INSPECTION

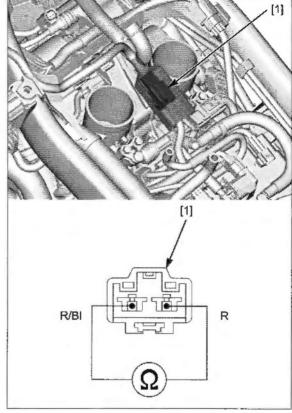
Remove the fuel tank (page 7-7).

Disconnect the ignition switch 2P connector [1].

Check for continuity between the ignition switch side connector terminals in each switch position.

Refer to the wiring diagram for the terminals and switch status:

- MT model: (page 23-2)
- DCT model: (page 23-5)



LEFT HANDLEBAR SWITCH

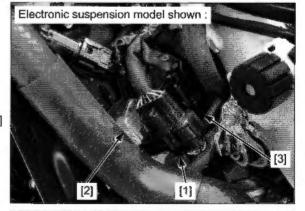
REMOVAL

Remove the following:

- Left knuckle guard (page 2-22)
- Left inner cover (page 2-9)
- Air cleaner housing (page 7-14)

Disconnect the following:

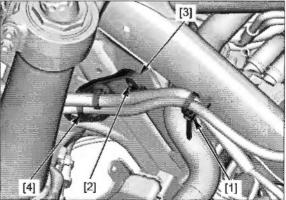
- Left handlebar switch 12P connector [1]
- Left handlebar switch 8P connector [2]
- Front suspension solenoid 2P connector [3] (electronic suspension model only)



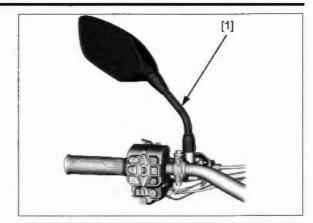
Remove the wire band [1]:

Remove the socket bolt [2] and stay [3].

Release the left handlebar switch wire clip [4] from the stay.



Remove the left rearview mirror [1].



Remove the wire clamp [1].

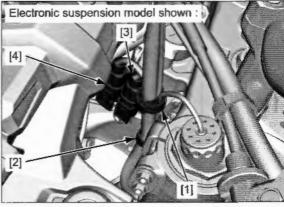
Release the wire clip [2] from the stay.

Disconnect the following:

- Left grip heater 2P connector [3]

- Front suspension solenoid 2P (electronic suspension model only)

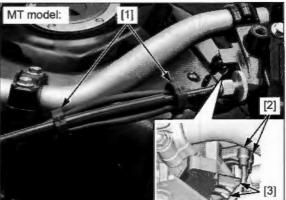
connector [4]



MT model: Remove the wire clamps [1].

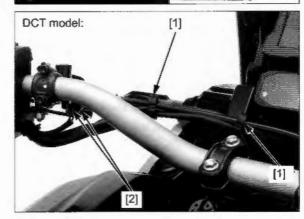
Disconnect the following:

- Clutch switch connectors (upper side) [2]
- Cruise cancel switch connectors (lower side) [3]

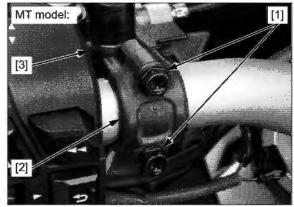


DCT model: Remove the wire clamps [1].

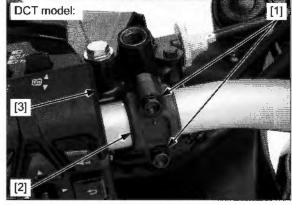
Disconnect the parking brake switch connectors [2].



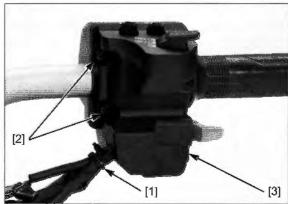
MT model: Remove the bolts [1], holder [2], and clutch lever assembly [3].



DCT model: Remove the bolts [1], holder [2], and parking brake lever assembly [3].

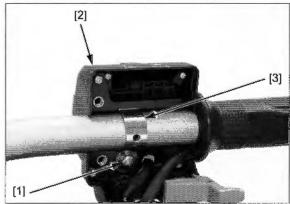


Remove the wire band [1].
Remove the left handlebar switch screws [2].
Separate the left handlebar switch housing [3].



Remove the screw [1].

Remove the left handlebar switch front housing [2] by opening the setting plate [3].

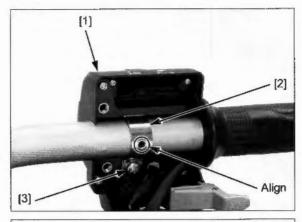


INSTALLATION

Install the left handlebar switch front housing [1]. Set the setting plate [2].

NOTE:

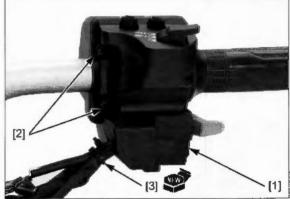
Align the setting plate tab with the handlebar hole.
 Install and tighten the screw [3] securely.



Instalt the left handlebar switch rear housing [1]. Install and tighten the left handlebar switch screws [2] to the specified torque.

TORQUE: 2.5 N·m (0.3 kgf·m, 1.8 lbf·ft)

Install a new wire band [3].

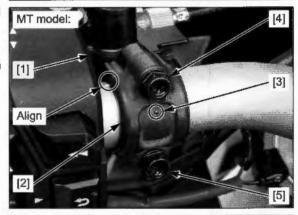


MT model:

Install the clutch lever assembly [1] by aligning its end with the paint mark on the handlebar.

Install the holder [2] with its punch mark [3] facing up.

Install the bolts, and tighten the upper bolt [4] first, then the lower bolt [5].

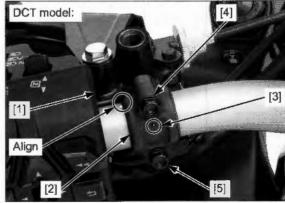


DCT model:

Install the parking brake lever assembly [1] by aligning its end with the paint mark on the handlebar.

Install the holder [2] with its punch mark [3] facing up.

Install the bolts, and tighten the upper bolt [4] first, then the lower bolt [5].

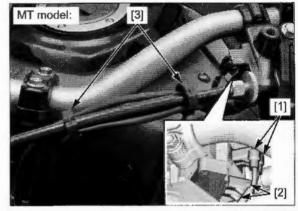


MT model: Connect the following:

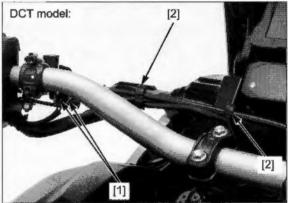
- Clutch switch connectors (upper side) [1]

- Cruise cancel switch connectors (lower side) [2]

Install the wire clamps [3].



DCT model: Connect the parking brake switch connectors [1]. Install the wire clamps [2].



Install the wire clip [1].
Install the wire clamp [2].
Connect the following:

- Left grip heater 2P connector [3]

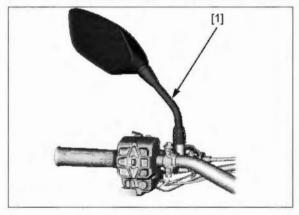
 Front suspension solenoid 2P connector [4] (electronic suspension model only)

Electronic suspension model shown:

[3]

[4]

Install the left rearview mirror [1].

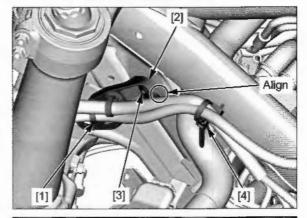


Install the left handlebar switch wire clip [1] to the stay. Install the stay [2] and socket bolt [3].

NOTE:

· Align the stay tab with the frame hole.

Tighten the socket bolt securely. Install the wire band [4].



Connect the following:

- Left handlebar switch 12P connector [1]
- Left handlebar switch 8P connector [2]
- Front suspension solenoid 2P connector [3] (electronic suspension model only)

Install the following:

- Left knuckle guard (page 2-22)
- Left inner cover (page 2-9)
- Air cleaner housing (page 7-14)

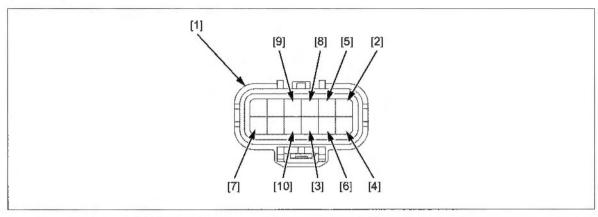


INSPECTION

NOTE:

· Before inspection, check that there is no DTCs.

Measure the resistance between the left handlebar switch side 12P connector [1] terminals when each switch is operated.



| CONNECTION: | STANDARD (at 25°C/77°F): | |
|-----------------------------------|-------------------------------|-------------------|
| Blue [2] - Green/blue [3] | Headlight dimmer switch: | 95.5 – 105.5 Ω |
| | Passing light control switch: | 338.9 – 374.7 Ω |
| White/black [4] – Green/blue [3] | Page switch: | 1609.6 – 1779.1 Ω |
| | Voice control switch: | 736.1 – 813.7 Ω |
| | Function lever (up): | 95.5 – 105.5 Ω |
| | Function lever (down): | 338.9 – 374.7 Ω |
| White/blue [5] – Green/blue [3] | Sel left switch: | 95.5 – 105.5 Ω |
| | Back switch: | 338.9 – 374.7 Ω |
| | Sel up switch: | 736.1 – 813.7 Ω |
| | Sel down switch: | 1609.6 – 1779.1 Ω |
| White/red [6] – Green/blue [3] | Sel right switch: | 95.5 – 105.5 Ω |
| | ENT switch: | 338.9 – 374.7 Ω |
| | Skip switch: | 736.1 – 813.7 Ω |
| | Goes back switch: | 1609.6 – 1779.1 Ω |
| White/green [7] – Green/blue [3] | Horn switch: | 95.5 – 105.5 Ω |
| | Favorite switch: | 338.9 – 374.7 Ω |
| White/yellow [8] – Green/blue [3] | Turn signal left switch: | 736.1 – 813.7 Ω |
| | Turn signal right switch: | 1609.6 – 1779.1 Ω |
| | Turn signal cancel switch: | 338.9 – 374.7 Ω |
| | Hazard switch: | 95.5 – 105.5 Ω |

DCT model only:

| CONNECTION: | STANDARD (at 25°C/77°F): | | |
|-----------------------------------|--------------------------|-----------------|--|
| Black/blue [9] - Green/white [10] | Shift up switch (+): | 406.9 – 449.8 Ω | |
| | Shift down switch (-): | 267.8 – 296.1 Ω | |

Replace the left handlebar switch if any switch resistance is not standard value.

RIGHT HANDLEBAR SWITCH

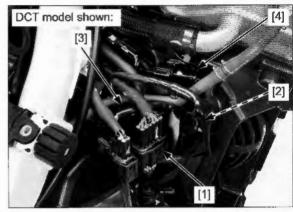
REMOVAL

Remove the following:

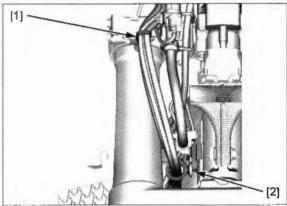
- Right knuckle guard (page 2-22)Right inner cover (page 2-9)
- Air cleaner housing (page 7-14)

Disconnect the following:

- Right handlebar switch 12P connector [1]
- Right handlebar switch 4P connector [2]
- Grip APS 8P connector [3]
- Right grip heater connector [4]



Remove the wire band A clip [1] and wire band B clip [2] from the stays.



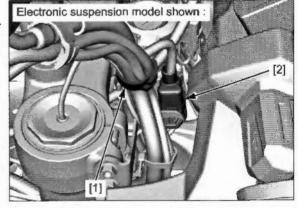
Remove the right rearview mirror [1].



Remove the wire clamp [1].

Electronic suspension model only:

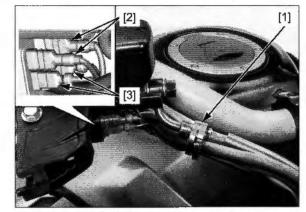
Disconnect the front suspension stroke sensor connector [2].



Remove the wire clamp [1].

Disconnect the following:

- Front brake switch connectors (upper side) [2]
- Cruise cancel switch connectors (lower side) [3]



Remove the bolts [1], holder [2], and front master cylinder [3].

NOTE:

 Keep the front master cylinder upright to prevent air from entering the hydraulic system.



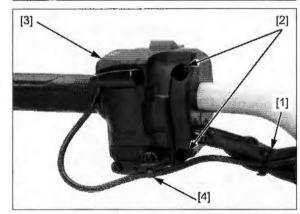
Remove the wire band [1].

Remove the right handlebar switch screws [2].

Separate the right handlebar switch housing [3].

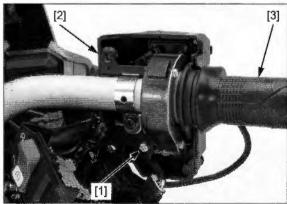
CRF1100A4/D4:

Release the wire clip [4].



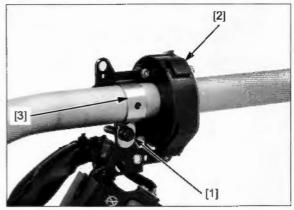
Remove the screw [1].

Remove the right handlebar switch housing [2] and throttle grip pipe [3].



Remove the screw [1].

Remove the grip APS [2] by opening the setting plate (3).



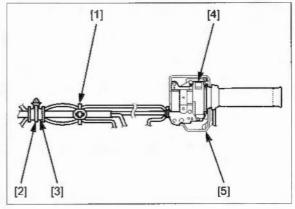
DISASSEMBLY

Remove the right handlebar switch (page 22-34).

Remove the following:

- Wire band A [1]
- Wire band B [2]
- Wire protector [3]

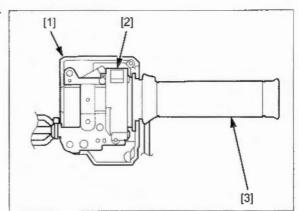
Remove the grip AP\$ [4] from the right handlebar switch rear housing [5].



ASSEMBLY

Temporarily set the following to the right handlebar switch rear housing [1]:

- Grip APS [2]
- Throttle grip pipe [3]

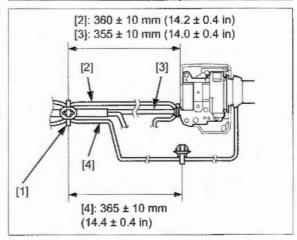


Secure the following wires with new wire band A [1] to specified range as shown.

- Grip APS wire [2]
- Right handlebar switch wire [3]
- Right grip heater wire [4] (CRF1100A4/D4)

NOTE

 Install the wire band A so that its clip is in the direction as shown.



Secure the following wires with new wire band B [1] and wire protector [2] to specified range from the wire band A [3] as shown.

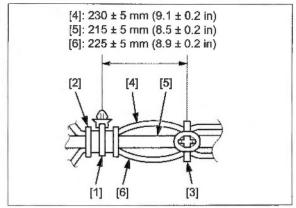
- Grip APS wire [4]
- Right handlebar switch wire [5]
- Right grip heater wire [6] (CRF1100A4/D4)

NOTE:

 Install the wire band B so that its clip is in the direction as shown.

Remove the following from the right handlebar switch rear housing:

- Grip APS
- Throttle grip pipe



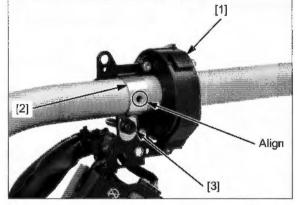
INSTALLATION

Install the grip APS [1].

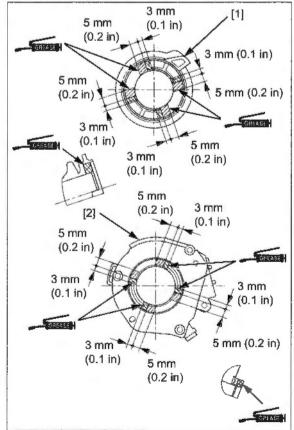
Set the setting plate [2].

NOTE:

Align the setting plate tab with the handlebar hole.
 Install and tighten the screw [3] securely.



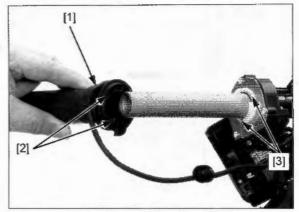
Apply grease to the throttle grip pipe [1] and APS [2] contact area as shown.



Install the throttle grip pipe [1] as shown.

NOTE:

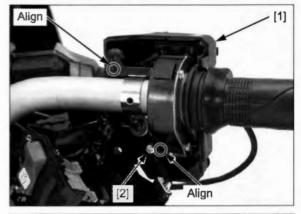
 Align the throttle grip pipe tabs [2] with the grip APS grooves [3].



Install the right handlebar switch rear housing [1].

NOTE:

Align the rear housing tabs with the holes.
 Install and tighten the screw [2] securely.



Install the right handlebar switch front housing [1].

NOTE:

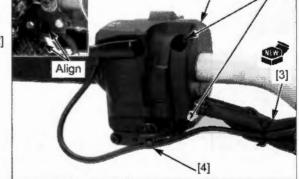
· Align the front housing boss with the hole.

Install and tighten the right handlebar switch screws [2] to the specified torque.

TORQUE: 2.5 N·m (0.3 kgf·m, 1.8 lbf·ft)

Install a new wire band [3].

CRF1100A4/D4: Install the wire clip [4].



[1]

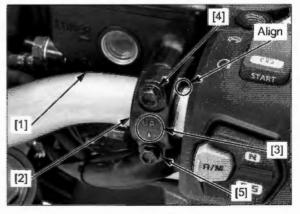
[2]

Install the front master cylinder [1] by aligning its end with the paint mark on the handlebar.

Install the front master cylinder holder [2] with its "UP" mark [3] facing up.

Install the front master cylinder bolts, and tighten the upper bolt [4] first, then the lower bolt [5] to the specified torque.

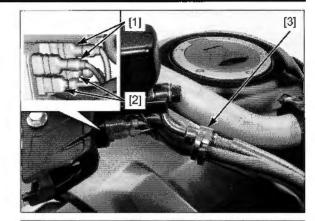
TORQUE: 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)



Connect the following:

- Front brake switch connectors (upper side) [1]
 Cruise cancel switch connectors (lower side) [2]

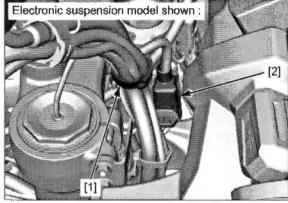
Install the wire clamp [3].



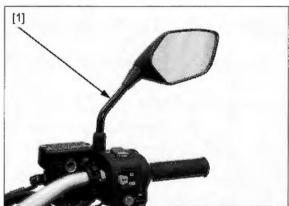
Install the wire clamp [1].

Electronic suspension model only:

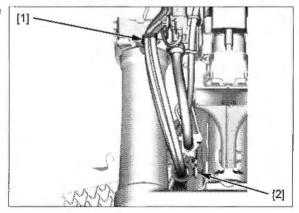
Connect the front suspension stroke sensor connector [2].



Install the right rearview mirror [1].



Install wire band A clip [1] and wire band B clip [2] to the stays.



Connect the following:

- Right handlebar switch 12P connector [1]
- Right handlebar switch 4P connector [2]
- Grip APS 8P connector [3]
- Right grip heater connector [4]

Install the following:

- Right knuckle guard (page 2-22)
- Right inner cover (page 2-9)
- Air cleaner housing (page 7-14)

NOTE:

Route the hoses and wires properly (page 1-26).

DCT model shown: [4] [2]

INSPECTION

NOTE:

Before inspection, check that there is no DTCs.

STARTER SWITCH INSPECTION

Disconnect the right handlebar switch 12P connector (page 22-34).

Check the continuity between the switch side 12P connector [1] terminals.

CONNECTION: Black - Green/black

There should be continuity only when the starter switch is pushed.

If the starter switch is OK, check the following:

- Open circuit in the Gray wire between the ECM 39P (Black) connector and right handlebar switch 12P (Black) connector
- Open circuit in the Gray wire between the right handlebar switch 12P and ECM 33P (Black) connectors
- Open circuit in the Gray wire between the ECM 33P (Gray) and right handlebar switch 12P connectors
- Engine stop switch function (page 22-40)

If the wires are OK, replace the ECM with a known good one and recheck.

ENGINE STOP SWITCH INSPECTION

Disconnect the right handlebar switch 12P connector (page 22-34).

Check the continuity between the switch side 12P connector [1] terminals.

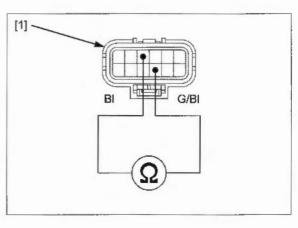
CONNECTION: White/blue - Green/black

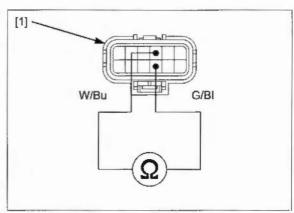
There should be no continuity only when the engine stop switch is OFF.

If the engine stop switch is OK, check the following:

- Open circuit in the White wire between the ECM 33P (Gray) and right handlebar switch 12P connectors
- Open circuit in the Gray wire between the right handlebar switch 12P and ECM 33P (Black) connectors
- Short circuit in the White wire between the ECM 33P (Gray) and right handlebar switch 12P connectors

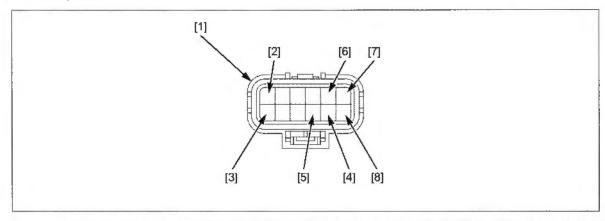
If the wire is OK, replace the ECM with a known good one and recheck.





OTHER SWITCHES INSPECTION

Measure the resistance between the right handlebar switch side 12P connector [1] terminals when each switch is operated.



| CONNECTION: | STANDARD (at 25°C/77°F): | |
|-----------------------------------|-----------------------------|-----------------|
| Green/blue [2] - Blue [3] | Function switch: | 95.5 – 105.5 Ω |
| White/black [4] - Green/black [5] | Cruise control main switch: | 85.2 – 94.1 Ω |
| | SET/- Cruise control lever: | 187.2 – 207.0 Ω |
| White [6] - Green/black [5] | RES/+ Cruise control lever: | 87.8 – 97.0 Ω |

DCT model only:

| CONNECTION: Black/blue [7] – Green/white [8] | STANDARD (at 25°C/77°F): | | |
|---|--------------------------|-----------------|--|
| | N switch: | 85.2 – 94.1 Ω | |
| | D-S switch: | 187.2 – 207.0 Ω | |
| | A/M switch: | 372.4 – 411.7 Ω | |

Replace the right handlebar switch if any switch resistance are not standard value.

BRAKE SWITCH

REMOVAL/INSTALLATION

FRONT

Refer to front master cylinder service (page 19-15).

REAR

Remove the front cross plate (page 7-8).

Disconnect the rear brake switch 4P connector [1].

Release the rear brake switch wire from the guide [2].

