

# **YOUR MOST FREQUENT QUESTIONS**

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From the obscure question to the newbie question, our technical staff has heard them all. As is human nature, often you still want written backup as a post-conversation reference. The source that we always recommend: <a href="https://doi.org/10.1001/jhearth-10.1001/jhea

Better than that, we've taken time to identify some of the specific parts questions that you may have. Here is a list of some of the questions we see at least once a day.

## **GAUGES**

#### Q Who makes the best Exhaust Gas Temperature (EGT) gauge?

A Great question. The staff at Geno's Garage boxed up \$2,000-worth of different exhaust gas temperature gauges, then sent them out for testing at an independent lab. They were tested for response and accuracy. The ten-page report was written up for the TDR magazine and was published in Issue 34, Fall of '01.

Way back when, the cliché, "you get what you pay for" proved to be correct. The SPA Technique digital gauge was the top performer. However, it was half-again as expensive and this company is no longer in business. The other EGT gauges were comparable in performance. With comparable performance, the choice becomes one of aesthetics. Gauge evaluator, Jim Wier, wrote, "In regards to the 'best gauge,' it is how you view the mechanical installation and how you like the color of the dial." So, while we may be biased toward a particular brand, the choice is yours.

Since that time (Weir's article ran in the Fall of '01), there have not been any revelations in the gauge business. So, really the choice is yours, and the prices (when you add 'em all up and throw in a mounting pod) are within 10% of one another. Which gauge will look the best in your truck? Which gauge is the easiest for you to read?

Now, for late model owners, if you have an '07.5 or newer truck with its 6.7-liter engine we highly recommend the EDGE "Insight CTS" unit which simply plugs into the OBDII data port. The data available at the OBDII port gives you <u>20+ data points</u>.

The Insight also has a host of other features that make it an item worthy of your consideration. For example, the big benefit of the EDGE Insight is that it will allow you to identify fault codes and clear them. The only drawback of the EDGE Insight: its exhaust gas temperature readings come from factory sensors that are too far downstream to really correlate to the true temperature at the manifold/turbocharger. The EDGE folks do offer a sensor you can purchase and tap into the exhaust if you want a true EGT number.

- Q I understand that it is imperative '98.5 to '02 truck owners monitor the fuel pressure from the fuel tank to the engine's VP44 (expensive) fuel injection pump. Note: diesel fuel cools the VP44, lack of /low fuel pressure will result in an expensive (\$2,000+) replacement of the VP44. What fuel pressure gauge do you recommend?
- A Over the years we have come to find that the mechanical fuel pressure gauge isolators stand up to diesel fuel much longer than the electrical gauge sending units. The mechanical gauge kits come with the gauge, the isolator, and the line from the isolator to the gauge. The isolator mounts under the hood, preventing fuel from entering the cab. A liquid filled line is then run from the isolator to the gauge. The gauge manufacturers recommend anti-freeze in this line. We have a couple of brands, ISSPRO and AutoMeter. They operate the same. The only difference between the two brands is the gauge style. You'll also need a fuel pressure snubber (RLT-SNUBBER) at the source to prevent hydraulic hammering the high frequency fuel pressure pulsation created by the injection pump from wearing out the inside of the gauge. You can install the snubber into the port on your fuel filter canister ('98.5-'99) or the snubber can go on the test port at the VP44 pump ('00-'02). Then, you'll need the Vulcan Universal Fit Fuel Pressure Line (VULCAN-FH) to get fuel to the isolator.

If you purchase a gauge mount with the gauge, it will be provided at 50% off the list price.

So, there you go! Choose the gauge style from ISSPRO or AutoMeter that you like; add a Vulcan Universal Fit Fuel Pressure Line; a snubber; and a gauge mount and you're good to go.





### EXHAUST

- Q I have a (pick a year, '89-'07) Turbo Diesel truck. What can you suggest and how do I install an exhaust brake?
- A This one is a long story. The TDR's "Perfect Collection" has the best answers, pages 4-9.
- Q Do I need new exhaust valve springs when I add an exhaust brake?
- A Again, a long story. The TDR's "Perfect Collection" has the best answers, pages 10-18:
- Q This 6.7-liter engine (years '07.5-current) has an abomination of exhaust aftertreatment hardware on it. Can I remove this stuff?
- A Short answer, no that's illegal and it puts you at risk of a steep (\$20,000) fine from the EPA. That is not the answer you wanted and likely you've got a problem with the system. With the big money that is involved with the repair and/or the consequences of an illegal truck, you'll want to make the educated assessment of the situation. Long answer: the TDR's <u>"Perfect Collection"</u> pages 182-184.

#### **⇒ FUEL SYSTEM □**

- Q I understand that the fuel system on '03-current trucks is call "high pressure, common rail" (HPCR). Some folks have said that these injectors fail at about 100,000 miles. What's the story?
- A Only 100,000 miles? The life of these injectors gets shorter and shorter every day. The life span we see is 150-200k, better if you have a great fuel filtration system. This, too, has a long story. See the TDR's "Perfect Collection" for the best answer, pages 19-31.
- Q What do you think about fuel additives?
- A Some things work, others are a waste of money. Your broken-record long answer for this question is the <u>"Perfect Collection"</u> pages 93-96.

#### **○ VARIOUS TOPICS**

- Q I'm in the market for a Third Generation ('03-'09) Turbo Diesel. Any suggestions on where I can go for believable information?
- A Here is the broken-record answer: The TDR's "Perfect Collection" pages 55-61
- Q I've heard about the "Death Wobble" but no one seems to know what exactly causes the problem. Any ideas?
- A Broken-record: The TDR's <u>"Perfect Collection"</u> pages 97-107.
- Q How do I fix the transmission lock/unlock problem in my ('94-'04) Turbo Diesel?
- A With a 75% certainty we can say it is the throttle position sensor [TPS, also known as the accelerator pedal position sensor (APPS)]. Yet, the 25% unknown is going to require some education on your part. Again, I hear a skip in the vinyl, the answer for this question is the "Perfect Collection" pages 154-155







#### WHERE IS IT MADE?

# Q I am considering a Gates water pump (43526). Is this a good pump? Do you use them in your trucks? Is this an OEM Cummins item? Where is it made?

A Short answer, it is a Gates item. Were it Cummins or MOPAR it would say as much in the description. This Gates item is about \$50. A water pump in a genuine Cummins box is \$180. The Gates item is made in China.

Here is the long answer: As you look through our catalog you will note a cross section of parts: name brands that are instantly recognized are sold alongside relatively unknown brands.

Need an example? Take the fuel shutoff solenoid, '94-'98 part number SA-4981. It is a generic part and we went directly to the source to purchase the part. You save money. Sure, it can be found in a different color box, but the price would be much higher.

On the other hand, consider the price of a Cummins fuel transfer pump, '94-'98, part number 4988747: the Cummins part has the lowest price.

More examples: MOPAR mud flaps, floor mats, etc.: MOPAR parts fit correctly, and those listed in the catalog are within 10% of competitive items that do not have the ease-of-fit or like quality. Paying up for these MOPAR items makes sense.

So, each item in the catalog has been examined closely by the staff to give you the best value. If it says "Cummins" it is Cummins. This is the same with "MOPAR, Gates, Fleetguard," etc. And, yes, some of the parts are made in Mexico, China, Turkey, Austria, Italy, Germany, Japan – you name it, it is a worldwide economy.

On a closing note, I remember back to the early 80s when Chrysler was in financial trouble. The CEO, Lee Iacocca, challenged consumers, "If you can find a better car, buy it." Likewise, we've worked hard to put together this collection of Turbo Diesel parts for you. We welcome your comments should you find a better value.