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1. VEHICLE EXTERIOR



FIGURE 1: XLII-45 CONVERTED VEHICLE EXTERIOR VIEW (TYPICAL)

- 1. Engine air intake
- 2. Engine compartment R.H. side door
- 3. Hinged rear fender
- 4. Baggage compartment
- 5. Fuel filler door
- 6. Condenser compartment or Baggage compartment
- 7. Entrance door
- 8. Entrance door power window
- 9. Engine compartment rear doors
- 10. Rear-view mirror

- 11. Reclining bumper
- 12. Front electrical & service compartment
- 13. Driver's power window
- 14. Evaporator compartment or Baggage compartment
- 15. Radiator door
- 16. Diesel Particulate Filter (DPF) compartment access door
- 17. R.H. side rear service compartment

Front Slide-Out (Optional)

Rear Slide-Out (Optional)



FIGURE 2: XLII-45E CONVERTED VEHICLE EXTERIOR VIEW (TYPICAL)

- 1. Engine air intake
- 2. Engine compartment R.H. side door
- 3. Hinged rear fender
- 4. Baggage compartment
- 5. Fuel filler door
- 6. Condenser compartment or Baggage compartment
- 7. Entrance door
- 8. Entrance door power window
- 9. Engine compartment rear doors

- 10. Rear-view mirror
- 11. Reclining bumper
- 12. Front electrical & service compartment

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- 13. Driver's power window
- 14. Evaporator compartment or Baggage compartment
- 15. Radiator door
- 16. Diesel Particulate Filter (DPF) compartment access door
- 17. Front Slide-Out (Optional)

2. VEHICLE STRUCTURE

The body of the XLII vehicles is an integral structure made of 14, 16 and 18 gauge welded and braced high tensile steel and stainless steel members. All stainless exterior panels are glued to anti-corrosion coated members. The complete structure is protected against corrosion prior to assembly. The front and rear caps are made of molded fiberglass. The main roof is made of high tensile aluminum panels riveted to the roof structure. The floor is made of 2 layers of ½" (13 mm) thick plywood separated by a 1/8" (3 mm) insulation to reduce power train and road noises.

Welding

Since welding is a procedure that may be carried out either as specific instructions from Prévost or by an independent decision of the owner, the following information pertaining to welding should be read before beginning any welding procedure. The prohibitions and requirements outlined below must be followed during welding procedure:

- 1. Welding must be done only by a qualified and experienced person.
- 2. Adequate ground contacts and shields must be positioned as required to protect components from damage due to heat, contact by weld splatter, arcing, or other potentially damaging events associated with welding.
- The following precautions are to be taken to protect the electronic control components. Refer to section 00, paragraph 3: "PRECAUTIONS TO BE OBSERVED BEFORE WELDING" in this manual.
- 4. Always wear the appropriate safety equipment.
- 5. Weld in clean and well ventilated area, and always have an appropriate fire extinguisher within your reach.

3. VEHICLE EXTERIOR MAINTENANCE

Regular washing to remove dust and dirt is recommended. See "*Owner's Manual*" for more details on washing and cleaning your vehicle.

3.1 CORROSION PREVENTION

Preventive maintenance is a key factor in avoiding corrosion and must be considered as part of the regular service intervals. The entire underside of the vehicle is sprayed with a heavy application of asphalt base undercoating. The operating environment the vehicle is subjected to will largely influence the amount of dirt and corrosion that will accumulate over a given period. Corrosion is one of the most costly factors of part failure and shortened part life. It is, however, an item that can be controlled when it is conscientiously looked after and the proper steps are taken in a timely manner.

Certain areas of the coach are more vulnerable to corrosion than others, and it is these areas that should be addressed. For example, the rear baggage compartment bulkhead in the rear wheelhousing area contains many key components and should be examined regularly for corrosion. Other areas include the front wheelhousing area and the engine compartment.

Road splash will affect undercarriage, condenser coil and engine compartment. These areas must be thoroughly cleaned to remove dirt accumulations from flanges, channels and ledges. These places accumulate dirt and salt and hold it in direct contact with steel and aluminum surfaces. Use an understructure high pressure spray as part of a regular wash. Damaged undercoating or paint should be promptly repaired before corrosion can start.

Frequency of wash periods depends on operating conditions. During periods of exposure to salt, daily washing as described above is recommended. If underbody parts show evidence of rust or corrosion, treat as follows:

- 1. Remove dirt, grease and oil by solvent washing.
- 2. Remove corrosion as well as all loose coating by cleaning with a wire brush or sandblasting.

Sandblasting can be used for cleaning bulkheads, brackets and other structural members. It should not be used for exterior side paneling. Extreme care should be taken not to sandblast excessively.

3. Apply correct primer, paint and undercoating after removing all corrosion to prevent further damage.

3.2 PREVENTIVE MAINTENANCE SCHEDULE

NOTE

TECTYL 185 GW rust inhibitor may have been applied on your vehicle underbody as an option, if this is the case, follow this procedure thoroughly. For future application of product, refer to paragraph 3.3 in this section.

	INTERV	/ALS			
DESCRIPTION	MONTHS	KM MILES	MAINTENANCE	CORRECTIVE ACTION	REFERENCE
BODY, EXTERNAL WINDOW FRAME	6	40 000 25 000	VISUALLY INSPECT SEALING BEADS CONDITION	REPAIR OR REPLACE SEALING BEADS IF NECESSARY	
VEHICLE UNDERBODY	12	100 000 60 000	USE A LOW PRESSURE SPRAY TO CLEAN UNDER- STRUCTURE AND VISUALLY INSPECT FOR CALCIUM DEPOSIT, CORROSION OR ANY DIRT ACCUMULATED ONTO EXPOSED SURFACES. VISUALLY INSPECT SEALING BEADS CONDITION.	APPLY UNDERCOATING LOCALLY AS NECESSARY.	
			VISUALLY INSPECT IF UNDERFLOOR IS PEALING. VISUALLY INSPECT WHEELHOUSING COATING.	APPLY UNDERCOATING LOCALLY AS NECESSARY	
			MAKE SURE DISCHARGE TUBES ARE FREE FROM OBSTRUCTIONS	REMOVE ANY OBSTRUCTION OR REPLACE DEFECTIVE TUBE	
SUSPENSION AND UNDER- STRUCTURE	12	100 000 60 000	VERIFY THE CONDITION OF ALL SUSPENSION AND UNDERSTRUCTURE FASTENERS AND CLAMPS	TIGHTEN OR REPLACE DEFECTIVE OR MISSING FASTENERS	
FLOOR COVERING	3	20 000 12 500	VISUALLY INSPECT IF FLOOR COVERING IS SHOWING SIGNS OF DETERIORATION SUCH AS CUTS, BURNS, ETC. ALSO, VISUALLY INSPECT SEALANT ALONGSIDE TRACKS. INSPECT WALL PANELS FROM BOTTOM TO WINDOWS	REPAIR OR REPLACE DEFECTIVE COVERING. MAKE SURE PROPER SEALANT IS USED.	
FLOOR CLEANING			CLEAN FLOOR COVERING AS NECESSARY		

Failure to follow this preventive maintenance schedule will result in warranty void.

3.3 RUST INHIBITOR APPLICATION

Material: Tectyl 185 GW R1KG21 Safety Rules: Use safety glasses Supplied air hood Solvent-resistant rubber gloves

1.0 Wash both wheelhousing mechanical parts before masking.	A water-hose nozzle is recommended. Water may be hot to reduce washing time especially during winter. If parts are soiled with oil, clean using R1KG21. Avoid rubber parts.
2.0 Dry all water sprayed parts. Surface temperature and dew point must be respected before applying rust inhibitor.	Air pressure system may be used, refer to annex 1 for surface temperature and dew point.
3.0 Front wheelhousing a) Mask all rubber joints. Braking system must also be protected (refer to arrows). Commercial aluminum foil may be used for masking.	
3.1 Front wheelhousing Front view	
3.2 Front wheelhousing	

3.3 Front wheelhousing (Entire braking system)	
4.0 Rear wheelbousing	
a) Mask all rubber joints. Braking system must also be protected (refer to arrows). Commercial aluminum foil may be used for masking (Entire braking system)	
4.1 Rear wheelhousing (Entire braking system)	

4.2 Rear wheelhousing	
(Entire braking system)	
4.3 Rear wheelhousing	
5.0 Close off wheelhousing using masking paper.	Prevent rust inhibitor from coming in contact with paint. To close off wheelhousing, a polythene sheet may be used.
6.0 Apply TECTYL 185 GW black rust inhibitor onto wheelhousing mechanical parts.	A spray gun and pumping system are required to apply the rust inhibitor. If the application is done inside a paint room, select high speed ventilation. Minimum required thickness is 10 mils wet or 5 mils dry .
7.0 Remove all masking material 30 minutes after application.	

ANNEX 1

1. Check and confirm that dew point and surface temperature are in accordance with to the following criteria:

Surface temperature > 10°C

Surface temperature > or = to dew point + 3°C

NOTE

Use the following table to determine dew point.

2. Check and confirm that TECTYL temperature is between 10°C and 35°C.

Section 18: BODY

									Rel	ative	ive Humidity (%)
	10	20	30	40	50	60	70	80	90	100	00
Temp (c)											
0		-16	-11	-8	-5	-3	-1	0	1	3	3
1		-15	-10	-7	-5	-3	-1	1	2	4	ł
2		-14	-10	-6	-4	-1	0	2	3	5	5
3		-13	-9	-5	-3	-1	1	2	4	6	\$
4		-13	-8	-5	-2	0	2	4	5	7	,
5		-11	-7	-4	-1	1	3	5	6	8	3
6		-11	-8	-3	0	2	4	6	7	9)
7	-18	-10	-6	-2	0	2	5	6	8	10	0
8	-17	-9	-5	-1	1	4	6	7	9	11	1
9	-16	-9	-4	-1	2	4	6	9	10	12	2
10	-16	-8	-3	0	3	5	7	10	11	13	3
11	-15	-7	-3	1	4	6	9	10	12	14	4
12	-14	-6	-1	2	5	7	10	11	13	15	5
13	-14	-6	-1	2	6	8	10	12	14	16	6
14	-13	-5	0	4	6	9	11	14	15	17	7
15	-12	-4	1	4	7	10	12	14	16	18	8
16	-11	-4	1	5	9	11	13	15	17	19	9
17	-10	-3	2	6	9	12	14	16	18	20	20
18	-10	-2	3	7	10	13	15	17	19	21	21
19	-9	-1	4	8	11	14	16	18	20	22	2
20	-9	0		5	9	12	15	17	19	21	.1 23
21	-8	0		5	10	13	16	18	20	22	2 24
22	-7	1		6	11	14	16	19	21	23	.3 25
23	-6	2		7	11	15	17	20	22	24	24 26
24	-6	2		8	12	16	19	21	23	25	25 27
25	-5	3		9	13	16	20	22	24	26	.6 28
26	-4	4		10	14	17	20	23	25	27	.7 29
27	-4	5		11	15	19	21	24	26	28	28 30
28	-3	6		11	16	19	22	25	27	29	.9 31
29	-2	6		12	17	20	23	26	28	30	0 32
30	-1	7		13	17	21	24	27	29	31	1 33 20 0 1
31	-1	8		14	19	22	25	27	30	32	i2 34
32	0	9		15	20	23	26	29	31	33	13 35

DEW POINT

4. COMMON FIBERGLASS REPAIR PROCEDURE

All repairs to fiberglass parts consist of filling the damaged area with fiberglass cloth and resin or strand fiberglass and resin. The repair is allowed to harden, and then finishing operations may be performed. Use of the various materials is determined by the type of repair to be made. Large holes, torn sections and separate joints require the adhesive qualities of the resin and the reinforcing qualities of the fiberglass. Small dents, scratches or pits can be repaired using resin and strand fiberalass and filler mixed into paste. Instructions for either mix are explained under their respective headings in this section. For best results when making repairs, temperature should be between 70 and 75 °F (21-24 °C). Some people experience a skin reaction to resins. In such cases, wipe resin off with denatured alcohol or a good thinner. Use of protective hand cream is recommended.



WARNING

Always wear a respirator and goggles when grinding or sanding.

Extreme care must be taken if the sander is electrically operated, as dust from some resins is combustible when subjected to sparks or open flames. The proper tool for sanding resin is a low speed, air driven disc sander with a water attachment or a dry sander having a vacuum bag. Either will eliminate flying glass and resin dust.

The following additional tools and materials will assist in making repairs: hacksaw blade, assorted files, emery paper or cloth (150 or finer), scissors or tin snips, wax paper or cellophane sheets, a 3" (75 mm) paint roller, paint brush, putty knife, acetone and one or more heat lamps.

4.1 REPAIR USING FIBERGLASS CLOTH

Where necessary, sand paint away around damaged area and scrape away undercoating, if any, and wipe clean with solvent. Grind or file the damaged area to form a "V" at the broken or cracked portion. Sides of "V" should have a shallow pitch for maximum bonding area.

NOTE

Roughening the surface improves adhesion of resin.

If part is warped from original shape, use clamping equipment to straighten the surface. Preheat area to be repaired with one or two heat lamps placed 18 to 24 inches (450-610 mm) from repair.

Temperature should not exceed 140 °F (60 °C) during 30 minutes in order to avoid distortion.

Cut fiberglass cloth with scissors or tin snips, 1 to 3 inches (25-75 mm) larger than area to be repaired. Build area to desired height.

Mix resin and hardener following instructions on their containers. Saturate layers of fiberglass with mixture and place laminates over damaged area. Smooth out wrinkles and make sure general contour of area is maintained. Bubbles and wrinkles can be eliminated with a roller.

The pot life of the mix is approximately 15 minutes. Any accidental contamination to the skin, clothing, tools, etc. must be removed within this period. Use acetone to remove uncured resin.

Heat resin material again by placing heat lamps 18 to 24 inches (450-610 mm) from repaired area. Allow 12 to 15 minutes for repair to cure. After repair is cured, grind, file or sand to contour. Files other than body files may be more suitable. Featheredge and finish sanding.

If small pits or irregularities appear after making repair, correct by using a liberal amount of chopped strand or filler mixed with resin to form a paste. Refer to heading *"Repair using Fiberglass Paste"* in this section.

4.2 REPAIR USING FIBERGLASS PASTE

Fiberglass paste is used for repairing small dents, scratches, and pits. Paste is made by mixing resin, hardener and fiberglass strand or filler to the consistency of putty. Where it may be necessary, sand paint away around damaged area. On underside of coach, scrape away undercoating from damaged area, and wipe clean with solvent.

Preheat the area to be repaired using heat lamps. Mix desired quantities of resin and hardener according to manufacturer's instructions. Add powdered fiberglass strand into mixture to thicken it into a putty state.

NOTE

If repair is made on a vertical surface, adding powdered filler material to mixture will reduce tendency of hot resin to flow or run.

Apply the material with a putty knife or similar object, building material up to the desired contour. For deep filling and on vertical surfaces, several layers of material may be used.

A hacksaw blade, held flat to adjacent contour and then moved in a sawing action across the repair when the resin is in a gel state, will remove excess resin from repair. Finish repair with the same procedure as when using fiberglass cloth.

4.3 TYPICAL FIBERGLASS REPAIR PROCEDURE

Remove all loose particles or damaged material using a power sander or rasp. Clean area, overlapping hole approximately 1" to $1-\frac{1}{2}$ " (25-40 mm) all around. Remove all dirt, grease and paint from area to ensure good bonding surface. Feather the cleaned area all around (Fig. 3).





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Cut a piece of fiberglass mat slightly larger than area being repaired. Impregnate mat with general purpose polyester resin catalyzed normally. Use a clean paint brush to apply the polyester resin. Apply impregnated mat over hole and press onto surface with brush to obtain good adherence. Another coat of general purpose polyester resin can be applied at this time (Fig. 4).



FIGURE 4: FIBERGLASS REPAIR

NOTE

Remove all air between surfaces being joined. Allow area to harden and sand surface to remove any wax.

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Apply another mat, followed by a cloth patch, and another mat. All layers must be thoroughly impregnated with polyester resin, brushed well and free of air. Apply more layers of mat and cloth as required until the desired strength and thickness is obtained, minimum two $1-\frac{1}{2}$ oz (43 g) mats and one 9 oz (255 g) cloth (Fig. 5).



Allow area to harden and contour the area with coarse sandpaper #100 (Fig. 6).



Cover the area with a layer of resin putty and allow drying for approximately 15 to 20 minutes (Fig. 7).



FIGURE 7: FIBERGLASS REPAIR

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Smooth off surface with coarse sandpaper #100 to desired shape. Further smooth surface with fine sandpaper #120 until repaired surface matches surrounding area paneling. Prime and paint the area to match surrounding paintwork.

5. COMMON PAINTING PROCEDURE

5.1 NEW PAINT CARE

Our paint supplier recommends that you follow these simple precautions the first months of your new vehicle's life.



Apply these recommendations after repainting vehicle.

During the first 30 days:

- Do not use a commercial bus wash. Stiff brushes or sponges could mar the finish and damage the surface. Wash the vehicle by hand only and with cool water and a very mild bus wash solution. Be careful to use only a soft cloth or sponge;
- Wash vehicle in the shade, never in direct sunlight;
- Do not "dry wipe" vehicle –always use clean water. Dry wiping could scratch the finish;
- Avoid extreme heat and cold. Park vehicle in the shade whenever possible;
- Do not park under trees which drop sap or near factories with heavy smoke fallout. Tree sap and industrial fallout may mar or spot a freshly painted surface;
- Trees are also likely to attract birds. Bird droppings are highly acidic and will damage a freshly painted surface. Bird droppings, tree sap and industrial fallout should be washed off as soon as possible;
- Do not spill oil, gasoline, antifreeze, transmission fluid or windshield solvent on new finish. IMMEDIATELY rinse off any such spill with clean water, DO NOT WIPE;
- Do not drive on gravel roads. Paint finish easily chips during the first 30 days;
- Do not scrape ice or snow from the surface.
 A snow scraper can act like a paint scraper if the finish is new. Brush off loose material with a soft snow brush.

During the first 90 days:

 Do not wax or polish the vehicle. This will allow the finish to dry and harden completely.

5.2 PAINT TOUCHUP

When paint touchup or partial repainting is necessary, refer to the vehicle's paint scheme for color codes and paint brand.

Prévost recommends using the original paint brand to ease color matching.

In the event you sand through to the gelcoat surface you should prime the area with Standox "Non Stop Fill Primer (ST-11000)".

If you sand through to metal surface, first prime with Standox "Etch Primer (ST-11858)" then with Standox "Non Stop Fill Primer (ST-11000)".

Be sure to heed all paint manufacturer's recommendations, especially concerning paint dilution and application.

5.3 PAINTING

The standard paint used on the exterior of the vehicle is Standox Basislack. It is a high gloss polyurethane enamel finish designed for exposure to extreme conditions. Other types of paint may be called for as options by owner but are not dealt with in this section.

5.3.1 Safety

Care should be exercised in storing, handling, mixing, and applying paint and chemicals listed in this manual. The topcoat, primer, solvent, catalysts, accelerators, and cleaners are highly volatile and/or toxic if not properly used. Observe all safety instructions marked on the different packaging, as well as the following:

- 1. Do not smoke in the paint room or in adjacent area exposed to residue fumes.
- 2. Wear respirators approved by the governing safety and health regulations.
- 3. Maintain adequate ventilation at all times.
- 4. Dispose of any leftover paint mix properly.
- 5. Wear rubber gloves, rubber apron, and face shield during all phases of paint and chemical handling

	Aluminum and / or Stainless Steel	Fiberglass	Comments				
Surface Preparation	Sand using P-150 grit sandpaper. It is recommended to sandblast rivets and panel edges with OLIMAG 35- 70 blast media.	Sand using P-180 or P-240 sandpaper.	Do not use paint remover over aluminum or fiberglass.				
Cleaning	saning STANDOX silicone remover ST-11654 (68-2989)						
Priming	STANDOX Reactive Etch Primer ST-13908 * Wait 30 minutes then apply STANDOX Non-Stop Füllprimer ST-11000 (68-2973)	Refer to product Technical Data sheet for proper mixing					
Basecoat	Refer to product Technical Data sheet for proper mixing						
Clearcoat	Refer to product Technical Data sheet for proper mixing						

5.3.2 Surface Preparation And Paint Application

If assistance or technical information on STANDOX products is needed, please dial: 1 (800) 551-9296

6. W5 MTH EXTERIOR FINISHING AND BODY REPAIR

The following procedures explain the steps to be followed for proper repair, installation and replacement for various doors, panels and windows pertaining to W5 MTH. The paragraph divides the vehicle into zones to facilitate the search; each zone is then sub-divided into components.



Refer to the appropriate zone then component for complete procedure.

FIGURE 8: W5 MTH ZONING





6.1 ZONE 1





6.1.1 Front Bumper

The front bumper can be tilted downward to give access to the bumper compartment. Pull the release handle located inside front service compartment to unlock. Tilt down the entire bumper assembly to access the compartment. Push the bumper back up firmly in place to lock in position.

Two people are required to remove and install the front bumper. Safely support the bumper and remove the two bolts on each bumper side to separate the bumper from the spare wheel compartment door. To install bumper, reverse the removal procedure.

Front bumper is heavy. Use proper lifting equipment to support the bumper during the removal and installation operations to avoid personal injury.



FIGURE 11: FRONT BUMPER REMOVAL

🔨 WARNING

The compartment behind the bumper is not designed for storage. Never store loose objects in this compartment since they can interfere with the steering linkage mechanism.

Use care when opening or closing the reclining bumper compartment to prevent personal injury.



FIGURE 12: FRONT BUMPER RELEASE HANDLE 18613

For gluing of front bumper panel refer to procedure **SAV00198** included at the end of this section.

6.1.2 Front Crest

• Use a Chix cloth and anti-silicone to clean the surface where the crest will be applied.



• Peel the back from the self adhesive crest side pieces.



- Peel the back from the self adhesive crest center piece. Center crest and apply.
- Compress the crest three pieces using your hands.



6.1.3 Headlights

Refer to Paragraph 9.1 Headlights, included in Section 06: Electrical of the Maintenance Manual for complete information on headlights.

6.1.4 Rear View Mirrors

Your vehicle is equipped with two exterior mirrors.

The mirrors may be equipped with an optional electric heating system which serves to minimize ice and condensation on the mirror glass in extreme weather conditions. Integral thermostats are installed in both mirrors to avoid continuous heating. Use the appropriate switch on the dashboard to activate the defroster system on both mirrors simultaneously. The mirrors can easily be adjusted by using the remote controls located on the L.H. side control panel. The mirrors have easy to replace glass in case of breakage. Remote control motors can also be replaced.





mounting bolt to swing arm in or out.

Adjustment

At the base of the mirror arm, loosen the

To pivot the mirror head, loosen the setscrews on each side of the ball stub at the base of the mirror head to facilitate the adjustment.

Disassembly

At end of mirror arm, loosen the setscrews to relieve tension on the ball stem. Remove the ball stem from the arm.

Remove the four screws fastening the mirror arm base to the coach.

Assembly

Mount the mirror arm base to the coach. Insert the ball stem into the mirror arm and tighten the socket setscrews.

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NOTE

Position the ball cup halves so the joint between them lies on the centerline of the arm. Ensure that the setscrews are not on the joint between the cup halves.

Replacement of Mirror Glass

Remove the broken glass.

Position new glass in mirror head and press to lock the Velcro in place.

Heated / Remote Controlled Rear View Mirrors

Heated/remote controlled external rear view mirrors may be provided to prevent the mirrors from frosting up in cold weather.

The remote controlled external rear view mirrors attach to support arms using a pivot collar secured by setscrews. Loosening the setscrews allows the whole head assembly to turn on the support arm for initial adjustment. A mounting bolt and washer hold the arm support to the mounting bracket. The arm support can be moved to position the mirror head into or away from the coach body.

The mirror heat switch is located to the left of the driver on the dashboard. This switch must be activated before the mirror heating element will energize. Once energized, the mirror heating element is kept at a sustained temperature (between $60-80^{\circ}F$) by a thermostat. Refer to wiring diagram annexed in the technical publication box.

Do not attach stick-on type convex mirror accessories to the heated mirror glass. This could impede uniform heat distribution on the mirror surface which could break the mirror.

Mirror Control

The remote control pointer knob(s) for the mirrors is (are) mounted on the L.H. side control panel. The harness to the mirror head runs through the arm support. The remote motor is mounted to the mirror head behind the mirror glass.

Turn pointer knob to the left for mirror head adjustments and to the right for convex mirror

adjustment, then push down on either of the button's (4) sides to adjust the selected mirror viewing angle.

Disassembly

At end of mirror arm, loosen the setscrews to relieve tension on the ball stud. Remove the ball stud. Remove the ball stud from the arm and gently pull the harness out until the connector is exposed.

Remove the four screws fastening the mirror arm base to the coach. Slide the harness free of the mirror arm base.

Assembly

Attach a stiff wire (snake) to the end of the harness and insert the wire through the mirror arm base and arm, gently pull the harness through the arm and disconnect the "snake". Connect the mirror head harness. Insert the harness connector back into the mirror arm. Insert the ball stud into the mirror arm and tighten the socket setscrews.

NOTE

Position the ball cup halves so the joint between them lies on the centerline of the arm. Ensure that the setscrews are not on the joint between the cup halves.

Convex & Flat Mirror Removal

The mirror glass assembly is mounted to the control mechanism or to mirror base with Velcro strips. Remove the mirror glass by gently pulling the lens to release the Velcro. Disconnect the heater grid at the two connectors.

Connect the connectors of the new mirror's grid to the harness. Install the lens by positioning the lens in the mirror frame and pressing to lock the Velcro in place.

6.1.5 Windshield Wipers

Refer to Paragraph 23.7 Windshield Wipers and Washers, included in Section 23: Accessories of the Maintenance Manual for complete information on windshield wipers.

6.1.6 Windshield

For the removal or installation of windshield, you will need:

- A rope,
- A plastic spatula to lift the rubber seal lip,

- A metal rod or screwdriver to clean the seal groove,
- A filler insertion tool,
- Goggles and protective gloves.
 - From inside of vehicle, remove center post and interior finishing panels surrounding the windshield. In this case, we are replacing the R.H. side windshield.
 - From outside of vehicle, remove filler located inside rubber seal to ease damaged windshield removal.
 - From inside of vehicle, push against the top L.H. side corner of windshield for the removal of a R.H. side windshield. If the L.H. side windshield had to be removed, you would have to push against the top R. H. side corner.

NOTE

We are referring to the L.H and R.H. side as viewed from the inside of the vehicle.

- At the same time, another person gradually lifts the rubber lip from the vehicle exterior using a plastic spatula from top to bottom.
- Remove the entire damaged windshield and broken glass if applicable.
- If applicable, using a screwdriver or metal rod, remove black butyl sealant residue from rubber seal then clean with Sika 205.

Windshield Installation



- Spray rubber seal with soapy water to ease windshield insertion.
- Insert rope into rubber extrusion leaving enough length at each corner to make a loop. Spray soapy water onto rope and rubber extrusion (Fig. 14).
- Slide windshield into rubber seal groove starting with the bottom curved side edge. Using a plastic spatula, move the rubber seal lip aside to gradually insert the windshield into the groove.

- Spray soapy water on a regular basis to ease this operation.
- Using the same type of plastic spatula, repeat the same operation from inside of vehicle, gradually inserting the windshield into the groove.





NOTE

Make sure windshield bottom edge is well inserted into the rubber seal groove before proceeding with the sides.

- Then, working from both sides of windshield bottom to top, gradually move the rubber seal lip aside to insert the windshield into the groove. Use also soapy water on the inside of vehicle to insert the windshield into the rubber seal groove.
- Insert the top curved corner then finish with the top of windshield.
- At the top of windshield, clean surface between fiberglass and rubber extrusion using Sika 205 (Fig. 15).
- Apply Sika 221 black between fiberglass and rubber extrusion
- Spray filler and rubber seal groove generously with soapy water.
- Using the special filler insertion tool, insert the filler into the rubber seal groove.
- Gradually insert filler into the rubber seal groove ensuring to leave a 2 inch excess length at the filler extremity.
- Every 6 inches or so, it is important to compress the filler due to its tendency to contract during drying process.

• When filler insertion is almost complete, cut filler leaving ¼" of excess length to thwart filler contraction over time then insert filler into groove.



FIGURE 15: APPLICATION OF SIKA 221 BLACK

- Reinstall center post and interior finishing panels.
- Clean windshield surface of butyl residue.

6.1.7 Front face Body Panel

For removal of front face body panel and molding, you will need:

Drill with drill bits, Lever or similar tool, Olfa knife, "C"-clamp, Razor sharp window scraper.

Front Face Molding Removal



FIGURE 16: VIEW OF FRONT FACE

- First of all, pry loose the front face molding using the lever. Save molding if only the body panel needs to be changed.
- Using the Olfa knife, cut the Sika bead and the double-face self adhesive tape. Remove the Sika bead and self adhesive tape residue with the scraper.

Front Face Body Panel Removal

- Using a drill and a 1/8" drill bit remove the rivets fixing the vertical molding. The stainless steel molding is located on the entrance door or service door frame side depending on body panel to be removed.
- Using the Olfa knife, cut the Sika bead and the double-face self adhesive tape. Remove the Sika bead and self adhesive tape residue with the scraper.
- Pry loose the front face body panel using the lever.
- While somebody cuts the Sika bead and double-face self adhesive tape, another person pulls the body panel using the "C"clamp to exert tension.
- Using the window scraper, remove any Sika bead or self adhesive tape residue left on fiber glass surface.

Front Face Molding Installation

For gluing of front face molding, refer to procedure **SAV00212** included at the end of this section.

Front face Body Panel Installation

For gluing of front face body panels, refer to procedure **SAV470047** included at the end of this section.

6.1.8 Entrance Door

For the removal of entrance door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper;

- Before removing body panel, you can to ease repair uninstall entrance door from vehicle. If applicable, remove reflector, keyless system keyboard and cornering light.
- You must also remove horizontal finishing molding located underneath the window. This molding is glued and will have to be replaced because it will be damaged at removal.
- Remove interior finishing panel to access rub rail fixing bolts, then remove rub rail.
- Using the "**Zip Gun**", cut Sika bead located ¼ inch (7-8 mm) from each body panel edge and around cornering light.

- Separate body panel from door.
- Remove from door surface Sika bead and double-face self adhesive tape residue using a razor sharp window scraper.
- Use a Chix cloth and anti-silicone to remove any dust or residue.

For assembly, gluing or finishing joints of entrance door, refer to procedure **SAV280020** included at the end of this section.

For gluing of entrance door horizontal finishing molding, refer to procedure **SAV00213** included at the end of this section.

For the installation of entrance door, refer to procedure **SAV280022** included at the end of this section.

6.1.9 Front Electrical & Service Compartment Door

For the removal of front electrical & service door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper;

- Before removing body panel, you can to ease repair uninstall front electrical & service door from vehicle. If applicable, remove reflector and cornering light.
- You must also remove horizontal finishing molding located underneath the window. This molding is glued and will have to be replaced because it will be damaged at removal.
- Remove interior finishing panel to access rub rail fixing bolts, then remove rub rail.
- Using the "Zip Gun", cut Sika bead located ¼ inch (7-8 mm) from each body panel edge and around cornering light.
- Separate body panel from door.
- Remove from door surface Sika bead and double-face self adhesive tape residue using a razor sharp window scraper.
- Use a Chix cloth and anti-silicone to remove any dust or residue.

For assembly, gluing or finishing joints of front electrical & service compartment door, refer to procedure **SAV280021** included at the end of this section.

For gluing of driver's window, refer to procedure **SAV290013** included at the end of this section.

For gluing of front electrical & service compartment door horizontal finishing molding, refer to procedure **SAV00213** included at the end of this section.

For the installation of front electrical & service compartment door, refer to procedure **SAV280022** included at the end of this section.

6.1.10 Upper Lateral Window

For the removal of driver's window or upper lateral window, you will need:

Pneumatic «Zip gun» type tool; Razor sharp window scraper; "Olfa" knife; Face shield.

- In the case of driver's window only, open front service compartment door.
- Mark the position of the driver's window for future reference.
- From inside of vehicle, cut Sika bead around window perimeter using a "Zip gun" while another person hold the window from the outside.

NOTE

Wear ear plugs during this operation.

- Then, move outside of vehicle and cut Sika bead to free window while somebody else hold the window from the inside.
- Carefully remove window from frame, ask for help if needed.
- Using a razor sharp window scraper, remove from window frame Sika bead and double-face self adhesive tape residue.
- First of all, check Sika 205 cleaner expiration date.
- Before applying Sika cleaner, fold "Chix" cloth twice for proper width.
- Apply an even coat onto the inside of window frame and allow drying for 2 minutes (maximum 2 hours).
- Discard waste according to applicable environmental regulations, use dangerous waste containers.
- Apply masking tape before applying Sika glue to protect paint and adjacent window during surface treatment.

For gluing of upper lateral window, refer to procedure **SAV290016** included at the end of this section.

6.1.11 Front Cap

The fiberglass front cap does not need any maintenance except painting as needed. It is held in place with adhesive. If ever it has to be replaced, make an appointment at a Prevost service center near you. For minor damages, refer to paragraph 4 "Common Fiberglass Repair procedure" and paragraph 5 "Common Painting Procedure".

6.2 ZONE 2



FIGURE 17: ZONE 2

6.2.1 Upper Side Panel

For structure preparation, refer to procedure **SAV00035** included at the end of this section.

For installation of upper side panel neoprene foam tapes, refer to procedure **SAV00036** included at the end of this section.

For installation of upper side panel, refer to procedure **SAV00041** included at the end of this section.

6.2.2 Fixed Windows

Depending on the method chosen for fixed side window removal or installation, you may need:

- * Drill equipped with a sharp pointed rod into which a small hole was drilled;
- * Razor sharp window scraper;
- Braided windshield wire and a pair of handles;
- * Gloves, goggles or face shield.

Fixed Window Removal

1st Method

NOTE

This method is used only in the case of a regular fixed side window. For the fixed upper portion of awning or sliding windows, you must use method number 2.

- Apply a sticky plastic film onto all of window outside surface for safety reason.
- Using a drill equipped with the special sharp pointed rod, drill through the window seal into one of the bottom corners, from a 30° angle with reference to the vehicle.
- This procedure requires accuracy and it is possible not to succeed on the first attempt. From the inside of vehicle, a second person ensures the rod passes through.
- Remove the rod; thread the wire into the small hole. Reinsert the rod and the wire into the hole far enough so that the person inside the vehicle can pull the rod using a pair of pliers.
- Attach the wire ends to the specially designed handles.
- Pull in turn from the inside and the outside of vehicle to gradually cut the Sika bead on the window perimeter.
- When you reach top corner, detach wire from the outside handle, secure it to a fish wire or rod and thread it underneath the aluminum molding behind the rivets.
- Detach wire from fish wire and continue cutting using the handle.

 Cut Sika bead until you come back to starting point, then you can remove the window by carefully pushing it out from the inside of vehicle.

2nd Method

- Apply a sticky plastic film onto all of window outside surface.
- To limit as much damage as possible, remove any interior molding in the way. Install a plastic film on the window interior surface and secure using masking tape onto all of window perimeter.

NOTE

Do not stretch plastic film and leave enough play to be able to push window out without tearing the plastic film.

- Using a ball peen hammer, hit one of the window bottom corners from the **outside**.
- Carefully push window out and lift it up sufficiently to separate it from the aluminum molding.
- Attach the windshield wire to a fish wire and thread it underneath the aluminum molding behind the rivets.
- Detach wire from fish wire and continue cutting using the handle.
- Make a notch at each window top corner to make sure you pass underneath the remaining pieces of glass.
- Remove the aluminum molding and clean up the frame using the window scraper.

For gluing of lateral fixed window behind driver, refer to procedure **SAV00046** included at the end of this section.

For gluing of lateral fixed half-window, refer to procedure **SAV00045** included at the end of this section.

For the installation of awning or sliding window, refer to procedure **SAV00038** included at the end of this section.

For gluing of lateral fixed window, refer to various procedures: **SAV00037** for gluing vertical and bottom rubber seals; **SAV00043** for the installation of lateral fixed window and **SAV00044** for making the Simson joint around fixed windows.

All these procedures are included at the end of this section.

6.2.3 Electric Awning Windows

The electric awning windows are connected directly on the batteries 24 V DC terminal block. As a result, they can be operated regardless of the state open or close of the master switch.

Window Removal

Replacement awning window does not include a new motor. If in working order, transfer the motor of the replaced window to the replacement window. If not, the motor can be bought separately. When replacing the window, keep the components in working order as spare parts.

- 1. Push the vertical latch handle downwards to release the track and then open the window using the horizontal latch handle.
- 2. Take out the screw at the lower end of the track to let free the swiveling arm roller.
- 3. Unplug connectors. Dismount the gas spring from the window.
- 4. Loosen the set screws #5 (figure 19) (rotate the arm to get to the second set screw) and disengage the swiveling arm from the motor shaft extension.
- 5. Push the glass window out ninety degrees (90°).

The window may fall out.

- 6. The window is free and can be unhooked.
- 7. Reverse procedure to install a new one.





FIGURE 19: ELECTRIC AWNING WINDOW EXPLODED VIEW (SASH)

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Actuator Replacement

- 1. Push the vertical latch handle downwards to release the track and then unlatch the window using the horizontal latch handle.
- 2. Remove actuator access cover by taking out screws #1 (8x).
- 3. Take out screws #2 (2x) and remove horizontal latch handle and guide.
- 4. Take out the guide screws #3 (4x) and remove releasing bar.
- 5. Unplug connectors from defective actuator, unscrew nuts #4 (2x) and remove the actuator.
- 6. Reverse operations for reinstallation.

Motor Replacement

- 1. Push the vertical latch handle downwards to release the track and then unlatch the window using the horizontal latch handle
- 2. Take out the screw at the lower end of the track to let free the swiveling arm roller.
- 3. Remove actuator access cover by taking out screws #1 (8x).
- 4. Loosen the set screws #5 (rotate the arm to get to the second set screw) and disengage the swiveling arm from the motor shaft extension.
- 5. Unplug motor connector and dismount motor and support assembly.
- The shaft extension is glued to the motor shaft. It has to be heated to break the binding to permit removal. Loosen set screw #6 and remove the shaft extension. Also loosen screw #7 and remove motor from the support.

Reverse operations for reinstallation.

ELECTRIC AWNING WINDOW – CONVERTER CHECKLIST						
A: The latching system will not operate without power.						
Is there electrical power to the latching circuit? The horizontal latch handle, on the sill sash will be seen to move if there is power on this circuit, or it can be checked with an electrical tester. If there is no power to this circuit when the window is closed and either rocker switch are switched "ON", there is a problem with the electrical system.						
B: The Proximity Sensor on the sash may not be switching power to the latching circuit if the magnet is not getting close enough to the switch OR the Proximity Sensor may be broken (or stuck in one position).						
Is the proximity sensor switching when the window is closed?						
 A: If the pull force required to move the latch is more than 20lbs the window will not latch properly. Average pull force during testing by manufacturer is 12lbs -15lbs. What is the force required to release the handle? Check using a force gauge (same test done by manufacturer). 						
A: If the window is too tightly installed OR if the sequence for tightening the clamping frame screws Is incorrect the window may not close properly.						
Was the window installed correctly?						
Was the correct sequence (see below) used when tightening the clamping frame screws?						
$\begin{array}{c} 2 \\ 1 \\ 0 \\ 3 \\ 0 \\ 6 \\ 5 \\ 4 \\ 5 \\ 6 \\ \end{array}$						

	Were the shipping blocks in place during installation?		
	C: Failure to remove the shipping blocks after installation can create interference between sash ar frame.		
	Have the shipping blocks been removed after installation?		
	D: The window is misaligned or not installed squarely.		
	Is there interference with any coach parts?		
	Is there proper clearance between the bottom of the outer glass and the belt-line trim / seal?		
Check for missing parts or misaligned parts	A: The frame and sash are misaligned.		
	Is there any interference between the sash and frame?		
	Is there clearance between the sash and the rocker switch covers?		
	B: Releasing bar guides are missing.		
	Check that the releasing bar guides are installed. There should be 4 installed on H win- dows, and 3 installed on XL2 windows.		

6.2.4 Electric Sliding Windows



FIGURE 20: ELECTRIC SLIDING WINDOW EXPLODED VIEW

Sash Removal

- 1. Remove the Screen Assembly
- 2. Pull down on both release latches simultaneously and rotate the sash inwards approximately 10 degrees.(Figure 21)



FIGURE 21: REMOVING THE SASH

3. Lift the sash up and out to disengage the bottom of the sash from the window frame. (Figure 22)



FIGURE 22: DISENGAGING THE BOTTOM OF THE SASH

Installation

1. Align the leading edge of the slot on the lower cam follower block with the sash stop. Use the power toggle switch to obtain the correct alignment. (Figure 23)



FIGURE 23: PROPER ALIGNMENT

2. Position the left hand lower corner of the sash over the front cam follower block (Figure 24)



FIGURE 24: POSITIONING THE LOWER LEFT CORNER OF THE SASH

- 3. Engage the sash pin with the leading edge of the slot of the cam follower block. Do the same at the rear of the sash.
- 4. Pull down on the release latches and rotate the sash inwards until it is parallel with the window frame.
- 5. Release the latches to engage the latch pins with the upper cam follower blocks.
- 6. Confirm that both latches are in the closed (latched) position. The upper edge of the latch opening must be aligned with upper edge of the sash opening (Figure 25)



FIGURE 25: RELEASE LATCH PROPER POSITION

- 7. * Failure to confirm this step may lead to the sash becoming disengaged with the frame and could result in personal injury.
- 8. Operate the window to confirm that it opens and closes properly.

Install the screen assembly.

6.3	ZONE 3	
0.3	ZONE 3	



FIGURE 26: ZONE 3

6.3.1 Rear Cap

The fiberglass rear cap does not need any maintenance except painting as needed. It is held in place with adhesive. If ever it has to be replaced, make an appointment at a Prévost service center near you.

For minor damages, refer to Paragraph 4 "Common Fiberglass Repair Procedure" and Paragraph 5 "Common Painting Procedure".

6.3.2 Engine Compartment Doors

Engine Compartment Doors Adjustment

Engine compartment doors may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, 2 Fig. 27) holding the hinge to the vehicle structure to shift the door "UP or DOWN".
- Loosening the bolts (3, Fig. 27) allows the door to be shifted "LEFT or RIGHT" and "IN or OUT".
- 3. Adjust the doors position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.
- 5. Check that the doors swing freely and close properly. It may be necessary to adjust the door latch to get proper fit and operation.

To adjust the latch mechanism (4, Fig. 27) and the striker pin:

- 1. Open the doors to access the striker pin.
- 2. Slightly loosen the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check doors fit and operation.



FIGURE 27: ENGINE COMPARTMENT DOORS 18633

Engine Compartment Door Body Panel Removal

For the removal of engine compartment door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper; A pair of locking pliers; Isopropyl alcohol.

- Remove damaged engine compartment door from vehicle.
- Install the damaged door onto an appropriate support.
- Wearing gloves, goggles and ear plugs, pry loose body panel using a "Zip gun" or lever starting from the edge opposite the curved side.
- Use the "Zip gun" to detach completely the stainless steel body panel from door frame.

Do not damage painted surface.

 Use a second person equipped with a pair of locking pliers to pull the body panel as you cut the Sika bead.

Be very careful when pulling the body panel, somebody could get hurt if the body panel suddenly detach from the door surface without notice.

• Using the window scraper, remove any Sika bead or self adhesive tape residue left on the fiber glass surface.

For gluing of engine compartment doors molding, refer to procedure **SAV00211** included at the end of this section.

For engine compartment door body panel installation, refer to procedure **SAV280032** included at the end of this section.

6.3.3 Rear Bumper

Remove three bolts on each side holding bumper to vehicle and remove bumper.

To install bumper, reverse the procedure.



FIGURE 28: REAR BUMPER

6.4 ZONE 4



FIGURE 29: ZONE 4

6.4.1 Rear Fender

On the "XLII MTH" series vehicles, rear fenders are hinged for maintenance on brakes and suspension. Each rear fender panel has two mechanical spring loaded holding devices fixing it to the vehicle's structure. Push the spring type rod sideways to disengage the lock.

For the installation of rear fender body panel, refer to procedure **SAV470046** included at the end of this section.

6.4.2 Engine Compartment R.H. Side Door

Engine compartment R. H. side door may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, Fig. 30) holding the hinge to the vehicle structure to shift the door "IN or OUT" and "UP or DOWN".
- Loosening the bolts (2, Fig. 30) allows the door to be shifted "LEFT or RIGHT" and "UP or DOWN".
- 3. Adjust the door position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.

5. Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.



FIGURE 30: ENGINE COMPARTMENT R.H. SIDE DOOR18635

To adjust the latch mechanism (3, Fig. 30) and the striker pin:

- 1. Open the door to access the striker pin.
- 2. Slightly loosen the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.

For gluing of engine compartment R.H. side door finishing molding, refer to procedure SAV00210 included at the end of this section.

6.4.3 Engine Radiator Door

Radiator door may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, Fig. 31) holding the hinge to the vehicle structure to shift the door "IN or OUT" and "UP or DOWN".
- 2. Loosening the bolts (2, Fig. 31) allows the door to be shifted "LEFT or RIGHT" and "UP or DOWN".



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- 3. Adjust the door position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.

5. Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.

To adjust the latch mechanism (3, Fig. 31) and the striker pin:

- 1. Open the door to access the striker pin.
- Slightly loosen the striker pin. 2.
- Using a hammer, adjust the striker pin to 3. center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.

* **Engine Small Radiator Door**

Small radiator door may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, Fig. 32) holding the hinge to the vehicle structure to shift the door "IN or OUT" and "UP or DOWN".
- 2. Loosening the bolts (2, Fig. 32) allows the door to be shifted "LEFT or RIGHT" and "UP or DOWN".



FIGURE 32: SMALL RADIATOR DOOR

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- 3. Adjust the door position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.
- 5. Check that the door swings freely and closes properly. It may be necessary to

adjust the door latch to get proper fit and operation.

To adjust the latch mechanism (3, Fig. 32) and the striker pin:

- 1. Open the radiator door to access the striker pin.
- 2. Slightly loosen the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.

For gluing of engine radiator door finishing molding, refer to procedure **SAV00210** included at the end of this section.

6.4.4 R.H. Side Rear Service Compartment Door

To adjust the R. H. side rear service compartment door:

- 1. Open the compartment door.
- Loosen the screws fixing the hinge to hinge attachment or hinge to door assembly. Loosening the screws allows the compartment door assembly to be shifted "LEFT or RIGHT" and "UP or DOWN" or "IN and OUT".
- 3. Adjust compartment door assembly position at the hinge.
- 4. Tighten the screws.

ZONE 5

6.5

- 5. Respect the required gap between exterior finishing panels.
- 6. Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.



FIGURE 33: R.H. SIDE REAR SERVICE COMPARTMENT DOOR

To adjust the latch mechanism and the striker pin:

- 1. Open the door to access the striker pin.
- 2. Loosen slightly the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.



FIGURE 34: ZONE 5

6.5.1 Baggage Compartment Doors

The baggage compartment doors on the vehicle are of identical design. The doors are pantograph, vertical-lift type and are fully sealed. Each door has a flush-mounted latch handle. To open, lift latch handle, then pull door outward and up. The door is held open by 2 gas-charged cylinders. To close, leave latch handle in the open position, pull downward on door and push down on latch to secure door. The door lower arm is spring loaded to secure effort required to close the door (Fig. 35).



FIGURE 35: BAGGAGE COMPARTMENT DOOR 18145

If a door does not remain in the fully open position, one or both cylinders on that door is (are) defective. To test the cylinders, first support the door in the open position with proper equipment. Disconnect the rod end of one cylinder and retract the rod. If strong resistance is felt, the cylinder is in good condition and can be reinstalled. If the rod retracts with little effort, the cylinder is defective and should be replaced at once. Use the same procedure to test the other cylinder on that door.

Door Removal

Two people are required to remove the baggage compartment doors.

- 1. Maintain the door halfway open by placing a wooden block between one of the pantograph arms and the upper frame.
- 2. Remove cap screw, lock washer and flat washer retaining lower arm to door
- 3. Remove spring pins and lock washers fastening the pantograph arms to the door.

Support the door properly to prevent it from falling.

- 4. Spread the pantograph arms away from the door and remove door.
- Inspect all pivot points and bushings for wear and damage. Check tension of gascharged cylinders and replace if necessary.
- Pantograph Arms Removal and Installation
- 1. Disconnect rod end of gas-charged cylinders from the pantograph arms.
- 2. Loosen jam nut and cap screw locking the horizontal member of the pantograph to the pivot pin.
- 3. Slide pantograph assembly to the right and remove assembly from the vehicle.
- 4. To install, perform the removal instructions in reverse.

Door Installation

- 1. Use a wooden block to support the pantograph arms horizontally.
- 2. Support the door and insert each pantograph arm into the pivot pins on the side of the door.
- 3. Install washer and spring pin to fasten each arm to its pivot pin.
- 4. Fasten lower arm to the door with flat washer, lock washer and cap screw.
- 5. Remove wooden block and close baggage compartment door.

Door should be adjusted to leave a gap of 3/16" (5 cm) above the top edge of the door. To adjust, loosen the bolts retaining lock plate support and position the door correctly. Tighten the bolts after the adjustment. If the baggage door locks too tightly or too loosely, the position of the catch striker is misadjusted. To adjust, loosen the catch striker retaining bolts, position the striker correctly and tighten the retaining bolts.

If the lower part of the baggage door does not close evenly with the side of the vehicle, adjust the lock plates by loosening their retaining bolts and positioning the locking plates correctly (Fig. 36).



FIGURE 36: BAGGAGE DOOR CATCH STRIKER 18146

For the removal and installation of baggage compartment door body panels, refer to procedure **SAV00177** included at the end of this section.

6.5.2 Condenser Compartment Door

- 1. Open the condenser door.
- Loosen the screws fixing the hinge to hinge attachment or hinge to door assembly. Loosening the screws allows the condenser door assembly to be shifted "LEFT or RIGHT" and "UP or DOWN" or "IN and OUT".
- 3. Adjust condenser door assembly position at the hinge.
- 4. Tighten the screws.
- 5. Respect the required gap between exterior finishing panels.
- Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.



FIGURE 37: CONDENSER DOOR

For the installation of condenser compartment door body panel, refer to procedure **SAV00131** included at the end of this section.

- 6.5.3 Evaporator Compartment Door
- 1. Open the evaporator door.
- Loosen the screws fixing the hinge to hinge attachment or hinge to door assembly. Loosening the screws allows the evaporator door assembly to be shifted "LEFT or RIGHT" and "UP or DOWN" or "IN and OUT".
- 3. Adjust evaporator door assembly position at the hinge.
- 4. Tighten the screws.
- 5. Respect the required gap between exterior finishing panels.
- Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.



FIGURE 38: EVAPORATOR DOOR

For the installation of evaporator compartment door body panel, refer to procedure SAV00133 included at the end of this section.

6.5.4 Fuel Filler Door

- Open the fuel filler door. 0
- Loosen the screws holding the panel to 0 hinge assembly.
- Adjust the fuel filler door position according 0 to distance required between exterior finishing panels.
- Tighten the nuts. 0

Check that the door swings freely and 0 closes properly.



FIGURE 39: FUEL FILLER DOOR



6.6 **ZONE 6**

FIGURE 40: ZONE 6

6.6.1 Front Fender

Front fender may be removed using the following procedure:

Remove the nuts on the inside of the fender. Remove the fender from the vehicle. To reinstall, reverse the procedure.

For the installation of front fender body panel, refer to procedure SAV470024 included at the end of this section.

6.7 ZONE 7



FIGURE 41: ZONE 7

6.7.1 Side Panel for Vehicles Not Fitted With Slide-Out

Removal

Remove top and bottom finishing moldings. Insert a screwdriver into snap-on finishing molding joint. Bend finishing molding enough to be able to fix a pair of locking pliers. Using the pair of locking pliers, pull the stainless steel molding and at the same time gradually cut Sika bead with a sharp knife.	Be careful not to damage the adjacent surfaces You need to remove the finishing molding support and rivets in the case of engine air intake panel.
Insert a flat screwdriver between the side panel and the vehicle chassis, in the top left and right corners.	
Use the c-clamp to peel the side panel from the back structural panel as far as the middle and at the same time gradually cut Sika bead with a sharp knife. Do the same for the other corner.	Ideally, the hoist or chain block must be fastened to the floor while pulling from a 45° angle so as not to damage the vehicle structure
Remove as much glue as possible from the structure using a putty knife or pneumatic knife without damaging 206 G+P primer.	Never heat SikaFlex adhesive to remove.
Check panel horizontal supports for straightness using a straight edge. Take measurements with a ruler.	Tolerance: 1mm towards the outside and 1.5mm towards the inside.

For the structure preparation before the installation of a ridged side panel, refer to procedure **SAV00027** included at the end of this section.

For gluing of ridged side panels, refer to procedure **SAV00028** included at the end of this section.

For sealing the side panels' upper portion, refer to procedure **SAV00030** included at the end of this section.

For gluing of horizontal finishing molding, refer to procedure **SAV00208** included at the end of this section.

6.7.2 Side Panel for Vehicles Fitted With Slide-Out

Removal

Refer to paragraph 6.7.1 for procedure.

Because most junction panels are only riveted and not spot welded, be careful when removing a side panel not to damage adjacent panels.

For the slide-out junction panel preparation before the installation of a ridged side panel, refer to procedure **SAV00031** included at the end of this section.

For gluing of ridged side panels on vehicles fitted with slide-out, refer to procedure **SAV00029** included at the end of this section.

- 6.7.3 Side Crest
- Clean vehicle surface using anti-silicone where the side crest and stickers will be applied.
- Using hands apply and compress side crest.
- Apply required stickers.



FIGURE 42: ZONE 8

6.8 ZONE 8

6.8.1 Slide-Out Exterior Finishing Panels & Windows

Refer to Maintenance Manual, Section 26: Paragraph 16 for the procedure on slide-out exterior finishing panels & windows.



6.9 ZONE 9

FIGURE 43: ZONE 9

6.9.1 Slide-Out Exterior Finishing Panels & Windows

Refer to Maintenance Manual, Section 26: Paragraph 16 for the procedure on slide-out exterior finishing panels & windows.



6.10 BODY PANEL AND WINDOW SPACING FOR W5 MTH NOT FITTED WITH SLIDE-OUT



6.11 BODY PANEL AND WINDOW SPACING FOR W5 MTH FITTED WITH SLIDE-OUT

FIGURE 45: BODY PANEL & WINDOW SPACING FOR W5 MTH FITTED WITH SLIDE-OUT

7. WE MTH EXTERIOR FINISHING AND BODY REPAIR

FIGURE 47: ZONE 1

7.1.1 Front Bumper

The front bumper can be tilted downward to give access to the bumper compartment. Pull the release handle located inside front service compartment to unlock. Tilt down the entire bumper assembly to access the compartment.

FIGURE 48: FRONT BUMPER RELEASE HANDLE 18613

Push the bumper back up firmly in place to lock in position.

Two people are required to remove and install the front bumper. Safely support the bumper and remove the two bolts on each bumper side to separate the bumper from the spare wheel compartment door. To install bumper, reverse the removal procedure.

Front bumper is heavy. Use proper lifting equipment to support the bumper during the removal and installation operations to avoid personal injury.

FIGURE 49: FRONT BUMPER REMOVAL

The compartment behind the bumper is not designed for storage. Never store loose objects in this compartment since they can interfere with the steering linkage mechanism.

Use care when opening or closing the reclining bumper compartment to prevent personal injury.

For gluing of front bumper panel refer to procedure **SAV00198** included at the end of this section.

7.1.2 Front Crest

• Use a Chix cloth and anti-silicone to clean the surface where the crest will be applied.

• Peel the back from the self adhesive crest side pieces.

- Peel the back from the self adhesive crest center piece. Center crest and apply.
- Compress the crest three pieces using your hands.

7.1.3 Headlights

Refer to Paragraph 9.1 Headlights, included in Section 06: Electrical of the Maintenance Manual for complete information on headlights.

7.1.4 Rear View Mirrors

Your vehicle is equipped with two exterior mirrors.

The mirrors may be equipped with an optional electric heating system which serves to minimize ice and condensation on the mirror glass in extreme weather conditions. Integral thermostats are installed in both mirrors to avoid continuous heating. Use the appropriate switch on the dashboard to activate the defroster system on both mirrors simultaneously. The mirrors can easily be adjusted by using the remote controls located on the L.H. side control panel. The mirrors have easy to replace glass in case of breakage. Remote control motors can also be replaced.

FIGURE 50: REAR VIEW MIRROR (RAMCO)

✤ Adjustment

At the base of the mirror arm, loosen the mounting bolt to swing arm in or out.

To pivot the mirror head, loosen the setscrews on each side of the ball stub at the base of the mirror head to facilitate the adjustment.

Disassembly

At end of mirror arm, loosen the setscrews to relieve tension on the ball stem. Remove the ball stem from the arm.

Remove the four screws fastening the mirror arm base to the coach.

Assembly

Mount the mirror arm base to the coach. Insert the ball stem into the mirror arm and tighten the socket setscrews.

NOTE

Position the ball cup halves so the joint between them lies on the centerline of the arm. Ensure that the setscrews are not on the joint between the cup halves.

Replacement of Mirror Glass

Remove the broken glass.

Position new glass in mirror head and press to lock the Velcro in place.

✤ Heated / Remote Controlled Rear View Mirrors

Heated/remote controlled external rear view mirrors may be provided to prevent the mirrors from frosting up in cold weather.

The remote controlled external rear view mirrors attach to support arms using a pivot collar secured by setscrews. Loosening the setscrews allows the whole head assembly to turn on the support arm for initial adjustment. A mounting bolt and washer hold the arm support to the mounting bracket. The arm support can be moved to position the mirror head into or away from the coach body.

The mirror heat switch is located to the left of the driver on the dashboard. This switch must be activated before the mirror heating element will energize. Once energized, the mirror heating element is kept at a sustained temperature (between 60-80°F) by a thermostat. Refer to wiring diagram annexed in the technical publication box.

CAUTION

Do not attach stick-on type convex mirror accessories to the heated mirror glass. This could impede uniform heat distribution on the mirror surface which could break the mirror.

Mirror Control

The remote control pointer knob(s) for the mirrors is (are) mounted on the L.H. side control panel. The harness to the mirror head runs through the arm support. The remote motor is mounted to the mirror head behind the mirror glass.

Turn pointer knob to the left for mirror head adjustments and to the right for convex mirror adjustment, then push down on either of the button's (4) sides to adjust the selected mirror viewing angle.

Disassembly

At end of mirror arm, loosen the setscrews to relieve tension on the ball stud. Remove the ball stud. Remove the ball stud from the arm and gently pull the harness out until the connector is exposed.

Remove the four screws fastening the mirror arm base to the coach. Slide the harness free of the mirror arm base.

Assembly

Attach a stiff wire (snake) to the end of the harness and insert the wire through the mirror arm base and arm, gently pull the harness through the arm and disconnect the "snake". Connect the mirror head harness. Insert the

harness connector back into the mirror arm.

Insert the ball stud into the mirror arm and tighten the socket setscrews.

NOTE

Position the ball cup halves so the joint between them lies on the centerline of the arm. Ensure that the setscrews are not on the joint between the cup halves.

Convex & Flat Mirror Removal

The mirror glass assembly is mounted to the control mechanism or to mirror base with Velcro strips. Remove the mirror glass by gently pulling the lens to release the Velcro. Disconnect the heater grid at the two connectors.

Connect the connectors of the new mirror's grid to the harness. Install the lens by positioning the lens in the mirror frame and pressing to lock the Velcro in place.

7.1.5 Windshield Wipers

Refer to Paragraph 23.7 Windshield Wipers and Washers, included in Section 23: Accessories of the Maintenance Manual for complete information on windshield wipers.

7.1.6 Windshield

For the removal or installation of windshield, you will need:

- A rope,
- A plastic spatula to lift the rubber seal lip,
- A metal rod or screwdriver to clean the seal groove,
- A filler insertion tool,
- Goggles and protective gloves.
 - From inside of vehicle, remove center post and interior finishing panels surrounding the windshield. In this case, we are replacing the R.H. side windshield.
 - From outside of vehicle, remove filler located inside rubber seal to ease damaged windshield removal.
 - From inside of vehicle, push against the top L.H. side corner of windshield for the removal of a R.H. side windshield. If the L.H. side windshield had to be removed, you would have to push against the top R. H. side corner.

NOTE

We are referring to the L.H and R.H. side as viewed from the inside of the vehicle.

- At the same time, another person gradually lifts the rubber lip from the vehicle exterior using a plastic spatula from top to bottom.
- Remove the entire damaged windshield and broken glass if applicable.
- If applicable, using a screwdriver or metal rod, remove black butyl sealant residue from rubber seal then clean with Sika 205.

Windshield Installation

NOTE

Rubber seal may have to be replaced if it was used on several windshield replacements.

- Spray rubber seal with soapy water to ease windshield insertion.
- Insert rope into rubber extrusion leaving enough length at each corner to make a loop. Spray soapy water onto rope and rubber extrusion (Fig. 51).
- Slide windshield into rubber seal groove starting with the bottom curved side edge. Using a plastic spatula, move the rubber seal lip aside to gradually insert the windshield into the groove.
- Spray soapy water on a regular basis to ease this operation.
- Using the same type of plastic spatula, repeat the same operation from inside of vehicle, gradually inserting the windshield into the groove.

FIGURE 51: WINDSHIELD INSTALLATION USING ROPE

NOTE

Make sure windshield bottom edge is well inserted into the rubber seal groove before proceeding with the sides.

- Then, working from both sides of windshield bottom to top, gradually move the rubber seal lip aside to insert the windshield into the groove. Use also soapy water on the inside of vehicle to insert the windshield into the rubber seal groove.
- Insert the top curved corner then finish with the top of windshield.
- At the top of windshield, clean surface between fiberglass and rubber extrusion using Sika 205 (Fig.52).
- Apply Sika 221 black between fiberglass and rubber extrusion

- Spray filler and rubber seal groove generously with soapy water.
- Using the special filler insertion tool, insert the filler into the rubber seal groove.
- Gradually insert filler into the rubber seal groove ensuring to leave a 2 inch excess length at the filler extremity.
- Every 6 inches or so, it is important to compress the filler due to its tendency to contract during drying process.
- When filler insertion is almost complete, cut filler leaving ¼" of excess length to thwart filler contraction over time then insert filler into groove.

FIGURE 52: APPLICATION OF SIKA 221 BLACK

- Reinstall center post and interior finishing panels.
- Clean windshield surface of butyl residue.

7.1.7 Front face Body Panel

For removal of front face body panel and molding, you will need:

Drill with drill bits, Lever or similar tool, Olfa knife, "C"-clamp, Razor sharp window scraper.

Front Face Molding Removal

FIGURE 53: VIEW OF FRONT FACE

- First of all, pry loose the front face molding using the lever. Save molding if only the body panel needs to be changed.
- Using the Olfa knife, cut the Sika bead and the double-face self adhesive tape. Remove the Sika bead and self adhesive tape residue with the scraper.

Front Face Body Panel Removal

- Using a drill and a 1/8" drill bit remove the rivets fixing the vertical molding. The stainless steel molding is located on the entrance door or service door frame side depending on body panel to be removed.
- Using the Olfa knife, cut the Sika bead and the double-face self adhesive tape. Remove the Sika bead and self adhesive tape residue with the scraper.
- Pry loose the front face body panel using the lever.
- While somebody cuts the Sika bead and double-face self adhesive tape, another person pulls the body panel using the "C"clamp to exert tension.
- Using the window scraper, remove any Sika bead or self adhesive tape residue left on fiber glass surface.

Front Face Molding Installation

For gluing of front face molding, refer to procedure **SAV00212** included at the end of this section.

Front face Body Panel Installation

For gluing of front face body panels, refer to procedure **SAV470047** included at the end of this section.

7.1.8 Entrance Door

For the removal of entrance door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper;

- Before removing body panel, you can to ease repair uninstall entrance door from vehicle. If applicable, remove reflector, keyless system keyboard and cornering light.
- You must also remove horizontal finishing molding located underneath the window. This molding is glued and will have to be replaced because it will be damaged at removal.
- Remove interior finishing panel to access rub rail fixing bolts, then remove rub rail.
- Using the "**Zip Gun**", cut Sika bead located ¼ inch (7-8 mm) from each body panel edge and around cornering light.
- Separate body panel from door.
- Remove from door surface Sika bead and double-face self adhesive tape residue using a razor sharp window scraper.
- Use a Chix cloth and anti-silicone to remove any dust or residue.

For assembly, gluing or finishing joints of entrance door, refer to procedure **SAV280020** included at the end of this section.

For gluing of entrance door horizontal finishing molding, refer to procedure **SAV00213** included at the end of this section.

For the installation of entrance door, refer to procedure **SAV280022** included at the end of this section.

7.1.9 Front Electrical & Service Compartment Door

For the removal of front electrical & service door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper;

 Before removing body panel, you can to ease repair uninstall front electrical & service door from vehicle. If applicable, remove reflector and cornering light.

- You must also remove horizontal finishing molding located underneath the window. This molding is glued and will have to be replaced because it will be damaged at removal.
- Remove interior finishing panel to access rub rail fixing bolts, then remove rub rail.
- Using the "Zip Gun", cut Sika bead located ¼ inch (7-8 mm) from each body panel edge and around cornering light.
- Separate body panel from door.
- Remove from door surface Sika bead and double-face self adhesive tape residue using a razor sharp window scraper.
- Use a Chix cloth and anti-silicone to remove any dust or residue.

For assembly, gluing or finishing joints of front electrical & service compartment door, refer to procedure **SAV280021** included at the end of this section.

For gluing of driver's window, refer to procedure **SAV290013** included at the end of this section.

For gluing of front electrical & service compartment door horizontal finishing molding, refer to procedure **SAV00213** included at the end of this section.

For the installation of front electrical & service compartment door, refer to procedure **SAV280022** included at the end of this section.

7.1.10 Upper Lateral Window

For the removal of driver's window or upper lateral window, you will need:

Pneumatic «Zip gun» type tool; Razor sharp window scraper; "Olfa" knife; Face shield.

- In the case of driver's window only, open front service compartment door.
- Mark the position of the driver's window for future reference.
- From inside of vehicle, cut Sika bead around window perimeter using a "Zip gun" while another person hold the window from the outside.

NOTE

Wear ear plugs during this operation.

- Then, move outside of vehicle and cut Sika bead to free window while somebody else hold the window from the inside.
- Carefully remove window from frame, ask for help if needed.
- Using a razor sharp window scraper, remove from window frame Sika bead and double-face self adhesive tape residue.
- First of all, check Sika 205 cleaner expiration date.
- Before applying Sika cleaner, fold "Chix" cloth twice for proper width.
- Apply an even coat onto the inside of window frame and allow drying for 2 minutes (maximum 2 hours).
- Discard waste according to applicable environmental regulations, use dangerous waste containers.
- Apply masking tape before applying Sika glue to protect paint and adjacent window during surface treatment.

For gluing of upper lateral window, refer to procedure **SAV290016** included at the end of this section.

7.1.11 Front Cap

The fiberglass front cap does not need any maintenance except painting as needed. It is held in place with adhesive. If ever it has to be replaced, make an appointment at a Prevost service center near you. For minor damages, refer to paragraph 4 "Common Fiberglass Repair procedure" and paragraph 5 "Common Painting Procedure".

7.2 ZONE 2

7.2.1 Upper Side Panel

For structure preparation, refer to procedure **SAV00035** included at the end of this section.

For installation of upper side panel neoprene foam tapes, refer to procedure **SAV00036** included at the end of this section.

For installation of upper side panel, refer to procedure **SAV00041** included at the end of this section.

7.2.2 Fixed Windows

Depending on the method chosen for fixed side window removal or installation, you may need:

- * Drill equipped with a sharp pointed rod into which a small hole was drilled;
- * Razor sharp window scraper;
- * Braided windshield wire and a pair of handles;
- * Gloves, goggles or face shield.

Fixed Window Removal

1st Method

NOTE

This method is used only in the case of a regular fixed side window. For the fixed upper portion of awning or sliding windows, you must use method number 2.

- Apply a sticky plastic film onto all of window outside surface for safety reason.
- Using a drill equipped with the special sharp pointed rod, drill through the window seal into one of the bottom corners, from a 30° angle with reference to the vehicle.

- This procedure requires accuracy and it is possible not to succeed on the first attempt. From the inside of vehicle, a second person ensures the rod passes through.
- Remove the rod; thread the wire into the small hole. Reinsert the rod and the wire into the hole far enough so that the person inside the vehicle can pull the rod using a pair of pliers.
- Attach the wire ends to the specially designed handles.
- Pull in turn from the inside and the outside of vehicle to gradually cut the Sika bead on the window perimeter.
- When you reach top corner, detach wire from the outside handle, secure it to a fish wire or rod and thread it underneath the aluminum molding behind the rivets.
- Detach wire from fish wire and continue cutting using the handle.
- Cut Sika bead until you come back to starting point, then you can remove the window by carefully pushing it out from the inside of vehicle.

2nd Method

- Apply a sticky plastic film onto all of window outside surface.
- To limit as much damage as possible, remove any interior molding in the way. Install a plastic film on the window interior surface and secure using masking tape onto all of window perimeter.

NOTE

Do not stretch plastic film and leave enough play to be able to push window out without tearing the plastic film.

- Using a ball peen hammer, hit one of the window bottom corners from the **outside**.
- Carefully push window out and lift it up sufficiently to separate it from the aluminum molding.
- Attach the windshield wire to a fish wire and thread it underneath the aluminum molding behind the rivets.
- Detach wire from fish wire and continue cutting using the handle.
- Make a notch at each window top corner to make sure you pass underneath the remaining pieces of glass.
- Remove the aluminum molding and clean up the frame using the window scraper.

For gluing of lateral fixed half-window, refer to procedure **SAV00045** included at the end of this section.

For the installation of awning or sliding window, refer to procedure **SAV00038** included at the end of this section.

For gluing of lateral fixed window, refer to various procedures: **SAV00037** for gluing vertical and bottom rubber seals; **SAV00043** for the installation of lateral fixed window and **SAV00044** for making the Simson joint around fixed windows.

All these procedures are included at the end of this section.

7.2.3 Electric Awning Windows

For window or components replacement, refer to paragraph 6.2.3.

7.2.4 Electric Sliding Windows

For sash removal or replacement, refer to paragraph 6.2.4.

7.3 ZONE 3

7.3.1 Rear Cap

The fiberglass rear cap does not need any maintenance except painting as needed. It is held in place with adhesive. If ever it has to be replaced, make an appointment at a Prévost service center near you.

For minor damages, refer to Paragraph 4 "Common Fiberglass Repair Procedure" and Paragraph 5 "Common Painting Procedure".

7.3.2 Engine Compartment Doors

Engine Compartment Doors Adjustment

Engine compartment doors may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, 2 Fig. 56) holding the hinge to the vehicle structure to shift the door "UP or DOWN".
- Loosening the bolts (3, Fig. 56) allows the door to be shifted "LEFT or RIGHT" and "IN or OUT".
- 3. Adjust the doors position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.

5. Check that the doors swing freely and close properly. It may be necessary to adjust the door latch to get proper fit and operation.

To adjust the latch mechanism (4, Fig. 56) and the striker pin:

- 1. Open the doors to access the striker pin.
- 2. Slightly loosen the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check doors fit and operation.

FIGURE 56: ENGINE COMPARTMENT DOORS 18633

Engine Compartment Door Body Panel Removal

For the removal of engine compartment door body panel, you will need:

Pneumatic "Zip gun" type tool; Razor sharp window scraper; A pair of locking pliers; Isopropyl alcohol.

- Remove damaged engine compartment door from vehicle.
- Install the damaged door onto an appropriate support.
- Wearing gloves, goggles and ear plugs, pry loose body panel using a "Zip gun" or lever starting from the edge opposite the curved side.
- Use the "Zip gun" to detach completely the stainless steel body panel from door frame.

Do not damage painted surface.

• Use a second person equipped with a pair of locking pliers to pull the body panel as you cut the Sika bead.

Be very careful when pulling the body panel, somebody could get hurt if the body panel suddenly detach from the door surface without notice.

 Using the window scraper, remove any Sika bead or self adhesive tape residue left on the fiber glass surface.

For gluing of engine compartment doors molding, refer to procedure **SAV00211** included at the end of this section.

For engine compartment door body panel installation, refer to procedure **SAV280032** included at the end of this section.

7.3.3 Rear Bumper

Remove three bolts on each side holding bumper to vehicle and remove bumper.

To install bumper, reverse the procedure.

FIGURE 57: REAR BUMPER

7.4 ZONE 4

7.4.1 Rear Fender

On the "XLII MTH" series vehicles, rear fenders are hinged for maintenance on brakes and suspension. Each rear fender panel has two mechanical spring loaded holding devices fixing it to the vehicle's structure. Push the spring type rod sideways to disengage the lock.

For the installation of rear fender body panel, refer to procedure **SAV470046** included at the end of this section.

7.4.2 Engine Compartment R.H. Side Door

Engine compartment R. H. side door may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, Fig. 59) holding the hinge to the vehicle structure to shift the door "IN or OUT" and "UP or DOWN".
- Loosening the bolts (2, Fig. 59) allows the door to be shifted "LEFT or RIGHT" and "UP or DOWN".
- 3. Adjust the door position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.
- Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.

FIGURE 59: ENGINE COMPARTMENT R.H. SIDE DOOR18635

To adjust the latch mechanism (3, Fig. 59) and the striker pin:

- 1. Open the door to access the striker pin.
- 2. Slightly loosen the striker pin.

- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.

For gluing of engine compartment R.H. side door finishing molding, refer to procedure SAV00210 included at the end of this section.

7.4.3 Engine Radiator Door

Radiator door may be adjusted for proper fit by untightening hinge bolts:

- 1. Loosen the bolts, (1, Fig. 60) holding the hinge to the vehicle structure to shift the door "IN or OUT" and "UP or DOWN".
- 2. Loosening the bolts (2, Fig. 60) allows the door to be shifted "LEFT or RIGHT" and "UP or DOWN".
- 3. Adjust the door position depending on the gap needed between exterior finishing panels.
- 4. Tighten the bolts.
- 5. Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.

To adjust the latch mechanism (3, Fig. 60) and the striker pin:

1. Open the door to access the striker pin.

FIGURE 60: RADIATOR DOOR

18636

- 2. Slightly loosen the striker pin.
- 3. Using a hammer, adjust the striker pin to center it in the door latch mechanism.
- 4. Tighten the striker pin.
- 5. Check door fit and operation.

For gluing of engine radiator door finishing molding, refer to procedure SAV00210 included at the end of this section.

ZONE 5

7.5

7.5.1 Baggage Compartment Doors

The baggage compartment doors on the vehicle are of identical design. The doors are pantograph, vertical-lift type and are fully sealed. Each door has a flush-mounted latch handle. To open, lift latch handle, then pull door outward and up. The door is held open by 2 gas-charged cylinders. To close, leave latch handle in the open position, pull downward on door and push down on latch to secure door. The door lower arm is spring loaded to secure effort required to close the door (Fig. 62).

If a door does not remain in the fully open position, one or both cylinders on that door is (are) defective. To test the cylinders, first support the door in the open position with proper equipment. Disconnect the rod end of one cylinder and retract the rod. If strong resistance is felt, the cylinder is in good condition and can be reinstalled. If the rod retracts with little effort, the cylinder is defective and should be replaced at once. Use the same procedure to test the other cylinder on that door.

Door Removal

Two people are required to remove the baggage compartment doors.

- 1. Maintain the door halfway open by placing a wooden block between one of the pantograph arms and the upper frame.
- 2. Remove cap screw, lock washer and flat washer retaining lower arm to door
- 3. Remove spring pins and lock washers fastening the pantograph arms to the door.

Support the door properly to prevent it from falling.

- 4. Spread the pantograph arms away from the door and remove door.
- Inspect all pivot points and bushings for wear and damage. Check tension of gascharged cylinders and replace if necessary.
- Pantograph Arms Removal and Installation
- 1. Disconnect rod end of gas-charged cylinders from the pantograph arms.
- 2. Loosen jam nut and cap screw locking the horizontal member of the pantograph to the pivot pin.
- 3. Slide pantograph assembly to the right and remove assembly from the vehicle.
- 4. To install, perform the removal instructions in reverse.

Door Installation

- 1. Use a wooden block to support the pantograph arms horizontally.
- Support the door and insert each pantograph arm into the pivot pins on the side of the door.
- 3. Install washer and spring pin to fasten each arm to its pivot pin.
- 4. Fasten lower arm to the door with flat washer, lock washer and cap screw.
- 5. Remove wooden block and close baggage compartment door.

Door should be adjusted to leave a gap of 3/16" (5 cm) above the top edge of the door. To adjust, loosen the bolts retaining lock plate support and position the door correctly. Tighten the bolts after the adjustment. If the baggage door locks too tightly or too loosely, the position of the catch striker is misadjusted. To adjust, loosen the catch striker retaining bolts, position the striker correctly and tighten the retaining bolts.

If the lower part of the baggage door does not

close evenly with the side of the vehicle, adjust the lock plates by loosening their retaining bolts and positioning the locking plates correctly (Fig. 63).

For the removal and installation of baggage compartment door body panels, refer to procedure **SAV00177** included at the end of this section.

7.5.2 Condenser Compartment Door

- 1. Open the condenser door.
- Loosen the screws fixing the hinge to hinge attachment or hinge to door assembly. Loosening the screws allows the condenser door assembly to be shifted "LEFT or RIGHT" and "UP or DOWN" or "IN and OUT".
- 3. Adjust condenser door assembly position at the hinge.
- 4. Tighten the screws.
- 5. Respect the required gap between exterior finishing panels.
- Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.

FIGURE 64: CONDENSER DOOR

For the installation of condenser compartment door body panel, refer to procedure **SAV00131** included at the end of this section.

- 7.5.3 Evaporator Compartment Door
- 1. Open the evaporator door.
- Loosen the screws fixing the hinge to hinge attachment or hinge to door assembly. Loosening the screws allows the evaporator door assembly to be shifted "LEFT or RIGHT" and "UP or DOWN" or "IN and OUT".
- 3. Adjust evaporator door assembly position at the hinge.
- 4. Tighten the screws.
- 5. Respect the required gap between exterior finishing panels.
- 6. Check that the door swings freely and closes properly. It may be necessary to adjust the door latch to get proper fit and operation.

FIGURE 65: EVAPORATOR DOOR

For the installation of evaporator compartment door body panel, refer to procedure SAV00133 included at the end of this section.

7.5.4 Fuel Filler Door

- Open the fuel filler door. 0
- Loosen the screws holding the panel to 0 hinge assembly.
- Adjust the fuel filler door position according 0 to distance required between exterior finishing panels.
- Tighten the nuts. 0

Check that the door swings freely and 0 closes properly.

FIGURE 66: FUEL FILLER DOOR

ZONE 6 7.6

FIGURE 67: ZONE 6

7.6.1 Front Fender

Front fender may be removed using the following procedure:

Remove the nuts on the inside of the fender. Remove the fender from the vehicle. To reinstall, reverse the procedure.

For the installation of front fender body panel, refer to procedure SAV470024 included at the end of this section.

7.7 ZONE 7

FIGURE 68: ZONE 7

7.7.1 Smooth Side Panel

Removal

A)	Remove finishing molding. Insert a screwdriver into snap-on finishing molding joint. Bend finishing molding enough to be able to fix a pair of locking pliers. Using the pair of locking pliers, pull the stainless steel molding and at the same time gradually cut Sika bead with a sharp knife.	Be careful not to damage the adjacent surfaces.
B)	Using a hammer and punch, drive out rivet shanks from top and bottom and from front and rear finishing molding supports. Use a #11 titanium drill bit to remove rivet heads.	
C)	Grind tig weld spots at each end of side panel.	
D)	Safely support or temporary fix side panel.	Warning: Panel weights over 200 pounds
E)	Insert a flat screwdriver between the side panel and the vehicle chassis, in the top left and right corners. Make sure to separate side panel from structure.	Be careful not to damage the adjacent surfaces.
F)	Use the c-clamp to separate the side panel from the back structural panel and at the same time gradually cut Sika bead with a sharp knife.	Ideally, the hoist or chain block must be fastened to the floor while pulling from a 45° angle so as not to damage the vehicle structure
G)	Remove as much glue as possible from the structure using a putty knife or pneumatic knife without damaging 206 G+P primer.	Never heat SikaFlex adhesive to remove.
H)	Check panel horizontal supports for straightness using a straight edge. Take measurements with a ruler.	Tolerance: 1 mm towards the outside and 1.5 mm towards the inside.

Installation Procedures

SMOOTH SIDE PANEL – STRUCTURE PREPARATION	SAV00072
SMOOTH SIDE PANEL – INSTALLATION	SAV00073
ENGINE AIR INTAKE PANEL - GLUING	SAV00074
SMOOTH SIDE PANEL – FINISHING JOINT	SAV00075
SMOOTH SIDE PANEL – GLUING MOLDINGS	SAV00214
SMOOTH SIDE PANEL – REAR MOLDING GLUING	SAV00215
SMOOTH SIDE PANEL – PROTECTION OF UNPRIMED TIG WELDING SPOTS	SAV00216
SMOOTH SIDE PANEL – GLUING SLIDE-OUT VERTICAL MOLDING	SAV00217
SMOOTH SIDE PANEL – CUTTING HORIZONTAL FINISHING MOLDING AT SLIDE-OUT LEVEL	SAV00220

7.7.2 Side Crest

- o Clean vehicle surface using anti-silicone where the side crest and stickers will be applied.
- Using hands apply and compress side crest.
- Apply required stickers.

7.8 ZONE 8

FIGURE 69: ZONE 8

7.8.1 Slide-Out Exterior Finishing Panels & Windows

Refer to Maintenance Manual, Section 26: Paragraph 16 for the procedure on slide-out exterior finishing panels & windows.

7.9 BODY PANEL AND WINDOW SPACING FOR WE MTH FITTED WITH SLIDE-OUT

FIGURE 70: BODY PANEL & WINDOW SPACING FOR WE MTH FITTED WITH SLIDE-OUT

8. VEHICLE JACKING POINTS

The vehicle can be lifted by applying pressure under body jacking points or front and drive axle jacking points. When it is necessary to lift the vehicle, care should be taken to ensure that the pressure is applied only on the specified areas. Equipment for lifting the front of the vehicle must have a combined lifting capacity of at least 20,000 lb. (9 100 kg). Equipment for lifting the rear of the vehicle must have a combined lifting capacity of at least 40,000 lb. (18 200 kg).

DO NOT tow or jack vehicle with people on board.

When it is necessary to raise the vehicle, care should be taken to ensure that pressure is applied only at the points indicated in figures 71 to 76.

Extra lift capacity may be required if luggage or any other type of load (e.g. conversion equipment) are onboard the vehicle.

The suspension of the vehicle must be in the normal ride position before jacking. The "Level Low" system on a motorcoach must be in the "DRIVE" position prior to turning the ignition key "OFF".

Twelve jacking points are located on the vehicle: three are located on each side of the frame and two are located under each axle. Refer to the following illustrations for the location of jacking points.

FIGURE 71: JACKING POINTS ON FRAME

FIGURE 72: FRONT SUBFRAME JACKING POINTS 18592

FIGURE 73: REAR SUBFRAME JACKING POINTS

FIGURE 74: JACKING POINTS ON IND. SUSPENSION 16095

FIGURE 75: JACKING POINTS ON DRIVE AXLE OEH3B762

Always unload or retract the tag axle before jacking the vehicle from the front and drive axle jacking points to prevent damage to suspension components.

FIGURE 76: JACKING POINTS ON TAG AXLE OEH3B764

The jacking points on the tag axle must be used for raising the tag axle only.

Several kinds of hydraulic jacks can be used. Only jack at the specified jacking points. Jack must support the following capacities:

Front axle: 20,000 lb. (9 100 kg);

Drive axle: 40,000 lb. (18 200 kg).

8.1 HYDRAULIC JACK

<u>To raise</u>: turn release valve clockwise. Insert handle in socket and raise vehicle by pumping.

<u>To lower</u>: remove handle and turn the release valve <u>slowly</u> counterclockwise.

Always keep ram and extension screw retracted when jack is not in use.

<u>Service</u>: Check oil level when jack fails to raise to full height. Lower ram completely with release valve open and jack in upright position, remove filler plug and refill to level of filler hole with hydraulic jack oil. Never use brake fluid.

DANGER

Jack is intended for lifting only. Do not get under the vehicle or load for any reason unless it is properly supported with safety stands and securely blocked.

DANGER

Do not overload jack above rated capacity. Prevent "side loading", make sure load is centered on ram. Do not push or tilt load off jack.

9. TOWING THE VEHICLE

The vehicle can be transported on a low bed semi-trailer of adequate gross axle weight

capacity. When transporting a vehicle, apply parking brake and shut down the engine. Block all wheels and secure vehicle with tie-downs. Check that overall height will clear obstacles on the route to follow, and obtain required permits.

The vehicle can also be towed by lifting the front axle or by towing from the front with all wheels on the ground. These two methods are described below under their respective headings. Whatever the method used, the vehicle should be towed by truck operators authorized and experienced in towing highway coaches.

Observe normal precautions including, but not limited to, the ones listed below when towing the vehicle:

- Make sure the parking brake is released before towing.
- Do not allow passengers to ride onboard the towed vehicle.
- Tow the vehicle at a safe speed as dictated by road and weather conditions.
- Accelerate and decelerate slowly and cautiously.

To prevent damage to the vehicle, use the two tow eyes located under the back bumper and/or fixed to the vehicle's frame between the front axle and the front bumper. Use only a solid link tow bar and a safety chain to tow the vehicle. If required, connect an auxiliary air supply to the vehicle so brakes can be operated while towing.

During a towing operation, the driver should be alone inside the vehicle.

To prevent damage to the drive train components, disconnect axle shafts or driveshaft before towing. Do not attempt to push or pull-start a vehicle equipped with an automatic transmission.

NOTE

Make sure axle shafts or driveshaft are installed correctly after towing. Tighten axle shaft and driveshaft nuts to the correct torque settings. Do not invert shafts

9.1 LIFTING AND TOWING

The towed vehicle must be lifted from under the front axle only. The tow truck must be equipped with the proper lifting equipment to reach under the front axle since no other lifting points are recommended. Lifting and towing from any other point are unauthorized as it may cause serious damage to the structure. Do not unload or raise the tag axle when lifting and towing to prevent overloading the drive axle.

1. Remove both drive axle shafts to prevent damage to the transmission. Plug axle tube to prevent oil loss. Refer to Rockwell's *"Maintenance manual no.5"* annexed at the end of Section 11, Rear axle, in this manual for correct procedure.

Transmission lubrication is inadequate when towing. The drive axle shafts must be removed to avoid serious damage to the transmission.

- 2. Operate the engine when towing to maintain brake system air pressure. If the engine cannot be operated, connect an external air pressure line from the tow truck to the emergency fill valve in the engine compartment.
- 3. The emergency fill valve in the front service compartment does not supply air pressure to the brake system. The air pressure must be a minimum of 75 psi (520 kPa), and the line should be attached to the air line with a clip-on chuck.

WARNING

Do not tow the vehicle without external air pressure applied to the emergency fill valve if the engine does not operate. Without brake system air pressure, the brakes may apply automatically if system air drops below 40 psi (275 kPa). If failure prevents releasing the parking brakes with air pressure, disengage the parking brakes mechanically.

- 4. Lift the vehicle from under the front axle, and adequately secure the underside to the tow vehicle lifting attachment with chains.
- 5. Observe safety precautions when towing.

9.2 TOWING WITHOUT LIFTING

When towing vehicle without lifting, use only a tow truck with a solid link tow bar and related equipment. All other means of towing are unauthorized. Tow only from the front of the vehicle.

1. Remove both drive axle shafts to prevent damage to the transmission. Plug axle tube to prevent oil loss. Refer to Rockwell's *"Maintenance manual no.5"* annexed at the end of Section 11, Rear axle, in this manual for correct procedure.

Transmission lubrication is inadequate when towing. The drive axle shafts must be removed to avoid serious damage to the transmission.

2. Operate the engine when towing to maintain brake system air pressure. If the engine cannot be operated, connect an external air pressure line from the tow truck to the emergency fill valve in the engine compartment. The emergency fill valve in the front service compartment does not supply air pressure to the brake system. The air pressure must be a minimum of 75 psi (520 kPa), and the line should be attached to the air line with a clip-on chuck.

Do not tow the vehicle without external air pressure applied to the emergency fill valve if the engine does not operate. Without brake system air pressure, the brakes may apply automatically if system air drops below 40 psi (275 kPa). If failure prevents releasing the parking brakes with air pressure, disengage the parking brakes mechanically.

- 3. Position the tow truck so that the tow bar contacts the front bumper of the vehicle.
- 4. Attach the tow truck chains only in the tow eyes of the vehicle under the bumper and take up all the slack.
- 5. Attach safety chains as applicable.
- 6. Observe safety precautions when towing.