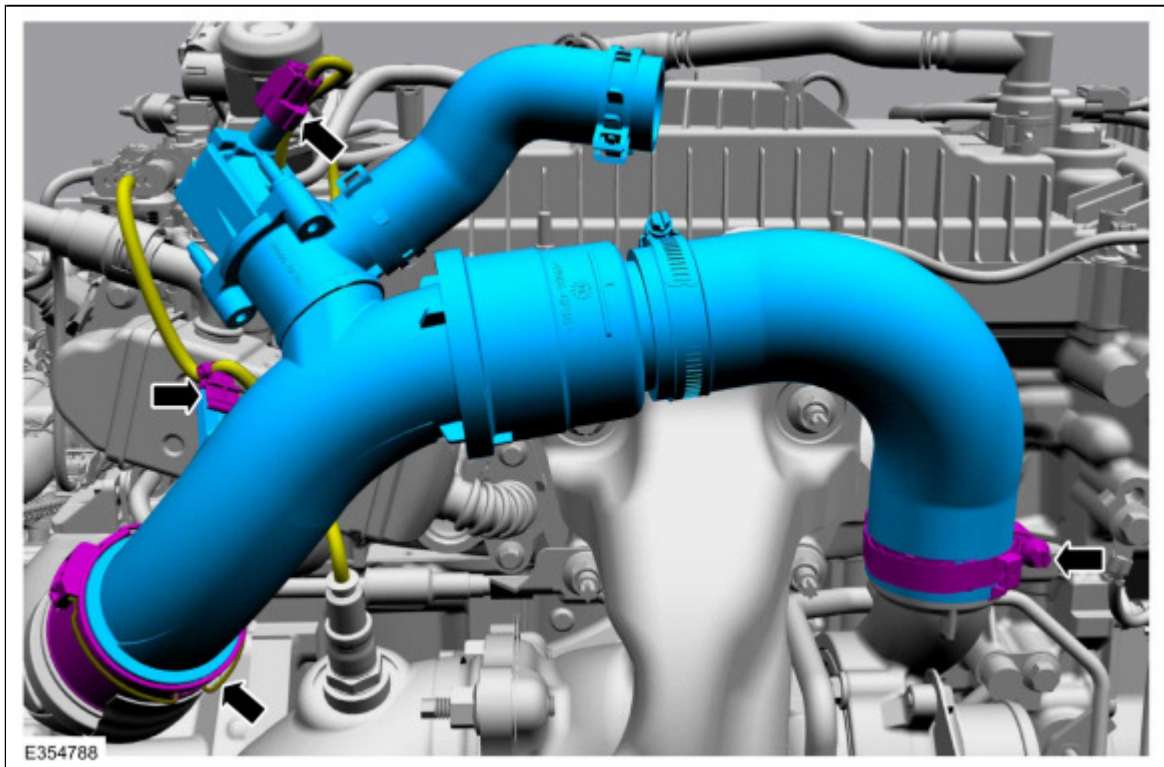


## Wastegate Control Actuator

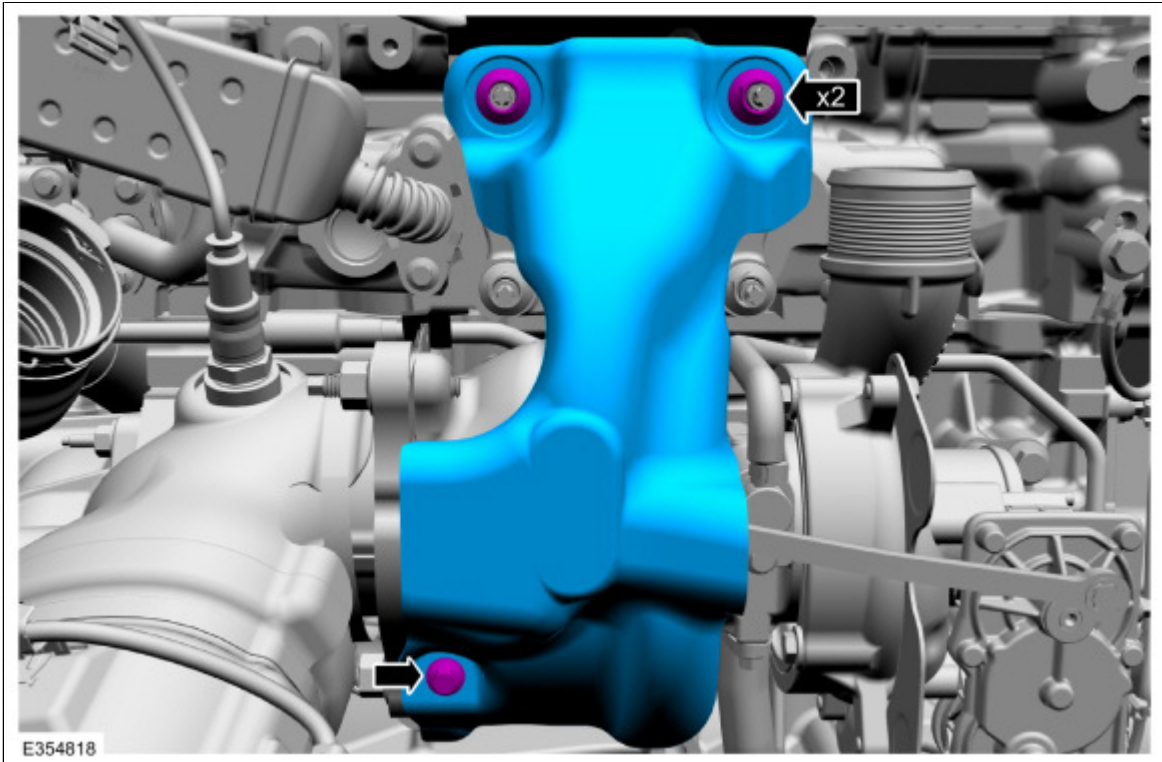
### Removal

**NOTICE:** The turbocharger compressor vanes can be damaged by even the smallest particles. When removing any turbocharger or engine air intake system component, ensure that no debris enters the system. Failure to do so may result in damage to the turbocharger.

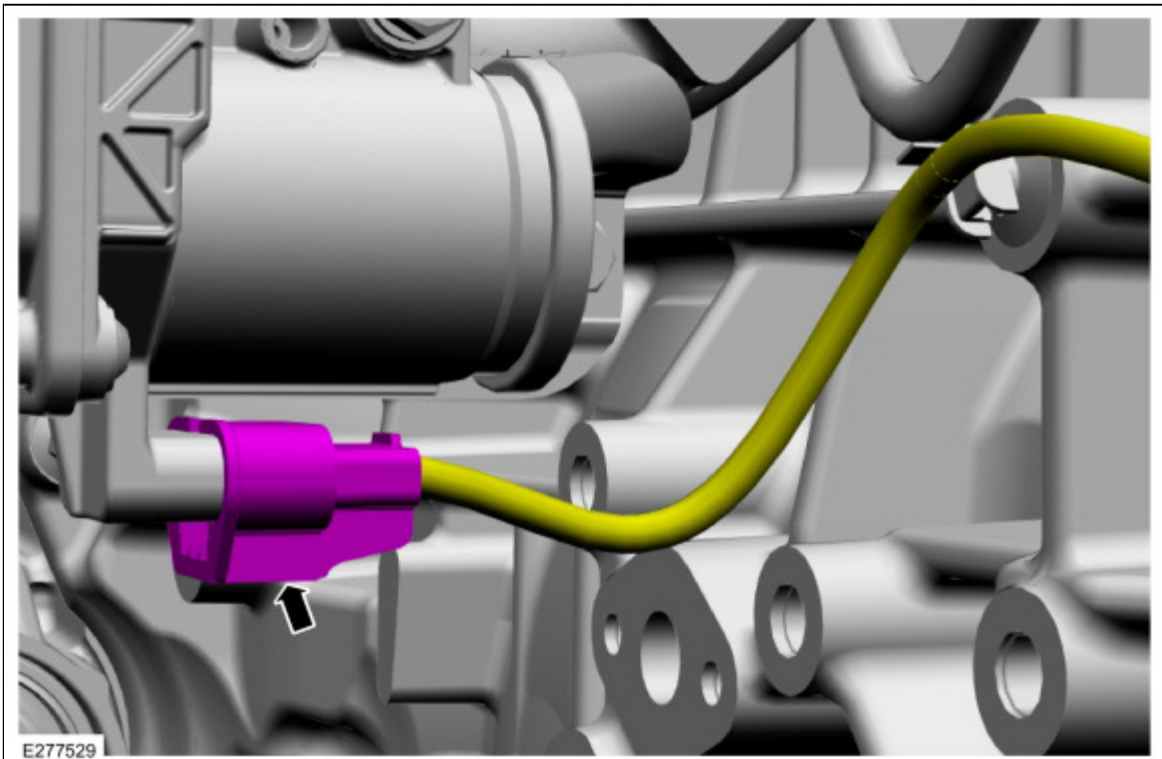
1. Remove the air cleaner outlet pipe.  
Refer to: [Air Cleaner Outlet Pipe - Vehicles With: Vacuum Brake Booster](#) (303-12A Intake Air Distribution and Filtering - 2.0L EcoBoost (177kW/240PS) – MI4, Removal and Installation).
2. Disconnect the turbocharger bypass valve electrical connector, then detach the harness retainer from the pipe. Release the charge air cooler upper inlet pipe retaining clip. Loosen the charge air cooler inlet pipe clamp, then remove the charge air cooler inlet pipe.



3. Remove the nuts and the bolt, then remove the heat shield.

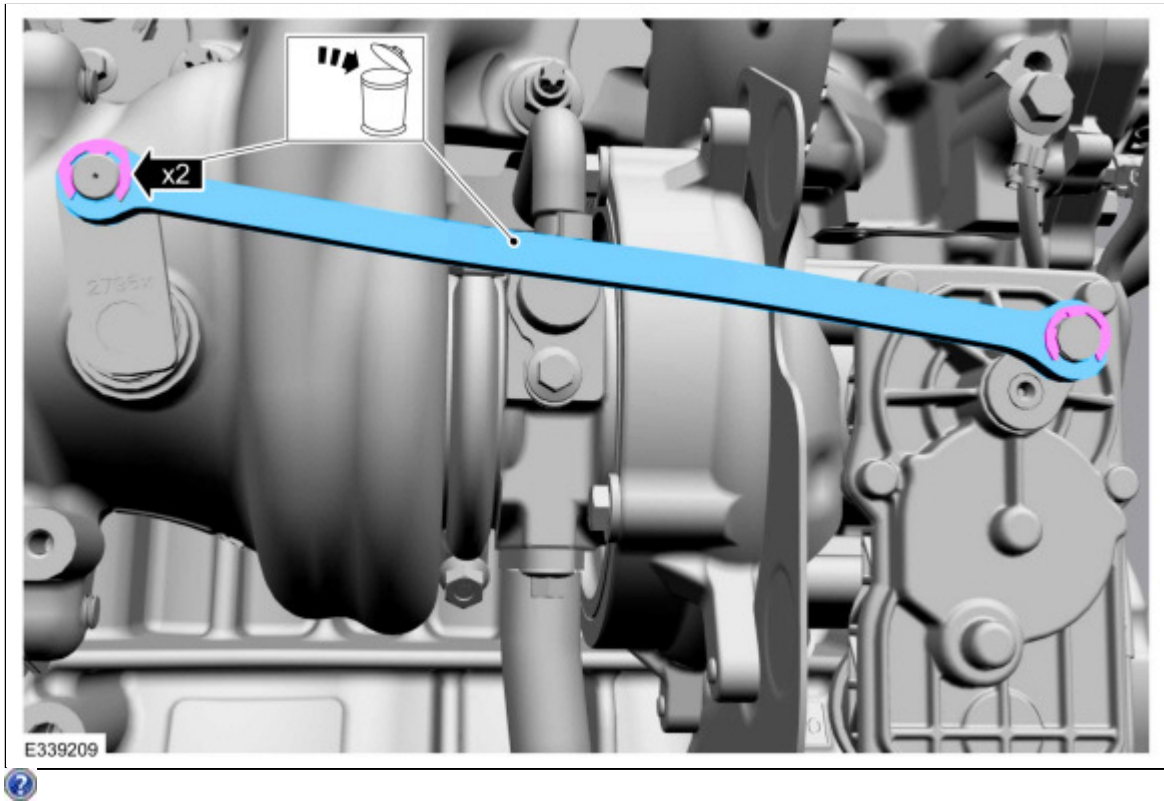


4. Disconnect the wastegate control actuator electrical connector.

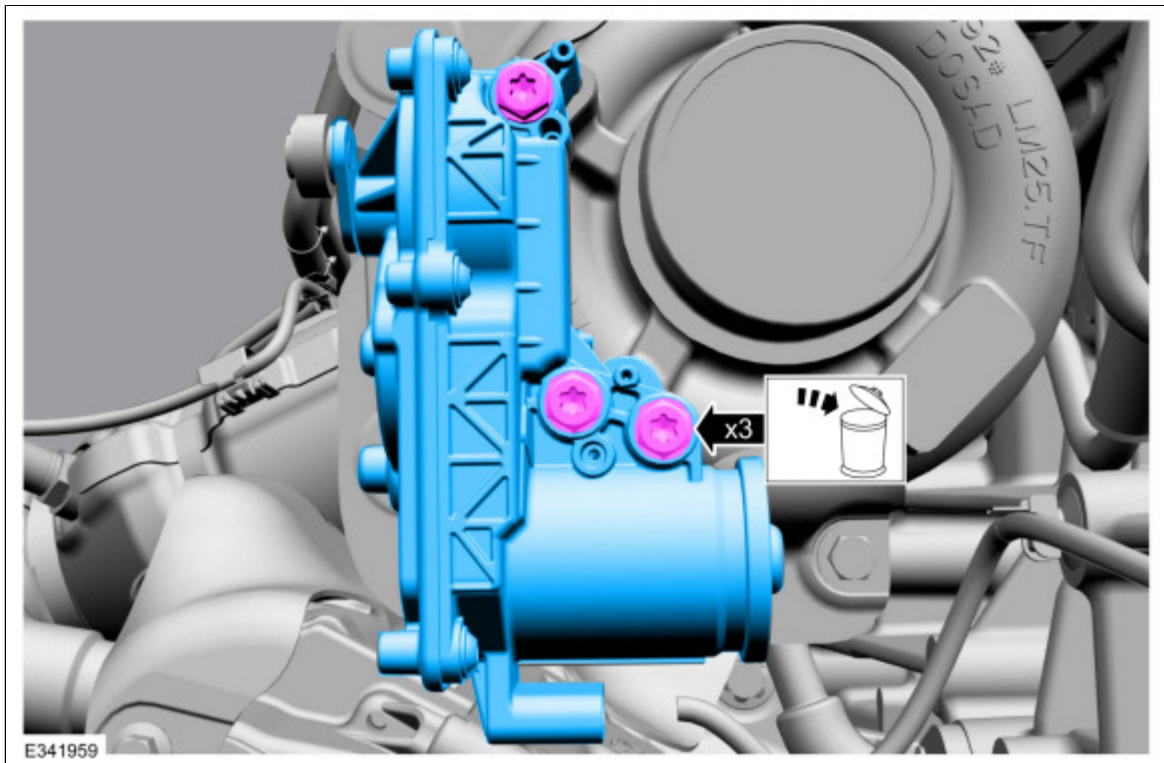


5. Remove and discard the wastegate control actuator linkage e-clips, then remove and discard the

linkage.



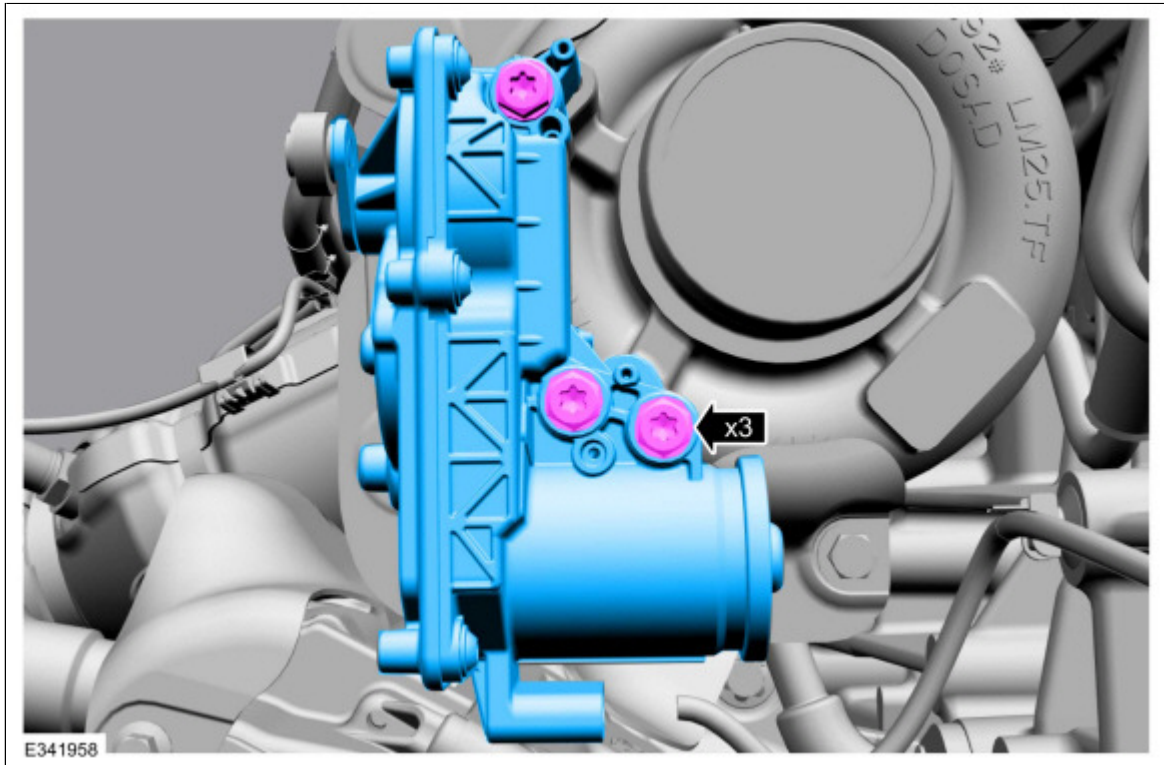
6. Remove and discard the wastegate control actuator bolts, then remove the wastegate control actuator.



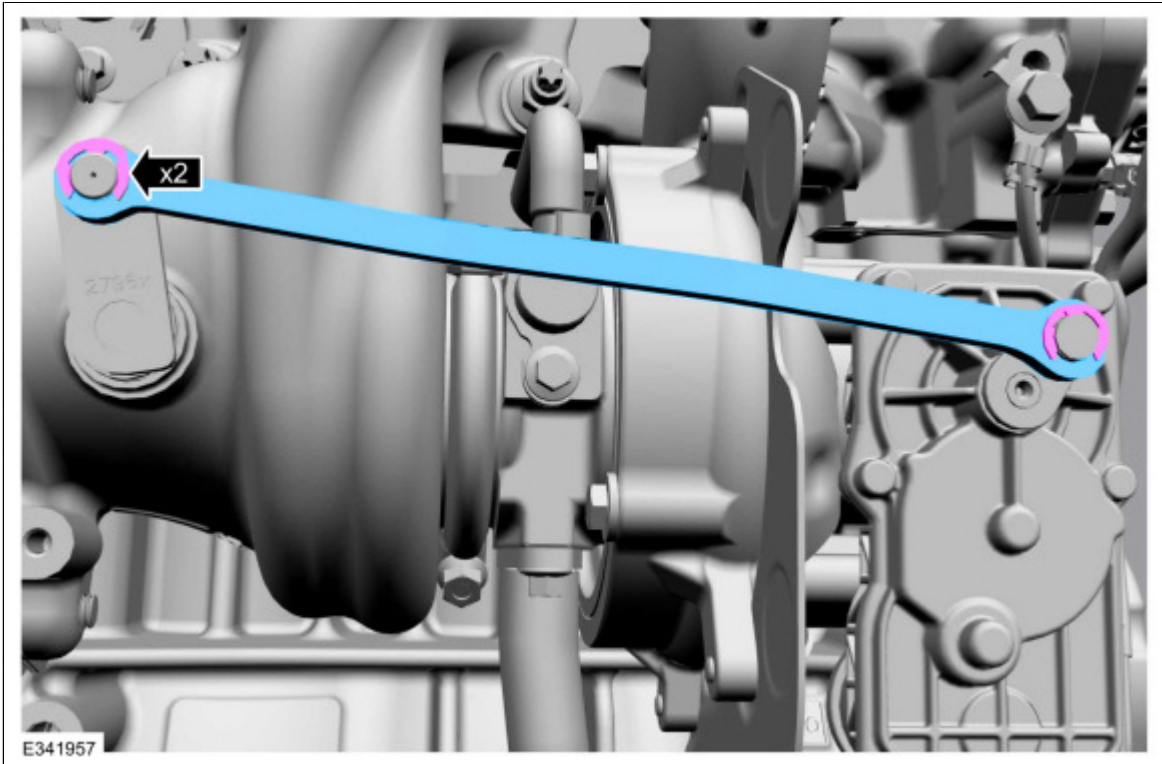


## Installation

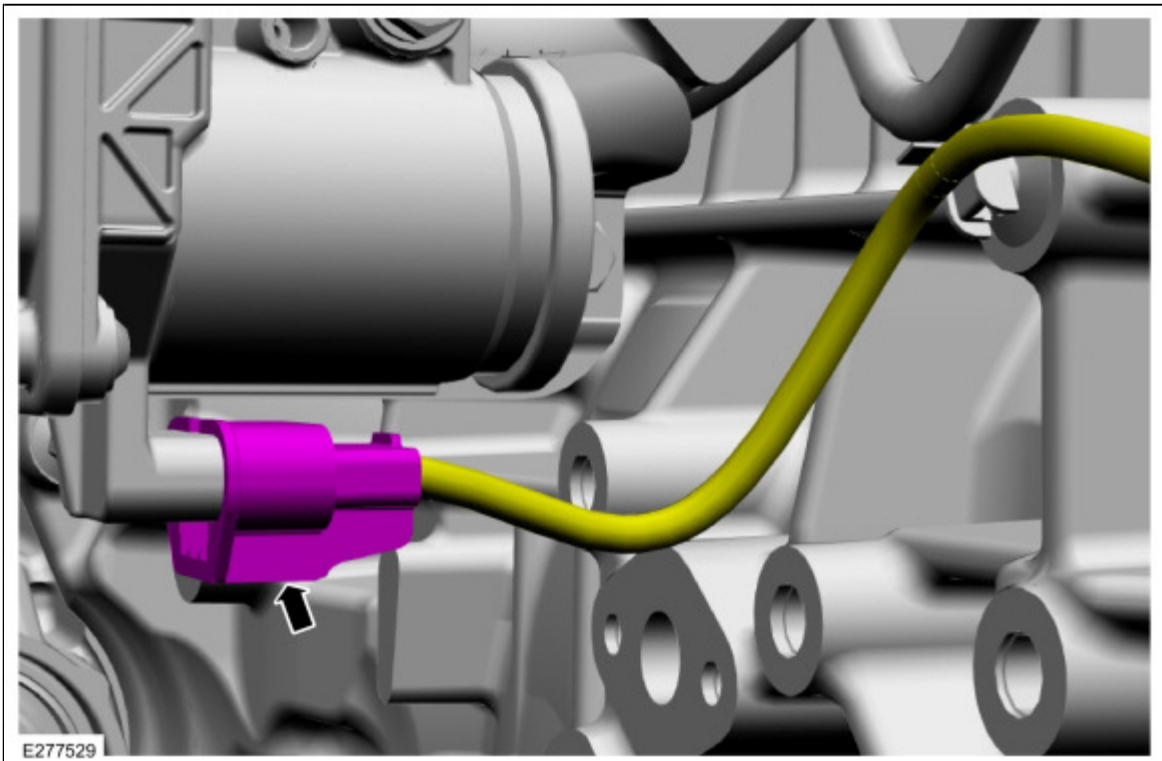
1. Install the wastegate control actuator, then install and tighten the new bolts.  
*Torque* : 62 lb.in (7 Nm)



2. Install the new wastegate control actuator linkage, then install the new e-clips.



3. Connect the wastegate control actuator electrical connector.



4. Install the heat shield, then install and tighten the nuts and the bolt.

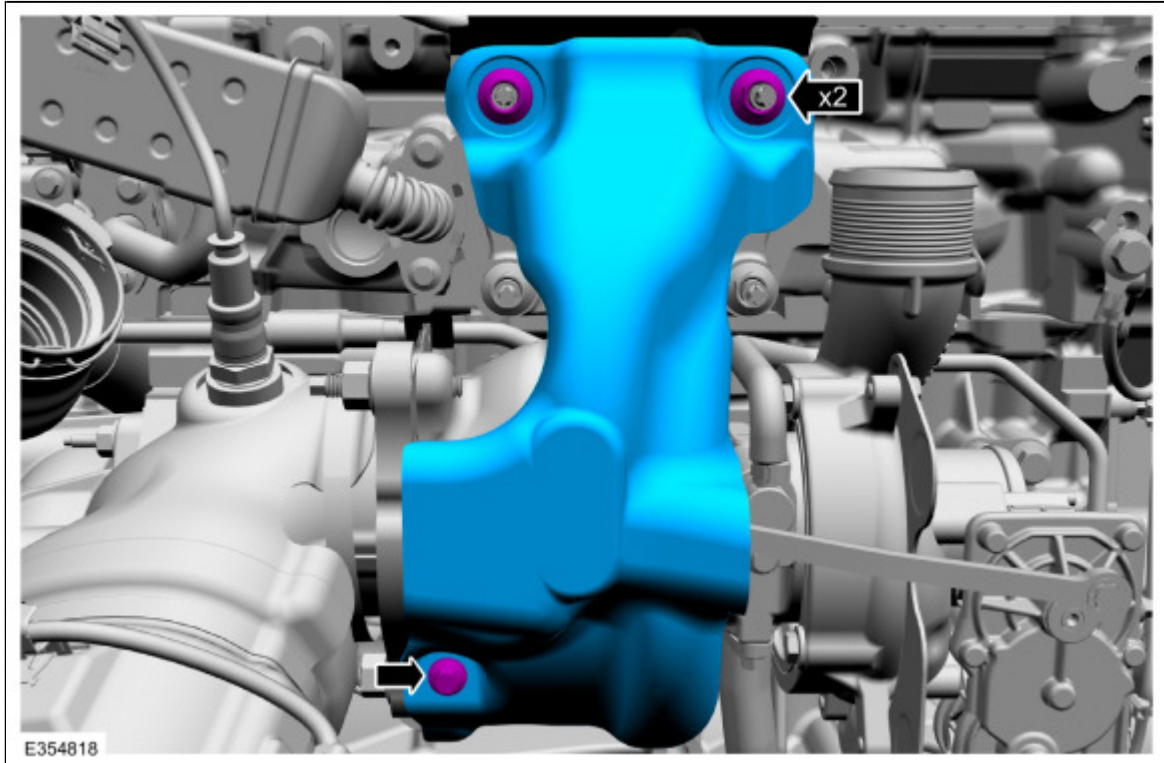
**Torque :**

Stage 1: Tighten the nuts to : 168 lb.in (19 Nm)

Stage 2: Tighten the nuts to : 39 lb.ft (53 Nm)

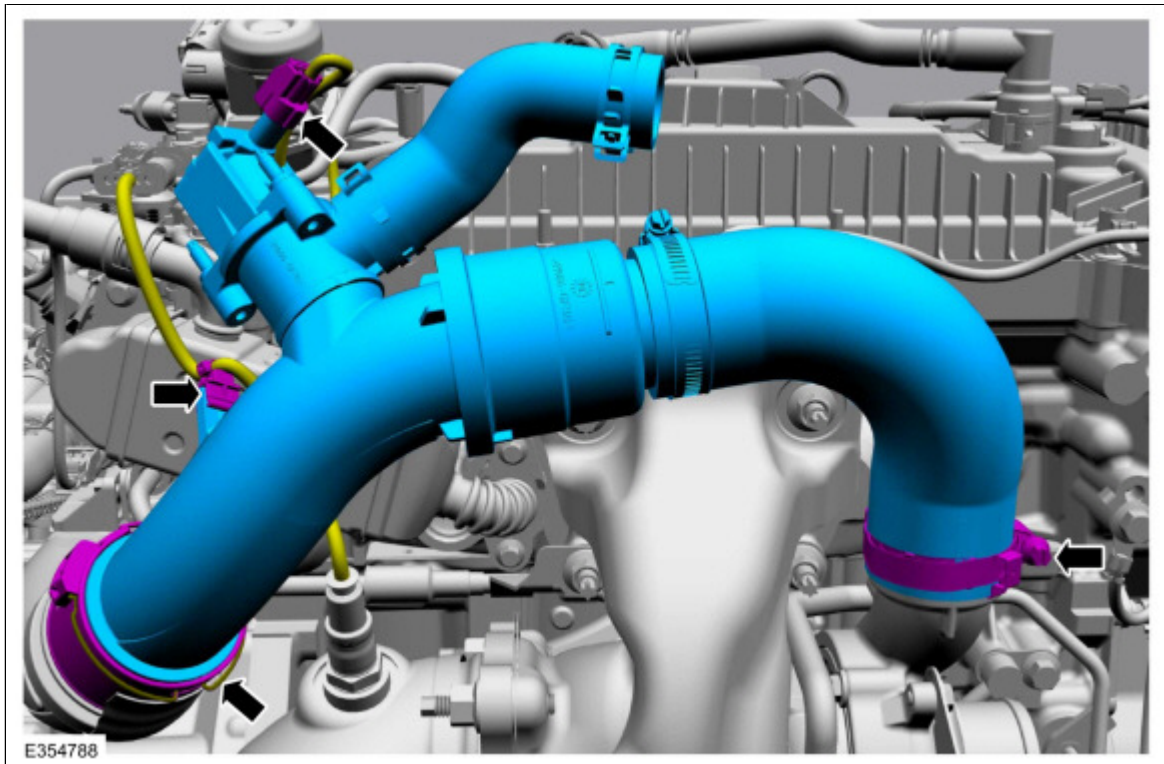
Stage 3: Re-tighten the nuts to : 39 lb.ft (53 Nm)

Stage 4: Tighten the bolt to : 97 lb.in (11 Nm)



5. Install the charge air cooler inlet pipe, then tighten the clamp. Engage the charge air cooler intake pipe retaining clip. Attach the harness retainer, then connect the turbocharger bypass valve electrical connector.

**Torque : 44 lb.in (5 Nm)**



6. Install the air cleaner outlet pipe.  
Refer to: [Air Cleaner Outlet Pipe - Vehicles With: Vacuum Brake Booster](#) (303-12A Intake Air Distribution and Filtering - 2.0L EcoBoost (177kW/240PS) – MI4, Removal and Installation).
7. **NOTICE: Substantial opening and closing torque is applied by this system. To prevent injury, be careful to keep fingers away from wastegate mechanism when actuated. Failure to follow these instructions may result in personal injury.**

With the KOEO, using a diagnostic scan tool, clear the PCM DTC's and reset the KAM.