November-December, 1944

The T'CRAFT MECHANIC Says-

Relining brakes may sound like a simple task, but unless one is experienced in this work, has the proper equipment and uses great care, considerable damage might be done. First the wheel must be removed. This is done by removing the hub cap, the axle nut and the keyed washer from the axle. The wheel will then come free, with the brake drum and lining. Lay the wheel face down and proceed as follows:

1—Remove the old lining by carefully grinding or chiseling the outer heads of the rivets until they are flush with the drum. With a punch whose diameter is smaller than that of the rivets drive out the rivets. Remove lining from the drum with a claw hammer or flat-ended bar, being careful to raise the lining evenly all around the circumference.

2—Clean inside face of the drum with fine sandpaper, eliminating all dirt, corrosion or burrs caused by removing the rivets.

3—Grind ends of new lining lightly until lining is right length for a snug fit in the drum.

4—Push lining in drum with gap in lining centered between two adjacent rivet holes. Start pushing lining in by hand, then place a board over lining and tap down until it is flush with rim of drum.

5—Drill holes through lining from outside, through the rivet holes in the drum, with a 9/64-inch drill.

6—Remove lining from drum with claw hammer or flat-ended bar, just as was done with old lining.

7—Using a countersink drill, countersink lining to 3/32-inch depth and to correct size for a 5/16-inch rivet head.

8—Be sure holes in new lining are aligned with those in the drum.

9—Place rivets in drum and rivet by setting head of rivet on end of a 5/16-inch rod held in a vise and hitting tubular end of rivet with a rivet set or hammer. Take care not to hit the aluminum drum and not to hammer the rivet more than is necessary as excessive pounding may distort the drum.

After replacing the wheel on the axle, you will be ready to adjust, or rig, your brakes. First take up any slack in the brake cables and eliminate any lost motion in the pedals. After a little use, the brakes should be re-adjusted to compensate for wearing of the high spots on the lining and for cable stretch. To accomplish this, jack up one wheel and unhook the lock springs from the two adjusting nuts located outside of the brake dust shield. Screw in adjusting nuts until a

Name of Part

Clip (adjusting nut lock spring)

Dust Shield (brake)

Anchor plate

Cotter pin

Washer

Brake shoe

Arm (cam)

Screw (flathead)

Nut (shoe adjusting)

Spring (brake shoe)

Bearing (wheel) 11/4"

Link (cam arm)

Wedge (shoe adjusting)

Bolt (shoe adjusting wedge)

No.

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26 & 27 Washers

heavy drag is produced in each shoe. Back out each nut one-half turn. Apply brakes firmly, release, and check for drag. If the wheel does not rotate freely, the corresponding nut must be backed out one-sixth of a turn at a time and brakes applied and released until sufficient clearance is obtained. When adjustment is satisfactory, engage the lock springs and tighten the brake cables until there is no lost motion in the pedals.



WHEEL AND BRAKE ASSEMBLY

No.	Name of Part
29 & 30	Lining (brake) and rivet
31	Half Wheel (inner)
32	Tube (axle shield)
33	Tire (6:00 x 6 - 4 ply)
34	Tube
35	Half Wheel (outer)
36	Bolt (assembly)
37	Nut (castle)
38	Nut (Valve . stem)
40	Bearing (wheel) 3/4"
41 & 42	Washers
43	Nut (shear)
45	Tripod
47	Screw (tripod)
48	Cap (hub)
52	Screw (round-head)

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