

# ***TS PERFORMANCE CHIP INSTALL***

## ***IMPORTANT - IMPORTANT - IMPORTANT***

Do NOT start the installation until these instructions have been fully read and fully understood! You must follow the sequence and directions for a successful installation.

## ***REMOVING THE COMPUTER FROM THE TRUCK.***

1. The vehicles key must be removed and the ignition must be off before starting the computer removal process and throughout the TS PERFORMANCE CHIP installation process!!.
2. Raise the hood, and look underneath the brake master cylinder, next to the drivers fender. Locate the wiring harness with the 10mm bolt in its center. There are three different wiring harness blocks in this general area, locate the one nearest the drivers fender! Completely loosen the 10mm bolt and pull the wiring block out of the computer.
3. Inside the cab locate the computer. The computer is located in front of the parking brake pedal, and to the far left of the under dash area. There are two 7mm bolts holding the black plastic computer sleeve to the metal computer mounting bracket at the rear of the computer. Remove these first. The computer is mounted in a metal bracket held in place by two 10mm fasteners. The first 10mm bolt is located above the top of the computer and through the metal bracket, it threads into the left side (drivers side) of the under dash kick panel area. The other 10mm nut is at the bottom of the computer on the firewall of the truck. Remove both 10mm fasteners now. 1995 thru 1997 Powerstroke owners will have to remove the emergency pedal assembly by removing three 13mm mounting bolts to gain access to their computer.
4. Pull the computer from the firewall and away from the metal bracket. Slide the black plastic sleeve from the computer. Note how the computer is oriented in the black plastic sleeve for reinstallation purposes later.

## ***COMPUTER CONNECTION PREPARATION***

1. Find a well lighted, dry, and clean work area. This is very important. Remove the black plastic access port cover on the end of the computer opposite of the wiring block connector. Some covers are attached with a screw but most are snapped into place. Remove the plastic port cover.

2. After removing the cover, the printed circuit board edge connector will be visible to you. This **MUST BE CLEANED** completely or your **TS PERFORMANCE CHIP** will not operate correctly. The edge connector has both a top and a bottom, both must be cleaned for a good connection.

The edge connector is coated with a clear lacquer and sometimes a silicone grease covering. Remove the silicone coating with a clean soft cloth dampened with brake cleaner, lacquer thinner, alcohol, or carburetor cleaner. **DO NOT** push down on the printed circuit board with enough force to crack the board!! After removing the silicone, use a scotch brite pad to remove the lacquer coating. Sometimes applying more of the brake cleaner will aid this process. **DO NOT** spray any cleaning chemicals into the computer!! Finally wipe the edge connector dry with another clean soft cloth and check for any debris you find. **NOTE - DO NOT** erode any of the silver material on the edge connectors while cleaning the contacts of silicone or lacquer coatings.

3. Once you are sure none of the coatings remain on the edge connector you are ready to install your **TS PERFORMANCE CHIP**. Press the chip into place on the edge connector until it bottoms out on the computer case. Occasionally the **TS PERFORMANCE CHIP** will not be parallel with the end of the computer case, if this happens shim the chip with tape and cardboard to achieve a parallel fit. The **TS PERFORMANCE CHIP** should be flush with the top, bottom and edge of the computer metal case, if not you have installed your **TS PERFORMANCE CHIP** backwards. Remove and re-insert the chip so that it is flush with the top, bottom and edge of the computer case. The only portion of the **TS PERFORMANCE CHIP** that is not flush with the computer case will be the end with the **TS PERFORMANCE** logo. Finally use duct tape to secure your chip to the computer case by using one wrap of tape over the chip and over the top and bottom of the computer. **REMEMBER 95%** of associated installation problems are due to incomplete edge connector cleaning. Slide the computer back into the black plastic cover.

## ***REINSTALLATION OF THE COMPUTER***

1. From inside the truck, install the computer into the metal bracket and push the computer through the rubber grommet in the trucks firewall. The bar code on the computer has to face the drivers side fender when installed correctly. Replace the 10mm nut at the bottom of the computer. Use a nylon zip tie through the holes in the plastic sleeve, and a metal bracket where the 7mm bolts were previously located. Do not reuse the 7mm nuts.
2. Under the hood, reconnect the wiring block and snugly tighten the wiring block 10mm bolt. Start the truck and observe the "check engine light". The "check engine light" should turn off. If the check engine or other lights are on, the computer is in limp mode and your contacts were not sufficiently cleaned. Retrace all the removal, cleaning, and reinstallation steps to insure your accuracy. When everything is clean, including the TS PERFORMANCE CHIP connectors, reinstall and restart the truck. Almost always the limp mode is activated by dirty or poor terminal contacts. Call TS PERFORMANCE customer service if you have any questions at 270-746-9999.
3. Replace the other 10mm bolt in the metal bracket by the drivers side kick panel area.
4. Enjoy the performance and power of your new TS PERFORMANCE CHIP!!  
Give us a call for any other diesel truck product you may need in the future.