



PREVOST

MAINTENANCE INFORMATION

MI16-12

DATE :	FEBRUARY 2016	SECTION: 18 - Body
SUBJECT :	GLUED FIXED THERMOS WINDOW PANE – INSTALLATION/GLUING PROCEDURE	

APPLICATION

Model	VIN		
X3-45 COMMUTER			

DESCRIPTION

Use this procedure to perform the replacement of glued fixed thermos window. This procedure may also be used for the replacement of non-thermos fixed window as the installation method is similar.

PRE-ASSEMBLED FIXED THERMOS WINDOW PANE

To ensure an easy installation when replacing a broken fixed thermos window, the pre-assembled fixed thermos window **p/n 290072** should be selected as replacement part. This pre-assembled fixed thermos window comes with the upper aluminum extrusion already glued on the window pane. The aluminum extrusion will assure perfect vertical positioning and support the window pane during adhesive curing.

MATERIAL

Part No	Description	Qty
ADHESIVE		
687957	TEROSON MS9399 MS-POLYMER (<i>twin-tube 400ml</i>)	a.r.
SEALANT		
684685	SEALANT, SIMSON ISR 70-03 BLACK (<i>tube 290ml</i>)	a.r.
CLEANER		
682989	SILICONE REMOVER 5 liters	a.r.
APPLICATOR / TIP		
687958	QUATTRO MIXER/APPLICATOR with V-TIP	a.r.
683655	APPLICATOR with V-TIP	a.r.
CLOTH		
682383	BLUE CLOTH	a.r.
682384	CHIX CLOTH	a.r.



#687957
TEROSON MS9399
MS-POLYMER



#687958
QUATTRO MIXER WITH
V-TIP



TOOL
400ml DUAL CARTRIDGE
PNEUMATIC APPLICATOR
(PREVOST #688467)



#684685
SEALANT
SIMSON ISR 70-03
BLACK 290ml



#682989
SILICONE REMOVER
(ANTI-SILICONE)
5 liters



#682384
CHIX CLOTH



#682383
BLUE CLOTH

 TOOL PUTTY KNIFE			
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NOTE

Material can be obtained through regular channels.

PROCEDURE**DANGER**

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

1. Inside the vehicle, remove the finishing trims around the window.
2. Remove the stopper blocks located at the top of the broken window if applicable (FIGURE 1). There may be a stopper block on the R.H. side as well as L.H. side of the window. These stopper blocks are found at the top of each emergency exit windows.

NOTE

In order to reinstall the stopper blocks at their original location, identify which stopper block goes on R.H. side and which one goes on L.H. side. You may use a piece of masking tape and write down the position on it.

**CAUTION**

Do not open an emergency window on which the stopper block has been removed. The emergency window could unhook and fall down.

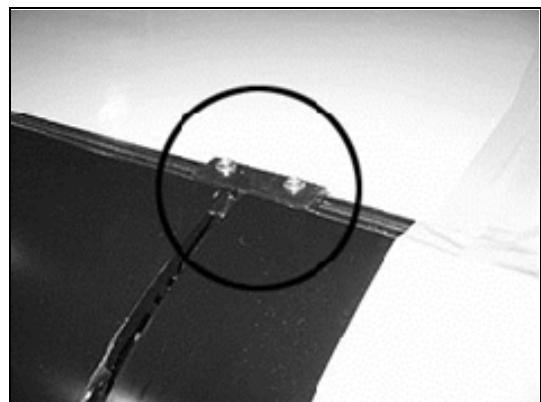


FIGURE 1: STOPPER BLOCK

3. Remove all debris of broken window if applicable.

4. Remove adhesive/sealant on the involved structural members using a putty knife. Read the note below first:

NOTE

Good adherence of glue to surface. Remove excess of glue using a putty knife. It is acceptable leave a thin layer of glue on the surface instead of breaking the surface of adherence with the blade. If primed surface is slightly scratched: Accept as it is.

If glue or primer become unstuck. Remove glue locally and sand defective area

5. The vertical rubber seal found on the L.H. and R.H. side vertical members (FIGURE 2) should be left in place if in good condition. Replace damaged vertical rubber seal if applicable.

Vertical rubber seal p/n: 293250 RUBBER SEAL1292±6.35mm LG

NOTE

Rubber seal is stick to the structural member with pre-applied double face adhesive tape

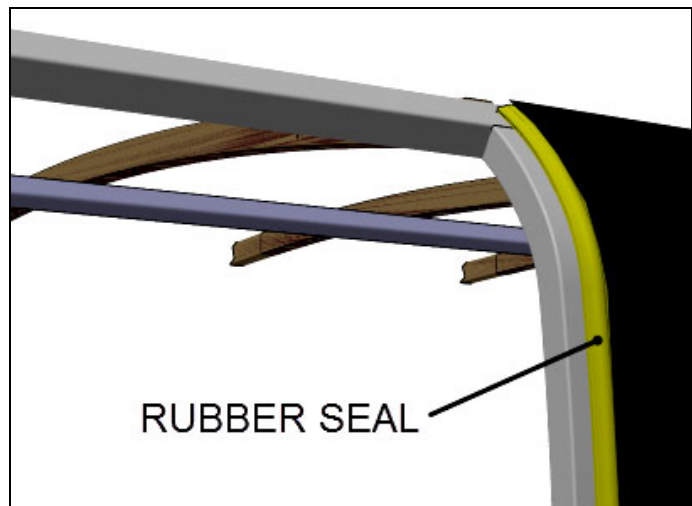


FIGURE 2

6. To avoid weak bonding, thoroughly clean the old adhesive layer on the structural member identified in FIGURE 3 and FIGURE 4 with silicone remover p/n 682989 and clean Chix clothes. Wipe and dry surfaces with clean blue clothes.

NOTE

For silicone remover (anti-silicone) application technique, refer to annexed SAV00001C SURFACE PREPARATION PRODUCT GUIDE.

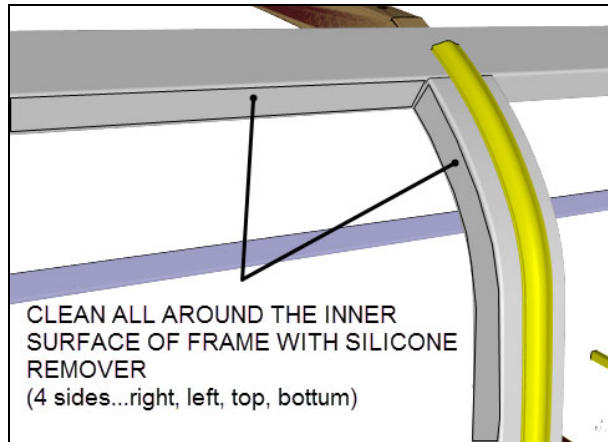


FIGURE 3

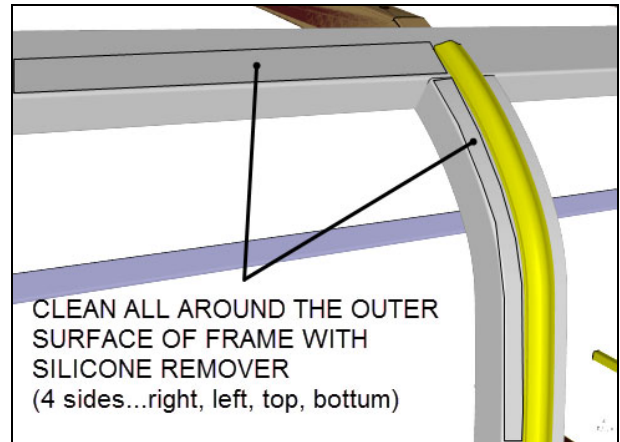


FIGURE 4

7. In preparation to adhesive application, clean the dark area on the inner side of the window pane using glass cleaner (refer to FIGURE 5).

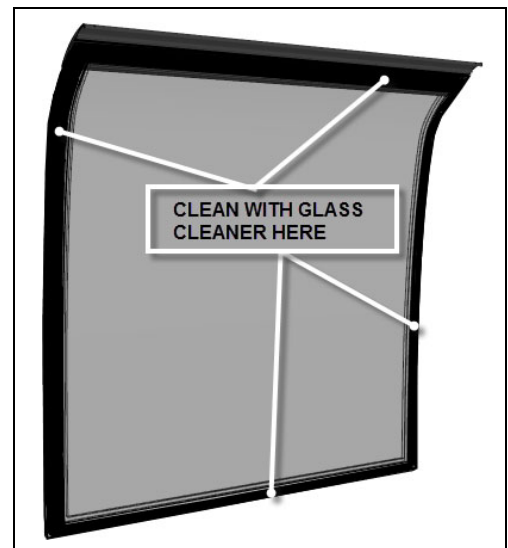


FIGURE 5

8. The adhesive must be applied in a triangular shaped bead of **20mm X 10mm** (13/16 in X 13/32 in) as shown on **FIGURE 6**.

NOTE

For application technique, refer to annexed SAV00001A TRIANGULAR BEAD APPLICATION RULES.

ADHESIVE

#687957 TEROSON MS9399 MS-POLYMER

- must be applied using special mixer/applicator #687958 with v-tip.
- **Open time: 18 minutes.**
- **Clamping time: 90 minutes.**
- Vehicle stop time (No driving with vehicle): 90 minutes.
- Cleaning: clean spills with **silicone remover**.
- Smoothing: use water or soapy water on a clean cloth.

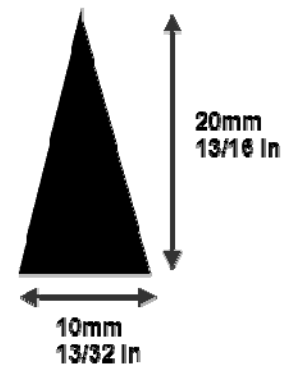


FIGURE 6

9. Apply a **continuous** triangular bead of adhesive on R.H. and L.H. side vertical members. Apply the adhesive bead centered between the vertical member edge and the rubber extrusion (FIGURE 7).

ADHESIVE OPEN TIME: the time interval after application of the adhesive during which successful bonding of substrates can occur.

ADHESIVE OPEN TIME =18 min. max TEROSON MS9399 MS-POLYMER

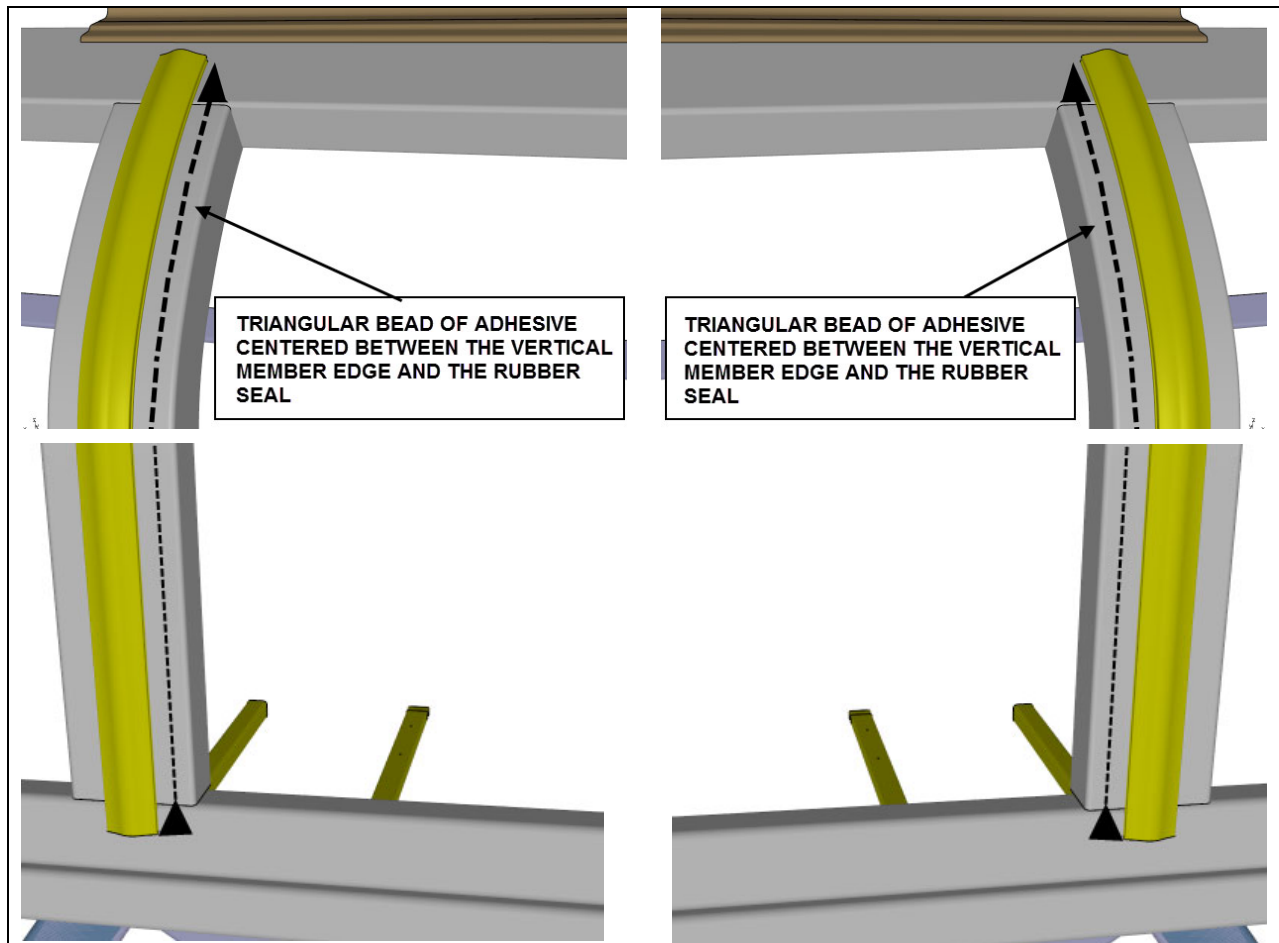


FIGURE 7

10. Apply two **continuous** triangular beads of adhesive on the upper horizontal member. Place the first bead along the edge of the horizontal member. Apply the second bead next to the first. R.H. and L.H. side vertical members (FIGURE 8).

NOTE

The two adhesive beads of the upper horizontal structural members are very important and must be done carefully to prevent water infiltration. Make sure that they reach the previously done vertical beads.

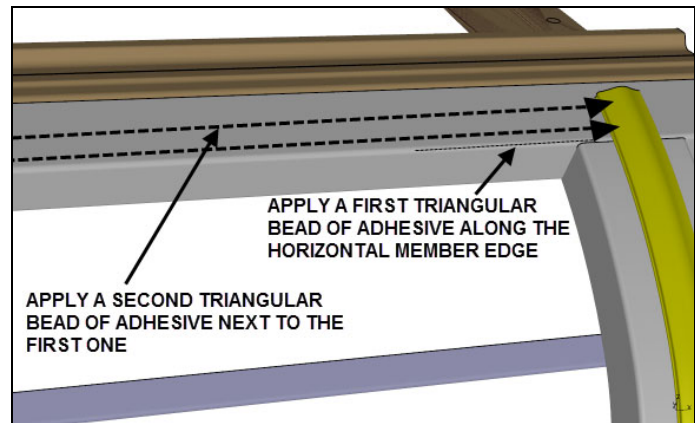


FIGURE 8

11. Apply a **continuous** triangular bead of adhesive on the lower horizontal member (FIGURE 9).

NOTE
<i>Make sure that the adhesive bead reaches the vertical beads previously done.</i>

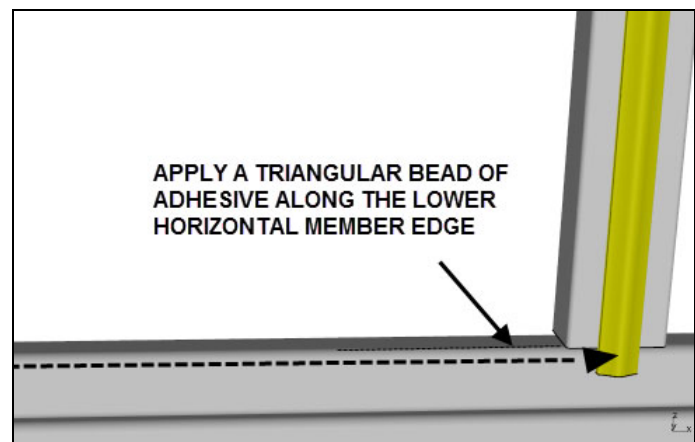


FIGURE 9

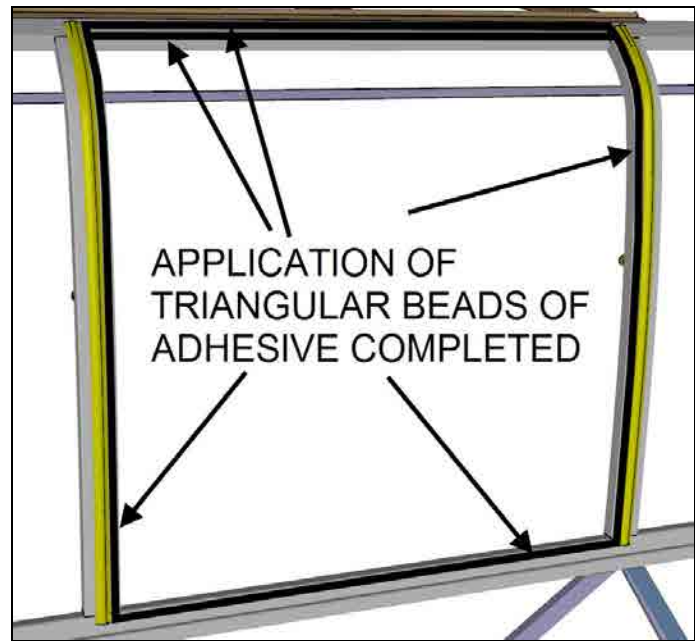


FIGURE 10

12. Install the window on the structure. Ideally, you would use suction cups (FIGURE 11) to manipulate the window. Using the aluminum extrusion already fixed to the window pane, hook the window to the rail found on the vehicle upper horizontal member (FIGURE 12). Place the window centered between the two adjacent windows before pressing the fixed window against structure. The gaps found on the right side and the left side should be equal. Wipe adhesive in excess if adhesive is visible from the outside.



FIGURE 11: HAND SUCTION CUP

**CAUTION**

Never raise a window once it has been pressed against the structure because the adhesive joint would break.

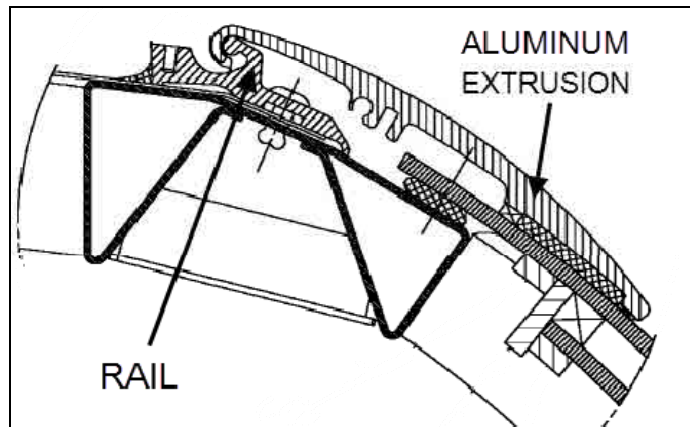


FIGURE 12

13. Check window alignment (flatness) with adjacent windows or panels. Using a small ruler (to prevent scratching, do not use metal ruler onto glass), make sure the window pane is flush with the windows located on each side of it. Allow enough clamping time for adhesive curing.

TEROSON MS9399 MS-POLYMER

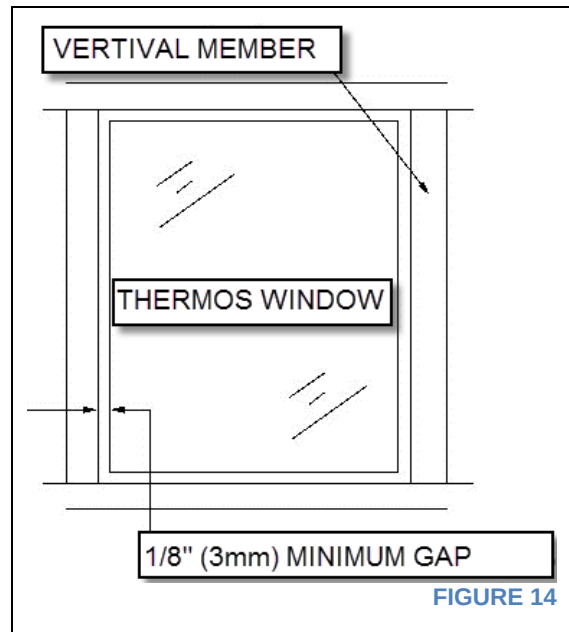
- Clamping time: 90 minutes.

On FIGURE 13, a special jig equipped with suction cups is used to clamp/hold the fixed window on the structural members from inside.



FIGURE 13

14. **Allow 60 minutes before performing this step.** While the adhesive is curing, from the interior of the bus, fill the gap between the thermos window and the surrounding structural members with **sealant Simson ISR 70-03** (fill the whole window perimeter to ensure water tightness). Remove sealant in excess using putty knife/scrapper. Smooth down (FIGURE 15) the joint with finger or using clean clothes soaked with water or soapy water. Sealant bead must be fully filled, uniformly applied, flush with the thermos surface. Clean sealant in excess using silicone remover.



Interior tolerance: A gap of **1/8" (3mm) minimum** should be met between thermos window and structural members.

OPEN TIME: the time interval after application of the adhesive during which successful bonding of substrates can occur.

SEALANT SIMSON ISR 70-03 OPEN TIME =10 minutes max

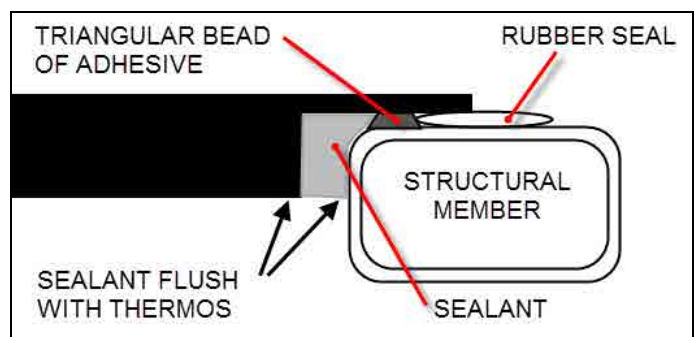


FIGURE 15

15. If applicable, reinstall the stopper blocks at their original location (FIGURE 1).

16. Allow 90 minutes of adhesive curing (vehicle stop time= 90 minutes).
17. Reinstall the interior trims.

PARTS / WASTE DISPOSAL

Discard according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)



Access all our Service Bulletins on <https://secureus5.volvo.com/technicalpublications/en/pub.asp>
Or scan the QR-Code with your smart phone.

E-mail us at technicalpublications_prev@volvo.com and type "ADD" in the subject to receive our warranty bulletins
by e-mail.

MEMORANDUM GLUING BEST PRACTICES

SAV00001

REVISION 15

SERVICE RELEASE 2013-09-06

GLUING PROCEDURE (QUALIFIED PERSONNEL ONLY)

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SAV00001C	Surface Preparation Product Guide
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SAV00001E	Repair / Replacement
SAV00001F	VHB Adhesive Tape-Backed Rubber Seal Gluing
SAV00001G	Finishing Joint Smoothing
SAV00001H	Product Date Verification Guide

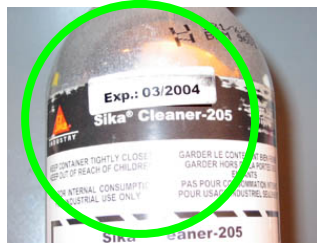
General health and safety guidelines

DISCARD  AS PER P908	WEAR  GLOVES	WEAR  SAFETY GLASSES
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General Remarks



**No
Back and forth**

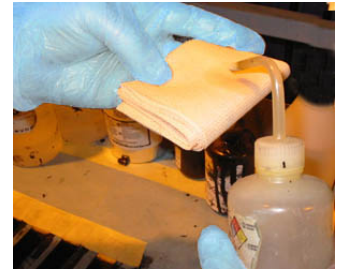
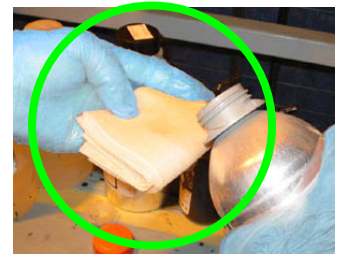


**Verify expiration
date**

See H



**Do not use
straight from the
bottle**



Work Place

- No excessive dust (mind the ventilation).
- Air blast forbidden. (Sprays dust in the work environment and contaminates surfaces by oil in the pneumatic system).
- All products containing silicone are forbidden.

Temperature and humidity %: **Standard is 23°C (73°F) and 50% of relative humidity.**

Effects of temperature;

>23°C (73°F) and/or >50% drying time and job time are reduced

<23°C (73°F) and/or <50% drying time and job time are increased

Keep in mind that it is forbidden to use products, parts, to prepare and/or glue surfaces if temperature is below 15°C (59°F).

Using Sika Products and Solvent in Nalgene Bottles

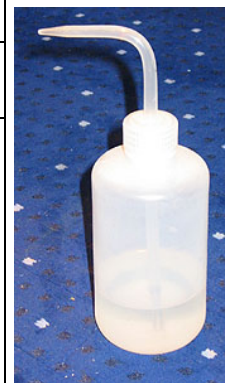
Primer 206G+P

Insert a ball in Nalgene bottle. This will enable mixing of product.

Preservation of all products

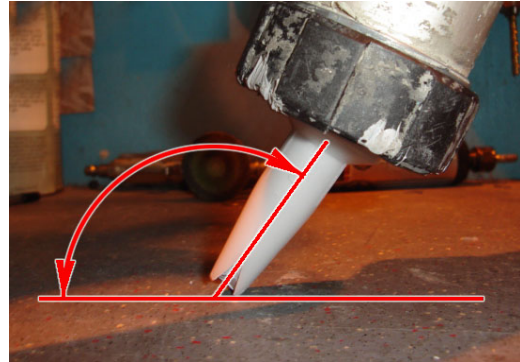
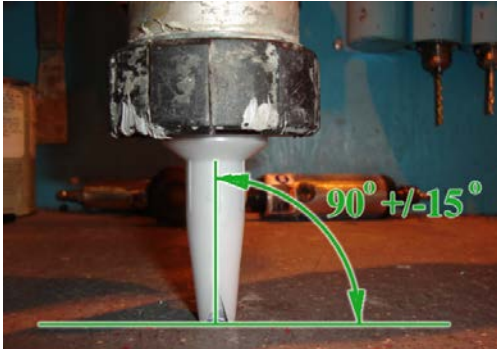
Put a cap when not in use. Surrounding air and humidity will cause product to dry and evaporate.

Discard all products starting to curdle (liquid state becoming gelatinous or lumpy).

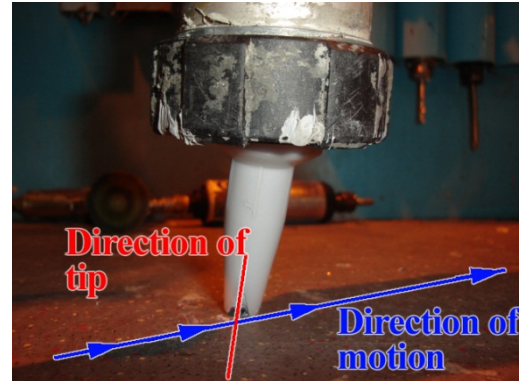
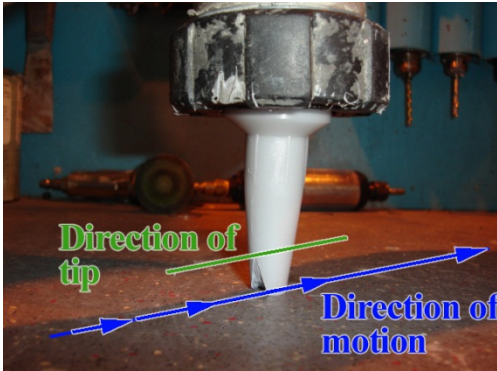


SAV00001A Triangular Bead Application Rules

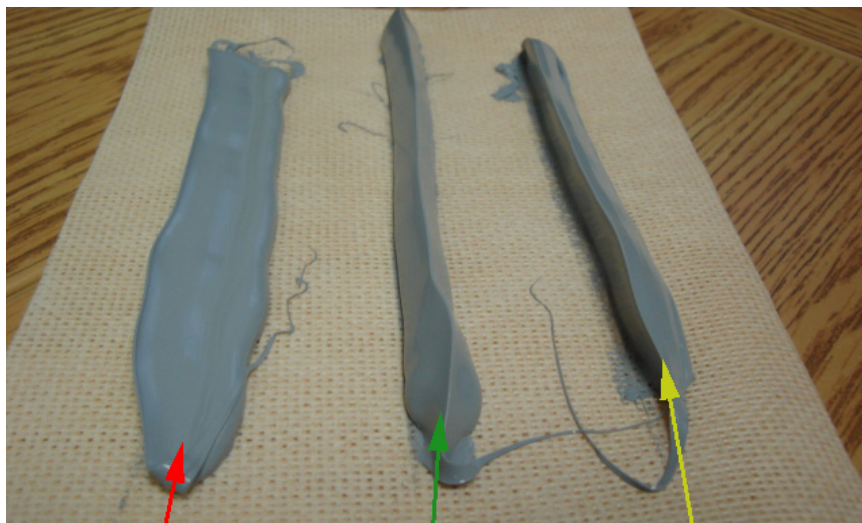
Nozzle must be as perpendicular to the surface as possible



Nozzle must be positioned to follow the direction of movement (towards the rear not side)



Bead Appearance



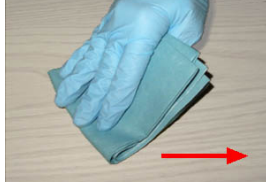
Unacceptable

Perfect

Max acceptable

SAV00001C Surface preparation product guide

Anti-silicone (or alcohol)

	1. Apply CHIX cloth		2. Dry immediately Blue cloth
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Note: Do not use over long distances. Turn cloth over. Clean until Chix cloth comes out clean.



Unacceptable



Unacceptable



Maximum acceptable

3. Allow drying
(Mandatory)

Minimum time: Until product evaporation

After 2 hours: Start cleaning operation again

Before applying any other product

If surface seems dusty, greasy or with finger marks, start cleaning operation again.

Sika 205



1. Apply

CHIX cloth

2. Allow evaporation (Mandatory)	Minimum time	- For a smooth surface (aluminum, stainless, steel, fiberglass (gel coat side), etc.):	2 minutes
		- For a porous surface (fiberglass (non gel coat side), etc.)	10 minutes
	After 2 hours: Reactivate surface with Sika 205		
	Before applying any other product		If surface seems dusty, greasy or with finger marks, start operation again.

Sika Aktivator

Glass

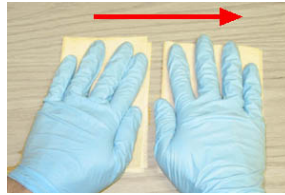


Plastic
spatula

CHIX cloth

CHIX cloth

Other material (plastic, paint, etc)



CHIX cloth

CHIX cloth

1. Apply & wipe immediately

Leave ½" to 2" between the 2 cloths

2. Allow evaporation

Do not use pads supplied in the box.



Mandatory

Minimum time: 5 minutes

After 2 hours : Remove dust using Chix cloth & repeat application

Before applying any other product

If surface seems dusty, dust using dry Chix cloth & repeat application.

If surface seems greasy or with finger marks, start operation again.

Glass cleaner



1. Spray
(Essex, Sprayway or Sika)



2. Dry

BLUE cloth

3. Allow evaporation

Mandatory

Minimum time : Complete evaporation of product

After 2 hours : Start cleaning operation again

Before applying any other product

If surface seems dusty, greasy or with finger marks, start cleaning operation again.

Sika Remover 208

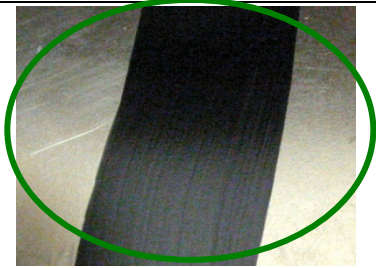
This product is specially designed to remove fresh sealant and Sika adhesive from a surface.
This product has the advantage of not contaminating the sealant.

Sika Primer 206 G+P, 210-T or 215



- 1.** Shake bottle to mix product
- 2.** Apply a thin layer

CHIX cloth



Even application, no drips no miss.

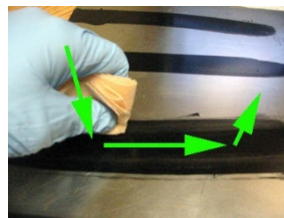


Uneven. Apply again locally onto missing areas after waiting drying time



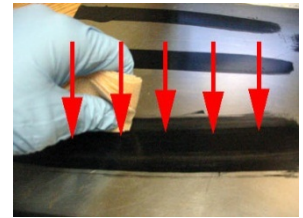
Dripping, avoid excessive accumulation

Renewal



Continuous Movement

Renewal



No tapping

3. Allow drying

Do not use pads supplied in the box.



Mandatory	206 G+P	Minimum time : 10 minutes
		After 2 hours: Remove dust using damp CHIX cloth (pure water)
		After 8 days : Reactivate with Aktivator as per section "C"
Mandatory	210-T	Minimum time: 10 minutes
		After 2 hours: Remove dust using damp CHIX cloth (pure water)
		After 8 days : Reactivate with Aktivator as per section "C"
		After 1 year : Throw away the part
Mandatory	215	Minimum time : 20 minutes
		After 2 hours : Remove dust using damp CHIX cloth (pure water)
Before applying any other product		If surface seems dusty, dust using damp Chix cloth (pure water).
		If surface seems greasy or with finger marks, reactivate with Aktivator.

Sanding

	 Scotchbrite grey 7446 or SIA P-110	 Scotchbrite grey 7446 or SIA P-110	 Sand belt coarse grit
Smooth surface:	Use orbit sander 	Use orbit sander 	Use belt sander 
Ridged surface:	Sand bottom of creases by hand 		
Important aspects to follow	Change paper or belt on a regular basis as per procedure.		
	In the case of Stainless steel, eliminate reflection (mirror image).		
Maximum delay between sanding and surface preparation, otherwise start operation again	Stainless = 7 days Aluminum and 3cr12 = 4hrs Fiberglass = No delay		

Simson Primer M



1. Apply

Chiffon CHIX

2. Allow to evaporate

Mandatory Minimum time; 10 minutes
After 3 hours: Sand surface with scotchbrite. Clean with anti-silicone. Repeat application of primer M.

Before applying any other product

If surface seems dusty, greasy or with finger marks, start operation again.

Plexus Primer PC-120



1. Apply

CHIX cloth

2. Allow to evaporate

Madatory

Minimum time; 2 minutes

Maximum time; 24 hrs. : Past this delay, repeat sanding and repeat application of primer PC-120.

Before applying any other product

If surface seems dusty, greasy or with finger marks, start operation again.

Loctite Primer 450



1. Apply

CHIX cloth

2. Allow to evaporate (Madatory)

Minimum time

- Smooth surfaces (aluminum, stainless, steel, fiber glass (gel coat side), etc...):

2 minutes

- For porous surface (fiber glass (non gel coat side), etc...)

10 minutes

After 3 hours: Sand surface with scotchbrite. Clean with anti-silicone. Repeat application of primer 450.

Before applying any other product

If surface seems dusty, greasy or with finger marks, start operation again.

Loctite Primer Terostat 8519P



1. Apply

CHIX cloth

2. Allow to evaporate (Madatory)

Minimum time : 2 minutes

After one hour: Clean with alcohol. Repeat application of primer 8519P

Before applying any other product

If surface seems dusty, greasy or with finger marks, clean with alcohol start operation again.(30 minutes minimum between both applications)

3M Primer 94



1. Shake bottle to mix product

2. Apply

CHIX cloth

3. Allow to evaporate
(Mandatory)

Minimum time : 5 minutes

After 2 hours: Repeat application.

Before applying any other product

If surface seems dusty, greasy or with finger marks, clean with alcohol start operation again.(30 minutes minimum between both applications)

Alodine 5700



1. Apply a thin coat

CHIX cloth

2. Wait 15 seconds



3. Remove excess with clean and dry cloth to even-out product quantity

Blue cloth

3. Allow to evaporate
(Mandatory)

Minimum time : 2 minutes

After 4 hours: Sand surface with scotchbrite. Clean with anti-silicone.
Repeat application of Alodine 5700.

Before applying any other product

If surface seems dusty, greasy or with finger marks, clean with alcohol start operation again.(30 minutes minimum between both applications)

SAV00001D Gluing product guide**A****SIKA TACK ULTRAFast II GLUE- 310ML TUBE (#683885)****Heating Sika Ultrafast II**

Sika Authorized ovens only. (Max 80°C, 176 °F). Minimum time: 1 hour Max time: 5hrs. Note: TUBE may be heated several times up to max heating time.

Glue	Work time *	Clamping time	Vehicle stop time (No driving with vehicle)
Sika 252	30 min. max.	According to procedure	24 hrs. minimum
Sika 221(BLACK) + booster	20 min. max.	90 min	4 hrs. minimum
Sika 254 + booster (pump)	25 min. max.	According to procedure	2.5 hrs. minimum
Sika Ultrafast II	10 min. max.	According to procedure	6 hrs. minimum
Sika 255	15 min. max.	According to procedure	24 hrs. minimum
Sika STP or PC + booster (pump)	15 min. max.	According to procedure	2 hrs. minimum
Sika 221	30-45 min. max.	According to procedure	24 hrs. minimum

*Temperature and humidity will modify work time

Smoothing

Water or soapy water (authorized soap: #680339 concentration 5%).

Cleaning (spills)

Use Sika 208. (Do not use anti-silicone or alcohol)

Paint

Seal joint can be coated with paint or primer only when dry to the touch.

CHECK "BEST BEFORE "DATE = REFER TO H

B
**SIMSON ISR 70-03 GLUE, BLACK, TUBE(#684685)
SIMSON ISR 70-03 GLUE, GREY, TUBE (#684517)**
Open time

Simson 70-03 = 10 min. maximum

Cleaning (spills)

Anti-silicone

Smoothing

Water or soapy water (authorized soap: #680339 concentration 5%).

Paint

Seal joint can be coated with paint or primer only when dry to the touch.

CHECK "BEST BEFORE "DATE = REFER TO H

C
**PLEXUS MA530 METHACRYLATE GLUE, 400 ML (#687956)
PLEXUS MA832GB METHACRYLATE GLUE, 380ML (#684743)
PLEXUS PC120 PRIMER, 944 ML (#687955)**
Open time

MA-832 = 12 à 15 minutes MA-530 = 30 minutes

Cleaning (spills)

Anti-silicone

CHECK "BEST BEFORE "DATE = REFER TO H

SAV00001E Repair / Replacement

Repair (Sika product or Simson)

During winter season, condensation and cold can influence the gluing parameters. The working area must be at a sufficient temperature. It will be necessary to preheat the zone mechanically (radiant heat lamp, hot air gun) or bring the vehicle to room temperature. See Section 1: General Remarks.

Remove part	Use a knife, Zip Gun or braided windshield wire	
Cleaning	If required, remove dirt, dust, sand, calcium, grease using Anti-silicone	
Remove former glue	Good adherence of glue to surface	If glue or primer become unstuck
	Remove excess of glue using a scraper. It is acceptable and recommended to keep a small layer of glue on the surface instead of breaking the surface of adherence with the blade. <u>If primed surface is slightly scratched: Accept as it is.</u>	Remove glue locally and sand defective area
Surface Preparation	1. Make sure surfaces are clean. Use anti-silicone if necessary.	Prepare surface locally as per procedure.
	2. Sika only; if primer was partially removed: Add primer locally.	
	3. Sika only; reactivate all surfaces with Sika Aktivator	
Paint / waiting time	See SAV0001D depending on glue/sealant type used.	

SAV00001F VHB adhesive-backed rubber seal gluing

To activate the adhesion process, pressure must be applied on the seal. Use a roller or other appropriate tool. Glue also requires an activation time to achieve bond force.

Surface preparation;

Depending on the procedure or particular set-up

When positioning the rubber seal with the backing liner on, make sure the backing liner is clean and dust free to avoid contaminating the receiving surface. Clean with a CHIX cloth or wet blue cloth (pure water).

Roller use;

Roller shape: according to procedure or particular set-up.

Pressure: Press hard on the roller (about 15 pounds). Apply roller minimum 2x.

Bonding force vs time;

50% of maximum bonding force after 20 minutes,

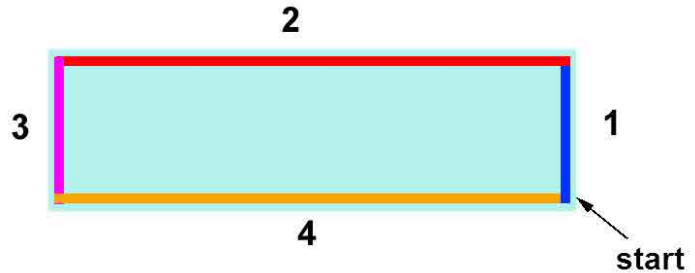
90% after 24 hours

100% after 72 hours.

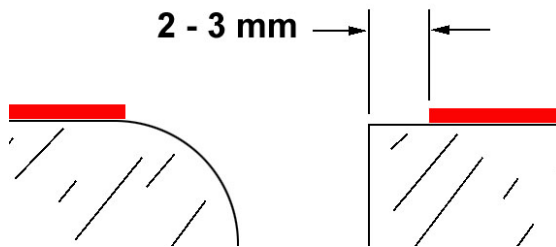
SAV00001G Finishing joint

MASKING TAPE APPLICATION

Tip : Always install tapes in the same sequence and direction, one above the other. This allows easy removal in one stroke



For round corners, install masking tape at start of radius
For sharp corners; install 2 to 3 mm away from edge (To have edge of corner embedded in joint)



Surface preparation

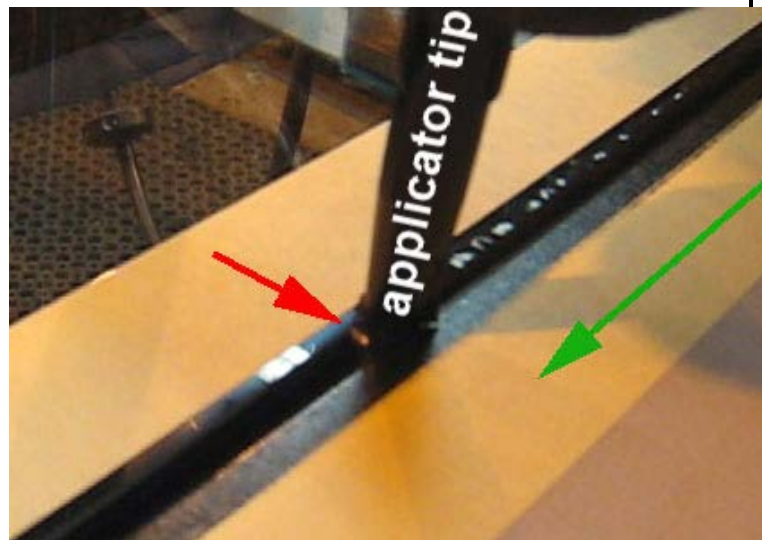
According to procedure

Sealant application

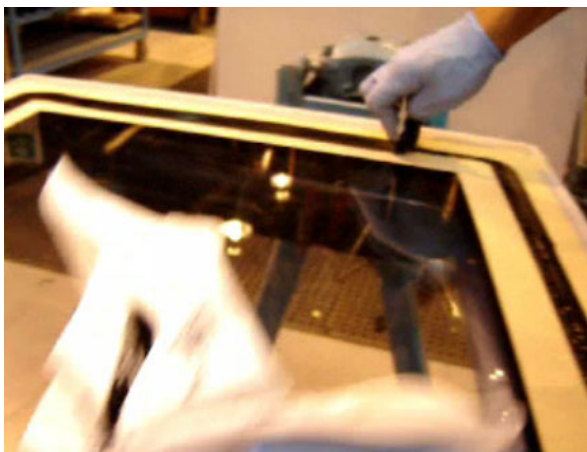
Sealant product according to specific procedure

Fill cavity

You must create a continuous flow in front of the applicator tip. If this is not the case, you are advancing too rapidly.

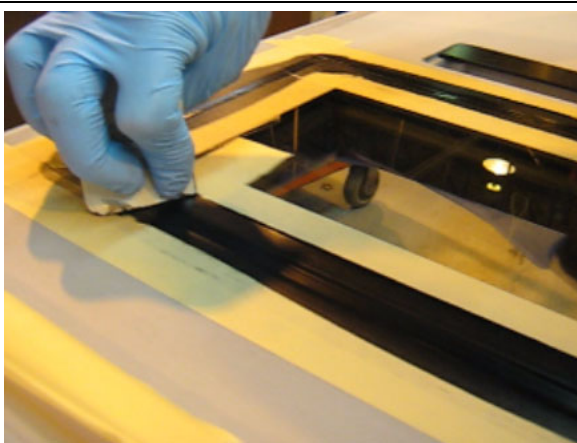


Remove excess with a plastic spatula and cloth.

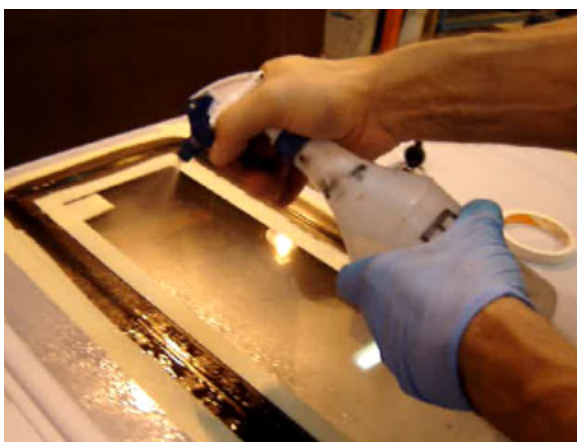


Smooth-out joint with a plastic spatula.

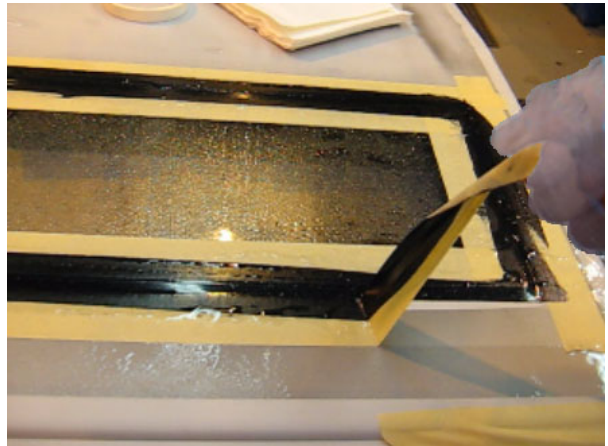
Proceed in a continuous movement (No stopping).



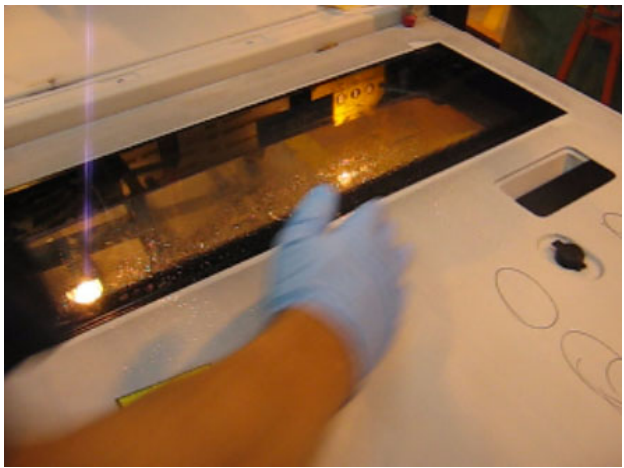
Spray pure water on joint. Smooth out joint with wet fingers.



Remove masking tape.



Spray joint with pure water. Smooth out joint with wet fingers.

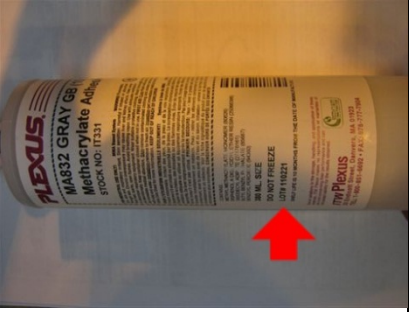


SAV000001H Product Date Verification Guide

A SIKAFLEX 221 GREY TUBE (#680532)	SIMSON ISR 70-03 GLUE GREY SAUSAGE. 600ML (#685126)	SIKAFLEX 252 BLACK TUBE (#682462) SIKAFLEX 252 BLACK SAUSAGE (#683083) SIKA TACK ULTRAFAST II - 310ML TUBE (#683885)
<u>Europe</u> 11 = month November / 07 = year 2007 	<u>Europe</u> BB = Best Before 03= month march / 11 = year 2011 	<u>United states (USA)</u> 05 = month may / 04 = 4th day / 11 = year 2011 
B SIMSON ISR 70-03 BLACK, TUBE (#684685) SIMSON ISR 70-03 GREY, TUBE (#684517)	SIMSON PRIMER "M", 500 ML (#685154)	BB = Best before 07 = month July / 08 = year 2008  BB = Best before 04 = month April / 12 = year 2012 

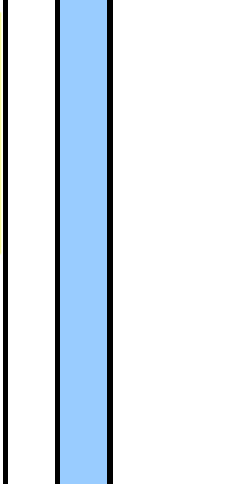
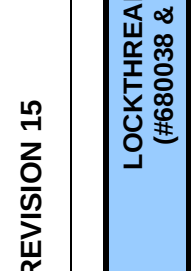
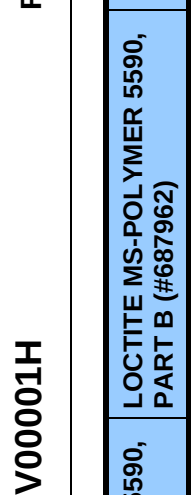
PROCEDURE NO: SAV000001H

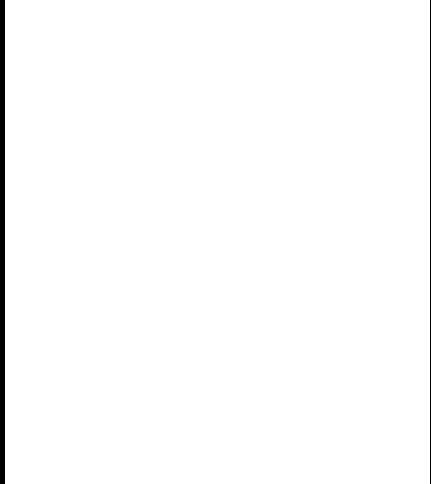
REVISION 15

C	PLEXUS METHACRYLATE (#687956 & 682444)	PLEXUS METHACRYLATE MA832GB, 380ML (#684743)	PLEXUS PC120 PRIMER, 944 ML (#687955)
	Shelf life is 7 months from the date of manufacture. => # LOT110111 => Date 2011-Oct. + 7 month = <u>May 2012</u> 	Shelf life is 10 months from the date of manufacture. => # LOT110221 => Date 2011-Oct. + 10 month = <u>August 2012</u> 	Shelf life is 13 months from the date of manufacture. => # LOT105031 => Date 2011-May + 13 month = <u>June 2012</u> 
D	BUTYL ALUM. TUBE 11 OZ. (#680096)		
	 1st character = month A = January B = February C = march D = April E = may F = June G = July H = august I = September J = October K = November L = December 2nd character= year Add 18 month <u>Ex</u> : G = month July / 10 = year 2010 Expiration date is: January 2012		

PROCEDURE NO: SAV000001H

REVISION 15

E	LOCTITE MS-POLYMER 5590, 400ML (#687957)	LOCTITE MS-POLYMER 5590, PART A (#687961)	LOCTITE MS-POLYMER 5590, PART B (#687962)	LOCKTHREAD LOCTITE (#680038 & #680100)
	USE BY 03 = month mars 09 = year 2009  BATCH: 0584208650 USE BY: 03/09	USE BY 25 = 25th day 01 = month Jan. 11 = 2011  USE BY: 25.01.11	USE BY 30 = 30th day 01 = month Jan. 11 = 2011  USE BY: 30.01.2011	  Example: L3(1)K)A B 7 9 4 0 L3 = Puerto Rico Production year 1 = 2011 month K = November (A = Jan, B = Feb, etc.) characters 3-6 = lot # Expiration date is 2 yr after fabrication date, so in this example: November 2013

F	Henkel Alodine 5700 (#687982)
	USE BEFORE 11 = month November 26 = 26th day 2015 = year 2015  USE BEFORE: 11/26/2015 CAUTION! This product may cause eye and skin irritation CHEMTREC EMERGENCY 1-800-424-9300