

Transportation Learning Center

Battery Electric Bus (BEB) Session #2: BEB High Voltage Safety

Test

Circle the best answer (only one) for each question

- 1) Current as little as 0.1 amp traveling across the heart can kill.
 - a. True
 - b. False

- 2) High voltage is present in various locations of a BEB that include:
 - a. DC-DC Converter
 - b. Inverter
 - c. All of the above
 - d. None of the above

- 3) The inverter changes DC voltage in the Energy Storage System into usable AC voltage. The inverter may contain both the AC and DC voltages at any given time.
 - a. Only the first statement is correct
 - b. Only the second statement is correct
 - c. Both statements are correct
 - d. Neither statement is correct

- 4) An arcfash:
 - a. Is a rare yet dangerous electric discharge that travels through the air between conductors.
 - b. May generate temperatures that exceed 35,000 degrees Fahrenheit.
 - c. Is capable of vaporizing metal.
 - d. All of the above.

- 5) When a High Voltage Interlock Loop (HVIL) is broken, battery voltage is then allowed to travel beyond the Energy Storage System.
 - a. True
 - b. False

- 6) A High Voltage Battery Disconnect also isolates low voltage in the bus.
 - a. True
 - b. False

- 7) High voltage is never grounded through the bus chassis.
- a. True
 - b. False
- 8) It is common practice to repair high voltage cables when they are damaged.
- a. True
 - b. False
- 9) A bus maintainer can wear a torn electrical insulating glove while working on a BEB as long as the tear is located in the top portion of the glove.
- a. True
 - b. False
- 10) When working on BEB high voltage electrical systems, digital multimeters and leads must be rated for a minimum of:
- a. 250 volts DC
 - b. 500 volts DC
 - c. 750 volts DC
 - d. 1000 Volts DC
- 11) In a BEB, the primary purpose of a lockout process is to make certain that:
- a. Every source or potential source of HV electrical energy is isolated from the vehicle.
 - b. The electrical starter button cannot be engaged.
 - c. No one can enter the bus.
 - d. None of the above.
- 12) Tagout devices are warning devices that a technician fastens to energy isolating devices (locks) to warn personnel not to reenergize the vehicle.
- a. True
 - b. False
- 13) Because of the high voltage contained in BEBs, technicians are no longer required to read and interpret schematics.
- a. True
 - b. False
- 14) A shepherd's hook is a safety device that is:
- a. used to temporarily disconnect high voltage when other safety devices are not available.
 - b. used by a second person to safely remove someone accidentally coming in contact with high voltage.
 - c. a special tool used to implement lock out/tag out procedures.
 - d. Has nothing to do with BEBs.

15) Because BEBs have a host of self-diagnostic features, skills associated with navigating various software programs are no longer essential.

- a. True
- b. False

BEB Course #2 Link:

https://www.transittraining.net/images/uploads/full_documents/BEB_Session_2_Slides_and_Notes.pdf