

SU Carburetors Revisited

by Richard Wood

This is not a technical thesis on the SU carburetor, rather an attempt to supply some basic "no frills know-how" to help you regain a speaking relationship with your MG. Some of the more common problems...

LEAKING (*Applies only to H types, not the HS or HIF models*)

Leaks usually occur where they can drip fuel on the hot exhaust system, making a full restoration imminent. Weekly checks should be made to see that all unions and fittings are tightened fully. If you have replaced your jet seals and installed a new jet, but you still have a leak from the jet carrier area, the jet itself could be the problem. The new jets have the yoke secured to the tube by a square headed bolt and sometimes this is not tightened fully at the factory. Hold the tube by putting an awl or a nail through the hole halfway down the jet tube and tighten the yoke with an adjustable wrench. Also, when replacing jet seals, make sure there are no old seals stuck in the bottom of the jet carrier.

SPITTING (*A filthy habit - Major League Baseball notwithstanding.*)

Spitting back usually occurs when opening the throttle. The first check is to make sure the damper is filled to the correct level with engine oil. This often-overlooked aspect of maintenance should be done at least once a month. If the dashpots have adequate oil, spitting generally indicates too lean a setting. Turn the jet nuts down a few flats to richen the mixture. If this ruins your idle it's time for...

ADJUSTING THE BEASTS!

First, check each throttle shaft where it enters the body. If you can wiggle them sideways appreciably, they must be replaced before you can hope to adjust the carbs. If they are quite firm, take your trusty Uni-Syn, loosen the clamp that connects the two shafts, balance the idle speed air flow of both carbs and retighten the clamp. (*Make sure there are no leaks where the carb bolts to the manifold or between the manifold and the head.*) Next, check the mixture by lifting the piston about 1/8". If the mixture is correct the engine should speed up then falter. If it stalls the mixture is too lean; if the revs go up and stay there, it is too rich. Adjust by turning the jet nut up (*to weaken*) or down (*to richen*). Set both carbs to optimum position, then recheck the balance and idle speed with your Uni-Syn. With the engine off, you should also check that both pistons rise all the way without sticking. (*Remove the dashpot dampers before you check this action.*) If they don't, then remove the dashpot and clean the insides carefully, as well as the perimeter of the piston. **DO NOT USE ANYTHING ABRASIVE!** Do one carb at a time so that you don't

mix the pistons and dashpots. Take care not to bend the needles. If the piston does not fall with a solid "click" your jet probably needs centering (*fixed needle carbs only*). Remember to refill the dashpot with oil and tighten the damper after exercise.

A FINAL WORD OF ADVICE

The problem with your SU carburetors is often your Lucas distributor! In other words, before messing around with any of the foregoing adjustments, make sure your plugs and points are clean and gapped properly, your cap and rotor are in good condition, your wires are not corroded at their ends, and your timing is correct. It doesn't hurt to adjust the valve clearances either, as wrong valve clearances will never allow you to set your carbs up properly.

(Courtesy of MGB Driver)