

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G80.640.1
Issue 1, May, 1955
AT&T Co Standard

CABLE CAR
MAINTENANCE

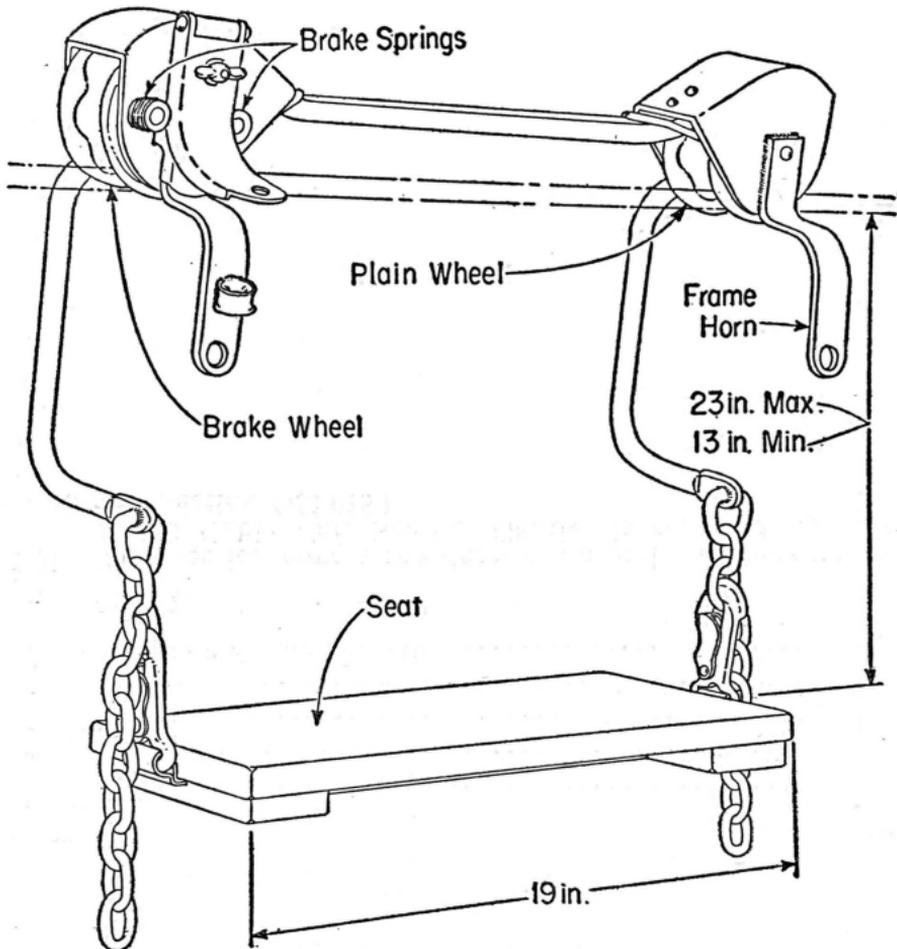
Contents	Page
1. General	1
2. Description	2
3. Inspection	3
4. Lubrication	4
5. Replacements and Repairs	4

1. GENERAL

1.01 This section covers the description and maintenance of the B Cable Car. Section G80.640 is replaced by this section and Section G51.015.1.

2. DESCRIPTION

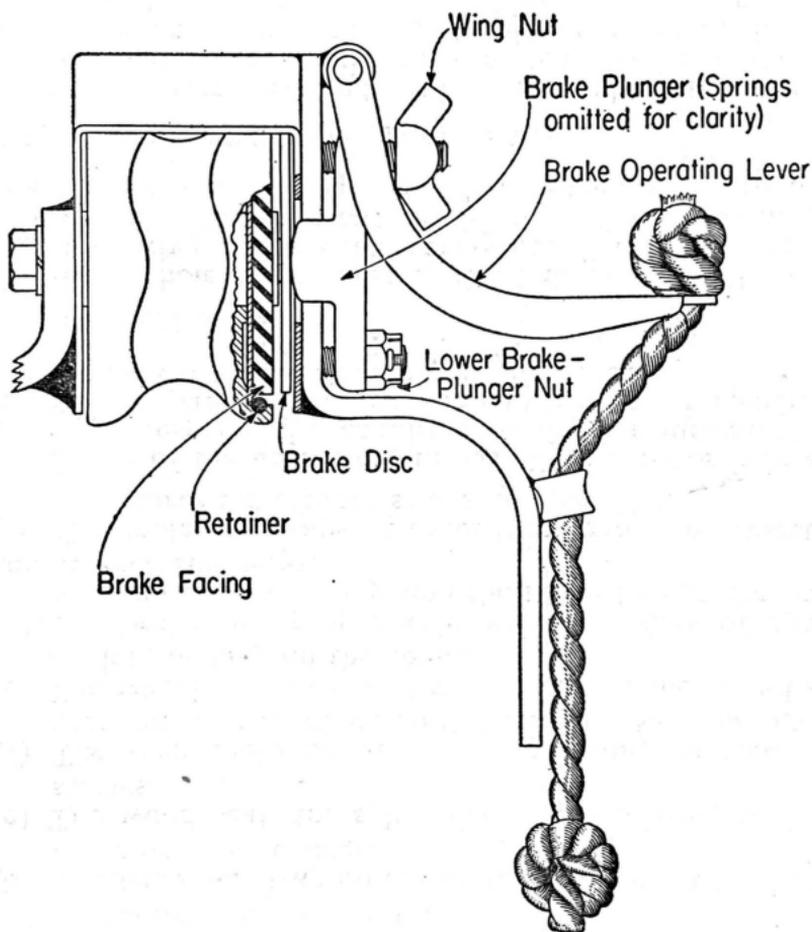
2.01 The cable car consists of a metal frame containing two wheels and a suspended wooden seat of adjustable height.



B CABLE CAR

2.02 The car wheels, one plain, the other equipped with a friction brake, are rubber treaded malleable iron or aluminum. The newer aluminum wheels are interchangeable with the corresponding malleable iron wheels.

2.03 The brake wheel is faced with braking material and a plunger-operated plate is mounted on the adjacent face of the wheel housing. The brake is operated through a brake lever to which a short length of rope may be attached for convenience. A wing nut adjustment is also provided for applying a steady drag on the brake or for holding the car in a stationary position.



3. INSPECTION

3.01 Make a careful general examination of the car for any weaknesses that might have developed as a result of wear, excessive corrosion or damage.

3.02 Examine particularly the following :

- (a) All brazed, welded and riveted joints, for cracks and looseness.
- (b) The tubular frame members, for any cracks, dents or deformations weakening these members.
- (c) The chain links and eyes and the holes in the frame horns, for excessive wear.
- (d) The flat steel strap on the seat, for cracks at the bends, dents or other damage.
- (e) The wood seat, for splits, decay and missing or loose screws.
- (f) The snap-hooks on the seat and straps, for weak depressing springs which do not close hooks properly.
- (g) The wheels, for excessive wear of the rubber tread and binding or play on the spindles.
- (h) The brake, for proper adjustment, freedom of operation and excessive play, and the brake linings, for damage or excessive wear.
- (i) The cable car straps, in accordance with the inspection procedures for climber straps and pads.

3.03 If any of the unsafe conditions above exist or if in any other respects the condition of the car indicates any doubt as to its safety, the worn or damaged parts should be replaced or the car should be returned for repair.

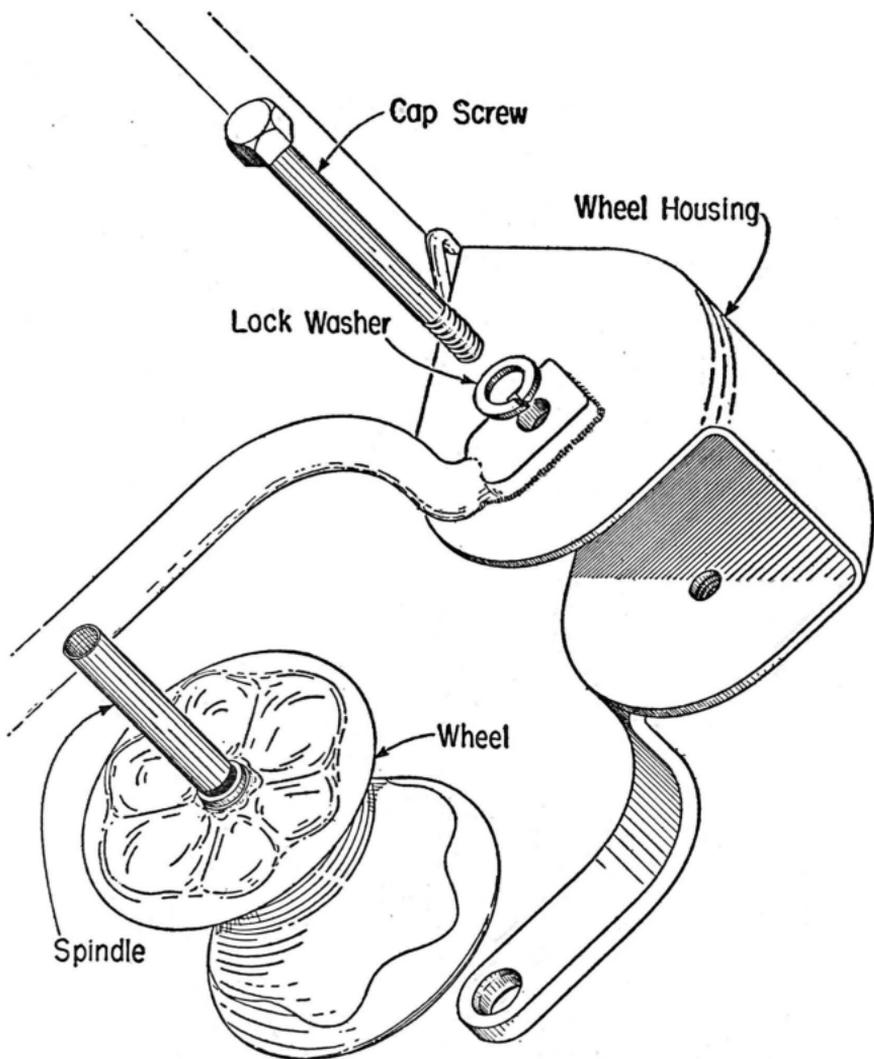
4. LUBRICATION

4.01 An oil hole is provided in the hub of each wheel for lubricating the wheel bearings occasionally. All of the commonly used automobile engine oils are satisfactory for this purpose, but heavier oils will have less tendency to run out.

5. REPLACEMENTS AND REPAIRS

5.01 Seat Assemblies and Frame Assemblies are interchangeable. If repairs or replacements of parts are necessary, the defective assembly should be returned for repairs. Defective cable cars or assemblies should be properly tagged to indicate the defect before being returned to the storeroom.

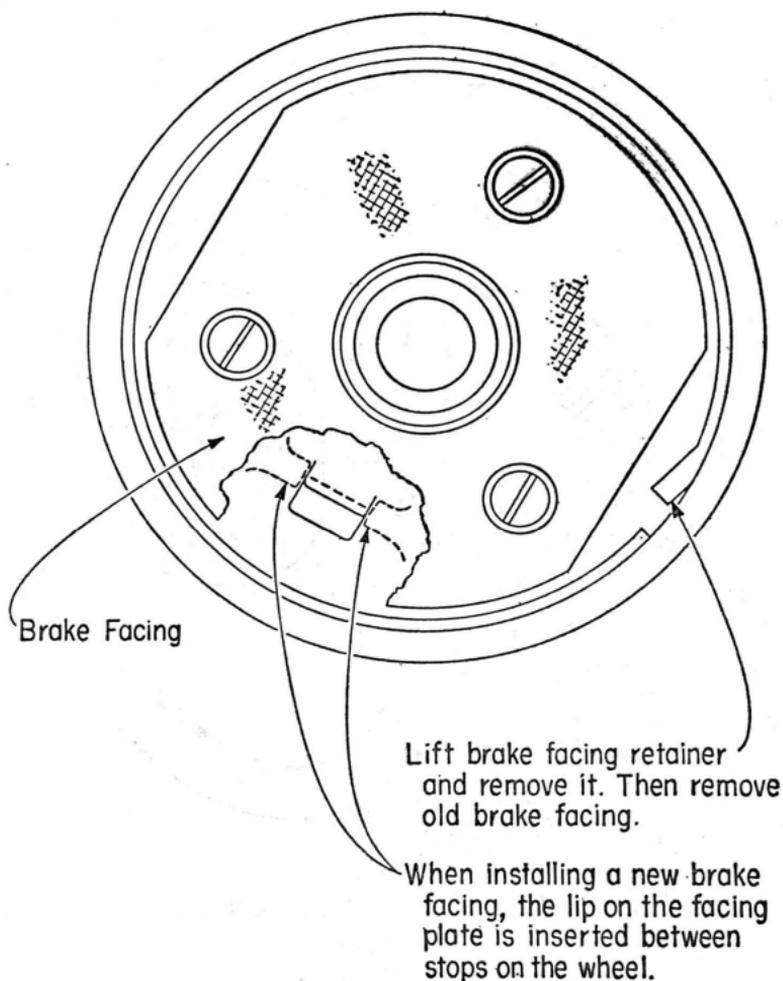
5.02 **To replace the plain wheel**, remove the cap screw and lock washer and slide the wheel out of the wheel housing. Remove the spindle from the old wheel.



If the spindle is in good condition and free from excessive play when inserted in the new wheel it may be reused; otherwise it should be replaced. Insert the new wheel in the housing and secure it with the cap screw and lock washer. Lubricate the wheel bearing before use.

5.03 To replace the brake wheel, release the brake by unscrewing the brake adjustment wingnut to the end of its travel and replace the wheel as in Paragraph 5.02 with the brake facing on the side toward the brake plate.

5.04 **To replace the brake facing**, remove the brake wheel as in Paragraph 5.03. Remove the brake facing retainer by prying out the bent lip with a screwdriver. Lift out the old brake facing.



When installing the new brake facing, insert the lip on the steel plate between the stops on the wheel. Replace the brake facing retainer and install the wheel in the car.

5.05 **To check the adjustment of the cable car brake** unscrew the brake adjustment wingnut to the end of its travel. The steel brake disc should be retracted against the inside of the wheel housing. Screw the wingnut two full turns from its outer limit of travel. The brake plate should start to advance toward the wheel within these two turns.

5.06 **To adjust the brake**

- (a) If the steel brake disc does not retract against the wheel housing, unscrew the brake adjustment wingnut to the end of its travel and then remove the cotter pin and unscrew the lower nut holding the brake plunger until the steel brake disc just touches the housing. Replace the cotter pin. If the disc does not retract fully, the brake springs may be weak or broken or the mechanism binding and the car should be marked defective and turned in for repair.
- (b) If the brake disc does not start to advance toward the wheel during the first two full turns of the brake adjustment wingnut, turn the wingnut in two full turns from its outer limit of travel, then remove the cotter pin and screw in the lower brake plunger nut until the brake disc starts to move toward the wheel. Replace the cotter pin.