

R22 SERVICE LETTER SL-94

R44 SERVICE LETTER SL-83

DATE: 22 July 2022

TO: R22-series & R44-series Owners, Operators, and Maintenance Personnel

SUBJECT: Engine RPM Sensor Preventive Maintenance

EFFECTIVITY:

- R22 Helicopter S/Ns 4825 & subsequent
- R44 Helicopter S/Ns 2625 & subsequent
- R44 Cadet S/Ns 30061, 30071 & subsequent
- R44 II Helicopter S/Ns 14364, 14412 & subsequent

TIME OF COMPLIANCE: Concurrent with engine oil filter change as described below.

BACKGROUND: R22 Service Bulletin SB-119 and R44 Service Bulletin SB-111 reference the importance of sound wiring for proper engine RPM governor operation. Additionally, an accurate signal from the C143 engine RPM sensor is required. Steel and iron wear particles during engine break-in may stick to the magnetic sensor, interfering with the signal. Wear particles appear as dark gray residue on the sensor. Cleaning the sensor at the first two oil filter changes since new, since overhaul, or since cylinder installation is recommended.

COMPLIANCE PROCEDURE:

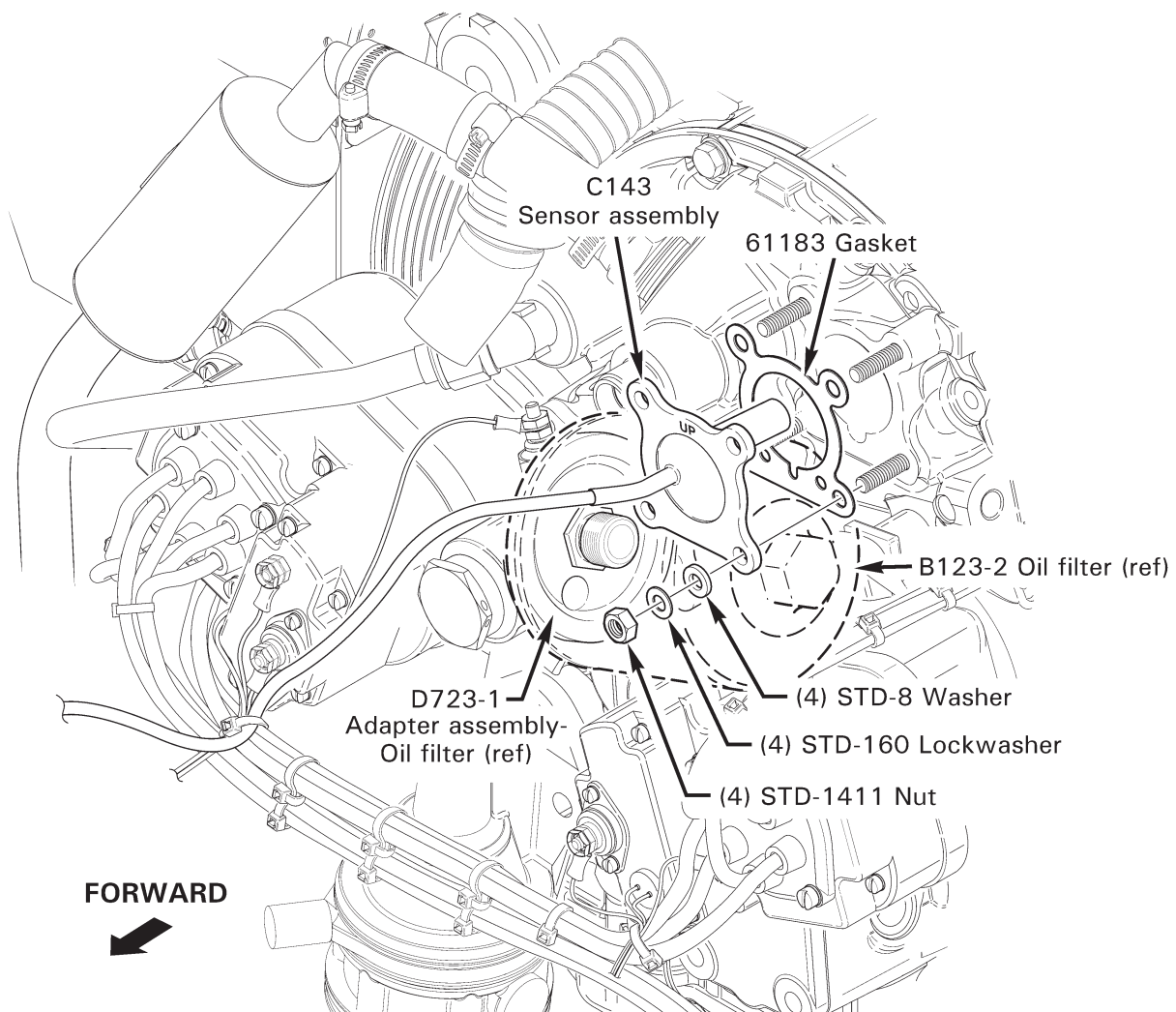
Complete at first 2 engine oil filter changes since new, since overhaul, or since cylinder installation. If sensor has visible particles at second filter change, continue cleaning at each filter change until no particles are observed.

NOTE: (4) STD-160 lockwashers and a 61183 gasket are required at each servicing.

1. After removing oil filter, temporarily cover openings on oil filter adapter (a latex glove works well).
2. Refer to figure on page 2. Clean exposed metal portion of C143 sensor assembly. Remove nuts, lockwashers, and washers securing sensor to engine; discard used lockwashers. Withdraw sensor from engine.
3. Remove and discard existing 61183 gasket. Clean mounting pad on engine and install new gasket.
4. Using a lint-free wipe, clean sensor's cylindrical protrusion and adjacent gasket surface.

(OVER)

5. Install C143 sensor on engine with engraved "UP" at top, and secure using (4) new STD-160 lockwashers with retained hardware. Torque nuts to 96 inch-pounds and torque stripe per Maintenance Manual Figure 2-1.
6. Remove temporary covers from oil filter adapter, and install oil filter. Oil filters with Robinson P/N B123-1 or B123-2 (Tempest/Aero Accessories P/N AA48108-2 or AA48112) have internal magnets to help capture steel/iron particles and are recommended.
7. Make appropriate maintenance record entries. Record should state whether or not particles were present prior to cleaning.



R44 II shown, R44 & R22 similar