Headlights

Thru the years there have been a lot of comments from owners about not being able to see well at night with original Model A headlights. This has been on ongoing discussion from the time the Model A was first sold. With an increase in power the Model A was faster than the Model T but the headlights were essentially the same. With the higher speed of the Model A, when driven at night, the headlights would not light the road far enough ahead for safe driving. Henry realized this and in February of 1929, the "Twolite" headlight system was introduced which incorporated a "low beam" for around the town driving and a "high beam" for open highway driving with no cars coming toward you. This was definitely an improvement but still was marginal at best. Aftermarket high output 50/32 C.P. (candle power) bulbs could be purchased which increased the "high beam" light output by more than 50%. When these bulbs were properly focused and adjusted and if the reflectors were in good condition, driving at night became much safer and enjoyable. Even today, this combination works well for most night driving situations.

In the late 1930's, the automobile industry introduced "Sealed Beam" units to replace the conventional separate headlight bulbs, reflectors and defusing lenses. Sealed Beam headlights had better light output and required much less maintenance. Kits soon became available to install Sealed Beam units in the Model A headlight housings and there are still many Model A's in service today with this conversion. Sealed Beam headlight units have the advantage of precisely positioning the filament at the exact focal point of the reflector, preserving the mirrored surface of the reflector from moisture and tarnish and keeping everything clean.

One downside of using 50/32 C.P. bulbs or Sealed Beam units was that the higher current requirement would tax the original Model A generator to its limit. Also if the generator output was adjusted for a higher output for driving at night, it would be too high for extended daytime driving which often resulted in overcharging the battery.

In recent years, with horsepower improvements and overdrives that allow our Model A's to be driven at even faster speeds, owners wanted even better light for night driving. One solution was to install "Quartz Halogen" headlight kits. While Halogen bulbs did produce better light, they required either modifying the existing reflectors or installing new reflectors. They also operated at a very high temperature and require even more current to operate. This resulted in failures of the sockets and wiring connections within the headlight assembly and a high output alternator was necessary to provide the increase in the current requirements. I do not recommend Halogen bulbs.

Recently, direct replacement LED headlight bulbs options have become available. These LED bulbs have the advantage of producing more light and require very little current to operate, much less than the original Model A TWOLITE Bulbs. When focused correctly, LED bulbs will definitely light up distance objects much better. They fit right into your original sockets and only require a few amps to operate. You may have to lengthen the focusing screw and spring to achieve good adjustment. There seems to be less light projected down onto the road immediately in front of the car but this may be just a perception.

The USA made direct replacement headlight bulbs use an array of several small LED elements while a direct replacement LED bulb made in the UK (England) uses just 2 large individual LED elements. The UK bulbs seem to be a little easier to focus. The USA made LED bulbs are available from most Model A Parts suppliers while the UK bulbs are available from: <u>http://www.dynamoregulatorconversions.com</u>



UK made, Dynamo & Regulator Conversion Co.



USA Made, Logo Light

Tech Tip

Model A headlights will not work well if the reflectors are not in good condition. Original reflectors in otherwise good condition can be re-silvered or you can purchase new reproduction reflectors. Brattons offer a very high quality reproduction headlight reflectors that are aluminum coated and sealed. These have the same reflectivity as the original silver plated reflectors and will probably cost less than having your original reflectors re-silvered.