Conflicts

Note: Not for installation on vehicles equipped with factory keyless entry.

Applicability

Note: 2016 Tacoma NOT equipped with factory keyless entry.

Kit Contents

<table>
<thead>
<tr>
<th>Item#</th>
<th>Quantity Req.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Control Module</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Main Harness</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Hardware Bag</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Valet Switch</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>24&quot; Cable Ties</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>3 Button Transmitter</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Owner's Card</td>
</tr>
</tbody>
</table>

Hardware Bag Contents

<table>
<thead>
<tr>
<th>Item#</th>
<th>Quantity Req.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>Red T-Taps</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Blue T-Taps</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>Black T-Taps</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Yellow T-Tap</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2-1/4&quot; x 2-1/4&quot; Foam Pad</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>8&quot; Cable Ties</td>
</tr>
</tbody>
</table>

Recommended Tools

Safety Tools

- Phillips Screwdriver
- Rachet w/ Extension
- Wire Cutters/Strippers
- Flashlight
- Torque Wrench (48 in. lbs.)
- Needle Nose Pliers
- Wire Crimpers

Installation Tools

- Straight-Slot Screwdriver
- 10 mm Socket
- Common Pliers
- Nylon Trim Tool
- Needle Nose Pliers
- Wire Crimpers

Special Chemicals

Additional Items Required For Installation

<table>
<thead>
<tr>
<th>Item#</th>
<th>Quantity Req.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00016-00063</td>
<td>1</td>
<td>Control Module</td>
</tr>
<tr>
<td>00016-34030-05</td>
<td>2</td>
<td>Keyless Entry Transmitter</td>
</tr>
<tr>
<td>00016-32901-01</td>
<td>1</td>
<td>Main Installation Harness</td>
</tr>
<tr>
<td>00016-30960-56</td>
<td>1</td>
<td>On/Off Toggle Control Switch</td>
</tr>
<tr>
<td>00016-32901-02</td>
<td>1</td>
<td>Hardware Bag</td>
</tr>
<tr>
<td>00016-35105-01</td>
<td>1</td>
<td>Headlight Extension Wire</td>
</tr>
</tbody>
</table>

Legend

STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.

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.

TOOLS & EQUIPMENT: This calls out the specific tools and equipment required for this process.

REVISION MARK: This mark highlights a change in installation with respect to previous issue.

SAFETY TORQUE: This mark indicates that torque is related to safety.

SPECIAL NOTE: After TMS and 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.

Part Number: 00016-32901
Accessory Code: KE1000
A. Pre-Installation Precaution

1. Use Seat and Floor protectors to avoid damage to surfaces.

2. Please review and familiarize yourself with this document and refer to TIS before installation to check for updates to any installation procedures or techniques included in this document.

B. Battery Disconnect

CAUTION:

- Certain systems need to be initialized after disconnecting and reconnecting the cable to the negative (-) battery terminal.

- Before starting the engine, make sure that the ground point is installed to the body with the bolts.

- After the ignition switch is turned off, the navigation receiver assembly records various types of memory and settings. As a result, after turning the ignition switch off, make sure to wait at least 60 seconds before disconnecting the cable from the negative (-) battery terminal. (for Navigation System)

- After the ignition switch is turned off, the radio and display receiver assembly records various types of memory and settings. As a result, after turning the ignition switch off, make sure to wait at least 80 seconds before disconnecting the cable from the negative (-) battery terminal. (for Audio and Visual System)

1. Before performing work on electronic components, disconnect the cable from the negative (-) battery terminal to prevent damage to the electrical system or components. When disconnecting the cable, turn the ignition switch and headlight switch off and loosen the cable nut completely. Perform these operations without twisting or prying the cable. Then disconnect the cable. Clock settings, radio settings, audio system memory, DTCs and other data will be cleared when the cable is disconnected from the negative (-) battery terminal. Write down any necessary data before disconnecting the cable. (Figure B1)
C. Disassemble Vehicle Trim

1. Remove Front Door Scuff Plate LH.
   a. Disconnect the 10 claws and 2 guides to remove the front door scuff plate LH. (Figure C1)

2. Remove Cowl Side Trim Board LH.
   a. Remove the clip. (Figure C2a)
   b. Disengage the 2 clips to remove the cowl side trim board LH. (Figure C2b)

3. Disconnect Hood Lock Control Lever Sub-Assembly.
   a. Disengage the claw and 3 guides to disconnect the hood lock control lever sub-assembly. (figure C3)
4. Remove Instrument Panel Lower Finish Panel Sub-Assembly
   a. Remove the bolt <A>.
   b. Remove the 2 screws <E>.
   c. Disengage the 11 clips and 4 claws.
   d. Disconnect the connectors to remove the instrument panel lower finish panel sub-assembly. (Figure C4)

5. Remove Lower Steering Column Cover.
   a. Remove the 2 screws.
   b. Push the right and left sides of the lower steering column cover, and disengage the 2 claws.
   c. Insert a finger into the opening of the tilt lever of the lower steering column cover to disengage the claw and remove the lower steering column cover. (Figure C5)

T-TAP INSTALLATION

When installing female T-Tap connectors, be sure the wire is located inside the wire channel of the female T-Tap connector before closing the connector over the wire with pliers. When possible, install T-Taps at least 1" away from connector.

STOP

IMPORTANT! After installation, inspect and ensure that Keyless System Harnesses are clear of all HOT, SHARP or MOVING objects.

IMPORTANT! Care MUST be exercised when using the BLACK T-Taps. To avoid damage and broken wires, please note:

• Ensure there is NO tension on the T-Tap connection when securing the harness. The wire should be slack.
• Excessive manipulation and/or stress on the wire connection could lead to wire breakage.
• Center the wire in the metal insert, NOT the plastic side of the T-Tap. Misalignment of the wire against the metal insert could lead to cutting the wire.
• It is recommended to close close the T-Tap with your fingers (Step A above). After the T-Tap has been closed with your fingers, applying light pressure with a set of pliers will complete the connection.
D. WIRING DIAGRAM

- **RED WIRE** [12 VDC]: Use black T-Tap and connect to the RED WIRE in connector IC2, location 4.
- **YELLOW WIRE** [Accessory]: Use black T-Tap and connect to the RED WIRE in connector IC2, location 10.

- **LF Door Unlock Switch**: Use black T-Tap and connect to the YELLOW WIRE in connector IC2, location 17.
- **LF Door Lock Switch**: Use black T-Tap and connect to the RED WIRE in connector IC2, location 9.
- **Unlock Detect**: Use black T-Tap and connect to the PINK WIRE in connector IC2, location 4.

- **10 AMP RED WIRE** [12 VDC]: Use Yellow T-Tap and connect to the RED WIRE in connector I7, location 4.
- **YELLOW WIRE** [Accessory]: Use black T-Tap and connect to the RED WIRE in connector I7, location 7.

- **BLACK WIRE** [18 GA.]: Connect with supplied nut to factory stud on dash brace.
- **GREEN/RED WIRE** [Horn]: Use black T-Tap and connect to the RED WIRE in connector S8, location 9.
- **WHITE WIRE** [Tail lights]: Use black T-Tap and connect to the GREEN WIRE in connector C11, location 18.
- **BLUE WIRE** [Headlights]: Use black T-Tap and connect to the LT. BLUE WIRE in connector C11, location 17.

**DETAIL "A" DRIVER'S DOOR UNLOCK CIRCUIT**

- Cut the BLACK WIRE in connector IC1, location 10.
- Strip the insulation from both sides of the cut wire.
- Crimp the WHITE WIRE from the keyless harness to the HARNESS side of the cut wire.
- Crimp the BLUE/WHITE WIRE from the keyless harness to the CONNECTOR side of the cut wire.
D. CONNECTOR DETAILS

### 1. CONNECTOR I7 : Ignition Switch
- **Location**: Steering Column
- **Color**: White

<table>
<thead>
<tr>
<th>Connector</th>
<th>Color</th>
<th>Pin</th>
<th>T-TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyless Car</td>
<td>Red</td>
<td>4</td>
<td>Yellow</td>
</tr>
<tr>
<td>Keyless Car</td>
<td>Yellow</td>
<td>7</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 2. CONNECTOR C11 : Tail Lights / Head Lights
- **Location**: Lower Steering Column Cover Area
- **Color**: Black

<table>
<thead>
<tr>
<th>Connector</th>
<th>Color</th>
<th>Pin</th>
<th>T-TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyless Car</td>
<td>White</td>
<td>18</td>
<td>Black</td>
</tr>
<tr>
<td>Keyless Car</td>
<td>Blue</td>
<td>17</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 3. CONNECTOR S8 : Horn
- **Location**: Lower Steering Column Cover Area
- **Color**: Black

<table>
<thead>
<tr>
<th>Connector</th>
<th>Color</th>
<th>Pin</th>
<th>T-TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyless Car</td>
<td>Green/Red</td>
<td>9</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 4. CONNECTOR IC1 : Unlock Motor
- **Location**: Driver's Kick Panel
- **Color**: Gray

<table>
<thead>
<tr>
<th>Connector</th>
<th>Color</th>
<th>Pin</th>
<th>T-TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyless Car</td>
<td>White</td>
<td>10</td>
<td>N/A</td>
</tr>
<tr>
<td>Keyless Car</td>
<td>Blue/White</td>
<td>10</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 4. CONNECTOR IC2 : Lock Switch / Unlock Switch
- **Location**: Driver's Kick Panel
- **Color**: White

<table>
<thead>
<tr>
<th>Connector</th>
<th>Color</th>
<th>Pin</th>
<th>T-TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink</td>
<td>Red</td>
<td>9</td>
<td>Black</td>
</tr>
<tr>
<td>Pink/White</td>
<td>Pink</td>
<td>4</td>
<td>Black</td>
</tr>
<tr>
<td>Pink/White</td>
<td>Yellow</td>
<td>10</td>
<td>Black</td>
</tr>
</tbody>
</table>
E. Installing The System.

1. Mounting the control module.
   a. Apply the adhesive pad to the rear of the control module. (Figure E1a)
   b. Using 2 long wire ties, secure the control module to the dash brace, as pictured. (Figure E1b)

   NOTE: Route the wire ties through the module’s mounting eyelets.

2. Routing the main wiring harness.
   a. Route the portion of the wire harness with the Red, Yellow, Green/Red, White, and Blue wires towards the steering column. Secure with wire ties as shown. (Figure E2a)

   NOTE: For best range route the antenna along with the rest of the wires towards the steering column.
   b. Route the portion of the harness with the White, Blue, Pink, and Pink/White wires towards the driver’s kick panel. Mount the toggle switch in the driver’s kick panel to the factory wiring harness. Secure with wire ties as shown. (Figure E2b)
c. Route Black Ground wire to the factory stud on the driver's dash brace, to the left of the steering column. Secure ring terminal to the stud with supplied 10mm nut. (Figure E2c)

**F. Completing The Installation.**

1. **Reconnect Negative Battery Terminal.**
   a. Temporarily reconnect the negative battery terminal. Disconnect the negative battery terminal again after testing the system.

2. **Testing The System.**
   Prior to delivering the vehicle, test all features of the system according to the owner's manual included.
   a. **LOCK** - Press and release the LOCK button on the transmitter. All doors should lock, horn should chirp once, parking lights should flash once, and the headlights should turn on for 30 seconds.
   b. **UNLOCK** - Press and release the UNLOCK button on the transmitter. The driver's door should unlock, the horn should chirp twice, parking lights flash twice, and headlights should turn on for 30 seconds.

   Press and release the UNLOCK button again within 5 seconds. All the doors should unlock. Headlights will remain on, but horn and parking lights will provide no further confirmation on 2nd unlock.

   c. **PANIC** - Press and hold the PANIC button on the transmitter for approximately 3 seconds. The horn should sound and the parking lights should flash.

   Press and release the PANIC button to silence the panic mode.

   NOTE: Verify both transmitters included in the kit function properly.

   NOTE: If the headlight switch is left in the ON or AUTO position, the parking lights may not flash. Verify the headlight switch is in the OFF position before testing the system.

   a. Reassemble all removed panels to the vehicle in reverse order of disassemble. Test thoroughly, any mechanical or electrical components disconnected or removed from the vehicle during disassembly.

4. Reconnect The Negative Battery Terminal.

   a. Reconnect the negative battery terminal. Using a torque wrench, torque the bolt to 48 in-lbf.
PROGRAMMING NEW or REPLACEMENT TRANSMITTERS TO THE SECURITY MODULE:

IMPORTANT NOTE: Once you enter the programming mode, if 30 seconds elapse with no activity on the system, the programming mode will be terminated. If this happens, simply start over.

**STEP 1**

To get started, disarm the module by first locating the silver toggle switch in the driver’s kick panel.

1. Insert the key into the ignition key cylinder and turn to the ON position

3. Flip the toggle switch ON, then OFF.

4. Turn the ignition key to the OFF position

**STEP 2**

Turn the vehicle’s ignition key ON then OFF 7 times at 1 second intervals.....

1 Second

....Ending in the OFF position.

The vehicle will respond by sounding the horn in a SHORT-LONG pattern to confirm you have entered programming mode.

**STEP 3**

Press the Lock button on the transmitter. The horn will chirp to confirm it has learned the transmitter.

**STEP 4**

Repeat Step 3 for all transmitters that you need to program to operate the vehicle. (Maximum of 4 transmitters per vehicle)

**STEP 5**

When all transmitters have been programmed, turn the ignition key ON then OFF to exit the program mode.

The vehicle will respond by sounding the horn in a SHORT-SHORT-LONG pattern to confirm programming mode has been terminated.

The programming mode will automatically terminate after 30 seconds of inactivity. This will be confirmed by the horn sounding a SHORT-SHORT-LONG pattern. If this happens, start over at step 1 to program transmitters.
VEHICLE FUNCTION CHECKLIST

THESE POINTS MUST BE CHECKED TO ENSURE A QUALITY INSTALLATION

☐ Head Light
   If the warning lights remains on, it may indicate a system malfunction.

☐ High Beams

☐ Turn Signal Lights

☐ Tail Lights

☐ Stop Lights

☐ Backup Lights

☐ Hazard Lights

☐ Marker Lights

☐ Dome/Courtesy Lights

☐ Panel/Switch Illumination

☐ Accessory Controls/Illumination (if equipped)

☐ Rear Window Defogger (if equipped)

☐ Key Sensor Buzzer

☐ Fog Lights (if equipped)

☐ Day Time Running Lights (if equipped)

☐ Trunk/Tailgate/Bed Lights (if equipped)

☐ Glove Box Light (if equipped)

☐ ABS Light (if equipped)

☐ Rear Wiper/Washer (if equipped)

☐ Clock (if equipped)

☐ Accessory Power Socket (if equipped)

☐ Starter

☐ Audio/Video (if equipped)

☐ Power Sliding Door (if equipped)

☐ Convenience Memory Settings (if equipped)

☐ Heated Seats (if equipped)

☐ Massage Seats (if equipped)

☐ Power Side Mirrors (if equipped)

☐ Side Mirror Defogger (if equipped)

☐ Front Windshield Defogger (if equipped)

☐ Navigation System (if equipped)

☐ Rear Sunshade (if equipped)

☐ Cruise Control Light (if equipped)

☐ Steering Wheel Audio Control (if equipped)

☐ HVAC

☐ Power Locks (if equipped)

☐ Power Windows (if equipped)

☐ Gauges

☐ Front Wiper/Washer

☐ Hood Latch Release

☐ Passenger Air Bag Switch (if equipped)

☐ Rollover Side Curtain Air Bag Switch (RSCA)

☐ Horn

☐ Seat Belt Warning Light
   If the warning lights remains on, it may indicate a system malfunction.

☐ Air Bag Warning Light
   If the warning lights remains on, it may indicate a system malfunction.

☐ Lamp Failure Sensor
   If the warning lights remains on, it may indicate a system malfunction.

☐ Track/Skid Control Light (if equipped)
   If the warning lights remains on, it may indicate a system malfunction.

☐ Tire Pressure Monitoring System (TPMS)
   Prior to TPMS activation and Pre-Delivery Service (PDS) of the vehicle the TPMS light will blink when IG is turned on. After TPMS activation and PDS of the vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.
Block Diagram
Keyless Entry System:
Tacoma: Kit P/N 00016-32901

Ground - Connect to Factory Stud on Dash Brace with Supplied Nut.

Ignition - Connect to Red Wire (Connector I7, Cavity 7)

+12v - Connect to Red Wire (Connector I7, Cavity 4)

Headlights - Connect to Lt. Blue wire (Connector C11, Cavity 17)

On/Off Toggle Control Switch P/N: 00016-30960-56

Factory wire is cut in half, refer to installation instructions for additional details.
### Checking the Harness Pinouts:

#### Connector C-1:
Keyless Entry Harness Connector
Connector End View

<table>
<thead>
<tr>
<th>Pin</th>
<th>Wire Color</th>
<th>Wire Function</th>
<th>Test Reference</th>
<th>Proper Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Pink/White</td>
<td>Unlock All Doors</td>
<td>Pin 5 to Ground.</td>
<td>• Approximately 12VDC at rest. Continuity to Ground (pulsed) when driver’s unlock switch is in the UNLOCK position or if keyless UNLOCK function is active (2nd UNLOCK press).</td>
</tr>
<tr>
<td>6</td>
<td>Pink/White</td>
<td>Unlock Detect</td>
<td>Pin 6 to Ground.</td>
<td>• Approximately 12 VDC at rest. Continuity to Ground (pulsed) when driver’s unlock switch is pressed.</td>
</tr>
<tr>
<td>7</td>
<td>Blue/White</td>
<td>Driver’s Unlock Motor ECU Side</td>
<td>Pin 7 to Ground.</td>
<td>• Approximately 0 VDC at rest. Approximately 12 VDC (pulsed) when driver’s unlock switch is pressed.</td>
</tr>
<tr>
<td>8</td>
<td>White</td>
<td>Driver’s Unlock Motor Motor Side</td>
<td>Pin 8 to Ground.</td>
<td>• Approximately 12 VDC (pulsed) when keyless UNLOCK function is activated (first UNLOCK press). Approximately 0 VDC at rest.</td>
</tr>
<tr>
<td>9</td>
<td>Orange/White</td>
<td>Active Out</td>
<td>Pin 9 to Ground.</td>
<td>• Always 12 VDC.</td>
</tr>
<tr>
<td>10</td>
<td>Green/Red</td>
<td>Horn Chirp / Panic</td>
<td>Pin 10 to Ground.</td>
<td>• Approximately 12 VDC at rest. Continuity to Ground (pulsed) when horn pad is pressed / honking.</td>
</tr>
<tr>
<td>11</td>
<td>White</td>
<td>Tail Light Flash</td>
<td>Pin 11 to Ground.</td>
<td>• Approximately 12 VDC at rest. Continuity to Ground (pulsed) when keyless is active. Continuity to Ground (solid) tail lights are switched to ON at headlight switch.</td>
</tr>
<tr>
<td>12</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>13</td>
<td>Red</td>
<td>Battery</td>
<td>Pin 13 to Ground.</td>
<td>• Approximately 12 VDC.</td>
</tr>
<tr>
<td>14</td>
<td>Black</td>
<td>Ground</td>
<td>Pin 14 to Ground.</td>
<td>• Always continuity less than 1 ohm.</td>
</tr>
<tr>
<td>15</td>
<td>Yellow</td>
<td>Ignition</td>
<td>Pin 15 to Ground.</td>
<td>• Approximately 12 VDC when the key is turned to the ON/Run position. Approximately 0 VDC when key is turned OFF.</td>
</tr>
<tr>
<td>16</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>17</td>
<td>Gray</td>
<td>Programming Switch</td>
<td>Pin 17 to Pin 18.</td>
<td>• Continuity to Ground when programming switch is in the ON position. No Continuity to Ground when programming switch is in the OFF position.</td>
</tr>
<tr>
<td>18</td>
<td>Black/Orange</td>
<td>Programming Switch</td>
<td>Pin 18 to Pin 17.</td>
<td>• Always continuity to Ground.</td>
</tr>
<tr>
<td>19</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>20</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>21</td>
<td>Pink</td>
<td>Lock</td>
<td>Pin 21 to Ground.</td>
<td>• Approximately 12 VDC at rest. Continuity to Ground when driver’s lock switch is in the LOCK position or if keyless LOCK function is active.</td>
</tr>
<tr>
<td>22</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>23</td>
<td>Blue</td>
<td>Headlight</td>
<td>Pin 23 to Ground.</td>
<td>• Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or UNLOCK operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLASH is Activated on the Headlight Switch.</td>
</tr>
<tr>
<td>24</td>
<td>No Wire</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>