



MGB FRONT TELESCOPIC DAMPER CONVERSION FITTING INSTRUCTIONS

This is a bolt-on conversion which has been designed to give the optimum performance, ride quality and handling.



The conversion kit consists of a pair of precision-machined LM25 aluminium top bracket and tubular wishbone arms, bespoke Avo adjustable telescopic dampers, lower damper mounting brackets and a fitting kit.

NOTE: Before you start to fit the kit, we recommend that you check all related suspension items (king pins, hub bearings, bushes etc.) and replace as required while installing the conversion. We would suggest a standard spring rate for road use. Performance can be enhanced by using polyurethane bushes, an uprated anti roll bar and differing spring rates.

If your vehicle is a Rubber Bumper shell make sure you have been supplied the spacer plates x2 and x8 longer fixings.

FITTING

- Remove the original lever arm damper units according to the workshop manual, ensuring that the lower wishbone arms and springs are properly supported and safe.
- Remove the rubber bump stop brackets. Cut off the mounting plates attached to the cross member, flush with the ends of the cross member. An angle grinder and a cutting disc are best suited to this job. Dress the outer end of the cross member in by 10mm to gain enough clearance for the damper. Repaint the area thoroughly
- Clean off the surrounding area to ensure no dirt enters the threads of the top mounting bolt holes. Clean the threads if necessary to ensure the bolts run freely in the threads.

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- Swing the king pin assembly away from the car to gain access to the lower wishbone pan. This will require the brake caliper and anti roll bar to be unbolted from the king pin. Take care to support the caliper and not to damage the brake hose if this is not being removed.
- Take the new lower damper mounting bracket and, using the socket button bolts, bolt it to the lower wishbone spring pan using the two existing holes and with the new third hole facing outwards. The third hole should be drilled and bolted into the wishbone pan using the new bracket as a guide. The button head bolt for the third bolt should be installed from above to allow clearance from the damper and from below for the existing two holes to allow clearance on the ant roll bar mounting.
- Offer the main bracket to the cross member. *if your car is a Rubber Bumper model please ensure you place the spacer plate between the Frontline suspension bracket and the cross member. This is bolted down using the Allen bolts provided. Fitting these bolts is a little tricky so ensure all 4 bolts are started and moving freely before bolting any down. Tighten to 43-45 lbft. Use copper grease or similar on the bolt threads.
- Remove the top half of the damper bush at the pin end, compress the damper a little by hand and insert the damper between the new top link and the new bottom bracket with the pin end uppermost.
- Now bolt the lower damper eyelet to the lower bracket. Raise the suspension using a jack or similar and then re-fit the top half of the damper top mounting bush and tighten using the locking nuts.
- At this point check for clearance of the damper body against the front crossmember. This should be about 5 mm on full bump. If it is not you will need to relieve the flange on the end of the crossmember to allow sufficient clearance.
- On full droop the damper sometimes come close to the large nut on top of the king pin. If it does interfere you may need to chamfer a small amount off the top edge of the nut (you only need a clearance here of 1mm to prevent damage to the damper). It is very rare to have to do this but caution should be exercised to make sure that the modifications are safe and secure. If in doubt please contact us or a competent mechanic
- Attach the outer end of the top arm to the top of the stub axle in the normal manner, using the ½ UNF x 4" bolts supplied. We recommend using polyurethane bushes for the top link.
- Re-fit the brake caliper where required and check the position and operation of the brake hose to ensure it will not foul anywhere.
- Repeat this installation procedure for the other side.

- Re-set the tracking to 2mm tow in overall (this is a guide setting and further adjustment may be required to gain the best overall handling characteristics).
- For the damper settings, we recommend turning the adjuster knob fully anti clockwise to a full soft setting. For cars fitted with their original engines turn clockwise for 7 clicks and for cars fitted with lighter engines like the Mazda engine set the dampers to 5 click from softest. This is usually the optimum damper setting but it can be adjusted to set up to your personal requirements and driving style.

When first testing your new suspension we recommend you take time to get used to the difference. We suggest that trying out the limits of this, and any other product, should be done in a safe place.

After the initial tests we strongly recommend re checking all fixing points and further tightening if required.