



DENTAL VACUUM SYSTEMS

# System Setup Connections and Scheduled Maintenance Guide

for VacStar Models

VS20

VS40

**Introduction** - This document provides the instructions necessary to install the VacStar Models VS20 and VS40 system into a utility room that is properly prepared for the system to be installed. This means that all site requirements have been met and plumbing and electrical systems are in place prior to making the installation.

**Installation -**

- Place VacStar in prepared utility site.
- Connect the operatory main line to the Intake solids collector inlet port.
- Connect the exhaust port of the VacStar to the facility drain
- Connect facility water to the push to connect water inlet connector.
- If installing a 24V remote switch, refer to the 24V Connections of this guide.
- Connect VacStar to the appropriate facility power.



VS20

**Important -**

- Make sure to install the system in accordance with all local electrical and plumbing codes.
- Make sure to efficiently use space by making connections as short and direct as possible to meet your particular site requirements.
- Make sure that all hose connections are straight and secure without any sharp bends or kinks.
- Since the vacuum hose is rigid, make sure not to stress connections especially at the pump inlet.



VS40

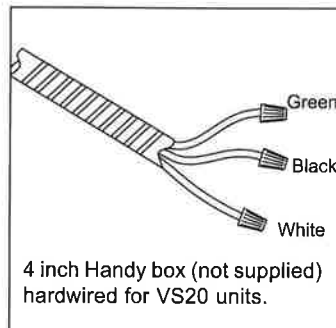
**VacStar Documentation** - Refer to the following VacStar documentation as necessary for more detailed information on the plumbing, electrical connections and site requirements.

- User's Manual, P/N 55151CUL.
- Pre-Installation Guide for Models VS20 and VS40, P/N 55341.

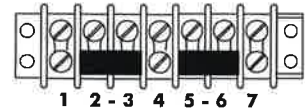
## ELECTRICAL CONNECTIONS

- ⇒ All VS20 VacStars are wired directly via an electrical (Handy) box that complies with local electrical codes to the VacStar's Electrical Connection Box.
- ⇒ The VS20 VacStar can be configured to run on 230 or 115 VAC. It comes configured to run on 230 VAC.
- ⇒ All VS40 VacStars are wired with a supplied hospital grade NEMA 6-15P line cord and requires a hospital grade 6-15R receptacle.
- ⇒ The VS40 VacStar uses 230 VAC only.

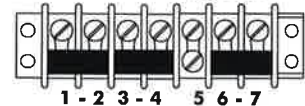
Handy Box Connection



Internal Dual Voltage Jumpers  
230 V, factory set Jumper Tabs  
position shown below



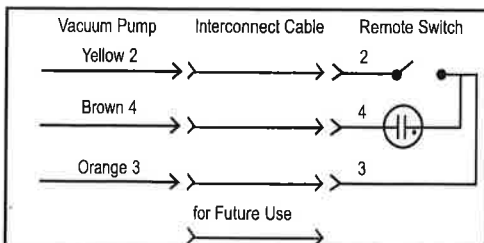
For 115 V, change by placing Jumper Tabs in position shown



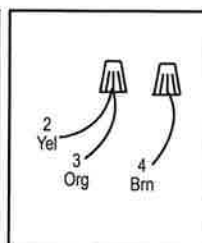
### VS20 115 or 230V Connections

### 24V CONNECTIONS

Connection to 24V Switch Only



Connection without 24V Switch

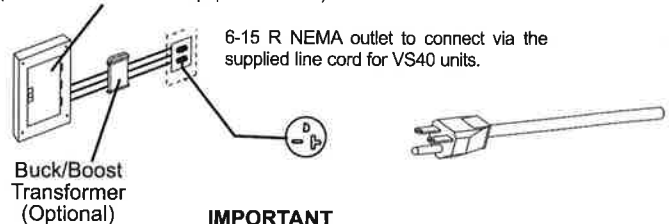


Use 18 Gauge, 4 Conductor, Interconnect Cable Between VacStar Pump and Remote Switch

Interior Electrical Box Connections

### VS40 230V Connections

Building Power Supply Panel  
(Should be located in equipment room.)

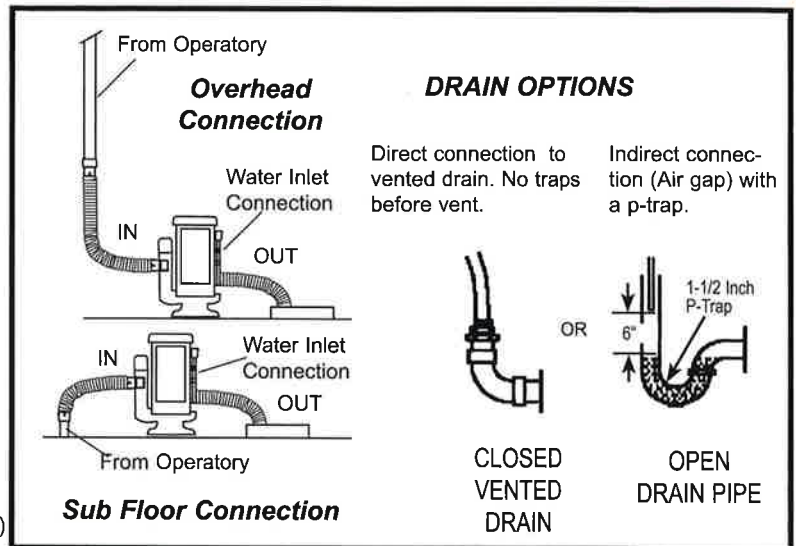
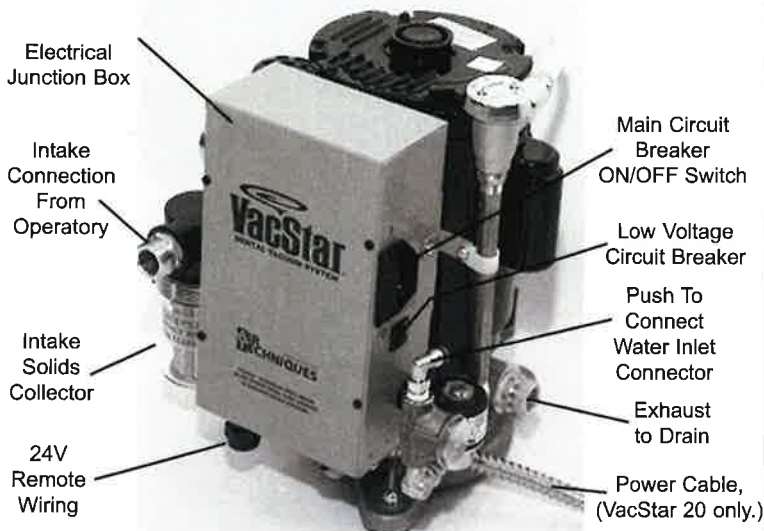


6-15 R NEMA outlet to connect via the supplied line cord for VS40 units.

**IMPORTANT**

Add service disconnect if Power Supply Panel is not located in equipment room.

# PLUMBING INSTALLATION



# SCHEDULED MAINTENANCE

## ☐ Daily Maintenance - Clean vacuum lines

Flush all vacuum lines and tubing in the dental system with Monarch CleanStream Evacuation System Cleaner.

## ☐ Routine Inspection - Monthly

1. Check tubing for kinks or cracks.
2. Check for abnormal noises and leaks.
3. Check exterior surfaces for dirt and debris, clean if necessary.
4. Check that no flammable, corrosive, or combustible materials are stored in the equipment room (especially in the area around the equipment).
5. Refer to the right and check the vacuum relief valve filter, clean if necessary.

## ☐ Intake Solids Collector Replacement - Monthly

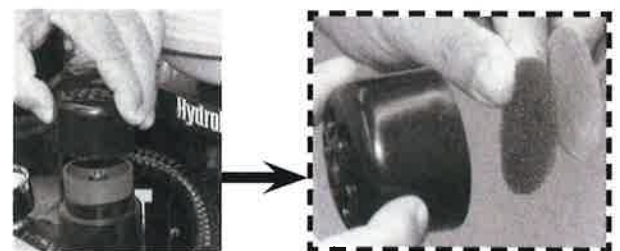
1. Turn off the power and water supply.
2. Unscrew the solids bowl (counter clock-wise) and remove the screen and gasket. Dispose of all three items.
3. Assemble a new bowl, screen and gasket included in the Solids Collector Replacement Kit. 55880 (55880C case of 12 kits).
4. Install the new solids collector by screwing the bowl into the solids collector body.

## ☐ Check/Clean Solenoid Water Inlet Strainer - Semi-Annually

1. Turn off the power and water supply to the equipment.
2. Use a 13/16 inch wrench to unscrew (counter clockwise) the cover nut.
3. Remove the cover nut and strainer.
4. Inspect the strainer and clean as necessary.

### Assembling the Water Inlet Strainer

1. Orienting the assembly with the cover nut facing down as shown, seat strainer into the cover nut.
2. Insert the strainer up into the strainer body and tighten the cover nut.
3. Make sure the strainer stays perpendicular to the strainer body.
4. Push up and tighten the cover nut making sure not over tighten.

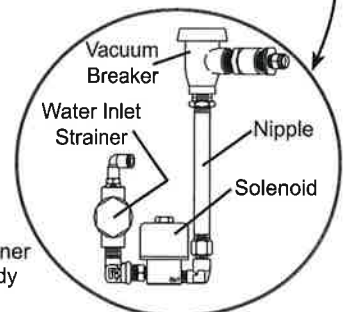
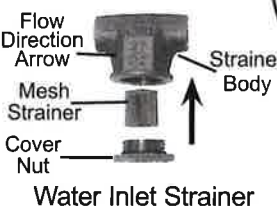


Vacuum Relief Valve Filter



Intake Solids Collector

NEVER OPERATE WITHOUT THE SCREEN INSTALLED IN THE BOWL



[www.airtechniques.com](http://www.airtechniques.com)



Scan QR Code for more about VacStar



Corporate Headquarters  
1295 Walt Whitman Road | Melville, New York 11747-3062, UAS  
Phone: 1-800-247-8324 | Fax: 1-888-247-8481

Western Facility  
291 Bonnie Lane, Suite 101 | Corona, CA 92880 - 2804, UAS  
Phone: 1-800-247-8324 | Fax: 1-951-898-7646



© Air Techniques, Inc Copyright 2014 • P/N 55013, Rev. A • August 2014