



April 20, 2018
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National Highway Traffic Safety Administration
1200 New Jersey Avenue SE.,
Washington, DC 20590

Subject: Recall campaigns 16V916 and 16V917

In response to your request of April 18, 2018, please find herein our answers to the follow-up questions regarding our request to cancel or invalidate the recall campaigns 16V916 and 16V917. Questions 1 and 2 were previously answered by email on April 17, 2018, while question 3 was not previously answered.

1. In Microbird's document submission dated January 23, 2018, Microbird describes how the original testing method was flawed, which led to the test failure; however, now that Microbird has determined the initial testing setup caused the failure, has Microbird re-tested with the correct testing setup and confirmed that this design indeed passes FMVSS requirements for 207/210?

Yes, Micro Bird has hired the independent laboratory PMG Technologies to conduct new 207/210 tests on different seat configurations to validate that our buses were in fact compliant. These tests were conducted in August 2017 and the reports completed in October and November 2017. The tests for 2-place seats equipped with Type 1 and Type 2 seat belts were successful, as well as those conducted on 3-place seats equipped with Type 2 seat belts. On the other hand, 3-place seats equipped with Type 1 seat belts failed. Following these results, analysis and a new test were conducted to confirm whether or not it was an isolated incident. Micro Bird decided that a recall campaign for these seats was necessary on February 3rd 2018. The recall campaign 18V101 was declared on February 9th 2018 and notifications to final owners have been sent between April 3rd and April 5th 2018.

2. On page 4/7 of Microbird's submittal, August 2017 refers to "FMVSS 207/210 tests at an independent laboratory with the new revised test procedure" – how was it confirmed that the "failure resulted from the initial test procedure and not design or construction of the vehicle?" Were there passing results for these tests (or any subsequent testing)? We will want to see these results.

As discussed in our submittal, the initial test was not conducted correctly and we concluded with PMG Technologies that the test procedure was at fault for the test failure. Accordingly, new tests were deemed necessary to validate the compliance with FMVSS 207/210, which was, after all, the intent of the initial test.

Prior these new tests, we went back to the Test Procedure documents provided by NHTSA to validate how the vehicle shall be attached for the test. The Test Procedure document for FMVSS 210 cites "(3) Raise the test vehicle until all 4 wheels are approximately 1" off the test surface and at its curb weight attitude. Secure the test vehicle to prevent lateral and longitudinal movement during belt anchorage load application. Test vehicles must not be restrained by the front or rear bumper systems. Position

the test vehicle so that load application angles will be correct”, while Figures 6B and 13 of the Test Procedure document of FMVSS 207 illustrates such attachments.

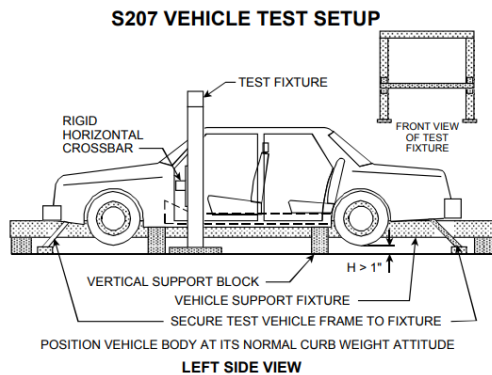


FIGURE 13

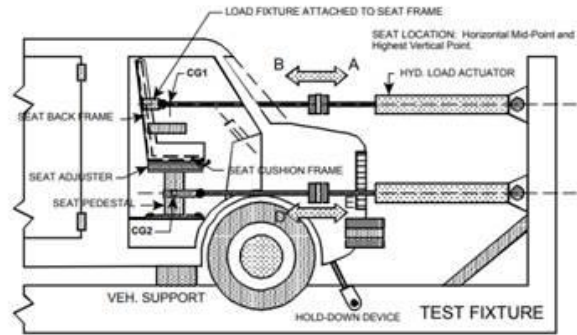
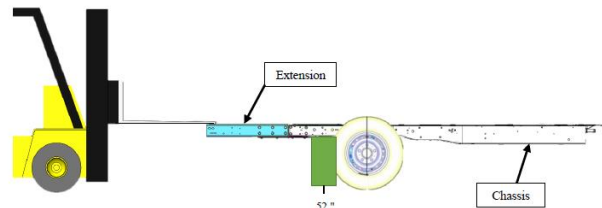


FIGURE 6B

It then became clear that the initial test procedure was responsible for the failing of the frame extension adaptor. As illustrated herein, because of the manner the vehicle was attached in the initial test, any movement was impossible from the front of the vehicle back to the attachment at 52 inches, just behind the rear axle (green rectangle), but small lateral and longitudinal movements were possible from the fixed attachment back to the rear extremity of the frame extension, which included the frame extension adaptor. We believe that during the pull, small movements of the frame extension dislodged the lift, which allowed the frame extension to become free to “follow” the pull force, resulting in the breakage of the frame extension adaptor.



During the new tests, the frame and frame extension were solidly attached - as herein pictured - in compliant with the requirements of FMVSS 207 and 210. These attachments insured to stop any lateral or longitudinal movements of the vehicle, including the frame extension. We believe the new tests demonstrated that the initial test procedure was responsible for the breakage, when none of the tests, even the failed test of the 3-place seats equipped with Type 1 seat belts, resulted in a breakage of the frame extension.

3. For recall 18V-101, can you explain the remedy and how it was verified that this remedy is sufficient to correct the issue?

Concurrently with the analysis of the test results for the 3-place seats equipped with Type 1 seatbelts, possible production solutions and field remedies were studied. It was determined that the compliant installation method used for 3-place seats equipped with Type 2 seatbelts shall be applied to all seatbelt-equipped 3-place seats. This was put in place in February 2018.

As for the remedy for the recalled vehicles, as detailed in the attached repair instructions, the chosen solution consists in adding a reinforcement plate under the floor and replacing the plate fixing the seat to the wall. Also, two attachment points (bolts) are added to fix the front leg to the floor.

The remedy passed the FMVSS 207/210 test conducted by PMG Technologies.

We hope these answers adequately meet your expectations and that they help you reach a positive decision in the case before you.

Yours sincerely,

A handwritten signature in black ink that reads "André Léger". The signature is written in a cursive style with a large initial 'A' and a stylized 'L'.

André Léger, P.Eng.

Director of Engineering, Micro Bird

Enclosed: Repair instructions provided to dealers and final owners of recall vehicles in campaign 18V101

Micro Bird Inc

**RECALL
CAMPAIGN**

TITLE:	Seat support reinforcement
TO:	Dealer/Owner
PRODUIT:	Model Ford Transit with QS11 seat 39" with lap belts
KIT #:	KS-1801, KS-1803, KS-1804, KS-1805
FROM:	Standards and Regulations

PLANNING

Description

This document describes the procedure to reinforce seat support.

KS-1801 applies to vehicle with one (1) 39" seat with lap belts.

KS-1803 applies to vehicle with three (3) 39" seat with lap belts.

KS-1804 applies to vehicle with four (4) 39" seat with lap belts.

KS-1805 applies to vehicle with five (5) 39" seat with lap belts.

The following images show the modification applied to each 39" seats with lap belts.

NOTE: Some steps require two mechanics. Look for the icon .

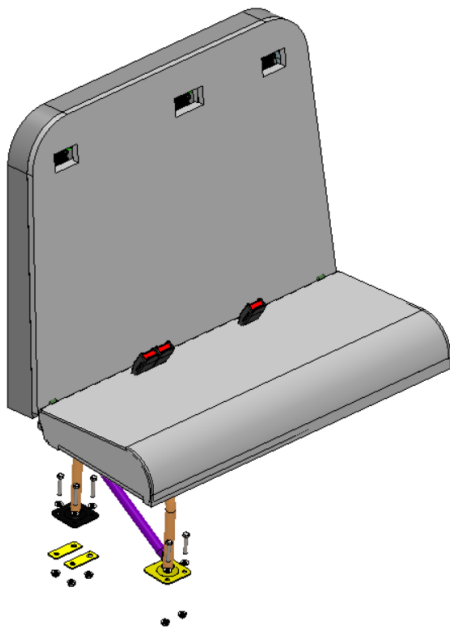


Figure 1: Actual seat setup

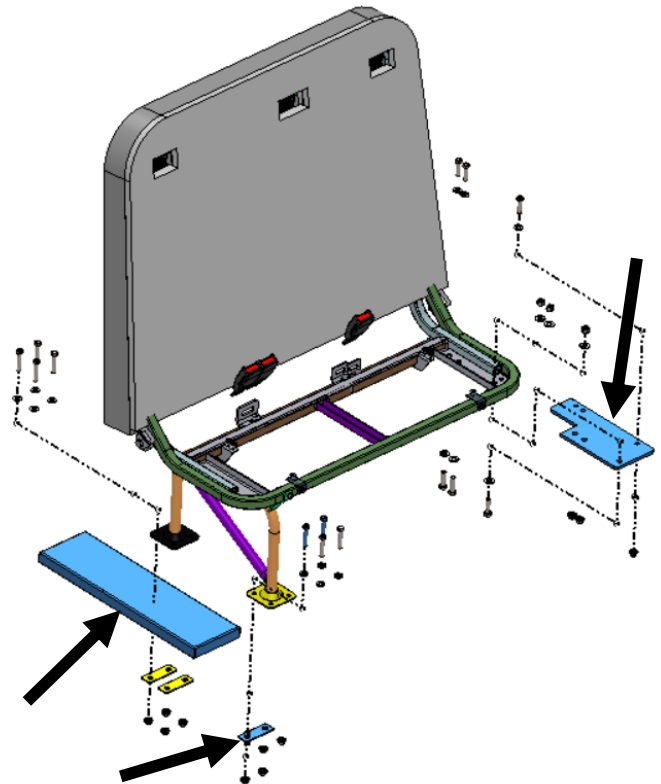


Figure 2: Reinforced seat setup (pointed components are added or changed)

Reason for amendment:

Addition of reinforcement is required to meet the C/FMVSS 207/210 requirements on 39" seats with lap belts.

Compliance

Please repair your vehicle and return the reply sheet for reimbursement.

It is recommended to proceed within forty-five days of the reception of this notification due to the risk incurred.

It is necessary to read all instructions before beginning the repairs.

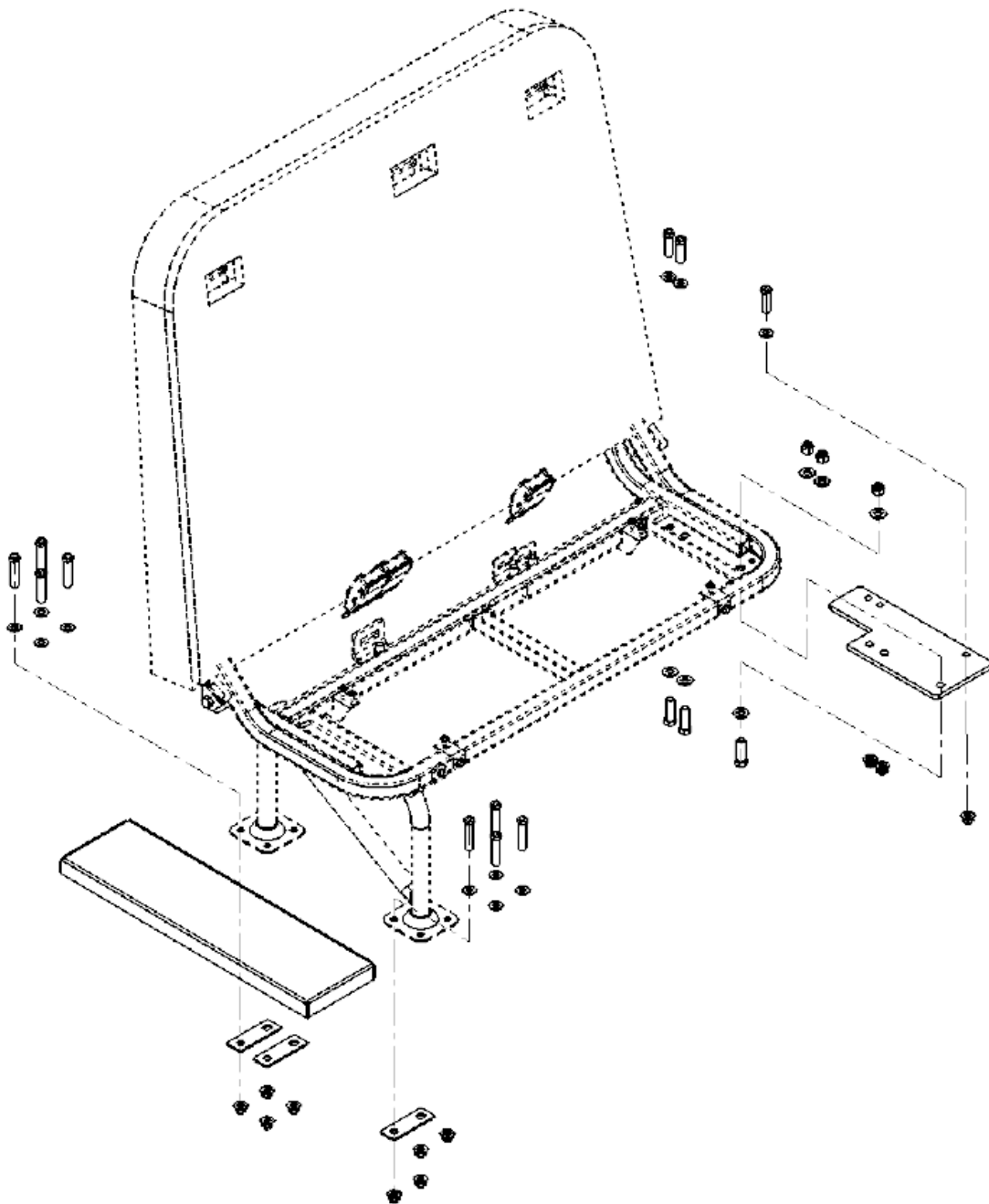


Figure 3 - Exploded view

Material Availability

The following parts are required:

#PIÈCE / PART#	KS-1801	KS-1803	KS-1804	KS-1805	DESCRIPTION
11D0487-REP	-	1	1	1	SEAT SUPP STIFFNER 720mm
11D0488-REP	1	2	3	4	SEAT SUPP STIFFNER 530mm
11D0489-REP	1	3	4	5	SIDE WALL FIX PLATE
31D0018	3	9	12	15	PLATE FLOOR SEAT CEW
81B07F108	3	9	12	15	HEXAGONAL BOLT 7/16-20 X 1½ GRADE 5
81C06C108	3	9	12	15	HEXAGONAL BOLT 3/8-16 X 1½ GRADE 8
81C06C200	8	24	32	40	HEXAGONAL BOLT 3/8-16 X 2 - GRADE 8
81C06C308	-	2	4	4	HEXAGONAL BOLT 3/8-16 X 3 ½ GRADE 8
82R06C	11	33	44	55	FLANGE LOCKNUT 3/8-16 GRADE 8
82E07F	3	9	12	15	FLANGE LOCKNUT 7/16-20 Gr.G PL. ZC
83A07	6	18	24	30	FLAT WASHER 7/16 GRADE 5 ZC PL
83J06	11	33	44	55	FLAT WASHER 3/8 GRADE 8
11D0497-REP	1	1	1	1	SEAT LEG DRILLING JIG
KS-1801-M	1	-	-	-	INSTRUCTION MANUAL
KS-1803-M	-	1	-	-	INSTRUCTION MANUAL
KS-1804-M	-	-	1	-	INSTRUCTION MANUAL
KS-1805-M	-	-	-	1	INSTRUCTION MANUAL

It is strongly recommended to proceed to these modifications in a working station equipped with a lift.

The following tools and material are required:

Tools and material
Jack (high position transmission jack recommended)
Lamp
Punch
Hand drill
Drill bit 3/8", 3½" long
Drill bit 3/8", 6 inches long
Locking pliers
Cutting pliers
9/16" wrench
5/8" wrench
9/16" drive socket
5/8" drive socket
13mm drive socket
Rubberized Gravlguard Paintable (Proform 532 recommended)

Total time allowed for the repairs:

KS-1801: 2½h
KS-1803: 5½h
KS-1804: 7h
KS-1805: 8½h

PROCEDURE

This procedure is to modify all the 39" seats equipped with lap belts, hereafter called the *concerned seats*. Other seats should not be modified. For details of the assembly (components and position), please refer to the image in the Parts and Material section.

Step 1: Clearing the space under the seat leg(s)

Time allowed: 20 min

To gain access to the concerned seat anchorage points, you may have to move some items under the vehicle.

First, use a jack to lower the gas tank. To do so, remove the 3 metal straps holding it with the 13mm drive socket. Carefully lower the tank, being careful that the hoses are not damaged or disconnected.

Carefully move aside any items, such as AC unit hoses, that may be in the way. If required, use a cutting plier to remove clips or partially cut insulating sleeves.

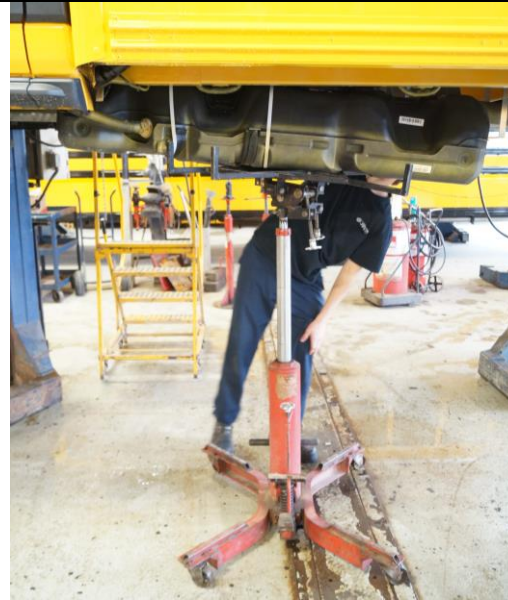


Figure 4 - Fuel tank descent



Figure 5 - Exemple of items to move under the vehicle

Step 2: Drilling additional holes in seat leg and in floor

Time allowed: 10 min / seat

Identify all the 39" seats equipped with lap belts installed in the vehicle (concerned seats).

For each concerned seat, use the jig (item #11D04970-REP) to mark the position of the holes to drill. To do so, align the three straight edge of the jig with the side of the leg plate, as shown on Figure 6.

Make sure work is done only on 39" seats with lap belts.

With the jig in position, use the punch to mark the position of the holes on the leg.

Remove the jig and drill two 3/8" holes in the leg plate and in the floor using the 3 1/2" long drill bit. Use a 6" long drill bit only if the hole is align with a floor cross member. If using a 6" long drill bit, be extremely careful to avoid damage to any item under the vehicle (especially the gas tank).

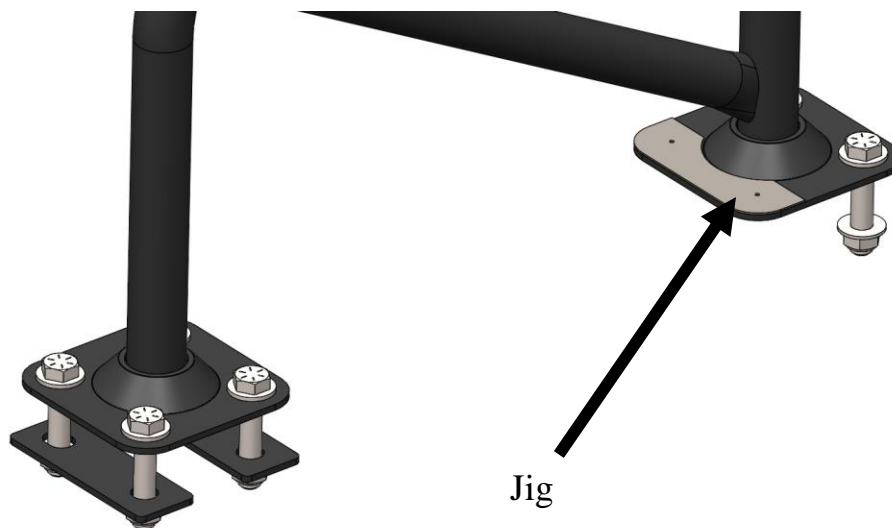


Figure 6 – Drilling jig positioning

Step 3: Preparing the seat support for the addition of the reinforcement

Time allowed: 15 min / concerned seat

Use water and a brush to thoroughly clean away the dirt from the seat support of the concerned seats.

Then remove the rivets ends present into the seat supports with a hammer and a chisel or a cutting wheel.



Figure 7 - Cutting rivet with chisel



Figure 8 - Cutting rivet with cutting wheel

Step 4: Preparing the seat support for the addition of the reinforcement

Time allowed: 5 min / seat

For each concerned seat, mark the center of the bolt pattern of the rear seat leg as indicated on Figure 9.

With one person in the bus and the other under, remove the bolts, including nuts and washer plates, attaching the legs of the concerned seats, using the hand drill with the 9/16" drive socket and the 9/16" wrench.

Note: Some bolts are assembled up-side down. Note the position of these bolts to make sure they are reinstalled the same way.



Figure 9 - Marking the center of the seat rear bolt pattern

Step 5: Positioning the reinforcement

Time allowed: 15 min / reinforcement

Insert the appropriate seat reinforcement (#11D0487-REP or #11D0488-REP) in each seat support having a rear leg attachment. Make sure the marked rear leg bolt pattern is as near from the center of the seat reinforcement as possible. Once positioned, fix it with locking pliers.

KS-1803, KS-1804 and KS-1805

IMPORTANT: Make sure that the longer seat reinforcement #11D0487-REP is inserted in the long seat support under the third seat. It can only fit in that position

See figure 11 for the position of 11D0487-REP, identified as ① on the Figure. The floor cross members are shown as black boxes and pointed with black arrows. Reinforcements should be inserted to fit in-between the floor cross members.



Figure 10 - Fixing the seat reinforcement

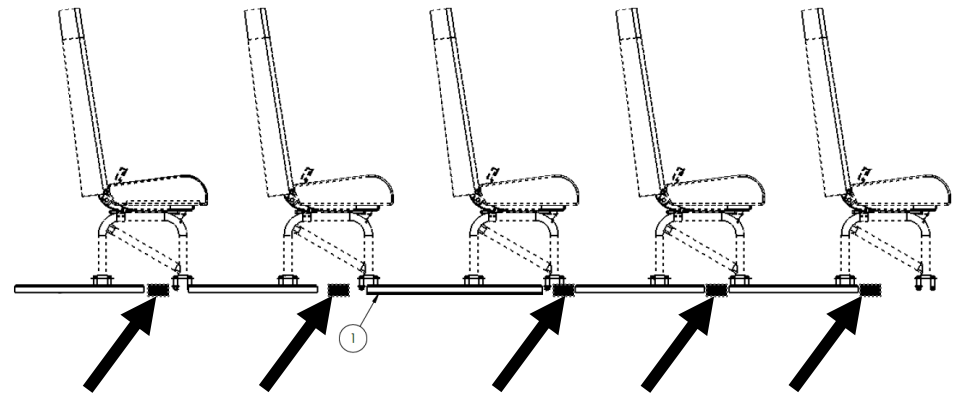


Figure 11 - Seat reinforcement position (long vs short)

Step 6: Drilling the reinforcement

Time allowed: 15 min / seat

From inside the vehicle, drill through the reinforcement using the holes in the seat leg as a template with a hand drill and a 3½" long 3/8" drill bit.

It is recommended to insert a bolt (#81C06C200) and tighten it with the appropriate washer (#83J06), plate (#31D0018) and nut (#82R06C) after each drilled hole.

In case a front leg need to be bolted through a cross member as illustrated in Figure 14, use longer bolts #81C06C308.



Figure 12 - Drilling from inside de vehicle



Figure 13 - Hole from under the vehicle

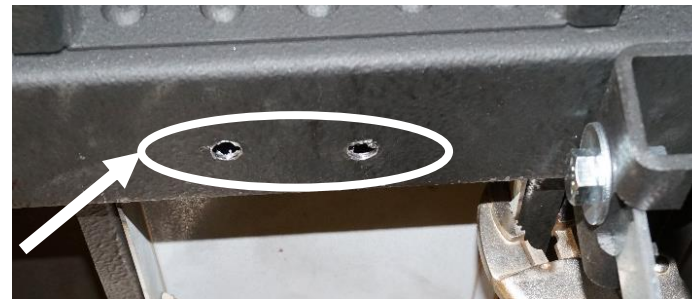


Figure 14 - Holes in floor cross-member

Step 7: Rebolting the seats

Time allowed: 10 min / seat

Bolt the seat to the floor with the new supplied fastener (#81C06C200, #83J06, #31D0018 and #82R06C).

Make sure the new bolts are installed with the same orientation as the removed ones. **Take special care specifically over the gaz tank, where bolts should be upside down.**

Only the bolts attaching the rear leg and the 2 rearmost bolts of the front leg should be bolted through the plate #31D0018.

If the bolt pattern in plate #31D0018 does not allow the correct assembly, it is acceptable to cut it in two halves and install them as shown on Figure 16 (top assembly).

Once the reinforcement is fixed, remove the locking pliers.



Figure 15 - Fixing the seat leg (in the vehicle)



Figure 16 - Fixing the seat leg (under the vehicle)

Step 8: Applying Gravlguard under the vehicle

Time allowed: 10 min

Apply Rubberized Gravlguard Paintable to completely cover the new components under the vehicle.

Reinstall the gas tank (see step 2) being careful not to damage or disconnect the hoses.

Make sure all others moved items in step 1 is reinstalled correctly.

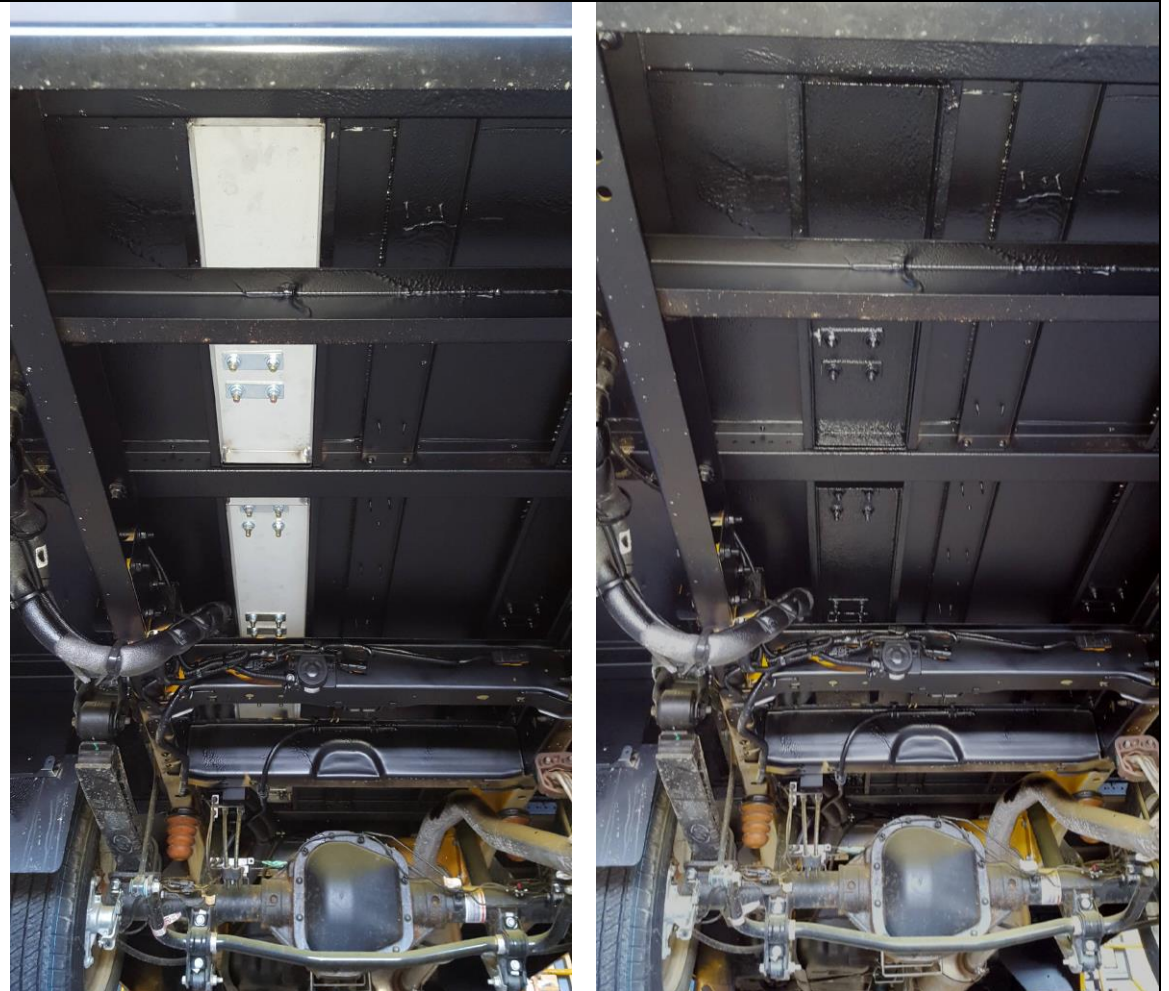


Figure 17 – Gravlguard application (before and after)

Step 9: Replacing the seat side plate

Time allowed: 10 min / seat

For each concerned seat, remove the seat cushion using the latch under it, as pointed on Figure 18.

Remove the plate fixing the seat to the side wall of the bus. To do so, remove the three bolts on the side wall with a 9/16" wrench and the three bolts on the seat with a 5/8" wrench.

Replace the original plate with the Side wall plate #11D0489-REP and attach it to the seat with:

- 3X 7/16 bolts #81B07F108
- 6X 7/16 washers #83A07
- 3X 7/16 flange locknuts #82E07F

and to the side wall with:

- 3X 3/8 bolts #81C06C108
- 3X 3/8 washers #83J06
- 3X 3/8 flange locknuts #82R06C.

Put the seat cushion back.



Figure 18 - Seat cushion latch position

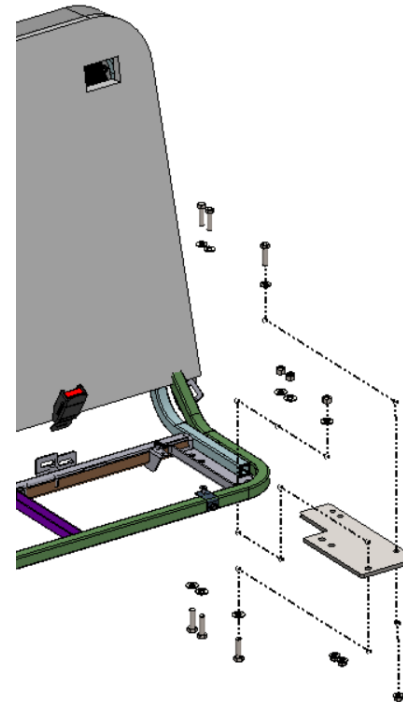


Figure 19 - Fixing plate installation

Step 10: Cleaning the inside of the vehicle

Time allowed: 10 min

Make sure to pick up all tools and used components.

Use a vacuum cleaner or a broom to clean up the inside of the vehicle, making sure there is no cutting chips left (See Figure 20).



Figure 20 - Drilling chip to clean