

The Dreaded Turn Signal / Horn Switch Assembly



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I attempted to open the top of the signals/horn push on the steering column. I removed three brass bolts to try and get to the internals, but I don't see how things come apart. Now I can't give up because the three bolts won't re thread. Can anyone tell me how this should open up?

Rodger,

You have just stepped smack dab into the middle of the dreaded (and feared) stator tube assembly.

1) At the bottom of the steering rack you will see a large (brass under all of the dirt) nut with a wire bundle coming out of it. Follow the bundle to where it joins the loom under the hood (bonnet). After carefully making note/marking the 4 wires, disconnect them from their connectors and cut the bullets off of the ends.

2) Loosen and remove the large nut at the rack (where the wires come thru).

3) Under this large brass nut you will find an "olive" er... brass compression fitting (5/16" - under \$2 at most better hardware stores - in the plumbing department) on the end of a 5/16" brass tube. Gently pull this olive and tube out of the end of the column/rack - it should be about a foot/14" long. When it is out, you can carefully separate the olive if you are intent on re-using it or take it to your local hardware store to match with a packet of new ones. For future reference, 5/16" thin wall brass tube is readily available at any radio control model aircraft hobby shop.

4) Inside the car you will find three setscrews (grub screws in British) around the perimeter of the steering wheel hub that retain the chrome horn push and steering wheel center piece. Loosen these so that you can pull the horn ring/turn signal assembly up and toward you, out of the steering column. This bit is rather long, so will need to go right up to the ceiling for the long stator tube to clear the column.

Once you have this all out, take a few minutes to study it (take a bunch of photos to act as crib notes!!!)



The back of the turn signal assembly with the long stator tube removed. Note the three holes to access the screws that hold the assembly together.



Thin brass cover plate that has to be rotated to expose the three screws that hold the assembly together

Like the pictures show, use a small thin screw driver to push this brass plate around until you can see three small screws that align through the holes in the back of the assembly and remove the screws.



Once the three screws are removed, the switch will separate into two halves, one that will be attached to the horn ring and one that connects to the stator tube. Pull them apart including pulling the long wire harness up and out of the tube.



My guess is that these are the three screws you loosened...

The reason you can't get the three small screws/nuts that you loosened on top to re-tighten is because they are through posts with nuts on the other end - the three nuts are visible in this photo. This would be a great time to replace the stator tube harness! The 4 wires can be un-soldered from their terminals and replaced the same way. Note: due to the tight confines of the tube, the wires really need to be 16 AWG and bundled quite tightly and smoothly so that it will fit down inside the stator tube easily. The harness available from Lou/Autosparks/British Wiring is specifically designed and built to do this and works a treat. This is also a very good time to determine which wire does what. There should be a solid "normal" green (#17) to feed power, a "light" green (#66) that feeds the green/yellow wire in the main harness which activates the RH side of the signal relay and RH signal lights (a good continuity tester/multi-meter comes in VERY handy here...), a "dark" green (#65) that feeds the green/blue wire in the harness which feeds the LH side of the relay/signal lights etc. and a brown wire that feeds power to the louden-honken horns.

5) After you have all of that bit sorted and the screws/nuts re-tightened, it is time to reassemble. First, start by re-attaching the halves of the signal switch, remembering (of course) to thread the wire bundle back down through the stator tube.

6) Stick the bundle back down the steering column and thread the stator tube assembly back down the column so that the horn ring etc. seats fully, align the bars on the horn push with the spokes on the steering wheel and re-tighten the grub screws.

7) Back underneath, you will note that the foot long brass tube has a slot in one end. This slot lines up with a small tab in the end of the long stator tube. Slide the short tube over the wire bundle and back up into the column, feeling around until you get the slot to line up with the tab and slide fully home. You will have a small bit of tube still sticking out of the column. Slide the compression fitting over the wire bundle and over this short end of tube. Slide the freshly cleaned large brass nut over the wire bundle and thread onto the column, but don't tighten it yet.

8) Have an assistant topside turn the steering wheel hub so that the MG logo is right side up and straight up and down. While your assistant is holding the centerpiece in this position, go underneath and snug up the large brass nut. Brute force is NOT needed here! Just snug enough to hold the horn center piece in place will do.

9) Now take the 4 wire bundle back up into the engine bay and attach fresh bullets and re-plug everything back into the harness. After testing, you should be done and have properly functioning horn and signals, and the horn centerpiece should stay nicely upright as the steering wheel turns.

10) The process for removing and replacing the steering wheel horn ring and center piece is explained in section J.1 of the factory repair manual.

Congrats! You have just mastered the dreaded stator tube assembly... and fear not the turf where mere mortals tremble and quake and despair to tread...

Steve H.