Kawasaki

Assembly Instructions

Model:	KLE650E/F
Description:	Grip Heater Kit
Part Number:	99994-0193

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.

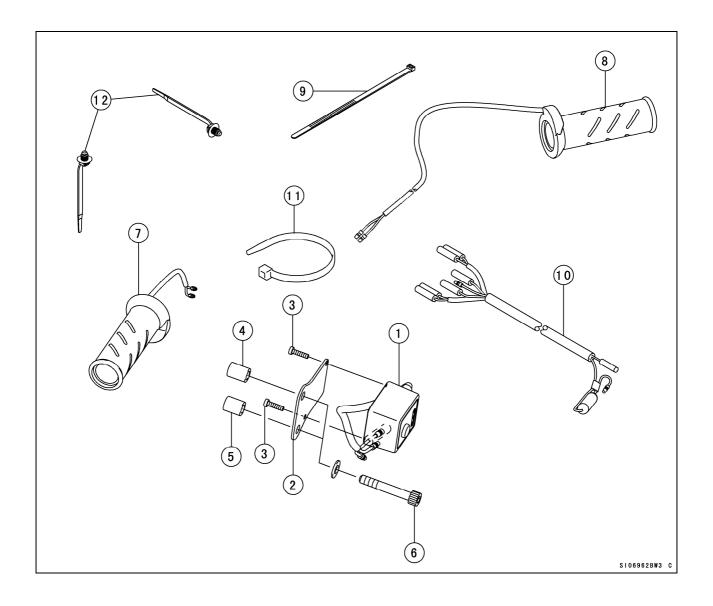
NOTE : NOTE indicates information that may help or guide you in the operation or service of the vehicle.

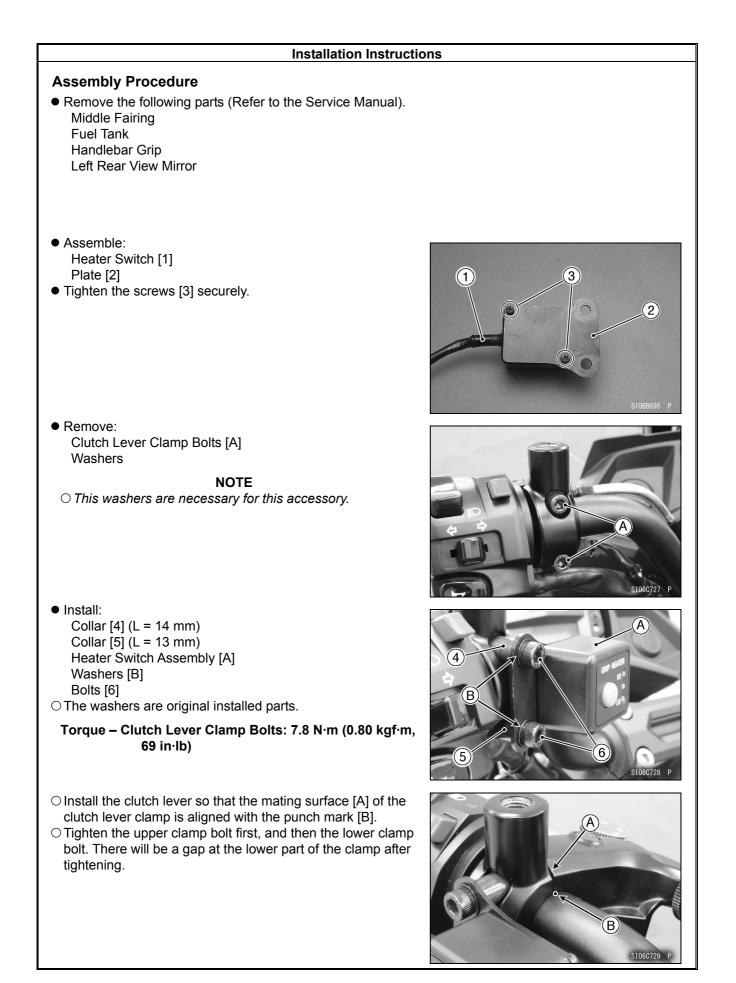
• Indicates a procedural step or work to be done.

O 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.

		Parts List		
No.	Component Name	Part No.	Qty	Remark
1	Heater Switch	27010-0126	1	
2	Plate	11056-0307	1	
3	Screw	92172-0489	2	
4	Collar	92152-0901	1	
5	Collar	92152-0902	1	
6	Bolt	120CB0640	2	
7	Left Grip Heater	46075-0101	1	
8	Right Grip Heater	46075-0102	1	
9	Band	92072-1195	1	
10	Sub-harness	26031-0971	1	
11	Band	92072-1197	1	Unused
12	Clamp	92072-1414	2	Unused

Refer to the Service Manual (P/No.: 99924-1490-01) for detailed procedures.





- Using a cleaning fluid, clean off any oil or dirt on the handlebar [A] and inside of the left grip heater [7].
- Apply thin coat of heat resistant adhesive to the handlebar end [B] and the inside rib [C] of the left grip heater.

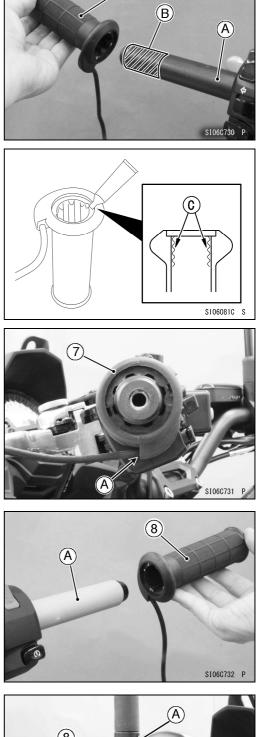
Sealant – Adhesive, TB1530C: 56042-0001

• Insert the left grip heater [7] onto the handlebar so that the harness come to the bottom side [A] of handlebar.

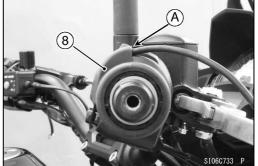
- Using a cleaning fluid, clean off any oil or dirt on the inner grip [A] and inside of the right grip heater [8].
- Apply thin coat of heat resistant adhesive to the inner grip surface.

Sealant - Adhesive, TB1530C: 56042-0001

• Insert the right grip heater [8] onto the handlebar so that the harness come to the top side [A] of handlebar.



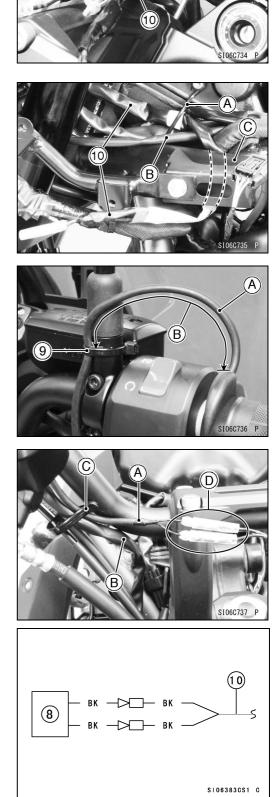
 $\overline{(7)}$



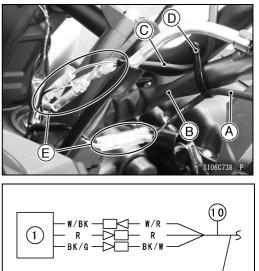
- Run the sub-harness [10] into the guide [A].
- Run the sub-harness [10] to the inside of the clutch cable [B].
- Run the sub-harness [10] in back of the ignition switch lead [C].
- Run the sub-harness [10] into the guide [A].
- Run the sub-harness [10] above the clutch cable [B].
- Run the sub-harness [10] under the frame [C].

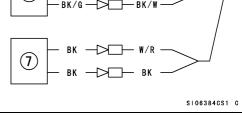
• Hold the right grip heater lead [A] with the band [9]. Lead Length [B]: 140 mm (5.51 in.)

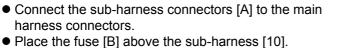
- Hold the right grip heater lead [A] and right switch housing lead [B] with the clamp [C].
- Connect the sub-harness connectors [D] to the right grip heater connectors as follows. Right Grip Heater [8] Sub-harness [10]
- Wrap the connectors with the available tape.



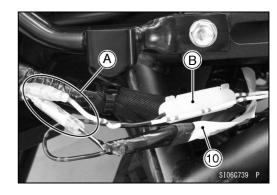
- Hold the left grip heater lead [A], left switch housing lead [B] and heater switch lead [C] with the clamp [D].
- Connect the sub-harness connectors [E] to the left grip heater connectors and heater switch connectors as follows. Heater Switch [1] Left Grip Heater [7] Sub-harness [10]
- Wrap the connectors with the available tape.



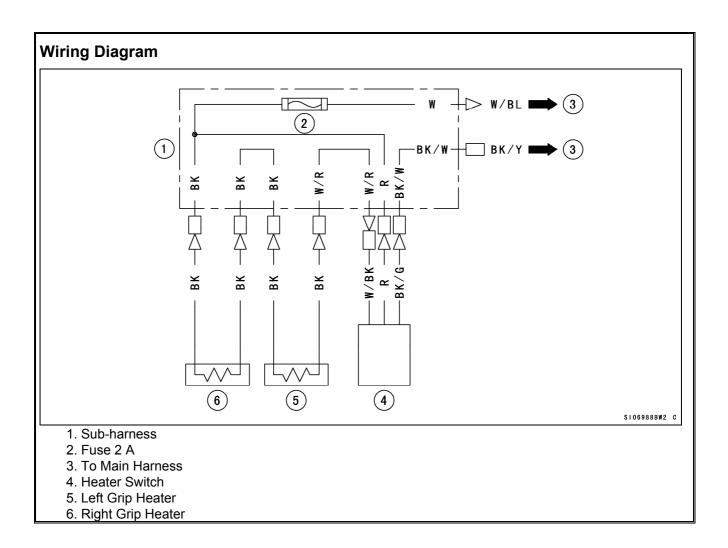




• Wrap the fuse and connectors with the available tape.



- Turn the ignition switch to "ON".
- ★ If the heater switch indicator light does not go on, inspect the installation condition of parts.
- Install the removed parts (Refer to the Service Manual).



Please check / adjust all screws in regular intervals.

This grip heater is rated at 18 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. 99958-0015) for operating procedures.

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



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.	
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.	

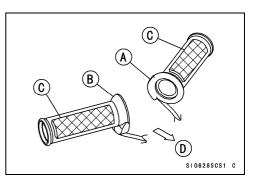
NOTE

• This grip heater is half type grip heater. The front half of the grip gets warm.

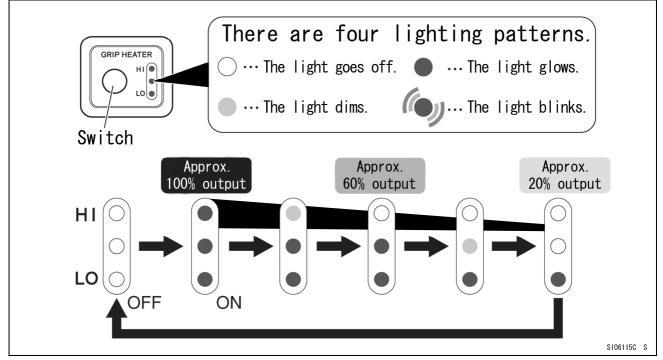
Left Grip Heater [A] Right Grip Heater [B] Heater Range [C] Front Side [D]

Specifications

Power Supply	Battery
Power Consumption	18 W
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.

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.

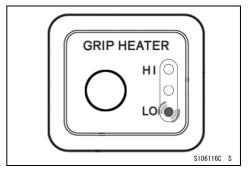
NOTE

- O 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.

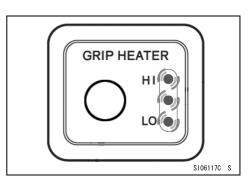
- Turn the grip heater switch OFF.
- ★ If the indicator light blinks as shown in the figure, battery voltage is too low. (This can occur at low engine RPM, when using high beam and other lights or electrical accessories.)
- Charge or replace the battery.



- 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	1. Has the engine started?
or cannot be adjusted.	2. At the above condition, does the indicator light go on
	between "HI" and "LO"?
	3. Raise the engine speed at the above condition.
The temperature of the grip	1. Has the temperature been adjusted between "HI" and "LO"?
heater is low or high.	2. Do you frequently drive at idle or low speed?
	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	1. This is normal. (To warm finger tips, the heater distribution is
get warm.	concentrated in the finger tip area.)