

ACADIA[®]

Part Numbers: A1250 and A1350

INSTRUCTION MANUAL



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This manual covers the installation and maintenance of the **Acadia** Amalgam Separator Assemblies PN A1250 and A1350. Although both units provide the same high level solid collection function, the **Acadia** PN A1350, also incorporates an **Acadia Alert** Monitor Module. This addition feature monitors the Solid Collection Filter and provides a visual and audible indication when the filter needs replacement.

Installation tacks include the following:

- Adding to any existing liquid ring or dry vacuum system.
- Installing as part of a new liquid ring or dry vacuum system.

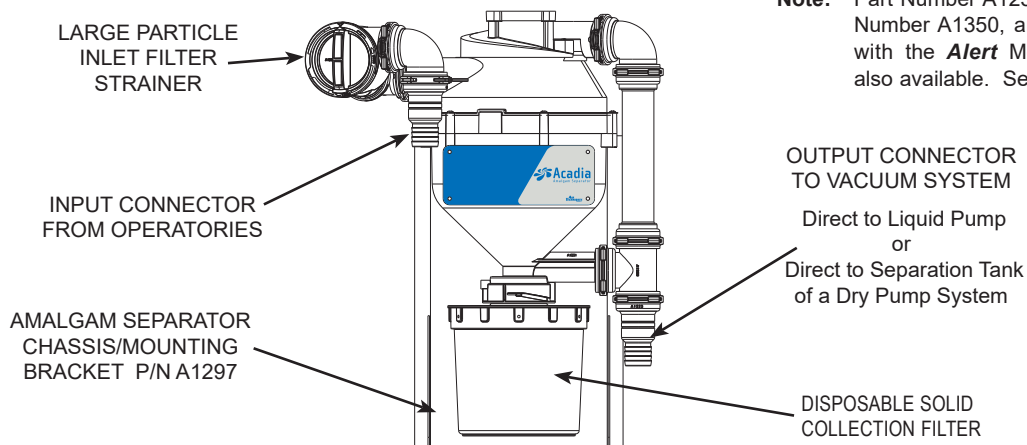
The manual provides additional maintenance and troubleshooting information for each unit, as well as, instructions to replace a **filled** Disposable Solid Collection Filter. The Acadia Amalgam Separator is hereafter referred to as the Separator in this manual. Make sure to review and follow the information specific to your installation to ensure that the Separator provides the highest level of safe service.

Important: Each kit provides the necessary parts to connect to both a STS Pump with CAS Tank and VacStar vacuum systems manufactured By Air Techniques. If the existing installations need different size fittings or hose lengths, they must be provided by the installer.

As shown by Figure 1, both Separator models are designed to exceed ISO 11143 requirements in the removal of amalgam from a dental suction system's wastewater stream. Installed between dental operatories and vacuum pumps, the Separator uses a disposable filter comprised of a sedimentation labyrinth containing articulated foam filters and a granular filter media. Each unit is designed to provide continuous cyclonic separation action of liquids and solids from gases causing a sedimentation process where high-density particles (Amalgam) fall from suspension in the wastewater stream and become trapped within the filters. The unit has been independently tested and certified to ISO 11143.

Features include:

- Capable of processing effluent for up to ten (10) operatories.
- Exceeds the ISO 11143 standard for separation efficiency.
- Continuous cyclonic separation of liquids and solids from gases.
- Reusable large particle inlet filter strainer.
- Minimal maintenance required.
- Disposable Collection Filter.
 - Easily removed using a quarter turn and pull.
 - Transparent housing enables user monitoring of capacity and when to replace filter.
 - Closure Cap provided to seal Disposable Collection Filter for transport.
- Mounting & Connections
 - Multiple mounting configurations (Wall Mount / Floor Mount).
 - Quick and easy installation using included tubing and plumbing fittings.
 - Custom molded clips allow easy assembly and disassembly of connection components.
 - Multiple inlet connection orientations that accommodates standard 1½ inch diameter pipe using a no-hub coupling or provided 1½ ID inch hose.



Note: Part Number A1250 is shown. Part Number A1350, an **Acadia** model with the **Alert** Monitor Module is also available. See page 14.

Figure 1. **Acadia** Amalgam Separator Assembly

SAFETY NOTICE

Knowledge of General Safety

The Separator has been designed to minimize exposure of personnel to hazards. While the equipment is designed for safe operation, certain precautions must be observed. Use of the Separator **not** in conformance with the instructions specified in this manual may result in permanent failure of the unit.

Users must exercise every precaution to ensure personnel safety, and be familiar with the general safety procedures concerning the Separator and associated vacuum systems, which include the following.

- Observe all local codes and relevant regulations when installing the Separator.
- Converting or modifying the Separator in any way is strictly prohibited. In such cases, any and all warranties will immediately become invalid.
- The operator must be knowledgeable in the operation of the appliance.
- The product is not designed to be used in medical treatment areas where there exists the danger of explosion. Areas where explosions could occur are those where flammable anesthetic material, skin cleansers, oxygen and skin disinfectants are present. This appliance is not to be used in areas where the atmosphere could cause fire.

Authorized Dealer Service Only.

The Separator is intended to be installed and serviced **only** by an authorized dealer service technician. Failure to heed this warning may result in equipment damage or personal injury, and will void any and all warranties. Contact your authorized dealer for service information.

Dental Waste Handling

Solid Collection Filters collect waste materials from dental procedures. All maintenance personnel must be familiar with the procedures and practices for handling such dental waste and exercise every precaution to ensure personnel safety. Additionally personnel must follow all local, state and/or federal laws and regulations for the proper disposal of dental waste containing mercury. Any operation, procedure or practice, which, if not strictly observed, may result in injury or long-term health hazards to personnel and should be handled, stored and disposed of according to regulations applying to dental waste containing mercury.

Correct Usage

The Separator is for Dental Use **only**. Any use of the Separator that is not described in this Instruction Manual is deemed to be incorrect usage.

Incorrect Usage

Any use of the Separator above and beyond that laid down in this Instruction Manual is deemed to be incorrect usage. The manufacturer cannot be held liable for any damage resulting from incorrect usage. The operator will be held liable and bears all risks.

SPECIFICATIONS

Number of dental units serviced	Up to 10		
Maximum Liquid flow rate	1 liter per minute (0.26 gal per minute)		
Liquid surge capacity	3 liters (0.79 gal)		
Solids collection capacity	600 mL (0.16 gal)		
Separation efficiency	Exceeds ISO 11143 requirements		
Maximum Vacuum	50.80 cm/Hg (20 in/Hg)		
Inlet Filter Screen Size	6 mm (0.24 in)		
Classification	Type 3 per ISO 11143		
Connection type	3.81 cm (1½ in) Hose barb adaptor with retaining clip		
Mounting	Attached chassis/mounting bracket provided		
Weight (empty)	9.5 kg (21 lbs)		
Dimensions	<u>Width</u>	<u>Depth</u>	<u>Height</u>
	53 cm (21 in)	38 cm (15 in)	69 cm (27 in)

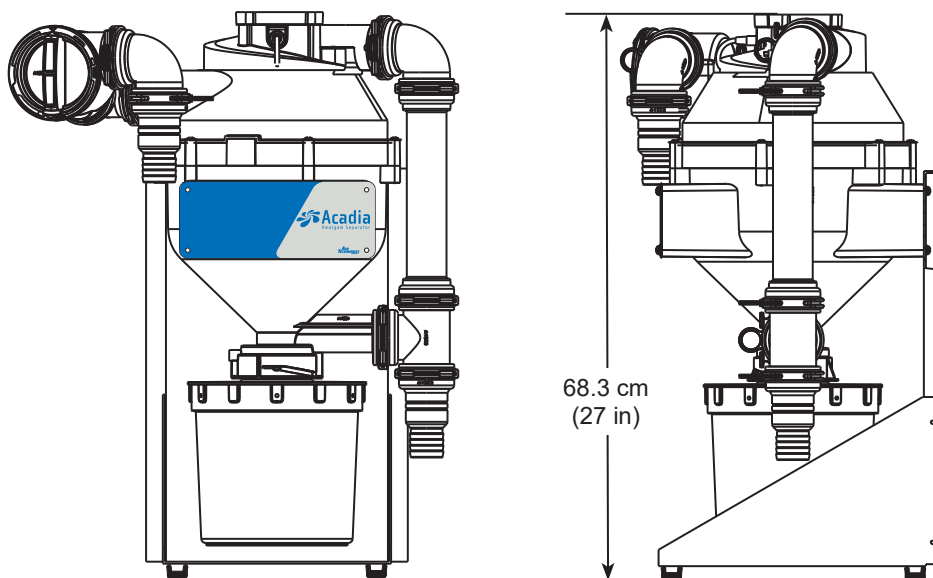
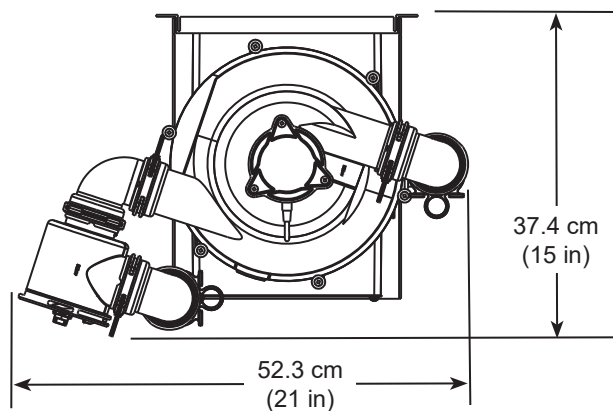


Figure 2. **Acadia** Amalgam Separator Assembly Outline/Dimension Drawing

UNPACKING AND INSPECTION

Unpacking

As shown by Figure 3, the Separator is shipped in a single carton containing the Separator assembly secured to the Chassis/Mounting Bracket, the Solid Collection Filter, inlet and outlet connection fittings and an installation accessory kit. Unpack each component of the Separator and inspect for physical damage such as scratched panels, damaged connectors, etc.

Included Separator Components

Each Separator consists of the components shown by Figure 3. Verify that all listed items were received. If any item is missing, notify Air Techniques.

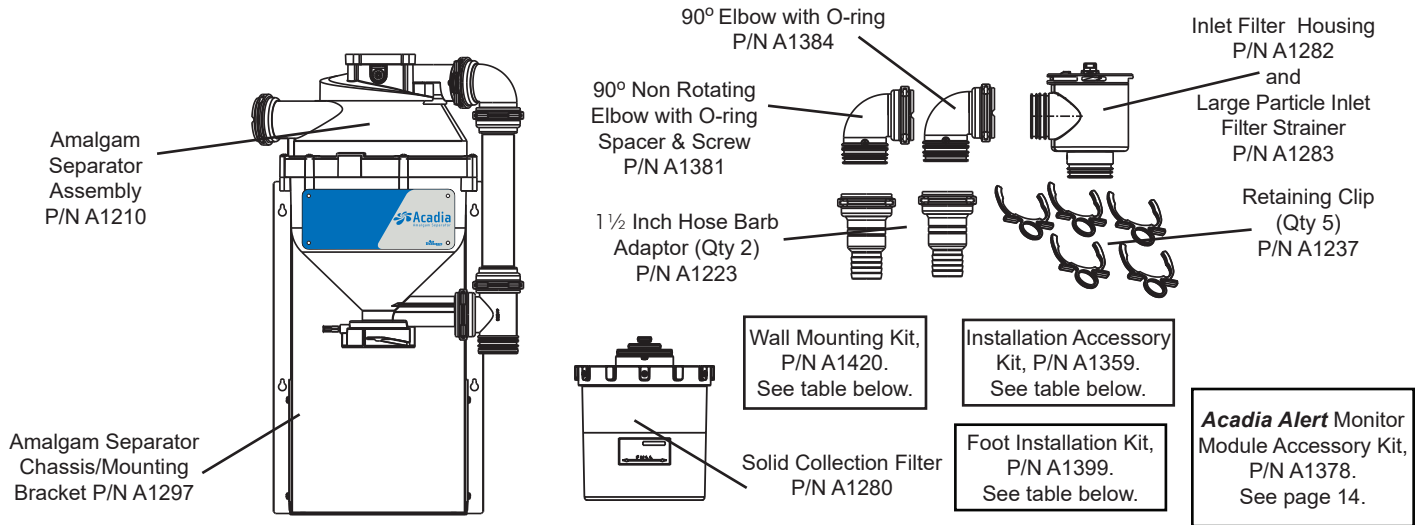


Figure 3. Acadia Amalgam Separator Assembly Component Identification

Important: Installation Accessory Kit, P/N A1359 provides the necessary parts to connect to both a STS Pump with CAS Tank and VacStar vacuum systems manufactured by Air Techniques. If the existing installations need different size fittings or hose lengths, they must be provided by the installer.

Installation Kit Components

The table below lists the supplied parts used to connect the Separator to new or existing vacuum systems.

Installation Kits

Description	Part No.	Quantity
Installation Accessory Kit	A1359	1
1 1/2 inch ID Clear with White Spiral Hose	54521	6 Feet
Note: If more than 6 feet of hose is needed, order additional P/N 54521 by the foot.		
1 1/2 inch MNPT X 1-1/2 inch BARB Connector Adapter	57253S	1
1 1/2 inch SLIP X 1-1/2 inch FNPT PVC Connector Adapter	54234	1
1.31 - 2.25 inch Diameter Hose Clamp	57169	4
1 1/2 inch SPG X 3/4 inch FNPT Reducing Bushing	A1164	1
1 1/2 inch SPG X 1 inch FNPT, Reducing Bushing	55552	1
1 1/2 inch Connector Flexible Coupling (No Hub)	57238	2
Foot Installation Kit	A1399	1
Foot; Non Skid,.5 + .1/-0 HIGH X 1"Diameter, #8 screw	61173	4
Screw; 8-32 X 5/8, Phillips Pan Head, 18-8 S.S.	30463	4
#8, Flat Washer, 18-8 SS	30052	4
8-32, Hex Nut, KEP, SS	31577	4
Wall Mounting Kit	A1420	1
#10 X 1 inch, Anchor, Plastic	30936	4
#12 X 3/4 Type A, Phillips Pan Head,	30935	4
#10, Flat Washer, 18-8 SS	30024	4

Important: The Separator is only installed between the treatment operator and the vacuum system input. DO NOT connect the unit to the outlet of any separation tank (dry vacuum system) or liquid ring pump (wet vacuum system).

Introduction

As shown by Figure 4, a Separator is installed onto either an existing or new dry pump or liquid ring pump vacuum system. The unit is only installed between the treatment operator output and the vacuum system input. This new installation or modification is to be performed by authorized service personnel using similar quality connection hoses and fittings. All installations must conform to local codes and meet all local, state and/or federal environmental laws and regulations.

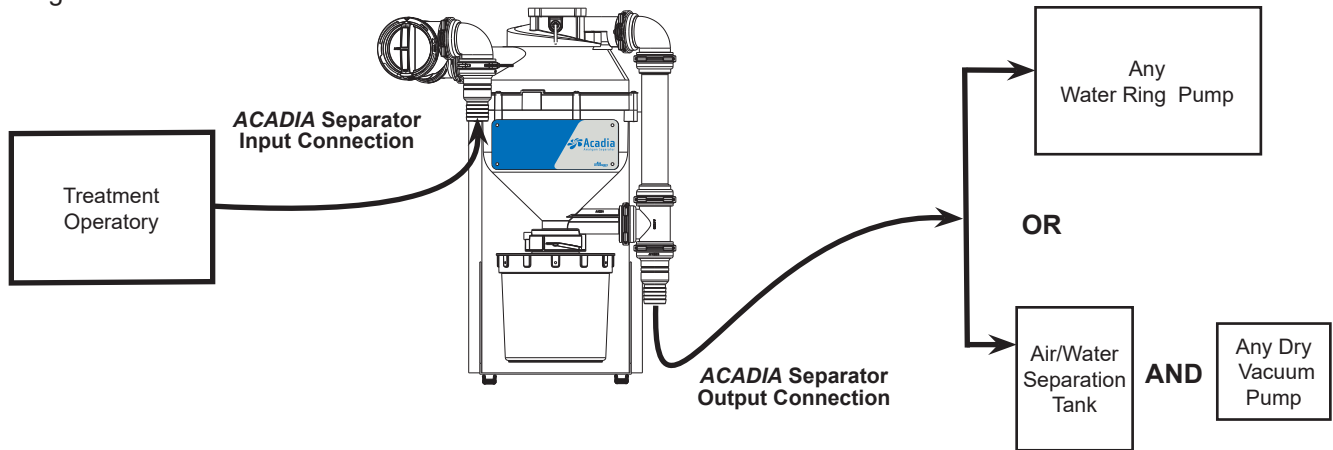


Figure 4. Typical **Acadia** Amalgam Separator Installation Configurations

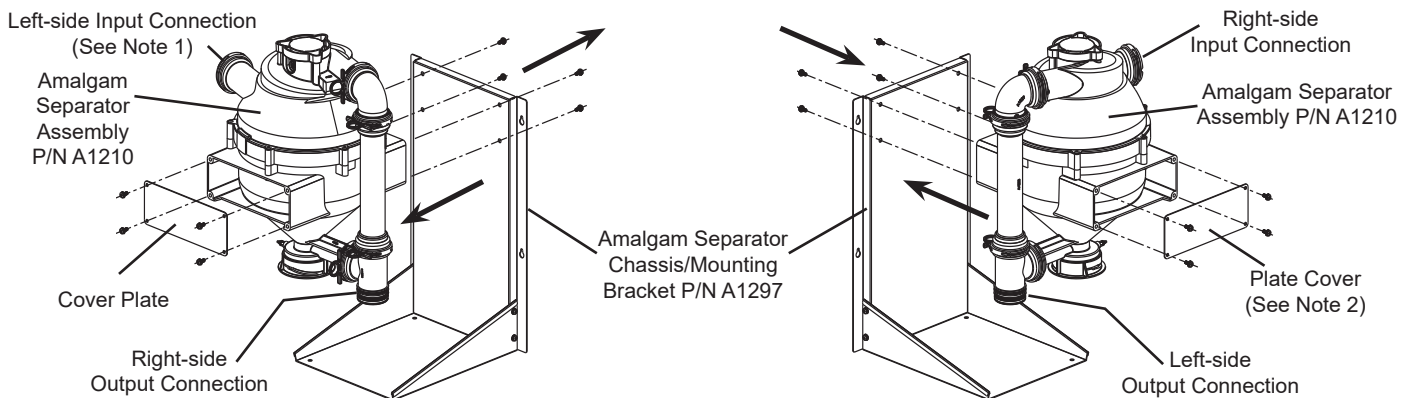
Important: Refer to pages 14 thru 18 when installing an **Acadia** with an **Acadia Alert** Monitor Module, PN A1350.

Input/Output Connector Orientation Option

Although the Amalgam Separator is shipped with the input connector facing to the left-side, the design allows the entire separator assembly to be rotated 180 degrees so the input connector can face to the right side to meet installation requirements. Refer to Figure 5 and perform the following steps to change the connector orientation as necessary.

Note: Make sure to save all removed screws. They are reused during installation.

1. Remove the 4 screws securing the cover plate to the front enclosure of the separator and remove the plate.
2. Remove the 4 screws securing the separator assembly to the chassis/mounting bracket.
3. Rotate the separator assembly 180 degrees and remount onto the chassis/mounting bracket and secure with the 4 screws removed in step 2.
4. Install the cover plate to the front enclosure of the separator and secure with the 4 screws removed in step 1.



Removing the Separator Assembly from the Chassis/Mounting Bracket

Installing the Separator Assembly to the Chassis/Mounting Bracket Right-side Input Connection

- Notes:**
1. The unit is shipped with the separator assembly secured to the chassis/mounting bracket with the input on the left-side.
 2. Install and connect the Amalgam Monitor Module as necessary.

Figure 5. Changing the **Acadia** Amalgam Separator Input to Right-side Orientation

INSTALLATION PROCEDURE

Acadia Amalgam Separator Installation.

Install the Acadia Amalgam Separator onto either an existing or new dry pump (STS Pump/CAS Tank) or liquid pump (VacStar) vacuum system by performing the procedures provided by the following paragraphs.

Acadia Amalgam Separator Mounting.

The Acadia Amalgam Separator can be placed on the floor or hung on a wall. In either installation the Separator must be level, securely mounted and located between the output of the facility Treatment Operator and the vacuum system input.

Refer to Figure 6 and mount the Separator assembly as shipped (secured to the Chassis/Mounting Bracket) to an existing wall using lag bolts. The structure and bolts should be capable of supporting 25 pounds. Mount directly using the four pre-drilled Keyhole Mounting Holes in the Chassis/Mounting Bracket. Molly bolts may be used providing they and the wall are capable of supporting the load.

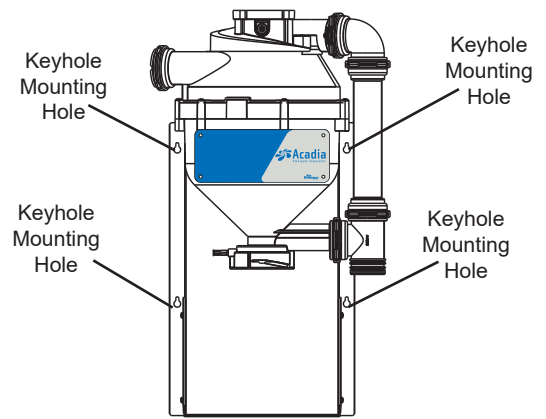
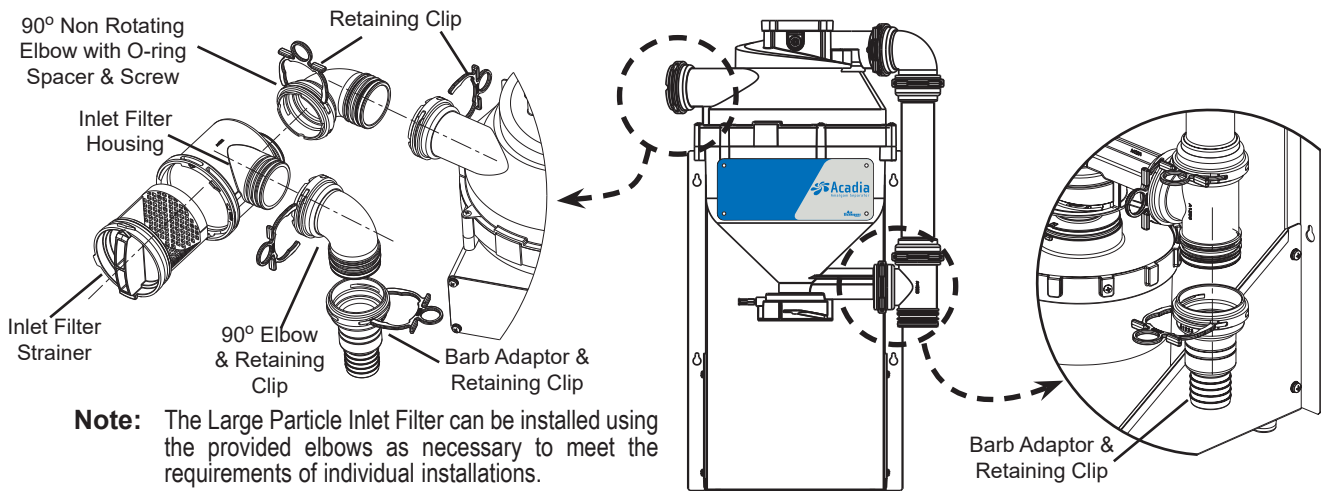


Figure 6. Separator Wall Mounting

Inlet and Outlet Connection Fittings Installation.

Refer to Figure 7 and install the Inlet and Outlet Connection Fittings as necessary. Each part slips over the associated connection point and is secured by an individual retaining clip. The Large Particle Inlet Filter Strainer can be installed using all or none of the provided elbows as necessary to meet the installation space requirements.



Note: The Large Particle Inlet Filter can be installed using the provided elbows as necessary to meet the requirements of individual installations.

Figure 7. Separator Inlet and Outlet Connection Fittings Install Locations

Solid Collection Filter Installation.

Refer to Figure 8 and install the Solid Collection Filter as follows.

1. Remove the cover from the filter and save for future filter replacements.
2. Align the two tabs of the filter with the corresponding slots of the collar.
3. Lift the Solid Collection Filter into place and secure by turning to the left.
4. Record the installation date on the label.

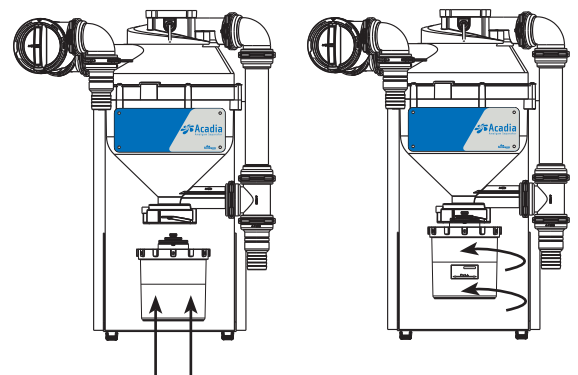
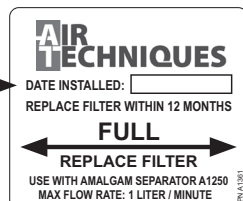
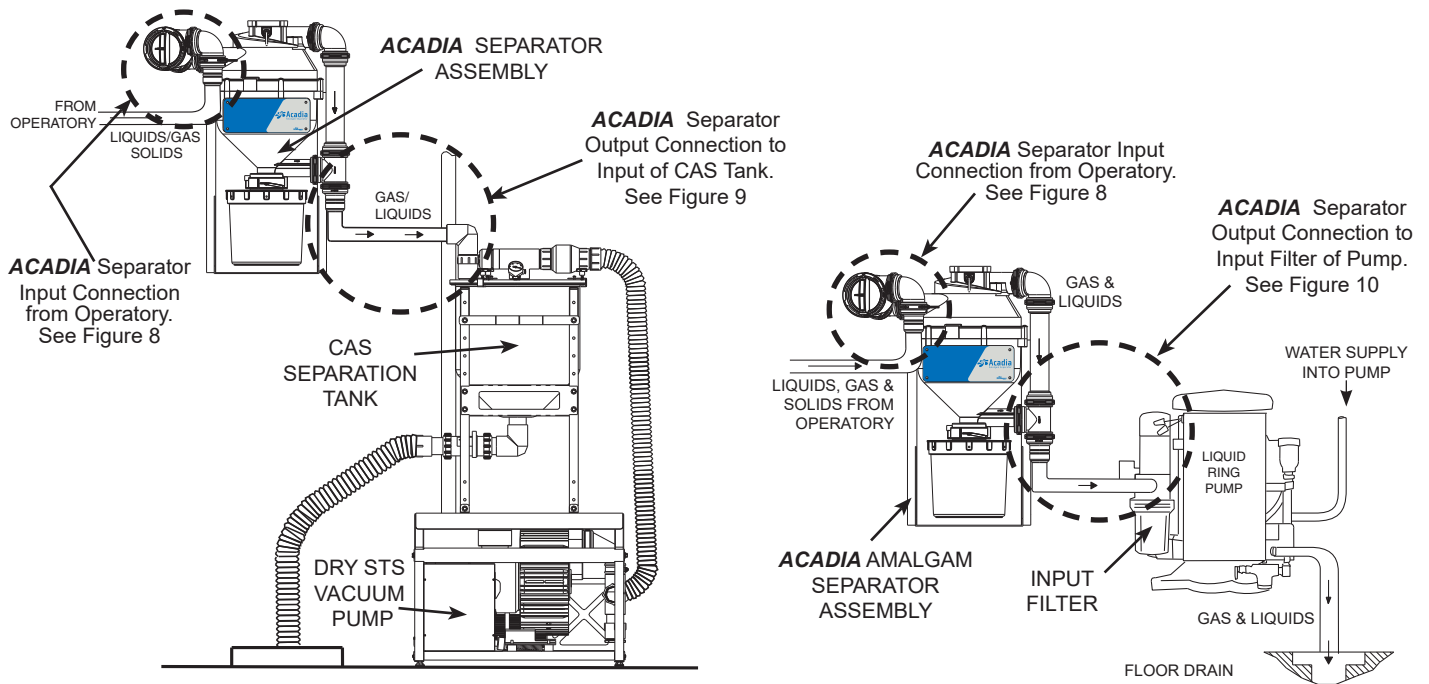


Figure 8. Solid Collection Filter Installation

Standard Separator.

Figure 9, shows standard Separator installations as part of a new or in an existing STS Pump/CAS Tank (dry pump) or VacStar (liquid pump) vacuum system manufactured by Air Techniques



Single Pump System Shown using an Air Techniques CAS Separation Tank. Dual Pump Systems are Connected the Same.

Single Pump System without a Separation Tank Shown. Dual Pump Systems are Connected the Same.

Figure 9. Typical **Acadia** Amalgam Separator Installation Configurations

Separator Connection to the Treatment Operatory Output.

Typical VacStar and STS/CAS installations use 1-1/2 inch PVC piping for the output from the facility Treatment Operatory. Refer to Figure 10 and connect Separator to the operatory piping as follows.

1. Install the 1/2 inch SLIP X 1-1/2 inch FNPT connector adapter to the operatory output piping.
2. Install the 1/2 inch MNPT X 1-1/2 inch BARB connector adapter and tighten.
3. Measure the distance between the BARB connector adapters of the operatory outlet and the Separator input. Cut the required length from the supplied 1-1/2 inch hose. Install the hose between the fittings and secure with 1-1/2 inch Hose Clamps.

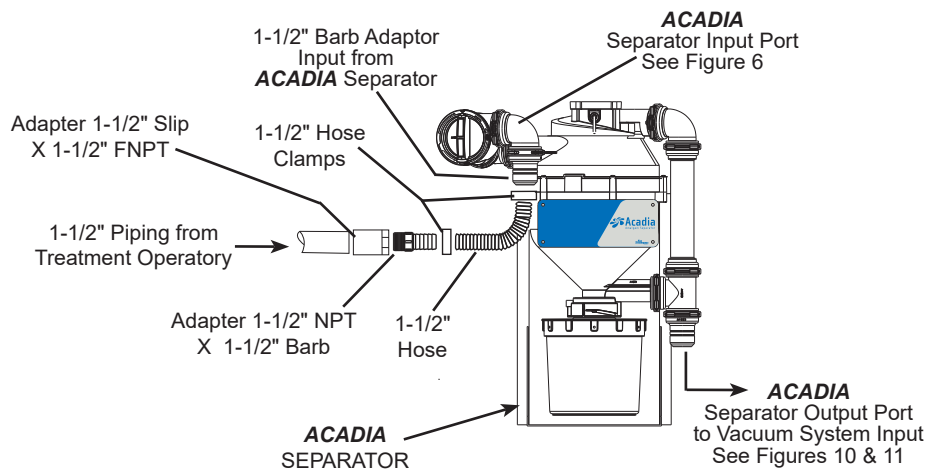


Figure 10. **Acadia** Amalgam Separator Connection to the Treatment Operatory Output Piping

INSTALLATION PROCEDURE

Important: The 1-1/2 inch hose used to connect the Separator to the input suction line of the CAS Tank is supplied in the CAS Tank Accessory Pack, P/N 54135, included with each new CAS Tank.

Installation Accessory Kit, P/N A1359 (see page 6), provides the necessary parts to connect to separation tank installations manufactured by Air Techniques. Installation to systems made by other manufacturers may need different size hoses and/or fittings that must be provided by the installer.

Separator Connection to CAS Separation Tank.

The input suction line connection to the CAS separation tank of STS/CAS installations uses 1-1/2 inch hose, which is included in the CAS Tank Accessory Pack, P/N 54135, supplied with each CAS tank. Refer to Figure 11 and connect the Separator to a CAS Tank by performing the following for either a new or existing installation.

Warning: The following procedures should be performed while wearing skin and eye protection.
Any area where material from the tank has spilled, should be thoroughly disinfected.

New STS/CAS installations -

1. Measure the distance between the CAS Tank inlet and the Separator output BARB connector adapters.
2. Cut the required length from the 1-1/2 inch hose supplied in the CAS Tank Accessory Pack.
3. Install the hose between the fittings and secure with 1-1/2 inch hose clamps.

Existing STS/CAS installations -

1. Disconnect the operatory output end of the existing hose connected from the CAS Tank inlet.
2. Leaving the hose connected to the CAS Tank inlet, transfer the operatory output end of the hose to the output BARB connector adapter of the Separator.
3. Cut any surplus length from the hose as necessary.
4. Secure the hose to the Separator output BARB connector adapter with a 1-1/2 inch hose clamp.

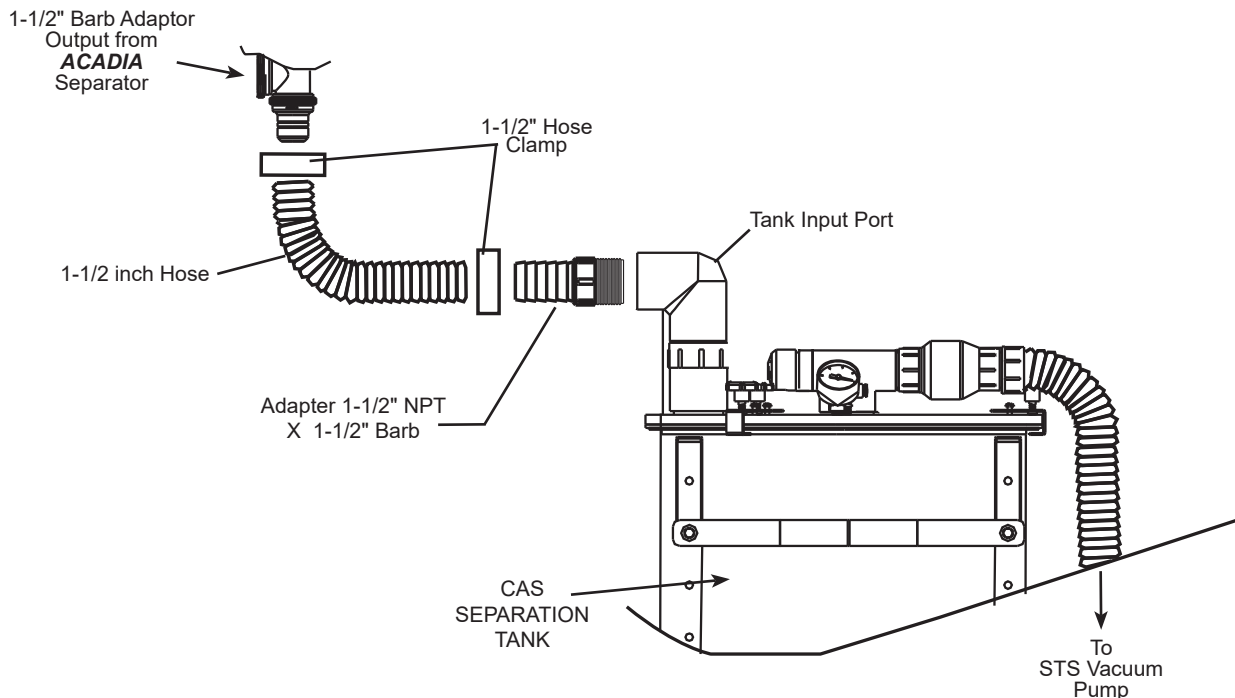


Figure 11. Acadia Amalgam Separator Connection to a STS Pump/CAS Tank Vacuum System (Direct connection to Separation Tank.)

Important: Dual pump VacStar installations use 1 inch hose & fittings, while single pump installations use 3/4 inch hose & fittings. Installation Accessory Kit, P/N A1359 (see page 6), provides the necessary parts to connect to liquid pump installations manufactured by Air Techniques. Installation to systems made by other manufacturers may need different size hoses and/or fittings that must be provided by the installer.

Separator Connection to VacStar Systems.

The input suction line connection to VacStar installations uses 1-1/2 inch hose, which is included in the Installation Accessory Pack, P/N 54135, supplied with each VacStar pump. Refer to Figure 12 and connect the Separator to a VacStar by performing the following for either a new or existing installation.

Warning: The following procedures should be performed while wearing skin and eye protection. Any area where material from the tank has spilled, should be thoroughly disinfected.

New VacStar installations -

1. Measure the distance between the VacStar inlet filter and the Separator output BARB connector adapters.
2. Cut the required length from the supplied appropriate diameter hose; 3/4 inch for a single pump VacStar system or 1 inch for a dual pump system.
3. Install the hose between the fittings and secure with 1-1/2 inch hose clamps.

Existing VacStar installations -

1. Disconnect the operatory output end of the existing hose connected from the inlet filter of the VacStar.
2. Leaving the hose connected to the VacStar inlet filter, transfer the operatory output end of the hose to the output BARB connector adapter of the Separator.
3. Check the hose length. If too long, remove the MNPT fitting from the hose and cut any surplus length as necessary.
4. Reinstall the MNPT fitting (removed above) into the hose and install the appropriate reducing bushing; either an 1½ inch SPG X 3/4 inch FNPT bushing for a single pump VacStar or an 1½ inch SPG X 1 inch FNPT bushing for dual pump systems.
5. Install a 1½ inch connector flexible coupling (No Hub) onto the slip side of the reducing bushing and secure with 1-1/2 inch hose clamp. Connect the no hub end of the hose to the Separator output BARB connector adapter and secure with a 1-1/2 inch hose clamp.

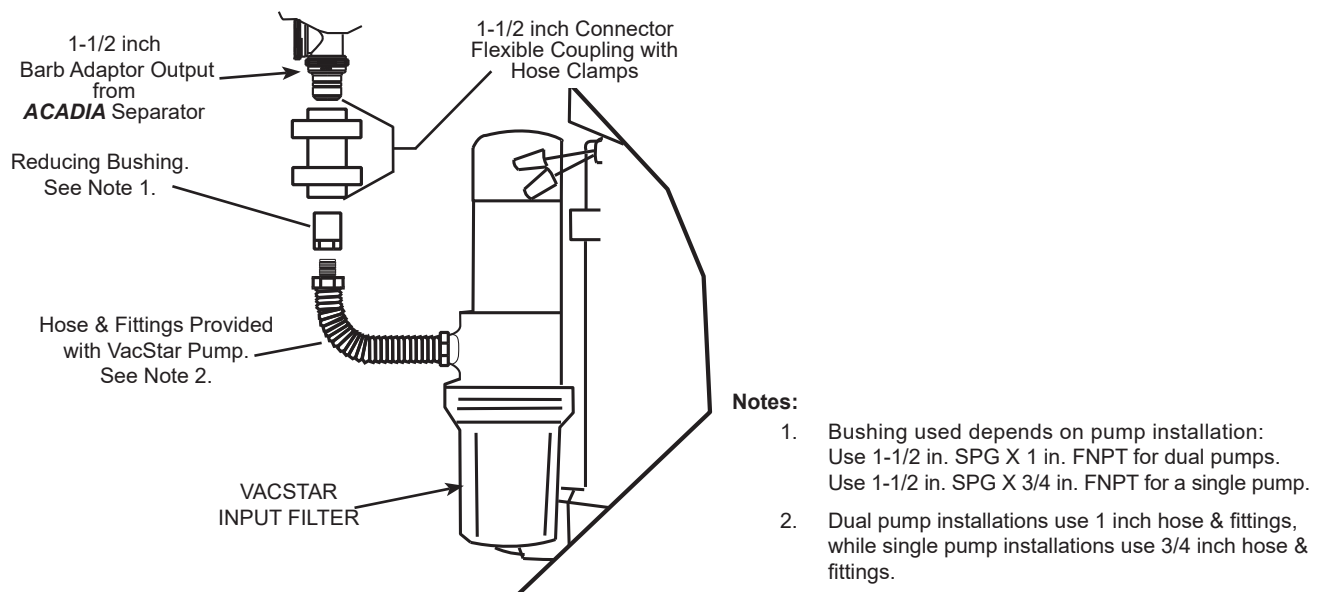


Figure 12. Acadia Amalgam Separator Connection to a VacStar System (Direct pump connection. No Separation Tank.)

FILTER REPLACEMENT & DISPOSAL

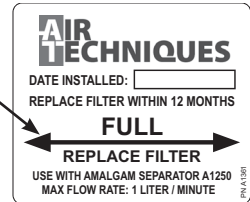
Important: The Solid Collection Filter is not to remain in use for a period longer than 12 months (one year) from the date of installation. Check filter FULL line weekly to ensure the effectiveness of waste collection.

Note: The Solid Collection Filter of an Acadia Amalgam Separator may **fill faster** than expected especially after a new vacuum pump is installed. A new vacuum pump may have the capability to remove built up deposits from the vacuum lines that would inevitably fill the Separator in less time than anticipated.

Use Period of Solid Collection Filter

The Solid Collection Filter is not to remain in use for a period longer than 12 months (one year) from the date of installation. Effectiveness of the Solid Collection Filter is reduced after 12 months due to the common growth of organic material within the unit. If the filter becomes full of collected solid dental waste and not replaced, it would result in improper filtering of amalgam and other dental waste and make it unable to pass an amalgam inspection. Consequently, it is recommended that the filter fill level, as shown to the right, be checked on a weekly basis to ensure the effectiveness of the solid dental waste collection for the particular installation.

Check weekly and replace filter when waste level is at or below the FULL line.



At an additional cost, Air Techniques offers the **Acadia Alert** Monitor Module (See Optional Equipment), which automatically monitors the fill level of the Solid Collection Filter and notifies the user that replacement is required. It provides visual and audible indication when the collection filter is nearly full of collected solid dental waste. This is accomplished from the utility room or other convenient location such as the treatment operator. The **Acadia Alert** ends the need to periodically check the filter fill level manually. This frees up office personnel time and aids in the trouble-free operation of the **Acadia** Amalgam Separator.

The following provides a guideline to predict when to replace the filter based on the number of users.

Collection Filter Replacement

Number of Users	Use Period
1 to 2	9 to 12 months
3 to 4	6 to 9 months
5 to 10	6 months or less

Caution: DO NOT use Chlorine Bleach or solutions of sodium Hypochlorite to clean or disinfect the vacuum system or In-line Amalgam Separator. Sodium Hypochlorite (Bleach) will reduce effectiveness of the Separator.

Note: Never ship the filled Solids Collection Filter or the used/contaminated Acadia assembly back to Air Techniques.

Replacement and Disposal of the Solid Collection Filter




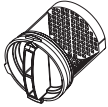



The use period for the Solid Collection Filter of an **Acadia** Amalgam Separator is **12 months** or less based on the above table. At the end of the use period, arrangement **must** be made for proper removal and disposal of the Solid Collection Filter and its contents in accordance with all local, state and/or federal laws and regulations.

A Replacement Kit for the Solid Collection Filter (PN: A1290) is available from Air Techniques. The kit provides replacement instructions (Instruction Sheet, PN A1366). Air Techniques also offers a recycle kit for the safe disposal/recycle of full Solid Collection Filters. Please contact your authorized dealer for complete recycle information for the safe disposal of the full collection filter. Refer to the procedures to replace the Solid Collection Filter. This replacement should be performed by authorized Air Techniques Dealer service personnel. Make sure to read and follow all the instructions contained in the Instruction Sheet provided with the replacement kit.

REPLACEMENT PARTS

The following lists the part number and description for components available to maintain the **Acadia** Amalgam Separator to meet your professional needs. Contact your authorized dealer for information.

Acadia Amalgam Separator Replacement Parts

Description	Part No.	
90 - Degree Non Rotating Elbow with O-ring, Spacer & Screw	A1381	
90 - Degree Elbow with O-ring	A1384	
Inlet Filter Housing	A1282	
Large Particle Inlet Filter Strainer	A1283	
Retaining Clip	A1237	
1 ½ Inch Hose Barb Adaptor	A1223	
Solid Collection Filter Replacement Kit	A1290	
1 ½ inch ID Clear with White Spiral Hose Note: If more than 6 feet of hose is needed, order additional P/N 54521 by the foot.	54521	

ACADIA MODEL WITH ALERT MONITOR

The **Acadia** Amalgam Separator Assembly, PN A1350, is available from Air Techniques with an **Acadia Alert** Monitor Module. **Acadia** separators using this equipment have the ability to monitor the Solid Collection Filter of an **Acadia** from the utility room or other convenient location such as the treatment operator. It provides visual and audible indication when the collection filter of the separator is nearly full of collected solid dental waste and needs replacement. If such a filter is not replaced, it would result in improper filtering of amalgam and other dental waste and cause failure to pass an amalgam inspection.

Operator Controls & Indicators

Figure 13 shows **Acadia Alert** Monitor Module front panel controls and indicators while the table below lists each state of the front panel STATUS LED Indicator and describes the corresponding condition. The Remote Panel Switch indicator LED behaves the same way as listed below for the front panel STATUS LED except it will be extinguished instead of Quick Flashing Green when the primary pump is off. Figure 14 shows the components provided in the **Acadia Alert** Monitor Module Accessory Kit, P/N A1378.

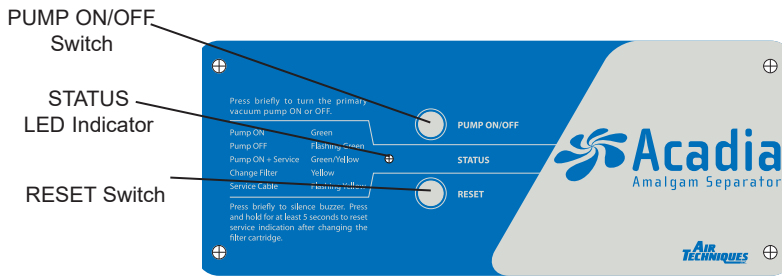


Figure 13. **Acadia** Amalgam Separator Assembly, PN A1350, **Alert** Monitor Module Front Panel View

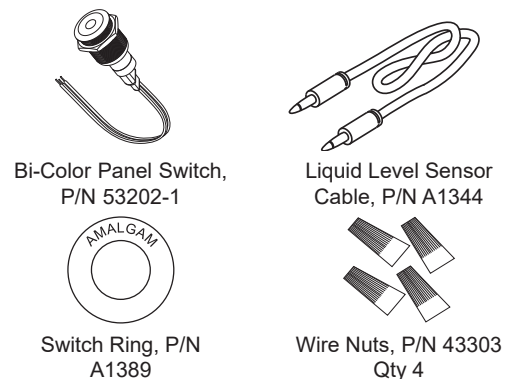


Figure 14. **Acadia Alert** Monitor Module Accessory Kit, P/N A1378

Operation

Acadia models with the **Acadia Alert** Monitor Module automatically monitor the fill level of the Solid Collection Filter and provides visual and audible indication when the collection filter is nearly full and requires replacement.

Acadia Alert Monitor Module Panel Controls & Indicator

Control Switches	
Switch	Function Description
PUMP ON/OFF	Turns the connected Primary Vacuum Pump ON and OFF Note: This switch is active only when the power circuit breakers of the Primary Pump are set in the ON position to supply 24VAC low voltage power.
RESET	Press briefly to silence buzzer. Press & hold at least 5 seconds to reset service indication after changing the filter cartridge. Note: A check sensor cable service indication automatically resets when the cable problem is fixed.
STATUS LED Indicator Conditions	
LED Condition	Function Description
None (Extinguished)	Module Has No Power
Quick Flashing Green	Primary Pump is OFF (if vacuum pump is connected)
Solid Green	Primary Pump is ON (if vacuum pump is connected)
Solid Yellow	Service Condition - Change Solid Filter
Flashing Yellow	Service Condition – Check Sensor Cable
Alternating Green/Yellow	Primary Pump is On and a Service Condition is Present Note: Turn the Pump OFF to check which condition is present.

Installation Information

Installation of **Acadia** models with the **Acadia Alert** Monitor Modules require making the electrical connections required for the associated vacuum system and connecting the Liquid Level Sensor Cable. The **Acadia Alert** Monitor Module has a flexible design that allows it to meet the electrical requirements of specific installations. Power can be connected from the 24VAC low voltage electrical box of the primary pump or via an optional 12 VDC power supply adapter (P/N A5135). A Bi-Color Panel Switch is also included for remote system control and/or indication as desired. Install the the **Acadia Alert** Monitor Module by performing the following procedures.

Electrical Connections

1. Refer to Figure 15 and access the connectors on the rear of the panel by removing the 4 nuts securing the **Acadia Alert** monitor electronics enclosure to the panel.
2. Connect the module as shown by the view of Figure 16 corresponding to your particular installation requirements. Make sure that the connected wires are positioned and held by the strain relief as shown by Figure 15.
 - View A shows the connections when using 24 VAC power, no Vacuum Equalizer and optional panel switch.
 - View B shows the connections when using 12 VDC power, no Vacuum Equalizer and optional panel switch.
 - View C shows the connections when using 24 VAC power, a Vacuum Equalizer and remote panel switch.
 - View D shows the connections when using 12 VDC power, a Vacuum Equalizer and remote panel switch..
3. Connect one end of the Liquid Level Sensor Cable to the Float Switch Connector J4 on the side of the module. Make sure that the cable is positioned and held by the strain relief as shown by Figure 16.

Important: 1. Make sure that all connections are made, including the Liquid Level Sensor Cable to the Float Switch Connector J4, prior to installing the **Acadia Alert** Monitor Panel Assembly onto the front enclosure of the Amalgam Separator.

2. Gather connected wires together in a loose "S" and secure with the strain relief. See Figure 15.

4. Install the monitor electronics enclosure onto the panel and secure with 4 nuts removed in step 1.
5. Go to page 7 and complete the installation of the **Acadia** unit to the associated vacuum system.

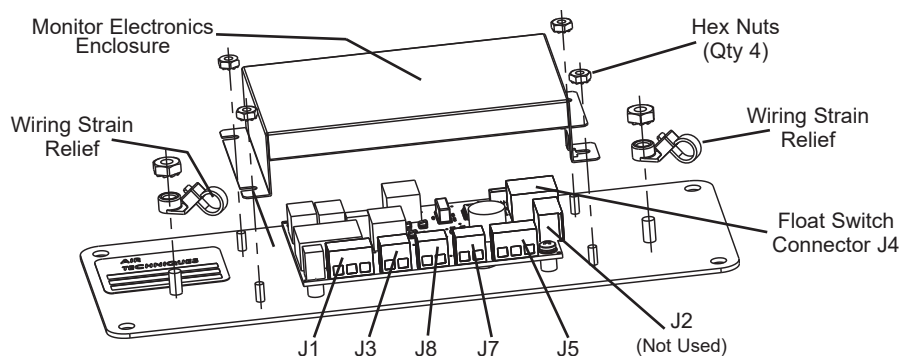


Figure 15. **Acadia Alert** Monitor Panel Electronics Enclosure

ACADIA MODEL WITH ALERT MONITOR

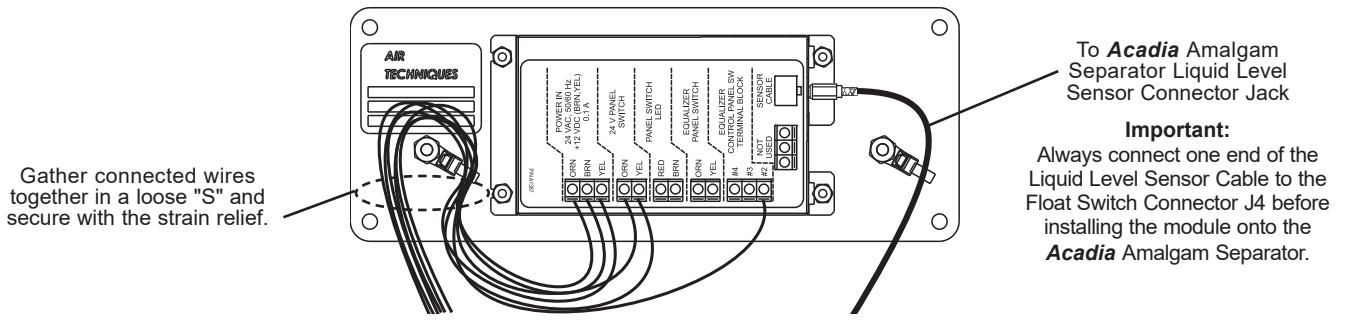
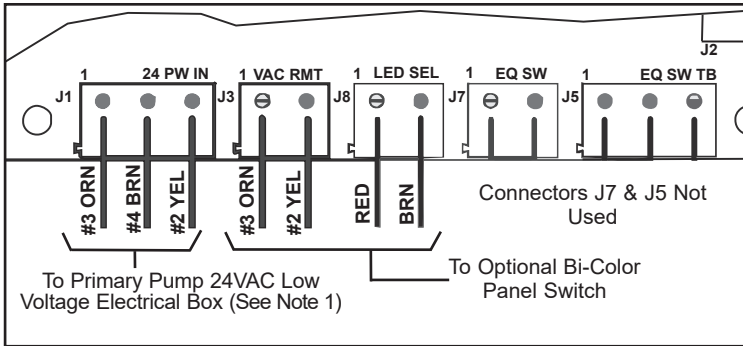
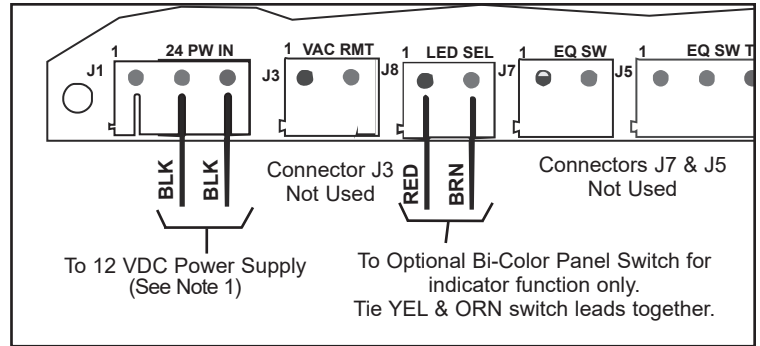


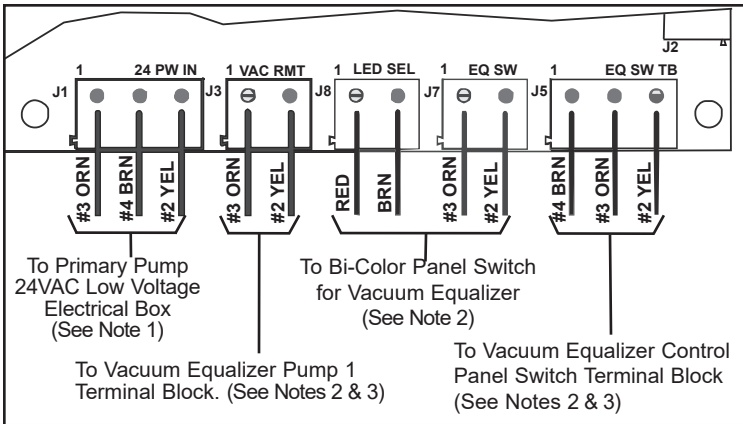
Figure 16. Typical Wire Routing Through Strain Reliefs



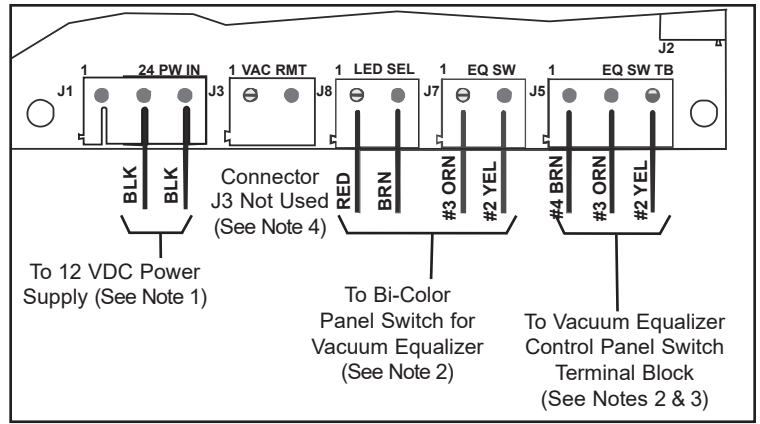
View A. Connections Using 24 VAC Power, No Vacuum Equalizer and Optional Panel Switch



View B. Connections Using 12 VDC Power, No Vacuum Equalizer and Optional Panel Switch



View C. Connections Using 24 VAC Power, a Vacuum Equalizer and Remote Panel Switch



View D. Connections Using 12 VDC Power, a Vacuum Equalizer and Remote Panel Switch

Notes:

1. The Primary Pump must have its power circuit breakers left in the ON position to supply 24VAC low voltage power. When an optional (P/N A5135) 12 volt DC power supply is used to power the **Acadia Alert** Monitor Module, clip off the plug end and connect the supply wires to the #4 BRN and #2 YEL leads of connector J1. This connection is polarity insensitive.
2. The Vacuum Equalizer is optional equipment and purchased separately. The Vacuum Equalizer automatically regulates the facility vacuum level.
3. This connection re-routes primary pump control to the Vacuum Equalizer pump terminal block when the optional Vacuum Equalizer is installed.
4. All Pump connections are wired directly to Vacuum Equalizer in 12 VDC power configurations.

Figure 17. **Acadia Alert** Monitor Module Electrical Connection Configurations

Acadia Alert Monitor Panel Assembly Installation

Refer to Figure 17 and install the **Acadia Alert** monitor panel assembly by performing the following steps..

1. Remove the 4 screws securing the existing cover plate (faceplate) to the separator front enclosure and remove the plate. Make sure to save the 4 screws which are used to secure the **Acadia Alert** Monitor Panel Assembly.

Important: Make sure that all connections are made, including the Liquid Level Sensor Cable to the Float Switch Connector J4, prior to installing the **Acadia Alert** Monitor Panel Assembly onto the front enclosure of the Amalgam Separator.

2. Place the **Acadia Alert** Monitor Panel Assembly on the separator front enclosure and align the 4 screw holes of the panel with the screw holes of the enclosure.

Important: Make sure not to disconnect wire connections to the panel.

3. Secure the panel to the front enclosure with the 4 screws removed in step 1.
4. Connect the unconnected end of the Liquid Level Sensor Cable to the Liquid Level Sensor Jack located on top of the separator. Figure 18 shows the **Acadia** Amalgam Separator with the **Acadia Alert** Monitor Module installation completed.

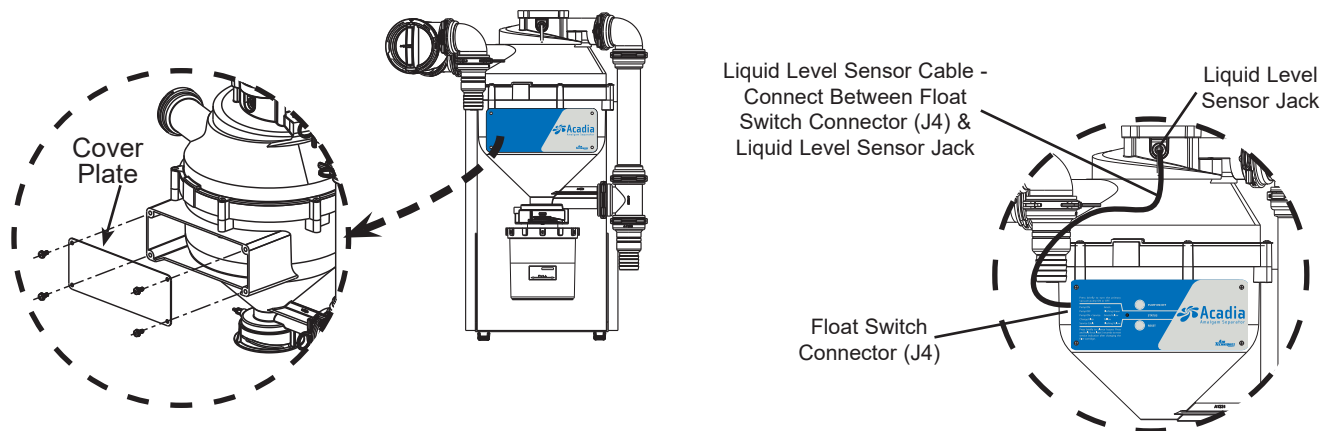


Figure 18. **Acadia Alert** Monitor Panel Assembly Installation and Liquid Level Sensor Cable Connection

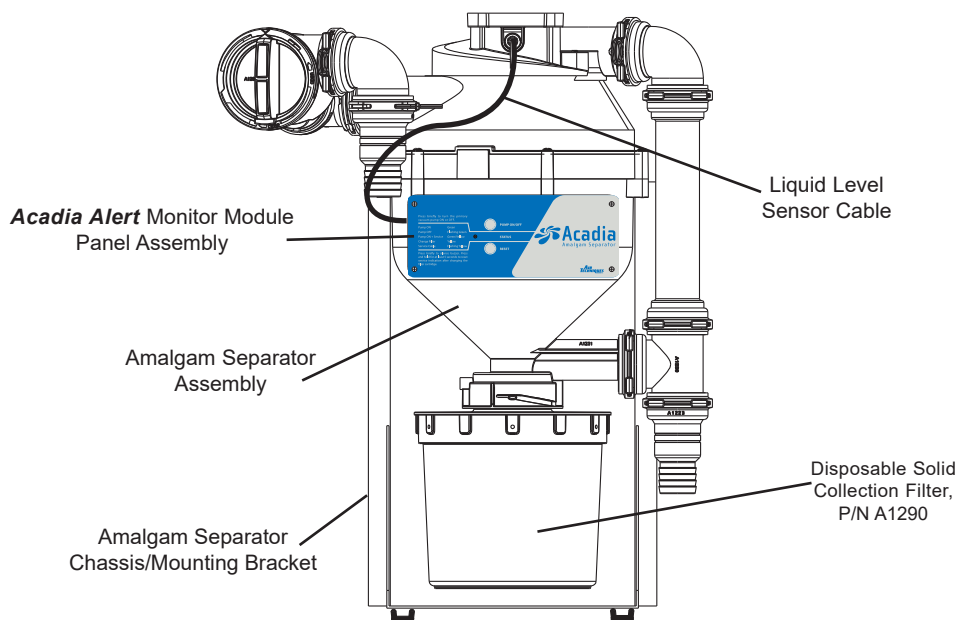


Figure 19. **Acadia Amalgam** Separator with Acadia Alert Monitor Module, PN A1350

MAINTENANCE

The **Acadia** Amalgam Separator requires minimal maintenance. The only maintenance requirements include:

- Checking the Large Particle Inlet Filter Strainer for any blockages and cleaning as necessary.
- Checking the fill level of Solid Collection Filter and replacing as necessary.
- Replacing the Solid Collection Filter 12 months (one year) from the date of installation.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Low suction or No suction.	a. Large Particle Inlet Filter Strainer clogged. b. Disposable Solid Collection Filter filled. c. Check that the input and output line connections to the Separator are tight. Make sure that there is no clogs or kinking collapsing.	a. Clean Inlet Filter Strainer. b. Replace the Solid Collection Filter. Call your authorized dealer if necessary. c. Call your authorized dealer for repair service if faulty connections are found.

WARRANTY

This Air Techniques equipment is warranted to be free from defects in material and workmanship for a period of twenty-four months from the date of installation by authorized Air Techniques Dealer service personnel.

Any item returned to our factory during the warranty period through an Authorized Dealer will be repaired or replaced at our option at no charge provided that our inspection shall indicate it is defective. Dealer labor, shipping and handling charges are not covered by this warranty.

This warranty does not apply to damage due to shipping, misuse, careless handling or repairs by non-authorized service personnel. The warranty does not include the Solid Collection Filter Replacement. Warranty void if installed or serviced by other than authorized service personnel. Air Techniques is not liable for indirect or consequential damages or loss of any nature in connection with this equipment.

This warranty is in lieu of all other warranties expressed or implied. No representative or person is authorized to assume for us any liability in connection with the sale of our equipment.

ON-LINE WARRANTY REGISTRATION

Quickly and easily register your new In-line Amalgam Separator on-line. Just have your product model and serial numbers available. Then go to the Air Techniques web site, www.airtechniques.com, click the **register a product link** and complete the registration form. This on-line registration ensures a record for the warranty period and helps Air Techniques keep you informed of product updates and other valuable information.

IF YOU NEED ASSISTANCE

Air Techniques Vacuum systems and accessories are designed and manufactured to high standards to deliver high-quality performance. If any difficulties are encountered with this product, please contact Air Techniques Technical Support as follows:

Headquarters:

1295 Walt Whitman Road, Melville, New York 11747-3062

Phone: 800-247-8324 • Fax: 1-888-247-8481

Website: www.airtechniques.com

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