

Crossfire TPMS (Tire Pressure Monitoring System) Information

Summary: Two paths available to have the TPMS function with new sensors.

Path 1) Use Chrysler dealership (ONLY) computer to put Crossfire into TPMS Relearn mode, teach the car the new sensor IDs.

Path 2} Have new sensors CLONED to use the same sensor IDs as previously learned sensors.

Path 1 Expanded Information

The SLK R170 had no provision for TPMS, so Chrysler adapted an existing Chrysler TPMS system into Mercedes electronics for Crossfire. Wheel sensors were the same as used in Jeeps, minivans, Viper, Prowler, others back at the early 2000's start of TPMS. Wheel sensors at that time required a magnet to trigger a signal transmission from a non-moving sensor, later versions added capability for triggering by LF (Low Frequency) radio signal from most TPMS testers. Some original Crossfire sensors might still be triggered only by a TPMS magnet, not by a tester radio signal, so ask that anyone testing an original sensor try with a magnet before deciding it cannot be read at all. These sensors have a fixed sensor ID code when manufactured, so the Crossfire must be taught this code for any such new sensor. The latest Mopar number for these sensors is 52088990AE, which is made by Schrader and the same as a Schrader 20028 (except for color).

The ONLY way to teach a Crossfire new sensor ID codes is with a Chrysler dealership computer diagnostic tool. Until sometime in 2017 this had to be the old Chrysler DRB III with a Crossfire software card plus the Crossfire-Sprinter Multiplexer cable. Many Chrysler dealerships never sold any Crossfire cars, never bought the special Crossfire diagnostic and repair tools, so never had this equipment. Others might have had it, but the equipment went unused or lost after the DRB III was superseded by a different Chrysler dealership diagnostic system in 2007. Only during calendar 2017 was the current Chrysler dealership diagnostic system, wiTECH 2.0 with the microPod II, updated to cover all Crossfire model years. Many dealership service people do not know this Enhanced DRB III Emulator function is available on their current system, since it is only required to service older vehicles. But every Chrysler dealership should have the capability. The downside is that nearly every dealership will charge at least an hour diagnostic labor time - over \$100 USD - to plug dealership diagnostic equipment into your car. Even though the whole relearn process should take a maximum of 5 minutes after plugging in, to walk around the car triggering each wheel sensor to be learned by the car system.

Path 2 Expanded Information

TPMS technology has evolved a lot since 2003. Single part number multi-protocol replacement sensors are available which can be programmed, and possibly cloned, to work on over 90% of cars on the road. Technology leader for this is the Schrader EZ-Sensor 33500. Other brands of aftermarket sensors with similar capabilities are available, and a tire shop needs to have corresponding equipment to program and clone

the particular brand of sensor. Mopar actually sells this programmable and cloneable EZ-Sensor 33500 with a rubber valve stem as their MAGNETI MARELLI OFFERED BY MOPAR part number 1AMTP3350A. To keep the Crossfire clamp in metal valve stem may require Mopar Aluminum Valve Service Kit - 1AMTP3400A. The Schrader number for the kit to convert the EZ-Sensor 33500 to have a metal stem is 34000. Not only does this metal valve stem match the original style, clamp-in stems are recommended for any application with speed capability over 115 mph. The EZ-Sensor 33700 is the same cloneable sensor with the metal clamp in stem.

As mentioned in Path 1, the original sensors might require a magnet to trigger a signal transmission, so ask for that before deciding the sensor ID cannot be retrieved. Sensors can transmit their IDs to the handheld tester place right next to the wheel for at least several months after the battery power is too low to signal to the in-car receiver up by the rear view mirror. Another detail of possible use: factory sensors had a label on the sensor body printed with the ID. Very few tire shops will be able to use this text ID to clone new sensors, though. They, and their equipment, may only be able to record IDs by radio transmission, then use those recorded IDs to clone new sensors.

Final point about cloned sensor IDs: if you have additional wheel sets for seasonal tires, track, etc. matching IDs will enable TPMS function after wheel swaps without further hassle.