

# GEN III/IV/V CHEVROLET SMALL BLOCK (LSx/LTx) TO NISSAN FRONTIER VQ40DE TRANSMISSION ADAPTER



## INSTALLATION INSTRUCTIONS

Rev – Mar 2020

### **!!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.

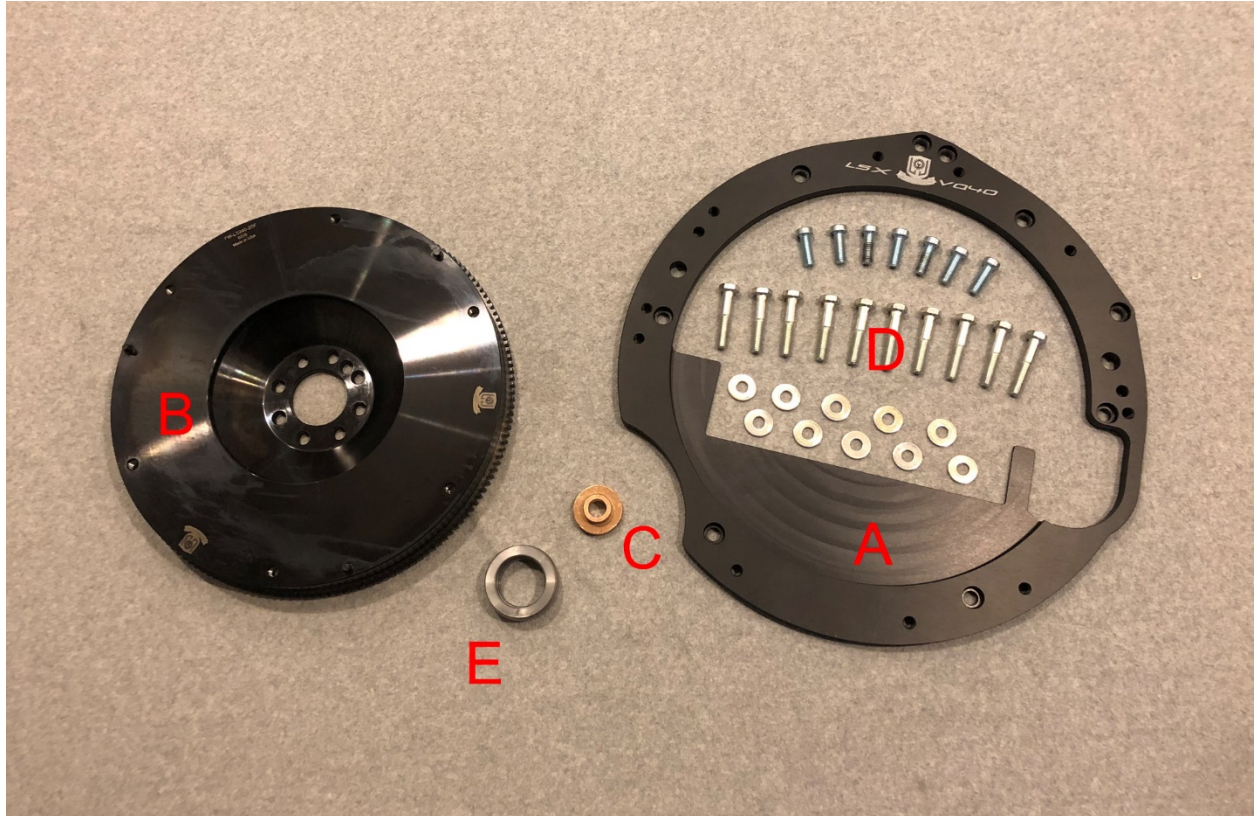
### **!!WARNING!!**

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.

**THIS PAGE INTENTIONALLY BLANK**

## BEFORE YOU BEGIN:

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



**A - (Qty 1) – Adapter Plate with Integral Dust Shield**

**B - (Qty 1) – Flywheel**

**C - (Qty 1) – Pilot Bushing**

**D - Hardware**

**E – (Qty 1) – Clutch Release Bearing**

*Other parts that you will need:*

- 1) (Qty 2) – Frontier Transmission to Engine Block Alignment Dowels
- 2) (Qty 2) – Gen III/IV/V Engine Block to Transmission Alignment Dowels
- 3) Gen III/IV Flywheel Bolts – OEM P/N 12563485/19257940 or LOJ ARP Long Length Flywheel Bolts
- 4) LS Pressure Plate Bolts
- 5) LS Clutch Assembly with a clutch disk that incorporates a Nissan 300ZX/350Z/Frontier input spline design. These are available from LOJ Conversions

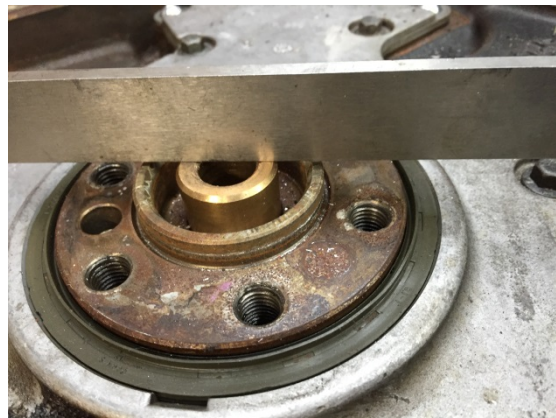
## **!!WARNING!!**

**The standard GM automatic flexplate bolts can not be used with this kit! You must either purchase OEM GM flywheel bolts, part number 12563485/19257940 or the extended length ARP flywheel bolts available from LOJ Conversions!**

### **INSTALLATION PROCEDURE:**

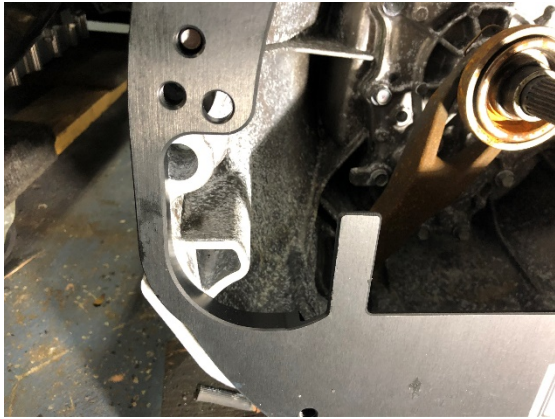
- 1) If your Engine came from a donor vehicle equipped with an Automatic Transmission, remove the Automatic Transmission Flex Plate and install the supplied Pilot Bushing into the crankshaft. If your Engine came from a donor vehicle equipped with a Manual Transmission, remove the Flywheel and Pilot Bushing before installing the LOJ Pilot Bushing into the crankshaft. It is OK if the step protrudes slightly from the end of the crankshaft.

**IMPORTANT –Pilot bushing to be installed with the step facing OUT.**





- 2) Before installing the adapter plate onto the engine, you will need to place the adapter onto the transmission to identify the location where a casting rib needs to be removed from the inside of the bellhousing. Mark the rib as shown in the picture on the right.

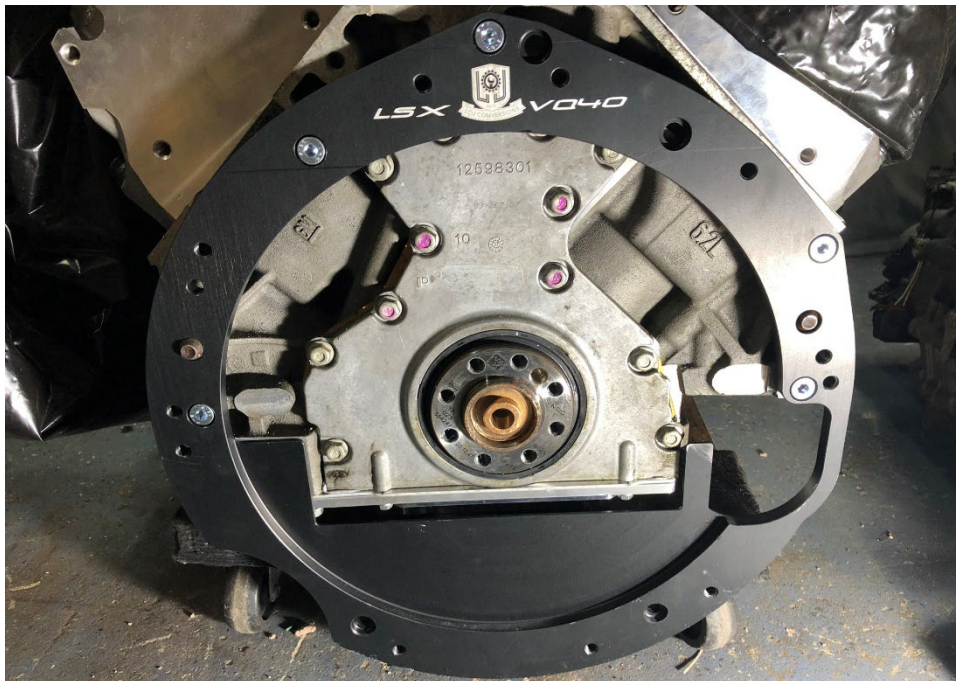


- 3) Remove the adapter plate and use grinder to remove the casting bosses to ensure your starter snout has sufficient clearance.



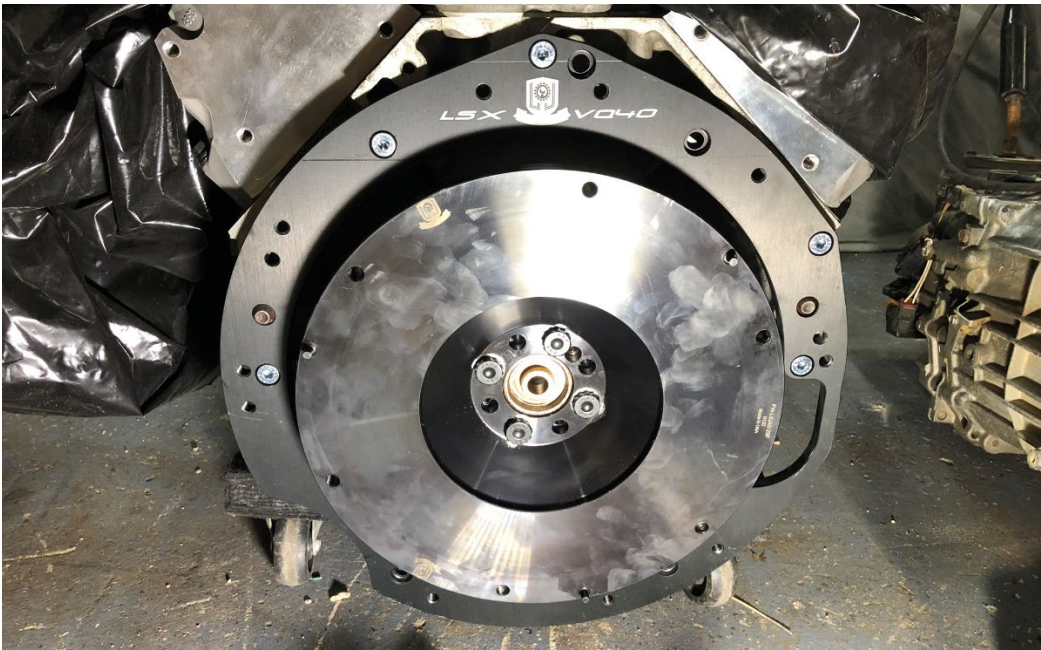
- 4) Install the LOJ Conversions Transmission Adapter Plate onto your Engine. Use the Seven M10x1.5 30mm Low-Profile Socket Head Cap Screws. If your engine did not have alignment dowel pins, install them before installing the adapter plate! Additionally, if you are using an aftermarket oil pan that does not utilize the lower two bolt, leave them uninstalled.

**IMPORTANT** – Check to make sure the OEM GM Dowels DO NOT extend past the face of the adapter plate. If they do, they must be tapped into the block further or ground down shorter with a grinder. Failure to do so could result in damage to transmission bellhousing when installing transmission to adapter plate.





- 5) Now install your flywheel onto the engine. Apply Loctite 242 thread locker (optional, not included) to the thread of the flywheel bolts and install according to factory specs.



- 6) Now install your clutch onto the flywheel according to the manufacturer's instructions. LOJ recommends using Loctite Blue on the pressure plate bolts.





- 7) Install the supplied clutch release bearing onto the clutch release sleeve from the Frontier transmission. The OEM Nissan release bearing is not compatible with the LS based clutch assembly and must be changed.





- 8) You are now ready to install your transmission onto the engine. Using the Ten M10x1.5 hex bolts and M10 flat washers, attach the transmission to the engine. **WARNING: The washers MUST be used, without the washers the bolts will protrude past the back of the adapter plate and damage to the engine/adapter will result!**



- 9) Your installation is complete, enjoy!!!