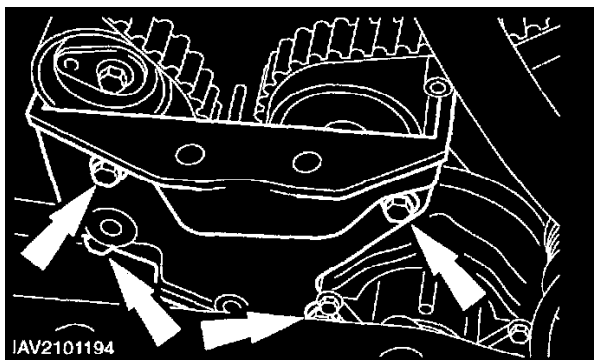


## Cylinder Head Assembly: Service and Repair

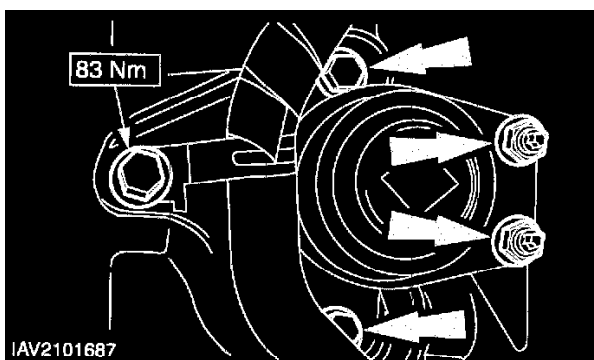
**NOTE:** Ford does not provide camshaft gear timing marks, or information to perform timing belt service without the special tools shown in this procedure.

### REMOVAL

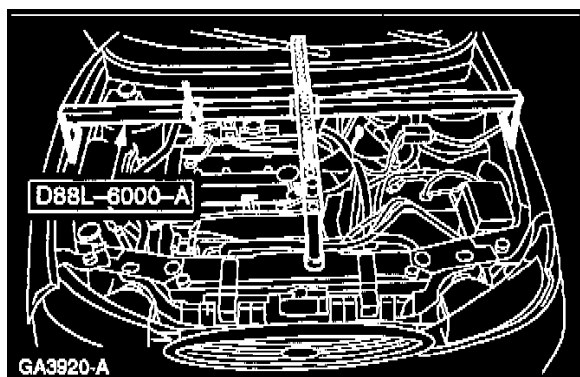
1. Drain the engine cooling system.
2. Remove the intake manifold.
3. Remove the exhaust manifold.
4. Remove the camshafts.



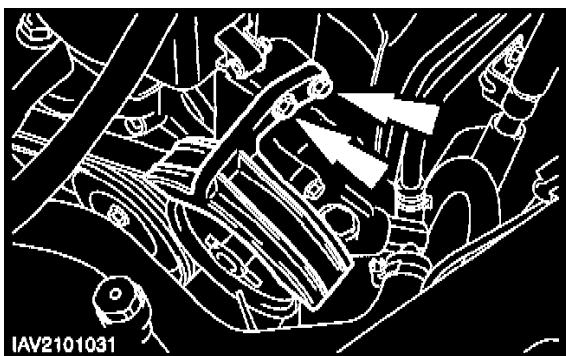
5. Install the center engine front cover.



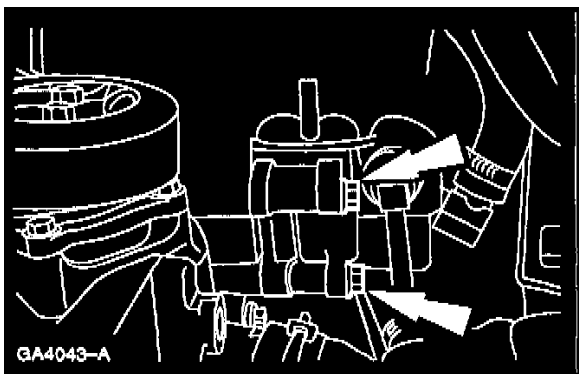
6. Install the front engine support insulator.



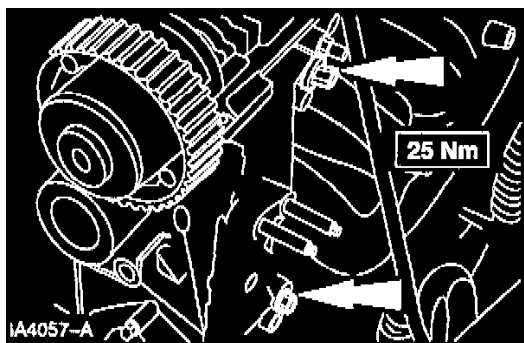
7. Remove the three bar support.



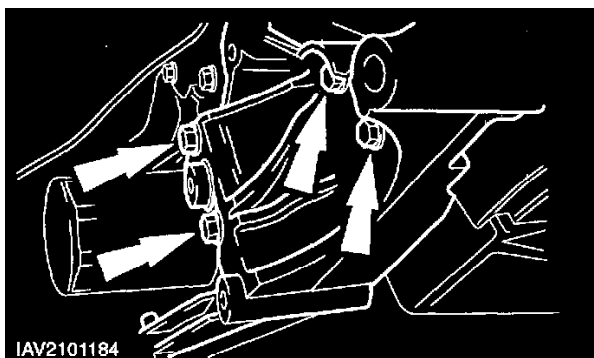
8. Remove the power steering pulley cover.
9. Remove the power steering pump pulley.



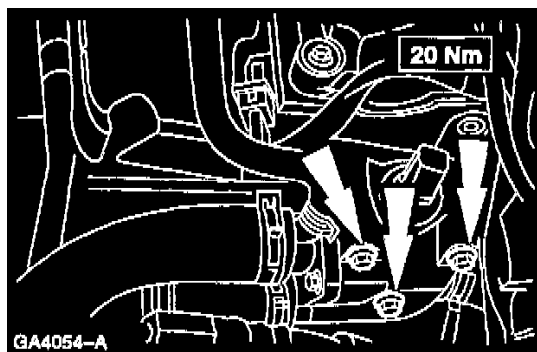
10. Remove the bolts and position the power steering pump out of the way.



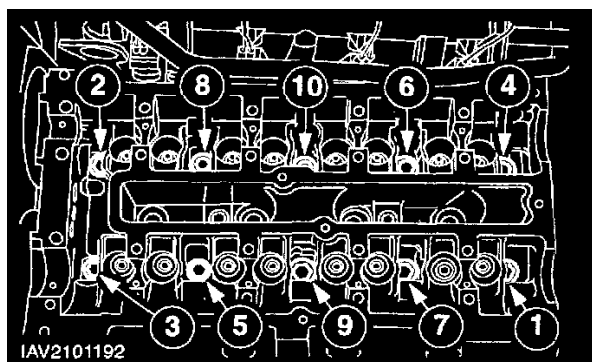
11. Remove the power steering pump bracket.



12. Remove the generator bracket.



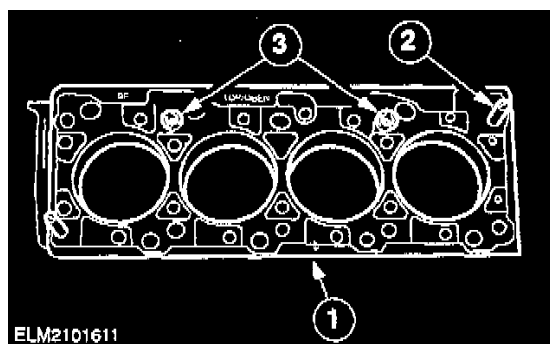
13. Remove the bolts and position the thermostat housing out of the way.



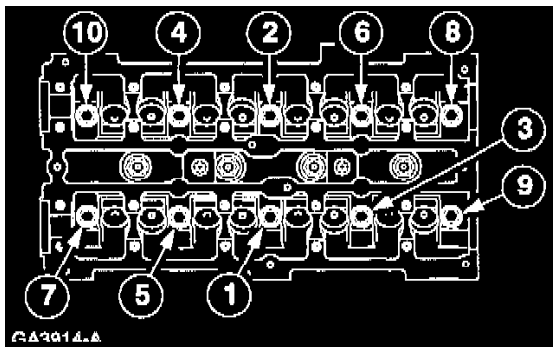
14. Remove the cylinder head.
- Remove the bolts in the indicated sequence.
  - Remove and discard the head gasket.

15. Check the cylinder head for distortion.

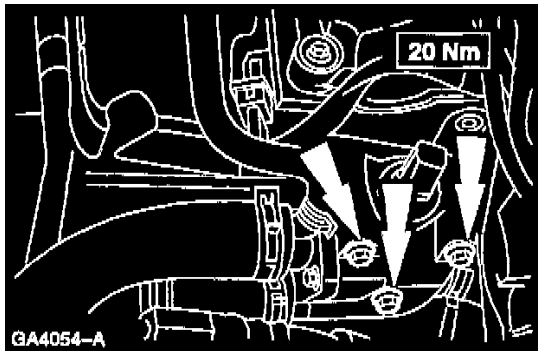
## INSTALLATION



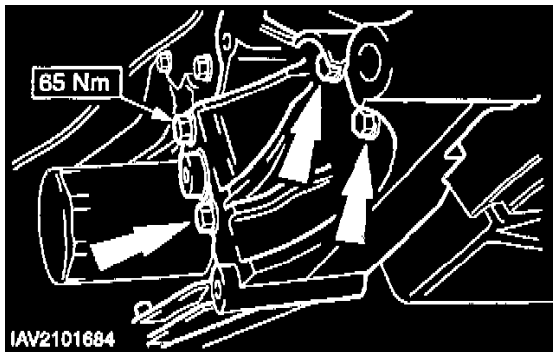
1. Install a new head gasket.
  - 1 Position the new head gasket.
  - 2 Install the guide pins.
  - 3 Install the guide sleeves.
2. Install the cylinder head.



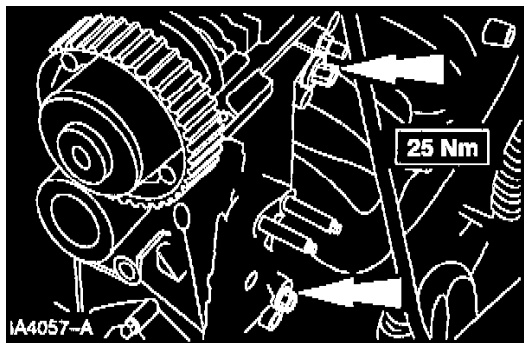
3. Install the cylinder head bolts.
  - 1 Install new cylinder head bolts.
  - 2 Tighten the cylinder head bolts in three stages in the indicated sequence:
    - Stage one: **25 Nm**
    - Stage two: **45 Nm**
    - Stage three: **105°**



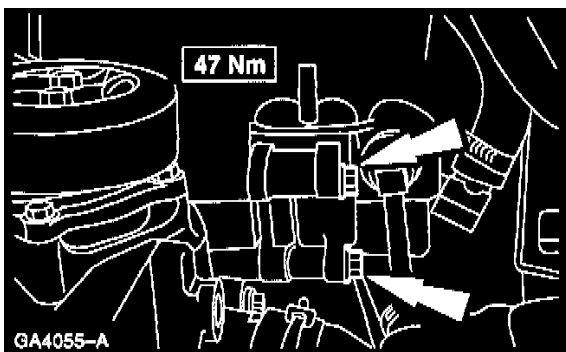
4. Position and install the thermostat housing.



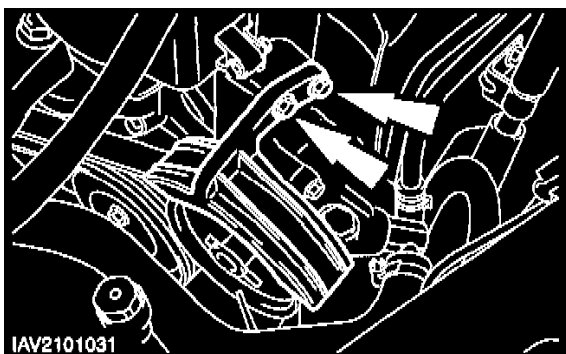
5. Install the generator bracket.



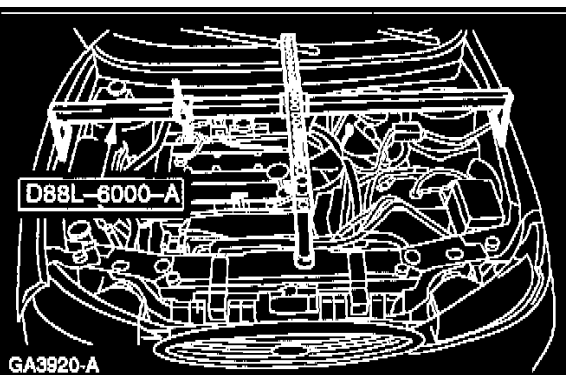
6. Install the power steering pump bracket.



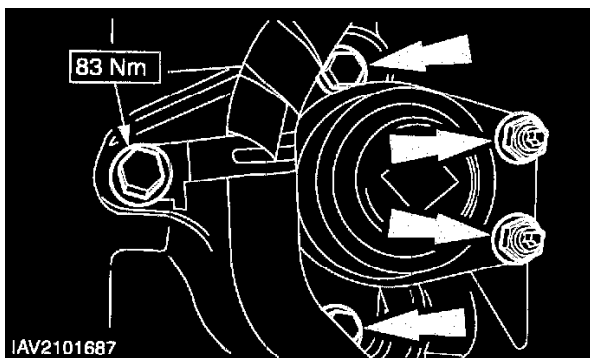
7. Position and install the power steering pump.
8. Install the power steering pump pulley.



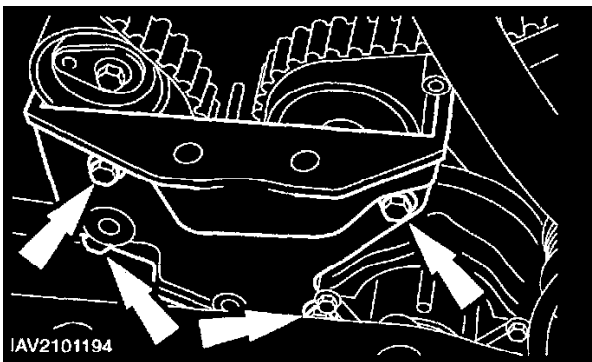
9. Install the power steering pulley cover.



10. Install the three bar support.



11. Remove the front engine support insulator.



12. Remove the center engine front cover.
13. Install the camshafts.
14. Install the exhaust manifold.
15. Install the intake manifold.
16. Fill the engine cooling system.