



Blank Page

IMPORTANT MANUAL INFORMATION

51	ш	160	16	O

A WARNING

PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING THIS MOTORCYCLE.

EAA00100

TT600R
OWNER'S MANUAL
©1997 by Belgarda S.p.a.
2nd Edition, February 1998
All rights reserved. Any reprinting or unauthorized use without the written permission of Belgarda S.p.a.
is expressly prohibited.
Printed in Italy.

CONTENTS

1 GIVE SAFETY THE RIGHT OF WAY
2 DESCRIPTION
3 CONTROL FUNCTIONS
4 PRE-OPERATION CHECKS
5 OPERATION AND IMPORTANT RIDING POINTS
6 PERIODIC INSPECTION AND MINOR REPAIRS
7 CLEANING AND STORAGE
8 TECHNICAL SPECIFICATIONS
9 CONSUMER INFORMATION
INDEX
ELECTRIC SYSTEM

Blank Page

INTRODUCTION

LAA20501

Welcome to the Yamaha world of motorcycling!

As the owner of a TT600R, you are benefiting from Yamaha's vast experience in and newest technology for the design and the manufacture of high-quality products, which have earned Yamaha a reputation for dependability.

Please take the time to read this manual thoroughly, so as to enjoy all your TT600R's advantages. The owner's manual does not only instruct you in how to operate, inspect and maintain your motorcycle, but also in how to safeguard yourself and others from trouble and injury.

In addition, the many tips given in this manual will help to keep your motorcycle in the best possible condition. If you have any further questions, do not hesitate to contact your Yamaha dealer.

The Yamaha team wishes you many safe and pleasant rides. So, remember to put safety first!

IMPORTANT MANUAL INFORMATION

FAA10603

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



The Safety Alert Symbol means ATTENTION BECOME ALERT! YOUR SAFETY IS INVOLVED!



Failure to WARNING instructions <u>could result in severe injury or death</u> to the motorcycle operator, a bystander or a person inspecting or repairing the motorcycle.

CAUTION:

A CAUTION indicates special precautions that must be taken to avoid damage to the motorcycle.

NOTE:

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

EUU00001

NOTA:

- This manual should be considered a permanent part of this motorcycle and should remain with it even if the motorcycle is subsequently sold.
- Yamaha continually seeks advancements in product design and quality. Therefore, while this
 manual contains the most current product information available at the time of printing, there
 may be minor discrepancies between your motorcycle and this manual. If there is any question concerning this manual, please consult your Yamaha dealer.



GIVE SAFETY THE RIGHT OF WAY

Give safety the right of way 1-1



GIVE SAFETY THE RIGHT OF WAY

Motorcycles are fascinating vehicles, which can give you an unsurpassed feeling of power and freedom. However, they also impose certain limits, which you must accept; even the best motorcycle does not ignore the laws of physics.

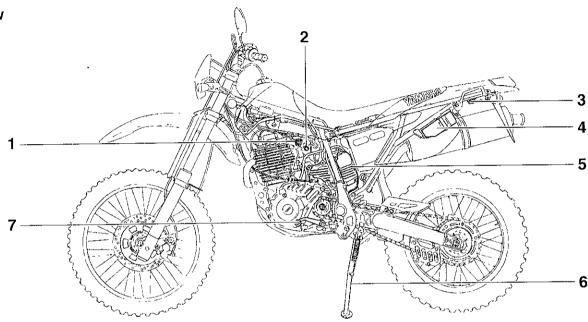
Regular care and maintenance are essential for preserving your motorcycle's value and operating condition. Moreover, what is true for the motorcycle is also true for the rider: good performance depends being in good shape. Riding under the influence of medication, drugs and alcohol is, of course, out of question. Motorcycle riders - more than car drivers - must always be at their mental and physical best. Under the influence of even small amounts of alcohol, there is a tendency to take dangerous risks.

Protective clothing is as essential for the motorcycle rider as seat belts are for car drivers and passengers. Always wear a complete motorcycle suit (whether made of leather or tear-resistant synthetic materials with protectors), sturdy boots, motorcycle gloves and a properly fitting helmet. Optimum protective wear, however, should not encourage carelessness.

Though full-coverage helmets and suits, in particular, create an illusion of total safety and protection, motorcyclists will always be vulnerable. Riders who lack critical self-control run the risk of going too fast and are apt to take chances. This is even more dangerous in wet weather. The good motorcyclist rides safely, predictably and defensively - avoiding all dangers, including those caused by others. Enjoy your ride!

Left view	2-1
Right view	2-2
Controls/Instruments	

Left view

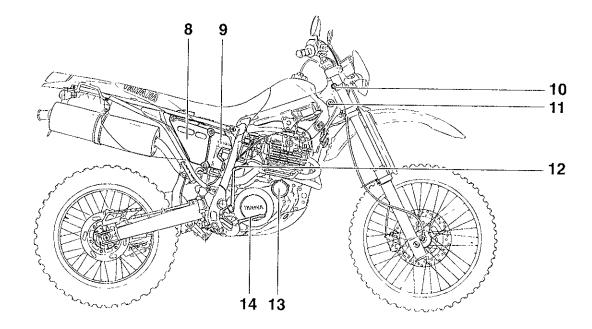


- 1. Fuel cock
- 2 Starter " | "
- 3. Helmet holder
- 4. Object box
- 5. Engine oil tank
- 6. Sidestand
- 7. Shift pedal

- (Page 3-8)
- (Page 3-9)
- (Page 3-10)
- (Page 3-10)
- (Page 6-6)
- (Page 3-14)
- (Page 3-5)

DESCRIPTION

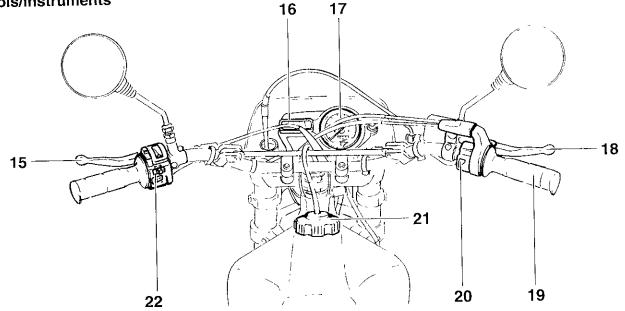
Right view



- ^o Air filter
- Rear shock absorber spring preload adjuster
- 10. Steering lock
- 11. Main switch
- 12. Kick starter
- 13. Oil filter
- 14. Rear brake pedal

- (Page 6-8)
- (Page 3-12)
- (Page 3-1)
- (Page 3-1)
- (Page 3-6)
- (Page 6-7)
- (Page 3-6)

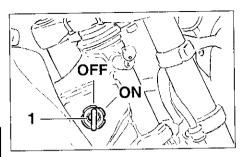
Controls/Instruments



- 15. Clutch lever
- 16. Indicator lights
- 17. Speedometer
- 18. Front brake lever
- 19. Throttle grip
- 20. Engine stop switch
- 21. Fuel tank cap
- 22. Handlebar switches

- (Page 3-5)
- (Page 3-2)
- (Page 3-5)
- (Page 3-6)
- (Page 3-4)
- (Page 3-7)
- (Page 3-3)

Main switch/Steering lock	3-1
Indicator lights	3-2
Handlebar switches	3-3
Speedometer	3-5
Clutch lever	3-5
Shift pedal	3-5
Front brake lever	3-6
Rear brake pedal	3-6
Kick starter	3-6
Fuel tank cap	3-7
Fuel	3-7
Frata I.	3-8
Starter "N"	3-9
Seat	3-9
Helmet holder/Object box	3-10
Front fork adjustment	3-11
Rear shock absorber	3-12
Rear shock absorber adjustment	3-12
Sidestand	3-14
Sidestand switch operation check	3-15



1 Main switch

EAB00100

Main switch

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

EAB00500

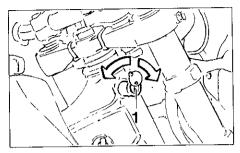
ON "()":

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

EAB00600

OFF "₩":

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

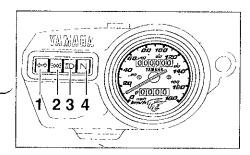


1. Steering lock

Steering lock

To lock the steering, turn the handlebars all the way to the left. Insert the key into the steering lock under the head pipe, and turn the key 1/2 turn in either direction. After checking to see that the lock is engaged, remove the key from the lock. To release the lock, insert the key, and turn it 1/2 turn in either direction.

EAC30300



- 1 Turn indicator light "Ф⇒"
- 2. Parking indicator light "≫€"
- 3. High beam indicator light "EO"
- 4. Neutral indicator light "N"

EAB10000

Indicator lights

EAB10102

This indicator flashes when the turn switch is moved to the left or right.

EAB00000

2. Parking indicator light "50€"

This indicator comes on when front and rear parking lights and meter lights are on.

EAB13200

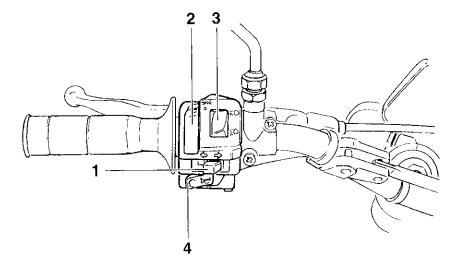
3. High beam indicator light "EO"

This indicator comes on when the headlight high beam is used

EAB13100

4. Neutral indicator light "N"

This indicator comes on when the transmission is in neutral.



Handlebar switches

EAB60000 EAB63500

1. Turn signal switch

To signal a right-hand turn, push the switch to "\$\phi\$". To signal a left-hand turn, — push the switch to "\$\phi\$". 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

EAB64000

2. Lights switch

Turning the light switch to "₹0€", turns on the auxiliary light, meter lights and taillight. Turning the light switch to "♣℃", turns the headlight on also.

EAB63400

3. Dimmer switch

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

EAB63700

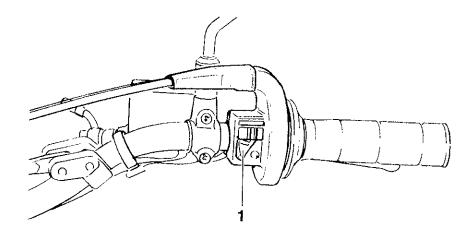
4. Horn switch "▶ "

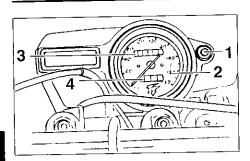
Press the switch to sound the horn.

EAB63800

1. Engine stop switch

The engine stop switch is a safety device for use in an emergency such as when the motorcycle overturns or if trouble occurs in the throttle system. Turn the switch to "\(\)" to start the engine. In case of emergency, turn the switch to "\(\)" to stop the engine.



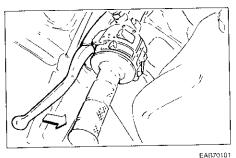


- 1. Reset knob
- 2 Speedometer
- 3. Odometer
- 4 Trip odometer

EAB40005

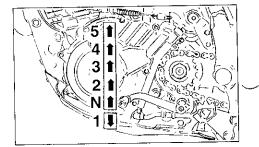
Speedometer

The speedometer shows riding speed. This speedometer is equipped with an odometer and trip odometer. The trip odometer can be reset to "0" with the reset knob. Use the trip odometer to estimate how far you can ride on a tank of fuel. This information will enable you to plan fuel stops in the future.



Clutch lever

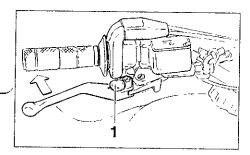
The clutch lever is located on the left handlebar; it disengages or engages the clutch. Pull the clutch lever to the handlebar to disengage the clutch, and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for smooth clutch operation.



EAB80001

Shift pedal

This motorcycle is equipped with a constant-mesh 5-speed transmission. The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting.

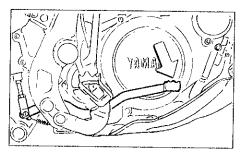


1 Lever position adjusting nut

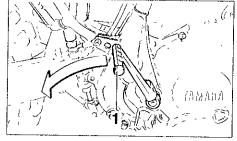
Rear brake pedal

EAB90403

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



EAB90101



1 Kick starter

EAC60201

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-coupled kick starter so the engine can be started in any gear if the clutch is disengaged. However, shifting to neutral before starting is recommended.

Front brake lever

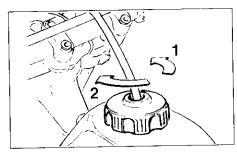
The front brake lever is located on the right handlebar and is equipped with a position adjuster. To activate the front brake, pull the lever toward the handlebar.

To adjust the front brake lever position, turn the adjusting nut while pulling the lever forward. Make sure the number on the adjusting nut is aligned with the mark on the lever.

EUU06700

NOTE:

This model features an autodecomp. device, which frees the operator from the trouble otherwise required.



1 To open 2 To lock

EAC01100

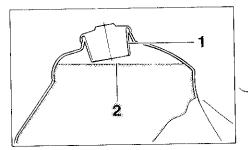
Fuel tank cap

Remove the fuel tank cap by turning it counterclockwise.

EUU61100

A WARNING

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



- 1 Fuel filler
- 2. Fuel level

Fuel

Make sure there is sufficient fuel in the tank.

EUU61000

EAE80000

▲ 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.

EUU39302

CAUTION:

Always wipe off spilled fuel immediately with a dry and clean soft cloth. Fuel may deteriorate painted surfaces or plastic.

EAE82000

Recommended fuel:

Regular unleaded gasoline with a research octane number of 91 or higher.

Fuel tank capacity:

Total:

10 L

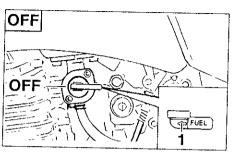
Reserve:

3 L

EUU19000

NOTE:

If knocking or pinging occurs, use a different brand of gasoline or higher octane grade.



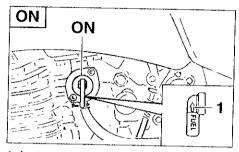
1. Arrow position

EAC10105

Fuel cock

The fuel cock supplies fuel from the tank to the carburetors while filtering it also. The fuel cock has three positions:

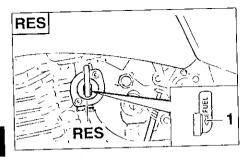
OFF: With the fuel cock in this position, fuel will not flow. Always set the fuel cock to this position when the engine is not running.



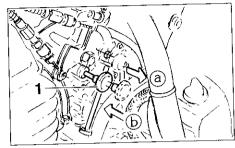
1 Arrow position

ON: With the fuel cock in this position, fuel flows to the carburetors. Set the fuel cock to this position when starting the engine and while riding.

RES: This indicates reserve. If you run out of fuel while riding, move the fuel cock to this position. Fill the tank at the first opportunity. Be sure to set the fuel cock back to "ON" after refueling!



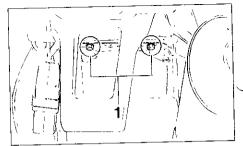




1 Starter " \"



EAC20502



1 Bolt (x 2)

FAC20502

Starter "N"

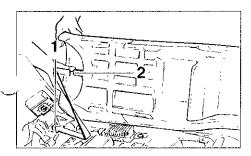
Starting a cold engine requires a richer air-fuel mixture A separate starter circuit supplies this mixture.

Move in direction (a) to turn on the starter.

Move in direction (b) to turn off the starter.

Seat

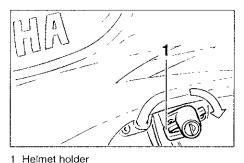
To remove the seat, remove the bolts. To install the seat, insert the lobe on the front of the seat into the receptacle on the frame, then tighten the bolts.



1 Receptacle on the frame2 Lobe

NOTE: _____

Make sure that the seat is securely fitted.



. Trominot mondo

EUU01700

EAC50001

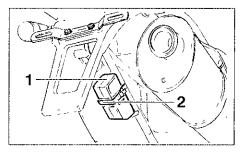
Helmet holder

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.

EUU72900

A WARNING

Never ride with a helmet in the helmet holder. The helmet may hit objects, causing loss of control and possibly an accident.



- 1. Object box
- 2. Rubber belt

EA000000

Object box

The object box is located under the left side cover and is fastened to the chassis by means of a rubber belt. EA00000H

Front fork adjustment

This fork is equipped with a rebound and compression damping effect adjuster on both forks.

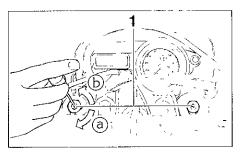
EUU00000

A WARNING

It is important to be sure that both fork tubes are adjusted in the same way. An uneven adjustment may cause loss of control of the motorcycle.

EUU36300

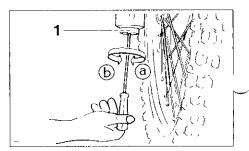
1. Adjust rebound damping effect as follows. Turn adjuster in direction ⓐ to increase the rebound damping effect and in direction ⓑ to decrease rebound damping effect



- 1 Adjusting the rebound damping effect
- (a) Increase damping effect
- **b** Decrease damping effect

EUU00000

2. Adjust compression damping effect as follows. Remove the rubber protecting cap. Turn adjuster in direction (a) to increase compression damping effect and in direction (b) to decrease compression damping effect



- 1 Adjusting the compression damping effect
- (a) Increase damping effect
- (b) Decrease damping effect

EUU00000

CAUTION:

Do not force the adjusting screws beyond the minimum and maximum limits.

EUU00000

CAUTION:

After adjusting, make sure to insert back the rubber protecting caps, so as to avoid dust and dirt infiltration.

Fork setting: STANDARD

REBOUND DAMPING EFFECT: 15 steps open from fully locked.

COMPRESSION DAMPING EFFECT:

12 steps open from fully locked.

Fork setting: TRAIL

REBOUND DAMPING EFFECT: 12 steps open from fully locked.

COMPRESSION DAMPING EFFECT: 3 steps open from fully locked.

EAI51502

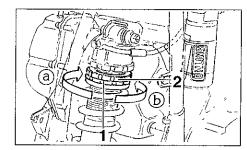
Rear shock absorber

A WARNING

EUU67301

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 the shock absorber to an open flame or other high heat source. This may cause the unit to explode due to excessive gas pressure.
- Do not deform or damage the cylinder in any way. Cylinder damage will result in poor damping performance.
- 4. Take your shock absorber to a Yamaha dealer for any service.



- 1. Adjusting the spring preload
- Increase spring preload
- (b) Decrease spring preload

EAI59102

2. Lock nut

Rear shock absorber adjustment

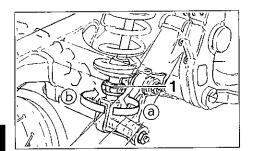
This shock absorber is equipped with a spring preload, rebound and compression damping force adjuster.

EUU36300

CAUTION:

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

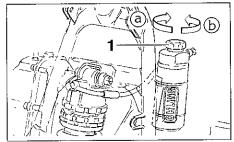
1. Adjust spring preload as follows. Turn adjuster in direction (a) to increase spring preload and in direction (b) to decrease spring preload.



- 1. Adjusting the rebound damping effect
- (a) Increase damping effect
- b Decrease damping effect

EUU36300

2. Adjust rebound damping force as follows. Turn adjuster in direction ⓐ to increase rebound damping force and in direction ⓑ to decrease rebound damping force.



- 1. Adjusting the compression damping effect
- Increase damping effect
- (b) Decrease damping effect

EUU36300

3. Adjust compression damping force as follows. Turn adjuster in direction ⓐ to increase compression damping force and in direction ⓑ to decrease compression damping force.

Shock absorber setting: STANDARD

SPRING PRELOAD: 18.5 mm (one turn of the adjuster will change the preload by 1.5 mm).

REBOUND DAMPING EFFECT: 18 > steps open from fully locked.

COMPRESSION DAMPING EFFECT: 18 steps open from fully locked.

Shock absorber setting: TRAIL

SPRING PRELOAD: 18.5 mm (up to 75 kg rider's weight).

REBOUND DAMPING EFFECT: 9 steps open from fully locked.

COMPRESSION DAMPING EFFECT: 10 steps open from fully locked.

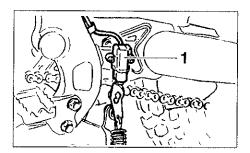
EUU68901

Shock absorber setting with LOAD (rider + passenger + cargo)

SPRING PRELOAD: 18.5 mm (to be varied according to load, if required).

REBOUND DAMPING EFFECT: 16 steps open from fully locked.

COMPRESSION DAMPING EFFECT: 10 steps open from fully locked.



1. Sidestand switch

EAD30101

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 3-15 for an explanation of this system).

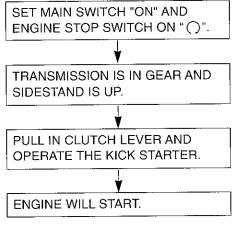
A WARNING

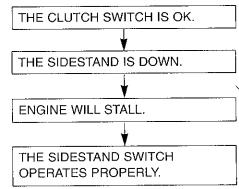
This motorcycle must not be operated with the sidestand in the down position. If the stand is not properly retracted, it could contact the ground and distract the operator, resulting in a possible loss of control. Yamaha has designed into this motorcycle a lockout system to assist the operator in fulfilling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

EAD30501

Sidestand switch operation check

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





EUU69100

A WARNING

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

3

PRE-OPERATION CHECKS

Pre-operation checks 4-1

Owners are personally responsible for their vehicle's condition. Your motorcycle's vital functions can start to deteriorate quickly and unexpectedly, even if it remains unused (for instance, if it is exposed to the elements). Any damage, fluid leak or loss of tire pressure could have serious consequences. Therefore, it is very important that, in addition to a thorough visual inspection, you check the following points before each ride.

No	ITEM	OPERATION	PAGE
No.	Fuel	Check fuel level and refill as required.	3-7 ~ 3-8
2	Engine oil	Check oil level, add oil as required.	6-6 ~ 6-7
3	Front and rear brake	 Check operation, fluid level and fluid leakage. Top-up with DOT 4 brake fluid if necessary. 	6-15 ~ 6-17
4	Clutch	Check operation and free play. Adjust if necessary.	6-18
5	Drive chain	Check chain slack and condition. Adjust and lubricate if necessary.	6-20 ~ 6-22
6	Throttle	Check for proper operation and reversal.	
7	Lights, turn indicator lights and switches	Check for proper operation.	3-2 ~ 3-4
8	Tires	Check tire pressure, wear and damages.	6-12 ~ 6-14
9	Frame fasteners	Check for proper tightening of all frame nuts, bolts and screws.	

NOTE: _

Pre-operation checks listed above should be performed 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.

OPERATION AND IMPORTANT RIDING POINTS

Starting the engine	5-1
Starting a warm engine	
Shifting	5-4
Fips for reducing fuel consumption	5-4
Engine break-in/Parking/Speedometer cable	5-5

5

OPERATION AND IMPORTANT RIDING POINTS

EUU67201

EAF1700A

EUU69200

A WARNING

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

EUU07401

NOTE: __

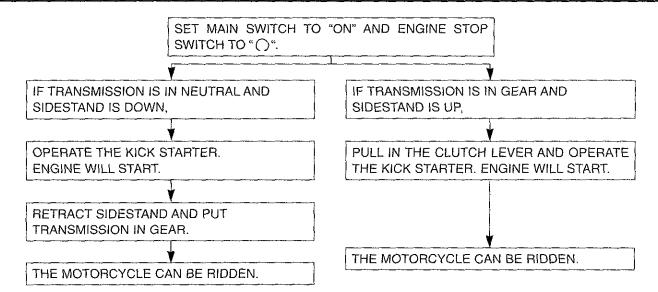
This motorcycle is equipped with an ignition circuit cut-off system.

- 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.

A WARNING

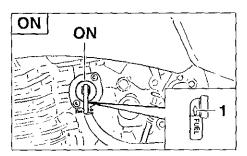
Before going through the following steps, check the function of the side-stand switch (refer to page 3-15.)

OPERATION AND IMPORTANT RIDING POINTS



EUU02701

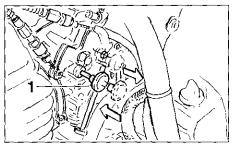
OPERATION AND IMPORTANT RIDING POINTS



- 1. Arrow direction
- 1. Turn the fuel cock to "ON".
- 2. Turn the main switch to "ON" and the engine stop switch to "O"
- 3. Shift transmission into neutral.
- 4. Turn on the starter " \" and completely close the throttle grip.
- 5. Operate the kick starter without turning the throttle control grip.

NOTE: _____

If the engine fails to start, wait a few seconds, then try again.



1 Starter "] "

EUU03001

NOTE:

When the transmission is in neutral, the neutral indicator light should be on. If the light does not come on, ask a Yamaha dealer to inspect it.

6. After starting the engine, move the starter " \ " to the halfway position.

NOTE:

EUU18700

For maximum engine life, never accelerate hard with a cold engine!

7. After warming up the engine, turn off the starter " \ " completely.

NOTE: _____

The engine is warm when it responds normally to the throttle with the starter " \" turned off.

EAF1080

Starting a warm engine

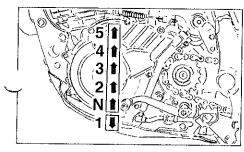
The starter " \" is not required when the engine is warm.

EUU31401

CAUTION:

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

OPERATION AND IMPORTANT RIDING POINTS



EAF20003

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 shift pedal is shown in the illustration.

To shift into neutral, depress the shift pedal repeatedly until it reaches the end of its travel, then raise the pedal slightly. EUU31501

CAUTION:

- Do not coast for long periods with the engine off, and do not tow the motorcycle far 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.
- 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 using the clutch.

EAF00100

Tips for reducing fuel consumption

Your motorcycle's fuel consumption depends to a large extent on your riding style. The following tips can help reduce fuel consumption:

- 1. Warm up the engine before riding.
- 2. Turn off the starter " \ " as soon as possible.
- Shift up swiftly and avoid high engine speeds during acceleration.
- 4. Do not double-clutch or rev the engine while shifting down and avoid high engine speeds with no load on the engine.
- 5. Turn off the engine instead of letting it idle for an extended length of time, i.e. in traffic jams, at traffic lights or railroad crossings

EAF40101

OPERATION AND IMPORTANT RIDING POINTS

Engine break-in

There is never a more important period in the life of your motorcycle than the period between zero and 1,600 km (1,000 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 1,600 km (1,000 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.

EAF34000

1. 0 ~ 1.000 km:

Avoid operation above 1/3 throttle.

2. 1.000 ~ 1.600 km: Avoid cruising speeds in excess of 1/2 throttle

EUU32001

CAUTION:

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

3. 1,600 km and beyond: Proceed with normal riding.

CAUTION:

EUU32200

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

EAF33901

Parking

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

EUU63001

A WARNING

The exhaust system is 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.

EA000000

Speedometer cable

A WARNING

Should motorcycle be overused offroad, speedometer cable is to be disconnected and cable seats must be protected in order to avoid speedometer gear damages due to dust and dirt infiltration.

Tool kit	6-1	Brake and clutch lever lubrication	6-18
Periodic maintenance/lubrication		Brake and shift pedal lubrication	
Removing the seat		Sidestand lubrication	6-19
Removing and installing the tank	6-4	Rear suspension lubrication	
Removing and installing the rear cowling	6-5	Drive chain slack check	6-20
Engine oil		Drive chain lubrication	
Air filter	6-8	Drive chain slack adjustment	
Carburetor adjustment	6-9	Front fork inspection	
Idle speed adjustment		Steering inspection	6-23
Valve clearance adjustment	6-10	Wheel bearings	
Decompression cable adjustment	6-10	Replacing the headlight bulb	
Spark plug inspection	6-11	Replacing the front parking light-bulb	
Tires	6-12	Replacing the turn indicator light-bulb	6-25
Wheels	6-14	Replacing the tail/brake light-bulb	6-25
Front brake lever position adjustment	6-15	Supporting the motorcycle	6-26
Rear brake pedal height adjustment	6-15	Front wheel removal	6-27
Checking the front and rear		Front wheel installation	
brake pads	6-16	-	
Inspecting the brake fluid level	6-16	Rear wheel installation	
Brake fluid replacement	6-17	Troubleshooting	
Clutch lever free play adjustment		Troubleshooting chart	

EAH00400

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 CONSID-ERATION THAT WEATHER, TERRAIN, GEOGRAPHICAL LOCATIONS. AND A VARIETY OF INDIVIDUAL USES ALL TEND TO DEMAND THAT EACH OWN-ER ALTER THIS TIME SCHEDULE TO SHORTER INTERVALS TO MATCH THE ENVIRONMENT. The most important points of motorcycle inspection, adjustment, and lubrication are explained in the following pages.

EUU63200

A WARNING

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

EAH10400

A WARNING

EUU67100

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.

Tool kit

The tool kit is located inside of the storage compartment. (See page 3-10 for compartment opening procedures.) The tools provided in the owner's tool kit are to assist you in the performance of periodic maintenance. However, some other tools such as a torque wrench are also necessary to perform the maintenance correctly.

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.

EUU18500

NOTE: _____

If you do not have necessary tools required during a service operation, take your motorcycle to a Yamaha dealer for service.

PERIODIC MAINTENANCE/LUBRICATION

						BREAK-IN	EV	ERY
 	N ₁	0.	ITEM	ROUTINE	TYPE	1,000 km	or	12,000 km or 12 months
L	1	*	Fuel line	Check fuel hose for cracks or damage. Replace if necessary.	_		0	0
	2		Spark plug	Check condition. Clean or replace if necessary.	See page 6-11.	0	0	0
	3	*	Valve clearance	Check valve clearance. Adjust if necessary.		Every 6,00	00 km or 6	months.
	4		Air filter (see NOTE on page 6-8)	Wash with water and biodegradable liquid soap, smear with oil.	SAE 20W/50 engine oil or special filter oil		0	0
	5		Air filter case	Check condition. Clean.	_		0	0
	6		Clutch	Check for proper operation. Adjust or replace the cable.	_		0	0
	7	*	Decompression device	Check for proper operation. Adjust if necessary.	-		0	0
	3	*	Front brake system	 Check for proper operation, fluid level and leakage (see NOTE, page 6-3A). Adjust lever free play if necessary Check and replace pads if necessary. Replace brake fluid every 24,000 km or 24 months. 	Brake fluid; DOT 4.		•	0

	\neg				BREAK-IN	EVE	ERY
No	•	ITEM	ROUTINE	TYPE	1,000 km	or	12,000 km or 12 months
9	*	Rear brake system	 Check for proper operation, fluid level and leakage (see NOTE, page 6-3A) Adjust pedal free play if necessary. Check and replace pads if necessary Replace brake fluid every 24,000 km or 24 months. 	Brake fluid: DOT 4		0	0
10		Drive chain	 Check and adjust chain slack and alignment. Clean and grease. 	SAE 80W/90 engine oil.	E	Every 500 ki	m.
11	*	Wheels	 Check damage, balancing, run-out, spoke tighteness. Tight spokes and balance/replace if necessary. 			0	0
12	*	Tires	Check damage and minimum tire tread depth. Replace if necessary.	_		0	0
13	*	Wheel bearings	 Check bearing assembly clearance/ damage. Replace if damaged. 	_		0	0
14	*	Grease nipple bushes (rear arm pivot shaft)	Check rear arm system for looseness. Grease moderately.	Lithium soap-based grease	0	0	0
15	*	Arm relay/connecting rod pivots (rear arm)	Check for proper operation. Adjust if necessary.	_	0	0	0
16	*	Steering bearings	Check bearing for smooth rotation/looseness. Repair if necessary Grease every 24,000 km or 24 months.	Lithium soap-based grease.	0	0	0

					BREAK-IN	EV	ERY
N	о.	ITEM	ROUTINE	TYPE	1,000 km	or	12,000 km or 12 months
17	*	Frame fasteners/ fittings	Check all nuts, bolts and screws for tightening. Tight if necessary.	~	0	0	0
18		Sidestand	Check for proper operation and lubricate. Repair if necessary.	Engine oil.		0	0
19	*	Sidestand switch	Check for proper operation. Replace if necessary.	_	0	0	0
20	*	Front fork	Check operation and for oil leakage. Repair if necessary.	_		0	0
21	*	Rear shock absorber	Check operation and for oil leakage Replace if necessary.	_		0	0
22	*	Lights and switches	Check for proper operation. Repair or replace if necessary.	_		0	0
23	*	Carburetor	Check engine idle speed, synchronization and starter operation. Adjust if necessary.	***	0	0	0
24		Engine oil	Replace (warm engine before draining).	See page 6-6.	Replace.	Replace 6,000	-
25	*	Engine oil filter	• Replace.	See page 6-6.	Replace.	Replace 6,000	,

6

PERIODIC INSPECTION AND MINOR REPAIRS

				BREAK-IN	EVERY	
No.	. ITEM ROUTINE	TYPE	1,000 km	or	12,000 km or 12 months	
26	Engine oil tank filter	Clean with solvent.	-		ery 24,000 4 months.	km or

Items marked with (*) require special equipment, data and know-how for servicing. Bring your motorcycle to a Yamaha dealer or refer to Repair Manual for the servicing of these parts

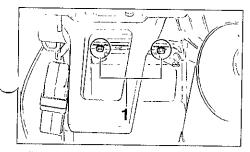
NIO	т		C	
NU		ᆮ	J	

- Should the motorcycle be frequently used off-track, it is advised to replace engine oil every 3,000 km.
- The air filter needs to be cleaned more frequently if the motorcycle is used in dusty or damp areas.

NOTE: ___

Brake fluid replacement:

- When disassembling the master cylinder or caliper, replace the brake fluid.
 Normally check the brake fluid level and add fluid as required.
- 2. Replace the oil seals of the internal master cylinder and caliper parts every two years.
- 3. Replace the brake hoses every four years, or if cracked or damaged.

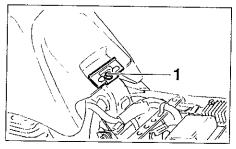


1. Bolt (x 2)

EAC20502

Removing the seat

To remove the seat, remove the bolts. To install the seat, insert the lobe on the front of the seat into the receptacle on the frame, then tighten the bolts.



1. Screw for fastening the tank

EA000000

Removing and installing the tank

To remove the fuel tank you must first remove the seat.

EUU00000

A WARNING

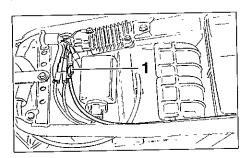
Be sure the cap is properly tightened and the fuel cock is in the "OFF" position before removing the tank. Remove the rear fastening bolt, pull out the fuel pipe from the fuel cock after removing its fastening clamp and remove the fuel tank by lifting it from the rear and freeing it from the front retaining grommets.

To reinstall the tank, secure it on the fastening grommets first, then tighten the rear bolt.

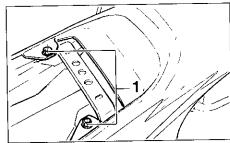
EUU00000

WARNING

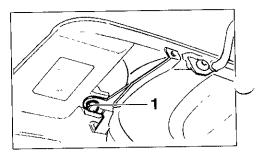
After installing the fuel tank, connect the fuel pipe by inserting it fully into the fuel cock, then lock it by means of the clamp. EA000000



1. Lamp connector



1. Upper fastener screw (x 2)



1. Lower fastener screw

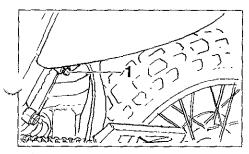
Removing and installing the rear cowling

To remove:

Disconnect lamp connector. Remove the upper fastener screws, the lower fastener screw and side fastener screws.

To install:

Set the rear cowling in its original position. Install the upper fastener screws, the lower fastener screw and side fastener screws. Connect lamp connector



1 Side fastener screw (x 2)

EAH558A0

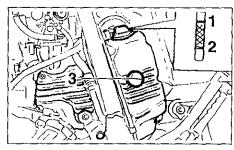
Engine oil

、__ NOTE: __ _

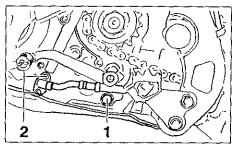
- 1. Oil level inspection
- a Start the engine and warm up until the oil temperature rises to approximately 60°C (140°F).
- b. Idle the engine for at least 10 seconds while keeping the motorcycle upright. After stop the engine and check the oil level through the level window located on the left side of the oil tank assy and(or) by oil level gauge.

EUU03901

Be sure the motorcycle is positioned straight up when checking the oil level. A slight tilt toward the side can result in false readings.



- 1. Maximum level mark
- 2. Minimum level mark
- Oil level window
 - c. The oil level should be between the maximum and minimum marks.
 - d. Adjust the oil level to the maximum level line, if necessary.
 - 2. Engine oil and oil filter element replacement
 - a Warm up the engine for a few minutes.
 - Stop the engine. Place an oil pan under the engine and remove the oil filler cap.
 - c. Remove the drain plug and drain the engine oil.



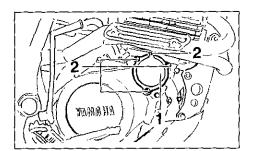
- 1. Drain plug
- 2. Oil hose flange bolt (x 2)
 - d. Remove two bolts and O-ring of the oil hose flange, and drain the oil from oil tank.
 - e. Remove the air bleed screw attached to the oil filter cover.
 - f. Wait until the oil has completely drained.

EUU06800

NOTE: ____

The oil filter cover is secured by three screws. The lower one should be removed so that the filter cavity will drain.

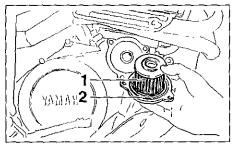
EUU32401



- 1. Filter cover
- 2. Bolt (x 3)
- 3. Air bleed screw
 - g. Remove the other filter cover screws and remove the oil filter cover.
 - h. Remove the oil filter and O-ring.
 - i. Reinstall the drain plug and tighten it to the specified torque:

Tightening torque:
Drain plug:
30 Nm (3.0 m·kg)

- j. Install a new oil filter and O-ring.
- k. Install oil filter cover, then tighten the bolts.
- Reinstall O-ring and hose oil flange, then tighten two bolts.



- 1. Oil filter
- 2 O-ring
 - m. Fill the engine with oil. Install the oil filler cap and tighten it.

Recommended oil:

See page 8-1.

Oil quantity:

Total amount:

3.3 L

Periodic oil change:

2.7 L

With oil filter replacement:

2.8 L

CAUTION:

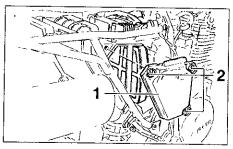
- Do not put in any chemical additives. Engine oil also lubricates the clutch and additives could cause clutch slippage.
- Be sure no foreign material enters the crankcase.
- n. Start the engine and warm it up for a few minutes. While warming up, check for oil leakage. If oil leakage is found, stop the engine immediately and check for the cause.

EUU37701

CAUTION:

After replacing the engine oil, be sure to check the oil pressure as described below.

- 1. Remove the air bleed screw from the oil filter cover.
- Start the engine and keep it idling until oil flows out of the bleed hole. If no oil comes out after one minute, turn off the engine immediately so it will not seize. In such a case go to the nearest Yamaha dealer for repairs.
- 3. After checking, tighten the air bleed screw securely.



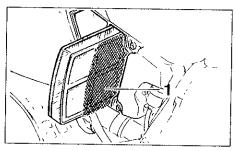
- 1. Box cap
- 2. Fast screw (x 3)

EAH610A1

Air filter

The air filter must be cleaned periodically as prescribed. Clean the air filter more frequently if the motorcycle is used in dusty or damp areas.

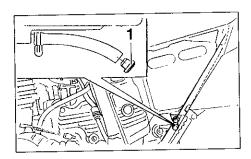
- Remove air filter box cap by turning the fast screws
- Remove the air filter from its seat and wash it with water and biodegradable liquid soap. Rinse properly and dry perfectly by squeezing the filtering element, without twisting it!
- Apply the recommended oil onto the entire surface and remove the oil in excess. The filtering element should be wet but not dripping.



1 Flame-trap net

Recommended air filter oil: SAE 20/50W or special filter oil

- 4. When installing the filtering element in its case, follow the direction indicated by the arrows, make sure that the flame-trap net is set forward and that the cap is properly assembled.
- 5. Lock cap by means of the fast screws.



1 Sieeve plug

EUU42403

CAUTION:

Make sure the air filter is properly seated in the air filter case.

The engine should never be run without the air filter installed. Excessive piston and/or cylinder wear may result.

EUU00000

CAUTION:

Periodically check whether the sleeve on the bottom of the air filter case is empty. Remove the plug and clean it if dirt or water accumulate.

EAH93100

Carburetor adjustment

The carburetors are important parts of the engine and require 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 may be serviced by the owner as part of routine maintenance.

EUU13700

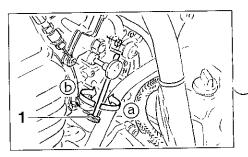
NOTE:

A diagnostic tachometer must be used for this procedure.

EUU47100

CAUTION:

The carburetors were set at the Yamaha factory after many tests. If they are changed, poor engine performance and damage may result.



1 Adjusting screw

FAH92002

Idle speed adjustment

NOTE:

EUU13700

A diagnostic tachometer must be used for this procedure.

 Attach the tachometer. Start the engine and warm it up for a few minutes at approximately 1,000 to 2,000 r/min. Occasionally rev the engine to 4,000 to 5,000 r/min. The engine is warm when it quickly responds to the throttle

EAH90701

PERIODIC INSPECTION AND MINOR REPAIRS

2. Set the idle to the specified engine speed by adjusting the throttle stop screw. Turn the screw in direction a to increase engine speed and in direction (b) to decrease engine speed.

Standard idle speed: 1,150 ~ 1,450 r/min

NOTE:

If the specified idle speed cannot be obtained by performing the above adjustment, consult a Yamaha dealer.

EUU04500

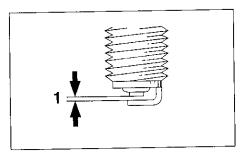
EAH90801

Valve clearance adjustment

The correct valve clearance changes with use, resulting in improper fuel/air supply or engine noise. To prevent this, the valve clearance must be adjusted regularly. This adjustment however, should be left to a professional Yamaha service technician.

Decompression cable adjustment

The decompression cable stretches with use, resulting in improper decompression function. To prevent this, the decompression cable must be adjusted regularly. This adjustment, however, should be left to a Yamaha dealer.



1. Electrode gap

EAH20102

Spark plug inspection

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

Normally, all spark plugs from the same engine should have the same color on the white 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. You should periodically remove and inspect the spark plugs 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 the specified plug.

Specified spark plug: DPR8EA-9 (NGK) DPR9EA-9 (NGK)

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

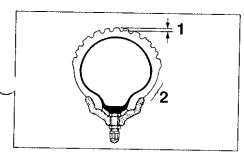
Spark plug gap: $0.8 \sim 0.9 \text{ mm} (0.031 \sim 0.035 \text{ in})$

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

Tightening torque: Spark plug: 18 Nm (1.8 m·kg, 13 ft·lb) NOTE:

EUU03802

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



- 1. Tread depth
- 2. Side wall

EAE90904

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.

EUU67500

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.

Max. load*:	180 kg			
Air pressure (cold tire):	FRONT	REAR		
Rider	180 kPa (1.80 kg/cm²) 1 80 bar	200 kPa (2 00 kg/cm²) 2.00 bar		
With max.	220 kPa (2.20 kg/cm²) 2.20 bar	240 kPa (2.40 kg/cm²) 2.40 bar		
Off-Road (Enduro)	130 kPa (1.30 kg/cm²) 1.30 bar	160 kPa (1.60 kg/cm²) 1.60 bar		
Long usage on Highway/ Motorway	220 kPa (2.20 kg/cm²) 2.20 bar	260 kPa (2.60 kg/cm²) 2.60 bar		

^{*} Maximum load is the total weight of cargo, rider, passenger and accessories

A WARNING

EUU67701

Proper loading of your motorcycle is important for several characteristics of your motorcycle, such as handling, braking, performance and safety. 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 center tread depth reaches the limit as shown, 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 the tire replaced.

FRONT:

Manufacture	Size	Туре
PIRELLI	90/90-21"-54R	MT21
PIRELLI	90/90-21"-54R	MT70
MICHELIN	90/90-21"-54S	T63
MICHELIN	90/90-21"-54R	BAJA

REAR:

Size	Туре
130/90-18"-69R	MT21
130/80-18"-66R	MT70
140/80-18"-70R	MT21
130/80-18"-66S	T63
140/80-18"-70R	BAJA
	130/90-18"-69R 130/80-18"-66R 140/80-18"-70R 130/80-18"-66S

Minimum tire	
tread depth	1.6 mm
(front and rear)	

A WARNING

EUU00000

It is recommended to use front and rear tires of the same manufacture.

EUU12600

NOTE:

These limits may be different by regulation from country to country. If so, conform to the limits specified by the regulations of your own country.

A WARNING

1. Operating the motorcycle with

excessively worn tires decrease

riding stability and can lead to

loss of control. Have excessively

worn tires replaced by a Yamaha

dealer immediately. Brakes, tires,

and related wheel parts replace-

ment should be left to a Yamaha

recommended. If it is absolutely

necessary to do so, use great care

and replace the tube as soon as

possible with a good quality

2. Patching a punctured tube is not

Service Technician.

replacement.

EUU70001

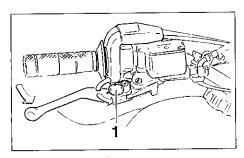
---- Wheels

EAE93401

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

- 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.
- 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.
- Ride at moderate speeds after changing a tire since the tire surface must first be broken in for it to develop its optimal characteristics.

To ono...



1 Lever position adjustment

EAH814A0

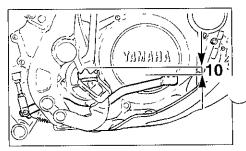
Front brake lever position adjustment

Brake lever distance from the throttle grip can be adjusted. To adjust, turn the adjuster while pushing the lever forward and align the setting on the adjuster with the arrow mark.

EUU81500

A WARNING

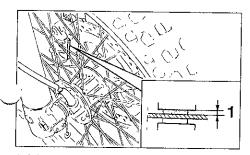
Check the brake lever free play. Be sure the brake is working properly. A soft or spongy feeling in the brake lever can indicate the presence of air in the brake system. This air must be removed by bleeding the brake system before the motorcycle is operated. Air in the system will cause greatly diminished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



EAH80402

Rear brake pedal height adjustment

The top of the brake pedal should be positioned 10 mm below the top of the footrest. If not, ask a Yamaha dealer to adjust it.

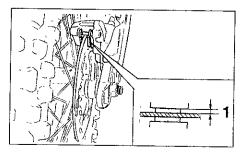


1. Wear limit 1 0 mm

EUU79300

A WARNING

A soft or spongy feeling in the brake pedal 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 inspect and bleed the system if necessary.

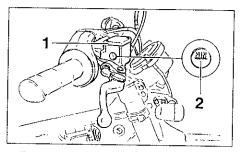


1. Wear limit 0.8 mm

EAH86500

Checking the front and rear brake pads

Check the brake pads for damage and wear. If the thickness is less than the specified value, have a Yamaha dealer replace the pads.



- Front brake tank
- 2. Minimum level mark

EAH88903

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 that the brake fluid is above the minimum level and replenish when necessary. Observe these precautions.

 When checking the fluid level, make sure the top of the master cylinder is level by turning the handlebards

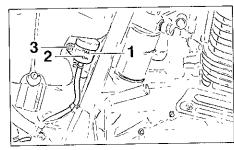
EAH83501

PERIODIC INSPECTION AND MINOR REPAIRS

2. Use only the designated quality brake fluid. Otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance

Recommended brake fluid: DOT 4

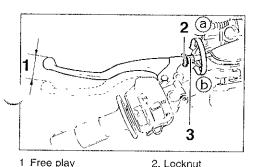
- 3. Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor brake performance.
- 4. Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor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



- 1 Rear brake tank
- Minimum level mark
- 3 Maximum level mark

Brake fluid replacement

- 1. Complete fluid replacement should be done only by trained Yamaha service personnel.
- Have a Yamaha dealer replace the following components during periodic maintenance or when they are damaged or leaking.
- Replace all rubber seals every two years.
- Replace all hoses every four years.



3. Adjusting bolt

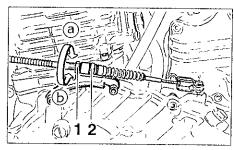
f A100505

Clutch lever free play adjustment

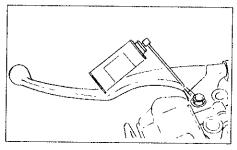
The clutch lever free play should be adjusted to $10 \sim 15$ mm ($0.39 \sim 0.58$ in).

- 1. Loosen the locknut at the clutch lever
- Turn the adjusting bolt at the clutch lever in direction (a) to increase free play or in direction (b) to decrease free play.
- . Tighten the locknut at the clutch lever.

If the specified free play cannot be obtained, proceed with the following steps.



- 1 Adjusting bolt
- 2. Locknut
- 4. Loosen the locknut at the clutch lever.
- Turn the adjusting bolt at the clutch lever in direction (a) to loosen the cable.
- 6. Loosen the locknut at the crankcase side.
- 7 Turn the adjusting nut at the crankcase in direction (a) to increase free play or in direction (b) to decrease free play.
- 8. Tighten the locknut at the crankcase and the clutch lever

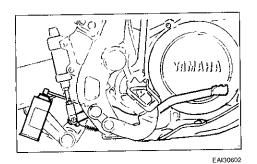


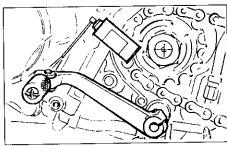
EAI30701

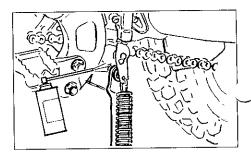
Brake and clutch lever lubrication

Lubricate the pivoting parts.

Recommended lubricant: SAE 10W30 motor oil







EAI31104

Brake and shift pedal lubrication

Lubricate the pivoting parts.

Recommended lubricant SAE 10W30 motor oil

Sidestand lubrication

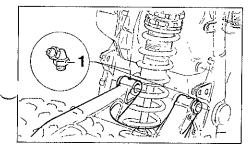
Lubricate the sidestand pivoting and mating parts. Check to see that the sidestand moves up and down smoothly

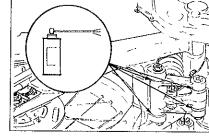
Recommended lubricant: SAF 10W30 motor oil

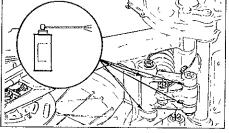
EUU70401

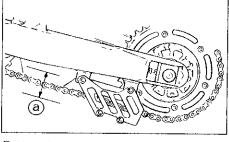
A WARNING

If the sidestand does not move smoothly, consult a Yamaha dealer.









(a) 30 ~ 40 mm

NOTE:

EAI40301

EUU04801

1. Grease nipple (x 2)

Rear suspension lubrication

EA131901

Lubricate the pivoting parts.

Recommended lubricant: Molybdenum disulfide grease

Drive chain slack check

Spin the wheel several times and find the tightest position of the chain. Check and/or adjust the chain slack while it's in this tightest position.

To check the chain slack the motorcycle must be held straight up with both wheels on the ground and without rider Check the slack at the position shown in the illustration.

Normal slack is approximately 30 ~ 40 mm If the slack exceeds 40 mm, adjust.

the O-Rings.

PERIODIC INSPECTION AND MINOR REPAIRS

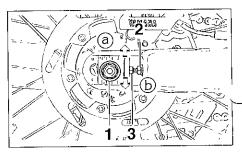
EA140702

CAUTION:

The chain consists of many parts which work with each other. If the chain is not maintained properly, it will wear out quickly. Therefore, the chain must be serviced regularly. This service is especially necessary when riding in dusty areas This motorcycle has a drive chain with small rubber O-Rings between the chain plates. Steam cleaning, highpressure washing and certain solvents can damage these O-Rings. Use only kerosene to clean the drive chain. Wipe it dry, and thoroughly lubricate it with SAE 80 ~ 90W motor oil or special lubrificant for O-ring chains. Do not use any other lubricants on the drive chain. They may contain solvents that could damage

Drive chain lubrication

Be sure to oil the chain after washing the motorcycle or riding in the rain.



1 Axle nut

FUU48300

- 2. Locknut (x 2)
- 3 Adjusting bolt (x 2)

EAI43101

Drive chain slack adjustment

- 1. Loosen the axle nut.
- 2 Loosen the locknuts on each side. To tighten the chain, turn the chain adjusting bolts in direction (a). Loosen the locknuts on each side. To tighten the chain, turn the chain adjusting bolts in direction (b) and push the wheel forward. Turn each adjusting bolt exactly the same amount to maintain correct axle alignment. There are marks on each side of the swingarm. Use these marks to align the rear wheel.

EUU33301

CAUTION:

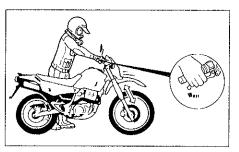
Too little chain slack will overload the engine and other vital parts. Keep the slack within the specified limits.

After adjusting, tighten the locknuts.
 Then tighten the axle nut to the specified torque.

Tightening torque:

Axle nut:

115 Nm (11.5 m·kg)



EAI20502

Front fork inspection

EUU65700

A WARNING

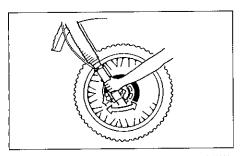
Securely support the motorcycle so there is no danger of it falling over.

- Visual check
 Check for scratches or damage on the inner tube and excessive oil leakage from the front fork.
- Operation check
 Pface the motorcycle on a level place.
- a. Hold the motorcycle in an upright position and apply the front brake.
- Push down hard on the handlebars several times and check if the fork rebounds smoothly.

EUU42500

CAUTION:

If any damage or unsmooth movement is found with the front fork, consult a Yamaha dealer.



EAI60301

Steering inspection

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

EUU65700

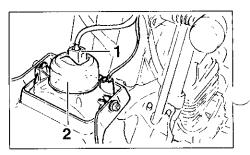
A WARNING

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

AI60201

Wheel bearings

If there is play in the front or rear 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.



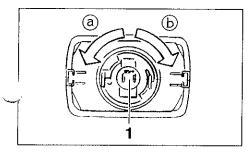
- Connector
- Rubber cover

EA18830A

Replacing the headlight bulb

The headlight of this motorcycle is equipped with a halogen bulb. Should the bulb burn-out, replace it according to the following instructions:

- Remove the front cowling from the fork by detaching the fastener rubber bands without disconnecting the harness.
- Disconnect the connector on the back of the headlight and remove the rubber cover.
- Turn the bulb socket counterclock wise (a) and remove the faulty bulb.



Bulb socket

EUU66002

A WARNING

Keep flammable products and your hands away from a bulb while it is on, as it is hot. Do not touch a bulb until it cools down.

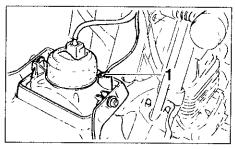
 Insert a new bulb and secure it into the headlight by turning it clockwise
 b.

EUU34101

CAUTION:

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

- 5. Reinstall the rubber cover properly and reconnect the bulb connector.
- Reinstall the front cowling by securing the rubber bands on the fork tube. You can adjust the headlight by using the screws which fasten the headlight to the front cowling. If adjustment of the headlight beam is necessary, consult a Yamaha dealer.



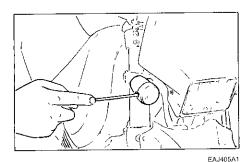
1. Parking light bulb holder

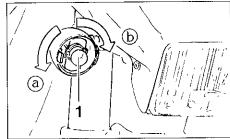
EAI88308

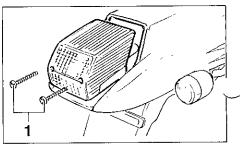
Replacing the front parking light-bulb

To replace the bulb, pull out the bulb holder inserted in the grommet on the headlight without disconnecting the wire harness Pull out "all glass" type bulb and replace it with new bulb.

1 Bulb







1. Lens fastening screw (x 2)

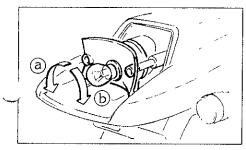
EAJ1A101

Replacing the turn indicator light-bulb

- Remove the lens by detaching it by means of a flat blade screwdriver.
- 2. Press the bulb (a) into place and turn it counterclockwise.
- Insert the new bulb in the coupling. Press the bulb into place and turn it clockwise until secured into the coupling b.
- 4. Install the lens.

Replacing the tail/brake light-bulb

- 1. Remove the screws and the lens
- 2. Press the bulb into place and turn it counterclockwise (a).
- 3. Insert the new bulb in the coupling. Press the bulb into place and turn it clockwise **b** until secured into the coupling.
- 4. Install the lens and the screws



EUU48900

CAUTION:

Do not over-tighten the screws as the lens may break.

EAJ83700

Supporting the motorcycle

Since the Yamaha TT600R has no centerstand, follow these precautions when removing the front and rear wheel or performing other maintenance requiring the motorcycle to stand upright.

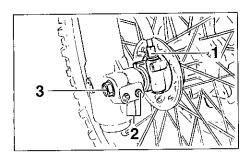
Front wheel service:

To stabilize the rear of the motorcycle, either use a motorcycle stand or place a motorcycle jack under the frame in front of the rear wheel to prevent it from moving from side to side. Then use a motorcycle stand to elevate the front wheel off the ground.

Rear wheel service:

Use a motorcycle stand or motorcycle jack to elevate the motorcycle so the rear wheel is off the ground. Alternatively, two jacks can be placed under the frame or swingarm.

Check that the motorcycle is in a stable and level position before starting any maintenance. A strong wooden box can be placed under the engine for added stability.



- 1 Speedometer cable
- 2. Pinch bolt (x 2)
- 3 Wheel axle

EAJ24404

Front wheel removal

EUU66202

A WARNING

- It is advisable to have a Yamaha dealer service the wheel.
- Securely support the motorcycle so there is no danger of it falling over.

- Remove the speedometer cable from the front wheel side.
- 2. Loosen the pinch bolt and wheel axle.
- 3. Elevate the front wheel by placing a suitable stand under the engine.
- 4. Remove the wheel axle and the front wheel.

EUU05401

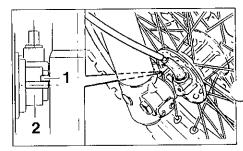
NOTE:

Do not depress the brake lever when the disc and caliper are separated.

EAJ83600

Front wheel installation

- Install the speedometer gear unit housing into the wheel hub. Make sure the slot in the speedometer gera unit housing fits over the stopper on the front fork outer tube.
- 2. Lift up the wheel between the front fork legs and guide the brake disc between the brake pads.
- 3. Install the wheel axle and tighten it to the specified torque.



- 1 Speedometer gear unit housing slot
- 2. Speedometer slot

Tightening torque: Wheel axle:

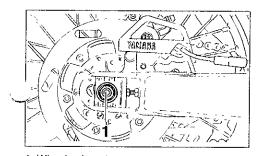
59 Nm (5.9 m.kg)

- Push down hard on the handle-bar several times to ceck for proper fork operation.
- 5. Install the pinch bolt and tighten it to the specified torque.

Tightening torque:
Pinch bolt:

9 Nm (0 9 m.kg)

6



1 Wheel axle nut

EAJ653A1

Rear wheel removal

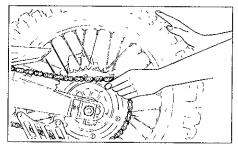
EUU66202

A WARNING

It is advisable to have a Yamaha dealer service the wheel.

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

- 1. Remove the wheel axle nut on the right side of the swingarm.
- 2. Push the wheel forward and remove the drive chain.
- Pull out the rear axle and remove the
 wheel assembly backward.



NOTE:

EUU21000

- Do not depress the brake pedal when the disc and caliper are separated.
- You do not have to disassemble the chain in order to remove or install the rear wheel.

EAJ825A2

Rear wheel installation

- Insert the wheel between the arms of the swingarm and drive the disc through the brake pads.
- 2 Install the chain on the crown gear.
- Insert the rear wheel axle on the lefthand side, make sure the distance pieces and chain pullers are positioned correctly.
- 4. Before tightening the wheel axle nut, adjust the chain slack.
- 5. Make sure the axle nut is properly torqued:

Tightening torque:
Wheel axle nut:
115 Nm (11.5 m.kg)

EAJ50002

Troubleshooting

Altough 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 loss of power. The troubleshooting chart describes a quick, easy procedure for making checks.

If your motorcycle requires any repair, bring it to a Yamaha dealer. The skilled technicians at a Yamaha dealership have the tools, experience, and knowhow to proprerly 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.

PERIODIC INSPECTION AND MINOR REPAIRS

Troubleshooting chart

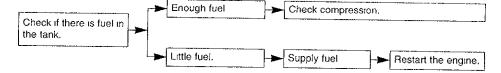
EAJ51600

EUU66300

A WARNING

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

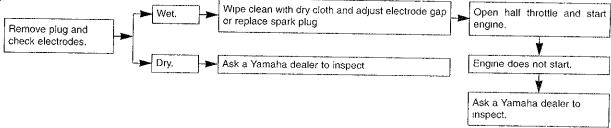
1. Fuel



2. Compression







Blank Page

Cleaning	7-1
Storage	

CLEANING AND STORAGE

EAK02001

EUU34602

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 the exhaust pipes to prevent water entry, a plastic bag and strong rubber band may be used.
- b. Make sure the spark plugs and all filler caps are properly installed.
- 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 degrease off with a garden hose. Use only enough pressure to do the job.

CAUTION:

Excessive hose pressure may cause water seepage and deterioration of wheel bearings, front fork, brakes, transmission seals and electrical parts. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

- Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old toothbrush or bottle brush is handy for hard-toget-at places.
- Rinse the motorcylce off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.

- Dry the chain and lubricate it to prevent rust.
- 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. May contain abrasives which may mar the paint or protective finish. When finished, start the engine and let it idle for several minutes.

7

EAK0180A

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 storages as follows:

- 1. Drain the fuel tank, fuel line and carburetor float bowl.
- Remove the spark plug, pour about one tablespoon of SAE 20W/50 motor oil in the spark plug hole and reinstall the spark plug.
 Kick the engine over several times (with ignition off) to coat the cylinder walls with oil.

- Remove the drive chain. Thoroughly clean the chain with kerosene and lubricate it.
 - Reinstall the chain or store it in a plastic bag (tied to the frame for safe-keeping).
- 4. Lubricate all control cables.
- 5. Block up the frame to raise both wheels off the ground.
- Tie a plastic bag over the exhaust pipe outlet to prevent moisture from entering.
- If storing in a humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of Vaseline. Do not apply Vaseline to any rubber parts or the seat cover.

				EUU05800
NOTE	:			
Make	any	necessary	repairs	before
storing	the i	notorcycle.		

Blank Page

Technical specifications	 	 8-

Technical specifications

Model TT600R

Dimensions:

Overall length 2,225 mm

Overall width 840 mm

Overall height 1,225 mm

Wheel base 1,480 mm

Ground clearance 310 mm

Minimum turning radius 3,300 mm (right)

3,100 mm (left)

Net weight (with oil

and full fuel tank): 154 kg

Engine:

Engine type Air cooled 4-stroke,

SOHC

Cylinder layout Single cylinder inclined forward

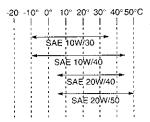
Displacement 595 cc
Bore x stroke 95 x 84 mm
Compression ratio 8.5 : 1

Starting system Kick-starter

Lubrification system Dry sump with separate oil tank

Engine oil:

Type



Classification Type API Service "SE", "SF"

or equivalent

SAE 20W/50 motor oil

Capacity

Periodic oil change 2 7 L With oil filter replacement 2.8 L Total amount 3 3 L

Air filter:

Oiled filter element

180 kg

Fuel:		Gear ratio	1st	2 308
Туре	Normal unleaded		2nd	1.588
Tank capacity	10 L		3rd	1.200
Reserve amount	3 L		4th	0 954
Carburetor:			5th	0.792
Type/Amount	Y30PV-2ATK	Frame:		
Manufacturer Spark plug:	TEIKEI	Frame type		Open-cradle backbone frame and removable rear frame
· · · ·	DDD0E4 O/NOK	Caster angle		26°30'
Type/Manufacturer	DPR8EA-9/NGK or DPR9EA-9/NGK	Trail		114 mm
Electrode gap	0.8 ~ 0 9 mm	Tires:		
Clutch type:	Wet, multi-disc	Туре		With tube
Transmission:		Size:		
Primary reduction system	Spur gear	Front:		90/90-21"-54R - 90/90-21"-54S
Primary reduction ratio	74/31 (2.387)	Rear:		130/90-18"-69R - 130/80-18"-66R
Secondary reduction system	Chain drive			140/80-18"-70R - 130/80-18"-66S
Secondary reduction ratio	44/15 (2 933)	Manufacturer/Modei		
Transmission type	Constant mesh 5-speed	Front:		PIRELLI MT21 or MT70
Transmission operation	Left foot operation			MICHELIN BAJA or T63
	2011.001.000	Rear:		PIRELLI MT21 or MT70
				MICHELIN BAJA or T63

Maximum load*

Air pressure (d	cold tire).	
Max load*		180 kg
Rider only		1
	Front	180 kPa; 1 80 kg/cm², 1 80 bar
	Rear	200 kPa; 2 00 kg/cm², 2 00 bar
With max.	load*	
	Front	220 kPa; 2.20 kg/cm , 2 20 bar
	Rear	240 kPa, 2 40 kg/cm ⁻ , 2 40 bar
Off-Road (i	Enduro)	
	Front	130 kPa; 1 30 kg/cm² 1 30 bar
	Rear	160 kPa, 1 60 kg/cm′, 1 60 bar
Long usage	e on Highway/Motorway	
	Front	220 kPa, 2.20 kg/cm², 2.20 bar
	Rear	260 kPa, 2 60 kg/cm , 2 60 bar
* The maximu accessories	m load is the total weig	ht of cargo, rider, passenger and
Tires:		
Туре		
	Front	Spoke
	Rear	Spoke
Size:		

21" x 1 85

18" x MT 2 50

Brakes:		
Front		
	Туре	Single ø 267 mm disk brake, caliper 2 x 28 mm
	Operation	Right hand operation
	Fluid	DOT 4
Rear		
	Туре	Single ø 220 mm disk brake, caliper 1 x 34 mm
	Operation	Right foot operation
Suspension:		
Front		
	Туре	Conventional telescopic fork
	External tube diameter	46 mm
Rear		
	Туре	Swingarm DELTA BOX - SWING ARM with adjustable shock absorber with separated tank OHLINS YA6262
Wheel travel:		
Front		280 mm
Rear		280 mm

Front

Rear

Ï

TECHNICAL SPECIFICATIONS

Electrical:

Ignition system

Digital CDI

Generator system

Туре

A C Magneto

Standard output

14V 13A / 5000 rpm

Headlight type:

Quartz-iodine bulb (halogen)

Bulb power x quantity:

Headlight

12 V 60 W / 55 W x 1

Auxiliary light Tail/brake light 12 V 5 W x 1 12 V 5 W / 21 W

Turn lights

12 V 10 W x 4

Indicator lights

Neutral

12 V - 1,2 W x 1

High beam

12 V - 1,2 W x 1

Turn lights

12 V - 1,2 W x 1

Speedometer light

12 V - 3 W x 1

Blank Page

CONSUMER INFORMATION

Identification number record	9-1
Key identification number	9-1
Vehicle identification number	9-2
Model label	9-2

CONSUMER INFORMATION

EAA61800

Identification numbers record

Record the key identification number, vehicle identification number and model label information in the spaces provided for assistance when ordering spare parts from a Yamaha dealer or for reference in case the vehicle is stolen



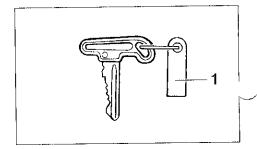


2. VEHICLE IDENTIFICATION NUMBER:



3. MODEL LABEL INFORMATION





1. Key identification number

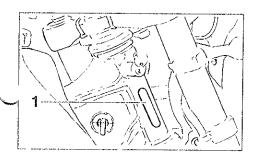
EAA61500

Key identification number

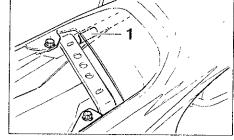
The key identification number is stamped on the key tag.

Record this number in the space provided and use it for reference when obtaining a new key





1 Vehicle identification number



1. Model label

EAA80000

Vehicle identification number

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

EUU00400

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.

Model label

The model label is affixed to the location shown in the figure. Record the information on this label in the space provided. This information will be needed to order spare parts from your Yamaha dealer.

EAA61602

INDEX

A Air filter
B Brake and clutch lever lubrication 6-18 Brake and shift pedal lubrication6-19 Brake fluid6-16 Inspection
C Carburetor adjustment
D Decompression cable adjustment 6-10 Description 2-1 Dimmer switch 3-3 Drive chain 6-20 Lubnication 6-21 Slack adjustment 6-20 Slack check

E
Engine break-in
Engine oil
Engine stop switch 3-4
- igitto otop ottetti i i i i i i i i i i i i i i i i i
F
Front brake lever 3-6
Front brake lever position adjustment 6-15
Front fork
Adjustment
Inspection 6-22
Front wheel installation6-27
Front wheel removal 6-27
Fuel
Fuel cock3-8
Fuel tank cap
. 40. 14.11.
Н
Handlebar switches 3-3
Dimmer switch 3-3
Engine stop switch3-4
Horn switch 3-3
Lights switch 3-3
Turn signal switch
Heimet holder3-10
High beam indicator light 3-2
Horn switch 3-3

INDEX

Р	
Panel removal and installation	1 6-4
Parking	5-5
Periodic inspection	
and minor repair	6-1
Periodic maintenance/lubricat	ion6-2
Pre-operation checks	4-1
R	
Rear brake pedal	3-6
Rear brake pedal height	
adjustment	6-15
Rear cowling (removing	
and installing)	6-5
Rear shock absorber	3-12
Rear shock absorber adjustm	ent . 3-12
Rear suspension lubrication .	
Rear wheel installation	
Rear wheel removal	6-28
Replacing the front parking	
light bulb	
Replacing the headlight bulb	6-23
Replacing the tail/brake	
light-bulb	6-25
Replacing the turn indicator	
light-bulb	
Right view	2-2

S
Seat (removing)
Shift pedal3-5
Shifting 5-4
Sidestand3-14
Sidestand lubrication6-19
Sidestand switch operation check 3-15
Spark plug inspection
Speedometer 3-5
Speedometer cable 5-5
Starter3-9
Starting a warm engine5-3
Starting the engine
Steering inspection 6-23
Steering lock3-1
Storage
Supporting the motorcycle6-26
Т
Tank (removing and installing)6-4
Technical specifications8-1
Tips for reducing fuel consumption . 5-4
Tires 6-12
Tool kit 6-1
Troubleshooting
Troubleshooting chart6-30
Turn indicator light
Turn signal switch3-3

/	
/alve clearance adjustment	6-10
/ehicle identification number	9-2
N	
Vheels	6-14

ELECTRIC SYSTEM

Electric system (see inside back cover)

- 1. CDI unit
- 2. Main switch
- 3. Front brake switch
- Emergency stop engine switch
- 5. Ignition coil
- 6. Earth
- 7. Rear brake switch
- 8. Sidestand switch
- 9 AC generator
- 10. Adjuster/Rectifier
- 11. Smooth condenser
- 12. Rear stop tail/light
- 13. Rear direction indicator lights
- 14. Diode
- 15. Neutral switch

- 16 Horn switch
- 17. Direction indicator light switch
- 18. Driving beam/dimmer light switch
- 19. Lights switch
- 20 Horn
- 21. Direction indicator lamp relay
- 22. Front direction indicator lights
- 23. Control light
- 24. Parking indicator light
- 25 High beam light
- 26. Direction indicator light
- 27. "N" neutral light
- 28. Running light
- 29. Driving beam/dimmer light
- 30 Resistor

Color

B - Black

Br - Brown Ch - Chocolate

Dg - Deep green

G - Green

Gy - Grey L - Blue

L - Blue

Or - Orange P - Pink

R - Red

R - Rea

Sb - Sky-blue

W - White Y - Yellow

B/R - Black/Red

B/W - Black/White

B/Y - Black/Yellow

Br/B - Brown/Black

Br/W - Brown/White

G/B - Green/Black

G/R - Green/Red

G/W - Green/White G/Y - Green/Yellow

L/R - Blue/Red

L/R - Blue/Red

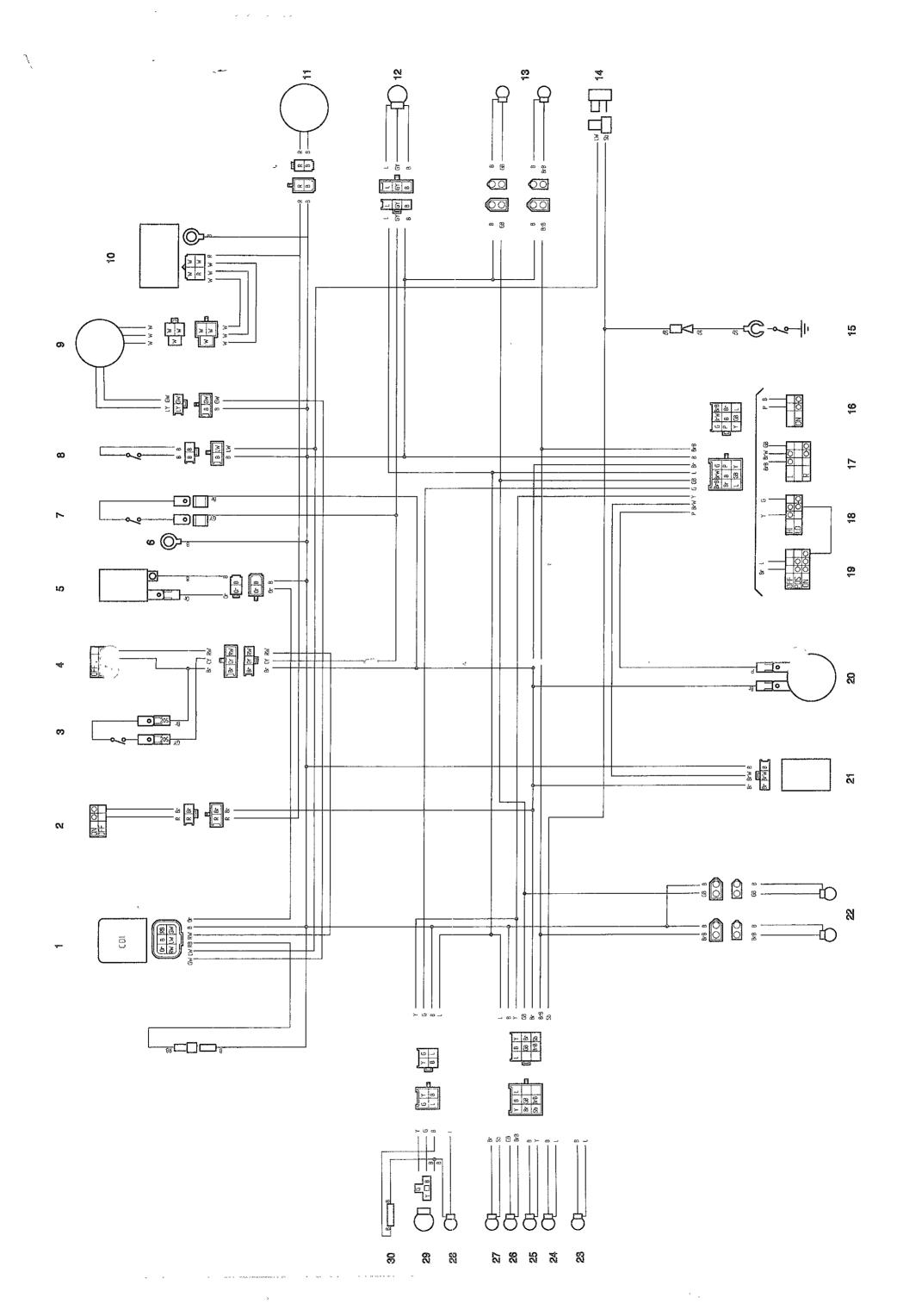
L/W - Blue/White

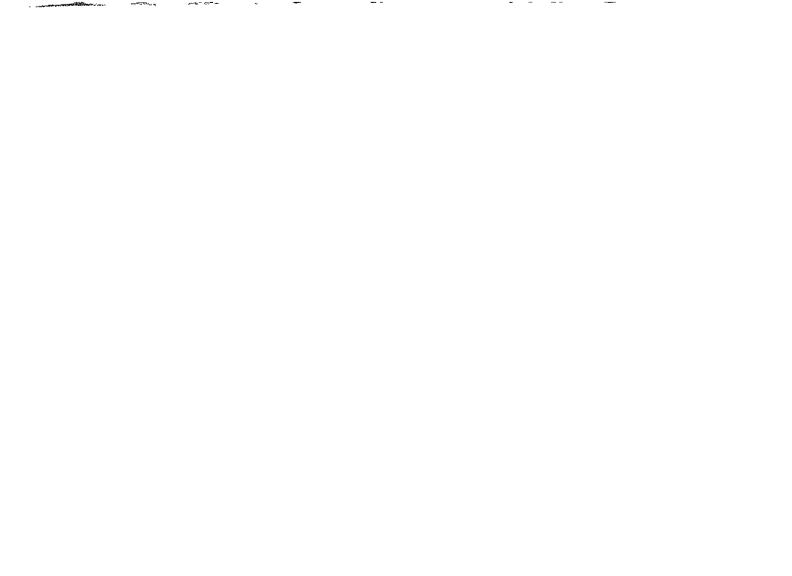
L/Y - Blue/Yellow R/B - Red/Black

R/W - Red/White

R/Y - Red/Yellow W/L - White/Blue

Y/R - Yellow/Red





ADDITION TO OWNERS HANDBOOK AS REQUIRED BY AUSTRALIAN DESIGN RULE 39/00: NOISE EMISSIONS

"TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED."

Owners are warned that the law may prohibit;

A/ 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 it's sale or delivery to the ultimate purchaser or while it is in use; and B/ the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

IMPORTANT NOTE:

Please follow the instructions contained in the owners handbook and workshop manual for the proper maintenance, use and repair of the vehicle in order to provide reasonable assurance of the elimination or minimisation of the degredation of noise control equipment throughout the life of your motorcycle.



distributrice esclusiva per l'Italia 20050 Gerno di Lesmo (MI) - Via Tinelli, 67/69 Telefono (039) 60961 Ricerca automatica