



TT470: CELLULAR STRENGTH IMPROVEMENT OPTIONS

2020-01-13



Electrical

APPLIES TO	SYMPTOMS
2020 Vehicles with a TCU.	<ul style="list-style-type: none">• Accessories• Audio System

Purpose for Technical Tip Bulletin

Dealers with low cellular signal strength inside the dealership have experienced difficulty performing TCU (Telematic Control Unit) initialization.

Harley-Davidson does not currently endorse any manufacturer or option of cell communications. The bulletin provides awareness of some options available if cellular reception is poor inside the dealership.

Markets Affected

All markets are affected.

Issue

Low cellular signal strength.

Resolution

Some dealers have experienced issues while performing the TCU initialization due to low cellular strength in the building. In some cases having the vehicle closer to exterior walls, or near windows improved the signal enough to complete the initialization. Some dealers moved the vehicle outside to get a stronger cell signal. Remember that the TCU operates on the GSM (Global System for Mobile Communications) network (example: AT&T®/T-Mobile® in the U.S. and Rogers™ in Canada) to communicate.

The bulletin offers two options currently available to help improve signal strength inside the dealer.

1. **Cell signal booster:** The booster receives a cell signal from an exterior antenna. At that point, it transmits the signal to an interior module that boosts signal inside. For this option, it is necessary to have a good carrier signal outside of the building. If there is no coverage in that area this option should not be used. There are numerous commercially available signal boosters, some options include:
 - <https://www.weboost.com/boosters/home-office>
 - <https://cel-fi.com/go-plus/>
 - <https://www.surecall.com/cell-phone-signal-booster-guide/>

2. **Microcell:** For dealers without carrier signals outside of the building. A microcell can provide a cell signal to the dealership by using the local internet connection. T-Mobile offers the CellSpot® to customers with a T-Mobile account, so the dealership must have T-Mobile account to qualify. More information on the CellSpot can be found:
 - <https://support.t-mobile.com/docs/DOC-24269>