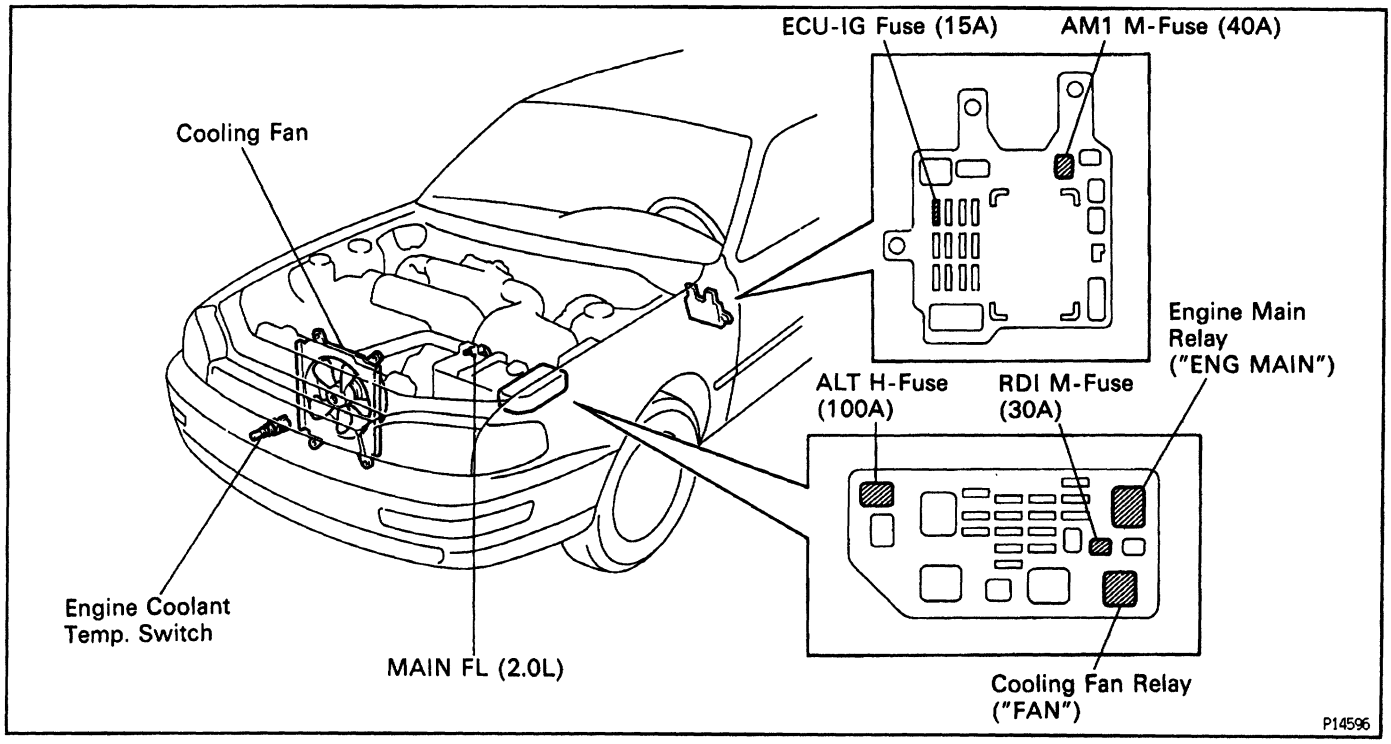
ELECTRIC COOLING FAN

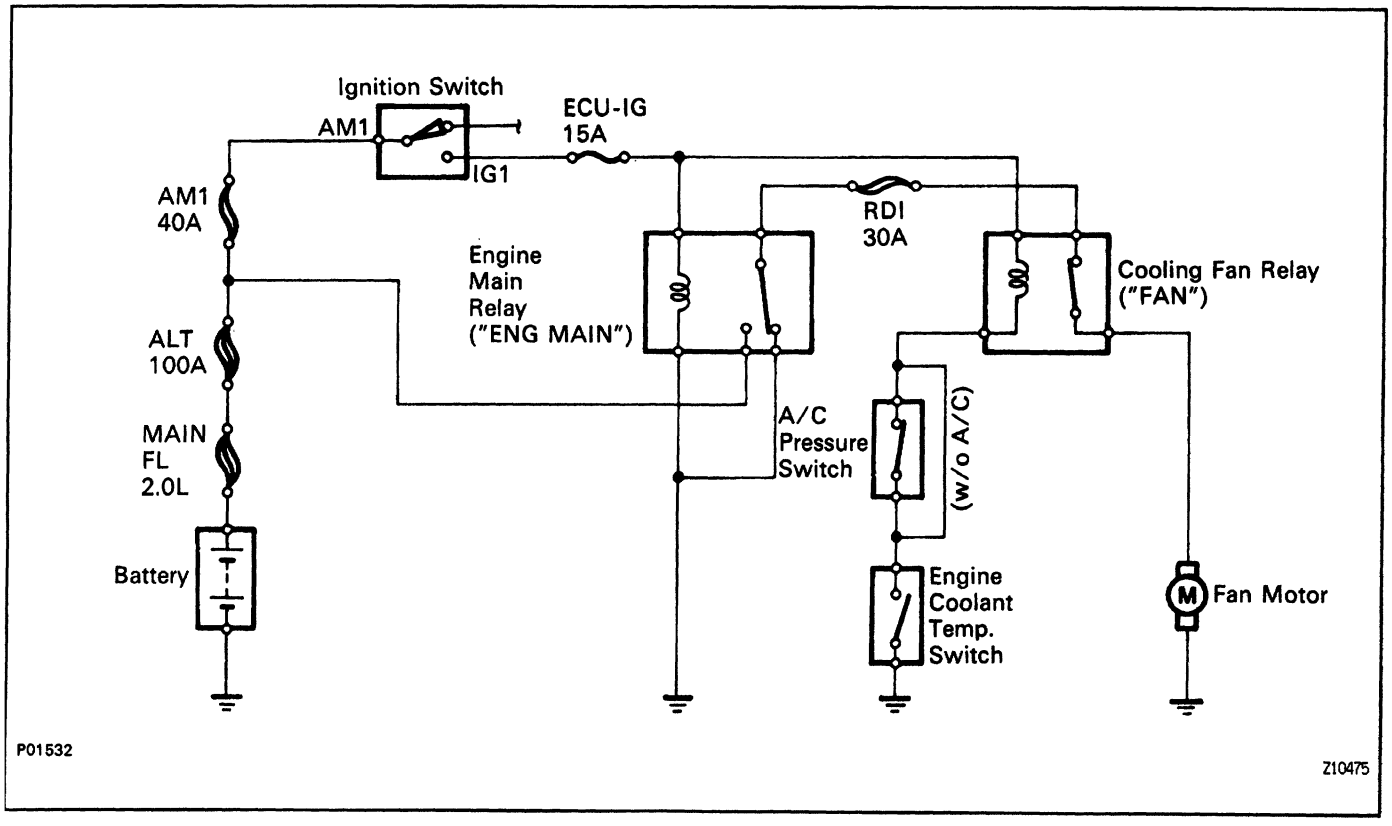
EG07B-01

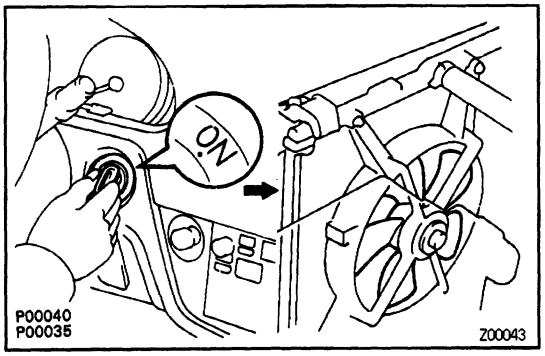
PART LOCATION



EG07C-0P

SYSTEM CIRCUIT





E907D–04

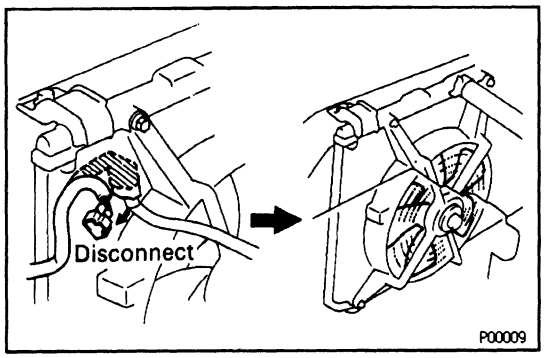
ON–VEHICLE INSPECTION

Low Temperature (Below 83°C (181°F))

1. TURN IGNITION SWITCH "ON"

Check that the cooling fan stops.

If not, check the cooling fan relay and engine coolant temperature switch, and check for a separated connector or severed wire between the cooling fan relay and engine coolant temperature switch.

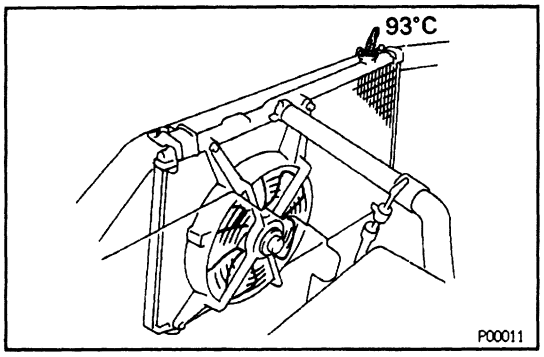


2. DISCONNECT ENGINE COOLANT TEMPERATURE SWITCH CONNECTOR

Check that the cooling fan rotates.

If not, check the cooling fan relay, cooling fan, engine main relay and fuse, and check for a short circuit between the cooling fan relay and engine coolant temperature switch.

3. CONNECT ENGINE COOLANT TEMPERATURE SWITCH CONNECTOR



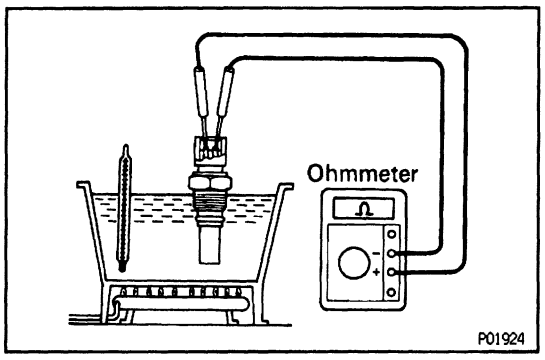
High Temperature (Above 93°C (199°F))

4. START ENGINE

(a) Raise engine coolant temperature to above 93°C (199°F).

(b) Check that the cooling fan rotates.

If not, replace the engine coolant temperature switch.



9–4 –01

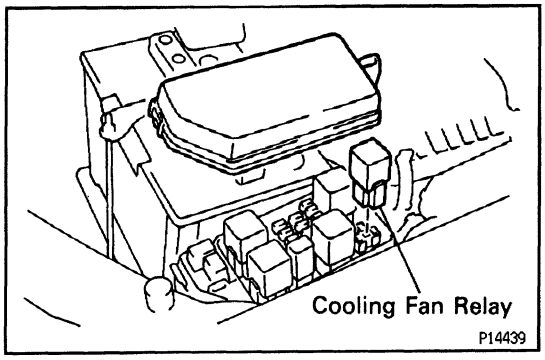
ELECTRIC COOLING FAN COMPONENTS INSPECTION

1. INSPECT ENGINE COOLANT TEMPERATURE SWITCH

(a) Using an ohmmeter, check that there is no continuity between the terminals when the engine coolant temperature is above 93°C (199°F).

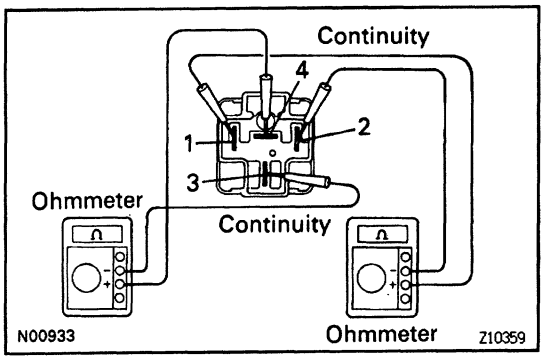
(b) Using an ohmmeter, check that there is continuity between the terminals when the engine coolant temperature is below 83°C (181 °F).

If continuity is not as specified, replace the switch.



2. INSPECT COOLING FAN RELAY (”FAN’)

A. Remove cooling fan relay

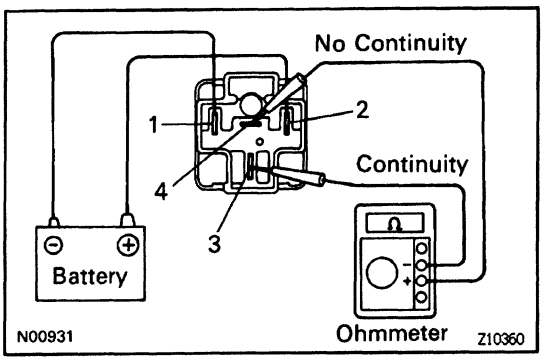


B. Inspect relay continuity

(a) Using an ohmmeter, check that there is continuity between terminals 1 and 2.

(b) Check that there is continuity between terminals 3 and 4.

If continuity is not as specified, replace the relay.



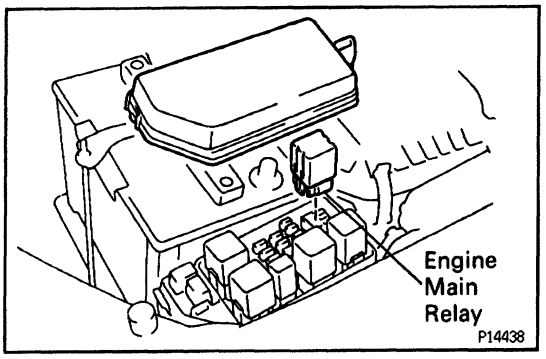
C. Inspect relay operation

(a) Apply battery voltage across terminals 1 and 2.

(b) Using an ohmmeter, check that there is no continuity between terminals 3 and 4.

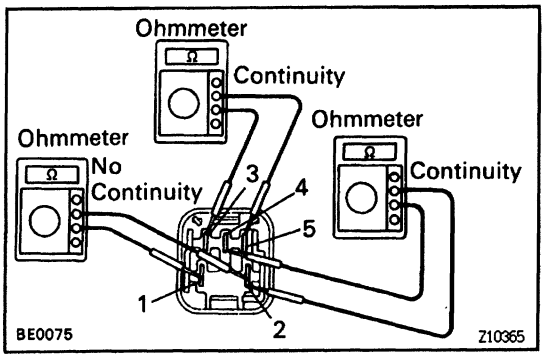
If operation is not as specified, replace the relay.

D. Reinstall cooling fan relay



3. INSPECT ENGINE MAIN RELAY (“ENG MAIN”)

A. Remove engine main relay



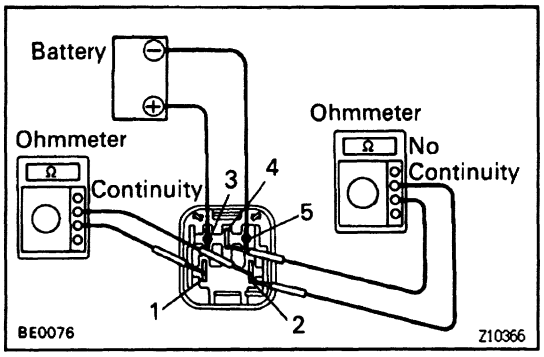
B. Inspect relay continuity

(a) Using an ohmmeter, check that there is continuity between terminals 3 and 5.

(b) Check that there is continuity between terminals 2 and 4.

(c) Check that there is no continuity between terminals 1 and 2.

If continuity is not as specified, replace the relay.



C. Inspect relay operation

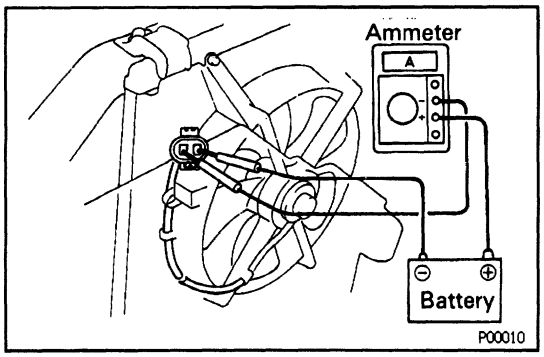
(a) Apply battery voltage across terminals 3 and 5.

(b) Using an ohmmeter, check that there is no continuity between terminals 2 and 4.

(c) Check that there is continuity between terminals 1 and 2.

If operation is not as specified, replace the relay.

D. Reinstall engine main relay



4. INSPECT COOLING FAN

(a) Connect battery and ammeter to the cooling fan connector.

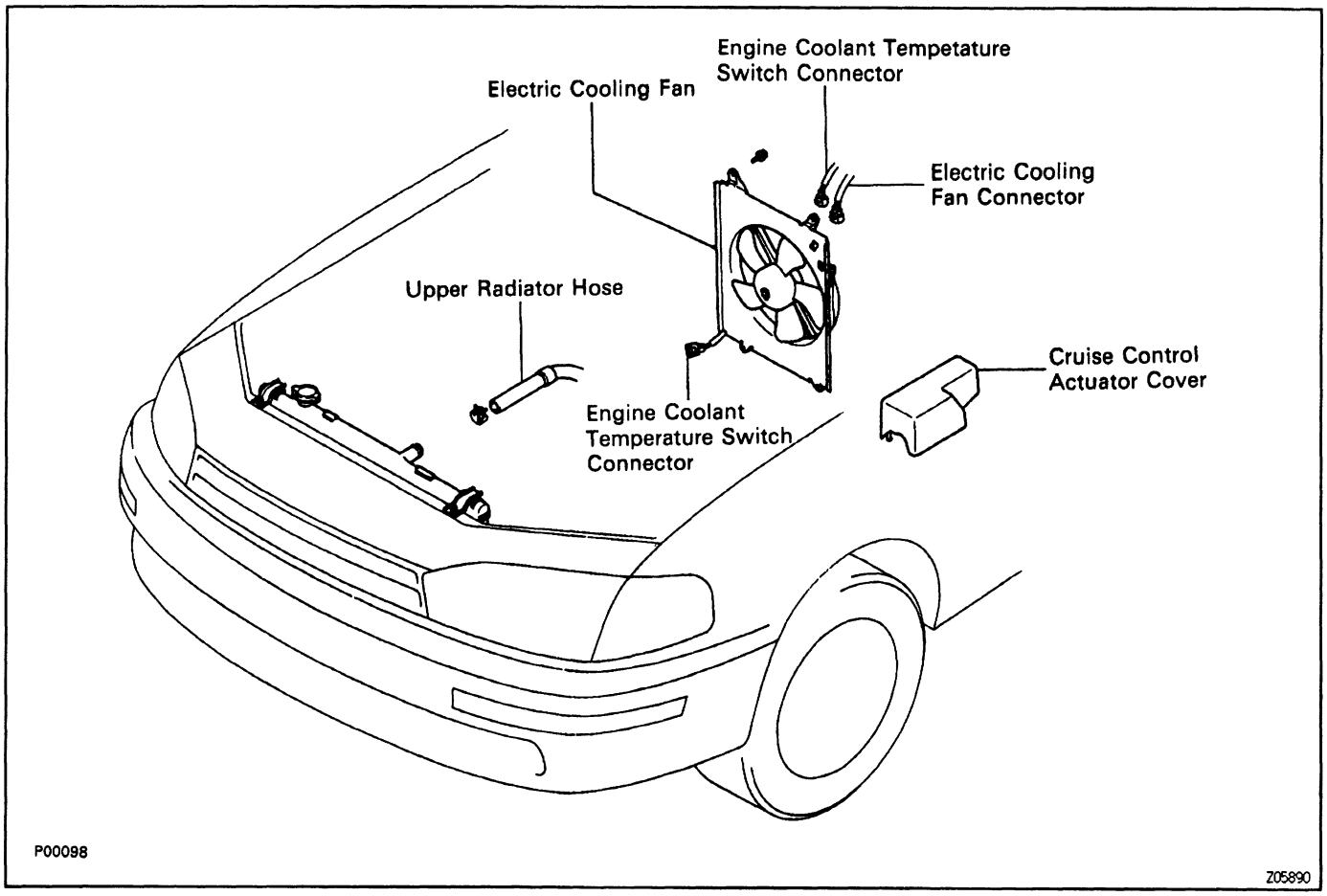
(b) Check that the cooling fan rotates smoothly, and check the reading on the ammeter.

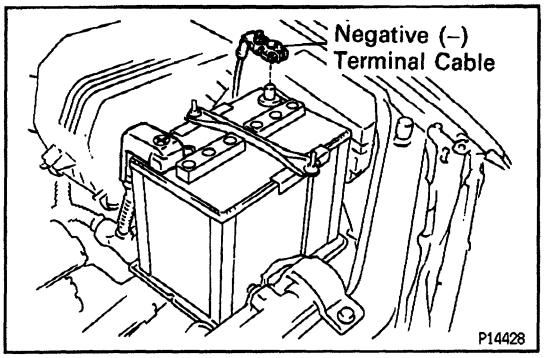
Standard amperage:

5.8 – 7.4 A

EG1C6–02

COMPONENTS FOR REMOVAL AND INSTALLATION





ELECTRIC COOLING FAN REMOVAL

(See Components for Removal and Installation)

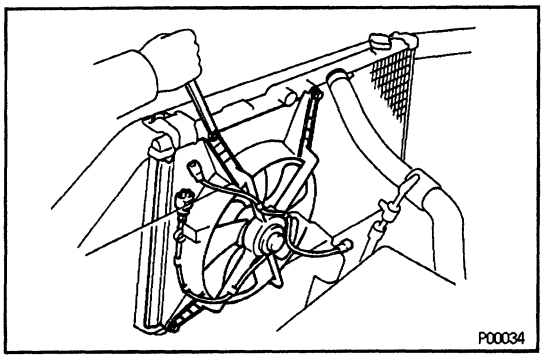
1. DISCONNECT NEGATIVE (–) TERMINAL CABLE FROM BATTERY

CAUTION: Work must be started after 90 seconds from the time the ignition switch is turned to the 'LOCK' position and the negative (–) terminal cable is disconnected from the battery.

2. DRAIN ENGINE COOLANT (See page EG1–241)

3. w/ CRUISE CONTROL SYSTEM:
REMOVE CRUISE CONTROL ACTUATOR COVER

4. DISCONNECT UPPER RADIATOR HOSE FROM RADIATOR



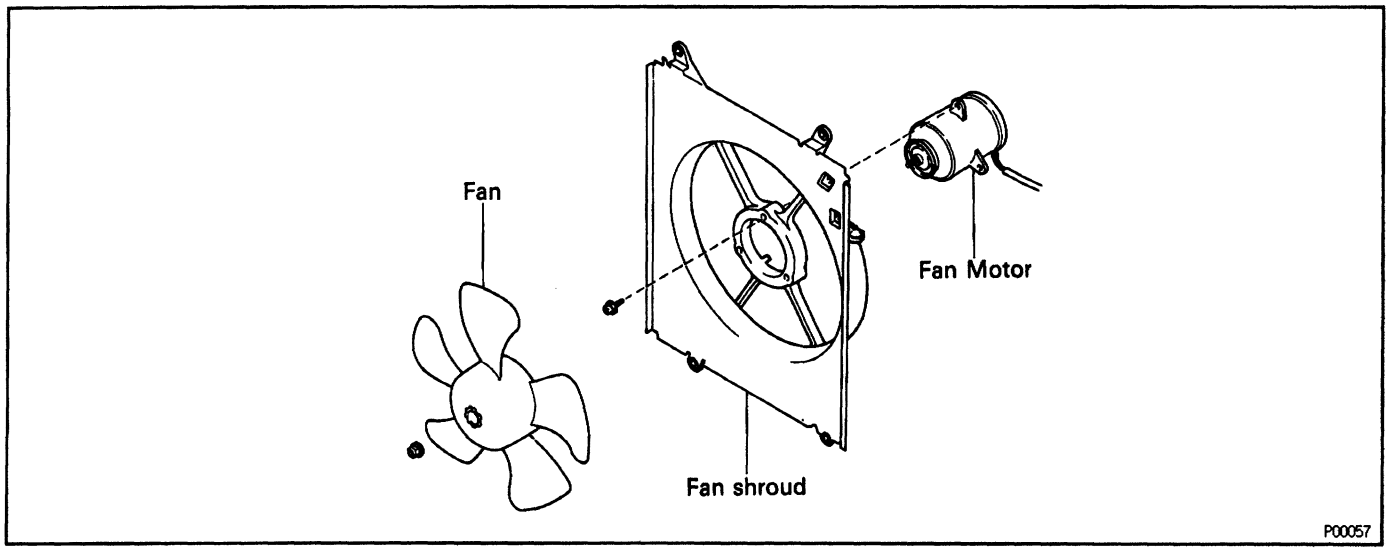
5. REMOVE ELECTRIC COOLING FAN

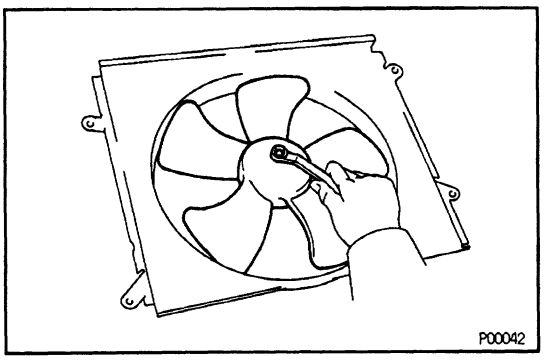
(a) Disconnect the engine coolant temperature switch connector from the radiator.

(b) Disconnect the engine coolant temperature switch and electric cooling fan connectors from the fan shroud.

(c) Remove the 4 bolts and cooling fan.

COMPONENTS FOR DISASSEMBLY AND ASSEMBLY



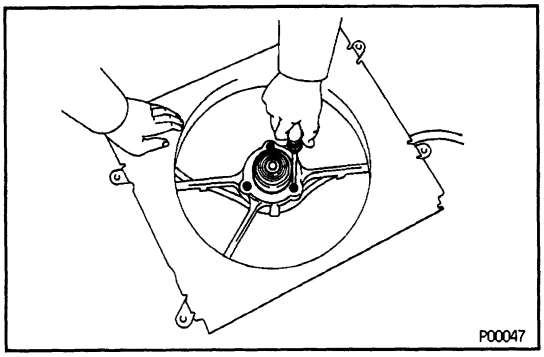


ELECTRIC COOLING FAN DISASSEMBLY

(See Components for Disassembly and Assembly)

1. REMOVE FAN

Remove the nut and fan.



2. REMOVE FAN MOTOR

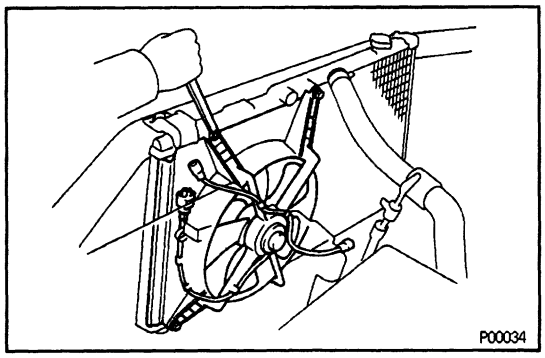
Remove the screws and fan motor.

ELECTRIC COOLING FAN ASSEMBLY EG07J–06

(See Components for Disassembly and Assembly)

1. INSTALL FAN MOTOR

2. INSTALL FAN



ELECTRIC COOLING FAN INSTALLATION

(See Components for Removal and Installation)

1. INSTALL ELECTRIC COOLING FAN

(a) Install the cooling fan with the 4 bolts.

(b) Connect the engine coolant temperature switch and electric cooling fan connectors to the fan shroud.

(c) Connect the engine coolant temperature switch connector to the radiator.

2. CONNECT UPPER RADIATOR HOSE TO RADIATOR

3. w/ CRUISE CONTROL SYSTEM:
INSTALL CRUISE CONTROL ACTUATOR COVER

4. FILL WITH ENGINE COOLANT

(See page EG1–241**)**

5. CONNECT NEGATIVE (–) TERMINAL CABLE TO BATTERY

6. START ENGINE AND CHECK FOR LEAKS