



INSTALLATION SHEET

TRANSMISSION CONTROLLER UPGRADE

2004 – 2006 5.7L HEMI V-8 CHRYSLER 300C/ DODGE MAGNUM/ CHARGER
PART NUMBER P5153332

TRANSMISSION CONTROLLER UPGRADE

The MOPAR Transmission Controller Upgrade has optimized shift schedule to take full advantage of the MOPAR 5.7L Hemi Performance Camshaft and Performance Torque Converter. The performance tuned AutoStick® calibration with the hold in-gear feature will prevent the transmission from up-shifting at red-line RPM in AutoStick® mode allowing for sportier driving.

Transmission Controller Upgrade Components:

- P5153332 Performance Transmission Control Module (TCM)
- Installation Sheet

Recommended Upgrades:

- P5153331 2004 - 2005 Powertrain Controller Upgrade (OR P5153450 2006 Powertrain Controller Upgrade)
- P5153570 Performance Camshaft & Lifters Kit
- 05174299AA Performance Torque Converter



SPECIAL NOTE: POWERTRAIN CONTROLLER UPGRADE

The MOPAR Transmission Controller Upgrade shift schedule has higher red-line RPM shifts (accelerator pedal fully depressed) than the production shift schedule. To support this performance shift schedule the vehicle **MUST** be equipped with the MOPAR Powertrain Controller Upgrade.

FAILURE TO INSTALL THE MOPAR POWERTRAIN CONTROLLER UPGRADE WILL PREVENT THE AUTOMATIC TRANSMISSION FROM UP-SHIFTING AT FULLY DEPRESSED ACCELERATOR PEDAL DRIVING CONDITION (WOT).

COWLING AND SILL TRIMS

REMOVAL – LEFT SIDE

NOTE: Vehicle right side shown for illustration purpose ONLY! The Transmission Control Module (TCM) is under the LEFT SIDE of the instrument panel (Fig. 3).

1. Using a trim stick or another suitable wide flatbladed tool, carefully pry the **LEFT SIDE** cowling trim (2) (Fig. 1) rearward from the front of the front door opening far enough to disengage the two spring clip retainers that secure the trim to the slots in the cowl (1) (Fig. 1).
2. Remove the cowling trim from the vehicle.

3. Using a trim stick or another suitable wide flatbladed tool and starting nearest the B-pillar trim (2) (Fig. 2), carefully pry the **LEFT SIDE** sill trim (3) upward from the front door opening sill far enough to disengage the three spring clip retainers that secure the trim to the slots in the sill.

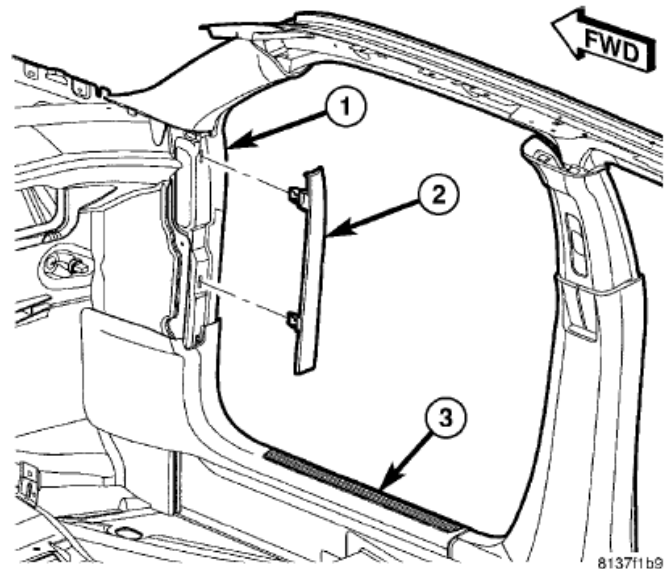


Fig. 1 Cowling Trim (2)

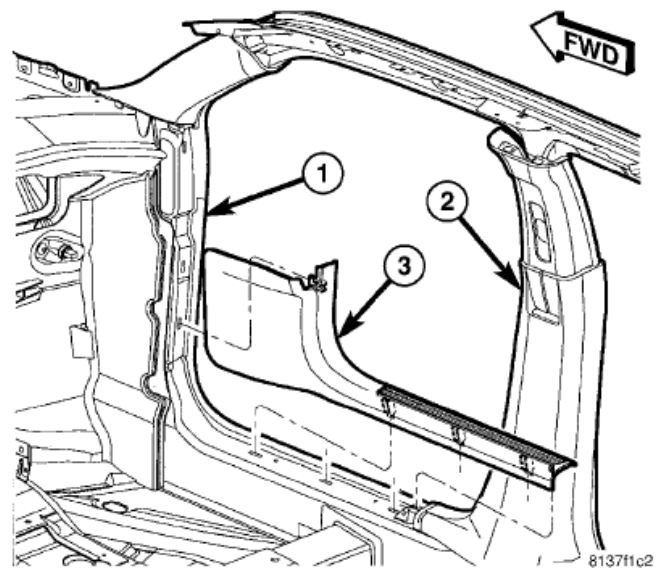


Fig. 2 Sill Trim (3)



INSTALLATION SHEET

TRANSMISSION CONTROLLER UPGRADE

2004 – 2006 5.7L HEMI V-8 CHRYSLER 300C/ DODGE MAGNUM/ CHARGER
PART NUMBER P5153332

- Using a trim stick or another suitable wide flatbladed tool, carefully pry the sill trim rearward from the front of the front door opening far enough to disengage the spring clip retainer that secures the trim to the slot in the cowl (1).
- Remove the sill trim from the vehicle.

TRANSMISSION CONTROL MODULE - EGS52

REMOVAL - Transmission Control Module – EGS52

The Transmission Control Module (TCM) is under the LEFT SIDE of the instrument panel (Fig. 3).



Fig. 3 EGS52 Transmission Control Module

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

- Disconnect and isolate negative battery cable.
- Remove the screws (2 and 6) that secure the steering column cover (1) to the instrument panel (Fig. 4).
- Pull the steering column cover rearward at the top and right side of the cover to release the snap retainers from the instrument panel.

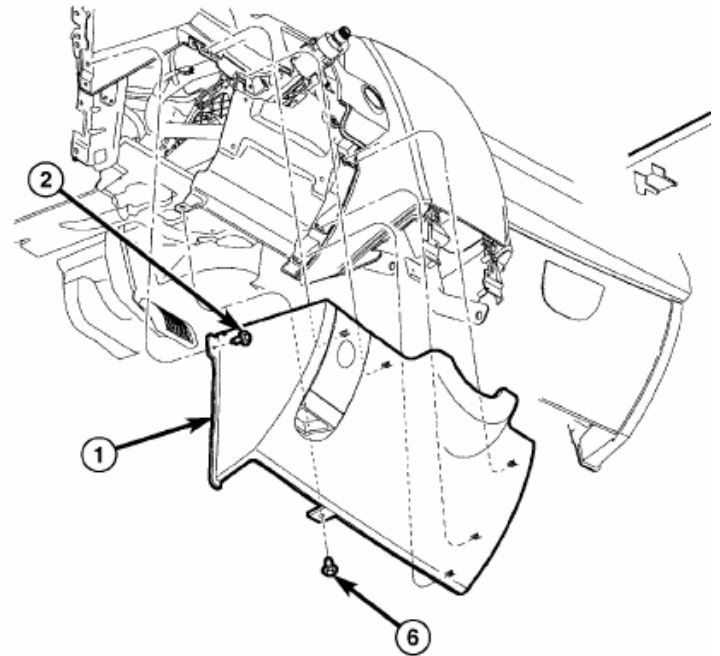


Fig. 4 Steering Column Cover

- Disconnect the wire harness connector (3) from the trunk release switch, if equipped (Fig. 5).
- Disconnect the release cable (4) from the emergency bracket release handle (5) and remove the steering column cover from the vehicle (Fig. 5).
- Remove the mounting screws that secure the TCM and remove the module.
- Unlock and disconnect the 2 electrical connectors from the TCM.



INSTALLATION SHEET

TRANSMISSION CONTROLLER UPGRADE

2004 – 2006 5.7L HEMI V-8 CHRYSLER 300C/ DODGE MAGNUM/ CHARGER
PART NUMBER P5153332

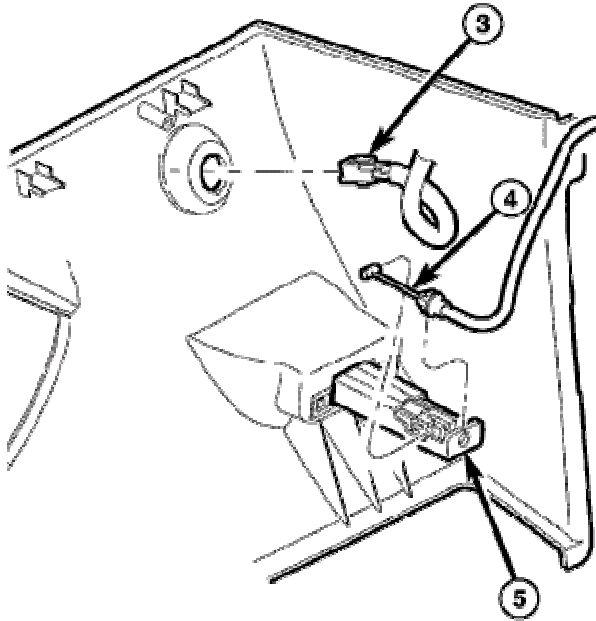


Fig. 5 Steering Column Cover (Back)

INSTALLATION - Transmission Control Module – EGS52

1. Install electrical connectors to TCM.
NOTE: The electrical connectors for the TCM are KEY Coded.
2. Install TCM to the mounting bracket and tighten mounting screws.
3. Position the steering column cover (1) into the vehicle.
4. Connect the release cable (4) to the emergency brake release handle (5) (Fig. 5).
5. Connect the wire harness connector (3) to the trunk release switch, if equipped (Fig. 5).
6. Install the steering column cover onto the instrument panel and carefully push on the top and right side of the cover to fully seat the snap clip retainers into the instrument panel.
7. Install the screws (2 and 6) that secure the steering column cover (1) to the instrument panel. Tighten the screws securely (Fig. 4).
8. Connect negative cable to battery.
9. Use the scan tool to verify if a Diagnostic Trouble Code (DTC) is set. If necessary, use a scan tool to erase any Diagnostic Trouble Codes (DTC's) from TCM.

COWLING AND SILL TRIMS

INSTALLATION

1. Check to be certain that the three plastic nuts are properly installed and in good condition in the slots of the front door opening sill. Replace a plastic nut if any damage is evident.
2. Position the vertical portion of the sill trim (3) to the cowl (1) at the front of the front door opening (Fig. 2).
3. Align the spring clip retainer on the trim with the slot in the cowl (1).
4. Using hand pressure, press firmly and evenly forward on the trim over the spring clip location until the retainer snaps into place.
5. Position the horizontal portion of the sill trim to the front door sill and the B-pillar trim (2) (Fig. 2).
6. Align the three spring clip retainers on the trim with the slots in the sill.
7. Using hand pressure, press firmly and evenly downward on the trim over each of the spring clip locations until the retainers snap into place.
8. Position the cowl trim (2) (Fig. 1) to the cowl (1) at the front of the front door opening and the sill trim (3).
9. Align the two spring clip retainers on the trim with the slots in the cowl.
10. Using hand pressure, press firmly and evenly downward on the trim over each of the spring clip locations until the retainers snap into place.

TCM ADAPTATION PROCEDURE - EGS52 Only



SPECIAL NOTE:
**THE TCM ADAPTATION PROCEDURE
REQUIRES THE USE OF THE APPROPRIATE
SCAN TOOL.**

The TCM adaptation procedure allows the electronic transmission system to recalibrate itself providing the proper baseline for shift quality and transmission operation.



INSTALLATION SHEET

TRANSMISSION CONTROLLER UPGRADE

2004 – 2006 5.7L HEMI V-8 CHRYSLER 300C/ DODGE MAGNUM/ CHARGER
PART NUMBER P5153332

FAILURE TO PERFORM THE TCM ADAPTATION PROCEDURE CAN RESULT IN POOR SHIFT QUALITY AND POSSIBLE TRANSMISSION DAMAGE. YOUR CAR CAN BE DRIVEN PRIOR TO PERFORMING THE TCM ADAPTATION PROCEDURE; HOWEVER, NO WIDE OPEN THROTTLE (WOT) UPSHIFTS SHOULD BE DONE UNTIL THIS PROCEDURE HAS BEEN PERFORMED.

1. Allow the transmission fluid to reach normal operating temperature. To do so, apply the parking brake and let the engine idle in neutral until the engine cooling fan has cycled (turned on and off) one complete time.
2. With the scan tool, reset the TCM adaptation memory to factory settings (default).

NOTE: Perform the Coast down Adaptations first. The transmission temperature must be greater than 60°C (140°F) and less than 70°C (158°F). Failure to stay within these temperature ranges will void the procedure.

3. Drive the vehicle until the transmission temperature is in the specified range.
4. Perform 4 to 5 coast downs from 5th to 4th gear and then 4th to 3rd gear.

NOTE: For Upshift adaptation, the transmission temperature must be greater than 60°C (140°F) and less than 100°C (212°F). Failure to stay within these temperature ranges will void this procedure.

5. From a stop, moderately accelerate the vehicle and obtain all forward gear ranges while keeping the engine RPM below 1800 RPM. Repeat this procedure 4 to 5 times.
6. Obtaining 5th gear may be difficult at 1800 RPM. Allow the transmission to shift into 5th gear at a higher RPM then lower the RPM to 1800 and perform manual shifts between 4th and 5th gears using the shift lever.
7. The TCM will store the adaptives every 10 minutes. After completion of the adaptation procedure make sure the vehicle stays running for at least 10 minutes.
8. It is possible to manually store the adaptives under the 10 minute time frame using the scan tool "Store Adaptives" procedure.

Once you have performed the TCM adaptation procedure and established a baseline, shift quality will continue to improve as the transmission control module continues to "learn" your particular driving style.

For technical assistance regarding the MOPAR 5.7L HEMI Powertrain Controller Upgrade kit, please call toll-free 1-888-528-HEMI (528-4364).

DISCLAIMER

MOPAR PERFORMANCE PARTS WARRANTY

Mopar Performance parts are sold "as is," without any warranty whatsoever. Implied warranties, including warranties of merchantability or fitness for a particular purpose, are excluded. The entire risk as to quality and performance 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 or if they fail as a result of modification.

Not legal for use on pollution-controlled vehicles, or vehicles registered for highway use.