**Toyota Corolla, Matrix/Pontiac Vibe**

**Part Number:** 250-1731

### Base Kit Contents

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Control Switch Assembly</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Screws (M5)</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Hardware Bag</td>
</tr>
</tbody>
</table>

### Hardware Bag Contents

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Cruise ECM Harnesses for Corolla</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Cruise ECM Harness for Tacoma</td>
</tr>
</tbody>
</table>

### Additional Items Required for Install

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
</table>

### Conflicts

**Note:** Note: All Corolla vehicles with VIN's beginning with “2T1”, and automatic transmission vehicles with VIN's beginning with “1NX” require part item 1 listed at bag contents. All Tacoma vehicles with V6 engines use item 2.

### Recommended Tools

**Personal & Vehicle Protection**

- Safety Glasses
- Fender Cover
- Gloves (optional)

**Special Tools**

- Battery Post Protector

**Installation Tools**

- Trim Removal Tool
- Phillips Screwdriver
- 10-MM Wrench
- T-30 Bit
- 3/4 Wrench Drive
  - 1/4” and 1 1/2” Hole Saw

**Special Chemicals**

### Tool Service Parts

**SVC Contents**

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Cutting Tool</td>
<td>250-2598</td>
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<tr>
<td>2</td>
<td>1</td>
<td>Extraction Tool</td>
<td>250-2600</td>
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</tbody>
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### General Applicability

**Corolla, Matrix/Pontiac Vibe All Models**

### Service Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Part#</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>250-2706</td>
<td>Corolla ECM Harnesses</td>
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<tr>
<td>2</td>
<td>250-2705</td>
<td>Tacoma ECM Harness</td>
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</tbody>
</table>

### Legend

**STOP:** Damage to vehicle may occur. Do Not Proceed until process compliance has been met.

**Operator Safety:** Use Caution to Avoid Risk of Injury.

**Critical Process:** Proceed with Caution to Ensure a Quality Installation. These points will be audited on a completed vehicle installation.

**General Process:** This highlights specific processes to ensure a quality installation. These points will be audited during the accessory installation.

**Tools & Equipment:** This calls out the specific tools and equipment required for the process.

**Revision Mark:** This mark highlights a change in installation with respect to previous issue.

**Special Note: Installation Sequences**

After Safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation. In some instances the suggested sequence is written for one associate to install, and in others the sequence is given as part of a team accessory installation. Unless otherwise stated in the document, the associates may perform the installation steps in any order to make the installation as efficient as possible while maintaining consistent quality.

**Form #5156, Rev. J, 10-10-12**
VEHICLE PREPARATION:

1. Disconnect the cable from the negative terminal of the battery. **Figure 1**

   **CAUTION:** Ensure that battery has been disconnected for more than 90 seconds prior to removal of airbag; failure to heed this warning may result in airbag discharge and may cause serious injury or death.

2. Remove airbag by extracting the two 30 Torx screws as illustrated in **Figure 2**.

3. Remove ground terminal and dummy horn/cruise connector from steering wheel and discard. Utilize small screwdriver to remove airbag connectors as illustrated in **Figure 3**.

   **CAUTION:** Be sure to store airbag face up as illustrated in Figure 4 to reduce injury in event of accidental discharge of airbag.

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**Figure 1**

**Figure 2**

**Figure 3**

**Figure 4**
CONTROL SWITCH

1. Using the Switch Hole Cutting Template on page 6, place the template on the inside of the trim piece as shown and drill a 1 1/2” hole into the shroud for the control switch. Figure 5

2. Mount Cruise Control switch with two (2) Phillips screws provided. Remove ground terminal and dummy horn/cruise connector from steering wheel and discard. Plug in cruise switch connector and reconnect ground terminal. Figures 6-7

3. Reinstall Airbag.

TESTING

1. Reconnect negative battery cable and torque to 3 ft*lbs.

2. Turn the ignition to the “on” position. Press the “Cruise On-Off” button. This turns the system on. The indicator light in the instrument panel will come on. If the light does not come on, or flashes, disconnect negative battery terminal and continue to next page.

3. If the indicator light in the instrument panel comes on, check cruise functionality. Ensure cruise disengages when vehicle is shifted into neutral or clutch is depressed. Also ensure cruise disengages when brake is depressed.

REASSEMBLY

1. Reinstall trim pieces taking special care to ensure harnesses and wiring connections are properly secured.

2. Be sure harness is not pinched or bound.
CRUISE ECM HARNESS

1. Disconnect negative battery cable from battery.

2. Locate connector A50 at driver side in the engine compartment. Release connector from the ECM and remove the plastic cover. Figure 9

3. Locate pin 40, in which, if pre-wired, would be a Blue/Black wire. If wire is present, cut off terminal on black ECM harness and solder. If wire is not present, remove the rubber seal in pin 40. Figure 10. Be sure to push out terminal retainer at the center of connector. Figure 11. Use ECM terminal with rubber seal as shown in Figure 12. Insert the ECM terminal from the black Cruise ECM Harness to pin 40 of connector A50 carefully locking terminal into place. Figure 13. Press in rubber seal on harness into connector housing.

4. Reassemble connector A50 and place back onto ECM. Route the Cruise ECM Harness through the grommet on the firewall as shown in Figure 14.

CAUTION: Ensure that battery has been disconnected for more than 90 seconds prior to removal of airbag; Failure to heed this warning may result in airbag discharge and may cause serious injury or death.
1. Disengage 4 clips to remove lower steering wheel shroud. Figure 15.

2. Locate connector E6 connector behind steering wheel at right side of sub assembly. Figure 16. Remove connector. Be sure to push out terminal retainer at the center of connector. Figure 17. If present, remove the yellow wire in pin 1 of connector E6. See Figure 18. Insert the clock-spring terminal from the Corolla Cruise ECM Harness (black wire) to pin 1 of connector E6. Carefully lock terminal into place. Pull the terminal back gently to check whether it is locked correctly.

3. If a wire is present in pin 2 of connector E6, reassemble connector and see testing instructions. Be sure retainer is pressed in before reinstalling connector.

4. If a wire is not present, insert the clock-spring terminal from the Cruise Ground Harness (black wire) to pin 2 of connector E6. Carefully lock terminal into place. Figure 18. Reassemble connector. Be sure retainer is pressed in before reinstalling.

5. Remove the driver side kick panel. Route the Ground Harness to vehicle ground point. Remove the 10mm ground screw. Install the Ground terminal from the black Cruise ECM Harness to ground point. Figure 19

6. See testing instructions on page 3.
TROUBLESHOOTING

1. Locate connector **E6** of clockspring below right hand side steering column. Refer to Figure 20

2. With ignition switch on, place positive lead of meter on **PIN 1** (DC).

3. Place common lead on **PIN 2** (Ground). Confirm readings are as follows:
   a. Key on: 12 volts.
   b. Key on, press cruise switch ‘On’ and hold: 0 volts.
   c. Key on, press cruise switch ‘Set’ and hold: 6 volts.
   d. Key on, press cruise switch ‘Resume’ and hold: 3 volts.

4. If the voltages are different replace control switch.

5. If there is not 12 volts on **PIN 1**, then do a continuity test from the control switch (behind air bag) to the computer.

6. If no continuity, then check pin insertions at control switch, clockspring and computer.

7. If continuity is good, then verify pin positions at clockspring and computer.

8. If all positions check ok and continuity is good, then there is a computer problem. Consult a Toyota dealer.