AIRCRAFT SPARK PLUGS tell a story...

Spark plug electrodes tell a story of normal engine performance and provide clues to increased risk of operational failure.

For proper spark plug and engine diagnosis:
After removing the plug, look at each electrode and compare it with the data shown on the chart.

**NORMAL**
Indicates proper service interval and correct operating temperature. Brownish-gray deposits and slight electrode wear normal.
- Replacement not necessary.
- Clean, regap and test before installing.

**WORN OUT (NORMAL)**
Indicates normal wear and erosion. Ground electrodes about half original thickness, centre electrode wear normal.
- Replacement necessary.

**WORN OUT (SEVERE)**
Excessively eroded center and ground electrodes indicate improper air fuel mix. Check fuel metering or use of plugs beyond proper service interval.
- Replacement necessary.

**LEAD FOULED**
Heavy lead fouled: Very hard lead residue left from cold operating temperature, high lead-content fuel or poor fuel vaporization. Appearance of greenish deposits.
- Replacement necessary.

Light lead fouled: (1) Clean and regap; (2) check engine manufacturer’s service manual for proper heat range; (3) refer to engine manufacturer’s publications on proper engine operation to prevent lead fouling.

**CARBON FOULED**
Dry, fluffy carbon deposits caused by excessive ground idling, an over-rich idle mixture or wrong application (plug type too cold).
- If correct plug is being used, clean, regap, test and reinstall.

**OIL FOULED**
Black, wet and oily. Indicates possible engine damage such as broken or worn piston rings, excessive valve guide clearances or a leaking impeller seal. Normal engine break-in will also cause this condition.
- Repair engine if needed. Clean, regap, test and reinstall spark plugs.

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