



## **Twisted Tuning Supra MKV/BMW Z4 Upgraded Transmission Mount Installation**

**Version 1.0**



### **What is a transmission mount?**

The transmission mounts in a BMW are a common part that is frequently overlooked. They are required to do many things in the vehicle, yet are not quite suitable for those who actually drive their BMWs.

The transmission mount is designed to do the following:

- Help stabilize the transmission under vehicle load
- Isolate vibration from the drivetrain to the chassis

Under engine load, the transmission can wiggle left and right. This wiggle gets worse when the car is being driven in turns and as power (torque) output is increased. This unwanted movement may potentially cause extra sheering forces and not ideal angles on the driveshaft.

### **Solutions to a Potential Problem**

When we sought to have our own transmission mounts produced, we wanted them to be compliant for street use. We wanted to ensure that there were no compromises in performance, no extras to buy, just a mount engineered to do what we want without needless add-ons.

What we have is a transmission mount based around CNC'd 6061-T6 aluminum with Poly inserts. This increases rigidity as well as still has a buffer for slightly decreased NVH than full solid mount. There will still be an increase from stock however.

We have designed these mounts to minimize unwanted transmission movement while maintaining some vibration dampening characteristics. To eliminate even MORE movement from the transmission, you must go to the root of the issue, the factory motor mounts. We are working on a Motor mount solution currently and hope to release soon to accompany our Trans mounts.

### **Whats Included**

- Trans Mount Set (Two Individual Mounts)
- Stainless Steel Hardware for installation
- Polyurethane 80duro Inserts or Kevlar Infused Polyurethane Inserts (Kevlar infused inserts are overall more durable insert with higher resistance to tearing and Deterioration)

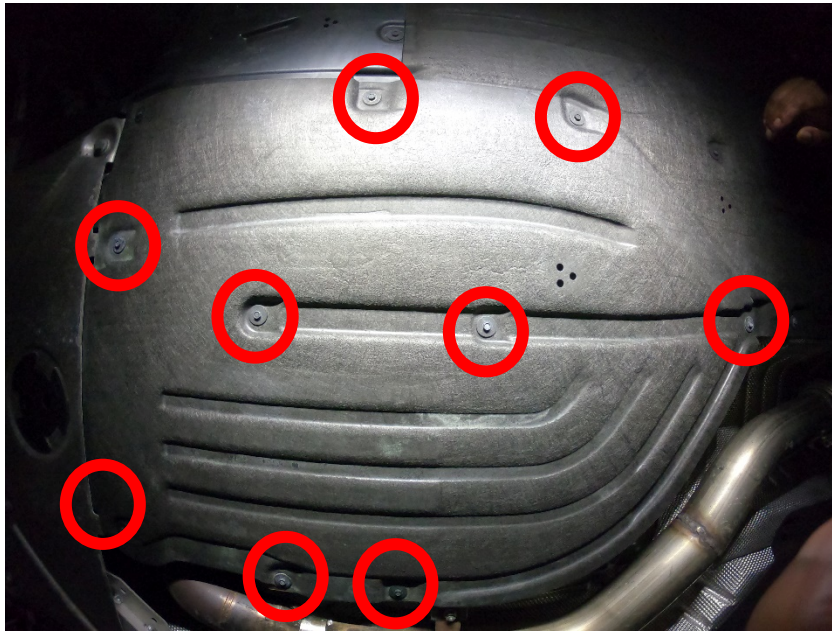
### **Tools Needed**

- Vehicle Jack and associated Jack Stands if you do not have a lift
- Wood Block or Trans jack (for supporting the trans when the crossmember is removed)
- 13mm deep-well socket
- 13mm open/box end wrench
- 8mm socket
- Ratcheting Socket Wrench (drive size associated with socket choice)
- Socket wrench swivel (need depends on the type of exhaust on the car)

## Installation Instructions

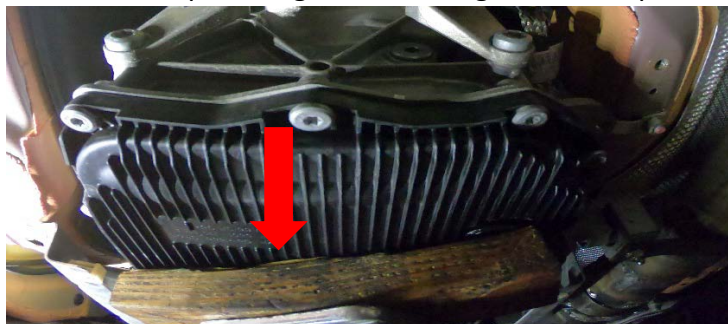
**\*\*\*\*NOTE – install instructions are assuming the Vehicle is currently on Jack stands or a lift and access to the underbody of the vehicle has already been acquired\*\*\*\***

1. Using the 8mm socket and ratcheting wrench, proceed to remove the vehicles transmission undertray by removing 9 screws.

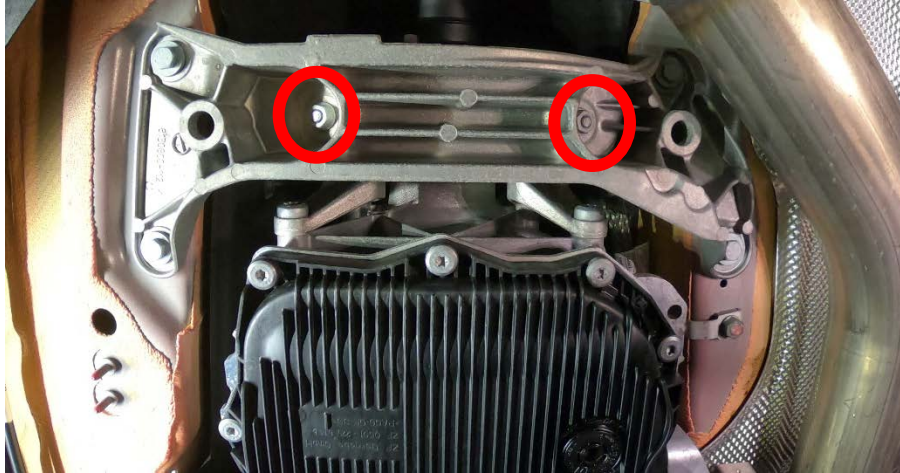


2. With the undertray cover removed. Position your transmission support under the trans pan and jack up the trans just enough to remove the weight off the crossmember and trans mounts.

NOTE – if using a support with a small diameter face, it is recommended to place a block of wood between it and the trans pan to more evenly distribute weight across the plastic pan. This decreases the chance of punching a hole through the trans pan. See below photo:



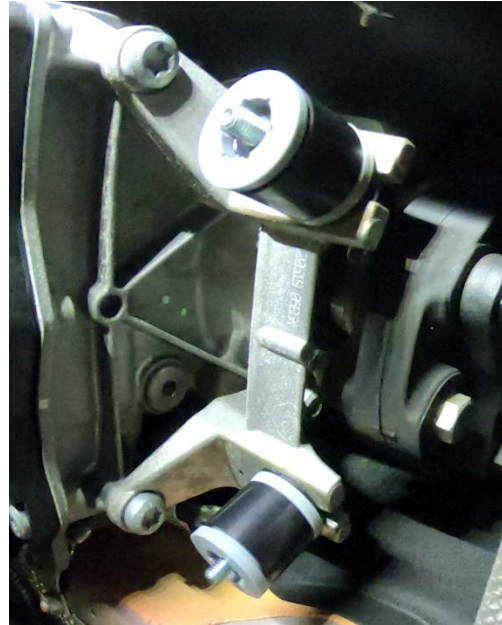
3. With the transmission now supported, using the 13mm socket and ratchet. Proceed to remove the two lower transmission mount nuts from the OEM transmission mounts.



4. Remove 4 bolts from the OEM transmission crossmember support using the 13mm socket and ratchet. And lower the crossmember and lay to the side. You should now be looking at what looks like the below photo.



5. Using the 13mm open/box end wrench, loosen both upper OEM trans mount nuts.  
NOTE- the nuts do not need to be completely removed. Loosen about halfway and slide the mounts off the transmission bracket.
6. Position the Twisted Tuning upgraded transmission mounts like shown in the picture below and slide onto the Transmission bracket. Positioning should be starting from top to bottom – Flange Bolt, SS Flat Washer, Transmission Mount bracket, TT Mount.

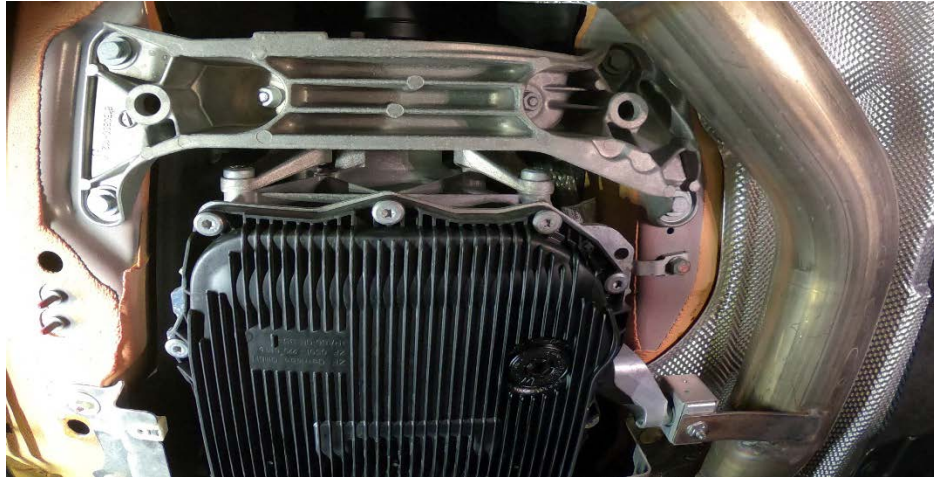


\*\*\*\*NOTE – The small o-ring found on the underside of the TT Mount is used to keep the mount from sliding off the mounting bolt and consequentially is also left in between as a small vibration buffer for the Mount collar sleeve and lower crossmember\*\*\*\*

7. Re-install the lower crossmember support using the 13mm socket and install 4 bolts for the crossmember. Ensure when re-installing the crossmember, that the bolts for the TT upgraded mounts go through the associated holes.



8. Lower the transmission support and move out of the way.
9. Using the 13mm deepwell socket and 13mm open/box end wrench, install the 13mm supplied serrated flange nut and flat washer and tighten to 15ft/lbs while holding the top flange bolt.



10. Re-install the lower transmission cover by installing the 9 screws that were removed prior.



11. Lower the vehicle onto level ground and clean up all your tools.

**NOW GO OUT AND ENJOY YOUR NEW PARTS AND A MORE RACECAR LIKE FEEL!!!**

**THANK YOU FOR YOUR CONTINUED SUPPORT.**

**-Twisted Tuning**