

04SLG2021-05-19

Product Line: SLG

Post Date: 2021-05-19

#### MSD Thread Subject

Slingshot AMT Grid and Kiss point learn

#### MSD Post Content

Good afternoon MSD community, I wanted to offer some tips and tricks on the transmission service procedures to help you out when we have a unit having some difficulties completing this calibration. First, let's look at the reason these values are important, and what we are completing when doing this. As many of you know, these transmissions are actuator shifted manual transmissions that gets controlled by the TCM. These values change from each unit and are specific to that vehicle's transmission, clutch, and actuator tolerances. Having incorrect values can cause accelerated clutch and synchro wear on a transmission as well as affect the overall shift quality of the vehicle. Grid Learn : There are 2 sensors which measure precise location of the actuators to shift the gears on the vehicle, each gear needs to "learn" its home position in order to accurately shift to the right location. Tips for Grid learn: - \*\*\* ALWAYS have 10amp charger on the unit when performing the grid learn, you want to maintain 13V and above when starting the learn as AMT pump will run for extended period of time and solenoids activating. - Park brake needs to be off and vehicle needs to be able to move ever so slightly. I recommend having an assistant slowly rock the unit, especially when we have low miles on the unit, this will help line up the synchro's as the actuator goes into each gear position. Kiss point Learn : The CSC (clutch slave cylinder) actuator also needs to be calibrated properly. It is equipped with a position sensor and a speed sensor that measures RPM at the clutch. When performing a kiss point learn, the TCM will learn a baseline that will provide data to know how much to modulate the clutch. This will also change throughout the life of the vehicle to maintain clutch wear. We recommend doing the launches after completing the kiss point learn as this will help fine tune the value. Tips when doing Kiss point learn: - Make sure your brake switch is adjusted properly(magnetic switch on brake pedal) TCM looks at brake inputs as we need the brakes for safety as clutch gets activate through procedure. - Always have at minimum 10 amp charger when performing this procedure. Any feedback from the field is always appreciated! Let us know if you have any questions.