

## Technical Service Bulletin

Date	Page(s)	Models	Shipping	Version
11.2018	2	ST1x, ST2, ST2s, ST3, ST5	All dealers All markets	1.0-2018

### 1. PURPOSE

Recently, we have seen an increased number of errors which could be caused by defective Wicket Cables (battery connector). For this reason we offer a small but effective diagnose tool to check if the Wicket cable is really defective. With this we hope to reduce the number of wrong replaced parts and to resolve errors quicker.

### 2. AFFECTED MODELS / TYPES

All ST1x, ST2, ST2s, ST3 and ST5 from all modelyears.

All Stromers with the Rosenberger Energybus connector.



### 3. SITUATION

Possible errors:

- The horn, brakelight and light do not work
- Error codes: 210002, 210003, 21000b, 21000c en 210280

Result errors:

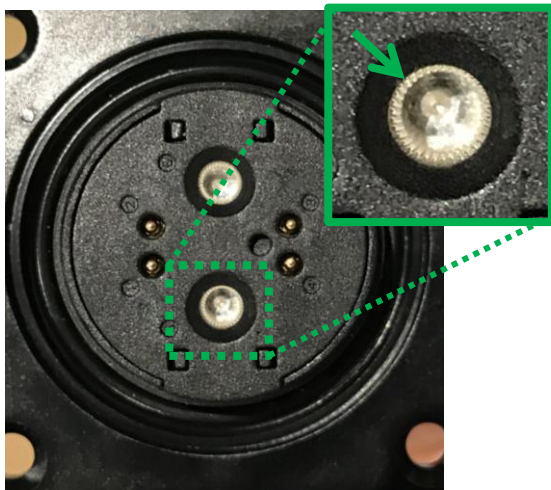
- The OMNI can't be started (12V circuit)
- CAN-bus errors (can-bus pin)
- Battery percentage is displayed as 0% or NA with a loaded battery

When one or more of the errors above occurs it doesn't definitely have to be the part you normally expect. In some of these cases it seems that the wicket cable is the cause for this. In the two thick connections are small springs which make contact with the two 48V pins from the battery.

Some of these springs are damaged and result in a bad connection with the battery. For this reason these connections need to be checked.

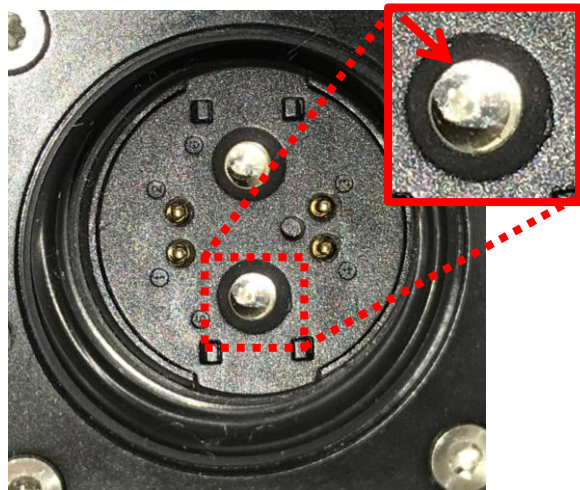
## Good contact

- Spring is good visible.
- 48V Pin will be clamped by the spring.



## Damaged contact

- Spring almost invisible.
- 48V Pin will have some tolerance and will make bad contact.



## 4. PROCEDURE

Together with this writing you receive a small pin. This pin has the exact same thickness as the 48V pins from the battery. Please save this pin with care.

Purely on sight it is impossible to make a confident diagnosis, but with this pin in the following test it will be possible to do this.

1. Take out the battery
2. Carefully push the pin in the 48V connection of the Wicket Cable
3. When you carefully pull out the pin the difference becomes clear:

**Good contact:** The pin is held by the spring and you will feel a small resistance when pulling out.

**Damaged contact:** The pin has a small tolerance and can be pulled out without any resistance or can even fall out of the connection by itself.

4. Repeat the steps for the second pin
5. When one or both of the springs are damaged the Wicket Cable has to be replaced.

Please make sure that the wicket cable is in good condition (good or replaced) before going on with your normal diagnosis.