

TURBO RESONATOR ELIMINATOR FREQUENTLY ASKED QUESTIONS

Q. What is a turbo resonator?

A. The turbo resonator is a plastic, bonded-together assembly used on the 2.7 liter, 5 CYLINDER IN-LINE Mercedes Benz turbo diesel engine to slightly lessen the intake whine of the turbocharger and to act as a "muffling" device for the intake air delivery system. This plastic assembly, in my opinion as a plastic injection mold designer, is not well suited for a high-heat, vibration and boost-pressure-rich environment. Reportedly on its third revision by the contractor who makes the resonator for Mercedes, some owners we have worked with are still reporting multiple failures, within less than 10,000 miles, each one leaving them stranded. Including failures of the last "new fix" design, released in 2006. The Sprinter chassis is becoming increasingly popular with RVers and commercial users because of its great fuel economy and driver-friendly characteristics. However, the turbo resonator is one flaw in the engine design that has caused the Sprinter chassis to suffer an inordinate amount of breakdowns. If the truth were published, this is a HUGE problem, not a small one.

Q. What exactly is this turbo resonator failure problem I have been hearing about on the Sprinter (tm) and Freightliner(tm) van chassis?

A. A typical turbo resonator failure happens under a period of maximum boost either climbing a hill or accelerating off a stop light with a load in the vehicle, although we know of failures where the vehicles have NOT been under a load and the parts have failed. The resonator is an assembly made up of two separate injection molded plastic parts which are bonded together. The failure results from the parts separating from each other and allowing turbo boost air to escape from the intake system. Dodge and Chrysler management and upper management I have spoken with are certainly acutely aware of this problem, even though many Sprinter owners have told us that their Dodge dealers who service their Sprinters have told them, "it is not a problem." Chrysler has tried, and failed, to solve the problem with multiple revisions but they are still using a two-part plastic assembly in a high temperature, high vibration and high pressure operating environment that I believe requires a metal part. As an injection mold designer, I know plastic parts and I know their strengths and weaknesses. I have cut apart each of the different "glass" or nylon filled Polycarbonate plastic versions and I still have not seen one that I would trust, especially in emergency vehicles, commercial applications or RV's. In my opinion the design of the part is inappropriate for the application and pre-destined to failure. Glass or nylon filled Polycarbonate is an excellent choice for a SINGLE part but is not ideal for "bonded" assemblies since this material typically does not bond well to each other. Further, the "beefy" side of the plastic resonator slips tightly into the output end of the turbo and is bolted firmly to the alternator bracket. That is ok. The problem is, the other end of the plastic assembly is simply bonded onto the beefy part and then slipped inside a long and rather heavy piece of intake rubber hose that is constantly vibrating in both a shear and tensile motion. So, with constant vibration and heat, it would most likely fail anyway in the long term, but adding 20 inches or more of turbo boost pressure, in many cases, shortens the life of the plastic assembly dramatically.

Q. What happens when the Sprinter turbo resonator fails?

A. The boost sensor sends a low pressure signal to the engine's computer which "thinks" there has been a failure of the turbo. The vehicle immediately goes into "limp home" mode which results in a nearly total loss of ability to climb hills and a top speed on flat ground of about 35 to 40 mph. This usually results in having the vehicle towed in for repair. Not exactly a desirable feature in emergency medical service vehicles transporting critically ill or injured persons or specialized armored vehicles carrying precious cargo that cannot afford to become vulnerable. One of our clients who owns an ambulance company with a fleet of Sprinter based ambulances experienced turbo resonator failures on fully half of their fleet before converting them all over to our Resonator eliminator. It is especially troubling to RVers who use their vehicles to "get away from it all" only to find that after they did they are now hundreds of miles or hours away from help. Winnebago "View" owner Larry Oslund found himself and his family in this situation three times in less than 9,300 miles. Larry told me, "Dodge told us there were only two five-star Dodge dealers that work on the Sprinter chassis in Mississippi, one in the North part of the State and one in the South. We were forced to drive 118 miles to get to the dealer, still in limp home mode, and then pay for a motel for five days while the Dodge dealer ordered the part and fixed the motorhome. Frankly, I believe Dodge should have to reimburse us for the vacation time lost and the motel costs". Needless to say, Larry put our part on his RV. In addition, the check engine light comes on. If our Eliminator is installed after a failure, the check engine light should go off after a few starting cycles. (full warm up and cool down of the engine.)

Q. Can a turbo resonator failure make the vehicle unsafe?

A. We have spoken with many Sprinter RV and commercial vehicle owners who had their turbo resonators blow out barely avoided being rear-ended. Larry Oslund, whom I mentioned above, shared this story: Larry told us, "This last time, we were traveling down the Interstate at 70 MPH with an 18 wheeler only 20 feet behind us when the turbo resonator failed and the motorhome did a nose-dive, went into the now familiar, 'limp home mode' and slowed to 35 mph instantly almost causing the 18 wheeler to crash into us."

Q. Is there any permanent fix for this problem?

A. Yes our company has developed a permanent fix for the problem with the development of our turbo resonator Eliminator, the new SRE-06, which is now available for \$139.95 plus shipping (and CA tax for CA residents). Presently we have literally hundreds of these parts installed in commercial Sprinter vans and chassis, ambulances, armored vehicles, delivery vehicles and RVs with thousands of trouble-free test miles on the Eliminator. Every customer we have spoken with is happy with the product.

Q. How long does it take to install the new Eliminator?

A. About 20 minutes, following clear & simple directions which are included.

Q. My turbo resonator has already been replaced with a new plastic one, shouldn't it be ok now?

A. Not from the feedback we are getting. According to Sprinter representatives with whom we have spoken, this part is made by a contractor and it is on its third revision and still having a high rate of reported failures. Many owners are having multiple failures only a few thousand miles apart from each other, causing their RVs to need repair in the middle of a vacation or interrupting their workday with a broken down work van or truck. Remember the stock part is a plastic "bonded together" assembly "living" in a vibration and heat rich environment while being subjected to high pressure. Our SRE-06 turbo resonator Eliminator is made of solid billet aluminum and is "happy" in all three environments.

Q. What Sprinter models are affected?

A. Late 2004, 2005, 2006, and early 2007 models all of which are equipped with the 2.7 liter, 5 cylinder in line turbo diesel. Models prior to 2004 did not have the plastic turbo resonators.

Q. Will replacing the stock turbo resonator with the resonator Eliminator void my new vehicle warranty?

A. No. Many Dodge dealers coast to coast carry our part in stock and regularly replace the plastic resonator with our billet aluminum part. In many cases Dodge has replaced their part with our part under warranty. None of our customers have expressed any problems with warranty coverage after installation of our Resonator Eliminator. Actually, the dealers themselves want to see their customers satisfied so they have no incentive to balk at replacement parts that keep customers happy without affecting the longevity or performance of their vehicles. Presently we have over a thousand of these parts installed in commercial Sprinter vans and chassis, ambulances, armored vehicles, delivery vehicles and RVs with thousands of trouble-free miles on our Eliminator. Every customer we have spoken with is happy with the product. Most importantly, legally, a vehicle manufacturer cannot void the warranty on a vehicle due to an aftermarket part unless they can prove that the aftermarket part caused or contributed to the failure in the vehicle (per the Magnuson Moss Warranty Act 15 U.S.C. 2302(C). Further our part conforms to the internal size of the original part and causes NO difference in performance. It makes no change to the operational aspects of the vehicle. It does not alter the emission control systems in any way. It simply replaces a constantly failing plastic assembly with a lifetime billet aluminum part.

Q. If my turbo resonator is working ok now should I wait until I have trouble to replace it?

A. After years of speaking with our customers, and listening to many stories of being stranded multiple times or nearly being rear-ended because of resonator failures, (some have experienced multiple failures in the first 5,000 miles of operations), our answer can only be to avoid being stuck or ending your vacation or workday on a tow hook, we advise replacing every plastic resonator as soon as possible. On our own Sprinter RV, (shown in the picture on our website) we changed it immediately to avoid ever having to worry about a breakdown at an inconvenient time or place.

Q. Is it difficult or time consuming to install?

A. No. Our SRE-06 resonator Eliminator, designed by us at the request of Dodge, is a high quality, high strength Billet aluminum replacement designed to last the life of the vehicle. It comes with clear and simple directions and takes about 15 minutes to install with only a small 1/4 inch wrench (or socket), a 5/16 inch wrench (or socket) and a flat blade screwdriver. Truly, anyone who can install a radiator hose will have no trouble quickly replacing this part. (Please click on the SRE-06 installation PDF on our website and you can see how easy it is to install)

Q. How is it that your company is providing the fix instead of Dodge?

A. For over thirty years our company has been in the business of providing fast and quality solutions for all types of OEM manufacturing companies for complex problems with vehicles, computers, robotics, aircraft, and many other applications. We provide full service fast turnaround design, fabrication, CNC machining, Injection molding etc. In this case a local Dodge dealer with knowledge of our company approached us for this particular solution which Dodge dealers coast to coast have approved and are now stocking.

NOTE: If you have any other problems with any other vehicles, we will be happy to contact the manufacturers with solutions and if our solutions are accepted, we will send you one at no charge.

Like all of our products, the SRE-06 is backed by our 100% satisfaction guarantee.