



Concrete Screed Head

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# 5898358

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a NorthStar 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 screed uses vibration through a screed board to embed aggregate and reduce air voids in concrete making the slabs stronger. It can be used with a variety of board lengths including 8ft, 10ft, 12ft, and 14ft on slab floors, roads, pavement or parking lots. Replacement boards and boards in other lengths are sold separately see technical specifications page for part numbers.

Power Source. The screed is powered by a gasoline engine.

Supplies Required. Normal operation will require you to supply:

- . Gasoline
- . Engine oil
- . Personal Protection Equipment

See “*Specifications*” section of this manual or the Engine Manual for more details

Packaging Contents

- Screed Head (1)
- Long Press Plate (1)
- Operation Manual for Screed Head(1)
- Operation Manual for engine (1)
- Goggle (1)
- Connecting Shaft(1)
- A Pair of Gloves (1)

Technical Specifications

Screed Head

VIBRATIONS	7,000 vpm
Length	43.3 in. (1,100mm)
Width	23.2in. (590mm)
Height	37.4 in. (950mm)
DRIVE SYSTEM	Flexible Shaft
WEIGHT	37.4lbs. (17kg)
Engine	Honda GX35 / 35.8cc
FUEL TANK Liter (gal)	0.65 (172)
KW HP / RPM	1.6HP / 7,000RPM

Screed Board (sold separately)

Item #	5898331	5898340
Length	8 Ft (2438.4mm)	12 Ft (3657.6mm)
Width	4.76 in (121mm)	4.76 in (121mm)
Height	3.38 in (86mm)	3.38 in (86mm)
Weight	11.1 lbs (5.0kg)	20.5 lbs (7.5kg)
Assembly type	Bolt & Nut	Bolt & Nut
Material	Aluminum	Aluminum

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 tool. 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 product until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this product 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 product 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. This product will be safer and do a better job 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

PROP 65

- This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to www.p65warnings.ca.gov.
- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:

- - lead from lead-based paints,
- - crystalline silica from bricks and cement and other masonry products, and
- - arsenic and chromium from chemically-treated lumber.
- Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.
- Handling power cords on corded products may expose you to lead, a chemical known to the state of California to cause cancer and birth defects or other reproductive harm. Wash your hands after handling.

⚠️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. 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 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

To avoid fatal accident

- . Stop the engine before refueling and be careful not to spill fuel during the refueling. Spilled fuel may ignite causing a fire.
- . Do not refuel the engine near flammable objects to avoid fire.
- . Do not run the engine in enclosed areas to prevent carbon monoxide poisoning.

To protect the operator

- . When fatigue from operation, the operator must stop the machine and take break.
- . Hearing protection is required as this machine creates a noise emission while 1 m (3 feet) away from the equipment.

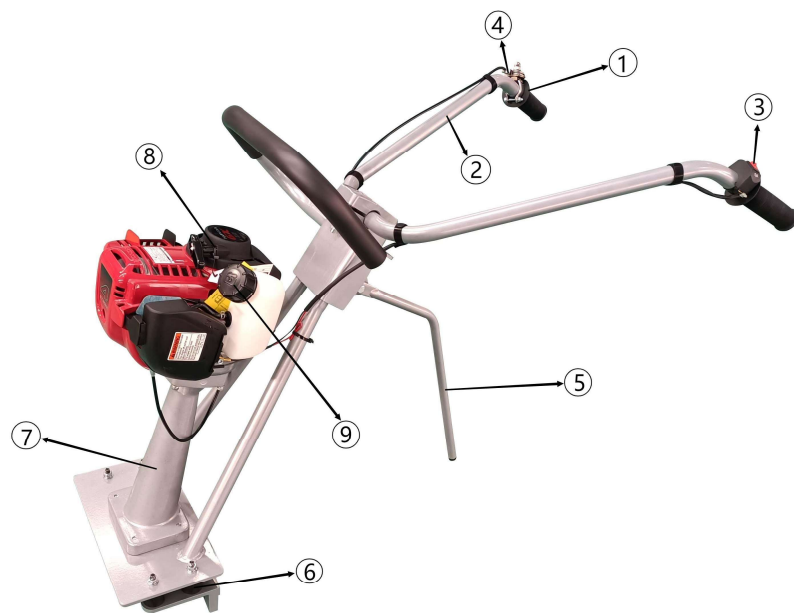
To avoid injury or damage

- . The plate compactors are only operated by authorized persons who:
 - are at least 18 years of age.
 - are physically and mentally able to operate the screed.
 - are properly trained in the operation and the maintenance of the screed by the owner or its authorized representative.
 - are assessed to be able to carry out their duties reliably.
- . People who are drinking alcohol beverages and/or taking drugs are not allowed to operate the plate compactor.
- . People are not allowed to enter into the danger zone of the screed.
- . The operator has to monitor the danger zone all the time. It is not allowed to operate if there is a person in the danger zone.
- . The operator has to give warning signs in case of an emergency situation.
- . The screed can only be operated when the adequate stability is granted.
- . The operator has to control the running speed of the screed all the time during its operation so that the screed can be stopped at any time.
- . The operator must turn off the screed completely as described in this manual before leaving the operating position. Also, the screed must be secured against unauthorized use.
- . The engine has to be turned off and secured against re-starting by pulling out the sparking plug socket during the maintenance and servicing.
- . The operator has to control the screed as regards functions and obvious defects before use.
- . Discovered defects must be reported to supervising personnel and to the operator. Do not leave the defects which may cause serious injury of the operator.
- . Do not operate the screed when a defect endangers the safety of the operator until the defect is rectified.
- . The screed has to be checked by an expert in regular bases (at least once a year). And it must be checked by an expert before the initial use and after the essential modification.
- . During the operation, the operator has to monitor other objects within a radius of 20m in case of lighting.
- . The screed generates mechanical heat so do not touch the body of engine, muffler or other parts during the operation, which may cause heat burn. Please wait until it cools down to touch.

- . The operator must be fully equipped with safety equipment including a crash helmet, safety gloves, safety shoes, safety glasses and mask before operating the screed.
- . Do not transport the screed with fuel in its fuel tank by the motor vehicle.
- . Do not lift the screed by a person when putting on and off from vehicle. Always use a proper lifting crane to move. Lifting by person may cause personal injury due to its heavy weight.
- . Make sure to securely fasten the screed for transportation. Improper fastening as holding the handle of the screed during the transportation may cause an injury.

Note: Refer to the instruction manual of the engine if there is a problem or a question about it before or during its operation.

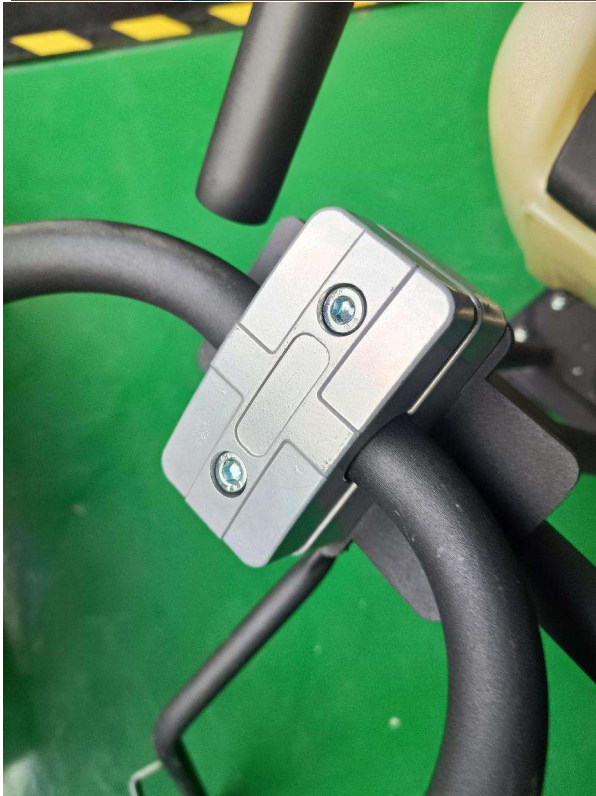
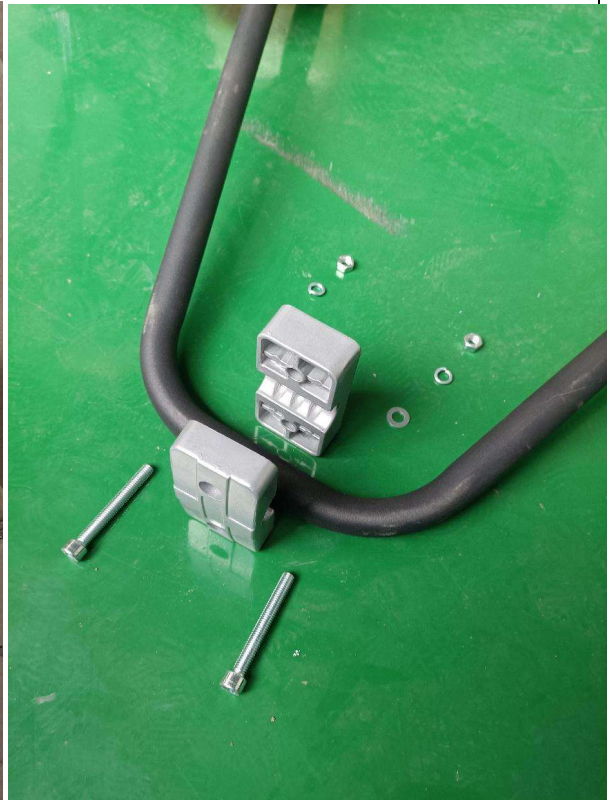
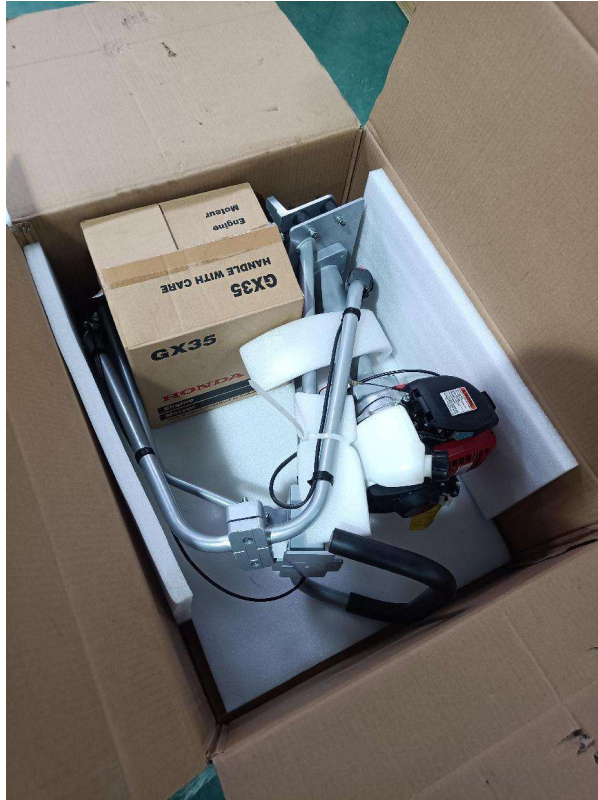
Main Parts of Product



01	Operation Handle Cover
02	Operation Handle
03	Engine On-Off Switch
04	Throttle Cable Assembly
05	Supporting Bar
06	Shock Absorber
07	Alu. Box
08	Engine Recoil Starter
09	Engine Fuel Cap

Subassembly

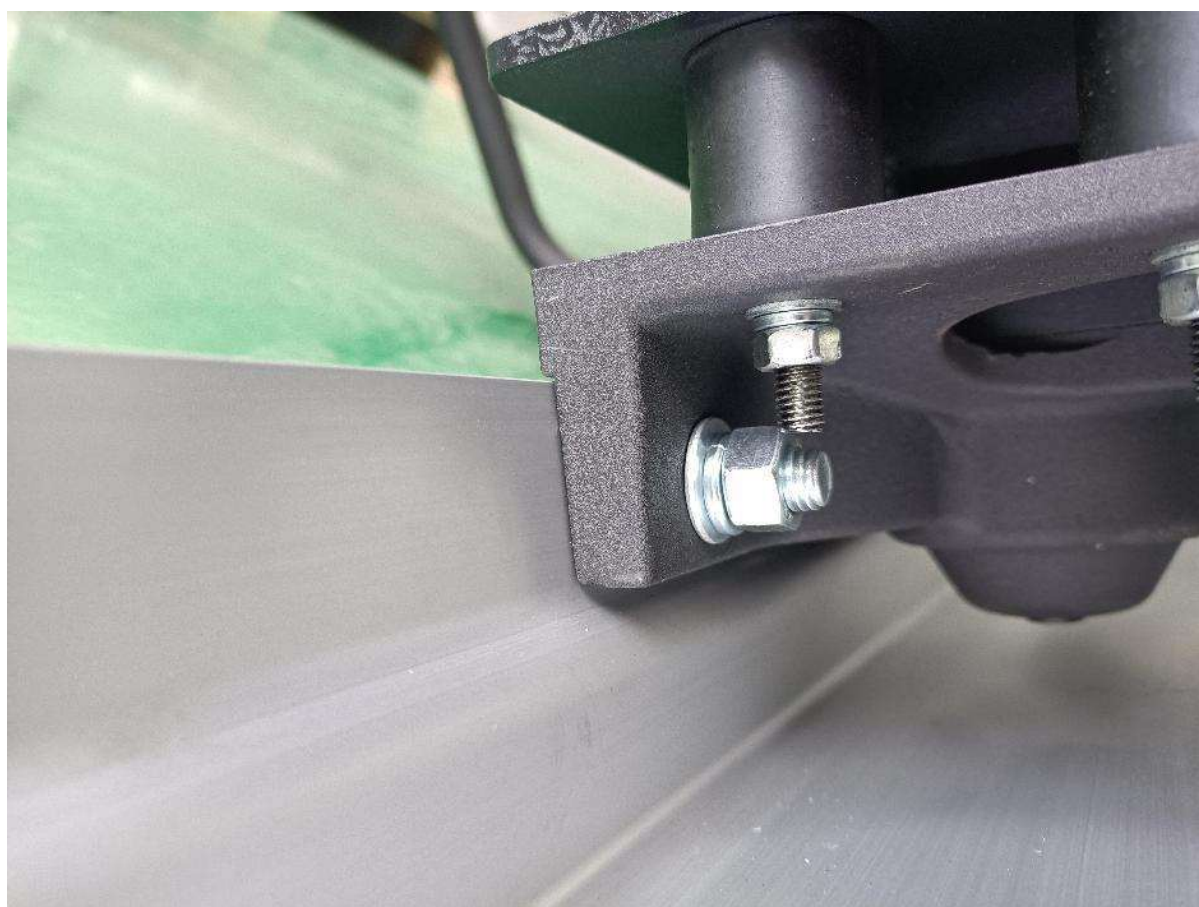
- 1 Take the Operation Handle out, loose the Nut M8(NO.49),Spring Gasket (NO.6),Flat Gasket (NO.7)
- 2 Put the Operation Handle on the Screed Body as the photo show.
- 3 Tighten them together with the M8(NO.49),Spring Gasket (NO.6),Flat Gasket (NO.7)



Assembly Instructions

⚠WARNING

- 1 Put Screed Board(NO.44) between Long Press Plate(NO.48) and Screed Head as the photo show.
- 2 Use Hexagonal Bolt M12*50(NO.38) and Flat Gasket Φ 12(NO.46) to lock them together,the other side is Nut M12(NO.45) Flat Gasket Φ 12(NO.46) and Spring Gasket Φ 12(NO.47).
- 3 Tighten the Bolt and the Nut with right torque.



Before Each Use

⚠WARNING

Preparation for operation

- 1 Check all bolts, nuts and belts and tighten any that are loose.
- 2 Get the desired length of screed board.

Recommended Fuel

The screed engine requires regular unleaded gasoline. Use only fresh, clean fuel. Fuel containing water or dirt will damage the fuel system. Consult engine owner's manual for complete fuel specifications.

Before starting Engine

- 1 Read and understand the safety and operating instructions manual for the engine.
- 2 Check :
 - Oil level in engine
 - Fuel level.
 - Condition of air cleaner
 - Tightness of external fasteners
 - Condition of fuel lines
 - Wear of spark plug

Operating Instructions

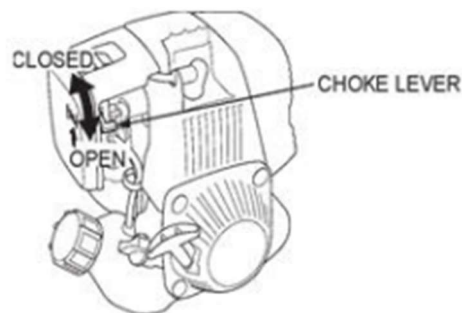
⚠WARNING

Read and understand both the screed user's manual (this manuals) and the engine manual before starting or operating the screed to avoid incorrect operation that may result in damage or injury.

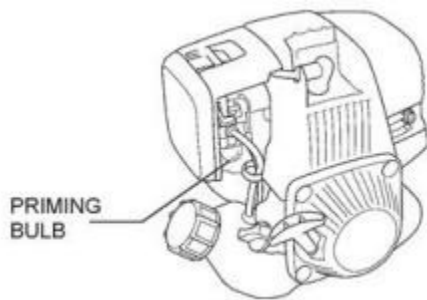
Starting the Engine

1. Perform all the Before Each Use steps.
2. To start a cold engine, move the choke lever to the CLOSED position.

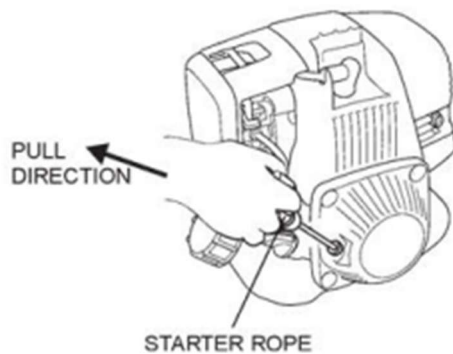
If restarting a warm engine leave the choke lever in the OPEN position.



3. Press the priming bulb repeatedly until fuel can be seen inside the clear plastic bulb.



4. Move the throttle lever slightly in the direction of the arrow.
5. Pull the starter rope (Figure 03) lightly until you feel resistance, then pull briskly in the direction of the arrow. Return the starter rope gently.



6. Once the engine has started, open the choke and allow engine to idle for 3 to 5 minutes to warm-up.

7 Once the engine has started and warmed up, open the throttle fully in the direction of the arrow to operate the screed.

- 8 Slowly move the screed backwards watching for smooth concrete in front of the screed.

Stopping the Engine

In an emergency situation, turn off the engine switch immediately. In normal conditions, do not stop the engine when the screed is at high speed or the engine temperature will rise suddenly, possibly causing engine parts to jam or the oil to deteriorate.

Note: To stop the engine in an emergency, simply press the Emergency Stop Switch on the handle.

To stop the engine normally:

1. Reduce the engine speed by moving throttle completely in the opposite direction of the arrow and let the engine idle for 2 - 3 minutes before turning it off.
2. Press the emergency stop switch on the handle.

Please see the instruction manual of engine for further detailed information.

After Each Use

⚠WARNING

Cleanup

Clean the screed and screed board. Clean the screed and screed board with water to remove all concrete but take care that the engine does not get wet. The screed board can be thinly coated with diesel fuel to help prevent rust and more easily remove concrete.

Clean the engine cylinder cooling fins. A broom or old brush are good tools to remove concrete before it becomes solid.

Refer to the engine manual for more information about the engine.

Storage

In case of storing the screed and board for a long period of time (for more than 30 days):

- 1) Clean the screed as described above.
- 2) Remove the board from the screed as described in this manual.
- 3) Drain the fuel tank and run the engine briefly until the fuel in the fuel in the carburetor is completely consumed
- 4) Change the engine oil and follow procedures described in engine manual for engine storage.
- 5) Clean or replace the engine air filter.
- 6) Store the Screed and board separately in a clean, dry area
- 7) Cover the screed and board completely with dry cloth

Maintenance

WARNING

Check that the engine is turned off and cooled before attempting any maintenance, cleaning, or inspection. Performing maintenance on an operating compactor can cause injury

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 before operating	Check the fuel level. Check the engine oil level. Inspect the fuel lines. Inspect the air filter and replace it if needed. Check and tighten the external hardware.
After the first 20 operating hours or 3 months	Change the engine oil.
After the first 50 operating hours or every 6 months	Clean the air cleaner element. Change the engine oil. Check and clean the spark plug.
After the first 100 operating hours or every year	Clean the fuel strainer.
After the first 200 operating hours or every 2 years	Check and adjust the valve clearance. Clean the cylinder head. Replace the spark plug.

Troubleshooting

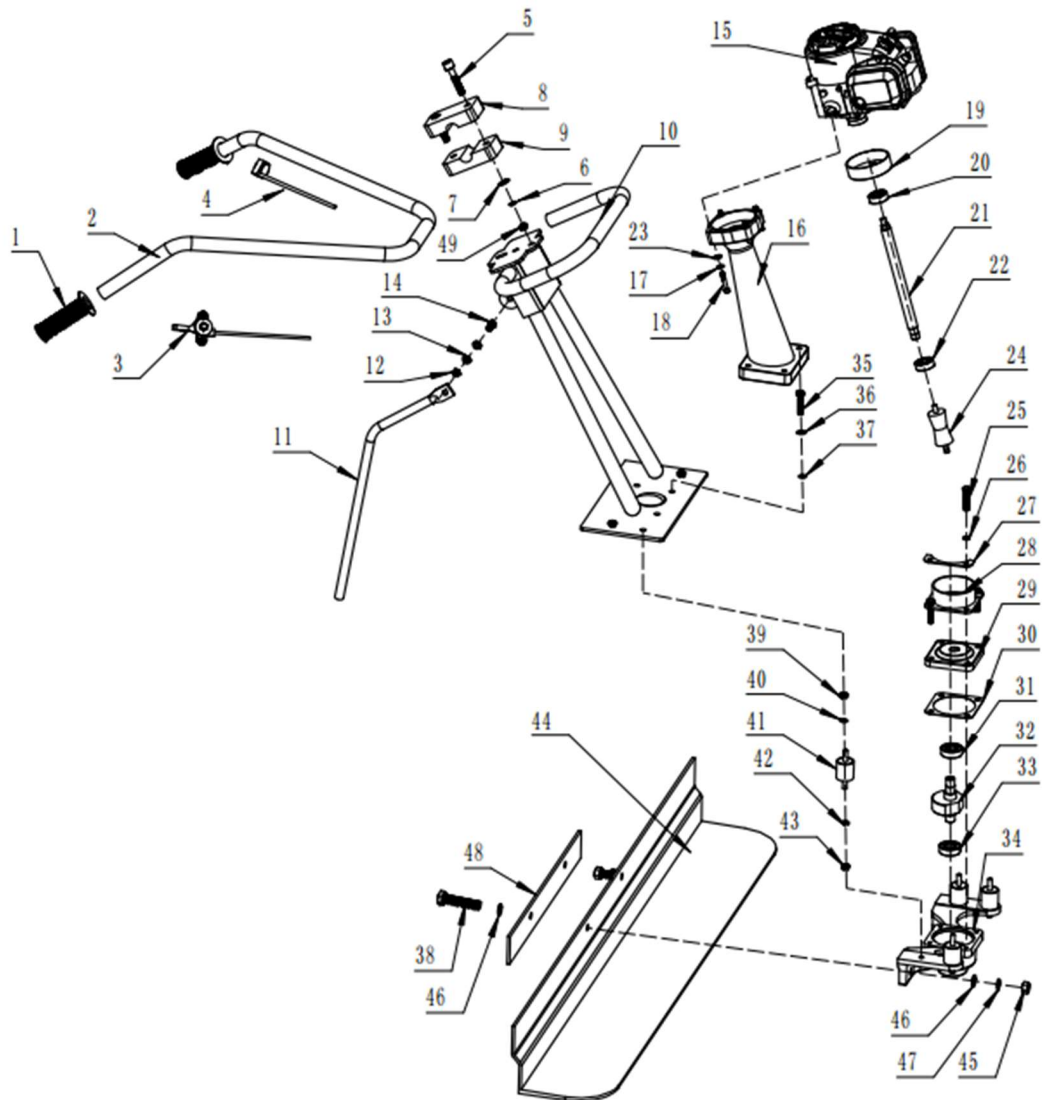
⚠WARNING

Please check the list below before addressing the problems to servicing personnel including local dealer. And if the problem continues after the troubleshooting as described below, call your local dealer for future assistance

Failure	Possible Cause	Corrective Action
Vibrates insufficient and as a result the concrete floor can't be leveled and smoothed in the proper way.	The centrifugal force is too low.	Increase engine speed.
	There are excessive amounts of concrete along the leading edge of the board.	Remove the excessive concrete from the board.
	The chosen width of the board is too large	Work with a smaller board.
Concrete looks	Operator moving too slowly	Walk backwards at a faster pace.

<p>“WAVY” as the screed board passes over it</p>	<p>Too much vibration for the type of concrete</p>	<p>Reduce engine speed and walk backwards at a faster pace.</p>
<p>Leaving HIGH or LOW spots during wet screeding.</p>	<p>Concrete too high or low on one side?</p>	<p>Have workers shape the concrete close as possible to grade. Maintain about 1 inch of concrete across the front of the board at all times.</p>
<p>Board digs into wet concrete.</p>	<p>Is board positioned correctly?</p>	<p>Each end of the board must ride on the same surface. Either each end of the board rides on forms or concrete(wet screed) not both.</p>

Parts Diagram



Parts List

Reference	Part Number	Part Description	Quantity
1	589835801	Operation Handle Cover	2
2	589835802	Operation Handle	1
3	589835803	Throttle Cable Assembly	1
4	589835804	On-Off Switch	1
5	589835805	Inner Hexagonal Bolt M8*60	2
6	589835806	Spring Gasket $\Phi 8$	2
7	589835807	Flat Gasket $\Phi 8$	4
8	589835808	Upper Press Plate	1
9	589835809	Lower Press Plate	1
10	589835810	Screed Cover	1
11	589835811	Supporting Bar	1
12	589835812	Locked Nut $\Phi 8$	1
13	589835813	Flat Gasket $\Phi 8$	2
14	589835814	Hexagonal Bolt M8*25	1

Reference	Part Number	Part Description	Quantity
15	589835815	Engine	1
16	589835816	Alu. Box	1
17	589835817	Spring Gasket Φ 6	4
18	589835818	Hexagonal Bolt M6*40	4
19	589835819	Clutch Drum	1
20	589835820	Bearing 6202	1
21	589835821	Main Shaft	1
22	589835822	Bearing 6202	1
23	589835823	Flat Gasket Φ 6	4
24	589835824	Connecting Shaft	1
25	589835825	Hexagonal Blot 8*35	4
26	589835826	Flat Gasket Φ 8	4
27	589835827	Steel Sheet	2
28	589835828	Rubber Seal	1
29	589835829	Case Cover	1
30	589835830	Paper Gasket	1
31	589835831	Bearing 62203	1
32	589835832	Eccentric Block	1
33	589835833	Bearing 6203	1
34	589835834	Vibrating Case	1
35	589835835	Out Hexagonal Blot 8*35	4
36	589835836	Spring Gasket Φ 8	4
37	589835837	Flat Gasket Φ 8	4
38	589835838	Hexagonal Bolt M12*50	2
39	589835839	Flat Gasket Φ 8	4
40	589835840	Spring Gasket Φ 8	4
41	589835841	Shock Absorber	4
42	589835842	Flat Gasket Φ 8	4
43	589835843	Spring Gasket Φ 8	4
44	589835844	Screed	1
45	589835845	Nut M12	2
46	589835846	Flat Gasket Φ 12	4
47	589835847	Spring Gasket Φ 12	2
48	589835848	Long Press Plate	1
49	589835849	Nut M8	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.

Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the NorthStar 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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Burnsville, Minnesota 55306

www.northerntool.com

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