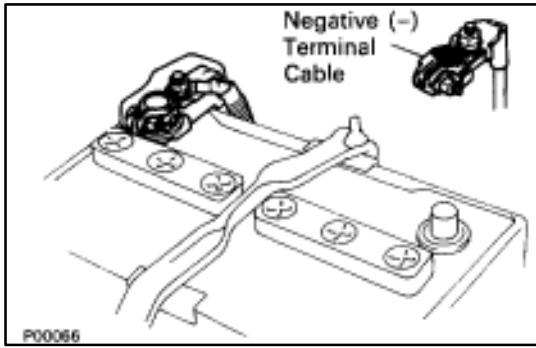


[illegible]



REMOVAL OF STARTER

(See Components on page [ST-5](#))

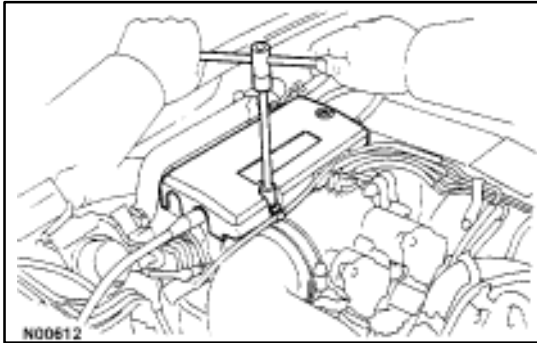
1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY

CAUTION: Work must be started after approx. 20 seconds or longer 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

3. REMOVE THROTTLE BODY COVER

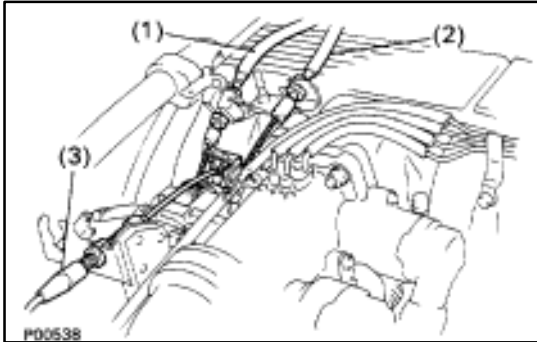
- Remove the mounting cap nut.
- Loosen the two bolts, and remove the throttle body cover.



4. DISCONNECT CONTROL CABLES FROM THROTTLE BODY

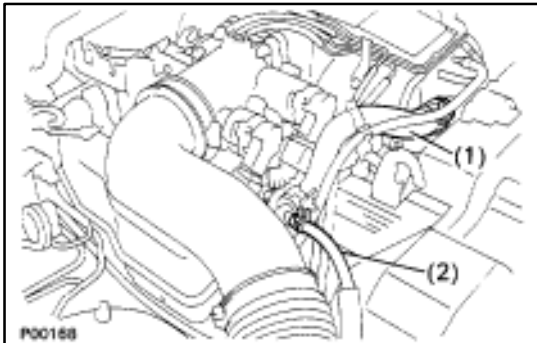
Disconnect the following cables:

- Accelerator cable
- A/T throttle control cable
- (w/ Cruise Control System)
Cruise control actuator cable

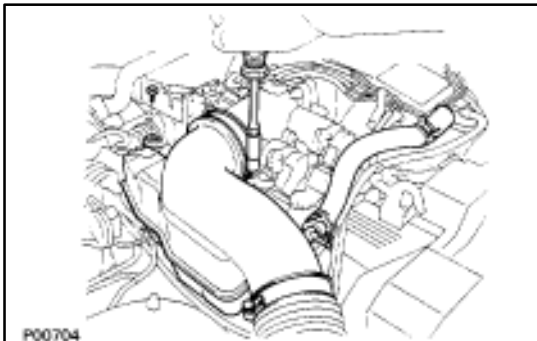


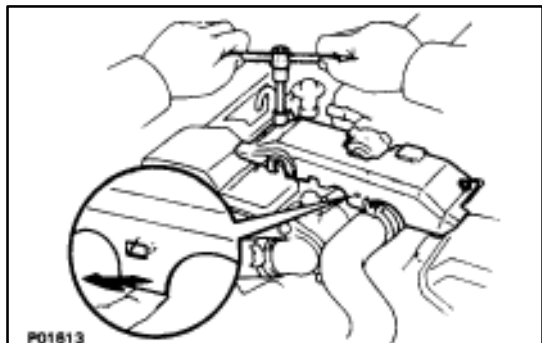
5. REMOVE INTAKE AIR CONNECTOR

- Disconnect the following hoses:
 - Air hose from ISC valve
 - Air hose (from PS air control valve) from intake air connector

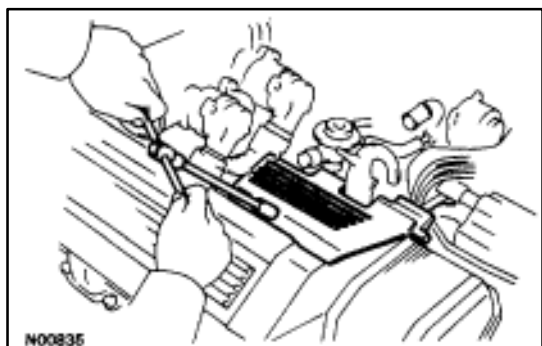


- Remove the bolt holding the intake air connector to the cylinder head cover.
- Loosen the two hose clamps.
- Disconnect the intake air connector from the throttle body and air cleaner hose, and remove the intake air connector.

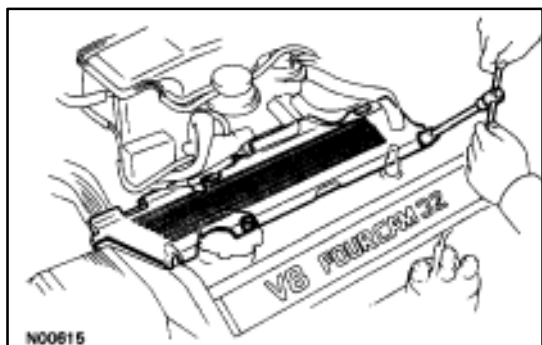


**6. REMOVE UPPER HIGH-TENSION CORD COVER**

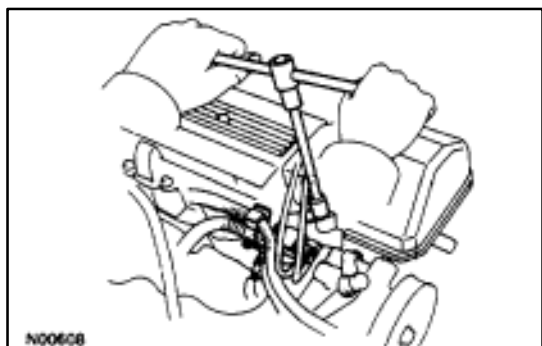
- (a) Remove the two mounting bolts.
- (b) Disconnect the front side claw groove of the cord cover from the claw of the lower cover, and remove the cord cover.

**7. REMOVE RH ENGINE WIRE COVER**

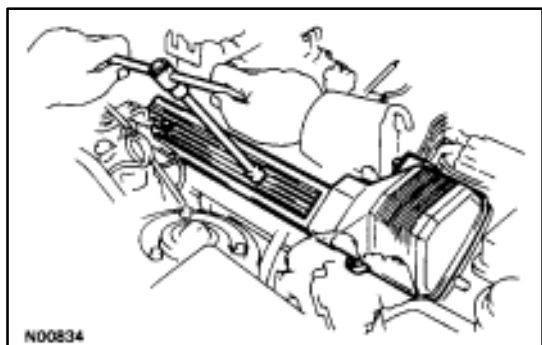
Remove the bolt and engine wire cover.

**8. REMOVE LH ENGINE WIRE COVER**

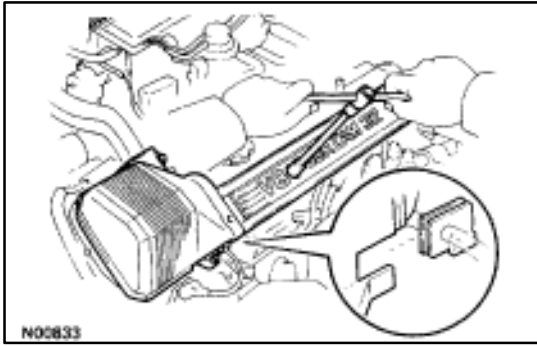
Remove the two bolts and engine wire cover.

**9. REMOVE VSV FOR EVAP SYSTEM**

Remove the two bolts, and disconnect the VSV from cylinder head and timing belt cover.

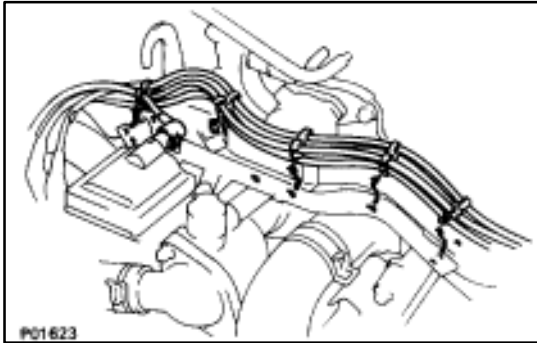
**10. REMOVE RH NO.3 TIMING BELT COVER**

Remove the three bolts and timing belt cover.



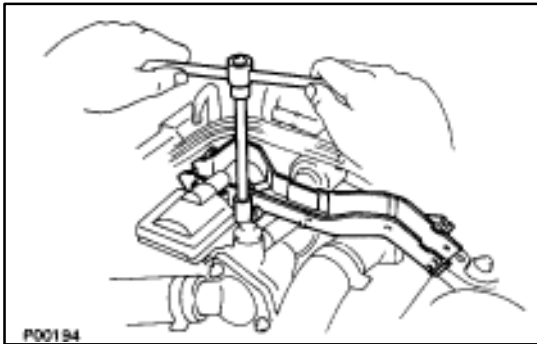
11. REMOVE LH NO.3 TIMING BELT COVER

- (a) Remove the four mounting bolts.
- (b) Disconnect the cord grommet from the timing belt cover, and remove the timing belt cover.
- (c) Remove the cord grommet from the high-tension cord.

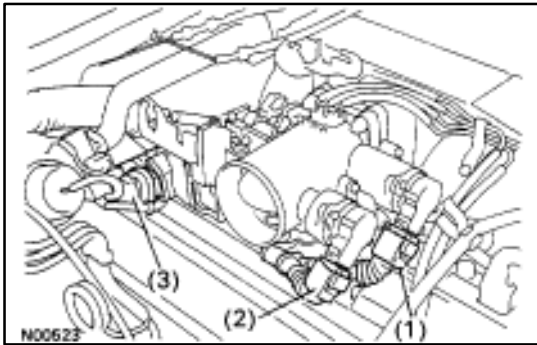


12. REMOVE LOWER HIGH-TENSION CORD COVER

- (a) Disconnect the high-tension cord from the RH ignition coil.
- (b) Disconnect the high-tension cords from the high-tension cord cover.

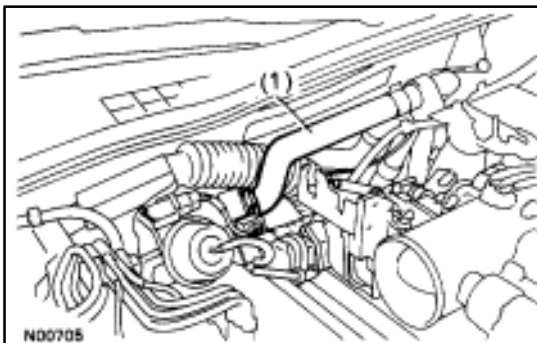


- (c) Remove the bolt and cord cover.

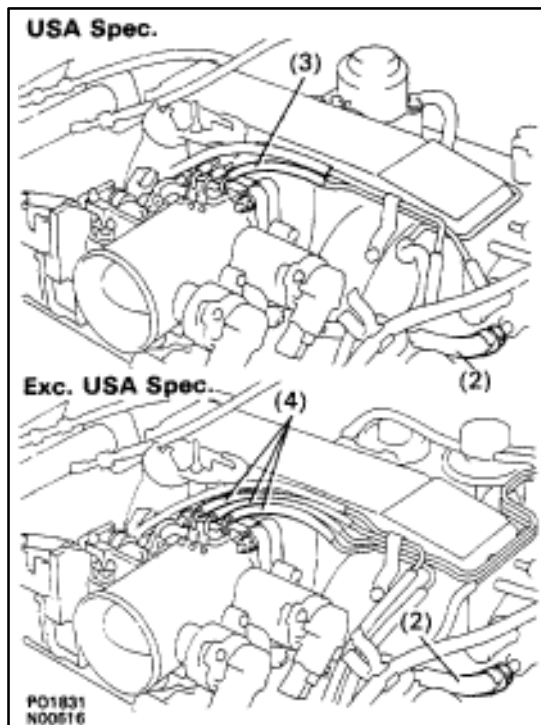


13. REMOVE THROTTLE BODY

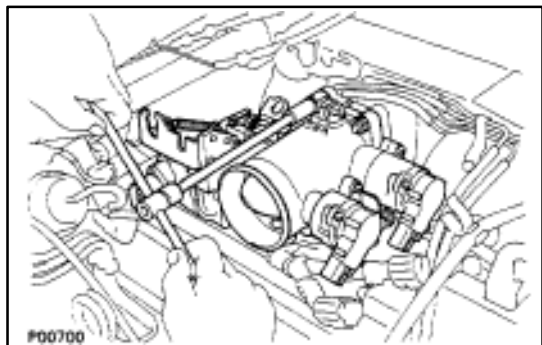
- (a) Disconnect the following connectors:
 - (1) Throttle position sensor connector
 - (2) (w/ TRAC)
Sub-throttle position sensor connector
 - (3) (w/ TRAC)
Sub-throttle actuator connector



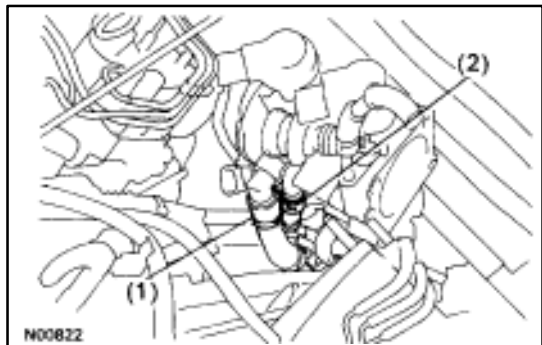
- (b) Disconnect the following hoses:
 - (1) Heat water hose from heater water valve



- (2) Water by-pass hose from ISC valve
- (3) (USA Spec.)
Vacuum hose from throttle body
- (4) (Exc. USA Spec.)
Three vacuum hoses from throttle body



- (c) Remove the two bolts and two nuts, disconnect the throttle body from the air intake chamber.

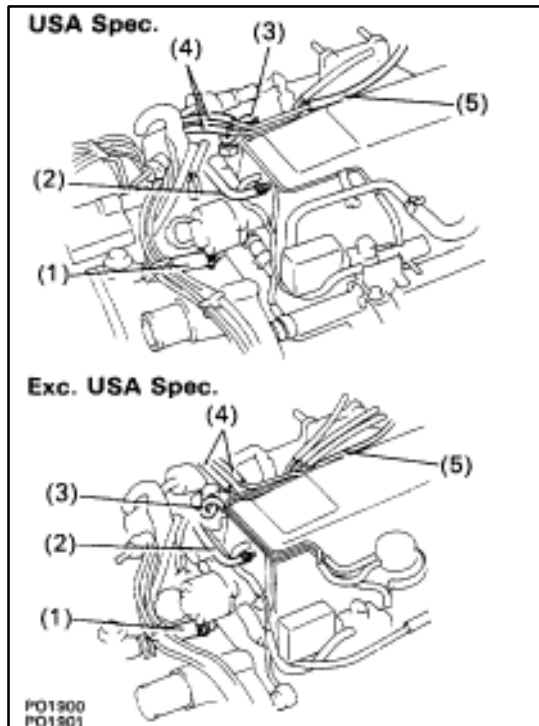


- (d) Disconnect the following hoses, and remove the throttle body:
 - (1) PCV hose from throttle body
 - (2) Water by-pass hose from throttle body
- (e) Remove the throttle body gasket.

14. DISCONNECT CONNECTORS

Disconnect the following connectors:

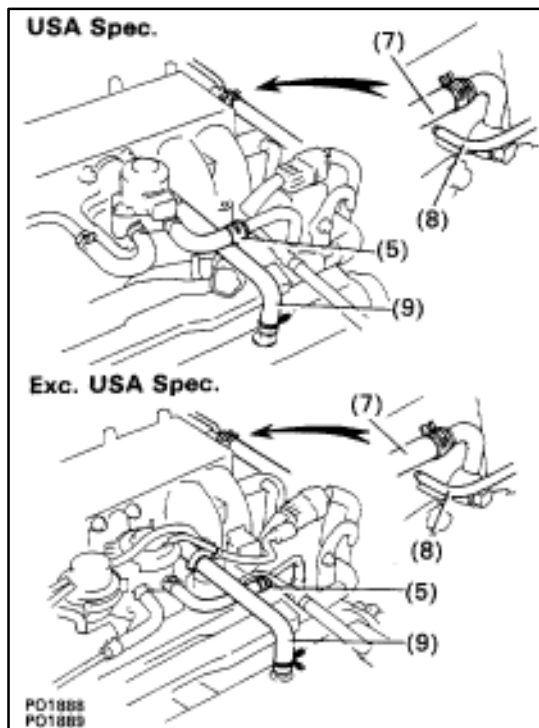
- Cold start injector connector
- ISC valve connector
- (USA Spec.)
EGR Valve connector
- (Exc. USA Spec.)
VSV connector for EGR system
- VSV connector for fuel pressure control system



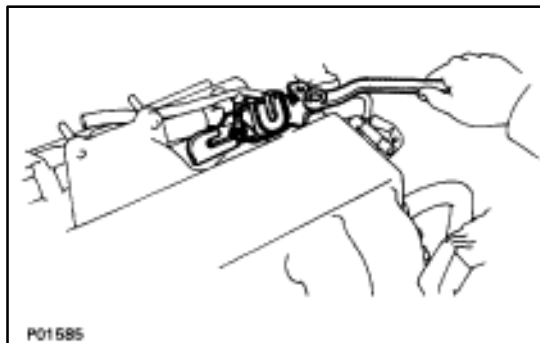
15. DISCONNECT HOSES

Disconnect the following hoses:

- (1) Water by-pass hose (from water inlet housing) from ISC valve
- (2) Vacuum hose (from PS air control valve) from air intake chamber
- (3) Vacuum sensing hose (from fuel pressure regulator) from vacuum pipe
- (4) Two vacuum hoses (from VSV for EVAP system) from vacuum pipe
- (5) Vacuum hose (from charcoal canister) from vacuum pipe.

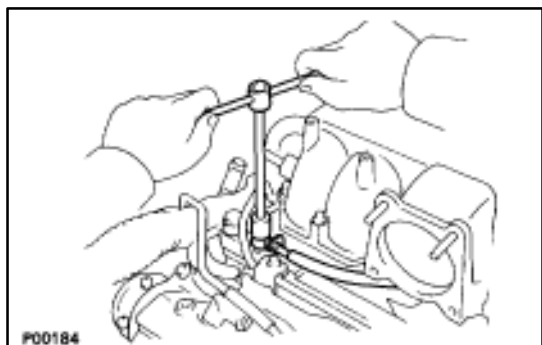


- (6) Water by-pass hose (from EGR valve) from water by-pass pipe
- (7) Vacuum hose (from brake booster) from air intake chamber
- (8) Vacuum hose (from VSV for heater water valve) from air intake chamber
- (9) PCV hose from LH cylinder head cover

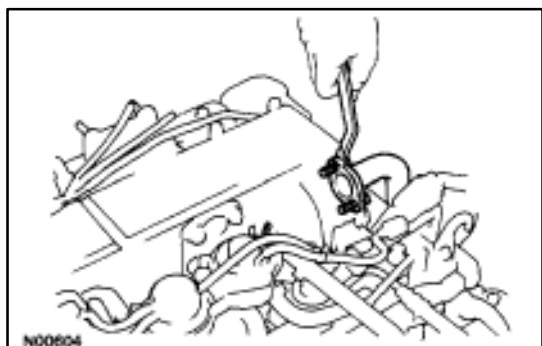


16. REMOVE AIR INTAKE CHAMBER

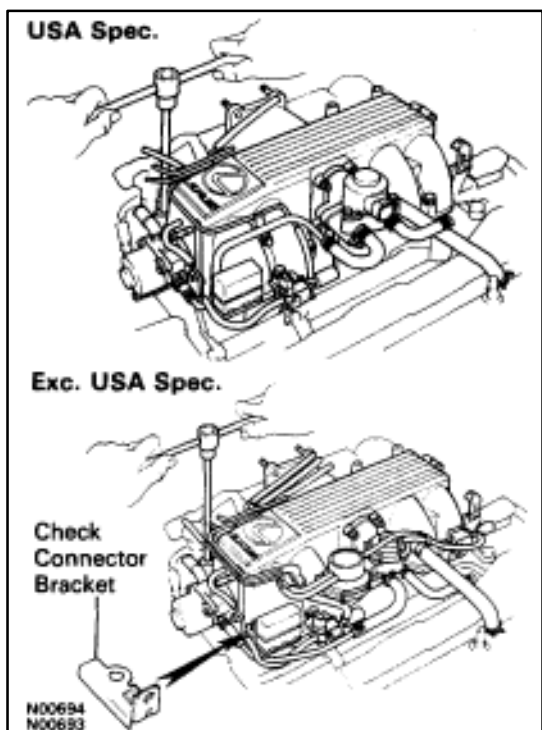
- (a) Remove the bolt, stud bolt and accelerator bracket.



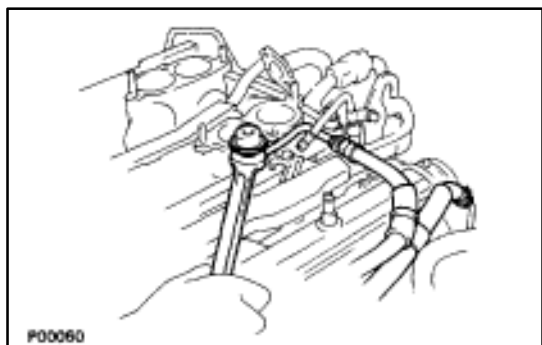
- (b) Remove the union bolt and two gaskets, and disconnect the cold start injector tube from the RH delivery pipe.



- (c) Remove the two bolts and gasket, and disconnect the EGR pipe from the air intake chamber.



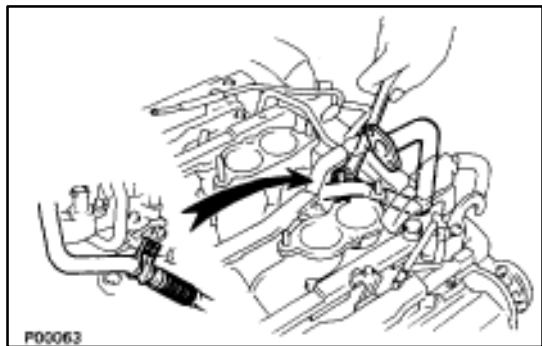
- (d) Remove the four bolts, eight nuts and A/T throttle cable bracket.
- (e) (USA Spec.)
Disconnect the check ("DIAGNOSIS") connector bracket from the air intake chamber.
- (f) (Exc. USA Spec.)
Remove the connector bracket from the check ("DIAGNOSIS") connector.
- (g) Remove the air intake chamber assembly and four gaskets.



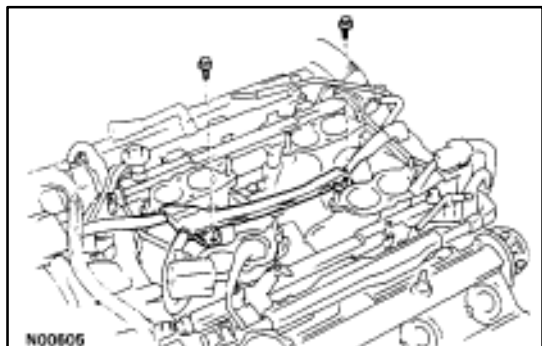
17. DISCONNECT FUEL INLET HOSE FROM LH DELIVERY PIPE

Remove the pulsation damper and two gaskets, and disconnect the inlet hose.

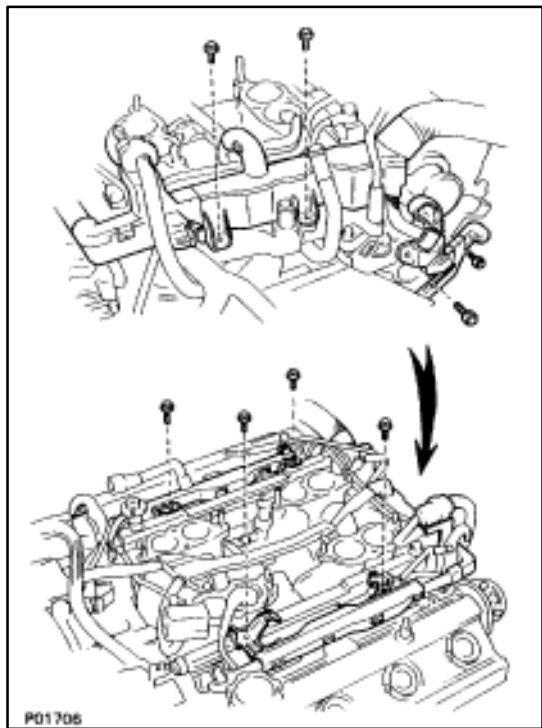
18. DISCONNECT FUEL RETURN HOSE FROM FUEL RETURN PIPE

**19. DISCONNECT EGR PIPE FROM RH CYLINDER HEAD**

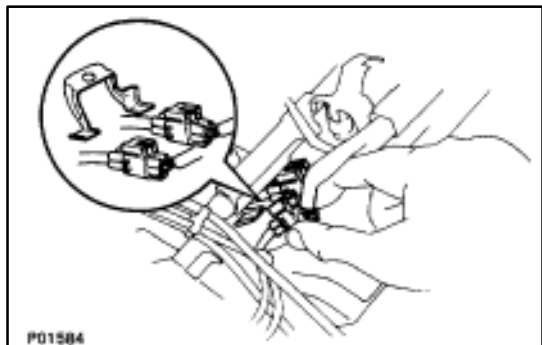
Remove the bolt holding the EGR pipe to the cylinder head, and disconnect the EGR pipe.

**20. DISCONNECT ENGINE WIRE FROM INTAKE MANIFOLD**

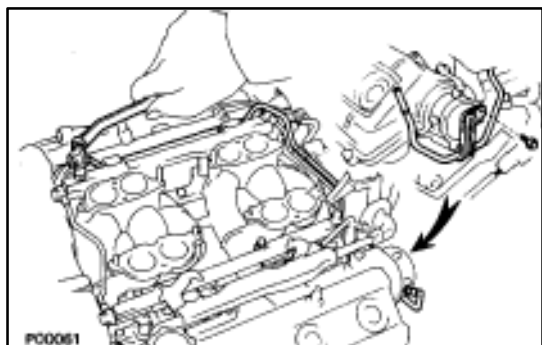
Remove the two bolts, and disconnect the engine wire.

**21. DISCONNECT ENGINE WIRE FROM DELIVERY PIPES, REAR WATER BY-PASS JOINT AND RH CYLINDER HEAD**

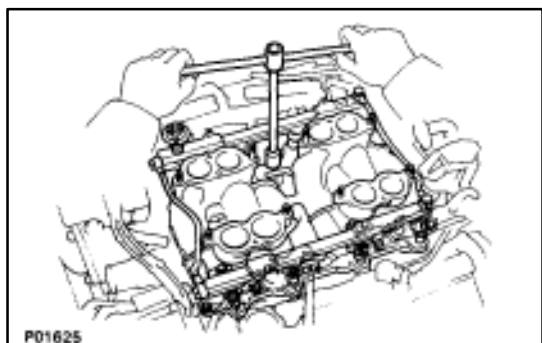
- (a) Remove the four bolts holding the engine wire to the delivery pipes, and disconnect the engine wire from the delivery pipe.
- (b) Remove the two bolts holding the engine wire to the rear water by-pass joint, and disconnect the engine wire from the rear water by-pass joint.
- (c) Remove the two bolts holding the engine wire to the rear side of the RH cylinder head, and disconnect the engine wire from the RH cylinder head.



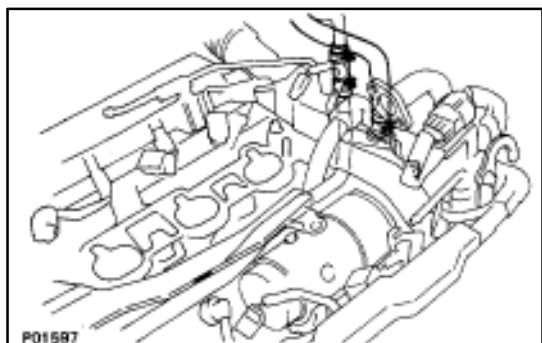
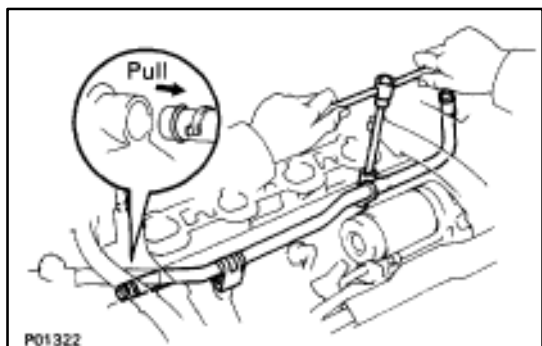
- (d) Disconnect the two engine wire connectors from the connector bracket on the front side of the LH delivery pipe.
- (e) Disconnect the eight injector connectors.

**22. REMOVE FUEL RETURN PIPE**

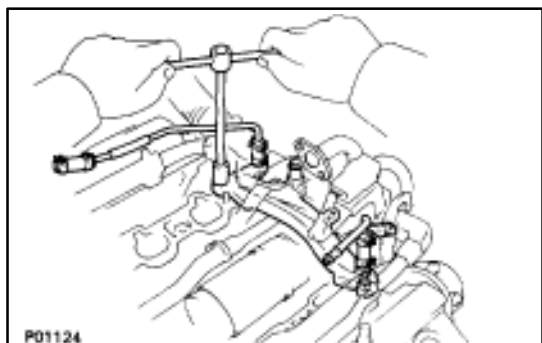
- (a) Remove the bolt holding the return pipe to the LH cylinder head.
- (b) Remove the union bolt, two gaskets and return pipe.

**23. REMOVE DELIVERY PIPES AND INTAKE MANIFOLD ASSEMBLY**

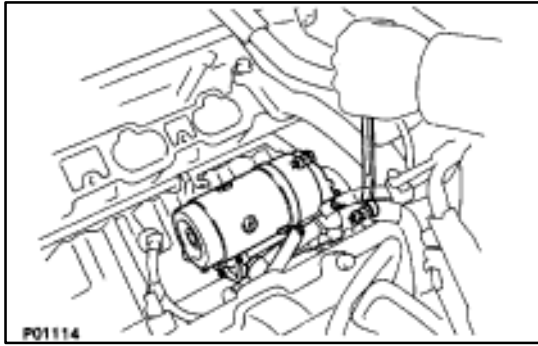
- (a) Remove the six bolts and four nuts holding the intake manifold to the cylinder heads.
- (b) Remove the two delivery pipe and intake manifold assembly.
- (c) Remove the two intake manifold gaskets.

**24. DISCONNECT HEATER WATER HOSES FROM WATER BY-PASS PIPE AND REAR WATER BY-PASS JOINT****25. REMOVE WATER BY-PASS PIPE**

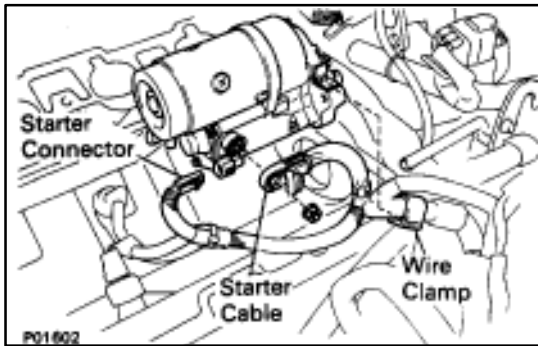
- (a) Remove the two mounting bolts.
- (b) Pull out the water by-pass pipe from the water pump.
- (c) Remove the O-ring from the water by-pass pipe.

**26. REMOVE REAR WATER BY-PASS JOINT**

Remove the four nuts, water by-pass joint and two gaskets.

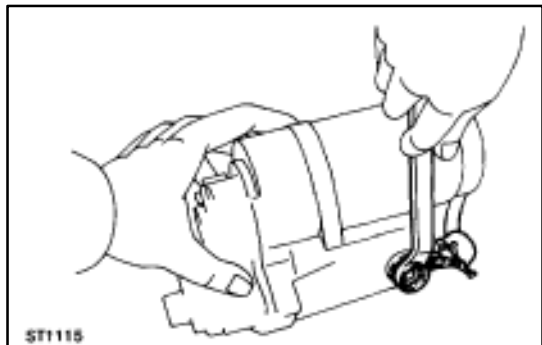
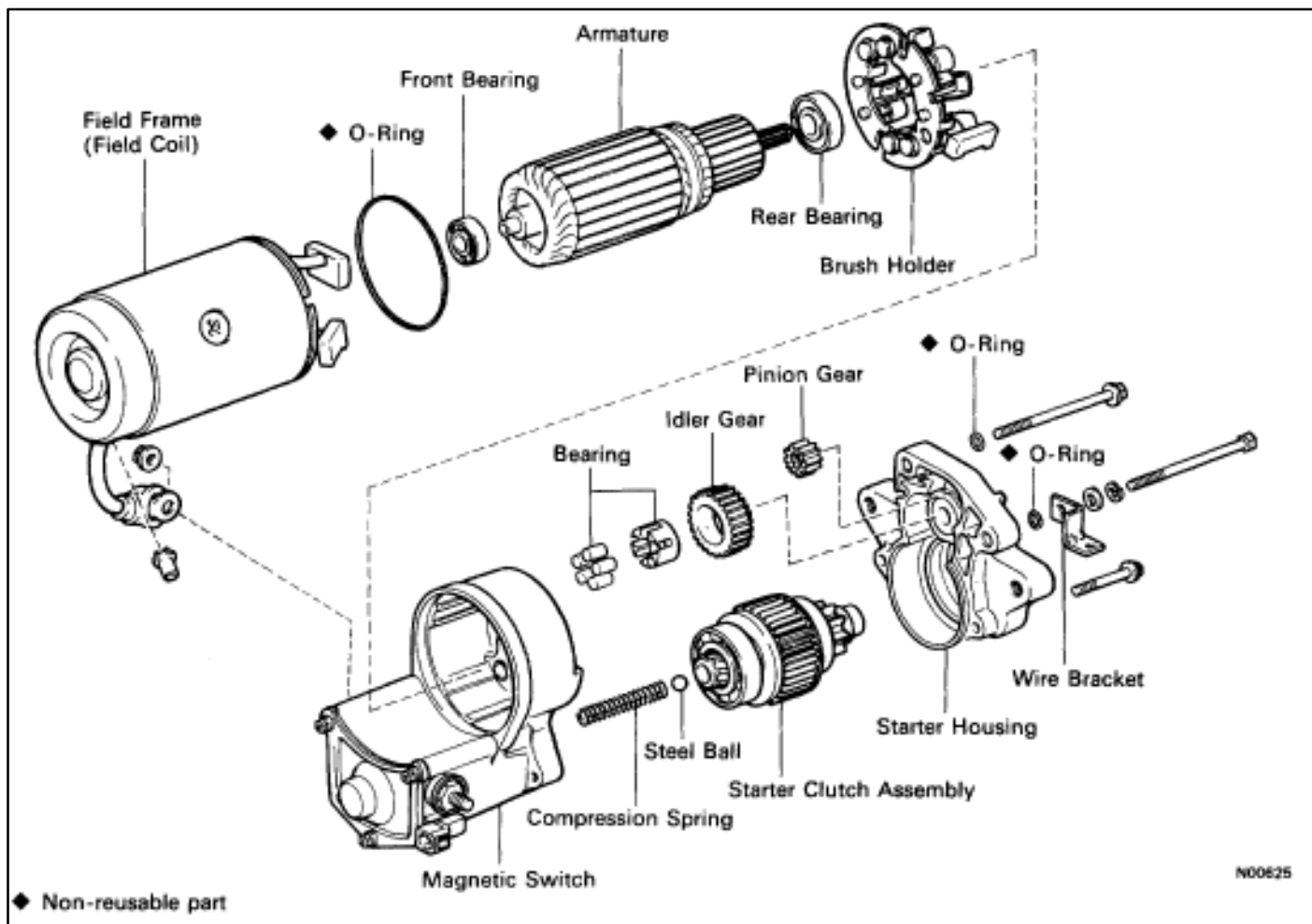
**27. REMOVE STARTER**

- (a) Remove the two bolts holding the starter to the cylinder block.



- (b) Disconnect the starter connector.
- (c) Remove the nut, and disconnect the starter wire.
- (d) Disconnect the wire clamp from the wire bracket, and remove the starter.

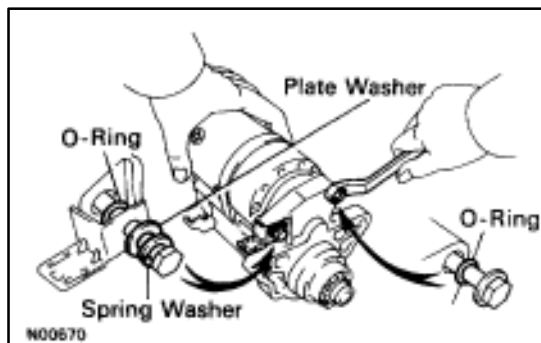
COMPONENTS FOR DISASSEMBLY AND ASSEMBLY

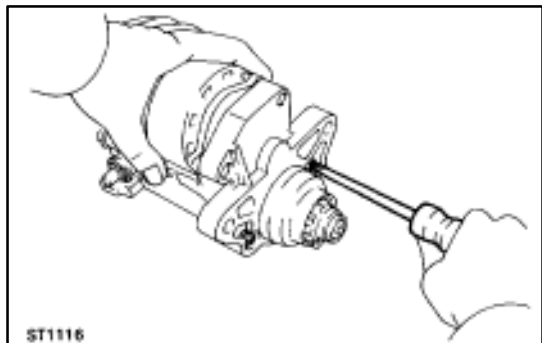


DISASSEMBLY OF STARTER

1. REMOVE FIELD FRAME AND ARMATURE

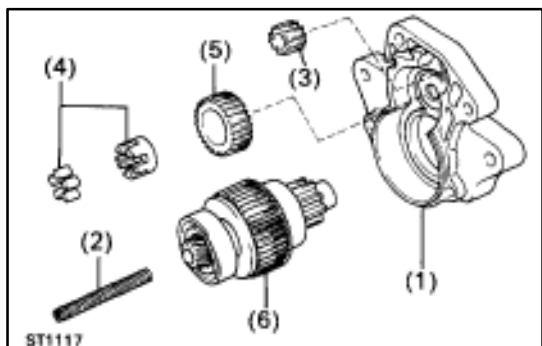
- Remove the nut, and disconnect the lead wire from the magnetic switch terminal.
- Remove the two through bolts, spring washer, wire bracket and two O-rings.
- Pull out the field frame together with the armature.
- Remove the O-ring from the field frame.





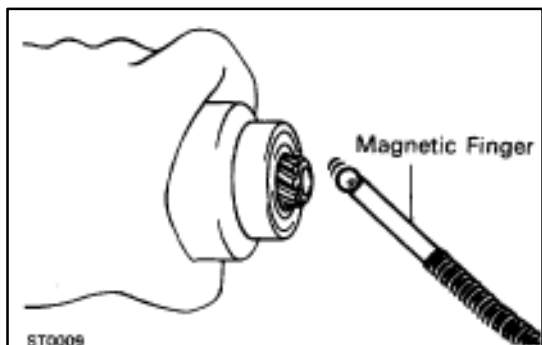
2. REMOVE STARTER HOUSING, CLUTCH ASSEMBLY AND GEARS

(a) Remove the two mounting screws.



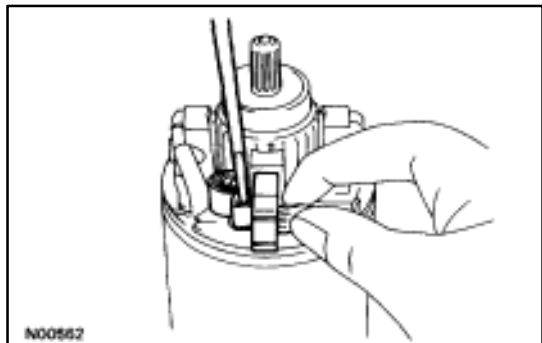
(b) Remove the following parts from the magnetic switch:

- (1) Starter housing
- (2) Return spring
- (3) Pinion gear
- (4) Bearing
- (5) Idler gear
- (6) Clutch assembly



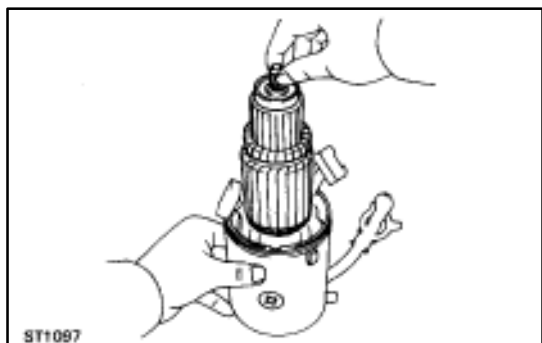
3. REMOVE STEEL BALL

Using a magnetic finger, remove the steel ball from the clutch shaft hole.

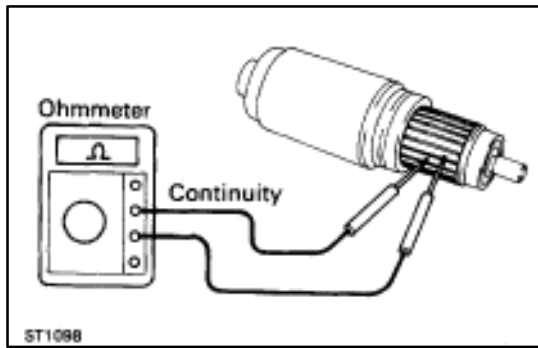


4. REMOVE BRUSH HOLDER

Using a screwdriver, hold the spring back and disconnect the brush from the brush holder. Disconnect the four brushes, and remove the brush holder.



5. REMOVE ARMATURE FROM FIELD FRAME

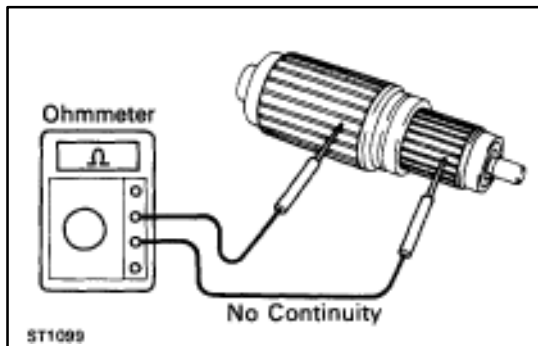


INSPECTION AND REPAIR OF STARTER Armature Coil

1. INSPECT COMMUTATOR FOR OPEN CIRCUIT

Using an ohmmeter, check that there is continuity between the segments of the commutator.

If there is no continuity, replace the armature.



2. INSPECT COMMUTATOR FOR GROUND

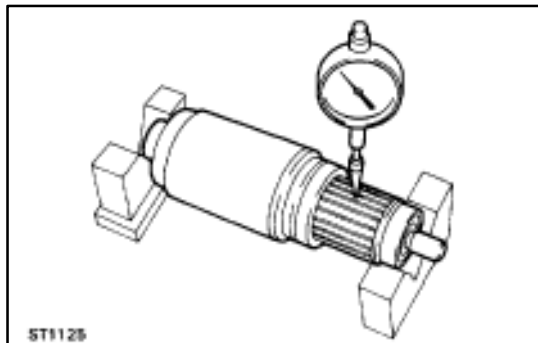
Using an ohmmeter, check that there is no continuity between the commutator and armature coil core.

If there is continuity, replace the armature.

Commutator

1. INSPECT COMMUTATOR FOR DIRTY AND BURNT SURFACE

If the surface is dirty or burnt, correct with sandpaper (No.400) or on a lathe.



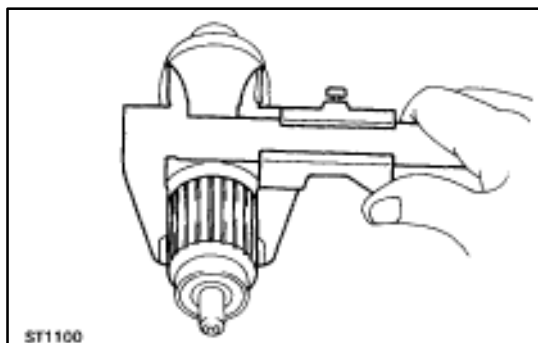
2. INSPECT COMMUTATOR FOR RUNOUT

(a) Place the commutator on V-blocks.

(b) Using a dial indicator, measure the circle runout.

Maximum circle runout: 0.05 mm (0.0020 in.)

If the circle runout is greater than maximum, correct it on a lathe.



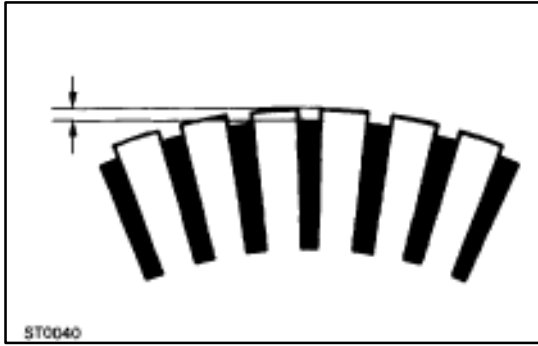
3. INSPECT COMMUTATOR DIAMETER

Using a vernier caliper, measure the diameter.

Standard diameter: 35.0 mm (1.378 in.)

Minimum diameter: 34.0 mm (1.339 in.)

If the diameter is less than minimum, replace the armature.



4. INSPECT UNDERCUT DEPTH

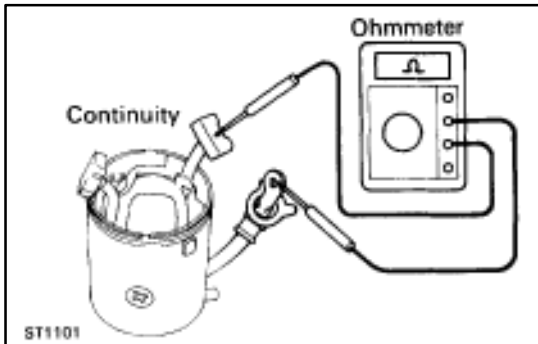
Check that the undercut depth is clean and free of foreign material. Smooth out the edge.

Standard undercut depth: 0.7–0.9 mm

(0.028–0.035 in.)

Minimum undercut depth: 0.2 mm (0.008 in.)

If the undercut depth is less than minimum, correct it with a hacksaw blade.

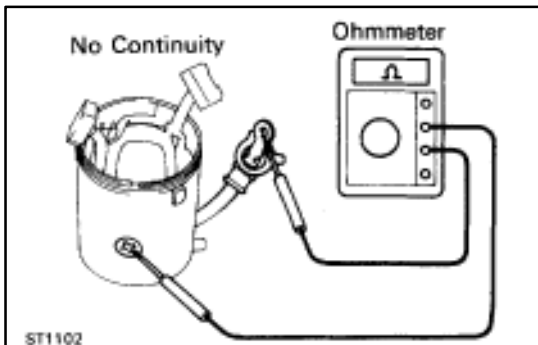


Field Coil (Field Frame)

1. INSPECT FIELD COIL FOR OPEN CIRCUIT

Using an ohmmeter, check that there is continuity between the lead wire and field coil brush lead.

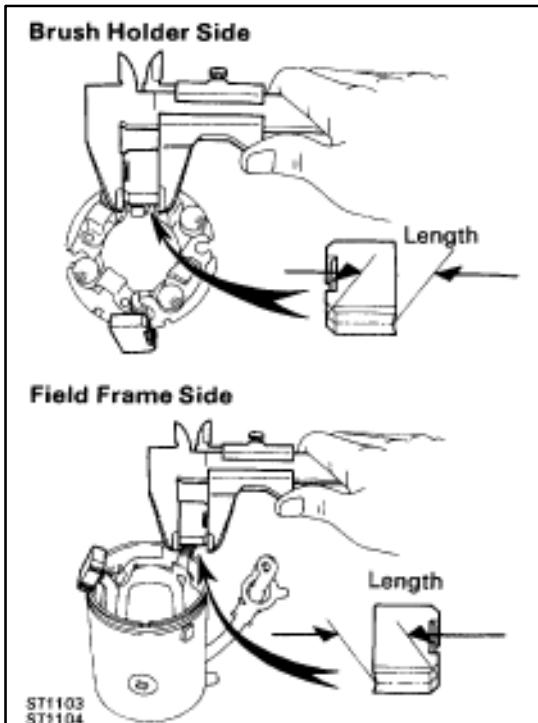
If there is no continuity, replace the field frame.



2. INSPECT FIELD COIL FOR GROUND

Using an ohmmeter, check that there is no continuity between the field coil end and field frame.

If there is continuity, replace the field frame.



Brushes

INSPECT BRUSH LENGTH

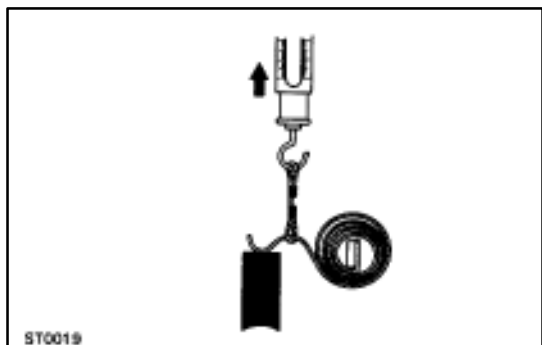
Using a vernier caliper, measure the brush length.

Standard length: 15.0–15.5 mm

(0.591–0.610 in.)

Minimum length: 9.5 mm (0.374 in.)

If the length is less than minimum, replace the brush holder and field frame.



Brush Springs

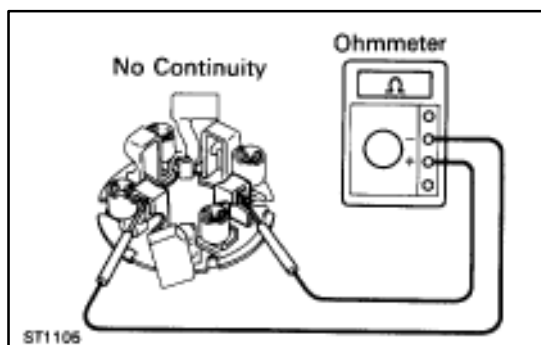
INSPECT BRUSH SPRING LOAD

Take the pull scale reading the instant the brush spring separates from the brush.

Standard installed load:

26–32 N (2.7–3.3 kgf, 6.0–7.3 lbf)

If the installed load is not as specified, replace the brush springs.



Brush Holder

INSPECT BRUSH HOLDER INSULATION

Using an ohmmeter, check that there is no continuity between the positive (+) and negative (–) brush holders.

If there is continuity, repair or replace the brush holder.

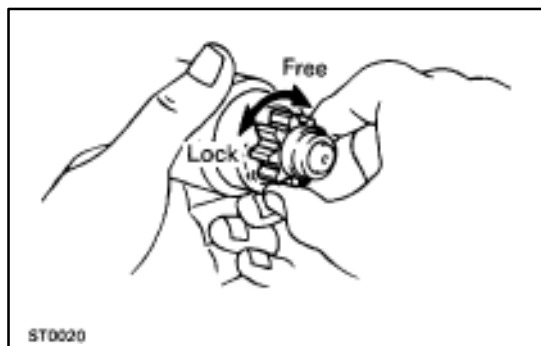
Clutch and Gears

1. INSPECT GEAR TEETH

Check the gear teeth on the pinion gear, idler gear and the clutch assembly for wear or damage.

If damaged, replace the gear or clutch assembly.

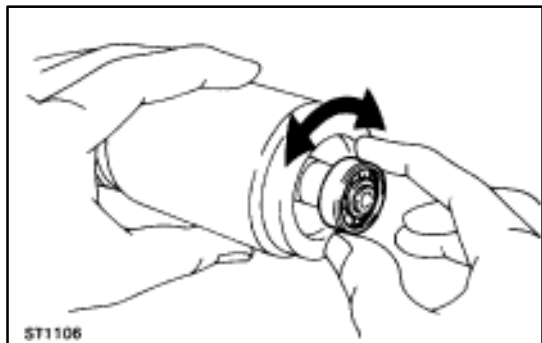
If damaged, also check the flywheel ring gear for wear or damage.



2. INSPECT CLUTCH PINION GEAR

Rotate the pinion gear counterclockwise and check that it turns freely. Try to rotate the pinion gear clockwise and check that it locks.

If necessary, replace the clutch assembly.

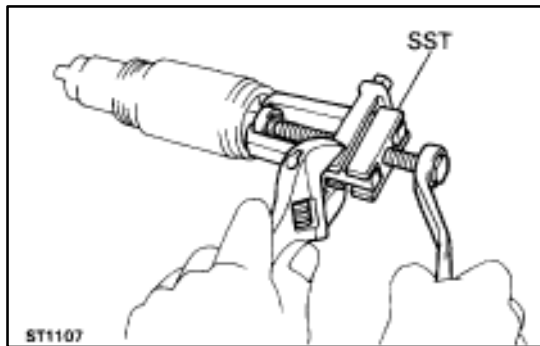


Bearings

1. INSPECT FRONT BEARING

Turn each bearing by hand while applying inward force.

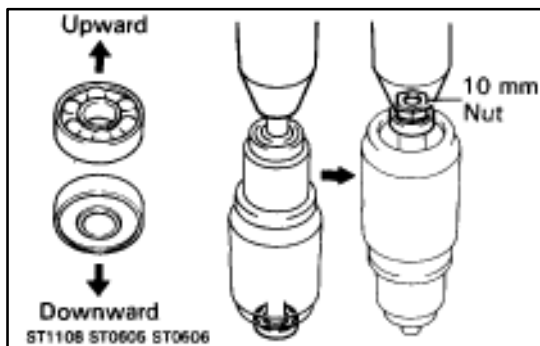
If resistance is felt or the bearing sticks, replace the bearing.



2. IF NECESSARY, REPLACE FRONT BEARING

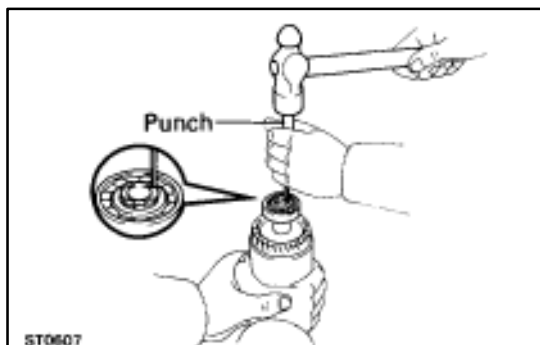
(a) Using SST, remove the bearing.

SST 09286-46011

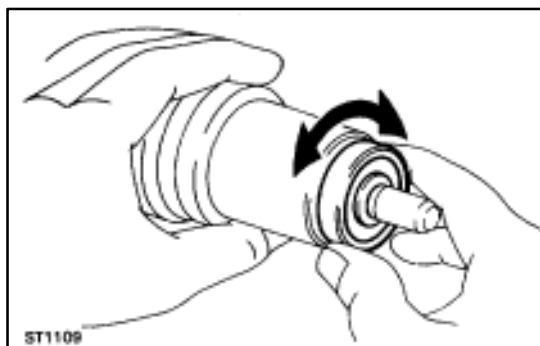


(b) Using a 10 mm nut and press, press in a new front bearing.

NOTICE: Be careful of the bearing installation direction.



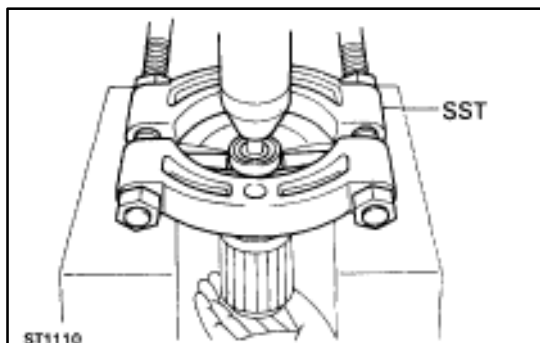
(c) Using a punch, stake the armature shaft.



3. INSPECT REAR BEARING

Turn each bearing by hand while applying inward force.

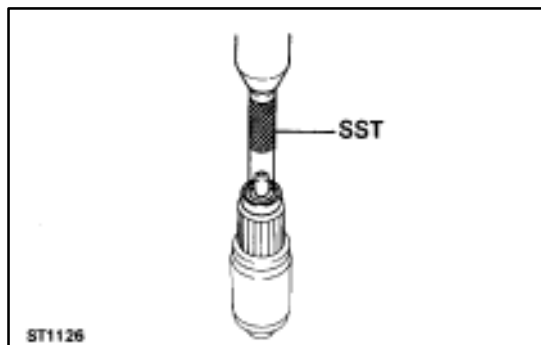
If resistance is felt or the bearing sticks, replace the bearing.



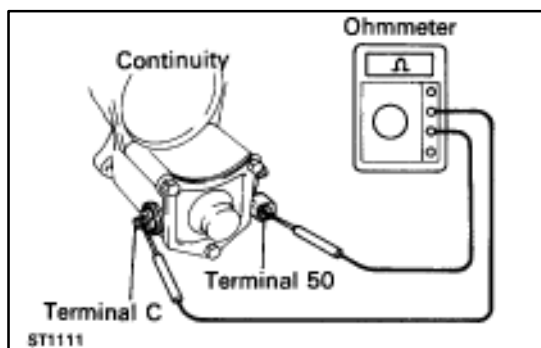
4. IF NECESSARY, REPLACE REAR BEARING

(a) Using SST and a press, press out the bearing.

SST 09950-00020



- (b) Using SST and a press, press in a new bearing.
SST 09201-41020

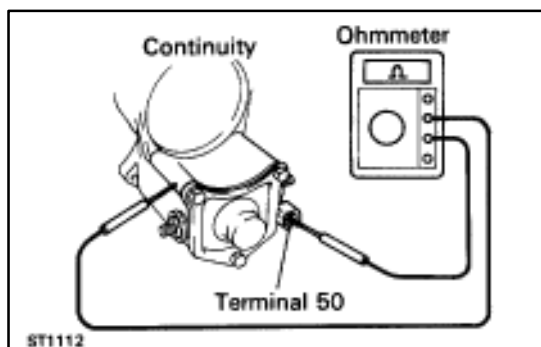


Magnetic Switch

1. PERFORM PULL-IN COIL OPEN CIRCUIT TEST

Using an ohmmeter, check that there is continuity between terminals 50 and C.

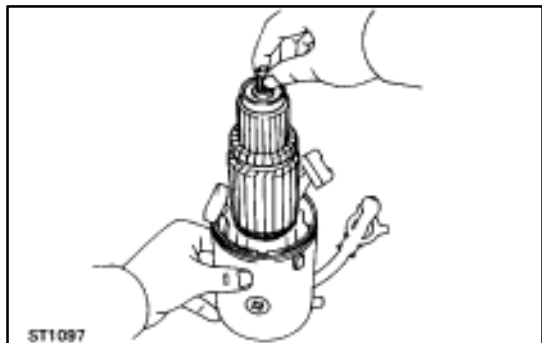
If there is no continuity, replace the magnetic switch.



2. PERFORM HOLD-IN COIL OPEN CIRCUIT TEST

Using an ohmmeter, check that there is continuity between terminal 50 and the switch body.

If there is no continuity, replace the magnetic switch.



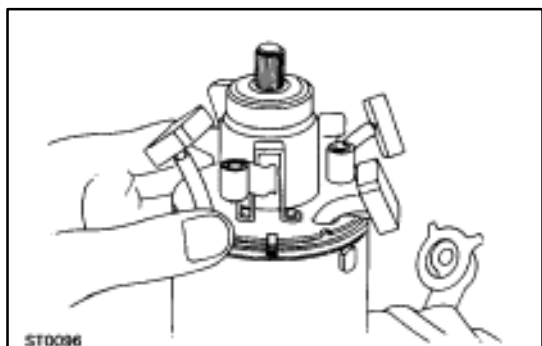
ASSEMBLY OF STARTER

(See Components on page [ST-15](#))

HINT: Use high-temperature grease to lubricate the bearings and gears when assembling the starter.

1. PLACE ARMATURE INTO FIELD FRAME

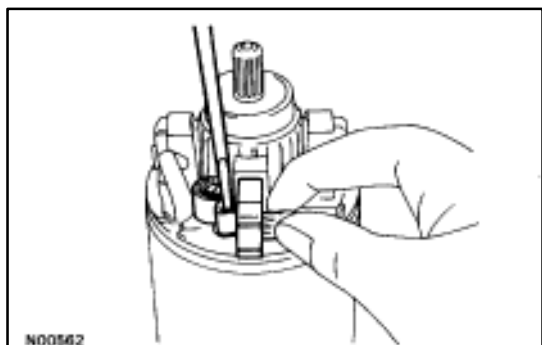
Apply grease to the armature bearings, and insert the armature into the field frame.



2. INSTALL BRUSH HOLDER

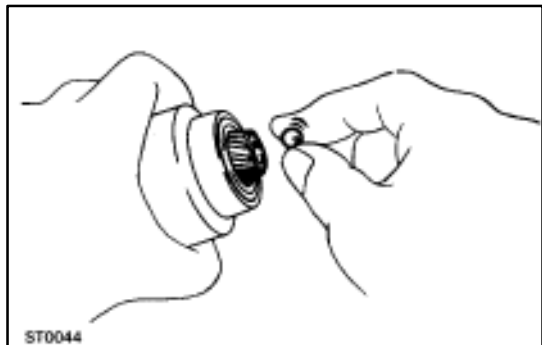
(a) Align the claw of the brush holder with the claw groove of the field frame.

(b) Place the brush holder on the field frame.



(c) Using a screwdriver, hold the brush spring back, and connect the brush into the brush holder. Connect the four brushes.

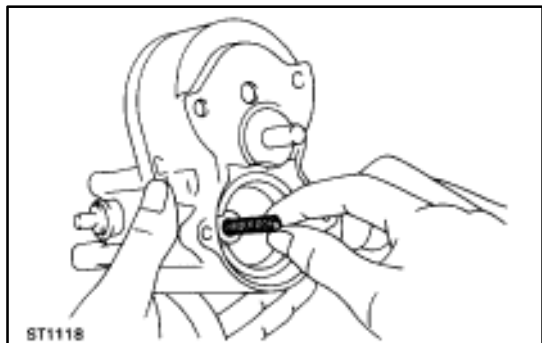
NOTICE: Check that the positive (+) lead wires are not grounded.



3. INSERT STEEL BALL INTO CLUTCH SHAFT HOLE

(a) Apply grease to the steel ball.

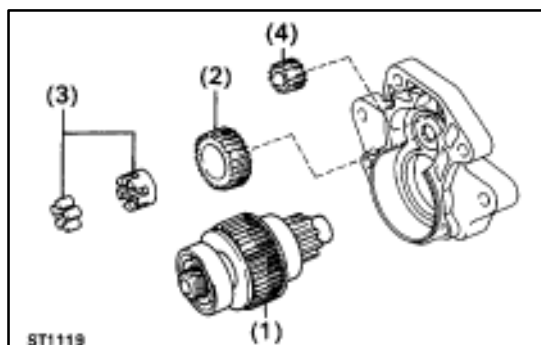
(b) Insert the steel ball into the clutch shaft hole.



4. INSTALL CLUTCH ASSEMBLY, GEARS AND STARTER HOUSING

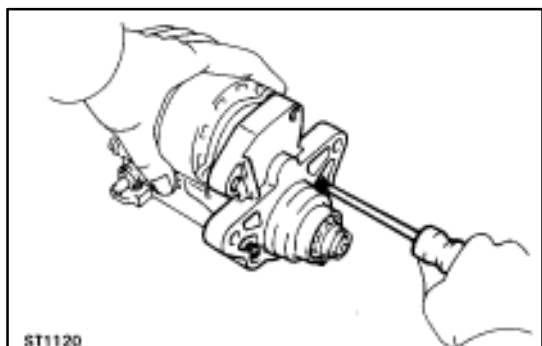
(a) Apply grease to the return spring.

(b) Insert the return spring into the magnetic switch hole.

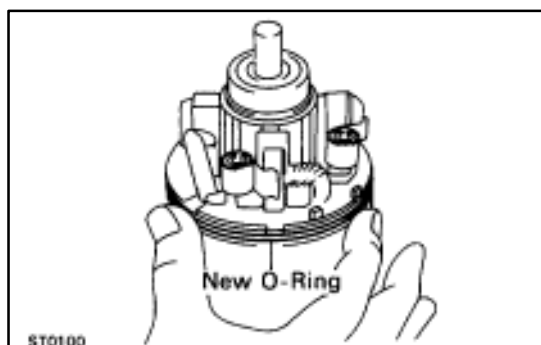


(c) Place the following parts in position on the starter housing:

- (1) Clutch assembly
- (2) Idler gear
- (3) Bearing
- (4) Pinion gear

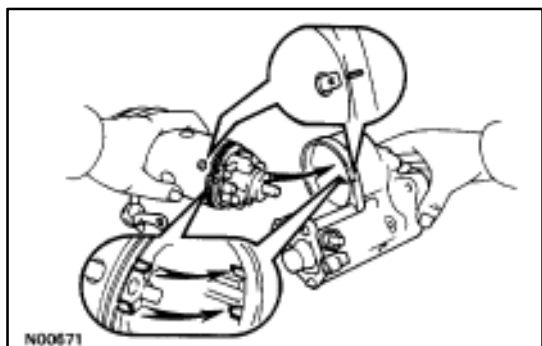


(d) Install the starter housing to magnetic switch with the two screws.



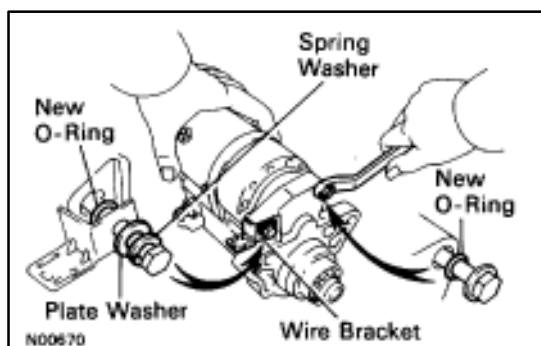
5. INSTALL FIELD FRAME AND ARMATURE ASSEMBLY

(a) Install a new O-ring to groove of the field frame.



(b) Align the claws of the brush holder with the grooves of the magnetic switch, and install the field frame and armature shaft assembly.

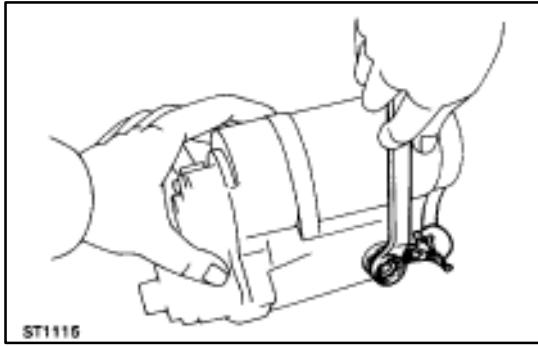
(c) Align the punch mark of the field frame with the line of the magnet switch.



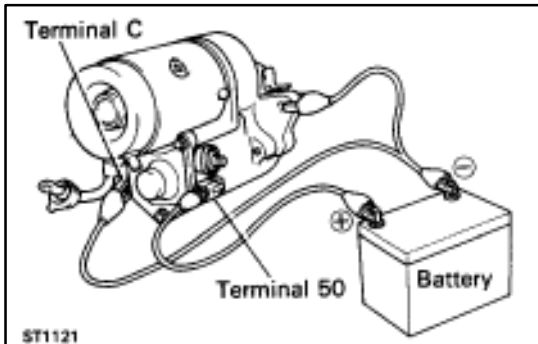
(d) Install a new O-ring to through bolt A.

(e) Install the spring washer, plate washer, wire bracket and a new O-ring to through bolt B.

(f) Install the two through bolts.



(g) Connect the lead wire to terminal C, and install the nut.



PERFORMANCE TEST OF STARTER

NOTICE: These tests must be performed within 3 to 5 seconds to avoid burning out the coil.

1. PERFORM PULL-IN TEST

- Disconnect the field coil lead wire from terminal C.
- Connect battery to the magnetic switch as shown. Check that the pinion gear moves outward.

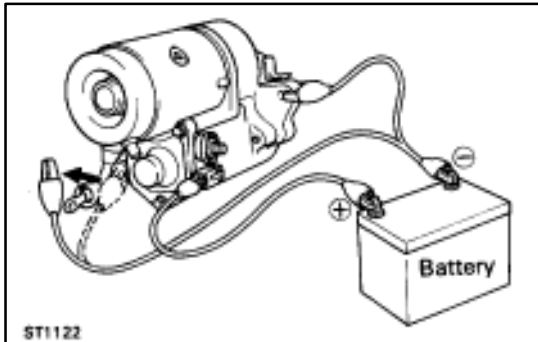
If the pinion gear does not move, replace the magnetic switch.

2. PERFORM HOLD-IN TEST

While connected as above with the pinion gear out, disconnect the negative (–) lead from terminal C.

Check that the pinion gear remains out.

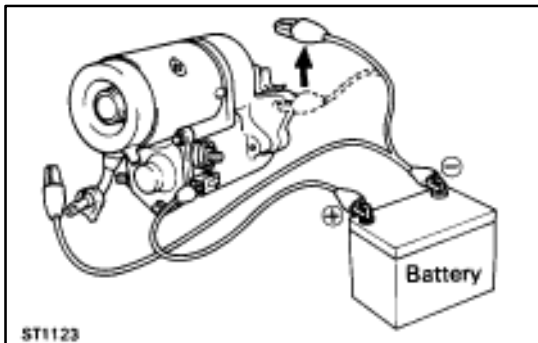
If the pinion gear returns inward, replace the magnetic switch.



3. INSPECT PLUNGER RETURN

Disconnect the negative (+) lead from the switch body. Check that the pinion gear returns inward.

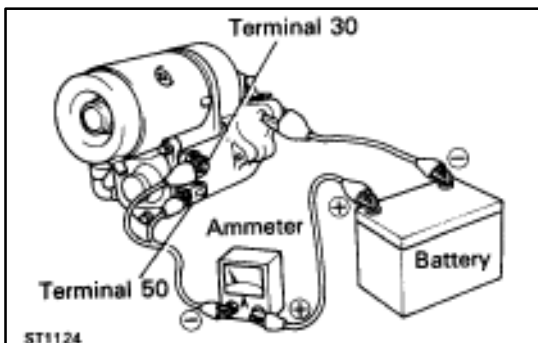
If the pinion gear does not return, replace the magnetic switch.

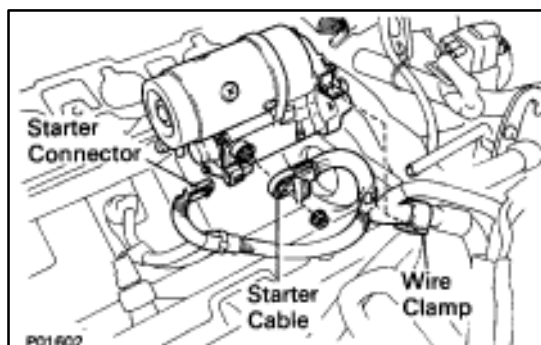


4. PERFORM NO-LOAD PERFORMANCE TEST

- Connect battery and ammeter to the starter as shown.
- Check that the starter rotates smoothly and steadily with the pinion gear moving out. Check the reading on the ammeter.

Standard amperage: 120 A or less at 11.5 V



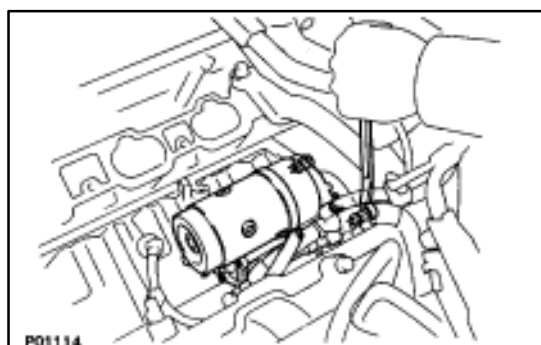


INSTALLATION OF STARTER

(See Components on page [ST-5](#))

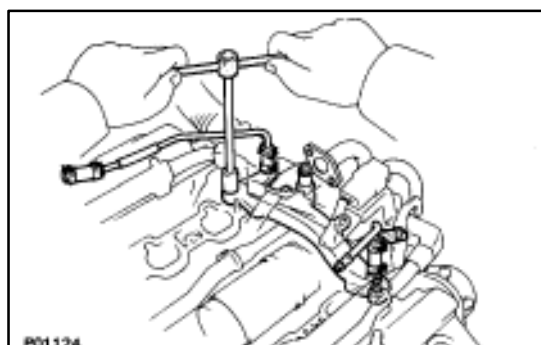
1. INSTALL STARTER

- Connect the wire clamp to the wire bracket.
- Connect the starter wire with the nut.
- Connect the starter connector.



- Install the starter with the two bolts.

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

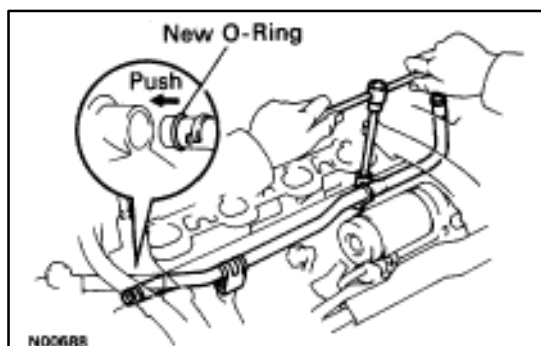


2. INSTALL REAR WATER BY-PASS JOINT

- Install four new gaskets and the water by-pass joint with the four nuts.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

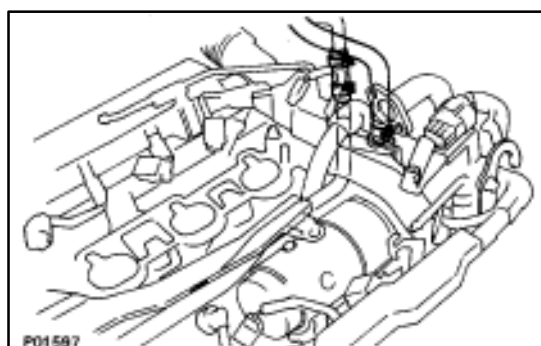
- Install the bolt holding the water by-pass pipe to the LH engine hanger.



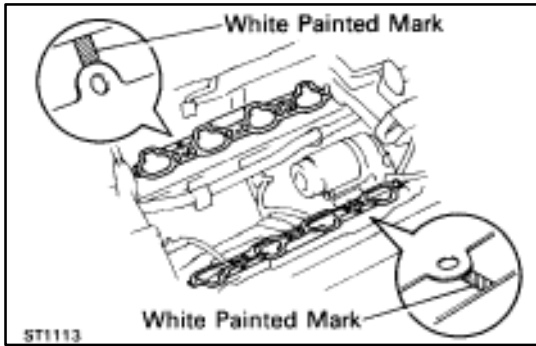
3. INSTALL WATER BY-PASS PIPE

- Install a new O-ring to the water by-pass pipe.
- Apply soapy water to the O-ring.
- Push in the water by-pass pipe end into the pipe hole of the water pump.
- Install the water by-pass pipe with the two bolts.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)



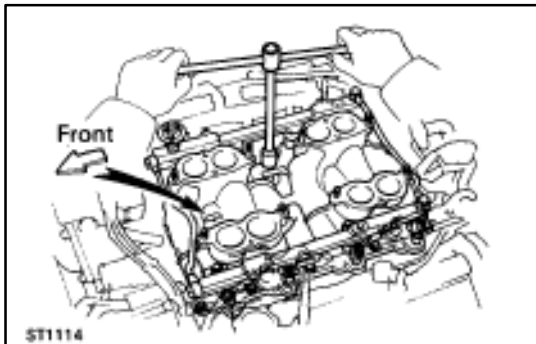
4. CONNECT HEATER WATER HOSES TO WATER BY-PASS PIPE AND REAR WATER BY-PASS JOINT



5. INSTALL DELIVERY PIPES AND INTAKE MANIFOLD ASSEMBLY

- (a) Place two new gaskets on the cylinder heads with the white painted mark facing upward.

NOTICE: Align the port holes of the gasket and cylinder head. Be careful of the installation direction.



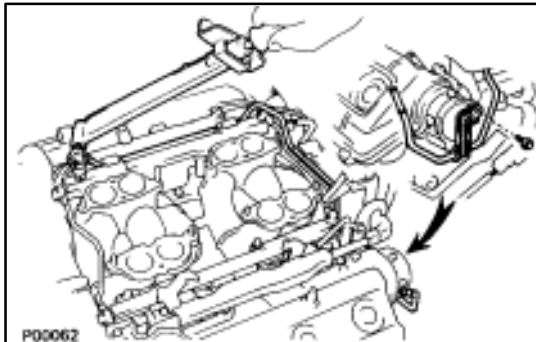
- (b) Place the delivery pipes and intake manifold assembly in position on the cylinder heads with the arrow mark on the intake manifold facing forward.

NOTICE: Be careful of the installation direction.

- (c) Install the six mounting bolts and four mounting nuts.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

HINT: Use bolts 30 mm (1.18 in.) in length.

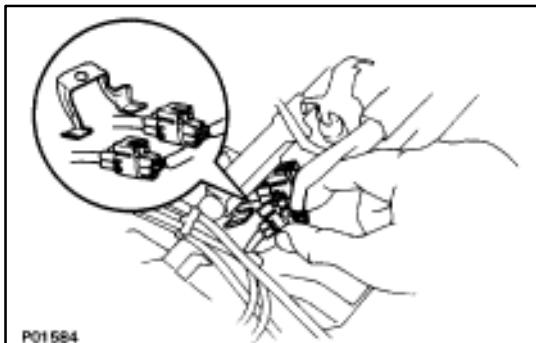


6. INSTALL FUEL RETURN PIPE

Install the return pipe with two new gaskets, union bolt and bolt.

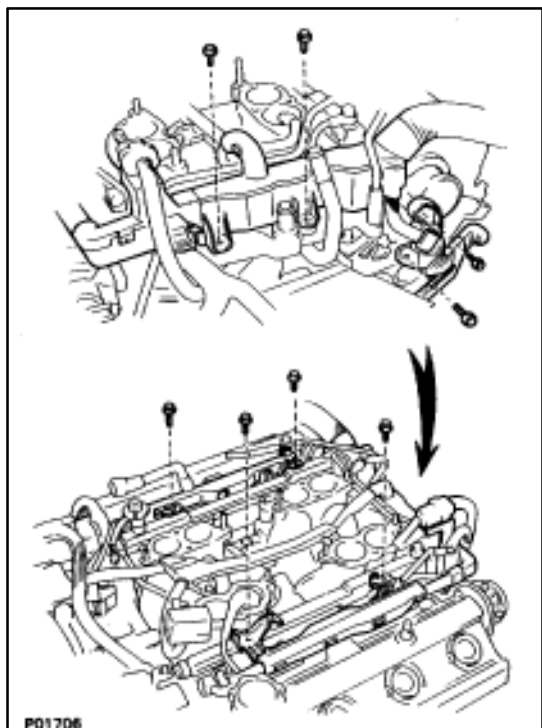
Torque (Union bolt):

35 N·m (360 kgf·cm, 26 ft·lbf)

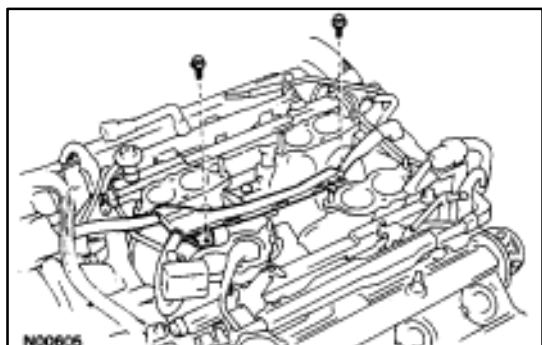


7. INSTALL ENGINE WIRE TO DELIVERY PIPES, REAR WATER BY-PASS JOINT AND RH CYLINDER HEAD

- (a) Connect the eight injector connectors.
- (b) Connect the two engine wire connectors to the connector bracket on the LH delivery pipe.

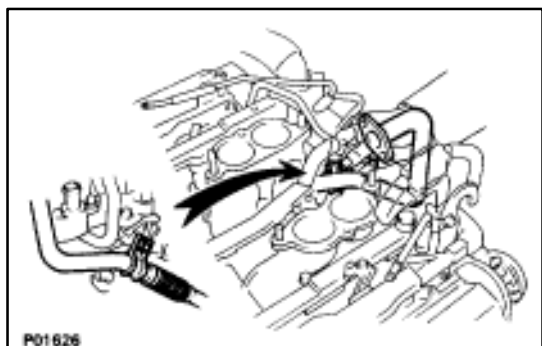


- (c) Install the engine wire to the RH cylinder head with the two bolts.
- (d) Install the engine wire to the rear water by-pass joint with the two bolts.
- (e) Install the engine wire to the delivery pipes with the four bolts.



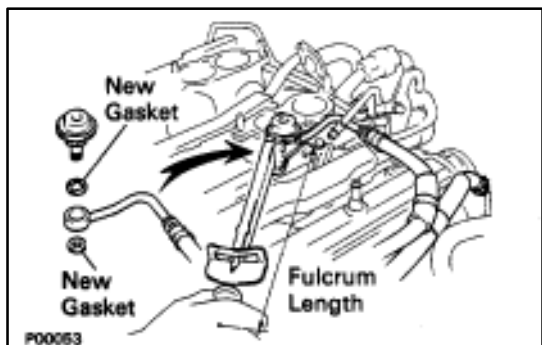
8. INSTALL ENGINE WIRE TO INTAKE MANIFOLD

Install the engine wire with the two bolts.



9. TEMPORARILY INSTALL EGR PIPE TO RH CYLINDER HEAD

Temporarily install the EGR pipe with the bolt.



10. CONNECT FUEL RETURN HOSE TO FUEL RETURN PIPE

11. CONNECT FUEL INLET HOSE TO LH DELIVERY PIPE

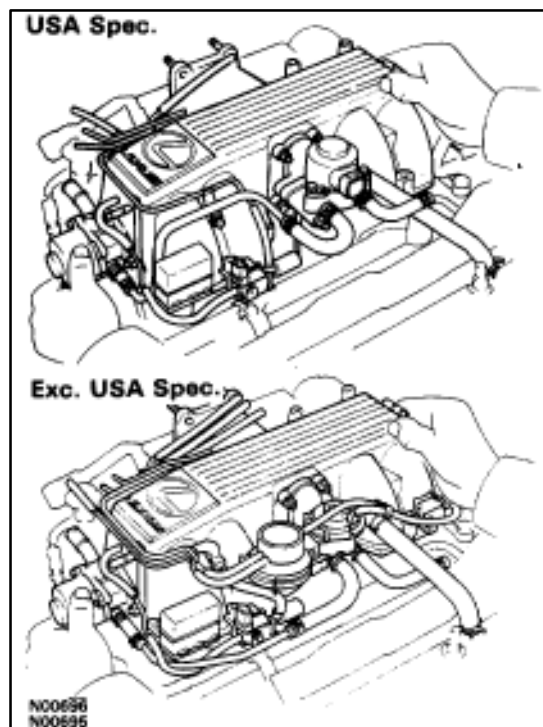
Using SST, connect the inlet hose with two new gaskets and pulsation damper.

SST 09612-24014 (09617-24011)

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

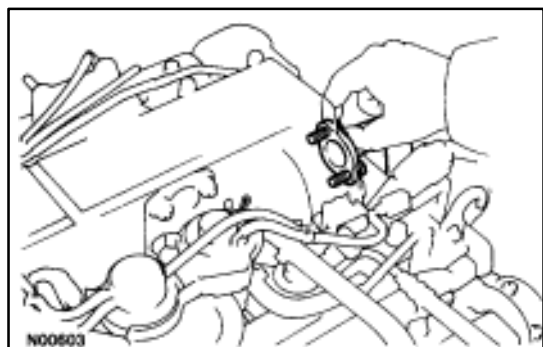
33 N·m (340 kgf·cm, 24 ft·lbf) for SST

HINT: Use a torque wrench with a fulcrum length of 30 cm (11.81 in.).

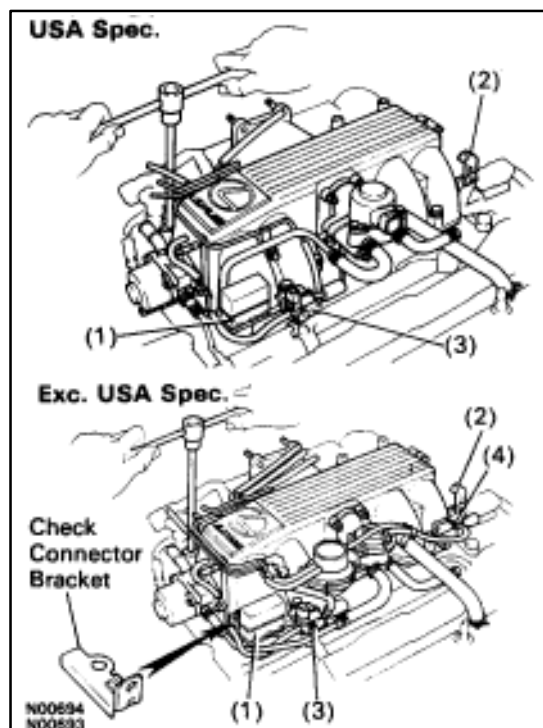


12. INSTALL AIR INTAKE CHAMBER

- (a) Place four new gaskets and the air intake chamber on the intake manifold.



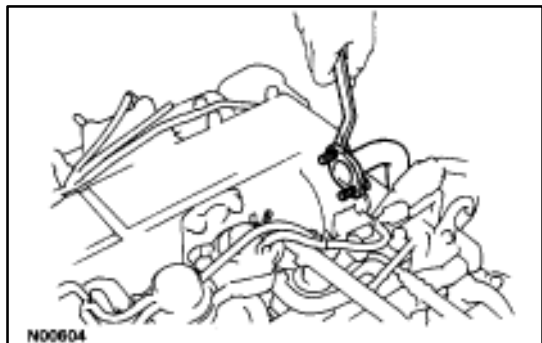
- (b) Temporarily install a new gasket and the EGR pipe to air intake chamber with the two bolts.



- (c) (Exc. USA Spec.)
Install the connector bracket to check ("DIAGNOSIS") connector.
- (d) Install the air intake chamber and following parts with the four bolts and eight nuts:
- (1) Check ("DIAGNOSIS") connector
 - (2) A/T throttle cable bracket
 - (3) VSV for fuel pressure control system
 - (4) VSV for EGR system

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

HINT: Use bolts 40 mm (1.57 in.) of length.

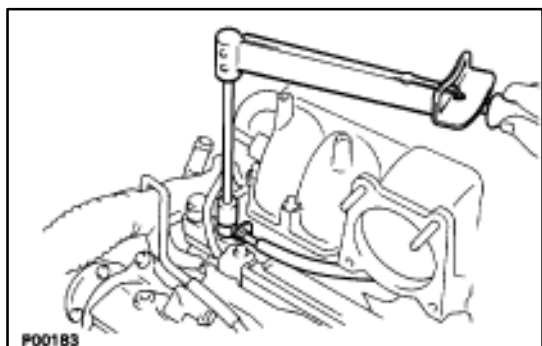


- (e) Tighten the bolt holding the EGR pipe to the air intake chamber.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

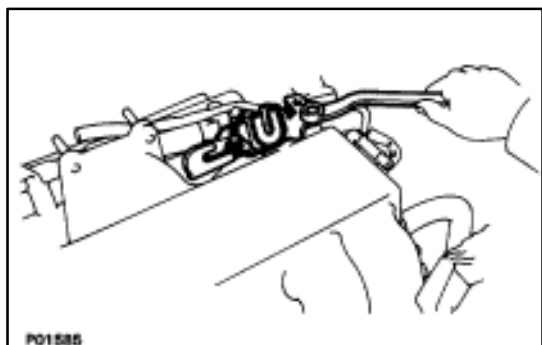
- (f) Tighten the bolt holding the EGR pipe to the RH cylinder head.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

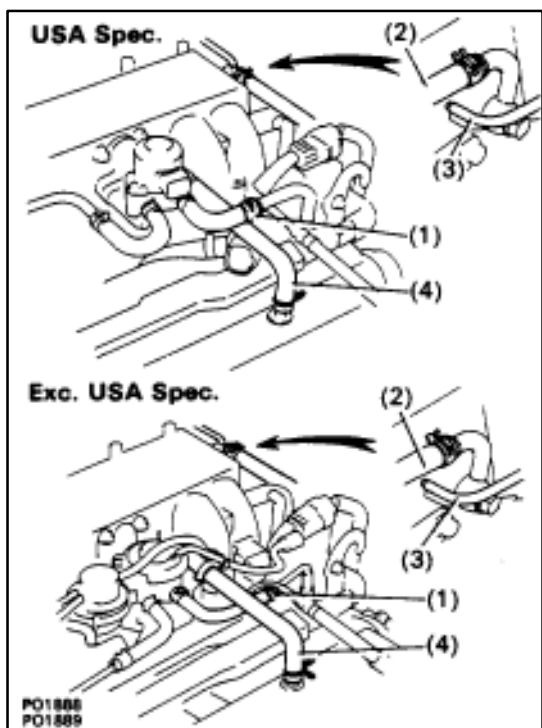


- (g) Connect the cold start injector tube to the RH delivery pipe with two new gaskets and union bolt.

Torque: 15 N·m (150 kgf·cm, 11 ft·lbf)



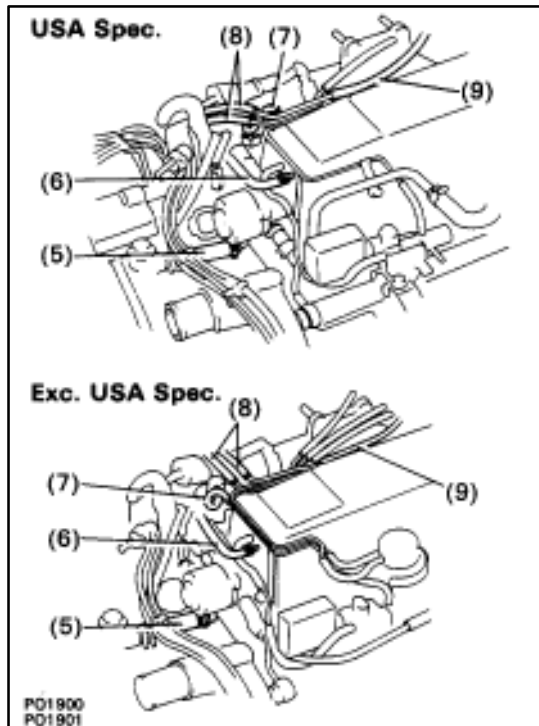
- (h) Install the accelerator bracket with the bolt and stud bolt.



13. CONNECT HOSES

Connect the following hoses:

- (1) Water by-pass (from EGR valve) to water bypass pipe
- (2) Vacuum hose (from brake booster) to air intake chamber
- (3) Vacuum hose (from VSV for heater water valve) to air intake chamber
- (4) PCV hose to LH cylinder head cover

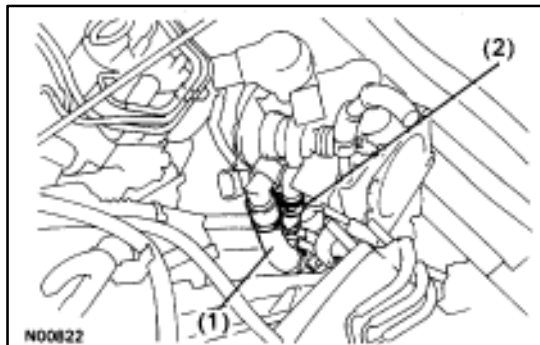


- (5) Water by-pass hose (from water inlet housing) to ISC valve
- (6) Vacuum hose (from PS air control valve) to air intake chamber
- (7) Vacuum sensing hose (from fuel pressure regulator) to vacuum pipe
- (8) Two vacuum hoses (from VSV for EVAP system) to vacuum pipe
- (9) Vacuum hose (from charcoal canister) to vacuum pipe.

14. CONNECT CONNECTORS

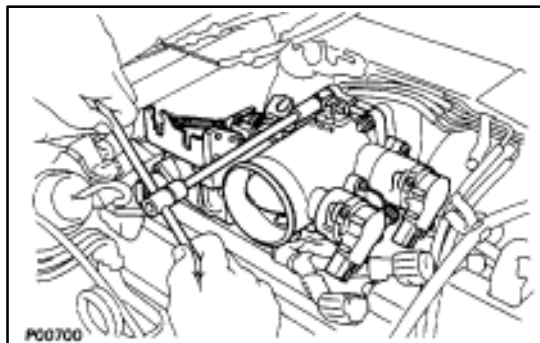
Connect the following connectors:

- Cold start injector connector
- ISC valve connector
- (USA Spec.)
EGR valve connector
- (Exc. USA Spec.)
VSV connector for EGR system
- VSV connector for fuel pressure control system



15. INSTALL THROTTLE BODY

- (a) Connect the following hoses:
 - (1) PCV hose to throttle body
 - (2) Water by-pass hose to throttle body

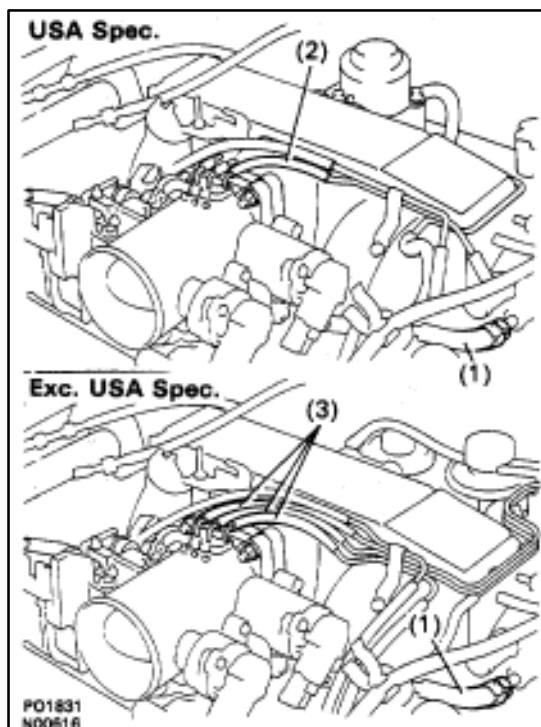


- (b) Install a new gasket and throttle body with the two bolts and two nuts.

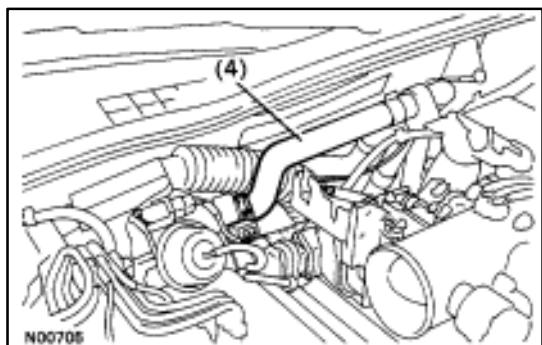
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

HINT: Use bolts 40 mm (1.57 in.) in length.

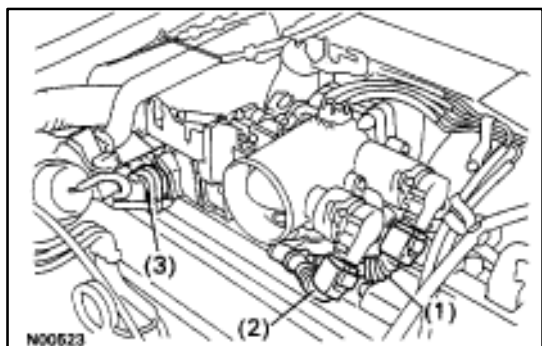
- (c) Install the water by-pass pipe (from rear water bypass joint) to the clamp on the engine wire cover.



- (d) Connect the following hoses:
- (1) Water by-pass hose to the ISC valve
 - (2) (USA Spec.)
Vacuum hose to throttle body
 - (3) (Exc. USA Spec.)
Three vacuum hoses to throttle body



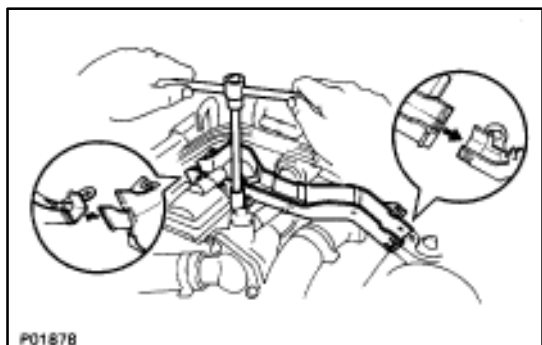
- (4) Heater water hose to heater water valve

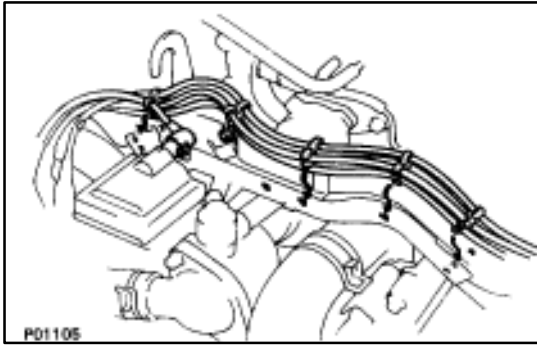


- (e) Connect the following connectors:
- (1) Throttle position sensor connector
 - (2) (w/ TRAC)
Sub-throttle position sensor connector
 - (3) (w/ TRAC)
Sub-throttle actuator connector

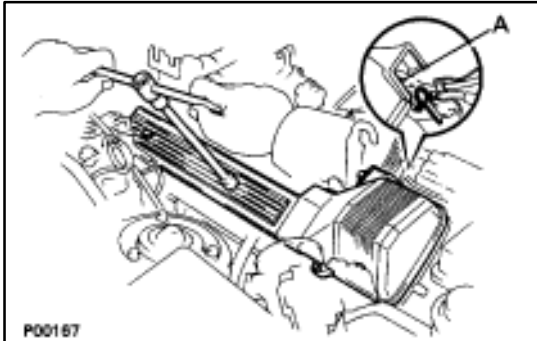
16. INSTALL LOWER HIGH-TENSION CORD COVER

- (a) Connect the end portions of the high-tension cord to the cord clamps
- (b) Install the high-tension cord cover with the bolt.



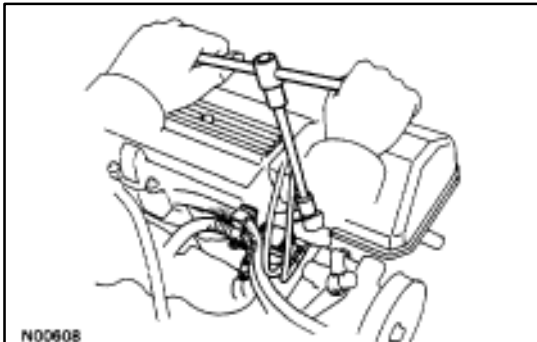


- (c) Install the clamps on the high-tension cords to the high-tension cord cover.
- (d) Connect the high-tension cord to the RH ignition coil.



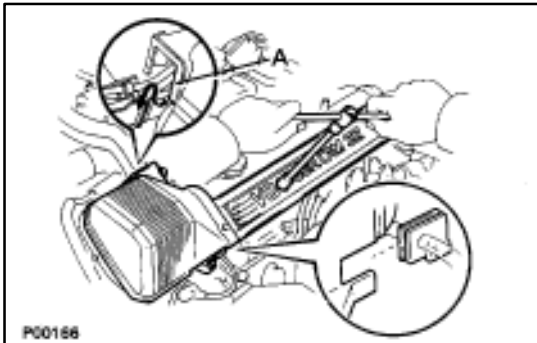
17. INSTALL RH NO.3 TIMING BELT COVER

- (a) Install the three gaskets to the timing belt cover.
- (b) Fit portion A of the timing belt cover, matching it with the lower high-tension cord cover.
- (c) Install the timing belt cover with the three bolts.



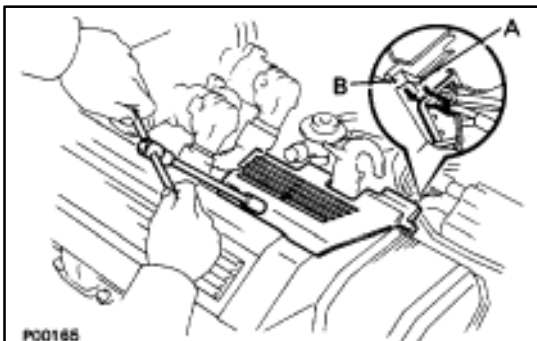
18. INSTALL VSV FOR EVAP SYSTEM

Install the VSV with the two bolts.



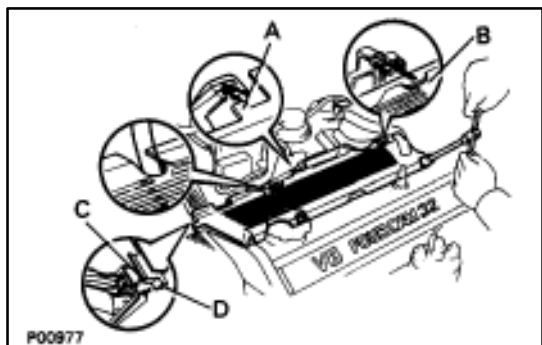
19. INSTALL LH NO.3 TIMING BELT COVER

- (a) Install the three gaskets to the timing belt cover.
- (b) Install the cord grommet to the high-tension cord.
- (c) Install the cord grommet to the timing belt cover.
- (d) Fit portion A of the timing belt cover, matching it with the lower high-tension cord cover.
- (e) Install the timing belt cover with the four bolts.



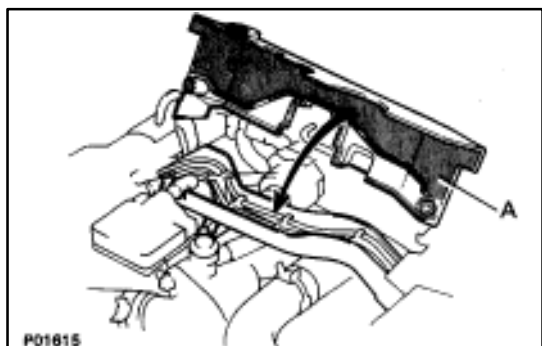
20. INSTALL RH ENGINE WIRE COVER

- (a) Fit portions A and B of the engine wire cover, matching them with the lower high-tension cord cover and No.3 timing belt cover.
- (d) Install the engine wire cover with the bolt.



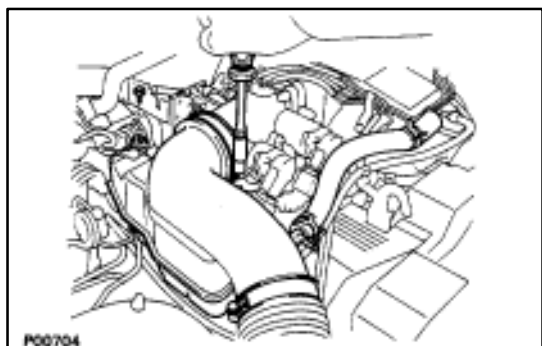
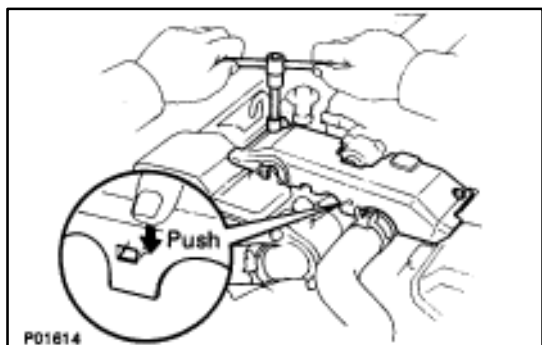
21. INSTALL LH ENGINE WIRE COVER

- (a) Connect portions A and B engine wire cover to the wire brackets.
- (b) Set the VSV (for fuel pressure control system) wire in original position.
- (c) Fit portions C and D of the engine wire cover, matching them with the lower high-tension cord cover and No.3 timing belt cover.
- (d) Install the engine wire cover with the two bolts.



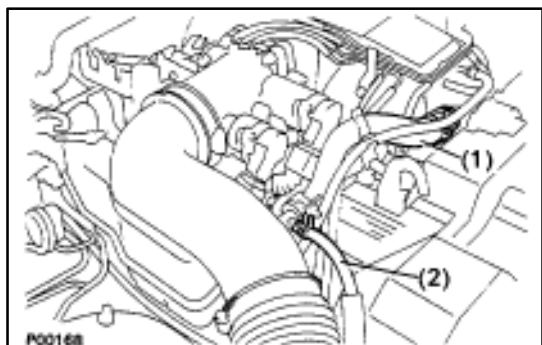
22. INSTALL UPPER HIGH-TENSION CORD COVER

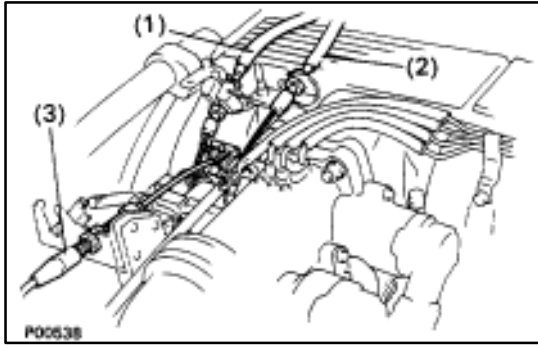
- (a) Fit portion A of the upper high-tension cover, matching it with the top of the lower high-tension cord cover.
- (b) Push the front side of the high-tension cord cover, and connect the front side claw groove of the upper high-tension cord cover to the claw of the lower high-tension cord cover.
- (c) Install the upper high-tension cord cover with the two bolts.



23. INSTALL INTAKE AIR CONNECTOR

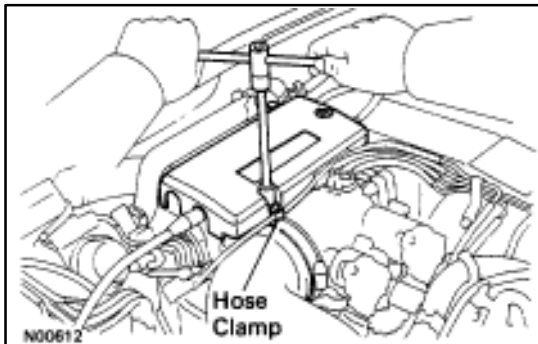
- (a) Connect the end portions of the intake air connector to the throttle body and air cleaner hose.
- (b) Tighten the two hose clamps.
- (c) Install the bolt holding the intake air connector to the cylinder head cover.
- (d) Connect the following hoses:
 - (1) Air hose to ISC valve
 - (2) Air hose (from PS air control valve) to intake air connector



**24. CONNECT CONTROL CABLES TO THROTTLE BODY**

Connect the following hoses:

- (1) Accelerator cable
- (2) A/T throttle control cable
- (3) (w/ Cruise Control System)
Cruise control actuator cable

**25. INSTALL THROTTLE BODY COVER**

Install the throttle body cover and hose clamp with the two bolts and cap nut.

26. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY**27. FILL WITH ENGINE COOLANT (See page [CO-7](#))****28. CHECK THAT ENGINE STARTS**