

Instruction Data Sheet



FKT 12V

Battery Checking Device

Safety Rules

This instruction sheet must be read with particular attention to the safety rules listed in the TX2000 instruction manual 07900-00759 and to the following safety rules, by any person operating the battery checking device or handling the batteries.

- 1 Do not use the battery-checking device outside the design intent.
- 2 Do not use batteries with this device other than those that are recommended and supplied by Avdel UK Limited.
- 3 The battery-checking device must be maintained in a safe working condition at all times.
- 4 The battery-checking device must at all times be operated in accordance with the relevant health and safety legislation. Any question regarding the correct operation of the device and operator safety should be directed to your local Avdel UK Limited company or authorised representative.
- 5 Ensure that vent holes do not become blocked or covered.
- 6 Do not operate the device in an environment allowing exposure to moisture, rain, combustible fluids or gasses.
- 7 Regularly check the battery-checking device and in case of damage have repairs completed by an authorised Avdel representative.
- 8 Do not discard batteries into water or fire, (danger of explosion). The battery must be disposed of in accordance with environmental regulations.

Features

Device for analysing the charge capacity, temperature and condition of Avdel® 12V Ni-Cd and Ni-MH Battery Packs.

- **Battery Capacity Level**
 - A coloured LED scale on the top of the unit indicates the level of charge remaining in terms of a percentage and a voltage value.
 - The battery capacity level can also be monitored in a loaded condition.
- **Battery Voltage**
 - Green LED indicates whether the battery voltage is greater than 10V, less than 10V or less than 3V.
 - If the green LED indicates that the battery voltage is less than 3V this is a good indication that the battery has reached the end of its life or is defective.
- **Battery Temperature**
 - Red LED indicates whether the battery is at the optimum temperature for charging, is too hot or cold for charging or defective.
- **Battery Condition**
 - If either the green or red LED do not emit a signal this is a good indication that the battery has reached the end of its life or is defective and therefore requires replacing.

Benefits

- Enables the user to determine the remaining charge level of the battery in both an unloaded and loaded state and therefore determine whether the battery requires re-charging prior to use.
- Enables the user to optimise the life of the battery by charging from the correct level. The optimum battery cycle life is achieved when the battery is re-charged from a capacity greater than 10% and less than 60%.
- Enables the user to charge the battery at the correct temperature. Leaving the battery within the checking device will also cool the battery to the correct temperature within 5 to 10 minutes.
- Enables the user to identify batteries that are at the end of their life cycle or defective, requiring replacement.

Specifications

PART NUMBER	•			•	71600-10200	
FUNCTION 1	•	Battery Capacity Level	•	10% TO 100%	•	10 V TO 13 V
FUNCTION 2	•	Battery Voltage	•	10V < V < 10V	•	V < 3V (Faulty)
FUNCTION 3	•	Battery Temperature	•	Temp. OK	•	Too Hot / Cold
FUNCTION 4	•	Battery Condition	•	Faulty	•	Replace Battery
BATTERY VOLTAGE	•	Suitable For Testing Avdel	•	12 V	•	
BATTERY TYPE	•	Suitable For Cell Chemistry	•	Ni-Cd	•	Ni-MH
KEY DIMENSIONS	•	L = 153 mm	•	W = 85 mm	•	H = 75 mm
WEIGHT	•		•	0.440 kg	•	0.97 lb

Intent of Use

The battery checking device FK12 in combination with the TX2000 tool is designed for analysing the charge capacity, temperature and condition of Avdel® 12V Ni-Cd and Ni-MH battery packs.

IMPORTANT

The battery checking device and batteries must be used in accordance with the operating and safety instructions contained within this instruction data sheet. The use of batteries, other than those recommended and supplied by Avdel UK Limited could have a detrimental impact on the operation of the checking device and could invalidate the warranty.

Operating Procedure

- Insert the battery correctly into the device with minimal force.
- Once the battery is inserted a coloured LED scale on the top of the unit, and red and green LEDs at the front of the unit will light-up. Inspection of these LED signals can be used to establish the state of the battery.
- A cooling fan will also operate as soon as the battery is inserted.
- **Battery Capacity Level**
 - The coloured LED scale on the top of the unit, running from red to green, indicates the level of charge remaining in terms of a percentage and a voltage value. A green LED indicating that the battery is fully charged and a red LED indicating that the battery is discharged. The label positioned on the top of the unit will aid the evaluation of the battery's capacity.
 - The battery capacity level can also be monitored in a loaded condition. Pressing the green button on the top of the unit will subject the battery to an 8A load for a period of 10 seconds. Testing when loaded provides a more representative indication of the battery capacity when in use.
 - If the checking device indicates that the remaining charge capacity of the battery is less than 30% it is recommended that the battery be re-charged before starting. However, the operator should make this decision based on experience with the unit, the battery and tool performance within the application.
- **Battery Voltage**
 - The Green LED signal at the front of the unit indicates the following:
 - Constant Signal - Battery voltage is greater than 10V. Battery condition is healthy.
 - Flashing Signal - Battery voltage is less than 10V. The more rapid the flash the lower the voltage. Battery should be recharged.
 - No Signal - Battery voltage is less than 3V. Battery is defective.
 - If the green LED indicates that the battery voltage is less than 3V this is a good indication that the battery has reached the end of its life or is defective. If this occurs the battery should be replaced.
- **Battery Temperature**
 - The Red LED signal at the front of the unit indicates the following:
 - Constant Signal - Battery is at the optimum temperature for charging. The best possible charge capacity can be achieved when charging at this temperature.
 - Flashing Signal - Battery temperature is too hot or cold for charging. The battery should be allowed to cool or warm up to the optimum temperature before charging.
 - No Signal - Battery is defective. The battery should be replaced.
 - If the battery is too hot, leaving the battery within the checking device will cool the battery to the correct temperature within 5 to 10 minutes, using the in built fan.
- **Battery Condition**
 - If either the green or red LED do not emit a signal this is a good indication that the battery has reached the end of its life or is defective and therefore requires replacing.

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Manual No.	Issue	Change Note No.	Date
07900-00829	AA	03/002	03-03
	AB	07/176	05-07