

# EMISSION CONTROL INFORMATION

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### EMISSION CONTROL CARBURETOR COMPONENTS

VL800 motorcycles are equipped with precision, manufactured carburetors for emission level control. These carburetors require special mixture control components and other precision adjustments to function properly.

There are several carburetor mixture control components in each carburetor assembly. Three (3) of these components are machined to much closer tolerances than standard machined carburetor jets. These three (3) particular jets—MAIN JET, NEEDLE JET, PILOT JET—must not be replaced by standard jets. To aid in identifying these three (3) jets a different design of letter and number are used. If replacement of these close tolerance jets becomes necessary, be sure to replace them with the same type close tolerance jets marked as in the examples shown below.

The jet needle is also of special manufacture. Only one clip position is provided on the jet needle. If replacement becomes necessary the jet needle may only be replaced with an equivalent performing replacement component. Suzuki recommends that Genuine Suzuki Parts be utilized whenever possible for the best possible performance and durability.

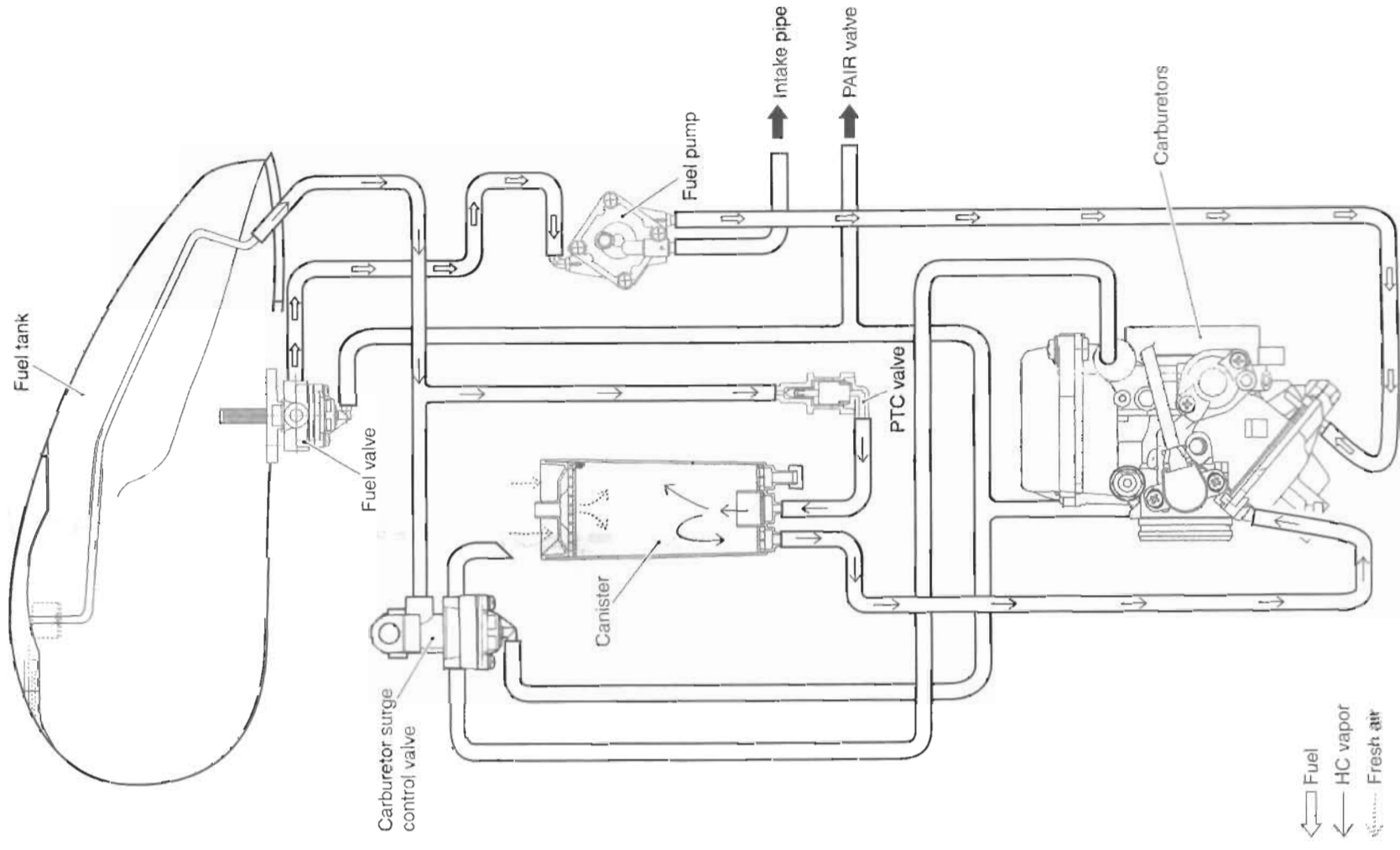
Conventional Figures Used on Standard Tolerance Jet Components

|   |                            |  |  |  |  |
|---|----------------------------|--|--|--|--|
| Emission Type Figures Used on Close Tolerance Jet Components                    | <b>1 2 3 4 5 6 7 8 9 0</b> |  |  |  |  |
| The carburetor specifications for the emission-controlled VL800 are as follows. | <b>1 2 3 4 5 6 7 8 9 0</b> |  |  |  |  |

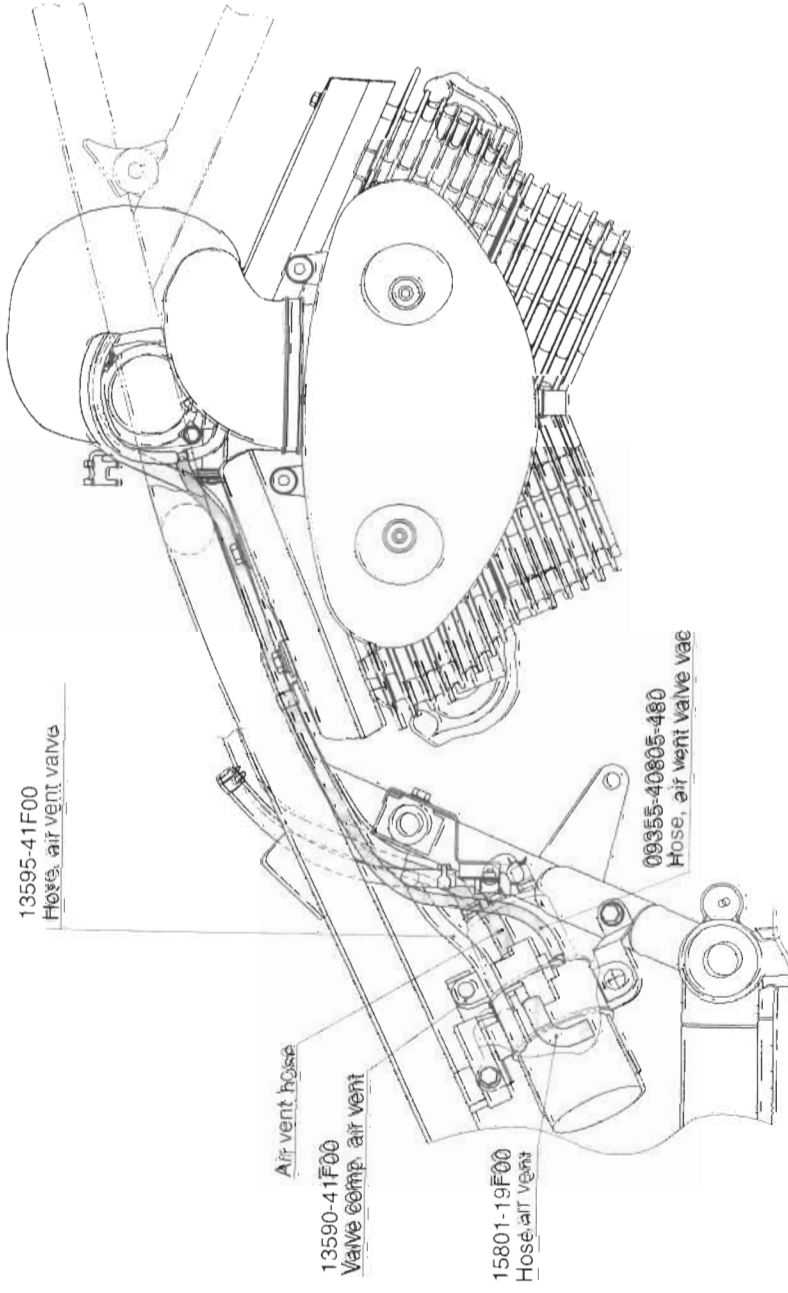
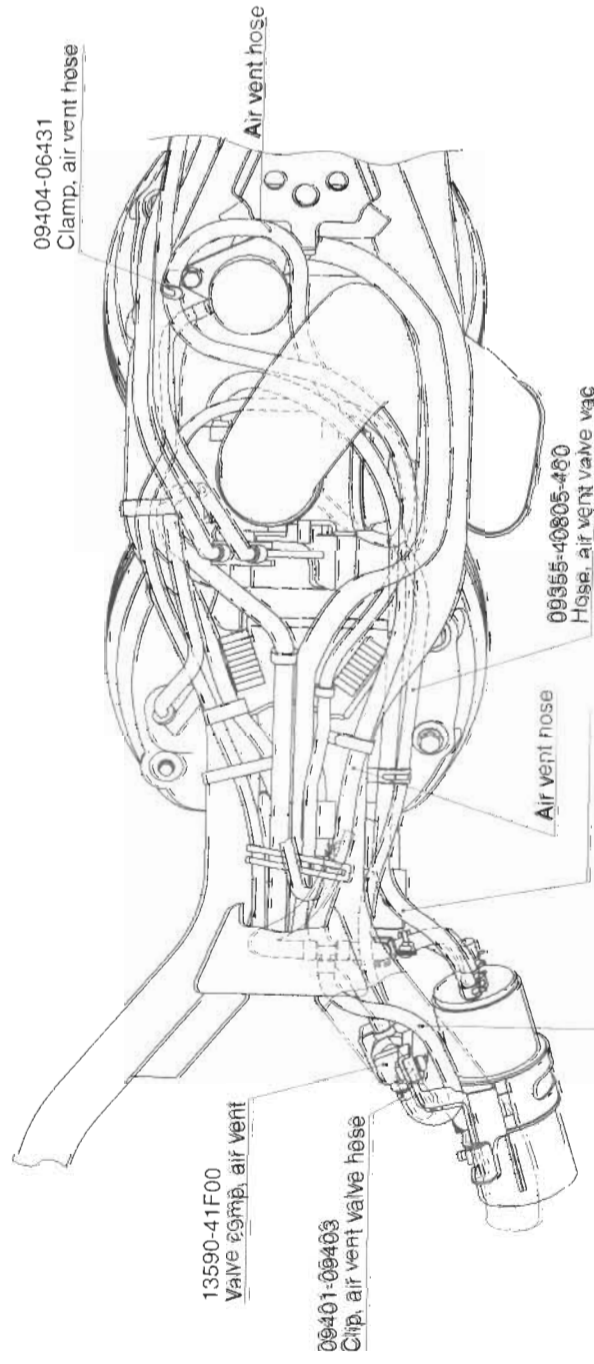
| Carburetor I. D. No.            | Main Jet | Needle Jet | Jet Needle | Pilot Jet | Pilot Screw                 |
|---------------------------------|----------|------------|------------|-----------|-----------------------------|
| 41F3<br>(California model only) | #132.5   | F-DM       | 5E23       | #27.5     | PRE-SET<br>DO NOT<br>ADJUST |
| 41F2                            |          |            |            |           |                             |

Adjusting, interfering with, improper replacement, or resetting of any of the carburetor components may adversely affect carburetor performance and cause the motorcycle to exceed the exhaust emission level limits. If unable to effect repairs, contact the distributors representative for further technical information and assistance.

### EVAPORATIVE EMISSION CONTROL SYSTEM (CALIFORNIA MODEL ONLY)



## CANISTER HOSE ROUTING



## EVAPORATIVE EMISSION CONTROL SYSTEM INSPECTION

## HOSES

- Inspect the hoses and pipes for wear or damage.
- Inspect the hoses and pipes for connection.

## CANISTER

- Inspect the canister for damage of the body.

## CARBURETOR SURGE CONTROL VALVE

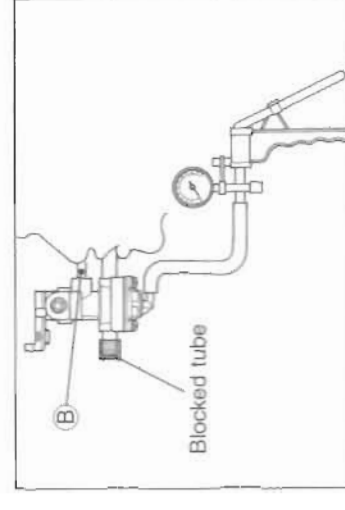
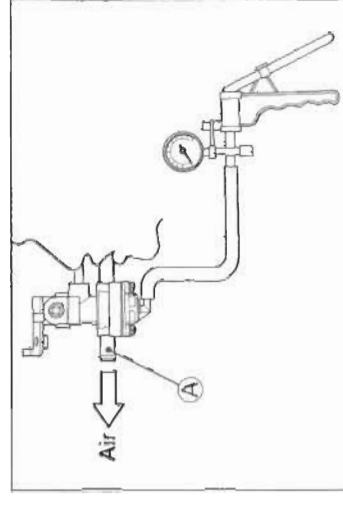
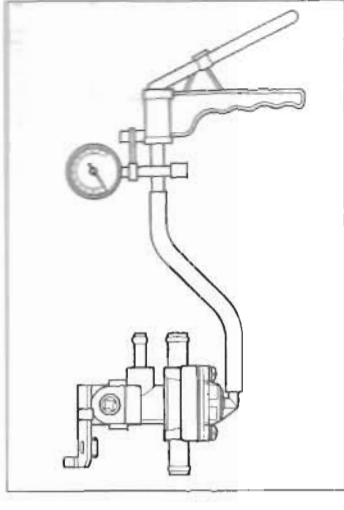
- Remove the carburetor surge control valve.
- Connect the vacuum pump to the vacuum port as shown.
- Apply the specified negative pressure to the carburetor surge control valve.
- The specified negative pressure must be maintained.
- Replace the carburetor surge control valve if negative pressure is not maintained.

**DATA** Negative pressure: 2.7 kPa (20 mm Hg)

**TOOL** 09917-47010: Vacuum pump gauge

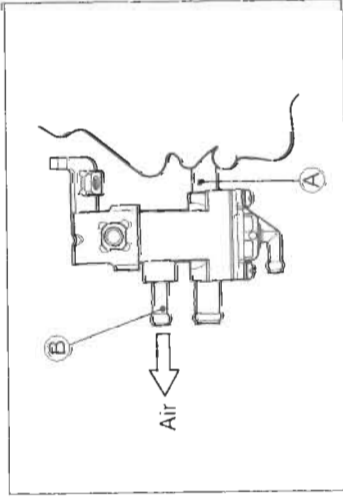
**CAUTION**

Use a hand operated vacuum pump to prevent the control valve damage.

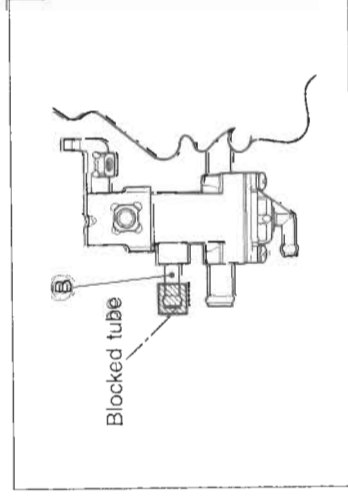


- While applying the specified negative pressure to the carburetor surge control valve vacuum port, blow air through the open air port.
- Air should flow through the carburetor surge control valve and out the air vent port (A).
- Replace the carburetor surge control valve if air does not flow out air vent port (A).
- Plug the air vent port (A).
- While applying the specified negative pressure to the carburetor surge control valve vacuum port, blow air through the open air port.
- Air should not flow through the carburetor surge control valve and out the canister port (B).
- Replace the carburetor surge control valve if air leaks out the canister port (B).

- Remove the vacuum pump and blow air through the air vent port (A).
- Air should flow through the carburetor surge control valve and out the canister port (B).
- Replace the carburetor surge control valve if air does not flow out the canister port (B).



- Plug the canister port (B).
- Air should not flow through the carburetor surge control valve and out the open air port.
- Replace the carburetor surge control valve if air leaks out the open air port.



Prepared by

**SUZUKI MOTOR CORPORATION**

Motorcycle Service Department  
January, 2001  
Part No. 99500-38040-01E  
Printed in Japan