



**BAVARIAN AUTOSPORT**

# M-Tech Cross-brace Installation Instructions

**SAFETY NOTE:** This procedure requires the front of the vehicle to be raised from around about 2 feet (enough to gain access to the front underside of the vehicle). Use appropriate safety procedures and precautions in lifting and securely supporting the vehicle. As the work will be performed overhead, safety glasses are also recommended).

## 3 Series

92 thru 98

### PART NUMBER:

51 71 8 410212K

### PROCEDURE:

1. Raise and support the front of the vehicle. Since you will be working in the vicinity of the engine crossmember jackstands should be placed at the frame rails or the engine crossmember just inboard of the inner control arm ball joints.
2. Remove the straight frame brace that runs between the left and right frame rails, just behind the engine oil pan. Save the bolts.
3. Temporarily bolt the rear of the M-Tech Cross-brace to the points where the straight brace was mounted using the original bolts.
4. Each of the front mounting pads (left and right) of the M-Tech Cross-brace has three holes. Only the inner and outer hole in each mounting pad is used to secure the M-Tech Cross-brace to the engine crossmember. Mark the location of the two holes on each side, using the M-Tech Cross-brace as the template.

**NOTE:** Depending on the vehicle and production date - there may already be some, or all, of the holes in the engine crossmember. Additionally, any existing holes may need to be enlarged. Some early M3s which were not delivered with the M-Tech Cross-brace may already have fully threaded holes. In this case DO NOT drill them out ..... simply install the M-Tech Cross-brace.

5. Remove the M-Tech Cross-brace.
6. Using an 11mm drill bit, drill out the marked mounting hole locations.
7. Assemble a tool for installing the rivet-nuts in the drilled holes. Using the supplied hardware, thread the 8mm nut onto the 40mm long 8mm bolt and slide two 8mm flat washers onto the bolt (note that the washers have a side with sharp edges and a smooth side ..... place the two smooth sides to each other). Thread a rivet-nut onto the bolt so that the flange of the rivet-nut is against the washers. Thread the nut and rivet-nut on to the bolt until the end of the bolt is flush with the end of the rivet-nut. Place a drop of oil in between the washers (just a DROP!).
8. Insert the rivet nut into one of the drilled holes. Place a box-end 13mm wrench over the bolt and onto the nut. Place a 13mm socket and ratchet over the bolt head. You will be holding the bolt head secure with the ratchet while using the wrench to turn the nut .... this will compress the rivet-nut in the hole and secure it. While holding the ratchet to keep the bolt from turning, apply upward pressure to the bolt, this will press the rivet-nut into the hole and help to keep it from turning. Turn the nut in a clockwise direction (tightening) to compress the rivet-nut, until you can tell that the nut is getting noticeably tighter. At this point the rivet-nut is fully compressed. Loosen the nut and remove the install tool. Repeat for the other three holes.
9. Install the M-Tech Cross-brace using the supplied four 8mm x 30mm bolts and washers, and the original two 10mm bolts at the rear.
10. Lower the vehicle.



Call Toll Free: **1.800.535.2002**