



Manifold Rework Instructions: 18V-057

DATE: Feb 27, 2018

TO: E-ONE Customers and Dealers

FROM: Kevin Kearns, Customer Support Manager

SUBJECT: **Manifold End-Cap Flat End Replacement on Trucks with 599699 or 621653 Manifold Assemblies**

Dear E-ONE Customers and Dealers,

E-One has identified a repair for possible flat cap manifold leakage/damage on E-ONE X036 and X113 trucks built between Jan. 19, 2001 and March 11, 2002.

Affected Products: E-ONE X036 and X113 trucks built between Jan. 19, 2001 and March 11, 2002 with flat end cap manifolds E-ONE part numbers 599699 or 621653.

Summary: Some apparatus manifolds may fail under high pressures or water-hammer events.

Remedy: Install a rounded end-cap to reduce the stresses at the ends of the front and rear sides of the manifold assembly. Instructions for replacement are attached.

NOTE: This document is for trained professional technicians, who have been trained in welding stainless pipes and have the tools to perform this service safely and correctly.

Repair Procedure:

- 1) Remove pump panel and body panels as needed to access the manifold assembly in the pump module.
- 2) Cut 4" from flat end of manifold at front and rear. Remove all burrs and sharp edges from inside the pipe to prevent suction turbulence.
- 3) Weld E-ONE 1075783 rounded end cap in place of removed material. Use ¼" fillet weld full round bead to join 1075783. See **Figure 1** for example of an updated manifold assembly. Weld in accordance with ASME B31.1/31.3 for stainless 3XX series pipe.

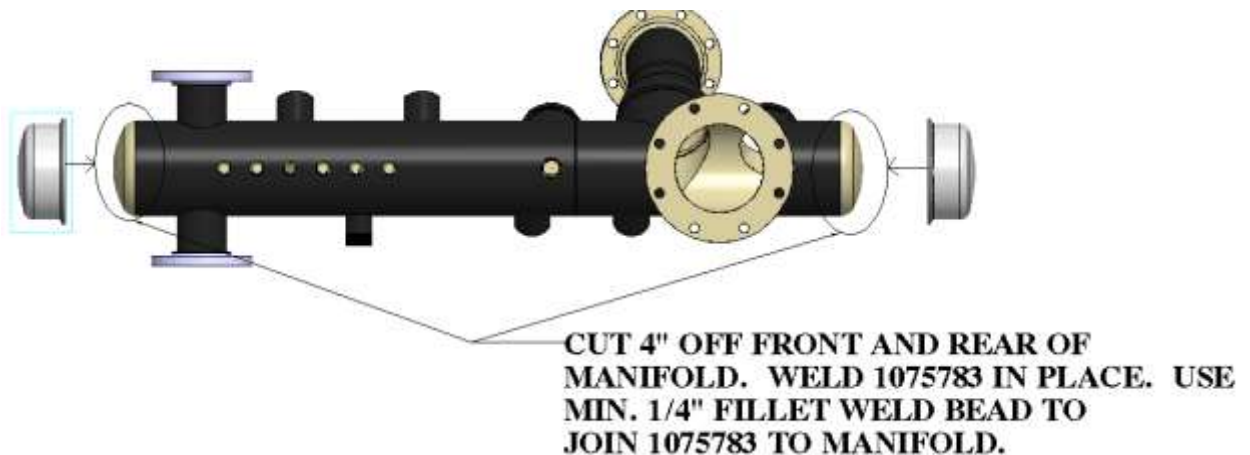


Figure 1: Manifold Repair Schematic

- 4) Perform a hydrostatic test of the manifold assembly in accordance to NFPA 16.13.10.2 (see Attachment 2).

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ATTACHMENT 2: NFPA HYDROSTATIC TESTING TO NFPA 16.13.10.2

NFPA 16.13.10.2: The hydrostatic test shall be conducted as follows:

- (1) The pump and its connected piping system are hydrostatically tested to a gauge pressure of 250 psi (1700 kPa).
- (2) The hydrostatic test is conducted with the tank fill line valve, the bypass line valve if so equipped, and the tank-to pump valve closed.
- (3) All discharge valves are open and the outlets capped.
- (4) All intake valves are closed with intakes uncapped, and Non-valved intakes are capped.
- (5) This hydrostatic test pressure is maintained for 3 minutes.