

## KB Supercharged '01 Cobra - Motor Mount Swap

### Vehicle Preparation

- 1) Disconnect the negative battery cable.
- 2) Loosen the serpentine belt & remove the alternator.
- 3) Remove the RH KB idler pulley from the front motor plate and mark the mounting hole with a shop pencil for reference during reassembly.
- 4) Install an engine support brace and chain fall, bolting the chain to the KB front motor plate at one of the RH threaded idler pulley attachment holes.
- 5) Loosen the front lug nuts and place car as high as possible on jack stands.
- 6) Remove the front wheels.
- 7) Loosen the two central transmission mount bolts on the transmission crossmember.
- 8) For convertibles, remove the 2 (two) underbody plastic splash shield push pins near the attachment points at the rear of the front subframe brace, and remove the brace by removing the 13 (thirteen) retaining bolts.
- 9) Remove the steering shaft pinch bolt and collapse the intermediate shaft back out of the way.
- 10) Remove the nuts securing the motor-mounts to the K-member.
- 11) Remove the sway bar end links and disconnect the tie rod ends from the control arms.
- 12) Unbolt the steering rack from the K-member and secure it to the car with tie wraps.
- 13) Remove the C-clips from the caliper retaining pins, remove the pins, and tie the calipers up out of the way in the wheel wells.
- 14) Remove the retaining nuts for the ABS cable brackets and the ABS sensor bolts, and tuck the sensors up out of the way.
- 15) Place a floor jack under the right control arm to unload the lower strut bolts and remove the lower strut bolts. Then, slowly lower the jack. (Depending on the particular spring and control arm bushings in use, the spring may need to be removed after the jack is lowered.)

- 16) Repeat step 15 on the left side.
- 17) Tighten the chain fall on the engine support to maintain engine height when the K-member is removed.
- 18) Place two floor jacks under the K-member, mark the positions of the bolts and crossmember for reference during reassembly, and remove the 8 (eight) K-member-to-chassis bolts.
- 19) Slowly lower both floor jacks enough to clear the front fascia with the K-member, and roll it out of the way to provide clear access to the motor mounts.

## Motor Mount Replacement

- 20) Remove the retention nuts securing the ground straps (LH mount) and wiring harness (RH mount).
- 21) Remove the old motor mounts by removing the bolts and stud bolts securing each to the block.
- 22) Transfer the driver side sheet metal heat shield to the new LH motor mount.

**NOTE:** When installing new *Energy Suspension* poly mounts, some modification of the heat shield is required to achieve proper fitment, but the shield can be made to fit the new mount.

- 23) Install the new mounts. Torque spec for all 6 (six) mounting bolts is **52 lb-ft**. **Use anti-seize!**

**NOTE:** The stud bolt on the RH mount belongs at the lower front attachment point. The stud bolts on the LH mount both belong at the front attachment points.)

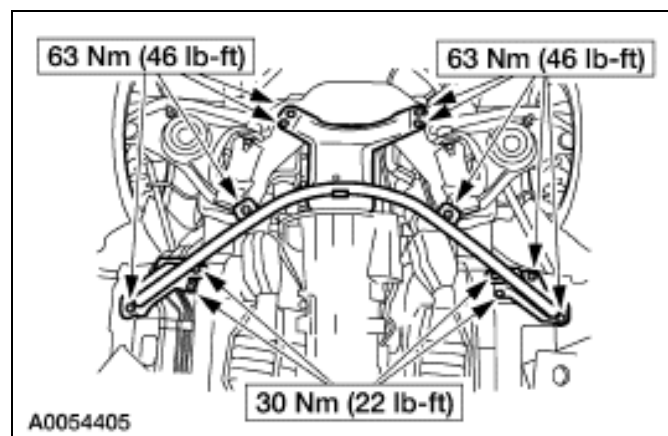
- 24) Secure the ground straps and wiring harness to their motor mount stud bolts with the retention nuts. Torque spec for all the retention nuts is **18 lb-ft**.

## Reassembly Procedure

- 25) Slowly the raise K-member, aligning it with the studs and locating dowels on the motor mounts and with the chassis attachment points. Then, loosely reinstall the 8 (eight) K-to-chassis bolts that were removed.
- 26) Align the K-member with the penciled alignment marks made during disassembly and tighten all 8 K-member bolts to specification. **Use red thread locker**. Torque specs are **85 lb-ft for the 4 upper** frame rail bolts and **66 lb-ft for the lower** bolts.
- 27) Loosen the chain fall on the engine support to enable the motor mounts to fully seat in the K-member.

- 28) Check all engine bay clearances, especially around the EGR pipe.
- 29) Ensure the locating dowels on the motor mounts are properly aligned with the cutouts on the K-member, and tighten the motor mount nuts to **111 lb-ft. Use red thread locker.**
- 30) Retighten the 2 (two) previously loosened transmission mount bolts on the transmission crossmember to **43 lb-ft.**
- 31) Reinstall the steering rack on the K-member. (Torque spec for the rack bushings when using *Maximum Motorsports* aluminum bushings is **45 lb-ft.**) **Use blue thread locker.**
- 32) Raise the control arms and reinstall lower strut bolts, tightening to **148 lb-ft. Use red thread locker.**
- NOTE:** Locate the bolt heads at the rear of the strut flanges, and the nuts at the front of the flanges.
- 33) Reinstall the ABS sensors (Torque retention bolts to **53 lb-inch**) and sensor cable brackets (Torque bracket nuts to **21 ft-lbs**). **Use anti-seize compound on sensor bolts.**
- 34) Reconnect the tie rod ends to the control arms. The bottom nuts of the *Steeda* bump steer kit spindles require **50 lb-ft** torque.
- 35) Reinstall the sway bar end links and tighten their retention nuts. **Use blue thread locker.**
- 36) Reinstall the front brake calipers on the rotors.
- 37) Reconnect the intermediate steering shaft to the steering rack, tightening the pinch bolt to **25 lb-ft.**) **Use blue thread locker.**
- 38) For convertibles, replace the front subframe brace and tighten all fasteners to spec. (See figure below for torque specs.) **Use blue thread locker.**

Ensure sufficient clearance between the brace and the bottom of the oil pan.



- 39) Replace the 2 (two) plastic push pins previously removed from the underbody splash shield. (Convertibles only.)
- 40) Replace the front tires and snug all lug nuts.
- 41) Remove the jack stands and tighten all lug nuts to specification (98 lb-ft).
- 42) Remove the engine support and chain fall.
- 43) Reinstall the KB idler pulley on the front motor plate and tighten to specification (35 lb-ft).
- 44) Reinstall the alternator (Front SHCS = 18 lb-ft, rear SHCS = 5 lb-ft, lower support hex bolts = 20 lb-ft).
- 45) Tension the serpentine belt.
- 46) Reconnect the negative battery cable.