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BD EGR COOLER

Ford 6.0L Power Stroke




2003-2004	1090201
2004.5-2007	1090202

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION




Kit Contents

Please check to make sure that you have all the parts listed in this kit

2003-2004 Round Style (Vehicle built before 09/22/03) Kit # 1090201

1900201	1900204	1400283
		
Round style EGR Cooler Qty: 1	Gasket Kit Qty: 1	O-ring Qty: 1

2004.5-2007 Round Style (Vehicle built on or after 09/22/03) Kit # 1090202

1900202	1900204	1400283
		
Square style EGR Cooler Qty: 1	Gasket Kit Qty: 1	O-ring Qty: 1

1900203	1452821	1900022
		
Nut (use in place of OEM) Qty: 1	Gear Clamp Qty: 2	Silicone hose 5/8" Qty: 5"

BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 1124 Fir Avenue, Blaine, WA 98230 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bddiesel.com

Core Return (1090201 only)

Please note if your cooler is dented or severely scratched it may be rejected and you may not receive your core credit.

Battery Disconnect

Record radio settings then disconnect the negative terminals on both of the vehicle's batteries.

Removal

Drain engine coolant.

Remove engine coolant reservoir bottle mounting bolts and disconnect two (2) small hoses. Move the bottle to the side and tie secure in place.



Remove the air cleaner assembly by disconnecting the MAF sensor and Filter Minder device. Then remove the ribbed hose, then the air box. Remove the two (2) 8mm bolts securing the hard tube. Then remove the breather tube from the vent on the driver side rocker cover. (NOTE: Wiggling and pulling out on the tube will help in removal).

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Remove the Intercooler and turbo inlet air tubes.

Remove the top section of the fan shroud which covers the serpentine belt.

Loosen the belt tensioner and remove the alternator.



Remove the oil filter and EGR valve and service both as required.



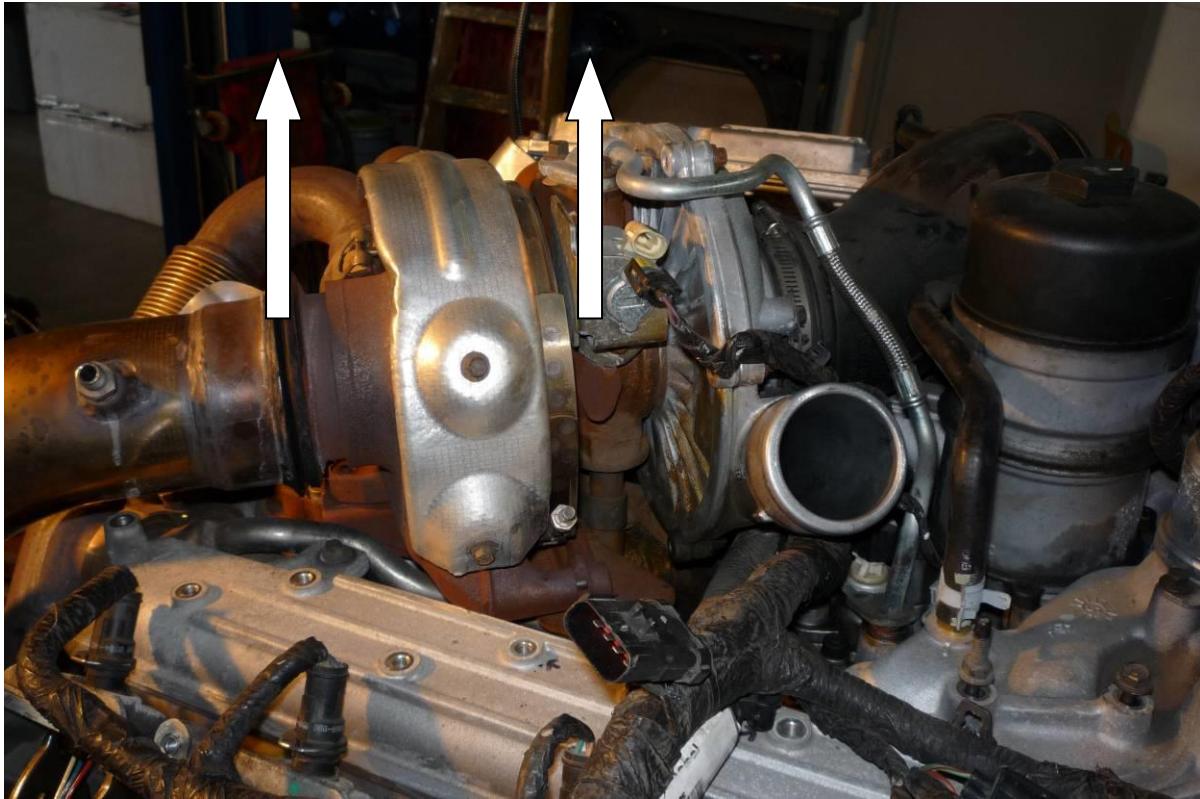
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Disconnect the fuel filter wiring connectors and fuel lines then remove fuel filter housing.



Remove the turbo charger by disconnecting the connector on the turbo solenoid and clip, the oil feed link, exhaust downpipe, and exhaust feed pipe clamp. Remove the three (3) 10mm mounting bolts and pull turbo out.

Remove the turbo pedestal mount by removing the four (4) 10mm mounting bolts and then remove the oil drain pipe.



Remove the FICM (Fuel Injection Control Module) by removing two (2) 10mm mounting nuts and two (2) 8mm bolts. Disconnect the three (3) electrical plugs from the wiring harness.

Unplug and remove the fuel injector wiring harness.

Unplug the engine wiring harness from the sensors and tie the harness out of the way.



NOTE: Bend back the tab on the rigid metal tube at the RH side of intake manifold to allow manifold to clear.

Remove the intake manifold by removing the two (2) 15 mm bolts through the shroud to the front of the intake. Remove one (1) 10mm bolt securing the fuel line to the front of the intake. Remove one (1) 8mm bolt at the back of the EGR cooler and two (2) 10mm bolts at the front of the EGR cooler by accessing them through the intake manifold. Remove the 10mm bolts securing the intake manifold and remove the manifold. (Clean carbon from manifold as required)



Remove the EGR cooler by disconnecting the clamp at the exhaust feed pipe then remove the coolant hose by first twisting about 90° and sliding back along the cooler tube.

Installation

1. Install your BD EGR Cooler using new gaskets (not supplied) and reinstall the clamp at the exhaust feed pipe, slide coolant hose forward onto oil cooler & twist to lock into position. Then install the supplied oring onto port. NOTE: Hose and clamps supplied in the 1090202 kit.



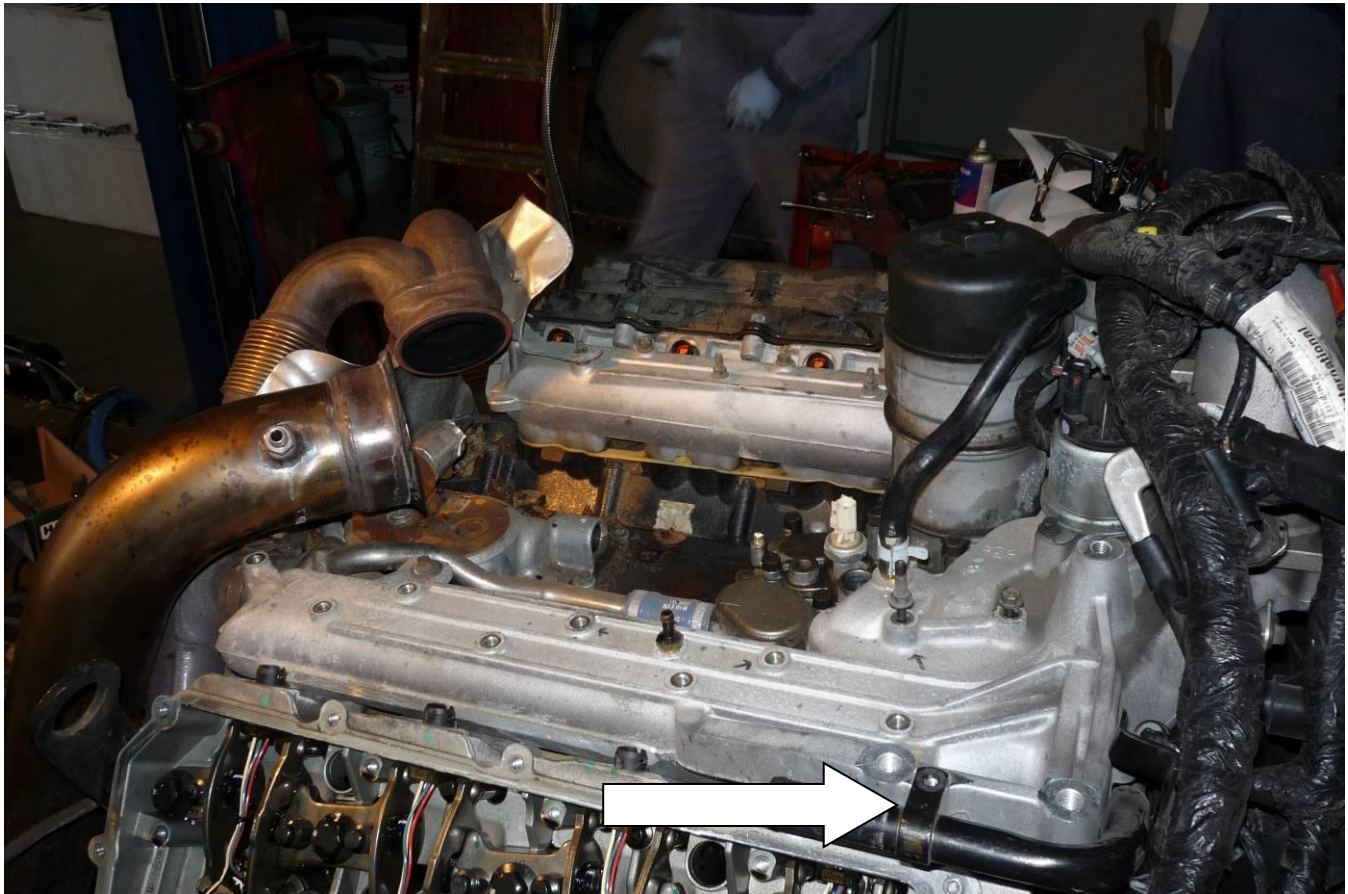
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2. Reinstall intake manifold.
3. Reinstall the one (1) 10mm bolt securing the fuel line to the front of the intake.
4. Reinstall one (1) 8mm bolt at the back of the EGR cooler and two (2) 10mm bolts at the front of the EGR cooler with gasket by accessing them through the intake manifold.
5. Reinstall the 10mm bolts securing the intake manifold and remove the manifold. (Clean carbon from manifold as required)
6. Bend coolant pipe tab back onto intake and secure with 8mm bolt.
7. Reinstall two (2) 15 mm bolts through the shroud to the front of the intake.
8. Plug in engine wiring harness from the sensors and re tie the harness securely.



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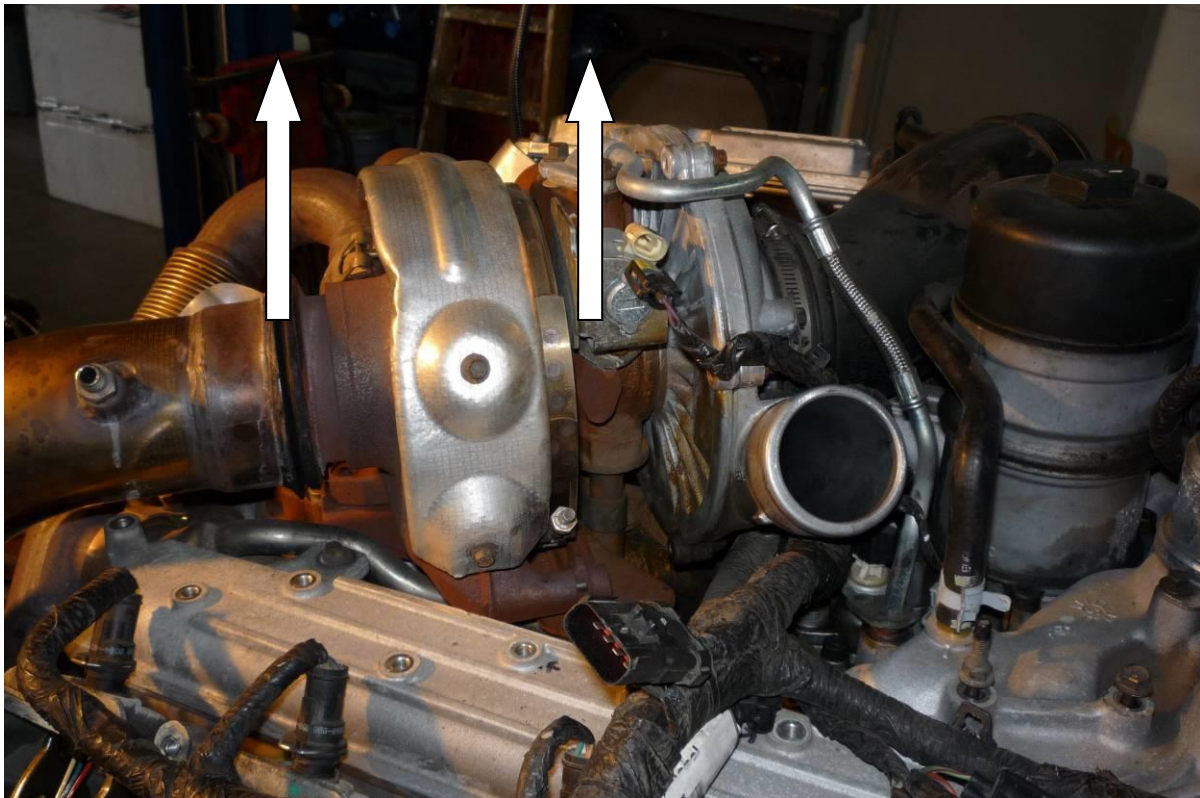
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9. Reinstall the oil drain pipe & turbo pedestal mount using four (4) 10mm mounting bolts.



10. Reinstall the turbo charger by reconnecting the connector on the turbo solenoid and clip, the oil feed link, exhaust downpipe, and exhaust feed pipe clamp. Reinstall the three (3) 10mm mounting bolts to hold the turbo in position.



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11. Reconnect fuel filter wiring connectors and fuel lines then fuel filter housing.



12. Reinstall the oil filter and EGR valve, service both as required.



13. Reinstall the alternator, then tighten the belt tensioner.

14. Reinstall the top section of the fan shroud which covers the serpentine belt.

15. Reinstall intercooler and turbo inlet air tubes.

16. Reinstall the air cleaner assembly and reconnect the MAF sensor, Filter Minder device and breather tube.

17. Reinstall engine coolant reservoir bottle.

18. Refill engine coolant.



19. Reconnect negative terminals on both of the vehicle's batteries. Reset radio settings.

20. Road test vehicle and check for leaks.