POWER, FUEL EFFICIENCY AND TRANSMISSIONS

LEVEL 10'S DIESEL ANSWER



PHOTOS BY JOHN FRANCO

Transmissions are usually one of those things that only gets touched when is has to. If it isn't broke, it must be fine.

We put that myth to rest in more ways than one with the 47RE automatic transmission out of our 1998 Dodge Ram 12-valve Cummins. The truck has 185,000 miles on the odometer. The transmission was slipping pretty badly. You could feel it slipping on the road anytime you got into 4th and laid into the throttle.

We have plans to build this truck up to more appealing horsepower standards (215 hp doesn't cut it

(middle) Custom Auto's Wade Boyd and Colby Hulse dropped the tired and worn 47RE out of the '98 Dodge.

(bottom left) The stock trans showed signs of neglect and abuse. Or what we call "normal" for a working truck.

(bottom right) A Level 10 technician guts our 47RE trans.







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anymore). We knew that if we began adding power to the engine it would get lost in the transmission. We wouldn't be able to tell how much we were gaining, and the trans would likely experience a catastrophic failure at an unpredictable time.

So we contacted Level 10 Performance Transmission Systems about rebuilding the 47RE before it exploded. We needed something that would handle 550-horsepower, and asked for a torque converter with a high stall speed to match our elevation.

What we learned from Level 10, however, is that there is another reason to let them rebuild our transmission aside from the reason we already had. That was to use Level 10's new Performance Transmission System (PTS) to maximize our truck's fuel efficiency.

Level 10 treats each transmission build differently. First, they gather all the information about the truck, its performance modifications, driving usage and typical conditions from the truck's owner, which goes on to a spec sheet. Level 10 technicians analyze the truck's power train needs and build a transmission the best suits the particular vehicle.

If we have two of the same trucks. but one has a simple tuner/exhaust/ intake combo and is used for driving to and from work, while the other truck has a longer list of mods and does more trailer towing. Some shops would sell you the same trans for both trucks, with just a few minor differences. But Level

(top and inset) Here's what the parts looked like after the trans was torn apart at Level 10. All of that crud in the old, milky fluid on the floor? That was inside our transmission.

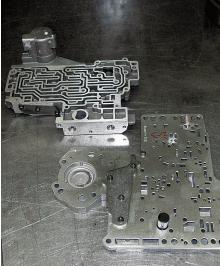
(middle left) All of the new Level 10 clutch packs, overdrive piston retainer, drums, planetaries and shafts ready for assembly.

(middle right) The valve body ready for installation.

(bottom) The tail housing together, ready for the valve body assembly.









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EVEL 10'S DIESEL ANSWER

10's approach is more targeted and more individualized.

When you bring the cost of diesel fuel into the mix, the idea of having a transmission that is built both for power and fuel efficiency becomes much more attractive. Level 10's research has resulted in a strong balance between power and fuel efficiency.

The PTS system is available in more than one way: either the complete specbuilt transmission upgrade, spec-built torque converter, and programmer. These components are built for your usage specifically.

If you don't need a complete transmission overhaul like our '98 Dodge did, the PTS is also available in separate components: Master Overhaul Kit, Super Pump, Hydrosystem valve body, Spec torque converter, and programmer.

So far, we've regained lost power from our 12 valve Cummins and seen an improvement in fuel efficiency. The truck shifts better than ever before and holds towed loads in taller gears, which also helps fuel economy. DT

(top left and right)The assembled valve body and pump back on the new transmission.

(middle left) The output end of the new transmission, ready to be shipped back and installed in the Dodge.

(middle right) We are running the good stuff in this project truck. The added cost may seem high right now, but when we have 550 horsepower running through the trans, Royal Purple's Max ATF will pay for itself in performance and longevity.

(bottom) The Level 10 transmission went back into the truck a heck of a lot easier than it came out. It's amazing the difference clean parts make. The highcapacity transmission pan with cooling fins will help prolong fluid life, and transmission life.

SOURCES:

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