NADA: Series One Head Lamp Trivia (Dixon Kenner)

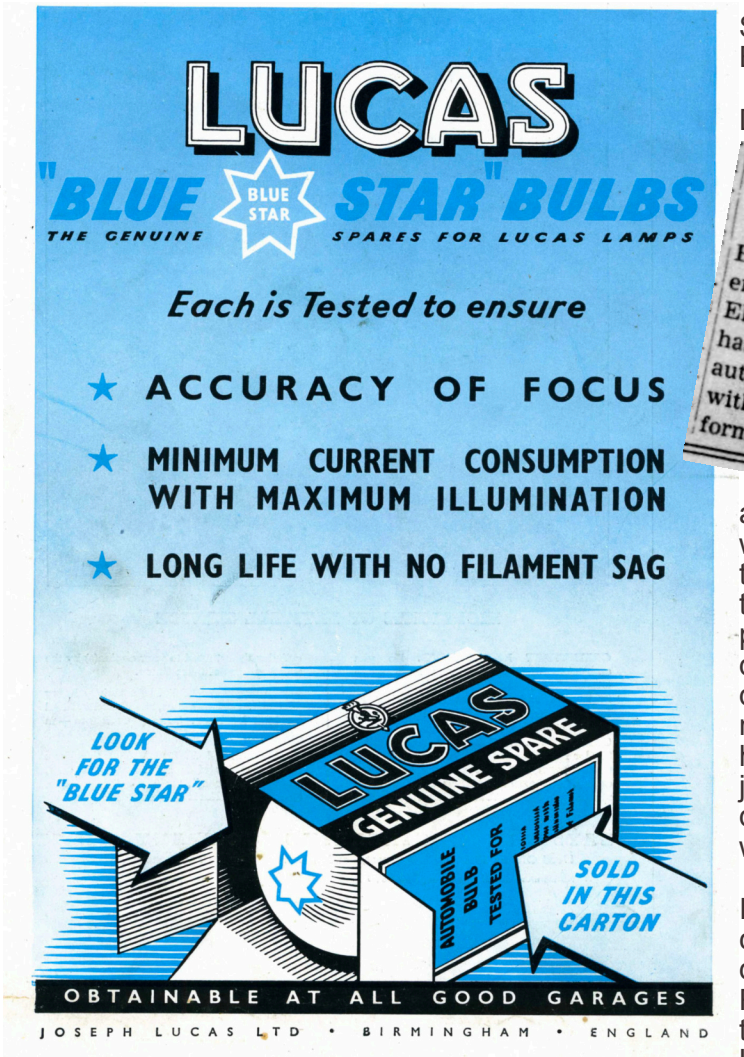
The other day, while in discussion with Keith Barrett about Series Land-Rover lighting, we went off on an interesting tangent. What headlamps were supplied with the North American Dollar Area (NADA) Land-Rovers that arrived? In fact, what headlights were used by British cars back in the late Forties, after the War, when the British, in a huge export drive, started to look to North America as a potential market. But first, We should ask what was the situation in North America vis-a-vis head lights?

First, the obligatory history lesson. What seems to be a simple thing today certainly wasn't in the Thirties. There was such dissatisfaction with headlamps in the U.S. that a common solution was needed. Headlamps, of that era, had metal reflectors, with a silvered reflecting surface, which, like silver coins, or your mother's fancy dinner set, tarnished in the air, and needed to be regularly polished. Bulbs were not standardised, they had metal bases, there were no common rubber o-rings to try and seal the unit from moisture. There was no common method for aiming the lights, either mechanically or visually.

The solution? A glass sealed beam headlamp was patented and it solved most of these problems. The sealed beam was made from two pieces of glass, one, a lens with optics, the other a parabolic aluminised reflector. Add in some tungsten filaments supported my metal lead wires. Fuse (melt) the assembly together and fill it with an inert gas to prolong the life of the tungsten filaments.

Within two years, 1940 & 41, all American and Canadian car production switched to one common headlamp size. 7 inch round, with two headlamps per vehicle. Because of some patent restrictions, some "sealed beam" headlamps used a metal reflector, soldered in bulb and a glass lens fused together. These would be phased out in the mid Fifties. [1]

At the end of the Forties all U.S. headlamps were as follows: 7 inch (178 mm) round sealed beams with high-beam filament on focus, low-beam filament off focus, visual aim, and more consistent lighting than previously obtainable. European headlamps had replaceable bulbs with an internal bulb shield on the low-beam filament, a symmetric low-beam pattern, visual aim, and continued emphasis on the accuracy of the filament location.



So, what was happening in England?

Dated 1948, this sounds exciting, but is really only wishful thinking from the marketing division of the Joseph Lucas company. [2] Although standardized in USA, and by default Canada, in 1940, no one British company had sufficient volume to justify the expense of producing sealed beams. So, what happened?

To Change Headlights

NEW YORK, Sept. 25 (CP).— British automobile manufacturers Friday said that the Lucas Electrical Company of England has arranged to supply British automobiles in the United States with headlights that will conform to state safety regulations.

In England, there was competition that Lucas dominated, Looking at Rover and Lucas publications, they reference the Lucas F700 unit for headlamps. Curiously 7 inches in diameter like the American sealed beam. At a time when there was little standards for headlamp sizes. [3] But, when you look at the detailed spare parts books, starting in 1950, one sees the list of parts for North America, but there is an asterisk for the bulb which reads "lamp supplied less bulb". [4]

What we have is a bit of a conundrum. The United States required sealed beams. But nobody in the U.K. made them. So, what happened? Well, we are left with a choice. Either (1) the vehicles came over

without headlamps, and they were installed at the port of entry by Rootes, or possibly Rover, (2) Rover bought supplies of sealed beam headlamps from North America and installed them over there, of (3) Options one or two for the American market cars, and the Lucas F700 headlamps for the Canadian market. Given the balance of payments situation, import restrictions, and William of Occam, it should be pretty clear.

What else comes into play? Well, in February 1950, Rover, for a variety of reasons, as well as seeing what a challenge setting up a dealer network would be, signed an agreement with Rootes Motors, and from that point on, all Rovers, the P3 and Land-Rover, would be sold and services by Rootes. Quite a unique arrangement, though not surprising. Both Reginald and William Rootes had visited Canada prior to the War. After the war, Brian Rootes, William's younger son, was sent to New York to set-up Rootes Motors Inc on Long Island, NY, and establish a network of dealerships. In May, 1948, Rootes was incorporated in Canada in Toronto. [5]

According to Lucas, post February 1950, Rover cars and Land-Rovers were supplied with Lucas part 553724, which is an adaptor made by Ward and Goldstone, which was a piece of harness with a three spade connector for the North American sealed beam unit. This neatly ties in with the Rootes-Rover agreement, and one can postulate that all vehicles coming over after a particular point would reflect Rootes desires.

Looking at 80 inch imports into North America, we see five (5) imported into Canada in 1948, one (1) in 1949, and then 75 into Canada and 14 into the USA in 1950. We already know that all 1951 model Land-Rovers are imported and sold by Rootes. [6]

Going to that fount of production data, the Land-Rover FAQ, looking up 1950 we quickly see that the Rootes-Rover agreement was in effect when the destinations for all of the Land-Rovers exported to Canada or the USA from April 1950 are to Rootes in Vancouver, Toronto, or simply Canada, or to New York, or simply USA. [7]

So, for the anorak or rivet counter restoring a 1950? If your vehicle is one of the 32 Land-Rovers delivered to Yorktown Motors, or 6 to Weir Motors, before April 1950, you should be looking for a set of the smaller "Butler" or L/WD/HO headlamps for your Land-Rover. *(Image top right)* [4] Do note, there was a Canadian bolt-in replacement available (ran out of space to footnote!)

If your vehicle serial number corresponds with a vehicle dispatched to Rootes, [5] well, Rootes would have installed sealed beams to meet US requirements, and for Canada, well, the jury is out for the time being. [8]

Really, if comes down to what other British cars were supplied locally with sealed beams, so what would have Rover, or later Rootes, have done? An interesting question for the aspiring anorak or rivet counter.

The history of Lucas points out that Austin and Morris were supplying vehicles without headlamps. They were fitting when they arrived. One would expect that Rootes, realising service issues would ensure that all of the vehicles they supported would be the same.

This issue would go away in 1959 when three UK manufacturers combined efforts and formed the joint company 'British Sealed Beams Limited' (40% AEI-Mazda, 20% Osram-GEC, and 40% Lucas.) [3, p179]

So, if your NADA spec 1950-59 has Lucas sealed beams, they are not original, nor concours. Head on over to Canadian Tire and pick up a set of cheap General Electric or similar domestic sealed beam headlamps.

As this is being written, checks are being made with the current custodians of a number of pre- and post-Rootes Land-Rovers for F700 assemblies. Sometimes, observations of actual vehicles have to trump what might be written in some parts catalogue somewhere. This article is part of a larger series of articles on NADA Land-Rovers being undertaken in parallel with Keith Barrett and will evolve. [9]

HEADLAMP, L-WD-H0	**50124**
Rim and glass	552261
Wires, glass fixing	504665
Glass	552282
Bead, rubber	551959
Reflector	551966
Bulb holder, double contact	504801
Nut, fixing	180370
The following headlamps fitted from Vehicle No. 06112001.	
HEADLAMP, F700, Right Hand Home	**50579**
Rim	552912
Screw, rim fixing	552816
Excluder, rubber	552906
Unit, light	552402
Rim, light unit	552905
Adaptor, single contact	858540
Gasket, body	553561
HEADLAMP, F700	
Left hand Home and dip right	50799
Adaptor, double contact	858543
Otherwise as 50579.	
HEADLAMP, F700, Export U.S.A.	**50807**
Adaptor, Ward and Goldstone	553724
Less light unit, otherwise as 50579.	

Excerpt from CE648, Rover and LandRover, February 1950

Acknowledgements: *Jane and Keith Barrett* for discussion, photos and arranging physical substantiation. *Anon* for arguing all NADA Series Ones had F700s, less the bulb. The combination led to this article.

Notes:

1. Better Lights offered, Sealed Beams maintain efficiency, New York Times, October 15th, 1939, p 168

2. "The Phoenix Star, Arizona, September 25th, 1948. From Keith Barrett's Series One library

3. In November 1948, the big six auto manufacturers in the UK got together, with Lucas, to standardise parts. Amongst the agreed changes were 7" headlamps. *Lucas, The First 100 years, Harold Nockolds,1978, p 122*

4. Lucas Quality Equipment and Spare Parts, CE648, February 1950. F700 for both, Export USA, includes Ward & Goldstone adapter, "less light unit"

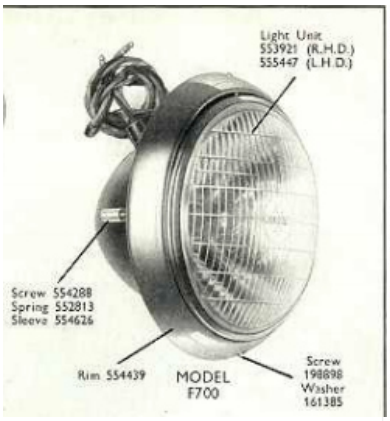
5. Brian Rootes was assisted in New York by John T Panks, who was a member of Rootes senior management. John Panks would move to Canada in 1949 to become CEO of the Canadian operation as Rootes Motors (Canada) Ltd. In 1950, Rootes purchased 32 acres in Scarborough and built a factory to assemble CKDs. All this to show the presence Rootes had in Canada and the USA. Austin was planning a CKD factory in Hamilton. Source: *A History of Rootes Canada, Peter S Badenoch, 2019*

6. Land-Rover 80" in North America, by Benjamin Smith, OVLR Newsletter December 2012, revised January 2016, abridged and published in the Land-Rover Register's Full Grille. Available at www.NASOR.org

7. www.LRFAQ.org, since 1998, the pages on serial numbers, production data and sales for NADA Land-Rovers.

8. 1950 model year Land-Rovers would have a 061 prefix, with a leading L or R for left or right hand drive. Non-Rootes vehicles would be Land-Rovers with a serial number of L06109218 or lower, the last being dispatched to Weir on March 10th, 1950. The first Land-Rover sent to Rootes was L06110886 on April 1st, 1950. All subsequent Series Ones were sold by Rootes in Canada and the USA, the North American Dollar Area of NADA.

9. There are photos of F700 equipped 1950 Cdn 80"s, as well as vehicles with sealed beams. Seventy years later, originality begins to become difficult as working headlamps are important, and if you cant find a Lucas bulb, a sealed beam is a fast replacement.



Above, the Lucas F700 unit showing the various parts. (From 1957)

Right, Lucas part 555447, or the LHD light unit, less bulb from a popular UK supplier of Lucas lighting supplies.

Left hand drive (N.A.D.A.)

Part No. / **Model**	*51984A / F700
§Adaptor, with cables	553724

Left hand drive, Europe (not France)

Part No. / **Model**	51782A / F700
§Light unit	553940
§Adaptor	554602
§Bulb	370

Excerpt from CCE905F, Rover Cars and LandRover, February 1957. The asterisk by the part number denotes "Lamp supplied less light unit and bulb"