

# Physical Hardware Connection Manual

Thank you for the purchase of your RaceMe Ultra Tuner. This guide will walk you through the required physical connections for proper operation of your device. The following picture depicts all the parts of the Ultra and their respective names. Each Ultra has a Micro SD included and is preinstalled in the top left corner of the display. For Update purposes, it can be removed by lightly pushing down on it until it unclicks from the socket. It can then be pulled out.



The Ultra requires all the parts shown in the above picture to be connected for proper operation.

Plug the micro USB cord into the back of the display, taking special care in the orientation of the cord. There is a “B” printed on one side of the cord plug, which must be facing the bottom of the monitor. Improper orientation of this cord will result in a damaged cord and/ or socket and will NOT be covered under warranty.



The other side of the Micro USB gets plugged into the Controller. Once again, the orientation of the cord is such that the printed “B” is facing the mounting tab, or the bottom of the controller. There are three ports in the end of the controller. The display port, shown below, the middle port (Mini USB Type B), Which can be connected to a computer for a direct relationship with our Warp custom tuning software, and the white socket, which connects to the optional EGT kit.



The Controller then connects to the Communication Module via a DB-15 serial connection. This is an interference fit connection. What this means is that when the two boxes are pushed together, the tight fit of the plastic cases will hold them together.



The DB-15 Connector on the other side of the Communication module will accept the OBD2 cable. The OBD2 cable plugs into the vehicle's diagnostic port under the dash. Finally, the RSA unlock cable connects to the side of the Communication Module.

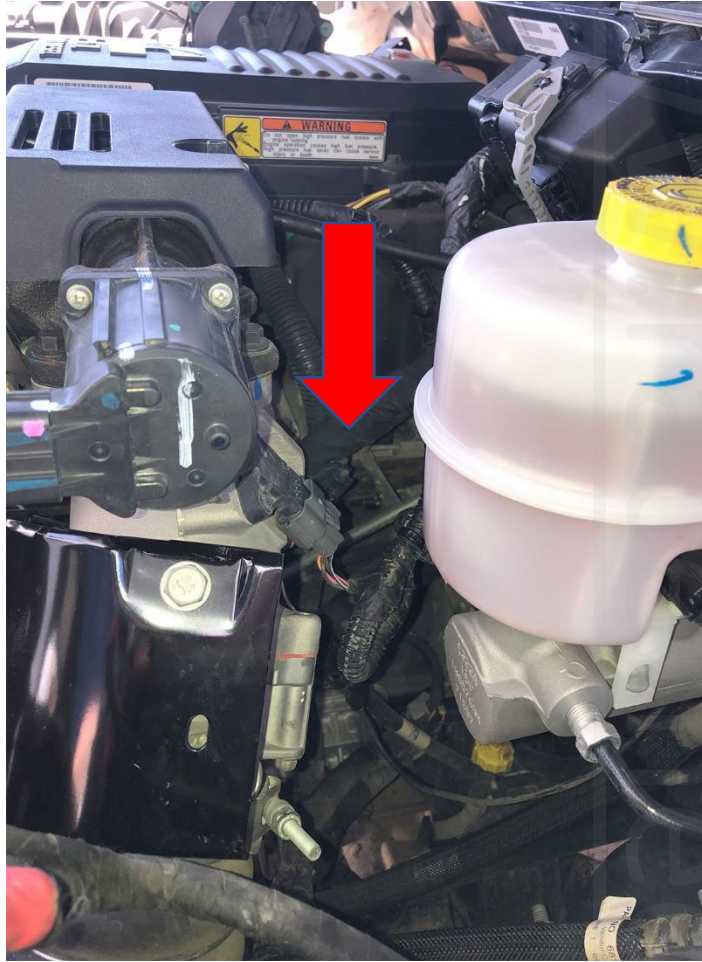


The RSA Unlock Cable is used for the unlocking of the vehicle's ECM. This cable is also required to be connected for the use of RT (Real Time) functions. This cord will be routed through the

firewall. The recommended area for this is the shift cable boot to the left of the steering column as shown in the following picture.



Once in the engine bay, locate the datalink connector. The location of the Datalink connector is the same in all trucks from 2010 – Present. The Datalink shares the same harness as the fuel injectors. It is located on the driver's side of the engine, behind the air intake horn, and is zip tied to the harness with a weather proof plug protector plugged into the end of it. This protector must be removed in order to plug the RSA unlock cable into. The location can be seen in the picture below.



This will complete the connections of the Ultra. Turning the ignition to the “Run” position will “wake up” the Ultra. The Tuner is now ready to program the ECM. For further information on the programming process, please see our Programming manual.