Frost Fighter®

Technical Bulletin

World leader in after-market vehicle defroster solutions

Bulletin 110

Removing and reattaching defroster tabs

Defrosters often fail to operate after tabs are re-bonded using off-brand tab bonding adhesive or the tabs become physically broken. If the tab is broken just the flat base may remain on the defroster.

This creates two problems, removing the tab, then re-bonding a replacement tab to the defroster to restore operation. This technical bulletin covers how to accomplish tab removal and re-bonding without breaking the glass or further damaging the defroster.

Tab removal

Off-brand tab adhesive can be very good at bonding but lacks the electrical properties needed for a reliable electrical connection to the defroster. While this makes removal a challenge the good news is that it can be done. There are several techniques to consider. Gripping the tab with pliers and gently rocking the tab to loosen it is a good technique. Using a flat blade screw driver can be helpful as well.

Applying heat with a hair dryer or heat gun while applying force with pliers can be effective. Care must be given not to break the glass when removing the tab.

If the tab is broken and the base is still on the defroster it is not normally possible to grip the metal tab base. It may be possible to pry the tab base off the glass using the techniques already discussed.

In some cases the tab base can be heated with a soldering iron to re-flow the solder and the base can be removed. Apply the iron directly to the metal tab base. Be very careful **not to overheat the glass as it can shatter when soldered**. Use a wet towel on the outside of the glass to minimize glass heating.

Alternatives

Alternatively the old tab base can be smoothed out with a Dremel or file and the new tab bonded directly over the old tab base. The idea is to have a good bonding site and electrical connection to the defroster.

Defroster and tab damage?

When removing the defectively bonded tab it is common that additional defroster material is pulled from the glass. This is not typically a problem as the entire area will be covered by the Frost Fighter Tab Bonding adhesive filling these damaged areas.

If pried off, the defroster the tab will likely be damaged beyond repair during removal. Damaged tabs can be replaced with the **Frost Fighter Uni-Clip kits** now available in many new designs.

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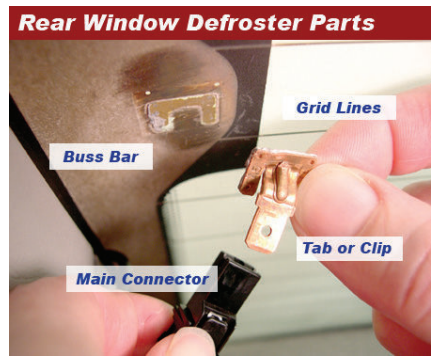
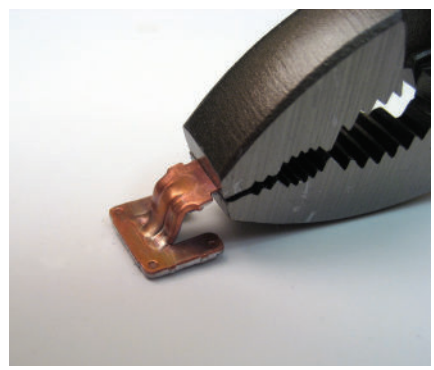




The PipeKnife® Company

13301 W. 43rd. Drive, #11 • Golden, CO 80403
Tel: 303-682-0274 • Fax: 303-232-8789
email: info@frostfighter.com

www.frostfighter.com • www.pipeknife.com

Another Option

If the bonding site on the defroster has been badly damaged from multiple repairs using solder, off-brand adhesive or other techniques the tab can be bonded at a site near the damaged area. Please use the Frost Fighter Tab Bonding kit for this.

Silver makes the difference

Silver is an excellent electrical conductor. Frost Fighter Tab Bonding adhesive uses over 80% silver to deliver the electrical properties needed to make the high-amperage-tolerant bonds needed for defroster tab attachment.

Soldering defroster tabs

Unless you have a good deal of experience and the proper tools, attempting to solder a tab back in place is NOT recommended. Glass breakage, damage to the defroster at the solder site and unreliable performance are often the result of soldering defroster tabs.

Re-bonding defroster tabs

Once removing the non-conductive adhesive and smoothing the bond site on the defroster, use sandpaper to clean the base of the tab even if it is a new Uni-Clip defroster tab. If using sandpaper or a scraper, do not remove all the defroster material in the bonding area.

Mask off the damaged area

When the bonding site and tab base are clean it is time to bond the new tab to the defroster. Using tape, mask off an area around the damaged area on the defroster that incorporates some of the undamaged defroster. Add a second layer of tape on top of the original so there are TWO tape thicknesses around the bonding site.

Bond defroster tab in place

Apply some of the silver adhesive to the masking area after mixing. Using a smooth edge, “squeegee” the silver adhesive into the masked off area. The kit’s mixing pads make good squeegees. The bonding area should fill with adhesive and be smooth.

Next, pull off the masking tape. Put a little silver adhesive on the tab and place it into position. The bonding material sets quickly. Wait three to five minutes for the bond to start to cure, then heat cure.

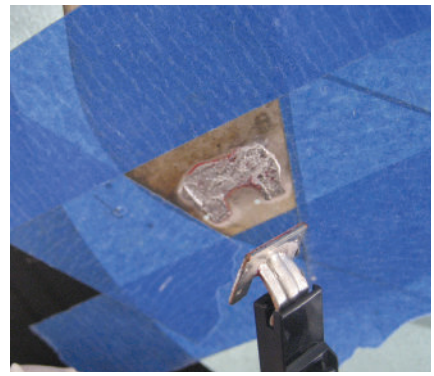
Do not cure adhesive between tape removal and tab positioning.

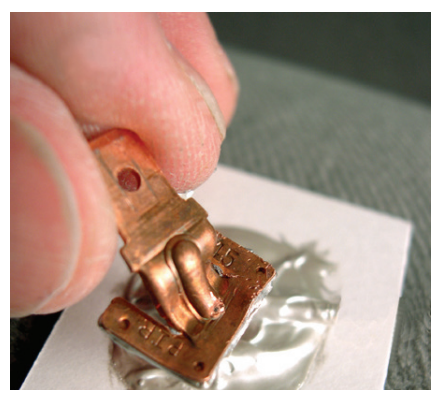
Heat curing is important

When curing the tab material heat improves the adhesion and electrical properties. Use a hair dryer, heat gun, lamp or other heat source to cure the material at 110-130°F (43-54°C) for at least 30 minutes. It is easy to use a fixture to hold the heat generator in place. Heat can be applied from the outside the window.

Caution

Tab removal can damage or break the glass. Use care when removing tabs or applying heat to glass. The PipeKnife Company is not responsible for any damage or consequence of tab removal.





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