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Intro: Programming Sensors With Wireless SmarTool

1. These instructions apply to all Valor CANbus–based TempTrac systems (Figure 1) using a Valor SmarTool updated to software version Pro 2.2 or higher.

2. Please check the software version of your hand held SmarTool by pressing the on/off button. The current firmware version of your SmarTool will display on the screen. It should match that shown in Figure 1A.
Main Menu

1. Once the SmarTool is turned on, the Start menu should be the same as that shown in Figure 2.

2. This is the home screen and it lists 7 possible selections as you scroll down the menu using the up/down arrow keys.

- Sensor 1/7
- Vehicle ID 2/7
- ID Learning 3/7
- Check ID 4/7
- Baseline 5/7
- Download 6/7
- System Set 7/7

Figure 2
System Setup

1. Your TempTrac Kit comes preprogrammed with two sensors in axle positions:

   6A (Temp Zone 1) and 6B (Temp Zone 2).

2. The following pages of instructions will assist you in programming up to 2 additional sensors.

3. By default the Valor SmarTool is set to 3 axles, to change this, scroll down the main menu to item 7/7 “System Set.” (Figure 3)

Please Note:

- Geotab firmware will only recognize Valor TempTrac sensors when programmed to axle 6.
- When the Valor SmarTool is turned OFF, the device will default back to 3 axles.
STEP 1

STEP 1 - Configure the SmarTool

To configure the SmarTool:

1. In main menu scroll to “System Set” (Item 7/7) (Figure 3).
2. Press ENTER
3. The Setting Menu will appear.
4. Using arrow key, scroll down to “Set Axle” (Figure 4)
5. Press ENTER
6. Using arrow key, scroll up to “Axle: 06” (Figure 5)
7. When you see “axle: 06” press the “ESC” button
8. This will return you to the “Setting” menu, press “ESC” again.
9. You should now be back at the main menu item 7/7.
STEP 2

STEP 2 - Read CANbus ID

1. Use the arrow down key on the SmarTool to position the arrow next to the “ID Learning” selection of the menu, item 3/7. (Figure 6)

2. Press ENTER

STEP 2.1

1. In the “ID Learning” sub-menu, select the “Read ID” option. (Figure 7)

2. Press ENTER
STEP 2

STEP 2.2

1. With “Vehic ID:” displayed on screen (Figure 8), position the SmarTool directly over the Valor CANbus transceiver and turn the power off and then back on. Alternatively, you can press the power interrupt switch on the harness. (Figure 12)

2. **DO NOT PRESS THE ENTER BUTTON** on the SmarTool, the Vehic ID number will populate automatically. (Figure 8A)
STEP 3 - Read Sensor ID/Set Positions

1. Before programming the sensor, you need to turn it on. On the back of the sensor is a recessed switch, slide the switch to the "on" position.

2. To assign sensor positions, use the arrow button and scroll down to select desired position (i.e. 6–A, 6–B, 6–C, etc.).

3. Note: position 6–A and 6–B should display the ID of the two preprogrammed sensors.

4. To assign a sensor to position 6–C, place the cursor next to 6–C: \(\text{Figure 9}\) and hold the sensor approx. 3 inches in front of the Valor SmarTool.

5. Press ENTER

6. A series of zeros will scroll across the display, the SmarTool will beep once when it locates the sensor. \(\text{Figure 10}\)

7. Once the SmarTool has located the sensor, it will display the ID number in the sensor position selected by the operator. \(\text{Figure 11}\)

8. Be sure to repeat this step for each temperature sensor being added. Position the cursor next to 6–D: using the down arrow button before repeating step 5.

9. Note: to re-position a sensor, simply select a slot (even if programmed), and read the sensor with the SmarTool. The new sensor ID will simply replace the previous one.

10. Once all the required Sensor ID numbers have been loaded, press the ESC key on the SmarTool to go back to the "ID Learning" menu. Return to the vehicle’s cab.
STEP 4

STEP 4 - Program Valor CANbus

1. Once in the cab of the vehicle, be sure you can access the programming switch located on the installation harness and the Valor CANbus transceiver. (Figure 12)

2. Using the SmarTool, scroll the cursor arrow to “ID Learning”, and press ENTER. Scroll down to the “Transmit” option and press ENTER. (Figure 13)

3. In the “Transmit” sub-menu, select the “Wireless” option. (Figure 14)

4. Reboot the Valor CANbus by pressing the programming switch located on the harness. The Valor CANbus transceiver will beep once. After hearing the beep, place the SmarTool directly over the Valor CANbus transceiver and press ENTER. (Figure 12)
STEP 4

STEP 4.1

1. The SmarTool will transmit the ID information to the Valor CANbus transceiver. “Transmitting” will appear on screen. (Figure 15)

2. Once the SmarTool has completed transmitting the information, the screen will display “Succeed.” (Figure 16)

3. If the SmarTool displays “Failed,” do not re-transmit, follow instructions in Step 5 to confirm if programming was completed. (Figure 17)
STEP 5 - Confirm Programming

1. After programming the new sensors, confirm that the correct ID numbers/positions were uploaded by checking the information in the menu option 4/7 “Check ID.” (Figure 18)

2. Turn your SmarTool OFF to clear the SmarTool memory.

3. Position the SmarTool directly over the Valor CANbus transceiver and turn the SmarTool back ON. The screen will display “Waiting Rec.” (Figure 19). Restart the Valor CANbus (power OFF and the back ON)

4. The SmarTool will display the sensor ID according to the position assigned during programming. (Figure 20)

Example:
6–C 01018E79
6–D 01016997