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AIR
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**SERVICE & INSTALLATION FOR
K52 & K552
VACUUM UNIT, AIR / VACUUM UNITS
UNITS 1200 SERIES .**

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IMPORTANT SAFETY INSTRUCTIONS
READ ALL INSTRUCTIONS BEFORE OPERATING

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY:

1. Do not use the vacuum on wet surfaces.
2. Use the vacuum only as described in the manual
3. Only the recommended Manufactures attachments should be used on the vacuum.
4. Do not handle the vacuum with wet hands
5. Do not put any objects into the openings of the vacuum.
6. Do not vacuum up anything that is burning such as: cigars, cigarettes, matches, or hot ashes.
7. Do not vacuum up flammable or combustible liquids, such as gasoline. This will trigger an explosion.
8. Do not use the vacuum in areas where flammable liquids may be present.

WARNING: VACUUMS EQUIPPED WITH AIR COMPRESSORS (K552-750) OR VACUUMS EQUIPPED WITH REMOTE AIR SOLENOIDS (K52-9)

1. Over inflation of tires may be dangerous. Please consult your vehicle owner's manual for proper tire inflation.

DANGERS:

This vacuum contains equipment that tends to produce arcs and sparks, which can cause an explosion. This vacuum must be located 18 inches above grade and at least 25 feet from a fuel dispenser.

The vacuum operates on 120-volt AC single phase, three wires electrical power. This vacuum must be connected to a grounded metal permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal, or lead on the unit.

ALL SERVICING OTHER THAN BASIC MAINTENANCE SHOULD BE PERFORMED BY QUALIFIED SERVICE PEOPLE.
SAVE THESE SAFETY INSTRUCTIONS

INSTRUCTION

The American Products / Air King Vacuum is manufactured in a variety of configurations to meet diverse customer needs. This manual has been prepared to aid service personal in installing, diagnosing and repairing American Products Inc. equipment.

In general they come in one type of cabinet styles and three different models.

1. K52 Standard 2 Motor Vacuum 1200 series cabinet. (vacuum only)
2. K552- Two Motor Vacuum with $\frac{3}{4}$ H.P. Compressor 1200 series Cabinet. (Air Vacuum)
3. K52-9 Standard 2 Motor with Remote Air Solenoid 1200 series Cabinet (Air Vacuum Remote)

The Cabinets for the models listed above are made out of 16 gauge stainless steel.

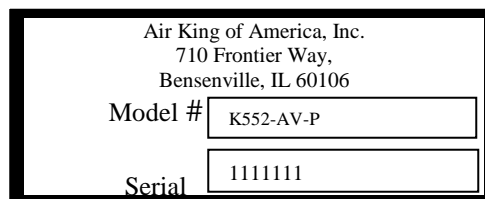
Each of the basic models comes with a variety of optional features.

1. Models can be set up for free operation or coin operation.
2. Cut resistant hose (Air Vacuum & Air Vacuum Remote units only)
3. Single hose reel assemblies (Air Vacuum & Air Vacuum Remote units only)
4. JB 7 Lock Box for coin box security.

UNIT IDENTIFICATION

The model number and serial number appear on a metal tag, bearing the American Products Inc. name (See Figure1 below). The identification tag is found inside the upper compartment.

Figure 1.



Technical Support:

Our technical support staff is available at 1-800-542-3336 during normal business hours to answer any questions regarding machine operation, components or spare parts. When calling for technical support it is extremely helpful to have the serial # and machine model # readily available.

SERVICE AND WARRANTY

WARRANTY STARTS FROM DATE OF INVOICING

- 1) Air Compressors are warranted for defects in materials and workmanship for 18 months.
- 2) Multi Coin timers part # 1512 & 1515 are warranted for defects in materials and workmanship for one year.
- 3) Hoses and air gauge's are warranted for thirty days from Manufacturer defects
- 4) All other parts of the unit are warranted for ninety days.
- 5) Warranty covers parts and materials only, warranty does not include labor or transportation costs of any kind.
- 6) If unit or parts are returned to the factory at the customers expense, there will be no charge for labor.
- 7) Vandalism or misuse of equipment, or tampering is not covered under warranty.
- 8) No returns will be accepted without a prior R.G.A. (RETURNED GOODS AUTHORIZATION).

For Service Call or Write:

Air King of America, Inc.
701 Frontier Way
Bensenville, IL 60106

Phone# 800-542-3336
Fax # 630-350-8011

GENERAL SPECIFICATIONS

AIR KING MODEL K52

1. Four bag filter system for longer life.
2. Two twin stage 1.7 H.P. high performance vacuum motors.
3. 15 foot X 2 inch Industrial grade, crush resistant and clog resistant hose with nozzle at the end of the hose.
4. Cabinet construction 16 and 11 gauge stainless steel or cold rolled steel powder coated with a clear coat finish.
5. Separate timer for each function vacuum or air.
6. Money box secured with two medco plug locks on the 1200 series vacuum.

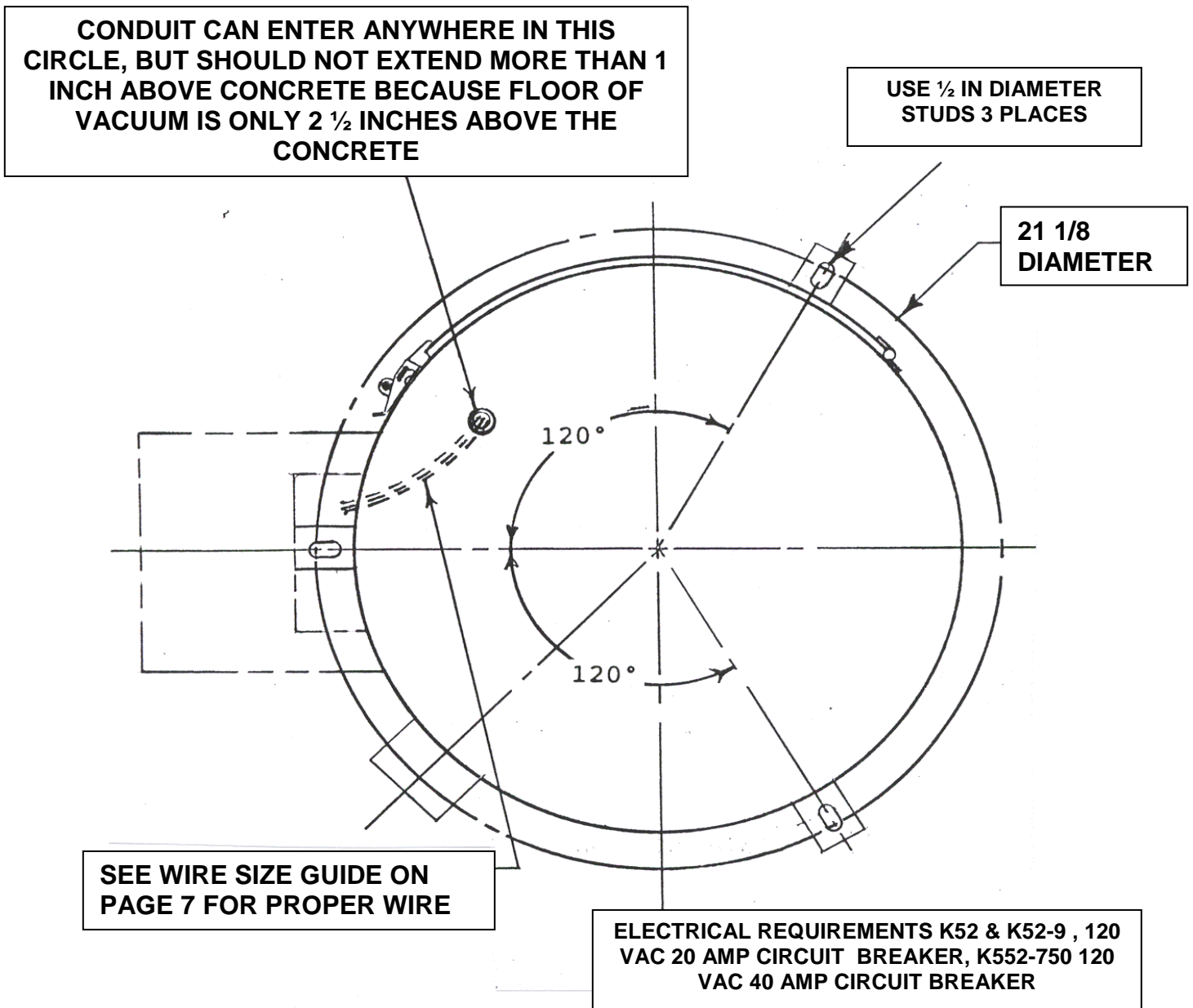
AIR KING MODEL K552-

1. High quality $\frac{3}{4}$ H.P. Industrial compressor.
2. Choice of standard red hose or cut resistant black hose.

MODEL	COMPRESSOR H.P.	VACUUM PEAK H.P	CFM 2.5 ORIFICE	ELECTRICAL RATING (VACUUM)	SHIPPING WEIGHT
K52	None Vac Only	1.7 each	109	60HZ 18AMPS	150 LBS
K552	$\frac{3}{4}$ or Remote Air	1.7 each	109	18 AMPS VAC 13 AMP Comp.	200 LBS

NOTE ALL SPECIFICATIONS ARE FOR 1200 SERIES VACUUM MACHINES

MOUNTING INSTRUCTIONS AND PATTERN



CONCRETE BASE SHOULD BE A MINIMUM OF 26 INCHES LONG BY 26 INCHES WIDE 36 INCHES HIGH. CONCRETE BASE SHOULD BE BURIED 24 INCHES IN THE GROUND. CONCRETE BASE SHOULD SIT UP A MINIMUM OF 12 INCHES ABOVE GROUND LEVEL OR CAR BUMPER HEIGHT.

OPERATING INSTRUCTIONS

To operate a K52 Vacuum coin operated model follow these instructions:

- A. Insert correct amount of coin or coins into the money slot of the machine.
The machine will then start.
- B. Take two inch vacuum hose off hose hanger and proceed to vacuum vehicle.

To operate a K52 Vacuum free operated model follow these instructions:

- A. To start machine there will be either a toggle switch or pushbutton switch to turn machine on either move switch up or down to start or simply push the button to turn vacuum on.
- B. Take two inch vacuum hose off hanger and proceed to vacuum vehicle.

To operate a K552- or a K52-9 Air Vacuum and Air Vac. remote follow these instructions.

- A. To operate the Vacuum side insert the correct amount of coin or coins into the money slot on the right hand side of the vacuum control box. The vacuum will then start, repeat the step B above and proceed to vacuum vehicle.
- B. To operate Air side insert the correct amount of coin or coins into the money slot on left hand side of the vacuum control box. The Compressor will then start. Take hose off of hose hanger or out of reel assembly place end of hose on valve stem of tire. You will have to hold the end of the hose on to the valve stem.
- C. Depress handle on air gauge and begin to fill tire. To check air pressure in tire leave hose end on valve stem and let up on handle of gauge. The gauge will pop out showing the air pressure in the tire.

BASIC MAINTENANCE

1. Removal of Money Box 1200 Series Vacuum
 - A. Remove the two medeco plug locks with keys on front of the money box face plate, rotate lock counter clockwise until you hear a click, pull lock completely out. Use a 5/16 allen wrench to loosen bolts where the locks were, turning bolts counter clockwise. When bolts are loose remove the money box faceplate. Coin box or boxes are sitting behind faceplate.

2. Reinstall Money Box 1200 Series Vacuum
 - A. Replace coin box or boxes in unit, place money box face plate back into position using 5/16 allen wrench line up bolts and tighten. Replace medeco plug locks. Turn locks clockwise half of turn until they click. Remove keys unit is now secured.

3. Cleaning Out Refuse Area 1200 Series Vacuums
 - A. Refuse area must be cleaned periodically. Refuse area is located behind lower door on unit. If refuse is caught in the filter bags close lower door and open top door and shake bags until refuse drops. Finish cleaning out lower refuse area.

4. Dome Removal 1200 Series Vacuums
 - A. The dome is held on with four allen head screws. When the screws are removed the dome may be lifted straight upward and off the unit.

5. Cleaning Exterior of the 1200 Series Vacuums
 - A. To remove scratches, paint, and dirt use soap and water or a cleaning solution. Use a nylon scouring pad such as a scotch brite and rub with the grain of the metal. Do not use steel wool and do not scrub decals.

POWER HOOK UP

Remove Money Box Face plate on 1200 Series

1. Remove two bolts holding the seam cover located below the Money Box face plate at the bottom of the machine.
2. Two of the bolts are in the control box where the coin boxes set. Remove locks and money box face plate. Remove coin boxes bolts are located behind the coin boxes. Refer to Basic Maintenance for lock removal.
3. Run the power wire from the stub up through the hold provided at the bottom of the unit. (See wire size guide on page 7)
4. Splice the power wire and the three wires from the unit together. Splice the same color wires together. If you are unsure which wires to splice call a qualified electrician. The use of wire nuts for splicing is strongly recommended.
5. To replace the seam cover reverse step one.

REPLACEMENT OF PARTS

Dome Removal 1200 Series Vacuums

1. The dome is held on with four allen head screws. When the screws are removed the dome may be lifted straight upward and off the unit.
2. Under the dome is where the vacuum motors, fuses and the compressor will be.

Vacuum Motor replacement of the 1200 Series Vacuums

1. Turn power off the unit.
2. If unit is K552-750 the air compressor must be removed first. (See instructions below for compressor removal).
3. Disconnect the wires from the vac motors. Remove the six bolts holding down the exhaust manifold. Remove the four screws (two per motor) holding the vacuum motors to the exhaust manifold. Lift manifold up and out of the unit. The motors may have to be rotated to be removed. Be sure to check motor gasket and screen to see that they are fastened tight
4. If you ordered new gaskets and screens with motor remove old gasket and adhesive strip off of gasket place screen on gasket over hole. Take gasket and screen and press adhesive side down onto where the old gasket and screen were.
5. To install motors follow in reverse the above procedure.

Air Compressor Replacement for 1200 Series Vacuums.

1. Turn Power off to unit.
2. Remove Air hose.
3. Disconnect wires to compressor
4. Remove bolts holding bracket.
5. Lift compressor and bracket together as a unit up from unit. (Compressor weights 26 pounds)
6. Remove four bolts holding compressor to bracket and take old compressor off of bracket
7. To install new compressor follow the procedures above in reverse order.

Fuse Replacement for 1200 Series Vacuums

1. Turn power off to unit.
2. The fuses are located under the dome mounted on the control box.
3. Only use 3AB 20 amp 250 volt fuses.

Electrical Plate for 1200 Series Vacuums.

1. Turn power off to unit
2. The electrical plate is located in the control box of the vacuum directly behind the coin acceptors. To get to the electrical plate use the round key you received with your unit, open the coin op face plate. You will see the coin acceptor or acceptors are connected to the timer or timers. The electrical plate is what the timers, ground faults or terminal blocks are attached to.

3. You can remove the entire electrical plate by disconnecting the motor connections and power line. Remove the three nuts in each upper right and left hand corner and one at the bottom in the middle.

4. This will allow you to receive the timer and replace them if necessary.

Filter bag replacement for the 1200 Series Vacuums.

1. Removal

- A. Open upper service door and lower, clean out door located on the left side of the vacuum.
- B. Firmly grasp top filter ring at the top going through the service door and lift toward the top of the unit. The top filter ring is hooked into an eyebolt. Slide the filter ring out of the eyebolt.
- C. The filter can now be pulled down and out through the bottom clean out door.
- D. To replace filter bags repeat procedure by reversing the above procedures.

2. Preparing new filter bags

- A. Remove A ring from top of the old bag by rotating the A ring counter clockwise until the ring is out of the bag.
- B. Remove bottom B ring from the bottom of the bag by rotating the ring out of the hold provided.
- C. To install rings in new bags by reversing the above procedures.

Installation of the vacuum hose.

1. When the vacuum is shipped the vacuum hose is in the top of the box the unit came in.
2. The hose must be screwed counter clockwise into the vacuum inlet on the right side of the vacuum.

Installation of the air hose on Models K552-, K52-, Series Vacuums.

1. When the vacuum is shipped the air hose is located in the bottom of the vacuum.
2. Insert the hose through the hose guard on the left hand side of the vacuum. Run the hose to the quick coupler on the compressor or solenoid valve on the K52-9 models. Push the quick coupler open and insert hose coupler on the end of the hose into the quick coupler. Holding the hose coupler into the quick coupler release the quick coupler. The hose is now hooked up.

TROUBLE SHOOTING

This part of the manual was designed to help you with any minor problems or repairs you may have with your AIR KING Vacuum 1200 Series.

Problem: Vacuum will not start up. Check circuit breaker in building. If the breaker in the building has not kicked out go out to the machine and do the following:

1. Check ground fault interrupter on Model K52 vacuum only. (Air vacuum model K552 do not have ground fault interrupters). If reset button is popped out this shows that there is a short of some kind in the machine. Shut breaker off inside building and check for loose wire connections.
2. Extremely wet or humid weather conditions may affect vacuum operation. Shut breaker off in building dry out machine and ground fault interrupter. Spray all wire connections with a contact cleaner to protect them from moisture. Do not spray any contact cleaner on or into the ground fault interrupter. (Note K52 Models only)
3. After checking ground fault turn breaker in building on. Push reset button on ground fault and start machine.
4. If machine still does not start and ground fault kicks out then check fuse underneath the dome. (See parts identification section for location of fuse. See page 8 for fuse replacement) Replace fuse push reset on ground fault and start machine. If machine still does not start you may have a possible bad vacuum motor or timer. Call American Products Inc for service.
5. Check for jammed coins in coin acceptor. Clear coins out if jammed.
6. Check coin switch on coin acceptor for bent or broken activation wire. If bent straighten wire if broken replace.

Problem: Compressor will not start up K552 models only. Check circuit breaker in building, if the breaker in the building has not kicked out shut off breaker and go out to the machine and do the following;

1. Check fuse underneath the dome. (See parts identification section for fuse location. See page 8 for fuse replacement) Replace fuse.
2. Turn circuit breaker back on and start Air Compressor side of air vacuum. If compressor does not start you may have a short in the compressor motor. Call American Products Inc for service.
3. Check for jammed coins in coin acceptor. Clear coins out if jammed.
4. Check coin switch on coin acceptor for bent or broken activation wire. If bent straighten, if broken replace.

Problem: If circuit breaker in building has kicked out. For K52 & K552 models.

1. Reset breaker, try and restart machine.
2. If machine does not start you may have a bad or weak breaker. Replace breaker and try to restart machine.
3. If machine does not start you may have a short, or you may have too much of a load running off of the same line. The vacuum and the air vacuum should have their own separate line. The vacuum model K52 requires a 30 amp breaker. The air vacuum model K552 requires a 40 amp breaker.
4. If the compressor in the vacuum model K552 hums at the start check to see what size wire you are running to the unit and how far the unit is from the fuse box. If the wire running from the breaker inside the building to the vacuum unit is too small a gauge the compressor will not start and run properly. Refer to the wire size guide on page 5 of this manual for the required size.

Problem: Vacuum runs but has no suction.

1. Check for clogged or broken hose. Check for open door or damaged door gasket, if gasket is damaged replace it.

Problem: Vacuum has low suction.

1. Check for plugged filter bags. Clean out bags if plugged. Check for holes in filter bags replace if necessary. Check for leaking door gaskets, replace if necessary.

Problem: Unit vibrating or has high pitched motor noise.

1. Check for dirt or junk in vacuum motor. Make sure gasket and screens are secure if they are not secure then replace them. Check vacuum filter bags for holes. Replace them if necessary.

Problem: Air compressor has no pressure.

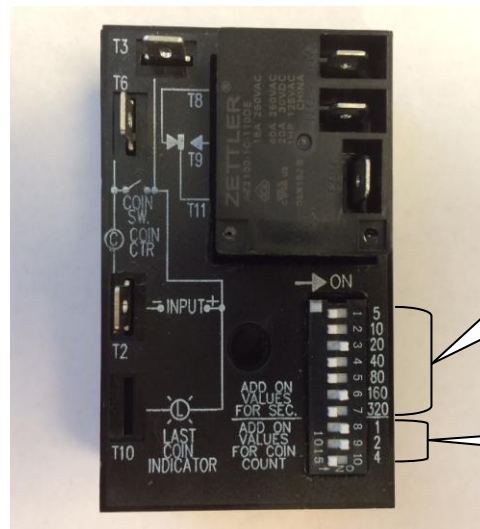
1. Check hose end make sure that chuck on the end of the hose has the chuck washer and deflator pin still in place. If unit is more than a year old and has a heavy use then the relief valve may need to be replaced. Check felt filter, if filters are dirty clean them out and replace them.

K52-9 Remote air unit no compressor equipped with solenoid valve.

1. The solenoid valve on the K52-9 remote air unit becomes clogged and stays open. Disconnect hose from valve, clean out debris around the valve and reattach. If valve is still does not operate properly the replace valve.

VACUUM MACHINE TIMERS

Timer Part # 1511 multi pulse Infitec ASCR . To adjust time and coins follow directions below:



Switches 1 thru 7 Are **Time setting switches**. Combine number of seconds to set the time: Here
Switch #3 (20 Seconds) &
Switch #6 (160 Seconds) are ON for a total run time =
 $20+160=180$ Seconds (3 minutes)

Coin setting Switches, 8, 9 & 10
Combine number of coins to set the total coins. Here
Switch # 8 (1 coin) and
Switch # 9 (2 coins) for a total of :
3 Coins / Quarters

Timer Part # 1512 multi pulse Infitec ASCR 540. To adjust time and coins follow directions below:

