



Retention System Provider Training Instructions and Documentation Worksheet

Column A	Column B	Column C
<p>Current AGRSS Standard sections and language that requires instruction from the retention system provider to help ensure AGR technician compliance. Note that only those sections of the Standard pertaining to the required support of the retention system provider are listed.</p>	<p>Retention System Provider instruction response to Column A (List the response that an AGR Technician should provide in order to match the instructions your company provides pertaining to the subject identified in Column A)</p>	<p>Identify the location within your current, written, comprehensive training instructions where your instruction response from Column B can be identified. (Document name, page and paragraph)</p>
3.0 Vehicle Assessment before Replacement		
3.01 Those engaged in automotive glass replacement shall not undertake or complete such installation when any related condition would compromise the retention system and the owner/operator shall be so notified.	If the installer identifies conditions that will compromise the installation, the installation should not be performed and the owner should be notified.	Page 7
4.0 Selection of Glass and Retention Systems		
4.01 Those engaged in automotive glass replacement shall use retention systems that are produced under documented quality assurance standards.	OETech products are manufactured according to American Standard Testing Method (ASTM) and International Standardization Organization (ISO) procedures (ISO 9001 and ISO14001.)	Page 9
4.03 Those engaged in automotive glass replacement must use either an OEM approved retention system or equivalent retention system as certified in writing by the equivalent retention system manufacturer directly or through a private labeler.	OETech produces OEM products for the truck, trailer, rail and marine manufacturers. For automotive aftermarket, OETech products are manufactured to meet or exceed the Ford (crash test) specification.	Page 10
4.04 Those engaged in automotive glass replacement shall obtain and follow written	Written instructions have been provided to ensure that	Page 12 & 13

<p>comprehensive and current application instructions from the retention systems manufacturer or private labeler. These instructions shall include at least the proper use of the retention system storage specifications, minimum drive-away time charts containing temperature and humidity variables if applicable, and any special procedures required for adverse weather conditions.</p> <p>NOTE: This section of the standard requires the technician, using your product for installation, to follow the exact written instructions. If they do not follow these instructions, an auditor will find the technician to be non-compliant to the standard. After reviewing urethane manufacture’s written instructions, we realize there are many items that would keep the technician safe , such as wearing goggles, but if not followed during the installation steps would not compromise the installation.</p> <p>With this in mind, please list your procedures for each of the following subject lines, defining your minimum requirements pertaining to each subject part of an auto glass replacement.</p> <p>Enter your answers in Column B and where these specific answers can be located in your current written instructions in Column C.</p>	<p>the products are used correctly and according to the products specification as detailed by the manufacturer</p>	<p>Page 14& 15 Page 17</p>
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<p><u>1. GLASS CLEANING:</u></p> <ul style="list-style-type: none"> • Product requirements • Application requirements • Storage requirements • Shelf-life (opened & unopened) • Adverse weather conditions • Additional requirements 	<p><u>Glass Cleaning</u></p> <ul style="list-style-type: none"> • Product requirements – OETechGC (recommended) or Pilkington Glass Cleaner • Application requirements – Using clean paper towel, clean part from center outwards rotating the towel to ensure contaminants are not redistributed. Spray Glass Cleaner to the bonding area a second time with a fresh paper towel and wipe clean. This cleans contaminants transported to the frit during the initial cleaning. • Storage requirements - Glass Cleaner should not be stored in temperatures above 120° F (49° C) • Shelf-life (opened & unopened) - Shelf life of OETech Glass Cleaner and Pilkington Glass Cleaner are 24 months • Adverse weather conditions - Auto glass replacements should not be performed outdoors while in severe weather. Safe drive away charts should be utilized to ensure that the weather conditions and product used are conducive for the desired safe drive away time. 	<p>Product requirements – Installation Instructions, page #12</p> <p>Application requirements – Installation Instructions, page #12</p> <p>Storage requirements - Installation Instructions FAQ’s, page 14</p> <p>Shelf-life (opened & unopened) – Installation Instructions FAQ’s, page 14</p> <p>Adverse weather conditions – Installation Instructions Page 12 (top).</p>
<p><u>2. GLASS PREP/PRIMING:</u></p> <ul style="list-style-type: none"> • Product requirements • Application requirements • Storage requirements • Shelf-life (opened & unopened) • Adverse weather conditions • Additional requirements 	<p><u>2. Glass Prep and Priming</u></p> <ul style="list-style-type: none"> • Product requirements – OETechAC (optional), OETechCP or OETechMP. Before each use, verify that the primers and activators are within use by dates and the OETech Activator was not originally opened more than one (1) month prior the and the OETech 1-step Combo Primer was not originally 	<p>Product requirements – Installation Instructions. Page #12 and Page #13</p>

<ul style="list-style-type: none"> - Used Glass - Pre-primed glass - PAAS - Non-traditional contamination - Other 	<p>opened more than seven (7) days prior.</p> <ul style="list-style-type: none"> • Application requirements <ol style="list-style-type: none"> 1. OETechAC - (Optional Step) in instances where non-traditional contaminants have been identified, this procedure is recommended. Using a dauber or other suitable clean unused applicator, apply OETech Activator (OETechAC) to the bonding surface and following with a clean towel, wipe off OETech Activator before it dries. 2. OETechCP. Shake the container of OETech 1-step Combo Primer continuously for at least 30 seconds. Using a dauber or other suitable clean unused applicator, apply a uniform, continuous solid coating of OETech 1-step Combo Primer (OETechCP) to the bonding area. Replace plastic insert and cap immediately. Allow primer to dry (flash) for a minimum of 10 minutes. If the temperature is below 40°F, please allow for 30 minutes flash time. 3. For PAAS/PVC, moldings and encapsulated parts, please use OETechMP (molding primer). Note: The OETechMP primer must flash for a minimum of 10 minutes and also must be used with 7 days of opening.) If the temperature is below 40°F, please allow for 30 min flash time. <ul style="list-style-type: none"> • Storage requirements - OETech Primers and Activators should be stored between 32°F and 95°F. OETech products may be brought into temperatures above and below the range (down to 0°F and up to 110°) for short periods of time (hours) in order to use/and transport the product from location to location. 	<p>Application requirements - Installation Instructions. Page #12 and Page #13</p> <p>Storage requirements - Installation Instructions FAQ's, Page #14</p>
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<p><u>3. PINCHWELD PREP/PRIMING:</u></p> <ul style="list-style-type: none"> • Product requirements • Application requirements • Storage requirements • Shelf-life (opened & unopened) • Adverse weather conditions • Additional requirements <ul style="list-style-type: none"> - Corrosion treatment - Gasket Sets 	<ul style="list-style-type: none"> • Shelf-life (opened & unopened) - Shelf life of OETechCP and OETechMP opened is 7 days and unopened is 9 to 12 months. Shelf life of OETechAC opened is 1 month and unopened is 9 to 12 months. • Adverse weather conditions - Auto glass replacements should not be performed outdoors while in severe weather. Safe drive away charts should be utilized to ensure that the weather conditions and product used are conducive for the desired safe drive away time. • Additional requirements <p>Used Glass – OETech does not recommend installing used glass except in the event of a repair and replacement.</p> <p>Pre-primed glass If the glass is clearly marked identifying which primers were used to preprime, the installer should contact that adhesive manufacturer to determine which products are compatible with those already used and should use only products identified as compatible in the installation. If the origin of the primer on the preprimed glass is not known, OETech products should not be used</p> <p><u>Pinchweld Prep/Priming</u></p> <ul style="list-style-type: none"> • Product requirements – OETechCP. Before each use, verify that the primers are within use by dates and the OETechCP primer was not originally opened more than seven (7) days prior If the temperature is below 40°F, please allow for 30 min flash time. • Application requirements - Shake the container of OETech 1-step Combo Primer well for at least 30 	<p>Shelf-life (opened & unopened) - Installation Instructions #14</p> <p>Adverse weather conditions - Installation Instructions. Page #12 (top)</p> <p>Used Glass - Installation Instructions FAQ's. Page #15</p> <p>Pre-primed Glass - Installation Instructions FAQ's. Page #15</p> <p>Product requirements – Installation Instructions. Page #12</p> <p>Application requirements Installation Instructions. Page #12 and Page #13</p>
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	<p>seconds. Using a dauber or other suitable clean unused applicator, apply a uniform, continuous solid coating to the frit and any bare metal scratches on the pinchweld (to help prevent corrosion and to ensure maximum adhesion and to maintain OEM specifications) Ensure any open bottles are not more than 7 days old.</p> <ul style="list-style-type: none"> • Storage requirements - OETech Primers and Activators should be stored between 32°F and 95°F. OETech products may be brought into temperatures above and below the range (down to 0°F and up to 110°) for short periods of time (hours) in order to use/and transport the product from location to location. • Shelf-life (opened & unopened) Shelf-life (opened & unopened) - Shelf life of OETechCP opened is 7 days and unopened is 9 to 12 months • Adverse weather conditions - Auto glass replacements should not be performed outdoors while in severe weather. Safe drive away charts should be utilized to ensure that the weather conditions and product used are conducive for the desired safe drive away time. <p>Corrosion treatment -the pinchweld must be in a suitable condition for the primer and urethane to make a proper bond. If corrosion is present, the installer should asses the severity of the corrosion and treat it by referring to the OETech pinchweld corrosion treatment document and following the instructions on that document.</p> <ul style="list-style-type: none"> • Light: Light metal discoloration; typically orange. The installer should remove corrosion with 802 grit sand paper or wire wheel. • Moderate: Moderate corrosion, typically has some 	<p>Storage requirements Installation Instructions FAQ's. page #14</p> <p>Shelf-life (opened & unopened) Installation Instructions, page #12</p> <p>Adverse weather conditions - Installation Instructions (top).</p> <p>Corrosion Treatment - Installation Instructions Q&A Page 15. OETech Pinchweld Corrosion Treatment and Pages 22 and 23</p>
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<p>4. URETHANE APPLICATION:</p> <ul style="list-style-type: none"> • Product requirements • Application requirements • Storage requirements • Shelf-life • Adverse weather conditions • Additional requirements 	<p>red spots. In order to treat Moderate corrosion, the installer should remove corrosion with wire wheel, media blast or chemical dust remover.</p> <ul style="list-style-type: none"> • Severe: This can be identified by deep “pitting”, dark red spots and raised edges. To treat severe corrosion, remove corrosion with media blast or chemical dust remover. • Perforation: This level can vary from microscopic holes to loss of metal. Do not attempt to treat this type of corrosion, the panel must be replaced and treated by a body shop. <ul style="list-style-type: none"> • Gasket Sets - If the OEM installation utilizes a combination of a rubber gasket and polyurethane as a retention system, then an equivalent adhesive bonding system must be used in the installation. In cases when the OEM didn't include polyurethane or an equivalent adhesive system, such systems shall be used if later production models included the addition of adhesive systems without body style modification. If the OEM gasket installation did not include adhesive and the vehicle is licensed for highway use, the installation shall include polyurethane or an equivalent adhesive bonding system. The following are permissible exceptions: egress applications, antique restorations, or in cases in which this practice conflicts with current vehicle manufacturer specifications. <p><u>URETHANE APPLICATION</u></p> <ul style="list-style-type: none"> • Product requirements – OETech1, OETech1S, OETech2, OETech2s, OETech3s, OETech3s+., OETechh+, OETech4 • Application requirements To get the proper size 	<p>Gasket sets - Installation Instructions FAQ, Q&A. Page #15</p> <p>Product requirements – Installation Instructions, page #12</p> <p>Application requirements– Installation</p>
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<ul style="list-style-type: none"> - SDAT identification - Non-conductive considerations - High modulus considerations - Other 	<p>bead for the specific vehicle for which you are working, placed the end of the nozzle on the pinchweld, trim the “V” of the nozzle to the height of the roof line. Apply OETech urethane according to individual preference (to glass or body) ensuring the stopping and starting points are closed. Set and deck glass part, replacing all moldings, clips and fasteners according to their removal. Release the vehicle to the customer after safe drive time has been achieved.</p> <ul style="list-style-type: none"> • Storage requirements OETech Urethane should be stored between 41°F and 77°F. OETech products may be brought into temperatures above and below the range (down to 0°F and up to 95°) for short periods of time (hours) as weather conditions may vary. • Shelf-life (opened & unopened) The shelf life of all OETech Urethane is between 9 and 12 months. Expiration dates are clearly marked on all perishable OETech products. • Adverse weather conditions - Auto glass replacements should not be performed outdoors while in severe weather. Safe drive away charts should be utilized to ensure that the weather conditions and product used are conducive for the desired safe drive away time. • SDAT identification – The vehicle should only be released when the safe drive away time has been achieved. • High modulus considerations & Non-conductive considerations – OETech1, OETech1s, or OETech4 should be used on vehicles requiring high modulus or low conductive properties. 	<p>Instructions, Page #13.</p> <p>Storage Requirements – Installation Instructions . Page #14.</p> <p>Shelf-life (opened & unopened) - Installation Instructions Page #14.</p> <p>Adverse weather conditions - Installation Instructions Page #12.</p> <p>SDAT identification - Installation Instructions . Page #13</p> <p>High modulus considerations & Non-conductive considerations - Installation Instructions FAQ’s. Page #14</p>
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4.05 Those engaged in automotive glass replacement shall require that lot numbers and expiration dates be printed on appropriate products	Batch/Lot numbers are printed on all OETech products.	Page #19
5.0 Installation Standards - Adhesive Bonded		
5.01 Those engaged in automotive glass replacement shall follow the adhesive manufacturer's application instructions as provided by the manufacturer directly, or through the private labeler. All in-shop or mobile installations shall be performed under environmental and other conditions that are compatible with the application instructions required in Section 5.	Installation Instructions are provided in the AGRSS tool kit and are included in this matrix.	Page 12, 13, 14 &15
5.02 Products must be stored and controlled according to manufacturers' requirements as provided directly or through a private labeler.	Storage Instructions are provided in the AGRSS tool kit and are included in this matrix.	Page 12, 13, 14 &15
5.03 No automotive glass replacement shall be undertaken using an adhesive glass retention bonding system that would not achieve minimum drive-away strength by the time the vehicle may be reasonably expected to be operated.	Safe drive away charts are provided in order to ensure that the installer is aware of the safe drive away time based on environmental factors	Page #17 and Page #18
5.04 The vehicle owner / operator shall be advised of the minimum drive-away time under the circumstances of the replacement.	The installer should communicate the SDAT to the owner/operator of the vehicle.	Page #13
5.05 Adhesive must be applied so that the finished bead cross section profile and dimensions meet or exceed original equipment configuration.	To get the proper size bead, place the end of the nozzle on the pinch weld, and trim the "V" to the height of the roof line.	Page #13

<p>5.06 If the OEM installation was polyurethane, then the glass must be replaced with polyurethane or an equivalent adhesive bonding system. If the OEM installation was butyl, polysulfide, or other non-polyurethane, and the vehicle is licensed for highway use, adhesive bonded stationary glass installations shall be performed using polyurethane or an equivalent retention system unless in conflict with current OEM specifications.</p>	<p>Unless the product conflicts with current OEM specifications, for vehicles licensed for highway use polyurethane products should be used even if butyl was used in the OEM installation.</p>	<p>Page #15</p>
<p>5.07 All adhesive system component lot numbers must be traceable to each job.</p>	<p>OETech prints batch numbers on all perishable OETech products.</p>	<p>Page#14</p>
<p>5.09 No product that has exceeded its expiration date, open shelf life, or active shelf life shall be used.</p>	<p>OETech products should not be used if they have exceeded their shelf life.</p>	<p>Page #12</p>
<p>5.11 When inappropriate replacement materials or methods are detected, those engaged in automotive glass replacement shall report their findings to the vehicle owner/operator.</p>	<p>When inappropriate replacement materials or methods are detected, those engaged in automotive glass replacement shall report their findings to the vehicle owner/operator.</p>	<p>Page #13</p>
<p>5.12 When those engaged in automotive glass replacement correct inappropriate glass installations, they shall remove any inappropriate materials that would compromise the retention system. They shall fully correct any adverse glass installation related condition(s) caused by the use of inappropriate materials or methods, and they shall use appropriate methods described elsewhere within Section 5 of this document.</p>	<p>When those engaged in automotive glass replacement correct inappropriate glass installations, they shall remove any inappropriate materials that would compromise the retention system. They shall fully correct any adverse glass installation related condition(s) caused by the use of inappropriate materials or methods, and they shall use appropriate methods described elsewhere within Section 5 of this document.</p>	<p>Page #13</p>
<p>5.13 When sealing air or water leaks within a polyurethane retention system, only compatible polyurethane adhesive shall be used. (No silicone or butyl may be used).</p>	<p>When sealing air or water leaks within a polyurethane retention system, only compatible polyurethane adhesive shall be used. (No silicone or butyl may be used).</p>	<p>Page #14</p>

5.14 Only the full cut method should be used for polyurethane retention systems.	OETech installation instructions direct me to cut the bead to approximately 1/16" (a.k.a. full cut method)	Page #13
6.0 Installation Standards - Rubber Gasket		
6.01 If the OEM utilizes the combination of a rubber gasket and polyurethane as a retention system, an equivalent adhesive bonding system must be used in the installation. In cases when the OEM didn't include polyurethane or an equivalent adhesive system, such systems shall be used if later production models included the addition of adhesive systems without body style modification.	If the OEM utilizes the combination of a rubber gasket and polyurethane as a retention system, an equivalent adhesive bonding system must be used in the installation. In cases when the OEM didn't include polyurethane or an equivalent adhesive system, such systems shall be used if later production models included the addition of adhesive systems without body style modification.	Page # 15
6.02 If the OEM gasket installation did not include adhesive and the vehicle is licensed for highway use, the installation shall include polyurethane or an equivalent adhesive bonding system. The following are permissible exceptions: egress applications, antique restorations, or in cases in which this practice conflicts with current vehicle manufacturer specifications.	If the OEM gasket installation did not include adhesive and the vehicle is licensed for highway use, the installation shall include polyurethane or an equivalent adhesive bonding system. The following are permissible exceptions: egress applications, antique restorations, or in cases in which this practice conflicts with current vehicle manufacturer specifications.	Page #15
6.03 When sealing air or water leaks within a rubber gasket/polyurethane ADHESIVE SYSTEM only compatible polyurethane shall be used. (No silicone or butyl may be used).	When sealing air or water leaks within a polyurethane retention system, only compatible polyurethane adhesive shall be used. (No silicone or butyl may be used).	Page #14
6.04 When sealing air or water leaks within a rubber gasket/SEALANT SYSTEM only OE compatible sealant shall be used.	When sealing air or water leaks within a rubber gasket/sealant system, only OEM sealants shall be used.	Page #14
7.0 Additional Requirements		
7.04 Whenever OEM retention systems are modified on later production models without body style modification, the most current	The most current retention system shall be used in the replacement unless otherwise specified by the OEM.	Page #15

retention system shall be used in the replacement unless otherwise specified by the OEM.		
7.05 The failure of any product used in the glass installation process that the installer believes could jeopardize customer safety shall be reported promptly to the manufacturer or supplier of the product.	Any potential failures of products used in the installation process should be reported to the supplier/manufacturer of the product.	Page #15
7.06 Those engaged in automotive glass replacement shall not introduce any chemical agents, such as cleaners, solvents, lubricants, release agents, or utilize any installation practice, which will adversely affect the glass retention system.	Those engaged in automotive glass replacement shall not introduce any chemical agents, such as cleaners, solvents, lubricants, release agents, or utilize any installation practice, which will adversely affect the glass retention system.	Page 14& 15
7.07 Those engaged in automotive glass replacement shall maintain documentation to demonstrate compliance with this standard.	Those engaged in automotive glass replacement shall maintain documentation to demonstrate compliance with this standard.	Page 14 & 15

Retention System Provider Deliverables:

Deliverable:	Retention System Provider Response:	Is Documentation Included: (Yes, No)
4.01 Those engaged in automotive glass replacement shall use retention systems that are produced under documented quality assurance standards. Identify your organizations current quality assurance standard and how this should be identified by your glass shop customers.	OETech products are manufactured according to American Standard Testing Method (ASTM) and International Standardization Organization (ISO) procedures (9001 and 14001)	Yes
4.02 Those engaged in automotive glass replacement must use either an OEM approved retention system or	OETech produces OEM products for the truck, trailer,	Yes

<p>equivalent retention system as certified in writing by the equivalent retention system manufacturer directly or through a private labeler.</p> <p>Provide validation to this requirement and how your glass shop customers' would demonstrate your compliance to this section of the Standard.</p>	<p>rail and marine manufacturers. For Automotive Aftermarket, OETech products to meet the Ford (crash test) standard.</p>	
<p>4.03 Those engaged in automotive glass replacement shall obtain and follow written comprehensive and current application instructions from the retention systems manufacturer or private labeler. These instructions shall include at least the proper use of the retention system storage specifications, minimum drive-away time charts containing temperature and humidity variables if applicable, and any special procedures required for adverse weather conditions.</p> <p>Identify the name and publish date of the document(s) fitting the description of "current, comprehensive, written application instructions" that are to be on hand and utilized by your company's glass shop customers.</p>	<p>Page 12 & 13, OETech website, Page 17 & 15</p>	<p>Yes</p>
<p>5.03 No automotive glass replacement shall be undertaken using an adhesive glass retention bonding system that would not achieve minimum drive-away strength by the time the vehicle may be reasonably expected to be operated.</p> <p>Identify the drive-away-time chart to be utilized by your company's glass shop customers in order to be compliant with this requirement.</p>	<p>Page 17</p>	<p>Yes</p>
<p>8.01 Technicians installing replacement automotive glass shall be fully qualified for the tasks they are required to perform. Such qualifications shall include, at a</p>	<p>OETech offers certification based on self training course. The test is provided to each installer and graded. Individuals who successfully complete the training exam</p>	<p>Page 18</p>

<p>minimum, completion of a comprehensive training program with a final exam and a continuing education component. The program shall include, among other things: AGR safety issues, an understanding of OEM installation standards and procedures, relevant technical specifications, comprehensive retention system specific training and the opportunity to apply and demonstrate the skills technicians learn.</p> <p>IF YOUR COMPANY DOES PROVIDE TRAINING, identify the name of your training course, the testing provided, the certificates provided and the frequency of such training and, or continuing education.</p>	<p>(correctly answer all questions) are provided a certificate, and a badge. Questions cover topics including, safety, installation instructions, product use and knowledge, specification data, MSDS and safe drive away times.</p>	
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