

# Scion tC MY07-09 Unichip PnP Installation Instructions and Warranty Information

2620021.0, 20 April 2009

# **Tools Required**

10mm combination wrench, Small Flashlight

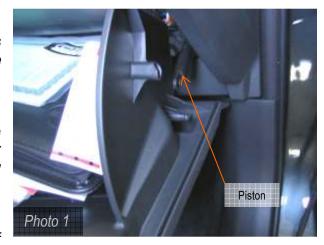
Notes: (1) All plugs in this installation are locking units keyed to only fit the correct connector. Each ECU connector has a small release tab which must be depressed to remove the plug and which should audibly "click" when inserted correctly – both into the ECU and into the PnP harness.

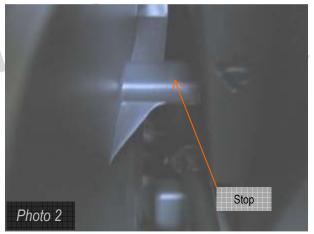
## Installation Procedures

 Using the 10mm wrench, disconnect the car's battery at the negative terminal in the engine compartment.

# 2. Expose the ECU

- a. (Photo 1) Open the glove box, and locate the piston located on the door side. Using your fingers, gently pop the piston off and allow the box to open until it hits the stops.
- b. (Photo 2) Locate the stops on both sides of the top of the glove box and gently push them in to release them allowing the glove box to open further.
- Pull up and out to remove the glove box and set it aside.



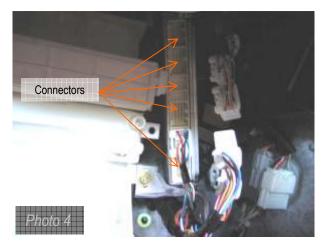


d. (Photo 3) Locate the ECU mounted vertically at the right side of the glove box opening.



e. (Photo 4) Working from the bottom to the top, remove the OEM plugs from the ECU. **Do not force the plugs.** 

Notes: (1) Each plug is secured with a locking tab which must be pushed in to release the plug.



# A. Remove the protective plastic strip from one side of the kit provided Velcro strip and attach it to the larger, flat face of the PnP Harness case.

3. (Photo 5) Install the PnP Harness

- b. Remove the other protective plastic strip from the Velcro strip and position the PnP Harness case on the right side of the OEM ECU as shown.
- c. Plug PnP Harness *Plugs* into the corresponding ECU connectors.
- d. Plug the OEM ECU plugs into the corresponding PnP connectors.
- e. Plug the Map A/B accessory cable into the 8-pin Molex connector labeled "Comm..".

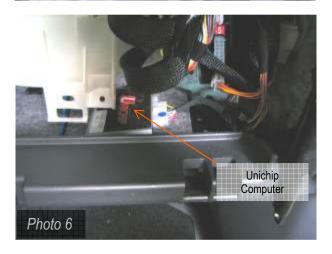
# 4. Install the Unichip Computer

- Remove the protective plastic cover from the kit provided Velcro strip to the back of the Unichip computer.
- b. (Photo 6) Remove the remaining protective plastic strip from the Velcro strip and attach the computer to the flat tray beneath the OEM ECU.
- c. Connect the PnP harness's 24-pin Molex Plug labeled "Unichip" into the large connector on the Unichip computer.

### 5. Route the Accessory Cable

 The accessory loom can be routed as desired, or alternatively, the Map A/B switch can be permanently mounted or connected to an unused OEM switch.





- 6. Test start the engine
  - a. To verify all connections are correct and secure, reconnect the battery and test start the engine. Note: If you need to work on any electrical connections, disconnect the battery again before doing so
- 7. Reassemble the glove box.
- 8. Reconnect the battery negative terminal.
- 9. Accessory Cable Functionality

Switch	Mode	Function	Notes
Мар А/В	I	More aggressive ignition timing	Unless otherwise specified, for higher octane fuel
	0	Less aggressive ignition timing	Unless otherwise specifiedDefault operational setting

- a. The normal position for the *Map A/B* switch is off (0) and unless you desire to run Map B it should remain in there. To change the switch, turn off the ignition key before actuating the switch.
- b. With the ignition key off and removed, selecting the on (I) position on the *Map A/B* switch selects timing Map B, which can be verified by illumination of the red LED when the vehicle is started. Using Map B will result in a CEL on approximately thirty percent of vehicles; the CEL results from that particular vehicle's increased sensitivity to detonation. If Map B produces a CEL in your vehicle, select reselect Map A and use the ECU power switch to clear the CEL as outlined below.

Note: (1) More is not always better... adding more timing can actually reduce power in a particular vehicle if that vehicle is sensitive to detonation. If the stock ECU detects detonation, it will reduce timing to protect the engine; if you're truck doesn't seem to be making more power than stock and you're running Map B, switch back to Map A and you will feel the power increase. This condition can and does occur even without a CEL.

### Unichip Warranty Information

For 90 days following the original owner's purchase of a Unichip, Unichip of North America (UNA) warrants no other ECU product generates more power from a specific gasoline engine than a properly functioning, custom tuned Unichip in the specific vehicle for which it is tuned. If another ECU product generates more power from that engine within 90 days of the original owner's purchase of the Unichip, the original owner can contact their Unichip dealer for a refund of all Unichip parts, Unichip installation charges, and Unichip custom tuning. Shipping, testing, dynamometer costs and the cost of removing any UNA parts are specifically not covered by this warranty and will not be refunded to the owner.

To claim a refund, owners must provide dynamometer proof another ECU product produced more power when installed on the specific vehicle and that vehicle and all of its parts were in an identical condition other than the ECU enhancement. Three repeatable dynamometer tests must be performed using the Unichip and three repeatable tests using the other ECU product. The average of the three tests performed on each product shall constitute that product's score for determining power. The same technician, using the same dynamometer in an identical condition with the same settings, must perform all test runs. All environmental conditions including ambient and IAT temperature and pressure altitude and the vehicle's cooling system temperatures and drive train temperatures must also be identical for all six runs. IAT and Coolant temperature data logged information for each run is required. The vehicle must also use the same fuel for all six tests. UNA reserves the rights to, at UNA's exclusive discretion, re-tune the Unichip involved in a performance warranty claim at no cost to the customer making the claim or to provide a warranty refund; if after a retune, the Unichip still makes less power than another product, the owner will receive a refund IAW this warranty statement.

All UNA parts, including Unichip piggyback computers, driver modules, and harnesses also carry a limited warranty against manufacturer's defect. This warranty is valid for the original owner only, for one year from the date of purchase regardless of the installation date. UNA only warrants Unichip products sold by an authorized UNA reseller. If a UNA product is found defective, the original purchaser may contact the reseller from whom they purchased the product for a replacement component at no cost. Shipping, testing, dynamometer costs, and the cost of removing any UNA parts are specifically not covered by this warranty and will not be refunded to the owner.

The above warranties are expressly made in lieu of any and all other warranties, express or implied, including any warranty on the engineering or design of the goods as well as the implied warranties of merchantability and fitness for a particular purpose.

Any and all warranties on the Unichip are void if: 1) the custom installation or custom tuning of the Unichip was performed by anyone other than a UNA qualified dealer or tuner, 2) anyone other than a qualified UNA tuner or dealer alters or modifies or attempts to alter or modify any of the electronic data within the Unichip or 3) the UNA product is used for anything other than its intended purpose or is physically or electrically damaged.

For all warranty claims, the product return shipping date stamp must be within the appropriate time limitation from the time of purchase. Additionally, proof of purchase in the form of either a properly completed warranty card or a sales receipt indicating both the date of sale and owners name is required and is the owner's responsibility. Customers with hard-wire installations are responsible for providing proof of when and where the installation was performed. Warranty claims will be denied if the customer cannot provide proof of purchase.

UNA is not liable for incidental, consequential, or punitive damages attributable directly or indirectly to the Unichip or UNA's actions or inactions with respect to the Unichip. UNA is also specifically not responsible or liable for damage of any kind: 1) to a vehicle into which UNA products are installed or 2) resulting from the use of a vehicle equipped with any UNA products.

UNA believes high performance driving should be confined to appropriate venues such as racetracks or organized closed course events such as Autocross competitions, and does not sanction or participate in any street racing or other illicit driving activity.