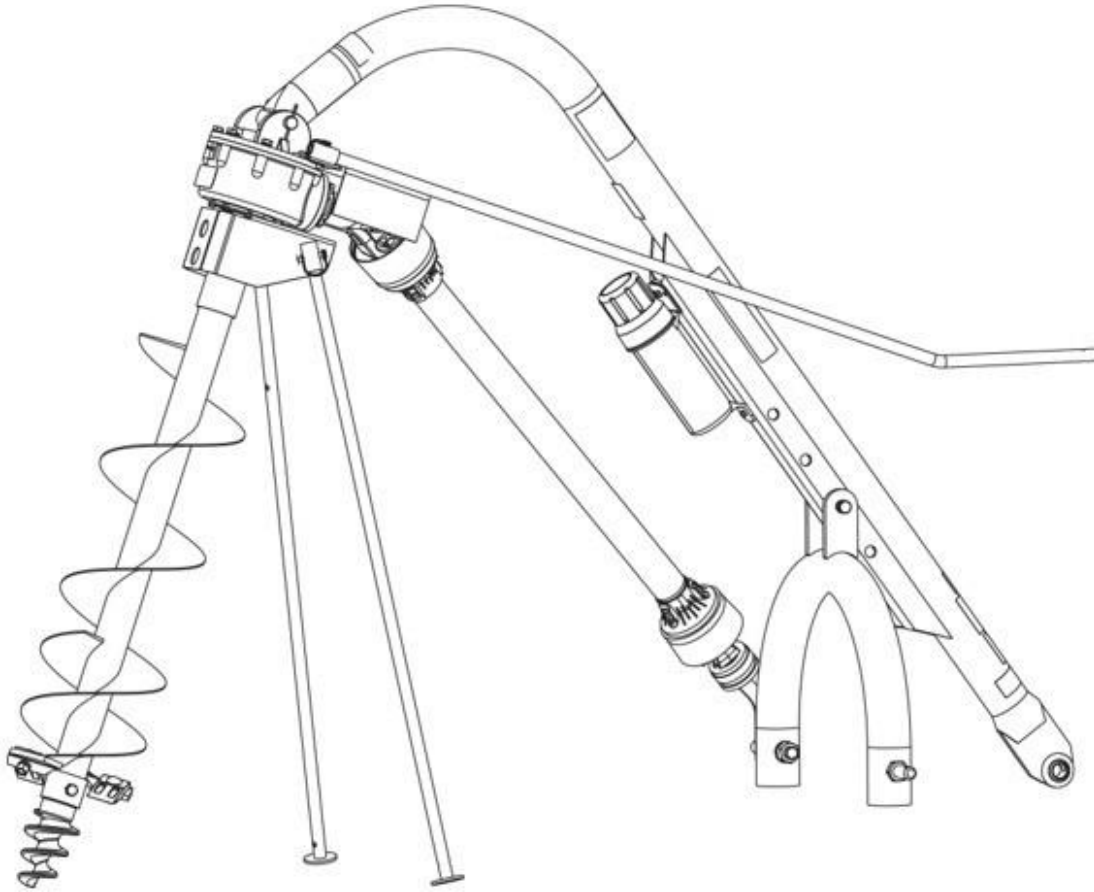


POST HOLE DIGGER 3-POINT MOUNTED



* Auger sold separately

OWNER'S MANUAL ASSEMBLY & OPERATING INSTRUCTIONS



WARNING: All operators must read this manual before operating this post hole digger. Follow the safety instructions in the manual and in decals attached to the product. Failure to do so could result in serious injury or death.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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Thank you very much for choosing this product! For future reference, please register your product at ytlinternational.com and complete the owner's record below:

Model No.: _____

Serial No.: _____

Purchase Date: _____


Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This product is designed for certain applications only. The manufacturer cannot be responsible for issues arising from modification. We strongly recommend this product not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted us to determine if it can or should be performed on the product.

For technical questions please call **888-723-6534**.

IMPORTANT SAFETY INFORMATION

WARNING: Read and thoroughly understand all instructions and safety information before assembling or operating this post hole digger. Failure to do so may cause serious injury or death. Do not allow anyone to operate this post hole digger who has not read this manual. As with all power equipment a post hole digger can be dangerous if assembled or used improperly. Do not operate this post hole digger if you have doubts or questions concerning safe operation. Call our customer service department at (888) 723-6534 to address these concerns.

 **WARNING:** This product can expose you to chemicals including Nickel which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



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

DANGER

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

WARNING

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

CAUTION

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

**IMPORTANT
or NOTICE**

IMPORTANT or NOTICE is used to address practices not related to personal injury.

INTENDED USE

This product is designed to dig holes in the soil when attached to the 3-point linkage system and power-take-off a tractor. It is **not** intended for any other use. Using the product for anything other than digging holes could result in serious injury or death.

PERSONAL PROTECTIVE EQUIPMENT



ALWAYS use appropriate personal protective equipment such as protective eyewear and safety shoes when operating this post hole digger.

NEVER wear loose clothing or jewelry that could become entangled in the auger or driveline.



IMPORTANT SAFETY INFORMATION



SAFETY DECALS

Make sure that all safety warning decals are in good condition and readable. Please contact YTL International at 888-723-6534 or parts@ytlinternational.com if any of the safety labels are damaged or missing and need replacing.



PART NUMBER: Y20231200
LOCATION: TOP OF BOOM,
TRACTOR END



PART NUMBER: Y20231300
LOCATION: TOP END OF AUGER TUBE



PART NUMBER: Y20232030
LOCATION: TOP OF HANDLE



PART NUMBER: Y20231400
LOCATION: TOP OF BOOM, GEARBOX END & AUGER TUBE



PART NUMBER: Y20231500
LOCATION: BOTH SIDES OF
GEARBOX SHIELD



PART NUMBER: Y20232010
LOCATION: TOP OF DRIVE LINE



PART NUMBER: Y20232020
LOCATION: TOP OF DRIVE LINE



IMPORTANT SAFETY INFORMATION



! DANGER

TO PREVENT SERIOUS INJURY OR DEATH:
Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.

- Read and understand owner's manual before operating.
- Operate only from the tractor seat.
- Stay away from rotating parts. Keep others away.
- Do not dig around underground utility lines without checking with authorities.

PART NUMBER: Y20231600
 LOCATION: UPPER RIGHT SIDE OF BOOM

! WARNING

- This digger may not be compatible with all tractor models.
- Before operating, mount the boom and A-frame to the tractor.
- Raise up and lower the 3-point lift arms to the max and min positions.
- Check that there is no tractor/boom interference at any position.
- If there is not interference, continue with the assembly of the digger.
- Failure to do so may result in damage to the tractor, digger and personal injury.
- This product can expose you to Nickel, a chemical known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

PART NUMBER: Y20231700
 LOCATION: TOP OF BOOM, TRACTOR END

! DANGER

TO PREVENT SERIOUS INJURY OR DEATH:

- Contact dealer, make sure your machine has all current safety guards and shields in place.
- Do not operate without all guards and shields in place.
- Do not operate when auger is higher than 12 inches above ground level. Doing so may cause driveline to bind, resulting in equipment damage or operator injury.
- Stop auger rotation before maneuvering, relocating or transporting.

PART NUMBER: Y20231800
 LOCATION: BOTH SIDES OF GEARBOX SHIELD

! DANGER



Rotating Driveline
CONTACT CAN CAUSE DEATH
KEEP AWAY!

DO NOT OPERATE WITHOUT-

- All driveline guards, tractor and equipment shields in place
- Drivelines securely attached at both ends
- Driveline guards that turn freely on driveline

PART NUMBER: Y20231900
 LOCATION: PTO DRIVE SHAFT SHIELD

! DANGER

GUARD MISSING When this is visible DO NOT OPERATE		KEEP CLEAR! Keep Others Away! ENTANGLEMENT HAZARD can cause Serious Injury or Death
---	---	---

Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.

- Never manually position the auger or manually force the auger into ground.
- This machine is designed to be operated ONLY from the tractor seat.
- Keep everyone clear of all moving parts of the digger while in operation.

PART NUMBER: Y20232000
 LOCATION: OUTPUT GUARD OF DIGGER



IMPORTANT SAFETY INFORMATION



GENERAL SAFETY AND PREPARATION

ALWAYS make sure that anyone else who operates this post hole digger has read and understood the contents of the owner's manual and all safety decals on the product.

ALWAYS be certain that all members of the work party are familiar with the operation of the digger and the hazards associated with it.

ALWAYS check with authorities for underground utilities before digging a hole. Serious injury or death could result from contact with gas or electric lines.

ALWAYS check the tractor owner's manual for instructions on operation, attachment of 3-point equipment and safety.

ALWAYS make sure that all safety shields are in place and tightened down. Do not operate this post hole digger if any shields are missing. Contact YTL at (888) 723-6534 or email at parts@ytlinternational.com for replacement parts.

ALWAYS make sure that the auger point, and cutting edges are intact and in good working order before using this digger.

OPERATING SAFETY

ALWAYS operate this post hole digger from the tractor seat. Only one person should operate the digger.

NEVER attach the post hole digger with the tractor engine running.

NEVER operate the post hole digger with anyone near or in contact with any part of the implement, PTO driveline or auger. Serious injury or death could result from entanglement with moving parts.

ALWAYS make sure that the tractor brake is set before digging a hole.

ALWAYS keep hands, feet and clothing away from power-driven parts during operation.

NEVER manually position the auger or manually force the auger into the ground.

ALWAYS make sure that the tractor engine is shut off and the PTO drive is disengaged before leaving the tractor seat.

NEVER move the tractor with the power-take-off in the ON position.

NEVER exceed 540 RPM PTO operating speed.

NEVER operate the post hole digger when the auger point is more than 12 in. above ground level.

Operating the digger in elevated positions may cause the PTO driveline "U" joints to bind resulting in equipment damage and operator injury.

ALWAYS turn off the digger immediately if an immovable object is encountered to prevent damage to the gear box or driveshaft and possible injury. Driveline is protected by a shear bolt. If the shear bolt shears stop operating immediately to prevent further damage.

NEVER operate or transport equipment while under the influence of drugs or alcohol.

REPAIR AND MAINTENANCE SAFETY

ALWAYS perform maintenance operations such as lubrication, adjustments or repairs on the post hole digger with the tractor engine off, the PTO drive disengaged and the auger point resting on the ground.

ALWAYS use the correct shear bolt (SAE Grade 2). **NEVER** use or replace the shear bolt with one that is longer than the one specified in the manual (3/18" NC x 3" shear bolt, SAE Grade 2).

Periodically inspect all moving parts for wear and replace, when necessary, with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Serious injury may occur from not maintaining this machine in good working order.

Do not modify or alter this Implement. Do not permit another to modify or alter this Implement, any of its components or any Implement function. Any modification will void the warranty.

ASSEMBLY INSTRUCTIONS

IMPORTANT: The gear box is shipped without lubricant. Fill the top hole with 80W-90 lubricant or the equivalent. Fill until the lube appears at the side level check hole. Approximately two pints (32 ounces) of lubricant is required. Do not fill to overflow point as this may damage the seals.

Be certain that the gear box has adequate lubrication. Check the oil level after every fifty hours of use.

WARNING

- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

CAUTION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Heavy Components: To avoid muscle strain or back injury, use lifting aids and proper lifting techniques.
- Failure to follow instructions in this manual can result in injury.

SET-UP INSTRUCTIONS

The digger is shipped partially assembled. Assembly will be easier if the components are aligned and loosely assembled before tightening hardware.

Select a suitable working area. Uncrate parts boxes and lay out parts and hardware to make location easy. Refer to illustrations, accompanying text, parts lists and exploded view drawings.

ATTACH A-FRAME AND BOOM TO TRACTOR

A tractor is required during assembly of post hole digger. A tractor will make part fit-up, part alignment, and part handling easier.

1. Connect lift arm pins (6), Figure 1, and hardware supplied with pins to the A-frame assembly (2).
2. Mount PTO shaft storage bracket as shown on outside of A-Frame.
3. NOTE: On tractors with 3-point arm spacing of 32 inches, place mounting pins on the outside of the yoke assembly. On tractors with 3-point arm spacing of 26 inches or less, place mounting pins on the inside of the yoke assembly.
4. Connect A-frame assembly to the tractor 3-point arms.
5. Attach boom (1) to the tractor top link bracket.
6. Align A-frame assembly with the adjustment channel on the boom, starting with the second hole. Secure into position using boom adjustment pin (3) and lynch pin (5).

IMPORTANT

- **With boom attached to tractor, raise boom by hand. Check clearance between boom and top link bracket. If interference exists, change hole location and recheck. Failure to check can result in damage to the tractor or boom.**

1. Boom
2. A-frame
3. Top link pin
4. Lynch pin
5. PTO shaft storage bracket
6. 7/8-14 NF x 6.78 lift arm pin
7. 7/8 NF jam nut
8. 7/8 lock washer
9. 7/8 NF hex nut

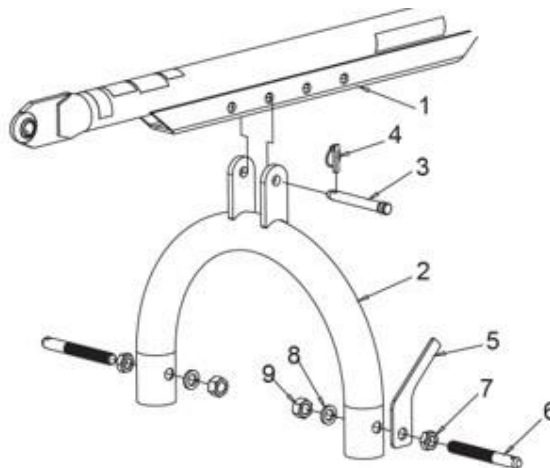


Figure 1. A-Frame to Boom Assembly

GEARBOX PREPARATION AND INSTALLATION

1. Place gearbox upside down on a level surface with the output shaft facing up.
2. Place the output shaft guard onto the gear box, aligning the two bolt holes with the holes on the gear box.
3. Secure output shaft guard with the two provided 5/16"-18 x 1" long hex head, grade 5 bolts with a lock washer under the head of the bolt.
4. Torque fasteners to 19lbs-ft (26 N-m).
5. Lower boom and with an assistant, align gearbox mounting holes with boom mount hole.
6. Secure gearbox assembly to boom using the supplied pin (4) and cotter pins (3).

1. Boom
2. Gearbox
3. Cotter Pin
4. Pin
5. Hex Head Bolt (x2)

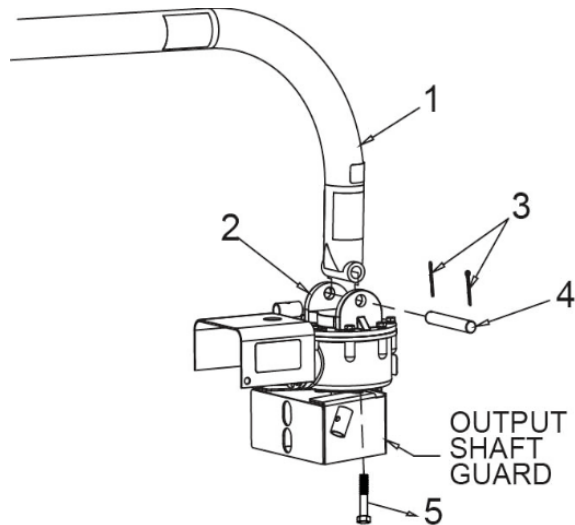


Figure 2. Gearbox to Boom Installation

ATTACH AUGER TO GEARBOX

1. Raise boom (1), allowing enough space to install auger.
2. Slide auger over gearbox output shaft and install 1/2 bolt (3), 1/2 lock washer (4), and 1/2 nut (5) in both hole locations. Tighten all hardware.

1. Boom
2. Gearbox
3. 1/2 NC Hex Bolt
4. 1/2 NC Lock Washer
5. 1/2 NC Hex Nut

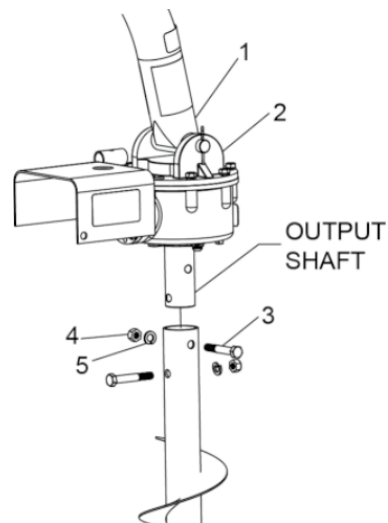


Figure 3. Auger to Gearbox Installation

INSTALL DRIVELINE

1. Clean input shaft on gearbox and smooth bore of driveline yoke. Remove any foreign material or paint. Lightly file any nicks or dents.
2. Grease the input shaft of the gearbox. This reduces the chance of the driveline galling the shaft if the shear bolt should fail.
3. Slide driveline over input shaft and align cross holes. Insert shear bolt (3) to hold parts together.
4. Loosen the jam nut (6) so that it is flush with the top of the set screw (7, Fig 3.1). Tighten the set screw against the gearbox input shaft. Once tightened, loosen the set screw (7) a 1/4 turn. Continue to hold the set screw (7) in this position while tightening the jam nut (6). Remove shear bolt (3) from cross hole. Driveline yoke should spin freely on shaft.

NOTE: The set screw prevents the driveline from coming off gearbox shaft if the shear bolt should shear.

5. Secure drive line to input shaft with shear bolt (3), lock washer (4), and hex nut (5).

NOTE: Under no circumstances should driveline adapters be used when attaching driveline to tractor.

1. Gearbox
2. Driveline
3. 3/8 NC x 3 Grade 2 shear bolt
4. 3/8 lock washer
5. 3/8 NC hex nut
6. M6x25 set screw
7. M6 jam nut

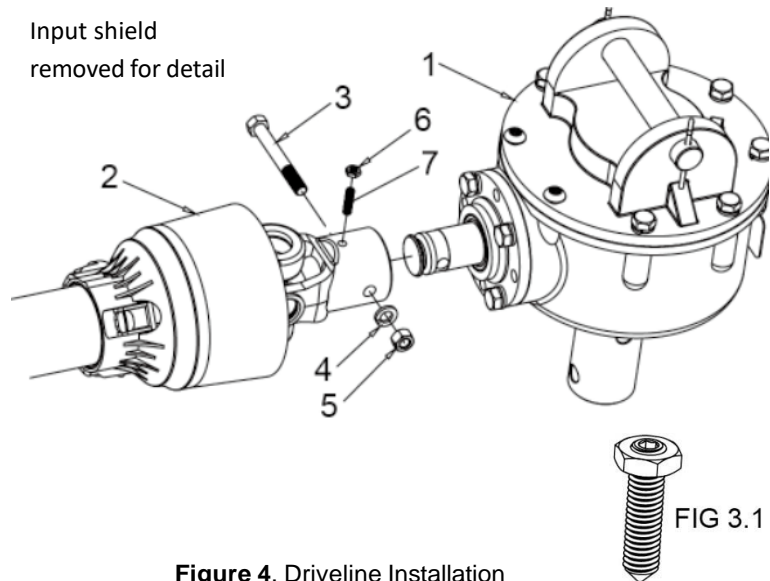


Figure 4. Driveline Installation

ADJUST DRIVELINE LENGTH

Check Driveline Movement

1. Remove auger from gearbox.
2. Attach driveline to the tractor PTO shaft.
3. Remove or place tractor drawbar in storage position.
4. Slowly raise and lower boom with the tractor 3-point arms. Check the driveline to see if it separates, binds, or bottoms out.

NOTE: Gearbox should lower to the ground. If not, change hole location between A-frame and boom or see if driveline is bottoming out. If driveline is bottoming out it will need to be shortened.

Shorten Driveline (If Required)

1. Remove driveline from gearbox shaft and tractor PTO.
2. Lower digger (with auger removed) until the input shaft of gearbox is in line with the PTO shaft of the tractor. This is the shortest distance required for the driveline.
3. Pull driveline apart. Connect driveline halves back to the gearbox and tractor PTO shaft.
4. Hold the two halves parallel to one another to determine how much the driveline must be shortened. Mark each end.

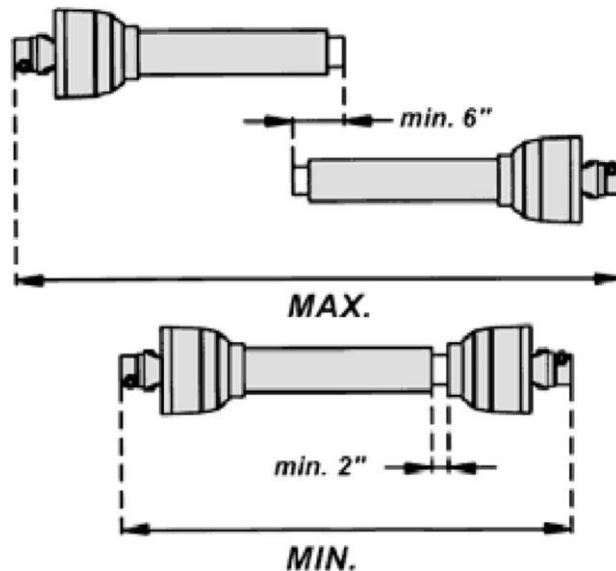


Figure 5. Example of Overlap

5. Raise the digger to the transport position using the tractor 3-point arms.
6. Hold the two halves parallel to one another and check for a minimum of 6-inch (15 cm) overlap.

NOTE: If driveline has less than 6 inches of overlap, do not use this driveline. Contact your place of purchase for a longer driveline.

NOTE: If driveline has more than 6 inches of overlap, the driveline will need to be shortened.

Cut Driveline

1. Place driveline half in a padded vise and cut shield off at the determined length.

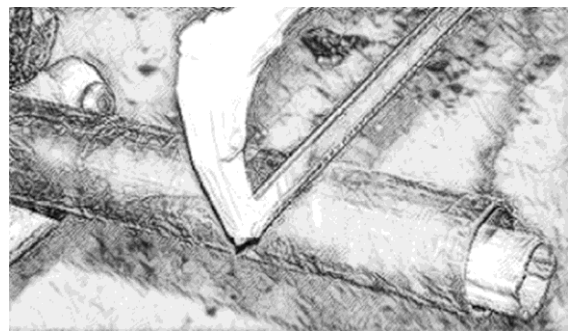


Figure 6. Cut Shield (Example)

- Place the cutoff portion of the shield against the end of the shaft and use it as a guide. Mark and cut the shaft.

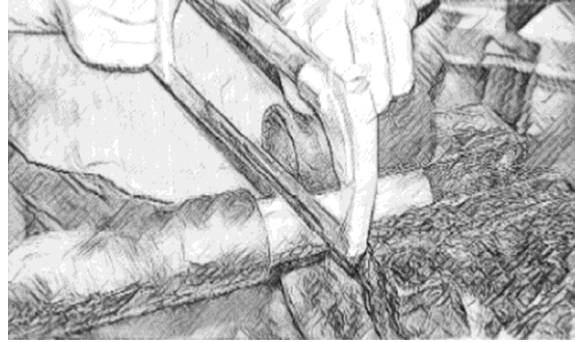


Figure 7. Cut Shaft to Length

- Repeat steps for other drive half.
- File and clean-cut ends of the both drive halves.
- Apply a multi-purpose grease to the outside of the male drive half. Slide the two drive halves together.
- Connect driveline to gearbox and tractor PTO.

WARNING: Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

- Make sure roll pin is installed in driveline yoke to secure driveline to gearbox input shaft.
- Carefully raise and lower the digger to check that the driveline does not pull apart or bind through its range of motion.
- Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the post hole digger from swaying side to side. Adjust as tightly as practical for best performance.

FILL GEARBOX

- Level gearbox and remove top fill plug and top sight plug on back side of gearbox.
- Fill gearbox with SAE 90W gear lube until oil runs out of sight hole.
- Install both plugs.

INSTALL HANDLE

Handle is used to position the auger as you lower the tip to the ground. You should be able to easily reach handle while seated in the tractor seat and operate the tractor 3-point lift arms. Adjust as necessary.

- The handle (4) has three holes that can be pinned at the gearbox: one on the short end and two on the long end. Use the hole that allows for safe clearance and access to the handle from the tractor seat.
- Install supplied handle grip once the handle position has been determined.

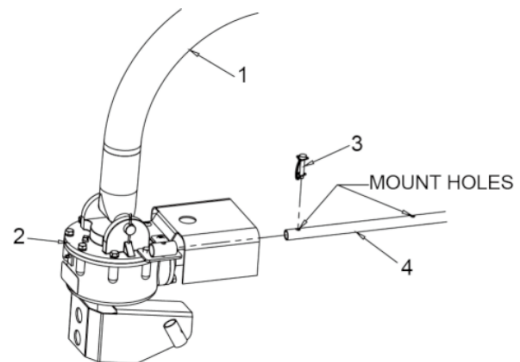


Figure 8. Handle Installed

- | | |
|------------|--------------------------|
| 3. Boom | 1. 5/16 x 1-1/3 lock pin |
| 4. Gearbox | 2. Handle |

OPERATING INSTRUCTIONS

The post hole digger and its individual components are NOT to be used for anything other than their intended use. The operator is responsible for the safe operation of the equipment. The operator must be properly trained. Operators should be familiar with the equipment, the tractor, and all safety practices before starting operation.

Post hole diggers are designed for one-man operation. You must always dig holes while sitting in the tractor seat. It is the responsibility of the operator to see that no one else is within twenty-five feet (25') of the digger when it is operating. Accidents have occurred when more than one person is in the immediate area of the operating equipment. Be sure no one else is near you when you operate this product.



DANGER

- Do not put digger into service unless all shields and guards are in place and in good condition. Replace if damaged.

WARNING

- Never aim auger point with hands on auger, gearbox, boom or driveline. To place auger, point use 3-point arms and handle. Handle should only be used to place the auger. DO NOT hold onto the handle while digging.
- Do not shovel dirt away from a running auger. The shovel could be caught and thrown by auger.
- Consult local utilities before working. Know location of all underground cables, pipelines, overhead wires, and other hazards in working area and avoid contact.
- When dislodging a stuck auger, disengage PTO, stop engine, set parking brake, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.
- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Do not put digger into service unless auger point and all cutting edges are intact and in good repair.
- Keep bystanders away from equipment.
- Shift tractor transmission into park or neutral and set brakes before engaging PTO and digging.

- Keep digger under control by running PTO at slowest speed possible (no faster than half-throttle in 540 RPM range).

CAUTION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.
- When digging holes, always sit in operator seat.

IMPORTANT

- Never exceed the recommended auger capacity of the post hole digger. Use of an incorrect auger or auger extension can cause equipment damage, loss of operator control and personal injury. See specifications on page 27 for available auger capacities.

PREPARATION

Thoroughly read and understand your Operator's Manuals.

Before beginning operation, clear area of objects that wrap around the auger or might be thrown.

Contact local utility company to make certain there are no buried gas lines, electrical cables, etc., in the work area.

Check for ditches, stumps, holes, or other obstacles that could cause the tractor to roll.

To dig properly, your digger must be able to raise or lower through the highest and lowest points of your lift arm travel without binding against the tractor frame.

Check carefully BEFORE attaching the auger. If it does bind, adjust the tractor 3-pt. linkage so that all movement is free.

Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the post hole digger from swaying side to side. Adjust as tightly as practical for best performance. Remove or place tractor drawbar in storage position.

IMPORTANT

- Post hole digger gearboxes are shipped without lubrication. Gearboxes must be serviced with 80W-90 gear lube before operation.
- If PTO driveline interferes with swinging drawbar, swing drawbar out of the way or remove.

PRE-OPERATION CHECKLIST

- * Review and follow all safety rules and safety decal instructions on pages 4 through 7.
- * Check that all safety decals are installed and in good condition. Replace if damaged.
- * Check that all shields and guards are properly installed and in good condition. Replace if damaged.
- * Consult local utilities before digging. Know location of and avoid contacting all underground cables, pipelines, overhead wires and other hazards in digging area.
- * Check that auger point and all cutting edges are intact and in good repair.
- * Check that equipment is properly and securely attached to tractor.
- * Make sure driveline spring-activated locking pin slides freely and is seated firmly in tractor PTO spline groove or gearbox PTO spline groove.
- * Set tractor PTO at correct rpm for your equipment.
- * Check all lubrication points and grease as instructed in “Service, lubrication information.”
- * Lubricate all grease fitting locations. Make sure telescoping PTO shafts and universal joints are lubricated.
- * Check that all hydraulic hoses and fittings are in good condition and not leaking before starting tractor. Check that hoses are not twisted, bent sharply, kinked, frayed or pulled tight. Replace any damaged hoses immediately.
- * Make sure tractor 3-point lift links do not interfere with hydraulic hoses or driveline throughout full turning range.
- * Check that all hardware and cotter pins are properly installed and secured.
- * Check attitude adjustment of auger.
- * Check and keep all bystanders 25 ft away from equipment working area.
- * Before starting engine, operator must be in tractor seat with seat belt fastened. Place transmission in neutral or park, engage brake and disengage tractor PTO.

OPERATING TECHNIQUE



- **Never aim auger point with hands on auger, gearbox, boom or driveline. To place auger point use 3-point arms and handle.**
- **Handle should only be used to place the auger. DO NOT hold onto the handle while digging.**
- **Do not shovel dirt away from a running auger. The shovel could be caught and thrown by auger.**

IMPORTANT

- **Do not use body weight or any body part to force the auger into the ground or to position auger when auger is turning.**

1. Position the tractor so that the auger point is placed where the hole is to be dug.
2. Set tractor brakes. Shift transmission into park or neutral.

3. Do not allow anyone to stand within 25 ft of the auger during operation.

4. Lower auger point slowly to the ground with the PTO disengaged.

The point of the auger should be approximately 3" back of center of the gearbox. As the auger works into the ground, this slight angle will straighten, due to the pivoting action of the boom downward. If the auger has a side tilt, correct with the lift arm adjustment on the tractor hitch.

If the auger tilts too far forward or to the rear, it may be necessary to move the tractor slightly. Be careful not to bend the auger.

With the auger point lowered to the ground, set the engine speed to idle, then engage the PTO. Make sure the auger point is on the ground before engaging the PTO.

IMPORTANT

- **Under no circumstances should the PTO be run in excess of 540 RPM.**

Start with the RPM setting on the tractor below the 540RPM setting and adjust the settings based on the best results in the soil you are digging in.

As the auger penetrates the ground, lower the unit slowly with the 3-point lift arms. **Do not let the auger screw itself into the ground!** Auger must dig with the dirt breaking up and being carried to the top by the auger flighting.

Dig the hole in small steps. Dig down several inches, then bring the auger up to let the soil clear. Repeat this procedure until the desired depth is reached. This allows better control of the auger and can prevent difficulties that could lead to an accident.

IMPORTANT

- **Be careful when raising the auger as high as your tractors 3-point lift arms can go. This can put the PTO shaft universal joints at an extreme angle and cause damage to the PTO shaft! It is best to raise the auger just enough to clear the hole when the PTO is engaged.**
- **It is recommended NOT to raise the auger more than six (6) inches above the ground while it is running. Once you dig the hole to the desired depth raise the auger while rotating to bring the dirt out of the hole.**

To get a clean hole, it is sometimes best to lower the auger into the hole with the auger turning and then, when at the bottom, stop the rotation and raise the auger while not turning. This brings the dirt up with little left in the hole.

Disengage the PTO when traveling between holes. In some types of soil, it may be necessary to use the 3-point lift arms to prevent the auger from screwing itself into the ground.

When the ground is too tough to penetrate with your cutting edges and point, sharpen or replace them and try again. These are replaceable parts and must be in good condition to penetrate. (An optional Hydraulic Down Pressure Kit is available.)

If you have difficulty penetrating hard ground, refer to the Troubleshooting section in this manual for suggestions.

SHEAR BOLT REPLACEMENT

WARNING

- **Never replace shear bolt or auger retaining bolt with a different length, or grade. Always use a SAE grade 2 bolt as a replacement.**

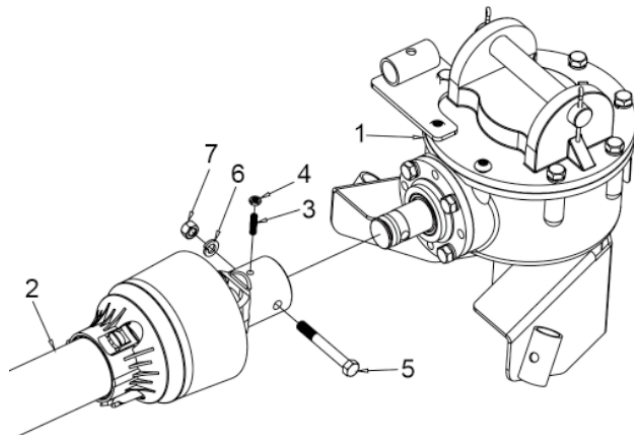
Shear bolts are important for both safety and preventing damage to the digger. Their intended function is to break when too much force is applied.

Always replace shear bolts at the gearbox input with manufacturer's part or one of the same size, length and **SAE Grade 2** specification.

Hardened bolts or bolts that are too long can cause accidents resulting in injury or death.

The set screw, Figure 3, prevents the driveline from coming off gearbox shaft if the shear bolt should shear.

1. Gearbox
2. Driveline
3. M6 x 25 set screw
4. M6 jam nut
5. 3/8 NC x 3 grade 2 shear bolt
6. 3/8 lock washer
7. 3/8 NC hex nut



TRANSPORT

WARNING

- **Do not operate PTO during transport.**
- **Not intended to operate or travel on public roadways.**
- **Keep bystanders 25 feet away from equipment during transport.**
- **Do not transport with parking stands installed or in storage position.**

The post hole digger auger is free-swinging, and care should be taken while transporting the machine.

Be sure auger is completely retracted from the hole before attempting to move the tractor.

DO NOT transport the post hole digger while the PTO is engaged as this could cause the universal joints of the PTO driveline into a sharp operating angle and cause failure of the driveline.

Pay particular close attention to the Safety Messages regarding transport. Avoid unnecessary injuries and equipment damage by exercising cautious, conscientious travel procedures.

Attaching the implement to the tractor increases the overall length of the working unit. Allow additional

clearance for the implement to swing when turning.
Raise the implement as high as possible for transporting.

REMOVE DIGGER FROM TRACTOR

When off the tractor, post hole diggers can be an awkward piece of equipment to handle. Be careful not to pinch hands and fingers in the various hinge points of the digger.

LODGED AUGER



- **When dislodging a stuck auger, disengage PTO, stop engine, set parking brake, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.**
 - **Removing a lodged auger can be dangerous work. Be careful.**
1. If the auger gets stuck in wet clay, stones or roots, disengage the PTO immediately and turn off the engine.
 2. Turn the auger backwards several turns with a large pipe wrench. Then attempt to raise the auger with the 3-point lift arms. You may need to remove the auger from the gear box and spin the it all the way out of the ground by hand.

NOTE: Do not attempt to raise the auger while turning it with a wrench or with a wrench attached to the auger. You could be injured if the PTO was accidentally engaged or the 3-point lift arms suddenly raised the auger.

Extreme rocking or lifting loads while trying to clear auger can cause auger, gearbox, or boom failure.

Do not attempt to remove the auger from the ground by driving the tractor forward or reverse.

3. Remove and store wrench before starting engine.

OWNER SERVICE

The information in this section is written for operators who possess basic mechanical skills. For your protection, read and follow all safety information in this manual.

WARNING

- Before performing any service or maintenance, lower digger to ground or block securely, turn off tractor engine, remove key, and disconnect driveline from tractor PTO.
- **NEVER GO UNDERNEATH EQUIPMENT.** Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- Service work does not require going underneath implement.
- Read Operator's Manual for service instructions or have service performed by a qualified dealer.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.

CAUTION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

ROUTINE MAINTENANCE

1. Check that all bolts, nuts, and screws are tight. Checking the bolts and nuts on the cutting blades is particularly important in rocky soil.
2. Check daily the level of the gearbox oil and top-off up to the correct level. Check for gearbox oil leaks. It should be noted that no warranty claim can be submitted on a gearbox that has run dry. It is essential that the gearbox is kept correctly filled with gearbox oil.
3. Grease the PTO shaft daily.
4. Check the wear on the cutting blades. Sharpen them routinely with an angle grinder or replace when worn down too far. Keep at least two sets of cutting blades, bolts, and nuts as spares.

LUBRICATION INFORMATION

WARNING

- Failure to maintain proper lubrication can result in damage to U-joints, gearbox, tractor PTO and/or driveline which can cause serious injury or death.

CAUTION

- When lubricating telescoping PTO drives, keep fingers out of shield access slots to prevent injury.

The accompanying chart gives the frequency of lubrication in operating hours, based on normal conditions. Severe or unusual conditions may require more frequent lubrication.

Do not let excess grease collect on or around parts, particularly when operating in sandy areas.

Use an SAE 90W gear lube in gearbox.

Use a lithium grease of No. 2 consistency with a MOLY (molybdenum disulfide) additive for all locations. Be sure to clean fittings thoroughly before attaching grease gun. When applied according to the lubrication chart, one good pump of most guns is sufficient. Do not over grease.

LUBRICATION CHART

Ref. No.	Description	Frequency
1	Front U-Joint	8 Hours
2	Rear U-Joint	8 Hours
3	Rear U-Joint to Input Shaft	Seasonally
4	Gearbox (Fill to proper level)	Check Daily
5	PTO Slip Joint	Daily

Daily lubrication of the PTO slip joint is necessary. Failure to maintain proper lubrication can result in damage to U-joints, gearbox, tractor PTO and/or driveline which can cause serious injury or death.

STORAGE

1. Drain and change the oil in your gearbox.
2. Check and replace, where necessary, blades, bolts, nuts on the machine.
3. Clean machine and touch up any rust spots that may have appeared.
4. Replace any safety decals if damaged, illegible, or painted over.
5. Make sure PTO driveline yoke and gearbox input shaft are clean and free of burrs. Keep well lubricated to prevent galling of yoke and input shaft when shear bolt becomes sheared.
6. Keep all shields in place. Order new shields if damaged or missing.
7. Keep cutting edges sharp. Sharp cutting edges dig easier and better. Outer cutting edges on larger augers

wear faster than inner cutting edges; switching teeth will even wear.

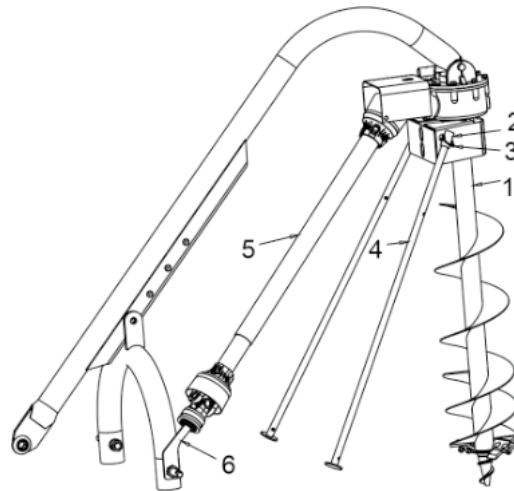
8. Store implement in clean and dry location.

REMOVE DIGGER FROM TRACTOR

When off the tractor, post hole diggers can be an awkward piece of equipment to handle. Be careful not to pinch hands and fingers in the various hinge points of the digger.

Parking Stand Installation

1. Auger
2. Gearbox output shield lug
3. 5/16 x 1-3/8 lock pin
4. Parking stand leg
5. Driveline
6. PTO storage bracket



1. Raise the implement as high as possible.
2. Insert the two parking stand legs (4) into the lug (2) on the front of the gearbox output shield. Secure with two locking pins (3).
3. Lower digger until the two legs and the auger form a tripod. This will support the post hole digger in a vertical position.
4. Remove 3-point arms and driveline from the tractor.
5. Hang the PTO end of the driveline (5) over the PTO shaft shortage bracket (6) to help prevent dirt and debris from accumulating in the locking collar on the driveline PTO yoke.

Alternative Suggestions

If available, the digger can be hung from an overhead rafter or beam. Attach the chain or rope around the boom just ahead of the gearbox. This allows one man to easily reconnect the digger to the tractor when next use is required.

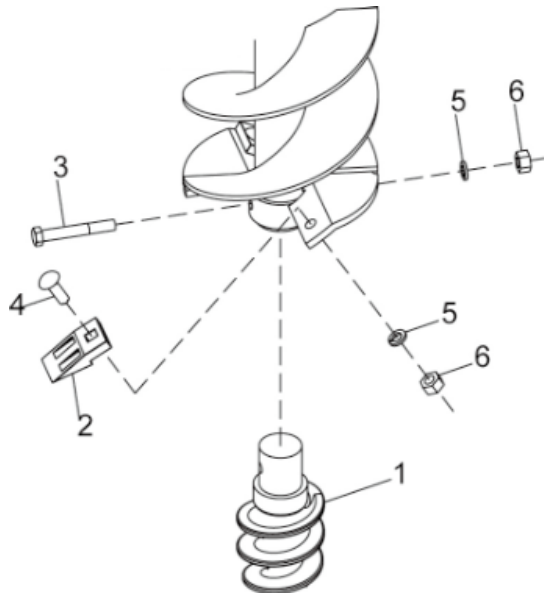
If storing outside, another idea is to dig a hole about 12-18 inches deep. Then shut the PTO off while the auger is in the hole. Set parking brake, turn off engine, and disconnect the digger from the tractor. The auger in the hole will keep the unit upright and make it possible for one person to disconnect or reconnect to the tractor. Doing this, will cause rusting of the auger, but it is easy for one person to handle the unit.

Do not store the product outdoors exposed to the elements.

REPLACE CUTTING EDGE

Cutting edges and center points are replaceable. They should be sharpened or replaced when worn.

1. Remove carriage bolt (4), lock washer (5), and hex nut (6) holding cutting tooth to the auger.
2. Replace or sharpen cutting tooth. Install carriage bolt, lock washer, and hex nut previously removed.
3. Remove center point (1) by removing cap screw (3), lock washer (5), and hex nut (6).



CLEAN POST HOLE DIGGER

After Each Use

- Remove large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Inspect machine and replace worn or damaged parts.
- Replace any safety decals that are missing or not readable.

Periodically or Before Extended Storage

- Clean large debris such as clumps of dirt, grass, crop residue, etc. from machine.
 - Remove the remainder using a low-pressure water spray.
1. Be careful when spraying near scratched or torn safety decals or near edges of decals as water spray can peel decal off surface.
 2. Be careful when spraying near chipped or scratched paint as water spray can lift paint.
 3. If a pressure washer is used, follow the advice of the pressure washer manufacturer.
- Inspect machine and replace worn or damaged parts.
 - Sand down scratches and the edges of areas of missing paint and coat with spray paint of matching color.

- Replace any safety decals that are missing or not readable.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES & SOLUTION
Auger will not dig	<p>Shear bolt sheared – install new shear bolt.</p> <p>Teeth dull – sharpen or replace.</p> <p>Ground too dry and hard – order optional down force kit, or wait until it rains.</p> <p>Auger turning too fast and bouncing – reduce speed.</p> <p>Tall grass has wrapped around auger teeth – remove grass.</p> <p>Auger encountering rocks, roots, or other obstruction – lift auger from hole and inspect.</p> <p>Auger teeth improperly positioned – see Parts section in this manual for proper tooth pattern.</p>
Post hole digger sways side to side	<p>No sway bars or sway blocks on tractor – add some.</p> <p>Lift arms not adjusted evenly – adjust lift arms.</p> <p>Post hole digger is mounted with excessive looseness in the hitch connecting points – use proper size pins or bushings.</p>
Bent auger flighting or bent auger	<p>Tractor moved while auger was turning in hole – always set brakes on tractor and make sure it is out of gear.</p> <p>Operator moved tractor with auger in hole to try and straighten a hole being dug at an angle.</p> <p>Auger is encountering rocks or roots or other foreign objects – remove object from hole or change location.</p> <p>Outer edge of auger flighting is bending due to contact with rocks or roots – use heavy-duty auger with thicker flighting.</p> <p>Shear bolt has been replaced with harder bolt – replace with Grade 2 bolt per instructions.</p>
Auger screws itself into the ground	<p>Operator did NOT ease 3-point hitch to ground slowly.</p> <p>Tractor 3-point does not have position control. Lift auger after advancing every 3" - 4".</p> <p>Faulty 3-point hitch hydraulic system on tractor.</p> <p>Draft control is not in OFF position.</p> <p>Tractor is too small to handle digger.</p>
Excessive vibration	PTO driveline bearing cross is worn – replace.
PTO driveline assembly comes off input shaft of	Set screw missing in yoke at gearbox input shaft.

gearbox when shear bolt is sheared	Install set screw as per driveline installation instructions. THIS IS A DANGEROUS SAFETY HAZARD, CORRECT IMMEDIATELY!
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PROBLEM	POSSIBLE CAUSES & SOLUTION
Auger digs so far, but will not dig deeper	<p>See solutions for above.</p> <p>PTO assembly “bottoms out,” not allowing digger to lower – remove auger from digger and lower digger. Gearbox should lower to the ground; if not, PTO driveline assembly may need to be shortened.</p>
PTO driveline failure	<p>PTO driveline interferes with swinging drawbar – swing drawbar out of the way or remove.</p> <p>Tractor hydraulic system may be faulty – consult tractor dealer.</p> <p>Soil could have hardpan layer 6"-10" below surface – use optional down force kit (see list of optional equipment).</p> <p>Operator raising post hole digger too high above ground when PTO is engaged – causes excessive PTO joint operating angle.</p> <p>PTO is engaged while moving between holes. (Auger swings, which causes excessive PTO joint operating angle.)</p> <p>Improper use of a hard shear bolt – use Grade 2 bolt per instructions.</p> <p>Driveline has not been properly lubricated.</p> <p>Engaging tractor PTO with engine at high rpm.</p> <p>Digging holes too deep so that PTO driveline contacts ground.</p> <p>Operating at high rpm.</p> <p>Use of auger extension can require post hole digger to be lifted high, which can cause excessive PTO joint operating angle.</p>
PTO driveline “galls” or “friction welds” to input shaft of gearbox	<p>Tractor is a “low profile model” (one that is low to the ground). Due to the low height of the tractor, the digger must be raised higher to have the bottom of the auger clear the ground. Generally, low profile model tractors can only use 30" long augers (standard auger length is 42"). Use a different tractor or purchase 30" long augers.</p> <p>No lubrication on input shaft of gearbox to allow yoke of PTO driveline to turn freely on input shaft</p>

	when shear bolt is sheared. Always keep input shaft greased.
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PROBLEM	POSSIBLE CAUSES & SOLUTION
Gearbox failure	No oil in gearbox. Oil not changed per instructions. Shear bolt has been replaced with a harder bolt – replace with Grade 2 per instructions. Bent output shaft is due to operator moving tractor when auger is in hole.
Gearbox overheating	Low on lubricant – fill to proper level. Improper type lubricant – replace with proper lubricant.
Auger bolts shear on gearbox output shaft	Shear bolt on input shaft has been replaced with a harder bolt – replace with Grade 2 bolt as per instructions.
Tractor stalls	Auger is encountering rocks or roots or another foreign object – remove object or change hole location. Tractor idle is not set correctly – tune tractor engine.

SPECIFICATIONS

Tractor Category Category 1 and Category 2 tractors only

Gear Box..... Special alloy pinion gears and tapered roller bearings on both sides of each gear, 540 RPM

Driveline Equipped with quick-latch yoke to fit standard 540 RPM, 6-spline PTO (completely shielded)

Augers..... Sold separately. 6 in., 9 in., 12 in., 18 in. and 24 in. sizes available

Cutting Edges Sold separately. Replaceable carbide

Point..... Sold separately. Cast ductile iron, spiral point, replaceable

Boom..... 3 in. O.D. high strength tubing

A-frame..... 3 in. O.D. high strength tubing

Safety shields..... On driveline, gear box “U” joint and gear box output shaft

Shear Pin Replaceable. On input shaft to protect driveline, auger and gears

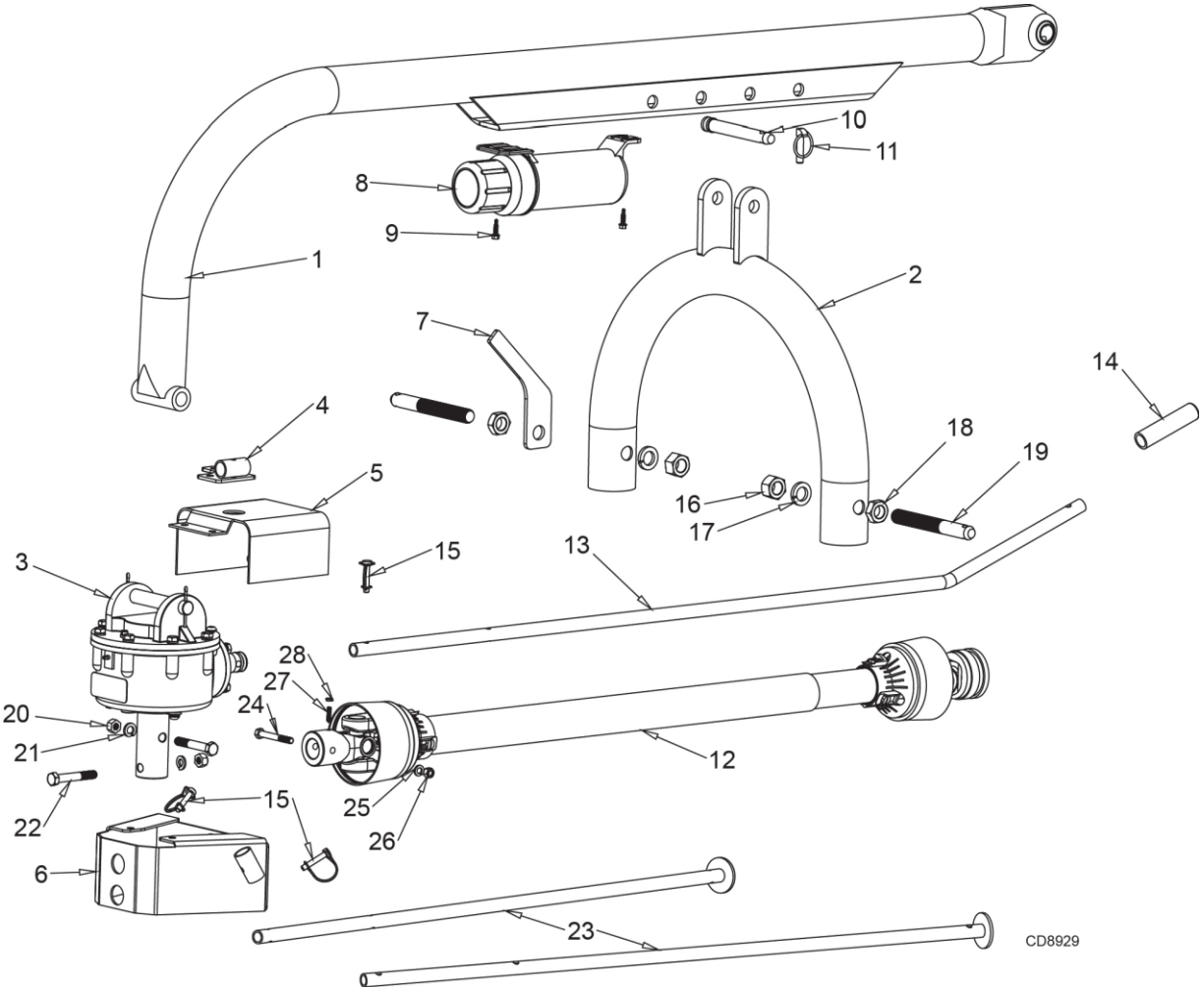
Options..... Hydraulic down force kit and weight mounting kit

ORDERING INFORMATION

PART NO.	DESCRIPTION
YTL-007-643	Heavy Duty post hole digger less auger
YTL-017-787	6 in. auger with spiral point and replaceable carbide cutting edges
YTL-017-794	9 in. auger with spiral point and replaceable carbide cutting edges
YTL-017-800	12 in. auger with spiral point and replaceable carbide cutting edges
YTL-007-681	18 in. auger with spiral point and replaceable carbide cutting edges
YTL-007-698	24 in. auger with spiral point and replaceable carbide cutting edges
YTL-050-456	Spiral point 6 in., 9 in., 12 in., 18 in., and 24 in. augers

YTL-050-463	2 in. carbide cutting edge for 6 in., 9 in., 12 in., 18 in., and 24 in. augers (Quantity required varies by auger size)
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POST HOLE DIGGER PARTS DRAWING



CD8929

POST HOLE DIGGER PARTS LIST

Ref#	Drawing No.	Description	Qty
1	PD2402-00001	BOOM	1
2	PD2402-00002	A-FRAME	1
3	PD2402-00003	GEAR BOX, COMPLETE (INCLUDES 3, 4, 5, 6)	1
4	PD2402-00004	LUG BRACKET	1
5	PD2402-00005	INPUT GUARD	1
6	PD2402-00006	OUTPUT GUARD	1
7	PD2402-00007	INPUT GUARD	1
8	PD2402-00008	MANUAL CANISTER	1
9	PD2402-00009	1/4" x 1" SELF TAPPING SCREW	2
10	PD2402-00010	3/4" TOP LINK PIN	1
11	PD2402-00011	7/16" LYNCH PIN	1
12	PD2402-00012	DRIVE LINE, LARGE, SLIDE COLLAR	1
13	PD2402-00013	HANDLE, PHD	1
14	PD2402-00014	GRIP	1
15	PD2402-00015	LOCK PIN, 5/16" X 1-3/8"	3
16	PD2402-00016	7/8" NF HEX NUT	2
17	PD2402-00017	7/8" LOCK WASHER	2
18	PD2402-00018	7/8" NF JAM NUT	2
19	PD2402-00019	PIN, LIFT ARM, 7/8" x 6.78	2
20	PD2402-00020	1/2" NC HEX NUT	2
21	PD2402-00021	1/2" LOCK WASHER	2
22	PD2402-00022	1/2 NC x 3-1/4 HEX BOLT, GRADE 5	2
23	PD2402-00023	LEG	2
24	PD2402-00024	3/8" NC x 3" SHEAR BOLT, GRADE 2	1
25	PD2402-00025	3/8" LOCK WASHER	1
26	PD2402-00026	3/8" HEX NUT	1
27	PD2402-00027	M6 x 25mm SET SCREW	1
28	PD2402-00028	M6 JAM NUT	1

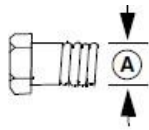
BOLT TORQUE CHART

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

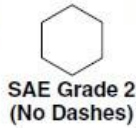
Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware. Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



SAE SERIES TORQUE CHART



SAE Bolt Head Identification

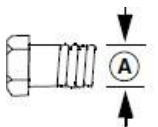


SAE Grade 5
(3 Radial Dashes)



SAE Grade 8
(6 Radial Dashes)

Ⓐ Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383



METRIC SERIES TORQUE CHART

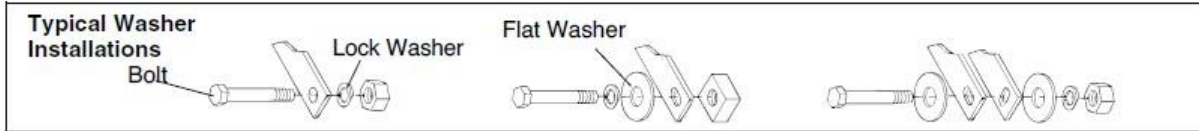


Metric Bolt Head Identification



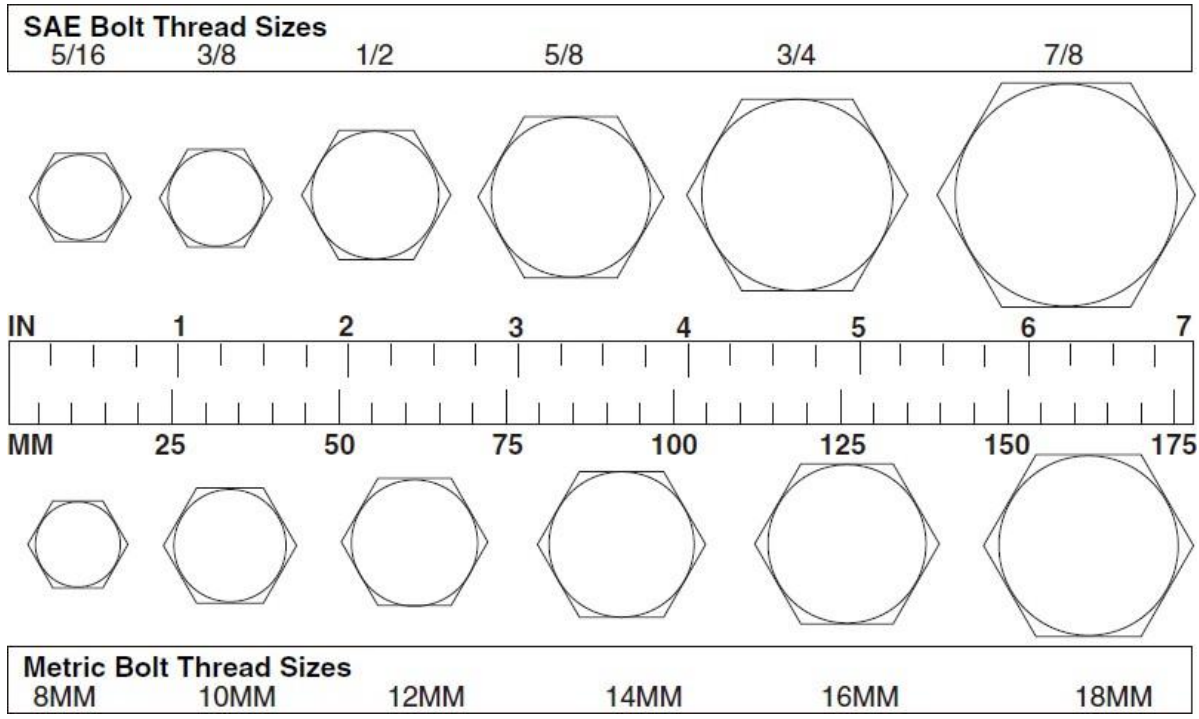
Metric
Grade 10.9

Ⓐ Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				Ⓐ Diameter & Thread Pitch (Millimeters)
		MARKING ON HEAD								
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0



BOLT SIZE CHART

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



ABBREVIATIONS

- | | |
|---|---|
| AG Agriculture | NC National Coarse |
| ATF Automatic Transmission Fluid | NF National Fine |
| BSPP British Standard Pipe Parallel | NPSM National Pipe Straight Mechanical |
| BSPTM British Standard Pipe Tapered Male | NPT National Pipe Tapered |
| CV Constant Velocity | NPT SWF National Pipe Tapered Swivel Female |
| CCW Counter-Clockwise | ORBM O-Ring Boss - Male |
| CW Clockwise | P Pitch |
| F Female | PBY Power-Beyond |
| GA Gauge | psi Pounds per Square Inch |
| GR (5, etc.) Grade (5, etc.) | PTO Power Take Off |
| HHCS Hex Head Cap Screw | QD Quick Disconnect |
| HT Heat-Treated | RH Right Hand |
| JIC Joint Industry Council 37° Degree Flare | ROPS Roll-Over Protective Structure |
| LH Left Hand | RPM Revolutions Per Minute |
| LT Left | RT Right |
| m Meter | SAE Society of Automotive Engineers |
| mm Millimeter | UNC Unified Coarse |
| M Male | UNF Unified Fine |
| MPa Mega Pascal | UNS Unified Special |
| N Newton | |

LIMITED WARRANTY

For 1 year from the date of purchase YTL International will replace or repair defects in material and workmanship, the gear box has a three warranty for the original purchaser of the digger. The warranty will not apply to any unit which was not assembled correctly, misused, overloaded or which has been used or operated contrary to our instructions, or which has been repaired or altered by anyone other than a service representative authorized by YTL International Inc.

Warranty Exclusions

This warranty does not cover cosmetic defects such as paint, decals or wear items This warranty will not cover failures or problems due to acts of God, or events or forces beyond the control of the manufacturer.

Normal Wear Exclusion

The digger needs periodic service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

Installation, Use and Maintenance Exclusion

This warranty will not apply to parts and/or labor if the digger has been misused, neglected, involved in an accident, abused, loaded beyond its limits, modified or assembled incorrectly. Normal maintenance is not covered under this warranty.

Contact Information

YTL International Inc.
17517 Fabrica Way Suite H
Cerritos, CA 90703
Phone: (888) 723-6534
Website: www.ytlinternational.com

Contact Information below for Warranty and Service

Parts and Service:

Toll Free (888) 723-6534 (USA & Canada)
Email: parts@ytlinternational.com