



Title: USE OF SPIRAL RETAINING RINGS ON AEL18840 CAMSHAFTS IN ENGINES USED ON EXPERIMENTAL AIRCRAFT

Issued: 05/20/03

Revision: 0

- 1.0 SUBJECT:** This service instruction provides installation instructions for experimental camshafts utilizing spiral retaining rings instead of MS16625 circular retaining clips. This assembly has NOT been FAA Approved for certificated applications.
- 2.0 DISASSEMBLY PROCEDURE:**
- 2.1 Disassembly requires the use of two small flathead screwdrivers (3 mm or 5/32", for example).
 - 2.2 Pick the end of the retaining ring out of the groove with one screwdriver. See Figure 1 below.
 - 2.3 With the second screwdriver, spiral the retaining ring clear of the groove and camshaft hole. See Figure 2 below.
 - 2.4 Retaining rings must NOT be reused. Contact ECi for replacement parts.
- 3.0 ASSEMBLY PROCEDURE:**
- 3.1 First, place the tachometer shaft AEL76121 in the end of the camshaft.
 - 3.2 Slightly stretch the retaining ring approximately 3/4" by pulling the two ends apart. See Figure 3 below.
 - 3.3 Place the end of the retaining ring in the ring groove and, using a small flathead screwdriver (3 mm or 5/32", for example), press the retaining ring into place, moving around the camshaft hole in a circular pattern to spiral the retainer into place.
 - 3.4 A fully seated Spiral Retaining Ring will look like that shown in Figure 5 below.



Figure 1: Picking the End of the Ring Out of the Groove



Figure 2: Disassembly of the Spiral Retaining Ring

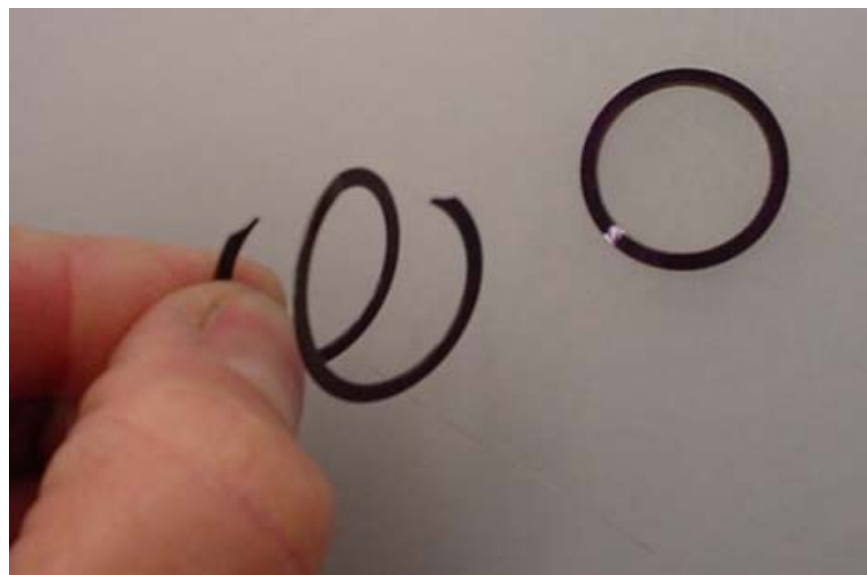


Figure 3: Stretching of Spiral Retaining Ring

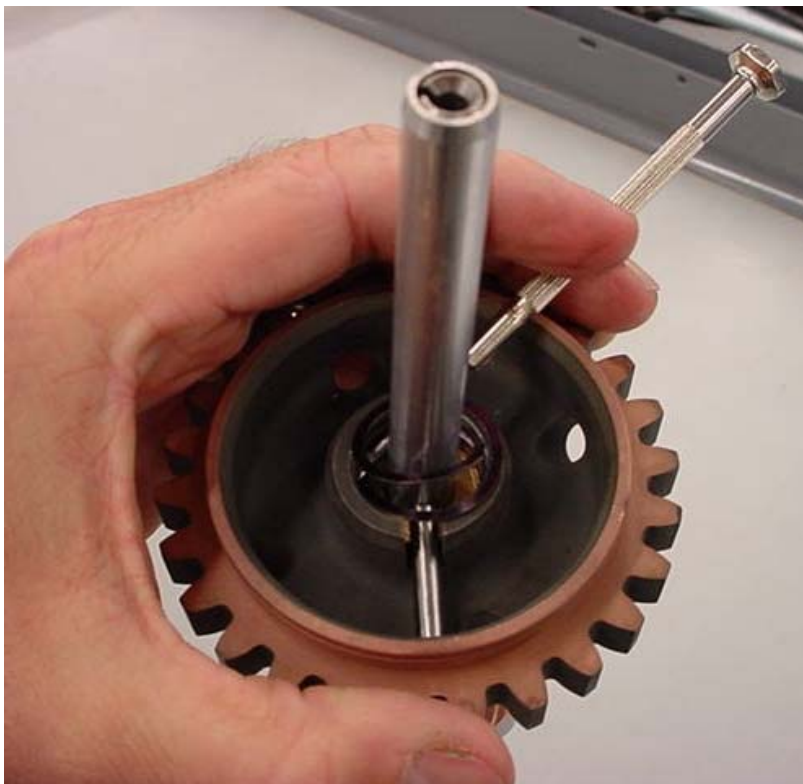


Figure 4: Assembly of Spiral Retaining Ring

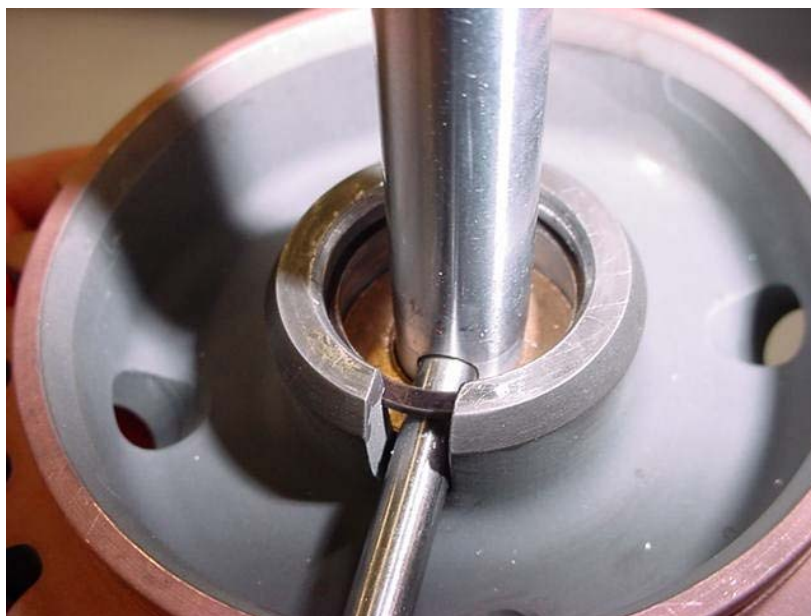


Figure 5: Finished Assembly showing a Fully Seated Spiral Retaining Ring