

# COMPUSHIFT Mini 3 Quick Install Guide

## STOP! READ THIS FIRST!

HGM Automotive Electronics thanks you for buying a COMPUSHIFT Mini 3. This Quick Install Guide gives you an overview, but please refer to the Owner's Manual online at [www.hgmelectronics.com](http://www.hgmelectronics.com) for complete details.

## Mobile Device / App Preparation

The COMPUSHIFT Mini 3 connects to your mobile device (phone or tablet) via the COMPUSHIFT Setup app for setup and diagnostics. Be sure you download the free COMPUSHIFT Setup app from the app store on your device before starting the installation. Updates for your COMPUSHIFT Mini 3 controller may be available, and you can install them using the app as well. You will need an internet connection the first time you connect to the COMPUSHIFT Mini 3.

## Vehicle Preparation

The COMPUSHIFT Mini 3 cannot properly operate a malfunctioning transmission. A malfunctioning transmission may damage COMPUSHIFT Mini and void your warranty.

Your transmission must be properly installed and in good mechanical condition before using COMPUSHIFT Mini 3. A qualified transmission repair shop can inspect, clean, install, and/or rebuild your transmission as required.

If you have any questions about the condition or type of transmission, please contact a qualified transmission repair facility, HGM headquarters, or one of our distributors for a recommendation.

## Pre-Installation Checklist

- Prior to installation, you should ensure that your powertrain, engine, transmission, drive shaft, rear axle, are all in good working condition.
- The vehicle's electrical system should be properly maintained and working correctly. Battery voltage should be 13.8 - 14.7 volts while the engine is running.
- The transmission should shift smoothly and correctly through its gears, and the shift linkage should be correctly adjusted.
- Your transmission must have a properly-calibrated speedometer gear.
- COMPUSHIFT Mini 3 uses the industry standard 1000 turns per mile speedometer cable speed to determine speed. On your road test, shifts should be early at light throttle later as the throttle is opened. Your transmission should work and feel just like it would in the type of vehicle it came from.

# Controller Installation

## Before installation, you will need to decide:

- Where to mount your COMPUSHIFT Mini 3 controller
- How to route the wiring harnesses
- Where to install the firewall grommet

## COMPUSHIFT Mini 3 Controller

- Mount the controller, preferably in a dry, cool, secure location using the provided section of tape with hook-and-loop fasteners (Velcro). Do not mount near a heat source and be sure there is free airflow around the unit.

## Wiring Harnesses

- Install the wiring loom in the vehicle by routing the loom through a hole in the firewall. Rubber grommet can be moved along the wire harness to the desired position.
- Drill or punch a 1.625" hole through the firewall in an appropriate location. Fit the grommet through the firewall from inside the vehicle rather than up from the transmission. Route harness along the right side of the transmission.
- Connect the red wire to a source of switched 12-volt power and black wire to a good ground connection.
- If desired, connect the purple wire with a white stripe to the signal input of your electronic speedometer.

## Speed Sensor

- Assemble the sensor, small section of drive cable, washer, and cable nut.
- Locate and remove the speedometer cable attached to the speedometer drive output of the tail housing of the transmission.
- Reattach the speedometer cable to the output of the speed sensor.

## Pressure Sensor (GM only)

- Locate pressure plug test port on the left side of the transmission, immediately behind the bellhousing of transmission
- Clean this area. Remove plug, prep with PTFE / Teflon sealant (or tape), thread the pressure sensor into the port, and tighten.

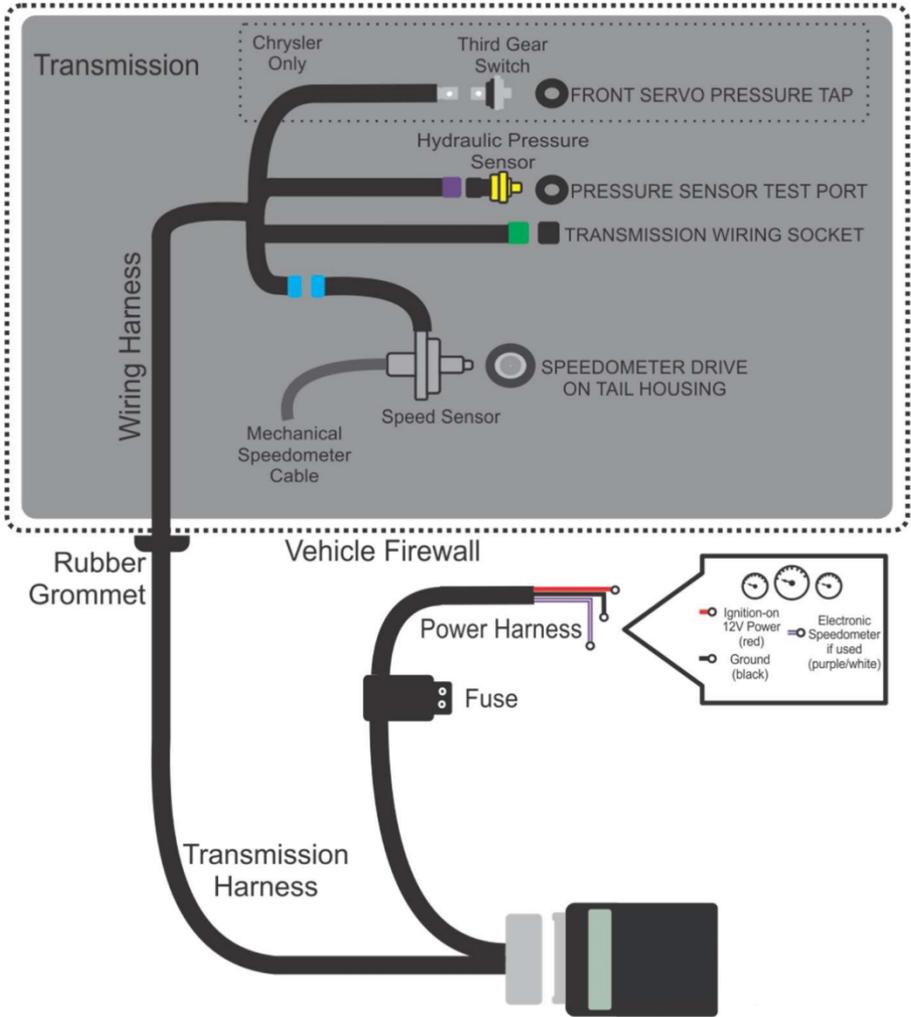
## Throttle Position Sensor (Chrysler only)

- Connect throttle position sensor wiring loom to the existing sensor or install and connect the sensor if your kit was ordered with one.

## Third Gear Switch (Chrysler only)

- Locate the front servo pressure tap on the right side of the transmission immediately behind bell housing on the transmission near the pressure plug.
- Clean this area. Remove the plug and thread the third gear switch into the port and tighten. Do not use Teflon sealant as this may prevent the switch from grounding properly.

## COMPUSHIFT Mini Quick-Install Diagram



### Install Wiring Harness on Transmission

- Connect the harness plug into the wiring socket, connect the speed sensor at the tail housing, connect the pressure sensor plug on the right side of the transmission. All wires are labeled. The Quick Install diagram is color coded to match these plugs.
- Use provided cable ties to fasten the harness to the bellhousing of transmission.

### System Check and Calibration

- Download and run the COMPUSHIFT Setup app on your mobile device.
- Power on the controller and select your device from the list. Then check the pressure sensor, check speed sensor, and calibrate the throttle position sensor. Refer to the owner's manual for more information on system check and calibration.

If you have any trouble or questions along the way, be sure to consult the Owner's Manual available at <https://www.hgmelectronics.com/product-manuals>.

If you need additional assistance, feel free to contact your distributor or HGM headquarters.

HGM Automotive Electronics  
2751 Plaza Del Amo Suite 305  
Torrance, CA, 90503, USA  
Phone: 877-SHIFT-UP (877-744-3887)  
Email: [support@hgmelectronics.com](mailto:support@hgmelectronics.com)

