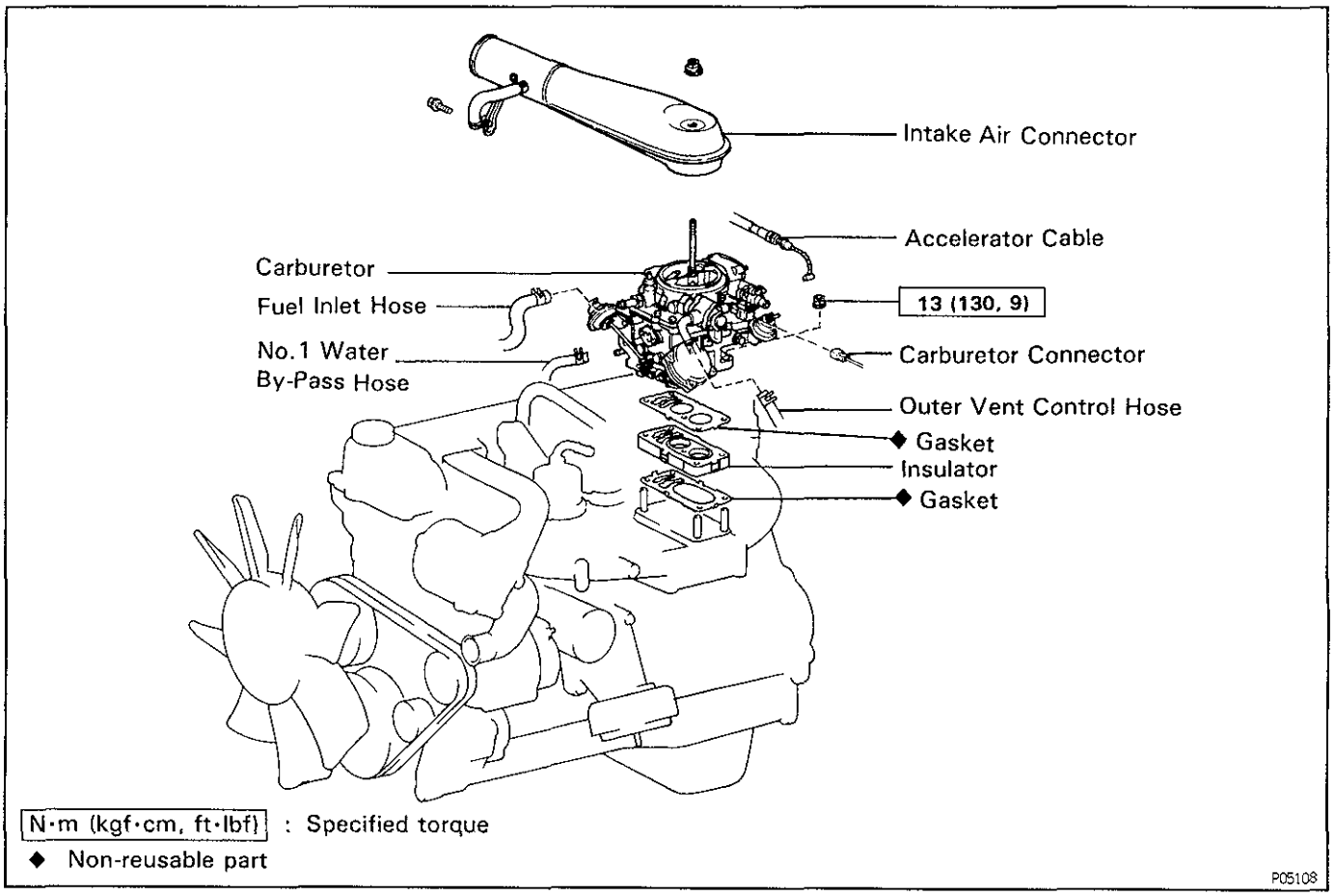
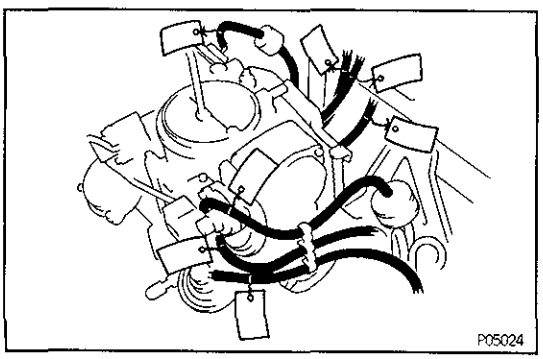
CARBURETOR

CARBURETOR REMOVAL

EG0UA--01

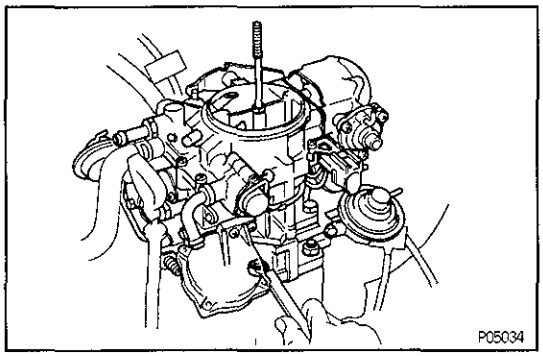


1. **DRAIN COOLANT**
   Disconnect the No.2 water by—pass hose from the intake manifold and drain the coolant from the manifold.
2. **REMOVE INTAKE AIR CONNECTOR**
3. **DISCONNECT ACCELERATOR CABLE FROM CARBURETOR**
4. **DISCONNECT CARBURETOR CONNECTOR**



5. **DISCONNECT FOLLOWING HOSES:**

(a) Fuel inlet hose
(b) Outer vent control hose
(c) No.1 water by—pass hose
(d) Emission control hoses
HINT: Before disconnecting the emission control hoses, use tag to identify how they should be reconnected.

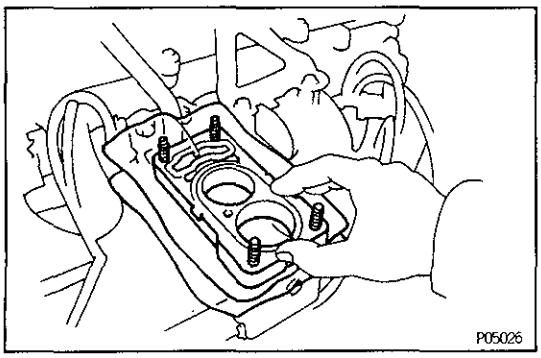


EG

6. REMOVE CARBURETOR

(a) Remove the four carburetor mounting nuts.

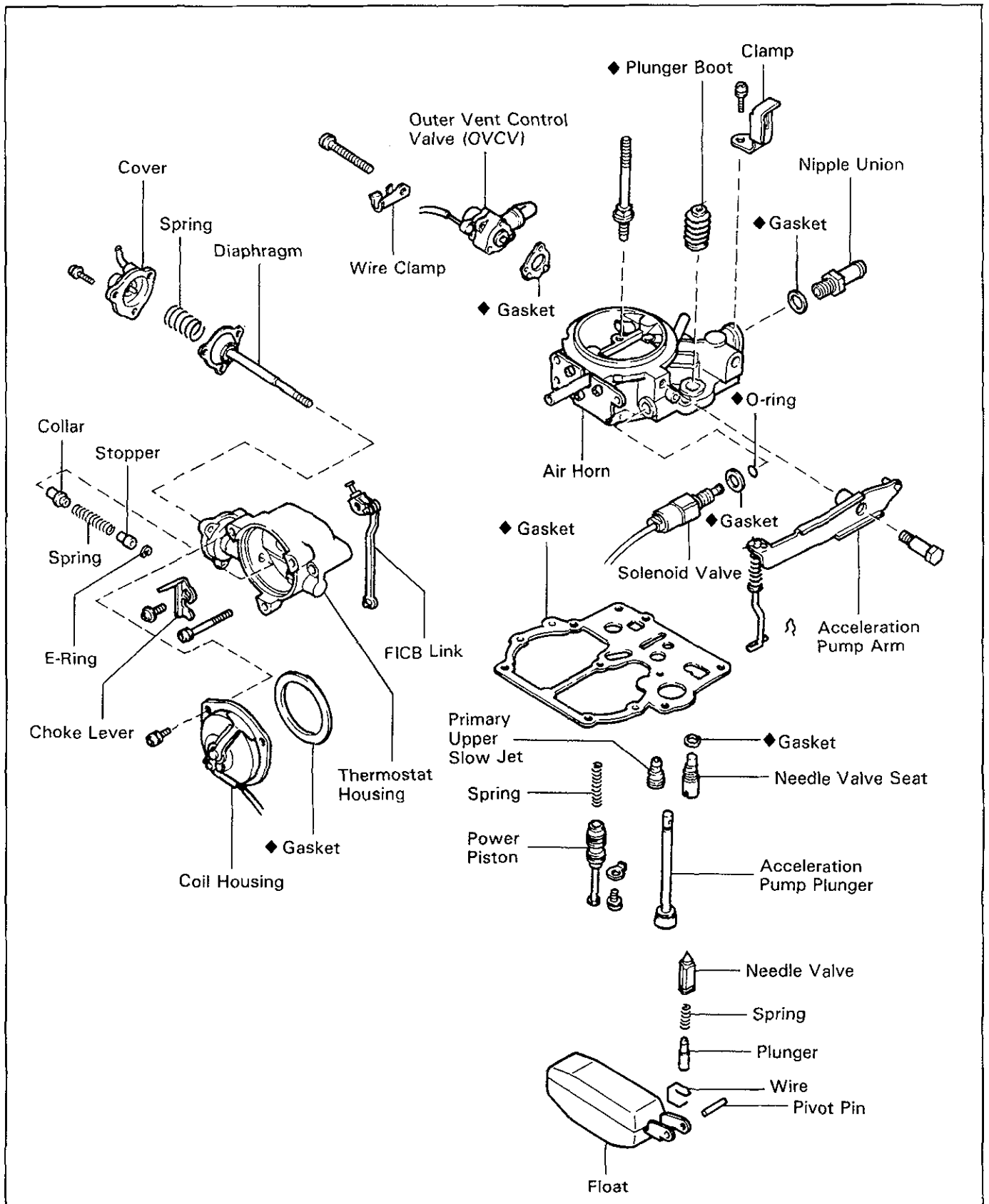
(b) Lift out the carburetor.



(c) Cover the inlet hole of the intake manifold with a cloth.

EG0UB-01

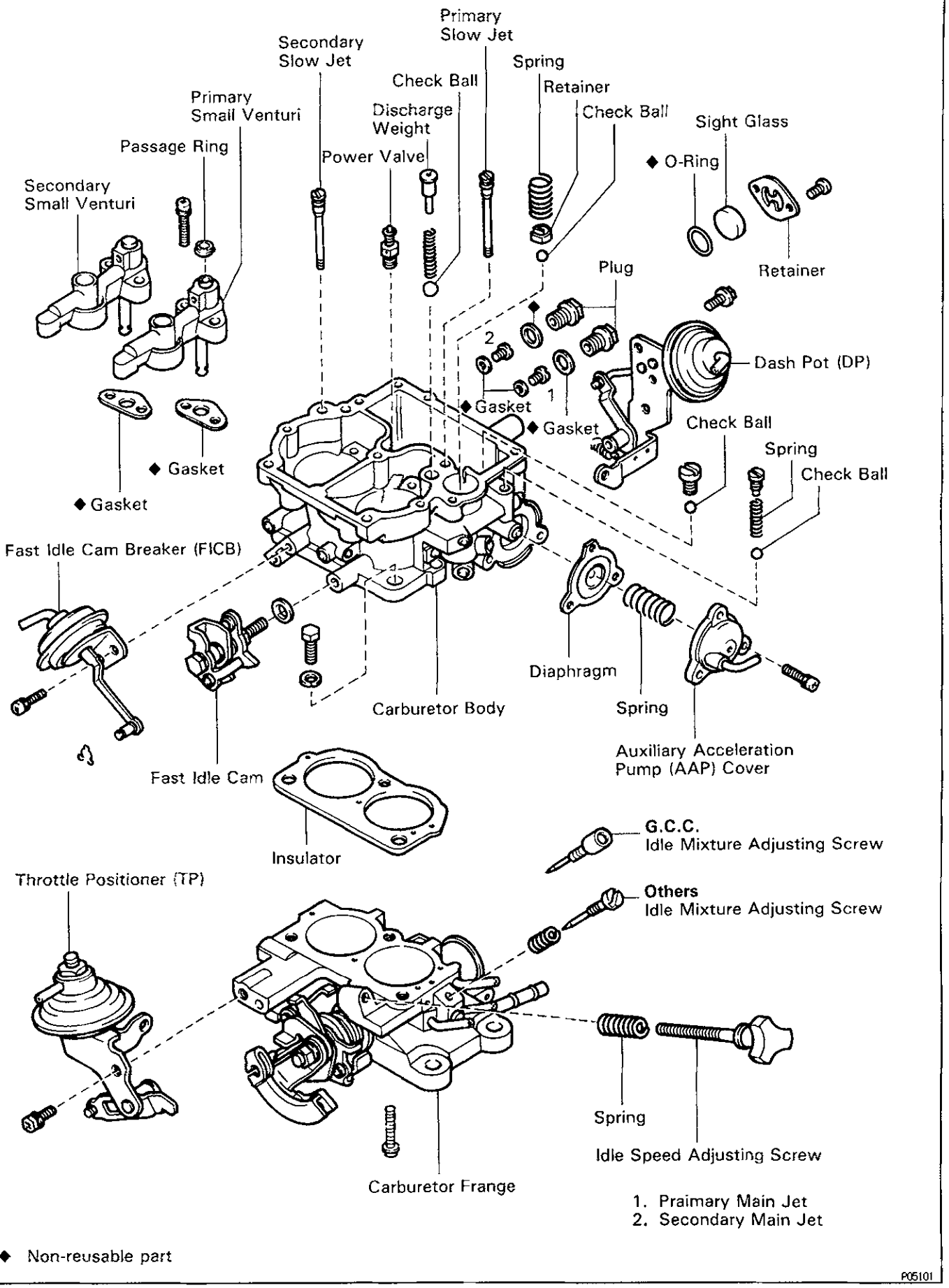
COMPONENTS



◆ Non-reusable part

P04922

EG


Primary Slow Jet
Secondary Slow Jet
Spring
Check Ball
Retainer
Primary Small Venturi
Discharge Weight
Check Ball
Sight Glass
Passage Ring
Power Valve
◆ O-Ring
Secondary Small Venturi
Plug
Retainer
2
Dash Pot (DP)
◆ Gasket
1
◆ Gasket
◆ Gasket
Check Ball
Spring
Check Ball
◆ Gasket
Fast Idle Cam Breaker (FICB)
Diaphragm
Carburetor Body
Spring
Auxiliary Acceleration Pump (AAP) Cover
Fast Idle Cam
Insulator
G.C.C.
Idle Mixture Adjusting Screw
Throttle Positioner (TP)
Others
Idle Mixture Adjusting Screw
Spring
Idle Speed Adjusting Screw
Carburetor Frange
1. Praimary Main Jet
2. Secondary Main Jet
◆ Non-reusable part
P05101

EG0UC–01

CARBURETOR DISASSEMBLY

HINT: The following instructions are organized sothat you will work only one component group at a time.
This will help you avoid confusion between similar looking parts from different subassemblies being on your workbench at the same time.

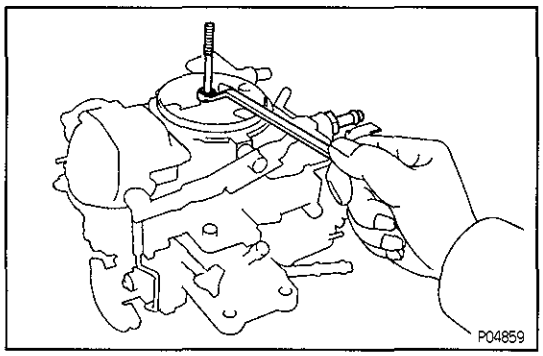
(a) To facilitate reassembly, arrange parts in order.
(b) Be careful not to mix up or lose balls, clips or springs.

(c) Use SST (carburetor driver set).
SST 09860–11011

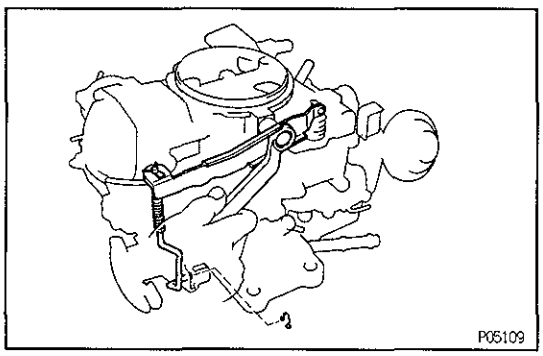
EG0UD–01

Air Horn Disassembly

(See page EG–311)

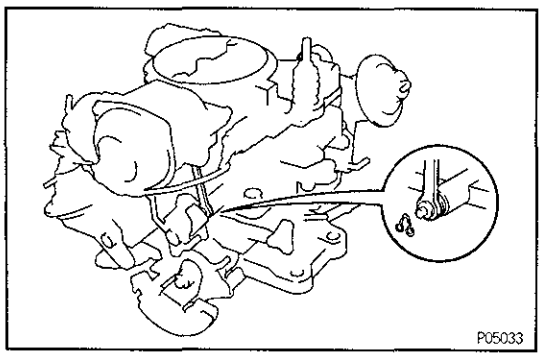


1. REMOVE CABURETOR STUD BOLT AND NIPPLE UNION

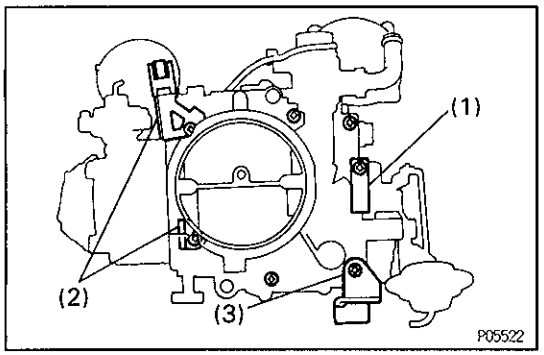


2. REMOVE ACCELERATION PUMP ARM
(a) Remove the snap ring from the pump connecting link.

(b) Remove the pivot bolt.
(c) Disconnect the pump arm from the pump plunger.
(d) Disconnect the pump connecting link from the throttle lever and remove the pump arm and pump connecting link.



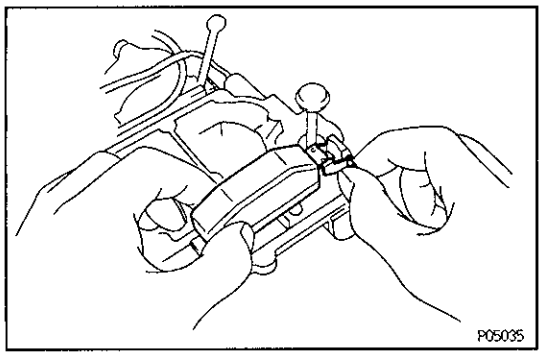
3. DISCONNECT FAST IDLE CAM BREAKER (FICB) LINK



4. REMOVE AIR HORN ASSEMBLY

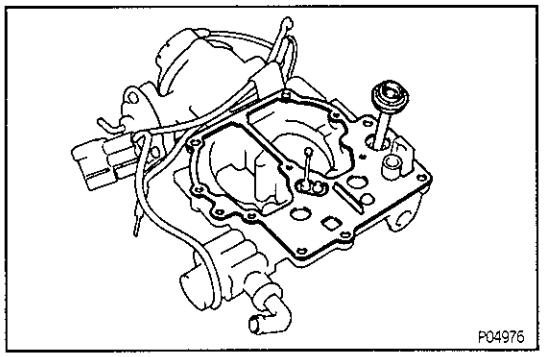
(a) Remove the seven screws and following parts:
  (1) Number plate
  (2) Wire clamps
  (3) Vacuum hose clamp

(b) Lift off the air horn assembly together with the air horn gasket.



5. REMOVE FLOAT AND NEEDLE VALVE

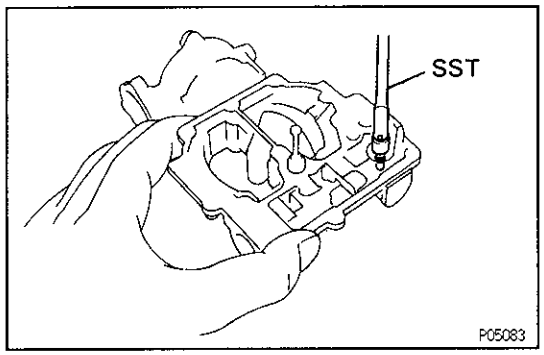
Remove the float pivot pin, float and needle valve subassembly.



6. REMOVE ACCELERATION PUMP PLUNGER

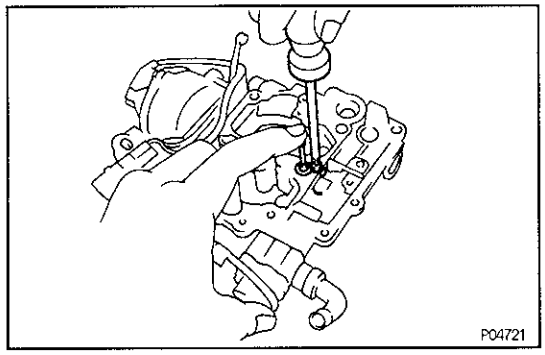
Remove the pump plunger and boot.

7. REMOVE AIR HORN GASKET



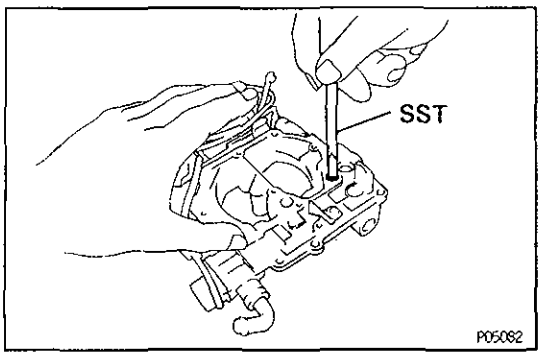
8. REMOVE NEEDLE VALVE SEAT

Remove the needle valve seat and gasket.



9. REMOVE POWER PISTON

Remove the screw, retainer, power piston and spring.

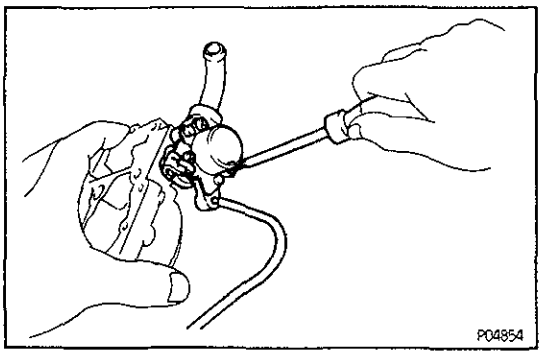


10. REMOVE PRIMARY UPPER SLOW JET

EG

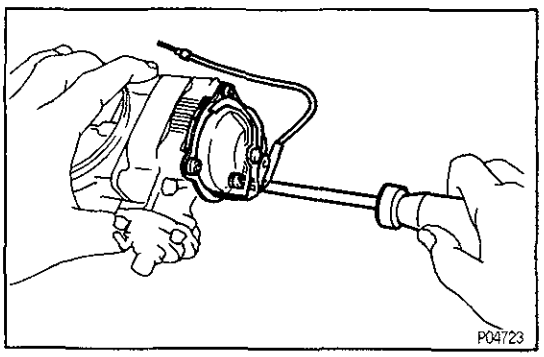
11. DISCONNECT WIRES FROM CARBURETOR CONNECTOR

Pry up the locking lugs with a screwdriver and pull out the terminal.



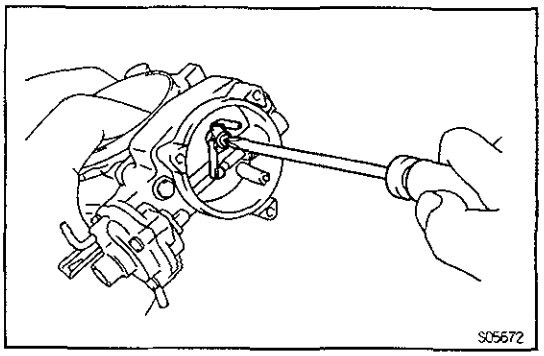
12. REMOVE OUTER VENT CONTROL VALVE (OVCV)

Remove the three screws, wire clamp, OVCV and gasket.



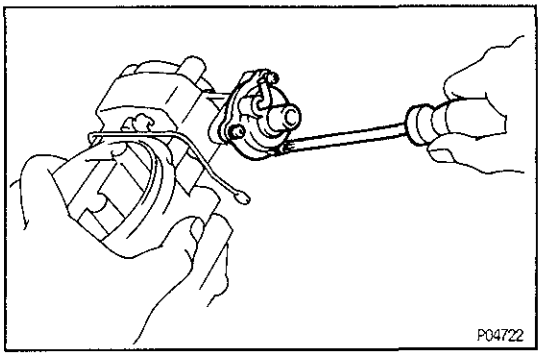
13. REMOVE COIL HOUSING

Remove the three screws, retainer, coil housing and gasket.



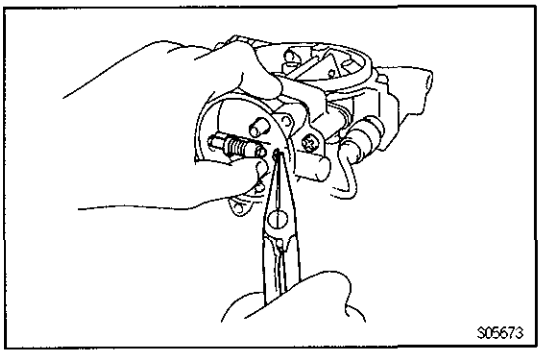
14. REMOVE CHOKE LEVER

Remove the screw and choke lever.

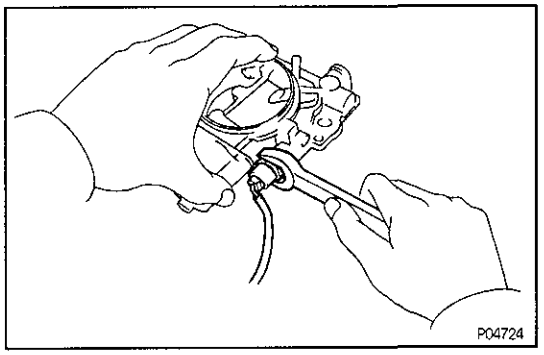


15. REMOVE CHOKE BREAKER (CB)

(a) Remove the three screws, cover and spring.

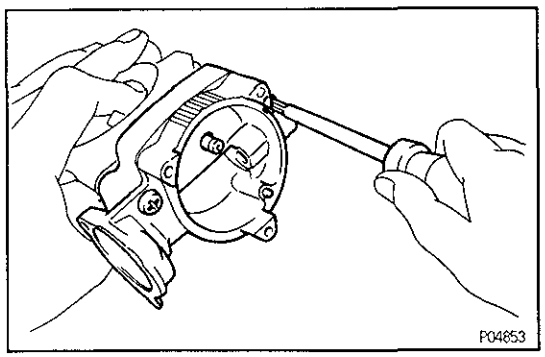


(b) Remove the E–ring, stopper, spring collar and diaphragm.



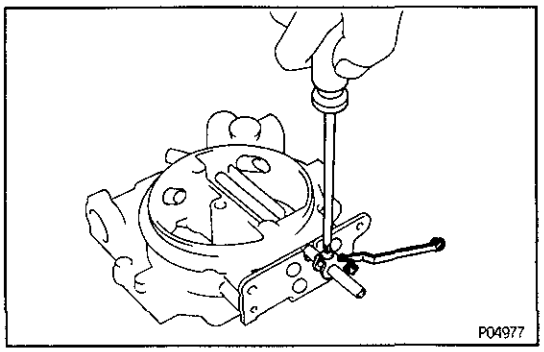
16. REMOVE FUEL CUT SOLENOID VALVE

Remove the solenoid valve and gasket.



17. REMOVE THERMOSTAT HOUSING

Remove the two screws and thermostat housing.

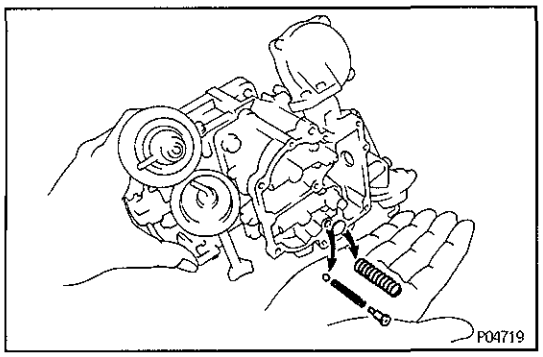


18. REMOVE FAST IDLE CAM BREAKER (FICB) LINK

Remove the screw and FICB link.

EGOUE–01

Carburetor Body Disassembly



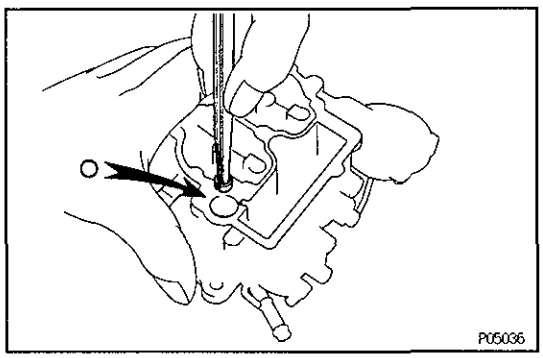
(See page EG–312)

1. REMOVE CHECK BALLS FOR ACCELERATION PUMP

(a) Remove the pump discharge weight, spring and large ball.

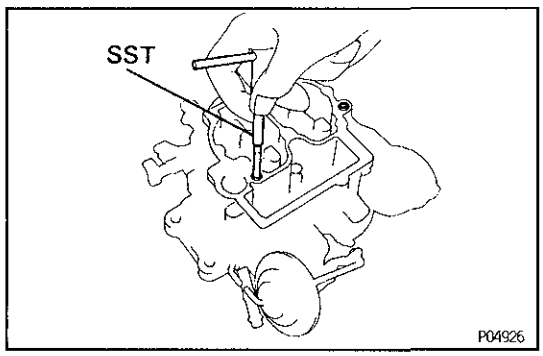
(b) Remove the plunger spring.

EG



(c) Using tweezers, remove the ball retainer.

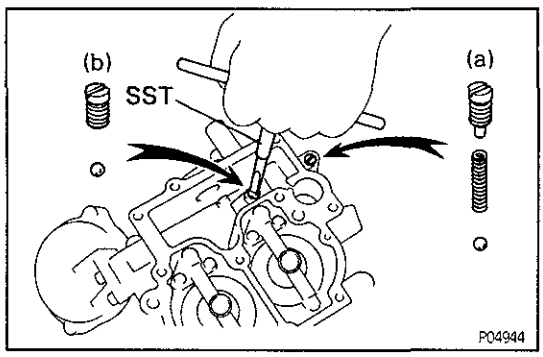
(d) Remove the small ball.



2. REMOVE SLOW JETS

(a) Remove the primary slow jet.

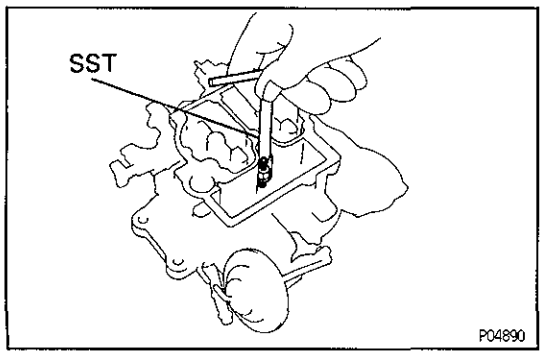
(b) Remove the secondary slow jet.



3. REMOVE CHECK BALLS FOR AUXILIARY ACCELERATION PUMP (AAP)

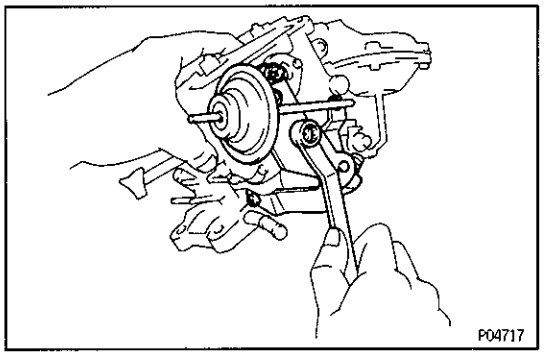
(a) Remove the plug, spring and ball.

(b) Remove the plug and ball.



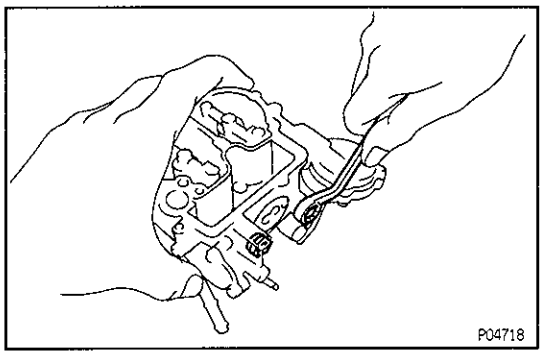
4. REMOVE POWER VALVE

EG



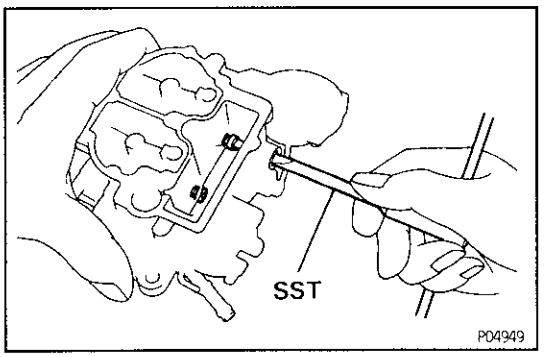
5. REMOVE DASH POT (DP)

Remove the three screws and DP.

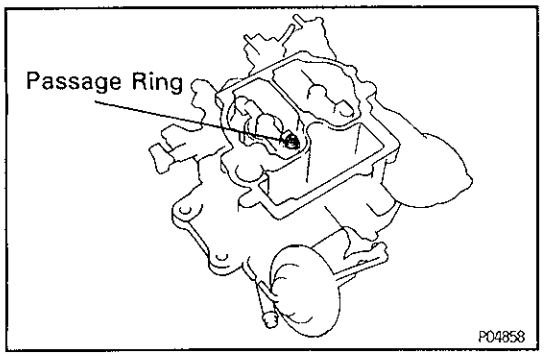


6. REMOVE PRIMARY AND SECONDARY MAIN JETS

(a) Remove the two passage plugs and gaskets.

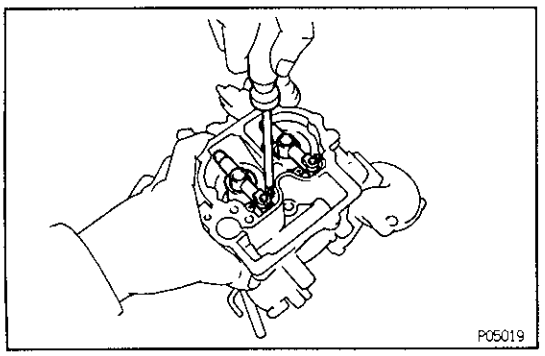


(b) Remove the primary and secondary main jets and gaskets.



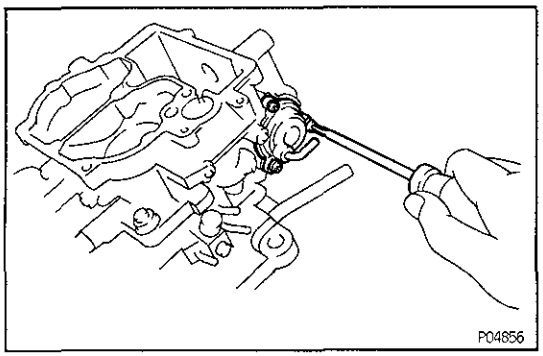
7. REMOVE SMALL VENTURIES

(a) Remove the passage ring.



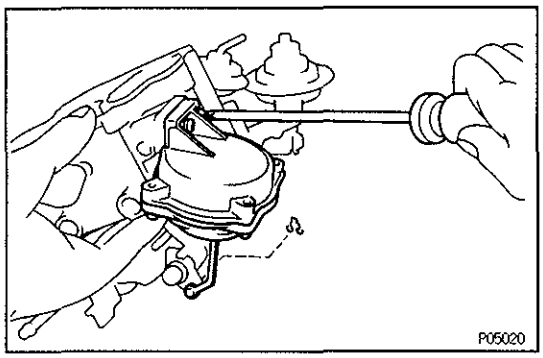
(b) Remove the two screws, primary small venturi and gasket.

(c) Remove the two screws, secondary small venturi and gasket.



8. REMOVE AUXILIARY ACCELERATION PUMP (AAP)

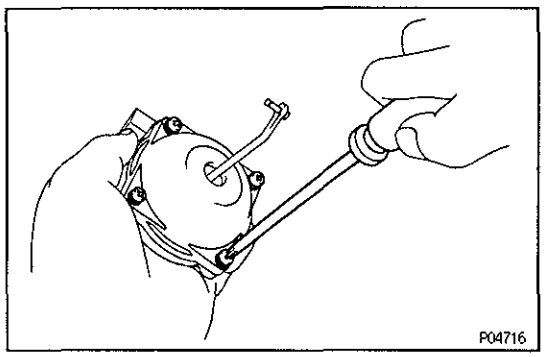
Remove the three screws, pump housing, spring and diaphragm.



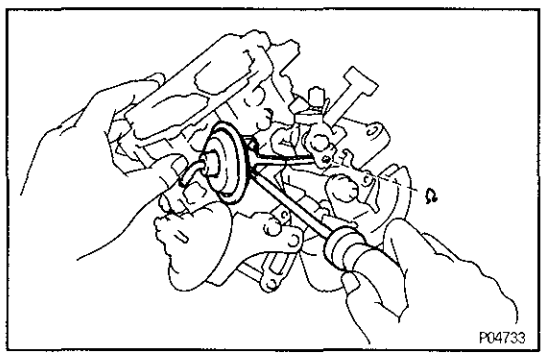
9. REMOVE SECONDARY THROTTLE VALVE DIAPHRAGM

(a) Remove the snap ring and disconnect the diaphragm link.

(b) Remove the two screws, throttle valve diaphragm assembly and gasket.



(c) If necessary, remove the four screws and disassembly the throttle valve diaphragm.

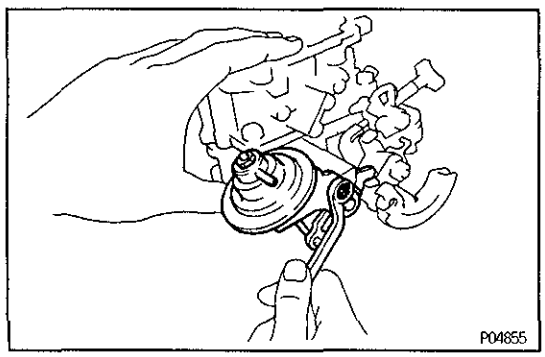


10. REMOVE FAST IDLE CAM BREAKER (FICB)

(a) Remove the snap ring.

(b) Remove the two screws.

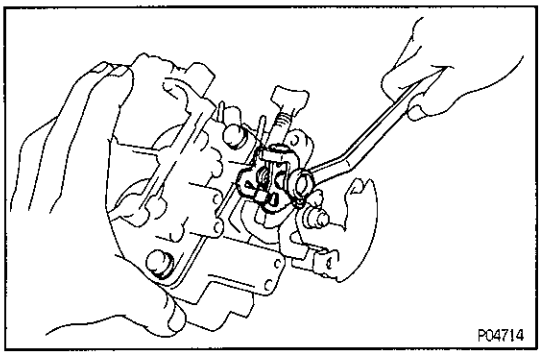
(c) Disconnect the link, and remove the FICB.



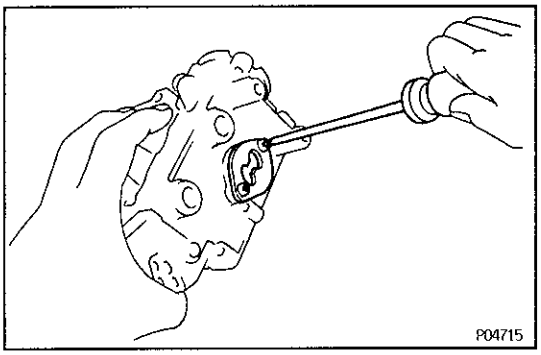
11. REMOVE THROTTLE POSITIONER (TP)

Remove the two screws and TP.

EG

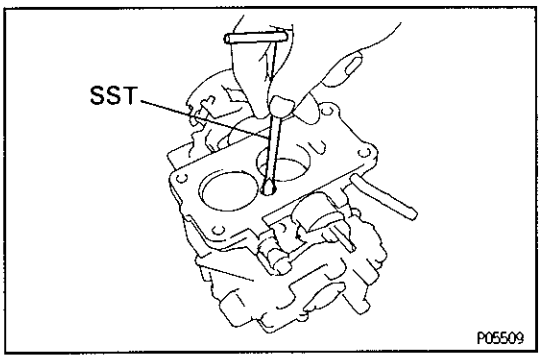


12. REMOVE FAST IDLE CAM



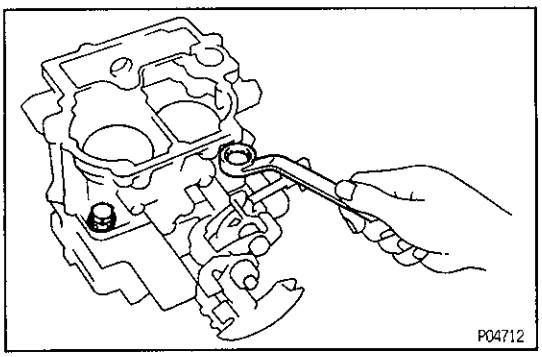
13. REMOVE SIGHT GLASS

Remove the two screws, retainer, sight glass and O–ring.

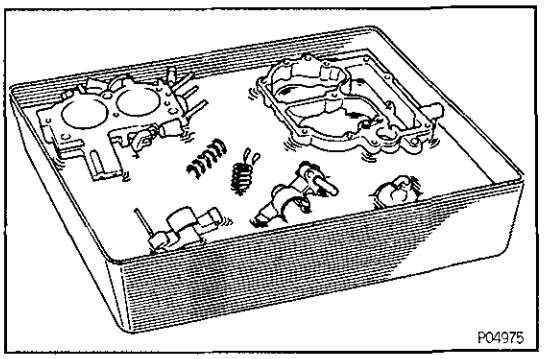


14. SEPARATE CARBURETOR BODY AND FLANGE

(a) Remove the passage screw and spring washer.



(b) Remove the two bolts.
(c) Separate the body and flange.
(d) Remove the insulator.

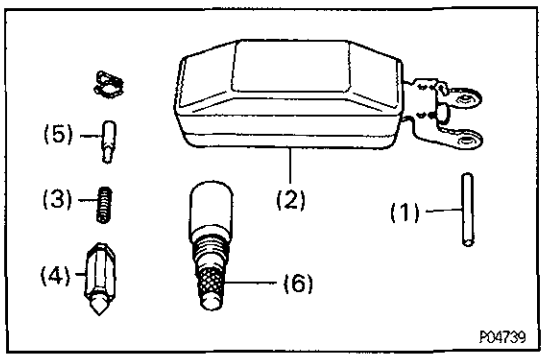


GENERAL CLEANING PROCEDURE

EG0UF-01

CLEAN DISASSEMBLED PARTS BEFORE INSPECTION

(a) With a soft brush wash and clean the cast parts in carburetor cleaner.
(b) Clean off the carbon around the throttle valve.
(c) Wash the other parts thoroughly in carburetor cleaner.
(d) Blow all dirt and other foreign material from the jets, fuel passages and restrictions in the body.

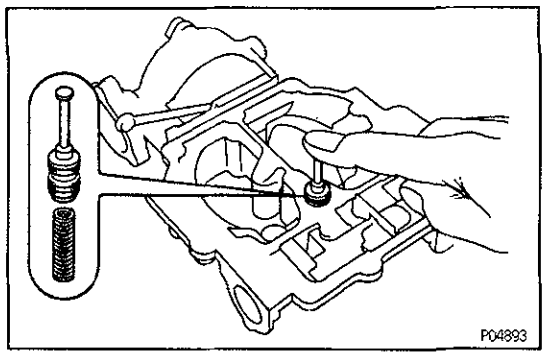


INSPECTION OF CARBURETOR

EG0UG-01

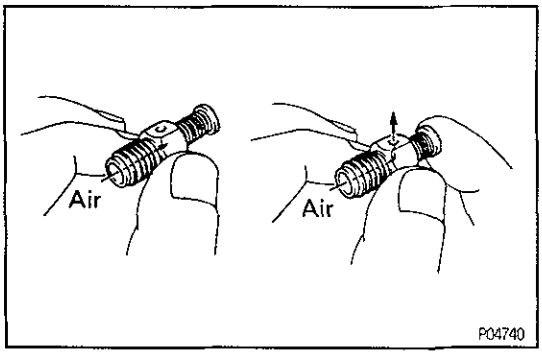
1. INSPECT FLOAT AND NEEDLE VALVE

(a) Inspect the pivot pin (1) for scratches and excessive wear.
(b) Inspect the float (2) for broken lips and wear in the pivot pin holes.
(c) Inspect the spring (3) for breaks and deformation.
(d) Inspect the needle valve (4) and plunger (5) for wear or damage.
(e) Inspect the strainer (6) for rust and breaks.



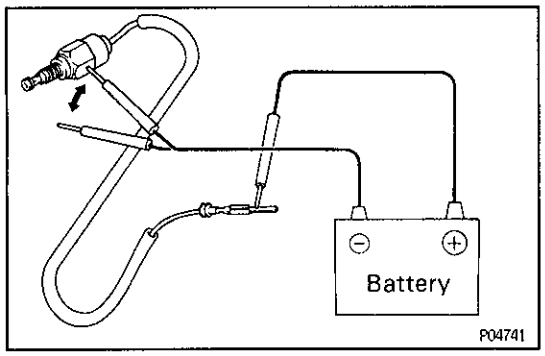
2. INSPECT POWER PISTON

Check that the power piston moves smoothly.



3. INSPECT POWER VALVE

Check for faulty opening and closing action.

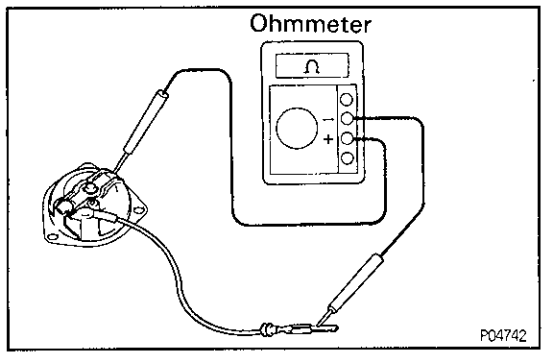


EG

4. INSPECT FUEL CUT SOLENOID VALVE

(a) Connect the connector terminals to the battery terminals.

(b) You should feel a "click" from the solenoid valve when the battery power is connected and disconnected.
If the solenoid valve is not operating properly, replace it.



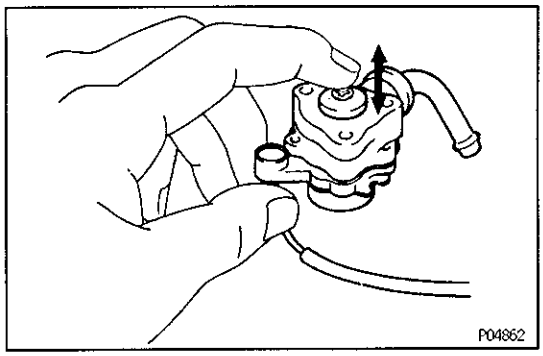
5. INSPECT CHOKE HEATER (COIL HOUSING)

Using an ohmmeter, measure the resistance between the terminals.

Resistance (Cold):

1.7—1.9 Ω at 20°C (68°F)

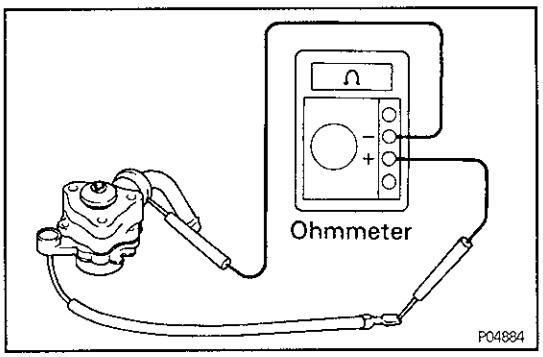
If a problem is found, replace the choke heater.



6. INSPECT OUTER VENT CONTROL VALVE (OVCV)

(a) Check the valve and seats for damage.

(b) Check the valve rod moves smoothly.

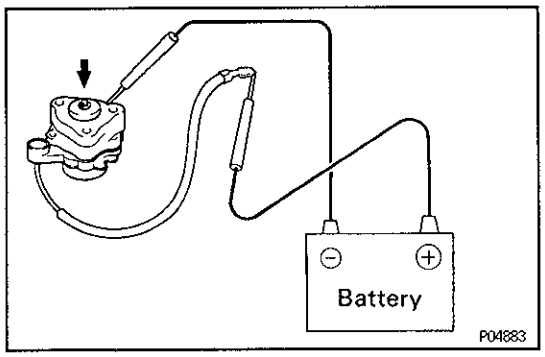


(c) Using an ohmmeter, measure the resistance between the wire terminal and body.

Resistance (Cold):

32—38 Ω

If the resistance is not within specification, replace the OVCV.



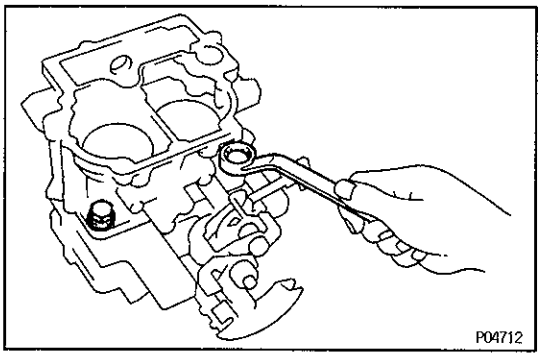
(d) Connect the OVCV body and wire terminal to the battery terminals and check that the valve is retracted.
If the OVCV is not operating properly, replace it.

EG0UH–01

CARBURETOR ASSEMBLY

HINT: Use new gaskets and O–rings throughout.

EG



EG0UJ–01

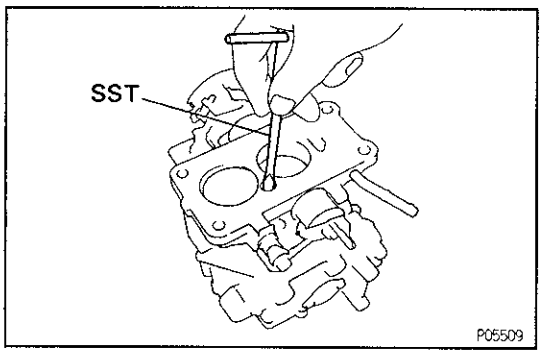
Carburetor Body Assembly

(See page EG–312)

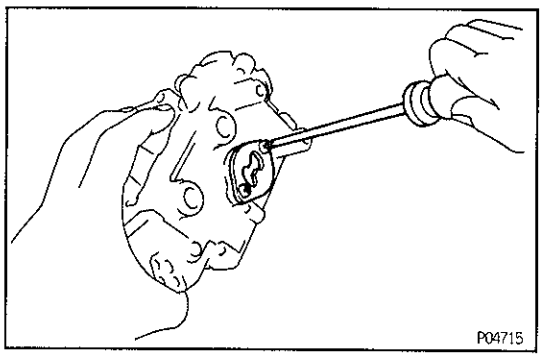
1. ASSEMBLE CARBURETOR BODY AND FLANGE

(a) Assemble the flange and body together with a new insulator.

(b) Install the two bolts.

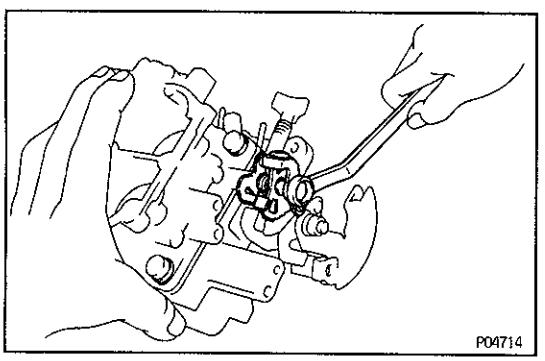


(c) Install the passage screw together with the spring washer.



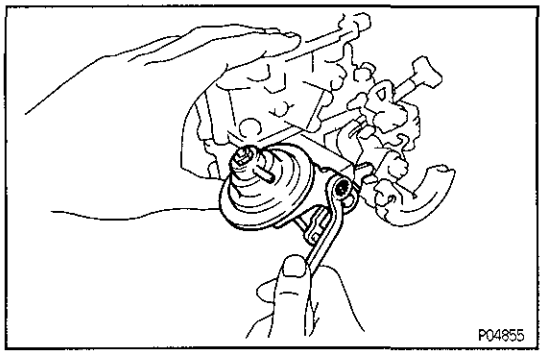
2. INSTALL SIGHT GLASS

Install a new O–ring, the sight glass and retainer with the two screws.



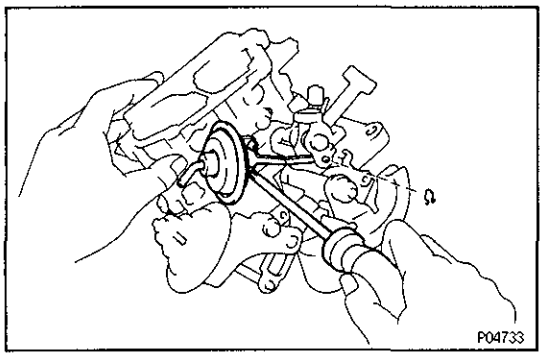
3. INSTALL FAST IDLE CAM

EG



4. INSTALL THROTTLE POSITIONER (TP)

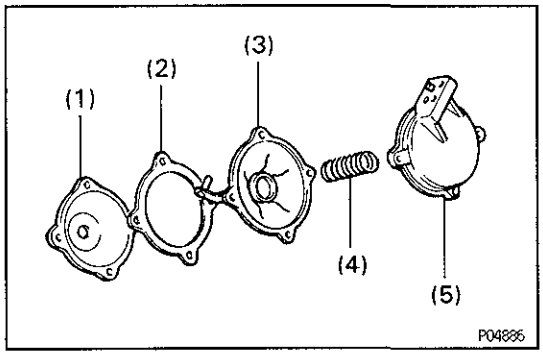
Install the TP with the two screws.



5. INSTALL FAST IDLE CAM BREAKER (FICB)

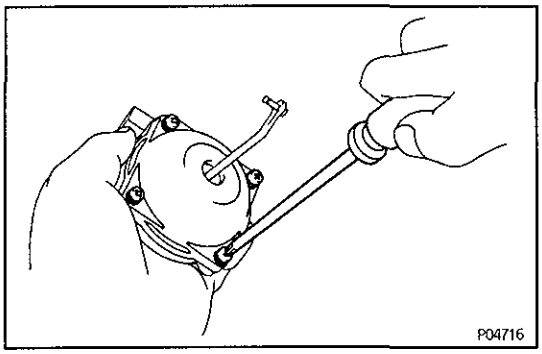
(a) Connect the link, and install the FICB with the two screws.

(b) Secure the link with the snap ring.

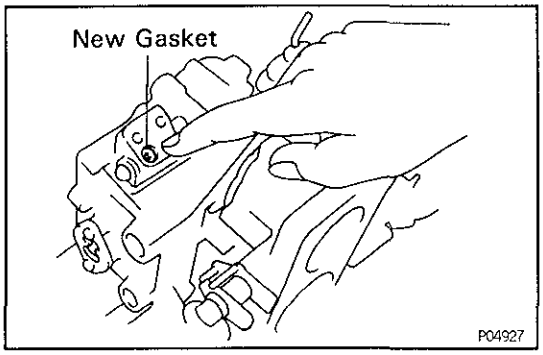


6. INSTALL SECONDARY THROTTLE VALVE DIAPHRAGM

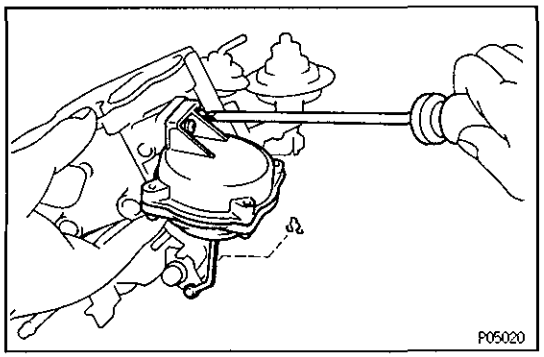
(a) Assemble the housing (1), a new gasket (2), the diaphragm (3), spring (4) and cover (5).



(b) Install the four screws.

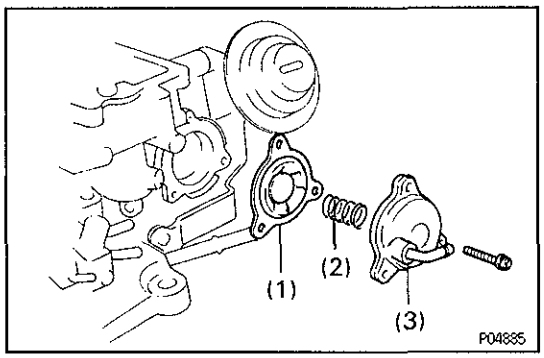


(c) Place a new gasket in position on the carburetor body.



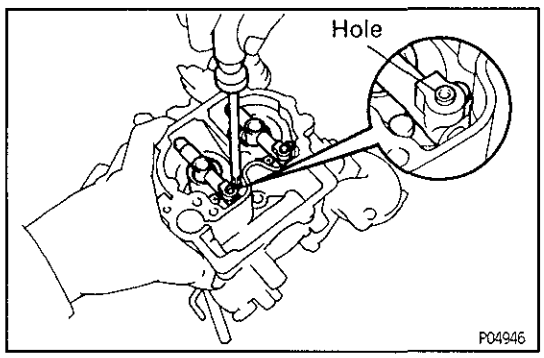
(d) Install the throttle valve diaphragm with the two screws.
(e) Connect the diaphragm link with the snap ring.

EG

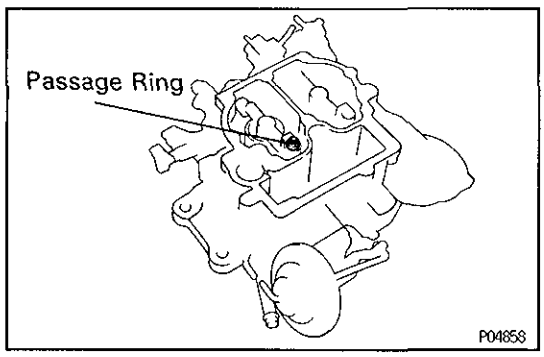


7. INSTALL AUXILIARY ACCELERATION PUMP (AAP)

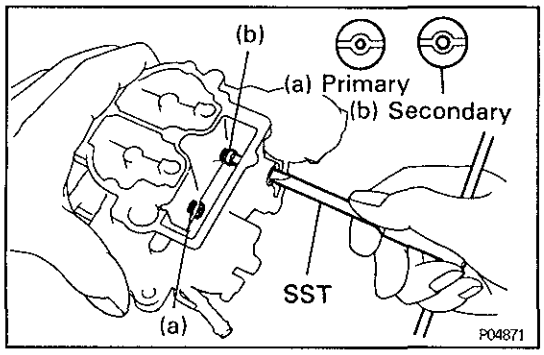
Install the following parts with the three screws.
(1) Diaphragm
(2) Spring
(3) Cover



8. INSTALL SMALL VENTURIES
(a) Install a new gasket and the primary venturi with the two screws.
(b) Install a new gasket and the secondary venturi with the two screws.

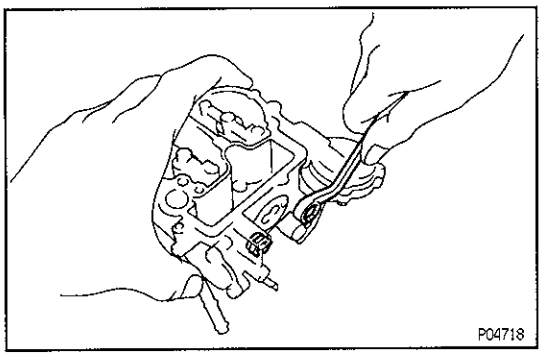


(c) Install the passage ring.

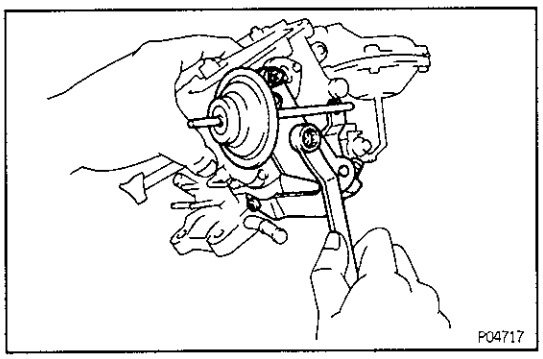


9. INSTALL PRIMARY AND SECONDARY MAIN JETS
(a) Install the primary and secondary main jets with new gaskets.

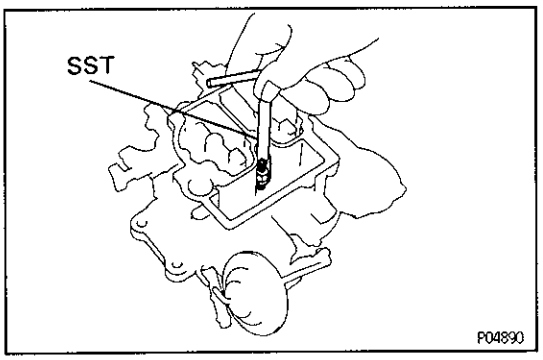
EG



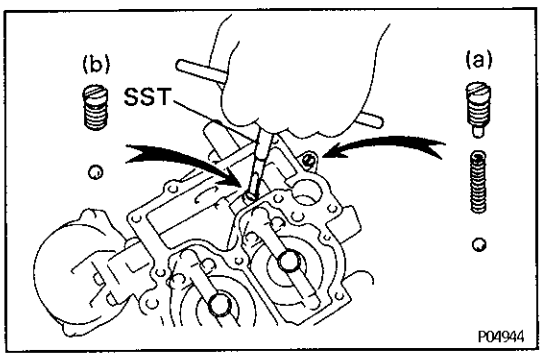
(b) Install the primary and secondary passage plugs with new gaskets.



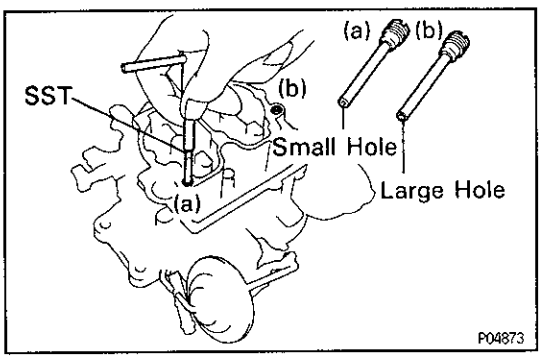
10. INSTALL DASH POT (DP)
Install the DP with the three screws.



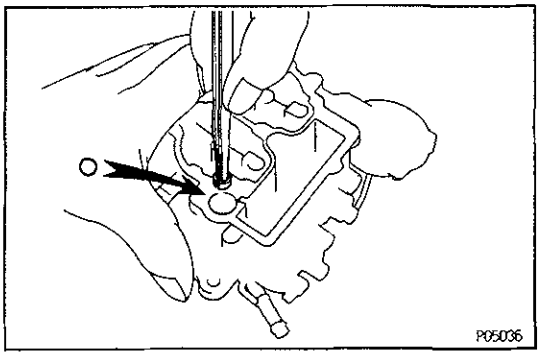
11. INSTALL POWER VALVE



12. INSTALL CHACK BALLS FOR AUXILIARY ACCELERATION PUMP (AAP)
(a) Install the ball, spring and plug.
(b) Install the ball and plug.



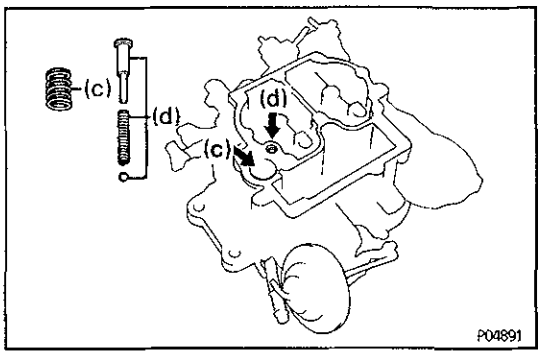
13. INSTALL SLOW JETS
(a) Install the primary slow jet.
(b) Install the secondary slow jet.



14. INSTALL CHECK BALLS FOR ACCELERATION

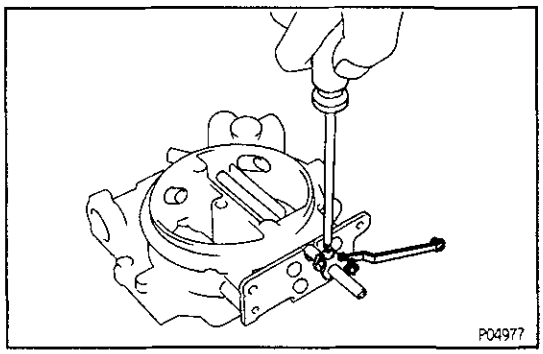
(a) Install the plunger small ball.

(b) Using tweezers, install the ball retainer.



(c) Install the plunger spring.

(d) Install the pump discharge large ball, spring and weight.



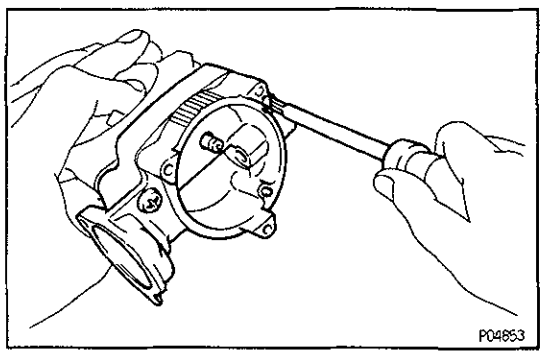
EG0UK–02

Air Horn Assembly

(See page EG–311)

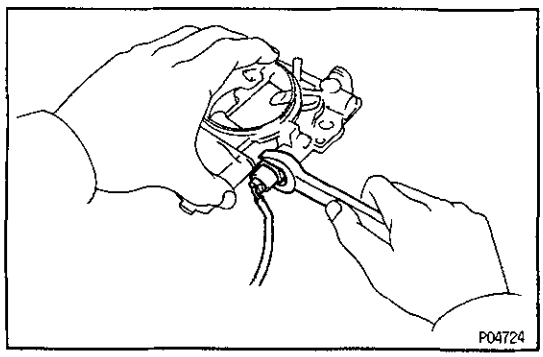
1. INSTALL FAST IDLE CAM BREAKER (FICB) LINK

Install the FICB link with the screw.



2. INSTALL THERMOSTAT HOUSING

Install the thermostat housing with the two screws.

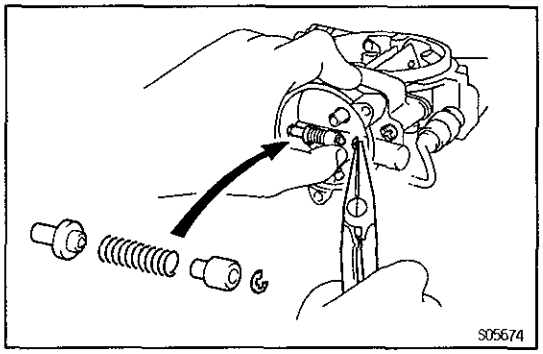


3. INSTALL FUEL CUT SOLENOID VALVE

(a) Install a new O–ring to the solenoid valve.

(b) Install the solenoid valve together with a new gasket.

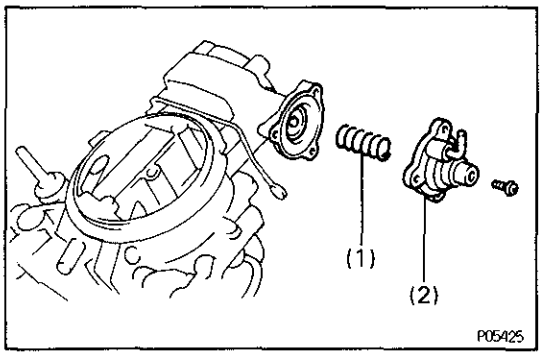
EG



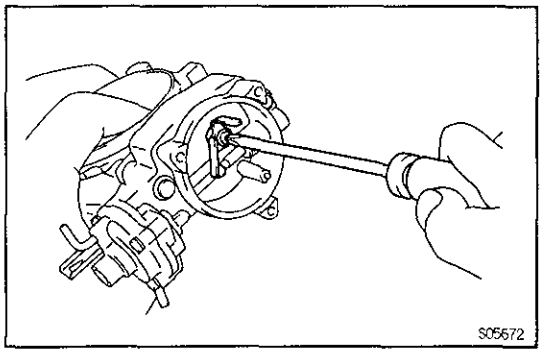
4. INSTALL CHOKE BREAKER (CB)

(a) Insert the diaphragm into the thermostat case, and install the collar, spring and stopper with the E–ring.

(b) Insert the shaft of the diaphragm into the hole of the thermostat case.

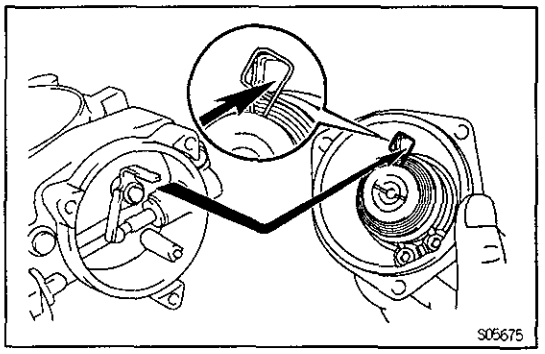


(c) Install the following parts with the three screws:
(1) Spring
(2) Cover



5. INSTALL CHOKE LEVER

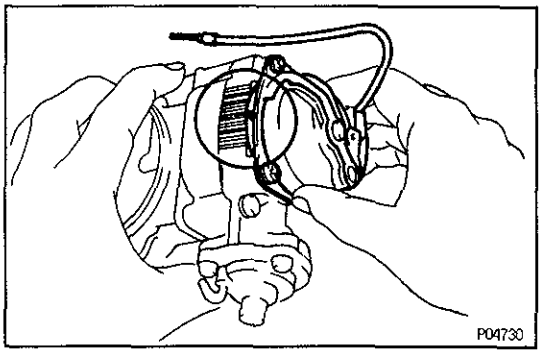
Install the choke lever with the screw.



6. INSTALL COIL HOUSING

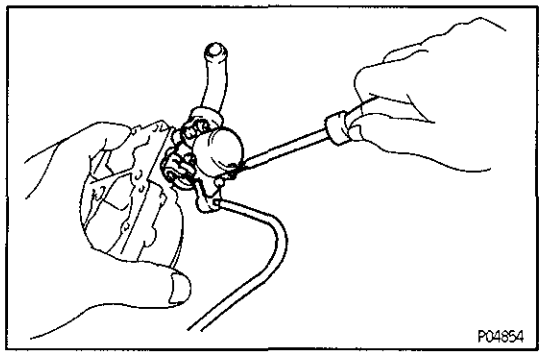
(a) Install the gasket to the thermostat case.

(b) Align the bi–metal spring with the wire spring and install the coil housing, aligning the choke lever as shown in the illustration.



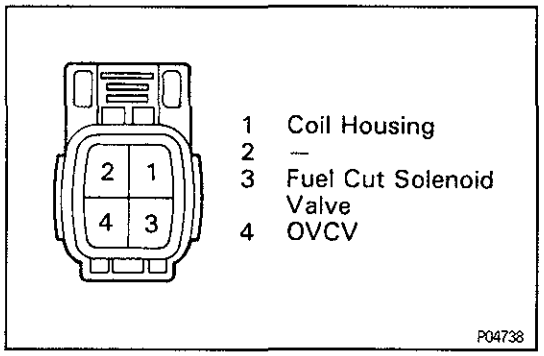
(c) Align the scale center line of the thermostat case with the coil housing line, and install the plate with the three screws.

(d) Check the choke valve action.



7. INSTALL OUTER VENT CONTROL VALVE (OVCV)

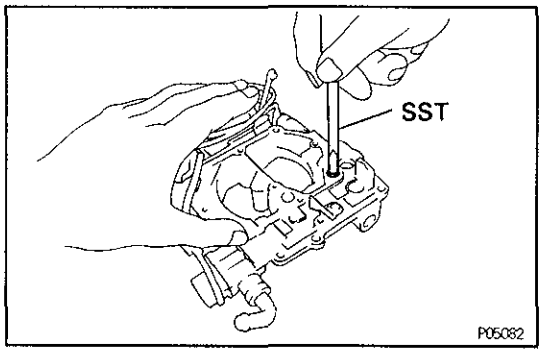
Install a new gasket, the wire clamp and OVCV with the three screws.



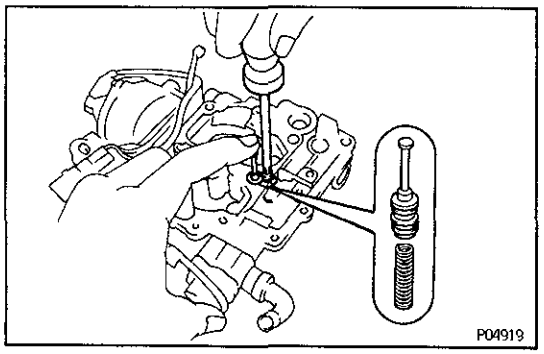
8. CONNECT WIRES TO CONNECTOR

(a) Push in the terminal until it is securely locked in the connecting lug.

(b) Pull on the wire to check that it is securely locked.

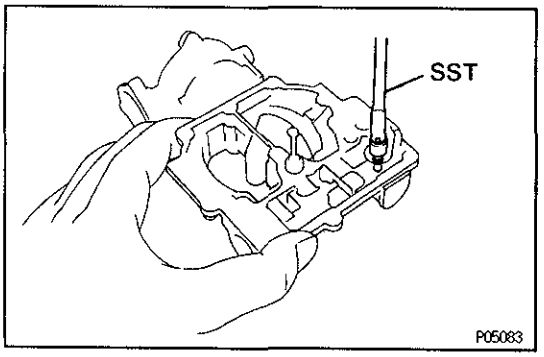


9. INSTALL PRIMARY UPPER SLOW JET



10. INSTALL POWER PISTON

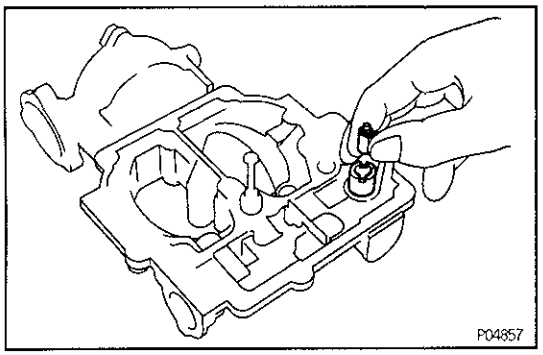
Install the spring and power piston with the retainer and screw.



11. INSTALL NEEDLE VALVE SEAT

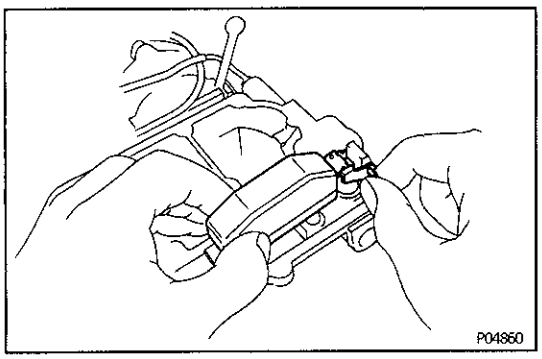
Install the valve seat together with a new gasket.

EG

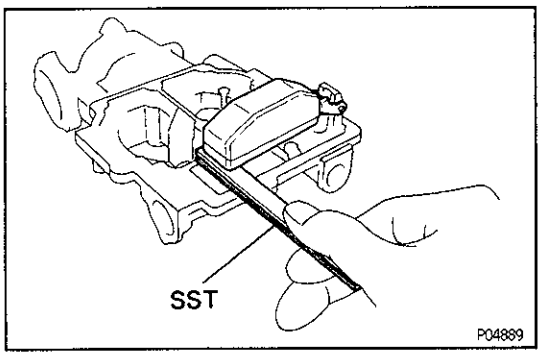


12. ADJUST FLOAT LEVEL

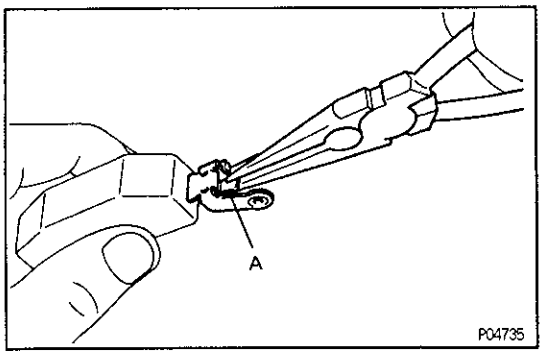
(a) Insert the needle valve, spring and plunger into the needle valve seat.
HINT: After adjusting the float level, install the clip onto the needle valve.



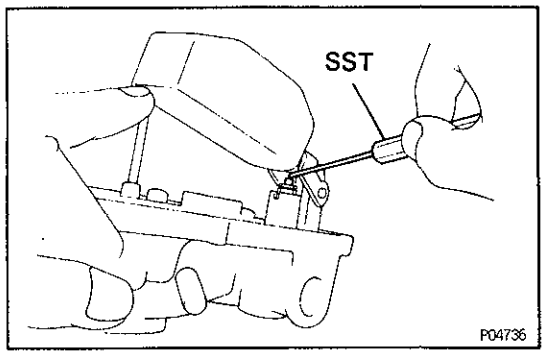
(b) Install the float with the pivot pin.



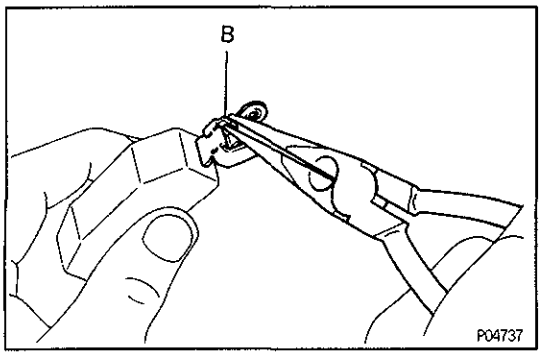
(c) Allow the float to hang down by its own weight.
Using SST, measure the clearance between the float tip and air horn.
SST 09240–00014
Float level (Raised position):
7.0 mm (0.276 in.)
HINT: This measurement should be made without a gasket on the air horn.



(d) Adjust by bending the portion of the float lip marked A.

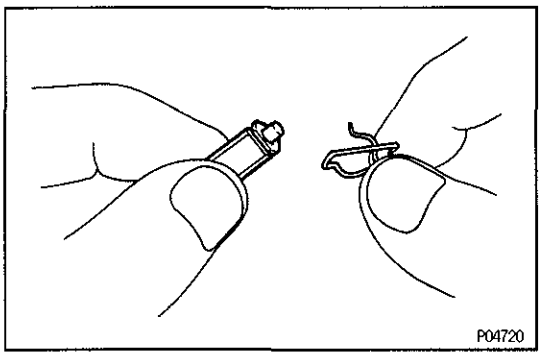


(e) Lift up the float.
Using SST, measure the clearance between the needle valve plunger and float lip.
SST 09240–00020
Float level (Lowered position):
0.9 – 1.1 mm (0.035 – 0.043 in.)

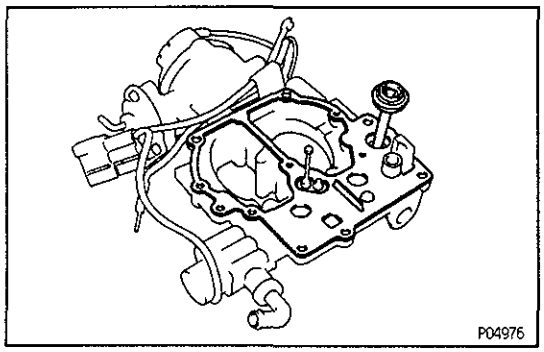


(f) Adjust by bending the position of the float lip marked B.

(g) After adjusting the float level, remove the float, plunger, spring and needle valve.



(h) Assemble the clip onto the needle valve.

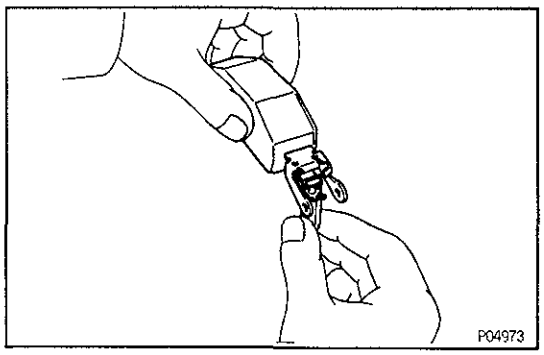


13. INSTALL NEW AIR HORN GASKET

Place the air horn gasket on the air horn.

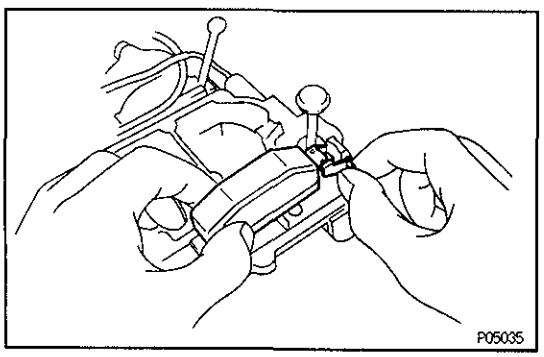
14. INSTALL ACCELERATION PUMP PLUNGER

Install a new boot and the pump plunger.



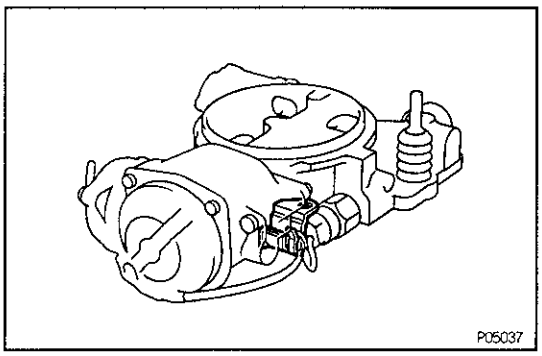
15. INSTALL NEEDLE VALVE AND FLOAT

(a) Hook the needle valve clip to the lip portion of the float.



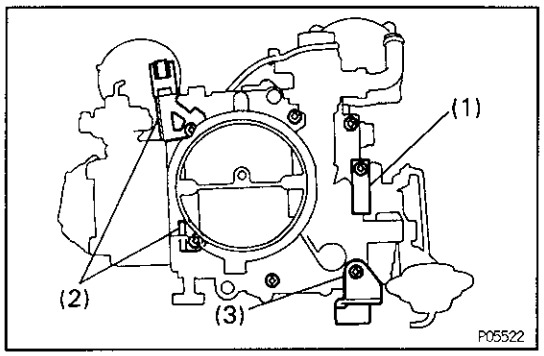
(b) Install the float and secure it with the pivot pin.

EG

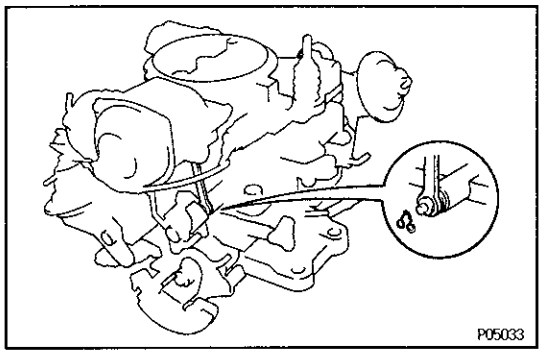


16. INSTALL AIR HORN ASSEMBLY

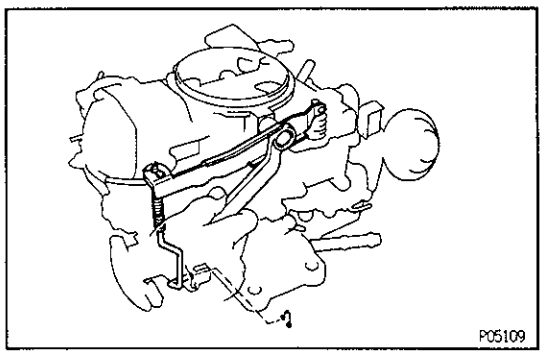
(a) Install the wire clamp in position.



(b) Place the air horn in the carburetor body.
(c) Install the following parts with the seven screws:
  (1) Number plate
  (2) Wire clamps
  (3) Vacuum hose clamp

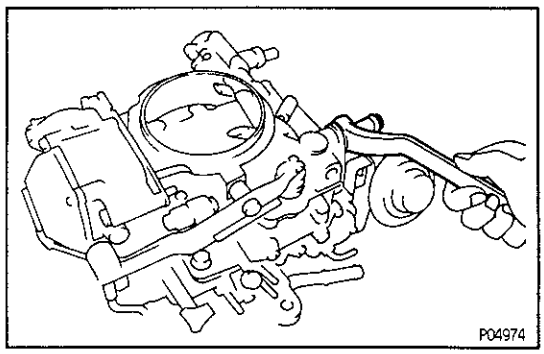


17. CONNECT FAST IDLE CAM BREAKER (FICB) LINK



18. INSTALL ACCELERATION PUMP ARM

(a) Connect the pump connecting link to the throttle lever.
(b) Connect the pump arm to the pump plunger.
(c) Install the pump arm with the pivot bolt.
(d) Secure the link with the snap ring.



19. INSTALL NIPPLE UNION

Install a new gasket and nipple union

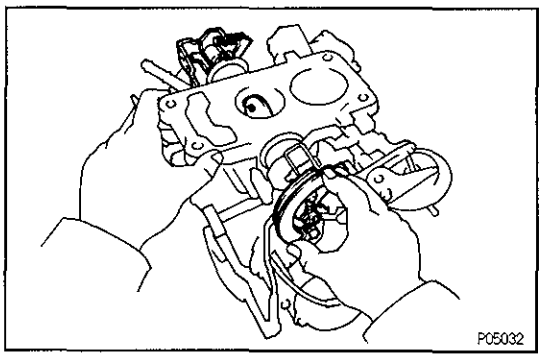
20. CHECK FOR SMOOTH OPERATION OF EACH PART

EG0UL–01

CARBURETOR ADJUSTMENT

HINT: Use SST 09240–00014 to make adjustment.

EG

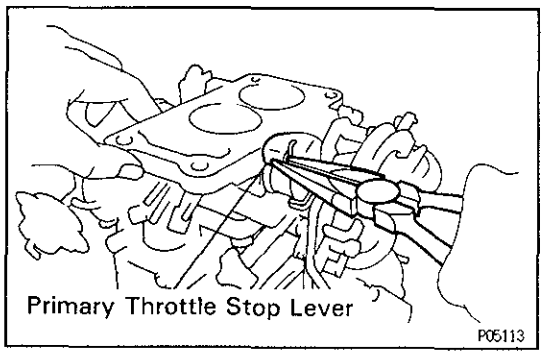


1. CHECK AND ADJUST THROTTLE VALVE OPENING

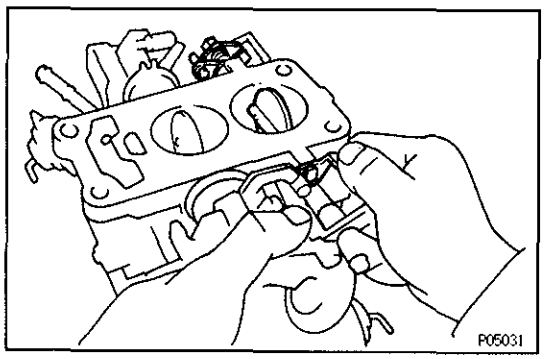
(a) Check the full opening angle of the primary throttle valve.

Standard angle:

90° from horizontal



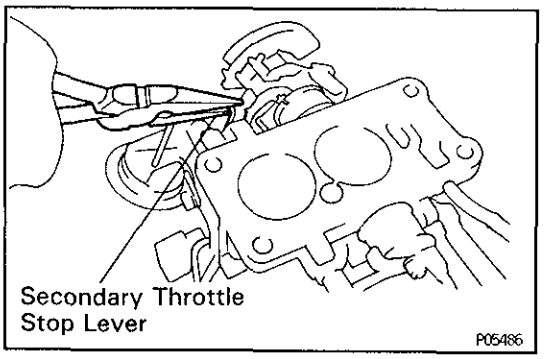
(b) Adjust by bending the primary throttle stop lever.



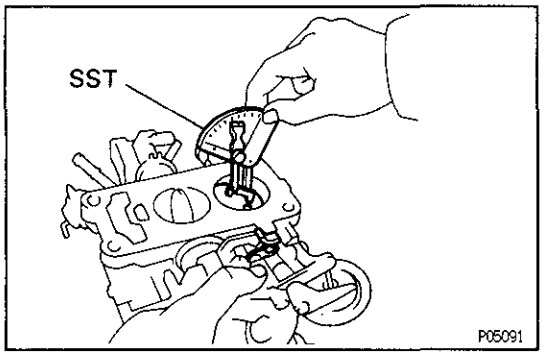
(c) Check the full opening angle of the secondary throttle valve.

Standard angle:

90° from horizontal



(d) Adjust by bending the secondary throttle stop lever.

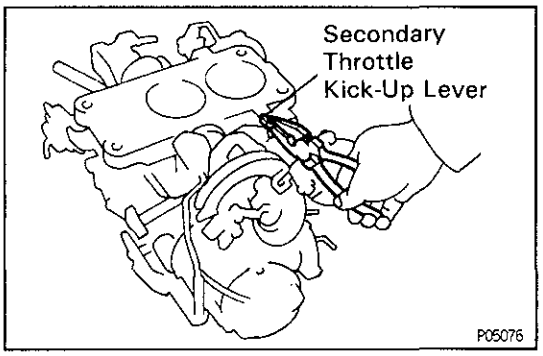


2. CHECK AND ADJUST KICK–UP SETTING

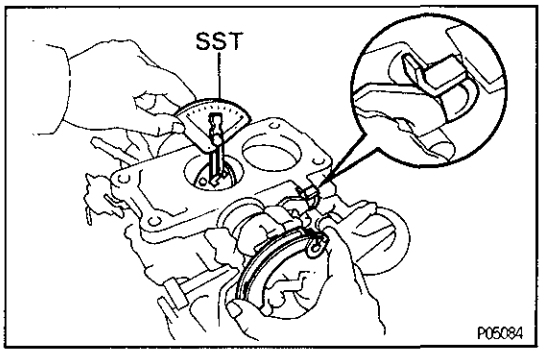
(a) With the primary throttle valve fully opened, check the opening angle of the secondary throttle valve.

Standard angle:

23° from horizontal



(b) Adjust by bending the secondary throttle kick–up lever.



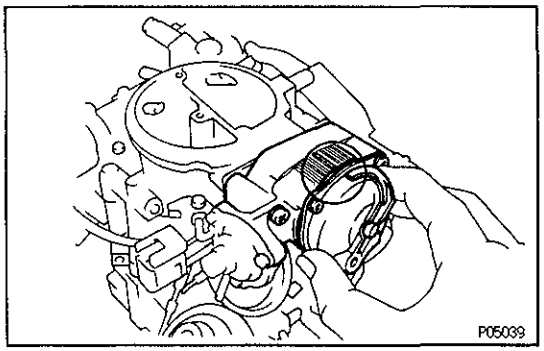
3. CHECK AND ADJUST SECONDARY TOUCH ANGLE

(a) Check the primary throttle valve opening angle at the same time the primary kick lever just touches the secondary kick lever.

Standard angle:

67° from horizontal

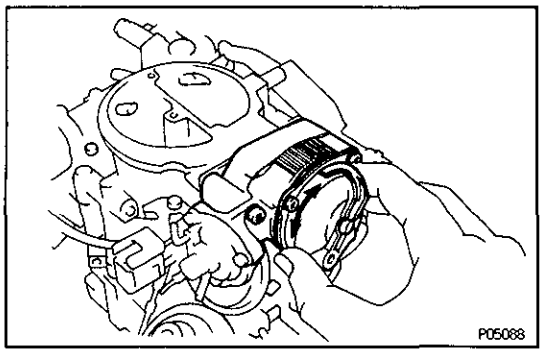
(b) If the angle is not within specification, replace the carburetor flange.



4. SET AUTOMATIC CHOKE

(a) Set the coil housing line so that it is aligned with the center line of the thermostat housing.

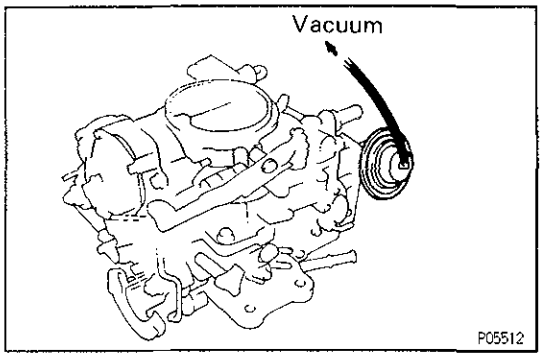
HINT: The choke valve becomes fully closed when the atmospheric temperature reaches 30°C (86°F).



(b) Depending on vehicle operating conditions, turn the coil housing and adjust the engine starting mixture.

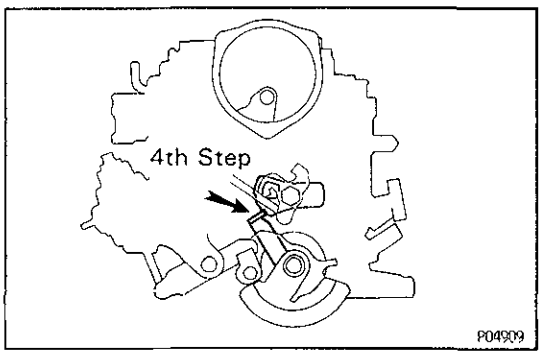
If too rich ..... Turn clockwise

If too lean ..... Turn counterclockwise

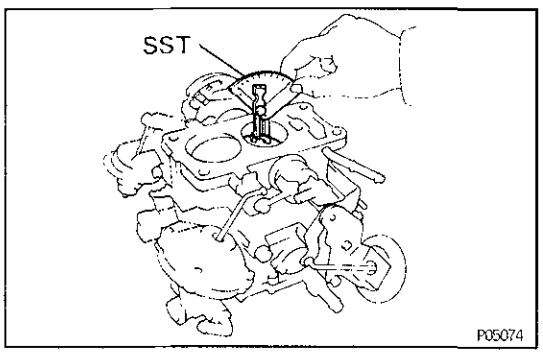


5. CHECK AND ADJUST FAST IDLE SETTING

(a) Apply vacuum to the dash pot (DP).



(b) Position the fast idle lever onto the 4th step as shown.



(c) Check the primary throttle valve angle.

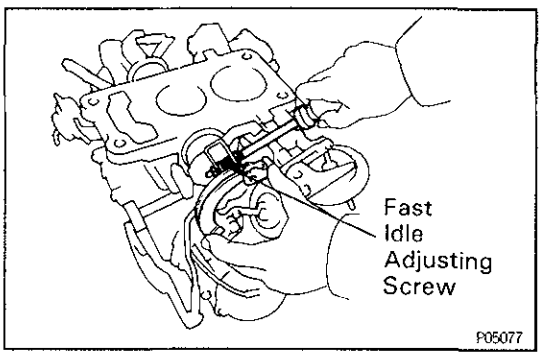
Standard angle:

G.C.C.

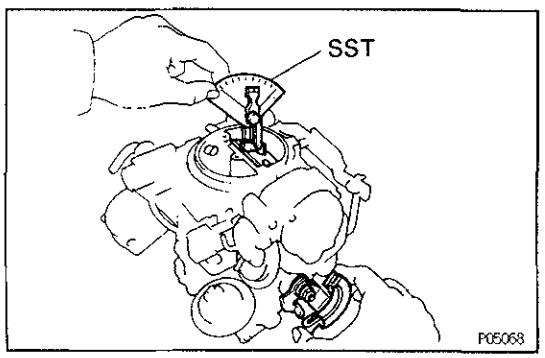
15.5 – 17.5° from horizontal

Others

17.0 – 19.0° from horizontal



(d) Adjust by turning the fast idle adjusting screw.

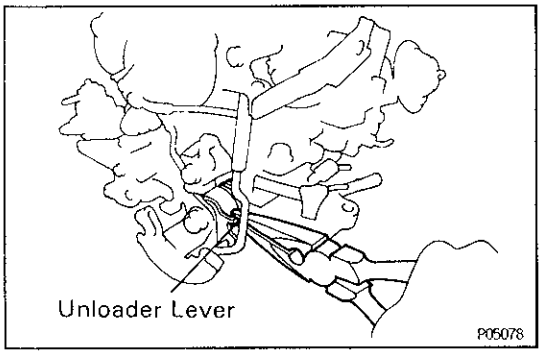


6. CHECK AND ADJUST UNLOADER

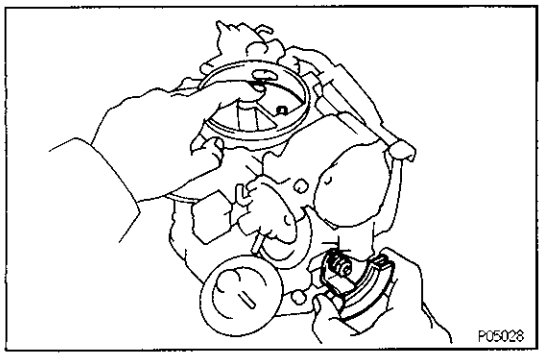
(a) With the primary throttle valve fully opened, check the choke valve angle.

Standard angle:

35 – 39° from horizontal



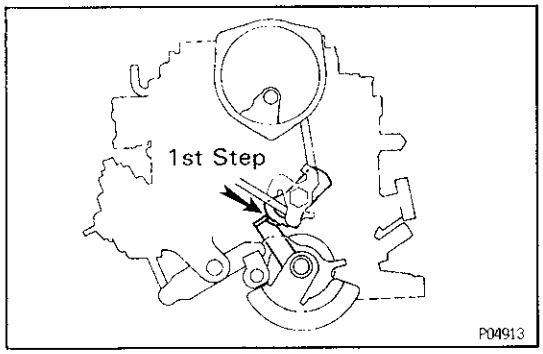
(b) Adjust by bending the unloader lever.



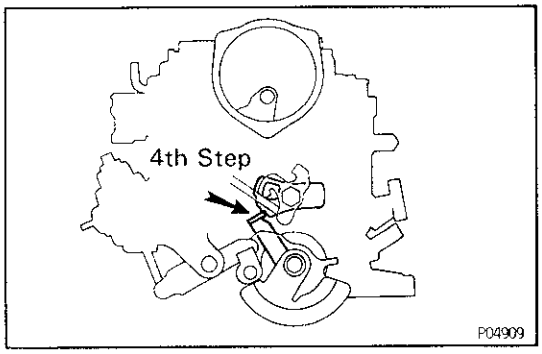
7. CHECK AND ADJUST FAST IDLE CAM BREAKER (FICB)

(a) Set the fast idle cam.

(1) While holding the throttle slightly open, push the choke valve closed, and hold it closed as you release the throttle valve.

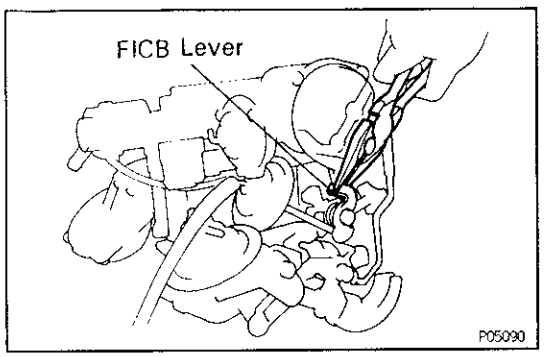


(2) Check that the fast idle lever is a set in the 1st step of the fast idle cam as shown.

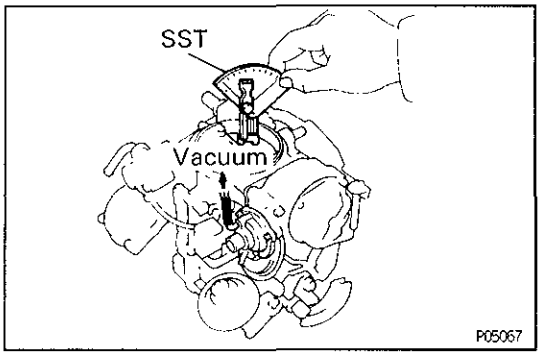


(b) Apply vacuum to the FICB and release it.

(c) Check that the choke linkage moves, and that the fast idle cam is released to the 4th step.



(d) Adjust by bending the FICB lever.



8. CHECK AND ADJUST CHOKE BREAKER (CB)

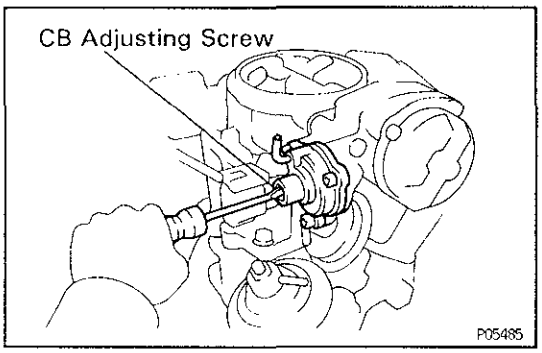
(a) Set the fast idle cam. (See step 8)

(b) Apply vacuum to the CB.

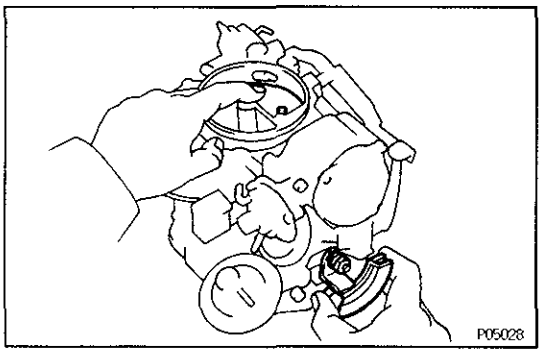
(c) Check the choke valve angle.

Standard angle:

44 – 46° from horizontal



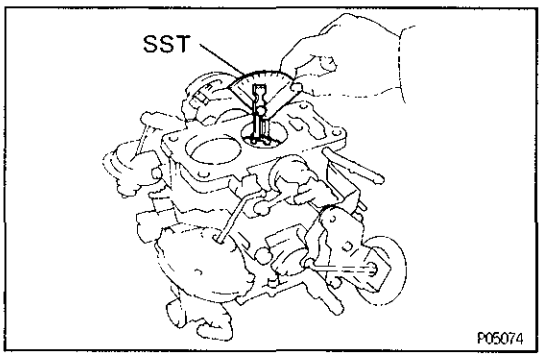
(d) Adjust by turning the CB adjusting screw.



9. CHECK AND ADJUST DASH POT (DP)

(a) Open the throttle valve and then close it with the choke valve fully open.

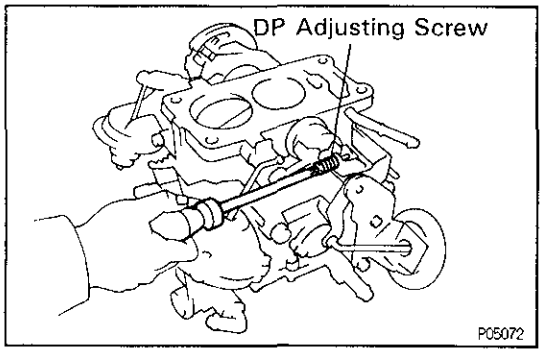
HINT: Check that fast idle is not operating.



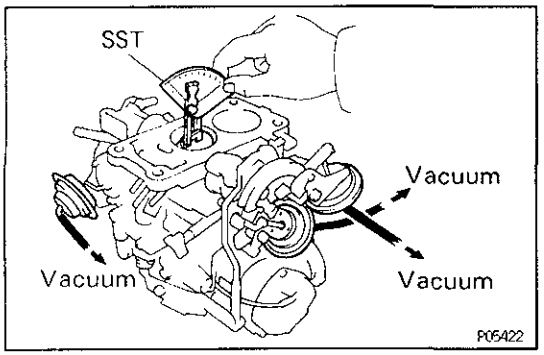
(b) Check the primary throttle valve angle.

Standard angle:

19 – 21° from horizontal



(c) Adjust by turning the DP adjusting screw.



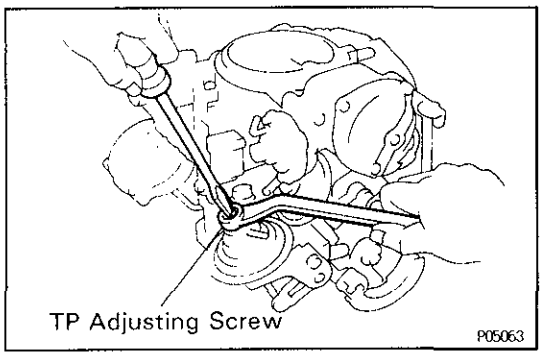
10. CHECK AND ADJUST THROTTLE POSITIONER (TP)

(a) Apply vacuum to dash pot (DP), fast idle cam breaker (FICB) and throttle positioner (TP).

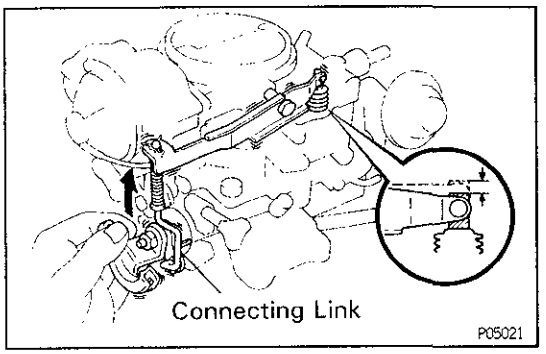
(b) Check the primary throttle valve angle.

Standard angle:

17.5 – 19.5° from horizontal



(c) Adjust by turning the TP adjusting screw.



11. CHECK AND ADJUST ACCELERATION PUMP

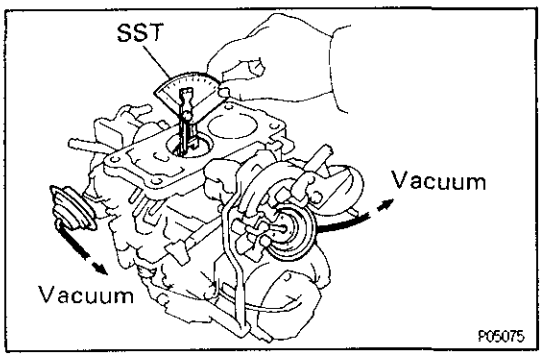
(a) Apply vacuum to dash pot (DP), fast idle cam breaker (FICB) and throttle positioner (TP).

(b) Rotate the throttle shaft and check that the length of the stroke.

Standard stroke:

10.9 mm (0.429 in.)

(c) Adjust the pump stroke by bending the connecting link.



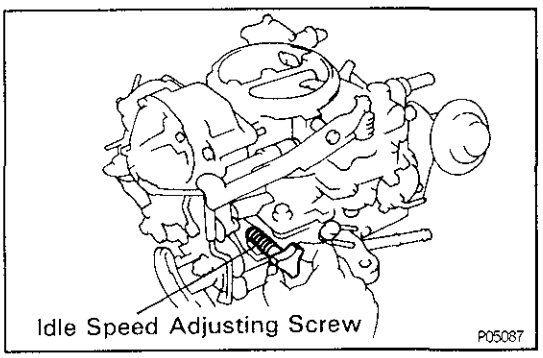
12. PRESET IDLE SPEED ADJUSTING SCREW

(a) Apply vacuum to dash pot (DP) and fast idle cam breaker (FICB).

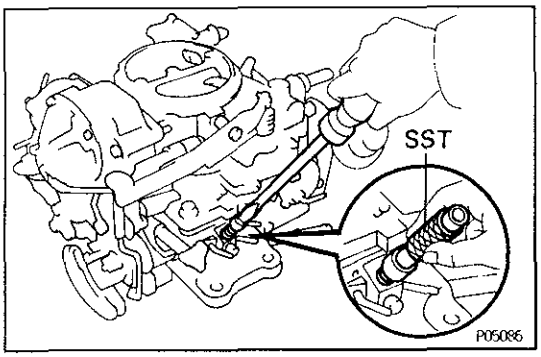
(b) Check the primary throttle valve angle.

Standard angle:

14° from horizontal



(c) Adjust turning the idle speed adjusting screw.



13. PRESET IDLE MIXTURE ADJUSTING SCREW

If the idle mixture adjusting screw has been removed, fully screw it in and then unscrew it the following amount.

Standard:

Return 2 1/4 turns from fully closed position

HINT: Use SST if necessary.

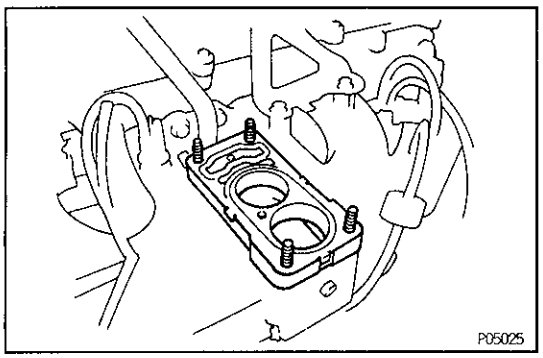
SST 09243–00020

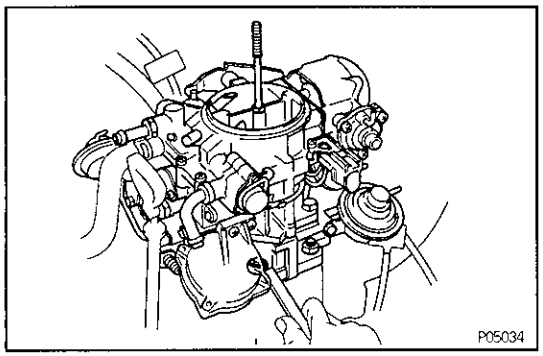
NOTICE: Use care not to screw it in too tightly and damage the screw tip.

14. CHECK FOR SMOOTH OPERATION OF EACH PART

15. INSTALL CABURETOR STUD BOLT

EG





EG0UM–01

CARBURETOR INSTALLATION

(See page EG–309)

1. INSTALL CARBURETOR

(a) Place the insulator and new gaskets on the intake manifold.

(b) Place the carburetor on the insulator.

(c) Install the four carburetor mounting nuts.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

2. CONNECT FOLLOWING HOSES

(a) Emission control hoses

(b) Fuel inlet hose

(c) Outer vent control hose

(d) No.1 water by–pass hose

3. CONNECT CARBURETOR CONNECTOR

4. CONNECT ACCELERATOR CABLE

5. INSTALL INTAKE AIR CONNECTOR

6. FILL WITH COOLANT

7. ADJUST IDLE SPEED AND IDLE MIXTURE

8. ADJUST FAST IDLE SPEED

9. ADJUST DASH POT (DP) SETTING SPEED

10. ADJUST THROTTLE POSITIONER (TP) SETTING SPEED