Introduction

This Special Airworthiness Information Bulletin (SAIB) informs owners and operators of aircraft installed with Parker Stratoflex 124-, 130-, and 170-series hoses qualified to TSO-C53a and 124K-, 156-, and 171K-series hoses qualified to TSO-C75 of an airworthiness concern regarding standards used to qualify the hoses to TSO requirements.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

While performing regular oversight activities, the FAA discovered multiple instances of qualification discrepancies to hoses produced by Parker Hannifin, Stratoflex Products Division (Parker SPD). TSO-C53a and TSO-C75 call out specific revision levels of the standards defining performance requirements for the various types and classes of hoses. Parker SPD produces hoses to industry standards developed by the Society of Automotive Engineers (SAE). Parker SPD adopted these standards in lieu of the standards specified in the applicable TSOs while performing testing to substantiate minor design changes to previously approved designs. Minor design changes to existing TSO articles do not require further FAA approval in accordance with 14 CFR 21.619(a). Certain aspects of the standards used by Parker SPD for qualification do not meet the minimum performance requirements outlined in the TSOs.

Recommendations

Parker SPD has provided the FAA with a matrix outlining the standards used to qualify the affected hoses in the past that do not meet the requirements defined in the applicable TSOs. Parker SPD has also removed certain TSO hoses from production and has taken steps to ensure that all hoses produced meet or exceed the minimum requirements defined in the applicable TSOs.

Approval of TSO articles via issuance of a TSO authorization does not constitute an installation approval for the article onto a given aircraft. The FAA recommends owners and operators identify any affected hoses installed on their aircraft and review the information detailed in the Parker SPD customer letter dated August 17, 2023, to determine if the environment unique to their installation falls within the environment evaluated by the qualification testing performed.

For Further Information Contact

John Miller, Aerospace Engineer, AIR-7F1, Fort Worth Aircraft Certification Office, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone (817) 222-5018; email: john.m.miller@faa.gov
Jacob Fitch, Program Manager, AIR-722, COS Program Management Section, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: (817) 222-5018; email: jacob.fitch@faa.gov

For Related Service Information Contact

Lori Loftis Jones, Business Team Leader, Parker Hannifin Stratoflex Products Division, 220 Roberts Cut-Off Road, Fort Worth, TX 76114; phone: (817) 210-1412; email: lori.loftis@parker.com