



Toyota Tacoma 4.0L MY05-08, 4Runner 4.0L MY03-08 FJ Cruiser, MY07-08 Unichip PnP Installation Instructions and Warranty Information

v1020151.4, 19 Mar 2009

Tools Required

10mm wrench, Small flashlight

Notes: (1) All plugs in this installation are locking units keyed to only fit into 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 PnP harness.

(2) If a plug is difficult to remove, try pushing it back in and then pull it back out. DO NOT FORCE THE PLUGS OUT OR IN.

1. **Disconnect the truck's battery.** Using a 10mm wrench, disconnect the truck's battery at the negative terminal in the engine compartment.
2. **Expose the ECU behind the passenger's side glove compartment.**

- i. (Photo 1) Locate the glove box strut outside the box's right side. Push the top of the strut towards the driver's side to pop it off.

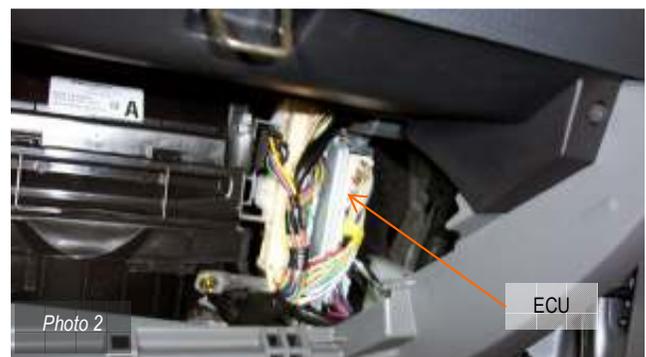
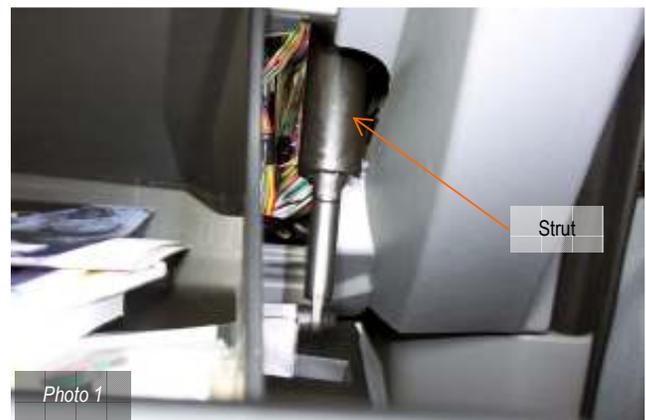
- ii. Gently push in on both sides of the glove box to remove the stops located at the top rear corners; pull the glove box toward the rear of the truck and remove it.

3. **Install the PnP Harness**

- i. (Photo 2) Locate the OEM ECU on the right side behind the glove box.
- ii. Disconnect the OEM plugs from the ECU.

Note: Each ECU connector has a small release tab which must be depressed to remove the plug. DO NOT FORCE THE PLUGS; if a plug is difficult to remove, try pushing it in and then pulling it back out while depressing the release tab.

- iii. Remove the protective plastic from one side of the long kit supplied Velcro strip and apply it to the larger flat side of the PnP harness.
- iv. (Photo 3) Remove the other protective plastic strip from the Velcro on the PnP harness and attach the harness to the right side of the OEM ECU with the flat side facing the OEM ECU; firmly press the PnP harness in place.



- v. (Photo 4) Disconnect OEM plugs 1, 3, 4, and 5 (counting from top-to-bottom) and insert them into the PnP Harness Connectors.

Each plug is keyed to only fit into the correct connector and which should audibly "click" when inserted correctly – both into the ECU and PnP harness.

- vi. Insert the PnP Plugs into the OEM ECU connectors.

Each plug is keyed to only fit into the correct connector and which should audibly "click" when inserted correctly – both into the ECU and PnP harness.



Photo 4

4. Install the Unichip Computer

- i. Attach the remaining kit supplied Velcro strip to the back side of the Unichip Computer.
- ii. (Photo 5) Position the Unichip Computer on the heater box above the two tabs as shown and press it firmly in place.
- iii. Route the PnP loom with the 18-pin Molex connector over the support bracket and insert the Plug into the Unichip.



Photo 5

- 5. **Route the Accessory Cable.** The loom with switches labeled and **Map A/B** can be routed where ever desired, but should be placed where it can be accessed. You can simply loop the loom inside the glove compartment, run it under the carpet pad, or permanently mount the switches as desired. See Section 16 for a description of the switches.
- 6. **Replace the glove box.**
- 7. **Attach the glove box strut.**
- 8. **Reconnect and tighten the battery's negative terminal.**
- 9. **Accessory Cable Functionality**

Switch	Mode	Function	Notes
Map A/B	1	More aggressive ignition timing	Unless otherwise specified, for higher octane fuel
	0	Less aggressive ignition timing	Unless otherwise specified Default operational setting

- i. The normal position for the **Map A/B** switch is off (0), and unless you desire to run Map B, it should remain there. To change the switch position, turn off the ignition key before actuating the switch.
- ii. With the ignition key off and removed, **Map A/B** switch's on (1) position selects timing Map B. Using Map B may result in a CEL on some vehicles; the CEL results from that particular vehicle's increased sensitivity to detonation.

Note: (1) More is not always better... adding more timing can actually reduce power if your particular vehicle is sensitive to detonation. If the stock ECU detects detonation, it reduces timing to protect the engine. If your truck doesn't seem to make 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.