# LEVEL 2 CHARGER INSTALLATION GUIDE

## THINGS TO CONSIDER WHEN INSTALLING A L2 CHARGER AT HOME:

1. **DO YOU NEED A L2 CHARGER AT HOME?** Installing a L2 charger at your home will enable you to charge your EV faster than if you were to use a regular 120V outlet. An EV could take more than 24 hours to fully charge using a standard 120V outlet. Using a L2 charger will enable an EV to add about 150 km to its range when charging for 4 hours.

2. **DOES YOUR HOME REQUIRE ELECTRICAL UPGRADES?** L2 chargers require a power source of 240V. You will need to identify if a 240V circuit is available in your electrical panel or if you will require a service upgrade. Talk to your electrician about these requirements. Furthermore, L2 chargers can deliver between 15-80 amps of power to your EV.

3. **WHAT TYPE OF L2 CHARGER SHOULD YOU PURCHASE?** There are a wide variety of chargers available to purchase. Referring to organizations including plugndrive.ca and chargehub.com that provide information on a wide variety of chargers will help you to select one that is reliable, safety certified for Canada and meets your needs. SaskPower does not endorse any manufacturer or brand.

4. **HOW MUCH DO L2 CHARGERS COST?** Prices range to purchase a charger and you will also need to consider any installation, upgrades to electrical panel or service and labour costs. Look for a charger (also known as EVSE-electrical vehicle supply equipment) that is Energy Star and safety tested for use in Canada. SaskPower recommends working with a licensed electrical contractor to have your charger installed.

5. **WHERE WILL THE CHARGER BE LOCATED?** Identify if the charger is going to be inside a garage or outside. This will help to determine the type of charger that you will need as you will need to consider winter conditions, heavy rain and heat if choosing an outdoor L2 charger.

6. **WHAT LENGTH OF CABLE IS REQUIRED?** Make sure you know where you want to install your charger and identify if the cable that comes with the charger will be long enough to reach your EV's charging port.

7. **WHAT TYPE OF CONNECTOR DO YOU NEED?** When you charge your cell phone you need the correct adapter and the same goes for charging your EV. The most common connector or plug type for L2 chargers is the "J plug" (SAE J1772). There is also the CHAdeMO plug that is less common but applies to some models of vehicles. Tesla has a proprietary connector but also has an adapter to enable Tesla drivers to charge at J1772 L2 chargers.

8. **DO YOU NEED A 'SMART' CHARGER?** It is recommended that L2 chargers used at your home are smart chargers. This means the charger can enable you to see your charging data, remotely start charging your EV and control access to your charger through an app on your phone. Smart chargers are encouraged by SaskPower as they are an effective way to set up EVs to charge off-peak power usage times or after 8pm.