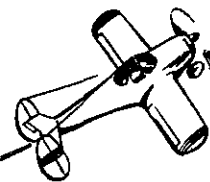


# Ercoupe BULLETIN

**SUBJECT: Replacement of  
Magnesium Die Cast  
Nose Wheel**



1. Due to an increase in reported failures of the Magnesium Die Case Nose Wheel, which can be identified by the casting number 34206 in raised characters on each rim, a Permanent Mold Aluminum Alloy Nose Wheel (415-34114) is now being used in Ercoupe production. It is also considered necessary to replace the die cast wheels on all Ercoupes now in service, to prevent possible failure of the wheels due to flaws or brittleness of the material in some of the die cast wheels.

2. Removal of die cast nose wheel and installation of the permanent mold wheel can be accomplished in the following manner:

1. Weight down the tail with sand bags or blocks, covering the surface of the stabilizer to prevent marring the alclad.
2. Straighten the tabs of the lock-washer (415-34112-3) (S.A.E.WO-7), which hold the lock nuts secure. Remove lock nut with spanner wrench. If spanner is not available, tap nut off counter-clockwise with a soft-nosed punch and hammer. Remove nut and lock-washer.
3. Remove the wheel.

#### Method A.

- (1) Have a helper back up wheel by placing both feet firmly against the left side of the wheel and tire assembly.
- (2) Fit a brass plug into axle from the right side. Plug must have a shoulder which rests against threaded end of axle. Strike the exposed end of plug with a heavy hammer or small sledge.

#### Method B. (using puller shown on Sketch A.)

- (1) Deflate tire.
- (2) Place puller over right rim, position plug and turn puller screw.

#### Method C.

- (1) Should the methods outlined above fail, the nose wheel can be taken off after removal of oleo strut from engine mount, by pressing the wheel from the shaft with an arbor press.

#### 4. Disassemble wheel.

- a. Deflate tire.
- b. Remove the nuts from the three bolts, and split wheel.
- c. Remove tire.

#### 5. Mount tire on new wheel.

- a. Disassemble wheel.
- b. Inflate tube slightly.
- c. Locate tire and tube on left wheel rim.
- d. Join left and right rim, attach and secure bolts.
- e. Complete inflation of tire to 20 P.S.I.
- f. Balance wheel both statically and dynamically. Many automotive machine shops will have facilities to balance the wheels. Counter balances, when required, should be permanently attached to the wheel rim, using self-tapping screw. Drill the wheel casting with a No. 38 drill for No. 4 x 1/4" slotted head, type A cadmium plated Parker-Kalon screw. (The company can supply 1/2 oz. and 1 oz. weight and the required screws.)

#### 6. Mount new wheel on axle.

- a. Place wheel on axle and force wheel onto axle by hand, sufficiently to start nut. Draw down nut, forcing wheel into position. Remove nut and complete installation as outlined in "d" below.

**CAUTION:** Care must be taken to avoid stripping threads.

- b. In some cases where the wheel bearing is a tight fit on the axle, use a piece of steel tubing to drive the bearing. This procedure should be used only as an alternate method when the strut has not been removed from the engine mount or an arbor press is not available. Extreme care should be exercised in this procedure to avoid damage to the bearing or axle threads.
- c. If difficulty is encountered in following method described above, or if Method C for removal of wheel has been followed, press wheel into place on axle by use of an arbor press.
- d. After making certain that the wheel is in place, place lock washer in position on axle with the internal tab of the washer extending into the milled slot on the axle. Replace lock nut and draw up tightly. Bend one of the external tabs into a milled opening on lock nut.

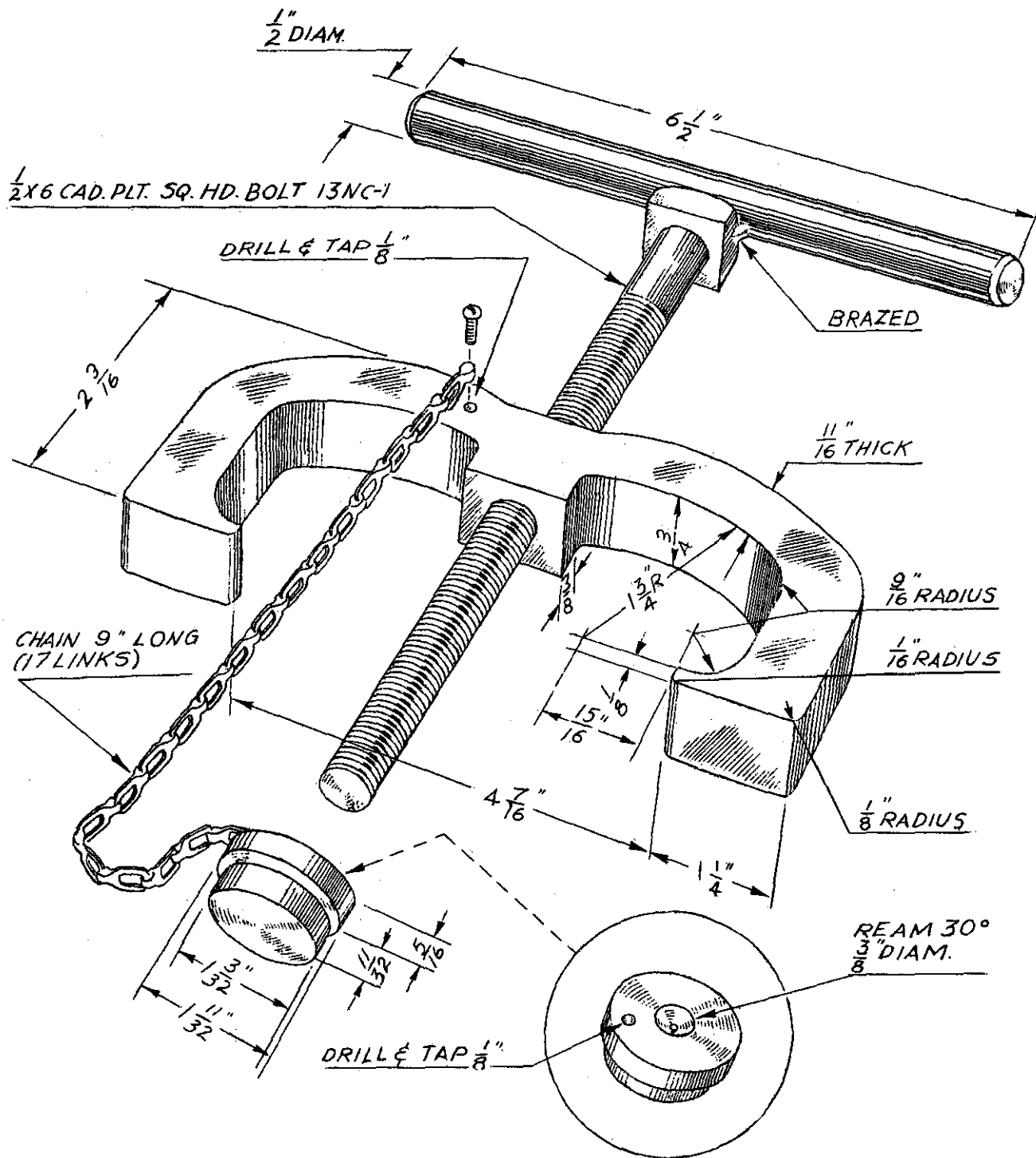
3. The serial numbers listed below are those of aircraft delivered with the die cast nose wheel. All Ercoupes with "single fork" nose gear should be checked and a permanent-mold aluminum alloy wheel installed if necessary. Attention should be

given to wheels in spare parts stock and they, too, should be replaced if identified as magnesium die cast wheels. It is essential that all die cast wheels be taken out of use immediately.

Serial No. 2898 through 3876 with the exception of 3378 and

3878	3902	3920	3940
3882	3904	3922	3942
3884	3906	3924	3944
3886	3908	3926	3946
3888	3912	3928	3948
3890	3914	3930	3950
3892	3916	3932	3952
3894	3918	3936	3954
3898		3938	3956

4. The type nose wheel assembly (415-34114) now being furnished can be identified by the casting number 34204 in raised characters on each rim. This type wheel will be made immediately available through our Distributor/Dealer Organization. The cooperation of all concerned in disseminating the above information and making the necessary replacements is anticipated and will be greatly appreciated.



NOSE LANDING GEAR  
WHEEL PULLER