

# 1974-79 EXHAUST EMISSION SYSTEMS

## Subaru Coasting By-Pass System

### 1977-79 All Models

#### DESCRIPTION

The purpose of this system is to control HC emissions during deceleration. This is done by supplying proper air/fuel mixture through the by-pass opening to maintain suitable combustion. System consists of a vacuum control valve, servo diaphragm, by-pass valve, by-pass jet and by-pass air bleed. See Fig. 1.

#### OPERATION

During coasting, vacuum develops in intake manifold due to closed throttle valve. This vacuum is transmitted to the vacuum control valve which, in turn, opens the poppet valve.

The vacuum reaching the servo diaphragm of the carburetor forces the by-pass valve in the carburetor to open. The by-pass passage connects the air horn with the secondary throttle bore slightly below the secondary throttle valve.

With by-pass valve open, air is admitted to by-pass valve from air horn. At the same time, the by-pass jet and by-pass air bleed allow additional air/fuel mixture to be metered and thus maintain proper fuel supply.

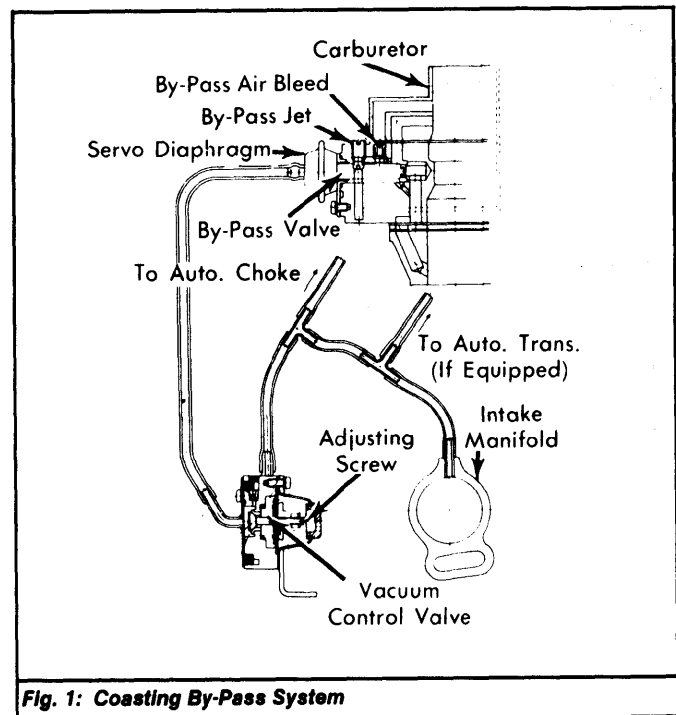


Fig. 1: Coasting By-Pass System