

# SHARK 4ZONE ATV LOCK-ON HEATED GRIPS with THUMB WARMER

Product Code: 800-01-041



## **USER INFORMATION & INSTALLATION INSTRUCTIONS**

Thank you for purchasing SHARK Heated Grips. SHARK Lock-On 4Zone Heated Grips with integrated controls are designed for easy installation on thumb-operated vehicles such as ATVs and snowmobiles. They are not intended for motorcycles and vehicles with twist throttle control. The grips offer 5 levels of heat, Heat Setting Memory function and the possibility to control a total of four heated devices. Thermistor in each grip helps to maintain a constant heat level.

## IMPORTANT!

- Heating is designed to fit most ATVs and snowmobiles with 12V electrical system and 22mm diameter handlebars. Heating must be installed and used in accordance with the instructions.
- Read all instructions carefully before installation and using, and follow the information carefully.
- For correct and safe operation of the heater, we recommend installation to be carried out by a qualified service technician.
- The manufacturer, distributor, or dealer will accept no liability for any damage resulting from improper installation or improper use of the product, or using of the product contrary to the instructions.
- Unauthorized or unprofessional installation, tampering or modification of the equipment poses the risk of damage to the equipment, vehicle electrical installation or the vehicle itself.
- Do not leave the vehicle unattended when the heated grips are turned on. Switch off the grips when you stop the vehicle.
- For safe operation, we recommend to connect the heating via the vehicle's main ignition switch so that the heating switches off when the ignition is switched off. Otherwise, if heating is connected directly to the battery, there is a risk of battery discharge if you forget to switch the heater off.

## **TECHNICAL DATA**

- For 22 mm handlebars
- 12 Volt systems only
- 5 heating intensity levels
- Power: Grips 40W (2x 20W) / Thumb 5W
- Current Drain: Grips 3.3A (total) / Thumb 0.4A
- Grips length: 130 mm
- WATERPROOF CONNECTORS
- Fuse 7.5 A, protection against overvoltage and reverse polarity

## **PARTS LIST**

- 2 Heated SHARK Lock-On Grips
- 1x Thumb Warmer
- Electronic control unit with complete wiring
- No. 2.5 Allen key for tightening the grips
- Mounting material
- · Heat shrink tubing for thumb warmer
- Zip ties

## INSTALLATION OF THE GRIPS

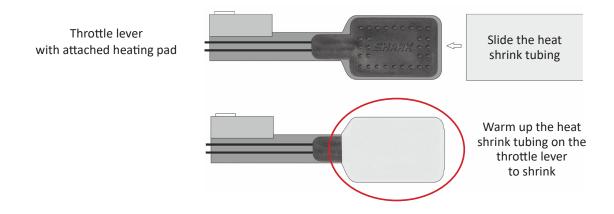
- 1. Remove the existing grips from the handlebars. If you have hand guards mounted on your handlebars, remove them first.
- 2. Clean the handlebar ends of all glue, residues and dirt. Smooth off any raised ridges with a file or sandpaper, and degrease the handlebars thoroughly.
- 3. If installing grips in combination with hand guards, first remove the Lock-On end caps from the outer clamps, see picture (2).
- 4. Loosen the screws on Lock-On clamps and slide the grips onto the handlebars with grip wires facing towards the machine.
- 5. Adjust the correct position of the grips: mount the vehicle and position the grips so that the control buttons can be operated comfortably with your thumbs.
- 6. Tighten both grips with the supplied Allen key (do not forget to tighten both clamps, see Fig. ①). If necessary, the handlebar surface can be roughened with sandpaper under the clamps for better adhesion. Check that grips are firmly locked onto the handlebars and do not twist.



## THUMB WARMER INSTALLATION

- 1. Peel the protective backing from the backside of the self-adhesive heating pad and stick the pad to the throttle lever from the front, towards the driver.
- 2. With heating pad glued on, slide the heat shrink tubing onto the throttle lever. Cut the tubing so that it overlaps the heating pad, covers the throttle lever and after shrinking will not hinder movement of the lever. Heat the shrink tubing with a heat gun, hair dryer or gas lighter to shrink. Avoid local overheating, take care not to burn the shrink tubing or the heating pad.
- 3. Secure the electrical cables to the throttle lever with zip tie, then run the thumb warmer cables along the handlebars and secure them to the handlebars with zip ties. Important: Be sure to leave enough slack in the cables when moving the throttle lever, the cables must not be stretched to avoid pulling tension.

**Note:** The thumb warmer is already connected to the wiring harness from the factory.



# **CONNECTION OF OTHER HEATED ACCESSORIES**

This heating allows you to add two other heated accessories, such as heated vest, heated shoe insoles, a separately heated passenger seat, etc. Connector (2) is already provided for these accessories, see picture on page 3. If any of your heated devices has a different type of connector, the wiring will need to be modified by changing the connector on the device, or by removing both connectors, or by connecting the cables with another suitable connector.

## **ELECTRICAL WIRING**

Thanks to the pre-wiring, electrical connection of the SHARK 4ZONE Heated Grips is easy.

- 1. Disconnect both battery terminals first disconnect the negative (- black) terminal and then the positive (+ red) one.
- 2. Measure the sufficient cable length and select suitable location for the electronic control unit. Place the control unit so that it will be protected from water and mud, on the place without risk of damage during operation.
- 3. Secure the cables with the zip ties, but do not tight them for now, leave the cables free. Make sure that cables are not pinched, have sufficient slack all along their length, and that the cables aren't/ won't be too tight anywhere.
- 4. Double check the cable wiring for sufficient slack by turning the handlebars to their full stop positions in both directions. The cables must not be stretched or strained in any way when moving the handlebars. Ensure that there is sufficient slack between the handlebars and the electronic control unit to allow free movement of the handlebars.
- 5. If your vehicle is equipped with a dedicated accessory connector controlled by the ignition switch (Accessory outlet), the heating can be plugged into this connector either directly, or with a suitable connector adapter, or by changing both connectors if they are different. If your vehicle is not equipped with an Accessories connector, disconnect the heating power supply male/female connector and connect the female part of the connector so that the red cable of the heater is connected to the +12 V cabling controlled by the main ignition switch (or use a switched relay). (If the attached cable fork terminal cannot be used, remove it and use another suitable terminal). Connect the black cable to the vehicle's ground wire\*.

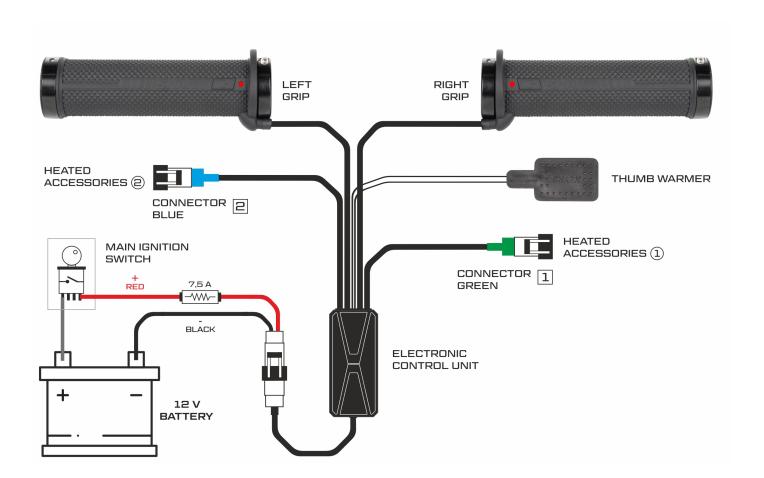
#### \*Note:

Do not connect the electrical circuit (black wire) to the vehicle frame, but only to the negative terminal of the battery. A good grounding connection is important for proper and safe operation of the heating.

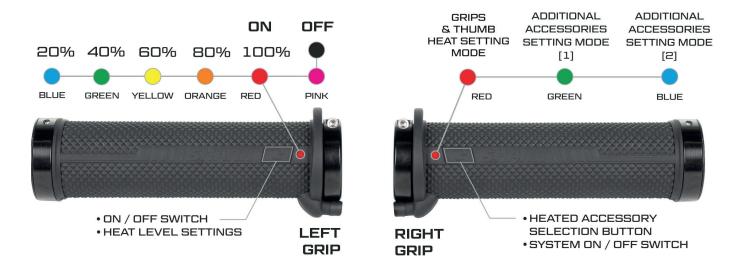
#### Warning:

We do not recommend to connect heated grips directly to the battery. If you forget to turn off the grips after stopping the engine, the battery could be drained.

6. Finally, reconnect the battery (positive (red) terminal first, then the negative (black) terminal), and test the whole system according to the instructions in the chapter Grips Control on page 4. If everything works properly, secure the cables to the handlebars / vehicle firmly by zip ties. Double check, that cables can't be torn or damaged during operation.



## **GRIPS CONTROL**



Switch on the ignition with the ignition key. Thanks to the memory function, the grips will remember the last setting you used and return to that setting when the vehicle is restarted.

**To switch on the grips:** Briefly press the  $\bigcirc$  button on the right grip.

Switching off the grips: Hold the G button on the right grip longer until the grips and all connected devices are switched off.

The LEDs on both grips will be red when first switched on. A red LED on the right grip means you are in the heated Grips/Thumb setting mode. A red LED on the left grip means that the heating intensity is set to 100%. The next time the ignition is switched on, the LEDs will be as they were when the ignition was switched off.

# Controls on the right grip

The  $\bigcirc$  button on the right grip switches the entire system on and also allows you to toggle between the individual heated devices. If you want to adjust the heating intensity of the grips and the thumb, press the right grip button until the LED turns red. The left grip will then switch to the grip and thumb heating intensity setting.

The G button on the right grip allows you to toggle between heated devices (even if you do not have any connected).

Heating control of grips and thumb:

Heating control of other heated accessories (1):

Heating control of other heated accessories (2):

LED is GREEN

LED is BLUE

# Controls on the left grip

On the left grip, you can use the button to adjust the heating level of the grips/thumb and other heated devices. If the LED is red, the heating level is set to 100% heat setting. Press the button again to reduce the heating intensity to 80%, and the LED will turn orange. With each subsequent button press, the heating intensity will decrease progressively to 60% (yellow LED), 40% (green) and 20% (blue). If you then press the left grip button again, the heating of the grips and thumb will switch off completely, the LED will change color to pink, briefly flash and then goes out. Other connected devices remain switched on with selected settings.

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