Replacing Stator Tube

By Steve Weil

As any owner of a British car knows, our cars are rare, and their problems often rare to the point of unique. I began compiling "dumb car tricks" because the process of unlocking the mysteries of some of these strange maladies seemed like it might save some other soul from some brain damage if we share our stories.

Well, the latest odd ball problem concerned my Austin Healey (BJ8) trafficator. This is the horn and turn signal assembly in the center of the steering wheel. After 18 years of driving the car it suddenly decided to stop staying put and began turning with the steering wheel. This would twist the wiring in the steering tube so the car had to stay parked until I could get to it.

Well I looked in my Haynes manual which said nothing about this problem nor had any diagrams. I turned to the Moss catalog which shows the trafficator, the stator tube and still could not readily see the problem.

When I removed the trafficator from the steering wheel it had a 12" section of tubing attached to it which looked like the drawing in the catalog. The drawing had marks showing the tube was longer than shown which made sense given the length I had. I called the technical people and they thought mine sounded ok from the description but I did not tell them the length of the stator tube. I was told to tighten the retaining screws on the steering wheel. This did not help. So I took the trafficator apart not knowing that it was not intended to be serviced. There were 3 metal tabs which bend back allowing it to come apart. At which point I disconnected the wires from their small retaining screws, made a diagram so I could reconnect later. This allowed me to remove the trafficator assembly and stator tube from the steering wheel, leaving the loose ends of the wires poking out and the car driveable until I could figure out the problem.

Moss advised checking on the net for more info, excellent advice. I found this site, www.owner-healeys@autox.team.net, which offers a venue for posting questions. There is a multitude of dialog on a full range of Healey and other related subjects. (See below for more details on how to join.)

I posted my problem and began hearing from people allover with suggestions. Unfortunately they were initially the same as what I had been told earlier — tighten the set screws in the steering wheel hub. So I reassembled the trafficator, reattached the wiring harness — no easy feat and the problem remained.

Finally in the course of deeper conversation with one of the more knowledgeable people I described the bottom of the stator tube as slightly rough and jagged. He immediately diagnosed it as having broken when I told him it was just 12" long. No where did the
diagrams indicate the tube was a full 4 feet long. I had no idea the full tube was held stationary in the steering box with a nut and ferrule.

I ordered the new tube from Moss for only about $30, received it promptly and removed the leftovers of the old tube. This took half an hour as opposed to the several hours I spent taking apart the trafficator and trying to diagnose the problem from the wrong end. By the way, the wiring harness is suppose to be disconnected from the front of the car, not the steering wheel end and you should attach a strong string or wire to the end of the harness to leave inside the steering tube after with pulling out the harness. Then you can easily pull the harness back thru the tube. So, having not done the simple thing here is a tip. Use a stiff wire to push from the steering wheel down the tube with the harness taped to the end. Fortunately with some unusual foresight the designers left the ends of the harness wires staggered so they will fit thru the stator tube end. Gently pull thru. It is a messy job as it goes through the oil reservoir of the steering box, best done with another set of hands needed up at the top to ease the harness thru the tight fitting tube. (My wife was reluctantly willing. I can only hope for my 3 year old son to get the bug before long!) Oh well, the trials and tribulations of home mechanics. Now it is back the way it was intended.

-Steve Weil