

SET UP PROCEDURE

for ELLCON-NATIONAL ENX Series Arm Type Empty Load Device

The following tests are to be performed on tangent, level track and in conjunction with the latest revision of the "AAR Code of Air Brake System Tests for Freight Equipment," Standard S-486. The following tests and adjustments, if necessary, can be performed on an empty car only.

Adjusting Block Size: (Empty Car)

On Revenue Cars - In Service where car has settled, Use a 1/4 Inch Block.

On New Cars - Allow 1/4 inch for car settling, 1/8 inch for lubrication pads (if used).

Example:

1/4 inch car settling + 1/8 inch lubrication pad + 1/4 inch standard block

Total: A 5/8 inch block for new cars

Loaded Car Block

Use a 2-inch block on all cars

Note:

An empty car test cannot be run on a loaded car.

EMPTY CAR SET-UP AND TEST

- 1) Install a brake cylinder pressure tap.
- 2) Place appropriate size block on side frame below adjusting screw - 1/4 inch block revenue cars, 5/8 inch block new cars.
- 3) Loosen lock nut on adjusting screw; rotate screw upward (see Figure 1).
- 4) Make a 30-lb reduction (from 90 psi brake pipe). With brakes applied, rotate adjusting screw downward until head of screw contacts adjusting block, creating a slight drag on adjusting block (see Figure 2).
- 5) Tighten locking nuts in place being sure adjusting screw does not rotate. Apply Blue Loctite No. 242 (see Figure 3).
- 6) Release brakes; remove adjusting block; re-apply brakes (30 psi reduction). There should be a gap between head of contact screw and top of side frame. Empty car indicator should be visible (see Figure 4). Record brake cylinder pressure.
- 7) Release brakes. Note that sensor arm retracts, indicator stem retracts and brake cylinder piston fully releases.

LOADED CAR TEST (On Empty Car)

- 1) Place 2-inch block on side frame under adjusting screw.
- 2) Apply brakes (30 psi reduction from 90 psi brake pipe). Sensor arm should move down until adjusting screw contacts top of 2-inch block (see Figure 5).
- 3) With brakes applied, check that empty car indicator is not visible indicating empty load valve is in loaded mode. Record brake cylinder pressure. It should be at least 20 psi higher than recorded in Step No. 6 of empty car test.
- 4) Release brakes. Note that sensor arm retracts upward and brake cylinder piston fully retracts.
- 5) Remove 2-inch block and brake cylinder pressure tap. Empty load set up and testing is complete.

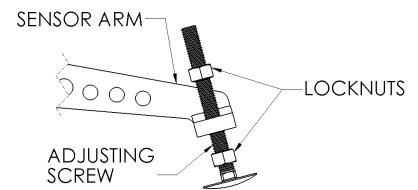


FIGURE NO. 1
SENSOR ARM

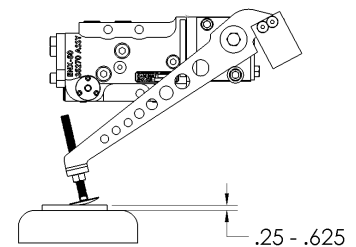


FIGURE NO. 2
ADJUSTING BLOCK

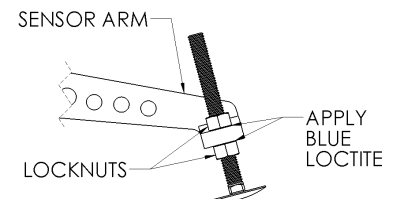


FIGURE NO. 3
SENSOR ARM

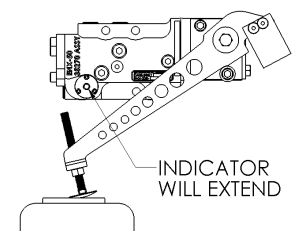


FIGURE NO. 4
EMPTY CAR INDICATOR

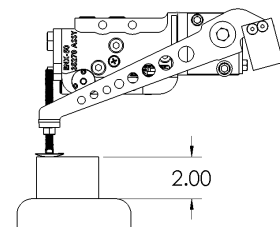


FIGURE NO. 5
LOADED CAR BLOCK