



## INSTRUCTION TO SERVICE

<b>ITS: 5173</b>	
<b>SECTION:</b>	219 Engine and Transmission
<b>WRITTEN BY:</b>	Shaun Cardinal
<b>SUBJECT:</b>	UCAP Cabinet Cover (Legacy)

# ITS5173

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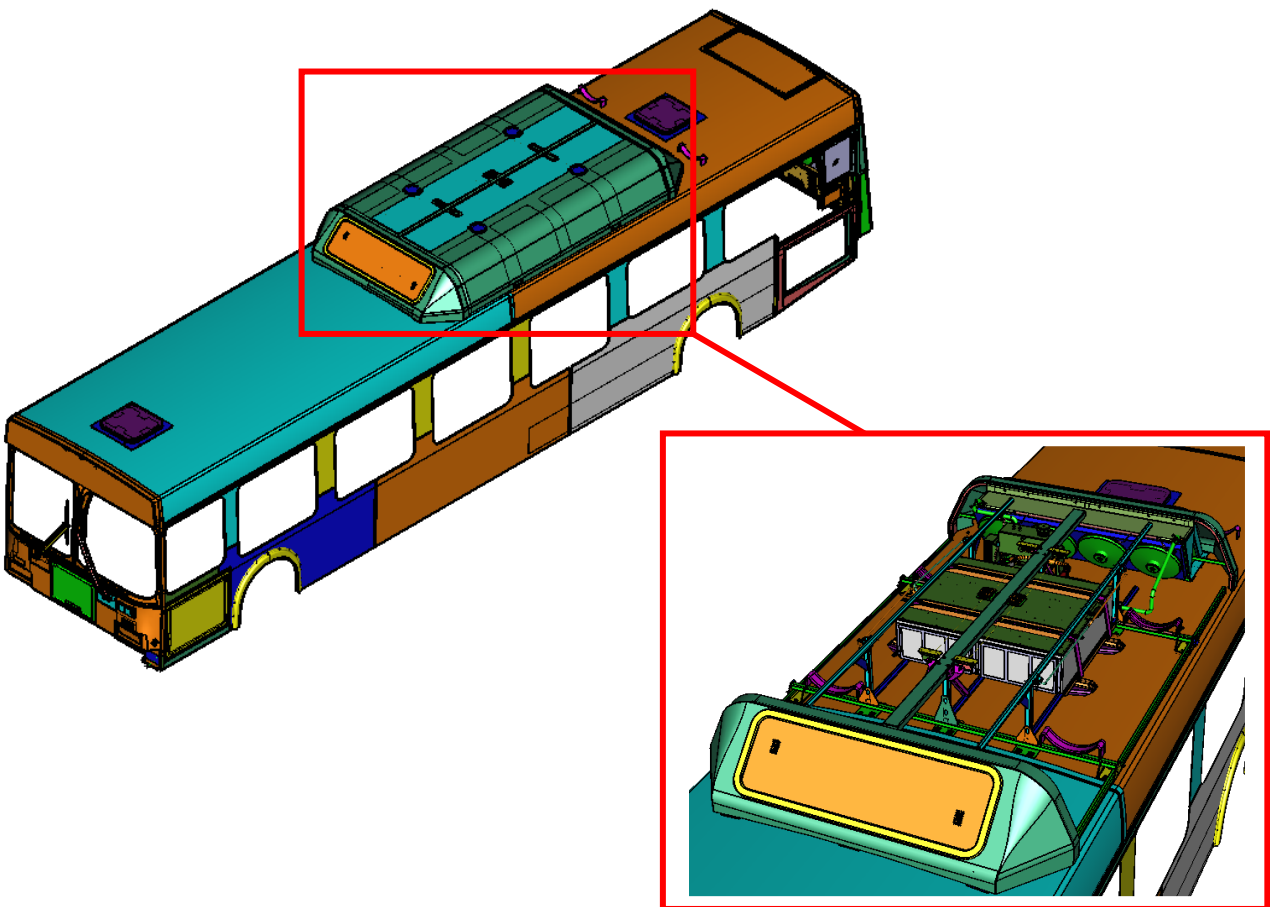
**PROCEDURE:**

1. Turn the main battery disconnect switch to the “OFF” position.

**⚠ WARNING:** ALWAYS discharge the Ultra Capacitors (UCAP) before performing high voltage system maintenance on this vehicle. Refer to Section 5 of the Service Manual under 2.17 *Discharging the Ultra Capacitors* for the discharge procedure.

**2. COVER INSTALLATION**

- a. Open the clam shell doors on top of the bus to access the UCAP assembly. See Fig 1



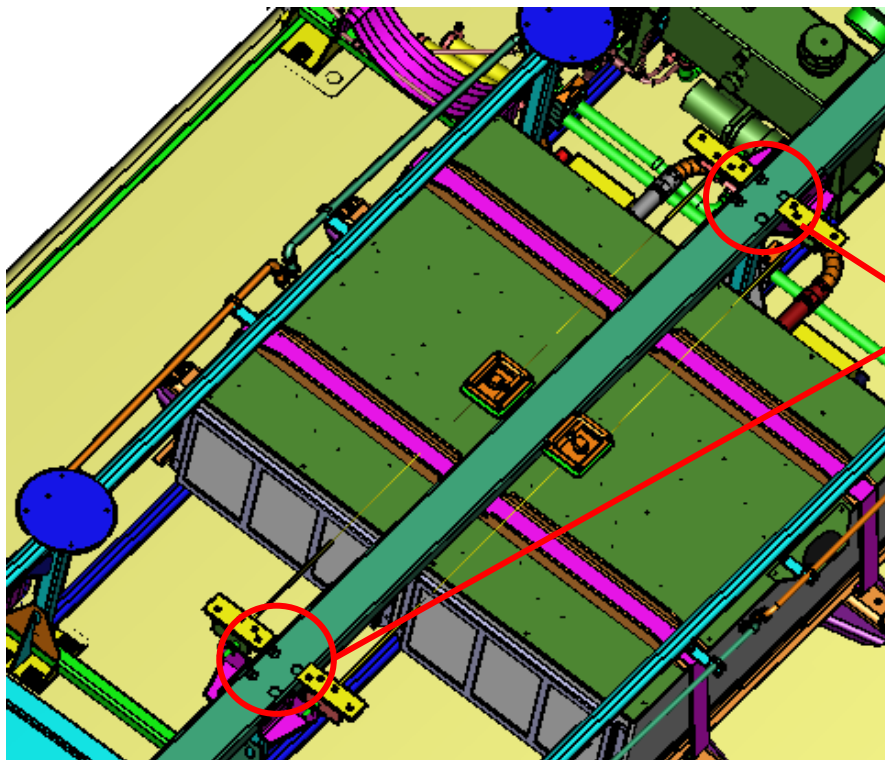
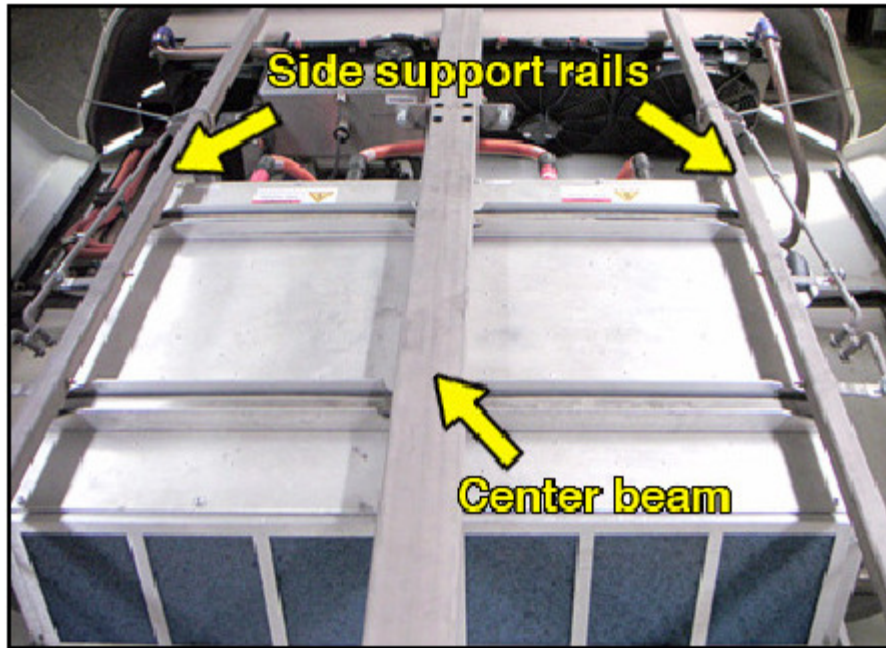
*Fig 1 – Legacy UCAP Location (doors removed for clarity)*



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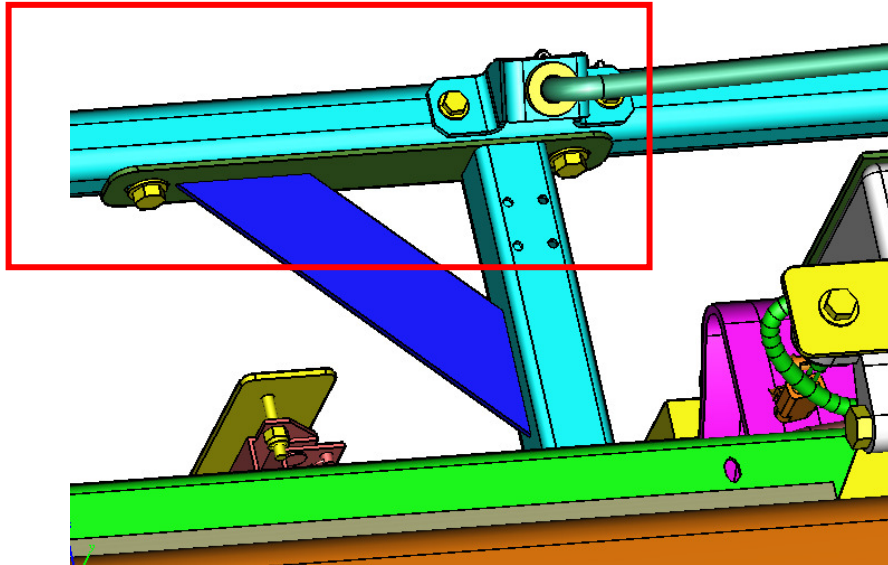
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- b. Remove the four front and rear hardware securing the center beam to the roof top frame. Trim foam strips on beam to access the hardware if required (Fig 2)



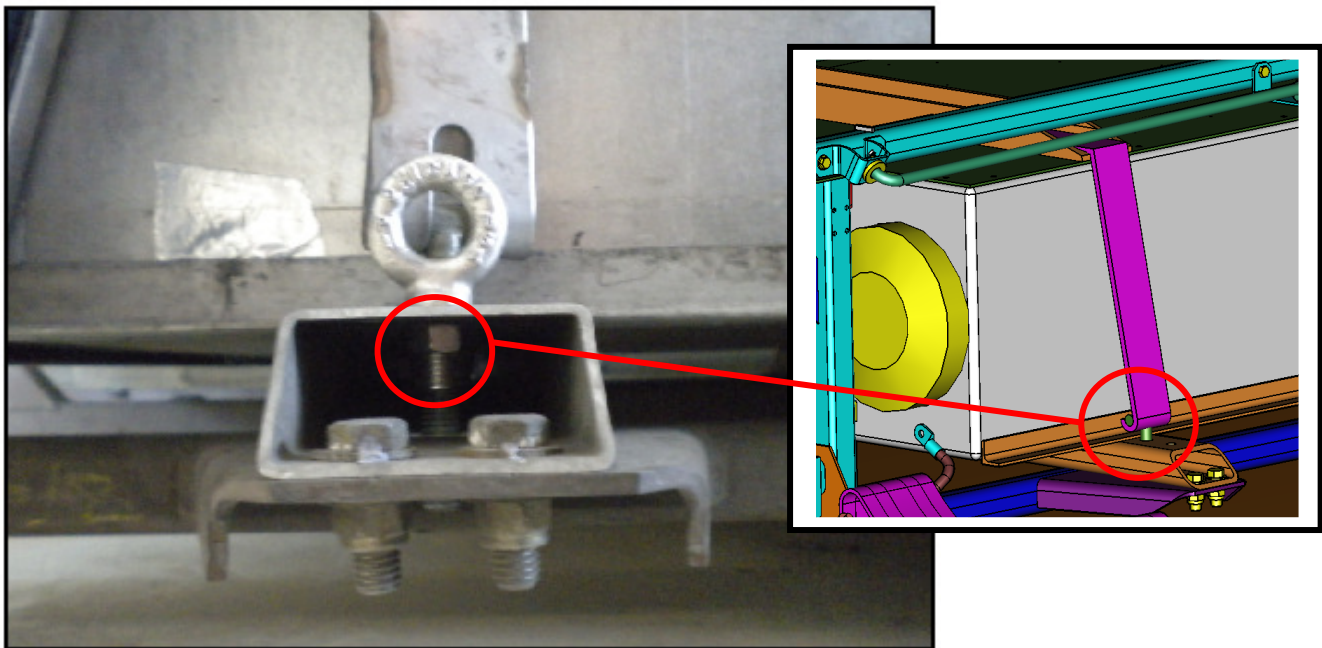
**Fig 2 – Legacy UCAP Beams**

- c. Remove the hardware securing side support rails (front and rear per side) see Fig 3. Before removal of curb side rail, remove coolant line clamps.



**Fig 2 – Legacy UCAP Side Beams**

- d. Remove the nut holding the strap to the base (one side only) of the bus. Remove strap from base and move out of the way to gain access to the UCAP lid. See Fig 3



**Fig 3 – Legacy UCAP Strapping**

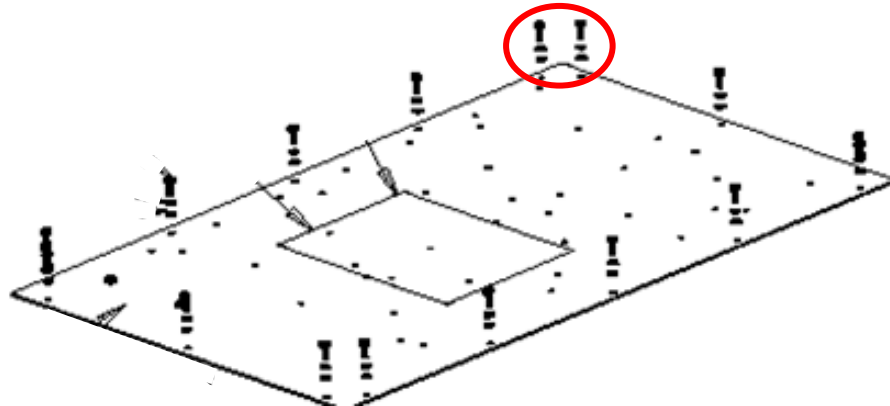


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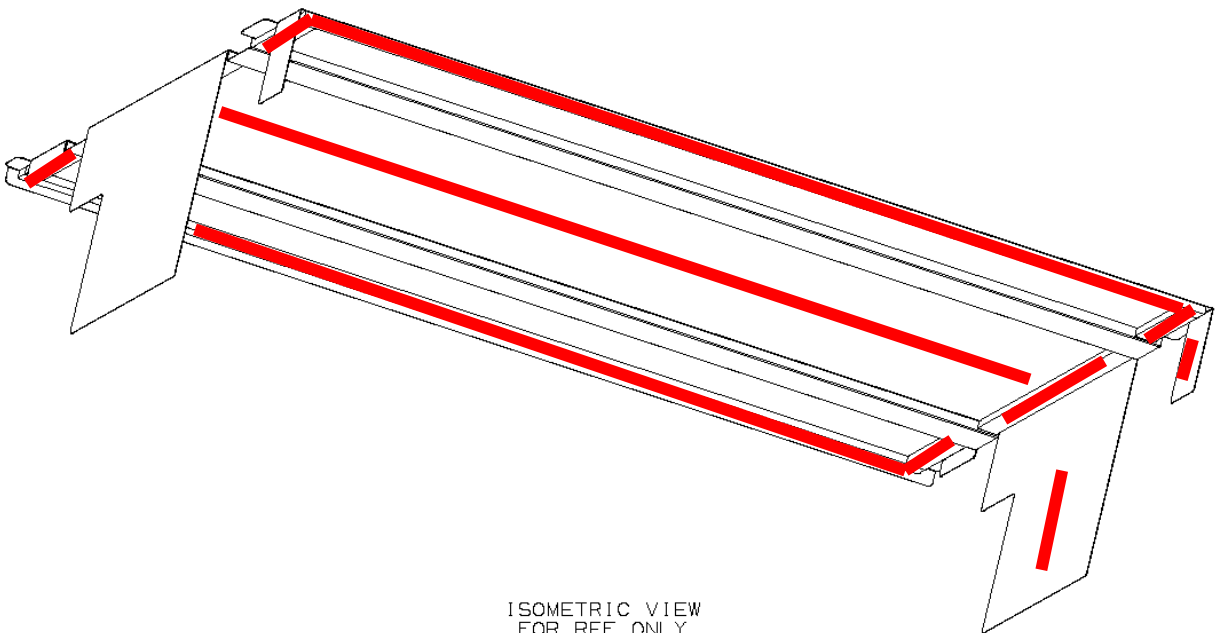
- e. Remove all existing perimeter hardware (16x screws, washers, and lock washers per UCAP) securing the UCAP lid to UCAP box (Fig 4).

**⚠ NOTE:** Do not remove lid as it will break the weather tight seal.

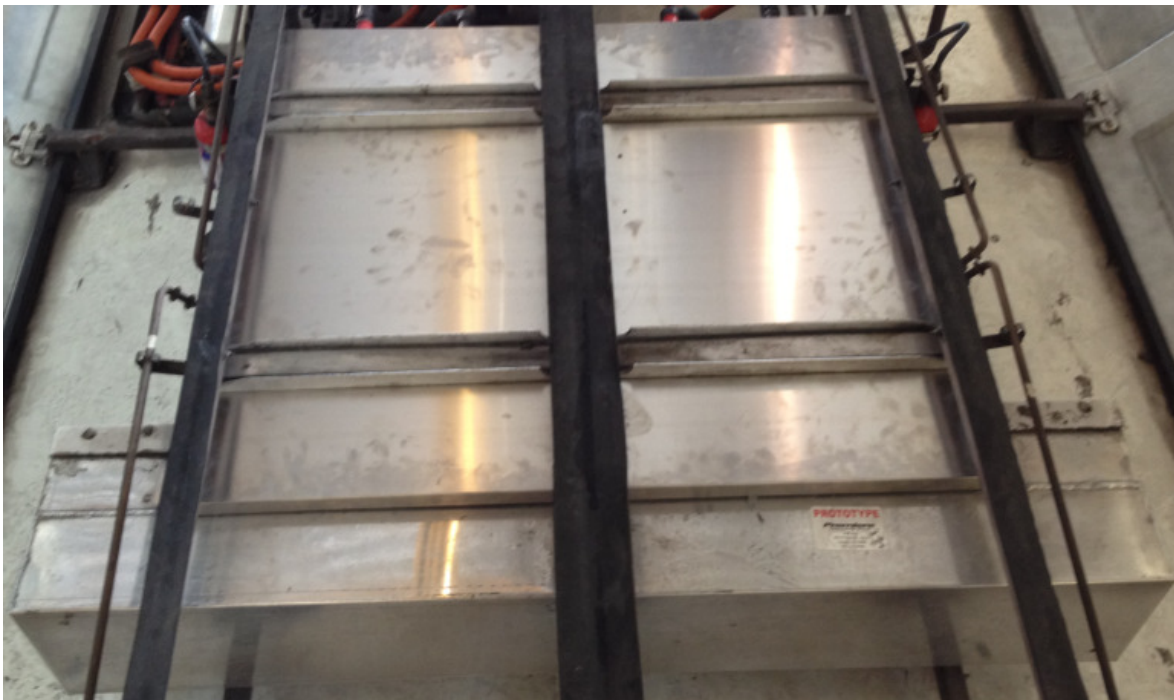
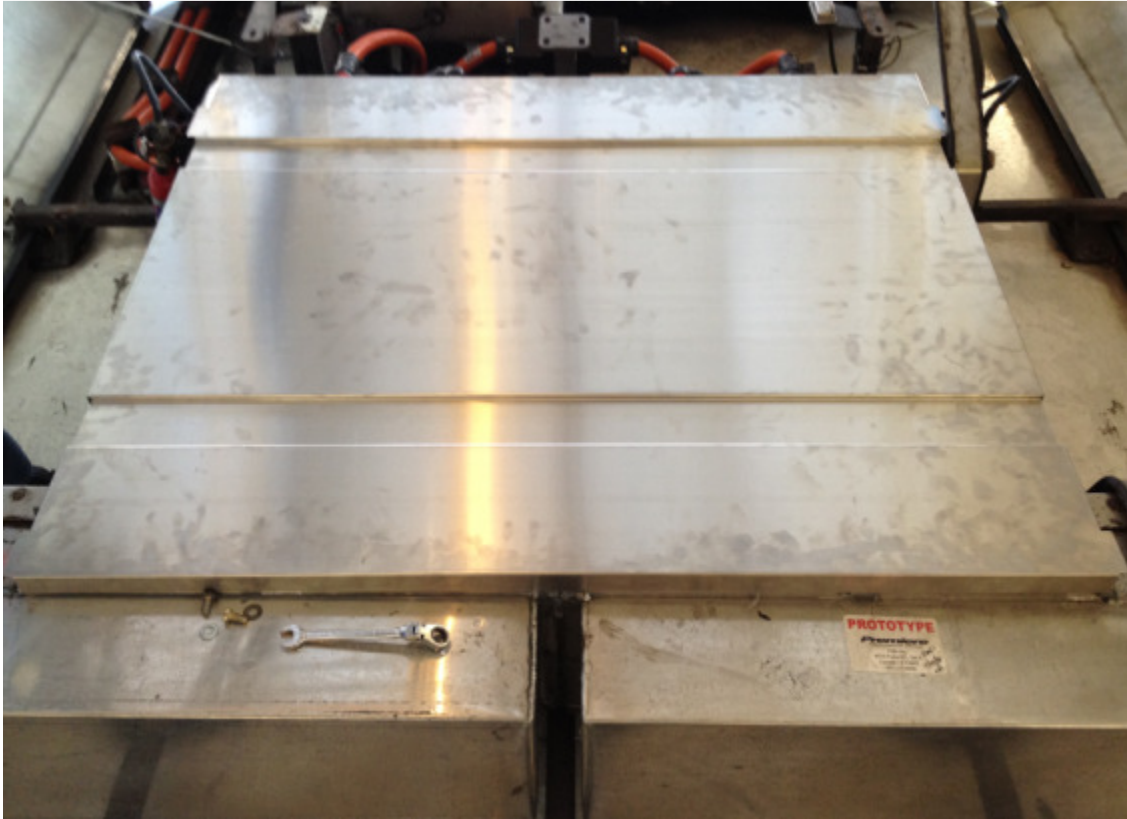


**Fig 4 – UCAP Lid Hardware**

- f. Replace hardware with new low profile hardware (**NFI PN 6409430**). Do not re-use the washers and lock washers.
- g. Install new cover assembly (**NFI PN 490384** and **NFI PN 5957793**) to the UCAP assemblies per Fig 5 and 6. Reverse steps b-d for securing UCAP.



**Fig 5 –Rubatex Seal (Both Sides)**



**Fig 6 – Installed Cover**

<b>LABOUR ESTIMATE</b>				
	Operation	Men	Hours	Labor Time M X HR
1	Install Legacy UCAP Cover	2	2.0	4.0

<b>PARTS REQUIRED</b>					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	490384	COVER-UCAP LEGACY	1	EA	
2	6409430	SCREW-FH 1/4-20 X 3/4LG LOW PROFILE	36	EA	
3	5957793	SEAL-RUBATX 1.0 X .06 TK	45	FT	