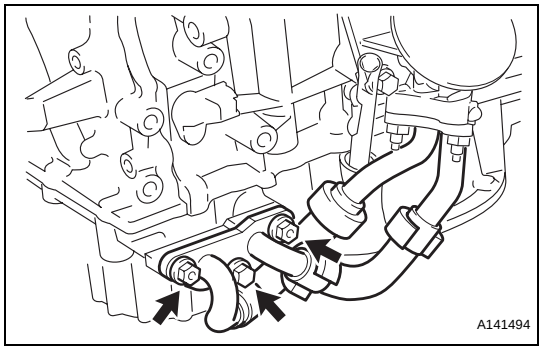
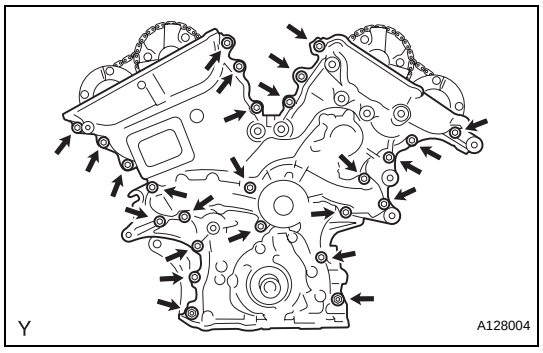
# REMOVAL

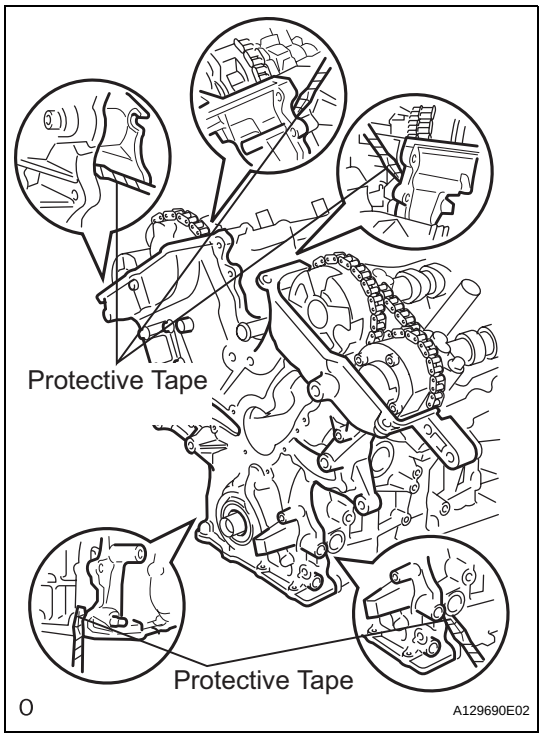
1. **REMOVE ENGINE ASSEMBLY WITH TRANSAXLE**
   HINT:
   See page EM-26
2. **REMOVE OIL LEVEL GAUGE GUIDE SUB-ASSEMBLY (See page EM-39)**
3. **REMOVE NO. 1 OIL PIPE (See page EM-77)**
4. **REMOVE OIL PIPE (See page EM-77)**
5. **REMOVE CRANKSHAFT PULLEY (See page EM-79)**
6. **SEPARATE OIL COOLER PIPE**
   (a) Remove the bolt and 2 nuts, and disconnect the oil cooler pipe from the oil pan sub-assembly.
   (b) Remove the gasket from the oil pan sub-assembly.



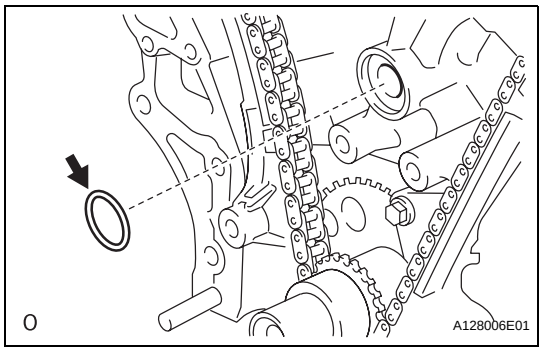

7. **REMOVE WATER INLET HOUSING (See page CO-12)**
8. **REMOVE CYLINDER HEAD COVER SUB-ASSEMBLY (for Bank 1) (See page EM-82)**
9. **REMOVE CYLINDER HEAD COVER SUB-ASSEMBLY (for Bank 2) (See page EM-82)**
10. **REMOVE NO. 2 OIL PAN SUB-ASSEMBLY (See page EM-82)**
11. **REMOVE OIL STRAINER SUB-ASSEMBLY (See page EM-83)**
12. **REMOVE OIL PAN SUB-ASSEMBLY (See page EM-83)**
13. **REMOVE TIMING CHAIN COVER SUB-ASSEMBLY**
    (a) Remove the 23 bolts and 2 nuts as shown in the illustration.



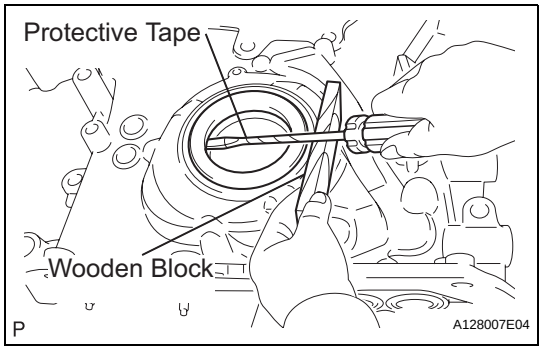

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(b) Remove the timing chain cover by prying between the timing chain cover and cylinder head or cylinder block with a screwdriver.
**NOTICE:**
**Be careful not to damage the contact surfaces of the cylinder head, cylinder block and chain cover.**
HINT:
Tape the screwdriver tip before use.

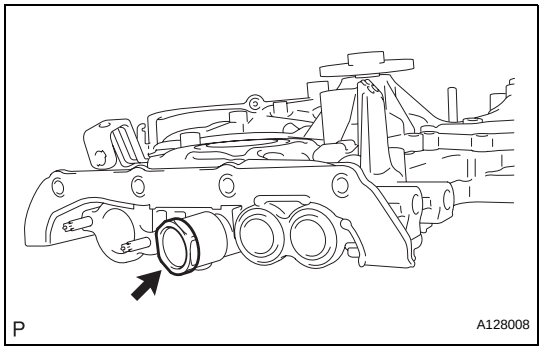



(c) Remove the gasket.




**14. REMOVE TIMING CHAIN CASE OIL SEAL**

(a) Using a screwdriver, pry out the oil seal.
HINT:
Tape the screwdriver tip before use.




# DISASSEMBLY

**1. REMOVE OIL PUMP RELIEF VALVE**

(a) Using a 27 mm socket wrench, remove the relief valve plug.
(b) Remove the valve spring and oil pump relief valve.