# 11. AUXILIARY ACCELERATION PUMP (AAP) SYSTEM

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## DESCRIPTION

The carburetor has matched for leaner mixture. Thus, when accelerating with cold engine, the main accelerating pump alone is insufficient, and the mixture is being too lean to provide good acceleration. The AAP system compensates for this by forcibly sending the fuel into the accelerating nozzle independent of the accelerating pump to obtain better driving performance.

## OPERATION

### 1. AAP System Operation

["ON" condition]

- At cold engine, the thermostatic vacuum switching valve (TVSV) is open because of the wax inside being contracted.
- When the TVSV is open, the intake manifold vacuum is acting on the AAP diaphragm.
- Thus, the gasoline from the float chamber is drawn into the AAP chamber.

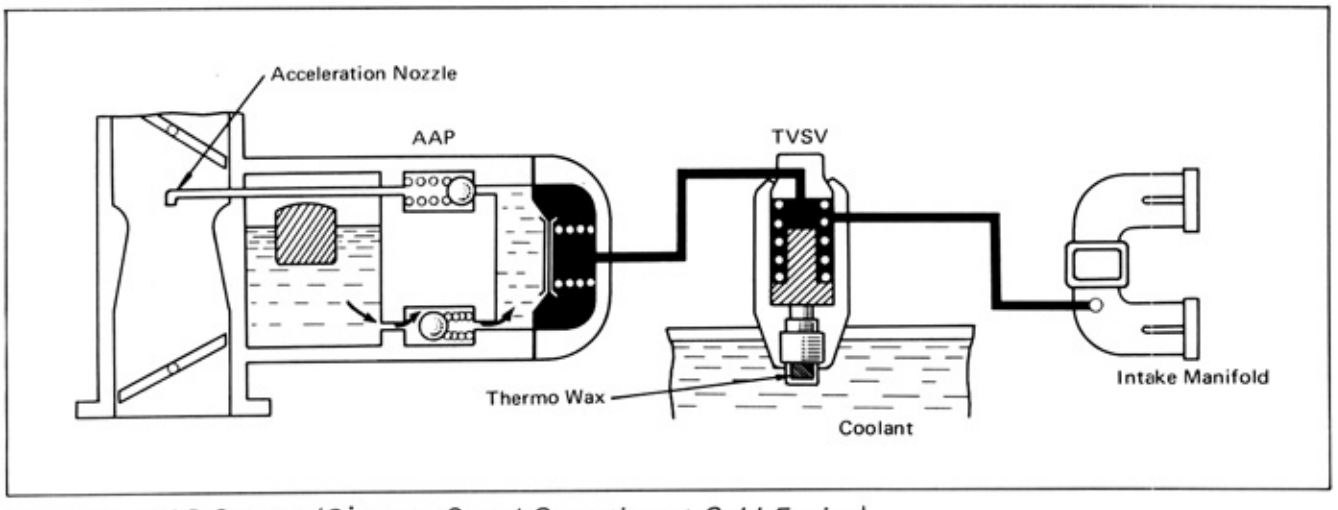



*Fig. 11-1 AAP System (Constant Speed Operation at Cold Engine)*

- When accelerated at the above condition, the intake manifold vacuum becomes smaller and allows the AAP diaphragm to be returned by spring tension.
- Thus, the gasoline in the AAP chamber is forced into the accelerating nozzle.

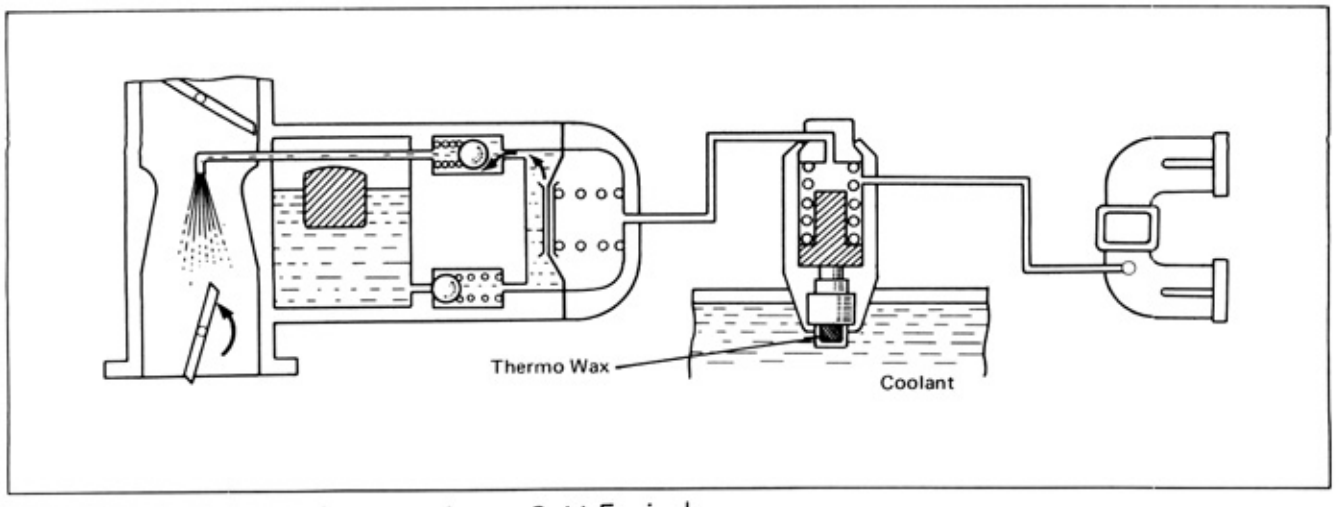
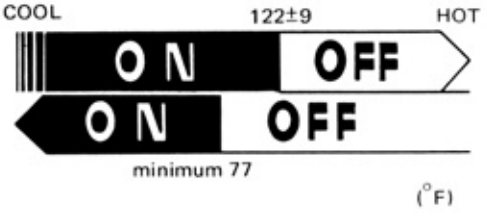



*Fig. 11-2 AAP System (Accelerating at Cold Engine)*

["OFF" condition]

- At warm engine, the TVSV is closed because of the wax expanding.
- Thus, the AAP system will not operate.

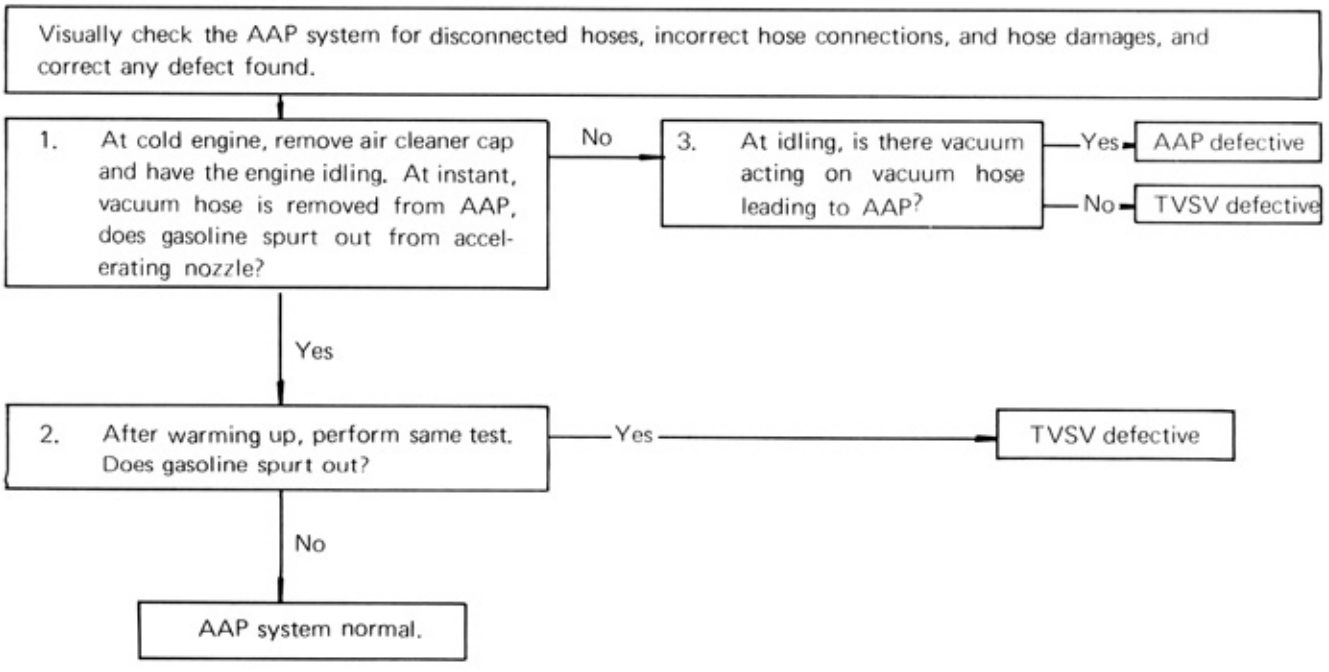
**2. TVSV "ON" and "OFF" ranges**

| 2T-C Engine | Except for 2T-C Engine |
|---|---|
|  |  |

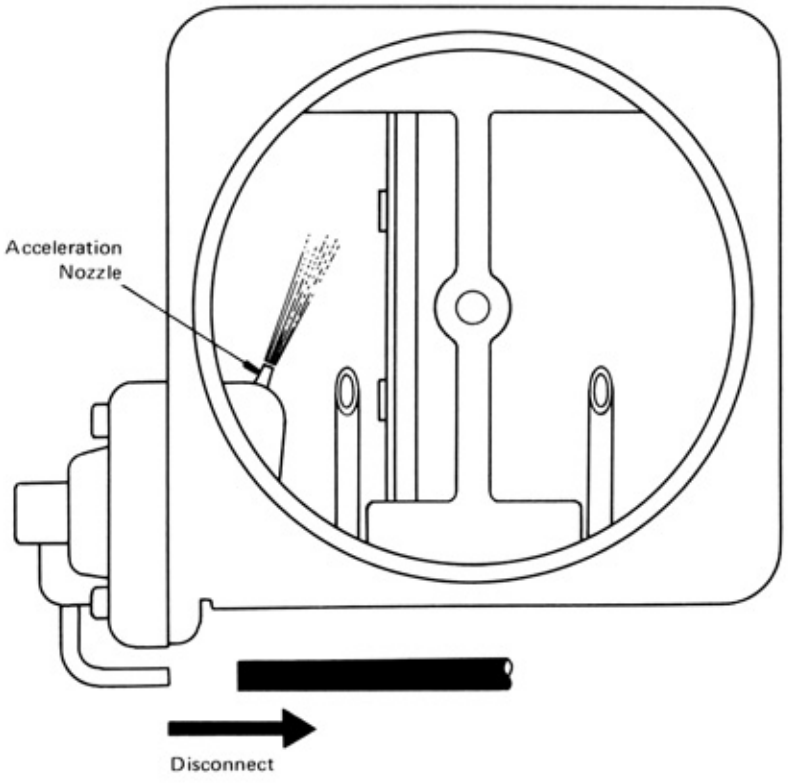




## AAP SYSTEM INSPECTION PROCEDURE



(1) Coolant Temp. below 110°F (2T-C)
below 75°F (Except 2T-C)

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