



Spartan Fire, LLC

Technical Service Bulletin
TSB23-560-003

DATE: 8/16/2023

APPLIES TO: This service bulletin applies to certain 2022 through 2024 model year, Gladiator, Metro Star, and FC-94 model emergency response chassis cabs built between December 2022 and April 2023.

CONDITION: Certain Ametek gauge smart dual pressure transducer modules may have inadvertently received a 120 Ω J1939 termination resistor in the printed circuit board assembly. This condition may present itself as a J1939 communication error, which may illuminate a check engine light, but will not impede operation of the vehicle. If this condition is identified, follow the instructions below.

CORRECTION: Measure J1939 data-bus resistance and replace Smart Dual Pressure Transducer (SDPT) if applicable.

LABOR ALLOCATION: 1.5 hour

CLASSIFICATION: V2

PARTS NEEDED:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	1999-NN1-001	Smart Dual Pressure Transducer (SDPT)

GENERAL INSTRUCTIONS:

Thoroughly review entire service bulletin before starting work. If there are questions or concerns with steps defined in this service bulletin, contact Spartan Fire, LLC. Customer & Product Support Group.

All applicable industry safety standards must be followed when performing work identified in this procedure.

Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of specific nature in conjunction with industry standards. Professional Technicians should be appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

Step By Step Instructions

Section 1: Inspection and Testing

1. Locate the datalink connector under the driver's side dash location as shown in *figure 2.1* below.



Figure 2.1

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2. With the master and ignition switches turned off, use a DVOM (Digital Volt Ohm Meter) to measure the resistance between pins C & D. See *Figure 3.1*

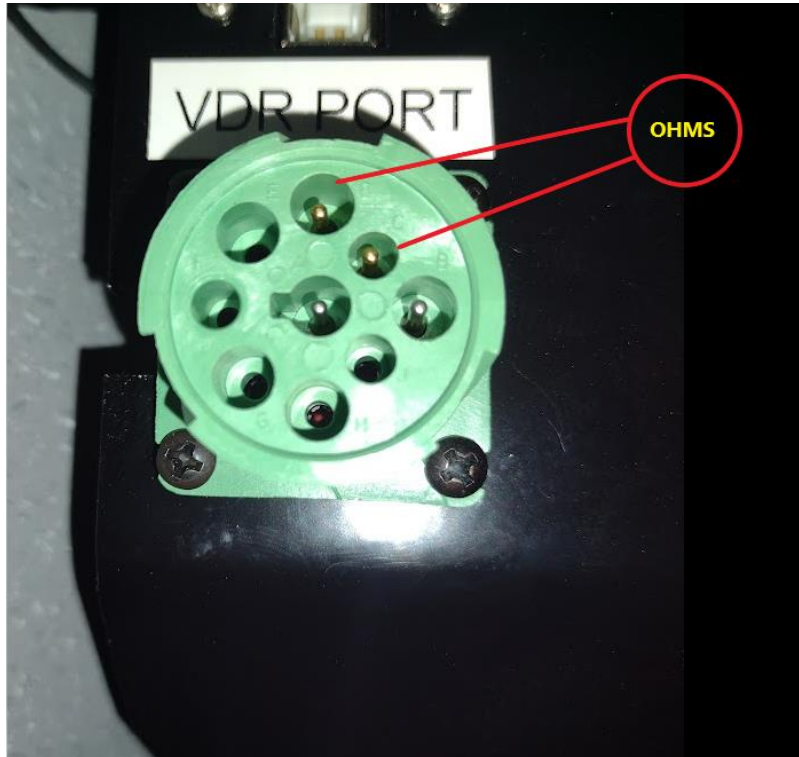


Figure 3.1

3. If approximately 60 ohms is measured, no further action is required. Do not proceed with the rest of the instructions. Unit can be put back in operation.
4. If the measurement is around 40 ohms, this indicates the Smart Dual Pressure Transducer (SDPT) could be equipped with its own terminating resistor, and it may require replacement with one that does not have a terminating resistor.

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Section 2: Replacement of Transducer Module

5. Remove driver's side headlights. (See Figure 4.1)



Figure 4.1

6. Locate SDPT module as shown in Figure 4.2

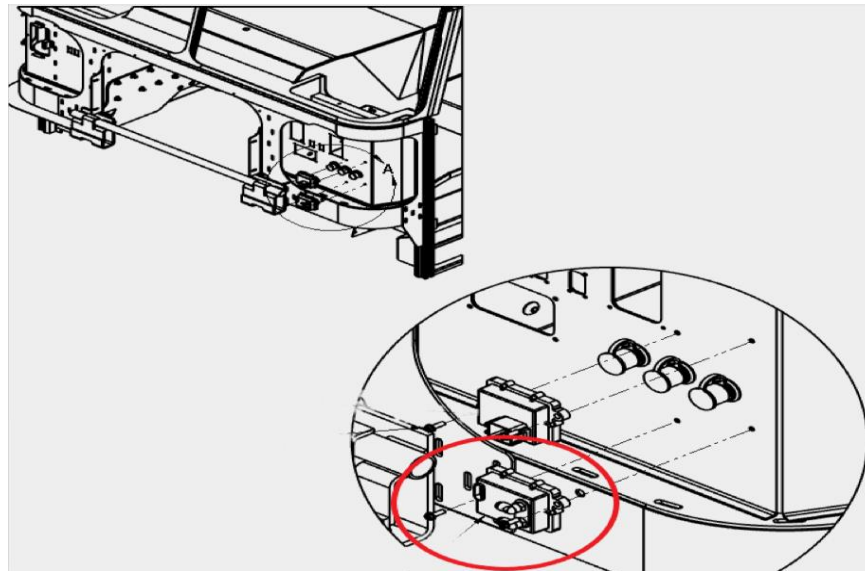


Figure 4.2

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7. Disconnect electrical connector from SDPT module.
8. Check resistance again between pins C & D of the diagnostic connector as shown in Figure 3.1 to confirm SDPT module is the issue.
 - a. If resistance is still 40 ohms with the SDPT connector disconnected, the SDPT is not the issue and there is another terminating resistor in the circuit that will have to be addressed. Reinstall connector and headlight assembly. Contact Spartan Customer Service (1-800-867-6478) for further assistance. Do not proceed any further with the instructions below.
 - b. If resistance is now at 60 ohms with the SDPT connector disconnected, proceed with SDPT replacement beginning in step 9.
9. Disconnect primary and secondary air lines from SDPT module. Note the orientation of the lines to the ports. *See Figure 5.1*

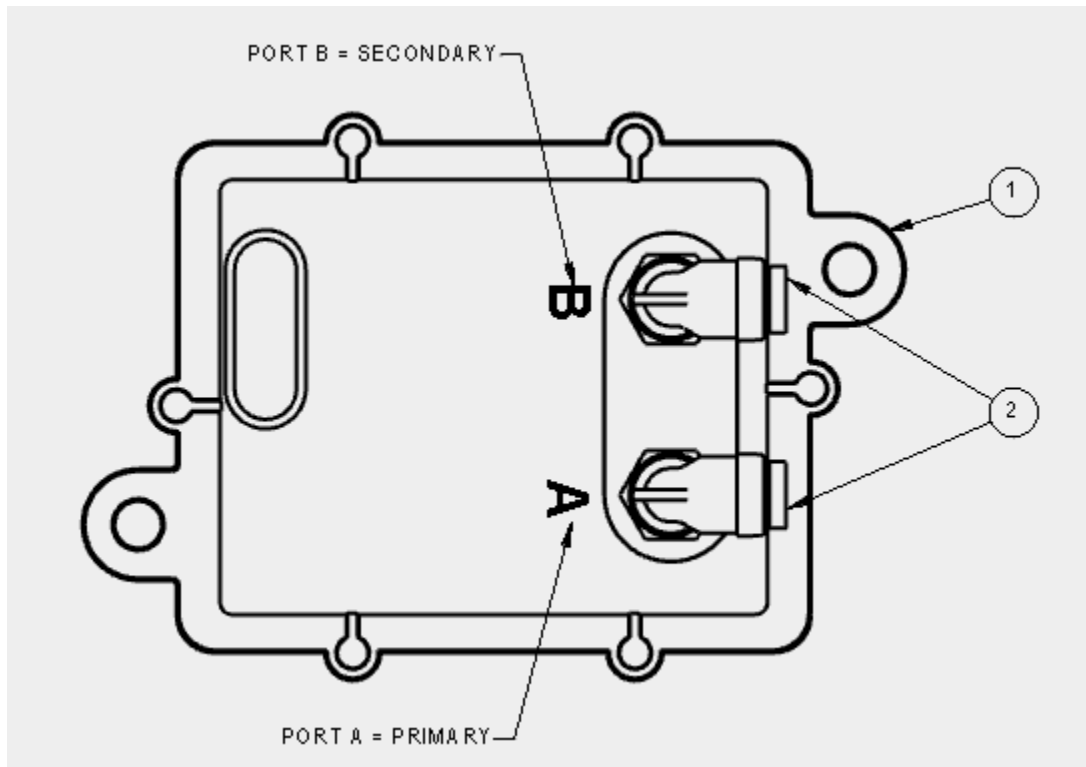


Figure 5.1

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10. Remove two fasteners holding module to the firewall and remove the module.
11. Install new SDPT module with the two original fasteners.
12. Reconnect electrical connector.
13. Reconnect the airlines to the appropriate ports. (Primary line to port A and Secondary line to port B.)
14. With DVOM (digital volt ohm meter), recheck the resistance between pins C & D and confirm resistance value is now 60 ohms.
15. Start engine and verify there are no air leaks and that the gauges work correctly.
16. Reinstall headlight assembly.

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