

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

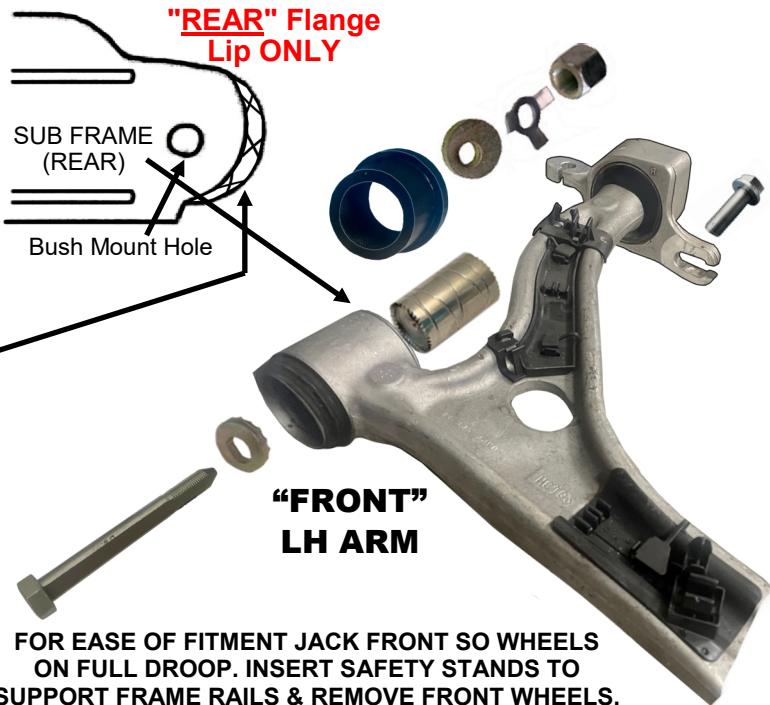
NOTE:

...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



INSTALLATION SHOULD BE CARRIED OUT BY A QUALIFIED PERSON

- 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. (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 REAR of bush - Lip flange side). CAN BE TIGHT INITIALLY - use impact wrench if available. Clean hole, insert elastomer bushes. Use the silicone grease supplied only on the steel bush centers and push in.
- D** Removing REAR BRACKET from arm - Early W164 unscrew the end "retaining bolt". Late W164 use a 5/16" (8mm) drill bit to drill out rubber bush or 3 jaw puller. If center alloy tube firmly attached to arm "end spigot" - remove by using small disc grinder or cutting wheel to carefully slit length (if high mileage chances are rubber bushes are broken & easy to remove).

© KMAC Align 2024 #503816

E Removing outer sleeve from "alloy 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 to **within 5/16"** (8mm) of "FRONT" of bracket.

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

- OEM - **OFFSET HOLE DOWN** and centered as per diagram.
- OR - **OFFSET HOLE INWARDS** If extra Positive Caster (In combination with KMAC front adjusters)

G **EARLY** - Grease and insert alloy spacer tube.

LATE - Grease arm end spigot THEN MOUNT BRACKET ASSEMBLY.

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 adjustment of Caster in combination with adjustable bushes Step F) - Offset OUT for more Pos. Caster (IN for less).

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)

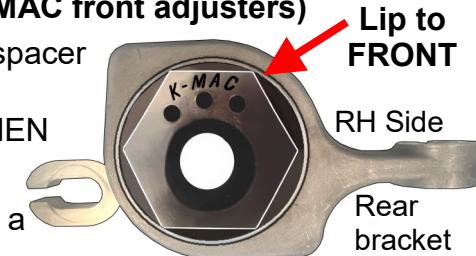
Rotate bush "downwards" to maintain clearance to cross member mount

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 184Nm (135ft/lb).

Front nuts to secure - fold 'one' of the 3 tabs that lines up with face of nut
Finally adjust OEM Toe settings

ESSENTIAL - RECHECK / MAKE SURE 4 NUTS ARE FULLY TIGHT
(Loose Nuts Cause Noise Noticeable Camber Change)





- **ESSENTIAL** — Preventing premature/costly inner edge tire wear
 - Result of wide profile tires, high cambered roads (with excess passengers side edge wear), altering height **through lowering** or load carrying or having adjustment for curb knock damage !

OR COMPENSATING FOR....

- **GETTING YOUR OFFROADER ON** — Lowering height/roll center For Flatter, Safer more Responsive 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 lip

BOLTS
 2 x Long
 2 x Short

NUTS
 2 x Long

WASHERS
 4 x "D" hole
 2 x Tab Lock

SLEEVES
 2 x Alloy

EXTRACTION
 1 x Tube

LUBRICANT

FRONT CAMBER (and CASTER) FOR THE 1st TIME
 (REAR - CAMBER & TOE KIT ALSO MANUFACTURED)

Plus **"Cost Effective"** Replacement
'4' FRONT HIGHEST WEARING BUSHINGS
 2 Rear subject to premature failure

- ✓ **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 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 !