





Healy Model 75 Series Low Perm Hose Assemblies

Warning  Follow all federal, state, and local laws governing the installation of this product and the entire system. When no other regulations apply, follow NFPA 30, 30A, and 70 from the National Fire Protection Association. Failure to do so could result in severe injury, death, serious property damage and/or environmental contamination.

Warning  Highly flammable vapors or liquids may be present in the environment in which this equipment is installed or serviced. Installing or working on this equipment means working in an environment that presents risks of severe injury or death if instructions and standard industry practices are not followed. Follow all applicable codes governing the installation and servicing of this product and the entire system.

Danger  Always lock out and tag electrical circuit breakers while installing or servicing this equipment and related equipment. A potentially lethal electrical shock hazard and the possibility of an explosion or fire from a spark can result if the electrical circuit breakers are accidentally turned on during installation or servicing. Do not smoke while working on or near this equipment, and use only non-sparking tools.

Healy 75 Series Hoses and Hose Assemblies should be serviced by a Healy Certified Technician. However, GDF Owner / Operator can remove and install hanging hardware (nozzle, curb hose, breakaway, flow limiter and whip hose). Hoses should be inspected for kinks, flat spots, abraded outer cover (wire strands visible) and leaking fittings on a weekly basis.

Note: It is the responsibility of the installer to be familiar with the current requirements of state, federal, local codes and air district rules and regulations for installation of gasoline dispensing equipment. It is the responsibility of the installer to be aware of all the necessary safety precautions and site safety requirements to assure a safe and trouble free installation.

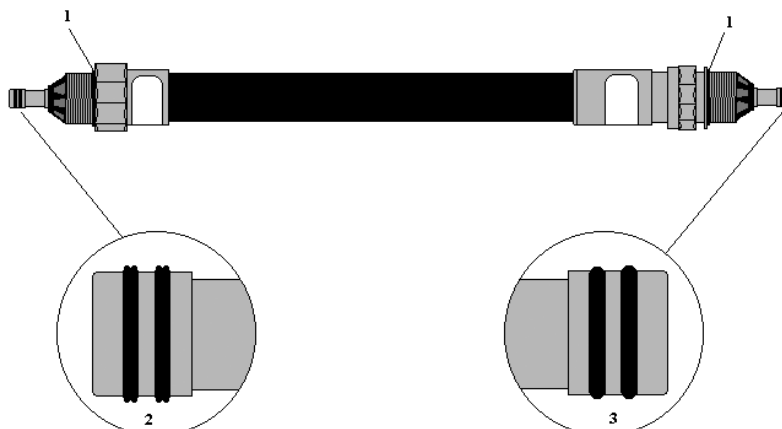
The warranty sheet provided with the component is to remain with the component, and must be provided to the end-user.

1. Hose Length

Select the correct whip hose and curb hose by selecting the correct thread type and hose length. The maximum length of the hose assembly shall not exceed eighteen (18) feet. Lengths greater than eighteen (18) feet are permitted if acceptable to authorities having jurisdiction.

2. Installation Instructions

- 2.1 Lubricate any O-rings or Quad Seals before installing the hose assembly into an adaptor, breakaway or nozzle assembly to make it easier to install and prevent the seal from getting cut. Motor oil (any weight) is acceptable for lubricating an O-ring or Quad Seal.
- 2.2 Connect hose assembly to nozzle, hose adaptor, breakaway, or flow limiter (if equipped).
- 2.3 Tighten hose connections between 35 to 70 foot pounds.



**Rule of Thumb: O-rings (item 3) to Nozzle and Hose Adaptor
Quad Seals (item 2) to Breakaway (or Flow Limiter)**

3. Hose Installation Functional Check

Note: The following checks shall be conducted after installation or repair of the hose assembly with the dispenser authorized and ready to dispense fuel.

- 3.1 Liquid Leak – Liquid gasoline visible on the hose assembly indicates a damaged or improperly installed O-ring, Healy Part No. HB-2 (item 1 in figure above). This O-ring seals the hose fitting to the nozzle and the adaptor. Replace the O-ring(s) if necessary.
- 3.2 Meter Creep – Dispenser gasoline display counting up when the nozzle is not dispensing gasoline indicates a damaged or improperly installed quad seals. The quad seals (2) are used on the end of the hose vapor tube that attaches to the breakaway assembly (or flow limiter, if equipped). Healy Part No. HB-4 (item 2 in figure above). Replace the quad seal(s) if necessary.
- 3.3 Meter Creep – Dispenser gasoline display counting up when the nozzle is not dispensing gasoline indicates a damaged or improperly installed O-ring seals (2) on the end of the hose vapor tube that connects to the nozzle. Healy Part No. 291 (item 3 in figure above). Replace these O-ring(s) if necessary.

4. Inspection and Maintenance

- Hose assemblies should be inspected weekly.
- Check/Inspect the hose assembly for leaks, kinks, blisters, bulges, flattened areas, soft spots, or any cuts, cracks or gouges deep enough and large enough to visibly expose the wire strands reinforcement beneath the cover of the hose.
- Hose assemblies showing signs of any of these issues should be replaced. **Follow Safety/ Lockout procedure.**



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ContiTech Low Permeation Coaxial Hose

1.0 Low Permeation Coaxial Hose

- 1.1 Select the correct whip hose and curb hose by selecting the correct thread type and hose length. The maximum length of the hose assembly shall not exceed eighteen (18) feet. Lengths greater than eighteen (18) feet are permitted if acceptable to authorities having jurisdiction.
- 1.2 This assembly has straight threads and is sealed by an o-ring. Do not use thread sealing compounds on straight threads.
- 1.3 Lubricate any o-ring before installing the hose assembly into an adapter, breakaway or nozzle. Motor oil of any weight can be used for lubricating an o-ring.
- 1.4 Tighten threaded connections to 35 - 50 ft-lbs.
- 1.5 Hose assemblies should be inspected weekly. Check the hose assembly for leaks, kinks, blisters, bulges, flattened areas, soft spots, or any cuts or gouges deep enough to expose the wire reinforcement beneath the cover of the hose. Hose assemblies showing signs of any of these issues should be replaced.

Note: It is the responsibility of the installer to be familiar with the current requirements of state, federal, local codes and air district rules and regulations for installation of gasoline dispensing equipment.

It is also the responsibility of the installer to be aware of all the necessary safety precautions and site safety requirements to assure a safe and trouble free installation.

The warranty tag provided with the component is to remain with component, and must be provided to the end-user.

ContiTech USA, Inc.
703 S. Cleveland Massillon Rd.
Fairlawn, OH 44333 USA
Telephone:1-800-235-4632



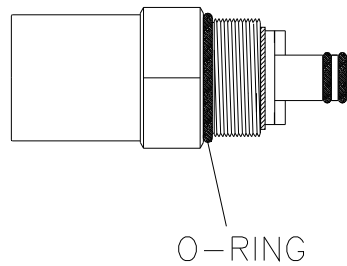
ContiTech

2.0 Field Serviceable Hose Components

Note: The following procedures shall be conducted after installation or repair, with the dispenser authorized and ready to dispense fuel.

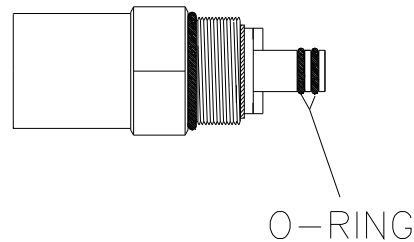
- 2.1 Liquid gasoline visible on the outer hose indicates a damaged or improperly installed o-ring. Replace the o-ring if necessary.

<u>Fitting Threads</u>	<u>O-ring Part #:</u>
M34 x 1.5	173537188
1-1/4"-18	173537203
1-7/8"-12	173537202



- 2.2 Meter creep (gallons dispensed display on dispenser is counting up when the nozzle is not dispensing gasoline), indicates a damaged or improperly installed o-ring. Replace the o-ring if necessary.

O-ring Part #: 173537082



Note: Contact your local distributor or Customer Service for replacement o-rings.

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ContiTech

VST Installation Procedure for Phase II EVR Vacuum Assist Low Permeation Fuel Hoses

Part Number Series: V34EV



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

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

This procedure must be followed to ensure leak-proof installation and operation of these hose products.

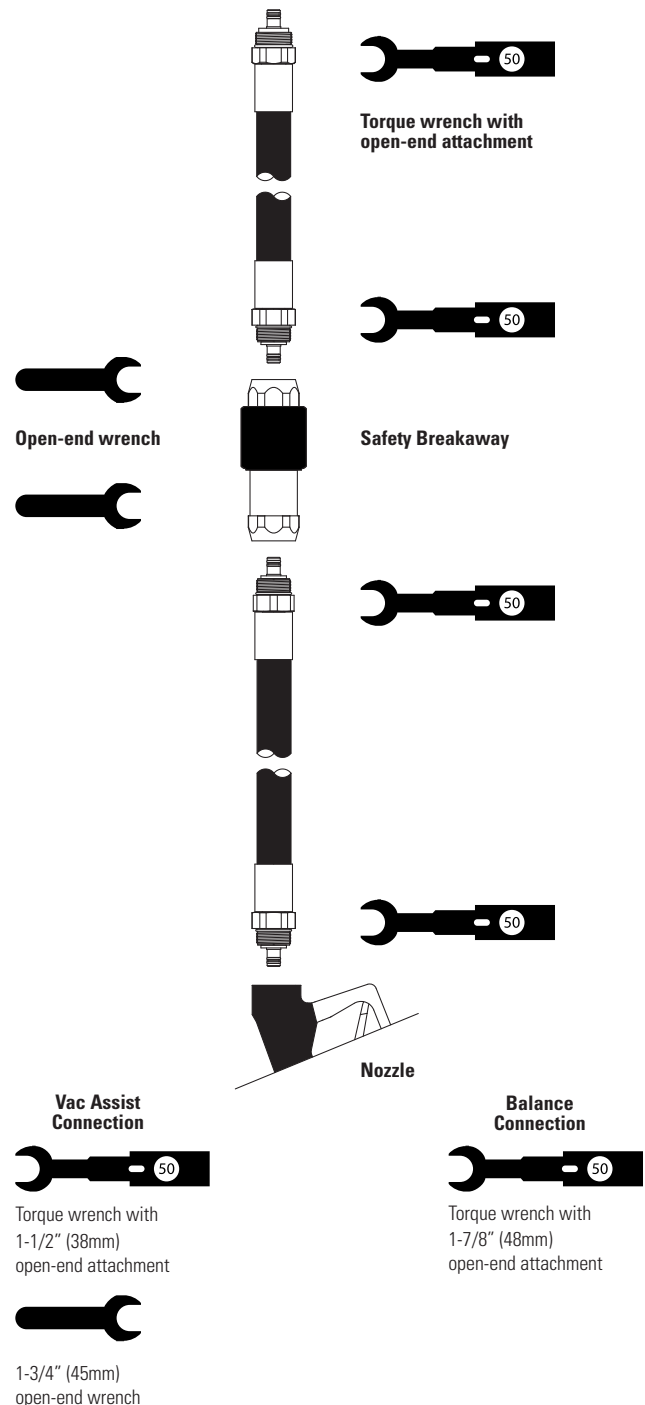
1. Turn off and tag the power to the dispenser. Dispenser must be de-energized prior to service to avoid personal injury.
2. Barricade work area to block vehicle access to the dispenser.
3. Close the dispenser shear valve prior to removing hanging hardware (hoses, safety breakaways, and nozzles).
4. Drain liquid product from the hanging hardware set into an approved container prior to replacing any hanging hardware components.
5. Remove hanging hardware from the dispenser prior to making replacement component assembly connections. VST recommends connecting the whip hose to the dispenser as the last connection during the hanging hardware assembly.

INSTALLATION

1. The maximum length of the hose assembly shall not exceed eighteen (18) feet. Lengths greater than eighteen (18) feet are permitted if acceptable to authorities having jurisdiction.
2. Initial inspection:
 - a. Carefully unpack hose from shipping carton.
 - b. Inspect ALL O-Rings on each end of the hose to determine that they are present and undamaged.
 - c. Inspect hose exterior for any damage.
 - d. Inspect coupling threads for any damage.
3. Lightly lubricate ALL O-Rings on mating connections with petroleum jelly or other suitable lubricant. DO NOT USE pipe dope or thread sealant.
4. Insert the hose coupling into the mating connection and hand-tighten.
5. Tighten all the hose-joint connections to 50 ft.-lbs. of torque. DO NOT OVER TIGHTEN. Use a torque wrench with an open-end attachment to fit the hose couplings and an open-end wrench to properly tighten coupling connections. DO NOT USE channel-locks or pliers to tighten hose joints. Proper ft.-lbs. torque may not be achieved with these tools.
6. 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

Figure 1.

EVR Vacuum Assist Hanging Hardware Assembly



VST Installation Procedure for Phase II EVR Vacuum Assist Low Permeation Fuel Hoses

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each hose joint connection for liquid leaks and meter creep. Make proper adjustments at the hose connection if necessary.

7. Check the nozzle shut-off action by dispensing fuel into an approved container at least three times to assure proper automatic operation. 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 nozzle automatically shuts off when liquid covers the vent hole at the end of the spout. The dispenser should deliver a minimum of 3 gpm. Hold open latch will disengage automatically when liquid covers the vent hole in the spout.
8. 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 the hose. Example: The measured resistance of a 12 foot hose must not exceed 840,000 ohms (840 kilohms).

MAINTENANCE

Inspect hoses regularly for damage, loose connections, leaks, kinks, blisters, bulges, flattened areas, soft spots, or any cuts/gouges deep enough to expose the reinforcement beneath the hose cover. Replace as necessary. Subject to customer abuse, hoses should be replaced when damaged.

The hose 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 the 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 hoses voids ALL approvals and warranties. VST products must be used in compliance with applicable federal, state, and local laws and regulations.