



Toyota Tundra 4.0L MY07-14, Land Cruiser 4.0L MY09-12, Unichip PnP Installation Instructions and Warranty Information

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Tools Required

10mm wrench, Small Flashlight, Box Cutter

Notes: (1) All plugs in this installation are locking units keyed such that they only fit into the correct connector.

(2) Each main ECU connector has a grey locking lever that must be released to remove the plug and seated to lock the plug in place. Do not force the locking levers or they may break... if the locking lever sticks, double check the plug is correctly seated.

(3) These instructions are for the basic kit which does not include the Flux Blue Tooth PDA unit. The kit can be upgraded at a later date; if you subsequently purchase the Flux update kit, follow the installation instructions included with it.

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 OEM ECU

- (Photo 1) Locate the ECU on the passenger's side of the engine compartment rear bulkhead.
- Rotate the top OEM plug's grey locking lever "up" and disconnect the plug from the ECU.

Note: The plugs have locking levers which must be rotated to remove and install the plugs. Do not force the locking levers or plugs

- Rotate the bottom OEM plug's grey locking lever "down" and disconnect the plug from the ECU.

Note: The plugs have locking levers which must be rotated to remove and install the plugs. Do not force the locking levers or plugs.



Photo 1



Photo 2

(Photo 3) Install the PnP harness.

- a. Install the large and small PnP Plugs into the OEM ECU and rotate the grey locking levers flush to secure them

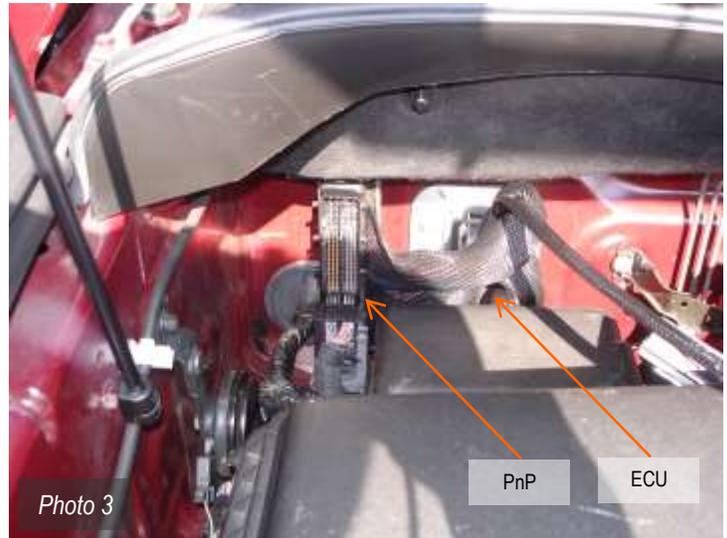
Note: The plugs have locking levers which must be rotated to remove and install the plugs. Do not force the locking levers or plugs

- b. Position the PnP Case vertically beside the OEM ECU, plug the small OEM plug into the PnP Case, and rotate the grey locking lever flush to secure it. The PnP Case should remain in position as shown in the photo.

Note: The plugs have locking levers which must be rotated to remove and install the plugs. Do not force the locking levers or plugs

- c. Connect the large OEM plug into the PnP Case and rotate the grey locking lever to secure it.

Note: The plugs have locking levers which must be rotated to remove and install the plugs. Do not force the locking levers or plugs



3. Route the Unichip and Accessory Cables.

- a. If you are using a 5-Way switch, there is no Accessory Cable as the switch connects directly to the Unichip.

- b. (Photo 5) Locate the grey grommet on the firewall just outboard of the OEM ECU.

- c. Using the box cutter, make a 1/2" incision in the grommet.

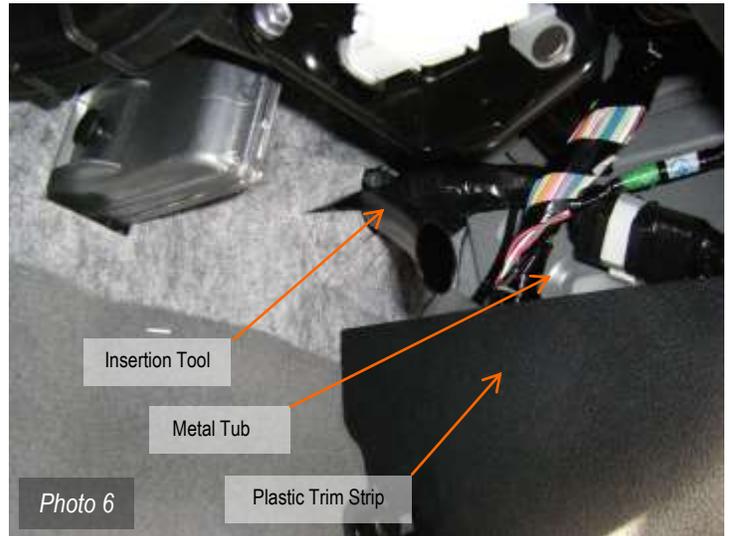
- d. Lubricate the end of the kit provided insertion tool with soapy water and gently slide it through the grommet being careful not to cause a tear.

- e. Insert the 24-Pin Molex Plug labeled "Unichip" into the end of the Insertion Tool.

- f. If using the 2-position Map 0/1 switch, position the 10-pin Molex Plug labeled "Comm" beside the "Unichip" Plug and tape both of them to the Insertion Tool with the kit provided friction tape.



- g. (Photo 6) Working inside the truck from the passenger's foot well, locate the end of the insertion tool above the A-pillar kick panel cover.
 - i. Gently pull the insertion and Molex plugs into the passenger foot well.
 - ii. Remove the friction tape to separate the 24-pin and 10-pin Molex Plugs from the Insertion Tool.



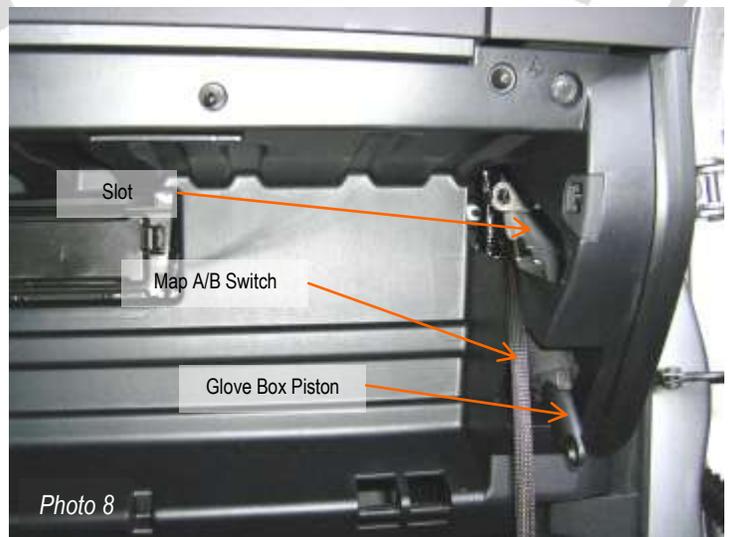
4. (Photo 4) Install the Unichip computer.

- a. Remove the protective plastic strip from one side of the kit provided Velcro strip and position the strip on the back side of the Unichip computer.
- b. Lying on the passenger compartment floor, look above the plastic trim strip in front of the passenger door and find the truck's metal tub.
- c. Remove the remaining protective plastic strip from Velcro on the back of the Unichip Computer and position the Unichip against the truck's tub above the trim strip with the connectors facing the rear of the vehicle.
- d. Press the Unichip firmly into place.
- e. If using the 5-way Map Select Switch, connect the Male 24-pin Plug into the Unichip.
- f. Place the 24-pin Molex PnP Harness plug labeled Unichip into the Unichip computer connector.



5. Route the Map Select Switch.

- a. If using the 2-position Map 0/1 switch, connect the 10-pin Connector on the Map A/B Switch Loom into the PnP Plug labeled "Comm."
- b. The Map Select Switch can be positioned as desired, but a convenient location for it is inside the glove box.
 - i. Open the glove box to it's limit
 - ii. Empty the contents of the glove box.
 - iii. Grab the sides of the glove box where it meets the dash pad and firmly press the sides towards the center of the glove box to release the stop tabs and allow the glove box to until it reaches the piston stop.
 - iv. Locate the piston on the outside of the glove box and slide it off the glove box and pull the glove box up and off of the clips holding the bottom to the dash pad.



- v. (Photo 8) Locate the slot in the side of the glove box opening above the piston and route the Map A/B switch through the slot so you can place it into the glove box.
- vi. Reverse the steps to reinstall the glove box.

6. Test start the Engine. Connect the battery to test start the truck and verify all connections are correct.

Map Select Switch Functionality

There are two mechanical Map select switch options, the 2-position Map 0/1 toggle switch and the 5-way switch.

- 1. If you are using the 2-position Map 0/1 toggle switch...

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

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 you're 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.

- 2. If you are using the 5-way switch...

Switch	Mode	Function	Notes
Map	1	Least aggressive ignition timing	Low-grade octane fuel map
	2	Moderate ignition timing	Mid-grade octane fuel map
	3	Most aggressive ignition timing	Premium grade fuel map
	4	Valet Mode	Engine will not accelerate to redline
	5	Immobilizer Mode	Engine will not start

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 you're 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.