

# The RE5R05A: A Deeper Look



by Mike Souza  
[members.atra.com](http://members.atra.com)  
[www.atra.com](http://www.atra.com)

The RE5R05A, also referred to as the JR507E, was first introduced in the US in 2002 in the Infiniti Q45.

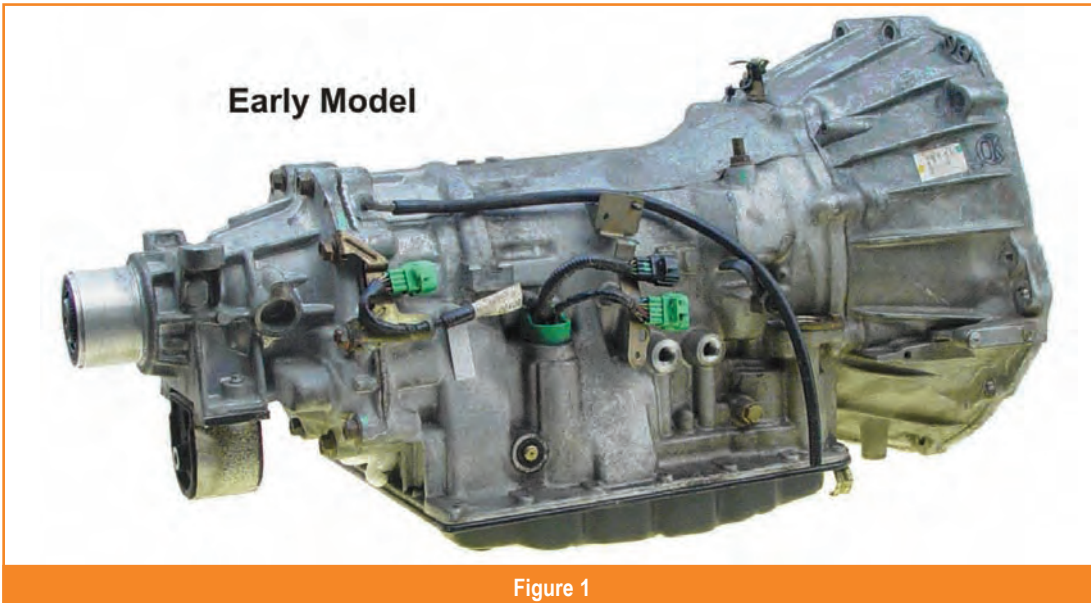


Figure 1

If it weren't for a radiator failure causing antifreeze to enter the transmission, the RE5R05A might have made a quieter entry into the automotive industry. Reminds me of a problem Nissan was having with radiators a few years ago: at least they're consistent.

In this article we're going to touch base on some of the information that'll be presented at this year's Expo in San Antonio, Texas, on September 9th to

the 12th.

The RE5R05A, also referred to as the JR507E, was first introduced in the US in 2002 in the Infiniti Q45. Since then, it's made its way into the Nissan line in 2004 and the Kia Sorento in 2005.

In mid-2004, the Transmission Control Module (TCM) was moved into the transmission. If you take in a 2004 RE5R05A with antifreeze contamination and you don't change the TCM

(figure 2), the vehicle may return in a couple days or weeks with ghost codes for solenoids that have nothing wrong with them.

The female terminals on the solenoids can lose tension, which can also set codes, even on new solenoids. So always check those terminals when rebuilding or repairing these units.

In addition to TCM contamination, the pressure switches on the TCM (figure 3) can also set ghost codes.

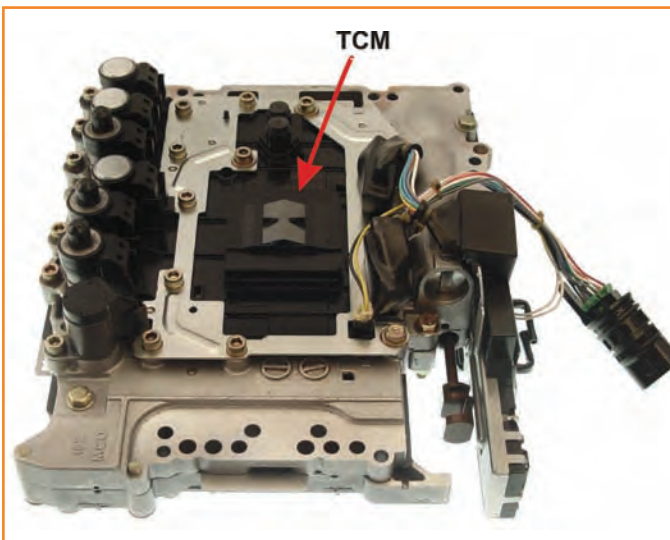


Figure 2

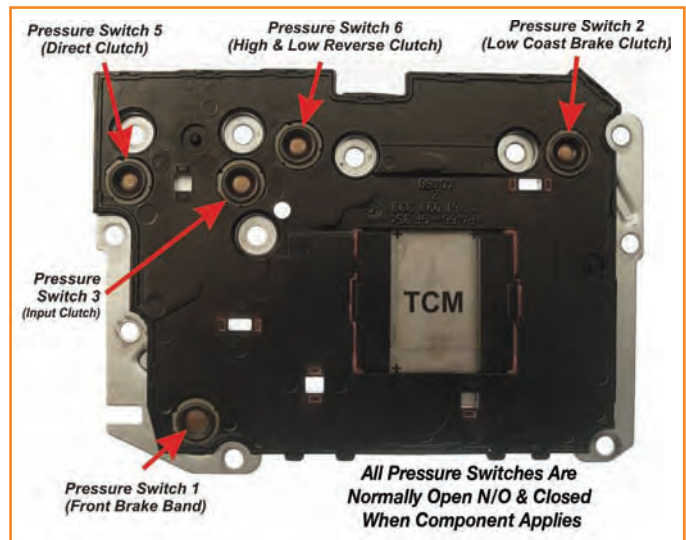


Figure 3

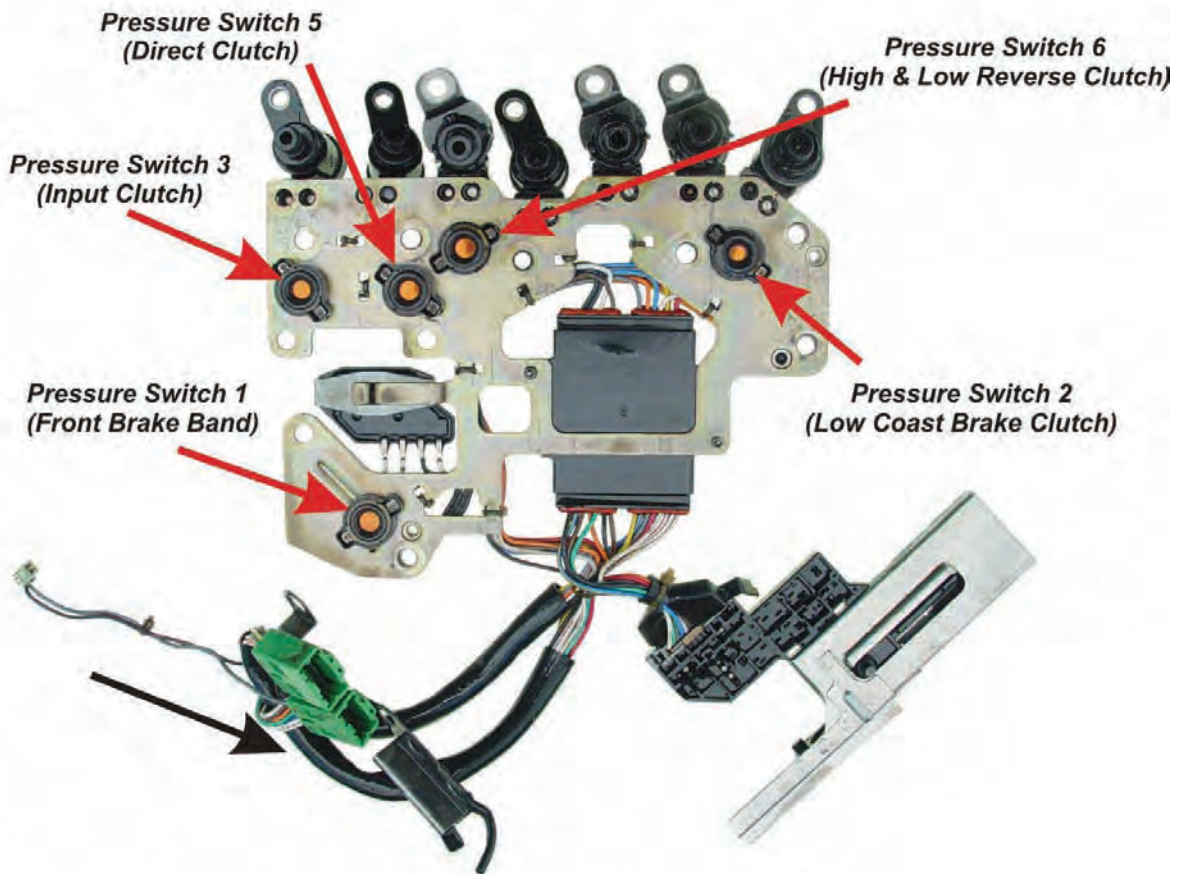


Figure 4

P0731 ratio error in 1<sup>st</sup> has been caused by a false signal from pressure switch 2 (low coast brake). The pressure switches on the earlier system are part of the internal harness (figure 4).

Be careful when exchanging valve

bodies: In the earlier valve body (figure 5), the neutral-reverse (N-R) accumulator springs are installed first; then the pistons. There's also an empty valve bore next to the direct clutch piston switching valve.

In the later valve body (figure 6), the N-R accumulator pistons install first, then the springs. They also added a direct clutch regulating valve in the bore that was empty on the earlier models. There are also checkball location

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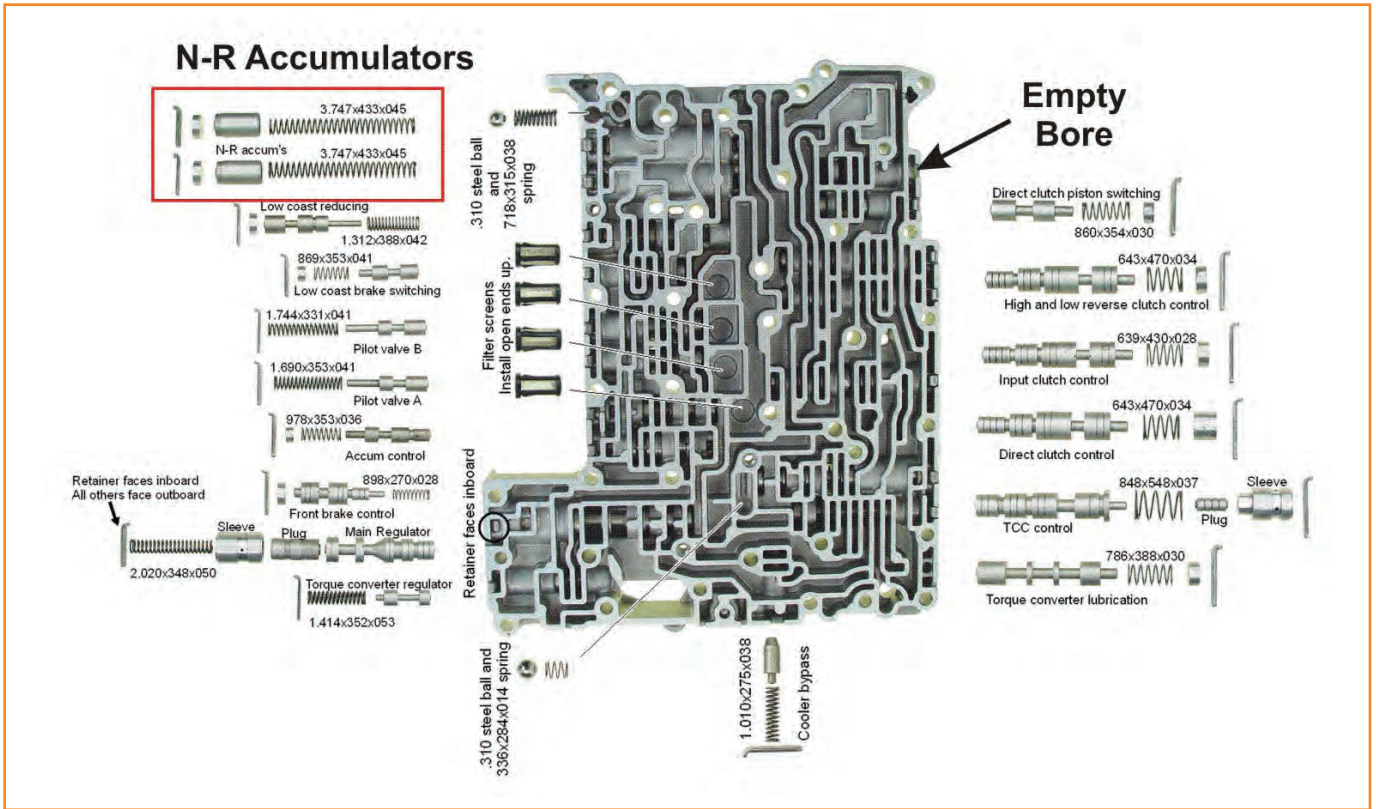


Figure 5

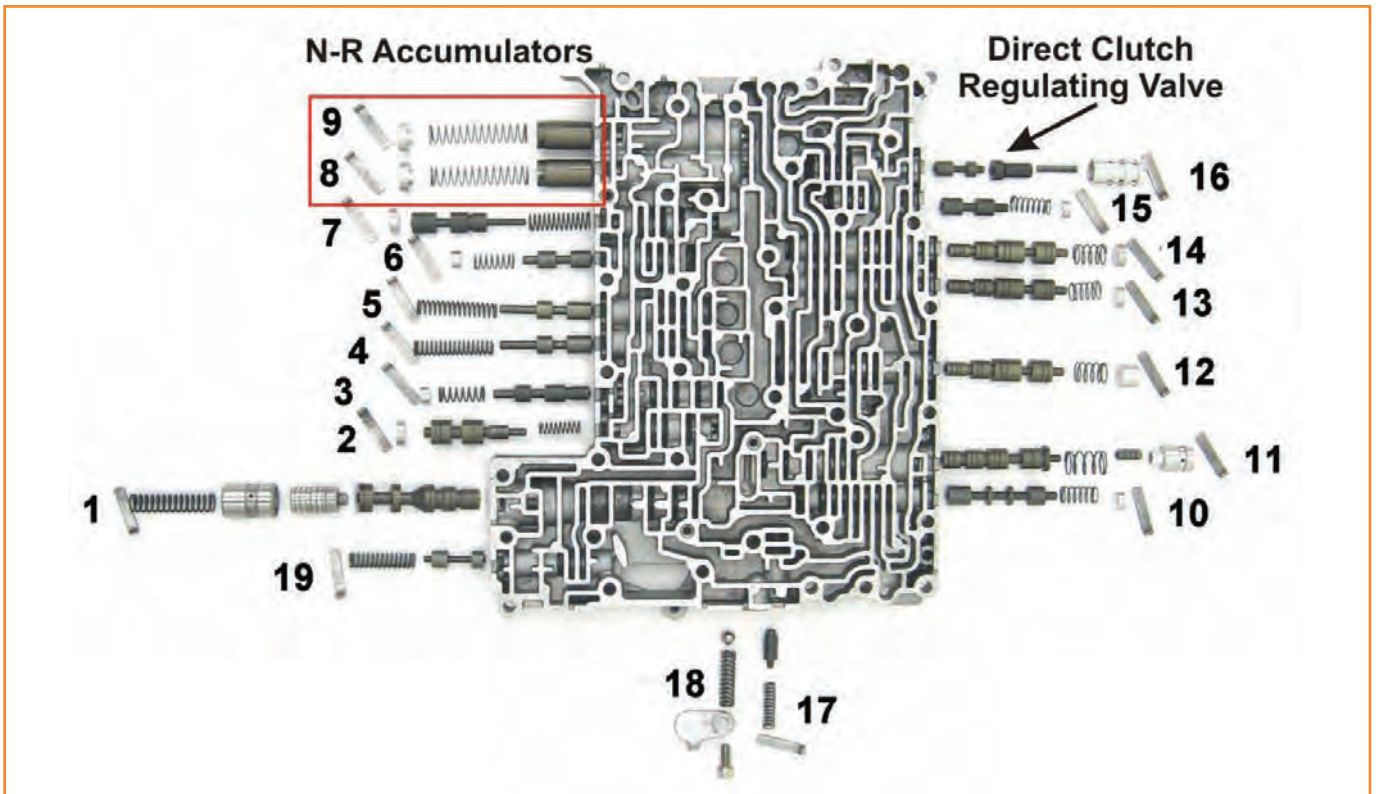


Figure 6

differences, so these valve bodies aren't interchangeable.

There are several pitfalls associated with this transmission, such as crossing connectors that may cause blown fuses

and set codes, swapping planets with the wrong ratio, and differences in input shafts and converters.

All these subjects plus many more will be discussed at the Expo in San

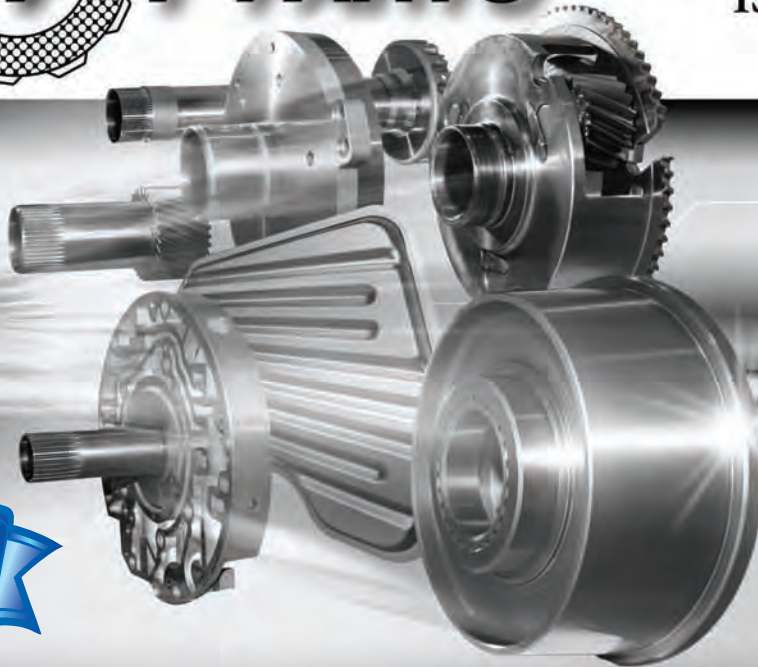
Antonio in September; I look forward to seeing you there!







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