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INSTRUCTION TO SERVICE ITS: 4701

SECTION: 219	MODEL: <input type="checkbox"/> 30FT <input type="checkbox"/> 35FT <input checked="" type="checkbox"/> 40FT <input type="checkbox"/> 60FT	TYPE: <input type="checkbox"/> HIGH FLOOR	WRITTEN BY: Shaun Cardinal
Engine and Transmission	<input type="checkbox"/> DSL <input type="checkbox"/> CNG <input checked="" type="checkbox"/> GE <input checked="" type="checkbox"/> HYD	<input checked="" type="checkbox"/> LOW FLOOR	

OBJECTIVE/SUBJECT:

X1 Dongle Replacement

PROCEDURE (FOR HYDROGEN BUS):

1. Turn the main battery disconnect switch to the "OFF" position. Check High Voltage (HV) Junction Box prior to any work.

⚠ WARNING: Ensure all Safety Procedures outlined in Section 1 of the Service Manual under "Safety" are reviewed before performing work.

PROCEDURE (FOR GAS ELECTRIC BUS):

2. Ensure the main battery disconnect switch is turned to the "OFF" position.

⚠ WARNING: ALWAYS discharge the Ultra Capacitors before performing high voltage system maintenance on this vehicle. Refer to the Safety section 2.7 in Service Manual for discharge procedure.

3. DONGLE REPLACEMENT:

- a. Open up Curb Side (CS) access door. See Fig 1.

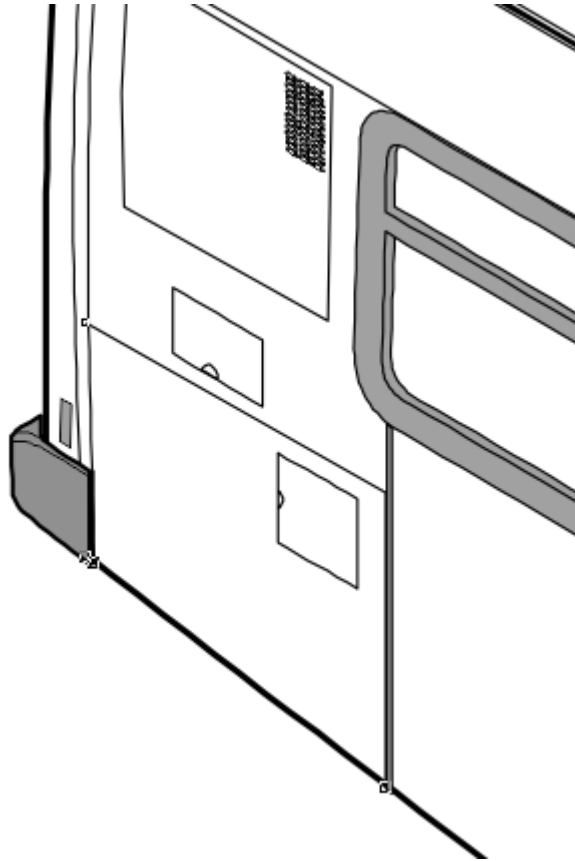


Figure 1 – CS access door

- b. Disconnect the 12 pin Deutsch connector and remove the two T25 torx screws. See Fig 2

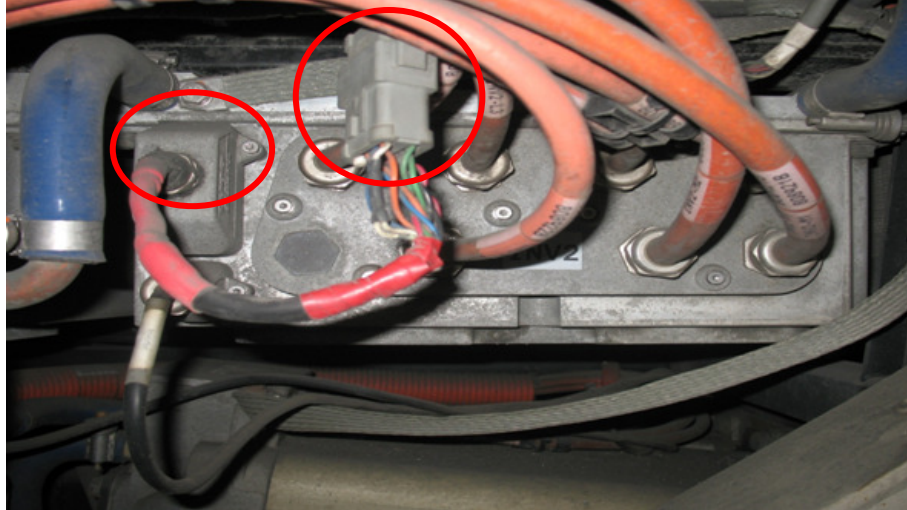


Figure 2 – Dangle Removal

- c. Inspect inverter for damaged pins. See Fig 3.



Figure 3 – Pin Inspection

- d. Install dielectric grease (**NFI PN 8111767**) around the new X1 dongle (**NFI PN 6403242**) pins and rubber seal. See Fig 4



Figure 3 – Pin Inspection

- e. Reinstall the new X1 dongle (only fits one way due to key way in connector) into the inverter (Fig 2).
- f. Install anti-seize (**NFI PN 5928660**) on the T25 torx screws and torque between 1.5-3.5 ft-lb (2-5Nm) equally.
- g. Reconnect the 12 pin deutsche plug.
- h. Turn the knife switch back on.
- i. Connect SIADIS GUI and check for inverter faults.
- j. Road test bus for faults and return to service.

LABOUR ESTIMATE				
	Operation	Men	Hours	Labour Time M X HR
1	X1 Dongle Replacement	1	1.5	1.5

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	6403242	ELFA2 X1 DONGLE	4	EA	
2	8111767	LUBRICANT NYK-77	4	EA	
3	5928660	NEVER SEIZE	.01	EA	