2003-2007

6.0 POWERSTROKE

INSTALL INSTRUCTIONS

KCTURBOS.COM

480-688-7160

TOOLS NEEDED

8MM SOCKET

10MM DEEP & SHALLOW SOCKET

11MM DEEP SOCKET

12MM DEEP SOCKET

13MM SOCKET

RATCHET, EXTENSIONS & SWIVEL

PRY BAR & PANEL POPPERS

TORQUE WRENCH

COMPONENTS

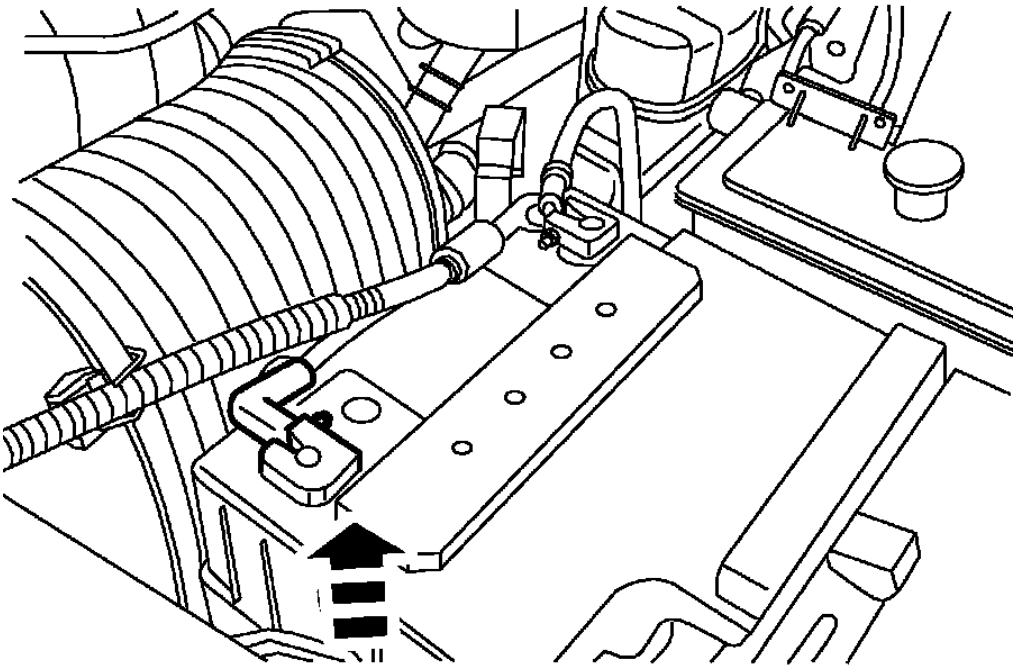
TURBO CHARGER

OIL FEED GASKET

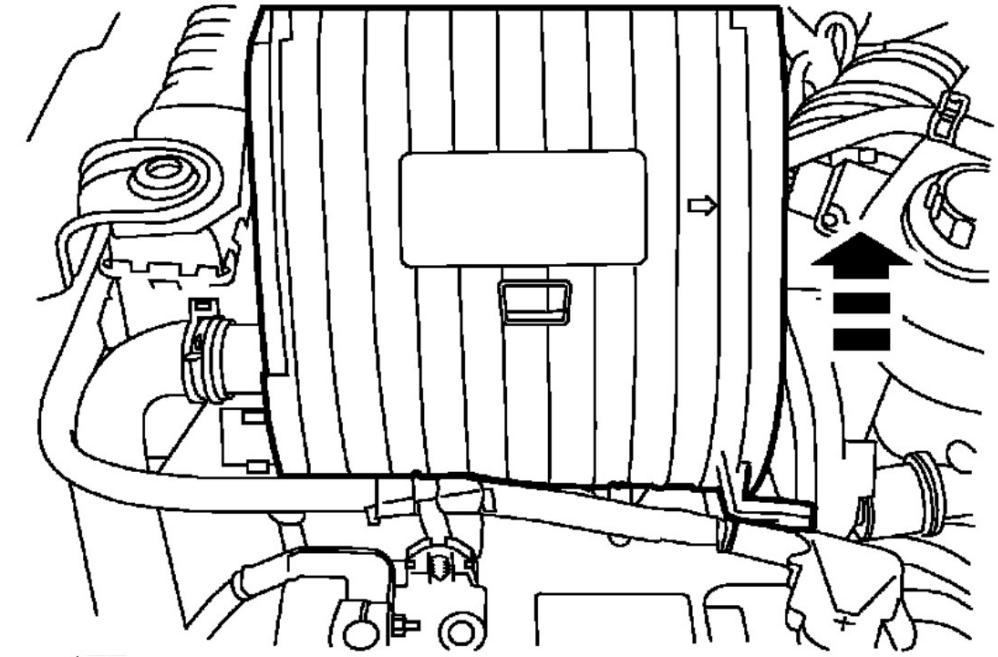
OIL DRAIN GASKET

Removal:

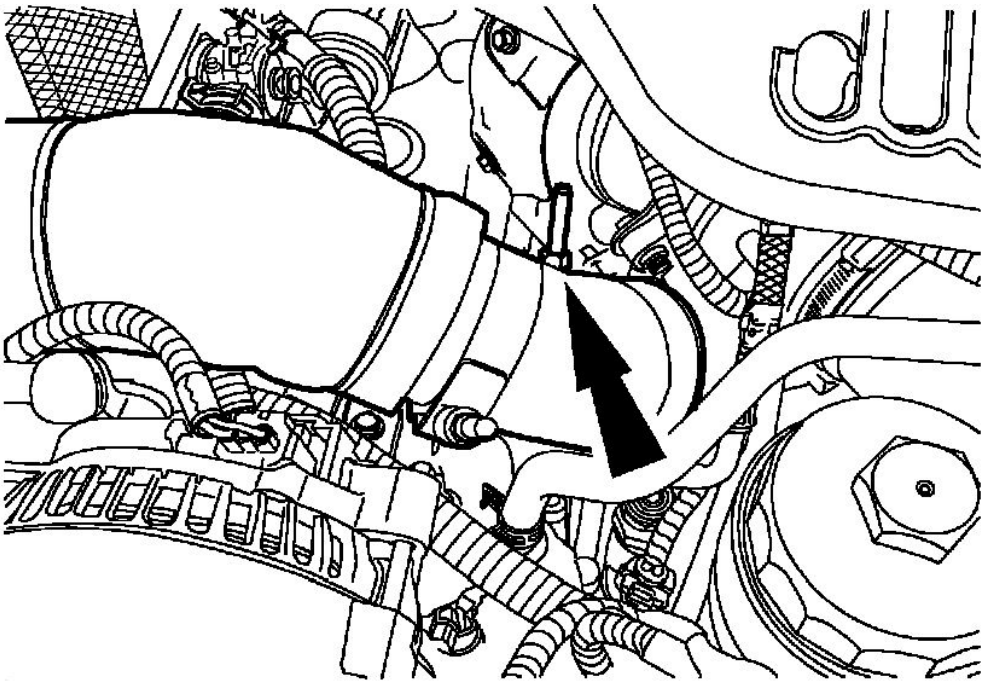
1. Disconnect Batteries



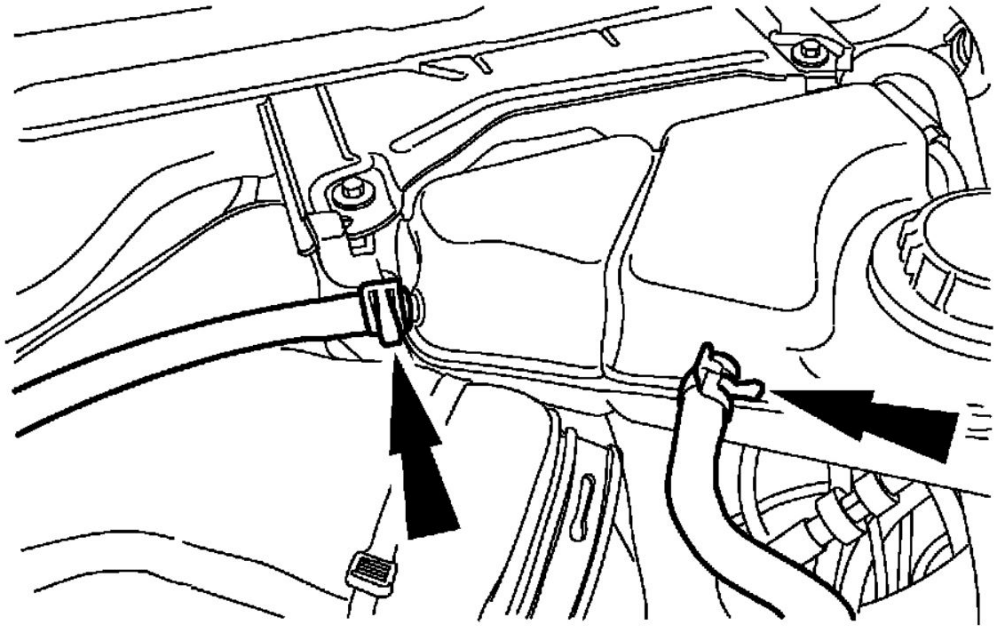
2. Remove the air cleaner assembly.



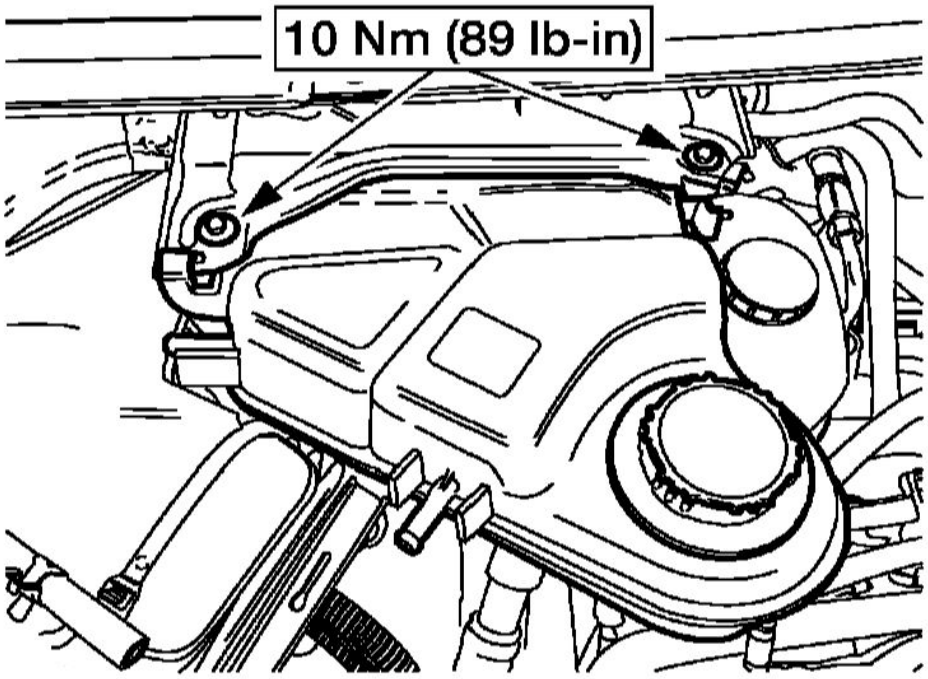
3. Disconnect the charge air cooler Inlet pipe.



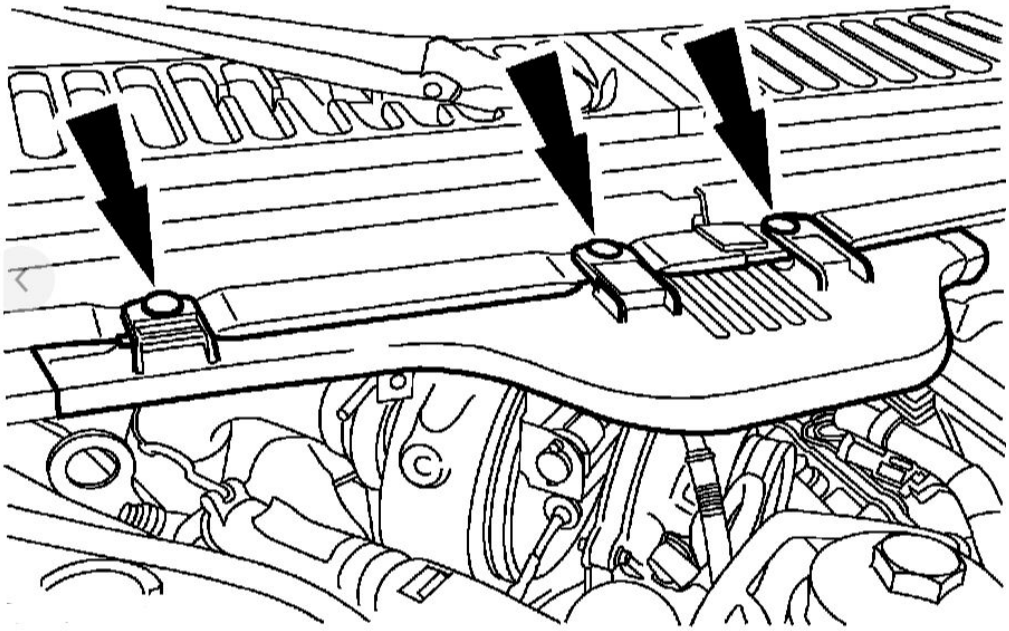
4. Disconnect upper hoses of degas bottle.
(Make sure there is no pressure / relief pressure slowly)



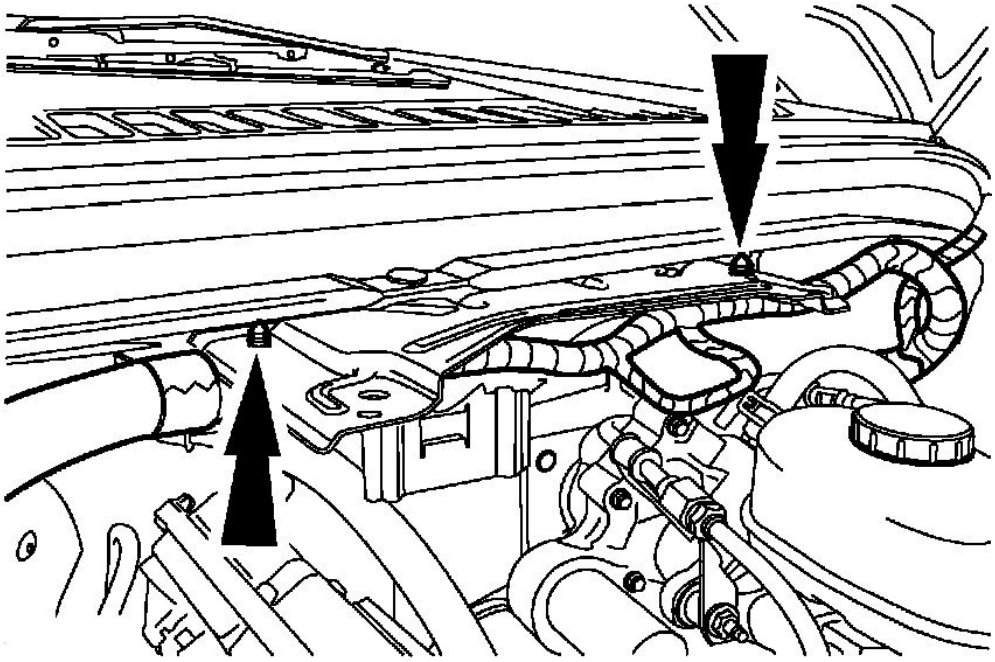
5. Remove bolts for degas bottle, move it to the side for better access



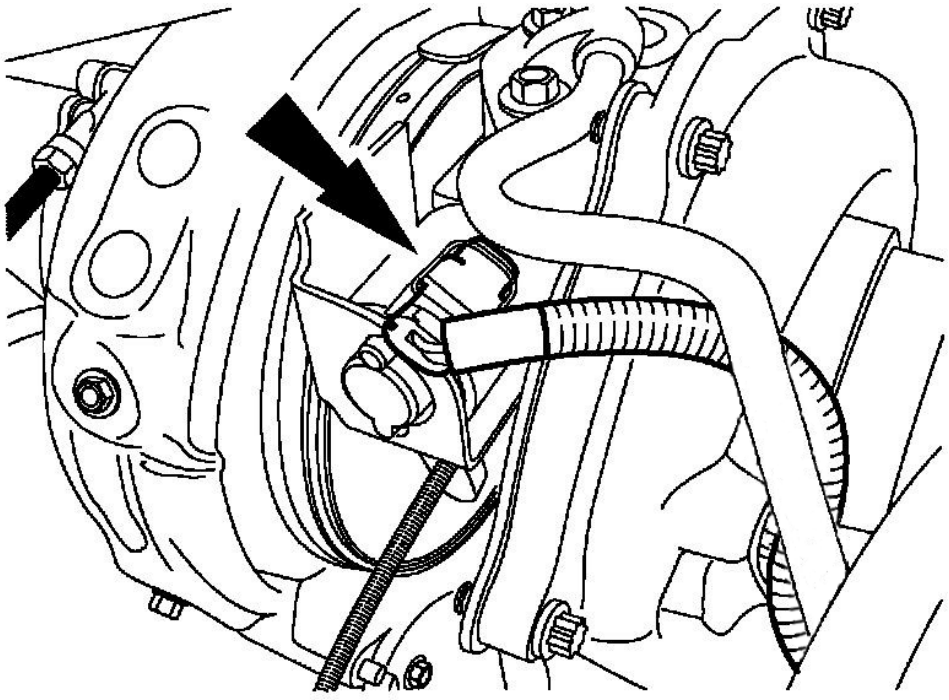
6. Remove Push Pins



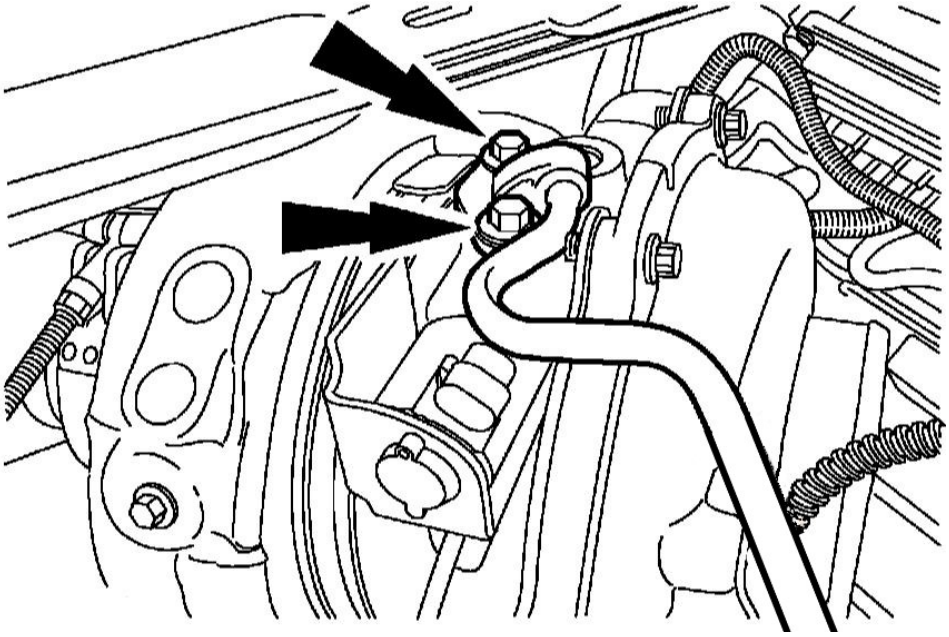
7. Disconnect the two wiring harness push pins and position aside.



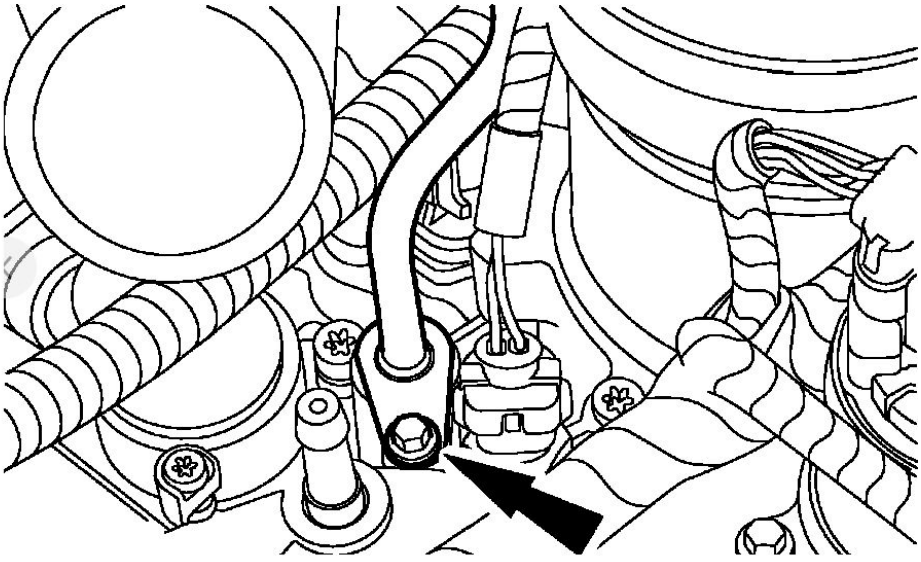
8. Disconnect the turbocharger variable vane hydraulic control valve electrical connector. (VGT Pigtail)



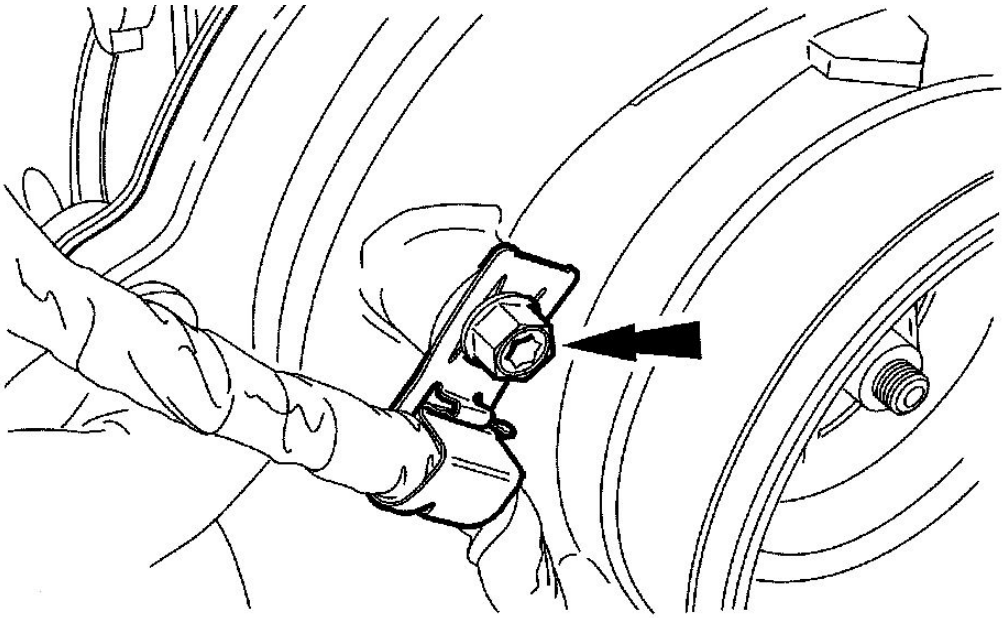
9. Remove the bolts for the oil supply tube. Remove and discard the gasket.
IMPORTANT: If you have the old style oil feed line we recommend replacing it with the updated solid feed line Ford Part # 3C3Z-9T516-A. The old flex style feed line is known for damaging turbos.



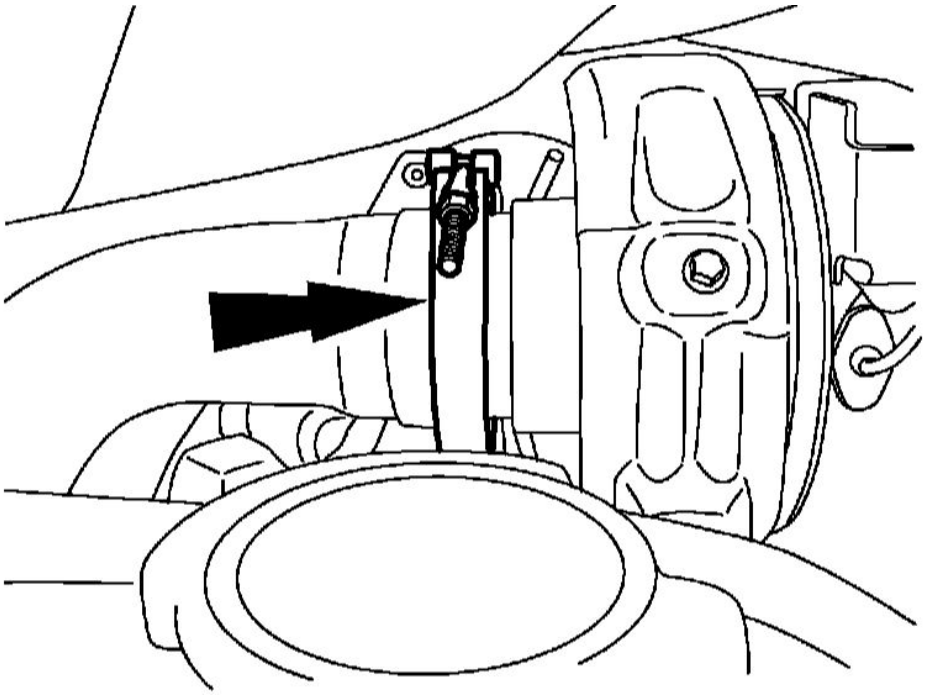
10. Remove the bolt and turbocharger oil supply tube.
Remove and discard the O-ring.



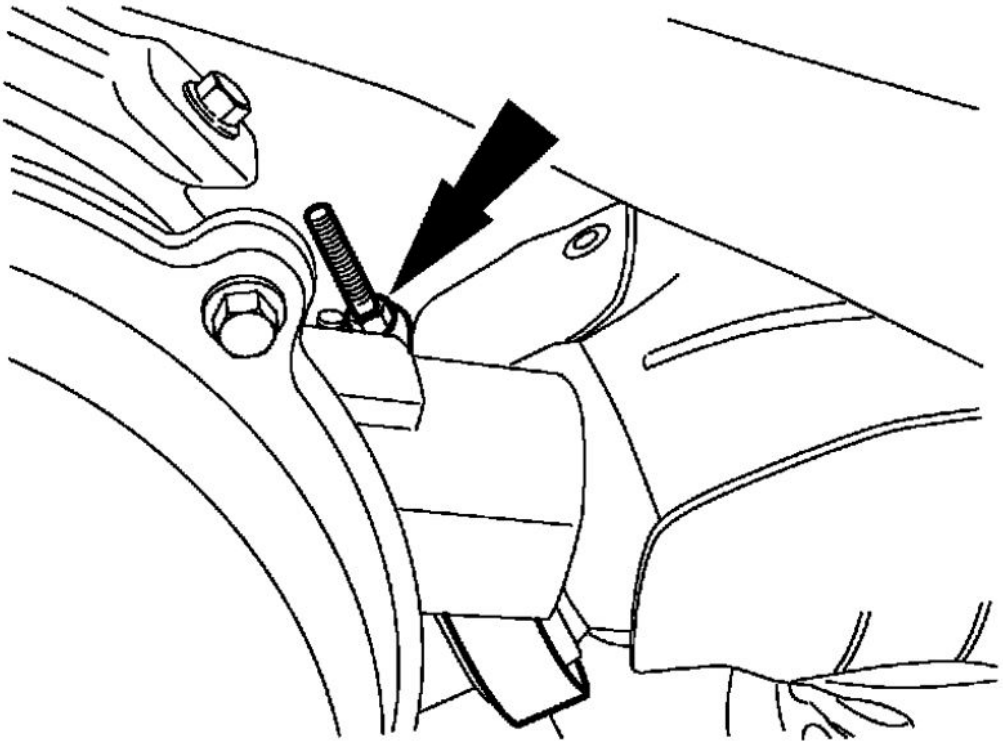
11. Remove the bolt and the wire retainer.



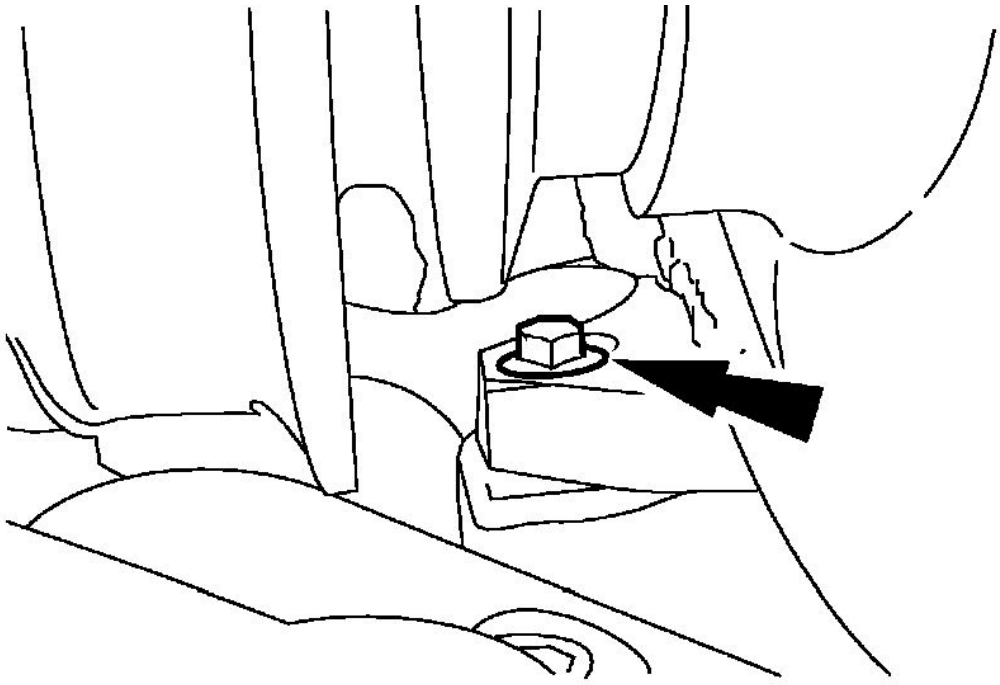
12. Remove the Mormon clamp from the turbocharger outlet / downpipe.



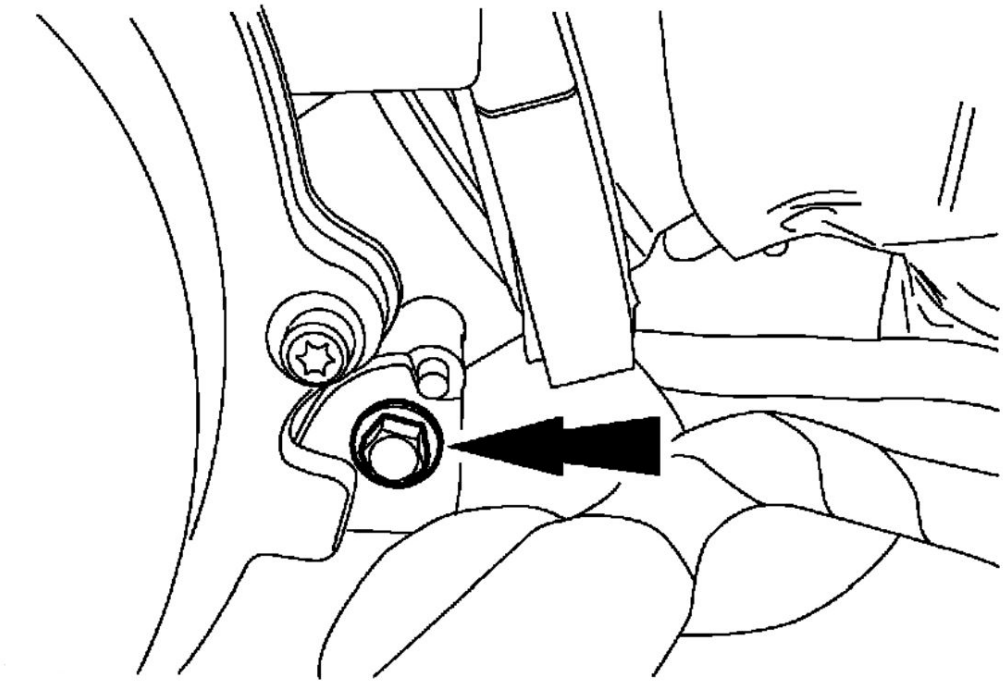
13. Remove the Mormon clamp from the turbocharger inlet up pipe.



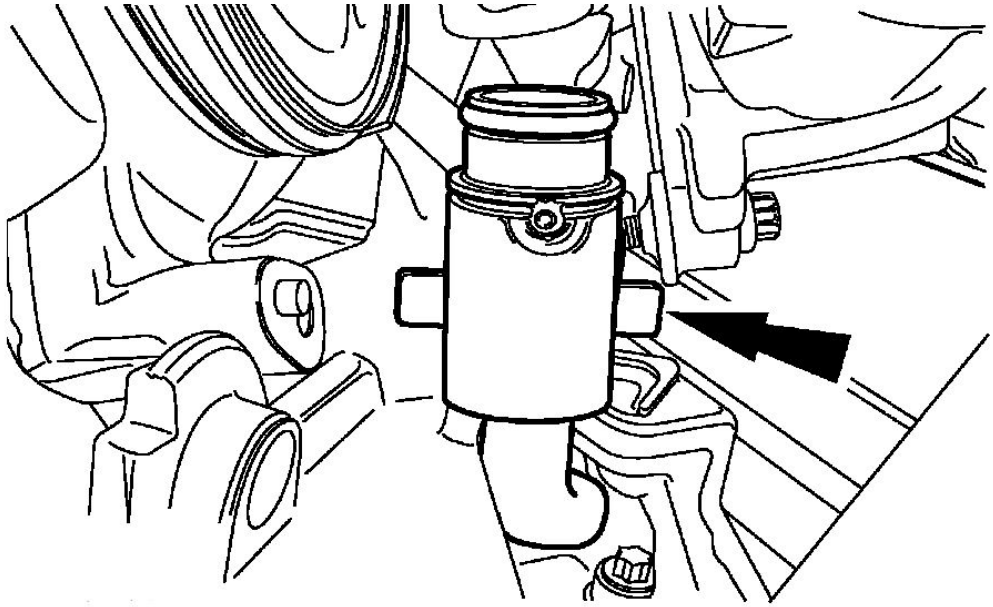
14. Remove the rear turbocharger mounting bolt.



15. Remove the front mounting bolts. NOTE: Left side shown, right side similar.



16. Position the turbocharger and remove the turbocharger drain tube. Remove and discard the drain tube O-rings

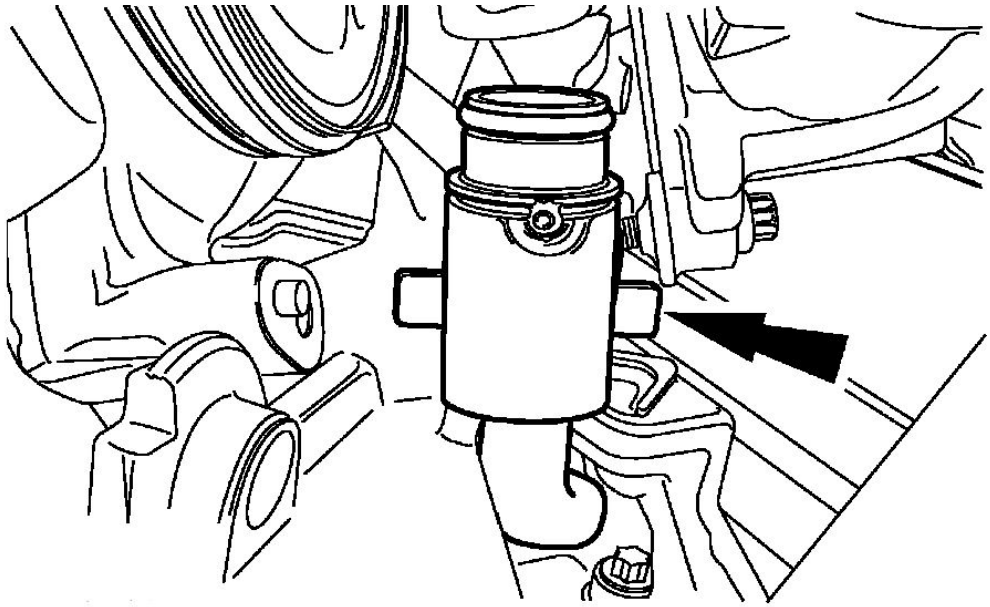


17. Remove the turbocharger.

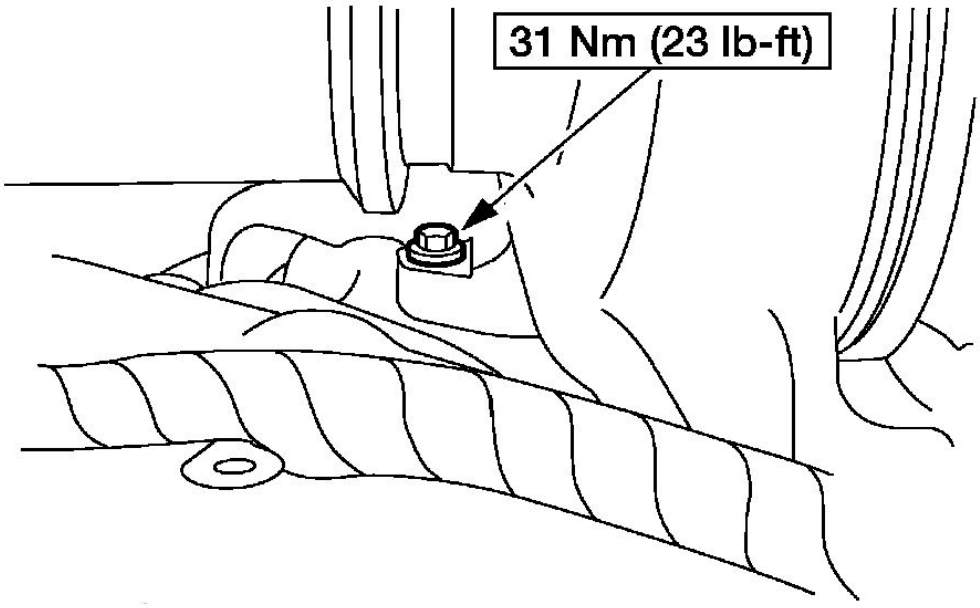
Install

1. Position the KC Turbocharger on the pedestal.

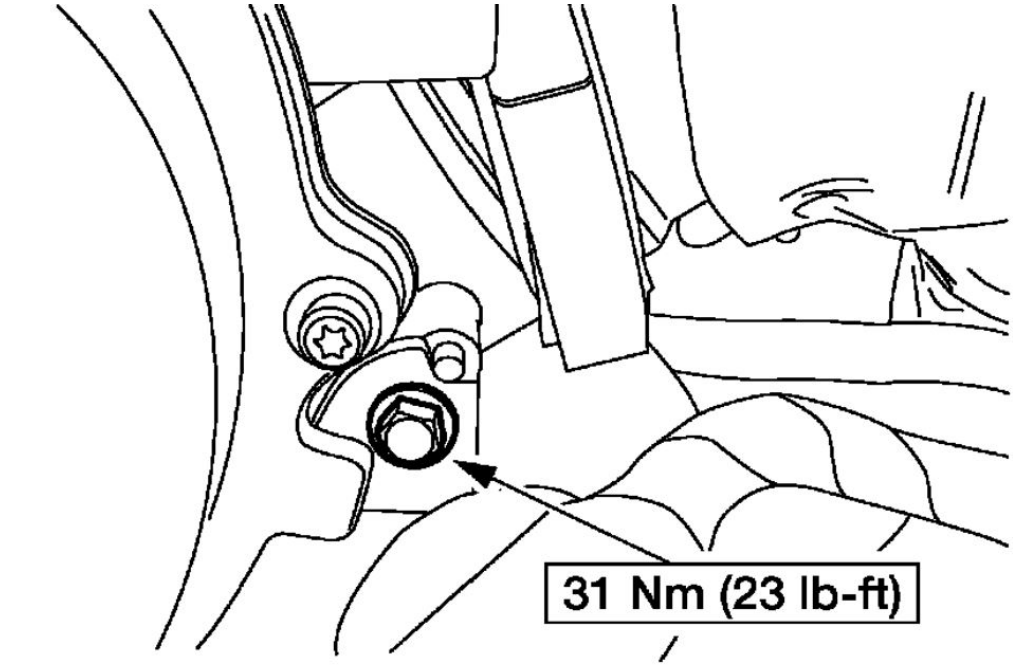
2. Install new O-rings and apply clean engine oil. Position the turbocharger and install the turbocharger drain tube.



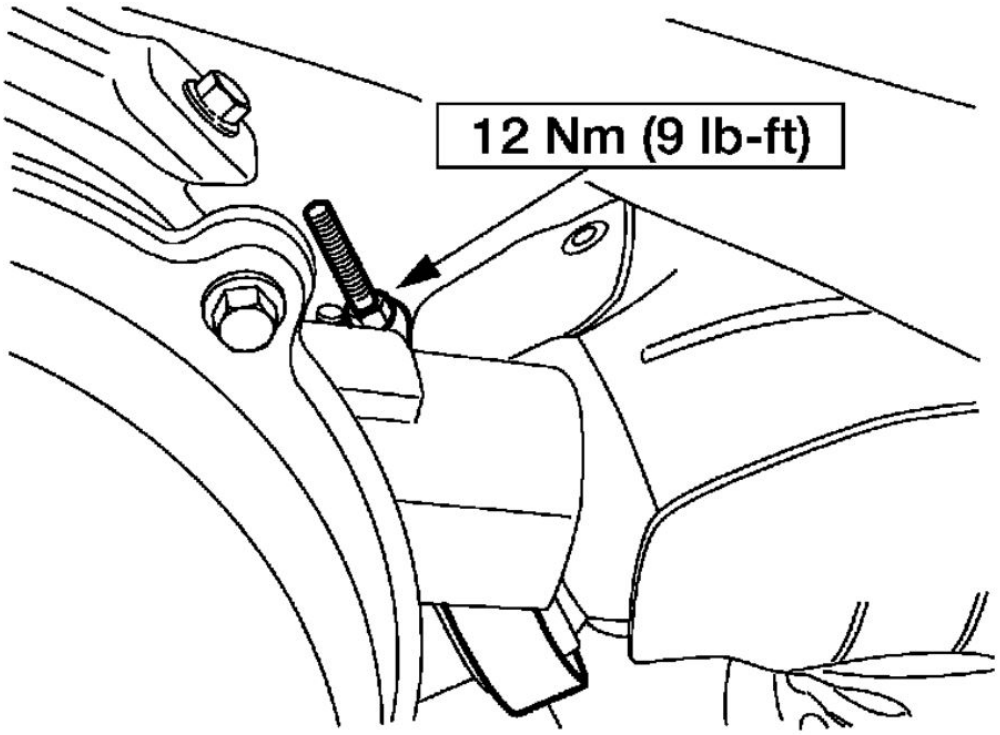
3. Install the turbocharger and the rear mounting bolt.
– High Nickel Anti-Seize is recommended.



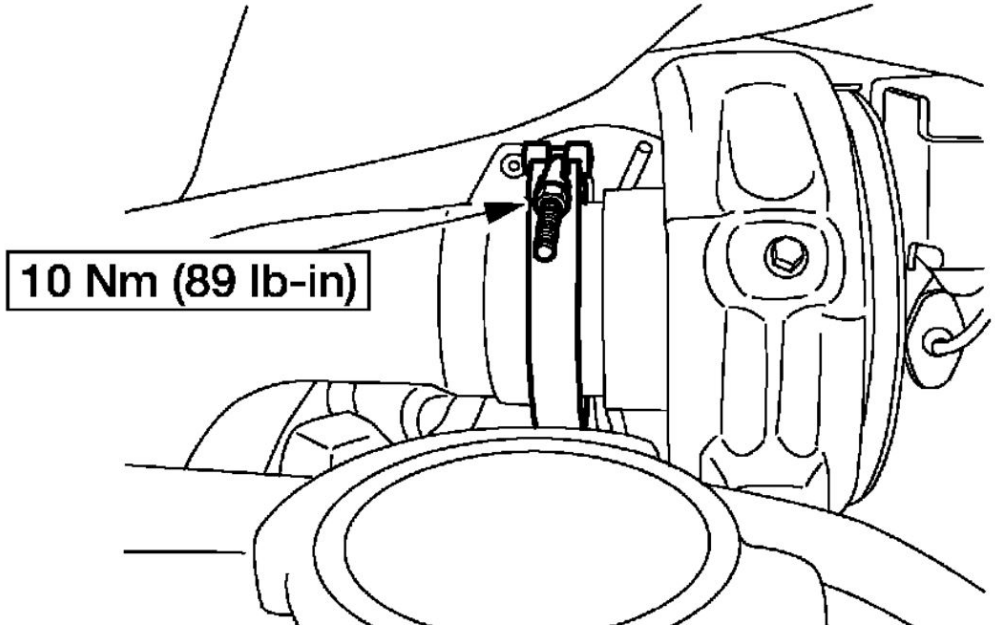
4. Install the turbocharger front mounting bolt.
– High Nickel Anti-Seize is recommended.



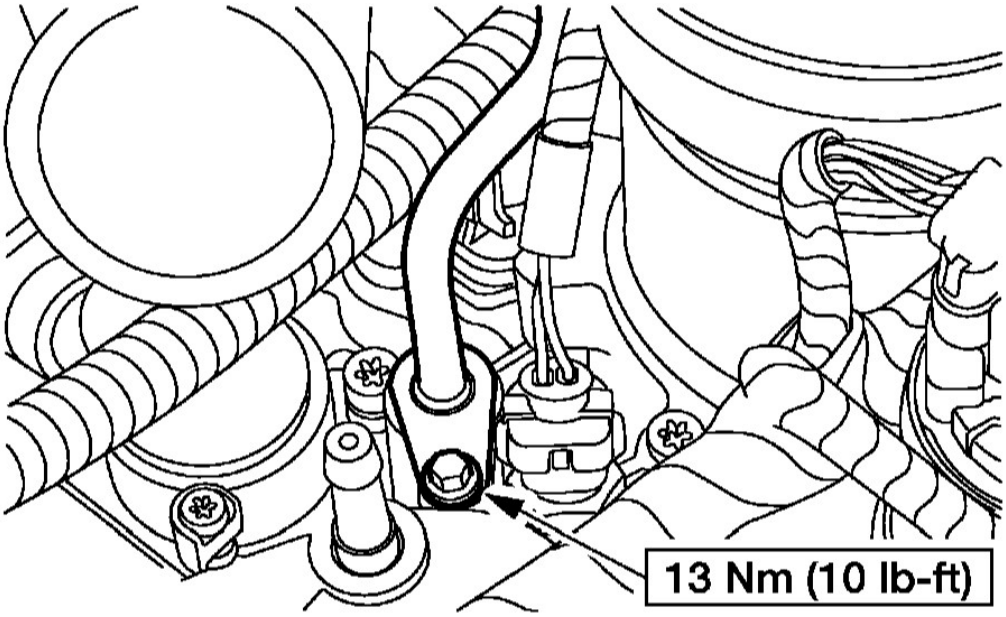
5. Install the turbocharger inlet Mormon clamp.



6. Install the turbocharger exhaust Mormon clamp.

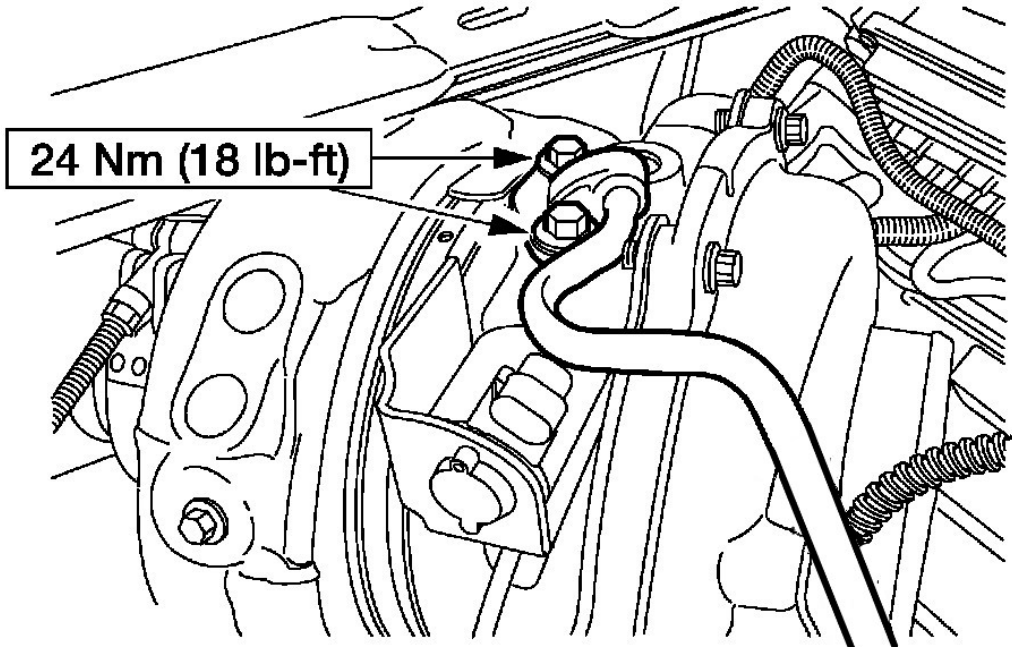


7. Install a new O-ring and apply clean engine oil. Install the oil supply tube. Position the locking bracket and install the bolt.

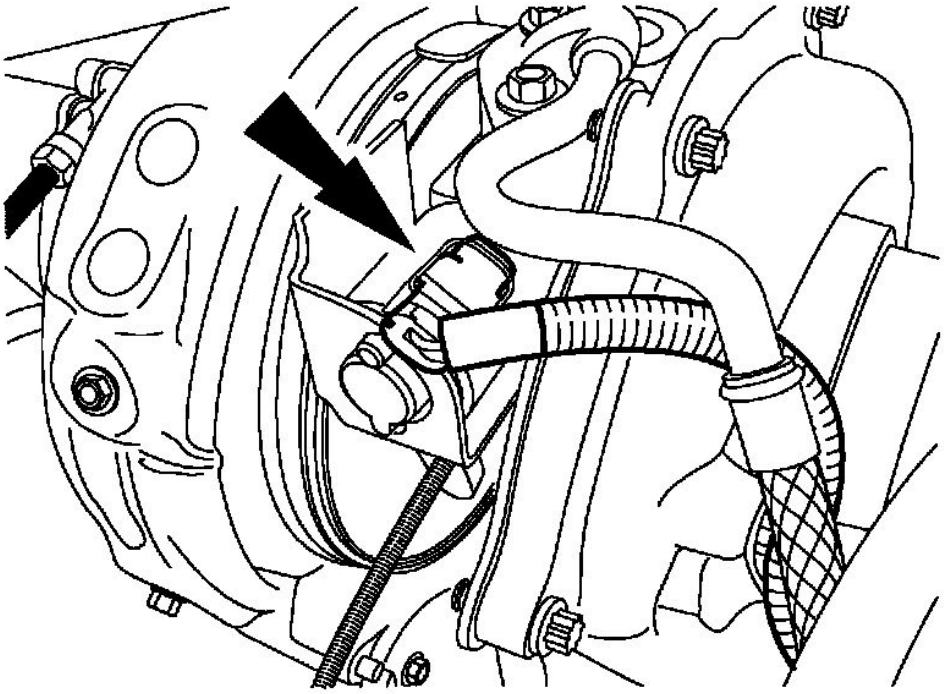


9. Pre-lubricate the oil inlet hole of the turbocharger assembly with clean engine oil and spin the compressor wheel several times to coat the bearing with oil.

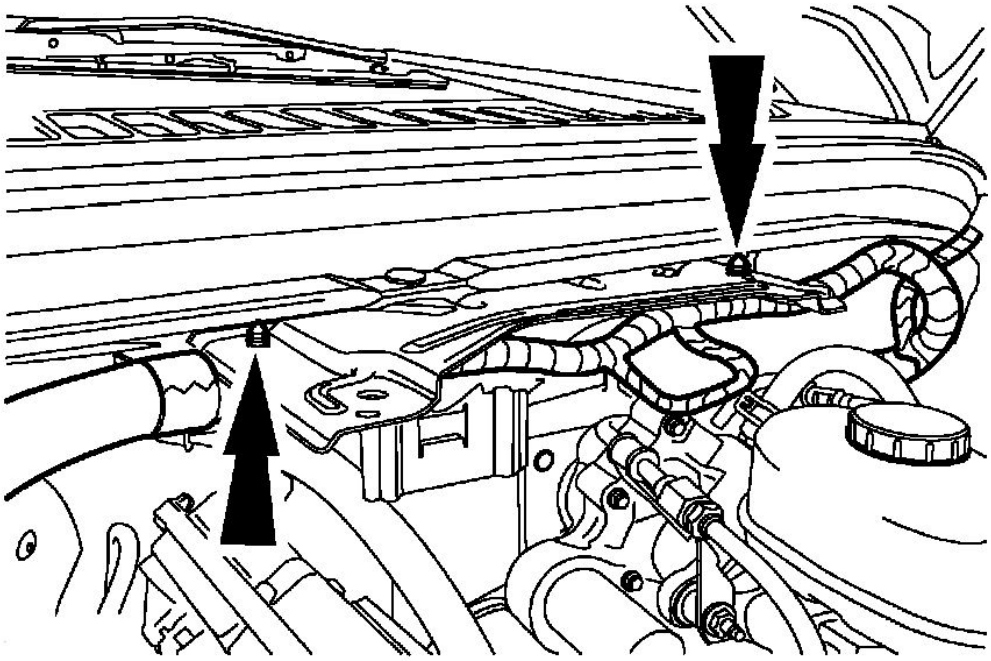
9.1 Install new gasket and position the oil feed tube and install the bolts
IMPORTANT: If you have the old style oil feed line we recommend replacing it with the updated solid feed line Ford Part # 3C3Z-9T516-A. The old flex style feed line is known for damaging turbos.



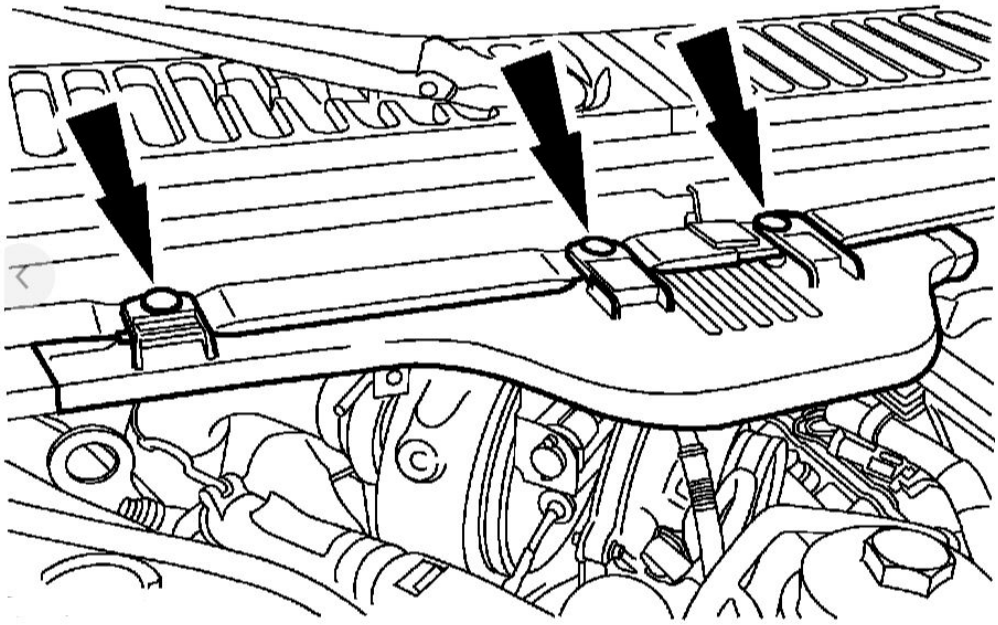
10. Connect the turbocharger variable vane hydraulic control valve electrical connector.



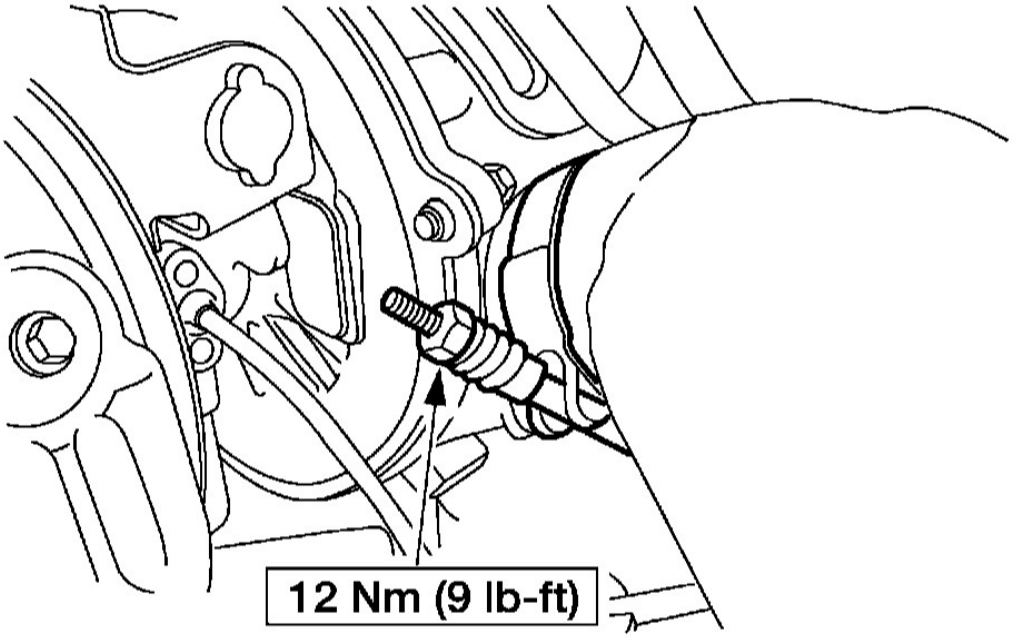
11. Position the wiring harness and connect the push pins.



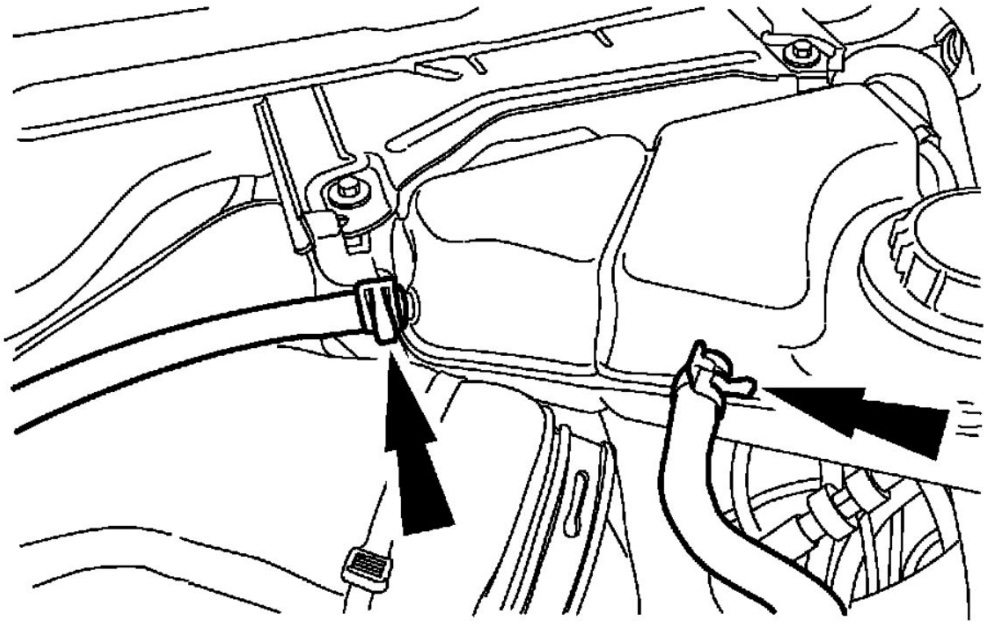
12. Install the push pins.



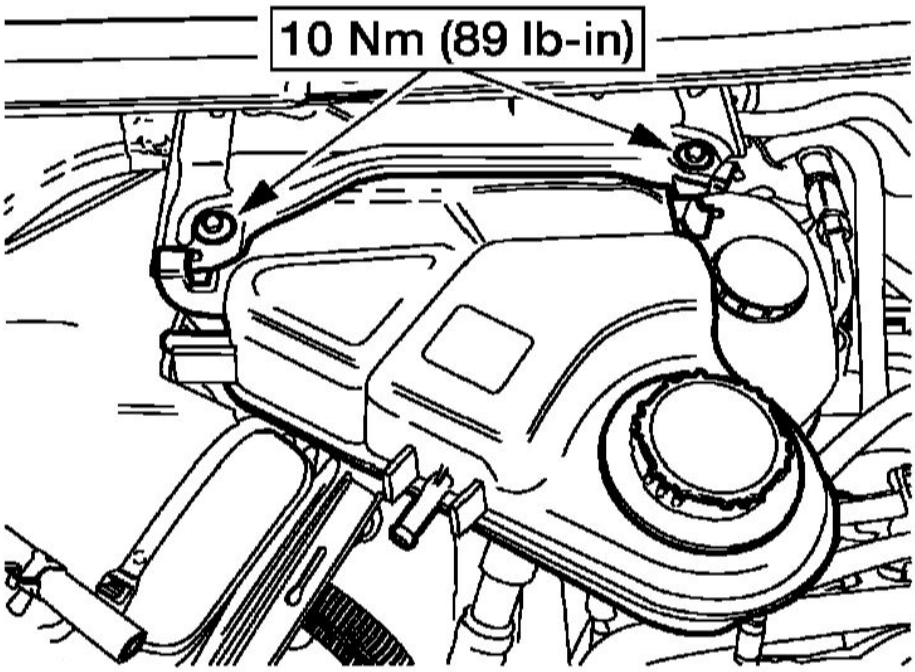
14. If there is any oil residue on charge air boot, clean both connecting ports and the inside surface of the charge air cooler pipe to prevent the pipe from blowing off. Connect the charge air cooler inlet pipe. Tighten clamp to spec.



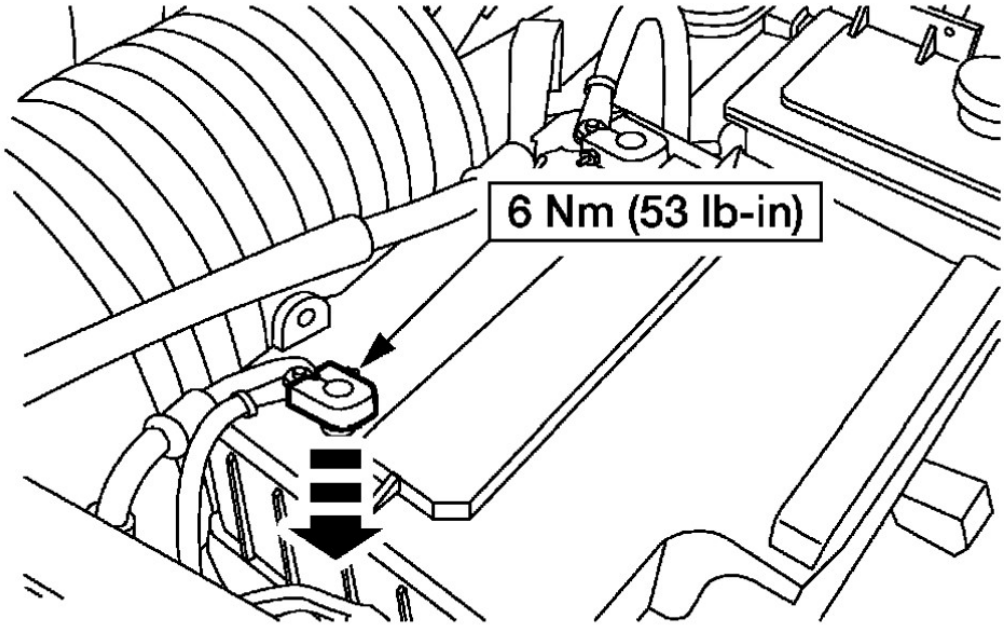
15. Connect hoses to degas bottle.



16. Install bolts and torque to spec. Top off coolant as needed.



17. Reconnect Batteries.



Before Starting the Truck:

-Before starting up ensure that you retrieved all tools and rags.
-Ensure air filter is clean and piping is clean so nothing other than clean air can get sucked into the turbo.

START THE TRUCK, Check and ensure following:

-Ensure that there is no leakage between Turbo and Oil Feed / Drain.
-Ensure that there are no abnormal noises.

Note: If everything check out, there is no further break-in needed.