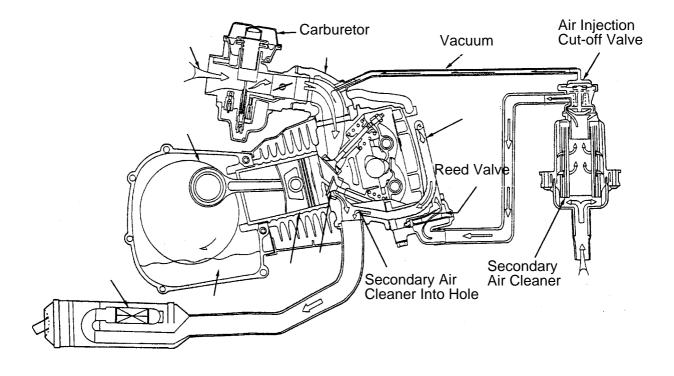




# EXHAUST EMISSION CONTROL SYSTEM

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# SCHEMATIC DRAWING



#### EXHAUST EMISSION CONTROL SYSTEM

The exhaust emission control system adopted in this model utilizes the reed valve to draw secondary air into the exhaust system for re-combustion by means of exhaust pulsation so as to minimize the exhaust emission.

#### FUNCTION

Item	Purpose	Function
Secondary Air Cleaner	Filter secondary air.	It filters the fresh air drawn for re-burning to prevent dirt or dust from affecting the operation of the air injection cut-off valve.
Air Injection Cut- off Valve	Prevent exhaust muffler noise and backfiring at sudden deceleration.	The air injection cut-off valve usually opens to lead air into the exhaust muffler in which air is re-burned to reduce CO. When the throttle valve closes suddenly, the air injection cut-off valve is actuated by vacuum to close and cut off secondary air in order to prevent exhaust muffler backfiring due to air in the exhaust system.
Reed Valve	Control the secondary air inlet to reduce CO.	When the motorcycle speed is less than 50km per hour, the reed valve operates to draw secondary air into the exhaust system for re-combustion.

# 20. EXHAUST EMISSION CONTROL SYSTEM



# TROUBLESHOOTING

# High CO at idle speed

- 1. Damaged or clogged reed valve
- 2. Damaged or clogged air injection cut-off valve
- 3. Clogged air cleaner

# Backfiring at sudden deceleration

- 1. Damaged reed valve (malfunction)
- 2. Faulty air injection cut-off valve (unable to close)
- 3. Carburetor incorrectly adjusted
- 4. Faulty air cut-off valve
- 5. Leaking vacuum tube

# Exhaust muffler noise

- 1. Faulty air injection cut-off valve
- 2. Broken vacuum tube
- 3. Faulty reed valve

#### SERVICE INFORMATION

#### **GENERAL INSTRUCTIONS**

- During operation, be careful to avoid scalding caused by the exhaust muffler.
- Note the locations of tubes for proper installation.
- Replace any damaged tube with a new one.
- Make sure to tighten the connector of each tube securely

# TOOLS

• Vacuum pump

# SPECIFICATIONS

Air injection cut-off valve actuating pressure - 250mm/Hg - 30 liter/min.

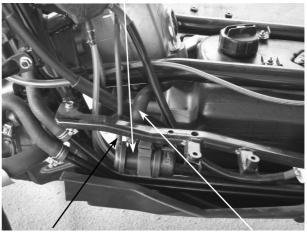
Reed valve stopper clearance - 4.6mm



#### SECONDARY AIR CLEANER / AIR INJECTION CUT-OFF VALVE (A.I.C.V.)

#### REMOVAL

Remove the seat. (⇒2-4) Remove the body cover. Disconnect the secondary air cleaner /(A.I.C.V) connecting tube. Secondary Air Cleaner / A.I.C.V.



Vacuum Tube

Air Outlet Tube

# INSPECTION

Inspect the air injection cut-off valve flow using a vacuum pump. If the flow is not within the specified values, replace with a new one.

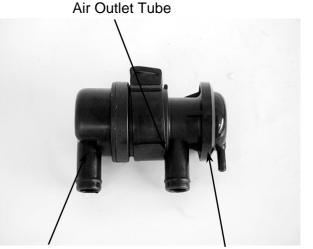
The flow should be at least 30 liter/min when a vacuum of 250mm/Hg is applied. The flow should be at least 1.6 liter/min when a vacuum of 320mm/Hg is applied. Check each connecting tube for cracks or damage and replace if necessary.

# INSTALLATION

The installation sequence is the reverse of removal.

\*

- The secondary air cleaner must be assembled and installed properly to avoid dust entering the air cleaner.
- When installing, be careful not to bend or twist the tubes and check for proper installation.
- The tube length is very important to its performance, use the tube of same specification for replacement.



Air Inlet Tube

Vacuum Tube

# 20. EXHAUST EMISSION CONTROL SYSTEM



#### **REED VALVE**

#### REMOVAL

Remove the frame body cover. Remove the floor-foot cover. Disconnect the secondary air inlet tube connector. Remove the reed valve cover three bolts

and two secondary air outlet tube bolts.

Reed Valve Cover Cylinder Head Cover



Secondary Air Inlet Tube

Remove the three bolts attaching the reed valve cover and the reed valve.



Reed Valve

#### INSPECTION

Check the reed valve for cracks, damage, big clearance or weak reeds. Replace if necessary.

Check the gasket and O-ring for damage or deterioration and replace if necessary. Reed valve stopper clearance: 4.6mm

# INSTALLATION

Install the reed valve in the reverse order of removal.

#### \*

• When installing, be careful not to bend or twist the tubes and check for proper installation.



Reed Stopper

20-4