

POWER HORSE™

20in. Surface Cleaner

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 #6133517

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a POWERHORSE product!

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

Serial Number/Lot Date Code (if applicable): _____

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 product is designed for certain applications only. Northern Tool and 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

This surface cleaner is designed to clean a variety of outdoor surfaces such as concrete, asphalt, paving stone walkways pool decks etc. The cleaner connects to a pressure washer rated up to 4000 PSI, 10 GPM with fluid temperatures up to 212° F.

Packaging Contents

- #20" Surface Cleaner (1)
- Manual (1)
- Replacement Nozzles (2)
- High Pressure Washer Gun With 61-inch Handrail (1)
- Steel Rubber High-pressure Hose (1)
- Accessories Pack

Technical Specifications

Property	Specification
Cleaning Width (in)	20
Max. PSI	4000
GPM	8
Material	Plastic
Caster Type	Swivel
Temperature Capacity (°F)	212

Important Safety Information

⚠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 product in confined work areas may put you dangerously close to cutting tools and rotating parts.
- Do not use the product where there is a risk of causing a fire or an explosion, e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the product 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 tool. 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 tool. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool 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. Always keep proper footing and balance.
- 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 product. 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 product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- Do not use a product with a malfunctioning switch. Any power tool that cannot be controlled with the power switch is dangerous and must be repaired by an authorized service representative before using.
- Disconnect the power/air supply from the product and place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store the product when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your product. 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 product without the guards in place.
- Do not leave the tool running unattended.

Specific Operation Warnings

⚠WARNING

- DO NOT exceed the rated PSI capacity.
- Keep body parts clear of nozzle heads and away from skirt while operating the machine.
- DO NOT lift the surface cleaner from the surface or point nozzle heads at people while operating.
- Wear the proper safety gear including ANSI Z87.1 approved safety glasses.
- Use only on hard level surfaces.
- No alterations shall be made to this product.
- Only attachments and/or adapters supplied by the manufacturer shall be used.
- Not for use by or around children.

Main Parts of Product

Subassembly
Surface Cleaner Main Machine*1
High Pressure Spray Gun*1
Down Strut Assembly*1
Up Strut Assembly*1
High Pressure Hose Assembly*1
L=65mm Lock Pin*2
B-shaped Lock Pin*3
L=60mm Lock Pin*1

Assembly Instructions

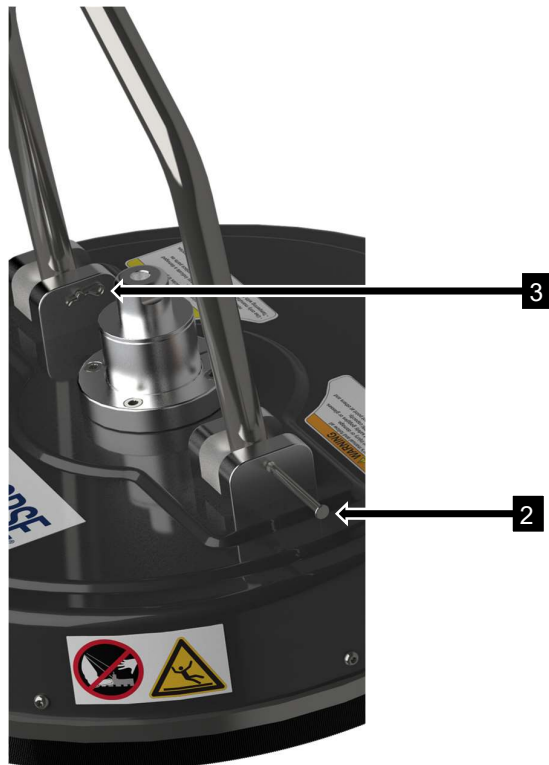
Before assemble surface cleaner, please do put on gloves to protect from sharp metal tearing skin. Please operate assembling procedure strictly according to instructions step by step.

1. Align down strut assembly to surface cleaner main machine hole as <Picture A> shows.



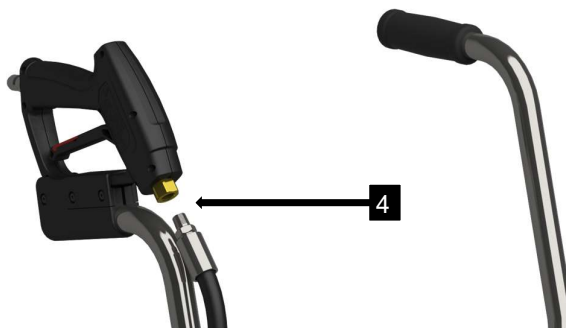
Picture A

2. Insert L=65mm Lock Pin into both outside aligned hole to fix down strut assembly with main machine general rotate assembly in step 1.



Picture B

3. Further fix with B-shaped Lock Pin on inner side after step 2, as <Picture B> shows.



Picture C

4. Thread sealing taped high-pressure hose 1/4 NPT connector with spray gun and make sure it tightened. As <Picture C> shows.



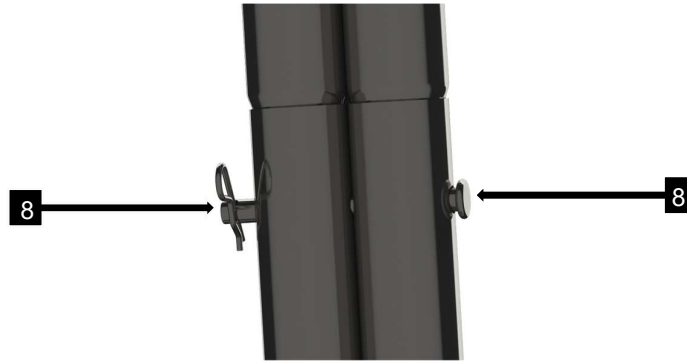
Picture D

5. Use zip tie to fasten high pressure hose with strut <Picture D>.
6. Cross high pressure hose assembly NPT3/8 connector side into hole from up to down.



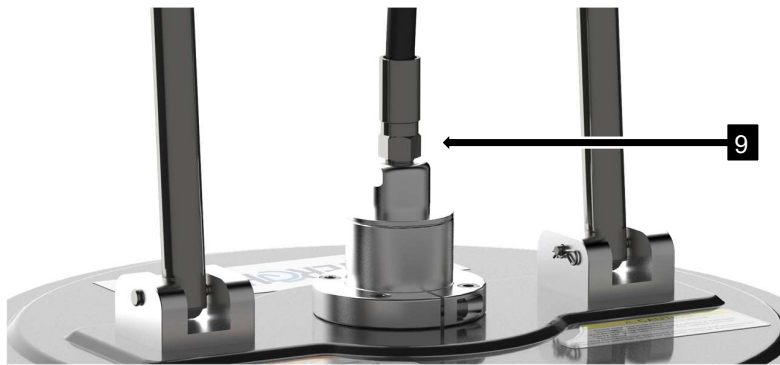
Picture E

7. Align up strut assembly to down strut assembly as <Picture E> shows.
8. Insert L=60mm Lock Pin into aligned hole and fix another side with B-shaped Lock Pin as <Picture F> shows.



Picture F

9. Thread sealing taped high pressure hose assembly connector side into main machine rotate assembly hole as <Picture G> shows.



Picture G

Before Each Use

⚠WARNING

Perform the following inspections before each to ensure the cleaner is working properly.

- Check for any worn or damaged parts. Replace any such part before using the cleaner.
- Check that all the parts are tightly fastened. Tighten any that are loose.
- Check that the casters swivel and roll smoothly. Repair or replace any that don't function properly.
- Check that the swivel and sprayer arm rotate smoothly.
- Use a low-pressure water connection to check that the sprayer nozzles are clear and spray correctly. If either do not, replace or clean the non-working nozzle (see maintenance section for the steps).

Operating Instructions

⚠WARNING

- Do not use the surface cleaner with a pressure washer that has a fluid delivery greater than 4000 PSI, 10 GPM, and 212° F. Fluid delivery above these parameters may overload the cleaner and cause damage to components and possibly person injury.
- Do not tilt the surface cleaner up off any of the casters while in use. Operating pressure very high and wildly spraying fluid that may cause personal injury and property damage.

1. After before-use inspections, place the cleaner at the edge of the surface to clean.
2. Bring a pressure washer to the area.
3. Connect the surface cleaner hose at the handle to the pressure washer hose.
4. With one hand on the surface cleaner handle, start the pressure washer.
5. Slowly walk behind the surface cleaner watching for good cleaning action.
6. When cleaning is complete, stop the pressure washer. When fluid pressure is released through the spray nozzles, disconnect it from the surface cleaner.

After Each Use

⚠WARNING

Perform the following inspections after each use to clean the cleaner and ready it for the next use.

- Clean out any dirt or foreign material from under the housing and the casters. If necessary, use a cloth or sponge to wash the surface cleaner and rinse it with tap water.
- Check for loose parts and any damage.

Maintenance

⚠WARNING

- Disconnect the surface cleaner from a pressure washer and ensure that the cleaner is not pressurized before performing and inspections, maintenance or adjustments to avoid any wildly spraying fluid that may cause personal injury and property damage.

Maintain the product by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep all cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. Keep handles dry, clean, and free from oil and grease. Also refer to the engine manufacturer's instruction manual for additional information about engine maintenance. The following chart is based on a normal operation schedule.

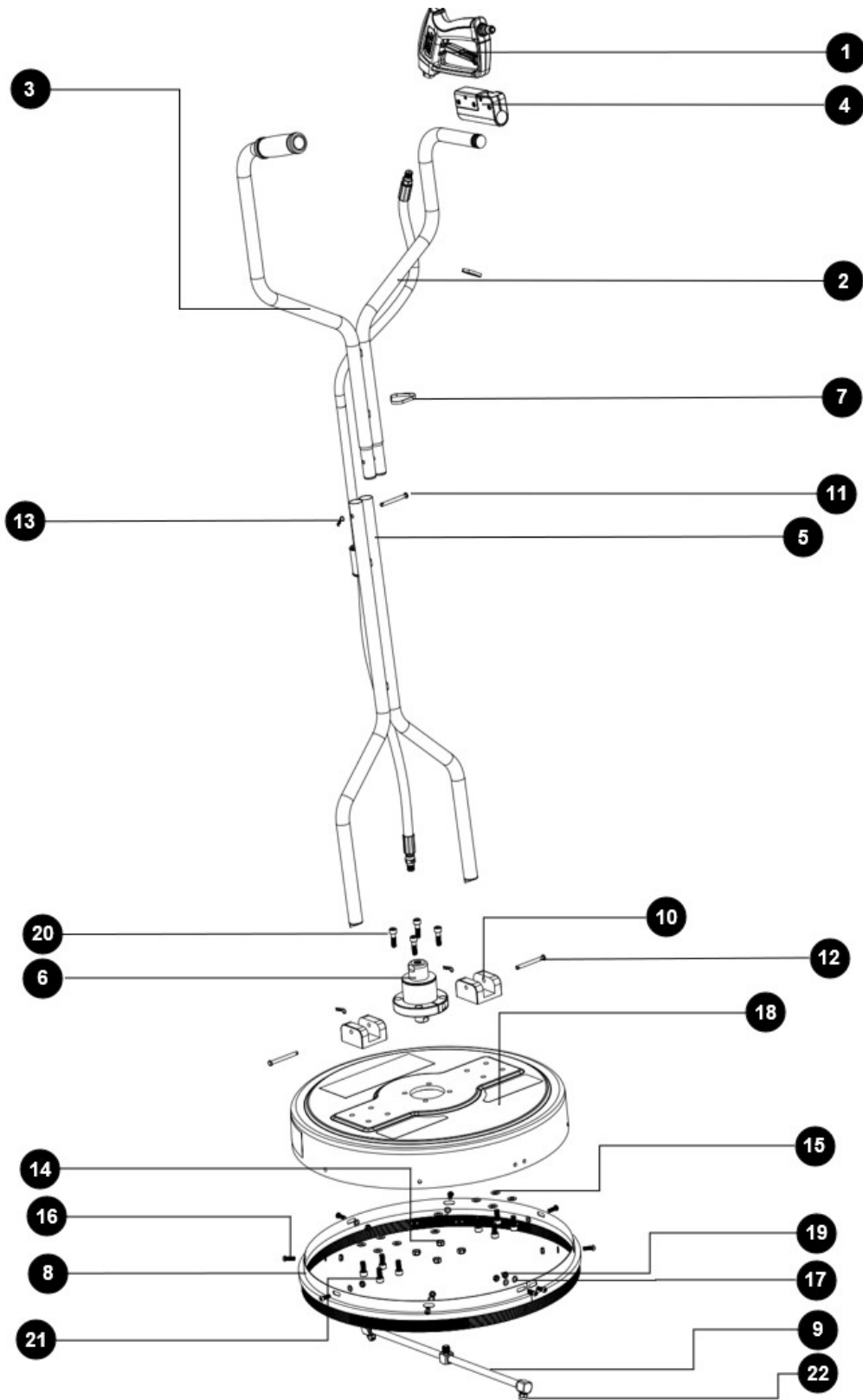
Maintenance Interval	Maintenance Point
Daily after operating	<ul style="list-style-type: none"> a. Turn off electricity equipment b. Keep product inner wall and brush under water to flush dirt away inside and outside c. Wipe water stains off d. Store under dry and ordinary room temperature
After the first 20 operating hours	<ul style="list-style-type: none"> e. Clean nozzle regularly f. Remove dirt attached on nozzle
After the first 50 operating hours or every week	<ul style="list-style-type: none"> g. Check screw or nut about stability h. Abnormal noise and shake may reflect more serious problem on product

Troubleshooting

Use the table below to troubleshoot problems before contacting Northern Tool and Equipment customer service. If the problem continues after troubleshooting, please call **1-800-222-5381**.

Failure	Possible Cause	Corrective Action
Nozzle blocked (not spraying)	Dirty nozzle	Twist the nozzle off and clean by needle or paperclip
Caster won't roll or swivel	Dirt in caster	Clean the caster

Parts Diagram



Parts List

Reference	Part Number	Part Description	Quantity
1	G02629	G26 Spray Gun	1
2	000436	Steel Rubber High-pressure Hose	1
3	000437	Up Strut Assembly	1
4	000435	Gun Fixture	1
5	000438	Down Strut Assembly	1
6	000439	20inch General Rotate Assembly	1
7	900749	Zip Tie	2
8	000441	Brush Assembly	1
9	000440	Rotate Pole Assembly	1
10	200769	Connector Base	2
11	200764	Pin	1
12	200770	Pin	2
13	200763	B Pin	3
14	300121	Nut	4
15	300119	Backup Ring	12
16	300127	Screw	9
17	300102	Backup Ring	9
18	100908	20inch Plastic Shell	1
19	300113	Nut	9
20	300125	Screw	4
21	300120	Screw	9
22	200755	Nozzle	2

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 improvements to product lines and manuals without notice.

Replace a Nozzle

To replace a clogged, worn, or damaged nozzle, simply unscrew it from the sprayer and screw on a new or cleaned replacement nozzle.



User should twist nozzle with thread sealing tape before applying to rotate tube assembly, without thread sealing tape may cause water leak problem.



Plugged nozzles can be easily cleaned with a needle or small paper clip.

Accessories Pasting Zone

Replacement Nozzle*2

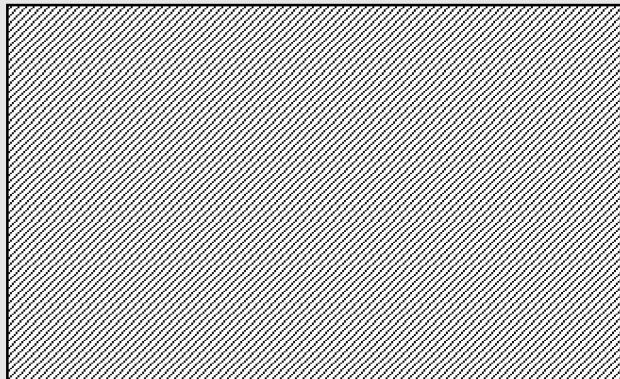
Thread Sealing Tape*2

200770 Pin*2

200763 B Pin*3

200764 Pin*1

Zip Tie*2



Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Powerhorse 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.



Distributed by:

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Burnsville, Minnesota 55306

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