SUBJECT: Inspection & Replacement of Hanlon & Wilson #637 Exhaust System

MODELS AFFECTED: M20B aircraft equipped with Hanlon & Wilson #637 Exhaust System, and M20C aircraft, Serial Numbers 1940 through 2395

TIME OF COMPLIANCE: At earliest convenience (not to exceed 50 hours)

INTRODUCTION
The Hanlon & Wilson Company has recently redesigned the No. 3 cylinder exhaust tube (Part No. 637-11) which is a part of the 637 exhaust system used on the Models M20B and M20C. This redesign is intended to increase the service life of the tube. We recommend that this tube be replaced on all aircraft in the field (see model and serial numbers affected).

INSTRUCTIONS
1. Remove the right and left cowl and inspect the four exhaust tubes attaching the cylinder to the muffler.
2. If cracks occur, they are most likely to appear in the area of the weld between the tube and the cylinder exhaust port mounting flange on the inboard side of the tube. The cracks may be identified by a grey-white stain on the tube surrounding the crack.
3. Replace No. 3 cylinder exhaust tube with Hanlon & Wilson #637-11 tube and the exhaust port gasket with Lycoming Part No. 65321 gasket.
4. During the course of the initial inspection of this exhaust system, it is advisable to replace the three bolts attaching the exhaust tail pipe to the muffler. The later model M20C aircraft have AN3-15 bolts in this position; the earlier models have AN3-13. The AN3-13 bolts have a shank 1-13/32" long, including the threads; the AN3-15 bolts have a shank length of 1-21/32". If the AN3-13 bolts are installed, replace them with AN3-15 bolts using care to re-install the springs and washers exactly in the same position as previously installed.

COMPLIANCE
Upon installation of the redesigned exhaust tube, please fill out and return the enclosed compliance card.

SERVICE LETTER KIT 20-106
Order Mooney S.L. Kit 20-106.
1. Hanlon & Wilson Exhaust Tube, Part No. 637-11 (1)
2. Lycoming Exhaust Port Gasket, Part No. 65321 (1)
3. AN3-15 (3)
This kit may be purchased from Mooney Aircraft, Inc. Spare Parts Department, P. O. Box 72, Kerrville, Texas, at a cost of $18.00.

If kits are ordered before August 15, 1963, and the tube returned to Mooney Aircraft, $5.00 credit will be extended to owners of M20B aircraft and owners of M20C aircraft, Serials 1940 through 2171. Full credit will be extended to owners of M20C aircraft, Serials 2172 through 2395.