



# Jeep Wrangler MY07 (JK) Unichip PnP Installation Instructions and Warranty Information

v2720041.1 30 Dec 2006

## Tools Required

10mm combination wrench

### Notes:

(1) The OEM ECU plugs are locked in place by a small red slide lock and a release tab. To remove the plugs, slide the red slide lock back away from the ECU until it clicks into place and then depress the release tab while pulling the plug out. To install the plugs, depress the release tab and press the plug into place and then slide the red lock forward until it clicks.

(2) Your vehicle may have either three or four OEM plugs into the ECU depending upon what options with which the vehicle is equipped.

(3) The ECU connectors are color coded for ease of installation. The OEM plugs have colored faces which correspond to a rectangle on top of the ECU connector. The PnP Plugs have a color metal locking tab on the top of each Plug.

(4) These instructions are for the Non-Flux PnP kit which uses the Map A/B mechanical switch. If you subsequently purchase the Flux system, refer to the instructions included with it for installation procedures

## Installation Procedures

### 1. Disconnect the battery

a. Locate the battery in rear of the engine compartment on the passenger's side and using the 10mm wrench, disconnect the car's battery at the negative terminal.

### 2. Install the PnP Harness

a. (Photo 1) Locate the OEM ECU on the driver's side of the bulkhead holding the radiator.

b. Remove the two OEM plugs closest to the fender as described in the Notes above.

c. Insert the Orange PnP Plug with the orange metal locking tab into the Orange ECU connector. Use caution to insure the connector is squarely aligned and firmly press it into place until the slot in the Metal Locking Tab clicks in place over the pin on the ECU.

d. (Photo 2) Install the PnP Plug with the Black Metal Locking Tab into the Black ECU connector by the same method.

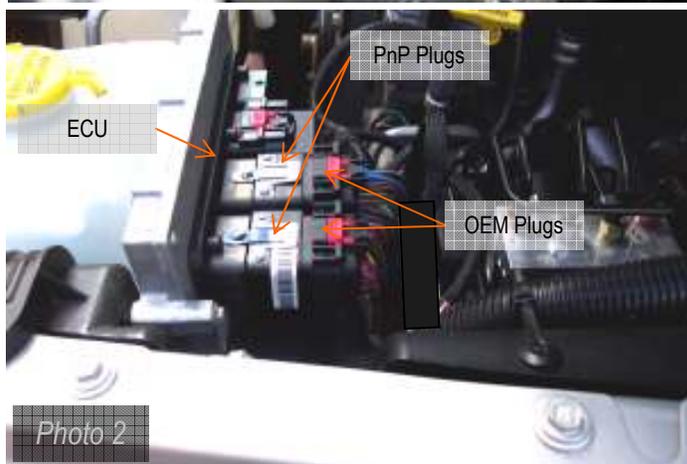
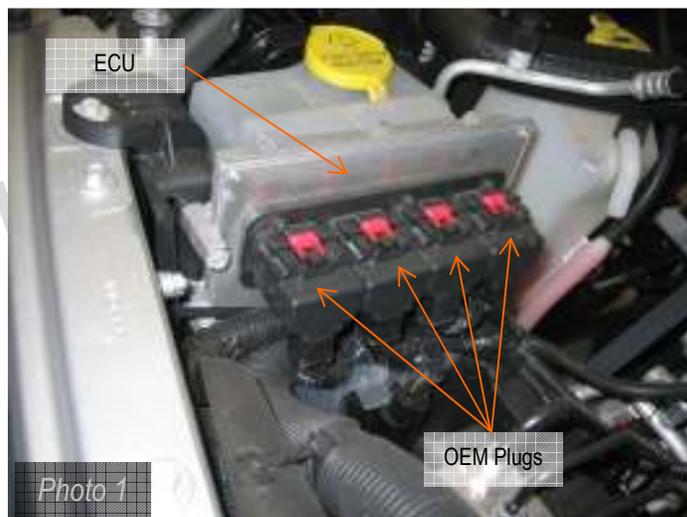
e. Carefully insert the Orange OEM plug into the Orange PnP Plug. Press the OEM plug firmly into place and slide the red locking tab forward until it clicks into place.

f. Install the Black OEM plug into the Black PnP Plug by the same method.

### 3. Install the Unichip Computer

a. (Photo 3) Connect the adapter harness and watertight cover to the Unichip Computer

b. Slide the watertight cover down over the Unichip Computer as far as it will go.

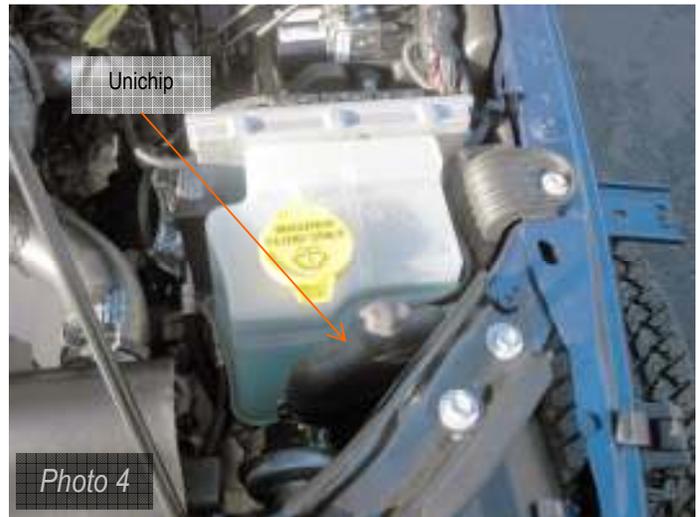


c. Fold the top of the watertight cover back against itself and tighten the kit supplied black Zip-tie connector around the folded section to hold it in place to prevent water intrusion..

d. Remove one side of the kit supplied Velcro strip's protective plastic cover and attach it to the bottom of the Unichip Computer.

e. Remove the remaining protective plastic strip from the Velcro strip on the bottom of the Unichip Computer.

f. (Photo 4) Position the Unichip Computer between the windshield washer fluid reservoir and the forward bulkhead on the black reservoir bracket. Firmly press the Unichip Computer in place so that the Velcro is attached to the bracket.



**4. Install and position the accessory cable.**

a. Connect the **Map A/B** accessory switch to the **COMM** Molex connector.

*Notes (1) The Molex plug has a locking tab on one side which should align with a corresponding tab on the connector. (2) The plug's locking tab should audibly "click" when the plug connects; if you don't hear or feel a click, depress the locking tab to remove the plug and reconnect it.*

b. Position the **Map A/B** switch and loom as desired; ensure the routed wires remain clear of all rotating and hot engine compartment components; failure to do so may result in damage to the Unichip, PnP harness or vehicle.

**5. Test start the vehicle**

a. Temporarily reconnect the negative lead of the battery

b. Start the engine and ensure it operates normally. If the engine doesn't start or operates abnormally, immediately shut the ignition off, disconnect the battery, and check all OEM and vehicle connections.

**6. Reconnect the battery negative terminal.**

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

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

- iii. CEL's may illuminate for hundreds of causes some of which require immediate correction but many of which are "nuisance" codes. Unfortunately, without reading the code triggering the light, you can't tell one from another. Until you know its cause, do not ignore a CEL.
  - a. The only "normal" Unichip CEL results from selecting Map B with insufficient octane or in a car sensitive to detonation. If you get a CEL with the Unichip installed, verify Map A is selected and/or you have the requisite octane fuel and clear the light by disconnecting the vehicle battery for one minute. If the CEL is still on after restarting the engine, turn off the engine, disconnect the battery, remove the Unichip PnP, and start the engine again; if the CEL is still on, it's a vehicle problem and you should contact your dealer or shop. If the CEL extinguishes with the Unichip PnP removed, contact your Unichip dealer.

## 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.