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**2013-2016 Viper Gen V RACE Control Module Kit Components:**

- ARR-50956AA (2013-2014) Gen V Race Control Module (RCM)
- ARR-50956BA (2015-2016) (DEC Trans .63 Ratio) Gen V Race Control Module (RCM)
- ARR-50956BB (2015-2016) (DD1 Trans .50 Ratio) Gen V Race Control Module (RCM)
- ARR-IS-956AA Installation Sheet



**Viper Gen V Race Control Module Kit Features:**

- Revised fuel, spark and cam position tables that maximize power increases associated with engine modifications and/or exhaust systems
- Aggressive off-throttle exhaust note
- **Requires min 93 octane fuel.**
- Rev limit increased to 6600 rpm with decreased hysteresis.
- Allows racing approved final drive ratios from 3.07:1 to 4.10:1.
- First to fourth gear skip shift eliminated for racing use.
- Catalyst monitor disabled to allow the use of high flow / or no catalyst and headers
- Air flow rationality diagnostic disabled which permits greater range of flow modifications
- Misfire detection disabled to permit reduce mass rotating assemblies and further modifications
- Includes all 2014 production updates.
- Not intended to work with superchargers, turbochargers, nitrous or power levels above 675 BHP

**IMPORTANT NOTICE:**

This device is not legal for use on pollution-controlled vehicles certified for use on streets or highways. Once this device is installed, use of the vehicle on a street or highway is a violation of the Clean Air Act, potentially subjecting the operator and the installer to civil penalties.

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This Race Control Module Kit can only be installed by an authorized SRT dealer. Specialized installation tools are required including use of an appropriate Scan tool to set up the Race Control Module.

**SPECIAL NOTE:**

**Electronic Throttle Control (ETC) Relearn Procedure**

This vehicle is equipped with an Electronic Throttle Control (ETC) system and requires the ETC RELEARN procedure to be performed when your new Race PCM is installed. This procedure checks the Accelerator Pedal Position Sensors (APPS) to make sure that idle and full pedal travel can be reached on both sensors.

**This procedure requires the use of the appropriate Scan tool.** Failure to perform the ETC RELEARN will cause the throttle not to respond to the accelerator pedal limiting engine output. It will also set the Diagnostic Trouble Code (DTC) and activate the Malfunction Indicator Light (MIL).

**SPECIAL NOTE:**

**VIN and Odometer Reset**

The vehicle's mileage and vehicle identification number (VIN) must be updated when the race control module is replaced.

**This procedure requires the use of the appropriate Scan tool.** If this step is not done a Diagnostic Trouble Code (DTC) may be set.





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## INSTALLATION POCEDURE

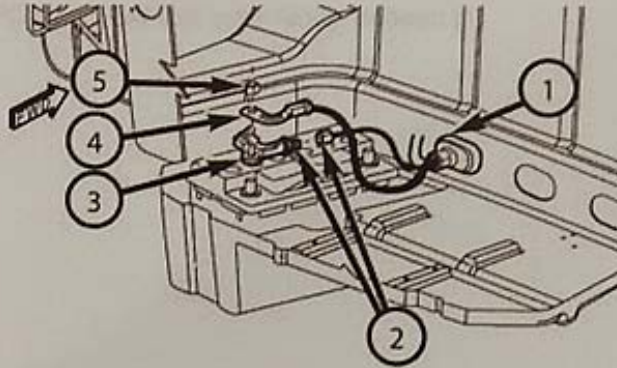
It is required that you bring your Viper to the nearest SRT dealer to perform the installation of the Race Control Module. The vehicle will not function properly until the necessary items have been updated in the new module. It is also recommended that you arrange for another means of transporting the modified vehicle from the dealer or auto shop, because once the Race Control Module is installed, the vehicle is no longer certified for use on a street or highway.

## REMOVAL OF EXISTING MODULE

The Powertrain Control Module (PCM) is located under the hood on the left side of the engine compartment. (Fig. 1).

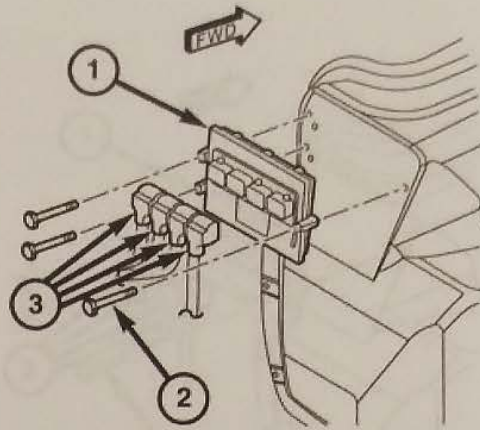
To avoid possible voltage spike damage to PCM, ignition key must be off, and the negative battery cable must be disconnected before unplugging the PCM connectors.

Disconnect and isolate negative battery cable at battery.



1. Remove the electrical connectors cover.

2. Disconnect electrical connectors (3) from PCM (1).



3. Remove mounting bolts (2) and PCM from left side inner fender support (1)

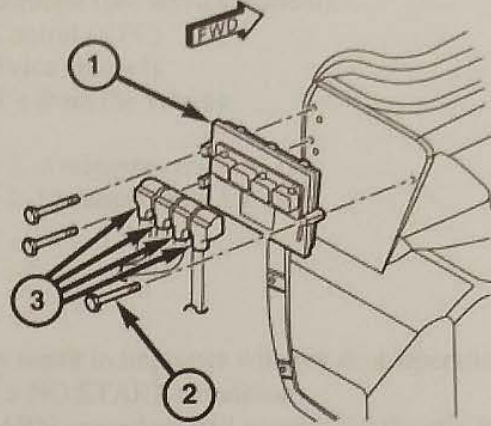


## INSTALLATION

1. Install Race Control Module (1) to left side inner fender support (1). Tighten bolts (3) to 7 N·m (62 in. lbs.).

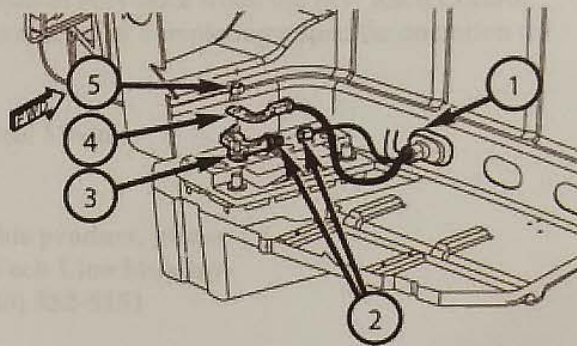
2. Install electrical connectors (3) to RCM.

3. Install cover. Tighten screws to 7 N·m (62 in. lbs.).



4. Connect negative battery cable. Tighten to 10 N·m (90 in. lbs.).

5. Reprogram radio and clock.







5. After the Race Control Module installation, perform the following operations using the appropriate Scan Tool:

- 5.1. Update Race Control Module VIN (see service manual).
- 5.2. Update Race Control Module Odometer (see service manual).
- 5.3. Execute the Electronic Throttle Control (ETC) RELEARN procedure (see service manual).
- 5.4. Use a Scan Tool to erase all DCT's from the vehicle
- 5.5. Idle Adaptive Learn Procedure  
Idle car with warm engine for 2 -3 minutes with A/C on  
Idle car with warm engine for 2-3 minutes with A/C off

NOTES:

- a) Failure to perform VIN update may result in improper window drop operation as the VIN defines the vehicle and a NO START Condition
- b) Failure to perform the ETC RELEARN procedure will prevent the throttle from responding to accelerator pedal inputs. The engine will run at idle speed only. It will also set a Diagnostic Trouble Code (DTC) and activate the Malfunction Indicator Light (MIL).
- c) The above operations are required only once when the new Race Control Module is installed. If issues arise after completing a specific operation try repeating the procedure.

6. Keep your original Powertrain Control Module.

**For technical assistance regarding this product, please contact the Arrow Racing Engines Tech Line Monday-Friday, 7:00am - 3:00pm EST at (248) 852-5151**



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#### NO PARTS WARRANTY – “AS IS”

Arrow Racing Engines Parts are sold “as is” unless otherwise noted. This means that parts sold by Arrow Racing Engines or its Dealer Network carry no warranty whatsoever. **Implied warranties, such as warranties of merchantability, are excluded.** (An implied warranty of merchantability means that the part is reasonably fit for the general purpose for which it was sold). The entire risk as to quality of such parts is with the buyer. Should such parts prove defective following their purchase, the buyer and not the manufacturer, distributor or retailer, assumes the entire cost of all necessary servicing or repair. Chrysler, Dodge and Jeep® vehicle and parts warranties are voided if the vehicle or parts are used for competition. The addition of Race parts does not by itself void a vehicle’s warranty. However, added Race parts (parts not originally supplied on the vehicle from the factory) are not covered by the vehicle’s warranty, and any failure that they may cause is also not covered by the vehicle’s warranty.

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