

# **TKOSROD1399K-PX1114DCX 2008-2017 PRO COMPETITION VIPER ADJUSTABLE MAX THROTTLE RESPONSE KIT**

**INSTALLATION INSTRUCTIONS  
TKOMOTORSPORTS.COM**

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**Prior to any work being done it is recommended to use collision tape or some other protective cover in area where work will be done to minimize possibility of damage. Vipers are very compact vehicles, drivers compartment especially. Working in the driver's compartment area requires patience, special skills and tools.**

### **Included in TKOSROD1399K**

<b>Qty</b>	<b>Desc</b>
1	Viper Max Throttle control box with mounting plate
1	Viper Max Throttle wire harness
1	Throttle sensitivity control
1	Pack of zip ties, rivets and sticky back wire routes, hook loop sticky back squares

### **Tools needed for drilling and riveting competition installation**

4mm allen wrench

3/16 drill bit and cordless drill

Hand held rivet gun with 3/16 rivet capacity

Interior removal plastic hand tool set (RECOMMENDED BUT NOT MANDATORY)

10mm socket with ratchet or 10mm box wrench

Small pair side cutters

Bottle of rubbing alcohol

## **Tools needed for quick installation with no 12-volt power for status LED**

Small pair side cutters

Bottle of rubbing alcohol

Interior removal plastic hand tool set (RECOMMENDED BUT NOT MANDATORY)

10mm socket with ratchet or 10mm box wrench

### **Step 1.**

Disconnect the positive side of the battery before starting installation. If you do not disconnect the battery, the factory ECU will not learn the correct starting position for the throttle pedal.

### **Step 2 - Mounting the throttle control box.**

Recommended mounting position for the Dodge Viper is on the transmission tunnel just aft of the throttle pedal. On most Vipers you will find an area just above the carpet and below the dash on the driver's side transmission tunnel that has exposed chassis surface. This area works well for mounting the control box out of the way and is the best route for the wiring harness.

### **Step 3.**

Underneath the dash in the drivers foot well, disconnect the factory pedal position sensor on the throttle pedal assembly. The max throttle connectors will install inline between the factory pedal position sensor and the main wire harness.

### **Step 4 - Mounting the throttle control box for competition use.**

With the aluminum mounting plate installed onto the throttle control box, position the control box in the area on the transmission tunnel just aft of the throttle pedal and just below the dash where the exposed transmission tunnel is. With the control box in the correct position, use the hand scribe to mark one of the mounting holes on the aluminum control box mounting plate. With one of the mounting holes marked, use your cordless drill and 3/16 drill bit to drill the mounting hole. **DRILL THROUGH THE SHEET METAL ON THE TRANSMISSION TUNNEL ONLY.** There is no need to plunge drill all the way through, it should only need to go in approx. 1/8-1/4 inch, just enough to make a fastener hole. With N0.1 fastener hole drilled, remove the aluminum control box mounting plate from the max throttle control box using a 4mm allen wrench and put the control box in and out of the way, position it while leaving the wiring connected. Using your rivet gun and 3/16 rivet provided in your hardware kit, install the control box mounting plate. Make sure the rivet is flush before using the hand riveter to pop the rivet. With the first rivet installed and the control box mounting plate installed on the transmission tunnel, use your cordless drill and 3/16 drill to drill a hole for the second fastener mounting hole on the control box aluminum mounting plate and repeat the rivet install procedure.

(OPTIONAL MOUNTING PROCESS REQUIRES NO DRILLING. *Using the hook loop sticky back squares provided in your hardware kit you can install the throttle control box. Peel and stick hook loop squares onto the throttle control box and peel out the side hook loop. Clean the transmission tunnel exposed area with alcohol and a clean rag. Now you can simply press the throttle control box with sticky back hook loop onto the transmission tunnel exposed area. This is not the recommended installation for competition use but it offers an alternative to Viper owners who do not wish to drill holes and rivet.*)

## **Step 5.**

Install the max throttle control box onto the aluminum mounting plate using a 4mm allen wrench. Make sure the wiring harness and plugs for the pedal position sensor area are all out of the way and clear of the Vipers steer shaft under the dash. Use the zip ties provided in your hardware installation kit to secure the wiring harness as needed.

## **Step 6 - Optional 12-volt status led installation.**

The red wire with inline fuse holder and marked “12v pos” installs directly to your 12-volt battery positive terminal. This is not a required installation; it is an option. If you do choose to install the 12-volt wire for the status LED, it will let you visually see the status of the throttle control box. A green LED will light up on the throttle control box indicating it is functioning. The green LED status light is a simple visual diagnostic tool.

### LED Diagnostic Lights

- > Green LED light: Solid Green LED = Device is powered ON and working
- > Blue LED light: Solid Blue LED = Knob is plugged in and set to 0-25%
- > Flashing slow Blue LED = Knob is plugged in and set to 25-60%
- > Flashing fast Blue LED = Knob is plugged in and set to 60-100%
- > Green, Yellow, Blue LED flashing = Max throttle is not connected. Check all connections.

You will need to remove and re-route the 12-volt status LED wire down the Viper transmission tunnel and back over the B-pillar bulkhead. To do this you will need to remove some simple interior carpeted parts. Your objective is to reach the battery in the trunk. Use the sticky back wire routes provided and zip ties to secure the 12-volt power wire harness as needed.

## **Step 7 - Install throttle adjustment box.**

On the Dodge Viper, we have found that the best location for the throttle adjustment box is just above the ignition key on the steering column. You are not required to mount the throttle adjustment box in this position. The throttle adjustment box has a heavy-duty adhesive backed hook loop already installed on it. Route the wire harness for the throttle adjustment box in through the dash area below the steering column. Use the zip ties provided to secure the wiring harness. Clean the steering column in the area above the ignition key with alcohol. Now, peel the backing off the square hook loop on the back side of the throttle adjustment box. Immediately install the throttle adjustment box onto the steering column. The adhesive backing on the hook loop will adhere to the plastic steering column cover.

## **Step 8 - Test the device.**

Once the device is installed and secured, insert the ignition key and start the vehicle. If you're using the optional 12-volt status LED, look at the throttle control box to make sure the green LED is illuminated, which alerts you that the max throttle is active and functioning. If the status LED is not connected to 12-volt, there will be no LED illuminated (however the device will still function).

Adjust the throttle adjustment box to zero or until you feel a “click”. Test drive the vehicle – drive the vehicle under normal conditions. Use the throttle adjustment box to dial in your desired throttle response. Throttle adjustment should be done at a complete stop for best results.

Recommended Dodge Viper throttle adjustment settings:

Road racing: 25%      Drag racing: 25-50%      Rolling start racing: 25-100%

# Trouble shooting

**Problem:** Check Engine Light on after install

**Solution:** If you have a KEY - turn the key back to the off position, remove the ignition key, wait 60 seconds for the ECU to reset and then restart the vehicle. When you restart the vehicle, the check engine light will be gone, and pedal response will be restored. If you have a key FOB: make sure that the vehicle is off and that the dash lights are off for at least 60 seconds. When you restart the vehicle, the check engine light will be gone and pedal response will be restored.

## 12-volt option installed..... status LED

### LED Diagnostic Lights on throttle control box

- > Green LED light: Solid Green LED = Device is powered ON and working
- > Blue LED light: Solid Blue LED = Throttle adjustment is plugged in and set to 0-25%
- > Flashing slow Blue LED = Throttle adjustment is plugged in and set to 25-60%
- > Flashing fast Blue LED = Throttle adjustment is plugged in and set to 60-100%
- > Green, Yellow, Blue LED flashing = Max throttle is not connected. **Check all connections.**