

## Vinyl Patching Methods

### GLUE PATCHING OF VINYL TENTS

1. Wash the area of the tent to be patched and remove all residue, i.e. dust, grease etc...
2. Define the area of the tent to be patched and lay flat on clean, hard surface to determine whether all pieces will pull back together into the original shape or form.
3. Cut a patch from vinyl tent material of the same weight of material in a size that is 2" larger than the tear or hole. For good appearing patches, material should be the same material as the tent top. Material should have the finish surface in the same plans as the tent top.
4. Lightly mark on the tent, the actual area where the patch is going to fit. In some cases, you may want to use masking tape, and "mask" off the area
5. Apply HH66 vinyl glue to the tent surface and the joining surface of the patch. Lay patch on a protected surface so all edges receive glue.
  - a. NOTE!! If this is an extremely large area you may want to apply the glue to a small portion of the patch, and patch area the at one time.
6. Let the glue dry completely until it has a light tack or until the glue no longer sticks to your finger.
7. Apply the patch to the tent. Remember this works like contact cement and once it is in place, it is difficult to move or adjust.
8. Roll down the patch with a hard rubber roller or press it firmly until all bubbles are removed and the patch is in complete contact with the tent top.
9. Remove any excess glue from edges with appropriate solvents.
10. To help prevent the patched area from sticking to other parts of the tent. Apply a thin layer of Talcum Powder (baby powder) over the patched area.

### HELPFUL HINTS / WARNINGS

Vinyl tents can be patched from either side, but are generally patched on the top surface. If the damage is extensive, you may want to patch on both side, creating a "sandwich" effect around the damaged area.

If load tape or webbing is involved, they should be re-sewn immediately to provide their full strength.

When tears are 4 feet long or more, or holes are larger than 12" in diameter, the entire panel should be replaced at a repair facility.

Do no use glue to attach webbing that has been sewn in place. Glue patching can not produce the mechanical holding power of stitched components.

## **HOT AIR WELDING METHODS**

- Equipment Needed:
- Hand held hot air welder, Leister brand or others
- Hand Roller
- Scissors, for trimming out patches

### Preparing for Surface:

Vinyl patch repair requires a smooth and hard surface to lay down the vinyl tent. Ideal surfaces are stainless steel counters, linoleum or vinyl floors, some hard compound boards, or at least very smooth, dense plywood. Area needs to be clean of all dirt and foreign matter. All surfaces should be clean and unpainted.

### Preparing the Tent:

Tent surface needs to be washed clean of dirt and foreign matter.

### Preparing the Patch:

The patch repair will either take place from the top or underside of the tent, depending on the severity of the damage. Choose the one that gives the best visual result to the patched area. Patch should always be cut 1" – 2" larger than the area to be repaired. The larger the patch, the easier and safer it is to work with. When the patch is cut out, all corners should be slightly rounded so it lays down smooth and easily.

### Preparing the Hot Air Welding Gun.

Turn up heat to the appropriate setting for the weight of vinyl being used in repair. 15oz-16oz. laminated vinyl works best on setting #6, specific to Leister Hot Air Welder.

### Testing your welding ability.

Prior to beginning your welding, take some scrap fabric of the same weight and set the gun, heat range and run a practice test to make sure it is hot enough to get a sufficient weld, yet not too hot to burn and scorch and shrink vinyl fabric. After running a test weld, pull on both pieces and if vinyl separates from the scrim, you know you have a strong weld.

Welding process: Lay out tent parts to be patched and put the cut out patch in place, making sure it covers the hole or tear.

Hint: Use a piece of tape to flag it or hold in place while you prepare to work with the welder. Insert the tip of the hot air welder under the patch, along one side holding the patch with roller. As the vinyl heats up, press down and move the roller to hold down the melted vinyl tight to the tent surface. Continue around the patch at the speed required, to get a good weld. After welding all sides, if edges are still loose, go back and warm the area with a welder and roll them down for a second time. Turn tent over, heat up any loose edges around the patch area and roll down from the opposite side.

### Tips on Hot Air Welding Maintenance.

At the finish of any hot air welding session, turn the heat control to zero, but leave the fan on for several minutes to cool down the heating gun. When your welding tip gets burnt on vinyl, clean immediately with chemicals or wire brush. Following these two steps will ensure safe use and longevity of the heating element.

## **STICKY BACK VINYL PATCH**

In today's market, there are 2-3 manufactures of adhesive vinyl patches that simply peel and stick. This is undoubtedly the easiest way to get a quick patch. With sticky back patches you still contend with a certain amount of adhesives squeezing out from the edges under the patches, they should be powdered with Talcum Powder (Baby Powder) once they are applied.

CAUTION: On sticky patches, life of patch may be shorter than glued-on patches and definitely shorter than hot air welding patch. Pressure sensitive patches tend to let go of adhesion after a few years of aging and wear and tear. It is simple to pull them off, clean the area with appropriate solvents and stick on a new patch.