Series E Trafficator Switch Overhaul

Sometime ago the right hand trafficator on my Series E slowly stopped functioning. Joe Greenaway advised using a multi-meter to test the resistance for indicator cables found at the bottom of the stator tube, steering column assembly. Sure enough there was no resistance on the cable for the right indicator. The left showed about 0.8 ohms. A good pathway for the electric current to flow through.

How to dismantle the system to determine the zero reading for the right cable. The self-cancelling switch also has the horn button on the top of the assembly found in the middle of the steering wheel. I had taken that apart many years ago however I couldn't remember the process. The 4 cables supplying power to operate the horn and indicators are located in the stator tube inside the centre of the steering shaft/ steering box. At the bottom of the steering box is the end of the stator tube, a brass nut, an olive nipple and 4 cables which need to be disconnected to allow the stator tube to be pulled out of the centre of the steering wheel into the car interior.

To dismantle or open up the switch assembly a thin bladed knife is used to carefully prise the chrome ring from the switch. Inside that are the horn assembly and two brass screws which hold the switch together. To access the nuts for those 2 screws the base of the unit is held together with 3 screws opening up the base of the switch. Undo those. The brass nut/screw which holds the earth ring in place and the other directly opposite-one will have a wire holding the switch together.

Photograph it so you have a record for reassembly. Undo those two opposite nuts and now the switch assembly can be gently pulled apart.

Photograph shows all the components inside the switch. It's relatively easy to dismantle. Three rounded nuts hold the wires in place and form the contacts for the left and right trafficators to be livened by the U-shaped sliding brass contact moved by the turn signal lever - chrome/Bakelite. I found the problem. No connection between the U-shaped brass contact and the right side nut. Somehow there was a raised portion between those 2 parts hence no electrical connection. By removing the high spot I was able to solve the problem.

The turn signal lever is attached to a half-round piece of steel wire which is divided into two parts left and right with small washers either side of the turn lever and then the spring. The Bakelite base holds those parts in position.



All components of the switch were then cleaned, given a slight smear of white lithium grease to provide lubrication for the turn signal lever, the roller and the two hinge levers and the Bakelite where those parts meet.

Reassembly is the opposite of disassembling.

Below are a series of photos to explain my text.



All the parts inside the switch. Top - Left to Right and around. Earth ring base with indicator contacts. Self-cancelling ring with felt pad to reduce rattles. Base plate at top of stator tube. Horn button parts. Sliding brass contact for left and right indicators, spring positions, hinge levers. Turn signal lever with roller and spring. Bakelite base that all the parts fit into.



Assembled turn signal lever showing hinge levers, U-shaped brass contact and spring, washers set up for lever mechanism.



View of wiring and earth ring. Lower left is the earth ring and through screw screw/nut. Above that on the left is the left trafficator wire. Next on right is the power feed wire, next is the right trafficator (yellow/red) and blue cable is the horn wire and also the through screw/nut to hold the assembly together



Switch with top of stator tube showing the three screws securing the base to the rest of the switch. The self-cancelling ring can be seen in the front of the Bakelite base.



Contributed By Doug Pagel

Trafficator Wiring Diagram

This wiring diagram was published in the newsletter back in 2018, but thought it might be useful if you are planning on restoring your trafficators.

