

## DESCRIPTION AND MAINTENANCE INSTRUCTIONS

## DESIGNATION OF AC SPARK PLUGS

- 1 The purpose of this EO is to familiarize personnel with the designation system of AC model spark plugs.
- 2 All AC model aircraft spark plugs are identified by a two or three digit type number appearing on the side of the insulator or shielding barrel.
- 3 Two digit types have a one or more letter prefix, or multiple letter prefix and suffix, e. g. , "LA-47, S-86R, HSR-83P". Three digit types have no letter prefix or suffix, e. g. , "171 and 285", except the 275 type, e. g. , "275D, 275E and 275F", which have a letter suffix. These one letter suffixes are used to identify the following changes to the original 275 model spark plug:-
  - (a) 275D - Incorporated a deeper recess in the insulator tip to increase spark plug anti-fouling characteristics.
  - (b) 275E - Incorporated removal of the knurl from the center electrode to eliminate insulator tip breakage and increasing the center electrode length to maintain the desired IMEP rating.
  - (c) 275F - Incorporated decreasing of the insulator shoulder above lower seat by 1/32 of an inch and the shell internal diameter by the same amount to provide greater resistance to shell breakage at the last thread.
- 4 In all cases, each letter and digit designates a feature of the AC aircraft spark plug, see Appendix "A".

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

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## TWO DIGIT TYPES:

Examples: LA-47, SR-87, SR-47P

Letter A - (Except "A" in LA-47) denotes unshielded spark plug.

Letter H - denotes high altitude with short reach.

Letter L - denotes long reach.

Letter P - denotes platinum electrode with short reach.

Letter R - denotes with resistor.

Letter S - denotes shielded spark plug.

First Digit - 4 denotes 14 mm, 8 denotes 18 mm.

Second Digit - 4, 6, 7 and 8 denotes heat range.

## THREE DIGIT TYPES:

Examples: 171, 181, 275, 285. All three digit types have 18 mm shell threads and resistors.

First Digit - 1 - denotes 5/8" diameter shielding barrel.

- 2 - denotes 3/4" diameter shielding barrel.

Second Digit - 7 - denotes massive electrode.

- 8 - denotes platinum electrode.

Third Digit - 1, 5 - denotes heat range.

- 2 - same heat range as 1 but different gap setting.

For letter suffix meaning pertaining to models 275D, E and F spark plugs, see para. 3.

NOTE

Heat range the lower digit denotes a colder plug with a shorter insulator tip. Higher digit, denotes a hotter plug with a longer insulator tip.