Piper PA 28-181 Cracked Rudder Support Assembly, ATA 2720

A technician wrote and said that he found the Aft Z" rudder pedal assembly cracked (P/N 62664-0000). The 'Z' assembly is riveted to the top forward end of the tunnel plate (P/N 62601-003) and acts as an attachment point for the rudder bar support assembly (P/N 63451-000) using four standard AN3-4A bolts, which are secured through nut plates that are riveted on both fore and aft 'Z' assemblies.

"This cracking is possibly caused by looseness in the toe brake support brackets (P/N 63468-0000) on both pilot and co-pilot's side. The standard AN3-13A bolts used to attach these toe brake support brackets loosen over time and cause loss of support to the rudder pedal-bar assembly (P/N 63420-000). This flexing transfers down to the 'Z' assemblies, causing metal fatigue and subsequent cracking.

The Technician recommended periodic re-torqueing of the toe brake support bracket bolts." (Provided fuselage station: 48.60.)

Part Total Time: 5,820.4 hours.