

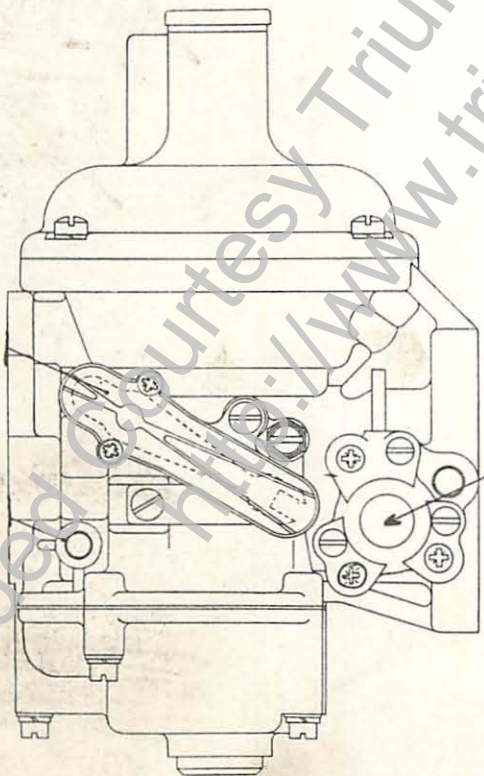
ZENITH STROMBERG CARBURETORS

Throttle By-Pass Valves

Problem Diagnosis

Dirt on the seat or valve face of the throttle by-pass valve will prevent complete closure of the valve and cause a high idle speed condition. It should be stressed that before attempting any servicing of the throttle by-pass valve, the general state of tune of the engine should be determined. Remember that ignition timing, for example, has a marked effect on the vacuum conditions of a particular engine and could, in fact, be the cause of the throttle by-pass valve being held off its seat and giving the high idle condition.

If it has been determined that the engine tune is in a satisfactory state and the by-pass valve is definitely suspect, it should be removed for cleaning and servicing.



By-Pass Valve

NOTE: The three slotted screws secure the unit to the carburetor.

The three POZIDRIV screws hold the assembly together.

Figure 1

Cleaning and Servicing the Throttle By-Pass Valve

Remove the by-pass valve, dismantle and thoroughly clean. Remove brass blanking washer so that adjusting screw will be exposed for final adjustments on vehicle. Reassemble valve as detailed in Figure 2.

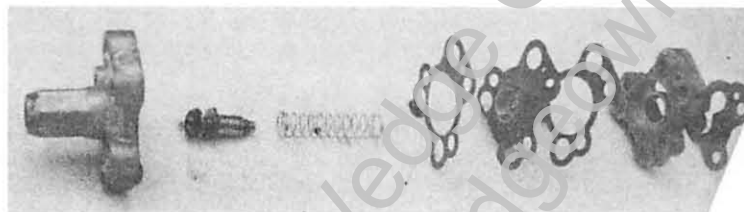


Figure 2

On later 1973 vehicles the throttle by-pass adjusting screw will not be blanked off with a washer, but will be secured by a spring clip. It will not be necessary to remove the spring clip when turning the adjusting screw.

Adjustment

With engine running at normal R.P.M., screw the by-pass valve adjusting screw clockwise until the engine speed increases abruptly (approximately 1500 R.P.M.). This indicates that the valve is floating on its seat. Turn the adjustment screw counter-clockwise until the engine just returns to normal idle. Open the throttle suddenly to increase engine speed and immediately return to normal. There should be a slight delay in the engine speed drop; approximately three seconds. If the engine fails to return to idle at this time, then the valve is still floating and it will be necessary to turn the adjustment screw counter-clockwise to further tension the spring. When these conditions have been achieved, turn the by-pass valve adjusting screw further half a turn counter-clockwise and leave at this setting. In the case of twin carburetor installations, repeat the operation on the remaining carburetor.

NOTE: In twin or multi carburetor installations when both by-pass valves have been removed for cleaning, it will be necessary to over-tension the spring by turning the adjusting screw counter-clockwise on one carburetor. You will then be able to adjust the remaining by-pass valve in accordance with the adjustment sequence. Finally, repeat the adjustment operation on the original carburetor.