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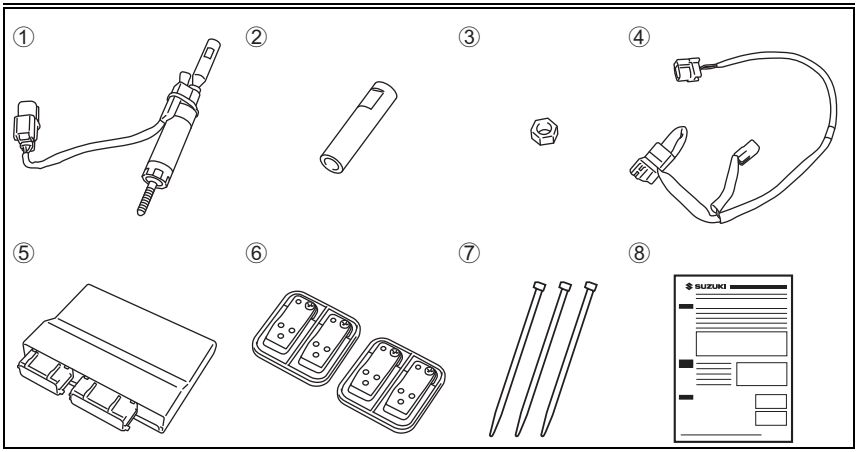
INSTALLATION INSTRUCTIONS

Description: **QUICK SHIFT SET** Installation Time: 1.7 Hours

Part Number	Applications	Spec	Part Number	Applications	Spec
25500-1781*	GSX-R1000A L7	E21,E24,E43,E69	25500-1785*	GSX-R1000A L7	P37
25500-1782*	GSX-R1000A L7	E38	25500-1786*	GSX-R1000A L7	E03,E28
25500-1783*	GSX-R1000A L7	E12,E14,E51	25500-1787*	GSX-R1000 L7	E33
25500-1784*	GSX-R1000A L7	E33	25500-1788*	GSX-R1000 L7	E03,E28

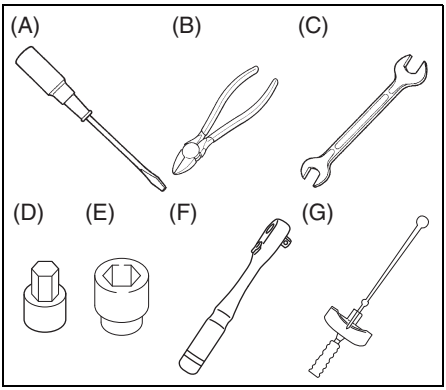
Contents

Ref.	Description	QTY
①	Gearshift sensor	1
②	Gearshift link rod	1
③	Lock-nut	1
④	Wiring harness	1
⑤	ECM	1
⑥	2nd air reed valve	2
⑦	Clamp	3
⑧	Installation instructions	1



Tools Required

Ref.	Description
(A)	⊖ Driver
(B)	Cutting pliers
(C)	Open end wrench (10 mm)
(D)	Hexagon socket (4 mm)
(E)	Socket (10 mm)
(F)	Ratchet
(G)	Torque wrench



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1. **Installation of the QUICK SHIFT SET must be carried out at an authorized SUZUKI dealer.**
2. **For the vehicle with the immobilizer system, re-registration of the immobilizer is necessary and re-registration of the immobilizer.**
3. **For the engine start, registration of two ignition keys including spare key is necessary at the same time. Ask your customer to bring the two keys.**

Important

⚠WARNING / ⚠CAUTION / *NOTICE* / *NOTE*

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol ⚠ and the words **WARNING, CAUTION, *NOTICE*** and *NOTE* have special meanings. Pay particular attention to messages highlighted by these signal words:

⚠ WARNING
Indicates a potential hazard that could result in death or serious injury.

⚠ CAUTION
Indicates a potential hazard that could result in minor or moderate injury.

NOTICE
Indicates a potential hazard that could result in vehicle or equipment damage.

NOTE: Indicates special information to make maintenance easier or instructions clearer.

Precautions for Installation

1. Check that the kit includes all the parts listed on the first page.
2. Check each part in the kit for scratches or any form of damage.
3. Park the vehicle on level ground.
4. Remove the ignition key from the switch and store it in a safe place.
5. Protect any items removed or to be installed from scratches by placing them on a soft cloth first before putting them on the ground.
6. Use care not to cause any damage to the body of the vehicle during installation of the accessory.

Tightening Torque

Tighten bolts to the torque indicated in the right table as standard value unless otherwise explicitly specified.
The value shows conventional or "4" marked bolt tightening torque. For other bolts not listed in the table, refer to the service manual.

Diameter (mm)	Tightening Torque		
	N·m	kgf-m	lbf-ft
5	3.0	0.3	2.0
6	5.5	0.55	4.0
8	13.0	1.3	9.5
10	29.0	2.9	21.0

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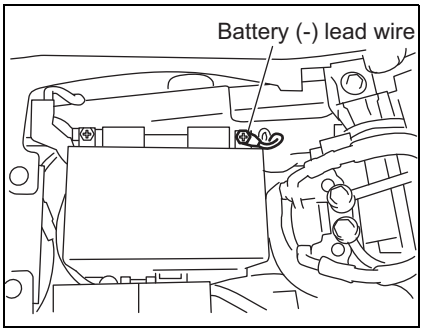
Installation **[Installation of Wiring harness]**

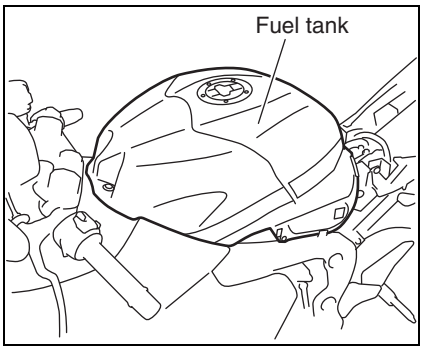
1. Disconnect the battery (–) lead wire. (Refer to the GSX-R1000/A service manual)



NOTICE
Be careful not to disconnect the battery (-) lead wire at least 5 seconds after ignition switch is turned to OFF. If the battery (-) lead wire is disconnected within 5 seconds after ignition switch is turned to OFF, there is a possibility of an unusual valve position being written in ECM and causing an error of throttle valve operation.

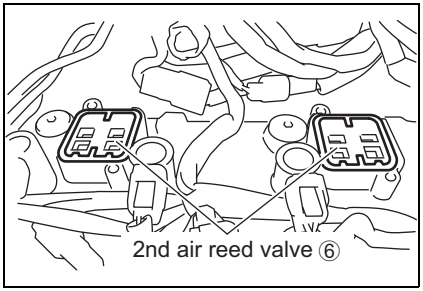
2. Replace the standard ECM with the ECM ⑤ included in the set. (Refer to the GSX-R1000/A service manual)

3. Remove the fuel tank. (Refer to the GSX-R1000/A service manual)

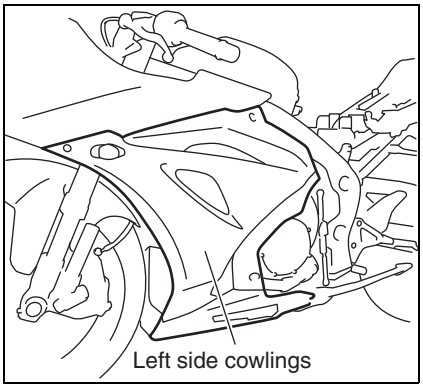


4. Replace the standard 2nd air reed valves with the 2nd air reed valves ⑥ included in the set. (Refer to the GSX-R1000/A service manual)

NOTE: Keep the fuel tank removed.

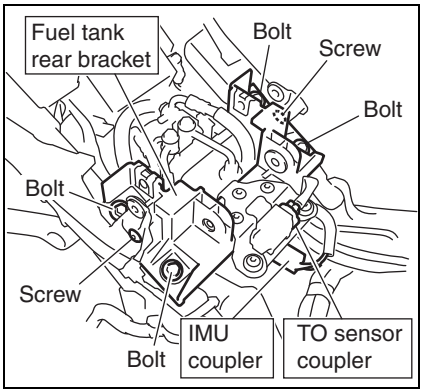


5. Remove the left side cowlings. (Refer to the GSX-R1000/A service manual)

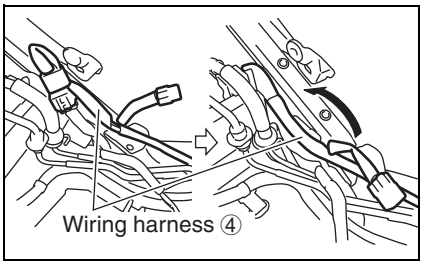


6. Disconnect the TO sensor coupler and IMU coupler and then remove the fuel tank rear bracket by removing bolts and screws.

NOTICE
The IMU is a precision unit and can be easily damaged. Handle the IMU carefully not to expose it to large shock.



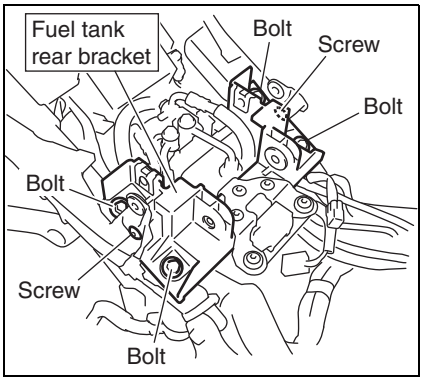
7. Connect the coupler of the Wiring harness ④ to the TO sensor coupler and put the harness into the position as shown.



8. Install the fuel tank rear bracket and tighten the bolts to specified torque.

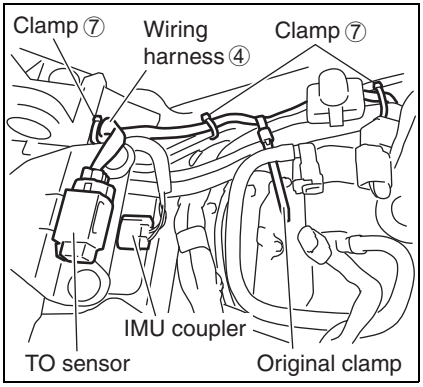
   Tightening torque
   Bolt: 10 N·m (1.0 kgf-m, 7.5 lbf-ft)

9. Tighten the other screws.

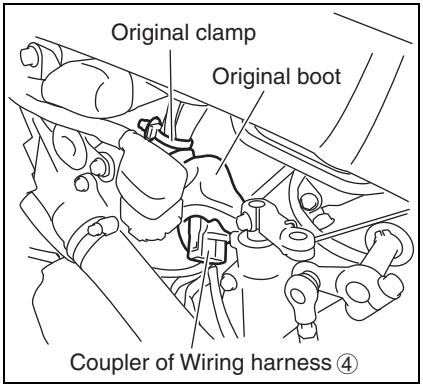


NOTICE
There is no abnormality in installation position or angle of the IMU and the IMU holder bracket spacers. **There is no deformation of the fuel tank rear bracket, IMU holder bracket and IMU holder.**

10. Connect the coupler of the Wiring harness ④ to the TO sensor and IMU coupler and then route the Wiring harness ④ as shown, and fix it with 3 points with the Clamps ⑦ and original clamp.



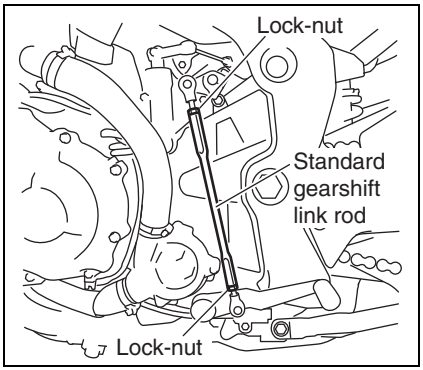
11. Insert the coupler of Wiring harness ④ into the original boot and fix the harness with original clamp.



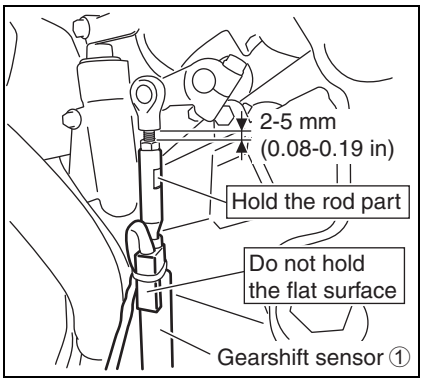
[Installation of Gearshift sensor]

12. Loosen the lock-nuts and remove the standard gearshift link rod.

NOTE: Use the lock-nuts as it is.



13. Facing the flat surface of the Gearshift sensor ① outward, install the Gearshift sensor ① to the Gearshift link arm so that the clearance between the link arm joint and lock-nut becomes 2 – 5 mm (0.08 – 0.19 in).
14. While holding the rod part of the Gearshift sensor ① with tool, tighten the lock-nut to the specified torque.



NOTICE
The Gearshift sensor ① could be damaged easily. **Do not hold the flat surface of the Gearshift sensor ① with tool.**

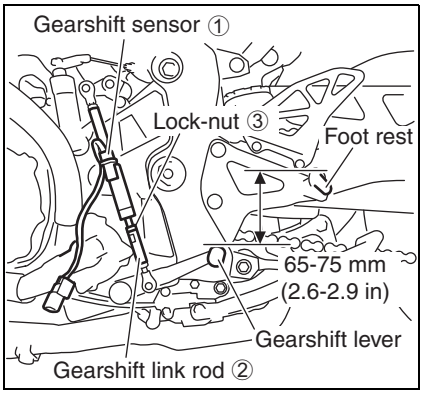
Tightening torque

Lock-nut: 10 N·m (1.0 kgf-m, 7.5 lbf-ft)

15. Install the Lock-nut ③ and Gearshift link rod ② to the Gearshift sensor ① and Gearshift lever link joint.

NOTE: Position the Gearshift link rod ② so that the length of the both threaded portions become equal.

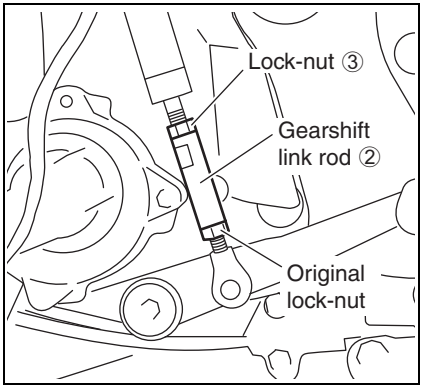
16. Turning the Gearshift link rod ②, adjust the gearshift lever height to 65 – 75 mm (2.6 – 2.9 in).



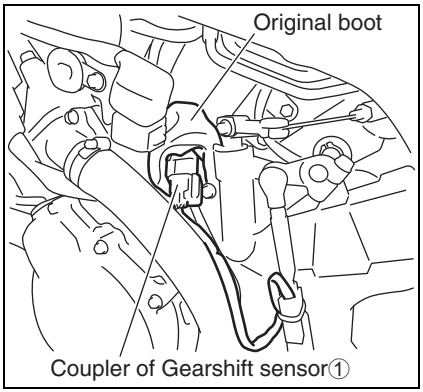
17. While holding the Gearshift link rod ② at width across flats, tighten the lock-nuts to the specified torque.

    Tightening torque

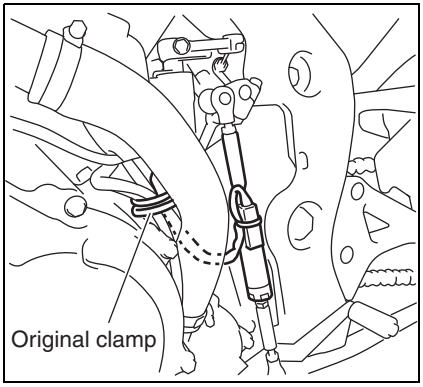
    Lock-nut: 10 N·m (1.0 kgf-m, 7.5 lbf-ft)



18. Connect the coupler of the Gearshift sensor ①.
19. Insert the coupler of the Gearshift sensor ① into the original boot.



20. Using the original clamp on the vehicle, fix the lead wire of the Gearshift sensor ①.



21. Install the left side cowlings which were removed in step 5.

22. Check the error code with SDS-II.

Operation of "Quick Shift"

Once the "Quick shift" has been set, the throttle grip and clutch lever operations are not required in the shift change operation.

1. Set the "QS SET" to <1> or <2>.

NOTE: For the "QS SET" setting, refer to "Setting of Quick Shift".

2. Squeeze the clutch lever and shift the gear into the 1st position.
3. When performing a shift change, operate the gearshift lever without using the clutch lever.
   - When the shift change operation is to be performed, the motorcycle adjusts the engine speed according to the situation at that time, so the throttle grip operation is not required.
   - The "Quick shift" is activated when the engine speed is 2000 rpm or more.
   - Even when the "Quick shift" has already been set, the shift change operation using the clutch lever is available.
   - When the shift change operation is to be performed, move the gearshift lever until you feel it at the end.
   - When the quick shift indicator "QS" blinks, the "Quick shift" is not available.

NOTICE
• **Operating the gearshift lever without using the clutch lever when the "Quick shift" is set to "OFF" can damage the engine or drive system.** **When the "Quick shift" is set to "OFF", use the clutch lever.** • **When the engine speed is 2000 rpm or less, the "Quick shift" is not available. In this case, operating the gearshift lever without using the clutch lever can damage the engine or drive system.** **Use the clutch lever to perform a shift change at the engine speed of 2000 rpm or less.**

NOTE: During riding, the quick shift indicator "QS" blinks in the following cases.
- *The shift operation is performed at the engine speed of 2000 rpm or less.*
- *The shift operation is performed with the clutch lever squeezed.*
- *The shift down operation is performed with the gear shifted to the 1st position, or the shift up operation is performed with the gear shifted to the 6th position.*

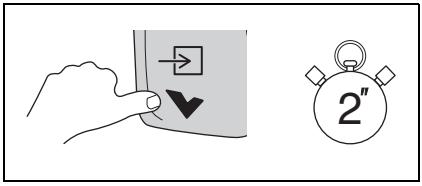
4. When the motorcycle is to be stopped, stop it with the clutch lever squeezed.

Setting of "Quick Shift"

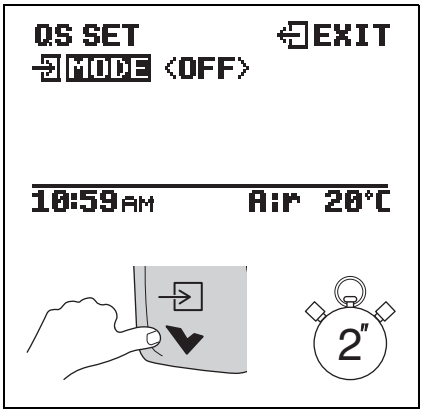
Set the "Quick shift". Once the "Quick shift" has been set, the throttle grip and clutch lever operations are not required in the shift change operation.

NOTE: For the riding with the "Quick shift" used, refer to "Operation of Quick Shift".

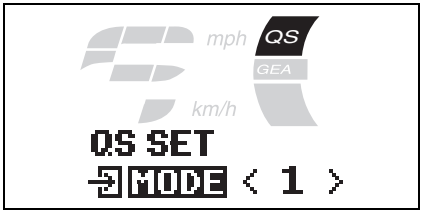
1. From the "MENU" indication, select "QS SET" and press the SELECT switch (Down) for about 2 seconds.
   "QS SET" starts blinking and moves to the setting screen.



2. Each pressing the SELECT switch (Down) for 2 seconds changes the mode to <OFF> → <1> → <2> → <OFF> again in this order.



When the <1> or <2> is selected, the quick shift indicator “QS” comes on.



OFF:
The “Quick shift” is unavailable.

MODE 1:
The “Quick shift” is available. The gearshift lever stroke required for the shift change, is set larger and the force required for gearshift lever operation is set heavier than those in MODE 2.

MODE 2:
The “Quick shift” is available. The gearshift lever stroke required for the shift change, is set smaller and the force required for gearshift lever operation is set lighter than those in MODE 1.