



*4L80E to Nissan automatic transmission adapter
(RB bellhousing)*

Revised 12/7/2017

Parts List

(1) Bellhousing adapter

Hardware:

(6) M8x1.25 tapered seat allen drive bolts

(1) M8x1.25 long bolt with hardwasher

(9) $\frac{5}{16}$ " NC x 1" flange-head bolts

(6) Viton o-rings, $\frac{5}{16}$ " ID

(7) Viton o-rings, $\frac{7}{16}$ " ID

Tools required to install kit onto transmission

5mm Allen socket

13mm socket

$\frac{1}{2}$ " socket

Torque wrench

Moly based grease

Transmission Modification

The bellhousing needs to be cut off of the 4L80E case and along with three bosses on the pump, machine all to 0.325" to 0.375" above the pump bolt hole faces (Figure 1).

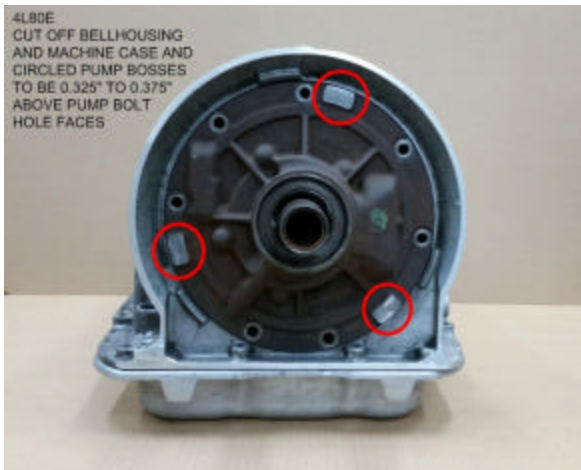


Figure 1 – Machined case and pump bosses



Figure 2 – Adapter back o-ring counter bores

Bellhousing Adapter

- Remove the OE bolts from the front pump and discard.
- Clean the surface of the pump and ensure that the housing and pump bosses have been machined to allow the adapter to install without interference.
- Install the 7/16” ID Viton o-rings into the counter-bores on the back of the adapter (Figure 2).
- Grease the six (8) tapered seat bolt shanks, threads, and under-head surface entirely.
- Slide the small 5/16” ID o-rings onto the tapered seat bolts (Figure 3).
- Install the adapter and thread the taper seat bolts into the transmission. Leave these semi-loose until all are installed and then snug them all.
- When all bolts are installed and snug, verify that none of the back o-rings have become dislodged, preventing the adapter from sitting flat on the pump surface.
- Torque the bolts using a 5mm Allen drive socket to 18 ft-lbs (see Figure 4 for torque sequence) and wipe off any excess grease.



Figure 3 — o-ring installed on bolt

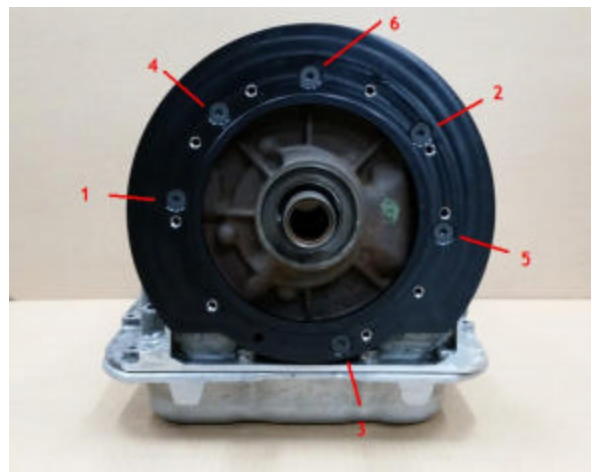


Figure 4 – Adapter installed, torque sequence

Bellhousing

- Place the bellhousing onto the adapter and rotate into position. Sight through the “long bolt” and “short bolt” holes indicated in Figure 5 to locate the bellhousing.
- Grease the entire shank and under-head flange surface of the long bolt and one short bolt and thread into the positions identified in Figure 5.

- Grease the remaining short bolt's threads and under-head flange surface and install into the remaining bolt holes.
- Torque bolts 7 - 16 to 18 ft-lbs using Figure 6 torque sequence below.

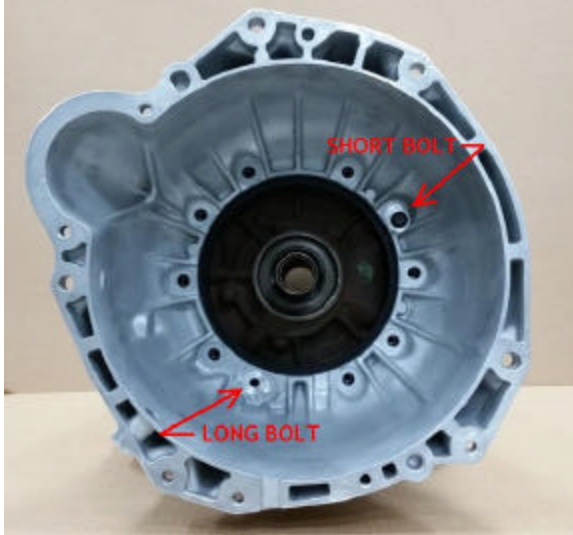


Figure 5 – RB bellhousing installed

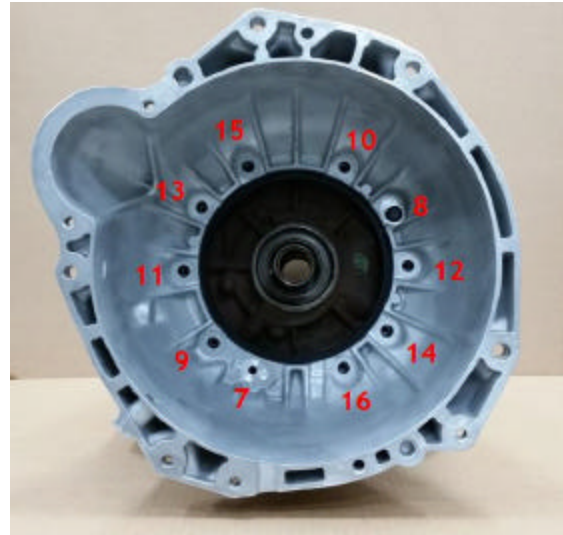


Figure 6 – Bellhousing torque sequence