

Post Hole Digger

USER MANUAL



Before using the machine, please read the manual carefully, ask your local dealer or manufacturer if you still have something unclear after you read it. This manual is for only user's reference. If the product has some changes, please use it according to the exact items.

TO THE CUSTOMER

- This manual contains valuable information about your new machine. It has been carefully prepared to give you helpful suggestions for operation, adjusting, and servicing.
- Keep this manual in a convenient place for quick and easy reference. Study it carefully, only by proper care and operation can you expect to receive the service and long life designed and built into this machine.

SAFETY

Equipment Safety Guidelines

- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- Review the safety instructions with all users annually.
- To prevent injury or death. Do not paint over, remove or deface any safety signs or warning signs on your equipment. Observe all safety signs and practice the instruction on them.
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question – DON'T TRY IT.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.

Safety Training

- Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is the equipment owner's responsibility, if this machine is used by any person other than yourself, is loaned or rented, to make certain that the operator, prior to operating:

1. Reads and understands the operator's manuals.
2. Is instructed in safe and proper use.

- Know your controls and how to stop tractor, engine, and loader quickly in an emergency.

Read this manual and the one provided with your tractor or skid steer.

- Do not allow children to operate this machine.

How to Install Safety Signs

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.

Preparation

- Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the implement. Do not allow long hair, loose fitting clothing or jewelry to be around moving parts.

- **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**
Tractors with or without implements attached can often be noisy enough to cause permanent,

partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. NOTE: Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.

- Clear area of stones, branches or other debris that might be thrown or entangled, causing injury or damage. Safety - Post Hole Digger
- Operate only in daylight or good artificial light.
- Make sure driveline spring-activated locking pin or balls operate freely and are seated firmly in tractor PTO stub shaft groove.
- Ensure that all safety shielding and safety signs are properly installed and in good condition.

Operational Safety

- This Post Hole Digger was designed for one-man operation from the tractor seat. It is the responsibility of the operator to see that no one is within twenty-five feet (25') of the digger when it is started. Do not operate the digger with another person near, or in contact with, any part of the digger, PTO driveline, or auger. Serious personal injury or death may result if any attempt is made to assist digger operation by hand.
- Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders twenty-five feet (25') from an operating digger. Only properly trained people should operate this machine. It is recommended the tractor be equipped with a Rollover Protection System (ROPS) and a seat belt that is used. Always stop the PTO, set brake, shut off the tractor engine, remove the tractor key, and allow auger to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.
- If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated. Always use, and maintain in place, all power take off guards furnished with the tractor as well as the power take off guards and shields furnished with the digger.
- This digger is designed for use only on tractors with 540 RPM power take off.
- When the use of hand tools is required to perform any part of assembly, installation, adjustment, maintaining, repairing, removal, or moving the digger, be sure the tools used are designed and recommended by the tool manufacturer for that specific task.
- Never place yourself between the tractor and digger while implement is in operation.
- Do not walk or work under a raised digger or attachment unless it is securely blocked or held in position. Do not depend on the tractor hydraulic system to hold the digger or attachment in place.
- A heavy load can cause instability of the tractor. Use extreme care during travel. Slow down on turns and watch out for bumps. The tractor may need front counter-weights to counter-balance the weight of the digger.
- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- Do not allow riders on the digger or tractor at any time. There is no safe place for any riders.
- Before you operate the digger, check over all pins, bolts and connections to be sure all are securely in place. Replace any damaged or worn parts immediately.

- Consult local utility companies to make certain there are no buried gas lines, electrical cables, etc., in the work area before beginning operation.

Operational Safety Continued

- Do not allow anyone who is not familiar with the safety rules and operation instructions to use this Post Hole Digger.
- Never allow children to operate or be around this digger.
- Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the Post Hole Digger from swinging side to side. Adjust as tightly as practical for best performance.
- Never replace the shear bolt OR auger retaining bolt with any length other than what is specified in this manual. A longer, or protruding fastener is more likely to grab loose clothing or gloves which can result in serious injury or death.
- Do not operate digger on steep hillsides. When digging on uneven or hilly terrain, position the tractor with the Post Hole Digger uphill. With the Post Hole Digger downhill, the tractor could tip when attempting to pull the auger from its hole.
- Never position the auger point by hand or with any tool when the tractor is running.
- Never position the auger point by putting your hands on the auger, gearbox, boom, or driveline.
- Inspect the entire machine periodically as indicated in the Maintenance Section of this manual. Look for loose fasteners, worn or broken parts, pinched hydraulic hoses, and leaky or loose fittings. Make sure all pins have cotter pins and washers. Serious injury may occur from not maintaining this machine in good working order.
- To prevent rapid wear of U-Joints and possible failure of drivelines, never lift auger point more than 12" off the ground with PTO operating.
- To prevent possible instantaneous driveline failure, never move digger from hole-to-hole or transport while auger is rotating. This could lead to injury from flying pieces of the failed driveline.
- Keep hands, feet, hair, jewelry, and clothing, away from all moving and/or rotating parts.
- To prevent entanglement and possible serious injury or death, never use body weight to try to push auger into the ground.
- Worn edges or a slightly rounded point can seriously effect auger penetration. Check for wear before each use, replace as necessary.
- Do not shovel dirt away from a rotating auger as the shovel can be caught and thrown by the auger.
- Do not operate the Post Hole Digger without all safety shields and guards in place.
- Take all possible precautions when leaving unit unattended: Disengage PTO, set parking brake, stop engine and remove key from ignition. Park in level area.
- Always use care when operating a Post Hole Digger.

Transport Safety

- Always be sure the implement is in the proper raised position for transport.
- Reduce speed when transporting mounted implements to avoid bouncing and momentary loss of steering control.
- Turn curves or go up or down hills only at a low speed and at a gradual steering angle. Make certain that at least 20% of the tractor's weight is on the front wheels to maintain safe

steerage. Slow down on rough or uneven surfaces, and loose gravel.

- Use extreme care and maintain minimum ground speed when transporting on hillside, over rough ground and when operating close to ditches or fences. Be careful when turning sharp corners.
- Never allow riders on either tractor or implement. Falling off can kill.

Maintenance Safety

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Keep service area clean and dry.
- Before working on this machine, drive to a level area, disengage the PTO, lower implement (or if working underneath, raise and block securely), shut off the engine, set the brakes, and remove the ignition keys.
- Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the digger. Do not allow long hair, loose fitting clothing or jewelry to be around moving parts.
- Always use two people to handle heavy, unwieldy components during assembly, installation, removal, or moving the digger.
- Never work under equipment unless it is blocked securely. Never depend on hydraulic system to keep implement in raised position.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance.
- Periodically tighten all bolts, nuts and screws and check that all cotter pins are properly installed to ensure unit is in a safe condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.
- If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.
- Never use your hands to locate a hydraulic leak on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.

Storage Safety

- Following operation, or when unhooking, stop the tractor, set the brakes, disengage the PTO, shut off the engine and remove the ignition keys.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.

INSTRUCTIONS :

- Check the tractor's 3-pt. hydraulic lift system. It should operate smoothly and have enough power to lift the dirt-loaded auger out of the hole. Refer to your tractor operator's manual or dealer for any adjustments to put the 3-pt. hydraulic lift system in good working order.
- Check the shield over the PTO stub shaft. Make sure it is in good condition and bolted securely to the tractor. Tractor must be equipped with stabilizer bars, adjustable sway chains,

or sway blocks to keep the post hole digger from swinging side to side.

- Smaller size tractors may need front counter weights to counter-balance the weight of the post hole digger and the weight of the dirt on the auger.
- Check that post hole digger is properly and securely attached to tractor.
- Make sure driveline spring-activated locking pin or locking balls operate freely and are seated firmly in tractor PTO spline groove.
- Lubricate all grease fitting locations. Make sure PTO shaft slip joint is lubricated. Check to sure gear lube runs out the small check plug on side of gearbox.
- Check that all hardware is properly installed.
- Check to ensure blades are sharp and secure and cutting edges are positioned correctly.
- Check that all shields and guards are properly installed and in good condition.
- Set tractor PTO gear select lever for 540 rpm operation.

Operation

This Post Hole Digger was designed for one-man operation from 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.

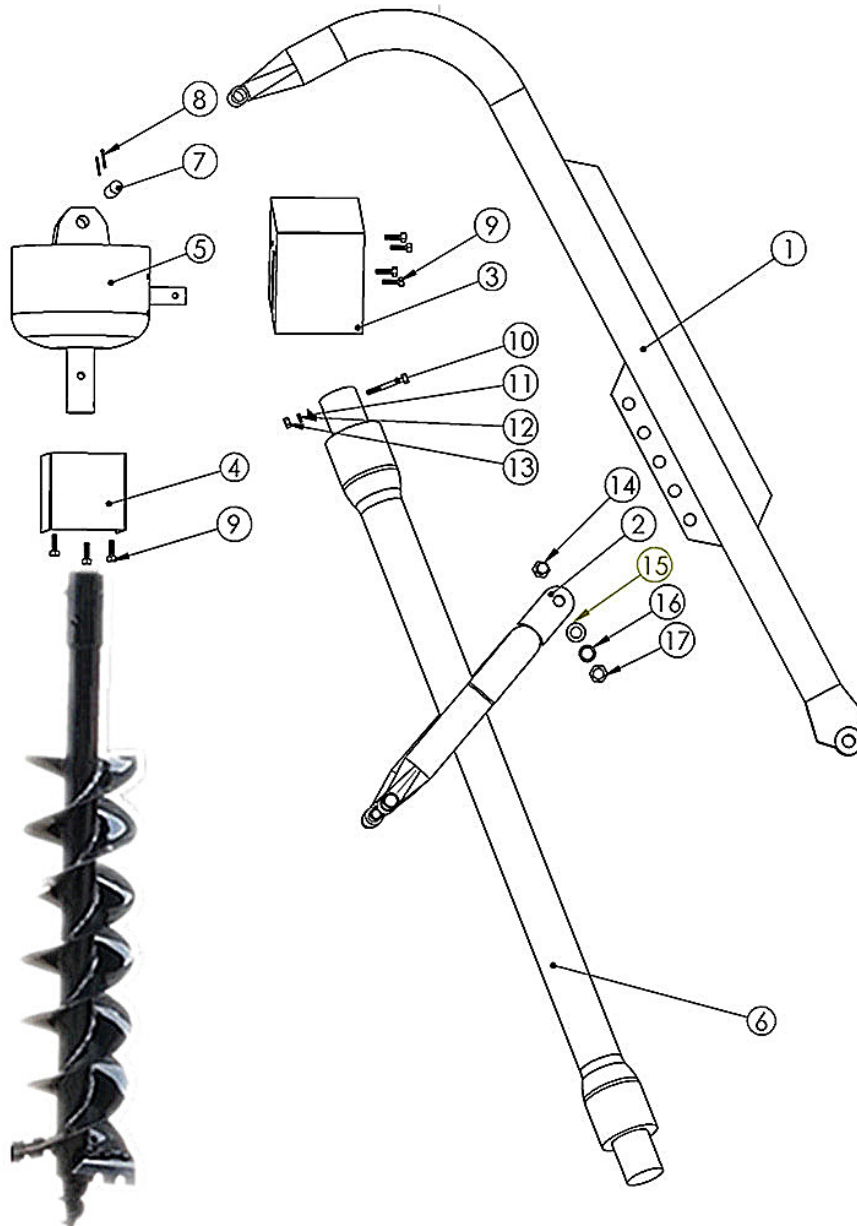
- Set tractor brakes. Take tractor out of gear. Shift to Park (if applicable).
- Do not allow anyone to stand behind, or to the side of a rotating auger.
- Lower auger point slowly to the ground with the PTO disengaged.
- With the auger point lowered to the ground, set the engine speed to idle, then engage the PTO. Make sure the auger point is on the ground before engaging the PTO.
- Increase the speed as required so dirt is conveyed from the hole. Refer to Owner's Manual for suggestions on PTO speed.
- Under no circumstances should the PTO be run in excess of 540 RPM.
- In some types of soil, it may be necessary to hold back against the auger screw suction by moving the hydraulic control lever to its HOLD or RAISE's position to keep the auger from screwing into the ground.
- Never use body weight to help the auger penetrate 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. (Optional Hydraulic Downpressure Kit is available)
- If you have difficulty penetrating hard ground, refer to Owner's Manual Trouble-shooting section for suggestions.
- When the auger has been lowered about a foot or so into the ground, raise the auger almost out of the hole to clear the dirt, then drill deeper and raise the auger again. Repeat this procedure until the desired hole depth is reached.
- Do not shovel dirt away from a rotating auger as the shovel can be caught and thrown by the auger.
- Disengage the power-take-off when traveling between holes.
- IT IS ESSENTIAL THAT EVERYONE INVOLVED IN THE ASSEMBLY, OPERATION, TRANSPORT, MAINTENANCE, AND STORAGE OF THIS EQUIPMENT BE AWARE, CONCERNED, PRUDENT, AND PROPERLY TRAINED IN SAFETY.
- The post hole digger auger is free-swinging, and care should be taken while transporting the machine. 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.

- **DIGGING A HOLE:** Position the tractor so that the auger point is placed where the hole is to be. Lower the auger so that the point touches the ground. 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.
- Engage the tractor PTO with the engine at idle (or below 1000 engine RPM). As the auger penetrates the ground, lower the unit slowly with the 3 pt. hydraulic system. **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. Once the hole is dug 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. For best results, allow the digger to dig about half the required depth, then lift it partially out of the hole to remove dirt and then re-enter hole and finish to the desired depth.
- Do not run the digger while transporting, as damage to the PTO shaft could occur.
- **DO NOT LET THE DIGGER DIG SO DEEP THAT THE PTO SHAFT IS RUNNING IN THE DIRT.**
- Once the auger is digging a hole, the tractor cannot be moved. Make sure brake is set securely. If the tractor does move while the auger is in a hole, damage to the gearbox or auger can result (not covered by warranty).
- Cutting edges and center point are replaceable. They should be sharpened or replaced when worn. In hard digging conditions, a fishtail type center point is more aggressive and is recommended.
- **NOTE:** Be careful when raising the auger as high as your tractor's 3 pt. hitch 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 while it is running more than six (6) inches above the ground.
- **NOTE:** If you have a rocky or large root soil condition, it is recommended that an industrial duty auger be used. If you encounter rocks or roots that catch the auger and cause shear bolts to break, then remove the auger from the hole and use a large, heavy pry bar to break up the obstructing rock. A large root may have to be chopped to remove.
- **NOTE:** Correct mounting of the cutting edges will assure a complete cut of earth by the auger. If auger becomes lodged below ground, **DO NOT** attempt to lift auger out of ground by hydraulic lift power alone. Turn tractor off and disconnect PTO driveline from the tractor. Reverse the rotation of the auger by several turns. This can be accomplished by using a large pipe wrench and screwing the auger backwards until it clears. Extreme rocking or lifting loads while trying to clear stuck augers can cause auger, gearbox, or boom failure.

**ALWAYS OBEY ALL SAFETY RULES!
ALWAYS BE CAREFUL!**

POST HOLE DIGGER DIAGRAM & PARTS LIST



Item No	Description	Quantity	Item No	Description	Quantity
1	Boom Weldment	1	10	Bolt Hex Head	1
2	Yoke Weldment	1	11	Washer Plain	1
3	Input Shield	1	12	Washer Springlock	1
4	Output Shield	1	13	Nut	1
5	Gear Box	1	14	Bolt Hex Head	1
6	Pto Shaft	1	15	Washer Plain	1
7	Pin, Gear box/Boom	1	16	Washer Springlock	1
8	Cotter Pin	2	17	Nut	1
9	Bolt Hex Head	8	18	Auger	1