



All Lightning eMotors EVs have regenerative braking, creep and hill-hold, making your EV easier and safer to drive and more efficient.

**Regenerative braking** occurs when the driver removes his or her foot from the accelerator pedal. The vehicle is slowed down by using the electric motor as a generator, which charges the batteries. This recaptures some of the kinetic energy (the “motion energy”) of a moving vehicle and stores it as charge in the batteries. This contributes to the overall efficiency of the vehicle, and extends its on-road range by a small amount. A valuable side-effect of regenerative braking is that the vehicle’s wheel brakes are used much less, which reduces brake wear and its associated maintenance costs.

**Creep** is the behavior of automatic transmissions where a vehicle will move slowly forwards (or backwards, if in reverse) when the driver takes his or her foot off the pedals. This is very useful for maneuvering and parking and is much appreciated by drivers.

**Hill-hold** is a related behavior where a vehicle that’s on an uphill slope will not roll backwards when the driver removes his or her foot from the pedals.

Regenerative braking, creep and hill-hold are not by-default behaviors of electric motors. They have to be specifically implemented in the control software so that the electric traction motor is powered in just the right way. **Every Lightning eMotors EV incorporates all three behaviors as standard.**