



AVIATION TECHNICAL BULLETIN

Champion Spark Plug Company

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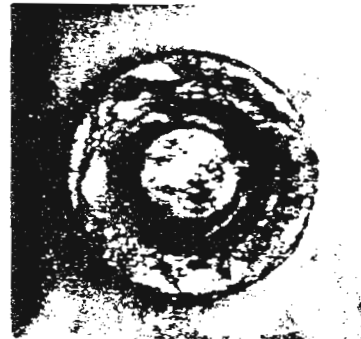
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IF IT LOOKS DIRTY, LEAVE IT ALONE!

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Unusual advice it is true, but it is absolutely true where certain types of igniters are concerned.



Typical Surface Gap Igniter

Typical igniters that should be left AS IS

Champion igniter types:

FHE19-6H & 6L	FHE146-7	FHE163
FHE24-10	FHE151	FHE176
FHE119	FHE161	FHE179

depend on the shorting between the electrodes in order to fire correctly. Known as Low Voltage Semi-Conductor designs, they employ at the firing ends a special coating or material that is a partial conductor of electricity. The initial electrical charge to the center electrode leaks across the gap and ionizes the surface of the semi-conductor material. Electrically, this permits a larger gap between the electrodes thereby resulting in a higher voltage energy release across the gap. Jet engine fuels, e.g. kerosene, with their heavy ends require a much bigger spark to kindle and sustain combustion.

CLEANING OF THE FIRING-END OF THESE IGNITERS BY EITHER ABRASIVE CLEANING OR WIRE BRUSHING WILL REMOVE THE SEMI-CONDUCTOR MATERIAL SO THAT THE IGNITER WILL NOT FIRE AS INTENDED.

First choice for dependable engine performance.