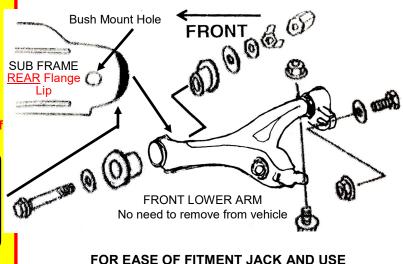
NO CAMBER OR
CASTER OEM.
K-MAC KIT is
designed for MAX.
Precise adjustment
(Positive or Negative)

## NOTE:

Minimum Camber (Resolve premature inner edge tire wear) ...need to grind back flange lip (rear only) of SUBFRAME.

12mm (1/2") is sufficient for 50mm (2")
lowering
Allowing
RH bush offset to
be at 90'clock.
LH at 30'clock.

CHECK clearance maintained between arm on suspension travel Can Install With - \*Arms on vehicle.



TAKE ALIGNMENT READINGS 1st

SAFETY STANDS TO SUPPORT FRAME

RAILS THEN REMOVE FRONT WHEELS.

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 bolt can be removed. 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. Remove REAR BRACKET from arm by unscrewing center bolt if no bolt use 1/4" 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 slit length.

- E. REAR BRACKET Use bench press with the extraction tubes supplied to support and press out the remaining "outer" sleeve from bracket. Clean hole and press in the new K-MAC bush. NOTE: press in initially ¼" (5mm) and check that it is accurately aligned then fully in until flush with front of bracket.
- F. Insert 8 sided elastomer bush (to contain 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 K-MAC front adjusters, these rear bushes will allow reduction in excess negative camber!

(or outwards for extra Pos. Caster)

**NOTE:** The 2 slotted bolts (one per side) enclosed replace the plain OEM bolts. Allowing to "fine adjust" bracket position for camber and/or caster.

Rear

- **G.** Clean and grease the arm end spigot only and push on the bracket assembly.
  - W164 "If end bolt" insert the thick alloy tube first.
  - W166 The thin wall tube.
- H. To aid reconnection of arms insert a "D" bolt into the FRONT "D" hole bush and rotate to 6 o'clock position.

Then raise arm and insert bolt into frame hole - (small washer under bolt head and bolt "flat" down - so lines up with 6 o'clock position of bush). Place the larger washer "behind" the bush then push bolt fully through with the remaining washer outside of frame then tab lock and nut.

Reconnect REAR BRACKET (fit the twin slot bolt to inside hole - allows 3 position adjustment - see NOTE (step F). Replace wheels, carry out below alignment, then replace engine tray etc.

## WHEEL ALIGN (TIRES ON SLIDING TURNTABLE)

FRONT MOUNTS - Unique K-MAC patented system,
Precise adjustment - simply rotate bolt head!
(Ensure lock nuts are loose)

(rotate bush "downwards" to maintain clearance to cross member mount)

REAR MOUNTS - Refer to step "F"

Once required settings (front - hold head of bolt in position) and fully torque nuts to 96Nm (72ft/lb). Front bush - if adjusting to reduce negative camber check bush arm has "clearance to sub frame" rear lip (see above diagram). Recheck all bolts fully tight - loose suspension bolts create noise. Finally adjust OEM Toe settings

(Front bush - Fold the one matching lock tab against side of K-MAC nut)

- ESSENTIAL 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 driving, lane changing, cornering.
- PLUS Replaces all the 4 front bushes subject to costly/premature failure.

## **TOOLS REQUIRED**

**WRENCH** -10mm x 1 , -18mm x 1 , -21mm x 2 , -22mm x 1 **DRILL** -1/4" drill bit **PRESS** - Min. open height 220mm (8 1/2")

## **PARTS ENCLOSED**

| BUSHES 2 x Steel (solid) 2 x Steel (outer) 4 x Elastomer | NUTS<br>2 x Nut<br>WASHERS<br>2 x Large |
|--|---|
| W166   | 4 x "D" hole                            |
| 2 x Tube Thin<br><b>W164</b>                             | 2 x Tab Lock<br><b>EXTRACTION</b>       |
| 2 x Tube Thick   | 1 x Tool                                |
| BOLTS<br>2 x Long  | 2 x Tubes<br><b>LUBRICANT</b>           |
| 2 x Short  | 1 x Lubricant                           |



SUIT MERCEDES BENZ (SUV)

ALL MODELS
SEE WEBSITE

W164/X164,W166/X166,W251,C292 #504016

FRONT CAMBER (and CASTER) FOR THE 1st TIME
Also "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 tubes (No need to remove Control arms)

**REAR - CAMBER (and extra Toe) ALSO MANUFACTURED** 

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.

Actual Inventors/Patentee's - The '3' Basic Suspension Systems

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