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Subject: ERA22FA418

Contact: Engine Teardown Examination, Lycoming, Williamsport, PA

The remaining four cylinders were removed at the Lycoming factory on October 25, 2022. The case halves were then separated. The crankshaft, crankshaft bearings, and camshaft remained intact. One area of note is a plug in the oil sump. The port would be used for oil return if the engine had a turbocharger. It looks like it was repaired at one point with a helicoil. The top section of the port exhibited a fracture, and the remainder of the oil sump does not exhibit impact damage. The oil sump and crankshaft were retained for metallurgical examination.





The Nos. 3 through 6 connecting rods separated from the crankshaft but remained attached to their respective piston. The No. 6 connecting rod had protruded out of the crankcase between the tappet bores. Some of the connecting rod pieces found in the oil sump were able to be identified by the

arm locations (two pieces from the No. 3 connecting rod, one piece from the No. 4 connecting rod, and two pieces from the No. 6 connecting rod).

The Nos. 3 through 6 connecting rod journals were blackened, scored, melted, and missing base metal. All oil feed areas from the main journals to the connecting rod journals were free of obstructions.