

## Mazda Mx-5 NA 1.6

### vTPS installation

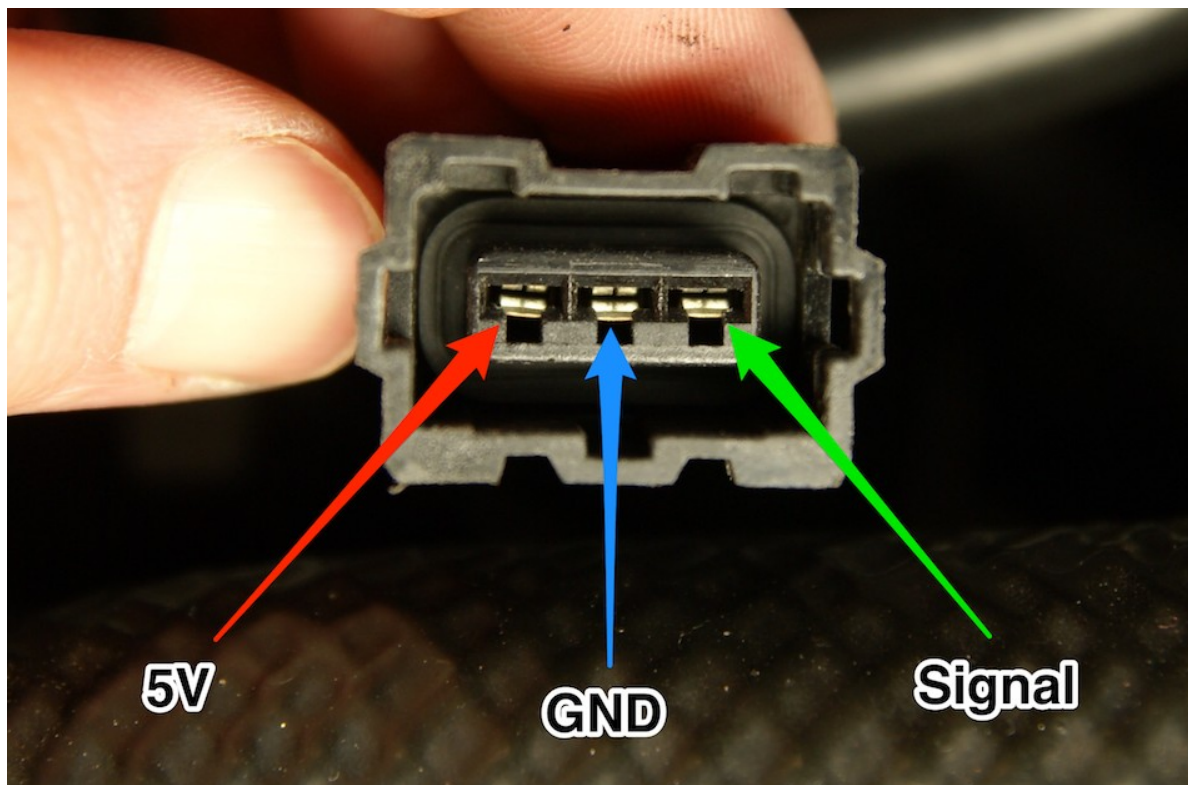
Required tools and materials:

- Mazda MX-5 NA 1.6 1989-1996
- vTPS set with this manual
- typical tools, including terminal removal tool

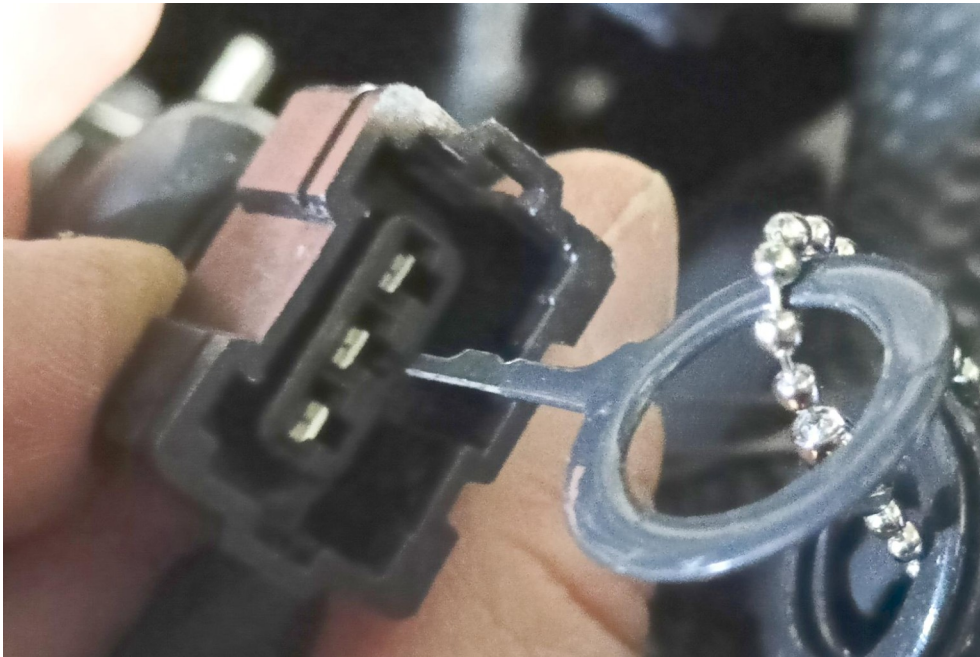
**procedure can be done without throttle body removal**

1. unplug TPS connector
2. rearrange terminals on connector

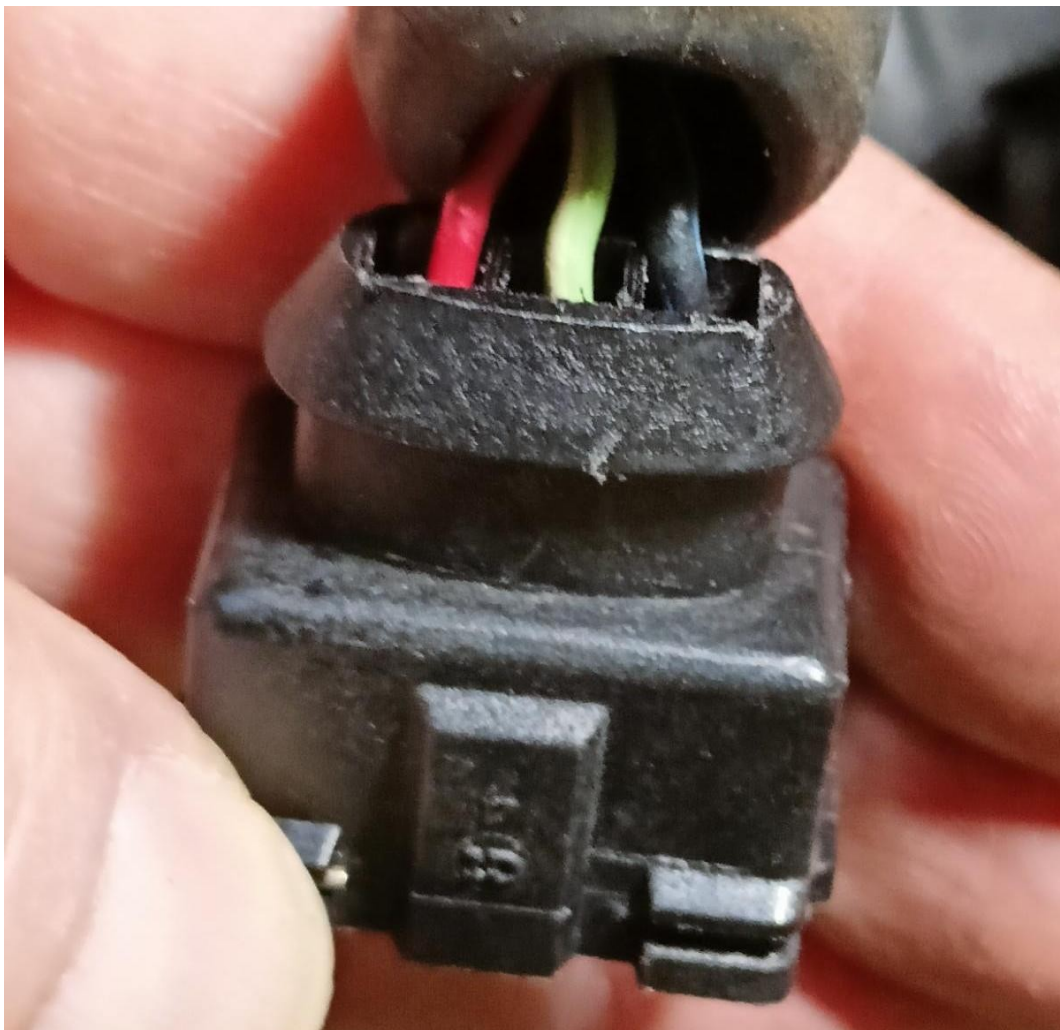
original arrangement



terminal removal

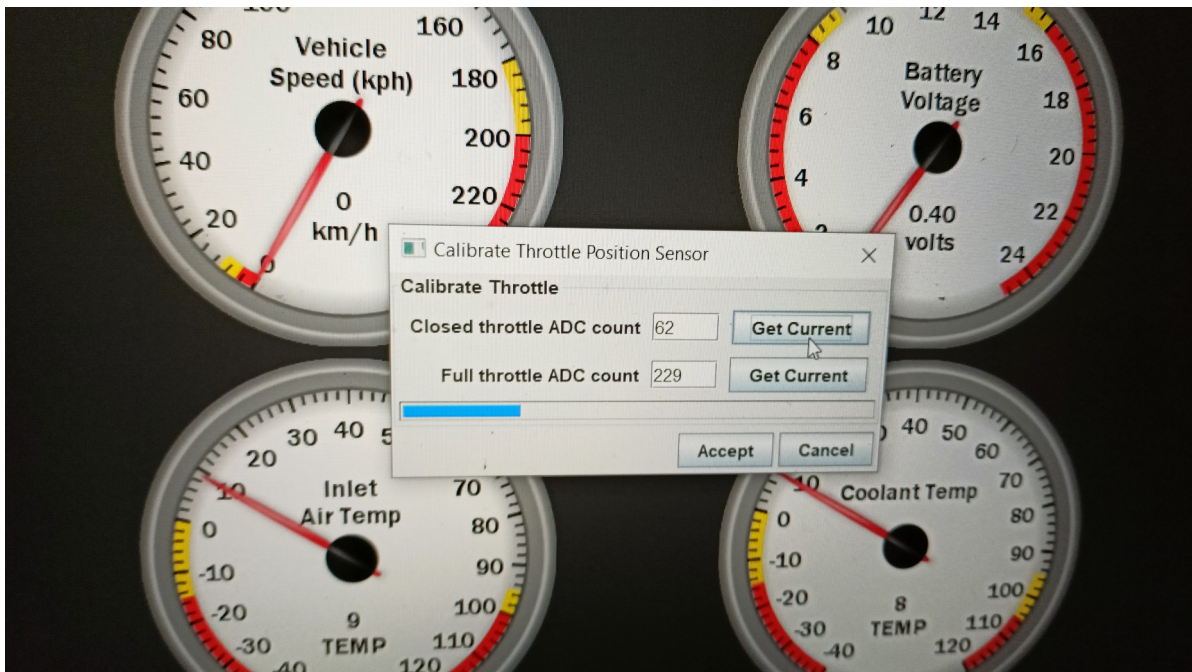


new arrangement

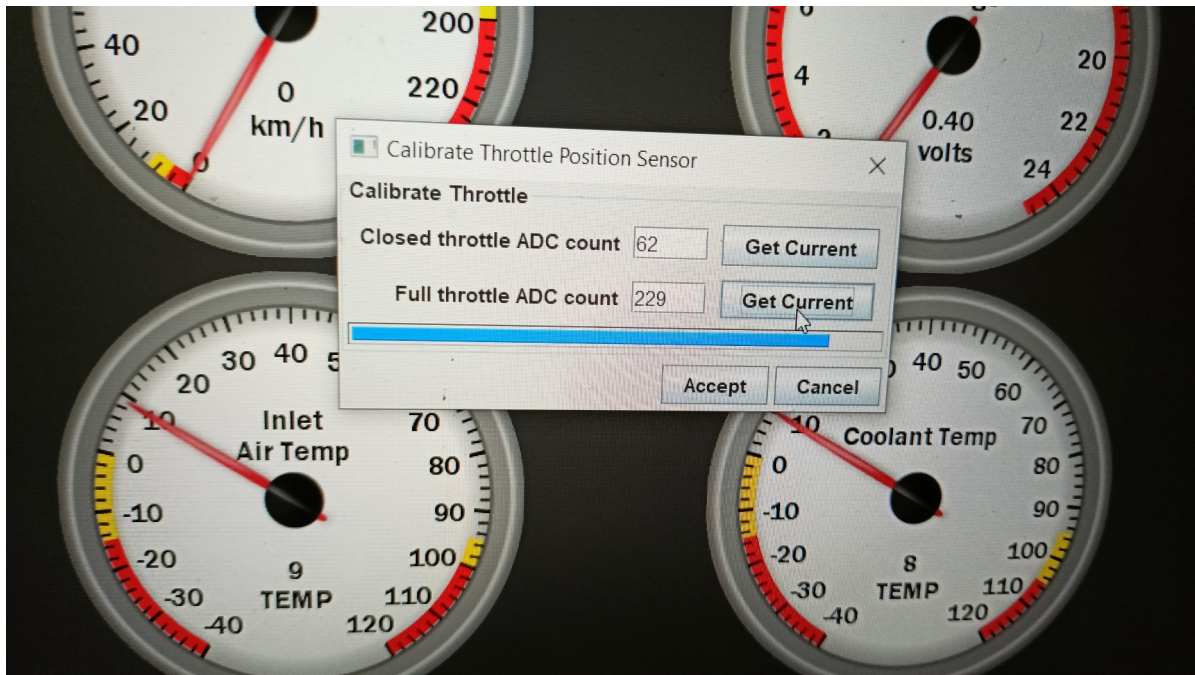


3. remove hose clamps blocking access to existing TPS
4. unscrew 2 bolts securing TPS
5. remove TPS cover, this is to make room
6. remove original TPS
7. connect new vTPS. Cable will be routed under tps
8. install vTPS. Make sure throttle shaft (its flattened on one side) matches potentiometer.
9. Reinstall screws but dont tighten them
10. run TunerStudio and go to TPS calibration
11. adjust TPS observing blue moving bar when using throttle pedal. Throttle shaft rotation in his extreme positions (closed and WOT) should not be making pressure on vTPS potentiometer – this may damage it immediately and permanently. If range of reading (blue bar) closed-WOT is symmetrical between 0 and 255 range it should be safe
12. when you are ready tighten screws then calibrate TPS in TunerStudio

closed (released) position



fully pressed (WOT) position



then **Accept**

13. reinstall hose clamps removed earlier

14. now you can enable new features like:

- Acceleration Enrichment (*tuning*→**Acceleration Enrichment**)
- deceleration fuel cut DFCO (*tuning*→**Acceleration Enrichment**, on the bottom)
- Launch Control and Flat Shift (*accessories*→**LaunchControl/FlatShift**).  
Clutch switch signal needed for this