



OWNER'S MANUAL

TTR250

TTR250S(C)

LIT-11626-17-01

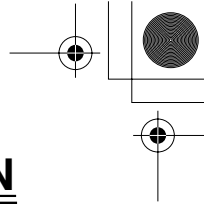
5GF-28199-15

WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

YAMAHA

LIT-CALIF-65-01

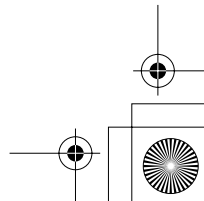
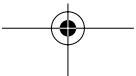


INTRODUCTION

EAU10060

TT250. This model is the result of Yamaha's vast experience in the producing machines. It represents the high degree of craftsmanship and reliability.

operation, inspection, and basic maintenance of this machine. If you have any question or need more information about your machine, please consult a Yamaha dealer.



FORMATION

EAU10160

n this manual by the following notations:

means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

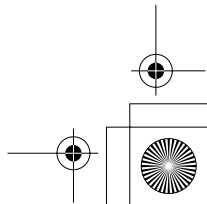
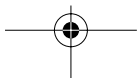
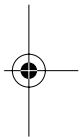
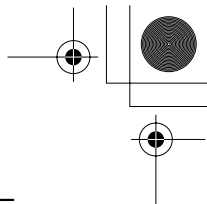
instructions could result in severe injury or death to the machine
person inspecting or repairing the machine.

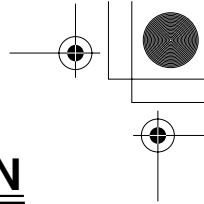
ial precautions that must be taken to avoid damage to the

ation to make procedures easier or clearer.

ent part of this machine and should remain with it even if the machine is

product design and quality. Therefore, while this manual contains the most
me of printing, there may be minor discrepancies between your machine
ncerning this manual, please consult your Yamaha dealer.





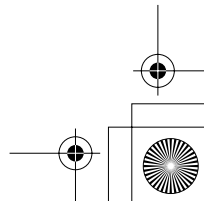
IMPORTANT MANUAL INFORMATION

EWA10010

U AND YOUR MOTORCYCLE: RIDING TIPS” BOOKLET CAREFULLY
S MACHINE. DO NOT ATTEMPT TO OPERATE THIS MACHINE UNTIL
DGE OF ITS CONTROLS AND OPERATING FEATURES AND UNTIL
OPER RIDING TECHNIQUES. REGULAR INSPECTIONS AND CARE-
ING SKILLS, WILL ENSURE THAT YOU SAFELY ENJOY THE CAPA-
CHINE.

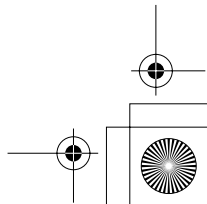
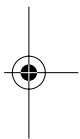
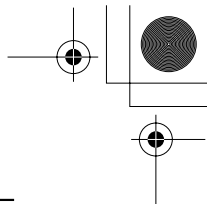
EWA10040

CTURED FOR OFF-ROAD USE ONLY. IT IS ILLEGAL TO OPERATE
AD OR HIGHWAY. SUCH USE IS PROHIBITED BY LAW. THIS MA-
OFF-HIGHWAY NOISE LEVEL AND SPARK ARRESTER LAWS AND
AL RIDING LAWS AND REGULATIONS BEFORE OPERATING THIS



FORMATION

EAU10191



AFFIX DEALER
LABEL HERE

TTR250S
OWNER'S MANUAL
Yamaha Motor Corporation, U.S.A.
1st edition, March 2003
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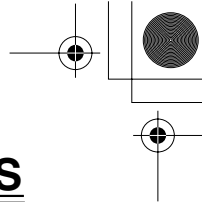
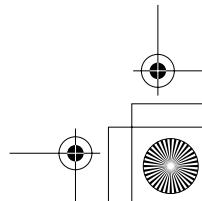
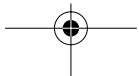
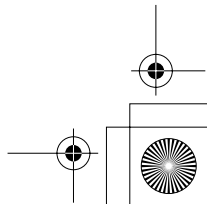
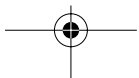
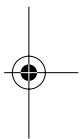
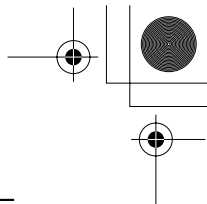


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HA MOTOR	
PORATION, U.S.A.	
ROAD MOTORCYCLE	
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SAFETY INFORMATION

IONS.

Riding

Always make pre-operation checks. Careful checks may help prevent an accident.

This machine is designed for off-road use only, therefore, it is illegal to operate it on public streets, roads, or highways. Off-road use on public lands may be illegal. Please check local regulations before riding.

This machine is designed to carry one operator only. No passengers. Many accidents involve inexperienced operators.

Make sure that you are qualified and that you only lend your machine to other qualified operators.

Know your skills and limits. Staying within your limits may help you to avoid an accident.

Many accidents have been caused by error of the machine operator. A critical error made by the operator

is veering wide on a turn due to EXCESSIVE SPEED or undercornering (insufficient lean angle for the speed). Never travel faster than warranted by conditions.

- Ride cautiously in unfamiliar areas. You may encounter hidden obstacles that could cause an accident.
- The posture of the operator is important for proper control. The operator should keep both hands on the handlebar and both feet on the operator footrests during operation to maintain control of the machine.
- Never ride under the influence of alcohol or other drugs.

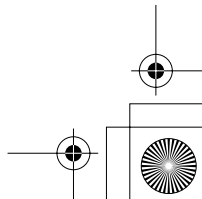
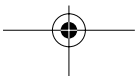
Protective apparel

The majority of fatalities from machine accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

- Always wear an approved helmet.
- Wear a face shield or goggles. Wind in your unprotected eyes

1

1-1



g and accessories

Accessories or cargo to your machine can adversely affect stability and handling if the weight distribution of the machine is changed. To avoid the possibility of an accident, use extreme caution when adding cargo or accessories to your machine. Use extra care loading a machine that has added accessories. Here are some guidelines to follow if loading or adding accessories to your machine:

The total weight of the operator, accessories, and cargo must not exceed the maximum load limit of 90.0 kg (198 lb). Loading within this weight limit, keep the following in mind:

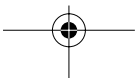
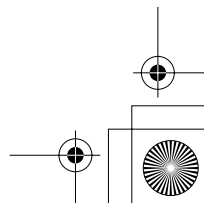
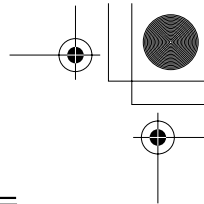
Cargo and accessory weight should be kept as low and close to the machine as possible. Make every effort to distribute the weight as evenly as possible on both sides of the machine to minimize imbalance or instability.

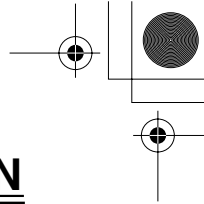
- Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the machine before riding. Check accessory mounts and cargo restraints frequently.
- Never attach any large or heavy items to the handlebar, front fork, or front fender. These items, including such cargo as sleeping bags, duffel bags, or tents, can create unstable handling or a slow steering response.

Accessories

Genuine Yamaha accessories have been specifically designed for use on this machine. Since Yamaha cannot test all other accessories that may be available, you must personally be responsible for the proper selection, installation and use of non-Yamaha accessories. Use extreme caution when selecting and installing any accessories.

Keep these guidelines in mind for mounting accessories in addition to





SAFETY INFORMATION

winds.

Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability, therefore, such accessories are not recommended.

Exercise caution when adding electrical accessories. If electrical accessories exceed the capacity of the machine's electrical system an electric failure could result, which could cause a dangerous loss of lights or engine power.

Engine and exhaust gas

GASOLINE IS HIGHLY FLAMMABLE:

Always turn the engine off when refueling.

Take care not to spill any gasoline on the engine or exhaust pipe(s)/muffler(s) when refueling.

Never refuel while smoking or in

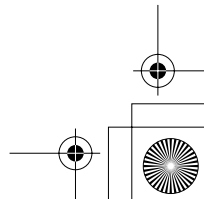
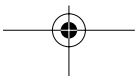
the vicinity of an open flame.

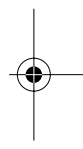
- Never start the engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your machine in an area that has adequate ventilation.
- Always turn the engine off before leaving the machine unattended and remove the key from the main switch. When parking the machine, note the following:
 - The engine and exhaust pipe(s)/muffler(s) may be hot, therefore, park the machine in a place where pedestrians or children are not likely to touch these hot areas.
 - Do not park the machine on a slope or soft ground, otherwise it may fall over.
 - Do not park the machine near a flammable source (e.g., a kerosene heater, or near an open

1

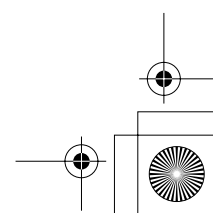
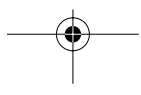


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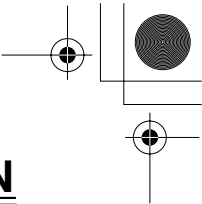




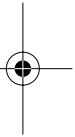
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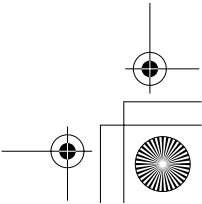
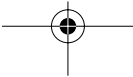
SAFETY INFORMATION

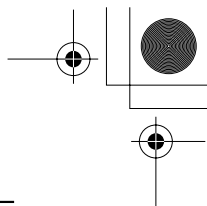


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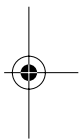
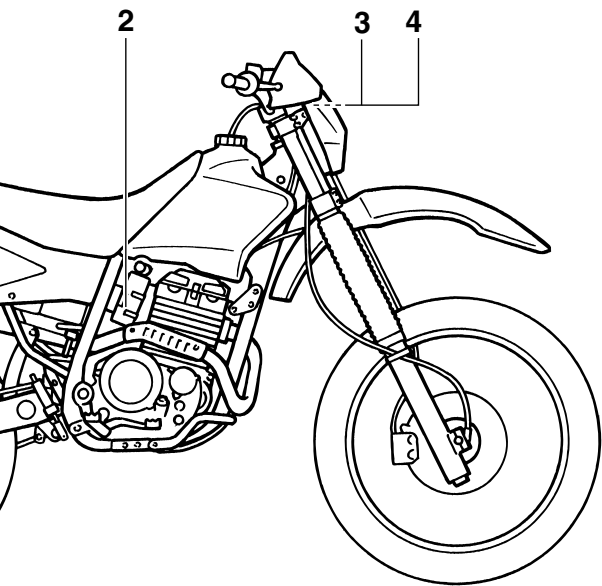
1-5



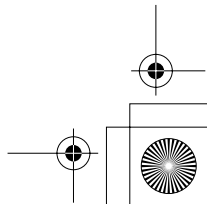
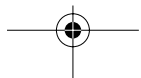


EAU10381

y before operating this vehicle.



1-6





1

- **BEFORE YOU OPERATE THIS VEHICLE, READ THE OWNER'S MANUAL AND ALL LABELS.**
- **NEVER CARRY A PASSENGER.** You increase your risk of losing control if you carry a passenger.
- **NEVER OPERATE THIS VEHICLE ON PUBLIC ROADS.** You can collide with another vehicle if you operate this vehicle on a public road.
- **ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET,** eye protection, and protective clothing.
- **EXPERIENCED RIDER ONLY.**

5PA-2118K-00

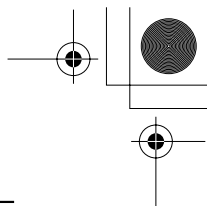


Cold tire normal pressure should be set as follows.

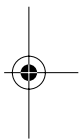
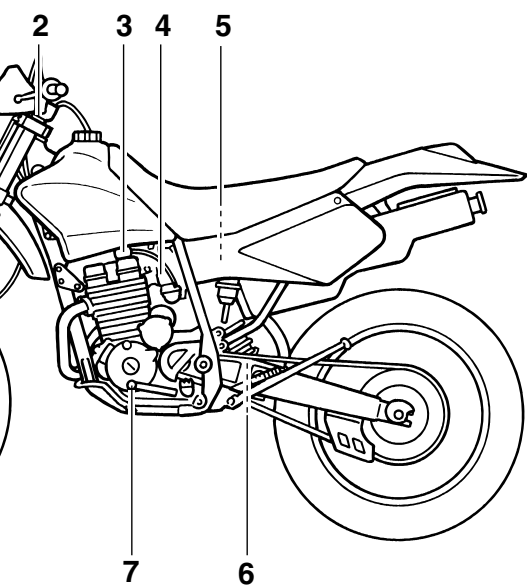
FRONT : 100 kPa, {1.00 kgf/cm²}, 15 psi
REAR : 100 kPa, {1.00 kgf/cm²}, 15 psi

3RV-21668-A0

22259-80



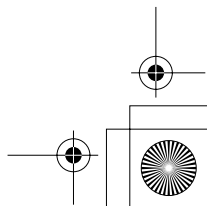
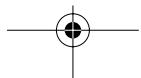
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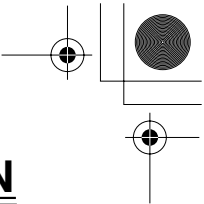


8. Front fork damping adjusting screw (page 3-7)

ng dial

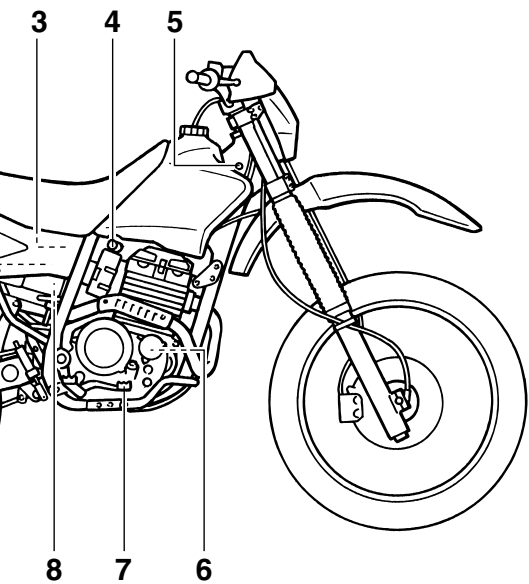
2-1



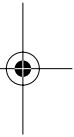


DESCRIPTION

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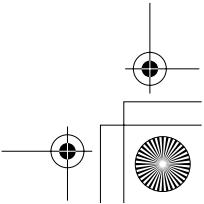
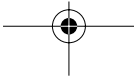
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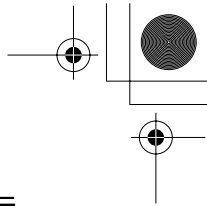


8. Shock absorber assembly spring preload adjusting nut (page 3-9)

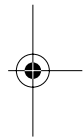
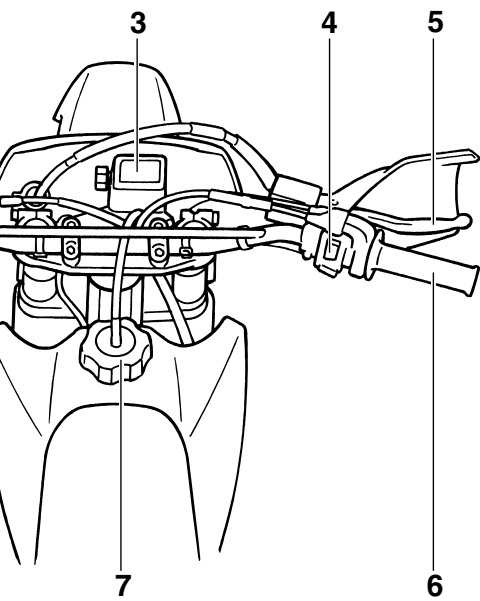
adjusting

2-2

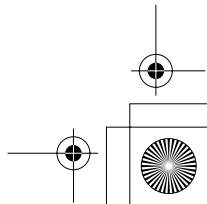
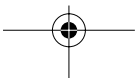




EAU10430



2-3

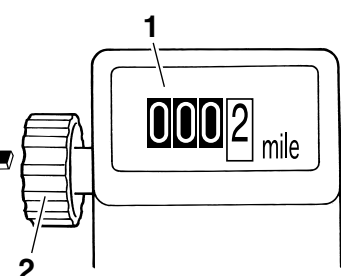


INSTRUMENT AND CONTROL FUNCTIONS

EAU11830

EAU12341

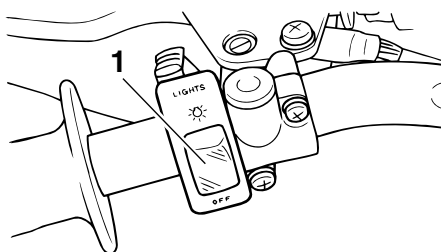
meter



meter
meter reset knob
meter shows the distance traveled since it was last set to zero with the knob. The tripmeter can be used to estimate the distance that can be traveled with a full tank of fuel. This information will enable you to plan future trips.

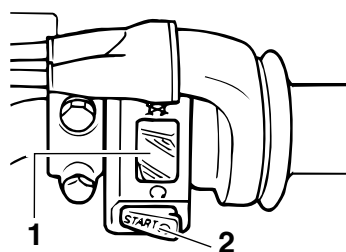
Handlebar switches

Left



1. Light switch "☀"

Right



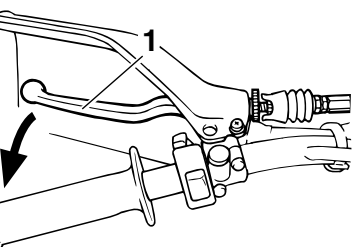
1. Engine stop switch "⊙/⊗"
2. Start switch "START"

L FUNCTIONS

EAU31640

EAU12870

Clutch lever

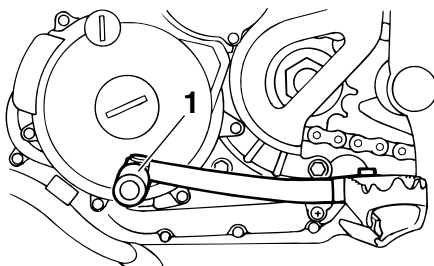


Clutch lever

The clutch lever is located at the left handlebar grip. To disengage the clutch, pull the lever toward the handlebar. To engage the clutch, release the lever. The lever should be pulled and released slowly for smooth operation.

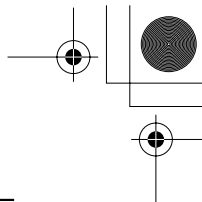
The clutch lever is equipped with a kill switch, which is part of the start-circuit cut-off system. (See page 11.)

Shift pedal

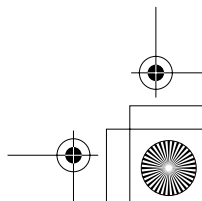
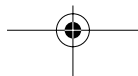


1. Shift pedal

The shift pedal is located on the left side of the engine and is used in combination with the clutch lever when shifting the gears of the 6-speed constant-mesh transmission equipped on this machine.



3-2



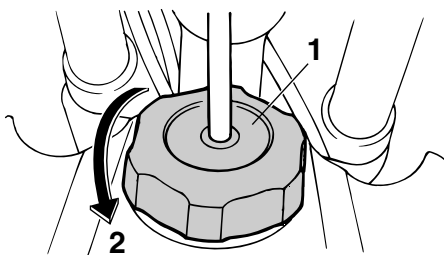
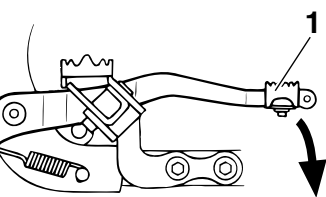
INSTRUMENT AND CONTROL FUNCTIONS

pedal

EAU12940

Fuel tank cap

EAU13180



3

pedal

ke pedal is on the right side of
chine. To apply the rear brake,
own on the brake pedal.

1. Fuel tank cap
2. Remove.

To remove the fuel tank cap, turn it
counterclockwise, and then pull it off.
To install the fuel tank cap, insert it into
the tank opening, and then turn it clock-
wise.

WARNING

**Make sure that the fuel tank cap is
properly closed before riding.**

EWA11090

L FUNCTIONS

may deteriorate painted surfaces and plastic parts.

EAU13300

Recommended fuel:
UNLEADED GASOLINE
ONLY

Fuel tank capacity:

15.5 L (2.51 us.gal)

12.09 imp.gal)

Fuel reserve amount:

1.0 L (0.53 us.gal)

0.84 imp.gal)

ECA11400

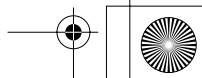
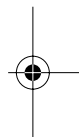
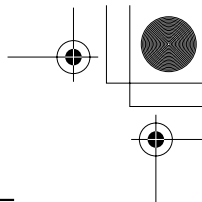
CAUTION: Do not use unleaded gasoline. The use of unleaded gasoline will cause severe damage to internal engine parts, including the valves and piston rings, and damage to the exhaust system.

This Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number of 86 or higher, or a research octane number of 91 or higher. If knocking (or pinging) occurs, use a

gasoline of a different brand or premium unleaded fuel. Use of unleaded fuel will extend spark plug life and reduce maintenance costs.

Gasohol

- There are two types of gasohol: gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if the ethanol content does not exceed 10%. Gasohol containing methanol is not recommended by Yamaha because it can cause damage to the fuel system or vehicle performance problems.



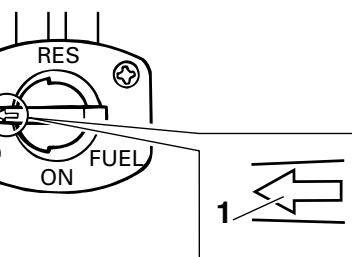
INSTRUMENT AND CONTROL FUNCTIONS

EAU13560

Fuel cock

The fuel cock supplies fuel from the tank to the carburetor while filtering it all the time.

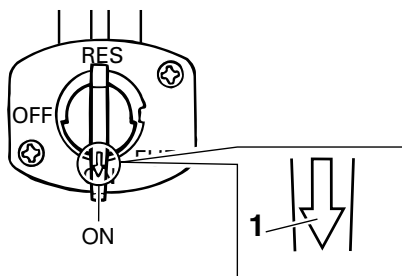
The fuel cock has three positions:



1. Arrow mark positioned over "OFF"

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

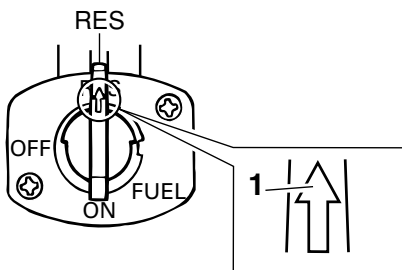
ON



1. Arrow mark positioned over "ON"

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

RES



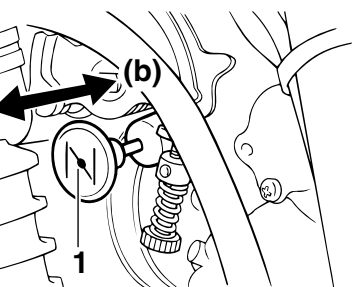
1. Arrow mark positioned over "RES"


This indicates reserve. If you run out of fuel, the engine will continue to run for a short time.

L FUNCTIONS

EAU13600

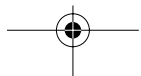
er (choke) knob “”



er (choke) knob “”

a cold engine requires a richer mixture, which is supplied by er (choke).
e knob in direction (a) to turn on er (choke).
e knob in direction (b) to turn off er (choke).

3-6

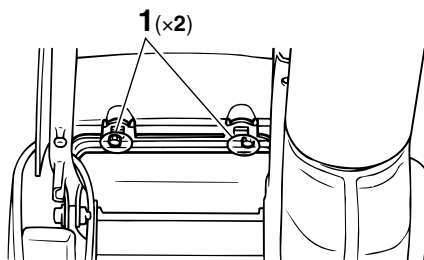


EAU13960

Seat

To remove the seat

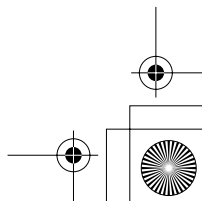
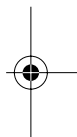
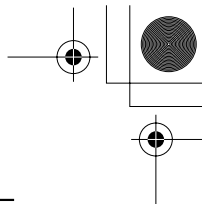
Remove the bolts, and then pull the seat off.



1. Bolt

To install the seat

1. Insert the projections on the front of the seat into the seat holders as shown.



INSTRUMENT AND CONTROL FUNCTIONS

EAU14671

Setting the front fork

The front fork is equipped with air valves for adjusting the spring rate and for adjusting the damping force.

EWA10190

WARNING

There should be no difference in air pressure between the fork legs.

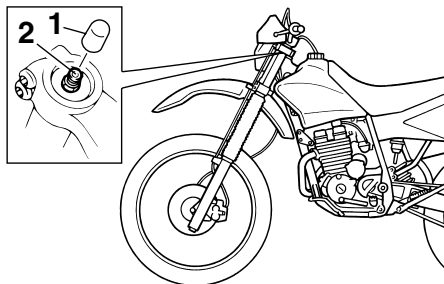
Spring rate

The spring rate is adjusted by changing the air pressure as follows.

1. Lift the front wheel off the ground according to the procedure on page 6-30.

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

3. Remove the air valve cap from each fork leg.



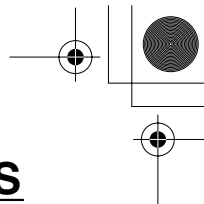
1. Front fork air valve cap
2. Front fork air valve

3. Check the air pressure in each fork leg with an air pressure gauge.

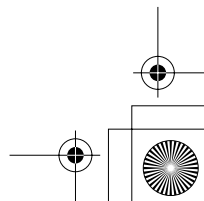
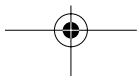
NOTE:

An optional air pressure gauge is available at a Yamaha dealer.

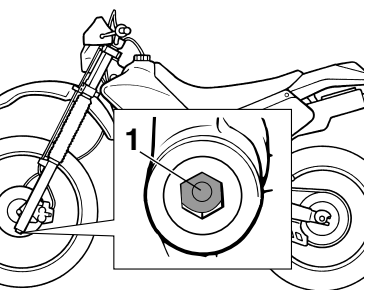
4. To increase the spring rate and thereby harden the suspension, increase the air pressure with an air pump. To decrease the spring rate and thereby soften the suspension, decrease the air pressure by



3

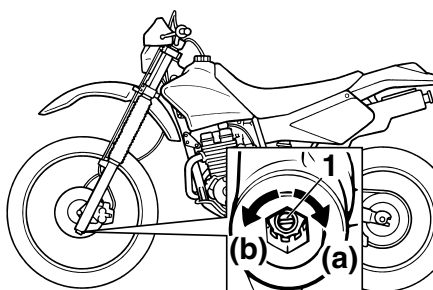


L FUNCTIONS



or cap

To increase the damping force and thereby harden the damping, turn the adjusting screw on each fork leg in direction (a). To decrease the damping force and thereby soften the damping, turn the adjusting screw on each fork leg in direction (b).



1. Damping force adjusting screw

Damping setting:

Minimum (soft):

20 clicks in direction (b)*

Standard:

11 clicks in direction (b)*

Maximum (hard):

1 click in direction (b)*

* With the adjusting screw fully turned in direction (a)

ECA10100

CAUTION:

Never attempt to turn an adjusting mechanism beyond the maximum or minimum settings.

INSTRUMENT AND CONTROL FUNCTIONS

Adjusting the shock absorber assembly

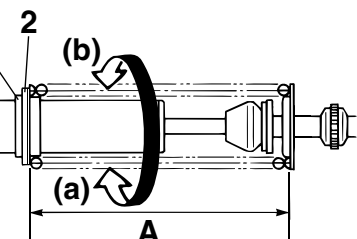
The shock absorber assembly is equipped with a spring preload adjusting knob, a rebound damping force adjusting knob and a compression damping force adjusting knob.

EAU15070

ECA10100

NOTE: Do not attempt to turn an adjusting knob beyond the maximum or minimum settings.

Spring preload



Turn the adjusting nut clockwise to increase the spring preload and counter-clockwise to decrease the spring preload.

2. To increase the spring preload and thereby harden the suspension, turn the adjusting nut in direction (a). To decrease the spring preload and thereby soften the suspension, turn the adjusting nut in direction (b).

NOTE:

- A special wrench is needed to make this adjustment and it can be obtained at a Yamaha dealer.
- The spring preload setting is determined by measuring distance A, shown in the illustration. The shorter the distance A is, the higher the spring preload; the longer distance A is, the lower the spring preload.

Spring preload:

Minimum (soft):

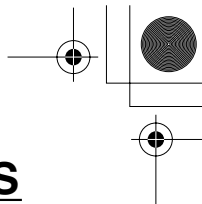
Distance A = 236 mm (9.3 in)

Standard:

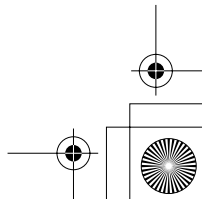
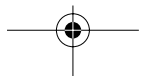
Distance A = 228 mm (9.0 in)

Maximum (hard):

Distance A = 224 mm (8.8 in)



3



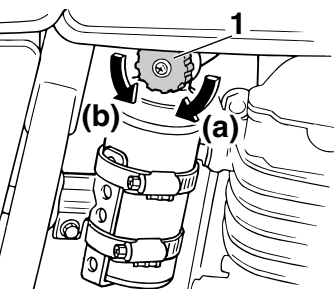
FUNCTIONS

and thereby soften the rebound
g, turn the adjusting dial in di-
b).

Compression damping setting:

Minimum (soft):
6 clicks in direction (b)*
Standard:
11 clicks in direction (b)*
Maximum (hard):
16 clicks in direction (b)*
With the adjusting dial fully turned
in direction (a)

Compression damping force



Compression damping force adjusting

ase the compression damping
d thereby harden the compres-

sion damping, turn the adjusting knob
in direction (a). To decrease the com-
pression damping force and thereby
soften the compression damping, turn
the adjusting knob in direction (b).

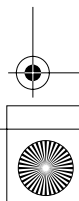
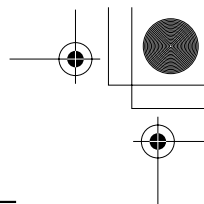
Compression damping setting:

Minimum (soft):
5 clicks in direction (a)*
Standard:
11 clicks in direction (a)*
Maximum (hard):
15 clicks in direction (a)*

* With the adjusting knob fully
turned in direction (b)

NOTE:

Although the total number of clicks of a
damping force adjusting mechanism
may not exactly match the above spec-
ifications due to small differences in
production, the actual number of clicks
always represents the entire adjusting
range. To obtain a precise adjustment,
it would be advisable to check the num-
ber of clicks of each damping force ad-
justing mechanism and to modify the



INSTRUMENT AND CONTROL FUNCTIONS

EAU15390

Starting circuit cut-off system

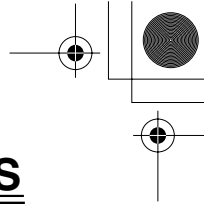
Starting circuit cut-off system (combination of the clutch switch and the neutral switch) prevents starting when the transmission is in gear and the clutch is not pulled.

Regularly check the operation of the starting circuit cut-off system according to the following procedure.

EWA10250

WARNING

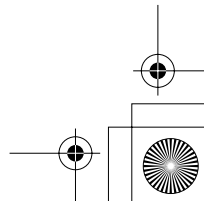
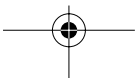
If a malfunction is noted, have a qualified technician check the system before driving.



3



3-11



L FUNCTIONS

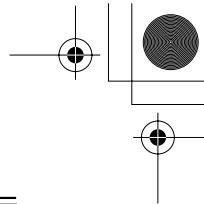
to “Q”.
on.

dden.

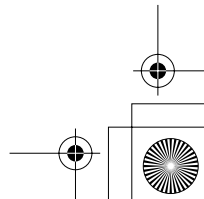
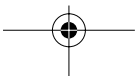
NOTE: _____
This check is most reliable if performed with
a warmed-up engine.

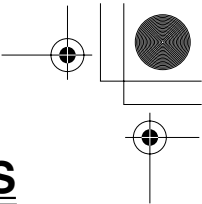
The neutral switch may be defective.
The motorcycle should not be ridden until
checked by a Yamaha dealer.

The clutch switch may be defective.
The motorcycle should not be ridden until
checked by a Yamaha dealer.



3-12





PRE-OPERATION CHECKS

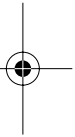
EAU15590

ability. Vital components can start to deteriorate quickly and unexpectedly, as a result of exposure to the elements). Any damage, fluid leakage or loss of components. Therefore, it is very important, in addition to a thorough visual inspection, to check the following items before starting the engine.

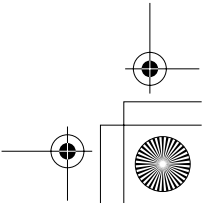
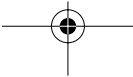
EAU15600

CHECKS	PAGE
Fuel tank. Leakage.	3-4
Engine. Recommended oil to specified level. Oil leakage.	6-7
Have Yamaha dealer bleed hydraulic system. Brake pads. Brake disc. Brake wear. Brake reservoir. Recommended brake fluid to specified level. Brake system for leakage.	6-18, 6-19
Have Yamaha dealer bleed hydraulic system. Brake pads. Brake disc. Brake wear. Brake reservoir. Recommended brake fluid to specified level. Brake system for leakage.	6-18, 6-19

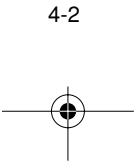
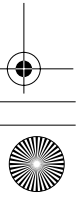
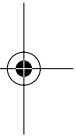
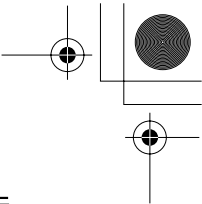
4



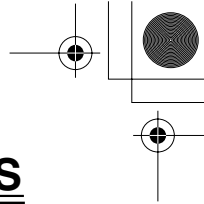
4-1



CHECKS	PAGE
ecessary. /.	6-16
ation is smooth. y. amaha dealer adjust cable free play and lubricate cable	6-13, 6-23
ation is smooth. ry.	6-23
on. ry.	6-20, 6-22
and tread depth.	6-13, 6-15
ation is smooth. ting points if necessary.	6-24
ation is smooth. ng points if necessary.	6-23
ation is smooth. ecessary.	6-24
ts, bolts and screws are properly tightened.	—
	—
	3-1



5



PRE-OPERATION CHECKS

the vehicle is used. Such an inspection can be accomplished in a very short
worth the time involved.

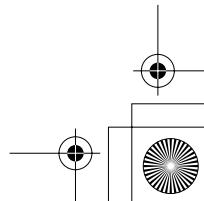
EWA11150

not working properly, have it inspected and repaired before operating

4



4-3



START RIDING POINTS

Starting and warming up a engine

For the starting circuit cut-off to enable starting, one of the following conditions must be met.

The transmission is in the neutral position.

The transmission is in gear with the clutch lever pulled.

WARNING

Before starting the engine, check the function of the start-circuit cut-off system according to the procedure described on page 3-11.

Never ride with the sidestand down.

Turn the fuel cock lever to "ON". Turn the key to "ON" and make sure that the engine stop switch is set to "O".

Shift the transmission into the neutral position.

4. Turn the starter (choke) on and completely close the throttle. (See page 3-6.)

5. Start the engine by pushing the start switch.

NOTE:

If the engine fails to start, release the start switch, wait a few seconds, and then try again. Each starting attempt should be as short as possible to preserve the battery. Do not crank the engine more than 10 seconds on any one attempt.

6. After starting the engine, move the starter (choke) back halfway.

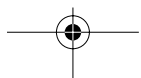
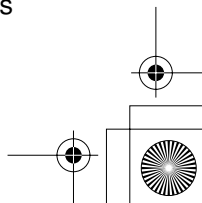
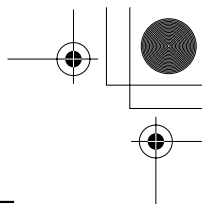
CAUTION:

For maximum engine life, always warm the engine up before starting off. Never accelerate hard when the engine is cold!

7. When the engine is warm, turn the starter (choke) off.

NOTE:

The engine is warm when it responds



OPERATION AND IMPORTANT RIDING POINTS

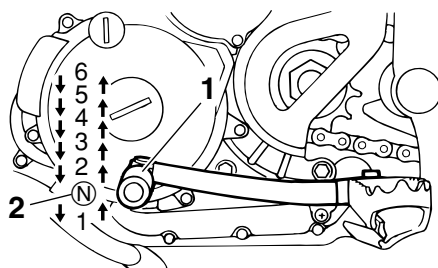
EAU16640

EAU16670

Starting a warm engine

Use the same procedure as for starting a cold engine with the exception that the starter (choke) is not required if the engine is warm.

Shifting



1. Shift pedal
2. Neutral position

Shifting gears lets you control the amount of engine power available for starting off, accelerating, climbing hills, etc.

The gear positions are shown in the illustration.

NOTE:

To shift the transmission into the neutral position, press the shift pedal down repeatedly until it reaches the end of its travel, and then slightly raise it.

IT RIDING POINTS

EAU16850

Break-in

There is never a more important period of your engine than the first 20 hours of riding. For this reason, you should read the following material carefully.

If the engine is brand new, do not place an excessive load on it for the first 20 hours of operation. The various stresses of the engine wear and polish the engine to the correct operating condition. During this period, prolonged full-throttle operation or any other operation that might result in engine overheating must be avoided. However, occasional full-throttle operation (i.e., two to three seconds) does not harm the engine. Full-throttle acceleration should be avoided with a substantial rest period after the engine. To allow the engine to cool down from the temporary build-up of heat, cruise at a lower engine

0–10 hours

- Avoid prolonged operation above 1/2 throttle.
- After every hour of operation, stop the engine, and then let it cool for five to ten minutes.
- Vary the engine speed from time to time. Do not operate the engine at one set throttle position.

10–20 hours

- Avoid prolonged operation above 3/4 throttle.
- Rev the engine freely through the gears, but do not use full throttle at any time.

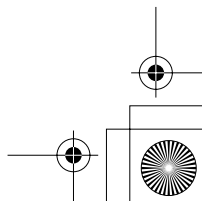
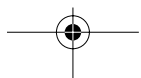
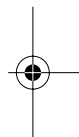
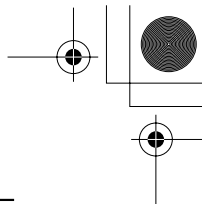
After break-in

Avoid prolonged full-throttle operation. Vary the engine speed occasionally.

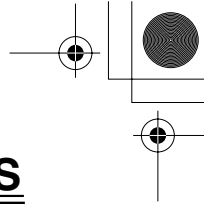
ECA10270

CAUTION:

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

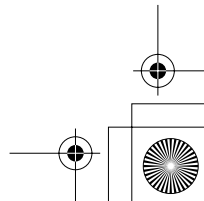
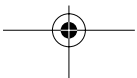


URATION AND IMPORTANT RIDING POINTS



5

5-4



END MINOR REPAIR

EAU17310

's tool kit

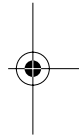
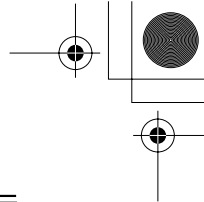
vice information included in this and the tools provided in the tool kit are intended to assist the performance of preventive maintenance and minor repairs. How- additional tools such as a torque may be necessary to perform maintenance work correctly.

do not have the tools or experi- quired for a particular job, have a dealer perform it for you.

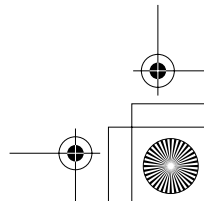
EWA10340

ARNING

ations not approved by a may cause loss of perfor- excessive emissions, and the vehicle unsafe for use. t a Yamaha dealer before at- g any changes.



6-1



PERIODIC MAINTENANCE AND MINOR REPAIR

EAU17691

Chart

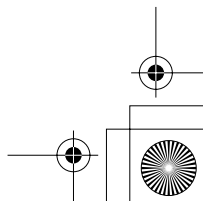
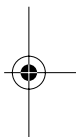
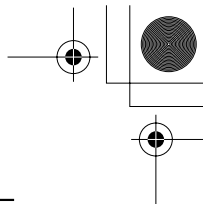
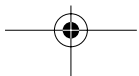
MAINTENANCE JOBS	Initial	EVERY	
	100 mi (150 km) or 1 month	600 mi (1,000 km) or 6 months	1,200 mi (2,000 km) or 12 months
cracks or damage.		✓	✓
ce if necessary.		✓	✓
ce.			✓
ecessary.		✓	✓
se for cracks or damage and drain		✓	✓
speed and starter operation.	✓	✓	✓
ry. ecessary.		✓	✓
ehicle for oil leakage.	✓	✓	✓
ne before draining.)	✓	✓	✓
le.	✓	✓	✓
d level and vehicle for fluid leakage. (6-4.)	✓	✓	✓
if necessary.			

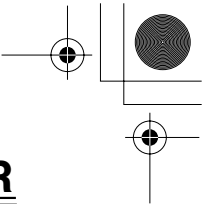
6-2

6

ND MINOR REPAIR

MAINTENANCE JOBS	Initial	EVERY	
	100 mi (150 km) or 1 month	600 mi (1,000 km) or 6 months	1,200 mi (2,000 km) or 12 months
level and vehicle for fluid leakage. (4.)	✓	✓	✓
necessary.			
freeplay. necessary.	✓	✓	✓
t, spoke tightness and for damage. balance, replace if necessary.	✓	✓	✓
d for damage.		✓	✓
ness or damage.		✓	✓
ake sure that the rear wheel is	Every ride		
d steering for roughness.	✓		✓
soap-based grease every 1,200 mi ths (whichever comes first).			
bolts and screws are properly tightened.	✓	✓	✓
necessary.	✓		✓
			✓
for oil leakage.		✓	✓





ODIC MAINTENANCE AND MINOR REPAIR

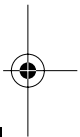
D MAINTENANCE JOBS	Initial	EVERY	
	100 mi (150 km) or 1 month	600 mi (1,000 km) or 6 months	1,200 mi (2,000 km) or 12 months
Shock absorber for oil leakage. Rubber assembly if necessary.			✓
Denom disulfide grease.			✓

EAU17630

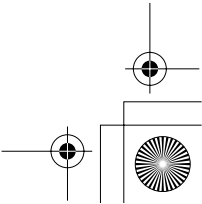
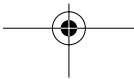
ou are riding in unusually wet or dusty areas.

ders and calipers, always change the fluid. Regularly check the brake fluid
onents of the brake master cylinders and calipers, and change the brake
and if cracked or damaged.

6



6-4

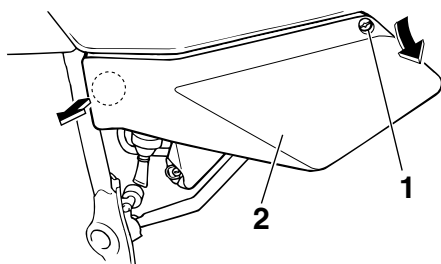
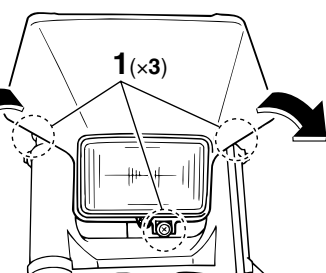


END MINOR REPAIR

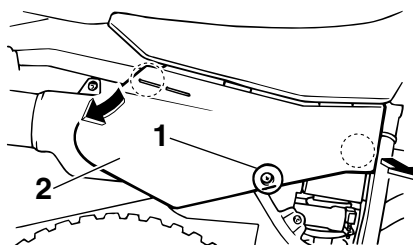
aintenance jobs described in this
Refer to this section each time
ing or a panel needs to be re-
and installed.

EAU18850

g A
ve the cowling
the cowling screws, and then
cowling off as shown.



- 1. Screw
- 2. Panel A



- 1. Screw
- 2. Panel B

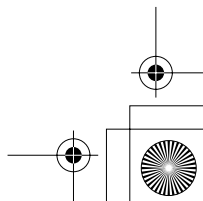
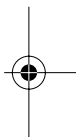
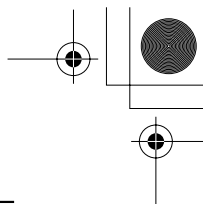
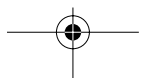
ll the cowling
e cowling in the original posi-
then install the screws.

EAU19291

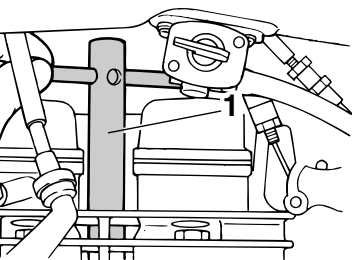
A and B
ve one of the panels
the screw, and then pull the
f as shown.

To install the panel

Place the panel in the original position,
and then install the screw.



PERIODIC MAINTENANCE AND MINOR REPAIR



spark plug wrench

Check the spark plug

Check that the porcelain insulator around the center electrode of the spark plug is a medium-to-light tan (the ideal color when the vehicle is idling normally).

If the spark plug shows a distinctly different color, the engine could be defective. Do not attempt to diagnose such problems yourself. Instead, have a qualified dealer check the vehicle.

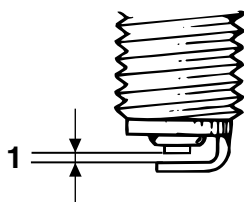
Check the spark plug for electrode erosion and excessive carbon or oil deposits, and replace it if

necessary.

Specified spark plug:
NGK/CR9E or
DENSO/U27ESR-N

To install the spark plug

1. Measure the spark plug gap with a wire thickness gauge and, if necessary, adjust the gap to specification.



1. Spark plug gap

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

2. Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the

END MINOR REPAIR

EAU19782

Oil and oil filter

The engine oil level should be checked each ride. In addition, the oil should be changed and the oil filter element cleaned at the intervals specified in the general maintenance and lubrication chart.

Check the engine oil level

Place the vehicle on a level surface and hold it in an upright position.

Ensure that the vehicle is positioned upright when checking the oil level. Tilting to the side can result in a false reading.

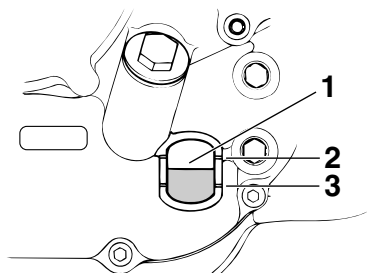
Start the engine, warm it up for several minutes, and then turn it off.

Wait a few minutes until the oil settles, and then check the oil level through the check window located at the bottom-right side of the

crankcase.

NOTE:

The engine oil should be between the minimum and maximum level marks.



1. Engine oil level check window
2. Maximum level mark
3. Minimum level mark

4. If the engine oil is below the minimum level mark, add sufficient oil of the recommended type to raise it to the correct level.

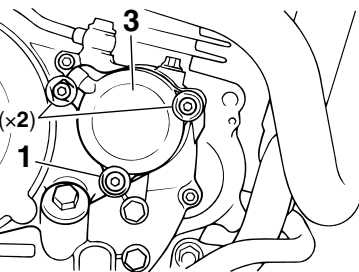
To change the engine oil (with or without oil filter element cleaning)

1. Start the engine, warm it up for several minutes, and then turn it off.
2. Place an oil pan under the engine

PERIODIC MAINTENANCE AND MINOR REPAIR

them if necessary.

Remove the oil filter element drain bolt to drain the oil from the oil filter element.



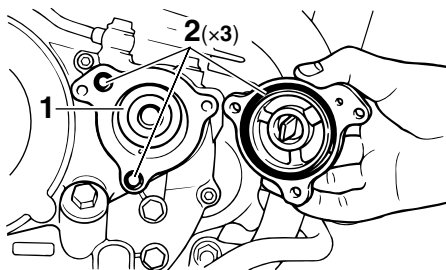
Oil filter element drain bolt

Oil filter element cover

Follow steps 5–9 if the oil filter element is being cleaned.

Remove the oil filter element cover by removing the bolts.

Remove the oil filter element and O-rings.



1. Oil filter element

2. O-ring

7. Check the O-rings for damage and replace them if necessary.

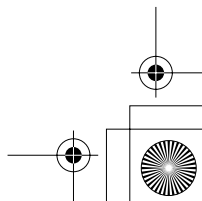
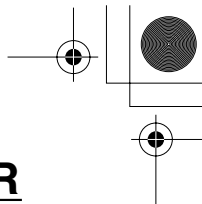
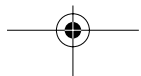
8. Clean the oil filter element with solvent, and then install it.

NOTE: _____

Check the oil filter element for damage and replace it if necessary.

6

6-8



END MINOR REPAIR

all and tighten the oil filler cap.

Recommended oil:

See page 8-1.

Quantity:

Without oil filter element

Replacement:

1.10 L (1.16 us.qt)

0.97 Imp.qt)

With oil filter element

Replacement:

1.20 L (1.27 us.qt)

1.06 Imp.qt)

ECA10390

CAUTION:

In order to prevent clutch slip-
page (since the engine oil also
lubricates the clutch), do not
add any chemical additives with
the oil.

Make sure that no foreign mate-
rials enter the crankcase.

Start the engine, and then let it idle
for several minutes while checking
for oil leakage. If oil is leaking, im-
mediately turn the engine off and
check for the cause.

6-9

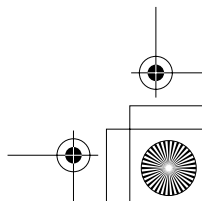
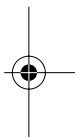
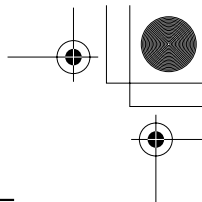
14. Turn the engine off, and then
check the oil level and correct it if
necessary.

ECA10970

CAUTION:

After replacing the engine oil, make
sure to check the oil pressure as de-
scribed below.

- Remove the bleed bolt from the
engine oil filter element cover.
- Start the engine and keep it
idling until oil flows out. If no oil
comes out after one minute,
turn the engine off immediately
so it will not seize. If this occurs,
have a Yamaha dealer repair the
vehicle.
- After checking the oil pressure,
tighten the bleed bolt to the
specified torque.



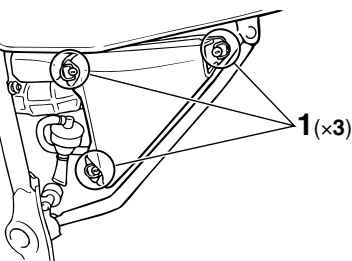
PERIODIC MAINTENANCE AND MINOR REPAIR

EAU20890

Changing the air filter element

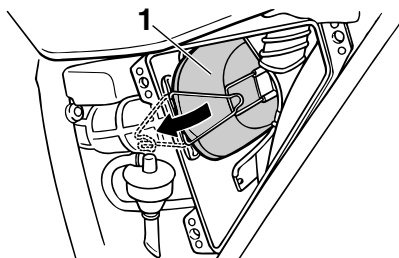
The air filter element should be cleaned at the intervals specified in the periodic maintenance and lubrication chart. Change the air filter element more frequently if you are riding in unusually dusty areas.

1. Remove panel A. (See page 6-5.)
2. Remove the air filter case cover by moving the holding clips.



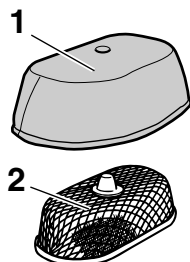
holding clip

3. Pull the air filter element out of the air filter case.



1. Air filter element

4. Remove the sponge material from the air filter element frame.



1. Sponge material

2. Air filter element frame

5. Clean the sponge material with solvent, and then squeeze the remaining solvent out.

END MINOR REPAIR

ECA10480

NOTE: Make sure that the air filter element is properly seated in the filter case.

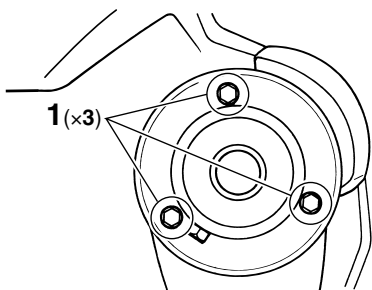
The engine should never be operated without the air filter element installed, otherwise the piston(s) and/or cylinder(s) may become excessively worn.

Remove the panel.

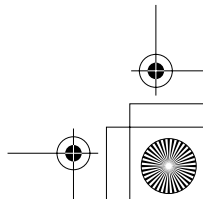
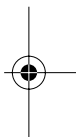
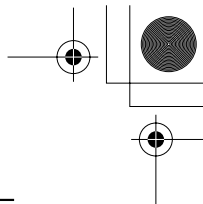
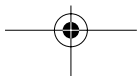
Cleaning the spark arrester

NOTE: Make sure to select a well-ventilated area free of combustible materials to clean the spark arrester.

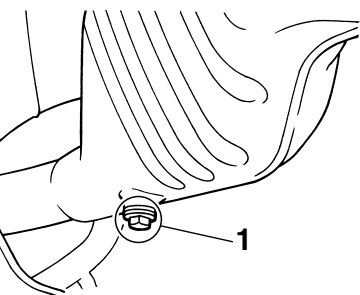
1. Remove the tailpipe by removing the bolts, and then pulling it out of the muffler.



1. Bolt
2. Tap the tailpipe lightly, and then use a wire brush to remove any carbon deposits from the spark arrester portion of the tailpipe.



PERIODIC MAINTENANCE AND MINOR REPAIR



ing bolt

Start the engine and rev it approximately twenty times while momentarily creating exhaust system back pressure using a shop towel to block the end of the muffler.

Stop the engine and allow the exhaust pipe to cool.

Loosen the purging bolt and tighten

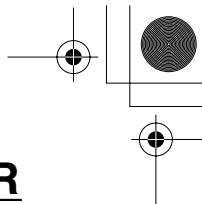
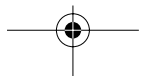
Adjusting the carburetor

The carburetor is an important part of the engine and requires very sophisticated adjustment. Therefore, most carburetor adjustments should be left to a Yamaha dealer, who has the necessary professional knowledge and experience. However, the following may be serviced by the owner as part of routine maintenance.

CAUTION:

The carburetor has been set and extensively tested at the Yamaha factory. Changing these settings without sufficient technical knowledge may result in poor performance of or damage to the engine.

6-12

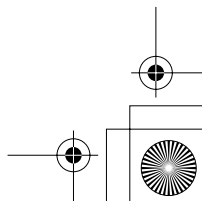


EAU21260

ECA10550



6



END MINOR REPAIR

EAU21400

ing the valve clearance
The clearance changes with use, and in improper air-fuel mixture can cause engine noise. To prevent this from occurring, the valve clearance should be adjusted by a Yamaha dealer at the intervals specified in the periodic maintenance and lubrication chart.

Tires

To maximize the performance, durability, and safe operation of your machine, note the following points regarding the specified tires.

Tire air pressure

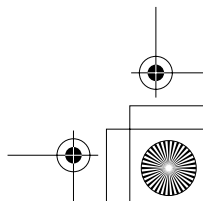
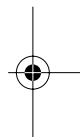
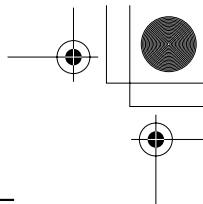
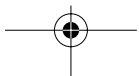
The tire air pressure should be checked and, if necessary, adjusted before each ride.

EAU21490

WARNING

- The tire air pressure must be checked and adjusted on cold tires (i.e., when the temperature of the tires equals the ambient temperature).
- The tire air pressure must be adjusted in accordance with the riding speed and with the total weight of rider, cargo, and accessories approved for this

EWA10440



PERIODIC MAINTENANCE AND MINOR REPAIR

the specified maximum load for the vehicle.

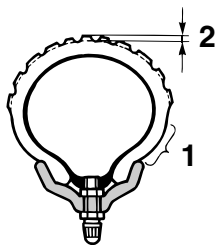
Do not carry along loosely packed items, which can shift during a ride.

Securely pack the heaviest items close to the center of the vehicle and distribute the weight evenly on both sides.

Adjust the suspension and tire pressure with regard to the load.

Check the tire condition and air pressure before each ride.

Inspection



sidewall
tread depth

6-14

The tires must be checked before each ride. If a tire tread depth reaches the specified limit, if the tire has a nail or glass fragments in it, or if the sidewall is cracked, have a Yamaha dealer replace the tire immediately.

Minimum tire tread depth
(front and rear):
4.0 mm (0.16 in)

Tire information

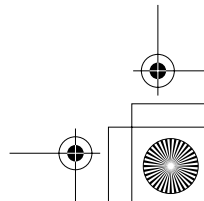
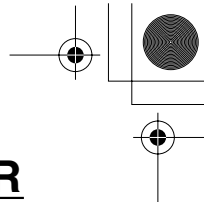
This machine is equipped with spoke wheels and tube tires.

EWA10460

WARNING

- The front and rear tires should be of the same make and design, otherwise the handling characteristics of the vehicle cannot be guaranteed.
- After extensive tests, only the tires listed below have been approved for this model by

6



ND MINOR REPAIR

ge and experience.

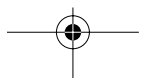
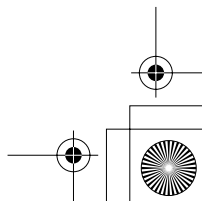
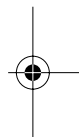
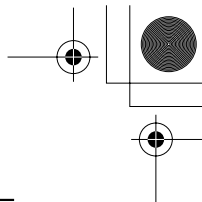
s not recommended to patch
punctured tube. If unavoid-
e, however, patch the tube
y carefully and replace it as
on as possible with a
h-quality product.

EAU21940

Spoke wheels

To maximize the performance, durabil-
ity, and safe operation of your machine,
note the following points regarding the
specified wheels.

- The wheel rims should be checked
for cracks, bends or warpage, and
the spokes for looseness or dam-
age before each ride. If any dam-
age is found, have a Yamaha
dealer replace the wheel. Do not
attempt even the smallest repair to
the wheel. A deformed or cracked
wheel must be replaced.
- The wheel should be balanced
whenever either the tire or wheel
has been changed or replaced. An
unbalanced wheel can result in
poor performance, adverse han-
dling characteristics, and a short-
ened tire life.
- Ride at moderate speeds after
changing a tire since the tire sur-
face must first be "broken in" for it
to develop its optimal characteris-
tics.

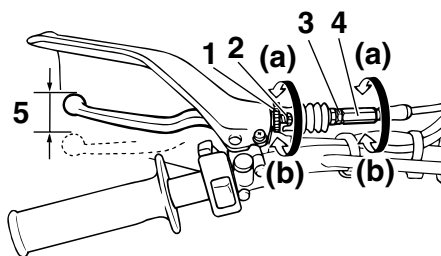


PERIODIC MAINTENANCE AND MINOR REPAIR

of items which have not
approved by Yamaha.

EAU22030

Adjusting the clutch lever free play



1. Locknut (clutch lever)
2. Adjusting bolt
3. Locknut (clutch cable)
4. Adjusting nut
5. Clutch lever free play

6

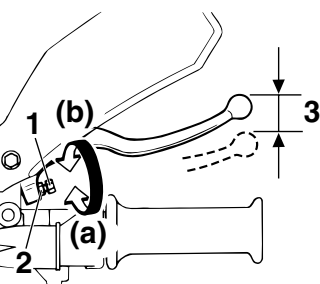
The clutch lever free play should measure 10.0–15.0 mm (0.39–0.59 in) as shown. Periodically check the clutch lever free play and, if necessary, adjust it as follows.

1. Loosen the locknut at the clutch lever.
2. To increase the clutch lever free play, turn the adjusting bolt in direction (a). To decrease the clutch

END MINOR REPAIR

Adjusting the brake lever free

EAU22090



ing bolt
ut
lever free play

ke lever free play should mea-
0–5.0 mm (0.08–0.20 in) as
Periodically check the brake le-
play and, if necessary, adjust it
vs.

osen the locknut at the brake le-

increase the brake lever free
y, turn the adjusting bolt in di-
ion (a). To decrease the brake
er free play, turn the adjusting
in direction (b).

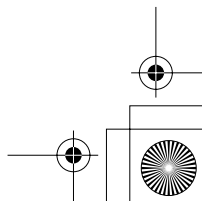
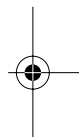
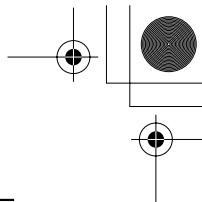
6-17

3. Tighten the locknut.

EWA10630

WARNING

- After adjusting the brake lever free play, check the free play and make sure that the brake is working properly.
- A soft or spongy feeling in the brake lever can indicate the presence of air in the hydraulic system. If there is air in the hydraulic system, have a Yamaha dealer bleed the system before operating the machine. Air in the hydraulic system will diminish the braking performance, which may result in loss of control and an accident.



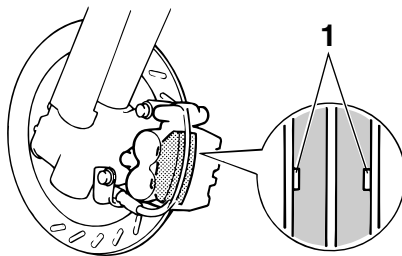
PERIODIC MAINTENANCE AND MINOR REPAIR

A worn hydraulic system will diminish braking performance, which may result in loss of control and an accident.

Checking the front and rear brake pads

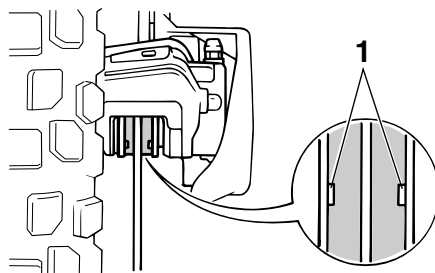
EAU22321

Front brake



1. Wear indicator groove

Rear brake



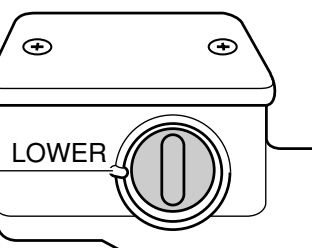
1. Wear indicator groove

The front and rear brake pads must be checked for wear at the intervals specified in the maintenance schedule.

END MINOR REPAIR

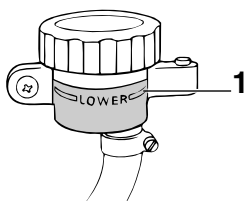
Checking the brake fluid level

EAU22580



um level mark

ake



um level mark

ent brake fluid may allow air to
e brake system, possibly caus-
become ineffective.

6-19

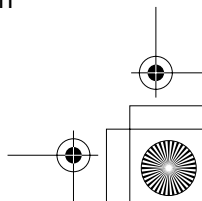
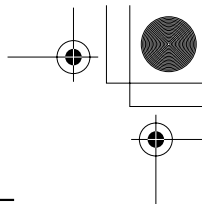
Before riding, check that the brake fluid is above the minimum level mark and replenish if necessary. A low brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage.

Observe these precautions:

- When checking the fluid level, make sure that the top of the brake fluid reservoir is level.
- Use only the recommended quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor braking performance.

Recommended brake fluid:
DOT 4

- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor braking performance.
- Be careful that water does not enter the brake fluid reservoir when



PERIODIC MAINTENANCE AND MINOR REPAIR

EAU22730

Changing the brake fluid

Have a Yamaha dealer change the brake fluid at the intervals specified in the maintenance schedule after the periodic maintenance and lubrication chart. In addition, replace the oil seals of the master cylinder and calipers as well as the brake hoses replaced at the intervals listed or whenever they are damaged or leaking.

Brake seals: Replace every two years.
Brake hoses: Replace every four years.

EAU22760

Drive chain slack

The drive chain slack should be checked before each ride and adjusted if necessary.

EAU22770

To check the drive chain slack

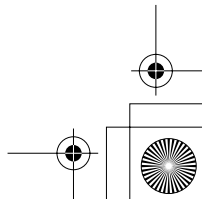
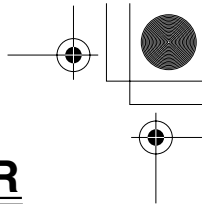
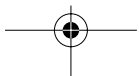
1. Place the machine on a level surface and hold it in an upright position.

NOTE:

When checking and adjusting the drive chain slack, the machine should be positioned straight up and there should be no weight on it.

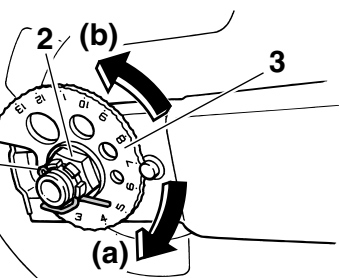
2. Shift the transmission into the neutral position.
3. Move the rear wheel by pushing the machine to locate the tightest portion of the drive chain, and then measure the drive chain slack as shown.

Drive chain slack:
35.0–50.0 mm (1.38–1.97 in)



END MINOR REPAIR

Ensure that both adjusting plates are in the same position for proper alignment.



pin
nut
adjusting plate

ECA10570

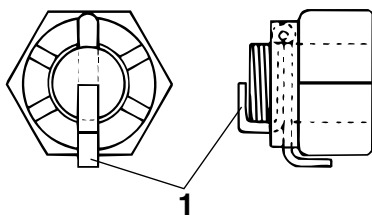
NOTE: Excessive drive chain slack will over-
load the engine as well as other vital
components of the machine and can lead to
chain slippage or breakage. To pre-
vent this from occurring, keep the
drive chain slack within the speci-
fied limits.

3. Tighten the axle nut to the speci-
fied torque.

Tightening torque:

Axle nut:
105 Nm (10.5 m·kgf, 76 ft·lbf)

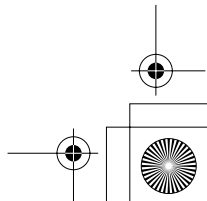
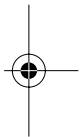
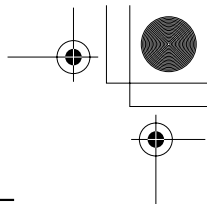
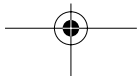
4. Insert a new cotter pin into the axle
nut, and then bend its ends as
shown.



1. Cotter pin

NOTE:

Make sure that two notches in the axle
nut are aligned with the hole through
the wheel axle, otherwise further tight-
en the axle nut until they are.



PERIODIC MAINTENANCE AND MINOR REPAIR

Lubricating the drive chain

The drive chain must be cleaned and lubricated at the intervals specified in the periodic maintenance and lubrication chart, otherwise it will quickly wear out, especially when riding in dusty or sandy areas. Service the drive chain as follows:

CAUTION:

The drive chain must be lubricated before washing the machine or riding in the rain.

Clean the drive chain with kerosene and a small soft brush.

CAUTION:

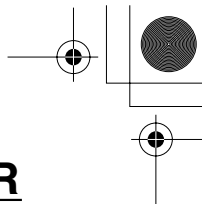
To prevent damaging the O-rings, do not clean the drive chain with steam cleaners, high-pressure washers or aggressive solvents.

Leave the drive chain dry. Thoroughly lubricate the drive chain with a special O-ring chain

lubricant.

CAUTION:

Do not use engine oil or any other lubricants for the drive chain, as they may contain substances that could damage the O-rings.



EAU23020

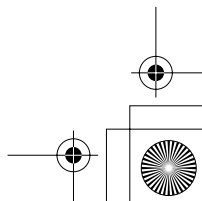
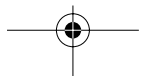
ECA11110

ECA10580

ECA11120

6

6-22



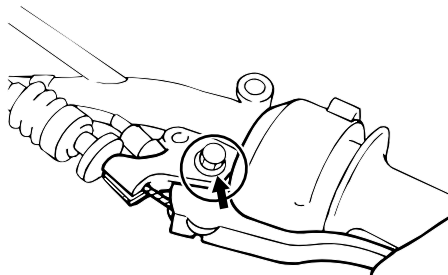
END MINOR REPAIR

EAU23110

Checking and lubricating the throttle grip and cable

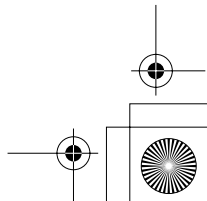
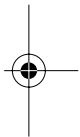
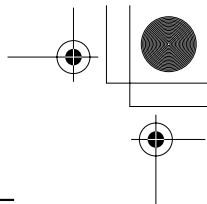
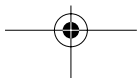
The operation of the throttle grip should be checked before each ride. In addition, the cable should be lubricated or replaced at the intervals specified in the maintenance chart.

Checking and lubricating the brake and clutch levers



The operation of the brake and clutch levers should be checked before each ride, and the lever pivots should be lubricated if necessary.

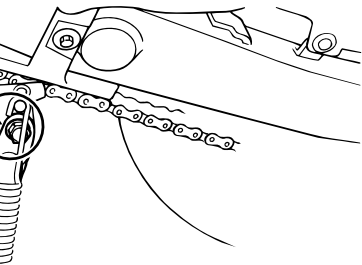
Recommended lubricant:
Lithium-soap-based grease
(all-purpose grease)



PERIODIC MAINTENANCE AND MINOR REPAIR

Checking and lubricating the sidestand

EAU23200



Operation of the sidestand should be checked before each ride, and the pivot and metal-to-metal surfaces should be lubricated if necessary.

EWA10730

WARNING
The sidestand does not move up and down smoothly, have a Yamaha check or repair it.

Recommended lubricant:
Lithium-soap-based grease
(all-purpose grease)

6-24

Checking the front fork

EAU23270

The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

To check the condition

EWA10750

WARNING

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

1. Check the inner tubes for scratches, damage and excessive oil leakage.

To check the operation

1. Place the vehicle on a level surface and hold it in an upright position.
2. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.

6

END MINOR REPAIR

EAU23280

ing the steering

loose steering bearings may
anger. Therefore, the operation
steering must be checked as fol-
the intervals specified in the pe-
maintenance and lubrication

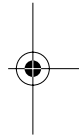
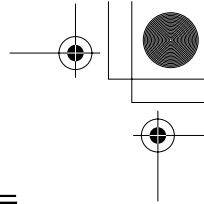
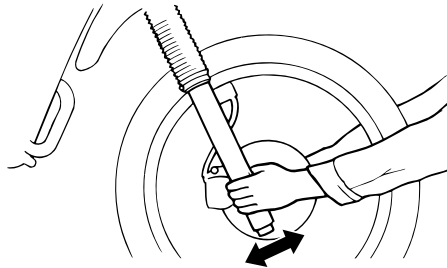
ce a stand under the engine to
e the front wheel off the
und.

EWA10750

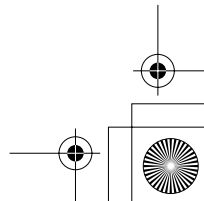
ARNING

y support the vehicle so that
no danger of it falling over.

d the lower ends of the front
legs and try to move them for-
d and backward. If any free
y can be felt, have a Yamaha
ler check or repair the steering.



6-25



PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23380

EWA10760

WARNING

- **Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.**
 - **EXTERNAL:** Flush with plenty of water.
 - **INTERNAL:** Drink large quantities of water or milk and immediately call a physician.
 - **EYES:** Flush with water for 15 minutes and seek prompt medical attention.
- **Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.**

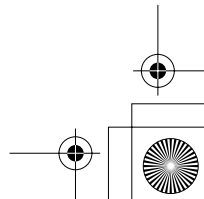
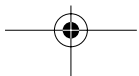
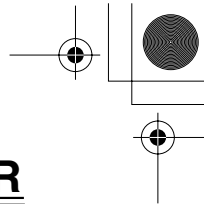


...y
...attery is located behind panel B.
...age 6-5.)
...model is equipped with a
...type (MF) battery, which does
...quire any maintenance. There is
...d to check the electrolyte or to
...tilled water.

ECA10620

CAUTION:

Do not attempt to remove the battery terminals, as this would permanently damage the battery.



END MINOR REPAIR

ECA10630

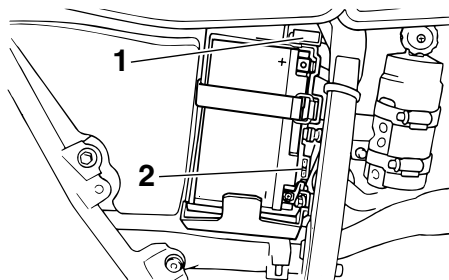
EAU23500

ON:

ways keep the battery charged. Storing a discharged battery can cause permanent battery damage.

to charge a sealed-type (MF) battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery. If you do not have access to a sealed-type (MF) battery charger, have a Yamaha dealer charge your battery.

Replacing the fuse



1. Fuse
2. Spare fuse

The fuse holder is located behind panel B. (See page 6-5.)

If the fuse is blown, replace it as follows.

1. Turn the key to "OFF" and turn off all electrical circuits.
2. Remove the blown fuse, and then install a new fuse of the specified amperage.

Specified fuse:
15.0 A

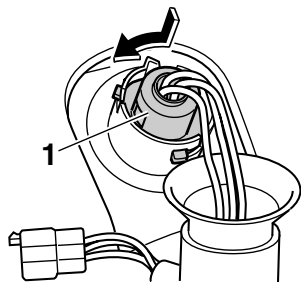
PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23841

Replacing the headlight bulb

This model is equipped with a quartz headlight. If the headlight bulb is burned out, replace it as follows.

Remove cowling A together with the headlight unit. (See page 6-5.) Disconnect the headlight coupler, and then remove the bulb cover.



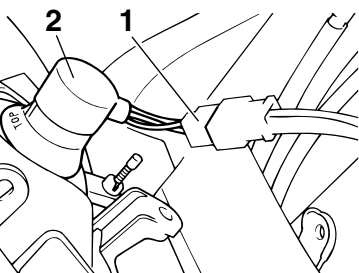
1. Headlight bulb holder

EWA10790

WARNING

Headlight bulbs get very hot. Therefore, keep flammable products away from a lit headlight bulb, and do not touch the bulb until it has cooled down.

6



Headlight coupler
Headlight bulb cover

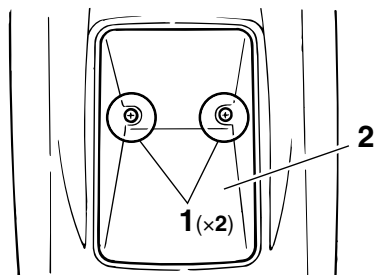
Remove the headlight bulb holder by pushing it inward and turning it counterclockwise, and then remove the defective bulb.

END MINOR REPAIR

EAU24191

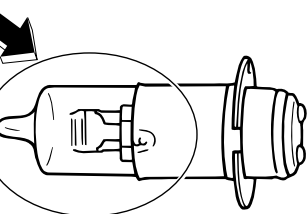
Replacing the taillight bulb

1. Remove the taillight lens by removing the screws.



1. Screw
2. Taillight lens

2. Remove the defective bulb by pushing it in and turning it counter-clockwise.



Do not touch the glass part of the bulb.
Remove the headlight bulb cover,
then connect the coupler.
Reattach the cowling together with
the headlight unit.
Have a Yamaha dealer adjust the
tailight beam if necessary.

PERIODIC MAINTENANCE AND MINOR REPAIR

Supporting the machine

This model is not equipped with a stand, follow these precautions when removing the front and rear wheels or performing other maintenance to keep the machine to stand upright. Make sure that the machine is in a stable level position before starting any maintenance. A strong wooden box should be placed under the engine for stability.

Supporting the front wheel

Stabilize the rear of the machine by using a machine stand or, if an additional machine stand is not available, by placing a jack under the frame in front of the rear wheel. Lift the front wheel off the ground by using a machine stand.

Supporting the rear wheel

Lift the rear wheel off the ground by using a machine stand or, if a machine stand is not available, by placing a jack under each side of the frame in front of the rear wheel or under each side of the swingarm.

6-30

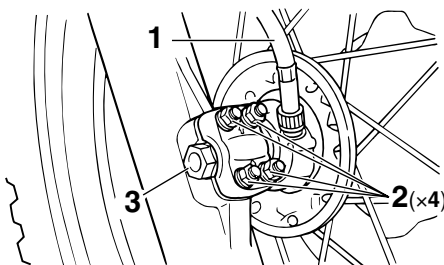
Front wheel

To remove the front wheel

WARNING

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

1. Remove the tripmeter cable from the front wheel.
2. Loosen the wheel axle holder nuts, then the wheel axle.



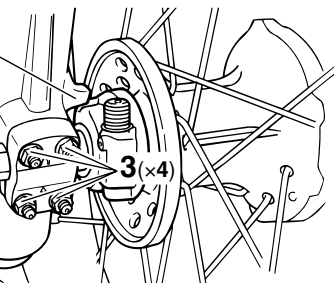
1. Tripmeter cable
2. Wheel axle holder nut
3. Wheel axle

6

END MINOR REPAIR

the wheel up between the fork
S.

ure that there is enough space
the brake pads before insert-
brake disc and that the slot in
meter gear unit fits over the re-
n the fork leg.



er
axle
axle holder nut

ert the wheel axle, and then
ten it to the specified torque.

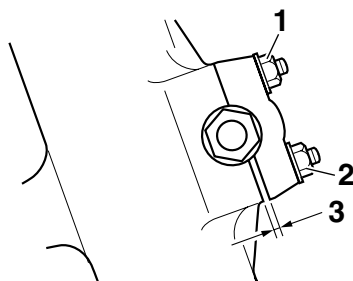
Tightening torque:

Wheel axle:
8 Nm (5.8 m·kgf, 42 ft·lbf)

4. Tighten the wheel axle holder nuts
to the specified torque.

NOTE:

Tighten the upper nuts first, and then
the lower ones. When the nuts are
tightened in this sequence, there
should be a gap at the bottom of the
axle holder.



- 1. Gap
- 2. Lower nut
- 3. Upper nut

Tightening torque:

Wheel axle holder nut:
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

5. While applying the front brake,
push down hard on the handlebars

PERIODIC MAINTENANCE AND MINOR REPAIR

Rear wheel

Remove the rear wheel

EAU25080

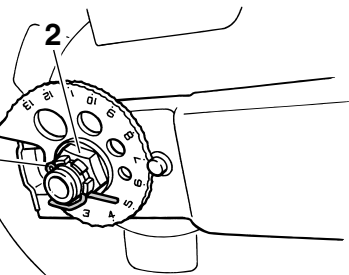
EAU25280

EWA10820

WARNING

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

Remove the axle nut cotter pin, and then loosen the axle nut.

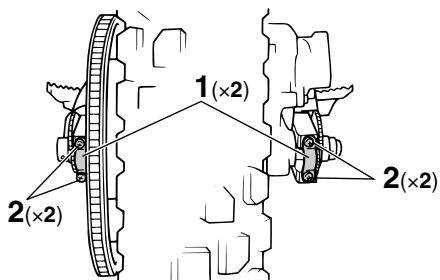


axle nut cotter pin
axle nut

Remove the rear wheel off the ground according to the procedure on page 6-30.

6-32

3. Remove each swingarm end cover by removing the screws.



1. Swingarm end cover
2. Screw

4. Push the wheel forward, and then remove the drive chain from the rear sprocket.

6

END MINOR REPAIR

brake disc between the pads.

all the drive chain onto the rear
ocket.

all each swingarm end cover
installing the screws, and then
er the rear wheel so that it is on
ground.

ust the drive chain slack. (See
e 6-20.)

nten the axle nut to the speci-
torque, and then install the cot-
pin.

ening torque:

e nut:

05 Nm (10.5 m·kgf, 76 ft·lbf)

EWA10700

ARNING

use a new cotter pin for the

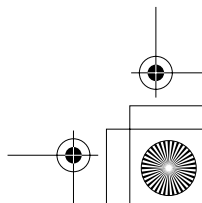
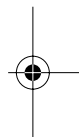
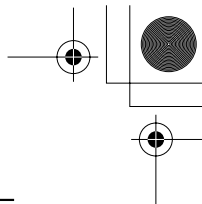
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Troubleshooting

Although Yamaha machines receive a thorough inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems, for example, can cause poor starting and loss of power.

The following troubleshooting chart represents a quick and easy procedure for checking these vital systems yourself. However, should your machine require any repair, take it to a Yamaha dealer, whose skilled technicians have the necessary tools, experience, and know-how to service the machine properly.

Use only genuine Yamaha replacement parts. Imitation parts may look like Yamaha parts, but they are often inferior, have a shorter service life and can lead to expensive repair bills.

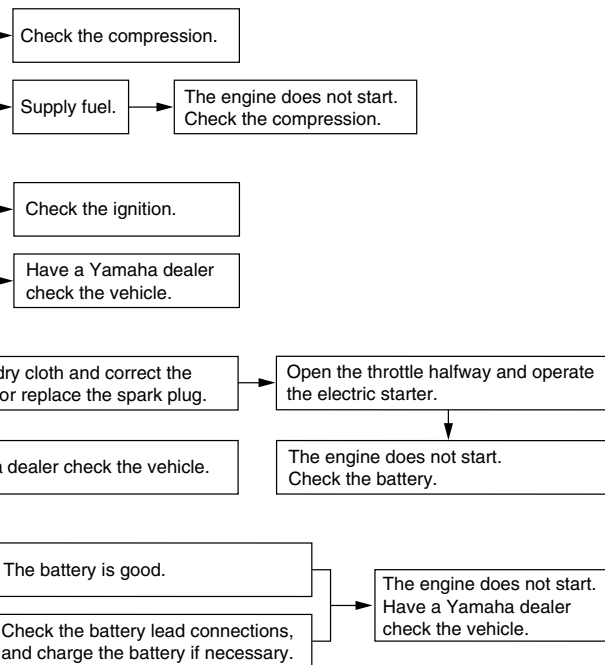


PERIODIC MAINTENANCE AND MINOR REPAIR

EAU25901

EWA10840

Before checking or working on the fuel system.



DAMAGE

sh, but never apply such prod-
s onto seals, gaskets, sprock-
the drive chain and wheel
es. Always rinse the dirt and de-
aser off with water.

g

ECA10770

ON: _____

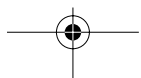
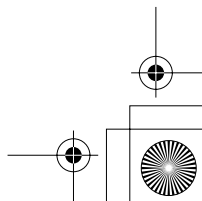
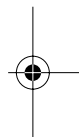
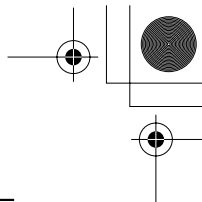
id using strong acidic wheel
aners, especially on spoked
eels. If such products are
d on hard-to-remove dirt, do
leave the cleaner on the af-
ted area any longer than in-
dicted. Also, thoroughly rinse
area off with water, immedi-
ly dry it, and then apply a cor-
ion protection spray.

proper cleaning can damage
dshields, cowlings, panels
d other plastic parts. Use only
soft, clean cloth or sponge
n mild detergent and water to
an plastic.

not use any harsh chemical
ducts on plastic parts. Be
e to avoid using cloths or

sponges which have been in
contact with strong or abrasive
cleaning products, solvent or
thinner, fuel (gasoline), rust re-
movers or inhibitors, brake flu-
id, antifreeze or electrolyte.

- Do not use high-pressure wash-
ers or steam-jet cleaners since
they cause water seepage and
deterioration in the following ar-
eas: seals (of wheel and swing-
arm bearings, fork and brakes),
electric components (couplers,
connectors, instruments,
switches and lights), breather
hoses and vents.
- For machines equipped with a
windshield: Do not use strong
cleaners or hard sponges as
they will cause dulling or
scratching. Some cleaning com-
pounds for plastic may leave
scratches on the windshield.
Test the product on a small hid-
den part of the windshield to
make sure that it does not leave





ECA10790

EWA10930

ECA10800

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Storage

Store your machine in a cool, dry place and, if necessary, protect it from dust with a porous cover.

Preparation:

Before storing the machine in a poorly ventilated room or covering it with a tarp, while it is still wet, allow water and humidity to evaporate in and cause rust.

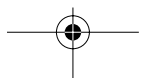
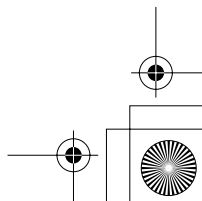
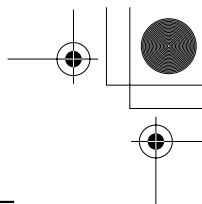
To prevent corrosion, avoid storing the machine in damp cellars, stables (because of the presence of ammonia) or areas where strong chemicals are stored.

Before storing your machine for several months, follow the instructions in the "Preparation" section of this chapter.

For machines equipped with a fuel tank that has an "OFF" position: Turn the fuel cock lever to "OFF". Drain the carburetor float chamber

by loosening the drain bolt; this will prevent fuel deposits from building up. Pour the drained fuel into the fuel tank.

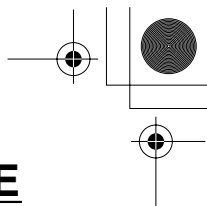
4. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel tank from rusting and the fuel from deteriorating.
5. Perform the following steps to protect the cylinder, piston rings, etc. from corrosion.
 - a. Remove the spark plug cap and spark plug.
 - b. Pour a teaspoonful of engine oil into the spark plug bore.
 - c. Install the spark plug cap onto the spark plug, and then place the spark plug on the cylinder head so that the electrodes are grounded. (This will limit sparking during the next step.)
 - d. Turn the engine over several times with the starter. (This will coat the cylinder wall with oil.)
 - e. Remove the spark plug cap from the spark plug, and then



MACHINE CARE AND STORAGE

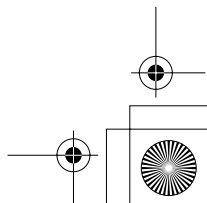
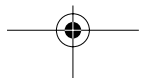
Do not store the battery in an excessively cold or warm place (less than 0 °C [30 °F] or more than 40 °C [90 °F]). For more information on storing the battery, see page 6-26.

Perform any necessary repairs before using the machine.



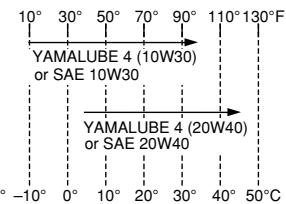
7

7-4



oil:

YAMALUBE 4, SAE10W30 or SAE20W40



Recommended engine oil grade:
service SE, SF, SG type or higher

oil quantity:

oil filter element replacement:

L (1.16 us.qt) (0.97 Imp.qt)

filter element replacement:

L (1.27 us.qt) (1.06 Imp.qt)

element:

element

Recommended fuel:
Unleaded gasoline only

Fuel tank capacity:
L (2.51 us.gal) (2.09 imp.gal)

Service amount:
L (0.53 us.gal) (0.44 imp.gal)

Motor:

Manufacturer:

KEI

Quantity:

Y30P x 1

Spark plug(s):

Manufacturer/model:

NGK/CR9E

Manufacturer/model:

DENSO/U27ESR-N

Spark plug gap:

0.7–0.8 mm (0.028–0.031 in)

Clutch:

Clutch type:

Wet, multiple-disc

Transmission:

Primary reduction system:

Spur gear

Primary reduction ratio:

74/24 (3.083)

Secondary reduction system:

Chain drive

Secondary reduction ratio:

52/13 (4.000)

Transmission type:

Constant mesh 6-speed

Operation:

Left foot operation

Gear ratio:

1st:

37/15 (2.467)

2nd:

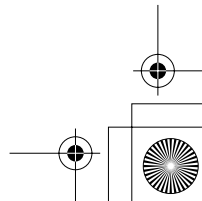
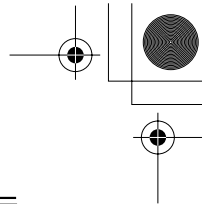
29/16 (1.813)

3rd:

30/22 (1.364)

4th:

27/25 (1.080)



kPa (15 psi) (1.00 kgf/cm²)

kPa (15 psi) (1.00 kgf/cm²)

Wheel:

type:
disc wheel

size:
1.60

Wheel:

type:
disc wheel

size:
2.15

Brake:

single disc brake
operation:
hand operation
recommended fluid:
4

Brake:

single disc brake
operation:
foot operation
recommended fluid:
4

Suspension:

telescopic fork
shock absorber type:
oil spring/oil damper

8-2

Wheel travel:
280.0 mm (11.02 in)

Rear suspension:

Type:
Swingarm (link suspension)
Spring/shock absorber type:
Coil spring/gas-oil damper
Wheel travel:
280.0 mm (11.02 in)

Electrical system:

Ignition system:
DC. C.D.I.
Charging system:
A.C. magneto

Battery:

Model:
GT7B-4
Voltage, capacity:
12 V, 6.5 Ah

Headlight:

Bulb type:
Halogen bulb

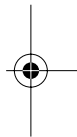
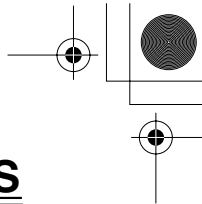
Bulb voltage, wattage x quantity:

Headlight:
12 V, 35.0 W/36.5 W x 1
Tail/brake light:
12 V, 5.0 W/21.0 W x 1

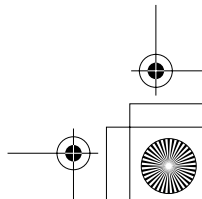
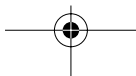
Fuse:

Fuse:
15.0 A

SPECIFICATIONS

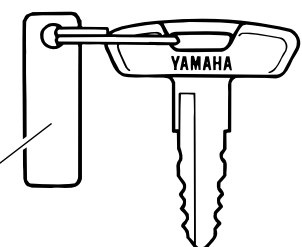


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Identification number

EAU26380

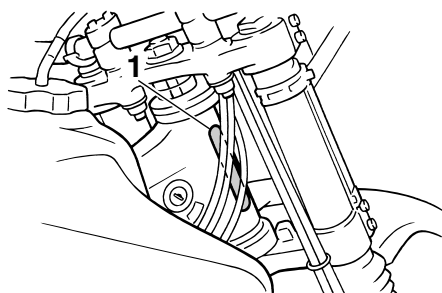


Identification number

The key identification number is stamped into the key tag. Record this number in the space provided and use it for reference when ordering a new key.

Vehicle identification number

EAU26400



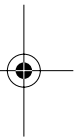
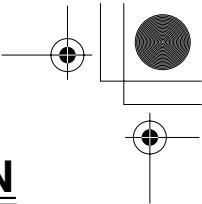
1. Vehicle identification number

The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

NOTE:

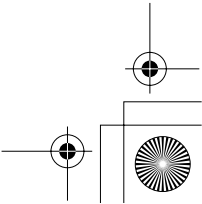
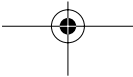
The vehicle identification number is used to identify your machine and may be used to register your machine with the licensing authority in your area.

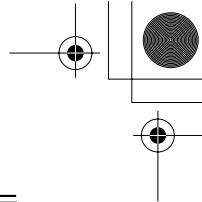
CONSUMER INFORMATION



9

9-2





EAU26560

PROHIBITED:

ing thereof: (1) The removal or rendering inoperative by any person other
cement of any device or element of design incorporated into any new ve-
e or delivery to the ultimate purchaser or while it is in use or (2) the use of
has been removed or rendered inoperative by any person.
STITUTE TAMPERING ARE THE ACTS LISTED BELOW".
systems; i.e., modification, removal, etc.

Exhaust system

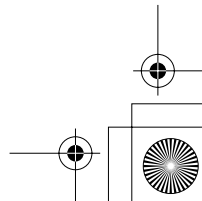
- Muffler
- Exhaust pipe
- Silencer

Air intake system

- Air cleaner case
- Air cleaner element
- Intake duct



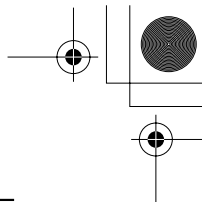
9-3





n the machine is serviced.

[illegible]



EAU26670

A. OFF-ROAD MOTORCYCLE LIMITED WARRANTY

EXCLUSIONS from this warranty shall include parts replaced due to normal wear or routine maintenance.

OWNER'S RESPONSIBILITY under this warranty shall be to:

1. Use and maintain the motorcycle as specified in the appropriate Owner's Manual, and
2. Take the motorcycle to an authorized Yamaha motorcycle dealer for any and all apparent defects within ten business days after discovery, and make the machine available at that time for inspection and repairs at the dealer's place of business.

WARRANTY TRANSFER: To transfer the warranty to a subsequent purchaser, the original purchaser must have the machine inspected and registered by an authorized Yamaha motorcycle dealer. In order for this warranty to remain in effect, this inspection and registration must take place within ten business days after transfer. An inspection and registration fee will be charged for this service.

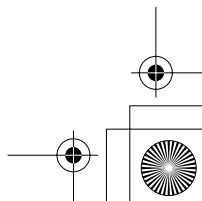
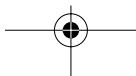
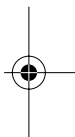
YAMAHA MOTOR CORPORATION, U.S.A. MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH EXCEED THE OBLIGATIONS AND WARRANTIES STATED IN THIS WARRANTY. ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED BY YAMAHA MOTOR CORPORATION, U.S.A. AND EXCLUDED FROM THIS WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE LIMITATION MAY NOT APPLY TO YOU. ALSO, SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

YAMAHA MOTOR CORPORATION, U.S.A.
P. O. Box 6555
Cypress, California 90630



CONSUMER INFORMATION

CUSTOMER SERVICE

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motorcycle dealer

If your machine requires warranty service, you must take it to any authorized Yamaha Motorcycle dealer within the continental United States. Be sure to bring your warranty registration card or other valid proof of the original date of purchase. If a question or problem arises regarding warranty, first contact the owner of the dealership. Since all warranty matters are handled at the dealer level, this person is in the best position to help you. If you are still not satisfied and require additional assistance, please write:

YAMAHA MOTOR CORPORATION U.S.A.
CUSTOMER RELATIONS DEPARTMENT
P.O. Box 6555
Cypress, California 90630

When contacting Yamaha Motor Corporation, U.S.A. don't forget to include any important information such as names, addresses, model, V.I.N. (frame number), dates, and receipts.

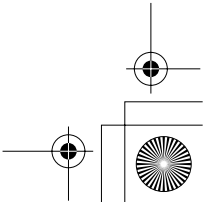
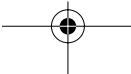
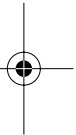
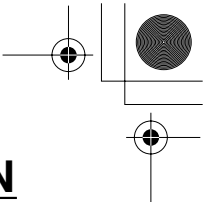
CHANGE OF ADDRESS

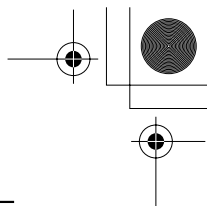
The federal government requires each manufacturer of a motor vehicle to maintain a complete, up-to-date list of all first purchasers against the possibility of a safety-related defect and recall. This list is compiled from the purchase registrations sent to Yamaha Motor Corporation, U.S.A. by the selling dealer at the time of your purchase.

If you should move after you have purchased your new motorcycle, please advise us of your new address by sending a postcard listing your motorcycle model name, V.I.N. (frame number), dealer number (or dealer's name) as it is shown on your warranty card, your name and new mailing address. Mail to:

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

This will ensure that Yamaha Motor Corporation, U.S.A. has an up-to-date registration record in accordance with federal law.





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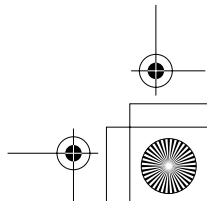
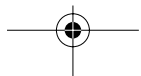
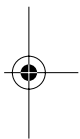
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- In addition, Travel and Recreation Interruption Protection (TRIP) is included at no extra cost. TRIP gives you up to \$150 reimbursement per occurrence for any reasonable expenses you incur because your Yamaha needs covered service: replacement vehicle rental, emergency towing, phone calls, even food and lodging when you are away from home. This superb coverage goes into effect when you purchase Y.E.S., so it applies to any warranty repairs as well as covered repairs during your entire Y.E.S. plan period.
- Y.E.S. coverage is honored at any authorized Yamaha dealer nationwide.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make your Yamaha much more valuable!

This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.



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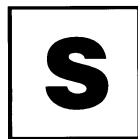
CONSUMER INFORMATION



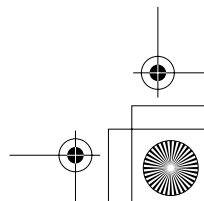
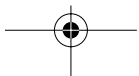
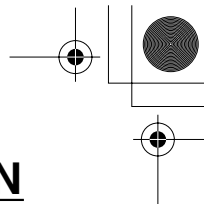
YAMAHA



EXTENDED



SERVICE




***PROTECT YOUR INVESTMENT
Use Genuine YAMAHA Parts And Accessories.***

***See your Authorized YAMAHA Dealer for a Genuine YAMAHA
Service Manual.***



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