

# GEN III HEMI / HELLCAT TO NISSAN 350Z VQ35DE TRANSMISSION ADAPTER



## INSTALLATION INSTRUCTIONS

Rev - – Mar 2024

### **!!NOTICE!!**

LOJ CONVERSIONS CORP HAS PREPARED THESE INSTRUCTIONS TO MAKE YOUR PRODUCT INSTALLATION AS SIMPLE AND HASSLE-FREE AS POSSIBLE. INSTALLATION ISSUES EXPERIENCED AS A RESULT OF NOT FOLLOWING THESE INSTRUCTIONS ARE THE SOLE RESPONSIBILITY OF THE USER.

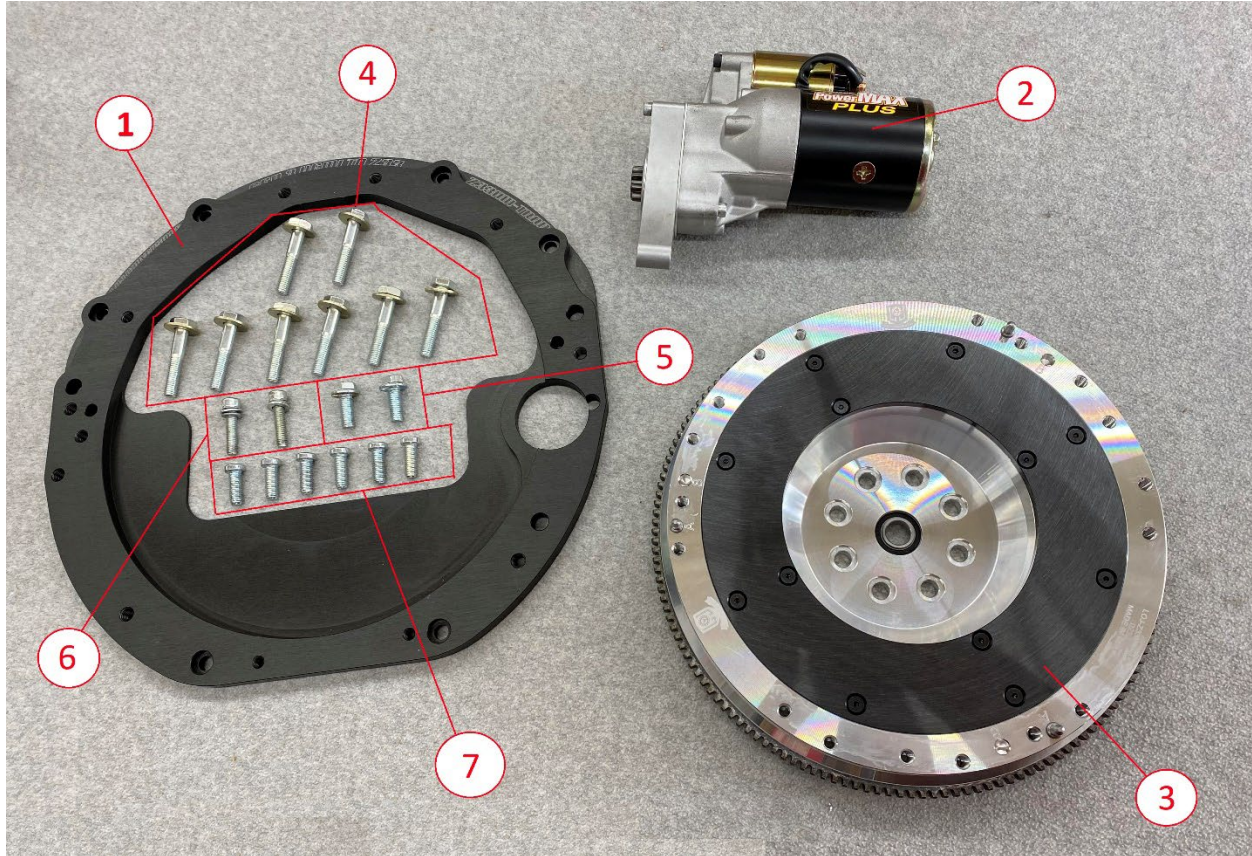
### **!!WARNING!!**

THE USER OF THIS PRODUCT ASSUMES ALL LIABILITY FOR ANY DAMAGES TO PERSONAL OR PUBLIC PROPERTY RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT. ANY INJURIES SUSTAINED BY THE USER AND/OR ANY OTHER INDIVIDUALS ARE ALSO THE SOLE RESPONSIBILITY OF THE USER. MOTORSPORTS ACTIVITIES ARE INHERINTLY DANGEROUS AND LOJ CONVERSIONS CORP CAN NOT BE HELD RESPONSIBLE FOR ANY INCIDENTS RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT.

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## BEFORE YOU BEGIN:

Please ensure that all of the components required for your installation have been included in your package. The Basic Adapter Kit should include the following components:



<b>1</b> - (Qty 1) – Adapter Plate – Hard Anodized Aluminum with Integrated Dust Shield	<b>5</b> - (Qty 2) – M10x1.5 25mm Long Flange Head Bolts
<b>2</b> - (Qty 1) – High Torque Mini-Starter	<b>6</b> - (Qty 2) – M8x1.25 35mm Long Socket Head Bolts with Lock and Flat Washers
<b>3</b> - (Qty 1) – Flywheel with Integrated Pilot Bearing	<b>7</b> - (Qty 6) – 3/8”-16 1” Long Low-Profile Socket Head Bolts
<b>4</b> - (Qty 8) – M10 x 1.5 55mm Long Bolts with Flat Washers	<b>NOT SHOWN</b> – (Qty 8) – M10x1.0 30mm Long Grade 12.9 Socket Head Bolts for Flywheel

*Other parts that you will need:*

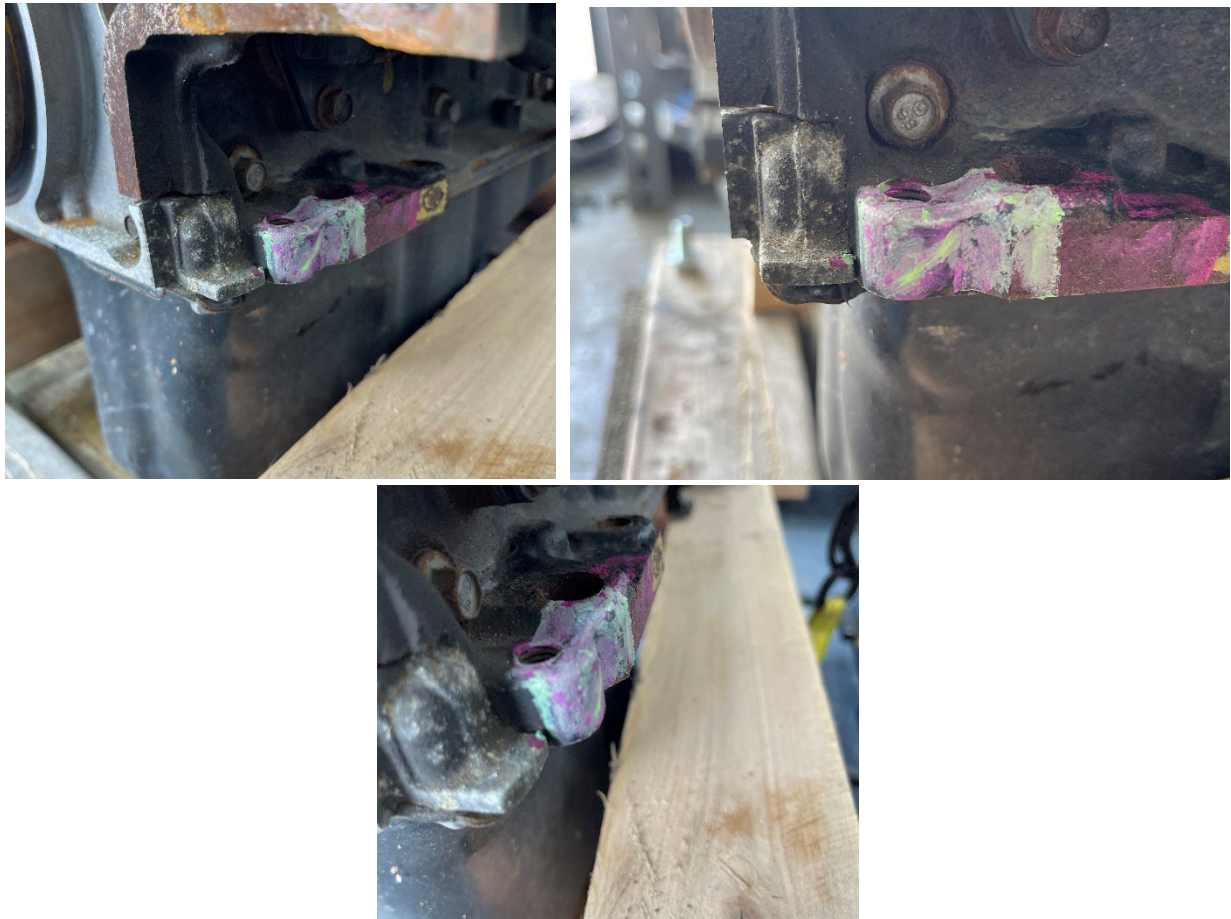
(Qty 2) – 350Z Transmission to Engine Block Alignment Dowels, Nissan part number 30412-H1001

(Qty 2) – Gen III Hemi Engine Block to Transmission Alignment Dowels, 0.5" Diameter, Multiple Manufacturers

(Qty 9) – 350Z Pressure Plate Bolts or LOJ ARP Pressure Plate Bolts

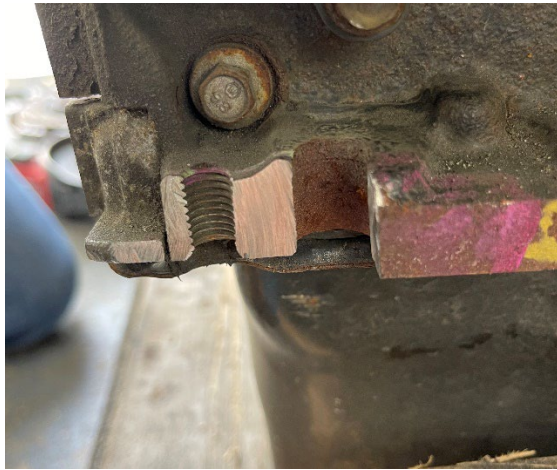
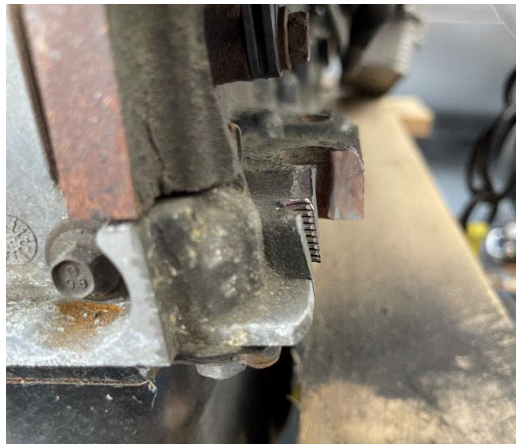
### **INSTALLATION PROCEDURE:**

- 1) If your Engine came from a donor vehicle equipped with an Automatic Transmission, remove the Automatic Transmission Flex Plate. If your Engine came from a donor vehicle equipped with a Manual Transmission, remove the Flywheel and Pilot Bushing/Bearing.
- 2) You will need to remove one boss from the RH rear side of your engine to provide sufficient clearance for the new starter. This can be accomplished with an angle grinder, hack saw, sawzall, or other suitable cutting tool.



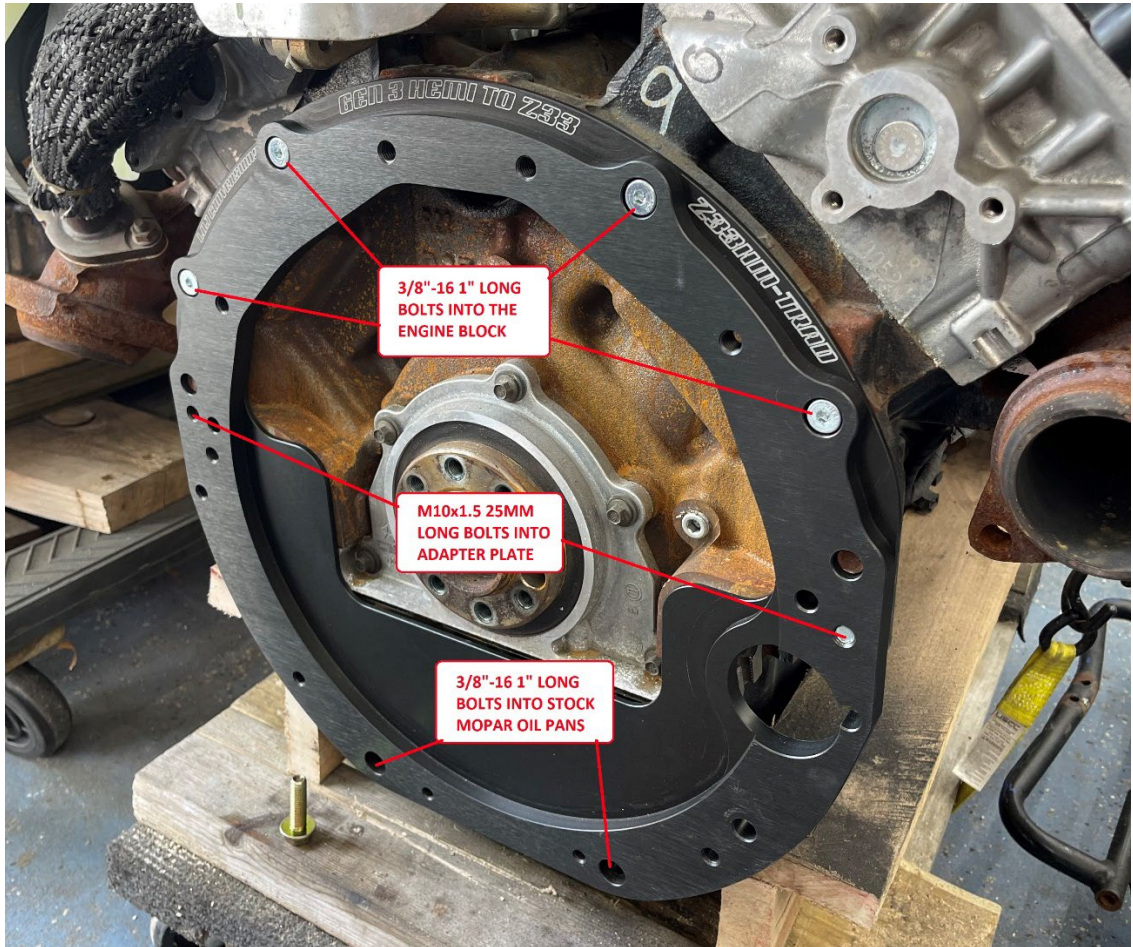
**BEFORE**





**AFTER**

- 3) Install the LOJ Conversions Transmission Adapter Plate onto your Engine. Use six 3/8"-16 1" Long Low-Profile Socket Head Screws. 4 Go from the Adapter Plate into the Engine Block, Two go from the Adapter Plate into the Oil Pan **ONLY IF USING A FACTORY HEMI PAN**. Two additional M10x1.5 25mm Long Flange Head Bolts install from the engine block side into the Adapter Plate.





- 4) Now install your flywheel onto the engine. Apply Loctite 242 thread locker (**REQUIRED**, not included) to the thread of the flywheel bolts and torque to 70ft-lb. **NOTE:** One bolt is clocked differently from the rest, be sure to align it properly.



- 5) Your flywheel comes pre-drilled for two different pressure plate bolt patterns. The smaller pattern (**B**) is meant for 350Z clutches. The larger pattern (**A**) is meant for 300ZX Twin Turbo clutches. Take care to examine which clutch style you have **BEFORE** installing the dowels into the flywheel. We recommend placing the pressure plate on the flywheel and lining up the holes to ensure the dowels are installed correctly, as removing them often damages the dowels. LOJ will not be responsible for replacement dowels if installed incorrectly. Additionally, one dowel is offset differently from the pressure plate holes than the others, this ensures the clutch can only be installed one way and proper balance is achieved. Install your clutch according to manufacturer's recommendations.

- 6) After testing multiple 350Z transmissions, it was determined that some castings are slightly different than others. One small area on the inside of the bellhousing (the inside wall of the slave cylinder mounting area) on some castings can cause interference with the flywheel ring gear. It is recommended to use a grinder to slightly enlarge this area. You can test fit your transmission to determine if this is necessary, or simply grind the area from the get-go to prevent the possibility of needing to remove the transmission and perform this step later. The pictures below show the area to be ground and the amount needed to be removed. This amount shown is MORE than enough to provide the necessary clearance.

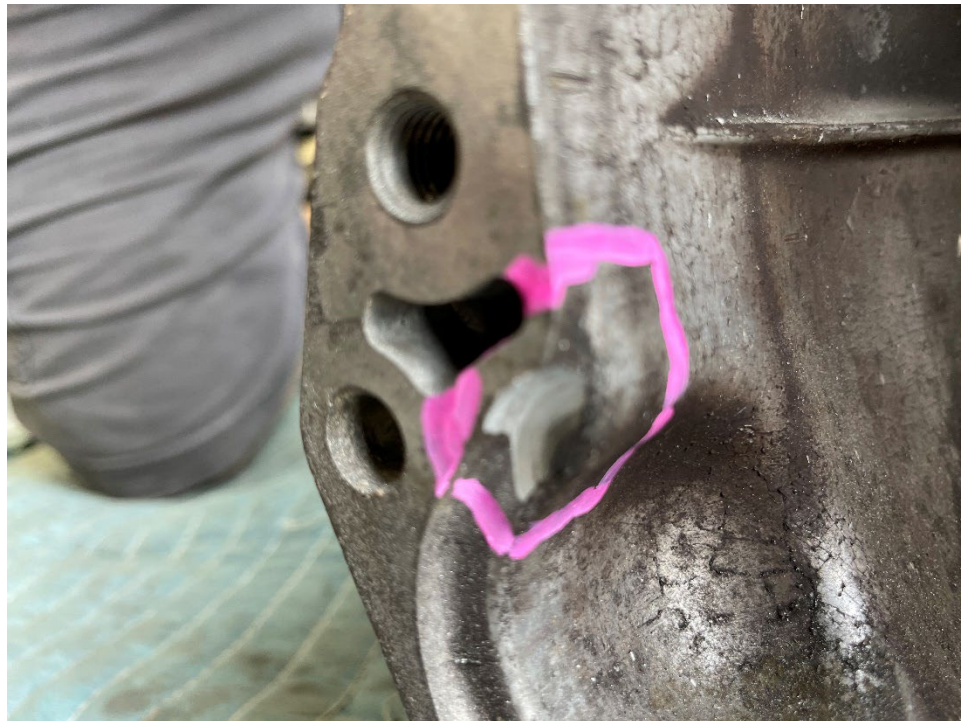




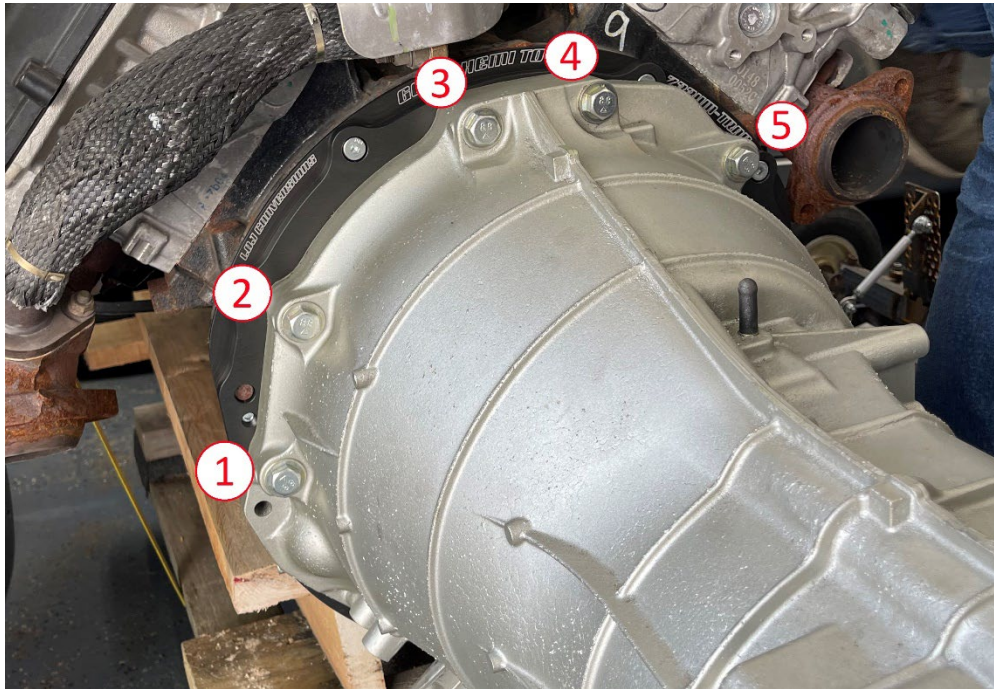


**NOTICE**– If you grind through the transmission case you have gone far beyond what is necessary. 0.125” was enough material to resolve the problem on the transmissions that have this issue.

- 7) There is a second location that needs minor clearance added for the starter. See image below. Remove ALL material in the area outlined in Pink.



- 8) You are not ready to install your transmission onto the engine. Using five of the eight M10x1.5 55mm long hex bolts and flat washers, attach the transmission to the engine.

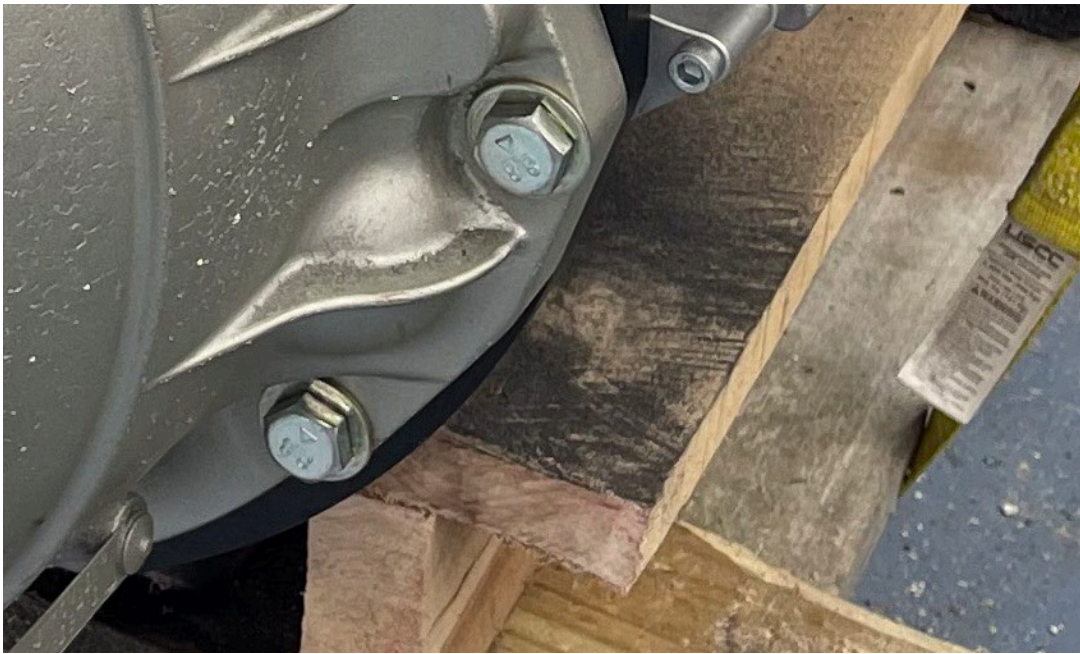


Using the Two M8x1.25 30mm Long Bolts, Lock Washers, and Flat Washers, Attach the lower part of the transmission to the adapter plate.





- 9) Now you can install your starter. Using the two remaining M10x1.5 55mm long bolts with flat washers, attach the starter to the adapter/transmission.



Your installation is complete, enjoy!!!