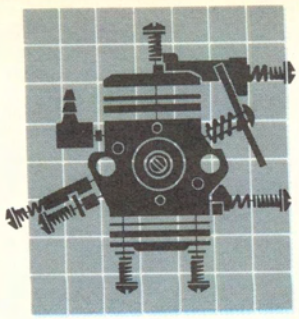

IdleTalk

A quarterly update on news & views of industry interest.

July 6, 1988

In past IDLE TALK issues, we have discussed various engine/carburetor related performance problems, many of which can often be misdiagnosed as strictly carburetion. Another area that deserves attention is the metering lever assembly.

Before we explain potential problems, let's try and understand the function of this part of the carburetor. The metering lever assembly is made up of the metering lever, a spring and the inlet needle. As our 12-page service manual (E-2013) explains, the engine's manifold vacuum will lower the pressure on the wet side of the metering chamber by drawing fuel into the engine. The atmospheric pressure on the dry side allows the metering diaphragm to lower and contact the metering lever. This action causes the metering lever to override the metering spring, lift the inlet needle off the seat, and allow fuel to flow from the fuel pump into the metering chamber to replace what the engine is using.

Now that we understand the basic operation of the metering assembly, let's look at metering lever adjustment problems. If for any reason, the lever is set higher than specified, the diaphragm will make contact with the lever and feed fuel earlier than the carburetor requires. This can be seen as a rich condition at idle or wide open throttle and may result in poor acceleration. If the lever is set lower than required, the diaphragm must travel farther in order to contact the lever and actuate it. This can be seen as a lean or fuel starvation condition. You will see it most as a poor acceleration or lean idle condition. Many times this rich or lean condition can be overcome by raising or lowering the metering lever.

Carburetor Group

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