



AVIATION TECHNICAL BULLETIN

Champion Spark Plug Company

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ROUTE TO	
SERVICE MANAGER	
SALES MANAGER	
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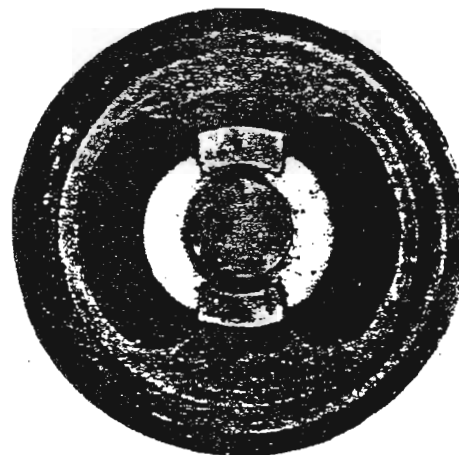
NO. 72-8

USED SPARK PLUGS BETTER THAN NEW? NEVER!

Used



New



There are circumstances where a used spark plug will fire an excessively lean fuel charge where the installation of a new spark plug will cause engine roughness.

Why? The following is a good example.

The carbureted engine that has a leaking intake pipe near the cylinder connection, which was not noticed during inspection -- this condition allows non-metered air to enter the combustion chamber, thus causing a very lean mixture and possible eventual engine damage. The large gap (.022 - .025) of the used spark plug gives a much greater intense spark that is sufficient to light the lean charge. Whereas the new spark plug with the nominal gap of .016 does not produce enough energy to sustain the abnormal fuel charge.

This condition would be more prevalent at low powers due to the greater pressure differential (atmospheric pressure versus intake manifold pressure). Fuel-injected, supercharged, and turbocharged engines will react similarly to an intake leak also, but to a lesser degree.

NEW SPARK PLUGS ARE ALWAYS LESS EXPENSIVE THAN TROUBLE!

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