



YAMAHA

Y0107N

DT50M

OWNER'S MANUAL

2FN-28199-20

IDENTIFICATION NUMBERS RECORD

1. KEY NUMBER:

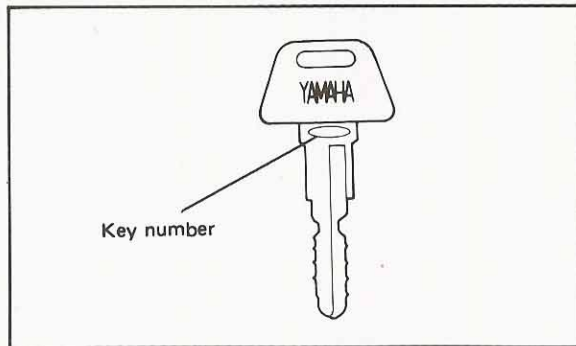
3263

2. FRAME NUMBER AND 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 frame and engine number in the spaces provided to assist you in ordering spare parts from your Yamaha dealer or for reference in case your vehicle is stolen. (See page 2-1)

A-001

DT50M
OWNER'S MANUAL
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Printed in Japan

INTRODUCTION

Congratulations on your purchase of the Yamaha DT50M. 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.

U-001

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Some data in this manual may become outdated due to future improvement on this model.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.

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

WARNING: _____

PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING 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: _____

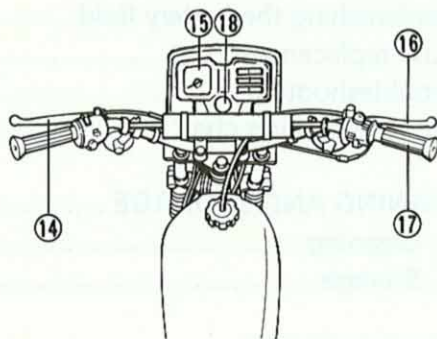
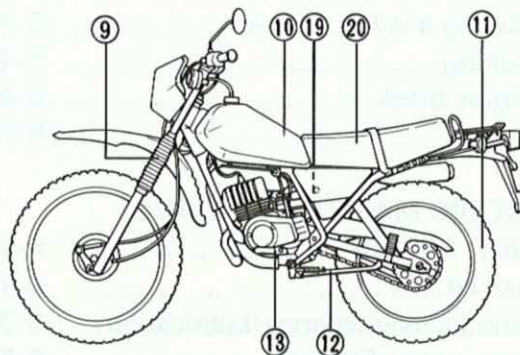
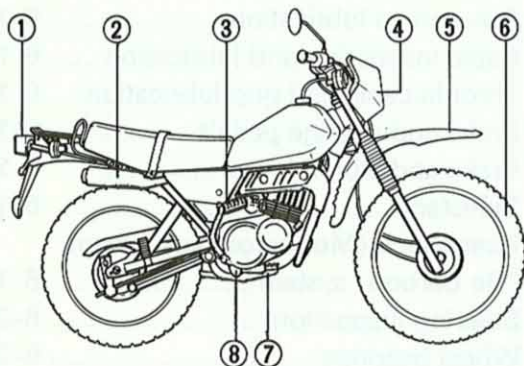
This manual should be considered a permanent part of this motorcycle and should remain with it even if the motorcycle is subsequently sold.

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DESCRIPTION



- | | |
|---------------------|-------------------|
| 1. Tail/Brake light | 11. Rear wheel |
| 2. Muffler | 12. Sidestand |
| 3. Kick starter | 13. Change pedal |
| 4. Headlight | 14. Clutch lever |
| 5. Front fender | 15. Speedometer |
| 6. Front wheel | 16. Brake lever |
| 7. Brake pedal | 17. Throttle grip |
| 8. Footrest | 18. Main switch |
| 9. Front fork | 19. Oil tank |
| 10. Fuel tank | 20. Seat |

U-002

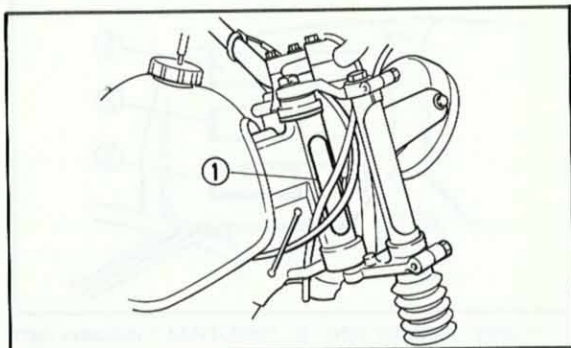
NOTE:

The motorcycle you have purchased may differ slightly from those shown in the photographs.

MOTORCYCLE IDENTIFICATION

Frame serial number

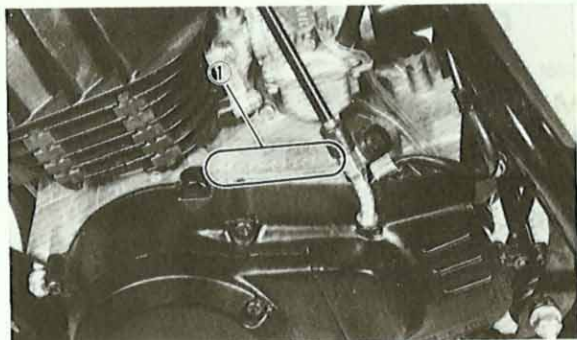
The frame serial number is stamped into the right side of the steering head pipe.



1. Frame serial number

Engine serial number

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



1. Engine serial number

NOTE:

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

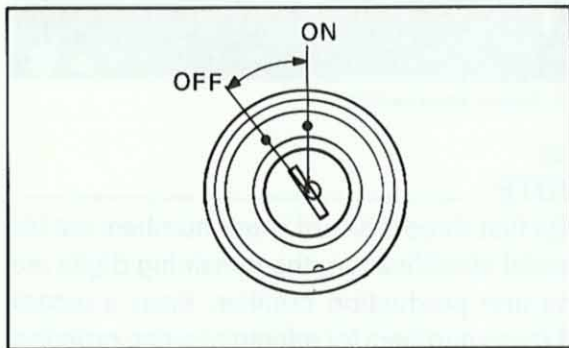
B-000

CONTROL FUNCTIONS

B-001

Main switch

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



B-005

ON:

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

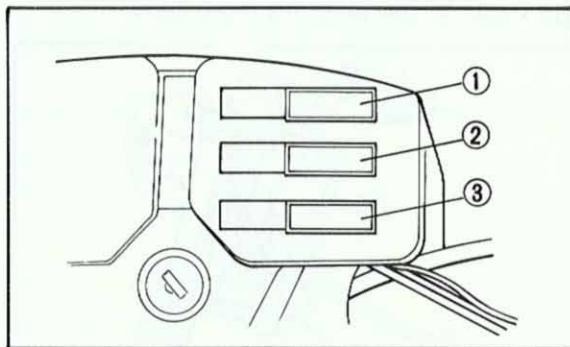
B-006

OFF:

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

B-100

Indicator lights



1. "TURN" indicator light
2. "NEUTRAL" indicator light
3. "HIGH BEAM" 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.

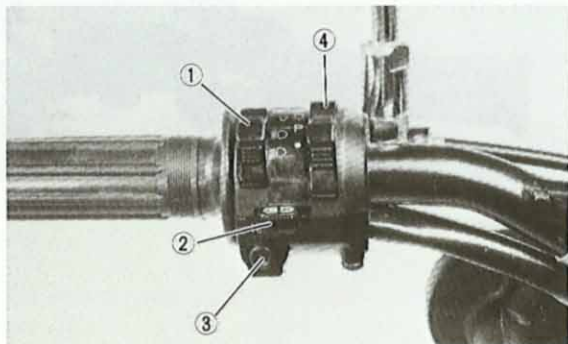
B-407K

Speedometer

The odometer is built into the speedometer.

B-600

Handlebar switches:



1. "LIGHTS" switch (dimmer)
2. "TURN" switch
3. "HORN" switch
4. "LIGHTS" switch

B-601

"LIGHTS" (Dimmer) switch

Turn the switch to "☰D" for the high beam and to "☷D" for the low beam.

B-605

"TURN" signal switch

This is a three-way switch: the center position is off; turn to the "L" to turn on the left flasher and to the "R" for the right flasher. Be sure to turn the switch off after completing a turn.

B-602

"HORN" switch

Press the switch to sound the horn.

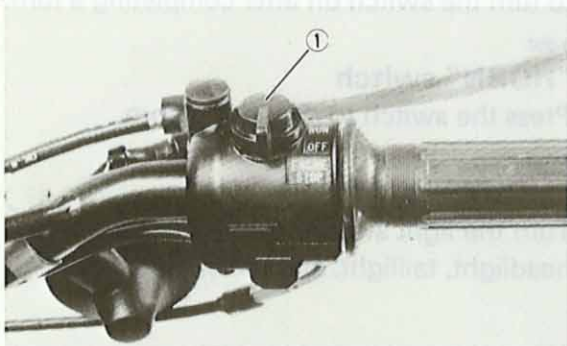
B-616

"LIGHTS" switch

Turn the light switch to "☀" to turn on the headlight, taillight, and meter lights.

"ENGINE STOP" switch

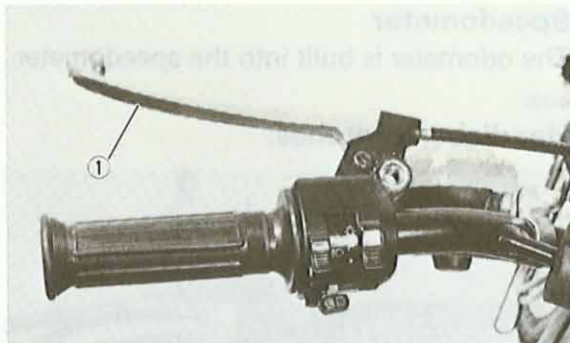
The engine stop switch is a safety device for use in an emergency such as when the motorcycle overturns or when trouble occurs in the throttle system. The engine will not run when the engine stop switch is turned to "OFF." In case of emergency, turn the switch to "OFF."



1. "ENGINE STOP" switch

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.

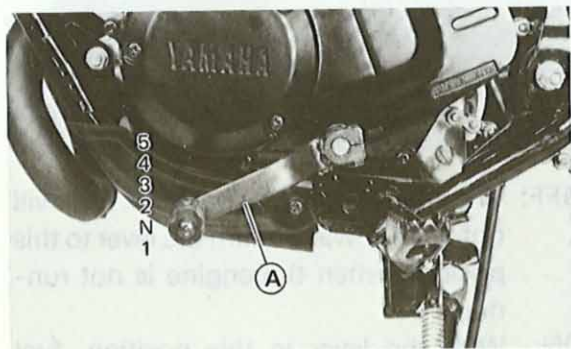


1. Clutch lever

B-800

Change pedal

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



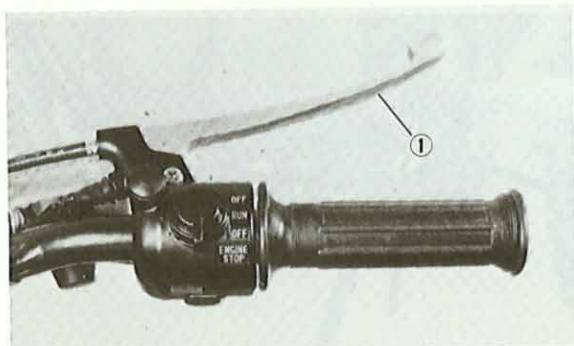
A. Change pedal

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.

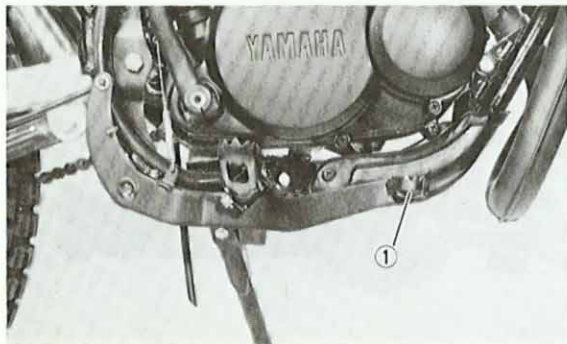


1. Front brake lever

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.

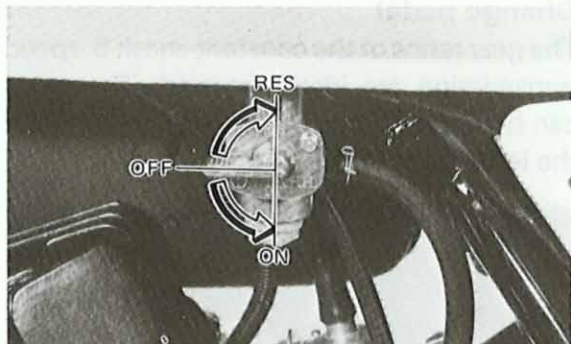


1. Rear brake pedal

C-101

Fuel cock

The fuel cock supplies fuel from the tank to carburetor while filtering the fuel. The fuel cock has the three positions:



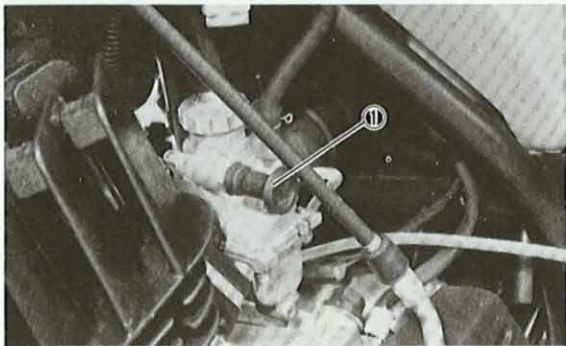
OFF: With the lever in this position, fuel will not flow. Always return the lever to this position when the engine is not running.

ON: With the lever in this position, fuel flows to the carburetor. Normal riding is done with the lever in this position.

RES: This indicates reserve. If you run out of fuel while riding, move the lever to this position. **FILL THE TANK AT THE FIRST OPPORTUNITY. BE SURE TO SET THE LEVER TO "ON" AFTER REFUELING.**

Starter knob (CHOKE)

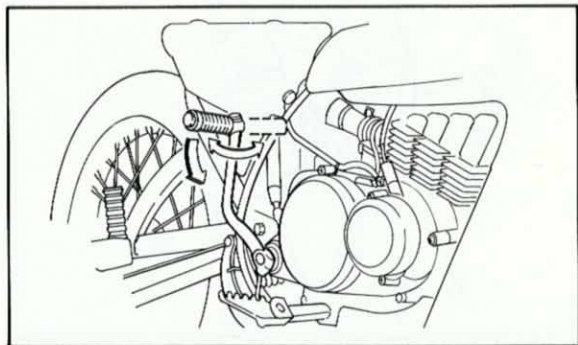
When cold, the engine requires a richer air-fuel mixture for starting. A separate starter circuit supplies this mixture. Pull the starter knob out to open the circuit for starting. When the engine has warmed up, push the knob in to close the circuit.



1. Starter knob

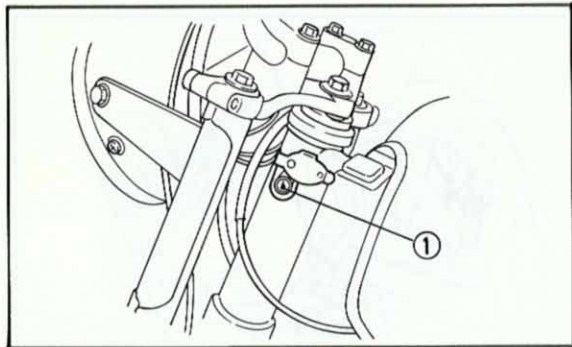
Kick starter

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 kick starter so the engine can be started in any gear if the clutch is disengaged. In normal practices, however, shift to neutral before starting.



Steering lock

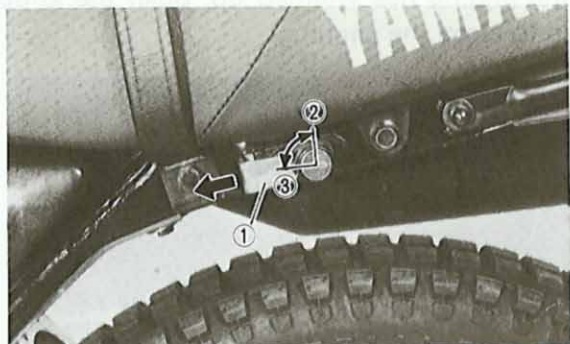
To lock the steering, turn the handlebars all the way to the right, and insert the key into the steering lock. Turn the key 1/8 turn counterclockwise, push it in, then turn it 1/8 turn clockwise. After checking to see that the lock is engaged, remove the key from the lock. To release the lock, reverse the above procedure.



1. Steering lock

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.



1. Helmet holder

2. Open

3. Lock

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.

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 5-2 for an explanation of this system.)

U-689

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 mal-

function, you must return the motorcycle to a Yamaha dealer immediately for repair.

D-305

Sidestand switch operation check

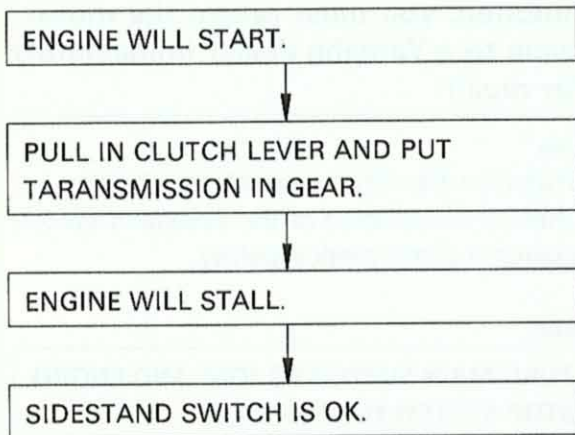
Check the operation of the sidestand switch against the information below.

CD3-02

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

TRANSMISSION IS IN NEUTRAL AND SIDESTAND IS DOWN.

KICK THE KICK STARTER.



U-691

WARNING:

If improper operation is noted, consult a Yamaha dealer immediately.

PRE-OPERATION CHECKS

Before using this motorcycle, check the following points:

Item	Routine	Page
Brakes	Check operation/adjustment	4-2, 6-11 ~ 6-14
Clutch	Check operation/lever adjustment	4-2, 6-14 ~ 6-15
Fuel tank	Check fuel level/top-up as required	4-7 ~ 4-8
Autolube tank	Check oil level/top-up as required	4-2 ~ 4-3
Transmission oil	Check oil level/top-up as required	4-3, 6-6 ~ 6-7
Drive chain	Check alignment/adjustment/lubrication	4-3, 6-15 ~ 6-17
Throttle	Check for proper throttle and Autolube calbe operation	4-2, 6-18
Wheels and tires	Check tire pressure/wear	4-3 ~ 4-6, 6-20
Fittings/fasteners	Check all — tighten as necessary	4-7, 6-5
Lights/signals	Check headlight/tail/brake light	4-7
Battery	Check electrolyte level/add distilled water as required	4-7, 6-20 ~ 6-22

NOTE:

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

Brakes (See page 6-11 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. Check the brake shoes.

Refer to page 6-13.

U-022

NOTE: _____

When this brake service is necessary, ask a Yamaha dealer.

E-200

Clutch (See page 6-14 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-301

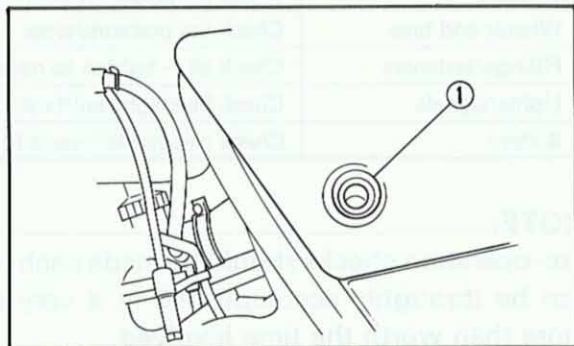
Throttle grip (See page 6-18 for more detail)

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 to make any necessary adjustments.

E-412

Engine oil

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



1. Inspection window

Recommended oil:

Yamaha oil 2T or equivalent
air-cooled, 2-stroke engine oil

Oil quantity:

Total amount
1.3 L(1.1 Imp qt, 1.4 US qt)

U-042

NOTE:

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

E-404

Transmission oil (See page 6-6 for more detail)

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

Recommended oil:

SAE 10W/30 type SE motor oil

Oil quantity:

Total amount:

0.65 L(0.57 Imp qt, 0.69 US qt)

Periodic oil change:

0.60 L(0.53 Imp qt, 0.63 US qt)

E-500

Chain (See page 6-15 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-907

Tires

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

1. Tire air pressure

Always check and adjust the tire pressure before operating the motorcycle.

WARNING:

Tire inflation pressure should be checked and adjusted when the temperature of the tire equals the ambient air temperature. Tire inflation pressure must be adjusted according to total weight of cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model), and vehicle speed.

CE9-03

Basic weight: With oil and full fuel tank	90 kg (198 lb)	
Maximum load*	170 kg (375 lb)	
Cold tire pressure	Front	Rear
Up to 90 kg (198 lb) load*	177 kPa (1.8 kg/cm ² , 26 psi)	196 kPa (2.0 kg/cm ² , 28 psi)
90 kg (198 lb) ~ Maximum load*	196 kPa (2.0 kg/cm ² , 28 psi)	226 kPa (2.3 kg/cm ² , 32 psi)

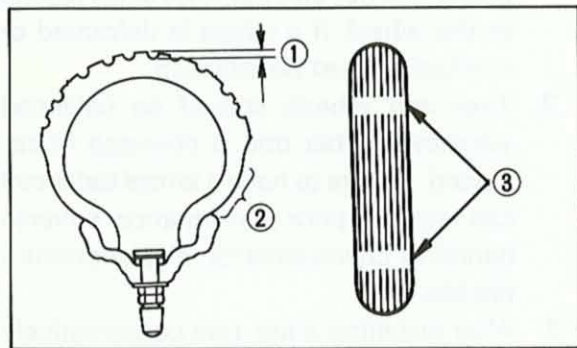
* Load is the total weight of cargo, rider, passenger, and accessories.

WARNING:

Proper loading of your motorcycle is important for the handling, braking, and other performance and safety characteristics of your motorcycle. Do not carry loosely packed items that can shift. Securely pack your heaviest items close to the center of the motorcycle, and distribute the weight evenly from side to side. 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 immediately and have him replace the tire.



1. Tread depth

2. Side wall

3. Wear indicator

U-678

WARNING:

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

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

CE9-02

FRONT:

Manufacture	Size	Type
Inoue	2.50-21-4PR	—
Yokohama	2.50-21-4PR	Y-963

REAR:

Manufacture	Size	Type
Inoue	3.00-18-4PR	—
Yokohama	3.00-18-4PR	Y-963

Minimum tire tread depth (front and rear)

1.0 mm (0.04 in)

WARNING:

- 1. It is dangerous to ride with a worn-out tire. When a tire tread begins to show lines. Have a Yamaha dealer replace the tire immediately. Brakes, tires, and related wheel parts replacement should be left to a Yamaha Service Technician.**
- 2. Patching a punctured tube is not recommended. If it is absolutely necessary to do so, use great care and replace the tube as soon as possible with a good quality replacement.**

Wheels

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 wheel; be sure the spokes are tight and undamaged. If any abnormal condition exists in a wheel, consult a Yamaha dealer. 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.**

E-850

Fittings/Fasteners

Always check the tightness of chassis fittings and fasteners before a ride. Use the chart on page 6-5 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

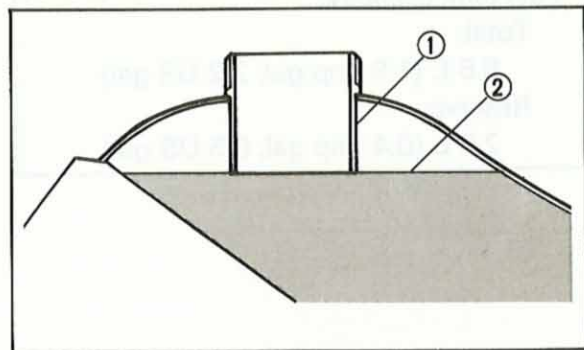
Battery (See page 6-20 for more detail)

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

E-800

Fuel

Make sure there is sufficient fuel in the tank.



1. Filler tube

2. Fuel level

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: Regular gasoline

Fuel tank capacity:

Total:

8.5 L (1.9 Imp gal, 2.2 US gal)

Reserve:

2.0 L (0.4 Imp gal, 0.5 US gal)

OPERATION AND IMPORTANT RIDING POINTS

U-672

WARNING:

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

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.

F-123

Starting a cold engine

U-074

NOTE:

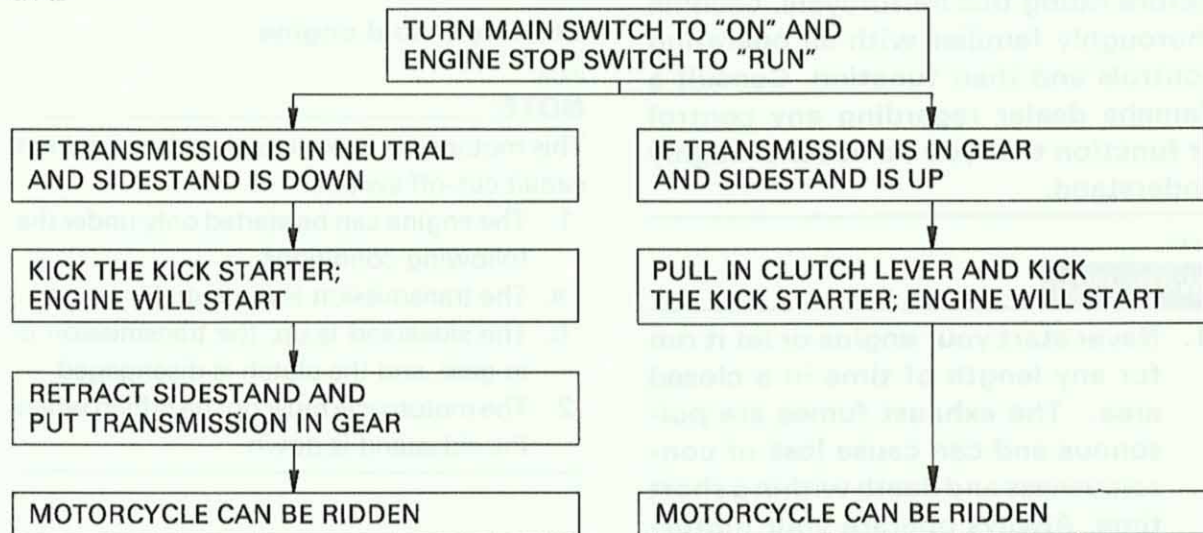
This motorcycle is equipped with an ignition circuit cut-off switch.

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.

WARNING:

Before going through the following steps, check the function of the side-stand switch. (Refer to page 3-8.)

CF1-02



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-030

NOTE: _____

When the transmission is in neutral, the neutral indicator light (green) should be on. If the light does not come on, ask a Yamaha dealer 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 the engine starts, warm it up for one or two minutes. Make sure the starter is returned to its original position before riding.

F-110

Engine warm-up

To ensure maximum engine life, always warm up the engine before riding your motorcycle. Never accelerate hard with a cold engine. An engine is warm if it responds normally to the throttle when the starter (CHOKE) is turned off.

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.

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 3-4)

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, tran-**

mission, and driveline are not designed to withstand the shock of forced shifting and can be damaged by shifting without the clutch.

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.

1. 0 ~ 500 km (0 ~ 300 mi):

It is very good for the engine, if it is allowed to cool about 10 minutes for each hour of operation.

During this period the engine should not be operated at a constant speed. Vary the speed occasionally. Do not exceed 1/2 throttle.

2. 500 ~ 1,000 km (300 ~ 600 mi):
Avoid cruising speeds in excess of 3/4 throttle.

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:

The engine can be operated occasionally at full throttle but be careful of the engine condition and check for noises, etc.

U-322

CAUTION:

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

F-401

Parking

When parking the motorcycle, stop the engine and remove the ignition key. Turn the fuel cock to "OFF" whenever stopping the engine.

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.

PERIODIC MAINTENANCE AND MINOR REPAIR

Periodic inspection, adjustment, and lubrication will keep your motorcycle in the safest and most efficient condition possible. Safety is an obligation of the motorcycle owner. The maintenance and lubrication schedule chart should be considered strictly as a guide to general maintenance and lubrication intervals. **YOU MUST TAKE INTO CONSIDERATION THAT WEATHER, TERRAIN, GEOGRAPHICAL LOCATIONS, AND A VARIETY OF INDIVIDUAL USES ALL TEND TO DEMAND THAT EACH OWNER ALTER THIS TIME SCHEDULE TO SHORTER INTERVALS TO MATCH HIS ENVIRONMENT.** The most important points of motorcycle inspection, adjustment, and lubrication are explained in the following pages.

WARNING:

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

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.

U-060

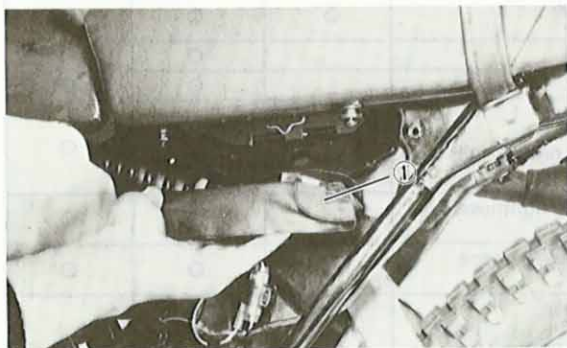
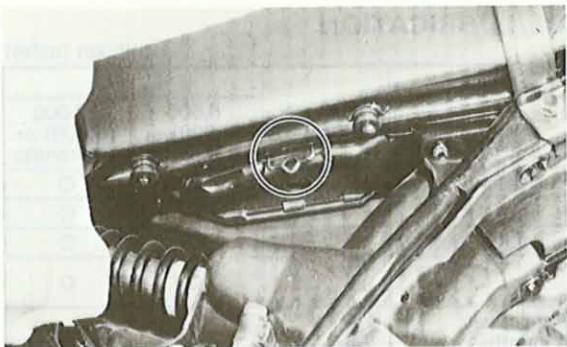
NOTE: _____

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

U-671

WARNING: _____

Modifications to this motorcycle not approved by Yamaha may cause loss of performance, and render it unsafe for use. Consult a Yamaha dealer before attempting any changes.



1. Tool kit

PERIODIC MAINTENANCE/LUBRICATION

Unit: km (miles)

ITEM	REMARKS	BREAK-IN 1,000(600)	EVERY	
			6,000 (4,000) or 6 months	12,000 (8,000) or 12 months
Spark plug(s)	Check condition. Clean or replace if necessary.	○	○	○
Air filter	Clean. Replace if necessary.		○	○
Carburetor*	Check idle speed/starter operation. Adjust if necessary.	○	○	○
Fuel line*	Check fuel hose for cracks or damage. Replace if necessary.		○	○
Transmission oil*	Check oil level/oil leakage. Correct if necessary. Replace every 24,000 (16,000) or 24 months. (Warm engine before draining.)	Replace	○	○
Autolube pump*	Check operation. Correct if necessary. Air bleeding.	○	○	○
Brake	Check operation. Adjust if necessary.		○	○
Clutch	Check operation. Adjust if necessary.		○	○
Rear arm pivot*	Check rear arm assembly for looseness. Correct if necessary. Moderately repack every 24,000 (16,000) or 24 months. **			○
Wheels*	Check balance/damage/runout/spoke tightness. Repair if necessary.		○	○
Wheel bearings*	Check bearings assembly for looseness/damage. Replace if damaged.		○	○
Steering bearing*	Check bearings assembly for looseness. Correct if necessary. Moderately repack every 24,000 (16,000) or 24 months. **	○		○

Unit: km (miles)

ITEM	REMARKS	BREAK-IN 1,000(600)	EVERY	
			6,000 (4,000) or 6 months	12,000 (8,000) or 12 months
Front forks*	Check operation/oil leakage. Repair if necessary.		○	○
Rear shock absorber*	Check operation/oil leakage. Repair if necessary.		○	○
Drive chain	Check chain slack/alignment. Adjust if necessary. Clean and lube.	EVERY 500 (300)		
Fittings/Fasteners*	Check all chassis fittings and fasteners. Correct if necessary.	○	○	○
Sidestand*	Check operation. Repair if necessary.	○	○	○
Sidestand switch*	Check operation. Clean or replace if necessary.	○	○	○
Battery*	Check specific gravity. Check breather pipe for proper operation. Correct if necessary.		○	○

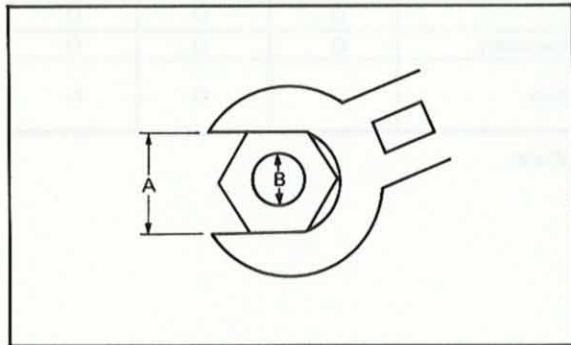
*: It is recommended that these items be serviced by a Yamaha dealer.

** : Medium weight wheel bearing grease.

Torque specifications

Use a torque wrench to tighten these items. It is recommended that these items be checked occasionally, especially before a long trip.

Always check the tightness of these items whenever they are loosened for any reason.

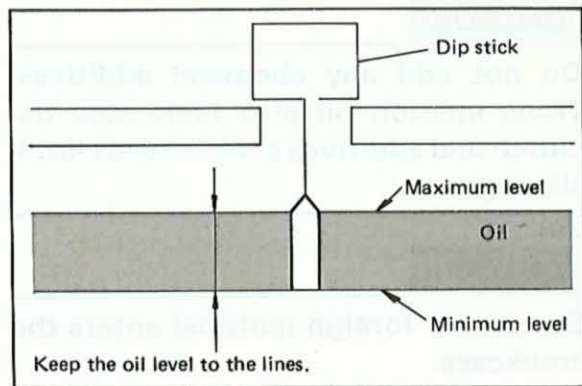


A (Nut)	B (Bolt)	General torque specifications		
		Nm	m·kg	ft·lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94

Item	Torque		
	Nm	m·kg	ft·lb
Spark plug	20	2.0	14
Engine drain plug	20	2.0	14
Front axle	45	4.5	32
Rear wheel axle	60	6.0	43

Transmission oil level check

1. To check the oil level, the motorcycle must stand VERTICALLY with its both wheels on the ground. A slight tilt toward the side can produce false readings.
2. When checking the oil level, stop the engine and remove the dip stick. Rest the dip stick on the threads of the hole.
3. The dip stick 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:

SAE 10W/30 type SE motor oil

Oil quantity:

0.65 L (0.57 Imp qt, 0.69 US qt)

CAUTION:

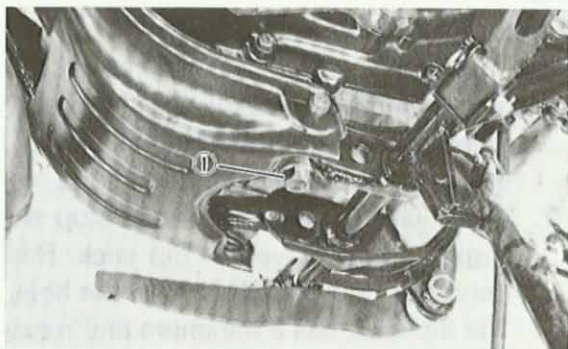
Do not add any chemical additives. Transmission oil also lubricates the clutch and additives could cause clutch slippage.

CAUTION:

Be sure no foreign material enters the crankcase.

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:

0.60 L (0.53 Imp qt, 0.63 US qt)

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

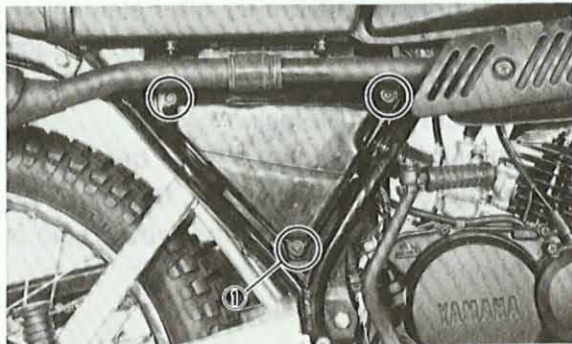
Fuel cock cleaning

The fuel cock has a built-in filter to remove any particles before they reach the carburetor. If the filter becomes blocked, fuel cannot enter the carburetor.

1. First, turn the cock lever to the "OFF" then remove the filter cup and clean the bottom of the cup with solvent.
2. After removing the filter cup, remove and clean the filter screen. At the same time, you should examine the condition of the filter gasket. Replace if damaged.
3. When reassembling, be careful not to clamp the filter cup too tightly as this may unseat the O-ring and lead to a fuel leak.

Air filter

1. Remove the right side cover, air filter case fitting screws, and filter case cover.



1. Case screw

2. Remove the air filter element from its case, and clean it with solvent. After cleaning, remove the remaining solvent by squeezing the element.
3. 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:

Yamaha oil 2T or equivalent
air-cooled 2-stroke engine oil

4. 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.
5. 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-900

Carburetor adjustment

The carburetor is a vital part of the engine and requires very sophisticated adjustment. Most adjustments should be left to a Yamaha dealer who has the professional knowledge and experience to do so. However, the following point may be serviced by the owner as part of this routine maintenance.

U-330

CAUTION:

The carburetor was set at the Yamaha factory after many tests. If the settings are disturbed, poor engine performance and damage may result.

H-203

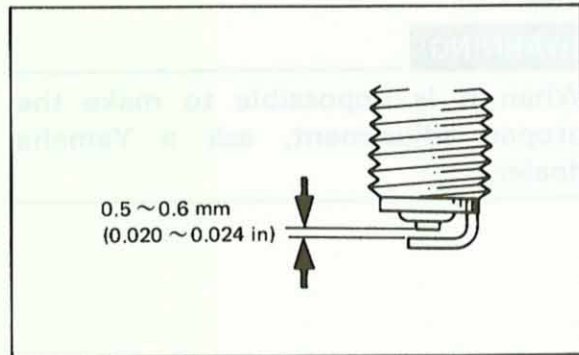
Spark plug inspection

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. The ideal color on the white porcelain insulator around the center electrode is a medium to light tan color for a motorcycle that is being ridden normally. Do not attempt to diagnose any problems yourself. Instead, take the motorcycle to a Yamaha dealer. You should periodically remove and inspect the spark plug because heat and deposits will cause the 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:
BR7HS (NGK)

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



Spark plug gap:

0.5 ~ 0.6 mm (0.020 ~ 0.024 in)

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

Spark plug torque:

20 Nm (2.0 m·kg, 14 ft·lb)

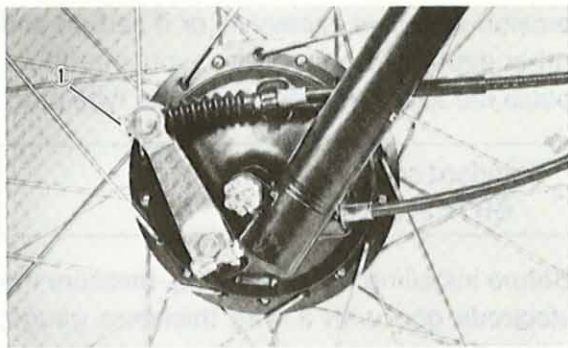
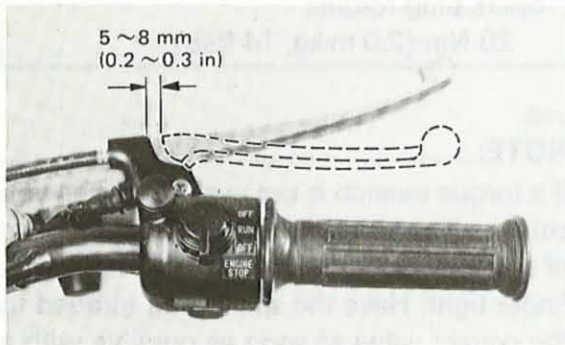
U-038

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.

Front brake adjustment

The front brake should be adjusted to suit the rider's preference; but free play at the brake lever pivot point should be 5 ~ 8 mm (0.2 ~ 0.3 in). Adjustment is accomplished at the front brake hub. To adjust, turn the adjuster clockwise to reduce play; turn it counter-clockwise to increase play.



1. Adjuster

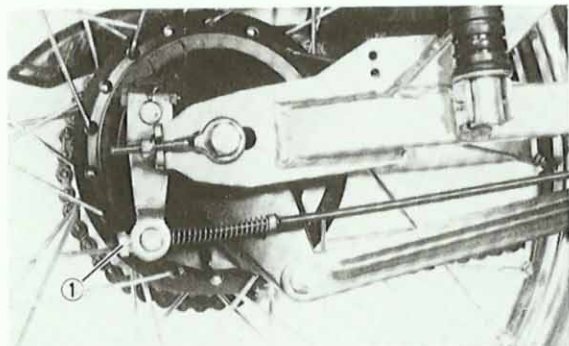
U-732K

WARNING:

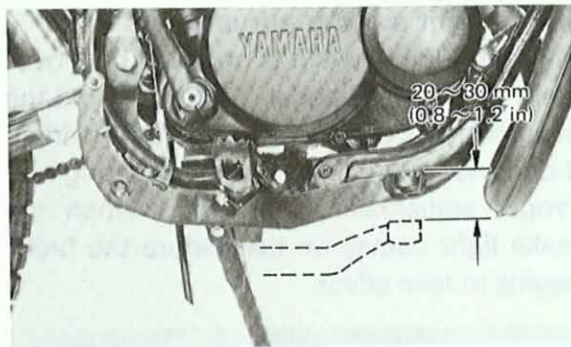
When it is impossible to make the proper adjustment, ask a Yamaha dealer.

Rear brake adjustment

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



1. Adjuster



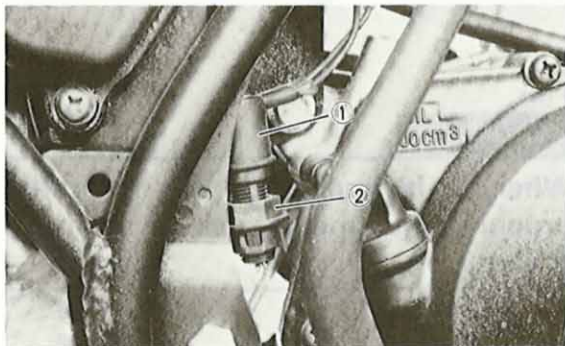
U-732K

WARNING:

When it is impossible to make the proper adjustment, ask a Yamaha dealer.

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. Switch body

2. Adjuster

Checking the brake shoes

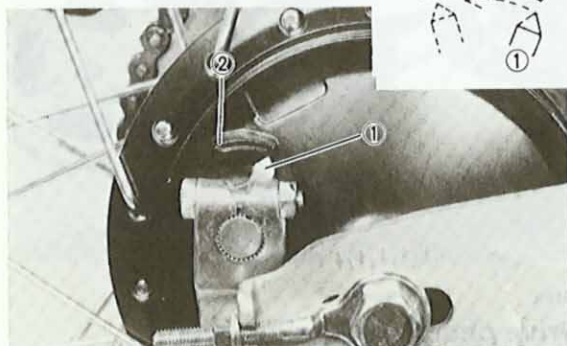
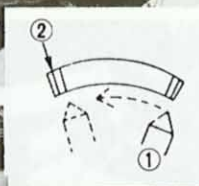
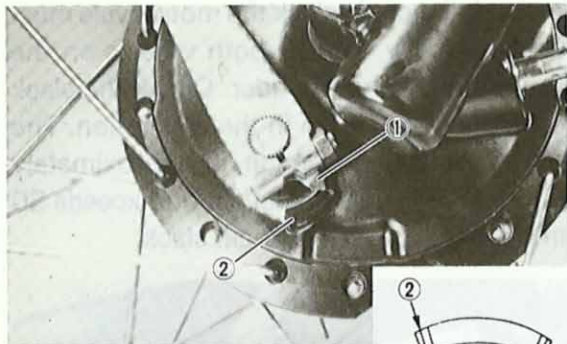
A wear indicator is attached to each brake to facilitate brake shoes check. This indicator permits a visual check without disassembling the brake. To check, look at the wear indicator while depressing the brake pedal or pulling the brake lever. If the indicator reaches to the wear limit line, ask a Yamaha dealer to replace shoes.

Clutch adjustment

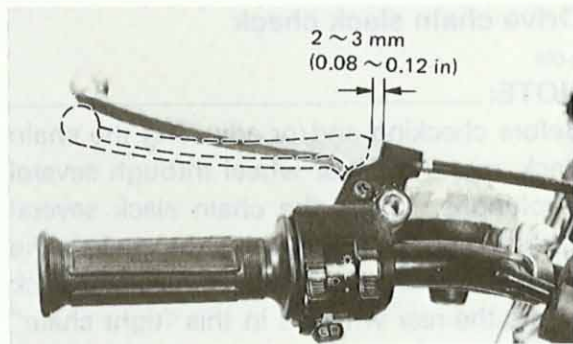
The clutch should be adjusted to suit the rider's preference, but free play at the lever pivot should be 2 ~ 3 mm (0.08 ~ 0.12 in). Loosen the adjuster lock nut. Next turn the length adjuster either in or out until proper lever free play is achieved.

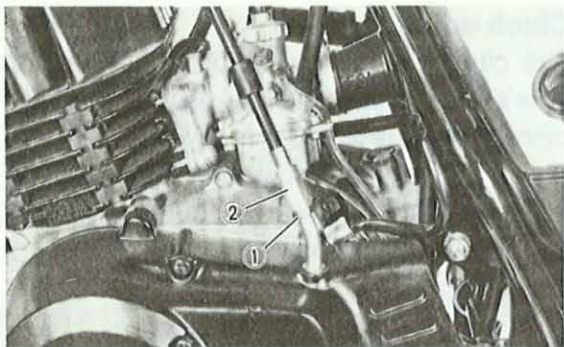
Clutch lever free play:

2 ~ 3 (0.08 ~ 0.12 in)



1. Wear indicator 2. Wear limit





1. Lock nut

2. Adjuster

I-408

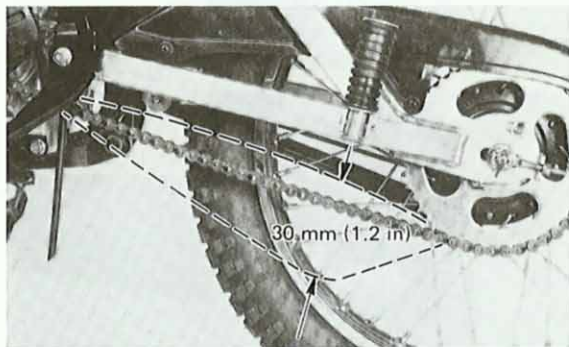
Drive chain slack check

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.

To check the chain slack the motorcycle must stand vertically with its both wheels on the ground and without a rider. Check the slack at the position shown in the illustration. The normal vertical deflection is approximately 30 mm (1.2 in). If the deflection exceeds 30 mm (1.2 in) adjust the chain slack.

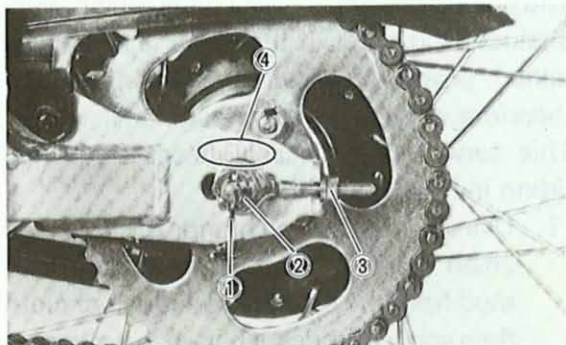


I-414K

Drive chain slack adjustment

1. Loosen the rear brake adjuster.
2. Remove the cotter pin from the rear wheel axle nut.

3. Loosen the rear wheel axle nut.



1. Cotter pin
2. Axle nut
3. Adjuster
4. Marks for alignment

4. To tighten the chain, turn 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.)

U-333

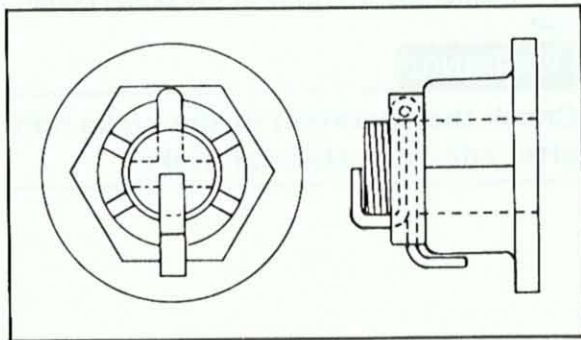
CAUTION:

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

5. After adjusting, be sure to tighten the axle nut.

Axle nut torque:

60 Nm (6.0 m·kg, 4.3 ft·lb)



6. 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.

7. Adjust the free play in the brake pedal.

U-645

WARNING: _____

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

I-406

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, service the chain regularly.

This service is especially necessary when riding in dusty conditions.

1. Use any of the many brands of spray type chain lubricant. First, remove all dirt and mud from the chain with a brush or cloth then spray a lubricant between both rows of side plates and on all center rollers. This should be performed every 500 km (300 mi).
2. To clean the chain, remove the chain from the motorcycle, dip it in solvent, and clean out as much dirt as possible. Take the chain out of the solvent and dry it. Immediately lubricate the chain to prevent rust.

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 to replace them.

Recommended lubricant:
SAE 10W30 motor oil

Throttle cable and grip lubrication

The throttle twist grip assembly should be greased at the time that the cable is lubricated, since the grip must be removed to get at the end of the throttle cable. Two screws clamp the throttle housing to the handlebar. Once these two are removed, the end of the cable can be held high to pour in several drops of lubricant. With the throttle grip disassembled, coat the metal surface of the grip assembly with a suitable all-purpose grease.

I-306

Brake and change pedals

Lubricate the pivoting parts.

Recommended lubricant:
SAE 10W30 motor oil

I-307

Brake and clutch levers

Lubricate the pivoting parts.

Recommended lubricant:
SAE 10W30 motor oil

I-311

Sidestand

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

Recommended lubricant:
SAE 10W30 motor oil

U-704

WARNING:

If the sidestand movement is not smooth, consult a Yamaha dealer.

I-515

Rear shock (Monocross suspension "De Carbon" system)

U-673

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 for any service.

I-603

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 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-602

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 inspect the wheel bearings. The wheel bearings should be inspected according to the Maintenance Schedule.

I-700

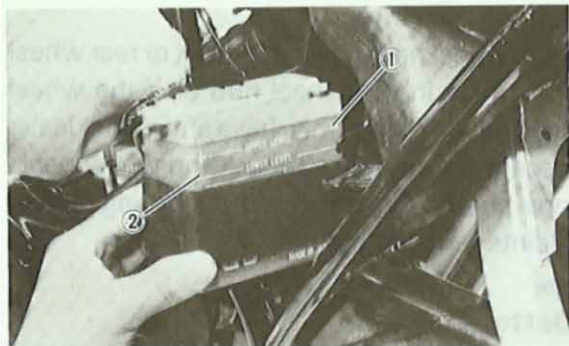
Battery

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

U-336

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.



1. Upper level

2. Lower level

U-658

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.

I-705

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.

U-338

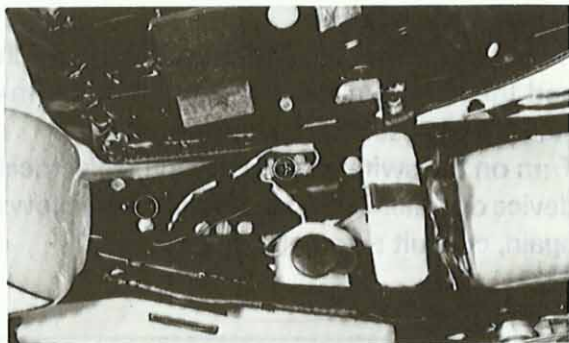
CAUTION:

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 re-using 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.



Fuse replacement

If a 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.

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.

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.

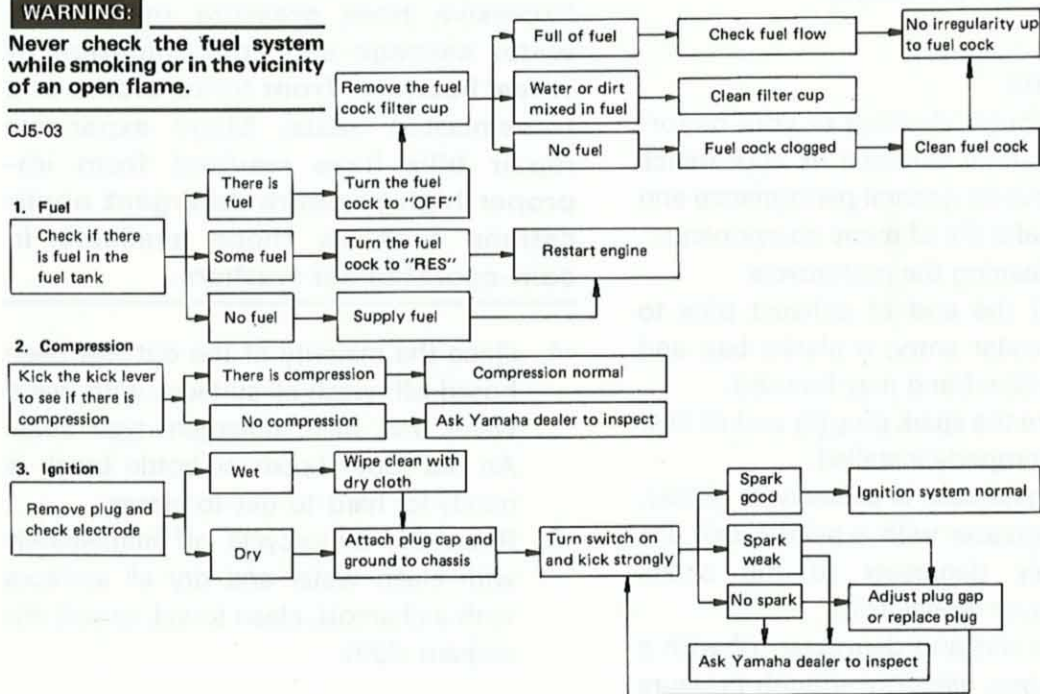
Troubleshooting chart

U-663

WARNING:

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

CJ5-03



CLEANING AND STORAGE

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. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
 8. 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.
2. Remove the 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 spark plug hole(s) and reinstall spark plugs. 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 solvent 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.

K-007

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 it for storage as follows:

1. Drain the fuel tank, fuel lines, and carburetor float bowl(s).

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.

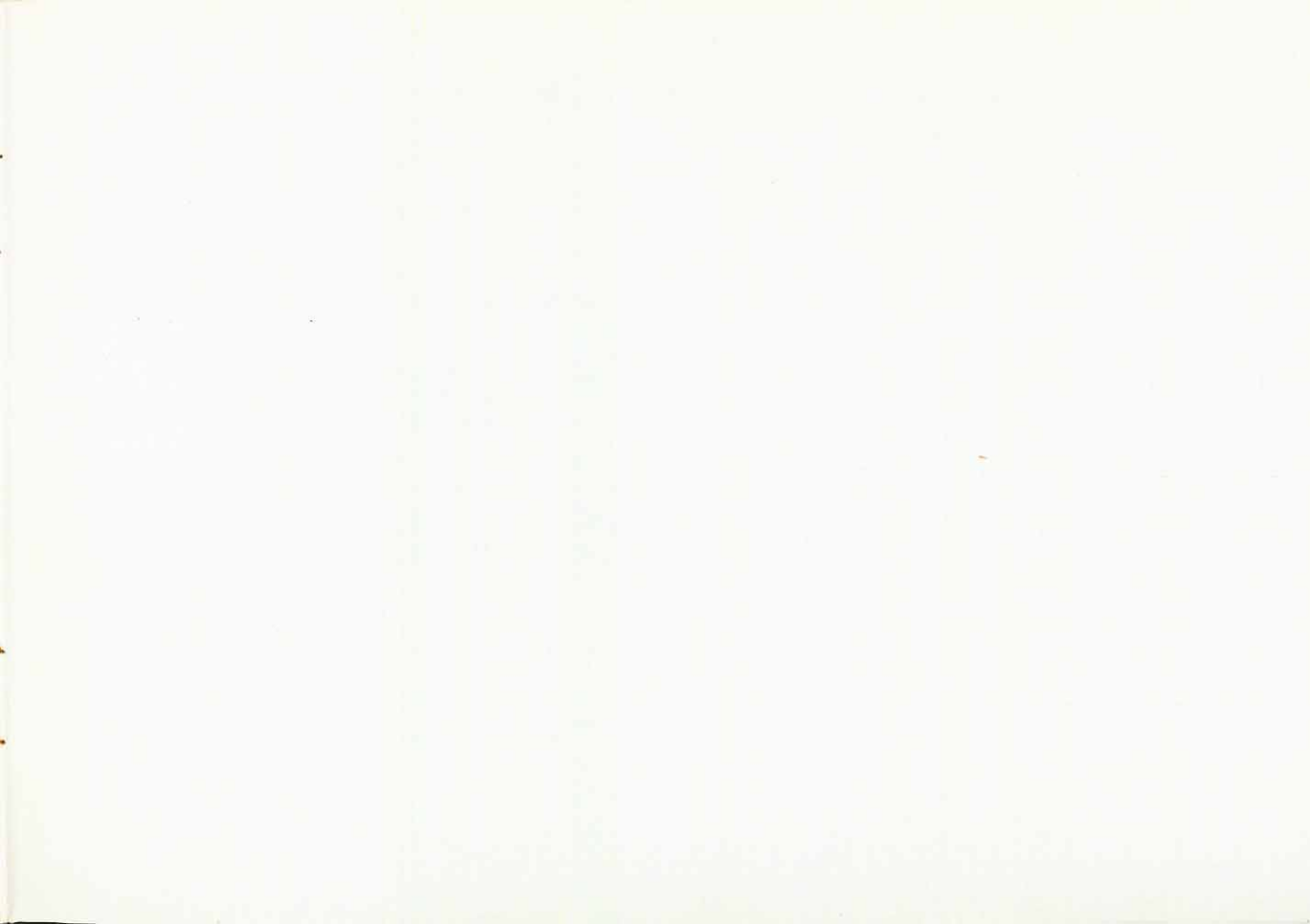
SPECIFICATIONS

Model	DT50M
Dimension: Overall length Overall width Overall height Wheelbase Minimum road clearance	2,055 mm (83.5 in) 835 mm (32.9 in) 1,115 mm (43.9 in) 1,280 mm (50.4 in) 260 mm (10.2 in)
Basic weight: With oil and full fuel tank	90 kg (198 lb)
Performance: Minimum turning radius	2,100 mm (82.7 in)
Engine: Type Model Cylinder Displacement Bore and stroke Compression ratio Starting system Ignition system Fuel tank capacity	2-stroke, gasoline 5M6 Single forward inclined 49 cm ³ (3.0 cu. in) 40 x 39.7 mm (1.57 x 1.56 in) 6.6 : 1 Kick starter CDI Total: 8.5 L (1.9 Imp gal, 2.2 US gal)

Model	DT50M
Oil tank capacity Lubrication system Battery type/Capacity Generator system Spark plug Carburetor Air cleaner Clutch type	Total: 1.3 L (1.1 Imp qt, 1.4 US qt) Separate system (Yamaha Autolube) 6N4B-2A-3/6V, 4.5AH Flywheel magneto BR7HS Y14P Wet type element Wet, multi-disc
Transmission: Type Primary reduction system Primary reduction ratio Gear ratio 1st 2nd 3rd 4th 5th Secondary reduction system Secondary reduction ratio	Constant-mesh, 5-speed Gear 68/19 (3.578) 39/12 (3.250) 34/17 (2.000) 30/21 (1.428) 27/24 (1.125) 25/26 (0.961) Chain 48/11 (4.364)
Steering: Caster Trail	30° 132 mm (5.2 in)

Model	DT50M
Tire size: Front Rear	2.50-21-4PR 3.00-18-4PR
Suspension: Front Rear	Telescopic fork Swingarm (Yamaha monocross suspension)
Shock absorber: Front Rear	Coil spring, oil damper Coil spring, nitrogen oil damper
Frame: Type	Tubular semi-double cradle
Electrical: Headlight Tail/Brake light Flasher light Meter light Pilot light: TURN NEUTRAL HIGH BEAM	6V, 25W/25W 6V, 5W/21W 6V, 21W x 4 6V, 3W 6V, 3W 6V, 3W 6V, 3W

— MEMO —





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