HOT EXHAUST. COOL SOLUTION.

What is an EGR Cooler?

The Exhaust Gas Recirculation (EGR) Cooler is an air-to-liquid heat exchanger device that uses engine coolant to reduce exhaust gas temperatures prior to recirculating them through the engine’s intake system. EGR reduces engine combustion temperature, which prevents the formation of Oxides of Nitrogen (NOx) pollutants. Before injecting spent exhaust gas into the engine, its temperature must be reduced, and the EGR Cooler accomplishes this task by reducing as much as 700 degrees F from the exhaust gas. In addition to minimizing NOx levels, EGR reduces thermal stress on cylinder head gaskets and intake/exhaust valves, resulting in longer component life.

Engine Oiling System

Prevent oil cooler plugging and EGR cooler failure by:

• Changing oil at the Ford-recommended interval (see Owner Guide Supplement for 6.0L Diesel Engine or FordOwner.com)
• Using the proper Motorcraft Full Synthetic SAE 5W-40 oil
• Installing a new Motorcraft-brand oil filter at every oil change

Engine Cooling System

Maintain the cooling system by:

• Replenishing with Motorcraft Diesel Cooling System Additive as necessary to prevent metallurgical failure and potential head gasket leaks
• Checking coolant nitrite strength and changing coolant at the Ford-recommended interval (see Owner Guide Supplement for 6.0L Diesel Engine or FordOwner.com)
• Performing the proper bleeding procedure to eliminate air pockets that can form in the EGR Cooler

Stay in Top Shape with Genuine OEM Parts

New Ford Genuine Parts engineering enhancements include:

• Tube-and-fin-style cooling design improvements
• Revised heat exchanger fin materials to prevent failures
• Outer case composition enhancements to help maintain uniform dimensions under a wide variety of thermal conditions

These enhancements ensure that the Ford Genuine Parts EGR Cooler removes more exhaust gas heat — faster — than aftermarket tube-only style coolers.

MAINTAIN THE SYSTEMS, AND THE COMPONENTS WILL FOLLOW!

Motorcraft Full Synthetic Diesel Motor Oil
SAE 5W-40

Motorcraft Premium Gold Engine Coolant

Motorcraft VC-8 Diesel Cooling System Additive

For complete Ford Power Stroke Diesel maintenance interval guides, visit PowerStrokeDiesel.com. You can also access the Motorcraft Chemicals and Lubricants Catalog at fcsdchemicalsandlubricants.com.
Risks of Aftermarket Products
Aftermarket products are typically not tested and approved by the EPA like Ford-engineered products. As a result, the use of aftermarket products creates risks for installers and consumers, including the following:

• Violation of Emissions and Anti-Tampering Laws
  – Federal U.S. Clean Air Act (42 USC Sec. 7522) prohibits tampering with motor vehicle emissions controls
  – Tampering is defined as removing, bypassing, defeating, disconnecting, damaging or in any way rendering ineffective any emission control device or element of design that has been installed on a motor vehicle or a motor vehicle engine, or having someone else do it for you
  – A California Air Resources Board (CARB) exemption in the form of a numbered Executive Order is required for approval of aftermarket parts in the 13 CARB-compliant states. Most do not have the exemption
  – Federal fines up to $37,500 per vehicle and State fines up to $25,000 per vehicle may both apply

• Engine and component damage (see below for specific risks of using aftermarket EGR Coolers and EGR Delete Kits)

• Voiding the Ford Warranty (component failure caused by installation of parts or kits not approved by the EPA can void the Ford warranty)

Risks of using an aftermarket EGR Cooler

• Risk #1: Less-efficient aftermarket EGR coolers may introduce exhaust gas temperatures hundreds of degrees hotter than the OE specification, adversely affecting engine valve and EGR valve life, head gasket durability, driveability and fuel economy

• Risk #2: Component failures due to installation of a “re-engineered” aftermarket EGR cooler are not covered by warranty

• Risk #3: If the EGR cooler is replaced with an aftermarket unit that does not cool as efficiently as the original equipment cooler, Oxides of Nitrogen (NOx) emissions may rise and the vehicle can fail its emissions inspection

Risks of using an EGR Delete Kit
Another aftermarket “approach” is to block off the EGR function entirely in a bid to eliminate the EGR cooler and EGR valve from the operating equation. This modification is prohibited for vehicles driven on a highway.

• Risk #1: When EGR is blocked off, combustion temperatures rise and NOx emissions spike

• Risk #2: Cylinder head gaskets are overheated and subjected to thermal stress

• Risk #3: Exhaust valves can become overheated and burn

• Risk #4: Check engine light may illuminate, resulting in additional expense to eliminate the light

Never block off the EGR on any engine. Instead, inspect and replace EGR components that need servicing. See the front side of this flyer for tips on keeping the integrated systems of a 6.0L Power Stroke Diesel engine serviced and ready for duty.

Source these and other Ford Genuine Parts at your local Ford dealership or FordParts.com

www.PowerStrokeDiesel.com