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TECHNICAL SERVICE BULLETIN

SUBJECT: **Pressure Switch to Transducer**

Products Affected: Air brake vehicles with dual pressure switches

Effective Date: 23 June 2023

Telma is committed to a philosophy of continuous improvement as a way of enhancing the end-user's experience with our product. We are continually examining service data to see if we can identify any trends which highlight information that could be useful to our customers.

This service bulletin relates to a supplier issue and obsolescence of pressure switches (TIG31055 and TIG31056) and the conversion from pressure switches to a pressure transducer. A kit (TIK10005) which consists of a TRCM2 (TIG31075), pressure transducer (TIG31065) and harness (TID11099) has been created to ease the conversion process.

Air brake applications using pressure switches TIG31055 and TIG31056 can now convert the two dual stage pressure switches to a single transducer. The transducer fits in the same aluminum block as the pressure switches and outputs a variable voltage based on brake pressure. This variable voltage is read by the TRCM2 and converted to a 12v output signal. The harness converts this 12v signal to the same ground output that the pressure switches were utilizing.

* For Mack trucks with the Telma controlled by CDS, (Mack customer defined software), the dual pressure switches are power based, not ground based and the relays will not be used. Please contact Telma engineering at 847-593-1098 for Mack factory installations using CDS to activate the Telma.

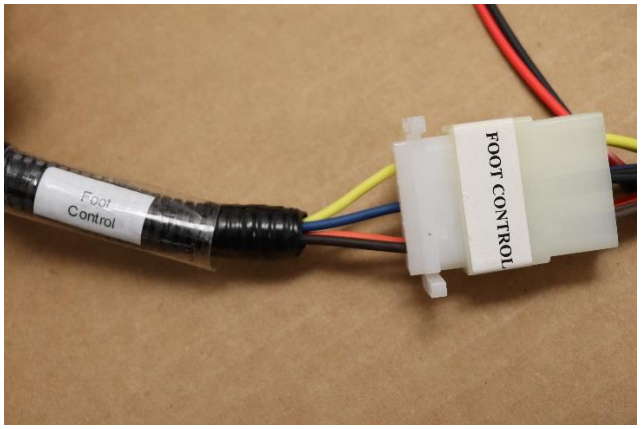
* For fire trucks with control box part number TID11008 with the Telma speed switch inside the control box, the dual pressure switches are power based, not ground based and the relays will not be used. Please contact Telma engineering at 847-593-1098 for installations using control box TID11008.

All information provided is for Telma supplied harnesses. For OEM or custom harnesses, the replacement connectors or wire colors may be different than what is listed in this bulletin. Telma harnesses use the color code orange, blue, yellow, brown, for stages 1 through 4. If your harness does not use this color code, please contact the vehicle manufacturer.

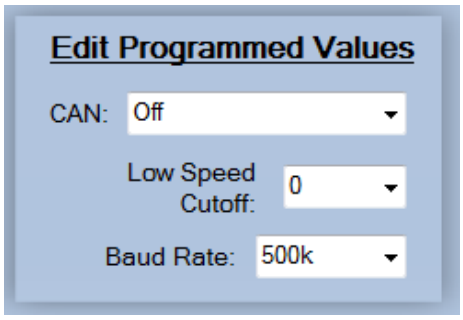
To convert from the dual stage pressure switches to the pressure transducer, unplug the white amp connector labeled foot control from the main harness. This sub-harness will be connected to the two pressure switches.

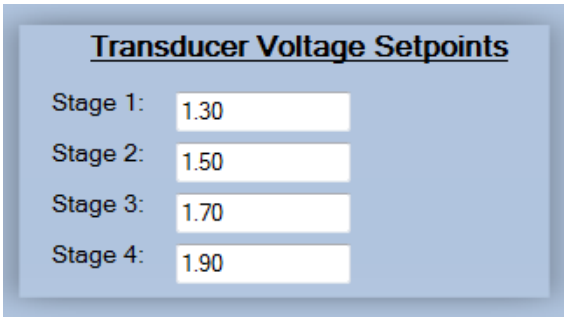
Remove one pressure switch and screw in the pressure transducer. Both pressure switches may be removed if the second port is plugged so air does not escape when the driver applies the brakes.

Connect the white amp connector labeled foot control from the harness in the kit as well as the three-pin transducer connector. Connect the supplied harness wires to 12v ignition and ground. The gray and black Deutsch connectors will be plugged into theTRCM2 included in the kit.



The TRCM2 will need to be reprogrammed. Plug the USBc cable into the port below the hole in the enclosure. Refer to the TRCM2 users guide (TL133012) for more information. Change the CAN setting to off and the low speed cutoff 0. The transducer will show 1.0v with no brake application. Each pound of pressure is equal to 0.1 volt. The 3 and 5 psi settings from the pressure switch is equivalent to 1.3v and 1.5v respectively.





Once updated press the blue “Program Module” button on the software and confirm the right side of the screen under current module values matches the inputs selected.

Apply brake pressure and make sure the relays click on. The TRCM function can be verified by checking for power coming out of the TRCM when the brakes are applied. Ground will be on the output side after the relays.