



# Service Bulletin SB0048

**Date:** December 2002  
**From:** Capstone Technical Support  
**Subject:** 3-Way Valve Orientation on Air Assist Circuit

---

## Systems Affected

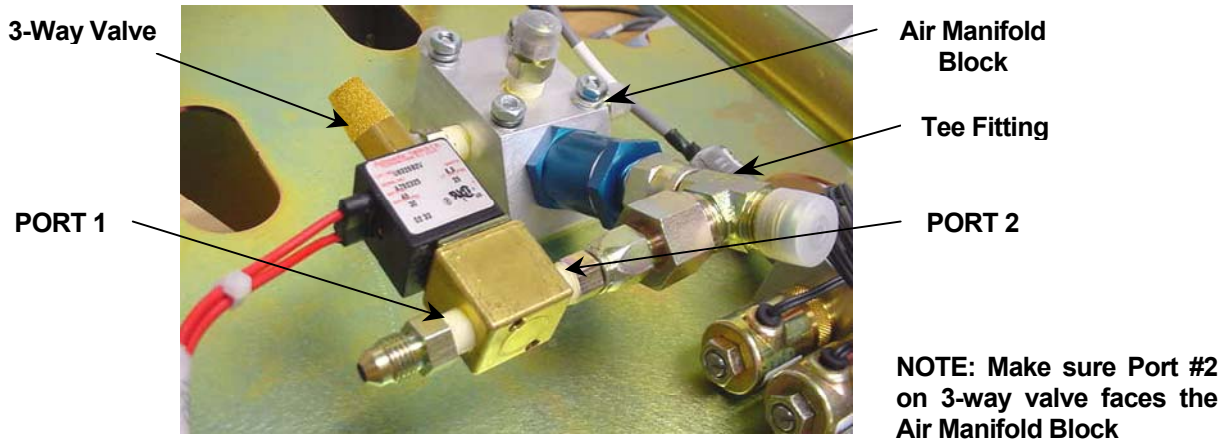
All Model C30 HEV liquid fuel MicroTurbine engines shipped between 09/17/02 thru 09/20/02 (System S/N 2633, 2637-2641, and 2644-2648).

## Description of Problem

The air-assist circuit on the HEV liquid fuel version of the 30-kilowatt Microturbine may have been shipped with the 3-way valve installed incorrectly at the factory. If installed in the wrong orientation, the engine will not idle correctly and fuel injectors are more susceptible to clogging. All users of this version of the Microturbine need to inspect and correct this issue if the valve is installed incorrectly.

The 3-way valve can be installed in two different orientations. Visually examine and verify that the number two (2) stamped on the valve housing is facing the air assist manifold as shown in the picture. If the 3-way valve is installed incorrectly, the valve must be removed and correctly repositioned.

The diagram below shows the correct orientation of the 3-way valve.



## Recommended Action

If the 3-way valve has been installed incorrectly, perform the following steps:

- 1) Detach the valve and fittings from the tee fitting connected to the air manifold block. Remove all pre-existing pipe tape thread from the fittings.
- 2) Rotate the valve so that port #2 (stamped on the valve housing) faces the air manifold block.
- 3) Carefully apply new pipe tape to each of the fittings, using caution not to extend the tape over the outer end of each fitting.

WARNING: Loose pipe tape debris could lead to injector clogging !

- 4) Re-install the fittings to the valve, maintaining the fitting locations as before. This is important, since the thread dimension is the same on both fittings, and it is possible to incorrectly reattach the fittings.
- 5) Re-install the valve to the tee fitting.

## Responsibility

It is the responsibility of Capstone to provide work instructions contained within this document to the Authorized Service Providers.

It is the responsibility of the Authorized Service Providers to contact the customer to inform and schedule the upgrade.

It is the responsibility of the Authorized Service Providers to provide Capstone with a Field Service Report upon completion of the upgrade.

## Capstone Technical Support

If you have additional questions, please contact:

### Capstone Technical Support

Toll Free Telephone: (877) 282-8966

Service Telephone: (818) 407-3600 • Fax: (818) 734-1080

E-mail: [service@capstoneturbine.com](mailto:service@capstoneturbine.com)

### Capstone Technical Support (Japan)

Service Telephone: (818) 407-3700 • Fax: (818) 734-1080

E-mail: [servicejapan@capstoneturbine.com](mailto:servicejapan@capstoneturbine.com)

### Capstone Turbine Corporation

21211 Nordhoff Street • Chatsworth, CA 91311 • USA

Telephone: (818) 734-5300 • Fax: (818) 734-5320

Website: [www.microturbine.com](http://www.microturbine.com)