



Service Instruction

TAT SI11-08, Revision None

Issued: 10/26/2011

The Engineering Aspects of This Service Instruction are FAA DER Approved.

SUBJECT:

Approved Spark Plugs

PURPOSE:

The purpose of this Service Instruction is to instruct owners of turbonormalized aircraft modified in accordance with STC's SA5223NM, SE5222NM, SA00214DE, SE00215DE, SA10588SC and SE10589SC to install only approved spark plugs in their engines. This publication lists spark plugs that are approved and unapproved by Engine Technologies, Inc. for its turbonormalized piston aircraft engines when modified in accordance with the STC's listed below and installed in the aircraft listed below. Engine Technologies, Inc. advises that only those spark plugs listed as approved be used.

AIRCRAFT AND ENGINES AFFECTED:

Hawker Beechcraft Corp. Model 35-C33A, 36, A36, E33A, F33A, G33, G36, S35, V35, V35A, V35B, A36TC, B36TC powered by Teledyne Continental Motors IO-520-B, IO-520-BA, IO-520-BB, and IO-550-B engines with turbonormalizer system installed per STC's SA5223NM and SE5222NM

Cessna Aircraft Company Model A185E and A185F powered by Teledyne Continental Motors IO-520-E or IO-550-D with turbonormalizer system installed per STC's SA00214DE and SE00215DE

Cirrus Design Corporation Model SR22 powered by Teledyne Continental Motors IO-520-N engine with turbonormalizer system installed per STC's SA10588SC and SE10589SC

COMPLIANCE:

As required when replacing spark plugs.

APPROVAL

Engine Technologies, Inc., the Turbonormalizing System STC holder for STC's SA5223NM, SE5222NM, SA00214DE, SE00215DE, SA10588SC and SE10589SC has approved all technical data in this Service Instruction that affect the type design.

APPROVED SPARK PLUGS:

When spark plugs are to be replaced, replace them with one of the following spark plugs:

Turbonormalized Engine	Spark Plug Manufacturer	Spark Plug Part Number	Spark Plug Gap
IO-520-B IO-520-BA IO-520-BB	Champion	RHB29E (preferred) RHB32E	.016 - .021 inch
IO-520-D	Tempest	URHB32E	.016 - .021 inch
IO-550-B IO-550-D IO-550-N	Tempest	URHB32S	.017 - .021 inch

UNAPPROVED SPARK PLUGS:

Until further notice, Champion fine wire spark plugs are not approved for use in turbonormalized aircraft and engines per STC's SA5223NM, SE5222NM, SA00214DE, SE00215DE, SA10588SC and SE10589SC. Champion RHB32S and RHB36S spark plugs should be replaced with approved spark plugs within the compliance time listed in applicable Tornado Alley Turbo Inc. Mandatory Service Bulletin TAT SB11-05 or TAT SB11-06.

MAINTENANCE:

Maintain spark plugs in accordance with standard maintenance practices. Inspect, recondition, regap, and test spark plugs on intervals recommended by engine manufacturer in accordance with spark plug manufacturer's service manual (for example: Champion document AV6-R). Experience with each particular engine may suggest modified inspection, reconditioning, and regapping intervals. Replace spark plugs with approved spark plugs when necessary. Checking spark plug gaps and deposits at appropriate regular intervals is crucial to preventing engine misfires. It is recommended that the internal resistance of the center electrode be checked during regular maintenance. If the resistance exceeds 5000 ohms, the spark plug should be replaced even if all other indications show that the spark plug may be reconditioned according to the spark plug manufacturer's maintenance manual.

PARTS AVAILABILITY

Contact Tornado Alley Turbo Inc. for approved spark plugs.
Spark plugs may also be obtained from other aviation supply companies.