COLLISION REPAIR PROGRAM

1

NAPA® Echlin® and Tech Expert® offer more than 8,000 parts that may need to be replaced in the event of a collision

2

Collision repair categories include Lighting, ADAS Components, Active Grille Shutters, Parking Brake Actuators, Sensors and more

3

Echlin® and Tech Expert® parts are designed and tested to correctly integrate with the complex electrical systems of modern vehicles

What's in your box?[™] Here's what's in ours.



What's New

Electronic Parking Brake Actuators

Parking Brake Actuators are a newer category and Echlin® is at the forefront of introducing new applications. The number of vehicles with parking brake actuators has grown exponentially since 2010 and as they age, service opportunities will rise.

For a complete listing of all Echlin® Parking Brake Actuators available, visit NAPAEchlin.com.



EPA002

Ford Trucks (RR & LR) (2023-22, 20-15) VIO: 4.2M





EPA003

GM Trucks & SUVs (RR & LR) (2023-19) VIO: 2.6M





EPA032

Audi / VW Cars & SUVs (RR) (2023-15) VIO: 800K



EPA033

Audi / VW Cars & SUVs (LR) (2023-15) VIO: 800K



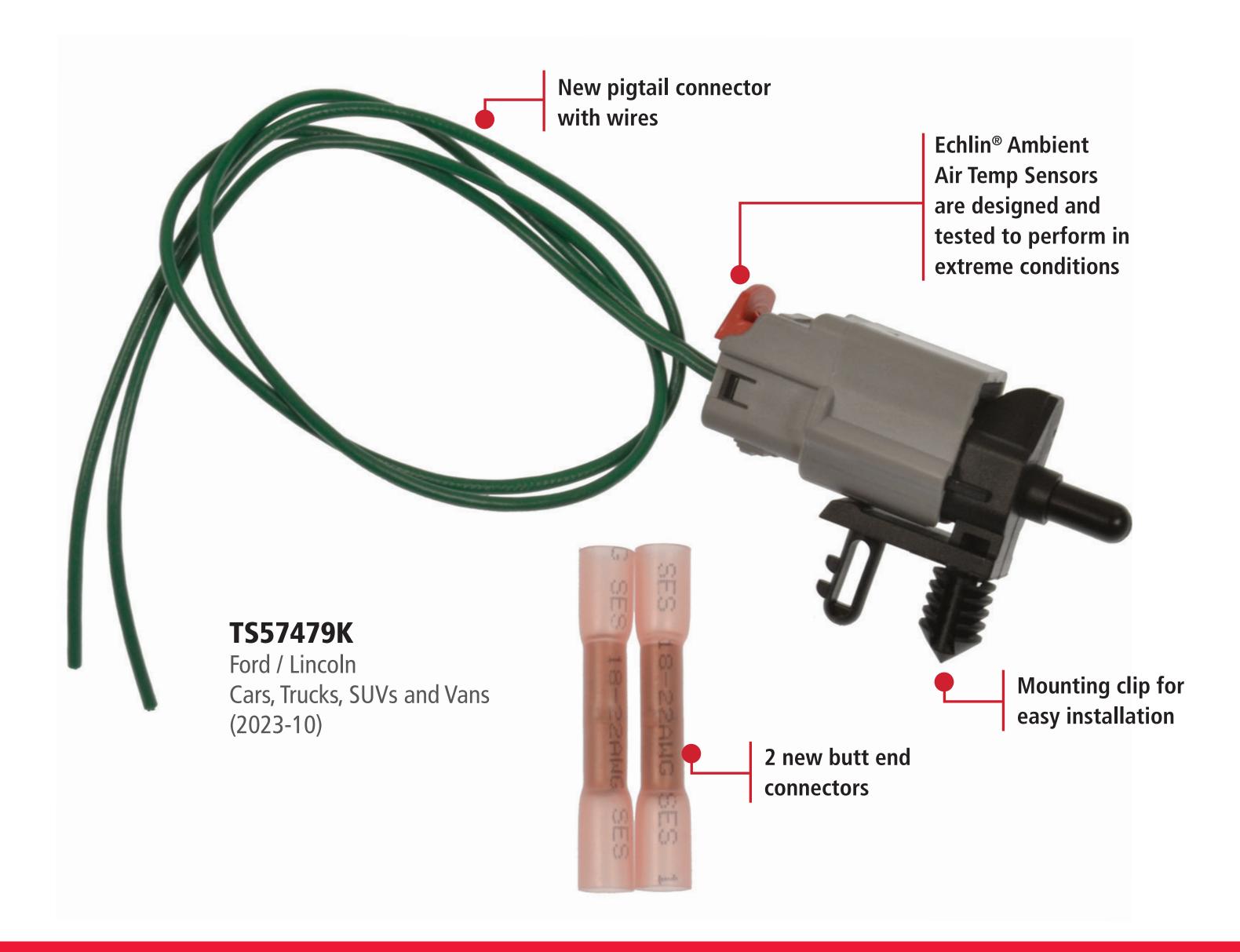


What's New

Ambient Air Temperature Sensor Kits

Usually located around the front bumper, ambient air temperature sensors are easily damaged in collisions. Our all-new Ambient Air Temperature Sensor Kits make it easier to replace a damaged or failed sensor along with the corresponding connectors.

Echlin® Ambient Air Temperature Sensor Kits





What's New

Active Grille Shutter Assemblies

Still a newer category, Echlin® has been continuously releasing Tech Expert® Active Grille Shutters, especially for late-model vehicles. To help provide technicians with everything they need to restore their customers' vehicles, we are also regularly introducing new Actuators for Active Grille Shutters.

For up-to-date listings on Active Grille Shutters and Actuators, visit NAPAEchlin.com.









NAPAEchlin.com

ADAS Coverage and Opportunities

Echlin® offers an aftermarket-leading 900+ ADAS numbers in key Advanced Driver Assistance System categories, and we're continually adding to this growing product line.

Since many of today's vehicles have multiple advanced ADAS parts per vehicle, we're covering more than 700 million part replacement repair opportunities!

Echlin® ADAS Coverage BSW137 Blind Spot LDW13 **Detection Sensor Lane Departure** (2 per car) **System Camera** (1 per car) 2018 **Ford Escape CCW17 PAW370**

Park Assist Camera **PAS1131** (1 per car) **Park Assist**

Sensor – Rear

(4 per car)





PAS1131

Park Assist



Cruise Control

(1 per car)

Distance Sensor

ADAS Components

Advanced Driver Assistance Systems in today's vehicles are already helping to save lives and prevent injuries.

Minimizing human error has been identified as a key factor in reducing the number of vehicle collisions resulting in serious injury and death.

Two of the more popular ADAS categories are park assist sensors and park assist cameras.



Park Assist Sensors

Vehicles use multiple park assist sensors on front and rear bumpers to report distance to an object, utilizing an ultrasonic signal. These sensors are often damaged in front or rear bumper collisions.

Echlin® Park Assist Sensors are direct-fit replacements that match the damaged OE units they are replacing.

186 SKUs / VIO: 211M



Park Assist Cameras

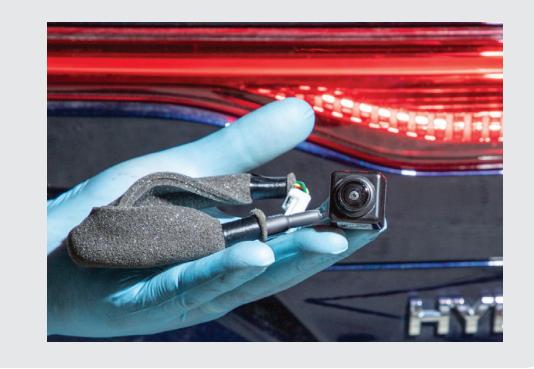
Easily damaged in a rear collision, park assist cameras have been mandatory in the U.S. since 2019. Most cameras are replaceable without additional programming or calibration.

As premium replacements for the failed OE unit, Echlin® Cameras are "plug & play" – no programming required. Each Camera is rigorously tested to match OEM vehicle-specific performance.

280+ SKUs / VIO: 155M

Did You Know

Park assist cameras have become one of the hottest ADAS components. If damage is minor, many motorists may opt NOT to go through an insurance claim and replace only the damaged camera/sensor.





ADAS Components

Sophisticated collision-avoidance components are ever-expanding in today's vehicles. Echlin® continues to grow this important safety category.

Did You Know

Blind spot detection sensors are also prone to failure due to corrosion from salt spray entering the casing and destroying the circuit board inside.





Blind Spot Detection Sensors

Located in the rear quarter area, typically just behind the bumper cover, blind spot detection sensors are often damaged in rear-end collisions.

Echlin® BSD Sensors are direct-fit replacements to ensure proper fit and performance. All BSD Sensors undergo extensive quality testing and product validation.

125+ SKUs / VIO: 55M



Lane Departure System Cameras

Located on the windshield behind the rearview mirror, lane departure system cameras are now also in side-view mirrors for additional protection.

Echlin® LDS Cameras are rigorously tested for fit, form and precise performance to match the original application they are replacing.

47 SKUs / VIO: 37M



Cruise Control Distance Sensors

Located behind the front grille opening area, cruise control distance sensors are often damaged in a frontal collision.

Echlin® CCD Sensors are designed and manufactured to stringent quality standards to match the original for an easy install and to deliver precise performance.

75+ SKUs / VIO: 37M



Steering Angle Sensors

Located in the steering column, these sensors are often damaged in frontal collisions.

Crash Avoidance Systems are dependent on accurate, timely data from the steering angle sensor. Echlin's vehicle-specific Steering Angle Sensors are designed and tested to integrate with ADAS systems.

285+ SKUs / VIO: 238M

TECH EXPERT. Collision Repair Program

Echlin[®] Quality

Park assist sensors help keep your customers safe. The quality and performance of the part matters, which is why Echlin® tests each part to make sure it integrates correctly with safety systems, and functions in all conditions.

Echlin® Park Assist Sensors





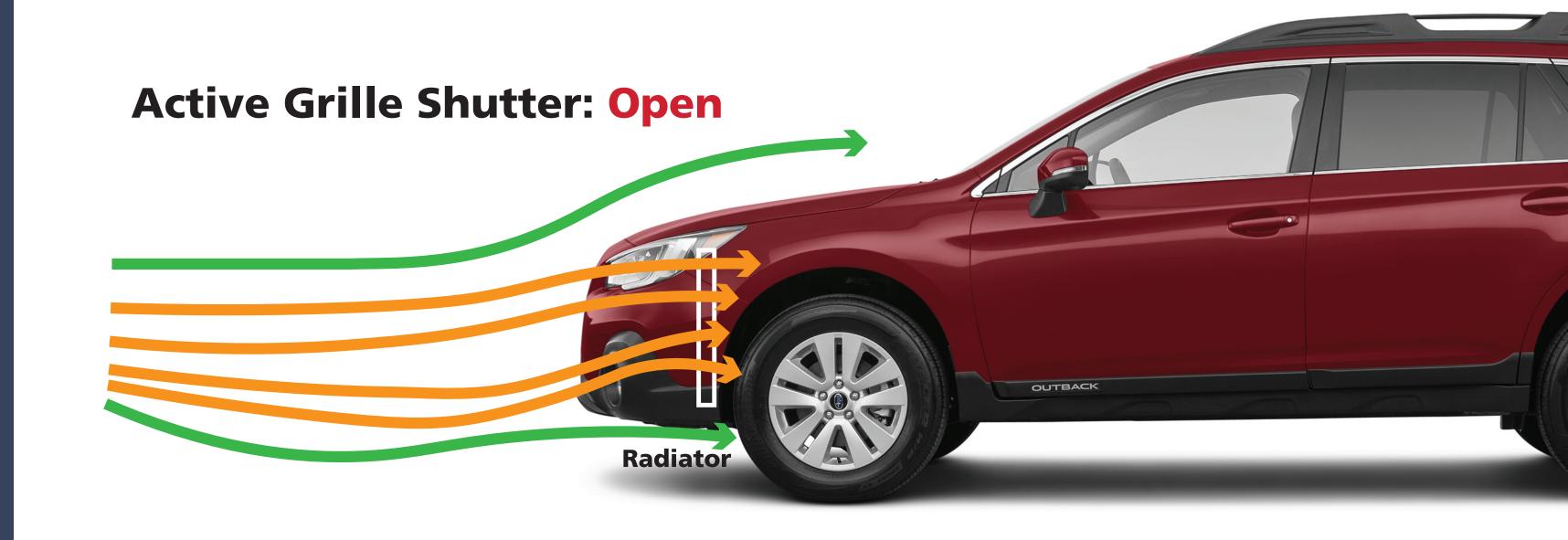


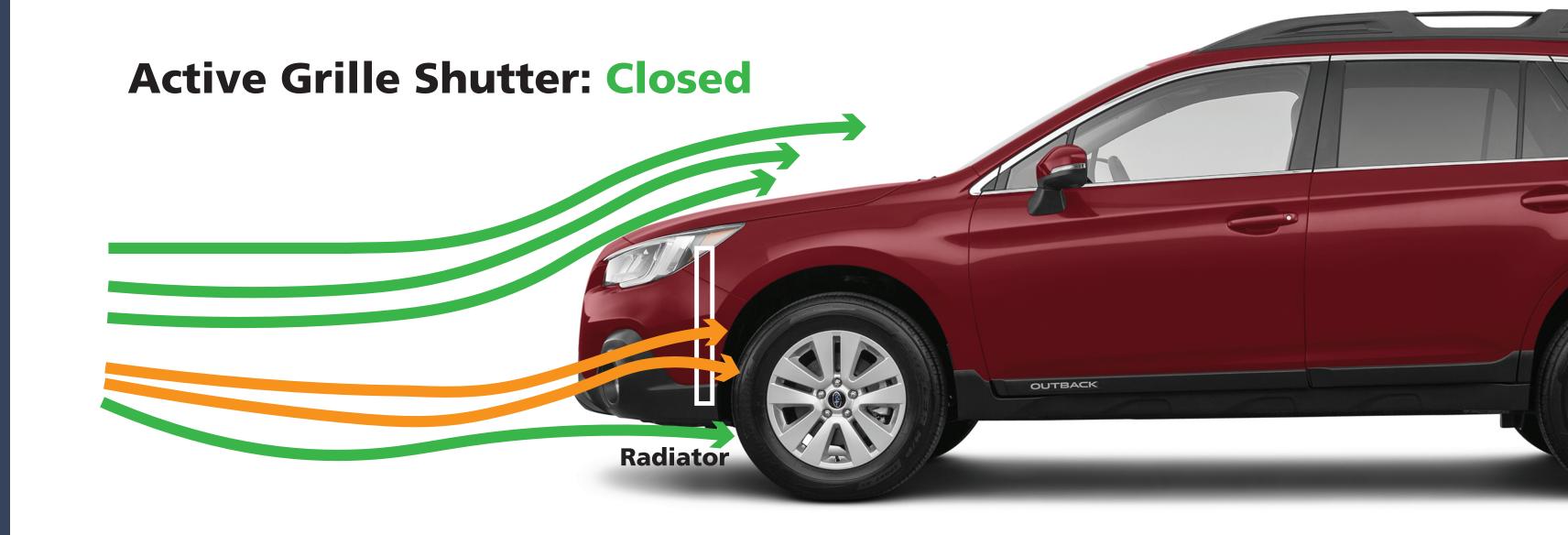
Product Spotlight

Active Grille Shutters & Actuators

Operated by an electronic actuator, active grille shutters open and close to control the airflow to the engine compartment and over the vehicle. They open to provide the radiator and cooling system with additional fresh air and close to help an engine warm up faster. They can also close to redirect air over the vehicle, improving aerodynamics and fuel milege.

Active grille shutters are even used on some hybrid and electric vehicles for battery cooling and to help improve range.









Underhood Components

Active grille shutters offer the latest technology to improve fuel economy, but they are also the first point of contact in a front-end collision.

Turbo intercoolers are mounted in the front of the vehicle, while ambient air temp sensors are mounted inside or near the front bumper. Both are extremely vulnerable during a frontend collision.



Active Grille Shutters

These are high OE failure components due to motor burnout as well as crashes. Tech Expert® AGS are direct-fit and specifically engineered for the application they are replacing, and are built from high-grade industrial plastic to resist corrosion and withstand extreme engine temperatures. All Tech Expert® AGS undergo 100% end-of-line testing.

43 SKUs / VIO: 29M



Ambient Air Temp Sensors

Echlin® offers a full line of Ambient Air Temp Sensors covering import and domestic vehicles through model-year 2024. Each **Echlin® ATS** is engineered and tested for extreme conditions. We now offer some Ambient Air Temp Sensors as a kit with new connectors and wires as a complete repair solution.

109 SKUs / VIO: 135M



Active Grille Shutter Actuators

Active grille shutter actuators control active grille shutters, allowing them to open and close to direct airflow. These are also easily damaged in front-end collisions and can fail over time. Tech Expert® Active Grille Shutter Actuators are precision engineered and tested to work with both the OE and Tech **Expert® Active Grille Shutters.**

14 SKUs / VIO: 14M



Turbo Intercoolers

Designed, manufactured and tested to stringent quality standards, and match the original to deliver precise vehiclespecific performance. Echlin® Intercoolers are 100% new, not remanufactured, and are built from the highest-quality materials to withstand harsh conditions for a long service life. 100% factory tested for air/water leaks.

36 SKUs / VIO: 19M





Lighting Components

Most lighting components are located in or near the headlamp assembly where they can be easily damaged in a frontend collision.

HID modules are prone to damage due to sensitive internal circuitry, and headlight level mechanisms often include actuator arms that are easily bent or damaged.

Located to maximize visibility, center high mount stoplight assemblies are unprotected, with lenses and interior components that often break on impact.



HID Modules (HID Headlight Ballasts)

Tech Expert® HID Modules feature OE-match internal circuitry with heavy-duty casings around electronics for durability. DOTcertified to comply with Federal Motor Vehicle Safety Standards.

50 SKUs / VIO: 30M



Tech Expert® High-Temp Headlight Connectors

"Plug & play" between the factory harness and new bulb for easy installation on vehicles with HID headlights. High-temp Connectors prevent melting caused by high-intensity bulbs.

8 SKUs / VIO: 100M+



Headlight Level Sensors

Direct-fit replacements restore the headlight self-leveling system function for improved visibility. These Sensors undergo rigorous testing to ensure proper performance under all conditions.

44 SKUs / VIO: 13M



Center High Mount Stoplight Assemblies

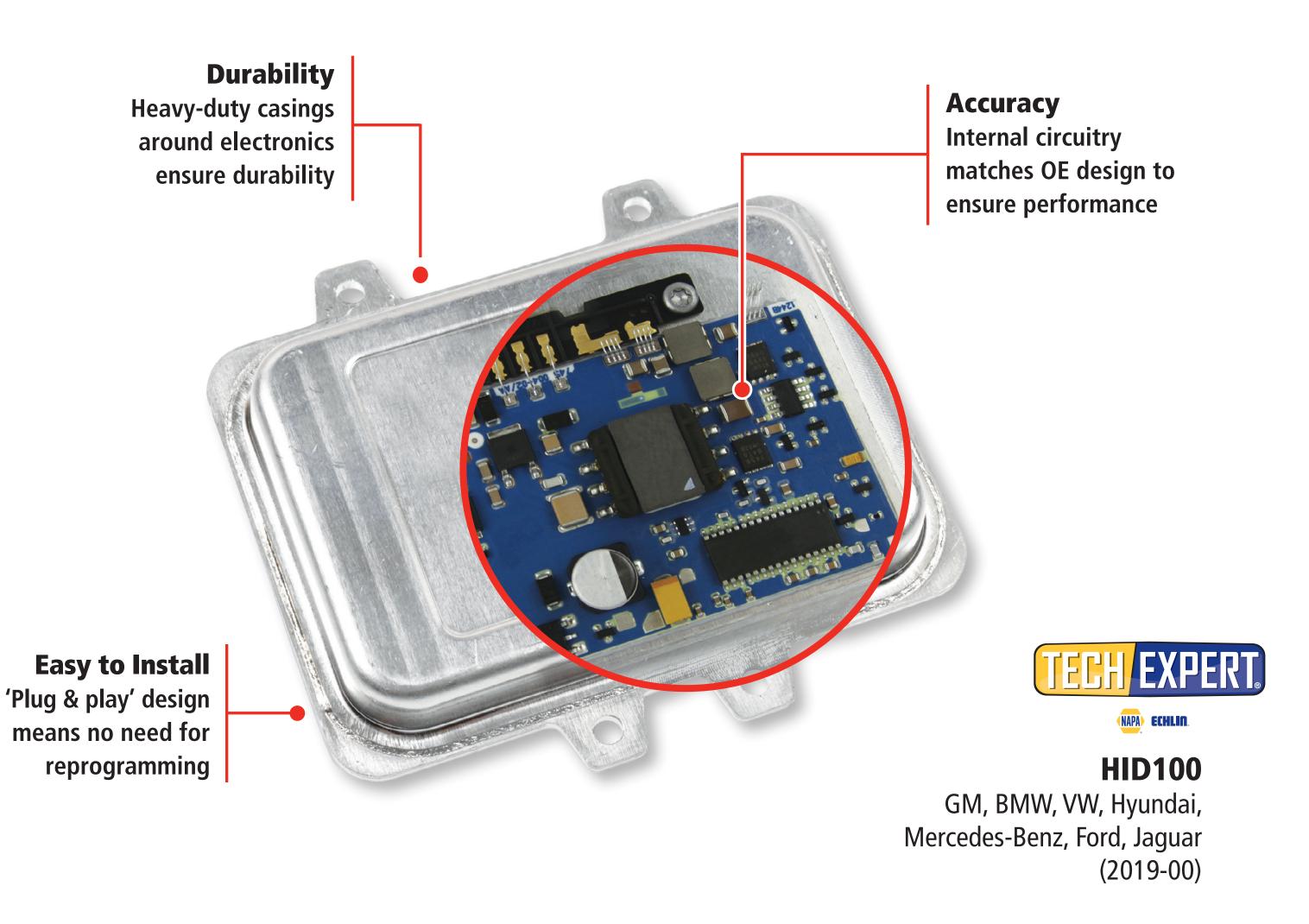
Quality-designed to prevent water intrusion, which can lead to brake light failure, these OE-matching replacements ensure proper fit, form, and function for an easy installation.

Coverage for popular import and domestic vehicles

OE HID light systems often fail due to overheating, moisture intrusion, or collision damage. To restore proper lighting function, we created directreplacement HID Headlight Modules — parts that match the fit, form, and function of the originals.

Tech Expert® HID Headlight Ballasts are DOT certified to comply with Federal Motor Vehicle Safety Standards.

Tech Expert® HID Headlight Ballasts

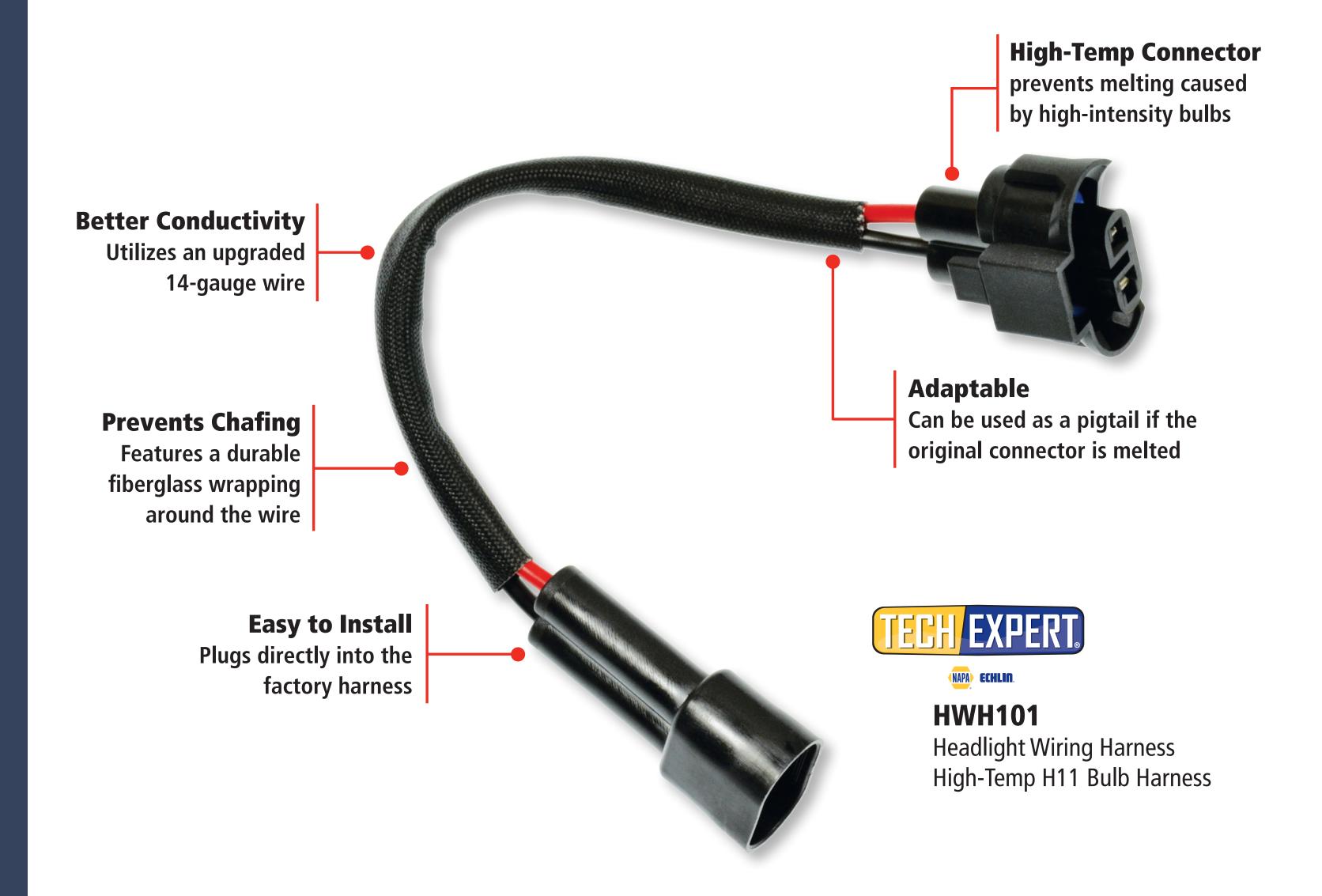




The heat generated by today's OE automotive light bulbs can melt the bulb's connectors. To prevent this, NAPA® Echlin® Headlight Wiring Harnesses are built with high-temp connectors that withstand extreme heat.

The harnesses also have 14-gauge wire for better conductivity and a "plug and play" feature that lets you plug the harness right between the factory harness and the new bulb.

Tech Expert® High-Temp Headlight Wiring Harnesses







Door/Body Components

Lock and latch actuators are all located in damage centric areas. Whether in the door or at the trunk or hood latch, these parts are often destroyed/broken/impacted in front, rear or side impact collisions.

Did You Know

The door lock actuator on the driver's door is the most replaced as it experiences more wear than the others.



Door Lock Actuators

This growing line features integrated and non-integrated Actuators. All Echlin® DLAs meet FMVSS (Federal Motor Vehicle Safety Standards) requirements for door ejection safety.

1,400 SKUs / 963M repair opportunities



Hood Latches and Actuators

Direct-fit OE replacement features "plug & play" design for easy install. Designed to meet FMVSS (Federal Motor Vehicle Safety Standards).

26 SKUs / VIO: 37M



Trunk Lock Actuators

Matches the original for application-specific performance and an easy install. Designed to meet Federal Safety Standards.

17 SKUs / VIO: 25M



Liftgate Actuators

Direct-fit OE replacement ensures proper fit and form to precisely match the function and performance of the original unit.

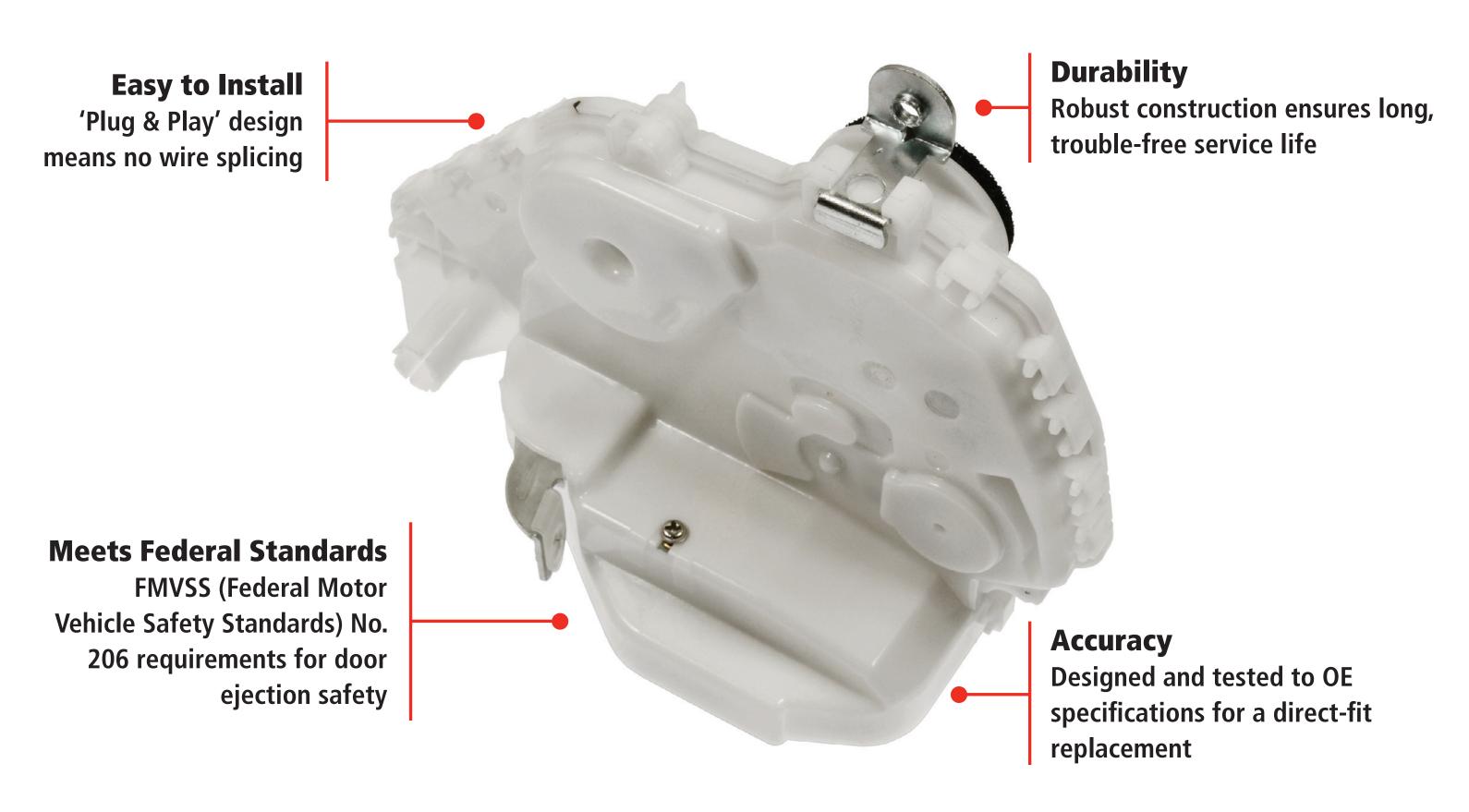
26 SKUs / VIO: 37M





Echlin[®] Integrated Door Lock Actuators combine electrical actuation with latch mechanization. Echlin® offers a line of Integrated Door Lock Actuators that are all direct OE replacements to ensure proper fit, form, and vehicle-specific function.

Echlin® Integrated Door Lock Actuators



DLA1524 Honda Pilot (2015-09)

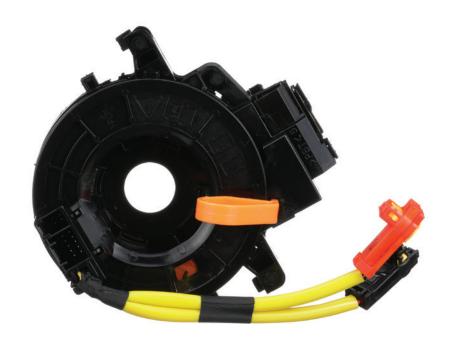




Cabin Components

Driver-operated combination switches and airbag clock springs are all vulnerable in a collision.

NAPA® Echlin® offers a complete line of top-quality Switches along with the supporting Connectors.



Airbag Clock Springs

When airbags are deployed, high heat is generated that melts the connector behind the airbag requiring the clock spring to be replaced.

Echlin® Clock Springs are direct-fit replacements featuring premium components to ensure superior application-specific performance.

190 SKUs / VIO: 150M



Combination Switches

These driver-operated switches are attached to steering columns which are designed to collapse upon impact, destroying the switch.

Designed, manufactured and tested to stringent quality standards matching the original to deliver precise vehicle-specific performance.

987 SKUs / VIO: 347



Power Window Switches

Impacts from collisions, water intrusion and general wear and tear can all lead to a failed power window switch.

Echlin® Power Window Switches are rigorously tested for fit, form and performance to match the original they are replacing.

1,860 SKUs / Over 1 billion repair opportunities



TECH EXPERT. Collision Repair Program

Undercar Components

Electronic Parking Brake Actuators

Parking brake actuators can be damaged in a collision and because of their location, they are also prone to corrosion.

Echlin® Electronic Parking Brake Actuators include new mounting hardware and a new seal to make installation easier.

64 SKUs / VIO: 34M

Echlin® Electronic Parking Brake Actuators



Did You Know

Electronic Parking Brake Actuators are an integral component of the Hill Hold Assist Systems found on modern vehicles.



Undercar Sensors

Any collision that impacts the wheels is likely to damage TPMS and ABS sensors.

The vehicle speed sensor is located in the transmission, or on the rear of the transfer case for 4WD vehicles. Speed sensors are usually plastic and are subject to damage in a collision.

Ride height sensors are a highly sensitive suspension system component with fragile linkages that can also be easily damaged in a collision.



TPMS Sensors

The Echlin® TPMS Sensor Program gives technicans a choice of the programmable QWIK-SENSOR® or the ready-to-install OE-Match Sensor. We also offer TPMS service kits and tools.

Available for popular import and domestic vehicles



Vehicle Speed Sensors

Features OE-exact connectors and terminals delivering the precise OE output signal to ensure accurate readings and performance. 100% tested.

430+ SKUs / 328M Repair Opportunities



ABS Sensors

Echlin® ABS Sensors are engineered and tested to correctly integrate with electronic crash avoidance systems and to help reduce stopping distance in all conditions.

2,600+ SKUs / 730M Repair Opportunities



Ride Height Sensors

Tech Expert® Ride Height Sensors come complete with sensor, linkage and mounting bracket for a complete assembly and easy

35 SKUs / VIO: 29M





Engineering & Performance

The ABS speed sensors on some newer vehicles measure more than just the speed of each wheel. They also monitor the direction which the wheel is rotating. Whether a wheel is rotating forward or backward, the sensor will send a unique signal to the ECU that lets the vehicle know the speed and direction of each wheel. This data is used by the electronic safety systems to help keep everyone in the vehicle safe.



Uses one simple sensor to measure wheel speed

Generates the same signal for forward and reverse

Failure to generate a correct signal could lead the vehicle's crash avoidance systems to not performing properly



Uses multiple micro sensors to measure wheel speed and wheel rotation

Generates separate signals for forward and reverse

Provide the ECU with accurate and complete information to keep crash avoidance systems operating as designed

As an expert manufacturer, we have complete control of the process to deliver a trouble-free sensor. All Echlin® Vehicle Speed Sensors (VSS) undergo environmental and endurance testing for signal amplitude and polarity to ensure consistent product reliability and application-specific performance.

Echlin® Pro Training Tip

VSS can be located in various locations such as in the transmission or in the differential. These locations expose the sensor to oil, road debris, and salt. Experts recommend replacing the electrical connector when a new sensor is installed.

Echlin® Vehicle Speed Sensors





Our Single Sensor Program features the QWIK-SENSOR® Multi-Frequency TPMS Sensor, combining all frequencies in one single sensor.

Straight from the factory with rubber or aluminum valve stem installed, additional interchangeable valve stems are also available separately.

One Single Sensor is All You Need.





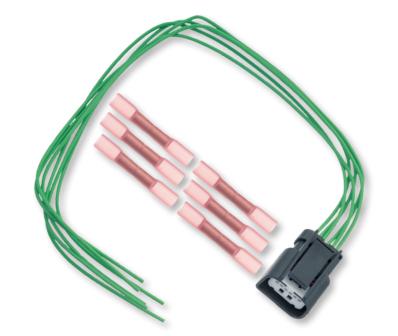


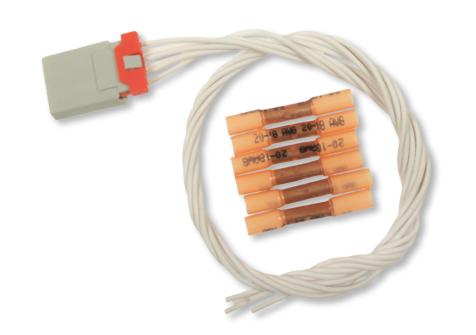
Sensor Connectors

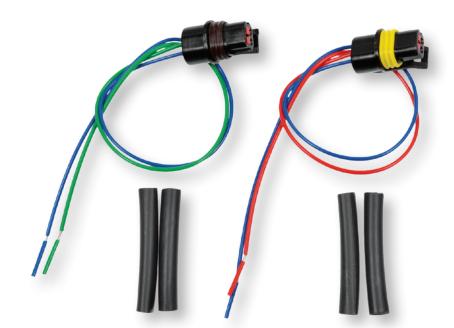
Whenever a sensor is damaged in a collision, it is recommended that the connector is also replaced. Echlin® offers more than 450 different Sensor Connectors to help get vehicles back on the road.

For more information, search "Sensor Connectors" in the catalog at NAPAEchlin.com.

Echlin® Sensor Connectors







ABS Sensor Connectors

Cruise Control Distance Sensor Connectors

Knock Sensor Connectors

Accelerator Pedal Sensor Connectors

EGR Valve Position Sensor Connectors

Mass Air Flow Sensor Connectors

Air Intake Temperature Sensor Connectors

Engine Oil Level Sensor Connectors

Misfire Sensor Connectors

Ambient Air Temperature Sensor Connectors

Engine Oil Temperature Sensor Connectors

Oxygen Sensor Connectors

Blind Spot Detection Sensor Connectors

Engine Speed Sensor Connectors

Park Assist Sensor Connectors

Camshaft Position Sensor Connectors

Exhaust Gas Temperature Sensor Connectors

Steering Angle Sensor Connectors

Crankshaft Position Sensor Connectors

Fuel Pressure Sensor Connectors

Vehicle Speed Sensor Connectors

...and more



Connector Kits

Electrical connectors are easily damaged in accidents. Even if the connector looks alright, it is still recommended to replace all connectors around the impact area.

Echlin® offers several Connector Kits that are popular with both body shops and general repair facilities.

Electrical Assortment Kit



EMPK15

Includes 16 of the top wire pigtails and sockets

Storage box features individual compartments and an easy-to-read part identification card for convenient reordering

Park Assist Connector Kit



EMPK13

Includes multiple quantities of the 5 most popular Park Assist Sensor Connectors (64 total pieces)

Applications for Asian, European and Domestic vehicles





Echlin® Pro Training Tech Tips

As experienced ASE-certified automotive technicians themselves, Echlin® Pro Trainers are experts in engine and sensor technology.

Here's what they say to look out for when replacing a high-tech component after a collision.



Performing a "Pre-Scan" is a must for any vehicle that has been in a collision – This will alert the technician of any additional repairs required and prevent the customer from an "Ever since you" type conversation after the repair



Always refer to service information or third party services to identify which ADAS components require replacement or recalibration after a collision has taken place



(NAPA) **ECHLIN**. TEEH EXPERT Collision Repair Program

Echlin® Professional Training

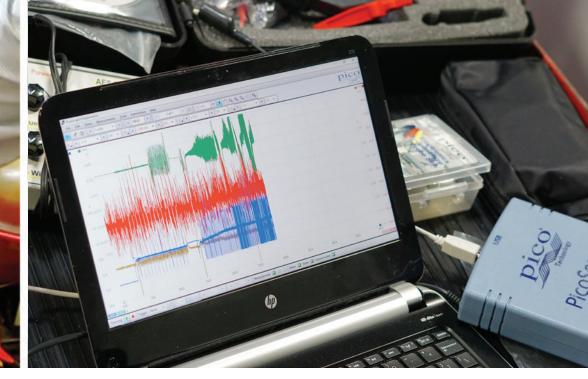
Award-Winning In-Person, Live Virtual, and Online Learning

Echlin® Pro Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of Echlin® training, our extensive YouTube video library has over 550 technical and installation videos.











ADAS Calibration Tips

Automotive Electrical Fundamentals

CAN Diagnostics

Diagnosing Vehicle Networks

Driver Assist Systems Overview

Electric Vehicle Safety Concerns



Available Classes

ADAS Calibration Techniques

Advanced Driver Assist Systems

Control Module Diagnosis and Programming

Highs and Lows of Network Faults

Modern AC Diagnosis and Repair



For information on replacing collision components, search "Collision" on the NAPA® Echlin® YouTube channel





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