INSTRUCTION PAMPHLET

U-5007

INSTALLATION AND
ADJUSTMENT OF
POSITION LIGHT SIGNAL

MAY, 1934

UNION SWITCH & SIGNAL CO.
SWISSVALE, PA.
Main Stem of Signal to be Approximately Aligned With the Track During Construction

*Exact Alignment* of main light beam to be obtained by adjustment of individual light unit "A" by means of ball and socket joint "B." Cast iron arm "D" must not be loosened from its pipe support.

Adjustment can be made by two men, one at the signal and an observer on the track. For ordinary range the latter should be about 1800 to 2000 ft. from the signal. For extreme long range the observer should be about 2500 to 3000 ft. away.

For the vertical adjustment of beam, slightly loosen the
bolts "C" on the horizontal center of the unit and loosen or tighten the bolts "C" on the vertical center.

For the horizontal adjustment of beam, slightly loosen the bolts "C" on the vertical center of the unit and loosen or tighten the bolts "C" on the horizontal center. In making horizontal adjustments, observer proceeds to a point at each side of the track and equidistant from it. If the unit appears equally bright from both sides, the horizontal adjustment is correct. On curves it may be necessary for the observer to be not more than 800 to 1000 ft. from the signal, but this depends entirely on the degree of curvature.

Upon approaching the signal the lower or "toric" section of the lens should brighten up as the main light beam is lost. If the toric indication does not appear the unit should be
examined to see that the lens is in its proper position. The lower portion is indicated by the word "bottom" imprinted in the glass and under no circumstances should this be turned to any other position. This is true of both the ordinary toric and the spreadlite toric.

At about 45 deg. vertical angle from the signal the short range indication should be obtained from the mirror reflector. This indication should be a bright spot in center of lens nearly filling the center section.

ALL ADJUSTMENTS MUST BE SECURELY LOCKED TO MAINTAIN THE PROPER INDICATION

For horizontal adjustment of this indication, loosen nuts "F" and shift hinge "G" sideways in slotted holes. Use bolt "E" for vertical adjustment of the indication.

The mirror should be wiped off occasionally, care being taken to avoid changing its adjustment.
In replacing incandescent lamps, lamp base must not bind in lamp receptacle sufficiently to prevent spring in base of the receptacle from forcing pins in lamp base to their proper seats. This is necessary in order to have the filament in its correct location.

In case all of the units in any row cannot be made to show uniformly bright by adjustment, usually considerable improvement can be secured by changing lamps around in the different units or by placing other lamps in the dull units.