



## INSTRUCTION TO SERVICE

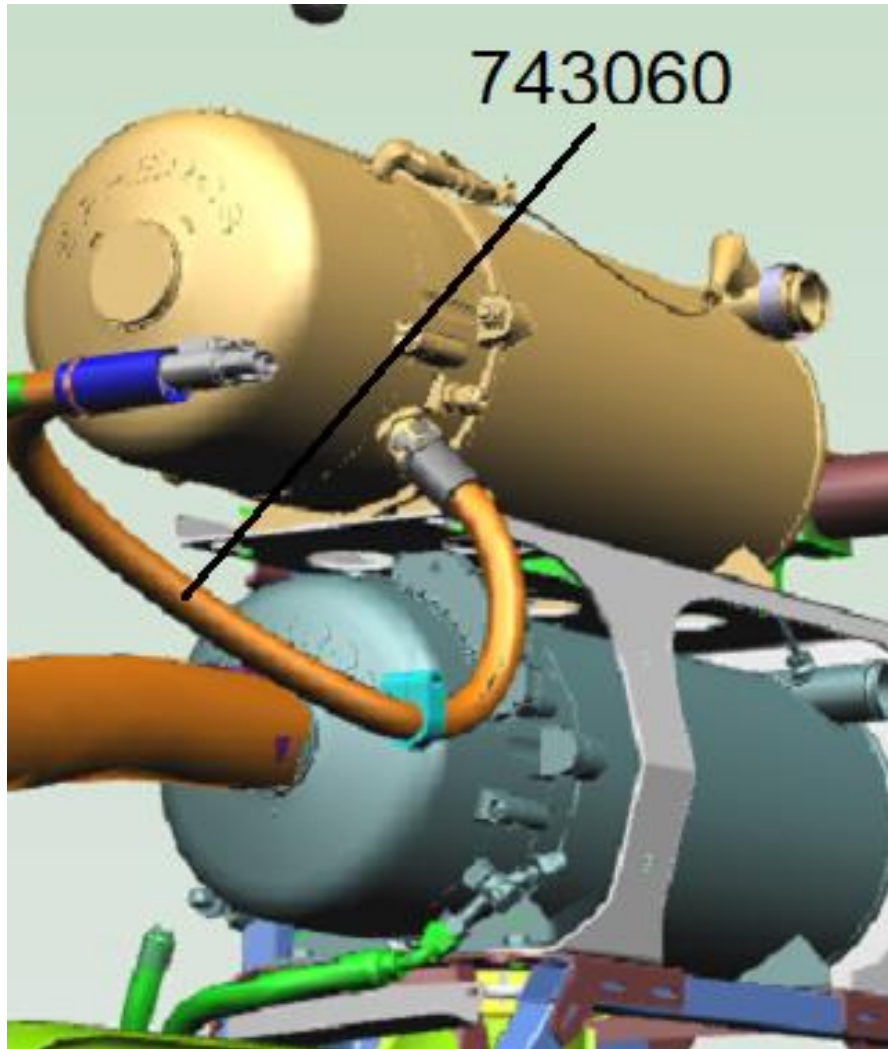
<b>ITS: 58940</b>	
<b>SECTION:</b>	549 – HVAC
<b>WRITTEN BY:</b>	Scott Geier
<b>SUBJECT:</b>	Check the polarity on the aux electric heater HV cable assembly.

# ITS-58940

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**Issue:** Auxiliary electric heater HV cable not built to print causing premature failure of the auxiliary heater HV contactor.

**Solution:** Check the polarity on the auxiliary electric heater HV cable assembly.



**Auxiliary heater HV cable assembly location reference.**



**Warning!**

**High voltage!  
Danger to life!**

Installation, maintenance and repairs may only be carried out when the vehicle's engine is not running and the high voltage supply (AC/DC) / power supply is switched off.

Before starting the work at the heater, it is to make voltageless acc. to DIN VDE 0105-100 and this state must be ensured for the duration of the work.

The following safety precautions must be observed:

- switch off the power supply to the heater
- ensure it cannot be switched on again
- verify system is voltage-free, all poles
- ground and short circuit (the de-energized circuit)
- cover or block neighbouring parts under voltage

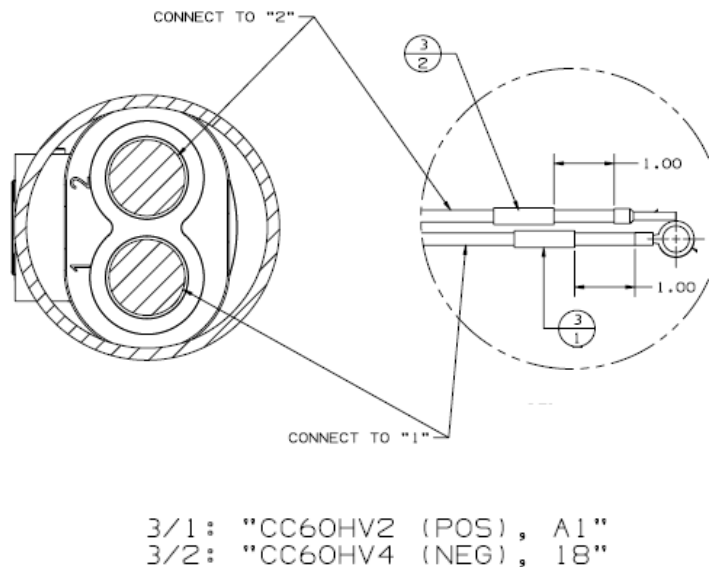
Electrical cables and operating elements of the heater must be arranged in the vehicle in such a way that their functioning is faultless under normal operating conditions and cannot be hampered.

Work at electrical equipment may only be started if protective measures against electric shock, short circuits and arcing faults have been carried out.

## PROCEDURE:

1. Locate the electric auxiliary heater on the rear of the bus beside the rear mount HVAC.
2. Remove the heater head cover to access the high voltage contactor.
3. Disconnect the HV cable assembly from the bus side.
4. With the digital multimeter set in Ohms position, check continuity from the positive connection of the aux heater to the positive side of the bus connector cavity # 1. See Figure 1.
5. With the digital multimeter set in Ohms position, check continuity from the negative connection of the aux heater to the negative side of the bus connector cavity # 2. See Figure 1.
6. Verify the orange high voltage positive cable is secured to the contactor. Torque to 5.9 ft-lbs.
7. Verify the orange high voltage negative cable is secured in then terminal block.
8. Reinstall the heater head cover and reconnect the connector to the bus side.
9. Fill out the "Inspection Form" below with your finding. Send a copy back to TSS.

**NOTE:** Any HV cable assembly found with polarities reversed must be replace along with the HV contactor through normal warranty process. To replace the Auxiliary heater HV contactor see ITS-58953.



**Figure 1: HV cable assembly connection reference.**



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### LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Check the polarity on the aux electric heater HV cable assembly.	1	0.50	0.50

### PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	743060	CC60HV-BATTERY TO HEATER 2	1	EA	As needed
2	6483228	Aux heater HV contactor	1	EA	As needed

