As a result of collision damage it may be necessary to diagnose and repair electrical system damage and faults. Therefore, it is essential for collision repair professionals to know proper electrical repair procedures as well as applicable safety precautions.

To enhance technician ability to perform proper electrical diagnosis and repairs and to reduce the chance of causing further electrical component damage, the University of Toyota has developed ‘Body Electrical Diagnosis & Repair’ course T502. This training is a blend of e-learning and hands-on activities. Visit [www.crrtraining.com](http://www.crrtraining.com) for a course description, training prerequisites, a schedule of classes and locations, and registration information.

There is no substitute for good training however body electrical diagnosis and repair should always begin with a thorough inspection and a keen eye for any signs of electrical component damage. Check for visible as well as hidden faults by using techniques outlined in the following summary:

- Damaged electrical components will typically illuminate Malfunction Indicator Lights (MIL), set Diagnostic Trouble Codes (DTC), and/or blow fuses.
- Before disconnecting 12 volt battery power, always turn the ignition switch to the ‘on’ position and check the instrument cluster for MIL that stay on beyond the vehicle’s on-board diagnostic self-check.
- If the vehicle is operational, start it to confirm that the ‘Check Engine’ MIL goes out. Make a note of any MIL that remain on.
- If any MIL stay illuminated, use a scan tool or Techstream special service tool to retrieve DTC and note applicable information.
- Check electrical system circuits for signs of proper operation and/or malfunction. Observe what is and what is not working properly.
- Use what is learned through these fundamental checks to guide electrical diagnostic and repair operations.