### Table 1: Part Numbers for Cruise Module and Related Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Cruise Module</th>
<th>Main Harness</th>
<th>Pedal Interface Harness</th>
<th>Diagnostic Harness</th>
<th>Control Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>1. 250-2895</td>
<td>2. 250-2759</td>
<td>3. 250-2788</td>
<td>4. 250-2785</td>
<td>5. 250-2867</td>
</tr>
</tbody>
</table>

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**Instructions and Warnings**

- **Warning:** All non-plug and play connections must be soldered. Failure to comply with this requirement will void warranty.

- **Warning:** Installation must be performed by a competent professional. All connections and circuits must be tested with a multi-meter.

- **Warning:** Do not use hand-held 2-way transceivers inside your vehicle while driving.

  When transmitting from inside the car, 2-way radios that operate in the 25MHz-700MHz frequency range with more than 2.0 watts of power can produce electromagnetic interference that could interfere with the operation of cruise and throttle controls resulting in vehicle "limp mode". Use of cellular phones will not interfere with these controls.
Installation Procedure

NOTE: Read this procedure before beginning work on the vehicle. Follow this procedure carefully to ensure proper installation.

NOTE: Failure to solder all spliced connections voids the warranty of this cruise control product.

NOTE: Due to the possibility of vehicle variation, even within a make/model/year, we require that you test cruise control for proper operation BEFORE making irreversible changes to the interior paneling (For example: drilling steering column shroud, or modifications to the OBDII connector mount). Rostra Precision Controls will not replace modified interior paneling.

Installation procedure (All vehicles)

1. Turn vehicle key to “run” position. Do not start engine.
2. Locate BRAKE SWITCH WIRE HARNESS (BSWH). This harness is attached to the brake pedal.
3. Use Multimeter (DC Voltage measurement) on BSWH to find wire which is +12V all the time. This is the Brake+ (Brk+) wire. Write down Brk+ wire color here: _______________________
4. Use Multimeter (DC Voltage measurement) on BSWH to find wire which is:
   - 0.0V Brake is unpressed AND +12V Brake is pressed. This is Brake- (Brk-)
   - Write down Brk- wire color here: _______________________
9. Locate ignition wire -- this wire must be +12V when key is on and 0V otherwise
   - Write down IGN wire location here: _______________________
10. Locate Ground (GND) point -- this point must have 3 ohm or less resistance to Battery- terminal.
    - Typical location is behind the driver-side kick panel:
    - Write down GND point location here: _______________________
11. Turn key off and disconnect negative battery terminal.
12. For the IGN, Brk+, Brk-, Cruise Clutch wires in the vehicle: remove 1/2” insulation from wire -DO NOT CUT WIRE- and solder appropriate cruise control MAIN HARNESS wire. Wrap exposed conductor with electrical tape.
13. Locate the vehicle OBD II DIAGNOSTIC CONNECTOR. Connect the DIAGNOSTICS HARNESS to the vehicle OBD II DIAGNOSTIC CONNECTOR. Plug the 2-pin end in to the CRUISE MODULE according to the diagram.
14. Connect the MAIN WIRE and PEDAL INTERFACE HARNESSES to the CRUISE MODULE and reconnect negative battery terminal.
15. Install the CONTROL SWITCH in to the LOWER STEERING COLUMN SHROUD – the switch is designed to be installed on the left side of the shroud. Run the harness through the steering column to the cruise module and reconnect the CONTROL SWITCH WIRE HARNESS in to the cruise control.
16. Test drive the vehicle. Ensure the cruise will engage above 30mph. Ensure that cruise will cancel on brake press, clutch press (manual trans. only), and “N” position of the gear selector (Manual transmissions, use clutch to make the shift, do not perform any operation that can damage the transmission).
17. Mount the cruise control inside the dash in a secure location near the driver’s side wall.

The installation is now complete. Thank you for choosing Rostra Precision Controls!

For Manual Transmission vehicles ONLY

5. Locate CLUTCH SWITCH WIRE HARNESS (CSWH). This harness is attached to Clutch pedal
6. Use Multimeter (DC Voltage measurement) on CSWH to locate a wire which changes to +12V OR 0V when the clutch is pressed.
   - Write down Clutch switch wire color here: _______________________
7. If clutch switch wire goes to:
   a. 12V when clutch is pressed, use YELLOW cruise clutch wire
   b. 0V when clutch is pressed, use WHITE cruise clutch wire.
   - Write down Cruise Clutch wire color here: _______________________
Pin 2

12V IGN RED

BRAKE + BLUE

GND BLACK

BRAKE – WHITE/BROWN

Note: Use only the wires listed in Main Harness. All other wires are not used.

Connect to the accelerator pedal.

To OBD2 Connector

Red Wire to Pin 5

Black Wire to Pin 14
NISSAN VERSA 250-9504

Clutch Wiring for Manual Transmission

Control Switch Installation

1. Find a suitable position for the switch on the left hand side of the covering around the steering column.
2. Mark the position and drill a 3/8 hole.
3. Use the enclosed fittings so the switch is angled to match the OE turn signal switch lever.
4. The switch head can be rotated as desired, and locked with the supplied retainer clip.
5. Insert the wires in the connectors to plug into cruise module shown below.
## MAIN WIRING HARNESS DESCRIPTION

<table>
<thead>
<tr>
<th>Function</th>
<th>Color</th>
<th>Results</th>
<th>Fault Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition</td>
<td>Red</td>
<td>+12V when switched on and +0V when switched off. Ignition must be greater than +10V while cranking vehicle.</td>
<td>No power, voltage drop, or intermittent connection will cause Loss of pedal or “Limp Mode” condition.</td>
</tr>
<tr>
<td>Brake positive +</td>
<td>Blue</td>
<td>“Hot” side of brake switch. +12V all the time.</td>
<td>Cruise will not function if this connection is not installed correctly.</td>
</tr>
<tr>
<td>Brake negative -</td>
<td>Brown/White</td>
<td>“Cold” side of Brake switch. Zero (0) resistance to ground when brake is not pressed. +12V when brake is pressed.</td>
<td>Cruise will not function if this connection is not installed correctly. If connection is good, and there is a high resistance to ground, a 5 terminal relay will be required to complete installation. See diagram below.</td>
</tr>
<tr>
<td>Ground</td>
<td>Black</td>
<td>Lowest resistance to ground closest to zero (0) ohms as possible. Use a vehicle ground point where other ground wires are connected to.</td>
<td>A bad ground connection will cause the following conditions: Cruise will not function; Loss of pedal or “Limp Mode” condition.</td>
</tr>
<tr>
<td>Clutch (GND triggered)</td>
<td>White</td>
<td>Ground active wire at switch when clutch is depressed.</td>
<td>Cruise will not function if wrong wire is connected –OR– Cruise will not disengage when clutch is depressed.</td>
</tr>
<tr>
<td>Clutch (+12V triggered)</td>
<td>Yellow</td>
<td>+12V active wire at switch when clutch is depressed.</td>
<td>Cruise will not function if wrong wire is connected –OR– Cruise will not disengage when clutch is depressed.</td>
</tr>
</tbody>
</table>

### 5 Terminal Relay for Brake Switch

![Diagram of 5 Terminal Relay for Brake Switch](image)