

VST Installation Procedure for Phase II Coaxial EVR Balance Safety Breakaway Devices

Reattachable Breakaway Part Number Series: VSTA-EVR-SBKA



Vapor Systems Technologies, Inc.

650 Pleasant Valley Drive
Springboro, Ohio 45066 (USA)

Toll Free: 1-888-878-4673

Phone: 937-704-9333

Fax: 937-704-9443

www.vsthose.com

APPLICATION

These VST Safety Breakaway devices are intended to prevent damage to the dispenser and hose in the event of a vehicle drive off. These devices separate at pull forces up to 350 lbs. Determine that 350 lbs. pull force will not damage the dispenser. After verifying that the dispenser is securely bolted to the island, it can be tested by using a spring scale and a length of rope. The rope must be connected at the dispenser outlet casting, which may require a threaded bushing with a hole for attaching the rope. Attach the scale to the rope and pull to 350 lbs. in several directions. Be sure to avoid damaging the dispenser.

NOTE:

- The whip hose **ALWAYS** attaches to the dispenser. If a retractor is being used, the retractor clamp **MUST** be between the breakaway and dispenser.
- VST hoses are made to withstand 350 pounds tensile pull without damage. If another brand of hose is present at the dispenser, VST recommends that you contact the hose manufacturer regarding the compatibility with this breakaway device.

General Information

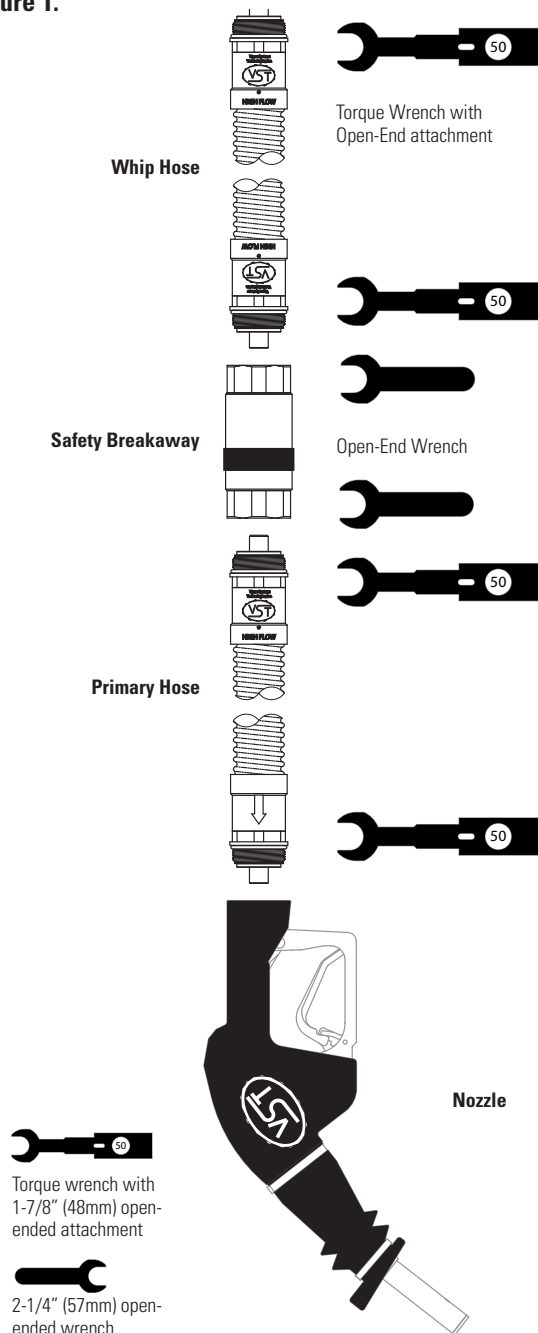
If hanging hardware components are involved in a drive-off or incur other customer abuse, each individual component must be functionally tested prior to customer dispensing activities.

Installation Preparation

These procedures must be followed to ensure leak-proof installation and operation of these safety breakaway products.

- Turn off and tag the power to the dispenser. Dispenser must be de-energized prior to service to avoid personal injury.
- Barricade work area to block vehicle access to the dispenser.
- Close dispenser shear valve prior to performing any service work with the hanging hardware (hoses, safety breakaways, and nozzles).
- Drain liquid product from the hanging hardware set into an approved container prior to replacing any hanging hardware component.

Figure 1.



VST Installation Procedure for Phase II Coaxial EVR Balance Safety Breakaway Devices

Reattachable Breakaway Part Number Series: VSTA-EVR-SBKA

5. For the installation of a new breakaway, remove hanging hardware from the dispenser prior to making replacement component assembly connections. VST recommends connecting the whip hose to dispenser as the last connection during hanging hardware assembly.

Installation and Function Tests

1. Initial inspection:
 - a. Carefully unpack safety breakaway from shipping carton.
 - b. Inspect safety breakaway for any damage to threads, O-rings, exterior, etc.
2. Lightly lubricate **ALL** O-rings on mating connections with petroleum jelly or other suitable lubricant. **DO NOT USE** pipe dope or thread sealant.
3. Attach breakaway on mating connection and tighten by hand. **NOTE FLOW DIRECTION ARROW** (where applicable). Use the hex on the breakaway body closest to the connection to tighten. **DO NOT USE** the breakaway body to tighten the unit.
4. Tighten breakaway connection to 50 foot-pounds of torque. **DO NOT OVER TIGHTEN.** Use the hex on the breakaway body closest to the connection to tighten. Use a torque wrench with an open-end attachment to fit the hose couplings and an open-end wrench to properly tighten breakaway connections. **DO NOT USE** channel-locks or pliers to tighten connections. Proper ft./lb. torque may not be achieved with these tools.
5. Purge air from the system by pumping one-tenth (1/10) to two-tenths (2/10) of a gallon of fuel into an approved container. Inspect each hose joint connection for liquid leaks and make proper adjustments if necessary. Checking for meter creep will verify the integrity of the connections. After dispensing the fuel, release the lever and move components around and/or gently shake the hose and verify if the displayed amount on the dispenser changes. If meter creep is experienced, check all components and replace as necessary.
6. Check the nozzle shut-off action by dispensing fuel into an approved container at least three times to assure proper automatic operation of the interlock rod. The fuel flow-rate must be greater than 3 gpm for the automatic shut-off mechanism to operate.

To test, operate the nozzle and submerge the spout tip in fuel until the fuel level covers the vent hole. The main valve of the

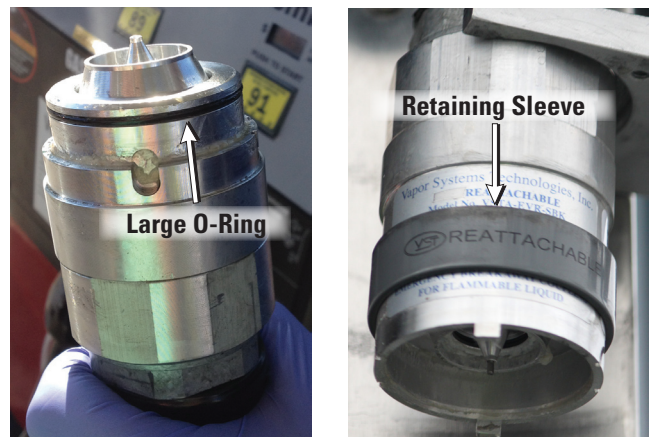


Figure 2: Check each half for damage

nozzle automatically shuts off when liquid covers the vent hole at the end of the spout. The nozzle is not designed to operate on gravity flow. The hold-open latch will disengage automatically when liquid covers the vent hole in the spout. Verify that the fuel flow stops when the nozzle collection sleeve is decompressed (e.g. interlock rod is disengaged). Slowly remove the nozzle from the container while dispensing fuel. Fuel flow should stop when the nozzle collection sleeve is fully decompressed.

7. Measure the resistance between the dispenser outlet casting and the tip of the nozzle spout. Use an electronic multimeter set on the high range of the ohmmeter function. Resistance should not indicate more than 70,000 ohms per foot of hose. Example: The measured resistance for a 12-foot hose must not exceed 840,000 ohms (840 kilohms).

BREAKAWAY REATTACHMENT PROCEDURE

The VSTA-EVR-SBKA Safety Breakaway may be reconnected with the use of the VST Breakaway Assembly Tool (VST-BAT-100).

BREAKAWAY REATTACHMENT PROCEDURE

1. Follow **INSTALLATION PREPARATION** steps 1-4.
2. Inspect both safety breakaway halves for damage that may have occurred during separation. Include looking for external damage to the product and missing alignment pin, etc. See **Figures 2 and 3. If damage or missing parts are detected, replace with new product.** Ensure that the retaining sleeve is placed on the breakaway half connected to the whip hose before reassembly.

VST Installation Procedure for Phase II Coaxial EVR Balance Safety Breakaway Devices

Reattachable Breakaway Part Number Series: VSTA-EVR-SBKA

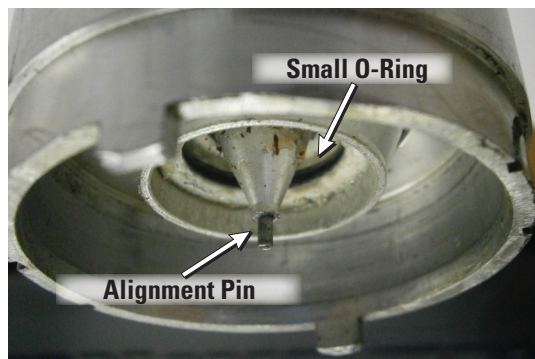


Figure 3: Check for Alignment Pin

3. Prior to reassembling, be sure the mating parts are undamaged and clean.
4. Replace all O-rings with those provided in the repair kit (VST-BRK-100).
 - a. Lightly lubricate the O-rings on mating connections with petroleum jelly or other suitable lubricant. **DO NOT USE** pipe dope or thread sealant.
 - b. Use the large O-ring provided in the repair kit to replace the outer O-ring on the curb hose side of the breakaway. See **Figure 5**.
 - c. Use the small O-ring provided in the repair kit to replace the inner O-ring on the whip side of the breakaway. Use a plastic pick provided in the kit to remove the old O-ring. See **Figure 3**.
5. Apply a liberal amount of lithium grease provided in the repair kit (VST-BRK-100) completely around the mating diameter surface of the curb hose side of the breakaway. The grease will need to cover the entire surface that will slide into the mating end of the breakaway. See **Figure 5**. **DO NOT USE** pipe dope or thread sealant.
6. Utilize the VST Breakaway Assembly Tool (VST-BAT-100) with the appropriate reassembly plates to reassemble the breakaway. The tool is used to provide appropriate leverage for the ease of reassembly of the breakaway and to secure the breakaway during replacement of the shear washers. This can be done without disassembling the hoses from the breakaway halves.
7. Press the button on the Breakaway Assembly Tool to spread the end clamps apart to allow the two separated breakaway halves

to fit between the top and bottom clamps. Slide the top clamp of the VST Breakaway Assembly Tool behind the hex on the breakaway half connected to the whip hose. See **Figure 4**.

8. Slide the separated bottom half of the breakaway (with curb hose and nozzle attached) onto the bottom clamp of the VST Breakaway Assembly Tool. Align the shear ring grooves away from the reassembly tool for ease of insertion of the shear washers. See **Figure 4**.
9. Slowly squeeze the VST Breakaway Assembly Tool trigger to bring the breakaway halves together.
10. Carefully align the two breakaway halves. Place the alignment pin from the breakaway upper half into the hole of the inner poppet on the lower half of the breakaway



Figure 4: Attach Reassembly Tool

CAUTION: Reconnection can cause a small amount of gasoline to leak out of the breakaway. A towel wrapped loosely around the breakaway can help to minimize spills.

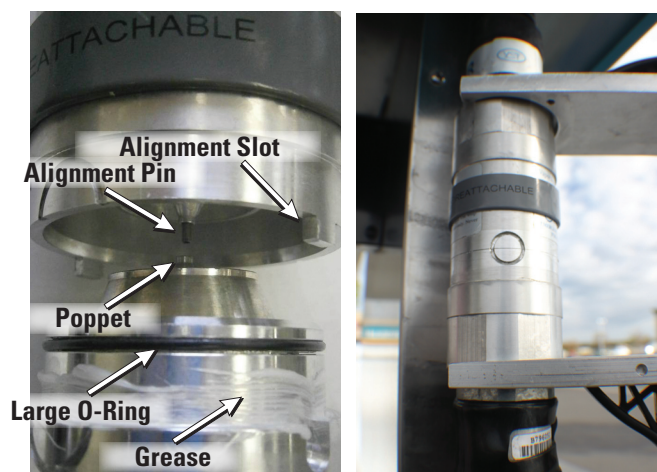


Figure 5: Align Poppet Pin from upper to lower half of breakaway and finish alignment

VST Installation Procedure for Phase II Coaxial EVR Balance Safety Breakaway Devices

Reattachable Breakaway Part Number Series: VSTA-EVR-SBKA



Vapor Systems Technologies, Inc.

650 Pleasant Valley Drive
Springboro, Ohio 45066 (USA)

Toll Free: 1-888-878-4673

Phone: 937-704-9333

Fax: 937-704-9443

www.vsthose.com

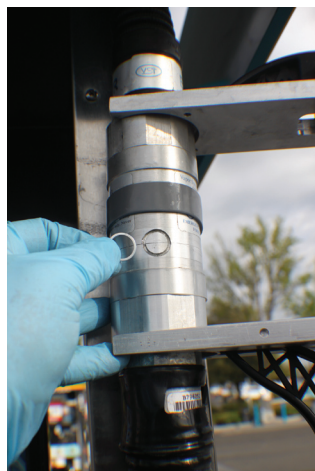


Figure 6: Add Shear Washer



Figure 7: Remove Grease



**Figure 8: Reposition
Retaining Sleeve**



**Figure 9: Verify
Connection Integrity**

that is connected to the nozzle end. Continue squeezing the trigger of the VST Breakaway Assembly Tool while guiding the alignment slots together to finish reassembly. See **Figure 5**.

NOTE: Once the two breakaway halves come together close enough for placement of the shear washers, do not squeeze the tool trigger any further. Unnecessary pressure on the tool could damage or break the tool.

11. Once the two aligned halves are together place one shear washer into each of the shear washer grooves (2 total) from the repair kit (VST-BRK-100). See **Figure 6**. Ensure that the shear washer is completely seated into the groove before moving the retaining sleeve into place. See **Figure 7**. Wipe off excess grease after installation of the shear rings.
12. After the two breakaway halves are reattached, remove the Breakaway Assembly Tool (press the button on the tool to allow the plates to release). Reposition the retaining sleeve to the groove between the two halves of the breakaway. See **Figure 8**. Give the reassembled breakaway a strong pull to verify that it is properly connected. See **Figure 9**.
13. If successful, follow the **Installation and Functional Tests** steps 5 – 7 in this document.

MAINTENANCE

Inspect safety breakaways regularly for damage, loose connections or leaks. Replace as necessary. Subject to customer abuse, safety breakaway should be replaced when damaged.

The safety breakaway is designed and constructed to give lasting service if properly handled and maintained. If for any reason it should need attention, contact your VST distributor for proper disposition.

NOTE: Due to abuse, misuse, changing gasoline formulas, variation in maintenance practices, environmental conditions and/or conditions beyond the manufacturer's control, dispensing equipment may need replacement before five (5) years. Inspections and proper maintenance procedures should be followed by the station manager to determine if replacement is required before five (5) years.

WARNING

Unauthorized rebuilding or modifying of safety breakaways voids ALL approvals and warranties.

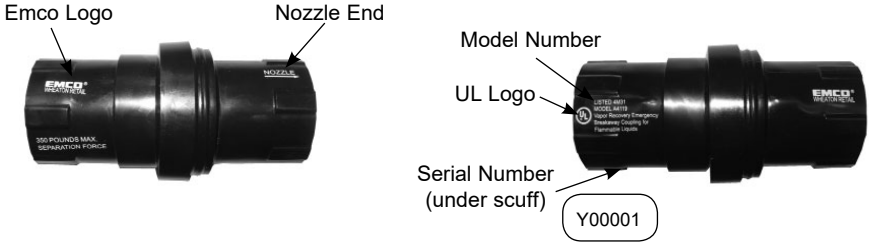
VST products must be used in compliance with applicable federal, state and local laws and regulations.



A4119EVR

Coaxial SafeBreak® Valve

Permanent ID:



INSTALLATION INSTRUCTIONS

Service Tools Required:

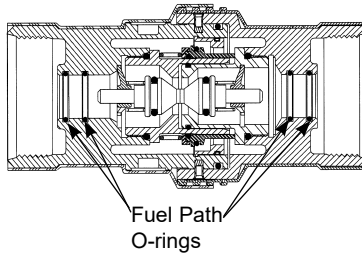
- 1 7/8" Crows Foot
- Gasoline Approved Container
- Petroleum Jelly or Other Suitable Lubricant
- Torque Wrench w/ 50ft-lbs Setting
- Pipe Wrench w/ Flat Jaws

CAUTION:

1. Always barricade work area to keep pedestrians and vehicles from accessing the dispenser.
2. Always use a gasoline approved container or test can when performing any type of preventive maintenance.
3. Before attempting to install, remove or service the A4119EVR Safe-Break® valve, turn off and tag out power to the corresponding dispenser.
4. Before attempting to install, remove or service the A4119EVR Safe-Break® valve, close the emergency impact valves located inside the base of the dispenser. Relieve the line pressure and standing fuel through the nozzle spout into a gasoline approved container by compressing the bellows and squeezing the lever.
5. If a hose retractor is used, the A4119EVR SafeBreak® valve must be attached on the nozzle end of the retractor clamp.

IMPORTANT: Failure to perform cautions 3 and 4 may result in a hazardous gasoline spill, damage to equipment, personal injury and/ or death.

Pre-Inspection:



1. Carefully unpack and remove the A4119EVR SafeBreak® valve from the shipping container and evaluate for any kind of damage.
2. Verify the fuel path o-rings located on both ends of the A4119EVR SafeBreak® valve. All o-rings must be properly secured inside the factory machined grooves.

Pre-Installation:



3. Lightly lubricate the fuel path o-rings using petroleum jelly or other suitable lubricant.



4. Before attempting to install the A4119EVR SafeBreak® valve onto the whip hose, verify the word "NOZZLE", which is printed on the scuff guard of the SafeBreak® valve, is on the opposite end. Verify the vapor path o-ring is properly secured onto the connector, and in good working condition. Lightly lubricate the o-ring using petroleum jelly or other suitable lubricant.



5. Before attempting to install the A4119EVR SafeBreak® valve onto the curb hose, verify the vapor path o-ring is properly secured onto the connector, and in good working condition. Lightly lubricate the o-ring using petroleum jelly or other suitable lubricant.

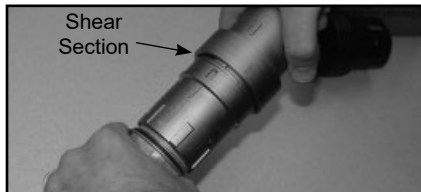
IMPORTANT: Do not use pipe thread sealant compound or Teflon tape when installing the A4119EVR SafeBreak® valve. Failure to comply will void warranty.

Installation:

IMPORTANT: If this is a new facility installation, the fueling point must be flushed into a gasoline approved container before installing the A4119EVR SafeBreak® valve. Failure to perform this procedure could result in foreign material becoming lodged inside the SafeBreak® valve's fuel path causing a reduction in fuel flow.



6. Remove the scuff guard by sliding on to the whip hose. Attach the A4119EVR SafeBreak® valve onto the whip hose connector. Tighten by hand to avoid cross threading. Take caution to avoid pinching the vapor path o-ring.



IMPORTANT: Never tighten across the shear section of the A4119EVR SafeBreak® valve. Failure to comply will result in damage to the SafeBreak® valve and void warranty.



7. Using a 1 7/8" crows foot and torque wrench, tighten the whip hose connector to 50 ft-lbs of torque.



8. Remove the scuff guard by sliding on to the curb hose. Attach the A4119EVR SafeBreak® valve onto the curb hose connector. Tighten by hand to avoid cross threading. Take caution to avoid pinching the vapor path o-ring.



9. Using a 1 7/8" crows foot and torque wrench, tighten the curb hose connector to 50 ft-lbs of torque.

Post Functional Tests:

10. Carefully purge the trapped air from the fueling point. Begin dispensing by compressing the bellows and then squeezing the lever. Dispense one gallon of fuel into a gasoline approved container.
11. Functional test the automatic shutoff of the A4005EVR nozzle. Begin dispensing by compressing the bellows and then squeezing the lever. Place the hold open latch in "high" clip position to secure the lever. Dispense one gallon of fuel into a gasoline approved container. At the same time, lower the spout tip into the standing fuel until the vent hole is completely submersed. The main valve of the A4005EVR nozzle will automatically close causing fuel flow to stop.

IMPORTANT: Perform step 11 a minimum of three times to assure the insertion interlock, hold open latch and the automatic shutoff of the A4005EVR nozzle are operating properly.

According to UL requirement 842, the fuel flow rate must be greater than 3 gallons per minute for the automatic shutoff to operate properly. A common problem cause of low flow rates are dirty or clogged dispenser filters.

Post Inspection:

12. Before placing the A4005EVR nozzle onto the dispenser cradle, inspect all hanging hardware connections for potential fuel leaks. Make proper adjustments if necessary.

PREVENTIVE MAINTENANCE

1. Weekly inspect the A4119EVR SafeBreak® valve, evaluate for any kind of damage. Damaged components must be replaced with factory authorized service kits.

<u>Part Number</u>	<u>Description</u>
494748EVR	Fuel Path O-ring Kit

2. Weekly inspect all hanging hardware connections for potential fuel leaks.

IMPORTANT: Should a drive-off or incidence of customer abuse occur, follow the initial inspection and function instructions found in the installation section.

PERFORMANCE STANDARDS & SPECIFICATIONS

This component was factory tested to, and met the following specifications:

1. Meets ARB Material Compatibility with Fuel Blends as per Section 3.8 of CP-201.
2. TP-201.2J – Complies with the maximum allowable component pressure drop of 0.04 inches of water column @ 60 CFH.

IMPORTANT: Leave these installation instructions, product warranty registration card and the warranty tag with the station owner and/or operator.

Emco Wheaton Retail Corp.
2300 Industrial Park Dr. • Wilson, NC 27893
252-243-0150 • 252-243-4759 (fax)

p/n 569043
Rev. H, 04/19

For use with Vapor Systems
Technologies VST California Air
Resources Board Executive
Orders VR-203 and VR-204



Packing List:

(2) Fuel Path O-rings

**A4005EVR Balance
Vapor Recovery Nozzle**



**A4119EVR Coaxial
Safe Break Valve**



INSTALLATION INSTRUCTIONS

Service Tools Required:

- Pipe Wrench w/ Flat Jaws
- Bench Vise w/ 5" Jaw Width
- Petroleum Jelly or Other Suitable Lubricant
- Scribe Tool w/ 90 Degree Tip
- Gasoline Approved Container

CAUTION:

1. Always barricade work area to keep pedestrians and vehicles from accessing the dispenser.
2. Always use a gasoline approved container or test can when performing any type of preventive maintenance.
3. Before attempting to install, remove or service the A4005EVR nozzle and A4119EVR safe break valve, turn off and tag out power to the corresponding dispenser.
4. Before attempting to install, remove or service the A4005EVR nozzle and A4119EVR safe break valve, close the emergency impact valves located inside the base of the dispenser. Relieve the line pressure and standing fuel through the nozzle spout into a gasoline approved container by compressing the bellows and squeezing the lever.

IMPORTANT: Failure to perform cautions 3 and 4 may result in a hazardous gasoline spill, damage to equipment, personal injury and/or death.

1

Pre-Inspection:

1. Carefully unpack and remove all kitted parts from the shipping container and evaluate for any kind of damage. Verify that no parts are missing from the packing list before proceeding with the installation.

Pre-Installation:

2. Empty all standing fuel within the spout and bellows into a gasoline approved container before attempting to service the fuel path o-rings.



3. It is necessary to remove the A4005EVR nozzle and A4119EVR safe break valve from the curb hose during the removal and installation of the fuel path o-rings. Use the pipe wrench with flat jaws to loosen the curb hose connector. Unfasten the curb hose connector by hand from the A4005EVR nozzle to avoid cross threading.

IMPORTANT: Drain the fuel from the hanging hardware into a gasoline approved container when removing the A4005EVR nozzle from the curb hose.



A4005EVR Nozzle



**A4119EVR
Safe Break Valve**

4. Use the bench vise to properly secure the A4005EVR nozzle or A4119EVR safe break valve during service.

Installation:

Removing the Existing Fuel Path O-rings



A4005EVR Nozzle



**A4119EVR
Safe Break Valve**

5. Use the scribe tool to remove the existing fuel path o-rings.
6. Clean and remove all existing grease, fuel residue, debris, etc. from within the machined grooves.

IMPORTANT: Properly discard all removed components.

Installing the New Fuel Path O-rings



A4005EVR Nozzle



**A4119EVR
Safe Break Valve**

7. Use the scribe tool to install the new fuel path o-rings. Verify that both o-rings seat properly into the machined grooves.



A4005EVR Nozzle



**A4119EVR
Safe Break Valve**

8. Lightly lubricate the fuel path o-rings using petroleum jelly or other suitable lubricant.

Post-Installation:

9. Before attempting to reinstall the A4005EVR nozzle or A4119EVR safe break valve, please refer to the following installation instructions below.

- A4005EVR Balance Vapor Recovery Nozzle p/n 570435
- A4119EVR Coaxial Safe Break Valve p/n 569043

PREVENTIVE MAINTENANCE

1. Weekly inspect the A4005EVR nozzle and A4119EVR safe break valve connections for leaks or fuel residue. Replace with factory authorized service kits.

<u>Part Number</u>	<u>Description</u>
494748EVR	Fuel Path O-ring Kit

PERFORMANCE STANDARDS & SPECIFICATIONS

This component was factory tested to, and met the following specifications:

1. Meets ARB Material Compatibility with Fuel Blends as per Section 3.8 of CP-201.

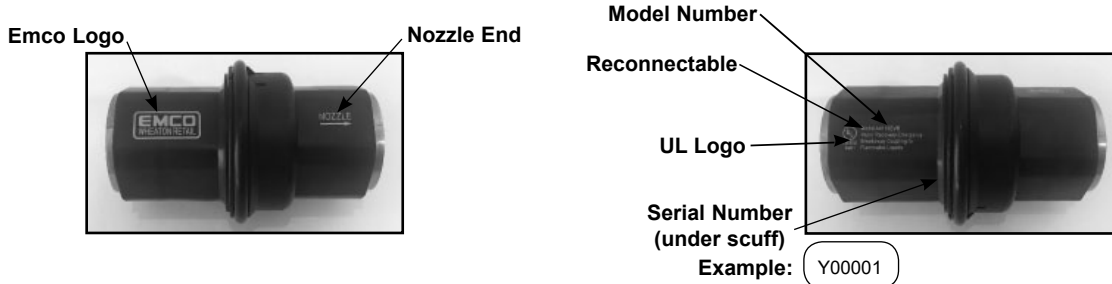
IMPORTANT: Leave these installation instructions with the station owner and/ or operator.



A4119EVR

Reconnectable Coaxial
SafeBreak® Valve

Permanent ID:



INSTALLATION INSTRUCTIONS

Service Tools Required:

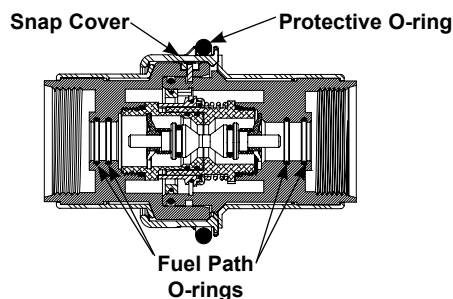
- 1 7/8" Crows Foot
- Gasoline Approved Container
- Petroleum Jelly or other Suitable Lubricant
- Torque Wrench w/ 50ft-lbs Setting
- Adjustable Wrench w/ Flat Jaws 1 7/8" to 2 1/4"

CAUTION:

1. Always barricade work area to keep pedestrians and vehicles from accessing the dispenser.
2. Always use a gasoline approved container or test can when performing any type of preventive maintenance.
3. Before attempting to install, remove or service the A4119EVR SafeBreak® valve, turn off and tag out power to the corresponding dispenser.
4. Before attempting to install, remove or service the A4119EVR SafeBreak® valve, close the emergency impact valves located inside the base of the dispenser. Relieve the line pressure and standing fuel through the nozzle spout into a gasoline approved container by compressing the bellows and squeezing the lever.
5. If a hose retractor is used, the A4119EVR SafeBreak® valve must be attached on the nozzle end of the retractor clamp.

IMPORTANT: Failure to perform cautions 3 and 4 may result in a hazardous gasoline spill, damage to equipment, personal injury and/ or death.

Pre-Inspection:



1. Carefully unpack and remove the A4119EVR SafeBreak® valve from the shipping container and evaluate for any kind of damage.
2. Verify the fuel path o-rings located on both ends of the A4119EVR SafeBreak® valve. All o-rings must be properly secured inside the factory machined grooves.
3. Verify the snap cover and protective o-ring are properly secured.



A4119EVR

Reconnectable Coaxial
SafeBreak® Valve

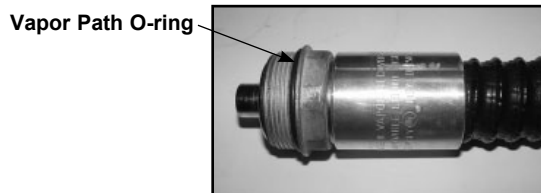
Pre-Installation:



4. Lightly lubricate the fuel path o-rings using petroleum jelly or other suitable lubricant.



5. Before attempting to install the A4119EVR SafeBreak® valve onto the whip hose, verify the word “NOZZLE”, which is printed on the scuff guard of the SafeBreak® valve, is on the opposite end. Verify the vapor path o-ring is properly secured onto the connector, and in good working condition. Lightly lubricate the o-ring using petroleum jelly or other suitable lubricant.



6. Before attempting to install the A4119EVR SafeBreak® valve onto the curb hose, verify the vapor path o-ring is properly secured onto the connector, and in good working condition. Lightly lubricate the o-ring using petroleum jelly or other suitable lubricant.

IMPORTANT: Do not use pipe thread sealant compound or Teflon tape when installing the A4119EVR SafeBreak® valve. Failure to comply will void warranty.

Installation:

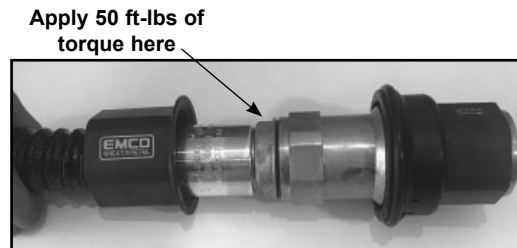
IMPORTANT: If this is a new facility installation, the fueling point must be flushed into a gasoline approved container before installing the A4119EVR SafeBreak® valve. Failure to perform this procedure could result in foreign material becoming lodged inside the SafeBreak® valve’s fuel path causing a reduction in fuel flow.



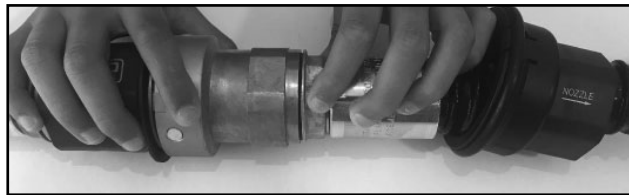
7. Remove the scuff guard by sliding the whip hose. Attach the A4119EVR SafeBreak® valve onto the whip hose connector. Tighten by hand to avoid cross threading. Take caution to avoid pinching the vapor path o-ring.



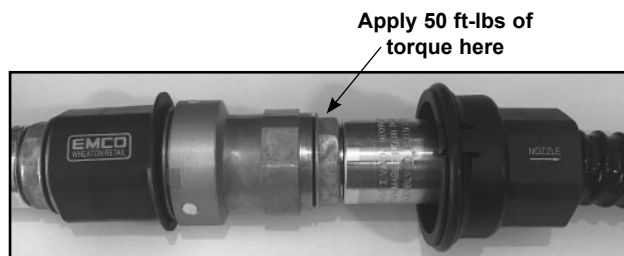
IMPORTANT: Never tighten across the shear section of the A4119EVR SafeBreak® valve. Failure to comply will result in damage to the SafeBreak® valve and void warranty.



- Using a 1 7/8" crows foot with a torque wrench and a 2 1/4" wrench (with flat jaws) secure the A4119EVR SafeBreak® valve and tighten the whip hose connector to 50 ft-lbs of torque.



- Remove the snap cover by pushing down on opposite tabs, then slide both the snap cover and scuff guard onto the curb hose. Attach the A4119EVR SafeBreak® valve onto the curb hose connector. Tighten by hand to avoid cross threading. Take caution to avoid pinching the vapor path o-ring.



- Using a 1 7/8" crows foot with a torque wrench and a 2 1/4" wrench (with flat jaws) secure the A4119EVR SafeBreak® valve and tighten the curb hose connector to 50 ft-lbs of torque.

Post Functional Tests:

- Carefully purge the trapped air from the fueling point. Begin dispensing by compressing the bellows and then squeezing the lever. Dispense one gallon of fuel into a gasoline approved container.
- Functional test the automatic shutoff of the A4005EVR nozzle. Begin dispensing by compressing the bellows and then squeezing the lever. Place the hold open latch in "high" clip position to secure the lever. Dispense one gallon of fuel into a gasoline approved container. At the same time, lower the spout tip into the standing fuel until the vent hole is completely submersed. The main valve of the A4005EVR nozzle will automatically close causing fuel flow to stop.



A4119EVR

Reconnectable Coaxial
SafeBreak® Valve

IMPORTANT: Perform step 12 a minimum of three times to assure the insertion interlock, hold open latch and the automatic shutoff of the A4005EVR nozzle are operating properly.

According to UL requirement 842, the fuel flow rate must be greater than 3 gallons per minute for the automatic shutoff to operate properly. A common problem cause of low flow rates are dirty or clogged dispenser filters.

Post Inspection:

13. Before placing the A4005EVR nozzle onto the dispenser cradle, inspect all hanging hardware connections for potential fuel leaks. Make proper adjustments if necessary.

PREVENTIVE MAINTENANCE

1. Weekly inspect the A4119EVR SafeBreak® valve, evaluate for any kind of damage. Damaged components must be replaced with factory authorized service kits.

<u>Part Number</u>	<u>Description</u>
494748EVR	Fuel Path O-ring Kit
495920	Shear Pin Kit
495843	Snap Cover Kit
495866	Scuff Guard Kit

2. Weekly inspect all hanging hardware connections for potential fuel leaks.

IMPORTANT: Should a drive-off or incidence of customer abuse occur, follow the initial inspection and function instructions found in the installation section.

PERFORMANCE STANDARDS & SPECIFICATIONS

This component was factory tested to, and met the following specifications:

1. Meets ARB Material Compatibility with Fuel Blends as per Section 3.8 of CP-201.
2. TP-201.2J – Complies with the maximum allowable component pressure drop of 0.04 inches of water column @ 60 CFH.

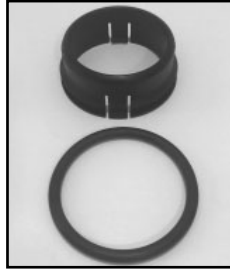
IMPORTANT: Leave these installation instructions, product warranty registration card and the warranty tag with the station owner and/or operator.

RECONNECTING PROCEDURES

Repair & Replacement Kits:



Shear Pin Kit P/N 495820
3 Shear Pins
1 Vapor Path O-ring



Snap Cover Kit P/N 495843
1 Snap Cover
1 Protective O-ring



Scuff Guard Kit P/N 495866
1 Male Scuff Guard
1 Female Scuff Guard

Service Tools Required:

- EMCO Clamp Tool p/n 572909
- Petroleum Jelly or other Suitable Lubricant
- Scribe Tool w/ 90 Degree Tip
- Towel Wipes

IMPORTANT: Refer to page 1, caution steps 1 through 5, before attempting to reconnect the A4119EVR SafeBreak® valve. Failure to perform the required steps may result in a hazardous gasoline spill, damage to equipment, personal injury and/ or death.

Pre-Inspection:



Figure 1: Male Half (dispenser end)

Vapor Path O-ring



Figure 2: Female Half (nozzle end)

1. Keep the nozzle of the ground by placing onto the dispenser cradle.
2. Carefully inspect both male and female halves for external and internal damage that may have occurred during separation. If signs of damage refer to page 1, pre-inspection, step 1 and replace with a new A4119EVR SafeBreak® valve.
3. Carefully inspect the snap cover, protective o-ring and scuff guards for damage or wear. Replace if necessary.

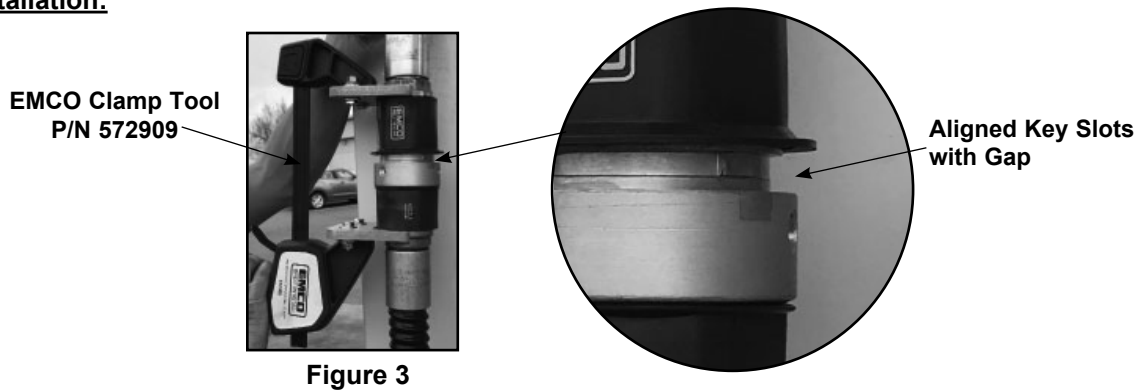
CAUTION: If damage or missing parts are found do not attempt to reconnect the existing A4119EVR SafeBreak® valve. Failure to comply may result in a hazardous gasoline spill, damage to the equipment or personal injury and/ or death.

Pre-Installation:

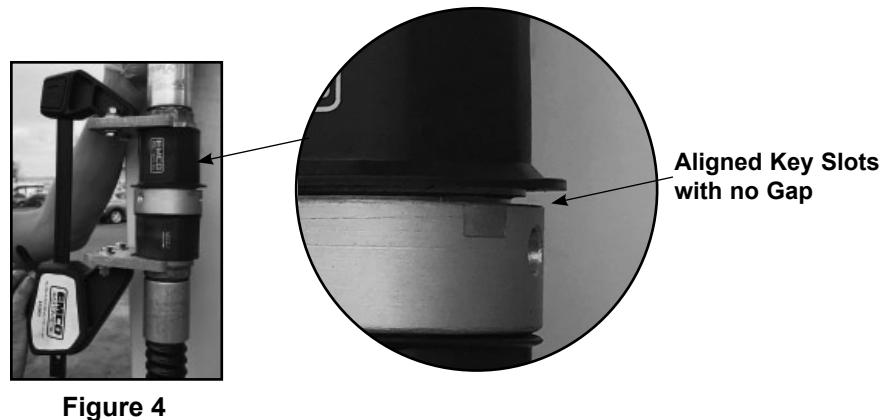
4. Using a scribe tool with a 90 degree tip replace the vapor path o-ring located on the male half and lightly lubricate with petroleum jelly or other suitable lubricant. **Refer to Figure 1.**
5. Using a towel wipe clean the inside area of the female half and lightly lubricate with petroleum jelly or other suitable lubricant. **Refer to Figure 2.**

IMPORTANT: Do not use pipe thread sealant compound as a lubricant.

Installation:



6. Place and secure the EMCO Clamp Tool P/N 572909 on both ends of the A4119EVR SafeBreak® valve. Align the top and bottom key slots before attempting to reconnect the male and female halves. **Refer to Figure 3.**



7. Slowly squeeze the lever of the EMCO Clamp Tool P/N 572909 until both the male and female halves come together. **Refer to Figure 4.**

CAUTION: Reconnection can cause a small amount of gasoline to leak out of the SafeBreak®. A towel wrapped loosely around the SafeBreak® can help to minimum spills.



Figure 5



Figure 6

8. Install each of the three shear pins into the openings of the female half. Be sure the yellow button sits flush with the outside surface. Once all three shear pins are secured in place remove the EMCO Clamp Tool P/N 572909 by squeezing the lever and relief lever at the same time. **Refer to Figures 5 and 6.**



Figure 7



Figure 8

Protective O-ring
Secured



Figure 9

9. Slide the snap cover upward over the shear pins until locked and secured into position. Verify by pulling downward. Be sure the protective o-ring is secured onto the snap cover groove. **Refer to Figures 7, 8 and 9.**

Post Function Tests:

10. Refer to page 3, post functional tests, steps 11 and 12.
11. Perform a meter creep test by keeping the fueling point activated without dispensing fuel for approximately 60 seconds. The meter reading on the dispenser display in gallons should not increment; this indicates the fuel path of the hanging hardware is leak free. If the meter reading increments, this indicates a possible faulty component that suffered damage during the drive-off occurrence; this includes the nozzle, curb or whip hoses.

Post Inspection:

12. Refer to page 4, post inspection, step 13.