AVIATION TECHNICAL BULLETIN

Champion Spark Plug Company
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ROUTE TO	
SERVICE MANAGER	
SALES MANAGER	
BULLETIN BOARD	

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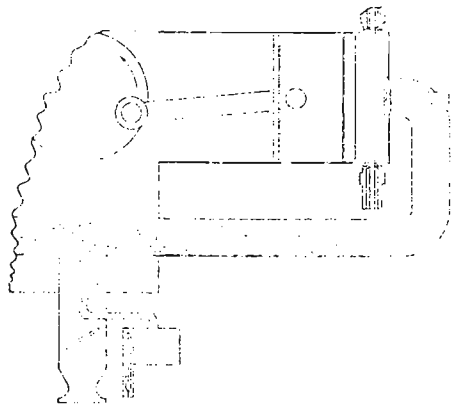
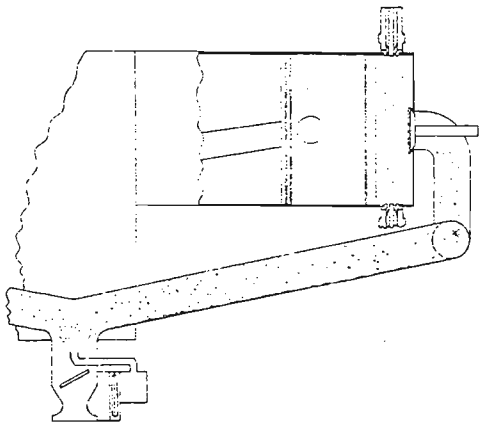
HELP PREVENT LEAD FOULING

The schematics of the intake manifold are illustrating what is happening when the fuel mixture is too rich. The heavy ends of the fuel that contain tetra ethyl lead (T.E.L.) revert back to a solid once they come in contact with a cold manifold. These lead globules build up, and eventually work their way into the cylinder and find their way to the spark plug, causing the spark plug to foul.





Now, what can be done?

Above all, ALWAYS follow the Instructions in the Operator's Manual.

1. Monitor fuel mixture settings constantly.
   Proper leaning not only eliminates excess fuel that cause spark plug lead fouling, but improves fuel economy.
2. Maintain proper operating temperatures.
   Correct operating temperatures improves fuel distribution. The warm intake manifold aids fuel vaporization.
3. Power-on Landings.
   Rather than closing the throttle, use other methods to drop air speed to loose altitude. Power-on landings prevent rapid temperature drop, retaining the advantage of proper operating temperatures.
4. Swap top spark plugs with bottom spark plugs.
   Swapping plug position at mid-spark plug servicing periods (50 hrs.), will prevent an excessive lead build-up.
5. Keep ground operation to a minimum.
6. Maintain and monitor idle mixture settings.
7. ALWAYS FOLLOW THE INSTRUCTIONS IN THE OPERATOR'S MANUAL.

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