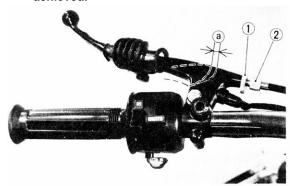
ment required is maintenance of free play at the clutch handlebar lever.

## 1. Free play adjustment

Loosen the handlebar lever adjuster lock nut. Next turn the length adjuster either in or out until proper lever free play is achieved.

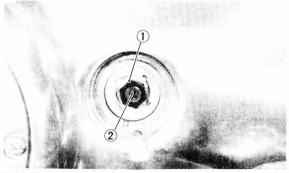


- 1. Lock nut a,  $2 \sim 3 \, \text{mm} \, (0.08 \sim 0.12 \, \text{in})$
- 2. Adjuster

# 2. Mechanism adjustment

The second adjustment is located behind the adjusting cover. Removing the cover

will expose the adjuster and lock nut. Loosen the lock nut, rotate the adjuster in until it lightly seats against the clutch push rod that works with the adjuster to operate the clutch. Back the adjuster out 1/4 turn and tighten the lock nut.



1. Lock nut 2. Adjuster

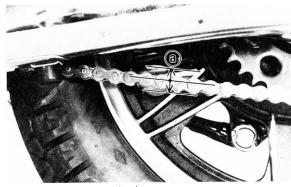
This adjustment must be checked because heat and clutch wear will affect this free play, possibly enough to cause incomplete clutch operation. Recheck clutch cable adjustment at the handlebar after adjusting.

Drive chain tension check

NOTE: ———

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

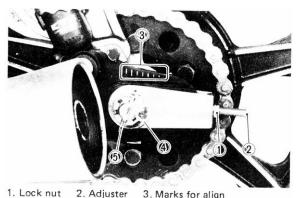
Inspect the drive chain with the center stand put up. Check the tension at the position shown in the illustration. The normal vertical deflection is approximately 20~30 mm (0.8  $\sim$  1.2 in). If the deflection exceeds  $20\sim30$  mm (0.8  $\sim$  1.2 in) adjust the chain tension.



a, 20~30 mm (0.8~1.2 in)

# Drive chain tension adjustment

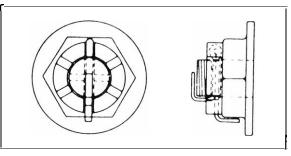
- 1. Loosen the rear brake adjuster.
- 2. Remove the cotter pin of the rear wheel axle nut with pliers.
- 3. Loosen the rear wheel axle nut.
- 4. Loosen the adjust bolt lock nuts on each side. To tighten the chain turn chain puller adjust bolts clockwise. To loosen the chain turn adjust bolts counterclockwise and push wheel forward. Turn each bolt exactly the same amount to



4. Rear wheel axle nut 5. Cotter pin

maintain correct axle alignment (There are marks on each side of rear arm and on each chain puller; use them to check for proper alignment).

- 5. After adjusting, be sure to tighten the lock nuts and the rear wheel axle nut.
- Insert the cotter pin into the rear wheel axle nut and bend the end of the cotter pin as shown in the illustration (if the nut notch and the cotter pin hole do not match tighten the nut slightly to match). 51



CAUTION: -

Always use a new cotter pin on the rear axle nut.

NOTE:

Excessive chain tension will overload the engine and other vital parts; keep the tension within the specified limits.

7. In the final step, adjust the play in the brake pedal.

**Drive chain lubrication** 

The chain consists of many parts which work against each other. If the chain is not main-

tained properly, it will wear out rapidly. Without lubrication the chain could wear out within 500 km (300 mi), therefore, form the habit of periodically servicing the chain. This service is especially necessary when riding in dusty conditions.

- Use YAMAHA CHAIN/CABLE LUBE or any of the many brands of spray type chain lubricant. First, remove dirt and mud from the chain with a brush or cloth and the spray the lubricant between both rows of side plates and on all center rollers. This should be performed every 500 km (300 mi).
- To clean the entire chain, first remove the chain from the motorcycle, dip it in solvent and clean out as much dirt as possible. Then take the chain out of the solvent and dry it. After drying lubricate the chain to prevent the formation of rust.

Cable inspection and lubrication

- Damage to the outer housing of the various cables, may cause corrosion and often free movement will be obstructed. An unsafe condition may result so replace as soon as possible.
- If the inner cables do not operate smoothly, lubricate them or ask Your Yamaha dealer or other qualified mechanic to replace them.

Recommended lubricant: YAMAHA CHAIN/CABLE LUBE or SAE 10W/30 motor oil.

Throttle cable and grip

The throttle twist grip assembly should be greased at the time that the cable is lubricated, since the grip must be removed to get at the end of the throttle cable. Two screws clamp

the throttle housing to the handlebar. Once these two are removed, the end of the cable can be held high to pour in several drops of lubricant. With the throttle grip disassembled, coat the metal surface of the grip assembly with a suitable all-purpose grease to cut down friction.

# Rear arm pivot bearings

The swing arm must pivot freely on its bearings, but not have any excess play. Have your Yamaha dealer or other qualified mechanic check rear arm pivot bearing operation according to the General Maintenance schedule.

Brake and change pedal/Brake and clutch lever Lubricate the pivoting parts of each lever and pedal.

### Recommended lubricant:

Yamaha chain and cable lube or SAE 10W/30 motor oil

Center and side stand pivots

Lubricate the pivots of each stand.

### Recommended lubricant:

Yamaha chain and cable lube or SAE 10W/30 motor oil

# Front fork oil change

#### - WARNING: -

- Fork oil leakage can cause loss of stability and safe handling. Have any problem corrected before operating the motorcycle.
- 2. Securely support the motorcycle so there is no danger of it falling over.
- 1. Raise the motorcycle or remove the front wheel so that there is no weight on the front end of the motorcycle.
- 2. Remove the rubber cap from the top of each fork.

- 3. Remove the cap bolts from the inner fork tubes.
- Place open container under each drain hole. Remove drain screw from each outer tube.

## -WARNING:

Do not allow oil to contact disc brake components. If any oil should contact the brake components, it must be removed before the motorcycle is operated. Oil will cause diminished braking capacity and will damage the rubber components of the brake assembly.

- 5. When most of the oil has drained, slowly raise and lower the outer tubes to pump out the remaining oil. It may be necessary to remove the spring seat, spring adjuster and top spring to keep them from falling out when raising fork tubes.
- 6. Inspect drain screw gasket. Replace if

- damaged. Reinstall drain screw.
- Pour specified amount of oil into fork inner tube.

Front fork oil capacity (each fork):
169 cc (5.71 oz)
Recommended oil:
Yamaha Fork Oil 10 wt or equivalent

- 8. After filling, slowly pump the outer tubes up and down to distribute the oil.
- 9. Inspect the "O-ring" on the cap bolt. Replace the "O-ring", if damaged.
- 10. Reinstall the cap bolt and the rubber cap.

Steering inspection

Periodically inspect the condition of the steering. Worn out or loose steering bearings may be dangerous.

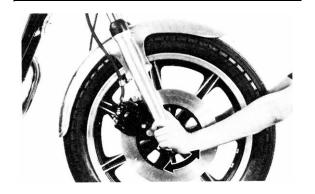
Place a block under the engine to raise the front wheel of the motorcycle off the ground;

then hold the lower end of the front fork and try to move it forward and backward. If any free play can be felt, ask a Yamaha dealer or other qualified mechanic to inspect and adjust the steering assembly.

Inspection is easier if the front wheel is removed.

#### - WARNING: —

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



## Wheel bearings

If the wheel bearings in the front or rear wheel allow play in the wheel hub, or if the wheel does not turn smoothly, have Your Yamaha dealer or a qualified mechanic inspect the wheel bearings. The wheel bearings should be inspected according to the General Maintenance schedule.

## **Battery**

Check the level of the battery fluid and see if the terminals are tight. Add distilled water if the fluid level is low.

#### -CAUTION: —

When inspecting the battery, be sure the breather pipe is routed correctly. If the vent tube 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.

#### -WARNING:

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. Contains sulfuric acid. Avoid contact with skin, eyes or clothing.

Antidote: EXTERNAL-Flush with water. INTERNAL-Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention. Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. away. Ventilate when charging or using in enclosed space. Always shield eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

# Replenishing the battery fluid

A poorly maintained battery will deteriorate quickly. The battery fluid should be checked at least once a month.

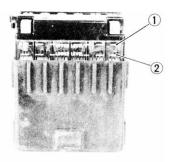
 The level should be between the upper and lower level marks. Use only distilled water if refilling is necessary.

### -WARNING:-

Battery fluid on the chain can cause premature failure and a possible accident.

#### NOTE:

Normal tap water contains minerals which are harmful to a battery; therefore, refill only with distilled water.



1. Upper level 2. Lower level

- When the motorcycle is not to be used for a month or longer, remove the battery and store in a cool, dark place. Completely recharge the battery before reusing.
- If the battery is to be stored for a longer period than the above, check the specific gravity of the fluid at least once a month and recharge the battery when it is too low.

 Always make sure the connections are correct when putting the battery back in the motorcycle.

Make sure the breather pipe is properly connected and is not damaged or obstructed.

# AC generator brushes

Have your Yamaha dealer or other qualified mechanic replace the generator brushes at times specified in the maintenance chart.

### Front wheel removal

- 1. Place the motorcycle on the center stand.
- 2. Remove the cotter pin and wheel axle nut.