



BETASEAL™ U-418HV primerless-to-glass with 2-hour MDAT

- 2-hour minimum drive-away time at 40°F and above
- Primerless-to-glass adhesive
- FMVSS crash proven
- High viscosity for easy application in all conditions
- Easy to gun, excellent decking and sag resistance



Made in the USA



BETASEALarg.com

Windshield installation instructions



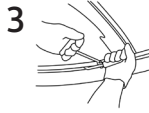
1 Wear appropriate safety equipment

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



2 Inspect replacement glass

- Spray glass bonding surface and vision area with BETACLEAN™ GC-800 Glass and Surface Cleaner and wipe glass clean with a lint-free paper towel
- Inspect replacement glass for defects, damage or signs of contamination
- Verify primer 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 using your preferred method



4 Prepare the glass

- Many contaminants are difficult to detect and remove
- Spray glass with BETACLEAN™ GC-800 glass cleaner
- Use Scotch-Brite™ pad or melamine foam sponge to abrade the surface
 - This is a mechanical abrasion step, make sure to use some pressure
 - Ensure the entire bonding surface is treated
- While the surface is still wet, wipe surface with a clean paper towel
- Spray glass again with BETACLEAN™ GC-800
 - If the glass cleaner de-wets, repeat steps a through d
 - If the glass cleaner does not de-wet, proceed to glass priming step

4.1

Primerless to auto glass urethane technology

BETASEAL™ U-418HV is a primerless-to-glass adhesive. Primerless-to-glass adhesives are designed to form the same chemical bonds to clean glass frit as the primer does. Eliminating the glass priming step saves time and can help to error proof installation.

Note: On clear glass without any frit, apply two coats of BETAPRIME™ 5504G All-in-One Primer, allowing each coat to dry.

4.2

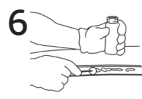
Prepare encapsulation or PAAS

- Clean encapsulation or PAAS bead with BETACLEAN™ GC-800 Glass Cleaner and a clean, lint-free paper towel
 - "Wet scrub" the encapsulation with an abrasive pad and BETACLEAN™ GC-800 Glass Cleaner, then clean again with BETACLEAN™ GC-800 and allow to dry completely
- Note:** Lightly abrade if bonding to PAAS
- Apply BETAPRIME™ 5504G All-in-One Primer to the encapsulation or PAAS surface with dauber
 - Apply BETAPRIME™ 5504G to any molding surface that contacts new urethane to promote adhesion
 - Allow primer to dry for 2 minutes at 20°F (-7°C) and above and from 20°F (-7°C) down to 0°F (-18°C) allow primer to dry for 6 minutes
 - Replace inner seal and cap on bottle immediately



5 Trim back the urethane

- Clean any dirt and debris from around the existing urethane with BETACLEAN™ GC-800 Glass and Surface Cleaner or water and a clean towel
- Trim the urethane, 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
- Any areas of trimmed urethane that require additional cleaning should be carefully wiped with BETACLEAN™ GC-800 Glass and Surface Cleaner or water and a clean towel



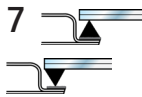
6 For priming any areas of bare metal (large or small, including scratches):

- Check the expiration date on the container
- Open the bottle of BETAPRIME™ 5504G All-in-One Primer carefully and insert a clean, unused dauber; to avoid spilling, never pour liquid on dauber
- Apply first coat of BETAPRIME™ 5504G with a clean wool dauber on any exposed bare metal
- Allow primer to dry for 2 minutes at 20°F (-7°C) and above and from 20°F (-7°C) down to 0°F (-18°C) allow primer to dry for 6 minutes
- Apply second coat of BETAPRIME™ 5504G with a clean wool dauber on any exposed bare metal and allow to dry
- Replace inner seal and cap on bottle immediately

Warning: Do not reinsert (double dip) the dauber into the primer bottle if it has touched the body of the vehicle. This could contaminate the remaining primer in the bottle.

For priming painted bonding surfaces:

- Check the expiration date on the container
- Open the bottle of BETAPRIME™ 5504G All-in-One Primer carefully and insert a clean, unused dauber; to avoid spilling, never pour liquid on dauber
- Apply one coat of BETAPRIME™ 5504G with a clean wool dauber on any exposed bare metal
- Allow primer to dry for 2 minutes at 20°F (-7°C) and above and from 20°F (-7°C) down to 0°F (-18°C) allow primer to dry for 6 minutes
- Replace inner seal and cap on bottle immediately



7 Apply BETASEAL™ Adhesive (Choose either glass or pinchweld application)

- Hold the applicator in a vertical position 90° to the glass 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, matching the location of the original adhesive bead on the glass or apply adhesive to the pinchweld perimeter directly on top of the freshly cut original equipment urethane film
- Either application: Hold the applicator in a vertical position (90°) and dispense the adhesive with a continuous motion in a uniform "V" shaped bead
- Make sure bead is uniform and has no gaps; add material or gently tool joints, if necessary



8 Install the glass

- Carefully place the glass in the body opening
- Adjust glass to precise alignment
- Lightly press it into position



9 Clean up

- Clean any excess uncured urethane with BETACLEAN™ U-424 Urethane Adhesive Cleaner
- Clean the newly installed glass with BETACLEAN™ GC-800 Glass Cleaner
- Clean up any remaining debris or broken glass on seats, floor, door handles and/or dash console



10 Recordkeeping

- Attach master lot code sticker to paperwork or manually record primer and adhesive lot numbers
- Record D.O.T. number from glass part on sticker
- Release vehicle to customer after the appropriate drive-away time elapses