

EPSA Conversions for Scimitar GTE

Note:-

Lots of bits on Ebay like speed sensors & ecu's to trick it into thinking its still on a Vauxhall.

Simplest way to vary amount of EPAS assist is to use potentiometer or rheostat (potentiometer is a three terminal device used for voltage control, while the rheostat is a two terminal device used for current control). But that requires constant manual setting changes or leaving in one optimised position, so not the best solution.

MGF EPS Conversion

Will Holder's note that he had fitted a MGF system to his 5A caught my eye (MGF generally regarded better than Corsa. Smaller, better quality, etc.)

Wiring drawing in RSSC Technical:-

Tech info about MGF EPAS:-

http://www.mgf.ultimatemg.com/group2/common_problems/epas_reset/index.htm

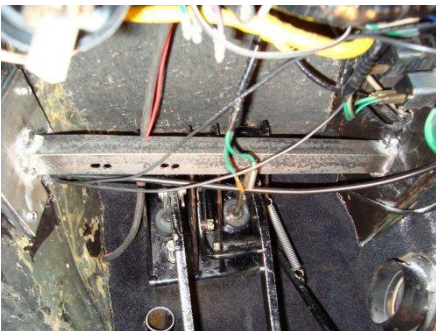
The first thing you notice with the MGF units is how good the bearings are at either end of the column.

Remove column tube (tube is just glassed through the bulkhead). Out with the drivers seat so you can get into the foot well on your back with your feet on the rear seat – essential.

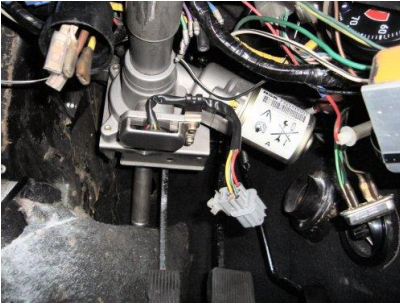


Fabricate a beam from which to “hang” the MGF column – 1 inch angle iron with plates at either end to screw it to the bulkheads at the side of the foot well.

Two plates welded to the angle iron.



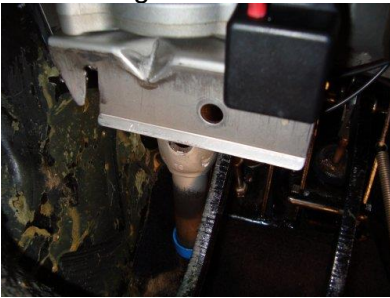
Column is now hanging from more or less its centre and although only held in place by six self tapping screws as the GRP is very thick it takes the weight effortlessly.



Next is the fitting just behind the steering wheel. Easiest way is to cut up the original tube and use its fitting (can be seen on picture 2) – grand idea, decided rather than weld it into place a couple of jubilee clips either side holds it perfectly. There is still enough of the MGF tube left to fit the original ignition barrel and the indicator stalk, the barrel has to be ground out a tiny bit as the MGF column has a slightly larger diameter than the original but its only a few mm so easy to do.

Fitting the indicator stalk is not a problem as the extra diameter of the tube is so small as not to be noticed. Next is connecting end of the column to the steering rack itself. The original rod coming up from the rack found 2.5inches short so a length of 14mm rod was bought. Two UJ's are needed one at the top and one at the bottom and they have to be drilled out to 14mm for the new rod and then flats cut into the rod where the fastening bolt goes through the UJ's – with the bolts tightened into place there is no chance of the rod rotating even though part of the splines has been drill out.

Lower end of the MGF column is on sliding splines this means the length is self adjusting which is great but there is also another UJ which is not great - three in line is one too many. I took this bit down to a local expert who cut out the UJ then fed a rod through the complete unit and welded the two bits together then removed the rod – solid job.



A new steering wheel boss of correct diameter may be required (from Wood and Pickett, MGF boss is the same as an early Mini).

The MGF has its own ECU but you have to fool it into thinking that its in a MGF which means you have to simulate the engine running and road speed.

Bought simulator from Bruno Lopes in Portugal. Not expensive and instructions a child can follow.

The ECU fitted into the passenger foot well high up, you cannot see it.

Next you have the power supplies to sort out. The MGF has two supplies both fused – the motor supply at 40A and the ECU (switched on only when the ignition is on) at 10A. Rather than running two sets of cables I ran one from the battery into the cabin fused at 40A directly to the motor and spurred off the ECU supply via a relay which is energised when the ignition is on but only fused at 7.5A – 10A seems to me to be excessive for a ECU. All finished, (control next to the ignition keys)

Control set at about half.

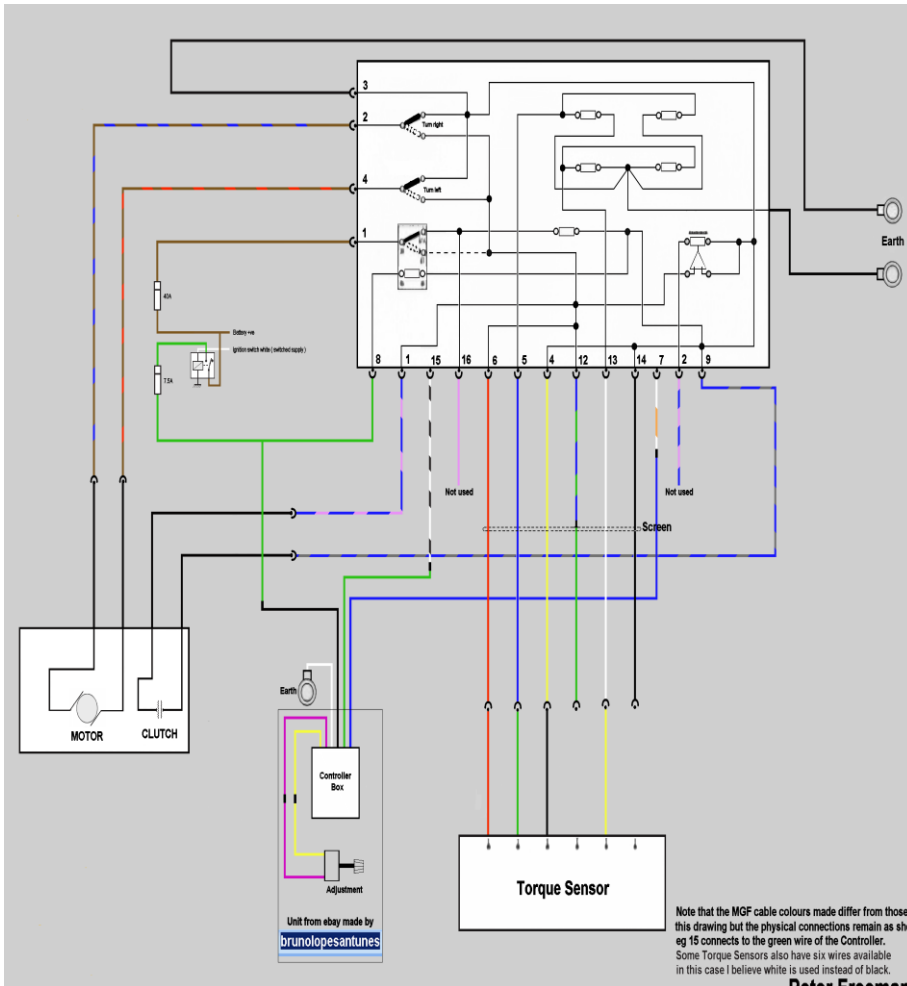
[peter freeman](#) This is where I got my parts - don't know if they are still around but worth trying - The speed input from Bruno you will need.

If anyone is thinking of fitting MGF power steering to their car try contacting Jason at mg-alfa-spares@hotmail.co.uk (07711097957) Not only did he supply the plugs he also took the time out to remove and supply the cable looms with them. I will go back to him should I need any other parts.

Speed input from Bruno Lopes:-

<https://www.ebay.co.uk/itm/Corsa-B-C-Ki...635-2958-0>

<https://www.ebay.co.uk/itm/Corsa-B-C-Ki...:rk:4:pf:0>



Wiring info for the pot is included in the EPAS drawing - note that the drawing only shows one black wire but the later interfaces from Bruno have two - connect either one or both (to keep the 2nd one from being earthed) - Don't forget the interface is used for Novas and other cars not just the MGF which is why the extra black is added.