

OUTER VENT SYSTEM

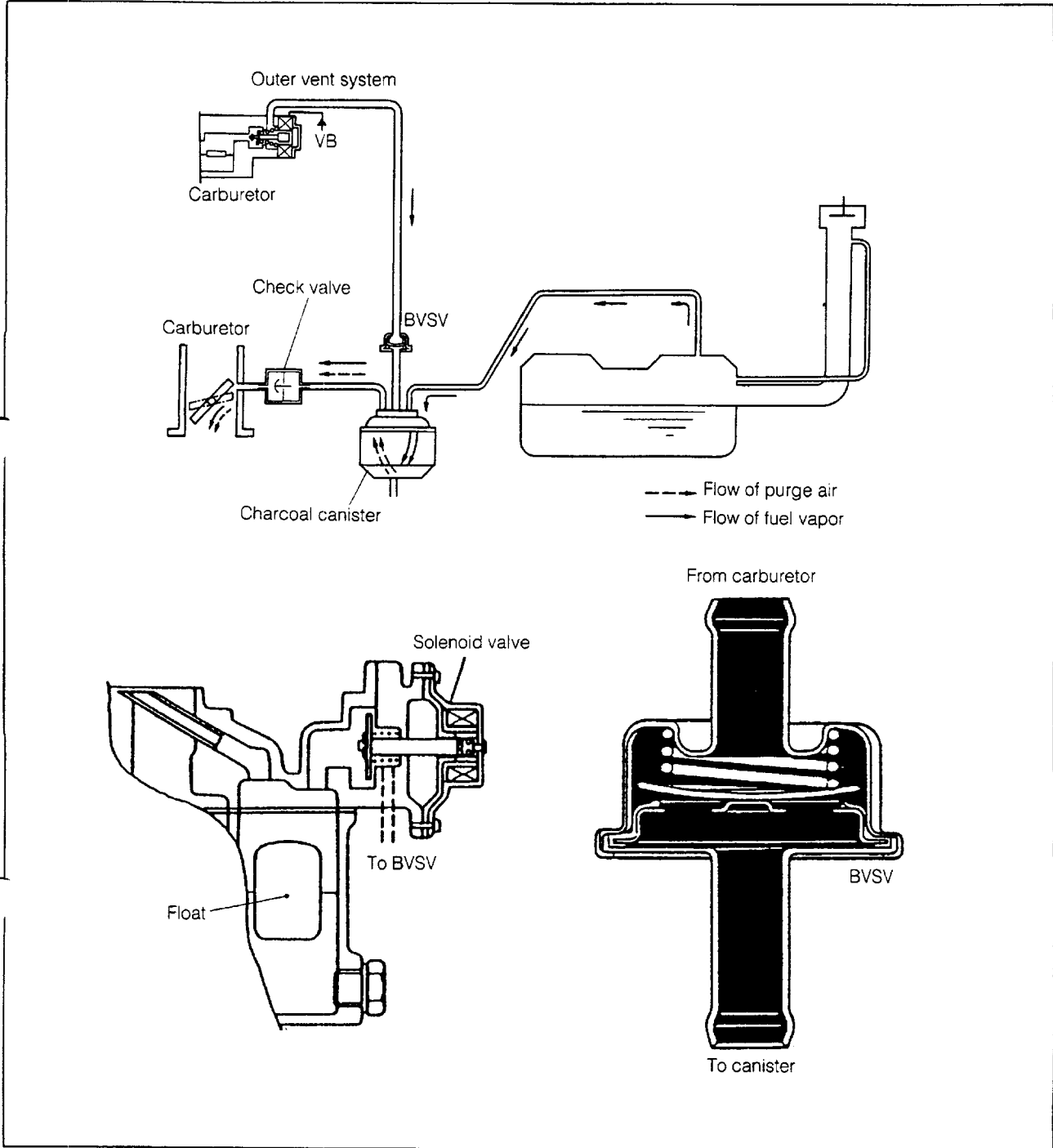


Fig. 12-55

WM-12060

This outer vent system has been adopted on all vehicles having Australian specifications. The system contributes to the reduction of HC emission.

Fuel evaporative emission which is emitted from the float chamber is sucked by means of the charcoal canister while the engine is stopped.

With the engine switch turned OFF, the outer vent opens the passage. As for the BVSV, it opens when the ambient temperature is above 60°C (140°F).

Furthermore, this system has made it easier to restart the engine when the engine is hot.

WM-12061

# EMISSION CONTROL SYSTEM

## UNIT CHECK

### BVSV

To check air continuity, blow your breath into the BVSV from the hose at the carburetor side.

Ambient Temperature

Below 40 °C..... No air continuity exists.

Above 60 °C..... Air continuity exists.

### Outer Vent Valve

With the engine switch turned ON, disconnect the hose of the BVSV at the carburetor. Blow your breath into the hose from the BVSV side. If no air continuity exists during the test above, but air continuity exists when the engine switch is turned OFF, it indicates a satisfactory operation.

Specified Value

Resistance between Terminals: 36 - 38 Ω

#### CAUTION:

Never attempt to suck the hose during the BVSV and outer vent valve checks, for most likely evaporative gasoline may remain in the hose.

### Charcoal Canister

Check the charcoal canister for continuity between ports, as follows:

1. Plug the port ① by your finger.
2. When you blow your breath into the canister through the port ②, there should be no air continuity. Also, when you blow your breath strongly into the canister through the port ③, there should be air continuity.
3. While blowing your breath strongly into the canister through the port ④, perform continuity check of the check valve provided at the ports ② and ③, following the procedure given below:
  - (1) When the port ② is plugged by your finger, air should be discharged from the port ③.
  - (2) When the port ③ is plugged by your finger, air should be discharged from the port ②.
4. When you blow your breath strongly into the canister through the port ④, air should be discharged from the the port ⑤.

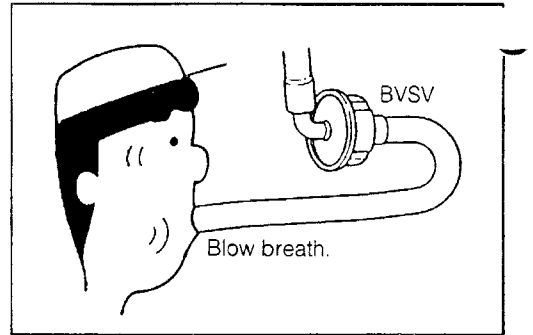


Fig. 12-56

WM-12062

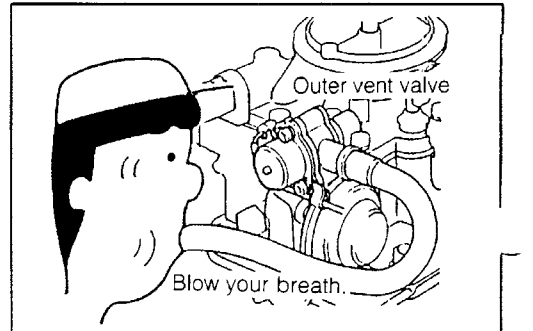


Fig. 12-57

WM-12063

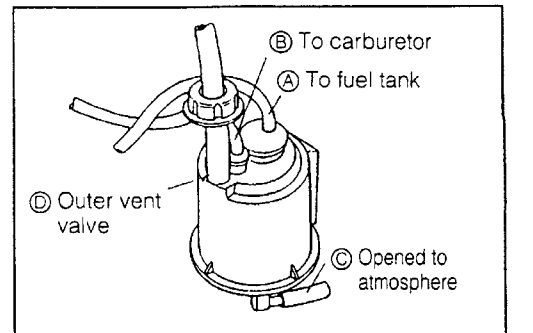


Fig. 12-58

WM-12064

IGNITION TIMING CONTROL SYSTEM CHECK [CB-23 Engine]

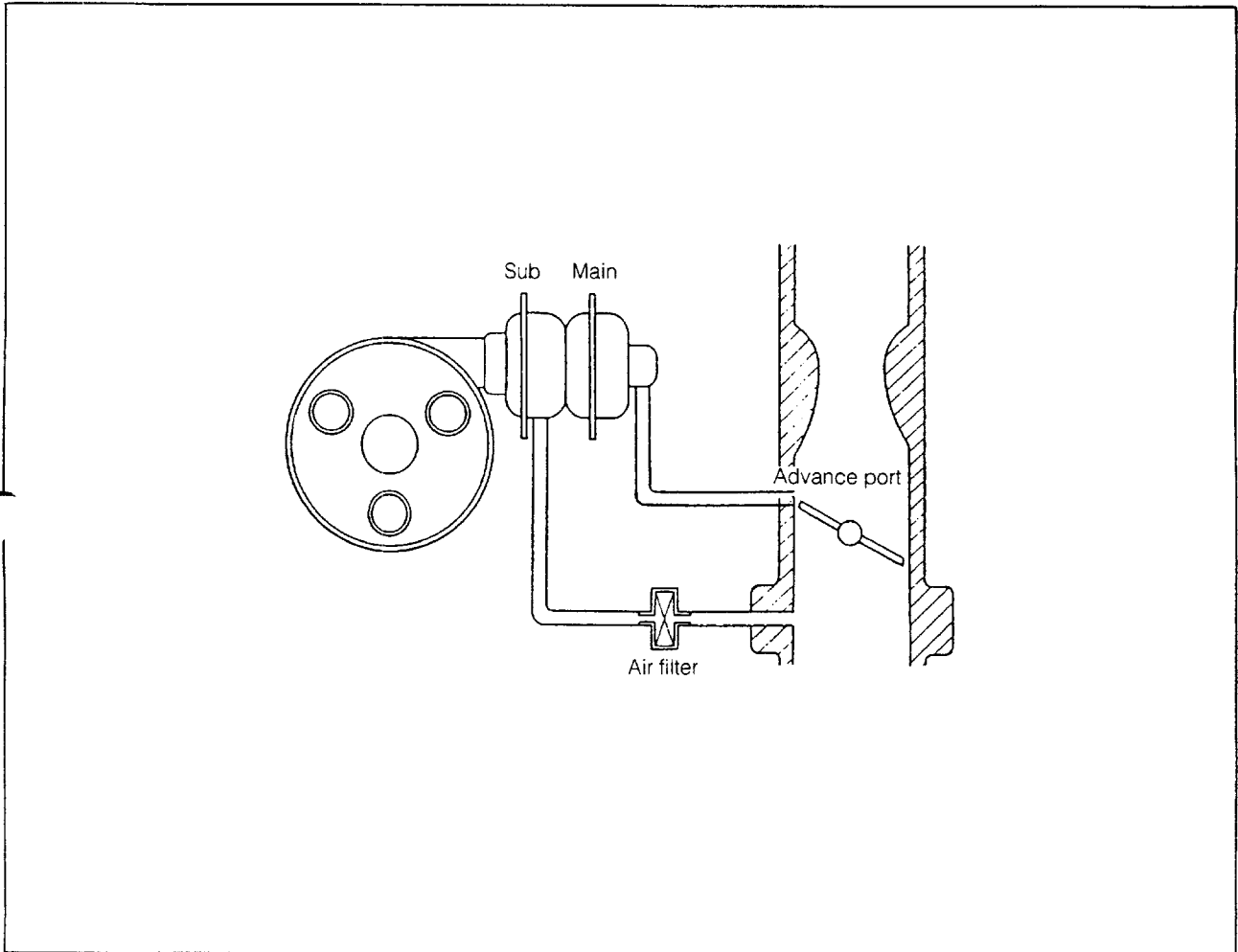


Fig. 12-59

WM-12065

**MAIN SIDE**

1. Connect a vacuum gauge between the main side of the distributor and the carburetor.
2. If the pointer of the vacuum gauge registers 150 mmHg or less during the idling, it means that the system is functioning properly.
3. Increase the engine speed gradually. If the negative pressure in proportion to the throttle opening is registered, it means that the system is functioning properly.

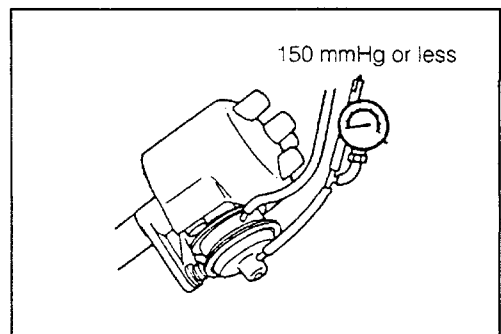


Fig. 12-60

WM-12066

**SUB SIDE**

1. Connect a vacuum gauge between the sub side of the distributor and the four-way joint.
2. If the vacuum gauge registers the manifold negative pressure (450 mmHg or more) during the idling operation, it means that the system is functioning properly.
3. Increase the engine speed gradually. If the negative pressure in proportion to the throttle opening is registered, it means that the system is functioning properly.

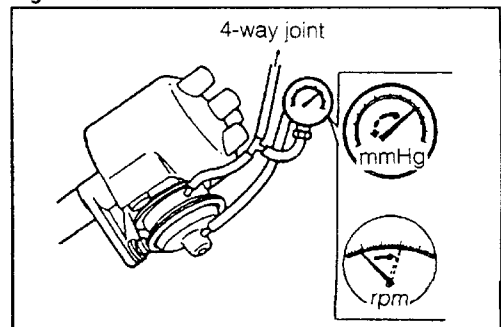


Fig. 12-61

WM-12067

## EMISSION CONTROL SYSTEM

### UNIT CHECK

#### Vacuum Controller

1. Operation Check
  - (1) Connect a MityVac to the main chamber or the sub chamber.
  - (2) If the breaker plate is sucked with the negative pressure applied, it means that the unit is satisfactory.
  - (3) If the breaker plate returns quickly with the negative pressure set to zero, it means that the unit is satisfactory.
2. Diaphragm Air-Tightness Check

If the pointer is stable when a negative pressure of 500 mmHg is applied, the unit is satisfactory.

#### Ignition timing check

1. Disconnect the vacuum hose at the sub side of the distributor. Then, plug the hose.  
SST: 09258-00030-000
2. Check the ignition timing while the engine is idling, using a timing light.  
Initial Ignition Timing: Manual transmission  
 $5^{\circ} \pm 2^{\circ}$ /BTDC  $800 \pm 50$  rpm  
Manual transmission  
 $5^{\circ} \pm 2^{\circ}$ /BTDC  $850 \pm 50$  rpm  
Automatic transmission

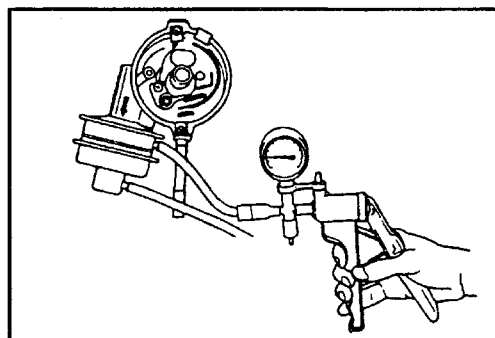


Fig. 12-62

WM-12068

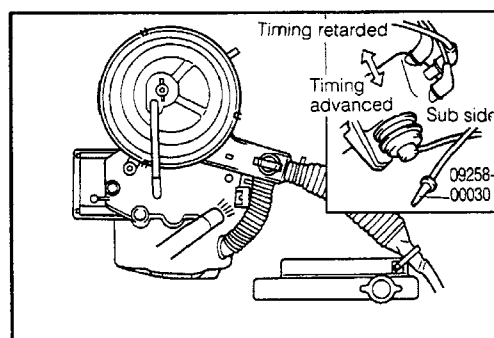


Fig. 12-63

WM-12069

## IGNITION TIMING CONTROL SYSTEM [CB-61 Engine]

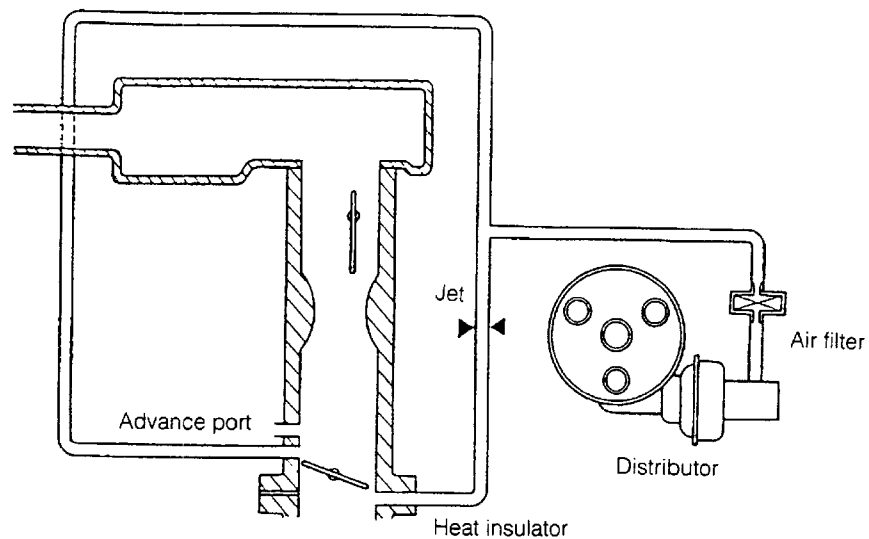


Fig. 12-64

WM-12070

## IGNITION TIMING CONTROL SYSTEM CHECK

1. Connect a vacuum gauge between the vacuum controller of the distributor and the carburetor.
2. If the pointer of the vacuum gauge registers between  $-250$  mmHg and  $-350$  mmHg during the idling, it means that the system is functioning properly.
3. Increase the engine speed gradually. If the negative pressure in proportion to the throttle opening is registered, it means that the system is functioning properly.
4. Disconnect the hose of the vacuum controller and connect the turbocharger pressure gauge into place. Apply a positive pressure up to  $0.5$  kg/cm<sup>2</sup>. If the ignition timing is retarded, it means that the system is functioning properly.

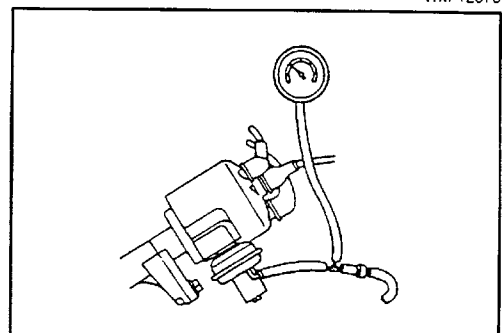


Fig. 12-65

WM-12071

## EMISSION CONTROL SYSTEM

### UNIT CHECK

1. Connect a MityVac or turbocharger pressure gauge to the vacuum controller and apply a negative pressure or positive pressure. If the breaker plate rotates, it means that the unit is functioning properly.
2. If the pointer is stable when a negative pressure of  $-500$  mmHg is applied, it means that the air-tightness is satisfactory.

### CHECK AND ADJUSTMENT OF IGNITION TIMING

1. Disconnect the vacuum hose of the vacuum controller of the distributor. Then, plug the hose.  
SST: 09258-00030-000
2. Check the ignition timing during the idling operation, using a timing light.  
Initial Ignition Timing:  
Ignition timing  
 $10^{\circ} \pm 2^{\circ}/\text{BTDC}$   $800 \pm 50$  rpm

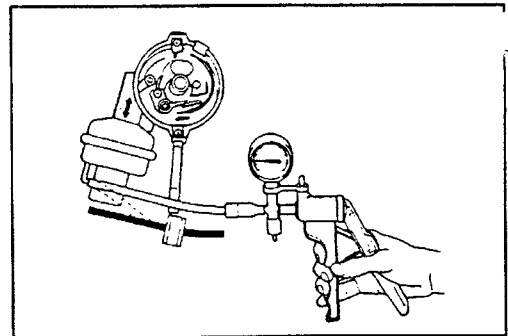
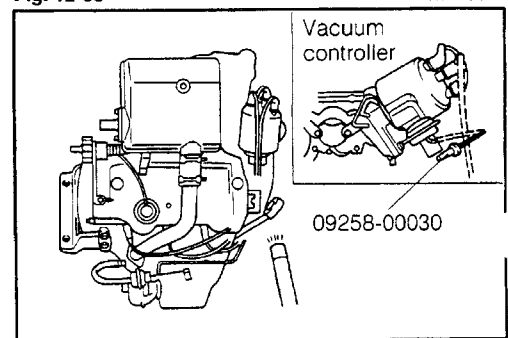


Fig. 12-66

WM-12072



Vacuum controller

09258-00030

WM-12073