

Overhaul of TR2/3 Steering Control Head

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Edited by Ian Cornish

From Richard Larter, who lives in Eire/Glasgow, comes this very interesting article on a subject that is most certainly not covered in any manuals. Richard is also responsible for the very clear and detailed illustrations (Figures 139A, B and C). The workshop manual states simply that if the control head is defective it must be replaced; easier said than done today! However this item is not too difficult to overhaul providing some care is taken as the bakelite casing is fragile, especially when old.

(1) Removal from the car

- (a) Disconnect the electrical connectors and remove the gland nut, olive and oil from the base of the steering box.
- (b) Remove the three small grub screws from the steering wheel and withdraw the control head complete with stator tube. This may not be possible with a hard top fitted, but that should be taken off anyway!

(2) Dismantling the Control Head

- (a) Separating the control head from the stator tube is the usual cause of breakage, as the wiring is often stuck inside the stator tube. On **NO** account should excess force be used as this will damage the bakelite casing. Remove the three small countersunk screws reached through holes in the base flange and separate the flange. If the wiring is stuck, the base flange can be gently pulled away to give sufficient clearance to insert a hacksaw blade to cut through the wires. Now, brute force and/or heat may be used to remove the wires from the stator tube.
- (b) Remove the three non-countersunk screws from the control head, releasing the top cover and exposing the horn contacts which should only need cleaning.
- (c) To dismantle the indicator section remove the two brass screws holding the horn contacts. The nuts should have been soldered, (and may be released by melting the solder, but (because solder is comparatively soft) will yield to the correct screwdriver and spanner. Two further screws are now exposed and should be removed along with the indicator arm allowing the two halves of the casing to be separated.
- (d) Remove the curved rod and springs from the bottom part of the casing, clean, and lightly grease them with vaseline. Also clean the indicator contacts now exposed. There is no need to remove these from the casing unless new wires are to be fitted. Care should be taken doing this as the terminals are spigotted into the bakelite casing.
- (e) The upper part of the casing is more complex because of the self-cancelling mechanism (I never realised this either). The central pivot, sprung roller and self-cancelling arms may be removed, cleaned and greased.

(3) Reassembly

- (a) Refit the central pivot to upper casing ensuring that the brass sprung electrical contact is a loose fit so the spring can push it into engagement.
 - (b) Insert the sprung roller into the central pivot.
 - (c) Push the triangular alloy block back into place against the sprung roller.
 - (d) Fit the self-cancelling arms with the bevelled sides facing each other (see Figure 139B).
 - (e) The lower part of the casing is assembled with the curved rod and springs.
 - (f) Fit the two halves of the casing together, tricky but possible. The assembly is held together with the single non-electrical screw.
 - (g) Attach the indicator arm using the very short countersunk screw.
 - (h) Fit the alloy collar with the felt seal facing downwards.
 - (i) Replace the horn contacts and brass earthing ring.
 - (j) Refit the top cover and horn push with the wider part of the spring facing downwards.
 - (k) Replace the bottom flange.
 - (l) Replace the stator tube by pulling the wiring through with a length of stiff wire. If the unit has been rewired, bind the wires tightly and completely without any twists and pull through before soldering on to bullet connectors.
 - (m) The unit **may** now be fitted to the car in a reverse order to removal except for pulling the wiring through the steering column with a stiff wire.
- Note that the self-cancelling mechanism only works if the components are in perfect condition, so do not expect too much!

(4) Interchangeability

- (a) The complete unit is identical to those fitted to Triumph Mayflowers except for the shorter stator tube.
- (b) Triumph Renowns have the same unit, but including a dip switch and probably a similar stator tube.
- (c) The lower, fragile part of the bakelite casing and internals are common to many cars of the 1950s, including Austins and Fords.
- (d) The stator tube may be found on some Austins, but most are too short.
- (e) Many of the above units may be fitted complete if originality is not crucial, or an original is not available.

