

## ND STRENGTHENED TRANSMISSION CASE STUD KIT 08-90700



Flyin' Miata

Thanks for purchasing our ND strengthened transmission case stud kit. If you have any questions during installation or suggestions for improvement to the product or the instructions - please don't hesitate to call or email.

**WARNING: Not everyone can perform every installation. It is critical that you be honest with yourself in regards to your ability. We're more than happy to help, but there are only so many things we can do from the other end of a phone / computer. If in doubt, discuss the install with us before you dive in. Improper installation could cause injury and / or death!**

### Required tools:

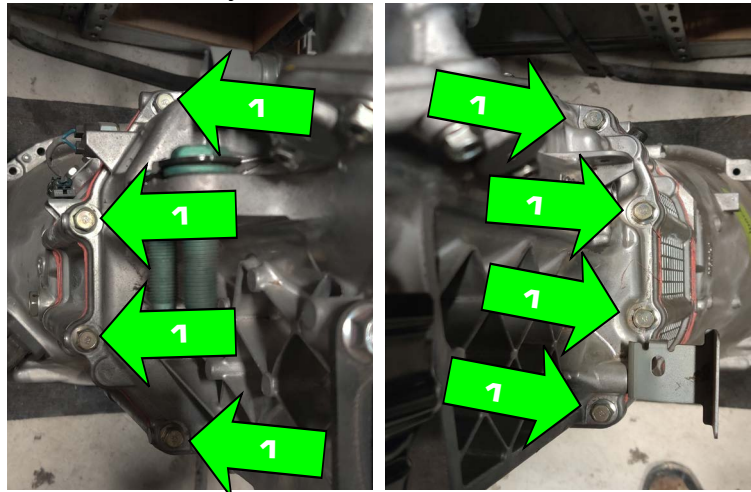
- Metric socket set
- Torque wrench
- Medium-strength thread locker (blue)
- Solvent cleaner (brake clean)

### Torque specs

- Studs: 15 lb-ft
- Nuts: 20 lb-ft

1. Jack up the car and support it with jackstands. Ensure that the car is secure and that there is sufficient room to work underneath it. Remove the X-brace, located just below the driveshaft, by removing the four bolts with a 12mm socket. The rearmost passenger side bolt hole is slotted so that bolt does not need to be fully removed.

2. At the back of the transmission, locate the eight bolts that hold the transmission case together (1). To ensure there is no case separation during the installation of the studs, it is recommended to fully replace the bolt with a stud one at a time. **Note:** *If any of your stock transmission bolts appear to be missing, it likely means that the bolt in that location has broken. This will mean that the end of the bolt is still threaded into the front of the transmission and will require the transmission case to be taken apart to extract it.*



3. Depending on your ability to access the bolts, it may be necessary to tilt the back of the transmission down to be able to better access the bolts. To do this, first support the transmission with a jack. Within the car remove both the leather and rubber shift boots. Now you can remove the midpipe, driveshaft, and PPF. Before tilting the transmission install a tail shaft plug to keep from losing any fluid out of the tail shaft. Be sure to only lower the tail of the trans down enough to gain access to the top bolts. Lowering it too much will cause the back of the engine to contact the firewall, which could result in damage.
4. Starting with the first bolt of your choosing, remove the bolt from the transmission.
5. Use brake clean to remove any protective oil from the threads of the new stud.
6. Apply a small dab of medium-strength thread locker on the threads of the rounded end of the stud and thread the rounded end of the stud into the case. Using a 5mm socket, torque the stud to 15 lb-ft.
7. Apply a small dab of medium-strength thread locker on the exposed threads of the stud, thread on the 12mm nut, and torque the nut to 20 lb-ft.
8. Repeat steps 3-6 for the remaining seven bolts.