

**WARNING** — The repair described in these instructions is for mobile air conditioning systems that use aluminum tubing and reduced barrier A/C hose. The KLEDGE-LOK™ system can also be used with steel and Poly-Armour® tubing, hard and soft copper tubing, NiCopp® tubing, and heater and transmission hose. **Never use on automotive braking systems or hydraulic clutch systems.**

### Aluminum Tube Repair Instructions



1. It is assumed that a leak has been discovered in the aluminum tube and the system has been evacuated. **NOTE: All mobile air conditioning work must be done by a certified technician according to SAE J2845 and all federal, state, and local regulations.**
2. Remove the entire leaking portion of the tube with a tubing cutter. **NOTE: If the removed tubing portion is greater than 1", it will be necessary to use two KLEDGE-LOK™ unions and a separate piece of aluminum tubing to fill the gap.**
3. Use a file to square the tube ends and make sure to remove any burrs and/or flakes. This will allow the tube ends to fit securely and squarely into the KLEDGE-LOK™ unions.
4. Rotate the supplied abrasive cleaning pad around the entire circumference of the tube ends to remove corrosion, dirt, or foreign contaminants. **NOTE: Avoid abrading in the direction of the tube and only use a circular motion.**
5. Wipe tube ends with a clean cloth to remove residue left from abrasive pad and use cotton swabs to remove any flakes or chips that may have entered the tube ends.
6. Apply **one small drop** of KLEDGE-LOK™ Anaerobic Sealing Compound to the cut end of the tubing and spread over the entire circumference with a clean, gloved fingertip, leaving a small clean area (1/8") at the end of the tube. **NOTE: Using more than a small drop of the compound can cause 'hydraulic lock' and make closing the KLEDGE-LOK™ union impossible.**
7. Select the correct KLEDGE-LOK™ union for your repair and slide one end of the center body over one of the cut and prepared ends, rotating to spread the compound inside of the union. Repeat with the other end.

8. Insert the KLEDGE-LOK™ union body and collar into the KLEDGE-LOK™ tool jaws. Make sure that the steps of the jaws and the steps of the union body and collar are lined up and snug. Hand tighten the cross screw to hold the KLEDGE-LOK™ union body and collar in place. **NOTE: Make sure the hex side of the cross screw is seated firmly in the support pillar and cannot catch on the edge of the chrome leg.**
9. Slip the KLEDGE-LOK™ union body and collar over the first tube end (collar towards tube). **NOTE: Make sure the tube end is bottomed out inside the union body or the connection could leak.**
10. Rotate the cross drive screw clockwise using either the supplied T-bar, a 3/8" ratchet drive or 3/4" (19mm) wrench, or a 3/8" pneumatic/electric tool until the first collar has slid completely over the end and stopped at the center rib. **NOTE: Overtightening can cause damage to both the KLEDGE-LOK™ tool and the KLEDGE-LOK™ unions.**
11. Rotate cross drive screw counter-clockwise and remove the KLEDGE-LOK™ tool from the now compressed union.
12. Repeat steps 8 through 11 above on the remaining tube end to complete the repair.
13. Block-off is the same procedure, but utilizes only one KLEDGE-LOK™ connection as the other end of the line is terminated.

### Aluminum Tube-to-Hose Repair Instructions



1. Follow above instructions for the connection to the tube end of the KLEDGE-LOK™ tube-to-hose union.
2. Cut the hose squarely and make sure there are no cracks or damage to the cut end.
3. Locate hose clamps within the cage in the provided slots and slip over the end of the hose until it reaches the hose end.
4. Force the end of the hose over the barbed end of the KLEDGE-LOK™ tube-to-hose union until it stops against the back of the center barrel. **NOTE: Lubricate the barb and inside of hose with PAG oil to ease installation of barb into hose. Crimp the clamps using a crimping tool to complete the repair.**

