# GMC Duramax (LBZ) High Idle Kit

## Note: Only for automatic transmissions with cruise control

| 1036606 | 2006-2007 GMC Duramax |
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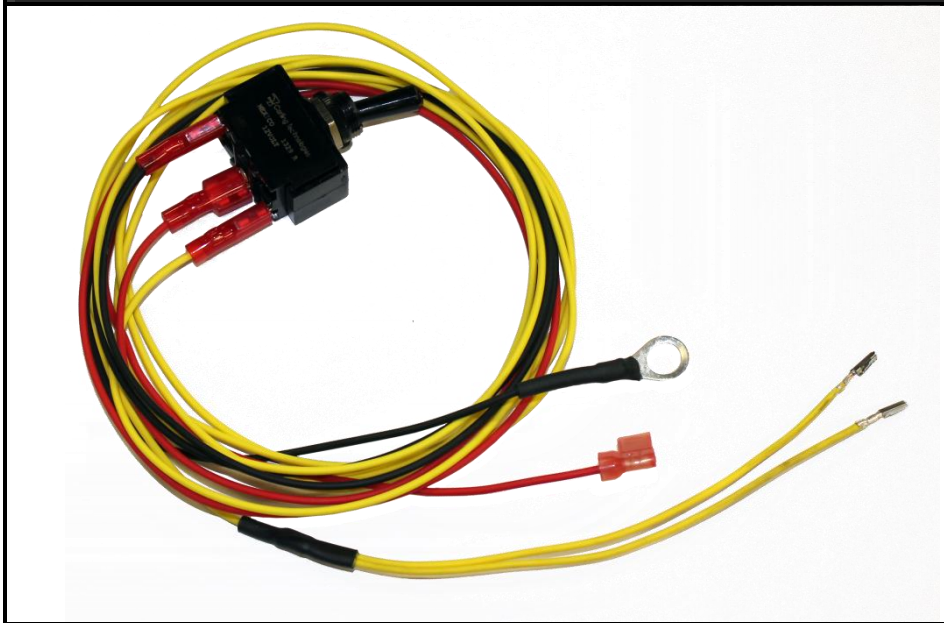
***PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION***

# ***K I T  C O N T E N T S :***

Please check to make sure that you have all the parts listed in this kit ***before*** you start the disassembly of your truck.

## *1036606 High Idle Kit*



*Wiring Harness*

**Qty: 1**

**1928498135**

*Spare ECM Terminals*

**Qty: 2**

**1330155**

*1/4” Loom*

**Qty: 90”**

**1300131**

*Medium Tie Wrap*

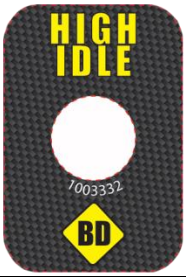
**Qty: 6**

**1300337**

*Mini Fuse Tapper*

**Qty: 1**

**1003332**




*Switch Decal*

**Qty: 1**

## Tools Required

- Drill with stepper drill bit
- Utility Knife
- Small flat screwdriver or pick
- 7mm and 10mm Sockets
- Ratchet with extension

## Introduction

This high idle kit allows the operator to enable the high idle programming within the Duramax ECM. In conjunction with the cruise control switches, the operator may select different RPMs for fast idle.

This kit is perfect for faster warm ups, extended idling and PTO applications.

## INSTALLATION

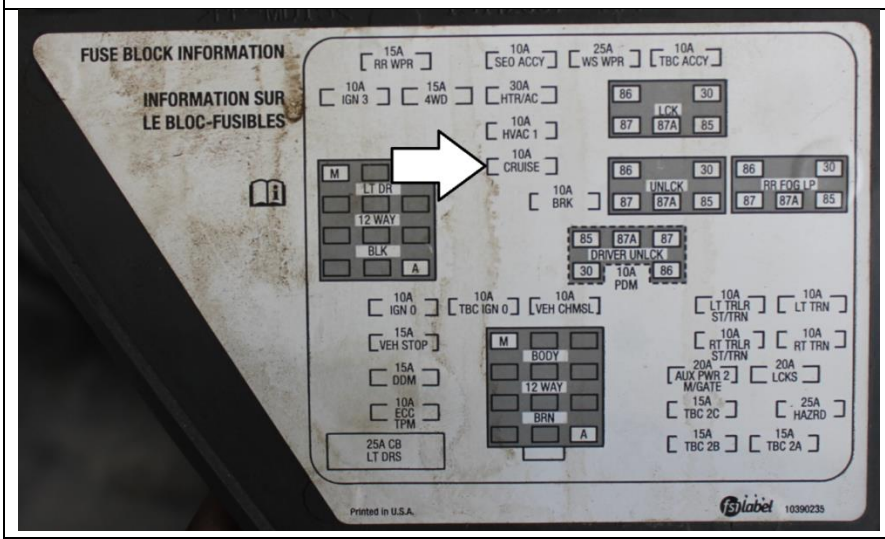
**VEHICLE SHOULD BE SAFELY SECURED BEFORE INSTALLATION.**

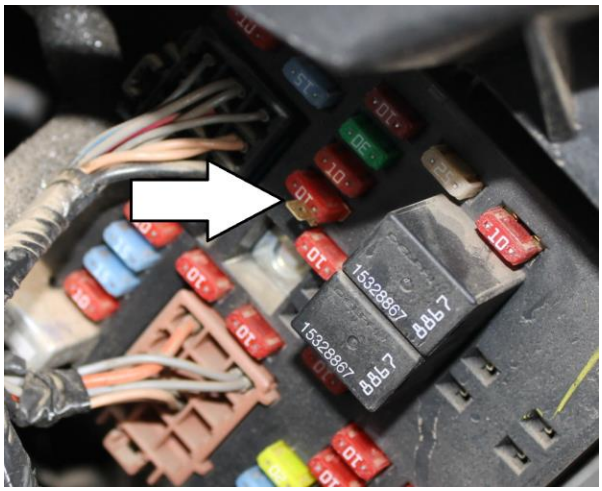
1. Disconnect both batteries for safety.
2. Remove trim surrounding instrument cluster by gently pulling out the clips. This may be eased by tilting the steering wheel downwards and moving the shift lever from park to 1st.

Remove fuse cover from end of dash. Remove knee bolster by removing the two 7mm screws along bottom edge, and then pull knee bolster outwards. Use care not to damage the clips.

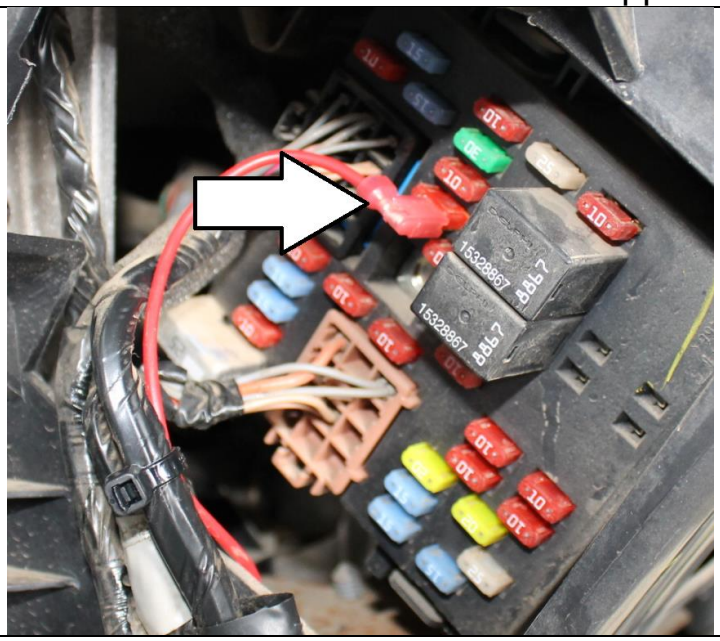
Position toggle switch near the desired location keeping sufficient wire slack. Feed the wires below the dash.

Remove the cruise control fuse from the in cabin fuse panel and install fuse tapper. Reinstall fuse with tapper on the right side of the fuse (towards the rear of the vehicle).

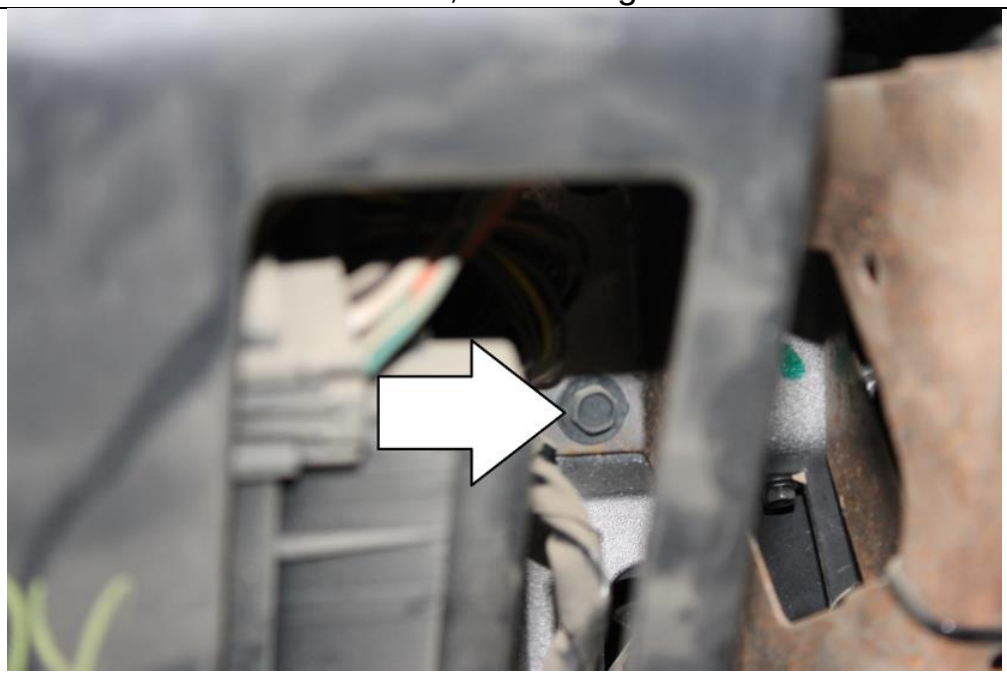


Route the red wire to the fuse box and connect to the fuse tapper

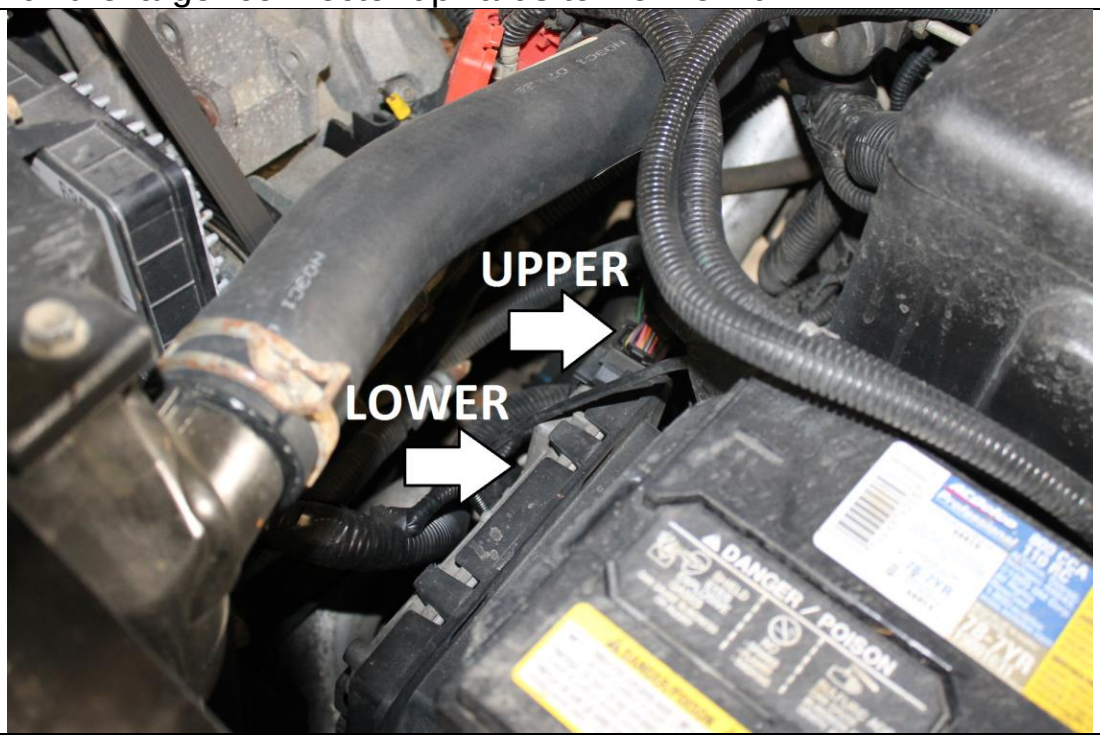


Route the black wire to the head of a bolt below the dash to serve as a ground. Remove the bolt using a 10MM socket and ratchet, install ring terminal and reinstall the bolt.

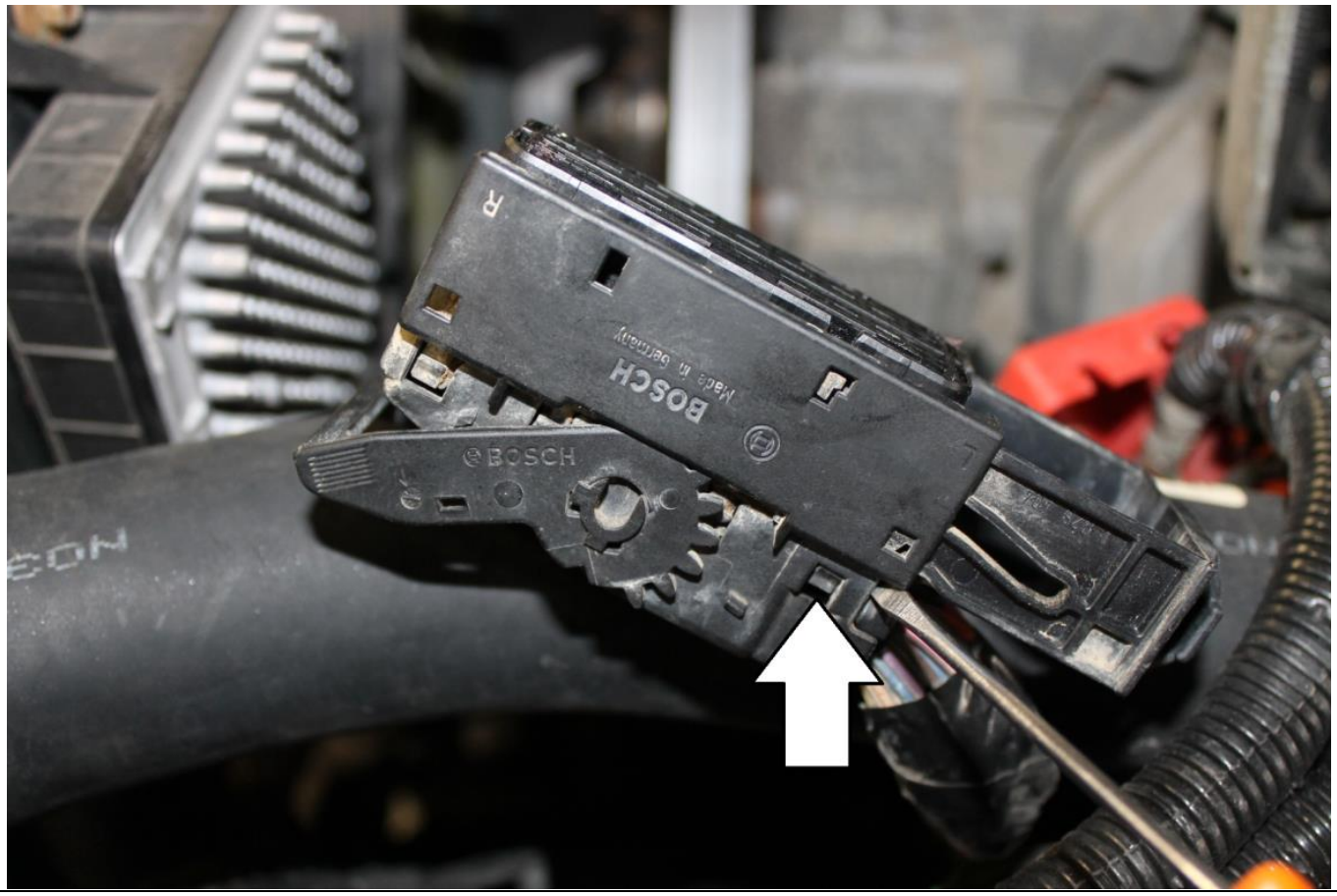


Locate suitable pass through location on firewall. Suggested location is alongside the smaller wiring harness passing through the firewall, this is located towards the passenger side of the brake booster assembly. Cut a small slit in the rubber boot using a utility knife for the wire to pass through. Alternatively, if other wires are already fed through the main wiring harness connector below the brake booster, this route may be used instead.
Feed the yellow wire from the switch through the firewall. Use care not to damage the pins while being pushed or fished through the rubber grommet as they are fragile. If the grommet being utilized is tight, do not damage the pins, either enlarge the hole or cut the wire and rejoin it afterwards.

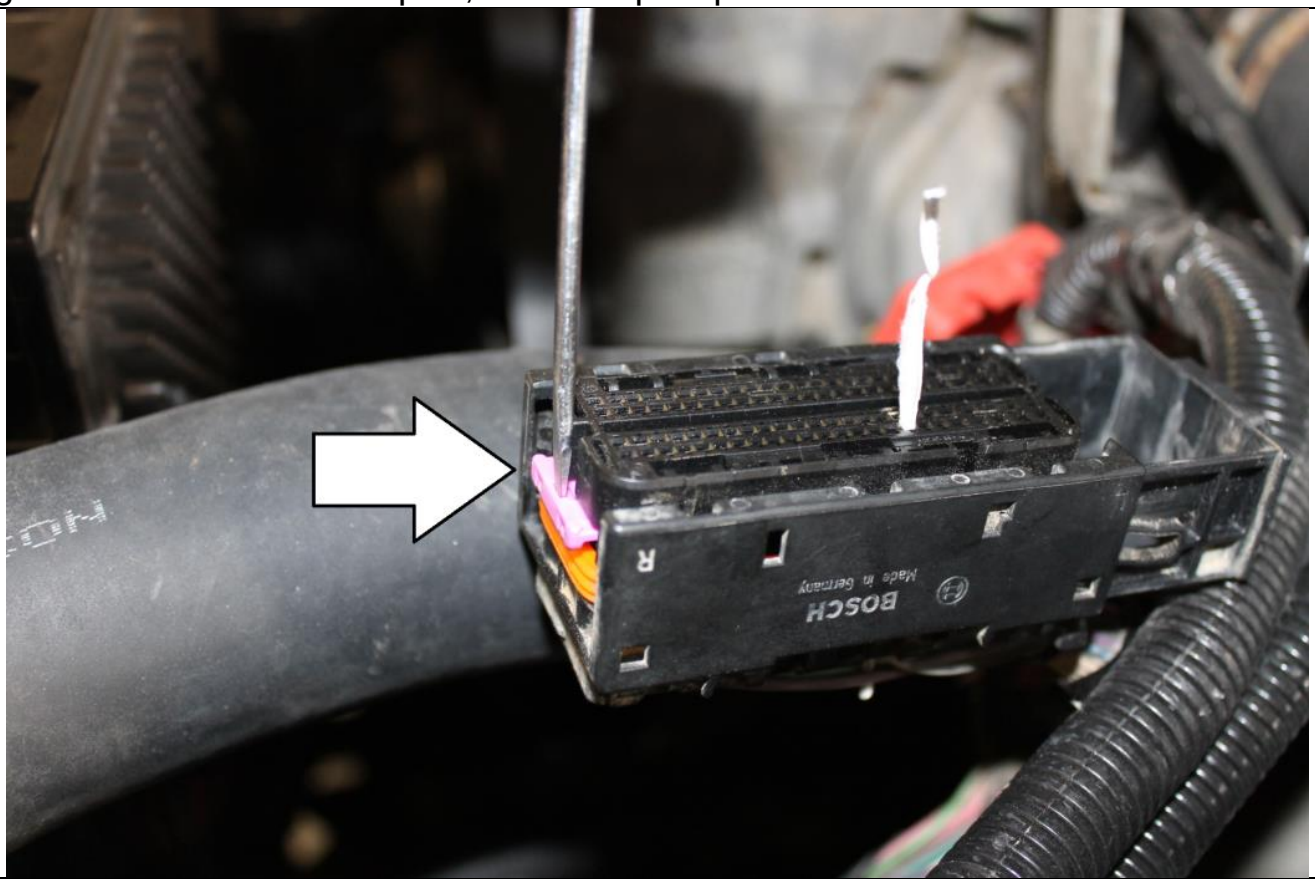
Remove the ECM connectors starting with the lower smaller connector. Turn the locking handle fully until the connector releases from the ECM. Repeat with the larger upper connector. Pull the larger connector upwards to work on it.



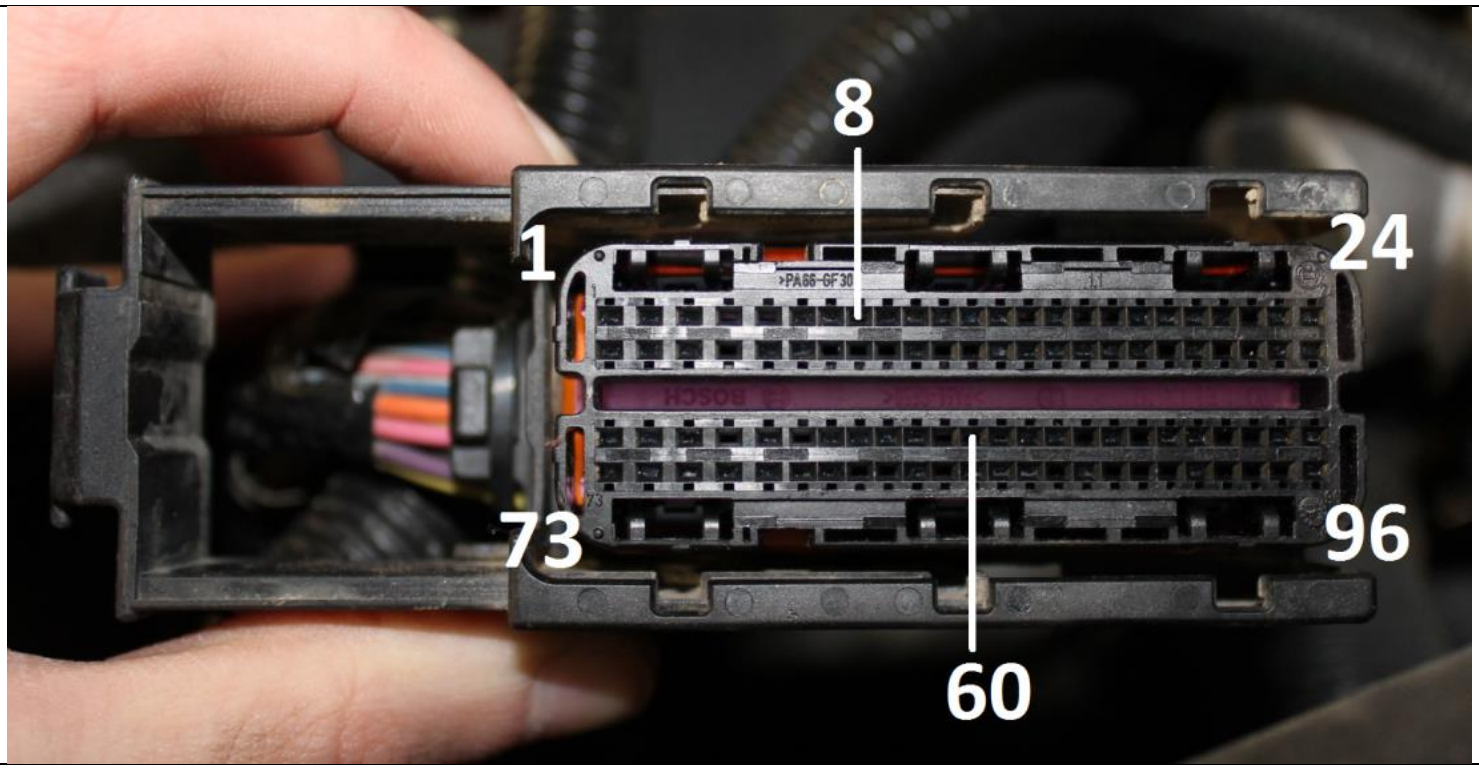

Using a suitable pick or small screwdriver release the two clips holding the rear end of the back shell to the connector.



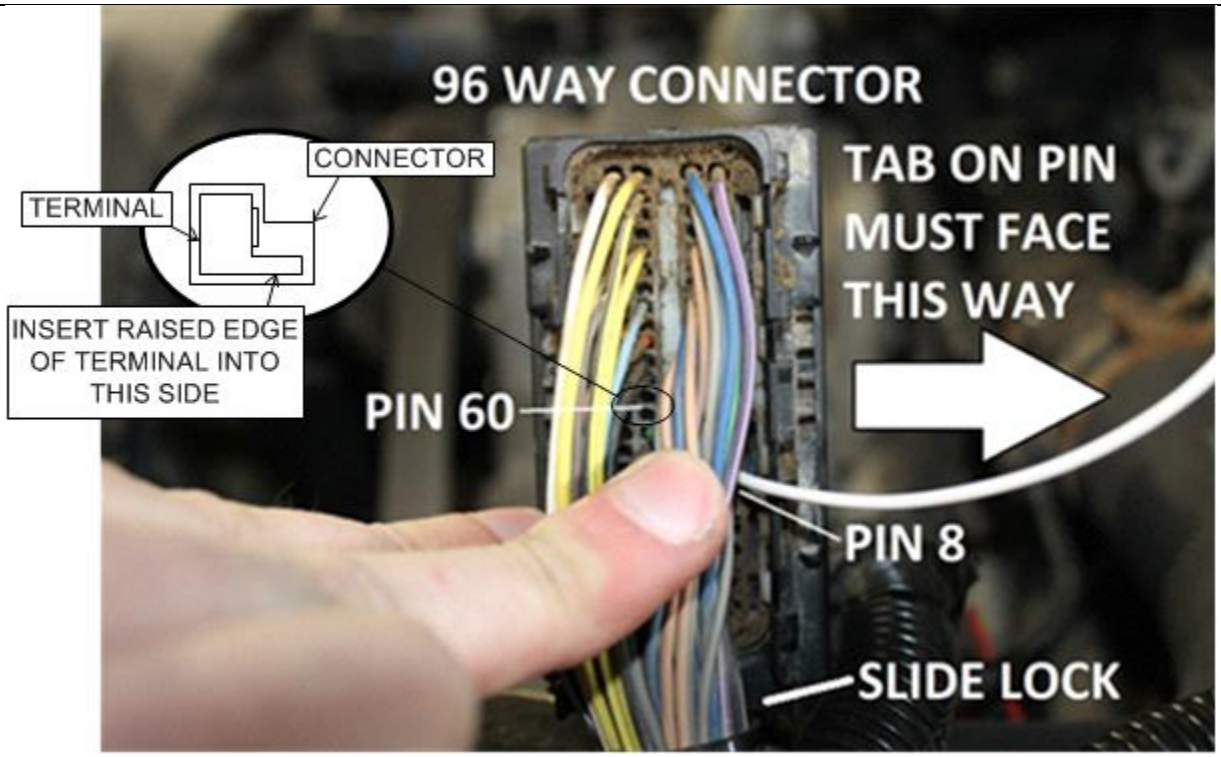
Using a small screwdriver or pick, slide the pink pin terminal lock out of the connector.




Locate pin locations 8 and 60. The ends of the connector have the pin numbers labelled. Count from the edge inwards. Be very careful to locate the pins locations correctly. As it can be difficult to locate these pin locations on the rear of the connector, a thin wire may be pushed from the front as a flag to the rear to verify location on the back side.

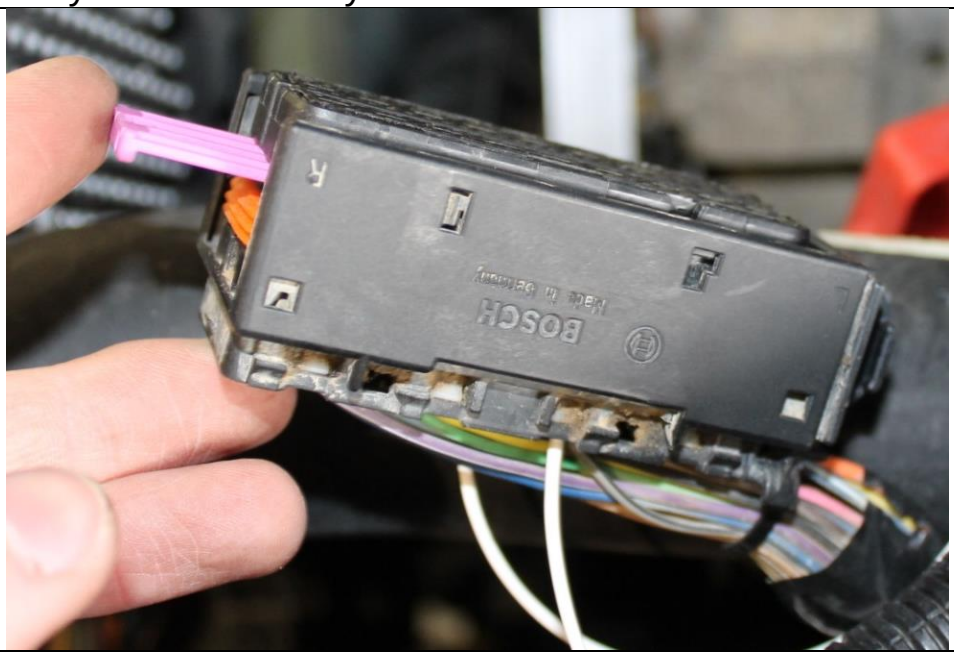



Insert one pin from the high idle kit into pin 8, the other into pin 60. The pins only go in one direction and should not require excessive insertion force. Use care while inserting pins as they are fragile. Crimps must be formed correctly or it will be difficult to insert, the crimp may be gently reformed with small pliers if necessary.

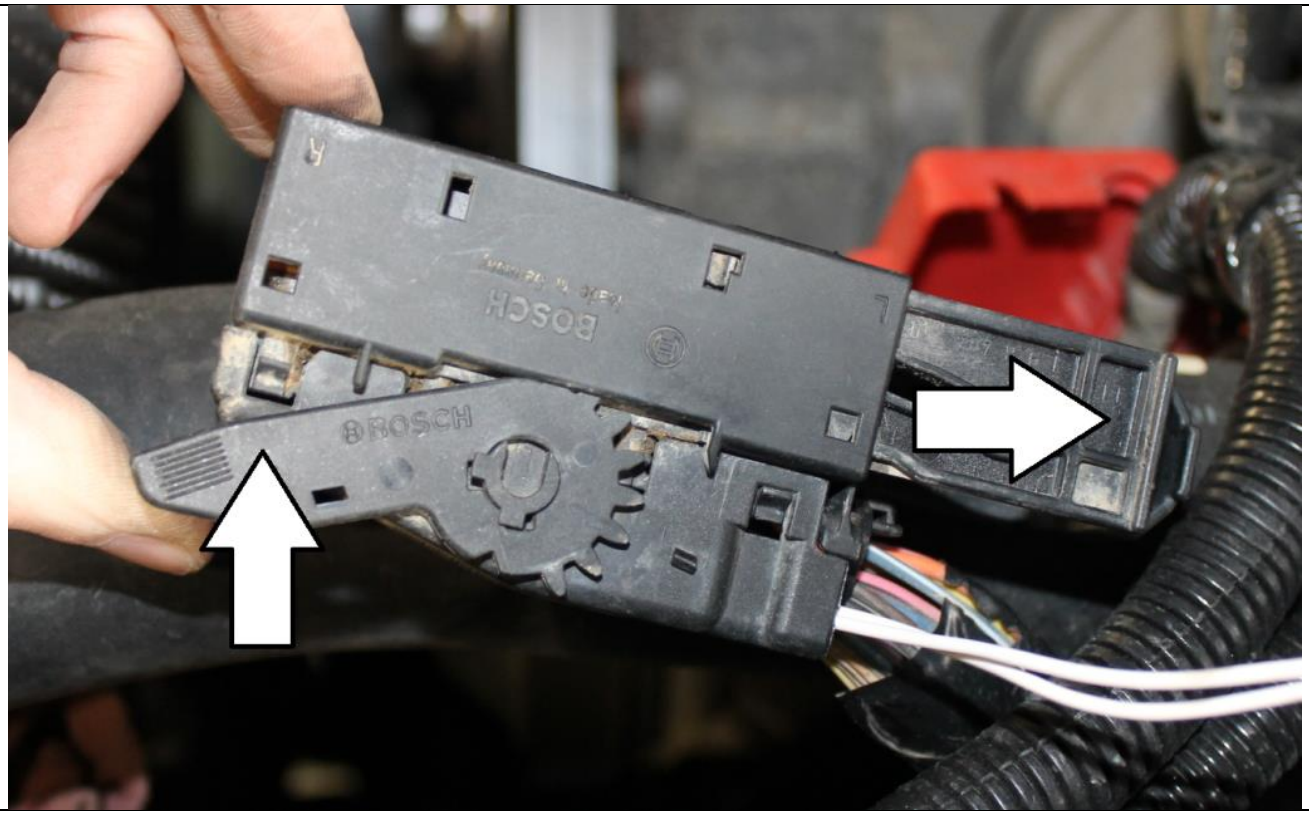



Two spare terminals have been supplied if the terminals on the harness are damaged during installation. These extra terminals are not required to be used during normal installation. Spare terminal Bosch P/N# **1928498135**

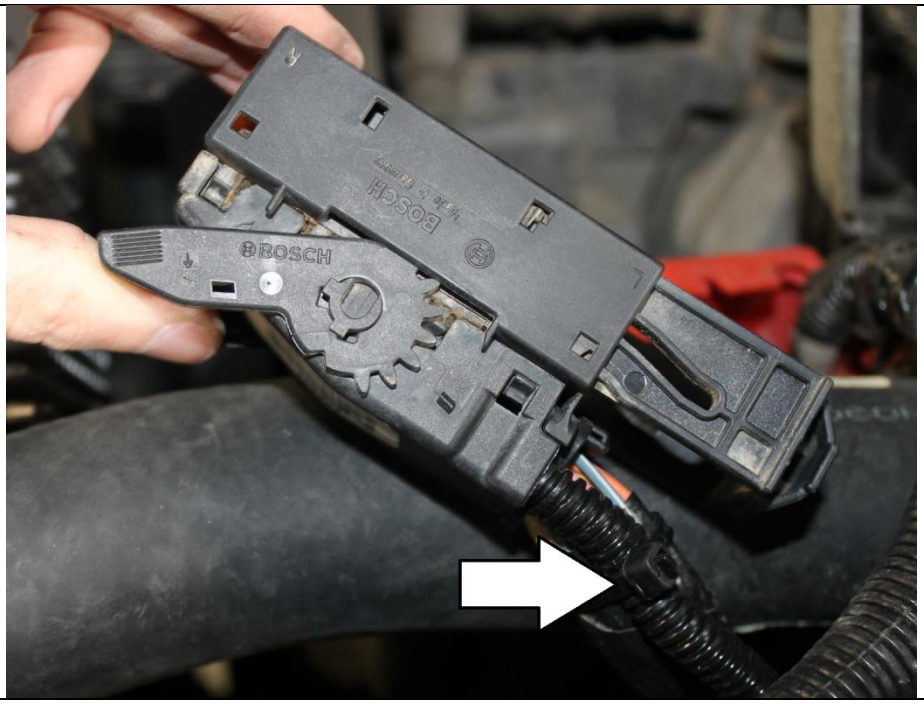
View the connector from the ECM side and ensure the pin is fully seated by comparing to adjacent pins. Lightly tug on the wire to ensure it is fully seated and locked.
Reinstall the pink pin retainer back into the connector. If this clip is not easy to insert, one of the pins is not fully seated and may need to be inserted further.



Before reinstalling the lock handle to the back of the connector, the gear on the ends of the handle must be properly aligned with the gear track in the connector. To do this, rotate the handle to the fully released position and pull the sliding lock mechanism in the connector fully outwards. Snap the cover back on and verify handle sweep correctly correlates with the position of the sliding lock mechanism.




Install supplied wire loom over the high idle kit wire from the ECM to the firewall. Secure with supplied zip ties at the connector to reduce strain on the wire.




Install the top large connector back on the ECM, followed by the lower small connector. Secure the remainder of the high idle wire harness within the engine bay and trim excess wire loom.

Using remaining wire loom, cover the under dash wiring and secure it out of the way. Drill hole in desired dash panel for switch using stepper bit. Ensure chosen location has

sufficient room behind it for the switch body.

Reinstall knee bolster, fuse panel cover, and bezel surrounding the instrument cluster. Install switch through hole.


Reconnect vehicle batteries. Test for correct operation.

## *Operation*

The 2006-2007 Duramax has three high idle speeds available, 800 rpm, 1250 rpm and 1700 rpm. To operate the high idle, the engine must be running, transmission in park, foot off of the brake and parking brake set. Turn the toggle switch on to start high idle. The engine will now increase from its normal idle speed to 800 rpm. To access the higher speeds, turn on the cruise control and press either SET or RESUME/ACCELERATE. Pressing SET (button on the end of the stalk) will yield 1250 rpm, pressing RESUME (one click past the on position) will yield 1700 rpm. To stop the high idle, simply turn the toggle switch back off.


Do not leave the high idle switch on while driving.
The idle speeds may be adjusted using a Tech2 factory scan tool. The above engine speeds are the default values and will suffice for normal extended idling, high idle and PTO applications.

## *Troubleshooting*

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| Toggle Switch Not Illuminated When On | Using test light, verify the fuse that has been tapped has switched ignition power.<br>Check ground ring terminal connection.<br>Verify toggle switch wiring is correct.<br>Toggle switch lamp burnt out. |
| High Idle Does not Function | Ensure toggle switch is lit, indicating it is powered.<br>Ensure the two pins inserted into the ECM are fully inserted and have not backed out.<br>Ensure brake lights are operating normally and brake is not pressed.<br>Ensure parking brake light in the instrument cluster is on when parking brake pressed and off when released.<br>Ensure PRNDL display does show P when transmission is in park. |