

# MODEL M-1 DRY VACUUM

## IMPORTANT SAFETY INSTRUCTIONS



**READ AND UNDERSTAND ALL INSTRUCTIONS  
BEFORE OPERATING OR SERVICING MACHINE**



**DANGER!** Failure to Observe These Instructions Can Cause Fire, Electrical Burn, Shock or Electrocution To Machine Operator or Bystanders.

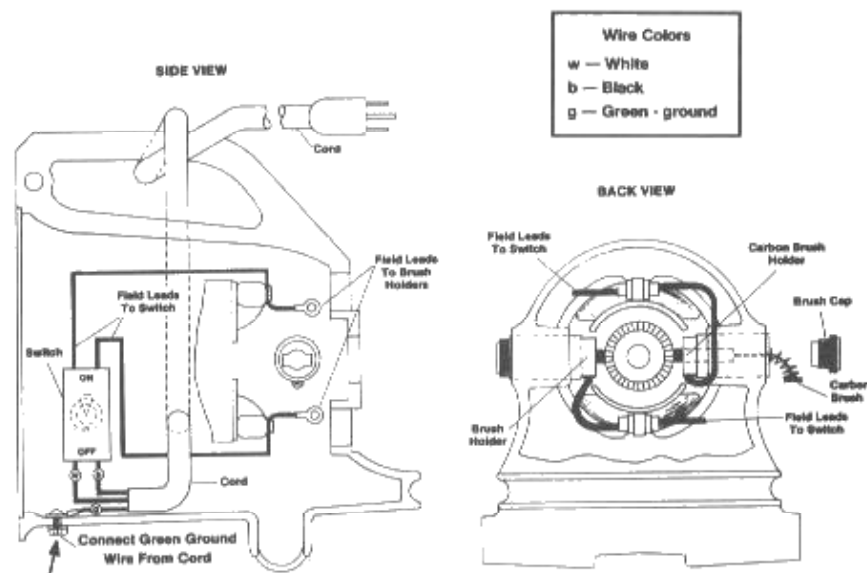
- When using an electrical appliance, basic precautions should always be followed, including the following:
- **NEVER** attempt to operate machine unless you have been trained in its operation.
- **NEVER** allow an untrained person to operate this machine.
- Use this machine **ONLY** as described in this manual.
- This vacuum cleaner is designed for DRY Pickup only. **DO NOT** use on wet surfaces or for wet pickup. **DO NOT USE OUTDOORS.** Electric shock could occur.
- **NEVER** operate machine with a damaged, broken, cut, abraded, or taped cord or plug.
- **ALWAYS** connect machine to a properly grounded electrical outlet. See page 2 for grounding instructions and wiring diagram.
- **NEVER** leave machine unattended when plugged in. Unplug machine from electrical outlet when not in use and before attempting repairs or maintenance.
- **ALWAYS** turn machine OFF before unplugging from electrical outlet.
- **NEVER** operate machine in the presence of flammable or combustible liquids, such as gasoline, fumes or dusts.
- **NEVER** attempt to pick up flammable or combustible liquids, such as gasoline, fumes or dusts.
- **NEVER** handle machine, cord or plug with wet hands.
- **NEVER** drop or insert any object into any machine opening.
- **ALWAYS** keep face, fingers, hair or any body part, or loose clothing away from any machine opening or moving part; revolving brush.
- **NEVER** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- **ALWAYS** use extreme care when cleaning on stairs or when machine is placed on stairs.
- **NEVER** operate machine if it is not working properly, if it has been dropped, damaged, exposed to weather, or dropped into water. Return machine to service center for examination and repair.
- **NEVER** operate machine with any air opening blocked. Keep all air openings free of dust, lint, hair and the like.
- **NEVER** operate machine without dustbag and/or filters in place.
- **DO NOT** pull or carry machine by electrical supply cord, use cord as a handle, close door on cord, pull cord around sharp edges or corners, expose to heated surfaces, or set heavy or sharp objects on cord.
- **NEVER** disconnect plug by pulling on cord. To disconnect from outlet, grasp the plug, not the cord.
- Machine may be equipped with a motorized brush. **NEVER** run motorized brush over power cord.
- **DO NOT** allow to be used as a toy. Close attention is necessary when used by or near children.

**SAVE THESE INSTRUCTIONS**



**DANGER:** DO NOT ATTEMPT MAINTENANCE OR REPAIRS BEFORE DISCONNECTING CORD FROM ELECTRICAL POWER SOURCE. READ ALL INSTRUCTIONS AND FOLLOW ALL ILLUSTRATIONS CAREFULLY.

## WIRING DIAGRAM 115V

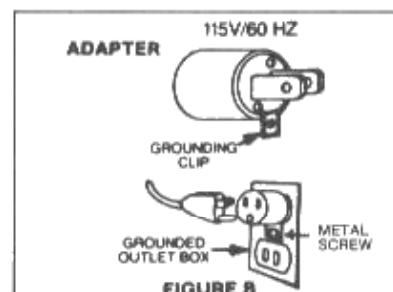
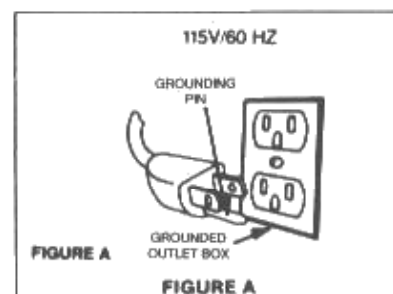


**WARNING — GREEN GROUND WIRE MUST BE SECURELY CONNECTED TO FRAME AS SHOWN IN DIAGRAM OR ELECTROCUTION MAY RESULT.**

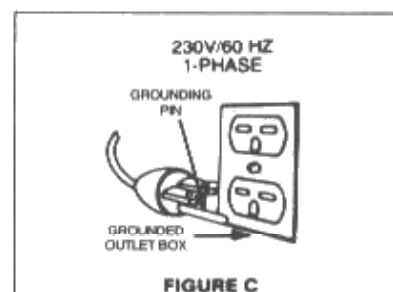
This machine is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in Fig. A. A temporary adapter that looks like the adapter illustrated in Fig. B may be used to connect this plug to a 2-pole receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a METAL screw.

## GROUNDING INSTRUCTIONS

This machine must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



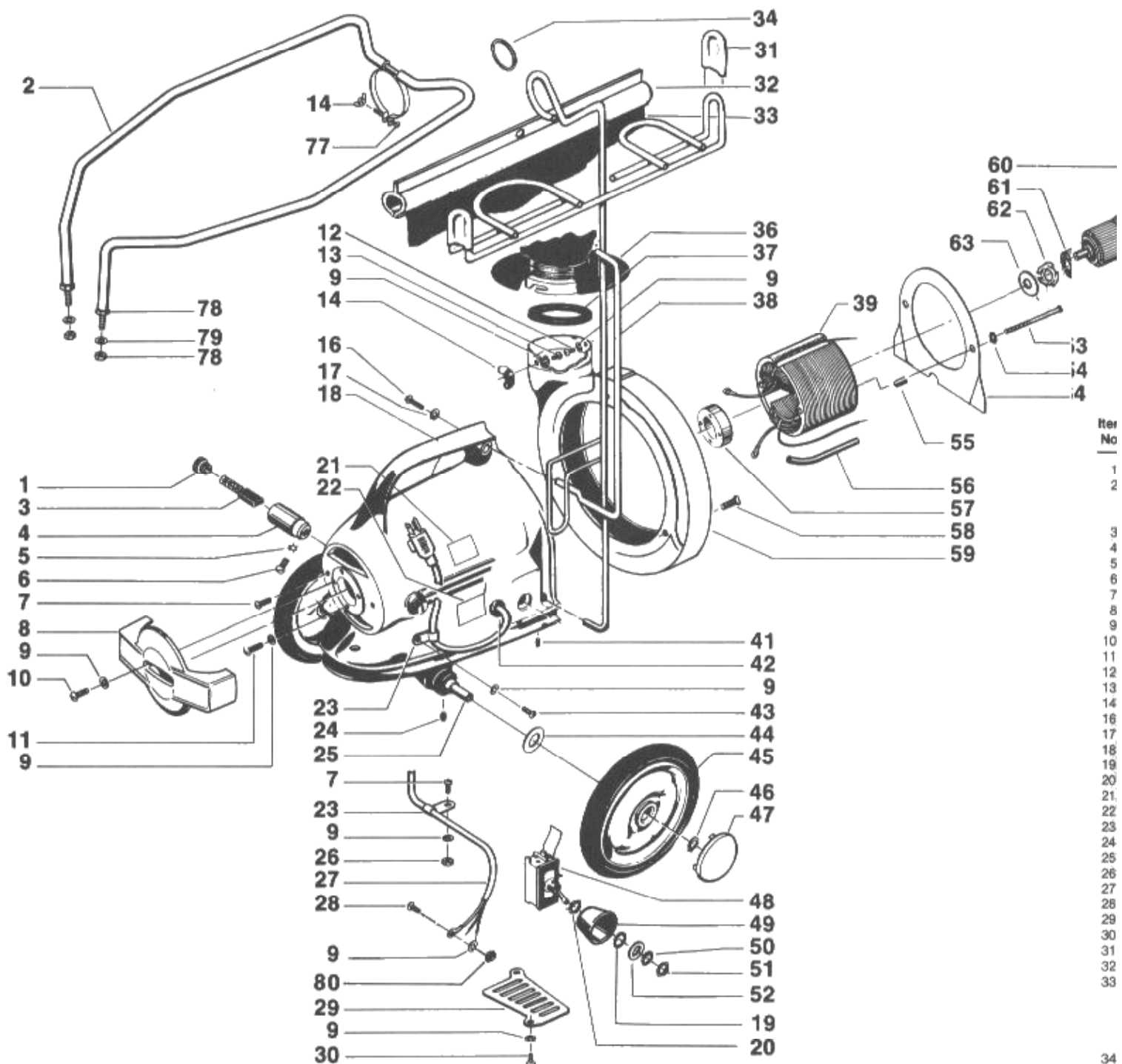
NOTE: Adapter NOT for use in Canada



**DANGER -** Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the machine - if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Always use a properly grounded 3-wire extension cord which has male and female plugs. Use only 14-3 ST or SO type extension cords for a total cord length up to 85 feet.

# MODEL M-1

**WARNING: This Vacuum Cleaner is Not Designed For Wet Pickup or Outdoor Use — Electrical Shock or Motor Damage Could Occur If Used On Wet Surfaces.**



## INSTRUCTIONS — THRUST SPRING & M-1 ARMATURE, BEARING AND SWITCH REPLACEMENT

Each Model M-1 is manufactured with one Thrust Washer (item 62) and either one or two 1/64" washers (item 63). When removing the armature, keep track of these washers. The simple rule to follow is to put back the same washers that came out. These washers sit between the bearing and the motor frame, and the thicker washer (the 1/16") always goes in the motor frame first. The legs of this Thrust Washer always rest against the outside edge of the bearing.

On older models, the bearings had a washer underneath them on the armature shaft. Always put washers in place when replacing

bearing on this type armature assembly. Bearing kit 10-9-997-9 provides bearing and two washers, one of which (the thin one) is correct size.

The switch should always be wrapped twice or more with electrical tape so that the connections are covered. When replacing a switch, always remember to wrap the new switch. The diagram shows a swath of tape covering part of the switch.

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## **TROUBLE SHOOTING ON THE MODEL M-1**

<b>Symptom</b>	<b>Cause</b>	<b>Solution</b>
Machine doesn't run	damaged switch damaged cord jammed fan burnt out armature burnt out coil	change switch change cord clear out jamming object change armature change coil
Poor Suction	clog in hose, tool, wand scrap trap full clog in fan hood bag full clog in filter bag tube fan worn out worn carbon brushes a twisted brush shunt	clear the clog empty trap clear the clog empty bag clear the clog change fan change brushes untwist shunt
Machine moves with difficulty	damaged wheels damaged casters	change wheels change caster
Bag leaks	improper clamp connection improper coupling connection	make sure clamp covers bead of bag adjust coupling connection
Excessively dusty bag	extremely fine dust being picked up	replace with blue denim bag or paper bag assembly
Bag rod loose	loose set screw loose upper screw	tighten set screw tighten upper screw
Model M-1 damaging furniture	no satellite bumper	install a satellite bumper assembly

# MODEL M-1 ASSEMBLY, OPERATION AND MAINTENANCE

The Model M-1 is intended for commercial use only.

## I ASSEMBLY

Your NSS Model Model M-1 requires minimal assembly prior to using. The bag rod, filter bag and hose coupling must be installed properly. Refer to the enclosed wall poster for additional instructions.

### A—Hose-25 prefix

The hose is attached to the intake on the container by means of the metal swivel hose coupling 25-9-001-9.

### B—Tube Handle-22 prefix

The 22-9-010-9 fiber tube handle is the lightest and easiest to use. It will withstand abrasive wear better than steel or aluminum. The aluminum handles 22-9-040-9, regular length and 22-9-030-9 short length for close quarter operation are preferable. The 22-9-020-9 plated steel is used for industrial applications.

The 22-9-121-1, 5" connector is used to connect the brush and upholstery tools to the hose for hand work.

For overhead cleaning the brush tools are used on the 22-9-110-9 Hi-Up tubes for removing dust from tops of door and window frames, walls, ledges, etc.

To use the swivel 22-9-141-2 with the brush and upholstery tools, use the 22-9-121-1 5" connector or the Hi-Up tubes to connect one end. The other end inserts directly into the end of the tools.

### C—Attachments-30 prefix

The swiveled floor tools slip on the tube handles and are locked by means of the brass locking collar to the brass lock of the tube handle.

Crevice tools fit directly into end of hose without use of 22-9-121-1 connector.

## II OPERATION

After machine is assembled with switch in off position, plug the conductor cord into electric outlet, making sure current is same as that which machine is designed to run on. Turn on switch located on the right side of the machine.

### A—General Floor Cleaning

When machine is used for general purpose floor cleaning on either bare floors or carpeting, the operator should drop arm slightly to allow air to enter front edge of tool on forward stroke. On back stroke, do the reverse of the forward stroke — raise arm slightly to allow the back edge of tool to clear floor. This method gives the air a chance to do the work in the most effective manner.

Make strokes at a leisurely pace and at a length that feels the most natural. Always work away from the machine, pulling machine behind you.

Many different tools are available for various carpet and bare floor applications. Select the proper tool for maximum cleaning results.

## III MAINTENANCE

Simple, regular maintenance of the Model M-1 is essential for maximum machine performance and longest life.

Many tasks may be performed by the machine owner. Refer to the enclosed wall poster for additional instructions.

1. *Current*—Machine should be run only on voltage specified on name plate or serious damage to the machine will occur.
2. *Cord*—Inspect daily for any damage to cord or plug. Never use machine with a damaged cord or plug.
3. After 1500 hours of running time, check item 3 carbon brush wear. When carbon brushes and copper on commutator are worn, return to authorized NSS service station for repair.
4. *Lubrication*—The motor has sealed bearings which require no further lubrication. Casters and wheels should be oiled as required.
5. *Hose* Remove hose from machine after each use. The tube handle should be removed from hose. It should then be laid in a loose coil or hung over several pegs on the wall, to remove the strain on it.
6. *Filter Bags*—The Model M-1 is available with three different types of filter bag.
  - 10-9-394-1 Standard filter bag.
  - 10-9-091-1 Zipper filter bag. Use with disposable paper filter bags.
  - 10-9-109-1 Denim filter bag. Greatly reduces dusting from bag.Filter bags must be emptied and cleaned regularly to prevent a loss of vacuum suction and possible machine damage.
7. *Tools*—Remove tool from tube handle weekly to clean and inspect for wear.
8. *Safety trap*—The safety trap is designed to catch debris before it is pulled into the suction fan. Empty the safety trap after each use to prevent damage to the suction fan.



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