

# **HW-17 Record Cleaning Machine**

## **Setup and Instruction Manual**

VPI Industries, Inc., 77 Cliffwood Ave. #3B, Cliffwood, NJ 07721  
phone: 732-583-6895 fax: 732-946-8578  
<http://www.vpiindustries.com>

# Table of Contents

Important: Read Before Proceeding! .....	3
Safety Instructions .....	4
Technical Specifications .....	6
Fuses .....	6
Vacuum Motor .....	6
Turntable Motor .....	6
Operating the HW-17 .....	7
Unpacking the Box .....	7
Setting Up the HW-17 .....	7
Using the HW-17 .....	7
Care and Maintenance of the HW-17 .....	10
Draining the HW-17 Catch Basin .....	10
Draining the HW-17 Fluid Reservoir .....	10
Cleaning the HW-17 .....	10
Cleaning the Vacuum Pickup Tube .....	10
Cleaning the Applicator Brush .....	11
Replacing the Vacuum Pickup Tube .....	11
Changing the Applicator Brush .....	11
Tips for Using the HW-17 .....	13
Troubleshooting .....	14
Problem: A record gets scratched during cleaning. ....	14
Problem: The Applicator Head drips fluid. ....	14
Problem: Fluid remains after vacuuming. ....	14
Problem: Fluid leaks from beneath the HW-17. ....	14
Problem: The record does not revolve with the turntable. ....	14
VPI Industries, Inc. Limited Warranty .....	15

## **Important: Read Before Proceeding!**

- Read and follow the *Safety Instructions* on page 4.
- Save all packing materials. The HW-17 should only be moved or shipped in its original packaging to reduce the risk of damage in transit.
- When handling the Vacuum Pickup Tube, do not touch the velvet surfaces. Skin oil will contaminate the velvet and affect the performance of the HW-17.
- To reduce noise from the HW-17, place it on a firm, stable surface.

## Safety Instructions



**Follow the instructions below to reduce risk of electrical hazard.**

1. Do not operate the HW-17 near an open flame, burning cigarette, pipe, cigar, etc.
2. To avoid electrical shock, do not open the cabinet of the HW-17.
3. If the power cord provided with the HW-17 does not reach an outlet, use a heavy-duty, grounded extension cord.
4. To avoid electrical shock, always plug the HW-17 into a grounded outlet.
5. Do not expose the HW-17 to rain or excessive moisture.



**Follow the instructions below to avoid damage to the HW-17.**

1. Do not leave the HW-17 unit running unattended.
2. Use the HW-17 in a well-ventilated area.
3. Place the HW-17 on a firm surface to allow proper ventilation to occur.
4. Keep the white hose clamp shut when cleaning records.
5. Clean up all fluid spills in the cabinet immediately. Failure to do so could cause the machine to warp.
6. Do not tip or move the HW-17 if there is fluid in the catch basin or fluid reservoir. This could cause fluid to leak.
7. Unlike VPI Record Cleaning Machine Fluid, some third-party cleaning fluids are flammable. Damage to the HW-17 caused by third-party cleaning fluids will void the warranty.
8. To avoid unnecessary wear on the vacuum motor, do not turn on the VACUUM switch unless the TABLE switch is already on.
9. Do not turn on the VACUUM switch unless the Vacuum Pickup Tube is in place. Without the tube to restrict air intake, any liquid in the catch basin could be drawn into the motor. This will damage the motor. Damage of this type is not covered by the warranty.

## Introduction

The HW-17 Record Cleaning Machine is a precision engineered product that microscopically cleans vinyl analog records. The cooling fan allows the HW-17 to withstand heavy, continuous use.

A special adapter and Vacuum Pickup Tube are available for cleaning seven-inch 45 RPM records and ten-inch 78 RPM records.



**NOTE:** Older 78 RPM shellac records can be cleaned using a special cleaning fluid available from VPI. The cleaning fluid provided with the HW-17 should **not** be used on shellac records.

Your new HW-17 Record Cleaning Machine has been carefully designed and manufactured. To ensure years of trouble-free performance, please read and follow the instructions in this manual.

### In This Package

- The HW-17 unit.
- Power cord.
- Bottle of VPI Record Cleaning Machine Fluid.
- This manual.
- 3/32 inch Allen wrench.

## Technical Specifications

### Fuses

- 10 amps, 22 by 5 millimeters (115 volt unit).
- 6.3 amps, 22 by 5 millimeters (230 volt unit).

### Vacuum Motor

- Permanently lubricated ball/sleeve bearings.
- Class A insulation.
- Intermittent duty.
- Maximum amps:
  - 5.7 (115 volt unit).
  - 3.3 (230 volt unit).
- CFM:
  - 95.0 (115 volt unit).
  - 99.0 (230 volt unit).

### Turntable Motor

- Grease-filled.
- Porous bronze bearings.
- RPM:
  - 18 (115 volt unit).
  - 16 (230 volt unit).
- 166:1 gear ratio.

## Operating the HW-17

### Unpacking the Box

The HW-17 is packed very carefully to avoid damage during shipping. It is important that you save the packing materials and box to use for shipping or moving the HW-17.

1. Remove the foam and cardboard.
2. Reach into the box and remove the power cord and bottle of VPI Record Cleaning Machine Fluid. Set aside.
3. Remove the foam corner blocks and packing materials surrounding the HW-17.
4. Lift one side of the HW-17 cabinet, slide off the plastic bag, then do the same with the other side of the cabinet.
5. Remove the HW-17 from the box, using caution with the attached hose.

### Setting Up the HW-17

When using the HW-17 for the first time, we recommend that you use a dirty, dispensable record.

1. Place the HW-17 on a firm, stable surface, making sure the drain hose is not caught under the unit and the clamp on the hose is closed.  
  
Do not remove the protective covering on the cover until the unit has been run successfully.
2. Make sure the TABLE switch is in the middle (off) position and the VACUUM switch is in the down (off) position.
3. Connect the power cord to the back of the unit and plug it into a grounded outlet that provides the necessary voltage.
4. Open the cover.
5. Turn on the TABLE switch. There will be noise from the high torque, 100:1 gear motor.
6. Turn on the VACUUM switch. There will be noise from the 19,000-RPM fan.
7. Turn off the VACUUM switch, then turn off the TABLE switch.

### Using the HW-17

Record cleaning must always be done in the following order.

1. If the Vacuum Pickup Tube is pointing toward the spindle, rotate it until it is clear of the turntable and pointing toward the back of the HW-17.
2. If the Applicator Head is pointing toward the spindle, lift it and rotate it until it is parallel to the back of the cabinet.
3. Remove the fluid reservoir stopper in the front left of the cabinet. Pour in [NN] ounces of VPI Record Cleaning Machine Fluid. The fluid reservoir can hold 6 ounces of fluid.

If you have used the HW-17 before, empty the catch basin before adding more fluid. See *Draining the HW-17 Catch Basin* on page 10 for instructions.

4. Remove the clamp, place the record on the turntable, and replace the clamp. Tighten the clamp enough to hold the record firmly, but not so much that the edge of the record curves upward (dishes).



**NOTE:** The record clamp should turn smoothly on the spindle and should not be forced. If it does not tighten smoothly, unscrew it and replace it. Forcing the record clamp could damage it.

5. Move the TABLE switch into the up position so the turntable is rotating in the clockwise direction.
6. Lift the Applicator Head and rotate it so it points toward the spindle.



**NOTE:** The Applicator Head assembly has a stop that positions the brush over the record and pointing toward the spindle. If the brush does not lock in this position, the brush may need to be realigned. Follow the directions in *Changing the Applicator Brush* on page 11.

When the turntable is rotating in the clockwise or anticlockwise direction, the Applicator Head will point about an inch beyond the spindle. This is done to keep fluid off the record label.

7. Press the PUMP button briefly. Do not hold it in for more than a moment or too much fluid will be dispensed. If you are using the HW-17 for the first time, you may need to press the button a second or third time. The correct amount of fluid will completely cover the record's grooved area without spilling over the edge of the record, or onto the record label. As you gain experience, it will become almost automatic to press the button the correct length of time.
8. After the turntable has complete three clockwise revolutions, move the TABLE switch down two clicks to the REVERSE position and allow the turntable to complete three anticlockwise revolutions.



**NOTE:** Cleaning a record in the reverse direction is normally done only the first time it is cleaned. The next time that record is cleaned, only the forward direction is needed.

9. Lift the Applicator Head and rotate it to its rest position, parallel to the back of the HW-17 cabinet.
10. Move the TABLE switch up two clicks to the forward position.
11. Rotate the Vacuum Pickup Tube anticlockwise over the record so that it is pointing almost toward the record spindle.
12. Move the VACUUM switch to the up position. The Vacuum Pickup Tube will lower and lock into position pointing toward the spindle.
13. After the record has completed two revolutions, move the VACUUM switch down to the off position. When the Vacuum Pickup Tube lifts off the record, rotate it until it points toward the back of the unit.

Two revolutions are usually sufficient to remove all of the cleaning fluid and leave the record completely dry. If some fluid remains on the record, turn on the VACUUM switch for two more revolutions.

The drying speed depends on your location due to differences in line voltage.



**NOTE:** Excessive vacuuming will lead to a build-up of static electricity, which will attract more dirt to the newly cleaned record.

14. Turn the TABLE switch down one click to the off position.



**NOTE:** To avoid damaging the HW-17 and your records, always turn off the VACUUM switch before turning off the TABLE switch.

15. Unscrew the record clamp, carefully remove the record, and repeat the procedure on the other side of the record.

## Care and Maintenance of the HW-17

### Draining the HW-17 Catch Basin

The catch basin for used record cleaning fluid can hold 20 ounces of fluid. The used cleaning fluid should be emptied from the HW-17 after every 6 records (or 12 record sides) are cleaned. The catch basin and fluid reservoir should be emptied before moving or shipping the HW-17.

1. To drain the used fluid, place a small container at the end of the hose. Release the clamp on the hose and tip the HW-17 back approximately 10 degrees.
2. Return the HW-17 to its original position and close the clamp on the hose. Dispose of the used fluid. Make sure clamp is tightly shut.

### Draining the HW-17 Fluid Reservoir

The fluid reservoir and catch basin should be emptied before moving or shipping the HW-17.

1. Gently pull the hose off the Applicator Head. The fitting may come out of the Applicator Head and remain in the end of the hose, or the hose may come free and leave the fitting in the Applicator Head. Either scenario is normal. Put the end of the hose over the left side of the cabinet.
2. Place a 1" block of wood or other suitable object under the front of the HW-17.
3. Place the end of the hose in your cleaning fluid container and press the PUMP button until the reservoir is empty.
4. Reattach the hose to the Applicator Head.

### Cleaning the HW-17

The cork mat is permanently bonded to the turntable. To clean it, move the TABLE switch up to start the turntable moving forward and rotate the Vacuum Pickup Tube until it is pointing at the spindle. Move the VACUUM switch up to the on position and vacuum the mat for one revolution. After vacuuming the mat, clean the velvet surfaces of the Vacuum Pickup Tube following the instructions below.



**NOTE:** The cork mat can be dry vacuumed, but a record should **never** be dry vacuumed.

Clean the inside of the cabinet with a slightly damp sponge. To remove any debris from around the turntable, use a vacuum cleaner with a dusting brush.

Clean the cover with a damp cloth or commercial plastic cleaner.

### Cleaning the Vacuum Pickup Tube

After every record cleaning session, clean the Vacuum Pickup Tube with a clean, lint-free, slightly damp sponge.

If the velvet surface that makes contact with the rim of the record is wearing out, the Vacuum Pickup Tube should be replaced before it begins to damage your records.

## Cleaning the Applicator Brush

The brush should be cleaned after every 50 records (100 sides). When the brush is dry, rub a clean pencil shaft (not the point or eraser) along the ends of the bristles to remove debris.

## Replacing the Vacuum Pickup Tube

If the velvet covering is worn or damaged, it must be replaced to avoid damaging your records. VPI recommends that you replace the Vacuum Pickup Tube after every 200 records (or 400 sides). Contact VPI to order a new Vacuum Pickup Tube.

1. To remove the old Vacuum Pickup Tube assembly, lift it straight up. Leave the spring in place.
2. Slightly twist the clear tube to remove it from the rest of the assembly.
3. Insert the new clear tube into the assembly with the velvet surfaces facing down and with the end of the slot slightly to the back of the HW-17.
4. Make sure that the space between the two velvet surfaces faces slightly backward. If the space faces directly down, the vacuuming will not work properly. Rotate the tube until it is in the correct position.
5. Put the Vacuum Pickup Tube assembly back in place.
6. Clean a record following the procedures in *Using the HW-17* on page 7. If the end of the Vacuum Pickup Tube closest to the record spindle does not touch the record, remove the assembly from the unit. Hold the black housing firmly and gently push down on the end of the Vacuum Pickup Tube to put it into proper alignment.
7. Replace the assembly and resume cleaning to make sure the Vacuum Pickup Tube contacts the record fully.



**NOTE:** Do not change the setting of the black collar on the Vacuum Pickup Tube. It has been set for proper spring tension and lift height.

## Changing the Applicator Brush

The Applicator Brush will wear over time. If you frequently use the HW-17, VPI recommends that you replace the brush on a yearly basis to ensure that the bristle tips reach all the way down into the grooves. Contact VPI to order a new Applicator Brush.

1. If the Applicator Head is pointing toward the spindle, lift it and rotate it until it is parallel to the back of the cabinet.
2. Gently pull the hose off the Applicator Head. The fitting may come out of the Applicator Head and remain in the end of the hose, or the hose may come free and leave the fitting in the Applicator Head. Either scenario is normal.
3. While holding the Applicator Head in place, use the 3/32" Allen wrench provided with the HW-17 to loosen the set screw farthest to the left. Do not remove the screw.

4. Grasping the head as close to the support rod end as possible, lift the head straight up off the support rod. It may be necessary to hold the black ring down with one hand while twisting the head gently back and forth while pulling up.
5. With the 3/32" Allen wrench, loosen the other two set screws on the side of the head. Do not remove the screws.
6. Remove the brush from its slot. If necessary, use a small screwdriver to gently pry the brush out. Be careful not to crack the plastic head when doing this.
7. Fit the new brush into the slot in the underside of the Applicator Head. If necessary, use a small screwdriver to push the metal base into place. Be careful not to crack the plastic head when doing this. Using the Allen wrench, tighten the two set screws. Be careful not to overtighten the screws, which could crack the Applicator Head.
8. Put the Applicator Head, with the brush pointing downward, back on the support rod. The top of the support rod should be about 1/16" below the surface of the Applicator Head. Align the head so that it is pointing toward the spindle.
9. Tighten the set screw farthest to the left. Be careful not to overtighten the screws, which could crack the Applicator Head.
10. Revolve the turntable in a clockwise direction. The Applicator Head should move about 1" beyond the spindle. This is done to keep fluid off the record label. If necessary to achieve this offset, readjust the Applicator Head on the support rod.
11. Reattach the hose to the Applicator Head.

## Tips for Using the HW-17

- The HW-17 is not a dry-cleaning machine. To avoid scratching a record and creating a build-up of static electricity, do not run the unit without liquid on the record.
- When cleaning heavily soiled records, turn the TABLE switch on and hold a damp sponge against the record for several seconds, then clean the record following the instructions. This will extend the life of the Vacuum Pickup Tube.
- For cleaning shellac records, use a different Vacuum Pickup Tube and brush from the ones used to clean vinyl records. Many shellac records were made with carbide abrasive materials to shape the steel needles used to play the records. This abrasive can be picked up on the velvet surfaces and the brush bristles; if the same Vacuum Pickup Tube and brush are used on vinyl records, damage can occur.

Be sure to mark the end of the Vacuum Pickup Tube and the brush that you use for shellac records to avoid confusing them.

- Drying time will vary based on line voltage conditions.

## Troubleshooting

### **Problem: A record gets scratched during cleaning.**

The velvet covering on the Vacuum Pickup Tube may be worn out, damaged, or has picked up debris. To remove debris, see *Cleaning the Vacuum Pickup Tube* on page 10. To install a new Vacuum Pickup Tube, see *Replacing the Vacuum Pickup Tube* on page 11.

### **Problem: The Applicator Head drips fluid.**

This may occur if too much fluid has been dispensed. Wipe up the spillage and dispense less fluid in subsequent cleanings. The correct amount of fluid will completely cover the record's grooved area without spilling over the edge of the record, or onto the record label.

### **Problem: Fluid remains after vacuuming.**

If fluid is not removed from the entire surface of the record, the Vacuum Pickup Tube may not be making contact over the entire length of the tube. For information on aligning the tube, see *Replacing the Vacuum Pickup Tube* on page 11.

### **Problem: Fluid leaks from beneath the HW-17.**

The HW-17 vacuum exhausts beneath the machine. Fluid will leak or be expelled only if the HW-17 was tipped or roughly moved with cleaning fluid in the reservoir or catch basin, or if the vacuum was operated without the Vacuum Pickup Tube in place. If this has happened, the HW-17 should be returned to VPI for inspection and possible motor replacement. This repair is not covered by the HW-17 warranty.

### **Problem: The record does not revolve with the turntable.**

If the Vacuum Pickup Tube is set too high, it will lift the edge of the record off the turntable. The turntable will revolve, but the record will not. To correct this, remove the Vacuum Pickup Tube assembly and adjust the position of the ring. Use the 3/32" Allen wrench provided with the HW-17 to loosen the set screw in the ring that rests on the spring. Move the ring upward (toward the tube) very slightly and tighten the set screw. Be careful not to overtighten and crack the assembly.

The tube should not be so high as to lift the record, but not so low as to pull excessively on the record and inhibit vacuuming.

## **VPI Industries, Inc. Limited Warranty**

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

VPI's obligation to repair or replace defective parts is the purchaser's sole and exclusive remedy. VPI is not liable for any injury, direct or indirect, or property damage arising from the use of the product, or defect in, or failure of the product.

This warranty does not extend to any unit that has been used with a fluid other than VPI record cleaning fluid. Some other commercial fluids can damage both the HW-17 and records.

This warranty does not extend to any unit, the serial number of which has been defaced or altered; nor to any unit that in the determination of VPI contains a defect or malfunction caused by incorrect installation, modification, misuse, servicing by the purchaser or a service technician not authorized by VPI to perform such service; nor does this warranty extend to trivial or cosmetic defects that do not impair the normal functioning of the unit.

VPI reserves the right to make changes in this product without assuming any obligation to install such change in any product previously manufactured by VPI.

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

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

**VPI Industries, Inc.**  
**Upgrades and Parts Order Form for**  
**HW-16.5 and HW-17 Record Cleaning Machines**

Item #	Item	Price	Quantity	Total
3000	White hose clamp	5.00		
3001	8 oz. RCM Fluid	6.00		
3002	1 oz. concentrated RCM fluid (makes 1 gallon)	16.00		
3004	Cork mat	12.00		
3005	45 RPM Tube and Tube Holder for seven-inch records	44.00		
3006	78 RPM Tube and Tube Holder for ten-inch records	44.00		
3007	Knurled black clamping knob	6.00		
3008	HW-16.5 and HW-17 vacuum tubes	26.00		

3010	Record cleaning brush for HW-16 and HW-16.5	36.00		
3011	Vacuum motor (HW-16, HW-16.5) 115 volts	120.00		
3012	Vacuum motor (HW-15, HW-16.5) 230 volts	130.00		
3013	Turntable motor (HW-16, HW-16.5) 115 volts or 230 volts	80.00		
3014	HW-16.5 mod kit with cover	100.00		
3016	HW-16.5 45 RPM kit (center, vacuum assembly)	70.00		
3017	HW-16.5 dust cover	50.00		

3117	Replacement brush (HW-17)	12.00		
3118	Vacuum motor (HW-17) 115 volts or 230 volts	130.00		
3119	Reversible turntable motor	90.00		
3120	HW-17 fluid pump	120.00		
3121	HW-17 complete brush assembly	60.00		
3122	HW-17 waste hose and clamp	12.00		
3123	HW-17 dust cover	60.00		
3124	HW-17 vacuum tube holder with ring	24.00		
3125	HW-17 tube holder outside ring	6.00		
3126	HW-17 brush holder (no brush)	36.00		
3128	Complete 45 RPM kit for seven-inch records	90.00		
3129	Complete 78 RPM kit for ten-inch records	72.00		
<b>Subtotal</b>				
<b>6% sales tax (New Jersey residents only)</b>				
<b>Shipping and handling</b>				
<b>Total</b>				

