

K-member Alignment for IRS Cobra

Support the engine from above with a chain fall and engine support brace, but do not loosen the motor mounts. The K-member can be positioned with the engine secured in the member, provided a brace is used to unload the engine weight.

Loosen the lug nuts on all the wheels, raise the vehicle at least 18 inches, and support it on jack stands. Position the jack stands such that they will not interfere with the measurements to be taken.

Remove the wheels. Ensure the vehicle is as level as possible by measuring from the bottoms of the rocker panels to the floor and adjusting the jack stands as necessary.

Hang plumb-bobs from the mounting bolts at the forward inboard ends of the upper rear control arms with their points just above floor. Ensure that the plumb-bobs hang exactly the same from their pickup points on the chassis. The two strings should hang identically relative to the vehicle's center line. Place some masking tape under each plumb-bob, and mark an "X" on the tape directly under its point.

Move the plumb-bobs to the front of the vehicle and hang them next to the nuts on the front inboard ends of the control arms, suspending them identically from the vehicle with their points just above floor. Be sure the plumb-bobs are located identically relative to the center line of the vehicle. Place some masking tape under each point, and mark an "X" on the tape under the point of the plumb-bob.

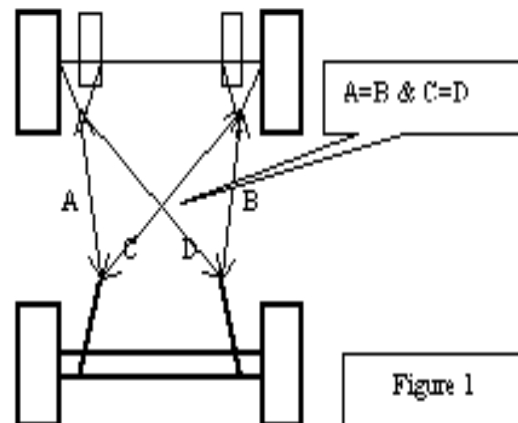
Using a tape measure, measure lengths A, B, C, and D from X-mark to X-mark. Dimension A should equal dimension B. Dimensions C and D should also be equal to one another. (Refer to Figure 1.)

If either pair of dimensions differ by more than 1/16 inch, the position of the K-member's position should be adjusted.

For convertibles, loosen the six (6) bolts securing the lower front brace to the K-member.

Loosen all eight (8) K-member mounting bolts just enough for you to be able to slide the K member for squaring.

NOTE: *the left forward upper mounting hole in the K-member is not slotted. Squaring the K-Member is accomplished by rotating it around this hole.*



If necessary, adjust the chain fall to lower the engine and K-member very slightly - just enough to minimize the clamping force between the K-member and the chassis.

Using a pry bar, adjust the position of the K-Member until the two diagonals are equal to each other and the two front-to-back dimensions are equal within 1/16 inch. (A 3-lb sledge hammer will expedite this process.)

NOTE: If equality cannot be reached for whatever reason, either slot the holes in the K-member as required or take the vehicle to a frame shop to have it straightened.

After squaring the K-member, torque all the bolts to factory specs (85 lb-ft for the 18mm upper bolts and 66 lb-ft for the 15mm lower bolts).

For convertibles, after tightening all the K-member bolts, torque the bolts between the lower front brace to the K-member to 46 lb-ft.