



## Accessory Fitting Instructions

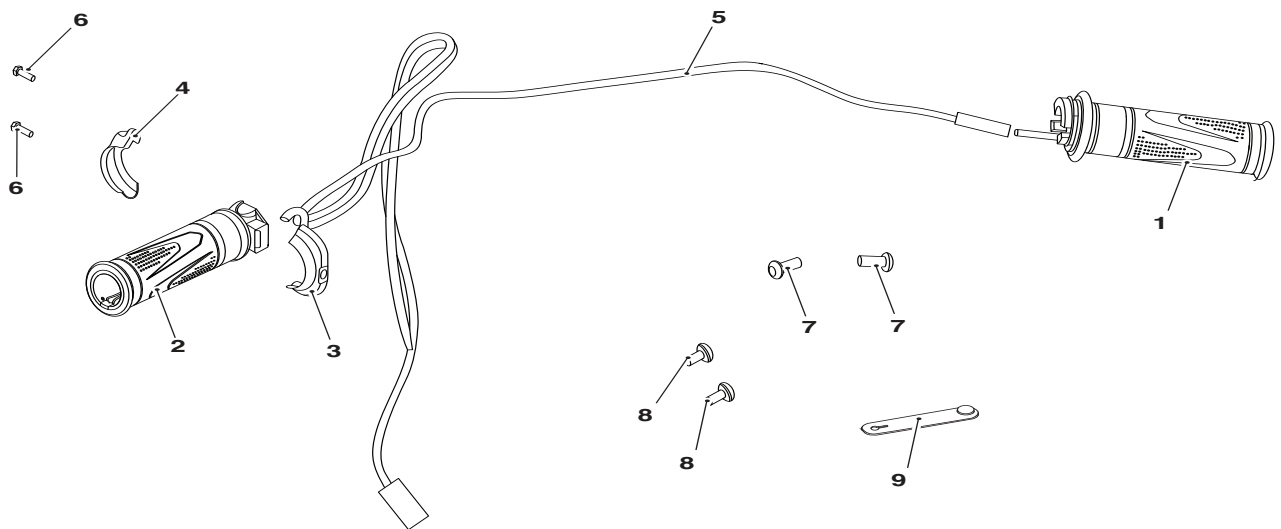
Heated Grip Kit	
Kit Number	Models Affected
A9638337	Tiger 850 Sport

Thank you for choosing this Triumph genuine accessory kit. This accessory kit is the product of Triumph's use of proven engineering, exhaustive testing, and continuous striving for superior reliability, safety and performance.

Completely read all of these instructions before commencing the installation of the accessory kit in order to become thoroughly familiar with the kit's features and the installation process.

These instructions should be considered a permanent part of your accessory kit, and should remain with it even if your accessory equipped motorcycle is subsequently sold.

### Parts Supplied



1.	Heated grip, right hand	1 off	6.	Screw, M3 x 12 mm	2 off
2.	Heated grip, left hand	1 off	7.	Screw, M6 x 16 mm	2 off
3.	Front switch housing	1 off	8.	Screw, M5 x 12 mm	2 off
4.	Rear switch housing	1 off	9.	Rubber strap	1 off
5.	Subharness	1 off			

**Warning**

Fit only genuine Triumph accessories to those models approved by Triumph as listed in the associated Triumph fitting instructions. The accessory kits covered in this instruction are designed for use on specific models of Triumph motorcycle. The accessory kits and the models applicable are listed at the start of the instruction. They should never be fitted to any other Triumph model or to any other manufacturer's motorcycle. Fitting an accessory kit to a Triumph model not listed, or to any other manufacturer's motorcycle will affect the performance, stability and handling of the motorcycle. This may affect the rider's ability to control the motorcycle and could result in an accident causing severe injuries or death.

**Warning**

Always have Triumph approved parts, accessories and conversions fitted by a trained technician of an authorised Triumph dealer. The fitment of parts, accessories and conversions by a technician who is not of an authorised Triumph dealer may affect the handling, stability or other aspects of the motorcycle's operation which will result in loss of motorcycle control and an accident.

**Warning**

Always ensure that the newly installed wiring does not chafe against other parts of the motorcycle such that it may be rubbed through and cause an electrical problem. In addition, always ensure that the newly installed wiring will not restrict steering movement. Both conditions are hazardous and could give rise to a dangerous riding condition resulting in a fire, loss of motorcycle control and an accident.

**Warning**

Throughout this operation, ensure that the motorcycle is stabilised and adequately supported to prevent risk of injury from the motorcycle falling.

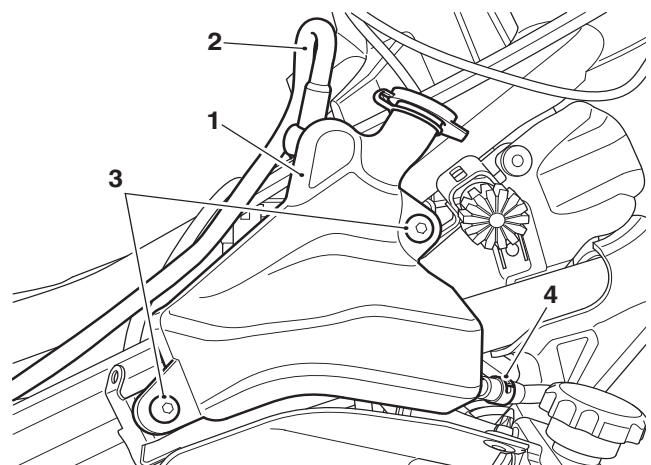
**Warning**

A torque wrench of known accurate calibration must be used when fitting this accessory kit. Failure to tighten any of the fasteners to the correct torque specification may affect motorcycle performance, handling and stability. This will result in loss of motorcycle control and an accident.

**Note:**

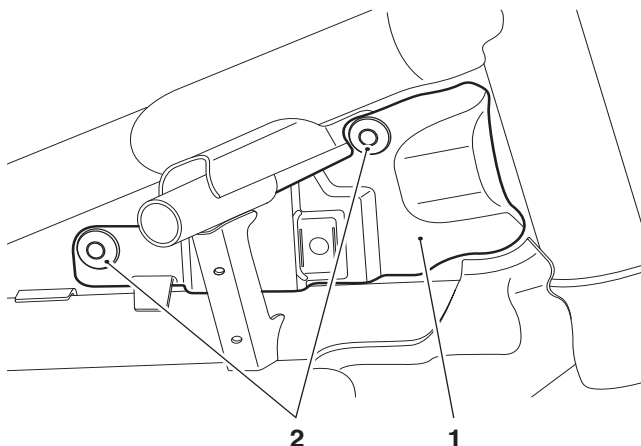
- **Triumph offers a broad range of approved genuine accessories for your motorcycle. We cannot therefore cover all possible equipment variations in these instructions. For removal and installation of Triumph Genuine Accessories always refer to the instructions supplied with the respective accessory kit. To obtain additional copies of any Triumph accessory instructions, visit [www.triumphinstructions.com](http://www.triumphinstructions.com) or contact your authorised Triumph dealer.**

1. Remove the seat, as described in the Service Manual.
2. Disconnect the battery as described in the Service Manual.
3. Remove the fuel tank, as described in the Service Manual.
4. Supporting the coolant expansion tank, remove the fixings that secure the coolant expansion tank to the frame. Discard the fixings. Do not disconnect the expansion overflow hose or remove the hose clamp.



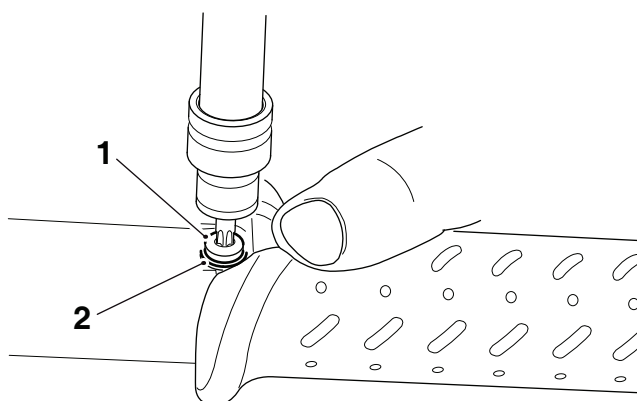
1. Coolant expansion tank
2. Expansion overflow hose
3. Fixings
4. Hose clamp

- With the coolant expansion tank supported, remove the right hand side harness retention moulding by releasing the retaining clips behind the coolant expansion tank.



- Harness retention moulding (right hand shown)
- Retaining clips

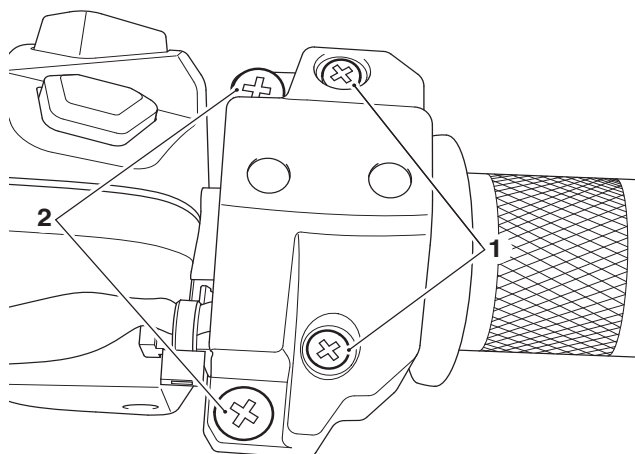
- Remove the left hand side harness retention moulding by releasing the retaining clips.
- Disconnect the heated grip connector from the left hand side harness retention moulding.
- Undo and remove the left hand side handlebar end weight fixing and remove the handlebar end weight. Repeat for the right hand side. Retain the fixings and bar end weight for reuse.
- Remove the left hand handlebar grip by removing the fixings as shown. Retain the fixings and washers for reuse. Retain the grip for reuse if the motorcycle is to be returned to its original condition.



- Fixing (one of two shown)
- Washer (one of two shown)

**Note:**

- The anti-tamper fixings on the twist grip housing must not be loosened or removed.
  - If the anti-tamper screws have been loosened or removed any warranty claims for the twist grip housing will not be honoured.
- Remove the twist grip from the right hand side of the handlebars, as described in the Service Manual. Retain the twist grip for reuse if the motorcycle is to be returned to its original condition.



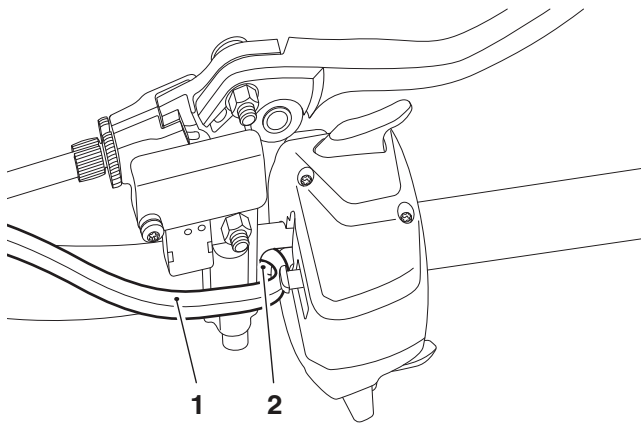
- Anti-tamper fixings
- Fixings

## Installation

11. Feed the longer subharness lead through the routing hole in the handlebar by the left hand side switch housing. The longer subharness lead is to be routed through the handlebar towards the right hand side and out through the open end of the handlebar end weight mounting.

### Note:

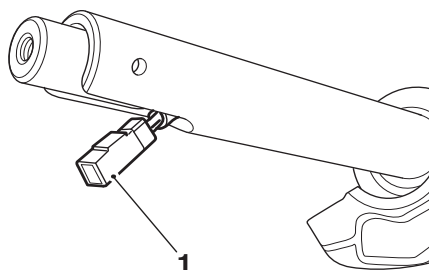
- To gain full access to the hole on the left hand side of the handlebar, it may be necessary to partially remove the left hand side switch housing, as described in the Service Manual.



### 1. Subharness

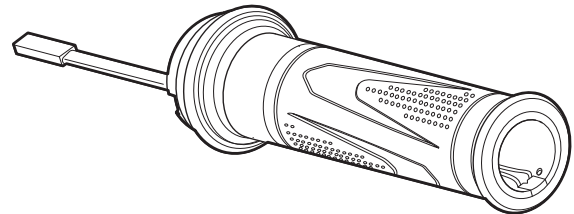
### 2. Routing hole

12. Feed the shorter subharness lead through the routing hole in the handlebar by the left hand side switch housing. The shorter subharness lead is to be routed through the handlebar towards the left hand side and out through the open end of the handlebar end weight mounting.



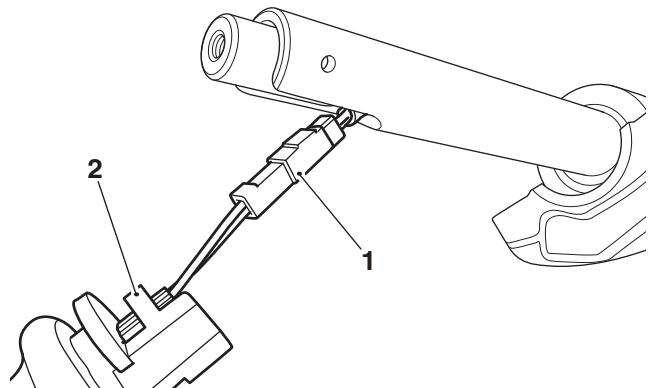
### 1. Electrical connector

13. Route the electrical connector of the heated twist grip through the heated grip as shown. Repeat for the left hand heated grip.



## Left Hand Side

14. Connect the heated grip harness connector to the left hand heated grip electrical connector on the subharness lead.



### 1. Heated grip subharness connector

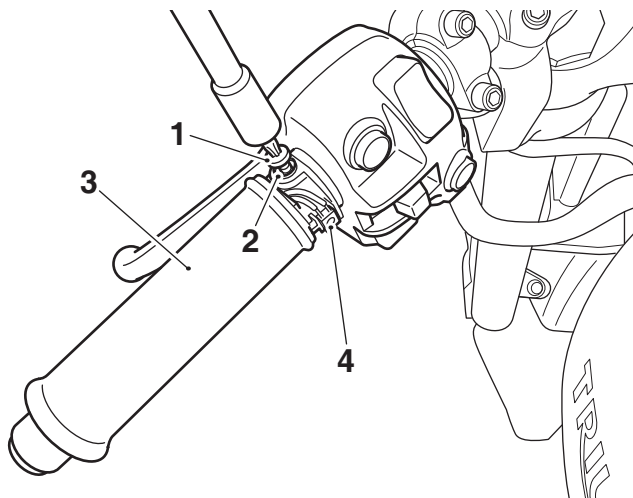
### 2. Heated grip connector

## Caution

A wiring harness which becomes trapped or kinked during installation, or general motorcycle operation, may result in wiring harness damage and electrical malfunctions.

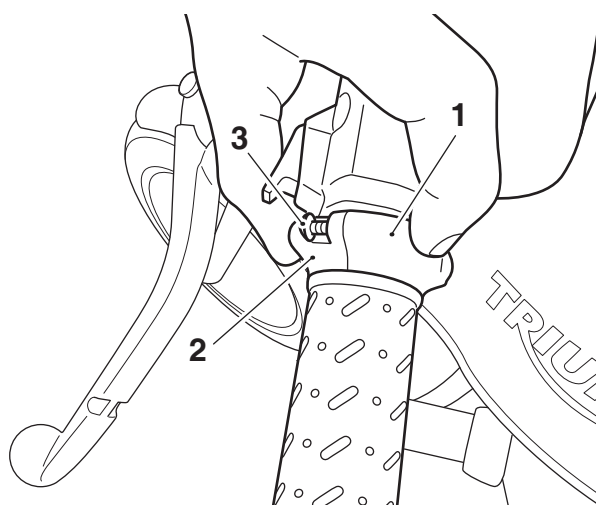
15. When fitting the grip onto the handlebar, carefully pull the harness back through the handlebar making sure the harness/heated grip connection is positioned into the handlebar.
16. If the switch housing was partially removed, reinstall the switch housing as described in the Service Manual.

17. Make sure the grip is in the orientation shown below with the switch contacts facing the rider. Secure the new grip with the original pan head self-tapping screws and washers. Tighten the fixings to **3 Nm**.



1. Screw, pan head self-tapping (one of two shown)
2. Washer (one of two shown)
3. Heated grip
4. Switch contacts

18. Fit the front and rear switch housings on to the heated grip using the M3 screws provided in the kit. Tighten the screws to **0.5 Nm**.

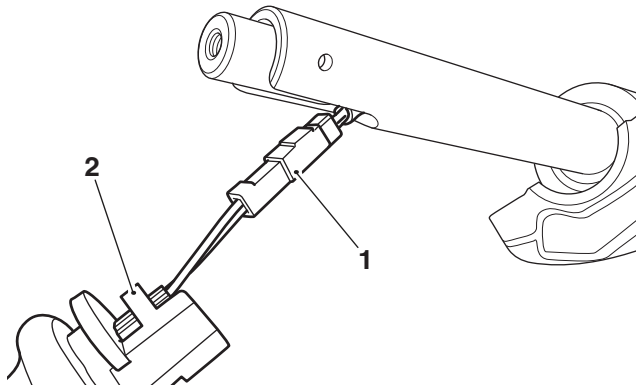


1. Front switch housing
2. Rear switch housing
3. Screw, Torx head self-tapping (one of two shown)

19. Refit the left hand side handlebar end finisher and fixing. Tighten the fixing to **6 Nm**.

#### Right Hand Side

20. Connect the heated grip harness connector to the right hand heated grip electrical connector on the subharness lead.



1. Heated grip harness connector
2. Heated grip connector



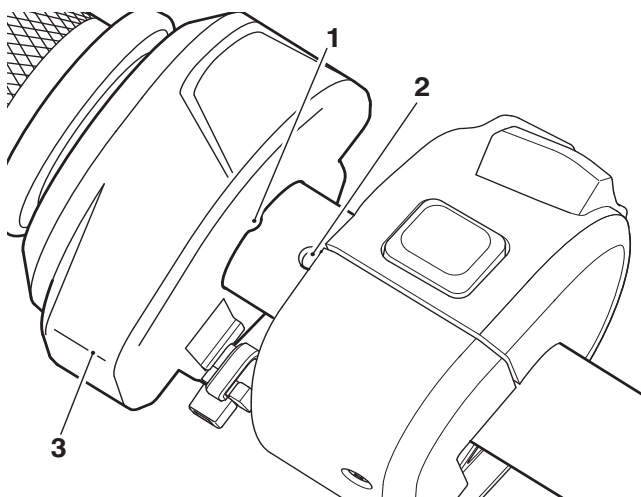
#### Caution

A wiring harness which becomes trapped or kinked during installation, or general motorcycle operation, may result in wiring harness damage and electrical malfunctions.

#### Note:

- The method of fitting the right hand heated grip (twist grip) to the twist grip position sensor and handlebars is the same as that for the original twist grip, as described in the Service Manual.
21. When fitting the grip onto the handlebar, carefully pull the harness back through the handlebar making sure the harness/heated grip connection is positioned into the handlebar.
  22. Make sure there is enough slack in the wires for the twist grip to rotate and the wires not to become trapped.

23. Fit the twist grip housing. Make sure the locating plug fits into its hole on the handlebar.

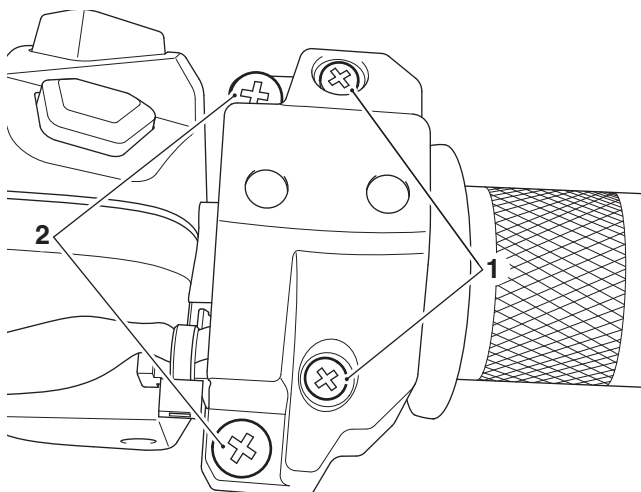


1. Locating plug
2. Hole
3. Twist grip housing

24. Fit and tighten the fixings, upper one first, to **2.5 Nm**.

**Note:**

- The anti-tamper fixings on the twist grip housing must not be loosened or removed.
- If the anti-tamper screws have been loosened or removed any warranty claims for the twist grip housing will not be honoured.



1. Anti-tamper fixings
2. Fixings

**Warning**

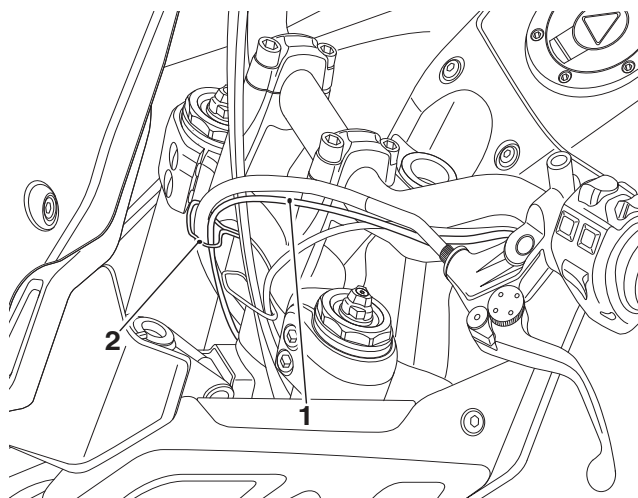
Check the operation of the right hand heated grip (twist grip). Ensure that the rearward and forward movement of the grip is smooth, without tightness and will return to the throttle closed position when released.

A tight or stuck twist grip may lead to loss of motorcycle control and an accident.

25. Carefully check that the twist grip rotates smoothly through its full range of movement, and is not restricted in any way. If any tightness or resistance is felt, check and rectify the cause before riding the motorcycle.
26. Make sure the throttle is fully closed, and the electrical cable inside the twist grip has adequate slack to allow correct throttle operation.
27. Refit the right hand side handlebar end finisher and fixing. Tighten the fixing to **6 Nm**.

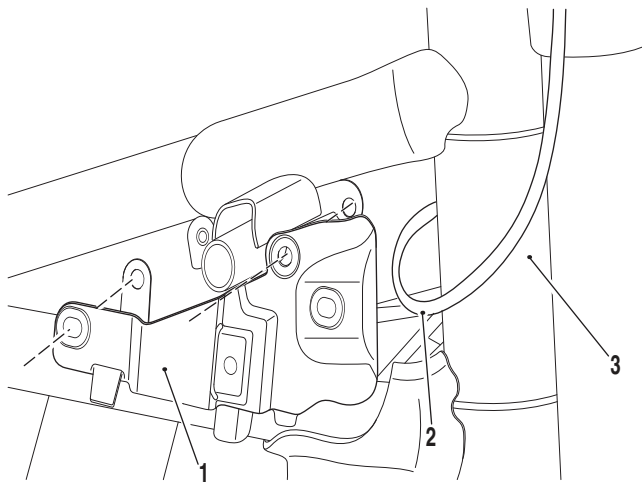
**Connecting the Heated Grip Subharness**

28. Route the heated grip subharness through the cable guide on the headstock.



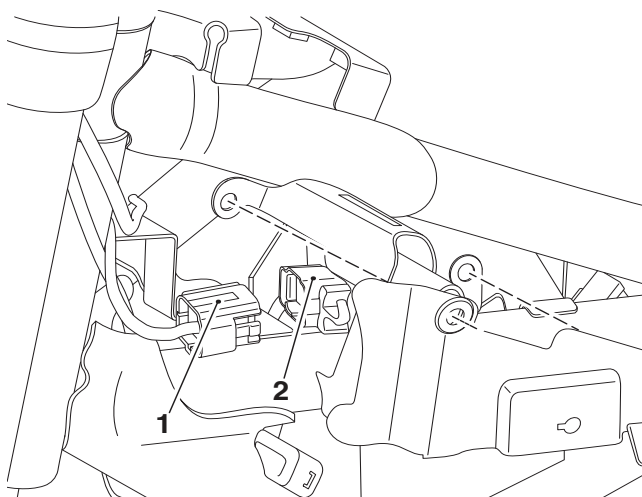
1. Heated grip subharness
2. Cable guide

29. The heated grip subharness should be routed to the right hand side of the headstock and behind the right hand side harness retention moulding as already removed (in step 5).



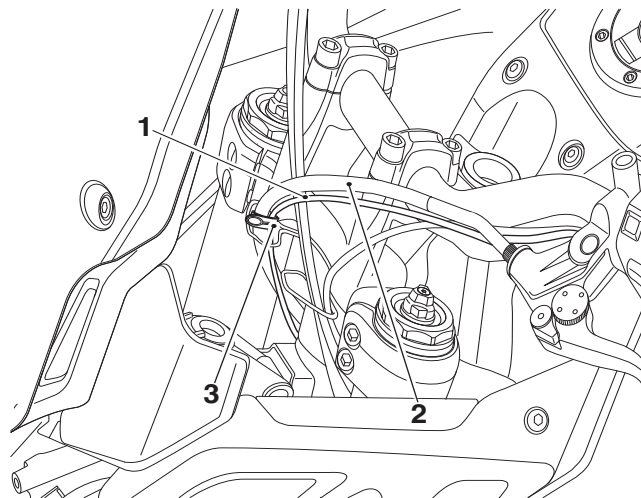
1. Right hand side harness retention moulding
2. Heated grip subharness
3. Headstock

30. Route the subharness behind the headstock until the subharness connector exits the left hand side of the headstock.
31. Identify the heated grip connector on the main wiring harness (already removed from the left hand side harness retention moulding) and remove the blanking plug. Retain the blanking plug if the motorcycle is to be returned to its original condition.
32. Connect the heated grip subharness connector to the heated grip connector.



1. Heated grip subharness connector
2. Heated grip connector

33. If there is no rubber strap on the motorcycle, use the rubber strap provided to secure the heated grip subharness to the clutch cable, as shown.



1. Heated grip subharness
2. Clutch cable
3. Rubber strap



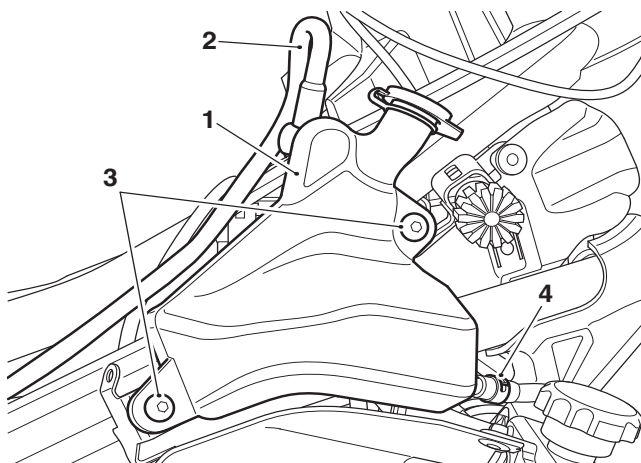
### Warning

Move the handlebars to the left and right full lock while checking that the cables and harness do not bind. A cable or harness that binds will restrict the steering and may cause loss of motorcycle control and an accident.

34. Refit the heated grip connector to the left hand side harness retention moulding.
35. Refit the left hand side harness retention moulding.
36. Refit the right hand side harness retention moulding.



37. Refit the coolant expansion tank using the M5 fixings supplied in the heated grip kit. Tighten the fixings to **3 Nm**.



- 1. Coolant expansion tank**  
**2. Expansion overflow hose**  
**3. Fixings**  
**4. Hose clamp**

38. Refit the fuel tank, as described in the Service Manual using the M6 fixings supplied in the heated grip kit. Tighten the fixings to **3 Nm**.
39. Reconnect the battery as described in the Service Manual.
40. Refit the seat, as described in the Service Manual.

## Heated Grip System Testing



### Warning

Never start the engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate the motorcycle in the open-air or in an area with adequate ventilation.

1. Start the engine and allow to idle to avoid discharging the battery.
2. Switch on the heated grips and check that the temperature of the heated grips increases.
3. Fuse number 2 within fuse box 1 protects the heated grip circuit. Refer to the label in the fuse box lid for fuse amperage.

## Operation

The heated grips work when the ignition is switched on. However, it is recommended that they are only used when the engine is running to avoid draining the battery.

The heated grips have three operating modes: HIGH, MEDIUM and LOW. Press the heated grip button and the status will be shown on the display screen as a heated grip symbol in different colours, as described below:

- Press once - HIGH:  
RED symbol with 3 dots.
- Press twice - MEDIUM:  
ORANGE symbol with 2 dots.
- Press three times - LOW:  
YELLOW symbol with 1 dot.

To switch OFF the heated grips, press and release the button until a GREY heated grip symbol is shown in the display screen. After three seconds, the heated grip symbol will disappear from the display screen. The heated grips are also switched off when the ignition is switched off.

For maximum benefit from cold conditions, use the heated grips in the HIGH status initially and when the grips have warmed up, change the status to LOW.



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## Automatic Shutdown

If the heated grips are on and 'LoBatt' is shown, then the heated grips are automatically switched off to prevent further discharge of the battery. It is not possible to resume heated grip operation until the engine has been running and the battery voltage has increased above 11.8 Volts.

In the event of a short circuit issue, the heated grips are automatically switched off. This will be indicated on the display screen. The heated grips can be switched back on after 25 seconds.

### **Warning**

If, after fitment of this accessory kit, you have any doubt about the performance of any aspect of the motorcycle, contact an authorised Triumph dealer and do not ride the motorcycle until the authorised dealer has declared it fit for use. Riding a motorcycle when there is any doubt as to any aspect of the performance of the motorcycle may result in loss of motorcycle control and an accident.

### **Warning**

Never ride an accessory equipped motorcycle at speeds above 80 mph (130 km/h).

The presence of accessories will cause changes in the stability and handling of the motorcycle. Failure to allow for changes in motorcycle stability may lead to loss of motorcycle control and an accident.

Remember that the 80 mph (130 km/h) limit will be reduced by the fitting of non-approved accessories, incorrect loading, worn tyres, overall motorcycle condition and poor road or weather conditions.

### **Warning**

The motorcycle must not be operated above the legal road speed limit except in closed-course conditions.

### **Warning**

Only operate this Triumph motorcycle at high speed in closed-course, on-road competition or on closed-course racetracks. High-speed operation should only be attempted by riders who have been instructed in the techniques necessary for high-speed riding and are familiar with the motorcycle's characteristics in all conditions.

High-speed operation in any other circumstances is dangerous and may lead to loss of motorcycle control and an accident.