*Material*: SikaÂ® Aktivator PRO / DowÂ® BETAPRIMEâ„¢ 5504G / SikaÂ® Primer-207

9. **NOTE:** *This step only applies to reusable fixed glass.*

   Visually inspect and remove remaining urethane adhesive from the glass leaving a thin layer to bond with the new urethane adhesive bead.

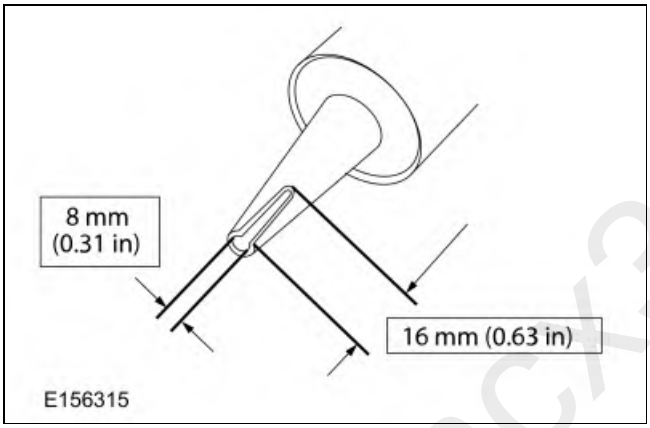
10. 

    **NOTE:** *This step only applies to reusable fixed glass.*

    Apply primer according to the manufacturer's instructions to the fixed glass anywhere the urethane adhesive was completely removed. Allow at least 10 minutes to dry.
    *Material*: SikaÂ® Aktivator PRO / DowÂ® BETAPRIMEâ„¢ 5504G / SikaÂ® Primer-207

11. 

    Cut the urethane adhesive applicator tip to specification.
    *Material*: SikaÂ® SikaTackÂ® MACH 60 / SikaÂ® SikaTackÂ® MACH 30 / DowÂ® BETASEALâ„¢ Express
    *Material*: Sika Tack ASAP Urethane Adhesive




12. 

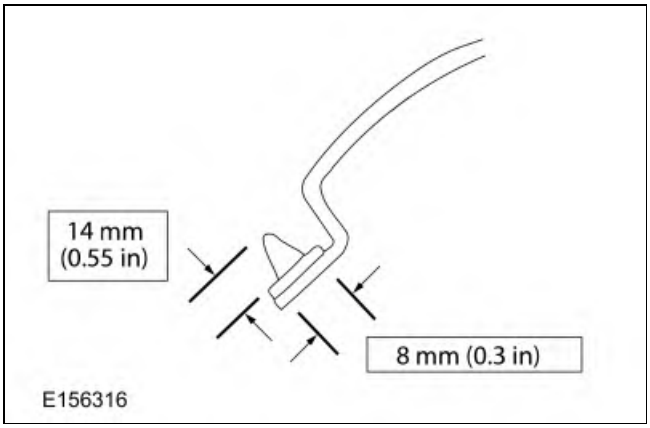
    **NOTICE: Make sure the urethane bead is uniform to prevent air and water leaks.**

    **NOTE:** *The fixed glass must be installed within 10 minutes of applying the urethane adhesive.*

    **NOTE:** *Use a power caulk gun that applies the urethane adhesive with less effort and a continuous bead.*

    Apply a urethane adhesive bead.
    1. Start and end at the original overlap points to prevent air and water leaks.
    2. **NOTE:** *Take care in applying urethane on vehicles without peripheral moldings as urethane expulsion could become an appearance issue.*

       Apply a urethane adhesive bead 14 mm (0.551 in) high and 8 mm (0.314 in) wide on top of the existing trimmed urethane adhesive bead on the pinch weld.
       Use the General Equipment: Power Caulk Gun
       *Material*: SikaÂ® SikaTackÂ® MACH 60 / SikaÂ® SikaTackÂ® MACH 30 / DowÂ® BETASEALâ„¢ Express
       *Material*: Sika Tack ASAP Urethane Adhesive
    3. Make sure there are no gaps in the bead.




13. **NOTICE: The door windows must be left open during the adhesive curing time.**

    Open the vehicle windows to prevent the air pressure of closing doors from compromising the urethane adhesive bond.

14. 

    **WARNING: Improper curing of the urethane adhesive may adversely affect glass retention, which is important for restraint system performance during a crash. Carefully follow the urethane adhesive manufacturer's curing instructions. Do not drive the vehicle until the urethane adhesive seal has cured. Failure to follow these instructions may result in serious injury to vehicle occupant(s) during a crash.**

    **NOTE:** *If equipped, the adhesive strip backings must be removed from the A-pillar mouldings before installing the fixed glass.*

    **NOTE:** *If replacing the windshield glass and equipped with a camera bracket, it must have locating pins and spacers to ensure correct alignment. Do not use a replacement windshield glass, without locating pins and spacers.*

    Install the fixed glass to the vehicle.
    1. Install the fixed glass, pressing firmly by hand to ensure a good bond.
    2. Secure the fixed glass in the correct position with tape until the urethane adhesive has cured.

15. If necessary, remove excess uncured urethane adhesive from the interior and exterior surface of the fixed glass.
    *Material*: MotorcraftÂ® Ultra-Clear Spray Glass Cleaner / ZC-23 (ESR-M14P5-A)

16. Install any removed components as needed.

17. If equipped, carry out the IPMA camera alignment.
    Refer to: Lane Keeping System - System Operation and Component Description (419-07 Lane Keeping System, Description and Operation).

# Heated Window Grid Wire Repair

**Materials**

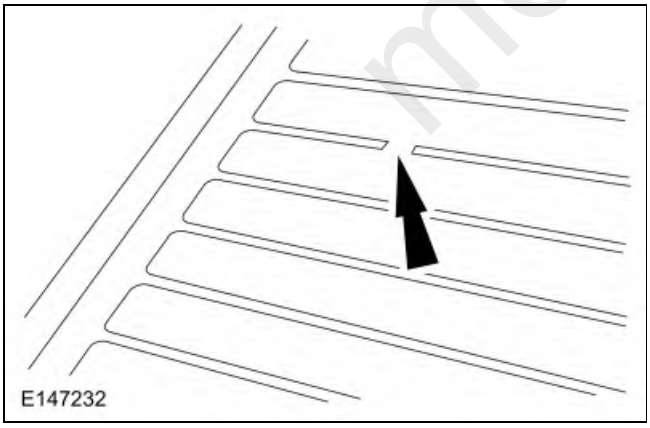
| Name | Specification |
|---|---|
| MotorcraftÂ® Ultra-Clear Spray Glass Cleaner ZC-23 | ESR-M14P5-A |
| MotorcraftÂ® Rear Window Defroster Repair PM-11 | WSB-M4J58-B |
| MotorcraftÂ® Lacquer Touch-Up Paint PMPC-19500-XXXXA, PMPM-19500-XXXXG, PMPP-19500-XXXXA | ESR-M2P100-C |

**Repair**

**NOTE:** *The antenna and heated window grid line material is not embedded into the glass, but is baked to the glass surface and consequently can be scraped off. An undamaged grid line has small ridges that project above the surface of the glass and can easily be felt when running a fingernail across them. Antenna and heated window grid lines that have been razor bladed will feel smooth when a fingernail is dragged across the affected area. Inoperative heated window grid lines may appear to the eye to be undamaged due to residue remaining on the glass and require diagnosis with a voltmeter or 12V test lamp.*

1. Bring the vehicle up to a room temperature of at least 16Â°C (60.8Â°F) or above.
2. **NOTICE: Do not use scrapers, sharp instruments or abrasive window cleaners on the interior surface of the rear door window glass as this may cause damage to the antenna and heated window grid lines.**

   Clean the entire antenna and heated window grid line repair area with glass cleaner and 0000 steel wool to remove all dirt, wax, grease, oil or other foreign material.
   *Material*: MotorcraftÂ® Ultra-Clear Spray Glass Cleaner / ZC-23 (ESR-M14P5-A)
3. Mark the location of the antenna or heated window grid break on the exterior of the rear door window glass.
4. Using a polypropylene film fine line tape, mask the area directly above and below the antenna or heated window grid break extending the tape 26 mm (1.0236 in) beyond the concern area in both directions. The break area should be at the center of the mask. Polypropylene Film Fine Line Tape (commercially available).

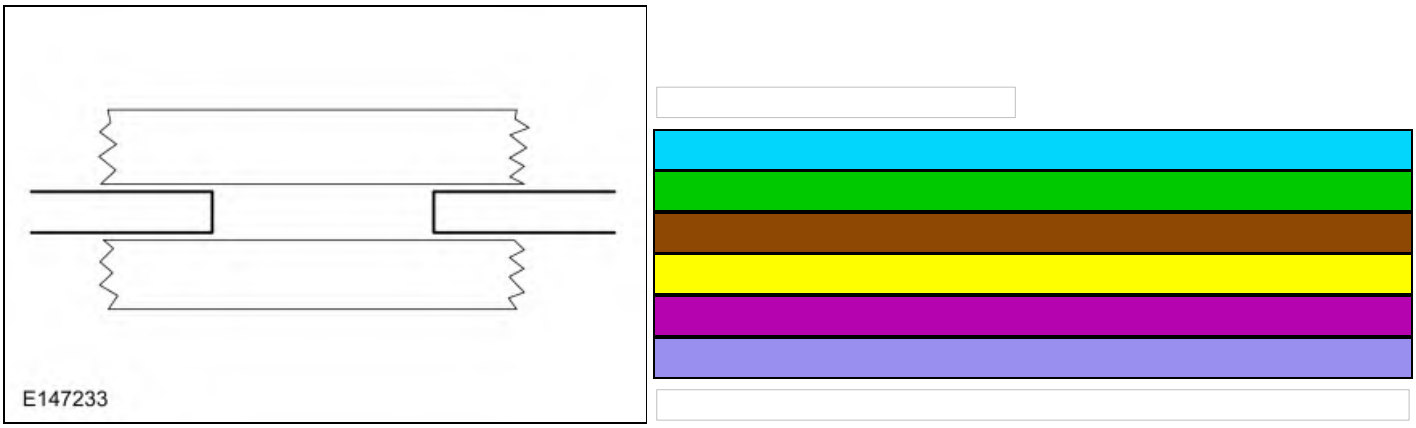



5. **NOTE:** *If the brown layer is not broken or missing, apply only the silver grid repair compound to the break. If both the brown and silver layers of the antenna or heated window grid are broken or missing, apply a coating of the lacquer touch-up paint across the break in the grid line prior to applying the rear window defroster repair compound. Do not overlap the silver grid line with the paint. Several applications may be necessary to achieve a color match.*

   **NOTE:** *Allow at least 5 minutes of drying time between applications for the touch-up paint or the silver repair coating. Applying fewer coats or not allowing adequate drying time between coats produces repaired resistance that is greater than Original Equipment Manufacturer (OEM) resistance, resulting in poor defrost performance and excessive localized heating.*

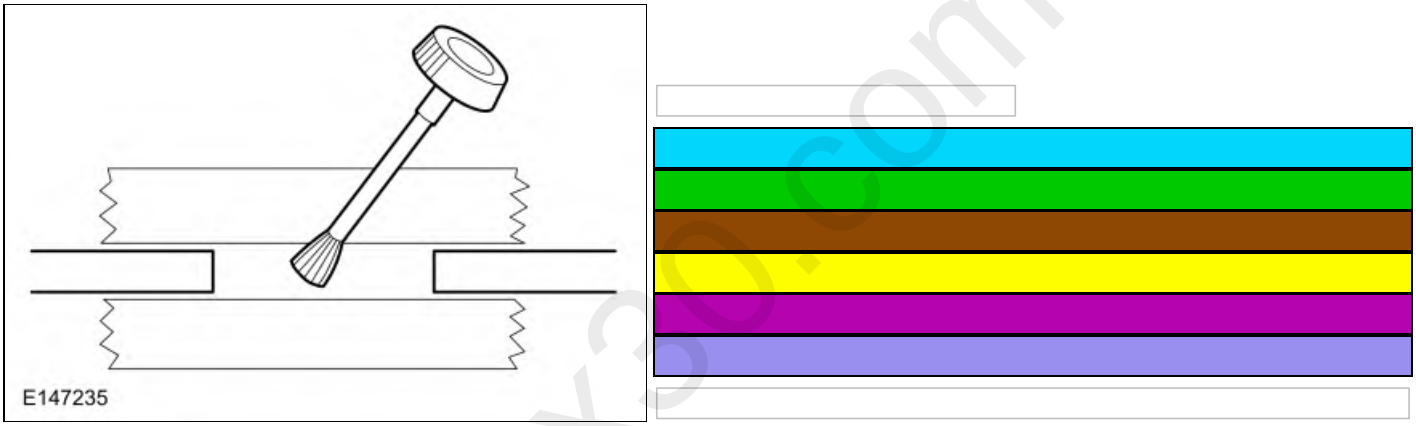
   Apply the repair coating to the antenna or heated window grid break area in several smooth, continuous strokes. Extend the silver repair coating at least 6.35 mm (0.25 in) on both sides of the break area. Apply a minimum of 6 applications of the grid repair compound.

Polypropylene Film Fine Line Tape (commercially available)
*Material*: MotorcraftÂ® Rear Window Defroster Repair / PM-11 (WSB-M4J58-B)
*Material*: MotorcraftÂ® Lacquer Touch-Up Paint / PMPC-19500-XXXXA, PMPM-19500-XXXXG, PMPP-19500-XXXXA (ESR-M2P100-C)




6. **NOTE:** *The repair coating air dries in approximately one minute and can be energized after 5 minutes. Optimum adhesion occurs after approximately 24 hours.*

   Allow the repair area to dry completely and remove the mask.




7. **NOTICE: Be careful not to damage the antenna or heated window grid line with the razor blade. If this occurs, additional repair may be necessary.**

   Remove any excess repair compound above or below the antenna or heated window grid line with a razor blade.

8. **NOTE:** *The interior side of the antenna or heated grid lines are not painted, but due to the silver tarnishing tend to change the grid to a gold or brown color. The repair area will be bright silver and also tarnish over time to match the rest of the antenna or heated window grid.*

   Test the system for normal operation.