

## Assembly Instructions

|                     |             |
|---------------------|-------------|
| Model:              | ZX1000W     |
| Description:        | Grip Heater |
| Part Number:        | 99994-0863  |
| Flat Rate Time(Hr): | 1.1         |

**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.

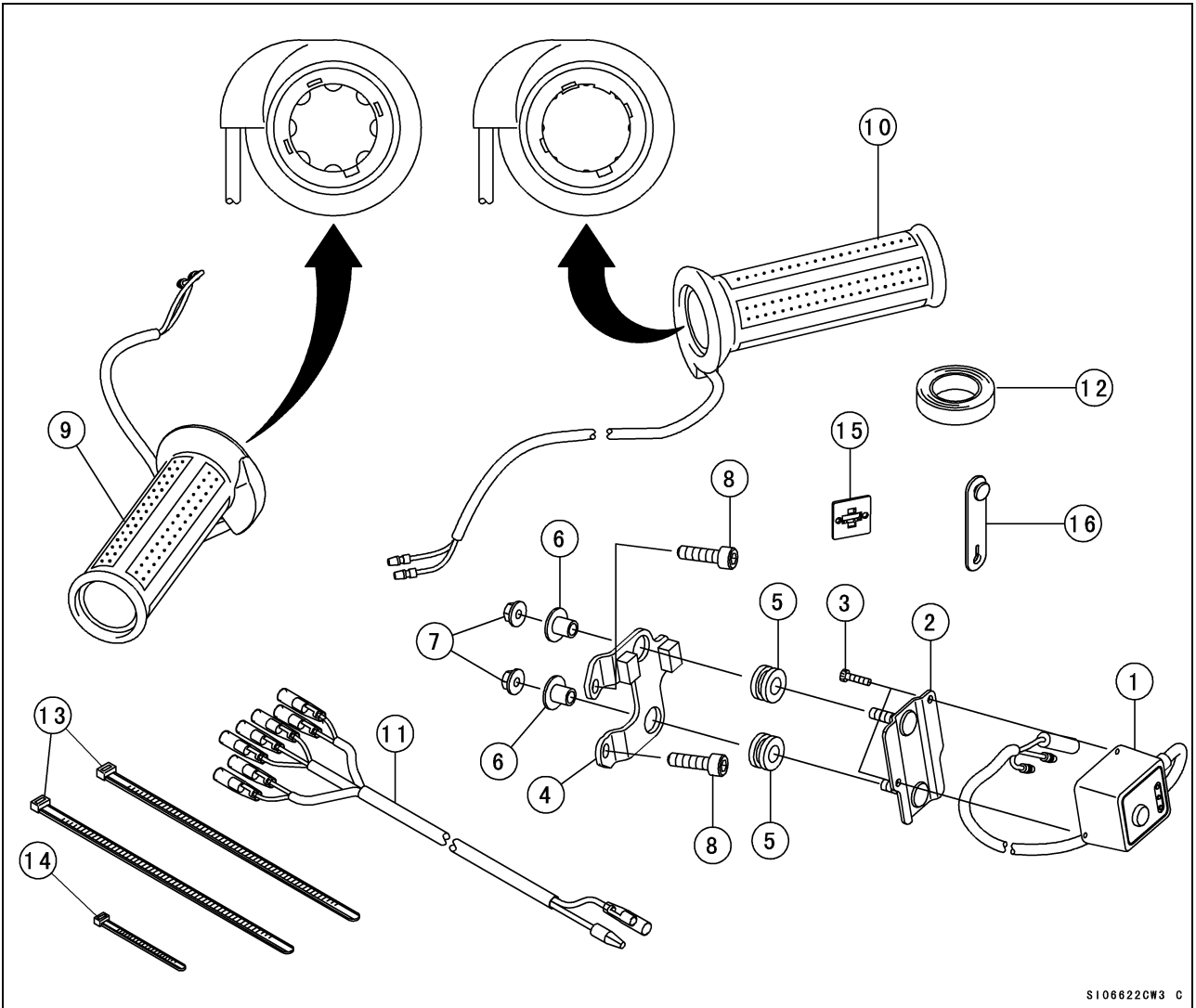
**NOTICE** : NOTICE is used to address practices not related to personal injury.

**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 Service Manual (P/No.: 99994-1519-01) for detailed procedures.

| Parts List |                   |            |     |                  |
|------------|-------------------|------------|-----|------------------|
| No.        | Component Name    | Part No.   | Qty | Remark           |
| 1          | Heater Switch     | 27010-0126 | 1   |                  |
| 2          | Bracket           | 11056-2701 | 1   | Rear             |
| 3          | Screw             | 92172-0489 | 2   | For switch       |
| 4          | Bracket           | 39184-0715 | 1   | Front, with Pads |
| 5          | Damper            | 92075-1912 | 2   |                  |
| 6          | Collar            | 92152-0134 | 2   |                  |
| 7          | Nut               | 92210-0007 | 2   |                  |
| 8          | Clamp Bolt        | 120CA0622  | 2   | For switch       |
| 9          | Left Grip Heater  | 46075-0599 | 1   |                  |
| 10         | Right Grip Heater | 46075-0600 | 1   |                  |
| 11         | Sub-harness       | 26031-1203 | 1   |                  |
| 12         | Harness Tape      | 39188-0006 | 1   |                  |
| 13         | Band              | 92072-1195 | 2   |                  |
| 14         | Band              | 92072-3875 | 1   | L = 100          |
| 15         | Clamp             | 92173-0812 | 1   |                  |
| 16         | Clamp             | 92173-1229 | 1   |                  |

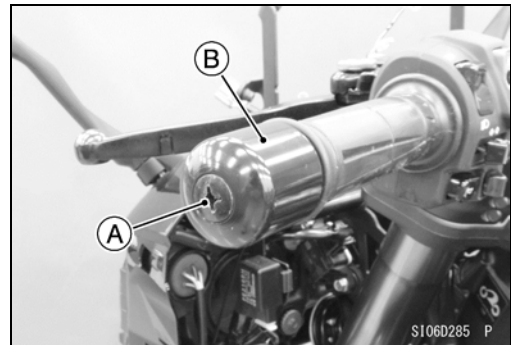


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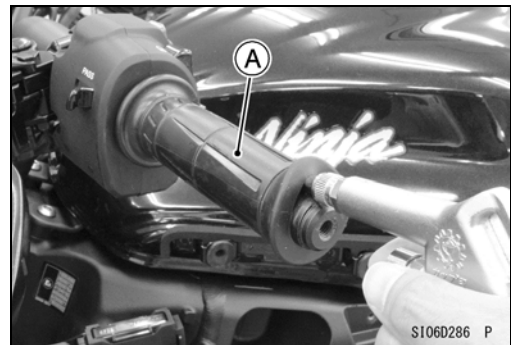
## Installation Instructions

- Remove the following parts (Refer to the Service Manual).
  - Windshield
  - Middle Fairing (Both Sides)
  - Meter Cover
  - Left Lower Fairing

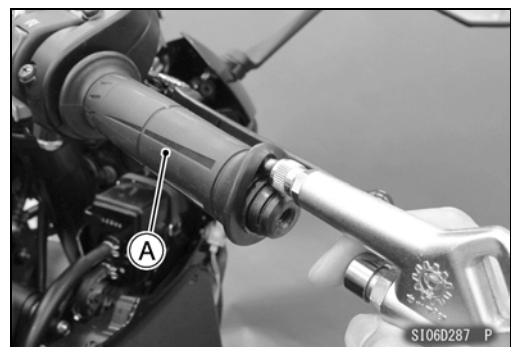
- Remove:
  - Bolt [A] (Both Sides)
  - Handlebar Weight [B] (Both Sides)



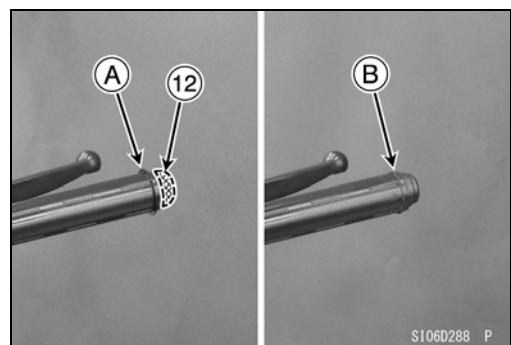
- Apply compressed air to the inside of the left handlebar grip [A] to remove the grip.



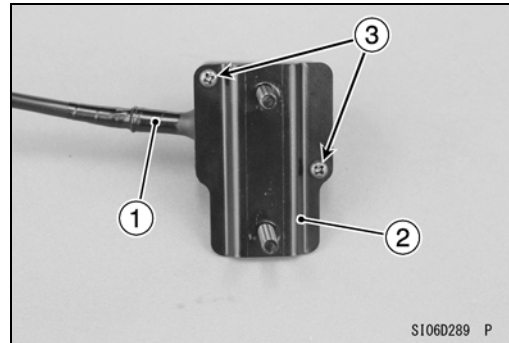
- Apply compressed air to the inside of the throttle grip [A] to remove the grip.



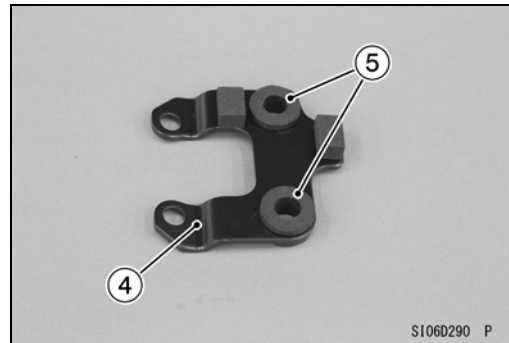
- Cover the right handlebar end with the harness tape [12] so that the shavings can not fall into crevice of between the inner grip and handlebar.
- Shave off the rib [A] of the inner grip as shown [B].
- Remove the covered harness tape from the right handlebar end.
- Open and close the inner grip to make sure that it moves smoothly.



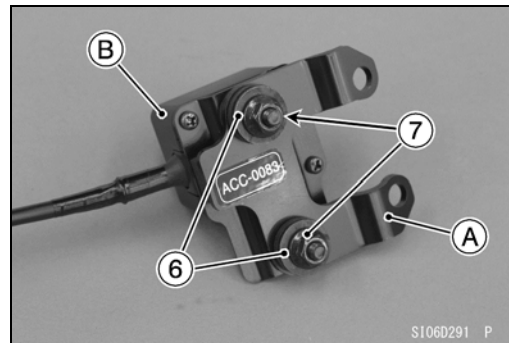
- Assemble the grip heater switch [1] and bracket [2].
- Tighten the screws [3] securely.



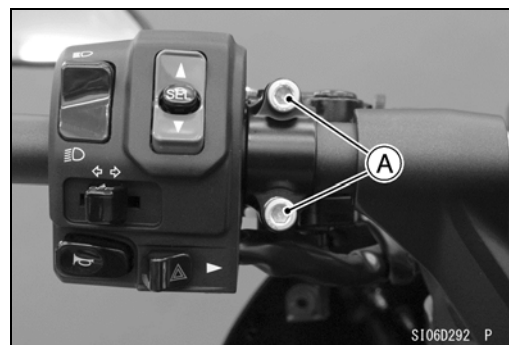
- Install the dampers [5] to the bracket [4].



- Install the collars [6] to the bracket assembly [A].
- Assemble the bracket assembly [A] and the grip heater switch assembly [B] as shown.
- Tighten the nuts [7] securely.



- Remove the clutch lever clamp bolts [A].
- The clutch lever clamp bolts are not reuse at the installation.

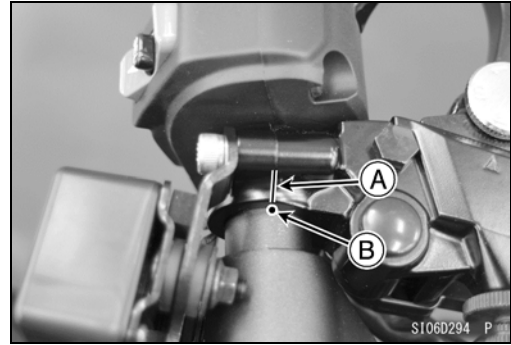


- Install the grip heater switch assembly [A] as shown.
- Tightening the upper clamp bolt [8] first, and then the lower clamp bolt [8].

**Torque – Clutch Lever Clamp Bolts: 8.0 N·m (0.82 kgf·m, 71 in·lb)**



- Install the clutch lever to match its mating surface [A] to the punch mark [B] of the handlebar.

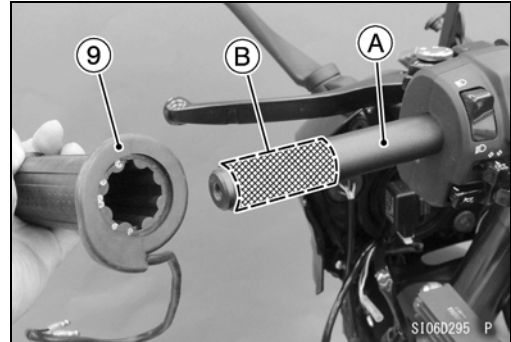


- Using a cleaning fluid, clean off any oil or dirt on the handlebar [A] and inside of the left grip heater [9], and dry them with a clean cloth.
- Apply thin coat of heat resistant adhesive to the handlebar end [B] and the inside rib [C] of the left grip heater.

**Sealant – Adhesive, TB1530C: 56042-0001**

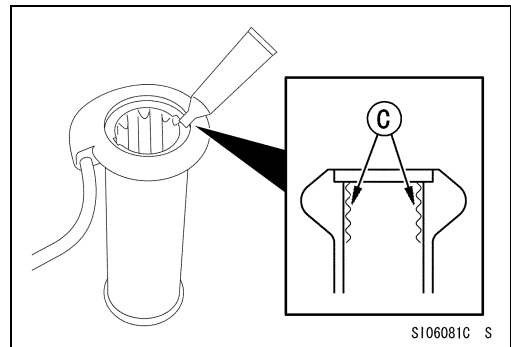
**NOTE**

- Quickly complete bonding process before the adhesive is dry. To prevent motorcycle from falling over, work with an assistant.



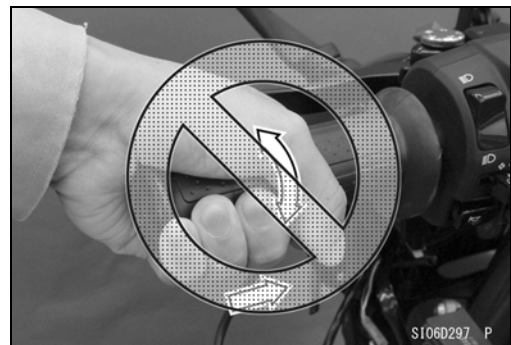
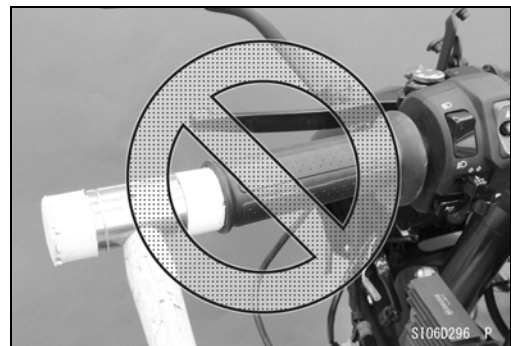
**⚠ WARNING**

**Be sure to use the specified adhesive to securely bond the right grip heater with the inner grip and 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.**

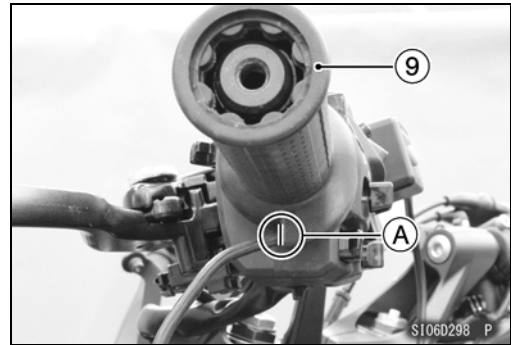


**NOTE**

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



- Insert the left grip heater [9] onto the handlebar so that the harness come to the bottom side [A] of handlebar.
- Wipe out excess adhesive.

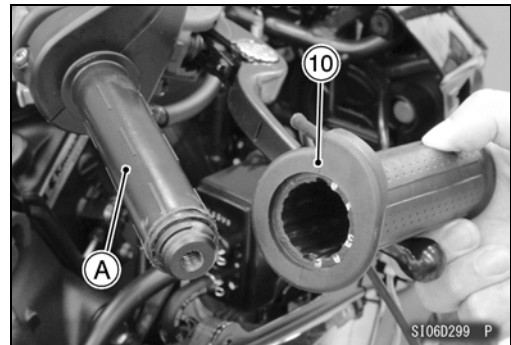


- Using a cleaning fluid, clean off any oil or dirt on the inner grip [A] and inside of the right grip heater [10], and dry them with a clean cloth.
- Apply thin coat of heat resistant adhesive to all the circumference of the inner grip surface [B].

**Sealant – Adhesive, TB1530C: 56042-0001**

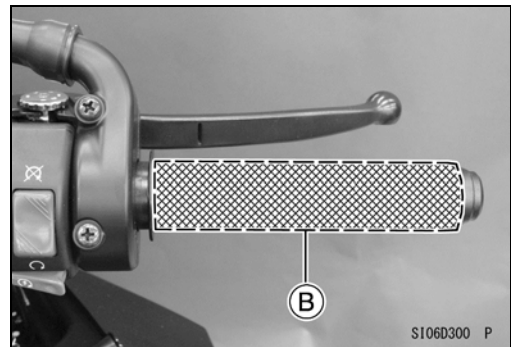
**NOTE**

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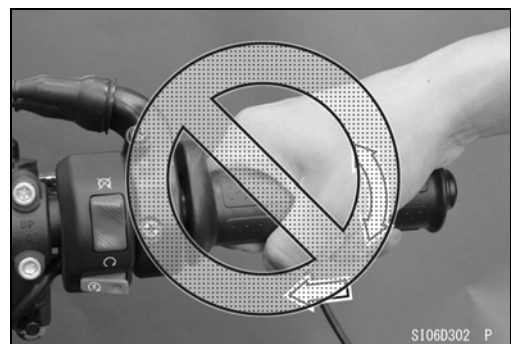
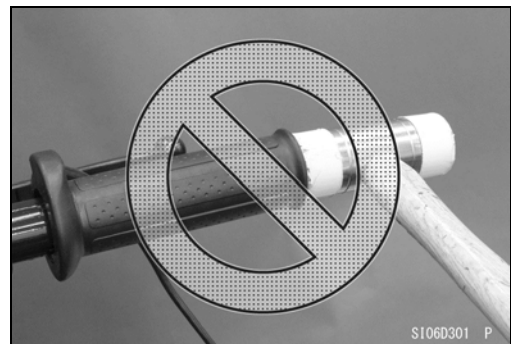
**⚠ WARNING**

**Be sure to use the specified adhesive to securely bond the right grip heater with the inner grip and 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**

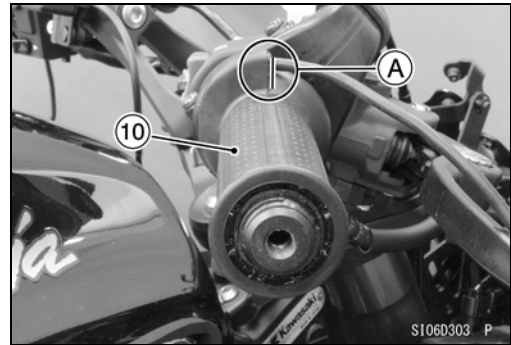
- When inserting the inner grip into the grip heater, do not hammer the grip end, or do not twist the grip strongly. The circuit in the grip heater may be broken. If the inner grip stops in the middle of the grip heater, inject degreaser into the gap between the grip heater and the inner grip to remove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



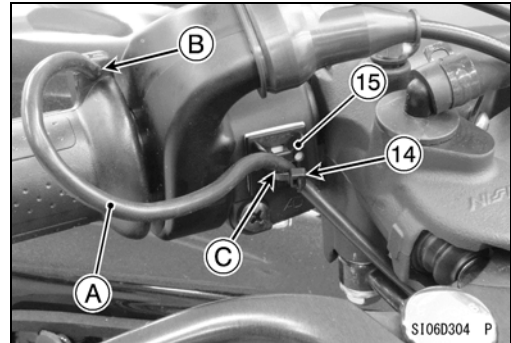
- Insert the right grip heater [10] onto the handlebar so that the harness come to the top side [A] of handlebar.
- Wipe out excess adhesive.

**⚠ WARNING**

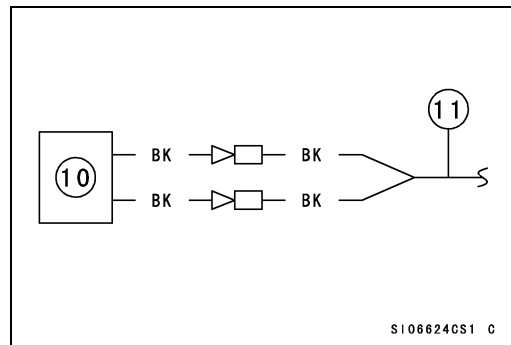
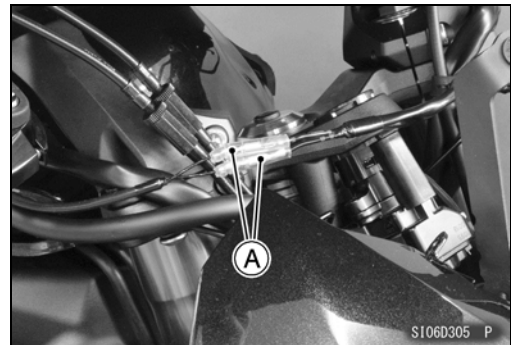
**After having installed the right grip heater to the motorcycle, open and close the throttle to make sure that it moves smoothly.**  
**Driving without conducting proper checks on the throttle can lead to an accident. If the throttle becomes stuck, it possibly causes motorcycle fall over accident, resulting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



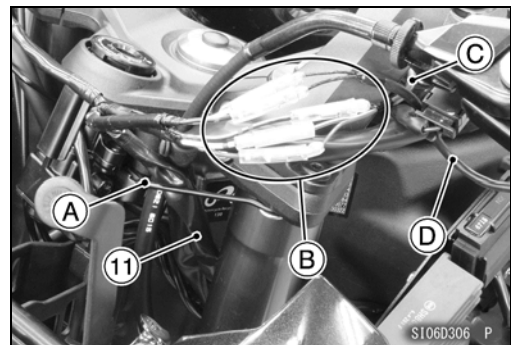
- Install the clamp [15] on the right switch housing as shown.
- Clamp the right grip heater lead [A] with the band [14] so that the length of the between the heater lead taking out surface [B] and clamp position [C] to be 155 mm (6.10 in.).
- Check that the throttle grip moves smoothly from full open to close.



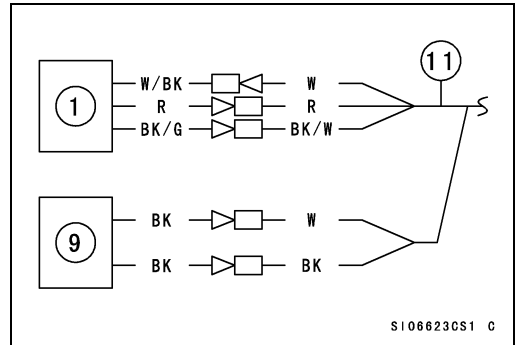
- Connect the sub-harness connectors [A] to the right grip heater connectors as follows.  
 Right Grip Heater [10]  
 Sub-harness [11]



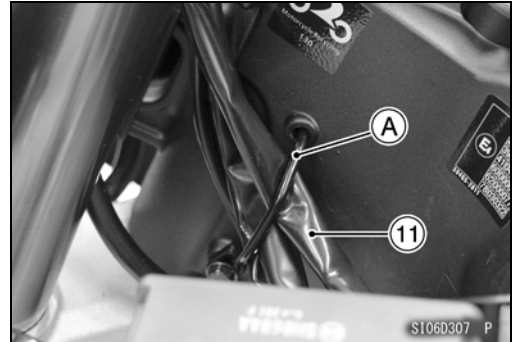
- Run the sub-harness [11] into the clamp [A].
- Run the sub-harness [11] inside of the left front fork.
- Connect the sub-harness connectors [B] to the left grip heater connectors and heater switch connectors.  
 Heater Switch Harness [C]  
 Left Grip Heater Harness [D]



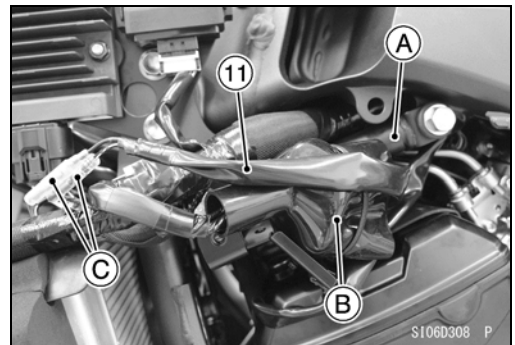
Heater Switch [1]  
 Left Grip Heater [9]  
 Sub-harness [11]



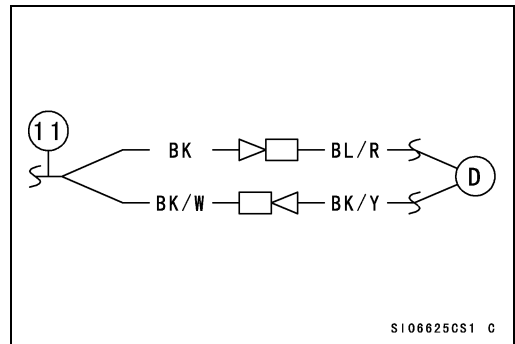
- Run the sub-harness [11] into the clamp [A].



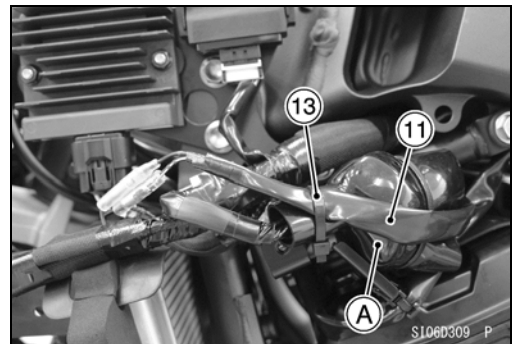
- Run the sub-harness [11] inside of the bracket [A].
- Run the sub-harness [11] over the connector cover [B].
- Connect the sub-harness connectors [C] to the main harness connectors.



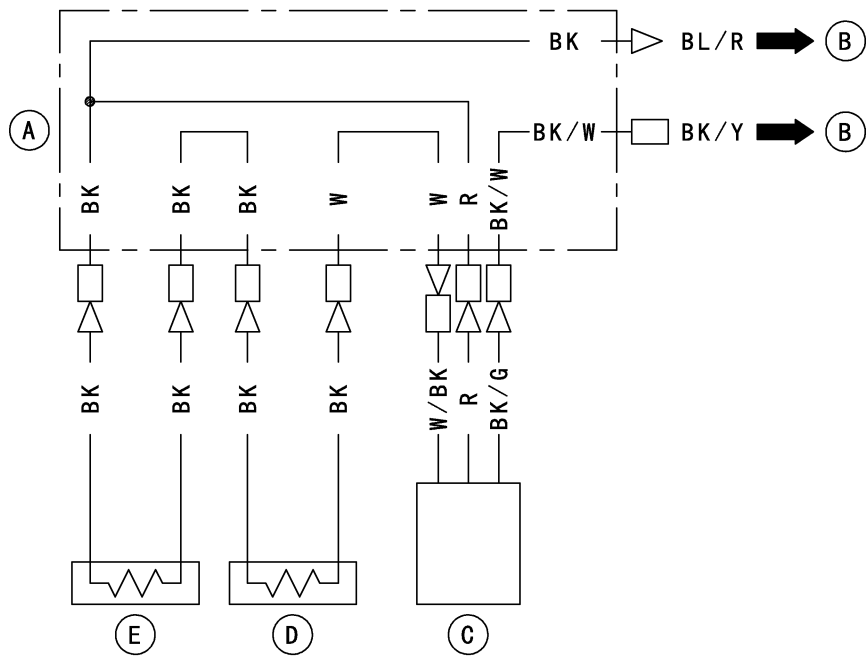
Sub-harness [11]  
 Main Harness [D]



- Clamp the sub-harness [11] on the connector cover [A] with the band [13] as shown.



## Wiring Diagram



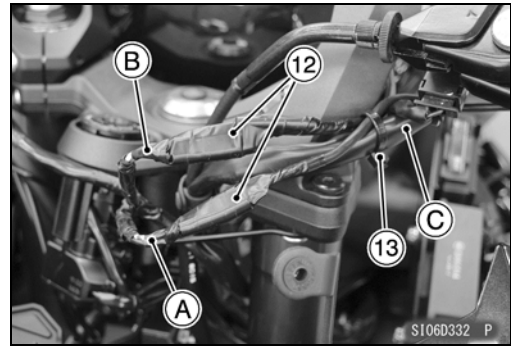
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- A. Sub-harness
- B. To Main Harness
- C. Heater Switch
- D. Left Grip Heater
- E. Right Grip Heater

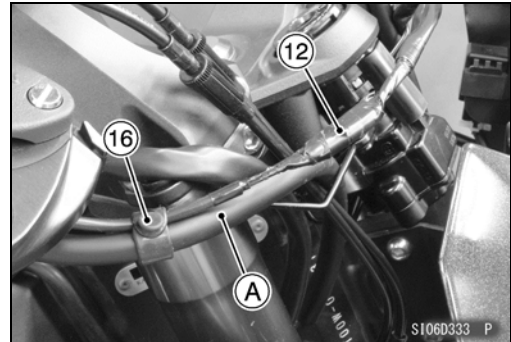
● Turn the ignition switch to "ON".

★ If the heater switch indicator light does not go on, inspect the installation condition of parts.

- Wrap the left grip heater connectors and heater switch connectors with the harness tape [12].
- Hold the left grip heater harness [A], heater switch harness [B] and left switch housing harness [C] with the band [13].



- Wrap the right grip heater connectors and sub-harness connectors with the harness tape [12].
- Hold the right grip heater harness and brake hose [A] with the band [16].



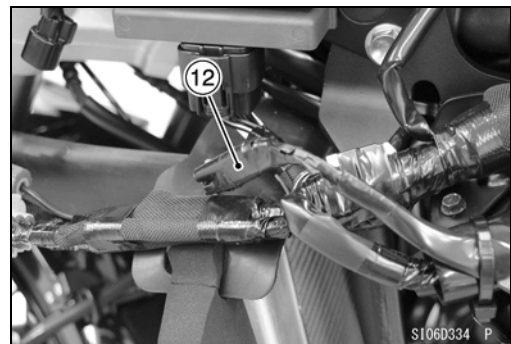
- Check that the throttle grip moves smoothly from full open to close.

### **⚠WARNING**

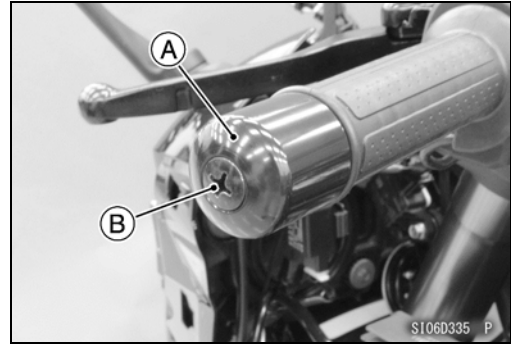
**After having installed the right grip heater to the motorcycle, open and close the throttle to make sure that it moves smoothly. Driving without conducting proper checks on the throttle can lead to an accident. If the throttle becomes stuck, it possibly causes motorcycle fall over accident, resulting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

- Turn the handlebar to both sides.
- ★ If the interfere with handlebar movement, inspect the installation condition of parts.

- Wrap the sub-harness connectors and main harness connectors with the harness tape [12].



- Install the both handlebar weights [A].
- Apply a non-permanent locking agent to the both handlebar weight bolts [B], and tighten them.



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

### Basic Torque for General Fasteners

The tables below, relating tightening torque to thread diameter, lists the basic torque for the bolts, nuts and screws. Use these tables for the bolts, nuts and screws which are not specified the tightening torque particularly on the previous pages. All of the values are for use with dry solvent-cleaned threads.

#### For Bolts and Nuts

| Threads dia. (mm) | Torque |       |          |
|-------------------|--------|-------|----------|
|                   | N·m    | kgf·m | ft·lb    |
| 5                 | 4.5    | 0.46  | 40 in·lb |
| 6                 | 8.0    | 0.82  | 71 in·lb |
| 8                 | 20     | 2.0   | 15       |
| 10                | 35     | 3.6   | 26       |
| 12                | 60     | 6.1   | 44       |

#### For Screws, Plastic Part Tightening Portions and Plastic Washer Tightening Portions

| Threads dia. (mm) | Torque |       |          |
|-------------------|--------|-------|----------|
|                   | N·m    | kgf·m | ft·lb    |
| 4                 | 1.2    | 0.12  | 11 in·lb |
| 5                 | 3.0    | 0.31  | 27 in·lb |
| 6                 | 4.0    | 0.41  | 35 in·lb |

#### For Wellnuts

| Threads dia. (mm) | Torque |       |           |
|-------------------|--------|-------|-----------|
|                   | N·m    | kgf·m | ft·lb     |
| 4                 | 0.2    | 0.02  | 1.8 in·lb |
| 5                 | 0.5    | 0.05  | 4.4 in·lb |
| 6                 | 1.0    | 0.10  | 8.9 in·lb |

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

**This grip heater is rated at 28 W.**

**When the grip heater is used at an ambient temperature of 15°C (59°F) or below , use of other accessories with electrical load capacity specified in the owner's manual of the vehicle will be allowed.**

### NOTICE

**Please refer to the Operating Manual (Part No. 99958-0002) for operating procedures.**

## Operation Manual

|              |             |
|--------------|-------------|
| Model:       | -           |
| Description: | Grip Heater |
| Part Number: | -           |

Thank you for your purchase. This manual contains information for proper operation of the accessory parts and precautions. Read through this manual before operation for proper use of the accessory parts.

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.

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

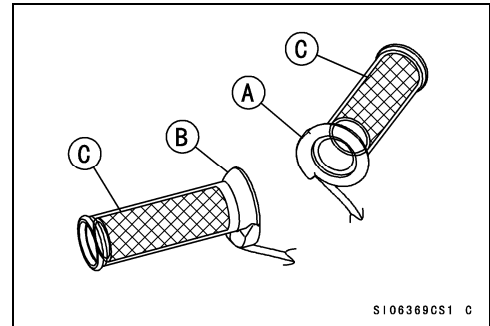
### NOTE

- This grip heater is all around type grip heater.

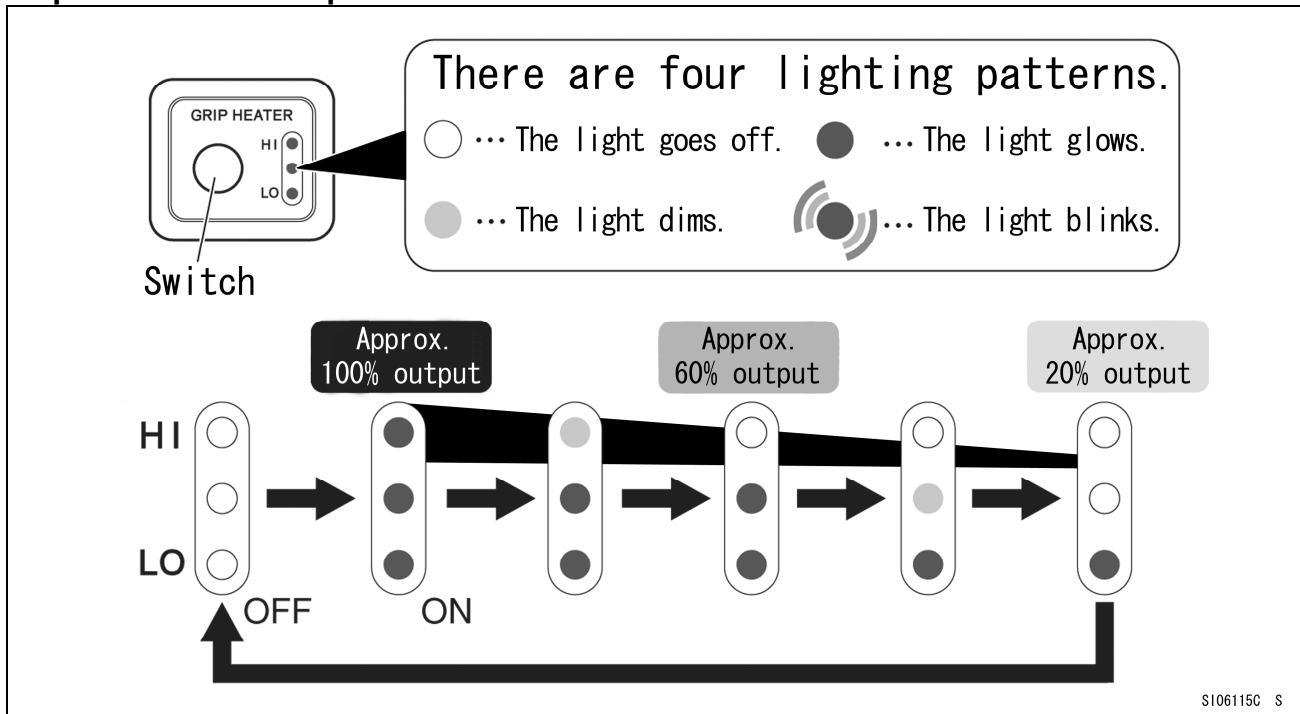
Left Grip Heater [A]  
 Right Grip Heater [B]  
 Heater Range [C]

### Specifications

|                   |                                     |
|-------------------|-------------------------------------|
| Power Supply      | Battery                             |
| Power Consumption | 28 W at the start-up                |
| Heater Type       | FPC (Flexible Print Circuit) Heater |



## Grip Heater Switch Operation



By pressing the switch the driver can turn the grip heater on/off or change the preset temperature.

- The indicator light shows the operating condition and preset temperature.
- The indicator lights have six modes which are changed by pressing the switch. The temperature can be set to five levels.
- The temperature can be adjusted in five levels between “LO” and “HI.” Set to the appropriate level according to the outside temperature or sensible temperature.
- The grip heater will be turned off when the main switch of the motorcycle has been turned off.

### **⚠ WARNING**

**Do not operate the grip heater switch during riding. Operating the switch during riding can cause the operator to lose control and the motorcycle to fall down, resulting in severe injury or death.**

### **NOTICE**

**Wear the gloves whenever using the grip heater. Handling the grip heater with bare hands can cause burn injury. When the rubber surface on the grip heater has worn or broken, replace it with a new one. Keep using the damaged grip heater can cause burn injury or electric shock. Do not use the grip heater in “HI” mode when the ambient temperature is 20°C (68°F) or higher.**

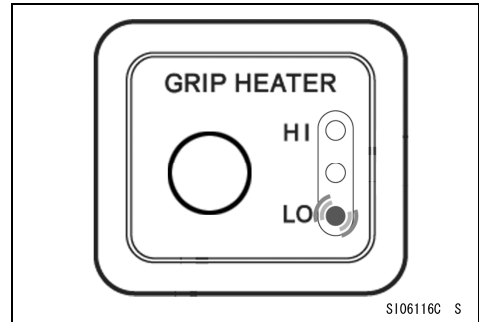
### **NOTE**

- *The grip heater is connected to the DC circuit from the battery. The IC which is activated by voltage detection is built into the heater switch to prevent battery rundown. Therefore, when the battery voltage is reduced at a stop or during slow driving (engine speed is low), the heater switch may be automatically turned off. However, once the battery voltage increases (engine speed is middle or high), the heater switch will be automatically turned on.*
- *During stop-and-go driving, the heater switch may not work depending on the battery condition.*
- *The battery is a consumable. The grip heater does not work at the end of the battery’s life. Inspect the battery and replace it with a new one if necessary.*

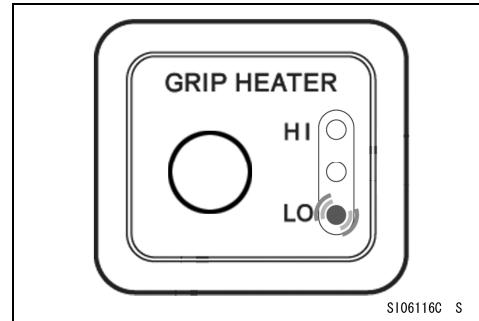
**Grip Heater Abnormal Condition**

With the ignition switch turned on, the relations between the grip heater switch, indicator light, the grip heater operating conditions, and the battery conditions are as follows.

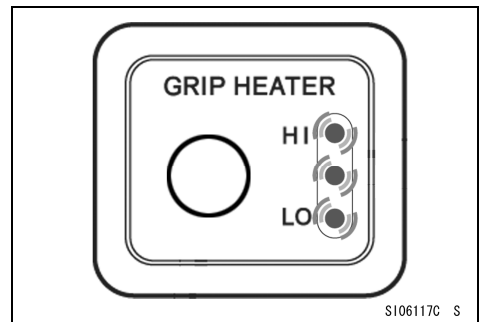
- Turn the grip heater switch OFF.
- ★ If the indicator light blinks as shown in the figure, battery voltage is too low. (This can occur at low engine RPM, when using high beam and other lights or electrical accessories.)
- Charge or replace the battery.



- Turn the grip heater switch ON.
- ★ If the indicator light blinks as shown in the figure, battery voltage is too low. (This can occur at low engine RPM, when using high beam and other lights or electrical accessories.)
- Inoperable because the “battery saver” circuit is working. The grip heater will be operable when the indicator light stops blinking with increase in battery voltage after running for a while.
- Charge or replace the battery.



- Turn the grip heater switch ON.
- ★ If the indicator lights blink as shown in the figure, no failures of the grip heater or battery.
- This lighting pattern can occur when idling is not stable.



**Troubleshooting (For Customers)**

Follow the checking procedures following table. If the grip heater does not work, consult your authorized Kawasaki dealer.

| Problem  | Checking Point and Measure  |
|--|---|
| The grip heater does not work or cannot be adjusted. | 1. Has the engine started?<br>2. At the above condition, does the indicator light go on between “HI” and “LO”?<br>3. Raise the engine speed at the above condition.   |
| The temperature of the grip heater is low or high.   | 1. Has the temperature been adjusted between “HI” and “LO”?<br>2. Do you frequently drive at idle or low speed?<br>3. If the temperature is high, switch the indicator to “LO” or turn the grip heater off, or wear heavy gloves. |
| The whole grip heater does not get warm.             | 1. This is normal. (To warm finger tips, the heater distribution is concentrated in the finger tip area.)   |