10885 May Chapel Rd. Lawrenceville, IL 62439

Ph. 618-943-4856 www.bowlertransmissions.com

All-in-one wiring harness solution

Enclosed is an all in one solution for your Tremec 6-speed Magnum transmission that allows for a simple 4 to 5 wire hook up to give you control over every function included on the transmission.

The all in one utilizes a small, built in, epoxy sealed control box that will control each of the 3 functions with power and grounding for each function through 1 switched +12v circuit (RED) and 1 (BLACK)wire connected to the negative battery post or engine block. Control of the reverse lockout solenoid is based on a user defined speed setting that is set up through the mobile app. This eliminates the need for a separate lock out control box. The electronic speedometer output connection on the harness is equipped with 2 speed sensor outputs (PURPLE/WHITE & PURPLE/YELLOW); the speed sensor outputs generate a square wave signal that goes from about -5 to roughly +5 volts, varying in frequency as the speed changes. If your ECM needs a positive only input, the output will automatically shift and give you 0 to +10 volts. The 2 speed sensor outputs are completely independent and can be calibrated separately with any pulse count and ratio you want. These two outputs should be able to drive any common speedometer, cruise control, or ECM. If only one output is needed you can choose either wire and cap the other that will not be used. This will give you much greater flexibility in the components you are able to use and requires less time wiring everything up. The reverse lights are powered by a pair of wires (RED/BROWN) connected to a switched +12 volt source and the positive side of your reverse lights; grounding of those lights should be local to the bulb socket.

Wiring Diagram and plug connections

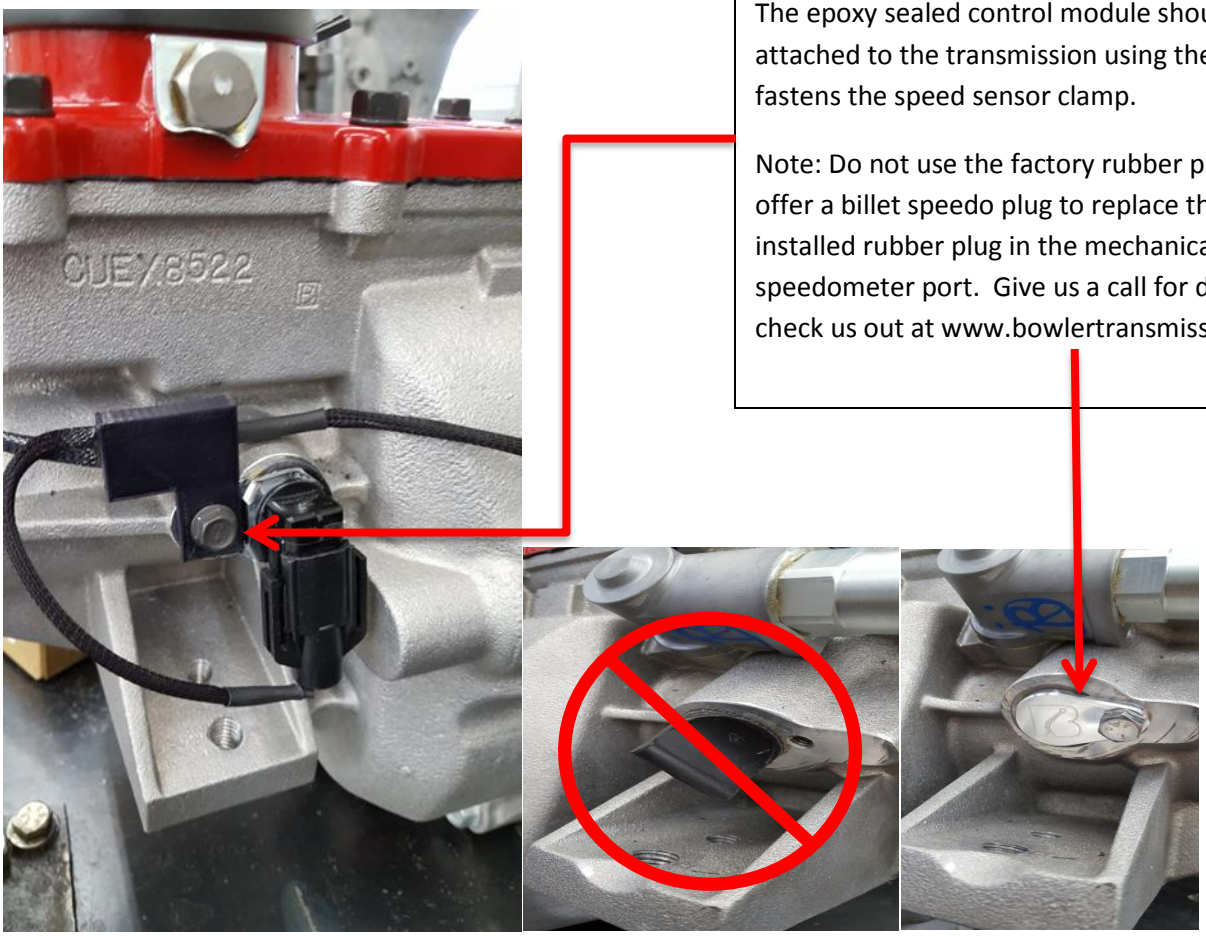
Red wire: Fused ignition switched +12 volt connection to provide power for reverse lockout and speed sensor functions.

Black wire: Ground connection for reverse lockout and speed sensor functions.*NOTE: It is extremely important to connect this to the battery negative terminal or engine block ground to avoid any electronic interference which could disrupt the speed sensor signals and give false readings.

Purple/White(output 1) & Purple/Yellow(output 2): These are both speed sensor outputs, and only needed when using an electronic speedometer or other module that requires a speed signal input to operate. You can utilize just one or both depending on your needs. They both are programmable based on the needs of the equipment they are sending signal to. If only one is used, cap off the other and secure it. Output one is preset at 40 pulses per revolution and option 2 is preset at 16 pulses per revolution.

Red/Brown(2): Reverse light power input/output. If using reverse light feature, these 2 wires work in conjunction with each other. They both are tied together so there is no way to connect them wrong if you hook them up to the correct sources. One wire will need to connect to a switched +12 volt source and the other will need to be connected to the positive (+) side of your reverse light bulb socket.(Does not matter which one connects to which) Power will be sent to this connection only when transmission is in reverse gear. The grounding of your reverse lights will be done direct to the bulb socket through a chassis ground.

The three terminated connectors on the harness each have one specific location and cannot be interchanged. It is a good idea to plug them all in even if you are not going to use one or more of them.



Mobile Blue Tooth App set up

The harness is equipped with a blue tooth chip that will connect to your smart phone along with an app we have developed for Apple or Android users. In the setup app, you can enter the expected number of pulses per driveshaft revolution for the speedometer or ECU being driven by the output. In addition, there is an adjustment that lets you modify that with a calibration ratio so that you can compensate for changes in tire size or final drive ratio.