

NISSAN VR30DDTT/VQ37VHR/VQ35HR ENGINE TO R32/R33/R34 NISSAN SKYLINE GTR AWD MANUAL TRANSMISSION ADAPTER



INSTALLATION INSTRUCTIONS

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!!NOTICE!!

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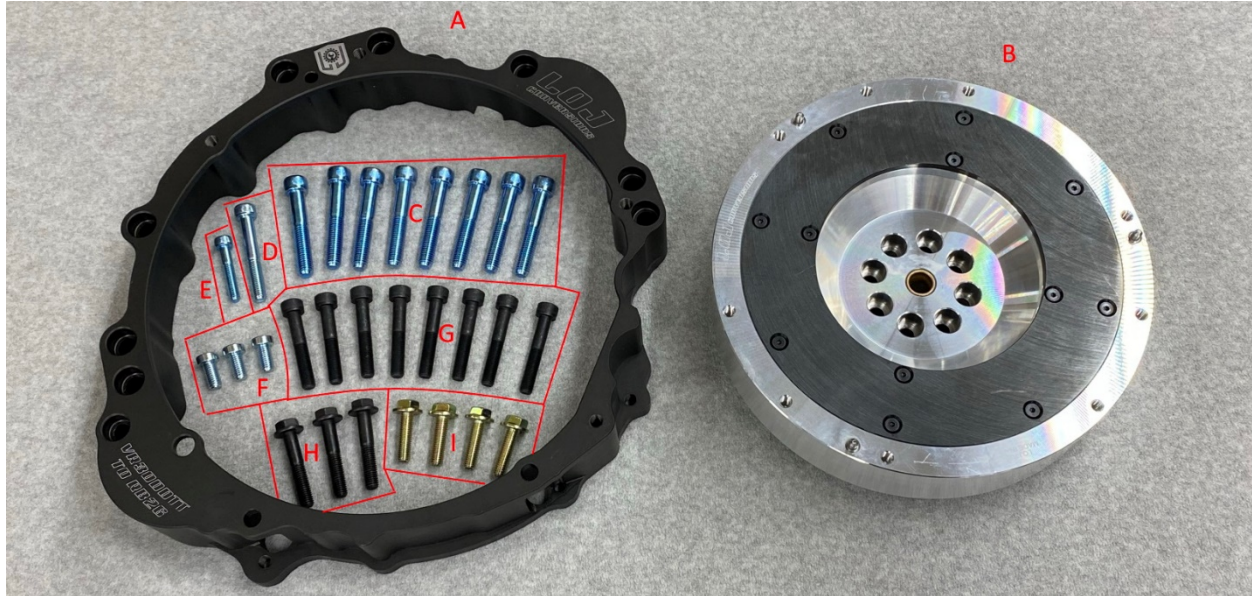
!!WARNING!!

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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 1) – Billet AL Flywheel (Accepts OEM 350Z/RB Single Disk Clutch Kit)
C - (Qty 8) – M12x1.75 Socket Head Bolts – 70mm Long
D - (Qty 1) – M10x1.50 Socket Head Bolt – 70mm Long
E - (Qty 1) – M8x1.25 Socket Head Bolt – 45mm Long
F - (Qty 3) – M10x1.50 Low Profile Socket Head Bolts – 20mm Long
G - (Qty 8) – M10x1.00 Grade 12.9 Socket Head Bolts – 60mm Long
H - (Qty 3) – M10x1.50 Hex Head Bolts – 55mm Long
I - (Qty 4) – M10x1.50 Hex Head Bolts – 35mm Long

Other parts that you will need:

(Qty 3) – 350Z Transmission to Engine Block Alignment Dowels (OEM 30412-H1000)

(Qty 1) – 300ZX Transmission to Engine Block Alignment Dowel (OEM 11022-21000)

!!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 clutch components!**

INSTALLATION PROCEDURE:

- 1) Remove the factory flywheel/flexplate from the engine and clean out any debris from the transmission to engine mounting holes. Ensure that the stock engine to transmission alignment dowels are still located in the engine block and clean any rust or corrosion from their surfaces. If they are missing, you *MUST* install new OEM dowels in these locations.
- 2) Install the Adapter Plate to the engine using the (8) supplied M12x1.75 70mm long socket head bolts. Install the 4 M10x1.5 35mm long flange head bolts through the oil pan into the adapter plate.



!!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 can result!

NOTE - If installing this adapter on a VQ35HR or VQ37VHR engine, not all 4 of the bottom M10x1.5 35mm long bolts will be used. Three of the holes in the VQ engine oil pan will need to be slotted for alignment with the threaded holes in the adapter and the fourth hole (closest to the starter) will not be used at all.

- 3) Install the VR/VQ Engine Starter into the Adapter Plate using the supplied M10x1.5 70mm long socket head bolt and the M8x1.25 45mm long socket head bolt. The M8 bolt will pass through the lower threaded hole in the starter and thread into the adapter plate as shown.



- 4) Place the factory VR/VQ automatic transmission flexplate onto the engine being sure to align the indicator pin correctly on the crankshaft. **DO NOT INSTALL** the VR/VQ torque plate (this is the thin metal plate that has 8 holes and was originally sandwiched between the heads of the flexplate bolts and the flexplate).



- 5) Place the flywheel onto the crankshaft sandwiching the flexplate between the flywheel and crankshaft. **WARNING!** You **MUST** align the notch in the back of the flywheel with the alignment pin on the crankshaft to ensure that the flywheel can fully seat onto the crankshaft. Failure to do so **WILL** result in damage to the flywheel, crankshaft, and other components if the full installation process is completed. Use the supplied M10x1.00 60mm long socket head bolts to secure the flywheel to the crankshaft and torque to 65ft-lb. Red Loctite should be used on these bolts.



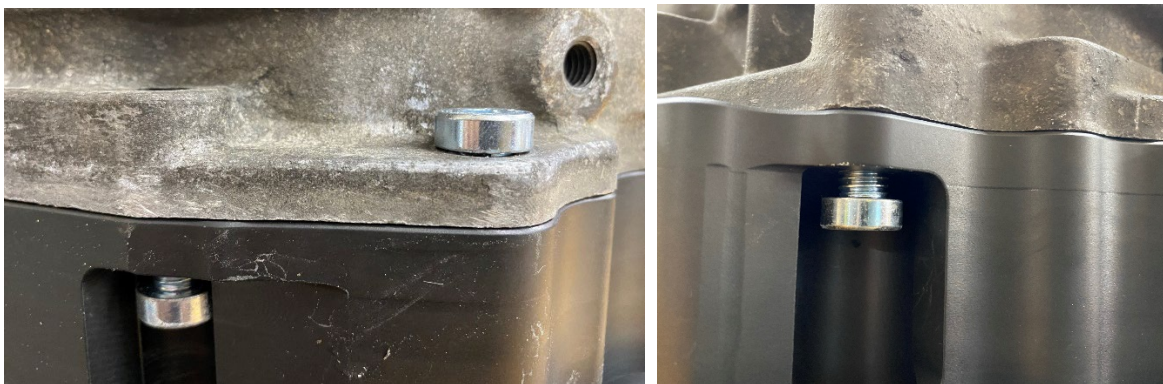
- 6) Install the RB Transmission to Engine alignment dowels in the adapter plate (not included). These are factory Nissan parts, and the part numbers are given in the beginning of this document. The larger dowel will be a tight fit and must be driven in with a hammer. Be sure not to over-drive this dowel as it can be pushed out the back and into the starter.



- 7) Install your clutch assembly according to the manufacturer's instructions.
- 8) Clean out any debris from the threaded mounting holes along the bottom of the RB Transmission Bellhousing. If possible, chase these threads with an M10x1.5 tap. This will ensure that the installation of the hardware in the following steps goes smoothly.
- 9) Install the transmission onto the adapter plate. Three M10x1.5 55mm long flange head bolts will be used around the top of the bellhousing and on the RH side as shown. The LH bolt that would normally pass through the larger dowel will not be used.



- 10) Install three M10x1.5 20mm long low-profile socket head bolts between the lower portion of the bellhousing and the adapter. There are two recesses machined into the adapter to allow two of these bolts to secure the adapter to the bellhousing. By cleaning the threads in step 8, it should be possible to easily start these bolts by hand and use a 7mm ball end allen key to run them in. Once bottomed out, a standard allen key can be used to tighten them. The third bolt simply bolts the bell to the adapter as shown.





11) Your installation is complete!

