



Vapor Systems Technologies, Inc.

Corporate Profile Products Literature Distributors Compliance Customer Support

News and Notes for the Fuel Dispensing Industry Professional

The ! Voice

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Hello!

It's summer 2017!

In this edition, you'll learn about VST Low Perm Vac Assist hoses and breakaways from both Doug Harty and Scott Bennett.

In my Training section are the enduring gentle reminders about how to get a new Level A certification and how to get Level B/C extensions.

Happy summering...

Until next time,

Susie

Susie McLaughlin
Editor, The VST Voice



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Tech Talk

BY DOUG HARTY: SENIOR APPLICATIONS ENGINEER: HARTY@VSTHOSE.COM

VST Low Perm Vac Assist Equipment

Big News!!

VST now offers our ENVIRO-LOC™ Vac Assist Low Perm Hose and SENTRY Breakaway for the EVR market. replacement hose and breakaway for the EVR market. And.....these hoses and breakaways are completely interchangeable with existing vacuum assist hardware.

Several features of this equipment is most attractive to GDF owners:

Hoses

- **The VST EVR Low Perm primary hose is non-directional, meaning that both ends are the same which simplifies the entire installation process.**
- The VST Balance to Vac Assist whip hose is designed with a rigid fitting at the dispenser outlet casting, eliminating the chance of liquid leaking into the vapor path, which destroys the vapor pump.
- VST uses the field proven Lip Seal Swivel coupling on all primary hose connections giving customers ease of use during the refueling process... no kinking... no twisting.

Lip Seal

- Our patented lip seal technology ensures a reliable swivel for the life of the hose.

Breakaways

- A simple field reattachable process requiring no additional parts or pins to reassemble.
- EVR Vac Assist SENTRY™ breakaway is specifically designed to separate at a specific PSI range to reduce the amount of hose recoil during a drive off event, reducing the potential damage to site property, customer vehicle, and most importantly the customer.

CARB Approvals

As a reminder, as of September 24, 2018, all vac assist hanging hardware needs to meet the CARB "LOW PERM" standard. Older hoses must be replaced before this date.

See the CARB advisory letter here:

https://www.arb.ca.gov/vapor/advisories/adv343_031815.pdf

This advisory letter does not include the updated VST Low Perm vac assist hardware, because the letter was issued before VST's low perm CARB approval. VST was CARB approved in Revision Q of Executive Orders VR-201 and VR-202 on 09.24.14.

Tech Talk

BY DOUG HARTY: SENIOR APPLICATIONS ENGINEER: HARTY@VSTHOSE.COM

Useful CARB Links

VST often gets asked where to find information pertaining to CARB specifications and testing procedures not only for VST equipment but other key industry suppliers as well. Below is a list of common requests to help streamline your search.

CP-201	Cert procedure	https://www.arb.ca.gov/testmeth/vol2/CP201_april2016.pdf
TP-201.1B	Static Torque	https://www.arb.ca.gov/testmeth/vol2/tp201.1b_Oct2003.pdf
TP-201.1C	Drop tube/drain	https://www.arb.ca.gov/testmeth/vol2/tp201.1c_Oct2003.pdf
TP-201.1D	Drop tube/overflow	https://www.arb.ca.gov/testmeth/vol2/tp201.1d_Oct2003.pdf
TP-201.1E	P/V Vent test	https://www.arb.ca.gov/testmeth/vol2/tp201.1e_Oct2003.doc
TP-201.3	Pressure Decay UST	https://www.arb.ca.gov/testmeth/vol2/tp201.3_april2013.pdf
TP-201.4	Dynamic Backpressure	https://www.arb.ca.gov/testmeth/vol2/tp201.4_070302.pdf
Exhibit 5	Vapor to Liquid - V/L	https://www.arb.ca.gov/testmeth/vol2/tp201_5.pdf
TP-201.6C	Liquid Removal	https://www.arb.ca.gov/testmeth/vol2/tp201.6c_070302.pdf
Clean Air Separator Test - Exhibit 4/14		https://www.arb.ca.gov/vapor/eos/eo-vr202/vr202u_ex04.pdf

Veeder Root Specific	
VST Balance Press sensor verification	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex10.pdf
VST Balance ISD OP Test	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex11.pdf
V/R Polisher Op Test	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex11.pdf
V/R Polisher Emission test	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex12.pdf
FFS Assist ISD OP – Veeder-Root	https://www.arb.ca.gov/vapor/eos/eo-vr202/vr202u_ex09.pdf

INCON Specific	
VST Balance Flow Meter Op	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex19.pdf
VST Balance Pressure Sensor Op	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex20.pdf
FFS Assist ISD OP – INCON	https://www.arb.ca.gov/vapor/eos/eo-vr202/vr202u_ex10.pdf

Tech Talk

BY DOUG HARTY: SENIOR APPLICATIONS ENGINEER: HARTY@VSTHOSE.COM

Useful CARB Links, continued

Vapor Recovery Executive Orders	
All VR Executive Orders	https://www.arb.ca.gov/vapor/eo.htm
All Phase II EVR EO's	https://www.arb.ca.gov/vapor/eo-evrphaseII.htm
FFS Vac Assist EO – No ISD	https://www.arb.ca.gov/vapor/eos/eo-vr201/eo-vr201.htm
FFS Vac Assist EO - ISD	https://www.arb.ca.gov/vapor/eos/eo-vr202/eo-vr202.htm
FFS Equipment list	https://www.arb.ca.gov/vapor/eos/eo-vr202/vr202u_ex01.pdf
FFS Scheduled Maintenance	https://www.arb.ca.gov/vapor/eos/eo-vr202/vr202u_iom01.pdf
VST Balance EO – No ISD	https://www.arb.ca.gov/vapor/eos/eo-vr203/eo-vr203.htm
VST Balance EO – ISD	https://www.arb.ca.gov/vapor/eos/eo-vr204/eo-vr204.htm
VST Equipment List	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u_ex01.pdf
VST Weekly Inspections	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u-iom02.pdf
VST Annual Inspections	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u-iom03.pdf
VST Alarm Troubleshooting	https://www.arb.ca.gov/vapor/eos/eo-vr204/vr204u-iom04.pdf

Tech Talk

BY DOUG HARTY: SENIOR APPLICATIONS ENGINEER: HARTY@VSTHOSE.COM

Useful CARB Links, continued

SJVAPCD Forms/TP's
Calibration Form
Test Procedures (TP):
TP-201.1B - Static Torque
TP-201.1C/D - Drain Valve / Drop Tube Integrity
TP 201.1E - Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves
TP-201.3 - Leak Decay
TP-201.3B - AST Leak Decay
TP-201.4 - Dynamic Back Pressure
TP-201.5 - Air to Liquid Volume
TP-201.6C Or EVR Liquid Removal Rate
TP-206.3 - AST Static Pressure
Executive Order Procedures:
Healy Clean Air Separator
VST Green Machine
VR-201/202 - Healy - Vapor to Liquid Volume
VR-201/202 - Healy - Dispenser Vapor Line Integrity
VR-201/202 - Healy - Nozzle Bag
VR-201/202 - Healy - Liquid Condensate Trap Test
VR-202 - Veeder-Root ISD - Vapor Pressure Sensor Reference Test & Site Shutdown Test
VR-202 - Veeder-Root ISD - Vapor Flow Meter Operability Test
VR-202- Incon ISD- Vapor Pressure Sensor Reference Test
VR-202 - Incon ISD - Dispenser Shutdown Mapping Verification Test & Vapor Flow Meter V/L Check Test
VR-203/204 - VST - Hydrocarbon Sensor Verification Test
VR-203/204 - VST - Vapor Pressure Sensor Verification Test & VST Processor Activation Pressure Test

Tech Talk

BY DOUG HARTY: SENIOR APPLICATIONS ENGINEER: HARTY@VSTHOSE.COM

Useful CARB Links, continued

SJVAPCD Forms/TP's, continued
VR-203/204 - VST – Nozzle Bag
VR-203/204 – VST – Veeder-Root Vapor Polisher Operability Test
VR-203/204 – VST – Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification Test
VR-203/204 – VST – Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification Test
VR-203/204 – VST – Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification Test
VR-204 - VST - Veeder-Root ISD - Balance Vapor Flow Meter Operability Test
VR-204 - VST - Veeder-Root ISD - Site Shutdown Test
Hirt VCS-100 Operability Test
VR-204/208 Incon ISD - Balance Vapor Flow Meter Operability Test
VR-204/208- Incon ISD- Dispenser Shutdown Mapping Verification Test
VR-204/208- Incon ISD- Vapor Pressure Sensor Reference Test
G-70-139 - Hirt VCS-200 Vapor Recovery Performance Tests
G-70-187 - Aboveground Healy 400 Vapor Recovery Performance Tests
G-70-193 - Hill-Vac Vapor Recovery Tests
EVR-401/402/501 AST Static Pressure Performance Test
Healy 400 ORVR AST Static Pressure Performance Test

VST Training

BY SUSIE MCLAUGHLIN: MANAGER, TRAINING & CERTIFICATIONS: MCLAUGHLIN@VSTHOSE.COM

Level A Training - Get it Done!

Executive Orders VR-203/204 Rev. P were signed in April of 2014. And with them came the **new requirement** that all contractors with existing VST Level A certifications are REQUIRED to re-certify their VST Level A by taking the Level A online training.

VST offers this training online, in a self-paced format, and at no charge to afford contractors an efficient / no cost way to keep themselves compliant with Air & Resources Board requirements. We strongly urge all contractors to get this done as soon as possible to take advantage of this wonderful opportunity.

The Level A training is available online, at no cost.

To access the training, go to <http://www.vsthose.com/education.aspx>

Level B/C Certification Extensions

If you have previously held a VST Level B or Level C certification, you are eligible for an extension on both levels by sending in the appropriate paperwork. Just scan and email the paperwork below to me, Susie McLaughlin: mclaughlin@vsthose.com

To get a Level B or a Level B/C extension:

1. Provide VST with a copy of your Level A certificate generated from the online training.
2. Provide VST with current Veeder-Root certs:
 - For Level B: VR Tank Monitoring
 - For Level C: VR Vapor Products

VST Training Videos

And on a final note... all VST training videos are available on the VST website.

Here is the link:

<http://www.vsthose.com/education.aspx> - In the "Sales Support" section

New VST Products

BY SCOTT BENNETT: V.P. SALES & MARKETING: BENNETT@VSTHOSE.COM

Vac Assist Low Perm Hose & Breakaway

09.24.2018 is the deadline that all standard Vac-Assist hoses must be taken out of service and replaced with the best available technology or a “Low Perm” Vac-Assist hose. This deadline creates quite the dilemma for GDF owners who are planning on replacing dispensers in the upcoming years and switching to the less expensive Balance solution. Adding a Low Perm primary and whip hose that will only be used for a short period and then be sent to the scrap pile is an expense no one wants to absorb.

VST offers a superior Low Perm hose and breakaway solution, with many cost-saving benefits over competitive products because:

- The rigid Balance Coupling was designed to eliminate the leak path for liquid leaking into the vapor path and causing premature failure of the vac pump motor as seen with competitive products that use a swivel at the outlet casting.
- The internal helix wire construction reduces kinking and damages of the inner and outer hose reducing the chance of ISD Alarms.
- The reattachable breakaway helps reduce cost by being field reattachable without requiring any nuisance pin replacement.
- The VST Low Perm hose and Breakaway used as an integrated system reduces hose recoil during a drive off event, reducing the chance of damage to vehicles, equipment, and harming customers.

Invest in VST TODAY and.... VST will invest in YOU TOMORROW!!!

Purchase the VST EVR Low Perm Hose and Breakaway today, and when you convert to VST Balance Solution, **VST will give you \$25 each for VST Low Perm Whip Hose, VST EVR Vac Assist Breakaway, and VST Primary Low Perm hose, plus \$50 for the Healy nozzle for a total of \$250 for each dispenser.**

Recap:

- Convert from VST Vac Assist to VST EVR Platinum Balance solution
- Receive a \$25 Rebate for Each: VST Low Perm Whip hose, VST EVR Vac Assist Breakaway, VST Low Perm Primary returned to VST
- Receive a \$50 Rebate for each FFS 900 Nozzle returned.

VST continues to be the market leader with innovative technology for EVR Vapor Recovery providing the Lowest Cost of Ownership for the end-user.

...Program details will be released later this summer...