

DATE: March 12, 1993

**Service Letter No. 93-001
Products and Applications
are FAA Approved**

SUBJECT: Superior Air Parts SL18840 Camshaft

ENGINE APPLICATIONS: O-320-A2B, A2C, A2D, A3B, E1A, E2A, E2B, E2C, E2D, E2G, E2H, E3D, E3H, B2B, B2C, B3B, D1A, D1D, D2A, D2B, D2C, D2G, D2J, D3G, A2A, A2B, A3A, A3C, B2A, B3A, B3C;
IO-320-B1A, B1C, C1A, D1A, E2A; O-360-A1A, A1AD, A1D, A1F6, A1F6D, A1G6, A1G6D, A2A, A2D, A2F, A2G, A3A, A3AD, A4A, A4G, A4J, A4K, A4M, A4N, A5AD, B2A, C1A, C1C, C1E, C1F, C2A, C2C, C2E, D2A, A1C, A2E, C2D, D2B;
IO360-A1A, B1A, B1B, C1A, C1C, C1D, C1D6, C1F, J1A6D, C1B; HO-360-B1A, B1B; HIO-360-A1A, B1A, C1A, C1B, E1AD, E1BD; TIO-360-A1B; AEIO-360-B1G6, H1A

In July 1991, Superior Air Parts, Inc. reintroduced P/N SL18840 replacement camshafts for Lycoming 320/360 engines. These camshafts were designed, engine tested and approved during a rigorous FAA certification program.

After introduction, it was brought to Superior's attention that the valve timing was slightly different than that of the OEM. Although there were no anomalies noted during the certification testing and no reported field problems, Superior believed it appropriate to review the timing issue. Industry experts were consulted and there was agreement that such a minor difference would not affect engine operation. However, to resolve the issue and end unproductive speculation, Superior changed the SL18840 valve timing to agree with that of the OEM. This change was incorporated in camshafts shipped after February 1992.

To further substantiate that the pre 1992 camshaft timing difference would not affect engine performance, the FAA, in conjunction with Textron Lycoming, conducted a back to back engine test. Engine performance was measured using a Lycoming camshaft and then a Superior camshaft in the same engine. The difference in performance, considering engine build variations and test cell uncertainty, was confirmed to be negligible.

Superior Air Parts Piston Division is constantly striving to produce the highest quality, best performing parts possible. We listen to our customers and strive to address any concerns in a thorough and timely manner. If you have any questions on the SL18840 camshaft or any other Superior product, please call our corporate office at (214) 233-4433.