

NOTE: You will require a chip or programmer that allows you to turn off the EGR flow insufficient codes.



EXHAUST GAS BYPASS **2008-2010 Ford 6.4L**

Part #: 1090003

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

THIS KIT IS FOR TEMPORARY USE ONLY.







K I T C O N T E N T S :

Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly of your truck.

Ford 6.4L 2008-10 (# 1090003)

1900051	1900054	1401585
		
EGB Plate	Gasket Exhaust	Intake Horn
Qty:1	Qty:1	Qty:1

1401586	1405404	1405211	1407030
			
-236V Oring	3"-3 1/4" Silicone Boot	0325 Clamps	0350 Clamps
Qty:1	Qty: 1	Qty: 1	Qty: 1

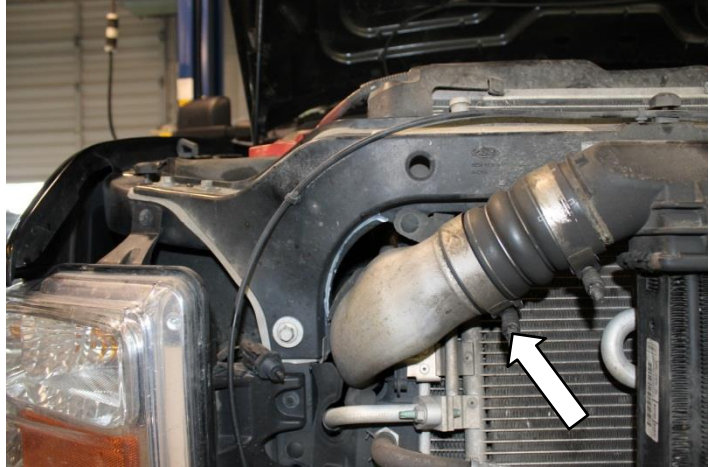
1900015	1900057	1900052	1130020	1900055	1900014
					
Bolt Flange M8 X 30mm	Bolt M8 x 40mm	EGB Coolant Plug	1/4" NPT Plug	Oring	Nut Flange M8
Qty:2	Qty:4	Qty:2	Qty:1	Qty:2	Qty:2

BATTERY DISCONNECT

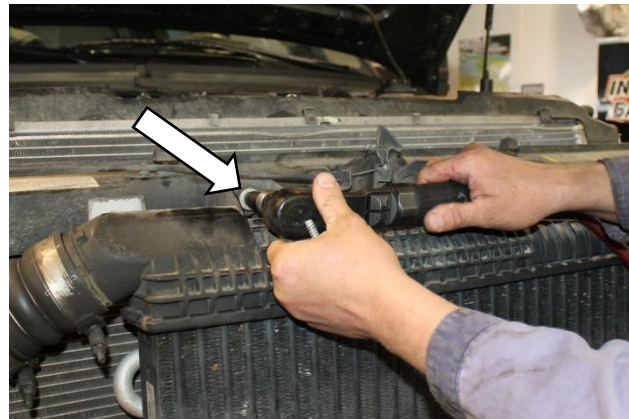
Record radio settings then disconnect the negative terminals on both of the vehicle's batteries. Drain coolant into container for reuse once installation is complete.

Cab On Removal (see page 12 for Cab Off Removal)

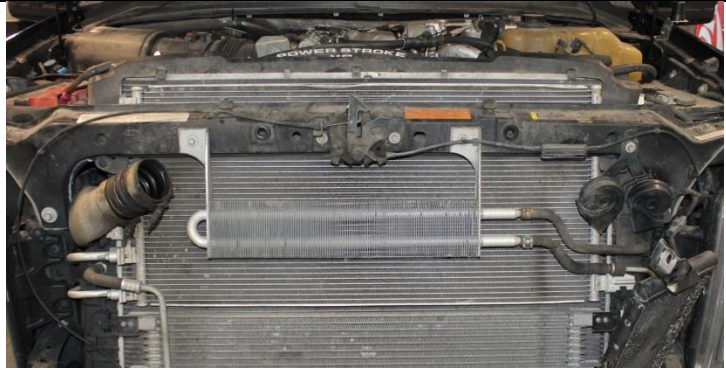
1. Loosen upper and lower CAC clamps.



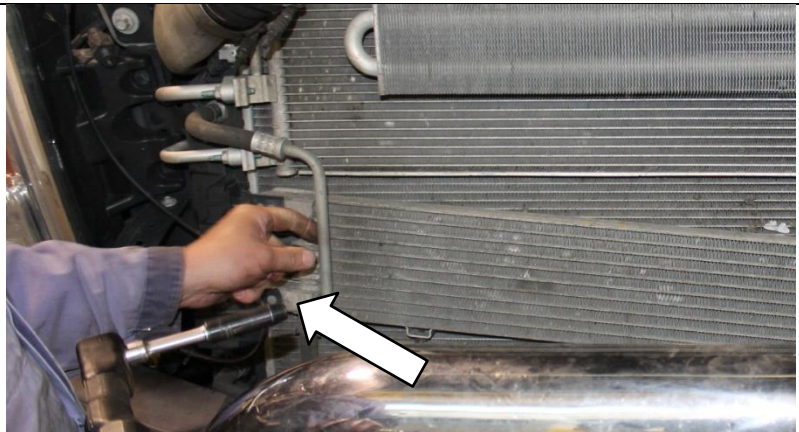
2. Remove upper CAC bolts (10mm)x2, fuel cooler bolt (10mm) and set cooler aside for reinstallation later.



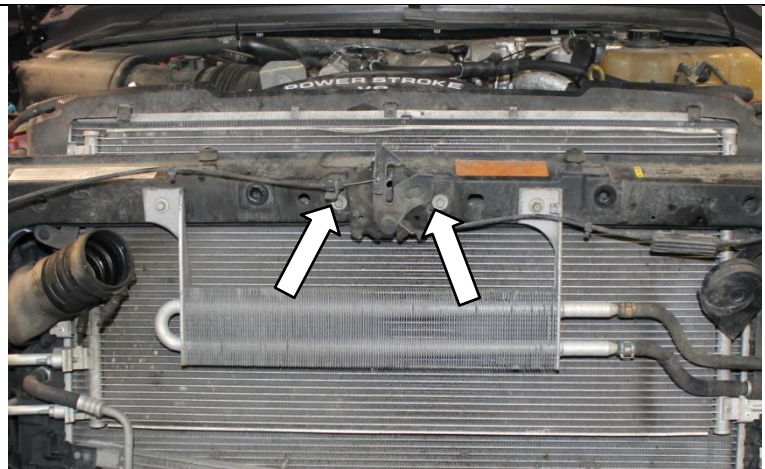
3. Remove CAC by sliding boots off & lifting the cooler up and towards the front of the vehicle.



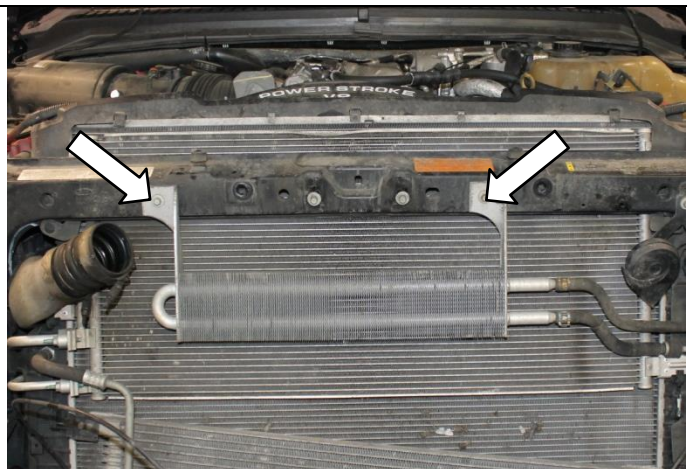
4. Unbolt transmission cooler (8mm)x2



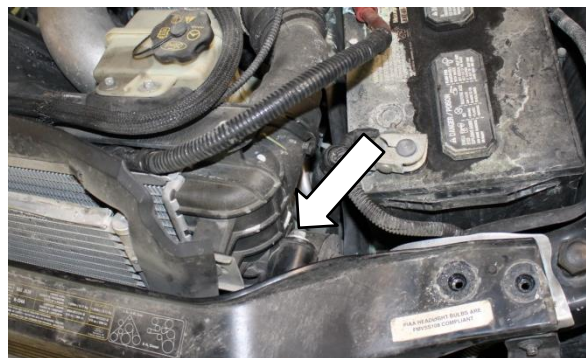
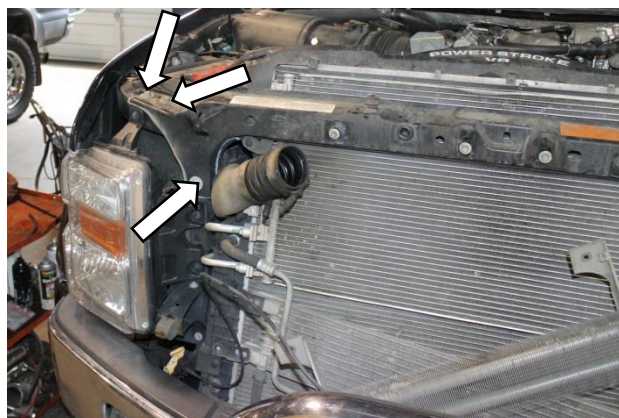
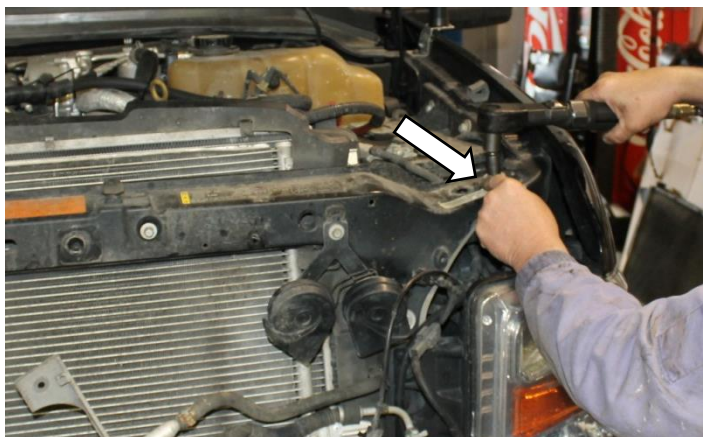
5. Mark hood latch position then remove hood latch & cable from the upper radiator support. (10mm)x2



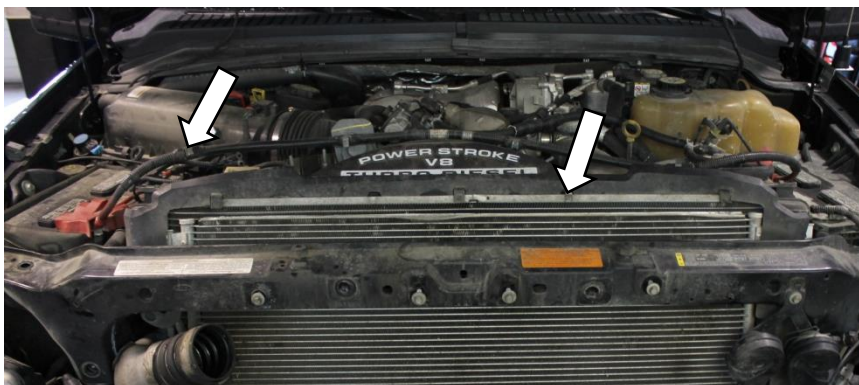
6. Unbolt the power steering cooler from the radiator support. (10mm)x2



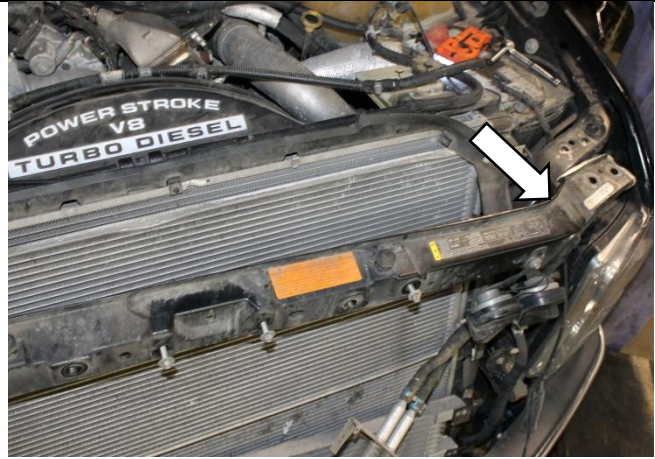
7. Remove (13mm)x6 upper radiator support mounting bolts & disconnect horn.
8. Remove radiator to radiator support bolts. (10mm)x4



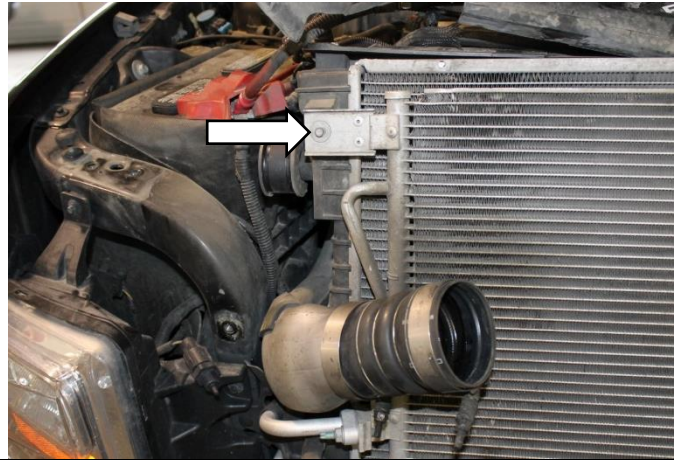
9. Unclip battery cable that clips along the top of the radiator. Rest the cable on top of the engine out of your way.



10. Remove upper radiator support and set aside for reinstallation later.



11. Remove A/C condenser bolts. (8mm)x2



12. Loosen top CAC to intake clamp, then remove CAC tube and pipe.

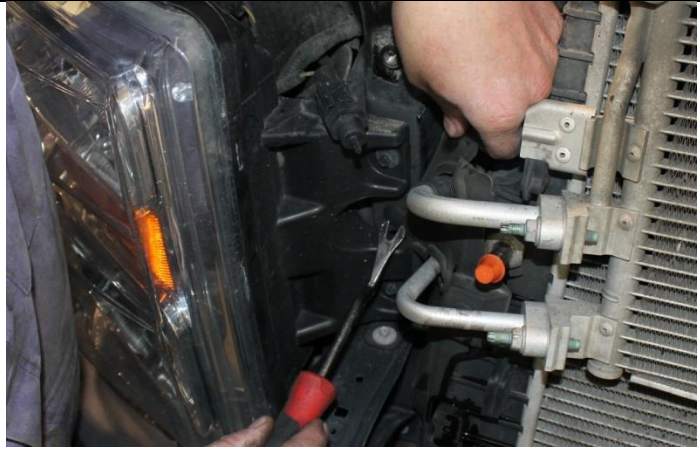


13. Disconnect transmission cooler from radiator hoses and cap hoses to avoid leakage.

Remove the transmission cooler.



14. Remove rubber skirts on radiator sides. (push pins)



15. Lift A/C condenser up out of the way.



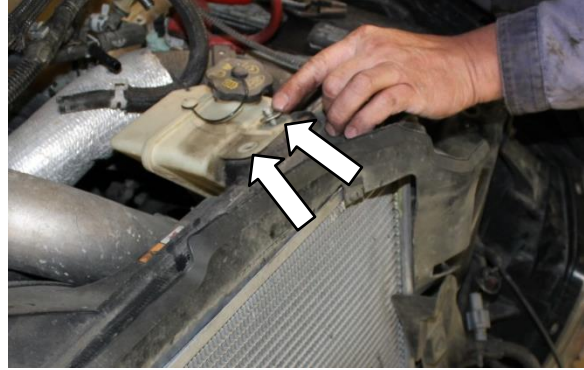
16. Remove coolant hose from intake horn.



17. If vehicle has a coolant line connected to the EGR valve. Disconnect coolant lines at tee connection by degas bottle and remove the two short lines, then connect long line directly to degas bottle.



18. Remove power steering reservoir bolts (8mm)x2 and lift upwards to disconnect from radiator shroud.

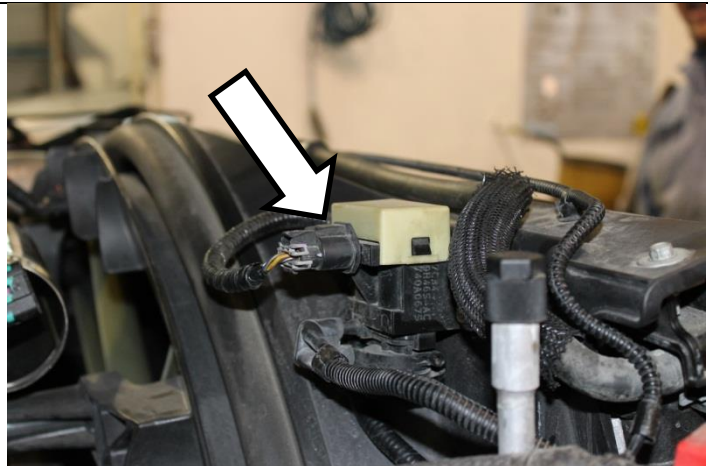


19. Disconnect upper radiator hose at radiator.

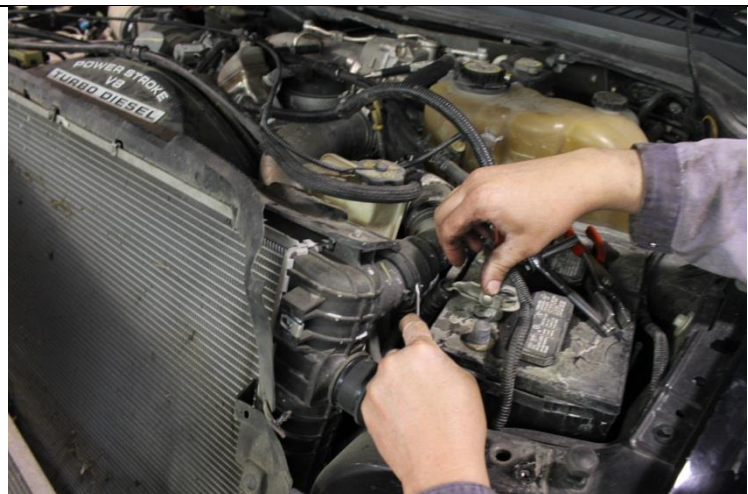
NOTE: Remove the wire clip before disconnecting the hose.



20. Unplug 4wd hub actuator.



21. Remove upper fan shroud bolts. (8mm)x4
 22. Remove coolant hose push pins from upper rad shroud.
 23. Remove upper radiator shroud.
 24. Disconnect lower radiator hose (wire clip see step 19).
 25. Remove lower shroud bolts (8mm)x2 bolt is low on rad tanks (no pic available)



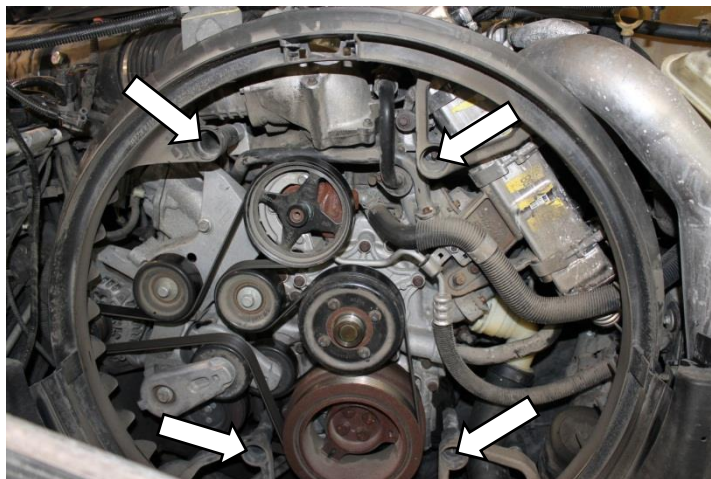
26. Lift radiator up and out of vehicle.



27. Remove fan with 1 7/8" wrench (clockwise).



28. Remove nuts holding inner fan shroud (13mm)x4 & lift from vehicle.

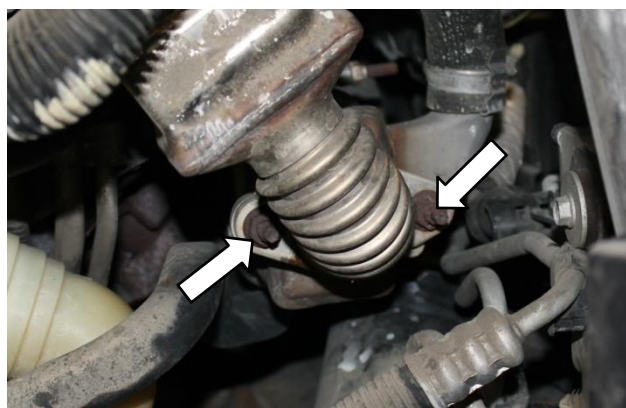


29. Loosen top EGR cooler clamps.

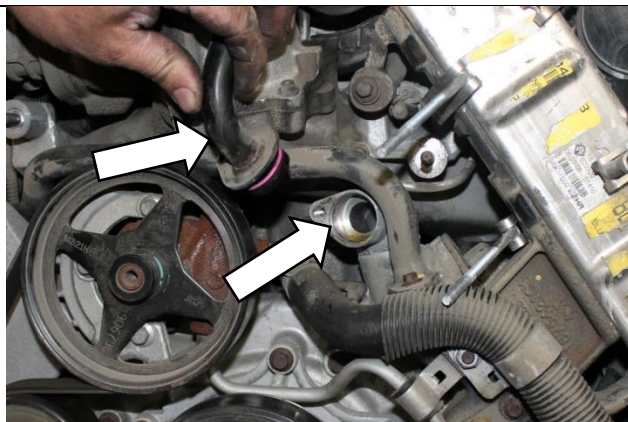
30. Remove EGR cooler lower bolts (13mm)x2

31. Remove coolant hose at top & bottom of cooler.

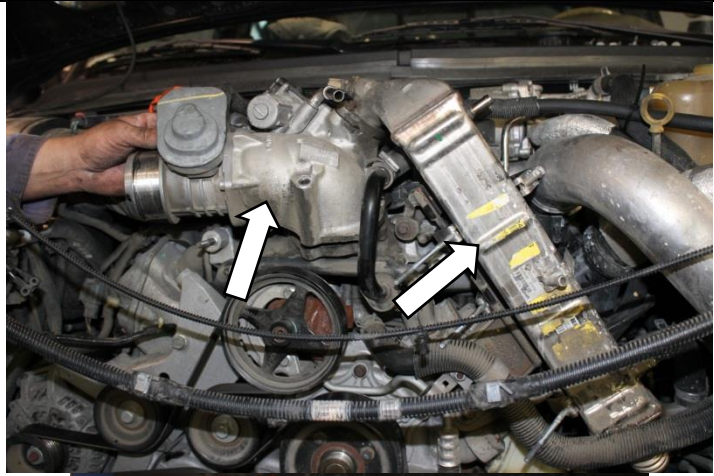
32. Disconnect temp sender, EGR valve, & throttle valve.



33. Remove bolt then coolant pipe (8mm) and remove intake horn bolts (8mm)x4



34. Remove intake horn & top EGR cooler together.



35. Remove lower radiator hose at engine (optional).

36. Remove bolt at steel coolant line from lower EGR cooler to timing cover. Reach along lower cooler to remove bolt that secures line to block(8mm) & loosen clamp (7mm).

37. Remove steel coolant pipe from timing cover & pull pipe forward to remove.



38. Lastly remove cooler bracket to complete the removal

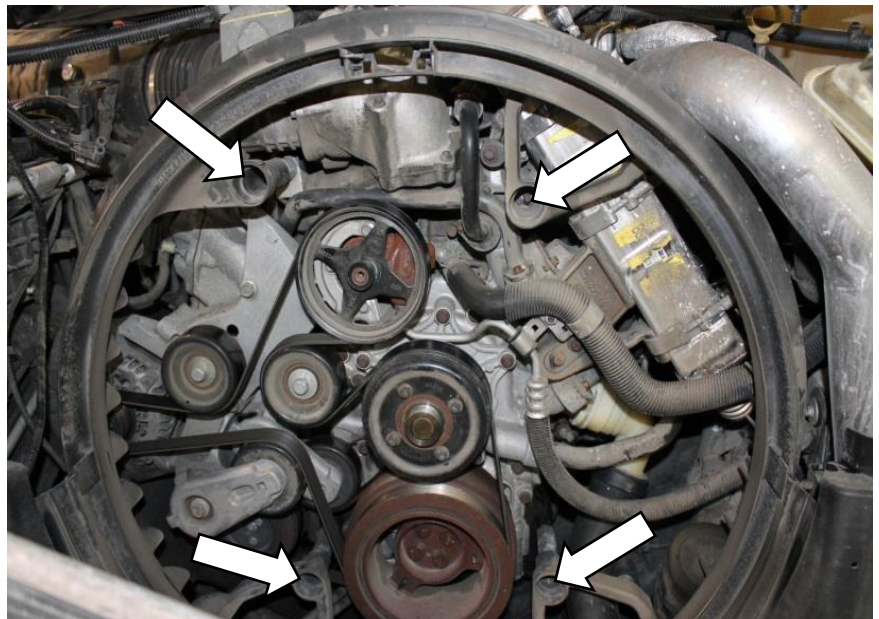


Cab Off Removal

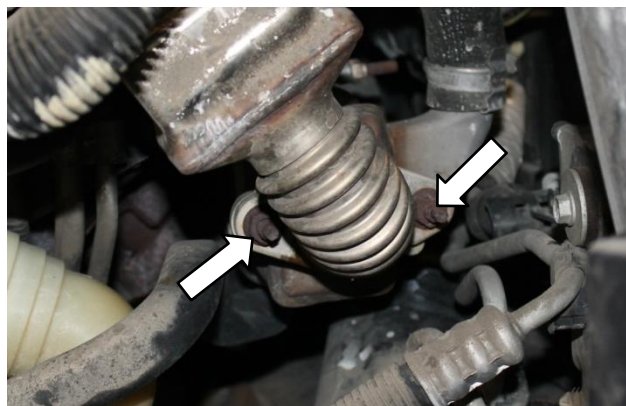
1. Once the cab is removed you can proceed with removing fan with 1 7/8" wrench (clockwise).



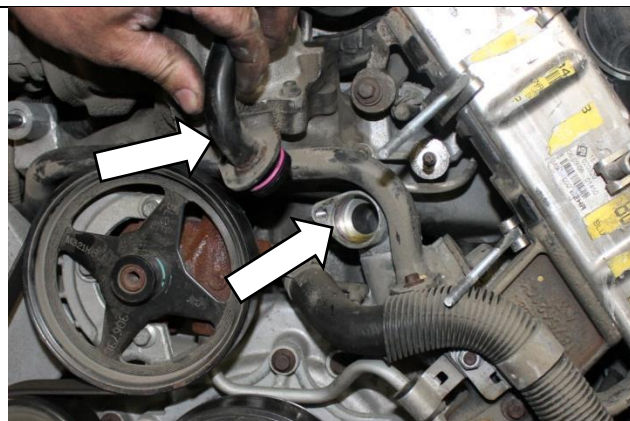
Remove nuts holding inner fan shroud (13mm)x4 & lift from vehicle.



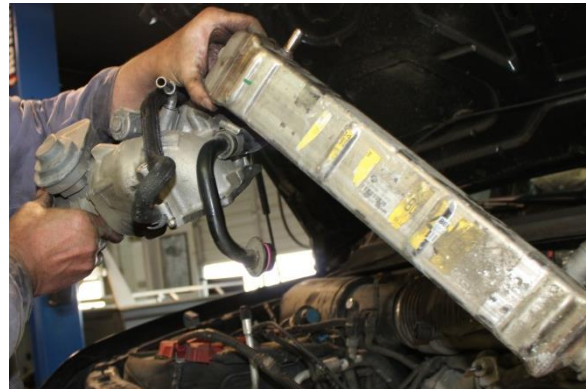
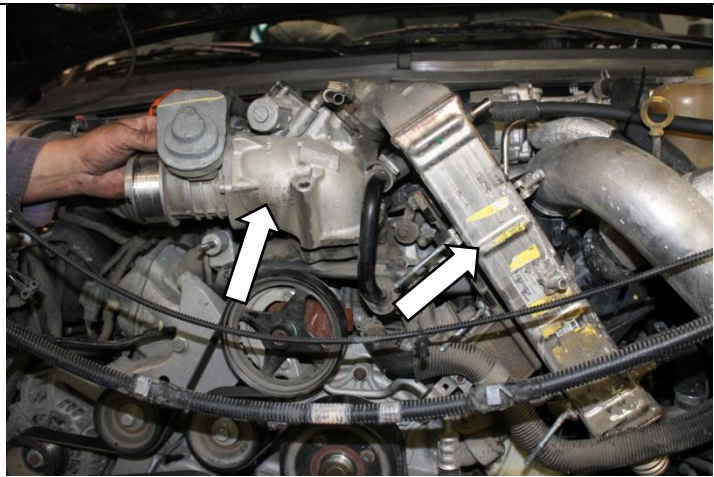
2. Loosen top EGR cooler clamps.
3. Remove EGR cooler lower bolts (13mm)x2
4. Remove coolant hose at top & bottom of cooler.
5. Disconnect temp sender, EGR valve, & throttle valve.



6. Remove bolt then coolant pipe (8mm) and remove intake horn bolts (8mm)x4



7. Remove intake horn & top EGR cooler together. Keep mounting bolts as they will be reused later.



8. Remove lower radiator hose at engine (optional).
9. Remove bolt at steel coolant line from lower EGR cooler to timing cover. Reach along lower cooler to remove bolt that secures line to block(8mm) & loosen clamp (7mm).
10. Remove steel coolant pipe from timing cover & pull pipe forward to remove.

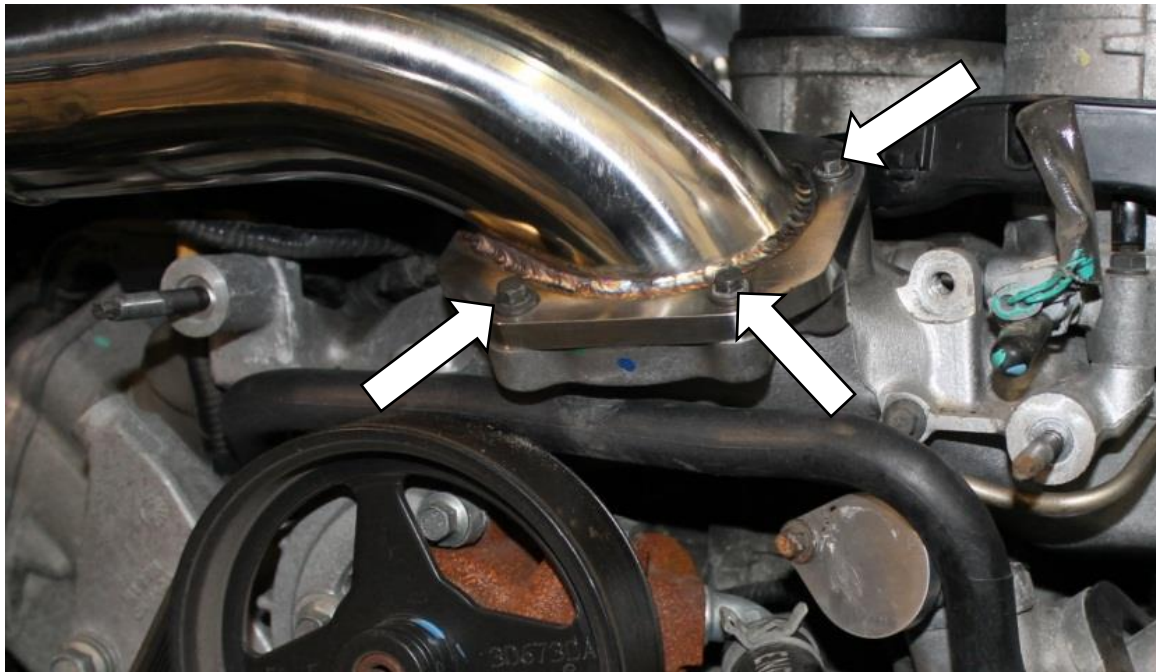


11. Lastly remove cooler bracket to complete the removal.

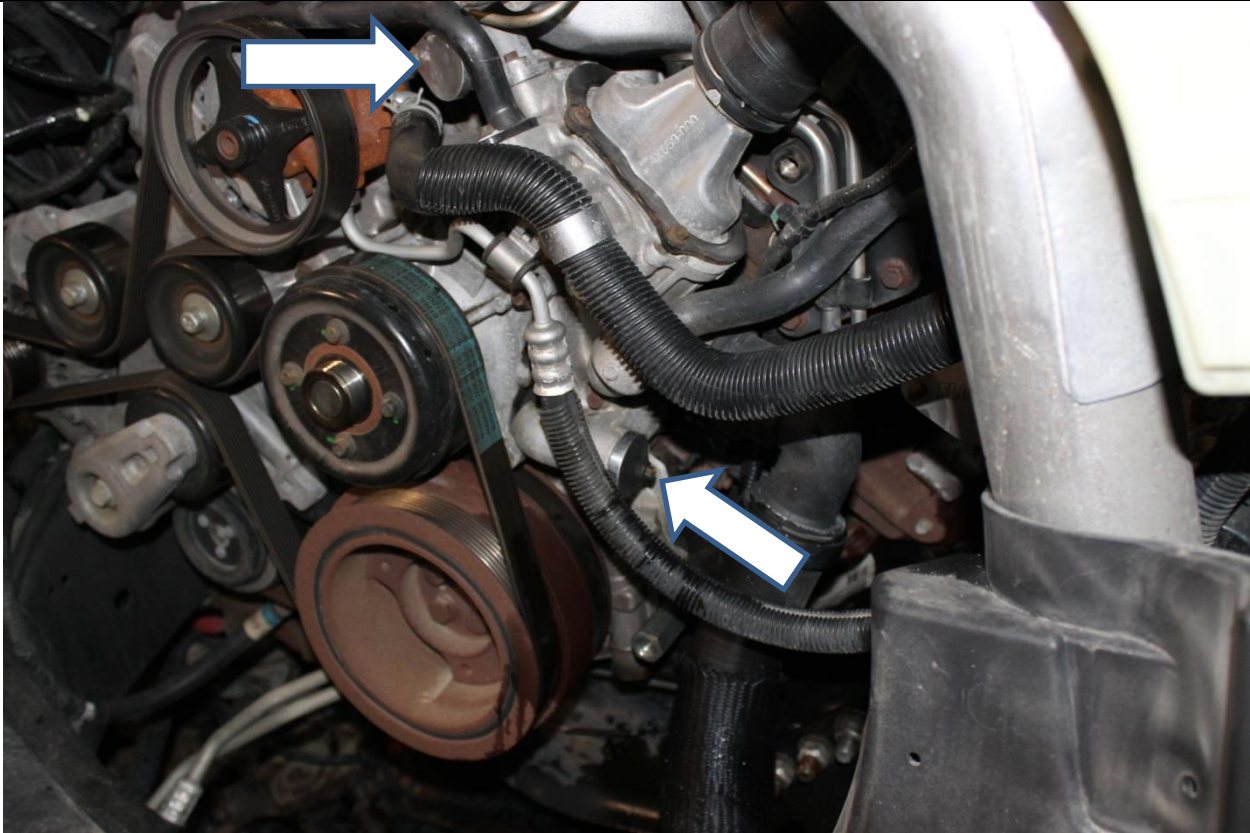


INSTALLATION

Cab Off Installation

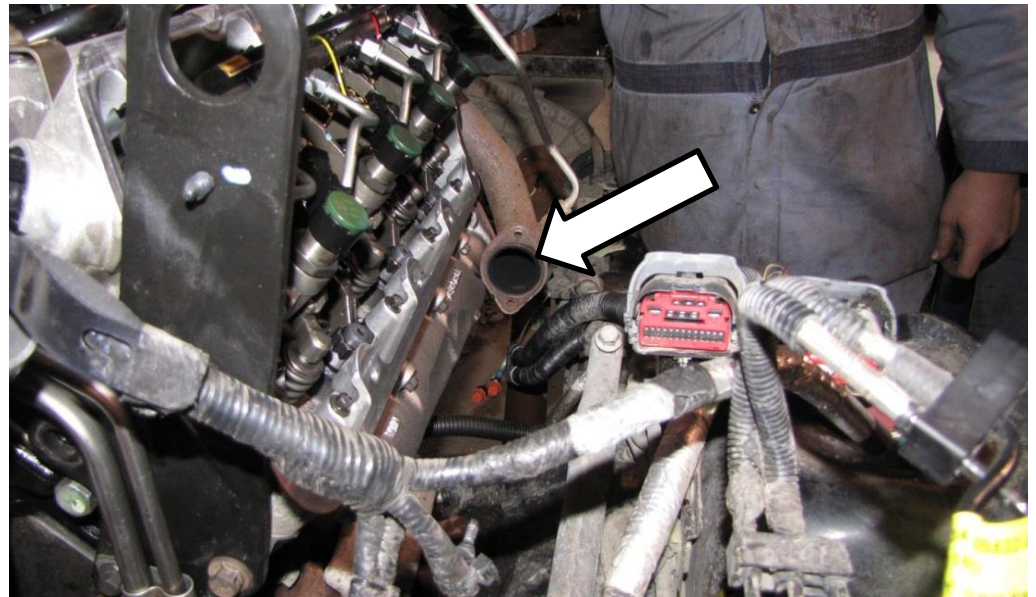


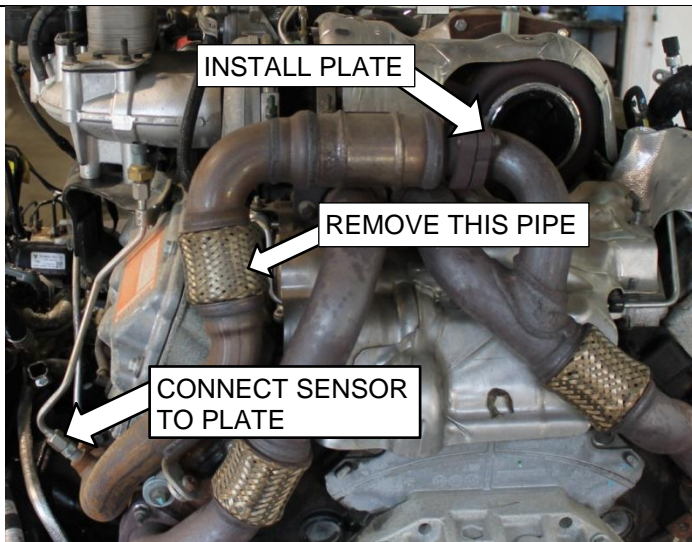
1. Remove the OEM boot on the CAC pipe, and install the supplied boot (1405404) onto the pipe with the supplied (1405211) clamp. Tighten until spring is bound.
2. Lubricate and insert supplied -236 oring into the bottom of the cast intake.
3. Place the other supplied clamp (1407030) onto the boot and Insert Intake horn (1401585) into the step boot then fasten to the motor using the OEM bolts (M6) and torque to factory specifications then tighten spring clamp until spring is bound.



4. Insert Plugs into ports and fasten using the existing hardware.

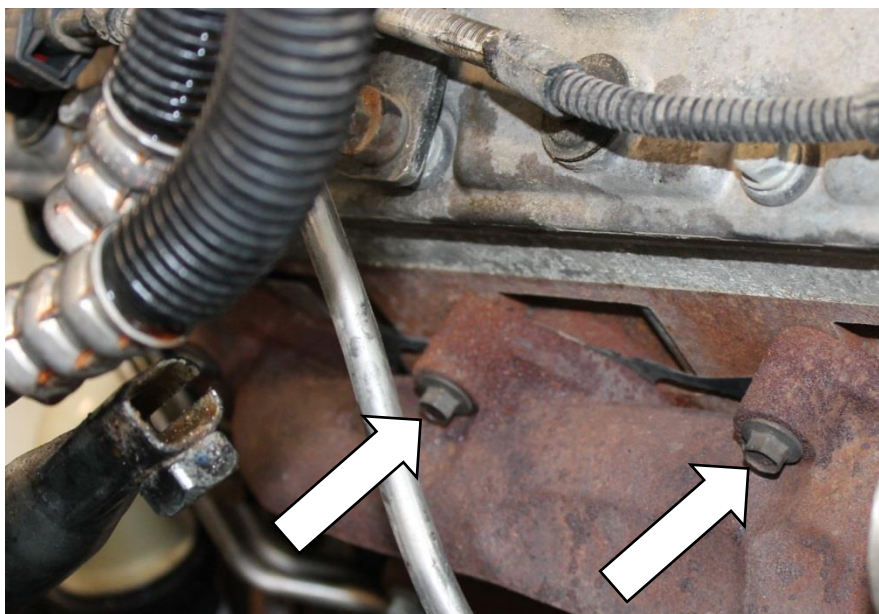
5. Remove rear EGR cooler and pipe.



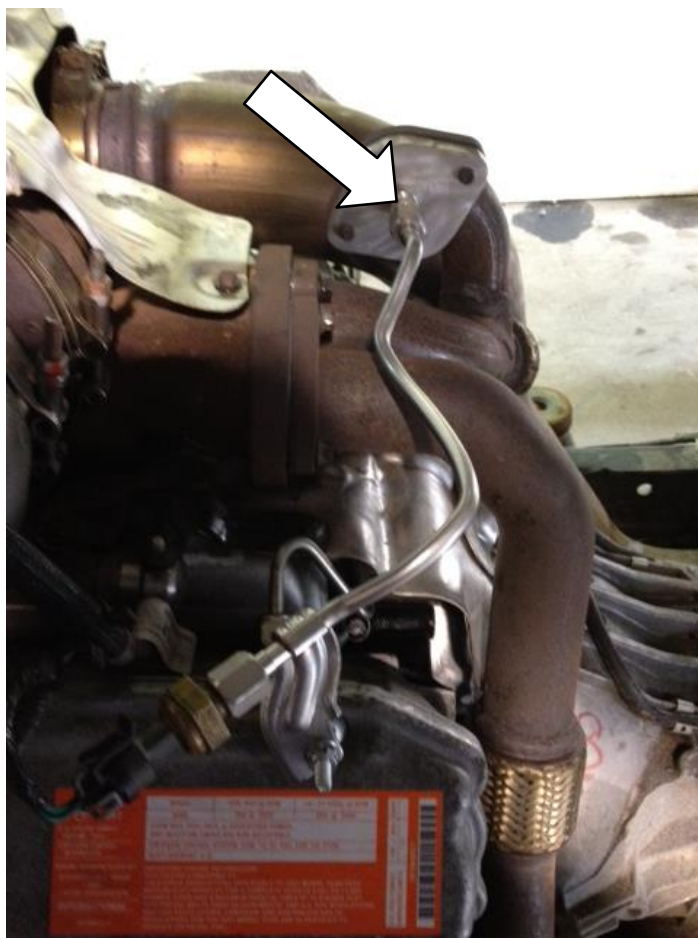


Rear view of Engine

- 6. Remove 4 bolts holding the lower cooler bracket, remove bracket, then Install the supplied shorter lower cooler bracket bolts (1900057).



7. Install EGR plate and gasket onto exhaust pipe using the OEM hardware. Remove the OEM exhaust back pressure tube and sensor, then install into threaded hole in plate.

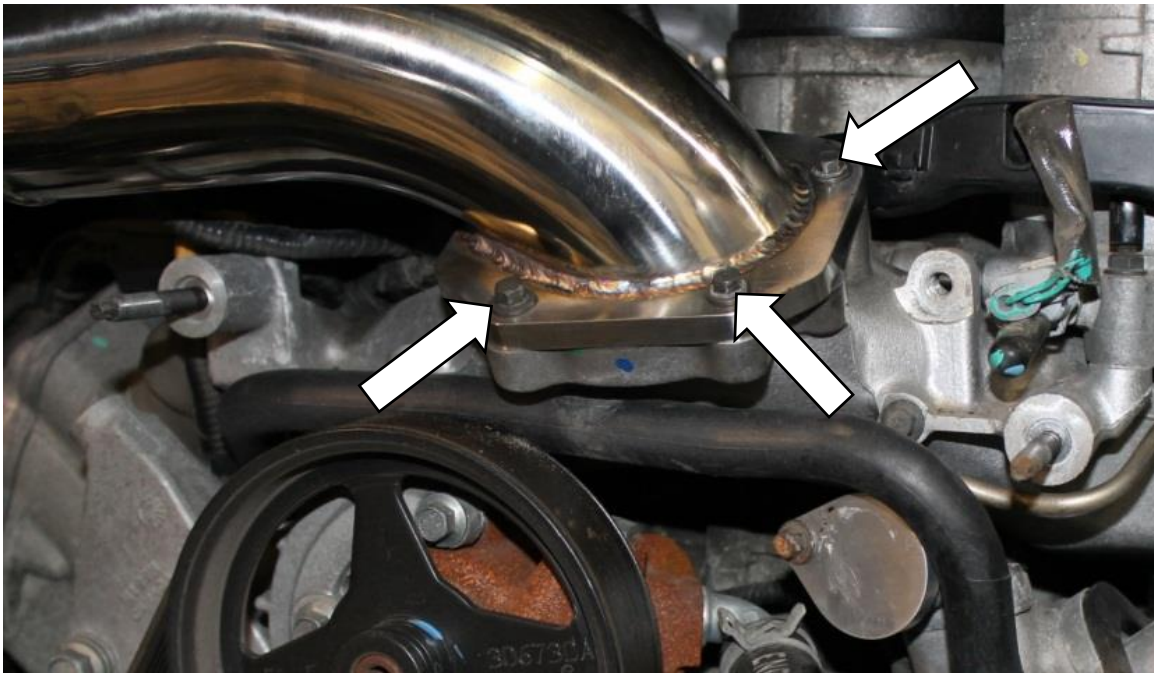


8. Reinstall fan with 1 7/8" wrench (counterclockwise).

9. Reinstall nuts holding inner fan shroud (13mm)x4 & lift from vehicle.
10. The Cab can now be set back onto the chasis using reversed procedure to remove the cab.



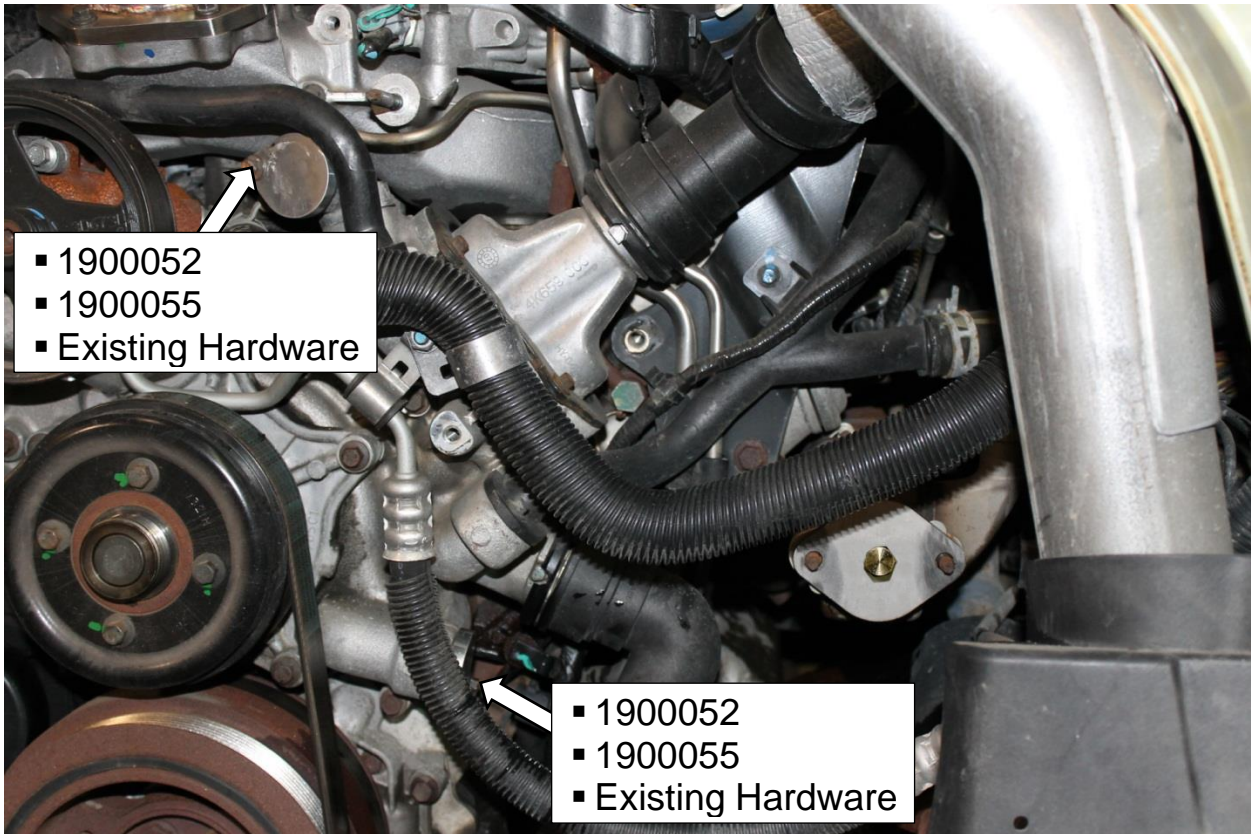
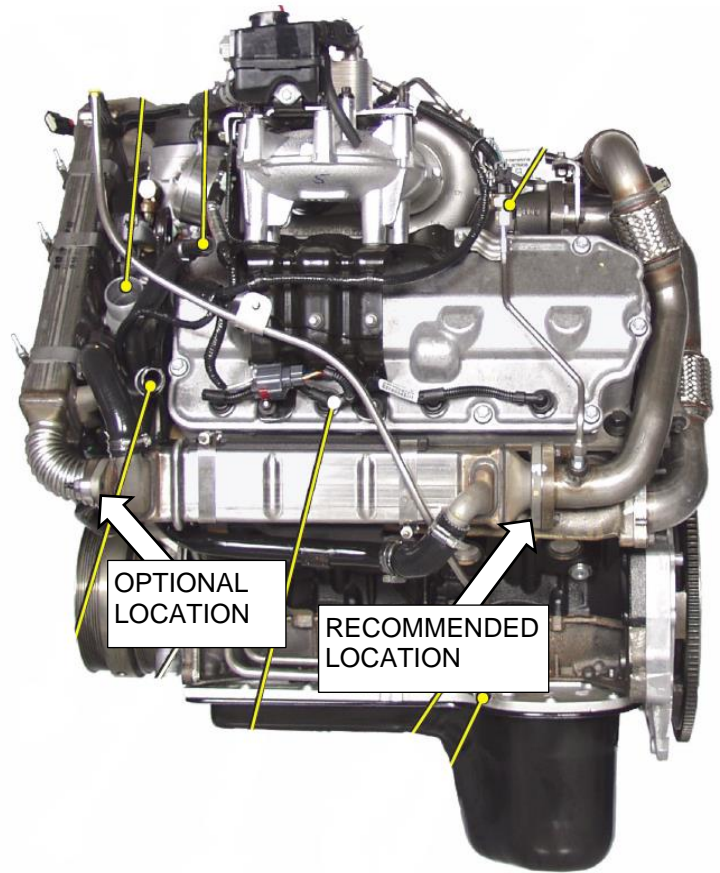
Cab On Installation



1. Remove the OEM boot on the CAC pipe, and install the supplied boot (1405404) onto the pipe with the supplied (1405211) clamp. Tighten until spring is bound.
2. Lubricate and insert supplied -236 oring into the bottom of the cast intake.
3. Place the other supplied clamp (1407030) onto the boot and Insert Intake horn into the step boot then fasten to the motor using the OEM bolts (M6) and torque to factory specifications then tighten spring clamp until spring is bound.

4. Insert supplied NPT plug (1130020) into plate if not using a Pyro and install EGR plate (1900051) & gasket (1900051) onto the pipe flange using the supplied bolts (1900015) & nuts (1900014) in the recommended location (see diagram).

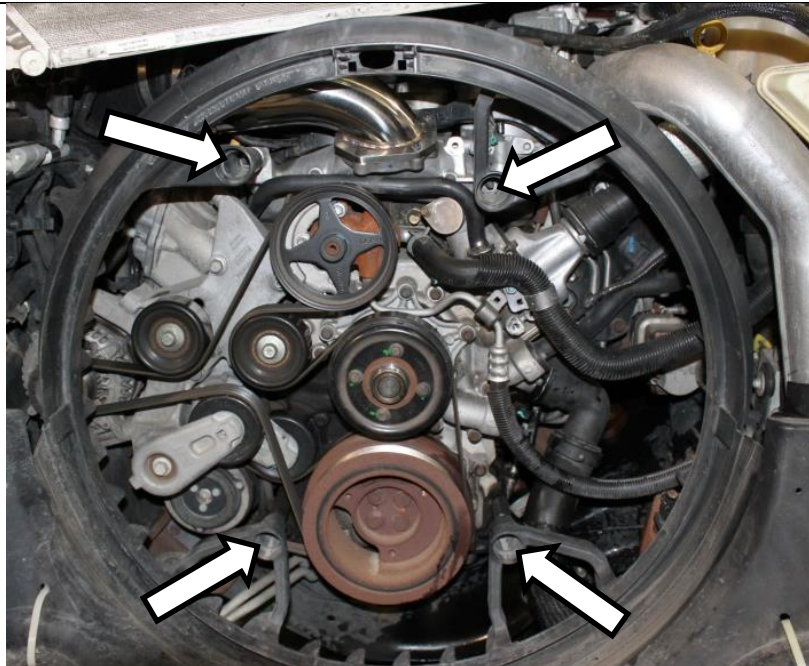
Note: EGR plate may be installed in the optional location if the recommended location is not accessible.



5. Insert Plugs into ports and fasten using the existing hardware

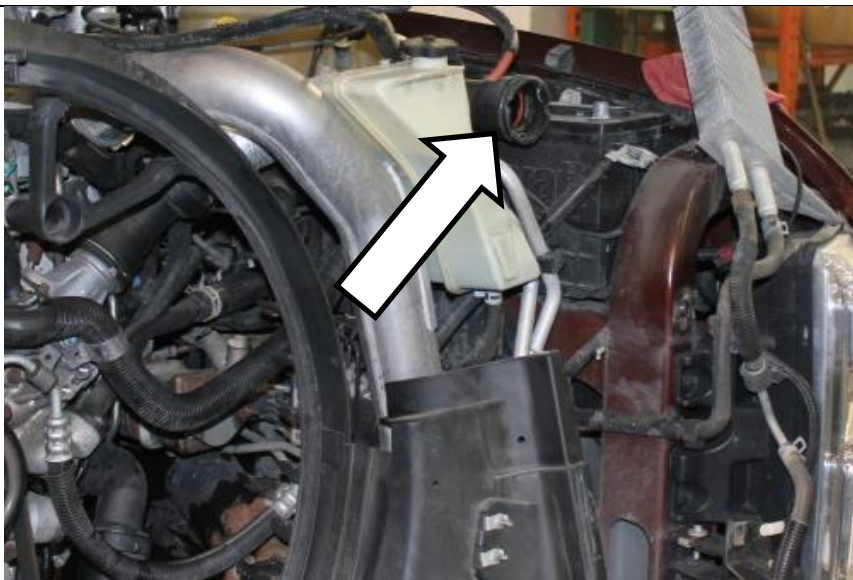
6. Reinstall inner fan shroud.
(13mm)

Note: This installation allows for easy access to the serpentine belt for replacement.



7. Reinsert coolant hose retaining clips into upper and lower radiator pipes.





8. Plug in and reinstall the fan hub.

Note: The Fan Hub is reverse thread. (left hand thread)

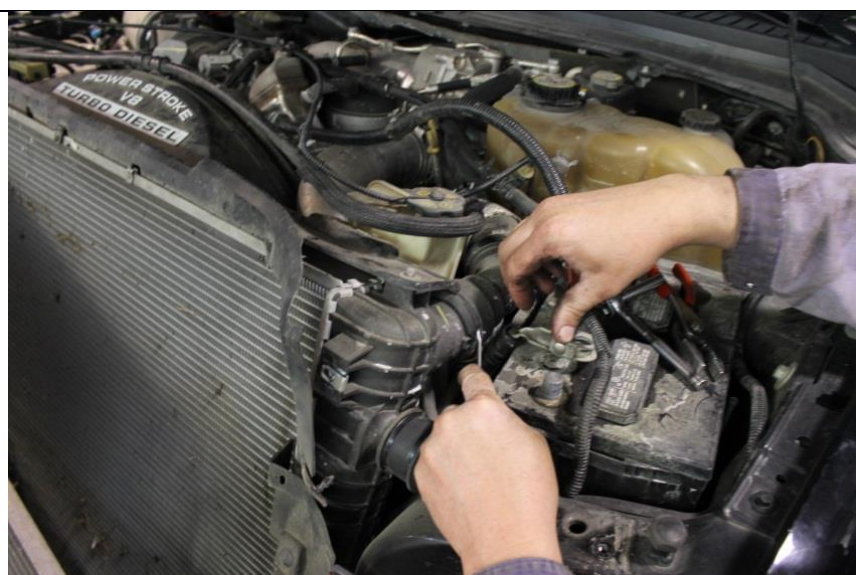


9. Reinstall radiator & connect upper/lower radiator pipes.

NOTE: Radiator hose clips should lock into place.



10. Reinstall lower shroud bolts. (8mm)x2
11. Reinstall the upper radiator shroud.
12. Reinstall upper fan shroud.
13. Reinstall the push pins into the upper rad shroud.



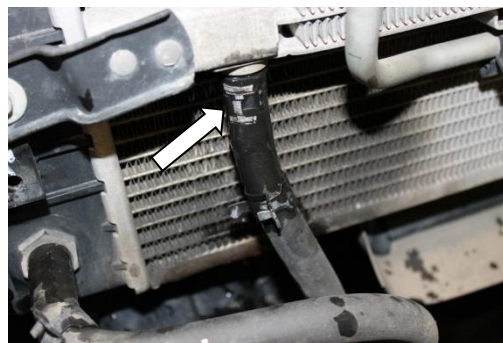
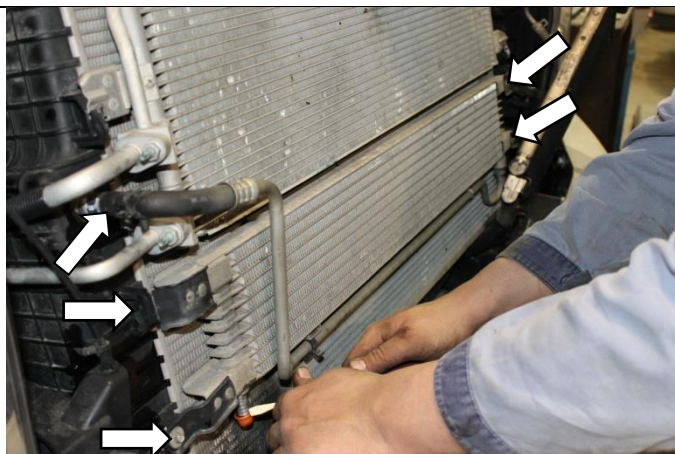
14. Carefully maneuver the AC condenser back into position.



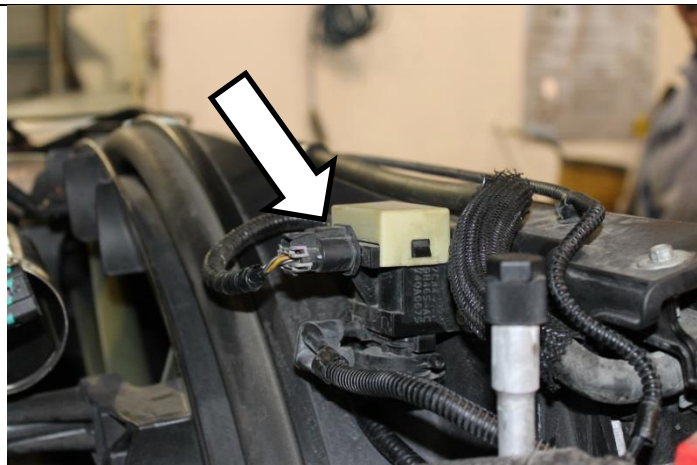
15. Reinstall power steering tank.



16. Reinstall the transmission cooler.



17. Reconnect the 4wd hub actuator.



18. Re clip battery cable to top of radiator.



19. Reinstall radiator side cover and top.

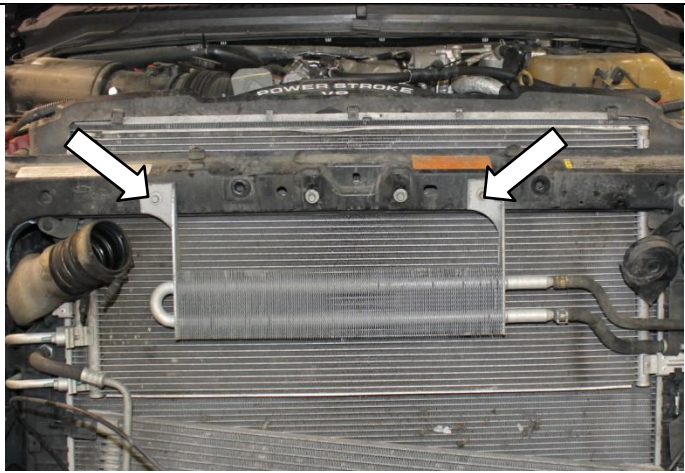


20. Reinstall OEM CAC tube to intake horn.

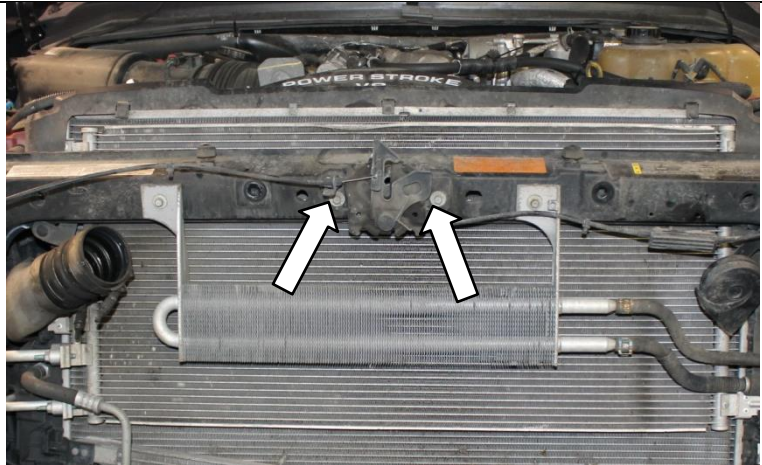
21. Reinstall upper rad support.



22. Reinstall power steering cooler. (10mm)x2



23. Reinstall the hood latch & cable.



24. Reinstall CAC. Connect CAC inlet/outlet connections leaving clamps loose.
 25. Reinstall upper CAC bolts and fuel cooler bolt.
 26. Tighten CAC hose clamps.
 27. Refill coolant to required level.



28. Installation is not complete. Road test vehicle and check for leaks.

