

# VST Installation Procedure for Stage II Coaxial Balance and Vacuum Assist Fuel Hoses

Part Number Series: VSTA, VDV, VST-ISP, VST-H, VST-ISE



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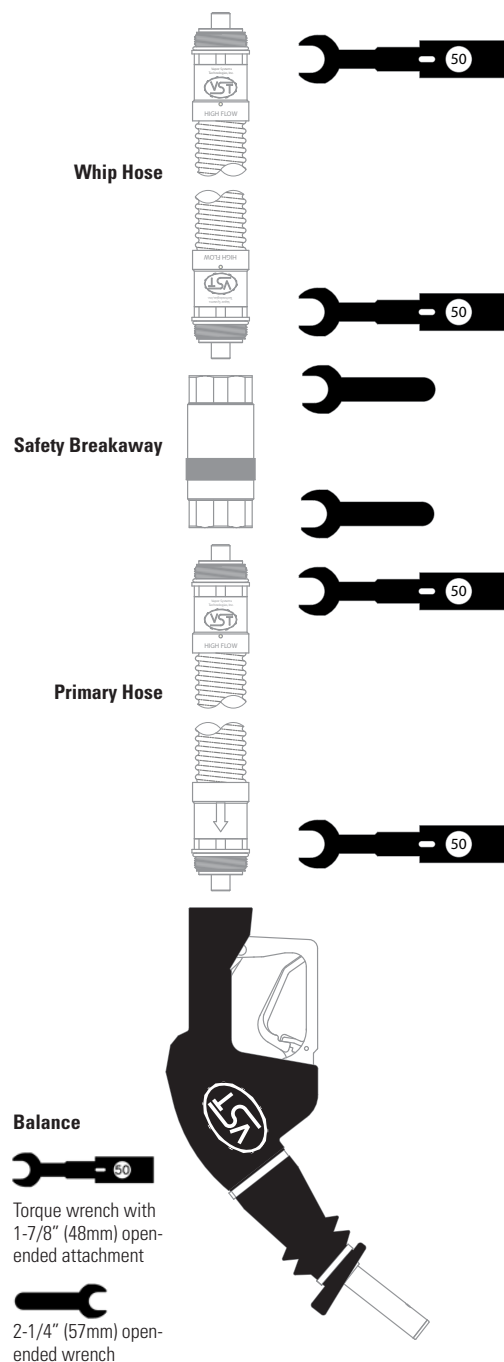
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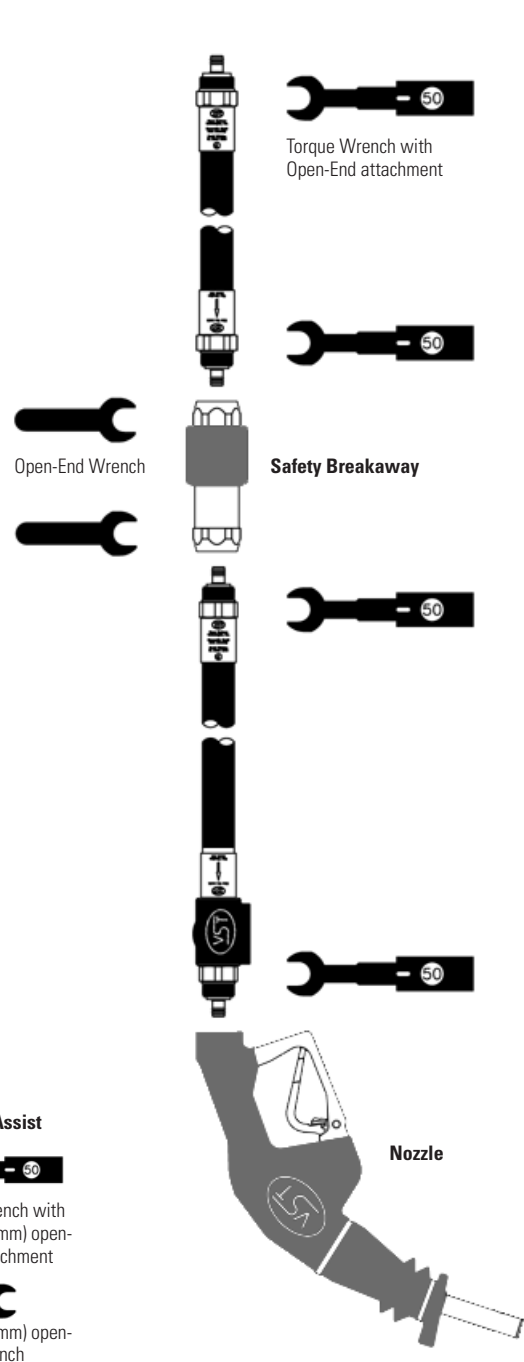
**Figure 1.**

Balance Hanging Hardware Assembly



**Figure 2.**

Vac Assist Hanging Hardware Assembly



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## INSTALLATION PREPARATION

This procedure must be followed to insure 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 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 component.
5. 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

1. 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.
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. Insert the hose coupling into the mating connection and hand-tighten.  
**NOTE:** Flow direction arrows on whip and primary hoses, where applicable, are indicated on hose coupling cuffs.
4. Tighten all the hose joint connections to 50 foot-pounds 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./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.

6. 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 nozzle is not designed to operate on gravity flow. The dispenser should deliver a minimum of 3 gpm. Hold open latch will disengage automatically when liquid covers the vent hole in the spout.
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).

## MAINTENANCE

Inspect hoses regularly for damage, loose connections or leaks. Replace as necessary. Subject to customer abuse, hose 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 abuse, misuse, changing gasoline formulas, variation in maintenance practices, environmental conditions and/or conditions beyond the manufacture'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.