

U-400HV, Speedlink™ U-208HV, BETASEAL™ 1500HV, and 1502HMNC Primed to Auto Glass Urethane Adhesives Installation Instructions

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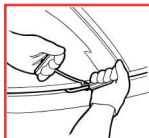
1. Wear appropriate safety equipment

- Protect yourself.
- Wear safety equipment, such as work gloves, Nitrile chemical-resistant gloves, safety glasses, work apron or other protection required by your company or safety regulations.



2. Clean and inspect replacement glass

- Use Essex GC-800 Glass & Surface Cleaner and a clean, lint-free paper towel to clean the bonding surface of the glass.
- Inspect replacement glass for defects.
- Verify all primers and adhesives are within use-by dates.



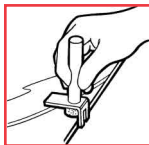
3. Cut out the glass

- Protect the customer's vehicle.
- Remove all hardware and reveal moldings.
- Cut out the windshield or body glass using your preferred method.
- Clean any dirt and debris from around the existing urethane.



4. Dry fit the glass

- Fit new glass into the opening.
- Determine how to best position the glass.
- Mark this position with "paint safe" tape as guides.



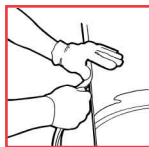
5. Prepare the glass/frit

(Choose either the one-step or the two-step procedure.)

One-step Procedure:

Apply BETAPRIME™ U-459SA 1-Step Glass/Frit Primer

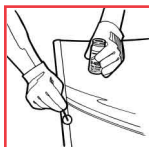
- Use GC-800 and a clean, lint-free paper towel to clean the bonding surface of the glass.
- Shake Essex U-459SA for at least one (1) minute before application.
- Activate single application stick according to the directions printed on the inside of the carton lid.
- Apply U-459SA along the bond line.
- Allow a minimum of six (6) minutes for the primer to dry.
- Apply the FlexiTrim™ reveal molding or original molding to the glass, if necessary.
- Note: Some bonded glass parts require special preparation due to the use of encapsulating materials such as PVC (Polyvinylchloride), PAAS (Pre-Applied Adhesive System) or RIM (Reaction Injection Molding). Please visit www.essexarg.com or contact Essex ARG for the most current application list for Essex U-4000 PAAS Activator, as well as preparation and application instructions.



Two-step Procedure:

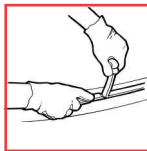
Apply U-401 Urethane Glass/Frit Prep #1

- Use GC-800 and a clean, lint-free paper towel to clean the bonding surface of the glass.
- Shake Essex U-401 for at least one (1) minute before application.
- Open U-401 bottle carefully. Insert a clean, unused dauber. To avoid spilling, never pour liquid on dauber.
- Apply U-401 to one length of the perimeter of the glass, such as the top, then immediately wipe with a clean, dry, lint-free paper towel.
- Finish the remaining three lengths, then repeat the procedure for a total of two applications to the windshield.
- Replace inner seal and cap on bottle immediately.



Apply U-402 Urethane Glass/Frit Primer #2

- Shake Essex U-402 for at least one (1) minute before application.
- Carefully open bottle. Insert a clean, unused dauber. To avoid spilling, never pour liquid on dauber.
- Apply U-402 directly on top of the U-401 path along the bond line.
- Replace inner seal and cap on bottle immediately.
- Allow a minimum of six (6) minutes for the primer to dry.
- Apply the FlexiTrim™ reveal molding or original molding to the glass, if necessary.
- Note: Some bonded glass parts require special preparation due to the use of encapsulating materials such as PVC (Polyvinylchloride), PAAS (Pre-Applied Adhesive System) or RIM (Reaction Injection Molding). Please visit www.essexarg.com or contact Essex ARG for the most current application list for Essex U-4000 PAAS Activator, as well as preparation and application instructions.



6. Trim back the urethane

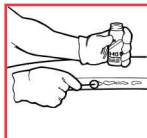
- Trim the urethane with an appropriate tool leaving a 1 mm to 2 mm base of Original Equipment urethane on the pinchweld.
- Take care not to damage the vehicle paint or pinchweld.



7. Apply U-413 Urethane Pinchweld Primer

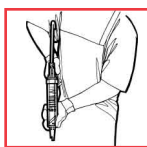
Note: Exposed bare metal areas over 1/2" x 1/2" require an etching primer to restore bond strength and durability. (See Section 7a.)

- Shake bottle for at least one (1) minute before application.
- Inspect the pinchweld for any bare paint or scratches.
- If found, prime these with Essex U-413.
- Carefully open the bottle. Insert a clean, unused dauber. To avoid spilling, never pour liquid on dauber.
- Apply U-413 to the bare paint or scratches along the bond line. Avoid priming existing urethane bead.
- Replace inner seal and cap on bottle immediately.
- Allow a minimum of six (6) minutes for the primer to dry.



7a. Bare metal priming

- Clean surface with an abrasive pad making sure to rough up edges of painted areas.
- Wipe area to be primed with a clean paper towel dampened with U-401 or 100% acetone.
- Allow U-401 to flash.
- Shake BETAPRIME™ U-5201 Bare Metal Etch Primer for at least one (1) minute before application.
- Using a clean, unused dauber, apply an even coat of BETAPRIME U-5201.
- Allow at least 30 minutes for material to dry. Metal and air must be at least 40°F (4.4°C) for material to flash.
- Apply a coat of U-413 on top of the freshly primed area making sure to completely cover BETAPRIME U-5201 etching primer at edges.



8. Apply urethane adhesive

(Choose either glass or pinchweld application.)

- Puncture top of cartridge.
- Remove endcap.
- Load the adhesive into the applicator.
- Make sure plunger is clear of the cartridge rim.

Glass Application:

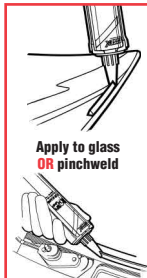
- Hold the applicator in a vertical position and dispense the adhesive with a continuous motion in a uniform "V" shaped bead.
- Apply adhesive to the glass on top of the bond line.
- Keep the applicator at a 90° angle to the glass.

Pinchweld Application:

- Hold the applicator in a vertical position and dispense the adhesive with a continuous motion in a uniform "V" shaped bead.
- Apply adhesive to the pinchweld perimeter directly on top of the freshly cut Original Equipment urethane film.
- Keep the applicator at a 90° angle to the pinchweld.

Either Application:

- Make sure bead is uniform and has no gaps. Add material, if necessary.



9. Install the glass

- Apply U-555 to any molding or encapsulation bonding surface that contacts new urethane to promote adhesion.
- Place the glass in the body opening.
- Use the tape guides to correctly position the glass. Adjust glass to precise alignment.
- Lightly press it into position.
- Backpaddle urethane around edge of glass into gaps.
- Replace the press-in style molding, if required.
- Replace any additional hardware.



10. Clean up

- Clean any excess uncured urethane with Essex U-421 Urethane Adhesive Cleaner.
- Clean the newly installed glass with GC-800.
- Complete the job paperwork and record lot numbers.
- Release the car to the customer after the appropriate drive away time elapses.

Reduce risk with
The Technology Leader

See the Essex ARG Technical Installation Guide or the Essex ARG Fixed Glass Installation Guide for additional details.

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