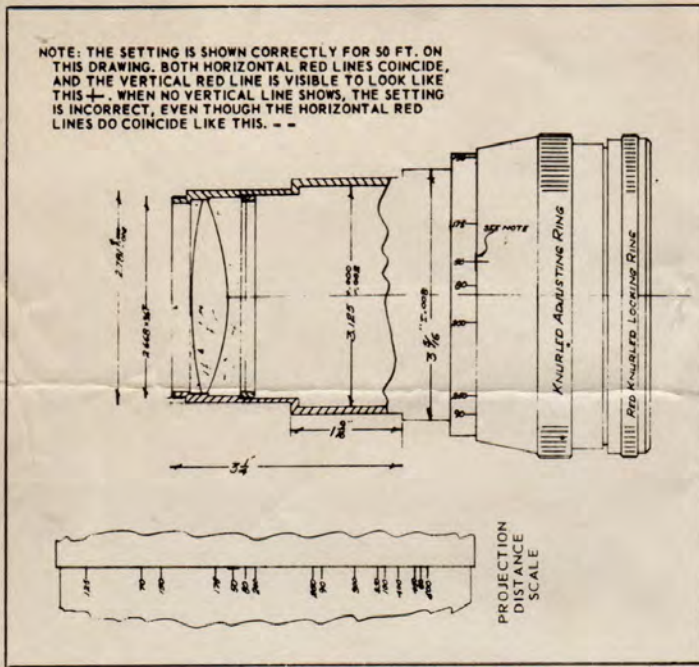


**DIRECTIONS FOR
ADJUSTING CINEMASCOPE ATTACHMENTS
TYPES 41-77-02 AND 41-77-04**



Each CinemaScope attachment must be adjusted for the projection distance in your theatre as follows:

Hold the attachment in the left hand with the front of the unit towards the right. Unlock the adjustment by loosening the red colored ring. Rotate the large diameter knurled uncolored ring so that the top turns away and continue the rotation until the end is reached but do not go against the end with much force. Turn the whole unit until you locate a short red line parallel to the axis and on the same part of the assembly as the uncolored ring. Hold the uncolored knurled ring from turning and rotate the left end of the assembly so that the top moves away until the short red index line is opposite the red line on the rotating part which has the number 50. Note that another red line crossing the line marked 50 at a right angle, and making a plus (+) sign, is just visible, and that there are no other crossed lines to be seen. If the attachment were left in this adjustment it would be properly set for a projection throw of fifty feet; the numerals indicate the distance from the projector to the screen center. The setting and the unfolded scale for both models are illustrated in Fig. 5 and 6. Continue the rotation past the intervening numbered lines until the next set of crossed lines appears at the number 60, which will be the next number higher than 50. When the short index line and the numbered line are directly opposite, the lens is adjusted for a 60 foot throw. Should a projection distance somewhere between 50 and 60 feet exist then estimate the correct setting between the two marks, as for example, if the throw were 53 feet the index line should be set about $\frac{3}{10}$ of the distance from 50 to 60.

For throws greater than 60 feet, continue the rotation as before watching for a crossed line to appear at that number which is just smaller than the projection distance and the next set of crossed lines would be greater than the required setting. Reset to the smaller number, that is, the one closest to but less than the throw. Estimate the setting between the two closest numbers, one lower and the other higher, as previously described and lock the adjustment by tightening the red colored ring. The CinemaScope attachment is now ready for assembly with the regular projection lens and installation of both into the projector.

A final test of the adjustment is described later. It must be clearly understood that once the attachment has been properly adjusted it needs no further attention in this regard unless it is moved to some other equipment or changes in projection throw are made.

The setting for the projection throw is not a focusing adjustment; it merely adjusts the astigmatism of the attachment so that uniform definition is obtained over the whole screen area. The combination of the projector lens and CinemaScope attachment should next be rotated so that vertical lines in the center of the screen appear vertical and focusing of the projector lens is then accomplished in the usual manner by use of the customary knob and screw.

UNDER NO CIRCUMSTANCES SHOULD THE ATTACHMENT ADJUSTMENT BE CHANGED AS THE PROJECTION LENS AND ATTACHMENT ARE FOCUSED, except as described in the following:

The accuracy of the setting of the CinemaScope attachment can be checked at the time of installation by turning the focusing knob on the projector so that the images go out of focus slightly in each direction and observing that the horizontal and vertical lines of the image go out of focus simultaneously and at the same rate. For example, if turning the focusing knob clockwise should make the horizontal lines fuzzy but the verticals should get a little sharper before becoming fuzzy, then adjustment of the CinemaScope attachment is indicated. Unlock the red clamping ring and turn the uncolored knurled ring slightly in one direction and repeat the in-and-out of focus test to see whether the change in horizontal and vertical lines occur together. If not, turn in the other direction slightly beyond the initial setting and recheck. When the best adjustment is found by this trial method lock the setting with the red clamping ring.

It must be emphasized that great care be used in this test and, in evaluating the screen result, it should be remembered that the scales on the barrel were placed thereon in manufacture of the unit and suitably tested. Should the test indicate a value 5% or more different than the scale setting the attachment should be returned for inspection.

