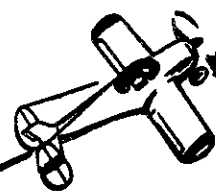


ERCOUPE
SERVICE
MEMORANDUM

No. **61**

Ercoupe MEMORANDUM

**SUBJECT: Overhauling of nose gear outer
cylinders—electrol and steel**



May 2, 1951

Service experience in the past two years has indicated that it would be desirable to provide certain service parts to improve the life of the Outer Cylinder for the steel nose gear, part #415-34080. We also found the need for oversize pins to permit the salvaging of the Outer Cylinder in the Electrol strut, part #415-34324 and its associated parts. We have, therefore, developed and obtained approval on the following rework on these items.

1. STEEL OUTER CYLINDER

a. The Outer Cylinder for the steel nose gear #415-34080, has an upper and a lower bronze bushing induction brazed into it at the time of manufacture. Service Memorandum #41 described a method of replacing the Lower Bushing with a new Bushing part #415-34133 and we have now developed a method of replacing the Upper Bushing in a similar manner with a replacement Bushing #415-34086-OS. This oversize bushing will be made available through the dealer-distributor organization and sketches for rework will also be distributed through this organization. The rework of the steel Cylinder is however a difficult procedure for the average shop and we are, therefore, setting up a system whereby serviceable Outer Cylinders can be sent into the factory for exchange for a reworked Outer Cylinder. Cylinders sent in on this program will be inspected upon receipt and credit will be given the customer only if the cylinder is suitable for reworking. Any cylinders not suitable for reworking will be held for thirty days after notification to the customer that the cylinders are no longer serviceable and will be scrapped unless the customer authorizes return of the cylinders at customer's expense. Reworked cylinders will be identified by "RW" stamped on the lower attachment boss.

2. ELECTROL OUTER CYLINDER

a. The Electrol Outer Cylinder is made of aluminum alloy and is held to the attaching Collar, part #415-34329 by two Pins, part #415-34338. The lower Bushing, part #34315 and the Bearing, part #415-34326 are likewise attached to the Outer Cylinder by two Pins, part #415-34322. The holes in which these attaching Pins fit have a tendency to become worn and elongated by the loads imposed on them thereby making the strut loose, contributing to shimmy and additional wear.

b. We have, therefore, developed oversize Pins, having the same part numbers followed by the letters "OS", which can be installed in lieu of the original Pins by line reaming the parts as follows:

1. Ream the Outer Cylinder lower holes .234" $\begin{matrix} -.0010 \\ -.0005 \end{matrix}$ Dia.
2. Ream the lower hole in the Bearing (Lower Sleeve) to match the Outer Cylinder.
3. Ream the holes for attaching the Collar .3020" .0010 Dia.
4. Ream the lower Bushing and the attaching Collar .281" .0010 Dia.

The four oversize Pins can then be inserted in these parts on assembly to provide a tight attachment for these parts. The oversize Pins can be obtained through the dealer-distributor organization. They are identified by "S" stamped on one end.