

Retention System Provider Training Instructions and Documentation Worksheet

Column A	Column B	Column C
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.	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)	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)
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.	Pre-installation inspection notes pertaining to the vehicle should be documented on the fixed glass replacement record provided	Page 7 Page 8
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.	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.	Page 10

4.04 Those engaged in automotive glass	Written instructions have been provided to ensure that	Page 12 & 13
replacement shall obtain and follow written	the products are used correctly and according to the	Page 14& 15
comprehensive and current application	products specification as detailed by the manufacturer	Page 17
instructions from the retention systems	products specificances as actuated by the manufactures	1.050 17
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.		
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.		
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.		
Enter your answers in Column B and where		
these specific answers can be located in your		
current written instructions in Column C.		
1. CLASS SERANDIS	Glass Cleaning	
1. GLASS CLEANING:	Product requirements – OETechGC	

- Product requirements
- Application requirements
- Storage requirements
- Shelf-life (opened & unopened)
- Adverse weather conditions
- Additional requirements

2. GLASS PREP/PRIMING:

- Product requirements
- Application requirements
- Storage requirements
- Shelf-life (opened & unopened)
- Adverse weather conditions
- Additional requirements
 - Used Glass
 - Pre-primed glass
 - PAAS
 - Non-tradi tional contamination
 - Other

(recommended) or Pilkington Glass Cleaner

- Application requirements Hold dispenser upright, 8" 12" from glass part. Spray fine mist on part. Using clean lint free 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 towel, wipe clean. This cleans contaminates transported to the frit during the initial cleaning.
- The surrounding environment must be conducive to proper cleaning of the glass.
- 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 s50 are 24 months
- Adverse weather conditions Before performing an auto glass replacement please ensure that the environment and surroundings are conducive to a safe installation. Auto glass replacements should not be performed in severe weather. Note: OETech recommends that the surface temperature of the vehicle and the temperature of OETech products both be between 41 and 95 degrees F. Air temperatures may vary and 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.

Product requirements – Installation Instructions, #3

Application requirements – Installation Instructions, #3

Storage requirements - Installation Instructions FAQ's Q&A 1

Shelf-life (opened & unopened) – The shelf life for glass cleaner is 24 months. Q&A 1

Adverse weather conditions – Installation Instructions Page 12 (top).

2. Glass Prep and Priming

• 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 opened more than seven (7) days prior.

• Application requirements

- 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** well, until agitator ball is moving
 freely, continuing to shake 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. Dispose of dauber in appropriate
 container. Allow primer to dry (flash) for at least 10
 minutes. If the temperature is below 40°F, please
 allow for 30 min flash time.
- 3. For PAAS/PVC, moldings and encapsulated parts, please use **OETechMP** (molding primer). Note: The

Product requirements – Installation Instructions. #5

Application requirements - Installation Instructions. #6 and #7 and #8

3. PINCHWELD PREP/PRIMING:

- Product requirements
- Application requirements
- Storage requirements
- Shelf-life (opened & unopened)
- Adverse weather conditions
- Additional requirements
 - Corrosion treatment
 - Gasket Sets

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.

- 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 95°) for short periods of time as weather conditions may vary.
- 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 Before performing an auto glass replacement, please ensure that the environment and surroundings are conducive to a safe installation. Auto glass replacements should not be performed in severe weather. Note: OETech recommends that the surface temperature of the vehicle and the temperature of OETech products both be between 41° F and 95° F. Air temperatures may vary and 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

Used Glass – OETech does not recommend installing used glass except in the event of a repair and replacement.

Storage requirements - Installation Instructions FAQ's, Q&A #1

Shelf-life (opened & unopened) -Installation Instructions #8

Adverse weather conditions - Installation Instructions Page 12, top

Used Glass - Installation Instructions FAQ's page 15

4. URETHANE APPLICATION:

- Product requirements
- Application requirements
- Storage requirements
- Shelf-life
- Adverse weather conditions
- Additional requirements
 - SDAT identification
 - Non-conductive considerations
- High modulus considerations
- Other

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 does not recommend using the preprimed glass

Pinchweld Prep/Priming

- **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, until agitator ball is moving freely, continuing to shake for at least 30 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.)
- 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 95°) for short periods of time as weather conditions may vary.
- Shelf-life (opened & unopened) Shelf-life (opened & unopened) Shelf life of OETechCP opened is 7

Preprimed Glass - Installation Instructions FAQ's page 15

Product requirements – Installation Instructions. #8

Application requirements Installation Instructions. #8

Storage requirements Installation Instructions FAQ's, Q&A 1

Shelf-life (opened & unopened) - Installation Instructions, #8

days and unopened is 9 to 12 months

• Adverse weather conditions - Before performing an auto glass replacement please ensure that the environment and surroundings are conducive to a safe installation. Auto glass replacements should not be performed in severe weather. Note: OETech recommends that the surface temperature of the vehicle and the temperature of OETech products both be between 41 and 95 degrees F. Air temperatures may vary and 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.

Adverse weather conditions - Installation Instructions (top).

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.

- 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 red spots. In order to treat Moderate corrosion, the installer should remove corrosion with wire wheel, media blast or chemical dust remover.
- 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.

Corrosion Treatment - Installation Instructions Q&A Page 15. OETech Pinchweld Corrosion Treatment and Pages 22 and 23 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.

Gasket sets - Installation Instructions FAQ, O&A #5 and #8

URETHANE APPLICATION

- **Product requirements** OETech1, OEtech1S, OETech2, OETech2s, OETech3s, OETech3s+., OETechh+, OETech4
- Application requirements To get the proper size 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.
- Storage requirements OETech Urethane should be stored between 41°F and 77°F. OETech products may be brought into temperatures above and below

Product requirements – Installation Instructions, page 12

Application requirements— Installation Instructions, #10

Storage Requirements – Installation Instructions FAQ's #1

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 and should be recorded on the fixed glass replacement record for each job performed using the OETech	Page 8
	High modulus considerations & Non-conductive considerations – OETech1, OETech1s, or OETech4 should be used on vehicles requiring high modulus or low conductive properties.	High modulus considerations & Non- conductive considerations - Installation Instructions FAQ #9.
	SDAT identification – The vehicle should only be released when the safe drive away time has been achieved.	SDAT identification - Installation Instructions #13
	environment and surroundings are conducive to a safe installation. Auto glass replacements should not be performed in severe weather. Note: OETech recommends that the surface temperature of the vehicle and the temperature of OETech products both be between 41 and 95 degrees F. Air temperatures may vary and 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.	
	Adverse weather conditions Before performing an auto glass replacement please ensure that the	Adverse weather conditions - Installation Instructions Page 12 (top)
	Shelf-life (opened & unopened) The shelf life of all OETech Urethane is between 9 and 12 months. Specific data relating to the shelf life of a particular product can be obtained from accessing the OETech website and selecting the spec data sheet for the product being used	Shelf-life (opened & unopened) - Installation Instructions FAQ's #2
	the range (down to 0°F and up to 95°) for short periods of time as weather conditions may vary.	

	products	
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.	OETech provides written installation instructions in addition to a fixed glass replacement record which is provided to document the conditions (such as temperature, relative humidity etc) to ensure that the installation was performed under the proper conditions.	Page 8 Page 12 & 13
5.02 Products must be stored and controlled according to manufacturers' requirements as provided directly or through a private labeler.	The fixed glass replacement record is provided to document the conditions (such as temperature, relative humidity etc) to ensure that the installation was performed under the proper conditions.	Page 8
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
5.04 The vehicle owner / operator shall be advised of the minimum drive-away time under the circumstances of the replacement.	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
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 12 & 13
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	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.	Page 14 & 15

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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.		
•		
5.07 All adhesive system component lot		Page 8
numbers must be traceable to each job.	document the batch/lot numbers on each job that is	
	performed	
5.09 No product that has exceeded its	The fixed glass replacement record is provided to	Page 8
expiration date, open shelf life, or active shelf	J	Page 14 & 15
life shall be used.	that is performed to ensure that the product is safe for	
	use. Shelf life parameters of OETech products are	
	between 9 and 12 months.	
5.11 When inappropriate replacement materials	The fixed glass replacement record is provided to	Page 8
or methods are detected, those engaged in	document the condition of the vehicle and report any	
automotive glass replacement shall report their	inappropriate materials or questionable methods to the	
findings to the vehicle owner/operator.	owner/operator	
5.12 When those engaged in automotive glass	The fixed glass replacement record is provided to	Page 8
replacement correct inappropriate glass	document the condition of the vehicle and report any	
installations, they shall remove any	inappropriate methods or materials to the	
inappropriate materials that would compromise	owner/operator	
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.		
5.13 When sealing air or water leaks within a	When sealing air or water leaks within a polyurethane	Page 14 & 15
polyurethane retention system, only compatible	Jan Jan Jan Park Transport	
polyurethane adhesive shall be used. (No	adhesive shall be used. (No silicone or butyl may be	
silicone or butyl may be used).	used).	
5.14 Only the full cut method should be used	OETech installation instructions direct me to cut the	Page 12 & 13
for polyurethane retention systems.	bead to 1/16" (a.k.a. full cut method)	
6.0 Installation Standards - Rubber		
6.0 Installation Standards - Rubber		

Coalvot		
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 14 & 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 14 & 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 & 15
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 grubber gasket/sealant system, only OEM sealants shall be used.	Page 14 & 15
7.0 Additional Requirements		
7.04 Whenever OEM retention systems are modified on later production models without body style modification, the most current retention system shall be used in the replacement unless otherwise specified by the OEM.	The most current retention system shall be used in the replacement unless otherwise specified by the OEM.	Page 14 & 15
7.05 The failure of any product used in the	Any potential failures of products used in the	Page 14 & 15

glass installation process that the installer believes could jeopardize customer safety shall		
be reported promptly to the manufacturer or		
supplier of the product.		D 140.15
7.06 Those engaged in automotive glass	Those engaged in automotive glass replacement	Page 14& 15
replacement shall not introduce any chemical	shall not introduce any chemical agents, such as	
agents, such as cleaners, solvents, lubricants,	cleaners, solvents, lubricants, release agents, or	
release agents, or utilize any installation	, , , , , , , , , , , , , , , , , , , ,	
practice, which will adversely affect the glass	utilize any installation practice, which will	
retention system.	adversely affect the glass retention system.	
7.07 Those engaged in automotive glass	Those engaged in automotive glass replacement	Page 14 & 15
replacement shall maintain documentation to	shall maintain documentation to demonstrate	
demonstrate compliance with this standard.	compliance with this standard.	

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	OETech products are manufactured according to American Standard Testing Method (ASTM) and	Yes
documented quality assurance standards.	International Standardization Organization (ISO)	
Identify your organizations current quality assurance	procedures	
standard and how this should be identified by your glass		
shop customers.		
4.02 Those engaged in automotive glass replacement must use either an OEM approved retention system or equivalent retention system as certified in writing by the	OETech produces OEM products for the truck, trailer, rail and marine manufacturers.	Yes
equivalent retention system as certified in writing by the equivalent retention system manufacturer directly or		
through a private labeler.		

Provide validation to this requirement and how your glass		
shop customers' would demonstrate your compliance to		
this section of the Standard.		
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 dive-away time charts containing temperature and humidity variables if applicable, and any special procedures required for adverse weather conditions.	Page 12 & 13, OETech website, Page 17 & 15	Yes
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.		
5.03 No automotive glass replacement shall be undertaken	Page 17	Yes
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.		
Identify the drive-away-time chart to be utilized by your		
company's glass shop customers in order to be compliant		
with this requirement.		
8.01 Technicians installing replacement automotive glass	OETech offers certification based on self training course.	Page 18
shall be fully qualified for the tasks they are required to	The test Is provided to each installer and graded.	
perform. Such qualifications shall include, at a	Individuals who successfully complete the training exam	
minimum, completion of a comprehensive training	are provided a certificate, and a badge.	
program with a final exam and a continuing education		
component. The program shall include, among other		

Contact Information:

Your Name:	
Your Phone Number:	
Your Email Address:	
Your Mailing Address:	