

Assembly Instructions

Model:	KL650F/G/H/J
Description:	Grip Heater
Part Number:	99994-1501
Flat Rate Time(Hr):	1.5

Before you begin, read through these instructions and check that all parts are present. Please note that Kawasaki cannot assume any responsibility for damage resulting from incorrect installation.

Kawasaki recommends that all genuine accessories should be fitted by an authorized Kawasaki dealer.

The following symbols indicate the information for proper installation and operation in this instruction.

 **WARNING** : WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

NOTE : NOTE indicates information that may help or guide you in the operation or service of the vehicle.

● Indicates a procedural step or work to be done.

○ Indicates a procedural sub-step or how to do the work of the procedural step it follows. It also precedes the text of a NOTE.

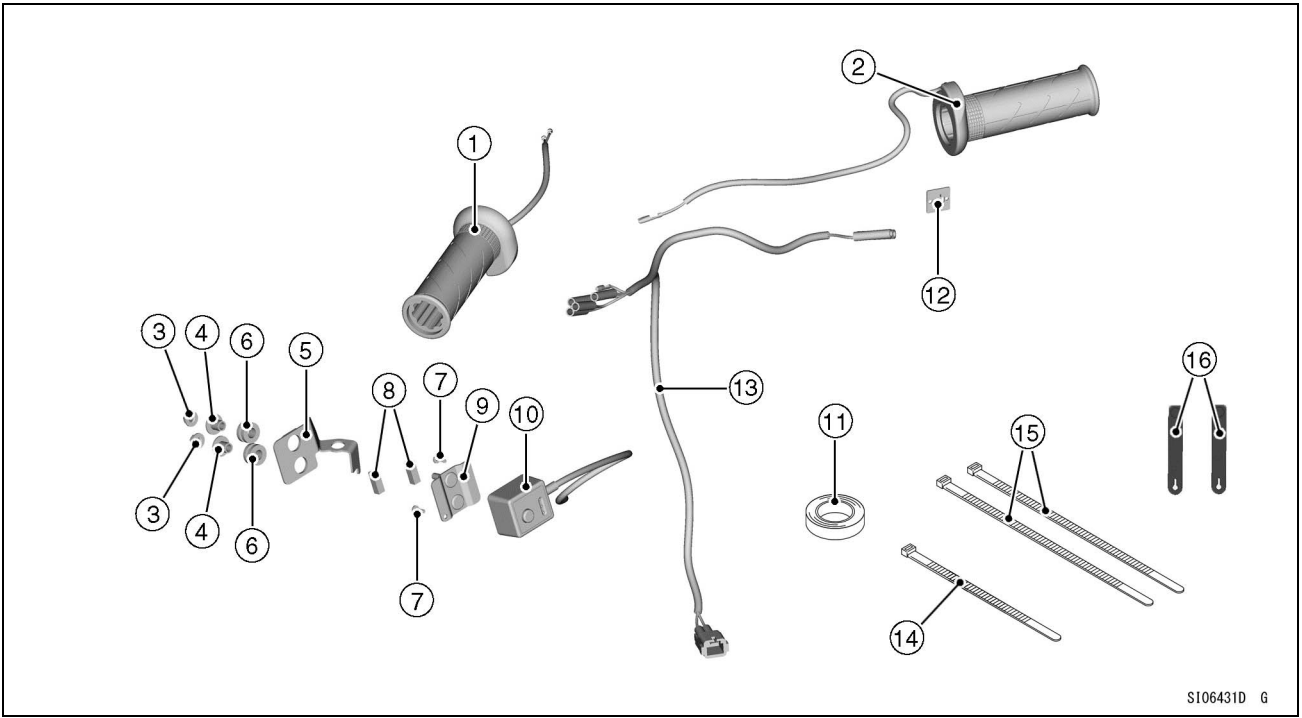
★ Indicates a conditional step or what action to take based on the results of the test or inspection in the procedural step or sub-step it follows.

Refer to the following Service Manual for detailed procedures.
(KL650F/G/H/J) P/No.: 99830-0066-01 or 99832-0201-01

NOTE

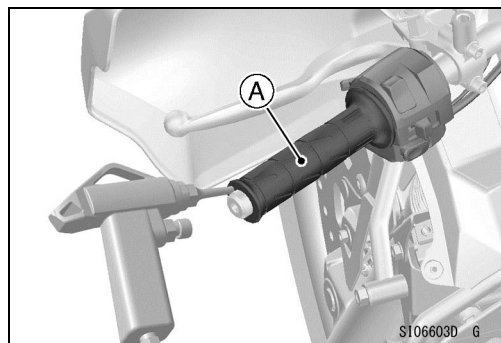
○ This kit does not operate if the relay kit is not installed, therefore install the relay kit (see Relay Kit (P/No.: 99994-1502) for Assembly Instructions Manual).

Parts List				
No.	Component Name	Part No.	Qty	Remark
1	Left Grip Heater	46075-0599	1	
2	Right Grip Heater	46075-0600	1	
3	Nut	92210-0007	2	
4	Collar	92152-0134	2	
5	Bracket	23062-1325	1	
6	Damper	92075-1912	2	
7	Screw	92172-0351	2	
8	Damper	92161-1756	2	
9	Bracket	11056-7296	1	
10	Grip Heater Switch	27010-0126	1	
11	Harness Tape	39188-0006	1	
12	Mount Base	92173-0812	1	
13	Harness	26031-3876	1	
14	Band	92072-3875	1	L = 100 mm
15	Band	92072-3874	2	L = 152 mm
16	Clamp	92173-2194	2	

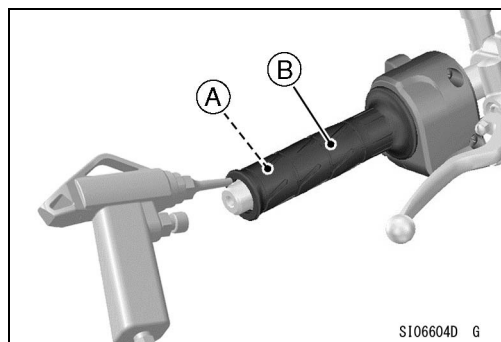


Installation Instructions

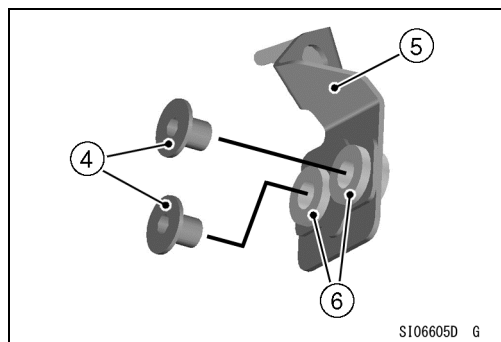
- Remove the following parts (Refer to the Service Manual).
Lower Fairings
Seat
Fuel Tank
Left Rear View Mirror
Right Hand Cover
Handlebar Weights
- Apply compressed air to the inside of the left handlebar grip [A] to remove the grip.



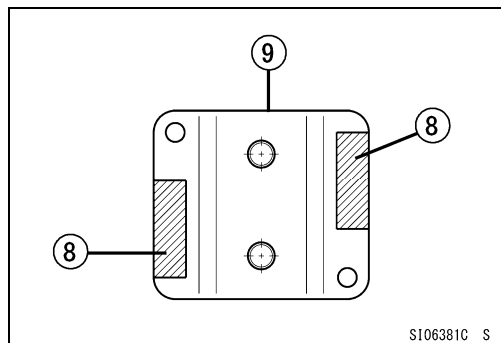
- Apply compressed air between the inner grip [A] and right handlebar grip [B] to remove the grip.



- Install the dampers [6] to the bracket [5].
- Install the collars [4] to the bracket [5].

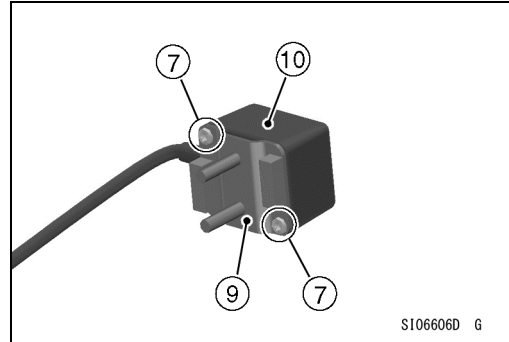


- Using a cleaning fluid, clean off any oil or dirt on the bracket [9], and dry them with a clean cloth.
- Paste the dampers [8] on the bracket [9] as shown.

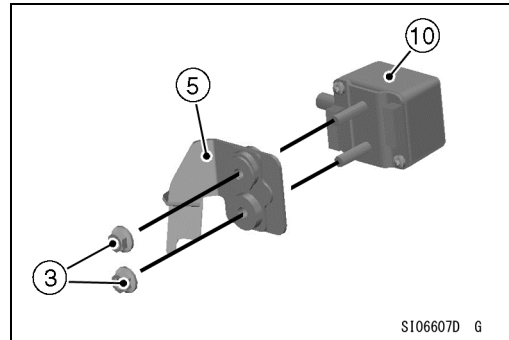


- Install the grip heater switch [10] to the bracket [9] as shown.
- Tighten the screws [7].

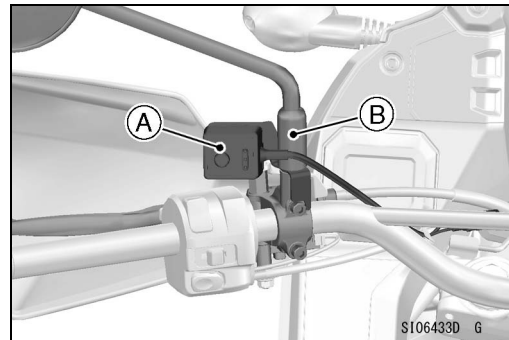
Torque – Screws: 1.2 N·m (0.12 kgf·m, 11 in·lb)



- Install the grip heater switch [10] to the bracket [5].
- Tighten the nuts [3].



- Install:
Grip Heater Switch Assembly [A]
Left Rear View Mirror [B] (Refer to the Service Manual)

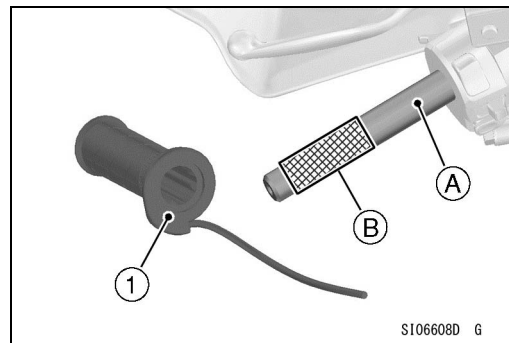


- Using a cleaning fluid, clean off any oil or dirt on the handlebar [A] and inside of the left grip heater [1], and dry them with a clean cloth.
- Apply thin coat of heat resistant adhesive to the handlebar end [B] and the inside rib [C] of the left grip heater.

Sealant – Adhesive, TB1530C: 56042-0001

NOTE

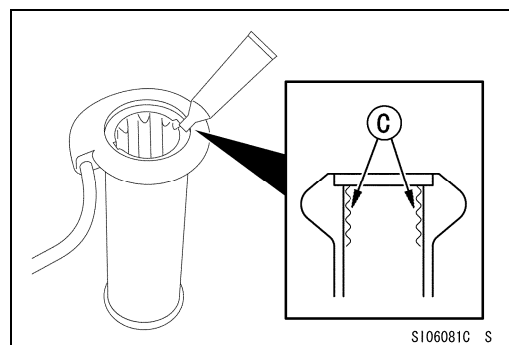
- Quickly complete bonding process before the adhesive is dry. To prevent motorcycle from falling over, work with an assistant.
- Once installed left grip heater cannot be reused.



⚠ WARNING

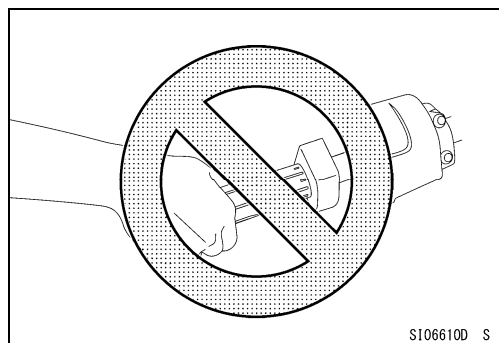
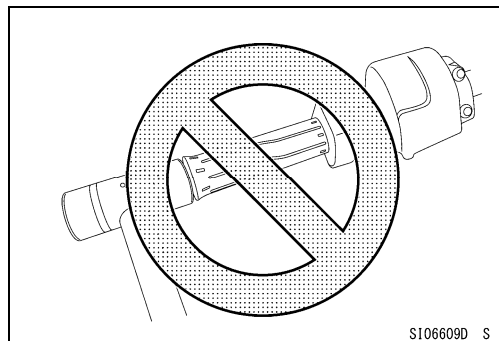
Be sure to use the specified adhesive to securely bond the left grip heater with the handlebar. Dry them until bonded. Make sure that they are completely bonded together.

Using an unspecified adhesive or insufficient drying time can cause the grip heater to fall off during riding, which leads to turnover accidents resulting in severe injury or death.

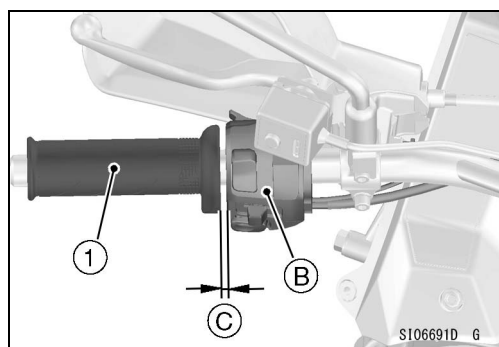
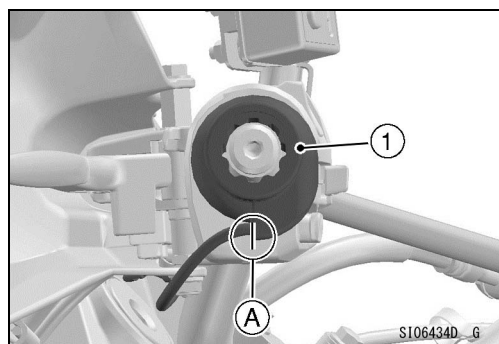


NOTE

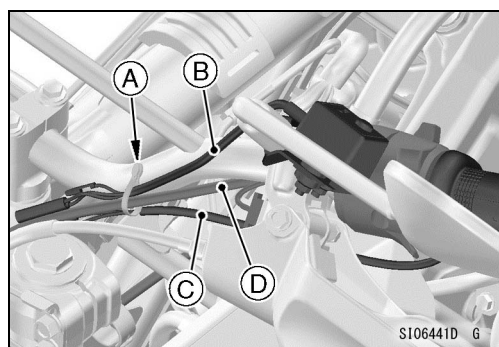
- When inserting the grip heater into the handlebar, do not hammer the grip end, or do not twist the grip strongly. The circuit in the grip heater may be broken.
If the grip heater stops in the middle of the handlebar, inject degreaser into the gap between the handlebar and the grip heater to remove the grip heater. Never try to prize out the grip heater with a wiring driver. The circuit in the grip heater may be broken.



- Insert the left grip heater [1] onto the handlebar so that the harness come to the bottom side [A] of the handlebar.
- Set the left grip heater so that the clearance between the left switch housing [B] and the left grip heater is 5 mm (0.2 in.) [C].
- Wipe out excess adhesive.



- Open the clamp [A].
- Run the grip heater switch lead [B] and left grip heater lead [C] as shown.
- Hold the grip heater switch lead and left switch housing lead [D] with the clamp [A].

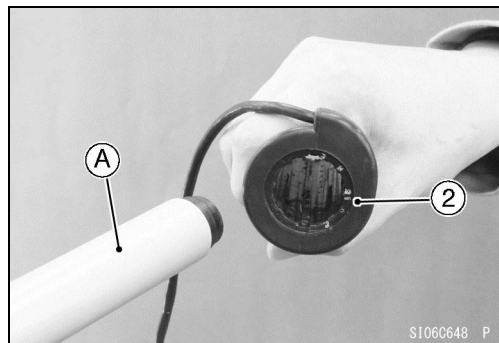


- Using a cleaning fluid, clean off any oil or dirt on the inner grip [A] and inside of the right grip heater [2], and dry them with a clean cloth.
- Apply thin coat of heat resistant adhesive to the inner grip surface.

Sealant – Adhesive, TB1530C: 56042-0001

NOTE

- Quickly complete bonding process before the adhesive is dry. To prevent motorcycle from falling over, work with an assistant.
- Once installed right grip heater cannot be reused.



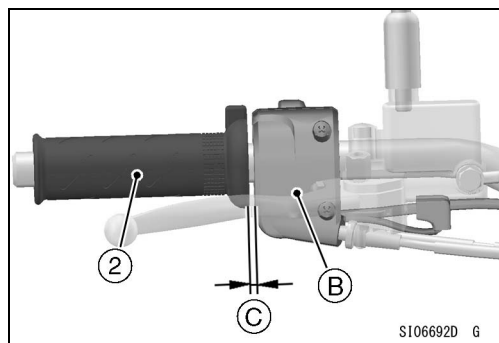
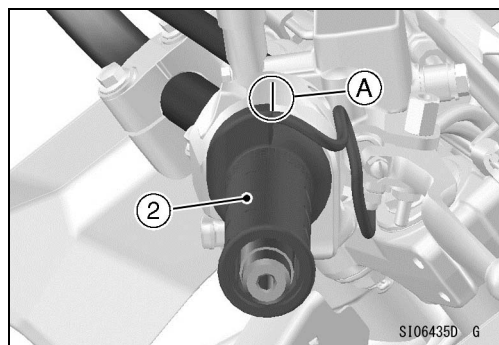
⚠ WARNING

Be sure to use the specified adhesive to securely bond the right grip heater with the inner grip. Dry them until bonded. Make sure that they are completely bonded together.

Using an unspecified adhesive or insufficient drying time can cause the grip heater to fall off during riding, which leads to turnover accidents resulting in severe injury or death.

NOTE

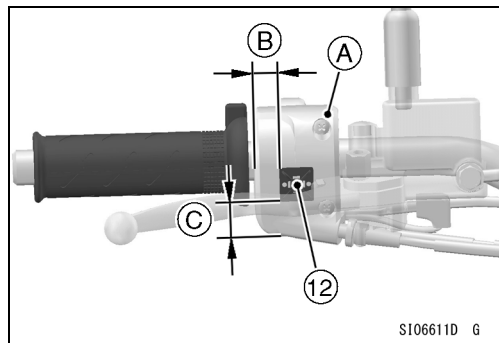
- When inserting the grip heater into the inner grip, do not hammer the grip end, or do not twist the grip strongly. The circuit in the grip heater may be broken. If the grip heater stops in the middle of the inner grip, inject degreaser into the gap between the inner grip and the grip heater to remove the grip heater. Never try to prize out the grip heater with a wiring driver. The circuit in the grip heater may be broken.
- Insert the right grip heater [2] onto the inner grip so that the harness come to the top side [A] of the handlebar.
- Set the right grip heater so that the clearance between the right switch housing [B] and the right grip heater is 5 mm (0.2 in.) [C].
- Wipe out excess adhesive.



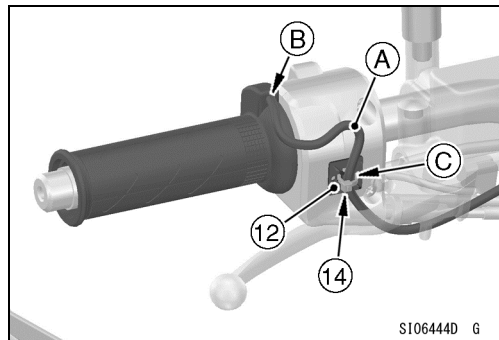
- Using a cleaning fluid, clean off any oil or dirt on the right switch housing [A], and dry them with a clean cloth.
- Paste the mount base [12] on the right switch housing in the position shown in the figure.

12 mm (0.47 in.) [B]

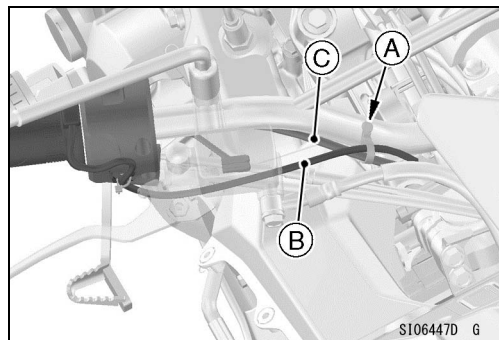
20 mm (0.79 in.) [C]



- Install the band [14] through the mount base [12].
- Run the right grip heater lead [A] as shown.
- Hold the right grip heater lead with the band [14] so that the length of the between the grip heater lead taking out surface [B] and hold position [C] to be 110 ~ 120 mm (4.33 ~ 4.72 in.).
- Cut the excess of the band.
- Make sure that the right grip heater lead is not tight when turning the throttle grip to fully opened position.



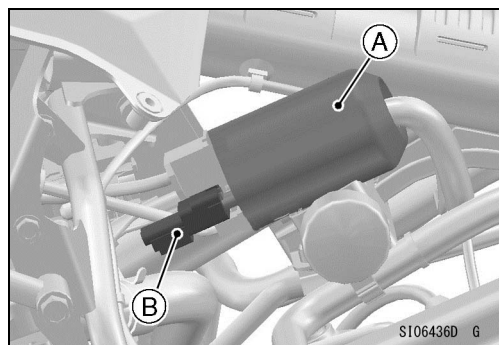
- Open the clamp [A].
- Run the right grip heater lead [B] as shown.
- Hold the right grip heater lead and right switch housing lead [C] with the clamp [A].



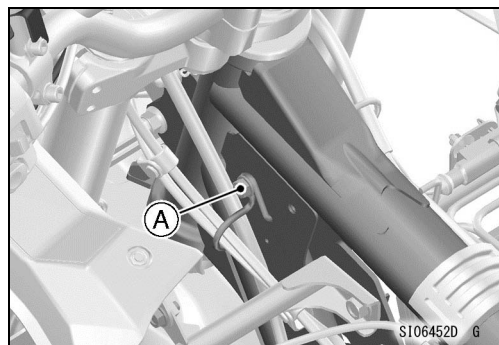
- Slide the dust cover [A].
- Remove the connector cap [B].

NOTE

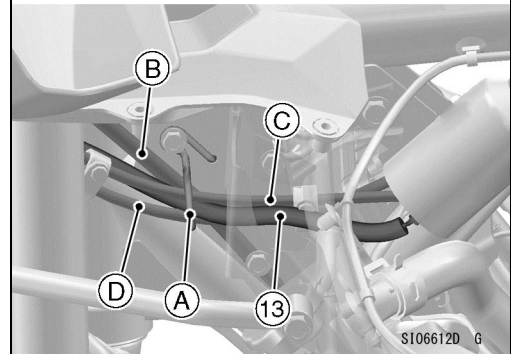
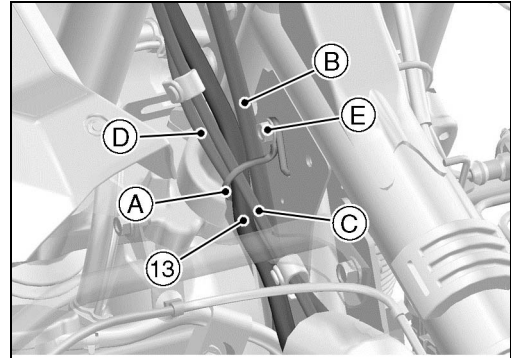
- *The removed connector cap is not necessary for this accessory.*



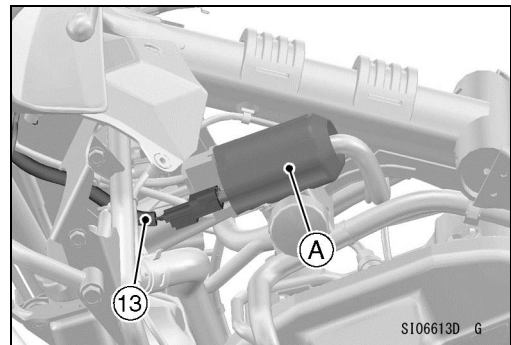
- Loosen the bolt [A].



- Run the harness [13] through the clamp [A] as shown.
- Run the harness to the outside of the clutch cable [B].
- Run the harness between the left switch housing lead [C] and ignition switch lead [D].
- Tighten the bolt [E].



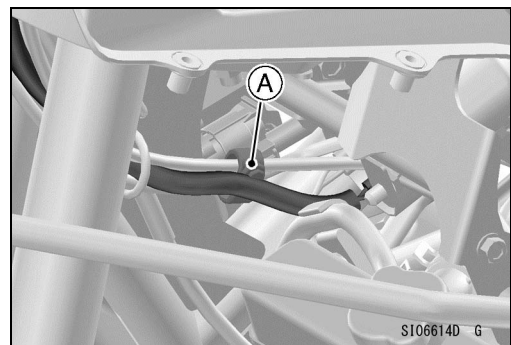
- Connect the connector of the harness [13] to the connector of the main harness.
- Slide the dust cover [A] to the original position.



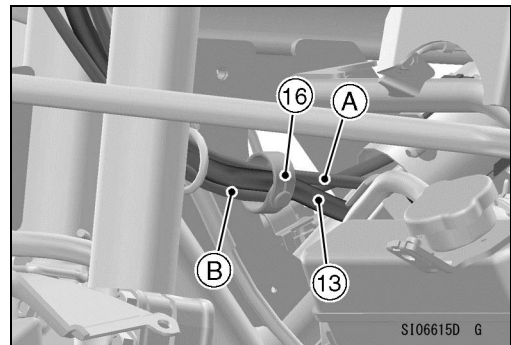
- Remove the clamp [A].

NOTE

- *The removed clamp is not necessary for this accessory.*



- Hold the harness [13], left switch housing lead [A] and ignition switch lead [B] with the clamp [16].

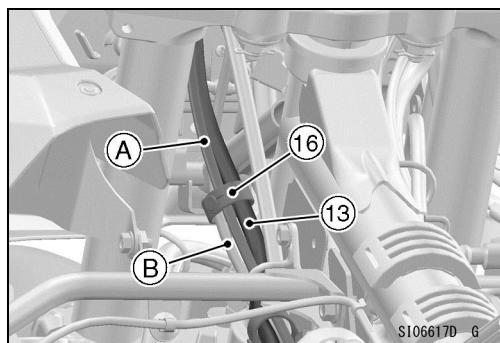
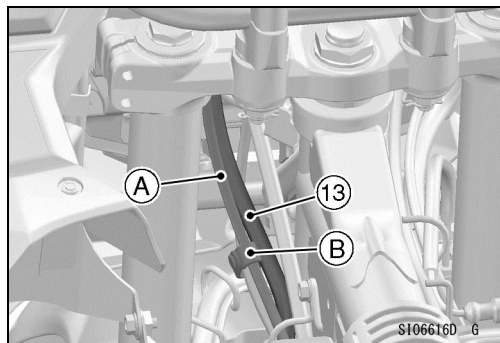


- Run the harness [13] along the left switch housing lead [A].
- Remove the clamp [B].

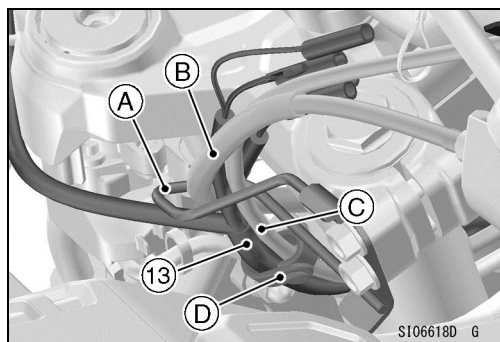
NOTE

○ The removed clamp is necessary for this accessory.

- Hold the harness [13], left switch housing lead [A] and ignition switch lead [B] with the clamp [16].

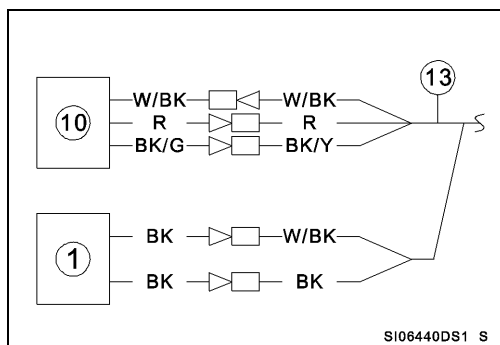
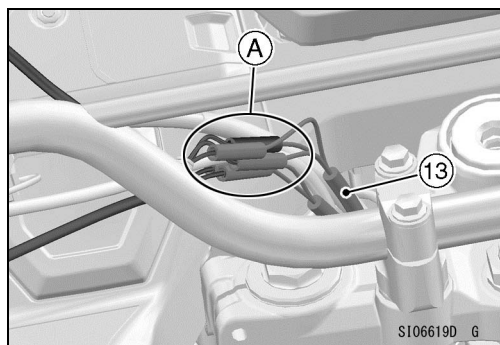


- Run the harness [13] through the clamp [A] as shown.
- Run the harness between the clutch cable [B] and left switch housing lead [C].
- Hold the harness [13] and left switch housing lead with the removed clamp [D].

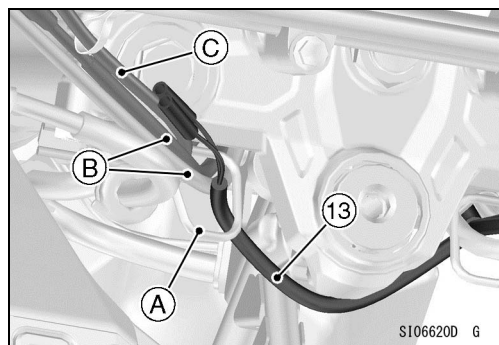


- Connect the connectors [A] of the harness [13] to the left grip heater lead connectors.

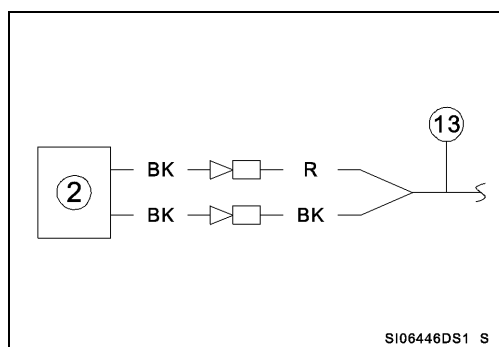
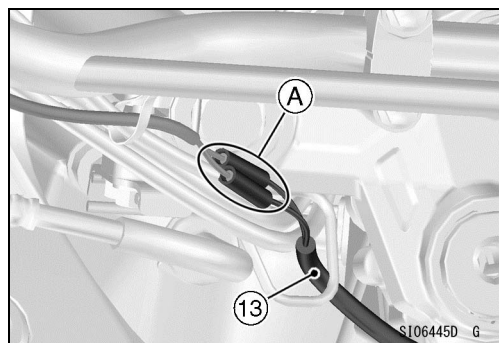
Left Grip Heater [1]
Grip Heater Switch [10]
Harness [13]



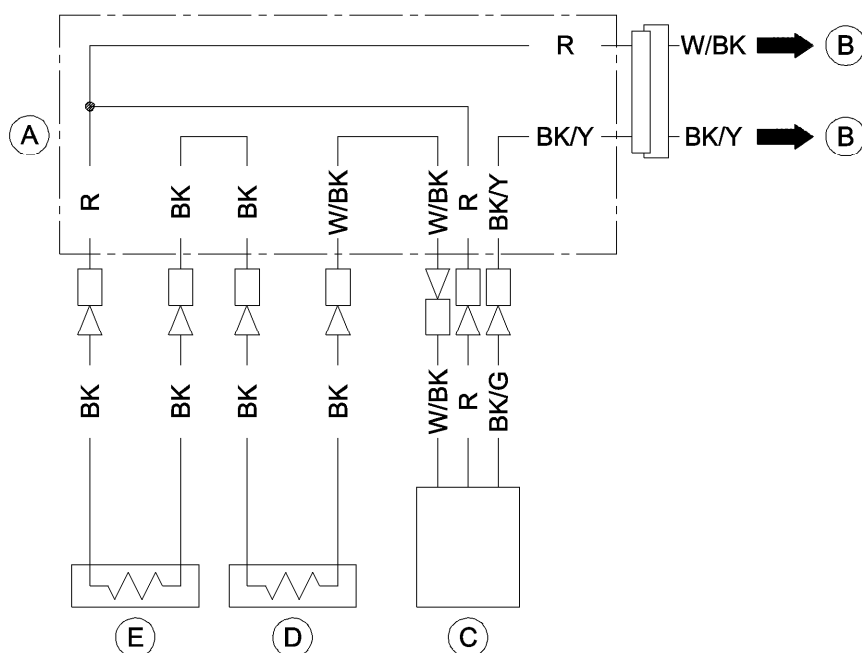
- Run the harness [13] through the clamp [A] as shown.
- Run the harness to the front side of the throttle cables [B].
Right Switch Housing Lead [C]



- Connect the connectors [A] of the harness [13] to the right grip heater lead connectors.
- Right Grip Heater [2]
Harness [13]



Wiring Diagram



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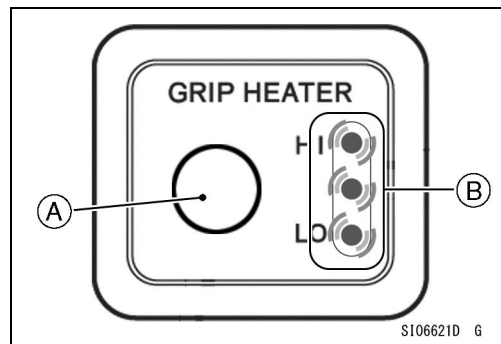
- A. Harness
- B. To Main Harness
- C. Grip Heater Switch
- D. Left Grip Heater
- E. Right Grip Heater

- Check that the throttle grip moves smoothly from full open to close.

! WARNING

After having installed the right grip heater to the motorcycle, open and close the throttle to make sure that it moves smoothly. Driving without conducting proper checks on the throttle can lead to an accident. If the throttle becomes stuck, it possibly causes motorcycle fall over accident, resulting in severe injury or death.

- Turn the handlebars to both sides.
- ★ If the interfere with handlebar movement, inspect the installation condition of parts.
- Turn the ignition switch on.
- Push the grip heater switch [A], and check the indicator lights [B] go on.
- ★ If the indicator lights do not go on, inspect the installation condition of parts.
- Turn the ignition switch off.

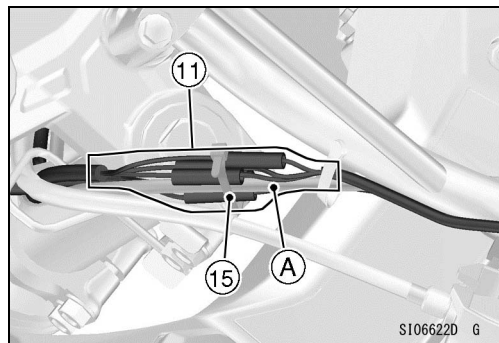


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- Wrap the left grip heater lead connectors and grip heater switch lead connectors with the harness tape [11].
- Hold the left grip heater lead connectors, grip heater switch lead connectors and left switch housing lead [A] with the band [15].
- Cut the excess of the band, and turn the band head so that it faces downwards.

NOTE

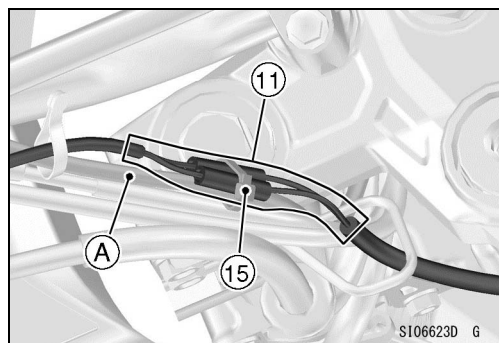
○ In this illustration, the harness tape has been removed for the purpose of explanation.



- Wrap the right grip heater lead connectors with the harness tape [11].
- Hold the right grip heater lead connectors and right switch housing lead [A] with the band [15].
- Cut the excess of the band, and turn the band head so that it faces downwards.

NOTE

○ In this illustration, the harness tape has been removed for the purpose of explanation.



- Install the removed parts (Refer to the Service Manual).

Basic Torque for General Fasteners

The table below, relating tightening torque to thread diameter, lists the basic torque for the bolts and nuts. Use this table for only the bolts and nuts which do not require a specific torque value. All of the values are for use with dry solvent-cleaned threads.

Threads dia. (mm)	Torque		
	N·m	kgf·m	ft·lb
5	3.4 ~ 4.9	0.35 ~ 0.50	30 ~ 43 in·lb
6	5.9 ~ 7.8	0.60 ~ 0.80	52 ~ 69 in·lb
8	14 ~ 19	1.4 ~ 1.9	10 ~ 13.5
10	25 ~ 34	2.6 ~ 3.5	19 ~ 25
12	44 ~ 61	4.5 ~ 6.2	33 ~ 45
14	73 ~ 98	7.4 ~ 10.0	54 ~ 72
16	115 ~ 155	11.5 ~ 16.0	83 ~ 115
18	165 ~ 225	17.0 ~ 23.0	125 ~ 165
20	225 ~ 325	23.0 ~ 33.0	165 ~ 240

Check tightness of all fasteners in regular interval. Retighten loose fasteners.

NOTE

- This grip heater is rated at 28 W.
- Please refer to the Operating Manual (Part No. 99958-0002) for operating procedures.