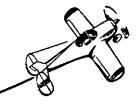
## Ercoupe MEMORANDUM

ERCOUPE SERVICE MEMORANDUM

No. **51** 

SUBJECT: Installation of the 5.00  $\times$  5 and 6.00  $\times$  6 nose wheel



- 1. The purpose of this memorandum is to give instructions on the installation of the  $5.00 \times 5$  and  $6.00 \times 6$  nose wheels on Ercoupes, serial numbers 113 through 4868, inclusive, and to strongly recommend the installation of these gears on Ercoupes which are subject to unusually rough landings or operating from unusually rough fields.
- 2. All Ercoupes, serial numbers 4424 and above, were delivered with the Electrol type nose oleo strut. Ercoupes manufactured before serial 4424 were originally equipped with the Erco strut; however, the Erco and Electrol gears are interchangeable as

assemblies after serial number 123. The support for the  $5.00 \times 5$  wheel is designed to fit only the Electrol strut, whereas the  $6.00 \times 6$  wheel support may be obtained for either the Erco or Electrol strut. Any purchase order for the  $6.00 \times 6$  wheel support must include the type of oleo strut on which the wheel is to be installed.

- 3. Complete nose gear assemblies and detail parts are available from Ercoupe distributors and dealers. Prices are being published through them.
- **4.** The following parts are required for the installation of the  $5.00 \times 5$  wheel on the Electrol strut:

Part Number	Nomenciature	Quantity
415-34355-S	Support and Axle Assembly	1 "
415-34353	Nut, Wheel Retaining	1
415-34360-1	Wheel, 5.00 x 5	1
415-34360-2	Tire	1
415-34360-3	Tube	1
The following are the	parts necessary for installation of the 6.00 x 6 wheel on either the Electro	ol or Erco
struts:		
Part Number	Nomenclature	Quantity
415 04001	C	
415-34361	Support and Axie Assembly (Liectroi)	1
415-34361-S	Support and Axle Assembly (Electrol) Support and Axle Assembly (Erco Strut)	1
415-34361-S	Nut, Wheel Retaining	1
415-34361-S 415-33214	Nut, Wheel Retaining	1
415-34361-S 415-33214 415-34364	Nut, Wheel Retaining	1
415-34361-S 415-33214 415-34364 415-34365-1	Nut, Wheel Retaining Spring, Taxiing Wheel, 6.00 x 6	1 1 1 1

- 5. The procedure outlined below is suggested for use in installing the larger nose wheels:
  - A. Remove the nose gear from the airplane, remove the wheel (5.00 x 4) from the support, and remove the support from the inner cylinder in accordance with Service Memorandum number 41.
  - B. Assemble wheel support to inner cylinder.
    - (1) Coat base of wheel support with Litharge of Lead Oxide and glycerine.
    - (2) Secure wheel support to inner cylinder with washer and self-locking nut.
  - C. When installing the 6.00 x 6 wheel, the taxi spring, part number 415-34041, must be replaced with the new spring, part number 415-34364. In order to install the new spring the oleo strut must be disassembled.
  - D. Install wheel assembly.
    - (1) Tap or press wheel on axle with the valve stem away from the wheel support.
    - (2) Install retainer nut and tighten with a spanner wrench or tap using a soft-nose

punch. Align slot with cotter pin hole in axle and safety with cotter pin.

(3) The recommended tire pressures of the nose wheels are:

5.00 x 5 15-18 P.S.I. 6.00 x 6 6-10 P.S.I.

Too high or too low  $\alpha$  pressure in the nose wheel tire will increase the tendency of the nose wheel to shimmy. Caution—the 6.00 x 6 main wheel tires require 17 P.S.I.

- E. Install nose landing gear to airplane in accordance with Service Memorandum number 41.
- **6.** A new computation of the weight and balance is required, and a standard C.A.A. Repair and Alteration Form must be filed.
- 7. We also wish to bring to the attention of all Ercoupe owners and operators the fact that the lock washer, part number 415-34110-3, on the 5.00 x 4 wheel should be examined to be certain it is .050" thick and not .032", and should be replaced with a new one rather than reused.