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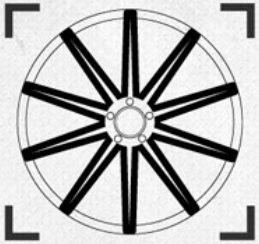
ELECTRIC VEHICLE AFTERMARKET

The United States has had a love affair with cars-since their commercialization. As a country we are always striving for better, more and, yes, faster. People want better steering, more power and better fuel economy.

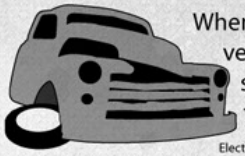
Thus, three aftermarket processes are highlighted to give a better understanding of electric vehicle aftermarket trends: convert, upgrade and repair.

The automotive aftermarket involves the manufacturing, remanufacturing, distribution, retailing, and installation of vehicle parts after the initial sale of a vehicle. Aftermarket automotive products gained momentum as a serious industry as a result of air pollution regulations. In the 1970's and 80's racing teams began utilizing aftermarket products to modify their vehicles and give themselves a competitive edge. Today the automotive aftermarket is worth over $257 billion and employs 4.54 million Americans.

Due to the recent popularity of electric vehicles (EV), EV related technology and aftermarket products have become available and cheaper. EVs are an inevitable part of the future and an aftermarket that is ripe for the picking.



REPAIR



When it comes to repairing electric vehicles, they tend to be significantly easier to deal with than gas cars.

Electric motors contain around six or so moving parts. Compare this to a gas engine that has hundreds of working parts. There are very few parts in an EV motor that can wear out and, even when they do, they will be simple to repair and replace. The aftermarket for EV repairs will be an inexpensive and efficient one.

Electric cars are maintained and repaired much in the same ways as vehicles with internal combustion engines. Battery, electrical/charging components, cooling systems, tire lubrication and replacement, as well as, brake repair/maintenance are common repairs for EVs. Computer based diagnostic equipment is a regular tool for an EV mechanic. It is used to maintain sophisticated battery, electrical, and motor operation.

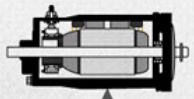
CONVERT

A typical conversion from gas to electric will cost between $5,000-$10,000.

Rising popularity in EVs have led to a new trend in the EV aftermarket… every day there are more hobbyists and do-it-yourselfers converting gas cars into electric. The wonderful thing about this is that they are creating new designs and concepts and constantly improving the technology.

Electric car conversions, traditionally, take a gas vehicle and convert the vehicle to run on electricity. A simplified explanation of it is that the electric motor needs to be installed to propel the vehicle and space needs to be found for the batteries. Further processes involve aspects of the vehicle not related to actually getting it to move - air conditioning, power steering and other electrical systems will need to be altered slightly to function properly with the new electric motor.

For all you "Do It Yourself-ers" there are tons of websites that are willing to teach and help with DIY electric conversions, for example EVTV.me. This site posts a weekly video of "do's" and "don'ts" for doing electric conversion and working with electric cars. Conversion makes up the largest portion of the EV aftermarket.



UPGRADE

A lot of aftermarket products for gas vehicles can be applied to EVs. As the EV market grows, the aftermarket for it will too. Soon you will be able to modify the battery system, to choose the best battery system, to go faster for longer. You could even change the sound of your EV to let people know when you are coming around the corner. It's an exciting time full of opportunity to develop new products for a new market.

Tuning up your EV is similar to it's gases counter part, things like: stiffened suspension, widened tires, better brakes, improved steering, and transmission modifications. Also, modifying the outside of a vehicle can change the overall appearance of the car as well as add downforce to increase traction and improve aerodynamics.

EV tuning modifications will often deal with electric motors, battery systems, controllers, tires, rims, and possibly engine sounds.

Using the SAE J1772 plug you are able to even upgrade your charging system for adaptable and faster chargers, which extends battery life and decreases charging time.