SAFETY WARNINGS:

1. Traffic regulations vary from state to state. Study the regulations in your state before riding this motorcycle.
2. This motorcycle is designed for on-road use only. It is not suitable for off-road use.
3. GASOLINE IS HIGHLY FLAMMABLE:
   * Always turn off the engine when refuelling.
   * Take care not to spill any gasoline on the engine or exhaust pipe(s)/muffler(s) when refuelling.
   * Never refuel while smoking or in the vicinity of an open flame.
4. If you should swallow some gasoline, inhale a lot of gasoline vapor, or allow some gasoline to get in your eye(s), see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash it with soap and water and change your clothes.
5. Always turn off the engine before leaving the motorcycle unatended, and do not forget to remove the ignition key. When parking the motorcycle, note the following:
   * The engine and exhaust pipe(s)/muffler(s) may be hot. Park the motorcycle in a place where pedestrians or children are not likely to touch the motorcycle.

Particularly important information is distinguished in this manual by the following notations.

NOTE: A NOTE provides key information to make procedures easier or clearer.

CAUTION: A CAUTION indicates special procedures that must be followed to avoid damage to the motorcycle.

WARNING: A WARNING indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

NOTE:

This manual should be considered a permanent part of this motorcycle and should remain with it even if the motorcycle is subsequently sold.

* Do not park the motorcycle on a lope or soft ground; the motorcycle may overturn.

6. When transporting the motorcycle in another vehicle, be sure it is kept upright and that the fuel cock(s) is turned to the "ON" or "RES" position (for vacuum type)/"OFF" position (for manual carburetor or fuel tank.
7. Never start your engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your motorcycle in an area with adequate ventilation.
8. Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a brightly colored jacket.
9. This motorcycle is designed for use as a two-wheeled vehicle capable of carrying a rider and a passenger. The total weight of the rider, accessories, and cargo must not exceed the maximum load limit. (See Page 23.)

INTRODUCTION

Congratulations on your purchase of the Yamaha XJ750K. This model represents many years of Yamaha experience in the production of fine sporting, touring, and pacesetting racing machines. You can now appreciate the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields.

This manual will provide the owner with a good basic understanding of one operation and basic maintenance of this vehicle. If you have any questions regarding the operation or maintenance of your motorcycle, please consult a Yamaha dealer.

NOTICE:

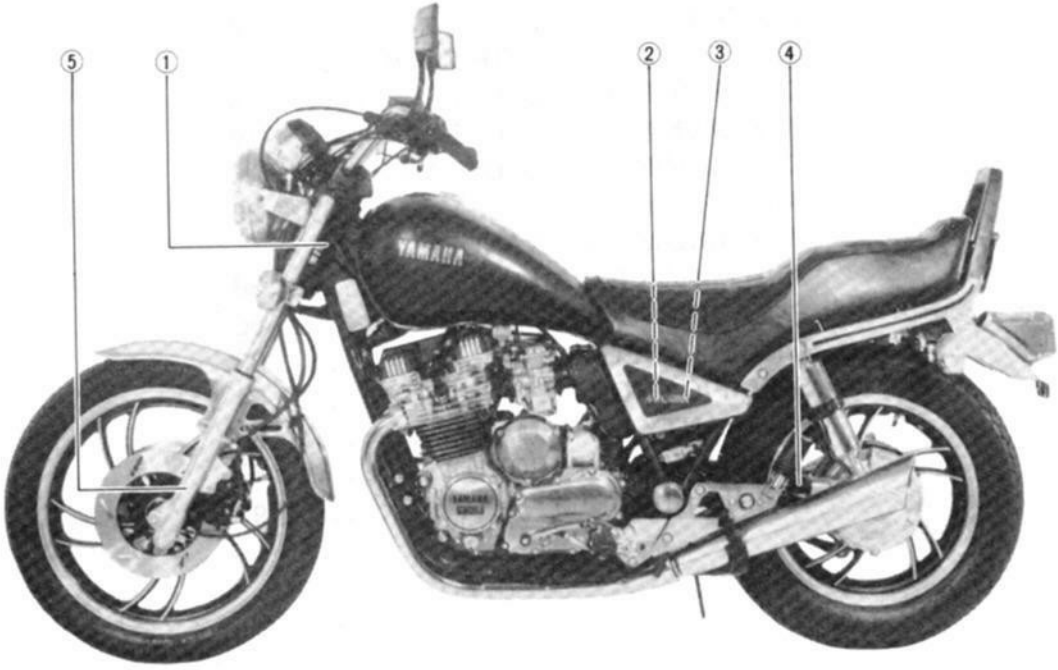
Some data in this manual may bacome outdated due to improvements made to this model in the future. If there is any question concerning this manual, consult your nearby Yamaha dealer.

This Yamaha Motorcycle in its design and manufacture fully complies with the emissions standard for clean air applicable at the date of manufacture. Yamaha has met these standard without reducing the motorcycle's performance or economy of operation. To maintain these high standard, it is important that you and your dealer pay close attention to the recommended maintenance schedules and operating instructions contained within this manual.

SERVICE DEPT.
INTERNATIONAL DIVISION
YAMAHA MOTOR CO., LTD.

CONTENTS

LOCATION OF THE "CAUTION AND SPECIFICATION LABELS"



①

MFD. BY YAMAHA MOTOR CO., LTD., (Month/Year) GVWR xxx LBS.
GAWR FRONT – xxx LBS. WITH xxxxx TIRE, xxxxx RIM,
AT xx PSI COLD. REAR – xxx LBS. WITH xxxxx TIRE,
xxxxx RIM, AT xx PSI COLD.
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.
VEHICLE IN NO. xxxxx (17 digits)
TYPE CLASSIFICATION . . . MOTORCYCLE

②

VEHICLE EMISSION CONTROL INFORMATION		THIS VEHICLE CONFORMS TO US EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 19xx MODEL YEAR NEW MOTORCYCLES.
ENGINE FAMILY: xxxxx DISPLACEMENT: xxxcc EXHAUST EMISSION CONTROL SYSTEM: EM		
ENGINE TUNE UP SPECIFICATIONS AND ADJUSTMENTS AT NORMAL OPERATING TEMPERATURE PUT VEHICLE IN THE UPRIGHT POSITION, TRANSMISSION IN NEUTRAL, AND WARM UP ENGINE		
ITEM	SPEC	INSTRUCTIONS
1. IGNITION TIMING xx BTDC AT IDLE SPEED		NO ADJUSTMENT
2. IDLE SPEED (RPM): xxxx		ADJUST THROTTLE STOP SCREW
3. IDLE MIXTURE		NO ADJUSTMENT
4. VALVE CLEARANCE (MM): IN: xxx EX: xxx		SEE SERVICE MANUAL
5. SPARK PLUG: xxx	SPARK PLUG CAP (MM): xxxxx	
FUEL SPECIFICATIONS		ENGINE LUBRICANT SPECIFICATIONS
GASOLINE GRADE: xxx RESEARCH OCTANE: xxx		ENGINE OIL: xxxxx
YAMAHA MOTOR CO., LTD.		

③

CAUTION

(BATTERY REMOVAL AND INSTALLATION)

1. Disconnect breather pipe before removing battery.
2. After installing battery, be sure to connect breather pipe into place.

④

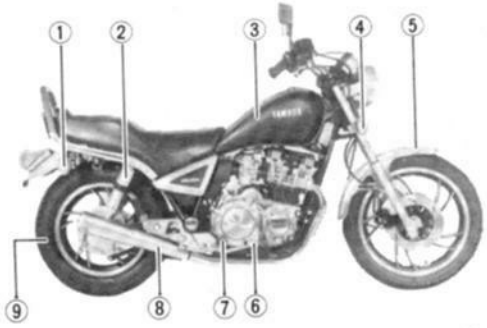
USE HYPOID GEAR OIL
SAE #80
YAMAHA MOTOR CO., LTD.

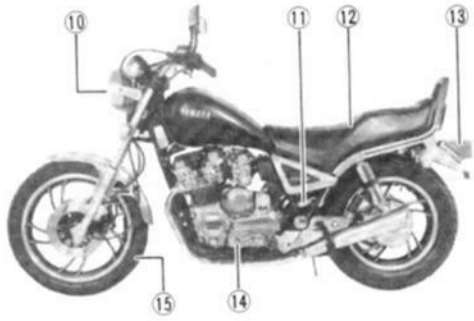
⑤

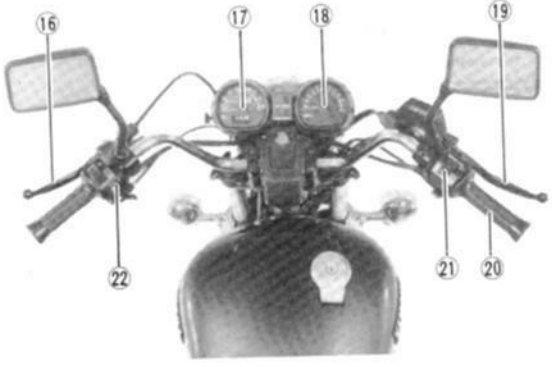
CAUTION (AIR SUSPENSION)

1. Containing highly compressed air.
2. Use only air or nitrogen gas, other gases may cause explosion.
3. Do not incinerate.
4. Servicing requires special knowledge and tools. Read owner's manual before operating this suspension.

DESCRIPTION





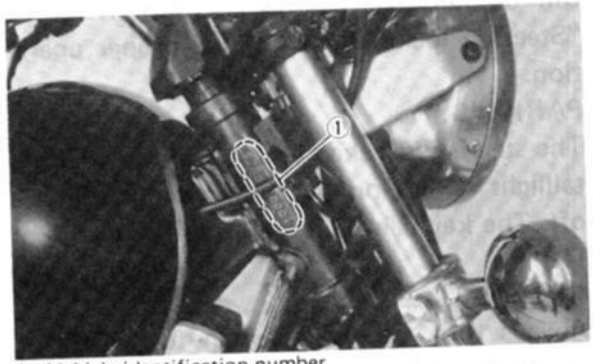


1. Rear flasher light
2. Rear shock absorber
3. Fuel tank
4. Front flasher light
5. Front fender
6. Brake pedal
7. Footrest
8. Silencer
9. Rear wheel
10. Headlight
11. Theft-Protection chain
12. Seat
13. Tail/Brake light
14. Change pedal
15. Front wheel
16. Clutch level
17. Tachometer
18. Speedometer
19. Brake lever
20. Throttle grip
21. Right handlebar switch
22. Left handlebar switch

MOTORCYCLE IDENTIFICATION

Vehicle identification number

The vehicle identification number is stamped the steering head pipe.



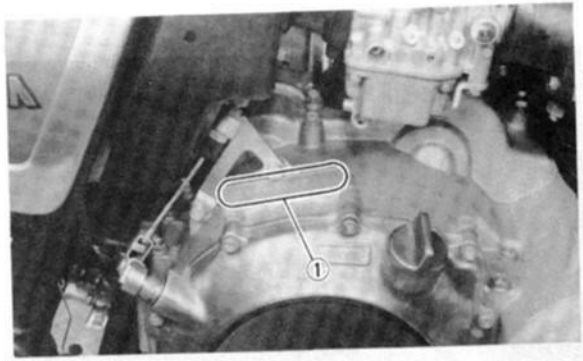
1. Vehicle identification number

NOTE:

The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your state.

Engine serial number

The engine serial number is stamped into the elevated part of the right rear section of the engine.



1. Engine serial number

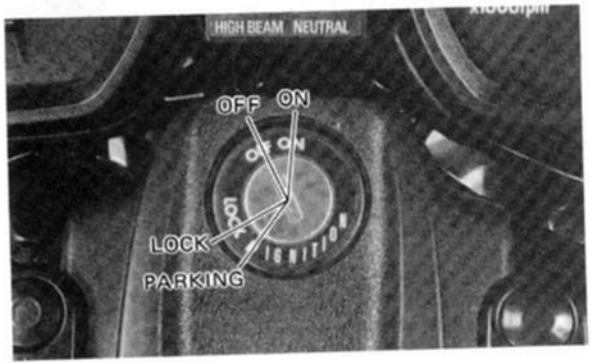
NOTE:

The first three digits of these numbers are for model identification; the remaining digits are the unit production number. Keep a record of these numbers for reference when ordering parts from a Yamaha dealer.

CONTROL FUNCTIONS

Main switch

Functions of the respective switch positions are as follows:



ON:

Electrical circuits are switched on, and the headlight, meter light, and taillight come on. The engine can be started. The key cannot be removed in this position.

OFF:

All electrical circuits are switched off. The key can be removed in this position.

LOCK:

The steering is locked in this position, and all electrical circuits are switched off. The key can be removed in this position. Refer to "Steering lock" (Page 13) for proper operation.

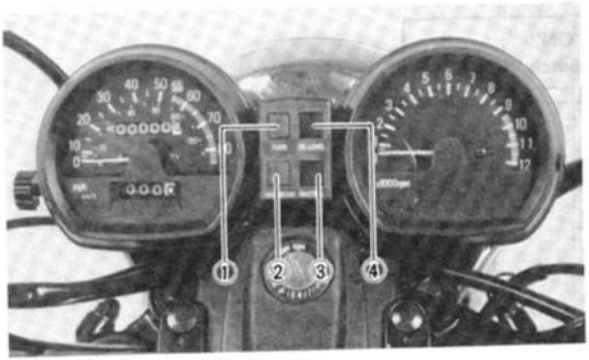
PARKING:

The steering is locked in this position, and the taillight comes on but all other circuits are off. The key can be removed in this position.

NOTE:

Always turn the main switch to "OFF" or "LOCK" and remove the key when the motorcycle is unattended.

Indicator lights



1. "TURN" indicator light
2. "HIGH BEAM" indicator light
3. "NEUTRAL" indicator light
4. "OIL LEVEL" indicator light

"TURN" indicator light (orange):
This indicator flashes when the turn switch is "ON".

"HIGH BEAM" indicator light (blue):
This indicator lights when the headlight high beam is used.

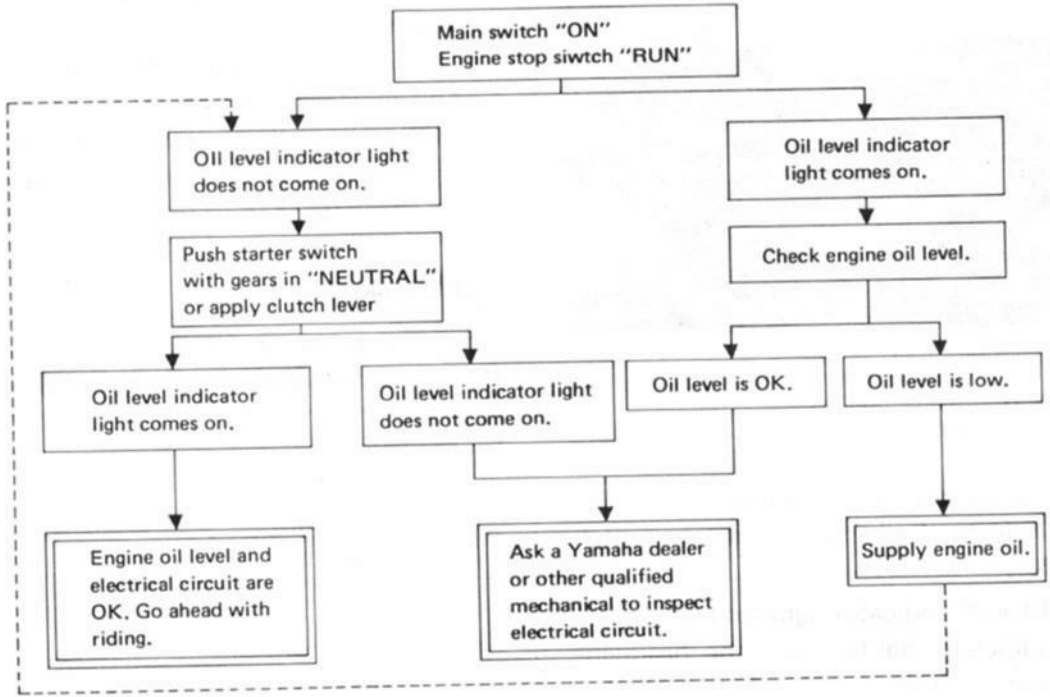
"NEUTRAL" indicator light (green):
This indicator lights when the transmission is in neutral.

"OIL LEVEL" indicator light (red):
This indicator light comes on when the oil level is low, thus warning the rider. This light circuit can be checked by the following check up chart.

CAUTION:

Do not run the motorcycle until you know the motorcycle has enough engine oil.

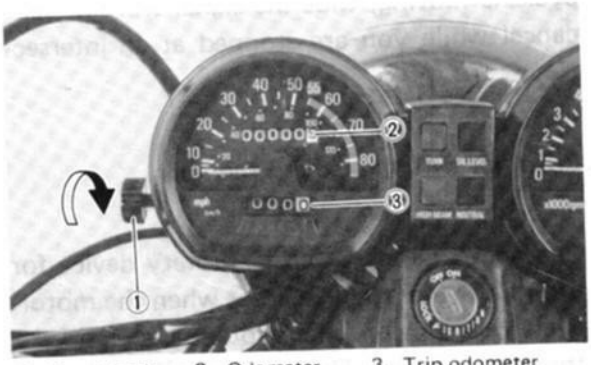
Oil level indicator circuit check



Speedometer

The odometer and trip odometer are built into the speedometer. The trip odometer can be reset to "O" with the reset knob.

Use the odometer and fuel level gauge to estimate how far you can ride on a tank of fuel before going to "EMPTY". This information will enable you to plan fuel stops in the future.



1. Reset knob 2. Odometer 3. Trip odometer

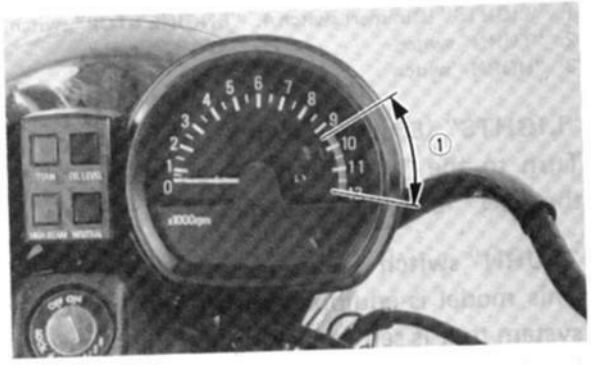
Tachometer

The tachometer is provided so the rider can keep engine speed within the ideal power range.

This model is provided with an electric tachometer.

CAUTION:

Do not operate in the red zone.
Red zone: 9,500 r/min and above.



1. Red zone

Handlebar switches:

1. "LIGHTS" (Dimmer) switch
2. "TURN" switch
3. "HORN" switch
4. "ENGINE STOP" switch
5. "START" switch

"LIGHTS" (Dimmer) switch

Turn to the "HI" for the high beam and to the "LO" for the low beam.

"TURN" switch

This model is equipped with a turn indicator system that is self-cancelling. To signal a right-hand turn, push down the switch to the right. To signal a left-hand turn, push down the switch to the left. Once the switch is released it will return to the center position. to cancel the signal push down the switch after it has returned to the center position. If the switch is not cancelled by hand, it will self-cancel after the motorcycle has travelled about 10 seconds or approximately 150 meters (490 feet) whichever is greater. The self-cancelling mechanism only operates when the motorcycle is moving; thus the signal will not self-cancel while you are stopped at an intersection.

"HORN" switch

Press the switch to sound the horn.

"ENGINE STOP" switch

The engine stop switch is a safety device for use in an emergency such as when the motorcycle overturn or when trouble occurs in the throttle system. The engine will not start when the engine stop switch is turned to "OFF". Incase of an emergency, turn the switch to "OFF".

"START" switch

To start the engine, push the starter switch.

CAUTION:

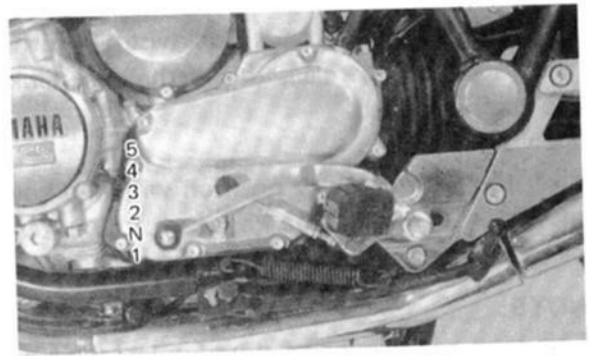
See starting instructions prior to starting engine.

Clutch lever

The clutch lever is located on the left handlebar, and the starting circuit cut-off switch is incorporated in the clutch lever holder. Pull the clutch lever to the handlebar to disengage the clutch, and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for smooth starts. (Refer to the engine starting procedures for the starting circuit cut-off switch functions.)

Change pedal

The gear ratios of the constant-mesh 5-speed transmission are ideally spaced. The gears can be shifted by using the change pedal on the left side of the engine.



N. Neutral

Front brake lever

The front brake lever is located on the right handlebar. Pull it toward the handlebar to activate the front brake.

Rear brake pedal

The rear brake pedal is on the right side of the motorcycle. Press down on the brake pedal to activate the rear brake.

Fuel tank cap

To open:

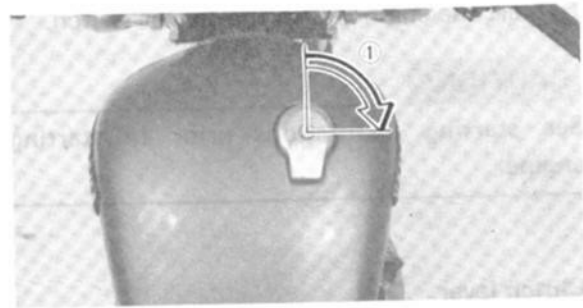
Insert the key and turn it clockwise 1/4 turn. The lock will be released and the fuel tank cap can be opened.

To close:

Push the tank cap into position with the key inserted. To remove the key, turn it counter-clockwise to the original position.

NOTE:

This tank cap cannot be closed unless the key is in the lock. The key cannot be removed if the cap is not locked properly.



1. Open

Fuel cock

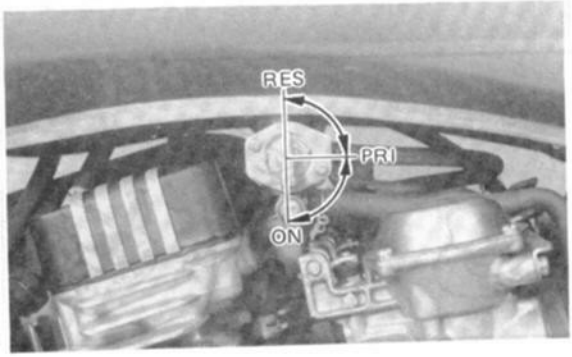
The negative pressure fuel cock supplies fuel from the tank to the carburetor(s) and also filters the fuel. The fuel cock has the following three positions:

ON: With the lever in this position fuel flows if the engine is running but stops if the engine is not running.

RES: This indicates "RESERVE". If you run out of fuel while riding, move the lever to "PRI" and switch to "RES" after starting the engine. FILL THE TANK AT THE FIRST OPPORTUNITY.

NOTE:

In the "ON" and "RES" the cock works on pressure from the engine turning over. If the line connecting the cock to the carburetor intake manifold is not connected or has a leak, the cock will not function properly.



PRI: This indicates "PRIME". With the fuel cock in this position fuel flows whether the engine is running or not. If the fuel tank is completely empty, refill the tank, prime the carburetor in this position, and then switch to the "ON" after starting the engine.

Starter lever (CHOKE)

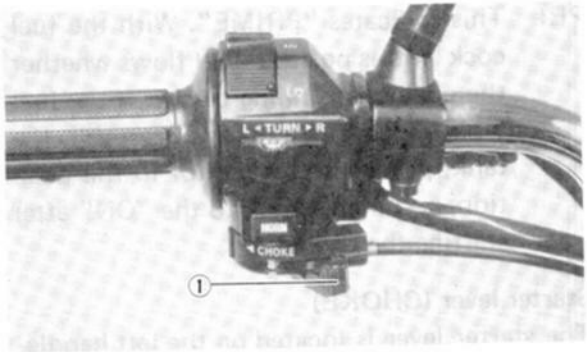
The starter lever is located on the left handlebar.

Starting a cold engine requires a richer fuel mixture. In such a case, turn the starter lever in the left direction.

After the engine is warm, turn the lever to its original position.

NOTE:

Refer to "Starting and warming up a cold engine" for proper operation.



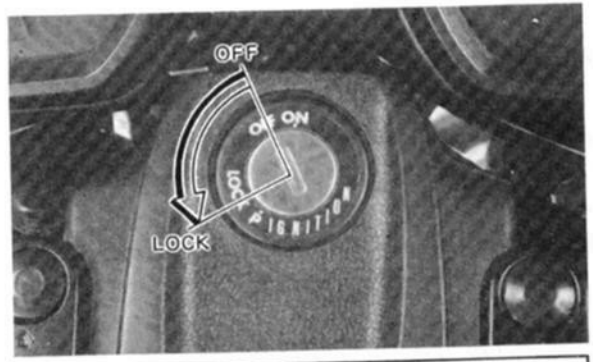
1. Starter lever

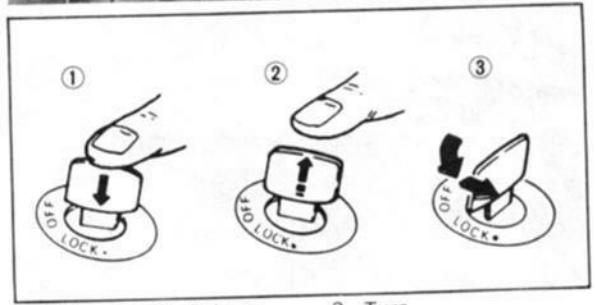
Steering lock

The steering is locked when the main switch is in the "LOCK". To lock the steering, turn the handlebars all the way to the right or left. Give one push to the key at the "OFF" position; then turn it counterclockwise to the "LOCK" and remove the key. To release the lock, then the key clockwise.

WARNING:

Never turn the key to "LOCK" when the motorcycle is moving.

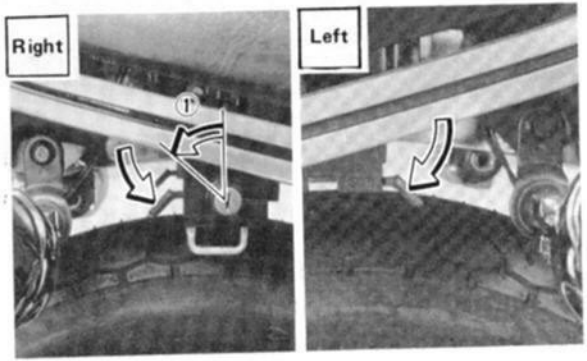




1. Push 2. Release 3. Turn

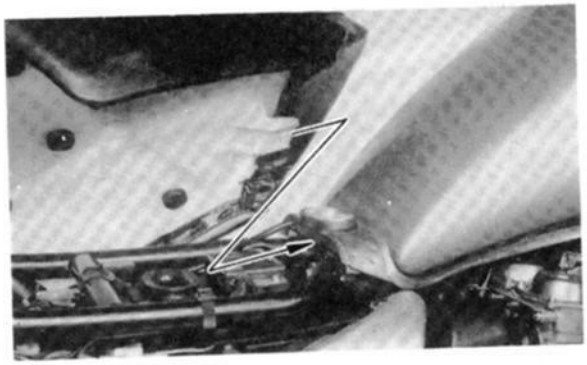
Seat lock

To open the seat lock, insert the key in the lock and turn it counterclockwise. Then push down the levers on both sides.



1. Open

In reinstalling the seat, insert the lobes on the seat front into the receptacles on the frame, then push down the seat at the end. After making sure the seat is securely fitted, turn the key clockwise to the center position to lock.



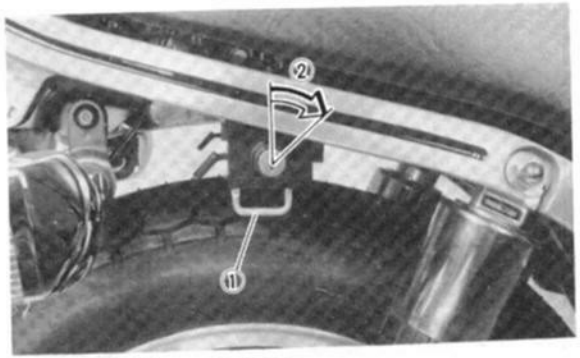
Helmet holder

To open the helmet holder, insert the key in the lock and turn it clockwise.

To lock the helmet holder, replace the holder in original position.

WARNING:

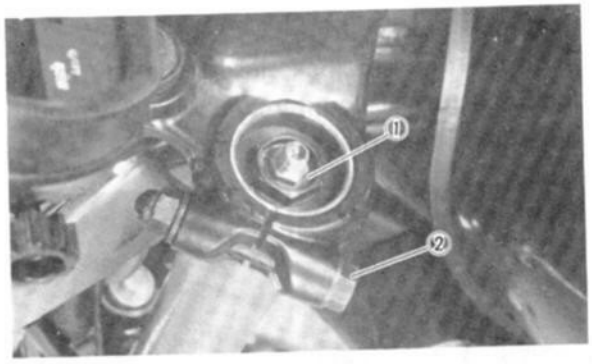
Never ride with a helmet in the helmet holder. It could interfere with rear wheel movement, causing loss of control and possible an accident.



1. Helmet holder 2. Open

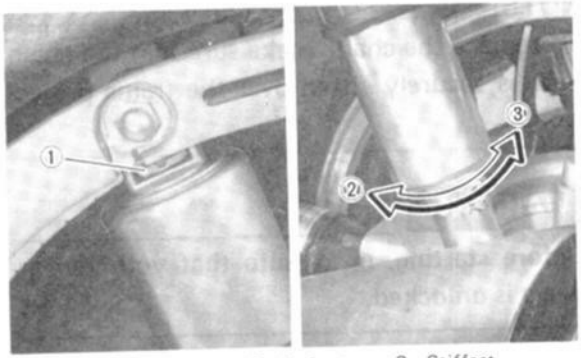
Front forks

The front forks of this model are pneumo-mechanical; namely, a combination air and mechanical coil spring in the inner tube provides suspension best suited to the motorcycle's load (ex: optional accessories etc.) and riding conditions by the adjustment of the air pressure. Refer to page 63 for proper adjustment procesures.



Rear shock absorber

The spring preload and the damping force can be adjusted to suit motorcycle's load (ex: optional accessories etc.) and riding conditions. Refer to page 64 for proper adjustment procedures.



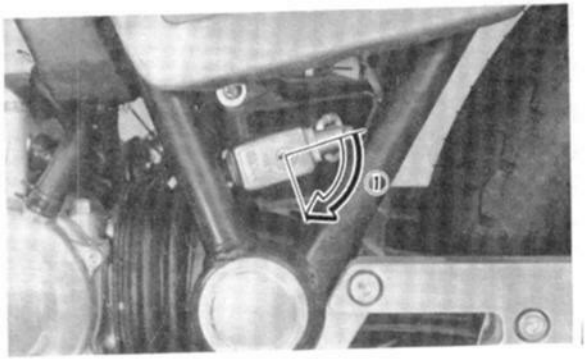
1. Damping adjuster 2. Softest 3. Stiffest

Theft protection chain

This chain is designed for theft protection of your motorcycle and is placed under the left-hand side cover.

Take out and use the chain as follows:

1. To remove the chain from the frame projection, insert the main switch key in the lock and turn it clockwise.

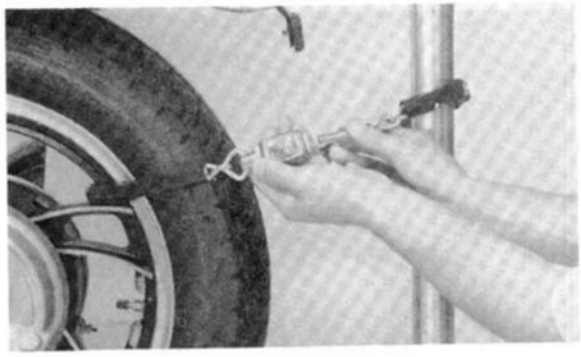


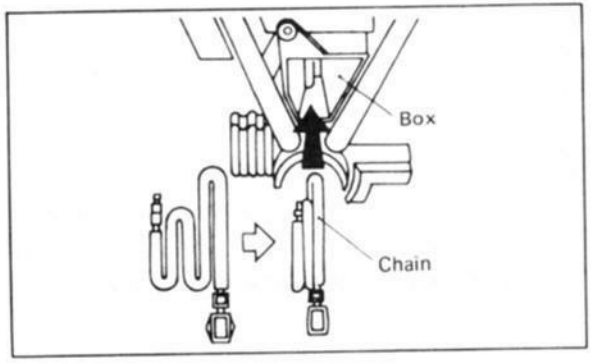
1. Open

NOTE:

Fasten the chain to a suitable fixed object.

2. To clock the chain, insert one end into the other. The chain automatically locks.
3. To unfasten the chain, insert the main switch key in the lock and turn it clockwise.





NOTE:

To replace the chain, make sure that the chain lock is securely fitted over the frame projection.

WARNING:

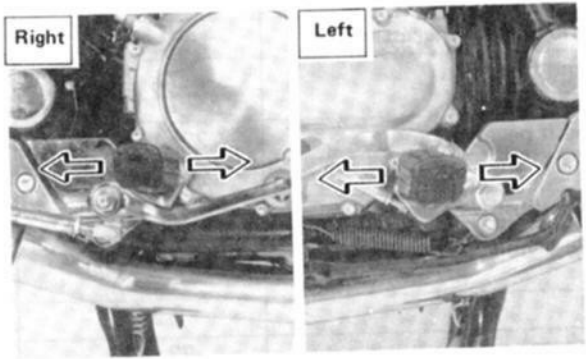
Before starting, make sure that your motorcycle is unlocked.

Sidestand

This model is equipped with an ignition circuit cutoff system. The motorcycle can be ridden only when the sidestand is up. The sidestand is located on the left of the frame. (Refer to Page 29 for an explanation of this system.)

Adjustable footrest

This model features adjustable footrests that can be moved back and forth so the best riding position can be determined according to rider's build and preference. For the adjusting procedure, see page 58.



PRE-OPERATION CHECKS (DAILY)

Before using this motorcycle check the following points:

No.	Item	Routine	Page
1	Brakes (Front)	Check operation, free play, fluid level and brake fluid leakage. Top-up with DOT #3 brake fluid if necessary.	21, 50 ~ 51 53 ~ 55
2	Brake (Rear)	Check operation, free play and adjust if necessary	51 ~ 53
3	Clutch	Check operation condition and free play. Adjust if necessary.	22, 56
4	Engine oil	Check engine oil level, add oil if necessary.	22, 45 ~ 47
5	Final gear oil	Check for leakage visually.	22, 47 ~ 48
6	Throttle	Check for smooth operation. Adjust if necessary.	22, 57
7	Battery	Check fluid level, top-up with distilled water if necessary.	27, 68 ~ 69
8	Lights/Signals	Check operation.	27
9	Wheels/Tires	Check tire pressure, wear damage.	22 ~ 26
10	Fittings/Fasteners	Check all chassis fittings and fasteners. Adjust, if necessary.	27, 44

NOTE:

Pre-operation checks should be made each time the motorcycle is used. Such an inspection can be accomplished in a very short time, and the added safety it assures is more than worth the time involved.

WARNING:

1. **The engine, exhaust pipe(s), and muffler(s) will be very hot after the engine has been run. Be careful not to touch them or to allow any clothing item to contact them during inspection or repair.**
2. **If any item in the PRE-OPERATION CHECK is not working properly, have it inspected and repaired before operating the motorcycle.**

Brakes (See page 50 for more detail)

1. Brake lever and brake pedal
   Check for correct play in the front brake lever and rear brake pedal. Make sure they are working properly. Check the brakes at low speed shortly after starting out.

WARNING:

A soft, spongy feeling in the brake lever indicates a failure in the brake system. Do not operate the motorcycle until the failure in the brake system is corrected. Ask a Yamaha dealer or other qualified mechanic for immediate repairs. A soft, spongy feeling could indicate an hazardous condition in the brake system.

2. Brake fluid (Front)
   Check the brake fluid level. Add fluid if necessary.

Recommended brake fluid: DOT #3

3. Checking the disc pads
   Refer to page 53.
4. Checking the rear brake shoe
   Refer to page 53.

NOTE:

When this brake service is necessary, have a Yamaha dealer or other qualified mechanic replace the pads.

Brake fluid leakage

Apply each brake for a few minutes. Check to see if any brake fluid leaks out from pipe joints or the master cylinder.

WARNING:

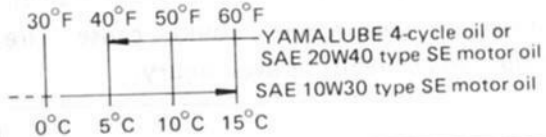
If brake fluid leakage is found, ask a Yamaha dealer or other qualified mechanic for immediate repairs. Such leakage could indicate a hazardous condition in the brake system.

Clutch (See page 56 for more detail)
Check for correct play in the clutch lever and make sure the lever operates properly.
If the play is incorrect, make an adjustment.

Throttle grip (See page 57 for more detail)
Turn the throttle grip to see if it operates properly and if the play is normal. Make certain the throttle springs closed when released.

Engine oil (See page 45 for more detail)
Make sure the engine oil is at the specified level. Add oil as necessary.

Recommended oil:



Final gear oil (See page 47 for more detail)
Make sure the final gear oil is at the specified level. Add oil as necessary.

Recommended oil:
SAE 80 API GL-4 Hypoid gear oil

If desired, an SAE 80W90 hypoid gear oil may be used for all conditions.

NOTE:
"GL-4" is a quality and additive rating. "GL-5" or "GL-6" rated hypoid gear oils may also be used.

Tires
To ensure maximum performance, long service and safe operation, note the following:

1. Tire air pressure
   Always check and adjust the tire pressure before operating the motorcycle.

WARNING:

Tire inflation pressure should be checked and adjusted when the temperature of the tire equals the ambient air temperature.

Tire inflation pressure must be adjusted according to total weight of cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model), and vehicle speed.

Basic weight: With oil and full fuel tank	234 kg (515 lb)	
Maximum load*	232 kg (511 lb)	
Cold tire pressure	Front	Rear
Up to 90 kg (198 lb) load*	177 kPa (1.8 kg/cm^2, 26 psi)	196 kPa (2.0 kg/cm^2, 28 psi)
90 kg (198 lb) - Maximum load*	196 kPa (2.0 kg/cm^2, 28 psi)	225 kPa (2.3 kg/cm^2, 32 psi)
High speed riding	225 kPa (2.3 kg/cm^2, 32 psi)	245 kPa (2.5 kg/cm^2, 36 psi)

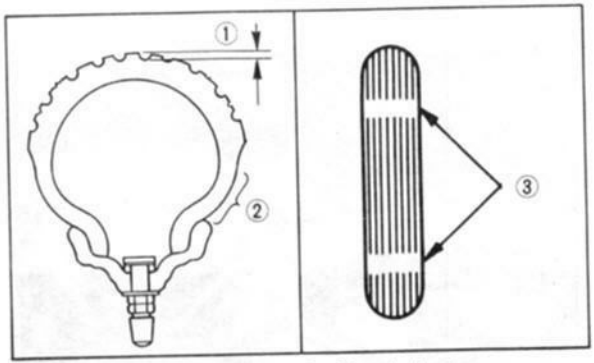
* Load is the total weight of cargo, rider, passenger, and accessories.

WARNING:

Proper loading of your motorcycle is important for the handling, braking, and other performance and safety characteristics of your motorcycle. Do not carry loosely packed items that can shift. Securely pack your heaviest items close to the center of the motorcycle, and distribute the weight evenly from side to side. Properly adjust the suspension for your load, and check the condition and pressure of your tires. NEVER OVERLOAD YOUR MOTORCYCLE. Make sure the total weight of the cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model) does not exceed the maximum load of the motorcycle. Operation of an overloaded motorcycle could cause tire damage, an accident, or even injury.

2. Tire inspection

Always check the tires before operating the motorcycle. If a tire tread shows crosswise lines (minimum tread depth), if the tire has a nail or glass fragments in it, or if the side wall is cracked, contact a Yamaha dealer or other qualified mechanic immediately and have him replace the tire.



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

	Standard tire
Front: Manufacture/Size	Bridgestone/3.25H-19 Dunlop/3.25H-19
Rear: Manufacture/Size	Bridgestone/130/90-16 Dunlop/130/90-16
Minimum tire tread depth (front and rear)	1.0 mm (0.04 in)

WARNING:

1. It is dangerous to ride with a worn-out tire. When a tire thread begins to show lines. Have a Yamaha dealer or other qualified mechanic replace the tire immediately. Brakes, tires, and related wheel parts replacement should be left to a Yamaha Service Technician or other qualified mechanic.
2. The tires equipped on this motorcycle are suited to normal riding and touring. They are not suited for sustained, high-speed running or racing and must not be

used for such purposes. Consider your riding skill, road and weather conditions, and correct weight distribution when loading your motorcycle.

Tubeless tires and cast wheels

This motorcycle is equipped with cast wheels designed for either tube or tubeless tires.
Tubeless tires are installed as standard equipment.

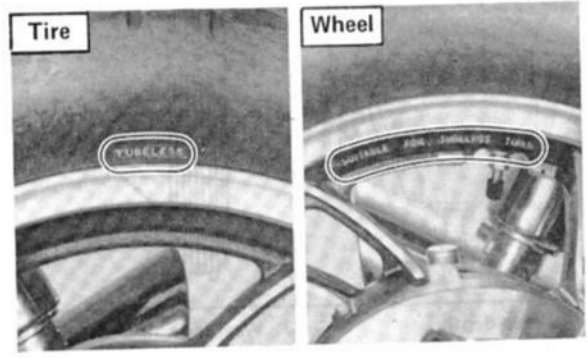
WARNING:

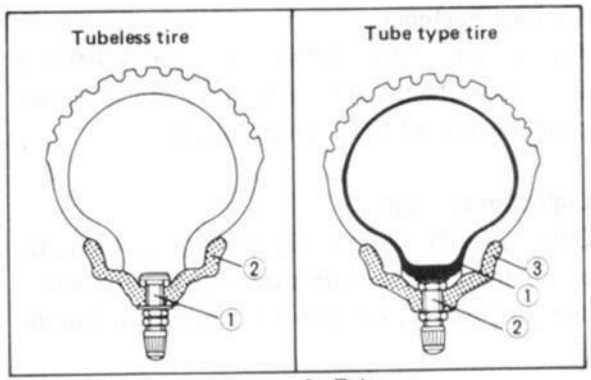
Do not attempt to use tubeless tires on a wheel designed for use only with tube-type tires. Tire failure and personal injury may result from sudden deflation.

Tube-type Wheel	→ Tube-type Tires only
Tubeless-type Wheel	→ Tube-type or Tubless tires

WARNING:

When using tube-type tires, be sure to install the proper tube.





1. Air valve
2. Cast wheel

1. Tube
2. Air valve
3. Cast wheel

To ensure maximum performance, long service, and safe operation, note the following:

1. Always inspect the wheels before a ride. Place the motorcycle on its centerstand and check for cracks, bends, or warpage of the wheels. If any abnormal condition exists in a wheel, consult a Yamaha dealer or other qualified mechanic. Do not attempt even small repairs to the wheel. If a wheel is deformed or cracked, it must be replaced.
2. Tires and wheels should be balanced whenever either one is changed or replaced. Failure to have a wheel balanced can result in poor performance, adverse handling characteristics, and shortened tire life.
3. After installing a tire, ride conservatively to allow the tire to seat itself on the rim properly. Failure to allow proper seating may cause tire failure, resulting in damage to the motorcycle and injury to the rider.
4. After repairing or replacing a tire, check to be sure the valve stem lock nut is securely fastened. It not, torque it as specified.

Tightening torque:
1.5 Nm (0.15 m·kg, 1.1 ft·lb)

Accessories or replacement parts

WARNING:

This motorcycle is not designed to pull a trailer or to be attached to a sidecar. The accessories or replacement parts you choose for your motorcycle should be designed specifically for it, and they must be securely mounted to maintain the inherent stability of the original design. Genuine Yamaha Parts and Accessories are designed and tested to be compatable with your motorcycle.
Please consider Genuine Yamaha Parts and Accessories before making an accessory purchase. Use of non-Yamaha-approved parts or accessories may cause loss of handling stability and riding safety. Since Yamaha cannot control the quality of parts or accessories manufactured by other companies, Yamaha cannot be held liable for any consequence caused by the use of items which have not been approved by Yamaha.

Fittings/Fasteners
Always check the tigtness of chassis fittings and fasteners before a ride. Use the chart on page 44 to find the correct torque.

Lights and signals
Check the headlight, flasher lights, taillight, brake light, meter lights and all the indicator lights to make sure they are in working condition.

Switches
Check the operation of the headlight switch, turn switch, brake light switch, horn switch, main switch, etc.

Battery (See page 68 for move detail)
Check fluid level and top-up if necessary.
Use only distilled water if refilling is necessary.

CAUTION:

Continuous riding with a low battery fluid level will damage the battery.

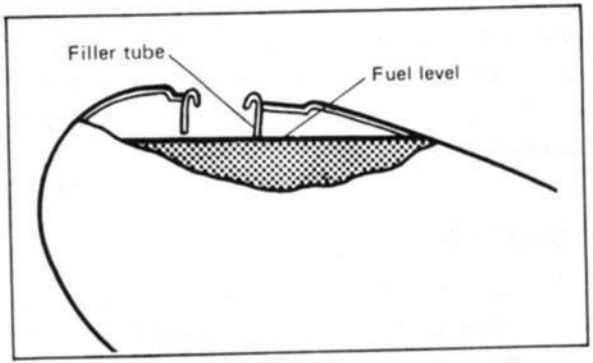
Fuel

Make sure there is sufficient fuel in the tank.

Recommended gasoline:
Regular gasoline
Fuel tank capacity
Full: 17 L (3.7 Imp gal, 4.5 US gal)
Reserve:
3.5 L (0.8 Imp gal, 0.9 US gal)

WARNING:

Do not overfill the fuel tank. Avoid spilling fuel on the hot engine. Do not fill the fuel tank above the bottom of the filler tube or it may overflow when the fuel heats up later and expands.



OPERATION AND IMPORTANT RIDING POINTS

WARNING:

Before riding this motorcycle, become thoroughly familiar with all operating controls and their function. Consult a Yamaha dealer or other qualified mechanic regarding any control or function you do not thoroughly understand.

CAUTION:

1. **Be careful where you store personal items on the motorcycle. Avoid blocking the air cleaner intake or performance will suffer.**
2. **Be careful not to put anything near the battery and its terminals. Electrical failure and acid corrosion may result.**

WARNING:

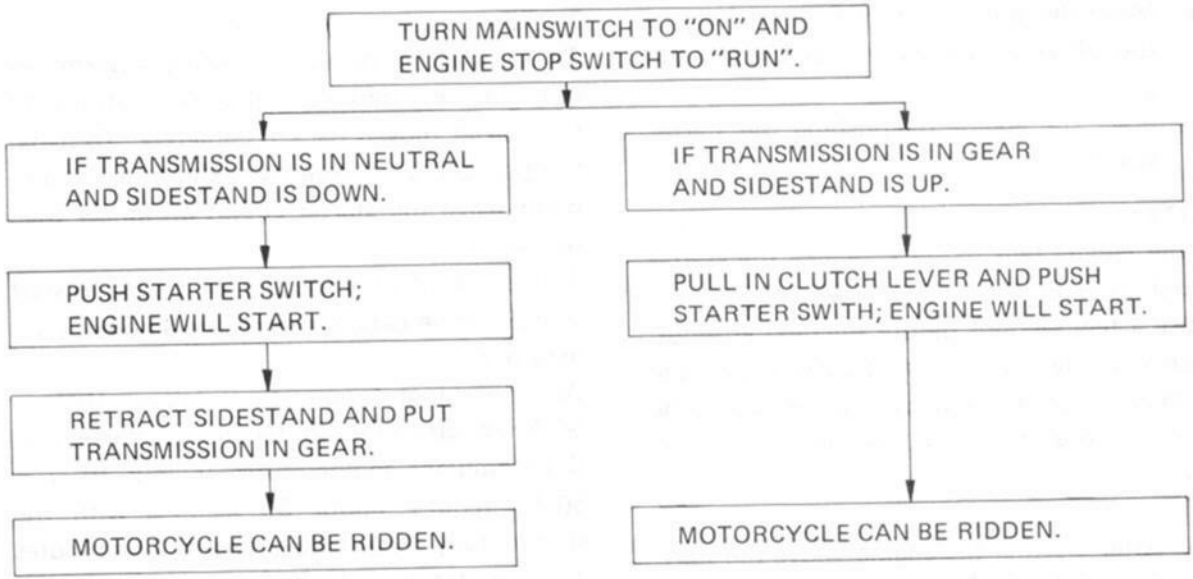
Never start your engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and can cause loss of consciousness and death within a short time. Always operate your motorcycle in an area with adequate ventilation.

Starting and warming up a cold engine

NOTE:

This motorcycle is equipped with a starting and an ignition circuit cutoff switch.

1. The engine can be started only under the following conditions:
   a. The transmission is in neutral.
   b. The sidestand is up, the transmission is in gear, and the clutch is disengaged.
2. The motorcycle can be ridden only when the sidestand is up.



1. Turn the fuel cock to "ON".
2. Turn the ignition key to the "ON" and the engine stop switch to "RUN".
3. Shift transmission into neutral.

NOTE:

When the transmission is in neutral, the neutral indicator light (green) should be on. If the light does not come on, ask a Yamaha dealer or other qualified mechanic to inspect it.

4. Move the starter (CHOKE) lever fully to the left and completely close the throttle grip.
5. Start the engine by pushing the starter switch.

NOTE:

If the engine fails to start, release the starter switch, then push the starter switch again. Pause a few seconds before the next attempt. Each cranking should be as short as possible to preserve battery energy. Do not crank the engine more than 10 seconds on each attempt.

6. After starting the engine, move the starter lever back. The starter operation periods differ with the ambient temperature, so refer to the following notes.

NOTE:

To see whether or not the engine is warm, see if engine responds normally to throttle with the starter moved back completely. To avoid the possibility of excessive exhaust emissions, never leave the starter circuit on longer than necessary.

The length of time the starter is used to start a cold engine depends upon the ambient temperature.

Warm ambient temperatures (above 10°C ~ 50°F) require about 25 seconds of starter use. Cold ambient temperatures (below 10°C ~ 50°F) require about 35 seconds with the starter fully open, then about 2.5 minutes with the starter in the half-open position.

To get maximum engine life, always "warm-up" the engine before starting off. Never accelerate hard with a cold engine!

Starting a warm engine

The starter lever (CHOKE) is not required when the engine is warm.

CAUTION:

See "Break-in section" prior to operating engine for the first time.

Shifting and acceleration

This model has a 5-speed transmission. The transmission allows you to control the amount of power you have available at a given speed or while accelerating, climbing hills, etc. The use of the change pedal is shown in the illustration. (Page 10)

To shift into NEUTRAL, repeatedly depress the change pedal to the end of its travel (you will feel a stop when you are in first gear), then raise it slightly.

To start out and accelerate:

1. Pull the clutch lever to disengage the clutch.
2. Shift into FIRST gear. The green neutral indicator light should go out.
3. Open the throttle gradually, and at the same time, release the clutch lever slowly.
4. At the recommended shift point shown in the table below, close the throttle, and at the same time pull in the clutch lever quickly.
5. Shift into SECOND gear. (Be careful not to shift into neutral.)
6. Open the throttle part way and gradually release the clutch lever.
7. Follow the same procedure when shifting to the next higher gear. Always shift gears at the recommended shift points.

To decelerate:

1. Apply front and/or rear brakes to slow the motorcycle.
2. When the motorcycle reaches 20 km/h (12.5 mi/h), shift to first gear.
   Any time the engine appears about to stall or runs very roughly, pull in the clutch and use the brakes to stop.
3. When motorcycle is almost completely stopped, shift to neutral.
   The green neutral indicator light should come on.

Recommended Shift Point

	Acceleration shift point km/h (mi/h)	Deceleration shift point km/h (mi/h)
1st → 2nd	23 (14)	20 (12.5)
2nd → 3rd	36 (22)	20 (12.5)
3rd → 4th	50 (31)	20 (12.5)
4th → 5th	60 (37)	20 (12.5)

CAUTION:

1. **Do not glide for long periods with the engine off, and do not tow the motorcycle a long distance. Even with gears in neutral, the transmission is only properly lubricated unless the engine is running. Inadequate lubrication may damage the transmission.**
2. **Always use the clutch when changing gears. The engine, transmission, and driveline are not designed to withstand the shock load of forced shifting and can be damaged by shifting without the clutch.**

Engine break-in

There is never a more important period in the life of your motorcycle than the period between zero and 1,000 km (600 mi). For this reason we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first 1,000 km (600 mi). The various parts in the engine wear and polish themselves to the correct operating clearances. During this period prolonged, full throttle operation or any condition which might result in excessive heating of the engine must be avoided.

1. 0 ~ 150 km (0 ~ 100 mi):
   Avoid operating above 5,000 r/min.
   Allow a cooling off period of 5 to 10 minutes after every hour of operation. Vary the speed of the motorcycle from time to time. Do not operate it at one, set throttle position.
2. 150 ~ 500 km (100 ~ 300 mi):
   Avoid prolonged operation above 6,000 r/min. Allow the motorcycle to rev freely through the gears but do not use full throttle at any time.
3. 500 ~ 1,000 km (300 ~ 600 mi):
   Avoid prolonged full throttle operation. Avoid cruising speeds in excess of 7,000 r/min.
4. 1,000 km (600 mi) and beyond:
   Avoid prolonged full thorttle operation. Avoid engine speeds in excess of 8,000 r/min. Vary speeds occasionally.

CAUTION:

After 1,000 km (600 mi) of operation, be sure to replace the engine oil and filter element.

If any engine trouble should occur during the break-in period, consult a Yamaha dealer immediately or other qualified mechanic.

Parking

When parking, stop the engine and remove the ignition key.

WARNING:

The muffler and exhaust pipe are hot. Park the motorcycle in a place where pedestrians or children are not likely to touch the motorcycle. Do not park the motorcycle on a slope or soft ground; the motorcycle may overturn.

PERIODIC MAINTENANCE AND MINOR REPAIR

Periodic inspection, adjustment and lubrication will keep your motorcycle in the safest and most efficient condition possible. Safety is an obligation of the motorcycle owner.

The most important points of motorcycle inspection, adjustment, and lubrication are explained in the following pages.

"Maintenance, replacement or repair of the emission control devices and systems may be performed by any repair establishment or individual using any part which is certified (if applicable)."

WARNING:

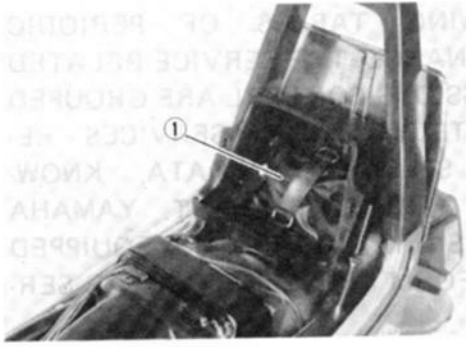
If the owner is not familiar with motorcycle service, this work should be done by a Yamaha dealer or other qualified mechanic.

PERIODIC MAINTENANCE

PROPER PERIODIC MAINTENANCE OF YOUR MOTORCYCLE IS IMPORTANT TO ITS GIVING YOU LONG, PLEASURABLE SERVICE: ESPECIALLY IMPORTANT ARE THE MAINTENANCE SERVICES RELATED TO EMISSIONS CONTROL. THESE CONTROLS NOT ONLY FUNCTION TO ENSURE CLEANER AIR BUT ARE ALSO VITAL TO PROPER ENGINE OEPRATION AND MAXIMUM PERFORMANCE. IN THE FOLLOWING TABLES OF PERIODIC MAINTENANCE, THE SERVICE RELATED TO EMISSIONS CONTORL ARE GROUPED SEPARATELY. THESE SERVICES REQUIRE SPECIALIZED DATA, KNOWLEDGE, AND EQUIPEMENT. YAMAHA DEALERS ARE TRAINED AND EQUIPPED TO PERFORM THESE PARTICULAR SERVICES.

Tool kit

The service information included in this manual is intended to provide you, the owner, with the necessary information for completing some of your own preventive maintenance and minor repairs. The tools provided in the owner's tool kit are sufficient for most of these purposes, except that a torque wrench, however is also necessary to properly tighten nuts and bolts.



1. Tool kit

NOTE:

If you do not have a torque wrench available during a service operation requiring one, take your motorcycle to a Yamaha dealer or other qualified mechanic to check the torque settings and adjust them as necessary.

WARNING:

Modifications to this motorcycle not approved by Yamaha may cause loss of performance. Excessive emissions can render it unsafe for use. Consult a Yamaha dealer or other qualified mechanic before attempting any changes.

PERIODIC MAINTENANCE EMISSION CONTROL SYSTEM

No.	Item	Remarks	Initial break-in		Thereafter every	
			1,000 km (600 mi) or 1 month	5,000 km (3,000 mi) or 7 months	4,000 km (2,500 mi) or 6 months	8,000 km (5,000 mi) or 12 months
1*	Valve clearance	Check and adjust valve clearance when engine is cold.		○		○
2	Spark plugs	Check condition. Adjust gap. Clean. Replace after intial 13,000 km (8,000 mi) or 18 months and thereafter every 12,000 km (7,500 mi) or 18 months.		○	○	Replace every 12,000 km (7,500 mi) or 18 months.
3*	Crankcase ventilation system	Check ventilation hose for cracks or damage. Replace if necessary.		○		○
4*	Fuel line	Check fuel hose and vacuum pipe for cracks or damage. Replace if necessary.		○		○
5*	Exhaust system	Check for leakage. Retighten as necessary. Replace gasket(s) if necessary.		○	○	
6*	Carburetor synchronization	Adjust synchronization of carburetors.		○	○	
7*	Idle speed	Check and adjust engine idle speed. Adjust cable free play if necessary.		○	○	

* It is recommended that these items be serviced by a Yamaha dealer or other qualified mechanic.

Spark plug inspection

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate something of the condition of the engine.

Normally, all spark plugs from the same engine should have the same color on the white porcelain insulator around the center electrode. The ideal color at this point is a medium to light tan color for a motorcycle that is being ridden normally. If one spark plug shows a distinctly different color, there could be something wrong with the engine. For example, if the center electrode procelain is very white, this color could indicate an intake tract air leak or carburetion problem for that cylinder. Do not attempt to diagnose such problems yourself. Instead, take the motorcycle to a Yamaha dealer or other qualified mechanic.

You should periodically remove and inspect the spark plug becuase heat and deposits will cause any spark plug to slowly break down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, you should replace the spark plug with one of the proper type.

Standard spark plug:
BP7ES (NGK)
W22WPU (NIPPONDENSO)

Before installing any spark plug, measure the electrode gap with a wire thickness gauge and adjust it to specification.

Spark plug gap:
0.7 ~ 0.8 mm (0.028 ~ 0.032 in)

When installing the plug, always clean the gasket surface and use a new gasket. Wipe off any grime from the threads, and torque the spark plug properly.

Spark plug torque:
20 Nm (2.0 m·kg, 14 ft·lb)

NOTE:

If a torque wrench is not available when you are installing a spark plug, a good estimate of the correct torque is 1/4 to 1/2 turn past finger-tights. Have the spark plug torqued to the correct value as soon as possible with a torque wrench.

GENERAL MAINTENANCE/LUBRICATION

No.	Item	Remarks	Type	Initial break-in		Thereafter every		
				1,000 km (600 mi) or 1 month	5,000 km (3,000 mi) or 7 months	4,000 km (2,500 mi) or 6 months	8,000 km (5,000 mi) or 12 months	16,000 km (10,000 mi) or 24 months
1	Engine oil	Warm-up engine before draining.	Refer to page 22	○	○	○		
2	Oil filter	Replace.	–	○	○		○	
3	Final gear oil	Replace.	Refer to page 22	○			○	
4*	Air filter	Clean with compressed air.	–		○		○	
5*	Brake system	Adjust free play. Replace pads if necessary. (Front) Replace shoes if necessary. (Rear)	–	○	○	○		
6*	Clutch	Adjust free play.	–	○	○	○		
7*	Control and meter cable	Apply chain lube thoroughly.	Yamaha chain and cable lube or SAE 10W30 motor oil	○	○	○		
8	Brake pedal and change pedal shaft pivots	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil		○	○		

No.	Item	Remarks	Type	Initial break-in		Thereafter every		
				1,000 km (600 mi) or 1 month	5,000 km (3,000 mi) or 7 months	4,000 km (2,500 mi) or 6 months	8,000 km (5,000 mi) or 12 months	16,000 km (10,000 mi) or 24 months
9	Center and sidestand pivots	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil		○	○		
10*	Rear arm pivot bearing	Check bearings assembly for looseness. Moderately repack every 16,000 km (10,000 mi).	Medium weight wheel bearing grease					Repack
11*	Front fork oil	Drain completely. Refill to specification.	Yamaha fork oil 20wt or equivalent					○
12*	Steering ball bearing and races	Check bearings assembly for looseness. Moderately repack every 16,000 km (10,000 mi).	Medium weight wheel bearing grease		○	○		Repack
13*	Wheel bearings	Check bearings for smooth rotation. Replace if necessary.	–		○	○		
14	Battery	Check specific Gravity. Check breather pipe for proper operation.	–		○	○		

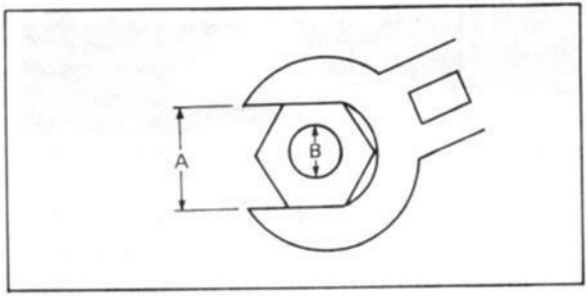
No.	Item	Remarks	Type	Initial break-in		Thereafter every		
				1,000 km (600 mi) or 1 month	5,000 km (3,000 mi) or 7 months	4,000 km (2,500 mi) or 6 months	8,000 km (5,000 mi) or 12 months	16,000 km (10,000 mi) or 24 months
15	Brake/Clutch lever pivot shaft	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil		○	○		
16*	A.C. Generator	Replace generator brushes. Replace at initial 13,000 km (8,000 mi) and thereafter every 16,000 km (10,000 mi).	–					Replace

* It is recommended that these items be serviced by a Yamaha dealer or other qualified mechanic.

Torque specifications

(For a more complete list, refer to the Service Manual for this model.)

Use a torque wrench to tighten these items. It is recommended that these items be checked occasionally, especially before a long trip. Always check the tightness of these items whenever they are loosened for any reason.



A (Nut)	B (Bolt)	General torque specifications		
		Nm	m•kg	ft•lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94

Item	Torque		
	Nm	m•kg	ft•lb
Spark plug	20	2.0	14
Engine drain plug	43	4.3	31
Oil filter bolt	15	1.5	11
Front wheel axle	110	11.0	80
Front axle pinch bolt	20	2.0	14
Rear wheel axle	110	11.0	80
Rear axle pinch bolt	6	0.6	4.3
Final gear drain plug	23	2.3	17
Front fork cap bolt	23	2.3	17
Front fork pinch bolt	20	2.0	14
Footrest	55	5.5	40

Engine oil

1. Oil level measurement

a. Place the motorcycle on the centerstand. Warm up the engine for several minutes.

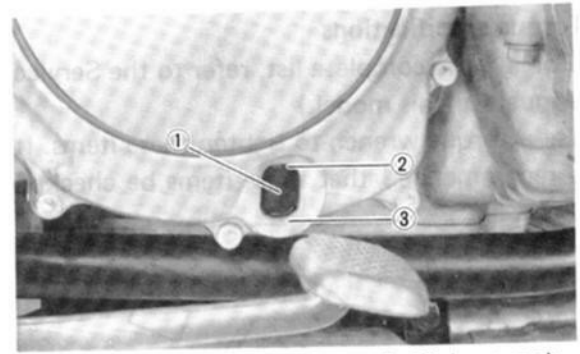
NOTE:

Be sure the motorcycle is positioned straight up when checking the oil level; a slight tilt toward the side can produce false readings.

b. With the engine stopped, check the oil level through the level window located at the lower part of the right side crankcase cover.

NOTE:

Wait a few minutes until the oil level settles before checking.



1. Level window 2. Maximum mark 3. Minimum mark

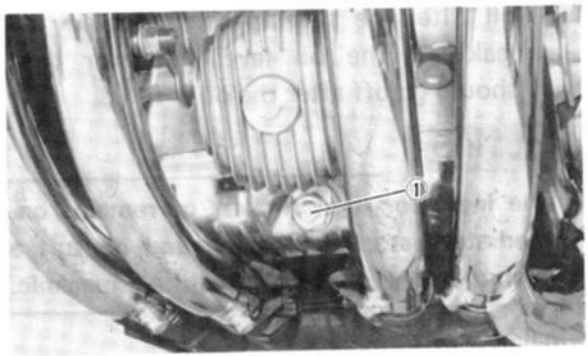
c. The oil level should be between maximum and minimum marks. If the level is lower, add sufficient oil to raise it to the proper level.

2. Engine oil and oil filter replacement

a. Start the engine and stop it after a few minutes of warm-up.

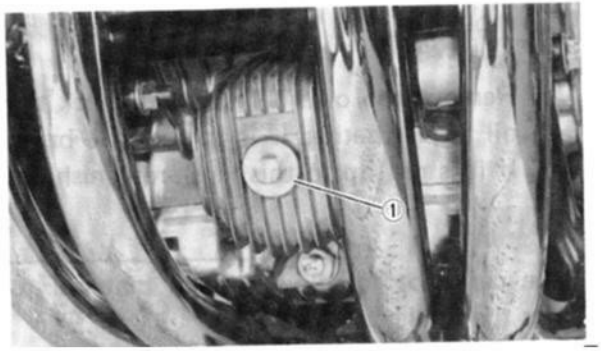
b. Place an oil pan under the engine and remove the oil filler cap.

c. Remove the drain plug and drain the oil.



1. Engine drain plug

d. Remove the oil filter bolt and filter element.



e. Re-install the drain plug (make sure it is tight).

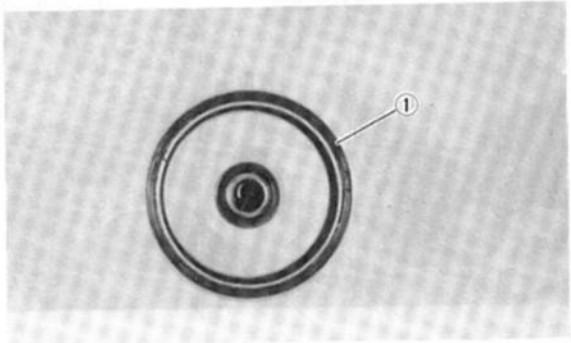
Drain plug torque:
43 Nm (4.3 m·kg, 31 ft·lb)

f. Install the new oil filter element, new O-ring and filter cover, tighten the oil filter bolt.

Oil filter bolt:
15 Nm (1.5 m·kg, 11 ft·lb)

NOTE:

Make sure the O-ring is positioned properly.



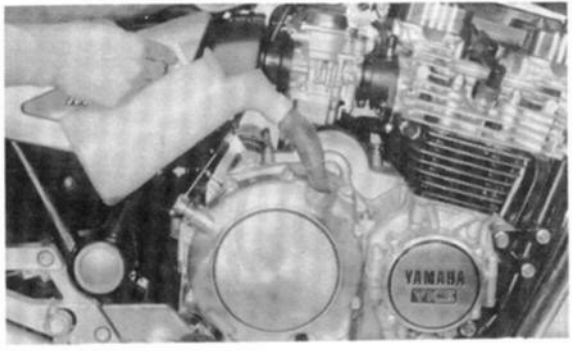
 1. Proper O-ring position

g. Add oil through the oil filler hole.

Periodic oil change:
2.5 L (2.2 Imp qt, 2.6 US qt)
With oil filter replacement:
2.8 L (2.5 Imp qt, 3.0 US qt)
Recommended oil: See page 22.

CAUTION:

Take care not to allow foreign material to enter the crankcase.



h. After replacement of engine oil and/or oil filter, be sure to check for any oil leakage. The oil level indicator light should go off after the oil is filled.

CAUTION:

If the indicator light flickers or remains on, immediately stop the engine and consult a Yamaha dealer or other qualified mecanic.

Final gear oil

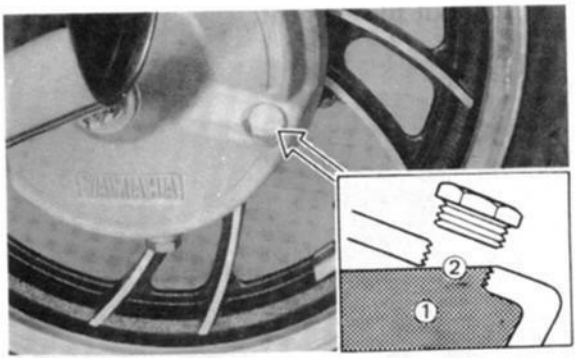
1. Oil level measurement

a. Place the motorcycle on a level place and place it on the centerstand. The engine should be cool (at atmospheric temperature).

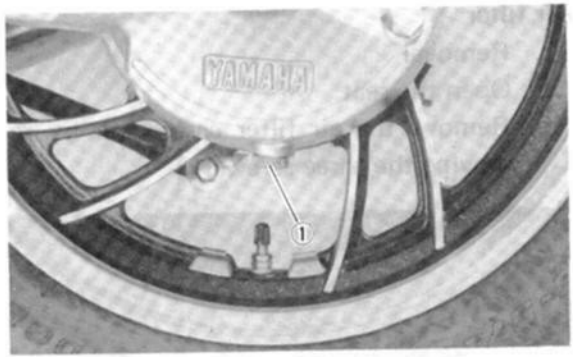
b. Remove the oil filler cap and check the oil level whether it is to the hole brim. If it is not up to this level, replenish oil.

CAUTION:

Take care not to allow foreign material to enter the final gear case.



1. Final gear oil 2. Correct oil level



1. Final gear drain plug

2. Gear oil replacement

a. Place an oil pan under the final gear case.

b. Remove the final gear oil filler cap and the drain plug, and drain the oil.

WARNING:

When draining or filling, take care not to allow foreign material to enter the final gear case. Do not to allow the gear oil to contract the tire and wheel.

c. Reinstall and tighten the final gear case drain plug. (See page 44 for torque specifications.)

d. Fill the gear case to the specified level.

Oil capacity:
Final gear case:
0.2 L (0.18 Imp qt, 0.21 US qt)
Recommended oil: See page 22

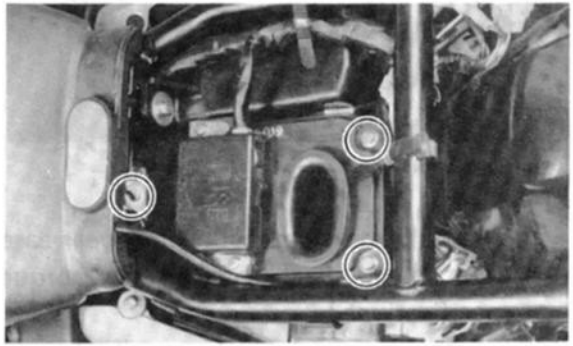
e. Reinstall the filler cap securely.

Air filter

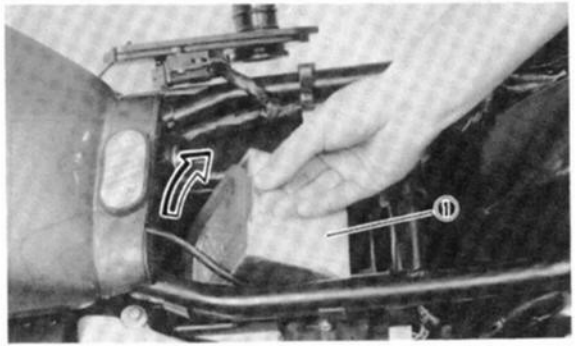
1. Removal

a. Open the seat.

b. Remove the air filter case cover by removing the three screws.



c. Pull out the element.



1. Air filter element

2. Cleaning method

Tap the element lightly to remove most of the dust and dirt; then blow out the remaining dirt with compressed air from the inner surface of the element. If element is damaged, replace it.

3. Reassemble by reversing the removal procedure. Check whether the element is seated completely against the case.
4. The air filter element should be cleaned at the specified intervals.

CAUTION:

The engine should never be run without the air cleaner element installed; excessive piston and/or cylinder wear may result.

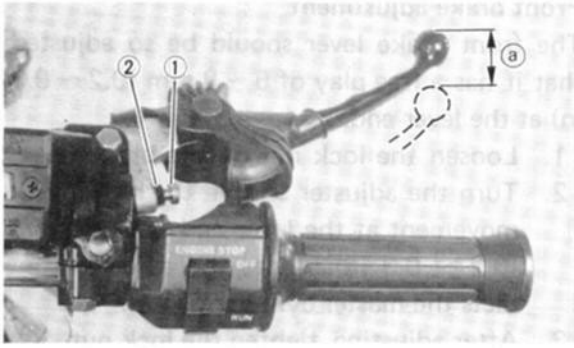
Front brake adjustment

The front brake lever should be so adjusted that it has a free play of 5 ~ 8 mm (0.2 ~ 0.3 in) at the lever end.

1. Loosen the lock nut on the brake lever.
2. Turn the adjuster so that the brake lever movement at the lever end is 5 ~ 8 mm (0.2 ~ 0.3 in) before the adjuster contacts the master cylinder piston.
3. After adjusting, tighten the lock nut.

NOTE:

Check for correct play, and make sure it lever is working properly.



1. Adjuster 2. Lock nut a. 5 ~ 8 mm (0.2 ~ 0.3 in)

WARNING:

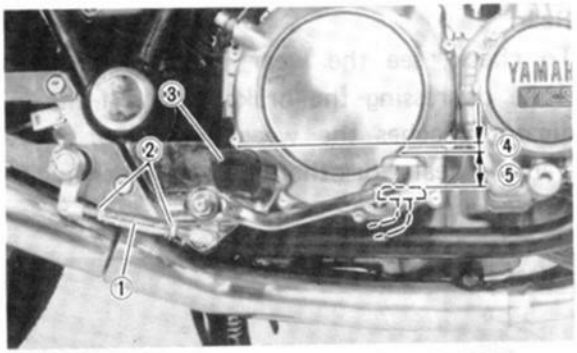
A soft or spongy feeling in the brake lever can indicate the presence of air in the brake system. This air must be removed by bleeding the brake system before the motorcycle is operated. Air in the system will result in greatly diminished braking capability and can result in loss of control and an accident. Have a Yamaha dealer or otehr qualified mechanic inspect and bleed the system if necessary.

Rear brake adjustment

WARNING:

For the brake pedal position adjustment, be sure to proceed as follows; (It is advisable to have a Yamaha dealer or other qualified mechanic make this adjustment).

1. Pedal height
a. Loosen the lock nuts.
b. By turning the adjuster clockwise or counterclockwise, adjust the brake pedal position so that its top end is approx. 20 mm (0.8 in) below the top of the footrest.
c. Secure the lock nuts.

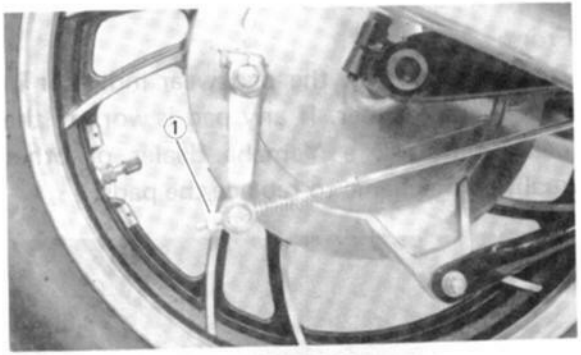


1. Adjuster (for pedal height)
2. Lock nut
3. Footrest
4. Pedal height 20 mm (0.8 in)
5. Free play 20 ~ 30 mm (0.8 ~ 1.2 in)

WARNING:

After adjusting the pedal height, the brake pedal free play should be adjusted.

2. Free play
   The rear brake should be adjusted to suit the rider's preference, but free play at the end of the brake pedal should be 20 ~ 30 mm (0.8 ~ 1.2 in).
   To adjust, turn the adjuster on the brake rod clockwise to reduce play; turn the adjuster counterclockwise to increase play.



1. Adjuster

WARNING:

Always check brakelight operation after rear brake adjustment.

Checking the front brake pads and rear brake shoes

A wear indicator is attached to each brake to facilitate brake pad and shoe check.

This indicator permits a visual check without disassembling the pads.

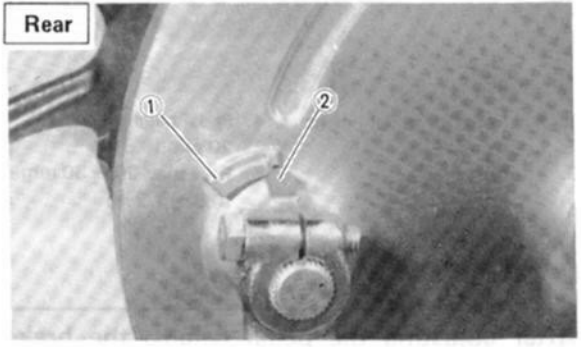
Front:

To check, look at the pad wear indicator in back of the caliper. If any pad is worn to the wear limit, ask a Yamaha dealer or other qualified mechanic to replace the pads.

1. Wear indicator

Rear:

To check, see the wear indicator position while depressing the brake pedal. If the indicator reaches the wear limit line, ask a Yamaha dealer or other qualified mechanic to replace the shoes.



1. Wear limit 2. Wear indicator

Inspecting the brake fluid level

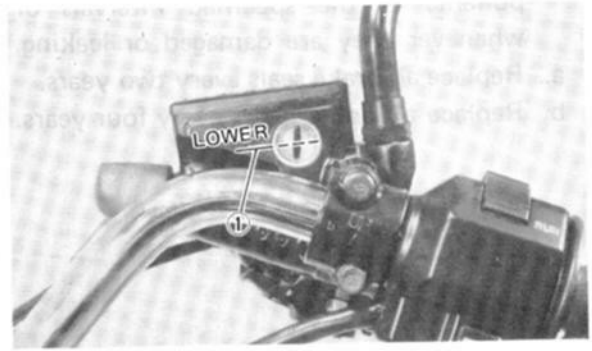
Insufficient brake fluid may allow air to enter the brake system, possibly causing the brakes to become ineffective.

Before riding , check the brake fluid level and replenish when necessary, and observe these precautions:

1. Use only the designated quality brake fluid; otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.

Recommended brake fluid: DOT #3

2. Refill with the same type of brake fluid; mixing fluids may result in a harmful chemical reaction and lead to poor performance.
3. Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point and may result in vapor lock.
4. Brake fluid may erode painted surfaces or plastic parts. Always clean up spilled fluid immediately.
5. Have a Yamaha dealer or other qualified mechanic check the cause if the brake fluid level goes down.



1. "LOWER" level

Brake fluid replacement

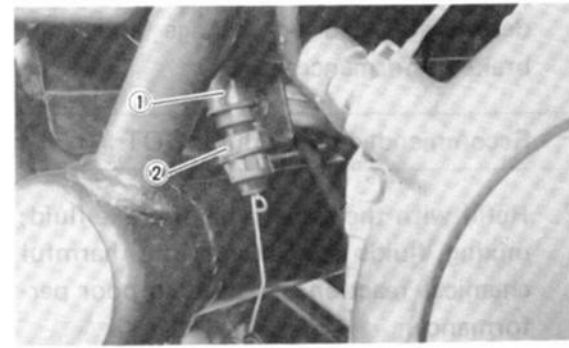
1. Complete fluid replacement should be done only by trained Yamaha service personnel.
2. Complete fluid replacement should be done whenever the caliper cylinder or master cylinder is disassembled, or the fluid becomes seriously contaminated.
3. Have a Yamaha dealer or other qualified mechanic replace the following components at the specified intervals or whenever they are damaged or leaking.

a. Replace all brake seals every two years.
b. Replace all brake hoses every four years.

Brake light switch adjustment

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

To adjust, hold the switch body with the hand so it does not rotate and turn the adjusting nut. Proper adjustment is achieved when the brake light comes on slightly before brake begins to take effect.



1. Main body 2. Adjusting nut

Clutch adjustment

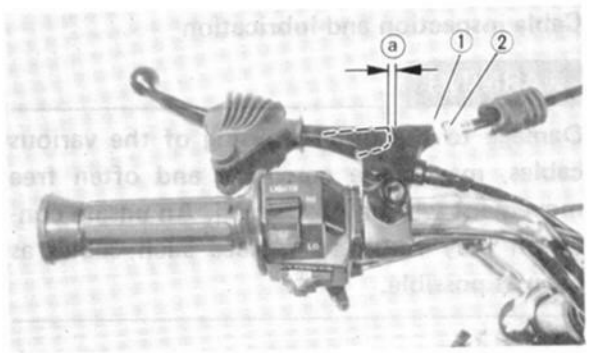
This model has two clutch cable length adjusters. The cable length adjusters are used to take up slack from cable stretch and to provide sufficient free play for proper clutch operation under various operating conditions.

1. Free play adjustment

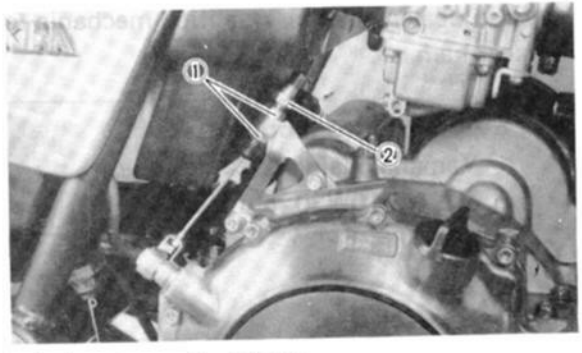
   The clutch should be adjusted to suit rider preference within a 2 ~ 3 mm (0.08 ~ 0.21 in) free play at the lever pivot side.

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

Clutch lever free play:
2 ~ 3 mm (0.08 ~ 0.12 in)



1. Lock nut 2. Adjuster a. 2 ~ 3 mm (0.08 ~ 0.12 in)



1. Lock nut 2. Adjuster

Cable inspection and lubrication

WARNING:

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 such cables as soon as possible.

Lubricate the inner cable and the cable end. If they do not operate smoothly, ask a Yamaha dealer or other qualified mechanic to replace them.

Recommended lubricant:
Yamaha chain and cable lube
or SAE 10W30 motor oil

Throttle cable and grip lubrication

The throttle twist grip assembly should be greased when 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.

Brake pedal shaft

Apply Yamaha chain and cable lube or SAE 10W30 motor oil to the brake pedal shaft.

Change pedal/Brake and clutch lever

Lubricate the pivoting parts of each lever and pedal.

Recommended lubricants:
Yamaha chain and cable lube
or SAE 10W30 motor oil

Center and sidestand pivots

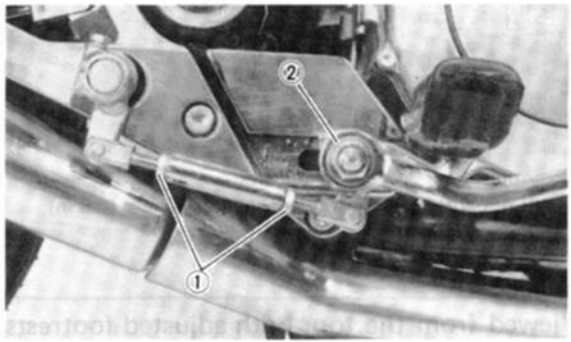
Lubricate the center and sidestand at their pivot points.

Recommended lubricants:
Yamaha chain and cable lube
or SAE 10W30 motor oil

Footrest adjustment

Right

1. Loosen the lock nuts and self-locking nut.

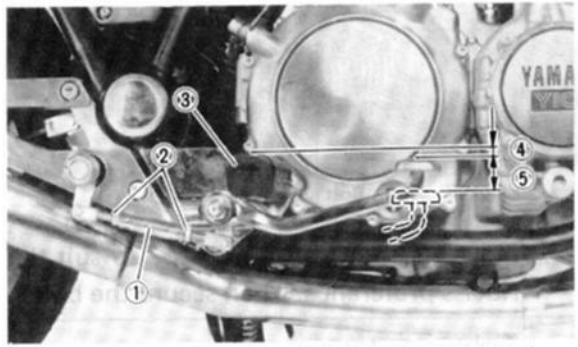


1. Lock nut
2. Self-locking nut

2. Move the footrest either way to suit the rider's preference. (Six possible positions only) Then secure the self-locking nut.

Tightening torque:
55 Nm (5.5 m·kg, 40 ft·lb)

3. By turning the adjuster clockwise or counterclockwise, adjust the brake pedal position so that its top end is approx. 20 mm (0.8 in) below the top of the footrest.
4. Secure the lock nuts.



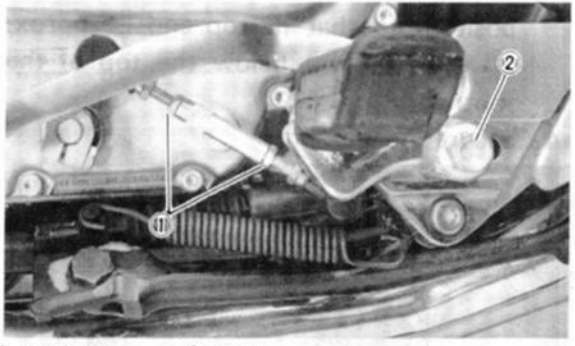
1. Adjuster (For pedal height)
2. Lock nut
3. Footrest
4. Pedal height 20 mm (0.8 in)
5. Free play 20 ~ 30 mm (0.8 ~ 1.2 in)

WARNING:

After adjusting the pedal height, the brake pedal free play should be adjusted.

Left

1. Loosen the lock nuts and bolt.

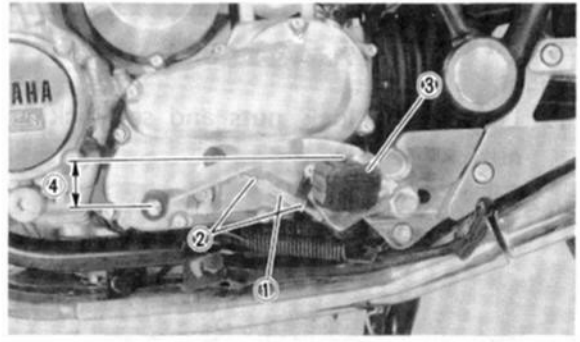


1. Lock nut 2. Bolt

2. Move the footrest either way to suit the rider's preference. Then secure the bolt.

Tightening torque:
55 Nm (5.5 m·kg, 40 ft·lb)

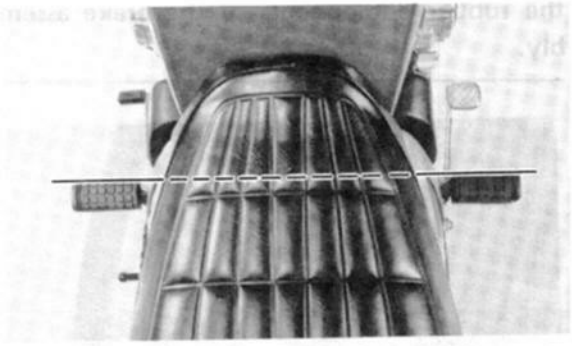
3. By turning the adjuster clockwise or conterclockwise, adjust the position of the change pedal so that its peg center is approx. 20 mm (0.8 in) below the top of the footrest.
4. Secure the lock nuts.



1. Adjuster (For pedal height)
2. Lock nut
3. Footrest
4. Pedal heidht 20 mm (0.8 in)

NOTE:

Viewed from the top, both adjusted footrests must be in line with each other.

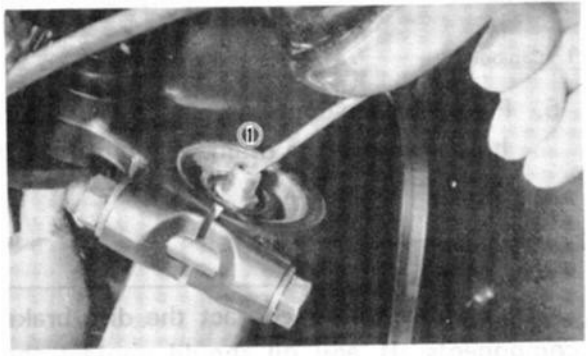


Front fork oil change

WARNING:

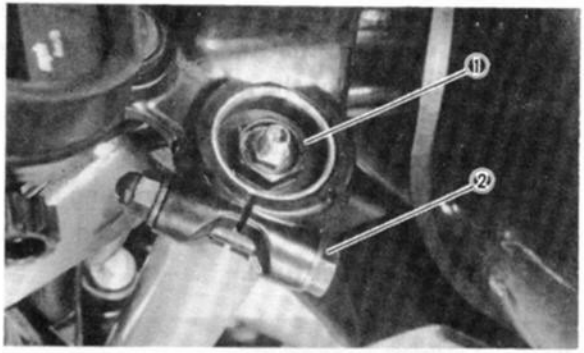
1. Fork oil leakage can cause loss of stability and unsafe handling. Have any problem corrected before operating the motorcycle.
2. Securely support the motorcycle so there is no danger of it falling over.

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. Keep the valve open while pressing it for several seconds so that the air can be let out of the inner tube.



1. Push

4. Loosen the pinch bolts and remove the cap-bolt from each inner tube.

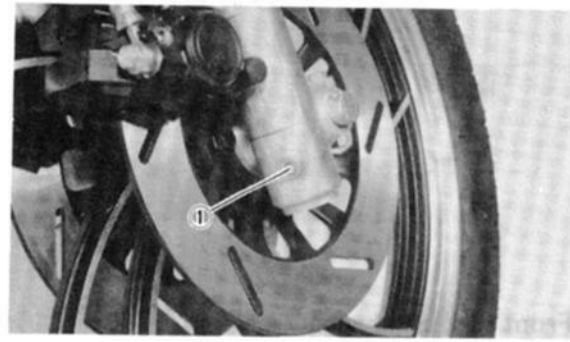


1. Cap-bolt 2. Pinch bolt

5. Place an open container under each drain hole. Remove the drain screw from each outer tube.

WARNING:

Do not allow oil to contact the 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.

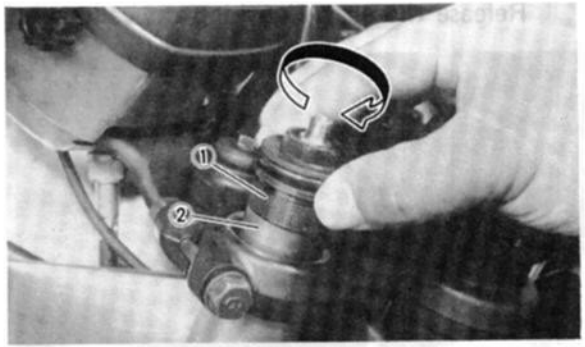


1. Drain screw

6. When most of the oil has drained, slowly raise and lower the outer tubes to pump out the remaining oil.
7. Inspect the drain screw gasket. Replace if damaged. Reinstall the drain screw.
8. Pour the specified amount of oil into the fork inner tube.

Front fork oil (each fork):
278 cm^3 (9.8 Imp oz, 9.4 US oz)
Yamaha Fork Oil 20wt or equivalent

9. After filling, slowly pump the forks up and down to distribute the oil.
10. Inspect the O-ring on the cap-bolt. Replace O-ring if damaged.
11. Reinstall the cap-bolt and the rubber cap. Then, tighten the pinch bolts.



1. Cap-bolt 2. Spacer

Tightening torque:
Cap-bolt:
23 Nm (2.3 m·kg, 17 ft·lb)
Pinch bolt:
20 Nm (2.0 m·kg, 14 ft·lb)

12. Fill the fork with air using a manual air pump or other pressurized air supply. Refer to "Front fork and rear shock absorber adjustment" for proper air pressure adjusting.

Maximum air pressure:
118 kPa (1.2 kg/cm^2, 17 psi)
Do not exceed this amount.

Front fork and rear shock absorber adjustment

WARNING:

Any adjustment except for air pressure or any replacement must be performed by a Yamaha dealer or other qualified mechanic.

Front fork:

WARNING:

Always adjust each fork preload on to the same setting. Uneven adjustment can cause poor handling and loss of stability.

1. Elevate the front wheel by placing the motorcycle on the centerstand.

NOTE:

When checking and adjusting the air pressure, there should be no weight on the front end of the motorcycle.

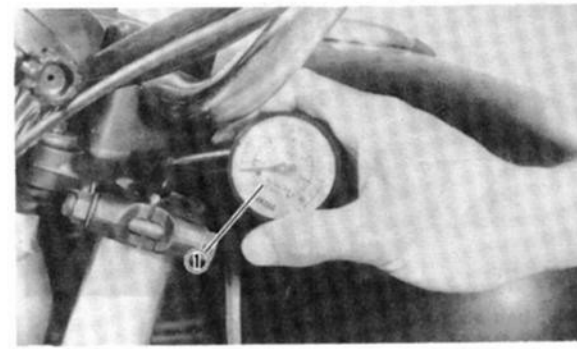
2. Remove the rubber cap from top of each fork.
3. Using the air check gauge, check and adjusted the air pressure.
   If the air pressure is increased, the suspension becomes stiffer and if decreased, it becomes softer.

To increase:

Use a manual air pump or other pressurized air supply.

To decrease:

Release the air by pushing the valve pin.



1. Air check gauge

NOTE:

An optional air check gauge is available. Please ask your nearby Yamaha dealer.

P/No. 2X4-2811A-00

Standard air pressure:
39.2 kPa (0.4 kg/cm², 5.7 psi)
Maximum air pressure:
118 kPa (1.2 kg/cm², 17 psi)
Minimum air pressure:
39.2 kPa (0.4 kg/cm², 5.7 psi)

WARNING:

Never pressurize the front fork above the maximum or below the minimum air pressure. It will cause damage to front fork and/or loss of motorcycle control.

WARNING:

The difference between both the left and right tubes should be 98.1 kPa (0.1 kg/cm², 1.4 psi) or less.

4. Install the rubber caps securely.

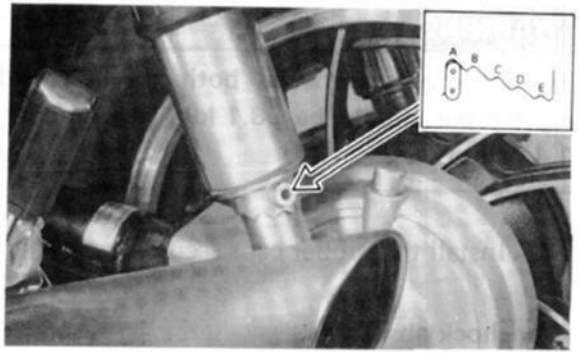
Rear shock absorber:

WARNING:

Always adjust each shock absorber on to the same setting. Uneven adjustment can cause poor handling and loss of stability.

1. Spring preload
   If the spring seat is raised, the spring becomes stiffer and if lowered, it becomes softer.

Standard position — A
A. position—Softest, E. position—Stiffest

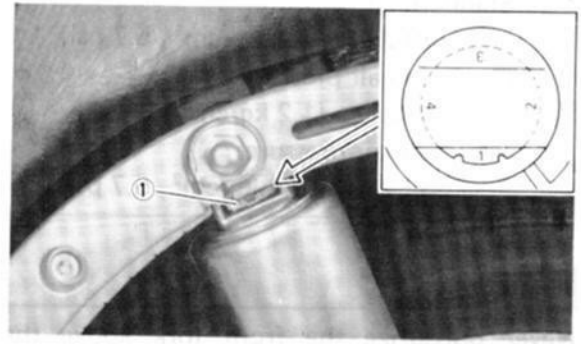


2. Damping force
   Turn the damping adjuster by your fingers to increase or decrease the damping. If it is difficult to turn it with your fingers, use a screw driver.

Standard position – No. 1 No. 1 – Minimum damping No. 4 – Maximum damping

NOTE:

When adjusting the damping, the adjuster should be placed in the clicked position. If not, the damping will be set to the maximum (No. 4).



1. Damping adjuster

Recommended combinations of the front fork and the rear shock absorber.
Use this table as guidance to meet specific riding conditions and motorcycle load.

Front fork	Rear shock absorber		Loading condition			
Air pressure	Spring seat	Damping adjuster	Solo rider	With passenger	With accessories	With accessories and passenger
39.2 ~ 78.5 kPa (0.4 ~ 0.8 kg/cm^2, 5.7 ~ 11 psi)	A ~ C	1	○			
	A ~ C	2	○	○		
	C ~ E	3		○	○	
78.5 ~ 118 kPa (0.8 ~ 1.2 kg/cm^2, 11 ~ 17 psi)	E	4			○	○

Steering inspection

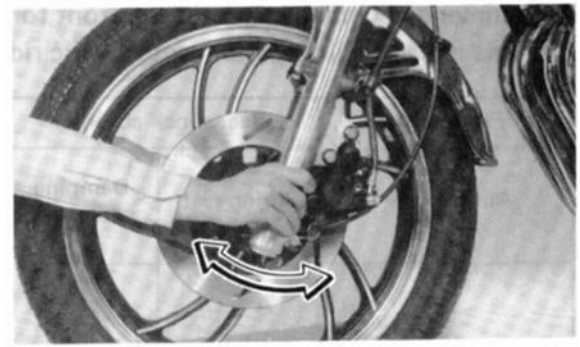
Periodically inspect the condition of the steering. Worn out or loose steering bearings may be dangerous.

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 a 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. It 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 closed space. Always shield eyes when working near batteries.

KEEP OUT OF RACH OF CHILDREN.

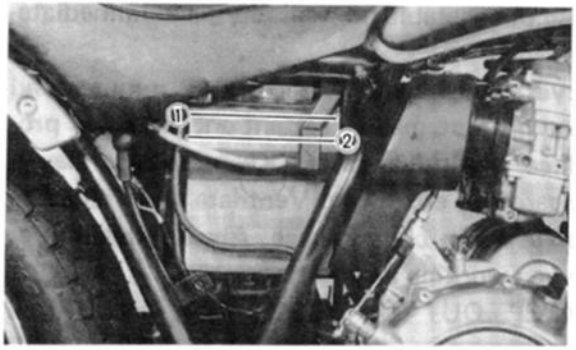
Replenishing the battery fluid

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

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

CAUTION:

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



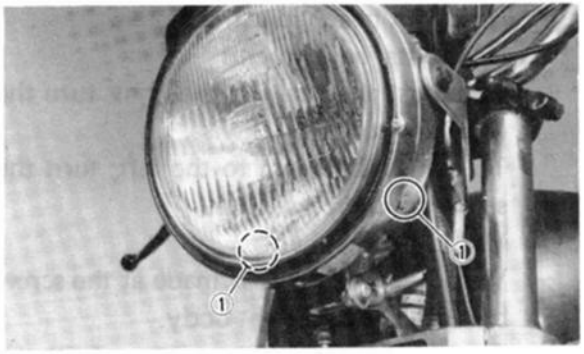
1. Upper level 2. Lower level

2. When the motorcycle is not to be used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reusing.
3. 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.
4. 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.

Headlight

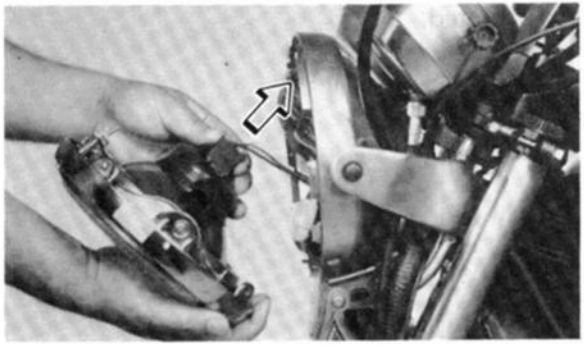
This motorcycle is equipped with a quartz bulb headlight. If the headlight bulb burns out, replace the bulb as follows:

1. Headlight bulb replacement
   a. Remove the 2 screws holding the light unit assembly to the headlight body.

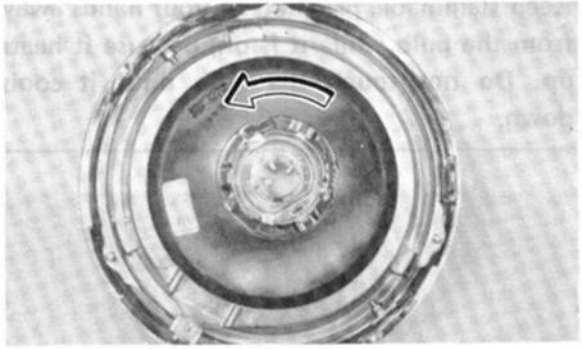


1. Holding screw

b. Disconnect the lead wires and remove the light unit assembly.



c. Turn the bulb holder counterclockwise and remove the defective bulb.



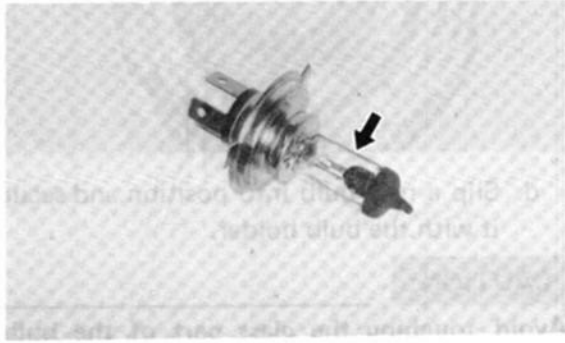
d. Slip a new bulb into position and secure it with the bulb holder.

CAUTION:

Avoid touching the glass part of the bulb. Also keep it free from oil stains; otherwise, the transparency of the glass, life of the bulb, and iluminous flux will be adversely affected. If the glass is oil stained, thoroughly clean it with a cloth moistened with alcohol or lacquer thinner.

WARNING:

Keep flammable products or your hands away from the bulb while it is on, because it heats up. Do not touch the bulb until it cools down.

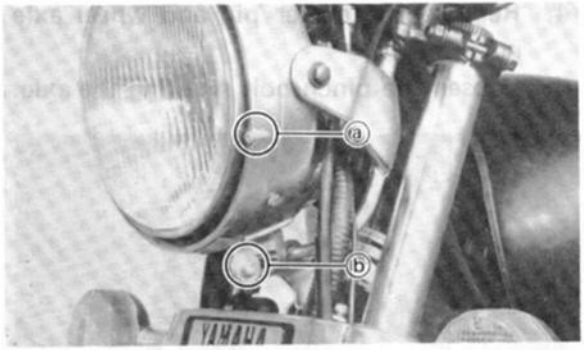


e. Reinstall the light unit assembly to the headlight body. Adjust the headlight beam if necessary.

2. Headlight beam adjustment

a. Horizontal adjustment:
To adjust the beam to the right, turn the adjusting screw clockwise.
To adjust the beam to the left, turn the screw counterclockwise.

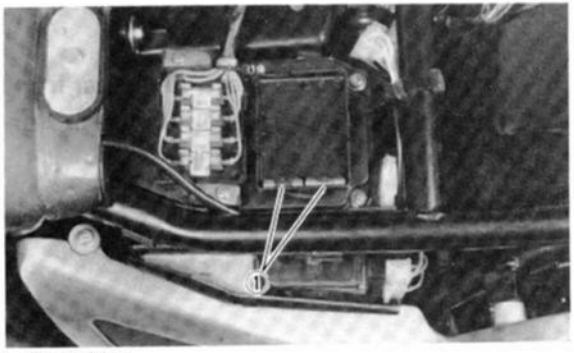
b. Vertical adjustment:
Vertical adjustment is made at the screw beneath the headlight body.
To adjust, loosen the screw and tilt the headlight body up or down by pushing it with your hands. Tighten the screw securly after the adjustment is completed.



a. Horizontal adjusting screw b. Vertical adjusting screw

Fuse replacement

1. The fuse block is located under the seat.



1. Spare fuse

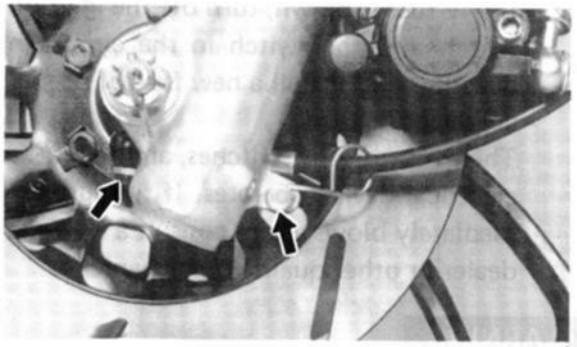
2. If any fuse is blown, turn off the ignition switch and the switch in the circuit in question and install a new fuse of proper amperage.
   Then turn on the switches, and see if the electrical device operates. If the fuse immediately blows again, consult a Yamaha dealer or other qualified mechanic.

WARNING:

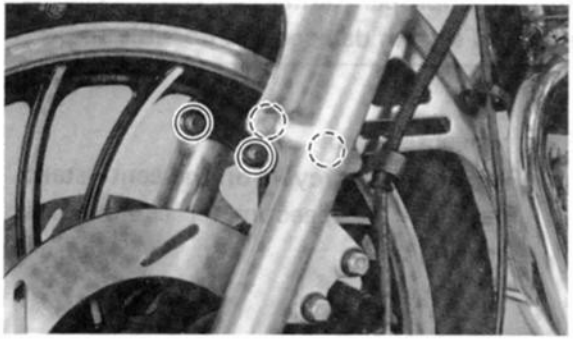
Do not use fuses of a higher amperage rating than those recommended. Substitution of a fuse of improper rating can cause extensive electrical system damage and possible fire.

Front wheel removal

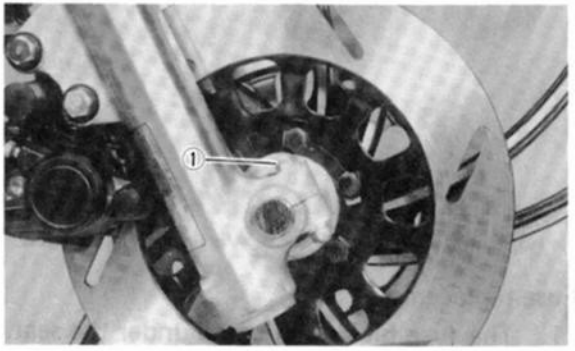
1. Place the motorcycle on the centerstand.
2. Remove the speedometer cable holder securing bolts.



3. Remove the front fender securing bolts and remove the fender.

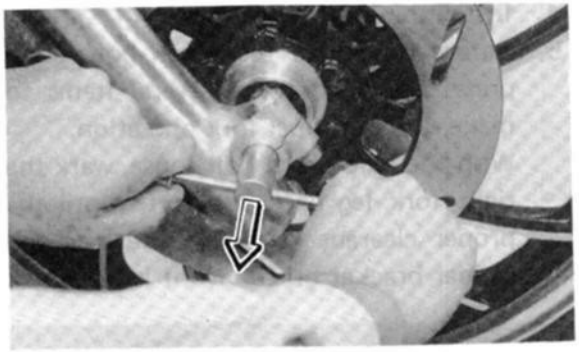


4. Remove the cotter pin and wheel axle nut.
5. Loosen the pinch bolt securing the axle.



1. Pinch bolt

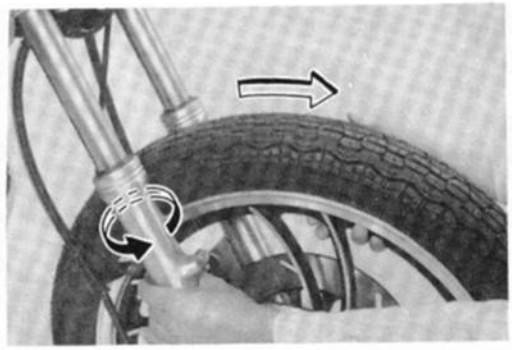
6. Remove the axle shaft and the front wheel. In this case, make sure the motorcycle is properly supported.



NOTE:

Do not depress the brake lever when the wheel is off the motorcycle as the brake pads will be forced to shut.

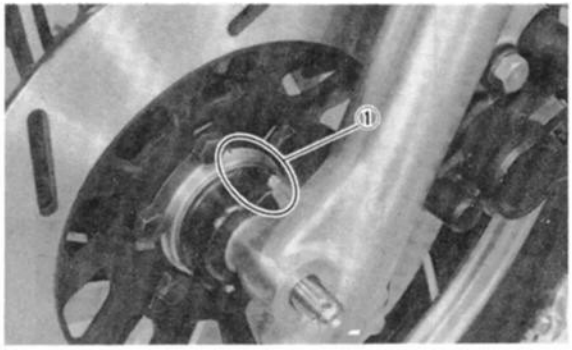
7. Lower the wheel until the brake discs come off the calipers. Turn the calipers outward so they do not obstruct the wheel, and remove the wheel.



Front wheel installation

When installing the front wheel, reverse the removal procedure. Pay attention to the following points.

1. Install the speedometer cable holder securing bolt.
2. Make sure the projection portion (toruqe stopper) of the speedometer housing is positioned correctly.



1. Torque stopper

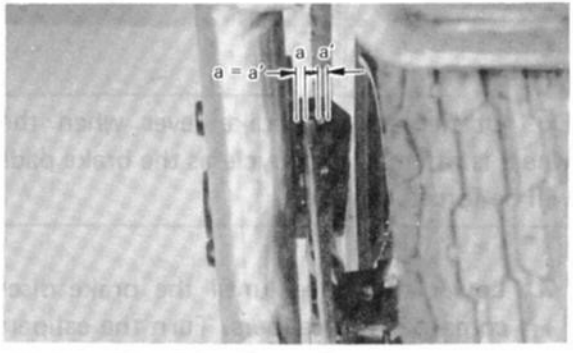
3. Make sure the axle nut is properly torqued, and a new cotter pin is installed.

WARNING:

Always use a new cotter pin on the axle nut.

Axle nut torque:
110 Nm (11.0 m·kg, 80 ft·lb)

4. Install the front fender.
5. Before tightening the pinch bolt, compress the front forks several items to make sure of proper fork operation.
   With the axle pinch bolt loose, wark the right fork leg back and forth until the proper clearance between the disc and caliper bracket on the front is obtained.



6. Tighten the axle pinch bolt.

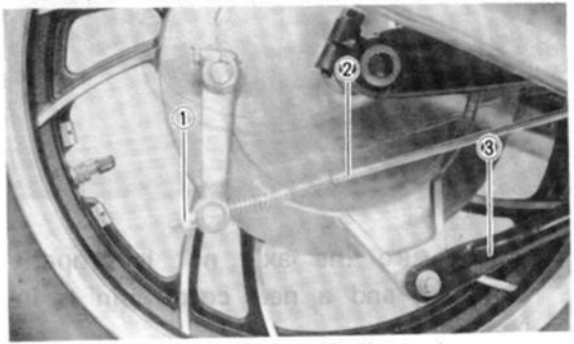
Axle pinch bolt torque:
20 Nm (2.0 m·kg, 14 ft·lb)

Rear wheel removal

CAUTION:

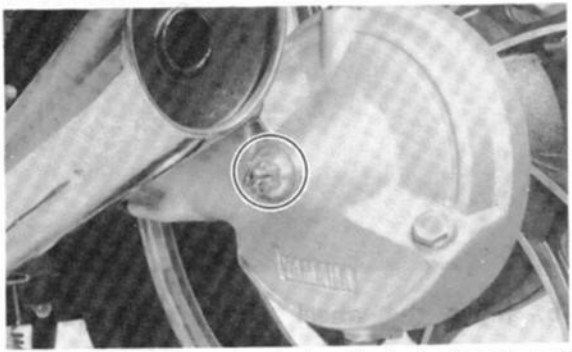
It is advisable to have a Yamaha dealer or other qualified mechanic make this removal and reassembly.

1. Place the motorcycle on the centerstand.
2. Remove the tension bar and the brake rod from the brake shoe plate. The tension bar can be removed by removing the cotter pin and nut from the tension bar bolt. The brake rod can be removed by removing the adjuster.

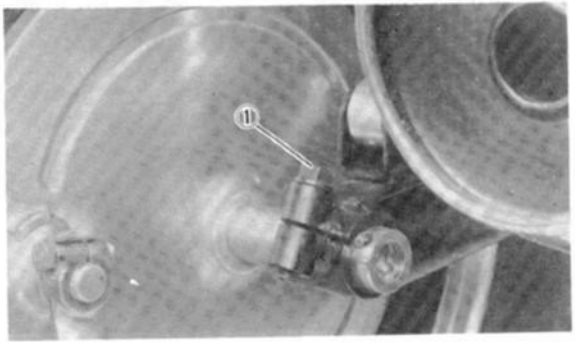


1. Adjuster 2. Brake rod 3. Tension bar

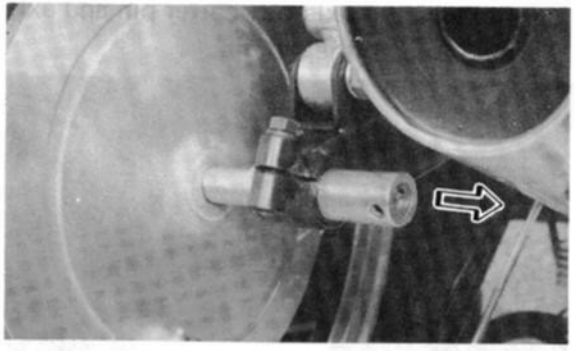
3. Remove the axle nut cotter pin and axle nut. Discard the old pin.



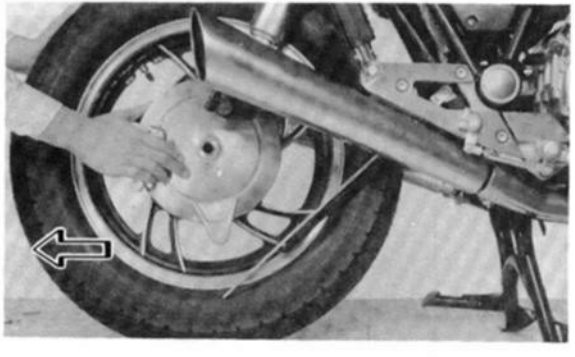
4. Loosen the rear axle pinch bolt and pull out the rear axle.



1. Pinch bolt



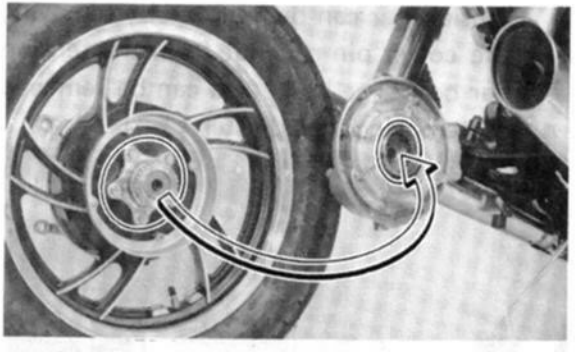
5. Move the wheel to the right side to separate it from the final gear case and remove the rear wheel.



Rear wheel installation

When installing the rear wheel, reverse the removal procedure. Pay attention to the following points.

1. Apply a light coating of lithium base grease to the final gear case splines and rear wheel hub splines.
2. Make sure the splines on the wheel hub fit into the final gear case.



3. Make sure the axle nut is properly torqued, and a new cotter pin is installed.

WARNING:

Always use a new cotter pin on the axle nut.

Tightening torque:
Axle nut:
110 Nm (11 m·kg, 80 ft·lb)
Axle pinch bolt:
6 Nm (0.6 m·kg, 4.3 ft·lb)

4. Adjust the rear brake.

WARNING:

Check the operation of the brake light after adjusting the rear brake.

Carburetor adjustment:

The carburetor is a vital part of the engine and its emission control system. Adjustment should be left to a Yamaha dealer or other qualified mechanic with the professional knowledge, specialized data and equipment to do so properly.

Troubleshooting

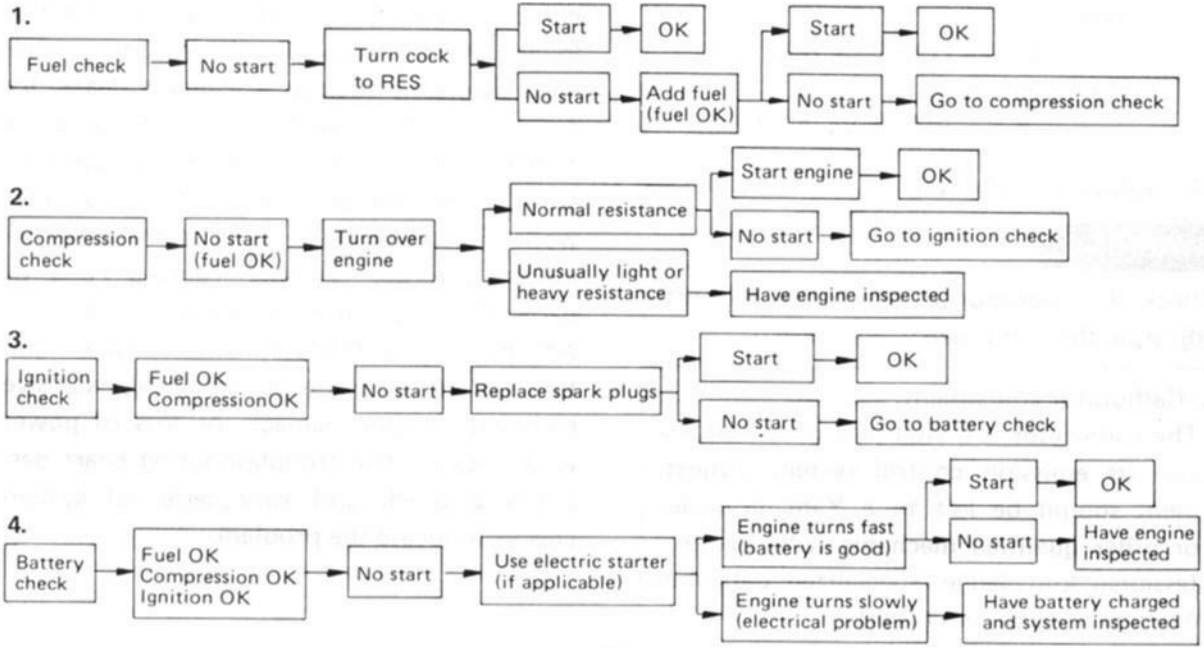
Although Yamaha motorcycles are given a rigid inspection before shipment from the factory, trouble may occur during operation. If this happens, check the motorcycle in accordance with the procedures given in the following chart. If repair is necessary, ask a qualified mechanic such as a Yamaha dealer for assistance. The skilled technicians at a Yamaha dealer are trained and equipped to perform the necessary maintenance and repair work. For replacement parts, Yamaha recommends you use Genuine Yamaha Parts or parts you know are equivalent in quality.

Any problem in the fuel, compression or ignition system can cause poor starting, excessive emissions, engine damage, or loss of power while riding. The troubleshooting chart describes a quick and easy series of system checks to locate the problem.

Troubleshooting chart

WARNING:

Never check the fuel system while smoking or in the vicinity of an open flame.



CLEANING AND STORAGE

A. CLEANING

Frequent through cleaning of your motorcycle will not only enhance its appearance but will improve general performance and extend the useful life of many components.

1. Before cleaning the motorcycle:
   a. Block off end of exhaust pipe to prevent water entry; a plastic bag and strong rubber band may be used.
   b. Make sure spark plugs and gas cap are properly installed.
2. If engine case is excessively greasy, apply degreaser with a paint bruch. Do not apply degreaser to wheel axles.
3. Rinse dirt and degreaser off with a garden hose, using only enough hose pressure to do the job.

CAUTION:

Excessive hose pressure may cause water seepage and contamination of wheel bearings, front forks, brakes and transmission seals. Many expensive repaire bills have resulted from improper use of high pressure detergent applications such as those available in coin-operated car washes.

4. Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old tooth brush or bottle brush is handy to reach hard-to-get-to places.
5. Rinse motorcycle off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.

6. Chrome-plated parts such as handlebars, fenders, forks, etc., may be further cleaned with automotive chrome cleaner.
7. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
8. Automotibe-type wax may be applied to all painted and chrome-plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar paint or protective finish on the fuel tank and side covers.
9. After finishing, start the engine immediately and let it idle for several minutes.

B. STORAGE

Long term storage (60 days or more) of your motorcycle will require some preventive procedures to insure against deterioration. After cleaning the machine thoroughly, prepare for storage as follows:

1. Drain fuel tank, fuel lines, and carburetor float bowl.
2. Remove the empty fuel tank, pour a cup of SAE 10W30 or SAE 20W40 motor oil in tank, shake the tank to coat the inner surfaces thoroughly and drain off excess the oil. Reinstall the tank.
3. Remove the spark plug, pour about one tablespoon of SAE 10W30 or SAE 10W40 motor oil in the spark plug hole and reinstall the spark plug. Crank the engine over several times (ground spark plug lead wires) to coat the cylinder walls with oil.

WARNING:

When using starter motor to crank the engine, remove spark plug wires and ground them to prevent sparking.

4. Lubricate all control cables.

5. Block up the frame to raise both wheels off the round.
6. Tie a plastic bag over the exhaust pipe outlet to prevent moisture entering.
7. If storing in humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to any rubber parts or the seat cover.
8. Remove the battery and charge it. Store it in a dry place and recharge it once a month. Do not store the battery in an excessively warm or cold place (less than 0°C (30°F) or more than 30°C (90°F)).

NOTE:

Make any necessary repairs before storing the motorcycle.

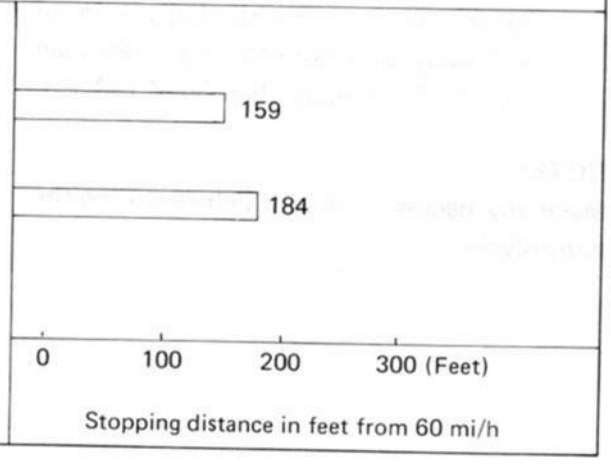
MISCELLANEOUS

STOPPING DISTANCE

These figures indicate braking performance that can be met or exceeded by the vehicles to which they apply, without locking the wheels, under different conditions of loading and with partial failures of the braking system. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: Yamaha motorcycle XJ750K

A. Fully Operational Service Brake



NOTE:
The statement above is required by U.S. Federal law. "Partial failures" of the braking system do not apply to this chart.

SPECIFICATIONS

General specifications

MODEL	XJ750K
Dimension:	
Overall length	2,145 mm (84.4 in)
Overall width	830 mm (32.7 in)
Overall height	1,175 mm (46.3 in)
Wheelbase	1,445 mm (56.9 in)
Minimum road clearance	135 mm (5.3 in)
Basic weight:	
With oil and full fuel tank	234 kg (515 lb)
Performance:	
Minimum turning radius	2,600 mm (102.4 in)
Engine:	
Type	4 stroke, gasoline, air-cooled DOHC
Engine model	22R
Cylinder	Forward incline 4 cylinder
Displacement	748 cm^3 (45.64 cu.in)
Bore x Stroke	65.0 x 56.4 mm (2.559 x 2.220 in)
Compression ratio	9.2 : 1
Starting system	Electric starter
Ignition system	Battery ignition (Full transistor ignition)

MODEL	XJ750K
Fuel tank capacity	Total : 17 L (3.7 Imp gal, 4.5 US gal) Reserve: 3.5 L (0.8 Imp gal, 0.9 US gal)
Engine oil quantity	Total amount: 3.5 L (3.1 Imp qt, 3.7 US qt) Periodic oil charge: 2.5 L (2.2 Imp qt, 2.6 US qt) With oil filter replacement: 2.8 L (2.5 Imp qt, 3.0 US qt)
Lubrication system	Wet sump
Battery type/capacity	YB14L/12V, 14AH
Generator	A.C. magneto
Spark plug	BP7ES (NGK), W22EPU (NIPPONDENSO)
Carburetor	HSC32 x 4
Air cleaner	Dry type element
Clutch type	Wet, multiple-disc
Transmission:	
Primary reduction system	Gear
Primary reduction ratio	97/58 (1.672)
Secondary reduction system	Shaft
Secondary reduction ratio	48/37 x 19/18 x 32/11 = 3.983
Gear box type	Constant mesh, 5-speed forward
Operation system	Left foot operation

MODEL		XJ750K
Gear ratio:	First	35/16 (2.187)
	Second	30/20 (1.500)
	Third	30/26 (1.153)
	Fourth	28/30 (0.933)
	Fifth	26/32 (0.812)
Chassis:		
Frame type		Tubular steel, double cradle
Steering:	Caster	29°
	Trail	124 mm (4.88 in)
Tire size:	Front	3.25H19-4PR Tubeless tire
	Rear	130/90-16 67H Tubeless tire
Braking system:	Front	Disc brake/Right hand operation
	Rear	Drum brake/Right foot operation
Suspension:	Front	Telescopic fork
	Rear	Swing arm
Shock absorber:	Front	Air/coil spring, oil damper
	Rear	Coil spring, oil damper

MODEL		XJ750K
Electrical:		
Headlight		12V, 60W/55W (Quartz bulb)
Tail/brake light		12V, 8W/27W x 2
Flasher light		12V, 27W x 4
Pilot lights:	TURN	12V, 3.4W
	OIL	12V, 3.4W
	NEUTRAL	12V, 3.4W
	HIGH BEAM	12V, 3.4W
Meter light		12V, 3.4W x 2

WARRANTY INFORMATION

Please refer to your copy of the Yamaha Owner's Warranty Guide* for details of the warranty offered on your new Yamaha.

The Warranty Guide contains the warranty policy, an explanation of the warranty, and other important information. Becoming familiar with these policies will be to your advantage in making the best use of Yamaha's warranty programs.

There are certain requirements which you must meet in order to qualify for warranty coverage. FIRST, your new Yamaha must be operated and maintained properly, as, explained in this manual. If you have any questions about any procedure in this manual, please consult your dealer. ABUSE AND NEGLECTED MAINTENANCE MAY LEAD TO MECHANICAL FAILURES WHICH CANNOT BE COVERED UNDER WARRANTY.

SECOND, IF ANY PROBLEMS OCCUR WHICH YOU FEEL SHOULD BE COVERED UNDER WARRANTY, NOTIFY YOUR DEALER IMMEDIATELY. Don't delay, as small problems left unrepaired can become large problems which may not be covered under warranty.

We recommend that the Warranty Guide be used as a folder in which you may keep your registration and other important documents related to your new Yamaha.

* The Yamaha Owner's Warranty Guide is to be supplied by your Yamaha dealer at the time of purchase. If you did not receive one, or have lost yours, you may obtain extra copies upon request from your Yamaha dealer or by writing to:

YAMAHA MOTOR CORPORATION, U.S.A.
P.O. Box 6555, Katella Avenue
Cypress, California 90630
Attn: Warranty Department

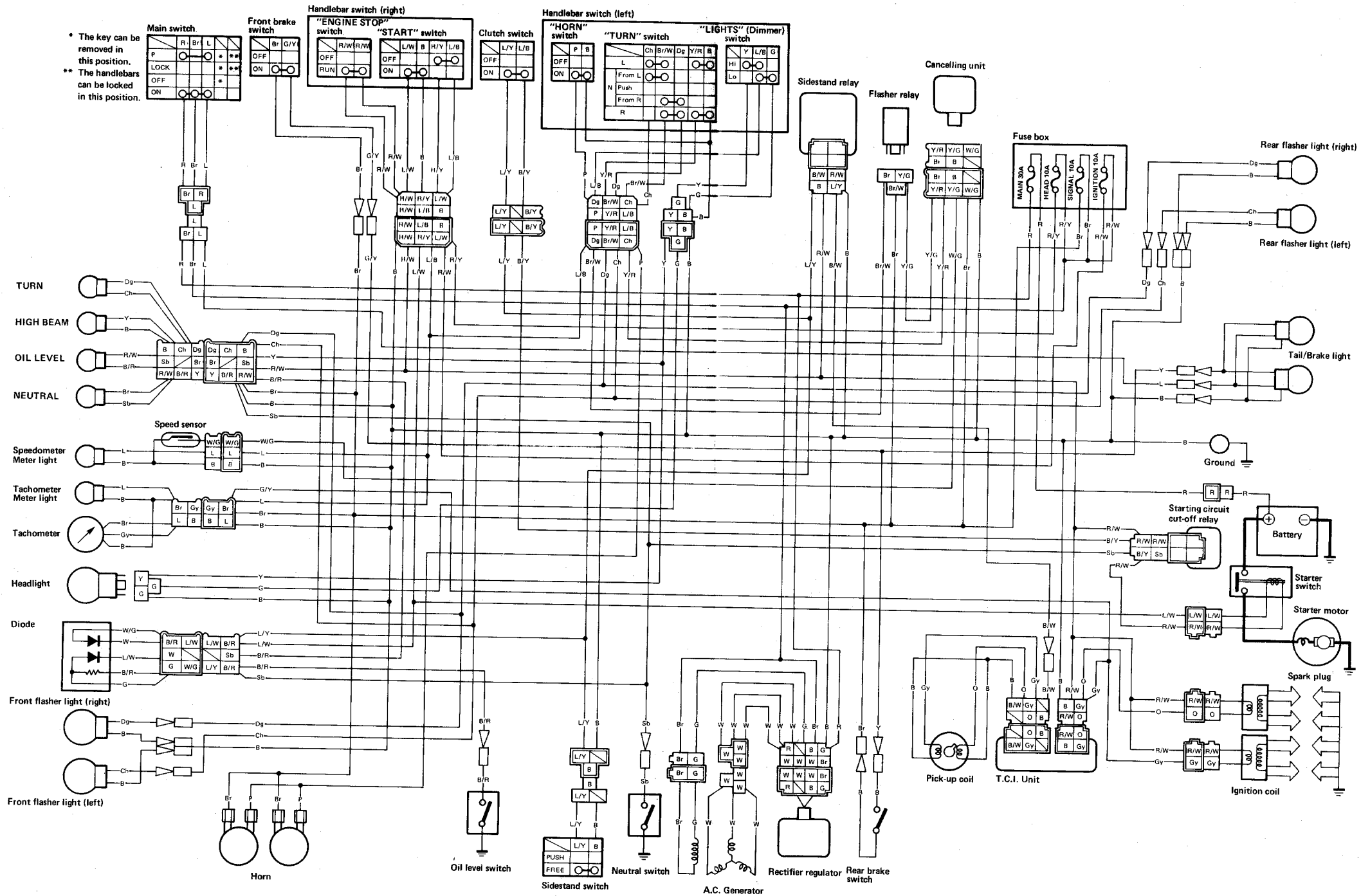
MAINTENANCE RECORD

Copies of work orders and/or receipts for parts you purchase and install will be required to document maintenance done in accordance with the emission warranty. The chart below is printed only as a reminder to you that the maintenance work is required. It is not acceptable proof of maintenance work.

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	SERVICING DEALER SIGNATURE
1,000 km or 600 mi or 1 mo.				
5,000 km or 3,000 mi or 7 mo.				
9,000 km or 5,600 mi or 13 mo.				
13,000 km or 8,100 mi or 19 mo.				
17,000 km or 10,600 mi or 25 mo.				

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	SERVICING DEALER SIGNATURE
21,000 km or 13,000 mi or 31 mo.				
25,000 km or 15,500 mi or 37 mo.				
29,000 km or 18,000 mi or 43 mo.				
33,000 km or 20,500 mi or 49 mo.				
37,000 km or 23,000 mi or 55 mo.				
41,000 km or 25,500 mi or 61 mo.				

XJ750K WIRING DIAGRAM



WIRING DIAGRAM

COLOR CODE

L.....	Blue
O.....	Orange
Br.....	Brown
B.....	Black
Dg.....	Dark green
Y.....	Yellow
Sb.....	Sky blue
Ch.....	Chocolate
G.....	Green
R.....	Red
P.....	Pink
Gy.....	Gray
W.....	White
R/W.....	Red/White
R/Y.....	Red/Yellow
W/G.....	White/Green
Br/W.....	Brown/White
L/B.....	Blue/Black
W/Y.....	White/Yellow
G/Y.....	Green/Yellow
W/R.....	White/Red
G/L.....	Green/Blue
L/W.....	Blue/White
W/B.....	White/Black
Y/R.....	Yellow/Red
Y/G.....	Yellow/Green
L/Y.....	Blue/Yellow
B/Y.....	Black/Yellow
B/R.....	Black/Red
G/R.....	Green/Red
B/W.....	Black/White