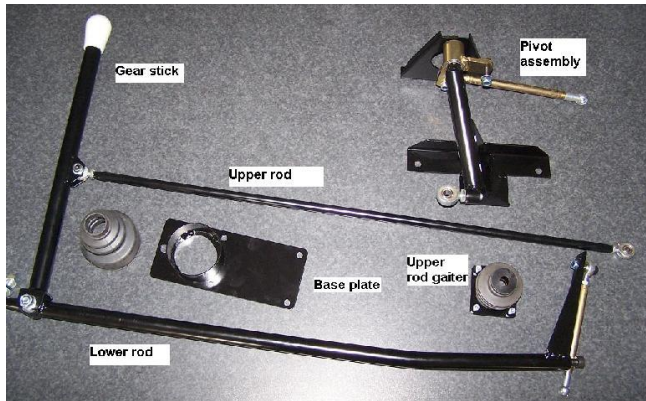


106 Competition MA gear linkage kit installation guide



This guide is intended to help simplify fitting of the kit. It is not a complete and definitive guide, it assumes the fitter will have a good grasp of the practices required and have access to the necessary tools. Read through the guide before starting and make a decision as to whether you feel confident about fitting the kit; if not, perhaps consider seeking the help of someone who does.

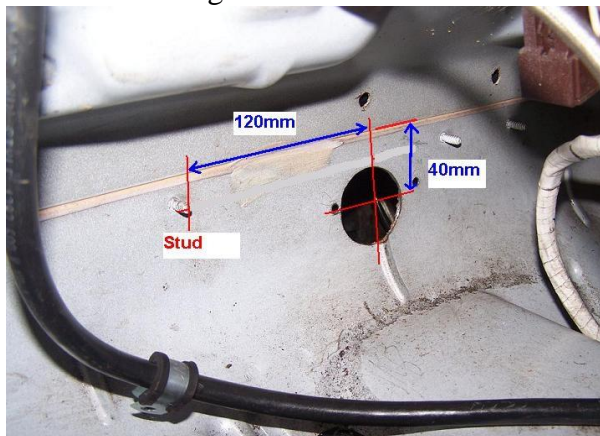
The safety of the kit in use depends on how it is installed. It is intended for use in competition cars and as such its effectiveness and safety must be ensured by the fitter or verified by qualified persons. The manufacturer insists that it is the fitter's responsibility to make sure it is safe and suitable for use.

It's strongly recommended that the battery is disconnected before work begins due to the proximity of live terminals to the fitting area.

Remove the original gear link rods, gear stick and gaiter and bulkhead gear pivot assembly. Removing the exhaust system helps make the fitting easier and is recommended, but not necessarily essential.

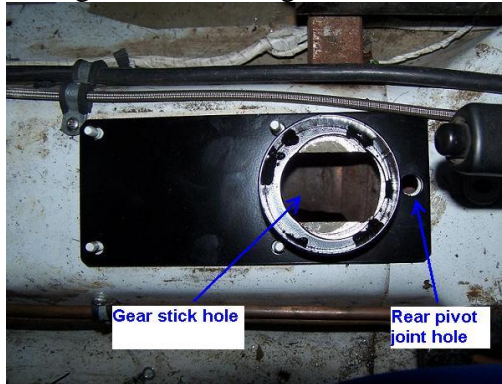
There is a brake pipe on standard cars that runs along the bulkhead lip. It may need to be removed from its clips and moved away to make room for the new pivot assembly; ideally a new brake pipe could be run. If it is altered, make sure it's operational safety won't be compromised!

The first cutting job is to make the hole for the upper rod in the bulkhead. A 38mm diameter hole is required to give clearance, the centre of the hole needs to be located 120mm to the right of the stud and 40mm below the seam shown, as below:



Be careful that the cutter does not damage the brake pipe on the outside of the bulkhead! Use the upper rod gaiter plate to mark out the 4x 6mm holes for the M5 mounting bolts.

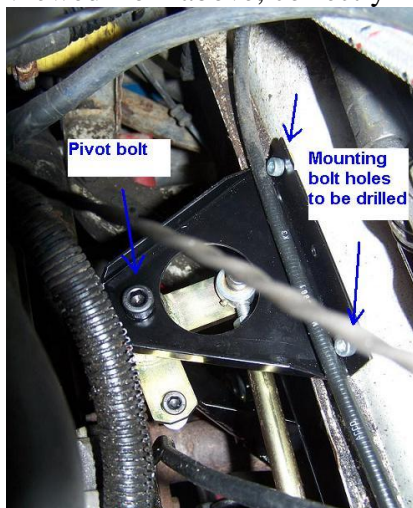
Loosely fit the gear stick base plate on the original studs to mark out the holes for the stick (approx 70-75mm diameter) and rear pivot joint (behind the stick)(12mm diameter hole). Once the holes are marked out, move the base plate away while cutting to avoid damage.



The pivot assembly needs to now be mounted on the bulkhead. On some models, there are wishbone mount stiffening bars that need to be slackened off to allow the pivot assembly to fit. It mounts on the upper stiffening bar bolts, which screw into captive nuts. Other models without the stiffeners, the captive nuts have grommets fitted and two M10x1.5 25mm long bolts will be needed (supplied).

The top plate on the pivot assembly needs two bolt holes (6mm) drilled in the bulkhead where it naturally sits on the top of the bulkhead lip. The main pivot bolt (8mm Allen head) needs to be slack when locating the pivot assembly and the top plate mounted so it fits square when the pivot bolt is tightened. Loose fitting all the mounting bolts initially, allows better access when fitting/tightening the bolts! When the pivot assembly is in place, final tighten all the bolts.

Viewed from above, correctly fitted:



Viewed from below, correctly fitted:



With the gear stick gaiter fitted on the stick, insert the stick through the hole in the base plate and fit the lower rod to the stick and pivot assembly as illustrated. There's a spacer between the two bearings at the base of the stick. The spacer can dislocate with the bolt removed, so it may need poking from the opposite side to locate it while the bolt is pushed through. Note the four washers on that bolt as supplied, need to be fitted as supplied! Refer to the pictures. The bolt at front end of the lower rod, that goes through the spherical bearing, should be thread-locked. Also the rear bolt through the rear spherical joint (that goes through the floor and base plate), should be thread-locked. The rear spherical joint is best left slack until the whole linkage has been fitted and tightened when all the adjustments have been made.

Rear pivot and lower rod correctly fitted, note washer positions:

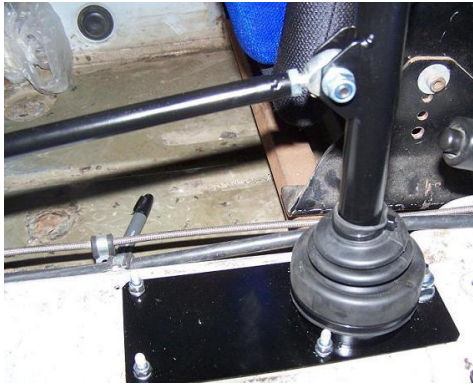


Before fitting the upper rod, some of the lower dash board may need to be trimmed off to clear the upper rod, so be prepared! This is a particular part of the installation that makes the kit difficult to install in road cars. Fit the upper rod with its gaiter through the bulkhead hole you've cut, between the gear stick and pivot assembly. The gear box end cross rods can now be fitted. Ensure the "bell crank" (right angled pivot lever), is at 90 degrees to the rods in the neutral position and adjust the cross rod lengths so that the stick is upright also in neutral.

The cross rods have lock wires that need to be removed before they're popped onto the gearbox end balls; re-fit the lock wires when all the adjustments have been finalised.

When you're happy that it's all working nicely and not hitting anything (especially the exhaust), then tighten all the mounting bolts and lower rod's rear spherical joint

nuts. Cable tie the stick gaiter in position and through bolt the upper rod gaiter base plate if you haven't already.



Enjoy!

Colin Satchell and Sandy Brown