



3-Pt. Subsoiler

Owner's Manual



⚠ WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #51463

SAVE THESE INSTRUCTIONS

Thank you very much for choosing a Nortrac™ product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: _____

Purchase Date: _____

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

This 3-Pt. Subsoiler is designed for certain applications only. Northern Tool & Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-800-222-5381**.

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Intended Use

With a solid, steel beam backbone and a forged, heat-treated reversible ripper tooth, this NorTrac 3-Pt., Category 1, Subsoiler is the tool you need for ripping sod and loosening compacted soil for better plant growth and production. The ripping depth can be adjusted up to 14 inches.

Technical Specifications

Property	Specification
Ship Weight	79.0 lbs
Working Width (in.)	2
Hitch Type	3-pt.
Working Depth (in.)	14
Max. HP	50
Required HP	22
Blades (qty.)	1
Blade Type	Reversible ripper tooth

Important Safety Information

⚠ WARNING

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this subsoiler. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the subsoiler until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this subsoiler in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the subsoiler was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. DO NOT use this equipment for a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

⚠ WARNING

WORK AREA SAFETY

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well lit. Cluttered, wet, or dark work areas can result in injury. Using the subsoiler in confined work areas may put you dangerously close to other cutting tools and rotating parts.
- Do not allow the subsoiler to come into contact with an electrical source. The tool is not insulated and contact will cause electrical shock.

- Keep children and bystanders away from the work area while operating the subsoiler. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

⚠ WARNING

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the subsoiler. Do not use the subsoiler while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the subsoiler may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.
- Remove keys or wrenches before connecting the tool to an air supply, power supply, or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may cause personal injury.
- Secure the work with clamps or a vise instead of your hand when practical. This safety precaution allows for proper tool operation using both hands.

⚠ CAUTION

PRODUCT USE AND CARE

- Do not force the subsoiler. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the subsoiler will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the subsoiler with a damaged part.
- Store the subsoiler when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the subsoiler for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your subsoiler. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.
- Keep guards in place and in working order. Never operate the subsoiler without the guards in place.

Specific Operation Warnings

⚠ WARNING

To prevent serious injury or death:

- Read and understand this Owner's Manual before operating, servicing, or repairing equipment.
- Stop the engine, remove the key, and set the brake before dismounting the tractor.
- Operate from the tractor's seat only.
- Never allow riders on equipment.
- DO NOT stand between implement and tractor.
- Keep hands and feet clear from shovel while engine is on.
- Keep bystanders at least 50 feet away while operating.
- DO NOT operate or transport on steep inclines.
- DO NOT exceed this implement's maximum speed of 5 MPH. Exceeding this speed may result in loss of control during transport or braking.
- DO NOT use if implement is damaged. Repair before continuing use.
- Park and store on a hard, level surface.
- Store out of reach of children. Not for use by or around children.
- To prevent property damage, watch for and avoid catching shoes on stumps, large rocks, and other immovable objects.

FALLING OFF CAN RESULT IN IMPALEMENT OR BEING RUN OVER.

- Tractor must be equipped with a Roll Over Protection Structure (or ROPS CAB) and seat belt. Keep a foldable ROPS system in the "locked up" position at all times.
- Keep the seat belt securely fastened.
- Never allow riders on equipment.

RAISED EQUIPMENT CAN DROP AND CRUSH.

- Before servicing, follow all instructions and safety rules in this Owner's Manual and securely block all corners of the equipment with jack stands.
- Securely blocking the equipment prevents it from dropping due to mechanical component failures.

FALLING OFF OR FAILING TO BLOCK SECURELY CAN RESULT IN SERIOUS INJURY OR DEATH.

Assembly Instructions

1. Make sure the lower draw pins (pull pins) are installed correctly for your tractor.
2. Hitch pins should be assembled outward for category 1 hitches.
3. Insert the hitch pins into the ball sockets in the lower lift arms of the tractor 3 point hitch. Lock in place with linchpins (not furnished). Attach the mast of the 3 point main frame by installing the tractor center link (top link) with a top link pin (not furnished).
4. Adjust the top link assembly to obtain the correct angle of the implement. Check the tractor's 3 point lift arms and adjust to level the implement from side to side.
5. For proper operation, level the subsoiler by adjusting the tractor linkage. This will assure that the subsoiler will run straight.
6. The tractor's 3 point hydraulic lift system should be set to transfer most of the subsoiler's weight and draft to the tractor to maximize traction. (There may not be a 3 point draft control on some small tractors. (Refer to the tractor's Owner's Manual.)

7. The subsoiler can be used to plant and dig potatoes, form ridges for other crops, and form drainage ditches.
8. Set your 3 point hitch depth control to operate the subsoiler at the desired depth. The deeper you operate, the greater the amount of soil you will plow or “hill-up”. In dry or hard soil conditions you may need to make a few passes.
9. By increasing the forward speed, the further you will “throw” the soil from both sides of the subsoiler.
10. Operate at a speed that forms the furrow or “hilling” operation you desire.
11. By adjusting the length of the 3 point top link, you can adjust the pitch of the subsoiler. In most soil conditions, the bottom of the subsoiler should be about level or with the point down slightly. This “pitch angle” will also determine how much soil is moved.

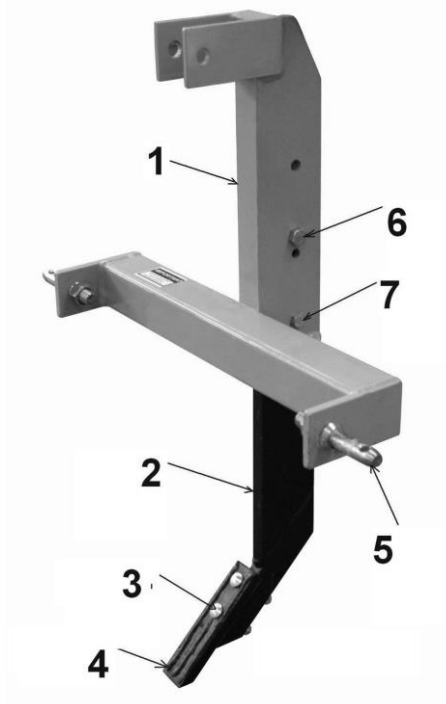
⚠WARNING

NEVER allow anyone to ride while operating this equipment and keep bystanders at a safe distance.

Maintenance

1. Check all nuts and bolts and make sure they are tight.
2. Store in a clean and dry location.
3. Check points for wear and damage. Replace when necessary,
4. After seasonal use, paint the shanks and points to prevent excessive rusting during extended non-use periods. This will reduce the scour time when you use the implement again.

Parts Diagram



Parts List

Reference Number	Description	Quantity
1	Main Frame	1
2	Shank	1
3	Blot M12x65	2
3	Nut M12	2
3	Washer M12	2
4	Ripper Tooth	1
5	Hitch Pin	2
6	Blot M16x70	1
6	Nut M16	1
6	Washer M16	1
7	Blot M12x85	1
7	Nut M12	1
7	Washer M12	1

Replacement Parts

- For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and or improvements to product lines and manuals without notice.

Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the NorTrac product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.



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