



BACKPACK VIBRATOR

INSTRUCTION MANUAL

SAFETY, ASSEMBLY, AND MAINTENANCE INSTRUCTIONS FOR MODEL:

PRO 50



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WARNING

When using concrete vibrators, as with any gasoline powered tool, basic safety precautions should always be followed to reduce the risk of fire and personal injury, including the following:

READ ALL INSTRUCTIONS

GENERAL SAFETY PROCEDURES

- Keep work area clean. Cluttered areas invite injury.
- Consider work area environment. Keep area well lit.
- Do not use in presence of flammable liquids or gasses.
- Keep children away. Do not let visitors contact tool.
- All visitors should be kept away from work area.
- Store tools when not in use in a dry, secure area out of the reach of children.
- Don't force tools, the job will be done better and safer by not exceeding the recommended max. vibrator head for the motor.
- Use the right tool, don't force a small tool to do a job meant for larger one.
- Do not use the tool for any purpose for which it is not intended. For example do not use the vibrator to drive posts in to the ground.
- Dress properly, do not wear loose clothing or jewelry. They can get caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- Wear safety glasses to protect against splashing concrete, and a dust mask if operation is dusty.
- Don't overreach, keep proper footing and balance at all times.
- Maintain tools by following instructions on cleaning and lubricating.
- Keep handles dry, clean, and free of oil and grease.
- Disconnect spark plug wire when not in use, before servicing and when changing flexible shafts and heads.
- Avoid unintentional starting.
- Stay alert, be aware of what you are doing and others around you. Do not operate the tool when you are tired.
- Check damaged parts before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

FUEL MIXTURE

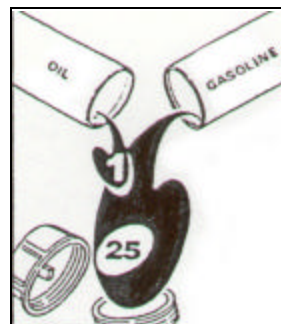
FUEL MIXTURE: 4% (25:1) oil/gasoline

Use gasoline with an octane rating of no less than 90. Use only oil for two stroke engines. Refill when the engine is off, cooled down and far away from flame.

Do not smoke when re-filling.

Fill the fuel tank only to 3/4 capacity to allow for fuel expansion.

Only prepare the quantity of fuel mixture for each job, do not leave the mixture in the fuel tank or in a fuel canister for prolonged periods.



US		IMPERIAL	
GAS (gal)	OIL (fl oz)	GAS (gal)	OIL (fl oz)
1	5.12	1	6.4
2	10.24	2	12.8
5	25.6	5	32

TECHNICAL DATA

Engine..... 2-stroke EMAK
Displacement..... 45.7 cc
Ignition.....Electronic
Carburetor..... Diaphragm type (all positions)
Fuel..... 4% mixture (25:1)
Clutch.....Centrifugal
Anti-vibration system.....Yes

SAVE THESE INSTRUCTIONS

Northrock flexible shaft vibrators are built to the highest standards of both quality and function. When properly assembled and maintained you will receive many hundred hours of service from these units. Please take a few minutes to read the assembly, maintenance, and safety instructions before attempting to operate the vibrator.

Assembly Instructions:

! Be sure spark plug wire is disconnected and switch is in stop position before proceeding.

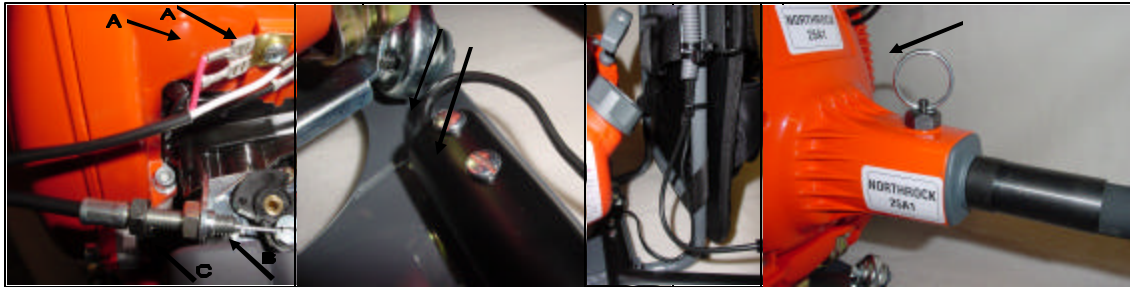


FIG. 1

FIG. 2

FIG. 3

FIG. 4

- 1- Un-screw the air filter cover screw allowing the door to hang down. On the end of the wiring harness you will see two terminals that will fit snug over the contacts (fig 1A).
- 2- Run the throttle cable end thru the throttle plate and insert the ball end into the connector as indicated (fig 1B).
Screw the threaded throttle cable end into the throttle plate (adjust insertion as needed) and tighten nut securely (fig 1C).
- 3- Attach the throttle control handle to the frame with the two bolts supplied. Secure tightly (fig 2).
- 4- Use the supplied cable ties to attach the throttle control cable and wiring harness to the frame (fig 3).
- 5- The motor is designed so that the shaft is a quick disconnect. Insert inner flexible core to motor adapter and then pull up on plunger assembly (Fig 4) and insert outer casing into motor with the hole facing upward to lock it into place.
- 6- Apply adhesive sealant to threads at the vibrator head end to prevent water from entering and to lock the head on.
Secure head to shaft using wrench flats provided on the head and a pipe wrench on the metal part of the flexible casing.

NOTE: The unit is now ready for operation, but with a new flexible shaft it will take a few minutes for the grease to run itself in. For this short period it is normal for the flexible shaft to rattle, and the motor speed to be somewhat slower (3-5 minutes).

Starting Engine:



FIG. 5

FIG. 6

Fill the carburetor by pushing primer bulb (fig 5). Put the choke lever in the closed position (fig 6). Pull the starting rope slowly until you meet resistance, then pull it hard until engine starts.

WARNING: When engine is warm. DO NOT use choke lever to restart.

Running the Engine:

During the first 20 working hours, do not use the backpack at maximum power for long periods. With the engine idling at 2600-2800 RPM, the backpack should not vibrate. We recommend that you have the dealer or an authorized mechanic carry out any service requirements.

Stopping the Engine:

Set the throttle to idle position and wait a few seconds to let the engine cool off. Turn off the engine by pressing the "KILL" switch (fig 7) until the engine stops. (Switch guard removed for illustration purposes).



FIG. 7

Maintenance Instructions:

- Engine: - Clean cylinder fins with a brush or compressed air periodically. Dangerous overheating of engine may occur due to impurities on the cylinder.
- Air filter: - Every 8-10 hours, open the air filter cover and remove the air filter. Clean the filter and refit it. Replace the filter if it is too dirty. Close and secure the air filter cover. The engine will run irregularly if the filter is clogged, with consequent higher fuel consumption and lower performance.
- Fuel filter: - Check fuel filter periodically. A dirty filter can cause difficulty in starting and lower engine performance. Replace fuel filter if dirty. **Fuel filters should not be cleaned.**
- Spark plug: - Clean the spark plug and check gap periodically. The spark plug should be gapped at .020 inches. Use Champion CJ-7Y spark plug.
- Shafts: - Inspect inner cores for lubrication after approx. 50 hours of operation as follows: remove core on to a clean surface free of dirt and grit, inspect core for dry areas, if lubrication is required wipe core with cloth, reinsert core into casing applying approx. 1/16" thick coating of high quality lithium grease. (available in 1lb cans from the factory) Do not over grease the flexible shaft as this will cause excess drag on the motor, and the shaft to get hot.
- Heads: - Heads are sealed at the factory since it is extremely important to keep contaminants out, therefore they require no field maintenance

Storage Instructions:

After performing the maintenance on your unit, empty the fuel tank and put the gas cap back on. Remove the spark plug, pour a small amount of oil into the piston chamber. Rotate the crankshaft several times using the starting rope in order to distribute the oil. Put the spark plug back in. If you are putting the engine away in a dusty area you should cover it with a plastic sheet to avoid getting dirt in the carburetor.