INSTRUCTION TO SERVICE

ITS: 6540	
SECTION:	Body
WRITTEN BY:	Kevin Robinson
SUBJECT:	MiDi - Add bulb seal to seal off return air duct, rewire TK to add run signal.

ITS6540

PROCEDURE:

1. Turn the main battery disconnect switch to the “OFF” position.
2. On the streetside of the bus, remove the stanchion that ties the aisle stanchion to the sidewall, behind the electrical locker. Keep all hardware for re-use. Refer to Figure 2.
3. Open the forward most streetside and curbside cove panels to access the return air ducting above. Keep all hardware for re-use. Refer to Figure 1.

Figure 1: Curbside cove panel shown opened

Figure 2: Stanchion to be removed

4. Remove the existing foam tape from the inside face of the cove panels. See Figure 3.

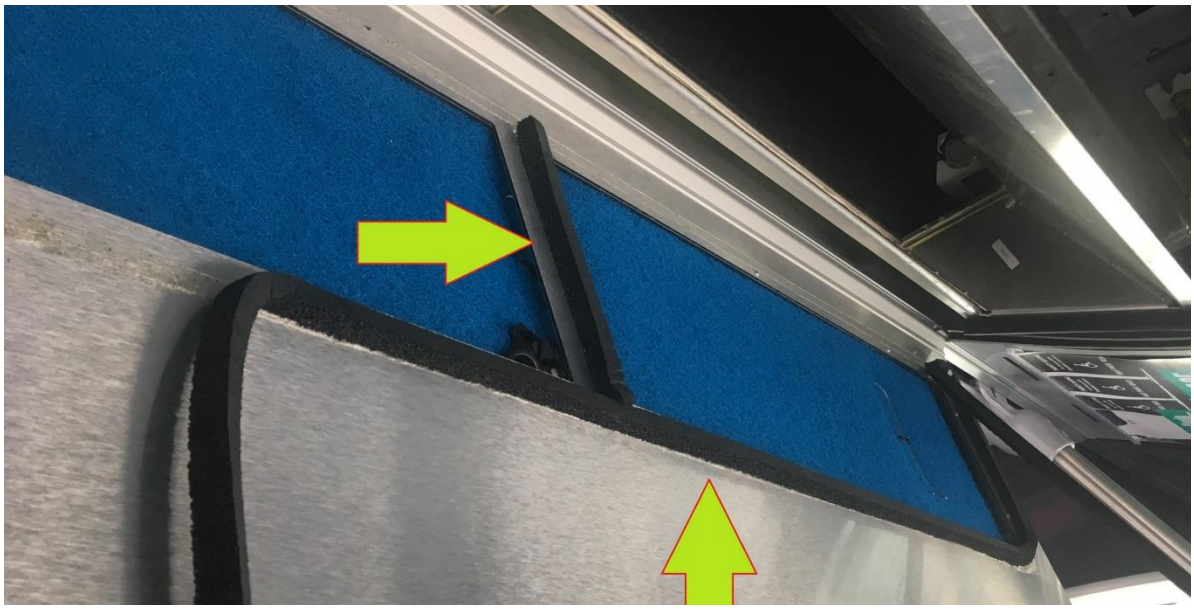

Figure 3: Foam to be removed from cove panels

5. Install the supplied bulb seal around the entire perimeter of the return air ducts in the ceiling. Trim as required. Refer to Figure 4.

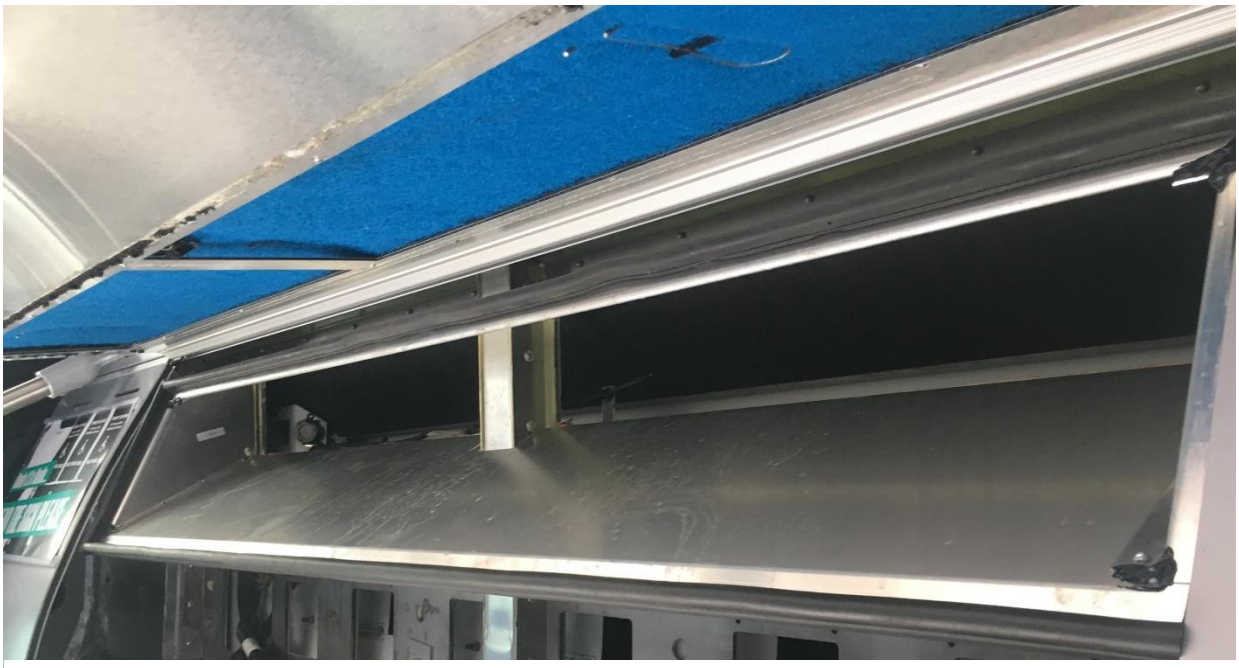

Figure 4: Bulb seal on edge of return air ducts

6. Fill the corners, where a gap exists, with sealant to further seal the return air ducts. See Figure 5 below.

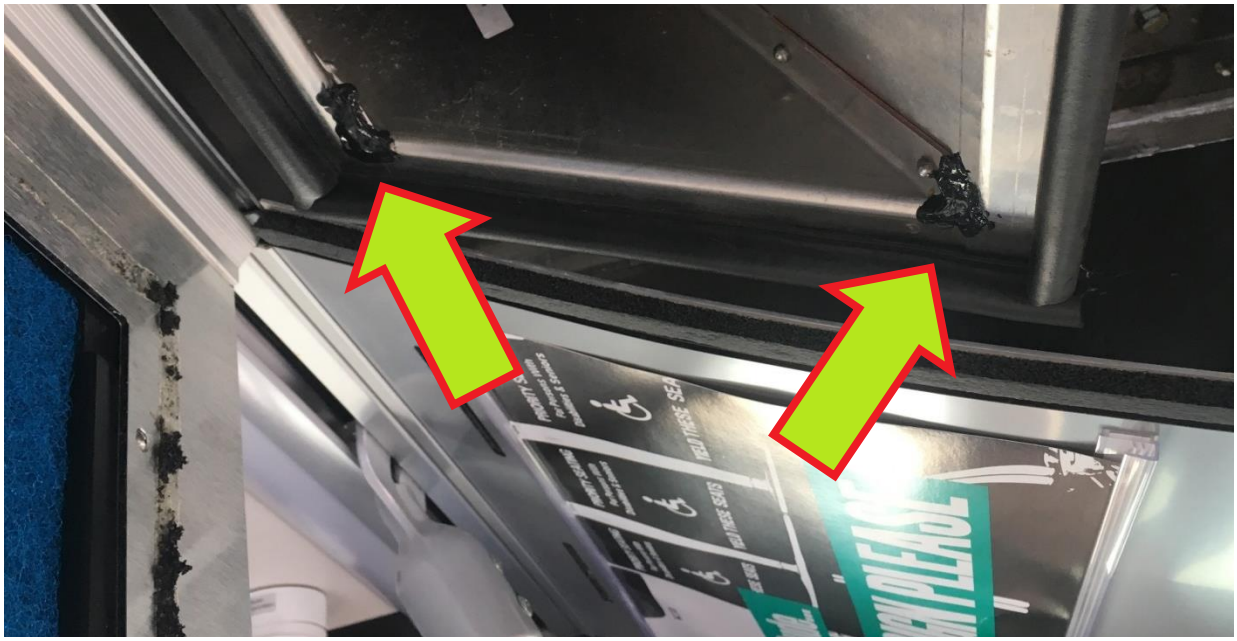

Figure 5: Seal duct corners with sealant

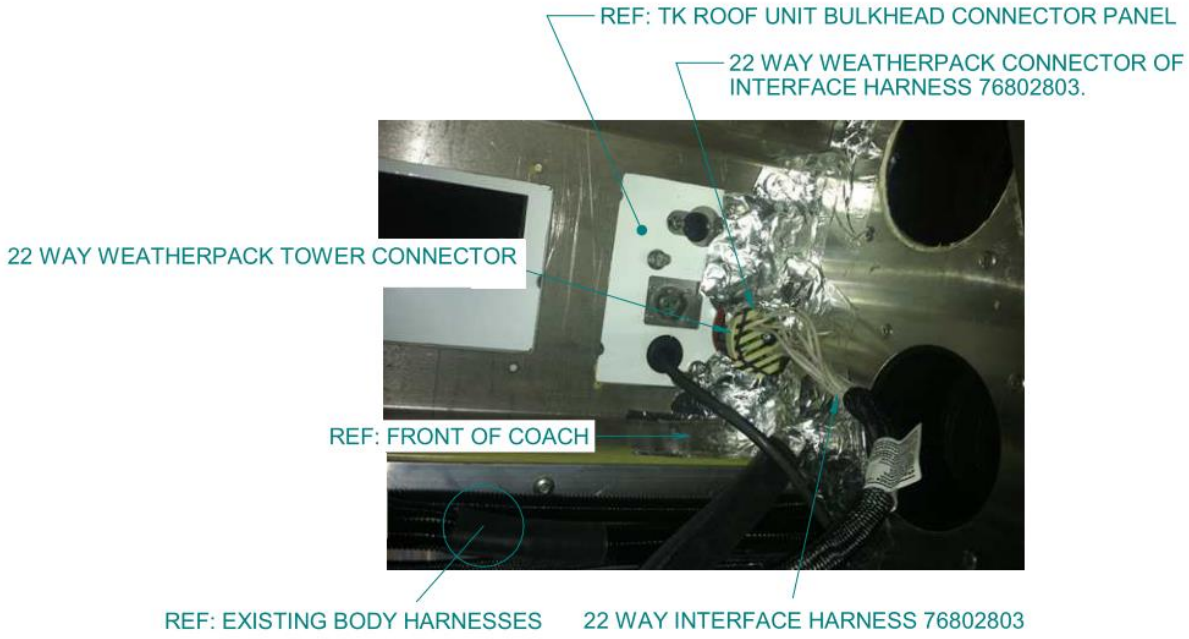

Figure 1: TK Roof unit bulkhead connector

7. Assemble the jumper harness.
   i. Install loom (P/N: 160060) over the provided wire labelled “FILL”
   ii. Strip approximately 0.25” from both ends of the wire labelled “FILL”.
   iii. Install wire seals (P/N: 102877) onto both ends of the wire.
   iv. Terminate both ends with a socket (P/N: 102879).
8. Locate the HVAC 22 Way Interface harness (P/N: 76802803) at the bulkhead connector, refer to Figure 1. It can be accessed by removing the street side return air filter.
   i. Insert one socket end of the jumper harness into cavity B.
9. Route the remaining end of the jumper harness towards the FEDC. It will be routed along the existing HVAC 22 Way Interface harness (P/N: 76802803). Refer to Figure 2 for the routing.
   i. Use tyraps (P/N: 5955945) to secure the jumper harness to the HVAC harness every foot. Open the SDS enclosure with a square key to gain better access to the harness routing.
   ii. Route the harness up to the 6 way Weatherpack tower connector which is part of the HVAC 22 Way Interface harness (P/N: 76802803). Gain access to the connector by opening the FEDC panel with a square key.
   iii. Insert the remaining socket end of the jumper harness into cavity F of the 6 way Weatherpack tower.

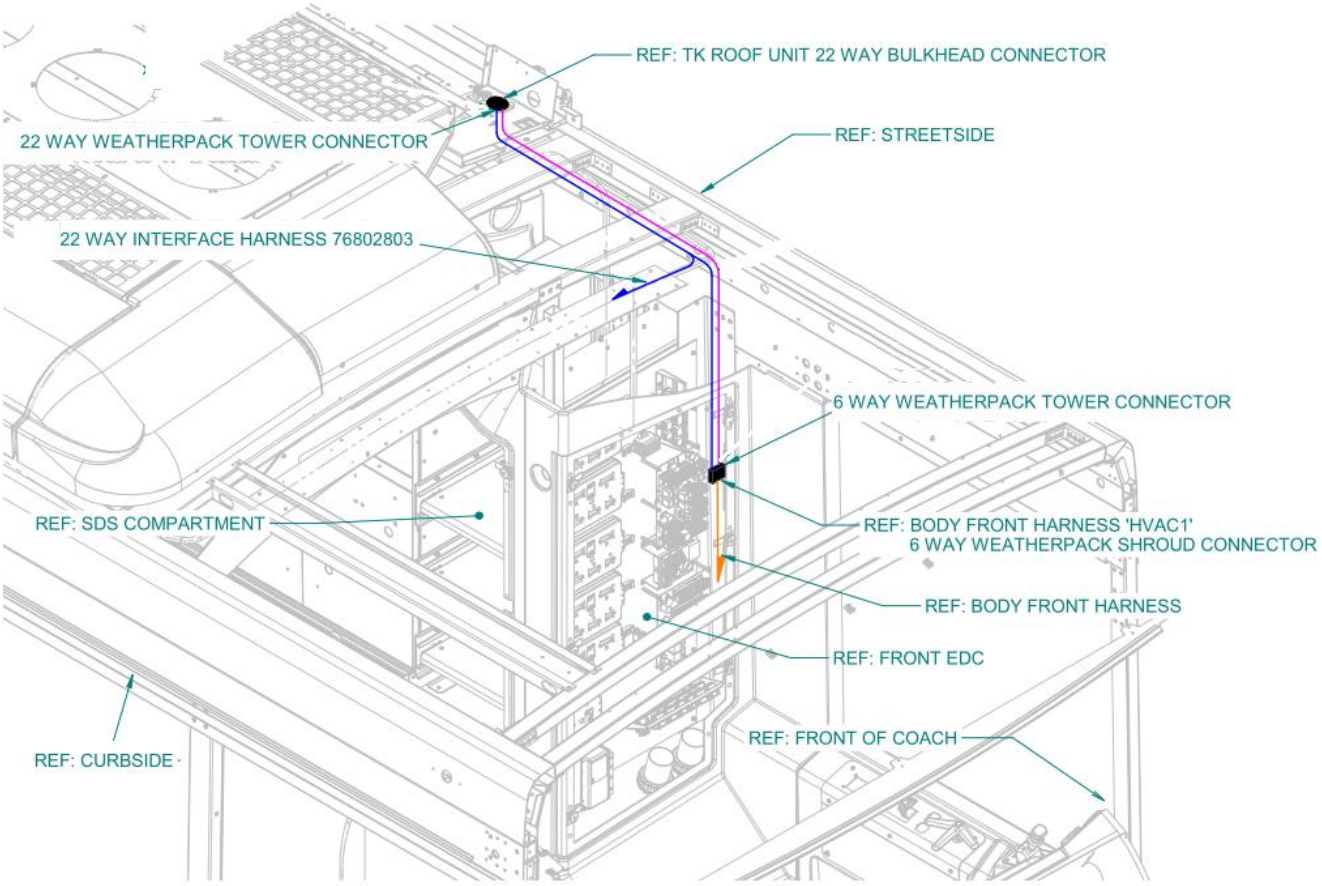

Figure 2: HVAC 22 Way Interface harness routing

10. Locate connector A at MUX2.1. Refer to Figure 5.
    i. Disconnect the connector. Remove the blue wire 207 from cavity 19. Reconnect connector A.
    ii. Route this wire to HVAC1 (6 way Weatherpack shroud for the Body Front harness). This wire should be routed along the existing harnesses in the FEDC. Refer to Figure 2 for location of the connector.
    iii. Cut off the existing terminal from this wire and add wire seal (P/N: 108872.
    iv. Terminate the wire with a pin terminal (P/N: 108871).
    v. Remove the plug in cavity F of the HVAC1 connector and insert the newly terminated wire.
11. Re-program the bus with the latest programs, available from your New Flyer RPSM.
12. Connect to the TK unit with CANDiag software and change the following parameters. Contact a TK technician to complete this step where you do not have the software.
    a. Choose Read Data. See Figure 3
    b. Uncheck “Auto On” box. See Figure 4
    c. Check “Alt Aux Outputs” box. See Figure 4
    d. Check “Mode Switch” box. See Figure 4
    e. Click “Send Data” to download to the unit. See Figure 4

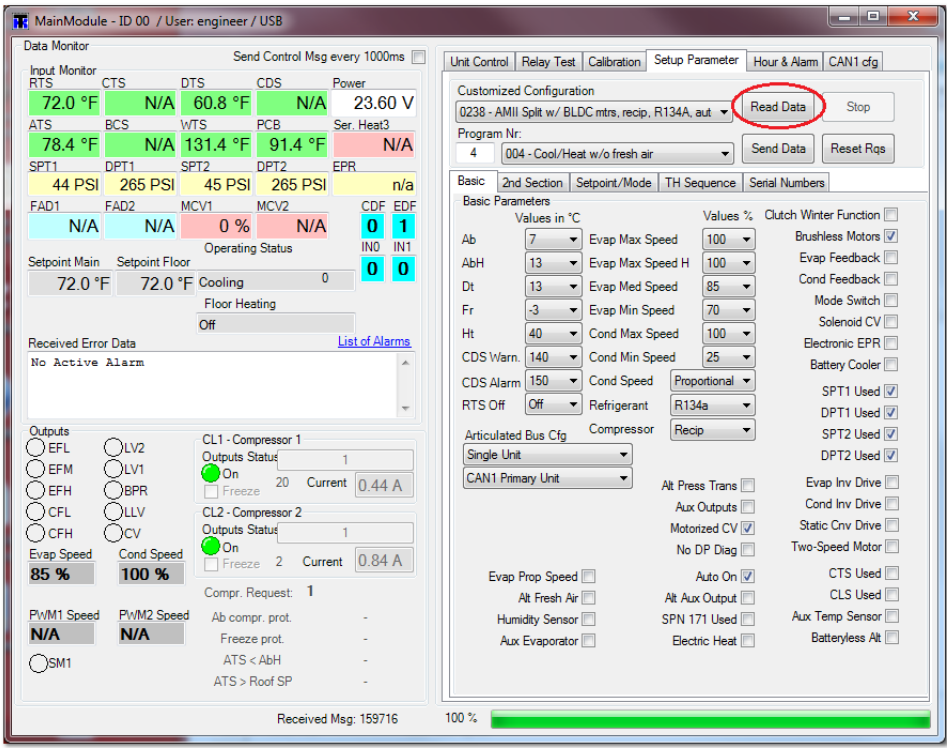

Figure 3: CANDiag – Read Data

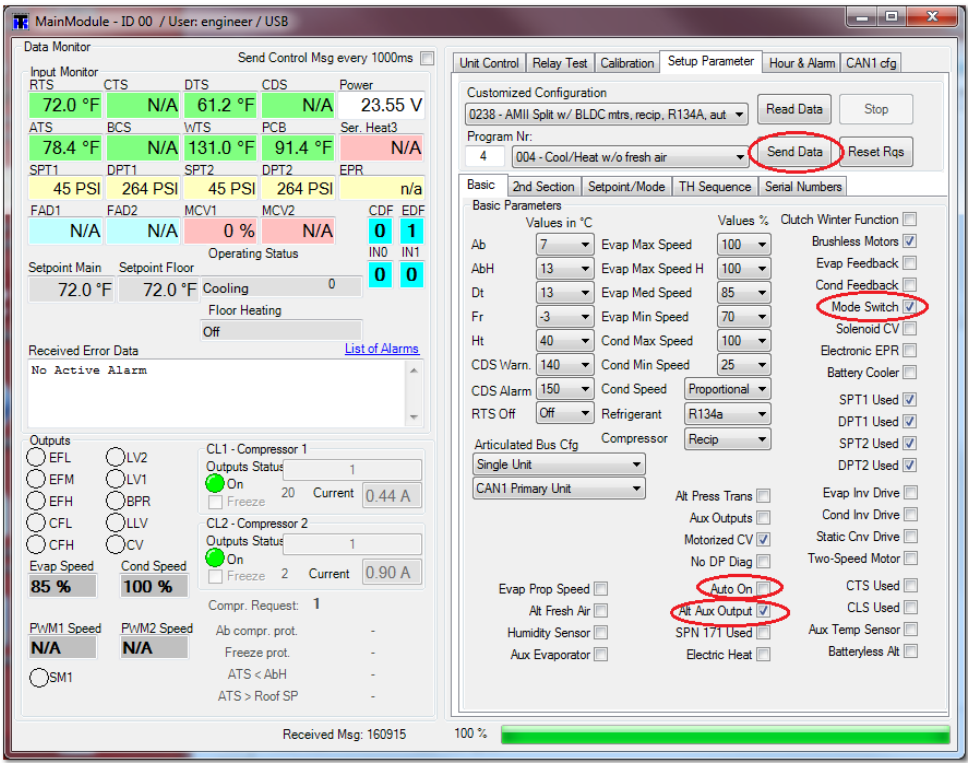

Figure 4: CANDiag – Parameters

13. Close the cove panels and re-secure them with hardware removed previously.
14. Re-install the stanchion, remove earlier, to the sidewall and aisle stanchions.
15. Remove all tools and debris and return the bus to service condition.
16. Turn the main battery disconnect switch to the “ON” position.

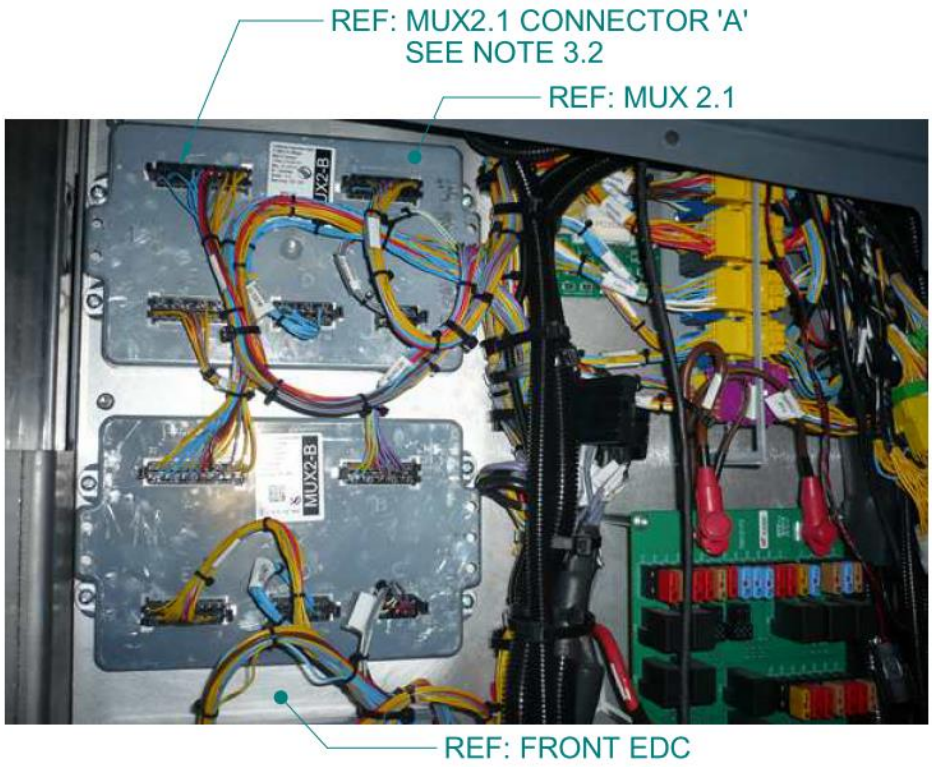

Figure 5: MUX2.1 location at Front EDC

LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	MiDi - Add bulb seal to seal off return air duct.	1	1.0	1.0

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	6470732	Bulb Seal	25	FT	
2	6470542	KIT – TK FILL HARNESS	1	EA	
3	NPN	Sealant	0.01	EA	Source Locally