

# FUEL SYSTEM

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## FUEL PUMP CUTAWAY VIEW

Fig. 6-1

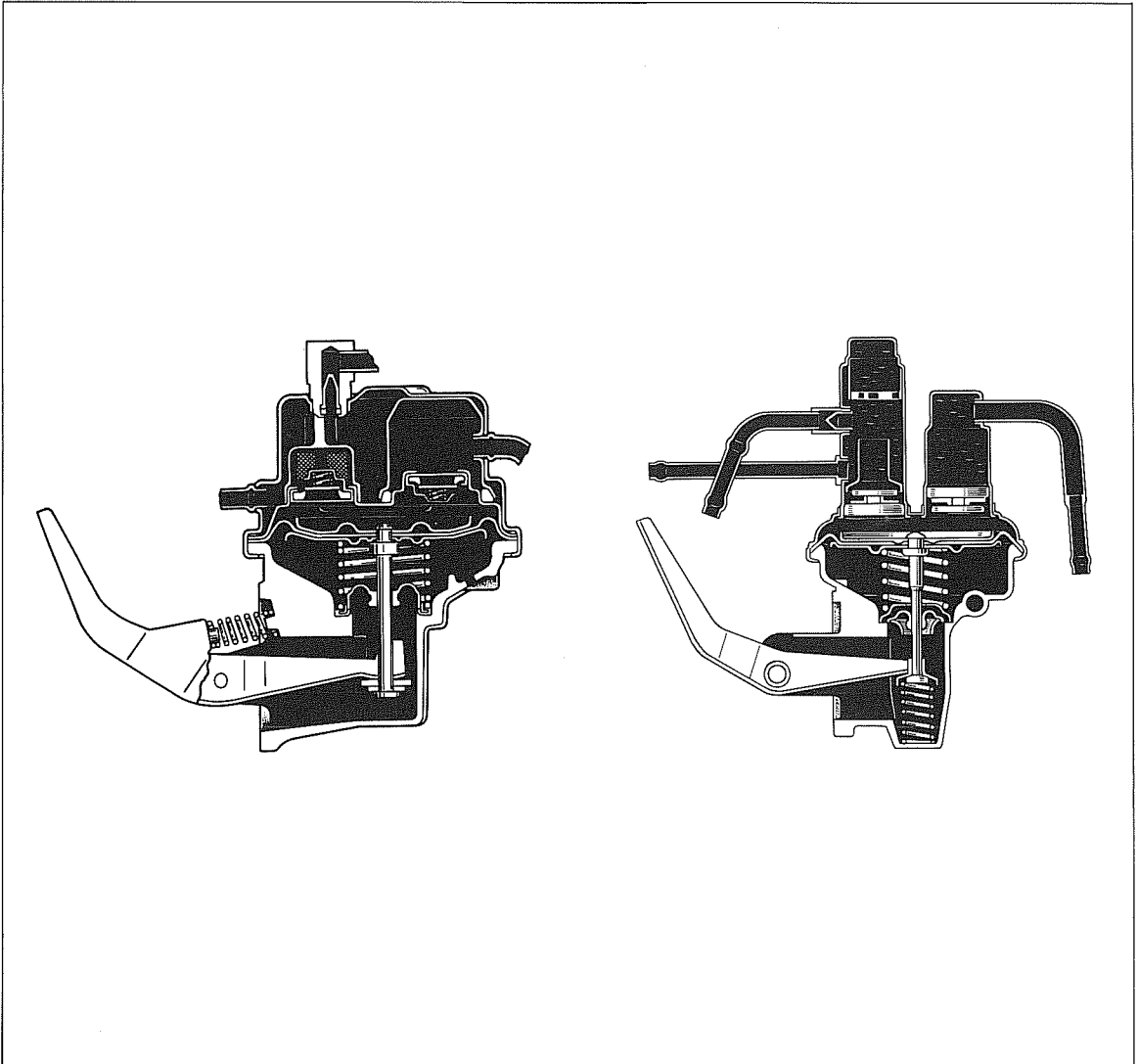
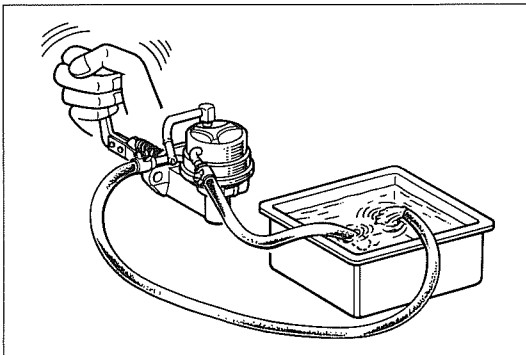


Fig. 6-2



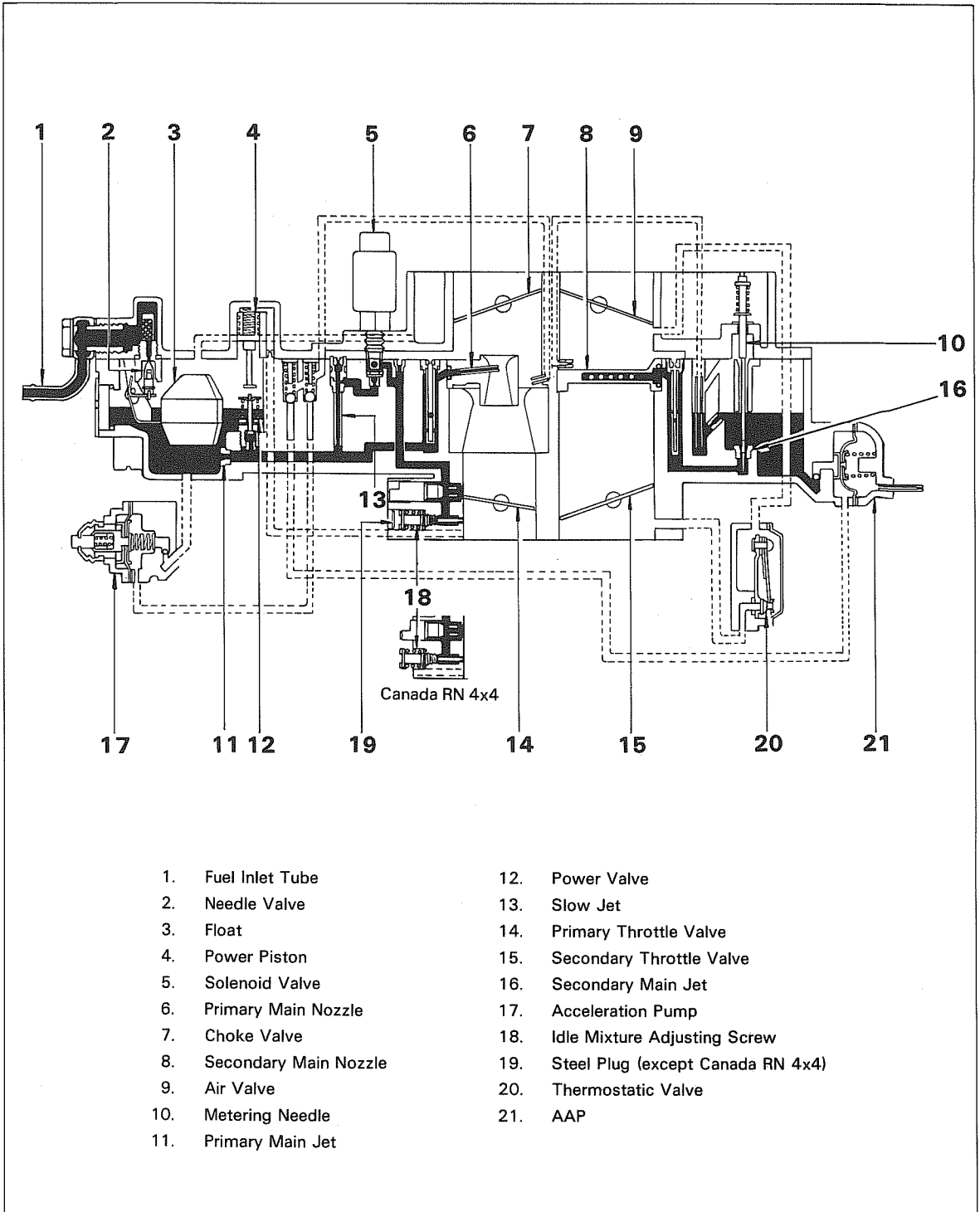
### INSPECTION

Operate the lever and confirm that fuel is being pumped out.

# CARBURETOR (USA & Canada)

## CARBURETOR CIRCUIT

Fig. 6-3



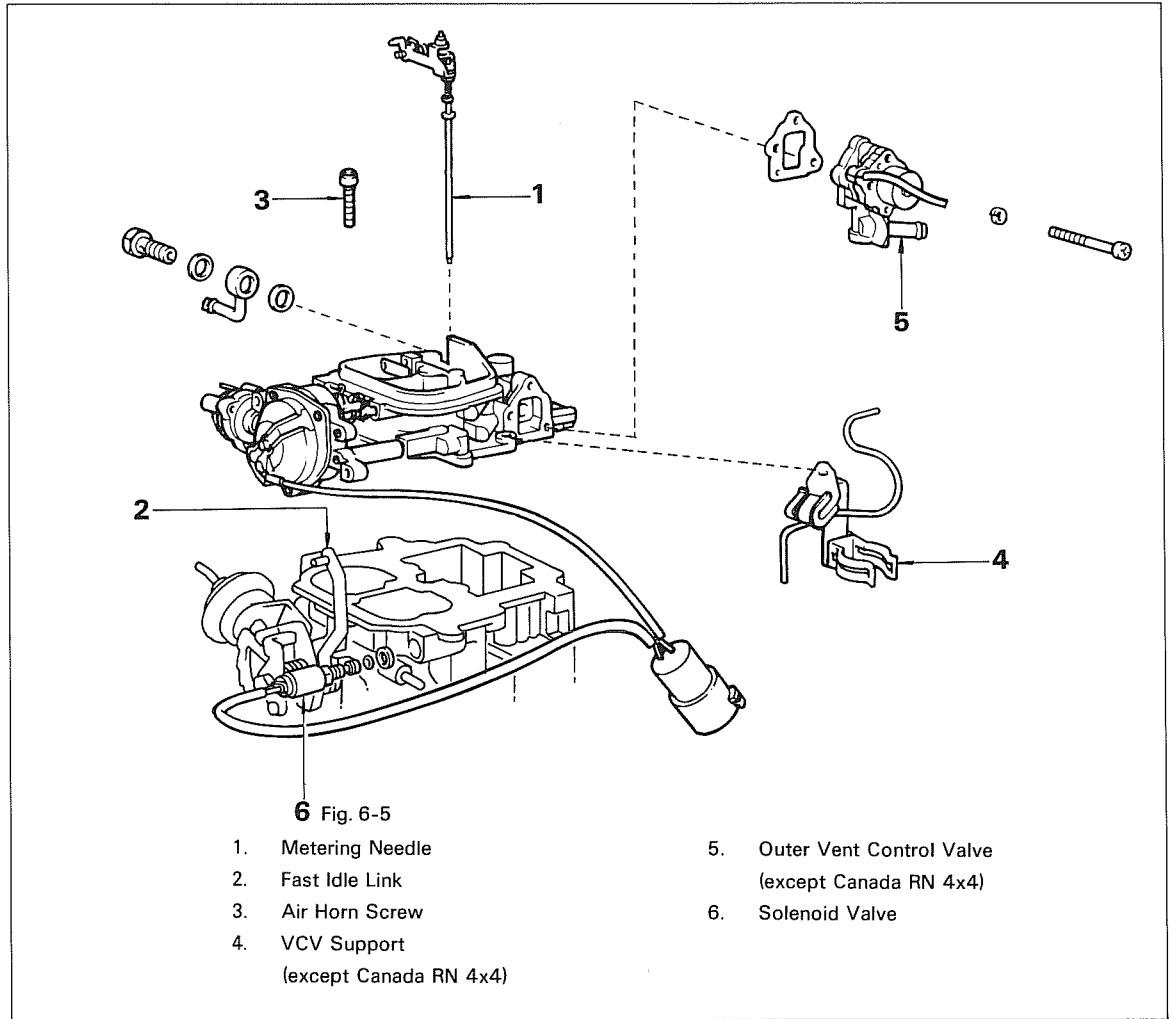
- |                          |                                       |
|--------------------------|---------------------------------------|
| 1. Fuel Inlet Tube       | 12. Power Valve                       |
| 2. Needle Valve          | 13. Slow Jet                          |
| 3. Float                 | 14. Primary Throttle Valve            |
| 4. Power Piston          | 15. Secondary Throttle Valve          |
| 5. Solenoid Valve        | 16. Secondary Main Jet                |
| 6. Primary Main Nozzle   | 17. Acceleration Pump                 |
| 7. Choke Valve           | 18. Idle Mixture Adjusting Screw      |
| 8. Secondary Main Nozzle | 19. Steel Plug (except Canada RN 4x4) |
| 9. Air Valve             | 20. Thermostatic Valve                |
| 10. Metering Needle      | 21. AAP                               |
| 11. Primary Main Jet     |                                       |

**DISASSEMBLY**

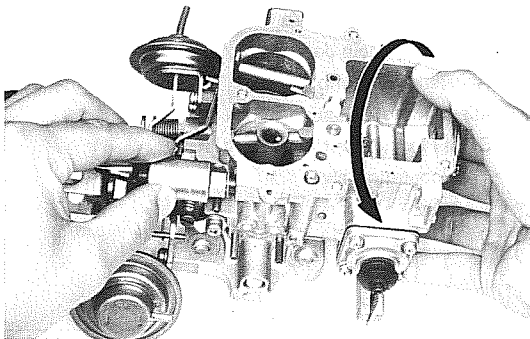
**Air Horn**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-4**



**Fig. 6-5**



Loosen the solenoid valve and remove it from the body by rotating the body counterclockwise.

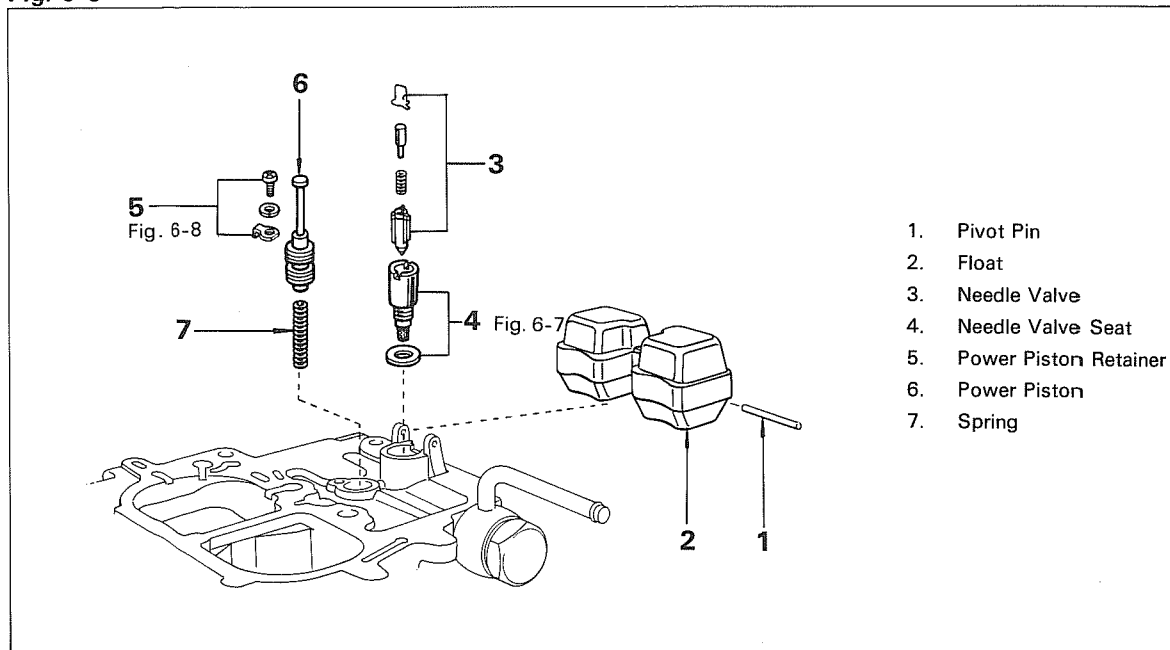
— Note —

**Be careful not to bend or distort the lead wires.**

**Float**

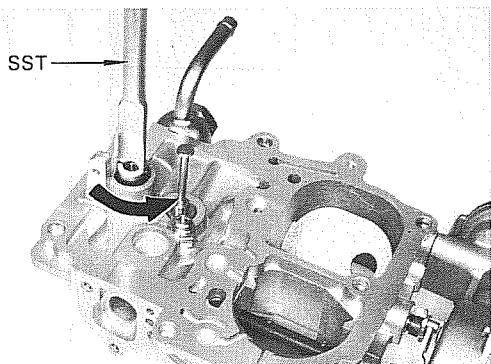
Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-6**



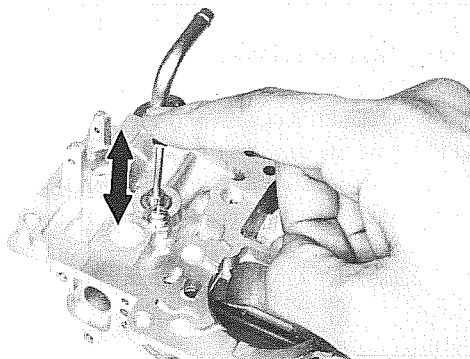
- 1. Pivot Pin
- 2. Float
- 3. Needle Valve
- 4. Needle Valve Seat
- 5. Power Piston Retainer
- 6. Power Piston
- 7. Spring

**Fig. 6-7**



Remove the needle valve seat with SST.  
SST [09860-11011]

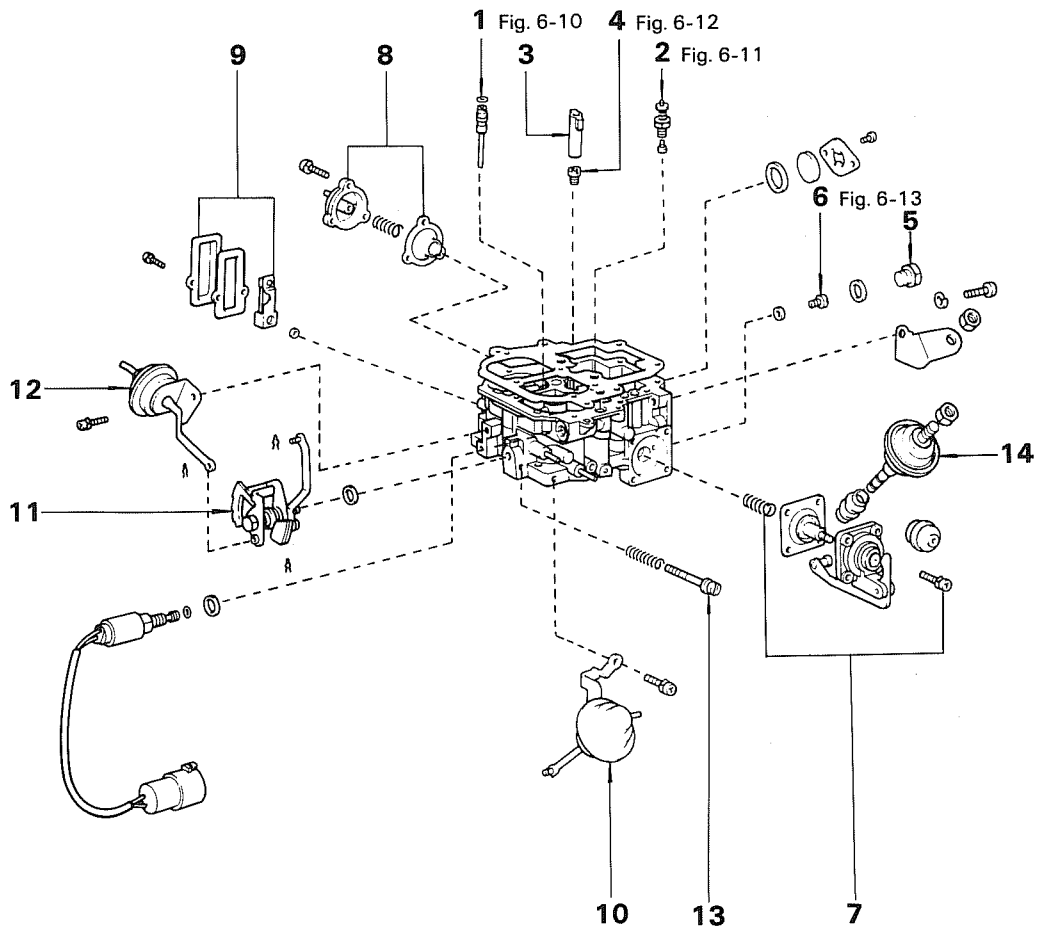
**Fig. 6-8**



Check the power piston for smooth movement.

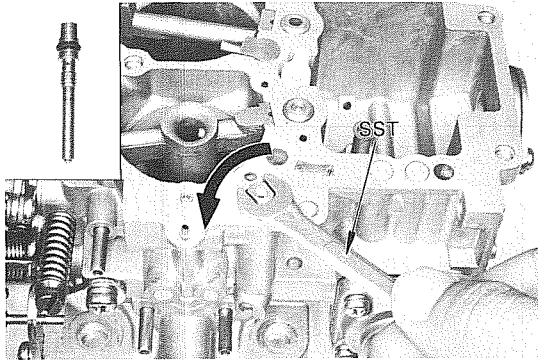
**Body**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-9**

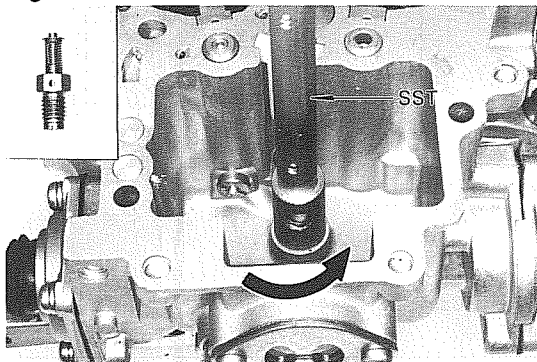
- |                          |   |
|--------------------------|---|
| 1. Slow Jet              | 9. Thermostatic Valve                                 |
| 2. Power Valve with Jet  | 10. Throttle Positioner<br>(Calif. RN 4x4 and RN C&C) |
| 3. Metering Needle Guide | 11. Fast Idle Cam                                     |
| 4. Secondary Main Jet    | 12. Choke Opener                                      |
| 5. Plug                  | 13. Idle Speed Adjusting Screw                        |
| 6. Primary Main Jet      | 14. Dash Pot<br>(USA RT A/T and USA RA A/T)           |
| 7. Acceleration Pump     |   |
| 8. AAP                   |   |

Fig. 6-10



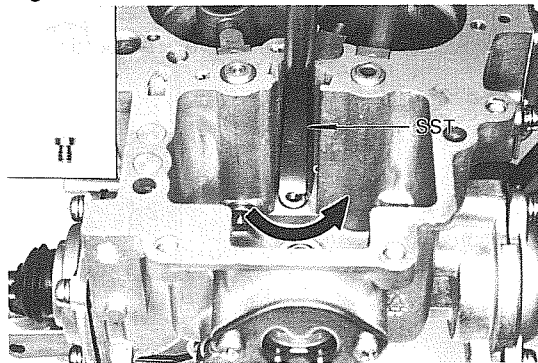
Remove the slow jet with SST.  
SST [09922-00010]

Fig. 6-11



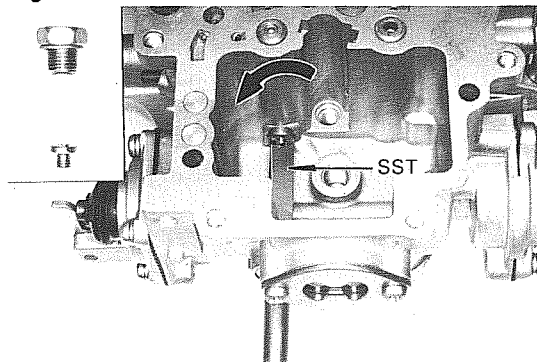
Using SST, remove the power valve together  
with the jet.  
SST [09860-11011]

Fig. 6-12



Remove the metering needle guide and then  
remove the secondary main jet with SST.  
SST [09860-11011]

Fig. 6-13

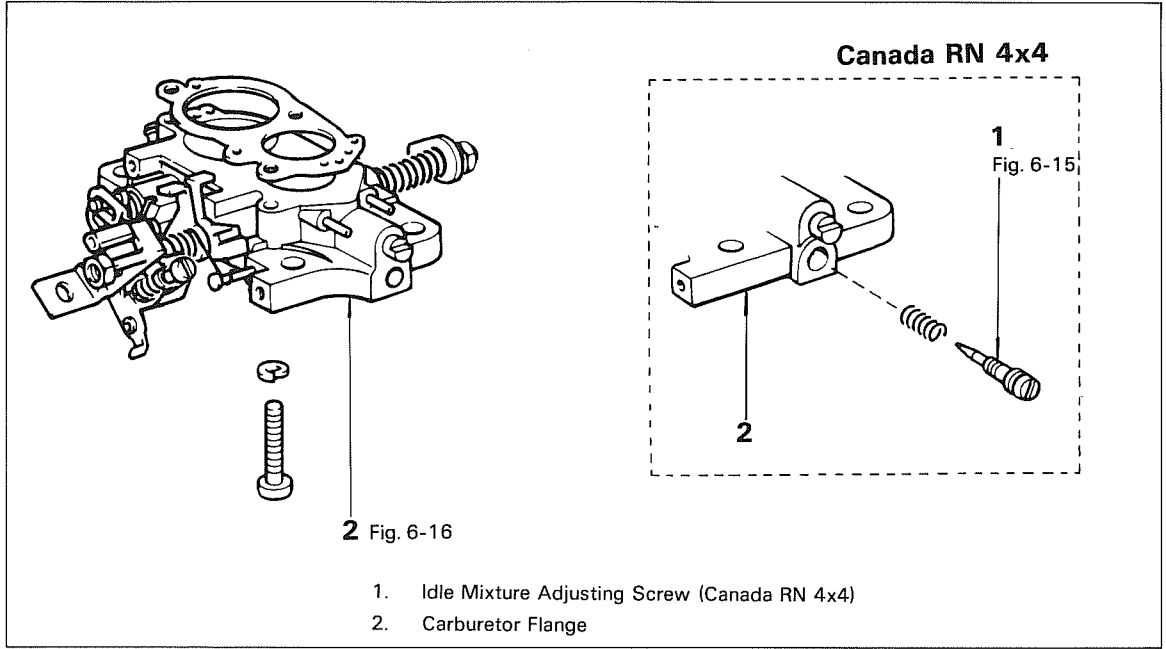


Remove the plug and then remove the primary  
main jet with SST.  
SST [09860-11011]

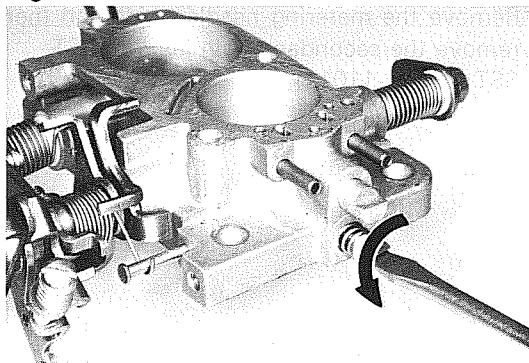
**Flange**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-14**

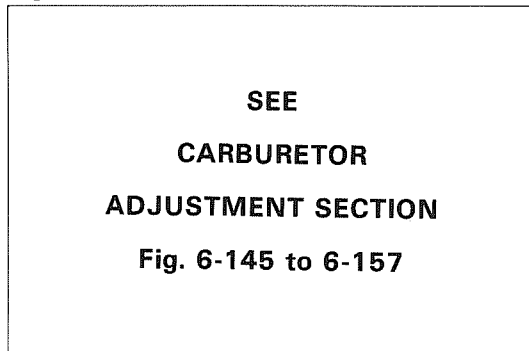


**Fig. 6-15**



(Canada RN 4x4)  
Remove the idle mixture adjusting screw.

**Fig. 6-16**



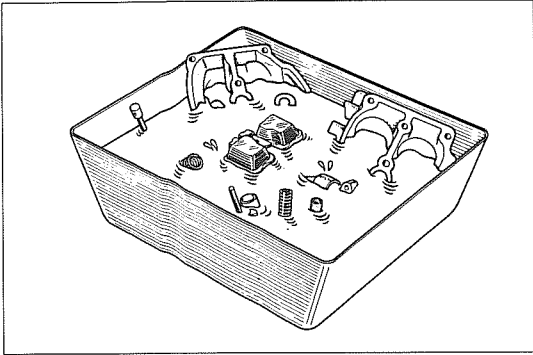
(Others)

The idle mixture adjusting screw is adjusted and plugged with a steel plug by the manufacturer.

If necessary, remove the steel plug and adjust the idle mixture speed referring to the CARBURETOR ADJUSTMENT section.



Fig. 6-17

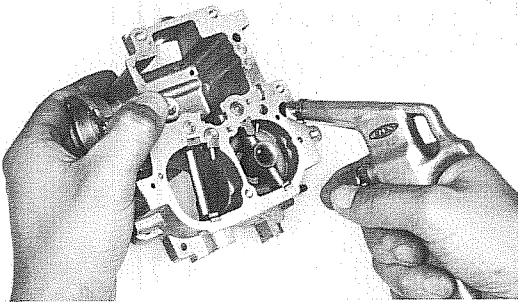


**INSPECTION**

— Precaution —

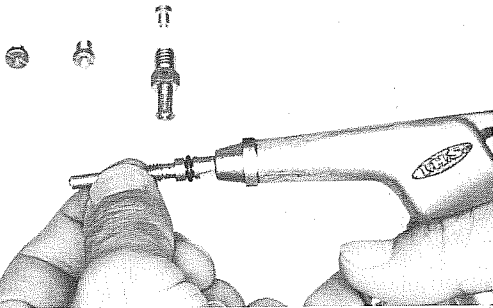
1. Before inspection, wash all parts thoroughly with gasoline.

Fig. 6-18



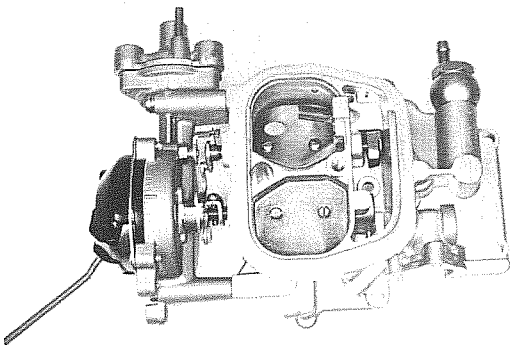
2. Using compressed air, blow all dirt and other foreign matter from the jets and similar parts, and from the fuel passages and apertures in the body.

Fig. 6-19



3. Never clean the jets or orifices with wire or a drill. This could enlarge the openings and result in excessive fuel consumption.

Fig. 6-20

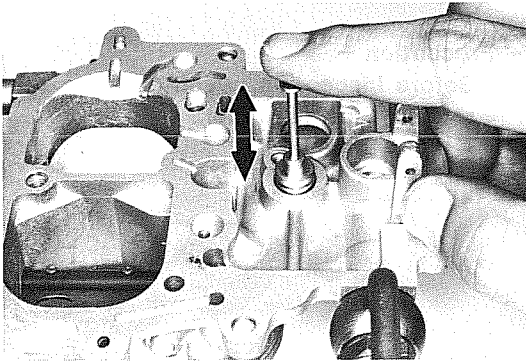


Inspect the following parts and replace any part damaged.

**Air Horn Parts**

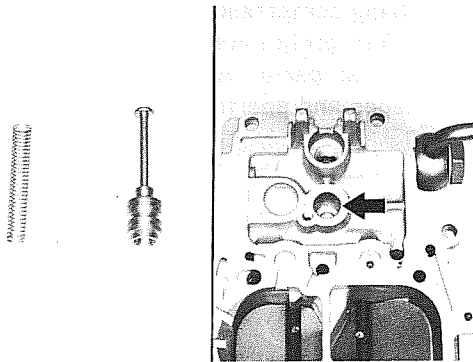
1. Air horn: Check for cracks, damages and excessive deformation of the air valve and choke valve.

Fig. 6-21



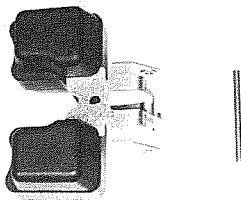
2. Insure that the power piston moves smoothly in the air horn bore.

Fig. 6-22



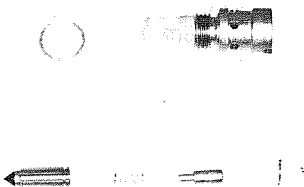
3. Power piston: Check for damage.  
Spring: Check for deformation or rust.  
Power piston bore: Check for wear or damage.

Fig. 6-23



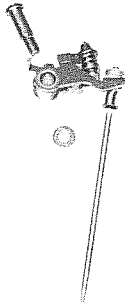
4. Float and pivot pin: Check for wear or breaks.

Fig. 6-24



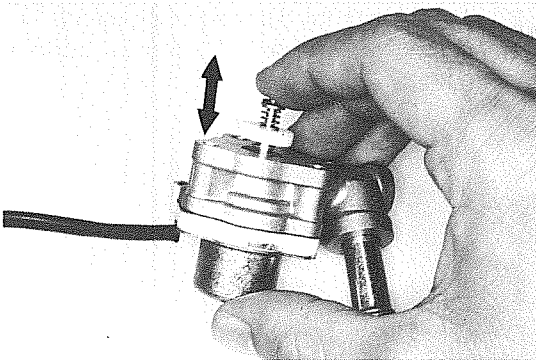
5. Strainer: Check for rust or breaks.
6. Needle valve surface.
7. Needle valve seat.

Fig. 6-25



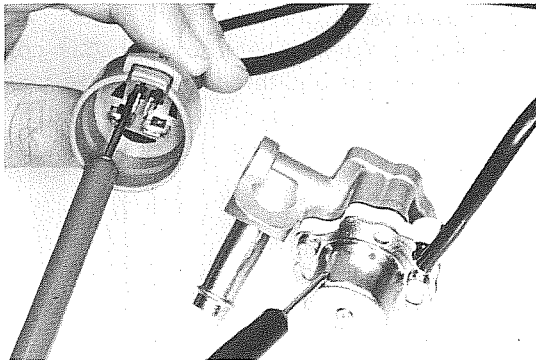
8. Metering needle: Check for bending or damage at the tapered tip.

Fig. 6-26



9. Outer vent control valve (except Canada RN 4x4): Check the valve and valve seats for damage and make sure that the valve rod moves smoothly.

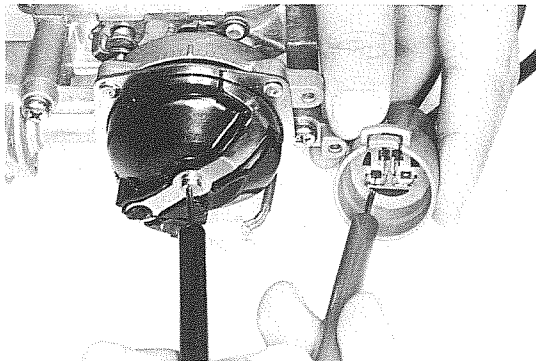
Fig. 6-27



Using an ohmmeter, measure the resistance between the terminal and solenoid body.

**Resistance: 63 – 73  $\Omega$  at 20°C (68°F)**

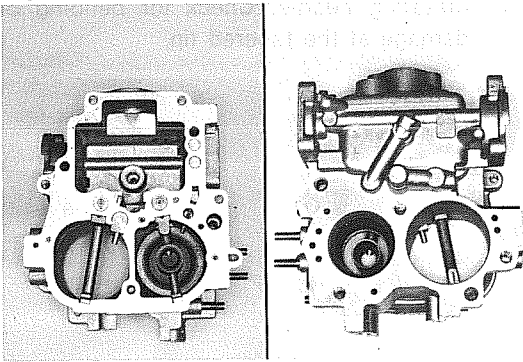
Fig. 6-28



10. Choke coil: Using an ohmmeter, measure the resistance between the terminal and coil housing.

**Resistance: 16 – 20  $\Omega$  at 20°C (68°F)**

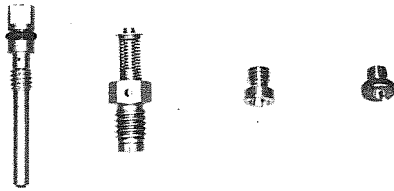
Fig. 6-29



**Body Parts**

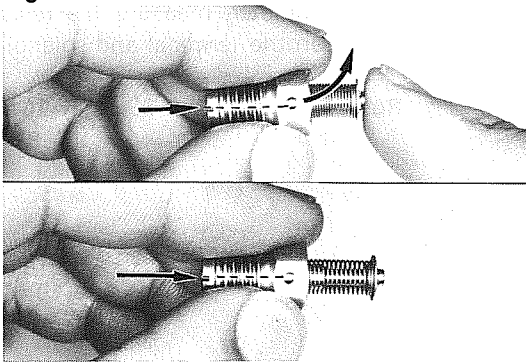
1. Body: Check for cracks, scored mounting surfaces and damaged threads.

Fig. 6-30



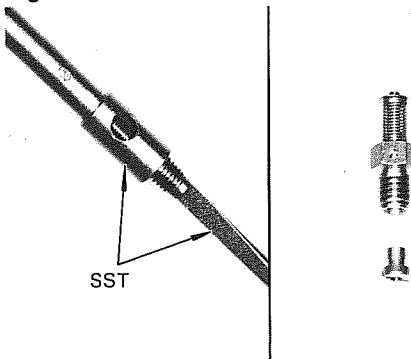
2. Jets: Check for damage or clogging. Check for damaged contact surface, threads and screwdriver slots.

Fig. 6-31



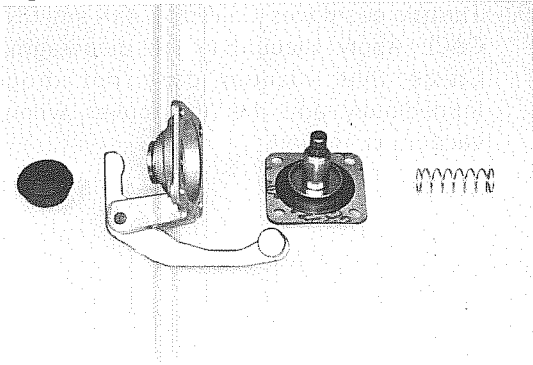
3. Power valve: Check for faulty opening and closing action. Check for damaged contact surface and threads.

Fig. 6-32



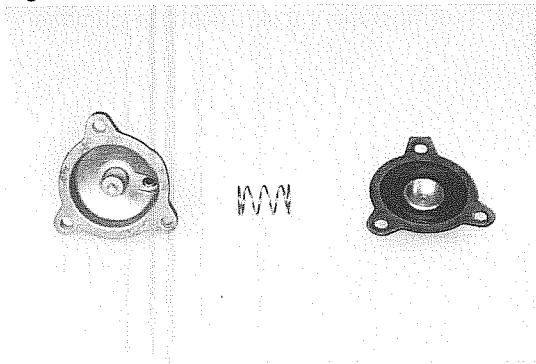
4. Remove the jet with SST. SST [09860-11011]

Fig. 6-33



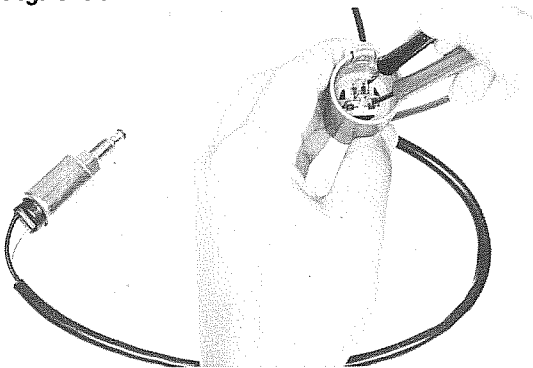
5. Acceleration pump: Check the diaphragm, housing and spring for wear or damage.

Fig. 6-34



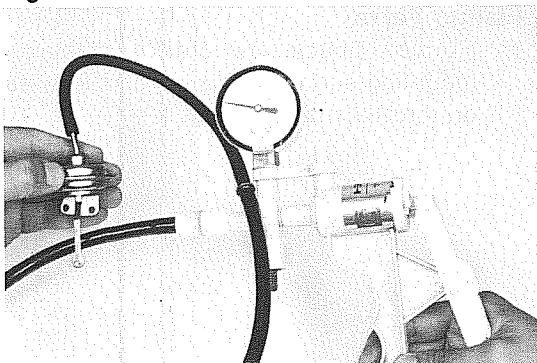
6. AAP: Check the diaphragm, housing and spring for wear or damage.

Fig. 6-35



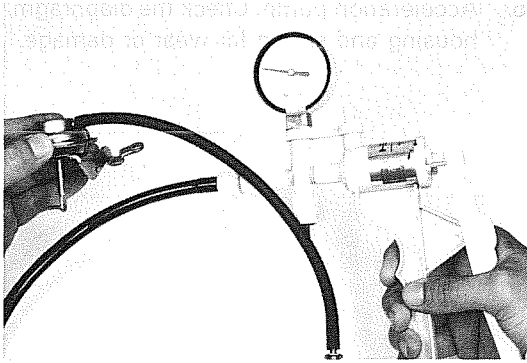
7. Solenoid valve: Connect two terminals and the battery terminals as shown in the figure. Check that you can feel a click from the solenoid valve when the battery is connected and disconnected.

Fig. 6-36



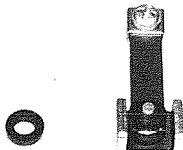
8. Choke opener: Apply vacuum to the diaphragm. Check that vacuum does not drop immediately and the link moves when vacuum is applied.

Fig. 6-37



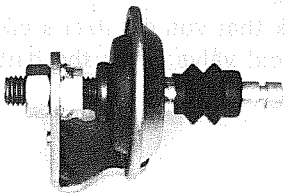
9. Throttle positioner (Calif. RN 4x4 and RN C&C): Apply vacuum to the diaphragm. Check that vacuum does not drop immediately and the link moves when vacuum is applied.

Fig. 6-38



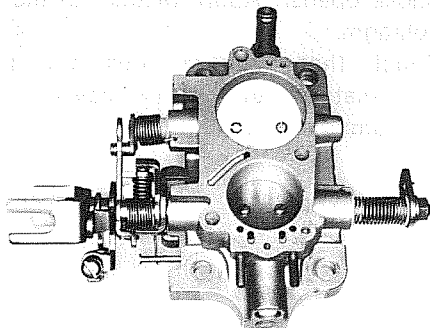
10. Thermostatic valve: Check for damage.

Fig. 6-39



11. Dash pot (USA RT A/T and USA RA A/T): Check the body and boot for cracks or damage.

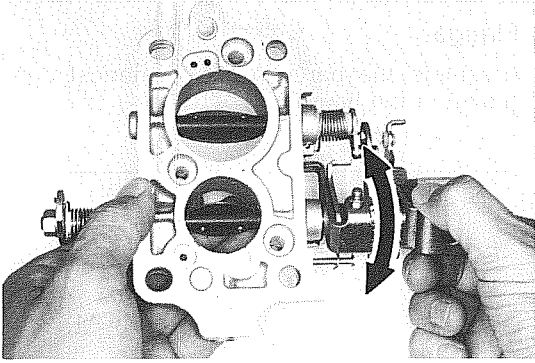
Fig. 6-40



### Flange Parts

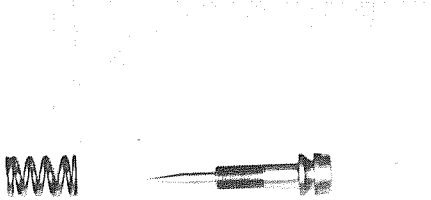
1. Flange: Check for cracks, damaged mounting surfaces, threads and for wear on throttle shaft bearings.

Fig. 6-41



2. Throttle valves: Check for worn or deformed valves and for wear, bending, twisting of shafts or faulty movement inside the housing shaft.

Fig. 6-42



3. Idle mixture adjusting screw (Canada RN 4x4): Check for damaged tapered tip or threads.

— Note —

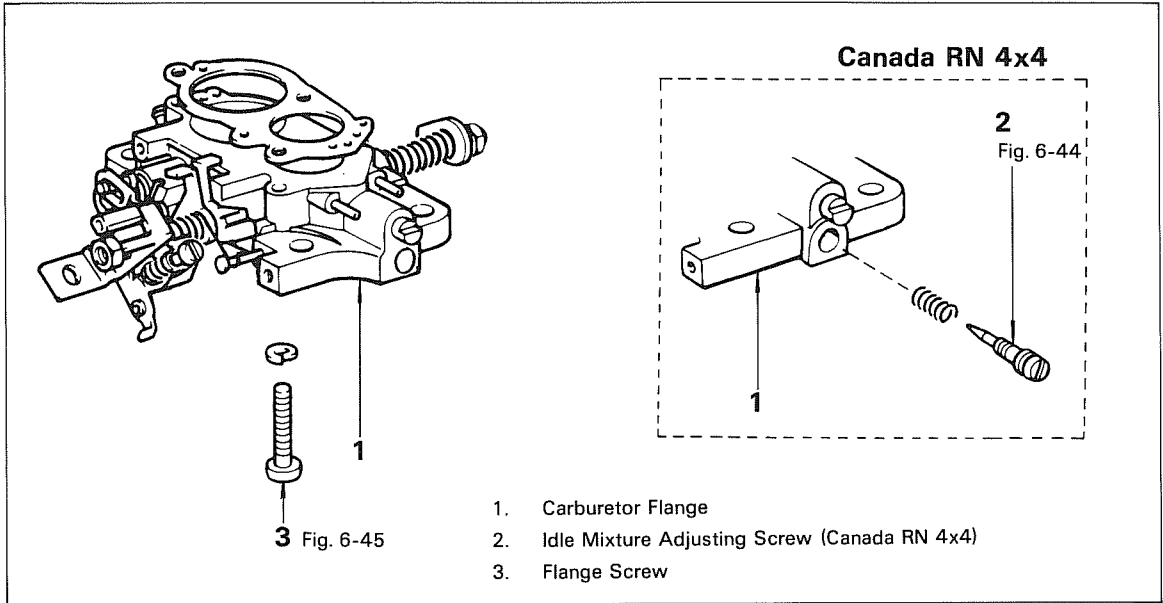
**For other vehicles, the idle mixture adjusting screw is adjusted and plugged with a steel plug by the manufacturer.**

**ASSEMBLY**

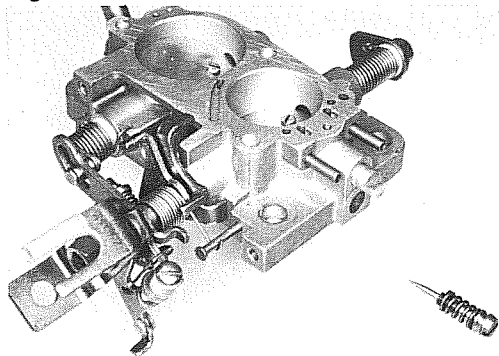
**Flange**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-43**



**Fig. 6-44**

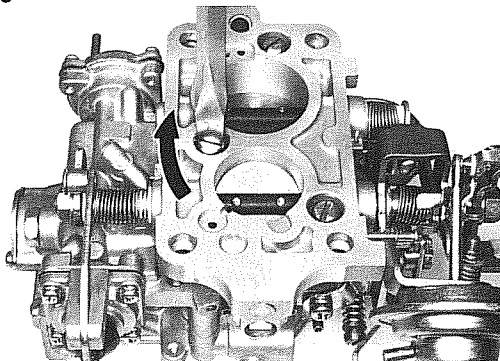


Temporarily install the idle mixture adjusting screw (Canada RN 4x4).

— Note —

**Be careful not to damage the screw tip.**

**Fig. 6-45**



First finger tighten all bolts and then tighten them down.

— Note —

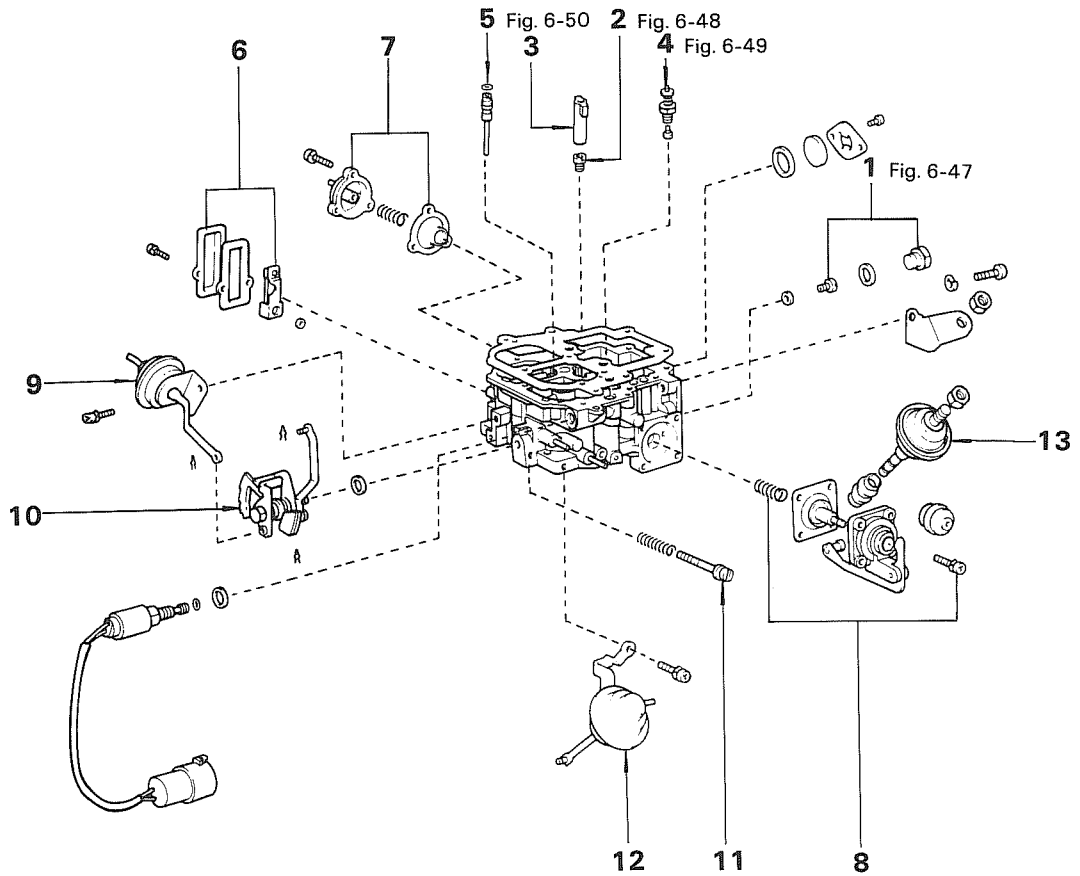
**Use a new gasket.**



**Body**

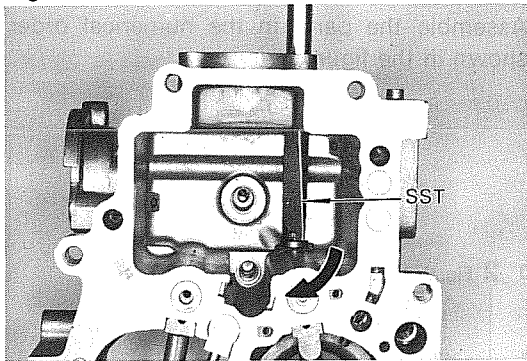
Assemble the parts in the numerical order shown in the figure.

**Fig. 6-46**



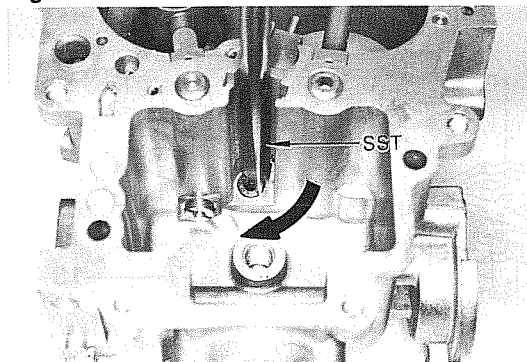
- |                            |                                      |
|----------------------------|--------------------------------------|
| 1. Primary Main Jet & Plug | 8. Acceleration Pump                 |
| 2. Secondary Main Jet      | 9. Choke Opener                      |
| 3. Metering Needle Guide   | 10. Fast Idle Cam                    |
| 4. Power Valve with Jet    | 11. Idle Speed Adjusting Screw       |
| 5. Slow Jet                | 12. Throttle Positioner              |
| 6. Thermostatic Valve      | 13. Dash Pot (USA RT 4x4 and RN C&C) |
| 7. AAP                     |                                      |

Fig. 6-47



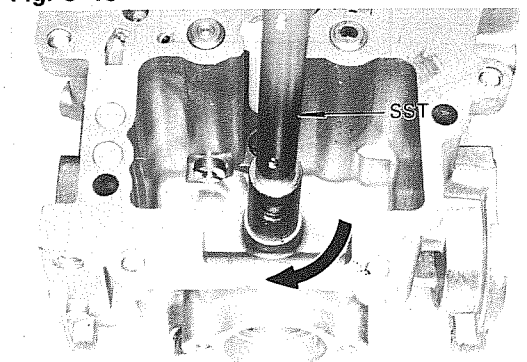
Install the primary main jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-48



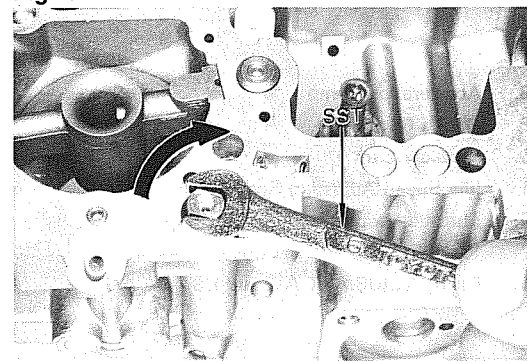
Install the secondary main jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-49



Install the power valve with jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-50

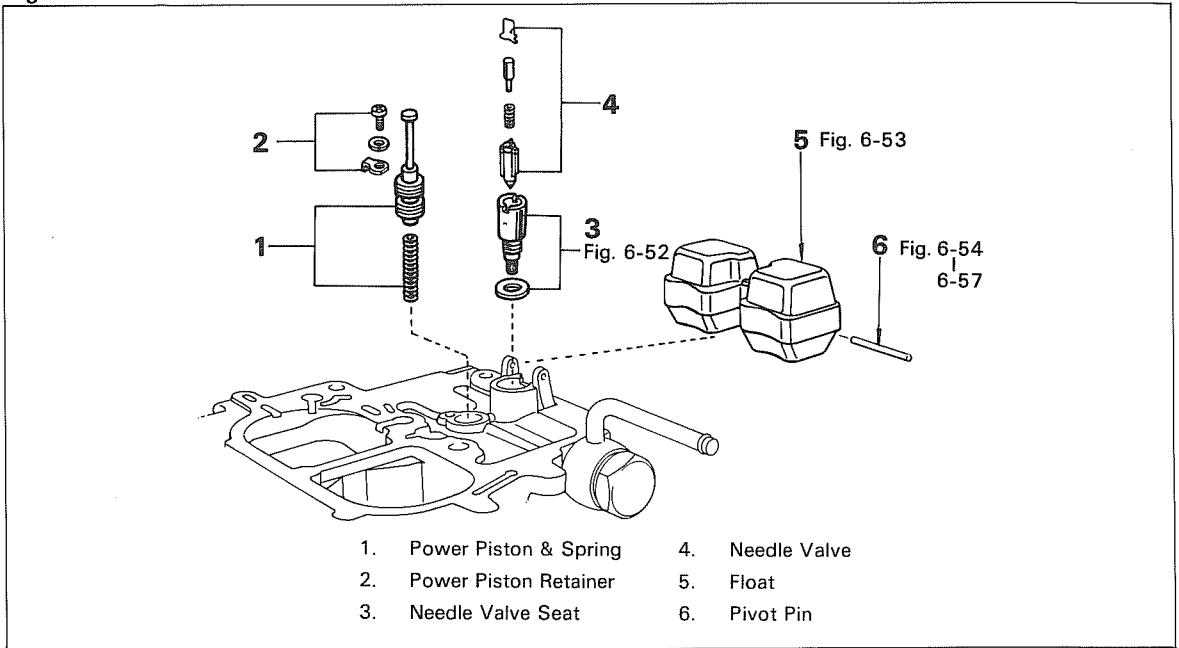


Install the slow jet and tighten it with SST.  
SST [09922-00010]

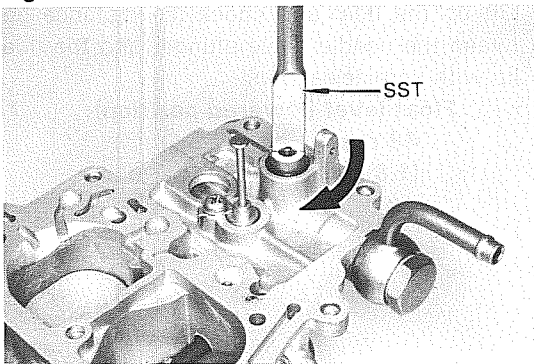
**Float**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-51**

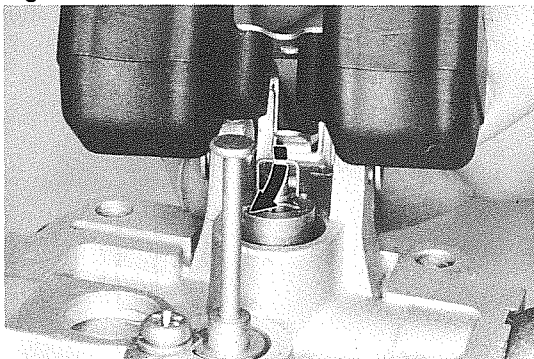


**Fig. 6-52**



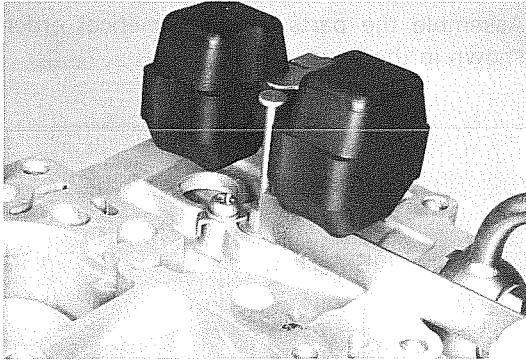
Install the needle valve seat and tighten it with SST.  
 SST [09860-11011]

**Fig. 6-53**



Insert the lip of the float under the wire of the needle valve.

Fig. 6-54



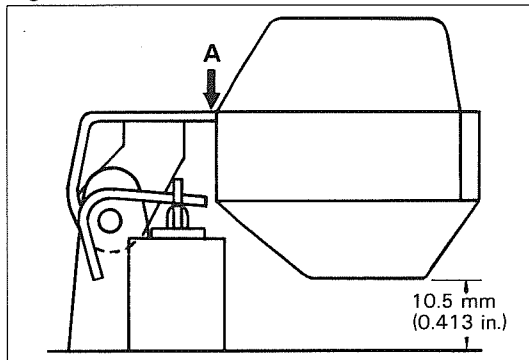
Adjust the float level.  
 Allow the float to hang down by its own weight.  
 Check the clearance between the float top and air horn with SST.  
 SST [09240-00014]

**Float level: 10.5 mm  
 (0.413 in.)**

— Note —

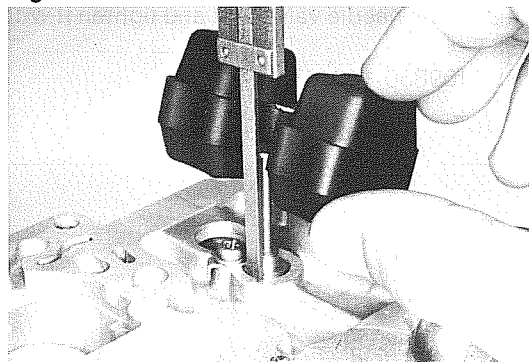
**Measure the clearance without a gasket on the air horn.**

Fig. 6-55



Adjust by bending the part of the float indicated by A in the figure.

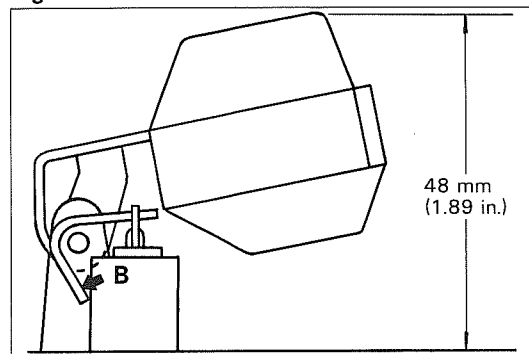
Fig. 6-56



Lift up the float and check the distance between the needle valve plunger and the float lip with vernier calipers.

**Float level (lowered position):  
 48 mm  
 (1.89 in.)**

Fig. 6-57

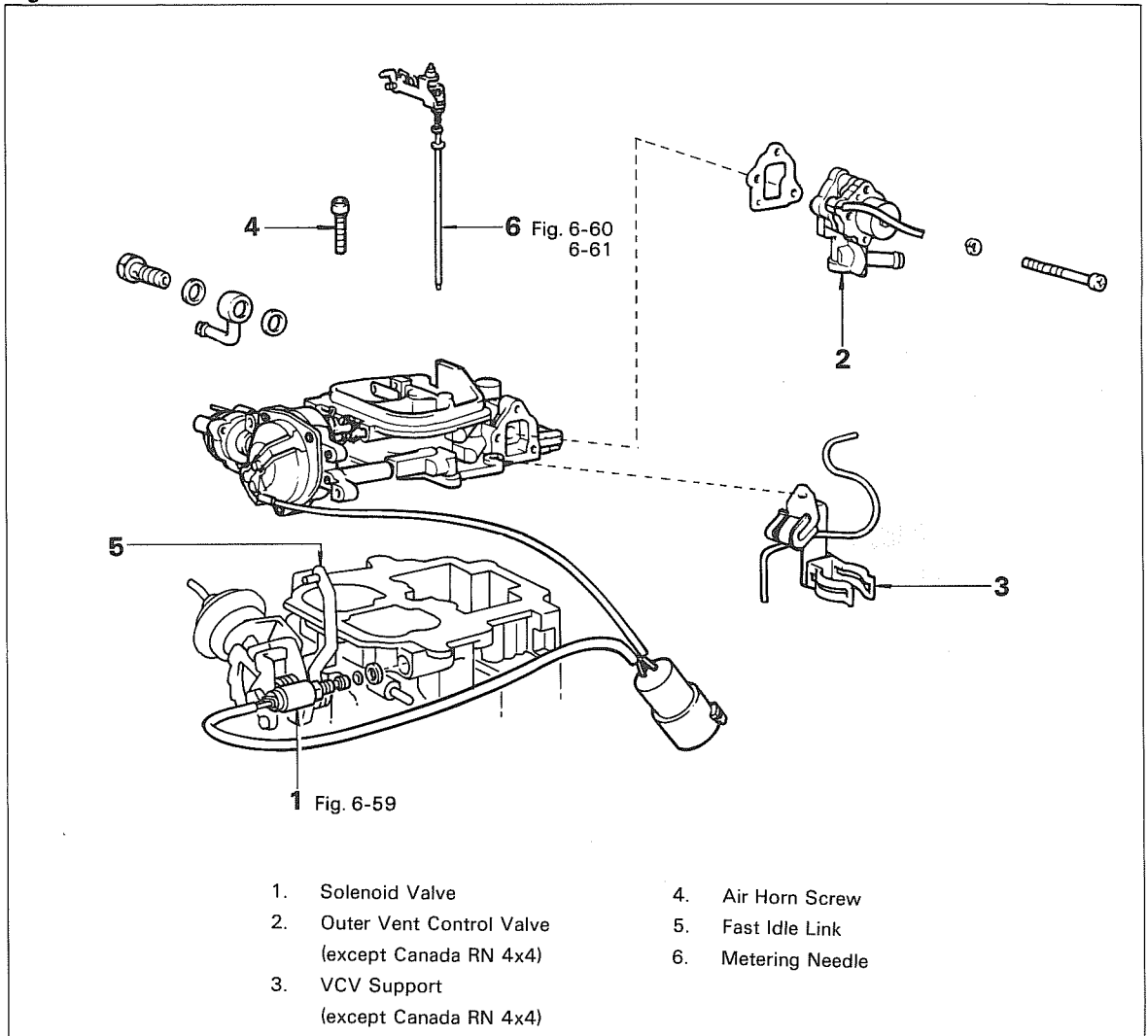


Adjust by bending the part of the float indicated by B in the figure.

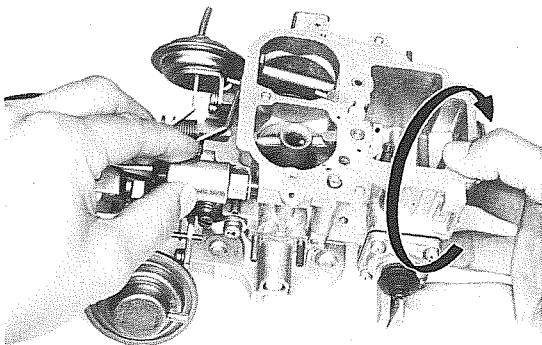
**Air Horn**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-58**



**Fig. 6-59**

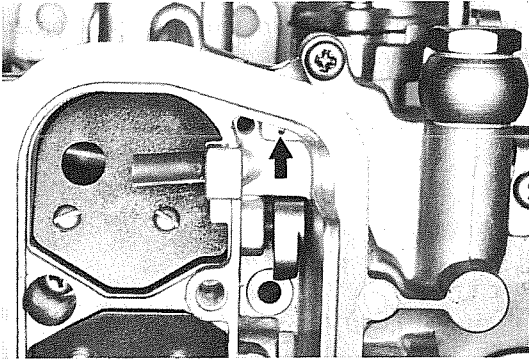


Install the solenoid valve into the carburetor body by rotating the carburetor body clockwise.

— Note —

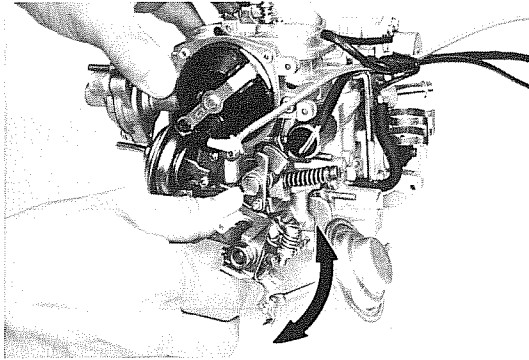
**Be careful not to bend or distort the lead wires.**

Fig. 6-60



Hook the metering needle spring end into the hole indicated in the figure. Then install the metering needle and two washers.

Fig. 6-61

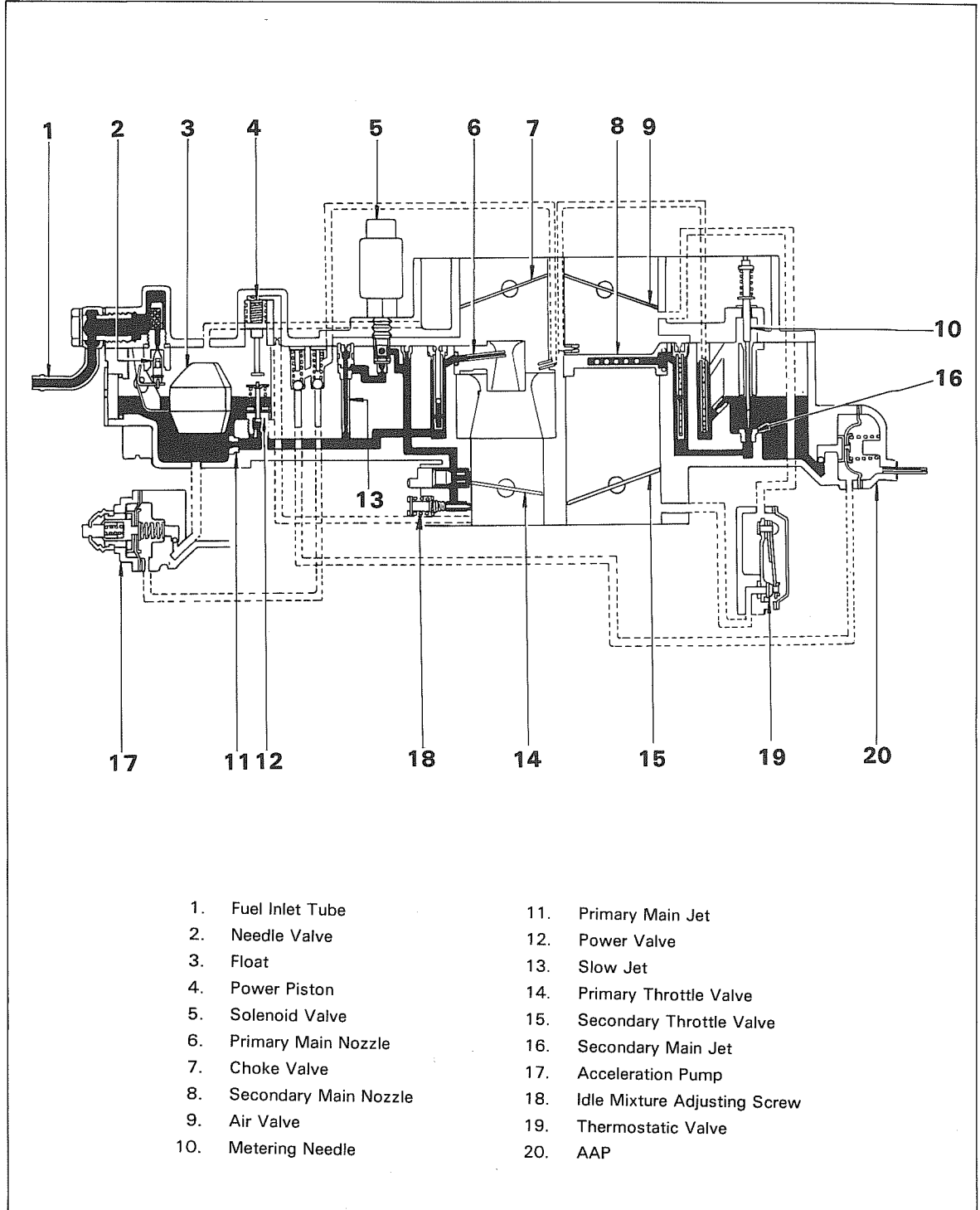


After assembly, make sure that each link moves smoothly.

# CARBURETOR (General Countries)

## CARBURETOR CIRCUIT

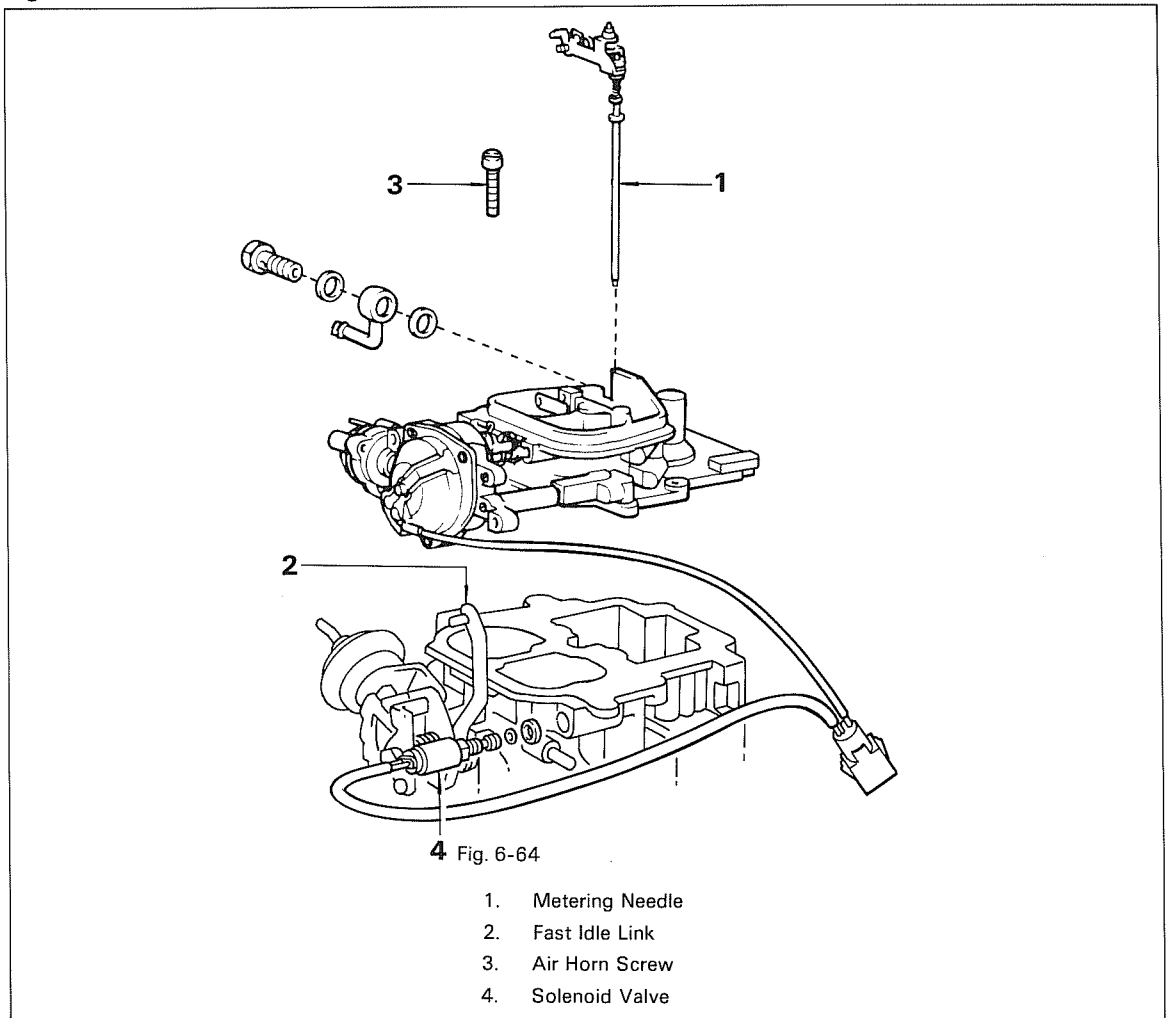
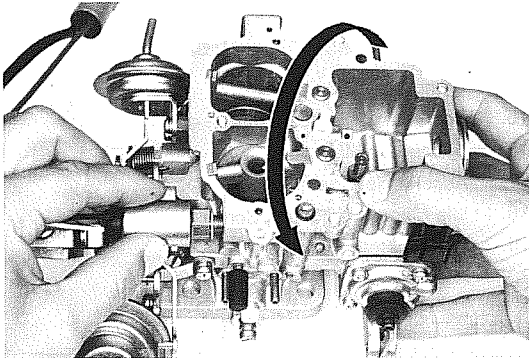
Fig. 6-62



- |                          |                                  |
|--------------------------|----------------------------------|
| 1. Fuel Inlet Tube       | 11. Primary Main Jet             |
| 2. Needle Valve          | 12. Power Valve                  |
| 3. Float                 | 13. Slow Jet                     |
| 4. Power Piston          | 14. Primary Throttle Valve       |
| 5. Solenoid Valve        | 15. Secondary Throttle Valve     |
| 6. Primary Main Nozzle   | 16. Secondary Main Jet           |
| 7. Choke Valve           | 17. Acceleration Pump            |
| 8. Secondary Main Nozzle | 18. Idle Mixture Adjusting Screw |
| 9. Air Valve             | 19. Thermostatic Valve           |
| 10. Metering Needle      | 20. AAP                          |

**DISASSEMBLY****Air Horn**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-63****Fig. 6-64**

Loosen the solenoid valve and remove it from the body by rotating the body counterclockwise.

— Note —

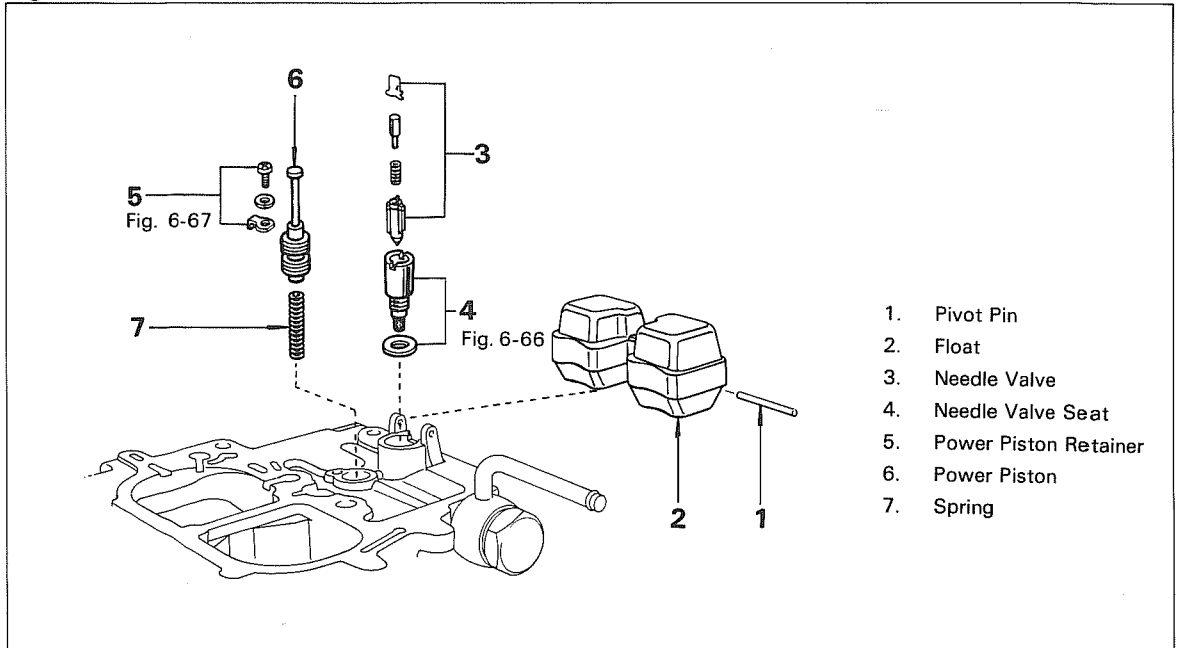
Be careful not to bend or distort the lead wires.



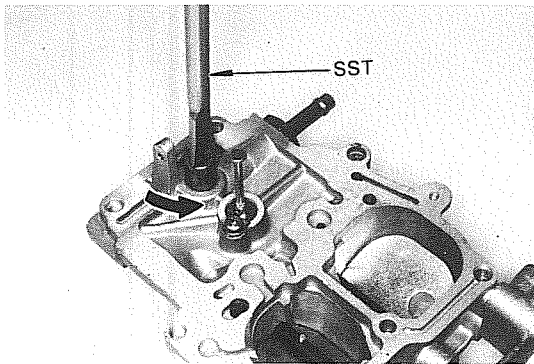
**Float**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-65**

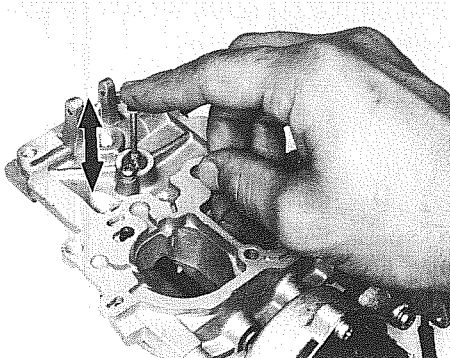


**Fig. 6-66**



Remove the needle valve seat with SST.  
 SST [09860-11011]

**Fig. 6-67**

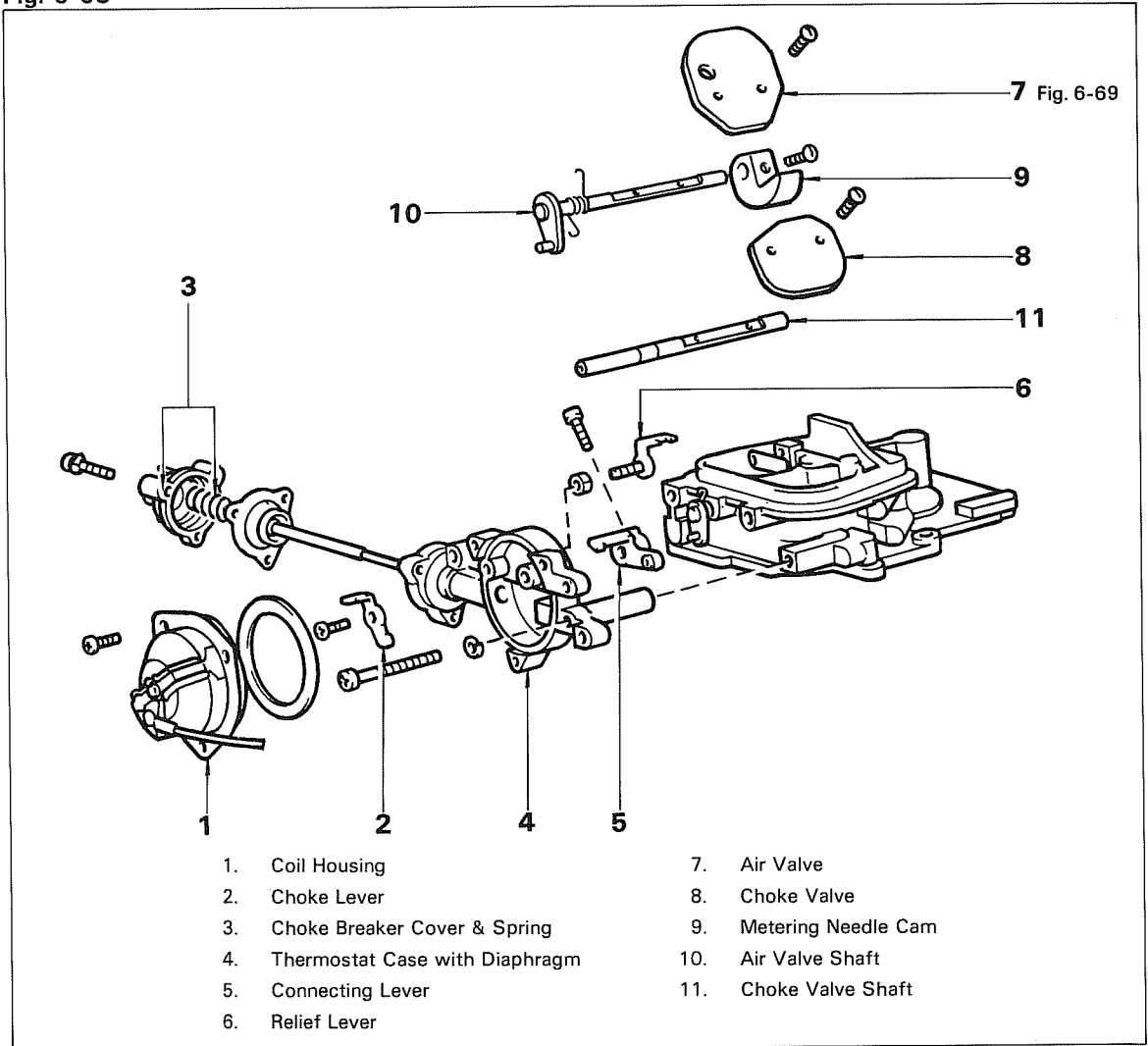


Check the power piston for smooth movement.

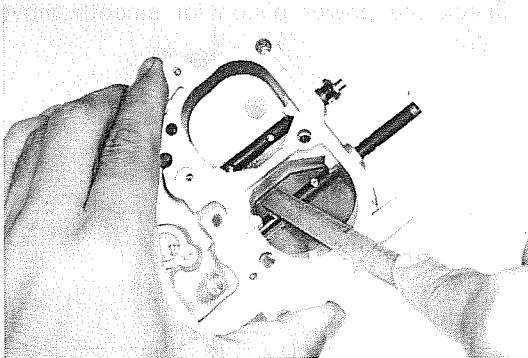
**Choke System**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-68**



**Fig. 6-69**

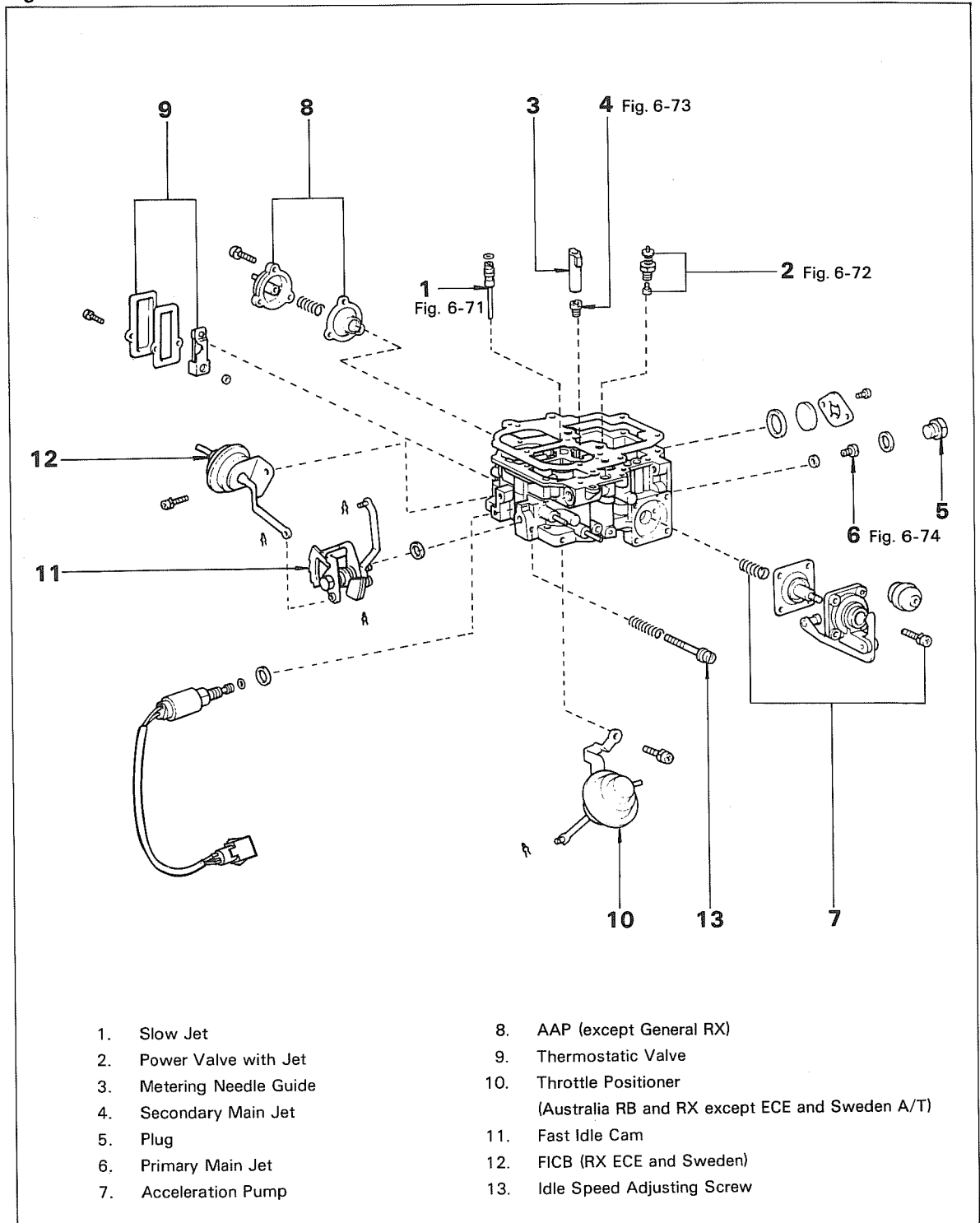


File off the set screw ends to remove the air valve and choke valve.

**Body**

Disassemble the parts in the numerical order shown in the figure.

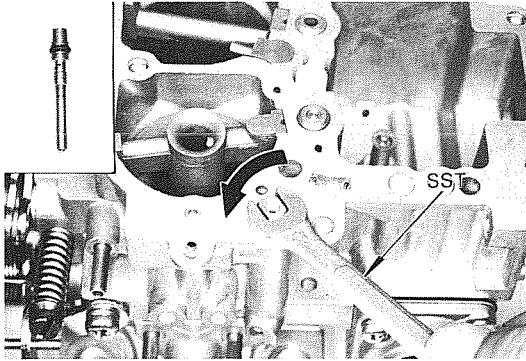
**Fig. 6-70**



- 1. Slow Jet
- 2. Power Valve with Jet
- 3. Metering Needle Guide
- 4. Secondary Main Jet
- 5. Plug
- 6. Primary Main Jet
- 7. Acceleration Pump

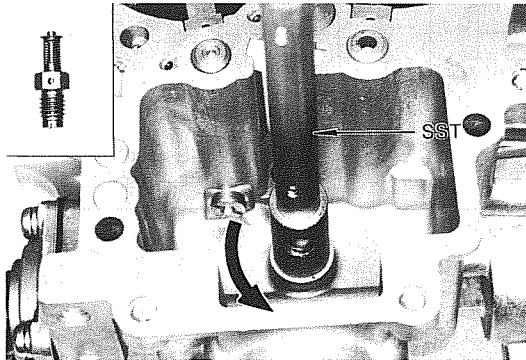
- 8. AAP (except General RX)
- 9. Thermostatic Valve
- 10. Throttle Positioner  
(Australia RB and RX except ECE and Sweden A/T)
- 11. Fast Idle Cam
- 12. FICB (RX ECE and Sweden)
- 13. Idle Speed Adjusting Screw

Fig. 6-71



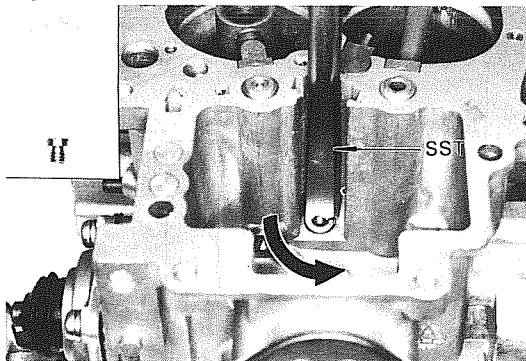
Remove the slow jet with SST.  
SST [09922-00010]

Fig. 6-72



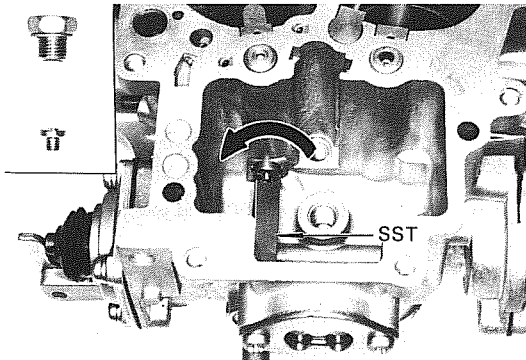
Using SST, remove the power valve together  
with the jet.  
SST [09860-11011]

Fig. 6-73



Remove the metering needle guide and then  
remove the secondary main jet with SST.  
SST [09860-11011]

Fig. 6-74

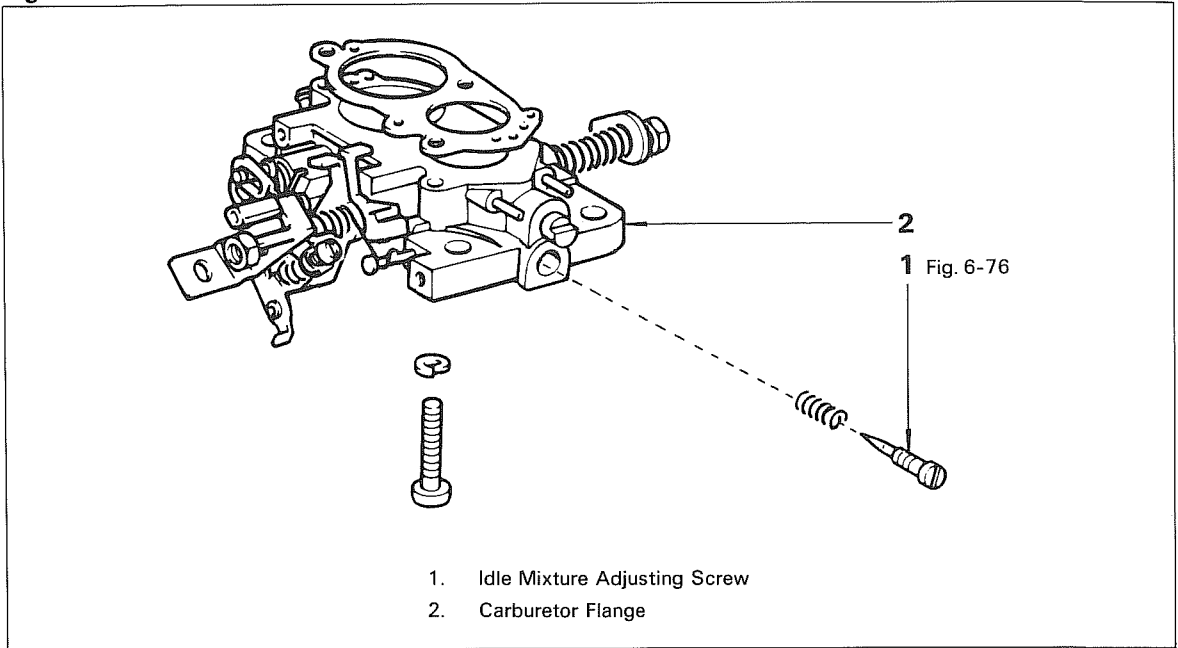


Remove the plug and then remove the primary  
main jet with SST.  
SST [09860-11011]

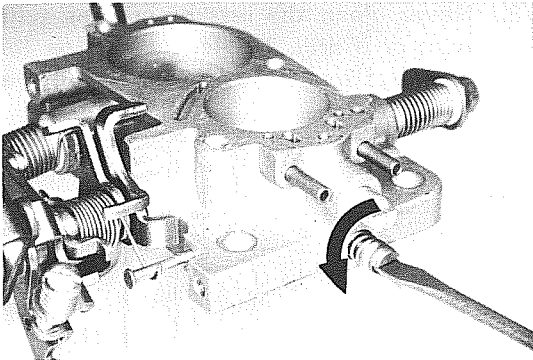
**Flange**

Disassemble the parts in the numerical order shown in the figure.

**Fig. 6-75**

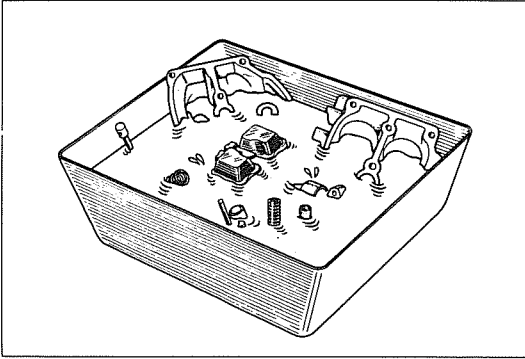


**Fig. 6-76**



Remove the idle mixture adjusting screw.

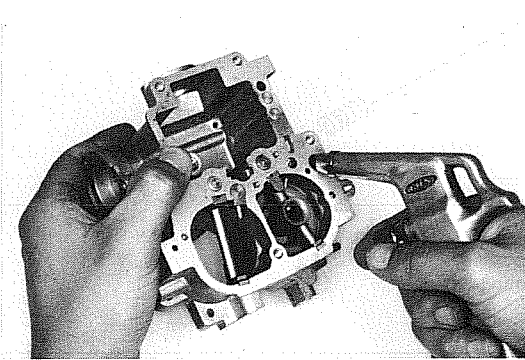
Fig. 6-77

**INSPECTION**

— Precaution —

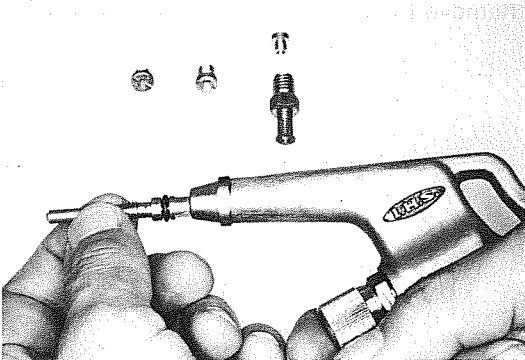
1. Before inspection, wash all parts thoroughly with gasoline.

Fig. 6-78



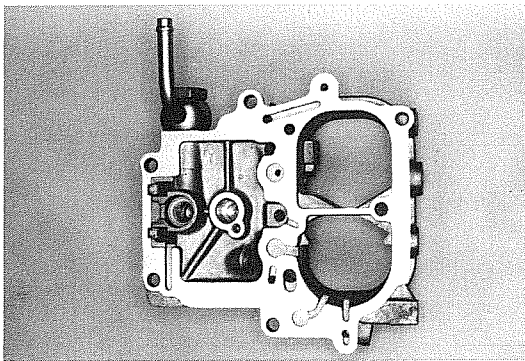
2. Using compressed air, blow all dirt and other foreign matter from the jets and similar parts, and from the fuel passages and apertures in the body.

Fig. 6-79



3. Never clean the jets or orifices with wire or a drill. This could enlarge the openings and result in excessive fuel consumption.

Fig. 6-80

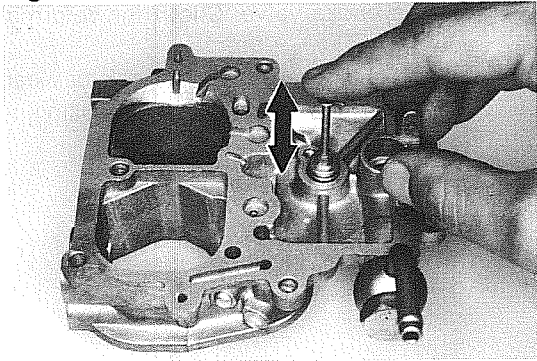


Inspect the following parts and replace any part damaged.

**Air Horn Parts**

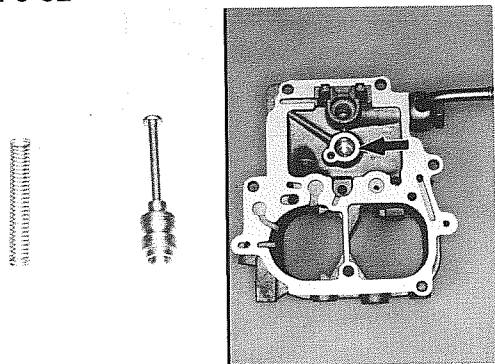
1. Air horn: Check for cracks, damaged threads and excessive wear on the choke and air valve shaft holes.

Fig. 6-81



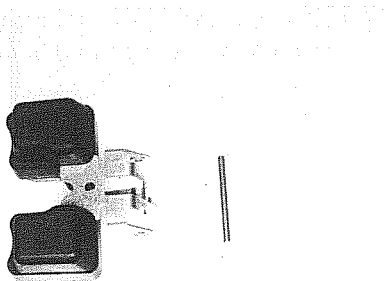
2. Insure that the power piston moves smoothly in the air horn bore.

Fig. 6-82



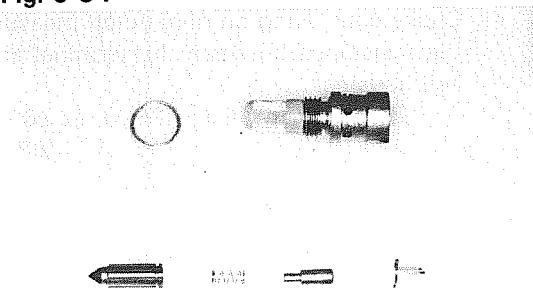
3. Power piston: Check for damage.  
Spring: Check for deformation or rust.  
Power piston bore: Check for wear or damage.

Fig. 6-83



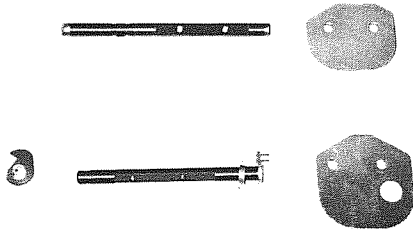
4. Float and pivot pin: Check for wear or breaks.

Fig. 6-84



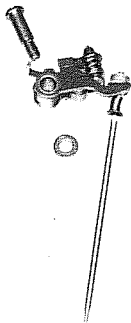
5. Strainer: Check for rust or breaks.
6. Needle valve surface.
7. Needle valve seat.

Fig. 6-85



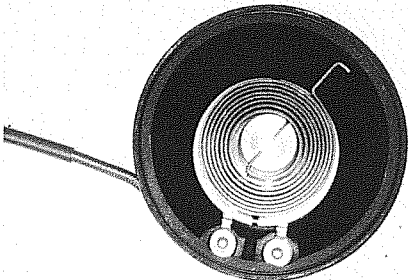
8. Air and choke valve: Check for deformation.  
Air and choke valve shaft: Check for wear, bending or improper fit in the housing.

Fig. 6-86



9. Metering needle: Check for bending or damage at the tapered tip.

Fig. 6-87



10. Coil housing: Check for cracks, and deformation of thermostatic bi-metal coil.

Fig. 6-88

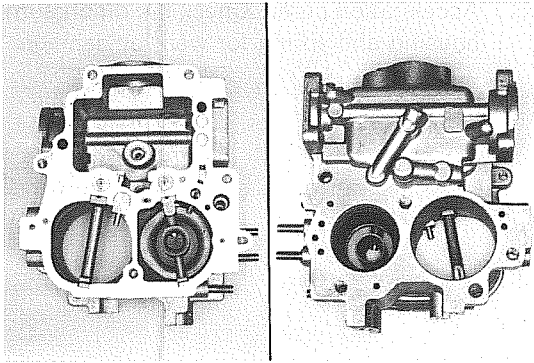


11. Choke coil: Using an ohmmeter, measure the resistance between the terminal and coil housing.

**Resistance: 16 – 20  $\Omega$  at 20°C (68°F)**



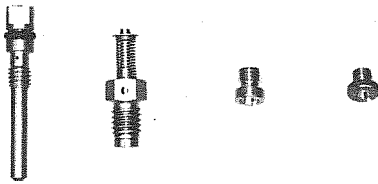
Fig. 6-89



**Body Parts**

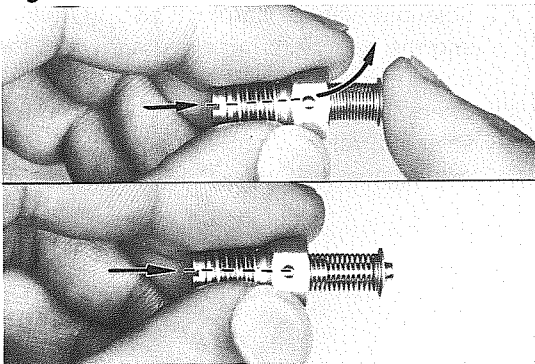
1. Body: Check for cracks, scored mounting surfaces and damaged threads.

Fig. 6-90



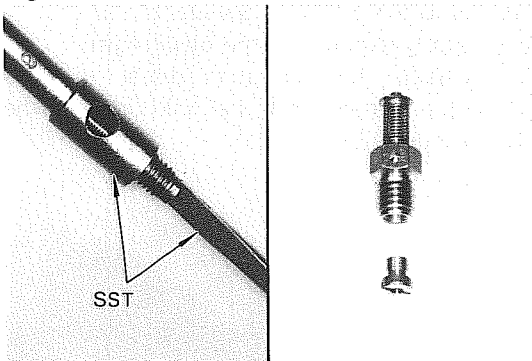
2. Jets: Check for damage or clogging. Check for damaged contact surface, threads and screwdriver slots.

Fig. 6-91



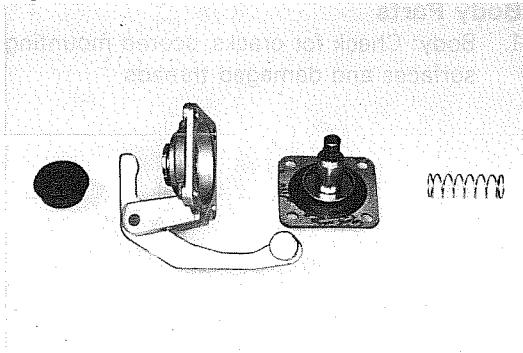
3. Power valve: Check for faulty opening and closing action. Check for damaged contact surface and threads.

Fig. 6-92



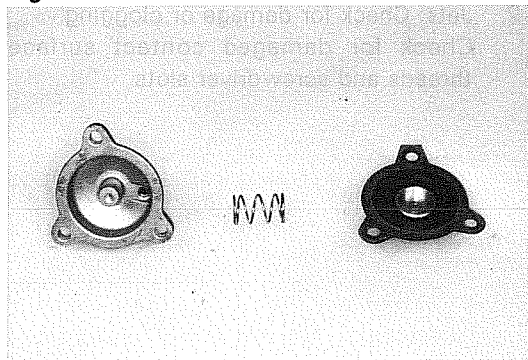
4. Remove the jet with SST. SST [09860-11011]

Fig. 6-93



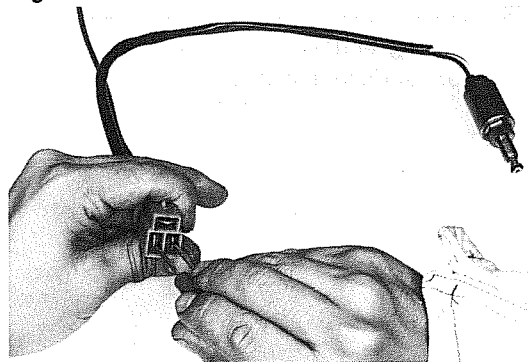
5. Acceleration pump: Check the diaphragm, housing and spring for wear or damage.

Fig. 6-94



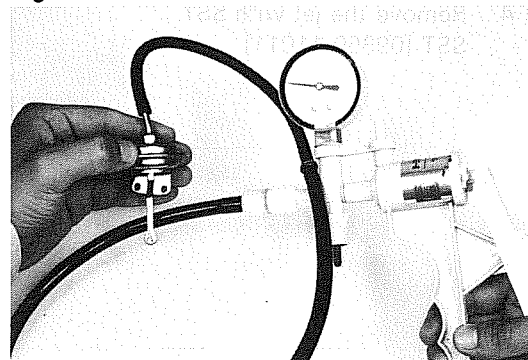
6. AAP (except General RX): Check the diaphragm, housing and spring for wear or damage.

Fig. 6-95



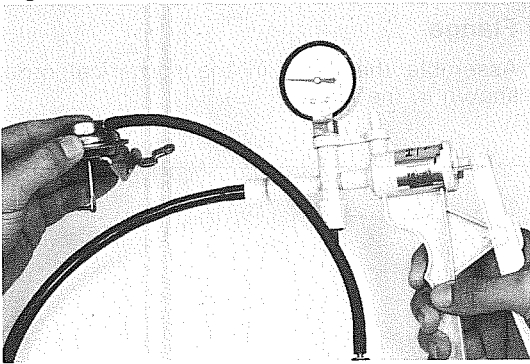
7. Solenoid valve: Connect two terminals and the battery terminals as shown in the figure. Check that you can feel a click from the solenoid valve when the battery is connected and disconnected.

Fig. 6-96



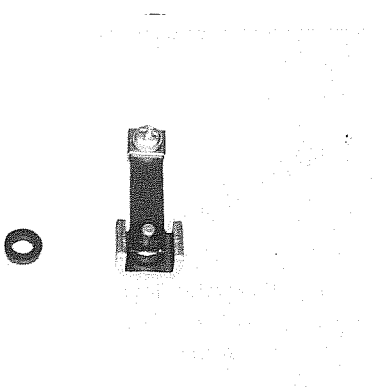
8. FICB (RX ECE and Sweden): Apply vacuum to the diaphragm. Check that vacuum does not drop immediately and the link moves when vacuum is applied.

Fig. 6-97



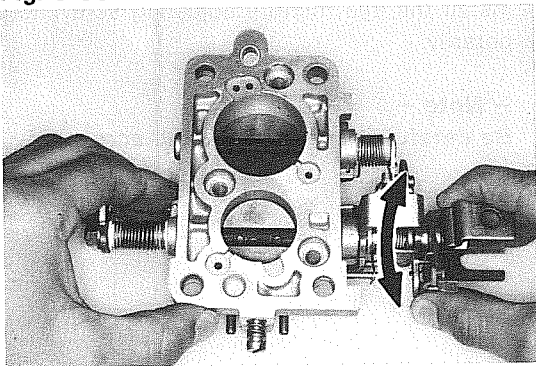
9. Throttle positioner (Australia RB and RX except ECE A/T): Apply vacuum to the diaphragm. Check that vacuum does not drop immediately and that the link moves when vacuum is applied.

Fig. 6-98



10. Thermostatic valve: Check for damage.

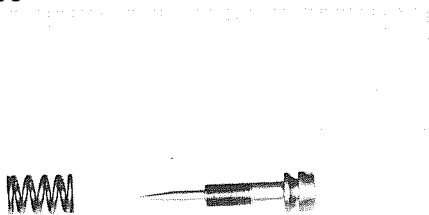
Fig. 6-99



**Flange Parts**

1. Flange: Check for cracks, damaged mounting surfaces, threads and for wear on throttle shaft bearings.
2. Throttle valves: Check for worn or deformed valves and for wear, bending, twisting of shafts or faulty movement inside the housing.

Fig. 6-100



3. Idle mixture adjusting screw: Check for damaged tapered tip or threads.

**ASSEMBLY****Flange**

Assemble the parts in the numerical order shown in the figure.

Fig. 6-101

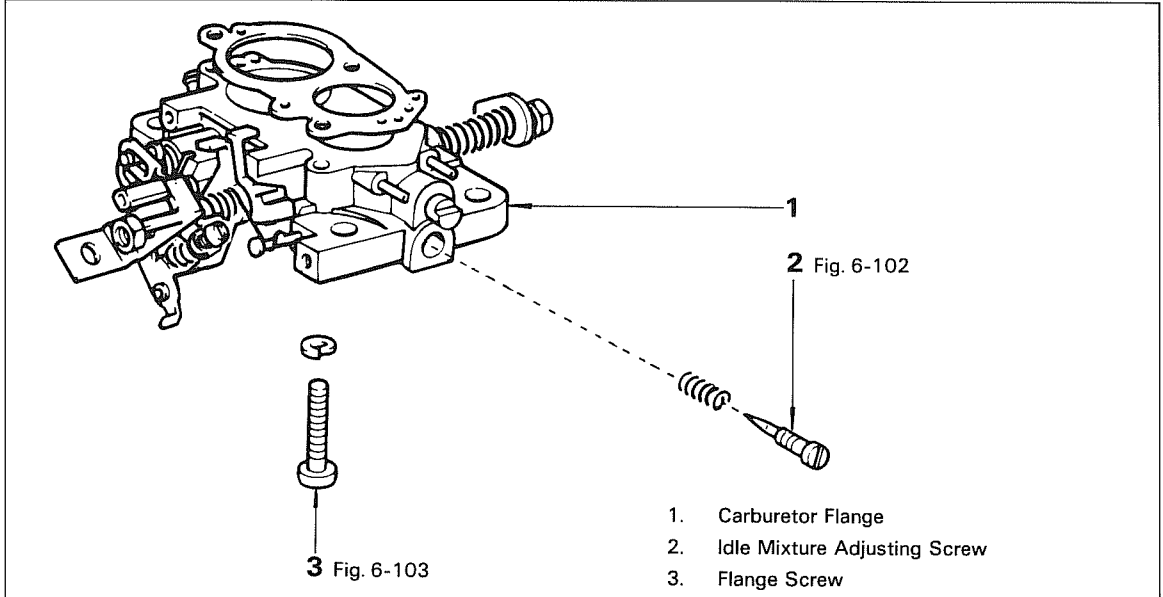
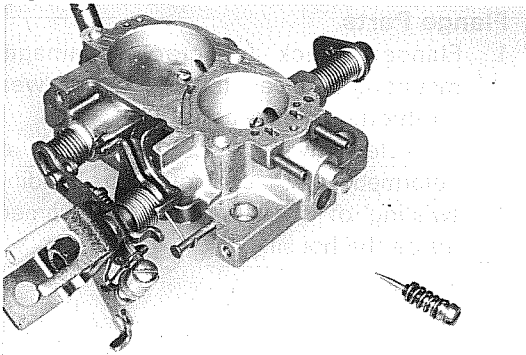


Fig. 6-102

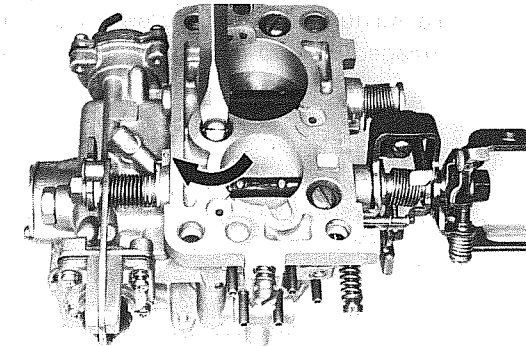


Install the idle mixture adjusting screw temporarily.

— Note —

**Be careful not to damage the screw tip.**

Fig. 6-103



First finger tighten all bolts and then tighten them down.

— Note —

**Use a new gasket.**

**Body**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-104**

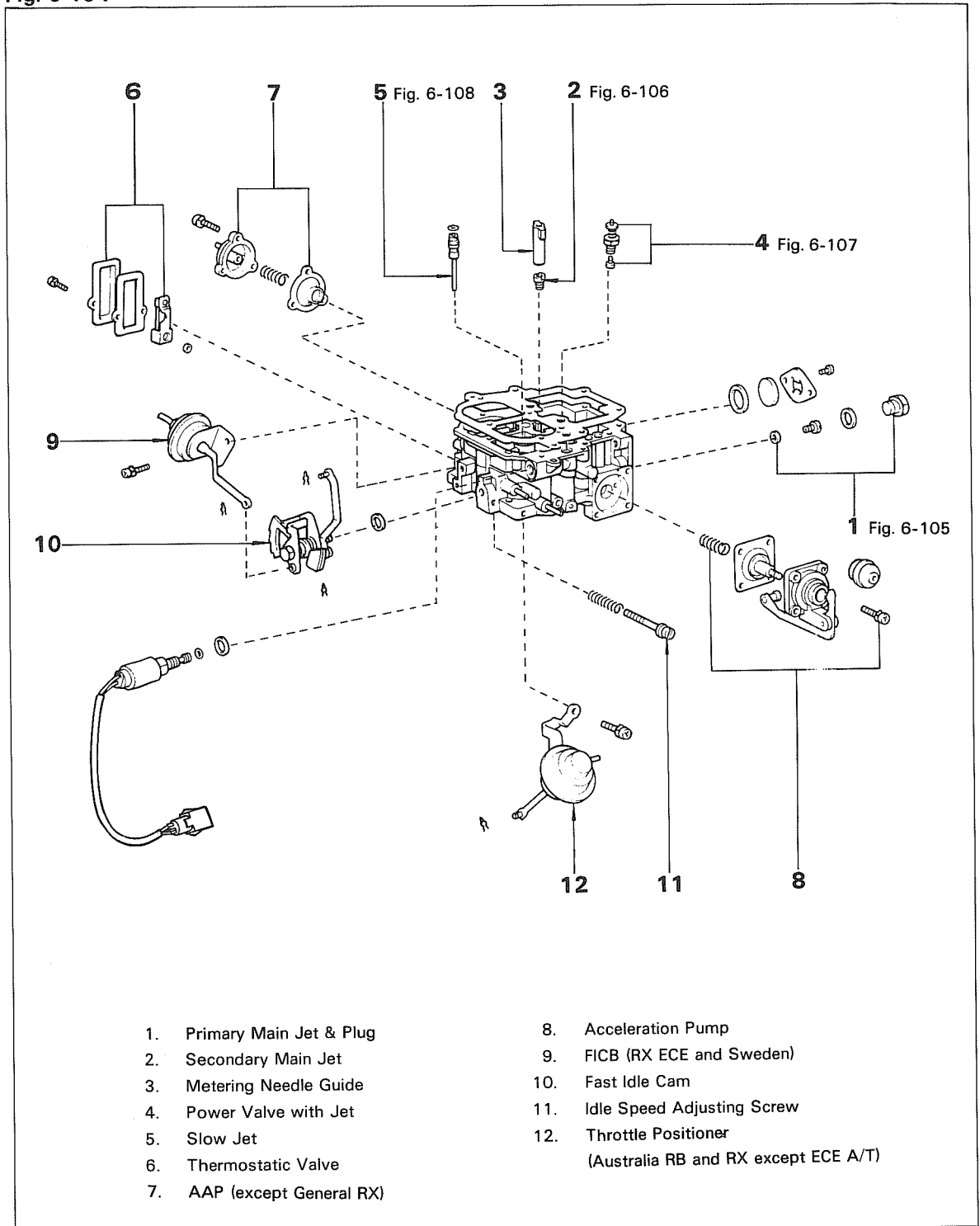
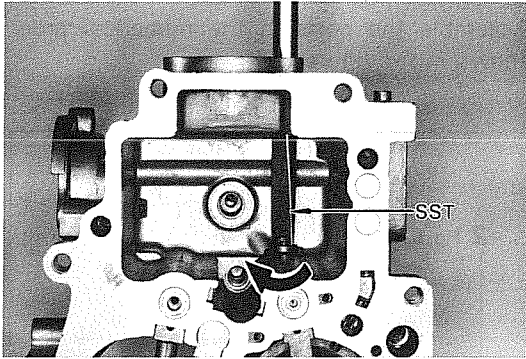
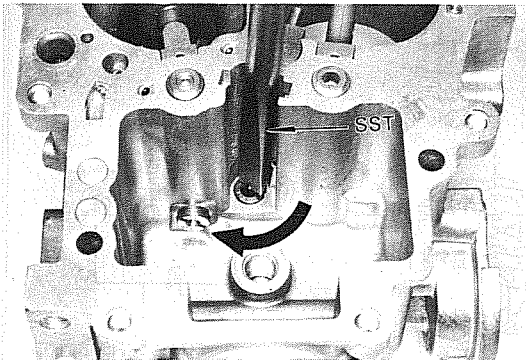


Fig. 6-105



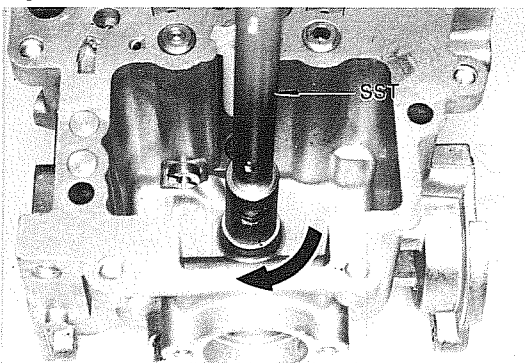
Install the primary main jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-106



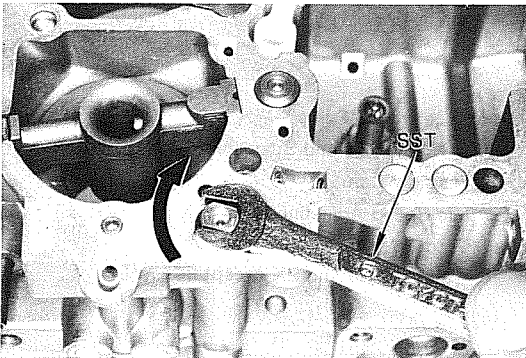
Install the secondary main jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-107



Install the power valve with jet and tighten it with SST.  
SST [09860-11011]

Fig. 6-108



Install the slow jet and tighten it with SST.  
SST [09922-00010]

### Choke System

Assemble the parts in the numerical order shown in the figure.

Fig. 6-109

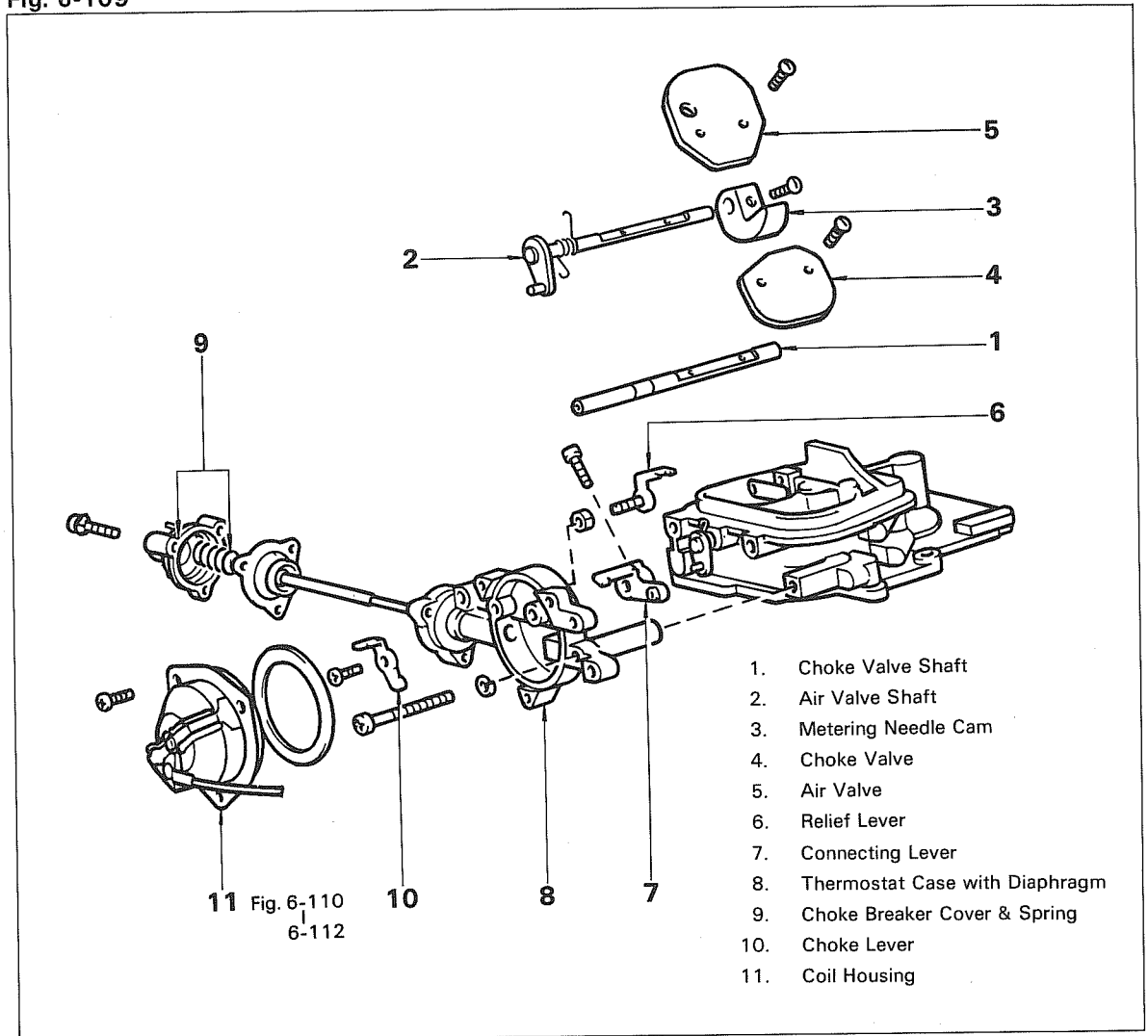
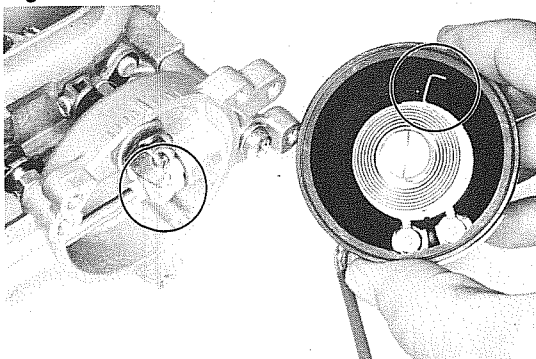
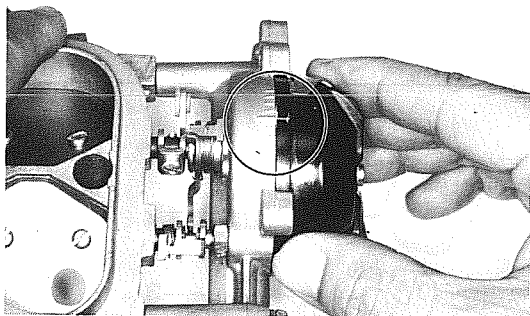


Fig. 6-110



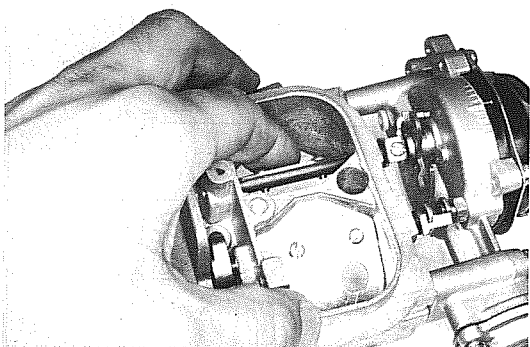
Hook the choke lever to the bi-metal spring.

Fig. 6-111



Align the case scale standard line with the housing scale line.

Fig. 6-112



Check the choke valve action.

— Note —

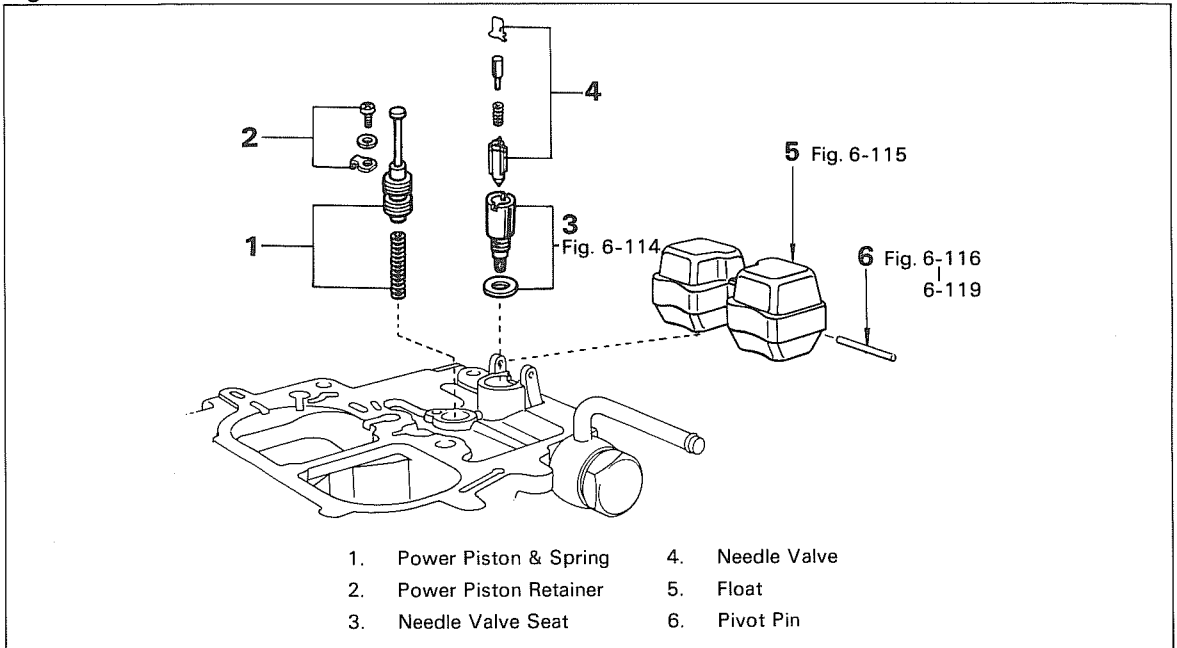
**Stake the choke valve shaft and air valve shaft screws after assembling.**



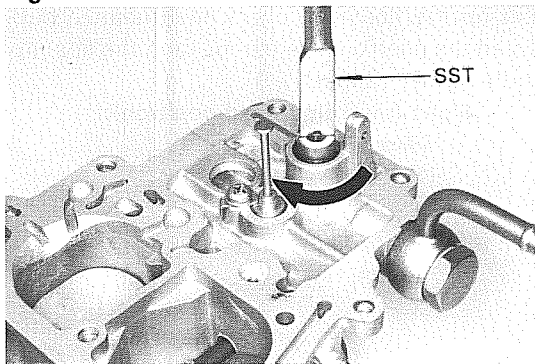
**Float**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-113**

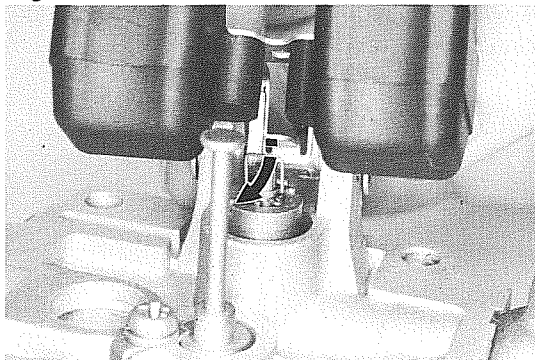


**Fig. 6-114**



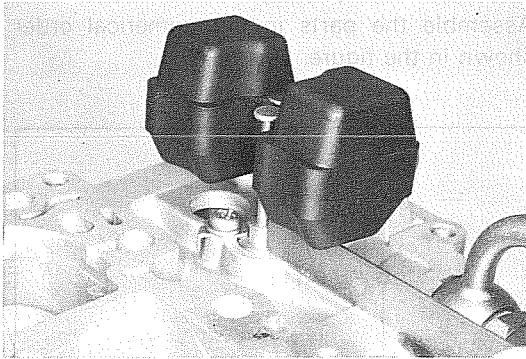
Install the needle valve seat and tighten it with SST.  
SST [09860-11011]

**Fig. 6-115**



Insert the lip of the float under the wire of the needle valve.

Fig. 6-116



Adjust the float level.

Allow the float to hang down by its own weight.

Check the clearance between the float top and air horn with SST.

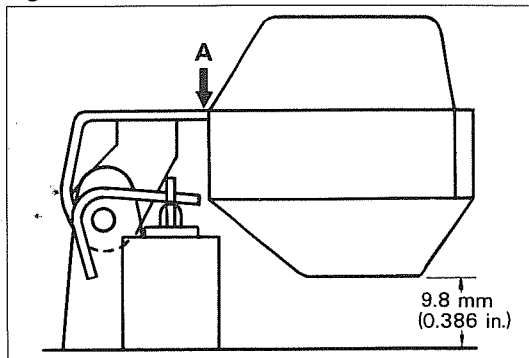
SST [09240-00014]

**Float level: 9.8 mm  
(0.386 in.)**

— Note —

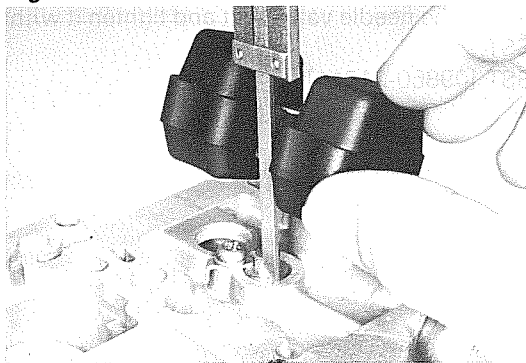
**Measure the clearance without a gasket on the air horn.**

Fig. 6-117



Adjust by bending the part of the float indicated by A in the figure.

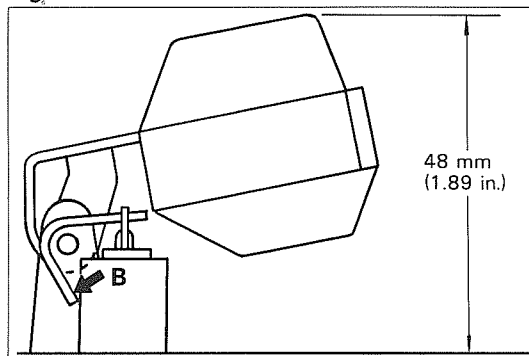
Fig. 6-118



Lift up the float and check the distance between the needle valve plunger and the float lip with vernier calipers.

**Float level (lowered position):  
48 mm  
(1.89 in.)**

Fig. 6-119

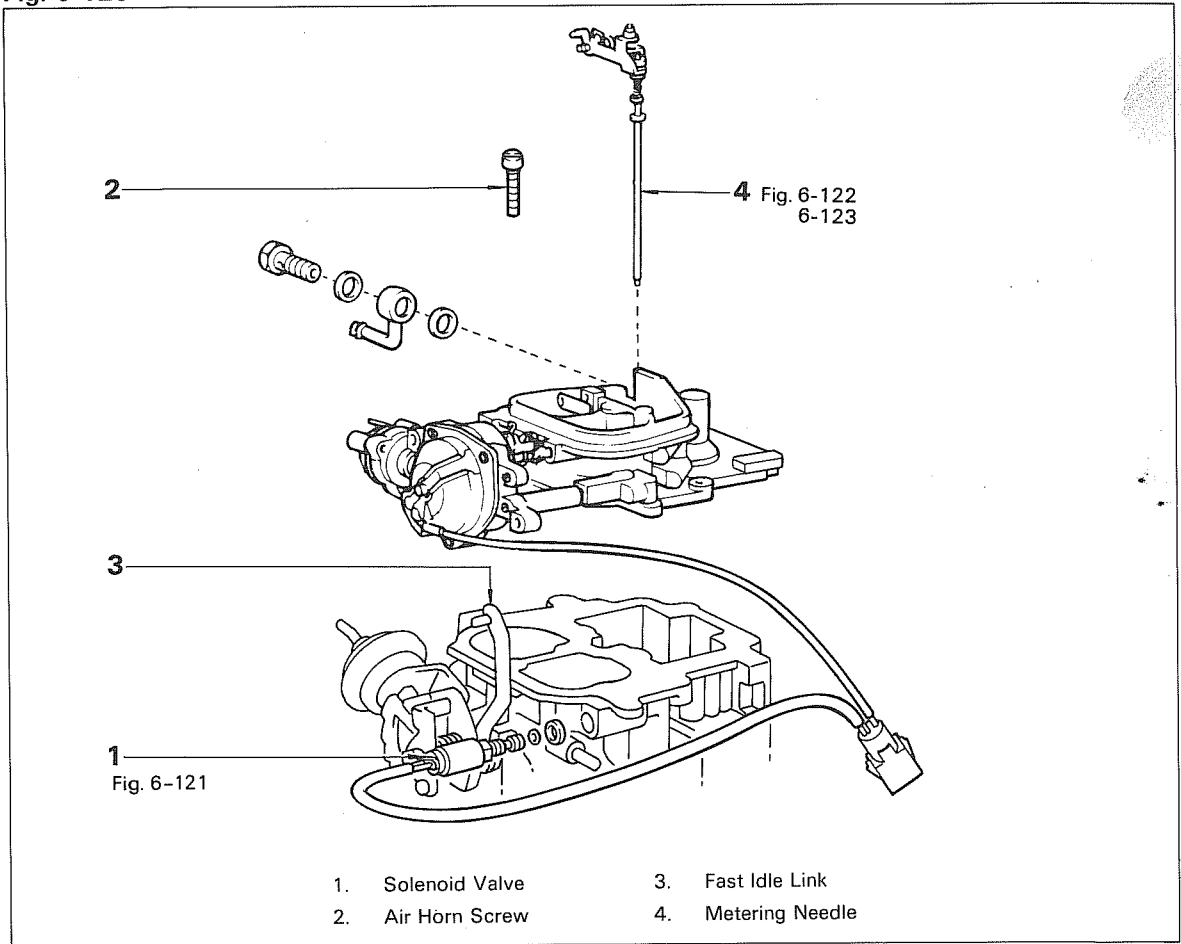


Adjust by bending the part of the float indicated by B in the figure.

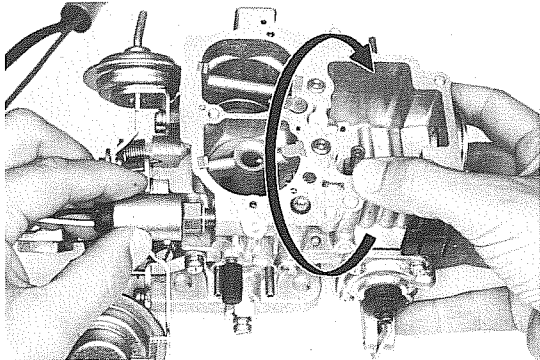
**Air Horn**

Assemble the parts in the numerical order shown in the figure.

**Fig. 6-120**



**Fig. 6-121**

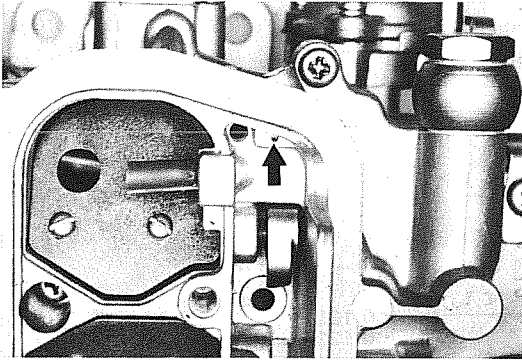


Install the solenoid valve into the carburetor body by rotating the carburetor body clockwise.

— Note —

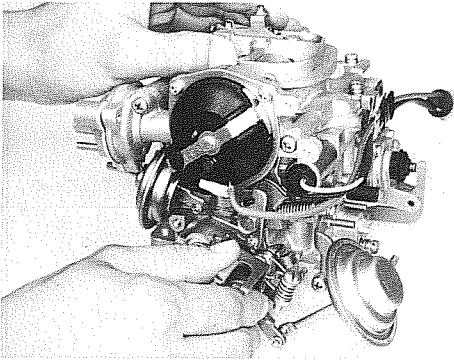
**Be careful not to bend or distort the lead wires.**

Fig. 6-122



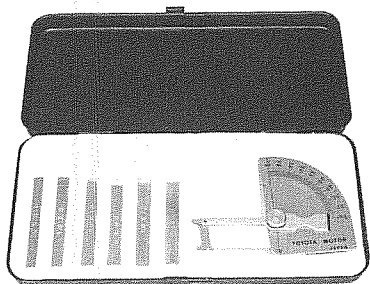
Hook the metering needle spring end into the hole indicated in the figure, then install the metering needle and two washers.

Fig. 6-123



After assembly, make sure that each link moves smoothly.

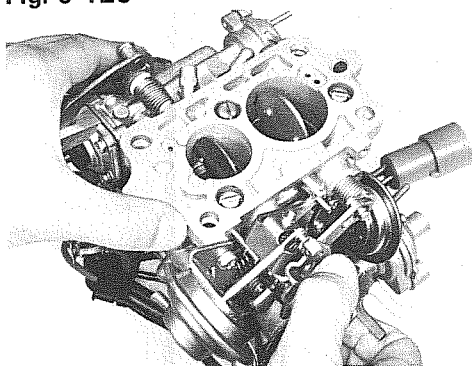
Fig. 6-124



## CARBURETOR ADJUSTMENT

Make adjustment with SST.  
SST [09240-00014]

Fig. 6-125

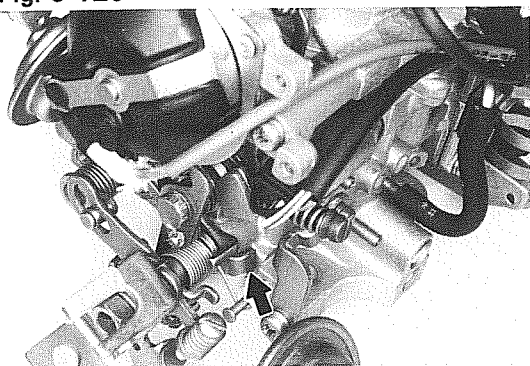


### PRIMARY THROTTLE VALVE OPENING

1. Fully open the primary throttle valve and check the opening angle.

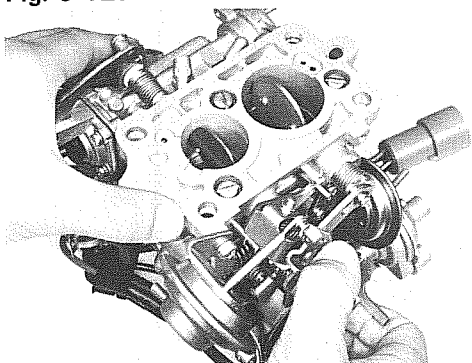
**Opening angle from horizontal plane: 90°**

Fig. 6-126



2. Adjust by bending the throttle arm lever.

Fig. 6-127

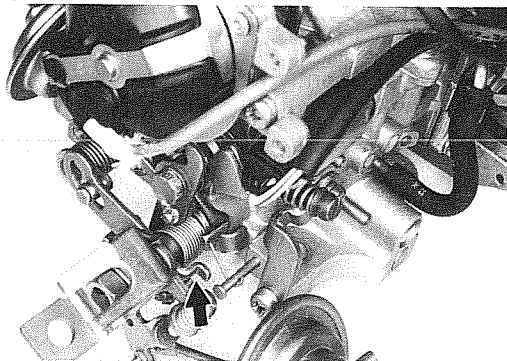


### SECONDARY THROTTLE VALVE OPENING

1. Fully open the secondary throttle valve and check the opening angle.

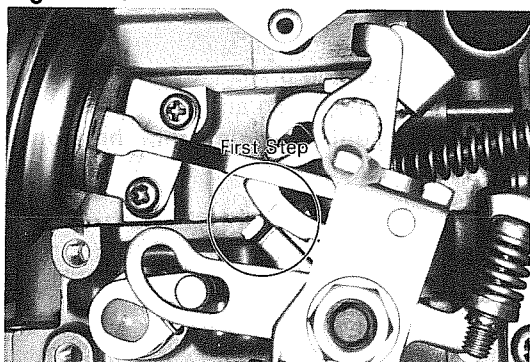
**Opening angle from horizontal plane: 90°**

Fig. 6-128



- Adjust by bending the throttle arm lever.

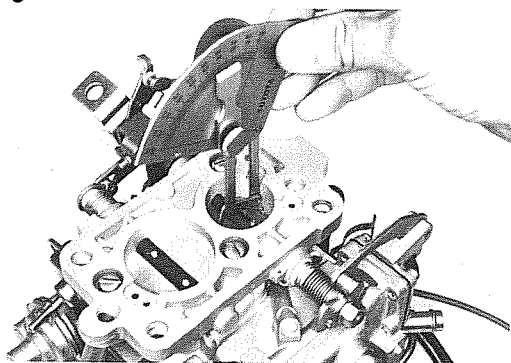
Fig. 6-129



### FAST IDLE SETTING

- Set the throttle shaft lever to the first step of the fast idle cam as shown in the figure.

Fig. 6-130

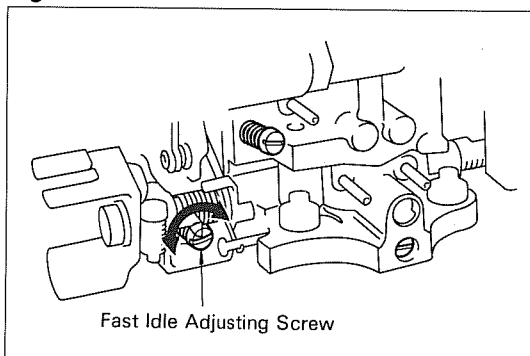


- With the choke valve fully closed, check the primary throttle valve angle with SST. SST [09240-00014]

#### Fast idle angle from horizontal plane:

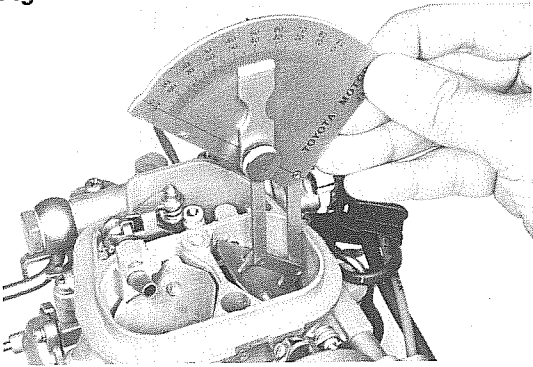
<b>ECE RX</b>	<b>21°</b>
<b>Sweden RX</b>	<b>22°</b>
<b>Others</b>	<b>24°</b>

Fig. 6-131



- Adjust by turning the fast idle adjusting screw.

Fig. 6-132



**UNLOADER**

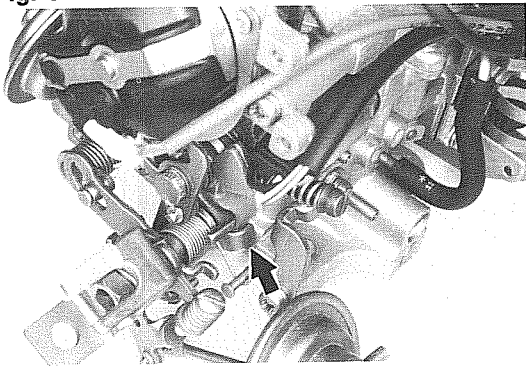
1. With the primary throttle valve fully opened, check the choke valve angle with SST.

SST [09240-00014]

**Choke valve angle from horizontal plane:**

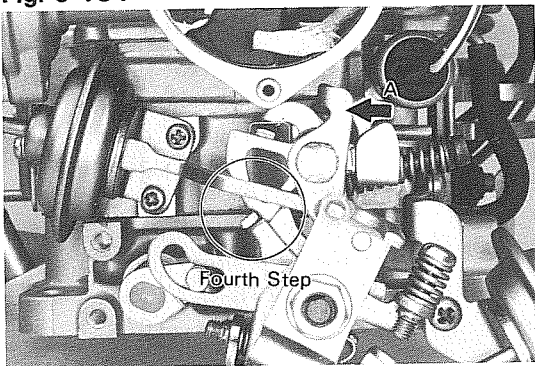
**Canada RN 4x4 and RX 50°**  
**Others 45°**

Fig. 6-133



2. Adjust by bending the first throttle arm.

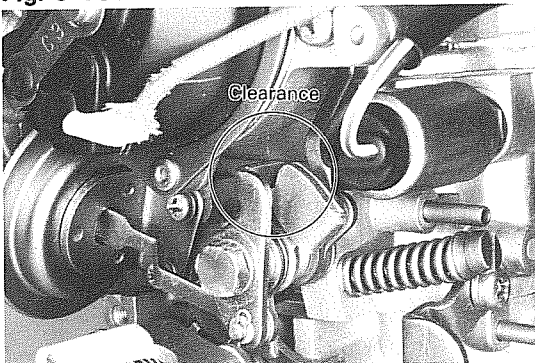
Fig. 6-134



**CHOKE OPENER (22R except RB)**

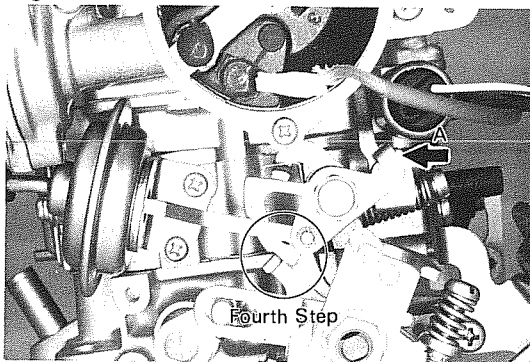
1. Apply vacuum to the choke opener diaphragm.
2. Check that the fast idle cam is released to the fourth step.  
If necessary, adjust by bending the choke opener lever A.

Fig. 6-135



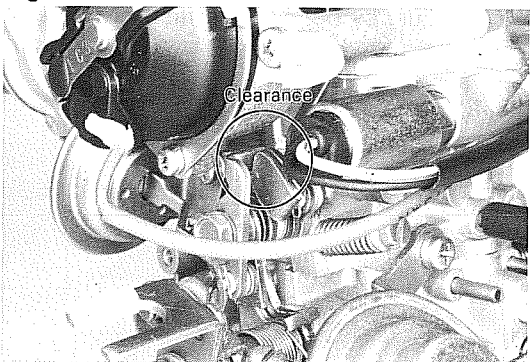
3. Close the choke valve and set the fast idle lever to the first step.
4. Check that there is clearance between the choke opener lever and fast idle cam.

Fig. 6-136

**FICB (RX ECE and Sweden)**

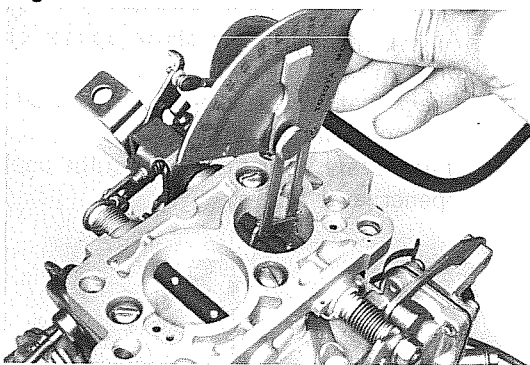
1. Apply vacuum to FICB diaphragm.
2. Check that the fast idle cam is released to the fourth step.  
If necessary, adjust by bending the choke opener lever A.

Fig. 6-137



3. Close the choke valve and set the fast idle lever to the first step.
4. Check that there is clearance between the choke opener lever and fast idle cam.

Fig. 6-138

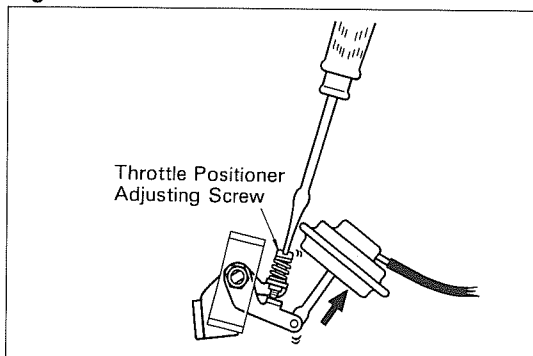
**THROTTLE POSITIONER (Calif. RN 4x4, RN C&C, Australia RB and RX except ECE A/T)**

1. Apply vacuum to the diaphragm.
2. Check the throttle valve opening angle with SST.  
SST [09240-00014]

**Throttle valve opening angle from horizontal plane:**

21R & 21R-C	17°
22R	16°

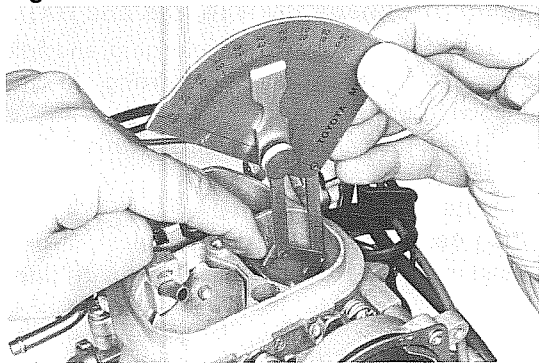
Fig. 6-139



3. Adjust by turning the adjusting screw.



Fig. 6-140



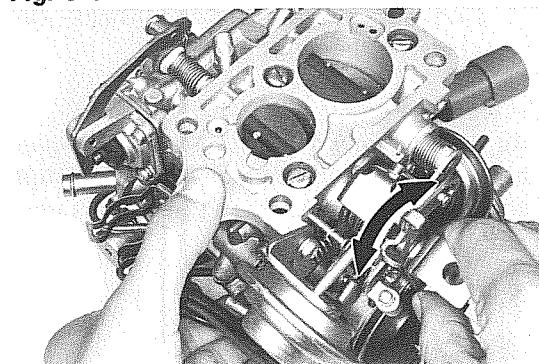
### CHOKE BREAKER

1. Apply vacuum to the choke breaker diaphragm.
2. While closing the choke valve by hand, check the choke valve opening angle with SST.

SST [09240-00014]

**Choke valve opening angle from horizontal plane: 38°**

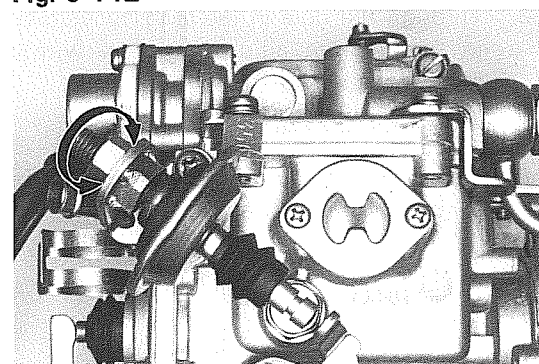
Fig. 6-141



### ACCELERATION PUMP

While rotating the throttle shaft, check that the pump lever and diaphragm rod move smoothly.

Fig. 6-142



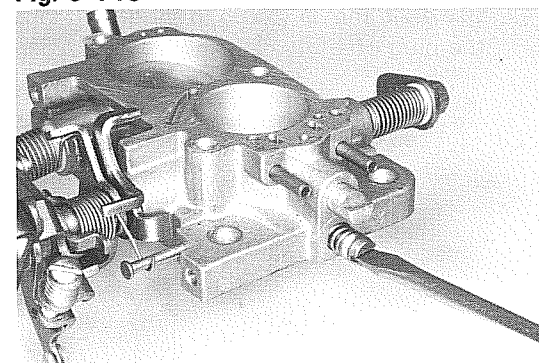
### DASH POT (USA RT A/T and USA RA A/T)

1. Fully open the choke valve and release the fast idle cam to the fourth step.
2. Fully open and return the throttle valve. Check the time required for the throttle valve return to the idle position.

**Time required: 3 seconds**

3. Adjust by turning the dash pot adjusting nut.

Fig. 6-143



### IDLE MIXTURE ADJUSTING SCREW (Canada RN 4x4, RB and RX)

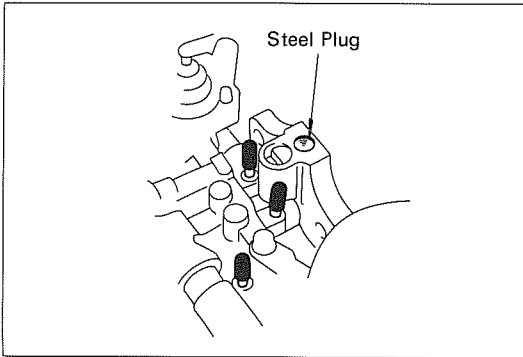
Tighten the idle mixture adjusting screw fully and then unscrew it the following amount.

**Return: 3 turns from fully closed**

— Note —

**Use care not to screw in too tightly and damage the screw tip.**

Fig. 6-144



**(except Canada RN 4x4, RB and RX)**

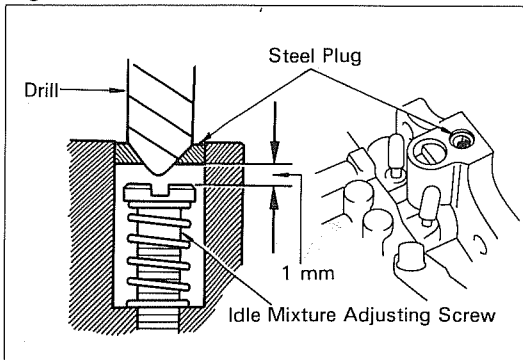
If necessary, remove the steel plug and idle mixture adjusting screw referring to the following procedures.

1. Mark the center of the plug with a punch.

— Note —

**Plug each carburetor vacuum port to prevent entry of steel particles when drilling.**

Fig. 6-145

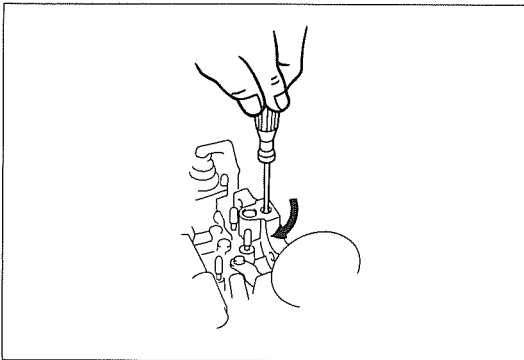


2. Drill a 6.5 mm  $\phi$  (0.256 in.  $\phi$ ) hole in the center of the plug.

— Note —

**As there is only 1 mm (0.04 in.) clearance between the plug and screw, drill carefully and slowly to avoid drilling onto the screw.**

Fig. 6-146

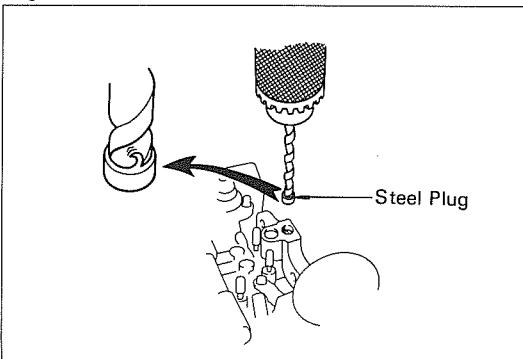


3. Through the hole in the plug, fully screw in the mixture adjusting screw with a screwdriver.

— Note —

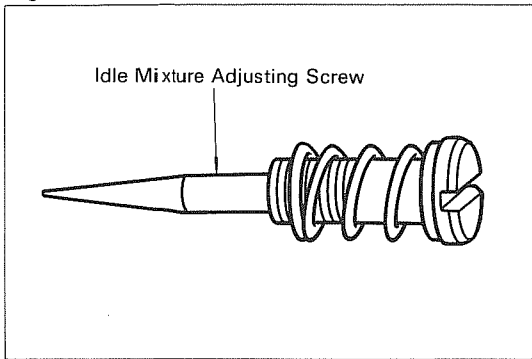
**Be careful not to damage the screw tip by tightening the screw too tightly.**

Fig. 6-147



4. Use a 7.5 mm  $\phi$  (0.295 in.  $\phi$ ) drill to force the plug off.

Fig. 6-148

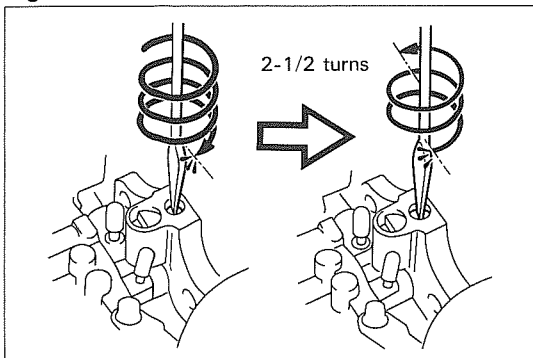


5. Blow off any steel particles with compressed air and remove the screw.

— Note —

If the drill has gnawed into the screw top or if the tapered position is damaged, replace the screw.

Fig. 6-149

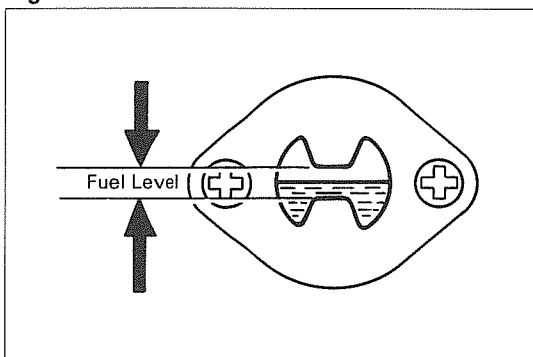


6. Fully screw in the idle mixture adjusting screw and then unscrew it about 2-1/2 turns.

— Note —

1. Be careful not to damage the screw tip by tightening the screw too tightly.
2. Do not install the steel plug until the idle mixture adjustment is finished.

Fig. 6-150

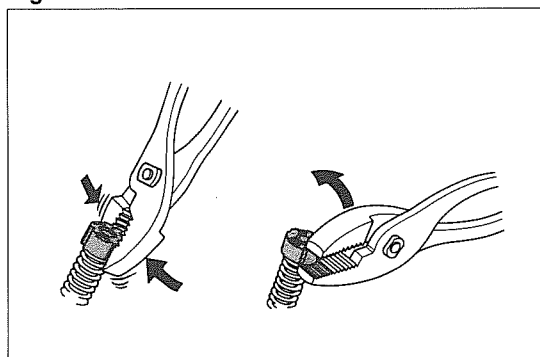


### IDLE MIXTURE SPEED ADJUSTMENT

In the case of the steel plug being removed, check the idle mixture speed referring to the following procedures.

1. Check the following items before adjustment.
  - (1) Air cleaner installed
  - (2) Normal operating coolant temperature
  - (3) Choke fully open
  - (4) All accessories switched off
  - (5) All vacuum lines connected
  - (6) Ignition timing set correctly
  - (7) Transmission in N range
  - (8) Fuel level should be about even with the correct level in the sight glass.

Fig. 6-151



2. Break the idle limiter cap on the idle speed adjusting screw if installed.

Fig. 6-152

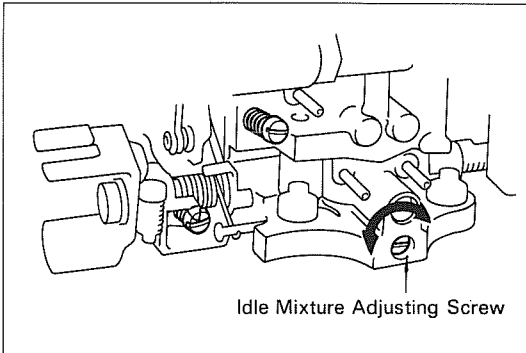


Fig. 6-153

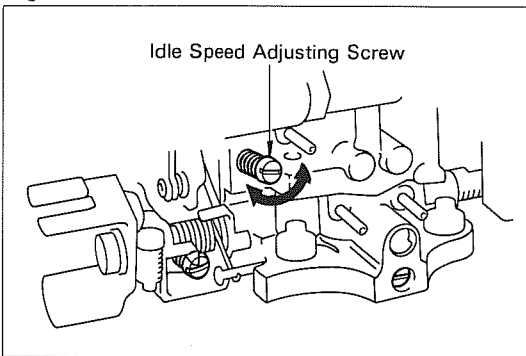


Fig. 6-154

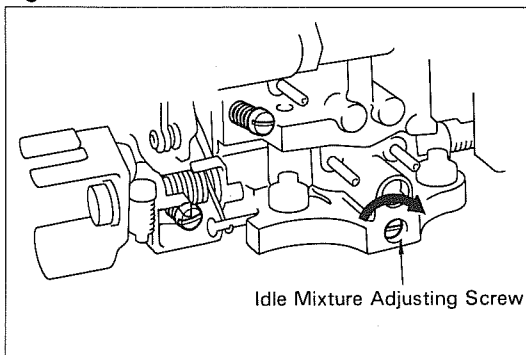
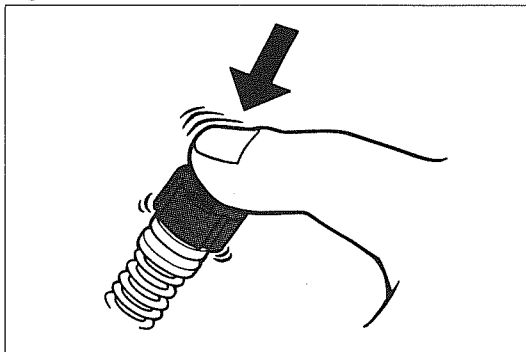


Fig. 6-155



3. Start the engine and set to the maximum speed by turning the idle mixture adjusting screw.

4. Set to the idle mixture speed by turning the idle speed adjusting screw.

**Idle mixture speed:**

All M/T	740 rpm
USA RA, RT, RN w/ A/T	
(Ex. Fed. RN w/ 4-speed A/T)	790 rpm
Fed. RN w/ 4-speed A/T	740 rpm
Canada RA, RT w/ A/T	890 rpm
Canada RN w/ A/T	790 rpm

**— Note —**

Before moving to the next step, continue the adjustments 3 and 4 until the maximum speed will not rise any further no matter how much the IDLE MIXTURE ADJUSTING SCREW is adjusted.

5. Set to the idle speed by screwing in the idle mixture adjusting screw.

**Idle speed:**

All M/T	700 rpm
USA RA, RT, RN w/ A/T	
(Ex. Fed. RN w/ 4-speed A/T)	750 rpm
Fed. RN w/ 4-speed A/T	700 rpm
Canada RA, RT w/ A/T	850 rpm
Canada RN w/ A/T	750 rpm

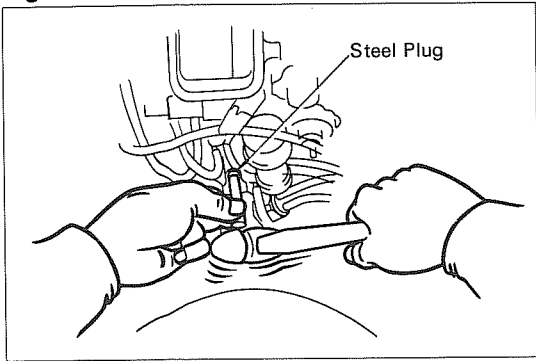
**— Note —**

This is the "Lean Drop Method" for setting idle speed and mixture.



6. Install a new limiter cap on the idle speed adjusting screw if one was installed.

Fig. 6-156



7. Tap in a new plug until it is even with the carburetor flange surface.

