

How to fix your hybrid car

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Hybrid automobiles have only been on the market for a short time but fixing them is still a matter for the professionals. And according to Andrew Walko of Walko Automotive in Hillsborough, “hybrids are here to stay.”

“Hybrids” or hybrid automobiles are cars that have an electric motor and gasoline engine inside. Either the engine or the motor can power the vehicle. When the car is going up a hill, the gasoline engine kicks in to carry the load; the extra energy from the Internal Combustion Engine (ICE) is then used to recharge the battery. Then when the car is cruising the energy stored up in the battery runs the vehicle from the electric motor.

Those who buy the cars believe the gasoline savings from hybrids are worth the extra maintenance required and may save the environment — but don’t think that you are going to repair your hybrid by yourself in the driveway.

And like any vehicle today, you don’t have to go back to the dealer with your hybrid vehicle for service. Any service station with the required hybrid electric vehicle certifications and equipment can repair a hybrid car. Tony Francisco of Crystal Auto Mall in Green Brook said, “For you to be an outside shop you have to have the investment.”

Remember the high voltages powering the engine? Well, Professor Robert McClure of Brookdale Community College said that two layers of protective gloves are necessary to disconnect the high voltage mains from a hybrid and that EMT’s and First Responders need to be “taught how to disable the battery.”

Typically, automotive mechanics achieve a Master Technician status from the National Institute for Automotive Service Excellence (ASE), but Walko Automotive has three Master Technicians who hold the extra L1, L2 and L3 certifications. “L3: is the Light Duty Hybrid / Electric Vehicle Specialist’s test.

“You have to hire high quality people,” said Walko, whose son Andrew Jr. is one of his certified technicians. Walko Automotive has five clean bays in which hybrid vehicles can be refurbished. “I put a good piece in your car and you are good-to-go for a long period of time,” he said.

The nickel metal or lithium ion batteries in an electric or hybrid automobile form crystals that must be cleaned out every six to seven years. Letting those crystals form is just like throwing rocks into your gasoline tank, experts says. Walko added that the crystals “reduces the area where energy can be stored.”

While you can go back to your Toyota dealership to maintain your Prius C, a graduate of Brookdale, which teaches General Motors’ accredited AAS Degree Program (GMASEP) among other certifications might lend a service station the expertise needed to guarantee their repair of your Ford Escape.

Walko Automotive, which is a franchise of the EV Hybrid Shop, is currently the “only (service station) in New Jersey that has the training” to fully refurbish a hybrid automobile, according to Walko.

Though the dashboard may seem just like your old Buick, everything about a hybrid car is different under the hood. From the air conditioner to the transmission the high voltage and other wiring harnesses are a whole new world to the average technician.

“We service a limited amount of hybrids,” says Robert LaRue of Princeton Garage in South Brunswick, whose shop also repairs Tesla all-electric rides, and agrees that hybrids have a whole new level of complexity that businesses like his are learning to serve.

Sal Risalvato of the New Jersey Gasoline C-Store Association agrees that any service station with the required training can service hybrids.

He added changes are afoot for the regulations regarding full-service gasoline pumping stations in New Jersey. He noted that hybrids can be recharged wherever a recharging station is available, and experts noted that with state monies available, more stations will be coming online at a variety of locations, from existing sites like hospitals and parking garages, to mall and other sites previously not considered.