CHALLENGER INSTRUCTIONS FOR CONTINUED AIRWORTHINESS STC No. SE02352CH

DOCUMENT #1125 REVISION D DATED 11/28/2023
CLEANABLE OIL FILTER

AIRWORTHINESS LIMITATIONS

Airworthiness limitations section is FAA approved and specifies maintenance required under sections 43.16 and 91.403 of the Federal Aviation Regulations unless alternative program has been approved.

Challenger cleanable oil filter with a stainless-steel element, must be cleaned and visually inspected at minimum with every oil change or sooner if operating in dusty conditions. The oil filters cleanable element must be replaced at 1250 hours or 5 years of engine operation, whichever should occur first.

MAINTENANCE INSTRUCTIONS

INSPECTION AND CLEANING

NOTE: Replace any damaged part of the oil filter assembly prior to cleaning.

- 1. Remove the oil filter assembly from the aircraft engine by twisting the assembly counterclockwise.
- 2. Disassemble by gently pushing the filter element straight down out of the locked position, twist filter element 1/3 turn counterclockwise and release. You should now be able to remove the stainless-steel filter element from the oil filter housing.
- 3. Visually inspect and wash the stainless-steel filter element, spring and housing and clean all metal surfaces with biodegradable cleaning, non-toxic shop solvent or soap and water. If inspection of trapped debris is desired, flush particles into a clean light-colored container. Use low pressure shop air to blow dry the filter element from the inside out to remove remaining particles or cleaning agent from the screen. NOTE: THE ELEMENT MUST BE REPLACED IF ANY METAL REMAINS TRAPPED IN THE ELEMENT.
- 4. Replace all parts that have been damaged, cracked, nicked, stripped threads, corroded or elements that cannot be cleaned.

ASSEMBLY

- 5. When all components are clean and dry, place the spring into the filter housing, large end down. Now place the filter element into the housing making sure all three "ears" on the element fall into their slots in the housing. Gently push the filter element straight down into the housing and twist the element 1/3 turn clockwise, locking the element up into the locked position. Make sure the three filter element ears are fully engaged in the housing notches (as the filter is tightened on the engine the filter will mate against the housing which will eliminate any play).
- 6. Install the quad-ring, part number CP-623, (either side up) fully into the groove in the housing. Lube the quad-ring surface with a thin film of clean engine oil and install the filter on the engine or oil filter adapter per Challenger Instructions #1124 latest revision. Tighten oil filter by hand until getting tight, then secure oil filter by setting torque value at 16-18 ft lb. Note: <u>"DO NOT OVER TIGHTEN."</u>
- 7. Run the engine and check for oil leaks and engine oil pressure. If visual oil leak is noticed repeat steps 5 thru 7. Safety wire filter using safety wire using drilled holes in the top cooling fin. Check oil filter and pressure every pre-flight inspection.

Call Challenger Aviation for product support at 937-387-6500 or email info@challengeraviation.com