

Sensor Tester

**TSTS A03** 

#### Introduction

TSTS A03 allows fast checks of the sensor parameters in vehicle with tachograph. Tester has the ability to check sensors removed from the vehicle.

### **Technical data**

- LCD Display 12x2.
- USB connector for PC.
- Plug RJ-45 to connect sensor.
- Record of last test parameters.
- Operating temperature -20°... +70°C.
- Current measurement accuracy ±0,1[mA].
- Current measuring range 2...30[mA].

#### Contents

- 1) Start testing.
- 2) Test <PD>.
- 3) Test <PZ>.
- 4) Validation DIGITAL test.
- 5) Program ProgTSTS.

## 1. Start testing.

Connect the sensor before switching on the tester.



Sensor do not installed in vehicle.



Sensor installed In vehicle.

After pressing O, a heading TEST SENSOR and battery charge status and the version of tester program appears on the screen .

Start page:



Press right button  $\bigtriangleup$  the parameters of the last test can be read in memory. Left button  $\bigtriangleup$  selection of the test options.



2. **<PD>** - read data from the sensor and then measure the current consumption.



After selecting AVERAGING the automatic read will start and the following parameters of the sensor will be show.

- Reading serial number
- Reading pairing status (pairing with Digital or Analogue Tachograph)
- Reading sensor type
- Reading manufacture date

After displaying the above data, the current measurement will start.



A - maximum current value

B - minimum current value

 ${\bf C}$  – sensor line state (H-high, L-low). Maximum and minimum currents are set separately for two states of this line.

**D** - current measurement of the current flowing from the sensor. In case of a sensor mounted on the vehicle, this will be the current returning to the tachograph.

E – current measurement of current flowing to the sensor. In case of a sensor mounted on the vehicle, this will be the current coming out of the tachograph.



F - recording time of current measurement (max 5 minutes)

At any time while pressing the buttom  $\bullet$ , the measurement will be stopped, the results will be saved and the device will shut down.

3. <PZ> - Measure the short-circuit current of the signal line.



When the sensor's signal line is in a high short-circuit state to the mass, that will cause the current flow, and will be displayed. In case of low short-circuit state, the current should not flow.



Make a test **<PZ>** on a moving vehicle. If the sensor works correctly, after some time, tachograph will display error (of cable, etc.).

### 4. Validation DIGITAL test.

# 5. Program ProgTSTS.

The program is available on the website:

http://www.bogart.pro/download

After installation of the program, connect tester TSTS A03. During the first connection to computer wait until the system installs the drivers. The program will start after correct connection with the computer. Program will download and display the serial number of TSTS and the chosen language(can be changed later):

						- • ×
ProgTSTS v1.02.005						000000
Testing device Number:170606J004	Type:TSTS Rev.A03	⊖ Polish ⊙ English	Read	Print		
MOTION SENSOR TEST						
Name of the exec ZIP code: City: Street: ID:	Sutor — — — — —	Sensor number: Pairing: Type: Manufacture date	— Maxia — Minin — Maxia — Minin	num current(H) [mA]: num current(H)[mA]: num current(L) [mA]: num current(L)[mA]:		
<u>15m4</u>						
10m4						
<u>5mA</u>						
Czas	1 min	2min	3min	4min		

After pressing "Read" data from the last test will display by the device. Example:

