



# '03-'09 Dodge Ram Diesel (5.9L & 6.7L) Electric Fan Clutch Assembly Misdiagnosis

Like most diesel engines, 2003–2009 Dodge Ram Diesel (5.9L and 6.7L) engines are designed with large cooling systems that often operate at idle for long periods of time. In these applications, the electric fan clutch assembly is activated by the ECU when the engine heat reaches a high temperature or the A/C head pressure reaches 240~270lbs. Proper function of the electric fan clutch assembly is crucial to maintaining A/C head pressure and a working A/C system, especially when idle and even more importantly, in warm weather. If A/C head pressure is not maintained, the compressor clutch may slip or burn causing premature A/C system failure.

## THE PROBLEM

A transducer, located in the discharge line, reports A/C head pressure to the ECU. The ECU uses this information to turn on/off the electric fan clutch assembly. In some cases what appears to be a failed electric fan clutch assembly, is rather a failed transducer.

## THE SOLUTION

Before replacing a “failed” electric fan clutch assembly for the Dodge Ram Diesel applications listed in this tech tip, check the transducer first. Although the electric fan clutch assembly may appear to be turning, it may not be working correctly due to a malfunctioning transducer.

gpd offers quality replacements  
for the electric fan clutch assembly & transducer.



gpd #2911297



gpd #1711554



## 2003–2009 Dodge Ram Diesel 5.9L & 6.7L Diesel

Dodge Diesels are fitted with an electronic viscous fan clutch which is electrically activated by the ECU when the engine temperature reaches high temperature or the air conditioning head pressure reaches 240 to 270lbs. The air conditioning head pressure is reported to the ECU by a transducer located in the discharge line and will cause the fan clutch to engage almost every time the truck idles for a few minutes in warm weather. Operating the electronic viscous fan clutch to maintain a reasonable head pressure is critical. The viscous fan clutch provides proper system cooling and prevents compressor clutch slippage or burning, as well as premature compressor failure. Dodge diesel trucks, as well as most other diesels models, are designed with large cooling system. These systems operate at idle for long periods of time. The fan clutch should always engage when the system head pressure reaches in the 240 to 270lbs range.

gpd has the electronic fan clutch assembly: part number **2911297**. We recommend that you check the transducer and fan clutch assembly, like all viscous fan clutches it may be turning, but is working correctly?



Manufacturer names, logos and part numbers are for reference only. All prices, taxes and availability are subject to change without notice. This document and any files transmitted with it are confidential and intended solely for the use of the individual or entity to which they are addressed. If you have received this document in error, please delete it immediately. Note that any views or opinions presented in this document are solely those of the author. Any unauthorized review, use, disclosure or distribution is prohibited. GPD accepts no liability for any damage caused by any virus or other means transmitted by this document.