

Mr Birchall said he could modify my rubber cones for ride height and softness at a cost of £25 + VAT inc P&P, per pair. He also wanted to know my weight, my wife's weight, and if I would be driving the car myself most of the time. When all of this information is collated, the cones will be re-profiled accordingly. I intend to send my cones to Mr Birchall for modification, so I can't comment on results as yet, but it does seem a step in the right direction.

I hope that this will be of interest to any other members, and the telephone number for Birchall Automotive is :
(060545) 711

Cheers for now,

Martin Dawson (Mini Section)

3 Brackenhurst Lane
Southwell
Notts.

Dear Colin,
I thought yet another response to your plea for contributions was due, so please find attached a brief description of how to fit a Marina T.C. instrument pod to a Mini Clubman wiring harness. This modification is one I made a while ago to my Mini Marcos. Previously it had a standard Mini Clubman pod with no tachometer but I was missing the facility of the tachometer and came across a supply of Marina 1.8 T.C. instrument pods in the local scrapyard... a good source of odds and ends when I was rebuilding the car. I thought that maybe another Mini Marcos Owner would be able to use the information. I am still enjoying the car but I need to sort out a bias towards the back brakes locking up under medium to heavy braking at low speed. It was totally cured a few weeks ago... a servo seal leaked and the brakes only worked on the last $\frac{3}{4}$ " of pedal travel, but I thought this was a little

drastic and fitted another servo and the problem seems particularly cured or I maybe braking more gently now. I think that the real cure will involve fitting new front discs when I can get a bank loan... they seem to be £30 each unless anyone knows of a cheaper supplier?

Anyway I hope that the info will be of use to someone.
Bye for now,

M. Crooks

P.S. Anyone else in the area got a Mini Marcos or should that be a 'Maad', please let me know.

To change to 1.8TC Marina instrument pod which is similar to Mini Clubman pod, but with addition of Tacho, use the Mini Clubman speedo... changes easily as only 2 screws (machine screws) retain it. The only technical job is to change the wiring on the multi-plug... it has extra and different connections. I removed the Marina pod and multi-plug... snip off the wiring 50mm beyond the plug, this makes them easier to remove. The connections can be removed by inserting a dart... I always knew they were useful for something... and then by pulling on the wire.

Remember First colour is the main colour, second is the trace colour. Refit the wires from the existing Clubman wiring in the revised positions to correspond with the following:

- No. 1) Instrument light feed.....red/green wire
- No 2) To fuel gauge sender unit...green/black
- No 3) To temp gauge sender unit...green/blue
- No 4) Main beam warning.....blue/black
- No 5) Earth lead.....black
- No 6) Speedo light feed.....red/green
- No 7) R.H. turn indicator.....green/white
- No 8) Charge warning light.....brown/yellow

- No 9) Instrument feed.....white
- No 10) Oil pressure warning light...white/brown
- No 11) Tacho feed.....green
- No 12) L.H. turn indicator.....green/red

White wire on the tachometer connects to the ignition switch to power. When the ignition is turned on, connect to instrument feed wire which goes into No. 9 connector. White/green wire goes to the coil + ve connection on the negative earth car.

Richard Cooke
27, Watermead,
Goldsworth Park
Woking
Surrey.

Triumph 2.5
MRD 460J

Dear Colin,

Many thanks for issue 50 of The Marcos Owners Club Magazine. The enforced editing didn't spoil my enjoyment of it. I'm pleased to say. Enclosed is the completed register form... photo to follow.

When I bought my Marcos, the fuel gauge didn't work. Not knowing where the sender is in the tank and the fact that the tank is covered in thick card type material. I checked all the other possible faults, first before cutting the card in search of the sender. The gauge/wiring/earthing were all ok. Luckily I guessed right on the sender... it's about 3 inches from the boot corner on the right hand side. With the sender out it was now obvious what the problem was... the float was full of petrol.

- That it should conform as far as possible to R.A.C. Motor Sport requirements.
- That it should be as inobtrusive as possible.
- That any loads it may be called upon to withstand should be fed into the main chassis through widely spaced strong points.

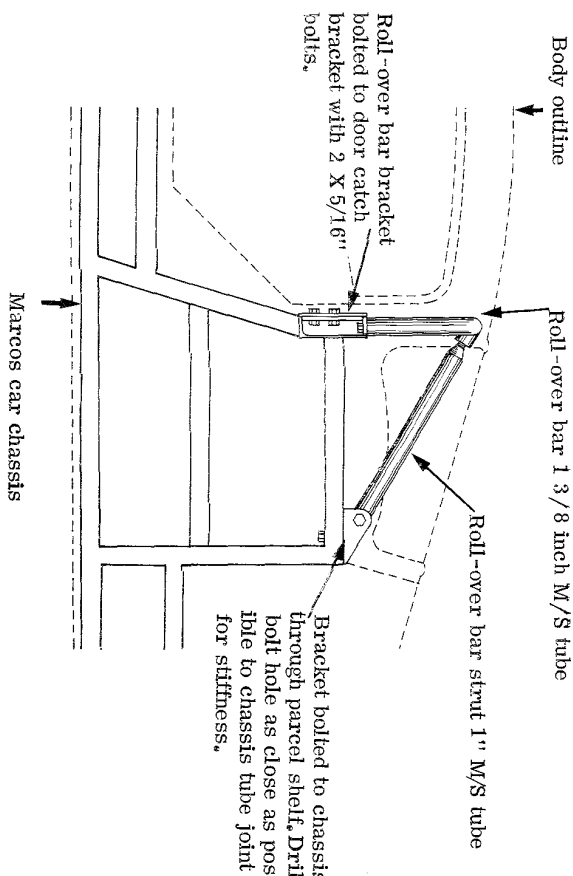
To achieve point a) the main bar was bent up from 1 3/8 inch diameter mild steel tube with 14 gauge wall thickness which will also fit nicely inside the angle of the rear roof pillars... or it should do.

It was at this stage I discovered that the passenger-side pillar was 1/4 inch narrower than the drivers side on my car. This was duly widened to accommodate the bar, which was all to the good,

because it closed up the rather large gap between the pillar and the door frame. A close tolerance fit down the pillars and up under the roof was necessary in order to achieve point b) and to allow the bar to be covered by the roof lining and its trim around the pillars. I had hoped to have a one piece bar which would bolt directly to the chassis strong points to which the door catches are bolted but the bar cannot be manoeuvred into position and so extra brackets need to be constructed from 1 1/2" 10 gauge mild steel angle to provide a base upon which to bolt the main bar close to the level of the parcel shelf.

To satisfy parameter c) and take care of any fore and aft loads I constructed a pair of struts from 1 inch diameter m/s tube (14 gauge wall thickness) to link the top of the main bar to the top of the chassis just in front of the boot hinges. The struts

ROLL-OVER BAR GENERAL ARRANGEMENT



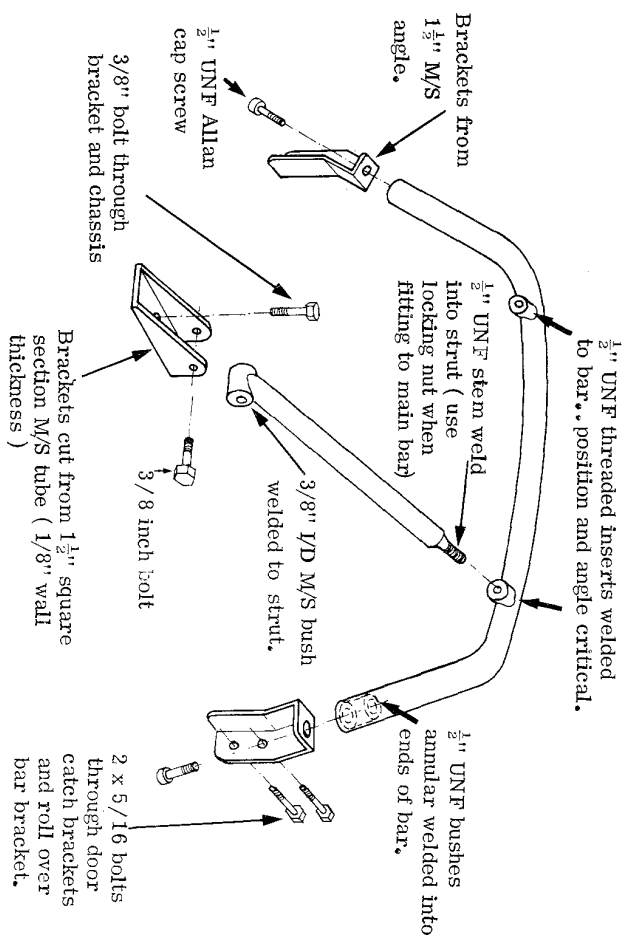
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have a 1/2 inch UNF threaded stem at one end and which screw into threaded inserts welded to the main roll-over bar and are bolted at the other end to a bracket which in turn is bolted to the chassis using 3/8 inch diameter bolts.

The method of construction may seem over complicated (and my description unintelligible) but it was the only way I could see to achieve parameters b) and c).

To help you to understand a bit more clearly, I have produced some drawings. These are not to scale and I have not attempted to give comprehensive dimensions because it seems to me that every Marcos is unique in one way or another. On my car for example the body is mounted 1/2 inch to one side of the chassis! However I made up a hardboard template for the fairly subtle shape of the main roll-over bar in order to fit the pillars

EXPLODED DIAGRAM



NB, second strut is omitted for clarity

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and the roof snugly. Other Marcos Owners Club Members are welcome to borrow the template if they wish to follow my design or to come and have a look at the bar fitted to my as yet unfinished Marcos Kit just phone Worcester 830581 for further details.

Constructing the bar is fairly labour intensive and very much made to measure. It requires access to a tube bender, lathe (to turn the various bushes) 1/2 inch UNF tap and die, and an arc welder.

I do not think that it would be a commercially viable proposition, should you wish to get someone else to do it for you... It would probably cost the earth!

Good luck!

Mick Wilks