

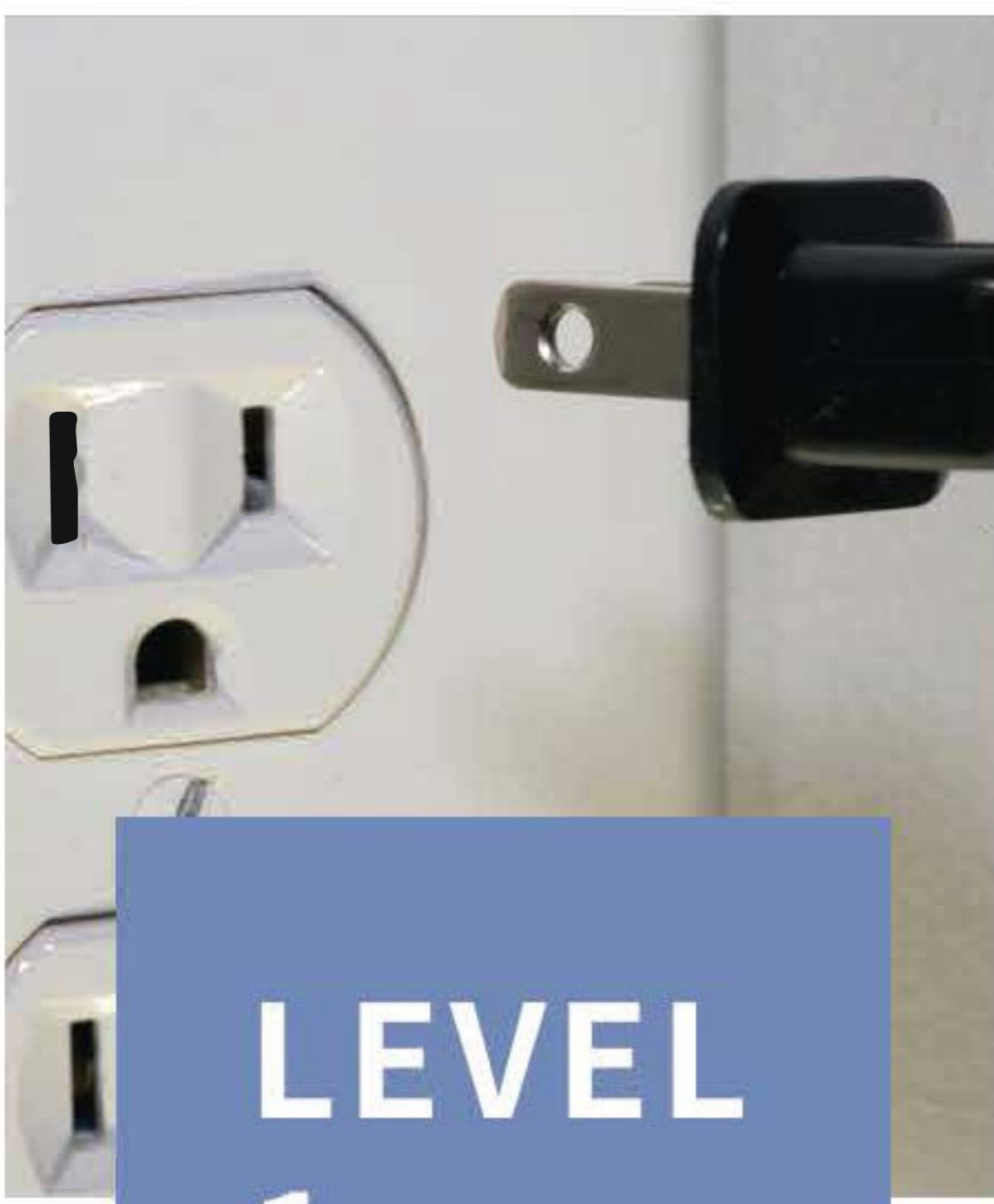


Electric Vehicle Basics



Charging Levels





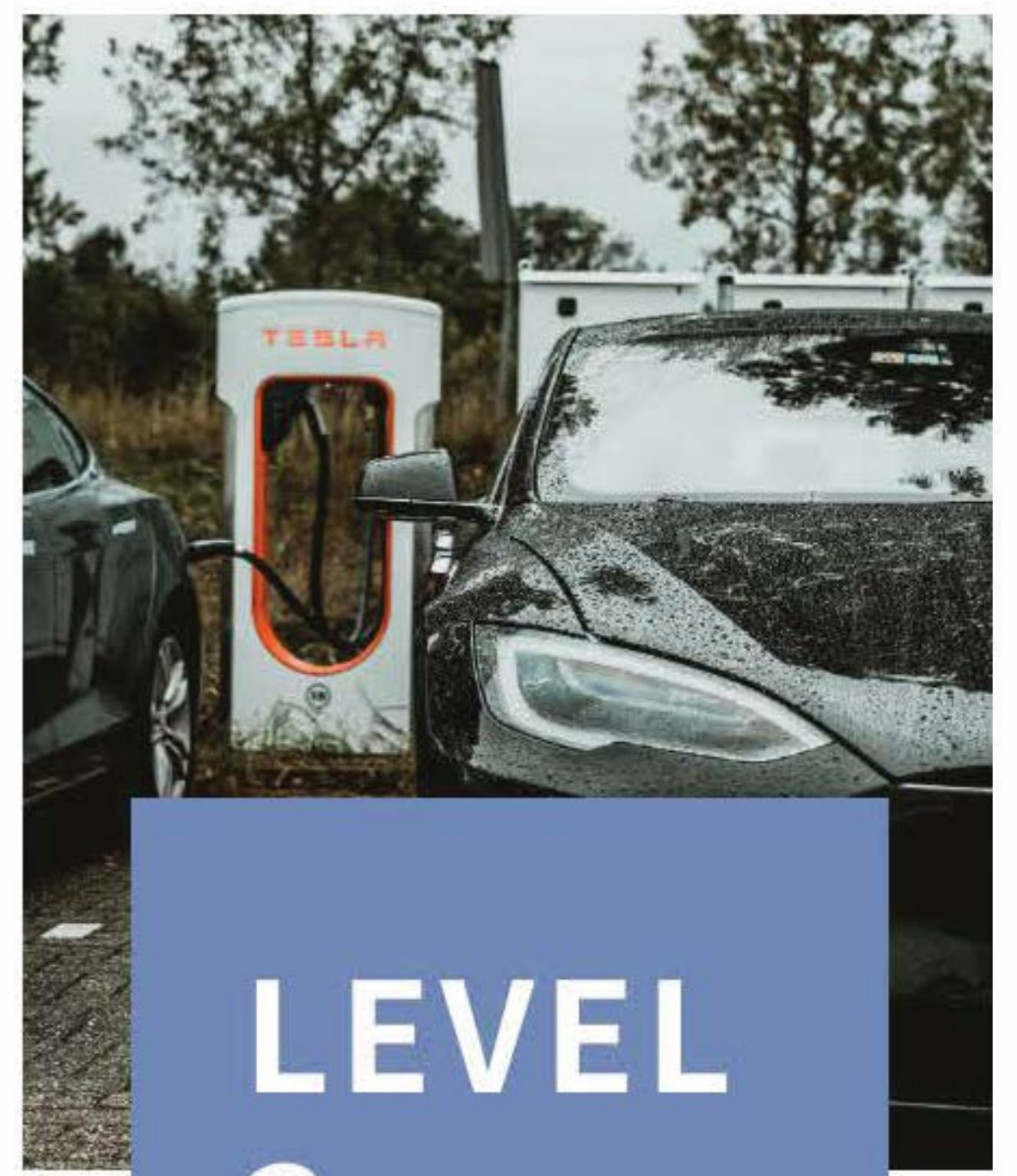
LEVEL 1

120 V
~40 miles in 8 hours*
(e.g. common household outlet)



LEVEL 2

240 V
100 - 300+ miles in 8 hours*
(e.g. wall chargers, clothes dryer outlet)



LEVEL 3

DC FAST CHARGING
~90 miles in 30 min*
~[Tesla Superchargers can add 170 miles in 30 min](#)
(e.g. Superchargers, CCS)

*Charging speed will vary with vehicle type and charger output

Charging Connectors



J-1772

Also known as the **J-Connector, level 1 & 2 charging** (All U.S. electric vehicles, Tesla provides adaptor for the J-connector)



CCS

Combo Charging System Used for fast charging, **level 3 charging** (Most commonly used in electric vehicles)



CHAdeMO

Level 3 charging, used in Japanese electric vehicles companies



Tesla

For use in Tesla vehicles, Supports **level 1, 2 and 3 charging**

State of Charge



- Keep battery charge level below 90% for daily driving.
- Don't leave your car sitting for a long period of time at 0% or 100%.

Maintenance & Charging Costs



Electric vehicles require minimal maintenance. Common items that require servicing include:

- Tire and Wheel Care
- Windshield Wipers & Fluid
- Air Filter
- Air Conditioning Service

Public chargers may use price based on kilowatt-hours of electricity used or time based billing

Look at a specific vehicles energy consumption:
fuelconomy.gov

References:

- Developing Infrastructure to Charge Plug-In Electric Vehicles. Retrieved November 19, 2020, from https://afdc.energy.gov/fuels/electricity_infrastructure.html
- (2018, March 9). Electric Vehicle Charging. Retrieved November 19, 2020, from <https://www.ucsusa.org/resources/electric-vehicle-charging-types-time-cost-and-savings>
- What can 6,000 electric vehicles tell us about EV battery health? Retrieved November 19, 2020, from <https://www.geotab.com/blog/ev-battery-health/>
- EV Support Program. Retrieved November 19, 2020, from <https://pluginaustralia.org>
- Maintenance and Safety of Hybrid and Plug-In Electric Vehicles. Retrieved November 19, 2020, from https://afdc.energy.gov/vehicles/electric_maintenance.html

