Sika AGRSS Tool Kit 2011



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Sika Corporation AGRSS Tool Kit

Sika has assembled this AGRSS tool kit to assist in your awareness and compliance to the current AGRSS Standard. These documents are designed to assist you with completion of portions of five of the eight new self-assessment requirements for registration with AGRSS¹. However, Sika strongly recommends that you log onto www.agrss.org and read the AGRSS standards and registration requirements. Within the contents of this tool kit you will find:

- A. <u>AGRSS Declaration of Standard Conformance Deliverable 4.01</u> To be copied and stapled to the DECLARATION CHECK-LIST- SHEET to cover Deliverable 4.01 of your self- assessment.
- B. <u>AGRSS Declaration of Standard Conformance Deliverable 4.03</u> To be copied and stapled to the DECLARATION CHECK-LIST- SHEET to cover Deliverable 4.03 of your self- assessment.
- C. <u>AGRSS Declaration of Standard Conformance Deliverable 4.04</u> To be copied and stapled to the DECLARATION CHECK-LIST- SHEET to cover Deliverable 4.04 of your self- assessment.
- D. <u>AGRSS Declaration of Standard Conformance Deliverable 5.03</u> To be copied and stapled to the DECLARATION CHECK-LIST- SHEET, along with a copy of Sika's current safe-drive-away time chart, to cover Deliverable 5.03 of your self- assessment.
- E. <u>AGRSS Declaration of Standard Conformance Deliverable 8.02</u> To be copied and stapled to the DECLARATION CHECK-LIST- SHEET, along with a copy of Sika's current certificate of training for one of your technicians, to cover Deliverable 8.02 of your self-assessment.
- F. AGRSS Safety Bulletin Corrosion Treatment

To be copied and provided to any customer that is experiencing corrosion damage in order that they understand what repair practices are permissible under the AGRSS Standard and that you must adhere to required safe auto glass installation practices to protect the integrity of the vehicle and occupant safety.

G. <u>AGRSS Safety Bulletin – Removal and Replacement of Automobile Glass Parts</u> To be copied and provided to any customer or body shop requesting the removal and replacement of a stationary bonded glass part. This document defines what is permissible and what the auto glass technician, customer and body shop must do to remain compliant within section 7 of the AGRSS Standard.

H. AGRSS Safety Bulletin - Pinchweld Restoration Considerations

To be copied and provided to any body shop performing a pinchweld repair or repainting a vehicle that involves a glass replacement. This document defines what is permissible and what the auto glass technician and body shop must do to remain compliant within section 7 of the AGRSS Standard.

¹ The language contained in the response section to each of the declaration documents listed above is by way of example only and should not be used if it does not accurately depict the prospective registrant's conduct or practices. This AGRSS Tool Kit is intended as a guide only and is not a guarantee or warranty by Sika to prospective registrant of its successful registration with the Auto Glass Replacement Safety Standards Council, of compliance with AGRSS Standards, or of compliance with Sika handling use and application instructions or applicable local, state or federal law. Sika is not however responsible for nor does Sika guarantee any installation technician's compliance with Sika's guidelines for handling and use of its products or its training instructions. TRAINING BY SIKA AS WELL AS A CERTIFICATION OF TRAINING COMPLETION SHALL NOT CONSTITUTE A WARRANTY OF ANY KIND BY SIKA OF AN INSTALLATION TECHNICIAN'S WORKMANSHIP OR THE HANDLING, USE, STORAGE AND APPLICATION OF SIKA'S PRODUCTS. SIKA GIVES NO WARRANTY OF GUARANTEE OF ANY KIND EXPRESS OR IMPLIED WITH RESPECT TO THE INFORMATION AND/OR ANY GUIDANCE WHICH MAY BE PROVIDED HEREIN OR ITS USE. SIKA SHALL NOT UNDER ANY CIRCUMSTANCES BE RESPONSIBLE FOR CONSEQUENTIAL DAMAGES OF ANY KIND UNDER ANY LEGAL THEORY ARISING FROM THE USE OF OR RELIANCE UPON THE INFORMATION AND/OR GUIDANCE PROVIDED HEREIN.







Sika AGRSS Tool Kit:

Registration Values

Registration Preparation

•Self-Assessment Preparation

•Sika Self-Assessment Assistance Program

Registration Values:

The AGRSS Registration Program provides two distinct values for participating companies: first, the ability to differentiate oneself from the competition and, second, the ability to validate safe auto glass installation practices that leads to increased revenue and reduced liability risks, respectively.

Registration Preparation:



AGRSS Self-Assessment Preparation:

When in receipt of the AGRSS Registration packet, you'll note within the instructions that a 90 day registration period is provided. The reason for this extended period of time is to allow for a thorough self-assessment of the required number of store locations of your company, and the ability to correct and re-assess any non-compliance issues.

What has proven beneficial, in terms of time efficiency and elimination of non-compliances, is the pre-work done prior to the conducting of your official self-assessment. To help ensure a smooth and hassle-free self-assessment, utilize the following instructions:

- 1. Understand that the square root of your total store location count must be assessed (look to the chart provided as part of the "Invitation Letter" to learn how many store locations, or functional units, are to be involved).
- 2. The element of "random sampling" means that the store locations to be assessed, if more than one is to be involved, must be selected randomly, such as drawing locations from a hat. Conduct some form of lottery to identify the store locations to be assessed.
- 3. "STANDARD part B" is the key document used for conducting the self-assessment. Understand that each of the store locations being assessed must have their own copy of "STANDARD part B" completed and submitted back to your management team for review. For example, if the company had 10 store locations, 3 would need to be assessed. The management team would be in receipt of 3 "STANDARD part B" forms that were fully completed.
- 4. There are 8 deliverables required as part of the self-assessment. These deliverables play an enormous role in validating conformance to the AGRSS Standard. Each store location completing their own STANDARD part B must also attach the 8 deliverables to the back "DELIVERABLE CHECK-LIST-SHEET".
- 5. Company management must review each of the completed STANDARD part B forms and deliverables making sure that each question is marked "Yes" and that 8 acceptable deliverables are attached. If this level of accuracy occurs, then management has validated that acceptable and consistent policies and procedures are in place to best ensure compliance to the AGRSS Standard. Management then is to complete one corporate registration packet that is to include one STANDARD part B with one set of deliverables, and one Application Form (along with proper payment, notarization and instructed submission of additional locations requiring website posting and certificates). While a copy should be maintained, the original set is to be mailed to the AGRSS Secretary as indicated on the Application Form. It may take up to 6 weeks for return registration approval.
- 6. If any store location has either indicated "No" on STANDARD part B, or fails to understand the question, management must assess those specific subjects, correct the situation and then reassess the situation as soon as possible. Note that only those specific questions not being adequately answered need to be re-assessed and only for those store locations having indicated such. Once all assessed locations are deemed to be in compliance, then final corporate registration forms are ready for completion and submission. Registration is by company, which is why only one properly completed registration packet is required.
- 7. On deliverables, note that 8 are required. If one form is being used to cover more than one deliverable, make sure to include the appropriate number of extra copies, highlighting the area on that document that pertains to the deliverable required.
- 8. From these instructions, it makes sense for management to make sure that all store locations conduct business in the same way, using the same policies, procedures and documents long before the self-assessment is completed. This practice eliminates much of the risk of discovering non-compliances, which add much additional work and time to the registration process.

Sika Self-Assessment Assistance Program:

Sika, as your preferred retention system provider, has taken great strides in assisting with your successful completion of becoming an AGRSS Registered company. Sika has been an "originator" and leader of many of the AGRSS related projects and, largely because, we believe AGRSS to be one of the greatest and most important subjects ever developed for the AGR Industry.

One such proof of our commitment to the AGRSS process has been the provision of Sika's AGRSS Tool Kit that provides 5 of the 8 required Deliverables that must be submitted with your properly completed registration packet. This Tool Kit is updated each year and provided to you as a Sika-trained and certified glass shop.

The basis of our new "Sika-Self-Assessment Assistance Program" is that one of our full-time, factory trained personnel will literally assist your management team in conducting your self-assessment process. Through our field trials of this new program, glass shop customers have found this support to be rewarding due to the expertise we bring to the process, the knowledge we have within many of the topics and deliverables measured, and the streamlined approach we have developed to ensure the best use of your time and effort in completing AGRSS registration.

Following are the steps that you need to take in order to utilize this new program:

- 1. Complete all steps outlined in the "Registration Preparation" box.
- 2. Read through and understand the self-assessment process outlined in the "Self-Assessment Preparation" box.
- 3. Representing the management of your company, create, what we refer to as, the "Model" STANDARD part B, which means type out each question and then write your preferred answer to each, understanding that "Yes" would be the expected box checked. This document becomes your company's targeted script and answer sheet that your Sika representative would use in assessing each of your assessed locations. Along with this document, include the 8 deliverable documents that are representative of what should be used by each technician when conducting business. Note that Sika provides 5 of the 8 deliverables through this Kit and that you will need to provide the documents used to record pre-inspection conditions, safe-drive-away time and traceability of lot numbers, DOT numbers and part numbers. Make sure to review this Model from with your Sika representative prior to assessing any locations.
- 4. Do your best to teach each technician and store location the policies, procedures and documents that are to be used in order to be compliant to AGRSS and do so prior to your scheduled time of assessment. This prevents much of the risk of having to conduct more than one assessment per location due to a non-compliance issue.
- 5. Once steps 1-4 are complete, call your local Sika Territory Account Manager to schedule time to conduct your self-assessment. Once the schedule is set, be sure that all pertinent locations and personnel are properly notified and committed to the schedule.
- 6. Sika personnel will complete one STANDARD part B for each store locations that they are able to assess (depending on schedules and number of locations, Sika personnel may only be available to complete a portion of the assessments while your people complete the balance). If any non-conformances are discovered, they will be reported on part B and discussed. It will be the responsibility of your management to correct and re-assess such issues in order for the non-compliant issue to be amended to "Yes".
- 7. Upon the successful completion of the self-assessment, it will be the responsibility of your management team to properly complete the Application Form, the corporate STANDARD part B and required attachments, then submit it for approval to AGRSS.

DELIVERABLE 4.01

Section 4.01 of ANSI/AGRSS 002-2002:

"Those engaged in automotive glass replacement shall use retention systems that are produced under documented quality assurance standards."

Sika Response:

Each of Sika's AGR adhesives and primers is manufactured according to our documented quality assurance procedures. These internal quality assurance procedures have been certified by a third party approved ISO registrar to meet the requirements of ISO 9001:2000 and ISO/TS 16949:2002.

ISO (International Organization for Standardization) is the world's largest developer of standards. For more information on ISO and this standard you can log onto its website using the following address.

www.iso.org

John F. King

John King Vice President – Aftermarket Sales Sika Corporation





DELIVERABLE 4.03

Section 4.03 of ANSI/AGRSS 002-2002:

"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."

Sika Response:

Sika automotive OEM direct glazing polyurethane adhesive systems are used by a number of automobile manufacturers, such as Audi, BMW, DaimlerChrysler, Volkswagen, and others. This fact validates Sika's ability to produce qualified adhesive systems that meet or exceed the stringent OEM specifications for quality and performance for automobiles produced in the United States as well as worldwide.

When used as directed, each of Sika's AGR adhesives meets or exceeds the strength requirements outlined in the direct glazing specifications of all automobile manufacturers.

John T. Ge

John King Vice President – Aftermarket Sales Sika Corporation





DELIVERABLE 4.04 Section 4.04 of ANSI/AGRSS 002-2002

"Those engaged in automotive glass replacement shall obtain and follow written comprehensive and current application instructions from the retention systems manufacturer or private labeler."

Registrant Response:

The attached diagram represents the current cover of the Sika Technician Training Manual and represents comprehensive application instructions covering all requirements stated within Section 4 of the AGRSS Standard. This manual is currently used by the registrant.





Sika Corporation, 30800 Stephenson Highway, Madison Heights MI 48071, USA Tel: 248 577 0020, Fax: 248 577 0810, www.sikaindustry.com



DELIVERABLE 5.03

Section 5.03 of ANSI/AGRSS 002-2002:

"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."

Registrant Response:

Sika measures the strength build up rates of each AGR adhesive under varying weather conditions using proprietary Safe Drive Away Time (SDAT) determination test methods. The resulting SDATs are then validated under the supervision of a third party crash test facility using the FMVSS 212 standard in its most severe interpretation. This process provides a reliable means to establish SDAT charts for each of Sika's AGR adhesives. The information published in the SDAT chart for each AGR adhesive allows an auto glass technician to determine how long the vehicle must remain out of service prior to use. Such time allowances depend on which product is being used, temperature, humidity and the presence of a passenger side airbag.

The registrant has provided each of its installation technicians with the Sika SDAT charts for the Sika AGR adhesives that they use. The registrant has also provided training to each of its technicians to ensure that they are able to interpret this information properly and inform the vehicle owners of this information when necessary.





Safe Drive Away Time Charts - The fastest, most reliable and cost effective adhesive system available.

Based on temperature and humidity, these charts indicate when Sika polyurethanes reach FMVSS 212/208 windshield retention requirements for both dual airbag and non-dual airbag automobiles. Follow all product installation instructions and recommendations given in the Sika AGR Technician Training Manual.

Hot-Applied Adhesives

nductive)

>95°F <120°F

2 hr 2 hr 2 hr

2 hr

30 min 30 min

30 min 30 min

30 min

30 min 30 min

30 min 30 min 30 min 30 min 30 min

%06 < > 70% > 40% > 20%

Without Airbag Humidity Relative

30 min 30 min 30 min

>72°F

>55°F

>25°F

3°0<

Temperature >35°F

	72°F		nim (nim.	nim	nim	H.	ju.	hr	hr	1
en en	< Post	-	nin 30	nin 30	nin 30	nin 30	in the	E	ur a	ur a	-
eratu	>65		30 r	30 r	30 r	30 r	2	2	C1	2	c
Tempe	>35°F		30 min	30 min	30 min	30 min	2 hr	2 hr	2 hr	2 hr	2 hr
	>25°F		30 min	30 min	30 min	30 min	2 hr	2 hr	2 hr	2 hr	2 414
	>15°F		30 min	30 min	30 min	30 min	2 hr	2 hr	2 hr	2 hr	2 14
Relative	Humidity	Without Airbag	> 90%	> 70%	> 40%	> 20%	> 0%	With Passenger Airbag > 90%	> 70%	> 40%	2000

30 min 30 min 30 min 30 min

30 min 30 min

30 min 30 min

30 min

30 min

> 0%

2 hr

4 hr 4 hr 4 hr 4 hr 4 hr

1.25 hr 1.5 hr 1.75 hr

1 hr 1 hr

1 hr 1 hr

45 min 45 min

45 min 45 min

With Passenger Airbag > 90%

2 hr 2 hr

1.5 hr 1.5 hr

1 hr

45 min 45 min 45 min 45 min

1 hr

45 min

45 min

> 0%0 <

1 hr

1 hr

> 40% > 20%

> 70%

Relative			Tempe	rature		
Humidity	>0°F	>25°F	>55°F	>72°F	>85°F	>95°F
Without Airbag						-
> 75%	RN	NR	30 min	30 min	NR	NR
> 40%	NR	NR	30 min	30 min	30 min	NR
> 20%	NR	NR	30 min	30 min	30 min	30 mil
> 10%	NR	NR	30 min	30 min	30 min	30 mii
> 0%	NR	NR	30 min	30 min	30 min	30 min
With Passenger Airbag > 75%	RN	RN	1 hr	1 hr	NR	g
> 40%	NR	NR	1 hr	1 hr	1 hr	NR
> 20%	NR	NR	1 hr	1 hr	1 hr	1 hr
> 10%	NR	NR	1 hr	1 hr	1 hr	1 hr
> 0%	NR	NR	1 hr	1 hr	1 hr	1 hr

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SikaTack®-MOVE^{IT} (suitable for non-conductive & high modulus)

Relative			Tempe	rature		
Humidity	3°0<	>25°F	>35°F	>52°F	>72°F	>90°F <120°F
Without Airbag						
> 90%	30 min					
> 70%	30 min					
> 40%	30 min					
> 10%	30 min					
> 0%	30 min					
With Passenger Airbag > 90%	1 hr	1 hr	1 hr	1 hr	t h	1 14
> 70%	1 hr					
> 40%	1 hr					
> 20%	1 hr					
> 0%	1 hr					

(sn)

Relative			Temper	ature		
Humidity	>0°F	>32°F	>40°F	>52ªF	>72°F	>90°F <120°F
Without Airbag						
> 90%	NB	45 min	30 min	30 min	30 min	30 min
> 70%	NR	45 min	30 min	30 min	30 min	30 min
> 40%	NR	60 min	45 min	30 min	30 min	30 min
> 20%	RN	60 min	45 min	45 min	45 min	30 min
> 0%	BN	60 min	45 min	45 min	45 min	45 min
With Passenger Airbag						
> 90%	MN	4 hr	2 hr	2 hr	2 hr	2 hr
> 70%	NR	4 hr	2 hr	2 hr	2 hr	2 hr
> 40%	NR	6 hr	4 hr	2 hr	2 hr	2 hr
> 20%	NR	6 hr	4 hr	4.hr	4 hr	2 hr
> 0%	NR	6 hr	4 hr	4 hr	4 hr	4 hr

elative			Temper	ature		
lumidity	>15°F	>25°F	>40°F	>50°F	>72°F	>95°F
lithout Airbag						
%06	24 hr	24 hr	4 hr	3 hr	2 hr	2 hr
70%	24 hr	24 hr	4 hr	3 hr	2 hr	2 hr
40%	NR	24 hr	24 hr	4 hr	2 hr	2 hr
10%	NR	NR	24 hr	24 hr	4 hr	2 hr
0%0	NR	NR	NR	NR	4 hr	4 hr
ith Passenger rbag 90%	NR	NR	16 hr	12 hr	8 hr	8 hr
%02	NR	NR	16 hr	12 hr	8 hr	8 hr
40%	NR	NR	NR	16 hr	8 hr	8 hr
10%	NR	NR	NR	NR	16 hr	8 hr
9%0	NR	NR	NR	NR	NB	NR

SikaTack®-ASAP (suitable for non-conductive)

DELIVERABLE 8.02

Section 8.0 of ANSI/AGRSS 002-2002:

"Technicians installing replacement automotive glass shall be fully qualified for the tasks they are required to perform. Such qualifications shall include, at a minimum, completion of a comprehensive training program with a final exam and a continuing education component. The program shall include, among other things: a) AGR safety issues b) An understanding of OEM installation standards and procedures c) Relevant technical specifications d) Comprehensive retention system specific training e) The opportunity to apply and demonstrate the skills technicians learn.

Registrant Response:

Sika offers training covering the proper use of Sika products when used as the retention system of any automobile. Our training course, named, "Sika AGR Technician Training Course", is an AGRSS registered training course and has been approved for compliance to Section 8, Education, of the AGRSS Standard. In addition, our training course complies with all other requirements outlined within Section 8, including but not limited to, the provision of a final exam, a continuing education component that is provided within a 2 year cycle, and training that allows the auto glass technician to demonstrate the skills learned.

Below you will see a sample certificate provided to technicians by Sika, when completing our specific training course and achieving a final examination score of 100%. It is our recommendation that all Sika trained technicians maintain and present a copy of their most current certificate to verify that they have successfully completed our course.







AGR Authorization Form

EXTERIOR

Mark all Damages as Followed:
"S" = Scratched
"P" = Peeled Paint
"D" = Dented
"C" = Chipped
"M" = Missing Parts
"R" = Rusted Spots
"O" = Other:

INTERIOR

ges as Foll	lowed:	
Tears	Stains	Area
	ges as Foll Tears 	ges as Followed: Tears Stains

BEFORE RETURNING TO CUSTOMER

Circle the following that has been checked and or completed:

Vacuumed:	yes / no
Trim Secure:	yes / no
Glass Clean:	yes / no
Wipers ok:	yes / no
Air Condition Run:	yes / no
Radio:	yes / no
Notes:	

Urethane Label	Aktivator Label
Ratch No.	Batch No Exp. Date
Exp Date	206 G+P Label
LAP. Dutt	Batch No Exp. Date
Safe Drive Away Time	215 Primer Label
AM PM	Batch No Exp. Date
Airbags: Single Dual	

RIGHT SIDE





Customer Name:	Date:
Phone:	Color Vehicle:
Type Vehicle:	_ VIN #:
Glass DOT Number:	Glass Part Number:
Urethane System Used:	Car Inspected By:



I hereby have read the inspection sheet, authorization and agreement, before affixing my signature below, and warrant that I fully understand the contents thereof.

Customer Signature:

Date:

Sika Corporation AGRSS Safety Bulletin

August 26, 2005

X05-25

Attention: Automobile Owner /Operator Subject: Corrosion Treatment; Section 3, ANSI/AGRSS Standard 002-2002

Section 3, Vehicle Assessment Before Replacement, of the American National Standards Institute/Auto Glass Replacement Safety Standard 002-2002 states that, "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." One condition which may exist within the mounting area of a glass part that fits this description is corrosion (rust). All auto glass technicians must abide by the specific instructions of the auto glass replacement adhesive supplier in evaluating the severity of corrosion and, its proper removal and pinchweld restoration.

When one of Sika Corporation's auto glass replacement adhesive systems is used as the glass replacement retention system, the following recommendations for corrosion treatment should be followed in order to be compliant with the ANSI/AGRSS Standard:

- 1. If any level of corrosion is found in or around the mounting area of the glass part, such corrosion must be fully removed down to bare metal and the bare metal must be properly primed prior to application of the adhesive in accordance with Sika's documented instructions set forth in Sika's Auto Glass Technician Training Manual available by calling 1-888-832-7452 or at www.sikaindustry.com¹.
- 2. In accordance with Sika's instructions, up to an accumulated maximum of 24 square inches of corrosion in the entire glass part mounting area can be properly restored by the auto glass technician, as long as there is no perforation (holes) in the mounting surface. If either of these parameters is not met, the vehicle must be restored by an authorized auto body repair facility.

If these practices are not followed, an auto glass replacement company may be in violation of the ANSI/AGRSS Standard 002-2002.

Recommendation: Since automotive glass parts are an integral part of a vehicle's overall passenger protection system, vehicle owners should only utilize the services of auto glass technicians who follow a comprehensive automotive glass replacement protocol which includes, but is not limited to, corrosion treatment procedures that comply with ANSI/AGRSS standards. Failure to comply with these recommendations may pose a risk to your personal safety.

Best regards,

& Woodford

Jeffry A. Woodford Sr. Product Engineer Sika Corporation



¹The information and recommendations contained herein and any other advice given by Sika are provided in good faith based on Sika's current knowledge and experience of its products when properly stored, handled and applied within shelf life under normal conditions in accordance with Sika's instructions. SIKA DOES NOT UNDER ANY CIRCUMSTANCES WARRANT OR ASSUME LIABILITY UNDER ANY LEGAL THEORY IN CONNECTION WITH THE USE OR APPLICATION OF ITS PRODUCTS BY ANY THIRD PARTY.

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August 26, 2005

X05-26

Attention: Auto Body Repair Facility

Subject: Removal & Replacement of Automobile Glass Parts Section 7, ANSI/AGRSS Standard 002-2002

Section 7 of the ANSI/AGRSS Standard 002-2002 states that "those engaged in automobile 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."

Removal and replacement of stationary glass parts is an installation practice that can, in a significant number of situations, adversely affect the glass retention system. When one of Sika Corporation's auto glass replacement adhesive systems is used as the glass retention system during a removal and replacement, there are a limited number of options to remain compliant with Section 7 of the ANSI/AGRSS Standard. Please note that if the situation described below in option 2 is the case, this type of part cannot be replaced using Sika Corporation's auto glass replacement adhesive systems.

Following removal of the part that is to be reinstalled, the existing bead of cured urethane on the glass part must be trimmed and tested for adhesion to confirm that remaining urethane is bonded to the glass. Generally, Sika recommends that the bead of urethane on these parts be trimmed just prior to reinstallation, but if this is not possible, the trimmed bead should be "cleaned" using Sika[®]Aktivator 10 minutes prior to reinstallation. One of the following three options MUST be followed when performing a removal and replacement in order to remain compliant with Section 7 of the ANSI/AGRSS Standard:

1. If the remaining layer of urethane adhesive has good adhesion to the entire perimeter of the glass part, it does not matter which adhesive company manufactured the remaining layer of adhesive, and this part can be installed using standard procedures. For further information refer to Sika's adhesive AGR System instructions set forth in its Auto Glass Technician Training Manual and available at www.sikaindustry.com or by calling 1-888-832-7452.

2. If the original urethane on the glass part does not have good adhesion around the entire perimeter of the part <u>and</u> it cannot be confirmed that this original urethane is a Sika system, then Sika does NOT recommend installation of the part.

3. In cases where it <u>can</u> be confirmed that the original adhesive system on the part was made by Sika and there are areas on the part where the Sika urethane was completely removed during the extraction process or the Sika urethane does <u>not</u> have good adhesion, these areas should be prepared using the following instructions prior to re-installation. Carefully wipe these areas with Sika[®]Aktivator, wipe off any excess, and allow at least ten minutes for the product to flash / cure. Install the part using standard installation procedures.



Recommendation¹: Since automotive glass parts are an integral part of a vehicle's overall passenger protection system, vehicle repair businesses should only utilize the services of auto glass technicians that follow automotive glass replacement procedures that comply with ANSI/AGRSS Standards¹. Your customer, whether it is the vehicle owner or the insurance company, will expect you to meet these requirements and return the vehicle with all safety related features in operable condition. Failure to comply with these recommendations may pose a risk to your customer's safety.

Best regards,

Jeff Woodford

Jeffry A. Woodford Sr. Product Engineer Sika Corporation

¹The information and recommendations contained herein and any other advice given by Sika are provided in good faith based on Sika's current knowledge and experience of its products when properly stored, handled and applied within shelf life under normal conditions in accordance with Sika's instructions. SIKA DOES NOT UNDER ANY CIRCUMSTANCES WARRANT OR ASSUME LIABILITY UNDER ANY LEGAL THEORY IN CONNECTION WITH THE USE OR APPLICATION OF ITS PRODUCTS BY ANY THIRD PARTY.

August 26, 2005

X05-24

Attention: Auto Body Repair Facility Subject: Pinchweld Restoration Considerations for Direct Glazing Applications Section 7, ANSI/AGRSS Standard 002-2002

Section 7 of the ANSI-AGRSS Standard 002-2002 states that "those engaged in automobile 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." The ANSI/AGRSS standard can be obtained via the Internet by first logging on to www.agrss.com and then by clicking on "The Standard."

The aftermarket application of basecoat and or clearcoat to an automotive glass part's mounting area (commonly referred to as a vehicle's pinchweld in the auto glass replacement industry) prior to installation of a polyurethane direct-glazed stationary auto glass part is an installation practice that can adversely affect the glass retention system. When one of Sika Corporation's auto glass replacement adhesive systems is used as the glass retention system during a replacement, the recommendations that follow must be used in order to remain compliant with Section 7 of the ANSI/AGRSS Standard. More importantly, any glass part installation performed without following the procedures set forth below (as well as the comprehensive application instructions contained in Sika's Auto Glass Technician Training Manual) could cause possible loss of glass adhesion and potential serious personal injury.

Recommendation: Since automotive glass parts are an integral part of a vehicle's overall passenger protection system, vehicle repair businesses should only utilize the services of auto glass technicians that are aware of and follow pinchweld preparation procedures that comply with the ANSI/AGRSS Standard. Your customer, whether it is the vehicle owner or the insurance company, will expect you to meet these requirements and return the vehicle with all safety related features in an operable condition. Failure to comply with these recommendations may pose a risk to your customer's safety. The instructions that follow have been taken from Sika's Auto Glass Technician Training Manual available at www.sikaindustry.com or by calling 1-888-832-7452. Any body shop work that involves glass replacement using Sika's AGR urethane systems must be conducted in accordance with all of the instructions in the Auto Glass Technician Training Manual for Sika's Auto Glass Technician Training Manual as they pertain to the work you perform.

The following information has been taken from the Pinchweld Preparation Section of Sika's Auto Glass Technician Training Manual:

AGR / body shop instructions for repaired pinchwelds and vehicles to be repainted²

Perforation corrosion located in a glass part's mounting area of a vehicle's pinchweld, just like perforation corrosion located in any structural area of a vehicle, requires replacement of the entire section of metal. Filling these types of areas with body filler is not acceptable. Furthermore, I-CAR



has made recommendations that state, "do not use body filler on the pinchweld where glass urethane adhesive will be applied." This recommendation was taken from the March - April 2000 I-CAR Advantage and this document also states that, "small irregularities in the flange surface will be filled when the adhesive bead is applied." Keep in mind that the glass bonding area of a pinchweld does not require a "Class A" appearance and, if required, welded areas can be sanded smooth prior to primer application. Again, **do not apply body filler in areas where glass bonding adhesive will be applied.**

For glass replacements involving a body shop repaired pinchweld or repainting of a vehicle, one of the following two options should be selected.

Option 1. Whenever possible, remove the glass part, by cutting the adhesive as close to the glass as possible, and leave the entire remaining urethane adhesive bead in place. Do not trim the adhesive bead until the vehicle has been painted and the new glass part is ready to be installed. In this case, it is not necessary to tape or otherwise protect the existing urethane. After the vehicle is repaired and painted, remove most of the existing urethane leaving 1-2 mm on the pinchweld and install the glass part (full cut method).

Option 2. If the pinchweld area is to be repaired and painted, remove the section of metal to be repaired, repair pinchweld and apply an epoxy or etch primer coat. Allow the primer to cure for at least as long as would be required prior to applying topcoat over the primer, following the paint manufacturer's recommendations. If topcoat is to be applied to remainder of the vehicle, mask off the bond area of the pinchweld with masking tape. Continue painting the vehicle as required. Remove the masking tape. If a forced drying process is to be used, remove the tape prior to baking the topcoat. Next, lightly abrade the primer with a Scotchbrite[®] or similar abrasive pad. Apply Sika[®] -Aktivator according to the instructions in this guide and allow it to cure for at least ten minutes. Paint a thin coat of Sika[®]Primer-206 G+P and then allow at least ten minutes for this product to dry. Then set the glass part using the appropriate Sika adhesive for the vehicle type and required drive away time.

*IMPORTANT NOTE: Option 2 above calls for the use of Sika[®] -Aktivator and Sika[®]Primer-206 G+P. If any of these procedures are to be performed at temperatures below 40°F, then please refer to the special low temperature precautions for these products, which can be found in the "Seasonal Concerns" section of Sika's Auto Glass Technician Training Manual. Also, please note that when these recommendations call for Sika[®]Primer-206 G+P, a Sika[®]Primer-206 Stix applicator may be used. However, due to the limited coverage of Sika[®]Primer-206 Stix, a can of Sika[®]Primer-206 G+P will most likely be the more convenient option.

Best regards,

Jeff Woodford

Jeffry A. Woodford Sr. Product Engineer Sika Corporation

¹Sika warrants its products for one year from date of installation to be free from manufacturing defect and to meet the technical properties on the current Technical Data Sheet(s) when used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTY EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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August 26, 2005

X05-26

Attention: Auto Body Repair Facility

Subject: Removal & Replacement of Automobile Glass Parts Section 7, ANSI/AGRSS Standard 002-2002

Section 7 of the ANSI/AGRSS Standard 002-2002 states that "those engaged in automobile 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."

Removal and replacement of stationary glass parts is an installation practice that can, in a significant number of situations, adversely affect the glass retention system. When one of Sika Corporation's auto glass replacement adhesive systems is used as the glass retention system during a removal and replacement, there are a limited number of options to remain compliant with Section 7 of the ANSI/AGRSS Standard. Please note that if the situation described below in option 2 is the case, this type of part cannot be replaced using Sika Corporation's auto glass replacement adhesive systems.

Following removal of the part that is to be reinstalled, the existing bead of cured urethane on the glass part must be trimmed and tested for adhesion to confirm that remaining urethane is bonded to the glass. Generally, Sika recommends that the bead of urethane on these parts be trimmed just prior to reinstallation, but if this is not possible, the trimmed bead should be "cleaned" using Sika[®]Aktivator 10 minutes prior to reinstallation. One of the following three options MUST be followed when performing a removal and replacement in order to remain compliant with Section 7 of the ANSI/AGRSS Standard:

1. If the remaining layer of urethane adhesive has good adhesion to the entire perimeter of the glass part, it does not matter which adhesive company manufactured the remaining layer of adhesive, and this part can be installed using standard procedures. For further information refer to Sika's adhesive AGR System instructions set forth in its Auto Glass Technician Training Manual and available at www.sikaindustry.com or by calling 1-888-832-7452.

2. If the original urethane on the glass part does not have good adhesion around the entire perimeter of the part <u>and</u> it cannot be confirmed that this original urethane is a Sika system, then Sika does NOT recommend installation of the part.

3. In cases where it <u>can</u> be confirmed that the original adhesive system on the part was made by Sika and there are areas on the part where the Sika urethane was completely removed during the extraction process or the Sika urethane does <u>not</u> have good adhesion, these areas should be prepared using the following instructions prior to re-installation. Carefully wipe these areas with Sika[®]Aktivator, wipe off any excess, and allow at least ten minutes for the product to flash / cure. Install the part using standard installation procedures.



Recommendation¹: Since automotive glass parts are an integral part of a vehicle's overall passenger protection system, vehicle repair businesses should only utilize the services of auto glass technicians that follow automotive glass replacement procedures that comply with ANSI/AGRSS Standards¹. Your customer, whether it is the vehicle owner or the insurance company, will expect you to meet these requirements and return the vehicle with all safety related features in operable condition. Failure to comply with these recommendations may pose a risk to your customer's safety.

Best regards,

Jeff Woodford

Jeffry A. Woodford Sr. Product Engineer Sika Corporation

¹The information and recommendations contained herein and any other advice given by Sika are provided in good faith based on Sika's current knowledge and experience of its products when properly stored, handled and applied within shelf life under normal conditions in accordance with Sika's instructions. SIKA DOES NOT UNDER ANY CIRCUMSTANCES WARRANT OR ASSUME LIABILITY UNDER ANY LEGAL THEORY IN CONNECTION WITH THE USE OR APPLICATION OF ITS PRODUCTS BY ANY THIRD PARTY.