

Report No. 00-33-014
B/E Aerospace-SMR Technologies
2MA1419 Pneumatic De-icer Repair Kit Instructions

Repair Limits

- a. The SMR Repair Kit is designed to make permanent patch repairs to all B/E Aerospace-SMR Technologies pneumatic de-icers.
- b. Permanent patch repairs are not recommended for the following damage:
 1. Cut, tear or rupture exceeding ¾" in length.
 2. Cut, tear or rupture within 1/8" of a stitch line (on sewn de-icers).
 3. Patch repairs are permissible for damage as described in (1) and (2) above temporarily, until a replacement can be scheduled, provided the part remains operational.
- c. Recommended limits for application of patches for maximum operating efficiency of a pneumatic de-icer.
 - Three (3) small patches (1 ¼" x 2 ½") per 12-inch square area.
 - Two (2) medium patches (2 ½" x 5") per 12-inch square area.
 - One (1) large patch (5" x 10") per 12-inch square area.

Material List

- a. Materials in kit:

<u>Part Number</u>	<u>Description</u>
2MA1419-07	½ pint Primer #94
4MA1929-3	30 pcs. (Pkg.) small oval patch (1 ¼" x 2 ½")
4MA1929-2	30 pcs. (Pkg.) medium oval patch (2 ½" x 5")
4MA1929-1	10 pcs. (Pkg.) large oval patch (5" x 10")
2MA1419-06	3 pcs. (Pkg.) emery cloth, coarse grit
2MA1913-01	1 ea. Patch Template/Sanding Shield
- b. Required materials **not** supplied in kit. (Equivalent substitutes permitted)

<u>Description</u>	<u>Vendor/Part Number</u>
2" Rubber Roller, 1 ea.	B/E Aerospace-SMR Technologies PN 2MA1414-02
Cement brushes, ½" (2-ea. Pkg.)	B/E Aerospace-SMR Technologies PN 2MA1414-10
Detergent	Commercially available
Lint-free cloths	Commercially available
Cleaning solvent, (Toluene or Alcohol)	Commercially available
"Zip-loc" bag, plastic, (One-gallon size)	Commercially available

Repair Instructions

CAUTION: Patches have one-way stretch across the width of the patch so that the patch will stretch as the de-icer is inflated. The patch must be installed with the length parallel to the de-icer tubes. Failure to do so may result in the patch lifting when the de-icer is inflated.

CAUTION: Patch adhesive is temperature sensitive. For best results if temperature is less than 50 degrees F, warm de-icer surface prior to applying primer and warm installed patch while drying. To warm, hold a plastic bag filled with hot water on de-icer surface installed patch. Patch may not adhere if surface and installed patch are not warmed.

NOTE: Patch must extend ½-inch minimum distance beyond the damaged area and may be trimmed for small areas.

1. Clean de-icer surface to be patched with hot water and detergent using a clean cloth to remove dirt, grease and silicone coatings.
2. Sand de-icer surface with coarse grit emery cloth or equivalent. Use patch template to outline damaged area and also use as a shield during sanding.
3. Wipe de-icer surface with a clean cloth dampened with cleaning solvent (Toluene or Alcohol) and allow drying.
4. Apply one coat of primer to de-icer surface and allow drying to touch (5 - 10 minutes).
5. Remove paper backing from patch and center patch over outlined primer area on the de-icer surface. Roll patch firmly with rubber roller.
6. Allow 30 minutes cure time before inflating de-icer.

Store in cool, dry environment
55° F (Suggested) 80° F (Maximum)