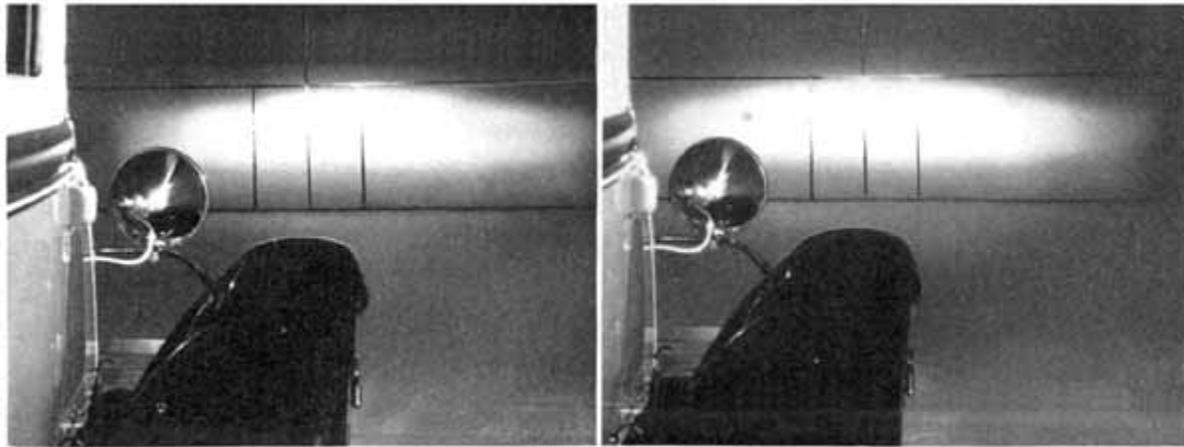


Ford Model 'A' Headlamp Adjustment - Twolite Type



Right Headlamp Properly Focused and Aligned

Fig. 650

Both Headlamps Properly Focused and Aligned

Fig. 651

General

The Twolite headlamps were introduced in February 1929 (later on foreign models) and phased in on passenger models first. Most passenger models had the new lamps by late March. The Twolite headlamps are distinguished by the prism lenses and larger diameter wiring plug. The reflectors, light sockets, and lenses are also unique to these headlamps. If any of these items are incorrect, proper focus can not be obtained.

The following information is adapted from the *Ford Service Bulletin* for February 1929. Although the method for adjustment is similar to the early "H" headlamps, the grid used to position the lights is quite different.

The new design Ford Twolite headlamps were supplied in two types- a two bulb type for cars without cowl lamps and a single bulb type for cars with cowl lamps. These lamps were nickel plated in 1929, stainless steel thereafter. Black enamel headlamps were furnished for trucks and commercial jobs.

The new lamps were supplied with 6-8 volt double filament double contact gas filled bulbs. Both of the filaments were 21 candle power. The lower filament provided a beam which gives exceptionally brilliant road illumination for high speed driving. The upper filament provided a downward tilting beam which illuminates the entire road surface close to the car.

The two bulb headlamp had a separate 2 candle power bulb mounted in the upper part of the reflector for parking purposes.

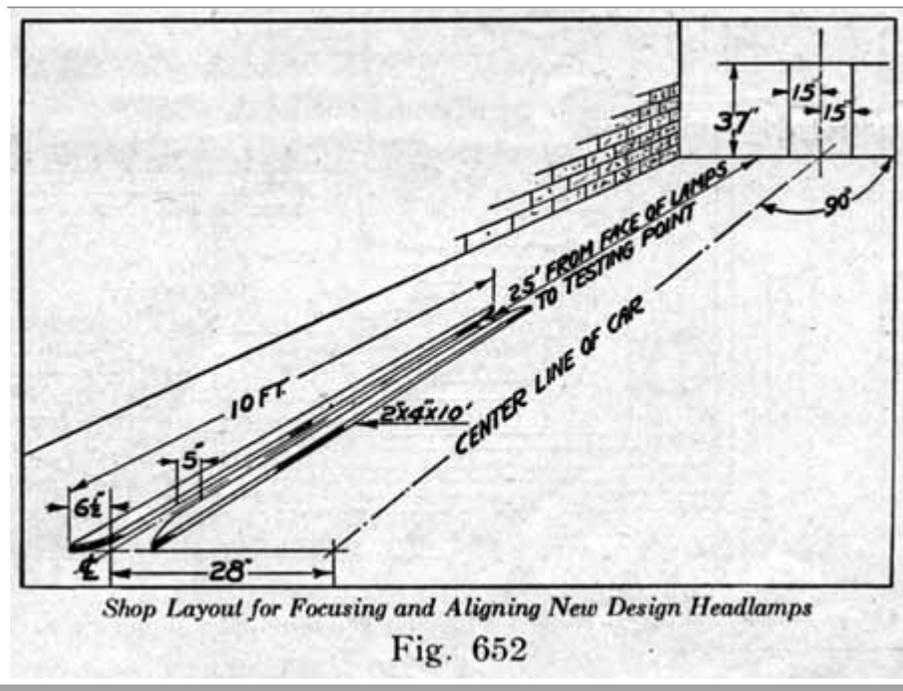
In addition to the standard 21 candle power Twolite bulbs Ford also released through service (in those States in which the law permitted) a 32-21 candle power bulb A-13007-D. This bulb gave a driving light of greater beam intensity than the standard bulb.

Headlamps - Focusing and Aligning

Align and focus headlamps with empty car standing on a level surface in front of

Ford Model 'A' Headlamp Adjustment - Twolite Type

a white wall or screen 25 feet from the front of the headlamps. This wall must be in semi-darkness or sufficiently shielded from direct light so that the light spots upon it from the headlamps can be clearly seen, and must be marked off with black lines as shown in Fig. 652.



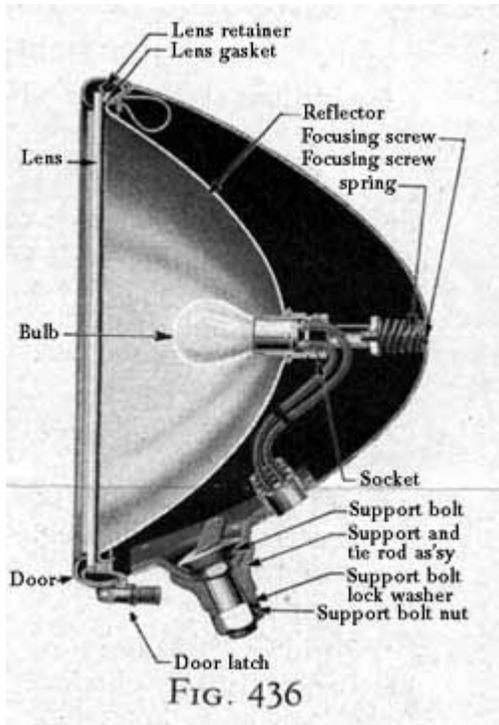
Focus

1. It is important that lens be installed in door with the word "top" at top of door and with all lettering reading properly from front.
2. Turn on upper beam.
3. Focus by means of screw at back of lamps, first one lamp and then the other, adjusting the bulb filament at the focal center of the reflector to obtain an elongated elliptical spot of light on the wall, with its long axis horizontal (see Fig. 650). In focusing, adjust the bulb to obtain as good contrast and as well defined cut-off across the top of the spot of light as possible.

With lamps thus focused for the upper beam the lower beam will be in satisfactory position.

No adjustment is necessary for the small bulb for parking light.

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Alignment

1. Headlamps are aligned by moving lamps after nut at bottom of bracket has been slightly loosened.
2. The tops of the bright spots on the 25-foot wall are to be set at a line 37 inches above level of surface on which car stands. (See Fig. 652.) With tops of bright spots thus set for empty car, the headlamps comply, under all conditions of loading, with the requirements of the various states.
3. The beam of light from each headlamp is to extend straight forward; that is, the centers of the elliptical spots of light must be 30 inches apart.

Summary

Original Twolite headlamps when properly restored, focused, and adjusted, are extremely effective. HOWEVER, there are distinct differences in the components that make up the different headlamps. If the components are mismatched the headlamps cannot produce the proper lighting.