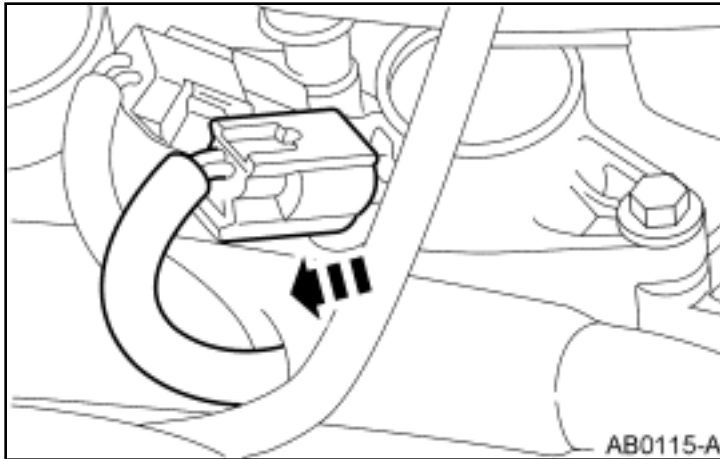


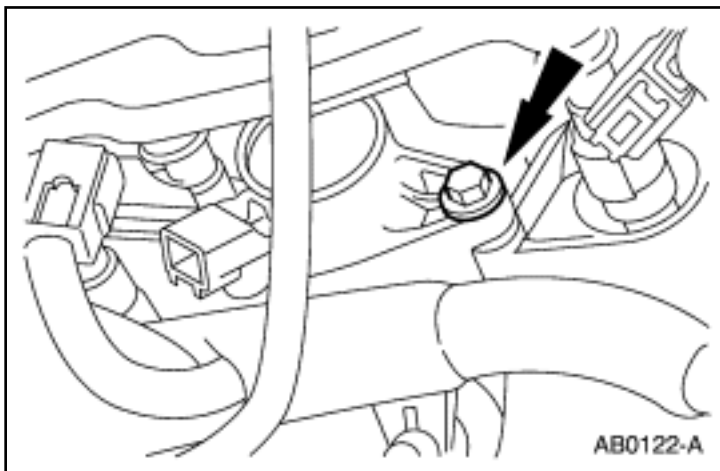
## Ignition Coil

### Removal

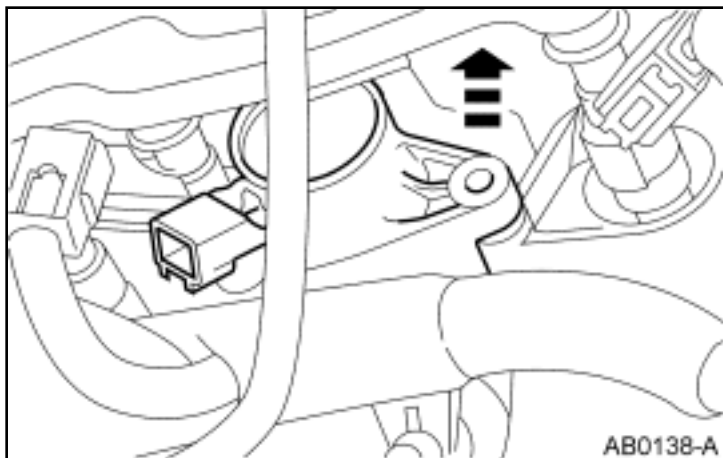
1. Remove the air cleaner outlet tube (6B659). For additional information, refer to [Section 303-12](#).
2. Disconnect the electrical connector from the ignition coil (12029).



3. Remove the bolt.

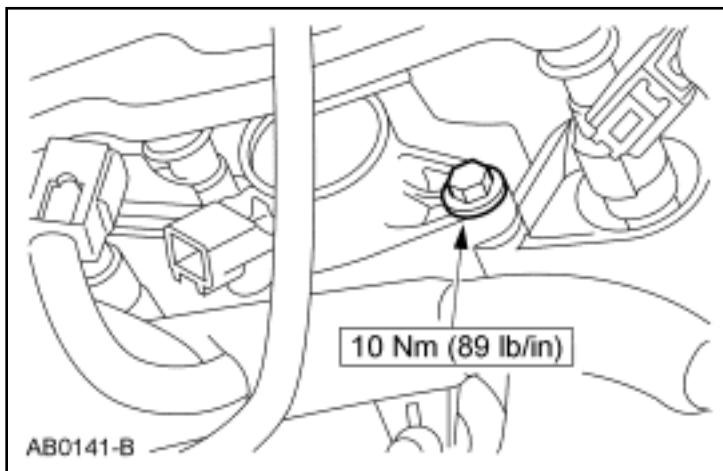


4. Remove the ignition coil.



## Installation

1. To install, reverse the removal procedure.

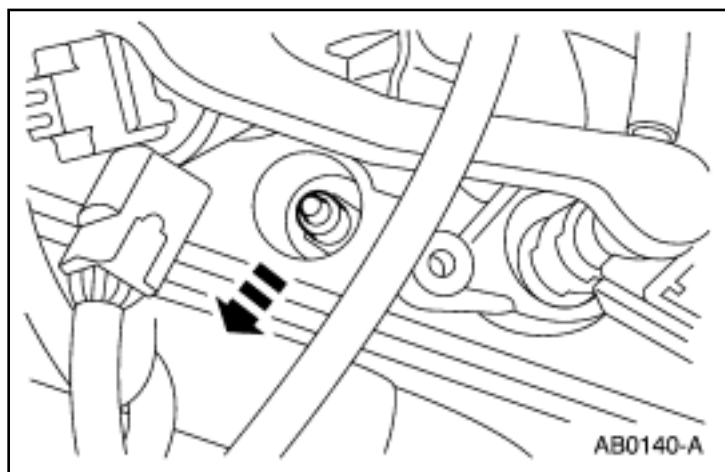


## Spark Plug

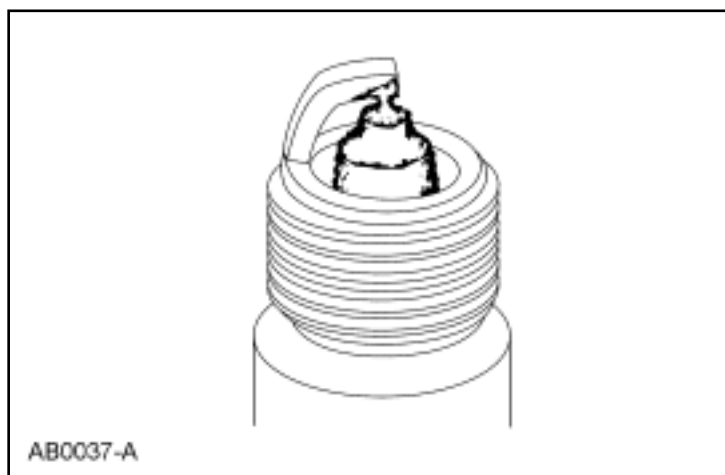
### Removal

1. Remove the ignition coil. For additional information, refer to [Ignition Coil](#) in this section.
2. **NOTE:** Use compressed air to remove any debris from the spark plug well before removing the spark plugs (12405).

Remove the spark plugs.



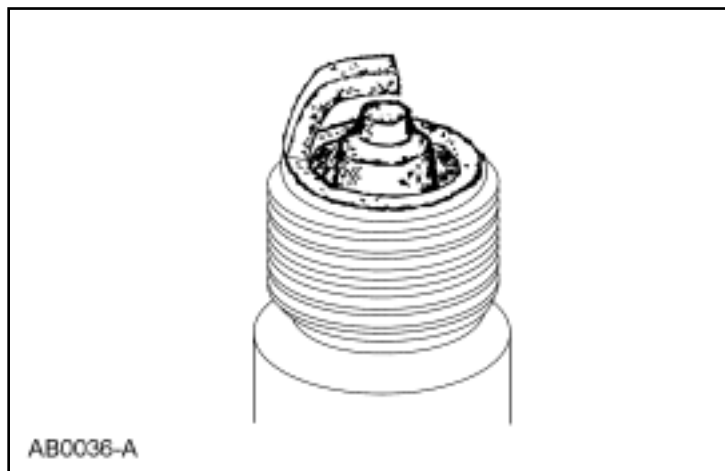
3. Inspect the spark plugs for a gap bridged.
  - Check for deposit build-up closing the gap between electrodes. Deposits are caused by oil or carbon fouling.
  - Clean the spark plug.



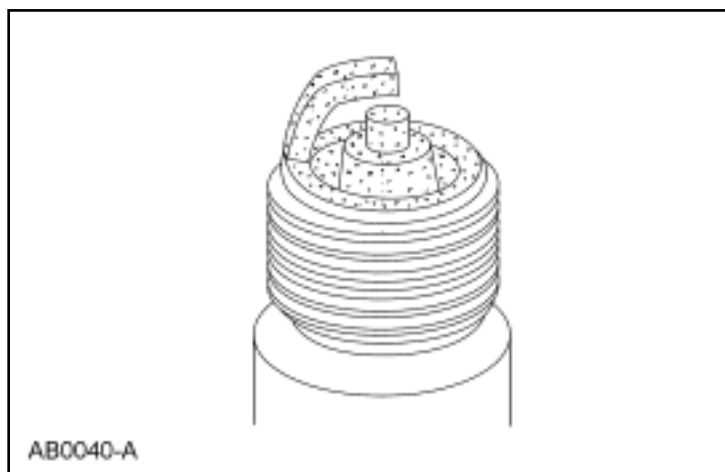
4. Inspect for oil fouling.
  - Check for wet, black deposits on the insulator shell bore electrodes, caused by

excessive oil entering the combustion chamber through worn rings and pistons, excessive valve-to-guide clearance or worn or loose bearings.

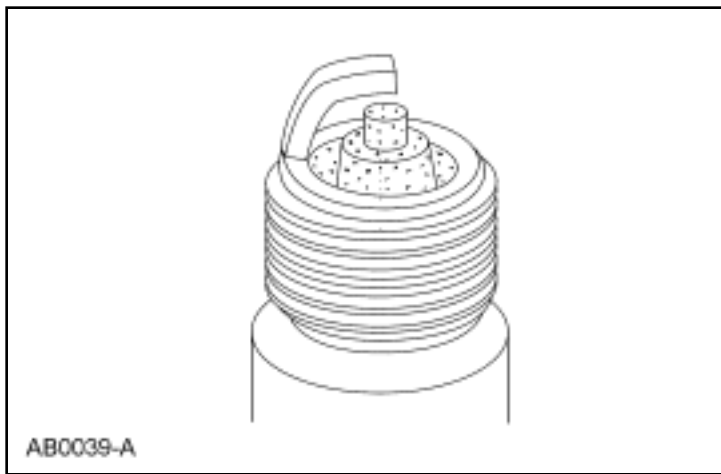
- Correct the oil leak concern.
- Install a new spark plug.



5. Inspect for carbon fouling, identified by black, dry, fluffy carbon deposits on insulator tips, exposed shell surfaces and electrodes. This is caused by a spark plug with an incorrect heat range, dirty air cleaner, too rich a fuel mixture or excessive idling.
  - Clean the spark plug.

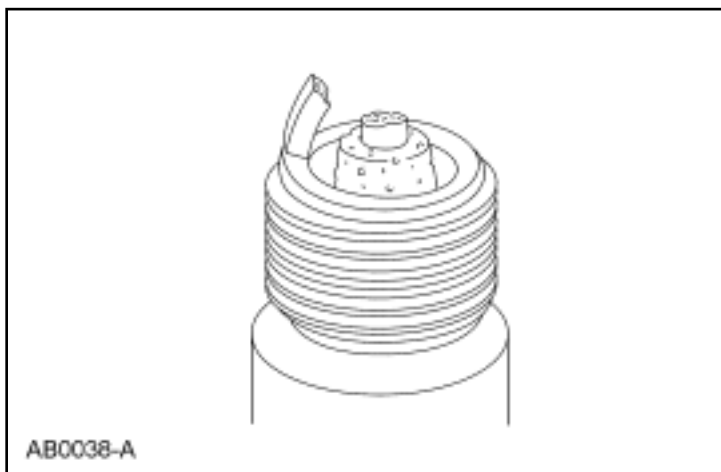


6. Inspect for normal burning.
  - Check for light tan or gray deposits on the firing tip.

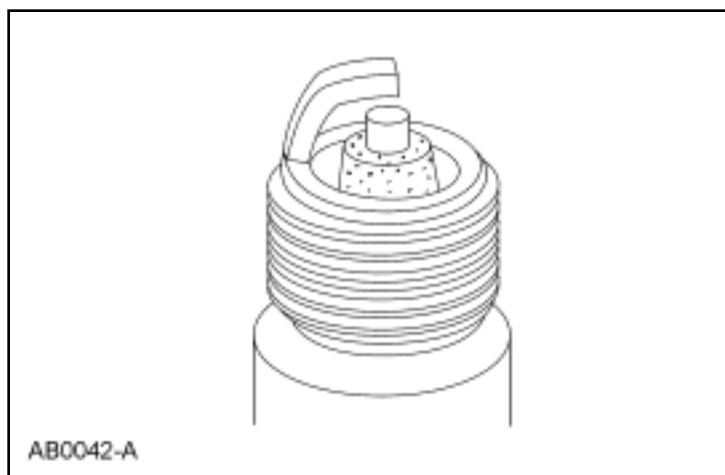


7. Inspect for pre-ignition,

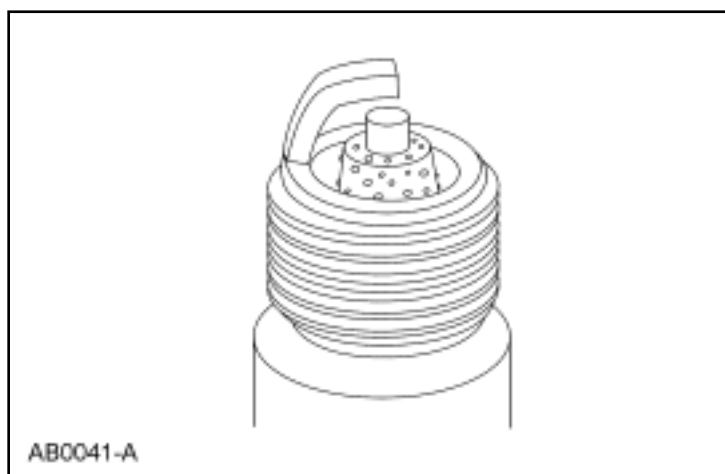
- identified by melted electrodes and possibly a damaged insulator. Metallic deposits on the insulator indicate engine damage, which may be caused by incorrect ignition timing, wrong type of fuel or the installation of a heli-coil insert in place of the spark plug threads.
- Install a new spark plug.



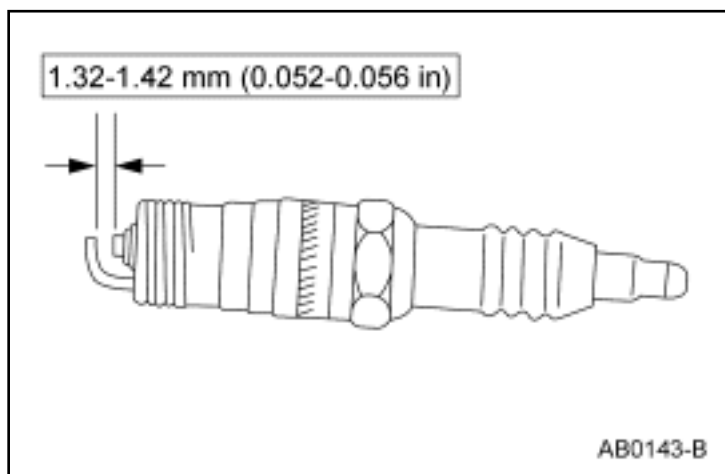
8. Inspect for overheating, identified by a white or light gray insulator with small black or gray-brown spots with bluish-burnt appearance of electrodes. This can be caused by engine overheating, the wrong type of fuel, loose spark plugs, spark plugs with an incorrect heat range, low fuel pump pressure or incorrect ignition timing.
- Install a new spark plug.



9. Inspect for fused spot deposits, identified by melted or spotty deposits resembling bubbles or blisters. These are caused by sudden acceleration.
  - Clean the spark plug.



10. Adjust the spark plug gap as required.



## Installation

1. To install, reverse the removal procedure.

