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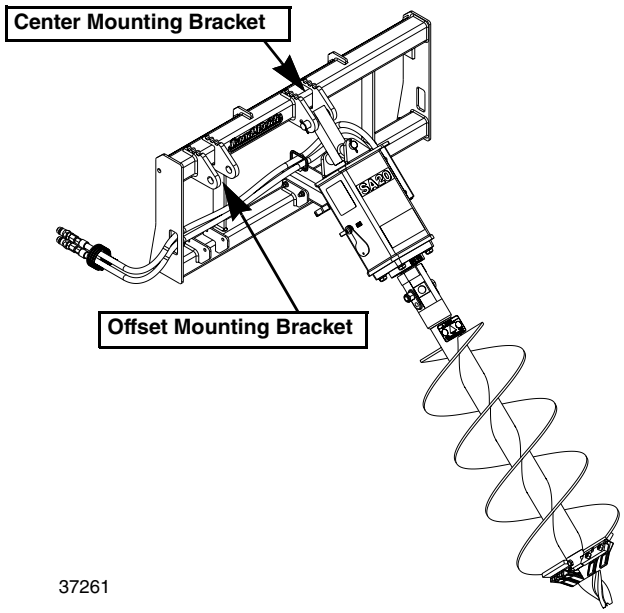
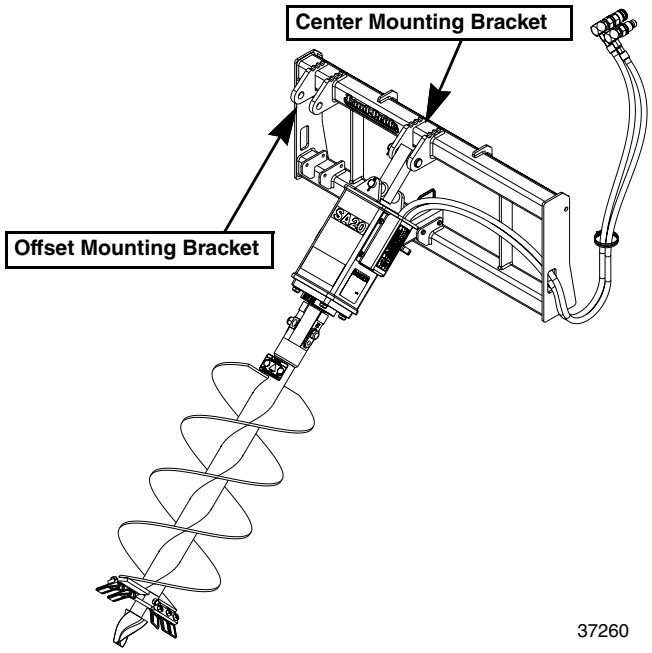
Hydraulic Post Hole Diggers

SA20



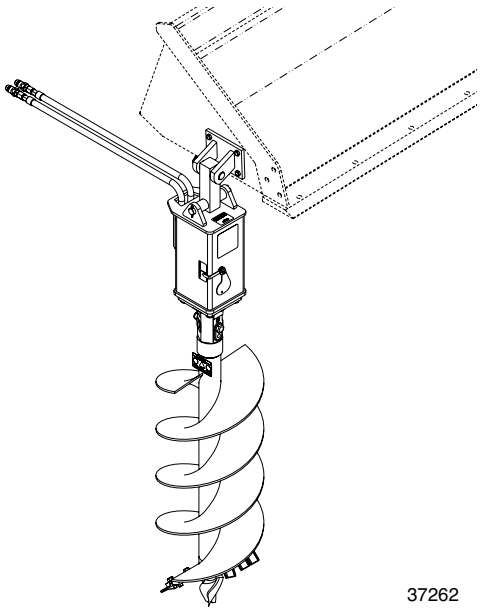
37261

Post Hole Digger For Tractor Loaders



37260

Post Hole Digger For Skid Steers



37262

Post Hole Digger For Bucket Mount

317-215M
Operator's Manual

Read the Operator's Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.

For an Operator's Manual and Decal Kit in French Language, please see your Land Pride dealer.

Printed 10/31/23

Machine Identification

Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

If you, or the dealer, have added Options not originally ordered with the machine, or removed Options that were originally ordered, the weights and measurements are no longer accurate for your machine. Update the record by adding the machine weight and measurements provided in the Specifications & Capacities Section of this manual with the Option(s) weight and measurements.

Model Number	
Serial Number	
Machine Height	
Machine Length	
Machine Width	
Machine Weight	
Delivery Date	
First Operation	
Accessories	

Dealer Contact Information

Name: _____

Street: _____

City/State: _____

Telephone: _____

Email: _____

California Proposition 65

⚠ **WARNING**: Cancer and reproductive harm - www.P65Warnings.ca.gov

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Please take our Customer Satisfaction SURVEY at landpride.com

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Printed in the United States of America.

See previous page for Table of Contents.

Parts Manual QR Locator

The QR (Quick Reference) code on the the left will take you to the Parts Manual for this equipment. Download the appropriate App on your smart phone, open the App, point your phone on the QR code and take a picture.

Dealer QR Locator

The QR code on the left will link you to available dealers for Land Pride products. Refer to Parts Manual QR Locator on this page for detailed instructions.

Listed below are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Careful operation is your best assurance against an accident.

All operators, no matter how much experience they may have, should carefully read this manual and other related manuals before operating the power machine and this attachment.

- ▲ Thoroughly read and understand the “Safety Label” section. Read all instructions noted on them.
- ▲ Do not operate the equipment while under the influence of drugs or alcohol, as they impair your ability to safely and properly operate the equipment.
- ▲ Operator should be familiar with all functions of the tractor/skid steer and attachment and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields appropriate for the operation are in place and secured before operating the attachment.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Start tractor/skid steer from the driver’s seat with steering levers and hydraulic controls in neutral.
- ▲ Operate tractor/skid steer and controls from the driver’s seat only.
- ▲ Never dismount from a moving tractor/skid steer or leave machine unattended with engine running.
- ▲ Do not allow anyone to stand between the attachment and tractor/skid steer while connecting to the attachment.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ While transporting and operating equipment, watch out for objects overhead and along the sides such as fences, trees, buildings, wires, etc.
- ▲ Store attachment in a safe and secure area where children normally do not play. When needed, secure attachment against falling with support blocks.

Look for the Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety and extra precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. Hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

A signal word designates a degree or level of hazard seriousness. They are:

DANGER: Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING: Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION: Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

Be Aware of Special Notices

Special notices are intended to point out important and helpful information that should be followed. They are usually placed inside a box. They are:

IMPORTANT: Indicates that equipment or property damage could result if instructions are not followed.

NOTE: Indicates supplementary explanations that will be helpful when using the equipment.

Safety Precautions for Children

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to attachments and their work.

- ▲ Never assume children will remain where you last saw them.
- ▲ Keep children out of the work area and under the watchful eye of a responsible adult.
- ▲ Be alert and shut the attachment and skid steer/track loader down if children enter the work area.
- ▲ Never carry children on the power machine or attachment. There is not a safe place for them to ride. They may fall off and be run over or interfere with the control of the power machine.
- ▲ Never allow children to operate the power machine, even under adult supervision.
- ▲ Never allow children to play on the power machine or attachment.
- ▲ Use extra caution when backing up. Before the power machine starts to move, look down and behind to make sure the area is clear.

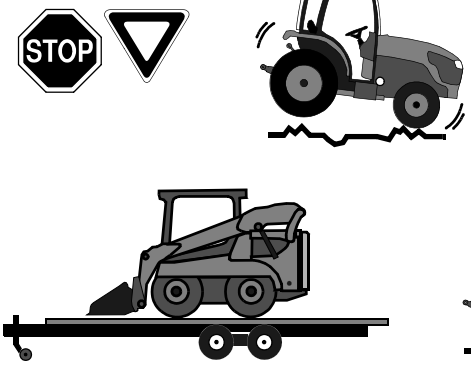
Listed below are common practices that may or may not be applicable to the products described in this manual.

Dig Safe - Avoid Underground Utilities

- ▲ USA: Call 811
  CAN:
  http://www.clickbeforeyoudig.com
- ▲ Always contact your local utility companies (electrical, telephone, gas, water, sewer, and others) before digging so that they may mark the location of any underground services in the area.
- ▲ Be sure to ask how close you can work to the marks they positioned.

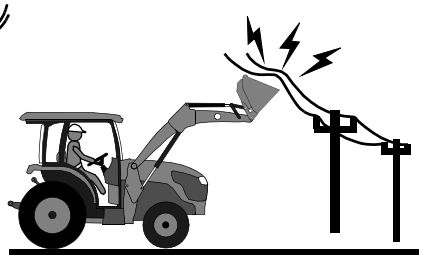
Towing Safely

- ▲ Comply with federal, state, and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with chocks, tie downs, and chains.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the vehicle towing the load.
- ▲ Sudden braking can cause a towed trailer to swerve unexpectedly. Reduce speed if trailer is not equipped with brakes.



Transport Safely

- ▲ Comply with federal, state, and local laws.
- ▲ Avoid contact with any overhead utility lines or electrically charged conductors.
- ▲ Always drive with attachment on the end of the loader arms low to the ground.
- ▲ Follow recommendations in the power machine Operator's Manual when driving uphill or downhill and when parking on an incline.
- ▲ Never travel at a speed which does not allow adequate control of the load, steering, and stopping. Some rough terrains require a slower speed.

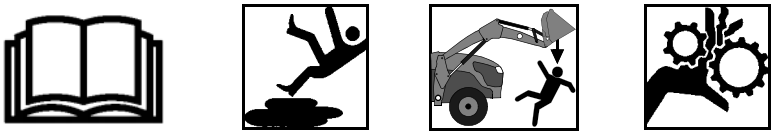


Tire Safety

- ▲ Tire changing can be dangerous and must be performed by trained personnel using the correct tools and equipment.
- ▲ Always properly match the wheel size to the properly sized tire.
- ▲ Always maintain correct tire pressure. Do not inflate tires above recommended pressures shown in the Operator's Manual.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ Securely support the attachment when changing a wheel.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
- ▲ Make sure wheel bolts have been tightened to the specified torque.

Practice Safe Maintenance

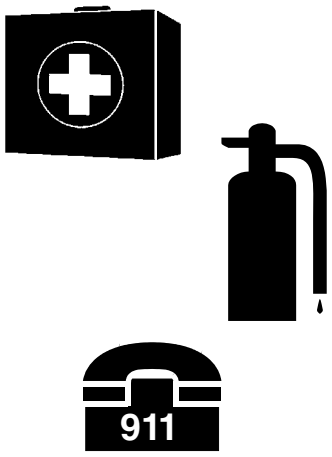
- ▲ Understand procedure before doing work. Refer to the Operator's Manual for additional information.
- ▲ Work on a level surface in a clean dry area that is well-lit.
- ▲ Lower attachment to the ground and follow all shutdown procedures before leaving the operator's seat to perform maintenance.
- ▲ Do not work under any hydraulically supported equipment. It can settle, suddenly leak down, or be lowered accidentally. If it is necessary to work under the equipment, securely support it with stands or suitable blocking beforehand.
- ▲ Use properly grounded electrical outlets and tools.
- ▲ Use correct tools and equipment for the job that are in good condition.
- ▲ Allow equipment to cool before working on it.
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on equipment.
- ▲ Inspect all parts. Make certain that parts are in good condition & installed properly.
- ▲ Replace parts on this attachment with genuine Land Pride parts only. Do not alter this attachment in a way which will adversely affect its performance.
- ▲ Do not grease or oil attachment while it is in operation.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Always make sure any material and waste products from the repair and maintenance of the attachment are properly collected and disposed.
- ▲ Remove all tools and unused parts before operation.



Listed below are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital, and fire department near the phone.



Wear Personal Protective Equipment (PPE)

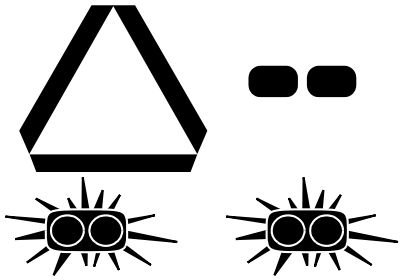
- ▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety, glasses, hard hat, dust mask, and ear plugs.
- ▲ Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating a machine safely requires the operator's full attention. Avoid wearing headphones while operating equipment.

Avoid High Pressure Fluids

- ▲ Escaping fluid under pressure will penetrate the skin or eyes causing serious injury.
- ▲ Relieve all residual pressure before disconnecting hydraulic lines or performing work on the hydraulic system.
- ▲ Make sure all hydraulic fluid connections are properly tightened/torqued and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, seek immediate emergency medical care or gangrene may result.

Use Safety Lights and Devices

- ▲ A slow moving power machine can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.
- ▲ For tractors and other agriculture equipment, a Slow Moving Vehicle (SMV) sign is required when traveling on public roads.

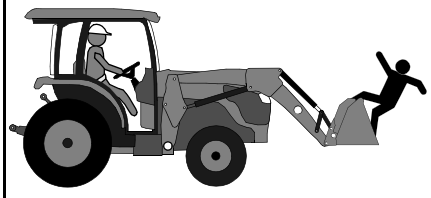


Use Seat Belt and ROPS

- ▲ Land Pride recommends the use of a CAB or roll-over-protective-structures (ROPS) and seat belt in almost all power machines. Combination of a CAB or ROPS and seat belt will reduce the risk of serious injury or death if the power machine should be upset.
- ▲ If ROPS is in the locked-up position, fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.

Keep Riders Off Machinery

- ▲ Never carry riders on the power machine or attachment.
- ▲ Riders obstruct operator's view and interfere with the control of the power machine.
- ▲ Riders can be struck by objects or thrown from the equipment.
- ▲ Never use the power machine or attachment to lift or transport riders.

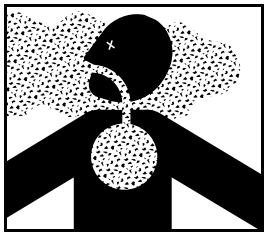


These are common practices that may or may not be applicable to the products described in this manual.

Avoid Crystalline Silica (Quartz) Dust

Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis).

There are guidelines which should be followed if crystalline silica (quartz) is present in the dust.



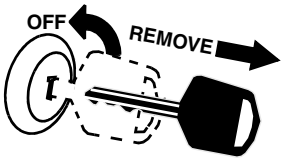
- ▲ Be aware of and follow OSHA (or other local, State, or Federal) guidelines for exposure to airborne crystalline silica.
- ▲ Know the work operations where exposure to crystalline silica may occur.
- ▲ Participate in air monitoring or training programs offered by the employer.
- ▲ Be aware of and use optional equipment controls such as water sprays, local exhaust ventilation, and enclosed cabs with positive pressure air conditioning if the machine has such equipment. Otherwise respirators shall be worn.
- ▲ Where respirators are required, wear a respirator approved for protection against crystalline silica containing dust. Do not alter respirator in any way. Workers who use tight-fitting respirators can not have beards/ mustaches which interfere with the respirator seal to the face.
- ▲ If possible, change into disposable or washable work clothes at the work site; shower and change into clean clothing before leaving the work site.
- ▲ Do not eat, drink, use tobacco products, or apply cosmetics in areas where there is dust containing crystalline silica.
- ▲ Store food, drink, and personal belongings away from the work area.
- ▲ Wash hands and face before eating, drinking, smoking, or applying cosmetics after leaving the exposure area.

Handle Chemicals Properly

- ▲ Protective clothing should be worn.
- ▲ Handle all chemicals with care.
- ▲ Follow instructions on container label.
- ▲ Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil, and property.
- ▲ Inhaling smoke from any type of chemical fire can be a serious health hazard.
- ▲ Store or dispose of unused chemicals as specified by the chemical manufacturer.

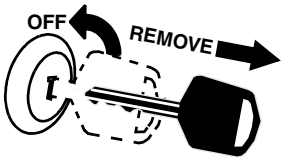
Skid Steer Shutdown And Storage

- ▲ Reduce engine speed and shut-off all power to the attachment.
- ▲ Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.
- ▲ Turn off engine. Do not remove ignition key at this time.
- ▲ Turn ignition key to the “RUN” position. Relieve all hydraulic pressure by moving both joysticks.
- ▲ Turn ignition key to Off and remove to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressures.
- ▲ If included, raise seat bar and move controls until both lock.
- ▲ Wait for all components to stop before leaving operator’s seat.
- ▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the skid steer.



Tractor Shutdown & Storage

- ▲ Reduce engine speed and shut-off all power to the attachment.
- ▲ Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.
- ▲ Put tractor in park or set park brake.
- ▲ Turn off engine and remove ignition key to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressures.
- ▲ Wait for all components to stop before leaving operator’s seat.
- ▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.



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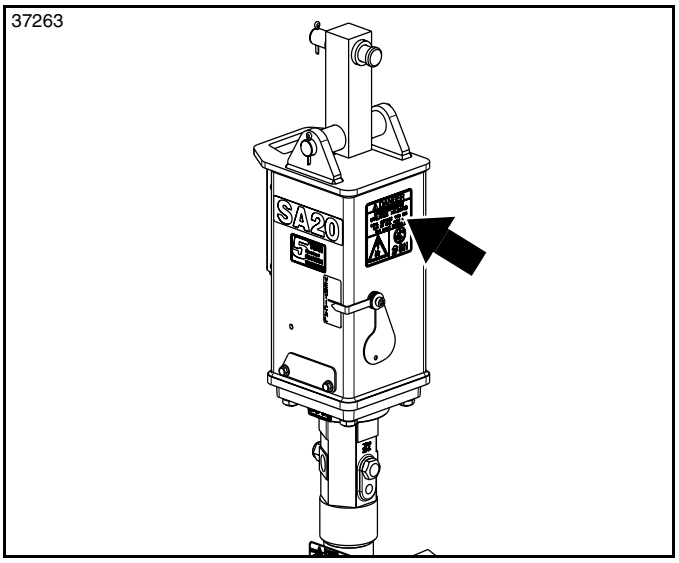
Safety Labels

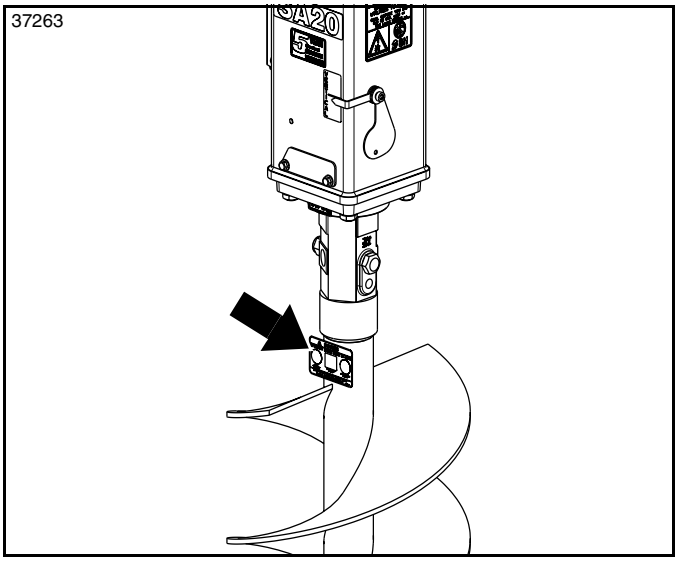
Your Post Hole Digger comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. *Keep all safety labels clean and legible.*
2. *Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.*
3. *Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.*
4. *Refer to this section for proper label placement.*
   To install new labels:
   a. *Clean surface area where label is to be placed.*
   b. *Spray soapy water onto the cleaned area.*
   c. *Peel backing from label and press label firmly onto the surface.*
   d. *Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.*



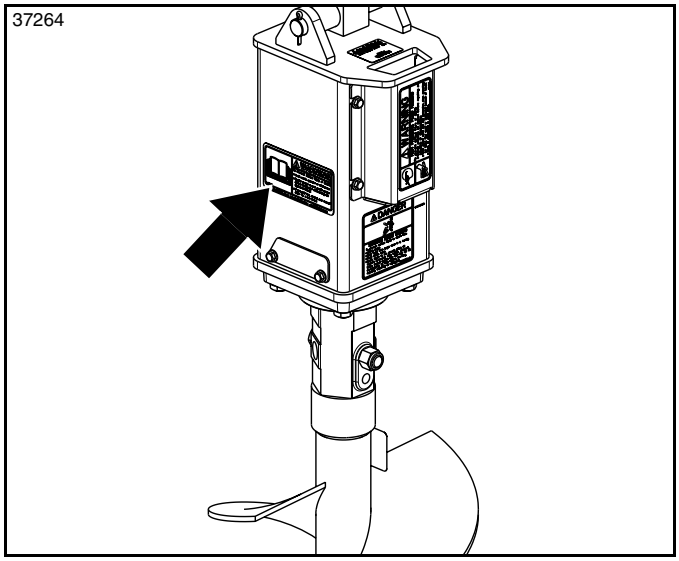
72928

844-194C
Danger: Underground Utilities Hazard
1 Place

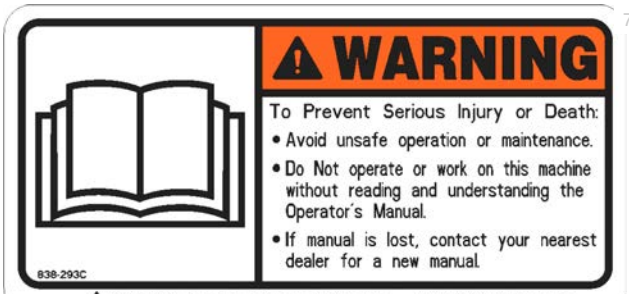


70246

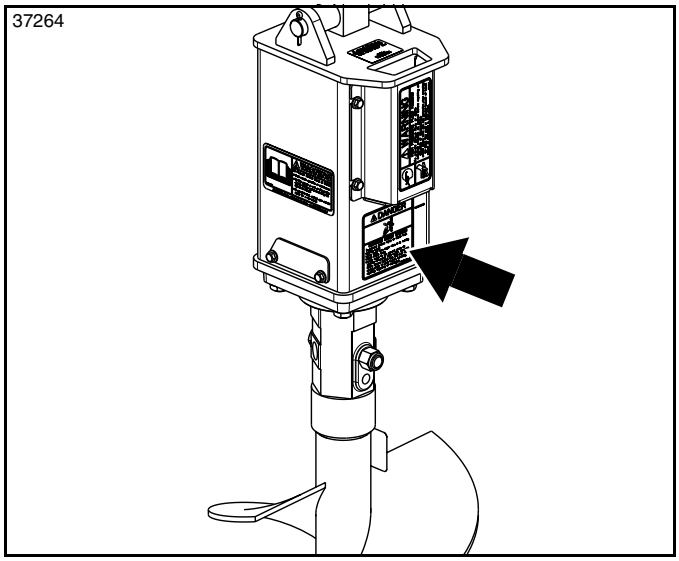
135500
Danger:
Dust Inhalation, Underground, & Entanglement Hazard
1 Place: On all dirt, tree, rock, and puff augers



70243

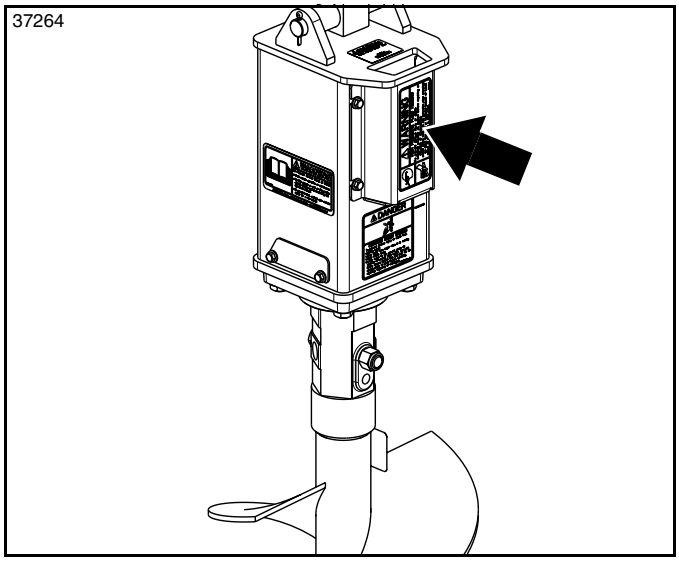


838-293C
Warning: Read Operator's Manual
1 Place



70244

838-294C
Danger: Rotating Auger Hazard
1 Place



70245

838-094C
Warning: High Pressure Fluid Hazard
1 Place

Land Pride welcomes you to the growing family of new product owners. This Post Hole Digger has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this Post Hole Digger.

Application

Land Pride offers a complete line of Post Hole Diggers designed to meet a wide range of customer needs and applications. Our SA20 Post Hole Digger is hydraulically driven with a planetary gearbox and can accommodate augers ranging from 9" (22.9 cm) to 36" (91.4 cm) in diameter. They can be purchased with a bolt-on bucket mount for bolting to the side of a bucket on a tractor front-end loader or with a hitch plate for attaching to a skid steer or tractor front-end loader equipped with a skid/loader plate. The SA20 features 3 motor options to accommodate hydraulic flow systems ranging from 6 to 30 gpm (22.7 to 113.6 lpm).

The SA20 is designed to deliver up to 2,621 ft-lbs (3,553 Nm) of torque to meet the heavy duty needs of nurseries, landscapers, contractors, construction companies, farmers, ranchers, and municipalities. No matter what your post hole digging needs are, Land Pride has a model to meet those needs.

The digging performance can be improved in heavy hardened soil conditions by applying additional down pressure with the loader arms. The ability to reverse auger rotation greatly reduces strain on auger and skid steer/tractor when extracting auger from the ground.

See **"Specifications & Capacities"** on page 30 and **"Features & Benefits"** on page 32 for additional information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com

Terminology

"Right" or "Left" as used in this manual is determined by the direction the operator faces while sitting looking forward in the operator's seat unless otherwise stated.

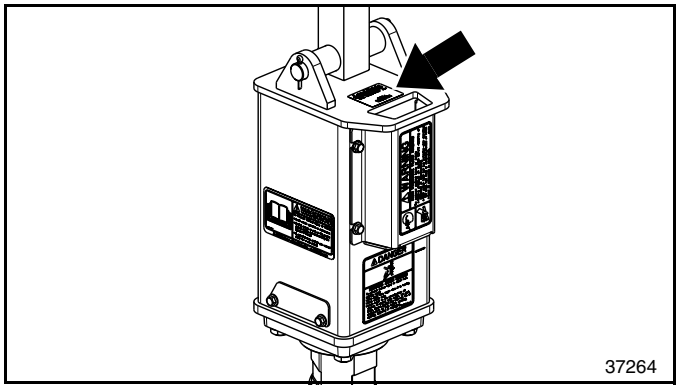
Owner Assistance

The dealer should complete the Online Warranty Registration at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Post Hole Digger have been specially designed by Land Pride and should only be replaced with genuine Land Pride parts. Contact a Land Pride dealer if customer service or repair parts are required. Your Land Pride dealer has trained personnel, repair parts, and equipment needed to service the implement.

Serial Number

For quick reference and prompt service, record model and serial number on the inside cover page and again on the warranty page. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. For location of your serial number plate, see Figure 1.



Serial Number Plate Location
Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new Post Hole Digger. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss any problems you have with your implement with your dealership service personnel so they can address the problem.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the question/problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060

E-mail address
lpservicedept@landpride.com

Skid Steer/Tractor Requirements

This Post Hole Digger is designed to attach to skid steers, track loaders, or tractor front-end loaders equipped with a skid steer type quick attach hitch that meets SAE. It will also attach to the side of a tractor loader bucket. The following requirements must be met:

Hydraulic pressure . .1,500-3,500 psi (10.3-24.1 mPa)
Hydraulic flow rate
Low flow motor . . . . . 6-15 gpm (22.7-56.8 lpm)
Medium flow motor . . . . .10-20 gpm (37.9-75.7 lpm)
High flow motor . . . . . 15-30 gpm (56.8-113.6 lpm)
Hydraulic Connections . . . . . 1 - Duplex outlet
Hydraulic Connections . . . . . 1 - Duplex outlet

Power Machine Weight

Machine horsepower and weight must be capable of controlling the Post Hole Digger under all operating conditions. Light weight machines must not be used.

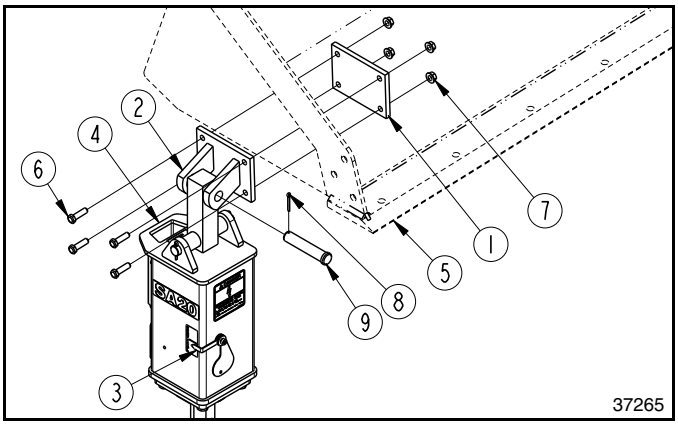
⚠ WARNING

To avoid serious injury or death:

Lightweight power machines may need weight added to the rear to maintain steering control and prevent forward tipping or side tipping caused by a heavy front load or lifting an auger stuck in the ground. Consult your power machine Operator's Manual to determine proper weight requirements and maximum weight limitations.

Torque Requirements

Refer to **"Torque Values Chart"** on page 34 to determine correct torque values for common bolts.



Bucket Mount Assembly of Motor/Gearbox
Figure 1-1

Optional Bucket Mount Assembly

This arrangement is designed to bolt onto the side of a tractor front-end loader bucket.

Motor/Gearbox Assembly

Refer to Figure 1-1:

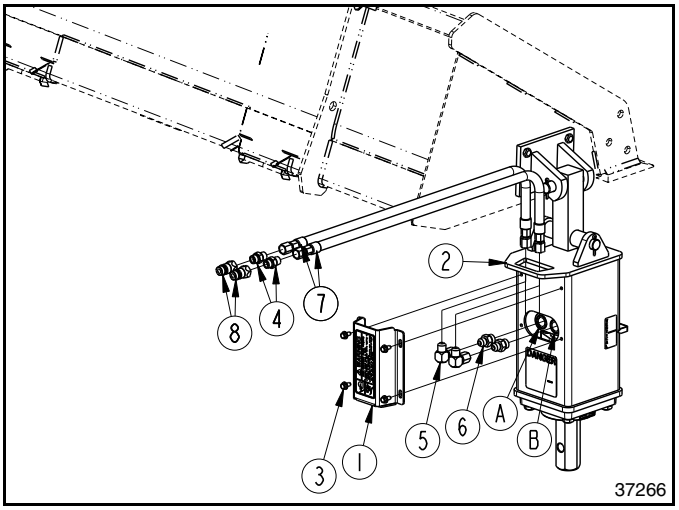
NOTE: Bucket Mounted Post Hole Diggers can be mounted on the left- or right-hand side of bucket.

NOTE: Vertical indicator arrow (#3) indicates auger is vertical side to side and not front to back.

1. Locate backer plate (#1) on right-hand or left-hand bucket sidewall in a location where it is most convenient for operator to view auger.
2. Using backer plate (#1) as a guide, locate and drill four 9/16" dia. holes in bucket side wall.
3. Attach bucket mount (#2) to bucket sidewall with 1/2"-13 x 1 3/4" GR5 bolts (#6), backer plate (#1), and 1/2" flange nuts (#7) as shown. Tighten nuts to the proper torque.

IMPORTANT: Make sure hydraulic hose guide (#4) is located on the back side of motor/gearbox assembly as shown. If needed, rotate motor/gearbox housing 180°.

4. Check orientation of motor/gearbox housing. Hose guide (#4) must face rearward as shown. If needed, rotate motor/gearbox housing as follows:
   a. Pull cotter pin (#8) and remove clevis pin (#9).
   b. Rotate motor/gearbox housing 180° and reinsert clevis pin (#9).
   c. Secure clevis pin with cotter pin (#8). Bend both legs of cotter pin to keep it from falling out.



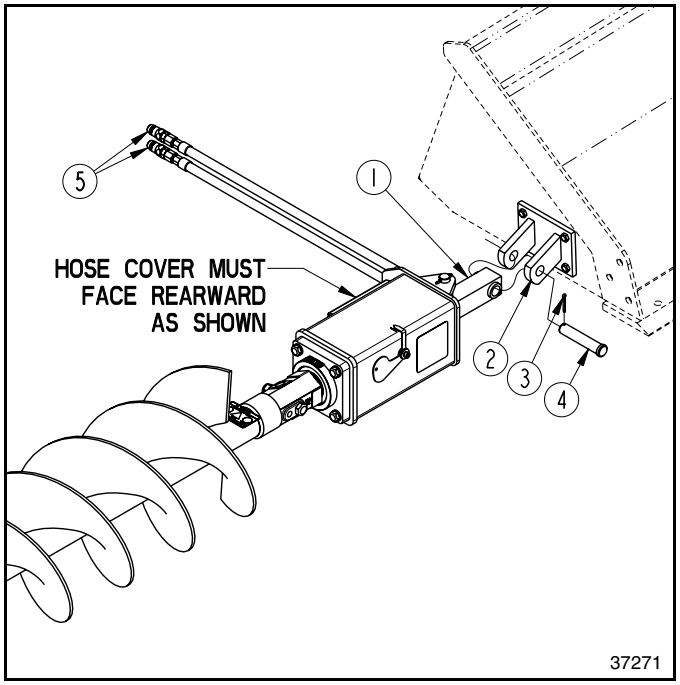
Hose Assembly For Bucket Mount
Figure 1-2

Hydraulic Hose Assembly

Refer to Figure 1-2:

NOTE: Hydraulic hoses (#7), adapter fittings (#4), and couplers (#8) are optional and may not be included with the bucket mount assembly

1. Screw MJIC end of adapter fittings (#4) to one end of 292" long hydraulic hoses (#7) and tighten.
2. Screw quick release couplers (#8) to adapter fittings (#4) until tight.
3. Remove bolts (#3) and hose cover (#1).
4. Remove plug from motor port "A" and screw o-ring end of straight adapter (#6) to motor port "A" until tight.
5. Screw 90° elbow (#5) to adapter (#6). Draw elbow up snug with open end up. Do not tighten at this time.
6. Remove plug from motor port "B" and screw o-ring end of straight adapter (#6) to motor port "B" until tight.
7. Screw 90° elbow (#5) to adapter (#6). Draw elbow up snug with open end up. Do not tighten at this time.
8. Insert opposite end of hydraulic hoses (#7) through hose guide (#2) and screw hoses to elbows (#5) until tight.
9. Tighten elbows (#5) to straight adapters (#6).
10. Replace hose cover (#1) and secure with 5/16"-18 x 5/8" GR5 hex flange serrated bolts (#3).
11. Tighten bolts (#3) to the correct torque.
12. Skip to **"Auger Assembly & Disassembly"** on page 14.



Hook-Up Bucket Mount Post Hole Digger
Figure 1-3

Hook-Up Bucket Mount

If Post Hole Digger is already attached to the bucket, skip to **"Hook-Up Hydraulic Hoses to Tractor"** on this page.

⚠ WARNING

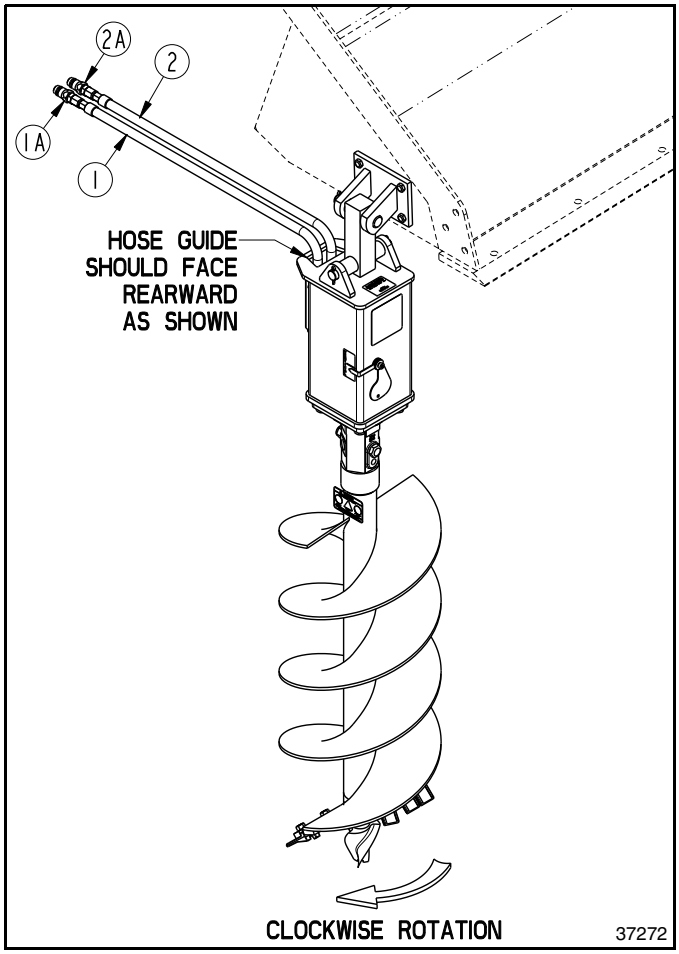
To avoid serious injury or death:

Always shut power machine down following the "Shutdown Procedure" provided in this manual before leaving the operator's station.

Hook-Up Post Hole Digger to Bucket

Refer to Figure 1-3:

1. If removed, attach bucket mount (#2) to right- or left-hand side of the bucket. See step 3 under **"Motor/ Gearbox Assembly"** on page 9 for detailed instructions.
2. Slowly approach Post Hole Digger with tractor and bucket while using control levers to lower and align bucket mount (#2) close to gearbox knuckle (#1).
3. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
4. Manually align hole in knuckle (#1) with holes in bucket mount (#2).
5. Insert clevis pin (#4) and secure with cotter pin (#3). Bend both legs of cotter pin around clevis pin to keep cotter pin from falling out.



Unhook Bucket Mount Post Hole Digger
Figure 1-4

Hook-Up Hydraulic Hoses to Tractor

WARNING

To avoid serious injury or death:

- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*
- *Make sure hydraulic hoses are properly routed without twists to prevent becoming stretched, pinched, or kinked. A damaged hydraulic hose can burst and leak hydraulic fluid.*

Refer to Figure 1-4:

1. Connect quick release couplers (#1A & #2A) to tractor's high pressure outlets.
2. While seated in the tractor seat, lift Post Hole Digger up until auger is 1 to 2 inches off the ground.
3. With tractor set at an idle, engage hydraulics to view auger rotation. The auger should rotate clockwise when looking down from above. Switch couplers at the duplex outlet if auger rotates counterclockwise:
   a. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
   b. Switch quick release couplers (#1A & #2A) at tractor duplex outlet.
4. Return to tractor and repeat steps 1-3 to verify auger is rotating properly.

NOTE: Customer to select and supply ties for securing hydraulic hoses along tractor loader arm. Land Pride recommends ties that can be reused without cutting them to remove hydraulic hoses when unhooking the Post Hole Digger.

5. Secure hydraulic hoses (#1 & #2) with customer supplied ties along tractor loader arm to keep hoses from becoming pinched, stretched, and/or kinked.
6. Cycle loader through complete range of motions to verify hydraulic lines will not become pinched, stretched, and/or kinked. Make any necessary adjustments.

Unhook Bucket Mount

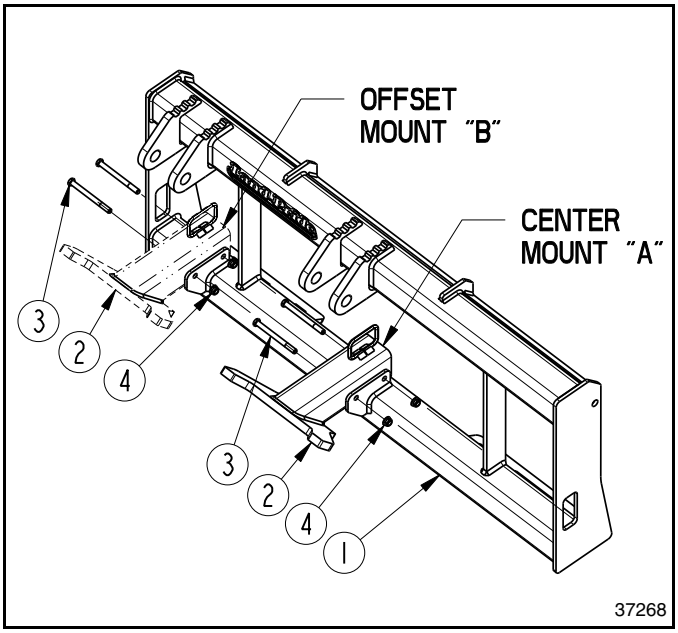
Refer to Figure 1-4:

1. Lower auger until auger tip touches the ground.
2. Lay Post Hole Digger down as follows:
   - If auger is mounted on right side of bucket, slowly turn tractor to the left while lowering bucket.
   - If auger is mounted on left side of bucket, slowly turn tractor to the right while lowering bucket.
3. Disconnect hydraulic hoses from tractor duplex.
4. Coil hoses up and store on motor/gearbox housing. Make sure couplers (#1A & 2A) are supported off the ground.

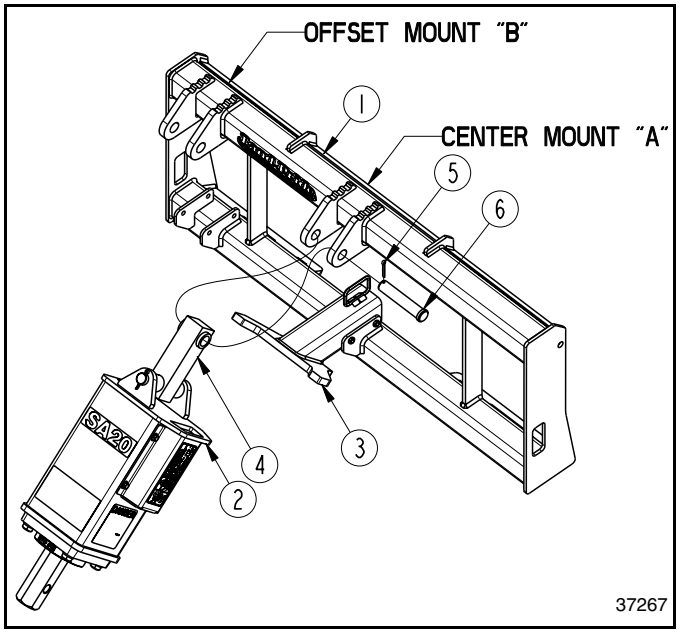
Refer to Figure 1-3 on page 10:

5. With Post Hole Digger laying on the ground, remove cotter pin (#3) and clevis pin (#4).
6. Return to the tractor and lift bucket away from auger.
7. Replace clevis pin (#4) and cotter pin (#3) in the gearbox knuckle (#1) for safe keeping.

NOTE: If preferred, bucket mount (#2) can be removed from the bucket. See Figure 1-1 on page 9 for exploded view of mounting bracket. If removed, store bracket with Post Hole Digger.



Gearbox Rest Assembly
Figure 1-5



Center/Offset Assembly of Motor/ Gearbox
Figure 1-6

Optional Hitch Assembly

The motor/gearbox assembly can be mounted centered on auger hitch (#1) or mounted offset 18" (45.7 cm) to the right. Two choices are offered to allow accessing hard-to-reach places and to provide best line-of-sight.

Gearbox Rest Assembly

Refer to Figure 1-5:

The auger hitch (#1) is shipped from the factory with gearbox support rest (#2) mounted backwards (not shown) in center mount "A". Determine which mount (Center Mount "A" or Offset Mount "B") will be used and reattach support rest facing forward in that mount.

1. Remove nuts (#4), bolts (#3), and gearbox support rest (#2).
2. Turn gearbox support rest (#2) around and reattach it in mount "A" or "B" with removed 3/8"-16 x 4 1/4" GR5 bolts (#3) and hex flange locknuts (#4) as shown.
3. Tighten hex flange locknuts (#4) to the correct torque.

Motor/Gearbox Assembly

Refer to Figure 1-6:

IMPORTANT: Make sure gearbox is mounted with hose guide (#2) on the left-hand side as shown and gearbox support rest (#3) is located directly below the gearbox.

1. Attach knuckle (#4) to upper center mount bracket "A" or to upper offset mount bracket "B" with clevis pin (#6) and cotter pin (#5).
2. Bend both legs of cotter pin to keep cotter pin from falling out.

Hydraulic Hose Assembly

Determine which hitch plate set-up option is included and follow appropriate instructions below:

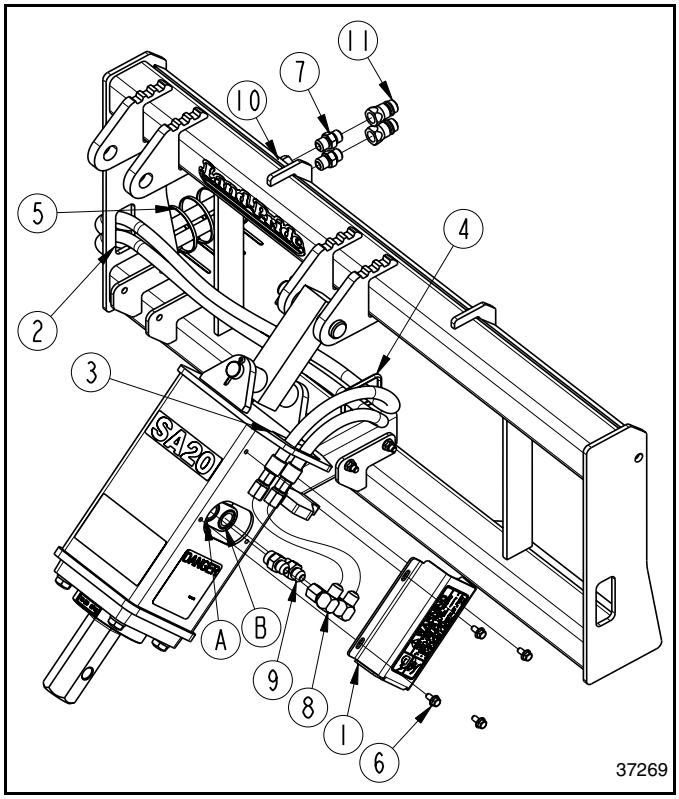
- Hose assembly for tractor hook-up. Refer to **"24 Foot Hose Assembly for Tractors"** below.
- Hose assembly for skid steer hook-up. Refer to **"8 Foot Hose Assembly for Skid Steers"** on page 13.

24 Foot Hose Assembly for Tractors

Refer to Figure 1-7 on page 13:

NOTE: Pioneer couplers (#11) and straight adapters (#7) are optional. See **"Couplers"** on page 25 for additional information.

1. Screw MJIC end of adapters (#7) to hydraulic hoses (#10) until tight.
2. Screw quick release couplers (#11) to MORB end (o-ring end) of adapter fittings (#7) until tight.
3. Thread opposite end of hydraulic hoses (#10) through right-hand hose guide (#2) as shown.
4. Thread hoses (#10) through hose guide (#4) as shown.
5. Remove bolts (#6) and hose cover (#1).
6. Remove plug from motor port "A" and screw o-ring end of straight adapter (#9) to motor port "A" until tight.
7. Screw 90° elbow (#8) to adapter (#9). Draw elbow up snug with open end up. Do not tighten at this time.
8. Remove plug from motor port "B" and screw o-ring end of straight adapter (#9) to motor port "B" until tight.



Hydraulic Hose Assembly For Tractors
Figure 1-7

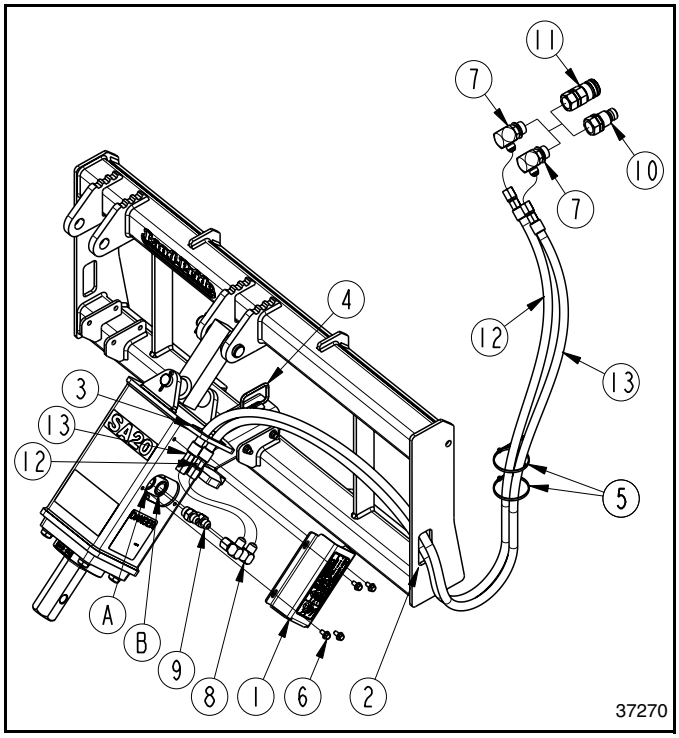
9. Screw 90° elbow (#8) to adapter (#9). Draw elbow up snug with open end up. Do not tighten at this time.
10. Insert hydraulic hoses (#10) through hose guide (#3) as shown and screw to elbows (#8) until tight.
11. Tighten elbows (#8) to adapters (#9).
12. Replace hose cover (#1) and secure with existing 5/16"-18 x 5/8" GR5 hex flange serrated bolts (#6).
13. Tighten bolts (#6) to the correct torque.
14. Skip to **"Auger Assembly & Disassembly"** on page 14.

8 Foot Hose Assembly for Skid Steers

Refer to Figure 1-8:

NOTE: Use Land Pride's 90° elbows (#7) if attaching to Kubota CTL.

1. Remove bolts (#6) and hose cover (#1).
2. Remove plug from motor port "A" and screw o-ring end of straight adapter (#9) to motor port "A" until tight.
3. Screw 90° elbow (#8) to adapter (#9). Draw elbow up snug with open end up. Do not tighten at this time.
4. Remove plug from motor port "B" and screw o-ring end of straight adapter (#9) to motor port "B" until tight.



Hydraulic Hose Assembly For Skid Steers
Figure 1-8

5. Screw 90° elbow (#8) to adapter (#9). Draw elbow up snug with open end up. Do not tighten at this time.
6. Insert hydraulic hoses (#12 & #13) through hose guide (#3) in gearbox housing and screw hoses to elbows (#8) until tight.
7. Tighten elbows (#8) to adapters (#9).
8. Thread hoses (#12 & #13) through left-hand hose guide (#2) as shown.
9. Screw MJIC end of 90° elbows (#7) to hydraulic hoses (#12 & #13) until tight.

NOTE: Flat face couplers (#10 & #11) and 90° elbows (#7) are optional. See **"Couplers"** on page 25 for additional information.

10. Select male coupler (#10) or female coupler (#11) that mates with skid steer's high pressure coupler. Hose (#13) is attached to motor port "A". Attach selected coupler to hydraulic hose (#13) and tighten.
11. Hose (#12) is attached to motor port "B". Screw remaining coupler to hydraulic hose (#12) until tight.
12. Replace hose cover (#1) and secure with existing 5/16"-18 x 5/8" GR5 hex flange serrated bolts (#6).
13. Tighten bolts (#6) to the correct torque.
14. Continue with **"Auger Assembly & Disassembly"** on page 14.

Auger Assembly & Disassembly

DANGER

To avoid serious injury or death:

Keep others away from the post hole digger while the auger is rotating. A person can become entangled in the auger, hit by the auger if swinging erratically, or pulled into the auger. Anyone helping should be kept a safe distance (a minimum of 10 feet or 3 meters) from the unit while it is rotating.

WARNING

To avoid serious injury or death:

Do not install a bolt that is longer than what was originally supplied with the auger. Protruding hardware is more likely to entangle a bystander by catching on loose clothing.

IMPORTANT: Use hoist or other lifting device to lift Post Hole Digger. If lifting device is not available, attach Post Hole Digger to a tractor or skid steer and use equipment hydraulics to raise unit. Refer to **"Hook-Up Bucket Mount"** on page 10 or **"Hook-Up Post Hole Digger"** on page 15.

NOTE: There are a variety of Dirt, Tree, and Rock Auger sizes and styles available to suit many applications. For detailed information, see **"Section 3: Options & Accessories"** on page 23.

NOTE: Auger extensions (#7 & #8 in Figure 1-10) are available in two lengths. For detailed information, see **"Auger Extensions (Accessory)"** on page 23.

Auger Assembly

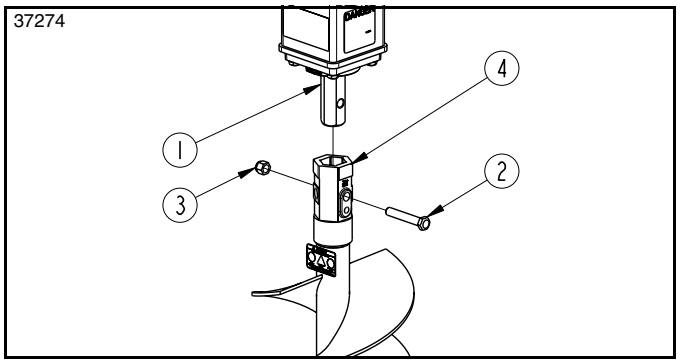
Refer to Figure 1-9:

1. Slide auger hub (#4) over gearbox output shaft (#1) until mounting hole in gearbox output shaft and 13/16" holes in auger hub are in alignment.
2. Insert 3/4"-10 x 4 1/2" GR5 bolt (#2) and secure with nylock nut (#3). Torque nylock nut tight.
3. Skip to **"Hook-Up Bucket Mount"** on page 10 or **"Hook-Up Post Hole Digger"** on page 15.

Auger Assembly With Auger Extension

Refer to Figure 1-10:

1. Slide hub of auger extension (#7 or #8) over gearbox output shaft (#1) until mounting hole in output shaft and 13/16" holes in extension hub are in alignment.
2. Insert 3/4"-10 x 4 1/2" GR5 bolt (#2) and secure with nylock nut (#4). Torque nylock nut tight.
3. Slide auger hub (#6) over auger extension (#7 or #8) until 5/8" mounting hole "A" or "B" in extension (#7) or hole "A", "B", "C" or "D" in extension (#8) align with 9/16" holes in auger hub (#6).
4. Insert 1/2"-13 x 4 1/4" GR5 bolt (#3)-9/16" holes in auger and auger extension hole and secure with nylock nut (#5). Torque nylock nut tight.
5. Skip to **"Hook-Up Bucket Mount"** on page 10 or **"Hook-Up Post Hole Digger"** on page 15.

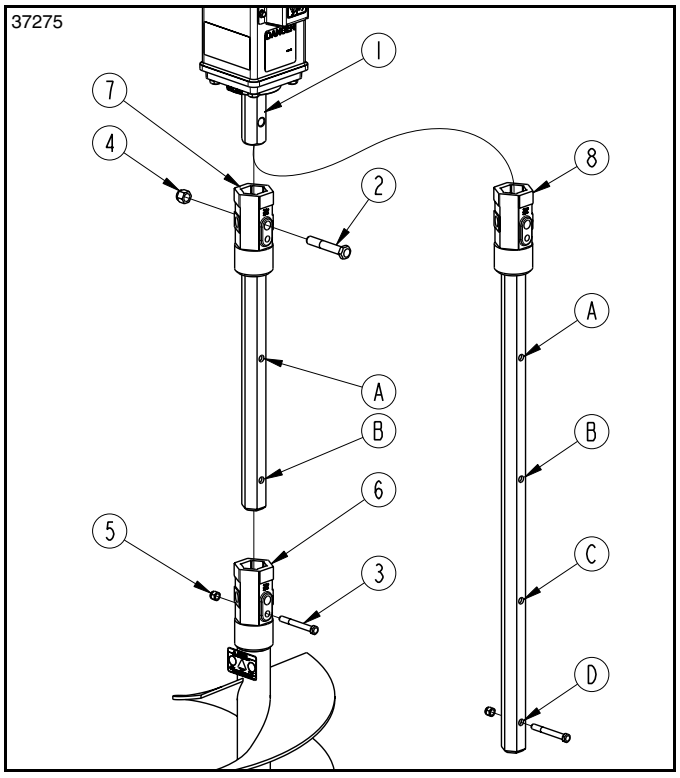


Auger Assembly & Disassembly
Figure 1-9

Auger Disassembly

Refer to Figure 1-9:

1. Remove nylock nut (#3) and bolt (#2).
2. Remove auger (#4) from gearbox output shaft (#1) or auger extension (#7) shown in Figure 1-10.



Auger & Auger Extension Assembly & Disassembly
Figure 1-10

Auger Extension Disassembly

Refer to Figure 1-10 on page 14:

1. Remove nylock nut (#4) and bolt (#2).
2. Remove extension (#7 or #8) from gearbox output shaft (#1).

Hook-Up Post Hole Digger

DANGER

To avoid serious injury or death:

A crushing hazard exists when connecting and disconnecting the attachment. Do not allow anyone to stand between attachment and power machine while approaching or backing away from the attachment. Do not operate hydraulic controls while someone is near the power machine and/or attachment.

WARNING

To avoid serious injury or death:

Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

Hook-Up Post Hole Digger Hitch Plate

Refer to Figure 1-11:

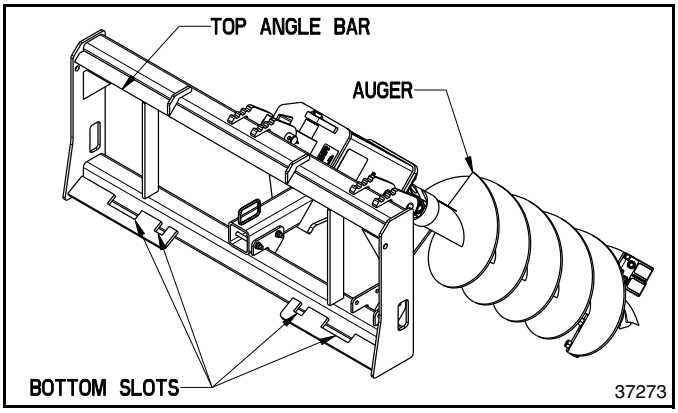
1. Check for and remove all debris in hitch point areas of skid/loader plate and auger hitch.
2. Raise lock pins on skid/loader plate.
3. Drive skid steer/tractor slowly to Post Hole Digger making sure skid/loader plate is parallel with auger hitch top angle bar.
4. Rotate top of skid steer/tractor tilt arms slightly forward.
5. Position top of skid/loader plate under the auger hitch top angle bar and slowly raise loader arms until skid/loader plate is seated under the top angle bar.
6. Rotate top of skid steer loader arms back until skid/loader plate makes full contact with auger hitch.
7. Lower lock pins on skid/loader plate. Make sure lock pins go through bottom slots in auger hitch and are in the locked down position.

Hook-Up Hydraulic Hoses to Tractor

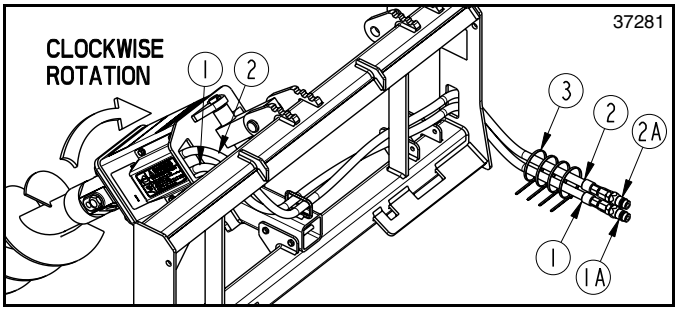
WARNING

To avoid serious injury or death:

- *Make sure hydraulic hoses are properly routed without twists to prevent becoming stretched, pinched, or kinked. A damaged hydraulic hose can burst and leak hydraulic fluid.*
- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*



Hook-Up Auger Hitch to Tractor/Skid Steer
Figure 1-11



Hook-Up Hydraulic Hoses to Tractor
Figure 1-12

Refer to Figure 1-12:

1. Connect quick release couplers (#1A & #2A) to the tractor's high pressure outlets.
2. While seated in the tractor seat, lift Post Hole Digger up until auger is off the ground 1 to 2 inches.
3. With tractor set at an idle, engage hydraulics to view auger rotation. Auger should rotate clockwise when looking down from above. If auger rotates counterclockwise, switch couplers at the duplex out:
   a. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
   b. Switch quick release couplers (#1A & #2A) at the duplex outlet on the tractor.
4. Return to the tractor and repeat steps 1-3 to verify auger is rotating properly.

NOTE: Customer to select and supply ties for securing hydraulic hoses along tractor loader arm. Land Pride recommends ties that can be reused without cutting them.

5. Secure hydraulic hoses (#1 & #2) with customer supplied ties along tractor loader arm to keep hoses from becoming pinched, stretched, and/or kinked.
6. Cycle loader through complete range of motions to verify hydraulic lines will not be pinched, stretched, and/or kinked. Make any necessary adjustments.

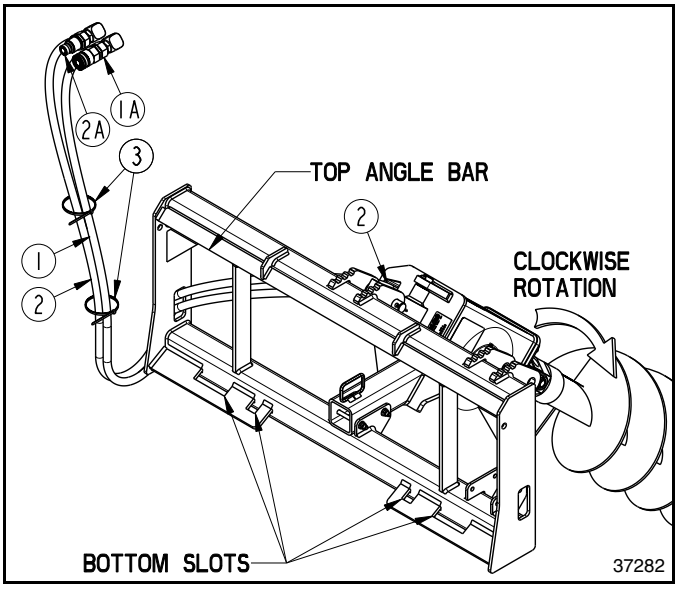
Hook-Up Hydraulic Hoses to Skid Steer

⚠ WARNING

To avoid serious injury or death:

- *Make sure hydraulic hoses are properly routed without twists to prevent becoming stretched, pinched, or kinked. A damaged hydraulic hose can burst and leak hydraulic fluid.*
- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*

NOTE: Skid steer hydraulics can vary from one machine to another. Be sure to review "Hydraulic Hook-Up" in your Skid Steer Operator's Manual before hooking hydraulic hoses to the Skid Steer.

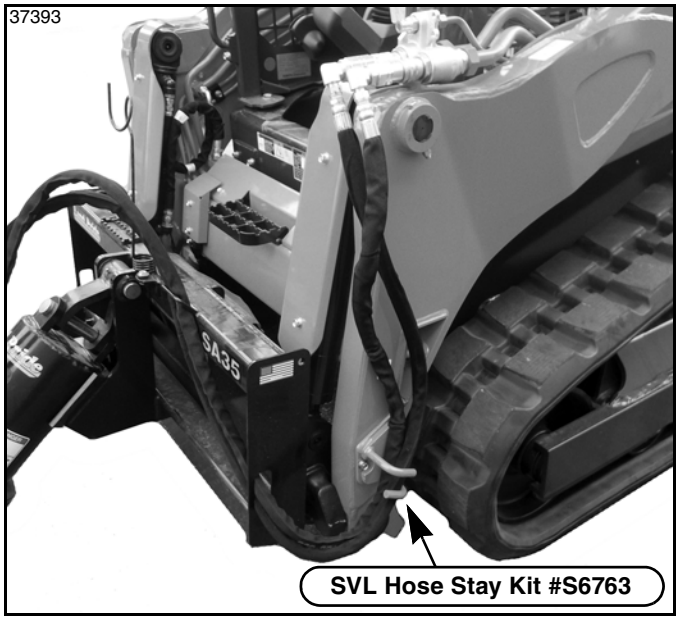


Hook-Up Hydraulic Hose to Skid Steer
Figure 1-13

Refer to Figure 1-13:

1. Route hydraulic hoses (#1 & #2) through the most convenient path to access your power equipment couplers. Path shown may not be the most convenient.

NOTE: If attaching to a Kubota SVL skid steer, route hydraulic hoses through Kubota's Hose Stay Kit #S6763 as shown in Figure 1-14.
Purchase **SVL Hose Stay Kit #S6763** through your nearest Kubota dealer. Refer to the SVL skid steer Operator's Manual for additional instructions.



Kubota SVL Hose Stay
Figure 1-14

Refer to* Figure 1-13 *on page 16:

2. Clean quick connect couplers of dirt and then connect male and female couplers to the skid steer or tractor outlets. Make sure quick connect couplers have fully engaged. If they have not, check the following:
   a. Make sure couplers are same size and type.
   b. Make sure hydraulic pressure has been released.
3. Attach quick release couplers (male #2A & female #1A) to the skid steer quick release couplers.
4. From inside the skid steer cab, lift Post Hole Digger up until auger is off the ground 1 to 2 inches.
5. With skid steer set at an idle, engage hydraulics to view auger rotation. The auger should rotate clockwise when looking down from above. If auger rotates counterclockwise, switch quick release couplers on hydraulic hoses (#1 & #2) as follows:
   a. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
   b. Disconnect hose couplers from skid steer outlets and switch male coupler (#1A) with female coupler (#2A) on hydraulic hoses (#1 & #2).
   c. Reconnect hose couplers to skid steer quick release couplers. Also see **"Hydraulic Hook-Up"** in your skid steer Operator's Manual.
6. Secure hydraulic hoses as needed with zip ties (#3) to keep hoses from becoming pinched, stretched, and/or kinked.
7. Cycle loader through complete range of motions to verify hydraulic lines will not become pinched, stretched, and/or kinked. Make any necessary adjustments.

Unhook Post Hole Digger

Refer to Figure 1-13 on page 16:

DANGER

To avoid serious injury or death:

A crushing hazard exists when connecting and disconnecting the attachment. Do not allow anyone to stand between attachment and power machine while approaching or backing away from the attachment. Do not operate hydraulic controls while someone is near the power machine and/or attachment.

1. See **"Long-Term Storage"** on page 26 before parking Post Hole Digger for a long time.
2. Park skid steer/tractor on a flat, level, solid surface, and lower Post Hole Digger until skid/loader plate is resting on the ground.
3. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
4. Disconnect hydraulic couplers (#1A & #2A) from skid steer/tractor.
5. Store hoses on the Post Hole Digger frame to keep dirt away from the couplers.
6. Disengage lock pins to clear bottom slots in auger hitch.
7. Restart skid steer/tractor and tilt top of skid/loader plate slightly forward.
8. Slowly lower skid/loader plate until it has separated from the auger hitch top angle bar.
9. Back skid steer/tractor slowly away while making sure the skid/loader plate does not interfere with Post Hole Digger.
10. Repeat step 3 above to shut skid steer/tractor down and dismount.
11. Check overturn stability of the unhooked Post Hole Digger. Make sure the unit will not tip over. If needed, add bracing to keep it from overturning.

Power Machine Shutdown Procedure

The following are basic power machine shutdown procedures. Follow these procedures and any additional shutdown procedures provided in your power machine Operator's Manual before leaving the operator's seat.

1. Reduce engine speed and shut-off all power to the attachment.
2. Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.

   Skid Steer and Track Loader

   a. Turn off engine. Do not remove ignition key at this time.

   b. Turn ignition key to the "RUN" position. Relieve all hydraulic pressure by moving both joysticks.

   c. Turn ignition key off and remove to prevent unauthorized starting.

   d. If included, raise seat bar and move controls until both lock.

   Tractor

   a. Put tractor in park or set park brake.

   b. Turn off engine, and remove ignition key to prevent unauthorized starting.

   c. Relieve all hydraulic pressures.
3. Wait for all components to come to a complete stop before leaving the operator's seat.
4. Use steps, grab-handles, and anti-slip surfaces when stepping on and off the power machine.

Operator's Responsibilities

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Post Hole Digger. Therefore, it is absolutely essential that no one operates the Post Hole Digger unless they have read, fully understood, and are totally familiar with the Operator's Manual.

Perform the following inspections before using your Post Hole Digger.

Operating Checklist

✔	Check	Page
	Read and follow all safety rules carefully. Refer to "Important Safety Information".	1
	Make sure all guards and shields are in place. Refer to "Important Safety Information".	1
	Make sure there are no hydraulic leaks. Refer to "Avoid High Pressure Fluids Hazard".	3
	Read and follow hook-up & preparation. Refer to "Section 1: Assembly & Set-up".	9
	Read and follow all operating procedures. Refer to "Section 2: Operating Procedures".	18
	Read and follow all Maintenance Instructions. See "Section 4: Maintenance & Lubrication".	26
	Read and follow all Lubrication Instructions. Refer to "Lubrication Points".	29
	Make sure gearbox is properly lubricated. Refer to gearbox lubrication.	29
	Check equipment initially and periodically for loose hardware. See "Torque Values Chart".	34

⚠ DANGER

To avoid serious injury or death:

- *Inspect interlock control system regularly and perform required maintenance to keep it operating properly.*
- *Never bypass or modify a safety device.*
- *All guards and shields must be installed and in good working condition while operating the implement.*
- *Never operate equipment from outside the cab.*
- *Always operate skid steer while seated in the cab with seat bar lowered when equipped and seat belt properly fastened. The operator can be pinched, crushed, or thrown if not properly seated in the cab or if operating the dipper arm from outside the cab.*
- *Keep your head, arms, and legs inside the cab while operating the power machine. Any extremity extended outside the cab can be crushed by the loader arms and attachment.*
- *Make sure the site is free from hazards before drilling. Look for obstacles on the ground, beneath mulching, and below the ground that may need to be removed. Obstacles such as landscape fabric, wire, etc can catch in the anger and pull a bystander into the auger. Hand digging may be necessary to verify the presence of underground materials.*
- *Keep attachment, loader arms, and/or load away from overhead electrical power lines. Place an orange warning sign under overhead lines indicating type of danger above.*
- *Do not allow anyone to manually push down on the post hole digger, or put anything or anyone on the unit for the purpose of adding weight to the unit. Objects and people can be thrown, pinched, or entangled in the unit.*
- *Keep all persons away from the post hole digger while lowering and raising the unit. A person can be hit, pinched, or crushed by the unit.*
- *Do not drill through landscape fabric. Prior to drilling, cut a hole in the fabric sufficiently larger than the diameter of the auger to prevent auger entanglement with the fabric. Fabric caught in the auger can pull a bystander into the auger.*
- *Do not allow anyone to manually guide the auger into position while the auger is rotating. A person will become entangled in the auger or hit by the auger.*
- *Keep others away from the post hole digger while the auger is rotating. A person can become entangled in the auger, hit by the auger if swinging erratically, or pulled into the auger. Anyone helping should be kept a safe distance (a minimum of 10 feet or 3 meters) from the unit while it is rotating.*
- *Do not remove spoil-pile with hand tools while auger is operating. The person can become entangled in the auger or hurt by tools that become entangled in the auger.*
- *Do not go near or under raised loader arms without first securing loader arms in the raised position with an approved lift-arm support.*
- *Use the skid steer's alternate emergency exit when exit passage through the front is blocked.*
- *Do not use hand or foot controls for handholds or steps. Using them for handholds or steps can activate the controls.*
- *Keep mud, snow, ice, and debris out of foot controls.*
- *If included, raise restraint bar and move controls until both are locked and interlock system is activated.*
- *Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to the hydraulics is off.*

⚠ WARNING

To avoid serious injury or death:

- *Allow only persons to operate this implement who have fully read and comprehended this manual, and who have been properly trained in the safe operation of this implement. Serious injury or death can result from the inability to read, understand, and follow instructions provided in this manual.*
- *Always shut power machine down following the "Shutdown Procedure" provided in this manual before leaving the operator's station.*

- *Do not travel across an incline where equipment could slip or roll-over. Consult the Operator's Manual for acceptable inclines the power machine is capable of crossing.*
- *Never carry riders on the attachment or power machine. Riders can obstruct the operator's view, interfere with controls, be pinched by moving components, become entangled in rotating components, struck by objects, thrown about, fall off and be run over, etc.*
- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*
- *Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.*
- *Operate only power machines equipped with a certified Roll-Over Protective Structure (ROPS) and seat belt. Fasten seat belt snugly and securely to help protect against serious injury or death from machine overturn.*
- *Always travel with adequate clearance between ground and auger. Hitting an object while traveling can damage equipment and cause the operator to lose control.*
- *Always transport with attachment carried low to protect against rollover, hitting overhead objects, power lines, and loss of control.*
- *Do not install a bolt that is longer than what was originally supplied with the auger. Protruding hardware is more likely to entangle a bystander by catching on loose clothing.*
- *This attachment has a 3500 psi (24.13 mPa) maximum hydraulic pressure rating. Make sure your powered machine's hydraulic pressure to this attachment does not exceed 3500 psi (24.13 mPa). Exceeding this rating can result in equipment damage, serious injury, or death.*
- *Do not use this attachment to lift, carry, push or tow other equipment or objects. It is not properly designed or guarded for this use. The operator could lose control resulting in equipment damage and/or tipping hazard.*
- *Never adjust tractor pressure relief valve for a pressure rating higher than what is recommended by the tractor manufacture.*
- *Protect freshly dug holes immediately after digging by filling it with a post, covering the hole with a cover capable of supporting a person, or place a physical boundary around the hole to stop entry into the area.*
- *Do not use post hole digger to wrap wire or any other items. Doing so can result in bodily injury and/or damage to the equipment.*
- *Never work near utilities such as gas lines, electrical lines, or other hazards that can cause serious injury or death from electrocution, explosion, or fire.*
- *Never make contact with underground utilities such as electrical power lines, gas lines, phone lines, etc. They can cause serious injury or death from electrocution, explosion, or fire. Always call 811 (USA) or local utility companies before digging so that they can mark the location of underground services in the area. For contact information, see Dig Safe in the "Important Safety Information" starting on page 1.*
- *Avoid exposure to dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica.*

⚠ CAUTION

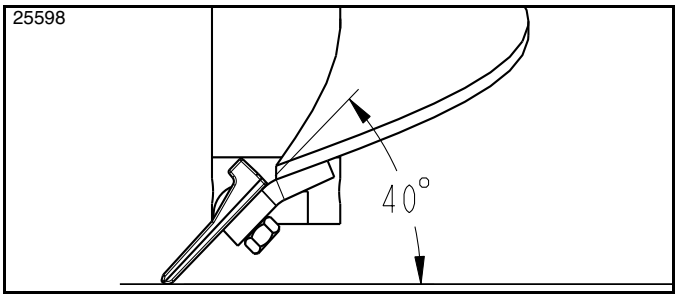
To avoid minor or moderate injury:

- *Auger tip gets hot after digging. Allow time for the tip to cool before touching or servicing the tip.*

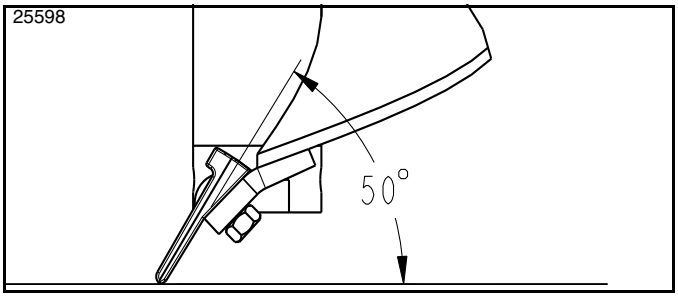
Dual-Angle Teeth

Refer to Figure 2-1 & Figure 2-2:

The Auger is shipped with teeth mounted at 40 degrees (see Figure 2-1). If you are experiencing difficulty in penetrating the soil, they can be turned over and mounted at 50 degrees (see Figure 2-2) for a more aggressive bite. Be sure to tighten all mounting hardware to the proper torque when securing teeth to the Auger. See **"Torque Values Chart for Common Bolt Sizes"** on page 34 for torque ratings.



Auger Teeth Mounted at 40 Degrees
Figure 2-1



Auger Teeth Mounted at 50 Degrees
Figure 2-2

Transport With Post Hole Digger

WARNING

To avoid serious injury or death:

- *Cross ditches and enter inclines slowly and carefully. The auger can come in contact with the ground causing damage to the equipment and operator to lose control.*
- *Always travel straight up and straight down inclines. Never make turns on the incline.*
- *Slow down when traveling over rough or hilly terrain that can cause equipment to bounce, or to hit obstacles that are close by. Either situation can cause damage and/or the operator to lose control.*
- *When traveling on public roadways, travel in such a way that faster moving vehicles may pass safely. Use hazard lights, clean reflectors, and a slow moving vehicle sign that is visible from the back to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.*

1. Select a safe ground travel speed when transporting from one area to another.
2. Transport Post Hole Digger low to the ground to maintain stability but at a height that does not block your view:
   - **Skid/Loader Hitch Plate:** Transport with cylinders on end of loader arms fully retracted, motor/gearbox housing supported in the rest support, and auger low to the ground at a height that does not block your view.
   - **Bucket Mount:** Transport with auger hanging straight down and low to the ground at a height that does not block your view.
3. Always travel straight up and straight down inclines. Make turns only on level ground.
4. Enter ditches and inclines slowly to make sure the auger does not dig into the ground. Stop and raise auger if needed to cross a ditch or start up an incline.
5. Reduce skid steer ground speed when turning. Leave enough room to clear obstacles such as buildings, trees, and fences.
6. Keep away from electrical power lines. Place an orange warning sign under overhead power lines indicating type of danger above.
7. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
8. Reduce transport speed when traveling over rough or hilly terrain.

Operating Instructions

WARNING

To avoid serious injury or death:

- *Auger point should be on the ground before engaging hydraulics to start drilling. An auger not resting on the ground can swing erratically and damage equipment or hit a bystander.*
- *Care should always be taken when first starting to drill a hole. The auger, when first entering the soil, can hit a solid object causing damage to the auger and/or auger to swing erratically and hit a bystander.*
- *Always stop auger from rotating 1 to 2 feet (30 to 60 cm) before it is out of the hole. This will keep the auger from wobbling with an unbalanced dirt load.*
- *Operate only one hydraulic function at a time. Operating two or more functions at a time can cause damage to the equipment and/or operator to lose control.*

IMPORTANT: Do not reverse auger rotation when raising it up. This will dump soil back into the hole.

IMPORTANT: If auger stalls while digging, raise auger to free it. Continue normal digging operations by lowering the auger slowly into the hole.

IMPORTANT: If auger starts to screw itself into the soil, stop auger rotation immediately and raise auger to free it. Continue normal digging operations by lowering the auger slowly into the hole.

IMPORTANT: If the dirt auger can not penetrate an obstruction, change auger head to the optional rock auger head, switch auger to the optional rock auger, or dig a new hole nearby. See “Options & Accessory” section in this manual for optional rock auger heads and rock augers.

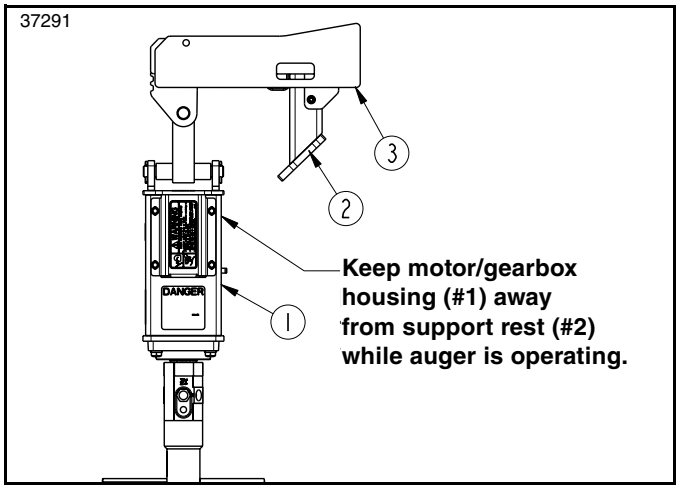
IMPORTANT: Some power machines have a hydraulic relief valve to protect the equipment. This valve will open in a stalled situation to allow oil to bypass. Check your power machine Operator’s Manual to see if it is equipped with a relief valve.

IMPORTANT: Operate one loader function at a time. Operating two or more functions at the same time (lift cylinders, tilt cylinder, engine speed, and power machine position) can lead to damaged equipment.

IMPORTANT: Avoid moving or causing side pressure on the auger while in the ground. This can damage the auger and drive components.

IMPORTANT: Before digging, rotate auger hitch (#3) horizontal as shown in Figure 2-3. This will put distance between motor/gearbox housing (#1) and support rest (#2). The auger, when first entering soil, could hit a solid object causing auger to swing around and damage equipment. Care should always be taken when first starting to drill a hole.

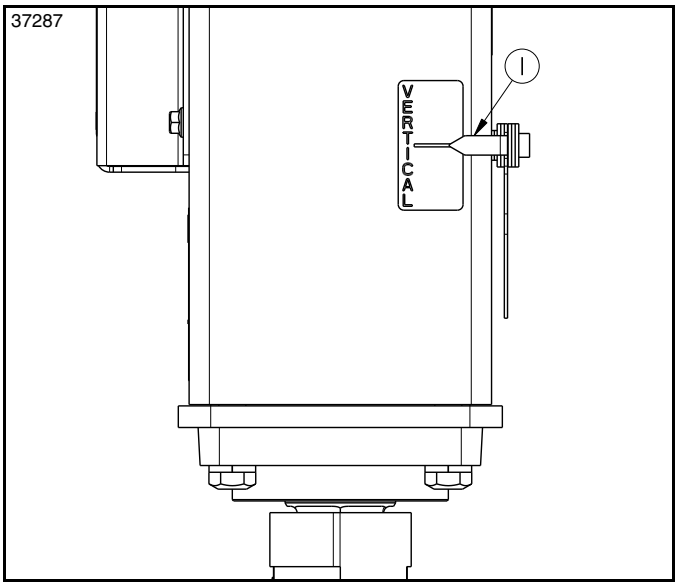
1. Rotate top of tilt arms back to carry auger low to the ground while traveling between drilling positions.
2. Position skid steer/tractor on the upside of hill when drilling a hole. This will greatly improve balance and down force.
3. Experiment with auger speeds before digging. Increase skid steer/tractor engine speed to increase auger speed and decrease engine speed to reduce auger speed. Run at higher auger speeds when digging in soft and/or sandy soils and at lower auger speeds when digging in hard, rocky, or frozen soils. Normal auger speed is 85 to 100 rpm. Never exceed 110 rpm or the equipment can be damaged.



Operating Position of Auger Hitch
Figure 2-3

Refer to Figure 2-3:

4. Extend hydraulic cylinders on end of skid steer/ tractor loader arms until auger hitch (#3) is horizontal as shown.
5. Maker sure auger rotation is stopped and then lower auger point to the ground.
6. With engine running at a slow speed, start auger turning clockwise. Increase engine speed to desired digging speed.
7. Periodically adjust machine's position to keep auger vertical while drilling. Be careful not to damage gearbox or auger. Refer to **"Adjust Post Hole Digger Vertically"** on page 21.
8. Apply down pressure to assist ground penetration. Excessive down pressure can stall auger. If auger speed slows or stops, reduce down pressure.
9. After penetrating the ground approximately 24" (61 cm), stop auger rotation and raise it up to remove soil and debris from the hole. Lower auger back down to continue digging. Dig another 24" (61 cm) and again raise auger up except this time keep auger turning to lessen the strain on the equipment. Stop raising auger within 1 to 2 feet (30.5 to 61 cm) of being out of the hole and lower it back down to continue digging. Repeat this procedure until the hole is at its final depth.
10. Allow auger to turn several revolutions at final depth. With auger still turning, raise auger up to within 1 to 2 feet (30.5 to 61 cm) of being out of the hole. Stop auger rotation and continue to raise auger out of the hole.
11. Roll tilt arms into a low carry position when transporting from one digging site to the next. Be careful to watch out for people, obstructions, and uneven terrain.



Vertical Indicator
Figure 2-4

Adjust Post Hole Digger Vertically

Refer to Figure 2-4:

The patent pending vertical indicator arrow (#1), when in view of the operator, helps operator to verify that the Post Hole Digger is operating vertical from front to back.

1. Stop skid steer/tractor on a surface that is level side to side.
2. Lower loader arms until auger point is resting on the ground at the location the hole is to be drilled.

IMPORTANT: Be careful not to move forward or backward while digging except to keep the auger vertical. Damage to auger and/or hitch can occur.

3. Ease skid steer/tractor forward or rearward and/or extend or retract hydraulic cylinders on the end of the skid steer/tractor loader arms until vertical indicator arrow (#1) point is on the "Vertical Line" as shown.
4. To keep auger vertical while digging, repeat adjustments outlined in step 3 above as needed.

General Operation

By now you should have thoroughly read your Operator's Manual, properly attached your Post Hole Digger to your machine, verified auger rotation turns clockwise, and gone over the **"Operating Checklist"** on page 18. Make sure your operator protective shield or safety door is securely in place. If you plan to dig holes immediately, you should have contacted your local utility companies to make sure it is safe to dig where you plan to work. If you haven't done all of the things just described above, please stop and do them now. This is a must for your safety and the safety of others.

Now that you are properly briefed, your SA20 Post Hole Digger is properly installed, and you have the proper digging authorization from the utility companies; it's time to transport to the work site. Make sure that the Post Hole Digger is in the raised position and not in contact with the ground. If you have an extensive distance to travel, you may want to secure the auger with ropes, slings, or chains to keep auger from falling off its support rest causing damage. Select a safe speed and transport to your digging site in such a manor that faster moving vehicles can pass you safely. A slow moving vehicle sign should be employed if you are using a public road or right-of-way.

If attachment is to be operated in reverse, make sure visibility to the rear of the power unit is appropriate for the attachment.

Once you have safely arrived at your digging site, position your skid steer/tractor so that the auger is directly over the spot where you want to dig a hole. Extend hydraulic cylinders on end of skid steer/tractor loader arms to rotate auger hitch horizontal as shown in Figure 2-3 on page 21. Lower skid steer/tractor arms and auger until auger point is on the ground where the hole is to be dug. If needed, adjust skid steer/tractor position forward or rearward to align auger vertically.

Do not operate Post Hole Digger with auger more than 2" or 3" (5.1 or 7.6 cm) above ground. The auger could swing erratically causing injury to operator and damage to equipment.

With engine at idle, engage hydraulic drive circuit and raise engine rpm to operate Post Hole Digger at its rated hydraulic flow. Auger should be turning clockwise at an approximate speed of 85 to 100 rpm. Do not operate auger above 110 rpm or damage to the Post Hole Digger and skid steer/tractor could result. Use loader arm controls to lower auger into the ground. After penetrating the ground approximately 24" (61 cm), stop auger rotation and raise auger up to remove soil and debris from the hole. Lower auger back down and continue digging. Dig another 24" (61 cm) and again raise auger up except this time keep auger turning to lessen the strain on the equipment. Stop raising auger within 1' to 2' (3.5 to 61 cm) of being out of the hole and lower auger back down to continue digging. Repeat this procedure until hole is at its final depth. Allow auger to turn several more revolutions at final depth. With auger still turning, raise auger up to within 1' to 2' (3.5 to 61 cm) of being out of the hole. Stop auger rotation and continue to raise auger out of the hole.

Periodically adjust skid steer/tractor position to keep auger vertical while digging the hole. Use vertical indicator as a guide. Be careful not to damage gearbox or auger.

Apply down pressure to assist ground penetration. If auger speed slows or stops, reduce down pressure. Excessive down pressure can stall auger. Stop auger rotation immediately if an obstacle is encountered that stalls the auger while digging. Reverse auger rotation and lift up to clear the obstacle.

Once hole is completed, disengage hydraulic drive, raise auger to a point where the auger tip is approximately 12" (30.5 cm) off of the ground, release park brake and move away from the hole.

Before dismounting your skid steer/tractor; you must always set park brake, lower your loaders arms and attachment to the ground, turn off machine, and remove ignition key. If you must park on a hillside you should always chock skid steer/tractor wheels for an extra measure of safety.

With a little practice and experience you should become very good at operating your Land Pride SA20 Series Post Hole Digger.

See **"Features and Benefits"** section or **"Product Specifications"** for additional information on performance enhancing options.

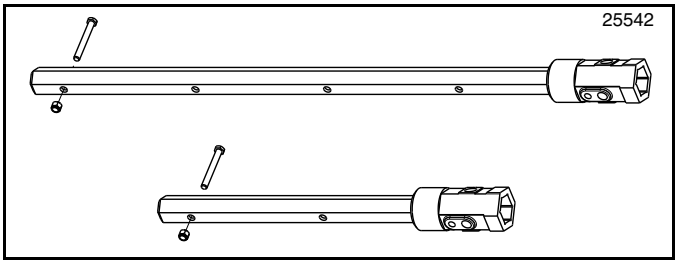
Auger Extensions (Accessory)

Refer to Figure 3-1:

If hole depth cannot be achieved, an auger extension can be purchased from your nearest Kubota dealer.

Land Pride Auger Extensions

Part No.	Part Description
317-129A	SA 24" X 2" HEX AUGER EXTEN. ASSY
317-130A	SA 36" x 2" HEX AUGER EXTEN. ASSY
317-131A	SA 48" X 2" HEX AUGER EXTEN. ASSY



Auger Extensions (24" & 48" Shown)
Figure 3-1

Dirt & Tree Augers

Refer to Figure 3-2 & Figure 3-3:

Land Pride offers dirt and tree augers with 2" hex hubs and aggressive auger teeth.

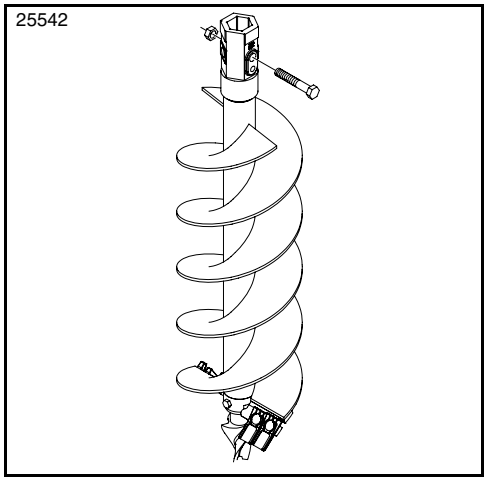
Tree augers are excellent for digging holes that are larger in diameter at the top and smaller at the bottom. This hole design is good for planting bush, shrub, and tree bulbs at soil level and allowing the root system to reach down underneath to collect needed nutrients.

Land Pride Dirt Augers

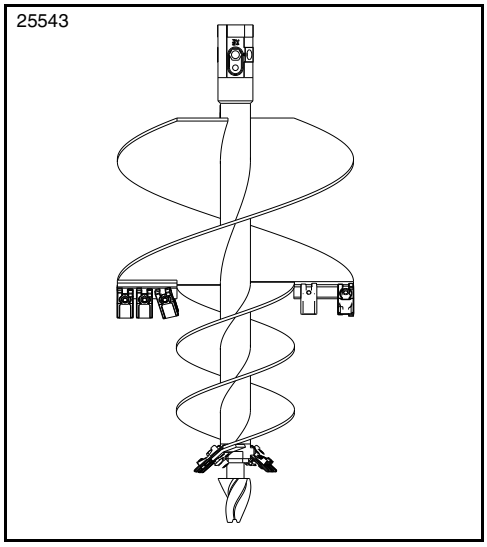
Part No.	Part Description
317-273A	SA 6" X 2" HEX HUB DOUBLE AUGER
317-095A	SA 9" X 2" HEX HUB DOUBLE AUGER
317-098A	SA 12" X 2" HEX HUB DOUBLE AUGER
317-101A	SA 15" X 2" HEX HUB DOUBLE AUGER
317-104A	SA 18" X 2" HEX HUB DOUBLE AUGER
317-107A	SA 24" X 2" HEX HUB DOUBLE AUGER
317-113A	SA 30" X 2" HEX HUB DOUBLE AUGER
317-119A	SA 36" X 2" HEX HUB DOUBLE AUGER

Land Pride Tree Augers

Part No.	Part Description
317-110A	SA 24" X 2" HEX HUB TREE AUGER
317-116A	SA 30" X 2" HEX HUB TREE AUGER
317-122A	SA 36" X 2" HEX HUB TREE AUGER



Dirt Augers
Figure 3-2



Tree Augers
Figure 3-3

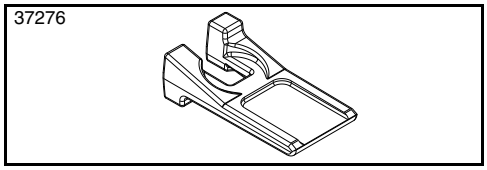
Dirt & Tree Auger Teeth

Refer to Figure 3-4:

Standard dirt and tree auger teeth are forged steel teeth that can be mounted at a 40° angle for standard digging and 50° angle for aggressive digging. Carbide teeth last longer and should be used when standard teeth can not stand-up to the abrasion.

Land Pride Auger Teeth

Part No.	Part Description
820-233C	Auger Tooth (Standard)
820-738C	Auger Tooth, Carbide (Service Part)



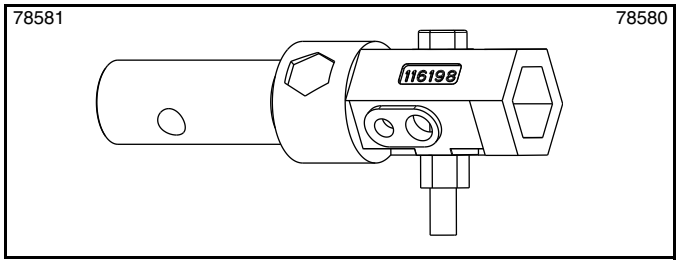
Auger Tooth
Figure 3-4

Auger Adapter (Accessory)

Refer to Figure 3-5:

This auger adapter converts the 2" Hex shaft to a 2.5" round shaft.

Part No.	Part Description
892-047C	Auger Adapter, 2 Hex - 2.5" Round Shaft

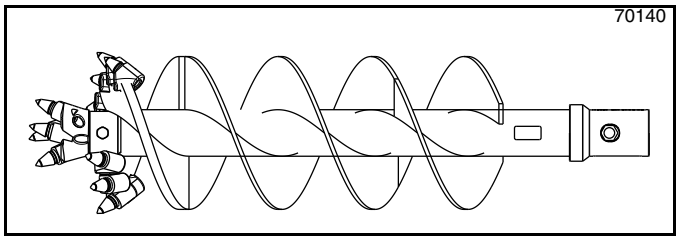


Auger Adapters
Figure 3-5

Rock Augers (Option)

Refer to Figure 3-6:

Rock Augers		
Part No.	**Part Description**	
317-280A	SA 6" X 2"	HEX HUB ROCK AUGER
317-263A	SA 9" X 2"	HEX HUB ROCK AUGER
317-264A	SA 12" X 2"	HEX HUB ROCK AUGER
317-265A	SA 15" X 2"	HEX HUB ROCK AUGER
317-266A	SA 18" X 2"	HEX HUB ROCK AUGER
317-267A	SA 24" X 2"	HEX HUB ROCK AUGER



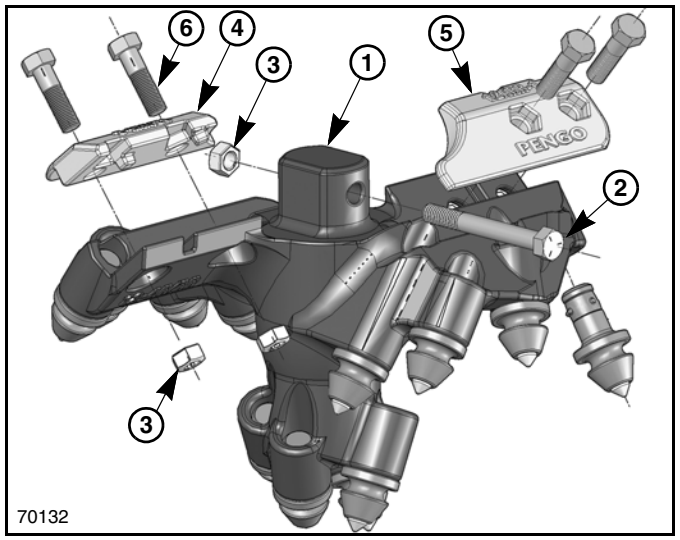
2" Hex Hub Rock Augers
Figure 3-6

Bolt-on Rock Heads (Accessory)

Refer to Figure 3-7:

The SA20 Dirt Augers can be converted to Rock Augers with this accessory. Remove existing dirt auger teeth and point. Attach rock head (#1) to the auger with 1/2"-13 GR5 bolt (#2) and locknut (#3). Clamp rock head to the auger's spiral flighting with wear caps (#4 & #5), 1/2"-13 GR5 bolts (#6), and locknuts (#3). Tighten locknuts (#3) to the correct torque.

Bolt-on Rock Heads	
Part No.	**Part Description**
317-274A	SA 6" Bolt-on Rock Head Assembly
317-275A	SA 9" Bolt-on Rock Head Assembly
317-276A	SA 12" Bolt-on Rock Head Assembly
317-277A	SA 15" Bolt-on Rock Head Assembly
317-278A	SA 18" Bolt-on Rock Head Assembly
317-279A	SA 24" Bolt-on Rock Head Assembly

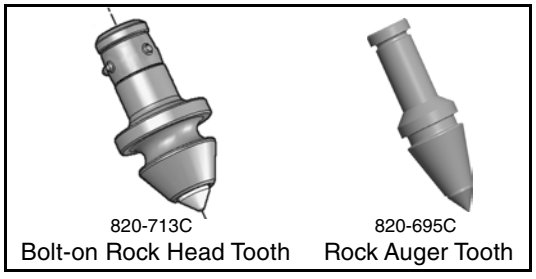


Bolt-on Rock Heads (12"Assembly Shown)
Figure 3-7

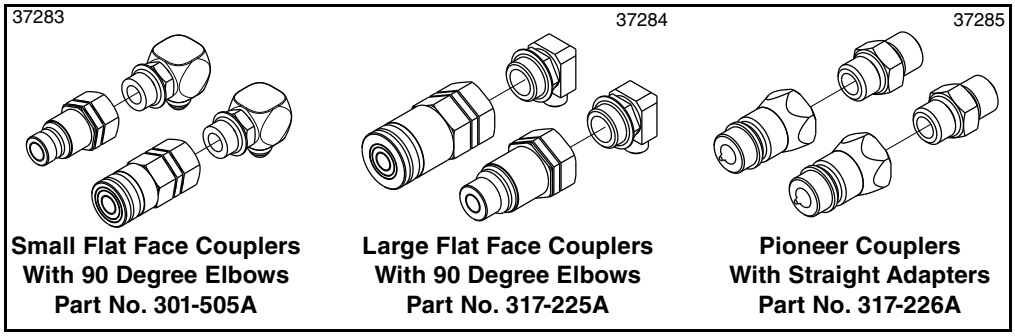
Rock Auger Teeth

Refer to Figure 3-8:

Rock Auger Teeth	
Part No.	**Part Description**
820-695C	Belltec Auger Tooth (For Rock Augers)
820-713C	Pengo Rock Auger Tooth (Bolt-on Rock Heads)



Rock Auger Teeth
Figure 3-8



Quick Release Coupler Assemblies
Figure 3-9

Couplers

Refer to Figure 3-9:

SMALL FLAT FACE COUPLERS 301-505A
Small flat face couplers consist of one small flat face male coupler, one small flat face female coupler, and two 90° elbows.

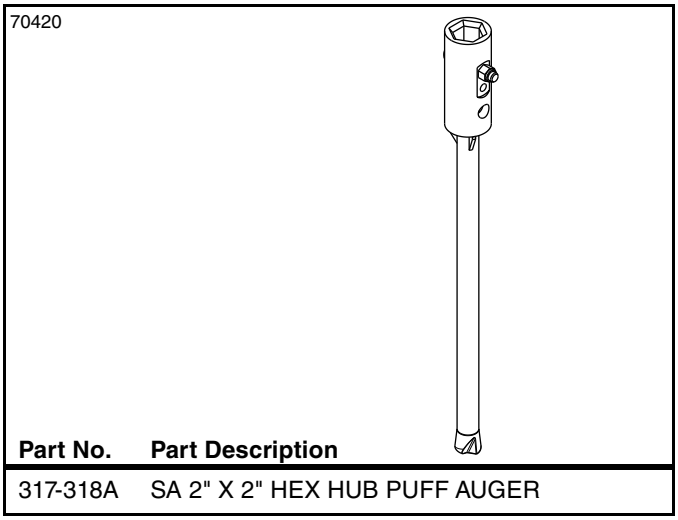
LARGE FLAT FACE COUPLERS 317-225A
Large flat face couplers consist of one large flat face male coupler, one large flat face female coupler, and two 90° elbows

PIONEER COUPLERS 317-226A
Consists of two male QD poppet type couplers and two straight adapters.

Puff Auger (Option)

Refer to Figure 3-10:

The puff auger is a 2" rock drill used for drilling T-post holes in tough conditions.



Part No.	Part Description
317-318A	SA 2" X 2" HEX HUB PUFF AUGER

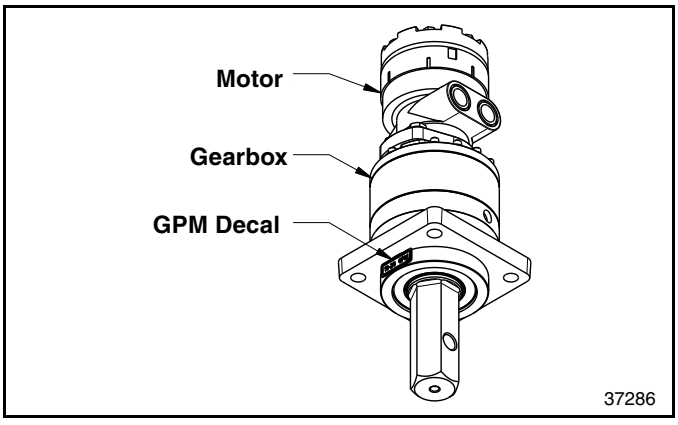
Puff Auger Assembly
Figure 3-10

Hydraulic Motor/Gearboxes

Refer to Figure 3-11:

HYD MOTOR/GEARBOX LO (6-15 gpm) 317-216A
HYD MOTOR/GEARBOX MED (10-20 gpm) .317-209A
HYD MOTOR/GEARBOX HI (15-30 gpm). . . .317-217A
Three motor/gearbox assembly options are offered to meet your hydraulic flow requirements. All are interchangeable and do not require adapter kits. Compare your skid steer/tractor rating with ratings above. If your hydraulic motor is not compatible with your skid steer/tractor, you should replace it with one of the assemblies above that is compatible.

NOTE: The SA20 gearbox is compatible with all three hydraulic motors. If preferred, you can order an alternate motor and decal from your nearest Land Pride dealer to meet your machine flow requirements. When changing motors, be sure to also replace flow decal on gearbox.



Motor/Gearbox Assembly
Figure 3-11

Maintenance

Proper servicing and adjustment is key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

Read and obey all safety labels on the Post Hole Digger. Securely block raised equipment before working under or around it. Do not allow anyone to operate or perform maintenance on this implement who has not been properly trained in its safe operation.

DANGER

To avoid serious injury or death:

- *All guards and shields must be installed and in good working condition while operating the attachment.*
- *Keep all persons and animals away from rotating components. They can become entangled in the equipment.*
- *Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to the hydraulics is off.*

WARNING

To avoid serious injury or death:

- *Make sure controls are all in the neutral position or park before starting the power machine.*
- *Always shut power machine down using the "Shutdown Procedure" provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.*
- *Do not alter attachment or replace parts on the attachment with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the attachment. Replace parts only with genuine OEM parts.*
- *Allow only persons to perform maintenance on this implement who have been properly trained in its safe operation.*
- *Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.*
- *Make sure safety labels are in their proper location and are in good condition before operating the attached implement. Read and obey all instructions on the labels.*

Daily Inspections

1. Inspect auger point and teeth for wear and loose fit. Keep cutting edges sharp. Sharp cutting edges dig easier and better.
2. Inspect auger flighting for wear, bend, and cracks.
3. Inspect auger mounting hardware for wear, bend, and loose fit.
4. Inspect all connecting pins and hardware for wear, bend, and loose fit.
5. Inspect output shaft for bend and wear.
6. Check gearbox fluid level periodically. Refer to **"Gearbox Lubricant"** on page 29 for detailed instructions.
7. Replace all worn, damaged, or illegible safety labels by obtaining new labels from your nearest Land Pride dealer.

Long-Term Storage

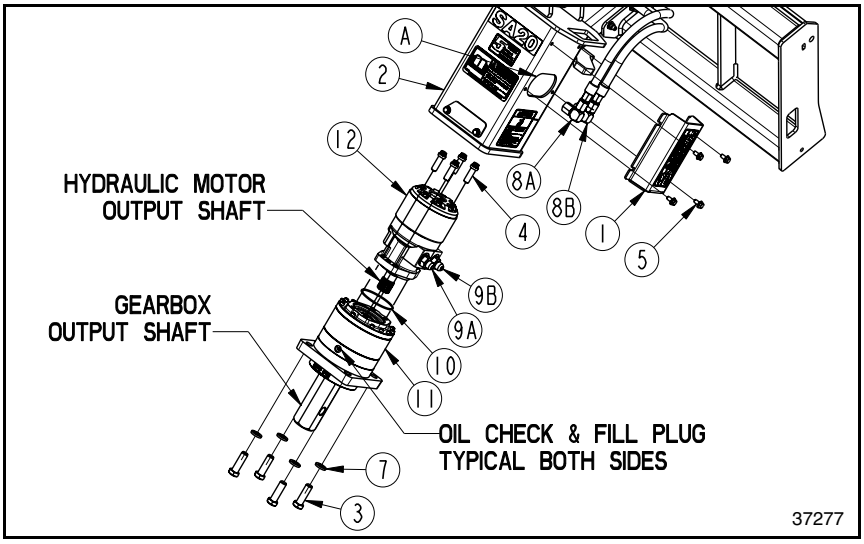
Clean, inspect, service, and make necessary repairs to the Post Hole Digger when storing it for long periods and when storing it at the end of a working season. This will help ensure the auger is ready for field use the next time you hook-up to it.

1. Clean off any dirt and grease that may have accumulated on the unit and moving parts. Scrape off compacted dirt and then wash surfaces thoroughly with a garden hose. A coating of oil may also be applied to the spiral flights to minimize oxidation.
2. Check auger flighting for wear, bend, and cracks and repair or replace as needed.
3. Inspect auger for loose, damaged, or worn components and adjust or replace as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Land Pride touch-up paint. They are available in aerosol spray cans, touch-up bottles, quarts, and gallon sizes.

Touch-Up Paint

Part No.	Part Description
821-070C	GLOSS BLACK ENAMEL SPRAY CAN
821-070CTU	GLOSS BLACK ENAMEL BOTTLE & BRUSH
821-070CQT	GLOSS BLACK ENAMEL QUART
821-070CGL	GLOSS BLACK ENAMEL GALLON

5. Replace all damaged or missing decals.
6. Lubricate as noted on page 29.
7. Store unit on a level surface in a clean, dry place. Be sure unit is properly supported so as not to fall on any one during storage.
8. Follow **"Unhook Bucket Mount"** on page 11 or **"Unhook Post Hole Digger"** on page 17 when disconnecting skid steer/tractor from Post Hole Digger.



Hydraulic Motor & Gearbox Assembly & Disassembly
Figure 4-1

Motor Maintenance

Refer to Figure 4-1:

The gearbox and motor will need to be removed from the motor/gearbox housing to lubricate. To do this, the Post Hole Digger should be hooked-up to the skid steer or tractor. The bucket on bucket mount units should be resting on the ground with auger laying horizontally on the ground. On skid/loader plate units, the Post Hole Digger hitch should be resting on the ground and auger laying horizontally on the ground.

Park Post Hole Digger

1. Shut power machine down using "Power Machine Shutdown Procedure" on page 17 before dismounting.
2. **Skid Steers Only:** If equipped, raise seat bar and move controls until both lock.
3. Use grab-handles, steps, and anti-slip surfaces when getting on and off the skid steer/tractor.

Remove Motor/Gearbox Assembly

1. Disconnect hydraulic hoses from skid steer/tractor.
2. Remove auger or auger extension from gearbox output shaft. Refer to **"Auger Assembly & Disassembly"** on page 14 for detailed instructions.
3. Remove bolts (#5) and hose cover (#1) from gearbox housing (#2).
4. Mark hydraulic hose and elbow (#8A) with tape or other method to keep track of it.
5. Unscrew 90° elbows (#8A & #8B) from straight adapters (#9A & #9B).
6. Remove bolts (#3) and lock washers (#7) from gearbox (#11).
7. Remove motor/gearbox (#12 & #11) from motor/gearbox housing (#2).

Lubricate Motor Output Shaft

The Hydraulic motor (#12) needs to be separated from gearbox (#11) only when lubricating hydraulic motor output shaft.

1. Remove bolts (#4) from hydraulic motor (#12).
2. Separate motor (#12) from gearbox (#11). Be careful not to damage O-ring (#10).
3. Lubricate output shaft of hydraulic motor (#12). Refer to **"Lubrication Points"** on page 29 for detailed instructions.
4. Inspect O-ring (#10). Make sure it is properly seated in motor (#12) and not damaged. Replace O-ring if damaged.
5. Reattach hydraulic motor (#12) to gearbox (#11) with bolts (#4). Tighten bolts (#4) to the correct torque.

Assembly of Motor & Gearbox

1. Align adapters (#9A & #9B) with motor/gearbox opening "A" and insert motor/gearbox (#12 & #11) in motor/gearbox housing (#2).
2. Secure motor/gearbox (#12 & #11) to motor/gearbox housing (#2) with 5/8"-11 x 2" GR5 bolts (#3) and lock washers (#7). Tighten bolts (#3) to the correct torque.
3. Screw elbow (#8B) to adapter (#9B) until tight.
4. Screw elbow (#8A) to adapter (#9A) until tight.
5. Attach hose cover (#1) to motor/gearbox housing (#2) with 5/16"-18 x 5/8" GR5 hex flange serrated bolts (#5). Tighten bolts (#5) to the correct torque.

Gearbox Maintenance

The oil in the gearbox should be changed after the first 50 hours of operation and every 100 hours or annually there after. Check oil level weekly.

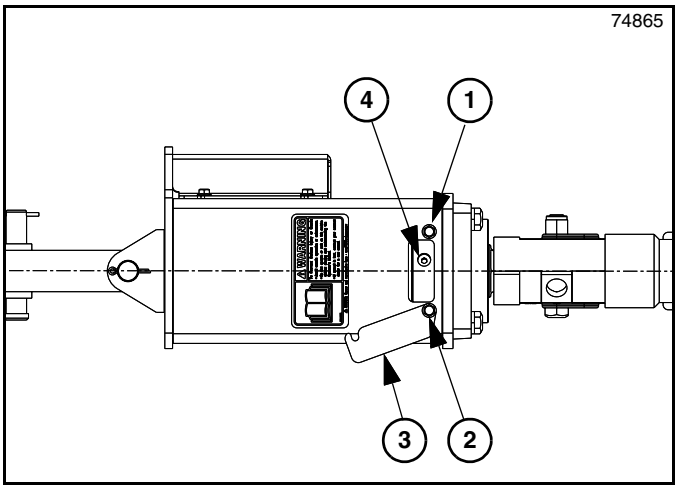
Check Oil Level

Refer to Figure 4-2:

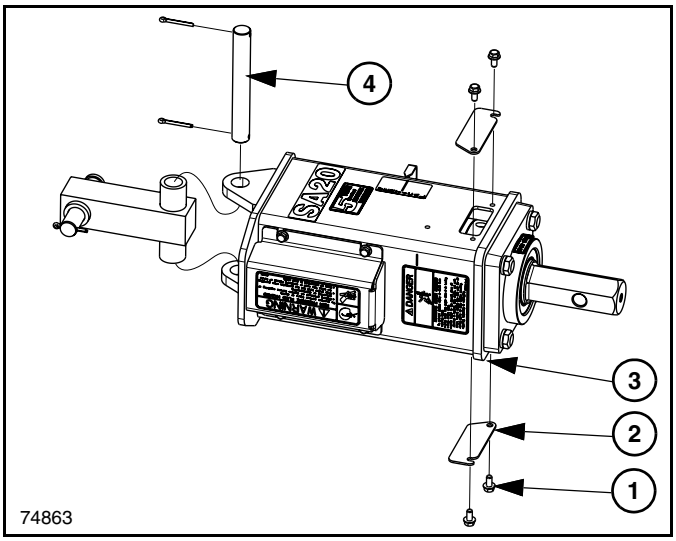
To check oil level in the gearbox the Post Hole Digger should be hooked up to the skid steer or tractor. The hitch should be resting on the ground and the auger supported horizontally off the ground as shown in Figure 4-2:

1. Shut power machine down using “Power Machine Shutdown Procedure” on page 17 before dismounting.
2. Disconnect hydraulic hoses from the skid steer/ tractor.
3. Loosen bolts (#1 & 2) pivot access cover (#3) from the gearbox housing.
4. Remove oil plug (#4) located above the centerline as shown. Check that oil is level with bottom of plug hole.

After checking oil level and filling if needed. Reinstall oil plug (4) and pivot access cover (#3) back to closed position. Tighten bolts (#1 & 2)



Checking the Gearbox Oil Level
Figure 4-2



Changing the Gearbox Oil
Figure 4-3

Change Oil

Refer to Figure 4-3:

To change oil in the gearbox, the Post Hole Digger should be removed from the skid steer hitch or tractor bucket. Auger can be removed for easier positioning of gearbox motor assembly. Rest in side position high enough off ground for catching oil as shown in Figure 4-3:

1. Shut power machine down using **“Power Machine Shutdown Procedure”** on page 17 before dismounting.
2. Disconnect hydraulic hoses from the skid steer/ tractor.
3. Remove auger or auger extension from gearbox output shaft. Refer to **“Auger Assembly & Disassembly”** on page 14 for detailed instructions.
4. Remove Pin (#4) closest to the gearbox housing
5. Remove bolts (#1) and access covers (#2).
6. Remove drain plug (#3). Prepare to catch oil in container dispose of oil in accordance to local oil facility for recycling.
7. Position gearbox housing assembly horizontal as shown.
8. Inspect and reinstall oil drain plug (#3)
9. Add oil to gearbox. Refer to **“Check Oil Level”** on this page.

Lubrication Points

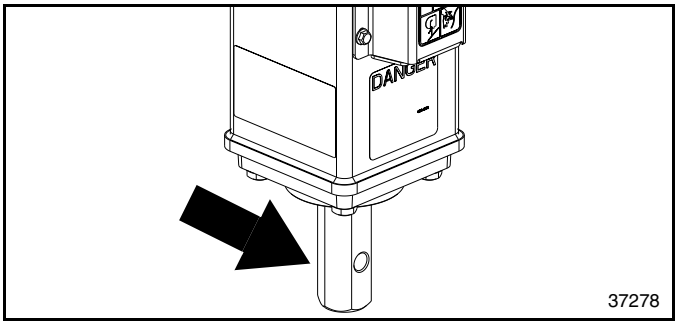
Lubrication Legend

Multi-purpose spray lube

Multi-purpose grease lube

Multi-purpose oil lube

50 Hrs — Intervals in hours at which lubrication is required

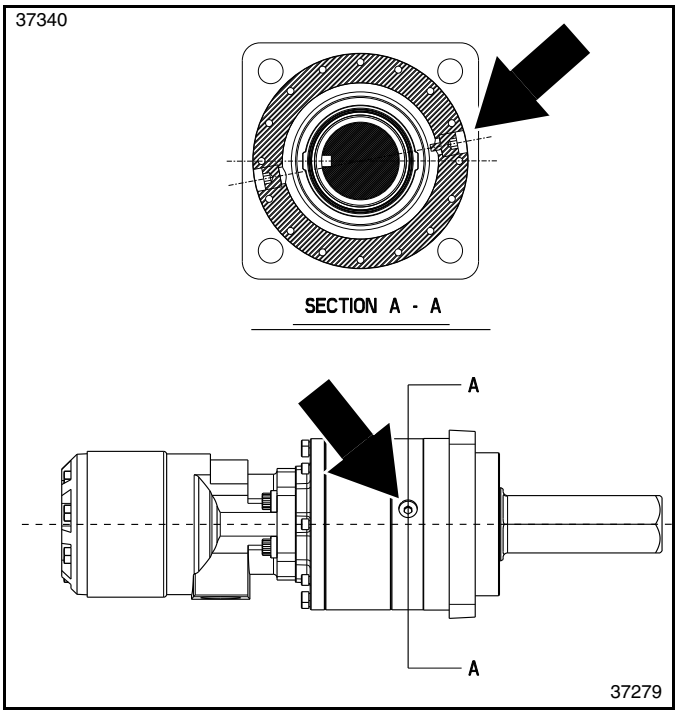


As Required

Gearbox Output Shaft

Type of Lubrication: Multi-purpose grease

Quantity = Light film



As Noted

Gearbox Lubricant

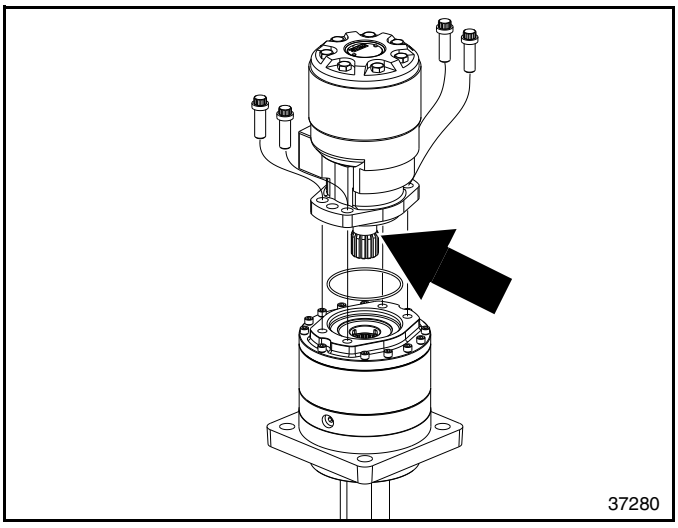
The gearbox should be horizontal as shown to check, add, and/or change oil. Refer to **"Gearbox Maintenance"** on page 28 for detailed instructions.

Change oil after the first 50 hours of operation. Then every 100 hours or 12 months whichever comes first.

Check oil weekly before use as follows:
Lay unit horizontal with oil plugs on both sides. Remove plug located above center. If oil level is below bottom of plug hole, add oil through same plug hole until level with bottom of plug hole.

Quantity: Fill to bottom of plug hole. Do not overfill. Replace oil plug when finished.

Type of API-GL-5 lubricant:
SAE 90 @ 35^{o} F min. temperature



As Required

Hydraulic Motor Output Shaft

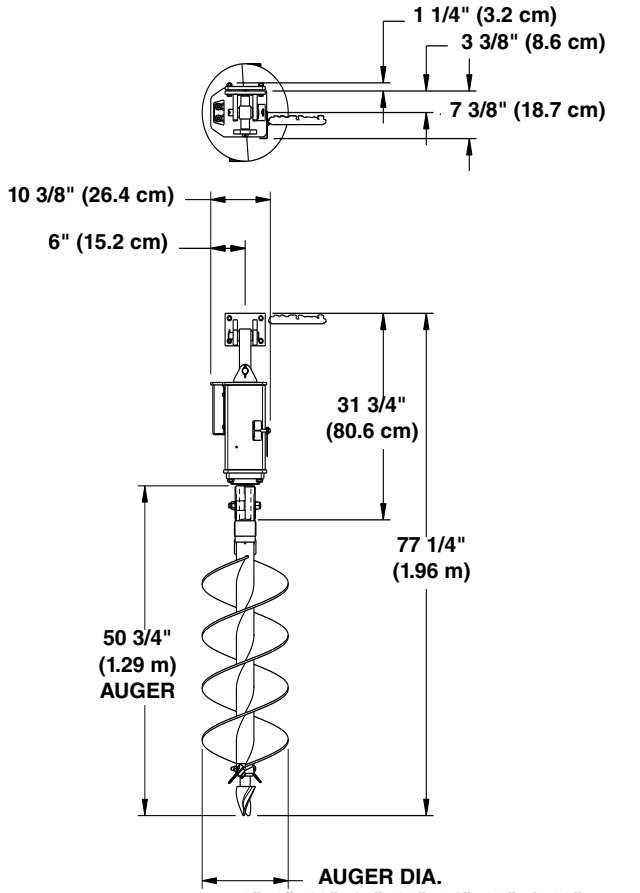
The motor/gearbox must be removed and disassembled to lubricate motor output shaft. Refer to **"Motor Maintenance"** on page 27 for detailed instructions.

Type of Lubrication: Multi-purpose grease

Quantity = Light film

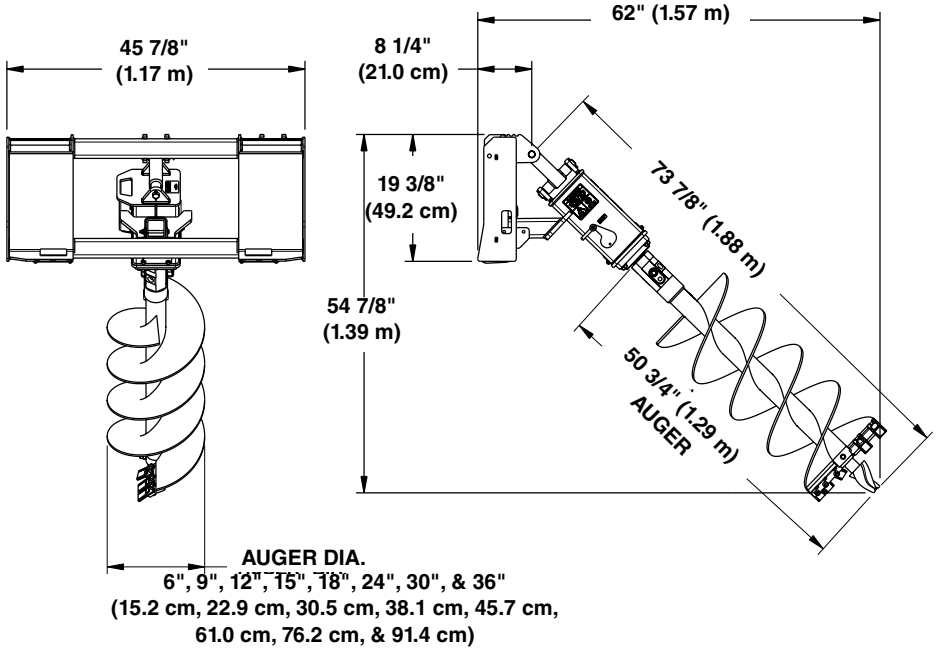
SA20 Model

Specifications & Capacities			
Hydraulic requirements	6-30 gpm (22.7-113.6 Lpm)@ 1500 to 3500 psi (10.34 to 24.13 MPa)		
Base Weight without Options	46 lbs (20.9 kg)		
Auger length	9" (22.9 cm) Auger size = 49" (1.24 m) All other auger sizes = 50 3/4" (1.29 m)		
Auger flighting thickness	5/16" (8 mm)		
Auger pipe	2 1/2" (6.4 cm) ID		
Auger teeth	Forged, Individually Replaceable 40 Degree angle installed on flat side 50 Degree angle installed on angled side		
Number of auger teeth	Hex Head Double Augers 6" (15.2 cm) - 2 teeth 9" (22.9 cm) - 4 teeth 12" (30.5cm) - 4 teeth 15" (38.1cm) - 5 teeth 18" (45.7 cm) - 6 teeth 24" (61.0 cm) - 8 teeth 30" (76.2 cm) - 10 teeth 36" (94.4 cm) - 12 teeth	Hex Head Tree Augers 24" (61.0 cm) - 9 teeth 30" (76.2 cm) - 11 teeth 36" (91.4 cm) - 13 teeth	Rock Augers 6" (15.2 cm) - 6 teeth 9" (22.9 cm) - 10 teeth 12" (30.5 cm) - 12 teeth 15" (38.1 cm) - 14 teeth 18" (45.7 cm) - 16 teeth 24" (61.0 cm) - 20 teeth
Auger pilot	Cast Steel, 3 - Drill Points		Cast Steel, 4 - drill points
Auger drive	Hydraulic		
Gearbox	Hydraulically driven planetary gearbox; reversible		
Gearbox output shaft	2" (5.1 cm) Hex		
Gearbox API-GL-5 oil weight	SAE 90 @ 35^{o} F (1.7^{o} C) min. temperature		
Gearbox oil capacity	14 oz. (414 mL)		
Puff auger part #. 317-318A	33 lbs (15.0 kg) 2" (5.1 cm) Pilot bit x 2" (5.1 cm) hex hub x 38.7" (98.3 cm) overall length		
Options and Accessories			
Hitch options & weights	Universal quick attach hitch that meets SAE standards: With 8 foot (2.44 m) hoses for skid steer mount = 138 lbs (63 kg) With 24 foot (7.32 m) hoses for tractor front loader mount = 145 lbs (65.8 kg) Bucket side mount with 24 foot (7.32 m) hoses = 44 lbs (20 kg) Bucket side mount without hoses = 14 lbs (6.4 kg)		
Hydraulic motor options & weights **Low flow** **Medium flow** **High flow**	 99 lbs (44.9 kg) 6-15 gpm (22.7-56.8 Lpm) @ 1500 to 3500 psi (10.34 to 24.13 MPa) 94 lbs (42.6 kg) 10-20 gpm (37.9-75.7 Lpm) @ 1500 to 3500 psi (10.34 to 24.13 MPa) 97 lbs (44 kg) 15-30 gpm (56.8-113.6 Lpm) @ 1500 to 3500 psi (10.34 to 24.13 MPa)		
Auger sizes **Dirt** **Tree** **Rock**	6", 9", 12", 15", 18", 24", 30", & 36" (15.2 cm, 22.9 cm, 30.5 cm, 38.1 cm, 45.7 cm, 61.0 cm, 76.2 cm, & 91.4 cm) 24", 30" & 36" (61.0 cm, 76.2 cm, & 91.4 cm) 6", 9", 12", 15", 18", & 24" (15.2 cm, 22.9 cm, 30.5 cm, 38.1 cm, 45.7 cm, & 61.0 cm)		
Bolt-on Rock Head Sizes	6", 9", 12", 15", 18", or 24" (15.2 cm, 22.9 cm, 30.5 cm, 38.1 cm, 45.7 cm, or 61.0 cm)		
Auger Hex extensions (Accessories)	58 lbs (15.4 kg) 24" lg x 2" Hex hub (61 cm x 5.1 cm) 46 lbs (20.9 kg) 36" lg x 2" Hex hub (91.4 cm x 5.1 cm) 58 lbs (26.3 kg) 48" lg x 2" Hex hub (122 cm x 5.1 cm)		
Augers Adapter (Accessory):	19.6 lbs (8.9 kgs) 2" Hex Hub x 2.5" round shaft (5.1 cm x 6.4 cm)		
Coupler options	Pioneer, large flat face, or small flat face = 3 lbs (1.4 kg)		



Post Hole Digger For Bucket Mount

37288



Post Hole Digger For Skid/Loader Hitch Plate, Center & Offset Gearbox Mount

37289

SA20

Features	Benefits
Skid steer type quick attach that meets SAE	Fits a wide range of tractors and skid steers. Easy hook-up and unhook capabilities. Loader arms can be used to apply additional down force.
Center and 18" offset mounts on auger hitch	Choice of two motor/gearbox mounting points allows operator to pick which mount is best for accessing hard-to-reach places and for best line-of-sight. Steps are incorporated into mounting points for safe entry to skid steers.
Gusseted corners & hitch bar	Provides added strength where others do not.
Dual openings for hose routing	Allows hoses to be routed out either side of hitch frame.
Patent pending vertical indicator	Indicates when auger is vertical, makes it easier to drill straight vertical holes.
2" Hex output shaft	High torque resistance.
Choice of drive motors	Three flow ranges (6-15 gpm, 10-20 gpm, and 15-30 gpm) cover a wide range of skid steers and tractors.
Hydraulic hoses routed out top of motor/gearbox housing	Allows motor/gearbox housing to follow auger into hole and dig a deeper hole without damaging hoses. Some competitors don't offer this.
Large selection of augers	Variety of Dirt, Tree, and Rock Auger sizes and styles to suit many applications.
Large selection of Bolt-on Rock Heads (Accessory)	Pengo Dirt Augers can be converted to Rock Augers with this accessory.
Puff auger	Used for drilling 2" rock T-post holes in tough conditions.

Troubleshooting Chart

Problem	Cause	Solution
Auger will not dig	Teeth are dull.	Sharpen or replace teeth.
	Auger is turning too fast and bouncing.	Reduce engine speed. Do not exceed 110 rpm.
	Auger is encountering rocks, roots, or other obstructions.	Lift auger from hole and remove obstruction or change location.
	Tractor/skid steer is not positioned properly.	Reposition skid steer/tractor.
Auger digs so far, but will not dig deeper	Soil could have hardpan layer below surface.	Use tractor to push auger into ground. May need to use an extension.
Auger is digging at an angle	Skid steer/tractor moved on its own while auger was in the hole.	Always make sure gear selector is in neutral or park and brakes are set.
	Operator moved skid steer/tractor excessively with auger in hole to try to straighten hole being dug at an angle.	Be careful not to damage gearbox or auger when moving. While digging, move skid steer/tractor in small increments to keep the hole straight.
	Auger is encountering rocks, roots, or other obstructions.	Lift auger from hole and remove obstruction or change location.
Excessive oil heating	Flow in hydraulic line is restricted due to dirt particles in fittings and twisted hydraulic hoses.	Remove dirt particles in fittings and untwist hydraulic hoses that may be pinched or kinked.
	Defective or mismatched coupler.	Replace with proper couplers.
	Hydraulic fluid is dirty.	Replace hydraulic fluid and filter.
	Insufficient quantity of hydraulic fluid.	Fill reservoir to proper level. Increase reservoir storage capacity.
	Digging load is excessive.	Reduce load to within machine specifications.
	Auger motor does not match skid steer/tractor hydraulic flow.	Change motor to match.
Gearbox is damaged	No oil in Gearbox.	Check oil level in gearbox per instructions.
	Oil not changed per instructions.	Change oil per instructions.
Jerky operation	Cold oil or air in hydraulic lines.	Allow time for the hydraulic oil to warm up.
	Hydraulic system not working properly.	See skid steer/tractor Operator's Manual.
Insufficient digging power	Excessive wear of auger teeth or point.	Replace auger teeth or point.
	Low system pressure. (psi)	Check system with pressure gauge. If low, investigate cause.
	Relief valve is damaged or is set wrong.	Refer to skid steer/tractor or Operator's Manual.
	Excessive digging load.	Reduce load to within machine specifications.
Hydraulic Oil leaks	Loose or damaged hoses.	Tighten or replace hydraulic hoses.
	Loose or damaged fittings.	Tighten or replace hydraulic fittings.
	Hydraulic motor seals and gaskets are worn or damaged.	See Dealer for repair.
Auger turns in reverse direction	Hydraulic hoses are reversed at the couplers.	Re-install hoses correctly.
	Tractor/skid steer control lever operated incorrect	Reverse skid steer/tractor control lever direction.
Auger speed is slow	Low hydraulic flow through the system.	Check with flow meter. If low, investigate and correct.
	Flow in hydraulic line is restricted due to dirt particles in fittings and twisted hydraulic hoses.	Remove dirt particles in fittings and untwist hydraulic hoses that may be pinched or kinked.
	Defective or mismatched couplers	Replace with proper couplers.
	Fittings and/or connections are too small.	Replace with proper size fittings and/or connections.
	Dirty oil filter.	Replace oil filter.
	Worn or damaged hydraulic pump.	See dealer for repair
	Excessive wear of auger teeth or point.	Replace auger teeth and/or point.

Torque Values Chart for Common Bolt Sizes

Bolt Size (inches)	Bolt Head Identification Grade 2		Grade 5		Grade 8	
in-tpi [1]	N · m [2]	ft-lb [3]	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12
- 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1-1/8" - 12	540	395	1210	890	1960	1440
1-1/4" - 7	680	500	1520	1120	2460	1820
1-1/4" - 12	750	555	1680	1240	2730	2010
1-3/8" - 6	890	655	1990	1470	3230	2380
1-3/8" - 12	1010	745	2270	1670	3680	2710
1-1/2" - 6	1180	870	2640	1950	4290	3160
1-1/2" - 12	1330	980	2970	2190	4820	3560

Bolt Size (Metric)	Bolt Head Identification 5.8 Class 5.8		8.8 Class 8.8		10.9 Class 10.9	
mm x pitch [4]	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	39	72	53
M10 X 0.75	39	29	61	45	85	62
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

[1] in-tpi = nominal thread diameter in inches-threads per inch

[2] N· m = newton-meters

[3] ft-lb= foot pounds

[4] mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.
All locknuts or lubricated fasteners: Use 75% of torque value. (i.e. 1/2"-13 GR5 = 76 ft-lb; 75% of 76 or .75 x 76 = 57 ft-lb)

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit: One year Parts and Labor.

Auger: One year (somewhat considered a wear item.)

Gearbox: 5 years on Housing, Gears, and Shafts.

Hydraulic Motor: 5 years Parts and Labor.

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of original purchase.

IMPORTANT: The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

Model Number _____ **Serial Number** _____

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