

Economizer Test and Calibration

Note:

This procedure only applies to vehicles equipped with older NexGen LNG tanks that have adjustable economizers. All newer NexGen LNG vehicle tanks are equipped with factory-adjusted economizers. These economizers are not adjustable.

1. Determine required set point for vehicle tank economizers. **Note:** Inadequately adjusted regulators will cause vehicle tanks to be difficult to fill due to high residual pressures in the vehicle tanks or uneven emptying of multiple tanks.
2. Remove economizer regulator. Refer to procedure VT-001.
3. Connect gas source as shown in Figure 1. Use a ¼ inch diameter piece of stainless steel tubing with a Parker A-Loc or Swagelok® compression fitting already pre-swaged onto it similar to the economizer tube fitting removed in previous step. Attach the fitting directly to the brass elbow attached to the economizer. Use only natural gas, nitrogen, or argon for this test.
4. Open valve (A) at the pressure source (follow appropriate safety rules).
5. Slowly open valve (B) just enough to allow some gas to escape.
6. Pressure gauge (C) will indicate the setting to which the economizer regulator is set. Increase setting by turning economizer regulator adjusting screw (D) in or lower setting by turning the adjusting screw out.
7. Gas will flow through the economizer regulator when the gas pressure reaches the pre-set setting.

8. Close valve (B). Ensure economizer will hold at the set pressure and the valve seat is clean. There should be no significant leakage. If there is leakage, remove economizer and inspect for debris on valve seat. Clean as necessary.
9. Tighten the counter nut against the screw to ensure the setting is maintained.
10. Mark—with paint or some other permanent marking device—position of screw and counter nut.

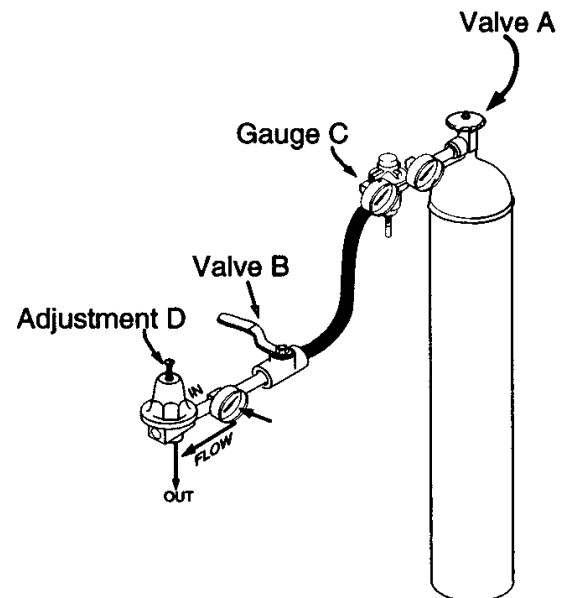


Figure 1

11. Mount economizer per Procedure VT-0001

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This procedure is for use by trained mechanics experienced with using Liquefied Natural Gas systems and vacuum technology. Review all pertinent safety documents before starting this procedure.