



Base

DENTAL SYSTEMS **VAC**TM

M-VAC SERIES INSTALLATION GUIDE

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IMPORTANT INFORMATION

INTENDED USE

To provide vacuum suction during general examinations and procedures conducted by qualified dental professionals.

DISPOSAL OF EQUIPMENT

At the end of product life, the unit(s), accessories, and other consumable goods may become contaminated from normal use. Consult local codes and ordinances for proper disposal of equipment, accessories and other consumable goods.

TRANSPORTATION / STORAGE CONDITIONS

Ambient Temperature Range.....0°F to 160°F (-17°C to +71°C)
Relative Humidity10% to 90% (non-condensing)
Atmospheric Pressure500hPa to 1060hPa (0.49atm to 1.05atm)

SAFETY SYMBOLS



DANGER

Indicates an imminently hazardous situation which will result in serious or fatal injury if not avoided. This symbol is used only in the most extreme conditions.



WARNING

Indicates a potentially hazardous situation which could result in serious injury if not avoided.



CAUTION

Indicates a potentially hazardous situation which may result in minor or moderate injury if not avoided. It may also be used to alert against unsafe practices.



EQUIPMENT ALERT

Indicates a potentially hazardous situation which could result in equipment damage if not avoided.

NOTE

Amplifies a procedure, practice, or condition.

BASEVAC™ SYSTEMS ARE MANUFACTURED BY:



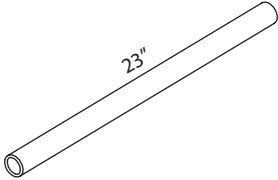









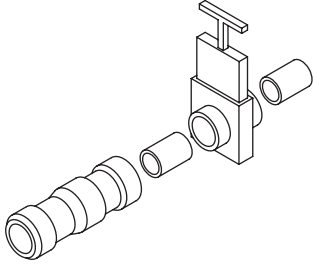
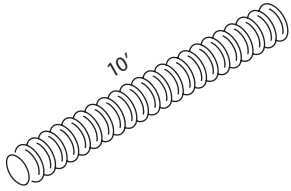
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Visit www.basevaccidental.com for frequently asked questions, user submitted installation photos and downloadable resources.

LOOSE PARTS

M-VAC SERIES

1HD4.16 / 1HD4.25 / 1HD4.40

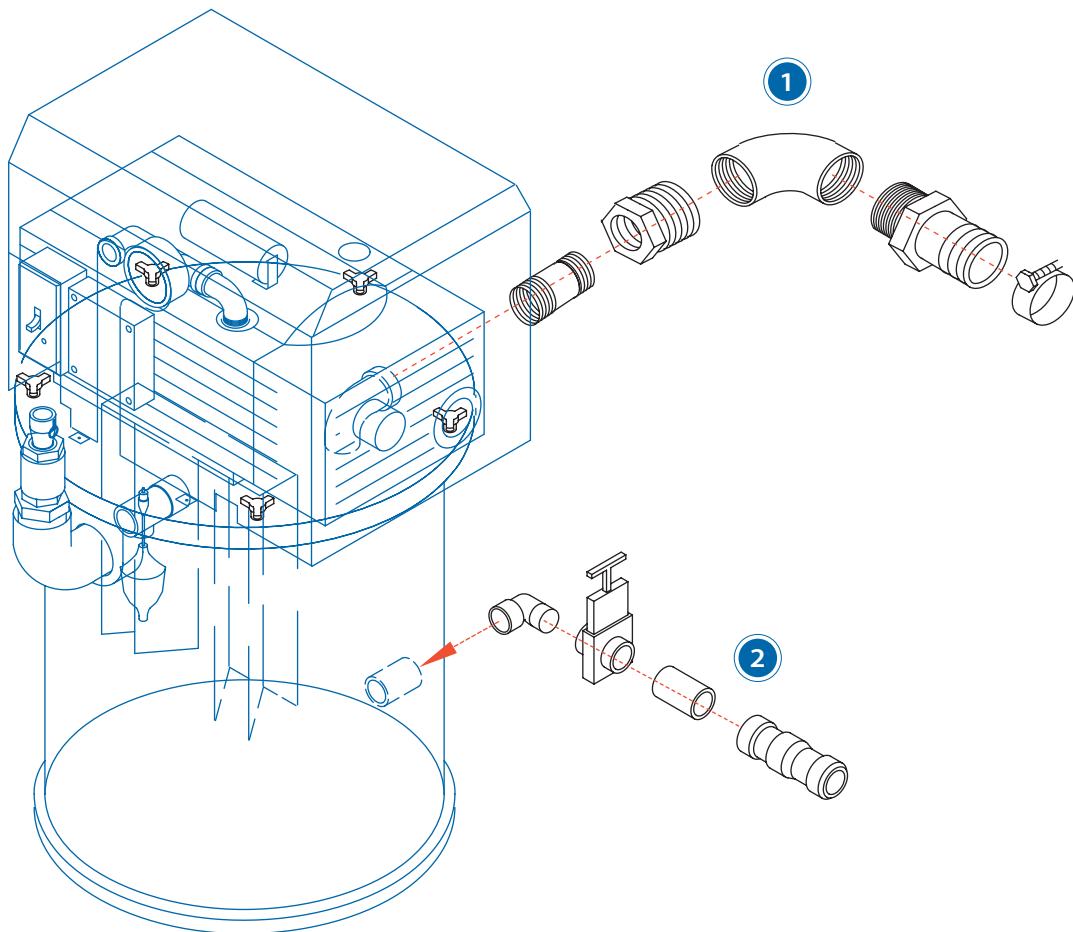
| | | | | | |
|--|---|---|--|---|---|
|  <p>23"</p> | |  <p>4"</p> |  |  | |
| x1 | | x2 | x2 | x1 | |
|  |  <p>5"</p> |  |  |  |  |
| x1 | x1 | x1 | x1 | x1 | x1 |
|  | | |  <p>10'</p> | | |
| x1 | | | x1 | | |

COLLECTION TANK SETUP

NOTE

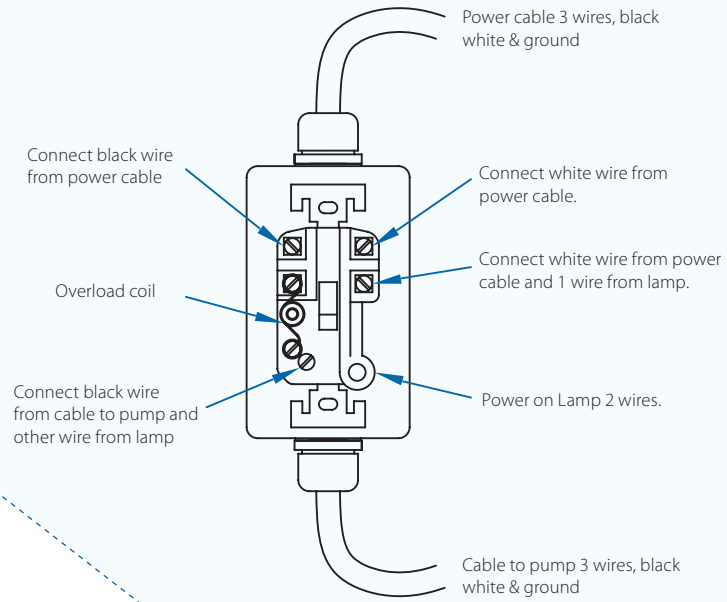
All connection hardware except for drain piping is included.

- 1 Assemble inlet kit and fasten onto tank inlet.
- 2 Connect the tank drain outlet hardware to the drain connection located at the bottom of the tank. Make sure that the gravity check valve flap is hanging down. The check valve has a 1.5" PVC compression fitting for connection to a drain (drain piping is not supplied). These fittings should be fastened with PVC glue.

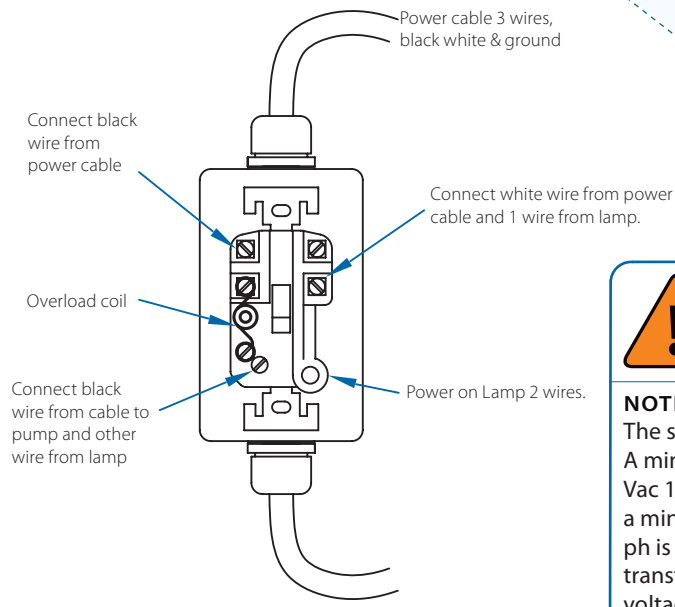


ELECTRICAL CONNECTIONS

220 VOLT



115 VOLT



WARNING
All electrical connections are to be completed by qualified personnel only.

NOTE
The standard panel is a 220 Vac 1 phase connection. A minimum of 215 Vac 1/ph and a maximum of 240 Vac 1/ph is to be connected. For a 115 volt connection a minimum of 108 V 1/ph and a maximum of 122 V 1/ph is to be connected. If below or above, a buck-boost transformer should be installed to maintain proper voltage. This input voltage should be checked at least 3 times daily to ensure stable voltage, in some cases voltages may vary from the load in the area during different times of day.

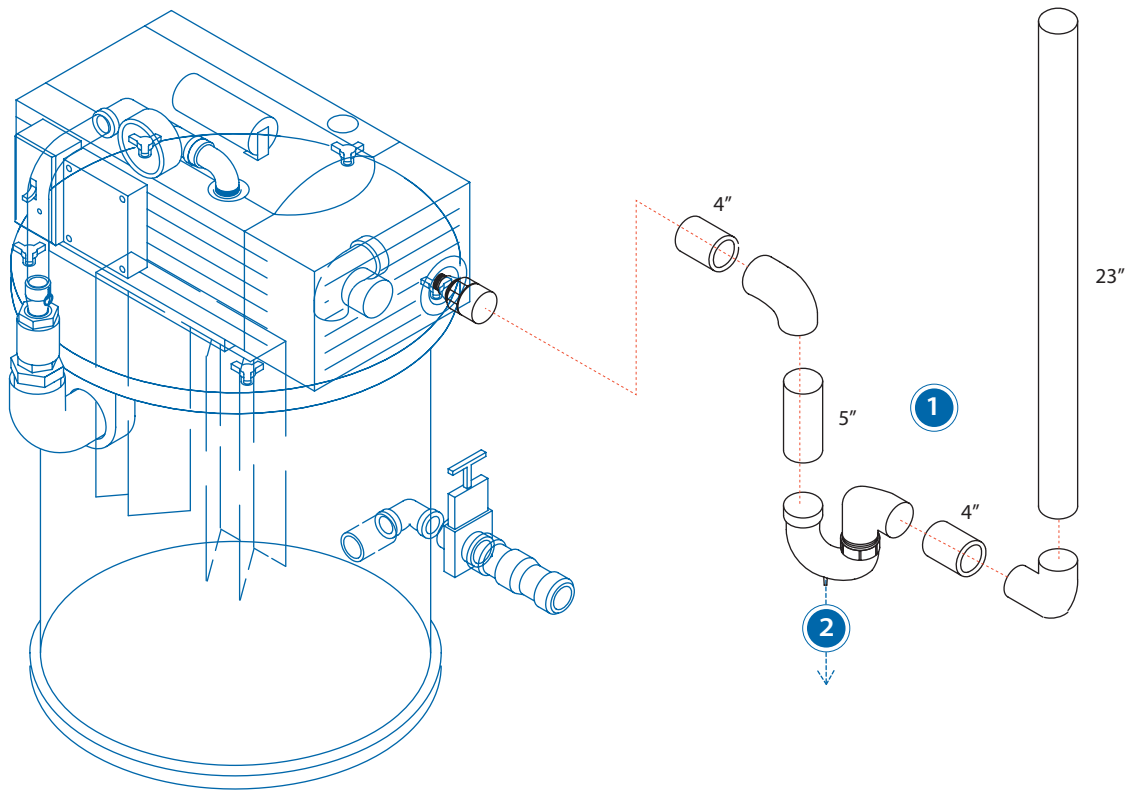
- 1 Plug receptacle into 15 amp protected outlet of proper voltage. If connecting directly yo power line (15 amp protected) follow connections as per drawings.

EXHAUST CONNECTIONS (OPTIONAL)

NOTE 1

Pump exhaust piping should run to an outdoor source.

- 1 Assemble piping as shown for your series of pump. Use PVC glue to fasten piping. Extension to outside is to be supplied by others.
- 2 Connect hose barb located on bottom of p-trap and elbow to drain. (Hose is not supplied)



PRODUCT SPECIFICATIONS 1HD SERIES



| | MAX # OF (HVE) USERS | SUCTION POWER ("HG) | POWER (HP) | POWER (AMP) | VOLTAGE | NOISE LEVEL (DBA) | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|------------------|----------------------|---------------------|------------|-------------|------------------|-------------------|---------------------|--------------|
| 1HD 4.10M | 1 | 25 | 0.60 | 7.6 | 110V, 1 Phase | 64 | 17 x 30 | 72 |
| 1HD 4.16M | 2 | 25 | 0.94 | 5.2 | 220V, 1 Phase | 67 | 17 x 30 | 86 |

TROUBLESHOOTING GUIDE

| PROBLEM | POTENTIAL CAUSE | SYMPTOM | SOLUTION |
|-----------------------------------|---|--|--|
| Pump will not start | Electrical -Main fuse failure | Activate remote switch, nothing happens | - Check main fuse or breaker, reset or replace |
| | Electrical -Breaker OK, pump still will not start | Activate Pump panel switch to ON, nothing happens | - Check and reset overload in pump control panel. |
| | Mechanical -Vaness worn or broken | Pump keeps tripping breaker when turned on | If hour meter shows 6000 to 7000, vanes may have broken and need to be replaced, follow vane replacement guide. |
| | Pump internals have been flooded or seized with rust. | Pump keeps tripping; vanes are OK. Pump rusted inside | Remove vanes (see vane replacement guide). Use sand paper to remove visible rust. Using an Allen key, free the rotor with centre shaft bolt. Clean and replace vanes. |
| Low or Poor Vacuum | Clogging of filters and separators | Gradual drop in suction | - Clean all air filters in the line - Inspect amalgam separator to insure it is not full - Clean air-water separator |
| | Air Water separator full, float blocking inlet | Low or no vacuum | Turn pump off, wait 4 minutes for tank to drain and make sure drain valve is open (handle up) |
| | Pump problem | Sudden drop in suction, vanes noise sounds different | - Inspect the pump for broken vanes using vane replacement guide - Insure vacuum regulating valve is turned all the way in |
| Pump room is excessively hot | Exhaust piping | The pump room heats up during the day. | - Look for and correct leaks, crack or separation in exhaust or piping - Remove outside obstructions, example bird nest, garbage receptacle |
| Liquid leaking from front of pump | Air water separator malfunction | Pump continues to run water leaks from pump exhaust and filter cover. Pump in-line "white" filter bowl full. | - Inspect float switch in air water separator, clean and or replace - If using remote drain pump, check fuse - Remote drain pump - Check for drain obstructions Important: Correct problem and drain water from pump by following steps in vane replacement guide. Dry the pump with rags. Reassemble pump and immediately run the pump for minimum of 4 hours until it is dry. |
| | Condensation in exhaust line | Water is leaking from front of pump but inline "white" filter is dry. | - Inspect and drain drop leg condensate traps on exhaust piping - Insure exhaust piping slopes away from pump exhaust port - Review exhaust piping guidelines |
| Noise in exhaust piping | Vibration from Pump transferred to piping | The resonating sound changes with pump load. | - Check for rigid mounting connections and remove them. - Replace a section of rigid pipe with flex hose. - Install exhaust silencer |
| | | The vibration sound never changes. | - Inspect pump to insure it is installed level with no brackets connected from the pump frame to wall or floor - Insure nothing is leaning against the pump or exhaust piping |