FUEL SYSTEM

FUEL PUMP

DISASSEMBLY

Disassemble in numerical order.

Fig. 8-1

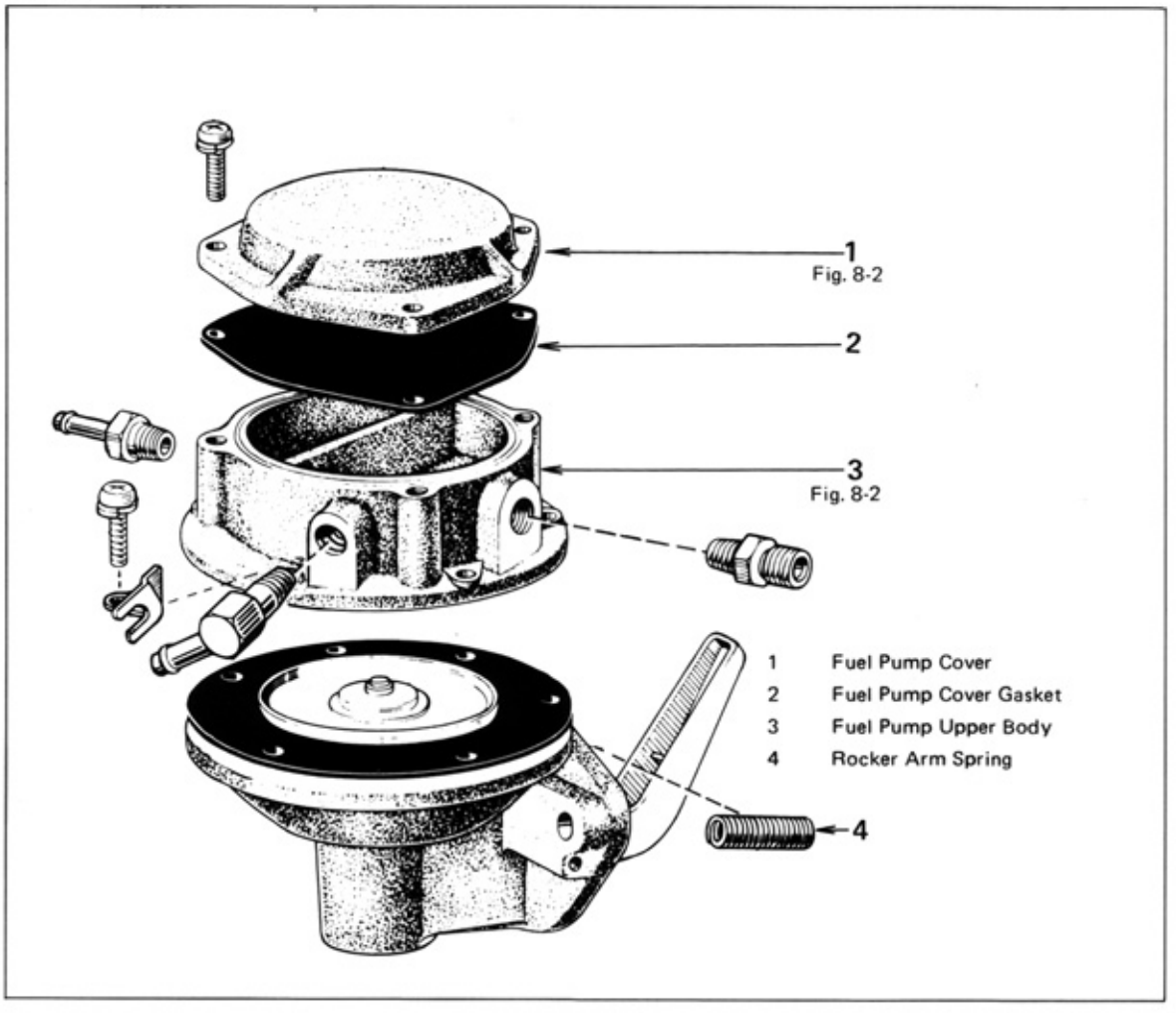
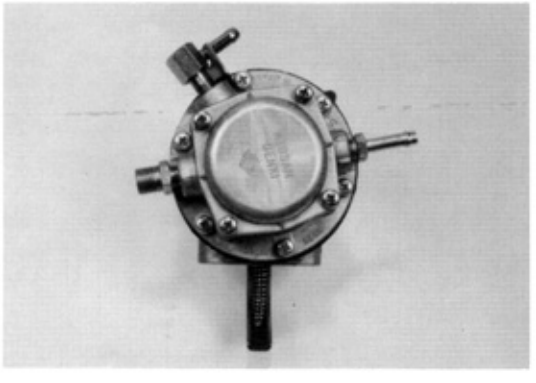
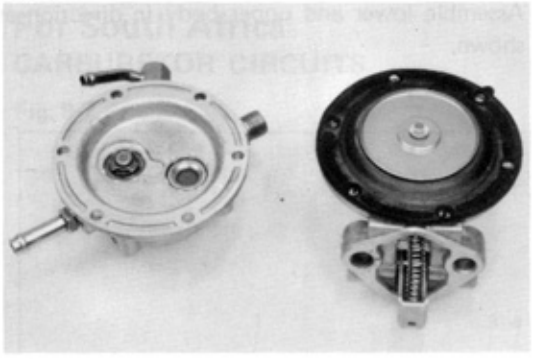


Fig. 8-2



⚠ Mark the position of pump cover and upper body.

Fig. 8-3



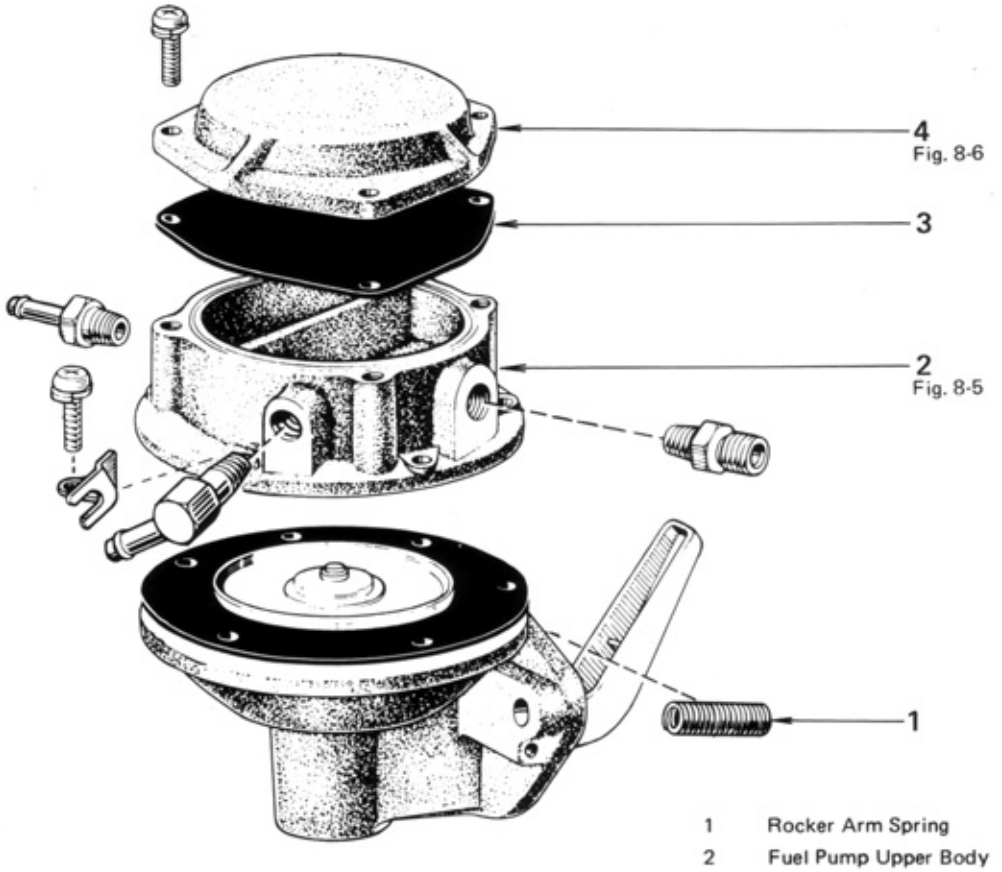
INSPECTION

Inspect diaphragms for tear and check valves for defective operation. Replace if damaged.

ASSEMBLY

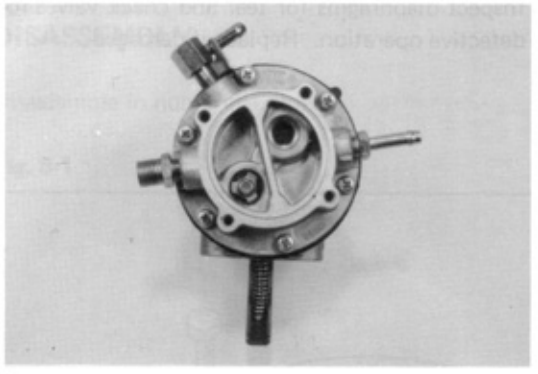
Assemble in numerical order.

Fig. 8-4



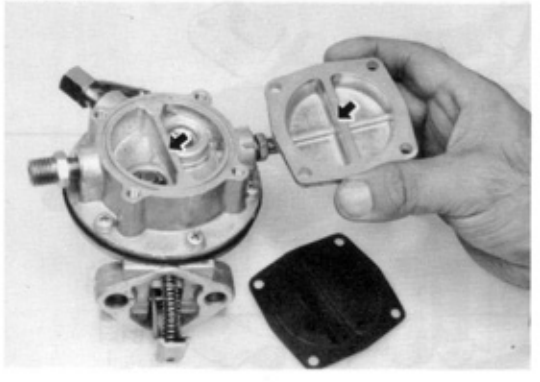
1 Rocker Arm Spring
2 Fuel Pump Upper Body
3 Fuel Pump Cover Gasket
4 Fuel Pump Cover

Fig. 8-5



Assemble lower and upper body in direction as shown.

Fig. 8-6



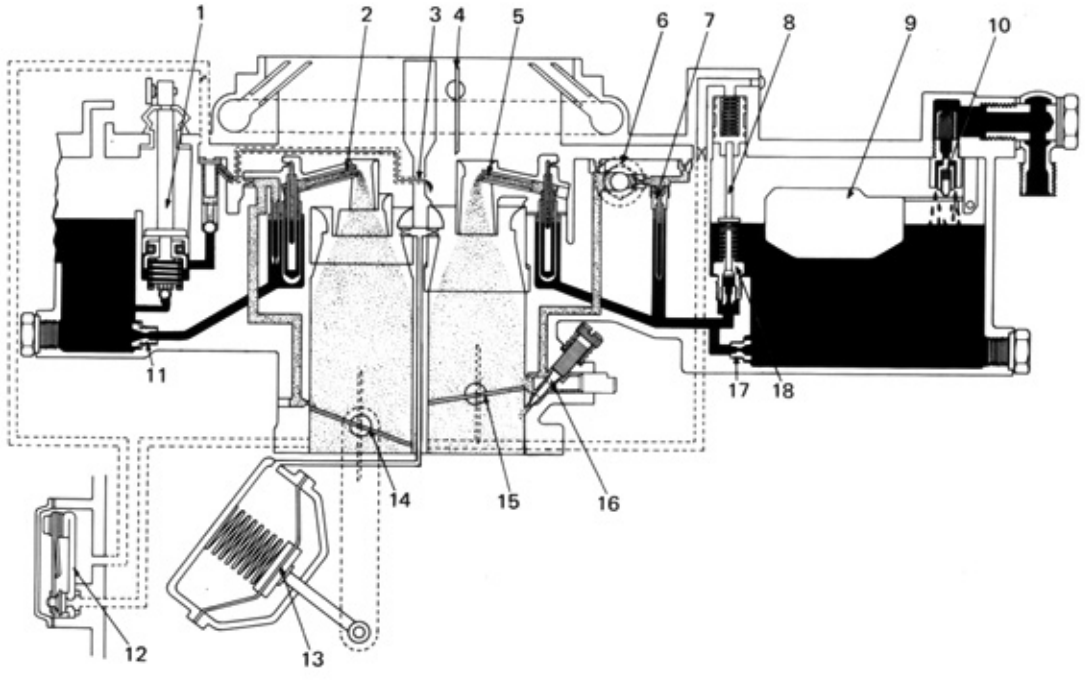
Assemble upper body and cover over the diaphragm.
Inlet and outlet chamber separating walls should be aligned.

CARBURETOR(FOR 18R ENGINE)

For South Africa

CARBURETOR CIRCUITS

Fig. 8-7



1	Pump Plunger	10	Needle Valve
2	2nd Main Nozzle	11	2nd Main Jet
3	Pump Jet	12	Thermostatic Valve
4	Choke Valve	13	Diaphragm
5	1st Main Nozzle	14	2nd Throttle Valve
6	Solenoid Valve	15	1st Throttle Valve
7	Slow Jet	16	Idle Mixture Adjusting Screw
8	Power Piston	17	1st Main Jet
9	Float	18	Power Valve

DISASSEMBLY

Air Horn

Disassemble in numerical order.

Fig. 8-8

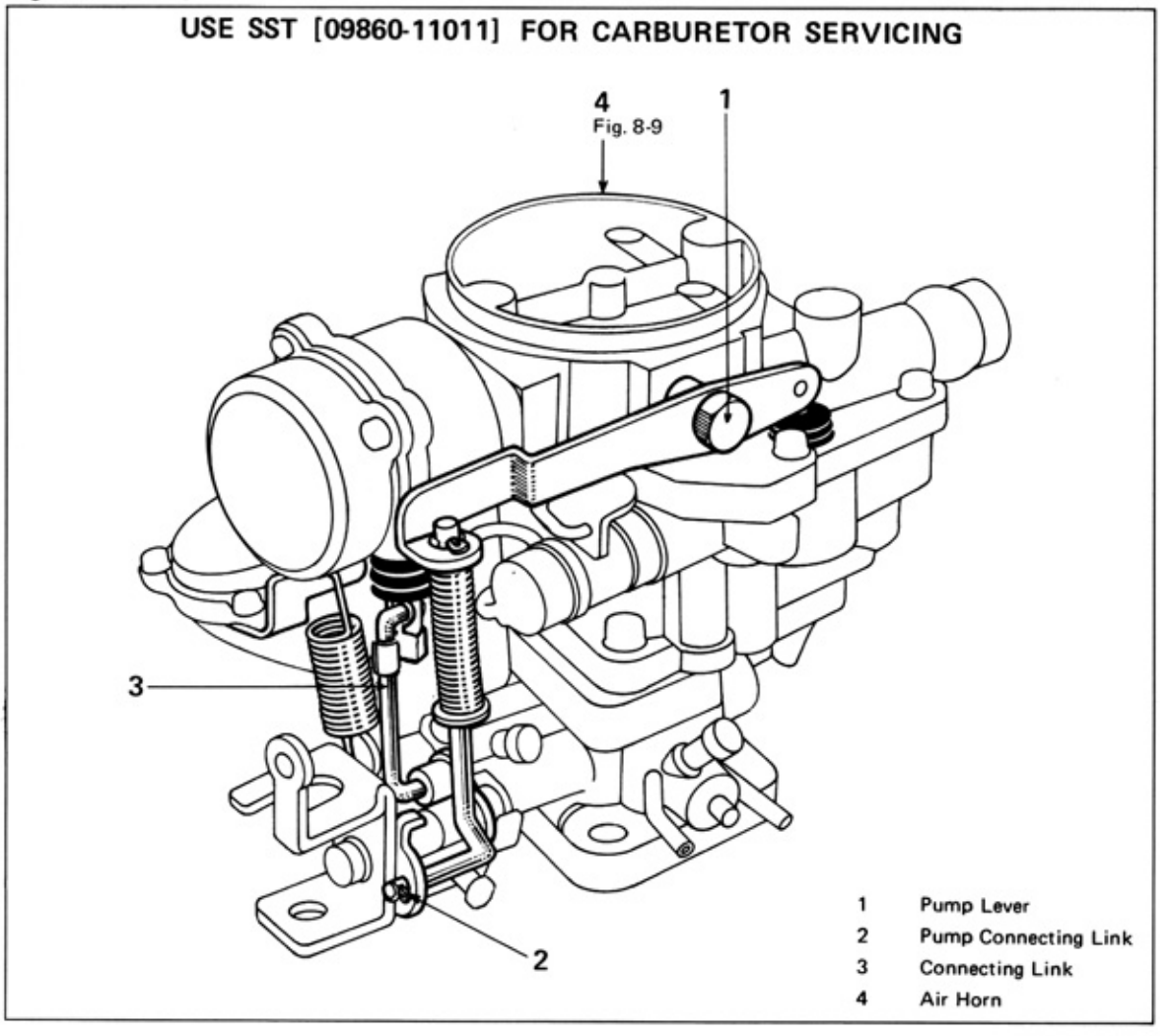
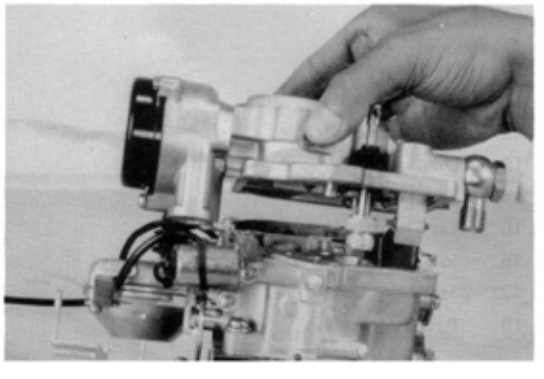


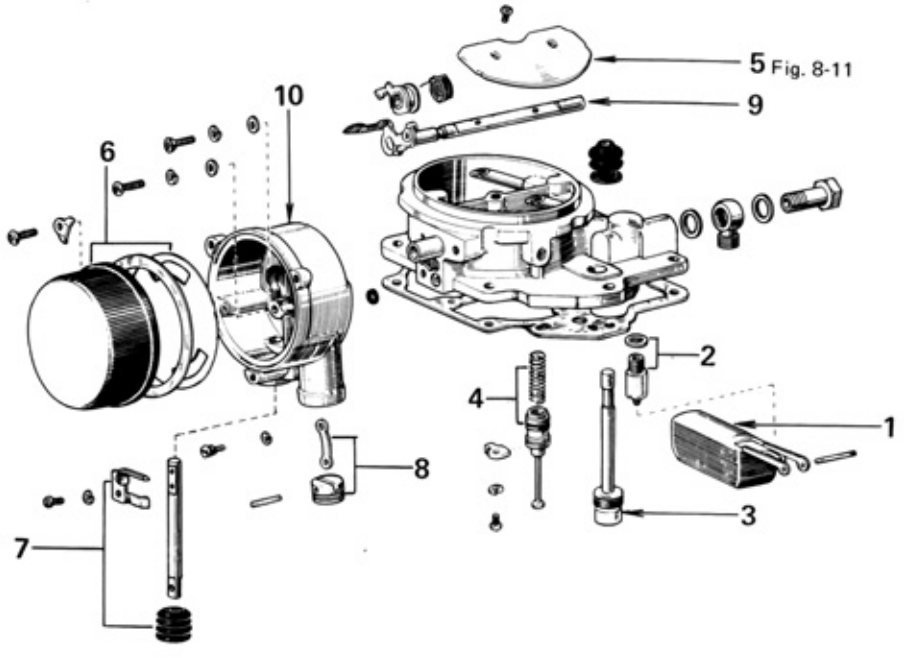
Fig. 8-9



Lift out air horn.

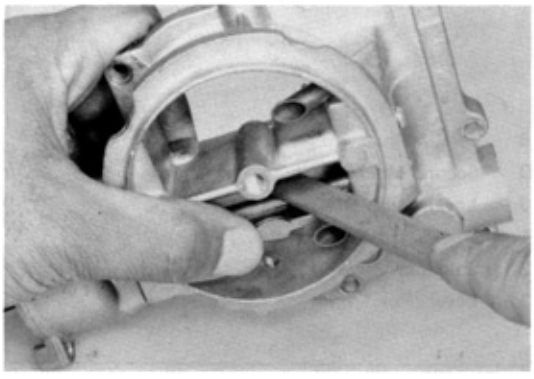
Disassemble in numerical order.

Fig. 8-10



1	Float	6	Coil Housing & Plate
2	Needle Valve Sub-assembly	7	Sliding Rod & Fast Idle Cam Follower
3	Pump Plunger	8	Vacuum Piston & Connector
4	Power Piston & Spring	9	Choke Shaft
5	Choke Valve	10	Thermostat Case

Fig. 8-11

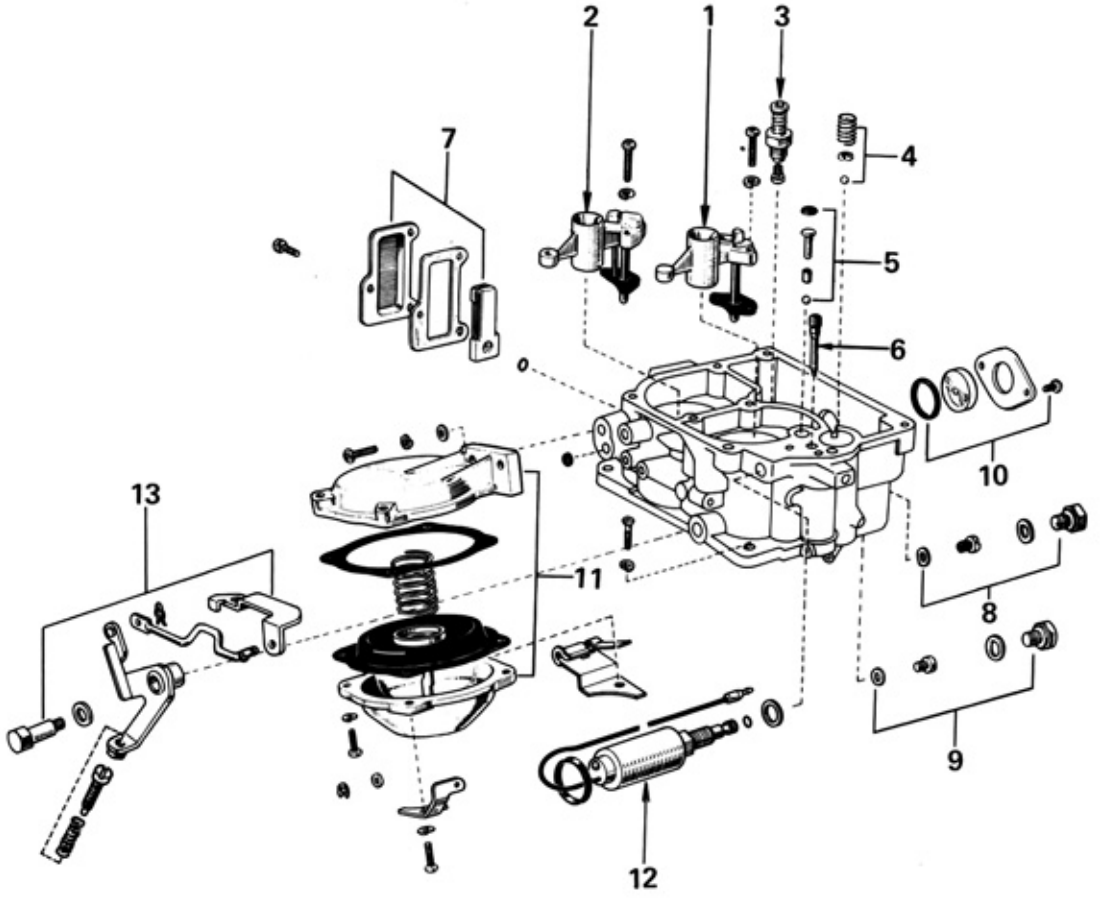


Pare off the end of set screws with a file, and remove choke valve.

Body

Disassemble in numerical order.

Fig. 8-12



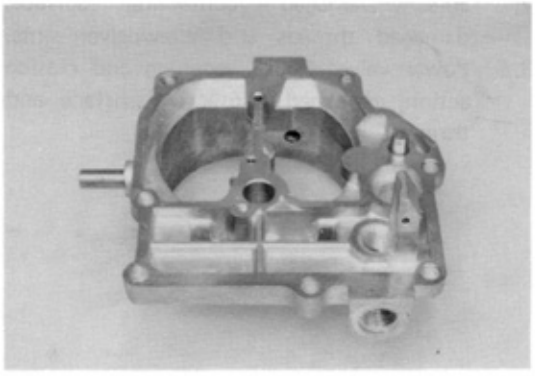
1	First Small Venturi	8	First Main Jet
2	Second Small Venturi	9	Second Main Jet
3	Power Valve	10	Level Gauge Glass
4	Pump Damping Spring & Steel Ball	11	Diaphragm Sub-assembly
5	Pump Discharge Weight & Steel Ball	12	Solenoid Valve
6	Slow Jet	13	Lever (For T.P.)
7	Thermostatic Valve		

INSPECTION

– Precaution –

1. **Before inspecting the parts, wash them thoroughly in gasoline. 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.**
2. **Never clean the jets or orifices with wire or a drill. This could enlarge the openings and result in excessive fuel consumption.**

Fig. 8-13

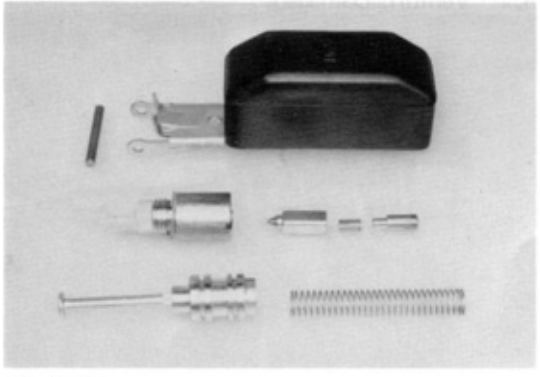


Inspect the following parts and replace any part damaged.

Air Horn Parts

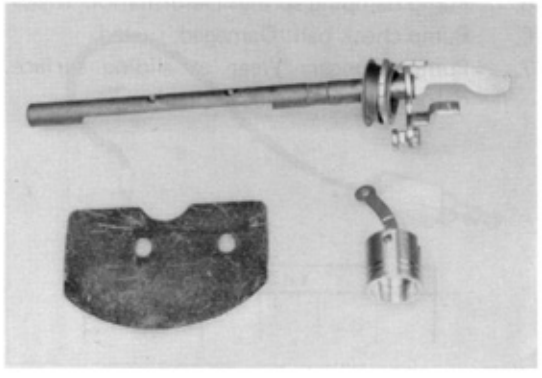
1. Air horn: Cracks, damaged threads, and wear on choke shaft bores.

Fig. 8-14



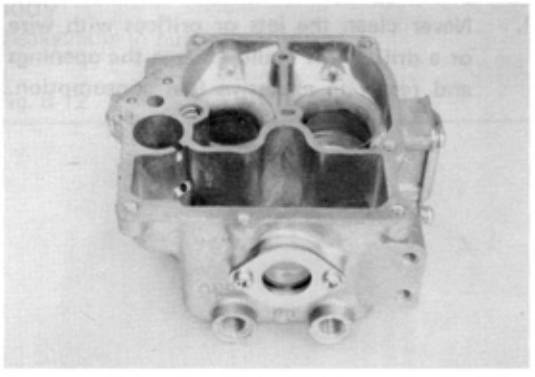
2. Float: Broken lip, wear in float pivot pin holes.
3. Needle valve surface contacting valve seat.
4. Strainer: Rust, breaks.
5. Power piston : Scratches, excessive wear. Power piston spring broken or deformed.

Fig. 8-15



6. Vacuum piston: Defective sliding of piston, carbon adhering to the inside thermostat case.
7. Choke valve: Deformation. Choke shaft worn, bent, or not fitting properly into housing.

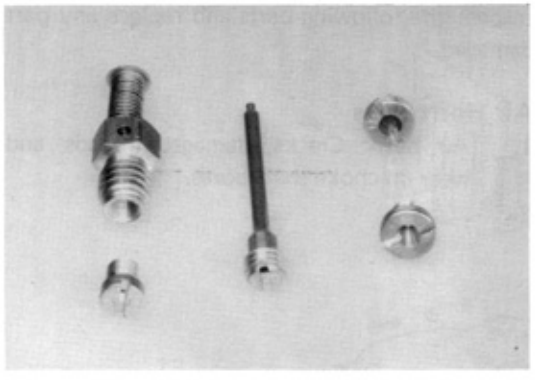
Fig. 8-16



Body Parts

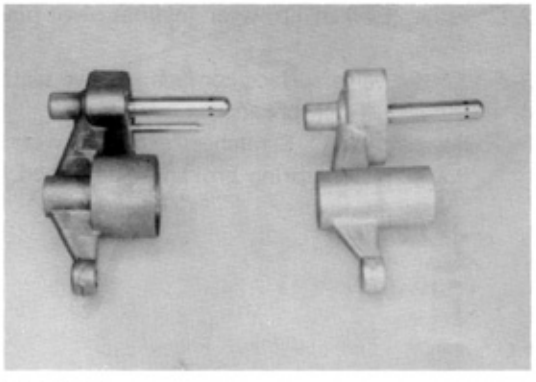
1. Body: Cracks, scored mounting surfaces, damaged threads.

Fig. 8-17



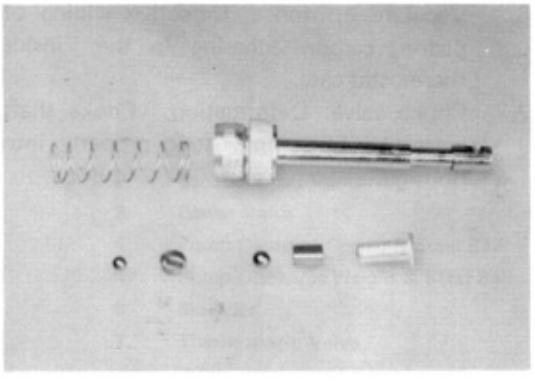
2. Jets: Damaged contacting surface, damaged threads and screwdriver slots.
3. Power valve: Faulty opening and closing action, damaged contacting surface and threads.

Fig. 8-18



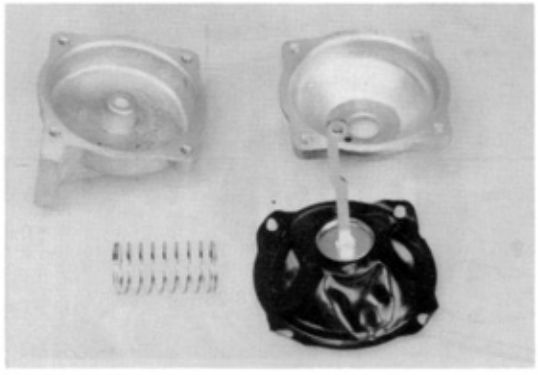
4. Venturi: Damaged.

Fig. 8-19



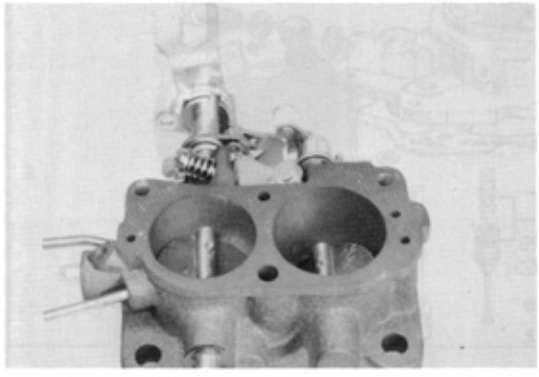
5. Pump damping spring: Deformation, rust.
6. Pump check ball: Damaged, rusted.
7. Pump plunger: Wear at sliding surface, deformed or damaged leather.

Fig. 8-20



8. Secondary diaphragm: Damaged.

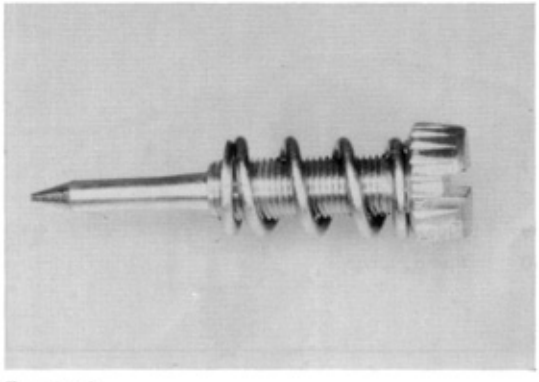
Fig. 8-21



Flange Parts

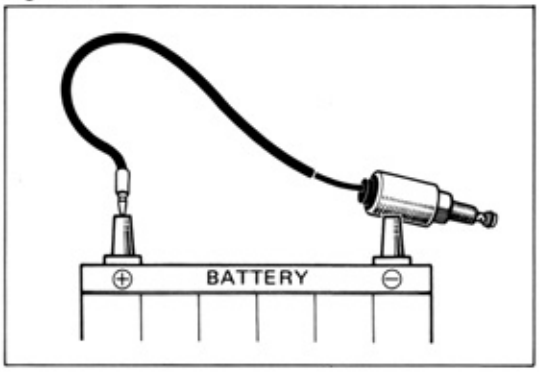
1. Flange: Cracks, injured mounting surfaces, damaged threads, wear at throttle shaft bearings.
2. Throttle valves: Wear or deformation in valves. Wear, bending, twisting, or faulty movement inside housing of shaft.

Fig. 8-22



3. Idle mixture adjusting screw: Damage at tapered tip or threads.

Fig. 8-23



Solenoid Valve

Check operation of solenoid valve.

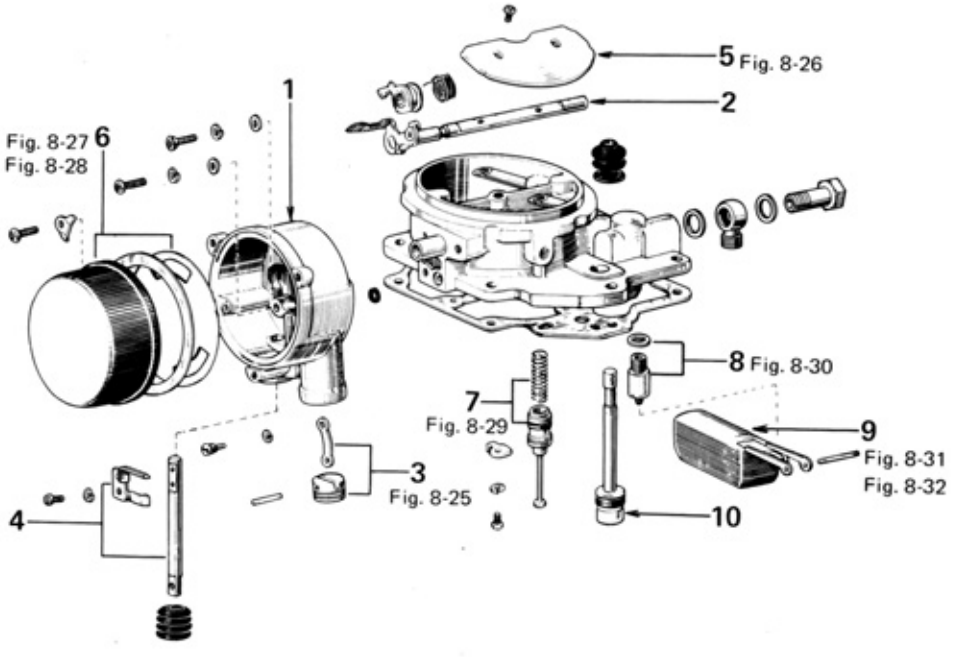
Connect wiring to the battery positive terminal and ground the body. The needle valve should be pulled in.

ASSEMBLY

Air Horn

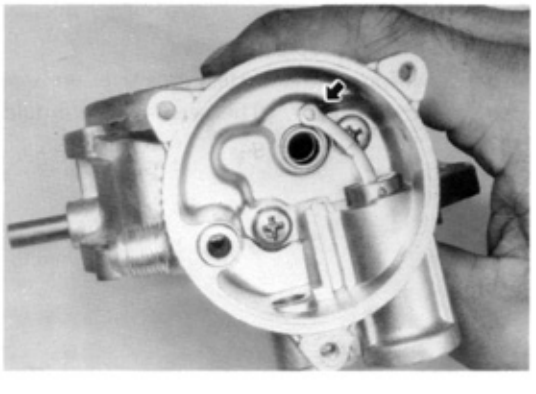
Assemble in numerical order.

Fig. 8-24



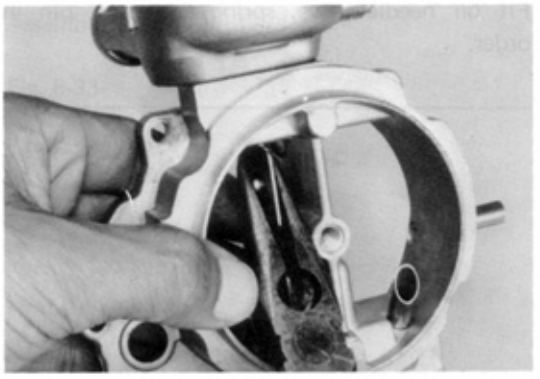
1	Thermostat Case	6	Coil Housing & Plate
2	Choke Shaft	7	Power Piston & Spring
3	Vacuum Piston & Connector	8	Needle Valve Sub-assembly
4	Sliding Rod & Fast Idle Cam Follower	9	Float
5	Choke Valve	10	Pump Plunger

Fig. 8-25



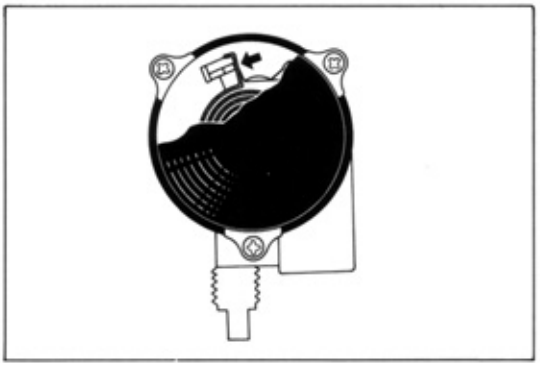
Assemble the vacuum piston in the direction as shown.

Fig. 8-26



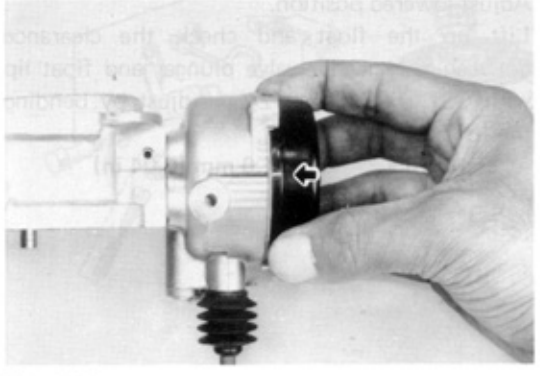
Install choke valve, then peen screws.

Fig. 8-27



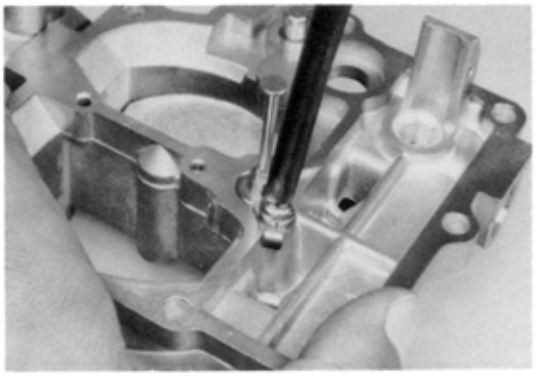
Align the bimetal with the choke shaft when installing the housing.

Fig. 8-28



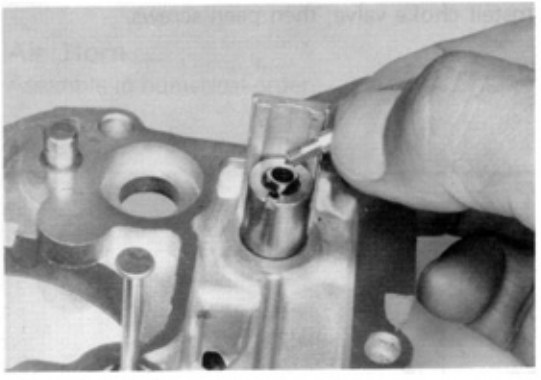
Align the case scale center line against the housing scale line.
Check the choke valve to see that it will close completely when released from fully open position. (Atmospheric temperature below 25°C or 77°F).

Fig. 8-29



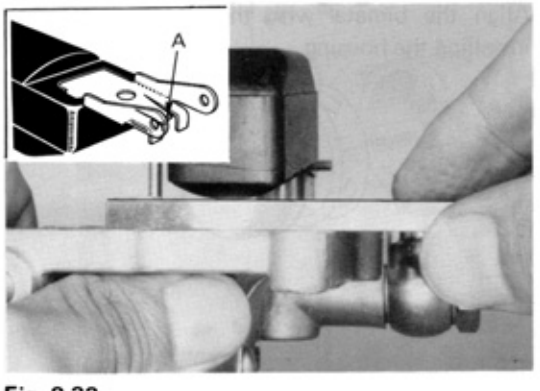
Install power piston and spring.
Make sure that the piston moves smoothly.

Fig. 8-30



Fit on needle valve, spring and push pin in order.

Fig. 8-31



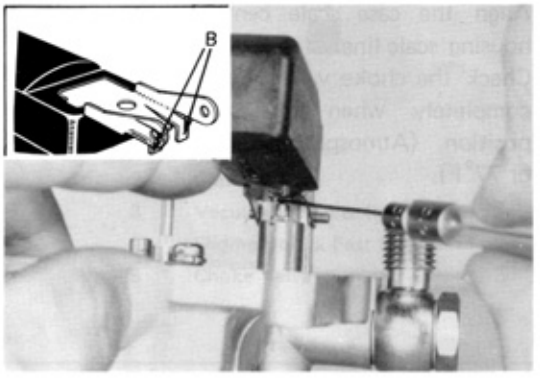
Adjust float level.
Allow the float to hang down by its own weight. Then check the clearance between the float tip and air horn with SST [09240-00012]. Adjust by bending the (A) part of float lip.

Standard **5.0 mm (0.20 in)**

–Note–

This measurement is always made without any gasket on air horn.

Fig. 8-32



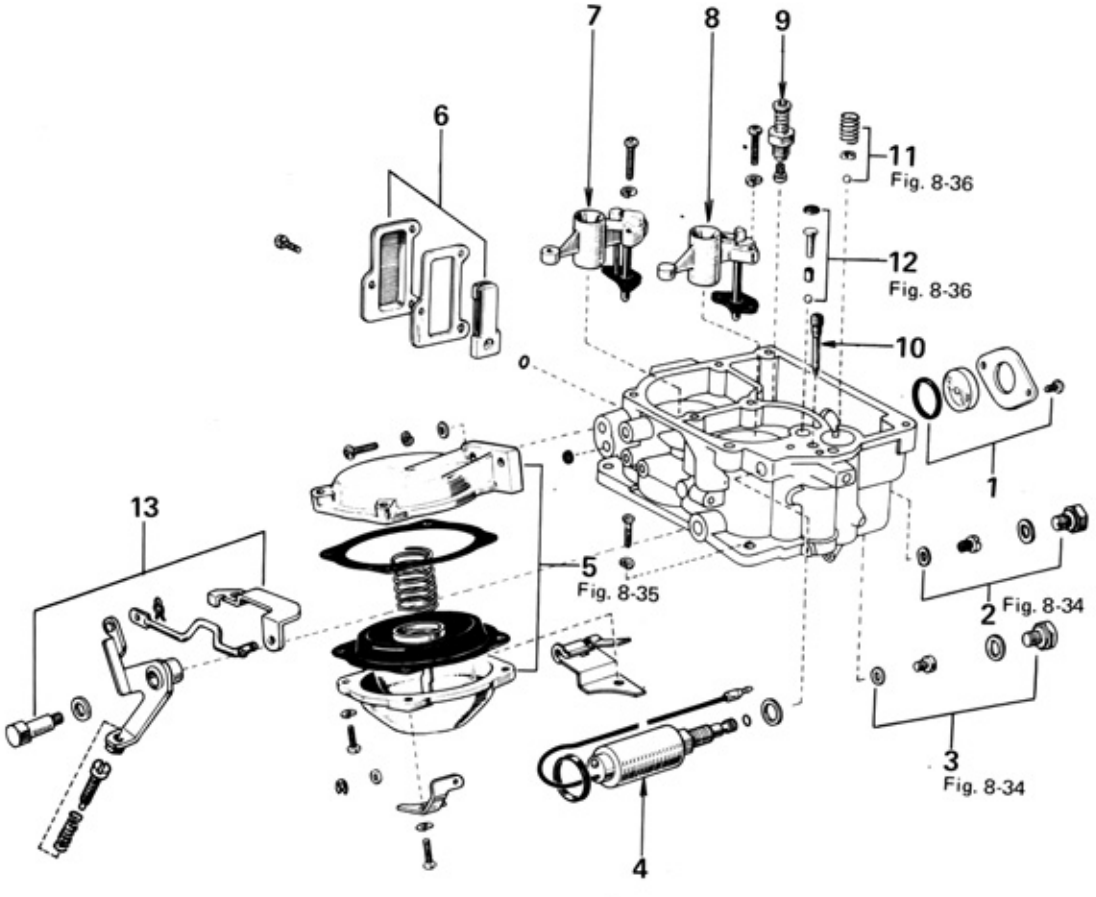
Adjust lowered position.
Lift up the float and check the clearance between the needle valve plunger and float lip with SST [09240-00012]. Adjust by bending the (B) part of float lip.

Standard **1.0 mm (0.04 in)**

Body

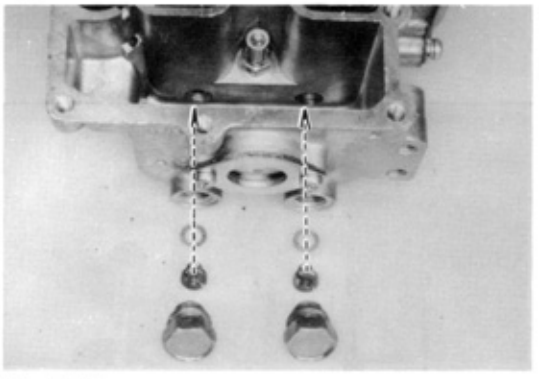
Assemble in numerical order.

Fig. 8-33



1	Level Gauge Glass	8	First Small Venturi
2	First Main Jet	9	Power Valve
3	Second Main Jet	10	Slow Jet
4	Solenoid Valve	11	Pump Damping Spring & Steel Ball
5	Diaphragm Sub-assembly	12	Pump Discharge Weight & Steel Ball
6	Thermostatic Valve	13	Lever (For T.P.)
7	Second Small Venturi		

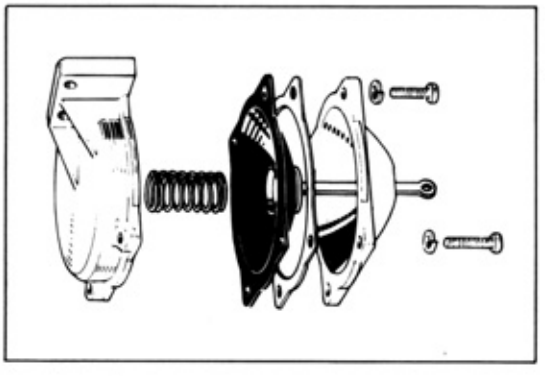
Fig. 8-34



Install main jets over gasket.

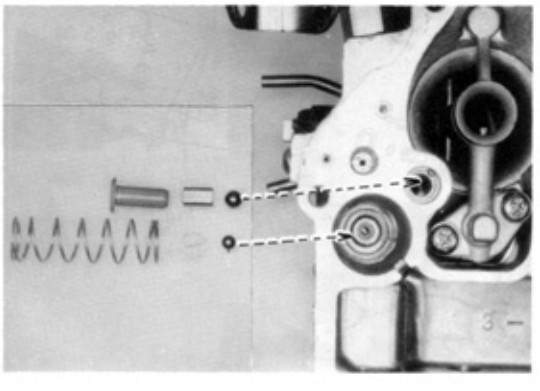
Primary jet	**Brass colored**
Secondary jet	**Chrome colored**

Fig. 8-35



Assemble secondary diaphragm in order as shown.

Fig. 8-36



Install pump outlet ball and weight.

– Note –

There are two sizes of balls.

Larger ball: For Pump outlet.

Smaller ball: For Pump inlet.

Body And Air Horn

Assemble in numerical order.

Fig. 8-37

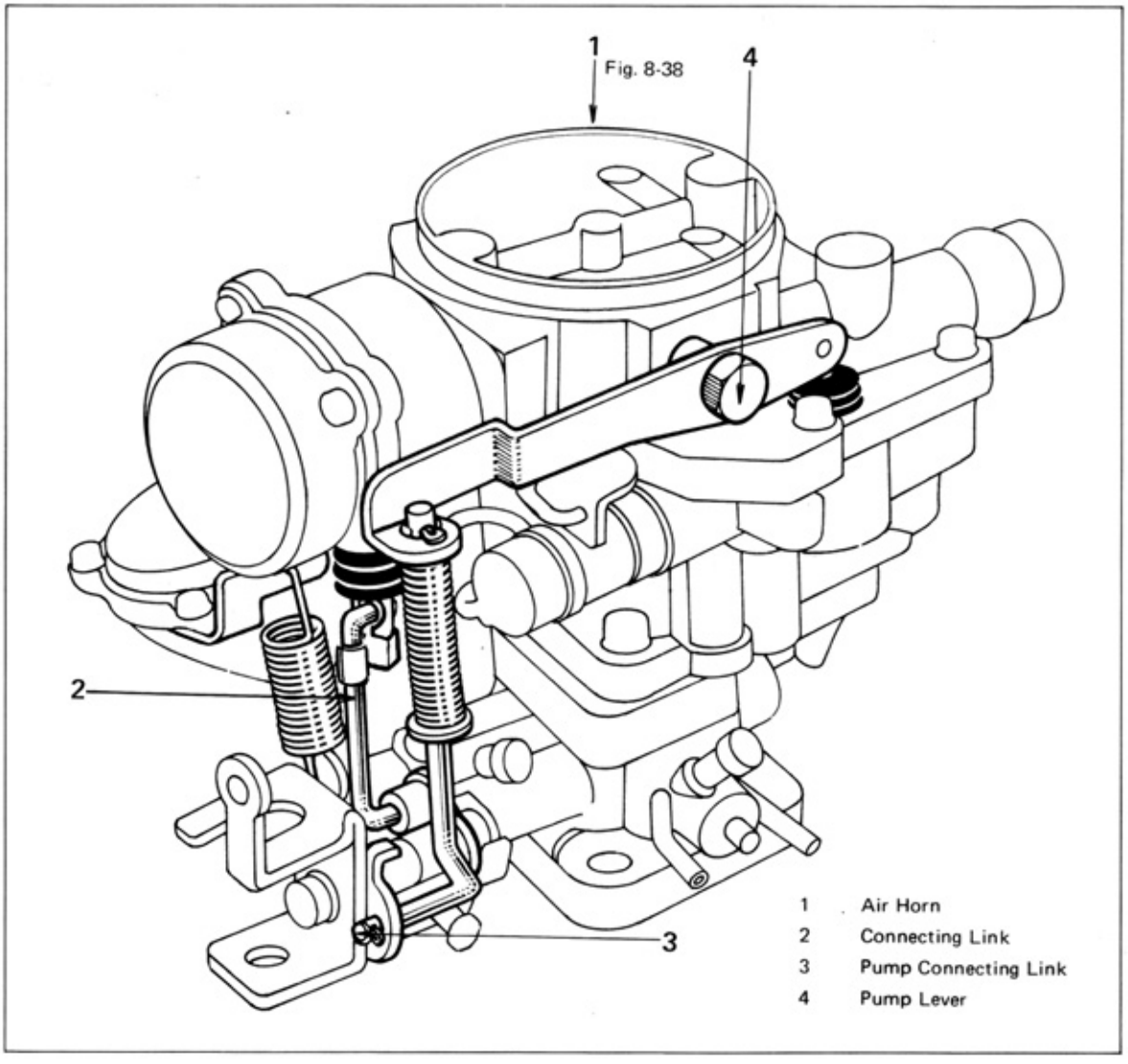
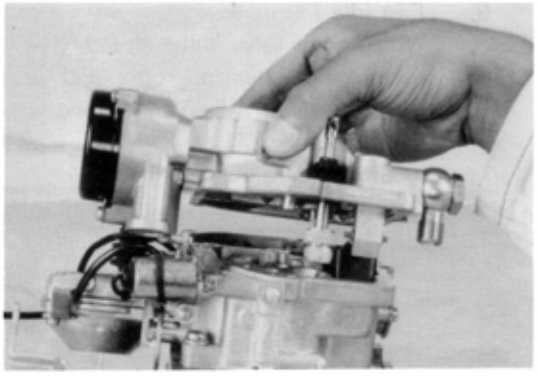
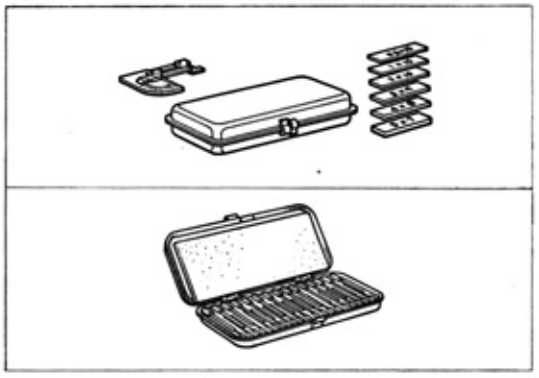


Fig. 8-38



Assemble body and air horn over new gasket. Take care not to damage pump plunger leather.

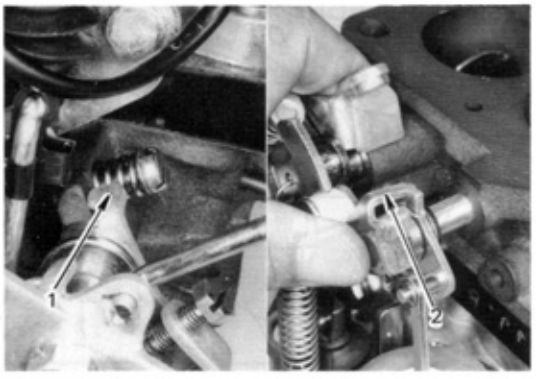
Fig. 8-39



ADJUSTMENT

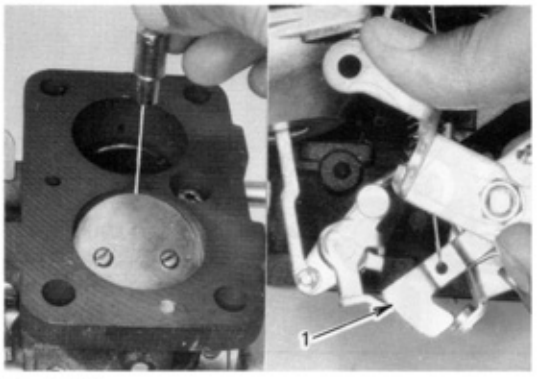
Use SST [09240-00014 and 09240-00020] to make adjustments.

Fig. 8-40



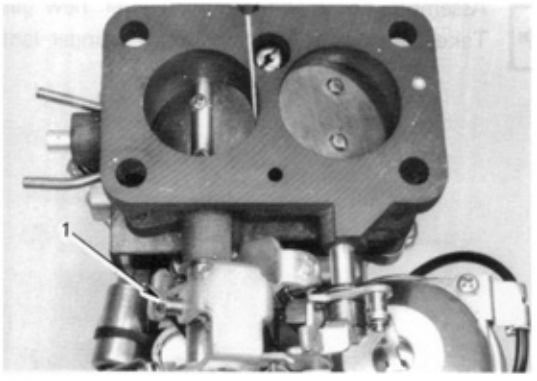
1. Throttle valve openings
   Open the primary and secondary throttle valves separately and check if the throttle valves will be perpendicular to the flange surface when fully opened. Adjust by bending the respective throttle lever stoppers at the primary (1) and secondary sides (2).

Fig. 8-41



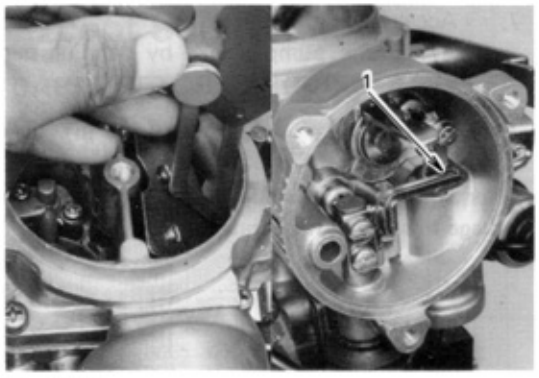
2. Kick up
   Adjust the clearance between the second throttle valve and body by bending the second throttle lever (1).
   With first throttle valve opening
   64 ~ 90°
   Standard elearance
   0.2 mm(0.0079 in)

Fig. 8-42



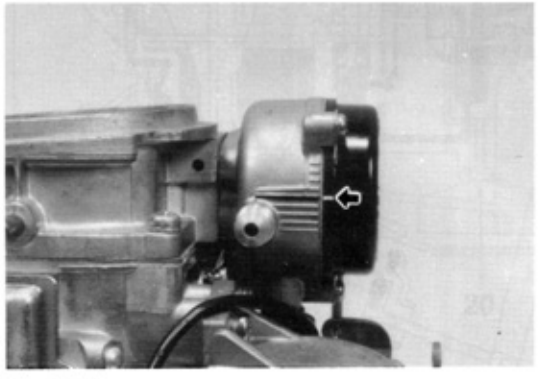
3. Fast idle
   With choke valve fully closed, check the clearance between bore and primary throttle valve. Adjust by turning fast idle adjusting screw (1).
   Standard clearance
   1.0 mm(0.04 in)

Fig. 8-43



4. Unloader
With the first throttle valve fully opened, adjust the choke valve angle by bending the fast idle cam follower or choke shaft lip (1).
Standard angle 47° from bore

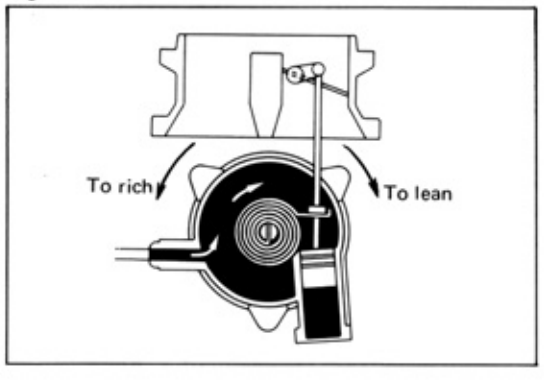
Fig. 8-44



5. Automatic choke
(1) Set the coil housing scale mark so that it will be aligned with the center line of the thermostat case.

— Note —
The choke valve becomes fully closed when atmospheric temperature reaches 25°C (77°F).

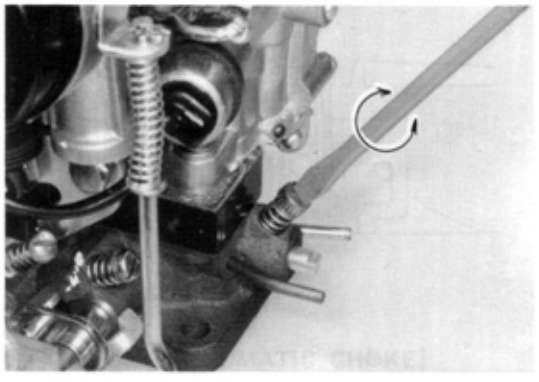
Fig. 8-45



(2) Depending on the vehicle operating conditions, turn the coil housing and adjust the engine starting mixture.
If too rich ..... Turn clock-wise.
If too lean ..... Turn counterclock-wise.

— Note —
One graduation of thermostat case scale equals 5°C (9°F) change.

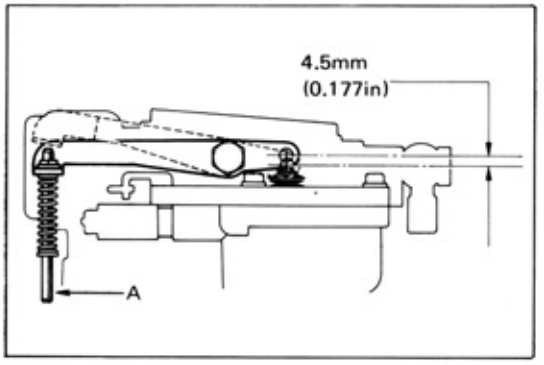
Fig. 8-46



6. Idle mixture adjusting screw
Screw in the idle mixture adjusting screw and then unscrew it by the following amount.
Standard (Reference only)
Returned about 2½ turns from full closed

— Caution —
Take care not to screw in too tightly and damage the screw tip.

Fig. 8-47



7. Accelerating pump
   Adjust the pump stroke by bending part (A).

   Standard 4.5 mm (0.177 in)

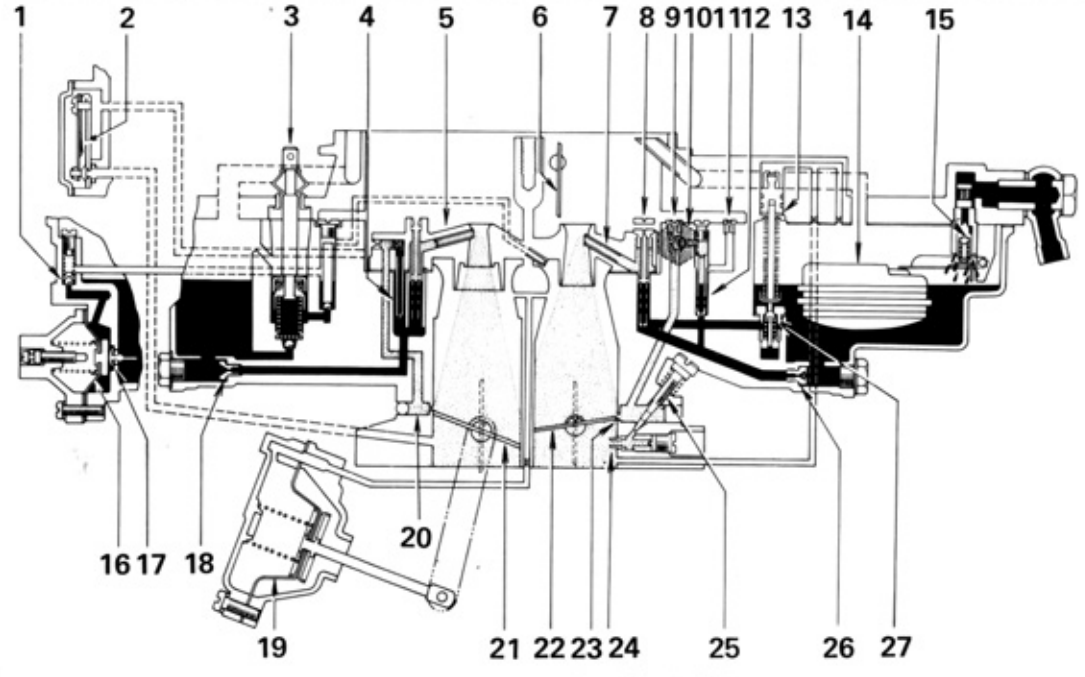
— Note —

After adjustment is made, be sure to check the linkage to see that it operates smoothly.

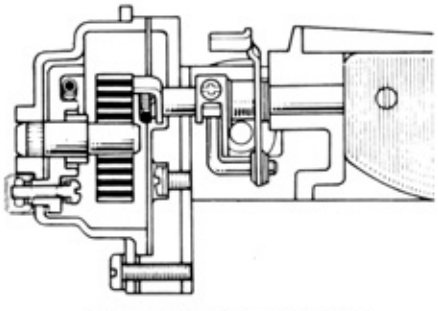
CARBURETOR (FOR 18R ENGINE)
Except South Africa

CARBURETOR CIRCUITS

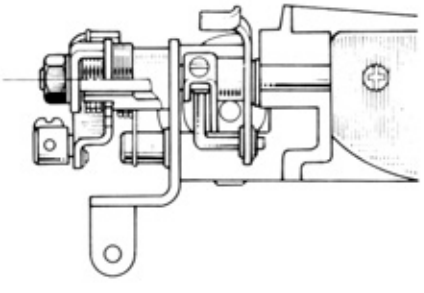
Fig. 8-50



1	AAP Outlet Check Valve	15	Needle Valve
2	Hot Idle Compensator	16	AAP Diaphragm
3	Pump Plunger	17	AAP Inlet Check Valve
4	Second Slow Jet	18	Second Main Jet
5	Second Main Jet	19	Second Throttle Valve Diaphragm
6	Choke Valve	20	Second Slow Port
7	First Main Jet	21	Second Throttle Valve
8	First Main Air Bleed	22	First Throttle Valve
9	Second Slow Air Bleed	23	First Slow Port
10	Fuel Cut Solenoid Valve	24	Idle Nozzle
11	First Slow Air Bleed	25	Idle Mixture Adjusting Screw
12	First Slow Jet	26	First Main Jet
13	Power Piston	27	Power Valve
14	Float		

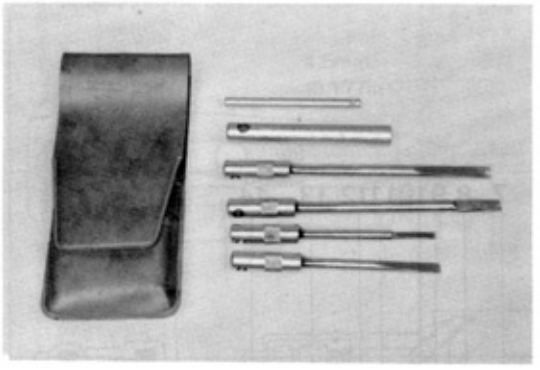


[AUTOMATIC CHOKE]



[MANUAL CHOKE]

Fig. 8-51



⚠ Use SST [09860-11011] for carburetor servicing.

DISASSEMBLY

Air Horn

Disassemble in numerical order.

Fig. 8-52

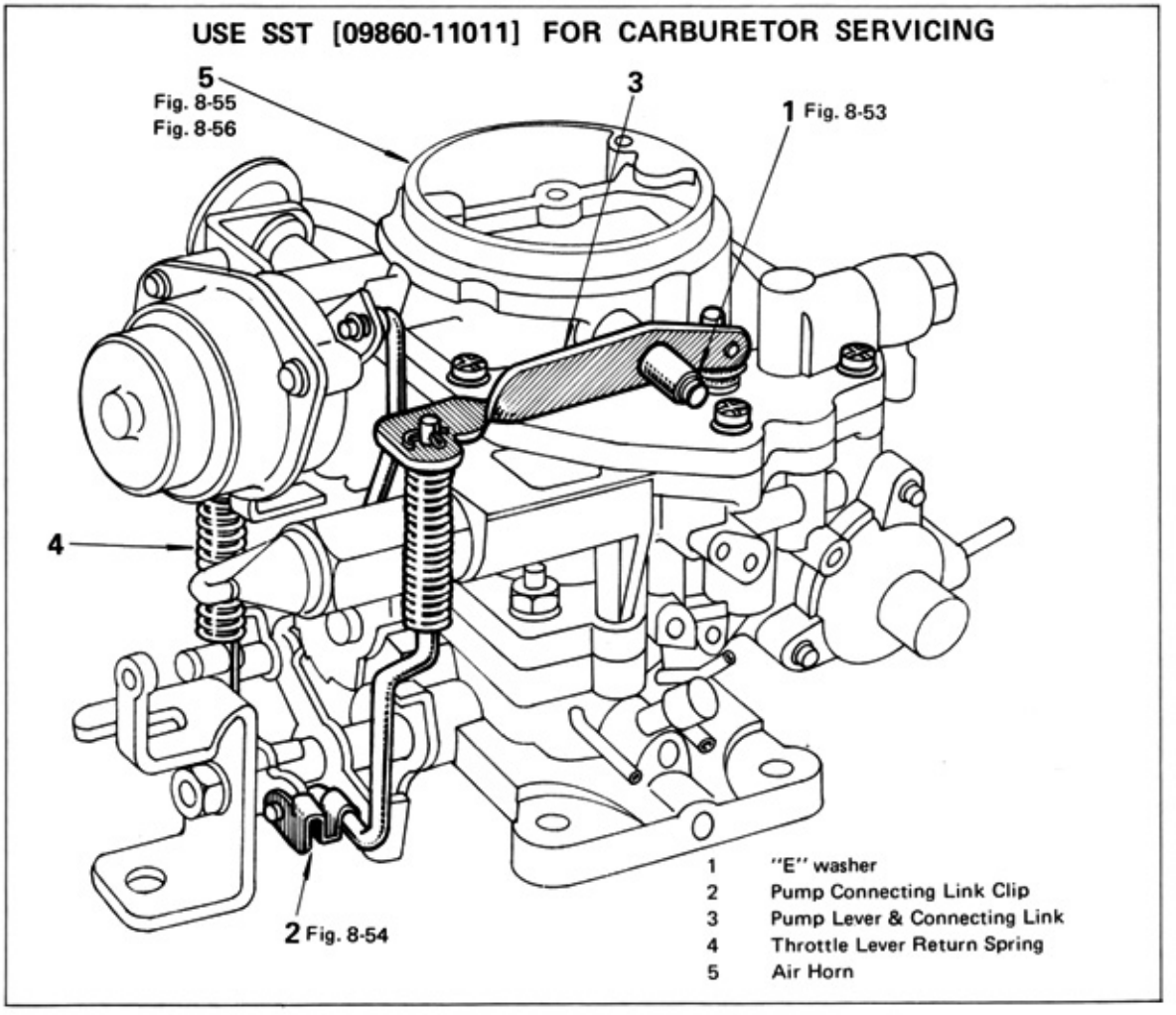
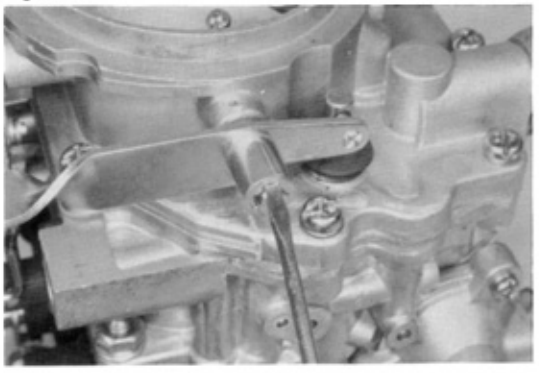
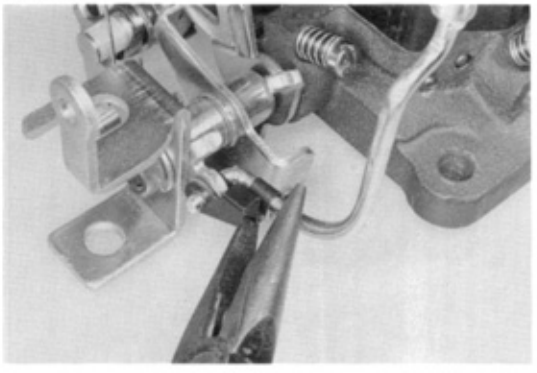


Fig. 8-53



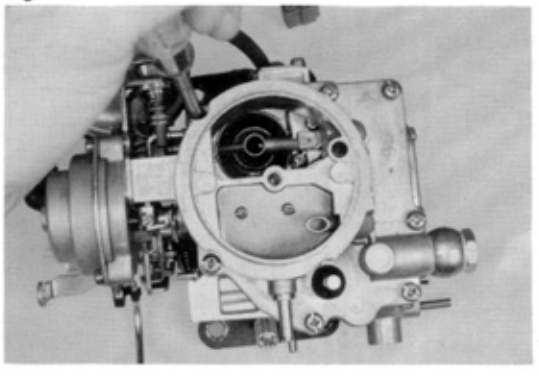
Remove "E" washer with a small screwdriver.

Fig. 8-54



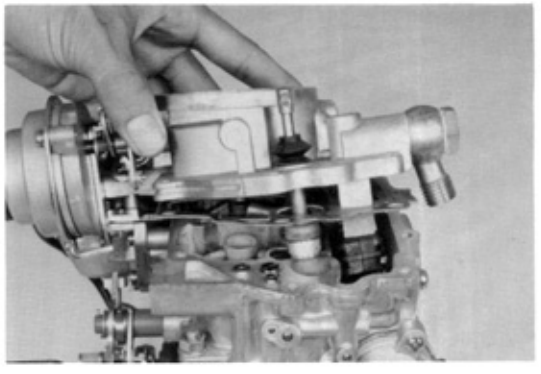
Disconnect pump connecting link from throttle shaft lever.

Fig. 8-55



Gradually loosen air horn set screw in 2 or 3 stages in diagonal order.

Fig. 8-56



Lift out air horn.

Float

Disassemble in numerical order.

Fig. 8-57

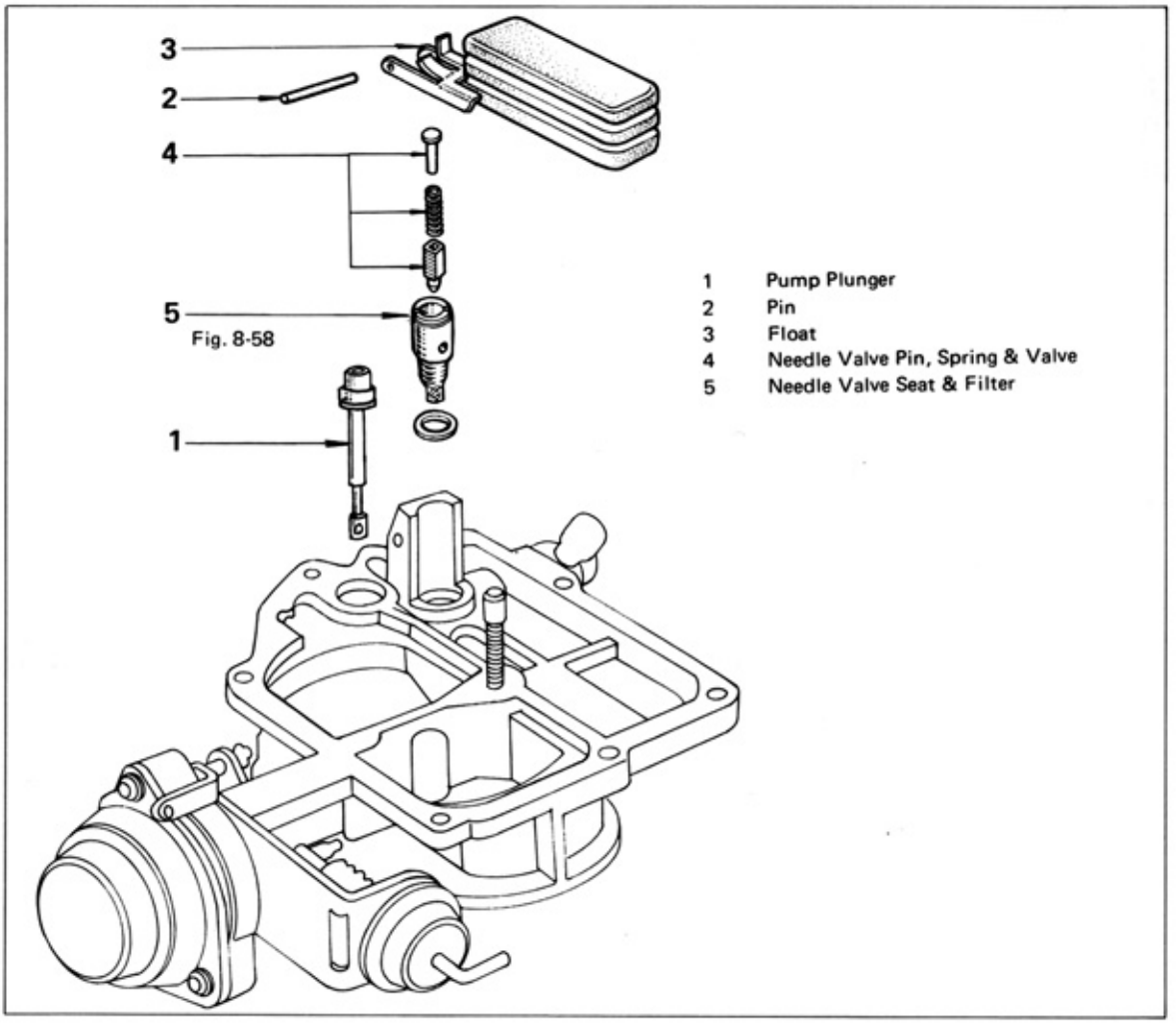
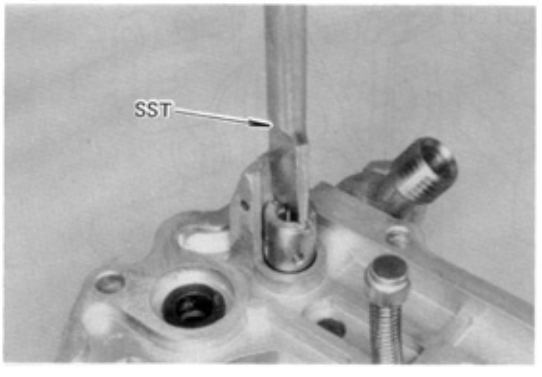
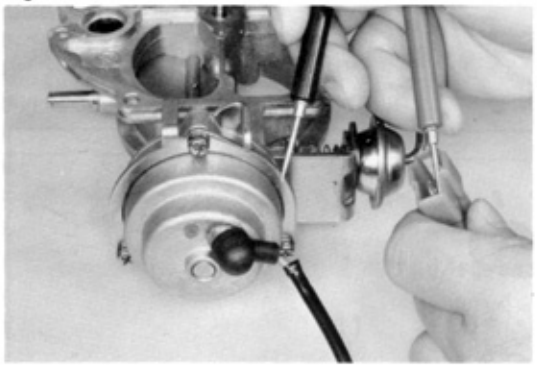


Fig. 8-58



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

Fig. 8-59



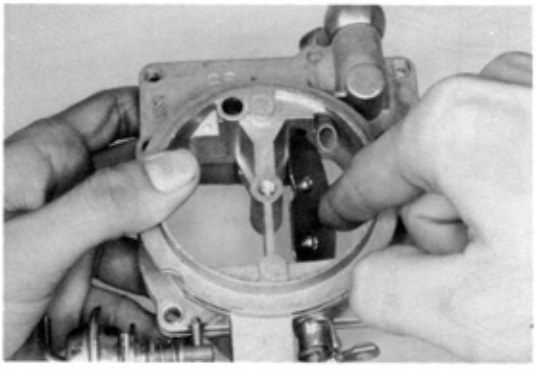
Air Horn

Before disassembling, check following items.

1. Measure heating coil resistance with ohmmeter.

   Resistance **7.5 – 10.0 Ω**

Fig. 8-60



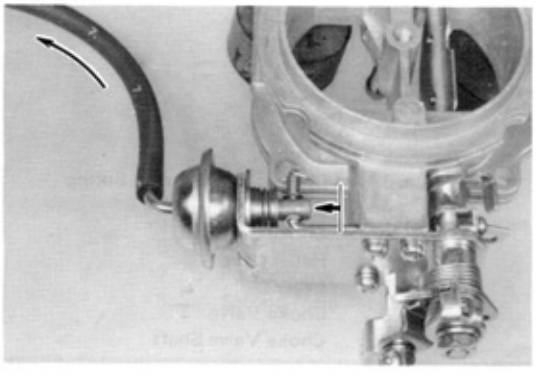
2. Check choke valve action.

Fig. 8-61

3. Check choke breaker diaphragm action.

   Automatic choke

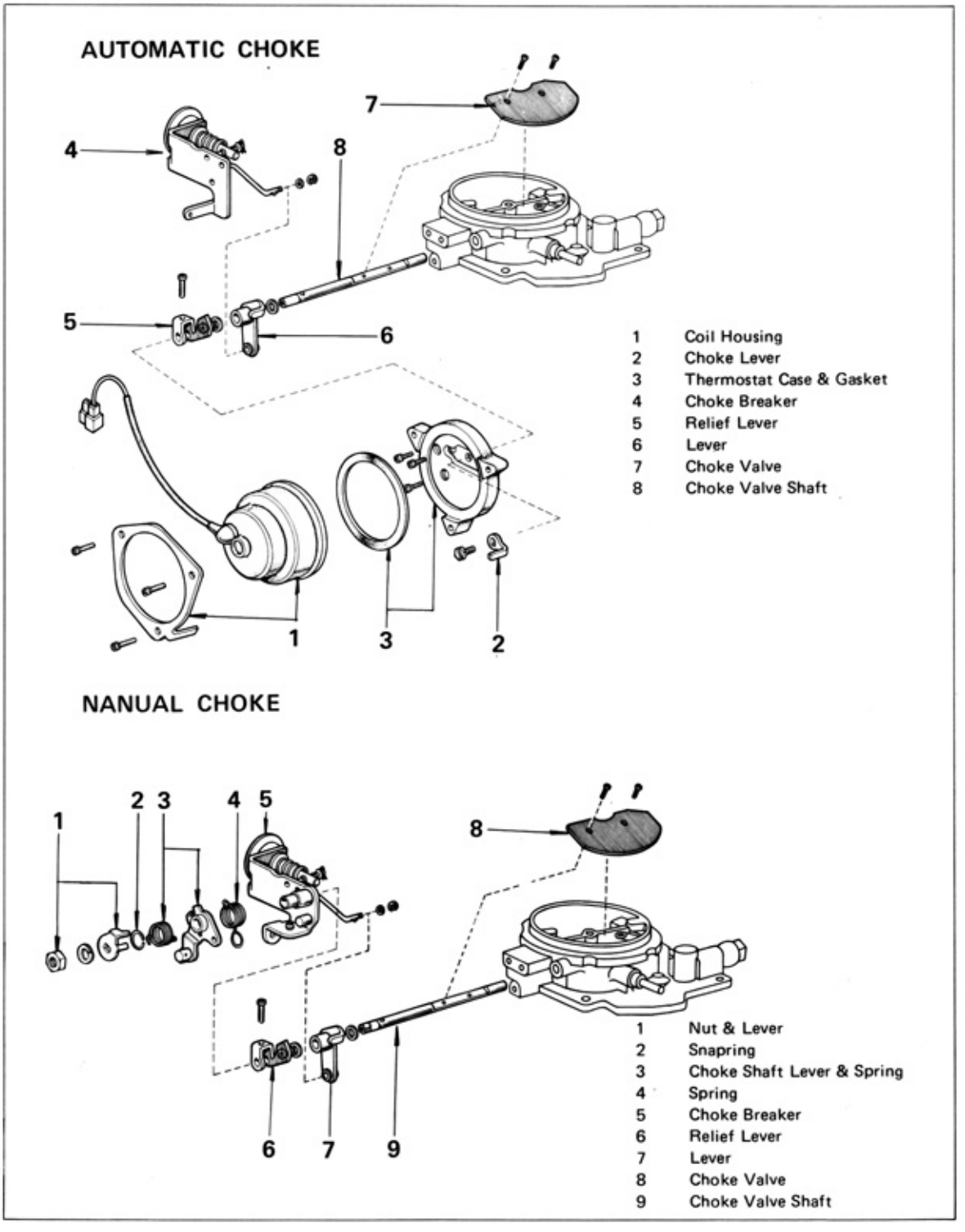
Fig. 8-62



Manual choke

Disassemble in numerical order.

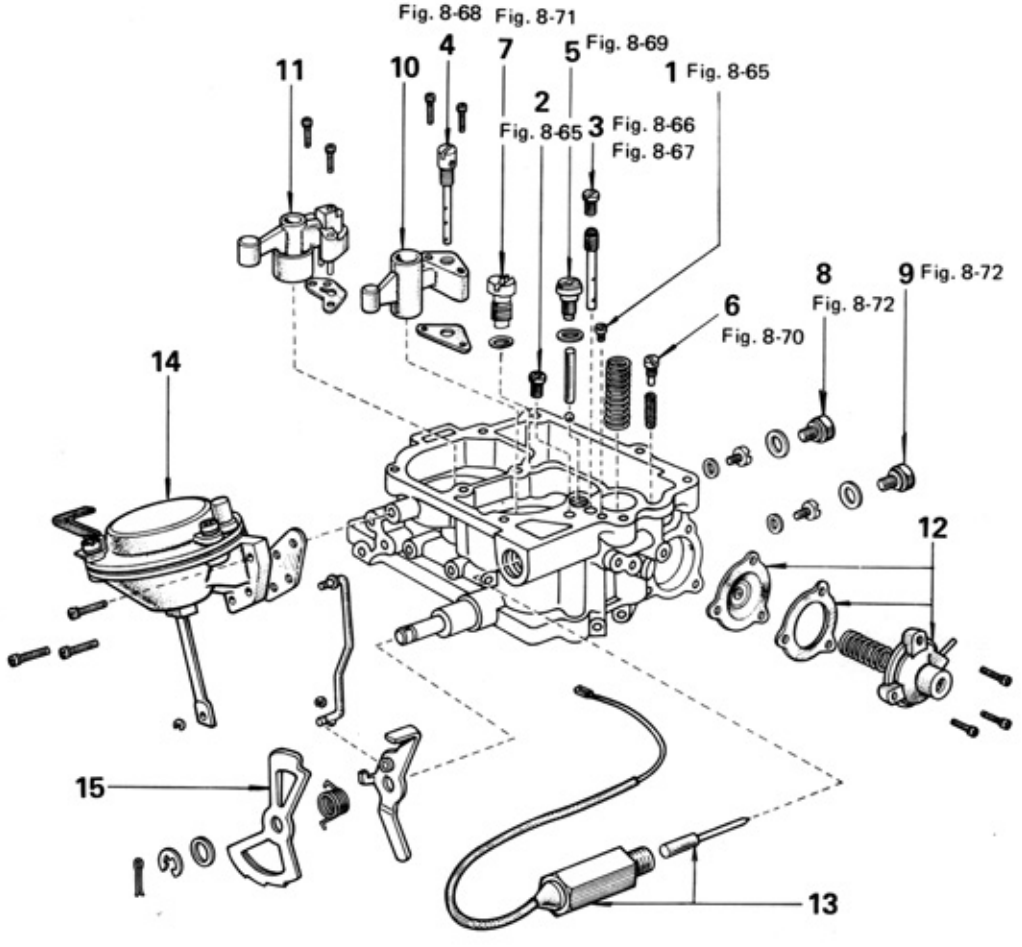
Fig. 8-63



Body

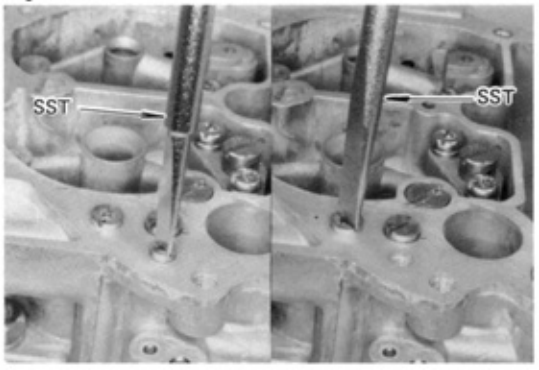
Disassemble in numerical order.

Fig. 8-64



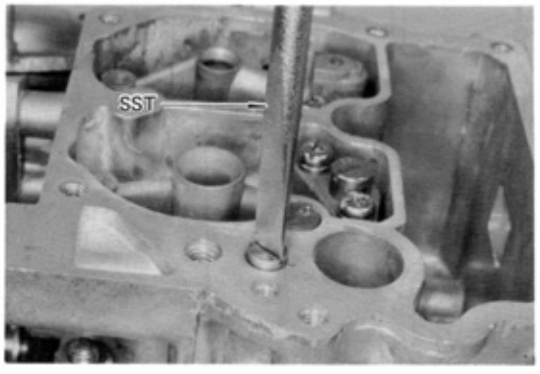
1	1st Air Bleed Jet
2	2nd Air Bleed Jet
3	Slow Jet
4	Main Air Bleed
5	Pump Discharge Weight & Outlet Valve
6	AAP Outlet Valve
7	Power Valve
8	Second Main Jet
9	First Main Jet
10	First Small Venturi
11	Second Small Venturi
12	AAP Diaphragm
13	Solenoid Valve
14	Second Throttle Valve Diaphragm
15	Fast Idle Cam

Fig. 8-65



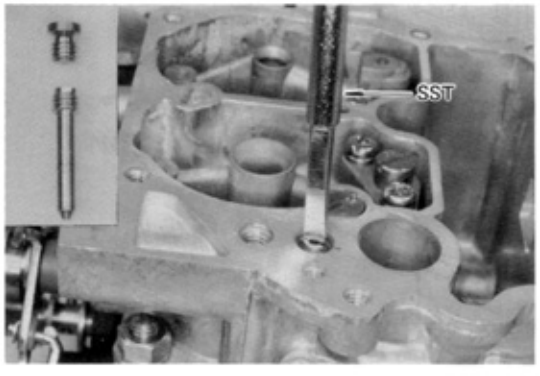
Remove 1st and 2nd slow air bleed jet with SST [09860-11011].

Fig. 8-66



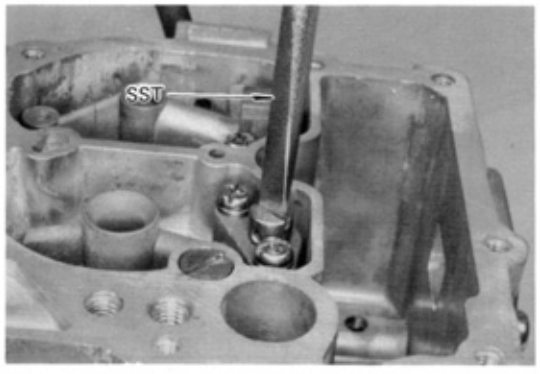
Remove slow jet plug with SST [09860-11011].

Fig. 8-67



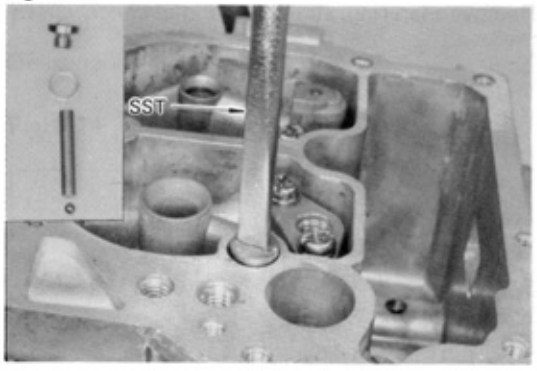
Remove slow jet with SST [09860-11011].

Fig. 8-68



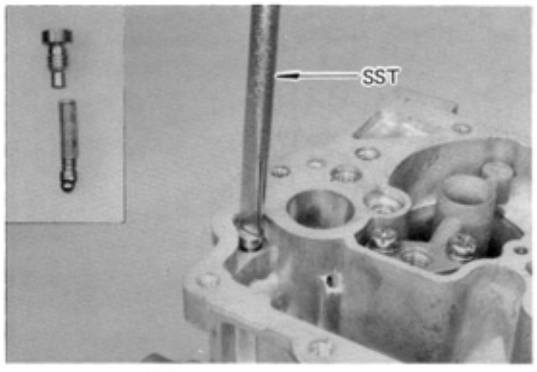
Remove 1st main air bleed with SST [09860-11011].

Fig. 8-69



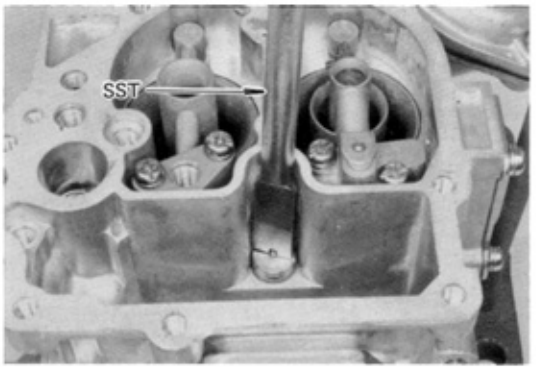
Remove discharge weight plug with SST [09860-11011], then remove discharge weight and outlet check valve.

Fig. 8-70



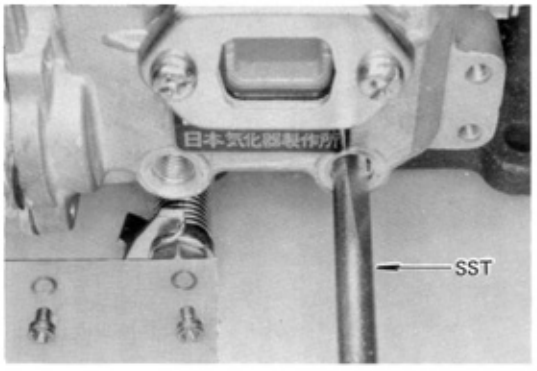
Remove AAP outlet valve plug with SST [09860-11011], then remove spring and outlet check valve.

Fig. 8-71



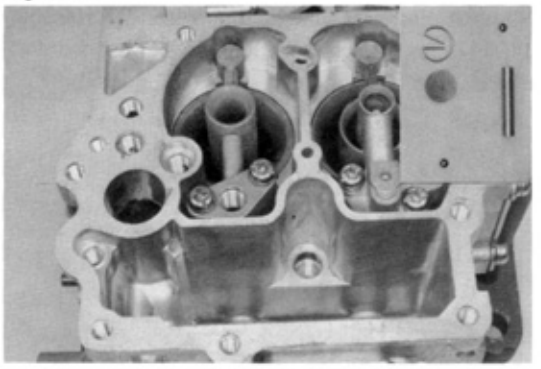
Remove power valve with SST [09860-11011].

Fig. 8-72



Remove 1st, 2nd main jet and gaskets.

Fig. 8-73



Remove snap ring, strainer and inlet check valve.

Flange

Disassemble in numerical order.

Fig. 8-74

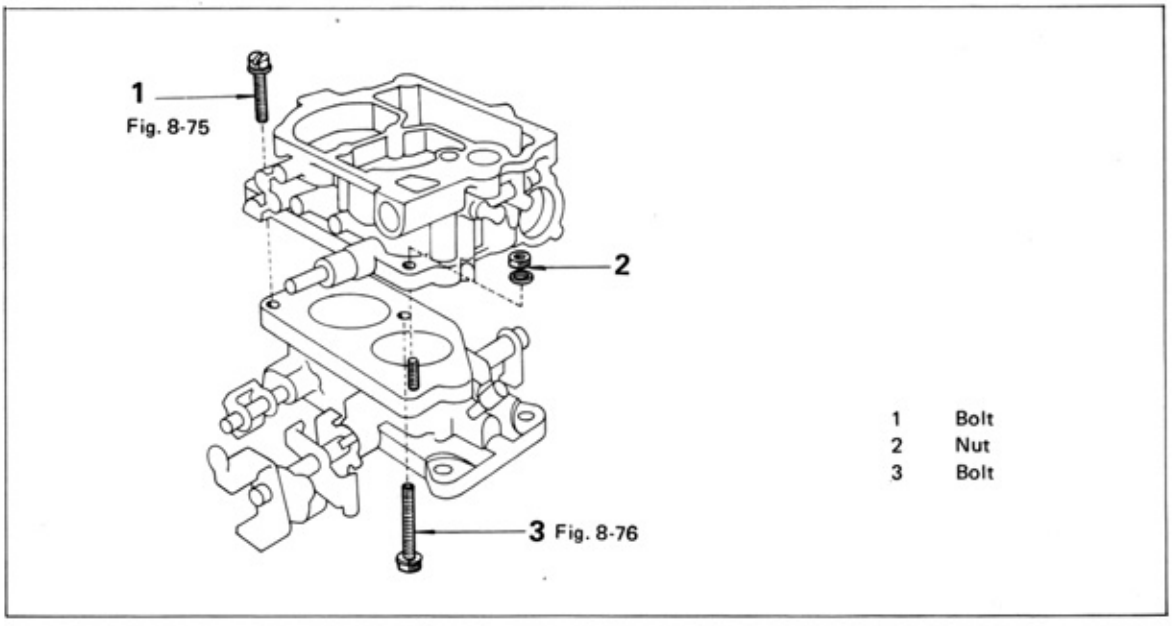
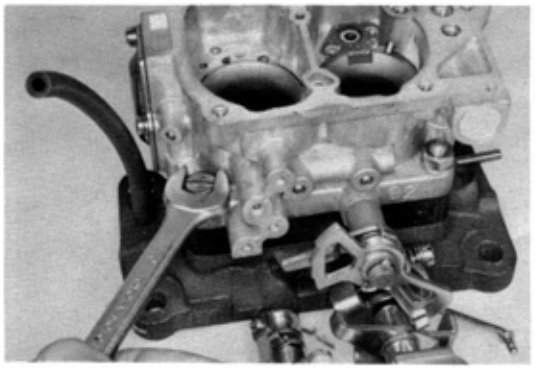
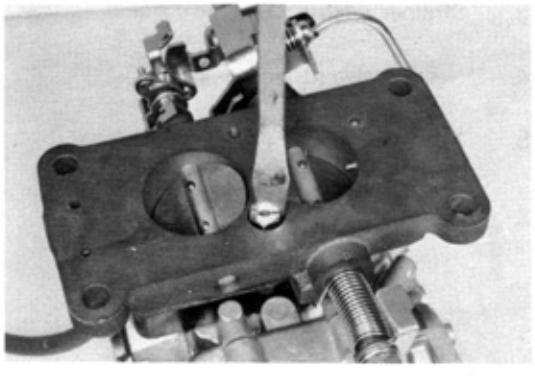


Fig. 8-75



Remove bolt and nut from body.

Fig. 8-76



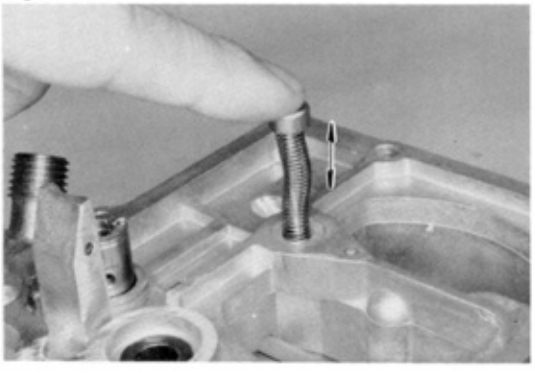
Remove bolt from flange.

INSPECTION

– Precaution –

1. **Before inspecting the parts, wash them thoroughly in gasoline. 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.**
2. **Never clean the jets or orifices with wire or a drill. This could enlarge the openings and result in excessive fuel consumption.**

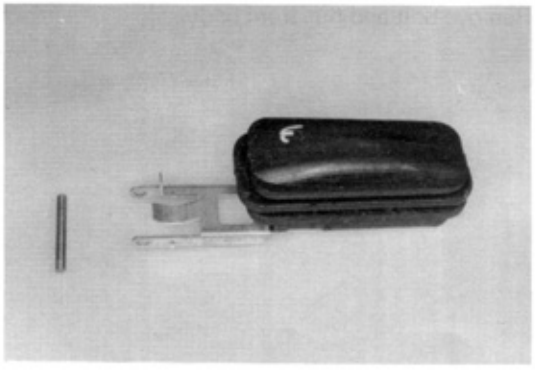
Fig. 8-77



Air Horn Parts

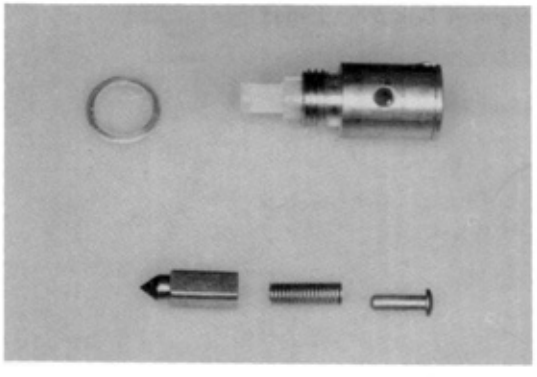
1. Make sure that power piston moves smoothly.

Fig. 8-78



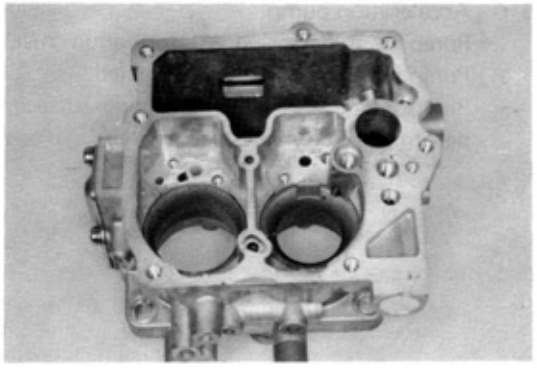
2. Check float and pivot pin for wear or broken.

Fig. 8-79



3. Strainer : Rust, breaks.
4. Needle valve surface.
5. Needle valve seat.

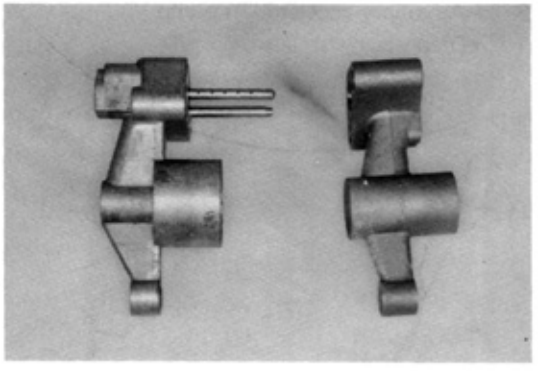
Fig. 8-80



Body Parts

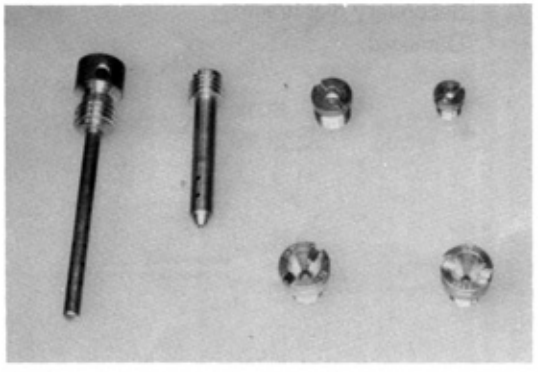
1. Body
   Cracks, scored mounting surfaces, damaged threads.

Fig. 8-81



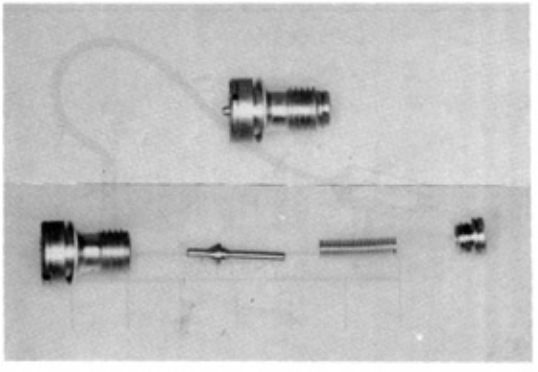
2. Venturi
   Damaged.

Fig. 8-82



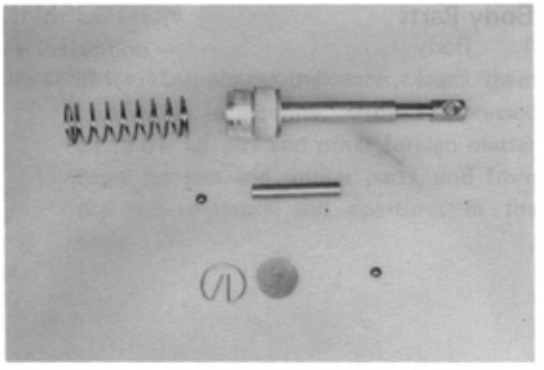
3. Jets
   Damaged contacting surface, damaged threads and screwdriver slots.

Fig. 8-83



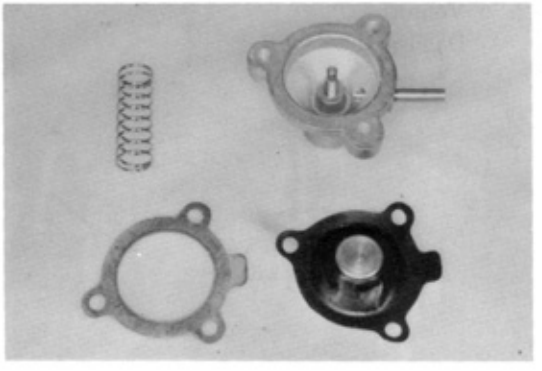
4. Power valve
   Faulty opening and closing action, damaged contacting surface and threads.

Fig. 8-84



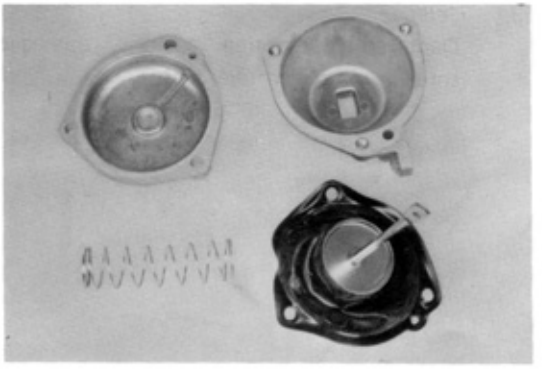
5. Acceleration pump
Pump damping spring: Deformation, rust.
Pump check ball: Damaged, rusted.
Pump plunger: Wear at sliding surface, deformed or damaged leather.

Fig. 8-85



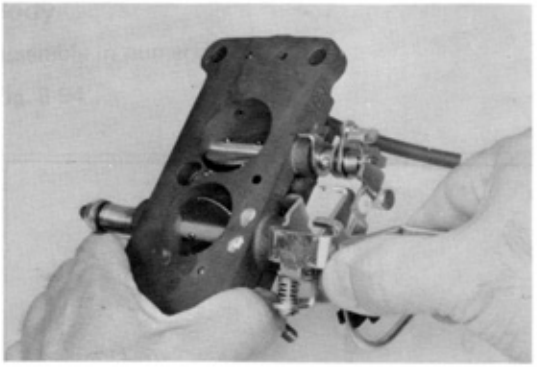
6. Auxuliary acceleration pump
Diaphragm damaged.

Fig. 8-86



7. Secondary diaphragm
Damaged.

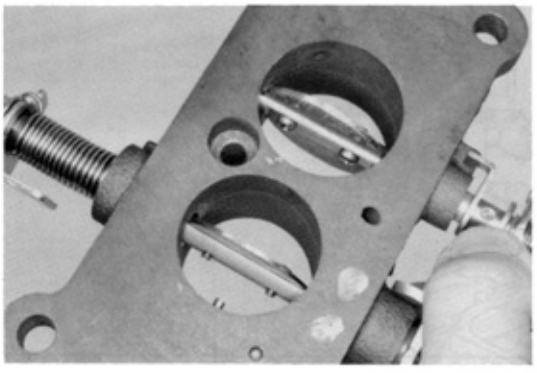
Fig. 8-87



Flange Parts

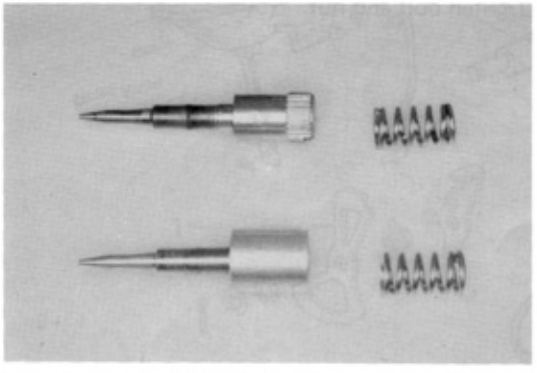
1. Flange: Cracks, injured mounting surfaces, damaged threads, wear at throttle shaft bearings.

Fig. 8-88



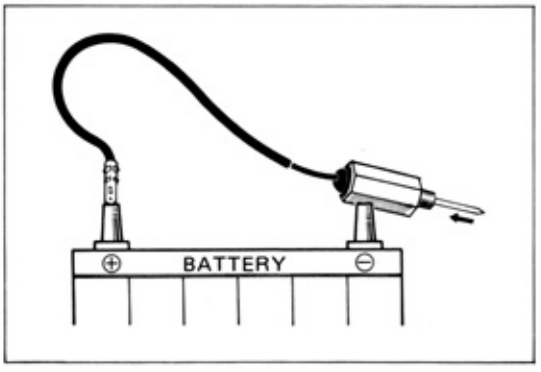
2. Throttle valves: Wear or deformation in valves. Wear, bending, twisting, or faulty movement inside housing of shaft.

Fig. 8-89



3. Idle mixture adjusting screw: Damage at tapered tip or threads.

Fig. 8-90



Solenoid Valve

1. Check operation of solenoid valve.
   Connect wiring to the battery positive terminal and ground the body. The needle valve should be pulled in.
2. Check needle valve "A" part.

ASSEMBLY

Assemble in numerical order.

Fig. 8-91

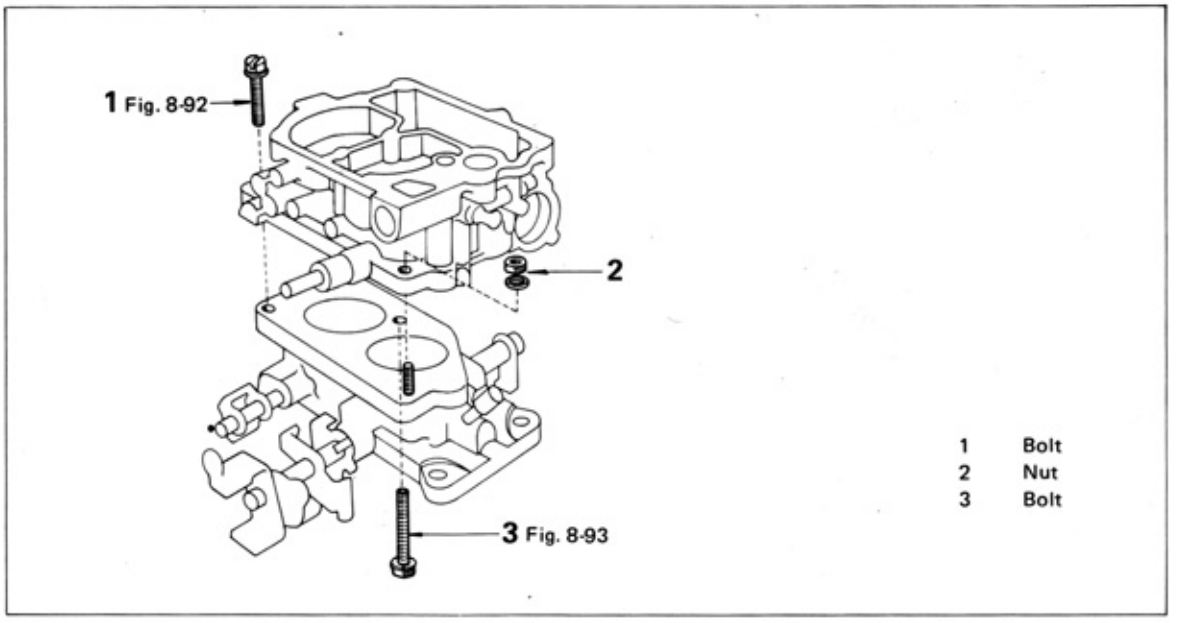
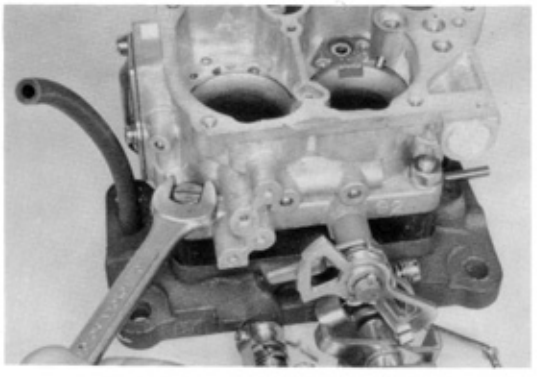
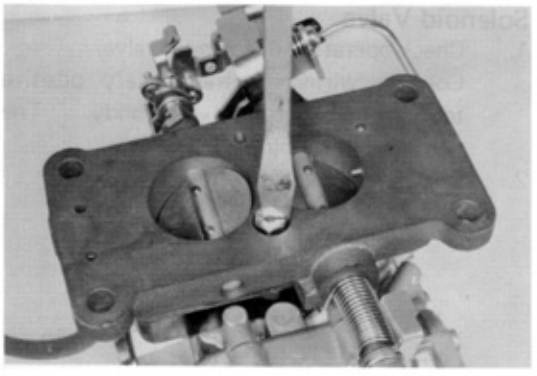


Fig. 8-92



Tighten bolt and nut.

Fig. 8-93

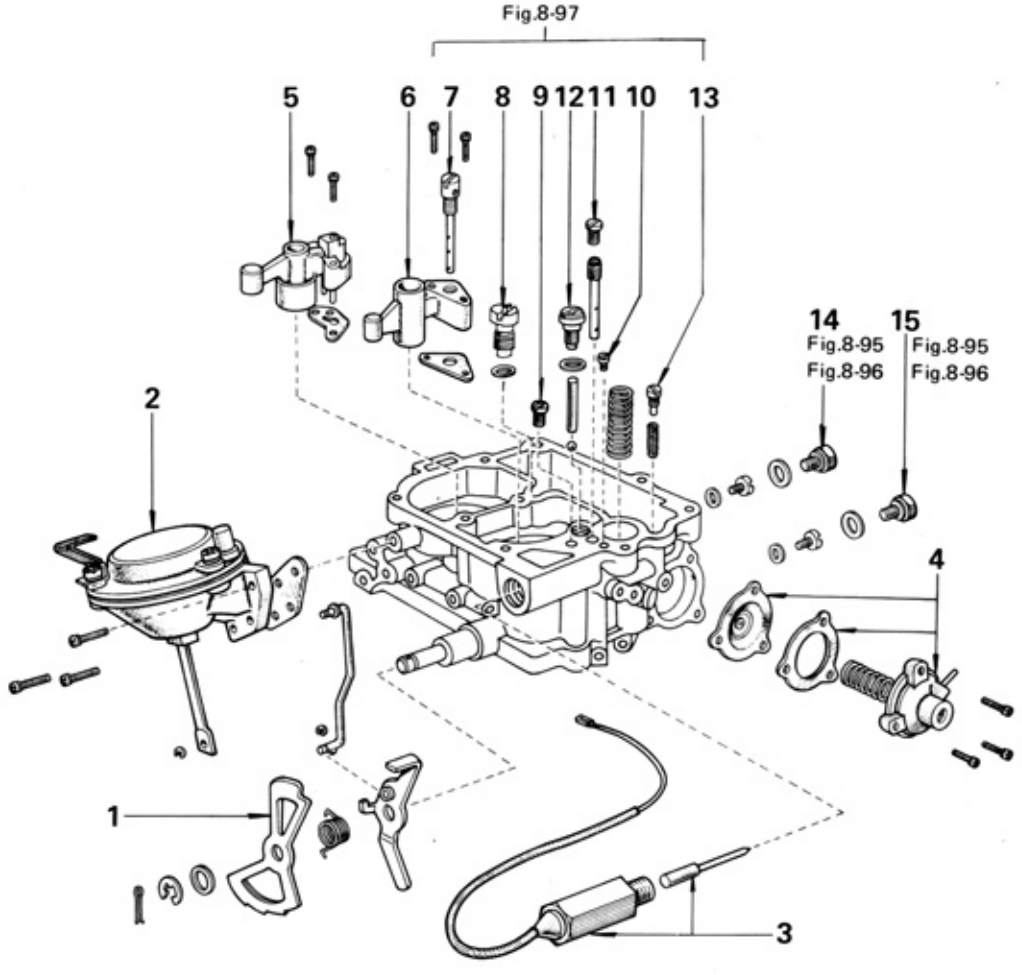


Tighten bolt.

Body

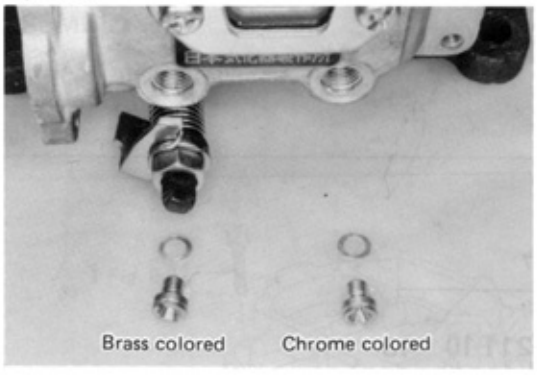
Assemble in numerical order.

Fig. 8-94



1	Fast Idle Cam	9	Second Air Bleed Jet
2	Second Throttle Valve Cam	10	First Air Bleed Jet
3	Solenoid Valve	11	Slow Jet
4	AAP Diaphragm	12	Pump Discharge Weight & Outlet Valve
5	Second Small Venturi	13	AAP Outlet Valve
6	First Small Venturi	14	Second Main Jet
7	Main Air Bleed	15	First Main Jet
8	Power Jet		

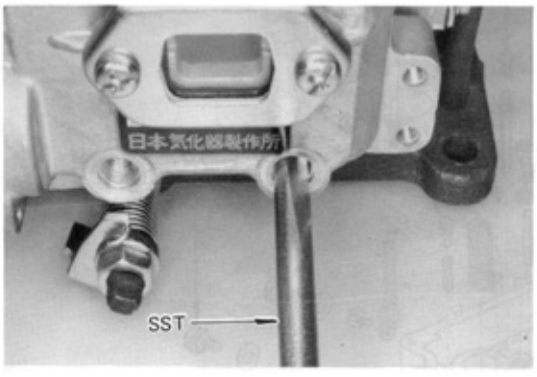
Fig. 8-95



Install main jets over gasket.

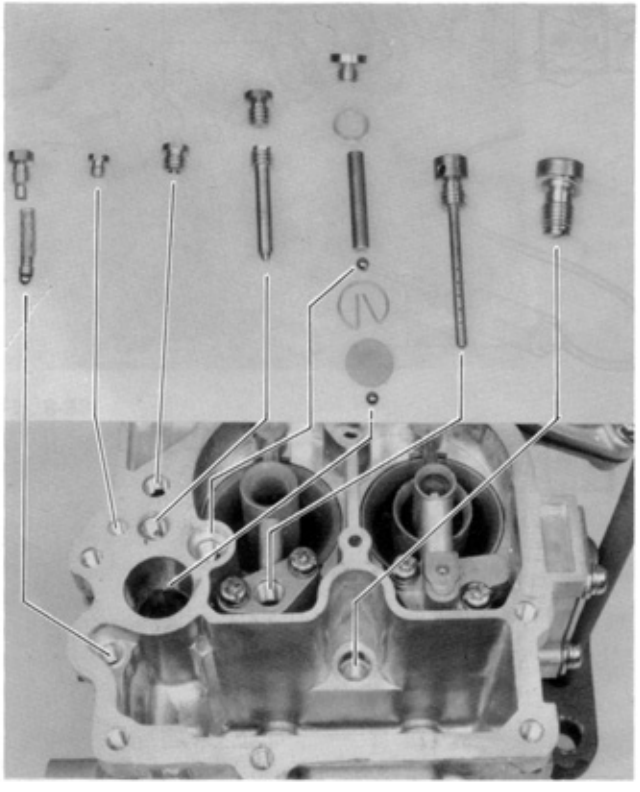
First jet	**Brass colored**
Second jet	**Chrome colored**

Fig. 8-96



Tighten first and second main jets with SST [09860-11011].

Fig. 8-97



Install jets, air bleed, valve and plugs as shown.

Air Horn

Assemble in numerical order.

Fig. 8-98

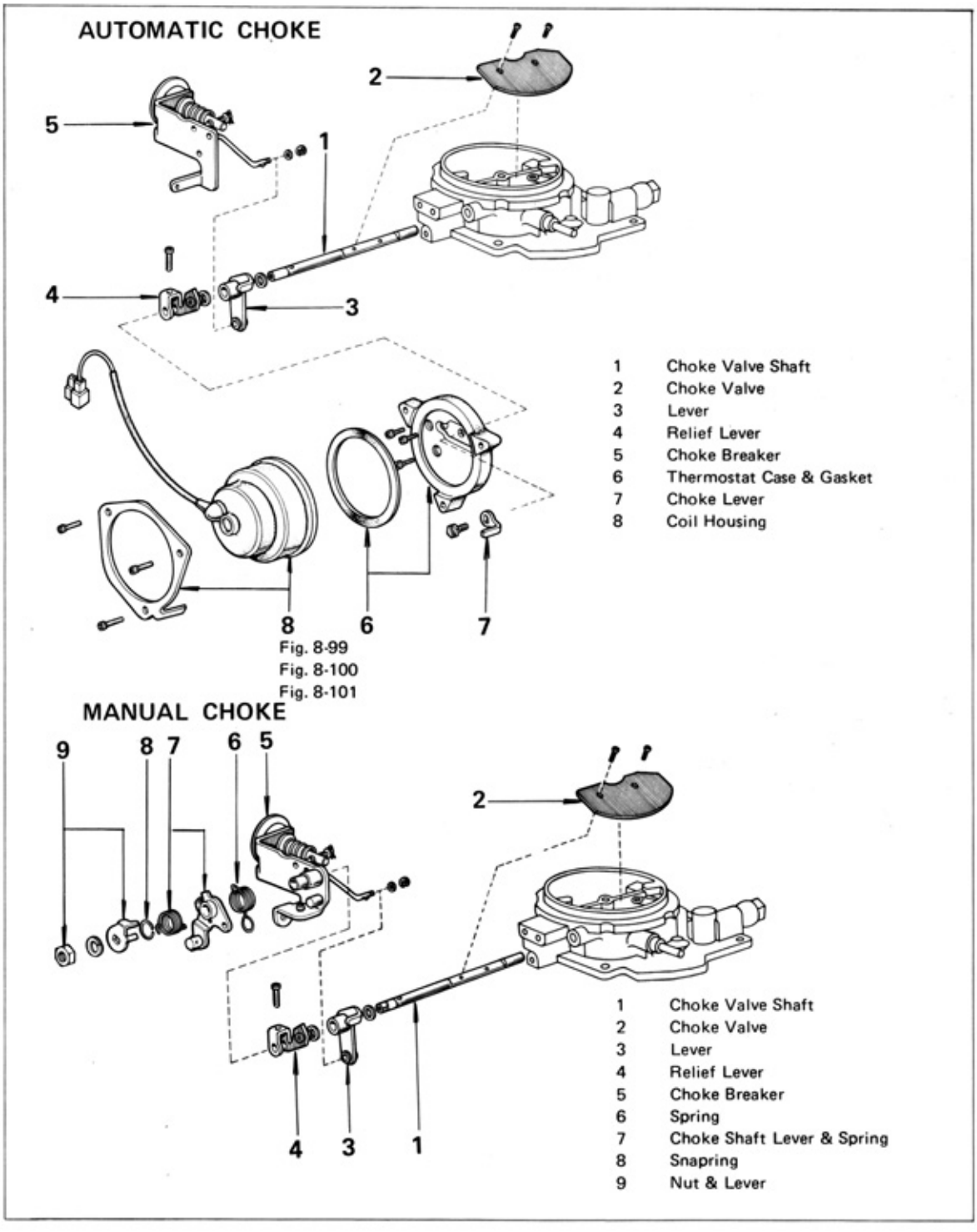
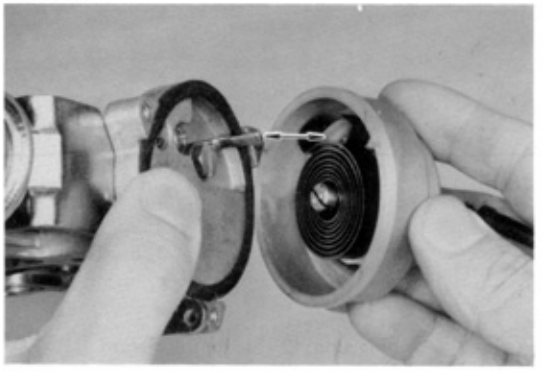


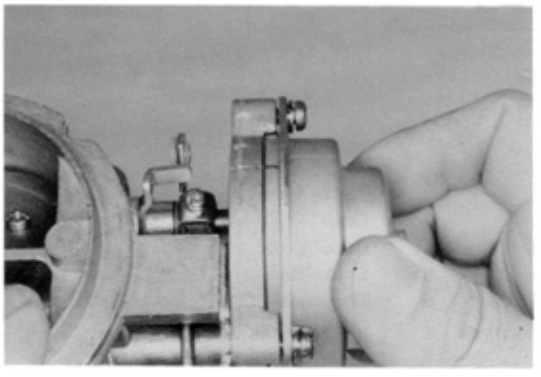
Fig. 8-99
Fig. 8-100
Fig. 8-101

Fig. 8-99



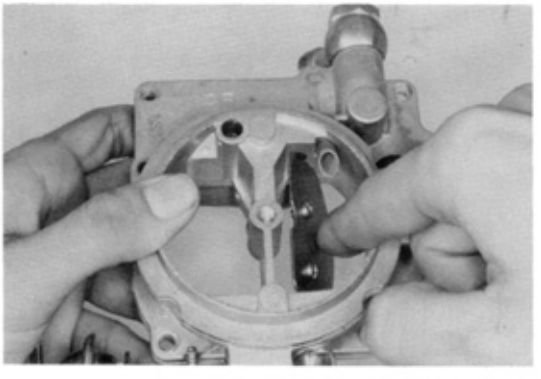
Hook lever to bimetal spring.

Fig. 8-100



Align case scale standard line against housing scale line.

Fig. 8-101



Check choke valve action.

Float

Assemble in numerical order.

Fig. 8-102

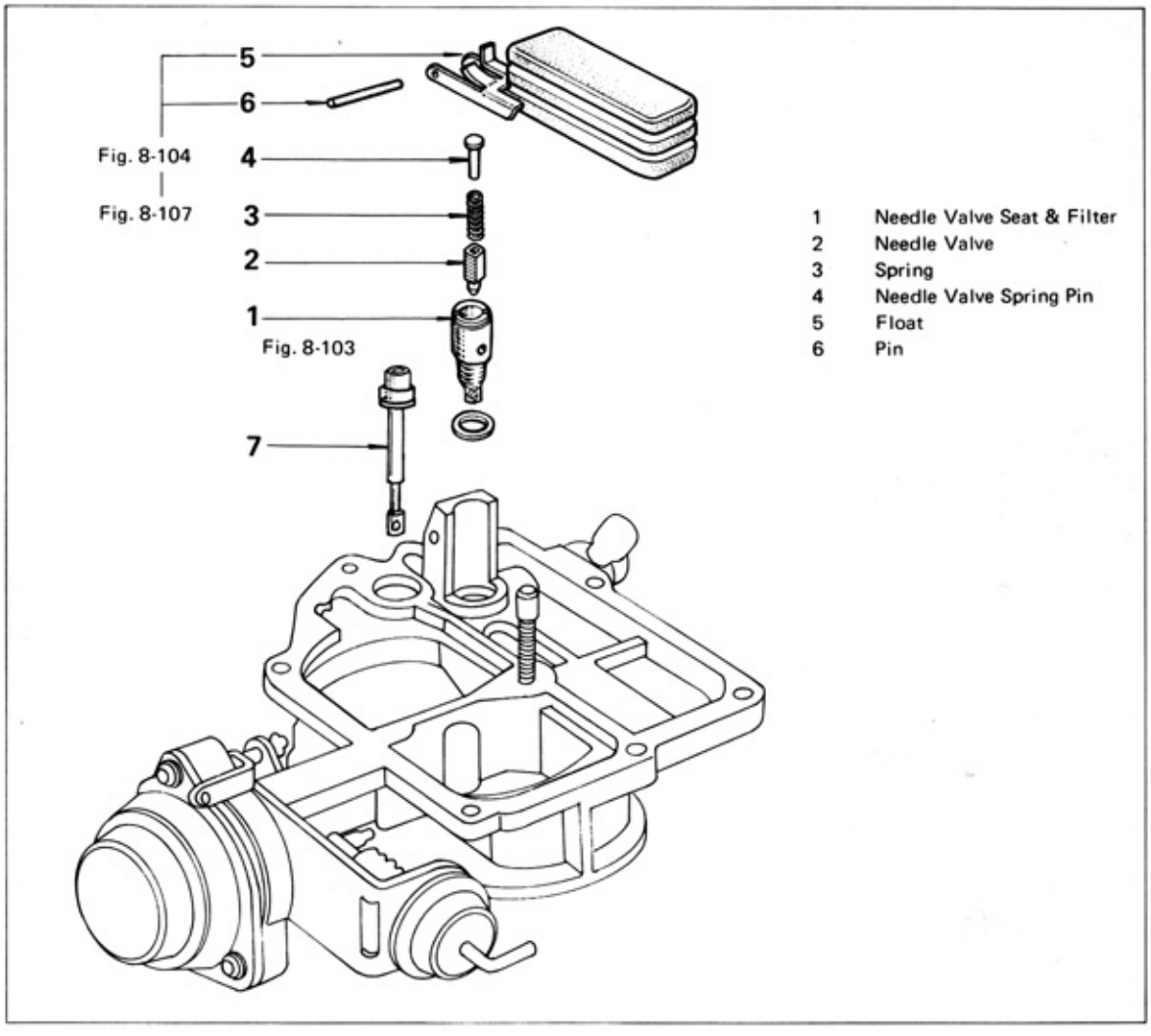
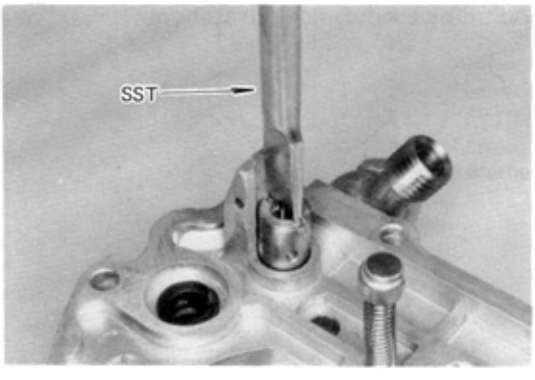
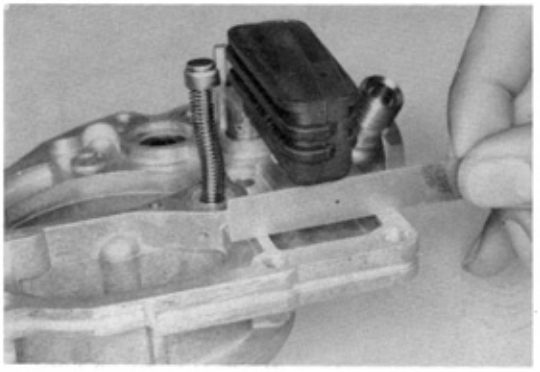


Fig. 8-103



Tighten needle valve seat with SST [09860-11011].

Fig. 8-104

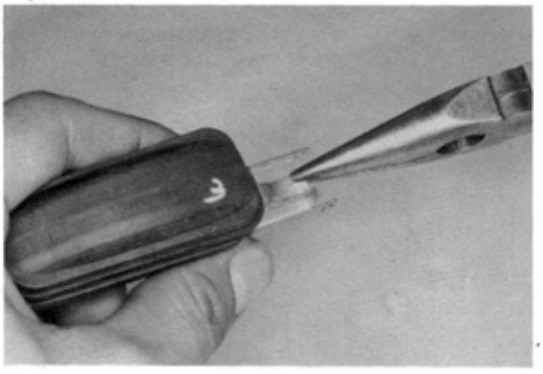


Adjust float level.
Allow the float to hang down by its own weight. Then check the clearance between the float tip and air horn with SST [09240-00014]. Adjust by bending the (A) part of float lip.

Standard **10.0 – 11.0 mm (0.39 – 0.43 in)**

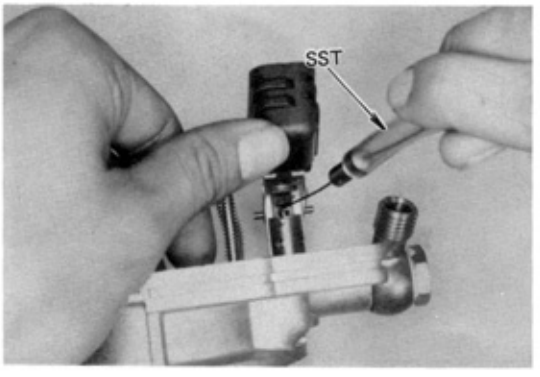
– Note –
This measurement is always made without any gasket on air horn.

Fig. 8-105



Adjust by bending float lip as shown.

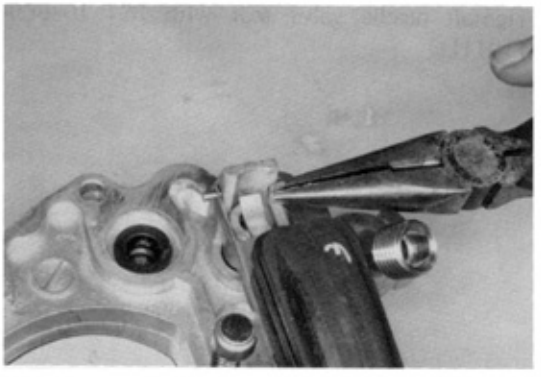
Fig. 8-106



Adjust lowered position.
Lift up the float and check the clearance between the needle valve plunger and float lip with SST [09240-00020]. Adjust by bending the (B) part of float lip.

Standard **1.0 – 1.2 mm (0.039 – 0.047 in)**

Fig. 8-107

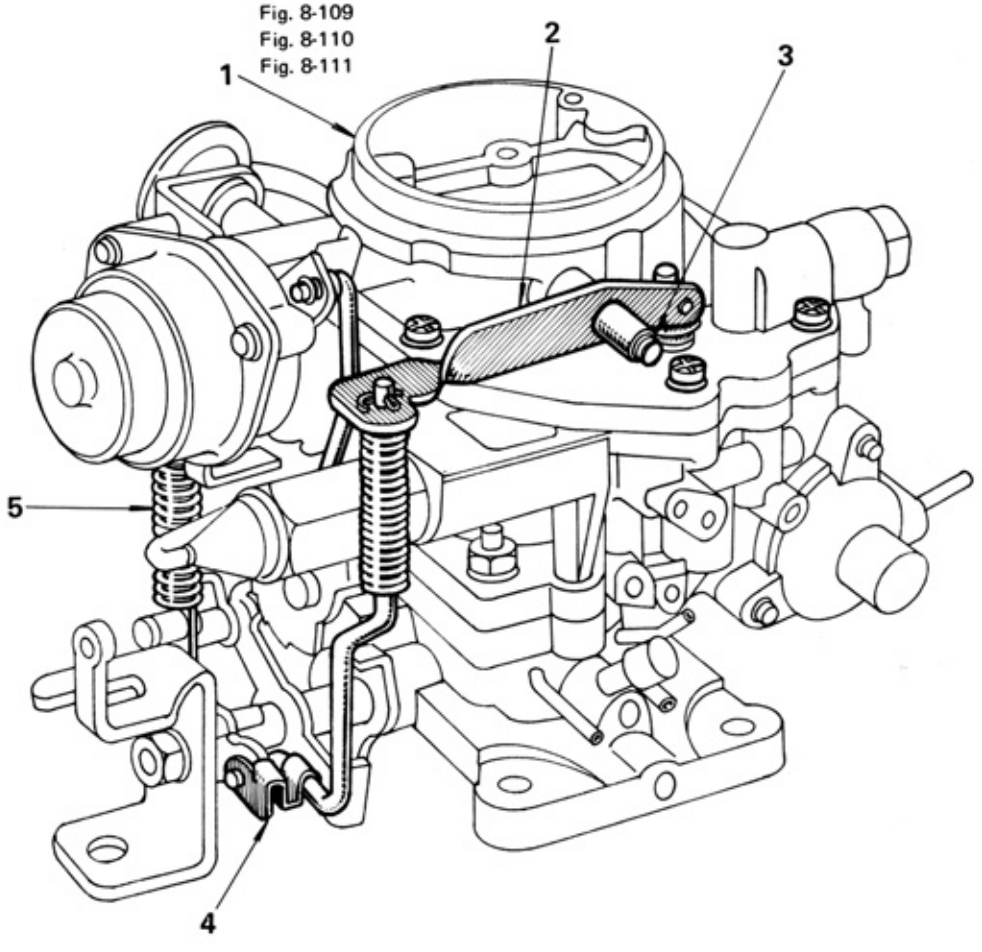


Adjust by bending float lip as shown.

Body And Air Horn

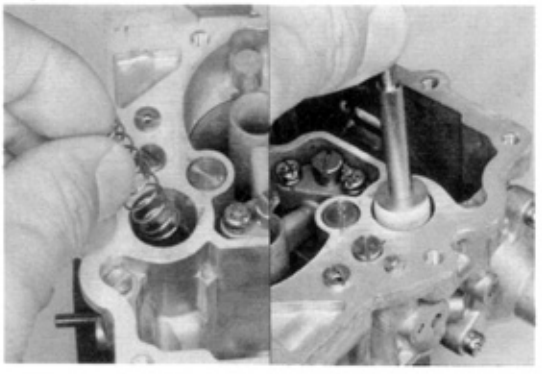
Assemble in numerical order.

Fig. 8-108



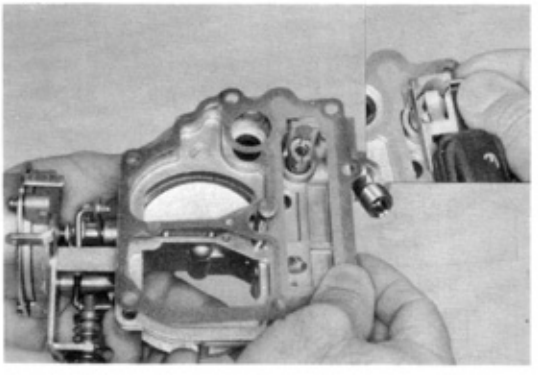
1 Air Horn
2 Pump Lever & Connecting Rod
3 "E" Washer
4 Clip
5 Throttle Lever Return Spring

Fig. 8-109



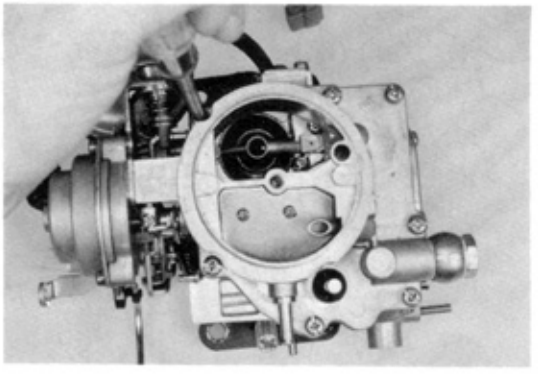
Before assembling air horn, pump damping spring and plunger.

Fig. 8-110



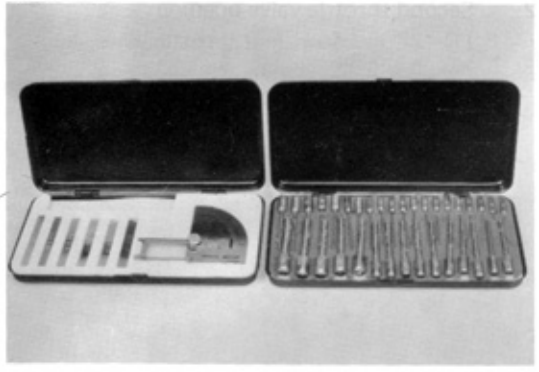
Put on gasket on air horn and install needle valve and float.

Fig. 8-111



Gradually tighten air horn set screw in 2 or 3 stages in diagonal order.

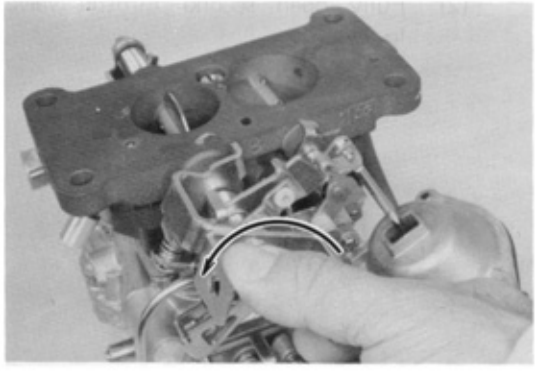
Fig. 8-112



ADJUSTMENT

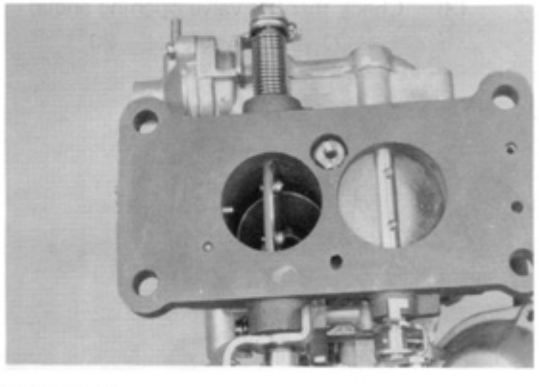
Use SST [09240-00014 and 09240-00020] to make adjustments.

Fig. 8-113



1. First throttle valve opening.
   (1) Fully open first throttle valve.

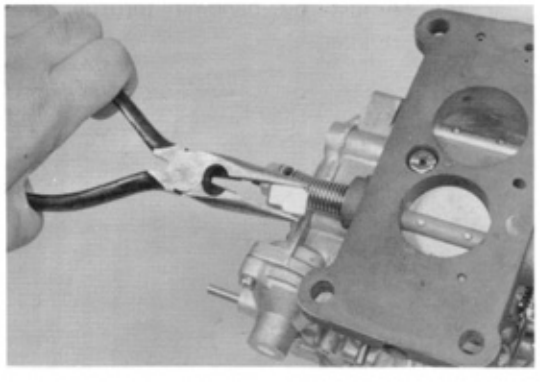
Fig. 8-114



(2) Check first throttle valve opening angle.

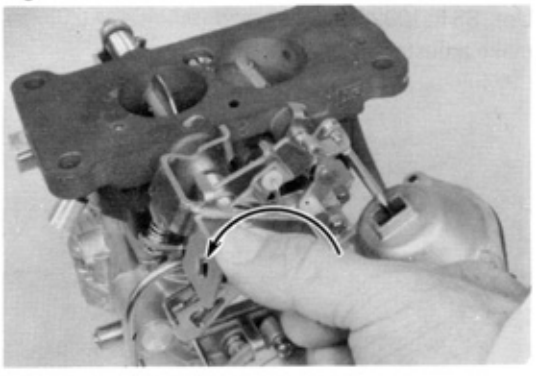
Opening Angle 90°

Fig. 8-115



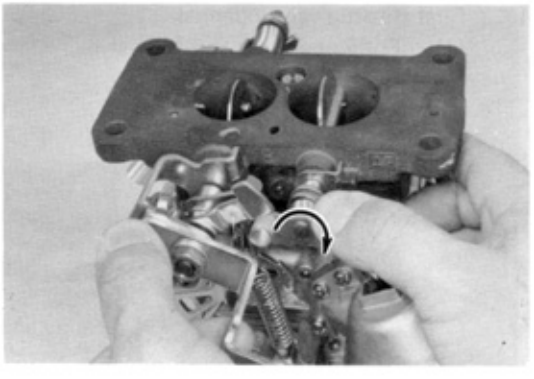
(3) Adjust by bending throttle lever stopper.

Fig. 8-116



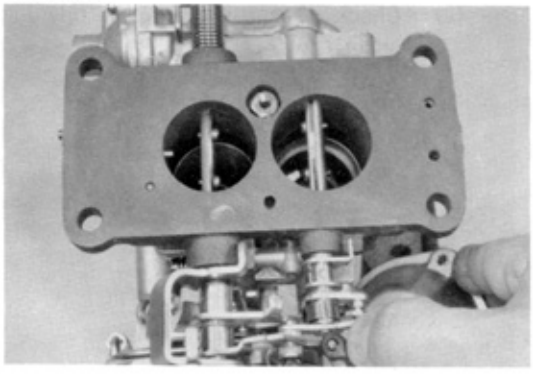
2. Second throttle valve opening
   (1) Fully open first throttle valve.

Fig. 8-117



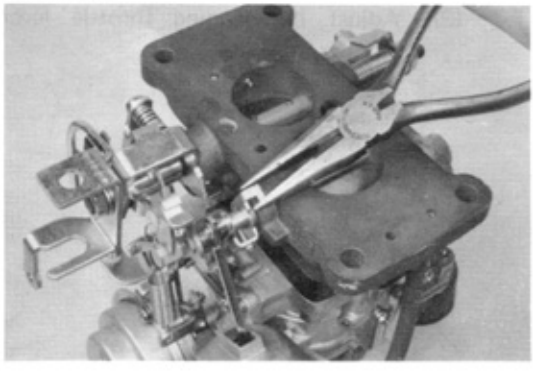
(2) Fully open second throttle valve lever.

Fig. 8-118



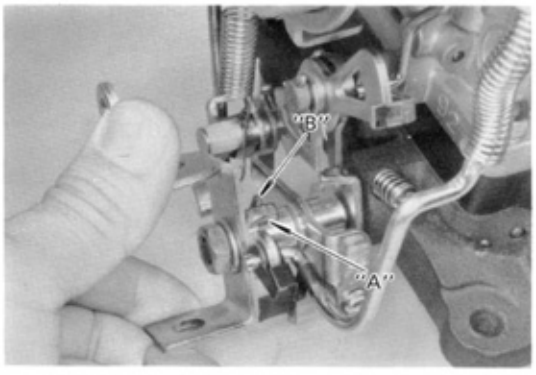
(3) Check throttle valve opening angle.
Opening Angle 90°

Fig. 8-119



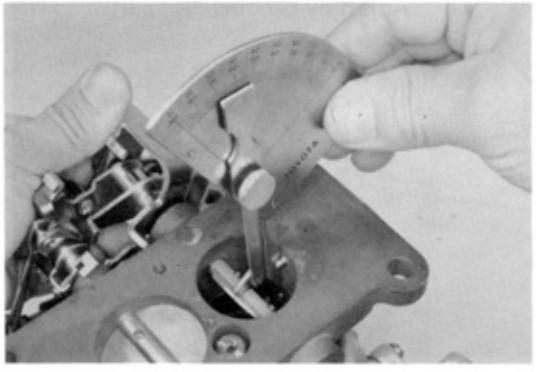
(4) Adjust by bending throttle lever stopper.

Fig. 8-120



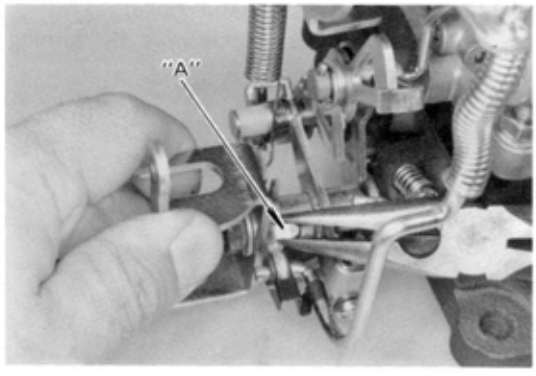
3. Seco-touch angle.
   (1) Open first throttle valve until throttle valve lever "A" part touch "B" part.

Fig. 8-121



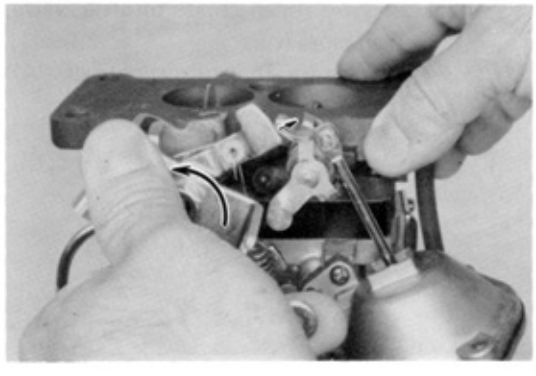
(2) At this time, check first throttle valve opening angle.
Seco-touch Angle 57 – 61°

Fig. 8-122



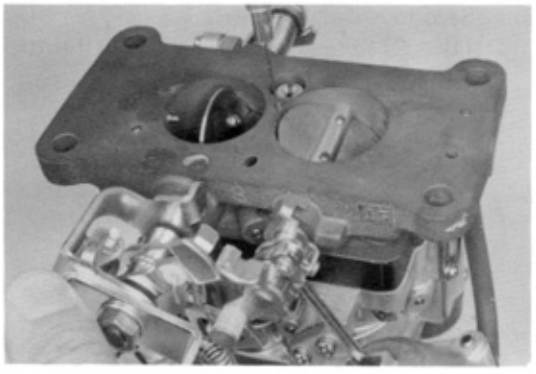
(3) Adjust by bending "A" part.

Fig. 8-123



4. Kick up
   (1) Open first throttle valve until kick arm slightly open second throttle valve.

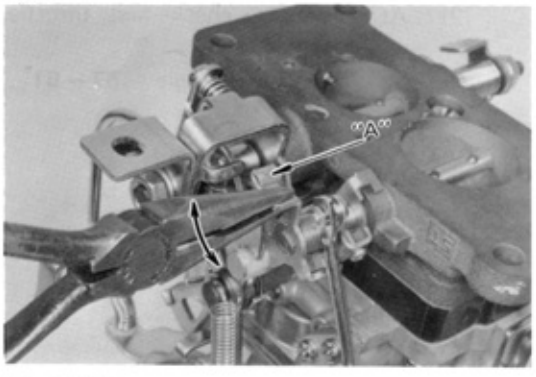
Fig. 8-124



(2) Check clearance between second throttle valve and body.

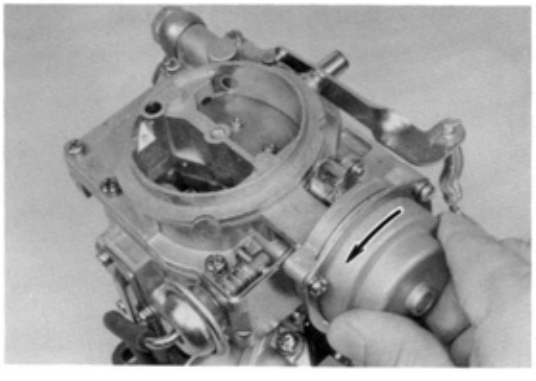
Kick up clearance
0.1 – 0.3 mm
(0.004 – 0.012 in)

Fig. 8-125



(3) Adjust by bending "A" part.

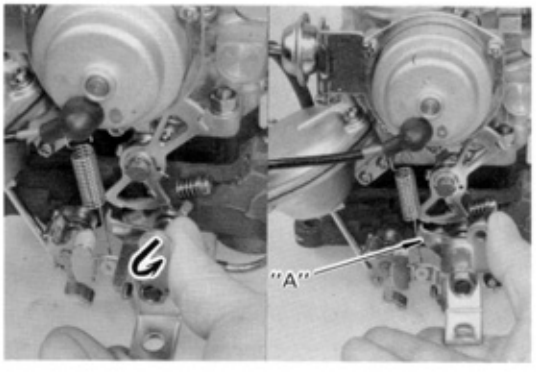
Fig. 8-126



5–1. Fast idle (only automatic choke)

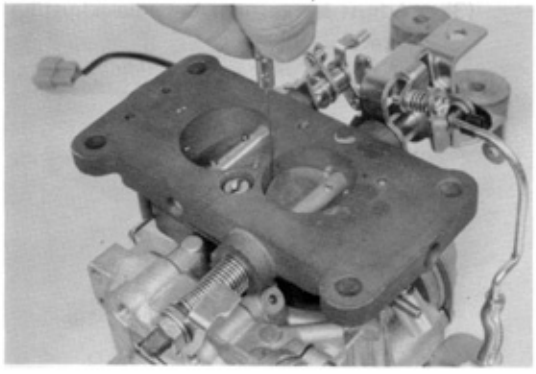
(1) Fully close choke valve by turning coil housing.

Fig. 8-127



(2) Slightly open first throttle valve, then close it.
Make sure that throttle lever "A" part hook fast idle cam.

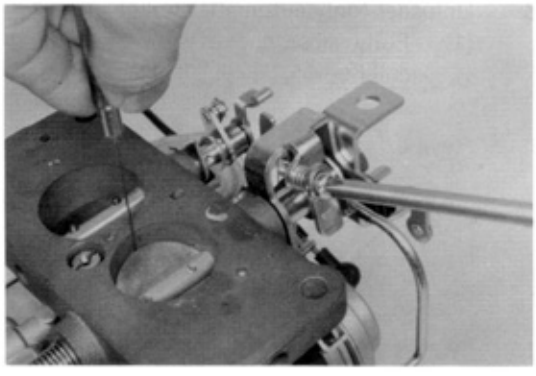
Fig. 8-128



(3) Check clearance between first throttle valve and bore.

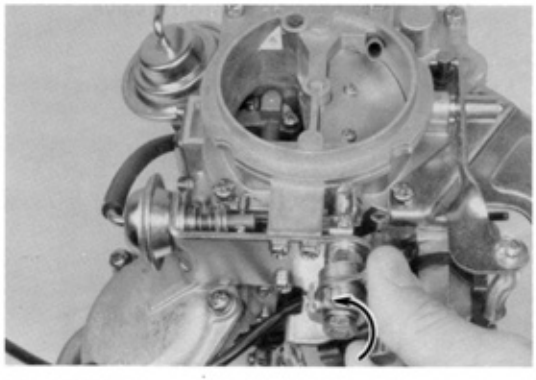
Fast idle clearance
0.81 mm (0.032 in.)

Fig. 8-129



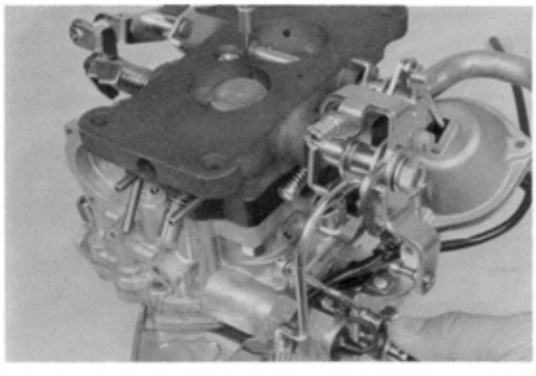
(4) Adjust by turning fast idle adjusting screw.

Fig. 8-130



5–2. Fast idle (only manual choke)
(1) Fully close choke valve by turning choke shaft lever.

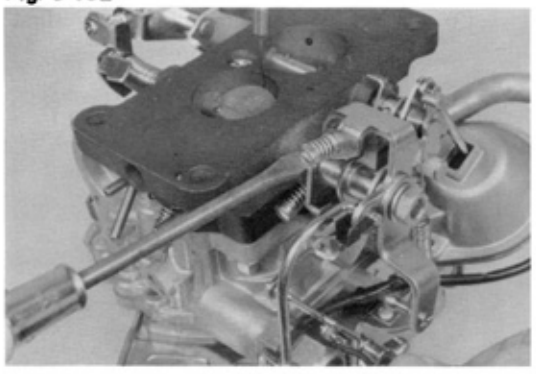
Fig. 8-131



(2) Check clearance between first throttle valve and bore.

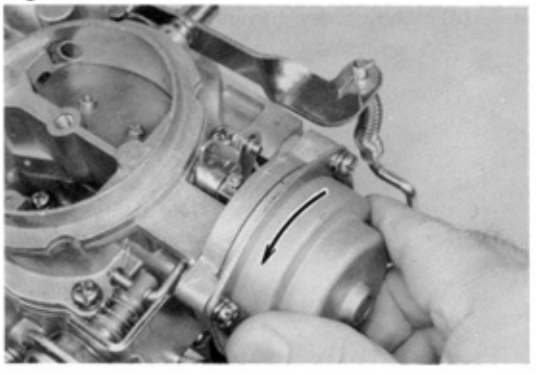
Fast idle clearance
1.01 mm (0.039 in)

Fig. 8-132



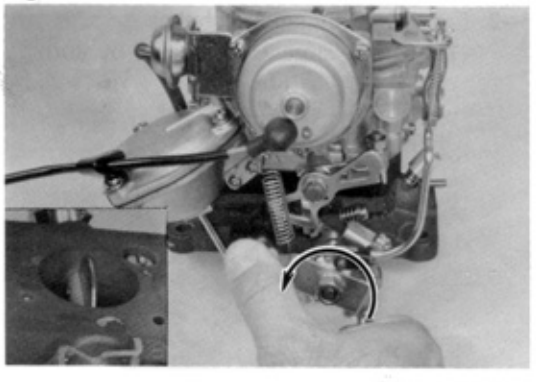
(3) Adjust by turning fast idle adjusting screw.

Fig. 8-133



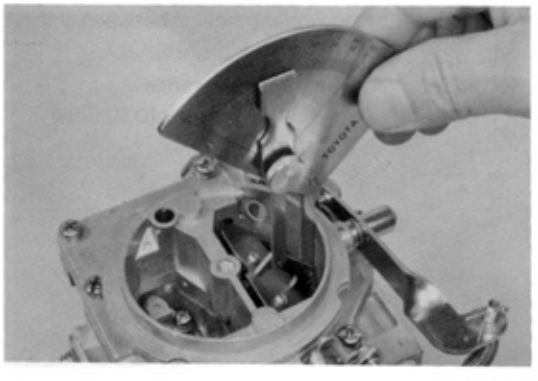
6. Unloader (only automatic choke)
(1) Fully close choke valve by turning coil housing.

Fig. 8-134



(2) Fully open first throttle valve.

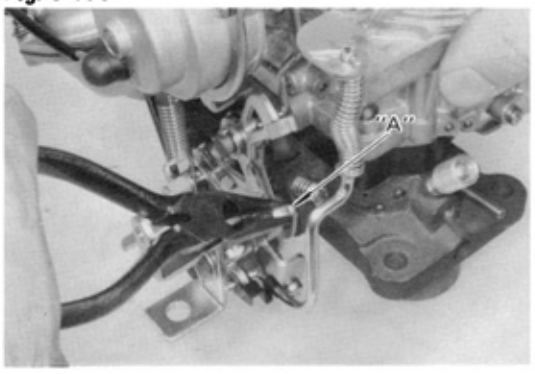
Fig. 8-135



(3) At this time, check chock valve opening angle.

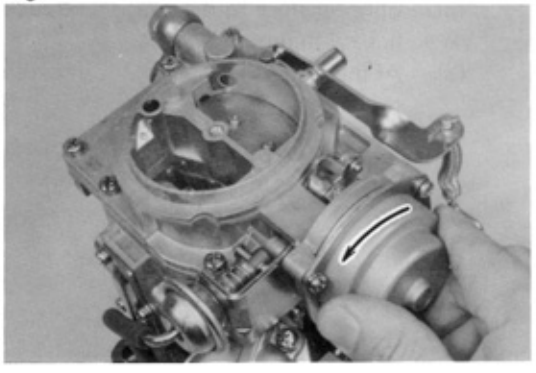
Unloader Angle 50°

Fig. 8-136



(4) Adjust by bending "A" part.

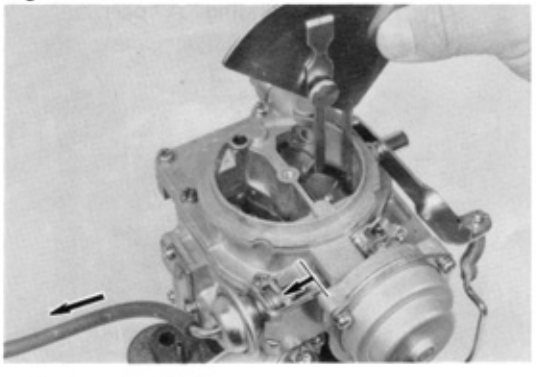
Fig. 8-137



7-1. Choke breaker (only automatic choke)

(1) Fully close chock valve by turning coil housing.

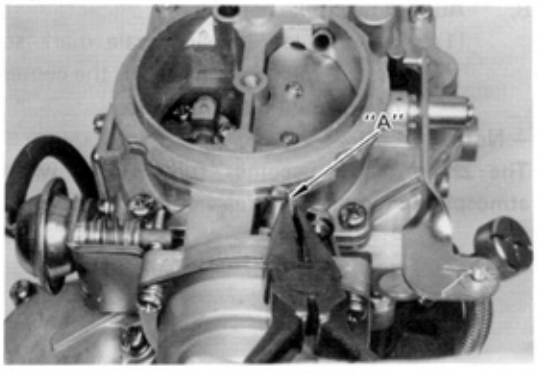
Fig. 8-138



(2) Connect hose to diaghragm and suck hose with mouth.

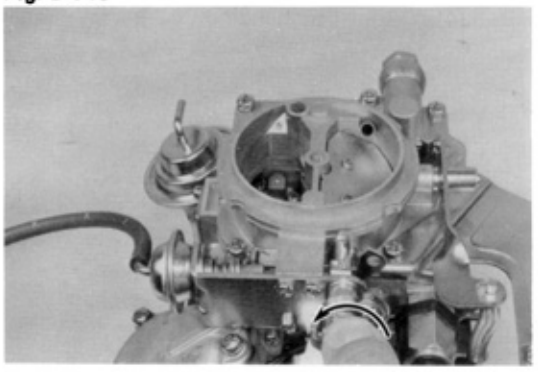
(3) At this time, check clearance between choke valve and bore.

Fig. 8-139



(4) Adjust by bending "A" part.

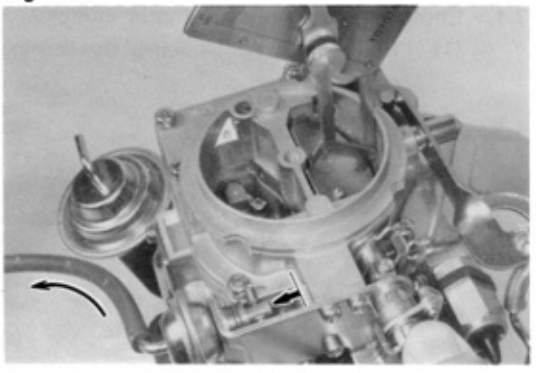
Fig. 8-140



7-2. Choke breaker (only manual choke)

(1) Fully close chock valve by turning choke lever.

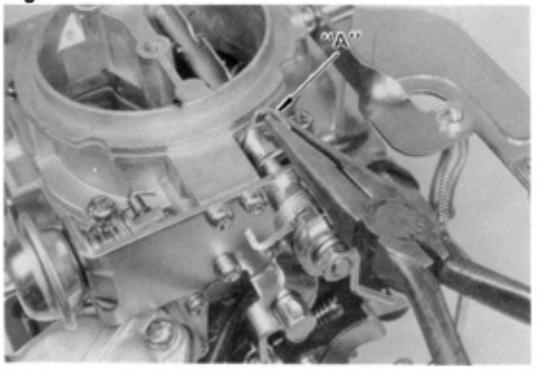
Fig. 8-141



(2) Connect hose to diaghragm and suck hose with mouth.

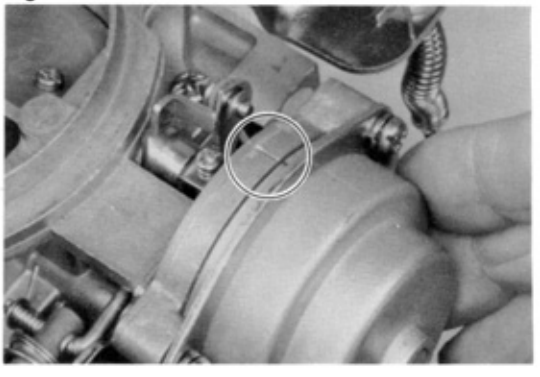
(3) At this time, check clearance between choke lever, and bore.

Fig. 8-142



(4) Adjust by bending "A" part.

Fig. 8-143



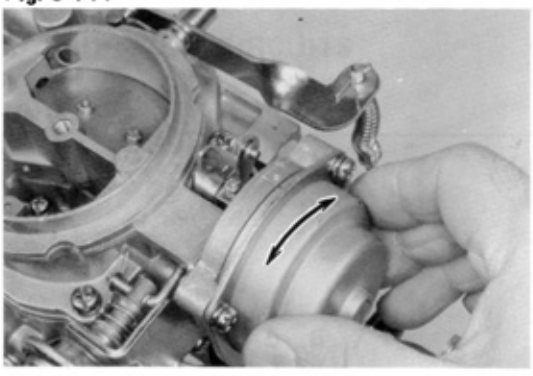
8. Automatic choke

(1) Set the coil housing scale mark so that it will be aligned with the center line of the thermostat case.

– Note –

The choke valve becomes fully closed when atmospheric temperature reaches 25°C (77°F).

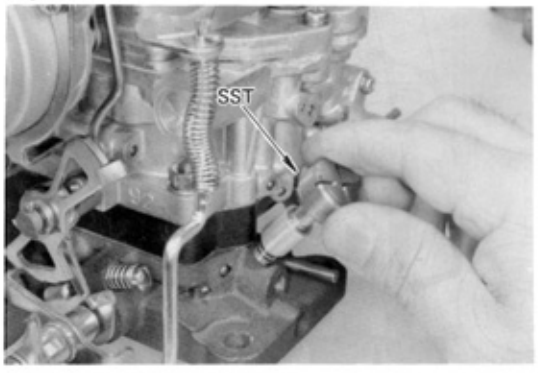
Fig. 8-144



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

If too rich ..... Turn clock-wise.
If too lean ... Turn counterclock-wise.

Fig. 8-145

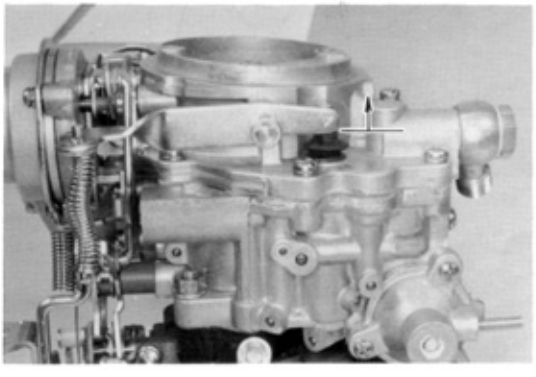


9. Idle mixture adjusting screw.
Screw in the idle mixture adjusting screw and then unscrew it by the following amount.

Standard (Reference only)
Returned about 3 turns from full closed

— Caution —
Take care not to screw in too tightly and damage the screw tip.

Fig. 8-146



10. Accelerating pump
Adjust the pump stroke by bending part (A).

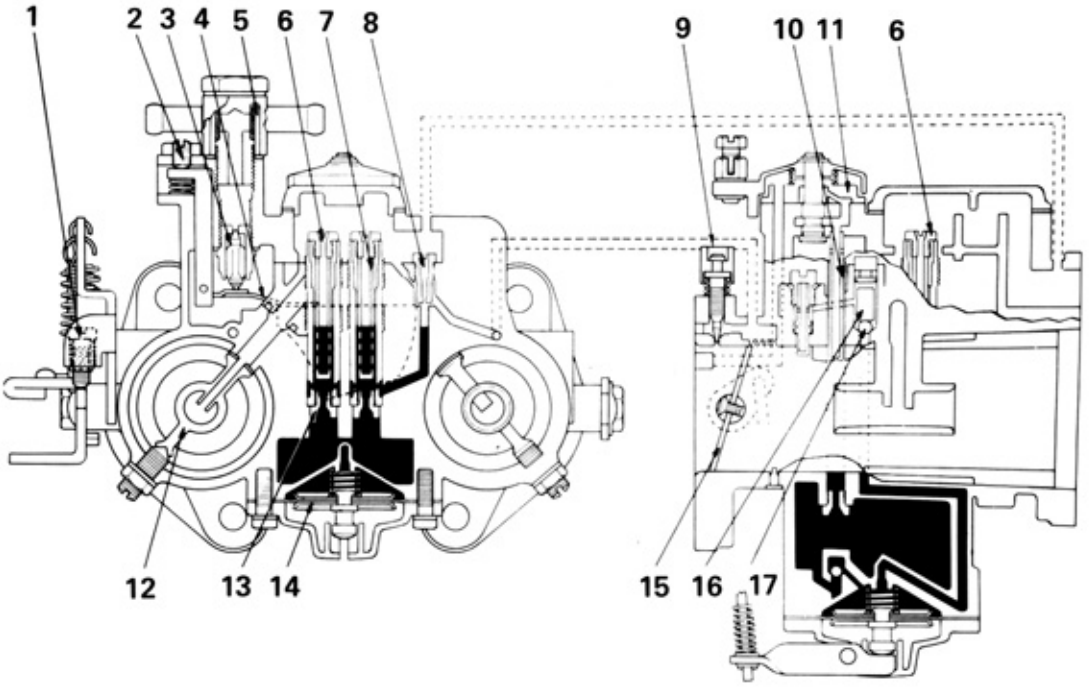
Standard 4.0 mm (0.16 in)

— Note —
After adjustment is made, be sure to check the linkage to see that it operates smoothly.

CARBURETOR(FOR 18R-G ENGINE)

CARBURETOR CIRCUITS

Fig. 8-150



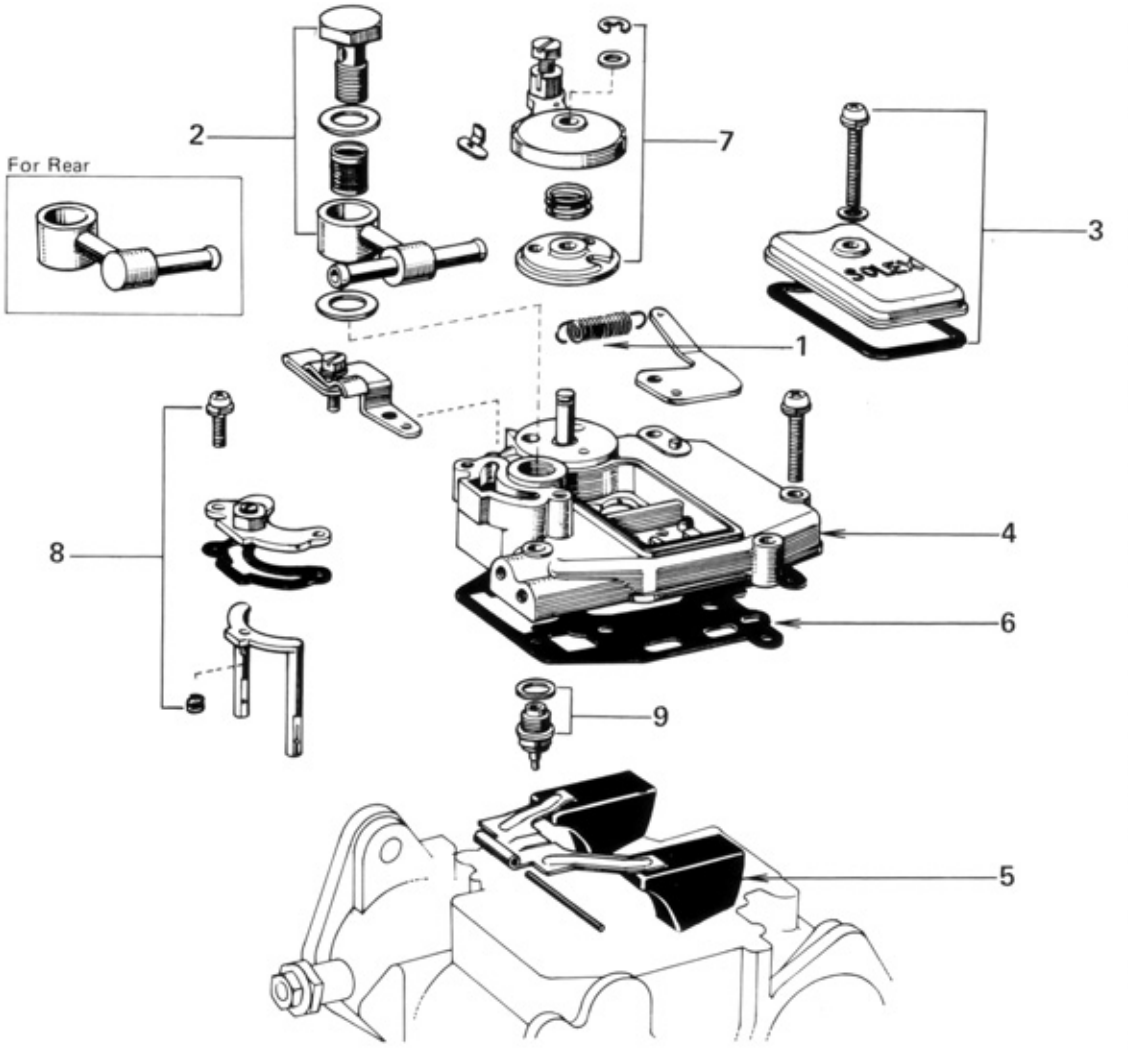
1	Idle Speed Adjusting Screw	10	Air Bleed Tube
2	Screw (For Float Adjustment)	11	Starter Disc
3	Needle Valve Sub-assembly	12	Inner Venturi
4	Float Sub-assembly	13	Main Jet
5	Strainer	14	Diaphragm Rod Sub-assembly
6	Main Air Bleed Jet	15	Throttle Valve
7	Main Air Bleed Tube	16	Pump Valve Weight
8	Slow Jet	17	Pump Valve Check Ball
9	Idle Mixture Adjusting Screw		

DISASSEMBLY

Bowl Cover

Disassemble in numerical order.

Fig. 8-151

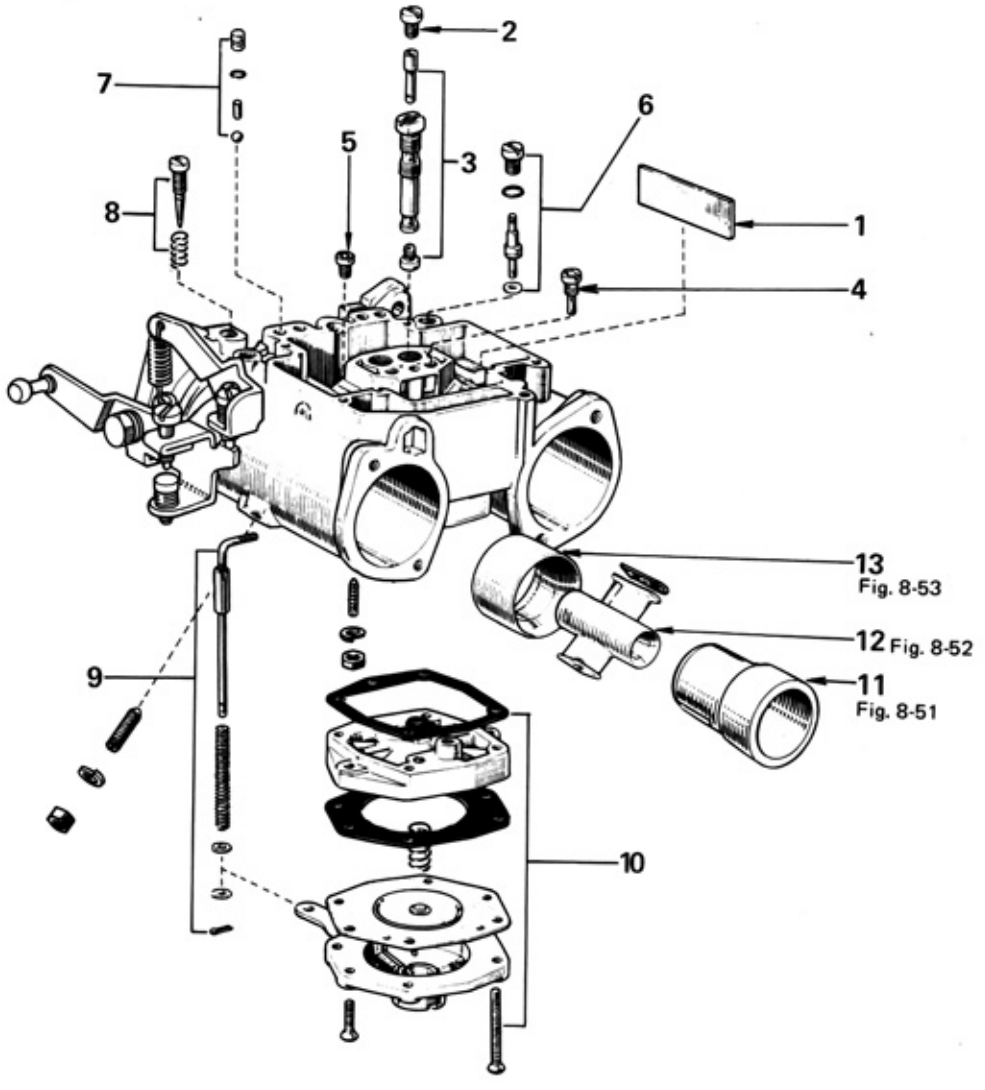


1	Starter Back Spring	6	Bowl Cover Gasket
2	Fuel Union	7	Starter Disc
3	Jet Chamber Cover	8	Float Adjusting Stay
4	Bowl Cover Sub-assembly	9	Needle Valve Sub-assembly
5	Float		

Body

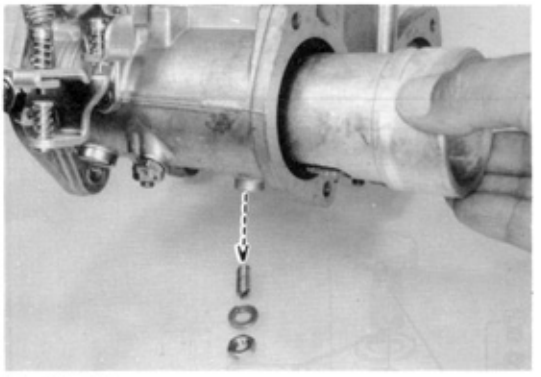
Disassemble in numerical order.

Fig. 8-152



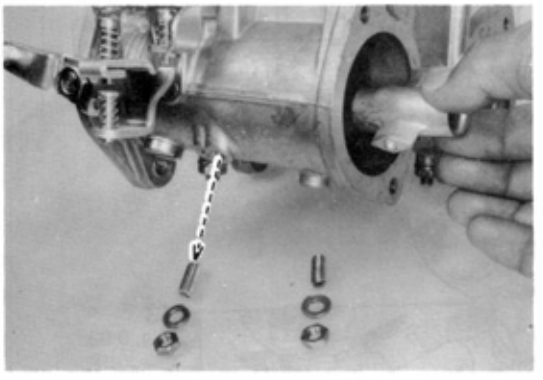
1	Float Chamber Plate	8	Idle Mixture Adjusting Screw
2	Main Air Bleed Jet	9	Pump Rod
3	Main Jet Holder	10	Accelerating Pump
4	Slow Jet	11	Sleeve
5	Starter Jet	12	Small Venturi
6	Pump Nozzle	13	Large Venturi
7	Pump Check Valve		

Fig. 8-153



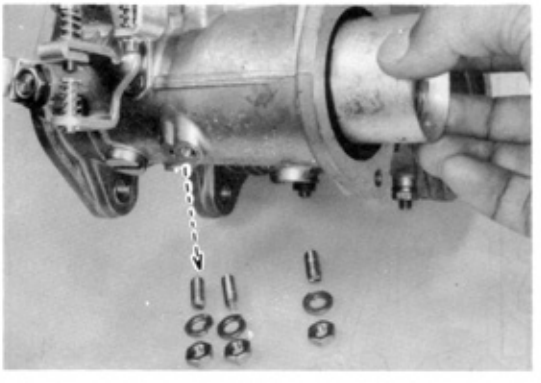
Remove the set screw and take out the sleeve.

Fig. 8-154



Remove the set screw and take out the small venturi.

Fig. 8-155



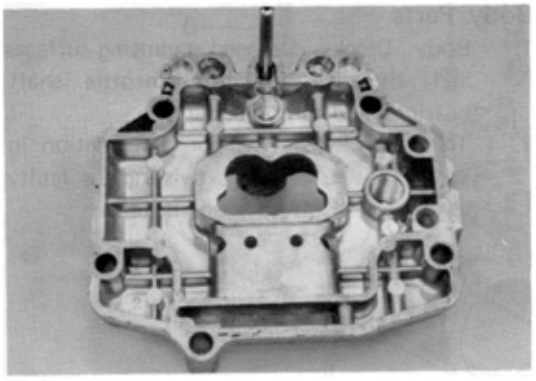
Remove the set screw and take out the large venturi.

INSPECTION

— Precaution —

1. **Before inspecting the parts, wash them thoroughly in gasoline. 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.**
2. **Never clean the jets or orifices with wire or a drill. This could enlarge the openings and result in excessive fuel consumption.**

Fig. 8-156

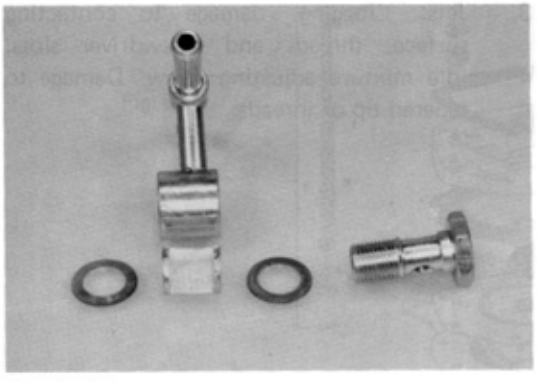


Inspect the following parts and replace any part damaged.

Bowl Cover Parts

1. Bowl cover: Cracks, damaged threads.
2. Starter pipe: Damaged and/or clogged.

Fig. 8-157

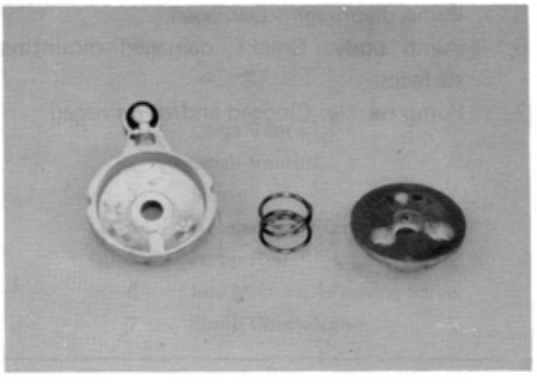


3. Filter: Clogged, rusted, or damaged.

— Note —

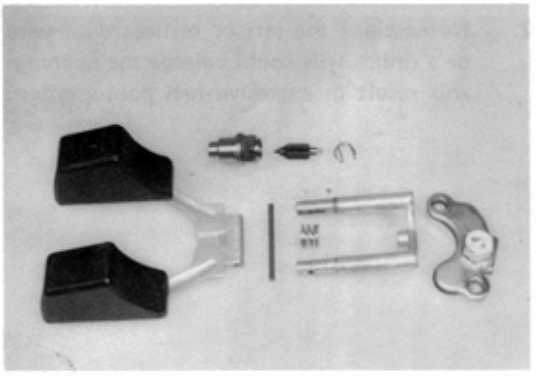
New gasket must always be used whenever the union is removed.

Fig. 8-158



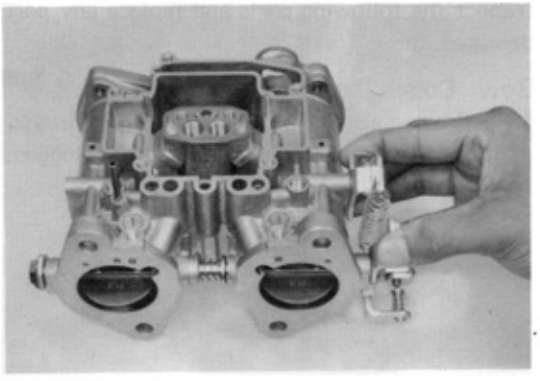
4. Starter disc: Damaged or worn sliding surface.

Fig. 8-159



5. Needle valve: Contacting valve seat.
6. Float: Deformed, wear in float lever pin holes, bent float arms.

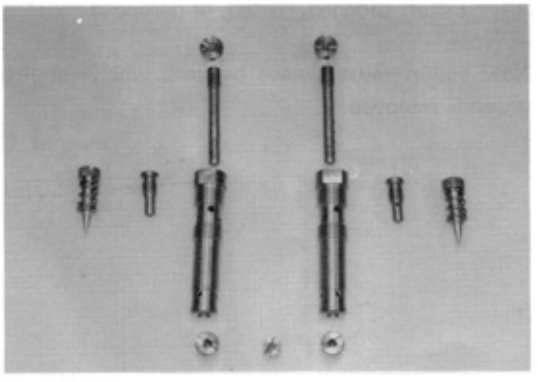
Fig. 8-160



Body Parts

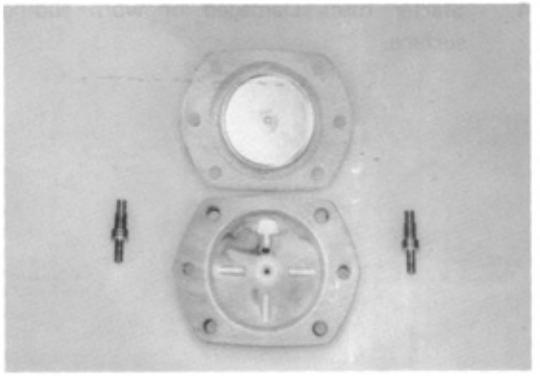
1. Body: Cracks, damaged mounting surfaces and threads, wear on throttle shaft bearings, and carbon adherence.
2. Throttle valves: Wear or deformation in valves. Wear, bending, twisting, or faulty movement inside housing of shaft.

Fig. 8-161



3. Jets: Clogging, damage to contacting surface, threads and screwdriver slots.
4. Idle mixture adjusting screw: Damage to tapered tip or threads.

Fig. 8-162



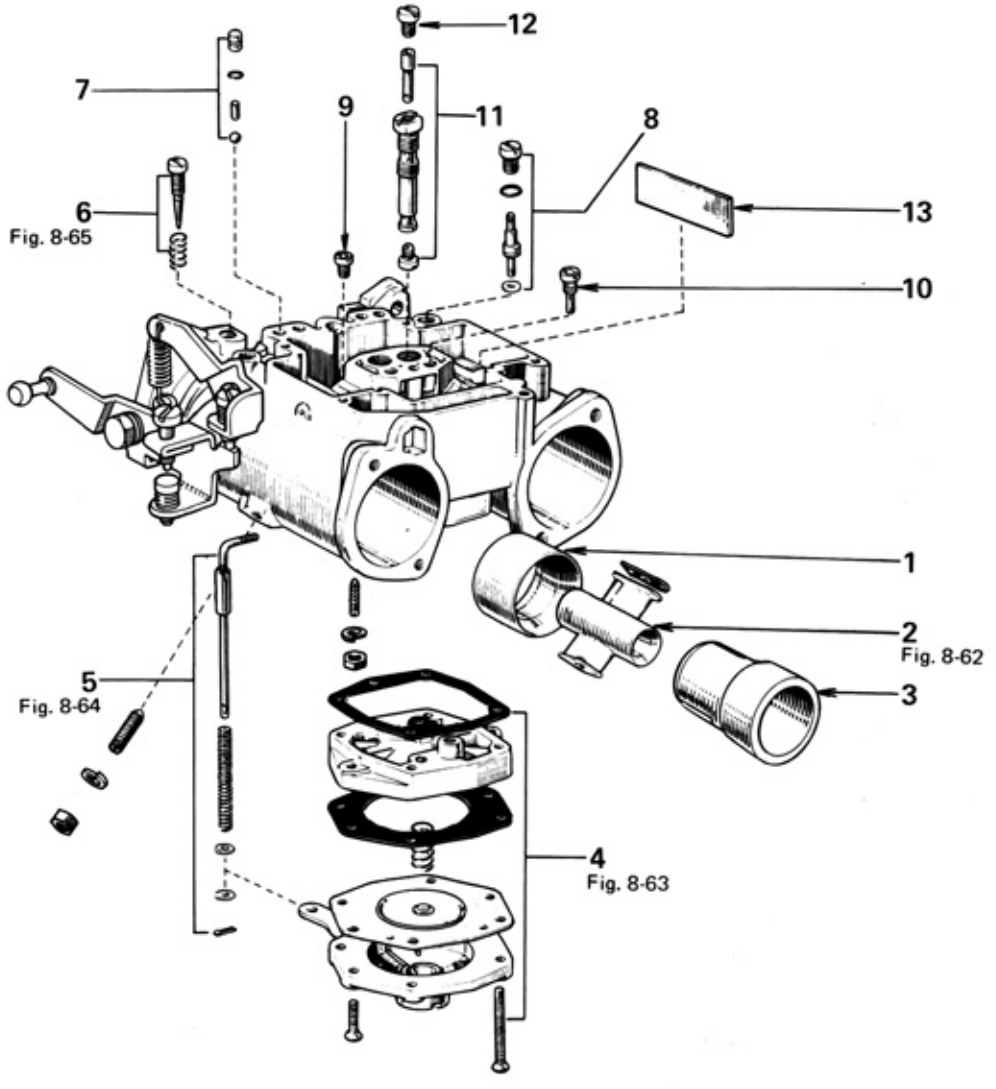
5. Pump diaphragm: Damaged.
6. Pump body: Cracks, damaged mounting surfaces.
7. Pump nozzle: Clogged and/or damaged.

ASSEMBLY

Body

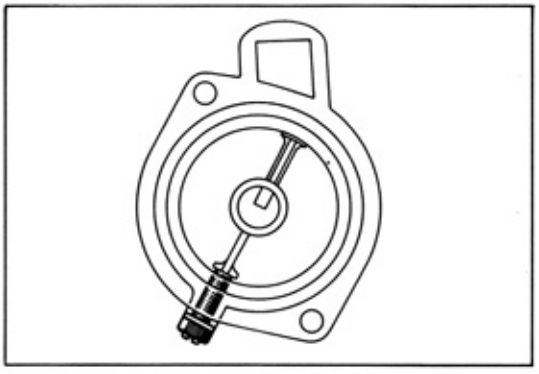
Assemble in numerical order.

Fig. 8-163



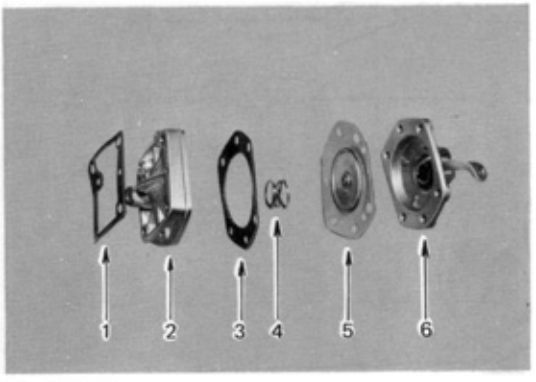
1	Large Venturi	8	Pump Nozzle
2	Small Venturi	9	Starter Jet
3	Sleeve	10	Slow Jet
4	Accelerating Pump	11	Main Jet Holder
5	Pump Rod	12	Main Air Bleed Jet
6	Idle Mixture Adjusting Screw	13	Float Chamber Plate
7	Pump Check Valve		

Fig. 8-164



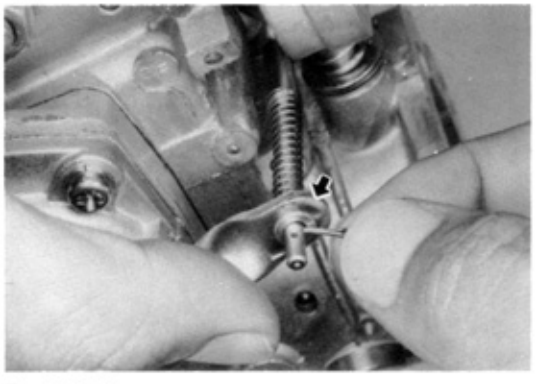
Using the longest screw, assemble the small venturi as shown.

Fig. 8-165



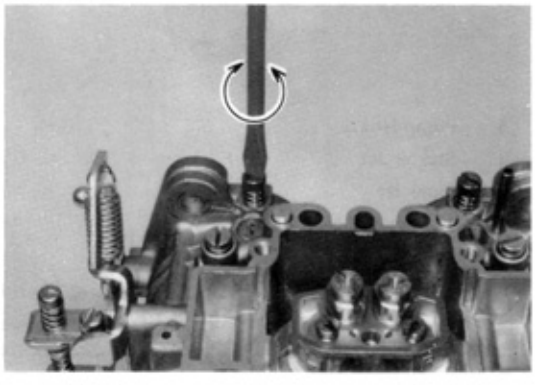
Assemble the accelerating pump in numerical order as shown.

Fig. 8-166



Install the cotter pin in the third hole from the tip of pump rod.

Fig. 8-167



Screw out 1½ turn from fully closed position.

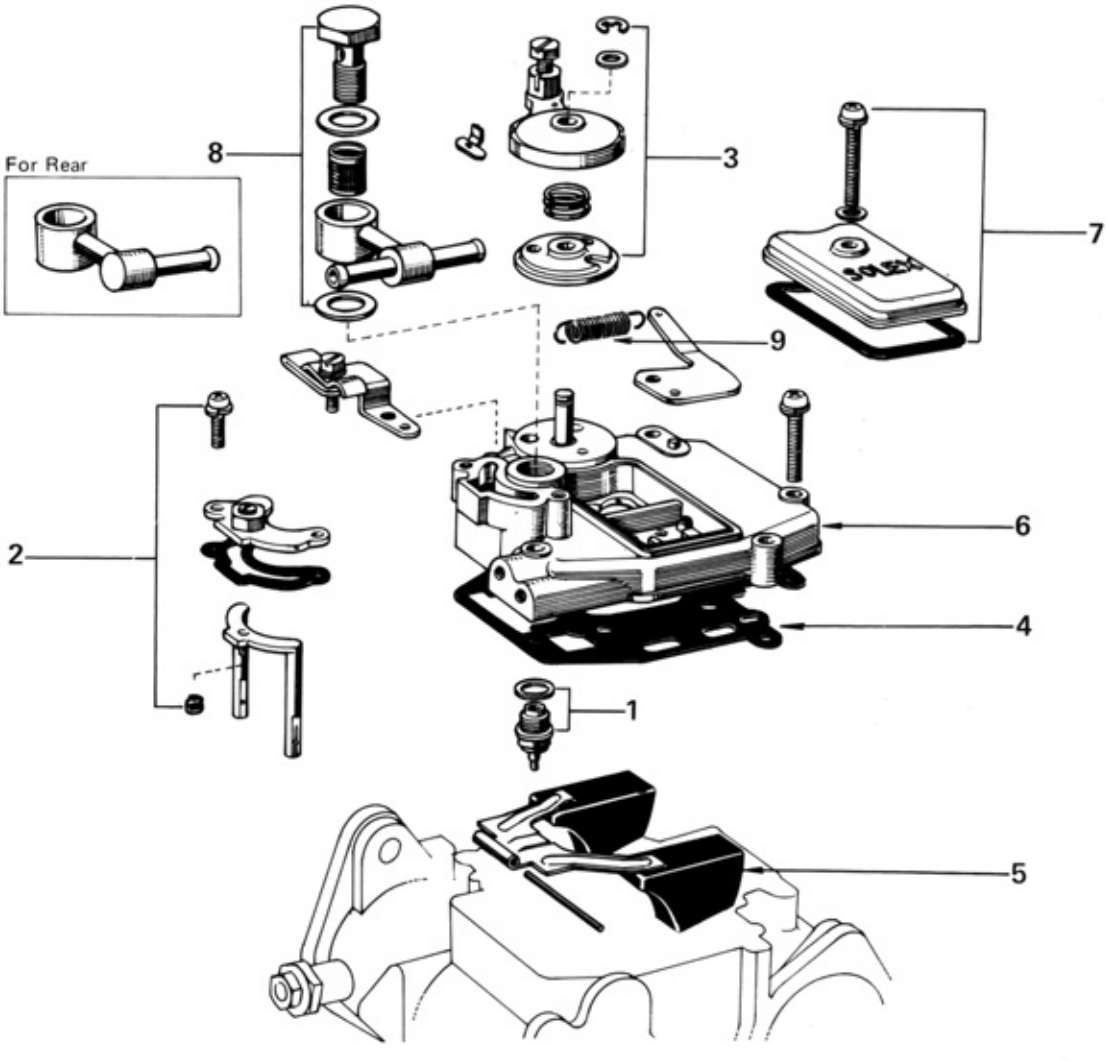
— **Note** —

Take care not to mistake the left and right sides.

Bowl Cover

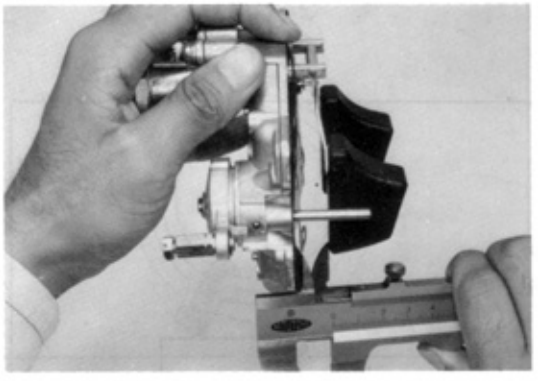
Assemble in numerical order.

Fig. 8-168



1	Needle Valve Sub-assembly	6	Bowl Cover Sub-assembly
2	Float Adjusting Stay	7	Jet Chamber Cover
3	Starter Disc	8	Fuel Union
4	Bowl Cover Gasket	9	Starter Back Spring
5	Float		

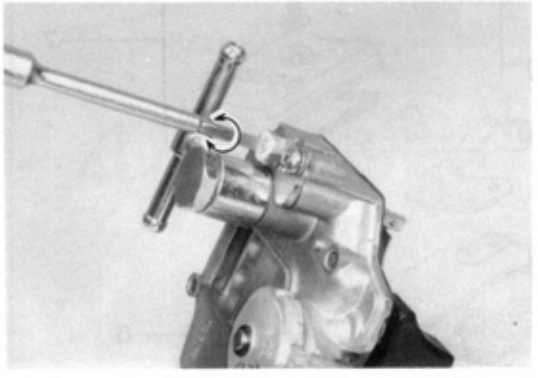
Fig. 8-170



Preset the float position.

About 16 mm (0.63 in) from bowl cover lower surface.

Fig. 8-169



Adjust the float position as shown, if necessary.