

Kelso Technologies – Kelso One-bolt Manway Serration Repair System

General Operation

The Kelso One-bolt manway system is a robust system that requires a minimal amount of maintenance. Designed to withstand the most severe of conditions and events, the following activities are recommended to provide an "In Field" repair process should damage to the serrations occur. Please refer to the Kelso One-bolt Manway System Maintenance Manual for additional details concerning maintenance and operation. For questions concerning the Kelso One-bolt Manway System please contact Kelso Engineering at (903) 583-9200.

Note:

Should any questions present themselves between this document and the Maintenance Manual always defer to the Maintenance Manual.

Always evaluate the need for, and utilize, proper Personal Protective Equipment (PPE) when conducting the following activities.

Product Preparation (Pre Repair)

- 1. Using a general shop degreasing agent, thoroughly clean the damaged area removing all dirt, oil, salts and other debris from area that extends at least 1". Proper cleaning of the damaged area is critical to a good repair. Vigorous scrubbing action using a brass wire brush should be used to clean the affected area.
- 2. After the area has been properly cleaned, the damaged section of serrations should be scrapped using the included dental tool. Scrapping of the damaged area exposes base metal that assists in creating a solid anchor for the repair material to bond.
- 3. Using compressed air at low volume, "blow dry" the serrations and damaged area removing all residual cleaning agents and debris from the area to be repaired.

Repair Procedure

- 1. Prepare a small amount of the repair epoxy ensuring that the product is thoroughly mixed. This is indicated when the epoxy has a uniform "gray" coloration throughout.
- 2. Immediately begin "packing" the mixed epoxy into the damaged area forcing the epoxy down and into the damaged area and serrations.
- 3. Once the damaged serration 1" extended area has been filled with epoxy, place the enclosed cardboard scrapper onto the surface of the serrations and gently scrap all excess epoxy off.
- 4. Allow the epoxy to sit undisturbed for 24 hours. Optimal temperature of (60'F 70'F) is recommended.
- 5. Using a sharp knife or file, remove all dried epoxy that remains on the sides of the nozzle or has accumulated along the sides of the seal area on the lid.
- 6. Once the edges of the repair area are clean, begin cleaning the horizontal seal area. Using 400 grit sand paper, begin sanding the repair area to remove build up down to the top of the serrations. Care must be taken to avoid creating a low spot in the damaged area. To ensure that the area has been properly prepared, place the enclosed flat edge over the damaged area to verify that a flat surface is present.

Product Preparation (Post Repair)

1. Using compressed air under low pressure, blow out all dust and debris from the repaired area.