



# COLLISION REPAIR PROFESSIONALS: ELECTRICAL/MECHANICAL TECHNICIAN



The Electrical/Mechanical Technician diagnoses and repairs collision-related mechanical damage including steering, suspension, air conditioning, engine, brake, restraint, and electrical systems. This individual uses measuring and alignment equipment to diagnose damage and return front and rear wheel alignments to manufacturer's specifications. Electrical diagnostics are performed using scan tools. Hand tools and power tools are used to remove or repair damaged parts and properly install new parts.

To be recognized as an I-CAR Platinum Individual® in the Electrical/Mechanical Technician role, you must fulfill training requirements for each I-CAR® ProLevel™ before your renewal date in the year specified below. This document provides a partial list of training options to fulfill knowledge areas. For a comprehensive list of options, reference the Training Planner in *myI-CAR*. To retain your designation, you must complete training from each subsequent training level within 12 months of the date when the original I-CAR Platinum Individual® designation was awarded.

I-CAR® PROLEVEL™ <b>1</b> 2012	I-CAR® PROLEVEL™ <b>2</b> 2013	I-CAR® PROLEVEL™ <b>3</b> 2014	▶ <b>ONGOING TRAINING</b>
<b>KNOWLEDGE</b>			
<ul style="list-style-type: none"> <li>• Electrical circuits and troubleshooting electrical systems using basic diagnostic equipment</li> <li>• Diagnose, test, and repair electrical loads</li> <li>• HVAC, lighting, starting, charging, fuel, exhaust, brake, steering, suspension, drivetrain, and restraint systems</li> <li>• Safely work around alternative fuel vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced restraint and braking systems</li> <li>• Basic scan tool operation</li> <li>• Diagnose steering and suspension angles</li> <li>• Full-frame replacement</li> <li>• Understand diagnostic flow charts, clear codes, and identify flash codes</li> </ul>	<ul style="list-style-type: none"> <li>• Receive role-relevant annual training</li> <li>• Strongly encouraged to maintain ASE Mechanical and Electrical Components (B5) certification</li> <li>• Use of diagnostic testing equipment to identify and repair computer controlled electronic systems, including advanced suspension systems</li> </ul>	<p>Once your training requirements for I-CAR® ProLevel™ 3 have been met, you need to take six (6) credit hours of role relevant training (not previously taken) on an annual basis to maintain your designation. Options can come from either Training or New Technology Training.</p>
<b>TRAINING</b>			
<ul style="list-style-type: none"> <li><input type="checkbox"/> Air Conditioning (AIR01)</li> <li><input type="checkbox"/> Brakes (BRA01)</li> <li><input type="checkbox"/> Diagnosis, Testing, and Repair of Common Electrical Loads (ELE02)</li> <li><input type="checkbox"/> Drivetrains and Engine Mounts (DRT01)</li> <li><input type="checkbox"/> Electric and Electric Hybrid Vehicles (ALT01) <b>-OR-</b> (ALT01e) ▲</li> <li><input type="checkbox"/> Electrical Circuits and DVOM Usage (ELE01)</li> <li><input type="checkbox"/> Fuel and Exhaust Systems (FUE01)</li> <li><input type="checkbox"/> Hazardous Materials, Personal Safety, and Refinish Safety (WKR01)</li> <li><input type="checkbox"/> Heating and Cooling Systems (HEA01)</li> <li><input type="checkbox"/> Hybrid Electric and Alternative Fuel Vehicles (ALT02) <b>-OR-</b> (ALT02e) ▲</li> <li><input type="checkbox"/> Lighting, Starting, and Charging Systems (LSC01)</li> <li><input type="checkbox"/> Power Accessories (PWR01)</li> <li><input type="checkbox"/> Rack and Pinion and Parallelogram Steering Systems (STE03)</li> <li><input type="checkbox"/> Restraints (RES01)</li> <li><input type="checkbox"/> Suspension Systems (STE02)</li> <li><input type="checkbox"/> Plus one New Technology course</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Advanced Restraint Systems (RES02)</li> <li><input type="checkbox"/> Anti-Lock Brakes and Traction Control Systems (ABR01)</li> <li><input type="checkbox"/> Electronic Stability Control Systems Overview (ESC01) ▲</li> <li><input type="checkbox"/> Fault Code Retrieval, Diagnosis, and Testing Electronic Systems (ELE03)</li> <li><input type="checkbox"/> Full-Frame Replacement (SPS06)</li> <li><input type="checkbox"/> Wheel Alignment and Diagnostic Angles (STE04)</li> <li><input type="checkbox"/> Plus one New Technology course</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Electronically Controlled Steering and Suspension Systems (STE05)</li> <li><input type="checkbox"/> Plus one New Technology course</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Adaptive Cruise Control (CRU01) ▲</li> <li><input type="checkbox"/> Collision Warning Systems (CWS01) ▲</li> <li><input type="checkbox"/> Rear Heating and Air Conditioning Damage Analysis and Repair (RHA01) ▲</li> <li><input type="checkbox"/> I-CAR® Industry Training Alliance role-relevant training</li> </ul>
<b>Training Course Key:</b> ▲ Online Course			

## NEW TECHNOLOGY TRAINING

One course from this section not taken for another level must be taken to complete training for each I-CAR® ProLevel™; Ongoing Training may include any courses not previously taken.

- |   |   |
|---|---|
| <input type="checkbox"/> Collision Repair for Ford and Lincoln Vehicles (FOR05)         | <input type="checkbox"/> Overview of Cycle Time Improvements for the Collision Repair Process (CYC01) |
| <input type="checkbox"/> Collision Repair for Toyota, Lexus, and Scion Vehicles (TOY01) | <input type="checkbox"/> Vehicle Technology and Trends 2010 (NEW10)                                   |
| <input type="checkbox"/> Damage Analysis of Advanced Automotive Systems (DAM07)         | <input type="checkbox"/> Vehicle Technology and Trends 2011 (NEW11)                                   |

Certain training through the I-CAR® Industry Training Alliance may also be used to meet your training requirements. Contact I-CAR® Customer Care at 800.422.7872 or [customercare@i-car.com](mailto:customercare@i-car.com) to learn more.