



5/8 HP CONCRETE VIBRATOR

Owner's Manual



⚠ WARNING: Read and understand all instructions, warnings, and cautions before using this product. Failure to follow the instructions, warnings, and cautions may result in serious personal injury and/or property damage.

Item # 41967

SAVE THESE INSTRUCTIONS

Thank you very much for choosing a Klutch 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.

This concrete vibrator is designed for certain applications only. Northern Tool and Equipment cannot be responsible for issues arising from modification or use of this product in 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 concrete vibrator causes vibration in wet concrete, making any air bubbles in the concrete float up to the surface. The resulting concrete is mixed so well that it becomes more solid and durable.

This concrete vibrator features double insulation so that it can be used at a work site where grounding is not available. This also increases the safety of the motor switch holder and switch.

The aluminum motor case is highly durable with a “back to front “cooling system that increases motor efficiency.

Technical Specifications

CONCRETE VIBRATOR		
Frequency	vpm	12,000~14,000
Voltage(AC)	V	115/230
Vibration Amplitude	mm	1.1
Head Dia X Length	mm	3.2X190
Total Length	m	1.0
Weight	kg(lb)	4.2(9.3)~4.9(10.8)
Power	W	480

Important Safety Information

⚠ WARNING

- 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 assemble or operate this product until they have read this manual and have developed a thorough understanding of how the product works.
- 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

- 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 the power cord 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 the work area clean, dry, free of clutter, and well lit. Cluttered, wet, or dark work areas can result in injury.
- Do not use the tool where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The tool can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the tool 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 tool.
- 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.
- 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.
- Use safety apparel and equipment. Use ANSI Z87.1 - approved 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 adjusting keys or wrenches before connecting the tool to the 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.
- Be sure equipment is properly grounded.
- Use only outdoor-rated, grounded extension cords of proper sized.
- DO NOT operate in wet locations.

⚠ WARNING

ELECTRICAL SAFETY

- Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the power cord. Never use the power cord to carry the tools or pull the plug from an outlet. Keep the power cord away from heat, oil, sharp edges, or moving parts. Replace damaged power cords immediately. Damaged power cords increase the risk of electric shock.
- When operating a power tool outside, use an outdoor extension cords marked "W-A" or "W". These extension cords are rated for outdoor use, and reduce the risk of electric shock.

⚠ CAUTION

CONCRETE VIBRATOR USE AND CARE

- Do not force the product. Products do a better and safer 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.
- Disconnect the power supply from the tool and place the power 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 product 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 product.
- Keep guards in place and in working order. Never operate the product without the guards in place.
- Do not leave the product running unattended.

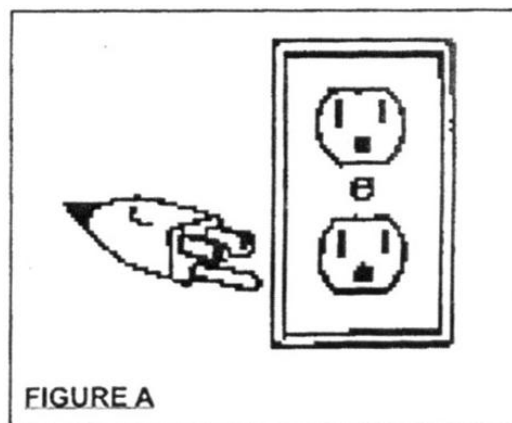
Grounding

Grounded Tools: Tools with 3-Prong Plugs

Tools marked with **Grounding Required** have a 3-wire cord and 3-prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure A.)

The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically live terminal.

Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration.



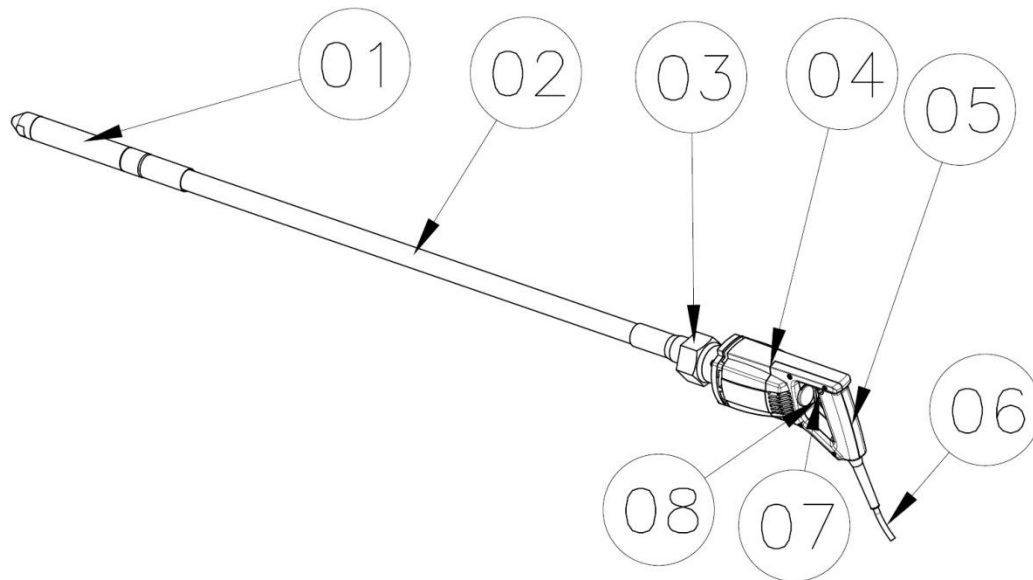
Extension Cords

- Grounded tools require a 3-wire extension cord. Double Insulated tools can use either a 2- or 3-wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.
- The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14-gauge cord can carry a higher current than a 16-gauge cord. Minimum extension cord wire size is shown in the following table:

Minimum Wire Size Of Extension Cords				
Nameplate AMPS	Cord Length			
	25'	50'	100'	150'
0-6	18 AWG	16 AWG	16 AWG	14 AWG
6-10	18 AWG	16 AWG	14 AWG	12 AWG
10-12	16 AWG	16 AWG	14 AWG	12 AWG
12-16	14 AWG	12 AWG	NOT RECOMMENDED	

- When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required.
- If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size.
- If you are using an extension cord outdoors, make sure it is marked with the suffix **W-A** (**W** in Canada) to indicate it is acceptable for outdoor use.
- Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

Assembly Instructions



1. Vibrator Poker
2. Flexible Hose
3. Motor Coupling Nut
4. Motor
5. Motor Handle
6. Power Cord
7. Switch Holder
8. Switch

⚠ WARNING

Make sure the vibrator is disconnected from its power source before assembly to avoid any unwanted starts.

Tools for assembly: Metal Bar(It should be available to penetrate the gap on handle)

Vice Pliers

Spanner(Or Wrench)





[Pic.1]

Step 1. Loosen the motor coupling nut by hand first.

When the coupling nut is enough to be loosened, use spanner(or wrench) and pull out of it.

[Refer Pic. 1]



[Pic. 2]

Step 2. If you pull out the flexible hose as the above picture, you can see the wire inside.

[Refer Pic. 2]



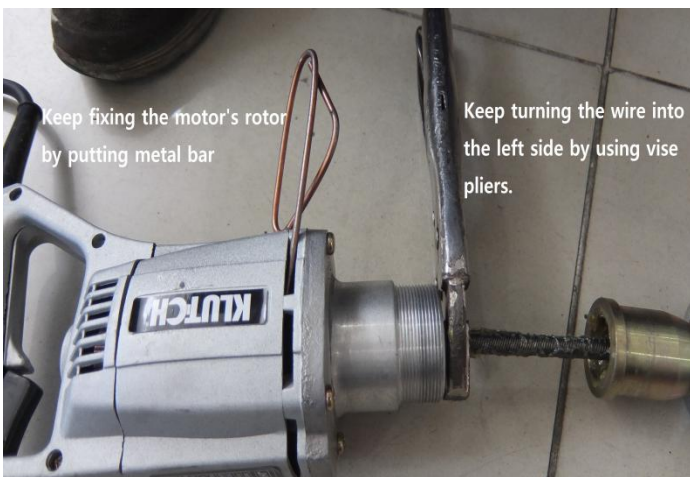
[Pic. 3]

Step 3. For pulling out the wire, hold it by using vise pliers.

[Refer Pic. 3]



[Pic. 4]

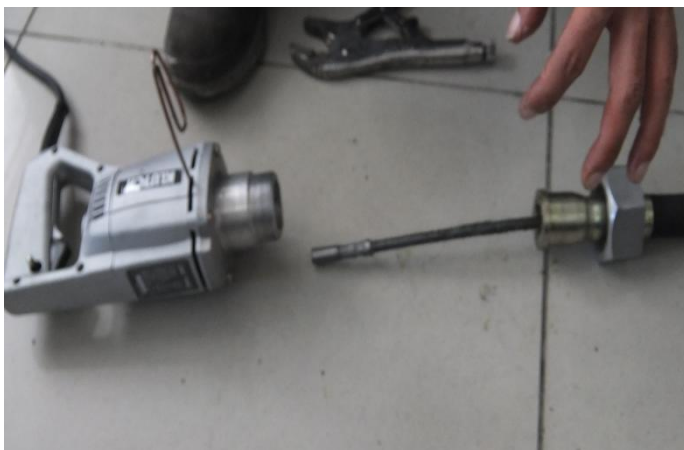


[Pic. 5]

Step 4. Turn the wire into the left side to loosen it by using vice pliers until it is perfectly disassembled.

You need to fix motor's rotor continuously not to rotate it by putting metal bar to the gap on handle while turning the wire.

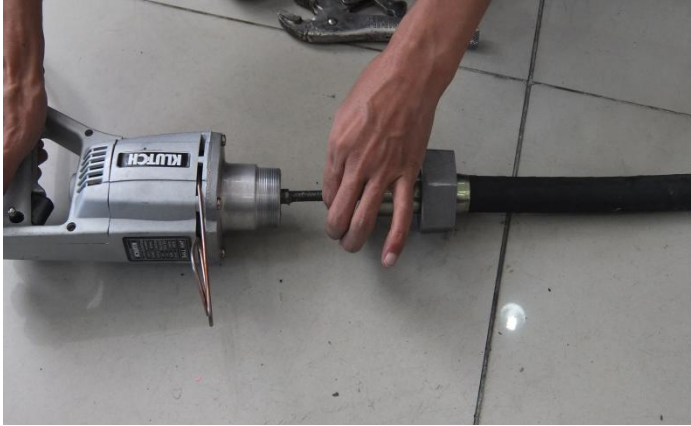
[Refer Pic. 4 & Pic. 5]



[Pic. 6]

Step 5. The wire might be disassembled if you keep turning it into the left side in fixing the rotor.

[Refer Pic. 6]



[Pic. 7]

Step 6. Put the new wire of new flexible hose to the shaft.

[Refer Pic. 7]



[Pic. 8]

Step 7. After putting the wire, turn it into right side by hand.

The rotor should be kept fixed.

[Refer Pic. 8]



[Pic. 9]

Step 8. After hand tight, tighten it again turning into right side by using vice pliers.

[Refer Pic. 9]



[Pic. 10]

Step 9. Refer the above picture.

[Refer Pic. 10]



[Pic. 11]

Step 10. Tighten the motor coupling by hands. Do not make it too tight before test.

[Refer Pic. 11]

Step 11. Plug in the vibrator and make it operate for testing for about 2-3 minutes.



[Pic. 12]

⚠ WARNING

Make sure the vibrator is disconnected from its power source before assembly to avoid any unwanted starts.

Before Each Use

- Check the power supply condition at work site. The vibrator uses 115V. Also check that the connection is grounded.
- Check the vibrator for wear or damage.
- Clean the vibrator if needed using only soap and a damp cloth. Many cleaners are harmful to plastics and insulation. Never let liquid get inside the motor.

Operating Instructions

⚠ WARNING

Do not run the motor with the head out of the mix for long periods of time. This can cause the bearing to overheat.

- Hold onto the handlebars on the machine and support and cover the motor with other hand.
- Keep pressing the switch that is on handlebars. The concrete vibrator starts operating and vibrating.
*If you release handle switch, the motor stop working.
- If you operate the machine without pushing operating switch, press the switch holder while pressing the operating switch.[Refer Pic. 13.]
- Then the motor keep operating without pressing the operating switch.



[Pic. 13]

- If you want to release the switch holder, just press operating switch.
- Hold the head (the vibrating poker) in air or place it on a soft surface when starting the motor. This will prevent the head from bouncing on a hard surface during the start, which could damage the bearings.
- During use, insert the head quickly into the concrete mix, but when removing it pull it out slowly. Rapid removal is the main cause of poor concrete consolidation.
- For best results, submerge the head completely and try to establish a symmetrical pattern for inserting and removing it.
- Avoid vibrating an area of wet concrete for a long time as it can cause the material to separate.

- Avoid sharp bends in the flexible hose. This can create hot spots.
- Do not let the cord touch wet concrete as this may cause a short in the electrical system.
- When moving the vibrator around the jobsite, do not drag the head on the ground.
- Avoid touching forms and re-bar when inserting the head in the concrete mix.
- If the vibrator stops suddenly, turn off the switch and disconnect the power source. Check the motor brushes.
- If not using the vibrator for more than 15 minutes:
 1. Check that the power switch is turned off.
 2. Remove the cable from the power source.
 3. Wash residual cement concrete from the flexible hose and head (the vibrating poker).

After Each Use

Clean the vibrator using only soap and a damp cloth. Many cleaners are harmful to plastics and insulation. Never let liquid get inside the motor.

Check the vibrator for wear or damage. Parts can be ordered and replaced before the next use.

When storing the vibrator, put the vibrator, including power cable, in a safe place. Disconnect the flexible hose from the motor body.

Maintenance

Maintain your tool by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures:

⚠ WARNING

Make sure this tool is disconnected from its power source before attempting any maintenance, cleaning, or inspection.

If any abnormal vibrations or noise occurs, turn the vibrator off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.

Motor Brushes:

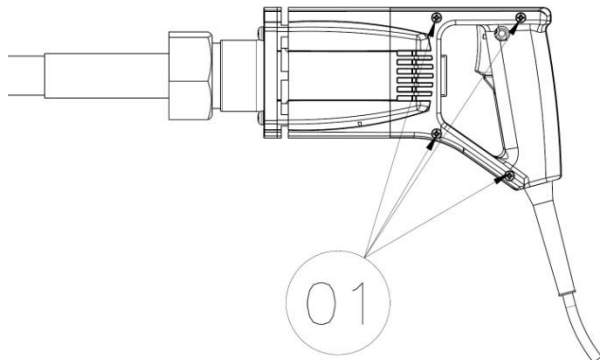
To protect the motor, the brushes are designed to automatically shut off the motor if they become too short. If the motor stops during operation, the brushes may need to be replaced.

To avoid having the brushes shut down the motor unexpectedly, inspect brushes every 50 hours, and replace them when necessary. Always replace both brushes at the same time.

In order to inspect or replace brushes:

Warning: Make sure this tool is disconnected from its power source.

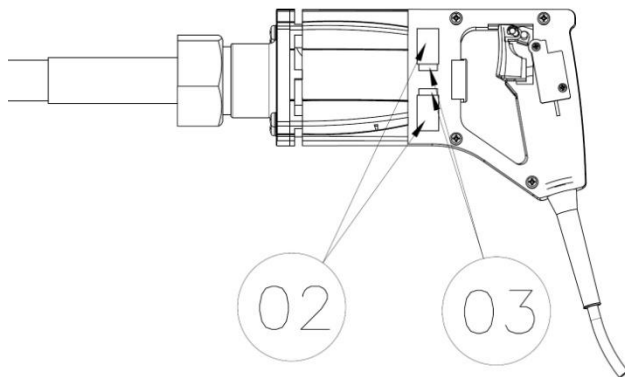
Step 1. Put the motor on flat surface.



[Pic. 14]

Step 2. Loosen 4 screws(① of Pic. 14) by using + driver.

Step 3. Take the old brush(② of Pic. 15) out and replace it with new one.



[Pic. 15]

Step 4. After replacing brush, put the cover and tighten 4 screws.

Do not plug in uncovering motor.

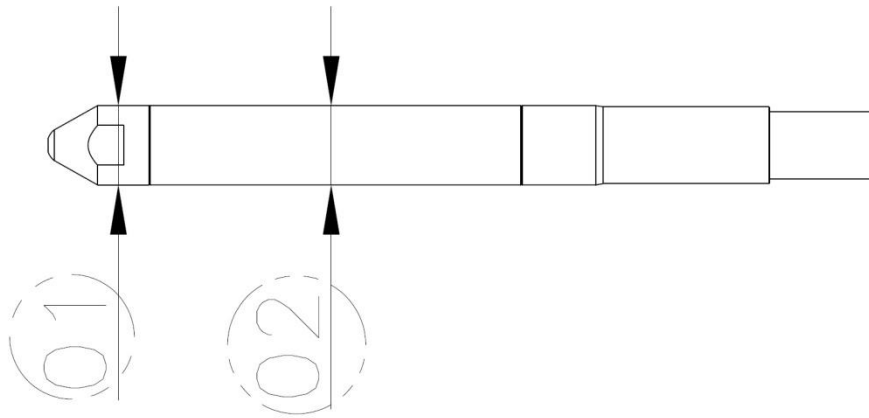
Step 5. Operate the vibrator after plug-in for testing the motor.

Step 6. If there are a lot of sparks with brush, let the machine operating for about 5-10 Min.

Add any other maintenance instructions here

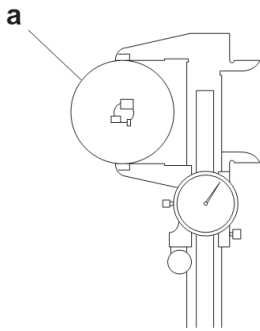
You have to check the Vibrator Poker Head worn out.

Step 1. Measure the diameter of Poker Head(① of Pic. 16) and Pocker Case(② of Pic. 16) by using Vernier Calipers.



[Pic. 16]

Step 2. If the diameters of both Pocker Head and Pocker Case, any of them, are under 30mm, the whole vibrator poker assembly should be replaced.

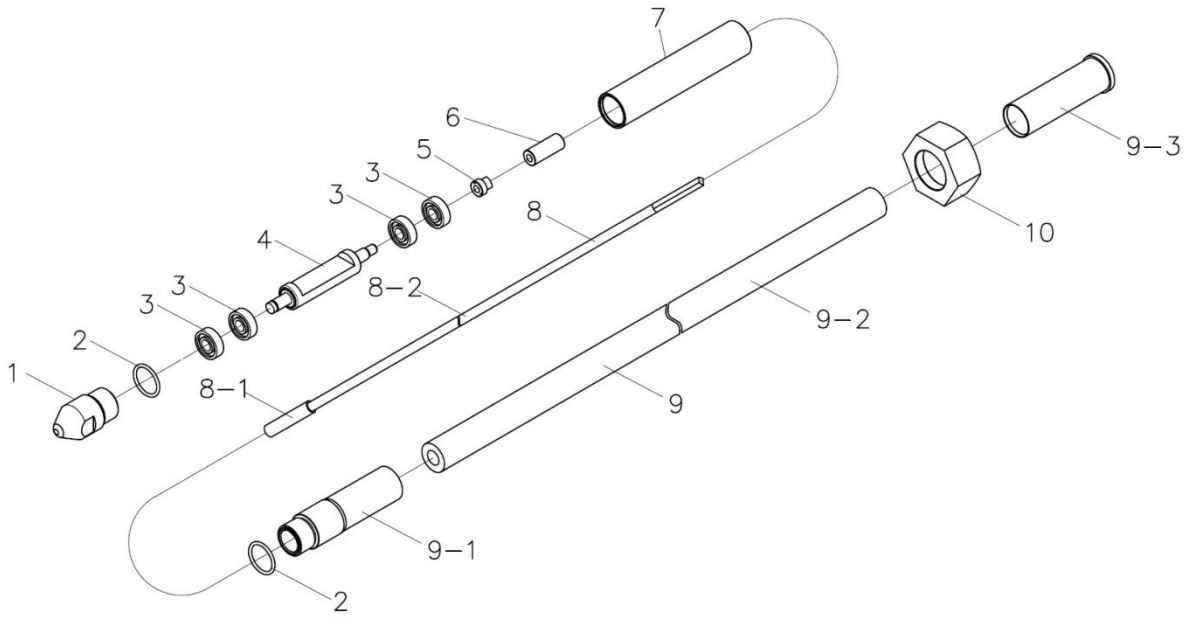


[Pic. 17]

↑ Measure using a Venier Caliper.

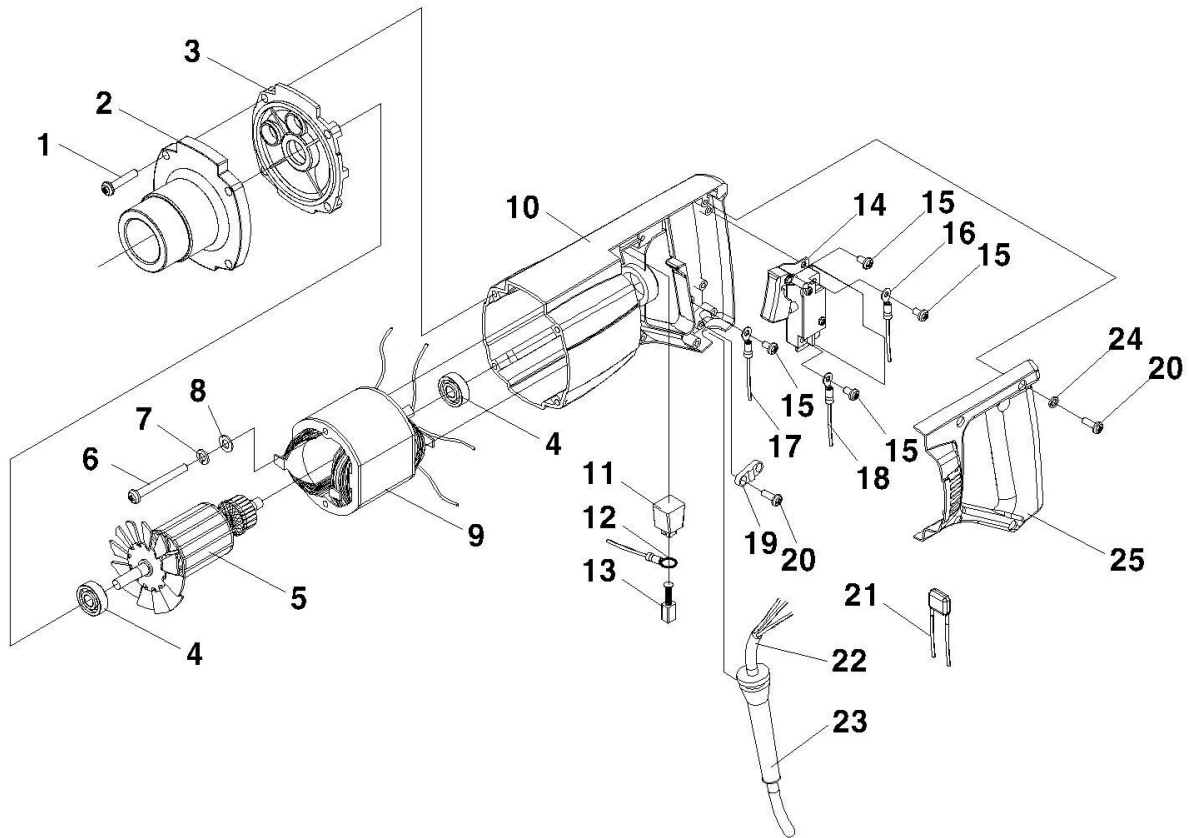
Parts Diagrams

Vibrator Poker and Flexible Hose



No	Part No	Part name	Qty	Standard
1	VF32-003	Head Cap	1	
2	QOR-S25	O-ring	2	S25
3	QBR-6000	Bearing	4	6000ZZ
4	VF32-005	Eccentric Rotor	1	
5	VF28-107	Shaft Joint Adapter	1	
6	SA040-004	Shaft Joint	1	
7	VF32-004	Case	1	
8	WIRE-H0801	Handy Wire Assembly	1	01meters
8-1	VF28-009	Wire-Joint	1	
8-2	WIRE-0801	Flexible Wire	1	01meters
9	HOSE-H2701	Handy Hose Assembly	1	01meters
9-1	VF28-006	Hose Coupling Case"H"	1	
9-2	HOSE-2701	Flexible Hose	1	01meters
9-3	VF28-112	Hose Coupling Case"M"	1	
10	VF28-114B	Coupling Nut	1	

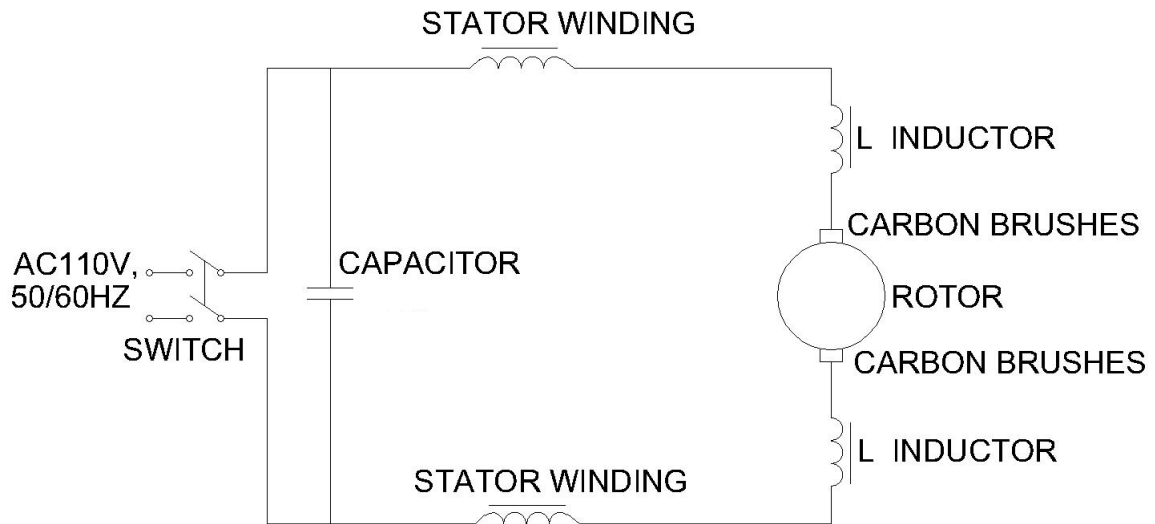
Motor



No	Part No	Part name	Qty	Standard
1	QBL-RM5X25	Round Head Bolt	4	M5X25L
2	MG-014B	Front Cover	1	
3	MG-013	Middle Cover	1	
4	QBR-608ZZ	Bearing	2	608ZZ
5	MG110-002	Rotor Assembly	1	
6	QBL-RM5X45	Round Head Bolt	2	
7	QWS-SM5	Spring Washer	2	M5
8	QWS-PM5	Plain Washer	2	M5
9	MG110-003	Stator Assembly	1	
10	MG-011B	Housing	1	
11	MG-019	Carbon Brush Holder	2	
12	MG-021	Carbon Brush Connector	2	
13	MG-017	Carbon Brush	2	
14	MG-024	Switch	1	
15	QBL-RM4X6	Round Head Bolt	4	M4X6L

No	Part No	Part name	Qty	Standard
16	MG-027	Connector 1	1	
17	MG-028	Connector 3	1	
18	MG-029	Connector 2	1	
19	MG-025	Cable Support	1	
20	QBL-RM4X12	Round Head Bolt	6	M4X12L
21	MG-023	Capacitor	1	
22	MG-022	Cable and Plug	1	
23	MG-026	Cable Protect Cover	1	
24	QWS-SM4	Spring Washer	4	M4
25	MG-012B	Handle Cover	1	

Wiring Schematic Diagrams



Troubleshooting

Use the table below to troubleshoot problems before contacting service personnel or your local dealer. If the problem continues after troubleshooting, call your local dealer for assistance.

Describe any problems that may occur with the product and how to fix the problems. Here is an example:

Problem	Solution
Motor is not working	Please check the power supply Please check the cord and replace with new one if it has a problem. Please check the brush.
Motor is working but vibration is not working	Please check the inner flexible wire. Please check the square part of inner flexible wire.

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 will be required: Model Number, Serial Number/Lot Date Code, and Description.
- 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 KLUTCH 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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