

YAMAHA

⚠ Read this manual carefully before operating this vehicle.

www.legends-yamaha-enduros.com

OWNER'S MANUAL

RZ350N2
RZ350NC2

LIT-11626-04-93

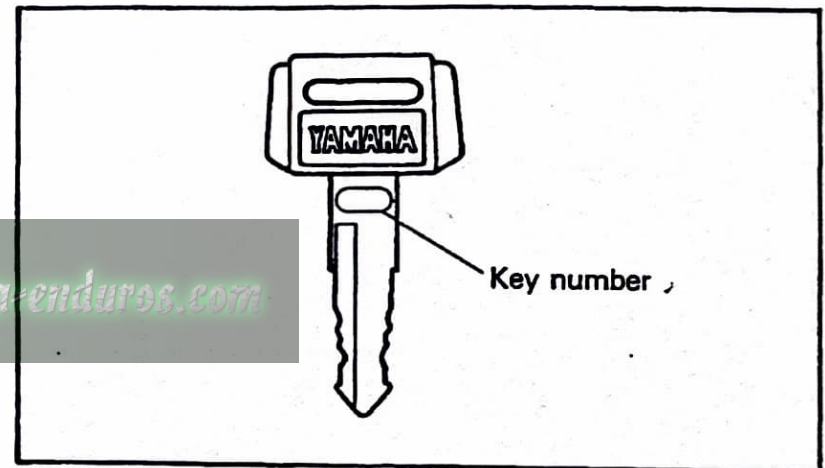
IDENTIFICATION NUMBERS RECORD

1. KEY NUMBER:

2. VEHICLE NUMBER:

3. ENGINE NUMBER:

Your key identification number is stamped on your key as shown in the following illustration. Record this number in the space provided for reference if you need a new key.



Record your vehicle and engine numbers in the spaces provided to assist you in ordering spare parts from your Yamaha dealer or for reference in case your motorcycle is stolen.

(See page 5)

INTRODUCTION

Congratulations on your purchase of the Yamaha RZ350N2/RZ350NC2. This model is the result of Yamaha's vast experience in the production of fine sporting, touring, and pacesetting racing machines. It represents the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields. This manual will give you an understanding of the operation, inspection, and basic maintenance of this motorcycle. If you have any questions about the operation or maintenance of your motorcycle, please consult a Yamaha dealer.

NOTE:

Some data in this manual may become outdated due to future improvement on this model. If you have any questions about this manual or your motorcycle, please consult a Yamaha dealer.

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

**TECHNICAL PUBLICATIONS
SERVICE DIVISION
MOTORCYCLE OPERATIONS
YAMAHA MOTOR CO., LTD.**

A-100

U-600

WARNING:

PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING THIS MOTORCYCLE. DO NOT ATTEMPT TO OPERATE THIS MOTORCYCLE UNTIL YOU HAVE ATTAINED A SATISFACTORY KNOWLEDGE OF ITS CONTROLS AND OPERATING FEATURES AND UNTIL YOU HAVE BEEN TRAINED IN SAFE AND PROPER RIDING TECHNIQUES. REGULAR INSPECTIONS AND CAREFUL MAINTENANCE, ALONG WITH GOOD RIDING SKILLS, WILL ENSURE THAT YOU SAFELY ENJOY THE CAPABILITIES AND THE RELIABILITY OF THIS 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.

U-000

NOTE:

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

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SAFETY WARNINGS:

1. Traffic regulations vary from state (jurisdiction) to state (jurisdiction). Study the regulations in your area 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 unattended 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.

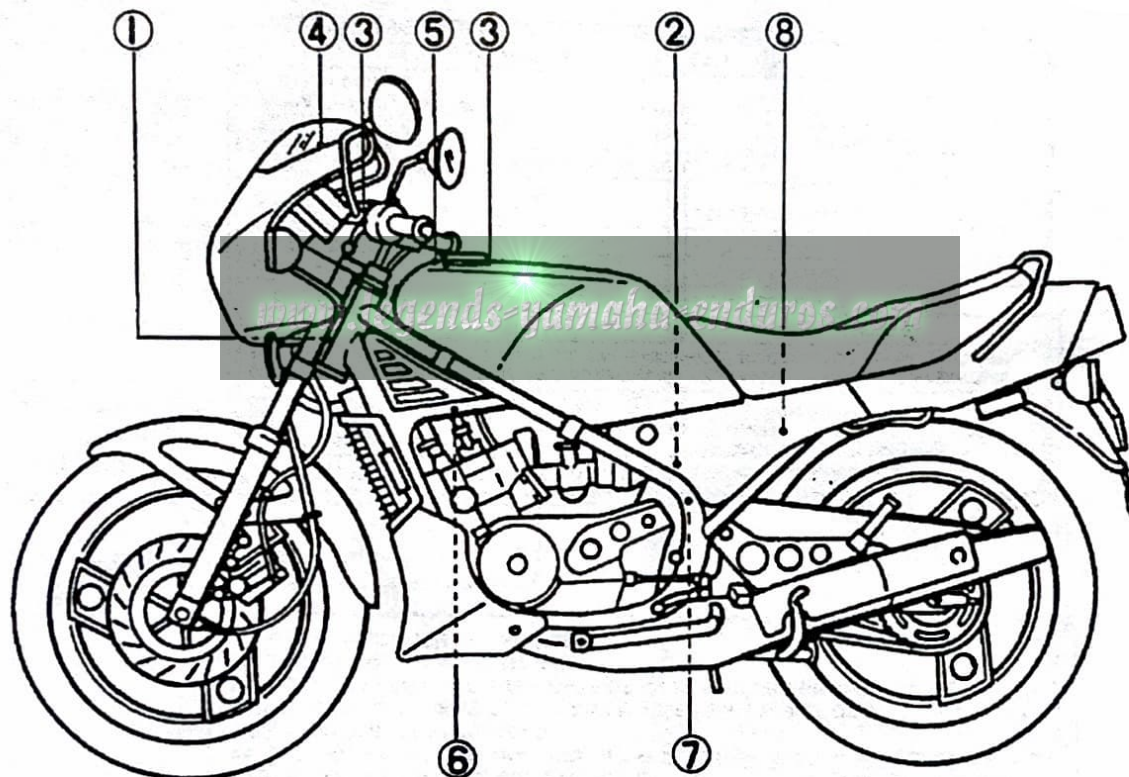
- * Do not park the motorcycle on a slope or soft ground; the motorcycle may overturn.**
- 6. When transporting the motorcycle in another vehicle, be sure it is kept upright and that the fuel cock(s) is turned to "ON" or "RES" (for vacuum type)/"OFF" (for manual type). If it should lean over, gasoline may leak out of the 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, passenger, accessories, and cargo must not exceed the maximum load limit (See page 30.)**
- 10. Be sure that the rider's and a passenger's feet are on the foot pegs during operation.**
- 11. It is important in maintaining control of the vehicle to keep the rider's hands on the handlebars at all time.**

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LOCATION OF THE IMPORTANT LABELS

Please read following labels carefully before operating this motorcycle.



①

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

②

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

③

UNLEADED FUEL ONLY

④

WINDSHIELD CLEANING

CLEAN THE WINDSHIELD WITH A CLOTH OR FOAM RUBBER DAMPED WITH A NEUTRAL DETERGENT, AND AFTER CLEANING, THOROUGHLY WASH OUT WITH WATER. SOME CLEANING COMPOUNDS FOR PLASTICS MAY LEAVE SCRATCHES ON SURFACE OF THE WINDSHIELD. BEFORE USING, MAKE A TEST BY POLISHING AN AREA WHICH DOES NOT AFFECT YOUR VISIBILITY.

CAUTION

AVOID USING ANY ALKALINE OR STRONG ACID CLEANER, GASOLINE, BRAKE FLUID, OR ANY OTHER SOLVENT.

⑤

WARNING

The catalytic converters on this motorcycle will emit destructive heat. Avoid touching the mufflers and keep flammable materials away.

Consult the Owner's Manual for more information.

⑥

MOTORCYCLE NOISE EMISSION CONTROL INFORMATION

THIS 19 x x YAM x x x x x MOTORCYCLE MEETS EPA NOISE EMISSION REQUIREMENTS OF x x dB (A) AT x x x x RPM BY THE FEDERAL TEST PROCEDURE.

MODIFICATIONS WHICH CAUSE THIS MOTORCYCLE TO EXCEED FEDERAL NOISE STANDARDS ARE PROHIBITED BY FEDERAL LAW. SEE OWNER'S MANUAL.

⑦

**YAMAHA MONOCROSS
SUSPENSION**
"DE CARBON" SYSTEM

x x x — x x

YAMAHA MOTOR CO., LTD.

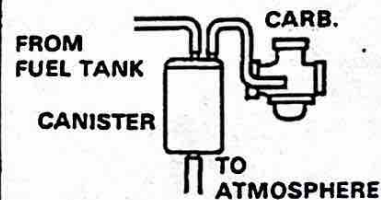
MADE IN JAPAN

— WARNING —

1. Contains high pressure nitrogen gas.
2. See owner's manual for disposal and adjusting unit.
3. Do not open. Do not incinerate. Incineration, puncture or disassembly may cause this unit to explode.

⑧

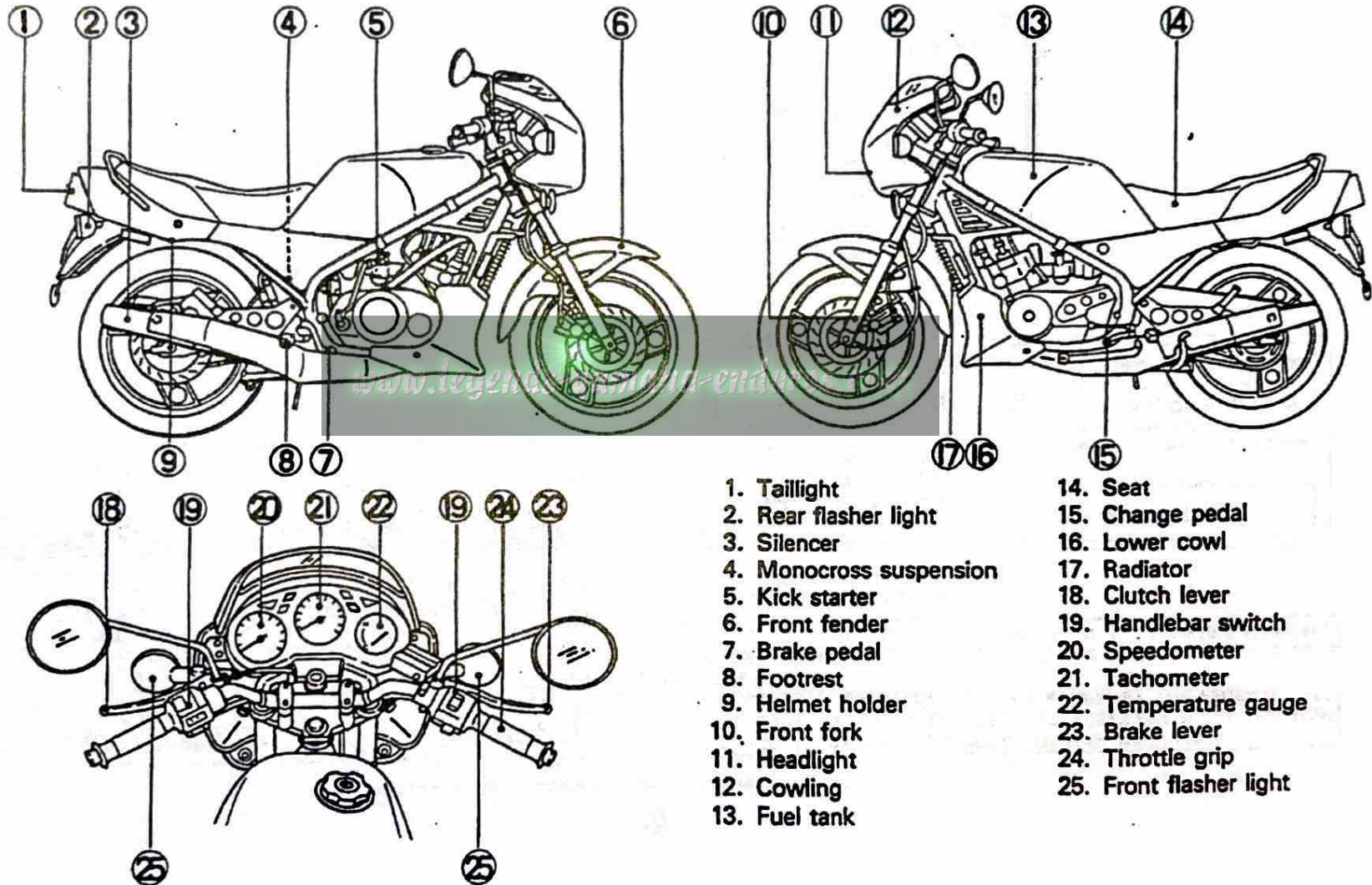
(For California)

EMISSION HOSE ROUTING

YAMAHA MOTOR CO., LTD. 

A-500

DESCRIPTION



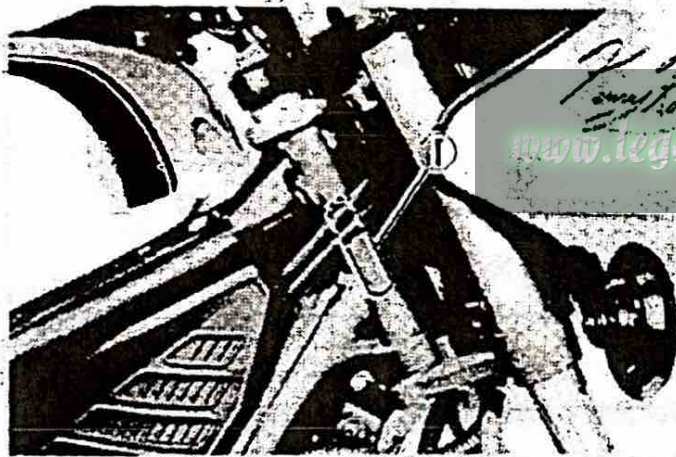
A-600

MOTORCYCLE IDENTIFICATION

A-800

Vehicle identification number

The vehicle identification number is stamped into the steering head pipe.



1. Vehicle identification number

U-004

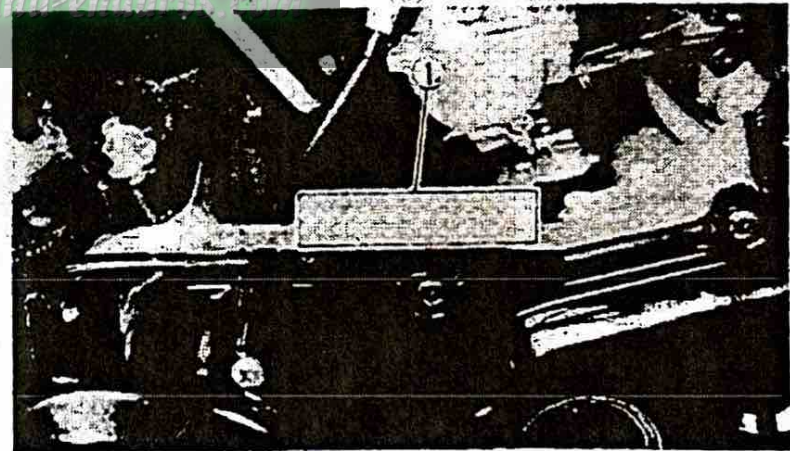
NOTE: _____

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.

A-700

Engine serial number

The engine serial number is stamped into the left side of the engine.



1. Engine serial number

U-003

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.

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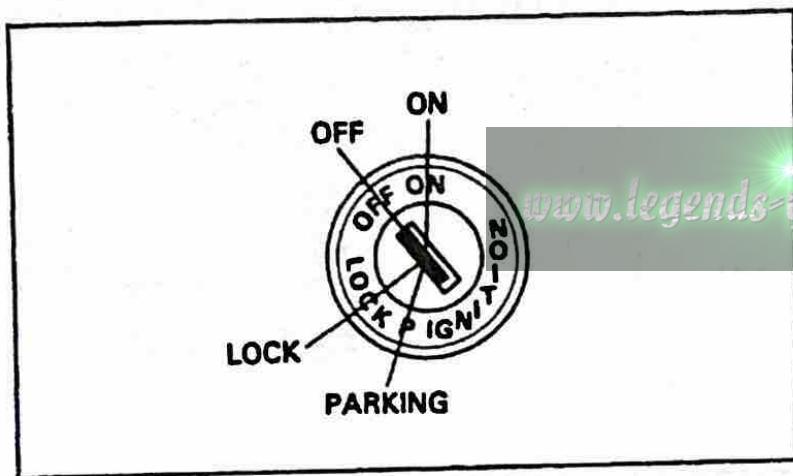
B-000

CONTROL FUNCTIONS

B-001

Main switch

The main switch controls the ignition and lighting systems; its operation is described below.



B-014

ON:

Electrical circuits are switched on and taillight comes on. The engine can be started. The key cannot be removed in this position.

U-006

NOTE:

When the engine is started, the headlight and meter lights come on automatically, and the lights stay on until the main switch is turned to "OFF" even if the engine stalls.

B-006

OFF:

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

B-007

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 17) for proper operation.

B-008

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.

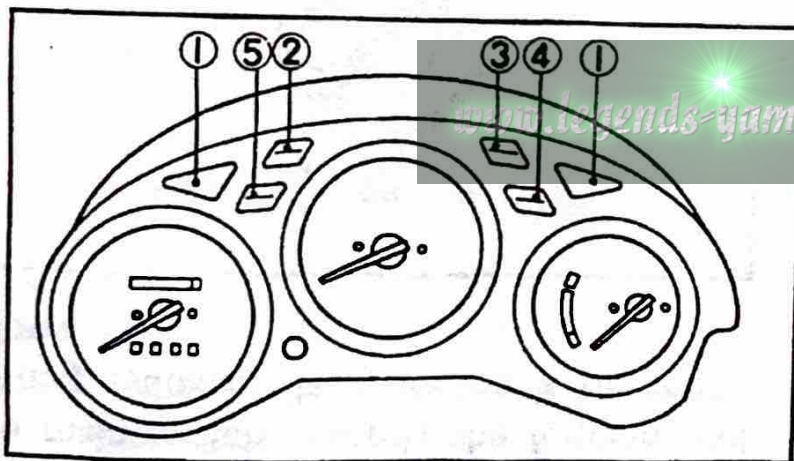
U-007

NOTE:

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

B-100

Indicator lights



1. "TURN" indicator light
2. "NEUTRAL" indicator light
3. "HIGH BEAM" indicator light
4. "OIL" warning indicator light
5. "CATALYZER" warning indicator light

B-101

"TURN" indicator light (orange):

This indicator flashes when the turn switch is "ON".

B-102

"NEUTRAL" indicator light (green):

This indicator comes on when the transmission is in neutral.

B-103

"HIGH BEAM" indicator light (blue):

This indicator comes on when the headlight high beam is used.

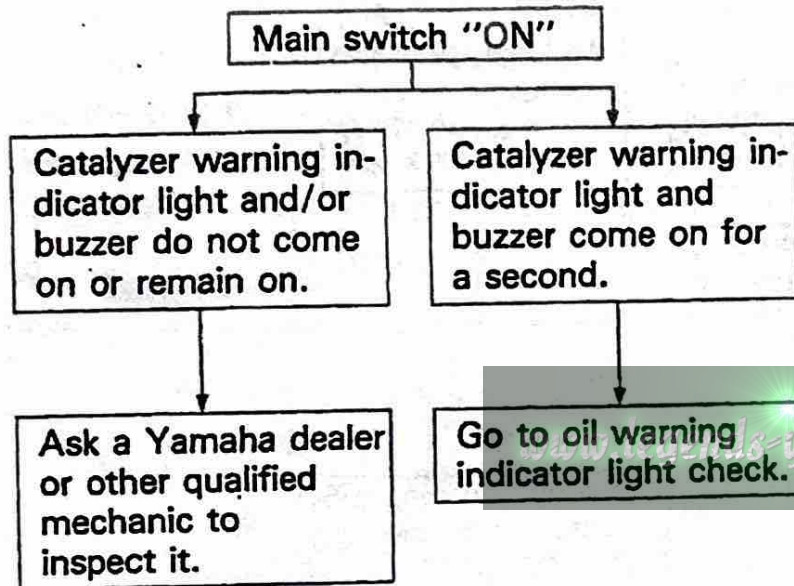
B-110

"CATALYZER" warning indicator light (red) and buzzer

This indicator light and buzzer come on when the catalyzer heats up extremely (about 900°C). So stop the engine immediately and wait until it will cool down sufficiently. These light and buzzer circuits can be checked by the following procedure.

B-304

Catalyzer warning indicator circuit check



B-107

"OIL" warning indicator light (red):

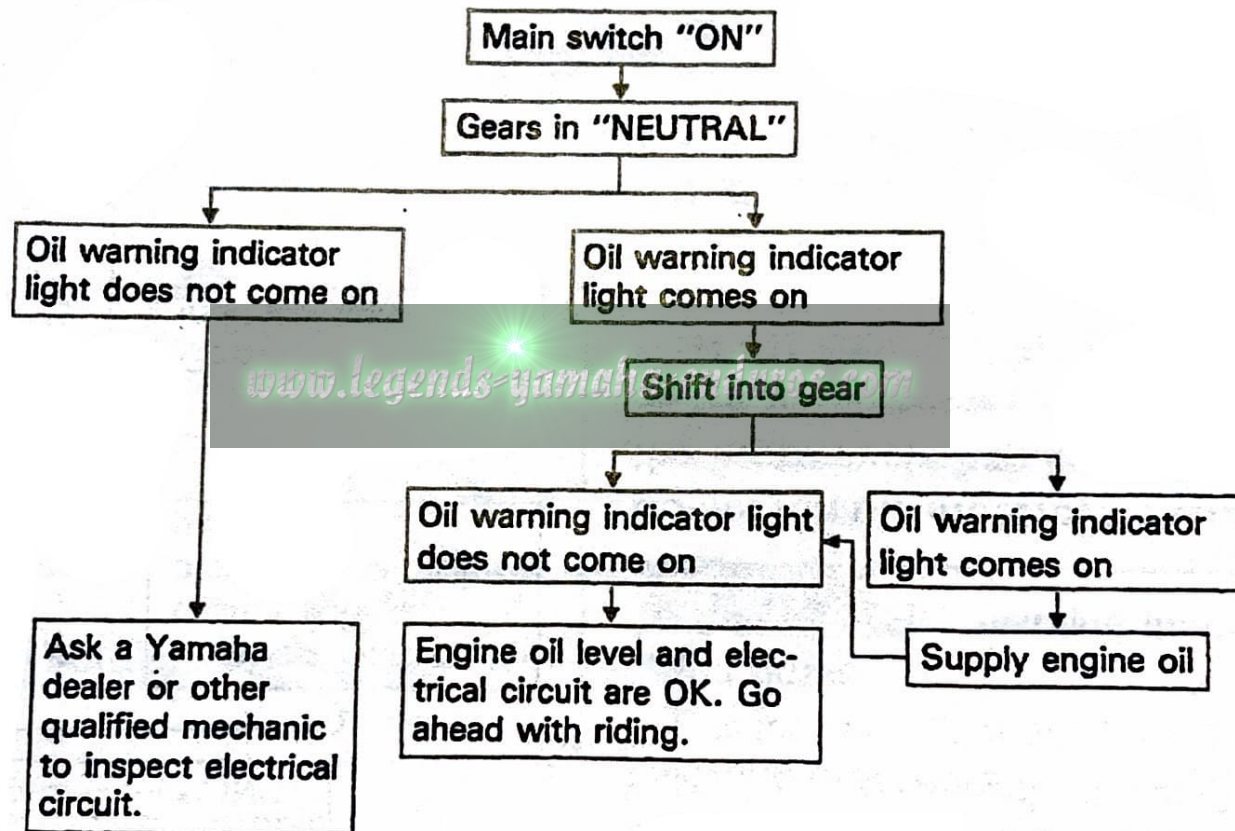
This indicator comes on when the oil level is low. This light circuit can be checked by the following procedure.

U-300

CAUTION:

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

Oil warning light checking method

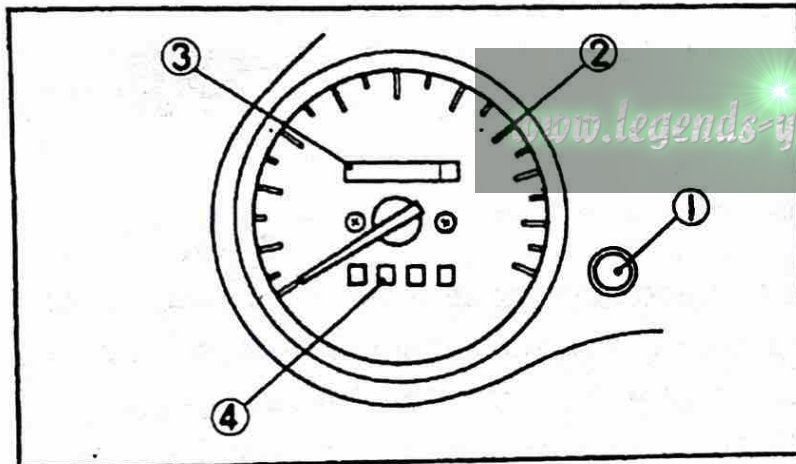


B-400

Speedometer

The odometer and trip odometer are built into the speedometer. The trip odometer can be reset to "0" with the reset switch.

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



1. Reset switch 2. Speedometer 3. Odometer
4. Trip odometer

B-403

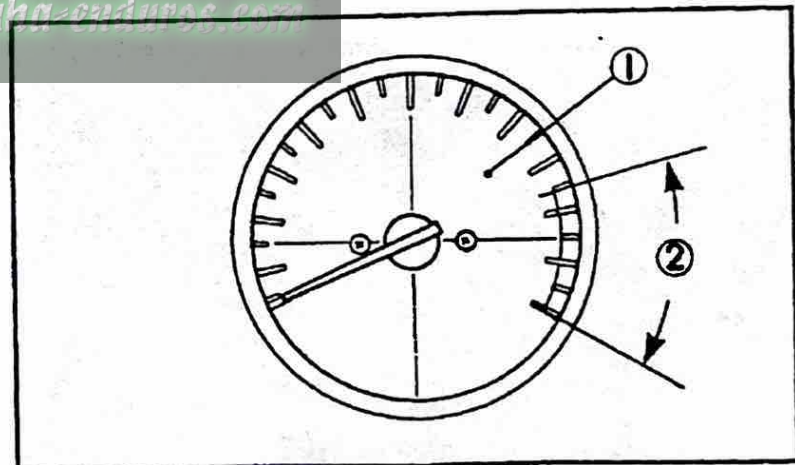
Tachometer

This model is equipped with a tachometer so the rider can monitor the engine speed and keep it within the ideal power range.

U-304

CAUTION:

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

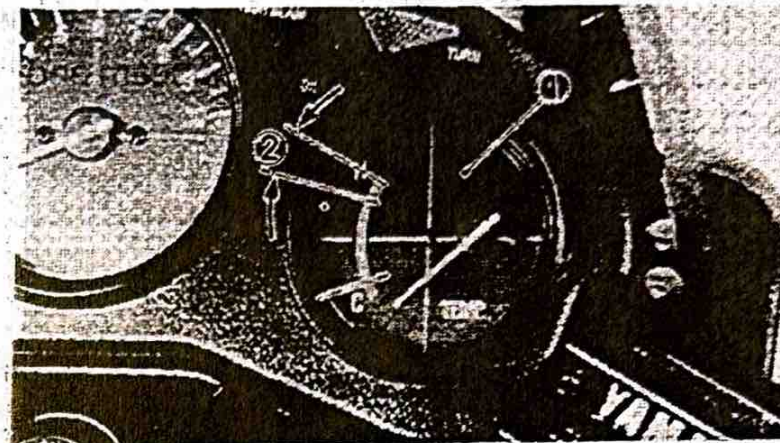


1. Tachometer 2. Red zone

B-501*

Engine temperature gauge

This gauge indicates the coolant temperature when the main switch is ON. The engine operating temperature will vary with changes in weather and engine load. If the needle points to the red zone or higher, stop your motorcycle and let the engine cool. (See page 56 for more detail.)



1. Engine temperature gauge 2. Red zone

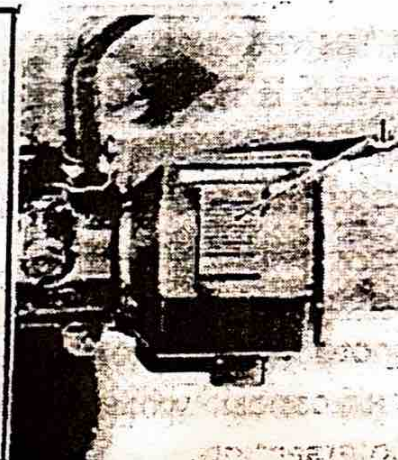
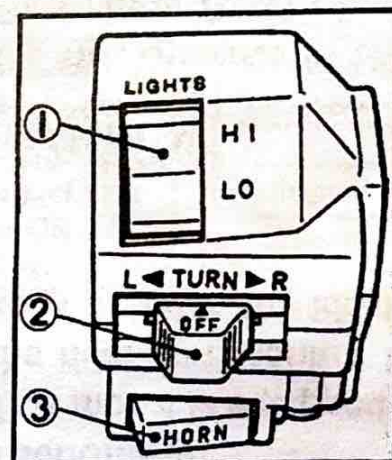
U-305

CAUTION:

When the engine is overheated, do not continue riding.

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Handlebar switches:



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

B-601

"LIGHTS" (Dimmer) switch

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

B-603

"TURN" signal switch

This model is equipped with self-cancelling turn signals. To signal a righthand turn, push the switch to the right; to signal a left-hand turn, push the switch to the left. Once the switch is released it will return to the center position. To cancel the signal, push the switch in 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 for 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.

B-602

"HORN" switch

Press the switch to sound the horn.

B-609

"ENGINE STOP" switch

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

B-701

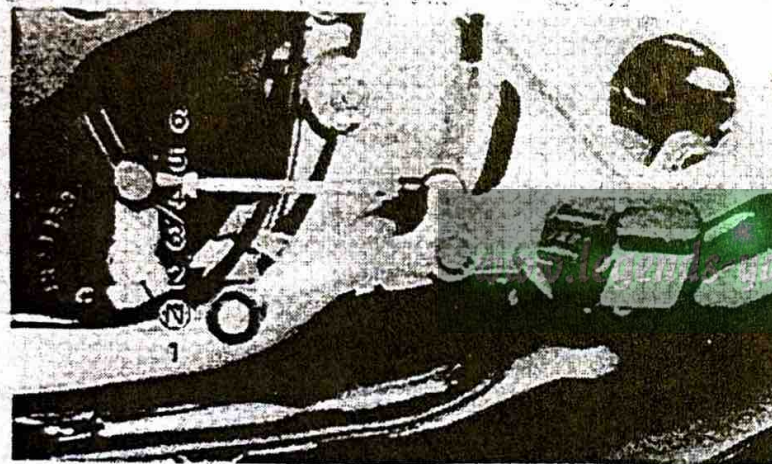
Clutch lever

The clutch lever is located on the left handlebar; it disengages or engages the clutch. 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.

B-800*

Change pedal

The gear ratios of the constant-mesh 6-speed transmission are ideally spaced. The gears can be shifted by using the change pedal on the left side of the engine.



N. Neutral

B-900

Front brake lever

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

B-901

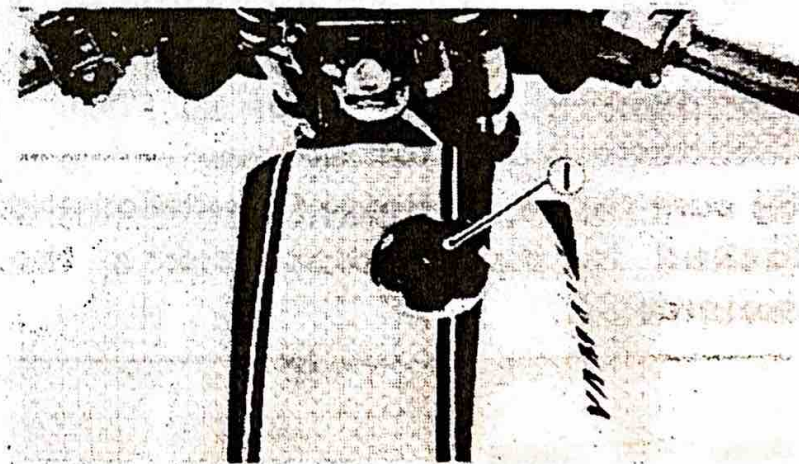
Rear brake pedal

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

C-003

Fuel tank cap

1. To remove the tank cap, insert the key in the lock and turn the key 1/4 turn counterclockwise. Rotate the cap 1/3 turn counterclockwise and remove it from the tank.



1. Fuel tank cap

NOTE:

The tank cap cannot be reinstalled unless it is unlocked. The key must remain in the cap until the cap is properly installed and locked on to the fuel tank.

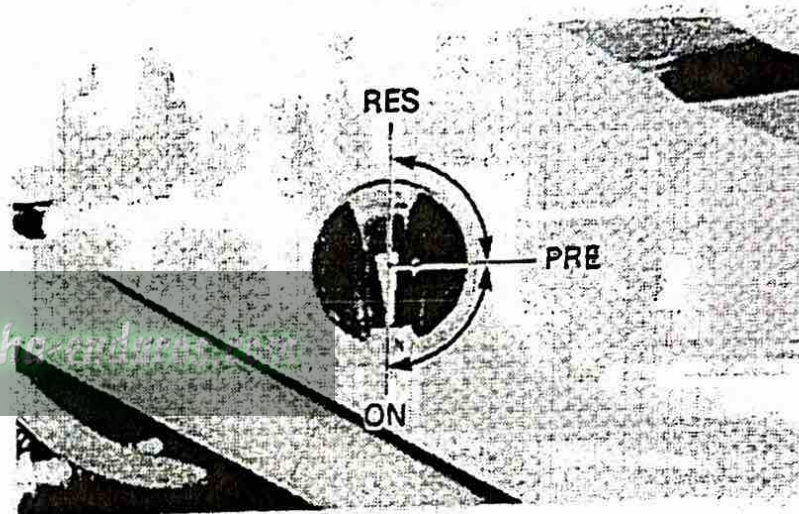
2. To reinstall the tank cap, set the cap in the filler neck and rotate the cap 1/3 turn clockwise. Lock the cap by turning the key 1/4 turn clockwise and remove the key.

WARNING:

Be sure the cap is properly installed and locked in place before riding the motorcycle.

Fuel cock

The negative pressure fuel cock supplies fuel from the tank to the carburetors 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", start the engine, then switch to "RES".

FILL THE TANK AT THE FIRST OPPORTUNITY. BE SURE TO SET THE LEVER TO "ON" AFTER REFUELING.

U-014

NOTE:

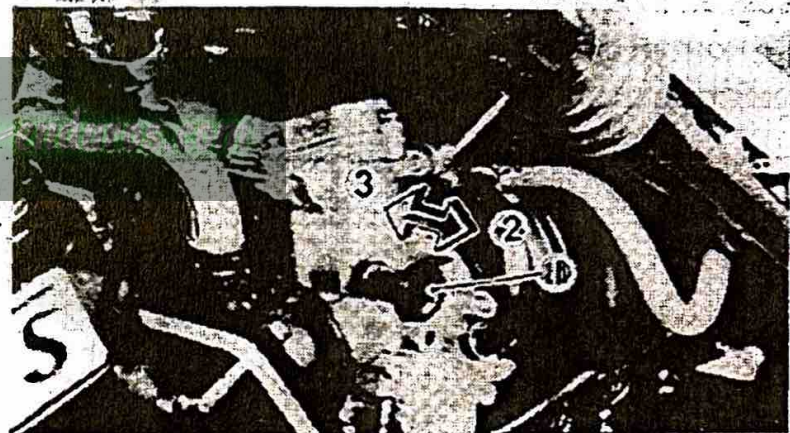
The fuel cock operates on vacuum from the engine when set at "ON" or "RES." If the line connecting the cock to the carburetor intake manifold is not connected or has a leak, the cock will not function properly.

PRI: This indicates prime. With the lever 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 "ON" after starting the engine.

C-202

Starter knob (CHOKE)

When cold, the engine requires a richer air-fuel mixture for starting. A separate starter circuit supplies this mixture. Pull the starter knob out to open the circuit for starting. When the engine has warmed up, push the knob in to close the circuit.

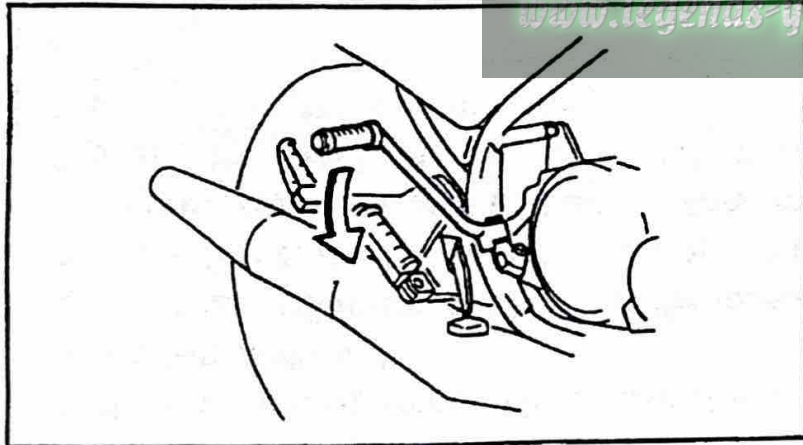


1. Starter knob 2. Open the circuit 3. Close the circuit

C-600

Kick starter

Raise the right footrest, and rotate the kick starter away from the engine. Push the starter down lightly with your foot until the gears engage, then kick smoothly and forcefully to start the engine. This model has a primary-coupled kick starter so the engine can be started in any gear if the clutch is disengaged. In normal practice, however, shift to neutral before starting.



C-300

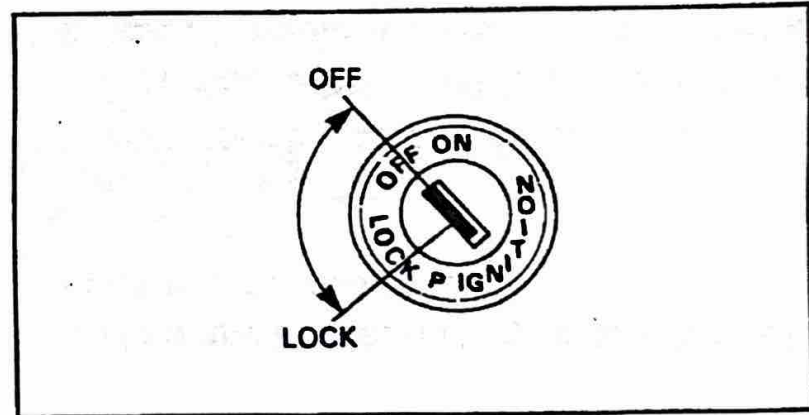
Steering lock

The steering is locked when the main switch is turned to "LOCK." To lock the steering, turn the handlebars all the way to the left or right. With the key at "OFF," push it into the main switch, turn the key counterclockwise to "LOCK," and remove the key. To release the lock, turn the key clockwise.

U-614

WARNING:

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

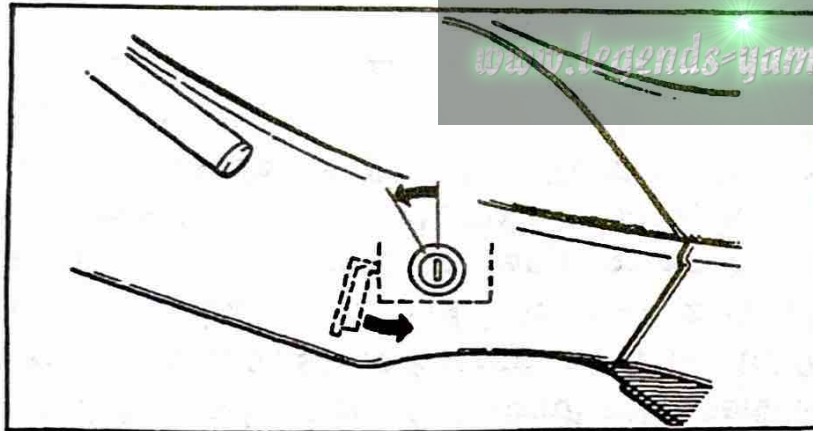


C-402

Seat lock

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

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



C-500

Helmet holder

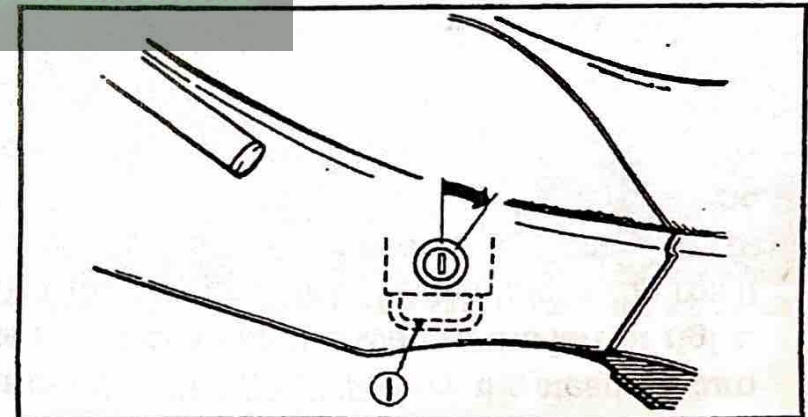
To open the helmet holder, insert the key in the lock and turn it as shown.

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

U-615

WARNING:

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

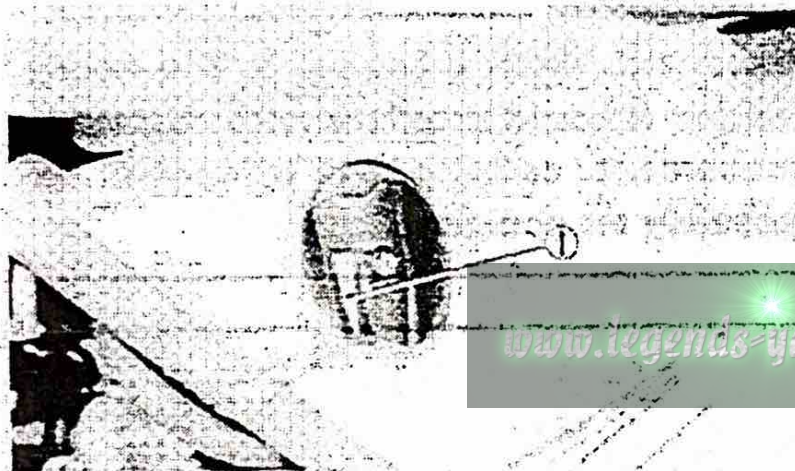


1. Helmet holder

C-704

Left side cover removal

To remove the left side cover, remove the fuel cock knob and pull out the side cover. To install the side cover, reverse the above steps.

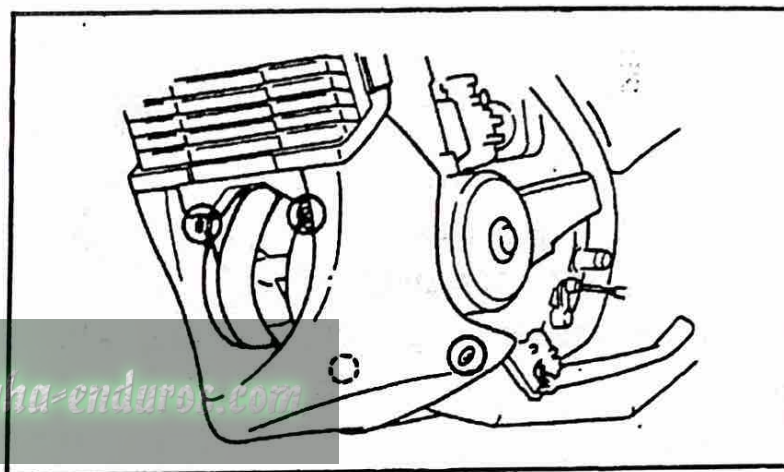


1. Fuel cock knob

D-600

Lower cowl removal

1. Remove the four screws securing the lower cowl.

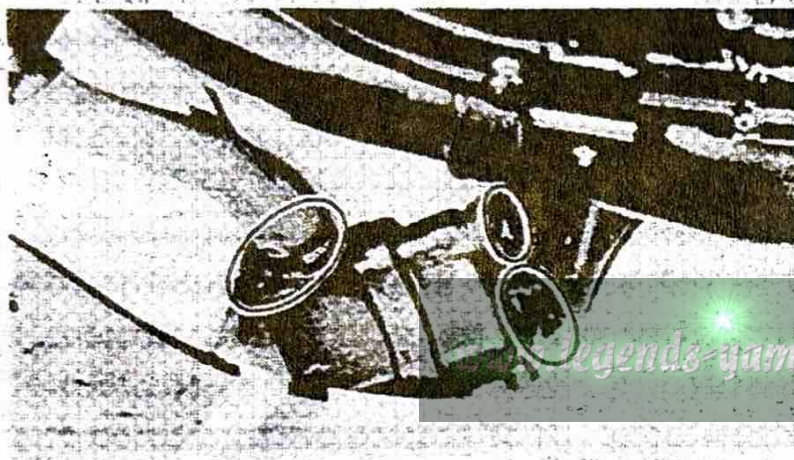


U-077

NOTE: _____

Do not remove the three screws securing the secondary air filter assembly.

2. Disconnect the hoses by loosening the clamp, and remove the lower cowl with air filter assembly.



3. To install the lower cowl, reverse the removal procedure.

C-800*

Front forks

The front forks of this model are pneumo-mechanical; namely, a combination air and mechanical coil spring in the inner tubes. By adjusting the air pressure, you can alter the suspension to suit the motorcycle's load and the operating conditions. Refer to page 75 for proper adjustment procedures.

C-902*

Rear shock absorber

The spring preload of the rear shock absorber can be adjusted to suit motorcycle's load (ex: optional accessories etc.) and riding conditions. Refer to page 78 for proper adjustment procedures.

D-400

Catalyzer

This motorcycle is equipped with catalytic converters in both mufflers. Therefore, the temperature of the mufflers during and directly after engine operation is extremely high.

- Never park this motorcycle in an area where a fire hazard such as grass or rags may exist.
- Make sure the mufflers have cooled down before adjusting or lubricating the drive chain or checking the tires.
- Do not allow the engine to idle for very long after the engine is fully warmed up.
- If the catalytic converter overheats, a warning light will come on and a buzzer will sound. If this occurs, immediately stop the motorcycle in a safe area, shut off the engine, let it cool off, and then restart. If the warning light and buzzer operate frequently, consult a Yamaha dealer or other qualified mechanic.

D-500K

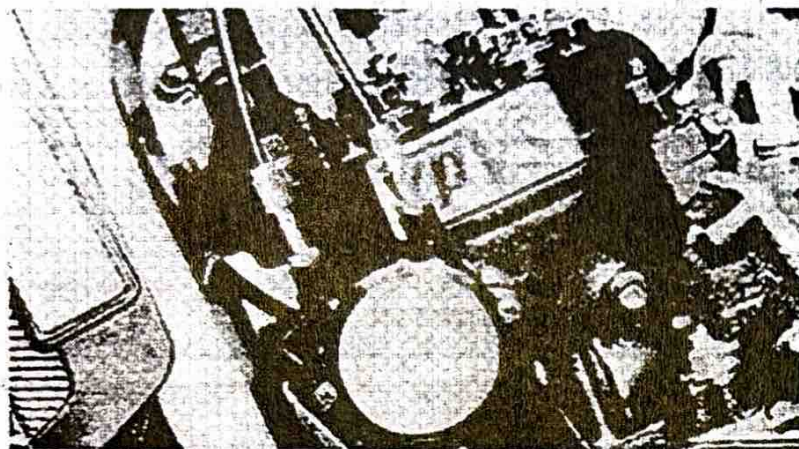
Y.P.V.S. (Yamaha Power Valve System)

The Y.P.V.S. is a vital part of the engine and requires very sophisticated adjustment. Most adjustment should be left to a Yamaha dealer or other qualified mechanic who has the professional knowledge and experience to do so.

U-369

CAUTION:

The Y.P.V.S. was set at the Yamaha factory after many tests. If the settings are disturbed without having technical knowledge, poor engine performance and damage may result.



The Y.P.V.S. operation can be heard in the following instances:

- When the main switch is turned on and the engine is started.
- When the engine stalls while the main switch is on.

U-370K

CAUTION:

If the Y.P.V.S. does not operate, ask a Yamaha dealer or other qualified mechanic.

D-300*

Sidestand

This model is equipped with an ignition circuit cut-off system. The motorcycle must not be ridden when the sidestand is down. The sidestand is located on the left side of the frame. (Refer to page 38 for an explanation of this system.)

U-694

WARNING:

This motorcycle must not be operated with the sidestand in the down position. If the stand is not properly retracted, it could contact the ground and distract the operator resulting in a possible loss of control. Yamaha has designed into this motorcycle a lockout system to assist the operator in fulfilling his responsibility of retracting the sidestand. Please check carefully the operating instructions listed below and if there is any indication of a malfunction, you must return the motor-

cycle to a Yamaha dealer or other qualified mechanic immediately for repair.

D-306

Sidestand switch operation check

Check the operation of the sidestand switch against the information below.

U-690

WARNING:

Be sure to use the centerstand during this inspection.

TURN MAIN SWITCH TO "ON" AND ENGINE STOP SWITCH TO "RUN".

TRANSMISSION IS IN NEUTRAL AND SIDESTAND IS DOWN.

KICK THE KICK STARTER.

ENGINE WILL START.

PULL IN CLUTCH LEVER AND PUT TRANSMISSION IN GEAR.

ENGINE WILL STALL.

SIDESTAND SWITCH IS OK.

U-695

WARNING:

If improper operation is noted, consult a Yamaha dealer or other qualified mechanic immediately.

PRE-OPERATION CHECK

Before using this motorcycle check the following points:

No.	ITEMS	REMARKS	PAGE
1.	Brake	Check operation, free play, fluid level and fluid leakage. Top-up with D.O.T. No.3 brake fluid if necessary.	26, 27, 63 ~ 67
2.	Clutch	Check operation, condition and free play. Adjust if necessary.	27, 67, 68
3.	Engine oil	Check engine oil level, add oil if necessary.	27
4.	Transmission oil	Check transmission oil level, add oil if necessary.	28, 55, 56
5.	Drive chain	Check chain slack and condition. Adjust if necessary.	29, 68 ~ 71
6.	Engine coolant	Check for coolant level and leakage, add coolant if necessary.	28, 29, 56 ~ 60
7.	Throttle	Check for smooth operation. Adjust if necessary.	27
8.	Battery	Check fluid level, top-up with distilled water if necessary.	35, 81 ~ 84
9.	Lights/Signals	Check operation.	35, 85 ~ 87
10.	Wheels/Tires	Check tire pressure, wear, damage.	29 ~ 34, 88 ~ 91
11.	Fittings/Fasteners	Check all chassis fittings and fasteners. Adjust if necessary.	34, 54

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.

E-102*

Brakes (See page 63 for more detail)

1. Brake lever and brake pedal

Check for correct free 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. If the free play is incorrect, adjust it.

2. Brake fluid

Check the brake fluid level.
Add fluid if necessary.

Recommended brake fluid: DOT #3

3. Check the disc pads. Refer to page 65.

U-618

WARNING:

A soft, spongy feeling in the brake lever (and/or brake pedal) 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 a hazardous condition in the brake system.

U-021

NOTE:

When this brake service is necessary, ask a Yamaha dealer or other qualified mechanic.

E-106

Brake fluid leakage

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

U-624

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.

E-200*

Clutch (See page 67 for more detail)

Check the free play in the clutch lever, and make sure the lever operates properly. If the free play is incorrect, adjust it.

E-300*

Throttle grip

Turn the throttle grip to see if it operates properly, and check the free play. Make sure the grip returns by spring force when released. Ask a Yamaha dealer or other qualified mechanic to make any necessary adjustments.

E-409

Engine oil

Make sure the engine oil is at the specified level. Add oil as necessary.

Recommended oil:

Yamalube 2-cycle oil or air-cooled 2-stroke engine oil with "BIA certified for service TC-W".

Oil quantity:

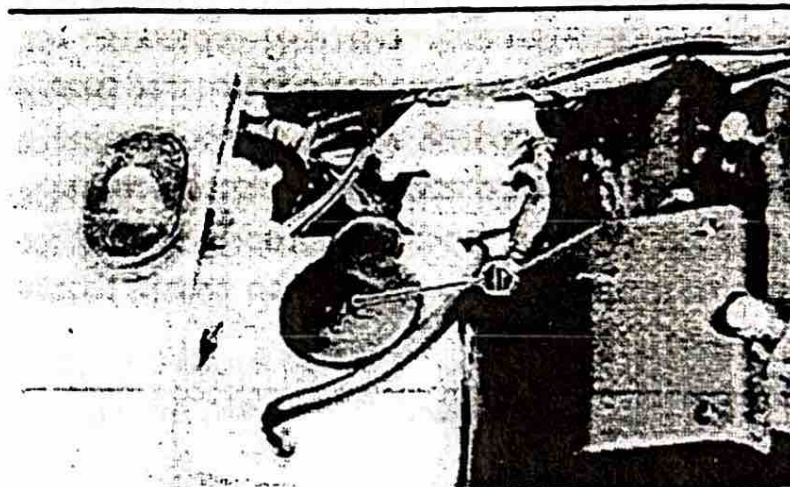
Total amount

1.6 L (1.41 Imp qt, 1.69 US qt)

U-042

NOTE:

Be sure to push the cap into the filler neck until it is properly seated.



1. Oil tank cap

E-404*

Transmission oil (See page 55 for more detail)

Make sure the transmission oil is at the specified level. Add oil as necessary.

Recommended oil:

SAE 10W30 type SE motor oil

Oil quantity:

Total amount:

1.7 L (1.5 Imp qt, 1.8 US qt)

Periodic oil change: www.legends-yamaha-enduro.com

1.5 L (1.3 Imp qt, 1.6 US qt)

E-600*

Coolant

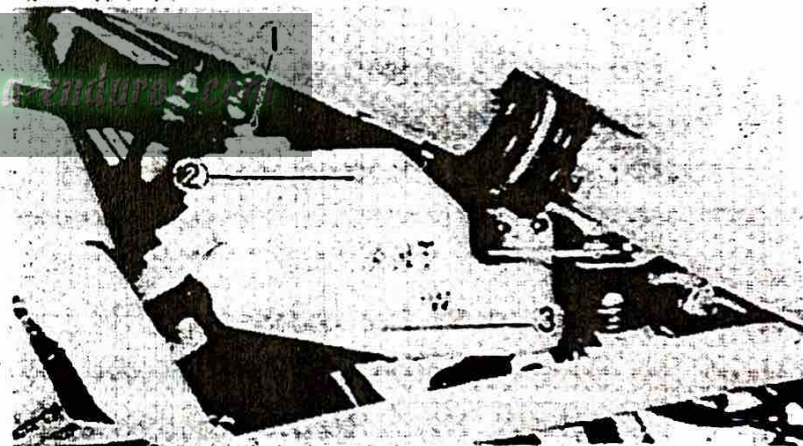
Check the coolant level in the reservoir tank when the engine is cold. (The coolant level will vary with engine temperature.) The coolant level is satisfactory if it is between the FULL and LOW marks on the tank. If the coolant level is at or below the LOW level, add tap water (soft water) to bring the level up to FULL.

Change the coolant every two years. (See page 56 for more detail.)

U-626

WARNING:

Do not remove the radiator cap when the engine is hot.



1. Coolant reservoir tank cap
2. "FULL" level
3. "LOW" level

U-309

CAUTION:

Hard water or salt water is harmful to the engine. You may use distilled water if you can't get soft water.

Reservoir tank capacity:

Total:

215 cm³ (0.19 Imp qt, 0.23 US qt)

From LOW to FULL level:

185 cm³ (0.16 Imp qt, 0.20 US qt)

E-500*

Chain (See page 68 for more detail)

Check the general condition of the chain and check the chain slack before every ride. Lubricate and adjust the chain as necessary.

E-901

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.

U-675

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	168 kg (370 lb)	
Maximum load*	207 kg (456 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*	226 kPa (2.3 kg/cm ² , 32 psi)	275 kPa (2.8 kg/cm ² , 40 psi)
High speed riding	196 kPa (2.0 kg/cm ² , 28 psi)	226 kPa (2.3 kg/cm ² , 32 psi)

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

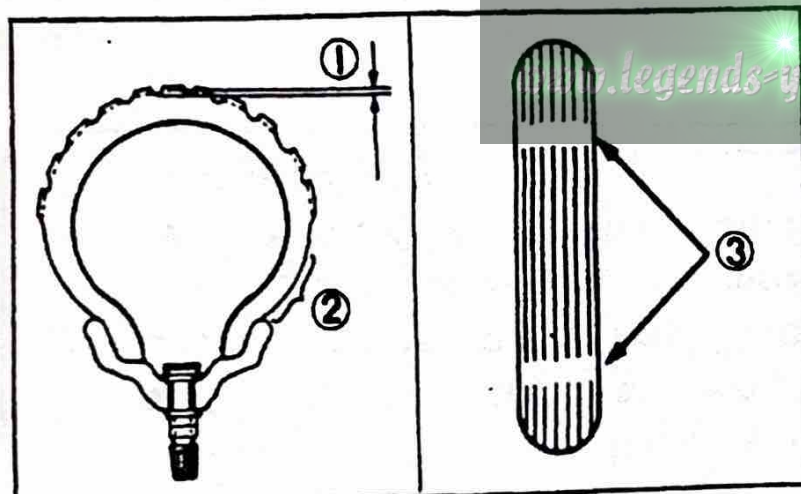
U-677

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

FRONT:

Manufacture	Size	Type
Yokohama	90/90-18	Y-994A
Dunlop	90/90-18	F14A

REAR:

Manufacture	Size	Type
Yokohama	110/80-18	Y-996
Dunlop	110/80-18	K230

Minimum tire tread depth (front and rear)

1.0 mm (0.04 in)

U-682

WARNING:

1. It is dangerous to ride with a worn-out tire. When a tire tread 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.

E-937

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.

U-686

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

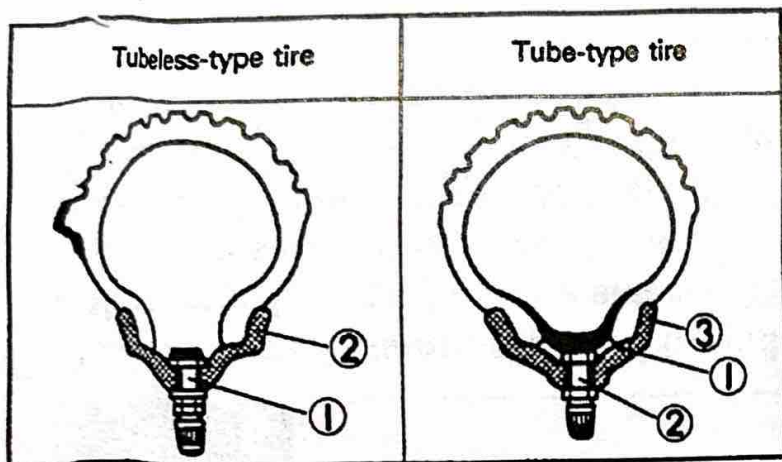
Tubeless-type Wheel

→ Tube-type or Tubeless tires

U-687

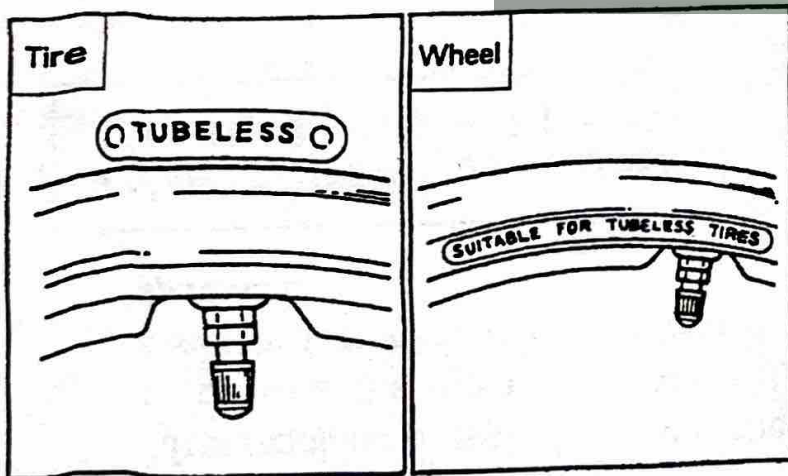
WARNING:

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



1. Air valve
2. Cast wheel
(Tubeless 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. 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. If not, torque it as specified.

Tightening torque:

1.5 Nm (0.15 m•kg, 1.1 ft•lb)

E-939

Accessories or replacement parts

U-697

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 compatible 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.

E-850

Fittings/Fasteners

Always check the tightness of chassis fittings and fasteners before a ride. Use the chart on page 54 to find the correct torque.

E-700

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.

E-704

Switches

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

E-705*

Battery (See page 81 for more detail)

Check the fluid level and top-up if necessary. Use only distilled water if refilling is necessary.

E-806K

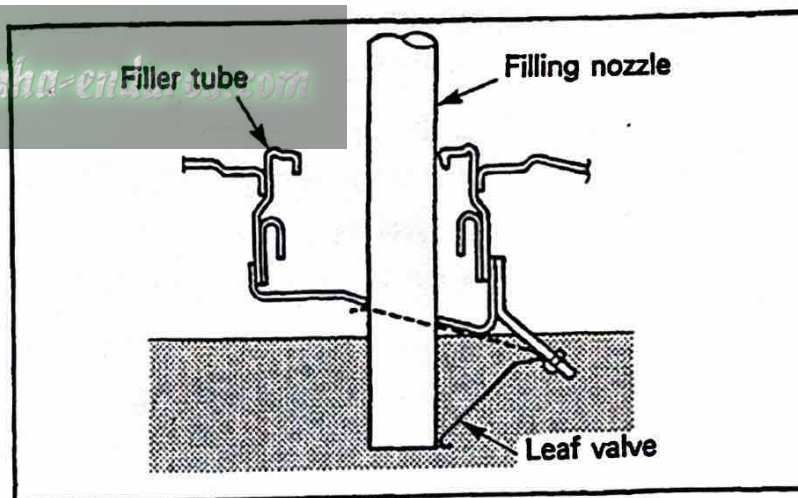
Fuel

Make sure there is sufficient fuel in the tank. To fill the tank with fuel, be sure to insert the filling nozzle into the filler hole as shown.

U-610

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 as shown in the illustration or it may overflow when the fuel heats up later and expands.



Recommended fuel:

UNLEADED FUEL ONLY

(Unleaded regular gasoline)

Fuel tank capacity:

Total:

20.0 L (4.3 Imp gal, 5.3 US
gal):RZ350N2

18.0 L (4.0 Imp gal, 4.8 US
gal):RZ350NC2

Reserve:

2.0 L (0.4 Imp gal, 0.5 US gal)

U-371

CAUTION:

The use of leaded-gasoline will give unrepairable damage to the catalyzer. So the muffler assembly must be replaced.

OPERATION AND IMPORTANT RIDING POINTS

U-627

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 that you do not thoroughly understand.

U-311

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.

U-628

WARNING:

1. 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.
2. Before starting out, always be sure the sidestand is up. Failure to retract the sidestand completely can result in a serious accident when you try to turn a corner.

Starting and warming up a cold engine

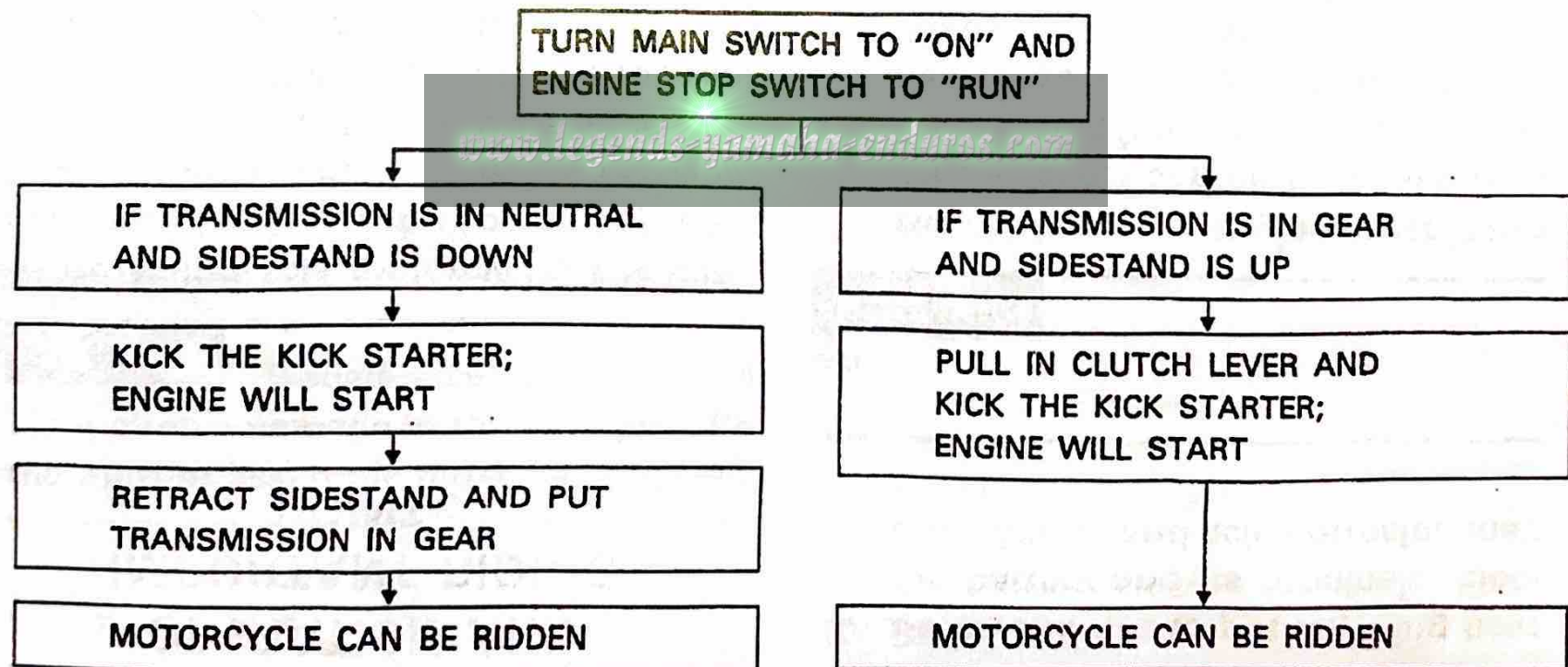
U-074

NOTE: _____

This motorcycle is equipped with an ignition circuit cut-off 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 must not be ridden when the sidestand is down.
-



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

U-076

NOTE: _____

When the transmission is in neutral, the neutral indicator, catalyzer indicator, and oil indicator light should be on. If the lights do not come on, ask a Yamaha dealer or other qualified mechanic to inspect it.

4. Operate the starter (CHOKE), and completely close the throttle grip.
5. Kick the kick starter to start the engine.
6. After starting the engine, turn back the starter knob. The starter operation periods differ with the ambient temperature, so refer to the following notes.

U-031

NOTE: _____

The engine is warm when it responds normally to the throttle with the starter turned off. To avoid the possibility of excessive exhaust emissions, never leave the starter circuit on longer than necessary.

The length of time the starter is needed depends upon the ambient temperature.

Warm ambient temperatures (above 10°C—50°F) require about 15 seconds of starter use.

Cold ambient temperatures (below 10°C—50°F) require about 15 seconds with the starter fully open, then about 1.5 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!

F-108

Starting a warm engine

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

U-314

CAUTION:

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

F-200*

Shifting

The transmission lets you control the amount of power you have available at a given speed for starting, accelerating, climbing hills, etc.

The use of the change pedal is shown in the illustration. (Page 14)

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

U-315

CAUTION:

1. Do not coast 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 when 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 of forced shifting and can be damaged by shifting without the clutch.

F-201

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 in the table below, close the throttle, and at the same time, quickly pull in the clutch lever.
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.

F-203

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 into first gear.

Any time the engine is about to stall or runs very roughly, pull in the clutch and use the brakes to stop.

3. When the motorcycle is almost completely stopped, shift into neutral. The green neutral indicator light should come on.

F-204

Recommended shift point

	Acceleration shift point km/h (mi/h)	Deceleration shift point km/h (mi/h)
1st → 2nd	25 (16)	20 (12.5)
2nd → 3rd	40 (25)	20 (12.5)
3rd → 4th	55 (34)	20 (12.5)
4th → 5th	70 (43)	20 (12.5)
5th → 6th	85 (53)	20 (12.5)

F-300

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.

F-311

1. 0 ~ 500 km (0 ~ 300 mi):
Avoid operation above 6,000 r/min. Stop the engine and let it cool for 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. 500 ~ 1,000 km (300 ~ 600 mi):
Avoid prolonged operation above 7,000 r/min. Rev the motorcycle freely through the gears, but do not use full throttle at any time.

U-354

CAUTION:

After 1,000 km (600 mi) of operation, be sure to replace the transmission oil.

3. 1,000 km (600 mi) and beyond:
Full throttle can be used.

U-387

CAUTION:

Never let engine speeds enter the red zone.

U-356

CAUTION:

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

F-400

Parking

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

U-630

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.

H-000

PERIODIC MAINTENANCE AND MINOR REPAIR

H-001

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)."

U-631

WARNING:

If you are not familiar with motorcycle service, this work should be done by a

Yamaha dealer or other qualified mechanic.

H-003

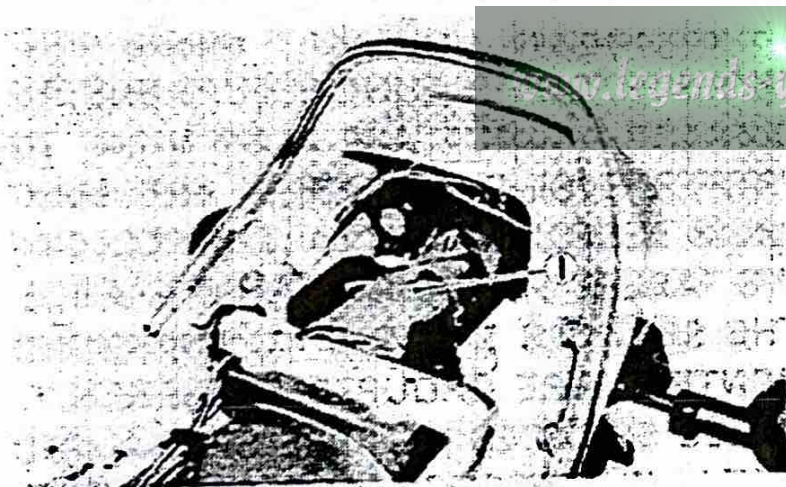
PERIODIC MAINTENANCE

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 OPERATION AND MAXIMUM PERFORMANCE. IN THE FOLLOWING TABLES OF PERIODIC MAINTENANCE, THE SERVICES RELATED TO EMISSIONS CONTROL ARE GROUPED SEPARATELY. THESE SERVICES REQUIRE SPECIALIZED DATA, KNOWLEDGE, AND EQUIPMENT. YAMAHA DEALERS ARE TRAINED AND EQUIPPED TO PERFORM THESE PARTICULAR SERVICES.

H-100

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; however a torque wrench is also necessary to properly tighten nuts and bolts.



1. Tool kit

U-037

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.

U-633

WARNING:

Modifications to this motorcycle not approved by Yamaha may cause loss of performance, excessive emissions, and 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	ODOMETER READING				
			1,000 km or 1 month (600 mi)	**1 7,000 km or 7 months (4,400 mi)	**2 13,000 km or 13 months (8,200 mi)	19,000 km or 19 months (12,000 mi)	25,000 km or 25 months (15,800 mi)	31,000 km or 31 months (19,600 mi)
1.	Spark plug	Check condition. Adjust gap and clean. Replace at 13,000 km (or 13 months) and thereafter every 12,000 km (or 12 months).		○	Replace	○	Replace	○
2.*	Fuel line	Check fuel hose and vacuum pipe for cracks or damage. Replace if necessary.		○	○	○	○	○
3.*	Exhaust system	Check for leakage. Retighten if necessary. Replace gasket(s) if necessary.		○	○	○	○	○
4.*	Carburetor synchronization	Adjust synchronization of carburetors.		○	○	○	○	○
5.*	Idle speed	Check and adjust engine idle speed. Adjust cable free play.		○	○	○	○	○

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

NOTE:

For farther odometer reading, repeat the above maintenance at the period established; **1: Every 6,000 km (3,800 mi) **2: Every 12,000 km (7,600 mi), intervals.

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.

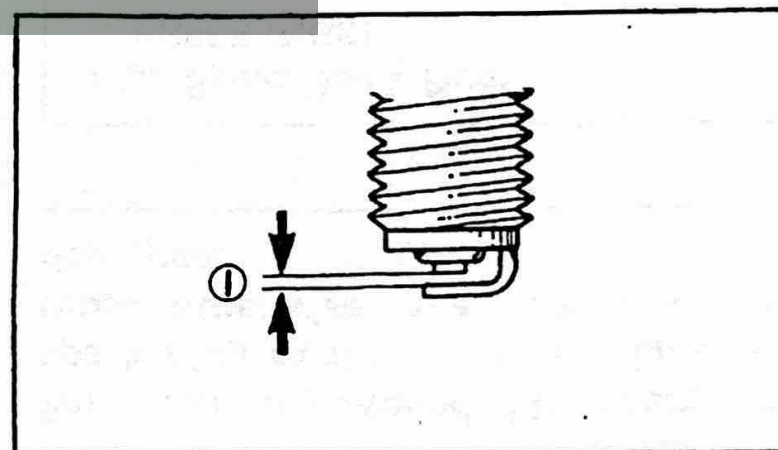
Normally, all spark plugs from the same engine should have the same color on the white porcelain insulator around the center electrode. The ideal color at this point is a medium to light tan color for a motorcycle that is being ridden normally. If one spark plug shows a distinctly different color, there could be something wrong with the engine.

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 because 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 a proper type plug.

Standard spark plug:
BR8ES (NGK)

Before installing any spark plug, measure the electrode gap with a wire thickness gauge; adjust the gap to specification as necessary.

Spark plug gap:
0.7~0.8 mm (0.028~0.031 in)



1. Spark plug gap

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, 14.0 ft•lb)

U-038

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 turns past finger tight. Have the spark plug torqued to the correct value as soon as possible with a torque wrench.

CAUTION:

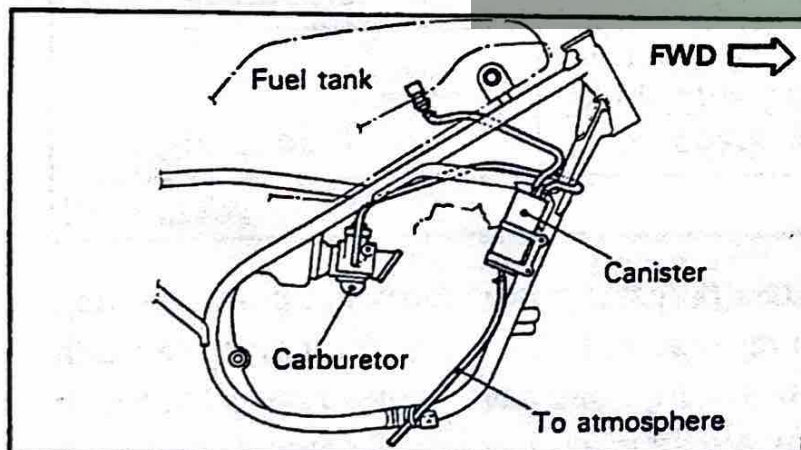
For a long high-speed ride, change the spark plug to the following high-speed type; otherwise, the engine will be damaged.

High Speed Spark Plug:
BR9ES (NGK)

Canister (for California only)

This model is equipped with a canister to prevent the discharging of fuel vapor into the atmosphere. Before using this motorcycle be sure to check the following:

1. Check each hose connection.
2. Check each hose and canister for cracks or damage. Replace if damaged.
3. Make sure the bottom (vent.) hose is not blocked. Clean it if necessary.

Side view

ANTICIPATED MAINTENANCE

The maintenance items in this table are set apart from the regular periodic maintenance items because of their anticipated need for irregular service intervals. The service interval is dependent upon variable factors such as the severity of use, operating conditions, etc. Therefore, perform this maintenance when the described symptoms warrant it.

No.	ITEM	REMARKS
1	Spark plug	If any spark plug failure is noticed replace it. Symptoms indicating spark plug failure are anticipated to occur around 6,000 km (3,800 mi).
2*	Decarbonization	If heavy power loss is evident, decarbonize the cylinder head, piston head, and exhaust system. Carbon build-up is anticipated to occur around 5,000 ~ 10,000 km (3,000 ~ 6,000 mi).
3*	Piston	If the piston rattles, the vehicle becomes hard to start, appears to be lacking power, or becomes inoperative, repair as follows: replace the piston and piston rings, clean, hone, or replace the cylinder. These symptoms are anticipated to occur mainly below 500 km (300 mi).

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

GENERAL MAINTENANCE/LUBRICATION

Unit: km (mi)

NO.	ITEM	REMARKS	TYPE	INITIAL	ODOMETER READINGS					
				1,000 km or 1 month (600 mi)	**1 7,000 km or 7 months (4,400 mi)	**2 13,000 km or 13 months (8,200 mi)	**3 19,000 km or 19 months (12,000 mi)	**4 25,000 km or 25 months (15,800 mi)	31,000 km or 31 months (19,600 mi)	
1	Transmission oil	Warm-up engine before draining.	Yamalube 4-cycle oil or SAE 10W30 type SE motor oil or "GL" gear oil	○	Check	○	Check	○	Check	
2*	Autolube pump	Check and adjust minimum pump stroke.	—		○	○	○	○	○	
3*	Air filter	Wet type filter must be washed and damped with oil. Replace if damaged.	Yamalube 2-cycle oil or equivalent		○	○	○	○	○	
4*	Cooling system	Check hose for cracks or damage. Replace if necessary.	—		○	○	○	○	○	
		Replace coolant every 24 months.	Ethylene glycol anti-freeze coolant					○		
5*	Brake system	Adjust free play. Replace pads if necessary.	—		○	○	○	○	○	
6*	Clutch	Adjust free play.	—		○	○	○	○	○	
7	Drive Chain	Check chain condition. Adjust and lubricate chain thoroughly.	SAE 30W – 50W motor oil or chain lubricant suitable for O-ring chains	Every 500 km (300 mi)						

Unit: km (mi)

NO.	ITEM	REMARKS	TYPE	INITIAL	ODOMETER READINGS					
				1,000 km or 1 month (600 mi)	**1 7,000 km or 7 months (4,400 mi)	**2 13,000 km or 13 months (8,200 mi)	**3 19,000 km or 19 months (12,000 mi)	**4 25,000 km or 25 months (15,800 mi)	31,000 km or 31 months (19,600 mi)	
8	Control and meter cable	Apply chain lube thoroughly.	Yamaha chain and cable lube or SAE 10W30 motor oil	○	○	○	○	○	○	
9*	Rear arm pivot shaft	Apply until new grease shows.	Molybdenum disulfide grease			○		○		
10*	Rear suspension link pivots	Apply grease lightly.	Molybdenum disulfide grease				○			
11	Brake/Clutch lever pivot shaft	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil.		○	○	○	○	○	
12	Brake pedal and change pedal shaft	Lubricate Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil.		○	○	○	○	○	
13	Center/Sidestand pivots and kick crank boss	Check operation and lubricate. Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W30 motor oil.		○	○	○	○	○	
14*	Front fork oil	Check operation and leakage.			○	○	○	○	○	
15*	Steering bearings	Check bearing assembly for looseness. Moderately repack every 24,000 km (15,200 mi).	Medium weight wheel bearing grease.		○	○	○	Repack	○	
16*	Wheel bearings	Check bearings for smooth rotation.			○	○	○	○	○	

Unit: km (mi)

NO.	ITEM	REMARKS	TYPE	INITIAL	ODOMETER READINGS					
				1,000 km or 1 month (600 mi)	**1 7,000 km or 7 months (4,400 mi)	**2 13,000 km or 13 months (8,200 mi)	**3 19,000 km or 19 months (12,000 mi)	**4 25,000 km or 25 months (15,800 mi)	31,000 km or 31 months (19,600 mi)	
17*	Secondary air filter	Wet type filter must be washed and damped with oil. Replace if necessary.	Yamalube 2-cycle oil or equivalent.			○		○		
18	Battery	Check specific gravity and breather pipe for proper operation.	—		○	○	○	○	○	
19*	Sidestand switch	Check and clean or replace if necessary.	—	○	○	○	○	○	○	

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

NOTE:

For farther odometer reading, repeat the above maintenance at the period established; **1: Every 6,000 km (3,800 mi) **2: Every 12,000 km (7,600 mi), **3: Every 18,000 km (11,400 mi) and **4: Every 24,000 km (15,200 mi) intervals.

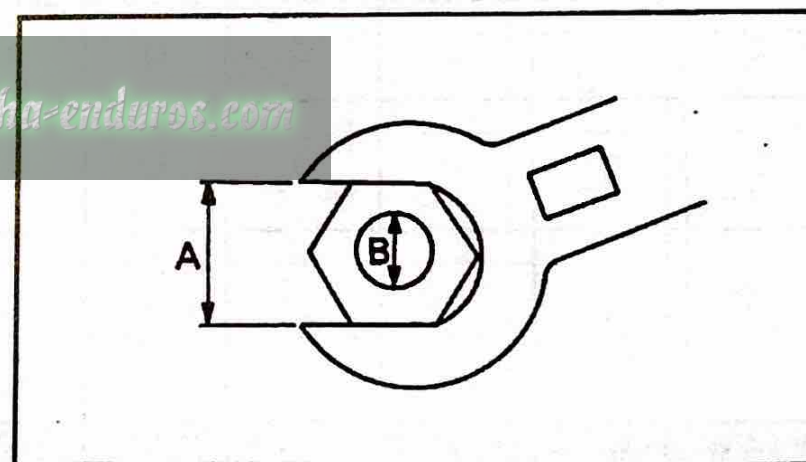
Torque specifications

(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.

ITEM	Torque		
	Nm	m•kg	ft•lb
Spark plug	20	2.0	14
Engine drain plug	20	2.0	14
Front fork cap bolt	23	2.3	17
Front fork pinch bolt	20	2.0	14
Handlebar installation bolt	20	2.0	14
Front wheel axle	74	7.4	53
Rear wheel axle	105	10.5	75
Rear caliper installation bolt	35	3.5	25

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



H-413

Transmission oil level check

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

U-039

NOTE: _____

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

2. With the engine stopped, unscrew the filler cap and rest it on the threads of the hole.
3. The filler cap has a minimum and maximum mark; the oil level should be between the two. If the level is low add oil to raise it to the proper level.

Recommended oil:

Yamalube 4-cycle oil or SAE 10W30
type SE motor oil or GL gear oil

Oil quantity:

1.7 L (1.5 Imp qt, 1.8 US qt)

U-349

CAUTION: _____

Do not add any chemical additives. Transmission oil also lubricates the clutch and additives could cause clutch slippage.

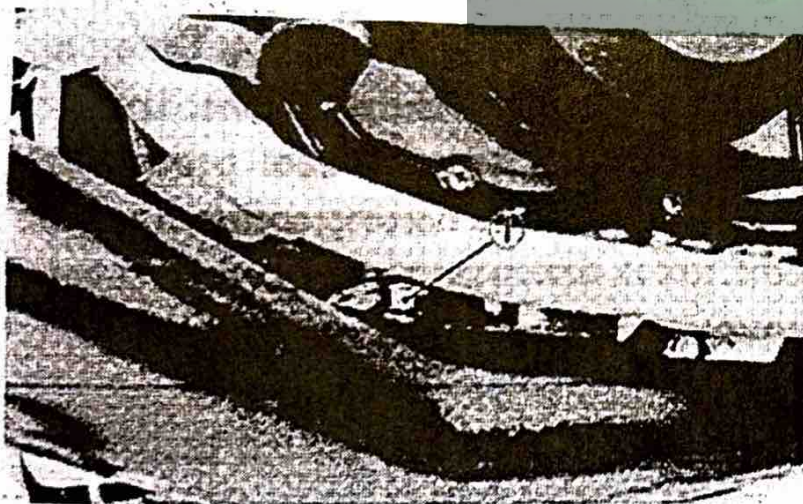
CAUTION

Be sure no foreign material enters the crankcase.

H-404*

Transmission oil replacement

1. To drain the oil, warm up the engine for several minutes.
2. Place an oil pan under the engine.
3. Remove the drain plug and drain the oil.



1. Drain plug

4. Reinstall the drain plug (make sure it is tight).

Drain plug torque:

20 Nm (2.0 m•kg, 14 ft•lb)

5. Add oil through the dip stick hole.

Periodic oil change:

1.5 L (1.3 Imp qt, 1.6 US qt)

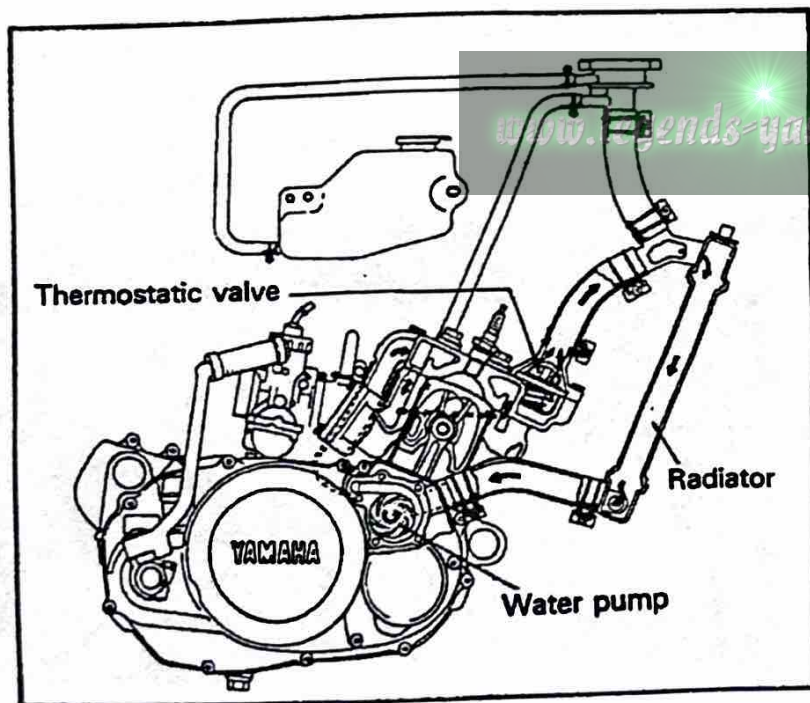
6. After replacement of transmission oil, be sure to check for oil leaks.

H-501K

Cooling system

The coolant is circulated by an impeller type pump mounted on the right-hand crankcase and driven by a gear. The coolant is drawn by the pump from the bottom tank of the radiator, through the pipe (1), and discharged into the cylinder-head and cylinder through the pipe (2).

The coolant passes from the cylinder-head to the cylinder through coolant passages. After circulating around the combustion chamber jacket, it enters the radiator upper tank via the pipe (3). The heated coolant from the engine then passes down through the finned tubes to the present a large surface area to the air and dissipate the heat.

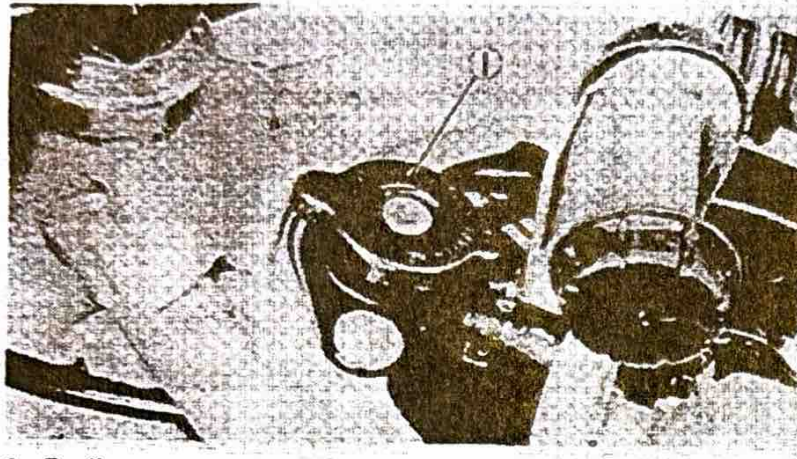


1. If your motorcycle overheats

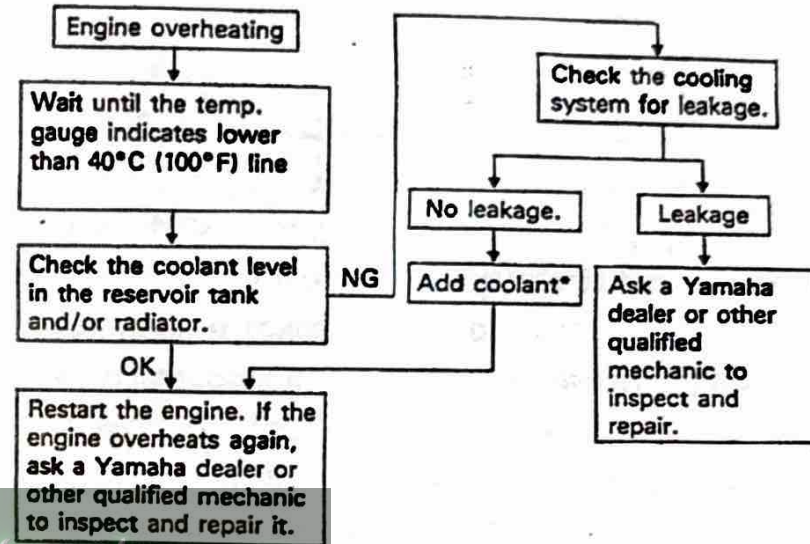
U-705K

WARNING:

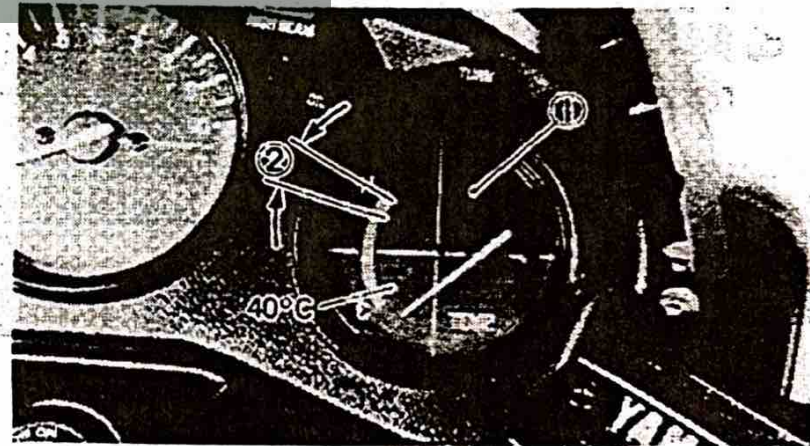
Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. When the engine has cooled, open the radiator cap by the following procedure: Remove the seat and fuel tank. Place a thick rag, like a towel, over the radiator cap, slowly rotate the cap counterclockwise to the detent. This procedure allows any residual pressure to escape. When the hissing sound has stopped, press down on the cap while turning counterclockwise and remove it.



1. Radiator cap



www.legends-yamaha-enduros.com



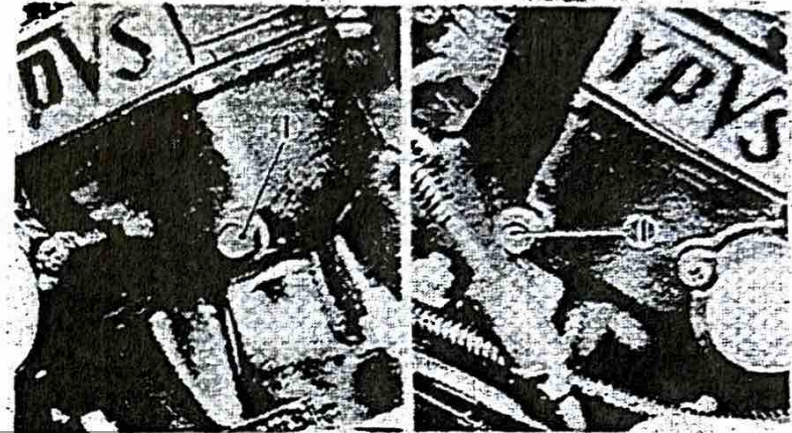
1. Temperature gauge 2. Red zone

NOTE:

If it is difficult to get the recommended coolant, tap water can be temporarily used, provided that it is changed to the recommended coolant as soon as possible.

2. Changing the coolant

- a. Place a container under the engine.
- b. Remove the lower cowling and reservoir tank cap.
- c. Remove the seat, fuel tank, and radiator cap.
- d. Remove the two drain bolts at the left and right sides of the cylinder.



1. Drain bolt

- e. Remove the pipe (1) at the crankcase.
- f. Drain the coolant completely, and thoroughly flush the cooling system with clean tap water.
- g. Retighten the drain bolts and the pipe (1). If the gasket is damaged, replace it.
- h. Pour the recommended coolant into the radiator. Then fill with clean tap water (soft water) until the radiator is full.

Recommended coolant:

High quality ethylene glycol antifreeze containing corrosion inhibitors for aluminum engines.

Coolant and water mixed ratio:
50%/50%

Total amount:

1,500 cm³ (1.32 Imp qt, 1.59 US qt)

Reservoir tank capacity:

215 cm³ (0.19 Imp qt, 0.23 US qt)

From LOW to FULL level:

185 cm³ (0.16 Imp qt, 0.20 US qt)

- i. Start the engine and top up the radiator with tap water (soft water). Fill the reservoir tank to FULL level.
- j. Install the radiator and reservoir tank caps and check the drain bolts; they should not leak.

U-071

NOTE:

If you found any leaks, ask a Yamaha dealer or other qualified mechanic to inspect.

U-309

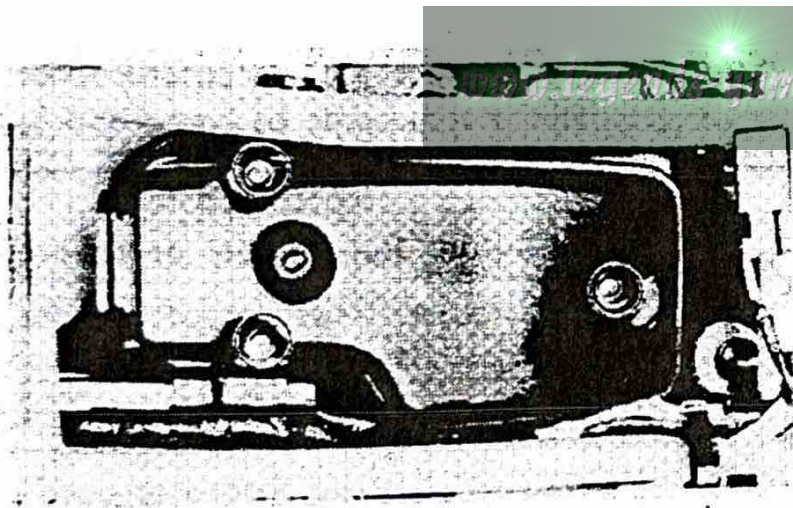
CAUTION:

Hard water or salt water is harmful to the engine. You may use distilled water if you can't get soft water.

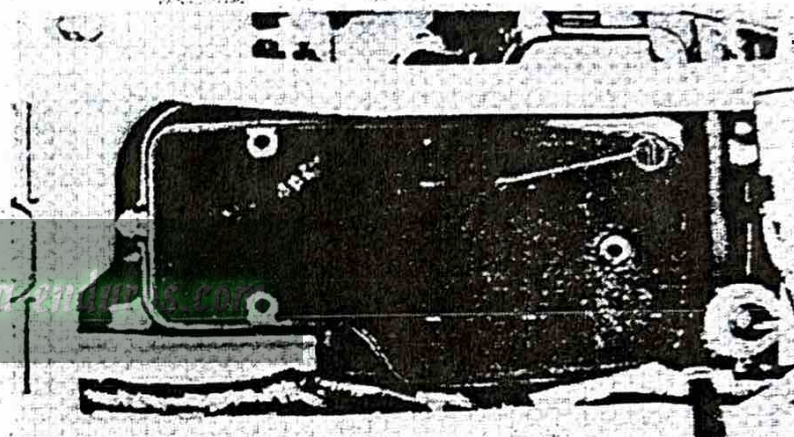
- k. Install the fuel tank, seat, and lower cowling.

Air filter

1. Remove the seat and the bolt holding the fuel tank.
2. Turn the fuel cock lever to "ON," and disconnect the fuel pipes.
3. Remove the fuel tank and the screws holding the filter case cover.



4. Remove the air filter element from its case, and clean it with solvent. After cleaning, remove the remaining solvent by squeezing the element.



1. Filter element

5. Apply recommended oil to the entire surface of the filter and squeeze out the excess oil. The element should be wet but not dripping.

Recommended oil

Yamalube 2-stroke engine oil or SAE
10W30 motor oil

6. When installing the air filter element in its case, be sure its sealing surface matches the sealing surface of the case so there is no air leak.
7. The air filter element should be cleaned at the specified intervals. It should be cleaned more often if the motorcycle is operated in dusty or wet areas.

U-326

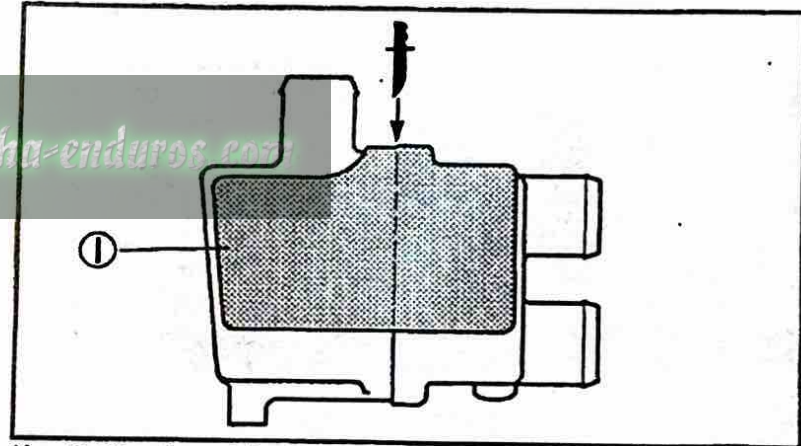
CAUTION:

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

H-620K

Secondary air filter

1. Remove the lower cowl. (See page 19.)
2. Remove the secondary air filter assembly from the lower cowl.
3. Using a knife on the like, cut the thin aluminum sheet on the filter case along the case mating line. (for California only)



(for California only)

1. Aluminum sheet

CAUTION:

(for California only):

This aluminum sheet protects the filter assembly from the exhaust pipe heat. Replace the sheet if it is so damaged during the above cut as to bare any part of the filter case.

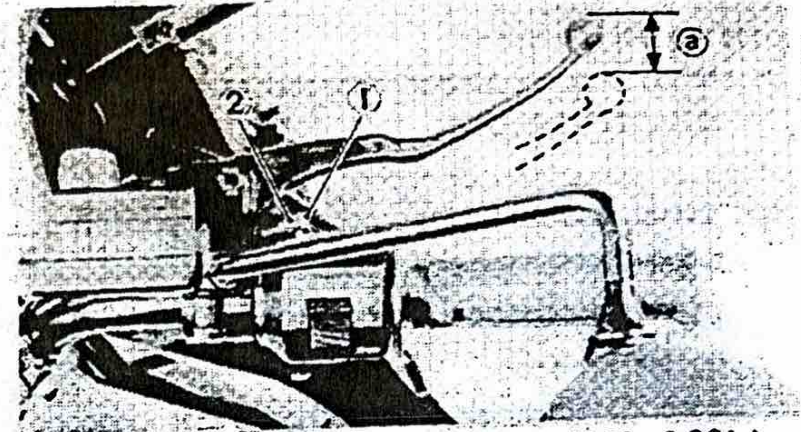
4. Refer to "Air filter" for cleaning method.

Carburetor adjustment

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

Front brake adjustment

The free play at the end of the front brake lever should be 2 ~ 5 mm (0.08 ~ 0.20 in).



1. Adjuster 2. Lock nut a. 2~5 mm (0.08~0.20 in)

1. Loosen the lock nut.

2. Turn the adjuster so that the brake lever movement at the lever end is 2~5 mm (0.08~0.20 in) before the adjuster contacts the master cylinder.

3. After adjusting, tighten the lock nut.

WARNING:

Check the brake lever free play. Be sure the brake is working properly.

U-640

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 cause greatly diminished braking capability and can result in loss of control and an accident. Have a Yamaha dealer or other qualified mechanic inspect and bleed the system if necessary.

H-905

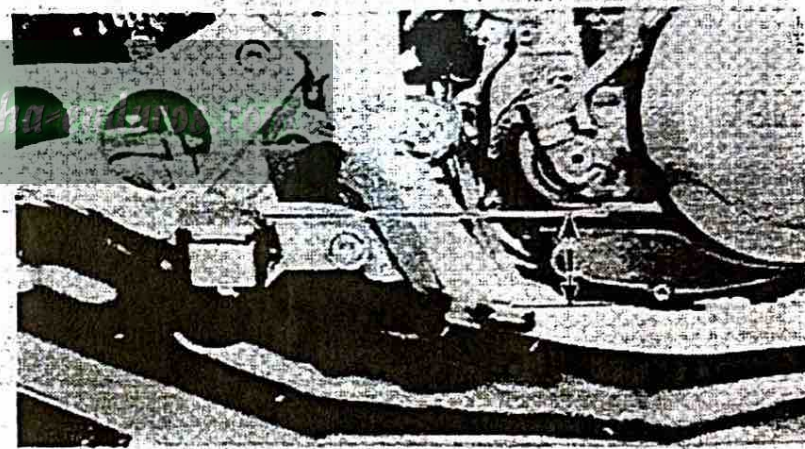
Rear brake adjustment

The brake pedal top end should be 40 mm (1.6 in) below the top of the footrest. If not, ask a Yamaha dealer or other qualified mechanic.

U-706

WARNING:

An incorrect free play indicates a hazardous condition 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.



1. Pedal height 40 mm (1.6 in)

H-833

Brake light switch adjustment

The brake light switch is operated by movement of the brake pedal. To adjust, hold the main body of the switch with your hand so it does not rotate and turn the adjusting nut. Proper adjustment is achieved when the brake light comes on just before the brake begins to take effect.

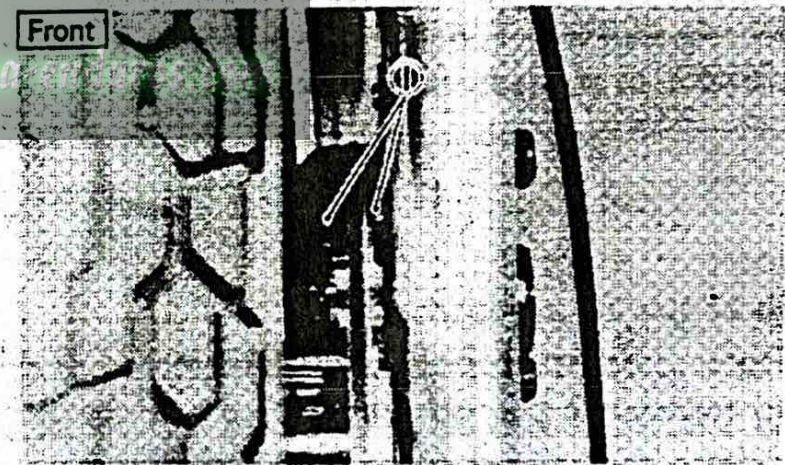


1. Main body 2. Adjusting nut

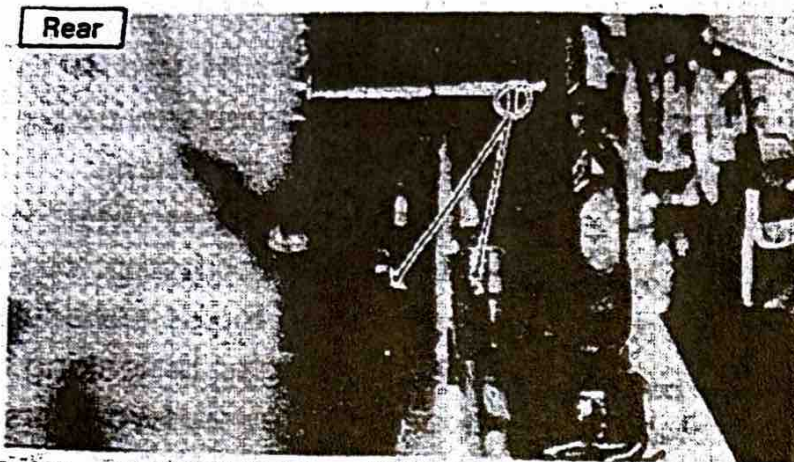
H-841

Checking the front and rear brake pads

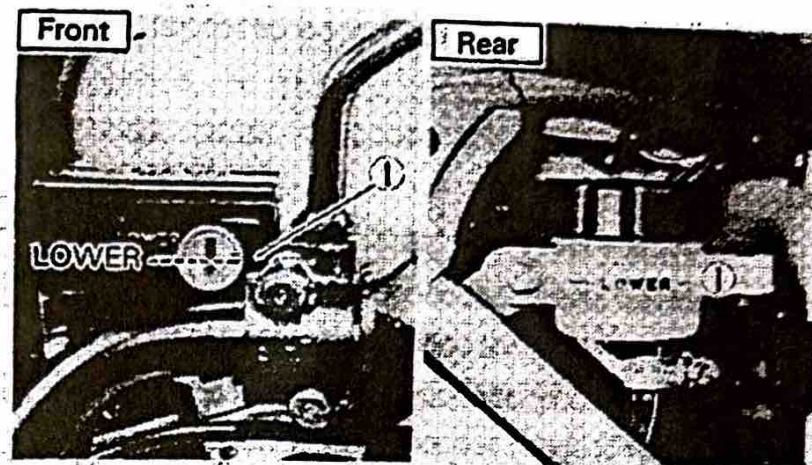
A wear indicator is attached to each brake pad to facilitate disc brake pad checks. This indicator permits a visual check without disassembling the pads. To check, depress the brake and inspect the wear indicator. If the wear indicator is ALMOST in contact with the disc plate, ask a Yamaha dealer or other qualified mechanic to replace the pads.



1. Wear indicator



1. Wear indicator



1. Lower level

H-827

Inspecting the brake fluid level

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

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

1. When checking the fluid level, make sure the master cylinder top is horizontal by turning the handlebars.
2. Use only the designated quality brake fluid: otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.

Recommended brake fluids:

DOT #3

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

H-840

Brake fluid replacement

1. Complete fluid replacement should be done only by trained Yamaha service personnel or other qualified mechanic.
2. Have a Yamaha dealer or other qualified mechanic replace the following components when indicated in the schedule or when they are damaged or leaking.
 - a. Replace all rubber seals every two years.
 - b. Replace all hoses every four years.

Clutch adjustment

This model has a clutch cable length adjuster and a clutch mechanism adjuster. The cable length adjuster is used to take up slack from cable stretch and to provide sufficient free play for proper clutch operation.

The clutch mechanism adjuster is used to provide the correct amount of clutch "throw" for proper disengagement. Normally, once the mechanism is properly adjusted, the only necessary adjustment involves maintaining the proper free play at the clutch lever.

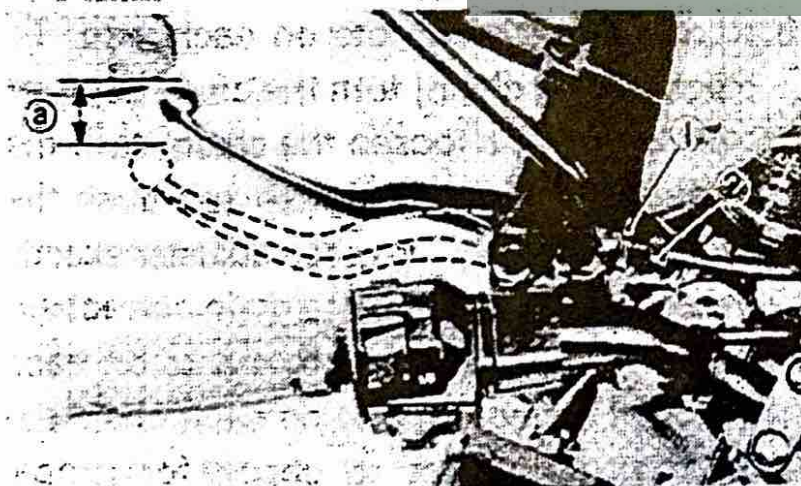
I-008K

Free play adjustment

The clutch should be adjusted to suit the rider's preference, but free play at the end of the lever should be 8~12 mm (0.3~0.5 in).

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

Clutch lever free play:
8~12 mm (0.3~0.5 in)



1. Lock nut 2. Adjuster a. 8~12 mm (0.3~0.5 in)

I-006

Mechanism adjustment

When it is impossible to make an adjustment at the clutch lever, ask a Yamaha dealer or a qualified mechanic for adjustment of the internal clutch mechanism.

I-400K*

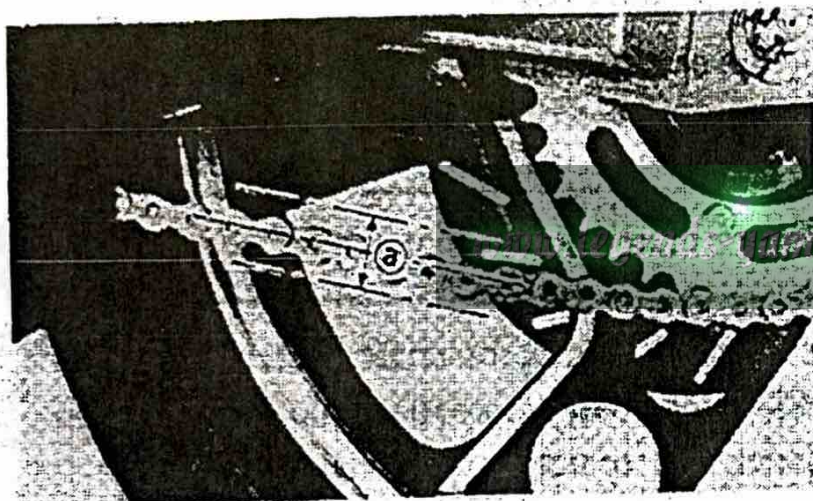
Drive chain slack check

U-048

NOTE:

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

Inspect the drive chain when the motorcycle is on the centerstand. Check the slack at the position shown in the illustration. The normal vertical deflection is approximately 30 ~ 40 mm (1.2 ~ 1.6 in). If the deflection exceeds 30 ~ 40 mm (1.2 ~ 1.6 in), adjust the chain slack.



a. 30 ~ 40 mm (1.2 ~ 1.6 in)

I-409K

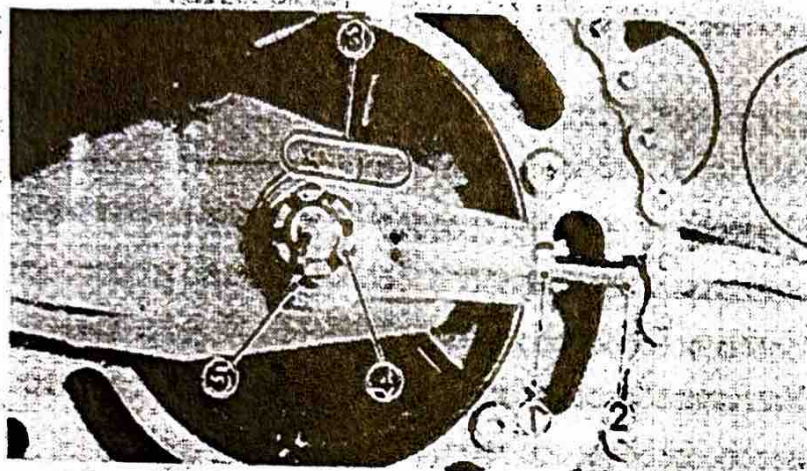
Drive chain slack adjustment

U-333

CAUTION:

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

1. Remove the cotter pin from the rear wheel axle nut.
2. Loosen the rear wheel axle nut.
3. Loosen the lock nuts on each side. To tighten the chain, turn the chain adjuster clockwise. To loosen the chain, turn the adjuster counterclockwise and push the wheel forward. Turn each adjuster exactly the same amount to maintain correct axle alignment. (There are marks on each side of swingarm and on each chain adjuster; use them to check for proper alignment.)



1. Lock nut 2. Adjusting bolt 3. Marks for alignment
4. Axle nut 5. Cotter pin

4. After adjusting, be sure to tighten the lock nuts and the axle nut.

Axle nut torque:

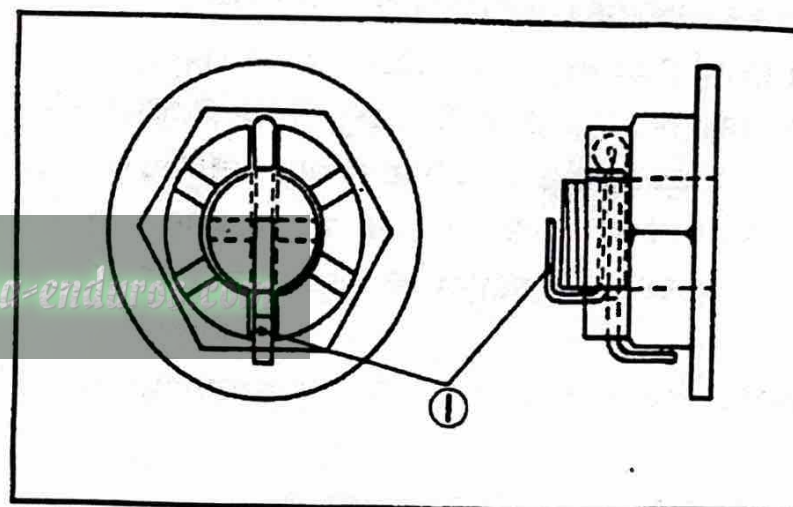
105 Nm (10.5 m•kg, 75 ft•lb)

5. Insert a new cotter pin into the rear wheel axle nut and bend the end of the cotter pin as shown in the illustration. (If the nut notch and the cotter pin hole do not match tighten the nut slightly to align them.)

U-647

WARNING:

Always use a new cotter pin on the axle nut.



1. Cotter pin

I-407

Drive chain lubrication

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

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

I-100

Cable inspection and lubrication

U-646

WARNING:

Damage to the outer housing of the various cables may cause corrosion and interfere with the movement of the cable. 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**

I-302

Brake and change pedals

Lubricate the pivoting parts.

Recommended lubricant:

Yamaha Chain and Cable Lube or
SAE 10W30 motor oil

I-304

Center and sidestand

Lubricate the pivoting parts. Check to see that the center and sidestand move up and down smoothly.

Recommended lubricant:

Yamaha Chain and Cable Lube or
SAE 10W30 motor oil

I-303

Brake and clutch levers

Lubricate the pivoting parts. www.legends-yamaha-enduros.com

Recommended lubricant:

Yamaha Chain and Cable Lube or
SAE 10W30 motor oil

U-703

WARNING:

If the center and/or sidestand movement are not smooth, consult a Yamaha dealer or other qualified mechanic.

I-313

Rear suspension

Lubricate the pivoting parts.

Recommended lubricant: www.legends-yamaha-enduro.com
Molybdenum disulfide grease

I-527

Front fork oil change

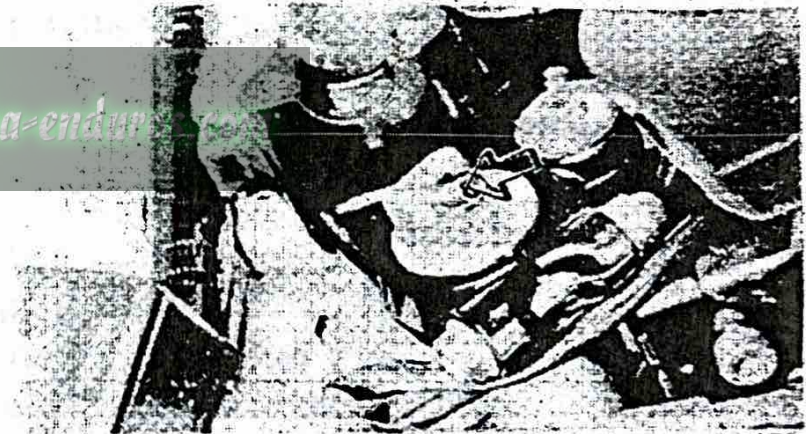
U-649

WARNING:

1. Fork oil leakage can cause loss of stability and safe handling. Have any problem corrected before operating the motorcycle.

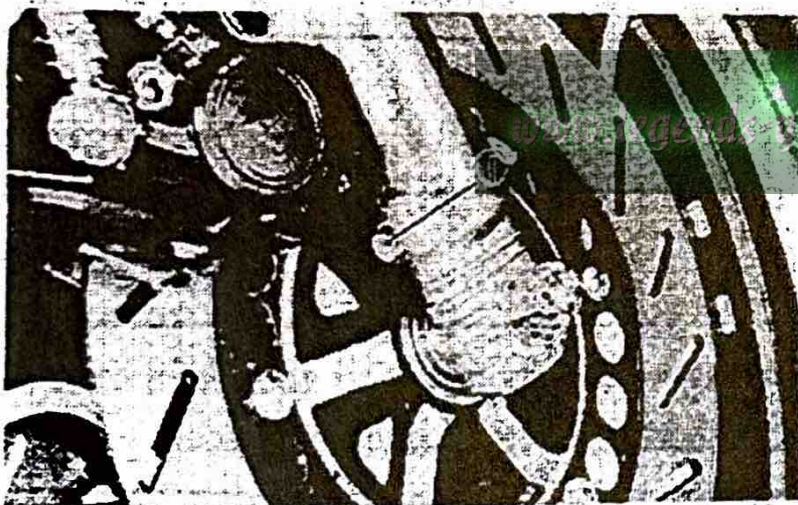
2. Securely support the motorcycle so there is no danger of it falling over.

1. Elevate the front wheel by placing a suitable stand under the engine. Remove the handlebars.
2. Remove the air valve cap from each fork.



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

4. Loosen the front fork pinch bolts and remove the cap bolts from the inner fork tubes.
5. Place an open container under each drain hole. Remove the drain screw from each outer tube.



1. Drain screw

U-650

WARNING:

Do not let oil 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.

6. After most of the oil has been drained, slowly pump the forks up and down to remove any remaining oil.
7. Inspect the drain screw gasket. Replace if damaged. Reinstall the drain screws.
8. Pour the specified amount of oil into each fork inner tube.

Front fork oil capacity (each fork):

253 cm³ (8.91 Imp oz, 8.55 US oz)

Recommended oil:

Yamaha Fork Oil 10wt or equivalent

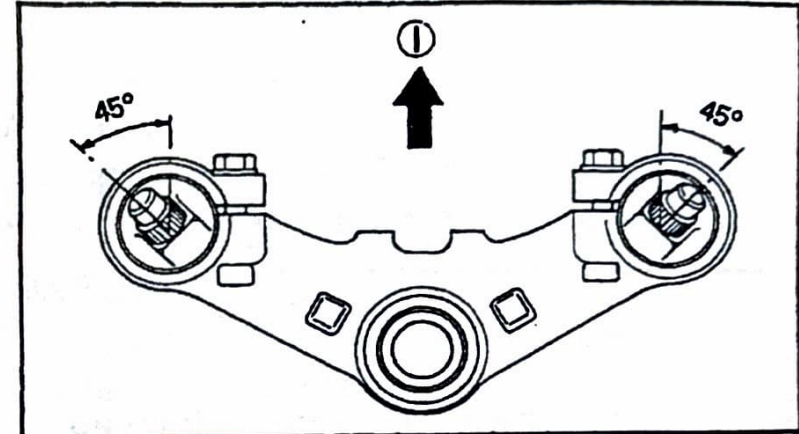
9. After filling, slowly pump the forks up and down to distribute the oil.
10. Inspect the O-ring on the cap bolt. Replace if damaged.
11. Reinstall the cap bolt.

Tightening torque:

Cap bolt:

23 Nm (2.3 m•kg, 17 ft•lb)

12. If the air valve does not face towards the front, loosen the pinch bolts on the under bracket and reset the forks in the following procedure:
 - a. Level the top of the inner fork tube with the top of the steering crown.
 - b. Face the air valve towards the front.



1. Frontward

13. Tighten the front fork pinch bolts and install the handlebars.

U-070

NOTE:

The upper handlebar holder should be installed with the punched mark forward.

U-367

CAUTION

First tighten the bolts on the front side of the handlebar holder, and then tighten the bolts on the rear side.

Tightening torque:

Front fork pinch bolt:

20 Nm (2.0 m•kg, 14 ft•lb)

Handlebar installation bolt:

20 Nm (2.0 m•kg, 14 ft•lb)

14. Fill the fork with air using an air pump or 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/cm², 17 psi)

Do not exceed this amount.

I-505*

Front fork and rear shock absorber adjustment

Front fork:

U-669

WARNING:

Always adjust each fork preload 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.

U-050

NOTE:

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

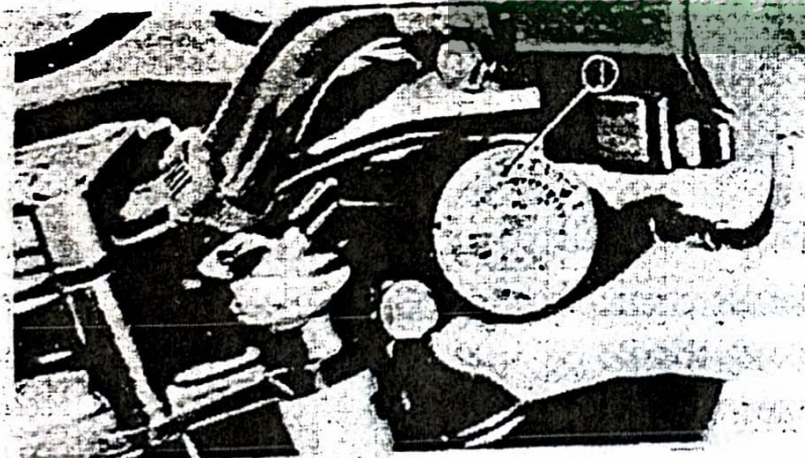
2. Remove the valve cap from each fork.
3. Using the air check gauge, check and adjust the air pressure.
If the air pressure is increased, the suspension becomes stiffer, and if decreased, it becomes softer.

To increase:

Use an air pump or pressurized air supply

To decrease:

Release the air by pushing the valve.



1. Air check gauge

U-051*

NOTE:

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

P/No. 2X8-2811A-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: Zero

U-334

CAUTION:

Never exceed the maximum pressure, or oil seal damage may occur.

U-665*

WARNING:

The difference between both the left and right tubes should be 9.81 kPa (0.1 kg/cm², 1.4 psi) or less.

4. Install the valve caps securely.

I-518

Rear shock (Monocross suspension "De Carbon" system)

U-674

WARNING:

This shock absorber contains highly pressurized nitrogen gas. Read and understand the following information before handling the shock absorber. The manufacturer cannot be held responsible for property damage or personal injury that may result from improper handling.

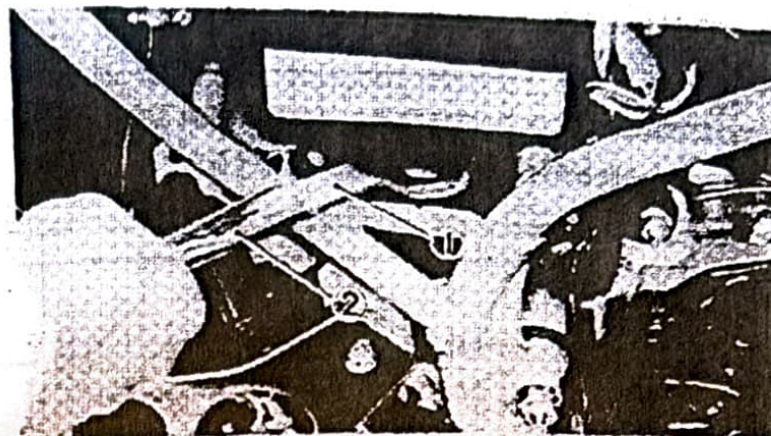
1. Do not tamper with or attempt to open the cylinder assembly.
2. Do not subject shock absorber to an open flame or other high heat source. This may cause the unit to explode due to excessive gas pressure.
3. Do not deform or damage the cylinder in any way. Cylinder damage will result in poor damping performance.
4. Bring your shock absorber to a Yamaha dealer or other qualified mechanic for any service.

Adjustment

The spring preload of the rear shock absorber can be adjusted to suit rider's preference, weight, and the course conditions.

1. Remove right side cover.
2. To increase preload, adjuster is turned toward the "H". To decrease preload, adjuster is turned toward the "S".

	Hard		STD	Soft
Adjusting position	5	4	3	2



1. Special wrench

2. Extension bar

NOTE:

When adjusting, use the special wrench and extension bar which are included in the owner's tool kit.

3. Install the right side cover.

Recommended combinations of the front fork and the rear shock absorber settings.
Use this table as a guide for specific riding and motorcycle load conditions.

	Front fork	Rear shock absorber	Loading condition			
			Solo rider	With passenger	With accessories and equipment	With accessories, equipment, and passenger
1.	39.2 kPa (0.4 kg/cm ² , 5.7 psi)	1 or 2	○			
2.	58.8 kPa (0.6 kg/cm ² , 8.5 psi)	3		○		
3.	78.5 kPa (0.8 kg/cm ² , 11.4 psi)	4			○	
4.	98.1 kPa (1.0 kg/cm ² , 14.2 psi)	5				○

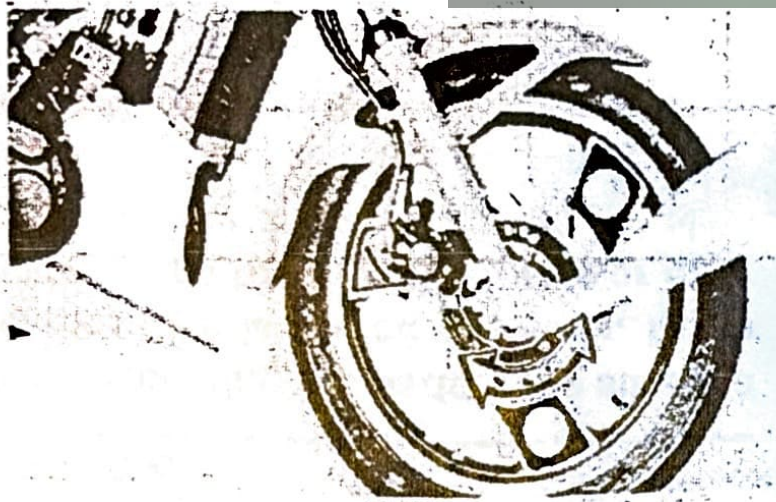
I-600

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 off the ground.

Hold the lower end of the front forks and try to move them forward and backward. If any free play can be felt, ask a Yamaha dealer or other qualified mechanic to inspect and adjust the steering. Inspection is easier if the front wheel is removed.



U-657

WARNING:

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

I-601

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.

I-700

Battery

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

CAUTION:

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

How to layout battery breather pipe

**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 a physician immediately.

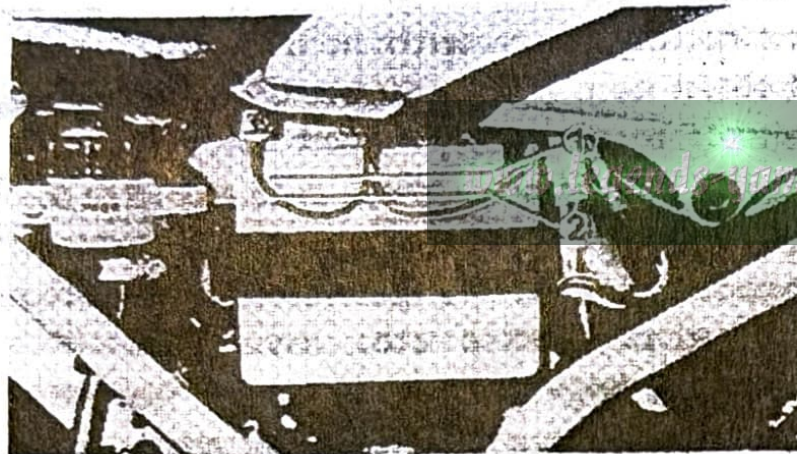
Eyes: Flush with water for 15 minutes and get prompt medical attention. Batteries produce explosive gases. Keep sparks, flame, cigarettes etc., away. Ventilate when charging or using in an enclosed space. Always shield your eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN.

Replenishing the battery fluid

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

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



1. Upper level 2. Lower level

CAUTION:

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

WARNING:

Battery fluid on the chain can cause premature failure and possibly an accident.

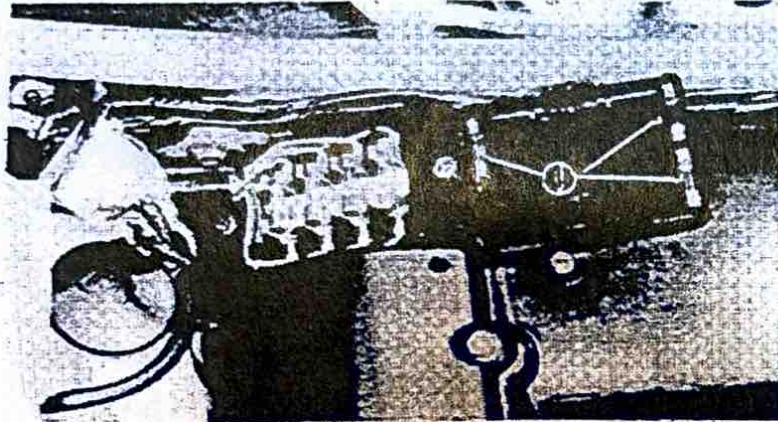
2. When the motorcycle will not be used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reusing it.
3. If the battery will be stored for a longer period than the above, check the specific gravity of the fluid at least once a month and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

4. Always make sure the connections are correct when putting the battery back in the motorcycle. The red lead is for the + terminal and the black lead is for the - terminal. Always connect the red lead first then connect the black lead. Make sure the breather pipe is properly connected and is not damaged or obstructed.

I-902

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. Install a new fuse of proper amperage.

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.

U-344

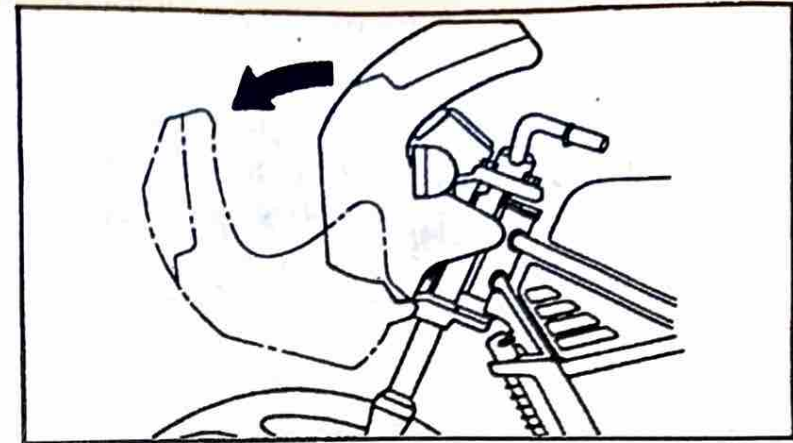
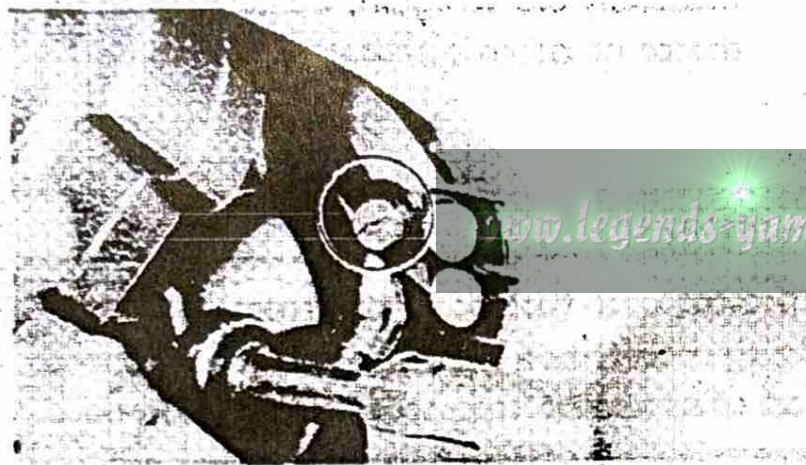
CAUTION:

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

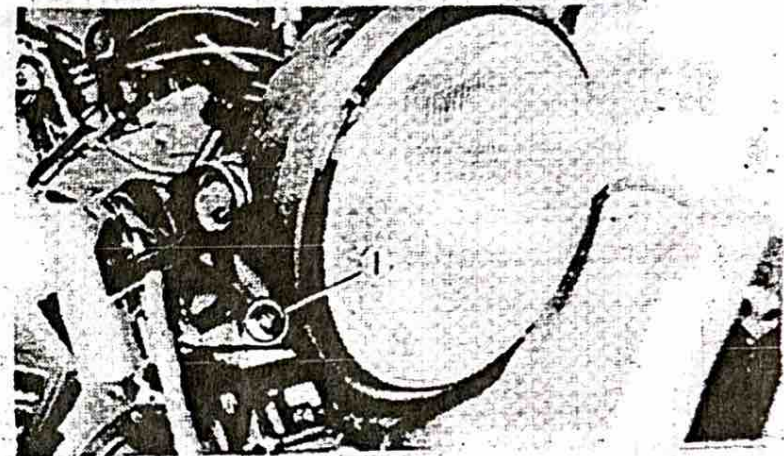
Replacing the headlight bulb

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

1. Remove the headlight cowl and headlight rim cover.



2. Remove the 2 screws holding the light unit assembly.



1. Holding screw

3. Disconnect the lead wires, and remove the light unit assembly.
4. Turn the bulb holder counterclockwise and remove the defective bulb.



U-660

WARNING:

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

5. Slip a new bulb into position and secure it in place with the bulb holder.

U-341

CAUTION:

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



1. Don't touch

6. Reinstall the light unit assembly. Adjust the headlight beam if necessary.
7. Reinstall the headlight rim cover and headlight cowl.

I-811

Headlight beam adjustment

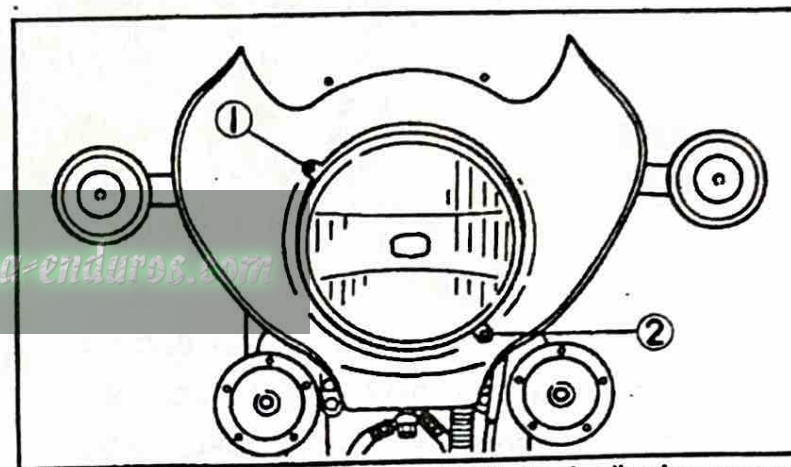
U-342

CAUTION

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

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

2. Vertical adjustment:
To raise the beam, turn the adjusting screw clockwise.
To lower the beam, turn the screw counterclockwise.



1. Horizontal adjusting screw 2. Vertical adjusting screw

Front wheel removal

1. Place the motorcycle on the centerstand.
2. Remove the speedometer cable at the speedometer gear housing.
3. Remove the front fender securing bolts and remove the fender.

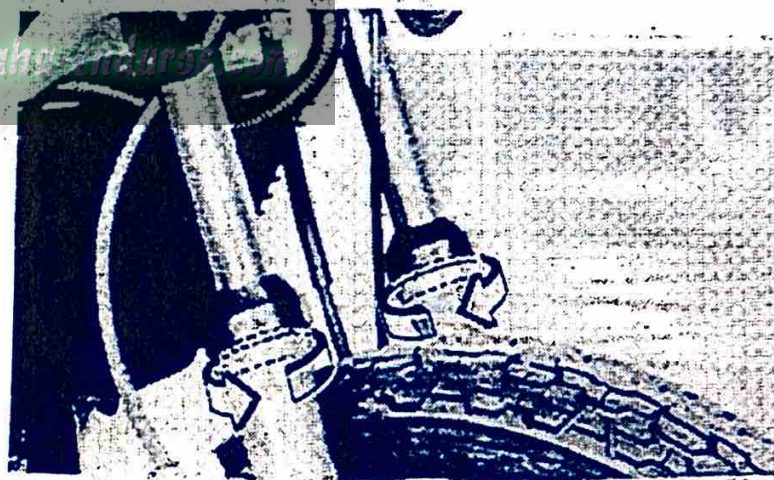


4. Remove the cotter pin and wheel axle nut.
5. Remove the axle. Make sure the motorcycle is properly supported.

NOTE:

Do not depress the brake lever when the disc is off the caliper as the brake pads will be forced shut.

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



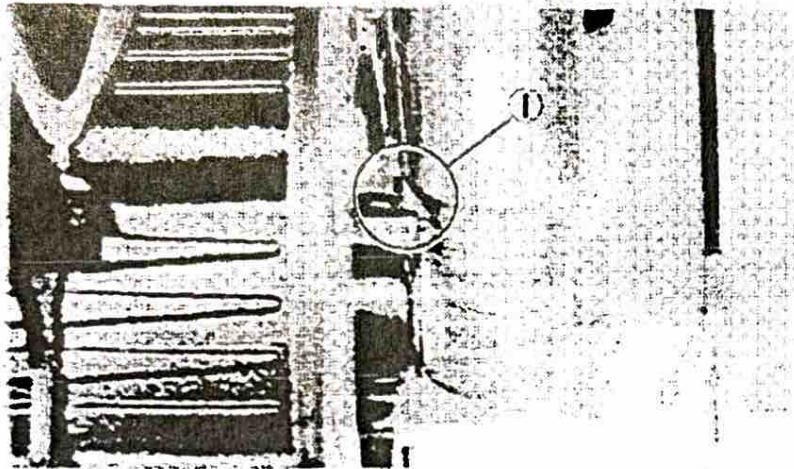
J-222

Front wheel installation

When installing the front wheel, reverse the removal procedure.

Pay attention to the following points:

1. Make sure the wheel hub and the speedometer clutch assembly are installed with the projections meshed into the slots.
2. Make sure the projecting portion (torque 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.

U-647

WARNING:

Always use a new cotter pin on the axle nut.

Axle nut torque:

74 Nm (7.4 m•kg, 53 ft•lb)

J-323

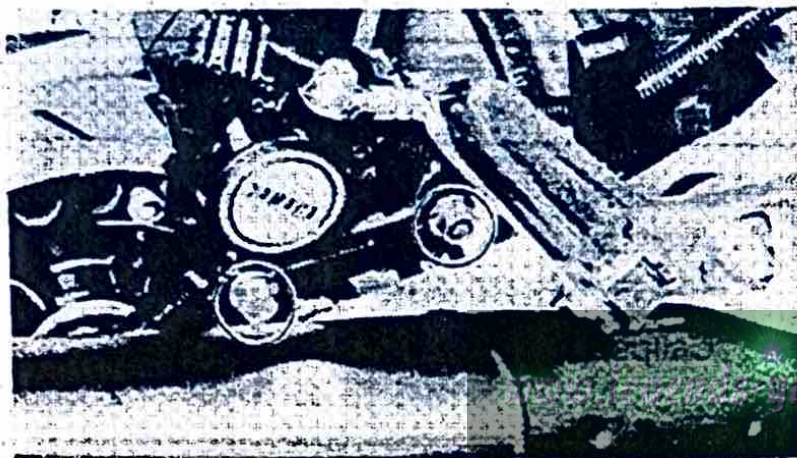
Rear wheel removal

U-661

WARNING:

It is advisable to have a Yamaha dealer or other qualified mechanic service the rear wheel.

1. Place the motorcycle on the centerstand.
2. Remove the caliper installation bolts and caliper.

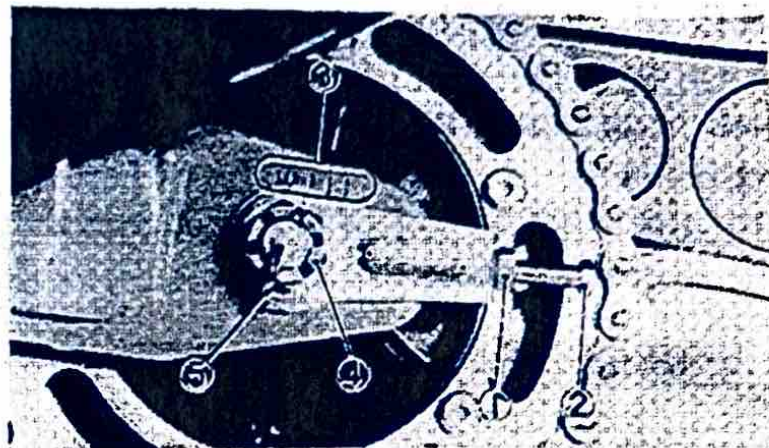


U-055

NOTE: _____

Do not depress the brake pedal when the disc is off the caliper as the brake pads will be forced shut.

3. Loosen the lock nuts of the right and left chain adjusters and loosen the adjusters.



1. Lock nut
2. Adjuster
3. Marks for align
4. Axle nut
5. Cotter pin

4. Remove the axle nut cotter pin and the axle nut.

5. The rear wheel assembly, the collar, the chain puller(s), etc., can be removed from the motorcycle by pulling the wheel axle.

U-056

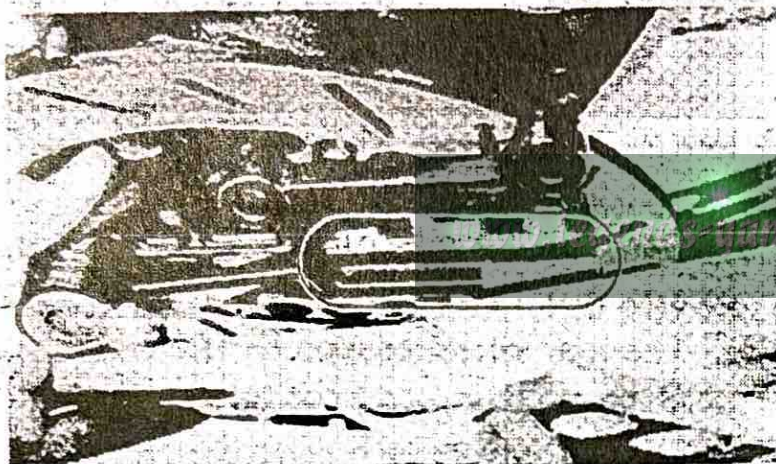
NOTE: _____

You do not have to disassemble the chain in order to remove or install the rear wheel.

Rear wheel installation

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

1. Make sure the projection (torque stopper) is position correctly.



2. Adjust the drive chain.
3. Make sure the axle nut and caliper are properly torqued, and a new cotter pin is installed.

WARNING:

Always use a new cotter pin on the axle nut.

Tightning torque:

Axle nut:

105 Nm (10.5 m•kg, 75 ft•lb)

Caliper installation bolt:

35 Nm (3.5 m•kg, 25 ft•lb)

Troubleshooting

Although Yamaha motorcycles receive a rigid inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems can cause poor starting and a loss of power. The troubleshooting chart describes a quick, easy procedure for checking these systems.

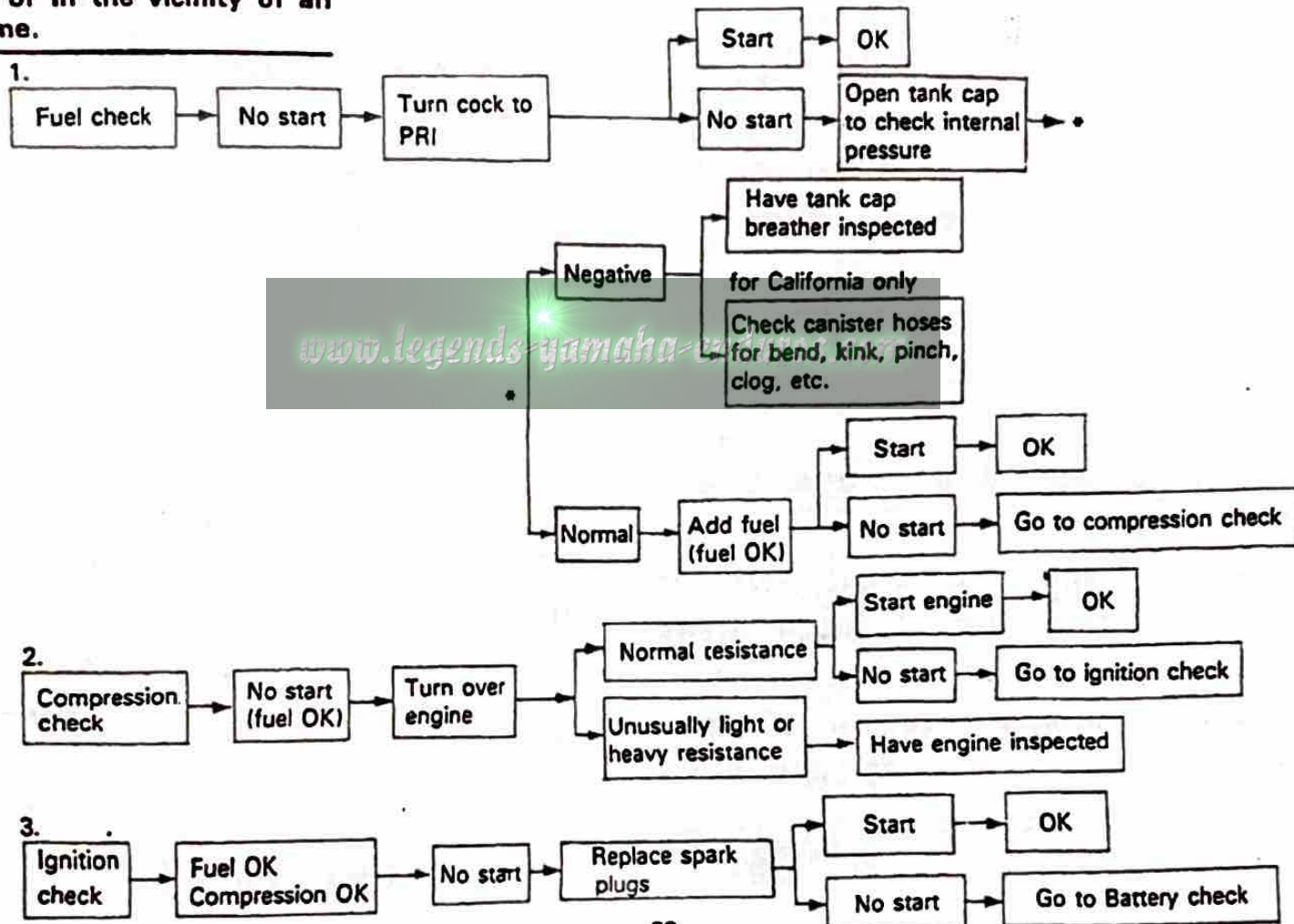
If your motorcycle requires any repair, bring it to a Yamaha dealer. The skilled technicians at a Yamaha dealer have the tools, experience, and know-how to properly service your motorcycle. Use only genuine Yamaha parts on your motorcycle. Imitation parts may look like Yamaha parts, but they are often inferior. Consequently, they have a shorter service life and can lead to expensive repair bills.

Troubleshooting chart

U-663

WARNING:

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



CLEANING AND STORAGE

K-013

A. CLEANING

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

1. Before cleaning the motorcycle:
 - a. Block off the end of exhaust pipe to prevent water entry; a plastic bag and strong rubber band may be used.
 - b. Make sure the spark plug(s) and all filler caps are properly installed.
2. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the chain, sprockets, or wheel axles.
3. Rinse the dirt and degreaser off with a garden hose, use only enough 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 repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

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 for hard-to-get-to places.
5. Rinse the motorcycle off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.
6. Dry the chain and lubricate it to prevent rust.

7. Windshield cleaning.



Avoid using any alkaline or strong acid cleaner, gasoline, brake fluid, or any other solvent.

Clean the windshield with a cloth or sponge dampened with a neutral detergent, and after cleaning, thoroughly wash out with water. Some cleaning compounds for plastics may leave scratches on surfaces of the windshield. Before using, make a test by polishing an area which does not affect your visibility.

8. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
9. Automotive-type wax may be applied to all painted and chrome-plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar the

paint or protective finish. When finished, start the engine and let it idle for several minutes.

K-010

B. STORAGE

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

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

over several times (with ignition off) to coat the cylinder walls with oil.

4. Remove the drive chain. Thoroughly clean the chain with kerosene and lubricate. Reinstall the chain or store it in a plastic bag (tied to frame for safe-keeping).
5. Lubricate all control cables.
6. Block up the frame to raise both wheels off the ground.
7. Tie a plastic bag over the exhaust pipe outlet to prevent moisture from entering.
8. If storing in a 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.
9. 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)).

U-058

NOTE: _____
Make any necessary repairs before storing the motorcycle.

MISCELLANEOUS

Consumer information

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 RZ350N2/NC2.

A. Fully Operational Service Brake

Load

RZ350N2: Light 168

Maximum 176

RZ350NC2: Light 166

Maximum 173

NOTE:

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

0 100 200 300 (Feet)
Stopping distance in feet from 60 mi/h

SPECIFICATIONS

Item	RZ350N2/NC2
Dimension: Overall length Overall width Overall height Wheelbase Minimum road clearance	2,120 mm (83.5 in) 710 mm (28.0 in) 1,175 mm (46.3 in) 1,385 mm (54.5 in) 175 mm (6.9 in)
Weight: Net	168 kg (370 lb)
Performance: Minimum turning radius	2,400 mm (94.5 in)
Engine: Type Engine model Cylinder Displacement Bore and stroke Compression ratio Starting system	Liquid cooled, 2-stroke Gasoline 48H: RZ350N2 1EL: RZ350NC2 Two in parallel, Forward inclined 347 cm ³ (21.17 cu.in) 64 × 54 mm (2.52 × 2.13 in) 6.0 : 1 Kick starter system

Item	RZ350N2/NC2
Ignition system Fuel tank capacity Oil tank capacity Transmission oil capacity Lubrication system Battery capacity Battery type Generator system Spark plug Carburetor Air cleaner	CDI Total: 20 L (4.4 Imp gal, 5.3 US gal): RZ350N2 18 L (4.0 Imp gal, 4.8 US gal): RZ350NC2 Reserve: 2.0 L (0.4 Imp gal, 0.5 US gal) 1.6 L (1.41 Imp qt, 1.69 US qt) 1.7 L (1.5 Imp qt, 1.8 US qt) Periodic: 1.5 L (1.3 Imp qt, 1.6 US qt) Separate lubrication (Yamaha Autolube) 12V, 5.5AH 12N5.5 — 3B AC magneto BR8ES (NGK) BR9ES (NGK) VM26 × 2 Wet foam rubber
Transmission: Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Clutch Gear box type Operating system	Gear 66/23 (2.869) Chain 40/17 (2.352) Wet multi-disc type Constant mesh 6-speed forward Left foot operation

Item		RZ350N2/NC2
Gear ratio:	First Second Third Fourth Fifth Sixth	36/ 14 (2.571) 32/ 18 (1.777) 29/ 22 (1.318) 26/ 24 (1.083) 25/ 26 (0.961) 24/ 27 (0.888)
Steering:	Caster Trail	26° 96 mm (3.8 in)
Tire size:	Front Rear	90/90-18 51H 110/80-18 58H
Suspension:	Front Rear	Telescopic fork Swing arm (New Yamaha Monocross suspension)
Shock absorber:	Front Rear	Coil/ air spring, oil damper Coil spring, nitrogen oil damper
Frame:		Tubular, double-cradle
Electrical:	Headlight Tail/ Brake light Turn light	12V, 60W/55W 12V, 8W/27W × 2 12V, 27W × 4

Item		RZ350N2/NC2
Pilot lights:	TURN	12V, 3.4W × 2
	HIGH BEAM	12V, 3.4W
	NEUTRAL	12V, 3.4W
	OIL	12V, 3.4W
	CATARYZER	12V, 3.4W
Meter lights		12V, 3.4W × 3

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WARRANTY INFORMATION

Please refer to your copy of the YAMAHA LIMITED WARRANTY* for details of the warranty offered on your new Yamaha.

The YAMAHA LIMITED WARRANTY contains the warranty policy, an explanation of the warranty, and other important information. Becoming familiar with these policies will help you make 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 a 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 YAMAHA LIMITED WARRANTY be used as a folder in which you may keep your registration and other important documents related to your new Yamaha.

* The YAMAHA LIMITED WARRANTY is to be supplied by a 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.

6555 Katella Avenue

P.O. Box 6555

Cypress, California 90630

Attn: Warranty Department

MOTORCYCLE NOISE REGULATION

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

"AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW."

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These acts include tampering with the following systems; i.e., modification, removal, etc.

Exhaust system	Muffler Exhaust pipe Silencer
Intake system	Air cleaner case Air cleaner element Intake duct

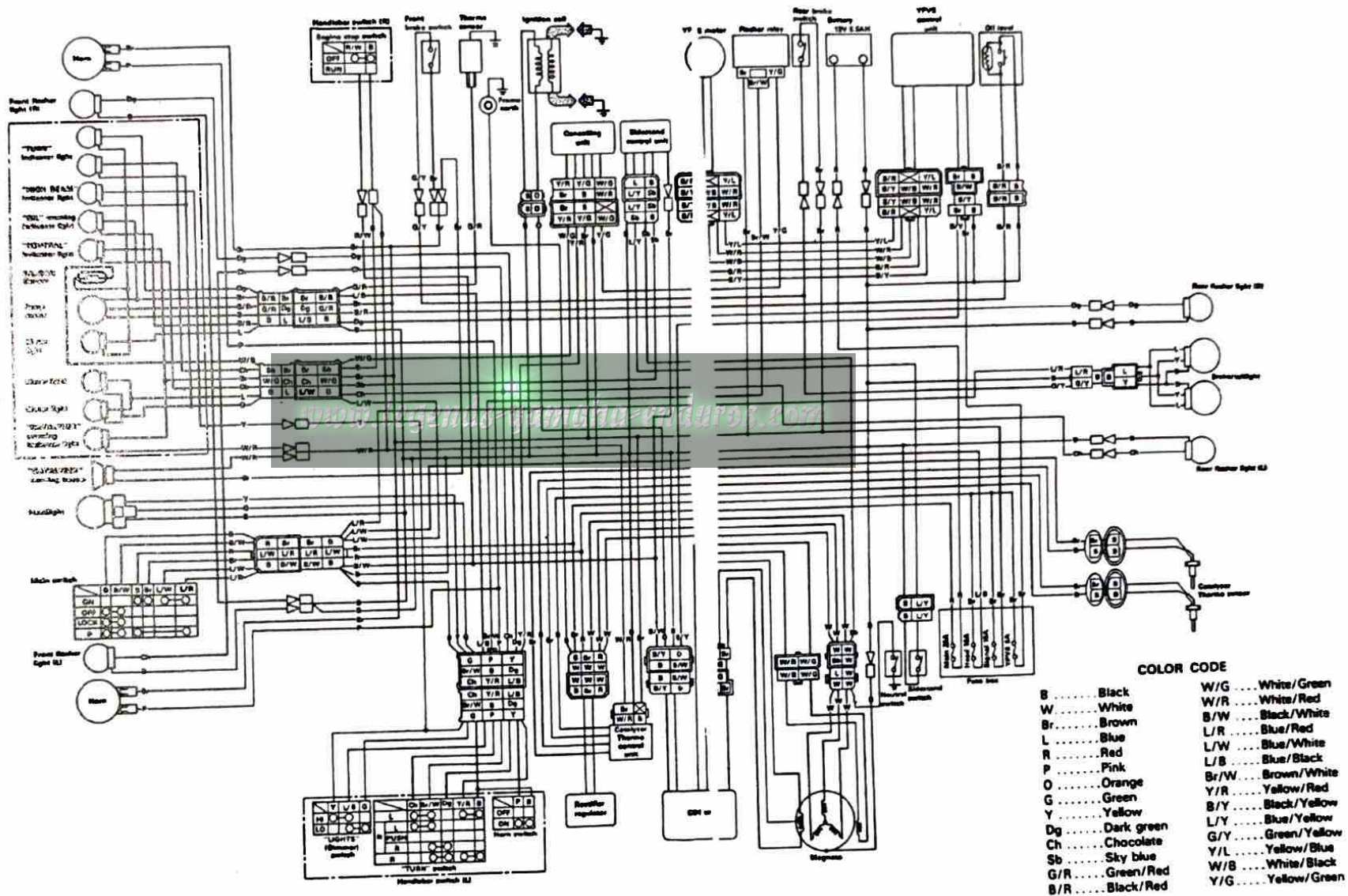
MAINTENANCE RECORD

Copies of work orders and/or receipts for parts you purchase and install will be required to document that maintenance has been completed 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	REMARKS
1,000 km or 600 mi or 1 mo.				
7,000 km or 4,400 mi or 7 mo.				
13,000 km or 8,200 mi or 13 mo.				
19,000 km or 12,000 mi or 19 mo.				
25,000 km or 15,800 mi or 25 mo.				

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	REMARKS
31,000 km or 19,600 mi or 31 mo.				
37,000 km or 23,400 mi or 37 mo.				
43,000 km or 27,200 mi or 43 mo.				
49,000 km or 31,000 mi or 49 mo.				
55,000 km or 34,800 mi or 55 mo.				
61,000 km or 38,600 mi or 61 mo.				

RZ350N2/RZ350NC2 WIRING DIAGRAM



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LIT-11626-04-93