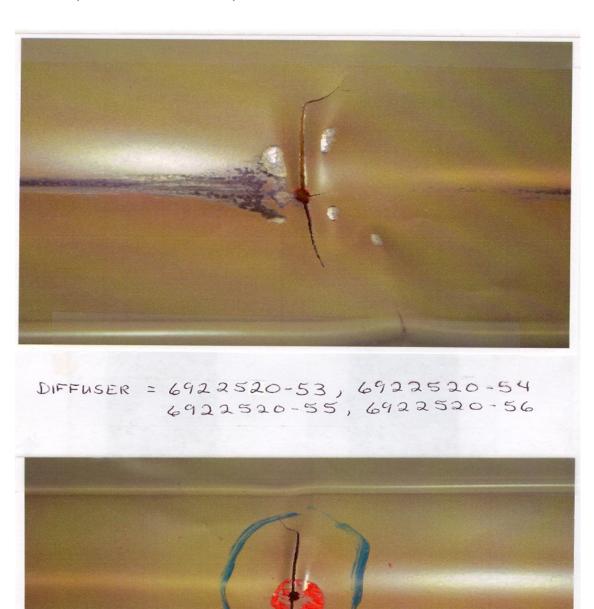
## Cessna 680, Cracked Diffuser Ducts, ATA 3010

A repair station technician describes a heat duct defect. "We found these wing bleed air heated leading edge diffusers cracked or deformed on numerous aircraft. This (particular) discrepancy was found while performing A301001 Wing/Horizontal Stabilizer Bleed Air Anti-Ice System Detailed Inspection. Task 30-10-00-220 is part of Inspection Document nine—a 48 month inspection.

This discrepancy was likely caused by thermal expansion and flight vibrations of the wing leading edge, anti-ice piccolo tube. The piccolo tube is hard mounted to the diffuser with no vibration dampeners or means to compensate for thermal expansion. The material for the diffusers is thin and bends easily. We have also found the piccolo tubes chafing on the diffusers. We recommend the diffusers be built with a heavier material and the piccolo tube mounting to be redesigned. This occurrence was corrected by replacement of the effected parts." (Diffuser P/N's 6922520-53, -54, -55, and -56.)



Part Total Time: 3,042.0 Hours