

**2008 - 2010 Ford  
6.4L Powerstroke  
Cooler Upgrade Kit**

**USER MANUAL**

# Important! Unplugging the EGR cooler

IF YOU ARE DOING EMISSIONS OFF TUNING FOR YOUR TRUCK BUT ARE LEAVING THE EGR COOLER IN PLACE, UNPLUG THESE CONNECTORS TO NOT HAVE WARNING CODES

## 6.4L Powerstroke EGR Plugs to be undone

THE TWO PLUGS CIRCLED  
ARE THE ONLY TWO PLUGS  
REQUIRED TO REMOVE  
LOCATED ON THE FRONT OF  
THE ENGINE NEAR THE FAN  
SHROUD



# Warning Regarding Emission Laws

NOT LEGAL FOR SALE OR USE ON POLLUTION-CONTROLLED MOTOR VEHICLES ANYWHERE IN THE UNITED STATES. LEGAL ONLY FOR OFF-ROAD COMPETITION RACING VEHICLES AND CANNOT BE USED ON VEHICLES THAT ARE OPERATED ON PUBLIC STREETS, ROADS, OR HIGHWAYS.

## Disclaimer

- BY INSTALLING THIS PRODUCT ONTO YOUR VEHICLE, YOU ASSUME ALL RISK AND LIABILITY ASSOCIATED WITH ITS USE.
- IT IS YOUR RESPONSIBILITY TO MAKE SURE YOUR VEHICLE COMPLIES WITH ALL FEDERAL, STATE, AND LOCAL EMISSIONS LAWS. FEDERAL AND MANY STATE AND LOCAL LAWS PROHIBIT THE REMOVAL, MODIFICATION OR RENDERING INOPERATIVE OF ANY PART OF THE DESIGN AFFECTING EMISSIONS OR SAFETY ON MOTOR VEHICLES USED ON A PUBLIC STREET OR HIGHWAY. VIOLATION MAY RESULT IN A FINE OF UP TO \$32,500 PER VEHICLE (OR POSSIBLY HIGHER DEPENDING ON CHANGES IN THE LAW). ALL CIVIL PENALTIES AND FINES FOR REMOVING YOUR VEHICLE'S EMISSIONS EQUIPMENT ARE THE SOLE RESPONSIBILITY OF THE END USER.
- DUE TO ITS HIGH PERFORMANCE NATURE, THIS PRODUCT MAY VOID VEHICLE MANUFACTURER'S WARRANTY.
- THE DIESEL TECHS IS NOT RESPONSIBLE FOR MISUSE OF ITS PRODUCTS. BY INSTALLING THIS PRODUCT, YOU RELEASE GDP TUNING, LLC. OF ANY AND ALL LIABILITY ASSOCIATED WITH ITS USE.
- DEPENDING ON WHERE YOU LIVE, RESTRICTIONS MAY APPLY. CHECK ALL APPLICABLE LAWS BEFORE INSTALLING OR USING!
- THE PURCHASER AND END USER RELEASES, INDEMNIES, DISCHARGES AND HOLDS HARMLESS THE DIESEL TECHS FROM ANY AND ALL CLAIMS, DAMAGES, CAUSES OF ACTION, INJURIES, OR EXPENSES RESULTING FROM OR RELATING TO THE USE OR INSTALLATION OF THIS PRODUCT THAT IS IN VIOLATION OF THE TERMS AND CONDITIONS ON THE PAGE, THE PRODUCT DISCLAIMER, AND/OR THE PRODUCT INSTALLATION INSTRUCTIONS. THE DIESEL TECHS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, STATUTORY, OR INCIDENTAL DAMAGES OR FINES CAUSED BY THE USE OR INSTALLATION OF THIS PRODUCT.

## Caution

NEVER WORK ON A HOT VEHICLE. SERIOUS INJURY IN THE FORM OF BURNS CAN RESULT IF THE VEHICLE HAS BEEN IN USE. ALLOW VEHICLE TO COOL PRIOR TO INSTALLATION. ALWAYS WEAR EYE PROTECTION WHEN WORKING ON OR UNDER ANY VEHICLE.

# 2008 - 2010 Ford 6.4L Powerstroke



- A. COATED INTAKE ELBOW
- B. BLOCKER PLATE GASKET
- C. EXHAUST BLOCKER PLATE
- D. M10-1.25x40 MANIFOLD BOLTS (x4)
- E. COOLANT PLUG WITH O-RING (x2)
- F. M10-1.125x20 PLATE BOLTS (x2)

- G. M6-1.25x25 INTAKE ELBOW BOLTS (x4)
- H. HOSE ROUTING CLIPS (x2)
- I. PLUG BOLTS (x2)
- J. INTAKE ELBOW O-RING
- K. STUD SPACER
- L. BARBED HOSE CONNECTION

## Step 1

MAKE SURE THE FRONT WHEELS ARE STRAIGHT.

## Step 2

DISCONNECT BOTH BATTERIES.

## Step 3

DRAIN THE COOLANT USING THE COOLANT DRAIN PLUG LOCATED ON THE BOTTOM OF THE RADIATOR ON THE DRIVER SIDE.



## Step 4

REMOVE THE 3/8" HOSE THAT RUNS TO THE DEGAS BOTTLE (COOLANT OVERFLOW TANK). KEEP THIS HOSE AS IT WILL BE RE-USED DURING INSTALLATION.



## Step 5

REMOVE THE UPPER RADIATOR HOSE BY POPPING THE WIRE CLIP OUT AND PULLING THE HOSE STRAIGHT OUT.



## Step 6

REMOVE THE DRIVER SIDE BATTERY.

## Step 7

REMOVE ALL COOLANT HOSES GOING TO THE DEGAS BOTTLE. ALSO, REMOVE THE VENT LINE GOING TO THE BATTERY TRAY.

## Step 8

REMOVE THE BATTERY TRAY AND DEGAS BOTTLE. THIS IS HELD ON BY FOUR BOLTS. IMAGE FOUR SHOWS PARTS REMOVED. STRAIGHT OUT.



## Step 9

LOOSEN THE CLAMP ON DRIVER SIDE INTERCOOLER TUBE AND  
SEPARATE THE INTERCOOLER TUBE FROM THE RUBBER BOOT. IT IS NOT  
NECESSARY TO REMOVE THE TUBE.



## Step 10

DISCONNECT THE ELECTRICAL CONNECTOR ON TOP OF THE VERTICAL  
EGR COOLER. SHOWS PARTS REMOVED. STRAIGHT OUT.



## Step 11

DISCONNECT THE COOLANT LINES ON THE VERTICAL EGR COOLER.  
REMOVE THE NUTS AND BOLTS SECURING THE COOLERS TOGETHER.  
RELEASE THE MOUNTING CLAMPS AND SEPARATE THE TWO COOLERS BY  
PRYING ON THE FLANGES.



## Step 12

HOLD THE INTERCOOLER TUBE BACK WHILE PULLING THE VERTICAL EGR COOLER UP AND OUT. YOU MAY HAVE TO ROTATE THE COOLER TO RELEASE IT FROM ITS MOUNT.



## Step 13

REMOVE THE PLASTIC COOLANT TUBE. BE CAREFUL TO NOT BREAK THE COOLANT TUBE AS IT WILL BE RE-USED DURING INSTALLATION.



## Step 14

REMOVE THE UPPER RADIATOR HOSE FROM THE THERMOSTAT HOUSING. IF YOUR RADIATOR HOSE HAS A SINGLE O-RING IT IS A GOOD IDEA TO REPLACE IT WITH A NEW DOUBLE O-RING VERSION.



## Step 15

REMOVE THE UPPER EGR COOLER MOUNT. USE A 10MM WRENCH TO REMOVE THE THREE BOLTS. USE A 13MM WRENCH TO REMOVE THE STUD. KEEP THE STUD FOR SECURING THE POWER STEERING LINE DURING THE INSTALL.



## Step 16

REMOVE THE STEERING SHAFT BOLT AND SLIDE THE STEM UP AND OUT OF THE STEERING BOX SHAFT. NOTE: BE SURE TO NOT TURN THE STEERING WHEEL OR TIRES.



## Step 17

REMOVE THE STEERING SHAFT BOLT AND SLIDE THE STEM UP AND OUT OF THE STEERING BOX SHAFT. NOTE: BE SURE TO NOT TURN THE STEERING WHEEL OR TIRES.



## Step 18

RELEASE THE MOUNTING CLAMPS ON THE LOWER EGR COOLER. IT MAY BE EASIER TO ACCESS THE CLAMPS THROUGH THE WHEEL WELL.



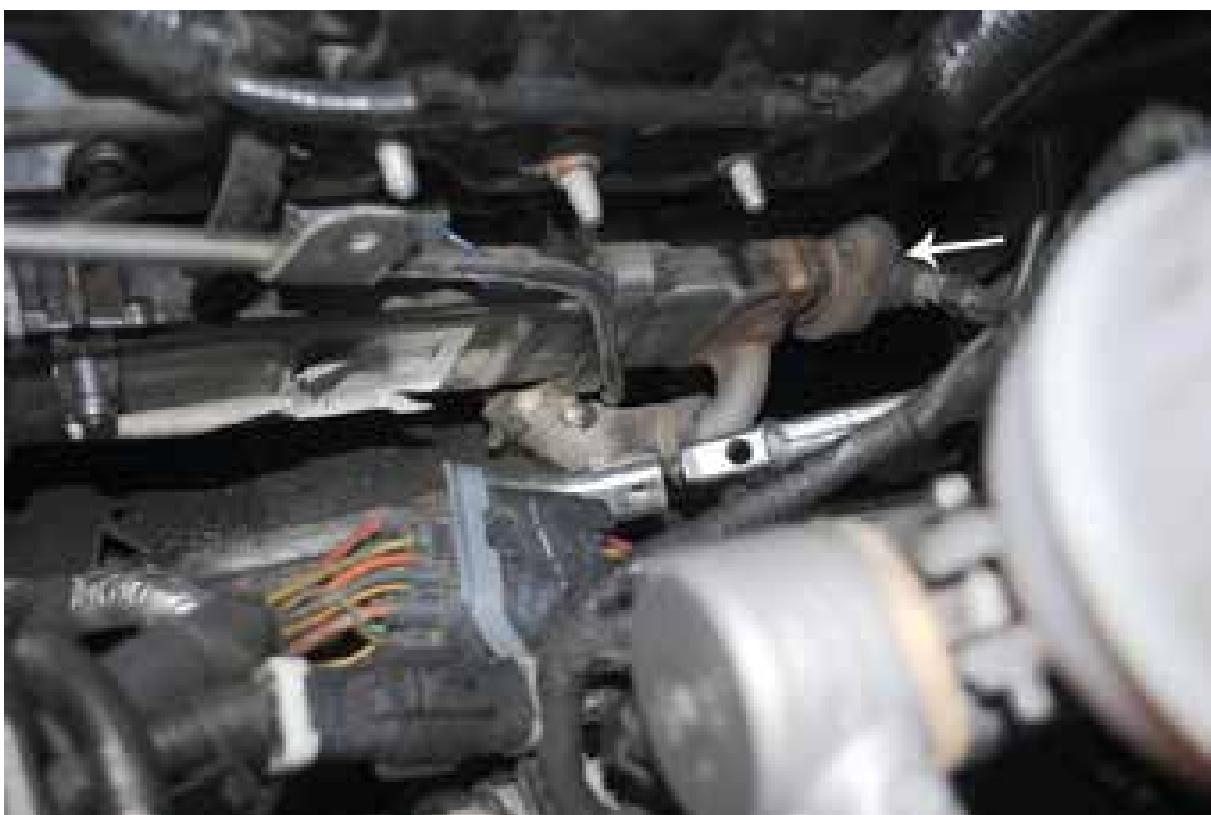
## Step 19

REMOVE THE COOLANT LINE ON THE EGR COOLER. IT MAY BE EASIER TO CUT THE LINE. NOTE: THE LINE WILL NOT BE REUSED.



## Step 20

REMOVE THE BOLTS ON THE REAR FLANGE OF THE EGR COOLER. IT IS EASIER TO ACCESS THE BOTTOM BOLT FROM UNDERNEATH THE TRUCK AND THE TOP BOLT FROM ABOVE.



## Step 21

WITH THE DIPSTICK MOVED OUT OF THE WAY, REMOVE THE EGR COOLER BY PULLING FORWARD AND ROTATING IT OUT OF ITS MOUNT.

## Step 22

REMOVE THE BOLT SECURING THE COOLANT LINE TO THE TIMING COVER. THIS LINE IS ATTACHED TO THE LOWER EGR COOLER MOUNT AND WILL BE REMOVED AS ONE PIECE.



## Step 23

USE A 10MM WRENCH TO REMOVE THE FOUR BOLTS ON THE LOWER EGR COOLER MOUNT.



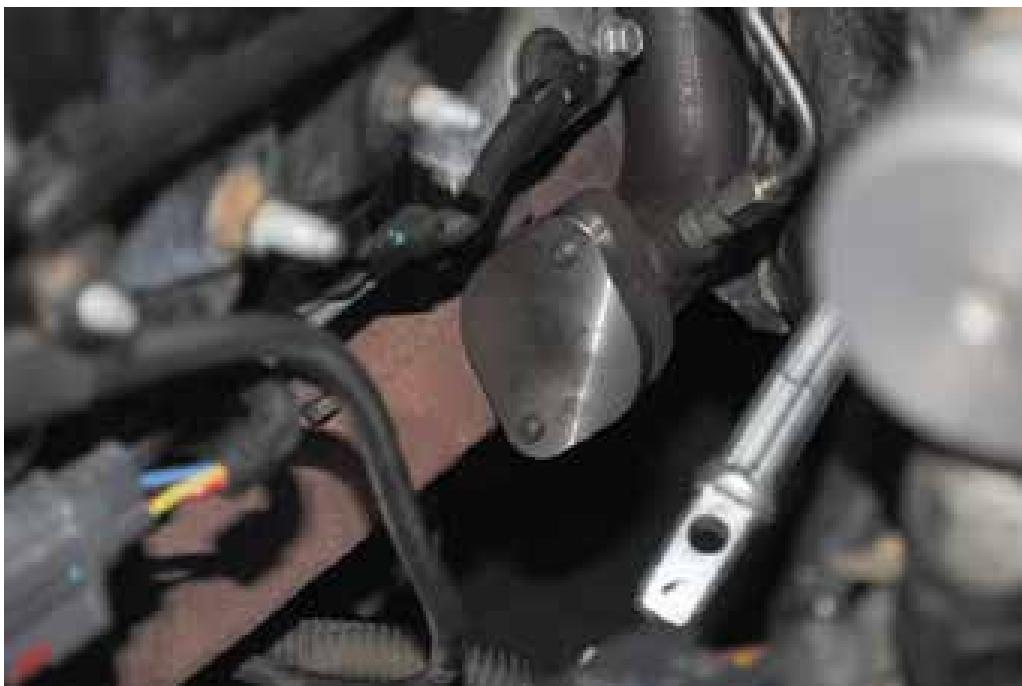
## Step 24

INSTALL THE FOUR REPLACEMENT BOLTS (M10-1.25 x 40) IN THE EXHAUST MANIFOLD AND TORQUE TO FACTORY SPECIFICATIONS.



## Step 25

INSTALL THE EXHAUST BLOCK OFF USING M10-1.125 X 20 BOLTS AND GASKET.



## Step 26

REMOUNT THE DIPSTICK TUBE WITH THE FACTORY BOLT.

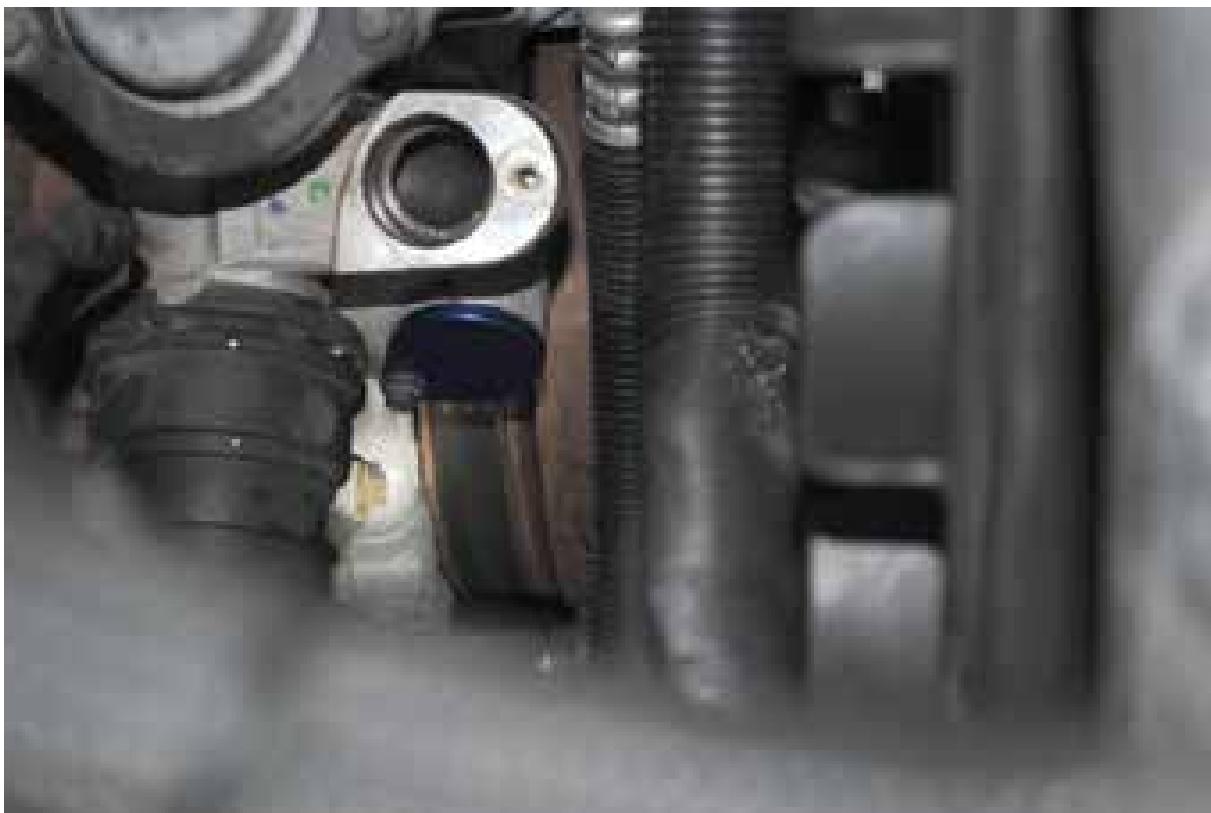
## Step 27

REMOVE THE COOLANT TUBE THAT WAS CONNECTED FROM THE VERTICAL EGR COOLER TO THE ENGINE. REPLACE IT WITH THE COOLANT PLUG SUPPLIED IN THE KIT TO BLOCK OFF THE HOLE.



## Step 28

INSTALL THE COOLANT PLUG INCLUDED IN THE GDP COOLER UPGRADE KIT. USE THE FACTORY BOLTS THAT SECURED THE LINES IN PLACE.



## Step 29

USE A 13MM WRENCH TO RE-INSTALL THE STUD USING THE SPACER PROVIDED IN THE GDP COOLER UPGRADE KIT. THEN SECURE THE POWER STEERING LINE TO THE STUD.



## Step 30

RE-INSTALL THE PLASTIC COOLANT TUBE. BE CAREFUL NOT TO CRACK OR BREAK IT.



## Step 31

RE-CONNECT THE STEERING SHAFT AND TORQUE TO THE FACTORY SPECIFICATIONS.

## Step 32

RE-INSTALL THE BATTERY BOX AND DEGAS BOTTLE.

## Step 33

RE-CONNECT THE COOLANT LINES TO THE DEGAS BOTTLE. ALSO RE-CONNECT THE VENT LINE TO THE BATTERY BOX.

## Step 34

CLEAN THE END OF THE SILICONE BOOT AND INTERCOOLER TUBE WITH GLASS CLEANER. RECONNECT THE INTERCOOLER TUBE.

## Step 35

RE-CONNECT THE UPPER RADIATOR HOSE AND MAKE SURE THE METAL CLIPS ARE SECURELY IN PLACE.

## Step 36

DISCONNECT THE WIRE CONNECTORS TO THE EGR VALVE.



## Step 37

REMOVE FOUR BOLTS AND LOOSEN HOSE CLAMP ON THE INTERCOOLER PLUMBING TO REMOVE THE EGR VALVE.



## Step 38

INSTALL THE INTAKE ELBOW BY SLIDING THE TUBE INTO THE BOOT.

USING SUPPLIED M6-1.25 x 25 BOLTS SECURE THE FLANGE TO THE INTAKE MANIFOLD.



## Step 39

USE THE 3/8" HOSE THAT WAS SAVED FROM STEP FOUR AND BARBED HOSE CONNECTION FROM THE KIT TO RE-CONNECT THE COOLANT LINE RUNNING OVER THE RADIATOR TO THE DEGAS BOTTLE.

THE LINE WILL HAVE TO BE CUT TO APPROPRIATE LENGTH. RE-USE FACTORY HOSE CLAMPS ON THE CONNECTIONS.



## Step 40

USE THE 3/8" HOSE THAT WAS SAVED FROM STEP FOUR AND BARBED HOSE CONNECTION FROM THE KIT TO RE-CONNECT THE COOLANT LINE RUNNING OVER THE RADIATOR TO THE DEGAS BOTTLE.

THE LINE WILL HAVE TO BE CUT TO APPROPRIATE LENGTH. RE-USE FACTORY HOSE CLAMPS ON THE CONNECTIONS.



## Step 41

REFILL THE COOLANT ACCORDING TO FACTORY SPECIFICATIONS.

## Step 42

RUN ENGINE AND CHECK FOR LEAKS.