



Montageanleitung für Lagerbolzensatz Querlenker (Best.-Nr. 300878)

1. Oberen Haltebolzen am Traggelenk und oberen Dreieckslenker demontieren.
Dabei ist darauf zu achten, dass die komplette Auflagefläche der Achsaufnahme eben und frei von Schweißrückständen ist (am Achsträger).
 2. Einstellbare Haltebolzen zusammen mit den dazugehörigen (großen) Montageblechen lose anschrauben. Je nach Montage der Achsaufnahme ändert sich auch der Anlenkpunkt des Dreieckslenkers.
 3. Bei tiefergelegten Fahrzeugen bitte Welle nach oben montieren,
bei original Fahrzeugen Welle nach unten montieren.
 4. Obere Dreieckslenker montieren.
 5. Nun zwischen oberen Kugelkopf und Dreieckslenker zum Ausgleichen die kleinen Montagebleche unterlegen.
- Um ein besseres Einlenkverhalten zu erzielen einen negativen Sturz von $1,5^\circ - 1,75^\circ$ einzustellen.
 - Nach Einstellung der Sturzwerte sind alle Verbindungen nachzuziehen.

Bitte bei TR 2-4 (bis Fahrgestell-Nr. CT6344) zusätzlich beachten!

- Bei diesen Fahrzeugen sind der obere Kugelkopf und die oberen Dreieckslenker des TR 4A-6 zu verwenden. Kugelkopf (Best.-Nr.: 1059), vorderer Querlenker (Best.-Nr.: 1673), hinterer Querlenker (Best.-Nr.: 270).
- Wir empfehlen bei TR2-4 Modellen die späten Messing-schwenklager des TR4 mit 3° Nachlauf zu verwenden. Links (Best.-Nr.: 1784), rechts (Best.-Nr.: 1783).

ACHTUNG!

Nach Einstellung der Sturzwerte sind die Montagebleche, die auf den Haltebolzen montiert sind, mit Schweißpunkten an den Haltebolzen zu fixieren!



Fitting instruction for fulcrum pin set wishbone (Part no. 300878)

Read all these instructions before commencing work to avoid making costly mistakes.

Before You Start:

It is essential that these Instructions should be fully read, referring where necessary to the appropriate original Triumph Workshop Manuals and/or Parts Books for the relevant car, prior to commencing work.

Safety:

Your Safety and that of the users of the vehicle to which these products are to be fitted and all other Road Users and members of the General public is paramount. Accordingly the fitment of these products should only be undertaken by persons who are competent skilled vehicle technicians and will execute the work in accordance with accepted standards of safety and quality of workmanship. All work should be undertaken with the correct tools, which must be in good and serviceable condition. Where applicable reference should be made to all safety instructions contained in the original Triumph Workshop Publications.

Warning:

This modified top fulcrum arrangement can only be fitted to TR's 2 to early TR4 where TR4 (late) to TR6 type top wishbones and top ball joints have been fitted, requiring a TR4 (late) lower trunnion, this arrangement gives 3° of castor.

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This kit is primarily intended for TR2-4 where no camber adjustment is provided in the standard front suspension arrangement. TR 4A-6 owners can use the kit to adjust out small amounts of chassis misalignment and to alter the height of the upper fulcrum in certain instances, particularly race applications.

The new top fulcrum can be used for both Road/Rally and Race Settings, to achieve this the fulcrum can be fitted with the pin both ways up.

With the pin fitted low to the top of the turret, i.e. nearest the ground, the virtual swing axle dimension is correct with 1° negative camber, 3° of caster and approximately 90 mm of chassis to ground clearance for Tarmac Rally/Hill climb and Sprint/race (depending on car weight and springs used).

With the pin fitted the other way up - i.e. with maximum distance between the pin and the top of the turret, the vertical swing axle dimension is correct for loose Rally and Fast Road use with 1.75° of negative camber (TR2-3B) or 1.5° of negative camber (TR4), 3° of caster and 155 - 165 mm of ground clearance. (TR2-3A), (145 mm to 155 mm for TR4) and 135 mm to 145 mm for TR4A-6 depending on car weight).

To assemble your new upper fulcrums proceed as follows:

Strip the front suspension and renew all worn bushes, preferably with polyurethane bushes or Nylatron/stainless steel kits depending on your application.

TR2-4 owners must weld a pair of nuts inside each spring turret at the inboard position. This allows the top fulcrum to be removed without first removing the road springs.

Reassemble the lower suspension arms, vertical links and hubs without the springs and dampers.

Decide which way up you require your new upper fulcrum as described above. Loosely assemble the upper fulcrum with 2 top plates, and 4 bolts, (leave out the spring washers at this stage) as follows:

TR2-4 3" bolts inboard, 2 1/4" bolts outboard.

TR4A-6 all attachments are 2 1/2" bolts.

Initially set the fulcrum with the pin most in board, i.e. with the machined cut outs in the pin, visible in the sliding pan, nearest the engine.

In the Hill climb mode where 90 mm of ground clearance is required TR2-4 owners will find it necessary to grind away the web on the forward edge of the turret to allow the new fulcrum to move fully inboard. In order to maintain the strength this web imparted, a new web should be welded in lower down.

Additionally, TR2-4 owners will notice that the top of the turret is in fact not flat and should it be necessary for the new fulcrum to be fitted well inboard, it will be necessary to file a small amount off the underside of the new assembly to accommodate the shape of the turret.

It is not all plain sailing for TR4A-6 owners who may find that the rear most leg of the new assembly touches the back of the bulge in the chassis there the damper is secured. If this is the case, when camber is correctly set, a small amount can be filed from the underside of the new assembly to accommodate this.

Additionally in Hill climb mode the box section forward of the turret may need to be modified if full droop is required.

You will notice that the distance between the two upper wishbones is now 10 mm or so greater than before. Using the spacers provided assemble the top ball joint to top wishbones with 3 1/4" UNF bolts, plain washers and nyloc nuts, disposing the spacers about the top ball joint so that there is no strain on the vertical link.

Trial fit all remaining components, except the springs and dampers, and with the road wheel in place ensures full and free movement over all steering and suspension travel, paying particular attention to brake hoses.

Once the suspension has been fully assembled and with the original lock stops in place, check-mount the hub (don't put the split pin in at this stage) and wheel with the springs and dampers still unfitted to ensure adequate clearance between the outboard ends of the upper wishbones and the wheel. Move the wheels from lock to lock on full bump and full rebound to ensure the wheel rim cannot touch the upper wishbones, or that the tyre does not touch the anti roll bar, on full lock.

If the wheels do touch the upper wishbones, the protruding edges of the wishbones can be ground away. Be sure not to grind away the nyloc nut. It is acceptable to grind away excess protruding thread of the outboard top ball joint attachment bolt, ensure one and a half threads remain visible beyond the nyloc nut.

If these adjustments don't give suitable clearance and/or the tyre touches the anti roll bar, remove the lock stops and fit two larger lock stops (22 mm diameter).

Should the above operation still prove inadequate, wheel spacers should be employed.

Check also that the brake hose does not touch anything, which moves. If the hose touches the wishbone it can be sheathed with stout petrol or water hose secured with tie wraps. TR2-3A owners with TR3A type calipers may wish to change the exit angle of the brake hose completely.

Using a suitable camber gauge set the upper fulcrum so as to achieve your desired camber angle at correct ride height. In the absences of the correct equipment, the camber should be set by eye so that wheels are vertical, and traileered to a suitably equipped tyre/tracking workshop or garage, where the camber can be set.

Before checking each time, ensure that the pin in the new unit is parallel to the centre line of the car.

Once this has been achieved, the top plate must be welded to the uprights of the new top fulcrums. This is essential to ensure the fulcrum cannot slip in use. Tack-weld the top plates to the fulcrum assembly, spraying water onto the fulcrum in between welds to protect the upper inner wishbones bushes. When satisfactorily tack welded, remove the fulcrums, disassemble and weld thoroughly around the top plate. Prime and paint to protect the fulcrums and reassemble taking care to put bushes, arms etc. back where they came from. Re-attach the top fulcrums to the suspension tower using the previously removed bolts, but now using the spring washers provided.

Do not drive the car before the top plates are fully welded to the upper fulcrum main body.

Refit all remaining components and check tightness of all bolts, nuts etc.

Resettle the front suspension by pushing up and down on the front wings, and pushing the car backwards and forwards. Finally reset the front wheel tracking to 0-1/16" toe in.



Mode d'emploi pour le montage des boulons de coussinet du bras oscillant transversal (ref. no. 300878)

1. Démonter les boulons de maintien supérieurs de l'articulation porteuse et du triangle de suspension. Il faut veiller à ce que la surface du logement de l'essieu soit lisse et sans résidus de soudure (sur le berceau).
 2. Il faut visser les boulons de maintien réglables sur les (grandes) tôles correspondantes. En fonction du montage du logement de l'essieu, le point de positionnement du triangle de suspension peut varier.
 3. Pour les véhicules surbaissés, l'arbre livré doit être monté vers le haut, sur les véhicules non surbaissés, il doit être monté vers le bas.
 4. Monter le triangle de suspension supérieur.
 5. Il faut caler des petites tôles de montage entre la rotule supérieure et le triangle de suspension afin de compenser.
- Régler une cambrure négative de 1,5° à 1,75° afin d'obtenir un meilleur rapport.
Après le réglage de la cambrure il faut revisser tous les raccordements.

Merci de suivre les instructions ci-dessous pour les TR2 – 4 (jusqu'au châssis no. CT6344)

- Il faut utiliser les rotules supérieures et les triangles supérieurs de suspension des voitures TR 4A-6. Rotule (ref. no.1059), bras oscillant transversal avant (ref. no. 1673), bras oscillant transversal arrière (ref. no. 270).
- Pour les modèles TR2-4 nous recommandons d'utiliser les pivots de fusée en laiton de la TR4 avec un angle de chasse de 3°. A gauche (ref. no.1784), à droite (ref. no. 1783).

ATTENTION !

- Après le réglage de la cambrure, les tôles de montage sont refixées sur les boulons de maintien avec des points de soudure !