

Common Problems with the Model A Light Switch

The Model A light switch is a unique design not found on cars from other manufacturers. When new, the light switch worked well and caused few problems but like a lot of other components the light switch has suffered from years of wear and tear and poor quality replacement parts. With a little understanding of how this system works and some careful attention to detail, the Model A light switch can be made to function correctly and reliably.

Some of the problems encountered include the lights do not turn on at all, the lever in the center of the steering wheel will move with the steering wheel or the horn does not work. Electrical connections for the horn are part of the light switch assembly. When addressing the Model A light switch, it is important to also include the light switch rod assembly which is used to operate the light switch. Les Andrews has very good information in his repair manuals about the disassembly and repair of the light switch.

There are 2 major components that make up the Model A light switch system, the light switch assembly itself, located at the bottom of the steering gear housing and the light switch handle and rod assembly, which is often referred to as the "horn rod".



Light switch assembly



Switch rotating contact assembly.



*Switch plate with terminals
(Note depressions or detents)*



*Steering gear end plate with tube
(Late 2 tooth steering gear only)*



*Light switch spider,
spring and "u" clip*

Attached to the lower end of the rod with a spring and a "U" clip is a sleeve with 2 prongs (more commonly known as the "spider"). The spider fits into the rotating contact in the switch assembly.

Rotating the switch handle to the first position to the right will operate the head lights on "Low Beam" while the second position to the right (29-31 "Twolite" headlights only) operates the "High Beams". The first position to the left operates the park, or cowl, lights. The tail lights will also illuminate when any of the lights are on. Straight down is the OFF position. The horn button is located in the center of the light switch handle assembly. The following are some common problems that owners have experienced.

Light Switch Assembly Full of Grease

The light switch rod is located in the center of the hollow steering gear shaft and passes out thru the bottom of the steering gear. A felt seal around the rod was originally provided to keep the oil in the steering gear from leaking out and into the light switch assembly. Often, this seal has failed and the switch housing has filled up with steering gear lubricant. To correct this, clean out the switch assembly and replace this felt seal or a better solution would be to install a modern end plate assembly with a long thin tube. The thin tube goes up inside the hollow steering shaft and keeps steering lube away from the light switch rod.

This Modern end plate is only available for the later 2 tooth steering gears, not the early 7 tooth steering gears. Later in the 1930's when this switch design was still being used on the new Fords, this tube was added to the steering gear end plate by the factory.

Lights Turn off When Turning the Steering Wheel

Several problems can allow the light switch handle to move when steering the car. First of all, there are "detents" designed into the connections in the light switch plate itself to keep the switch handle from moving when the steering wheel is rotated.

As you operate the light switch, you should feel a detent when you rotate the handle to the different positions. The brass switch terminals in the switch plate were originally made with a depression or dimples. As the rotating contact assembly moves from position to position, the round contacts will fall in these depressions and act as a detent to keep the rotating contact assembly from moving on its own. If these dimples are worn, the contact assembly may not want to stay in position and may rotate with movement of the steering wheel. Some reproduction

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wire harness assemblies have terminals that are either completely flat or the depressions are not deep enough to act as a detent. If necessary, a small rotary file or Dermal Tool can be used to make the dimples more pronounced.

Another cause of the light switch not wanting to stay in position is when the light switch rod is bent and is dragging on the inside of the steering shaft. In order for the switch rod to not drag, it must be perfectly straight. With patience and care, a switch rod can be straightened. Originally, there also was a small thin brass bushing that was installed at the upper end of the rod, under the switch lever. This bushing was designed to fit into the upper end of the hollow steering shaft it help keep the switch rod centered in the steering shaft.

To summarize, keep grease and oil from the inside of the switch assembly, be sure the detents in the switch plate assembly are deep enough and are not badly worn, be sure the light switch rod is straight and be sure the little bushing at the top of the rod is in place.



Upper switch rod bushing

CAR STORIES

The Ahooguh Origin

by Tom Endy

The ahooguh horn, also known as a Klaxon horn was developed and patented by Miller Reese Hutchison, an inventor of the early 20th century. Hutch, as he was known, patented the mechanism in 1908. The Lovell McConnell Manufacturing Company of Newark, New Jersey bought the rights to manufacture the device and it later became standard equipment on motor cars. Frankly Hallett Lovell Jr., the company founder, coined the name klaxon from the Ancient Greek verb klazō, meaning shriek. Klaxon horns produce an easily identifiable sound, often described in English as "ahooguh". Like most mechanical horns, the klaxon has largely been replaced by solidstate electronic devices, though the memorable tone has persisted on in classic cars of the era. Klaxon later became a brand name. The Klaxon horn was used on U.S. submarines during WWII. The Klaxon horn's characteristic sound is produced by a spring steel diaphragm with a rivet in the center that is repeatedly struck by the teeth of a rotating cogwheel. The diaphragm is attached to a horn that acts as an acoustic transformer and controls the direction of the sound. In the first Klaxons, the wheel was driven either by hand or by an electric motor. Hutch went to work for Thomas Edison in 1909, and was the chief engineer for Edison from 1912 to 1918. The ahooguh sound is usually heard today when a Model A Ford goes rolling down the road.



Miller Reese Hutchison 1876 -



A Poem About Old Cars

This poem was sent to Bob Moore by a fiend who was experimenting with AI (Artificial Intelligence) He asked the program (ChatGPT) to compose a poem of 30 lines about old cars in iambic pentameter. It composed this poem in about 3 seconds. He thought this was scary stuff.

Broadly speaking, artificially intelligent systems can perform tasks commonly associated with human cognitive functions — such as interpreting speech, playing games and identifying patterns. They typically learn how to do so by processing massive amounts of data, looking for patterns to model in their own decision-making. In many cases, humans will supervise an AI's learning process, reinforcing good decisions and discouraging bad ones. But some AI systems are designed to learn without supervision — for instance, by playing a video game over and over until they eventually figure out the rules and how to win.

OLD CARS

By ChatGPT

*In days of yore, when engines hummed with grace,
And roads were conquered by old cars embraced,
Their metal frames, a testament to might,
With each revving of engine, roared the fight.*

*In garages worn, they stood with timeless charm,
Collectors' treasures, relics safe from harm,
Their weathered paint, a testament to age,
Yet underneath, still youthful hearts engage.*

*Their wheels, like dancers, spun with rhythmic glee,
As tires gripped the asphalt, wild and free,
On open highways, they would swiftly glide,
Their spirits never wavered, never died.*

*With roaring engines and melodious roars,
They traveled through the past's forgotten doors,
Each bump and scrape a tale of bygone days,
Their faded glory, memories they blaze.*

*Oh, vintage beauties, guardians of the past,
The stones that you hold shall always last,
For in your metal bones, a history lies,
A testament to dreams that touched the skies.*

*So let them whisper secrets of the past,
As memories within their frames hold fast,
Old cars, reminders of a bygone time,
Forever cherished, in our hearts they chime.*