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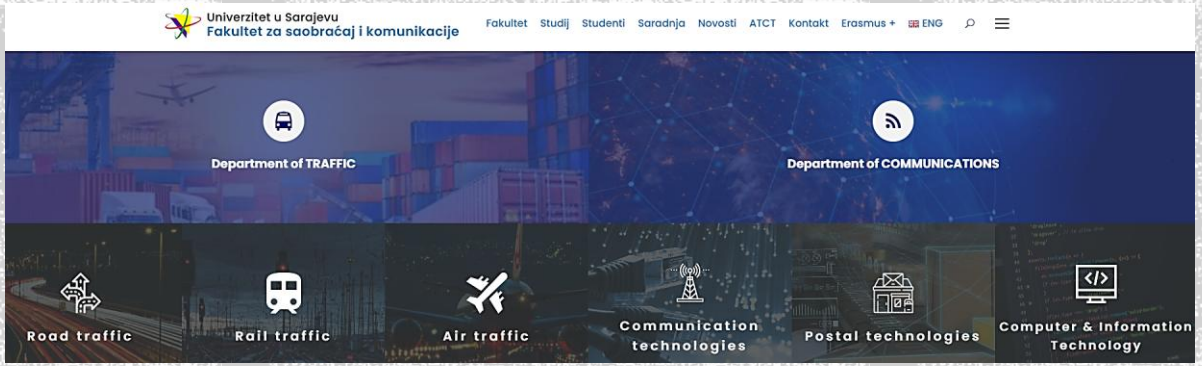


Osnovni sistemi EV i održavanje EV

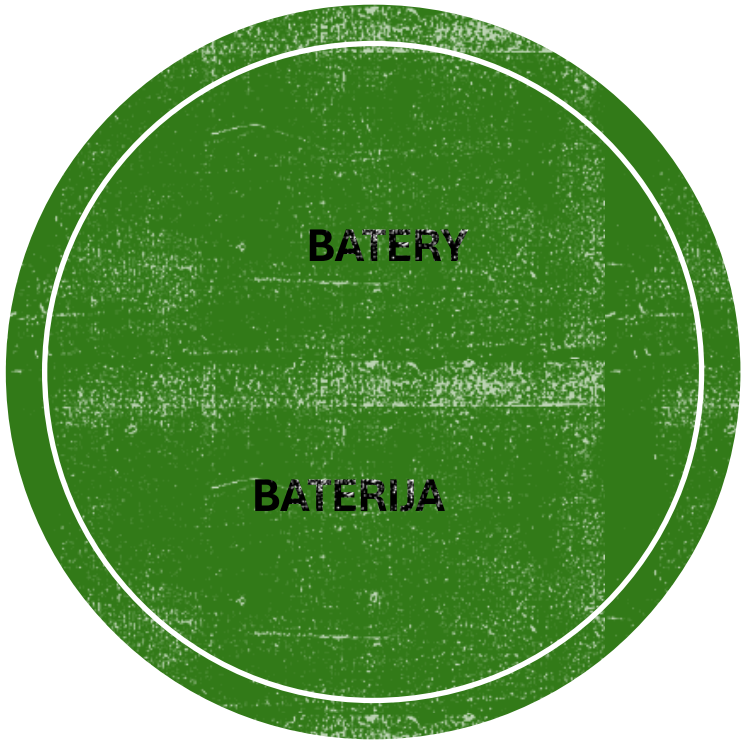
EV BASIC systems and MAINTENANCE of EV

ELEKTROMOTOR

Electric motor

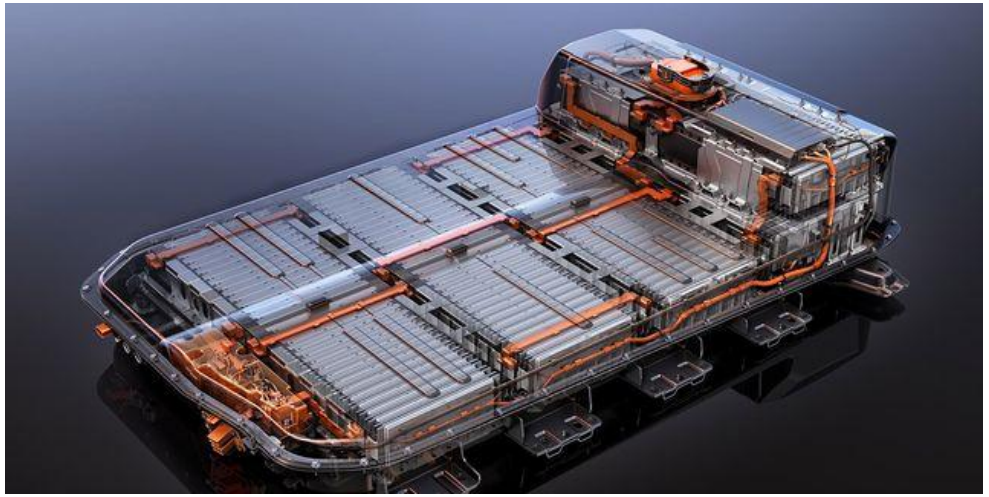
Elektromotor naziva se i kao električna mašina ili motor/generator, koristi se za pomicanje vozila. Ova komponenta također može da funkcioniše kao generator tokom regenerativnog kočenja. U zavisnosti od dizajna i primjene vozila, vozilo može imati između jedne i četiri električne mašine u vozilu.

Electric motor also colled electric machine or motor/generator, it is used to move a vehicle. This component can also function as a generator during regenerative braking. Depending on the design and application of the vehicle, the vehicle can have between one and four electric machines in the vehicle.



Poznata i kao vučna baterija, skladišti energiju i snabdijeva električnom motoru energiju i energiju; baterija uključuje niz fizički povezanih baterijskih ćelija i hardvera i softvera za upravljanje baterijama.

Also known as a traction battery, it stores energy and supplies the electric motor with energy and energy; The battery includes a range of physically connected battery cells and battery management hardware and software.



Pretvarač snage: Baterije mogu samo pohraniti i isporučivati istosmjernu struju, koja se naziva i DC. Motori EV zahtijevaju naizmeničnu struju, poznatu i kao AC, za pokretanje vozila i generisanje naizmenične struje tokom regenerativnog kočenja. Pretvarač snage, postavljen električno između baterije i motora/generatora, pretvara struju kako bi omogućio protok energije između baterije i elektromotora.

Power converter: Batteries can only store and deliver direct current, also called DC. EV motors require alternating current, also known as AC, to start the vehicle and generate alternating current during regenerative braking. The power converter, placed electrically between the battery and the motor/generator, converts electricity to allow the flow of energy between the battery and the electric motor.

Pretvarač snage

Power Converter

DC-DC PRETVARAČ

DC-DC Converter

Potpuno električna i mnoga hibridno-električna vozila ne koriste konvencionalni alternator za punjenje 12-voltne baterije. Umjesto toga, ova vozila koriste DC-DC konvertor za podizanje visokog napona iz akumulatora na niskonapon, dopunjujući niskonaponsku bateriju i snabdjevajući električnom energijom za druge niskonaponske funkcije.

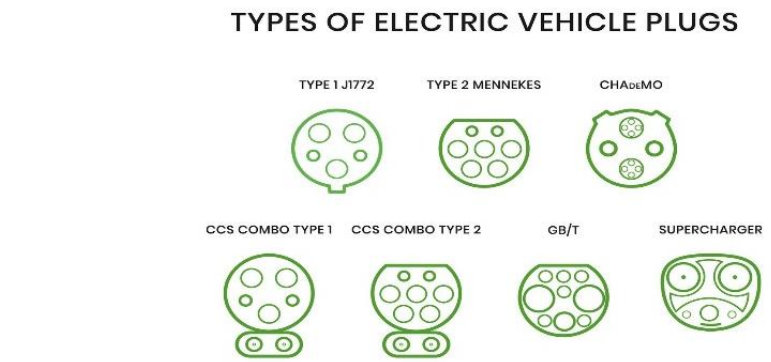
Full electric and many hybrid-electric vehicles do not use a conventional alternator to charge a 12-volt battery. Instead, these vehicles use a DC-DC converter to raise the high voltage from the battery to low voltage, replenishing the low-voltage battery and supplying electricity for other low-voltage functions.

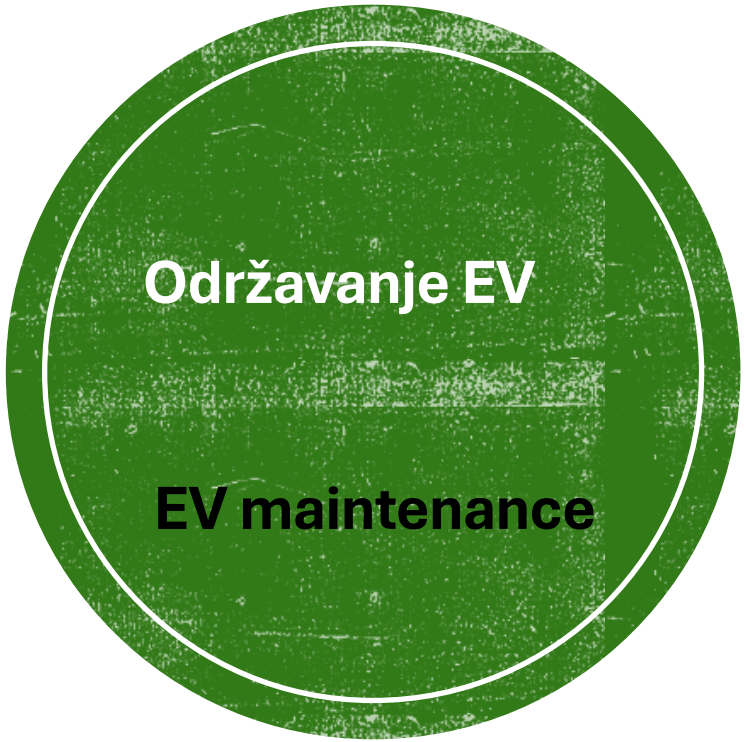
Konektor za punjenje

Charging Connector

Konektor za punjenje EV i plug-in vozila služe za konekciju na vanjski izvor napajanja za punjenje baterija EV.

The connector for charging EV and plug-in vehicles are used to connect to an external power source for charging EV batteries.





Potrebe održavanja i sigurnosni zahtjevi za plug-in hibridna električna vozila (PHEV) i hibridna električna vozila (HEV) slični su onima kod konvencionalnih vozila, dok potpuno električna vozila zahtijevaju manje održavanja. Potpuno električna vozila obično zahtijevaju manje održavanja od konvencionalnih vozila, zbog sljedećih karakteristika Full EV:

- ✓ Baterija, motor i povezana elektronika zahtijevaju malo ili nimalo redovnog održavanja.
- ✓ Postoji manje tečnosti, kao što je motorno ulje, koje zahtijevaju redovno održavanje.
- ✓ Habanje kočnica je značajno smanjeno zbog regenerativnog kočenja
- ✓ Mnogo je manje pokretnih delova u odnosu na konvencionalni motor na gorivo.

- ✓ The maintenance needs and safety requirements for plug-in hybrid electric vehicles (PHEVs) and hybrid electric vehicles (HEVs) are similar to those of conventional vehicles, while all-electric vehicles require less maintenance. Fully electric vehicles typically require less maintenance than conventional vehicles, due to the following Full EV characteristics:
- ✓ The battery, motor and connected electronics require little or no regular maintenance.
- ✓ There are fewer liquids, such as engine oil, that require regular maintenance.
- ✓ Brake wear is significantly reduced due to regenerative braking
- ✓ There are far fewer moving parts compared to a conventional fuel-powered engine.

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Thank you for your attention

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