

# TRANSPARENCY TOPICS

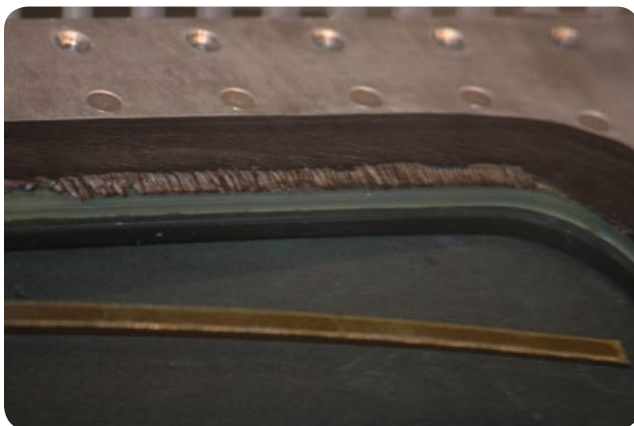
## HUMP SEAL REPAIR

### Using PPG Aerospace Hump Seal Repair Kit

An aircraft windshield's sealant system is the most critical element in extending windshield service life. The outboard moisture, or weather, seal protects against moisture ingress, which can cause delamination, interlayer degradation and windshield heating system damage. Commonly called a hump seal because of its appearance, this seal also acts as an aerodynamic smoother and covers the outboard edge of the transparency. Because it is subjected to the effects of wind and rain erosion and UV exposure, a hump seal can degrade over time. It is important to maintain the seal.

PPG Aerospace – Transparencies makes it easy to repair a hump seal in the field with hump seal repair kits designed for windshields on commercial and general aviation aircraft. The kits contain everything needed to repair a hump seal on a windshield, including new PR-1425CF chromate-free sealant by PPG Aerospace. Because PR-1425CF sealant cures in less than half the time of PR-1425 sealant, hump seal repairs can be done overnight on the line or during a minor maintenance check in the hangar. Contact the nearest PPG Aerospace application support center for more information and to purchase hump seal repair kits.

Hump seal repair procedures for most windshields are outlined in the applicable Aircraft Maintenance Manual (AMM) or PPG Abbreviated Component Maintenance Manual (ACMM). PPG recommends inspecting the windshield moisture seal every four months or every 1,000 flight hours, whichever occurs first, for signs of erosion, degradation or cracking.



This hump seal shows evidence of wind and rain erosion, and it should be repaired.

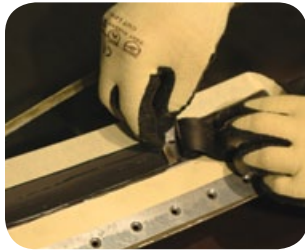
On the back are easy-to-follow steps for repairing a hump seal using the PPG Aerospace Hump Seal Repair Kit for the applicable windshield. This information is intended as a general guide only and does not replace or supersede the recommendations provided by the OEM in either the AMM or ACMM. Please consult the applicable AMM or ACMM for the specific hump seal repair procedure.



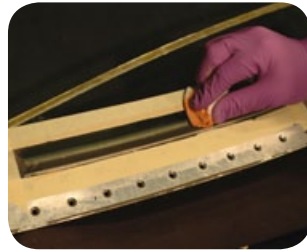
The PPG hump seal repair kit contains everything needed to repair the seal on a windshield:

- Cleaning compound
- Forming tool for specific windshield
- PR-1861 adhesion promoter
- PR-1425CF chromate-free windshield sealant
- Task wipers
- Semco® scraper
- Gloves
- Masking tape
- Gauze
- Razor blades
- Squirt bottle
- Sponges
- Butt guide

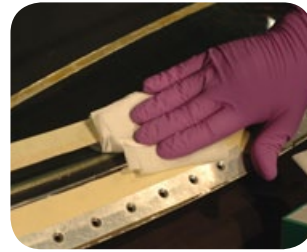
# USING PPG AEROSPACE HUMPS SEAL REPAIR KIT



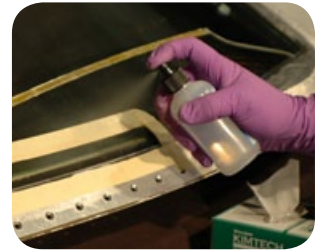
Step 1



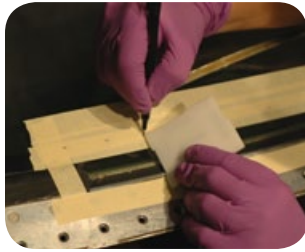
Step 2



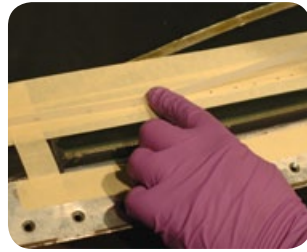
Step 3



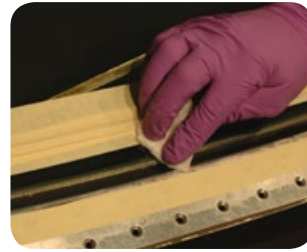
Step 4



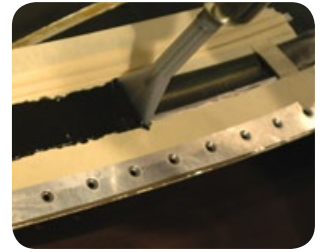
Step 5



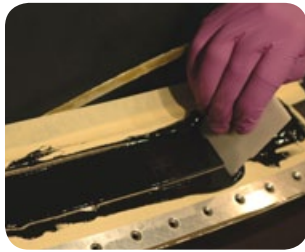
Step 6



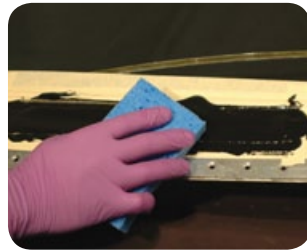
Step 7



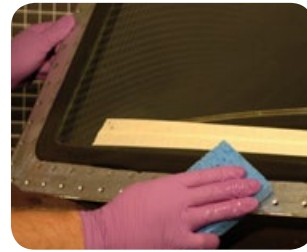
Step 8



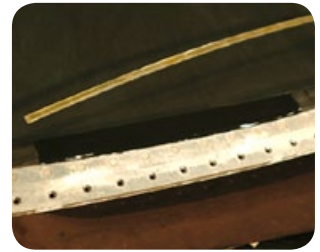
Step 9



Step 10



Step 11



Step 12

## Step 1.

Apply masking tape around the damaged area of the hump seal. Carefully remove only the damaged area of the seal with a razor blade, following the ACMM.

## Step 2.

Clean the repair area using the cleaning compound to remove any dirt or oils.

## Step 3.

Wipe the cleaned area with a task wiper to remove any cleaning compound residue.

## Step 4.

Make sure the surface is water break free, or hydrophilic, by squirting water to verify the water does not adhere and sheets across the surface, demonstrating there are no contaminants. This assures a good bonding surface for the new sealant.

## Step 5.

Apply additional masking tape to the area around the removed sealant. Use the forming tool as a guide to mark a line on the tape for applying the butt guide.

## Step 6.

Apply the butt guide along the marks. The guide will be used to form a uniform shape for the finished seal.

## Step 7.

Use gauze to apply PR-1861 adhesion promoter to the clean glass and metal surfaces. Allow for a cure time of 30 minutes.

## Step 8.

Apply PR-1425CF windshield sealant (compatible with PR-1425 sealant).

## Step 9.

Use the forming tool to form the seal.

## Step 10.

Wipe the surface with a wet sponge to smooth the sealant.

## Step 11.

Remove the tape and smooth the sealant again with a wet sponge.

## Step 12.

Allow the sealant to cure according to the recommendations on the *Semkit*® package of PR-1425CF sealant. The finished repair shows the new seal merging with the original seal.

For the PPG Aerospace transparencies sales office or application support center nearest you, please visit our website at [www.ppgaerospace.com](http://www.ppgaerospace.com).



**PPG Aerospace**  
Transparencies

PPG Industries, Inc.  
1719 Highway 72 East  
Huntsville, Alabama 35811 USA  
Telephone +1 (256) 851-7001  
Fax +1 (256) 851-8822  
SITA HSVXPCR

Sierracin/Sylmar Corp.  
12780 San Fernando Road  
Sylmar, California 91342 USA  
Telephone +1 (818) 362-6711  
Fax +1 (818) 362-7801

Issue Date: 1/12  
Supersedes: New