

## RECALL CAMPAIGN

**TITLE: Push out window repair procedure for  
Thermal T-Slider and panoramic type windows.**

**TO: Micro Bird customers & distributors**

**FROM: Micro Bird Service & Warranty**

**10-038-WIU / 10-038-WIC**

### PLANNING INFORMATION

#### Description

This document contains procedures to reinforce the window's latching mechanism on vehicles equipped with thermal T-slider and panoramic type push-out windows with 2 release handles (one on each side).

#### Compliance

The requested parts to perform this procedure will be shipped from Corp. Micro Bird free of charge for vehicles under warranty and claim must be sent to Corp. Micro Bird within 45 days of the repair date.

#### Manpower

We allow thirty (30) minutes per window to perform the repair.

### MATERIAL INFORMATION

The following tools are required to perform this modification:

- Electric drill
- 1/8" drill bit
- 9/32" drill bit
- Drill stoppers (for 1/8" and 9/32" drill bits)
- # 2 screwdriver (Philips or Robertson (square drive))
- Isopropyl alcohol
- Cleaning rag

Micro Bird by Girardin will supply the following parts for each window repair:

Product number	Description	Qty
	Template stickers (1 x left, 1 x right)	2
43D0111	Do not remove yellow decal	2
84F10200	Countersunk head Philips #2 / Robertson #2 screws #10-12X 2"	10

**Note:** It is assumed that all of the procedures required to embody this modification will be performed according to professionally accepted standards.

It is also recommended to read the entire procedure before beginning repairs. **The left side of the window must be repaired and tested** before proceeding to the modification of the right side.

**1** - Locate the push out windows in the minibus. Those windows have two red handles, one on each side (see figure 1).



Figure 1

**2** - To reach the repair area, the push out window must be opened. To do so, the emergency handles must be raised (see figure 2).

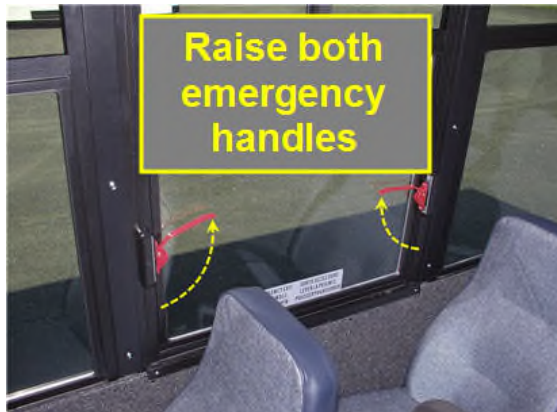


Figure 2

**3** - Once the window is opened, you can see the areas to be reworked (yellow circles on figures). Figure 3a shows the left side while figure 3b shows the right side.

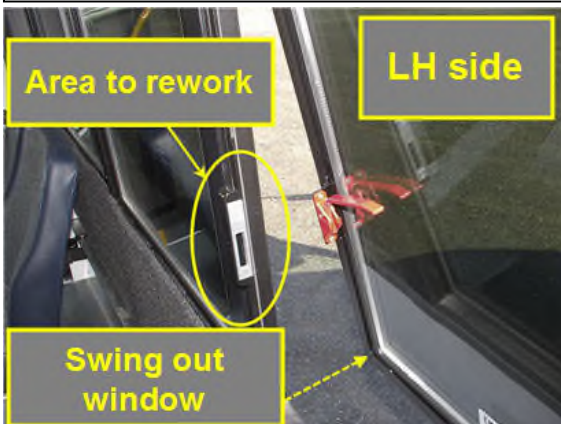


Figure 3a



Figure 3b

**4** - In order to make the rework, the window must remain open. This can be achieved by using a device (such as a piece of wood) between window and frame (simulated by a yellow line on figure 4). Both ends of the device must be covered with a soft tissue to avoid scratching the window black paint (see figure 4).

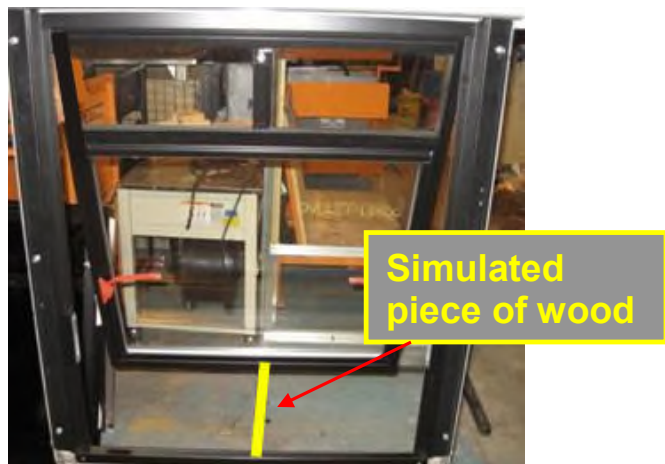


Figure 4

**IMPORTANT NOTE:**

To drill at correct angle, repairs should be done from **inside the bus**.

For the remaining of the procedure, please remember that: the terms **LEFT SIDE** and **RIGHT SIDE** indicate the areas to be repaired when **facing the window** from **inside the bus**.

**5** – Install the left template sticker on the window's vertical left section, just beside the clear zinc plated steel plate. The sticker's bottom bold black line must be aligned with the bottom of the steel plate.

The outside edge of the sticker (dotted line on figure 5) must be aligned with the window frame (see figure 5).

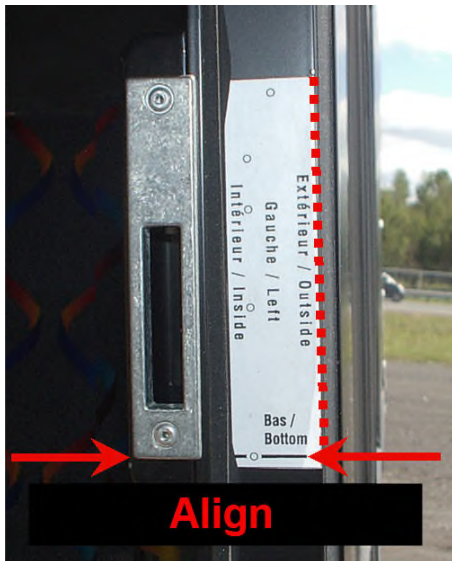


Figure 5

**6** – Using the template sticker as a reference, drill the four lower holes (#1, #2, #3 and #4) with the 1/8 inch drill bit (**DO NOT drill upper #5 hole yet**). The decal's printed small circles are the center marks of those holes (see figure 6).



Figure 6

**NOTE** – The lower four 1/8 inch holes (#1, #2, #3 and #4) must be drilled through the window frame **AND through the bow** of the minibus' structure. Drill up to about 1½ inch below window's aluminum surface.

**NOTE** – Drill perpendicular to the surface in order for the bow holes to be aligned with those on the window frame.

**7** – For now, upper hole (#5) must be drilled (1/8" diameter) **only on the window frame (bow will be drilled later)**. A drill stopper **MUST** be used in order for the drill bit not to go deeper than 3/16 inch below the aluminum surface.

**8**- When the five 1/8" holes are drilled, remove the template sticker (see figure 7).



Figure 7

**\*\*\*\*\* VERY IMPORTANT \*\*\*\*\***

In step 9, **ONLY** the holes on the window frame need to be enlarged.

**DO NOT ENLARGE THE BOW HOLES:** those bow holes must remain at original 1/8" diameter.

**9** – Using a 9/32" drill bit and a drill stopper adjusted at a 3/16 inch depth, enlarge the five holes in the window frame (see figure 8).



Figure 8

**UPPER HOLE #5**

**10** – By looking through upper hole (#5), locate the switch's ground wire (it should be close to the yellow line on figure 9). The use of a flashlight is required.

Once you found the ground wire, move it sideways (with something having no sharp edge) toward the steel plate, to position it as far away as possible from the hole.

Then, using upper hole #5 as a guide, drill the corresponding 1/8" in the bow after double checking that the wire ground is not in the way. This 1/8" bow hole must be as centered as possible with #5 9/32" window frame hole (see figure 9).

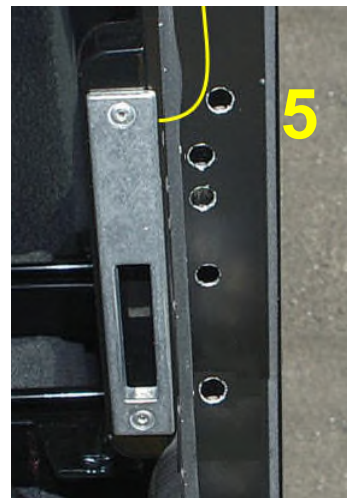


Figure 9

**11** – Now that all 1/8" and 9/32" holes are drilled, install supplied #10 x 2" screws in each hole. Screws will go freely in window frame but will bite in bow's 1/8" holes.

**NOTE:** Again, double check to be sure the ground wire is not in the way of the screw inserted in upper #5 hole.

**NOTE** – An electric drill (at slow speed) can be used but **only to start the screw insertion** in bow hole.

Because the window frame is quite easy to distort, **a hand screwdriver must be used for the remaining of the screw insertion process.** Once the screw's first threads made their way into the bow, remaining of the screwing process is quite effortless.

## 12 – **ATTENTION!!**

Begin by lightly seating each screw on window frame. Once done, turn them again, by a maximum of 1/8<sup>th</sup> of a turn increment, to eliminate the risk of any induced unseating.

Each screw needs to exert a small pressure on the frame without inducing excessive distortion; too much distortion can move the housing where the emergency handle locks and can affect the intended operation of the push out handle.

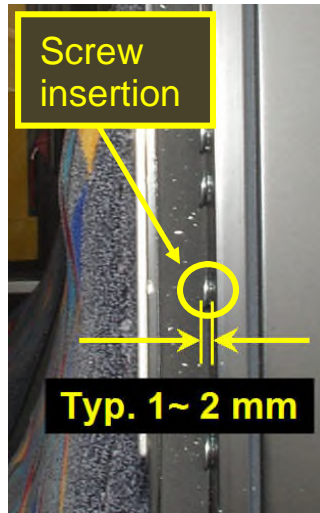


Figure 10



Figure 11

As shown on figure 10, typical screw "height" after seating is between 1 and 2 mm (~1/16") from window surface.

End result is shown on figure 11.

**13** – When all five screws are correctly seated, it's time to check if there is any interference with window swing out movement. If a screw head touches the window while the latter being moved, the screw must be turned slightly until the window can close without any rubbing. **This operation can unseat the other screws** so they all must be checked. When the window moves freely and all screws are slightly tight, you can move to next step.

**14** – Close the push out window and lock down both emergency handles. **Then, turn on the ignition** and test the push out window operation: when raising the handle, you should hear the buzzer. Repeat this step each time one handle is reworked to avoid guessing which window handle might be defective after repairs have been completed.

NOTE: If the buzzer is "on" while the reworked emergency handle is still in the closed position, the ground wire possibly has been damaged during the repair. Remove the screw off #5 upper hole to confirm if this is the cause. If the wire ground is damaged, please contact Micro Bird to receive a rework procedure about replacing the emergency switch and its ground wire.

## **RIGHT SIDE**

**15** – The rework procedure illustrated on previous pages is for the left side of a window. The same procedure must be repeated on the right side. Everything is the same except for being a mirror image. The template sticker for the right side is also supplied and must be used as a reference to rework the right side (see figure 12).

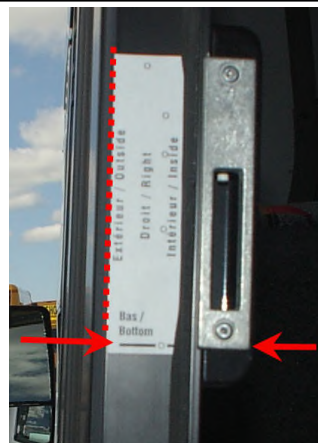


Figure 12 – Right side template installed before drilling

**16** – After both sides of a window have been reworked, they will respectively look like what is shown on figure 13.



Figure 13

**17** - Clean off any aluminum drilling residue on the window. Then, wipe the window frame with a solvent impregnated cleaning rag to remove any grease residue for optimal adhesion of decals.

**18** – Final step is to install a "Do not remove this decal" warning over the screws.

Center the decal over the five screws. Begin the installation at the bottom, applying a small pressure with your finger against the window frame and screw heads (location shown by red circles).

While going up, try to make the decal adhere to the top and bottom contour of the screw heads. After the whole decal has been put in place, finish its installation by applying a circular pressure around each screw. That way, adhesion should be optimum on aluminum extrusion and on screws.

Figure 14 shows the final installation.



Figure 14