

FIG. 1

No. 277584 — Air Silencer Assembly — RD-17 through RD-18 Series.

Assembly of the above air silencer and attachment to the carburetor are operations which must be performed with special care — misalignment or “overhanging” of the gasket between the silencer and carburetor must be avoided. The large hole in the gasket must align “precisely” with the corresponding throat walls of the silencer. Figure 1.

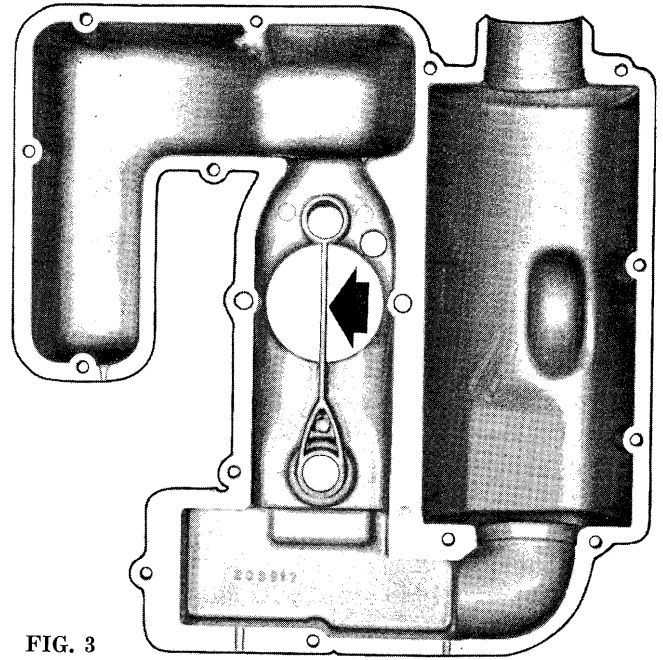


FIG. 3

minimize the possibility of a situation of this sort developing, coat the gasket face of the silencer with cement — place gasket (correctly aligned) in position to secure. Carefully attach assembly to the carburetor.

Similarly, on disassembly and re-assembly of the silencer sections (halves), the center “rib” in each section (indicated by arrows, Figures 1, 2 and 3) must be “lined up” — flush on both sides to avoid formation of eddy currents and resultant faulty carburetion.

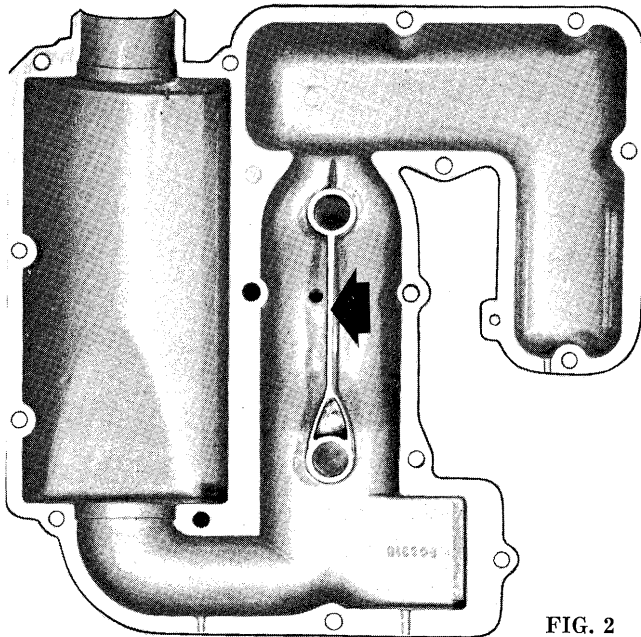


FIG. 2

In the event of misalignment in this respect or “overhanging,” small eddy currents build up to interfere with normal air flow through the carburetor resulting in faulty fuel distribution (one cylinder running richer than the other). To mini-

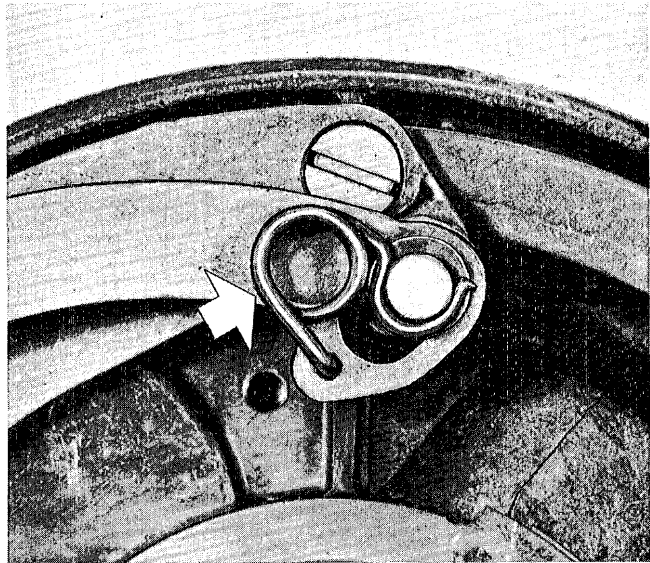
NOTES



FUEL SAVER CONTROL RD-18 UP, RX AND RK — ADJUSTMENT

In principle, the fuel saver arrangement as installed on all RD-18's and the Javelin is of extremely simple construction — accomplished through a series linkage between the armature plate and carburetor shutter. Carburetor and spark control are synchronized as usual — but not "all the way" so to speak. That is, at full "fast" position, spark is fully advanced with full open carburetor shutter. But, it will be noted on observation, when "twisting" the speed control grip towards slow or retarded speed, the carburetor shutter partially closes before position of the spark (timing) has been affected.

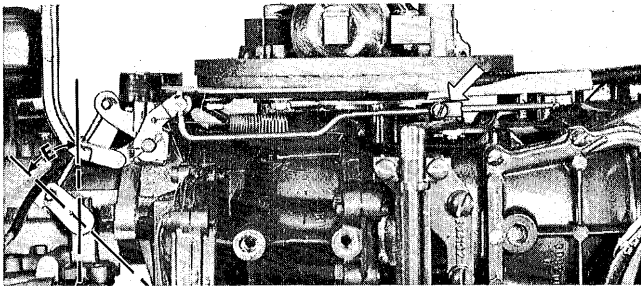
In the higher speed ranges, it is possible to "cut" the carburetor control back a bit without changing degree of spark advance and causing but a slightly perceptible drop in RPM's — not enough to materially affect over-all performance of the unit — fuel saving. Actual control of the carburetor shutter then is governed by position of a small collar ("A") (secured with screw) on the synchronizing or fuel saver linkage ("B") as illustrated below.



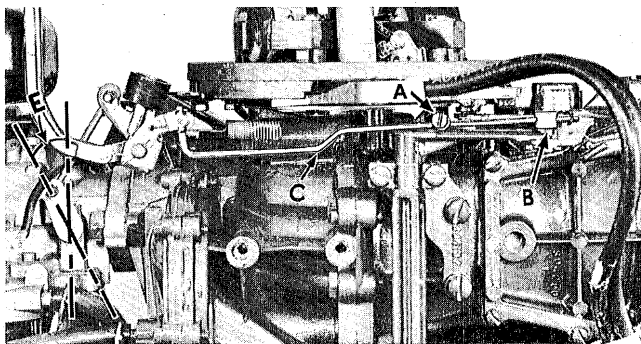
It may be noted in some instances that full spark advance has not been achieved when setting the speed control (grip on lever) to full "Fast" position — this, due to slack in control linkage (shown here) not being fully taken up by spring #304220 as it should.

The original spring #304220 has consequently been cancelled and replaced with one of "stiffer" tension — to obtain full spark advance at full throttle setting.

To be assured of full spark advance at full throttle, stop bracket (indicated by arrow in the illustration) should come to rest against the boss cast on to the cylinder block. In event the bracket must be further advanced to gain contact or new contact in this respect, simply replace spring #304220 with the "stiffer" spring #304656.

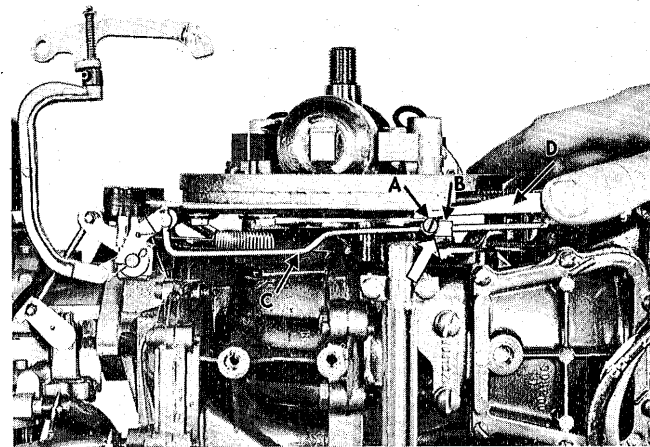


Showing Fuel Saver linkage arrangement — Spark at full advance, throttle (carburetor shutter) at full open. Note angle "E" — shutter opening.



Showing Fuel Saver linkage set in fuel saving range — Spark at full advance, throttle (carburetor shutter) slightly closed to reduce volume of fuel vapor entering the crankcase. Note angle "E" — shutter opening.

Possible fuel saving in this respect, of course, is largely dependent on loading conditions at the moment, hull design and other inherent characteristics of the particular craft.



To adjust Fuel Saver linkage, (1) Set speed control grip to "fast" position (shift lever in forward); (2) To assure maximum spark advance, make certain armature plate bracket "D" comes to rest firmly against crankcase boss "F" by exerting thumb pressure as above; (3) Slide collar "A" up on link "C" until it rests firmly against pivot pin "B". Secure in this position by drawing up lightly on the lock screw.