GTI SERVICE NOTE GTI 114

APRIL, 2014

DE-3020 Controller Channel 28 DIP Switch Setting

The GTI+ Bi-Fuel system utilizes two pressure sensors in the mixer gas inlet chamber, which surrounds the venturi. One sensor is dedicated to the DE-3020 controller and the other for the AGV5-2L. Each provides an industry standard 0-5V signal. One of these sensors feeds its signal to the AGV5 fuel valve, and the other connects to channel 28 of the DE-3020 controller. Unlike the earlier DE-3010, the new DE-3020 has configurable inputs that are set using DIP switches located under the Lexan cover of the controller.

For GPN2020 panels, serial number 1039 and below, it may be necessary to remove this Lexan cover and adjust the DIP switches, for Ch.28, as shown below. Once this is complete, the cover should be reinstalled and the commissioning process carried out per the GTI instructions and procedures. For GPN2020 panels starting with panel serial number 1040, these will be set at the factory to the default channel 28 DIP switch settings (analog). This change only affects the user interface for the commissioning engineer, and does not affect the function of the product. Any units already commissioned should be left in the current state, and it is the decision of the distributor if the change should be implemented. Just note that, for panel serial number 1040 and later, the numbers displayed on Ch.28 and the "S" value on the NEXT screen will look slightly different than what was previous.

Tools Required: Small Flat Screwdriver

Procedure:

- 1. Verify the GPN panel is not powered.
- 2. Disconnect the DB-25 cable from the terminal board (figure 1).
- 3. Remove the four terminal connectors and move them away from the terminal board.

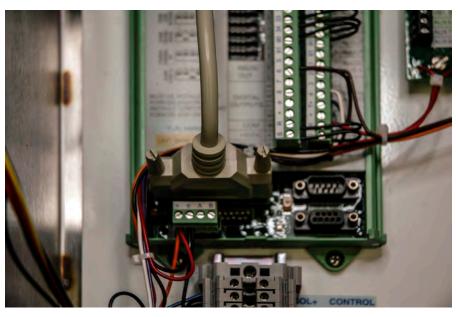


Figure 1



- 4. Remove the four round head screws securing the Lexan label to the terminal board (figure 2).
- 5. Carefully pull the center of the label up. This will cause the label to bend and the edges of the label will pull from the groove at the edges of the terminal board tray.
- 6. Before removing the label completely from the terminal board, note the switch position guide on the label. You will be instructed to change the switch positions for channel 28 to change the input type from a 4-20mA input to an analog input. Remove the terminal board and set aside.

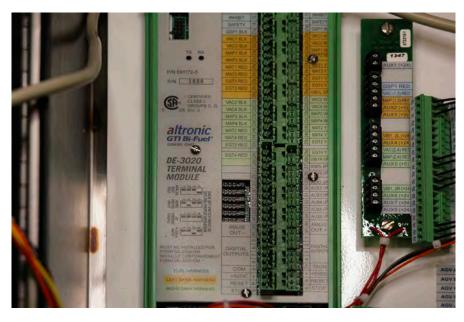


Figure 2

7. Channel 28 (AGV5 I/P) is the seventh switch package up from the power connector end of the terminal board. Using a small screwdriver or pointed tool, gently move switch position 3 to the up position or opposite the direction of the arrow on the switch package (figure 3).

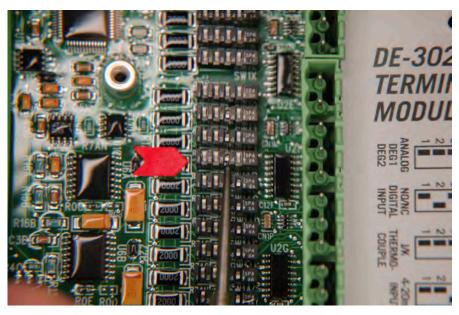
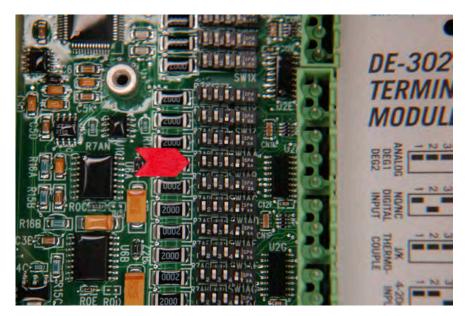


Figure 3

- 8. Gently move switch position 4 down or in the direction of the arrow (figure 4).

Figure 4





9. Channel 28 is now an analog input (figure 5).

Figure 5

10. Slide the Lexan label into the groove on the edge of the terminal board tray. Then slide the other two edges into the grooves (figure 6).



Figure 6

- 11. Secure the Lexan label with the 4 round head screws removed earlier (figure7).
- 12. Reconnect the DB25 connector (figure7).
- 13. Reconnect the 4 terminal connectors (figure 7)

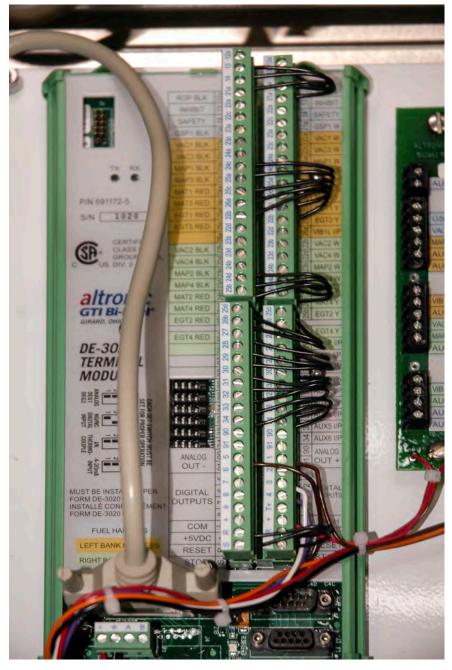


Figure 7

