

CHASSIS

FRONT BRAKE ADJUSTMENT

1. Check:
 - Brake level free play **a**
 - Out of specification → Adjust.



Free play:
2 ~ 5 mm (0.08 ~ 0.20 in)

2. Adjust:
 - Brake lever free play

Adjustment steps:

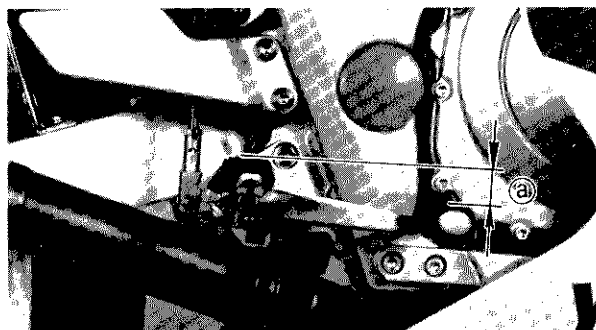
- Loosen the locknut **①**.
- Turn the adjuster **②** in or out until the specified free play is obtained.

| | |
|----------|-------------------------|
| Turn in | Free play is decreased. |
| Turn out | Free play is increased. |

- Tighten the locknut.

⚠ CAUTION:

Proper lever free play is essential to avoid excessive brake drag.



REAR BRAKE ADJUSTMENT

1. Check:
 - Brake pedal height **a**
 - Out of specification → Adjust.



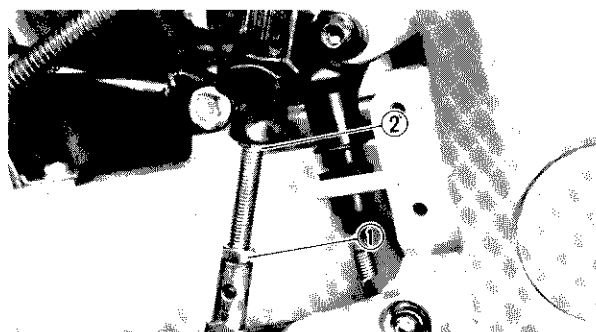
Brake pedal height:
44 mm (1.70 in)
Below top of footrest.

2. Adjust:
 - Brake pedal height

Adjustment steps:

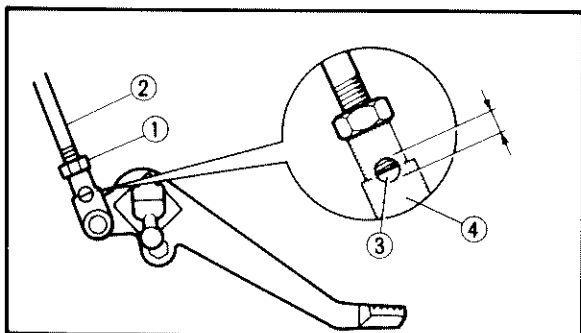
- Loosen the locknut **①**
- Turn the adjuster **②** in or out until the specified pedal height is obtained.

| | |
|----------|----------------------------|
| Turn in | Pedal height is increased. |
| Turn out | Pedal height is decreased. |



BRAKE FLUID INSPECTION

**INSP
ADJ**



⚠ WARNING:

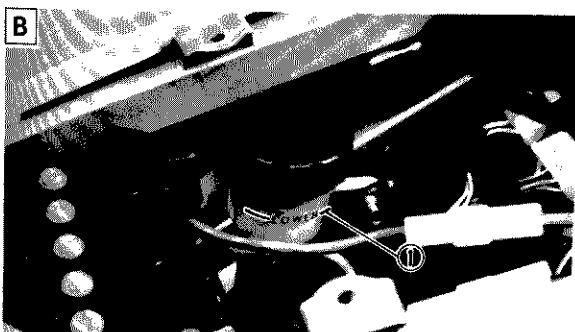
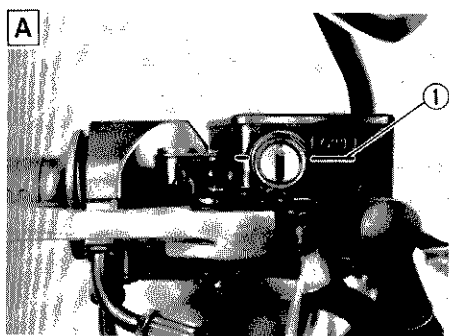
After adjusting the brake pedal height, visually check the adjuster end through the hole (3) of the joint holder (4). The adjuster end must appear within this hole.

- Tighten the locknut (1).



Locknut:

26 Nm (2.6 m · kg, 19 ft · lb)



BRAKE FLUID INSPECTION

1. Place the motorcycle on a level surface.
2. Inspect:
 - Brake fluid level

Fluid level is under "LOWER" level line
 (1) → Replenish.



Recommended brake fluid:

Front brake:

DOT #4 only

Rear brake:

DOT #4

(If DOT #4 is not available,
#3 can be used.)

A Front brake **B** Rear brake

NOTE:

- Position the motorcycle straight up when inspecting the brake fluid level.
- When inspecting the front brake fluid level, make sure the master cylinder top is horizontal by turning the handlebars.
- Before inspecting the rear brake fluid level, remove the side cover (right).

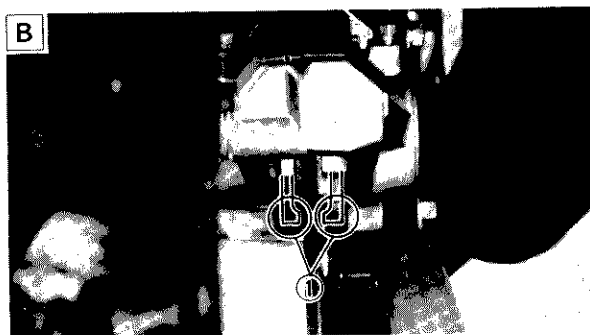
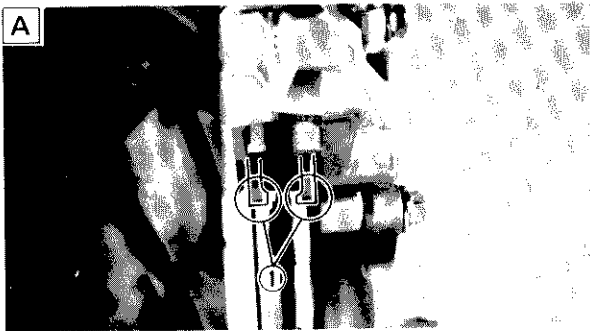


⚠ CAUTION:

Brake fluid may erode painted surface or plastic parts. Always clean up spilled fluid immediately.

⚠ WARNING:

- Use only the designated quality brake fluid; otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.
- Refill with the same type of brake fluid; mixing fluids may result in a harmful chemical reaction and lead to poor performance.
- Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.



BRAKE PAD INSPECTION

1. Activate the brake lever or brake pedal.

2. Inspect:

- Brake pad
Wear indicator ① almost contacts brake disc → Replace brake pad as a set.
Refer to "BRAKE PAD REPLACEMENT" section in the CHAPTER 7 for replacement.

A Front brake

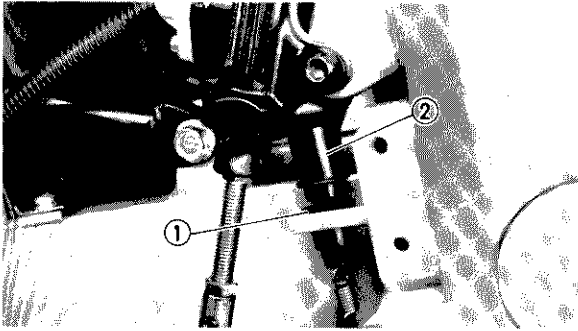
B Rear brake

BRAKE LIGHT SWITCH ADJUSTMENT

NOTE:

The brake light switch is operated by movement of the brake pedal.

Proper adjustment is achieved when the brake light comes on just before the brake begins to take effect.



1. Loosen:
 - Locknut ①
2. Adjust:
 - Rear brake light switch

Hold the switch body ② with your hand so it does not rotate and turn the adjuster.

NOTE:

Proper adjustment is achieved when the brake light comes on just before the brake begins to take effect.

3. Tighten:
 - Locknut



BRAKE HOSE INSPECTION

1. Inspect:
 - Brake hoses

Cracks/Wear/Damage → Replace.

- A Front brake
- B Rear brake

AIR BLEEDING

WARNING:

Bleed the brake system if:

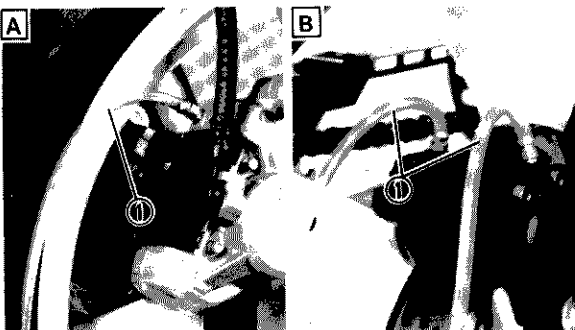
- The system has been disassembled.
- A brake hose has been loosened or removed.
- The brake fluid is very low.
- The brake operation is faulty.

A dangerous loss of braking performance may occur if the brake system is not properly bled.

1. Bleed:
 - Brake system

Air bleeding steps:

- a. Add proper brake fluid to the reservoir.
- b. Install the diaphragm. Be careful not to spill any fluid or allow the reservoir to overflow.
- c. Connect the clear plastic tube ① tightly to the caliper bleed screw.



- ☐ A Front
- ☐ B Rear

- d. Place the other end of the tube into a container.
- e. Slowly apply the brake lever or pedal several times.
- f. Pull the lever in or push down on the pedal. Hold the lever or pedal in position.
- g. Loosen the bleed screw and allow the lever or pedal to travel towards its limit.
- h. Tighten the bleed screw when the lever or pedal limit has been reached; then release the lever or pedal.



Bleed screw:
6 Nm (0.6 m · kg, 4.3 ft · lb)

- i. Repeat steps (e) to (h) until of the air bubbles have been removed from the system.

NOTE: _____

If the bleeding is difficult, it may be necessary to let the brake fluid system stabilize for a few hours. Repeat the bleeding procedure when the tiny bubbles in the system have disappeared.

- j. Add brake fluid to the level line on the reservoir.

DRIVE CHAIN SLACK ADJUSTMENT

NOTE: _____

Before checking and/or adjusting the chain slack, rotate the rear wheel through several revolutions. Check the chain slack several times to find the point where the chain is the tightest. Check and/or adjust the chain slack where the rear wheel is in this "tight chain" position.

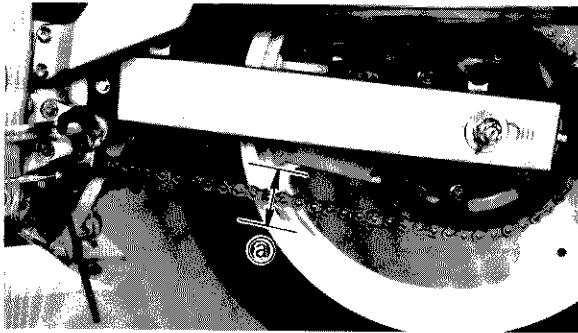
1. Place the motorcycle on a level place, and hold it in an upright position.

NOTE: _____

The both wheels on the ground without rider on it.

DRIVE CHAIN SLACK ADJUSTMENT

**INSP
ADJ**

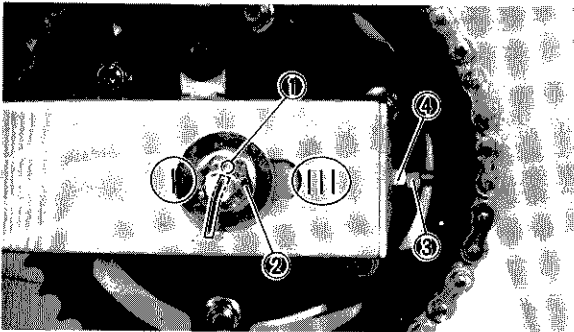


2. Measure:

- Drive chain slack ①
- Out of specification → Adjust.



Drive chain slack:
20 ~ 30 mm (0.8 ~ 1.2 in)



3. Adjust:

- Drive chain slack

Adjustment steps:

⚠ CAUTION:

Too small chain slack will overload the engine and over vital parts; keep the slack within the specified limits.

- Remove the cotter pin ① .
- Loosen the axle nut ② .
- Loosen the both locknuts ③ .
- Turn the adjuster ④ clockwise, or counter-clockwise and push the rear wheel forward until the specified slack is obtained.

| | |
|--|---------------------|
| Turning clockwise | Slack is increased. |
| Turning counter-clockwise and pushing rear wheel | Slack is decreased. |

NOTE:

Turn each adjuster exactly the same amount to maintain correct axle alignment. (There are marks on each side of swingarm; use them to check for proper alignment.)

- Tighten the locknut.
- Tighten the axle nut to specification, while pushing up or down the chain to be tight.

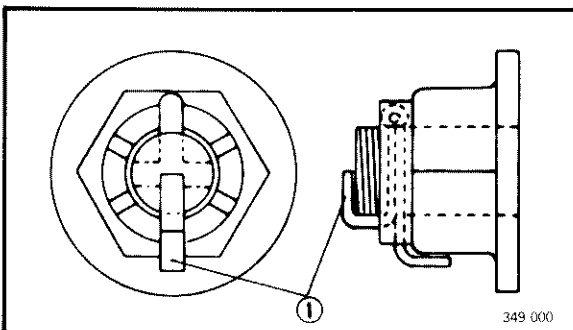


Axle nut:
107 Nm (10.7 m · kg, 77 ft · lb)

- Install the cotter pin ① .

⚠ WARNING:

Always use a new cotter pin on the axle nut.



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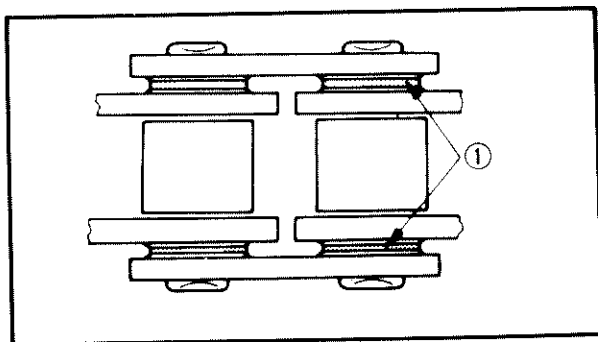
⚠ CAUTION:

Do not loosen the axle nut after torque tightening. If the axle nut groove is not aligned with the cotter pin hole, align groove with the hole by tightening up on the axle nut.

DRIVE CHAIN LUBRICATION

The chain consists of many parts which work against each other. If the chain is not maintained properly, it will wear out rapidly, therefore, form the habit of periodically servicing the chain. This service is especially necessary when riding in dusty conditions.

This motorcycle has a drive chain with small rubber O-rings between the chain plates. Steam cleaning, high-pressure washes, and certain solvents can damage these O-rings. Use only kerosene to clean the drive chain. Wipe it dry, and thoroughly lubricate it with SAE 30~50W motor oil. Do not use any other lubricants on the drive chain. They may contain solvents that could damage the O-rings.



Recommended lubricant:
SAE30 ~ 50 motor oil

① O-ring

CHANGE PEDAL ADJUSTMENT

1. Check:

- Change pedal position

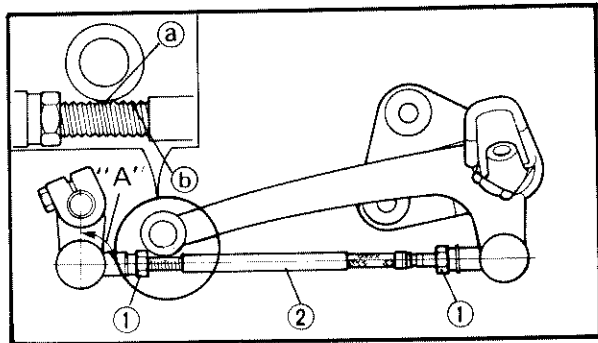
While looking at the side view, the bottom ① of the change pedal cover should be even with the top ② of the thread area of the shift rod.

(Also, angle "A" will be approximately 90°)

Not even → Adjust.

2. Adjust:

- Change pedal position



Adjustment steps:

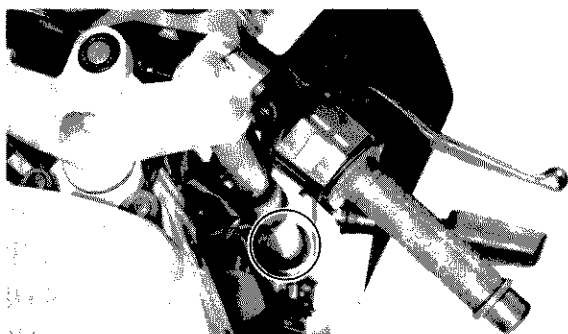
- Loosen both locknuts ① .
- Turn shift arm ② in or out until adjustment is suitable.
- Tighten the both locknuts.

FRONT FORK INSPECTION

⚠ WARNING:

Securely support the motorcycle so there is no danger of it falling over.

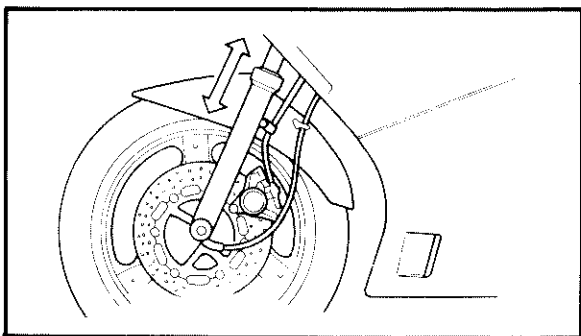
1. Place the motorcycle on a level place.



2. Check:

- Inner tube
Scratch/Damage → Replace.
- Oil seal
Excessive oil leakage → Replace.

3. Hold the motorcycle on upright position and apply the front brake.



4. Check:

- Operation
Pump the front fork up and down for several times.
Unsmooth operation → Repair.

STEERING HEAD INSPECTION

⚠ WARNING:

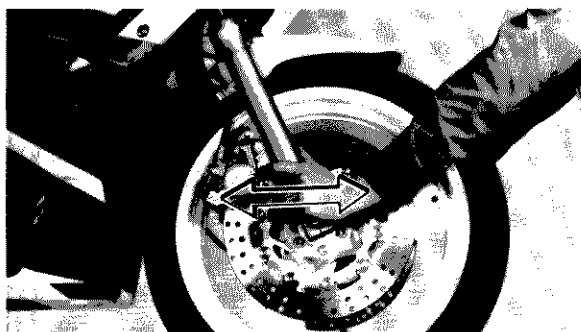
Securely support the motorcycle so there is no danger of it falling over.

1. Place the motorcycle on a level place.

2. Elevate the front wheel by placing a suitable stand under the engine.

3. Check:

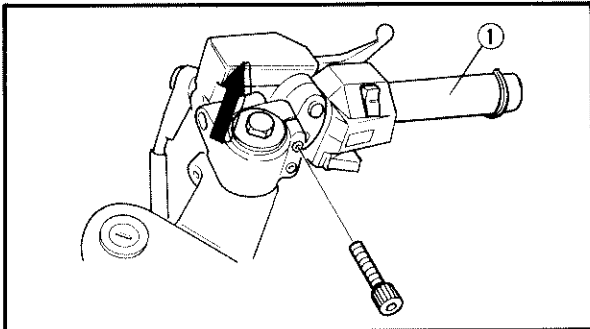
- Steering assembly bearings
Grasp the bottom of the front forks and gently rock the fork assembly back and forth.
Looseness → Adjust the steering head.





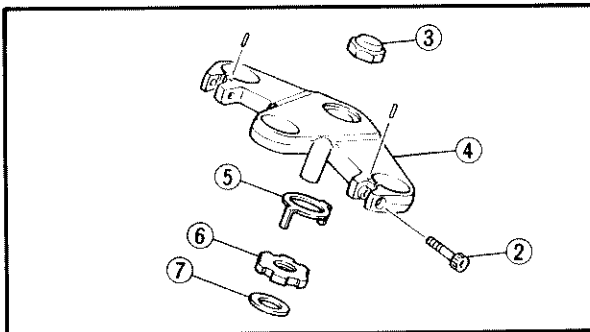
4. Remove:

- Rear view mirrors (left and right)
 - Stay (upper cowl)
 - Top cover
- Refer to "COWLINGS/COVERS REMOVAL AND INSTALLATION."



5. Remove:

- Handlebar ①
- From front fork.

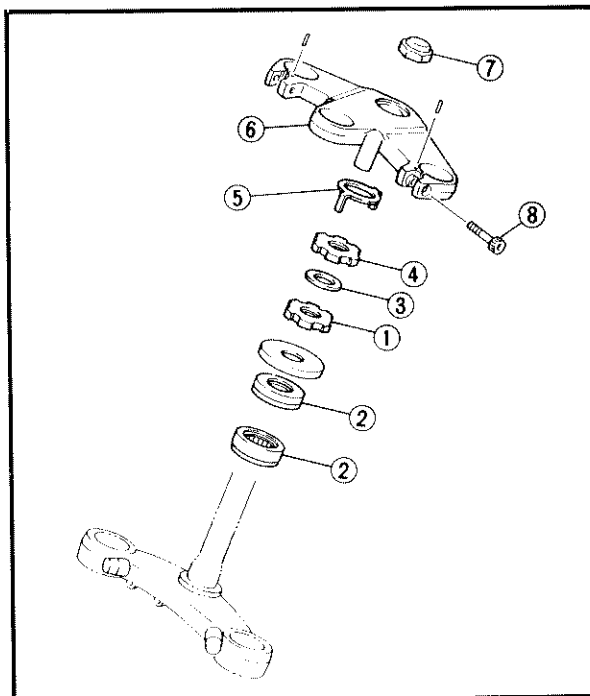


6. Loosen:

- Pinch bolt (handle crown) ②

7. Remove:

- Steering stem nut ③
- Handle crown ④
- Lock washer ⑤
- Ring nut (upper) ⑥
- Washer (rubber) ⑦



8. Tighten:

- Ring nuts (lower and upper)

Ring nuts tightening steps:

NOTE:

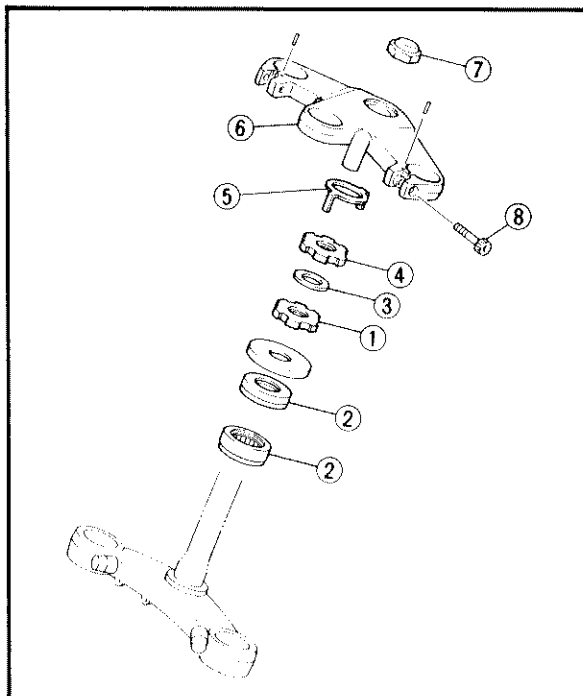
Set the Torque Wrench to the Ring Nut Wrench so that they form a right angle.

- Loosen the ring nut (lower) ① .

NOTE:

The tapered side of ring nut must faced downward.

- Tighten the ring nut (lower) ① using the ring nut wrench.



Ring nut wrench:
YU-33975
90890-01403



Ring nut (lower) ①
(initial tightening):
52 Nm (5.2 m · kg, 37 ft · lb)

- Loosen the ring nut ① completely and retighten it to specification.

⚠ WARNING:

Do not over-tightening.



Ring nut (lower) ① (final tightening):
3 Nm (0.3 m · kg, 2.2 ft · lb)

- Check the steering stem by turning it lock to lock. If there is any binding, remove the steering stem assembly and inspect the steering bearings ②.

Refer to "STEERING HEAD" section in the CHAPTER 7 for more details.

- Install the washer (rubber) ③.
- Install the ring nut (upper) ④.

NOTE:

The tapered side of ring nut must face downward.

- Finger tighten the ring nut ④, then align the slots of both ring nuts. If not aligned, hold the ring nut (lower) ① and tighten the other until they are aligned.
- Install the lock washer ⑤.

NOTE:

Make sure the lock washer tab is placed in the slots.

- Install the handlebar crown ⑥ and tighten the steering stem not ⑦ to specification.



Nut (steering stem):
110 Nm (11.0 m · kg, 80 ft · lb)

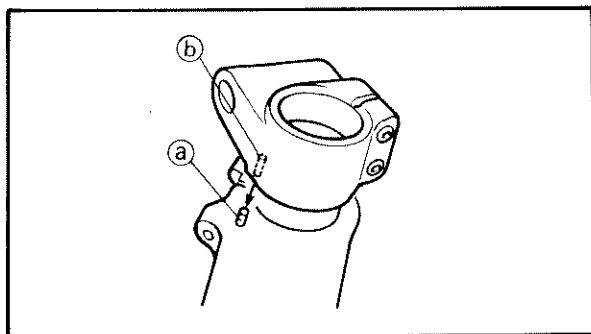
- Tighten the pinch bolts ⑧ to specification.



Pinch bolt (handle crown):
26 Nm (2.6 m · kg, 19 ft · lb)

REAR SHOCK ABSORBER ADJUSTMENT

**INSP
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9. Install:

- Handlebar



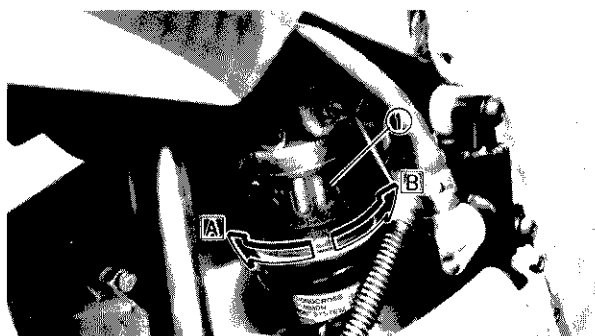
Bolt (handlebar):
20 Nm (2.0 m · kg, 14 ft · lb)

NOTE:

Align the projection (a) with the hole (b).

10. Install:

- Blind plugs
- Stay (upper cowl)
- Rear view mirrors (left and right)



REAR SHOCK ABSORBER ADJUSTMENT

1. Adjust:

- Spring preload

Adjustment steps:

- Turn the adjuster (1) to direction [A] or [B].
(Use special wrench included in tool kit)

⚠ WARNING:

Securely support the motorcycle so there is no danger of it falling over.

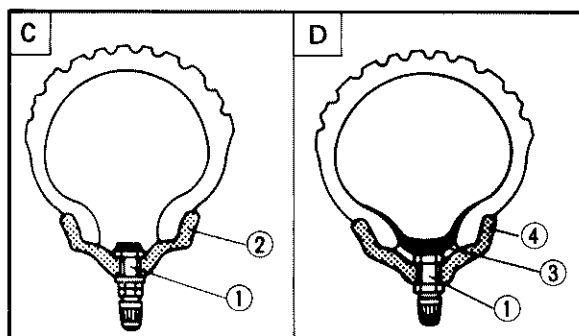
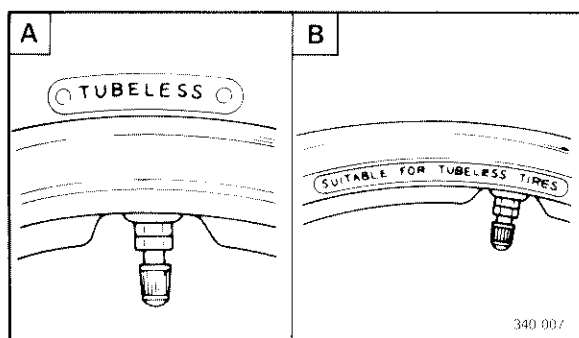
Turning in [A] Preload is increased.

Turning out [B] Preload is decreased.

| | HARD | | | | STD | SOFT | |
|---------------------|------|---|---|---|-----|------|---|
| ADJUSTMENT POSITION | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

⚠ CAUTION:

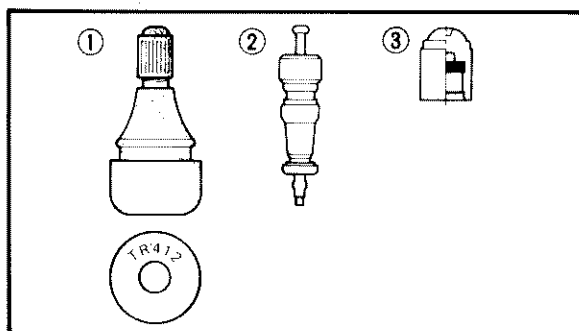
Never attempt to turn the adjuster beyond the maximum or minimum setting.

**FRONT:**

| Manufacture | Size | Type |
|-------------|----------------|-------|
| Bridgestone | 110/70V17-V240 | G549 |
| Dunlop | 110/70V17-V240 | K275F |

REAR:

| Manufacture | Size | Type |
|-------------|----------------|------|
| Bridgestone | 130/70V18-V240 | G550 |
| Dunlop | 130/70V18-V240 | K275 |

**TIRE INSPECTION****⚠ WARNING:**

- Do not attempt to use tubeless tires on a wheel designed for tube type tires only. Tire failure and personal injury may result from sudden deflation.

| Wheel | Tire |
|---------------|----------------------------|
| Tube type | Tube type only |
| Tubeless type | Tube type or tubeless type |

- Be sure to install the correct tube when using tube type tires.

- A** Tire **C** Tubeless tire
B Wheel **D** Tube type tire
1 Air valve
2 Aluminum wheel (tubeless type)
3 Tube
4 Aluminum wheel (tube type)

⚠ WARNING:

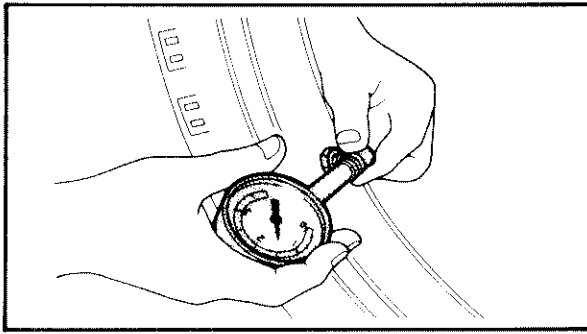
- After extensive tests, the tires mentioned have been approved by Yamaha motor Co., Ltd. for this model. No guarantee for handling characteristics can be given if tire combinations other than what is approved are used on this motorcycle.

The front and rear tires should be of the same manufacture and design.

- The use of tire valves and valve cores other than listed could cause tire deflation during extreme high speed riding. Always use genuine parts or their equivalent for replacement.
- Be sure to install the valve caps securely, as these are important to prevent air pressure leakage during extreme high speed riding.

- 1** Tire valve (TR412)
2 Valve core #9000A (genuine)
3 Valve cap with seal

| | Type |
|------------|------------------|
| Tire valve | TR412 |
| Valve core | #9000A (genuine) |



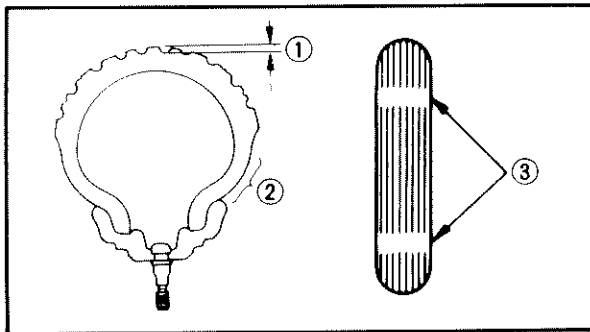
1. Measure:

- Tire pressure

Out of specification → Adjust.

| | | |
|---|---|---|
| Basic weight: With oil and full fuel tank | 201 kg (443 lb) | |
| Maximum load * | 159 kg (351 lb) 154 kg (340 lb) (FZR600WC) | |
| Cold tire pressure | Front | Rear |
| Up to 90 kg (198 lb) load | 230 kPa (2.3 kg/cm ² , 33 psi) | 250 kPa (2.5 kg/cm ² , 36 psi) |
| 90 kg (198 lb) ~ Maximum load * | 250 kPa (2.5 kg/cm ² , 36 psi) | 290 kPa (2.9 kg/cm ² , 42 psi) |
| High speed riding | 250 kPa (2.5 kg/cm ² , 36 psi) | 290 kPa (2.9 kg/cm ² , 42 psi) |

* Load is the total weight of cargo, rider, passenger, and accessories.



2. Inspect:

- Tire surfaces

Wear/Damage → Replace



**Minimum tire tread depth
(Front and Rear):
1.0 mm (0.04 in)**

- ① Tread depth
- ② Side wall
- ③ Wear indicator

WHEEL INSPECTION

1. Inspect:

- Aluminum wheels

Damage/Bends → Replace.

NOTE:

Always balance the wheel when a tire or wheel has been changed or replaced.

⚠ WARNING:

Never attempt even small repairs to the wheel.



CABLE INSPECTION

⚠ WARNING:

Damage cable sheath may cause corrosion and interfere with the cable movement. An unsafe condition may result so replace such cable as soon as possible.

1. Inspect:

- Cable sheath
- Cables (throttle, clutch and starter)

Damage → Replace.

LUBRICATION

Cables

1. Check:

- Cable operation

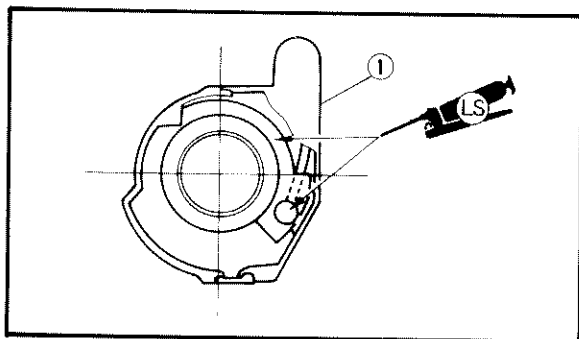
Unsmooth operation → Lubricate.



Recommended lubricant:
SAE 10W30 motor oil

NOTE:

Hold cable end high and apply several drops of lubricant to cable.



2. Apply the grease to the throttle cable end and cable guide groove at inside of throttle housing ①.



Lithium soap base grease

Lever/Pedal

1. Lubricate the pivoting parts of the each lever and pedal.



Recommended lubricant:
SAE 10W30 motor oil

**Sidestand**

1. Lubricate the pivoting parts.



Recommended lubricant:
SAE 10W30 motor oil

Rear suspension

1. Lubricate the pivoting parts.

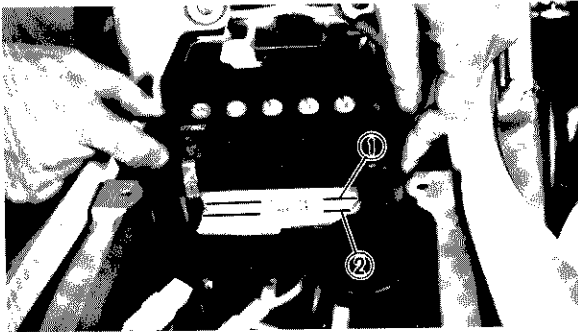


Recommended lubricant:
Lithium-soap base grease

ELECTRICAL**BATTERY INSPECTION**

1. Remove:

- Seat



2. Inspect:

- Fluid level

Fluid level should be between upper ① and lower ② marks.

Incorrect → Refill.

⚠ CAUTION:

Refill with distilled water only; tap water contains minerals harmful to a battery.

3. Inspect:

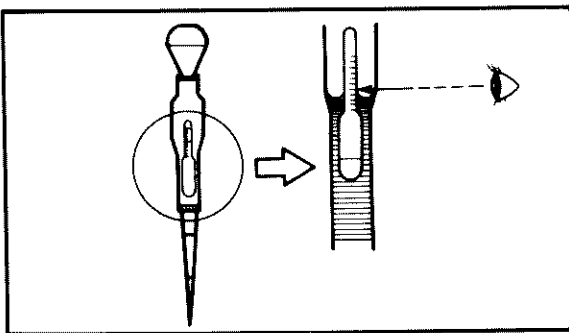
- Battery terminal

Dirty terminal → Clean with wire brush.

Poor connection → Correct.

NOTE:

After cleaning the terminals, apply grease lightly to the terminals.



4. Check:

- Specific gravity:

Less than 1.280 → Recharge battery.



Charging current:

1.2 amps/10 hrs

Specific gravity:

1.280 at 20°C (68°F)

Replace the battery if:

- Battery voltage will not rise to a specific value or bubbles fail to rise even after many hours of charging.
- Sulfation of one or more cells occurs, as indicated by the plates turning white, or an accumulation of material exists in the bottom of the cell.



- Specific gravity readings after a long, slow charge indicate one cell to be lower than the rest.
- Warpage or buckling of plates or insulators is evident.

⚠ CAUTION:

Always charge a new battery before using it to ensure maximum performance.

⚠ WARNING:

Battery electrolyte is dangerous; it contains sulfuric acid and therefore is poisonous and highly caustic.

Always follow these preventive measures:

- Avoid bodily contact with electrolyte as it can cause severe burns or permanent eye injury.
- Wear protective eye gear when handling or working near batteries.

Antidote (EXTERNAL):

- SKIN — Flush with water.
- EYES — Flush with water for 15 minutes and get immediate medical attention.

Antidote (INTERNAL):

- Drink large quantities of water or milk followed with milk of magnesia, beaten egg, or vegetable oil. Get immediate medical attention.

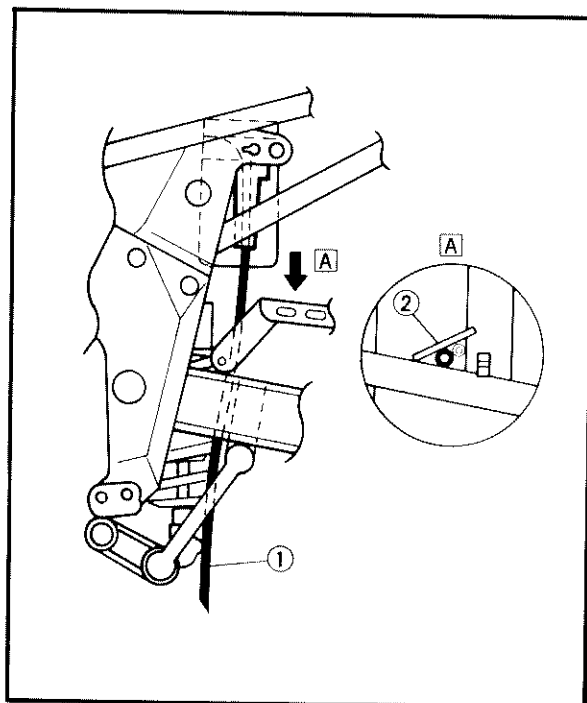
Batteries also generate explosive hydrogen gas, therefore you should always follow these preventive measures:

- Charge batteries in a well-ventilated area.
- Keep batteries away from fire, sparks, or open flames (e.g., welding equipment, lighted cigarettes, etc.)
- DO NOT SMOKE when charging or handling batteries.

KEEP BATTERIES AND ELECTROLYTE OUT OF REACH OF CHILDREN.



FUSE INSPECTION



5. Inspect:

- Breather hose (battery) ①
Obstruction → Reroute.
Damage → Replace.

6. Connect:

- Breather hose (battery) ①
Be sure the hose is properly attached and routed.

⚠ CAUTION:

When inspecting the battery, be sure the breather pipe is routed correctly..If the breather pipe touches the frame or exits in such a way as to cause battery electrolyte or gas to exit onto the frame, structural and cosmetic damage to the motorcycle can occur.

- [A] Pass the battery breather hose through the guide ② on swingarm.

FUSE INSPECTION

1. Remove:

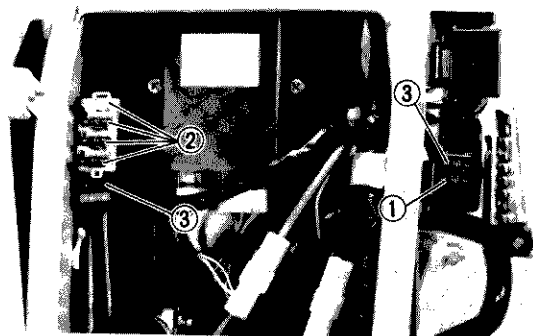
- Seat
- Side cover (left)
Refer to "COWLINGS/COVERS REMOVAL AND INSTALLATION" section.

2. Inspect:

- Fuses
Defective → Replace.
Blown fuse (New) → Inspect circuit.

NOTE:

Install new fuses of proper amperage.



- ① Main fuse
- ② Other fuse
- ③ Spare fuse



| Description | Amperage | Quantity |
|-------------|----------|----------|
| Main | 30A | 1 |
| Headlight | 20A | 1 |
| Signal | 10A | 1 |
| Ignition | 10A | 1 |
| Fan | 10A | 1 |
| Reserve | 30A | 1 |
| | 20A | 1 |
| | 10A | 1 |

3. Replace:

- Blown fuse

Blown fuse replacement steps:

- Turn off ignition and the circuit.
- Install a new fuse of proper amperage.
- Turn on switches to verify operation of electrical device.
- If fuse blows immediately again, check circuit in question.

⚠ WARNING:

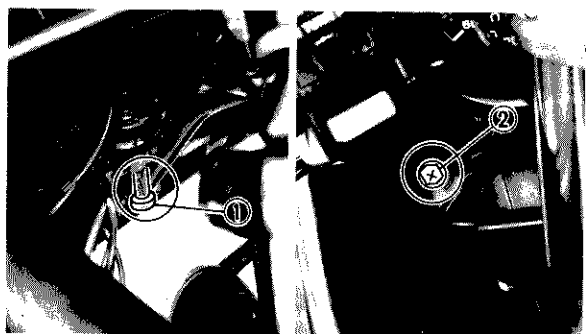
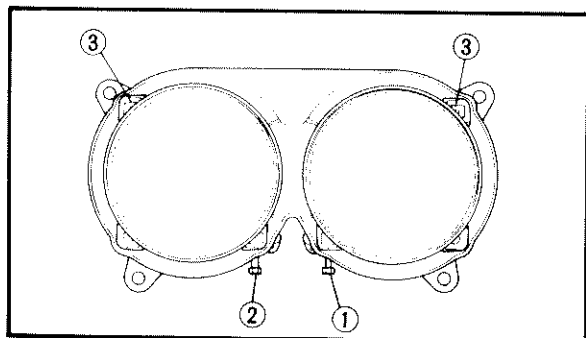
Do not use fuses of higher amperage rating than recommended. Extensive electrical system damage and fire could result from substitution of a fuse of improper amperage.

4. Install:

- Side cover (left)
- Seat

Refer to "COWLINGS/COVERS REMOVAL AND INSTALLATION" section.

HEADLIGHT BEAM ADJUSTMENT/ HEADLIGHT BULB REPLACEMENT



HEADLIGHT BEAM ADJUSTMENT

NOTE:

This model is equipped with dual headlight. Adjust the headlight beam for each individual headlight.

1. Adjust:

- Headlight beam (horizontally)

(Right headlight)

| Horizontal adjustment | |
|-----------------------|--|
| Right | Turn adjusting screw ① clockwise |
| Left | Turn adjusting screw ① counter-clockwise |

(Left headlight)

| Horizontal adjustment | |
|-----------------------|--|
| Right | Turn adjusting screw ② counter-clockwise |
| Left | Turn adjusting screw ② clockwise |

2. Adjust:

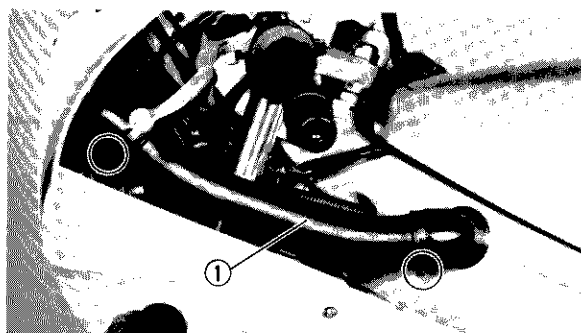
- Headlight beam (vertically)

| Vertical adjustment | |
|---------------------|--|
| Higher | Turn the adjusting screw ③ clockwise |
| Lower | Turn the adjusting screw ③ counter-clockwise |

HEADLIGHT BULB REPLACEMENT

1. Remove:

- Air intake duct ①



2. Remove:

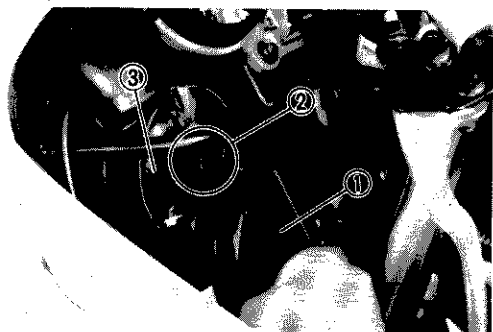
- Headlight covers ①

3. Disconnect:

- Headlight couplers ②

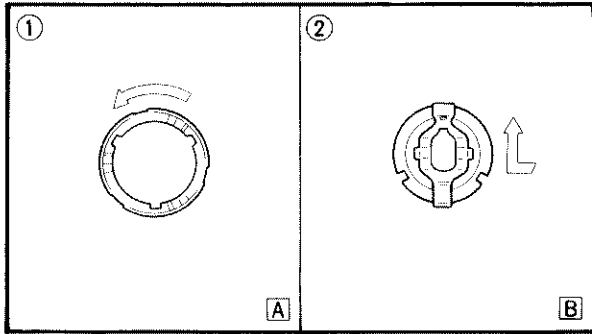
4. Remove:

- Headlight bulb cover ③



HEADLIGHT BULB REPLACEMENT

INSP
ADJ



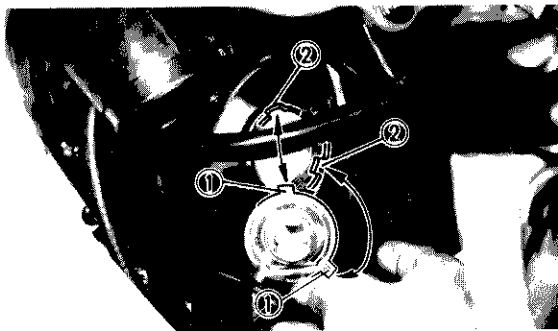
5. Remove:
- Bulb holder

- ① Left side
② Right side
A Turn
B Unhook

6. Remove:
- Bulb (defective)

⚠ WARNING:

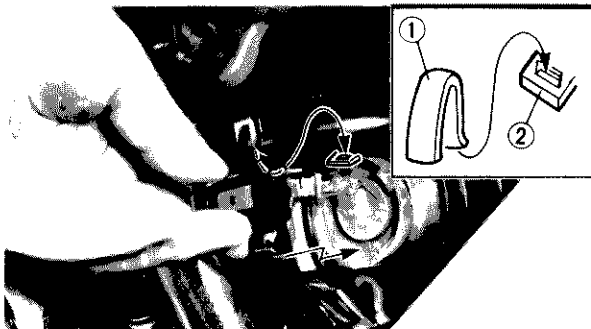
Keep flammable products or your hands away from the bulb while it is on, it will be hot. Do not touch the bulb until it cools down.



7. Install:
- Bulb (new)

NOTE:

- Left side:
Make sure the projections ① on the bulb are meshed with the slot ② in the bulb case.
- Right side:
Make sure the projections ① on the bulb are meshed with the slot ② in the bulb case.



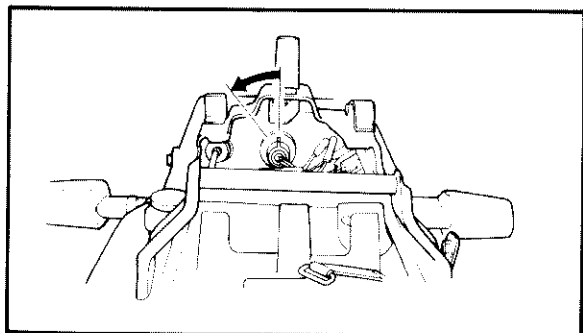
⚠ CAUTION:

Avoid touching the glass part of the bulb. Keep it free from oil; otherwise, the transparency of the glass, life of the bulb, and illuminous flux will be adversely affected. If oil gets on the bulb, thoroughly clean it with a cloth moistened with alcohol or lacquer thinner.

TAIL/BRAKE BULB REPLACEMENT**1. Remove:**

- Seat
- Tail cover

Refer to "COWLINGS/COVERS REMOVAL AND INSTALLATION" section.

**2. Remove:**

- Bulb socket

Turn the bulb socket approximately counterclockwise.

3. Remove:

- Defective bulb

4. Install:

- Bulb socket
- Tail cover
- Seat