CRACKED TURBO HOSE FIX (ADAP09) FREQUENTLY ASKED QUESTIONS For Sprinter Late 2002 through 2007 2.7 liter, 5 Cyl in-line engines

Q. What is the cracked turbo hose Fix ?

A. The cracked turbo hose fix, our ADAP06 is a billet aluminum adaptor that replaces the metal end on the intake side turbo hose found on the **driver's side** on the 2.7 liter, 5 cyl. In-line Mercedes Benz turbo diesel engine found in 2002 up to2007 Dodge Sprinter Vans. Our Hose adapter has a nicely rounded end which resists hose cracking even in high temperatures, high vibration and high boost pressures. The Sprinter chassis is becoming increasingly popular with RVers and commercial users because of its great fuel economy and driver-friendly characteristics. However, the intake turbo hose with its flawed metal ends is causing the Sprinter chassis to suffer an inordinate amount of breakdowns.

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

A. A typical turbo hose end 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 hoses have still failed. The failure results from, in our opinion, an extremely poor design of the attach point between the rubber hose and the metal end "formed" onto the hose. In the process of sealing the rubber hose to the steel hose fitting, the hose is "machine pinched" into the metal fitting in a manner that sets the hose up for failure right from the start. (Be sure to see the PDF of our installation instructions for clear photos of the problem) The failure occurs on the driver's side hose (the only hose on this engine with this fitting) due to constant expansion , contraction and flexing. Most Dodge Sprinter service departments are acutely aware of this problem, however until now, the only solution was to replace the entire hose assembly at a cost of around \$120 to \$140 just for the hose assembly, not counting labor. To avoid getting stuck on the road, we are recommending replacing this hose end with the ADAP06 to prevent the failure before it happens.

Q. What happens when the Sprinter turbo hose ends fail?

A. The boost sensor sends a low pressure signal to the engine's computer which "thinks" there has been a failure of the turbo and 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, however this particular problem can start out with "partial failures" since the cracks sometimes start out very small and can put you in AND OUT of "limp home mode" several times before full failure or "blow out" of the hose puts you in limp home mode once and for all. This is not exactly a desirable feature in emergency medical service vehicles, armored vehicles, RVs and other commercial vehicles that cannot afford to become inoperable. It is especially troubling to RVers who use their vehicles to "get away from it all" only to find that after they are "away from it all" they are now hundreds of miles or hours away from help. In addition, the check engine light comes on. If **our ADAP06** hose adapter 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 hose end failure make the vehicle unsafe?

A. We have spoken regularly with Sprinter RV and commercial vehicle owners who had this turbo hose end blow out, and barely avoided being rear-ended, since when the vehicle goes into limp home mode, there is no warning for driver approaching quickly from behind. Some of these customers had already installed our turbo resonator eliminators on their Sprinters and immediately called us to ask if this was a similar problem, since the end result seemed to be exactly the same.

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 hose end adapter, the new ADAP06, which is now available for \$89.95 plus shipping (and CA tax for CA residents). That is not a lot more than the price of replacing one cracked hose assembly. Presently we have these parts installed in Sprinter commercial vehicles and RVs with thousands of trouble-free test miles on the ADAP06. Every customer we have spoken with is happy with the product.

Q. How long does it take to install the new ADAP06 turbo hose adapter?

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

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

A. Not from the feedback we are getting from Dodge dealers and Sprinter owners. According to Sprinter representatives with whom we have spoken, this part is having a moderately high rate of reported failures. Many owners have had multiple failures, causing their RVs to need expensive repair in the middle of a vacation or interrupting their workday with a broken down work van or truck. Remember the stock hose end is (in our opinion and in the opinion of numerous Sprinter mechanics) an improperly joined assembly "living" in a vibration and heat rich environment while being subjected to high pressure. Our ADAP06 turbo hose adapter is made of solid billet aluminum with "hose-friendly", well-

rounded and smooth hose attach points and is "happy" in all three environments.

Q. What Sprinter models are affected?

A. All 2002 and up models equipped with the 2.7 liter, 5cy. In-line turbo diesel.

Q. Will replacing the stock turbo hose with the ADAP06 Turbo hose adapter void my new vehicle warranty?

A. No. Dodge dealers carry our part in stock and install our ADAP06 for customers rather than replacing the original hose assembly because a) it is much less expensive for the customer and b) the hose end will not suffer the cracking failure at the end of the hose, while replacing the original hose with another original hose will leave the customer facing the same failure again and again. None of our customers have expressed any problems with warranty coverage after installation of our ADAP06. 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. 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 ADAP09 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 hose assembly with a lifetime billet aluminum part.

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

A. After speaking with our customers, and listening to stories of being stranded multiple times or nearly being rearended because of turbo hose end failures, (some have experienced multiple failures), our answer can only be to avoid being stuck or ending your vacation or workday on a tow hook, we advise replacing the metal hose end with our ADAP06 turbo hose adapter as soon as possible to avoid ever having to worry about a breakdown due to this hose failure at an inconvenient time or place.

Q. Is it difficult or time consuming to install?

A. No. Our ADAP06 turbo hose adapter, 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 18 minutes to install with only a few simple tools. Truly, anyone who can install a radiator hose will have no trouble quickly replacing this part. (Please click on our installation instructions PDF 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 across the Country have approved and are now stocking.

Q. I have heard about hoses "popping off" the adaptors under pressure. Is this a problem?

A. There have been instances where installers did not properly clean the inside of the hose from diesel oil or simply did not torque the clamp tightly enough. We researched this issue and now supply with every ADAP06 a new **wider and shielded stainless steel "liner" clamp** designed for high torque, high pressure applications. The liner prevents the clamp screw from "digging into" the rubber hoses as the clamp is tightened. We have tested these clamps under full loads and have experienced zero "pop-offs" when the clamps are properly torqued to our specs provided in the installation instructions. **(please see our installation instructions PDF on this site.)**

NOTE: We offer these wider, high torque, high pressure replacement "liner" clamps AT NO CHARGE to anyone who purchased an ADAP06 prior to January 1, 2010 (please send request by email and we will verify your order and send one clamp per ADAP at no charge to you!)

ADDITIONAL NOTE: We also offer these clamps for sale to anyone wishing to replace their stock turbo hose clamps since the stock Sprinter clamps pop-off the stock Sprinter plastic resonators on the 2.7 liter 5 cyl engines on a regular basis and can pop off the intercooler sides of the engines after hose replacement as well, , , . . .please email us for cost and shipping info.

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.

The ADAP06 is backed by our 100% satisfaction guarantee. If it ever fails we will replace it at no charge. © 2009, 2010 The James F. Riordan, Company, Inc.