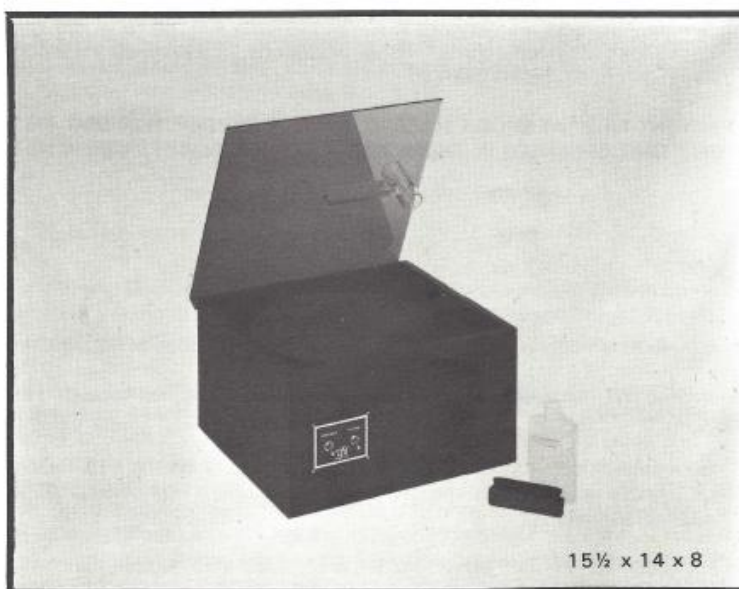




HW-16 RECORD CLEANING MACHINE OWNER'S MANUAL

**READ THESE INSTRUCTIONS
BEFORE UNPACKING YOUR HW-16**



INTRODUCTION

Your new HW - 16 record cleaning machine has been carefully designed and manufactured. It is capable of giving you many years of trouble-free performance if you will take the time to read this manual carefully and follow the instructions within.

The HW - 16 will microscopically clean all vinyl analog records as well as the new Compact Discs, for which a special adaptor is available from the factory.

Older 78 r.p.m. shellac records can be cleaned using Discwasher D - 4 fluid. Alcohol based cleaners must never be used on shellac records.

1. PRELIMINARY REMARKS

Save the carton, all internal fillers, and plastic bags. If you should ever need to carry or ship your HW - 16 any distance, there is much less chance of it suffering damage in transit if it is properly packed in its original carton.

Claims for shipping damage can only be filed by the recipient (consignee). Inspect your HW - 16 carefully and follow the procedure specified in Section 3, "Upon Receiving Your Record Cleaner: Initial Checkout Procedure." If damage has occurred, save the carton for inspection by the carrier.

Electrical Requirements: HW - 16's are designed to run on 110 Volts A.C., 60 Hz or 220 Volts A.C., 50 Hz. The shipping carton shows which is the correct voltage for your unit. To prevent electric shock, ALWAYS PLUG THE HW - 16 INTO A GROUNDED OUTLET.

CAUTION: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN, OR MOISTURE BEYOND THAT SPECIFIED IN THESE INSTRUCTIONS. ALWAYS USE IN WELL VENTILATED AREAS.

2. UNPACKING

- A. Gently remove the four foamed plastic corner fillers. Lift them from beneath so as not to break them.
- B. Before removing the HW - 16, reach in and carefully remove the plastic bag containing the cleaning fluid and brush
- C. Reach into the carton with both hands, placing one on either side of the HW - 16. Reach under the bottom of the machine with both hands and lift it free. When putting it down, be careful that the line cord is not caught underneath.
- D. Taking care not to damage the front panel switches and the line cord, remove the plastic bag from around the HW - 16 by lifting the side at the open end of the bag and sliding the bag back as far as you can. Now gently put that side down and push the bag back over the top of the HW - 16 so that only the other two feet are resting on the bag. Lift the other side and slip the bag out from under the feet.

- E. If the hinged, smoked plastic cover has a paper protective covering, do not remove it now. Wait until instructed to do so later. If the cover has a protective plastic bag, lift up the cover and gently slip the bag off.

3. UPON RECEIVING YOUR RECORD CLEANER: INITIAL CHECK - PROCEDURE

- A. Lift up the hinged cover and examine the velvet-coated vacuum pickup tube which is attached to the underside of the lid on the right. Make sure that it shows no signs of damage.
- B. Plug the HW - 16 into a grounded outlet which provides the voltage required by your HW - 16 as specified on the carton. With the cover open, turn on the switch labeled "**turntable**." The turntable is rotated by a high torque, 100:1 gear motor and some gear noise is perfectly normal.
- C. With the cover still open, turn on the switch labeled "**vacuum**." Your HW - 16 is working properly if you hear a loud rushing sound similar to what you would expect from a household vacuum cleaner.
- D. Turn off both switches.
- E. Unscrew the round, black record clamp from the turntable's spindle, remove the foam mat, and lower the cover. Turn on the **vacuum** switch, pick up the HW - 16, and shake it gently for 10 seconds to loosen all of the shipping debris in the machine. (Be careful when doing this as the HW - 16 weighs some 28 lbs.). Wipe out the area around the turntable platter, and the platter itself, with a slightly damp sponge, or, using a vacuum cleaner with dusting brush, vacuum up any debris that may have accumulated around the turntable.
- F. Place your HW - 16 on a clean, dry surface which CANNOT be marred by alcohol. Allow at least a two-inch clearance behind the HW - 16 for the vacuum exhaust vent. Any surface against which the vent exhausts must also be impervious to alcohol.

4. PROPER RECORD CLEANING PROCEDURE

- A. Your HW - 16 was carefully checked before leaving the factory. HOWEVER, since we have no control over the carrier's trucks, it is imperative that you test the machine with the first record you clean. For this test, select one dirty, BUT dispensable record.
- B. Lift the cover of your HW - 16, place this record on the turntable, and screw on the record clamp. Tighten the clamp just enough to hold the record firmly but not so much that the outer rim of the record bows up (dishes).
- C. Flip up the switch labeled "turntable." Squirt some of the cleaning fluid onto the groove area of the record with your right hand while firmly pressing the walnut handled brush against the groove area with the left hand. The brush's bristles should completely span the grooves and the pressure should not be so much that they bend significantly. Take care not to get cleaning fluid on the record's label. Use enough fluid so that it forms a continuous film over the entire groove surface. As you gain experience, it will become almost automatic to apply the right amount.

- D. After a few turns and when the groove area is completely covered with the cleaning fluid, remove the brush and, with a flick of the wrist, shake any excess cleaning solution off the brush. Make sure that any surface the fluid may fall on is impervious to alcohol.
- E. It is now time to determine that your HW - 16 properly removes the cleaning fluid. The speed with which it does this will vary throughout the country because of differences in line voltage.

Lower the cover and flip up the switch labeled "vacuum". Allow 15 seconds to pass. Turn off the vacuum switch. Then turn off the turntable switch. THIS MUST ALWAYS BE DONE IN THIS ORDER TO PREVENT DAMAGE TO YOUR RECORDS!

- F. If the record is dry, your machine is working properly. If your cover has paper covering it, you can now peel it off.

As you become familiar with your HW - 16, **always** use the shortest possible vacuuming time. In many instances, two revolutions will be enough. Do not think that if two revolutions are good, ten are better. This is not true. Excessive vacuuming time can cause a build-up of static electricity which will then attract the very same kind of dirt you have just removed.

- G. Unscrew the record clamp, lift the record carefully, and repeat the entire operation on the other side.

CLEANING OF RECORDS MUST ALWAYS BE DONE IN THE ORDER PRESCRIBED.

5. ADDITIONAL TIPS

- A. This is NOT a dry cleaning machine. Do NOT run this machine without liquid on the record. All that will happen if the machine is run dry is that dirt will be moved around the record (causing possible damage) and the record will develop a high static electricity charge.
- B. It is very important not to overload your HW - 16 with waste cleaning fluid. If fluid leaks out of the machine, the fluid is not being vaporized fast enough. Probably too many records are being cleaned at one time for the fluid to thoroughly vaporize internally. To remove this liquid build-up, it is necessary to run the HW - 16's vacuum with the cover open for thirty seconds.
- C. Low or high line voltage conditions will always change the amount of drying (vacuuming) time needed. The lower the voltage is, the longer the drying time will be.
- D. Make sure that the velvet-covered vacuum pickup tube is free of debris. Gently wipe it clean with a clean, slightly damp cloth each time you finish using your HW - 16.
- E. The velvet surface on the vacuum pickup tube will not last forever. The rate of wear will vary with the amount of grit on your records and your geographical location. A regular maintenance schedule should be established. As a minimum, you should be able to clean one hundred sides before needing to change velvet surfaces.
- F. Drying the brush between uses will keep the solid walnut handle from warping.

The bristles can be cleaned by passing the brush over the vacuum intake opening at the right of the turntable, with the vacuum motor running and the lid open.

- G. When cleaning very warped records, it may be necessary to hold down the cover so that the vacuuming action is complete over the whole record surface. In extreme cases, you may find it necessary to lift the cover over a warp and then hold it down over a "dip."
- H. **Special Records:** When cleaning extra-thick records (such as UHQR), it is necessary to shim the large circular vacuum tube (which couples with the vacuum hole at the right of the turntable) with a thick gasket. These special gaskets are available from the factory at a nominal cost.

6. POSSIBLE PROBLEMS

- A. If the record does not dry: This is usually caused by a turntable that is too low. The turntable can be raised (or lowered) as follows:

Method One

1. Remove the mat and unscrew the three Phillips-head screws found at the center of the turntable with a #1 Phillips screwdriver. Without removing the screws from their holes in the platter, lift the platter up and off. If the screws should come out of their holes, take care not to lose the washer found under the head of each screw.
2. Under the turntable is a machined aluminum flange. This flange can be raised and lowered by loosening the set screw which holds it to the motor shaft. To do this proceed as follows:

- a. Notice that the plate through which the flange protrudes has two sets of four Phillips-head screws arranged in a rectangular pattern -- an inner set and an outer set.

Remove the four outer screws only and set them aside, then carefully lift up on the flange to remove the plate, taking care not to stress the three wires connecting the motor which is attached to the underside of the plate.

There is enough slack in the wires to allow the motor assembly to be placed just to the side of its mounting hole.

- b. If necessary, gently rotate the flange (there will be a bit of resistance) until the Allen set screw is visible under the plate. With a 1/8" Allen wrench, loosen the set screw and move the flange up or down as required on the motor shaft. This should be done in very small increments only.

Retighten the set screw. NOTE: the set screw rests against a flattened portion of the motor shaft.

It will be necessary to reassemble and to test the HW - 16's drying action after each adjustment.

- c. Replace the motor assembly in its mounting hole. NOTE: The turntable support flange is set off-center on the plate. The plate is properly positioned when the motor wires are not twisted and the flange is closer to the cover hinges.

Replace the four screws, taking care not to over-tighten them which would strip the threads in the board.

HW - 16 CAUTIONS

- A. Never use more than 25% alcohol by volume in solution to clean records. Use of V.P.I. Fluid will protect the life of your cleaning machine. If V.P.I. Fluid is not readily available, a satisfactory cleaning solution can be made from Isopropyl Alcohol and distilled water. If you use less than 99% Isopropyl Alcohol, the alcohol's water content should be taken into account.
- B. Use alcohol solution on vinyl records only! For all other records, use distilled water or Disc washer D - 4 fluid for shellac 78 r.p.m. records.
- C. When cleaning shellac 78 r.p.m. records, always use a different vacuum pickup tube from the one used for vinyl records. Many shellac records were made with a carbide abrasive mixed in with the shellac. This was done to shape the steel needles used to play these records. The vacuum pickup tube's velvet covering can pick up some of this abrasive which would then damage vinyl records. Be sure to mark the square end of the pickup tube you use for 78's with a dab of nail polish for easy identification.
- D. When using an alcohol cleaning solution, DO NOT use the HW - 16 near a fire, open flame or burning cigarette, pipe, cigar, etc. The vaporized alcohol in the vacuum exhaust may ignite explosively. Use in well ventilated area.

V.P.I. INDUSTRIES, INC. LIMITED WARRANTY

This unit is warranted by V.P.I. Industries, Inc. (V.P.I.) against defects in materials and / or workmanship for 90 days from the date of purchase by the original retail purchaser. V.P.I.'s sole obligation under this warranty is limited to the repair or replacement, at V.P.I.'s option, of any part (s) found to be defective.

V.P.I.'s obligation to repair or replace defective parts is the purchaser's sole and exclusive remedy, and V.P.I. shall not be liable for any direct or indirect injury and / or property damage arising out of the use of the product or defect in or failure of the product.

This warranty does not extend to any unit whose serial number has been defaced or altered, or to any product which V.P.I. determines contains a defect or malfunction caused by damage due to incorrect installation, modification, misuse, or servicing by the purchaser, and it does not cover trivial or cosmetic defects which do not impair the unit's normal function.

V.P.I. reserves the right to make changes in this product without assuming any obligation to install such change in any product previously manufactured.

This warranty to repair or replace defective parts is in lieu of all other express or implied warranties of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description herein.

Some states do not allow exclusion of implied warranties or limitation of incidental or consequential damages, so the above exclusion or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.