



AVIATION TECHNICAL BULLETIN

Champion Spark Plug Company

P. O. BOX 910, TOLEDO, OHIO 43601

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SPARK PLUG TESTING - WHY AND HOW

Let's be realistic about this testing and ask ourselves, *"What do we really want to know about the spark plug we are testing?"* Actually all we are trying to determine is that the spark plug insulation value is sufficient to allow the spark plug to spark across the electrodes under simulated operating conditions without shorting either in the shielding barrel, across the core nose, or internally.

If properly done, pressure or "bomb" testing can assure you that the spark plugs will perform satisfactorily when installed in an engine.

With the various types of spark plugs and testing equipment in use today, there seems to be some question as to just what is the correct testing procedure for each plug type.

If a spark plug gapped at .016 in. sparks steadily at 110 psi or over or if gapped at .019 in. at 90 psi or over, then the plugs will fire satisfactorily in an engine. These test pressures are greater than those that a plug will normally be subjected to in an aircraft engine at the time of ignition.

Check gaps using only a round wire type feeler gauge such as the Champion CT-450 Gap Gauge.

If your testing unit has not been serviced recently, we suggest that you consult the operating manual for instructions on adjusting the coil for maximum voltage output.

first choice for dependable engine performance