

BSM# 821B

TRU-STOP BRAKE

OPERATION AND MAINTENANCE

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1. GENERAL

1.01 This section covers the operation, adjustment and maintenance of the Tru-Stop brake used principally on construction trucks as a parking and holding brake.

2. SAFETY PRECAUTIONS

- 2.01** Do not leave truck unless parking brake is applied.
- 2.02** Block wheels while brake is being adjusted.
- 2.03** If the truck is equipped with a two speed axle with vacuum shift, leave truck parked in low range of the axle.

3. DESCRIPTION AND NAMES OF PARTS

3.01 The Tru-Stop brake consists of a rotating ventilated disc mounted directly in the drive shaft line, and either two or four brake shoe assemblies mounted to anchor brackets that are in turn fastened directly to the rear face of the transmission, to a cross-member of the truck frame, or to the mounting brackets of the power take-off.

3.02 The brake operating parts consist of lined brake shoes, lever arms and operating levers with necessary shoe and anchor pins, clevis pins and bolts. These parts are attached to the anchor brackets by anchor pins.

3.03 To order parts for the brake the assembly number must be known. In most trucks the assembly number will be 20D-2A367, which means

20—12-inch disc.

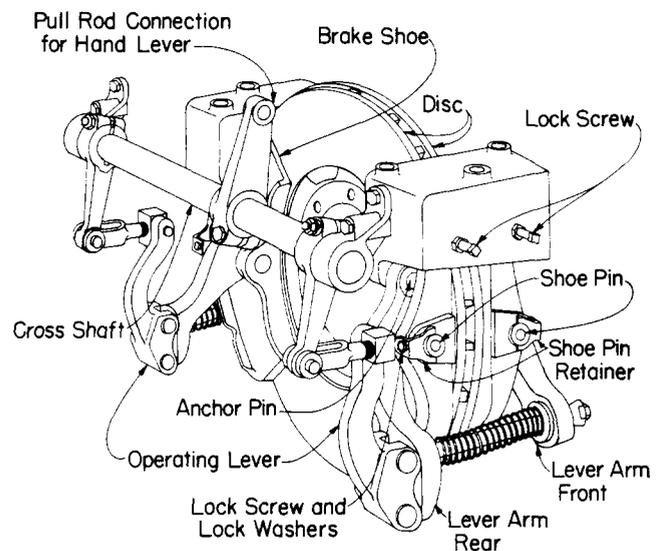
D—Double shoe brake.

2A—Drilling and piloting of disc; this is found on the edge of the disc.

367—Mounting and brackets.

The number might be 40D-11482 which indicates a 14-inch disc with a different drilling. With the proper part number and the name of the part, orders can be placed.

3.04 Figure 1 shows the various parts of the brake assembly.



TRU-STOP BRAKE ASSEMBLY
AND PARTS

Fig. 1

4. USE AND OPERATION

4.01 The brake is for use as outlined below.

- (a) In conjunction with wheel chocks while placing cable, erecting poles or similar work operations.
- (b) As a parking brake.
- (c) As a supplement to the foot brake if this type of brake should fail while the truck is traveling. It should be used for this purpose only to stop the truck and then necessary repairs should be handled in accordance with local instructions prior to using the truck again. If it is necessary to use the Tru-Stop brake to stop the truck, the brake should be applied slowly.

4.02 The brake is applied through a system of lever arms connected to the hand brake lever by a pull rod or cable.

4.03 As the hand brake lever is pulled back, the brake shoes located on each side of the disc are forced against the disc mounted on the propeller shaft. The lined faces of the shoes press against both sides of the rotating disc and cause a gripping or squeezing action on the disc which prevents rotation between the shoes and disc and holds the vehicle in place.

4.04 Under normal stopping conditions use the service brake to bring the truck to a stop. After the truck has come to a stop, set the hand brake to maintain the parked position. Do not use the hand brake until the truck has been brought to a complete stop. If a quick pull is exerted on the hand brake lever just as the truck is being brought to a stop, damage can result to the braking mechanism and drive shaft.

4.05 The hand brake lever is locked in the "on" position by a ratchet and pawl. It is released by pulling back slightly on the lever and at the same time actuating the pawl release and then pushing the lever forward as far as it will go.

4.06 Make sure the brake is released when the truck is in motion.

5. LUBRICATION

5.01 Lubricate the brake at the grease fittings supplied at the same intervals as specified for the truck lubrication. All other working parts of the brake should be oiled at this time.

5.02 If the truck is lubricated at other than Company garages the lubrication of the brake should be called to the attention of the motor vehicle service man. The brake is special equipment and might otherwise be overlooked.

6. MAINTENANCE

6.01 Inspect the brake at intervals of about 1000 miles or at the time of each lubrication to make sure that no undue wear is taking place and that adjustments and lubrication are correct. If the brake shoes are sticking on the pins due to poor lubrication they should be removed, cleaned and properly lubricated.

6.02 Make sure that no warping of the discs has occurred.

7. ADJUSTMENT (See Fig. 2)

7.01 Adjust the brake as follows:

- (1) Disconnect cross shaft from the operating levers.
- (2) Tighten adjusting nuts so that adjusting spring exerts enough pressure to bring operating levers solidly against rear lever arm.
- (3) Insert 1/32" shim between rear shoe lining and disc on one pair of shoes.
- (4) Further tighten adjusting nuts until front shoe is firm against disc and so that shim between rear shoe and disc can be removed. Then remove shim.
- (5) See that shoe tension spring is in place, then adjust shoe stop screws so that linings are parallel to disc.
- (6) Repeat 3, 4, 5 with other pair of shoes.
- (7) Be sure hand lever is in fully released position, then adjust brake rods to the proper length and make final connections.

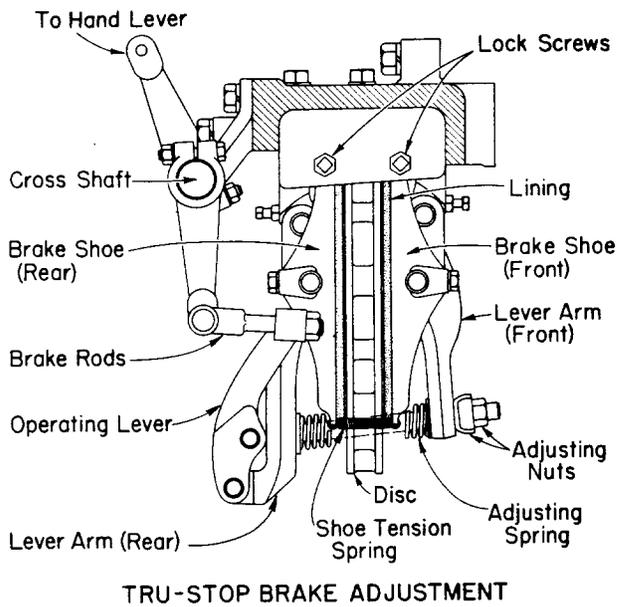
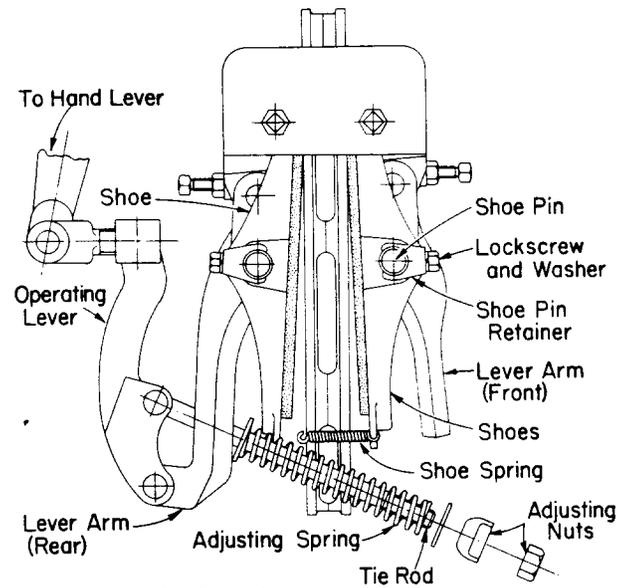


Fig. 2

8. RELINING

8.01 Reline the brakes as illustrated in Figure 3.
Use only brake lining supplied by the manufacturer of the brake.



- 1 Remove adjusting nuts.
- 2 Remove shoe spring.
- 3 Apply hand lever so that arm can be swung clear of the rod and spring.
- 4 Remove shoe pin retainer. Drop shoe.
- 5 Replace relined shoes and assemble in reverse order.
- 6 Adjust.

RELINING TRU-STOP BRAKES

Fig. 3