# NISSAN VQ35HR & VQ37VHR ENGINE TO GM AUTO TRANSMISSION ADAPTER (POWERGLIDE, TH350, TH400, 4L60, 4L80, etc.)



#### INSTALLATION INSTRUCTIONS

**Rev – Mar 2021** 

## !!NOTICE!!

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# !!WARNING!!

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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 Adapter Kit should include the following components:



A - (Qty 1) - Adapter Plate

**B** - (Qty 2) - M10x1.5 Socket Head Bolts - 35mm Long (Adapter Plate to Starter)

C - (Qty 6) - M12x1.75 Low Profile Socket Head Bolts - 35mm Long (Adapter Plate to Engine)

**D** - (Qty 4) – M10x1.5 Flange Head Bolts – 30mm Long (Engine to Adapter Plate)

#### Other parts that you will need:

(Qty 2) – 370Z Transmission to Engine Block Alignment Dowels (OEM 30412-H1000)

(Qty 2) – Gen III/IV Chevy Engine Block to Transmission Alignment Dowels

(Qty 1) – VQ35HR or VQ37VHR Auto Trans Flexplate (OEM or LOJ Conversion Billet) with appropriate mounting hardware.

(Qty 1) - Nissan Auto Trans Converter Pilot Bushing (OEM 12330-14LOA)

### !!WARNING!!

You must use appropriate engine to adapter plate and adapter plate to transmission alignment dowels! Failure to align these components properly will result in damage to engine, transmission, and torque converter!

#### **INSTALLATION PROCEDURE:**

- If your Engine came from a donor vehicle equipped with a Manual Transmission, remove the manual transmission pilot bushing and install an automatic transmission pilot bushing. (Not included)
- 2) Remove factory VQ exhaust manifolds, as they will not clear the adapter plate.
- 3) Install the adapter plate to the engine using two OEM VQ Engine to Transmission alignment dowels (not included) and supplied mounting hardware. Qty. 6 M12 bolts will hold the adapter plate to the engine block, and Qty. 4 M10 flange head bolts will holt the adapter plate to the oil pan.



# !!WARNING!!

If adapter plate does not seat fully onto dowels, use a hammer and a block of wood to tap adapter down until it is flush with the engine block, DO NOT use the bolts to pull the plate down, as damage to the plate will result!

4) Install either an OEM VQ transmission flexplate or the LOJ Conversions Billet Flexplate to the engine. LOJ Billet Flexplate shown in the image below.



5) Install the OEM VQ starter to the adapter plate using the supplied M10x1.5 socket head bolts as shown below.



6) Remove the stock torque converter from the GM transmission you are installing and test fit the transmission to the adapter plate. Depending on the transmission model, it may be necessary to cut the transmission bellhousing to clear the VQ starter and mounting bolts. Do this now.

### !!WARNING!!

You must use OEM GM Engine to Transmission alignment dowels to properly alight the transmission to the adapter plate! Failure to do so will result in damage to the engine, transmission, and torque converter!

- 7) Install the LOJ Conversions or privately sourced custom torque converter to the transmission.
- 8) Assemble the engine and transmission, being careful to align the torque converter mounts to the flexplate as you install.
- 9) Use OEM LS transmission to engine mounting bolts. Thread pattern on the adapter plate is M10x1.5. Each transmission type requires different bolt lengths, which is why they are not included with the adapter plate.

Your installation is complete