



Installation Instructions

18SP560—Install Exhaust Gas Temperature Measurement Kit on a Series 50 or Series 60 Engine

Introduction

The exhaust gas temperature kits listed in Table 1 are intended for use on Detroit Diesel Series 50® or Series 60® diesel-fueled transit coach engines manufactured during or after October 2002. Components of kits 23531227, 23531228, and 23531229 are shown in columns A, B, and C, respectively.

Item	Part No.	Quantity			Description
		A	B	C	
–	23531227	1			Kit, Exhaust Gas Temperature Measurement
–	23531228		1		Kit, Exhaust Gas Temperature Measurement
–	23531229			1	Kit, Exhaust Gas Temperature Measurement
1	23521882	1	1	1	– Sensor, Exhaust Temperature (with 72 in. long cable)
2	23531076	1			– Harness, Exhaust Temperature Sensor – 160 In. L.
2	23531075		1		– Harness, Exhaust Temperature Sensor – 98 In. L.
2	23531074			1	– Harness, Exhaust Temperature Sensor – 28 In. L.
–	18SP560	1	1	1	– Installation Instructions

Table 1 – Service Kits and Components

Installation

Install the exhaust temperature sensor from the kit in the exhaust outlet of the muffler/catalyst assembly as follows:

1. Record the engine serial number, vehicle identification number, and bus number. Verify that the vehicle ignition is switched to the OFF position.

2. With the engine at ambient temperature, remove the adaptor cap from the muffler/catalyst assembly.
3. Install the exhaust temperature sensor (Item 1). Use care to route the cable away from any hot surface.
4. Remove the three-terminal turbo boost pressure sensor FGI connector. Connect it to the compatible 3-pin end of the electrical harness (item 2). Connect the remaining 3-pin connector into the turbo boost sensor.
5. Remove the thirty-pin vehicle interface harness connector from the ECM. Strip and install the tan, blunt cut and unterminated single wire of the electrical harness (Item 2) into cavity D-3 using the typical DDEC® pull-to-seat crimped terminator.



CAUTION:

To avoid the possibility of personal injury (burns) from the hot muffler/catalyst assembly, allow the engine to cool to ambient temperature before working on the muffler/catalyst assembly or installing the sensor.

6. Connect the two-pin female Weather Pack™ connector on the electrical harness to the male connector on the end of the exhaust temperature sensor. Route the sensor cable and conduit along existing wiring in the engine compartment and tie-wrap to secure them in place.
7. Reconnect the thirty-pin vehicle interface connector to the ECM.

**CAUTION:**

To avoid injury from loss of vehicle/vessel control, the operator must not attempt to use or read any diagnostic tool when the vehicle/vessel is moving.

8. Plug in a DDR (diagnostic data reader) and verify that a reading is received for exhaust temperature and that no Active Codes exist.

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18SP560 Page 2 of 2