



WINDSHIELD REPAIR KIT

08580

Kit Includes:

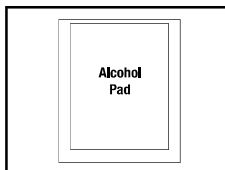
- | | |
|---|--|
| 1 – Alcohol Wipe | 1 – Stick Pin |
| 1 7/8 in x 2 in
(4,7 cm x 5 cm) | 7/8 in (2,2 cm) |
| 1 – Bridge Assembly | 1 – Dropper |
| 4 3/4 in x 1 1/4 in x 3/8 in
(12 cm x 3,1 cm x 1,9 cm) | 6 1/4 in (15,8 cm) |
| 2 – Suction Cups | 1 – Razor Blade |
| 1 3/4 in x 3/4 in
(4,4 cm x 1,9 cm) | 1 5/8 in x 7/8 in
(4,1 cm x 2,2 cm) |
| 2 – Phillips Head Screws | 1 – Clear Plastic Film |
| 3/8 in (0,9 cm) | 4.2 in square (10,6 cm) |
| 1 – Resin Chamber | 1 – Step-by-Step |
| 1 3/4 in (4,4 cm) | Directions for Use |
| 1 – Resin Chamber Tip | |
| 1/2 in (1,2 cm) | |
| 1 – Injector | |
| 2 1/4 in (5,7 cm) | |
| 1 – Injector o-ring | |
| 1/4 in x 3/8 in
(0,6 cm x 0,9 cm) | |
| 1 – Resin bottle | |
| 0.25 oz (7.08 g) | |

**This kit is designed to repair
small bulls-eye, spider web, and
star damage on windshields.**

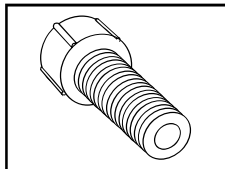
About Windshield Repair:

- This kit is designed to provide vehicle owners the necessary information and tools to repair small damages in laminated automotive glass windshields.
- The National Glass Association (NGA) and the American National Standard Institute (ANSI) have jointly worked to develop an approved Repair of Laminated Automotive Glass Standard (ROLAGS). Reference document number ANSI/NGA R1. 1-2007 for more information about repairing laminated glass.
- This kit should only be used on bulls-eye, spider web, star damage, and some combination breaks smaller than 1 inch (25mm) in diameter. This kit will not repair surface pits larger than or cracks longer than 3/16 inch (5 mm).
- If the damage(s) are in the Driver's Primary Viewing Area (DPVA), as described in the ROLAGS, owners should have their windshield inspected by a professional glass repair technician to determine whether the windshield should be repaired or replaced.
- This kit can be used to repair multiple damages.
- The use of this kit may not repair the full optical clarity of the glass.

NOTE: Exerting pressure on the windshield can cause cracks to propagate.
DO NOT rest your body weight on the glass.



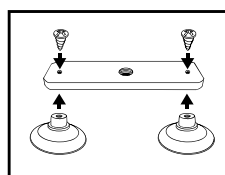
1 alcohol wipe



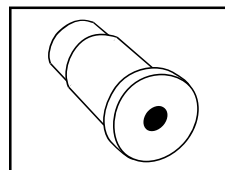
1 resin chamber



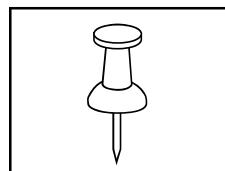
1 bottle glass repair resin



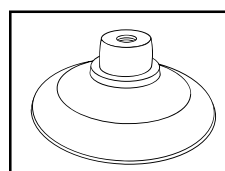
1 bridge assembly



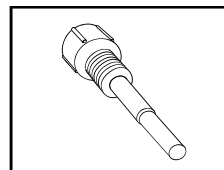
1 resin chamber tip



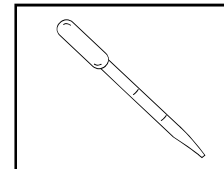
1 stick pin



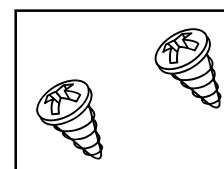
2 suction cups



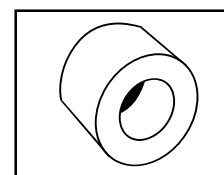
1 injector



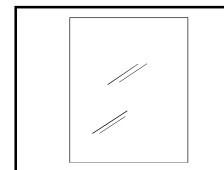
1 dropper



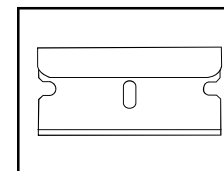
2 phillips head screws



1 injector o-ring



1 clear plastic film



1 razor blade

CAUTION

Vehicle should not be driven while performing these steps as clear vision through the windshield may be impaired.

To prevent injury from sharp installation tools

- Use care when handling the sharp scraper blade.
- Never bend the scraper blade or it could break unexpectedly.
- Use care when handling the sharp stick pin.
- Properly dispose of the scraper blade and stick pin in accordance with any local and/or national regulatory requirements.

WARNING! May cause allergic skin reaction. May cause eye, skin, nose and throat irritation.

CONTAINS: 2-Hydroxy-2-Methyl-1-Phenyl-1-Propanone (7473-98-5); 1,6-Hexanediol Diacrylate (13048-33-4).

PRECAUTIONS: Avoid eye contact. Do not get on skin or clothing. Avoid breathing of vapors. Use only with adequate ventilation. Do not swallow. Wash thoroughly after handling. Close container after each use.

KEEP OUT OF REACH OF CHILDREN.

FIRST AID INFORMATION: **Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If Swallowed:** Do not induce vomiting. Get medical attention.

VOC: Please consult State and Local Regulations. This Product: VOC content less than or equal to 0% VOC.

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Additional Product Safety and Health Information Source:

Material Safety Data Sheet (28-8620-8) or

3M Automotive Aftermarket Division

3M Center/Bldg. 223-6N-01, St. Paul, MN 55144-1000

1-877-MMM-CARS (666-2277) www.3MCarCare.com

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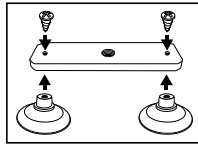
Kit components made in the USA with US & globally sourced material;
Razor Blade Made in Mexico.

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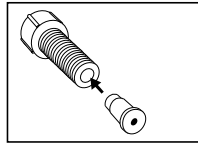
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ASSEMBLING THE BRIDGE, RESIN CHAMBER, AND INJECTOR

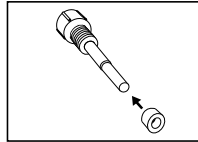
1. **BRIDGE ASSEMBLY:** One at a time, attach the two suction cups to the bridge assembly with the two Phillips head screws as shown here.



2. **RESIN CHAMBER ASSEMBLY:** While holding the resin chamber in one hand, insert the resin chamber tip as shown here. Push the tip in until it is fully seated against the shoulder of the resin chamber.



3. **INJECTOR ASSEMBLY:** While holding the injector in one hand, slide the injector o-ring onto the injector as shown here. Push the o-ring onto the injector until it seats against the shoulder at the mid-point.



MAKING THE REPAIR

NOTE: A mirror taped to the inside of the windshield helps correctly place the bridge and resin chamber over the damage.

1. Place a cloth or paper towel near the bottom of the windshield, below the damage. This will catch any resin that might get spilled or leaked from the repair area.
2. If necessary, use the stick-pin to gently remove any loose glass from the center of the damage.



3. Thoroughly clean the outside of the glass in the damaged area with the alcohol wipe. Work from the center of the damage outwards.



4. Place the bridge assembly on the windshield with the opening for the resin chamber centered directly over the top of the damage. Press down on the assembly until a vacuum is created by the suction cups (suction cups will be nearly flat against the windshield) and let go. Suction cups should firmly hold the assembly onto the glass.



5. Screw the resin chamber assembly into the bridge until the rubber tip of the resin chamber just touches the surface of the windshield. Visually inspect to make sure that the rubber tip is centered and covers as much of the damage as possible (reposition the bridge assembly as necessary to achieve this). Turn the resin chamber down an additional 3 half - turns to create a tight, leak-free seal against the glass. **IMPORTANT:** Do not over-tighten as further windshield damage can occur.



6. Uncap the bottle of Glass Repair Resin and use the dropper to fill the resin chamber approximately half full with the Glass Repair Resin. Put any unused resin back into bottle and recap.



7. Start to screw the injector assembly into the resin chamber assembly. Pressure will begin to build in the resin chamber and an increase in effort will be felt. Slowly continue to turn the injector to maintain this pressure and to force the resin into the damage. Some damages may have to be under pressure for 15 to 20 minutes to completely fill the damage.



NOTE: If the resin chamber begins to turn while turning in the injector, it may not be tight enough against the glass. Resin leaking between the resin chamber seal and the glass or from any other part of the bridge assembly indicates that the maximum pressure is being achieved. Excessive, forceful injector turning / pressure in the resin chamber, simply leads to more loss of resin and a shorter time under pressure.

8. Visually inspect the repair with the mirror or from the inside of the vehicle. If the injector has been fully turned in and the damage has not been completely filled, remove the injector assembly and repeat steps 6 & 7.
9. Once the damage has been filled with repair resin, remove the resin chamber and bridge assembly from the windshield.

10. **Optional Step:** If there is a pit in the surface of the glass, apply a drop of resin directly over the pit and cover it with the clear plastic film. Press down on the outside of the plastic film (finger pressure) to work any trapped bubbles away from the pit and to squeeze excess resin from between the film and the pit. The pit will require only a very small amount of resin to fill it. The plastic film should remain stuck to the glass until the resin is fully cured.



NOTE: Repeat steps 4 thru 10 to achieve desired results or if additional damage needs repair.

11. Remove any excess resin from the windshield. Once cured, the resin will be much more difficult to remove.
12. Move the vehicle to a brightly sunlit area and allow the entire assembly to sit for at least 20 minutes. Longer periods of time will be required when sunlight is not directly over head, if using on tinted glass, if there are air pollutants, or if it is an overcast or cloudy day. An ultraviolet light with a range of 200 to 400 nm can be used as an alternative to natural sunlight to cure the resin.
13. Test to see if the resin is fully cured by testing its hardness with your finger or the stick pin. When fully cured, the resin will be very hard. If in doubt, allow more time (ultraviolet exposure) before proceeding.
14. If the clear film was used to fill a surface pit: Carefully remove the film by peeling it back from one corner at a sharp angle over-top itself. The resin-bond to-the-film must be carefully separated or all of the resin along with the material in the surface pit may peel off with the film.
15. Use the scraping blade to remove any excess cured adhesive from the surface of the windshield.



16. Clean the windshield with glass cleaner and a clean towel.

