



## **Turbospecialties Turbo KIT**

**<http://www.turbospecialties-race.com>**

**[E-mail:turbospecialties@aol.com](mailto:turbospecialties@aol.com)**

## **HONDA CIVIC**



**Engine Model R18**

**TURBO KIT**  
**Service Manual**

**06' ~ UP**

# INSTALLATION INSTRUCTION

Turbo specialties suggests that installation should be done by a professional although a person with good automotive experience will be able to do the installation.

Before starting the installation please review the entire instruction.

Cleaning the engine with a steam cleaner or spray engine cleaner such as gunk will help keep the work area clean.

First you should drain the radiator water and engine oil, then disconnect the battery.

You will need to raise the car to do installation, if you jack up the car use good quality jack stands and be sure that the car is supported properly.

Due to differences in model years and car styles it may be necessary to modify the charge piping and or down pipe.

Check your oil pressure, if it is over 50Lbs, you will need to use an oil pressure restrictor, which included with the kit, to prevent damage to the turbo.

When you do the installation make sure that all banjo fittings connected to the turbo are tight and that the actuator moves smoothly and that it is not interfered with after the installation is complete.

## **Turbo Specialties and Garrett**

Assume no responsibility or liability for misuse and advise that some of the items listed in this catalog are legal for use in California only for off road vehicles or racing applications.

Installation of some items may void the vehicles manufacturers warranty.

We are not responsible for any product failure, engine damage, or possible bodily injury due to misuse or faulty installation to be determined by the manufacturers.

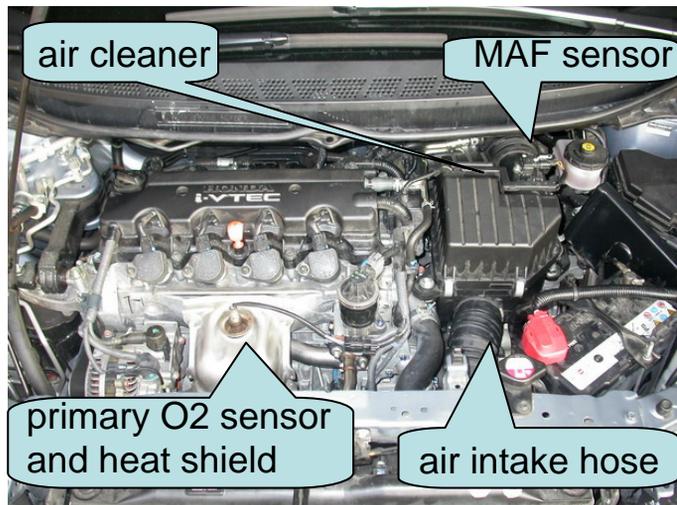


# HONDA CIVIC FD INSTALLATION

06 – UP CIVIC R18A

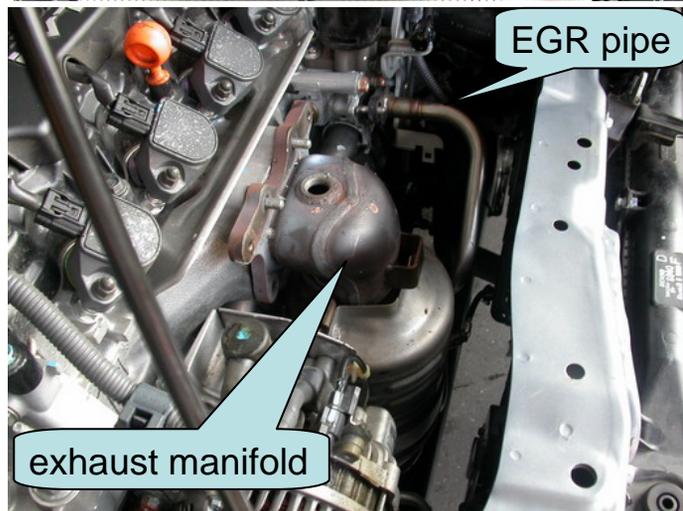
## 1. Remove the air intake system

1. Remove the air intake hose blow-by hose and air cleaner.



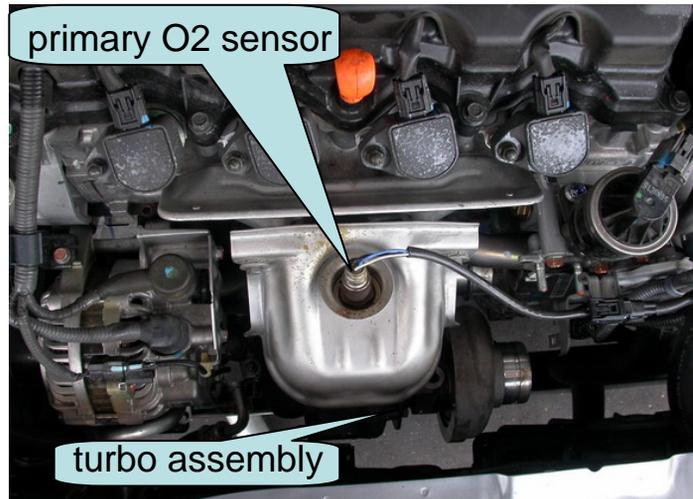
## 2. Remove the exhaust system.

1. Remove the primary O2 sensor
2. Remove the exhaust manifold heat shield.
3. Remove the exhaust manifold include catalyst.
4. Take off the EGR pipe between EGR inlet and catalyst.
5. Install the cover plate to EGR inlet.

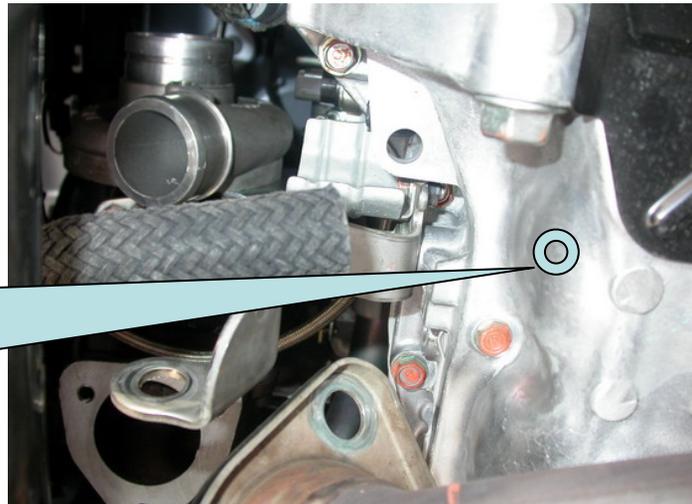


### 3. Installation of turbo assembly

1. Install the turbo assembly on the cylinder head be sure all bolts or nuts are secure.
2. Reinstall the primary O2 sensor and heat shield on exhaust manifold.
3. At this time using the oil return hose locate the proper place to install the oil return hose fitting.

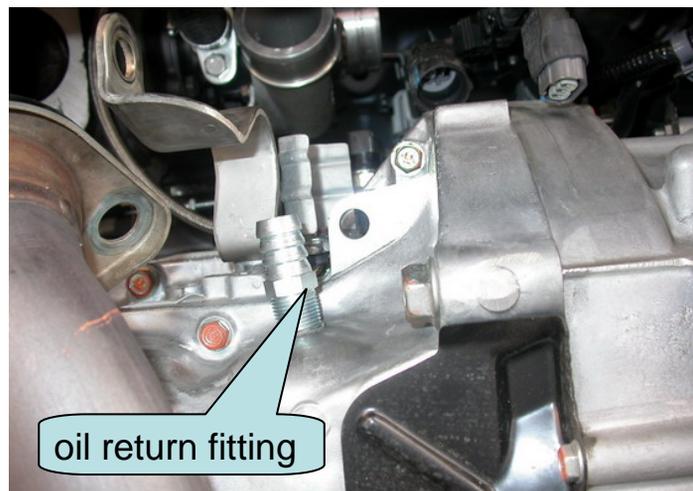


When marking pan, it is best to have the location as far up on the oil pan as possible and in as straight of a line down from the turbo as possible.



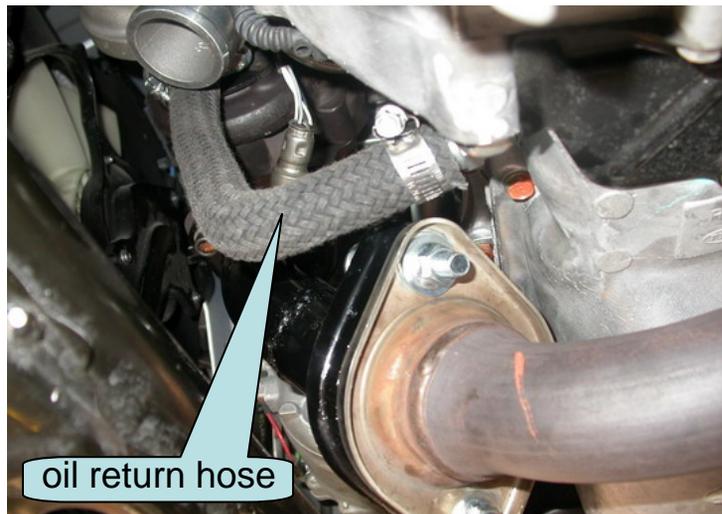
### 4 Installing oil return fitting

1. Remove the oil pan
2. Drill an 15mm hole in the pan where you previously marked for oil return fitting.
3. Install oil return fitting into oil pan.
4. Clean the oil pan and gasket making sure there are no metal particles left in pan from drilling.
5. Reinstall the oil pan on the engine block.



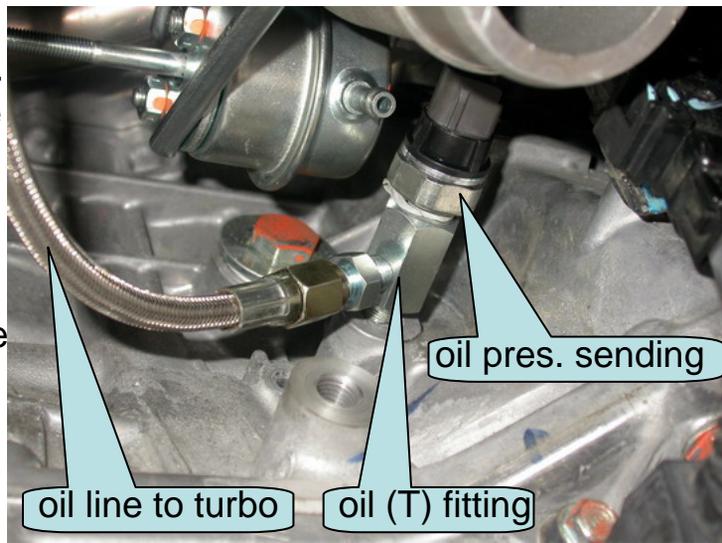
**5. Install the oil return hose.**

- 1. Install the oil return hose between turbo oil outlet and oil return hose.
- 2. Using the hose clamps included in the kit, secure the oil return hose.



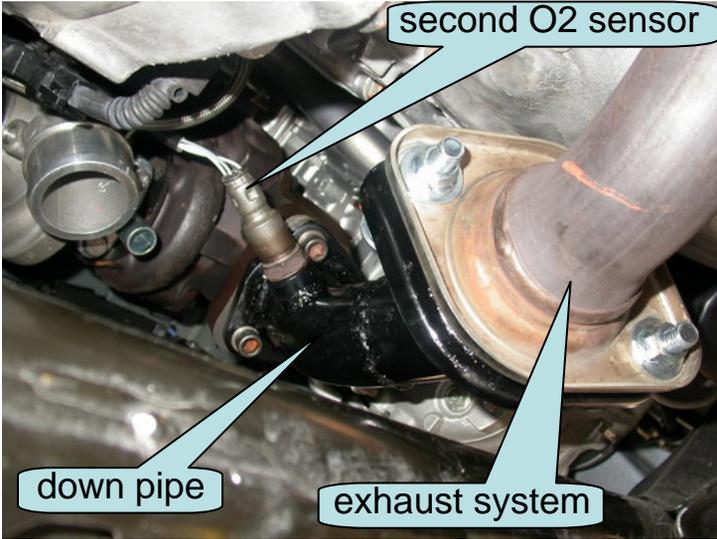
**6. Installation of oil supply system**

- 1. Remove the oil pressure sending unit.
- 2. Install brass (T) connector into engine block and install oil pressure sending unit into (T) fitting.
- 3. Install oil line fitting in the side of the (T) fitting
- 4. Connect stainless oil line to the oil line fitting.
- 5. Bring oil line around to turbo and connect to oil inlet of turbo.



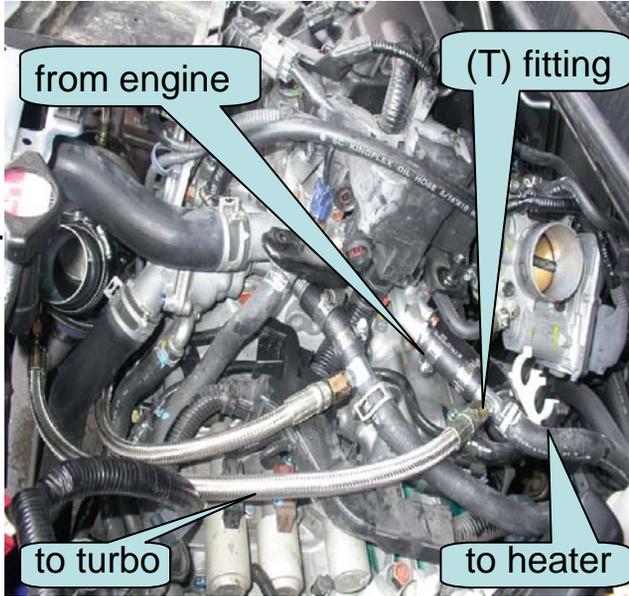
### 7. Installation of the down pipe

- 1.Reinstall the second O2 sensor on down pipe. When installing the O2 sensor first install the O2 spacer to bring the sensor out of the down pipe.
- 2.Install the down pipe to the turbo exhaust outlet.
- 3.Connect down pipe to exhaust system with carbon gasket.



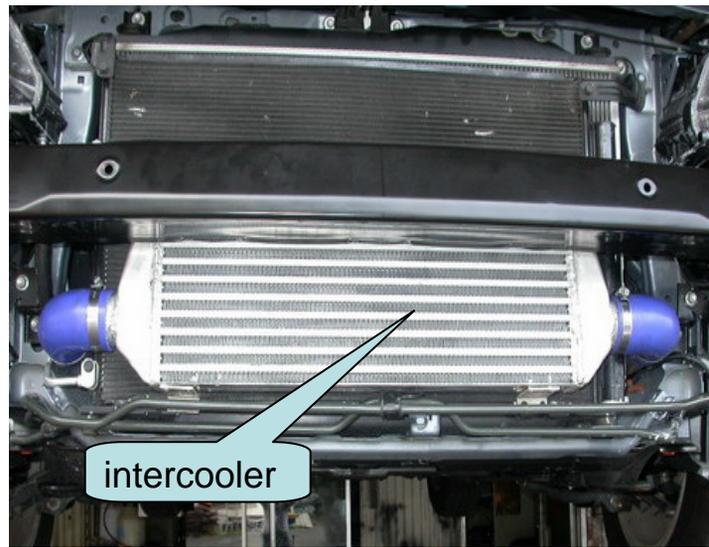
### 8. Installation of water cooling system

- 1.Locate the heater water inlet hose ,cut in half in an easy to reach location. Insert the (T) fitting supplied into each half of the hose and secure with hose clamps supplied.
- 2.Locate the heater water outlet hose, cut in half in an easy to reach location. Insert the (T) fitting supplied into each half of the hose and secure with hose clamps supplied.
- 3.Connect the stainless water lines supplied to the (T) fittings and then feed both lines to the turbo. connect the water lines to either of the water connections of the turbo.



## 9. Installing the intercooler system

1. Remove front bumper.
2. When installing the intercooler first fit the charge piping to compressor outlet and around to intercooler inlet. then locate position of intercooler mounting to correspond with charge piping.
3. See photograph to locate proper position to mount intercooler.
4. Using brackets included fix brackets to lower side of radiator support.



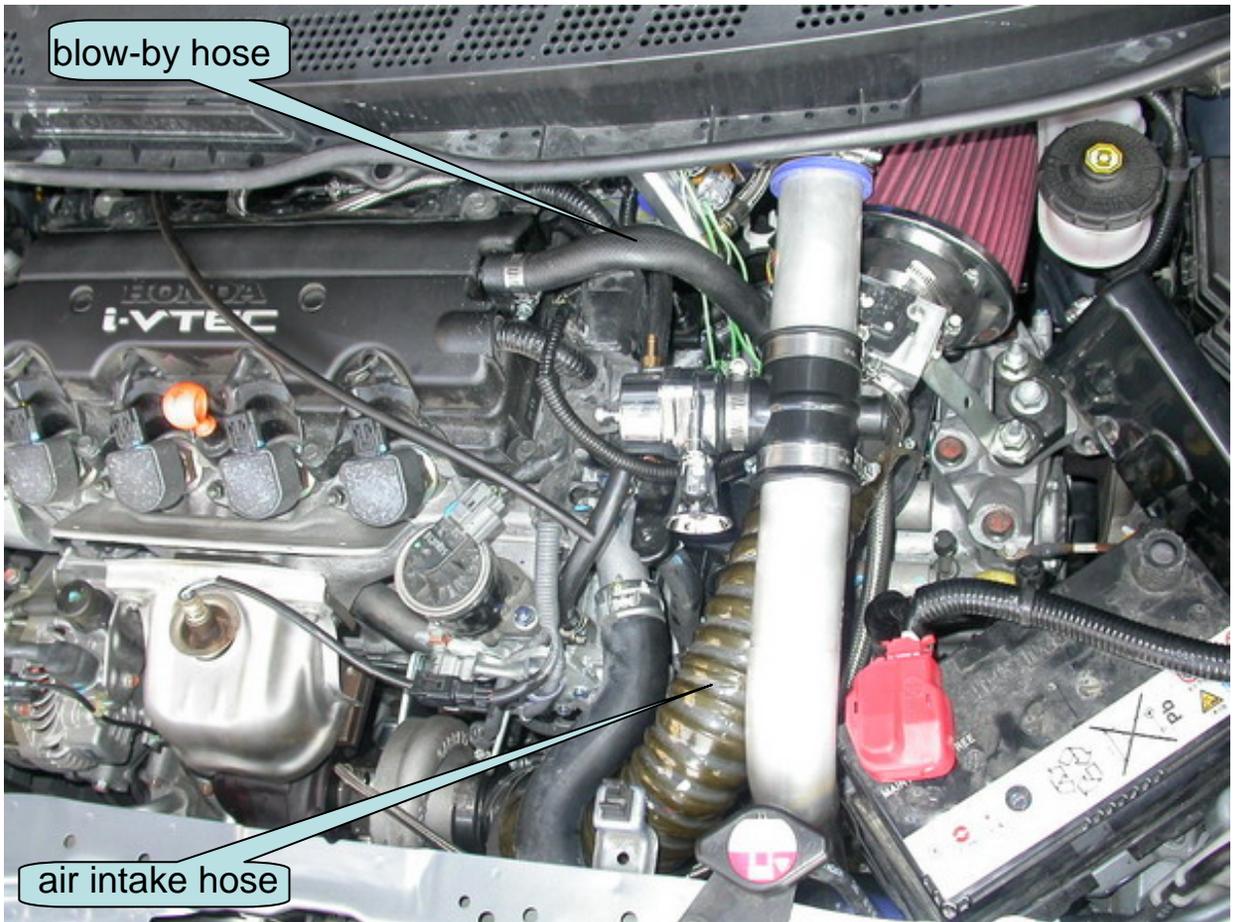
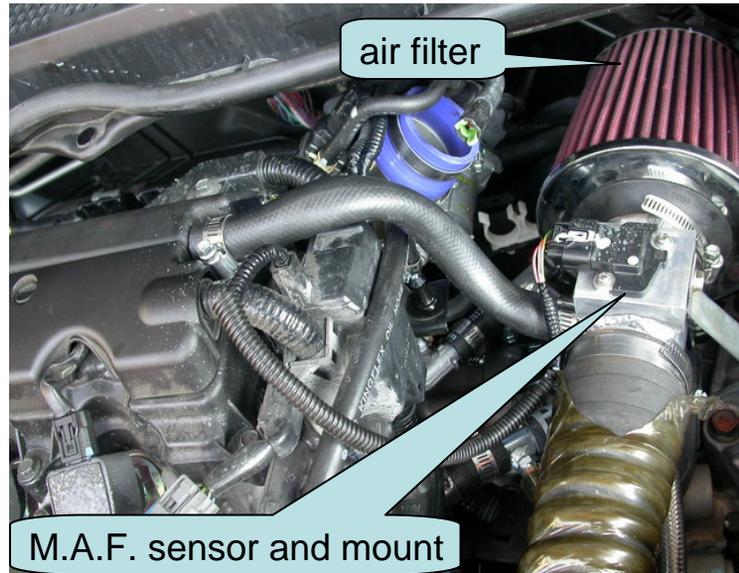
## 10. Install and connect charge piping

1. Refer to photos and drawing for flow layout.
2. Note corresponding numbers on charge piping.
  - A. Flow of charge air is in the direction of the arrow on the charge pipes.
3. Install blow off valve between sections of charge piping as shown.
  - A. There is an adjustment screw on top of B.O.V. for sooner or later release of pressure.



## 11. Install air intake system

1. Take off the M.A.F. sensor from air cleaner box.
2. Reinstall the M.A.F. sensor on M.A.F. sensor mount.
3. Install air filter to the M.A.F. sensor mount.
4. Install one end of the air intake hose to the compressor inlet and the other end to the M.A.F. sensor mount and air filter.
5. Install the blow-by hose to the valve cover and to the air intake pipe.



## 12. FUEL / IGNITION CONTROL

The kit includes the AEM fuel / ignition management system. It has been flashed for civic R 18 ECU. All that needs to be done is for the F/IC box to be hard wired into the ECU harness. And a vacuum/boost line connected to the F/IC unit.

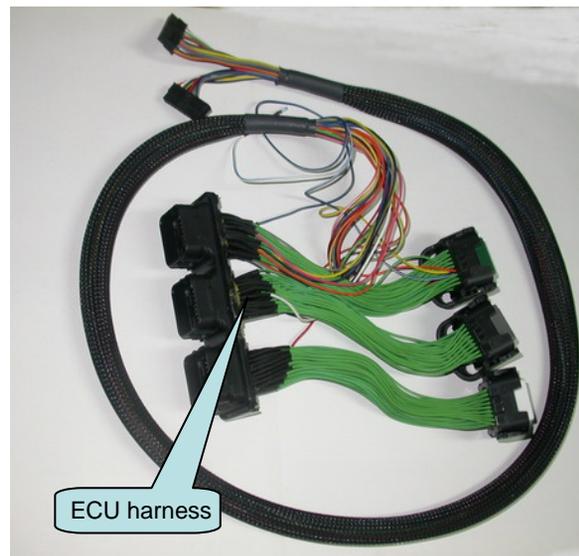
The wiring instructions can be found on the A.E.M. web site and each wire that comes with the A.E.M. harness is marked. Also following page has a copy of the wiring instructions. This should be done by a professional.

There is also an optional PLUG N PLAY harness available from your dealer which is manufactured BOOM SLANGE a custom harness manufacturer.

The use of this harness will assure that the connections are correct and that there would be no damage to the factory ECU.

## 13. FUEL INJECTORS:

It is necessary to replace the fuel injectors with larger ones to accommodate the increased horsepower. The kit includes injectors clips and pins that will provide ample increased fuel flow.



Your installation should now be complete. Prior to setting car on ground take a moment to check all lines hoses fitting etc. At this time refill radiator and engine oil. check for any leaks.

If everything looks good connect battery and start motor. Let it run for a few minutes. Turn off motor and check for leaks.

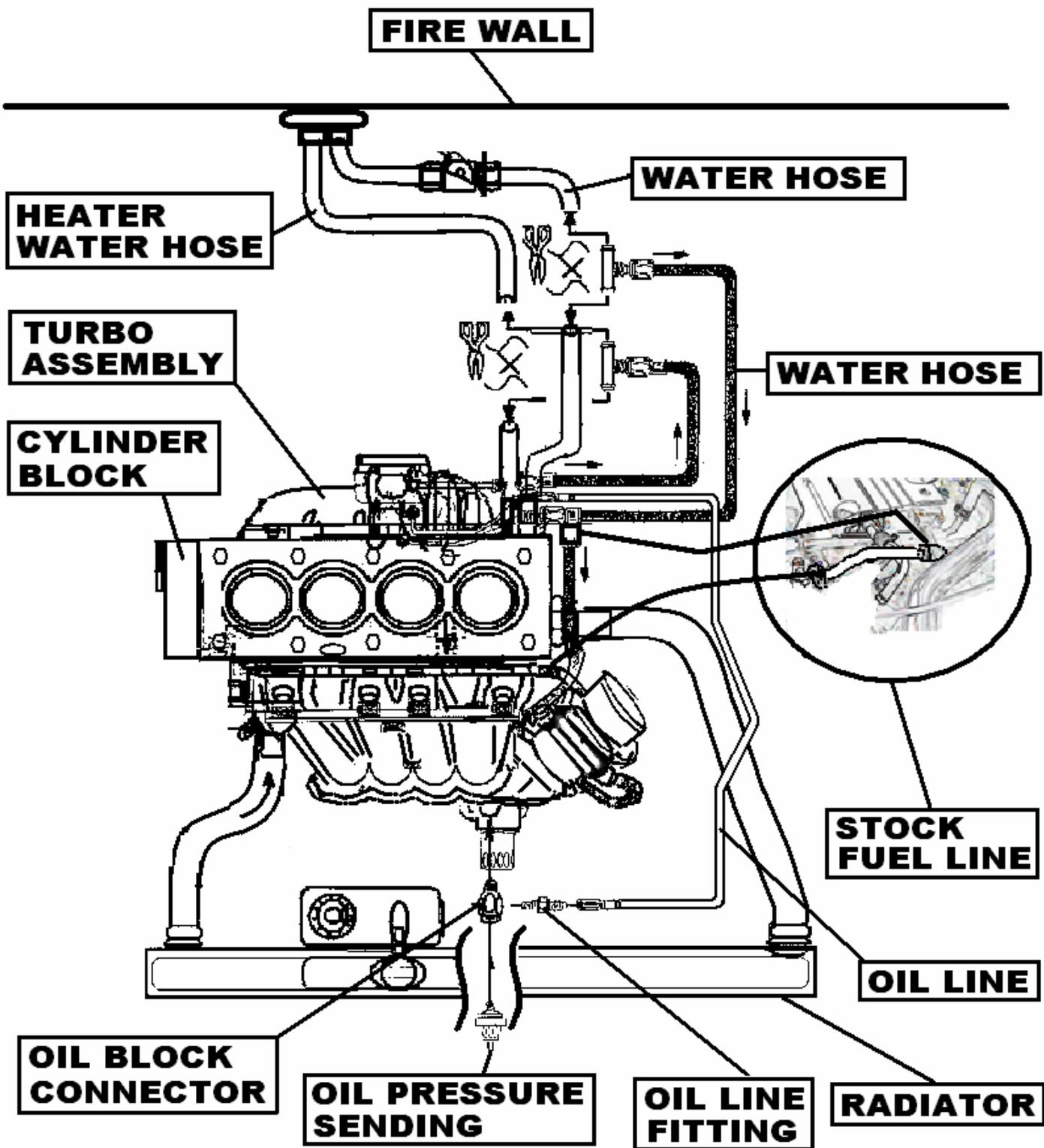
After running engine and car is still lifted it is recommended to change oil and filter to make sure any loose material is removed.

Installation should now be complete.

**NOTE: DUE TO DIFFRENCES IN ELAVATION AND AIR DENSIDY IT IS RECOMANDED THAT THE A.E.M. F/IC UNIT BY FINE TUNED BY AN EXPERIANCED TUNING SPECIALISTS.**

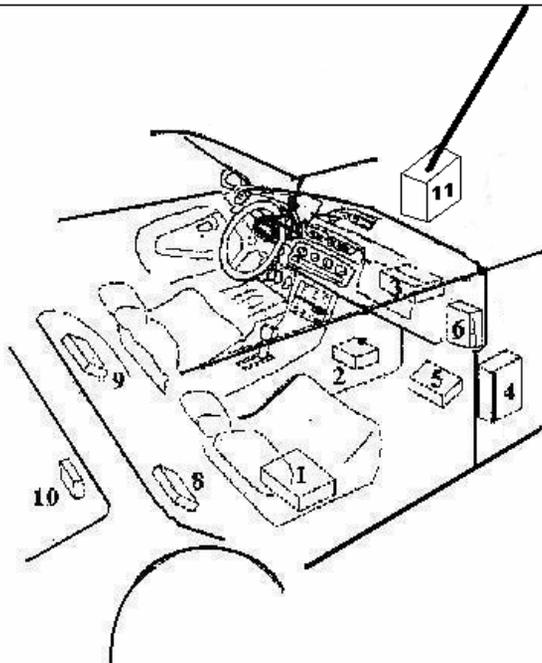
**ENJOY YOUR NEW HORSEPOWER TURBO SPECIALTIES**

**FIGURE 1:**



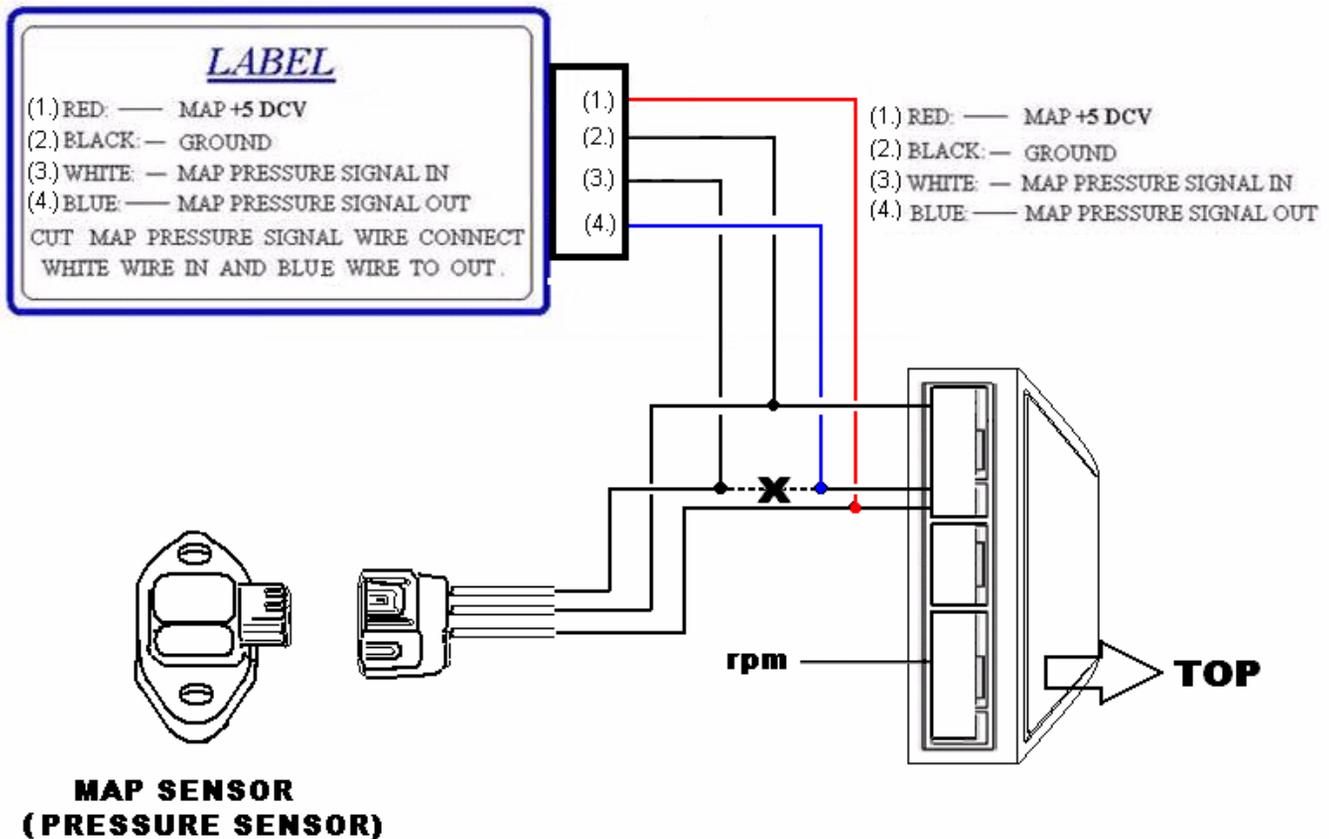
## FIGURE 2:

# HONDA CIVIC 2006 YEAR R18 ENGINE PRESSURE SENSOR & ECU ELECTRIC CONNECTION



# FIGURE 3 :

## Pressure Sensor & ECU electric connection



**DISCARD THE GREEN WIRE THE GREEN WIRE IS NOT USING ON THIS APPLICATION.**