

## 106 Rear Pushrod Set-up Guide

This guide is intended to help simplify the 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, as such it comes with no warranty and we will not be held responsible for damage/injury caused by the fitting and using of the kit.

It is intended for use in <u>competition cars</u> 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.

## Prerequisites:

- Monotube type shock absorbers with 425mm open length, and to fit between a 24mm clevis with 10mm holes
- Standard 18mm torsion bars (these allow the rockers to do most of the work)
- 100lb/inch 8" free length 2.25" springs for the shock absorbers. (We can advise different rates upon application)
- 3" free length 2.25" ID squash flat helper springs
- Original bump stops to be left in
- Grinder with flap disc
- Drill with 34mm (approx) step drill.

## Solid Mounts

In ALL circumstances of using the rear kit you MUST fit the solid mounts to the rear beam. Using this kit without these fitted will allow movement on the bracing/rocker pins, leading to premature failure. It is imperative that these are fitted. The large washers that are fitted to the axle originally are to go between

the shell and the top of the solid mounts. This allows for correct spacing and spreads the loading of the axle. There should NOT be one fitted to the lower side of the solid mounts.

Once the solid mounts are fitted and the rear axle is in place, it is advisable to use a transmission jack to support it underneath the car. There is a small casting mark on the nearside casting that needs to be ground off (in picture) to allow the nearside rocker stub to be fitted. It is just below the the original upper shock absorber bolt hole.



Fit both rocker stub pins and the horizontal brace between them. Loosely do up the M12 bolts in the brace and the rearward axle bolts to the shell, not forgetting the washers between.

Leaving the transmission jack in place, you will need to get in to the boot of the car. There is a small hole in the middle that lines up with the hole in the horizontal brace that you have just fitted. (Citroen AX will need one drilling.) The top side of this hole needs to be enlarged to approximately 34mm to fit the supplied square washer. Using a magnet, lower the washer into the channel in the boot floor. Fit the M10 cap head, and catch nut. Do not do up tight.



Now back to the underside of the car, fit the rockers then the small spacers, all the remaining bracing and the large nuts. Again, do not fully tighten them up. Fit both shock absorbers with the springs, but **DO NOT FIT THE PUSHRODS**.

Once happy that everything is in place, tighten all fixings properly.



## **Setting Up Your Rear Suspension**

With everything fitted, but no pushrods connected, set your ride height with the torsion bars alone to 25mm lower than desired. With the car on the floor, use a tape measure and take note of the ride height you have just set. Measure from a position on the wheel rim to the wheel arch (do not measure from the floor as tire deforming will give inaccurate measurements). Make a note of this.

Measurement 'A' .....

Spend time to get these even from side to side and make sure you are on a level floor. Now lift/ jack your car up so the rear wheels are off the ground. Fit both pushrods and adjust them so that there is 75mm of droop from the ride height you have just set.

Measurement 'A' ..... + 75mm = ....

Tighten both lock nuts.

Once you are happy with this, lower your car back to the ground and adjust the spring platforms so that the springs on the shock absorbers raise the car to your desired ride height taking up the original "minus 25mm" ride height that was set initially on the torsion bars alone.

It is highly recommended that you double check all fixtures and fittings to make sure they are tight. As with all race/ track cars regular checks should be made on all components, especially suspension.

Contact us if you have problems with setup.