Contents

3M Auto Glass Urethane Adhesives

3  Fast Cure Auto Glass Windshield Adhesive
3  Auto Glass Urethane Windshield Adhesive-(HV)
3  Auto Glass Urethane Windshield Adhesive-(MV)
3  Windo-Weld™ Super Fast Urethane
4  Rapid Two-Part Auto Glass Urethane Windshield Adhesive (RTP)

3M Primers

4  Clear Primer (Step 1)
4  Black Primer (Step 2)
5  Single Use Primer Applicators
5  Primer Daubers

3M Damming Products

5  Single-Sided Foam Dam Tape
5  Foam Spacer Blocks
6  Windo-Weld™ Ribbon Sealer
6  Windo-Weld™ Resealant (Flow Grade)

3M Sealant Products

7  Automotive Bedding & Glazing Compound

3M Windshield Molding Retention Tapes

7  Scotch™ Black Preservation Sealing Tape-No. 481
7  Scotch™ Safe-Release™ Painter’s Masking Tape-No. 2090

3M Aerosol Adhesives, Cleaners & Lubricants continued...

9  Anti-Seize Lubricant
9  Super Trim Adhesive
9  General Trim Adhesive
10  Spray Trim Adhesive
10  Glass Cleaner
10  General Purpose Adhesive Cleaner
10  Release Agent
11  Lithium Lube
11  Spray Lube
11  Silicone Lubricant (Dry Type)
11  Silicone Lubricant Plus (Wet Type)
12  4-Way Spray Lubricant
12  Super Weatherstrip Adhesive
12  Weatherstrip Adhesive-Black
12  Quick Fix Adhesive

3M Applicators & Accessories

13  Mixing Nozzles-Clear
13  Applicator Guns
13  Shop/Glass Stand

3M Abrasive Products

14  Green Corps™ Roloc™ Discs
14  Wetordry™ Polishing Cloth Belts
14  Roloc™ Bristle Discs
15  Roloc™ Radial Bristle Discs
15  Scotch-Brite™ Multi-Flex Abrasive Sheet Rolls
15  Tri-M-Ite™ Resin Bond Cloth Discs
16  Duo-Glass™ Belts

3M Automotive Windshield Replacement Procedures

19-20  Replacement Instructions
The Windshield... A Structural Member of Today’s Automobile

In the early 1980’s auto makers responded to skyrocketing fuel prices by reducing vehicle weights and increasing vehicle aerodynamics. Flush-mounted glass and the windshield becoming a structural part of the vehicle were results of this effort.

As the windshield became a designed safety feature of the vehicle, windshield replacement technology changed quickly and corresponding regulations emerged. Department of Transportation regulations 212 and 216 set standards for the windshield retention and roof crush during rollover. And, with the windshield a designed safety feature, glass shops had to consider specific regulations such as the Motor Vehicle Safety Act (see bottom of page). Glass shops were now responsible for replacing glass to meet OEM specifications.

3M is an innovator in the development of windshield replacement products and methods.

3M has provided products to the automotive industry for glass installation the past 40 years:

- In 1972, 3M reacted to new auto glass technology by pioneering the use of an aftermarket polyurethane adhesive/sealant that quickly became the industry standard.

- Through the 80’s and 90’s, and now in the new millennium, 3M continues its history of innovation with products designed to work with flush-mounted windshields.

3M is the only urethane manufacturer to have two windshield urethane adhesives that are both Carlite™ by Visteon™ approved and officially licensed by NASCAR™:

3M™ Rapid Two Part Auto Glass Urethane passed the rigorous Carlite™ by Visteon™ 35 mph test with 100% retention in 2 hours at 25 degrees using 3M’s cold temperature procedure.

3M™ Fast Cure Auto Glass Urethane (one-part, high viscosity urethane) passed the Carlite™ by Visteon™ rigorous 35 mph test in 8 hours at 70 degrees fahrenheit and 50% relative humidity. At 90 degrees fahrenheit and 80% relative humidity, 3M™ Fast Cure Auto Glass Urethane reaches an Overlap Shear Strength of 250 psi in 2 hours and 150 psi in only 1 hour. This means 3M™ Fast Cure Auto Glass Urethane is the fastest curing 3M one part auto glass urethane available.

Motor Vehicle Safety Act-Section 1397 (a) (2) (a) “No...dealer...repair business shall knowingly render inoperative, in whole or in part, any device or element of design installed on or in a motor vehicle...unless...such...vehicle...will not be used...during the time such device or element or design is rendered inoperative.”
### 3M™ Fast Cure Auto Glass Urethane
- Fast cure
- High viscosity-glass supporting
- Meets FMVSS 212 & 216
- Meets OEM strength requirements
- Flex Pack: Job size, easy to use, less to dispose, 450 ml & 600 ml sizes
- Carlite™ by Visteon™ approved
- Officially Licensed by NASCAR™

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>QTY/ CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08689</td>
<td>450 ml Flex Pack</td>
<td>12</td>
</tr>
<tr>
<td>08690</td>
<td>10.5 fluid oz. Cartridge</td>
<td>12</td>
</tr>
<tr>
<td>*08566</td>
<td>600 ml Flex Pack</td>
<td>12</td>
</tr>
</tbody>
</table>

### 3M™ Auto Glass Urethane Windshield Adhesive-(High Viscosity)
- High viscosity-glass supporting
- Meets FMVSS 212 & 216
- Meets OEM strength requirements
- Flex Pack job size easy to use and less to dispose (450 & 600 ml sizes)
- Carlite™ by Visteon™ approved

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08696</td>
<td>10.5 fluid oz. Cartridge</td>
<td>12</td>
</tr>
<tr>
<td>08698</td>
<td>450 ml Flex Pack</td>
<td>12</td>
</tr>
<tr>
<td>*08565</td>
<td>600 ml Flex Pack</td>
<td>12</td>
</tr>
</tbody>
</table>

### 3M™ Auto Glass Urethane Windshield Adhesive-(Medium Viscosity)
- Medium viscosity
- Meets FMVSS 212 & 216
- Meets OEM strength requirements
- Flex Pack job size easy to use and less to dispose (450 & 600 ml sizes)

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08693</td>
<td>10.5 fluid oz. Cartridge</td>
<td>12</td>
</tr>
<tr>
<td>08695</td>
<td>450 ml Flex Pack</td>
<td>12</td>
</tr>
<tr>
<td>*08564</td>
<td>600 ml Flex Pack</td>
<td>12</td>
</tr>
</tbody>
</table>

### 3M™ Windo-Weld™ Super Fast Urethane
- Moisture curing adhesive/sealant intended for all flush-mounted and bonded windshield or backlite replacements
- Flows evenly, smoothly
- Odorless
- Medium viscosity
- Meets OEM strength requirements
- Officially Licensed by NASCAR™

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>CONTAINERS/ CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08609</td>
<td>10.5 fluid oz. cartridge</td>
<td>12</td>
<td>BLACK</td>
</tr>
</tbody>
</table>

* Available July 1, 2002
3M™ Rapid Two-Part Urethane Windshield Adhesive (RTP)

- Fast cure formula*
- OEM strength performance
- 10-20 minutes working time
- Requires no expensive application equipment
- Officially licensed by NASCAR™
- High modulus and non-conducting
- Easy clean up
- Easy mixing
- Carlite™ by Visteon™ approved

*Can be accelerated by heat assist

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08683</td>
<td>Clear 30 ml</td>
<td>6</td>
</tr>
<tr>
<td>08685</td>
<td>Clear 125 ml</td>
<td>6</td>
</tr>
</tbody>
</table>

3M™ Clear Primer (Step 1)

- A clear, fast-drying product
- Designed to prime windshield prior to applying 3M™ Black Primer (Step 2)
- Prior to using, clean glass with 3M™ Glass Cleaner (08888)

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08683</td>
<td>Clear 30 ml</td>
<td>6</td>
</tr>
<tr>
<td>08685</td>
<td>Clear 125 ml</td>
<td>6</td>
</tr>
</tbody>
</table>

3M™ Black Primer (Step 2)

- A black, fast-drying product
- Designed for use on windshield edges in combination with 3M™ Clear Primer (Step 1) (Part No. 08683 or 08685) prior to bonding with 3M's auto glass urethane windshield adhesives.
- Use to coat bare metal scratches on the pinchweld to inhibit corrosion.
- PVC primer

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08684</td>
<td>Black 30 ml</td>
<td>6</td>
</tr>
<tr>
<td>08686</td>
<td>Black 125 ml</td>
<td>6</td>
</tr>
</tbody>
</table>
3M™ Primer Daubers

• To be used with both clear and black primers

3M™ Single Use Primer Applicators

• No dauber contamination of primer
• No mess or spillage
• Applies a uniform, consistent film
• Disposable dispenser
• Conforms to hand better than conventional daubers

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY/ CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08691</td>
<td>Single Use Clear Primer (Step 1)</td>
<td>12</td>
</tr>
<tr>
<td>08692</td>
<td>Single Use Black Primer (Step 2)</td>
<td>12</td>
</tr>
<tr>
<td>08982</td>
<td>Single Use PAAS Primer</td>
<td>10</td>
</tr>
</tbody>
</table>

3M™ Primer Daubers

- To be used with both clear and black primers

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08688</td>
<td>n/a</td>
<td>500</td>
</tr>
</tbody>
</table>

3M Damming Products

3M™ Foam Spacer Blocks

- Adhesive backed foam blocks designed for windshield support during installation
- Maintains proper glass elevation
- Minimizes sinking and sagging of windshield
- Minimizes excessive urethane squeeze

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>BLOCKS PER PAD</th>
<th>PADS PER CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08529</td>
<td>5/16” x 1/4” x 1”</td>
<td>72</td>
<td>18</td>
</tr>
</tbody>
</table>
3M™ Windo-Weld™ Ribbon Sealer

- Unique feature of controlled compressibility allows easy installation yet will not squeeze out or allow glass to contact pinchweld
- Excellent glass adhesion
- No cure time required
- Neat—no cleanup necessary
- No odor

(*) Tape-type sealer for use only in vehicles that were OEM butyl installations. Requires 3M Butyl Tape Primer PN 08643 on both windshield and pinchweld. Not to be used on urethane bonded auto glass.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>ROLLS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08610</td>
<td>Kit- 1/4” x 15 ft.</td>
<td>12</td>
</tr>
<tr>
<td>08611</td>
<td>Kit- 5/16” x 15 ft.</td>
<td>12</td>
</tr>
<tr>
<td>08612</td>
<td>Kit- 3/8” x 15 ft.</td>
<td>12</td>
</tr>
</tbody>
</table>

3M™ Windo-Weld™ Resealant (Flow Grade)

- Flow grade sealant developed to stop leaks and act as a supplementary seal on “gasketless” windshield and backlight car models
- Do not use on urethane set stationary glass
- Flows easily into pinholes and suspected water leaks
- Dries fast into flexible, rubbery seal
- Adheres to glass, painted metal
- Excellent resistance to weathering—no hardening or cracking

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08633</td>
<td>Pint Can</td>
<td>6</td>
<td>Black</td>
</tr>
<tr>
<td>08634</td>
<td>1/10 Gallon Cartridge</td>
<td>12</td>
<td>Black</td>
</tr>
</tbody>
</table>

*Applicator Gun (Part No. 08994) used with Part No. 08633. Applicator Gun (Part No. 08993) used with Part No. 08634.
3M™ Automotive Bedding and Glazing Compound

- Non-hardening, pliable, water resistant, medium bodied sealer for sealing between windshield rubber and car body on gasket set installations
- Remains permanently soft
- Has non-sag consistency for vertical and overhead applications
- Cleans up with a dry rag

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08509</td>
<td>1/10 Gal. Ctg.</td>
<td>12</td>
<td>Black</td>
</tr>
</tbody>
</table>

3M Windshield Molding Retention Tapes

Scotch™ Black Preservation Sealing Tape- No. 481

- A 2-year, outdoor, weather resistant tape
- Pigmented black plastic film tape conforms readily to irregular surfaces
- Excellent stain resistance
- Resists hot and cold weathering over two years
- Removes quickly and easily

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY/ CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>03174</td>
<td>1&quot; x 36 yards</td>
<td>36</td>
</tr>
<tr>
<td>04319</td>
<td>2&quot; x 36 yards</td>
<td>24</td>
</tr>
<tr>
<td>03175</td>
<td>3&quot; x 36 yards</td>
<td>12</td>
</tr>
</tbody>
</table>

Scotch™ Safe-Release™ Painter’s Masking Tape-No. 2090

- A 7-day outdoor, weather resistant tape
- Easy removal for up to seven days after application
- Adhesive transfer resistant
- Unique adhesive that is resistant to ultra-violet light
- No clean-up needed
- Not recommended for use with lacquers or on lacquered surfaces

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>ROLLS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>06817</td>
<td>3/4&quot; x 60 yards</td>
<td>48</td>
</tr>
<tr>
<td>06818</td>
<td>1&quot; x 60 yards</td>
<td>36</td>
</tr>
<tr>
<td>06819</td>
<td>1 1/2&quot; x 60 yards</td>
<td>24</td>
</tr>
<tr>
<td>06820</td>
<td>2&quot; x 60 yards</td>
<td>24</td>
</tr>
</tbody>
</table>
**3M Aerosol Adhesives, Cleaners and Lubricants**

### 3M™ Structural Adhesive
- Two-part general purpose structural adhesive that may be used for bonding metal, glass and plastic
- May be used for trim, fiberglass and flexible body parts repair
- Use for sidelite channel bonding
- Easy mixing
- Sets up quickly
- Spreads smoothly
- Cures to an extremely strong bond

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/ CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08101</td>
<td>2-2 fl. oz. Kit</td>
<td>6</td>
<td>Grey</td>
</tr>
</tbody>
</table>

### 3M™ Automix™ Channel Bonding and Sidelite Adhesive
- Flexible, durable adhesive for bonding moveable and stationary automotive side glass into place
- 4-5 minute working time
- Drive-away time of 1 hour

* Used with 3M™ AutoMix™ Applicator Gun (Part. No. 08191) and Mixing Nozzles-Clear (Part No. 08197)

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>QUANTITY/ CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08641*</td>
<td>1.6 fl. oz.</td>
<td>6</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 3M™ Rear View Mirror Adhesive
- Permanently bonds mirror bracket to windshield
- Professional strength

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>TUBES./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08752</td>
<td>.02 oz. Tube</td>
<td>12</td>
</tr>
</tbody>
</table>

### 3M™ Super Glue Gel
- Professional strength formula
- No-run gel-stays in place
- Permanent bond in seconds
- Bonds metal, rubber, plastic and more

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>QTY/ CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08751</td>
<td>.07 fl. oz.</td>
<td>12</td>
</tr>
</tbody>
</table>
3M™ AutoMix™ Fast Cure Epoxy Adhesive

- Clear two part epoxy that delivers strong, durable bonds within minutes after application
- Makes difficult repair jobs easy when used to join parts made of plastic, metal, glass, fiber glass, wood, etc.
- 3-5 minute worklife
- Handling strength reached in about 5 minutes, with full cure in one hour

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08107*</td>
<td>1.6 fl. oz.</td>
<td>6</td>
<td>Clear</td>
</tr>
</tbody>
</table>

*Used with 3M Automix™ Applicator Gun (Part No. 08191) and Mixing Nozzles-Clear (Part No. 08197)

3M™ Anti-Seize Lubricant

- Lubricates and prevents corrosion
- High temperature formula
- Prevents seizing of spark plugs, cylinder head and exhaust bolts
- Prevents seizing of windshield wiper arm onto post

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NET WT./QTY</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08772</td>
<td>1.0 oz.</td>
<td>12</td>
</tr>
</tbody>
</table>

3M™ Super Trim Adhesive

- Fast acting, high strength aerosol contact adhesive designed for two-surface application
- Resistant to heat and plasticizing oils
- Bonds can be made within minutes or as long as one hour after application

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08090</td>
<td>24 oz. Aerosol</td>
<td>6</td>
<td>Yellow</td>
</tr>
<tr>
<td>08091</td>
<td>8 oz. Aerosol</td>
<td>6</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

3M™ General Trim Adhesive

- Convenient sprayable adhesive used for bonding a variety of trim fabrics
- Controllable spray pattern
- Non-misting
- No agitation of can is required
- High strength

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08088</td>
<td>24 oz. Aerosol</td>
<td>6</td>
<td>Clear</td>
</tr>
</tbody>
</table>
3M™ General Purpose Adhesive Cleaner

- Specially blended solvent
- Provides easy cleanup of most types of adhesives
- Quickly removes waxes, road tars, grease, oil and similar materials
- Will not harm most thoroughly cured automotive paint, vinyl or fabrics when properly used

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08884</td>
<td>Quart Can</td>
<td>6</td>
</tr>
<tr>
<td>08987</td>
<td>20 oz. Aerosol</td>
<td>12</td>
</tr>
<tr>
<td>08986</td>
<td>5 Gallon Can</td>
<td>1</td>
</tr>
</tbody>
</table>

3M™ Release Agent

- A blend of solvents
- Softens bond between weatherstrip and metal, auto glass and rubber grommets
- Works on all rubber set installations

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08879</td>
<td>16 oz. Aerosol</td>
<td>6</td>
</tr>
</tbody>
</table>

* To be discontinued. Superceded by 3M™ General Purpose Adhesive Cleaner.
3M Aerosol Adhesives, Cleaners and Lubricants

3M™ Lithium Lube

- Actual high solids “white grease” in the convenience of an aerosol can
- Eliminates messiness
- Extra heavy bodied lubricant
- Snorkel spray
- Excellent for metal-to-metal moving parts
- Resists heat and moisture
- Protects metal against corrosion

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08875</td>
<td>16 oz. Aerosol</td>
<td>12</td>
</tr>
</tbody>
</table>

3M™ Spray Lube

- A clear, flowable, high-performance, general purpose grease
- Designed to be water resistant
- Can be used to lubricate many items including hinges, latches and seat tracks
- Flows as a liquid then sets up to a uniform coating of grease

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08878</td>
<td>16 oz. Aerosol</td>
<td>12</td>
</tr>
</tbody>
</table>

3M™ Silicone Lubricant (Dry Type)

- High quality silicone lubricant
- Eliminates rubber squeaks and prevents sticking
- Contains no petroleum oils to stain fabrics
- Will not freeze at -28°F.
- Will not degrade at 350°F
- Seals out moisture

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08897</td>
<td>16 oz. Aerosol</td>
<td>12</td>
</tr>
</tbody>
</table>

3M™ Silicone Lubricant Plus (Wet Type)

- High solids version of Part No. 08935
- Provides increased lubricating qualities, especially on sliding parts
- Long lasting
- Facilitates the installation of rubber-set windshield
- Will not freeze at -28°F.
- Will not degrade at 350°F
- Seals out moisture

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08877</td>
<td>16 oz. Aerosol</td>
<td>12</td>
</tr>
</tbody>
</table>
### 3M™ 4-Way Spray Lubricant
- Specialized formula for general or all-around use
- Provides characteristics of a lubricating oil, a penetrating oil, a demoisturizing coating, a thin bodied, transparent rust preventative coating
- Literally, a “4 in 1” general purpose spray material which contains no silicone
- Lubricates, stops squeaks
- Frees rusted bolts
- Guards against rust
- Seals out moisture

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08898</td>
<td>24 oz. Aerosol</td>
<td>12</td>
</tr>
</tbody>
</table>

### 3M™ Super Weatherstrip Adhesive
- Used for bonding and sealing weatherstripping to car trunks and doors
- An excellent adhesive for rubber, paper and cork engine gaskets
- A good general-purpose cement
- Easy to brush and spread
- Extremely fast-drying
- Exceptional bonding strength
- Waterproof
- Flexible (rubbery)
- Resists oil, grease and solvents

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08008</td>
<td>5 fl. oz. Tube</td>
<td>6</td>
<td>Black</td>
</tr>
<tr>
<td>08001</td>
<td>5 fl. oz. Tube</td>
<td>6</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

### 3M™ Weatherstrip Adhesive-Black
- Fast-drying adhesive used for bonding and sealing weatherstripping
- Also an excellent adhesive for new EPDM weatherstripping
- Easy to apply
- Remains flexible
- Waterproof

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08011</td>
<td>5 fl. oz. Tube</td>
<td>6</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 3M™ Quick Fix Adhesive
- Bonds metals, plastics and rubber (even EPDM)
- Ideal for bonding automotive emblems, loose molding, rubber bumper guards and dashboard trim
- High viscosity cyanoacrylate formula resists run-off during application
- Resistant to shock, chemicals, solvents, water and temperature extremes
- Not recommended for rearview mirror bonding

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>CONTAINERS/CASE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>08155</td>
<td>1 oz. bottle</td>
<td>12</td>
<td>Clear</td>
</tr>
</tbody>
</table>
3M™ Mixing Nozzles-Clear

- For use with 3M Automix™ Channel Bonding and Sidelite Adhesive (PN 08641) and 3M™ Automix™ Fast Cure Epoxy Adhesive (PN 08107)

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>QUANTITY/BAG</th>
<th>BAGS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08197</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

3M Applicator Guns

- Available for easiest application of 3M™ Automotive Adhesives and Sealers

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>CONT./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>08991</td>
<td>3M™ Flex Pack Heavy Duty Applicator Gun (450 ml)</td>
<td>6</td>
</tr>
<tr>
<td>08993</td>
<td>3M™ Professional Caulking Gun (310 ml)</td>
<td>1</td>
</tr>
<tr>
<td>08994</td>
<td>3M™ Applicator Gun (Pint Can)</td>
<td>12</td>
</tr>
<tr>
<td>08191</td>
<td>3M™ Automix™ Heavy Duty 2 oz. Application Gun</td>
<td>1</td>
</tr>
</tbody>
</table>

3M™ Shop/Glass Stand

- Sturdy, portable shop stand for convenient and efficient repairing of parts or for glass preparation
- Portable for easy set up and storage
- Constructed of 16 gauge 1” square tubing
- Provides maximum floor surface for support and stability
- Full 3/8” thick, durable rubber pads to protect parts and glass
- Red epoxy powder paint for lasting durability and appeal
- Maximum weight capacity: 250 lbs.

To order, call Shopware at 1-800-877-9344
- OUS FAX (952) 392-2018

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>CONT./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>02519</td>
<td>Shop/Glass Stand (Not stocked as a 3M item)</td>
<td>1</td>
</tr>
</tbody>
</table>
3M Abrasive Products

3M™ Green Corps™ Roloc™ Discs

- Handy quick change tool for disc grinding fits any standard 1/4" drill or air tool
- A quick 1/2 turn on, 1/2 turn off speeds disc changing
- 3M™ Roloc™ discs are color coded by grade

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>GRIT</th>
<th>SIZE</th>
<th>DiscoS/BOX</th>
<th>BOXES/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01406</td>
<td>50</td>
<td>3&quot; Diameter</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>01407</td>
<td>36</td>
<td>3&quot; Diameter</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>01408</td>
<td>24</td>
<td>3&quot; Diameter</td>
<td>25</td>
<td>10</td>
</tr>
</tbody>
</table>

3M™ Roloc™ Disc Pad Assembly

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DIAMETER</th>
<th>SHAFT</th>
<th>QTY./CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>05539</td>
<td>2&quot;</td>
<td>1/4&quot; Diameter</td>
<td>10</td>
</tr>
<tr>
<td>05540</td>
<td>3&quot;</td>
<td>1/4&quot; Diameter</td>
<td>10</td>
</tr>
</tbody>
</table>

3M™ Roloc™ Bristle Discs

- Super tough plastic bristle brush, embedded with abrasive, wear as they clean continually exposing fresh abrasive
- The ideal tool to replace scrapers, wire wheels and chemical gasket stripper
- Eliminates the danger of loose wires flying back at operator
- Safer for parts and the environment than hazardous chemical strippers
- Maximum operating speeds (M.O.S.) allow for use on both die grinders and pistol grip grinders
- Use green on steel parts and yellow on aluminum parts for quick and safe removal
- Bristles ride over surface cleaning contaminants without gouging surface
- Use with 3M™ Roloc™ Disc Pad Assemblies Part Nos. 05538, 05539 and 05540

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>GRADE</th>
<th>COLOR</th>
<th>DISCS PER BOX</th>
<th>BOXES PER CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>07524</td>
<td>2&quot;</td>
<td>50</td>
<td>Green</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07525</td>
<td>2&quot;</td>
<td>80</td>
<td>Yellow</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07526</td>
<td>3&quot;</td>
<td>50</td>
<td>Green</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07527</td>
<td>3&quot;</td>
<td>80</td>
<td>Yellow</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07528</td>
<td>2&quot;</td>
<td>120</td>
<td>White</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07529</td>
<td>3&quot;</td>
<td>120</td>
<td>White</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07530</td>
<td>1&quot;</td>
<td>50</td>
<td>Green</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07531</td>
<td>1&quot;</td>
<td>80</td>
<td>Yellow</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07532</td>
<td>1&quot;</td>
<td>120</td>
<td>White</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

1" Discs MOS = 30,000 RPM
2" Discs MOS = 25,000 RPM
3" Discs MOS = 18,000 RPM

(Contact your local 3M sales representative to purchase these items)
3M™ Roloc™ Radial Bristle Discs

- 3” diameter x 3/8” center hole
- Unique bristle pattern reaches tight or awkward areas such as grooves and along 90° angles
- Flexible bristles conform to the part and clean without removing base material
- Helps to reduce damage and rework
- Higher cut rate than wire brushes for faster, more uniform finish
- Applications include:
  - Removal of adhesive, paint, oxidation and other coatings
  - Clean and prepare surfaces before and after welding
  - Remove gasket materials from recessed areas
  - Remove o-ring residue

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>GRADE</th>
<th>DISCS PER BOX</th>
<th>BOXES PER CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>07542</td>
<td>3”</td>
<td>50</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07543</td>
<td>3”</td>
<td>80</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>07544</td>
<td>3”</td>
<td>120</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

(Contact your local 3M sales representative to purchase these items)

Scotch-Brite™ Multi-Flex Abrasive Sheet Rolls

- Thin, ultra-conformable, extra sharp and economical Scotch-Brite™ sheets
- Quick scuffing of irregular surfaces
- Cleans whitewalls and parts
- Use for scuffing of new parts, primer, door jambs and hood webs
- Non-leveling, reusable, use wet or dry

**Part Number 07522**
- Use for final scuffing on primer, primer surfaces and blend areas
- Extra sharp for fast surface preparation
- Non-leveling, reusable, use wet or dry

(Contact your local 3M sales representative to purchase these items)

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SHEET SIZE/GRADE</th>
<th>SHEETS/ROLL</th>
<th>ROLLS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>07521</td>
<td>4” x 8” A-VFN General Purpose Maroon/Purple</td>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>07522</td>
<td>4” x 8” S-UFN General Purpose Ultra-Fine Gray</td>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>07447</td>
<td>Scotch-Brite™ Gen. Purpose (Maroon)</td>
<td>20/Box</td>
<td>3 Boxes/Case</td>
</tr>
<tr>
<td>07448</td>
<td>Scotch-Brite™ Ultra Fine Pad (Gray)</td>
<td>20/Box</td>
<td>3 Boxes/Case</td>
</tr>
</tbody>
</table>

3M™ Tri-M-Ite™ Resin Bond Cloth Discs

- Same tough abrasive mineral (silicon carbide) as used on 3M Duo-Glass™ Grinding Belts
- Durable, sharp, long-lasting and fast-cutting mineral that resists dulling
- Available with 6” x 7/8” or 7” x 7/8” center hole in grades 60X, 80X and 120X

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>GRIT</th>
<th>SIZE</th>
<th>DISCS/BOX</th>
<th>BOXES/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01613</td>
<td>120X</td>
<td>7” x 7/8”</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>01614</td>
<td>80X</td>
<td>7” x 7/8”</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>01615</td>
<td>60X</td>
<td>7” x 7/8”</td>
<td>50</td>
<td>5</td>
</tr>
</tbody>
</table>
3M™ Duo-Glass™ Belts

- Specially designed for glass and mirror grinding, finishing, and polishing
- New SINE-LOK butt splice with uninterrupted mineral coating reduces edge chipping and belt bumping at the splice
- SINE-LOK splice allows the belt to run in either direction eliminating need for directional arrow during installation
- Synthetic backing is stronger than conventional cloth belts
- Provides greater support than conventional belts
- Waterproof resin bond permits wet or dry use of belt

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>GRADE</th>
<th>SIZE</th>
<th>BELTS/BOX</th>
<th>BOXES/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>04301</td>
<td>220</td>
<td>3” x 21”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04303</td>
<td>120</td>
<td>3” x 21”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04305</td>
<td>80</td>
<td>3” x 21”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04308</td>
<td>400</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04309</td>
<td>220</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04310</td>
<td>180</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04311</td>
<td>120</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04312</td>
<td>100</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04313</td>
<td>80</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04314</td>
<td>60</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04315</td>
<td>40</td>
<td>3” x 24”</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>04317</td>
<td>220</td>
<td>4” x 24”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04319</td>
<td>120</td>
<td>4” x 24”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04325</td>
<td>220</td>
<td>4” x 64”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04327</td>
<td>120</td>
<td>4” x 64”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04329</td>
<td>80</td>
<td>4” x 64”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04332</td>
<td>400</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04333</td>
<td>220</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04334</td>
<td>180</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04335</td>
<td>120</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04336</td>
<td>100</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04337</td>
<td>80</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04338</td>
<td>60</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04339</td>
<td>40</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04345</td>
<td>80</td>
<td>4” x 118”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04348</td>
<td>400</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04349</td>
<td>220</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04350</td>
<td>180</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04351</td>
<td>120</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04353</td>
<td>80</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04354</td>
<td>60</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

3M™ Wetordry™ Polishing Cloth Belts

- Used in final polishing of glass edges to remove sand scratches
- Must be wet

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTAINER SIZE</th>
<th>BELTS/BOX</th>
<th>BELTS/CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>04207</td>
<td>4” x 106”</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>04211</td>
<td>4” x 132”</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
The 3M Certification Program is an important part of your commitment to quality. Use these materials to show your customers you took the time and effort to be “trained, tested, trusted.” Let your installers know you’re proud of them, too, when you give them their certificates and buttons.

1. **Certificate**
   Given to each installer when he or she passes the certification test.

2. **Hang Tag**
   Place in customer’s cars after their windshields have been replaced.

3. **Brochure**
   Give to customers if they have any questions about the program.

4. **Table Tent**
   Place in waiting area or checkout desk.

5. **Door Sticker**
   Place on your front door or on any window in the shop.

6. **Reply Card**
   Use this to order more certification program materials.

7. **Patch**
   Have each certified employee wear these with pride.

8. **Van Sticker**
   Place on vans to show you care about quality.
3M Auto Glass Certification Kit
Show your customers you’re trained, tested, trusted.

1. Certificate
2. Hang Tag
3. Brochure
4. Table Tent
5. Door Sticker
6. Reply Card
7. Patch
8. Van Sticker

We use 3M products. Ask us why.

Our Technicians are 3M Certified
These instructions describe the proper use of 3M Auto Glass urethanes and related 3M glass shop products and are intended for use as a supplement to detailed service manuals and instructions provided by automotive manufacturers. Automobile manufacturers instructions should be followed when removing automotive trim and moldings as well as other special requirements pertaining to specific car models.

Full Cutout Method With Dam Materials Using 3M™ Auto Glass Urethane-Medium Viscosity Part Numbers 08693, 08695, or 08564

The following instructions cover replacement procedure for urethane bonded automotive windshield using the full cut out procedure with dam material. The dam material provides the proper setting height.

1. If necessary, remove windshield wiper arms and trim necessary to expose the entire perimeter of glass.
2. Clean dirt and debris from around the pinchweld area before cutting out the glass and again after the glass is cut out to minimize contamination.
3. Cut into existing urethane around entire perimeter of glass with a utility knife. Cut as close to edge as possible.
4. Cut out glass with appropriate removal tools keeping as close to the glass as possible. Remove the glass and repeat Step 2.
5. Dry set the glass. Align for uniform fit and adjust setting blocks as needed for best fit. To allow for sufficient bonding of urethane, make sure there is a MINIMUM of 1/4 inch of glass, in addition to the space that will be taken up by any dam material, around the entire perimeter of the glass. Mark location by applying masking tape to windshield and car body. Silt tape at edge of glass. Remove windshield.
6. Remove major portion of old urethane adhesive from the pinchweld. Use a razor blade knife or utility knife to prevent scraping paint off the pinchweld and exposing bare metal. NOTE: On urethane installations, it is recommended that a thin film of the old urethane be left on the pinchweld and fresh urethane bonded to remaining film. When removing butyl tape or unknown material, remove all old material from pinchweld before applying fresh urethane.
7. Prime any bare metal scratches with 3M™ Black Primer, (Step 2) (P/N 08684, 08686). NOTE: When excessive abrasive cleaning is required, prime pinchweld metal with a 2 part epoxy automotive paint primer and allow to cure properly. Apply 3M™ Black Primer (Step 2) to repaired area and allow to dry for at least 5 minutes.
8. Clean inside surface of glass with 3M™ Glass Cleaner, P/N 08888 taking care to clean surface where the urethane bond will be made.
9. Apply a thin film of 3M™ Clear Primer (Step 1), (P/N 08683, 08685 or P/N 08691) with a clean wipe. Wipe off excess primer while still wet with a clean lint free cloth. Allow primer to dry for at least 5 minutes. (Repeat, Step 9)
10. Apply 3M™ Black Primer (Step 2) (P/N 08684, 08686, or 08692) over the primed 3/4 inch of glass. Allow primer to dry for at least 5 minutes.
11. Apply dam material to inside edge of pinchweld or 3M™ Foam Spacer Blocks, PN 08529.
12. Cut tip to desired shape and size large enough to be slightly higher than the dam material. A triangular shaped notch will provide the desired bead shape and height. A height of 1/2 to 3/8 inch is suggested. NOTE: When installing encapsulated glass, apply a bead high enough to assure glass contact before encapsulation contacts the car body and prevents further setting. Back padding material after setting will not be possible.
13. Apply 3M™ Auto Glass Urethane Windshield Adhesive - MV directly onto the remaining OEM urethane film, behind and contacting the dam material.
14. Position the glass by aligning the masking tape on glass and car body. Press glass in place to assure complete contact with dam material and urethane adhesive.
15. Paddle squeeze out around edge of glass if possible. If necessary, paddle additional adhesive between glass and car body to fill voids.
16. Remove masking tape alignment strips.
17. Replace moldings, windshield wipers and other trim removed in Step 1.
18. Clean any excess urethane with adhesive cleaner.

Full Cut Method Without Dam Materials Using: 3M™ Fast Cure Auto Glass Urethane-(High Viscosity) Part Numbers 08689, 08690, 08566 or 3M™ Auto Glass Urethane-High Viscosity Part Numbers 08696, 08698, 08565

The following instructions cover replacement procedure for urethane bonded automotive windshields using the full cut out procedure without the use of a dam material. High viscosity urethane products provide windshield support while the cure is attained to provide structural strength.

1. If necessary remove windshield wiper arms and trim necessary to expose the entire perimeter of glass.
2. Clean dirt and debris from around the pinchweld area before cutting out the glass and again after the glass is cut out to minimize contamination.
3. Cut into existing urethane around entire perimeter of glass with a utility knife cutting as close to edge of the glass as possible.
4. Cut out glass with appropriate removal tools keeping as close to the glass as possible. Remove windshield and repeat Step 2.
5. Dry set the glass. Align for uniform fit and adjust setting blocks as needed for best fit. To allow for sufficient bonding of urethane, make sure there is a MINIMUM of 1/4 inch of glass, in addition to the space that will be taken up by any dam material, around the entire perimeter of the glass. Mark location by applying masking tape to windshield and car body. Silt tape at edge of glass. Remove windshield.
6. Remove major portion of old urethane adhesive from the pinchweld. Use a razor blade knife or utility knife to prevent scraping paint off the pinchweld and exposing bare metal. NOTE: On urethane installations, it is recommended that a thin film of the old urethane be left on the pinchweld and fresh urethane is bonded to remaining film. When removing butyl tape or unknown material, remove all old material from pinchweld.

7. Prime any bare metal scratches with 3M™ Black Primer (Step 1) (P/N 08683, 08685 or 08691) to the outer 3/4 inch of the glass. Prime any bare metal scratches with a 2 part epoxy automotive paint primer and allow to cure properly. Apply 3M™ Black Primer (Step 2) to repaired area and allow to dry for at least 5 minutes.

8. Clean inside surface of glass with 3M™ Glass Cleaner, P/N 08888 taking care to clean surface where the urethane bond will be made.

9. Apply a thin film of 3M™ Clear Primer (Step 1) (P/N 08683, 08685 or 08691) to the outer 3/4 inch of the glass with a clean wipe. Wipe off excess primer with a clean lint free cloth while still wet. Allow primer to dry for at least 5 minutes. (Repeat, Step 9)

10. Apply 3M™ Black Primer (Step 2) (P/N 08684, 08686, or 08692) over the primed 3/4 inch of glass. Apply primer to dry for for at least 5 minutes.

11. If a foam dam was used in the OEM application it is suggested that foam dam material be replaced.

12. Cut tip to desired shape and size to provide a bead height sufficient to give good contact with the windshield around the entire perimeter. A triangular shaped notch will provide the desired bead shape and height. A height of 1/2 inch to 9/16-inch and a 1/4 inch- 5/16-inch base is suggested. NOTE: Where installing encapsulated glass, apply a bead high enough to assure glass contact before encapsulation contacts the car body and prevents further setting. Back paddling material after setting will not be possible.

13. Apply 3M™ Auto Glass Urethane Windshield Adhesive High Viscosity, or 3M™ Fast Cure Auto Glass Urethane, directly onto the OEM urethane film on the pinchweld or directly to the glass.

14. Position the glass by aligning the masking tape on glass and car body. Press glass in place to assure complete contact with the urethane adhesive.

15. Paddle squeeze out around edge of glass if possible. If necessary, paddle additional adhesive between glass and car body to fill voids.

16. Remove masking tape alignment strips.

17. Replace moldings, windshield wipers and other trim removed in Step 1.

18. Clean any excess urethane with an adhesive cleaner.

Full Cut Method Without Dam Materials Using 3M™ Rapid Two-Part Auto Urethane Adhesive (RTP) Part Numbers 08533, 08534

The following instructions cover replacement procedure for urethane bonded automotive windshields using the full cut out procedure using 3M™ Rapid Two-Part Urethane.

1. If necessary remove windshield wiper arms and trim necessary to expose the entire perimeter of glass.

2. Clean dirt and debris from around the pinchweld area before cutting out the glass and again after the glass is cut out to minimize contamination.

3. Cut into existing urethane around entire perimeter of glass with a utility knife cutting as close to edge of the glass as possible.

4. Cut out glass with appropriate removal tools keeping as close to the glass as possible. Remove windshield and repeat Step 2.

5. Dry set the glass. Align for uniform fit and adjust setting blocks as needed for best fit. To allow for sufficient bonding of urethane, make sure there is a MINIMUM of 1/4 inch of glass, in addition to the space that will be taken up by any dam material, around the entire perimeter of the glass. Mark location by applying masking tape to windshield and car body. Slit tape at edge of glass. Remove windshield.

6. Remove major portion of old urethane adhesive from the pinchweld. Use a razor blade knife or utility knife to prevent scraping paint off the pinchweld and exposing bare metal. NOTE: On urethane installations, it is recommended that a thin film of the old urethane is left on the pinchweld and fresh urethane is bonded to remaining film. When removing butyl tape or unknown material, remove all old material from pinchweld.

7. Prime any bare metal scratches with 3M™ Black Primer (Step 2) (P/N 08684, 08686). NOTE: When excessive abrasive cleaning is required, prime pinchweld with a 2 part epoxy automotive paint primer and allow to cure properly. Apply 3M™ Black Primer (Step 2) to repaired area and allow to dry for at least 5 minutes.

8. Clean inside surface of glass with 3M™ Glass Cleaner, P/N 08888 taking care to clean surface where the urethane bond will be made.

9. Apply a thin film of 3M™ Clear Primer (Step 1) P/N 08683, 08685 or 08691 with a clean wipe. Wipe off excess primer while still wet with a clean lint free cloth. Allow primer to dry for at least 5 minutes. (Repeat, Step 9)

10. Apply 3M™ Black Primer (Step 2) P/N 08684, 08686 or 08692, over the primed 3/4 of glass. Allow primer to dry for at least 5 minutes.

11. If a foam dam was used in the OEM application, it is suggested that foam dam material be replaced. If no foam dam was used it is suggested that the foam dam tape or 3M™ Foam Spacer Blocks, P/N 08529 be applied to assist in setting the glass when using 3M™ Rapid Two-Part Urethane Windshield Adhesive (RTP).

12. Cut tip to desired shape and size large enough to be slightly higher than the dam material. A triangular shaped notch will provide the desired bead shape and height. A height of 1/2 to 9/16 inch and 1/4 to 5/16 inch base is suggested. NOTE: When installing encapsulated glass, apply a bead high enough to assure glass contact before encapsulation contacts the car body and prevents further setting. Back paddling material after setting will not be impossible.

13. Position the glass by aligning the masking tape on glass and car body. Press glass in place to assure complete contact with dam material and urethane adhesive.

14. Paddle squeeze out around edge of glass if possible. If necessary, paddle additional adhesive between glass and car body to fill voids.

15. Remove masking tape alignment strips.

16. Replace moldings, windshield wipers and other trim removed in Step 1.

17. Clean any excess urethane with an adhesive cleaner.
3M Branch Offices

Alaska
11151 Calaska Circle
Anchorage, Alaska 99515
Telephone: (907) 522-5200
Fax (907) 522-5200

Atlanta
2860 Bankers Industrial Drive
Atlanta, Georgia 30360
Telephone: 1-800-524-6429
Fax 1-800-699-7840

Chicago
4 Westbrook Corporate Center
Suite 300
Westchester, IL 60154-9978
Telephone: 1-800-524-5406
Fax 1-800-421-2483

Dallas
2121 Santa Anna Avenue
Dallas, Texas 75228-1698
Mail to: P.O. Box 28158
Dallas, Texas 75228-0158
Telephone: 1-800-524-6431
Fax 1-800-421-4876

Hawaii
4443 Malaai Street
Honolulu, Hawaii 96818
Mail to: P.O. Box 30048
Honolulu, Hawaii 96820
Telephone: (808) 422-2721
Fax (808) 422-9557

Los Angeles
6023 South Garfield Avenue
Los Angeles, California 90040
Mail to: P.O. Box 54019
Los Angeles, California 90054-4019
Telephone: 1-800-221-7569
Fax 1-800-648-0871

New York
15 Henderson Drive
West Caldwell, New Jersey 07007
Mail to: P.O. Box 2076
West Caldwell, New Jersey 07007
Telephone: 1-800-524-0401
Fax 1-800-769-0945

Puerto Rico
Puerto Rico Industrial Park
P.O. Box 100
Carolina, Puerto Rico 00986-0100
Telephone: (809) 750-3000
Fax (809) 750-3035

Twin Cities
3130 Lexington Avenue South
Eagan, Minnesota 55121-2239
Mail to: P.O. Box 33211
Eagan, MN 55133-3211
C/C 01, Loc 023
(651) 733-3300
TRIMINET 733-3300
Fax (651) 736-2694

Fax On Demand (For Five or Fewer Material Safety Data Sheets) 1-800-305-0419
Internet: www.3M.com/automotive

The brand names 3M, GREEN CORPS, ROLOC, TRI-M-ITE, LONG-MASK, DUO-GLASS, WETORDRY, AUTOMIX,
WINDO-WELD, SCOTCH-BRITE and SCOTCH, are trademarks of Minnesota Mining and Manufacturing Company, St. Paul,
Minnesota 55144-1000