

# Assembly and Pre-Delivery Service Guide

## VZR1800K6

### FOREWORD

This motorcycle has been designed and produced utilizing Suzuki's most modern technology. The finest product, however, cannot perform properly unless it is correctly assembled and serviced. This service guide has been produced to aid you in properly assembling and servicing this motorcycle.

Please review this service guide carefully before performing any work. Take special care to properly perform the required assembly and servicing marked by either a Warning or a Caution. Failure to follow the directions in either of these two (2) categories could lead to serious problems. **▲ WARNING** and **CAUTION** areas are denoted to emphasize certain areas and carry the following meanings:

**▲ WARNING** . . . . . Indicates a potential hazard that could result in death or injury.

**CAUTION** . . . . . Indicates a potential hazard that could result in motorcycle damage.

Any assembly and pre-delivery set-up performed on any Suzuki motorcycle by the dealer shall be deemed by your Suzuki distributor to be performed at the dealer's sole risk and responsibility. The Suzuki distributor disclaims any and all liability, obligation or responsibility for any defects resulting from said assembly and pre-delivery set-up, and for any claims, demands or causes of action for damage to property or for personal injuries resulting from the Dealer's assembly and pre-delivery set-up of Suzuki motorcycle.

This Assembly and Pre-Delivery Service Guide may contain photographs of products sold in other markets. The assembly and pre-delivery service procedures in this guide, however, apply to this market.

**SUZUKI MOTOR CORPORATION**

*K6*

**SUZUKI**

99505-01096-03E  
(英)

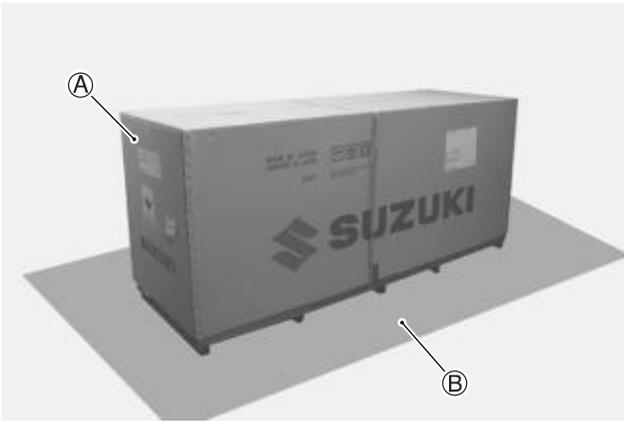
# PREPARATION

## WORKSHOP

### ⚠ WARNING

The workshop where the machine is assembled should be clean, spacious, and have a level floor.

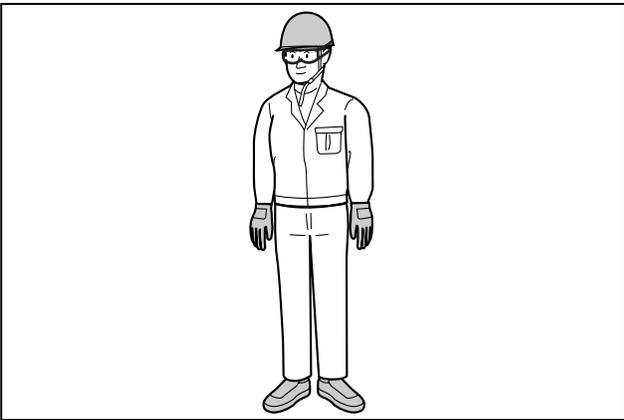
- A: Packed motorcycle
- B: Working space



## SELF PROTECTION

### ⚠ WARNING

The technician should wear protective clothing such as leather gloves, a long sleeve shirt, eye protection and safety shoes as shown in the illustration when handling metal crates.



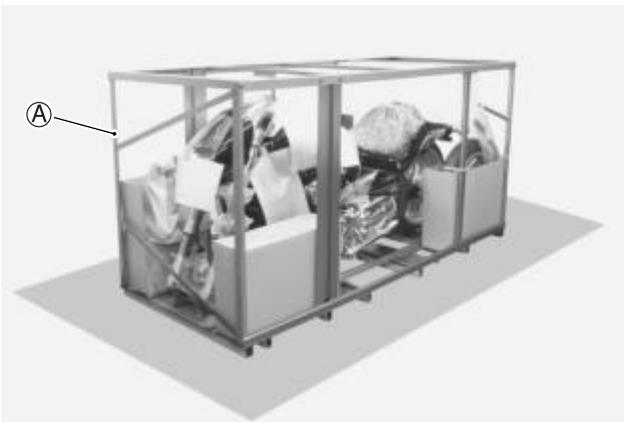
# UNCRATING THE MOTORCYCLE

Remove the carton.

### ⚠ WARNING

Metal crates may have sharp edges and may cause injury.

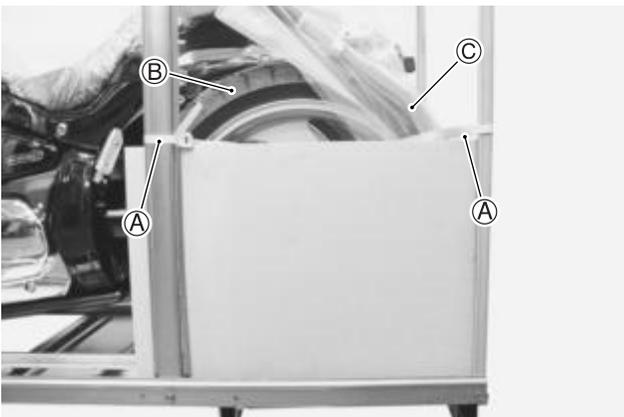
- A: Crate

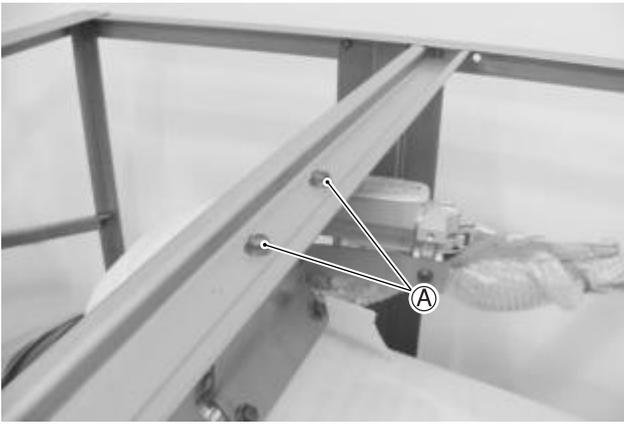


Remove the strap.

Take the front wheel assembly and handlebars assembly off the crate base.

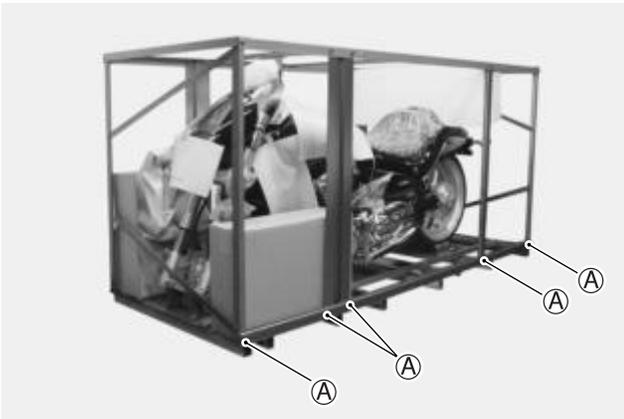
- A: Strap
- B: Front wheel assembly
- C: Handlebars assembly





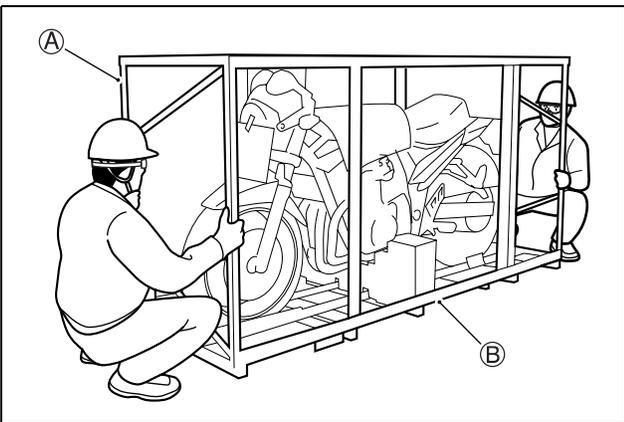
Remove the bolts of the bracket.

A: Bolt



Remove the bolts from the crate.

A: Bolt



Lift the steel frame to separate it from the base of the crate.

Carefully remove the various component parts packaged around the motorcycle.

**⚠ WARNING**

**Handling crates requires two operators.**

**CAUTION**

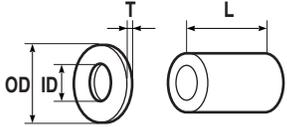
**Be careful not to scratch the motorcycle.**

A: Steel frame  
B: Crate base

# LOCATION OF PARTS

Check all the components which have been removed from the base of the crate.

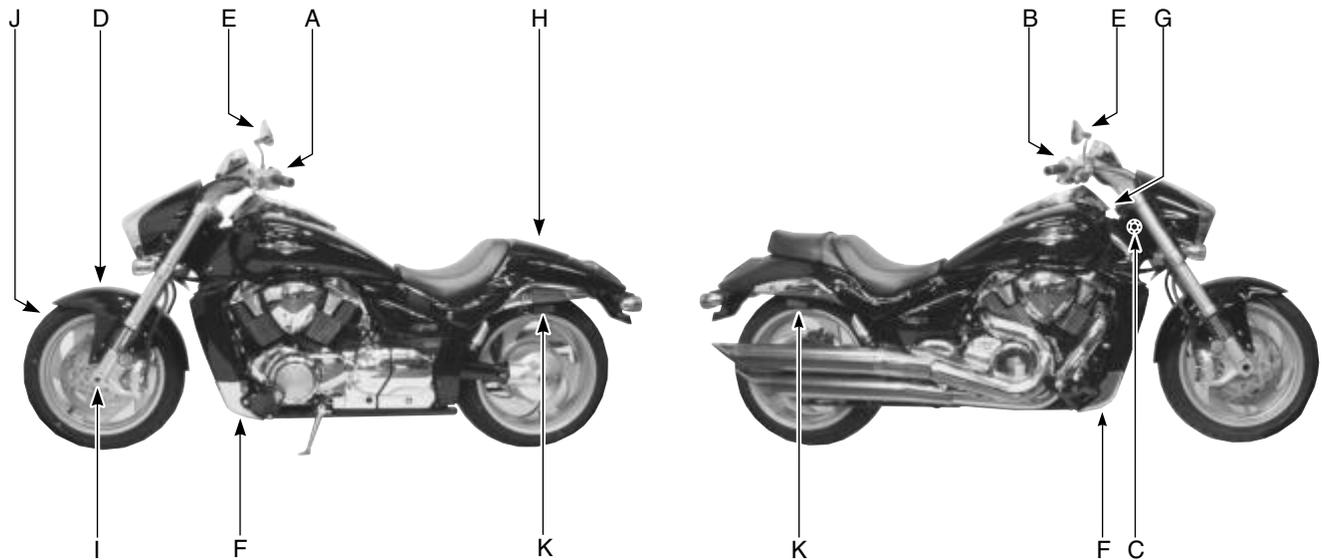
Item	Part Name	Q'ty	Remarks	Item	Part Name	Q'ty	Remarks
A	Handlebars assembly	1		E	Rear view mirror	2	Right and Left
	Clamp	2		F	Frame body cover	2	Right and Left
	Allen bolt	4	8 × 35 mm		Frame body lower cover	1	
	Plastic cap	4	OD:14.5 For handlebar clamp bolt		Fastener	1	Large
	Screw	1	5 × 35 mm For throttle assembly		Fastener	2	Medium
	Screw	1	5 × 30 mm For left switch	Tapping screw	2	5 × 16 mm	
	Screw	1	5 × 45 mm For left switch	G	Fastener	1	Small
	Clutch lever cover	1		H	Seat tail cover	1	
	Strap	5	L:140	H	Hexagonal wrench	1	5 mm
	Plastic cap	2	OD:36.0 For handlebar end		I	Front wheel spacer	1
B	Holder	1	For front brake master cylinder	J	Front wheel assembly	1	
	Allen bolt	2	6 × 20 mm	K	Reflex reflector	2	Right and Left
C	O-ring	1	For throttle cable		Bracket	2	Right and Left
	Strap	1	L:90		Flange nut	2	5 mm
D	Front fender	1			Flange bolt	1	6 × 12 mm
	Stepped Allen bolt	4	6 × 16 mm	L	Battery electrolyte container	1	
				M	Owner's manual	1	

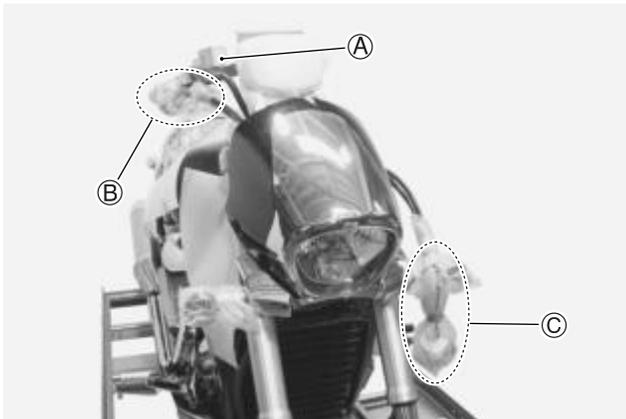
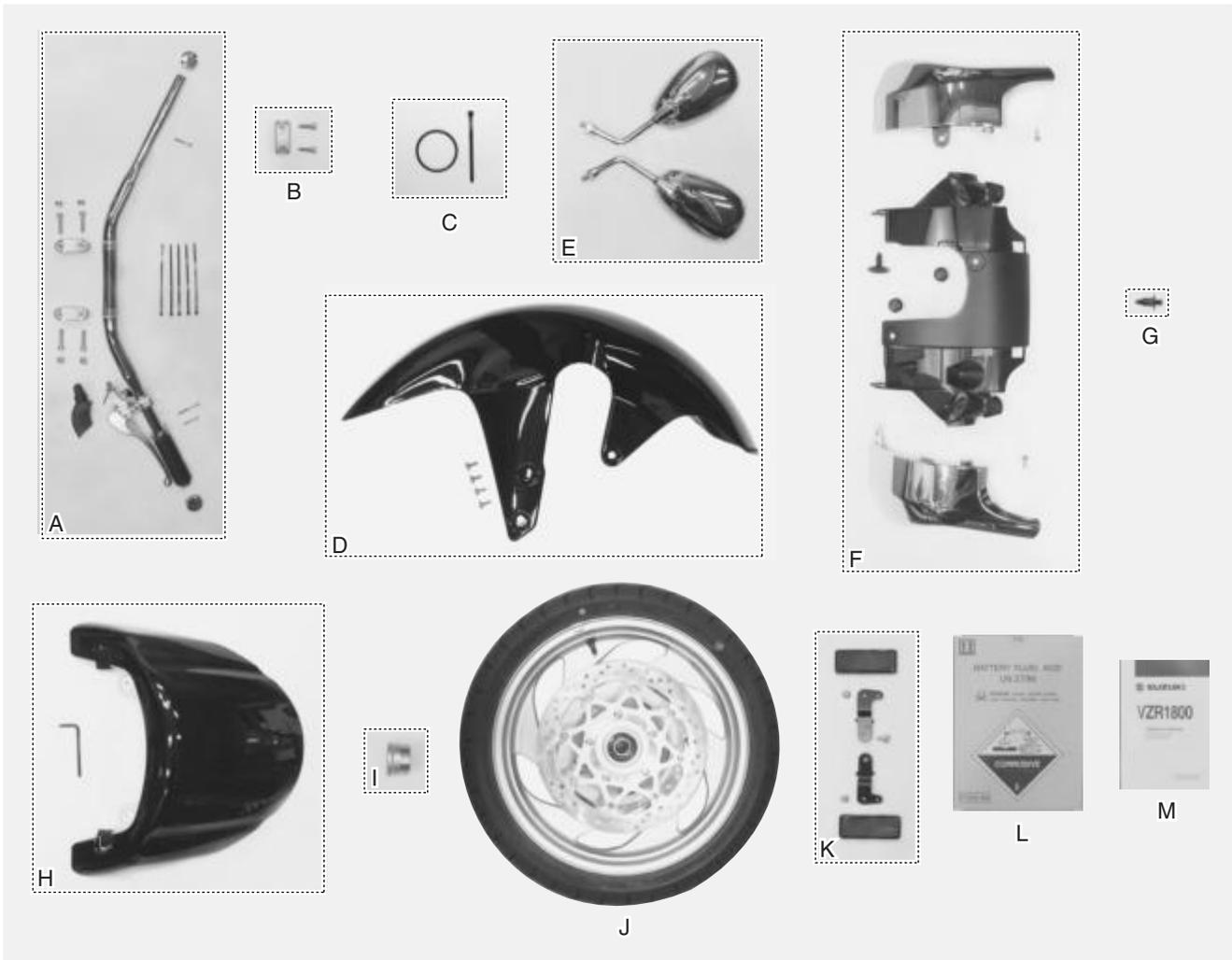


**OD** : Outside diameter (mm)  
**ID** : Inside diameter (mm)  
**L** : Length (mm)  
**T** : Thickness (mm)

**NOTE:**  
 Please hand over the parts shown as Item H in the above table to your customer together with motorcycle.

Parts listed above are installed respectively into the positions as follows.



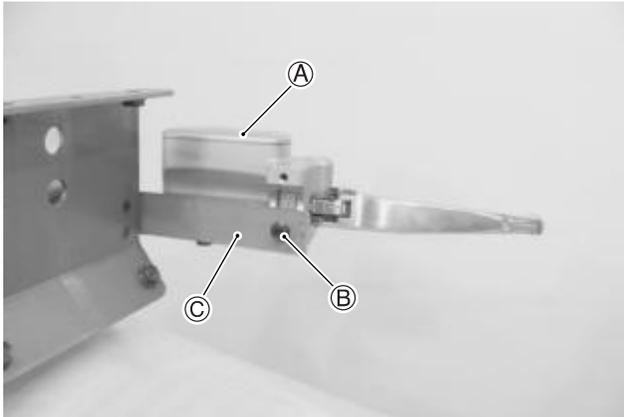


The photograph shown indicates the parts dismantled from the motorcycle in addition to the items shown in the preceding page.

- A: Front brake master cylinder
- B: Throttle assembly
- C: Left switch  
Clutch cable

The certification of vehicle pre-delivery form must be filled out in duplicate for every motorcycle. Use of this form is mandatory and serves as protection for yourself and your customer, as well as assuring that all necessary assembly and service functions have been completed.

## ASSEMBLY



### REMOVING THE BRACKET

Remove the bolt to take off the front brake master cylinder from the bracket.

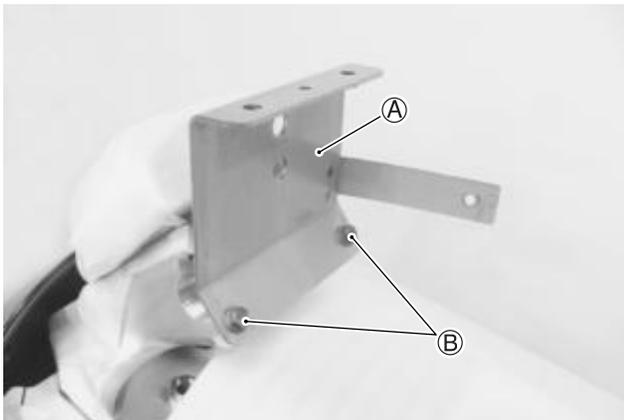
#### CAUTION

Keep the position of front brake master cylinder with its cap facing upwards until it is installed.

#### NOTE:

The bolt is no longer needed and this may be discarded.

A: Front brake master cylinder  
B: Bolt  
C: Bracket



Remove the bracket from the handlebar mounting position.

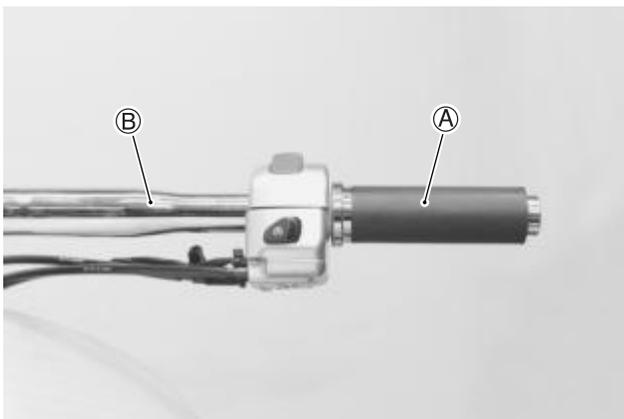
#### CAUTION

Be careful not to scratch the fuel tank.

#### NOTE:

The bracket and bolts are no longer needed and these may be discarded.

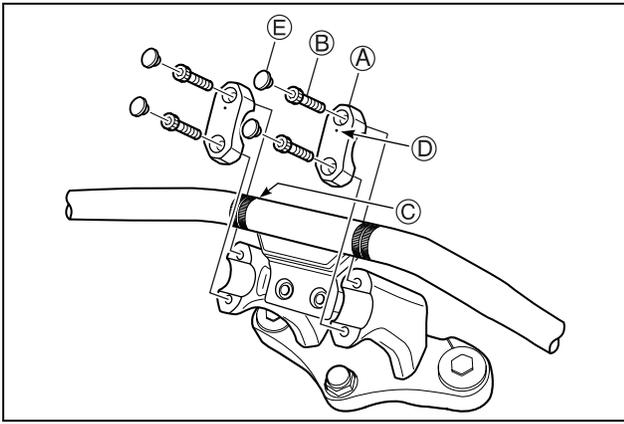
A: Bracket  
B: Bolt



### HANDLEBARS

Loosen the throttle housing retaining screws. Insert the throttle assembly onto the handlebars.

A: Throttle assembly  
B: Handlebars



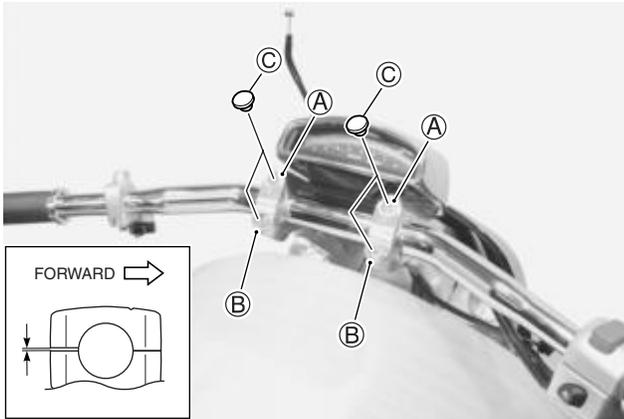
Install the handlebars assembly using the two clamps and four bolts.

**NOTE:**

The punch mark on the clamps shows front side.

Align the dot mark on the handlebars with the mating surface of the front side of left clamp.

- A: Clamp
- B: 8 × 35 mm Allen bolt
- C: Punch mark
- D: Dot mark
- E: Plastic cap OD:14.5 mm



Tighten the handlebar clamp bolts to the specified torque.

**Handlebar clamp bolt:**

**23 N·m (2.3 kgf-m, 16.5 lb-ft)**

**NOTE:**

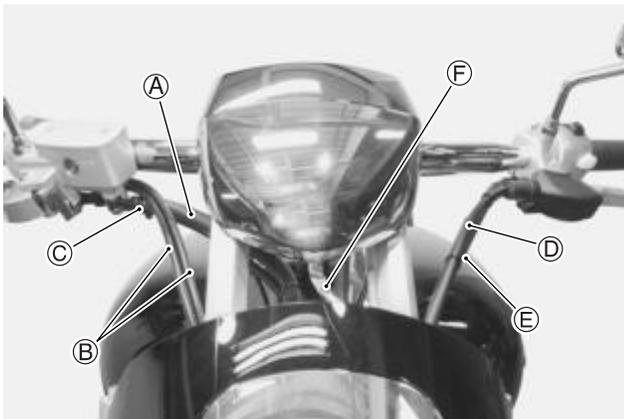
To install the handlebars correctly, first tighten the bolt **A** of the front side with specified torque and then tighten the bolt **B** of the rear side.

**CAUTION**

Make sure that the clamp has no clearance at the front side as shown in the illustration.

After installing the handlebars, fit the plastic cap on the head of each bolt.

- A: 8 × 35 mm Allen bolt
- B: 8 × 35 mm Allen bolt
- C: Plastic cap OD:14.5 mm

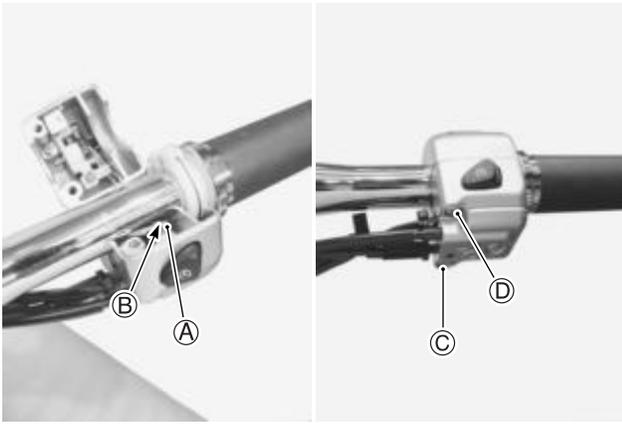


**WARNING**

The line drawings on page 37, 38 and 39 show the proper routing of the control cables, hose and wirings.

Refer to them in addition to following the instructions carefully.

- A: Front brake hose
- B: Throttle cables
- C: Right switch wiring harness
- D: Clutch cable
- E: Left switch wiring harness
- F: Tachometer lead wire



## THROTTLE

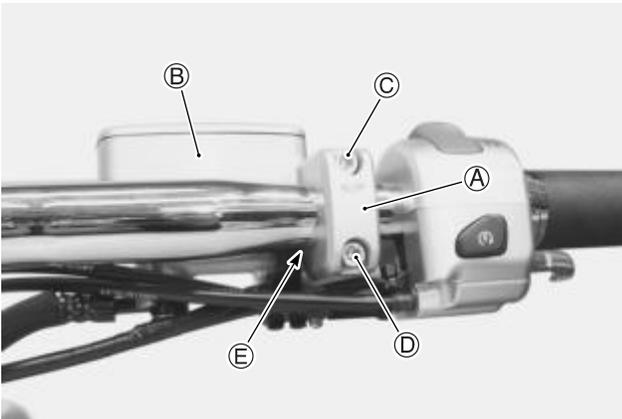
Insert the boss of the throttle housing into the hole on the handlebars.

Tighten the throttle assembly with two screws.

### ⚠ WARNING

**Check to ensure that the throttle operates freely and closes automatically.**

- A: Boss
- B: Hole
- C: 5 × 45 mm screw
- D: 5 × 35 mm screw



## FRONT BRAKE MASTER CYLINDER

Install the front brake master cylinder onto the handlebars.

Align the dot mark on the handlebars with the master cylinder-to-holder fitting surface.

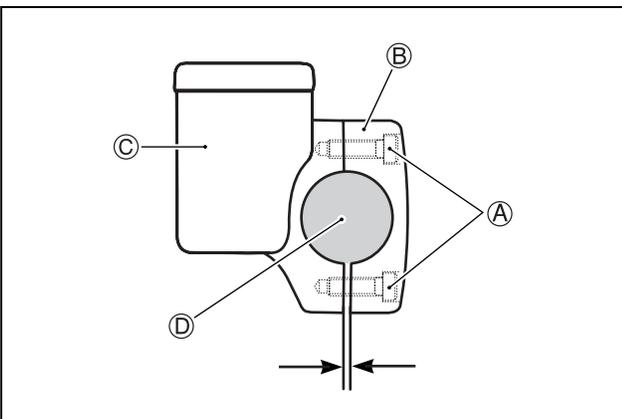
Tighten the master cylinder mounting bolts to the specified torque.

**🔩 Front brake master cylinder mounting bolt:  
10 N·m (1.0 kgf-m, 7.0 lb-ft)**

### NOTE:

**To install the holder correctly, first tighten the bolt © of the upper side with specified torque and then tighten the bolt © of the lower side.**

- A: Holder
- B: Front brake master cylinder
- C: 6 × 20 mm Allen bolt
- D: 6 × 20 mm Allen bolt
- E: Dot mark



### NOTE:

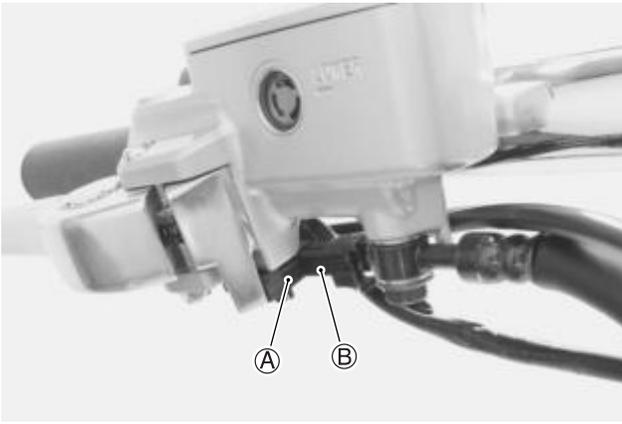
**Install the holder in position according to the mark "UP".**

**Make sure that the holder has no clearance at the upper side as shown.**

### CAUTION

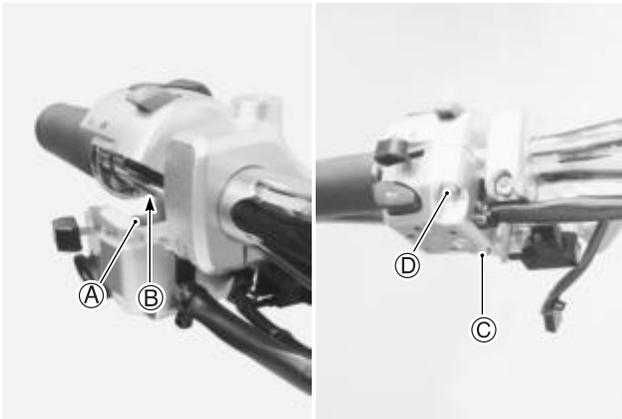
**Check for brake fluid leakage.**

- A: Bolt
- B: Holder
- C: Front brake master cylinder
- D: Handlebars



Connect the front brake light switch lead wires coupler to the brake light switch.

- A: Front brake light switch
- B: Lead wire coupler



### LEFT SWITCH

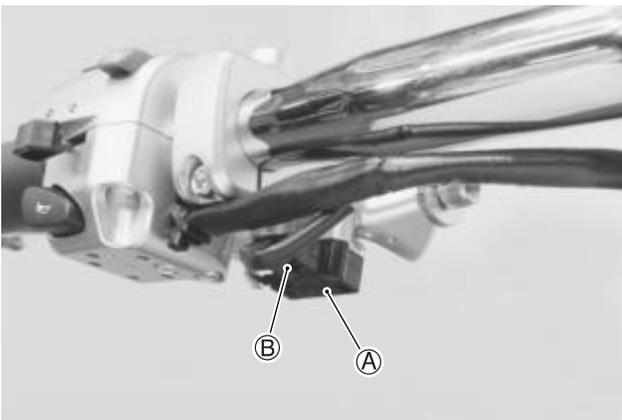
Insert the boss of the left switch holder into the hole on the handlebars.

Tighten the left switch assembly with the two screws.

#### CAUTION

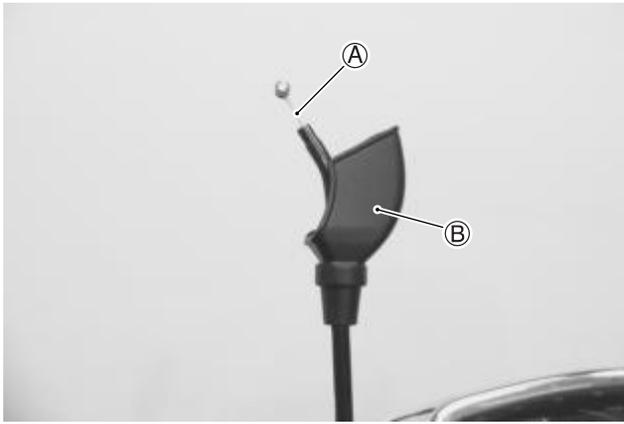
**Be careful not to pinch the wiring harness between the housing and holder.**

- A: Boss
- B: Hole
- C: 5 × 45 mm screw
- D: 5 × 30 mm screw



Connect the clutch lever position switch lead wire coupler to the switch.

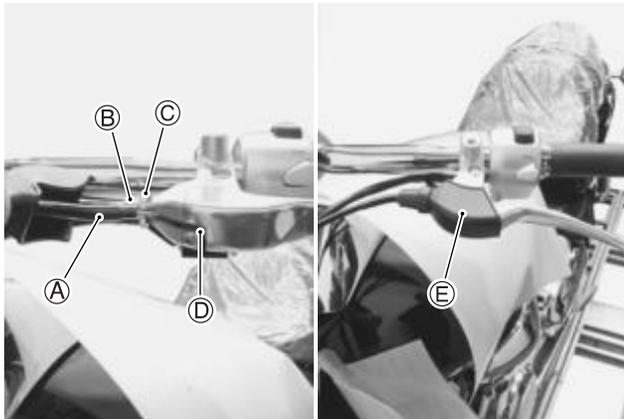
- A: Clutch lever position switch
- B: Lead wire coupler



## CLUTCH CABLE

Pass the clutch cable through the lever cover.

- A: Clutch cable
- B: Clutch lever cover



Turn the clutch cable adjuster and lock nut in as far as possible and align the slots.

Insert the inner cable end into the recess in the clutch lever, then pull on the outer cable housing and insert it into the adjuster.

Do not adjust at this time.

Adjustment will be covered in the SERVICING section.

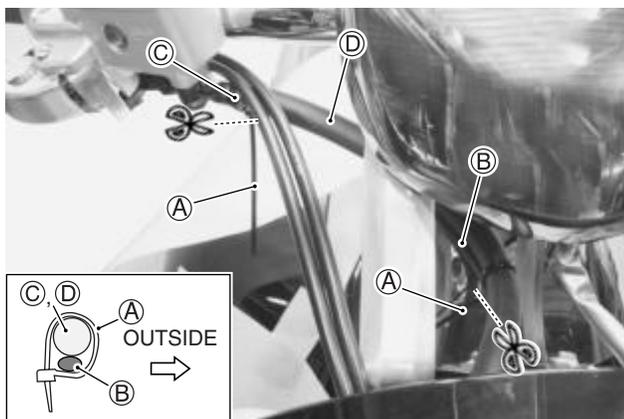
### NOTE:

**Before installing the cable, grease the cable end.**

Install the lever cover.

- A: Clutch cable
- B: Adjuster
- C: Lock nut
- D: Cable end
- E: Clutch lever cover

RIGHT



## CLAMP

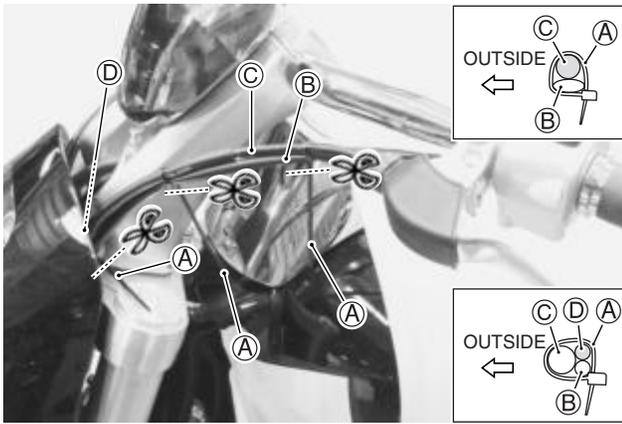
Clamp the right handlebar switch wiring harness, front brake hose union or front brake hoses with straps.

### NOTE:

**Cut the remaining of the strap as shown in the photograph.**

- A: Strap L:140 mm
- B: Right switch wiring harness
- C: Front brake hose union
- D: Front brake hose

LEFT

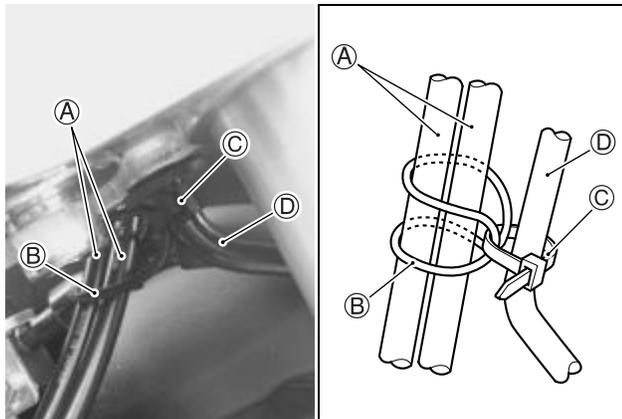


Clamp the handlebar left switch wiring harness, clutch cable and tachometer lead wire with strap.

**NOTE:**

**Cut the remaining of the strap as shown in the photograph.**

- A: Strap L:140 mm
- B: Left switch wiring harness
- C: Clutch cable
- D: Tachometer lead wire



Clamp the throttle cable to the headlight stay with O-ring.

**NOTE:**

**Cut the remaining of the strap as shown in the photograph.**

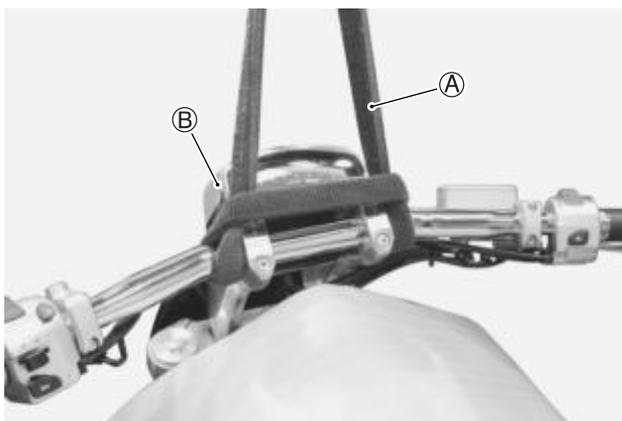
- A: Throttle cables
- B: O-ring
- C: Strap L:90 mm
- D: Headlight stay



**PLASTIC CAP**

Install the plastic cap on the handlebars end.

- A: Plastic cap OD:36.0 mm

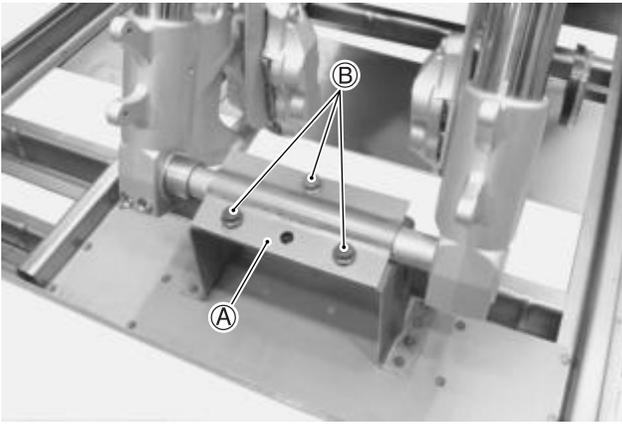


Attach a hoist band, Pass the hoist band through the handlebar as shown in the photograph.

**CAUTION**

**Be careful dose not touch the hoist band and tachometer.**

- A: Hoist band
- B: Tachometer

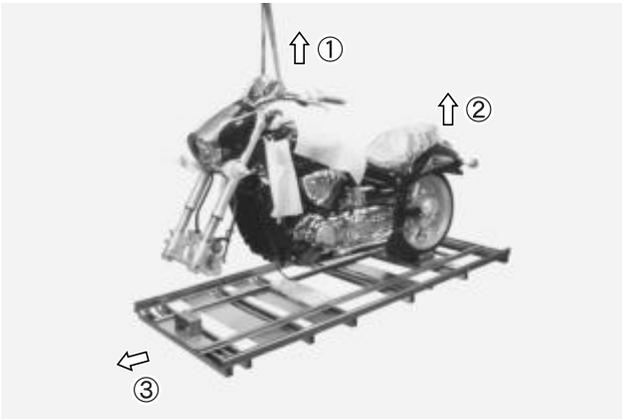


Remove the crate axle bracket from the crate base.

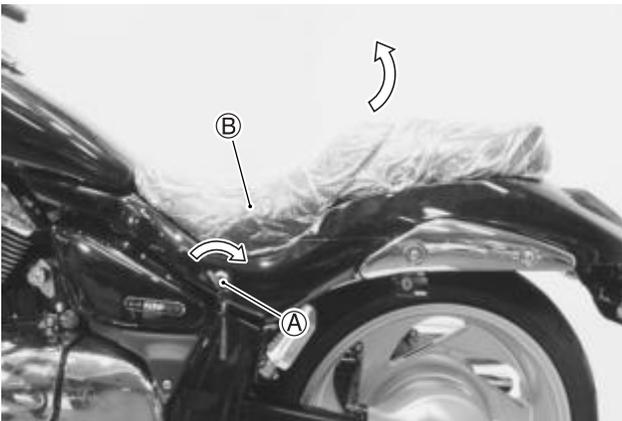
**NOTE:**

**The bracket and bolts are no longer needed and these may be discarded.**

A: Crate axle bracket  
B: Bolt



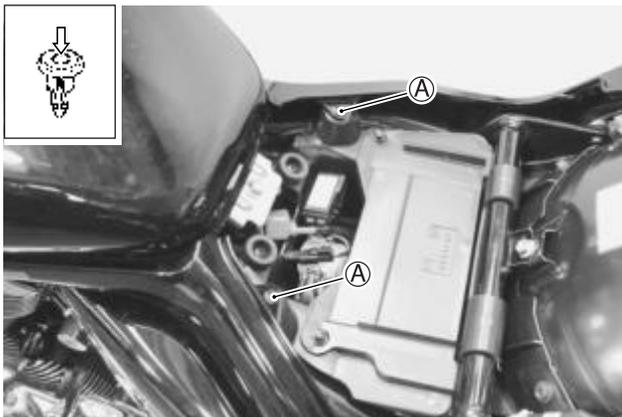
- ①. Lift the front of motorcycle by using a hoist.
- ②. Raise the rear of motorcycle.
- ③. Pull the crate base forward, then balance the motorcycle.



**FRAME BODY COVER**

Remove the seat using the key.

A: Seat lock  
B: Seat

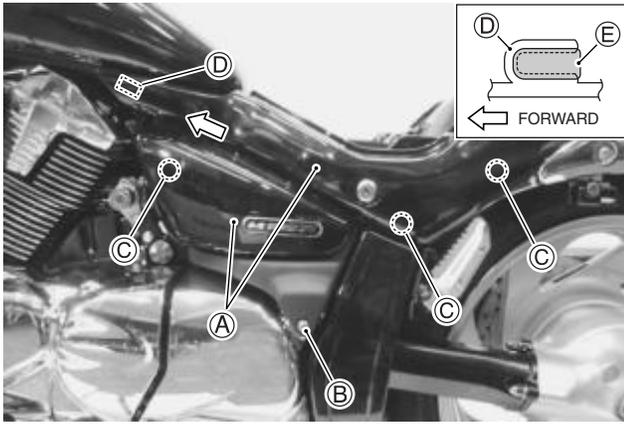


Remove the fastener.

**NOTE:**

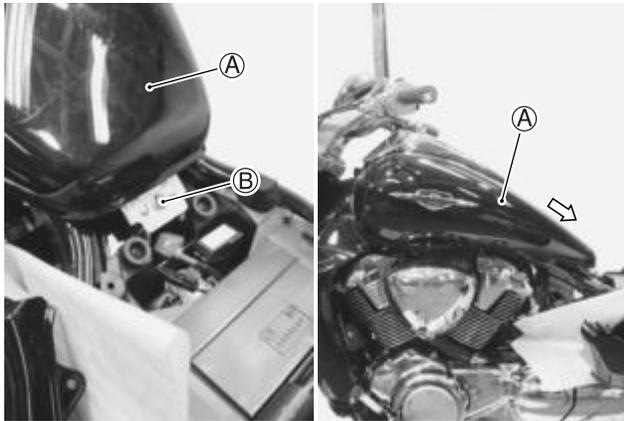
**To remove the fastener, push in the center pin and pull out the fastener.**

A: Fastener



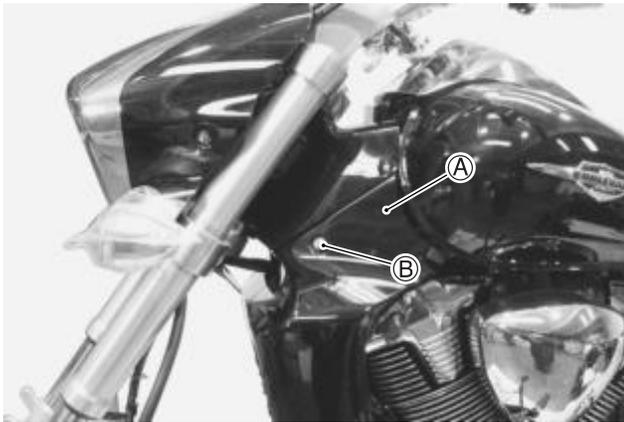
Remove the screws.  
Remove the frame covers.

- A: Frame cover
- B: Allen screw
- C: Boss
- D: Hook (Frame cover)
- E: Rubber cushion (Fuel tank)



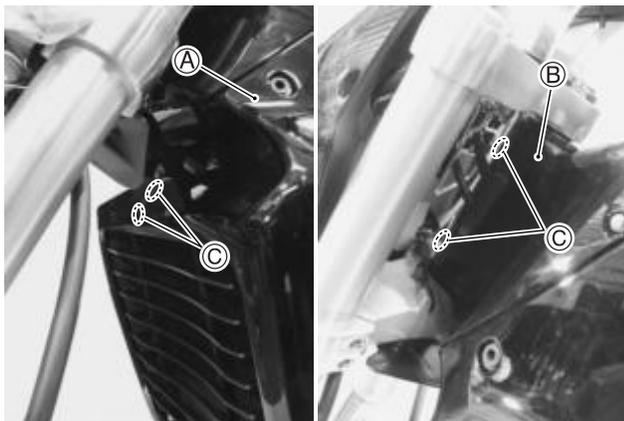
Remove the fuel tank fitting bolt.  
Slide the fuel tank backward a little.

- A: Fuel tank
- B: Bolt



Remove the screws.

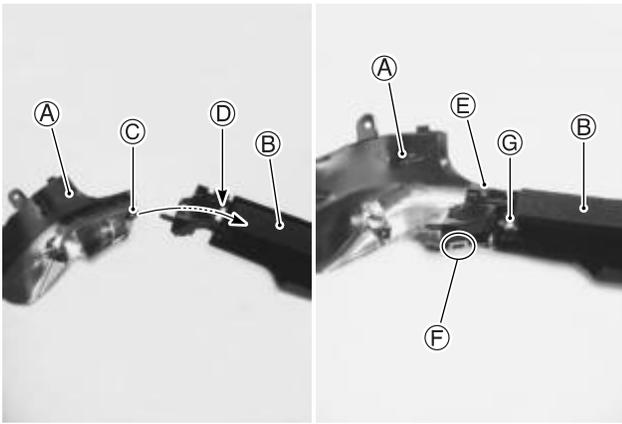
- A: Frame body upper cover
- B: Stepped Allen screw



Unhook the clicks.  
Remove the frame body upper cover assembly.

- A: Frame body upper cover
- B: Frame body head cover
- C: Click

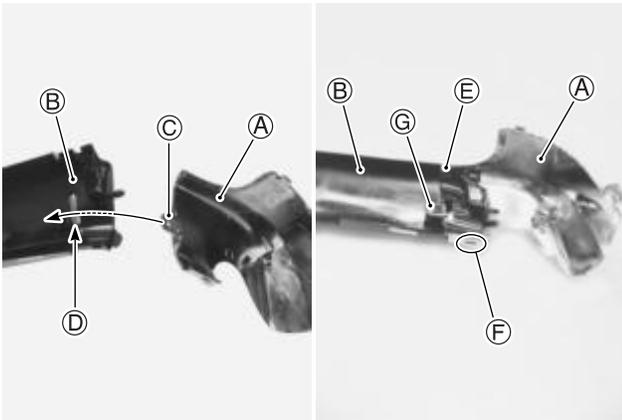
RIGHT



Fix the frame body cover to the frame body upper cover assembly with screw. (Right)

- A: Frame body cover
- B: Frame body upper cover
- C: Guide
- D: Hole
- E: Hook
- F: Click
- G: 5 x 16 mm tapping screw

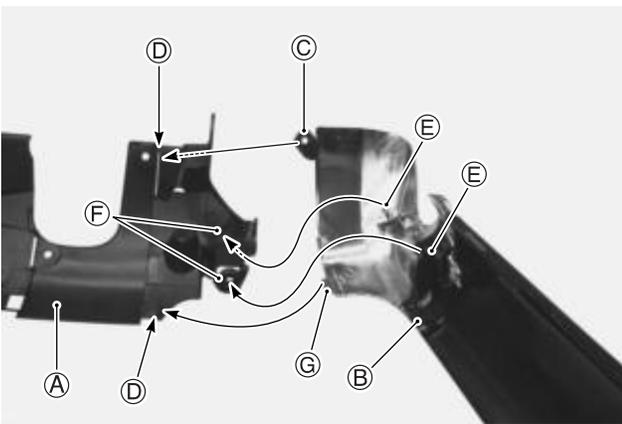
LEFT



Fix the frame body cover to the frame body upper cover assembly with screw. (Left)

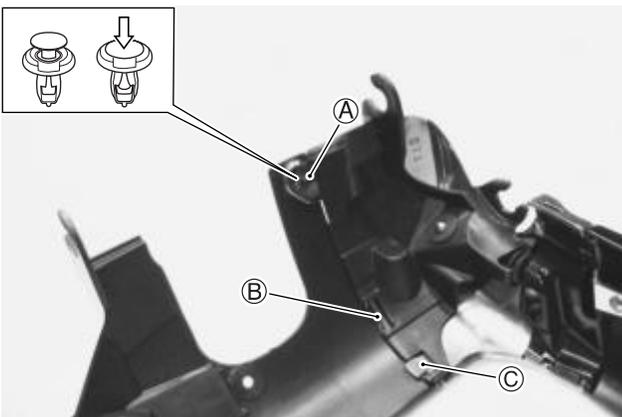
- A: Frame body cover
- B: Frame body upper cover
- C: Guide
- D: Hole
- E: Hook
- F: Click
- G: 5 x 16 mm tapping screw

LEFT



Fit the frame body cover assembly (Left) to the frame body lower cover.

- A: Frame body lower cover
- B: Frame body cover assembly (Left)
- C: Guide
- D: Hole
- E: Boss
- F: Hole (rubber cushion)
- G: Hook



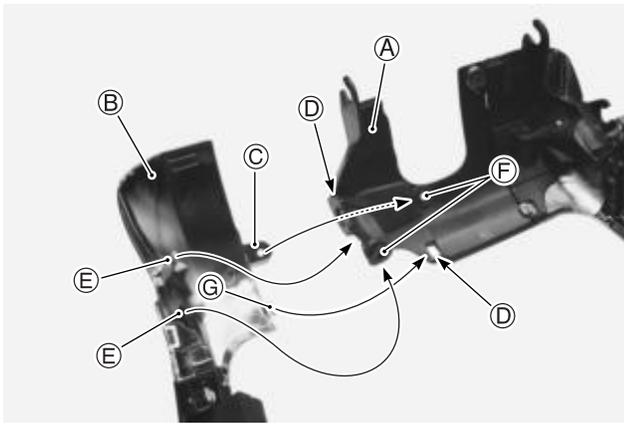
Fix the frame body cover assembly (Left) to the frame body lower cover with fastener.

**NOTE:**

**To install the fastener, pull the center pin and fix the fastener by pushing the center pin.**

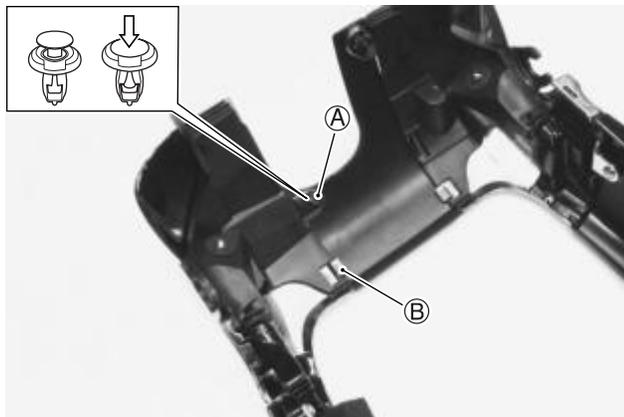
- A: Fastener
- B: Guide
- C: Hook

RIGHT



Fit the frame body cover assembly (Right) to the frame body lower cover assembly.

- A: Frame body lower cover assembly
- B: Frame body cover assembly (Right)
- C: Guide
- D: Hole
- E: Boss
- F: Hole (rubber cushion)
- G: Hook

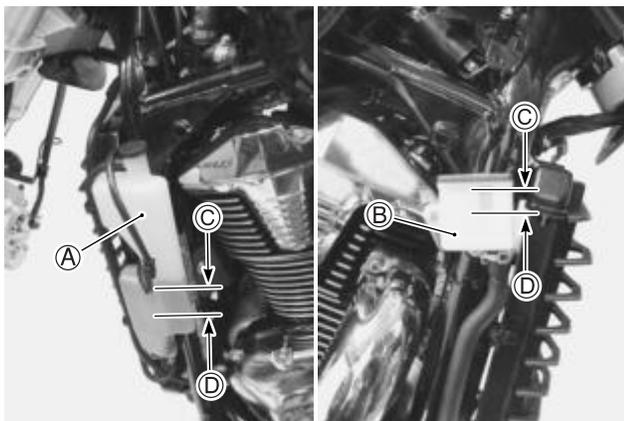


Fix the frame body cover assembly (Right) to the frame body lower cover assembly with fastener.

**NOTE:**

**To install the fastener, pull the center pin and fix the fastener by pushing the center pin.**

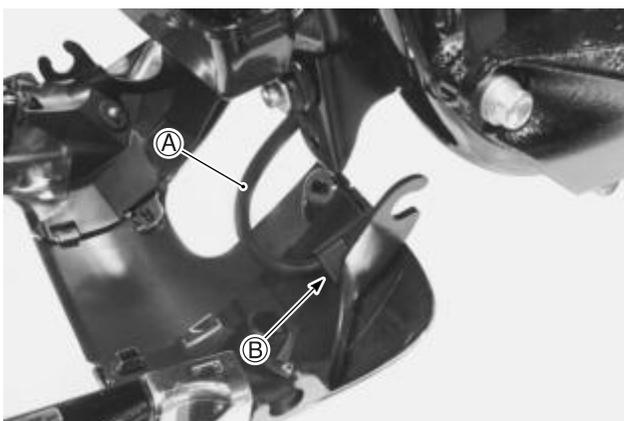
- A: Fastener
- B: Hook



Check the engine coolant and brake fluid level.

If the level is lower than the "LOW" level line, carry out the SERVICING procedure.

- A: Engine coolant reservoir
- B: Rear brake master reservoir
- C: Upper level line
- D: Lower level line



Insert the breather hose to the hole.

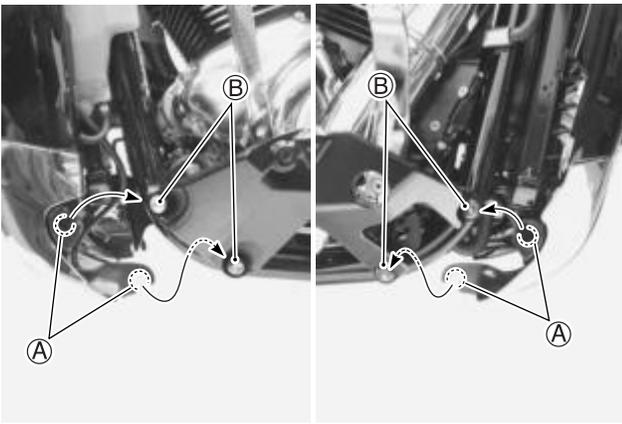
**CAUTION**

**Be sure not to bend or twist the hose when installing.**

- A: Breather hose
- B: Hole (Frame body lower cover)

LEFT

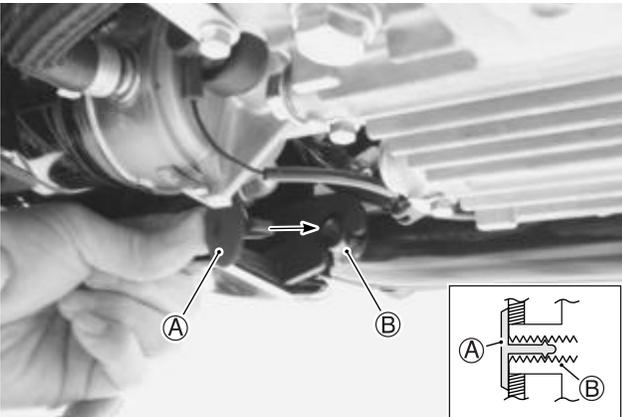
RIGHT



Install the recess of frame body lower cover to the boss of frame.

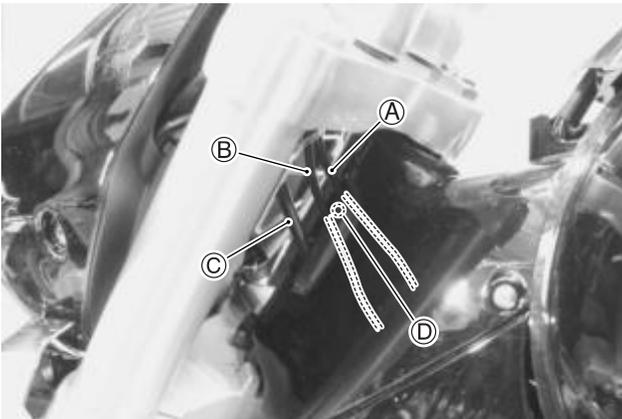
- A: Recess (Frame body lower cover)
- B: Boss (Frame)

RIGHT



Install the fastener by pushing.

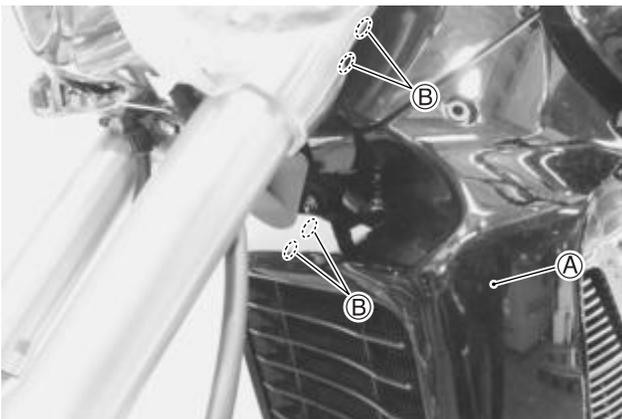
- A: Fastener (Large)
- B: Boss (Frame)



Install the frame body cover assembly.

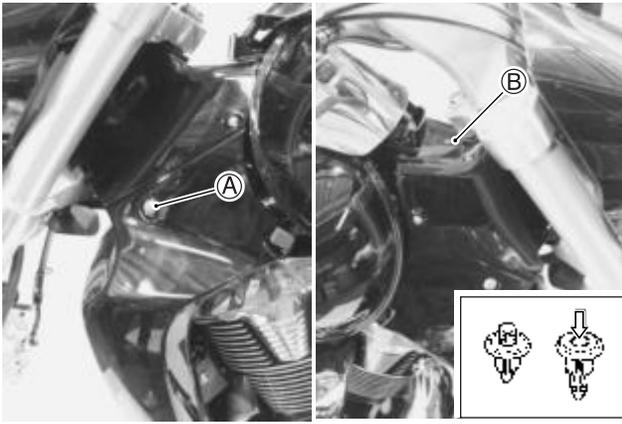
Pass the throttle cable (Pulling) through over the boss of frame body head cover.

- A: Throttle cable (Pulling)
- B: Throttle cable (Returning)
- C: Clutch cable
- D: Boss



Fit the frame body cover (Right and Left).

- A: Frame body cover assembly
- B: Click

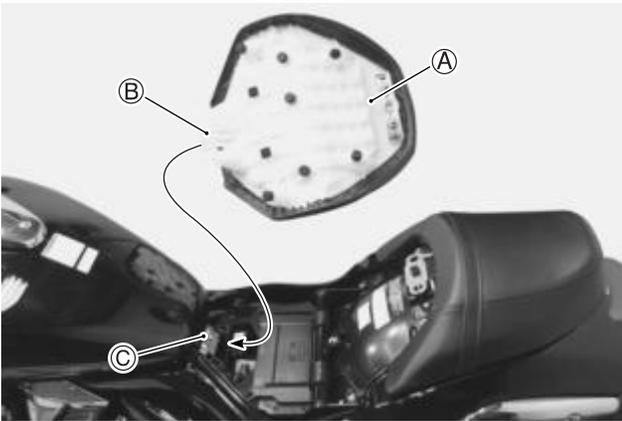


Tighten the screws.  
Install the fastener.

**NOTE:**

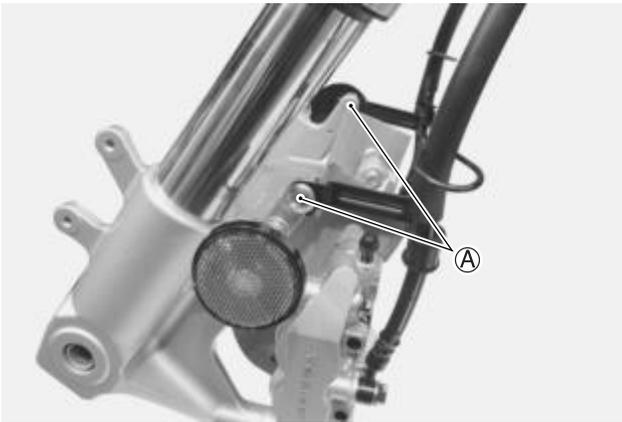
**To install the fastener, pull the center pin and fix the fastener by pushing the center pin.**

A: Stepped Allen screw  
B: Fastener (Small)



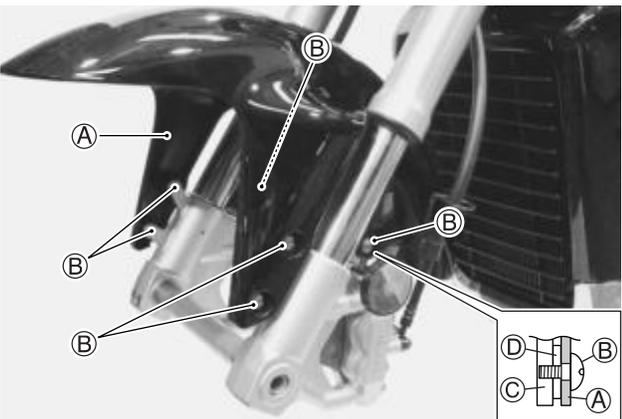
Reinstall the fuel tank.  
Reinstall the frame cover.  
Reinstall the seat.  
Insert the seat hook into the seat hook retainer and push down the seat firmly.

A: Seat assembly  
B: Seat hook  
C: Seat hook retainer



**FRONT FENDER**  
Remove the bolts.

A: 6 × 16 mm stepped Allen bolt

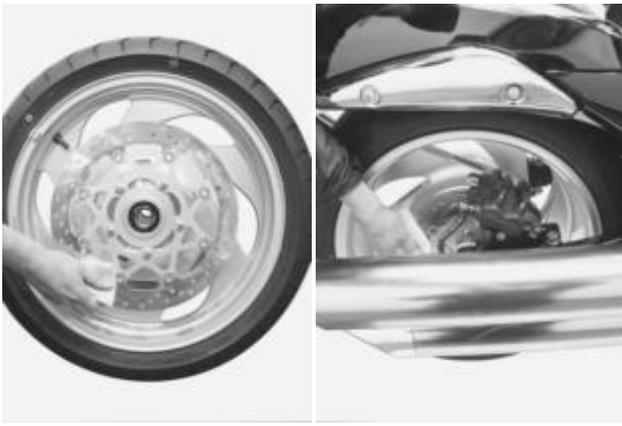


Install the front fender to the front fork legs with six bolts.

A: Front fender  
B: 6 × 16 mm stepped Allen bolt  
C: Front fork  
D: Bracket (Front brake hose)

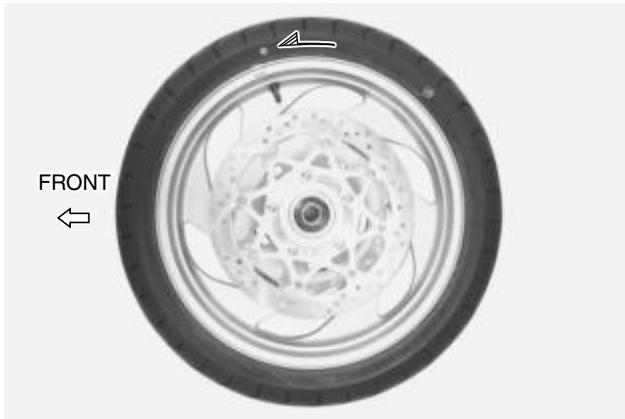
FRONT

REAR



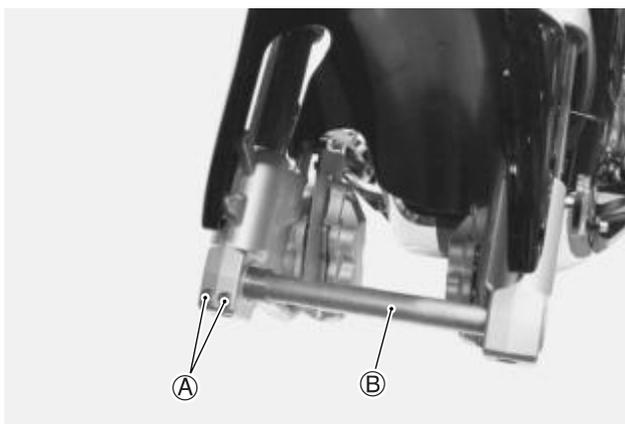
### BRAKE DISC

To prevent brake squeaking and pad contamination, carefully clean the front and rear brake disc plates with alcohol or other non-petroleum based solvent. This will remove the rust-preventive coating and dirt.



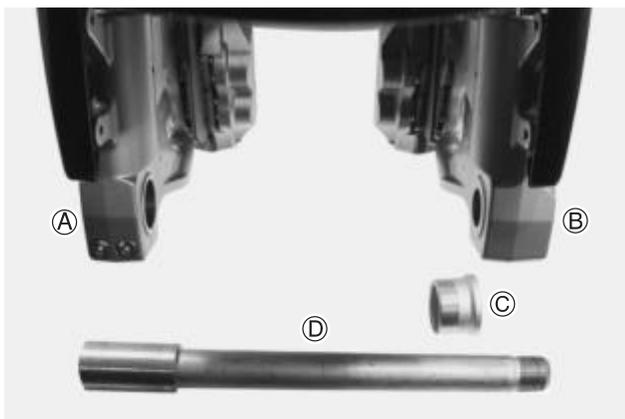
### FRONT WHEEL

When installing the front wheel onto the axle, special attention must be paid to the arrow of the rotational direction on the tire sidewall. When the tire is properly installed, the arrow must indicate forward rotation of the wheel.



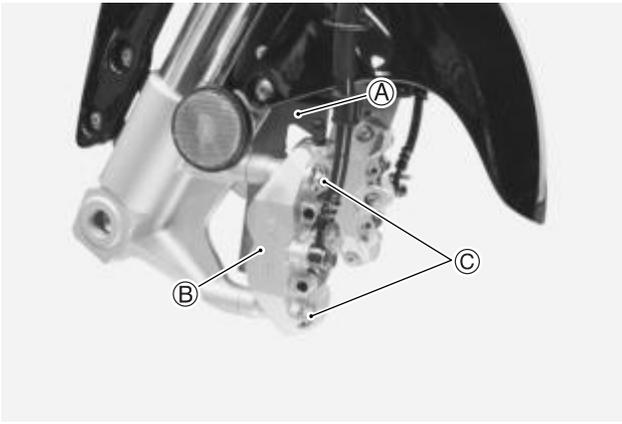
Loosen the axle clamp bolt.  
Remove the front axle from the fork legs.

- A: Axle clamp bolt
- B: Front axle



Mount the front wheel assembly properly.

- A: Right fork leg
- B: Left fork leg
- C: Front wheel spacer
- D: Front axle

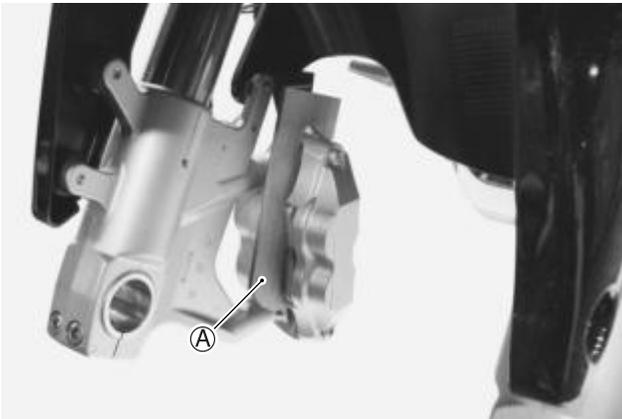


Temporarily remove the left front brake caliper.

**CAUTION**

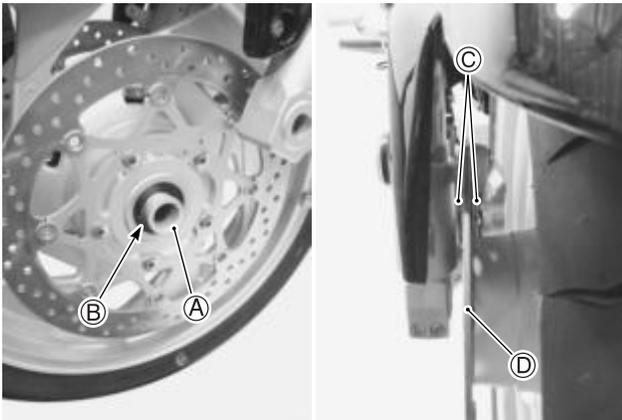
**Do not remove the supporter inserted between the brake pads until the brake caliper is installed.**

- A: Supporter
- B: Brake caliper (Left)
- C: Caliper mounting bolt



Remove the supporter from the brake pad of the right front brake caliper.

- A: Supporter

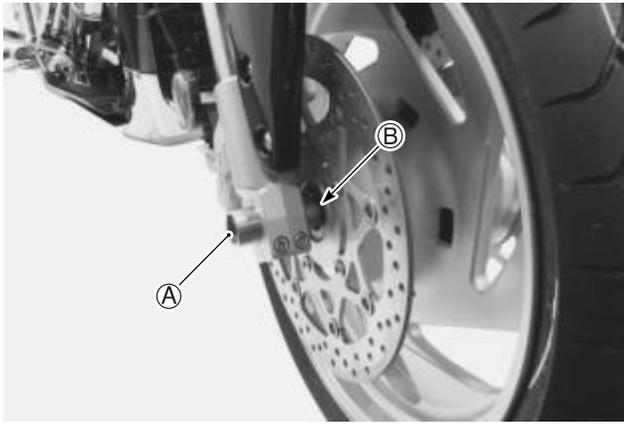


Attach the front wheel spacer to the front wheel hub. Carefully insert the front brake disc plate between the caliper brake pads.

**CAUTION**

**When install the front wheel spacer, be careful not to scratch the oil seal lip.**

- A: Front wheel spacer
- B: Oil seal (Lip)
- C: Pads
- D: Disc plate

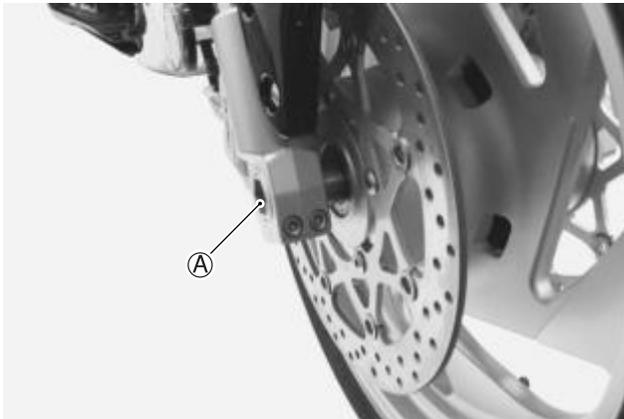


Insert the front axle from the right side of fork leg and fix the front wheel assembly to the front fork.

**CAUTION**

**When install the front axle, be careful not to scratch the oil seal lip.  
Never use force to install the front axle.  
If it cannot be installed by hand, it is not correctly aligned.**

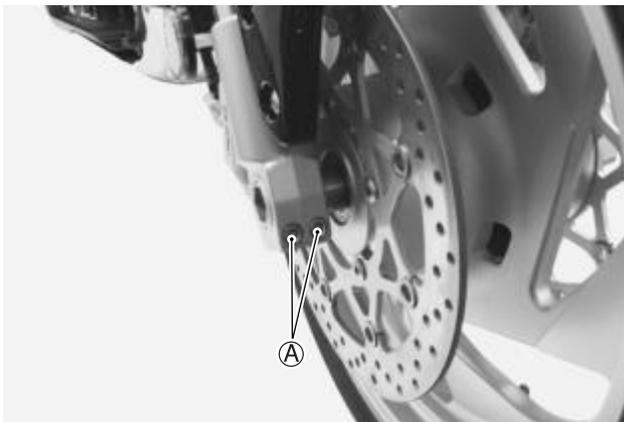
A: Front axle  
B: Oil seal (Lip)



Tighten the front axle to the specified torque.

 **Front axle: 100 N·m (10.0 kgf-m, 72.5 lb-ft)**

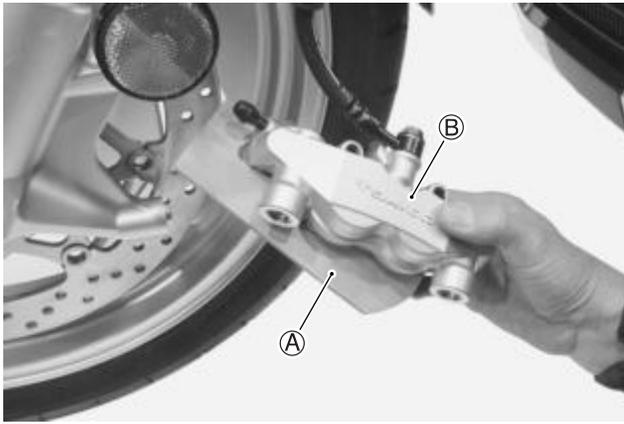
A: Front axle



Tighten the axle clamp bolt to the specified torque.

 **Front axle clamp bolt:  
23 N·m (2.3 kgf-m, 16.5 lb-ft)**

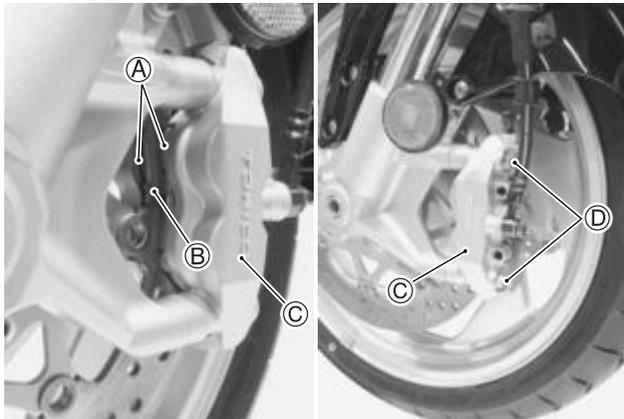
A: Axle clamp bolt



### FRONT BRAKE CALIPER

Remove the supporter from the brake pad of the left front brake caliper.

- A: Supporter
- B: Brake caliper



Set the front brake caliper so the brake disc plate is inserted between two brake pads.  
Install the front brake caliper.

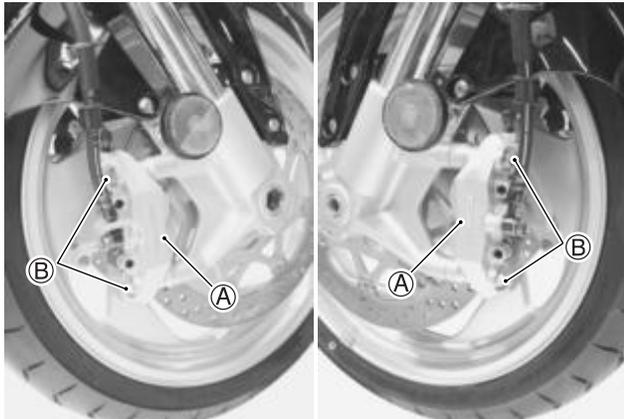
#### CAUTION

**Be careful not to scratch the front wheel.**

- A: Pads
- B: Disc plate
- C: Brake caliper (Left)
- D: Caliper mounting bolt

RIGHT

LEFT



Tighten the front brake caliper mounting bolts to the specified torque.

#### ⚠ WARNING

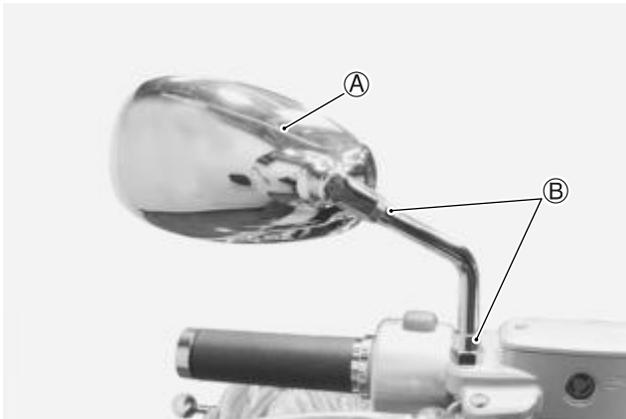
**Make sure that both the right and left caliper mounting bolts are tightened with specified torque.**

**🔩 Front brake caliper mounting bolt:  
39 N·m (3.9 kgf-m, 28.0 lb-ft)**

- A: Brake caliper
- B: Caliper mounting bolt



Place the motorcycle on the side stand, then remove the hoist hook.



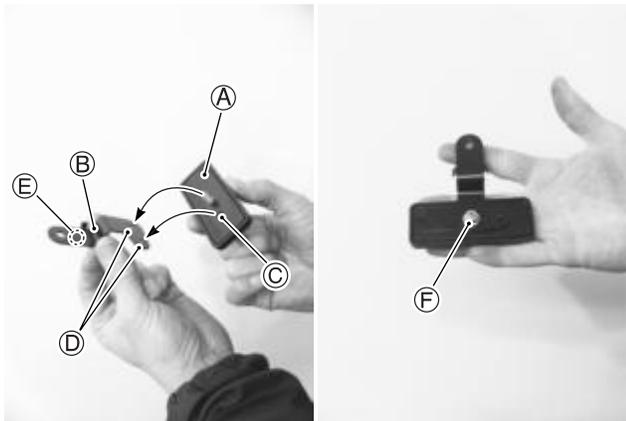
### REAR VIEW MIRROR

Install the rear view mirror and tighten lock nuts securely after positioning them properly.

**NOTE:**

**Fix the mirror in the position so as to secure rear view.**

- A: Rear view mirror
- B: Lock nut

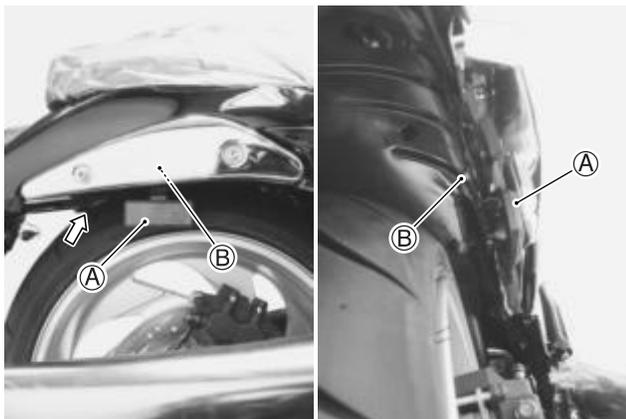


### REFLEX REFLECTOR (RIGHT)

Align the boss of reflex reflector to the hole of bracket. Install the reflex reflector to the bracket.

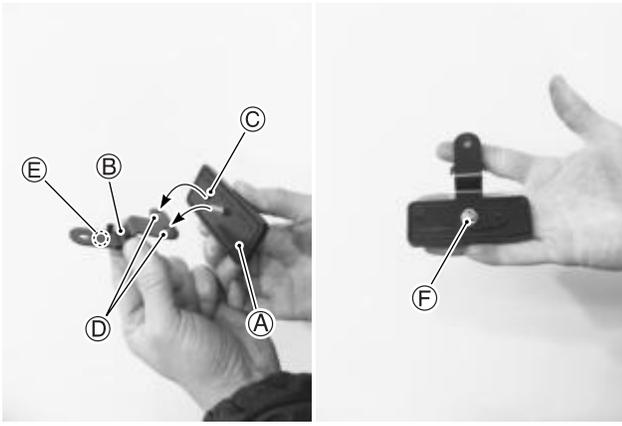
- A: Reflex reflector
- B: Bracket
- C: Boss
- D: Hole
- E: Mark "R"
- F: 5 mm nut

**VIEW**



Install the reflex reflector assembly to the frame with bolt.

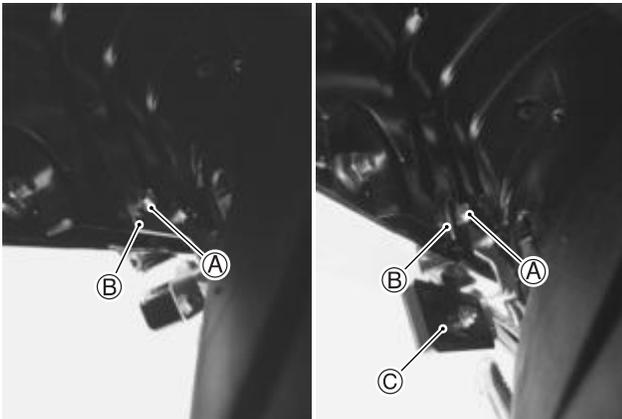
- A: Reflex reflector assembly
- B: 6 x 12 mm flange bolt



### REFLEX REFLECTOR (LEFT)

Align the boss of reflex reflector to the hole of bracket.  
Install the reflex reflector to the bracket.

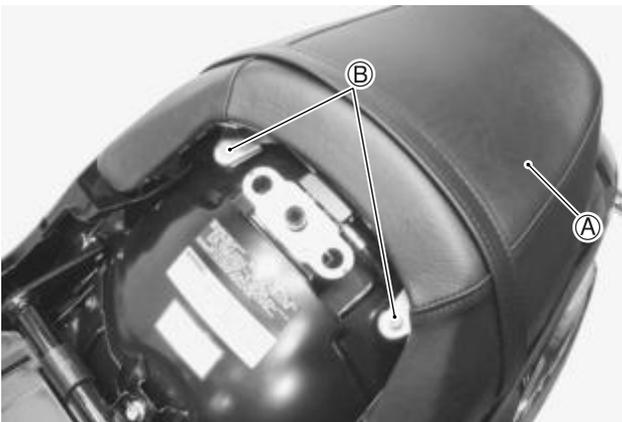
- A: Reflex reflector
- B: Bracket
- C: Boss
- D: Hole
- E: Mark "L"
- F: 5 mm nut



Remove the bolt.

Install the reflex reflector assembly to the frame with bolt.

- A: 6 x 12 mm flange bolt
- B: Bracket (Helmet lock assembly)
- C: Reflex reflector assembly

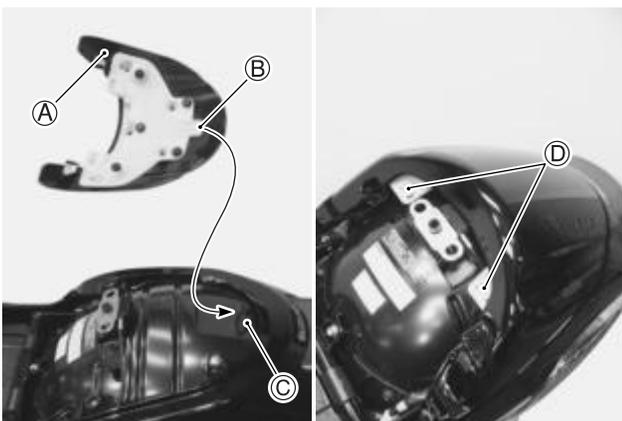


### SEAT TAIL COVER

When installing the seat tail cover to the motorcycle, following the procedures below.

1. Remove the bolts to take off the rear seat.

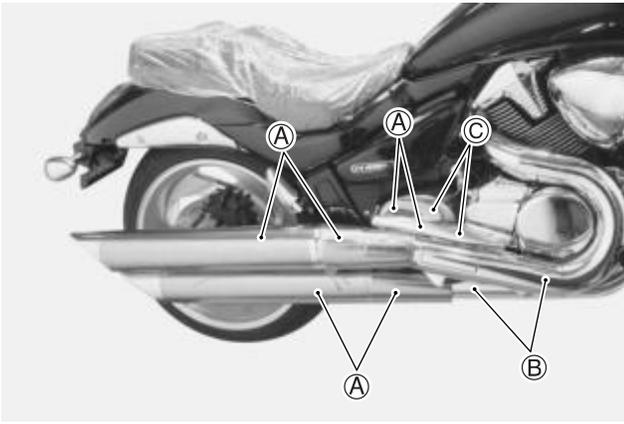
- A: Rear seat
- B: Allen bolt



2. Insert the seat hook to the seat hook retainer.

3. Tighten the bolt.

- A: Seat tail cover
- B: Seat hook
- C: Seat hook retainer
- D: Allen bolt



### REMOVING THE TAPE

Remove the tapes from the muffler and cover.

- A: Tape
- B: Muffler
- C: Cover



### OWNER'S MANUAL

Remove the seat using the key.  
Store the owner's manual in place.

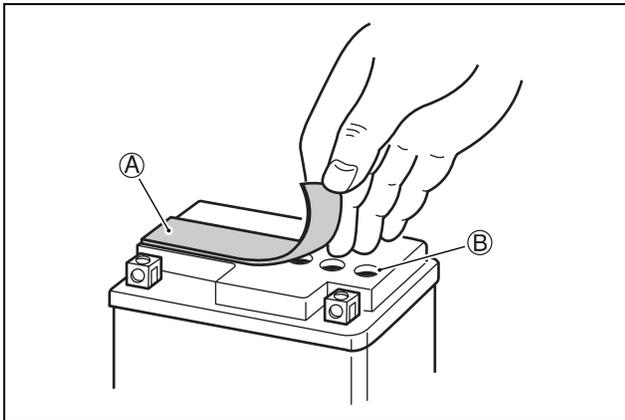
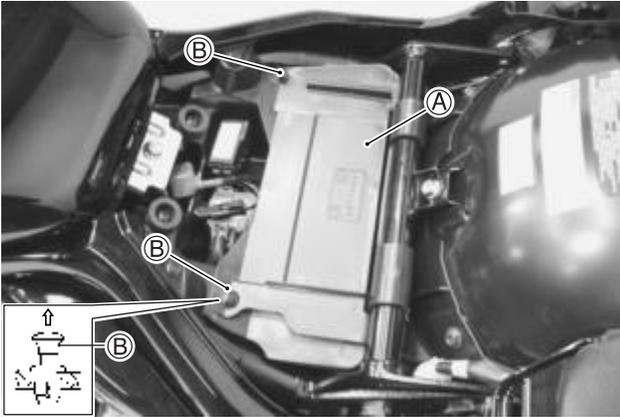
- A: Owner's manual

# SERVICING

## BATTERY

The battery is located under the seat.  
Remove the seat using the key.  
Pull the fastener knob.  
Remove the battery holder lid.  
Remove the battery from the motorcycle.

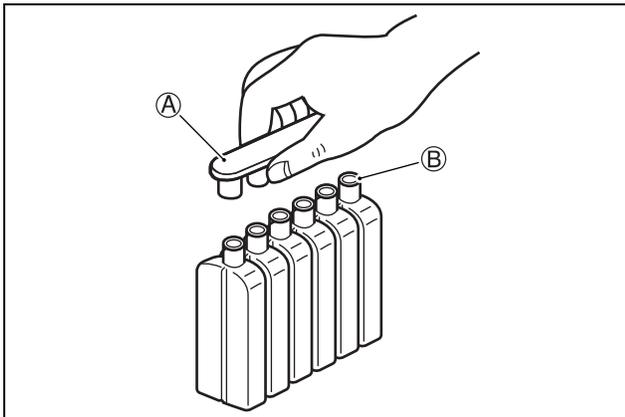
A: Battery holder lid  
B: Fastener



## Filling electrolyte

Remove the aluminium tape sealing the battery electrolyte filler holes.

A: Aluminium tape  
B: Electrolyte filler hole

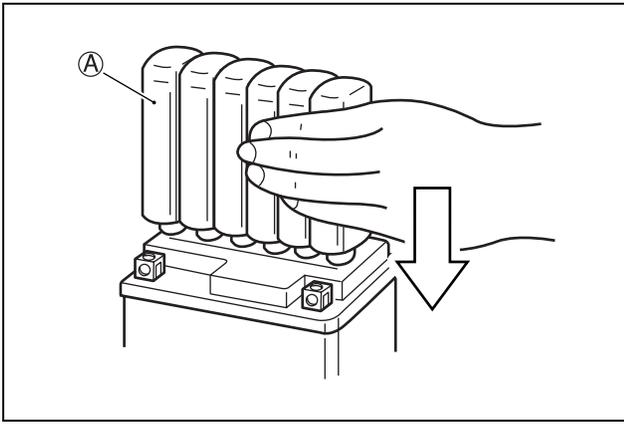


Remove the caps from the electrolyte container.

### NOTE:

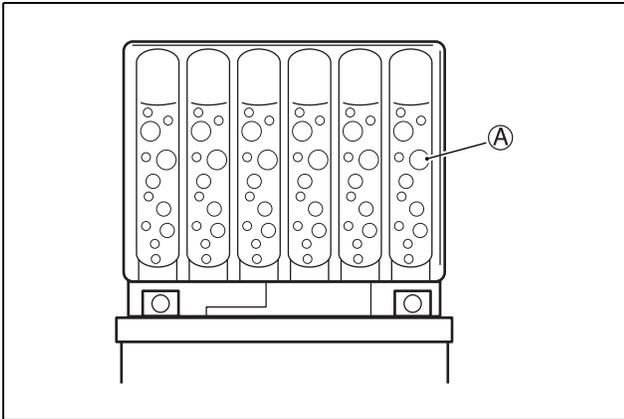
**Use the removed caps as the sealed caps of battery filler holes.  
Do not remove or pierce the sealed areas of the electrolyte container.**

A: Caps  
B: Sealed area



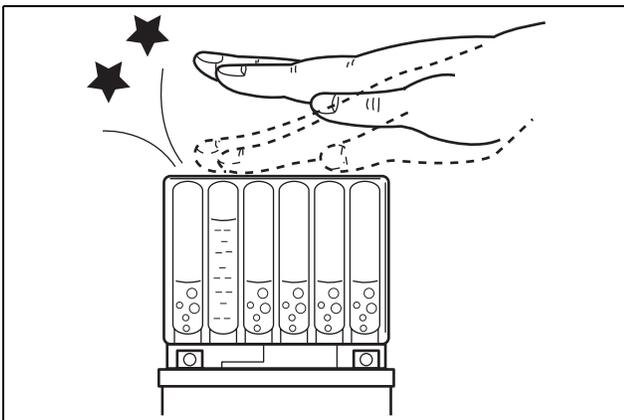
With just enough force to break the nozzle seal of electrolyte container, push each nozzle of the electrolyte container into the battery's electrolyte filler ports and hold the container firmly so that it does not fall. Take precaution not to allow any of the fluid to spill.

A: Electrolyte containers



Make sure air bubbles are coming up in each electrolyte container, and leave in this position for about 20 minutes.

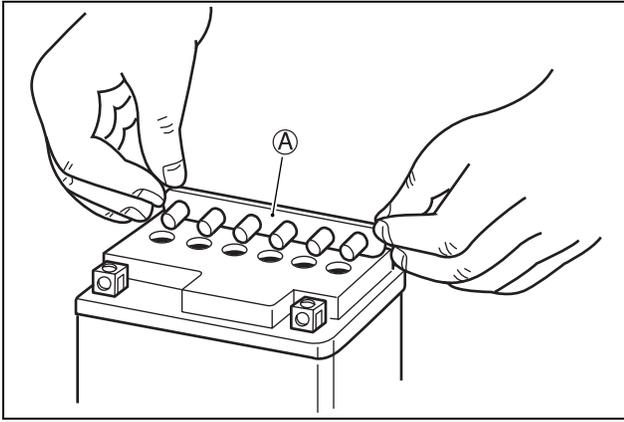
A: Air bubbles



**NOTE:**

If no air bubbles are coming up from a filler port, tap the bottom of the container two or three times.

Never remove the container from the battery.



After confirming that the electrolyte has entered the battery completely, remove the electrolyte containers from the battery.

Wait for around 20 minutes.

Insert the caps into the filler holes, pressing in firmly so that the top of the each caps does not protrude above the upper surface of the battery's top cover.

A: Caps

**CAUTION**

**Never use anything except the specified battery electrolyte.**

**Once the sealing cap has been installed in the battery, do not remove the sealing cap.**

Charge the battery with a battery charger.

**CAUTION**

**For charging the battery, make sure to use the charger specially designed for MF battery.**

**Otherwise, the battery may be overcharged resulting in shortened service life.**

**Do not remove the cap during charging.**

**Position the battery with the cap facing upward during charging.**

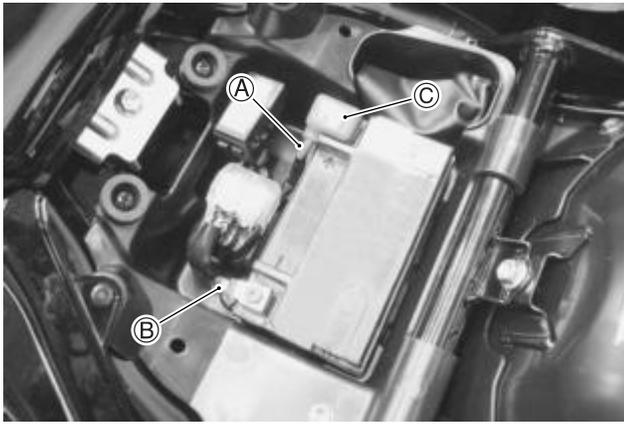
After charging the battery, install the battery in the motorcycle as follows.

**CAUTION**

**When attaching the wiring harness battery leads to the battery terminals, observe the correct polarity.**

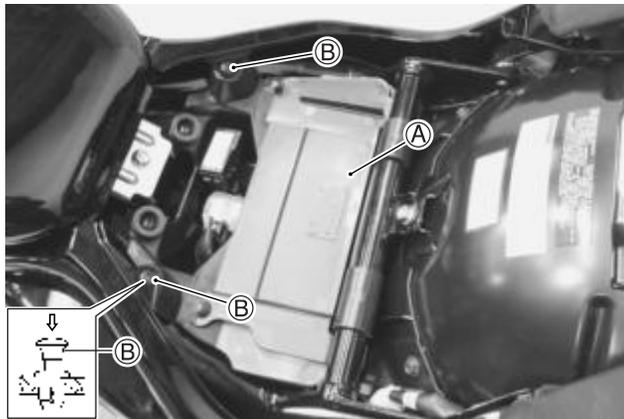
**NOTE:**

**The terminal bolts and nuts are attached to the battery.**



1. Reinstall the battery in the motorcycle.
2. First connect the ⊕ lead to the ⊕ positive terminal of the battery.
3. Cover ⊕ terminal with rubber boot.
4. Connect the ⊖ lead to the ⊖ negative terminal of the battery.

A: ⊕ lead  
 B: ⊖ lead  
 C: Rubber boot

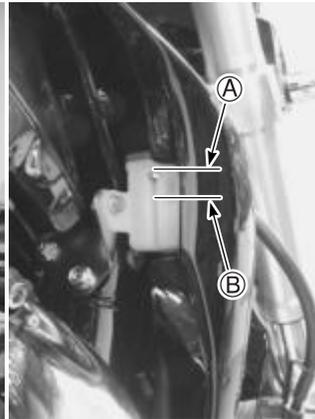
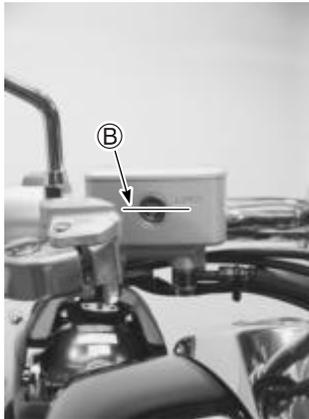


5. Reinstall the battery holder lid and fix the fastener by pushing knob.
6. Reinstall the seat.

A: Battery holder lid  
 B: Fastener

FRONT

REAR



### BRAKE FLUID

Keep the motorcycle upright and place the handlebars straight.

Check the brake fluid level in both the front and rear master cylinder reservoirs.

If the fluid level is below the lower level indicated in the figure, add the correct type of brake fluid.

Refer to the chart below for the proper selection.

Specification and Classification
DOT 4

### CAUTION

**Be careful not to spill any brake fluid on the paint or plastic components as they will be damaged.**

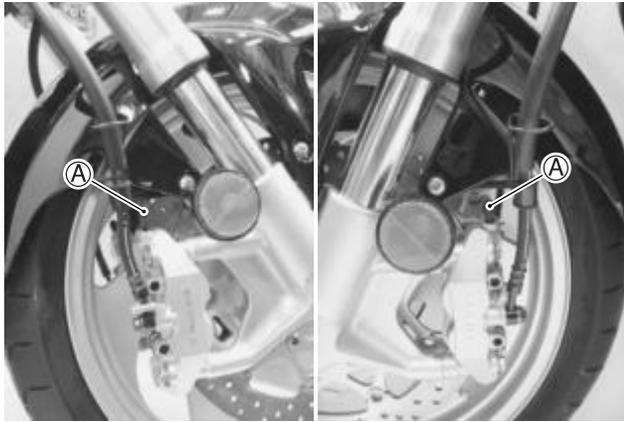
A: Upper level line  
 B: Lower level line

FRONT

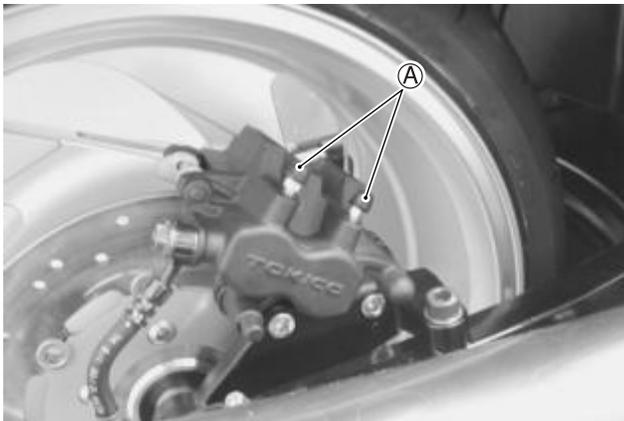


RIGHT

LEFT



REAR



**BRAKE AIR BLEEDING**

Any air which may have been trapped in the brake fluid circuit must be bled completely.

If the brake lever or brake pedal feels spongy or weak, then most likely there is air in the hydraulic circuit.

To bleed the air from the front brake, use the following procedure:

1. Connect a clear hose to the air bleeder valve and run the hose into a suitable clear container.
2. Pour approximately 1/2 in of brake fluid into the container so that the end of the clear hose is submerged and cannot draw any additional air back into the circuit during the air bleeding servicing.
3. Close the valve, pump and squeeze the lever, and open the valve while squeezing brake lever.
4. Repeat this process until the fluid flowing into the receptacle no longer contains air bubbles.

**NOTE:**

**Do not drop brake fluid level below lower level line while bleeding air.**

5. After bleeding the brake circuit, tighten the bleeder valve to the specified torque.  
Reinstall the rubber protective cap.
6. Be sure to check the brake fluid level in the reservoir tank.



**Brake caliper air bleeder valve:**

**7.5 N·m (0.75 kgf-m, 5.5 lb-ft)**

A: Bleeder valve

The procedure to bleed the rear brake is identical to that of the front.

A: Bleeder valve

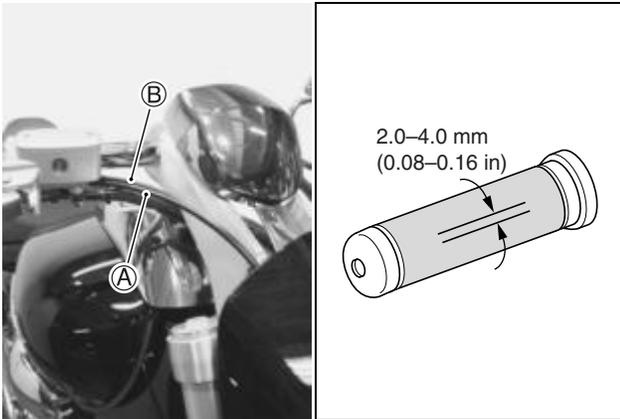


### FRONT BRAKE LEVER

Make sure the front brake lever position is correct. The standard setting for this motorcycle is as indicated in the table below.

Standard setting	3
------------------	---

A: Adjuster

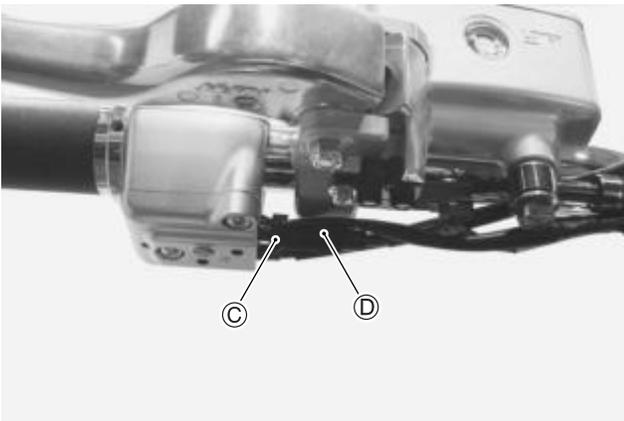


### THROTTLE CABLE

This motorcycle has a twin throttle cable system. Cable **A** is for pulling cable and cable **B** is for returning.

Check the throttle cable play at the throttle grip.

**Throttle cable play: 2.0–4.0 mm (0.08–0.16 in)**

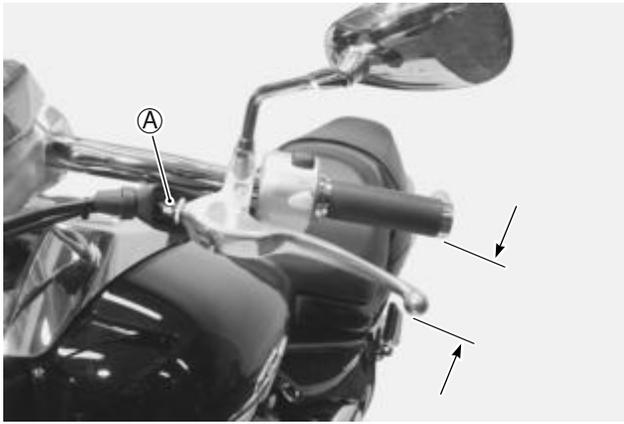


If adjustment is necessary, carry out the procedure below:

1. Loosen the throttle cable adjuster lock nut **C**.
2. Turn the adjuster **D** in or out until the correct play.
3. Tighten the lock nut **C** while holding the adjuster **D**.

### **⚠ WARNING**

**After the adjustment is completed, check that handlebar movement does not raise the engine idle speed and that the throttle grip returns smoothly and automatically.**



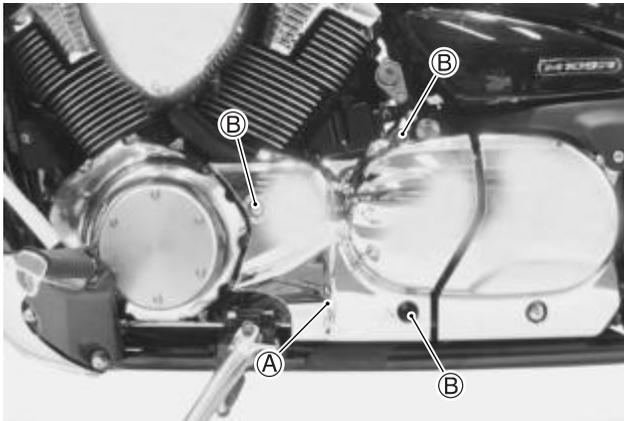
## CLUTCH CABLE

Check the clutch lever play at the clutch lever end when the lever is lightly pulled in towards the grip.

**Clutch lever play: 10–15 mm (0.4–0.6 in)**

### NOTE:

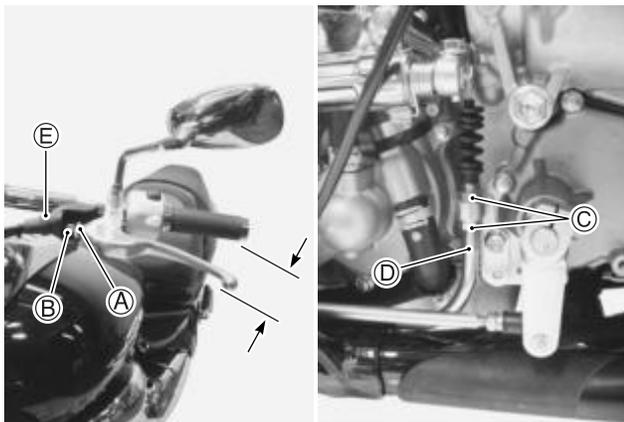
Minor adjustments can now be made with the clutch lever adjuster **A**.



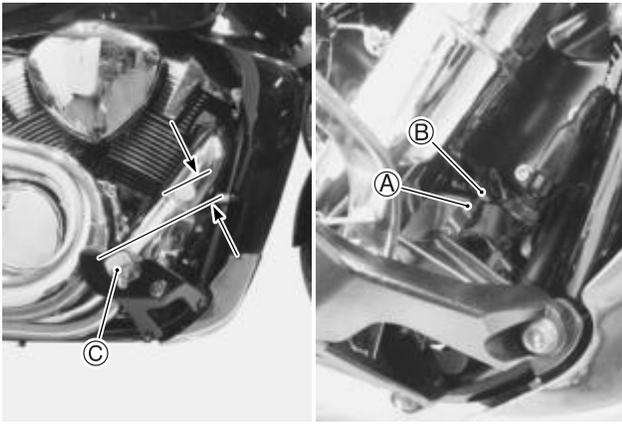
If adjustment is necessary, carry out the procedure below:

1. Remove the bolts to take off the secondary gear box cover.

A: Secondary gear box  
B: Allen bolt



2. Loosen the lock nut **A** of the clutch lever adjuster and turn in the adjuster **B** as far as possible.
3. Loosen the cable adjuster lock nuts **C** and slide the cable **D** to obtain the correct play.
4. Tighten the lock nuts **C**.
5. Tighten the lock nut **A** and place the lever cover **E**.
6. Reinstall the secondary gearbox cover to the original position correctly.



## REAR BRAKE PEDAL

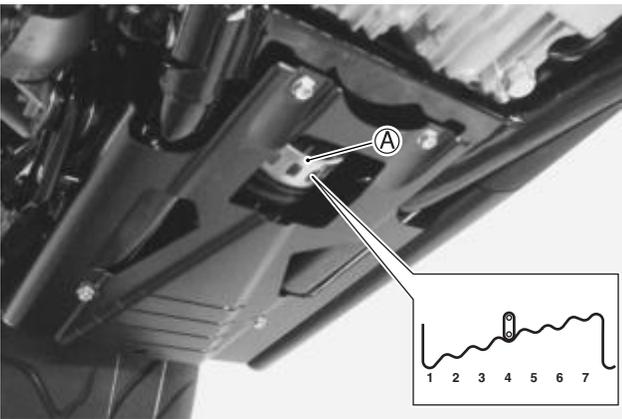
Check the rear brake pedal height.

**Rear brake pedal height: 25–35 mm (1.0–1.4 in)**

If the rear brake pedal height is not correct, adjust in the following manner:

1. Loosen the lock nut (A).
2. Rotate the push rod (B) to locate the pedal to the correct height above the top face of the footrest (C). Be sure to measure this height carefully.
3. Tighten the lock nut (A) to the specified torque.

 **Rear brake push rod lock nut (A):**  
**18 N·m (1.8 kgf·m, 13.0 lb·ft)**



## REAR SUSPENSION

### Checking spring setting

Check for the spring setting of the rear suspension.

This motorcycle is delivered from the factory with its adjuster set on position 4.

A: Adjuster



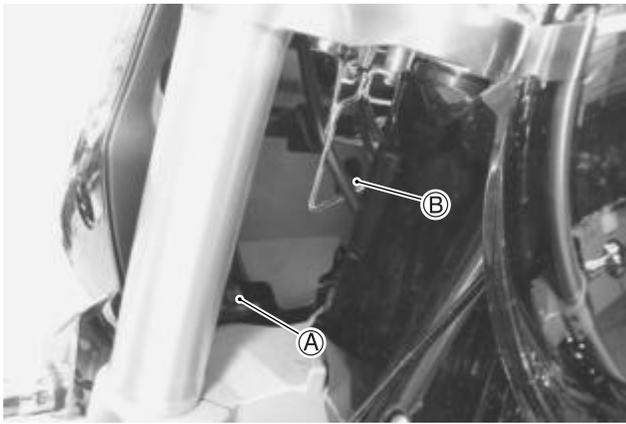
## TIRE PRESSURE

Using an accurate air gauge, check the air pressure of the front and rear tires.

The pressure should be as shown.

### COLD INFLATION TIRE PRESSURE

	SOLO RIDING	DUAL RIDING
FRONT	250 kPa	250 kPa
	2.50 kgf/cm <sup>2</sup>	2.50 kgf/cm <sup>2</sup>
	36 psi	36 psi
REAR	290 kPa	290 kPa
	2.90 kgf/cm <sup>2</sup>	2.90 kgf/cm <sup>2</sup>
	42 psi	42 psi



## HEADLIGHT BEAM ADJUSTMENT

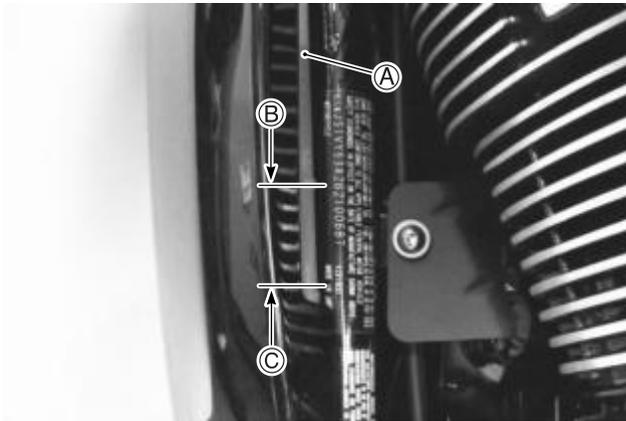
The headlight beam can be adjusted both horizontally and vertically if necessary.

### To adjust the beam horizontally:

Turn the adjuster **A** clockwise or counterclockwise.

### To adjust the beam vertically:

Turn the adjuster **B** clockwise or counterclockwise.

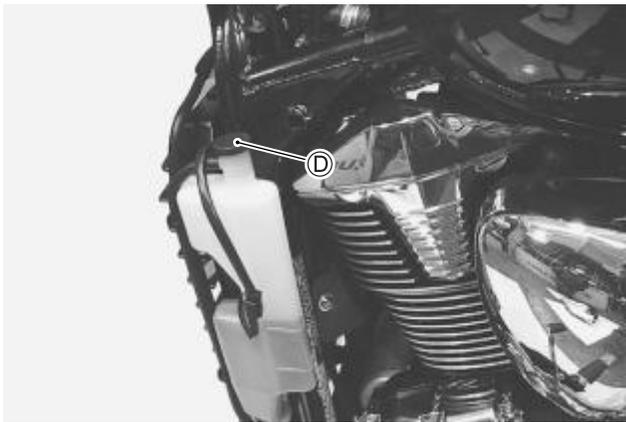


## ENGINE COOLANT

The engine coolant level should be kept between the “FULL” and “LOW” level lines as shown in the photograph.

Inspect the level with the motorcycle held upright on level ground.

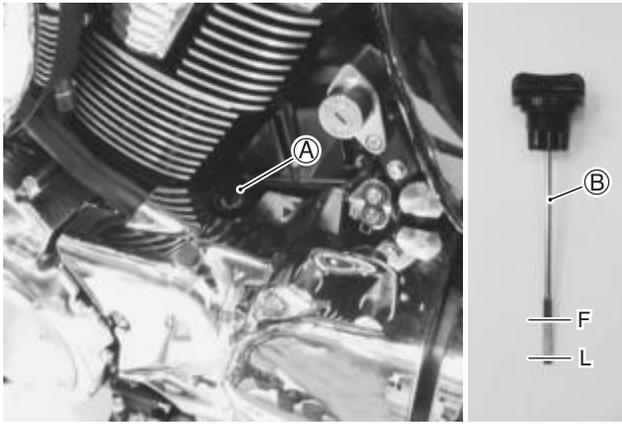
- A: Engine coolant reservoir
- B: “FULL” level line
- C: “LOW” level line



If the level is lower than the “LOW” level line, add the properly mixed engine coolant as follows.

1. Remove the frame body cover.
2. Remove the reservoir tank cap and add 50 : 50 mixture of engine coolant and distilled water to the “FULL” level line from the engine coolant filler hole.
3. Reinstall the reservoir tank cap.
4. Reinstall the frame body cover.

- D: Reservoir tank cap



## ENGINE OIL

### CAUTION

**This motorcycle is shipped from factory with the engine filled with engine oil. Be sure to check oil level.**

Check the engine oil level with the engine oil dipstick. The motorcycle held vertically on level ground.

1. Start the engine and allow it to run for 15 minutes at idling speed.  
Stop the engine and wait about three minutes.
2. Remove the oil filler plug.  
The engine oil dipstick comes out together with the oil filler plug.  
Wipe the oil from the dipstick with a clean rag.
3. Holding the motorcycle vertically, reinsert the dipstick until the threads touch the filler neck, but do not screw the plug in.
4. Draw out the dipstick and check the oil level.  
The level found on the dipstick should be between "L" (Low) and "F" (Full) line.
5. If the oil level is below the "L" line, add fresh oil from the filler hole until the oil level reaches to "F" line.  
If the level is above the "F" line, drain oil to "F" line.
6. Reinstall the drain plug and engine oil filler plug.  
Tighten them securely.

 **Oil drain plug: 23 N·m (2.3 kgf·m, 16.5 lb-ft)**

A: Engine oil filler plug  
B: Engine oil dipstick

### Engine oil

Oil quality is a major contributor to your engine's performance and life.

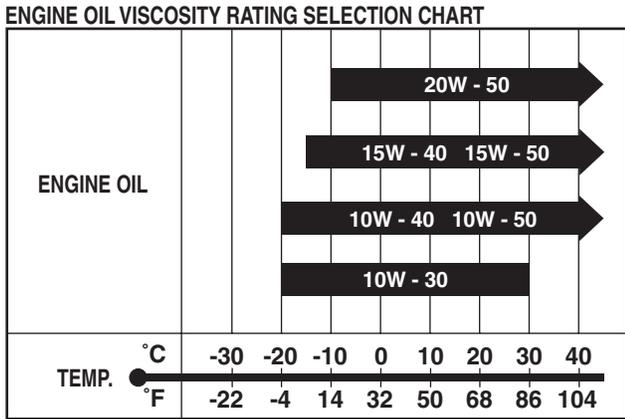
Always select good quality engine oil.

Suzuki recommends the use of SUZUKI PERFORMANCE 4 MOTOR OIL or equivalent engine oil.

Use SF/SG or SH/SJ in API (American Petroleum Institute) classification, with MA in JASO.

SAE	API	JASO
10W-40	SF or SG	—
10W-40	SH or SJ	MA

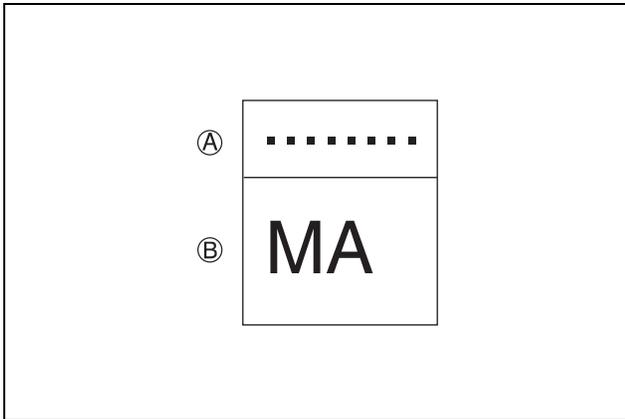
API: American Petroleum Institute  
JASO: Japanese Automobile Standards Organization



**SAE Engine Oil Viscosity**

Suzuki recommends the use of SAE 10W-40 engine oil.

If SAE 10W-40 engine oil is not available, select an alternative according to the following chart.



**JASO T903**

The JASO T903 standard is an index to select engine oils for 4-stroke motorcycle and ATV engines.

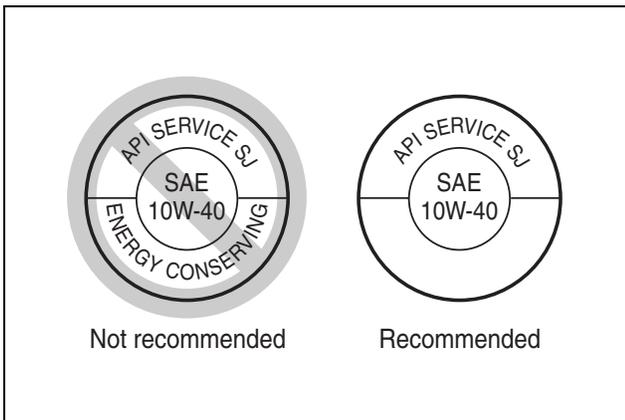
Motorcycle and ATV engines lubricate clutch and transmission gears with engine oil.

JASO T903 specifies performance requirements for motorcycle and ATV clutches and transmission.

There are two classes, MA and MB.

The oil container has following classification for confirming the standard.

- A: Code number of oil sales company
- B: Oil classification



**Energy Conserving**

Suzuki does not recommend the use of “ENERGY CONSERVING” oils.

Some engine oils which is API SH or greater has “ENERGY CONSERVING” indication in API classification doughnut mark.

These oils can affect engine life and clutch performance.



### FINAL DRIVE GEAR OIL

1. Keep the motorcycle upright.
2. Remove the oil filler plug.
3. Check the oil level.
4. If the oil level is below the filler hole, add final gear oil into the filler hole until the oil reaches the filler hole level and stop pouring just before oil flows out.
5. Reinstall the oil filler plug.  
Tighten it firmly.

**NOTE:**

**Use hypoid gear oil SAE 90, API grade GL-5.**

**If the motorcycle is ridden where the ambient temperature is below 0°C or 32°F, use hypoid gear oil SAE 80, API grade GL-5.**

A: Oil filler plug

### IDLE SPEED ADJUSTMENT

Check the engine idle speed.

**Engine idle speed: 800–1 000 r/min**

**NOTE:**

**If the engine idle speed is not within the specified range, ask your Suzuki dealer or a qualified mechanic to inspect and repair the motorcycle.**

### FUEL

**CAUTION**

**Use only premium unleaded gasoline of at least 90 pump octane (R/2+M/2 method) or 95 octane or higher rated by the research method.**

**Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.**

Test ride the motorcycle checking all mechanical functions.

Tighten all nuts, bolts, and miscellaneous mounting parts to the proper torque specs.

Confirm that all cables and wiring harnesses are connected and routed correctly.

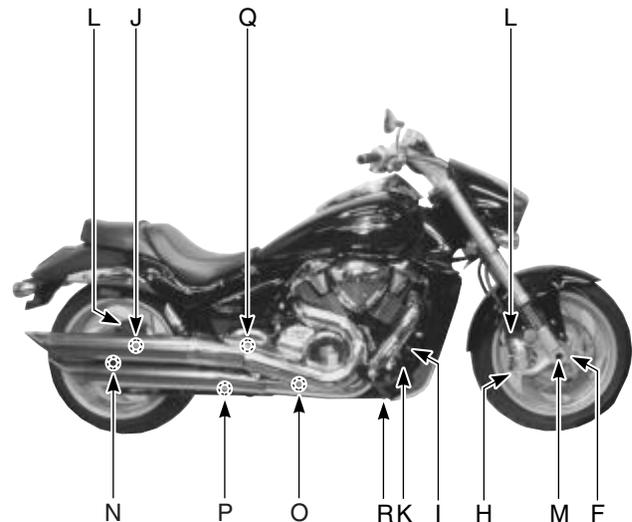
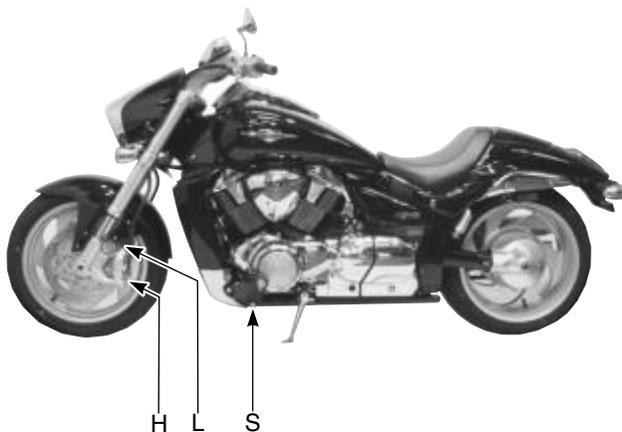
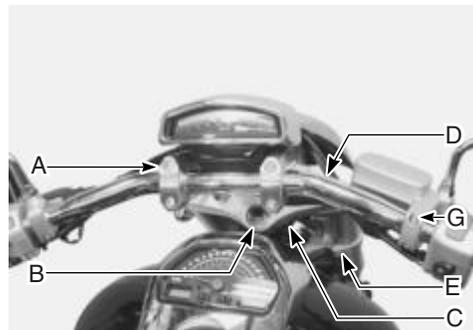
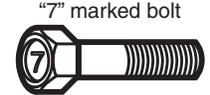
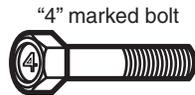
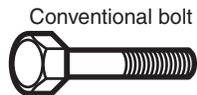
# TIGHTENING TORQUE

Item	Part Name	N-m	kgf-m	lb-ft
<b>FRONT FORK</b>				
A	Handlebar clamp bolt	23	2.3	16.5
B	Steering stem head nut	90	9.0	65.0
C	Handlebar holder bolt	85	8.5	61.5
D	Front fork upper bracket bolt	23	2.3	16.5
E	Front fork lower bracket bolt	23	2.3	16.5
F	Front axle clamp bolt	23	2.3	16.5
<b>BRAKE</b>				
G	Front brake master cylinder mounting bolt	10	1.0	7.0
H	Front brake caliper mounting bolt	39	3.9	28.0
I	Rear brake master cylinder mounting bolt	10	1.0	7.0
J	Rear brake caliper mounting bolt	39	3.9	28.0
K	Rear brake push rod lock nut	18	1.8	13.0
L	Brake caliper air bleeder	7.5	0.75	5.5

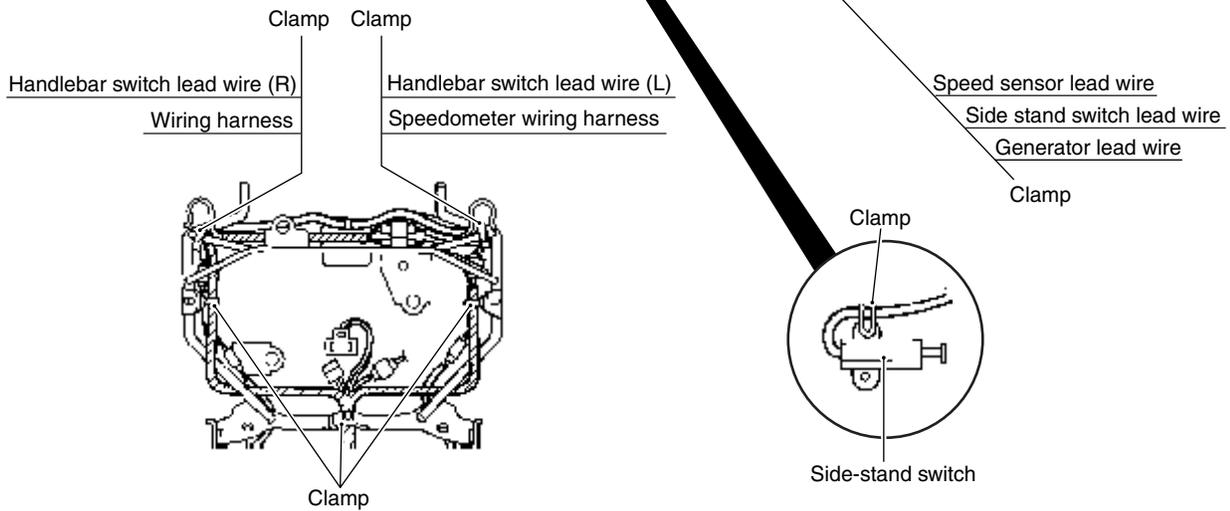
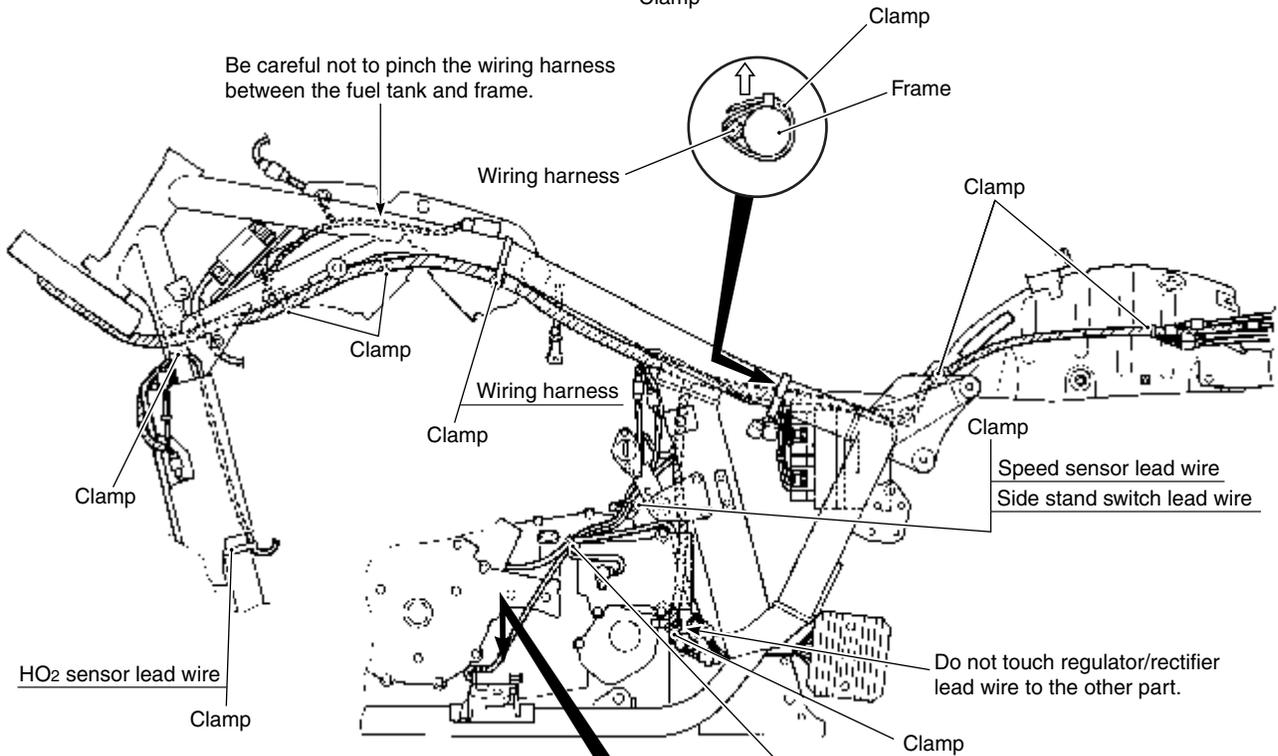
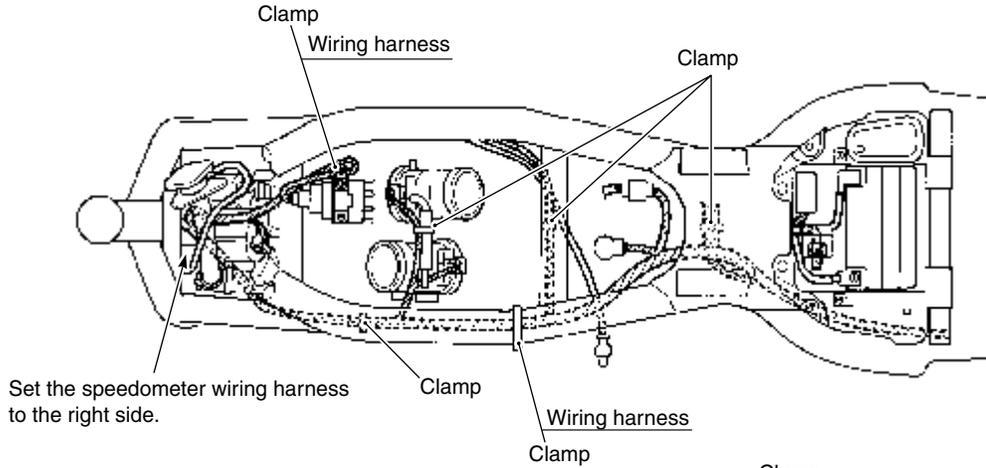
Item	Part Name	N-m	kgf-m	lb-ft
<b>AXLE</b>				
M	Front axle	100	10.0	72.5
N	Rear axle nut	100	10.0	72.5
<b>ABSORBER</b>				
O	Rear shock absorber nut (Front)	45	4.5	32.5
P	Rear shock absorber nut (Rear)	45	4.5	32.5
<b>OTHERS</b>				
Q	Rear swingarm pivot shaft	100	10.0	72.5
R	Front footrest bolt (Right)	60	6.0	43.5
S	Front footrest bolt (Left)	50	5.0	36.0

For other bolts and nuts not listed, refer to this chart.

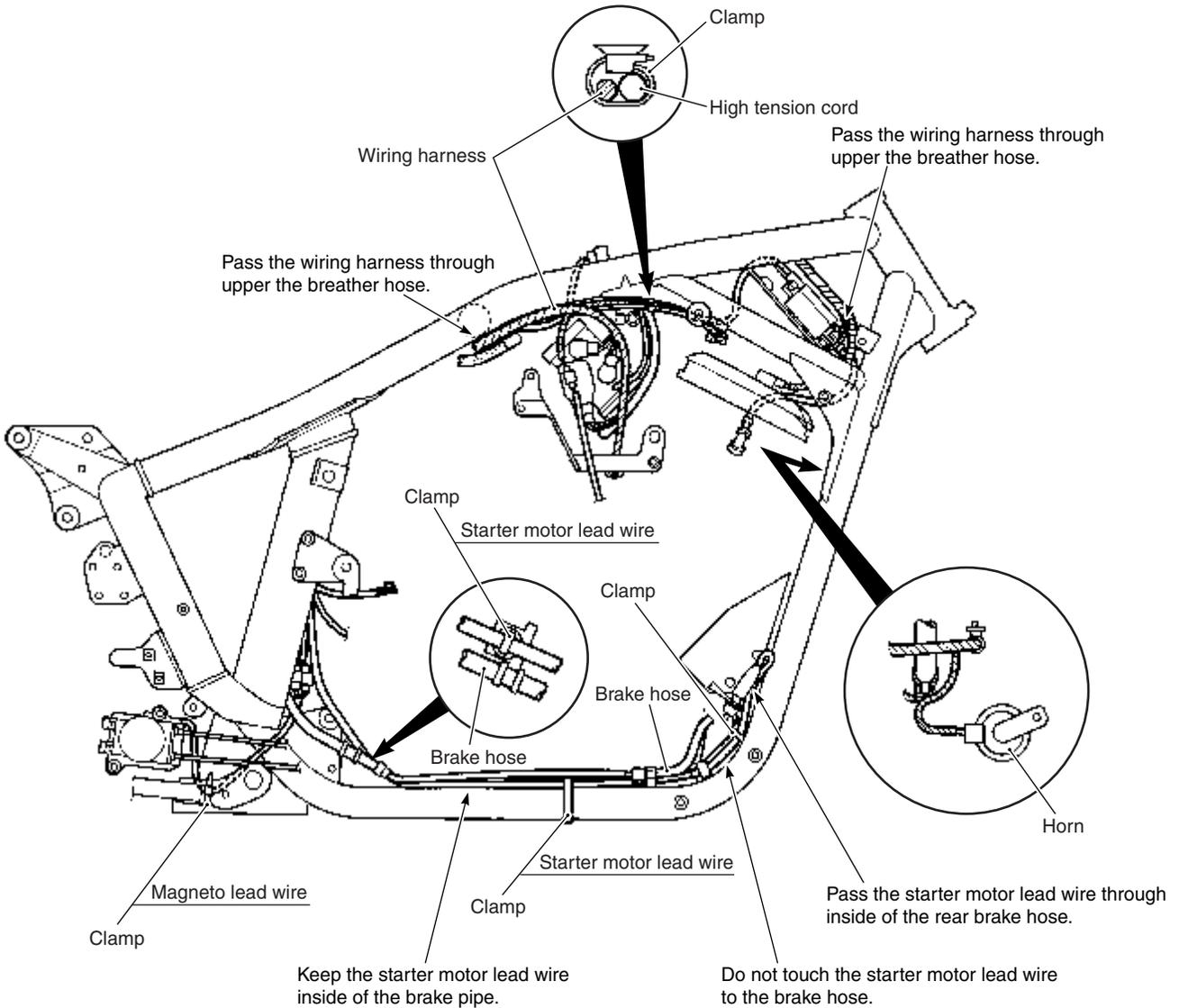
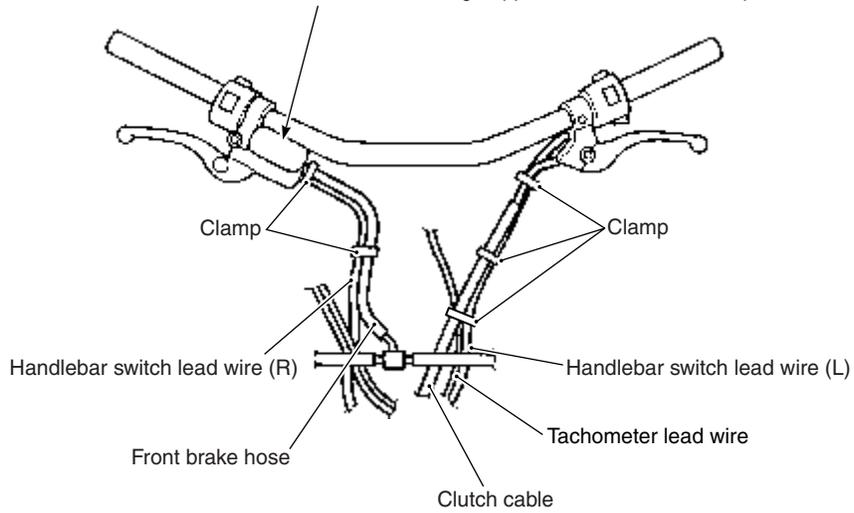
Bolt Diameter (mm)	Conventional or "4" marked bolt			"7" marked bolt		
	N-m	kgf-m	lb-ft	N-m	kgf-m	lb-ft
4	1.5	0.15	1.0	2.3	0.23	1.5
5	3	0.3	2.0	4.5	0.45	3.0
6	5.5	0.55	4.0	10	1.0	7.0
8	13	1.3	9.5	23	2.3	16.5
10	29	2.9	21.0	50	5.0	36.0
12	45	4.5	32.5	85	8.5	61.5
14	65	6.5	47.0	135	13.5	97.5
16	105	10.5	76.0	210	21.0	152.0
18	160	16.0	115.5	240	24.0	173.5



# HARNESS ROUTING

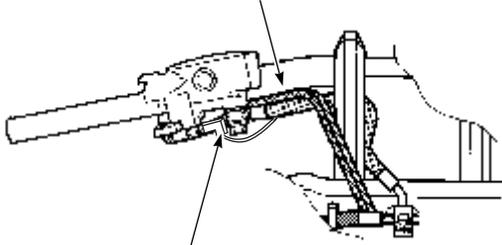


Pass the handlebar switch lead wire through upper the brake switch coupler.



# CABLE ROUTING

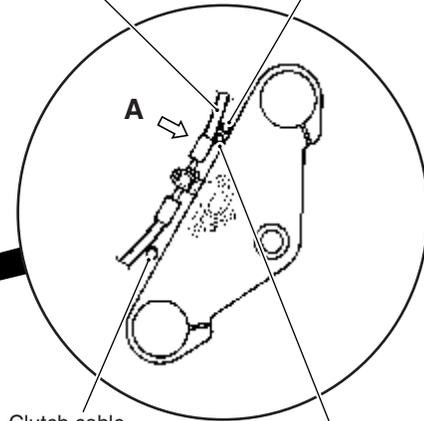
Pass the throttle cable through between the handlebar and brake hose.



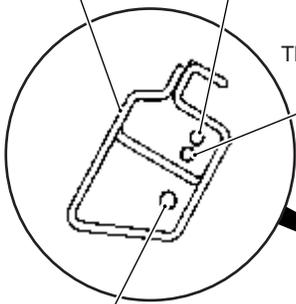
Throttle cable must be passed under the handlebar switch lead wire and brake switch coupler.

**VIEW A**

Front brake hose Throttle cable (Returning cable)



Cable guide Throttle cable (Pulling cable)  
Throttle cable (Returning cable)  
Clutch cable



Pass the throttle cable (pulling) through over the boss of the frame body head cover.

Throttle cable (Pulling cable)  
Throttle cable (Returning cable)

0 mm  
0 mm  
Boss

Pass the clutch cable through inside of heat shield plate.

Clutch cable

0 mm

