

INSTRUCTIONS

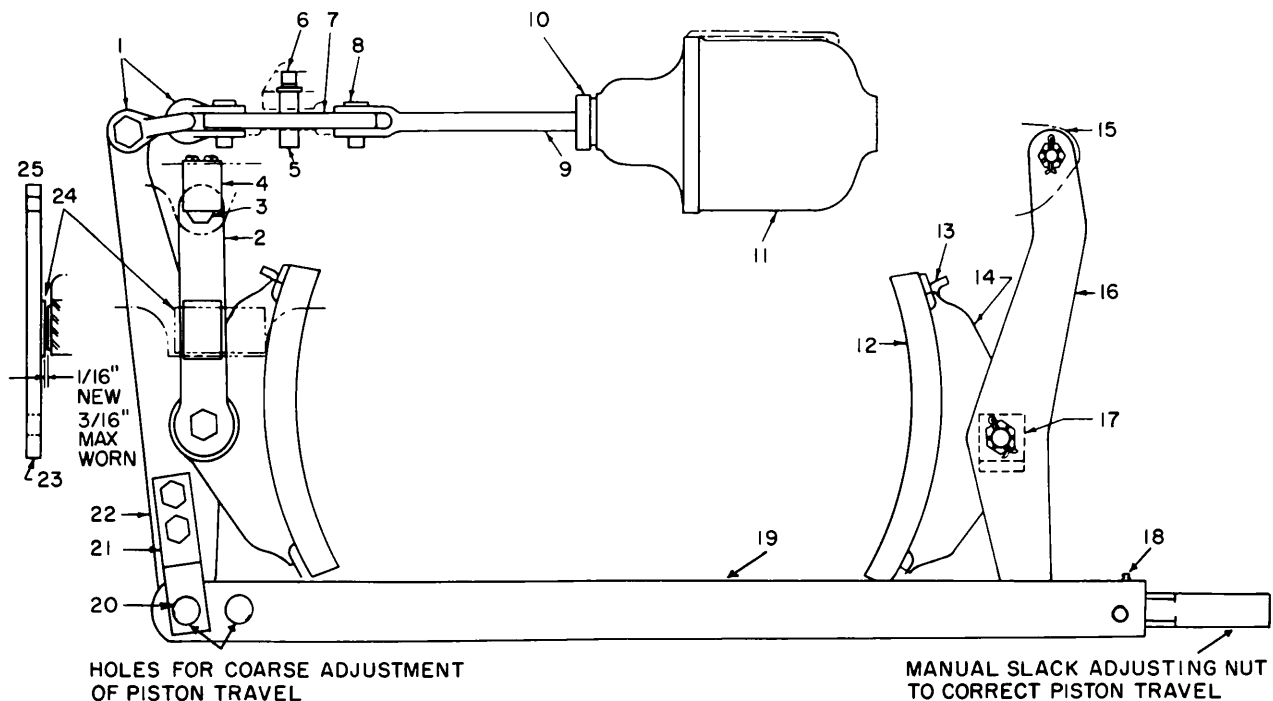
BRAKE RIGGING FOR RAILROAD LOCOMOTIVES



INTRODUCTION (See Fig. 1.)

The brake assembly on this locomotive is known as the "clasp type." It provides for two brake shoes to be applied to each locomotive wheel. The brake rigging assembly consists of air cylinders,

pushrods, brake shoes and mechanical linkage made up of various hangers, clevises, levers and brake rods. When the brakes are applied, the air cylinder moves the mechanical linkage to apply the brake shoes to all the locomotive wheels in a "clasping" action. This provides a quick, positive braking effort.



HOLES FOR COARSE ADJUSTMENT
OF PISTON TRAVEL

MANUAL SLACK ADJUSTING NUT
TO CORRECT PISTON TRAVEL

- | | | |
|--------------------|---------------------|-----------------------|
| 1 Clevises | 9 Special push rod | 18 Grease fitting |
| 2 Hangers | 10 Piston | 19 Brake rod assembly |
| 3 Pin | 11 Brake cylinder | 20 Pin |
| 4 Pin retainer | 12 Brakeshoe | 21 Pin retainer |
| 5 Pin | 13 Key | 22 Live lever |
| 6 Retaining bolt | 14 Brake head | 23 Hanger |
| 7 Equalizing lever | 15 Truck frame | 24 Wear plates |
| 8 Push rod pins | 16 Dead levers | 25 Hanger restraint |
| | 17 Connection strap | |

Fig. 1. Clasp brake rigging (E-11690)

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

INSPECTION

Daily or Trip - Inspect the brake shoes for wear. Look for loose, broken or missing parts. Check the brake cylinder piston travel. The piston travel should not exceed six in. See ADJUSTMENT.

LUBRICATION

Monthly - Apply a good grade of ball bearing grease to the slack adjuster grease fittings. Do not lubricate pins, bushings or wear plates. (It has been found that grit and dirt sticking to exposed oil surfaces cause more wear than when the parts are left dry.)

ADJUSTMENT (See Fig. 2.)

Brake cylinder piston travel, which increases as the brake shoes wear, should not exceed six in. A manual slack adjuster is provided to take up small amounts of slack in the brake rigging. Two holes in the ends of the brake rods provide means for coarse adjustment.

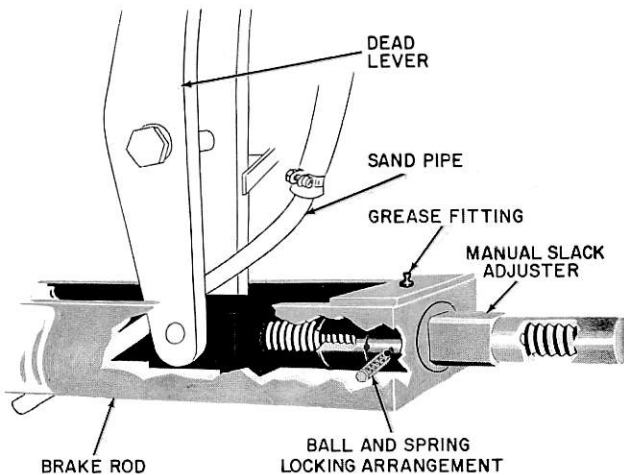


Fig. 2. Cutaway view of manual slack adjuster (E-11698)

1. Release the locomotive brakes.

2. To reduce brake cylinder piston travel, turn the slack adjuster to move the brake shoes closer to the wheels. Adjust the shoes to hold the cylinder piston travel as close as possible to the low limit of 2-1/2 in.

NOTE: The slack adjuster has an automatic ball and spring locking arrangement. To engage this locking arrangement, the slack adjuster must be turned in increments of 180 degrees.

3. When the piston travel cannot be adjusted with the slack adjuster, a coarse adjustment becomes necessary.

4. To make a coarse adjustment, turn the slack adjuster to the extreme release position. Move the live lever to the next hole toward the locomotive wheel. Use new cotter pins when securing the live lever pins in the new position.

BRAKE SHOE RENEWAL

1. Release the locomotive brakes.

2. Turn the slack adjuster to move the shoes as far as possible from the wheel tread.

3. Disconnect the live levers from the brake rods.

4. Remove the brake shoe key by pounding on the lug of the key. Knock the brake shoe loose from the brake head to remove it.

5. Position the new brake shoe to the brake head and align the key slots of both parts. Drive the key in place to secure the brake shoe to the head.

6. Reconnect the live lever to the brake rods.

7. Adjust the brake rigging to obtain the correct brake cylinder piston travel.

LOCOMOTIVE AND CAR EQUIPMENT DEPARTMENT

GENERAL  **ELECTRIC**

ERIE, PA.