

8 Steering System

8.1 Modifying Steering Rack

What you need:

Rack.
File.
Saw.

Fig 8a



Prior to fitting the rack it needs to be modified as it is from a Ford Escort Mk2.

- Cut off the last four threads off the rack ends using a hacksaw (one side only)
- Now file off the burrs to ensure that the track rod ends and lock nut will screw on easily.



Fig

8b

8.2 Fitting Steering Rack

What you need:

Rack.
1 x M8 x 40 bolt with nyloc nut.
2 x M8 x 25 bolts with nyloc nuts.
1 x M8 x 80 bolt with nyloc nut.
U-brackets x2.
Bushes x2.

- Place steering rack into position on the chassis and through the pre-cut holes in the body.
- Place the bushes and u-brackets into position over the steering rack, the brackets will only go on one way.
- Insert the 2 M8 x 25 bolts onto the offside u-bracket and through the pre-drilled chassis holes, as shown in figure 8a 8b
- Insert the M8 x 40 bolt on the near side front u-bracket and through the pre-drilled chassis holes, as shown in figure 8.21b.
- drill the M8 hole and fit other bolt to the nearside bracket (or fit nut inside tube)

- Tighten the bolts using the M8 nyloc nuts, thus securing the steering rack to the chassis.-do not overtighten and indent tubes.
- the steering rack may need to have stops fitted,these can be spot welded into position inside the rack boots-or it is possible to use a type of jubilee clip inside the boot as a means of stopping the wheel from touching the suspension
- R6 and B6 see fig 19 (rear of manual) extentions are used on these models (part no. 3) the rack is cut to shorten – both sides- before extentions are fitted

Steering column

What you need:

Steering column.

- The column is as shown in figure 8.31- and 8.4.and is from a Golf Mk 2

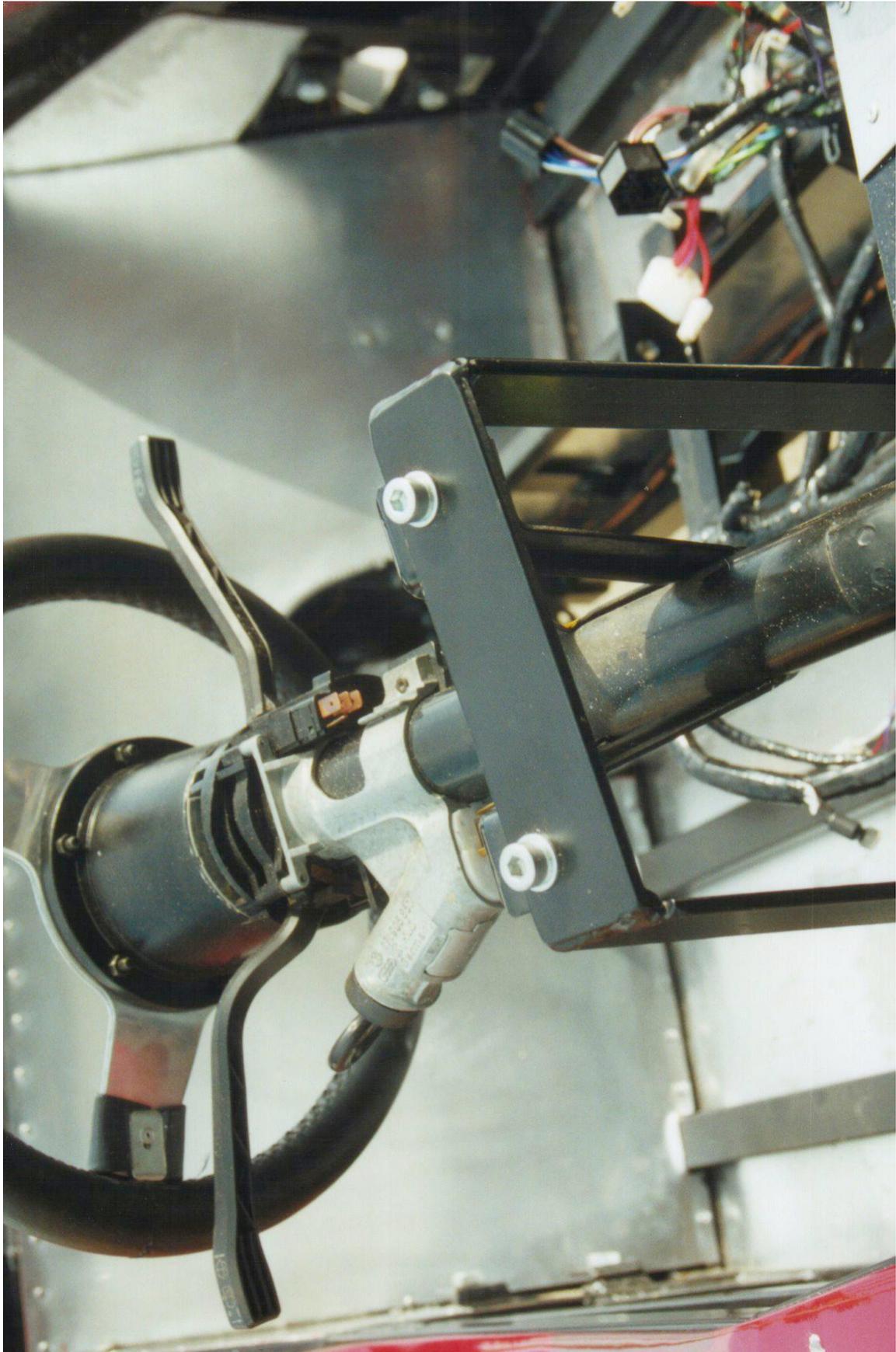
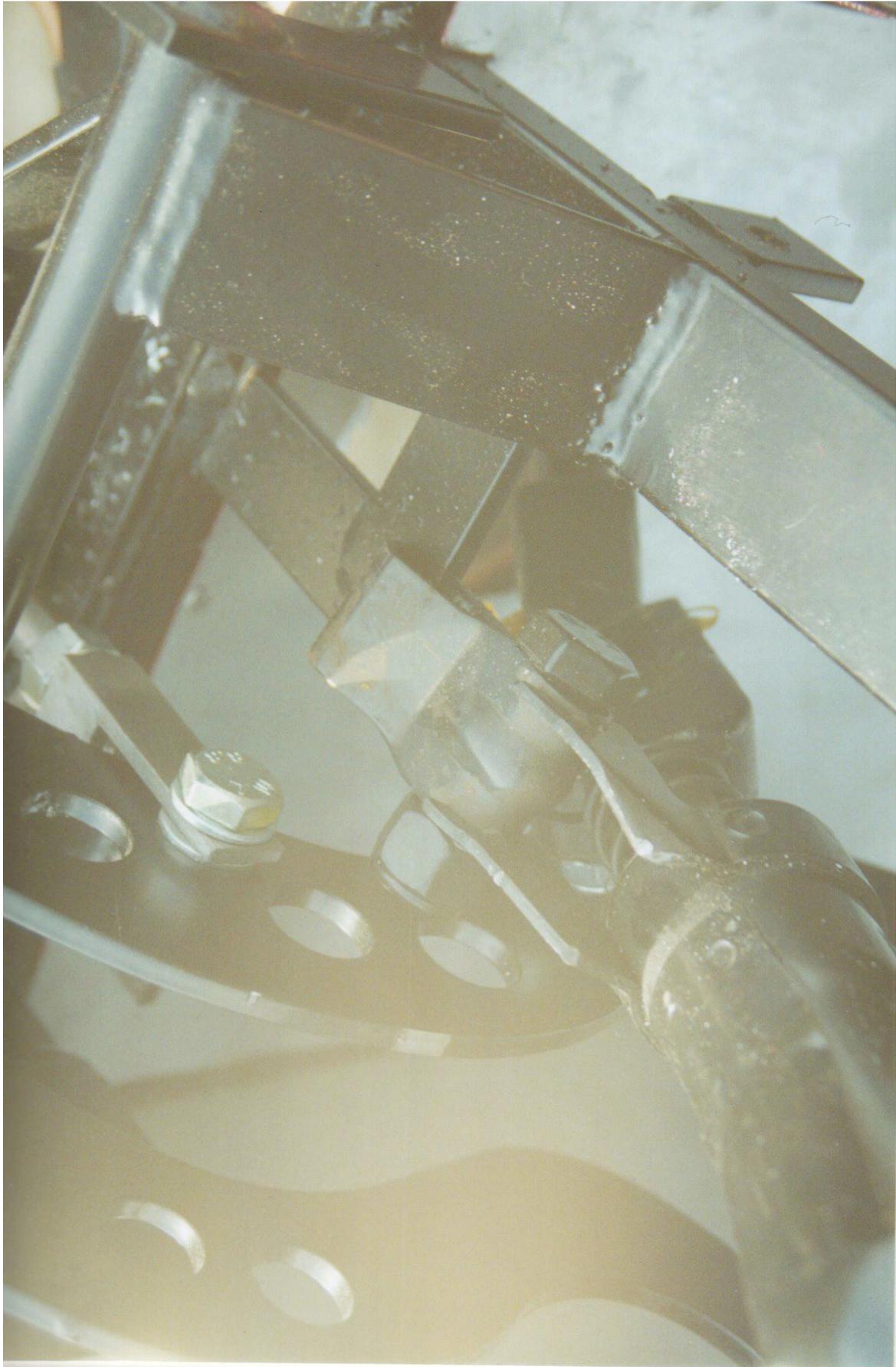


Fig 8.31



8.4 Fitting Steering Column (golf)

The column sits as shown in figure 8.31

- The bracket at the front end of the column sits on the bolt fixed to the chassis in the drivers footwell, and is held in place with a nut. As in figure 8.4 the drivers end of the column locates with two bolts (drill m8) into chassis. Fig 8.31
- The end of the splined shaft protruding has a groove cut into it which a bolt locates securing it to the tiger modified steering shaft U/J

8.5 Fitting Steering Shaft

What you need:

Steering Shaft.

2 x M8 x 35 bolts with nyloc nuts.

The steering shaft sits between the column and rack connecting the two. There is a rose joint approx half way down shaft –this bolts to a hole in chassis bracket fig 8bb

- cut a hole in drivers footwell so that the shaft may connect to the column.
- Place the smaller end of the shaft on the rack.
- There is a spline(male) on the rack which slides into the coupling on the shaft(female), use a mallet to knock the shaft the required distance in order for the groove in the pin to line up with the hole, so that the bolt has secured the shaft to the rack, as shown figure 8.aa
- The universal joint end attaches to the shaft/column. Ensure that the shaft is inserted into the U/J end completely so that the bolt will secure it
- Tighten bolts.



Fig 8bb

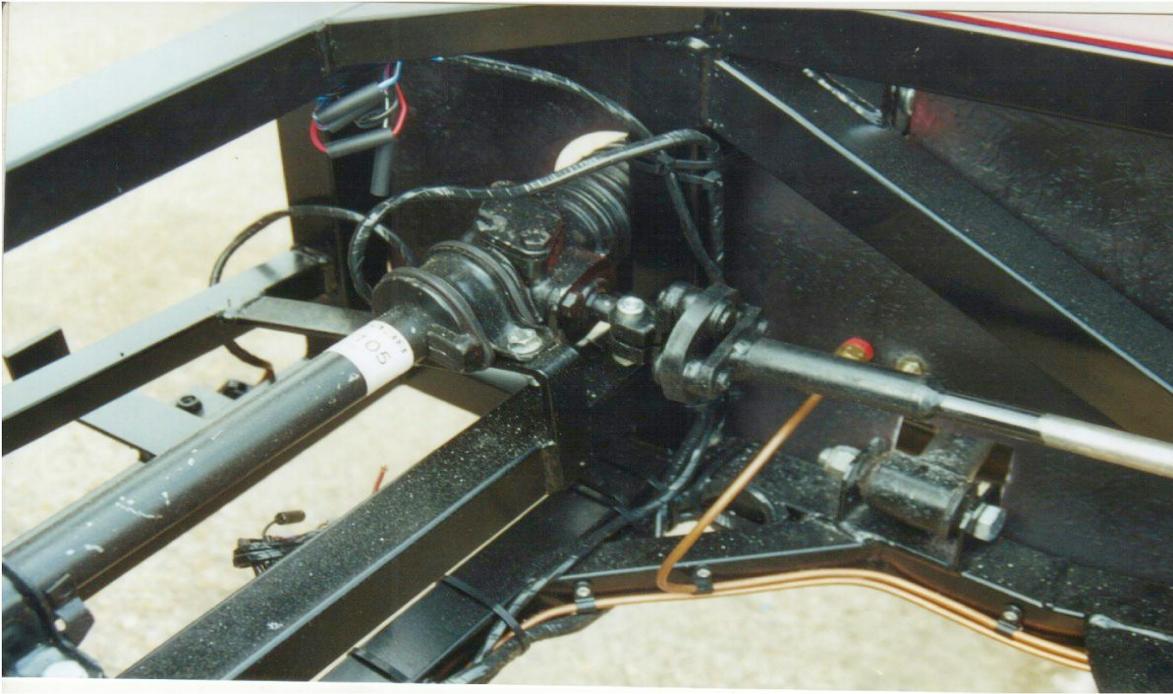


Fig 8aa

Shows early steering shaft –the later type now have u/j joints on steering rack end.