

CHAPTER

74

IGNITION

Pratt & Whitney
JT12 OVERHAUL MANUAL (PN 435108)

IGNITION
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The List of Effective Pages records not only each page of subject revision but also each previously issued page which is still current. Blank pages and pages which are no longer current do not appear on this list. If there is any question about the currency of the maintained copy, it is recommended that each page of the manual be checked off against this List of Effective Pages. Any page which does not check out with this list, either by number or by date, shall be discarded. This list is reissued in its entirety whenever this manual section is revised.

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REVISION NO. 74 DATED APRIL 1, 2007

HIGHLIGHTS - IGNITION

| <u>CHAPTER/ SECTION</u> | <u>PAGE NO</u> | <u>DESCRIPTION OF CHANGE</u> | <u>EFFECT OF CHANGE</u> |
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| 74-00-00 ACCY | 1101 | Added ignition part section. | -ALL |

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R 1. **Ignition Components - General**

R A. **General**

R (1) In this section are procedures for Cleaning, Inspection,
R Repair, and Test of ignition components for the JT12/
R JFTD12 engine.

2. **Igniter Plug**

A. **Cleaning**

- R (1) Degrease the plug by SPOP 209. Refer to Section
R 70-21-00 in the Standard Practices Manual.
- (2) Clean the outer shell of the plug with a wire brush.

CAUTION: DO NOT USE ABRASIVE CLEANERS ON THE PLUG
(THIS WILL CAUSE DAMAGE).

- (3) Use hot SPOP 209 solvent and a non-metallic brush to
remove deposits from the external surface of the firing
end of the plug. It is not necessary to make the
ceramic as clean as a new plug.

NOTE: It is not recommended to clean the recessed
center electrode cavity.

- R (4) Clean the ceramic barrel of the igniter plug with a
soft swab moist with Stoddard Solvent (PMC 9001).

NOTE: Do not use abrasive blast on the ceramic barrel
(this will remove the glaze).

- (5) Remove all remaining solvent from the plug with
compressed air.

B. **Inspection**

- (1) Examine the coupling threads and shell threads of the
plug. Chase the threads if necessary with a
5/8 inch - 24NS die for the coupling threads and a
3/4 inch - 20NS die for the shell threads.
- (2) Examine the ceramic section of the plug that is open.
Cracks are cause to reject the plug.

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- (3) Galling of the plug in the area that touches the combustion chamber is permitted for 360 degrees but must not have a depth of more than 0.030 inch.
- (4) For a plug used in a North American aircraft, make sure that erosion of the center electrode and shell is in limits. See Figure 1101 and Figure 1102.
- (5) For a plug used in Lockheed and Sikorsky aircraft, a firing check will show that the plug is serviceable (see Testing).

C. Testing

- (1) Do a firing check:
 - (a) Operate the plug with the usual engine ignition system as the source of current.
 - (b) Visually compare the spark with that from a new plug.

R
R

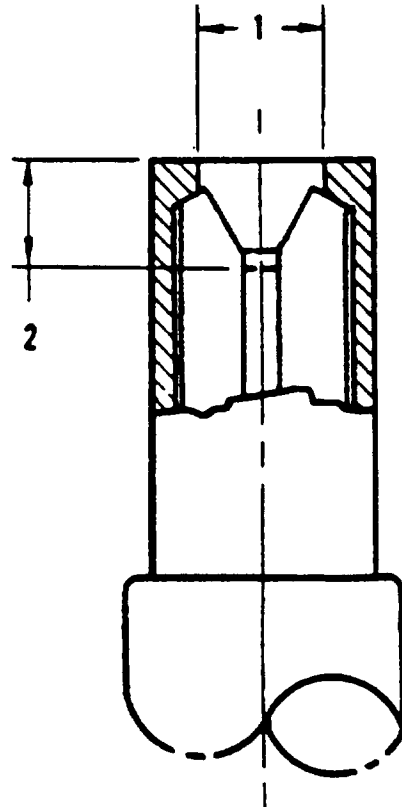
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1. 0.287 Inch ID Maximum Outer Shell Erosion With Negligible Center Electrode Erosion.
2. 0.305 Inch Maximum Center Electrode Depth Measured From Outside Surface Of Outer Shell To Tip Of Center Electrode. Outer Shell Erosion Must Be Negligible.

Igniter Plug Erosion Limits
Figure 1101

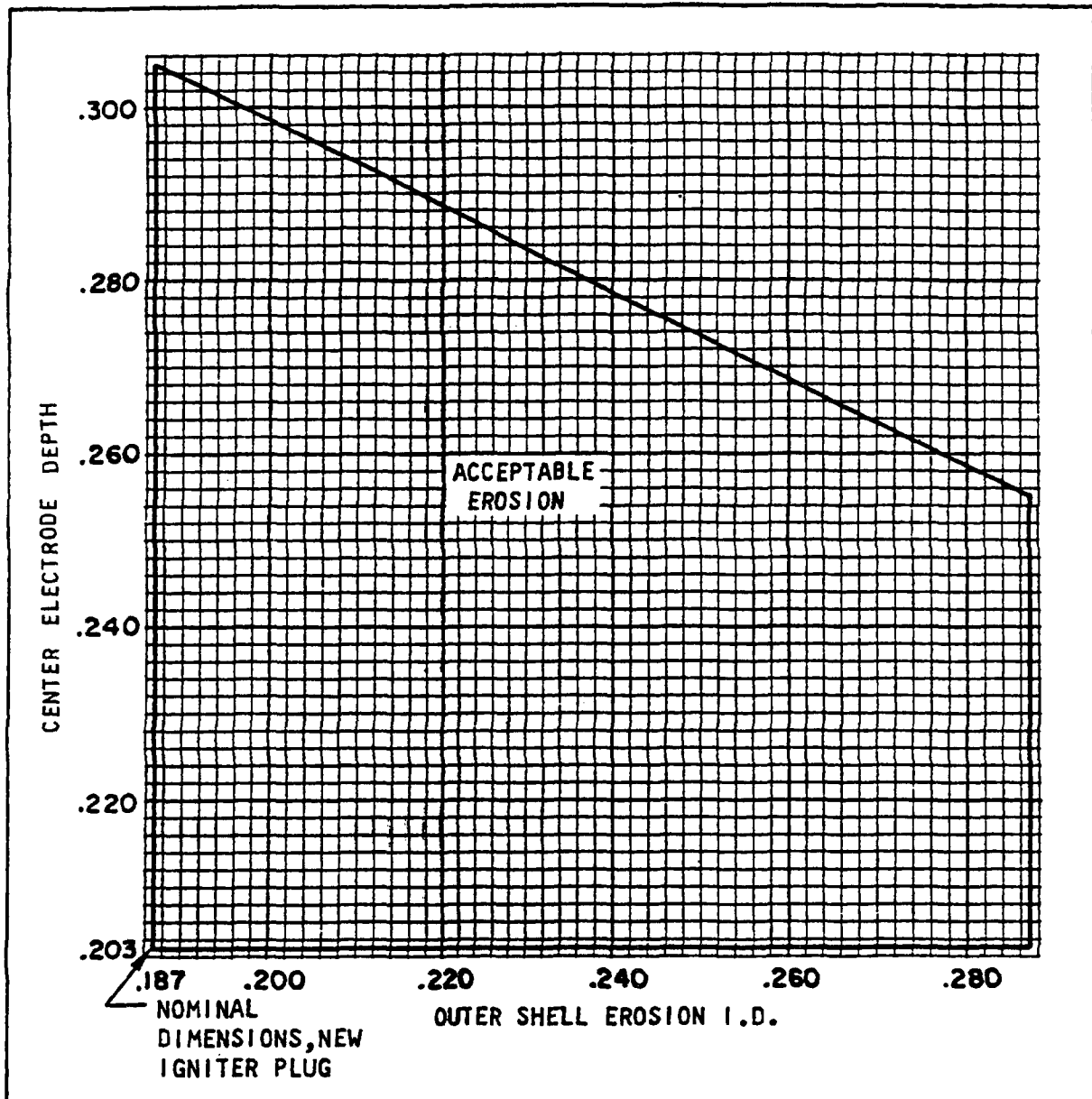
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Igniter Plug Erosion Limit Graph
Figure 1102

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