Dual electric car charger

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We didn"t mean to get a second electric car. After purchasing a Tesla Model 3 earlier this year, my wife and I began asking ourselves, "Why are we still burning gas at all when we don"t have to?" Plus, we discovered we like the way electric cars drive - even the non-Tesla ones - more than gas-powered cars. When we found a good deal on a 2016 Chevy Spark EV, we pulled the trigger and welcomed a second EV into our happy home.

The only problem was we had never planned to charge two electric cars at home. When we bought the Model 3, we had an electrician install a 240-volt outlet in the second bay of our two-car garage. This was a considerable expense, as the heavy-duty wiring had to exit our home"s basement, travel along the exterior of our house, go through our garage"s seriously thick cinder block wall, and then travel across the ceiling of our garage"s first bay to get to the second. Did I mention our garage bays are also separated by a brick wall?

So we were faced with a question that will become increasingly common as more and more households go completely electric with two EVs - how do we charge two electric cars at home?

My next call was to InsideEVs Contributor Tom Moloughney, who has lived with multiple EVs for many years now (he currently owns a Tesla Model 3 and BMW i3). Tom gave me three options of varying cost and complexity to consider.

Tom"s third recommendation was by far the least expensive and simplest: charge the Spark EV on a simple 120-volt outlet most of the time since its battery is relatively small (about 19 kWh compared to the Model 3"s estimated 80 kWh battery). For those times when the Spark EV needs a quicker charge, he recommended getting a JLONG 20-ft EV extension cord to help our current charger reach the Spark EV in the first bay of the garage from the second. Cost? $200.

There"s one factor I neglected to mention that made choosing between Tom"s three options a lot easier: while our garage bays are separated by a brick wall, for some strange reason, there"s a window in the wall and it opens. This means a charging cord from the second bay can easily be passed through the window into the first. Separate garage bays are probably rare, but if you do have them like I do, it"s always possible to make some sort of pass-through in the wall to snake a charging cord through, even if the wall is made of brick or cinder block.

With this revelation in mind, we took Tom"s second option off the table, as wiring up a second outlet just wouldn"t be necessary. So we were left with getting a Clipper Creek Dual Charger for $1,300 or buying a $200 extension cord and managing the charging of our two EVs with one charger.

We decided to get the Clipper Creek HCS-D40 Dual Charging Station. While it"s not cheap, we were bracing for an even more expensive project had we upgraded our electric panel to accommodate another 240-volt line.

Also, we thought we could get away with not hiring the electrician to install the dual charging station (more on that later). Lastly, since we were going all-in on driving electric, we didn"t want this solution to be a compromise, which is what sharing a single charge cord between two vehicles felt like.

I"m about as handy around the house as a distracted teenager, so for the electrical part of the installation process, I asked a person who always knows best: my dad. You should always use a licensed electrician for this sort of work, or at least someone well versed in the complexities of electrical systems. We have the Navy to thank for my dad"s experience here, and so I was confident we could safely and properly install the charging unit without a licensed electrician.

First thing"s first, of course: we shut off electrical power to the garage. The rest is rather anti-climactic. After opening the 240-volt junction box, the job of installation came down merely to matching three service conductors from the charger to their corresponding partners in the junction box. It"s not rocket science, but the job did require larger twist-on wire connectors than we were expecting. That resulted in Home Depot trip #1.

After the three wires were securely connected and the ground set, we closed the junction box and set the charging unit on a nearby stool so we could test whether or not the electrical part of the installation had worked. We plugged in the Model 3 and Spark EV and, lo and behold, two amber lights on the front of the charging unit began to glow, indicating both were charging at the same time. We also looked at each car"s information display to verify that they were charging, and indeed they were.

Dad had to take off, and with my sense of achievement more than fulfilled enough for the day, I left mounting the charging unit to the wall for another day. Which became a week. Which became three weeks.