

ENGINEERING NOTICE			
TO	All AMO Personnel	ISSUE NO	GAM/EN/23/01
COMPLIANCE	Immediate Effect	ISSUE DATE	17 TH April 2023
SUBJECT	Misinterpretation Of Maintenance Manual		

Background

A spark igniter was taken out during a routine maintenance check that called for an engine turbine wash so that a spray nozzle could be installed for the intended purpose. According to EMM 74.20.00 para. 7 (see figures 1 and 2), the removed spark igniter had the chance to undergo a visual inspection. A misinterpretation of the EMM led to the igniter being rejected, and as a result, CAMO sent out a work order to all AW139 fleets covered by GAM contracts instructing them to inspect the spark igniter during the next available scheduled maintenance opportunity.

Applicability

All GAM AMO personnel are subject to the notice below. It is crucial that all personnel are aware of this notice and abide by its instructions. Failure to follow these instructions may result in the needless replacement of components and the unintentional grounding of an aircraft.

Compliance

To avoid unjustified or unnecessary part replacement, the first rule is to confirm that the Maintenance Manual has been accurately interpreted.

Engineering personnel should formally consult the OEM or hold a small-group discussion with other engineers if they are unsure. Before deciding to reject any parts from service, the group should consult with an experienced LAE and the approved data for clarity. This is essential to make sure that the right decisions are made and that the relevant measures are taken because removing parts from service without the proper justification could lead to extra costs and safety risks, which could cause an aircraft to be grounded.

7. Inspection/Check

A. Inspection of Spark Igniters (Ref. Fig. 202)

- (1) Examine exterior cylindrical area of firing end of igniter shell for chafing wear. Wear is acceptable to a depth of 0.015 inch.
- (2) Examine the igniter shell and electrode for erosion (Ref. Dim. A). If the dimension of the erosion is equal to or more than 0.300 inch or if there are cracks in the ceramics, reject the spark igniter.
- (3) Check air cooling holes are clear and unobstructed.
- (4) Test acceptable and replacement spark igniters (Ref. 74-20-00, ADJUSTMENT/TEST).

B. Inspection of Ignition Cables

- (1) Inspect cables for signs of damage to braiding and general condition.
NOTE: Damaged outer braiding may cause an increase in EMI emission levels.
- (2) Inspect cable coupling nuts for corrosion.
- (3) Inspect central conductor and insulation for cracks, contamination, pitting and burning.
NOTE: Evidence of burning and heat damage on the central conductor mating with the igniter may be the result of a faulty igniter.
- (4) Use an igniter or a retention tool (Ref. Table 201) to do the retention test on the igniter end of the cable only:
 - (a) Connect contact with the igniter or tool.
 - (b) Contact must hold a 0.125 lb. weight.
 - (c) If contact does not hold weight, ship cable to an authorized repair shop for inner cable replacement.

Figure 1

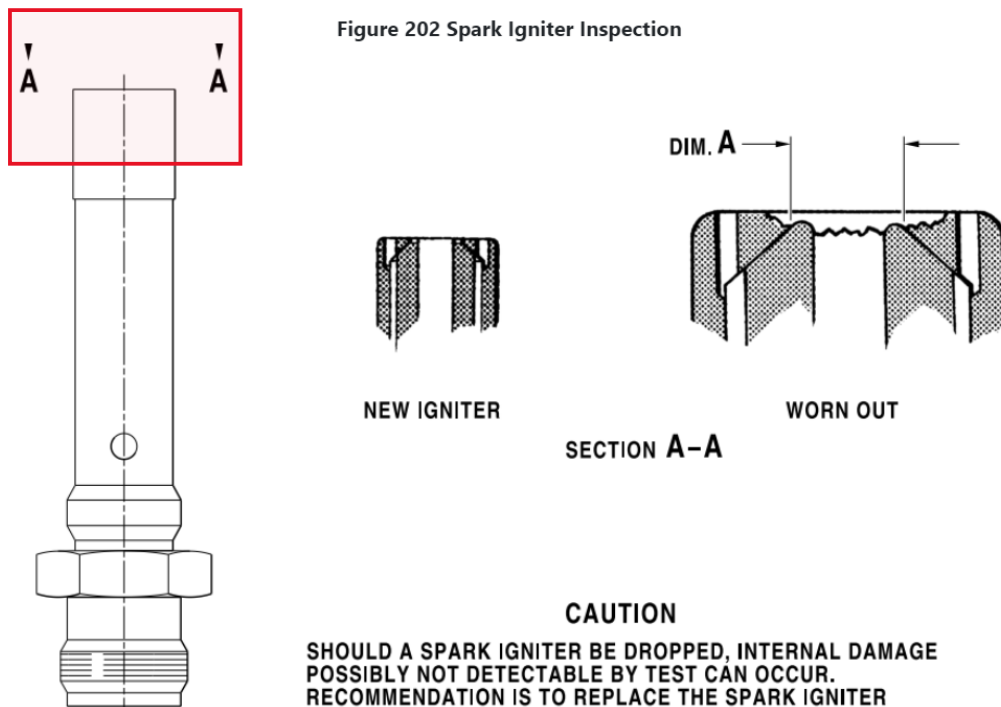


Figure 2



Spark Igniter (Firing End)



Spark Igniter (Cable End)

The rejection was based on the presumption that the ceramic at the cable end of the igniter was cracked, which wasn't the ceramic mentioned in the maintenance manual.