

**NO CAMBER OR CASTER OEM.**

**KMAC KIT is designed for MAX. Precise adjustment (Positive or Negative)**

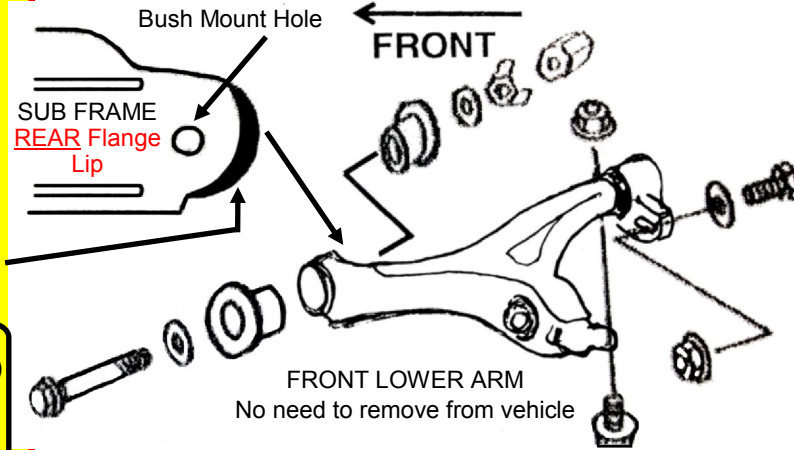
**NOTE:**  
**Minimum Camber (Resolve premature inner edge tire wear) ...MAX. Travel is achieved by grinding back flange lip (rear only) of SUBFRAME.**

**12mm (1/2") is sufficient for 50mm (2") lowering**

**RH bush offset to be at 9 o'clock. LH at 3 o'clock.**

**CHECK / observe clearance maintained between arm on full suspension travel**

## Can Install Without Arm Removal



**FOR EASE OF FITMENT JACK AND USE SAFETY STANDS TO SUPPORT FRAME**

Installation should be carried out by a qualified engineer

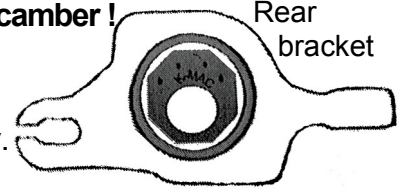
- A.** Unbolt and remove engine tray, then the 2 front "U" brackets that retain the anti-sway bar (so bar can be lowered to gain access to the bolt on each lower control arm FRONT BUSH).
- B.** Jack and support each control arm so that this front bolt can be removed. (Airmatic suspension - disconnect top airline to deflate first) Then remove the 2 bolts attaching the REAR BRACKET. Now lower arm sufficient to expose the front bush.
- C.** Use the extraction tool supplied to remove FRONT BUSH (tool needs to be positioned at FRONT of bush). Clean hole and insert the elastomer bushes. Use the silicone grease supplied only on the steel bush centers and push in.
- D.** **Removing Rear bracket from control arm** - Early W164 unscrew the end "retaining bolt. Late W164 use a 3 jaw puller or use 5/16" (8mm) drill bit to drill out rubber bush. If the center tube is firmly attached to arm "end spigot" - remove by using small disc grinder or cutting wheel to carefully slit length.

**E.** **Removing outer sleeve from bracket** - Use bench press with the extraction tubes supplied to support and press out. Clean hole and press in the new KMAC sleeve. NOTE: press in initially 1/4" / 5mm (check that it is accurately aligned) then - through until sleeve is 3/8" (10mm) short of "FRONT" of bracket.

**F.** Insert 8 sided elastomer bush (**CHECK "LIP-END" IS TO FRONT**).

- **OFFSET HOLE DOWN** and centered as per diagram.
  - **OFFSET HOLE INWARDS** if extra adjustment required - maximum is horizontal (vehicle lowered or curb knock damage).
- In combination with KMAC front adjusters, these rear bushes will allow reduction in excess negative camber!** (or outwards for extra Pos. Caster)

**G.** Clean and grease the arm - end spigot only and push on the bracket assembly. NOTE: Early W164 (with end mounting bolt) grease and insert alloy spacer supplied "into assembly" then reattach to arm.



**H.** To aid reconnection of arms insert a "D" bolt into the FRONT "D" hole bush and rotate to 12 o'clock position.

Then raise arm and insert bolt into frame hole - (tooth washer under bolt head and bolt "flat" UP - so lines up with 12 o'clock position of bush). Push bolt fully through with remaining washer outside of frame, tab lock washer and nut.

**I.** Reconnect REAR BRACKET (fit the twin slot bolt supplied to inside hole -allows extra adjustment in combination with Step F). Replace wheels, carry out below alignment, then replace engine tray etc.

### WHEEL ALIGN (TIRES ON SLIDING TURNTABLE)

**REAR MOUNTS** - Refer to step "F" & "I"

**FRONT MOUNTS** - Unique KMAC patented system, Precise adjustment

- Simply rotate bolt head! (Ensure lock nuts are loose)

Rotate bush "downwards" to maintain clearance to cross member mount

**If adjusting to reduce negative camber check bush arm has "clearance to sub frame" rear lip (see above diagram).**

Once required settings (front - hold head of bolt in position) and fully torque nuts (and rear bolts) to 96Nm (72ft/lb).

**Recheck all bolts fully tight - loose suspension bolts create noise. Note: Front nuts to secure - fold 'one' of the 3 tabs that lines up with face of nut**

Finally adjust OEM Toe settings

- **ESSENTIAL** — Preventing premature/costly inner edge tire wear — Result of wide profile tires, high cambered roads, altering height **through lowering** or load carrying, curb knock damage.
- **OR REGAINING** — More even tire wear after lowering height/roll center (getting your Off-roader-On.... For flatter, safer handling - highway curves / lane changing, cornering).
- **PLUS** — Replaces all 4 main front bushings (highest wearing suspension bushes - **Especially the OEM front lower / inner rear which are subject to premature failure and are expensive to replace**).

### TOOLS REQUIRED

**WRENCH** -10mm x 1 , -18mm x 1 , -21mm x 2 , -22mm x 1  
**DRILL** – 8mm(5/16”) drill bit **PRESS** - Min. open height 220mm (8 1/2”)

### PARTS ENCLOSED

#### BUSHES

2 x Steel (solid)  
 2 x Steel (outer)  
 4 x Elastomer

#### BOLTS

2 x Long  
 2 x Short

#### NUTS

2 x Long

#### WASHERS

4 x “D” hole  
 2 x Tab Lock

#### EXTRACTION

1 x Tool  
 2 x Tubes

#### LUBRICANT

1 x Lubricant



**SUIT MERCEDES BENZ (SUV)** ALL MODELS SEE WEBSITE

**W166/X166, W251, C292 #503816-1**

**FRONT CAMBER (and CASTER) FOR THE 1st TIME**

(REAR - CAMBER & TOE KIT ALSO MANUFACTURED)

Plus “Cost Effective” Replacement ....

**of the ‘4’ FRONT HIGHEST WEARING BUSHINGS**

- ✓ **CAMBER** - Positive or Negative  
(Resolve Costly, Premature Inner Edge Tire Wear)
- ✓ **BUSHINGS** - Twice the load bearing area  
(same time replacing the “2 rear” highest wearing)
- ✓ **ADJUSTMENT** - Precise “Single Wrench”  
(accurately under load direct on alignment rack)
- ✓ **IMPORTANT** - Adjusts lower arms, not upper  
(retaining clearance top of tire to outer fender)
- ✓ **INCLUDES** - Extraction / insertion tools

*Always 1st With The Latest Design Breakthroughs ....*

1. **WISHBONE:** Precise Ball Joint Adjustment System.
2. **STRUT(top):** Biggest/Quickest Adjustment System.
3. **BUSHINGS:** Single Wrench - Precise On Car Adjustment.  
**Including a unique KMAC “non-slip” lock system!**  
*Actual Inventors/Patentee’s - The ‘3’ Basic Suspension Systems*

*We do appreciate any ideas to further improve our market leadership !*