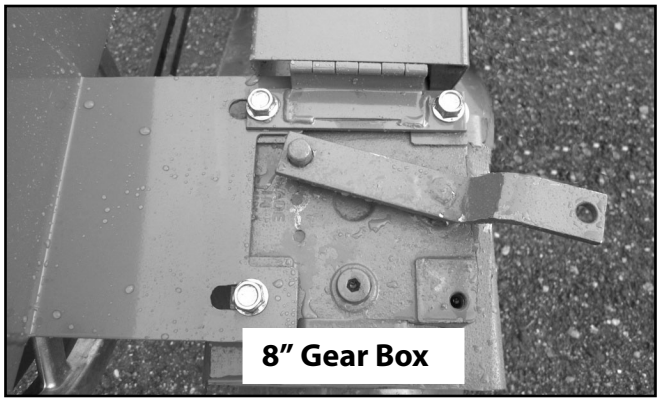


FIG. 4-5. Shift lever - Forward Position

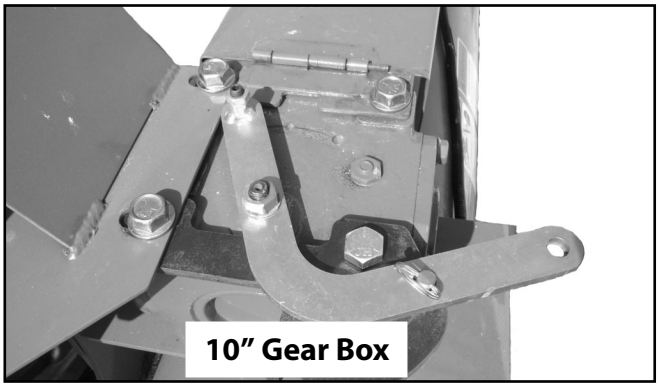


FIG. 4-6. Shift Lever - Forward Position

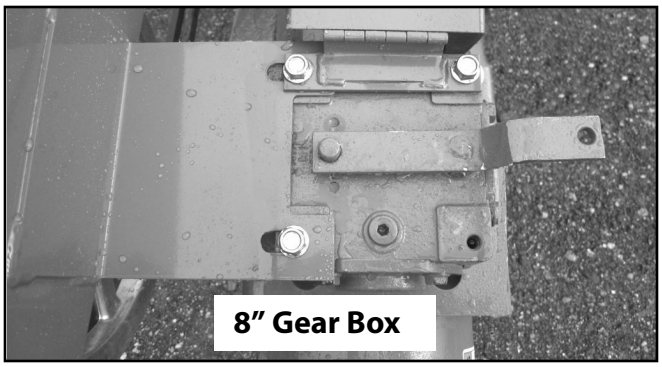


FIG. 4-7. Shift Lever - Neutral Position

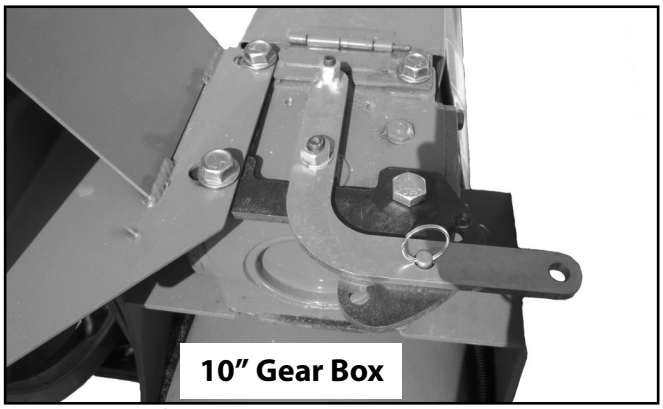


FIG. 4-8. Shift Lever - Neutral Position

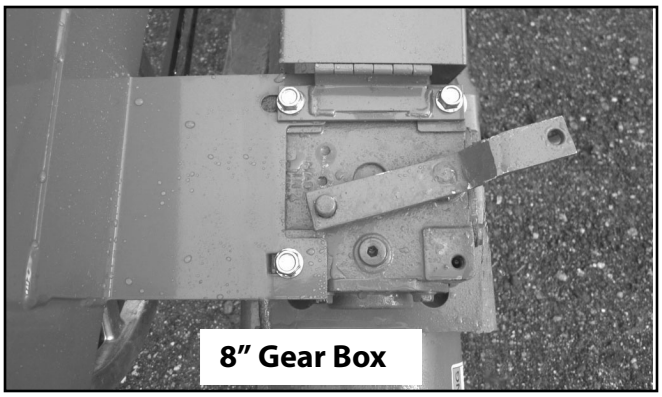


FIG. 4-9. Shift Lever - Reverse Position

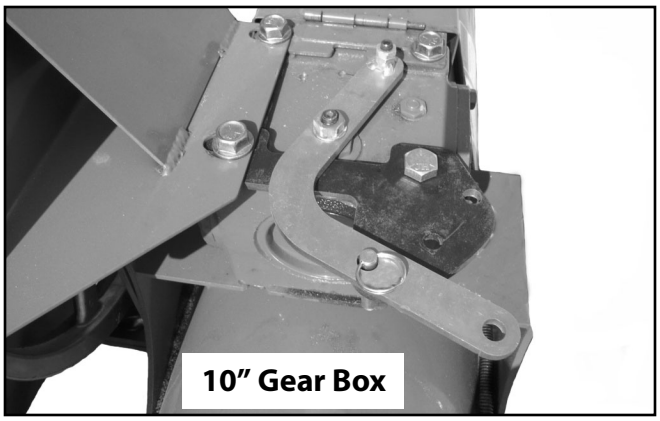


FIG. 4-10. Shift Lever - Reverse Position

4.8 Intake Guard

For your safety, this auger has been equipped with an Intake Guard.

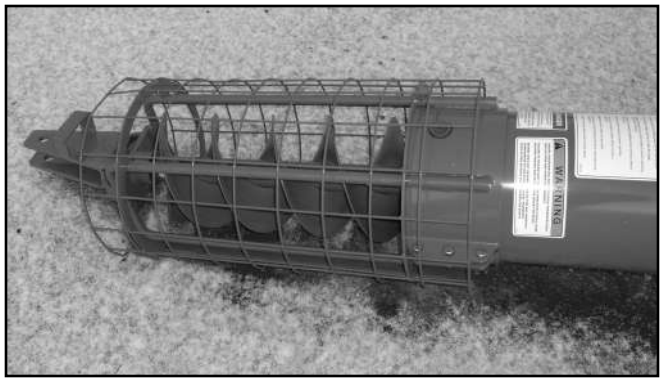


FIG. 4-11. Intake Guard

REMOVAL OF THE INTAKE GUARD IS DONE AT THE USER'S RISK AND MAY RESULT IN SERIOUS INJURY OR DEATH.

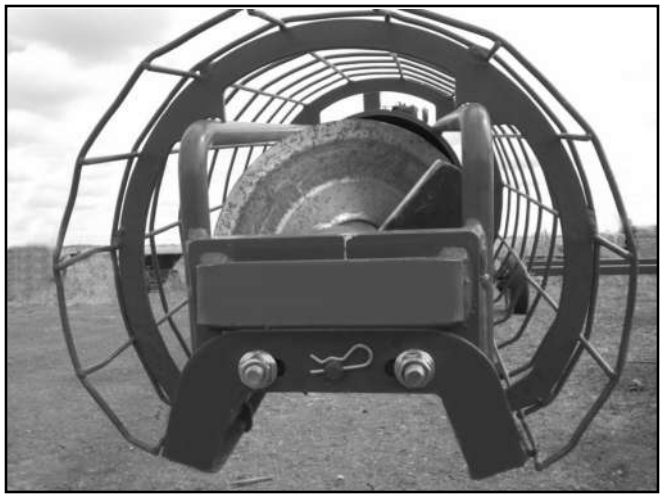


FIG. 4-12. Intake Guard Fasteners

⚠ DANGER

DANGER! TO PREVENT SERIOUS INJURY OR DEATH, KEEP HANDS, FEET AND CLOTHING AWAY FROM AUGER INTAKE.

4.9 Clean Up and Storage

When the operation has been completed, it is recommended that you move the auger to the new work area or storage area.

- Clean the entire area.
- Remove all anchors, supports and wheel chocks.
- Move the auger slowly out of working position with a towing vehicle - **NOT BY HAND**.
- If not already in transport position, lower the auger to the full down position immediately upon clearance of any obstructions.
- Transport the auger to the new work area or storage area. It is recommended that the auger be stored in the fully down position with the intake end anchored to the ground.
- **Never leave the auger resting against a bin or storage building.**

4.10 Transport

Moving the Auger with a Towing Vehicle to or from the Work Area.

- Clear the area of bystanders, especially children.
- Always transport the auger in the fully down position. The lift arm of the undercarriage should be seated against the transport stop with **slight tension on the winch cable** and at least **three complete wraps** of cable around the winch drum.
- Make certain the hitch pin or bolt is securely attached with a retainer and a additional safety chain is secured to the auger and tow vehicle. See Section 2.6.1.
- **DO NOT** transport the auger at speeds in excess of 80 km/h (50 mph). Be sure to comply with all local regulations governing marking, towing and maximum width.
- Be alert to overhead obstructions and electrical wires.

DANGER! Electrocution can occur without direct contract with power lines.

- Never allow persons to stand underneath or ride on the auger when it is being transported.

WeTmrbo F j

WARNING

uTokfkd! S z z z
z 4
4 z z
4 imm z 6

WARNING

uTokfkd! i z z
z z R
6

F8B c i

CAUTION

W 8 n z
z
4" 4
"" z 6

- Y z 5W z imm
l z 6n z lRV
z z 5
0Vi1z 6R z z" z
lRV "z z 6
- l e " z 5r z z
z z z
" z z 6n z z
z z " z 6l z
z z 4 z
z z 6

F8C i

B8 n f z z T
z z z z 6

C8 n z z z z z 6

D8 p z " z z
z 6

E8 k z z z "
z 6

F8 b z z 4 z
z 6 R z " z
z z z 6k z z 6

Uh ghmhoVk YkVRlV SVRkbgYl Rl mab
f Rr URf RYVmaVlVRe6

F8D p f

m z z z
z ″ z z ″
i 5h z l C6B6

F8D8B l e a

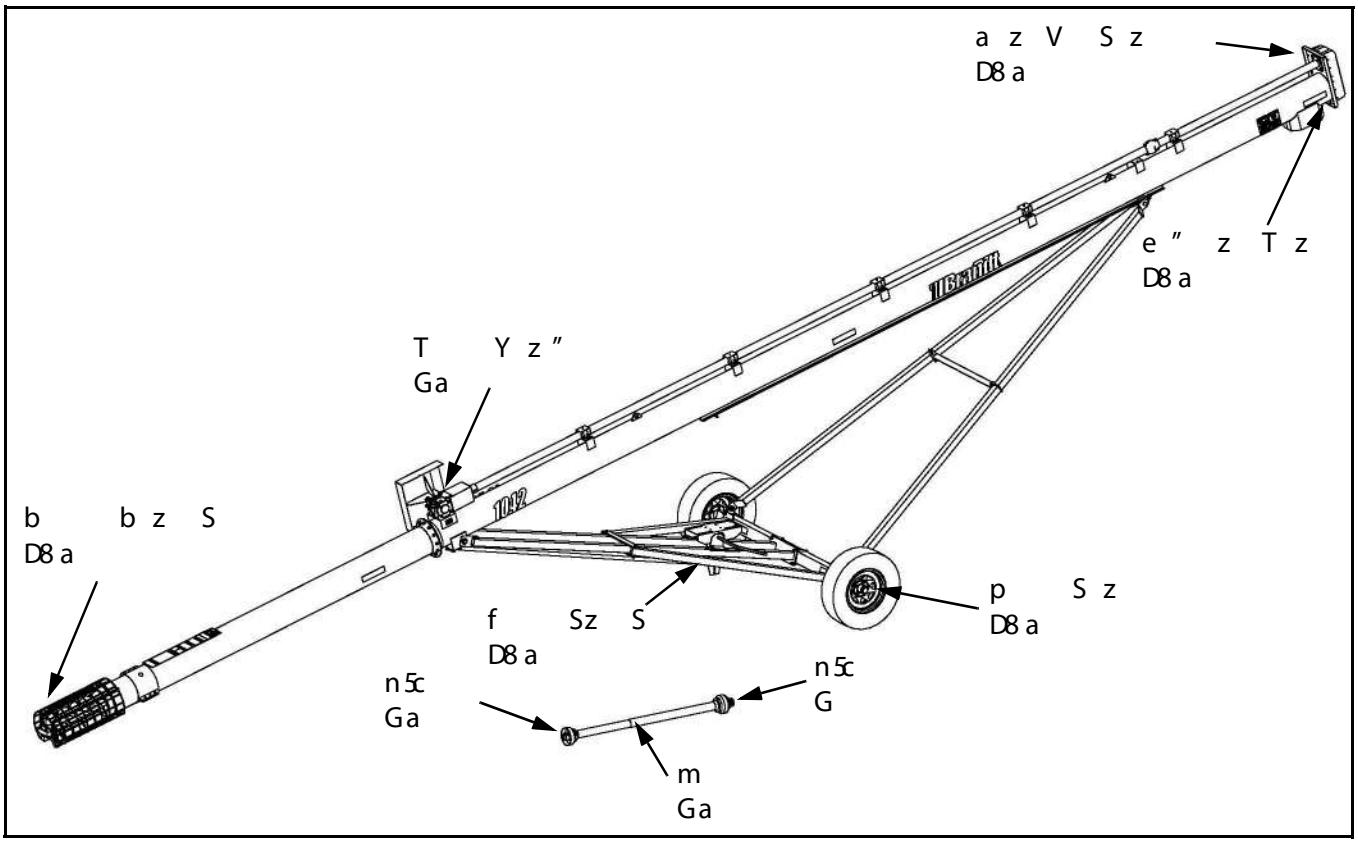
- e ″ z imm 60 1
  5 z
  5 ″
- T ″ 6m
  ″ 997A E5G
  ″6 z z 6m
  ″ 97A
  E5G ″6 z
  z 6
- T z″ z 6b
  z″ z z z 4 ″ z 6
- T ″z
  z 6
- T z″ z 6m
  ″ A
  G z z A97A
  98 z 6k z 6 n
  G8pH8 z 6
- T z ″z
  z ″ z z 6l ″z z
  z z z″ z z 6
- T z ″ z6

F8D8C FAe u

- T z z
  6k l D6E6
- T ″ z
  z 6

F8D8D T

- T z z z z
  z 6
- e ″ z a z V ″z 6
- T ″z 4
  z z 6
- T ″ 6

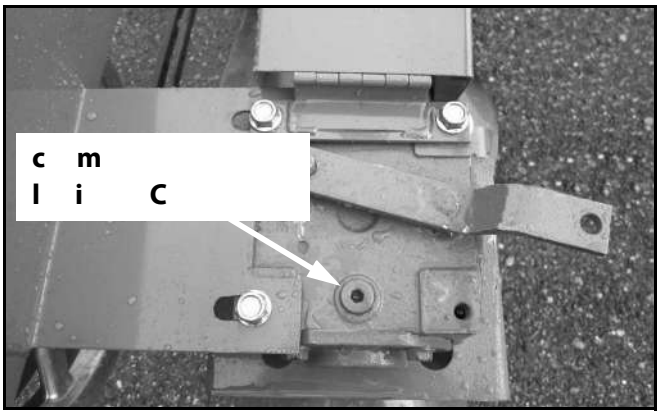


cfd8F7B8 p i

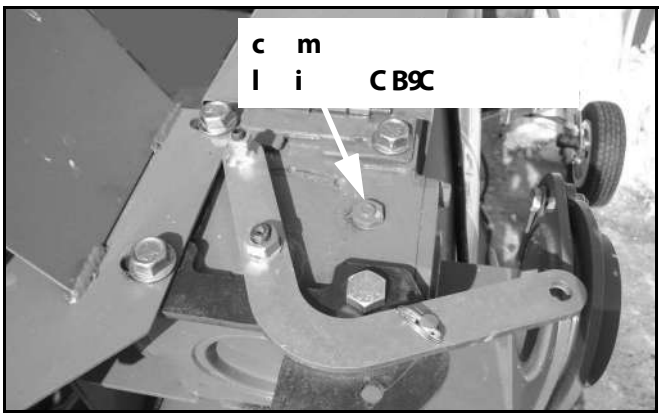
F Œ d l i

m z " 4
z " z z
z z 6

m z " W 6
D5A z W 6D5B6 n G8p H8 z 6



cfd8F7C8 l d l W i



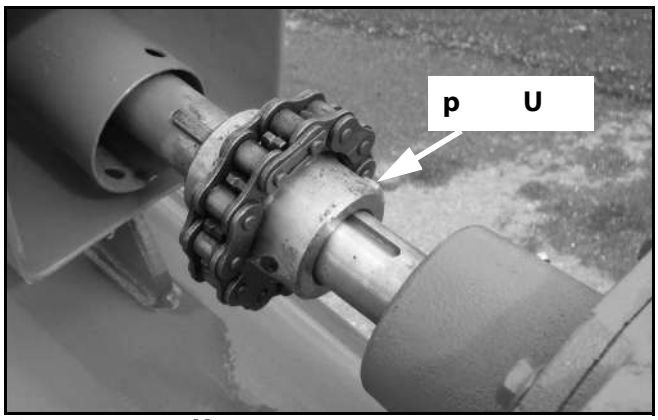
cfd8F7D8 BA d l W i

F8F p m

m z ″ z z ″
6n z
z 6

R G R 5D79E A aU k i 5S z i z
g 6G8ACGEC

R 98 R 5B7G A aU k i 5S z z
6G8ACGEA



cfd8F7E8 p U

F8G a b W T

m z z z 4
6

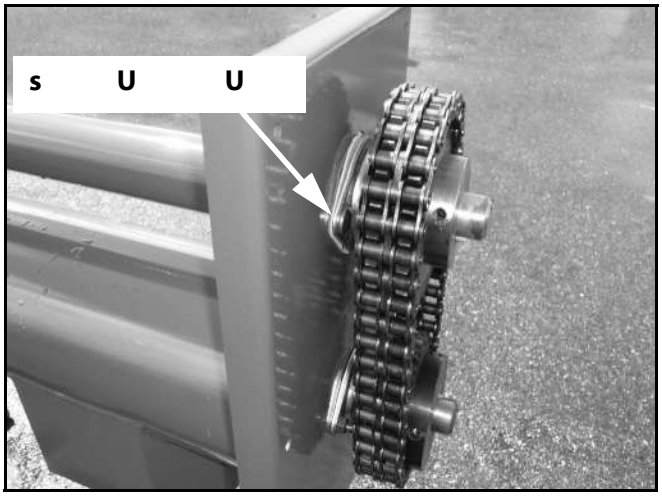
B8 k z z 6

C8 e ″ ″ z
z 6l W 6D6D6

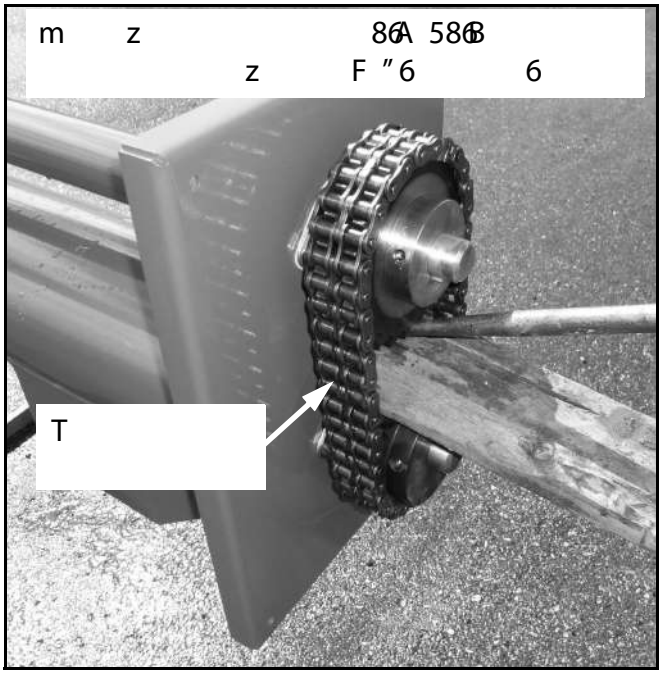
D8 R z
″ z z z ″z z
″ 6l W 6D6E6 **al klr efr reb pmol Whbr u fre T prbbi eTj j bo8** m
z z z z
86A 586B z F ″6
6

E8 m ″ z
″ z 6l W 6D6D6

F8 k 5 z z z 6
V z ″ z
6



cfd8F7F8 s U c



cfd8F7G8 T W r

F8H u e f

F8H8B T e r

m z D" " 4
6

B8 k z "6k
z z 6

C8 m z D8 5" 6m
" z z z
6k z z
z 6 m
z z 6

D8 e z
z " " z 6

E8 m z A8 5" 6m
" z z
6

F8 e z
z z 6
m " z 97E z 6

G8 b z " "
6

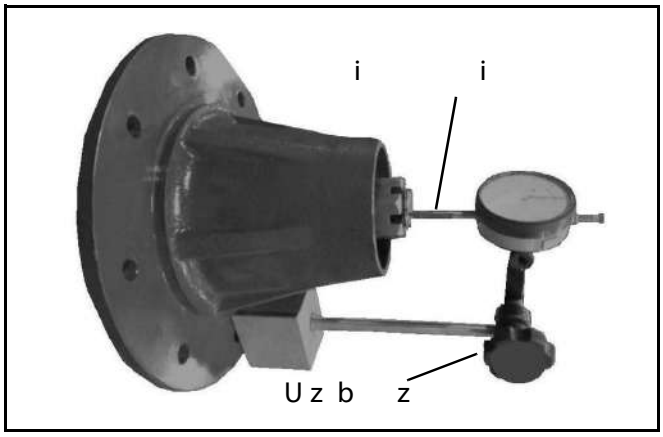
H8 m "z z z 6
b " 4"
4 z z
z z z 6
b " z z
4 z
8688 8688D 4z l
D6F6A6

F8H8C W b m f e

V z " z U z
b z 6

B8 V " z " z
z z 6

C8 R z "z U z b z
z "6l W 6D5F6



cfd8F7H8 W e b m

D8 R U z b z
z z z 6

E8 Y z "z " z B / z
H / 6i z "
z z "z z z z
z 6

F8 V z " z 8688
8688D6b 4 G6

G8 b z z 8688D4
z l D6F6 z
z 6

H8 b z 8688D z
z l D6F64
z
z z 6m 97E z
6

I8 b z z
" z 6

K8 i z z z z 6

F8 a U T

R z
" 6i " "
z z z " "
z 6 m z z
z 4 " z z
z " 6

k R U R " z z
z " 6

F8K p o

n z" z 6l e " z l D6A z
6

mz" T T 5T e 5e " z

	Hours										
	Serviced by, Initials										
	Service Schedule										
	8 Hours or Daily										
L	PTO Universal Joints (if required)										
L	PTO Telescoping Members (if required)										
C	Drive Belt Tension										
C	Lift Cable										
C	Winch Brake										
C	Gear Box Oil Level										
C	Driveshaft Wooden Bearings										
C	Gear Box Flex Coupler										
	50 Hours or Annually										
L	Head End Bearings										
L	Motor Base Bushings										
L	Head End Drive Chain										
C	Wheel Bearings, Repack if Necessary										
C	Intake Oilite Bushing										
C	Head End Drive Chains & Sprockets										
C	Check all fasteners for tighteness										
C	Check Wheel Bolts for proper torque										

I 0 BA r T

CHAPTER 6 Troubleshooting

The Brandt 8" & 10" Transport Augers have been designed to give long and trouble-free use. Minor problems do, however, occur from time to time. In the following section, we have listed many of the problems, causes and solutions to the problems that you may encounter. If you encounter a problem that is difficult to solve, even after reading through this trouble shooting section, please contact your local Brandt dealer. Before you call, please have this manual and the serial number from your Auger at hand.

Symptom	Possible Cause	Solution
Noisy Flight	Foreign object stuck on flight.	Stop auger and remove foreign object.
	Worn head end bearings and/or intake bearing.	Replace head end bearings and/or intake bearing.
	Dented auger tube.	Contact the Brandt dealer about having the dent removed.
	Bent auger flight.	Contact the Brandt dealer about having the flight straightened.
	High spots in the flight.	Check the auger tube for hot spots. Remove the flight from the tube and grind the flight in the appropriate areas.
Shear bolt breaking	Foreign object stuck in flight.	Stop the auger, remove the foreign object and replace the shear bolt with the proper size.
	Head end bearings siezed.	Replace the head end bearings and lubricate.
	Wood driveshaft bearing siezed to driveshaft.	Remove the wood bearing and sand off the paint from under the bearing. Replace the bearing if required.
	Head end chain too loose.	Tighten or replace the chain. Check the sprockets and replace if necessary.
	Chain Coupler Sprockets not assembled correctly.	There must be a small gap between the sprockets and also between the chain plates and the outside of the sprockets. Adjust so there is some flexiblity in the coupler.

Symptom	Possible Cause	Solution
Poor capacity	Auger flight running too slow.	Make sure the drive pulleys are the correct size. Make aure the engine or tractor is running at the proper speed.
	Auger flight running too fast. (Electric or Engine Drive)	Make sure the drive pulleys are the correct size. Make aure the engine or tractor is running at the proper speed.
	Auger flight running too fast. (PTO Drive)	If an adapter shaft is being used on the 1000 rpm PTO shaft, make sure the tractor speed is reduced so the 1000 rpm shaft is running at 540 rpm.
	Auger intake is restricted.	Remove the restriction from the intake. Make sure the product is being dumped directly on the intake flight.
	Auger flight joint is out of time.	Remove the auger flight, remove the flight joining bolt and turn the flight 180 degrees so the lower flight overlaps the upper flight.

6.0 Troubleshooting Guide (continued)

6.0 Troubleshooting Guide (continued)

Symptom	Possible Cause	Solution
Drive belts bouncing.	Belts are too loose.	Retighten the belts
	The drive and gearbox pulleys are not aligned.	Align the drive and gearbox pulleys.
	Bent pulley.	Replace pulley.
	Pulley out-of-round.	Replace pulley.
	The gearbox is out of align with the auger tube.	Realign the gearbox so it is square to the auger tube.
	Gearbox bearings are worn out.	Replace the bearings and seals in the gearbox.
	Driveshaft bearings are worn out.	Replace the driveshaft bearings.
	Bent driveshaft.	Replace the driveshaft.
	Tractor is out-of-square with the auger.	Realign the tractor so it is inline with the PTO base and square with the auger.
	The u-joints in the PTO shaft are worn out.	Replace the u-joints.
	The engine is vibrating excessively.	Check the engine mount bolts. Check all the motor base mounting bolts.

CHAPTER 7 Additional Information

7.1 General Torque Specifications

Use the following guidelines when tightening bolts.

- Tighten all bolts to the torques specified in charts unless otherwise noted throughout this manual.
- Check the tightness of the bolts periodically, using the bolt-torque chart as a guide.
- Replace hardware with the same strength bolt.
- Torque figures are valid for non-greased or non-oiled threads and heads unless otherwise specified. Do not grease or oil bolts or cap screws unless specified in this manual. When using locking elements, increase the torque values by 5%.

7.1.1 Unified Inch Bolt and Screw Torque Values

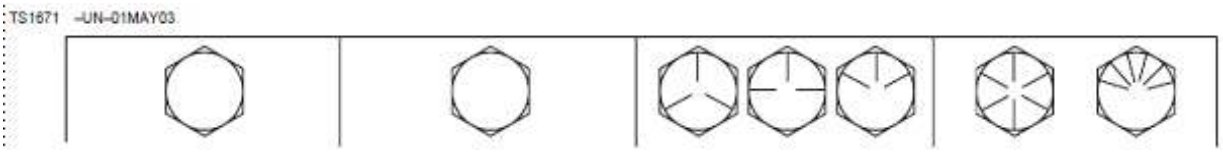


TABLE 7-1. Unified Inch Bolt and Screw Torque Values

Bolt or Screw Size	SAE Grade 1				SAE Grade 2 [a]				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]	
	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in
1/4	3.7	33	4.7	42	6	53	7.5	66	9.5	84	12	106	13.5	120	17	150
													N.m	**lb-ft**	**N.m**	**lb-ft**
5/16	7.7	68	9.8	86	12	106	15.5	137	19.5	172	25	221	28	20.5	35	26
									N.m	**lb-ft**	**N.m**	**lb-ft**				
3/8	13.5	120	17.5	155	22	194	27	240	35	26	44	32.5	49	36	63	46
			N.m	**lb-ft**	**N.m**	**lb-ft**	**N.m**	**lb-ft**								
7/16	22	194	28	20.5	35	26	44	32.5	56	41	70	52	80	59	100	74
	N.m	**lb-ft**														
1/2	34	25	42	31	53	39	67	49	85	63	110	80	120	88	155	115
9/16	48	35.5	60	45	76	56	95	70	125	92	155	115	175	130	220	165
5/8	67	49	85	63	105	77	135	100	170	125	215	160	240	175	305	225
3/4	120	88	150	110	190	140	240	175	300	220	380	280	425	315	540	400
7/8	190	140	240	175	190	140	240	175	490	360	615	455	690	510	870	640
1	285	210	360	265	285	210	360	265	730	540	920	680	1030	760	1300	960
1-1/8	400	300	510	375	400	300	510	375	910	670	1150	850	1450	1075	1850	1350
1-1/4	570	420	725	535	570	420	725	535	1280	945	1630	1200	2050	1500	2600	1920
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2140	1580	2700	2000	3400	2500
1-1/2	990	730	1250	930	990	730	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For plastic insert or crimped steel type lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application. Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Replace fasteners with the same or higher grade. If higher grade fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

[a] Grade 2 applies for hex cap screws (not hex bolts) up to 6 in. (152mm) long. Grade 1 applies for hex cap screws over 6 in. (152mm) long and for all other types of bolts and screws of any length.

[b] Lubricated means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or 7/8 in. and larger fasteners with JDM F13C zinc flake coating.

[c] Dry means plain or zinc plated without any lubrication, or 1/4 to 3/4 in. fasteners with JDM F13B zinc flake coating.

7.1.2 Metric Bolt and Screw Torque Values

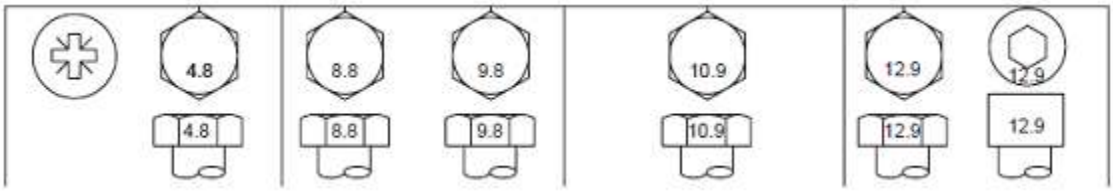


TABLE 7-2. Metric Bolt and Screw Torque Values

Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]	
	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in	N.m	lb-in
M6	4.7	42	6	53	8.9	79	11.3	100	13	115	16.5	146	15.5	137	19.5	172
									N.m	lb-ft	N.m	lb-ft	N.m	lb-ft	N.m	lb-ft
M8	11.5	102	14.5	128	22	194	27.5	243	32	23.5	40	29.5	37	27.5	47	35
			N.m	lb-ft	N.m	lb-ft	N.m	lb-ft								
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
	N.m	lb-ft														
M12	40	29.5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	480	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instructions for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown int he chart, unless different instructions are given for the specific application.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class. If higher property class fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

[b] Lubricated means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or M20 and larger fasteners with JDM F13C zinc flake coating.

[c] Dry means plain or zinc plated without any lubrication, or M6 to M18 fasteners with JDM F13B zinc flake coating.

7.1.3 Suggested Torque for Hydraulic Fittings

TABLE 7-3. Suggested Torque for Hydraulic Fittings

Fitting Size	Dash Size	Torque					
		37° JIC		ORB		ORF	
		ft-lb	N-m	ft-lb	N-m	ft-lb	N-m
1/4	04	12	15	14	20	12	15
3/8	06	20	25	23	30	25	35
1/2	08	40	55	40	55	55	75
5/8	10	60	80	45	60	75	100
3/4	12	80	110	75	100	130	175
7/8	14	-	-	85	115	170	230
1	16	110	150	120	165	210	285
1-1/4	20	130	175	155	210	250	340
1-1/2	24	165	225	170	230	320	435

7.1.4 Suggested Torque for Tapered Pipe Thread Hydraulic Fittings

TABLE 7-4. Tapered Pipe Thread Torque

Suggested Wrenching Torque for Tapered Pipe Thread Fittings						
Tapered Pipe Thread with Sealant*				Tapered Pipe Thread without Sealant		
Thread Size	N-m	lb-ft		Thread Size	N-m	lb-ft
1/16-27 UNF	15	10		1/16-27 UNF	20	15
1/8-27 UNF	20	15		1/8-27 UNF	25	20
1/4-18 UNF	25	20		1/4-18 UNF	35	25
3/8-18 UNF	35	25		3/8-18 UNF	45	35
1/2-14 UNF	45	35		12-14 UNF	60	45
3/4-14 UNF	60	45		3/4-14 UNF	75	55
1-11 1/2 UN	75	55		1-11 1/2 UN	90	65
1-1/4-11 1/2 UN	95	70		1-1/4-11 1/2 UN	110	80
1-1/2-11 1/2 UN	110	80		1-1/2-11 1/2 UN	130	95
2- 11 1/2 UN	130	95		2- 11 1/2 UN	160	120
*SUGGESTED WRENCHING TORQUE FOR TAPERED PIPE THREAD chart meets FUNK Engineering Procedures Manual Torque Specifications QS04.01.4 (YZS-101)						

7.1.5 Cable Clamps

TABLE 7-5. Cable Clamp Torque Values

Cable Clamp Size	Min. Number of Clamps	Amount of Cable to turn back in inches	Torque in lb-ft
3/16"	2	3 3/4"	7.5
1/4"	2	4 3/4"	15
5/16"	2	5 1/4"	30
3/8"	2	6 1/2"	45
1/2"	3	11 1/2"	45
5/8"	3	12"	90

7.2 SAE-to-Metric Conversions

This manual provides values and measurements in units according to the standards of the Society of Automotive Engineers (SAE). Table 7-6 provides the conversion factor for SAE units to SI units (metric system).

TABLE 7-6. SAE-to-Metric Conversion

SAE Unit	Conversion Factor	SI Units (Metric)
ft/min	x 0.3048	Metres/min (m/min)
ft/s	x 0.3048	Metres/s (m/s)
US gallon	x 3.7854	Litres (L)
US gal/min (GPM)	x 3.7854	Litres/min (L/min)
hp	x 0.7457	Kilowatts (kW)
in	x 2.54	Centimetres (cm)
in	x 25.4	Millimetres (mm)
in^3	x 16.3871	Cubic centimetres (cm^3 or cc)
lb	x 0.4535	Kilogram (kg)
lbf	x 4.4482	Newtons (N)
lbf.ft *or* ft-lb	x 1.3558	Newton metres (N.m)
lbf.in *or* in-lb	x 0.1129	Newton metres (N.m)
mph	x 1.6063	Kilometres/hour (km/h)
oz	x 29.5735	Millilitres (ml)
psi	x 0.06894	Bar
psi	x 6.8948	Kilopascals (kPa)
psi	x 0.00689	Megapascals (MPa)

7.3 Acronyms and Abbreviations

TABLE 7-7. Acronyms and Abbreviations

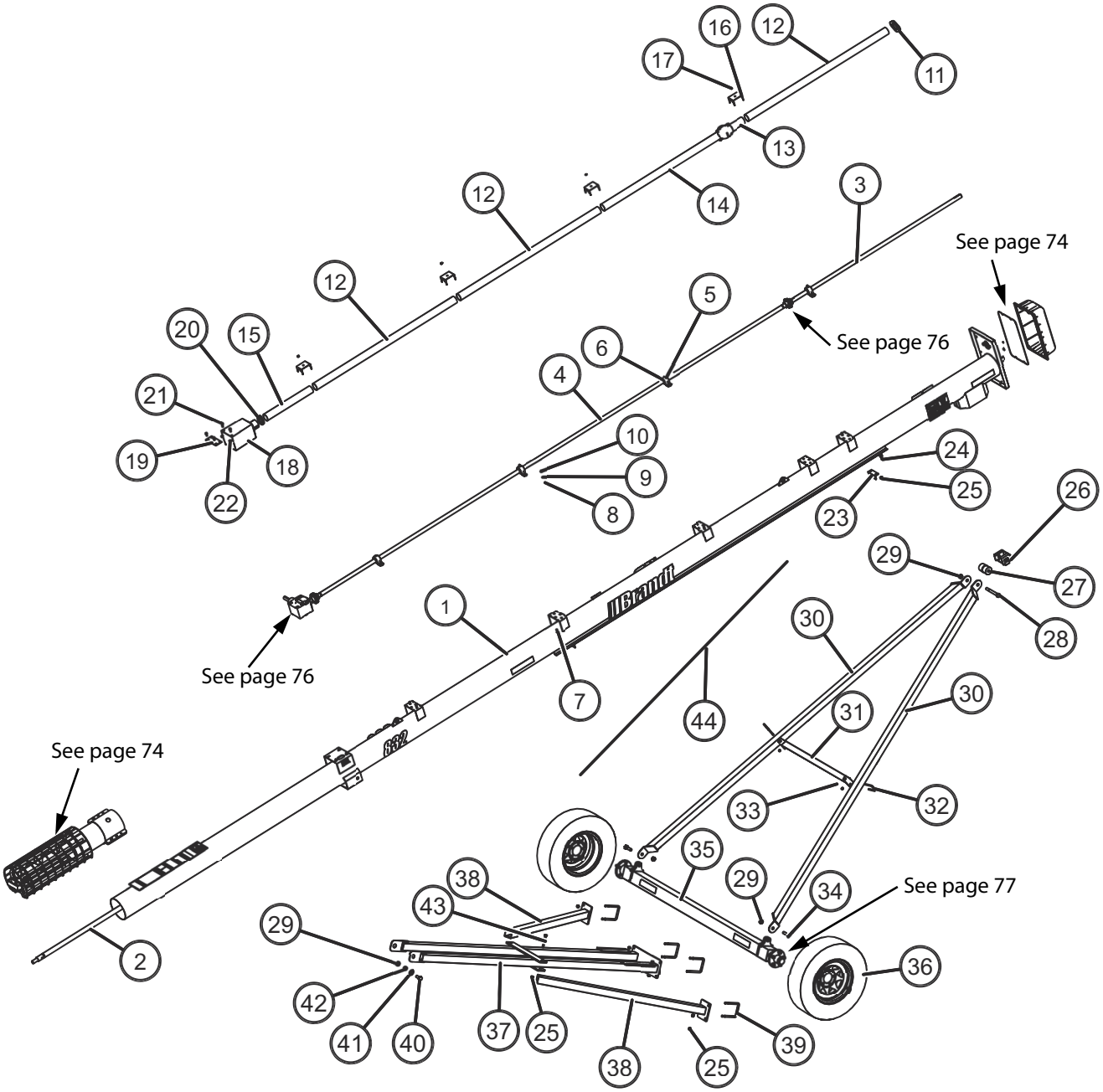
Term / Symbol	Definition
‘	Foot
“	Inch
A	Ampere
API	American Petroleum Institute
ASABE	American Society of Agricultural and Biological Engineers
ASTM	American Society of Testing and Materials
F	Fahrenheit
ft	Foot
ft/min	Feet per minute
ft/s	Feet per second
GPM	U.S. gallons per minute
hp	Horsepower
HPU	Hydraulic power unit
Hz	Hertz
in^3	Cubic inches
ID	Inside diameter
lb	Pound
lbf	Pounds force
lbf.ft *or* ft-lb	Pound feet *or* foot pounds
lbf.in *or* in-lb	Pound inches *or* inch pounds
mph	Miles per hour
N/A	Not applicable
OD	Outside diameter
OEM	Original Equipment Manufacturer
oz	Ounce
PH	Phase
psi	Pounds per square inch
RPM	Revolutions per minute
SAE	Society of Automotive Engineers
VAC	Volts, alternating current
VDC	Volts, direct current

CHAPTER 8

Parts List

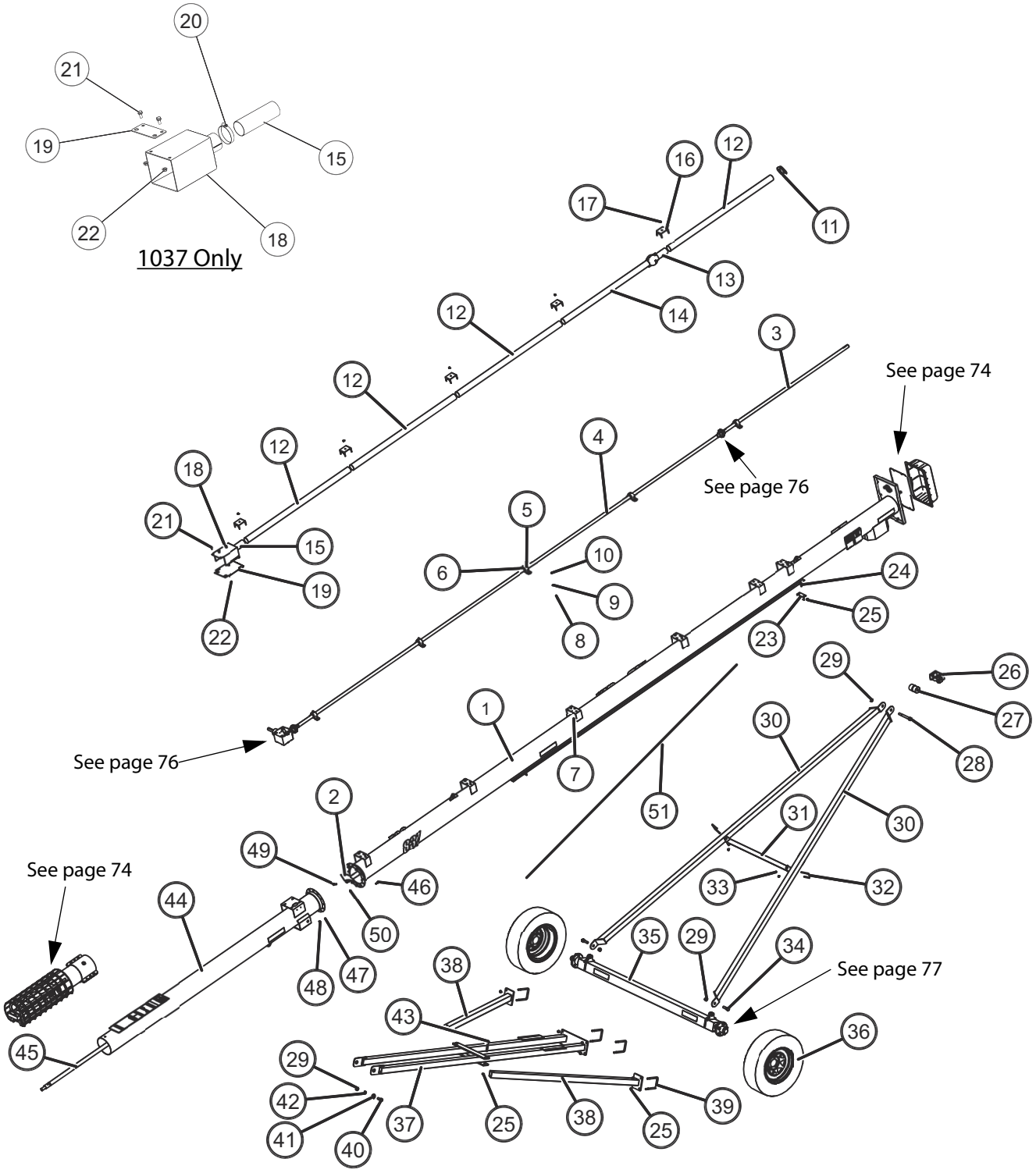
8.1 Drawing List

Common Assembly - 8" & 10" x 32' Auger



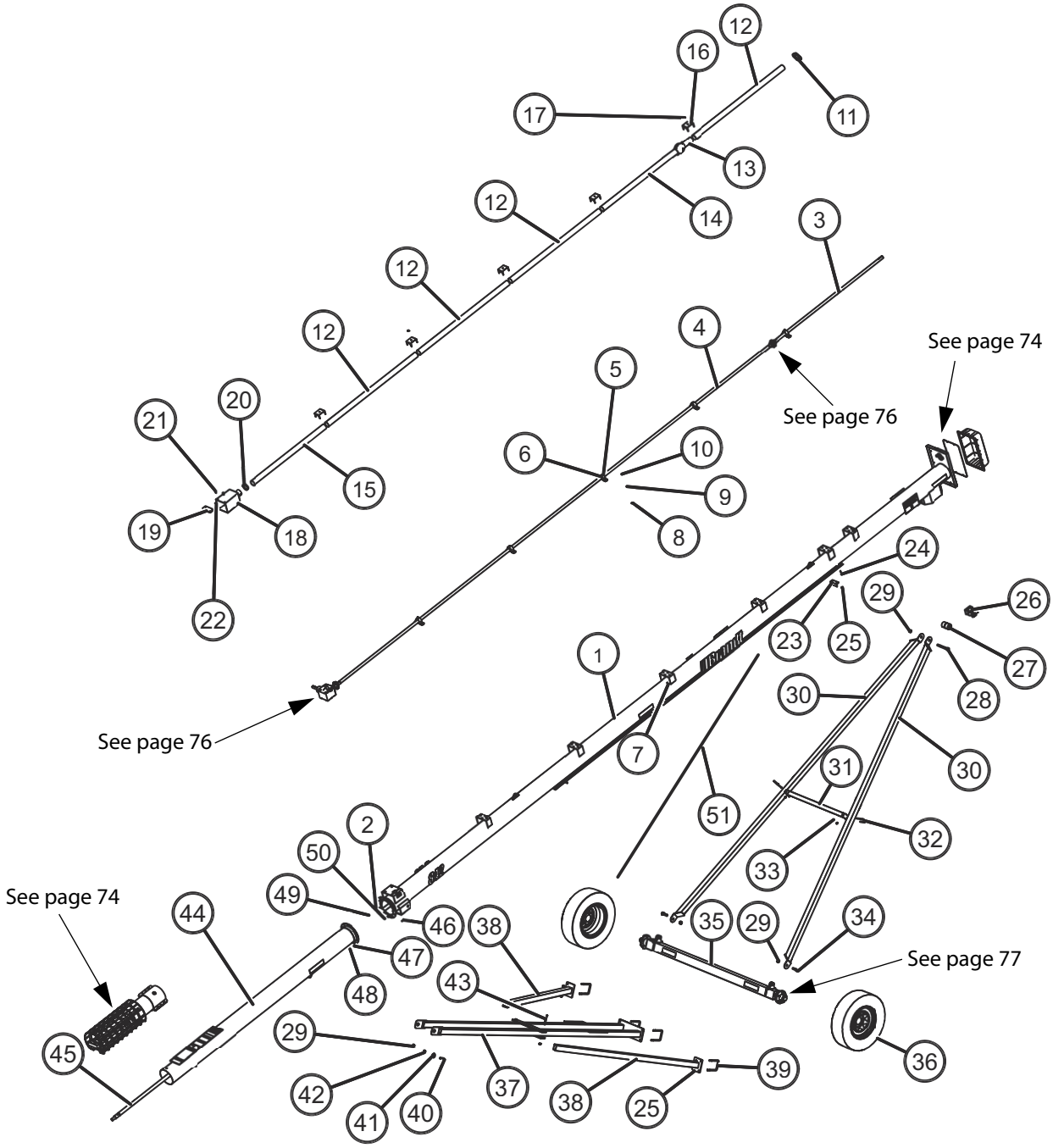
Ref #	Part No.	Description	Qty
1	C816883A	TUBE WELDMENT - 832	1
	D316458A	TUBE WELDMENT - 1032	1
2	C816995	MAIN FLIGHT WELDMENT - 832	1
	D316459	MAIN FLIGHT WELDMENT - 1032	1
3	D316441	UPPER DRIVESHAFT	1
4	C816992	LOWER DRIVESHAFT WELDMENT - 832	1
	D316460	LOWER DRIVESHAFT WELDMENT - 1032	1
5	B887477	DRIVESHAFT BEARING HOUSING	4
6	B017045	1 1/4" WOOD BEARING INSERT	4
7	8000237	3/8" x 1" BOLT - GR.5	8
8	8001100	3/8" FLATWASHER	8
9	8001107	3/8" LOCKWASHER	8
10	8000755	3/8" HEX NUT	8
11	C816869	8" DRIVELINE ADJUSTMENT PLATE	1
	D316421	10" DRIVELINE ADJUSTMENT PLATE	1
12	D316418	COMMON DRIVESHAFT GUARD	3
13	D316433	SHORT DRIVESHAFT GUARD	1
14	D316434	LONG DRIVESHAFT GUARD	1
15	D316474	DRIVESHAFT GUARD - 19"	1
16	D311019	DRIVESHAFT GUARD CLAMP	4
17	8000056	5/16" LOCK NUT	4
18	B027015	PLASTIC COUPLER COVER	1
19	D312110	COUPLER COVER MOUNT	1
20	B024215	2 1/2" HOSE CLAMP	1
21	8023316	3/8" x 3/4" SERRATED FLANGE BOLT	2
22	8000763	3/8" FLANGE LOCK NUT	2
23	D316413	TRANSPORT STOP	1
24	8023370	1/2" x 1 1/4" BOLT	2
25	8015210	1/2" LOCK NUT	12
26	C816887	4" TRACK SLIDE	1
27	C816886	4" SLIDE ROLLER	1
28	8000572	3/4" x 6 1/2" BOLT - GR.5	1
29	8023319	3/4' LOCK NUT	5
30	D316404	32' A-FRAME ARM	2
31	C816909	A-FRAME CROSS BRACE	1
32	B0020168	3/8" x 2 1/2" U-BOLT	2
33	8023319	3/8" LOCK NUT	4
34	8000539	3/4" x 2 1/2" BOLT - GR.5	2
35	C816126A	4" AXLE ASSEMBLY	1
36	B011209	15" TIRE & RIM	2
37	D316400	32' AXLE FRAME	1
38	C816129	AXLE FRAME SUPPORT	2
39	B002018	1/2" x 4" U-BOLT	4
40	8023514	3/4" x 2" BOLT - GR.5	2
41	8001135	3/4" FLATWASHER	2
42	D316440	UNDERCARRIAGE BUSHING	2
43	8000422	1/2" x 4" BOLT - GR.5	2
44	B191515	WINCH CABLE	1

Common Assembly - 8" and 10" x 37' Auger



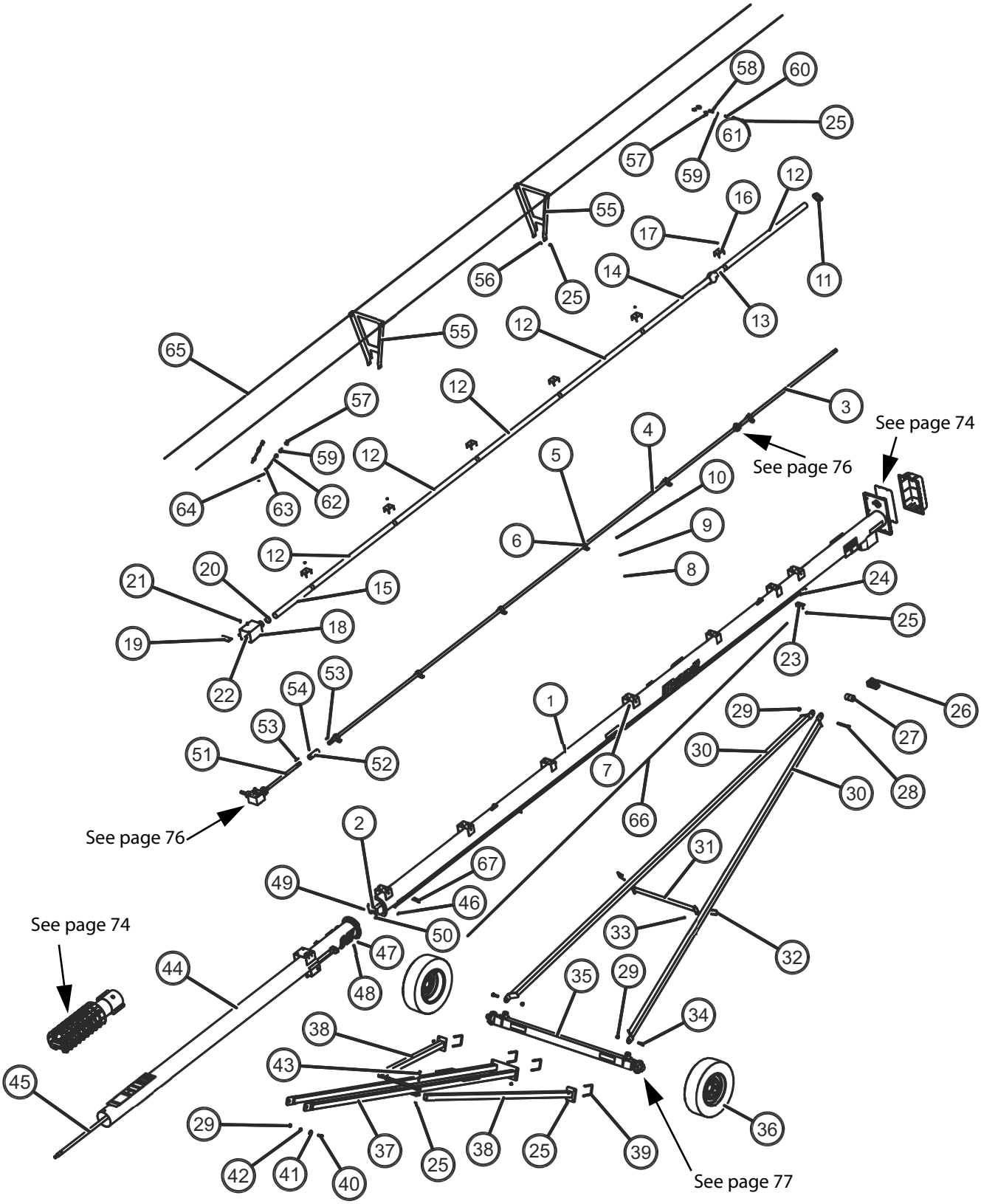
Ref	Part No.	Description	Qty	Ref	Part No.	Description	Qty
1	C816885A	UPPER TUBE WELD - 837	1	33	8023319	3/8" LOCK NUT	4
	D316463A	UPPER TUBE WELD - 1037	1	34	8000539	3/4" x 2 1/2" BOLT - GR.5	2
2	C816903	UPPER TUBE FLIGHT - 837	1	35	C816126A	4" AXLE ASSEMBLY	1
	D316465	UPPER TUBE FLIGHT - 1037	1	36	B011209	15" TIRE & RIM	2
3	D316441	UPPER DRIVESHAFT	1	37	D316401	37' AXLE FRAME	1
4	C816880	LOWER DRIVESHAFT WELD - 837	1	38	C816128	AXLE FRAME SUPPORT	2
	D316466	LOWER DRIVESHAFT WELD - 1037	1	39	B002018	1/2" x 4" U-BOLT	4
5	B887477	DRIVESHAFT BEARING HOUSING	5	40	8023514	3/4" x 2" BOLT - GR.5	2
6	B017045	1 1/4" WOOD BEARING INSERT	5	41	8001135	3/4" FLATWASHER	2
7	8000237	3/8" x 1" BOLT - GR.5	10	42	D316440	UNDERCARRIAGE BUSHING	2
8	8001100	3/8" FLATWASHER	10	43	8000422	1/2" x 4" BOLT - GR.5	2
9	8001107	3/8" LOCKWASHER	10	44	C816993A	LOWER TUBE WELD - 837	1
10	8000755	3/8" HEX NUT	10		D316464A	LOWER TUBE WELD - 1037	1
11	C816869	8" DRIVELINE ADJUSTMENT PLATE	1	45	C816876	LOWER FLIGHT WELD - 837	1
	D316421	10" DRIVELINE ADJUSTMENT PLATE	1		D316416	LOWER FLIGHT WELD - 1037	1
12	D316418	COMMON DRIVESHAFT GUARD	4	46	8000237	3/8" x 1" BOLT - GR.5 (837)	12
13	D316433	SHORT DRIVESHAFT GUARD	1		8023370	1/2" x 1 1/4" BOLT - GR. 5 (1037)	12
14	D316434	LONG DRIVESHAFT GUARD	1	47	8001107	3/8" LOCKWASHER (837)	12
15	D316433	DRIVESHAFT GUARD - 6 1/4" - 837	1		8001122	1/2" LOCKWASHER (1037)	12
	D316472	DRIVESHAFT GUARD - 7 1/2" - 1037	1	48	8000755	3/8" HEX NUT (837)	12
16	D311019	DRIVESHAFT GUARD CLAMP	5		8000775	1/2" HEX NUT (1037)	12
17	8000056	5/16" LOCK NUT	5	49	8000261	3/8" x 2" BOLT - GR.5 (837)	2
18	C816160	COUPLER COVER - 837	1		8000409	1/2" x 3" BOLT - GR.5 (1037)	2
	B027015	PLASTIC COUPLER COVER - 1037	1	50	8023319	3/8" LOCK NUT (837)	2
19	C816159	COUPLER COVER BOTTOM - 837	1		8015210	1/2" LOCK NUT (1037)	2
	D312110	COUPLER COVER MOUNT - 1037	1	51	B897778	WINCH CABLE	1
20	B024215	2 1/2" HOSE CLAMP - 1037	1				
21	8023316	3/8" x 3/4" SF BOLT	2				
22	8000763	3/8" LOCKING FLANGE NUT	2				
23	D316413	TRANSPORT STOP	1				
24	8023370	1/2" x 1 1/4" BOLT - GR.5	2				
25	8015210	1/2" LOCK NUT	12				
26	C816887	4" TRACK SLIDE	1				
27	C816886	4" SLIDE ROLLER	1				
28	8000572	3/4" x 6 1/2" BOLT - GR.5	1				
29	8023319	3/4" LOCK NUT	5				
30	D316405	37' A-FRAME ARM	2				
31	C816909	A-FRAME CROSS BRACE	1				
32	B0020168	3/8" x 2 1/2" U-BOLT	2				

Common Assembly - 8" and 10" x 42' Auger



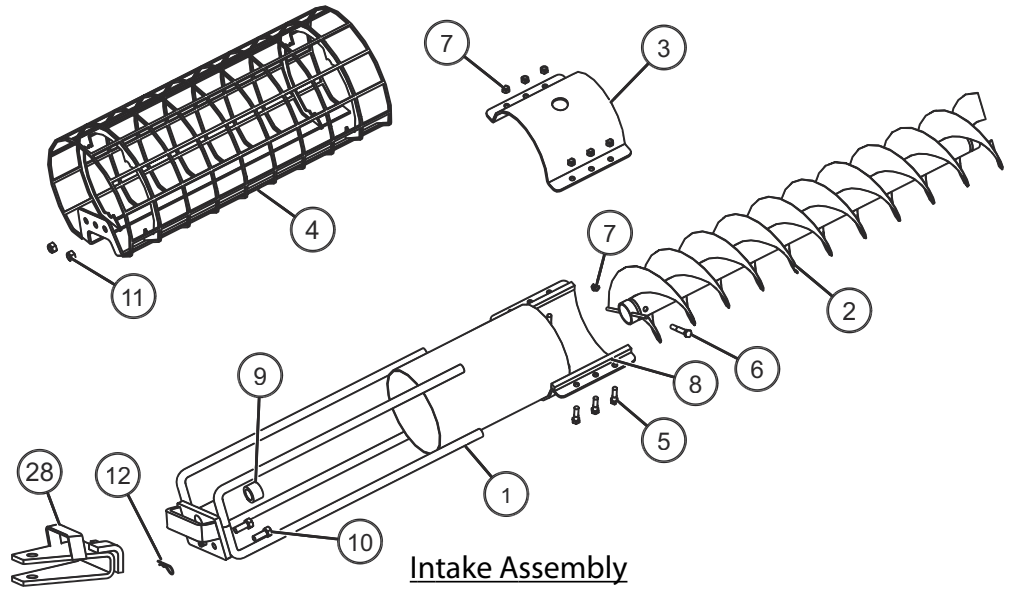
Ref	Part No.	Description	Qty	Ref	Part No.	Description	Qty
1	C816867A	UPPER TUBE WELD - 842	1	33	8023319	3/8" LOCK NUT	4
	D316408A	UPPER TUBE WELD - 1042	1	34	8000539	3/4" x 2 1/2" BOLT - GR.5	2
2	C816877	UPPER TUBE FLIGHT - 842	1	35	C816126A	4" AXLE ASSEMBLY	1
	D316414	UPPER TUBE FLIGHT - 1042	1	36	B011209	15" TIRE & RIM	2
3	D316441	UPPER DRIVESHAFT	1	37	D316402	42' AXLE FRAME	1
4	C816872	LOWER DRIVESHAFT WELD - 842	1	38	C816140	42' AXLE FRAME SUPPORT	2
	D316419	LOWER DRIVESHAFT WELD - 1042	1	39	B002018	1/2" x 4" U-BOLT	4
5	B887477	DRIVESHAFT BEARING HOUSING	5	40	8023514	3/4" x 2" BOLT - GR.5	2
6	B017045	1 1/4" WOOD BEARING INSERT	5	41	8001135	3/4" FLATWASHER	2
7	8000237	3/8" x 1" BOLT - GR.5	10	42	D316440	UNDERCARRIAGE BUSHING	2
8	8001100	3/8" FLATWASHER	10	43	8000422	1/2" x 4" BOLT - GR.5	2
9	8001107	3/8" LOCKWASHER	10	44	C816868A	LOWER TUBE WELD - 842	1
10	8000755	3/8" HEX NUT	10		D316409A	LOWER TUBE WELD - 1042	1
11	C816869	8" DRIVELINE ADJUSTMENT PLATE	1	45	C816876	LOWER FLIGHT WELD - 842	1
	D316421	10" DRIVELINE ADJUSTMENT PLATE	1		D316416	LOWER FLIGHT WELD - 1042	1
12	D316418	COMMON DRIVESHAFT GUARD	4	46	8000237	3/8" x 1" BOLT - GR.5 (842)	12
13	D316433	SHORT DRIVESHAFT GUARD	1		8023370	1/2" x 1 1/4" BOLT - GR. 5 (1042)	12
14	D316434	LONG DRIVESHAFT GUARD	1	47	8001107	3/8" LOCKWASHER (842)	12
15	C816870	DRIVESHAFT GUARD - 47 1/8" - 842	1		8001122	1/2" LOCKWASHER (1042)	12
	C816870	DRIVESHAFT GUARD - 47 1/8" - 1042	1	48	8000755	3/8" HEX NUT (842)	12
16	D311019	DRIVESHAFT GUARD CLAMP	5		8000775	1/2" HEX NUT (1042)	12
17	8000056	5/16" LOCK NUT	5	49	8000261	3/8" x 2" BOLT - GR.5 (842)	2
18	B027015	PLASTIC COUPLER COVER	1		8000409	1/2" x 3" BOLT - GR.5 (1042)	2
19	D312110	COUPLER COVER MOUNT	1	50	8023319	3/8" LOCK NUT (842)	2
20	B024215	2 1/2" HOSE CLAMP	1		8015210	1/2" LOCK NUT (1042)	2
21	8023316	3/8" x 3/4" SF BOLT	2	51	B897778	WINCH CABLE	1
22	8000763	3/8" LOCKING FLANGE NUT	2				
23	D316413	TRANSPORT STOP	1				
24	8023370	1/2" x 1 1/4" BOLT - GR.5	2				
25	8015210	1/2" LOCK NUT	12				
26	C816887	4" TRACK SLIDE	1				
27	C816886	4" SLIDE ROLLER	1				
28	8000572	3/4" x 6 1/2" BOLT - GR.5	1				
29	8023319	3/4" LOCK NUT	5				
30	D316406	42' A-FRAME ARM	2				
31	C816909	A-FRAME CROSS BRACE	1				
32	B0020168	3/8" x 2 1/2" U-BOLT	2				

Common Assembly - 847, 852, 862 and 1052

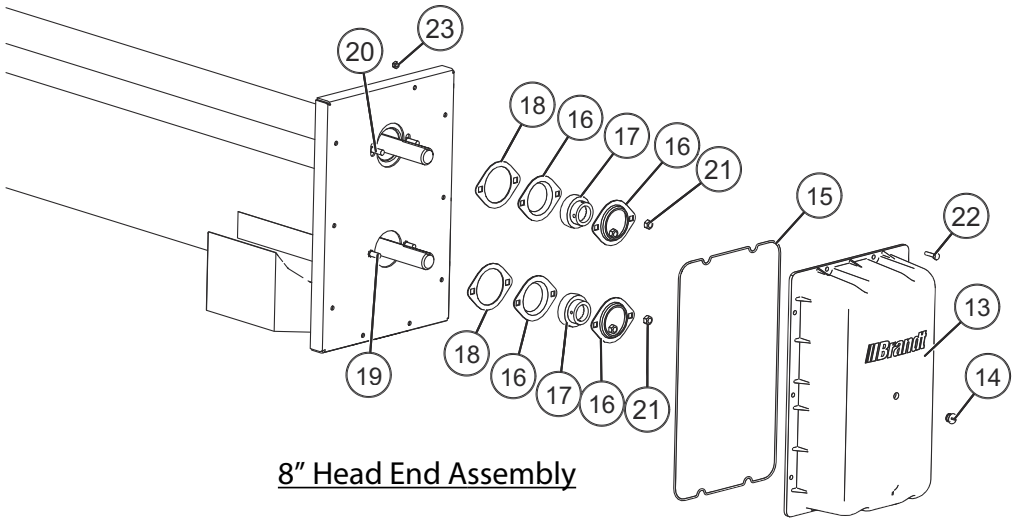


Ref	Part No.	Description	Qty	Ref	Part No.	Description	Qty
1	C816897A	UPPER TUBE WELD - 847, 852 & 862	1	38	C816857RA	62' AXLE FRAME SUPPORT - RIGHT	1
	D316422A	UPPER TUBE WELD - 1052	1	39	B002018	1/2" x 4" U-BOLT	4
2	C816877	UPPER TUBE FLIGHT - 847, 852 & 862	1	40	8023514	3/4" x 2" BOLT - GR.5	2
	D316414	UPPER TUBE FLIGHT - 1052	1	41	8001135	3/4" FLATWASHER	2
3	D316441	UPPER DRIVESHAFT	1	42	D316440	UNDERCARRIAGE BUSHING	2
4	C816923	COMMON UPPER DRIVESHAFT -8"	1	43	8000422	1/2" x 4" BOLT - GR.5	2
	C816923	COMMON UPPER DRIVESHAFT -10"	1	44	C816890A	LOWER TUBE WELD - 847	1
5	B887477	DRIVESHAFT BEARING HOUSING	6		C816894A	LOWER TUBE WELD - 852	1
6	B017045	1 1/4" WOOD BEARING INSERT	6		C816898A	LOWER TUBE WELD - 862	1
7	8000237	3/8" x 1" BOLT - GR.5	12		D316424A	LOWER TUBE WELD - 1052	1
8	8001100	3/8" FLATWASHER	12	45	C816900	LOWER FLIGHT WELD - 847	1
9	8001107	3/8" LOCKWASHER	12		C816901	LOWER FLIGHT WELD - 852	1
10	8000755	3/8" HEX NUT	12		C816902	LOWER FLIGHT WELD - 862	1
11	C816869	8" DRIVELINE ADJUSTMENT PLATE	1		D316426	LOWER FLIGHT WELD - 1052	1
	D316421	10" DRIVELINE ADJUSTMENT PLATE	1	46	8000237	3/8" x 1" BOLT - GR.5 (8")	12
12	D316418	COMMON DRIVESHAFT GUARD	5		8023370	1/2" x 1 1/4" BOLT - GR. 5 (1052)	12
13	D316433	SHORT DRIVESHAFT GUARD	1	47	8001107	3/8" LOCKWASHER (8")	12
14	D316434	LONG DRIVESHAFT GUARD	1		8001122	1/2" LOCKWASHER (1052)	12
15	D316475	DRIVESHAFT GUARD - 25 1/2" - 47'	1	48	8000755	3/8" HEX NUT (8")	12
	D316473	DRIVESHAFT GUARD - 7 1/2" - 52'	1		8000775	1/2" HEX NUT (1052)	12
16	D311019	DRIVESHAFT GUARD CLAMP	6	49	8000261	3/8" x 2" BOLT - GR.5 (8")	2
17	8000056	5/16" LOCK NUT	6		8000409	1/2" x 3" BOLT - GR.5 (1052)	2
18	B027015	PLASTIC COUPLER COVER	1	50	8023319	3/8" LOCK NUT (8")	2
19	D312110	COUPLER COVER MOUNT	1		8015210	1/2" LOCK NUT (1052)	2
20	B024215	2 1/2" HOSE CLAMP	1	51	C816989	LOWER DRIVESHAFT - 847	1
21	8023316	3/8" x 3/4" SF BOLT	2		C816935	LOWER DRIVESHAFT - 852	1
22	8000763	3/8" LOCKING FLANGE NUT	2		C816988	LOWER DRIVESHAFT - 862	1
23	D316413	TRANSPORT STOP	1		D316442	LOWER DRIVESHAFT - 1052	1
24	8023370	1/2" x 1 1/4" BOLT - GR.5	2	52	B195771	DRIVELINE COUPLING	1
25	8015210	1/2" LOCK NUT	16	53	B884505	1/4" KEY x 2"	2
26	C816887	4" TRACK SLIDE	1	54	8000956	5/16" x 1/4" SET SCREW	4
27	C816886	4" SLIDE ROLLER	1	55	D311125	TRUSS TOWER - 47' & 52'	2
28	8000572	3/4" x 6 1/2" BOLT - GR.5	1		C816997	TRUSS TOWER - 862	2
29	8023319	3/4" LOCK NUT	5	56	8023370	1/2" x 1 1/4" BOLT	4
30	C816862	47' A-FRAME ARM	2	57	B008070	1/4" CABLE CLAMP	12
	D316407	52' A-FRAME ARM	2	58	8000371	1/2" x 1 3/4" BOLT	2
	C816864	62' A-FRAME ARM	2	59	B008071	1/4" CABLE THIMBLE	4
31	C816909	A-FRAME CROSS BRACE - EXCEPT 862	1	60	B0023115	5/8" LONG SPACER	2
32	B0020168	3/8" x 2 1/2" U-BOLT	2	61	8001118	1/2" FLAT WASHER	2
33	8023319	3/8" LOCK NUT	4	62	B002025	1/2" x 6 3/4" EYEBOLT	2
34	8000539	3/4" x 2 1/2" BOLT - GR.5	2	63	8001118	1/2" FLAT WASHER	4
35	C816126A	4" AXLE ASSEMBLY (ALL EXCEPT 862)	1	64	8000775	1/2" HEX NUT	4
	C816125A	4" AXLE ASSEMBLY (862)	1	65	B897777	1/4" TRUSS CABLE x 35' 6" (47' & 52')	2
36	B011209	15" TIRE & RIM	2		B897778	1/4" UPPER TRUSS CABLE x 41' (862)	2
37	C816853	47' AXLE FRAME	1		C811073	1/4" LOWER TRUSS CABLEx 29.5'(862)	2
	C816854	52' AXLE FRAME	1	66	C802766	1/4" WINCH CABLE x 61' 6" (47' & 52')	1
	C816855	62' AXLE FRAME	1		C802768	1/4" WINCH CABLE x 66' 6" (862)	1
38	C816130	47' AXLE FRAME SUPPORT	2	67	2060557	MAXIMUM HEIGHT STOP - 862	1
	C816127	52' AXLE FRAME SUPPORT	2	NS	C816216	A-FRAME CROSS BRACE - 862	2
	C816857LA	62' AXLE FRAME SUPPORT - LEFT	1				

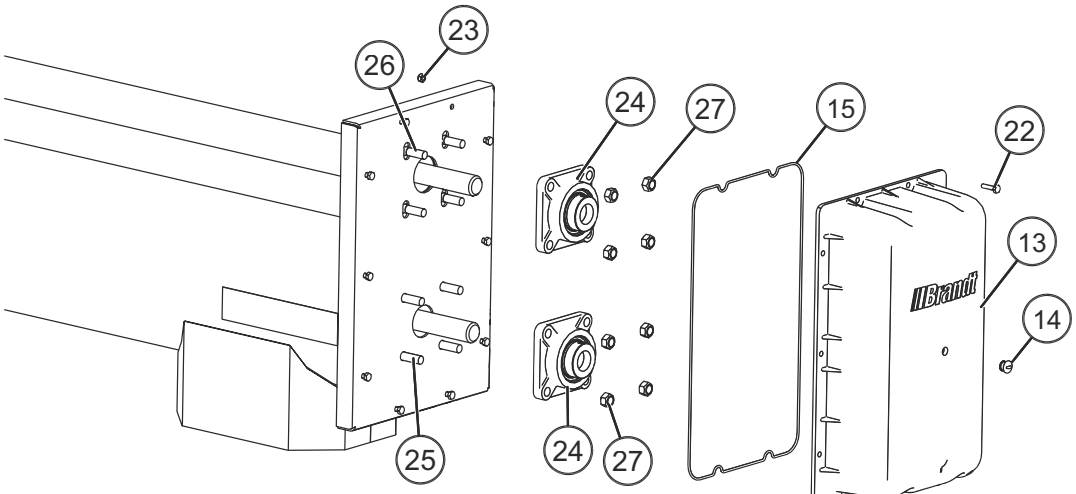
Intake and Head End Parts - All Sizes



Intake Assembly



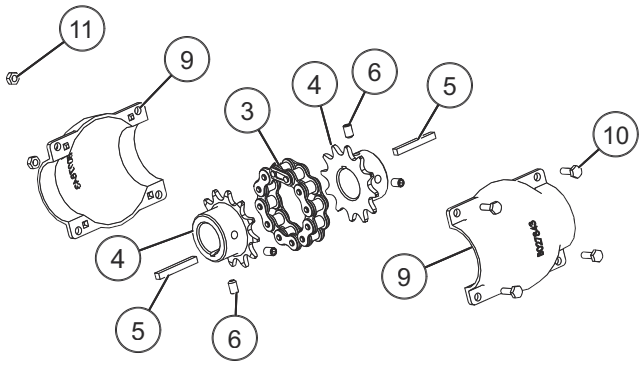
8” Head End Assembly



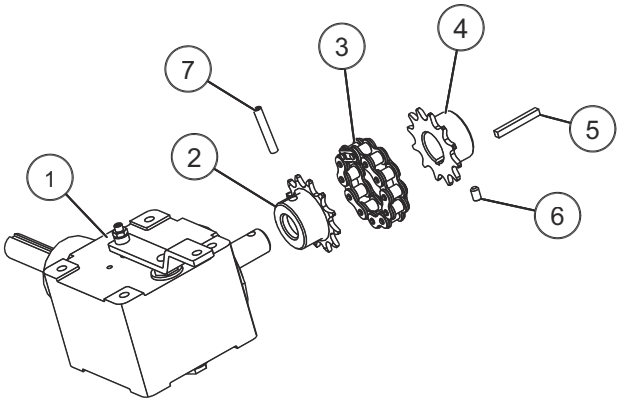
10” Head End Assembly

REF #	PART NO.	DESCRIPTION	QTY
1	C816873A	8" STANADRD INTAKE C/W BUSHING	1
	C816881A	8" SUPERCHARGED INTAKE C/W BUSHING	1
	D316417A	10" STANDARD INTAKE C/W BUSHING	1
	D316456A	10" SUPERCHARGE INTAKE C/W BUSHING	1
2	C816878	8" STANDARD INTAKE FLIGHT	1
	C816991	8" SUPERCHARGE INTAKE FLIGHT	1
	D316415	10" STANDARD INTAKE FLIGHT	1
	D316461	10" SUPERCHARGE INTAKE FLIGHT	1
3	C817676	8" UPPER INTAKE CLAMP	1
	D317617	10" UPPER INTAKE CLAMP	1
4	C816996	8" STANDARD INTAKE GUARD	1
	C816994	8" SUPERCHARGE INTAKE GUARD	1
	D316467	10" STANDARD INTAKE GUARD	1
	D316468	10" SUPERCHARGE INTAKE GUARD	1
5	8000250	3/8" x 1 1/2" BOLT - GR.5	6
6	8000273	3/8" x 2 1/2" BOLT - GR. 5 (8")	1
	8000281	3/8" x 3" BOLT - GR.5 (10")	1
7	8023319	3/8" STOVER LOCK NUT	7
8	8690	TRANSPORT AUGER INTAKE FOAM	2
9	B017610	OILITE BUSHING - 8"	1
	B017515	OILITE BUSHING - 10"	1
10	8023370	1/2" x 1 1/4" BOLT - GR.5	2
11	8015210	1/2" STOVER LOCK NUT	2
12	B002092	3/32" x 2 1/4" HAIR PIN CLIP	1
13	B027055	PLASTIC HEAD END COVER	1
14	B027057	HEAD END COVER PLUG	1
15	B027056	HEAD END COVER GASKET	1
16	B017862	FLANGETTE - 62MST	4
17	B017842	1 1/4" BEARING LC	2
18	B021842	BEARING GASKET	2
19	8000235	3/8" x 1" CARRIAGE BOLT	2
20	8000248	3/8" x 1 1/2" CARRIAGE BOLT	2
21	8023319	3/8" STOVER LOCK NUT	4
22	8000124	1/4" x 1" BOLT - GR.5	10
23	8000731	1/4" LOCK NUT	10
24	B017890	1 1/4" BEARING - 4 BOLT FLANGE	2
25	8000366	1/2" x 1 1/2" SERRATED FLANGE BOLT	4
26	8000379	1/2" x 2" CARRIAGE BOLT	4
27	8015210	1/2" STOVER LOCK NUT	8
28	B890400	TRANSPORT HITCH	1

Drive Shaft Parts - All Augers



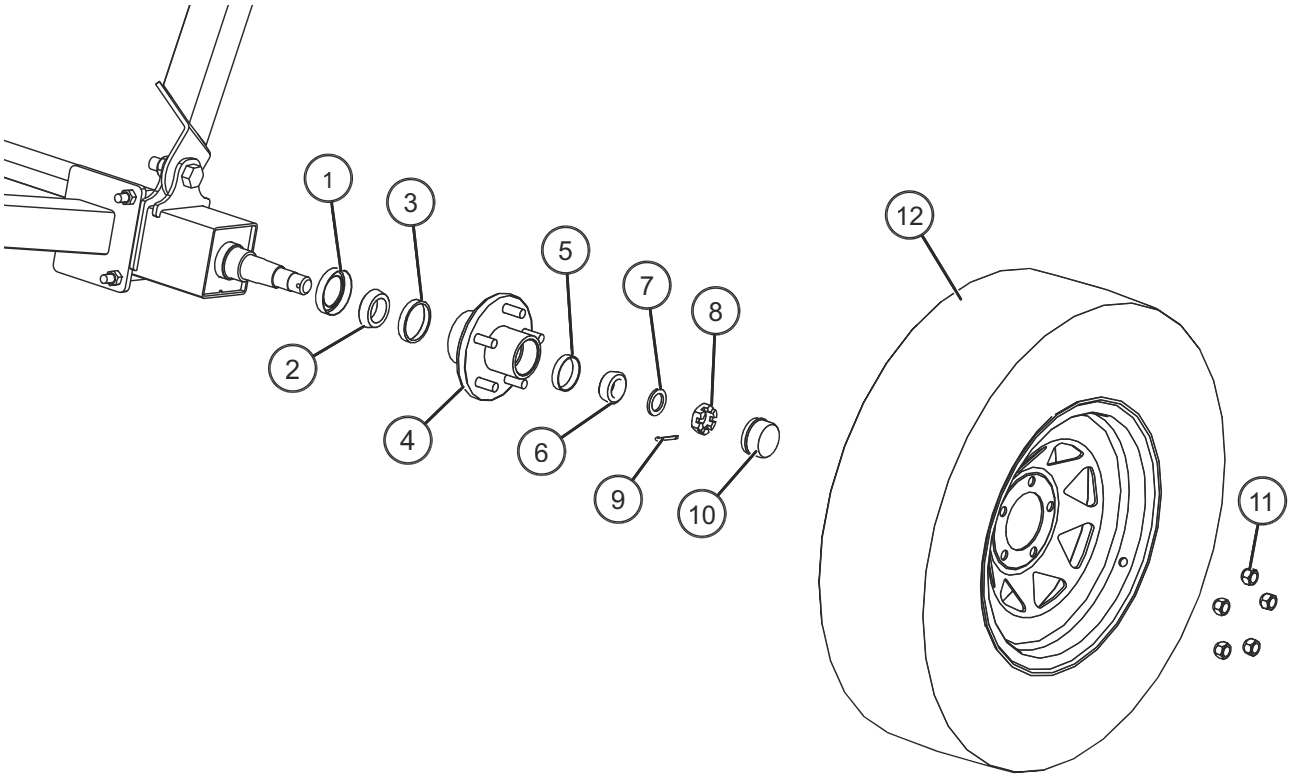
Discharge End Drive Shaft Coupler



Gear Box Drive Shaft Coupler

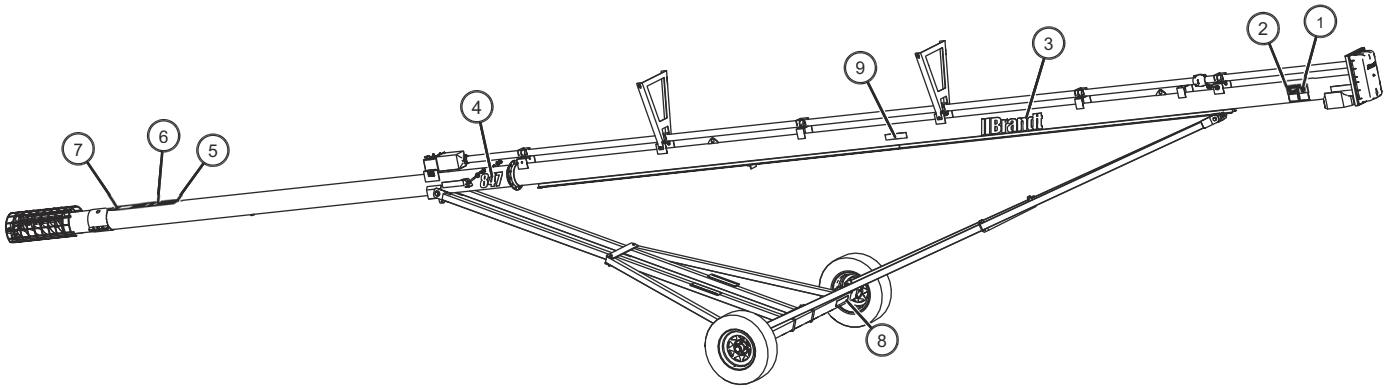
Ref #	Part No.	Description	Qty
1	B003005	8" GEAR BOX - BELT DRIVE - NON-REVERSING (EXCEPT 862)	1
	B003005R	8" GEAR BOX - BELT DRIVE - REVERSING (EXCEPT 862)	1
	B003012	8"x 62' GEAR BOX - BELT DRIVE - NON REVERSING	1
	B003012R	8"x 62' GEAR BOX - BELT DRIVE - REVERSING	1
	B003010	8" GEAR BOX - ELECTRIC & DIRECT DRIVE - NON REVERSING	1
	B003010R	8" GEAR BOX - ELECTRIC & DIRECT DRIVE - REVERSING	1
	B003012	10" GEAR BOX - NON-REVERSING	1
	B003012R	10" GEAR BOX - REVERSING	1
	B003012RME	10" GEAR BOX - REVERSING - ELEC. DRIVE	1
2	B009802	8" GEAR BOX SHEAR SPROCKET - 1" BORE	1
	B009801	10" GEAR BOX SHEAR SPROCKET - 1 1/4" BORE	1
3	B009842	R60 x 12 ROLLER CHAIN	1
4	B009800	COUPLER SPROCKET - 1 1/4" BORE - KEYED	3
5	B884505	1/4" KEY x 2" LONG	3
6	8000957	5/16" x 1/2" SET SCREW	6
7	8024864	5/16" x 2" ROLL PIN - 8" AUGERS	1
	8024862	3/8" x 2" ROLL PIN - 10" AUGERS & 862 BELT DRIVE	1
9	B027843	CHAIN COUPLER GUARD	2
10	8000117	1/4" x 3/4" BOLT - GR.5	4
11	8000731	1/4" LOCK NUT	4

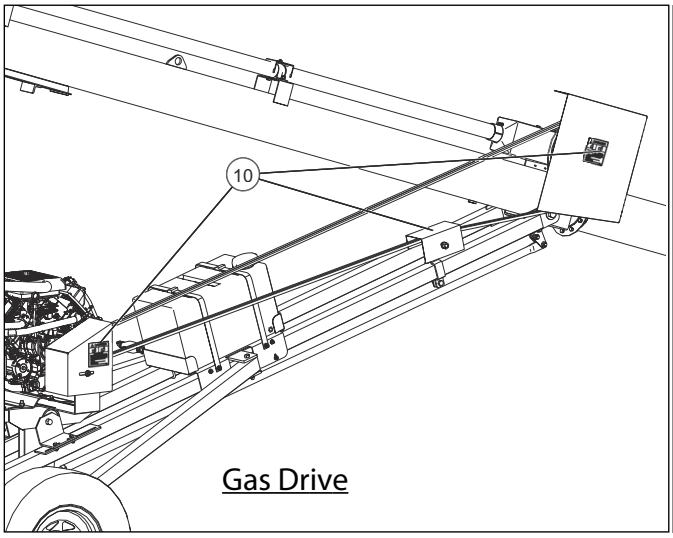
Wheel Parts - All Augers



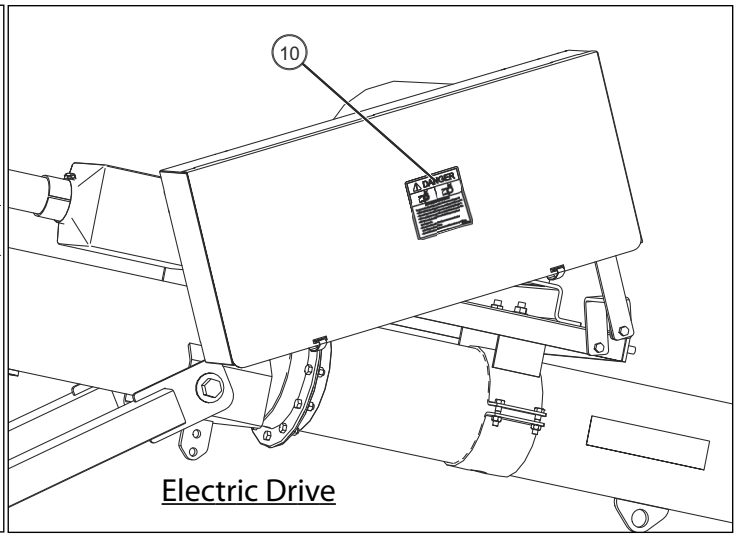
Ref #	Part No.	Description	Qty
1	B0116406	GREASE SEAL	1
2	B0116403	INNER BEARING CONE	1
3	B0116402	INNER BEARING CUP	1
4	B0116401	5 BOLT HUB ONLY c/w WHEEL STUDS	1
5	B0116404	OUTER BEARING CUP	1
6	B0116405	OUTER BEARING CONE	1
7	B002073	1" ID x 1 1/2" OD MACHINERY BUSHING	1
8	B001525	1" - 14 tpi SLOT NUT	1
9	B002047	3/16" x 1 1/4" COTTER PIN	1
10	B0116407	DUST CAP	1
11	B00116408	WHEEL NUT	5
12	B011209	ST205/75D15 TIRE & RIM	1
	B011209EZ	ST205/75D15 TIRE & RIM - AUGER MOVER	1

Decals - All Augers

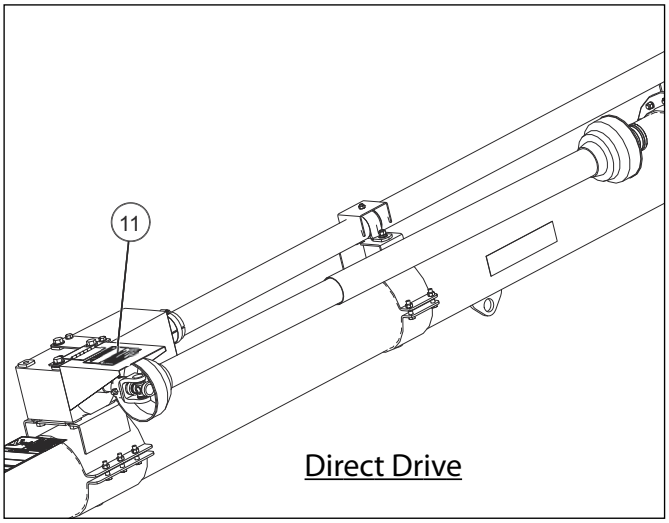




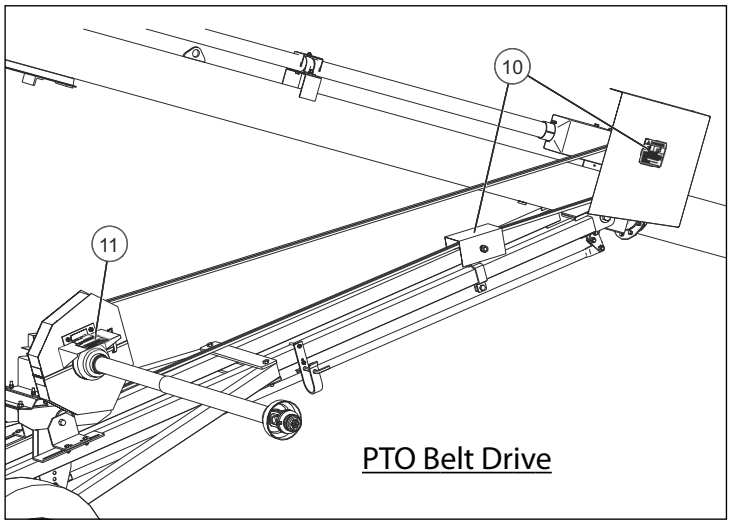
Gas Drive



Electric Drive



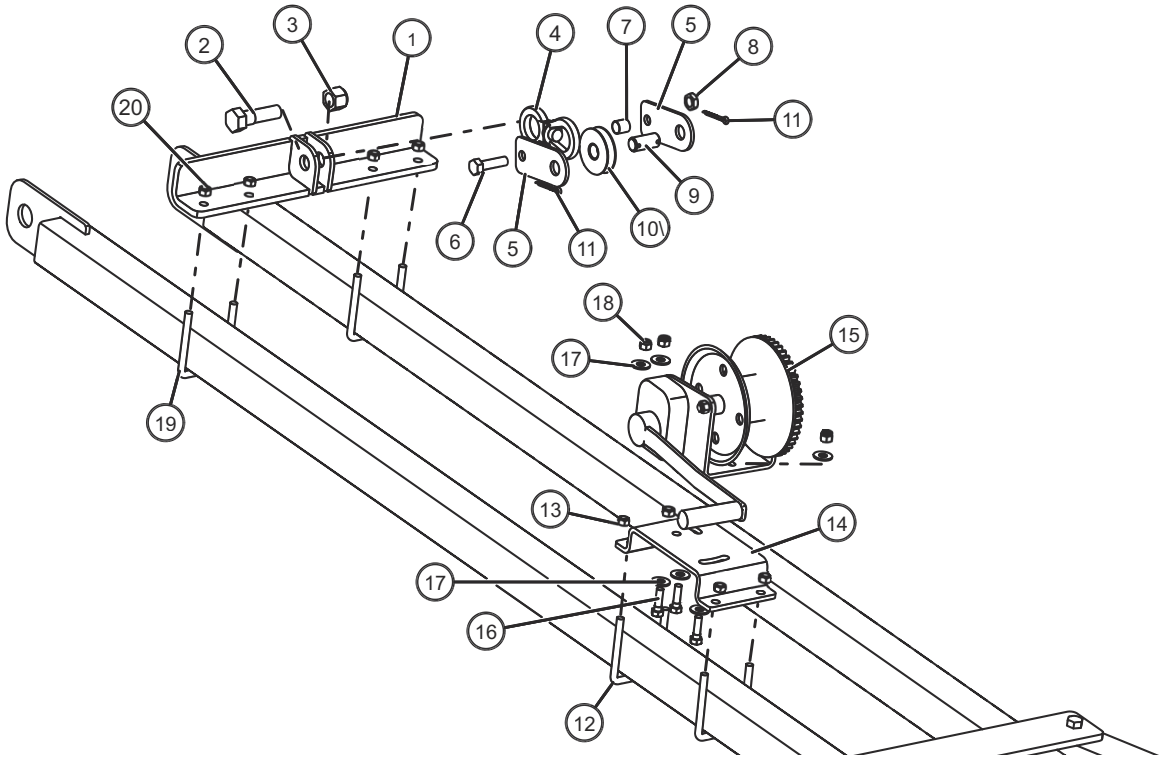
Direct Drive



PTO Belt Drive

REF #	PART NO.	DESCRIPTION	QTY
1	B029967	DECAL - DOWN SPOUT WARNING	2
2	B029965	DECAL - AUGER DISCHARGE	2
3	B029150	DECAL - BRANDT	2
4	B029982	DECAL - 832A	2
	B029983	DECAL - 837A	2
	B029984	DECAL - 842A	2
	B029985	DECAL - 847A	2
	B029986	DECAL - 852A	2
	B029987	DECAL - 862A	2
	B029988	DECAL - 1032A	2
	B029989	DECAL - 1037A	2
	B029990	DECAL - 1042A	2
	B029992	DECAL - 1052A	2
5	B029101	DECAL - DANGER AUGER INTAKE	1
6	B029100	DECAL - COMBINATION DANGER	1
7	B029971	DECAL - SAFE TRANSPORT	1
8	B0210266	RED REFLECTOR TAPE	2
9	B0210276	AMBER REFLECTOR TAPE	AR
10	B029111	DECAL - MOVING PARTS HAZARD	AR
11	B029170	DECAL - PTO SPEED 540 RPM	AR
NS	2050365	DECAL - 8" 'HP'	AR
NS	B029993	DECAL - 10" 'HP'	AR

Manual Winch - All Augers



Ref #	Part No.	Description	Qty
1	C816973	PULLEY BLOCK MOUNT	1
2	8000539	3/4" X 2 1/2" BOLT - GR.5	1
3	B001143	3/4" LOCK NUT	1
4	B0210342	1/2" CHAIN SWIVEL	1
5	C110102	SWIVEL PLATE	2
6	8000371	1/2" x 1 3/4" BOLT - GR.5	1
7	SW1069	LIFT ARM SPACER	1
8	B0011375	1/2" LOCKING JAM NUT	1
9	C310334	PULLEY PIN	1
10	C314453	2 1/2" CABLE PULLEY	1
11	B002048	5/32" x 1 1/2" COTTER PIN	2
12	B0020168	3/8" x 2 1/2" U-BOLT x 3 3/4" DEEP	2
13	8023319	3/8" STOVER LOCK NUT	4
14	C816206	MANUAL WINCH BASE	1
15	B030200	1500 LBS WINCH - 832 to 852 & 1032 to 1042	1
	B030250	2000 LBS WINCH - 862 & 1052	1
16	8000244	3/8" x 1 1/4" BOLT - GR.5	3
17	8001100	3/8" FLAT WASHER	6
18	8000761	3/8" LOCK NUT	3
19	B0020142	1/2" x 2 1/2" U-BOLT x 3 1/2" DEEP	2
20	8015210	1/2" LOCK NUT	4

Toll Free: 1-866-427-2638
www.brandt.ca